

TM 5-4210-222-14&P-1

TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE MANUAL
[INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST]

FOR

TRUCK, FIREFIGHTING, DRY CHEMICAL AFFF

NSN 4210-00-484-5729

VOLUME I

This copy is a reprint which includes current
pages from Change 1.

HEADQUARTERS, DEPARTMENT OF THE ARMY

14 APRIL 1986

CHANGE

HEADQUARTERS
DEPARTMENT OF THE ARMY

No. 1

WASHINGTON, D.C., 29 January 1990

Operator's, Organizational, Direct Support,
and General Support Maintenance Manual
(Including Repair Parts and Special Tools List)

for

TRUCK, FIREFIGHTING, DRY CHEMICAL AFFF
NSN 4210-00-484-5729

Approved for public release; Distribution is unlimited.

TM 5-4210-222-14&P, 14 April 1986, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages

Insert pages

1361

1361

2. Retain this sheet in front of manual for reference purposes.

By Order of the Secretary of the Army:

CARL E. VUONO
General United States Army
Chief of Staff

Officail:

THOMAS F. SIKORA
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with Special List.

TECHNICAL MANUAL
No. 5-4210-222-14&P-1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 14 April 1986

Operator's, Organizational, Direct Support,
and General Support Maintenance Manual
(Including Repair Parts and Special Tools List)
for

TRUCK, FIREFIGHTING, DRY CHEMICAL AFFF
NSN 4210-00-484-5729

This manual consists of 3 volumes.

Each volume has its own table of contents. The index found in Volume I pertains only to Volume I.

VOLUME I is the Illustrated Parts Breakdown for the entire truck.

VOLUME II contains the Operation, Maintenance, and Repair Manual for:
ENGINE, TRANSMISSION, CHASSIS, CAB and RELATED ITEMS

VOLUME III contains the Operation, Maintenance and Repair Manual for:
TWIN AGENT UNIT, INVERTER, HYDRAULIC RESCUE TOOL (Jaws of Life),
POWER UNIT, RESCUE SAW 10 TON HYDRAULIC RESCUE KIT,
ELECTRONIC SIREN

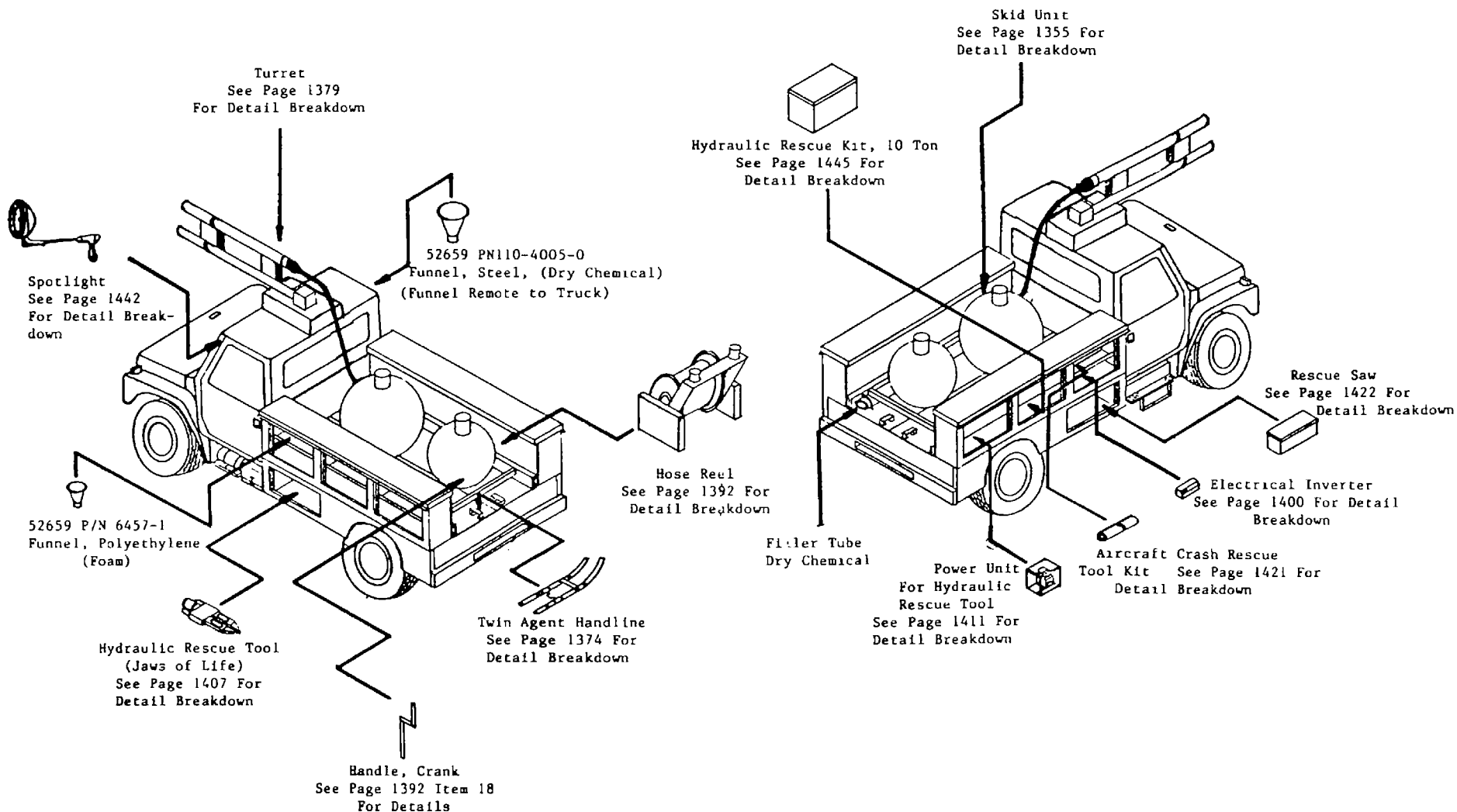
NOTE: Throughout these manuals, information has been deleted which is not pertinent.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, U.S. Army Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your fire truck needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, U.S. Army Troop Support Command, ATTN: AMSTR-QX, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished to you.



STOWED EQUIPMENT LOCATIONS

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
PARTS CATALOG - S-SERIES MODEL INTERNATIONAL HARVESTER	
GROUP INDEX	1001
A. GENERAL INFORMATION	1002
B. FRAME	
Bumper, Front	1026
Crossmember, Intermediate	1028
Sidemember, Chart	1030
C. FRONT AXLE	
Axle, Front, Driving, Dana FA64 9000 lb.	1031
Spring, Front, Mounting, Dana FA64 9000 lb.	1036
Flanges.....	1038
Light, Warning, Installation	1039
D. ENGINE	
Light, Warning, Installation	1041
E. CHASSIS SPRINGS	
Shock Absorber, Installation	1042
F. BRAKES	
Compressor, Piping, Air and Governor Mounting.....	1043
Compressor, Mounting and Piping, Air	1045
Strainer, Air Compressor	1047
Compressor, Air Midland Ross EL 740	1048
Governor, Air Compressor	1050
Valve, Parking Brake Control	1051
Valve, Brake Pedal and Control	1052
Compressor, Mounting and Hosing Air Midland Ross EL 740	1053
Shield Heat	1055
Valve, Double Check	1056
Switch, Stoplight	1057
Schematic System Diagram	1058
Bracket, Manifold Block, Button Plug, Chart	1059
Chamber, Air Brake MGM 30 in. - Emergency	1060
Valve, Check	1061
Chart, Connections, Elbows and Fittings	1062
Tank, Mounting and Hosing, Air	1067
Hoses, Tubes, Clamps, Chart	1069
Adjuster, Auto-Slack Repair Kits - Rear Axle.....	1071
Chamber, Air Brake, MGM 30 in. - Service	1072
Valve, Safety	1073
Valve, Quick Release	1074
Dryer, Mounting and Hosing, Air-Breakmaster Model 62.....	1075

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
F. BRAKES - CONTINUED	
Dryer, Air-Breakmaster Model 62	1077
Brake Mounting, Rear	1078
Brake, Rear	1079
Gauge, Switch Valve Chart	1081
G. STEERING GEAR	
Chart, Hoses and Fittings	1085
Column, Steering and Wheel - Standard	1088
Gear, Steering and Drag Link Installation	1091
Pump, Power Steering Installation	1093
Pump, Power Steering 2050 psi - Eaton 781.....	1094
Link, Drag	1096
Gear, Steering - Ross HFB 64	1097
H. PROPELLER SHAFTS	1099
J. EXHAUST SYSTEM	
Muffler, Tail Pipe, Exhaust and Mounting	1114
K. ELECTRICAL SYSTEM	
Terminals, Solderless - Standard	1117
Terminals, Solderless and Butt Splices - Standard	1118
Connector Bodies and Terminals - Standard	1119
Clips, Extensions and Straps - Standard	1121
Switches - Standard	1123
Wiring Harness, Battery Cables and Miscellaneous	1124
Clamps, Extension Clips - Standard	1126
Lamps, Bulbs, Indicators - Standard	1127
Horns, Buzzers, Warning	1128
Harness and Cables - Standard	1129
Light, Instrument Panel, Product Graphic	1130
Panel, Instrument Cluster with Speedometer	
Tachometer, Gauges and Bezels	1132
Flasher, Fuses and Circuit Breakers	1134
Harness, Turn Signal Light and Horn Hi-Note	1135
Harness, Automatic Transmission Wiring, Oil	
Temperature Gauge, Switches, Back-Up Light,	
Neutral Safety	1138
Harness, Stop, Tail, Turn and Back-Up Light	1141
Light, Turn Signal and Parking	1144
Light, Head with Bezel	1145
Cable and Mounting, Tachometer	1146
Motor, Starting 12V Delco	1148
Harness, Engine Wiring for D9.OL Engine with	
12V Start.....	1151

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
K. ELECTRICAL SYSTEM - CONTINUED	
Light, Stop, Tail, Turn	1155
Light, License Plate	1156
Battery Cable and Mounting with Frame Mounted Batteries.....	1157
Light, Clearance, Roof Mounting	1161
Light, Dome	1162
Switch, Turn Signal	1163
Pulley, Belt, Alternator and Mounting for D9.OL Engine	1164
Horn, Mounting, Dual Air	1165
Harness, Headlights, Turn Signals, Horns	1168
L. FRONT SHEET METAL	
Hood and Grille	1170
Guard, Splash	1172
Step	1173
Fender Extension and Hood Bumper Installation	1175
Deflector, Stone	1177
Fender, Rubber Extension	1178
Cable, Hood	1179
M. SPEEDOMETER	
Product Graphic and Miscellaneous Graphics	1180
Cable, Speedometer Drive	1182
N. ENGINE	
Radiator, Collar and Stay Rod Mounting	1184
Crossmember, Engine Mounting Front - Standard.....	1186
Accelerator, Control Throttle	1188
Bracket, Engine Mounting Rear	1189
Cover, Oil Pan Insulator	1191
Tank, Deaeration Mounting	1192
Vent, Crankcase	1193
Gasket Sets, Engine	1194
Injector, Fuel Nozzle and Nozzle Holder.....	1195
Pump, Fuel Injection	1196
Filter, Fuel Mounting	1198
Head, Cylinder and Related Parts	1199
Piping, Fuel Injector	1201
Pump, Fuel Injection and Mounting	1203
Crankcase and Related Parts	1204
Governor, Fuel Injection Pump	1206
Pump, Water Outlet and Thermostat	1209
Cooler, Oil Filter	1210
Pump, Oil	1212

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
N. ENGINE - CONTINUED	
Manifold, Intake and Crossover	1214
Fan, Clutch Drive Mounting	1215
Hosing, Radiator and Deaeration Tank Mounting	1216
Cleaner, Air Mounting and Piping	1218
Engine Shutdown	1220
Radiator, Mounting	1222
Piping, Air Compressor and Governor	1223
Pulley, Idler Belt and Mounting	1225
O. TRANSMISSION	
Transfer Case - Rockwell - Standard	1226
Product Graphics, Shifting	1229
Valve, Air Shift Selector	1230
Control, Auto, Transmission Mounting	1231
Control, Transfer Case Lever	1234
Valve, Transfer Case Control	1236
Angle, Transfer Case Mounting	1237
Adapter, Transmission to Engine	1238
Hosing, Oil Filter	1239
Filter, Oil	1240
Products Graphic, Shifting Diagram	1241
Gauge, Temperature Sender	1242
Flanges.....	1243
Valve, Chart	1246
Gauge, Oil Level	1247
AT545 Transmission Pictorial Index	1249
Kit, Service	1255
Torque Converter and Oil Pump	1257
Forward Clutch and Turbine Shaft	1260
Fourth Clutch	1262
Third Clutch, Center Support and Second Clutch	1264
Gear Unit and Output Shaft	1266
First Clutch	1269
Transmission Case, Governor and Vacuum Modulator.....	1271
Control Valve Body Assembly	1274
Oil Pan, Oil Filter, Governor and Speedometer	
Drive Gears	1279
Supplemental Parts Information.....	1283
Transmission Vent Assembly and Breather Shroud	1284
Front Support	1286
MY'79 Metric Converter	1288
Fourth Clutch Housing Assembly	1291
Fourth Clutch Trim in Reverse	1294
Control Valve Body Rework	1295

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
O. TRANSMISSION - CONTINUED	
Control Valve Body and Separator Plate Reference	1297
Stator Shaft Bushing Replacement	1298
Consolidation of Control Valve Body	1300
P. REAR AXLE	
Crossmember, Rear Spring and Mounting	1302
Axle, Rear, IH/Dana	1305
Q. FUEL TANK	
Tank, Fuel, 30 Gallon	1308
Pump, Submerged Fuel	1309
Tank, Fuel, 30 Gallon with Step	1311
Chart, Clamp, Cable Strap, Union, Plug, Fittings, Grommet, Connectors, Nipple, Adapter, Tee, Elbow, Hose, Tube and Conduit	1313
R. CAB AND BODY	
Fittings, Clamps, Hoses, Conduit, Cable Straps, Shut-Off Valves, Button Plugs, Grommets and O-Rings	1316
Mat, Floor	1319
Handle, Grab	1321
Emblem, Model Designation	1322
Panel, Roof and Cowl	1323
Panel, Back and Underbody	1324
Panel, Underbody	1325
Panel, Side	1326
Panel, Roof, Inner	1327
Mounting, Cab, Low	1328
Door, Cab	1329
Trim, Interior and Window Installation	1332
Panel, Instrument	1334
Wiper, Electric	1336
Visor, Sun	1338
Mirror, Rear View, Beach - Standard	1339
Plate, Master Cylinder Mounting	1340
Heater	1341
Seat, Driver and Passenger	1346
Belt, Seat	1348
Duct, Heater	1349
Washer, W/S.....	1350
S. WHEELS	
Rim, Tubeless, Tires	1352
Wheels, Drum or Rotor	1353

VOLUME I

PARTS MANUAL

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE(S)</u>
ROCKWOOD TWIN AGENT 1500/250 DRY CHEMICAL AFFF UNIT	1355
Section I - Twin Agent Unit	1356
1. Self Contained Dry Chemical System	1357
2. Self Contained AFFF System	1359
3. Dry Chemical/AFFF System Schematic	1361
Section II - Data Sheets for Components Supplied	1362
Section III - Discharge Devices	1373
1. Twin Agent Handline	1374
2. Remote Manual Twin Agent Turret	1379
3. Shaper - AFFF	1386
4. Dry Chemical Nozzle	1388
5. Hose Reel	1392
TWIN AGENT SKID SYSTEM SCHEMATICS	1393-1396
130 AMP LEECE-NEVILLE ALTERNATOR	1397
DYNAMOTE INVERTER	1400
HURST JAWS OF LIFE	1407
HURST POWER UNIT	1411
SIGNAL MODEL PA300* ELECTRONIC SIREN	1415
RESCUE CRASH TOOL KIT	1421
PARTNER SAW AND ATTACHMENTS	1422
BODY SCHEMATIC	1423
BRUSH GUARD	1425
ELECTRONIC SCHEMATIC	1427
SKID UNIT AIR CHARGING SYSTEM	1439
LAMP, QUARTZ WITH TELESCOPING POLE	1441
SPOTLIGHT.....	1442
LAMP, QUARTZ, 500 WATT	1444
HYDRAULIC RESCUE KIT, 10 TON	1445
INDEX.....	1446

VOLUME I

PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
PARTS CATALOG S-SERIES MODEL, INTERNATIONAL HARVESTER GROUP INDEX		
FRAME		
Bumper, Front	01-002	1026
Crossmember, Intermediate	01-004	1028
Sidemember, Chart	01-011	1030
FRONT AXLE		
Axle, Front, Driving, Dana FA64 9000 lbs.	02-001	1031
Axle, Front, Driving, Dana FA64 9000 lbs.	02-001	1032
Spring, Front and Mounting Dana FA 64 9000 lbs.	02-002	1036
Light, Warning Installation	02-004	1039
Light, Warning Installation	02-004	1040
CHASSIS SPRINGS		
Shock Absorber, Installation IH FA78	03-006	1042
BRAKES		
Compressor, Piping, Air and Governor Mounting	04-076	1043
Compressor, Mounting and Piping, Air	04-077	1045
Strainer, Air Compressor	04-078	1047
Compressor, Air Midland Ross EL 740	04-079	1048
Governor, Air Compressor	04-080	1050
Valve, Parking Brake Control	04-109	1051
Valve, Brake Pedal and Control.	04-110	1052
Compressor, Mounting and Hosing, Air Midland Ross EL 740	04-114	1053
Shield, Heat	04-126	1055
Valve, Double Check	04-127	1056
Switch, Stoplight	04-129	1057
Schematic - System Diagram.....	04-130	1058
Bracket, Manifold Block, Button Plug, Chart	04-131	1059
Chamber, Air Brake MGM 30 in. Emergency	04-153	1060
Valve, Check	04-162	1061
Chart, Connections, Elbows and Fittings	04-164	1062

VOLUME I

PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
BRAKES - CONTINUED		
Chart, Connections, Elbows and Fittings	04-164	1063
Tank, Mounting and Hosing, Air.....	04-180	1067
Hoses, Tubes, Clamps, Chart	04-186	1069
Adjuster, Auto-Slack Repair Kits - Rear Axle	04-239	1071
Chamber, Air Brake, MGM 30 in. Service	04-248	1072
Valve, Safety	04-281	1073
Valve, Quick Release	04-295	1074
Dryer, Mounting and Hosing Air-Breakmaster Model 62	04-317	1075
Dryer, Air-Breakmaster	04-318	1077
Brake Mounting, Rear	04-319	1078
Brake, Rear	04-377	1079
Gauge, Switch, Valve Chart	04-378	1081
STEERING GEAR		
Chart, Hoses and Fitting	05-001	1085
Column, Steering and Wheel Standard	05-007	1088
Gear, Steering and Drag Link Installation	05-025	1091
Pump, Power Steering Installation	05-026	1093
Pump, Power Steering 2050 psi Eaton 781	05-031	1094
Link, Drag	05-043	1096
Gear, Steering, Ross HFB 64	05-054	1097
EXHAUST SYSTEM		
Muffler, Tail Pipe, Exhaust and Mounting	07-029	1114
ELECTRICAL SYSTEM		
Terminals, Solderless - Standard	08-001	1117
Terminals, Solderless and Butt Splices - Standard.....	08-002	1118
Connector Bodies and Terminals - Standard	08-004	1119
Clips, Extensions and Straps - Standard	08-005	1121
Switches - Standard	08-007	1123
Wiring Harness, Battery Cables and Miscellaneous	08-009	1124

VOLUME I

PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
ELECTRICAL SYSTEM - CONTINUED		
Clamps, Extension Clips - Standard	08-012	1126
Light, Instrument Panel Product Graphic	08-018	1130
Panel, Instrument Cluster with Speedometer, Tachometer, Gauges and Bezels	08-029	1132
Flasher, Fuses and Circuit Breakers	08-031	1134
Harness, Turn Signal Light and Horn Hi-Note	08-033	1135
Harness, Automatic Transmission Wiring, Oil Temperature, Gauge, Switches, Back-Up Light, Neutral Safety	08-034	1138
Harness, Stop, Tail, Turn and Back-Up Light	08-036	1141
Light, Turn Signal and Parking.....	08-037	1144
Light, Head with Bezel	08-038	1145
Cable and Mounting, Tachometer.....	08-043	1146
Motor, Starting 12V Delco	08-052	1148
Harness, Engine Wiring for D9.OL Engine with 12V Start	08-053	1151
Light, Stop, Tail, Turn, Back-Up	08-054	1155
Light, License Plate at Frame.....	08-055	1156
Battery Cable and Mounting with Frame Mounted Batteries.....	08-057	1157
Light, Clearance, Roof	08-059	1161
Light, Dome	08-060	1162
Switch, Turn Signal	08-065	1163
Pulley, Belt, Alternator and Mounting	08-090	1164
Horn, Mounting	08-101	1165
Horn, Relay and Back-Up	08-106	1167
Harness, Headlights, Turn Signals, Horns	08-143	1168
FRONT SHEET METAL		
Hood and Grille	09-001	1170
Guard, Splash	09-005	1172
Step	09-007	1173
Fender Extension and Hood Bumper Installation	09-008	1175

VOLUME I

PARTS MANUALLIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
FRONT SHEET METAL - CONTINUED		
Deflector, Stone	09-009	1177
Fender, Rubber Extension	09-013	1178
Cable, Hood	09-017	1179
SPEEDOMETER		
Product Graphic and Miscellaneous Graphics	10-002	1180
Cable, Speedometer Drive	10-003	1182
ENGINE		
Radiator, Collar and Stay Rod Mounting	12-017	1184
Crossmember, Engine Mounting Front - Standard	12-020	1186
Accelerator, Control Throttle.....	12-022	1188
Bracket, Engine Mounting Rear	12-048	1189
Cover, Oil Pan Insulator	12-051	1191
Tank, Deaeration Mounting	12-054	1192
Vent, Crankcase	12-073	1193
Injector, Fuel Nozzle and Nozzle Holder	12-095	1195
Pump, Fuel Injection	12-096	1196
Filter, Fuel Mounting	12-097	1198
Head, Cylinder and Related Parts	12-098	1199
Piping, Fuel Injector	12-099	1201
Pump, Fuel Injection Drive and Mounting	12-100	1203
Crankcase, and Related Parts	12-101	1204
Governor, Fuel Injection Pump	12-102	1206
Pump, Water Outlet and Thermostat.....	12-103	1209
Cooler, Oil Filter	12-104	1210
Pump, Oil	12-105	1212
Manifold, Intake and Crossover.....	12-107	1214
Fan, Clutch Drive Mounting.....	12-108	1215
Hosing, Radiator and Deaeration Tank Mounting	12-109	1216
Cleaner, Air Mounting and Piping	12-110	1218
Engine Shutdown	12-112	1220
Radiator, Mounting	12-115	1222
Piping, Air Compressor and Governor	12-119	1223
Pulley, Idler Belt and Mounting.....	12-204	1225

VOLUME I

PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
TRANSMISSION		
Transfer Case - Rockwell		
Standard	13-002	1226
Product Graphics, Shifting	13-003	1229
Valve, Air Shift Selector	13-035	1230
Control Automatic Transmission		
Mounting	13-049	1231
Control, Transfer Case Lever	13-059	1234
Valve, Transfer Case Control	13-062	1236
Control, Transfer Case and		
Mounting	13-065	1237
Adapter, Transmission to Engine.....	13-070	1238
Hosing, Oil Filter	13-093	1239
Filter, Oil	13-096	1240
Products Graphics, Shifting		
Diagram	13-104	1241
Gauge, Temperature Sender	13-109	1242
Valve, Chart	13-120	1246
Gauge, Oil Level	13-121	1247
AT545 Transmission Pictorial		
Index	-----	1251
Torque Converter and Oil Pump	Figure 1	1256
Forward Clutch and Turbine		
Shaft	Figure 2	1260
Fourth Clutch	Figure 3	1262
Third Clutch, Center Support		
and Second Clutch	Figure 4	1264
Gear Unit and Output Shaft	Figure 5	1266
First Clutch	Figure 6	1269
Transmission Case, Governor and		
Vacuum Modulator	Figure 7	1271
Control Valve Body Assembly	Figure 8	1274
011 Pan, Oil Filter, Governor		
and Speedometer Drive Gears	Figure 9	1279
Model AT545 Transmission		
Cross Section	F.O. 2	1282
TRANSMISSION SUPPLEMENTAL PARTS		
INFORMATION		
Transmission Vent Assembly	Figure 1	1284
Breather Shroud	Figure 2	1284
Front Support	Figure 1	1287
MY'79 Metric Converter	Figure 1	1289
Fourth Clutch Housing Assembly	Figure 1	1291

VOLUME I

PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
TRANSMISSION SUPPLEMENTAL PARTS		
INFORMATION - CONTINUED		
Tanged vs. Tangless Pistons	Figure 2	1291
Fourth Clutch Trim in Reverse	Figure 1	1294
Control Valve Body Rework Area	Figure 2	1295
Typical Control Valve Body Rework	Figure 3	1296
Control Valve Body and Separator Plate Reference	Figure 4	1297
Stator Shaft Bushing Replacement.....	Figure 1	1299
REAR AXLE		
Crossmember, Rear Spring and Mounting	14-003	1302
Axle, Rear, IH/Dana	14-007	1305
FUEL TANK		
Tank, Fuel 30 Gallon	15-007	1308
Pump, Submerged Fuel	15-008	1309
Tank, Fuel 30 Gallon with Step	15-012	1311
Chart, Clamp, Cable Strap, Union, Plug, Fitting, Grommet, Connector Nipple, Adapter, Tee, Elbow, Hose and Conduit	15-057	1313
CAB AND BODY		
Fittings, Clamps, Hoses, Conduit, Cable Straps, Shut-Off Valves, Button Plugs, Grommets and O-Rings	16-001	1316
Mat, Floor	16-004	1319
Grab, Handle	16-012	1321
Emblem, Model Designation	16-014	1322
Panel, Roof and Cowl	16-020	1323
Panel, Back and Underbody	16-021	1324
Panel, Underbody	16-022	1325
Panel, Side	16-023	1326
Panel, Roof, Inner	16-024	1327
Mounting, Cab, Low	16-026	1328
Door, Cab	16-027	1329
Trim, Interior and Window Installation	16-028	1332
Panel, Instrument	16-029	1334
Wiper, Electric, American Bosh.....	16-030	1336
Visor, Sun	16-031	1338

VOLUME I

PARTS MANUALLIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
CAB AND BODY - CONTINUED		
Mirror, Rear View, Beach - Standard	16-032	1339
Plate, Master Cylinder Mounting	16-035	1340
Heater, Control	16-036	1341
Heater	16-037	1343
Seat, Driver and Passenger	16-045	1346
Belt, Seat	16-049	1348
Duct, Heater	16-084	1349
Washer, W/S.....	16-085	1350
WHEELS		
Rim, Tubeless Tires	17-002	1352
Wheels, Drum or Rotor	17-037	1353
PARTS MANUAL - ROCKWOOD TWIN AGENT		
1500/250 DRY CHEMICAL/AFFF UNIT		
Schematic	----	1361
Ball Type Check Valve	----	1363
Liquid Pressure Relief Valve	----	1364
M-Series Valve	----	1366
M-Series Parts List	----	1367
105DT Valve	----	1369
105DT Valve Parts List	----	1370
Nitrogen Regulator	----	1371
1½ Inch M-Series Ball Valve with Air Actuator	----	1372
Dual Agent Hand Line Foam/ Dry Powder	----	1376
Turret Remote Manual Twin Agent	----	1381
Remote Manual Turret	----	1383
Shaper - AFFF	----	1386
Dry Chemical Nozzle	----	1388
Hose Reel	----	1392
Twin Agent System Schematics	----	1393
PARTS MANUAL 130 AMP LEECE-NEVILLE		
ALTERNATOR		
Schematic	----	1398
PARTS MANUAL DYNAMOTE INVERTER		
Schematic	----	1404
Wiring Diagram	----	1405
Unit - Schematic	----	1406

VOLUME I

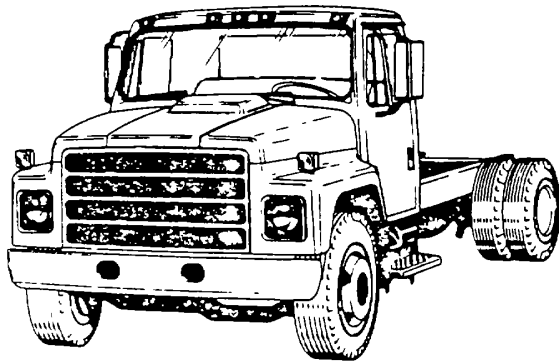
PARTS MANUAL

LIST OF ILLUSTRATIONS

<u>TITLE</u>	<u>IDENTIFICATION ILLUSTRATION</u>	<u>PAGES(S)</u>
PARTS MANUAL HURST JAWS OF LIFE		
Rescue Tool	-----	1408
Accessories	-----	1409
PARTS MANUAL HURST POWER UNIT		
4 Cycle Unit	-----	1412
PARTS MANUAL SIGNAL MODEL PA300*		
ELECTRONIC SIREN		
Chassis Removal	Figure 6-1	1417
Internal View	Figure 6-2	1417
Component Location Diagram	Figure 6-3	1418
Schematic Diagram	Figure 6-4	1419
MISCELLANEOUS EQUIPMENT	-----	1421
FIRE BODY	Figure 1	1423
BRUSH GUARD	Figure 2	1425
ELECTRICAL SCHEMATICS	Figure 3	1427
SKID UNIT AIR CHARGING SYSTEM	Figure 4	1439
LAMP, QUARTZ WITH TELESCOPING POLE.....	Figure 5	1441
SPOTLIGHT	Figure 6	1442
LAMP, QUARTZ, 500 WATT	Figure 7	1444
HYDRAULIC RESCUE KIT, 10 TON	Figure 8	1445

**MT145 GROUP INDEX
MT-145**

**PARTS CATALOG
S - SERIES MODELS**



**INTERNATIONAL
TRUCKS**

GROUP INDEX		
INDEX	DESCRIPTION INDEX	
FRAME		1026
FRONT AXLE	/ENGINE WARNING /LIGHT INSTALLATION	1031 1041
CHASSIS SPRINGS		1042
BRAKES		1043
STEERING GEAR		1085
PROPELLER SHAFTS		1099
EXHAUST		1114
ELECTRICAL	STANDARD HORNS STANDARD WIRING COMPONENTS	1117
FRONT SHEET METAL		1170
SPEEDOMETER		1180
ENGINE		1184
TRANSMISSION		1226
REAR AXLE		1302
FUEL TANKS		1308
CAB & BODY		1316
WHEELS		1352



GENERAL INFORMATION

A BRIEF GUIDE TO USING THIS MASTER PARTS CATALOG

	Page
I. VEHICLE AND ITS SPECIFICATIONS	2-6
A. Where to Locate Specific Information	2
o Line Setting Ticket (LST)	2
- Loose Copy in Vehicle	
- Copy Sent to Selling Location	
- Copy Sent to Selling Location Parts Department	
- Copy Available through IH Printing and Distribution Service - Westmont	
o Service Unit Record - A record of Vehicle Identification and Specifications for all IH trucks built each year. Available on microfiche only.	3
B. What Specific information is Available on Line Set Ticket	4-6
o Vehicle Model Number	4
o Vehicle Identification Number	4
o Component Codes or Unit/Division	5
o Chassis Build Data	6
C. How Does This Relate to the Catalog	
II. IDENTIFYING SPECIFICATIONS WITH OR WITHOUT LINE SET TICKET	7-14
A. Determine the Appropriate Group With or Without Line Set Ticket.....	7-9
o Alphabetical Parts Index Guide	7
o Unit/Division Identification	8
o Group Indexes	9
- Alphabetical Figure Title Index	
- Vendor Model Index	
- Unit/Division Index	
B. Identify Group Without Line Set Ticket	10-14
o Individual Group Information	10-14
o Supplier When Applicable	14
o Supplier Model and Serial Number	14
o Numerical Parts Index	14
o Alphabetical Parts List	14



GENERAL INFORMATION

	Page
III. General.....	14-16
A. Identifying Parts With a Figure	15-16
o Illustration and Parts List	15
o Attaching Parts	15
o Kits	15
o Bulk Material	15
o Build Date for Design Changes	15
o Special Equipment	15
o Vendor Part Number	15
o Ordering by Description	16
B. Support Publications	
o Index of Part Numbers	16
o Vendors Cross Reference Parts List	16
o Supersedence Parts List	16
o Accessories for International Trucks	16
o Fast Moving Truck Parts	16
o Expandable Catalog Binder	16
C. List of Abbreviations	17-19
D. List of General Descriptions and Group Location	20-24

NOTE: Current catalogs are generated from production bills of material. If a part or group of parts (unit or division) has been revised and/or added to production within 60 days of publication, this information will be included in the next catalog revision. If critical items or service information is omitted due to the time lapse, we often provide special reports through timely releases of Parts Information Letters (PIL) and Advanced Information to District Servicemen (AIDS).

I. VEHICLE AND ITS SPECIFICATIONS

A. WHERE TO LOCATE SPECIFIC INFORMATION

o LINE SETTING TICKET

For trucks built prior to 1973, the Line Setting Ticket (LST) must be used to determine needed information. The LST is the document required to determine which components are ordered and used to build a truck. Copies are made available in several places.



GENERAL INFORMATION

- Loose copy in vehicle -
Every vehicle leaves the plant with a full size LST copy included in the papers in the vehicle. This is very important and the customer should be encouraged to use it for parts ordering and retain it in the vehicle.
- Copy sent to selling location -
A copy is printed on the back of the Customer Service Record Card-BH-894-sent to the dealer selling the truck.
- Copy sent to Parts Department -
A copy is sent to the selling locations Parts Department for their records.
- Copy Available through IH Printing and Distribution Service-
Copies of LST's can be purchased through IH Printing and Distribution Service-Westmont.

o SERVICE UNIT RECORD

To determine the Model Number, Vehicle Identification Number and Component Codes for any IH truck manufactured in 1973 or later, the Service Unit Record should be used. This record covers every truck manufactured in each model year and is available in microfiche. You can order your own copy of this record. Availability through Westmont order Form. The example shows all information available and the layout of service unit records by chassis serial number.

Example:

CGA24869VIN24947CGA24869, NAME OF COF-4070A,WB 152,ENG 538729
NTC-350 12435,TRANSRTO-12513 13468, RA 4.10 R/S SQHD 14333,
SUSP DAY 4 SPRG 14625, FA IH 12000# WIDE TRD 02139,STG M49
05044, TANK DUAL SIDE AL 15532, TIRES 11.00X20

01078. 1406	270821. 7198	12704. 1413	16593. 1404
01616. 1402	07031. 1405	12762. 1401	16626. 1401
02139. 1400	08000. 1407	12783. 1401	16749. 1401
03110. 1444	08133. 1403	SE13000. 1437	16956. 1401
03503. 1400	08535. 1402	SE13468. 1401	16961. 1401
04311. 1408	08617. 1420	SE13860. 1401	17040. 1437
04595. 1405	08670. 1401	14333. 1423	170415. 0002
04642. 1401	09000. 1410	14625. 1401	19040. 1492
04809. 1411	10000. 1440	14850. 1411	190415. 0008
05272. 1407	10589. 0001	15532. 1404	614015. 0231
06100. 1422	SE11249. 1407	16000. 1411	29274. 1411
260722. 1180	12433. 1401	16155. 1408	

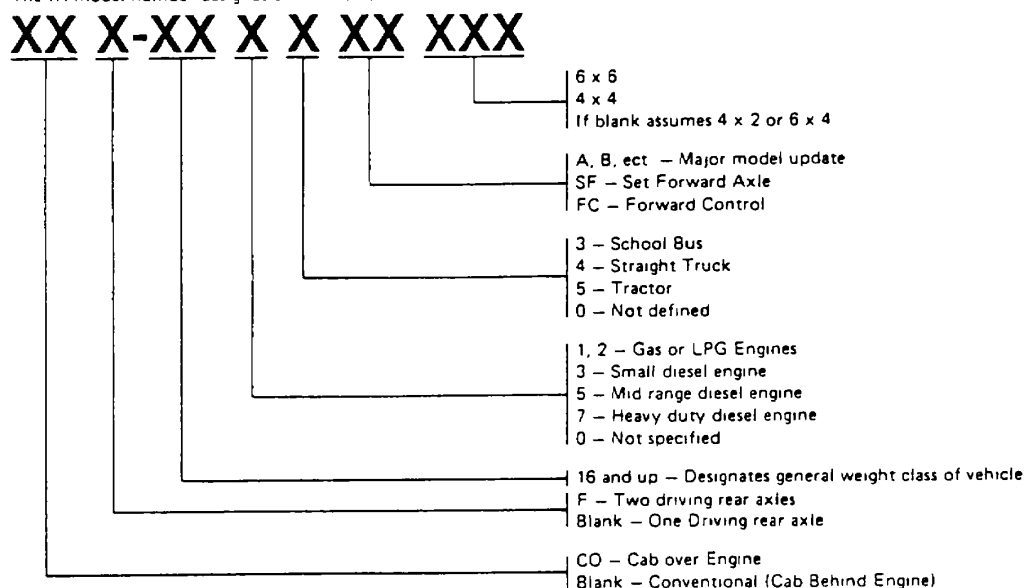


GENERAL INFORMATION

B. WHAT SPECIFIC INFORMATION IS AVAILABLE ON LINE SET TICKET

VEHICLE MODEL NUMBER

The IH model number designations are structured as shown



EXAMPLES.

COF-4070B - A cab over engine model with two driving rear axles, a heavy duty diesel engine, third major model update

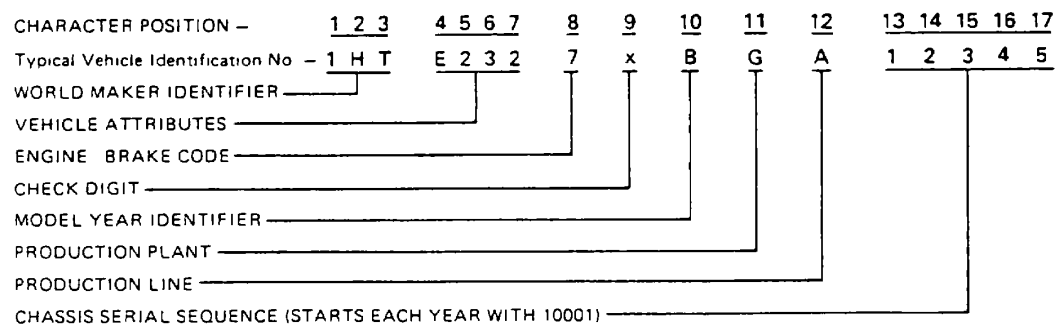
F-5050SF - Conventional model with two driving rear axles, a mid range diesel engine set forward front axle

VEHICLE IDENTIFICATION NUMBER (VIN) SYSTEM ALL IH TRUCKS SINCE SEPT. 1, 1980

To comply with government regulations a new 17 digit vehicle identification number (VIN) structure is being used on IH vehicles in lieu of the old 13 digit structure

Starting, September 1, 1980 vehicles will incorporate the new 17 digit (VIN) structure

The chart details the format of the new VIN structure



POSITION 1 - 3 WORLD MAKER IDENTIFIER (WMI)

1HT = US Produced Truck

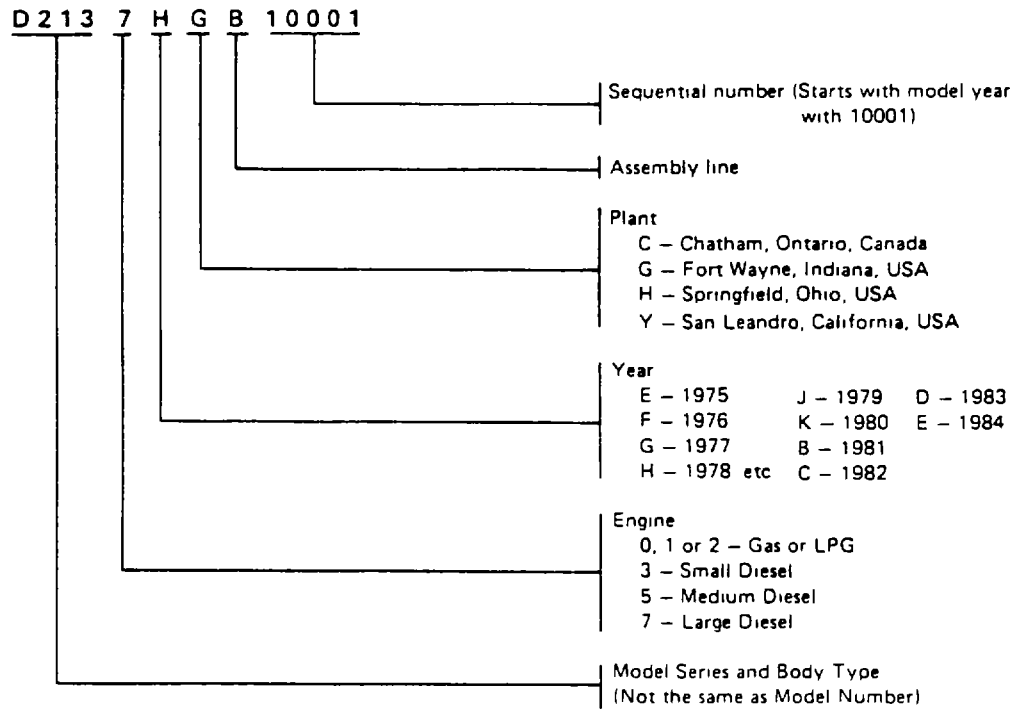
1HV = US Produced Bus

2HT = Canada Produced Truck

2HV = Canada Produced Bus



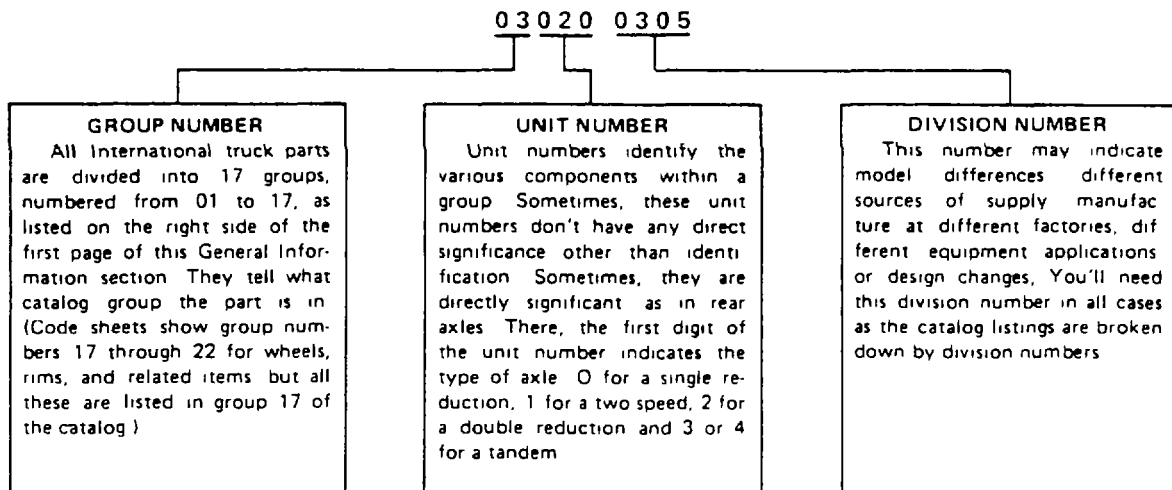
GENERAL INFORMATION



COMPONENTS CODES OR UNIT/DIVISIONS

Codes are the basic building blocks for identifying the components used on an IH Truck. They are used by sales personnel ordering the truck, by manufacturing to build that order and by parts personnel to service the truck. Many of the index items in this catalog are identified by codes so it is important to understand them.

The code structure is as follows:



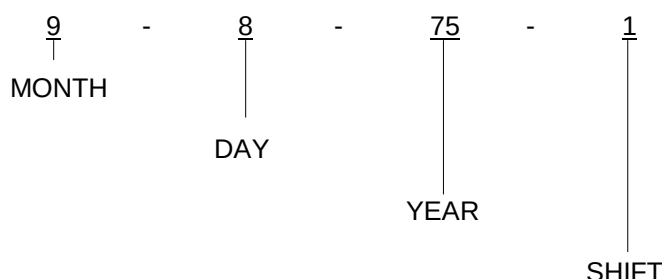


GENERAL INFORMATION

o CHASSIS BUILD DATE

Since 1974 the Chassis Build Date has been stamped on the capacity plate for each truck in the section called Date Mfg. As explained later in this section, this information has been used since 1974 in the Master Parts Catalogs to identify parts difference due to design change. This is necessary since trucks are not always built in Chassis Number sequence.

Chassis Build Date is also stamped on all LST copies except the reduced size version attached to the cab. The number as stamped on the capacity plate is structured as follows:



C. HOW DOES THIS RELATE TO THE CATALOG

This catalog is designed to provide information to the field in a like structure as is used to build the vehicle. By using the LST you can refer to a specific code in the Group which will identify each Figure or Figures required to service a specific unit/division code.

Example:

Figure No

02231.45XX R/S F1-931 16000# Frt Axle W/Dual Pwr Strg.
4500, 4501
Axle, Frt, R/S FL931 16000 and 18000LB 02-002
Spring, Shock Absorber Frt -STANDARD- 02-005

Figures 02-002 and 02-005 provide the front axle, spring and shock absorber service information available for this FA-231 front axle.

The .45XX indicates it covers all .4500 code series of the Unit Model 02231.

The figure numbers listed below the unit structure should always provide the necessary information to service the specific unit identified.

Where multiple divisions are covered as in .45XX, specific break downs are identified further within the index or within the catalog text.



II. IDENTIFYING SPECIFICATIONS WITH OR WITHOUT LINE SET TICKET

A. DETERMINE THE APPROPRIATE GROUP WITH OR WITHOUT LINE SET TICKET

o ALPHABETICAL PARTS INDEX GUIDE

- Refer to the Alphabetical Index Guide (Page 19) - General Group Location as it lists most parts by description and shows which Group they are in. Some parts that are standard equipment on their respective models do not always appear in the related Group.

Examples:

The standard front spring appears in Group 02 (Front Axle) and not in Group 03 (Chassis Springs) as optional chassis springs are in Group 03.

The air brake compressors are listed in Groups 04 and 12.

Brake Groups for front driving axles are listed in Group 02.

- Unit/Division in the same Group Index appearing on the Line Set Ticket are generally optional equipment and supersedes parts in standard Unit/Division.

Examples:

Unit/Division 12740.XXXX (Increased Cooling) supersedes the radiat used in the standard engine code. (Sometimes you may know you have increased cooling which should tell you to look for information other than standard. This can be Identified.)

Unit/Division 08540.XXXX (Dual Electric Horns) supersedes the horns used in the standard wiring system code.

Sometimes you need the unit code number in a Group Index other than the one you are looking up. Here are the cases where this is most likely:

To Correctly Identify Parts:

Frames in Group 01. In some cases you will have to know the type of engine, the transmission model or code. Crossmembers and tie bars for engine mounting are sometimes listed in engine and electrical groups respectively.

Optional and Special Equipment springs, U-bolts and seats in Group 03. Standard suspension information is listed with the appropriate axle information.



GENERAL INFORMATION

- Brakes in Group 04. For many brake parts you will have to know the axle model or code number. Generally front wheel brakes for front driving axles are listed with the front axle. You will also have to know brake codes and the size or capacity of the brakes to determine specific components. This information has been needed in past as well as present catalogs.
- Propeller shafts in Group 06. Some propeller shafts are coded to the rear axle, some to the transmission. In most cases you will have to know the propeller shaft code numbers listed on the line set ticket to determine specific propeller shaft assembly. For components of propeller shaft assemblies, refer to MT-90. Flanges are generally charted in Groups 13 and 14.
- Optional and special equipment brake systems and engine exhaust brakes are listed in Group 07. All standard exhaust systems are listed by engine model in Group 12.
- Parts in Group 10. You usually will have to know the transmission and rear axle code as well as the tire size and axle ratio to determine proper speedometer adapters.
- Clutches in Group 11. In some cases you will have to know the transmission and engine model or code unless you already know the clutch size, type and manufacturer.
- Parts in Group 16. For some parts you will need to know the transmission model and/or brake code for transmission and brake related parts.

o UNIT/DIVISION

Unit/Division codes showing XX or XXXX in Division Field of the Unit/Division Group Index page indicates a consolidation of divisions, i.e. (.53XX = .5300 thru .5304, .5306, .5308). If your division does not appear in this area, it has not been cataloged yet. Most divisions are similar, thus the usage of the .53XX listing.

o Example

Unit	Division
12740	.5304 .53XX .XXXX

In this same area an XXXX in the division indicates that all units 12740 are listed within that catalog structure, thus only specific exceptions will be listed on the catalog unit/division index or catalog text pages.



o GROUPS INDEXES

The following is a guide to locating parts within the parts catalog (Unit/Division structure with or without a line set ticket).

The current catalog is designed in much the same manner as previous catalogs (with additional index information added).

- Alphabetical Figure Title Index

At the beginning of each group is an Alphabetical Figure Title Index

Example:	Gauge, Oil Level and Filler	13-039
	Gauge, Oil Level and Filler W/MT-650	13-067

This means that Figure 13-039 is the standard and Figure 13-067 is for application with MT-650.

- Vendor Model Index

In drive train groups we have listed (after the Alphabetical Figure Title Index) a complete Vendor Model to IH code cross reference.

Example:	Fuller Transmissions
	RTF-915 13128 15-Speed

This means you can identify your code by knowing the Fuller model and refer to either the Alphabetical Index under transmission for transmission components or refer to Unit/Division code 13126 to identify transmission components as well as identify installation mounting and control parts.

- Unit/Division Index

The Unit/Division Index allows one to identify by Unit/Division all parts required for a specific code.

Example:	13128.45XX T-128 Trans RTF-915 Fuller 15-Speed	
	4500, 4501 (Includes both Divisions)	
	Bracket, Trans Chart Rear Mtg	13-074
	Control, Air Shift	13-033
	Control, Remote, Lever	13-026
	Control, Remote, Tower - Fuller-	13-027
	Flanges	13-070
	Hosing, Air Supply	13-037
	Spring, Rear Mtg	13-025
	Transmission, Fuller RTF-915	13-001
	Valve, Air Con	13-036
	Valve, Air Shift Sel	13-035

This allows you to identify all parts for and related to the RTF-915 Fuller Transmission.



GENERAL INFORMATION

B. IDENTIFY GROUP WITHOUT LINE SET TICKET

Note: If a line set ticket is not available, one can identify general information by relating to the Alphabetical Figure Title Index at the beginning of each group. This listing identifies all figures used in this MT Catalog Group, (most are self-explanatory, and unless so noted, are to be considered standard for their application.)

Group 01 - Figure titles are identified by description-frame and bumper information as well as sound shields that are attached to the frame. In addition to these, it gives tow hook information, frame reinforcements, sidemember charts, tire carriers, deck plates, etc. All of these can be readily identified from the description when the line set ticket is not available.

Group 02 - An example for using Group 02 would be to refer to Unit 02191, Division 50XX. This indicates that the catalog figures listed below this unit/division will apply for all unit/divisions within the 02191.5000 series. As the index page in the catalog shows, this particular unit is for FDS I600 Rockwell Standard driving front axle, 16000 pounds. In addition to the figure for the axle itself, the figures for the chamber, flanges, spring pins, brackets, shackles, brakes and spring mounting are all included within the grouping.

Although the above shows the unit/division 02191.50XX, it should be realized that within this particular model if you have an FA-191 front axle or a Rockwell Standard FDS 1600 front axle, the codes would be the same. (02191)

With this type of reasoning, it is not necessary to have the line set ticket, it is necessary to know what axle you have on the vehicle. If you follow this procedure throughout Group 02, you will see that the IH and vendor models are both available and easily identified.

It should be realized that for non-driving front axles, the brake parts are located in Group 04.

Group 03 - In the past 03 identified all springs and shock absorbers. Under our present catalog structure, it will identify all the auxiliary springs, special springs and shock absorber installations. All standard spring and shock absorber information is found in either the Front or Rear axle Groups 02 or 14.



GENERAL INFORMATION

In these cases if you know you have a 14472 (IH/RA472) rear axle, refer to axle code 14472 for standard suspension. However, if you have a special spring code called out on your line set ticket (or a special suspension), then it is referenced within the spring section. The only time you need a line set ticket is when it is required for special equipment to identify a special spring code, etc. As indicated previously, the individual axle groups will call out the standard spring and shock absorber information for particular axle assemblies.

Group 04 - Following the procedures established in Group 02, an example for Unit 04061.50XX indicates that all figures listed below this unit/division number are covered and will be specifically identified at the end of the description field when there is more than one figure for a particular unit/division application.

Following the unit/division we have identified that this is an air brake system with FMVSS 121 truck as well as all the divisions available. A further breakdown for this is immediately following the unit/division and description such as; break hosing with reusable ends, brake hosing, compressors, governors, harness, tanks, valves, slack adjusters, chambers, brake assemblies and brake mounting with figure numbers to cover each.

From the Figure Title you will note that many times hand control valve may be the same figure number throughout the brake systems, which in itself brings out the commonality of usage. This type of procedure follows throughout the remainder of the Group 04 index.

Group 05 - This is basically a follow-up of Groups 02 and 04 mentioned above and identifies the particular steering gear installation and all parts required for the particular unit/division listed. Here again, it should be noted that if you do not have a line set ticket, but you know you are working on a vehicle having Sheppard steering gear and you know the Sheppard steering gear type or model, you can identify these from the description referred to in the cross reference of vendor model to IH code. This listing follows the Alphabetical Figure Title Index.

05318.50XX covers all unit/division within the XX category. The description for this is a Sheppard 3925-4 power steering with gear driven pump. The figures listed below the U/D callout for this Sheppard gear are the steering wheel column, drag link, power steering gear, power steering hoses, power steering pumps, reservoirs, and gear installation. This type of arrangement is followed through the Group 05 index



GENERAL INFORMATION

- Group 06 - Basically the driveline section components are normally found in the MT-90. The only items found in Group 06 will be center bearing installations and miscellaneous items. Flanges are listed in axle and transmission groups.
- Group 07 - All exhaust systems for vehicles are found in this section. Exhaust information found in Group 07 will be items such as mufflers and tail pipes as well as engine exhaust brake systems.
- Group 08 - Electrical: (Figure Title Index) If you do not have a line set ticket and you are looking for a battery cable with mounting, you should refer to the Figure Title Index for the specific engine application. In addition to this without a line set ticket, look for the lights, motors, wiring diagrams, horns, etc. by noun name. The alternators are listed by unit/division as well as by amp size and manufacturer. Alternator belts are often listed in this index under pulley. Additional belts are located in Groups 12 or 16.
- Other items found in Group 08 under unit/division structure (where unit/division structure is not necessarily needed for identification) are dual electric horns, 7 way connectors, 5th wheel flood lights, front axle warning lights, chrome support lights, water temp and oil pressure warning lights, warning lights for rear parking brake, radio, etc. It should be that even though these are in alphabetical order by noun name, if you scan through the Figure Title Index page, you will normally be able to identify the item you are looking for within the group by relating to associated parts within the description field.
- Group 09 - Front End Section: The description in the figure will identify the type of front end information required.
- Group 10 - This section is for speedometers, tachometers, tachographs, odometers, speedometer adapters, recording tachographs, hourmeters, product graphics (plates, instructions, emblems), etc.
- Group 11 - This group specifically identifies within the Figure Title Index clutch types, sizes and other related parts.
- Group 12 - After the Alphabetical Figure Title Index we have identified by manufacturer the engine models used, horsepower rate and the IH unit number. In other words, you do not need a line set ticket. If you know you have a Cummins NTC 300 engine and you look at the chat, you can see it



GENERAL INFORMATION

is unit 12243. When you go to the index for 12243, it identifies 12243.50XX which means that all engines use within the cataloged model for the NTC are listed within this group.

When reading down through the description following that unit/division, you will find that this particular unit/division structure also gives several additional Cummins engine installations. We have listed all of these. If you refer to the codes in the index, it will send you back to the unit 12243.50XX for common information. Listed below the engines affected is all the information required for this engine installation and the part required.

In addition, the NTCC350 Cummins engine (IH code 12555) refers you back to 12243 for all basic information needed.

There are also listed several types of air cleaners, lubefrners, special fans, specific radio installation information, hand throttles, hand operated shutter information, air starts, oil temperature gauges; and for specific engines where it applies, cold starting equipment, silicone radiator hoses, etc.

- Group 13 - After the Alphabetical Figure Title Index is a list of all transmission assemblies in the catalog. In each of these cases if you know the specific vendor and type of transmission, you can identify the IH model code and reference this in the unit/division structure. You are not limited to servicing only IH vehicles for these particular transmissions. Any competitive type vehicle with similar vendor and model transmission can be serviced through the IH code by referring to the figure number for the transmission assembly.
- Group 14 - This follows the same pattern as Group 13.
- Group 15 - After the Alphabetical Figure Title Index, the unit/division structure is used for identifying all codes covered by this catalog. If you do not have a code, you can reference the alphabetical description and identify if you have a 60-gallon tank, etc. to find the part or associated parts you are looking for.
- Group 16 - After the Alphabetical Figure Title Index, this section carries the unit/division structure and should not confuse you when looking for specific seats. etc. Items can also be identified by trim levels, colors and materials.



GENERAL INFORMATION

Group 17 - Shown here is a listing of all wheel information as it relates to the line set ticket as well as descriptive information for each hub and wheel application with axle codes.

- o SUPPLIER WHEN APPLICABLE

One should always try to assure that the proper supplier identification for the specific part is provided to assure proper componentry and/or assembly replacement. In many cases multiples are used such as axles, brakes, steering, etc.

- o SUPPLIER MODEL AND SERIAL NUMBER

In many cases the supplier identifies their changes by model and serial number. Therefore, whenever possible, this information should be identified and crossed to the catalog information to assure proper replacement information is used.

- o NUMERICAL PARTS INDEX

This is a numerical list of all parts and locations thereof used within a given catalog.

- o ALPHABETICAL DESCRIPTION INDEX

The Description Index located at the front of the printed Master Parts Catalog and at the end (after Numerical Index) of the Microfiche version is a basic noun name alphabetical list of the parts shown within the catalog. Refer to Numerical Index for locations.

III. GENERAL

A. IDENTIFYING PARTS WITH A FIGURE

- o ILLUSTRATION AND PARTS LIST

Each figure consists of an illustration showing the parts in an assembly and a parts list identifying the keyed item number (as called out on the illustration), the part number, description, quantity required and the variation where it is used. Make sure you read all the information listed under your particular keyed number. Normally, if the variation column is blank, it means it is used for all variations; but restriction notes are listed in the description column. The Figure number is listed in the upper corner of the art work along with the title of the figure.



GENERAL INFORMATION

o ATTACHING PARTS

Attaching parts are usually shown without keyed numbers and are keyed within the mounting figures.

o KITS

Parts that are included in a kit are identified at the beginning of the description with a symbol (#, \$ or other). These symbols are also shown on the illustration as a callout for parts that are not serviced separately. Kit numbers are normally listed at the end of the parts list.

o BULK MATERIAL

For brake pipes, fuel pipes, loom, hose and similar parts, only the diameter and bulk part number are shown. This part number covers one foot of bulk material.

o BUILD DATE FOR DESIGN CHANGES

When a design change requires that old and new are serviced with different parts, but the code and other identifying methods stay the same, the parts list will record the before and after chassis build date which, as previously noted, can be found on the vehicle capacity plate. Before and after Chassis Number is no longer used since trucks are not built in strict Chassis Number sequence on the assembly line.

o SPECIAL EQUIPMENT

Many trucks have special equipment to meet special user requirements. Special equipment is now being listed within the Master catalog. In cases where a special equipment code is not in the parts catalog, this generally means the code was not released by production in time for catalog schedules and will be added to the next revision.

o VENDOR PART NUMBER

Catalogs released or revised after January 1, 1984 will have the vendor number listed in the description field. Vendors to be included in catalogs are Rockwell International, Dana (Spicer), Eaton and Fuller.

o ORDERING BY DESCRIPTION

When parts information cannot be found after a thorough search of Master Parts Catalogs and Special Equipment lists, the part can be ordered by part description rather than number.

Model Number and Vehicle Identification Number must be included.



B. SUPPORT PUBLICATIONS

Other parts publications are available to assist you in finding the proper parts for servicing IH and competitive vehicles. Publications are also available to cover accessories and other items not shown in the Master Parts Catalogs.

- o INDEX OF PART NUMBERS 26Xp

When only a part number is known, this index will show which Master Parts Catalog it is in.

- o VENDORS CROSS REFERENCE PARTS LIST 1008698-R

When only a vendor part number is known, this list will show the corresponding IH part number. This can be particularly valuable for servicing competitive trucks. This catalog also includes the IH to vendor cross reference (Major suppliers only).

- o SUPERSEDEANCE PARTS LIST 1008472-R

This list shows the latest part number for superseded parts for all Corporate Groups

- o ACCESSORIES FOR INTERNATIONAL TRUCKS

This catalog lists Accessories to increase the efficiency, comfort, convenience and economy of IH trucks. Contact your Region.

- o FAST MOVING TRUCK PARTS MT-90

A quick reference to high demand replacement parts.

- o EXPANDABLE CATALOG BINDER..... 1690061R1

This hard-back binder expands to hold larger catalogs.



C. LIST OF ABBREVIATIONS

ACCEL..... accelerating, accelerator
ADAP..... adapter
ADJ..... adjuster, adjustable,
 adjusting
AL..... aluminum
ALY-STL..... alloy steel
ALT..... altitude
AMP..... amperes, amper
ANG..... angle
ANL..... annealed
ANTI SQK..... anti squeak
APPROX..... approximately
AR..... as required
ATT..... attachment
AUTO..... automatic
AUX..... auxiliary
BAT..... battery
BO-HD..... binding head
B-HD..... button head
BRG..... bearing
BRK..... brake
BRKT..... bracket
BRS..... brass
BRZ..... bronze
BUSH..... bushing
CARB..... carburetor
CARR..... carrier
CD-PLTD..... cadmium plated
CD-PLTD-STL..... cadmium plated steel
CE..... commutator end
CHK..... check
CLSHFT..... clutch shaft
COL..... column
COMMUT..... commutator
COMPR..... compression, compressor
COMPT..... compartment
CON..... control
CONN..... connector, connection,
 connecting
CR-PLTD..... chromium plated
CR-PLTD-STL..... chromium plated steel
CI..... cast iron
CSK..... countersunk
CSK-HD..... countersunk head
CL-REC-HD..... clutch recess head
CONE-PT..... cone point
CDP..... copper
COP-PLTD..... copperplated
C-PIN..... cotter pin
CPT..... complete

CRES..... corrosion-resistant-steel
CR-REC-HD..... cross recess head
CRE..... corrosion resisting
CRG..... carriage
CRKCASE..... crankcase
CRKSHFT..... crankshaft
CS..... cold squeeze
CTR..... center
CTSHFT..... countershaft
CU..... cubic
CUP-PT..... cup point
CUSH..... cushion
CYL..... cylinder
DBL..... double
DE..... drive end
DEG..... degree
DIA..... diameter
DIAG..... diagram
DIAPH..... diaphragm
DIFF..... differential
DISTR..... distributor
DLD..... drilled
DID-F/C-PIN..... drilled for
 cotter pin
DID-F/LKG-WIRE..... drilled for
 locking wire
DOG-PT..... dog point
DOM..... domestic
DR..... drive
ELECT..... electric
EMERG..... emergency
ENG..... engine
EQUIP..... equipment
EXH..... exhaust
EXP..... export
EXT..... external
EXTN..... extension
FASTNR..... fastener
FIG..... figure
FIL-HD..... fillister head
FIN-NK..... fin neck
F-CSK-HD..... flat countersunk head
F-FIL-HD..... flat fillister head
F-HD..... flat head
F-PT..... flat-point
FITT..... fitting, fittings
FL..... flat
FLEX..... flexible
FLG..... flange
FRT..... front



GENERAL INFORMATION

C. LIST OF ABBREVIATIONS (Con't)

FT feet, foot
FUL fulcrum
FWD forward
GA gauge
GAL gallon
GALV galvanize
GASK gasket
GEN generator
GOV governor
GRD ground
GROM grommet
GUS gusset
HARN harness
HD head
HD heavy duty
HDLS headless
HEX hexagon
HEX-HD hexagon-head
HEX-SOC-HO hexagon socket head
HGE hinge
HP horsepower
HSG housing
HT heat treat
HV heavy
HYD hydraulic
HYDV hydrovac
ID inside diameter
IGN ignition
IH International Harvester
IMPEL impeller
IN inch, inches
INSP inspection
INST instrument
INT internal
INTER intermediate
JUNC unction
KNCKL knuckle
K/PIN King pin
LB pounds
LENTIL-HD lentil head
LGT light
LH left hand
LHD left hand drive
LK ock
LKG locking
LT left
LUB lubrication
LW lockwasher
LWR lower
MACH machine

MANF manifold
MAS CYL master cylinder
MASHFT mainshaft
MATL material
MBR member
MED medium
MIRR mirror
MLDG moulding
MTG mounting
NATL national
NC National Coarse Thread
NF National Fine Thread
NI nickel
NI-PLTD-STL nickel plated steel
NO number
NPN no part number
NPT National Pipe Thread
OC outside circumference
OD outside diameter
OPER operating
OPT optional
OTR outer
OV-HD oval head
OZ ounce
U/S oversize
PAN-HD pan head
PARKERIZED-STL parkerized steel
PC piece
PKG package
PL plain
PLG pillar
PLTD plated
PNL panel
PROG progressive
PROP propeller
PT point
PTO power take-off
RAD radiator
RD round
RD-END round end
RD-HD round head
RD-PT round point
REG regulator
REINF reinforce, reinforcing
RET retainer, retaining
REV reverse
RH right hand
RHD right-hand drive
RIV rivet
RPM revolutions per minute



C. LIST OF ABBREVIATIONS (Con't)

RT..... right
RUNN BD running board
SC screw
SEL..... selector
SER service
SF semi-finished
SHFT shaft
SHK/ABS shock absorber
SHPF shakeproof
SLT slotted
SLT-HD..... slotted head
SLT-BO-HO slotted binding head
SLT-FIL-HD slotted fillister head
SLT-F-HD slotted flat head
SLT-HEX-HD slotted hexagon head
SLT-PAN-HD slotted pan head
SLT-RD-HD..... slotted round head
SMBR side member
SPEC..... special
SPECS specification
SPEEDO..... speedometer
SPG spring
SQ square
SQ-HD square head
SQ-NK square neck
STD standard
STD-HD standard head
STGHT straight
STL steel
STRG..... steering
SUPT support
SW switch
SWVL swivel
SYS system
T..... teeth
TAP tapping
TEMP..... temperature
TERM terminal
THERMO thermostat
THD threads
TIM Timken
TRANS transmission
TR-HD truss head
TRUN..... trunnion
TUBLR..... tubular
UNFIN..... unfinished
UNIV universal
UPR upper
U/S undersize
V..... volt

VAC..... vacuum
VENT ventilator
WB wheel base
WIN..... window
WIR..... wiring
WAGON-BOX-HD wagon box head
W/ with
W/BRZ with bronze
W/HEX with hexagon
W/O..... without
W/S windshield
XMBER crossmember
ZN zinc
ZN-CT zinc coated
ZN-PLTD zinc plated



GENERAL INFORMATION

D. LIST OF GENERAL DESCRIPTIONS AND GROUP LOCATIONS (Con't)

DESCRIPTION	GROUP	DESCRIPTION	GROUP
Absorber, Shock Seat.....	16	Bumper, Front	01
Absorber, Shock (Optional).....	03	Button, Horn	05
Absorber, Shock (Standard).....	02/14	Buzzer, Warning	08
Accelerator, Throttle		Buzzer, Warning Oil	
Control	12	Pressure and Water	
Adapter, Two-Speed Axle.....	14	Temperature	08
Adapter, Trans. Engine	13	Cab	16
Adapter, Speedo Wiring		Cable (See Harness)	
Instl	10	Cable, Speedometer Drive	10
Adapter, Speedo Driven		Camshaft & Related Parts	12
Gear Chart.....	10	Carburetor.....	12
Adjuster, Auto-Slack Repair		Chamber, Air Shift (Axle)	14
Kits, Frt & Rear	04	Chamber, Air Brake	04
Alternator	08	Circuit Breaker	08
Antenna	08	Cleaner, Air	12
Ammeter	08	Clutch	11
Arm, Steering	05	Coil, Ignition	08
Axle, Forward Rear	14	Column, Steering	05
Axle, Front	02	Compression Brake	07
Axle, Rear	14	Compression Release	12
Axle, Rear Rear	14	Compressor, Air	04/12
Battery & Cable Mounting	08	Compressor Drive and Mtg.	
Bearing, Center	06/MT90	(Freon)	16
Bearing, Wheel	17	Compressor, Freon	16
Bell Housing	13	Compressor Strainer (Air).....	04/12
Belt, Drive	12	Condenser, A/C	16
Air Compressor (Standard).....	12	Condenser Core, A/C	16
Air Compressor (Optional)	04	Connectors, 4-Wheel Trailer	04
Fan & Water Pump	12	Connectors, 7-Way Trailer	
Generator (Separate from		Socket and Jumper Cable	04
Fan)	08	Control, Air Rad Shutter	12
Generator (Combination Fan		Control, Auxiliary	
and Generator)	12	Transmission	13
Hub, Fan Drive	12	Control, Fifth Wheel	01
Power Steering Pump	05	Control, Clutch	11
Freon Compressor	16	Control, Heater and A/C	16
Box, Battery	08	Control, Trans Air Shift	13
Box, Tool	16	Control, Trans Retarder	13
Brackets, Auxiliary Springs.....	14	Control, Power Divider	
Brackets, Spring (Optional)	03	Air Suspension	14
Brackets, Spring (Standard).....	02/14	Cooler & Filter, Trans Oil	13
Brake, Exhaust.	07	Cooler, Oil, Coolant Filter	
Brake, Front Driving Axle	02	& Connections	12
Brake, Front Axle	04	Cooler, Trans Remote Mtd	
Brake Mounting, Front	04	Oil Hosing	13
Brake Mounting. Rear	04	Cover, Crkcase & Related	
Brake, Parking	04	Parts	12
Brake, Rear Axle	04	Crankcase & Related Parts	12



GENERAL INFORMATION

D. LIST OF GENERAL DESCRIPTIONS AND GROUP LOCATIONS (Con't)

DESCRIPTION	GROUP	DESCRIPTION	GROUP
Crankshaft & Related Parts	12	Filter, Lube	12
Crossmember, Cab		Filter, Oil (Engine)	12
Mounting	01/12/16	Filter, Oil (Trans)	13
Crossmember & Tie Tube,		Filter, Water	12
Frame	01/08	Flange & Pulley, Frt.	
Crossmember, Rear Axle	14	Mdt. PTO	12
Cylinder, Air Shift	13/14	Flange, Companion	
Cylinder Head & Related		(Axle/Trans)	02/13/14
Parts	12	Flange, Companion	
Declutch, Related Parts,		(Center Bearing)	06
Trans	13	Frames	01
Disconnect, Frt Axle, Trans	13	Frame & Radiator	
Door Assy, Cab	16	Reinforcement	01/12
Distributor	08	Front End Section	09/16
Drive Shaft Parking Brakes	04	Front End Sheet Metal	09
Dryer, Air	04	Gauge, Auxiliary Trans	13
Duct, Heater & Heater A/C	16	Gauge, Air Application	04
Electrical System	08	Gauge, Air Cleaner	
Engine, IH	12	Restriction	12
Engine Shutdown	08	Gauge, Oil Instl	12
Engine Gasket Sets	12	Gauge, Oil Level	12
Engine Mtg	12	Gauge, Oil Pressure	12
Equalizer Beam	03/14	Gauge, Oil Pressure &	
Ether Start Mtg	12	Temp	12
Evaporator, Alcohol	04	Gauge, Oil Pressure &	
Exchanger, Heat (Trans)	13	Water Temp	12
Exhaust System	07	Gauge, Oil Temp	12
Eye, Towing	01	Gauge, Trans Temp	13
Fan Cooling	12	Gauge, Water Temp	12
Fan Belt, Bracket &		Gauge and Filler, Trans	
Pulley Mtg	12	Oil Level	13
Fan Belt, Clutch Drive		Gear, Power Steering	05
& Mtg	12	Gear, Speedometer Drive	13
Fan, Defroster & Mtg	16	Gears, Trans. & Related	
Fan, Modulated, Clutch		Parts	13
Drive	12	Gear, Steering	05
Fan Mtg, Standard	12	Generator	08
Fender Extension Rubber	09	Glad Hand, Aux	04
Fender Mtg	09	Glow Plug, Preheater	12
Filter and Piping, Fuel		Governor, Air Compressor	04
Inj. Pump	12	Governor, Aneroid,	
Filter, Fuel	15	Related Parts	12
Filter, Fuel Final	12	Grille Mtg., Frt. End	09
Filter, Oil Lubefiner	12	Guard, Grille	09
Filter, Fuel Primary	15	Guard, Mud	09
Filter, Fuel Secondary	15	Handle, Grab	16
Filter, Fuel/Water		Harness, Air Dryer	04
Separator	15	Harness, Auto Trans	08/13

GENERAL INFORMATION

D. LIST OF GENERAL DESCRIPTIONS AND GROUP LOCATIONS

<u>DESCRIPTION</u>	<u>GROUP</u>	<u>DESCRIPTION</u>	<u>GROUP</u>
Harness, Backup Light Switch.....	08	Hose...Part Nos. listed are for IH standard hose applications. If Stratoflex hose code 04758 is required, the prefix letter N must replace the A. If Aeroquip hose code 04759 is required, the prefix letter L must replace the A. Example A100280000 would become N100280000 for code 04758 or L100280000 for code 04759. (See MT-90 for parts required)	
Harness, Blend Air Heater.....	08		
Harness, Cab, Wiring	08		
Harness, Engine Jake Brake	07		
Harness, Engine, Wiring	12		
Harness, Engine W/air Starter	12		
Harness, Ether Start	12		
Harness, Frt Antilock	04		
Harness, Frt Bumper Mtd Headlights	08		
Harness, Front End	08		
Harness, Fuel Filter		Hose, Coiled (Semi-Trailer).....	04
Heater Racor	15	Hoses, Power Steering	
Harness, Fuel Pressure Gauge	08	Fittings	05
Harness, Glow Plug	08	Hourmeter	10
Harness, Power Supply & Power Source	08	Housing, Ctr Brg	06
Harness, Rear Antilock	04	Housing, Shift Bar (Trans.)	13
Harness, Oil Temp Sender	12	Hubodometer	10
Harness, Stop Light Switch	04	Hub, Wheel	17
Harness, Stop, Tail and Turn Light	08	I-Beam, Front Axle	02
Harness, Axle Temp Gauge	14	Indicator, Coolant Level	12
Harness, Trailer Socket 6 & 7 Way	08	Injection, Fuel, Linkage.....	12
Harness, Trans Temp Sender	13	Insulation, Cab	16
Harness, 2 Speed Axle	14	Insulator, Oil Pan	12
Head, Hydraulic, Inject. Pump	12	Intercooler, Mtg. & Piping ...	12
Headliner, Cab	16	Knuckle, Steering	02
Heater	16	Latch, Hood	09
Heater & Air Conditioner	16	Latch, Hood, Rear	16
Heater, Water	12	Lever, Control, Trans	13
Hitch, Trailer	01	Light, Cab Roof	08
Hood, Fenders, Splash Panels & Grille	09	Light, Clearance	08
Hook, Pintle	01	Light, Fifth Wheel	08
Hook, Towing Front & Rear	01	Light, Frt Turn Signal & Parking	08
Horn & Mtg. (Air)	08	Light, Head	08
Horn & Mtg. (Dual Elec)	08	Light, Spotlight Mounting	08
		Light, Stop and Tail Mtg	01
		Light, Stop, Tail & Backup Light	08
		Light, Transfer Case Warning	13
		Light, Warning Frt Axle	08

GENERAL INFORMATION

D. LIST OF GENERAL DESCRIPTIONS AND GROUP LOCATIONS

DESCRIPTION	GROUP	DESCRIPTION	GROUP
Light, Warning (Oil Pressure & Water Temp.)	08	Pump Adapter, Fuel	12
Light, Warning (Parking Brake)	08	Pump, Fuel Submerged	15
Lighting, Instrument Panel	08	Pump, Injection	12
Link, Drag	05	Pump, Oil, Inlet Pipe	42
Link, Steering Relay	05	Pump, Power Steering	05
Manifold, Exhaust and Intake	12	Pump, Water, Thermostat & Fan Drive	12
Mats, Floor	16	Pyrometer, Instl	07
Mirror, Rear View	16	Radiator Assy	12
Miscellaneous Parts	10	Radiator Mtg. & Piping	12
Motor, Starting (Elec.)	08	Radio, CB W/Antenna	08
Motor, Starting (Air)	12	Radio Mtg. & Piping	12
Motor, Elec. Shift	14	Radio Mtg. AM-FM W/Fader	08
Motor, Windshield Wiper	16	Radio Mtg. AM-FM Stereo W/8 Track Tape, Cassette	08
Mounting, Cab	16	Receiver Unit, Oil Pressure	08
Mounting, Steering Column	05	Receiver Unit, Temperature Gauge	08
Muffler and Tailpipe	07	Regulator, Window Electric	16
Muffler Support Brackets	07	Reinforcement, Frame Chart	01
Nozzle and Nozzle Holder	12	Reservoir, Power Steering Mtg.	05
Pan, Oil	12	Retainer, Rear Brg	13
Panel, Cab Back	16	Retarder Control	13
Panel, Cab Dash	16	Rim, Side Ring Disc	17
Panel, Instrument	16	Rim, Side Ring & Spacer Cast	17
Panel, Cab Roof & Cowl	16	Rim, Tubeless Tires Cast	17
Panel, Splash	09	Rod, Tie Front Axle	02
Panel, Side	16	Rod, Torque (Optional)	03
Panel, Cab Underbody	16	Rod, Torque (Standard)	02/14
Pin, Maneuvering	01	Rod, Transverse Torque Instl	14
Pipe, Exhaust	07	Seal, Strg Col	16
Pipe, Tail	07	Seat, Driver	16
Pistons and Connecting Rods	12	Seat, Passenger	16
Plate, Deck	01	Sending Unit, Fuel Gauge	15
Plate, Capacity	10	Sender Unit, Oil Pressure	08
Plate, Rear Axle Skid	14	Sender Unit, Temperature Gauge	08
Power Divider	14	Shafts, Rear Axle	14
Power Take Off	13	Shell, Radiator	09
Preheater, Glow Plug	12	Shield, Sound	12
Propeller Shafts	MT90	Shield, Splash	09
Product Graphic - Various Groups		Shift, Rear Axle Electric ..	14
Propeller Shaft Balancing Weights and Clamps	MT900	Shutoff, Fuel (Emergency)	08
Product Graphic, Decals. etc	10	Shutter, Radiator	12
Product Graphics Instl	13		
Pulley, Idler Belt	12		

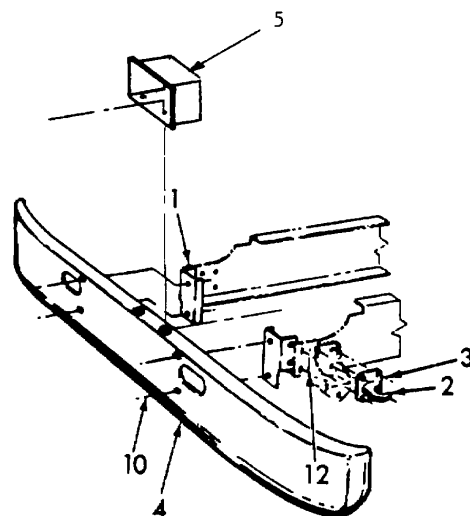
GENERAL INFORMATION

D. LIST OF GENERAL DESCRIPTIONS AND GROUP LOCATIONS

<u>DESCRIPTION</u>	<u>GROUP</u>	<u>DESCRIPTION</u>	<u>GROUP</u>
Shutter Air Control & Hosing	12	Tire Carrier	01
Sidemember Chart.....	01	Tools	10
Silencer, Oil Pan W/Frt		Transfer Case	13
Sump Oil Pan	12	Transmissions	13
Silencer, Oil Pan W/Rr		Transmission, Auxiliary	13
Sump Oil Pan	12	Transmission Mounting	13
Socket, Trailer Mtg	08	Transmission Range & Reduction	13
Solenoid, Injection Pump	12	Trim Cab, Interior ..	16
Speedometer	10	Turbocharger	12
Speedometer, Electric	10	Valve, Air Supply	04
Speedometer, Electric Engler Programmable Head	10	Valve, Auto Drain	14/04
Speedometer Sensor	04	Valve, Auto Frt Whl Limiting Mtg ..	04
Springs, Auxiliary	14	Valve, Brake & Treadle ..	04
Springs, Front (Optional)	03	Valve, Brake Pressure	04
Springs, Front (Standard)	02/14	Valve, Control ..	04
Spring, Pins & Brkt		Valve, Control & Warning Light	14
Instl Frt	02	Valve, Double Check	04
Spring, Frt W/Rubber Aux	03	Valve, Drain, Heater A/C	16
Step Plate, Door	16	Valve, Frt Whl Limiting Cntl Mtg ..	04
Step, Aux	09	Valve, Hand Control ..	04
Step, Fuel Tank Mtd	15	Valve, Limiting	04
Sunshade, Exterior	16	Valve, Trans Modulator ..	13
Suspension, Air Ride	14	Valve, Quick Release	04/14
Suspension, Mtg & Xmbrs	14	Valve, Safety Axle	14
Suspension, Overload Cushion Mtg	14	Valve, Sludge Remover	04
Suspension, R Type Instl	14	Valve, Spring Brk Control	04
Suspension, Rear Sprg, Xmbr & Mtg	14	Valve, Starting Fuel Release	12
Suspension, Rear Sprgs & Saddle	14	Valve, Tractor Parking Brake ...	04
Suspension, Rear Sprgs, Equalizer Beams & Mtg	14	Valve, Trans Safety	13
Switch, Buffer Jake Brake	07	Valve, Trans Air Control ..	13
Switch, Dome Light (Door) ..	16	Vent, Air	16
Switch, Fuel Gauge	08	Vent, Crankcase	12
Switch, Parallel Series	08	Ventilator, Roof ...	16
Switch, Stop Light	04	Visor, Sun (Interior) ..	16
Switch, Windshield Wiper ..	16	Wheels	17
Tachograph	10	Wheel, Steering	05
Tachometer	10	Window, Rear, Dbl Sliding W/Window Guard	16
Tachometer Drive & Related Pts	10	Window, Windshield and Rear	16
Tank, Air	04	Wiper, Windshield	16
Tank, Fuel	15	Wire, Bowden Shutoff	12
Tank Vent Pipes, Fuel	15		
Tanks and Piping, Fuel.....	15		



FIG. 01-002
BUMPER, FRT



TRAILER TOWER
80x97.5 BBC

PRINTED IN THE UNITED STATES OF AMERICA



FRAME

GROUP 01

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 01-002							
		BUMPER, FRT							
1		BRACKET ASSY, BUMPER MTG							
1		STANDARD							
1	573941C1	LEFT	1						
1	573943C1	RIGHT	1						
2		HOOK, TOWING							
2	473 210 C1	LEFT	1						
2	492 825 C1	RIGHT	1						
3		BOLT FLG HEX HD							
3	414 056 C1	1/2-20 UNRF X 2-1/2	4						
3	414 057 C1	1/2-20 UNRF X 2-3/4	4						
3	414 087 C1	NUT, FLG HEX HD 1/2-20 UNF	4						
4	KFT010	BUMPER, FRT (59556)							
4		1600 THRU 1900 MODELS							
4		FULL WIDTH -STD-	1						
5	605-500	Light, Quartz (78977)	1						
		See Figure 7 Page 1444							
		for Detailed Breakdown							
10		BOLT, HEX HD							
10	22 741 R1	1/2-13 UNC X 1-1/4	4						
10	25 710 R1	WASHER, HARDENED	4						
10	24 664 R1	WASHER, HARDENED SPL	4						
		SST 305							
12	414 052 C1	BOLT, FLG HEX HD 1/2-20	4						
		UNRF X 1-1/4							
12	414 087 C1	NUT, FLG HEX HD 1/2-20 UNF	4						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

1027

REVISION

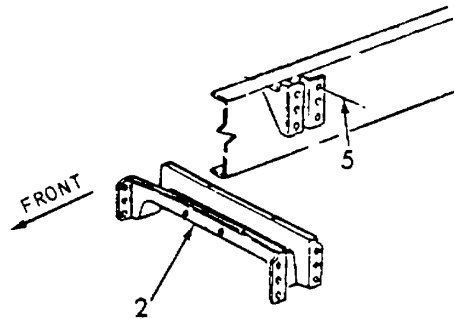
01-002

PAGE 2



FIG. 01-004

CROSSMEMBER, INTERMEDIATE



GROUP 01

MT-145
FRAME

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 01-004 CROSSMEMBER, INTERMEDIATE									
21		CROSSMEMBER									
21	473 323 C3	W/O AUX TRANS			1						
51		BOLT, FLG HEX-HD									
51	4T4 053 C1	1/2-20 UNRF X 1-3/4			1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

01-004

REVISION 01

1029

PAGE



FIG. 01-011

SIDEMEMBER, CHART

MODEL. 1600 THRU 1900 4 X 4
5/16" X 3-1/16" X 10-1/8" STEEL

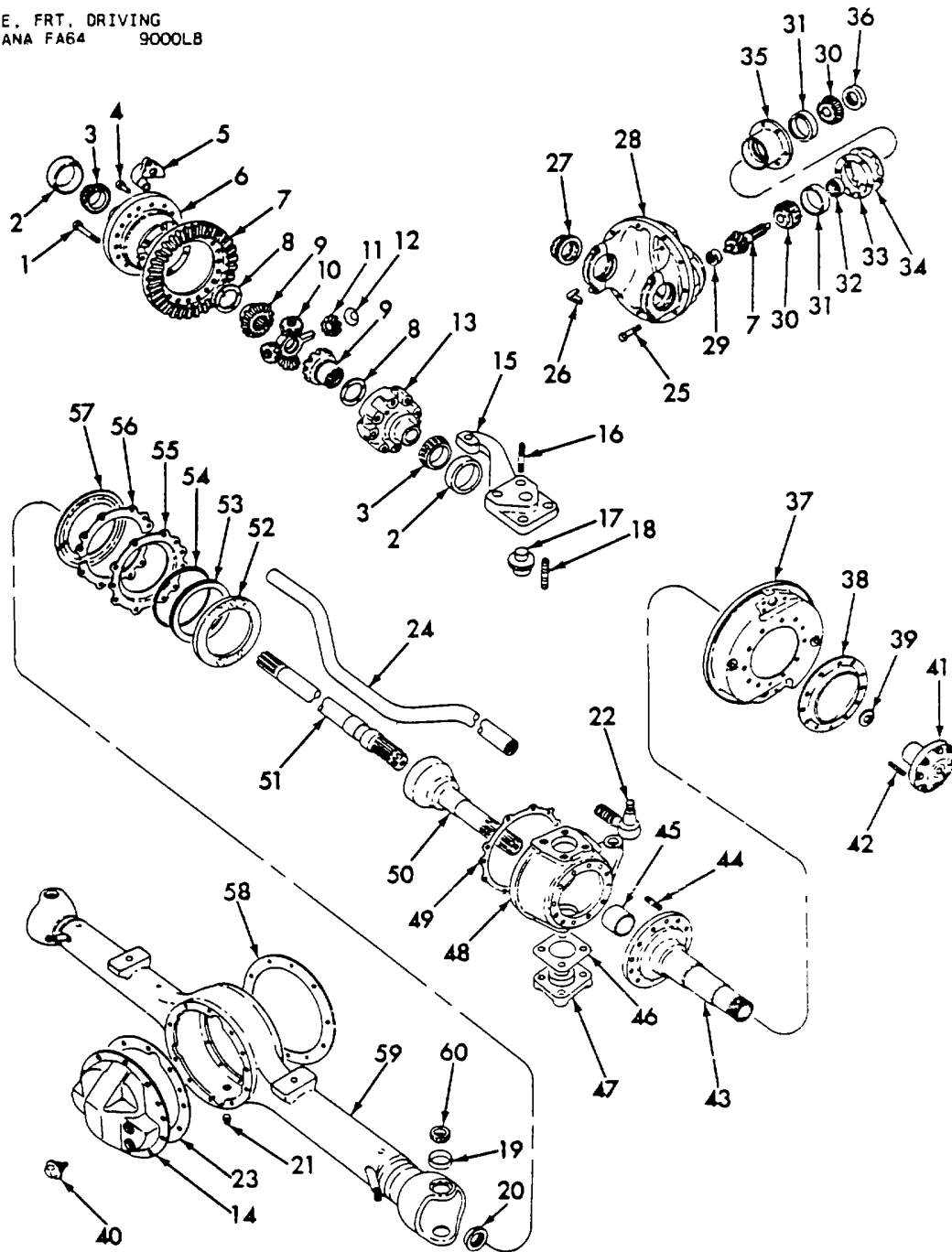
PRODUCTION NO.	LENGTH	SIDE	W.B. AND A.F.	SERVICE NO.
491922C3	243.8	L	152"W/63AF	491754C2
491923C3	243.8	R	152"W/63AF	491755C2

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 02-001

AXLE, FRT. DRIVING
DANA FA64 9000LB



PRINTED IN THE UNITED STATES OF AMERICA

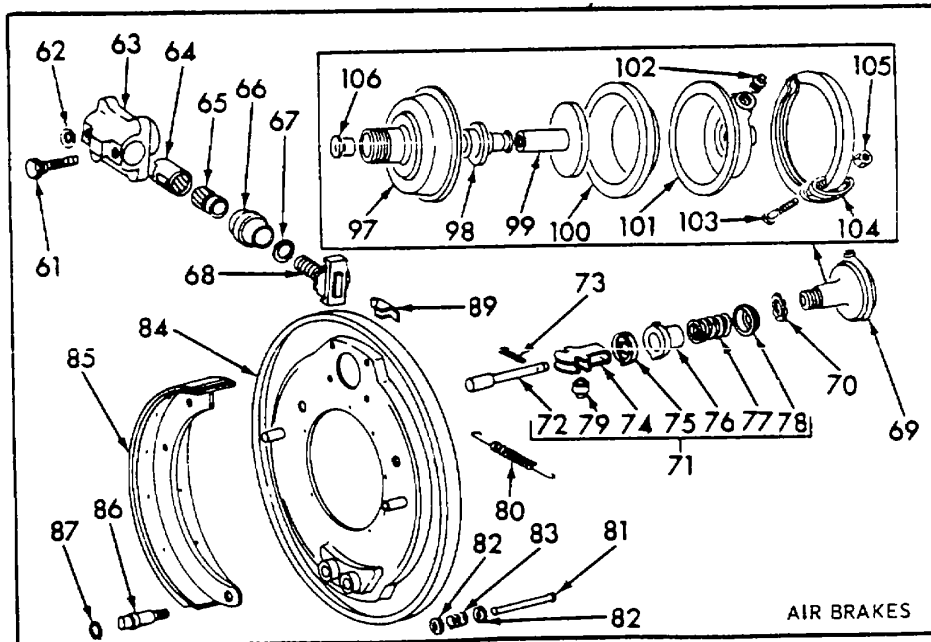
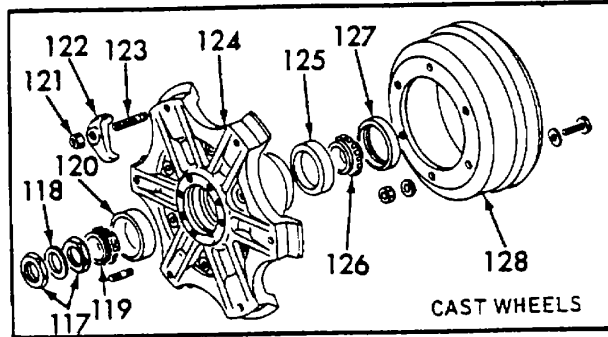
1031

REVISION 01

02-001



FIG. 02-001

AXLE, FRT, DRIVING
DANA FA64 9000LB

PRINTED IN THE UNITED STATES OF AMERICA

MT-145
FRONT AXLE



GROUP 01

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 02-001				63	482 436 C91	R/S A73299S4543		2	
		AXLE, FRT, DRIVING				63	24 839 R1	HOUSING, ACTUATOR		8	
		DANA FA64, 78 9000LB				63	3/8 R	BOLT, HEX-HD 3/8NC		8	
		AND FA81 7500LB				64	487 477 C1	WASHER, LK 3/8 REG		4	
						65	487 479 C1	R/S 2297C2863		4	
43	503 086 C91	DAN 097SP101		2		66	487 478 C1	PLUNGER, BRK SHOE ADJ		4	
		DAN 097SP101X				67	487 471 C1	R/S 2297N2874		4	
44	503 077 C1	SPINDLE, W/BUSH		24		68	487 480 C91	SLEEVE, BRK SHOE ADJ GEAR		4	
44	19 632 R1	STUD, SPINDLE TO KNCKL		24		69		R/S A31705M221		4	
		NUT, LK SPINDLE STUD				70	258 009 C2	SEAL, BRK SHOE PLUNGER		2	
		7/16NF				71	340 210 C91	R/S 1199C3712		2	
45	504 870 C1	BUSHING, SPINDLE		2		72		R/S A2297V2882		4	
46	473 001 C1	DAN H2246B		AR		73	107 762	SCREW, BRK SHOE ADJ		2	
47		SHIM, 005 THICK				74	340 216 C1	CHAMBER, BRK		2	
47	503 087 C1	CAP, KING PIN		1		75	340 215 C1	USE COMPONENTS		2	
47	503 095 C91	DAN H53846		1		76	340 214 C1	ITEM NOS 97 THRU 106		2	
47	503 087 C1	LOWER LT, LWR RT		1		77	340 217 C1	R/S 1727N40		2	
47	503 087 C1	UPPER RT		1		78	340 212 C1	NUT, SPANNER		2	
47	503 087 C1	AIR BPK		1		79	258 027 C1	R/S A1247H112		4	
48		DAN H53846		1		80	482 437 C1	R/S A2747H112		2	
48	503 089 C1	HYDRAULIC BRK		1		81	210 051 H1	WEDGE, BRK		4	
48	503 089 C1	KNUCKLE, STRG		1		82	264 624 C1	WEDGE		2	
48	503 090 C1	DAN H53963		1		83	264 623 C1	NOT SERVICED		2	
48	503 090 C1	LEFT		1		84	482 435 C91	SEPARATELY		2	
48	25 653 R1	DAN H53964		24		84	498 097 C1	PIN, COTTER 3/32 X 5/8		4	
48	473 080 C1	RIGHT		4		85	482 433 C91	R/S 1718P198		4	
49	473 016 C1	BOLT, HEX-HD 5/16NC X 1/2		2		86	482 438 C1	CAGE, ROLLER		4	
50	503 092 C91	OWEL, TAPER		2		87	152 450 R1	R/S 1729X336		4	
50	473 014 C1	DAN H10153		2		89	264 629 C1	WASHER, WEDGE RET		4	
		GASKET, RET TO KNCKL						R/S 1705W231		4	
		SHAFT, W/JOINT AXLE OTR						SEAL WEDGE		4	
		DAN H130169						R/S 2758Y181		4	
		RING, SNAP						SPRING, WEDGE		4	
		SHAFT INNER AXLE						R/S 1729W335		4	
52	503 083 C1	DAN H52848		2				RETAINER WEDGE		4	
53	503 082 C1	SEAL, DUST		2				R/S 1779F162		4	
54	503 079 C1	DAN H52847		2				ROLLER WEDGE		4	
55	503 081 C1	SEAL FRT AXLE OIL		2				R/S 2258T566		4	
56	503 080 C1	DAN H52843		4				SPRING, SHOE RETURN		4	
57	503 091 C1	SPRING, OIL SEAL		2				R/S 1779M377		4	
58	69 177 R1	DAN H52846		1				PIN, HOLD DOWN		4	
59	503 088 C2	RETAINER, OIL SEAL		1				R/S 1807A1		4	
		DAN H53973		1				CUP, ANTI-RATTLE SPG		4	
		RETAINER, HALF RING		1				R/S 2858M91		4	
		DAN 097CJ109X		1				SPRING, ANTI-RATTLE		4	
		DAN 097CJ111X		1				R/S A3236M2067		4	
		HOUSING, AXLE		1				PLATE BACKING		4	
59	968 936 R91	EAT 25110		1				DAN H506836		4	
59	25 961 DA	BREATHER		2				GROMMET, BACKING PLATE		4	
59	143 993	FITTING, LUB 1/8 STGHT		1				R/S A13222V1088		4	
60	503 098 C91	PLUG, GREASE 3/8 SLT		4				SHOE, W/LINING BRK		4	
61	455 305 C1	BEARING, FRT AXLE CONE		4				R/S 1259B262		4	
62	258 268 C1	R/S A1199Z3432		4				PIN, SHOE ANCHOR		4	
		PAWL, ADJ GEAR GUIDE						R/S NL1121		4	
		R/S 17298262						NUT ANCHOR PIN		4	
		GASKET, ADJ GEAR GUIDE						RING RET		4	
								R/S 1707A1		4	
								COVER, ADJ SLOT		4	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

1033

REVISION 01

02-001

GROUP 02

MT-145
FRONT AXLE

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 02-001				63	482 436 C91	R/S A73299S4543		2	
		AXLE, FRT, DRIVING				63	24 839 R1	HOUSING, ACTUATOR		8	
		DANA FA64, 78 9000LB				63	3/8 R	BOLT, HEX-HD 3/8NC		8	
		AND FA81 7500LB				64	487 477 C1	WASHER, LK 3/8 REG		4	
						65	487 479 C1	R/S 2297C2863		4	
						66	487 478 C1	PLUNGER, BRK SHOE ADJ		4	
43	503 086 C91	DAN 097SP101		2		67	487 471 C1	R/S 2297N2874		4	
		DAN 097SP101X				68	487 480 C91	SLEEVE, BRK SHOE ADJ GEAR		4	
44	503 077 C1	SPINDLE, W/BUSH		24		69		R/S A3170SM221		4	
44	19 632 R1	STUD, SPINDLE TO KNCKL		24		70	258 009 C2	SEAL, BRK SHOE PLUNGER		4	
		NUT, LK SPINDLE STUD				71	340 210 C91	R/S 1199C3712		2	
		7/16NF				72		R/S A2297V2882		2	
45	504 870 C1	BUSHING, SPINDLE		2		73	107 762	SCREW, BRK SHOE ADJ		2	
46	473 001 C1	DAN H2246B		AR		74	340 216 C1	CHAMBER, BRK		2	
		SHIM, .005 THICK				75	340 215 C1	USE COMPONENTS			
47		CAP, KING PIN				76	340 214 C1	ITEM NOS 97 THRU 106			
47	503 087 C1	DAN H53846		1		77	340 217 C1	R/S 1727N40		2	
		LOWER LT, LWR RT				78	340 212 C1	NUT, SPANNER		2	
47	503 095 C91	UPPER RT		1		79	258 027 C1	R/S A1247H112		2	
47	503 087 C1	AIR BRK		1		80	482 437 C1	R/S A2747H112		2	
		DAN H53846		1		81	210 051 H1	WEDGE, BRK		2	
		HYDRAULIC BRK				82	264 624 C1	WEDGE			
48		KNUCKLE, STRG				83	264 623 C1	NOT SERVICED			
48	503 089 C1	DAN H53963		1		84	482 435 C91	SEPARATELY			
		LEFT				85	482 433 C91	PIN, COTTER 3/32 X 5/8		2	
48	503 090 C1	DAN H53964		1		86	9412 368	R/S 1718P198		2	
		RIGHT				87	152 450 R1	CAGE, ROLLER		2	
48	25 653 R1	BOLT, HEX-HD 5/16NC X 1/2		24		89	264 629 C1	R/S 1729X336		2	
48	473 080 C1	DOWEL, TAPER		4				WASHER, WEDGE RET		2	
49	473 016 C1	DAN H10153		2				R/S 1705W231		2	
		GASKET, RET TO KNCKL						SEAL WEDGE		2	
50	503 092 C91	SHAFT, W/JOINT AXLE OTR						R/S 2758Y181		2	
50	473 014 C1	DAN H130169		2				SPRING, WEDGE		2	
		RING, SNAP						R/S 1729W335		2	
51		SHAFT INNER AXLE						RETAINER WEDGE		4	
								R/S 1779F162		2	
								ROLLER WEDGE		2	
								R/S 2258T566		4	
								SPRING, SHOE RETURN		2	
								R/S 1779M377		4	
								PIN, HOLD DOWN		2	
								R/S 1807A1		4	
								CUP, ANTI-RATTLE SPG		2	
52	503 083 C1	DAN H52848		2				R/S 2858M91		2	
		SEAL, DUST						SPRING, ANTI-RATTLE		4	
53	503 082 C1	DAN H52847		2				R/S A3236M2067		2	
		SEAL, FRT AXLE OIL						PLATE BACKING		4	
54	503 079 C1	DAN H52843		2				DAN H506836		4	
		SPRING, OIL SEAL						GROMMET, BACKING PLATE		4	
55	503 081 C1	DAN H52846		2				R/S A13222V1088		4	
		RETAINER, OIL SEAL						SHOE, W/LINING BRK		4	
56	503 080 C1	DAN H52844		4				R/S 12598262		4	
		RETAINER, HALF RING						PIN, SHOE ANCHOR		4	
57	503 091 C1	DAN H53973		2				R/S NL1121		4	
		RETAINER, SPLIT RING						NUT ANCHOR PIN		4	
58	69 177 R1	GASKET, DIFF CARR TO HSG		1				RING RET		4	
59	503 088 C2	DAN 097CJ109X		1				R/S 1707A1		8	
		DAN 097CJ111X						COVER, ADJ SLOT			
		HOUSING, AXLE									
59	968 936 R91	EAT 25110		1							
		BREATHER									
59	25 961 DA	FITTING, LUB 1/8 STGHT		2							
59	143 993	PLUG, GREASE 3/8 SLT		1							
60	503 098 C91	BEARING, FRT AXLE CONE		4							
61	455 305 C1	R/S A1199Z3432		4							
		PAWL, ADJ GEAR GUIDE									
62	258 268 C1	R/S 1729B262		4							
		GASKET, ADJ GEAR GUIDE									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



MT-145
FRONT AXLE

GROUP 02

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 02-001			119	79 013 R91	BEARING, CONE OTR	2	
		AXLE, FRT, DRIVING			120	ST 856	BEARING, CUP OTR	2	
		DANA FA64, >9000LB			121	54 495 R2	NUT, RIM CLAMP STUD	12	
					122	452 010 C1	CLAMP, RIM	12	
					123	54 494 R1	EAT 44723	12	
							STUD, RIM CLAMP		
					124	465 525 C91	WHEEL, W/CUPS -W/STUDS-	2	
							-6 SPOKE-		
					125	13 273 D	DAN 550207	2	
							BEARING, CUP INNER		
					126	13 277 DC	BEARING, CONE INNER	2	
					127	402 856 C1	SEAL, OIL	2	
					128		DRUM, BRK		
					128	472 278 C1	DAN H52021	2	
							CODE 02064		
					128	465 526 C1	DAN H49517	2	
							CODES 02078, 02081		
					128	5/8X 2-1/4N	BOLT, HEX-HD 5/8NF 2-1/4	12	
					128	223 740	BOLT, HEX-HD 5/8NF X 2-1/2	12	
					128	274 639	NUT, HEX LK 5/8NF	12	
					128	476 108 C1	SLINGER, EXCITER RING	2	

97		PLATE	4	
		NOT SERVICED		
		SEPARATELY		
98	356 113 C1	BOOT, PUSH ROD	4	
99	571 282 C1	ROD, PUSH	4	
100	871 929 R1	DIAPHRAM, CHAMBER	4	
101		PLATE	4	
		NOT SERVICED		
		SEPARATELY		
102	444 624	PLUG, PIPE 1/4	4	
103	266 287 C1	R/S 15X725	4	
		BOLT, HEX-HD 5/16NF X 2		
104	187 731 R92	CLAMP, BRK CHAMBER	4	
105	893 060 C1	NUT, HEX 5/16NF	4	
106	356 114 C1	GUIDE, PUSH ROD	4	

117	473 015 C1	NUT, BRG ADJ	4	
118	470 422 C1	WASHER, BRG ADJ NUT	4	

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

1035

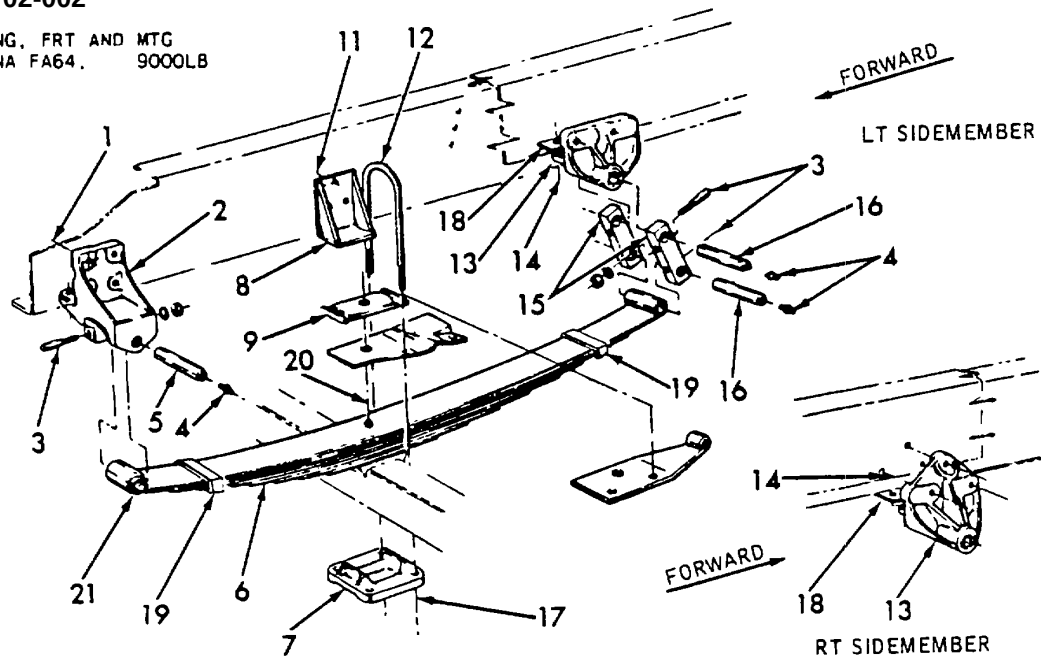


MT-145
FRONT AXLE

GROUP 02

FIG. 02-002

SPRING, FRT AND MTC
DANA FA64, 9000LB



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	414 053 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X 1-3/4	4		6	572 361 C1	LEAF, NO 2		
1	414 054 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X 2 0	8		6	572 362 C1	LEAF, NO 3		11
1	414 087 C1	NUT, FLG HEX LOCK 1/2-20UNF	12						
2	484 081 C1	BRACKET, FRT SPG FRT- LT W/O FRAME EXT	1	G	7	484 492 C1	PLATE, U-BOLT FRT AXLE RT	1	
					7	485 025 C1	PLATE, U-BOLT FRT AXLE LT	1	
					8	484 203 C1	STOP, AXLE ASSY LT	1	
					8	484 205 C1	STOP, AXLE RT	1	
					9	469 893 C2	SEAT, FRT SPRING U-BOLT	2	
2	484 083 C1	BRACKET, FRT SPG FRT- RT W/O FRAME EXT W/ 01636	1	G	11	24 861 R1	BOLT, HEX HD 1/2-13 UNC X 1-1/4 W/O REINF	6	
3	25 709 R1	WASHER HARDENED 3/8	10		11	9412 230	NUT, HEX LOCK 1/2-13 UNC	6	
3	441 246 C1	KEY DRAW	10		12	465 914 C11	U-BOLT, 3/4 X 12 IN LG	4	
3	9413 979	NUT, HEX LOCK 3/8-16 UNC	10		13	484 086 C91	BRACKET, FRT SPG RR LT W/O REINF 4X4 & 6X6	1	
4	109 461	DAN 5001682 FITTING, LUBRICATION 1/8-27 PT	6						
5	468 705 C2	PIN, FRT SPR, FRT BRKT	2		13	484 090 C91	BRACKET, FRT SPG RR RT W/O REINF 4X4 & 6X6 W/REINF 4X4	1	
6		SPRING ASSY FRT 9000LB							
6	572 359 C91	CHASSIS BUILT 1-29-81 AN			14	414 054 C1	BOLT FLG HEX HD 1/2-20 UNRF X 2 0		
6	572 360 C1	LATER LEAF, W/BUSH NO 1	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

1036

REVISION 01

02-002

MT-145
FRONT AXLE



GROUP 02

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 02-002							
		SPRING, FRT AND MTG							
		DANA FA64. 9000LB							
14	414 087 C1	NUT, FLG HEX LOCK 1/2-20	9						
		UNF							
15	468 699 C1	SHACKLE, SPG	4						
16	468 706 C2	PIN, FRT SPG RR SHACKLE	4						
17	416 743 C1	NUT, FLG HEX LOCK 3/4-16	8						
		UNF							
19	899 209 R11	CLIP, SPG	6						
20	268 223 C1	BOLT, CENTER	2						
20	7/16 X	NUT, CENTER BOLT	2						
21	472 479 C1	BUSHING, SPG EYE	4						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

02-002

REVISION 01

1037



MT-145
FRONT AXLE

GROUP 02

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 02-003									
		FLANGES									
	200 991 R11	EAT 50615 FLANGE, COMPANION W/ 02064,									
	54 554 H	EAT 19209									
	204 138 R1	SLINGER, COMPANION FLANGE									
		DAN 39429		2							
	25 525 R1	U-BOLT, TRUNNION									
		DAN 5003714		4							
	7/16	NUT, 7/16NF PHC TYPE 8									
	R	WASHER, LK 7/16 REGULAR		AR							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

1038

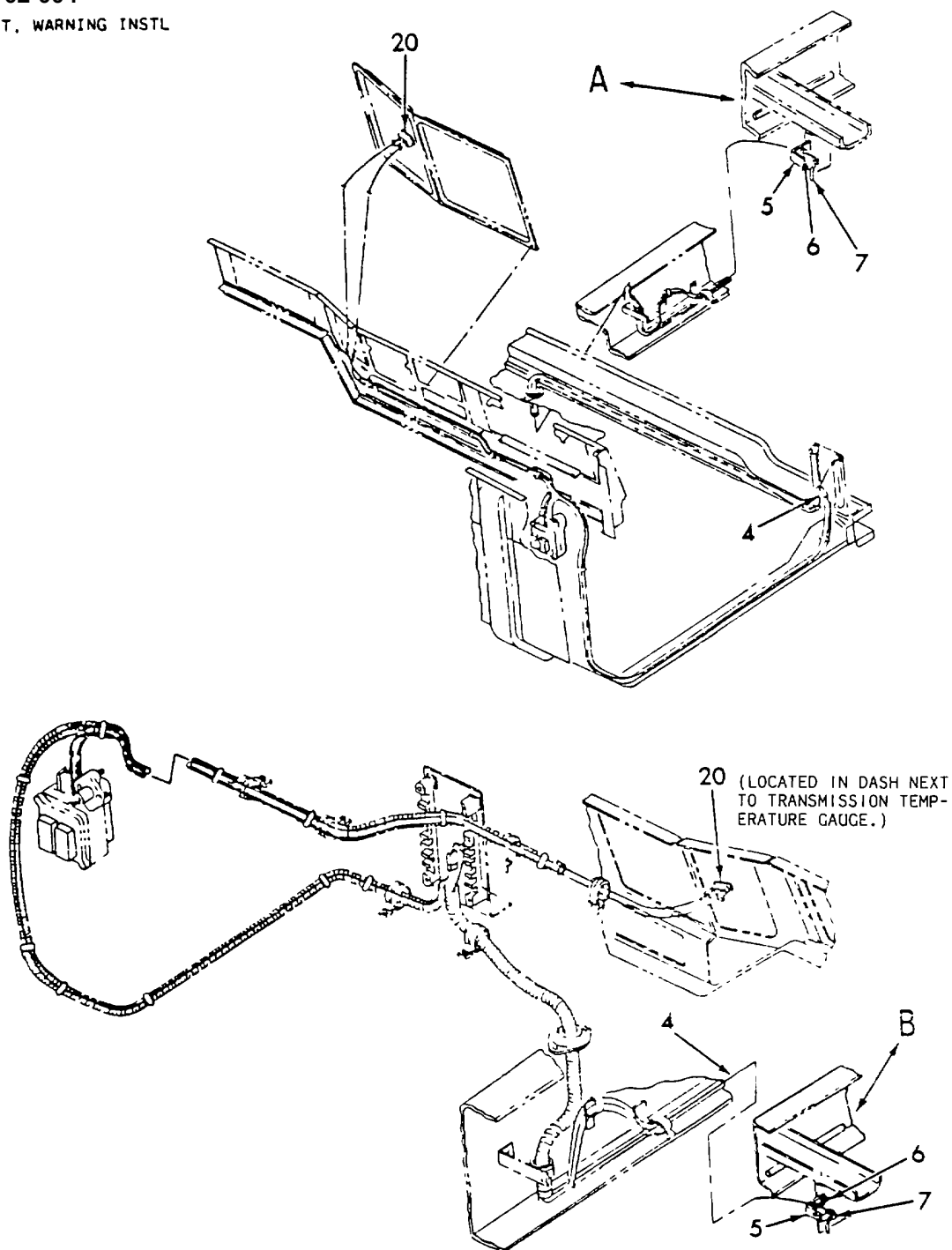
REVISION 01

02-003



FIG. 02-004

LIGHT, WARNING INSTL



PRINTED IN THE UNITED STATES OF AMERICA

1039

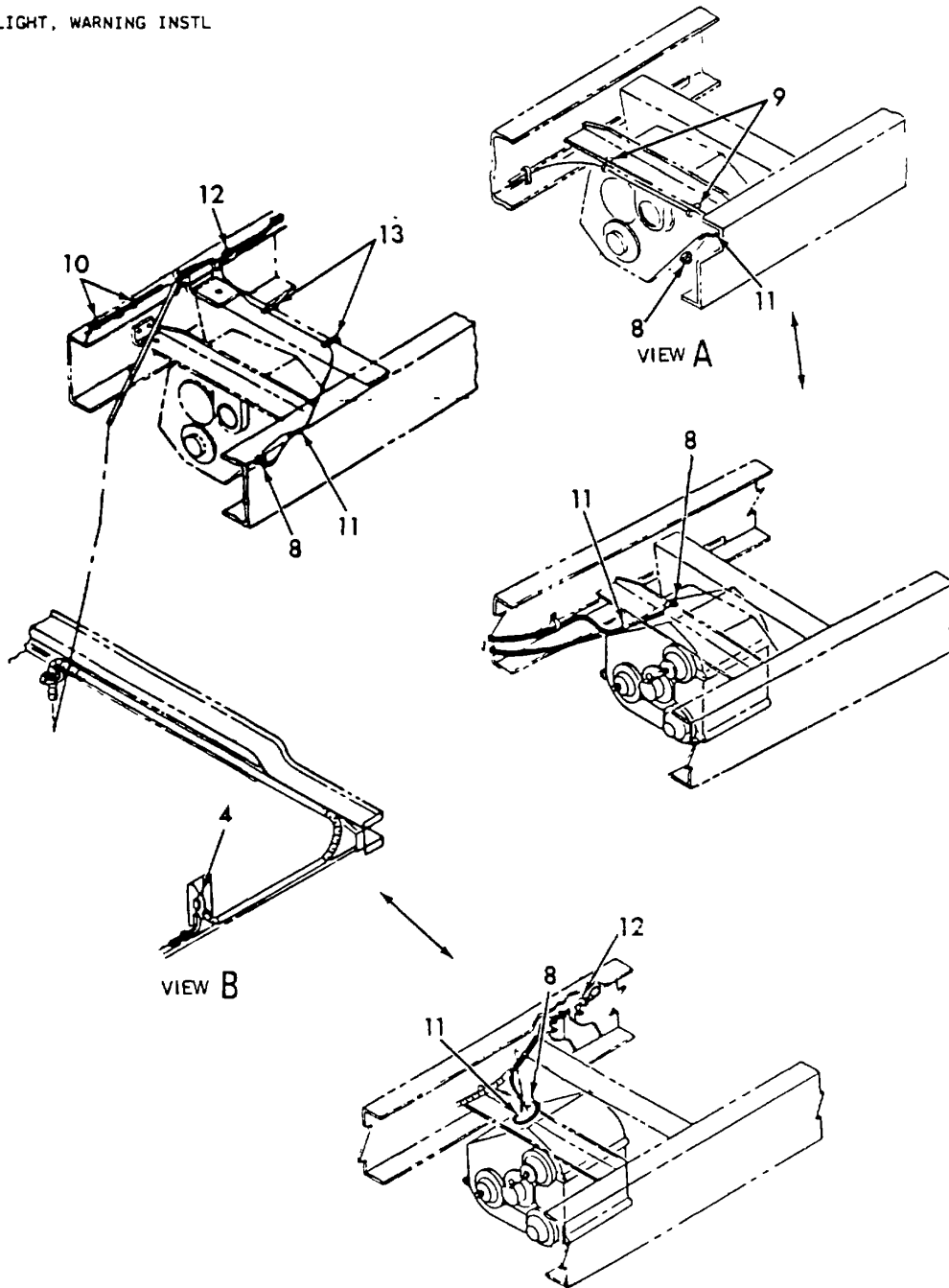
REVISION 01

02-004



FIG. 02-004

LIGHT, WARNING INSTL



PRINTED IN THE UNITED STATES OF AMERICA

MT-145
ENGINES



GROUP 02

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 02-004									
		LIGHT, WARNING INSTL									
4		CABLE		1							
		MAKE LOCALLY									
5	482 538 C1	BRACKET, FRT AXLE WARNING	M	1							
		LT SW									
5	25 708 R1	WASHER, FL 5/16	M	2							
5	25 751 R1	BOLT, HEX-HD 5/16-18UNC X	M	2							
		1-1/4 IN									
5	9413 977	NUT, LK HEX 5/16-18UNC	M	2							
6	299 401 C1	CLAMP	M	1							
6	25 222 R1	BOLT, HEX-HD 1/4-20UNC X	M	1							
		3/4 IN									
6	26 110 R1	NUT, LK HEX 1/4-20UNC	M	1							
7	1997 901	SWITCH, LGT, MECHANICAL	M	1							
		STOP									
7	160 046	SCREW, MACH PAN-HD-CR-REC	M	2							
		NO 10-32UNF X 1/2 IN.									
7	3/16 R	WASHER, LK NO 10	M	2							
8	461 778 C1	SWITCH, FRT AXLE WARNING		1							
		LGT									
9	299 400 C1	CLAMP	N	2							
9	9413 979	NUT, LK HEX 3/8-16UNC	N	2							
9	24 839 R1	BOLT, HEX-HD 3/8-16UNC X	N	2							
		3/4 IN									
10	289 862 C1	STRAP, CABLE LK	X	2							
11	299 401 C1	CLAMP	N	1							
12	289 862 C1	STRAP, CABLE LK	X	1							
13	85 059 R1	CLIP, FASTNR	X	2							
20	471 418 C1	LIGHT		1							
20	471 418 C1	NUT, SPEED	AR								

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

02-004

PAGE 3

1041

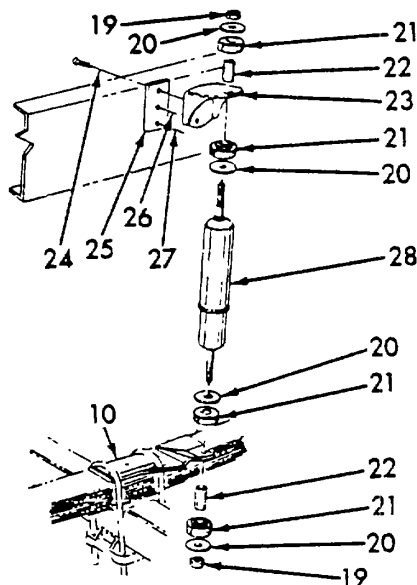
MT-145
CHASSIS SPRINGS

GROUP 03



FIG. 03-006

SHOCK ABSORBER, INSTL
IH FA78



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX
10	579 065 C1	BRACKET ASSY, SHOCK ABSORBER, LOWER LEFT RHD	1						
10	579 067 C1	BRACKET ASSY, SHOCK ABSORBER, LOWER RIGHT RHD	1						
19	414 087 C1	NUT, FLG HEX LOCK 1/2-20UNF	AR						
20	533 388 C1	WASHER, FLAT 17/32 ID X 2-1/4 OD X 182 THK	AR						
21	472 368 C1	BUSHING, SHOCK ABSORBER	AR						
22	617 605 R1	SPACER, PIPE 17/32 ID X 3/4 OD X 1-1/2 LG	AR						
23	471 876 C1	BRACKET, SHOCK ABSORBER UPPER	2						
24	431 309 C1	SCREW, FLAT HD 1/2-13 X 1-1/2	2						
24	9412 230	NUT, HEX LOCK 1/2-13 UNC	2						
25	467 703 C1	PLATE, SPACER	2						
26	414 054 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X 2 0	2						
26	414 087 C1	NUT, FLG HEX LOCK 1/2-20UNF	2						
27	414 053 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X 1-3/4	2						
27	414 087 C1	NUT, FLG HEX LOCK 1/2-20UNF	2						
28	506 911 C91	ABSORBER, SHOCK RHD	2						
28	472 367 C91	ABSORBER, SHOCK LHD	2						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

03-006

REVISION 01

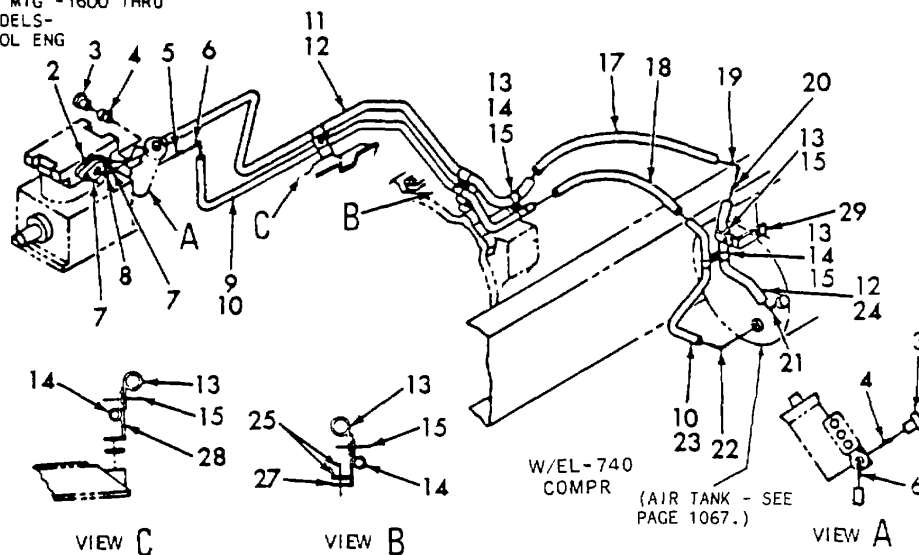
1042

GROUP 04

MT-145
BRAKES

Fig. 04-076

COMPRESSOR, PIPING, AIR
AND GOV MTG -1600 THRU
1900 MODELS-
W/09 OL ENG



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
2	92 474 H	GASKET	1	B	23		PIPE, AIR 3/8IN OD	1	B
3	505 027 C1	SWITCH, AIR PRESSURE	1	B			MAKE LOCALLY		
4	444 012	REDUCER, 1/8 MPT X 1/4 FPT	1	B	24		PIPE, AIR 5/8 IN OD	1	B
5	443 976	NIPPLE, 1/8-27	1	B			MAKE LOCALLY		
6	73 918 HX	ELBOW, 90DEG 1/8-27FPT X 3/8 TUBE	1	B	25	24 839 R1	BOLT, HEX-HD 3/8-16 UNC X 3/4 IN	1	B
7	25 492 R1	BOLT, HEX-HD 5/16-18UNC X 7/8IN	2	B	25	3/8 R	WASHER, LK 3/8	1	B
7 5/16 R		WASHER, LK 5/16	2	B	26	496 502 C1	PIPE, AIR 5/8 IN OD	1	B
8	429 523 C1	ELBOW, 90 DEG 1/2 MPT X 5/8 TUBE	1	B	27	300 787 C1	EXTENSION, CLIP	1	B
9		PIPE, AIR 3/8 IN OD	1	B	28	309 382 C1	EXTENSION, CLIP	1	B
		MAKE LOCALLY			29	373 037 C1	EXTENSION, CLIP	1	B
10	30 643 V	NUT, 3/8 TUBE	1	B	30	57 059 HX	ELBOW, 90DEG 1/8 MPT X 3/8 TUBE	1	B
10	30 644 V	SLEEVE, 3/8 TUBE	1	B	31		PIPE AIR 3/8 IN OD	1	B
11		PIPE, AIR 5/8IN OD	1	B			MAKE LOCALLY		
		MAKE LOCALLY			32		PIPE, AIR 3/8 IN OD	1	B
12	55 896 R1	SLEEVE, 5/8 TUBE	1	B			MAKE LOCALLY		
12	55 897 R1	NUT, 5/8 TUBE	1	B	33	506 879 C1	PIPE, AIR 5/8 IN OD	1	B
13	299 410 C1	CLAMP, 5/8	5	B	34	506 921 C1	PIPE, AIR 3/8 IN OD	1	B
14	299 403 C1	CLAMP, 3/8	5	B	35	30 757 VX	CONNECTOR, 3/8 TUBE X 1/4MPT	1	B
15	25 222 R1	BOLT, HEX-HD 1/4-20UNC X 3/4 IN	5	B	36	83 867 HX	ANCHOR COUPLING 3/4-16	1	B
15	25 519 R1	NUT, HEX 1/4-20UNC	5	B	37	26 546 R1	NUT, HEX 3/4-16	1	B
15 1/4 R		WASHER, LK 1/4	5	B	37	138 561	WASHER, INT TOOTH LK 3/4	1	B
17	511 213 C91	HOSE, AIR 5/8 OD	1	B	38	458 695 C1	ELBOW 45DEG 5/8 TUBE X 3/8MPT	1	B
18	575 348 C1	HOSE, AIR 3/4IN OD	1	B	39	194 665 R1	EXTENSION, CLIP	1	B
19	144 283	ELBOW, 90DEG 1/2 FPT X 5/8 FLARED TUBE	1	B	40		PIPE, AIR 3/8 IN OD	1	B
20	698 562 R91	CONNECTOR, 1/2 MPT X 5/8 TUBE	1	B			MAKE LOCALLY		
21	55 916 R11	ELBOW, 90DEG 1/2 MPT X 5/8 TUBE	1	C	41		PIPE, AIR 5/8 IN OD	1	B
22	30 761 VX	ELBOW, 90DEG 1/4MPT X 3/8 TUBE	1	B			MAKE LOCALLY		
					42	25 228 R1	R/S S2561	1	B
							BOLT, HEX-HD 5/16-18 X 3/4		
					42	25 520 R1	NUT, HEX 5/16-18	1	B

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

04-076

REVISION 01

1043



MT-145
BRAKES

GROUP 04

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STX	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STX
		Fig. 04-076 COMPRESSOR, PIPING, AIR AND GOV MTG -1600 THRU 1900 MODELS- W/D9 OL ENG									
42	5/16 R	WASHER, LK 5/16IN	B	1							
43	84 638 R11	ELBOW, 90DEG 3/8MPT X 5/8 TUBE		1							
44	309 449 C1	COUPLING, ANCHOR 1.0-14		1							
45	219 760	NUT, HEX 1.0-14		1							
45		WASHER, INT TOOTH LOCK 1 0		1							
		NON-SERVICE- MAKE LOCALLY									
46		PIPE, AIR 3/8 OD		1							
		MAKE LOCALLY									
47		PIPE, AIR 5/8 OD		1							
		MAKE LOCALLY									

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

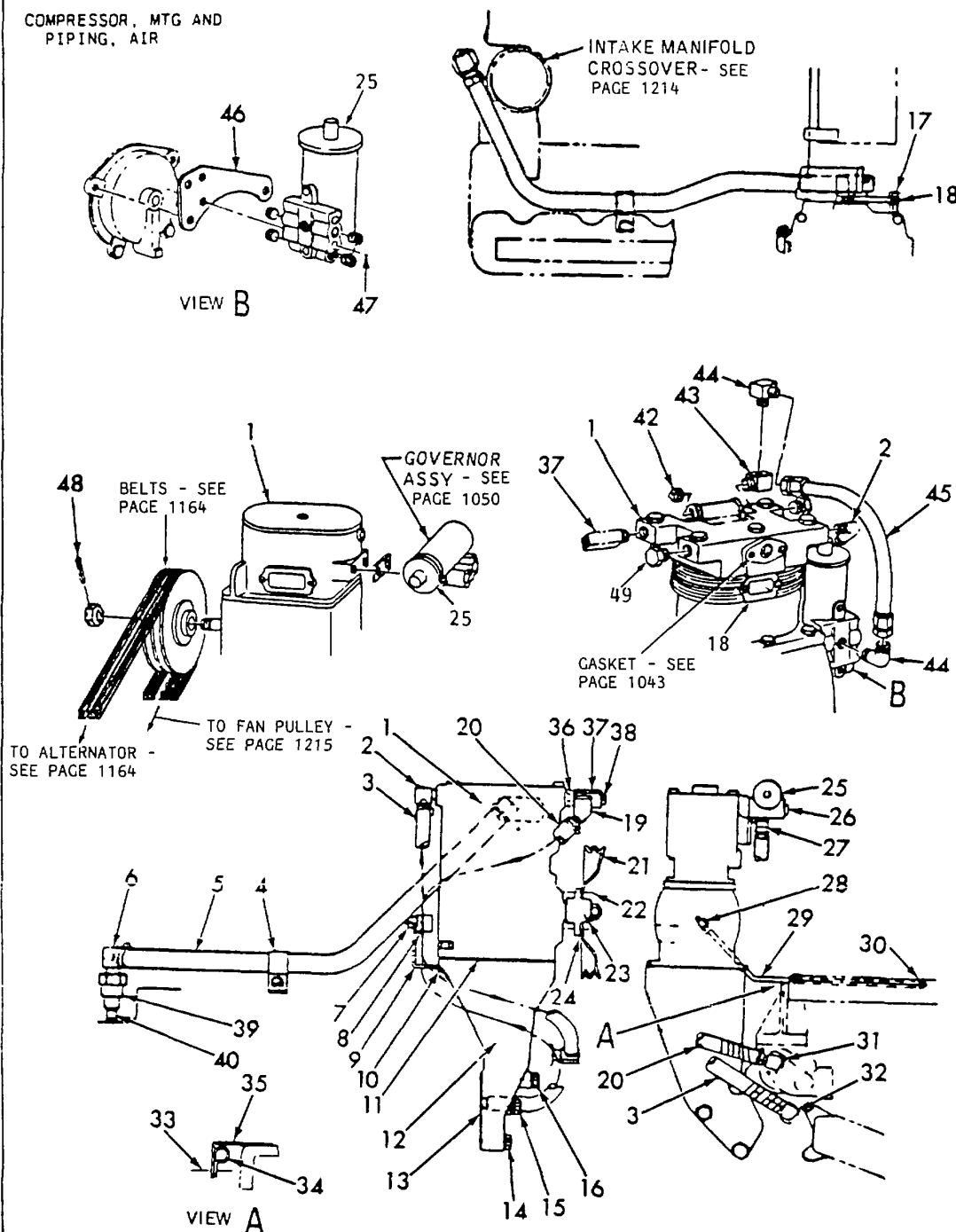
1044

REVISION 01

04-076



Fig. 04-077

COMPRESSOR, MTG AND
PIPING, AIR

PRINTED IN THE UNITED STATES OF AMERICA



MT-145
BRAKES

GROUP 04

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 04-077			26	26 269 R1	BOLT, 5/16 X 2-3/4 PHC TYPE 8		
		COMPRESSOR, MTG AND PIPING, AIR			26	25 708 R1	WASHER, 344 X 688 X 089 HDN	2	
1		COMPRESSOR, AIR			27	864 459 R1	ELBOW, HOSE 3/4 X 1/2	1	
1	398 568 C92	MIDLAND ROSS EL-740 SEPARATE BREAKDOWN- SEE FIG 04-079 PAGE 1048	1		28	322 296 C1	ELBOW, FLEX FITTING	1	
					29		PIPE, OIL-AIR COMPR TO JUNCTION TEE MAKE LOCALLY	1	
					30	1701 081 C1	ELBOW, 90 DEG, 188 FLEX FITTING X 125NPT FEMALE	1	
2	864 457 R1	ELBOW, HOSE 1/2 X 1/2	1		31	864 457 R1	ELBOW, HOSE 1/2 X 1/2	1	
3	364 358 C1	+HOSE, COOLANT 27/32 OD	1		32	864 439 R1	NIPPLE, HOSE 1/2 X 3/8	1	
3	995 218 R1	CLAMP, NO 12 TYPE F HOSE	2		33	25 752 R1	BOLT, 1/4 X 1/2 PHC TYPE 8	1	
3	441 735 C1	+CONDUIT, NON-METALLIC	1		33	1/4 R	WASHER, LK 1/4	1	
4	299 608 C1	CLAMP, RUBBER DIPPED	1		33	25 519 R1	NUT,	1	
5	364 360 C1	+HOSE, COOLANT 1-1/8 OD	1		34	299 398 C1	CLAMP, 188 DIA ZNP COATED MED CLO	1	
5	995 218 R1	CLAMP, NO 12 TYPE F HOSE	2		35	969 168 R1	EXTENSION, CLIP L TYPE	1	
6	864 462 R1	ELBOW, HOSE 3/4 X 3/4	1		36	444 034	BUSHING, 1/2 TO 3/8 PLN AUTO PIPE	1	
7	24 840 R1	BOLT, 3/8 X 1 PHC TYPE 8	1		37	444 150	TEE, 3/8-18 PLN	1	
7	25 709 R1	WASHER, .406 X 812 X 089 HDN	1		38	444 028	INT/EXT/INT AUTO PIPE BUSHING, 3/8 TO 1/4 PLN AUTO PIPE	1	
7	3/8 R	WASHER, LK 3/8	1		39	76 208 R91	VALVE, CHK VAC	1	
7	25 522 R1	NUT, 3/8 PHC TYPE 8	1		40	191 032	NIPPLE, 1/2 X 1-1/2 PLN LONG PIPE	1	
8	445 138 C1	CLAMP, PLASTISOL DIPPED	1		42	444 688	PLUG, 1/8-27 ZNP HEX/SKT AUTO PIPE	1	
9		EXTENSION, CLIP NON SERVICE - OBTAIN LOCALLY	1		43	9409 931	ELBOW, 1/8-27 PLN AUTO 90D PIPE STREET	1	
10	24 851 R1	BOLT, 7/16 X 1-3/4 PHC TYPE 8	4		44	118 753	ELBOW, 1/4 PLN 45D FLARED TUBE 90D	2	
10	7/16 R	WASHER, LK 7/16	4		45	AO40 075 000	HOSE, AIR REFER TO MT-90		
10	25 524 R1	NUT, 7/16 PHC TYPE 8	4		46	413 446 C1	BRACKET, GOV MTG	1	
11	83 817 H8	GASKET, AIR COMPR MTG	1		47	25 236 R1	BOLT, 5/16 X 3 PHC TYPE 8	2	
12	489 270 C1	BRACKET, AIR COMPR MTG	1		47	25 708 R1	WASHER, 344 X 688 X 089 HDN	2	
13	549 917 C2	GASKET, ELIMINATOR	1		48	103 386	PIN, COTTER 1/8 X 1-1/4	1	
14	24 852 R1	BOLT, 7/16 X 2-1/4 PHC TYPE 8	1		49	444 698	PLUG, 3/8-18 ZNP HEX/SKT AUTO PIPE	2	
14	7/16 R	WASHER, LK 7/16	1						
15	24 854 R1	BOLT, 7/16 X 2-3/4 PHC TYPE 8	1						
15	7/16 R	WASHER, LK 7/16	1						
16	24 856 R1	BOLT, 7/16 X 4 PHC TYPE 8	1						
16	7/16 R	WASHER, LK 7/16	1						
17	25 492 R1	BOLT, 5/16 X 7/8 PHC TYPE 8	2						
17	5/16 R	WASHER, LK 5/16	2						
18	283 641 C1	PLATE, ADAP AIR INLET	1						
18	302 044 R1	GASKET, COMPR AIR STRAINER	1						
19	864 446 R1	ELBOW, HOSE 1/2 X 3/8 5/8 X 3/8	1						
20	364 358 C1	+HOSE, COOLANT 27/32 OD	1						
20	995 218 R1	CLAMP, NO 12 TYPE F HOSE	2						
20	441 735 C1	+CONDUIT, NON-METALLIC	1						
21	489 298 C1	PULLEY, AIR COMPR	1						
22	25 228 R1	R/S S2561 BOLT, 5/16 X 3/4 PHC TYPE 8	4						
22	5/16 R	WASHER, LK 5/16	4						
23	489 297 C1	HUB, AIR COMPR PULLEY	1						
24	489 296 C1	SPACER, AIR COMPR PULLEY	1						
25	410 986 C92	GOVERNOR, AIR COMPR SEPARATE BREAKDOWN- SEE FIG 04-080 PAGE 1050	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

1046

REVISION 01

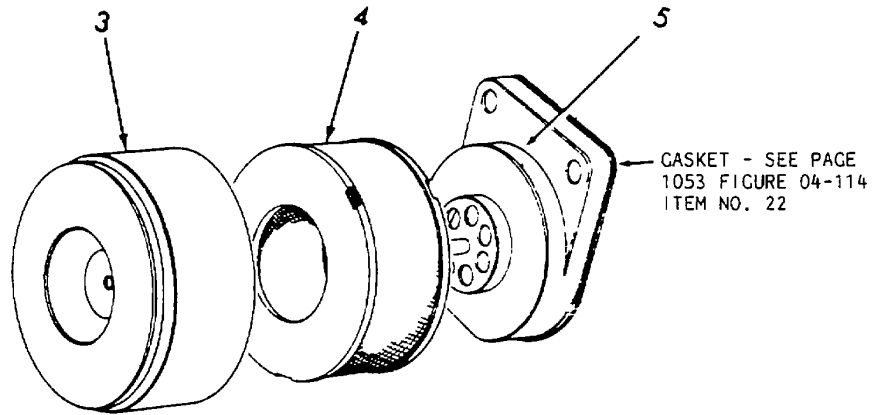
04-077



GROUP 04

FIG. 04-078

STRAINER, AIR COMPR



ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC
	281 911 C92	STRAINER, AIR		1							
	25 653 R1	BOLT, HEX-HD 5/16NC X 1/2		AR							
	25 492 R1	BOLT, HEX-HD 5/16NC X 7/8		AR							
	5/16 R	WASHER, LK 5/16 REGULAR		2							
3		COVER, AIR STRAINER		1							
3	359 379 C1	SNAP ON TYPE		1							
4	290 309 C91	ELEMENT, AIR STRAINER		1							
5		BASE		1							
		NOT SERVICED SEPARATELY									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

04-078

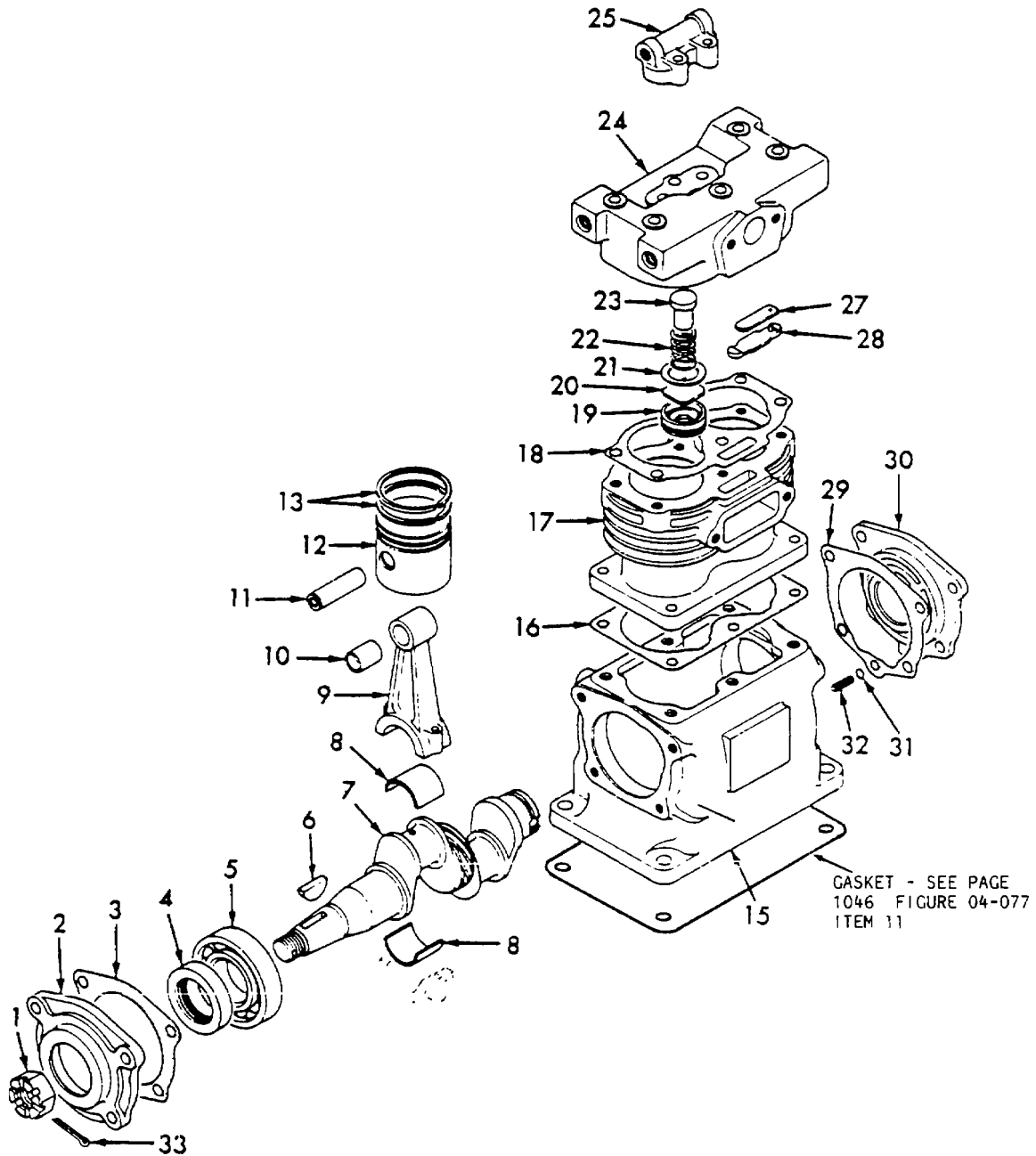
REVISION 01

1047



FIG. 04-079

COMPRESSOR, AIR
-MIDLAND ROSS EL 740
WATER COOLED-



PRINTED IN THE UNITED STATES OF AMERICA

MT-145
BRAKES



GROUP 04

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		F FIG. 04-079			32	280 955 C1	BUSHING, INSERT	1	
		COMPRESSOR, AIR			33	103 386	PIN, COTTER 1/8 X 1-1/4	1	
		-MIDLAND ROSS EL 740							
		WATER COOLED-							
	398 568 C92	COMPRESSOR, AIR							
1	427 640	NUT, HEX 3/4NF	1						
2	177 665 R2	COVER, FRT END	1						
2	26 678 R1	BOLT, COVER	4						
3	177 666 R1	% \$GASKET, FRT END COVER	1						
4	M 86 688	% \$SEAL, CRKSHFT	1						
5	ST 205 A	BEARING, CRKSHFT	1		474 574 C91	% KIT, COMPR MINOR REPAIR			
6	113 782	KEY, CRKSHFT	1						
7	300 836 C1	CRANKSHAFT	1		300 874 C92	% KIT, COMPR MAJOR REPAIR			
8	177 792 R21	% \$BEARING, CONN ROD	2						
		-STANDARD-							
9	291 194 C92	ROD, W/CAP AND BUSH, CONN	2						
9	298 612 C1	BOLT, BRG CAP	4						
9	25 736 R1	NUT, BRG CAP BOLT	4						
10	177 673 R1	BUSHING, WRIST PIN	2						
11		PIN	1						
		NOT SERVICED SEPARATELY							
12	291 175 C92	% PISTON SET -STANDARD-	1						
13	474 570 C91	% RING SET, PISTON	1						
		-STANDARD-							
15	300 867 C91	CRANKCASE	1						
16	177 678 R1	% \$GASKET, CYL BLOCK	1						
17	961 439 R1	% \$BLOCK, CYL	1						
17	177 664 R1	STUD, CYL BLOCK	6						
17	5/16	X NUT, HEX 5/16NF	6						
17	5/16	R WASHER, LK 5/16 REGULAR	6						
18	861 442 R1	% \$GASKET, CYL HD	1						
19	301 796 C1	% \$SEAT, DISCHARGE VALVE	2						
20	301 795 C1	% \$VALVE, DISCHARGE	2						
21	301 797 C1	% \$WASHER, COPPER	2						
22	177 688 R1	% \$SPRING, DISCHARGE VALVE	2						
23	298 559 C1	CAGE, DISCHARGE VALVE	2						
24	861 443 R94	HEAD, CYL	1						
24	866 260 R1	BOLT, CYL HD	5						
25	429 758 C92	% \$VALVE, W/PINS AND SPG, UNLOADER	1						
25	474 456 R1	BOLT, HEX-HD 1/4NC X 1-1/8	2						
25		BOLT, HEX-HD 5/16NC X 1-3/4	1						
		NON SERVICE-OBTAIN LOCALLY							
25		WASHER, LK 1/4 REGULAR	2						
		NON SERVICE-OBTAIN LOCALLY							
27	177 692 R1	% \$VALVE, AIR INLET	2						
28	210 234 R91	GUARD, W/PIN, INLET VALVE	2						
29	177 668 R1	% \$GASKET, REAR END COVER	1						
30	273 025 C92	% \$COVER, W/BUSH, REAR END	1						
30	243 119 R1	BOLT, COVER	4						
31	276 584 C1	% \$O-RING, INSERT BUSH	2						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

04-079

REVISION 01

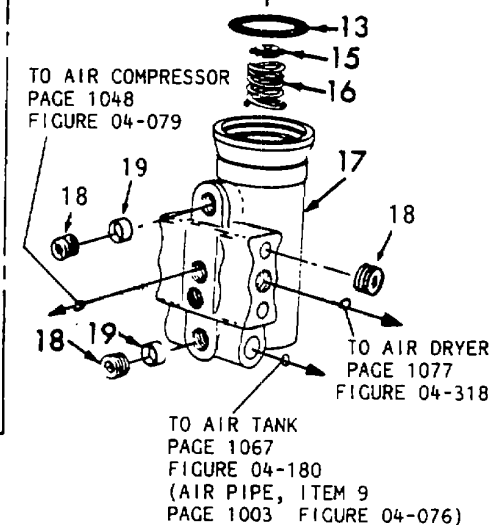
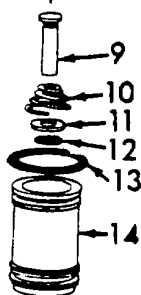
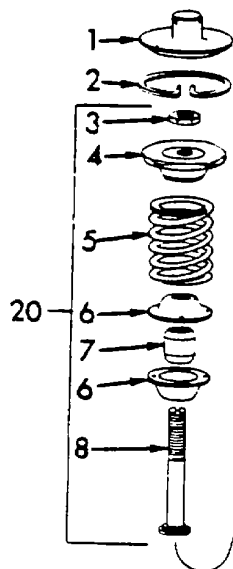
1049



FIG. 04-080

FIG.04-080

GOVERNOR, AIR COMPR



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
	410 986 C92	% GOVERNOR, AIR COMPR W/O MTG GASK							
1	321 739 R1	COVER, GOV	1						
2	160 094 R1	RING, COVER SNAP	1						
3	124 818	NUT, ADJ SCREW JAM	1						
4	177 633 H1	SEAT, UPR SPG	1						
5	321 747 R1	SPRING, GOV VALVE -UPR-	1						
6	321 748 R1	SEAT, LWR SPG	2			631 626 C91	% KIT, REPAIR		
7	321 749 R1	GUIDE, VALVE SPG	1						
8	177 629 H1	SCREW, ADJ	1						
9	177 627 H1	STEM, EXH VALVE	1						
10	321 742 R1	SPRING, EXH VALVE STEM	1						
11	177 622 H1	WASHER, EXH VALVE STEM	1						
12	3046 105 R1	FUL 15114	1						
13	382 137 R1	O-RING	2						
14	321 743 R91	PISTON, W/WASHER, GROM AND RING	1						
15	321 744 R1	VALVE, AIR GOV	1						
16	321 745 R1	SPRING, GOV VALVE -LWR-	1						
17		BODY NOT SERVICED SEPARATELY	1						
18	444 688	PLUG, PIPE HEX-SOC 1/8	4						
19	321 738 R1	SCREEN, GOV STRAINER	2						
20	321 740 R91	SPRING, W/SCREW, NUT, SEATS AND GUIDE	1						

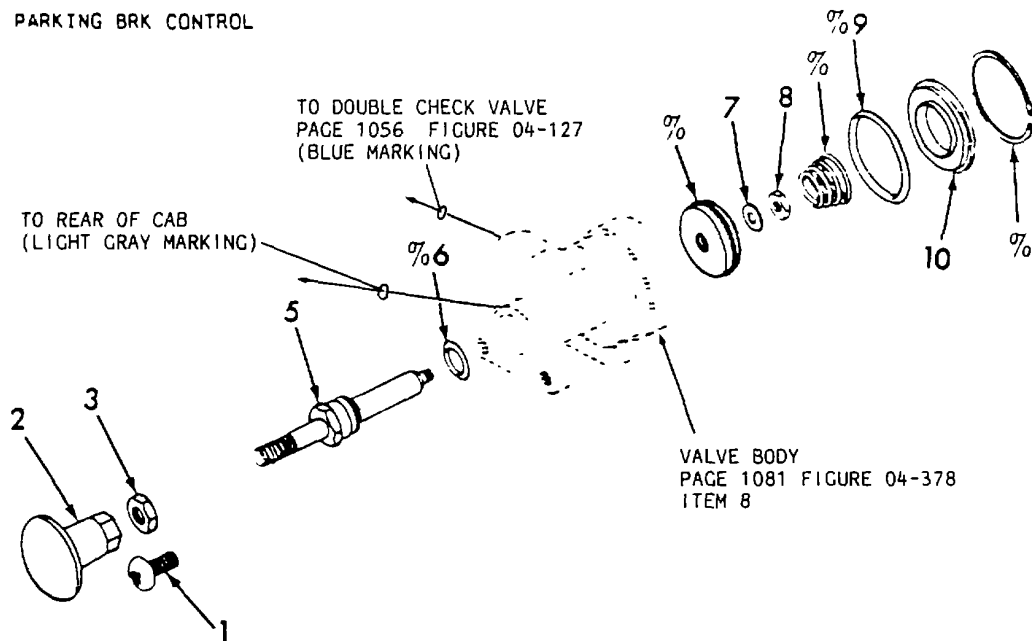
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-109

VALVE, PARKING BRK CONTROL



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR
	481 745 C91 %	VALVE, PARKING BRK CONTROL	1						
	592 699 C1	PRODUCTION ONLY	1						
		SERVICE ONLY							
1	167 164	SCREW, PAN-CR-REC-HD NO	2						
		10-32 X 1/2							
2	482 528 C1	KNOB, BRK CONTROL VALVE	1						
3	118 623	NUT HEX JAM 1/4NF	1						
5	344 025 C1	PISTON, BRK VALVE	1						
6	321 955 R1	O-RING, PISTON	1						
7	344 029 C1	WASHER, FLAT	1						
8	79 061 R1	NUT, LK NO 10NC	1						
9	370 943 R1	O-RING, END CAP	1						
10	344 024 C1	CAP, END	1						
	483 381 C91 %	KIT, BRK VALVE REPAIR							

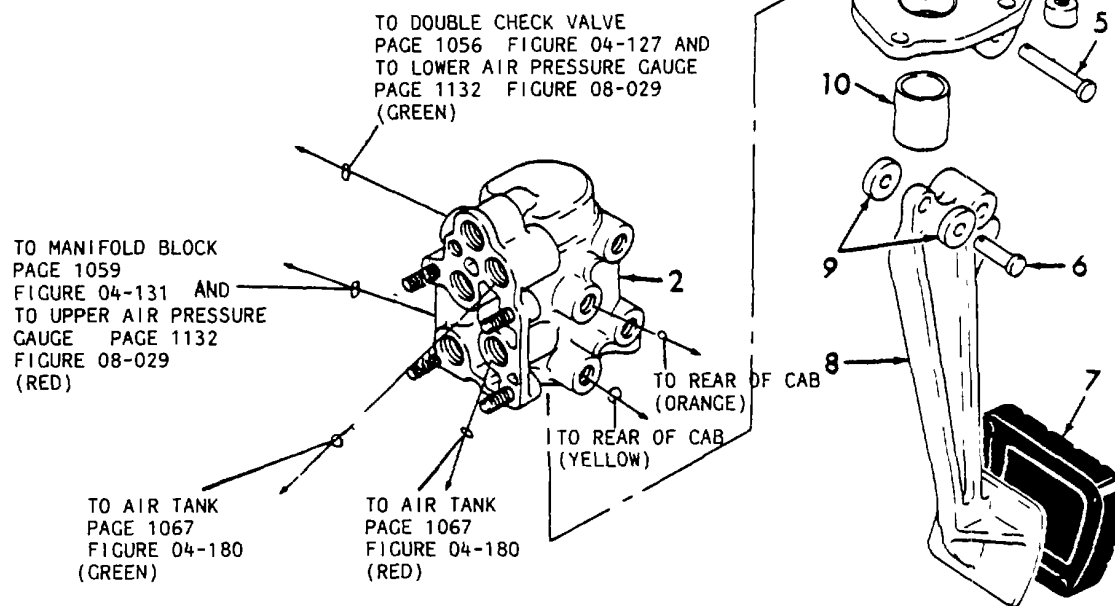
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-110

VALVE, BRK PEDAL AND CON



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX
		● VALVE, BRK			10		LHD		
		LHD			10	487 433 C1	W/O SUSPENDED PEDAL W/DT-466. 09 OL ENGS	1	
	574 787 C91	W/O SUSPENDED PEDAL W/DT-466. 09 OL ENGS	1				ENGs		
		● KIT, VALVE REPAIR							
		MINOR			464 903 C92				
2		VALVE BRK CON			501 776 C91		MAJOR		
2	579 510 C91	W/O SUSPENDED PEDAL	1						
3	464 906 C1	PLATE, PEDAL MTG	1						
3	25 493 R1	BOLT, HEX-HD 5/16UNC X 1	3						
3	5/16 R	WASHER, LK 5/16	3						
4	464 901 C1	STOP, BRK PEDAL	1						
5	552 697 R1	PIN, FULCRUM	1						
5	107 762	PIN, COTTER	1						
7	382 495 C1	PAD, BRK PEDAL	1						
8		PEDAL BRK							
8		LHD							
8		W/O SUSPENDED PEDAL							
8	487 432 C1	W/DT-466. 09 OL ENGS	1						
9	464 902 C1	ROLLER	1						
10		PLUNGER, BRK VALVE							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

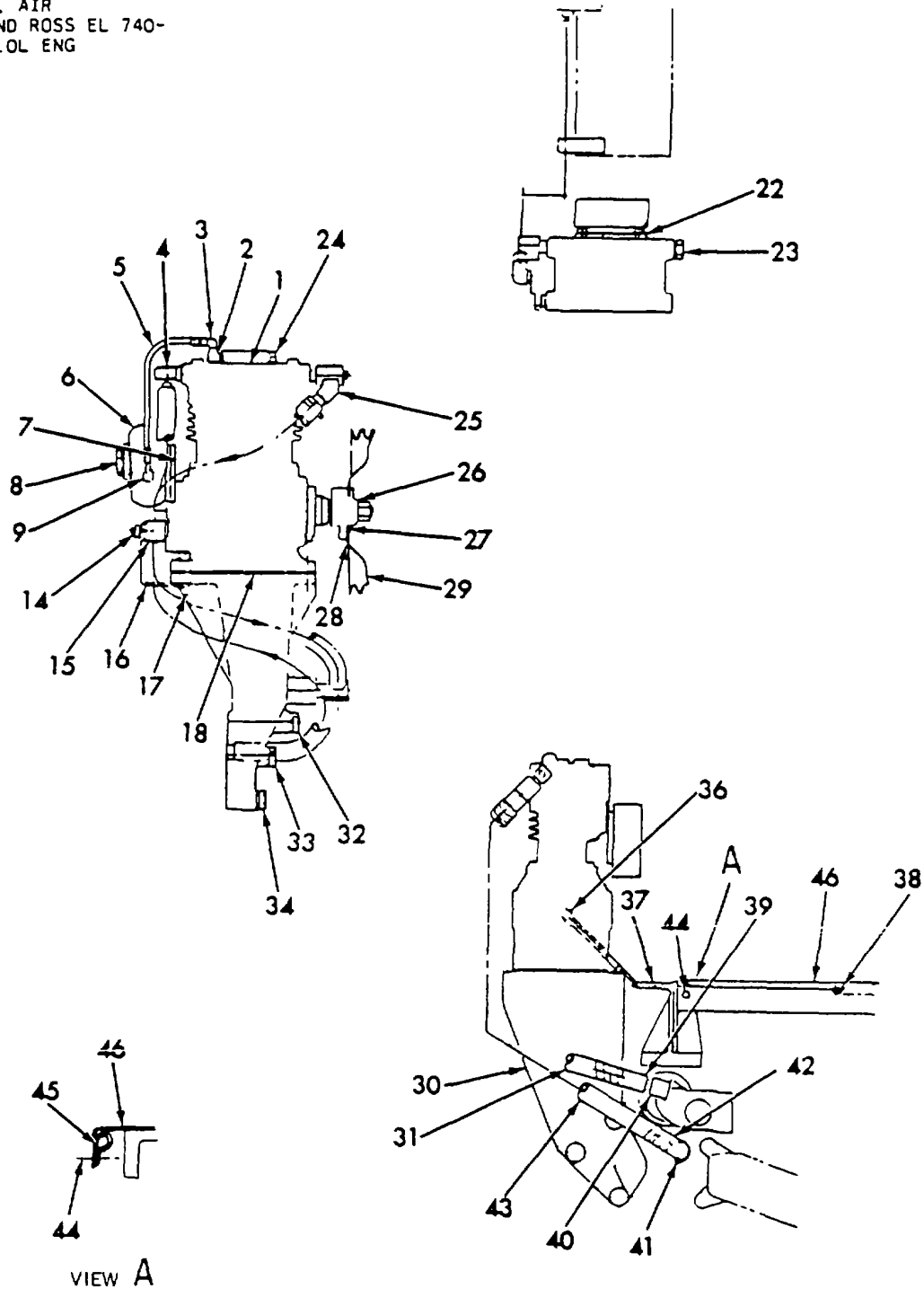
PAGE NO. 1

1052



FIG. 04-114

COMPRESSOR, MTG AND
HOSING, AIR
-MIDLAND ROSS EL 740-
W/D9.0L ENG



PRINTED IN THE UNITED STATES OF AMERICA



MT-145
BRAKES

GROUP

04

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 04-114			33	7/16 R	WASHER, LK 7/16	8	
		COMPRESSOR, MTG AND			34	24 852 R1	BOLT, 7/16 X 2-1/4 PHC	8	
		HOSING, AIR					TYPE 8		
		-MIDLAND ROSS EL 740-			34	7/16 R	WASHER, LK 7/16	8	1
		W/D9 OL ENG			36	322 296 C1	ELBOW, FLEX FITTING	8	1
					39	995 218 R1	CLAMP, NO 12 TYPE F HOSE	8	2
					40	864 457 R1	ELBOW, HOSE 1/2 X 1/2	8	1
					41	995 218 R1	CLAMP, NO 12 TYPE F HOSE	8	2
1		COMPRESSOR, AIR			42	864 439 R1	NIPPLE, HOSE 1/2 X 3/8	8	1
1	398 568 C92	MIDLAND ROSS EL 740	1		43	364 358 C1	+ HOSE, COOLANT 27/32 OD	8	1
		SEPARATE BREAKDOWN-			43	441 735 C1	+ CONDUIT, NON-METALLIC	8	1
		SEE FIG 04-079			44	25 752 R1	BOLT, 1/4 X 1/2 PHC TYPE 8	8	1
		PAGE 1048			44	1/4 R	WASHER, LK 1/4	8	1
					44	25 519 R1	NUT, 1/4 PHC TYPE 8	8	1
					46	969 168 R1	EXTENSION, CLIP L TYPE	8	1
2	9409 931	ELBCW, 1/8-27 PLN AUTO 90D	8	1					
		PIPE STREET							
3	118 753	ELBOW, 1/4 PLN 45D FLARED	8	1					
		TUBE 90D							
5	AO40 075 000	HOSE, AIR	8	1					
		REFER TO MT-90							
6	410 986 C92	GOVERNOR	8	1					
		SEPARATE BREAKDOWN-							
		SEE FIG. 04-080 PAGE 1050							
6	444 688	PLUG, 1/8-27 ZNP HEX/SKT	8	4					
		AUTO PIPE							
7	413 446 C1	BRACKET, GOV MTG	8	1					
8	25 236 R1	BOLT, 5/16 X 3 PHC TYPE 8	8	2					
8	25 708 R1	WASHER, .344 X .688 X .089	8	2					
		HON							
9	118 753	ELBOW, 1/4 PLN 45D FLARED	8	1					
		TUBE 90D							
11	364 360 C1	+ HOSE, COOLANT 1-1/8 OD	8	1					
12	995 218 R1	CLAMP, NO 12 TYPE F HOSE	8	2					
14	24 840 R1	BOLT, 3/8 X 1 PHC TYPE 8	8	1					
14	25 709 R1	WASHER, .406 X .812 X .089	8	1					
		HON							
14	3/8 R	WASHER, LK 3/8	8	1					
14	25 522 R1	NUT, 3/8 PHC TYPE 8	8	1					
15	445 138 C1	CLAMP, PLASTISOL DIPPED	8	1					
17	24 851 R1	BOLT, 7/16 X 1-3/4 PHC	8	4					
		TYPE 8							
17	7/16 R	WASHER, LK 7/16	8	4					
17	25 524 R1	NUT, 7/16 PHC TYPE 8	8	4					
18	83 817 HB	GASKET, AIR COMPR MTG	8	1					
20	25 492 R1	BOLT, 5/16 X 7/8 PHC TYPE	8	2					
		8							
20	5/16 R	WASHER, LK 5/16	8	2					
22	302 044 R1	GASKET, COMPR AIR STRAINER	8	1					
23	20 958 R1	PLUG, 3/8-18 ZNP SQ/HO	8	2					
		AUTO PIPE							
24	444 688	PLUG, 1/8-27 ZNP HEX/SKT	8	1					
		AUTO PIPE							
25	864 446 R1	ELBOW, HOSE 1/2 X 3/8 5/8	8	1					
		X 3/8							
26	489 297 C1	HUB, AIR COMPR PULLEY	8	1					
27	25 228 R1	R/S S2561	8	4					
		BOLT, 5/16 X 3/4 PHC TYPE							
		8							
27	5/16 R	WASHER, 5/16	8	4					
28	489 296 C1	SPACER, AIR COMPR PULLEY	8	1					
29	489 298 C1	PULLEY, AIR COMPR	8	AR					
30	489 270 C1	BRACKET, AIR COMPR MTG	8	1					
31	364 358 C1	+ HOSE, COOLANT 27/32 OD	8	1					
31	441 735 C1	+ CONDUIT, NON-METALLIC	8	1					
32	24 856 R1	BOLT, 7/16 X 4 PHC TYPE 8	8	1					
32	7/16 R	WASHER, LK 7/16	8	1					
33	24 854 R1	BOLT, 7/16 X 2-3/4 PHC	8	1					
		TYPE 8							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

04-114

REVISION 01

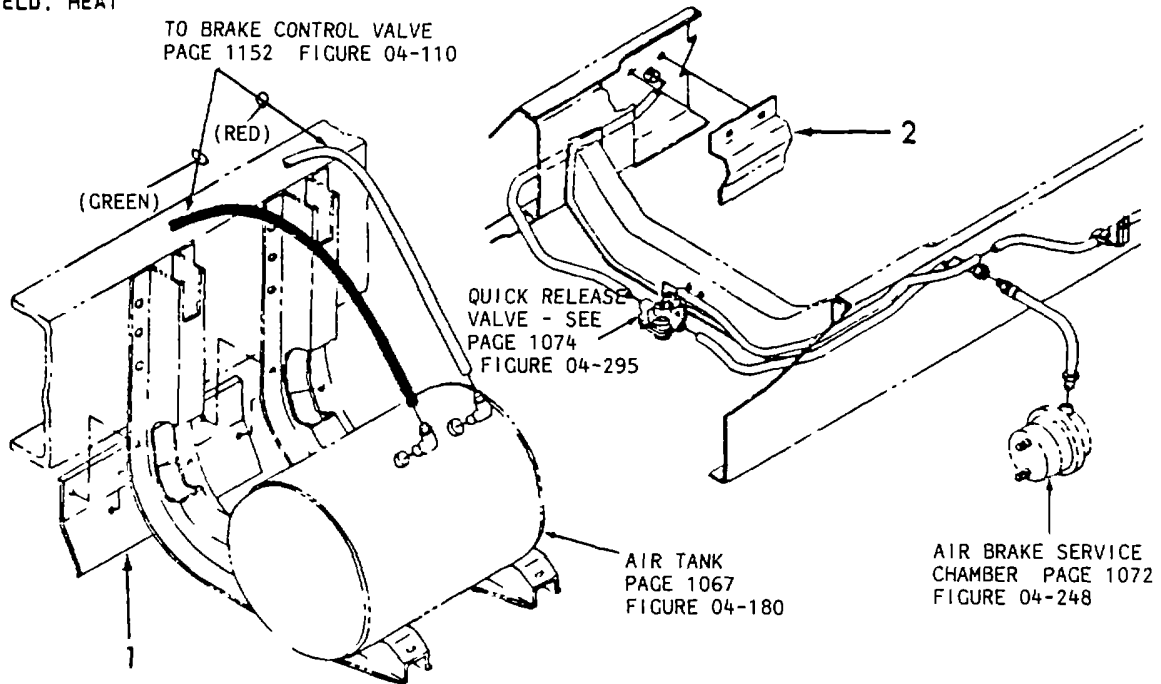
1054



FIG. 04-126

SHIELD, HEAT

TO BRAKE CONTROL VALVE
PAGE 1152 FIGURE 04-110



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	528 559 C1	SHIELD, CHASSIS CTR. HEAT 4 X 4 MODELS	1						
2	483 140 C1	SHIELD, CHASSIS FRT, HEAT	2						

MISSING ITEM NUMBERS ARE NOT USED

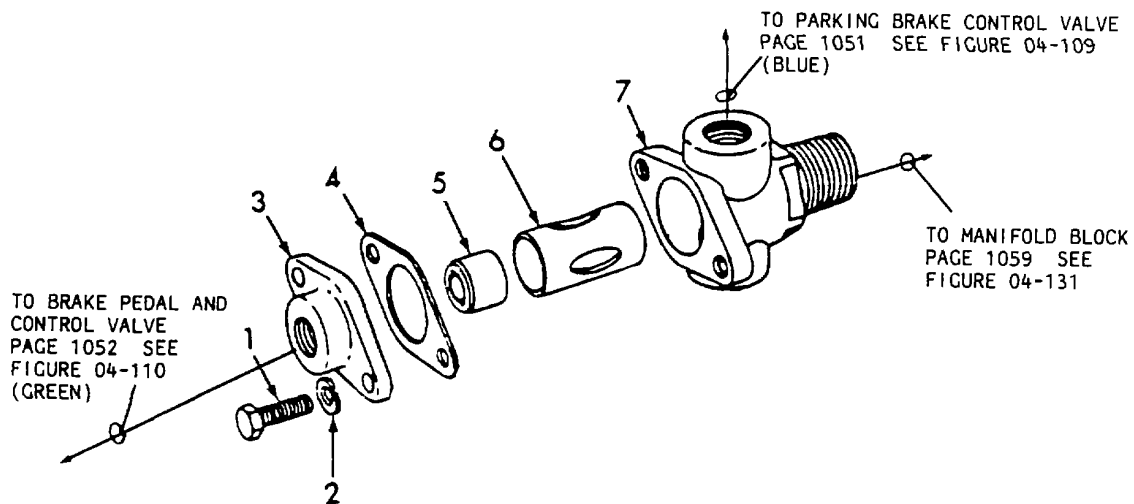
PRINTED IN THE UNITED STATES OF AMERICA

MT-145
BRAKES



GROUP 04

FIG. 04-127
VALVE, DOUBLE CHECK



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
	764 368 C92	VALVE, DBL CHK							
1	179 071 H2	BOLT, HEX-HD 1/4 NC X 3/4	2						
2		WASHER, SPECIAL	1						
		NOT SERVICED							
		SEPARATELY							
3	179 070 H2	COVER, VALVE	1						
4	382 137 R1	O-RING, VALVE COVER	1						
5		VALVE	1						
		NOT SERVICED							
		SEPARATELY							
6	179 067 H1	GUIDE, SHUTTLE VALVE	1						
7		BODY,	1						
		NOT SERVICED							
		SEPARATELY							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

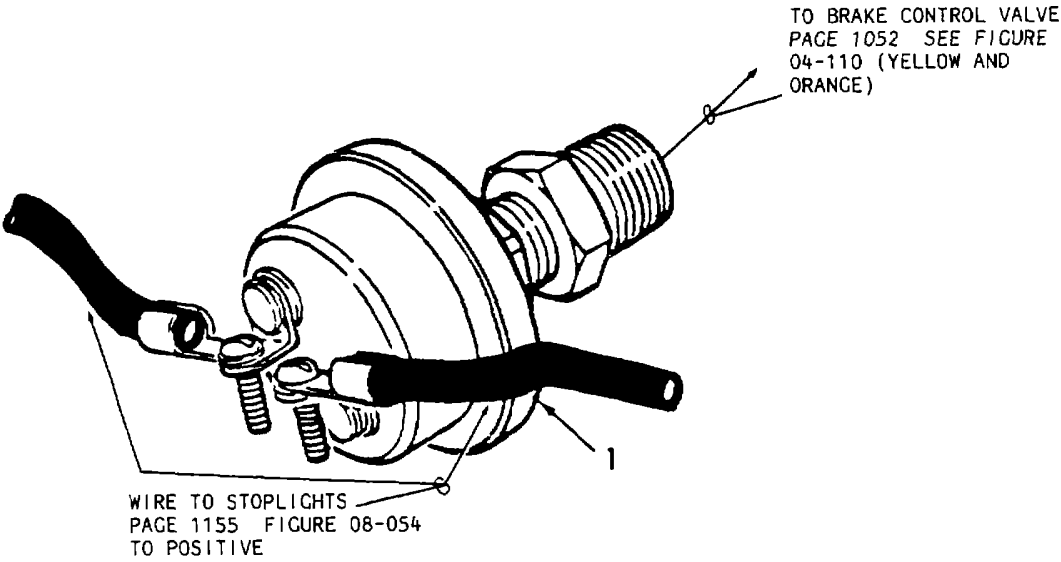
04-127

REVISION 01

1056



FIG. 04-129
SWITCH, STOPLIGHT



ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	505 026 C1	SWITCH, STOPLIGHT									

MISSING ITEM NUMBERS ARE NOT USED

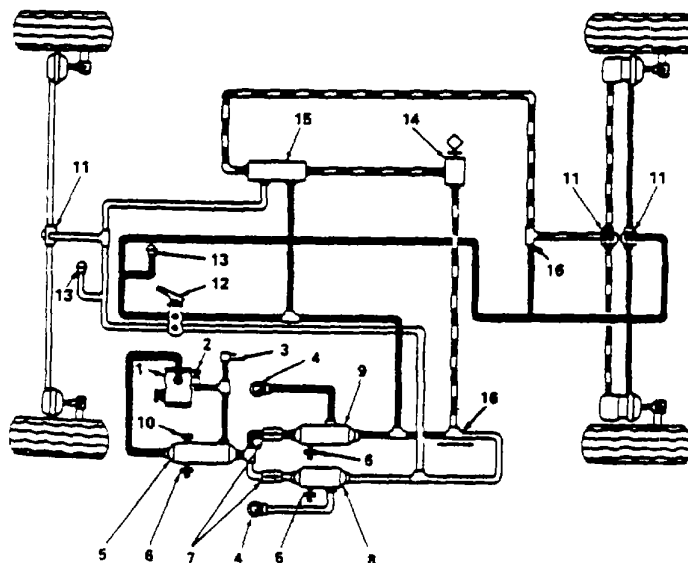
PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-130

SCHEMATIC, SYS DIAG FOR 4
X 2 AND 4 X 4 STGHT
TRUCKS

SYSTEM SCHEMATIC DIAGRAM FOR
4 X 2 AND 4 X 4 STRAIGHT TRUCKS



ITEM	DESCRIPTION
1	AIR COMPRESSOR SEE FIGURE 04-077 PAGE 1045
2	AIR COMPRESSOR GOVERNOR SEE FIGURE 04-080 PAGE 1050
3	LOW PRESSURE SWITCH SEE FIGURE 04-378 ITEM 2 PAGE 1081
4	AIR GAUGE SEE FIGURE 04-378 ITEM 1 PAGE 1081
5	SUPPLY RESERVOIR SEE FIGURE 04-180 PAGE 1067
6	DRAIN COCK SEE FIGURE 04-164 ITEM 42 PAGE 1063
7	CHECK VALVE SEE FIGURE 04-162 ITEM 1 PAGE 1061
8	SECONDARY RESEVOIR >SEE FIGURE 04-180 PAGE 1067
9	PRIMARY RESERVOIR
10	SAFETY VALVE SEE FIGURE 04-281 PAGE 1073
11	QUICK RELEASE VALVE SEE FIGURE 04-295 PAGE 1074
12	BRAKE VALVE SEE FIGURE 04-110 PAGE 1052
13	STOPLIGHT SWITCH SEE FIGURE 04-129 PAGE 1057
14	SPRING BRAKE CONTROL VALVE SEE FIGURE 04-109 PAGE 1051
15	INVERSION VALVE SEE FIGURE 04-378 ITEM 16 PAGE 1082
16	TWO WAY CHECK VALVE SEE FIGURE 04-127 PAGE 1056

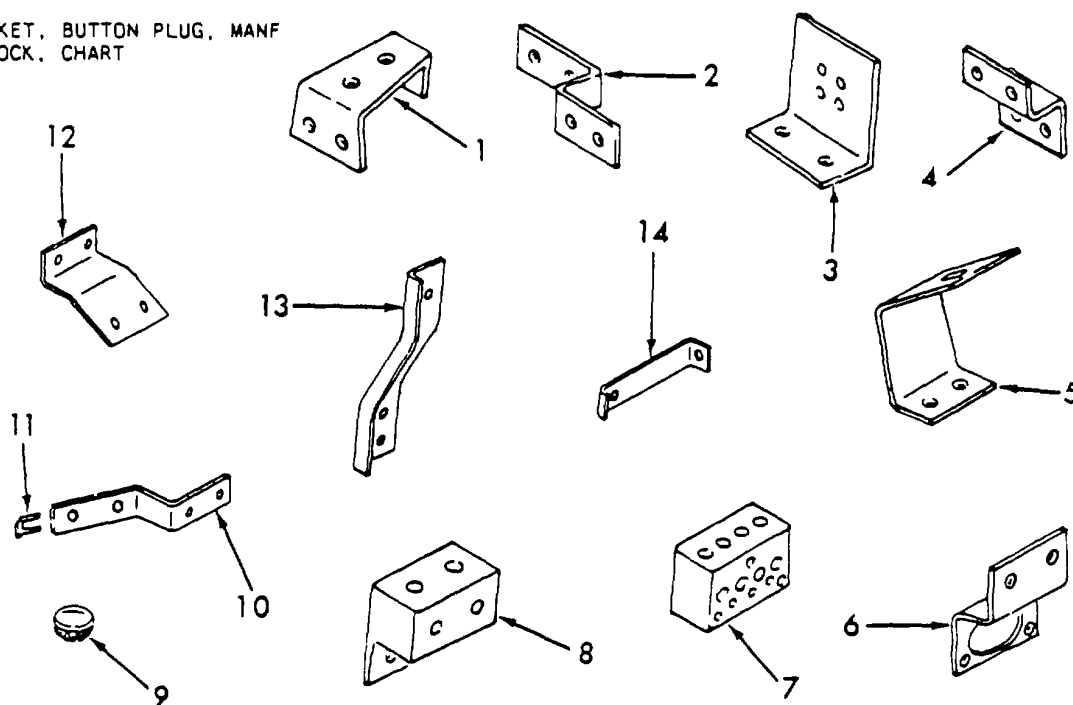
LEGEND

	PRIMARY SERVICE SYSTEM
	SECONDARY SERVICE SYSTEM
	PARKING BRAKE SYSTEM

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-131

BRACKET, BUTTON PLUG, MANF
BLOCK, CHART

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	481 209 C2	BRACKET, QUICK RELEASE, W/RELAY OR INVERSION VALVE									
2	575 332 C1	BRACKET, QUICK RELEASE VALVE									
3	523 247 C2	BRACKET, QUICK RELEASE VALVE									
4	461 565 C1	BRACKET, LIMITING VALVE									
5		BRACKET, HOSE SUPT									
5	461 822 C3	EXC FA-83 AXLE									
6	488 696 C1	BRACKET, MANF BLOCK									
7	475 352 C3	BLOCK, MANF									
8	452 810 C1	BLOCK, MANF									
9		PLUG, BUTTON									
9	454 164	25/32									
9	432 449	1-1/2									
10	483 639 C1	BRACKET, HOSE SUPT									
11	493 295 C1	CLIP, HOSE ANCHOR									
12	486 748 C1	BRACKET, HOSE SUPT									
13	532 420 C1	BRACKET, PIPE SUPT									
14	483 152 C1	BRACKET, PRESSURE DIFF VALVE									

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

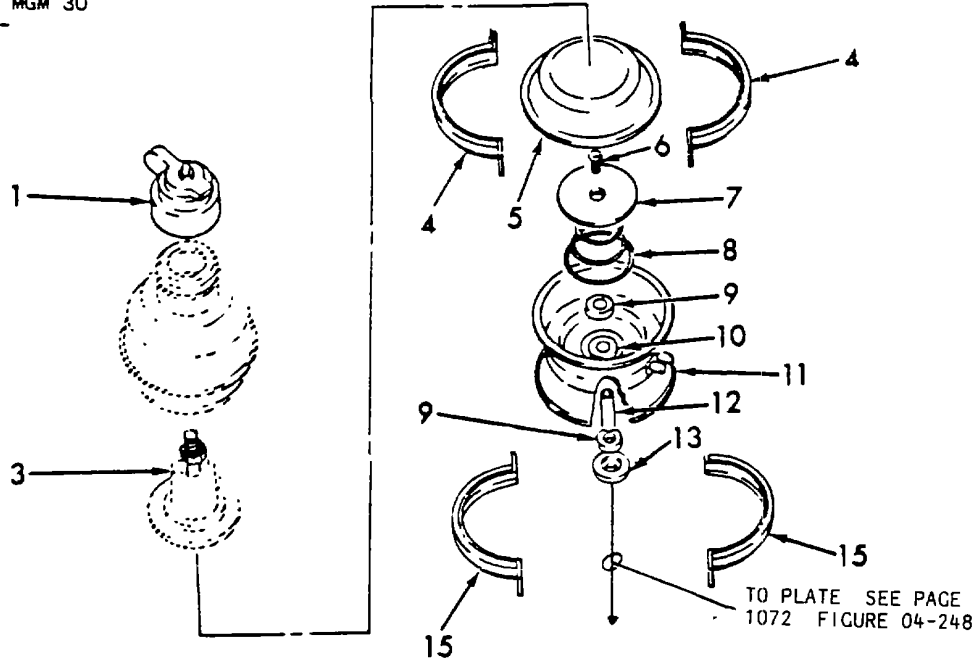
REVISION 02

1059



FIG. 04-153

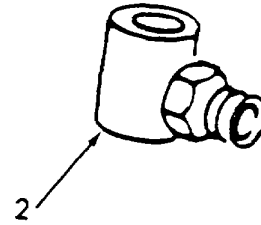
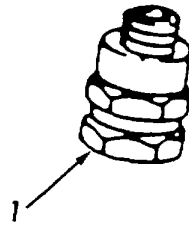
CHAMBER, AIR BRK MGM 30
IN -EMERGENCY-



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
	596 003 C91	CHAMBER, AIR BRK - LEFT							
	596 004 C91	CHAMBER, AIR BRK -RIGHT-							
1	573 219 C1	CAP BRK CHAMBER							
3	472 151 C1	NUT, RELEASE BOLT	1						
4	683 062 R91	CLAMP, RING	1						
4	175 570 R1	BOLT, 3/8NC X 2	2						
4	19 231 R1	NUT, 3/8NC	2						
5	472 153 C1	DIAPHRAGM	1						
6	356 117 C1	SCREW, SPEC PUSH PLATE	2						
7	352 662 C1	PLATE, PUSH ROD SPG	1						
8	464 947 C1	SPRING, PISTON RETURN	1						
9	418 508 C1	BUSHING, GUIDE	2						
10	328 235 C1	SEAL, CASE	1						
11	573 216 C1	CASE, FLG	1						
12	472 149 C1	ROD, PISTON PUSH	1						
13	263 082 C11	PLATE, PUSH ROD	1						
14	472 153 C1	DIAPHRAGM	1						
15	683 062 R91	CLAMP, RING	1						
15	184 791 R1	BOLT, 3/8NC X 2	2						
15	19 231 R1	NUT, 3/8NC	2						
16	472 152 C91	PISTON, W/ROD	1						
17	464 947 C1	SPRING, PISTON RETURN	1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

FIG. 04-162
VALVE, CHECK

004051 92XX 06 0483144C91

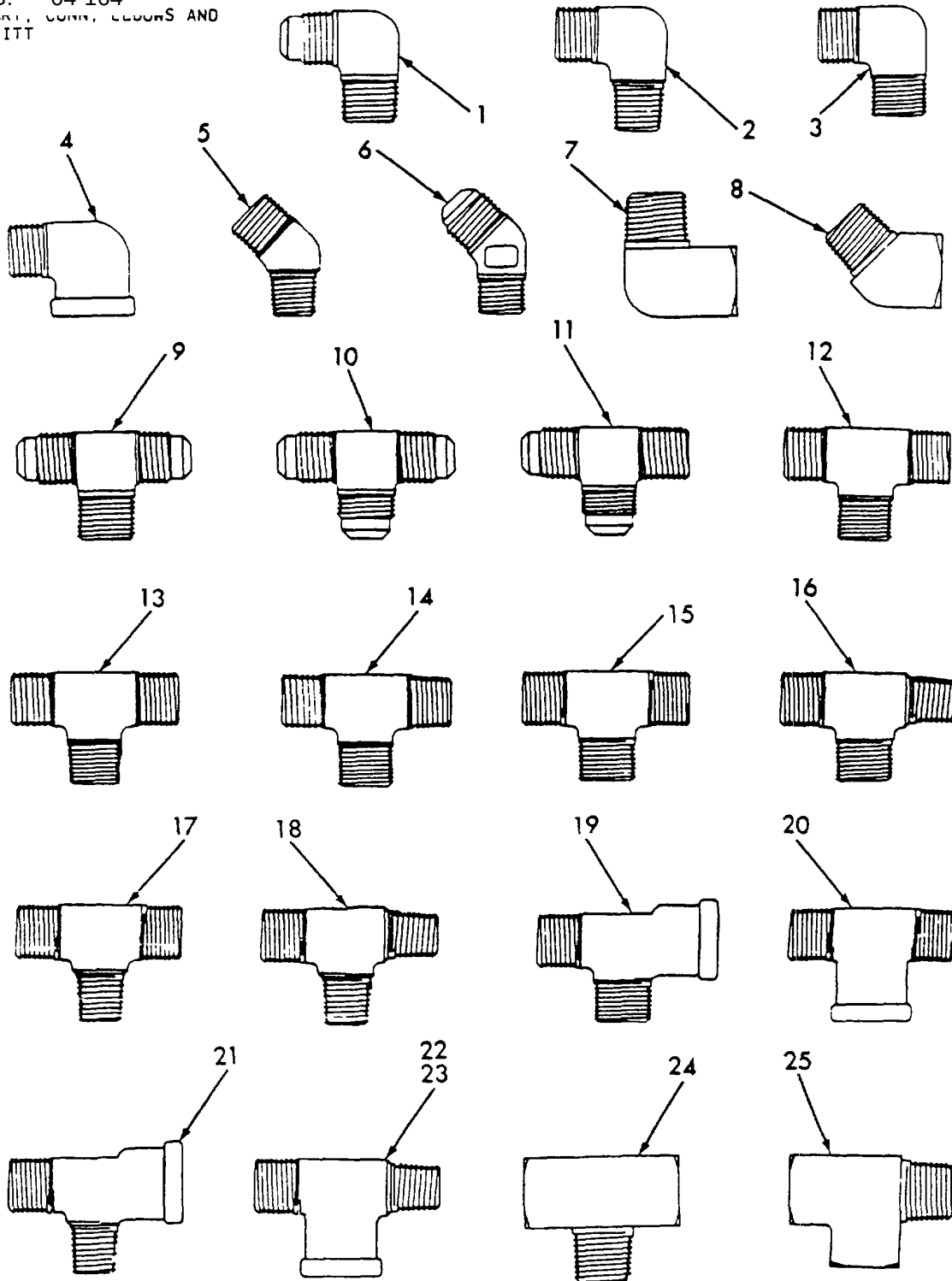
ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	865 753 R92	VALVE, CHECK -WILL WORK FOR 343522C91-	1						
2	483 144 C91	VALVE, 90 DEG, CHECK	1						
	486 888 C1	KIT, 90 DEG CHECK VALVE, REPAIR							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 04-164
FIG. 04-164
CHART, CONT. ELBOWS AND
FIT

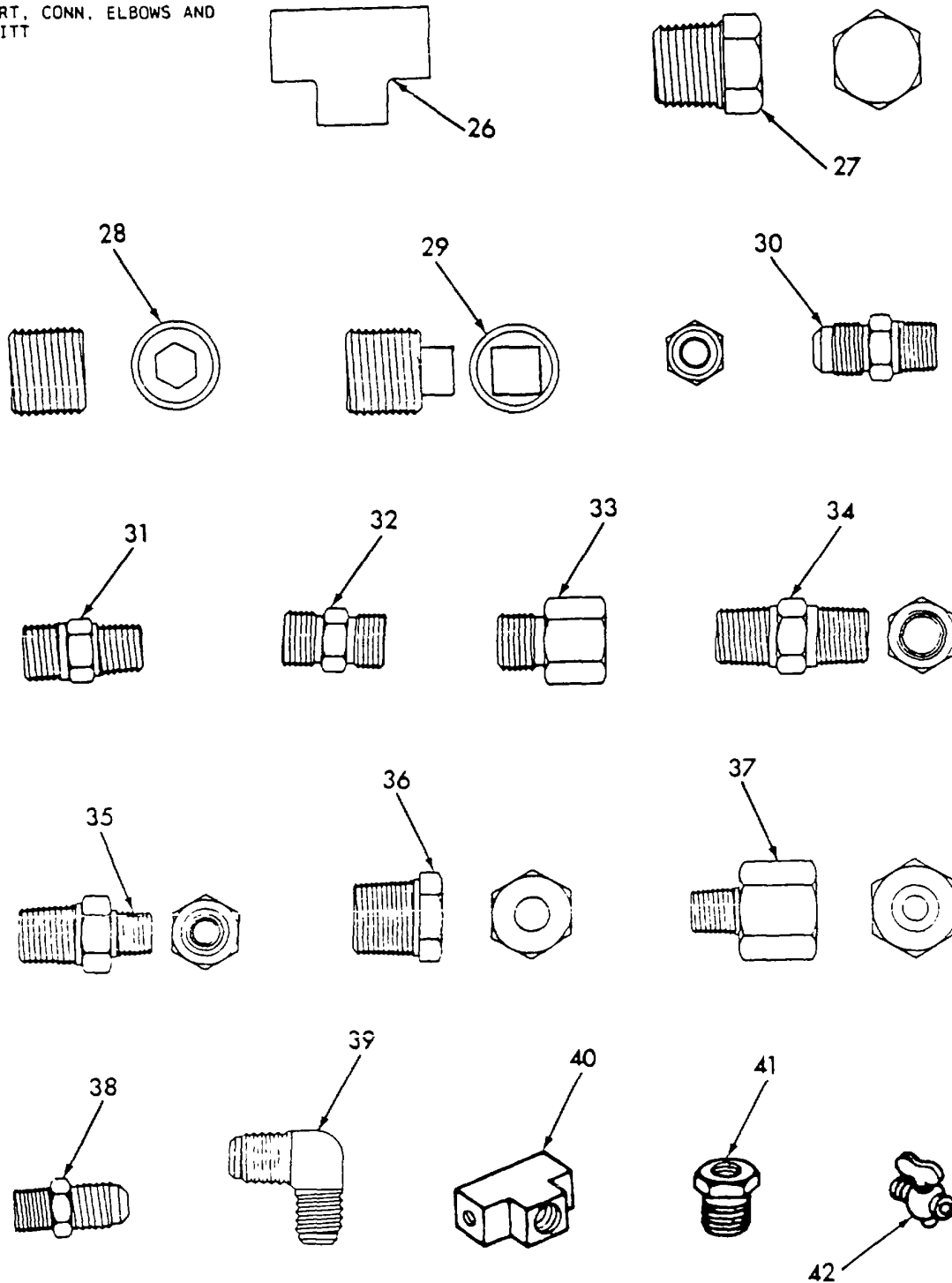


PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-164

CHART, CONN. ELBOWS AND
FIT



PRINTED IN THE UNITED STATES OF AMERICA

04-164



MT-145
BRAKES

GROUP

04

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 04-164			26	120 498	1/4-18 PIPE		
		CHART. CONN. ELBOWS AND FITT			26	444 122	3/8-18 PIPE		
					26	444 124	1/2-14 PIPE		
					26	444 126	3/4-14 PIPE		
					27		PLUG, HEX HD -AUTOMOTIVE PIPE		
16	153 177 R1	3/8 TUBE X 1/2 TUBE X 1/2 MPT			27	444 614	1/8-27 PIPE -BRASS-		
16	971 582 R91	3/8 TUBE X 5/8 TUBE X 1/2 MPT			27	444 613	1/8-27 PIPE -STEEL-		
16	684 958 R1	1/2 TUBE X 3/8 TUBE X 3/8 MPT			27	20 988 R1	1/4-18 PIPE -BRASS-		
17		TEE, -SPHERICAL SLEEVE-			27	444 618	1/4-18 PIPE -STEEL-		
17	252 132 C1	3/8 TUBE X 1/4 MPT X 1/4 TUBE			27	20 990 R1	3/8-18 PIPE -BRASS-		
17	971 593 R91	3/8 TUBE X 3/8 MPT X 1/2 TUBE			27	444 632	1/2-14 PIPE -BRASS-		
17	55 083 HX	1/2 TUBE X 3/8 MPT X 3/8 TUBE			27	444 630	1/2-14 PIPE -STEEL-		
17	179 841 H1	1/2 TUBE X 1/2 MPT X 1/2 TUBE			27	444 638	3/4-14 PIPE -BRASS-		
18	349 598 C1	TEE, 3/8 TUBE X 1/4 MPT X 1/4 MPT -SPHERICAL SLEEVE-			27	444 636	3/4-14 PIPE -STEEL-		
19	971 648 R91	TEE, 3/8 TUBE X 3/8 TUBE X 1/4 FPT -SPHERICAL SLEEVE-			27	444 644	1-11-1/2 PIPE -BRASS-		
20	190 875 R1	TEE, 5/8 TUBE X 1/2 FPT X 5/8 TUBE -SPHERICAL SLEEVE-			27	444 642	1-11-1/2 PIPE -STEEL-		
21	242 149 R1	TEE, 1/2 TUBE X 3/8 MPT X 1/4 FPT -SPHERICAL SLEEVE-			28		PLUG, RECESS HEX HD -AUTOMOTIVE PIPE-		
22		TEE, -SPHERICAL SLEEVE-			28	444 689	1/8-27 PIPE -BRASS-		
22	55 923 HX	3/8 TUBE X 1/4 FPT X 1/4 MPT			28	444 688	1/8-27 PIPE -STEEL-		
22	292 896 C11	1/2 TUBE X 1/2 FPT X 1/2 MPT			28	444 693	1/4-18 PIPE -BRASS-		
22	971 604 R91	5/8 TUBE X 1/4 FPT X 1/2 MPT			28	444 691	1/4-18 PIPE -STEEL-		
23		TEE, -SPHERICAL SLEEVE-			28	444 699	3/8-18 PIPE -BRASS-		
23	971 599 R91	1/4 MPT X 1/4 FPT X 1/4 TUBE			28	444 705	1/2-14 PIPE -BRASS-		
23	101 917 R1	1/4 MPT X 1/4 FPT X 3/8 TUBE			28	444 709	R/S P412		
23	84 262 R11	3/8 MPT X 1/2 FPT X 3/8 TUBE			28	444 717	3/4-14 PIPE -STEEL-		
23	150 872 R1	3/8 MPT X 1/4 FPT X 1/2 TUBE			28	444 715	1-11-1/2 PIPE -BRASS-		
23	125 643 R1	1/2 MPT X 1/4 FPT X 5/8 TUBE			29		1-11-1/2 PIPE -STEEL-		
24		TEE, DRYSEAL -AUTOMOTIVE PIPE			29	444 572	PLUG, SQ HD -AUTOMOTIVE PIPE-		
24	9409 939	1/8-27 PIPE			29	444 578	1/8 PIPE		
24	444 134	1/4-18 PIPE			29	444 584	1/4-14 PIPE		
24	444 136	3/8-18 PIPE			30		3/8-18 PIPE		
24	444 138	1/2-14 PIPE			30	118 748	CONNECTOR, -45 DEG FLARED TUBE-		
24	444 140	3/4-14 PIPE			30	118 749	1/8 PIPE X 1/4 TUBE		
24	444 156	1-11-1/2 PIPE			30	29 485 H	1/8 PIPE X 5/16 TUBE		
25		TEE, DRYSEAL -AUTOMOTIVE PIPE-			30	425 364 R1	1/8 PIPE X 3/8 TUBE		
25	9409 943	1/8-27 PIPE			30	110 200	1/4 PIPE X 1/4 TUBE		
25	444 148	1/4-18 PIPE			30	118 750	1/4 PIPE X 5/16 TUBE		
25	444 150	3/8-18 PIPE			30	300 914 R1	1/4 PIPE X 3/8 TUBE		
25	444 152	1/2-14 PIPE			30	282 357 C1	1/4 PIPE X 1/2 TUBE		
25	444 461	3/4-14 PIPE			30	425 123 R1	1/4 PIPE X 5/8 TUBE		
25	444 156	1-11-1/2 PIPE			30	442 703	3/8 PIPE X 1/4 TUBE		
26		TEE, DRYSEAL -AUTOMOTIVE PIPE-			30	986 296 R1	3/8 PIPE X 5/16 TUBE		
26	9409 935	1/8-27 PIPE			30	118 752	3/8 PIPE X 3/8 TUBE		
					30	285 611 C1	3/8 PIPE X 1/2 TUBE		
					30	452 741 C1	3/8 PIPE X 5/8 TUBE		
					30	986 297 R1	1/2 PIPE X 1/4 TUBE		
					30	303 068 R1	1/2 PIPE X 3/8 TUBE		
					30	116 487	1/2 PIPE X 1/2 TUBE		
					30	110 287	1/2 PIPE X 5/8 TUBE		
					30	438 721 C1	3/4 PIPE X 1/2 TUBE		
					30	759 431 C1	3/4 PIPE X 3/4 TUBE		
					31		CONNECTOR, -SPHERICAL SLEEVE-		
					31	142 064 H	1/8 PIPE X 1/4 TUBE		
					31	75 317 HX	1/8 PIPE X 3/8 TUBE		
					31	30 775 VX	1/4 PIPE X 1/4 TUBE		
					31	30 757 VX	1/4 PIPE X 3/8 TUBE		
					31	59 595 DX	1/4 PIPE X 1/2 TUBE		
					31	416 282 C1	3/8 PIPE X 1/4 TUBE		
					31	77 911 HX	3/8 PIPE X 3/8 TUBE		
					31	59 588 DX	3/8 PIPE X 1/2 TUBE		
					31	971 625 R91	3/8 PIPE X 5/8 TUBE		
					31	55 931 R1	1/2 PIPE X 3/8 TUBE		
					31	95 552 R11	1/2 PIPE X 1/2 TUBE		
					31	698 562 R91	1/2 PIPE X 5/8 TUBE		

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

04-164

REVISION 01

1065

MT-145
BRAKES

GROUP 04



ITEM NO	PART NUMBER	FIG. 04-164	Y	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 04-164				38	986 297 R1	1/2-14 PIPE X 3/8 TUBE			
		CHART, CONN, ELBOWS AND FITT				38	110 287	1/2-14 PIPE X 3/4 TUBE			
						38	759 431 C1	3/4-14 PIPE X 3/4 TUBE			
						38	565 014 R1	3/4-14 PIPE X 1 TUBE			
						38	606 367 C1	1-12 PIPE X 3/4 TUBE			
						39		ADAPTER, 90 DEG ELBOW			
								UNION -45 DEG FLARED			
								TUBE-			
31	58 671 R11	1/2 PIPE X 3/4 TUBE				39	118 810	1/4 TUBE			
32		CONNECTOR, -SPHERICAL				39	118 811	5/16 TUBE			
		SLEEVE-				39	118 812	3/8 TUBE			
32	136 286 R11	1/8 PIPE X 1/4 TUBE				39	118 814	1/2 TUBE			
32	30 777 V	1/8 PIPE X 3/8 TUBE				39	144 277	5/8 TUBE			
32	143 406 HX	1/4 PIPE X 1/2 TUBE				39	110 290	3/4 TUBE			
32	972 906 R91	3/8 PIPE X 5/8 TUBE				39	9402 869	1 TUBE			
32	142 394 HX	1/2 PIPE X 3/4 TUBE				40		ELBOW, SPECIAL DROP			
33		CONNECTOR, -SPHERICAL				40	459 279 C1	1/4 FPT X 1/4 FPT			
		SLEEVE-				40	459 280 C1	3/8 FPT X 3/8 FPT X			
33	13 950 HX	1/8 PIPE X 1/4 TUBE						1/4 NC			
33	48 059 HX	1/8 PIPE X 3/8 TUBE				40	459 281 C1	1/2 FPT X 1/2 FPT X			
33	126 606 HX	1/4 PIPE X 3/8 TUBE						1/4 NC			
33	971 631 R91	3/8 PIPE X 3/8 TUBE				41		COUPLING, ANCHOR			
33	138 173 HX	3/8 PIPE X 1/2 TUBE				41	123 259 R11	1/4 FPT			
33	971 632 R91	1/2 PIPE X 1/2 TUBE				41	309 449 C1	3/8 FPT			
33	60 702 R11	1/2 PIPE X 5/8 TUBE				41	444 033	1/2 FPT X 1/4 FPT			
34		NIPPLE, DRYSEAL THREADS				42	25 450 H	COCK, DRAIN			
		-AUTOMOTIVE PIPE-									
34	443 976	1/8-27 PIPE									
34	443 978	1/4-18 PIPE									
34	443 980	3/8-18 PIPE									
34	443 982	1/2-14 PIPE									
35		NIPPLE, DRYSEAL THREADS									
		-AUTOMOTIVE PIPE-									
35	443 986	1/4-18 PIPE X 1/8 X 27									
35	443 988	3/8-18 PIPE X 1/8 X 27									
35	443 990	3/8-18 PIPE X 1/4 X 18									
35	443 992	1/2-14 PIPE X 3/8 X 18									
36		ADAPTER, DRYSEAL THREAD									
		-AUTOMOTIVE PIPE-									
36	444 024	1/4-18 MPT X 1/8-27 FPT									
36	444 026	3/8-18 MPT X 1/8-27 FPT									
36	444 028	3/8-18 MPT X 1/4-18 FPT									
36	444 030	1/2-14 MPT X 1/8-27 FPT									
36	444 032	1/2-14 MPT X 1/4-18 FPT									
36	444 034	1/2-14 MPT X 3/8-18 FPT									
36	436 604 C1	1/2 MPT X 3/8 FPT									
36	24 466 R1	3/4-14 MPT X 1/2-14 FPT									
37		ADAPTER, DRYSEAL THREADS									
		-AUTOMOTIVE PIPE-									
37	444 010	1/16-27 MPT X 1/8-27 FPT									
37	443 996	1/8-27 MPT X 1/8-27 FPT									
37	444 012	1/8-27 MPT X 1/4-18 FPT									
37	444 000	1/4-18 MPT X 1/4-18 FPT									
37	444 014	1/4-18 MPT X 3/8-18 FPT									
37	444 016	3/8-14 MPT X 1/2-14 FPT									
37	444 002	3/8-18 MPT X 3/8-18 FPT									
37	444 004	1/2-14 MPT X 1/2-14 FPT									
37	444 018	1/2-14 MPT X 3/4-14 FPT									
37	444 006	3/4-14 MPT X 3/4-14 FPT									
37	444 020	3/4-14 MPT X 1-11-1/2									
		FPT									
38		ADAPTER									
38	118 748	1/8-27 PIPE X 1/4 TUBE									
38	118 749	1/8-27 PIPE X 5/16 TUBE									
38	425 364 R1	1/4-18 PIPE X 1/4 TUBE									
38	110 200	1/4-18 PIPE X 5/16 TUBE									
38	118 750	1/4-18 PIPE X 3/8 TUBE									
38	300 914 R1	1/4-18 PIPE X 1/2 TUBE									
38	425 123 R1	3/8-18 PIPE X 1/4 TUBE									
38	986 296 R1	3/8-18 PIPE X 3/8 TUBE									
38	118 752	3/8-18 PIPE X 1/2 TUBE									
38	285 611 C1	3/8-18 PIPE X 5/8 TUBE									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

04-164

REVISION 01

PAGE 5

1066

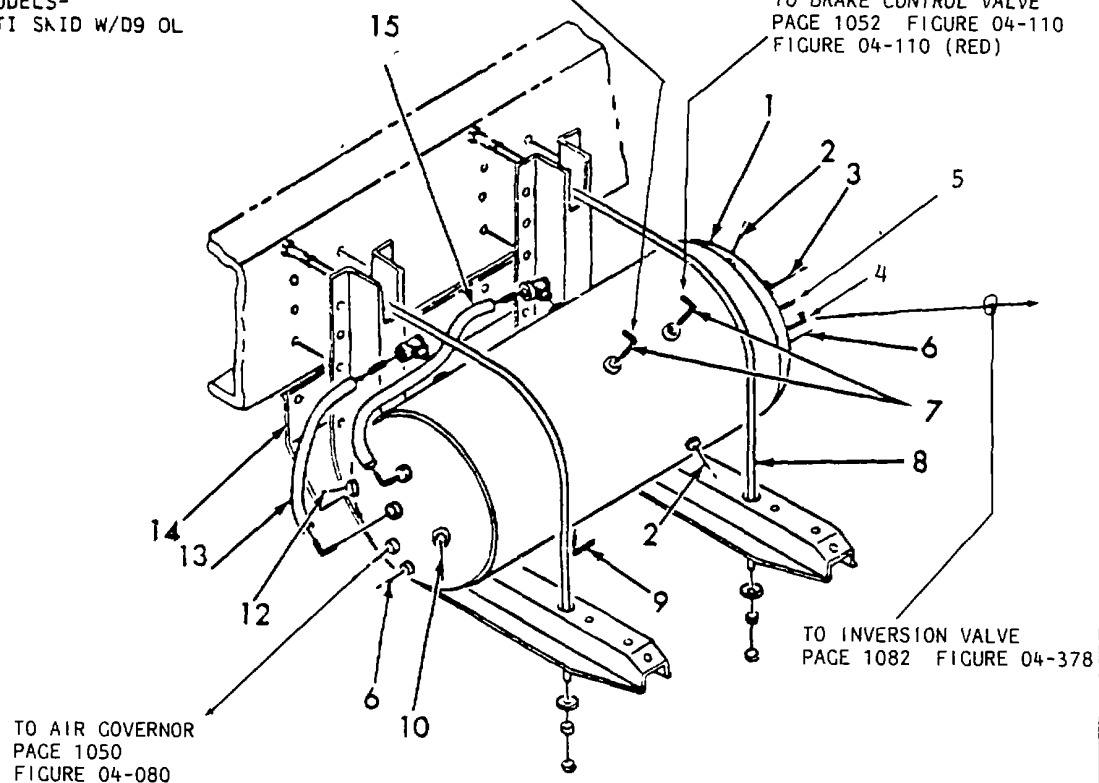


FIG. 04-180

TANK, MTG AND HOISING, AIR
-4 X 4 MODELS-
W/O ANTI SKID W/D9 OL

TO BRAKE CONTROL VALVE
PAGE 1052 FIGURE 04-110
(GREEN)

TO BRAKE CONTROL VALVE
PAGE 1052 FIGURE 04-110
FIGURE 04-110 (RED)



TO AIR GOVERNOR
PAGE 1050
FIGURE 04-080

TO INVERSION VALVE
PAGE 1082 FIGURE 04-378

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

1067

MT-145
BRAKES

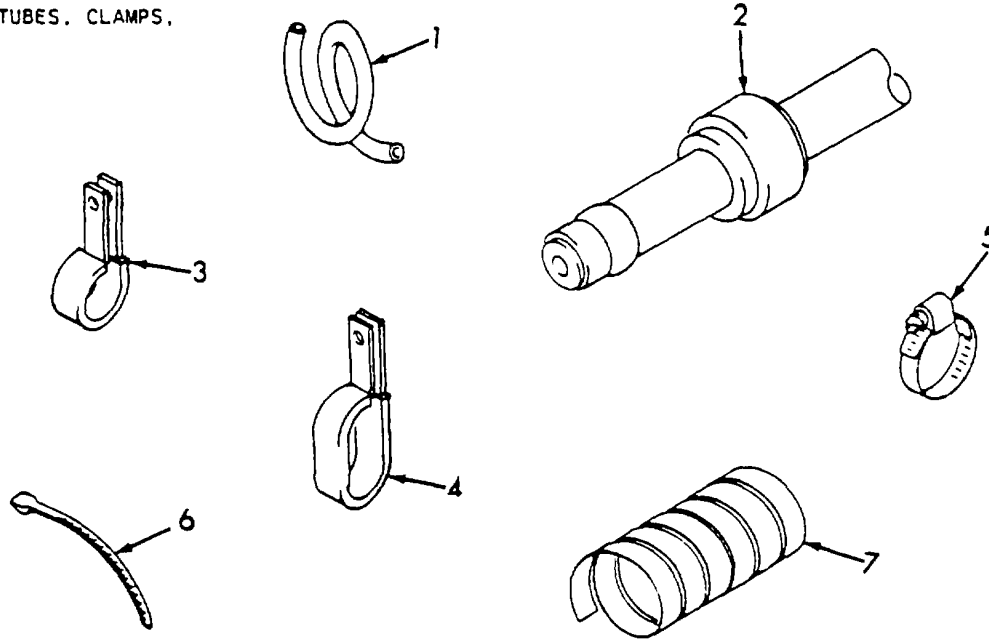
GROUP 04

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 04-180			
		TANK, MTG AND HOSEING, AIR			
		-4 X 4 MODELS-			
		W/O ANTI SKID W/D9.0L			
		AND CAT3208 ENG			
1	483 116 C1	TANK, AIR	D	1	
2	20 988 R1	PLUG, 1/4MPT	D	2	
3	444 632	PLUG, 1/2MPT	D	1	
4		ELBOW, 90DEG 1/4MPT			
4	30 761 VX	W/NYLON TUBE	D	1	
5	444 705	PLUG, HEX SOCKET 1/2PT	D	1	
6	25 450 H	COCK, DRAIN	D	2	
7		ELBOW, 90DEG 1/2MPT			
7	55 916 R11	W/NYLON TUBE	D	2	
8	484 093 C1	CABLE ASSY, 889.0MM/35 O	D	2	
8	114 494	R/S NUJA6245	D	4	
		NUT, HEX JAM 3/8UNF			
8	874 027 R1	WASHER, FLAT 7/16	D	2	
9	444 054	ELBOW, 45DEG 1/4MPT X	D	1	
		1/4FPT			
9	25 450 H	COCK, DRAIN	D	1	
10	444 032	REDUCER, 1/2MPT X 1/4MPT	D	1	
10	25 450 H	COCK, DRAIN	D	1	
12	444 032	REDUCER, 1/2MPT X 1/4MPT	D	1	
12	386 398 C91	VALVE, SAFETY SEE FIG.04-281	D	1	
13	417 201 C2	+ TUBE, NYLON 5/8OD X	D	1	
		356 OMM/14 OIN.			
13	55 916 R11	ELBOW, 90DEG 1/2MPT X 5/8	D	1	
		TUBE-AT WET TANK			
13	698 562 R91	CONNECTOR, 1/2MPT X 5/8	D	1	
		TUBE-AT SECONDARY TANK			
13	414 508 C1	INSERT, 5/8 TUBE	D	2	
13	55 897 R1	NUT, 5/8 TUBE	D	2	
13	55 896 R1	SLEEVE, 5/8 TUBE	D	2	
13	483 144 C91	\$ VALVE, CHECK 90DEG-AT	D	1	
		SECONDARY TANK			
14	528 559 C1	SHIELD, HEAT	D	1	
14	25 708 R1	WASHER, FLAT 5/16	D	4	
14	25 228 R1	R/S S2561	D	4	
		BOLT, HEX HD 5/16-18X3/4			
14	9413 977	NUT, HEX LOCK 5/16	D	4	
15	417 201 C2	+ TUBE, NYLON 5/8OD X	D	1	
		483 OMM/19 OIN			
15	55 916 R11	ELBOW, 90DEG 1/2MPT X 5/8	D	1	
		TUBE-AT WET TANK			
15	698 562 R91	CONNECTOR, 1/2MPT X 5/8	D	1	
		TUBE-AT PRIMARY TANK			
15	414 508 C1	INSERT, 5/8 TUBE	D	2	
15	55 897 R1	NUT, 5/8 TUBE	D	2	
15	55 896 R1	SLEEVE, 5/8 TUBE	D	2	
15	483 144 C91	\$ VALVE, CHECK 90DEG-AT	D	1	
		PRIMARY TANK			

REVISION 01



FIG. 04-186

HOSES, TUBES, CLAMPS,
CHART

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC
1		+ HOSES, REUSABLE END REFER TO MT-90				1	575 005 C91	W/996599R3 HOSE W/1/4 THD			
1	375 051 C2	1/4 TUBING EQUIVALENT 0 188 ID X 0 491 OD				1	574 897 C91	W/574896C1 HOSE W/3/8 THD			
1	375 052 C2	5/16 TUBING EQUIVALENT 0 250 ID X 0 554 OD				1	575 006 C91	W/574896C1 HOSE W/1/2 THD			
1	375 053 C2	3/8 TUBING EQUIVALENT 0 313 ID X 0 617 OD				1		SLEEVE, FIXED END			
1	375 054 C2	1/2 TUBING EQUIVALENT 0 406 ID X 0 737 OD				1	591 160 C1	W/990701C1 HOSE			
1	375 055 C2	5/8 TUBING EQUIVALENT 0 500 ID X 0 831 OD				1	575 375 C1	W/996599R3 HOSE			
1	375 056 C2	3/8 TUBING EQUIVALENT 0 625 ID X 0 956 OD				1	575 376 C1	W/574896C1 HOSE			
1	375 057 C2	1 TUBING EQUIVALENT 0 875 ID X 1 206 OD				2		+ TUBE, NYLON			
1	407 995 C2	1-1/4 TUBING EQUIVALENT 1 125 ID X 1 487 OD				2	417 196 C2	1/4 OD			
1		+ HOSE, FIXED END				2	417 199 C2	3/8 OD			
1	990 701 C1	1/4 ID X 5/8 OD				2	417 200 C2	1/2 OD			
1	996 599 R3	3/8 ID X 3/4 OD				2	417 201 C2	5/8 OD			
1	574 896 C1	1/2 ID X 7/8 OD				2	417 202 C2	3/4 OD			
1		FITTINGS, REUSABLE END				2		+ TUBE, COPPER			
1	375 014 C2	1/4 X 7/16-20 THD				2	995 059 R1	1/8 OD			
1	375 015 C2	5/16 X 1/2-20 THD				2	995 060 R1	3/16 OD			
1	375 016 C2	3/8 X 5/8-18 THD				2	995 061 R1	1/4 OD			
1	375 017 C2	1/2 X 3/4-16 THD				2	995 062 R1	5/16 OD			
1	375 018 C2	5/8 X 7/8-14 THD				2	995 063 R1	3/8 OD			
1	375 019 C2	3/4 X 1-1/16-14 THD				2	995 064 R1	1/2 OD			
1	375 161 C2	1 X 1-5/16-12 THD				2	995 509 R1	5/8 OD			
1	407 994 C2	1-1/4 X 1-5/8-12 THD				2	995 065 R1	3/4 OD			
1		FITTINGS, FIXED END				2		+ TUBE, STEEL			
1	590 660 C91	W/990701C1 HOSE W/1/8-27 THD				2	990 093 C1	3/16 OD			
						2	990 094 C1	1/4 OD			
						2	990 095 C1	5/16 OD			
						2		SLEEVE, NYLON TUBE			
						2	30 774 V	1/4 TUBE			
						2	30 644 V	3/8 TUBE			
						2	47 126 H	1/2 TUBE			
						2	55 896 R1	5/8 TUBE			
						2	76 263 H	3/4 TUBE			

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

MT-145
BRAKES



GROUP 04

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 04-186									
		HOSES, TUBES, CLAMPS. CHART						+ PART NO COVERS ONE FOOT BULK MATERIAL			
2		INSERT, NYLON TUBE									
2	414 504 C1	1/4 TUBE									
2	414 505 C1	3/8 TUBE									
2	414 506 C1	1/2 TUBE									
2	414 508 C1	5/8 TUBE									
2	414 507 C1	3/4 TUBE									
2		NUT, NYLON TUBE									
2	30 773 V	1/4 TUBE									
2	30 643 V	3/8 TUBE									
2	47 128 H	1/2 TUBE									
2	55 897 R1	5/8 TUBE									
3		CLAMP, SINGLE -COATED-									
3	299 398 C1	3/16 ID									
3	299 399 C1	1/4 ID									
3	299 401 C1	5/16 ID									
3	299 403 C1	3/8 ID									
3	98 959 R1	1/2 ID									
3	299 410 C1	5/8 ID									
3	367 887 C1	11/16 ID									
3	299 566 C1	3/4 ID									
3	299 414 C1	7/8 ID									
3	299 415 C1	15/16 ID									
3	406 381 C1	1 ID									
3	299 608 C1	1-1/4 ID									
3	299 608 C1	1-3/8 ID									
3	299 277 C91	1-5/8 ID									
3	459 655 C1	2-1/2 ID									
4		CLAMP, DOUBLE -COATED-									
4	309 140 C1	1/4 X 1/4 ID									
4	343 539 C1	3/8 X 1/4 ID									
4	358 018 C1	1/2 X 1/2 ID									
4	282 382 C1	5/8 X 3/8 ID									
4	297 363 C1	5/8 X 1/2 ID									
4	365 215 C1	3/4 X 1/2 ID									
4	364 323 C1	3/4 X 5/8 ID									
4	470 375 C1	1 X 1 ID									
4	445 137 C1	1-5/16 X 5/8									
4	445 138 C1	1-5/8 X 1-5/8									
5		CLAMP ADJ									
5	244 713 R1	7/32 TO 5/8 ID									
5	553 791 C1	7/16 TO 25/32 ID									
5	39 093 H	1 ID									
5	299 277 C91	1-5/8 ID									
6		STRAP, LK									
6	869 707 C1	2-1/2 LONG									
6	289 862 C1	6-3/4 LONG									
6	470 321 C1	8 LONG									
6	533 959 C1	10 LONG									
6	306 132 C1	14-13/16 LONG									
7		WILL WORK FOR 291207C1									
7		+ WRAP STEEL -REUSABLE END									
7		HOSE-									
7	375 044 C1	W/375051C1 HOSE									
7	375 045 C1	W/375052C1 HOSE									
7	375 046 C1	W/375053C1 HOSE									
7	375 047 C1	W/375054C1 HOSE									
7	375 048 C1	W/375055C1 HOSE									
7	375 049 C1	W/375056C1 HOSE									
7	375 050 C1	W/375057C1 HOSE									
7	441 734 C1	+ WRAP, PLASTIC									
7	436 897 C1	+ CONDUIT, SPIRAL 1-1/4 ID									
7	441 733 C1	+ CONDUIT, CONVOLUTED TUBE 1/4									

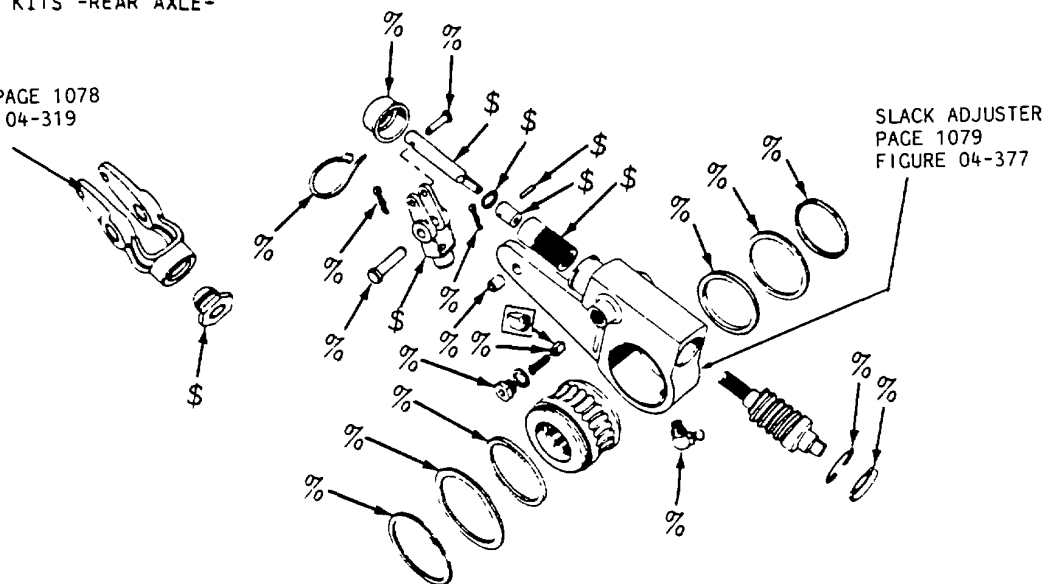
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01



FIG. 04-239

ADJUSTER, AUTO-SLACK
REPAIR KITS -REAR AXLE-YOKE PAGE 1078
FIGURE 04-319SLACK ADJUSTER
PAGE 1079
FIGURE 04-377

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		KIT, AUTO-SLACK ADJ REPAIR							
	501 293 C91	R/S 963 % MINOR							
	501 294 C91	R/S 1350 \$ MAJOR							

MISSING ITEM NUMBERS ARE NOT USED

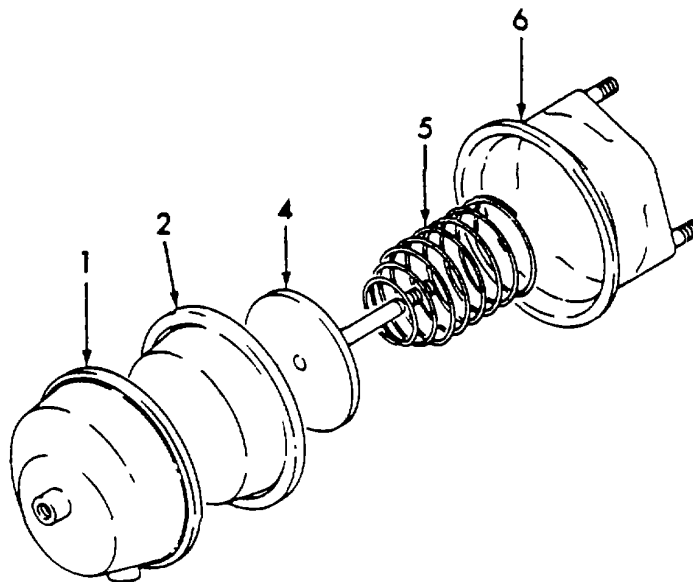
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

1071



FIG. 04-248

CHAMBER, AIR BRK MGM
30 IN -SERVICE-BOLTS TO BRAKE
CAMSHAFT BRACKET
PAGE 1078
FIGURE 04-319

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1		CHAMBER, AIR BRK SEE FIG. 04-319 ITEM 5 PAGE 1078 PLATE NOT SERVICED SEPARATELY	1						
2	871 934 R1	DIAPHRAGM, CHAMBER	1						
4	464 945 C1	PISTON, W/ROD	1						
5	464 947 C1	SPRING, PUSH ROD	1						
6	453 119 C1	PLATE	1						

PRINTED IN THE UNITED STATES OF AMERICA

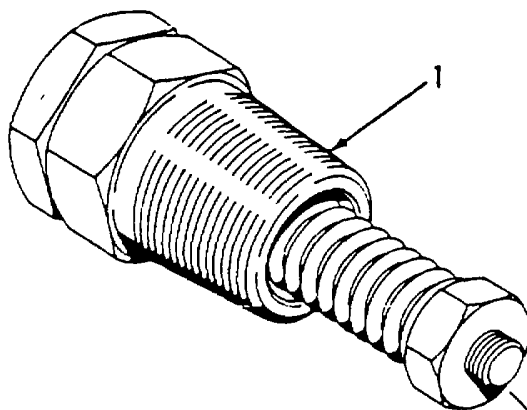
MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

1072



VALVE, SAFETY



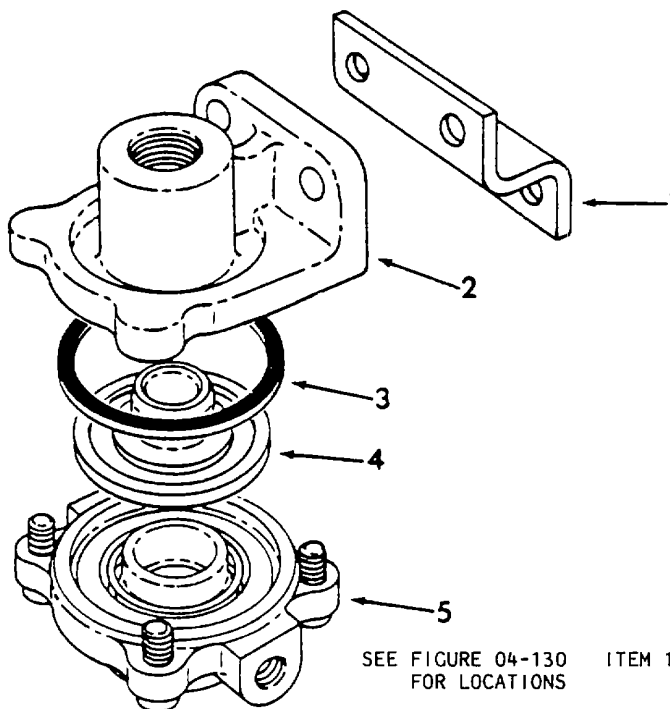
LOCATED IN AIR TANK
PAGE 1067 FIGURE 04-180
ITEM 12

ITEM NO	PART NUMBER	DESCRIPTION	Y S	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y S	QTY	REC STK
1	386 398 C91	VALVE ASSY. SAFETY		1							



FIG. 04-295

VALVE, QUICK RELEASE



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STX
	473 794 C91	VALVE, QUICK RELEASE							
	25 493 R1	BOLT, HEX-HD 5/16NC X 1	AR						
	25 654 R1	BOLT, HEX-HD 5/16NC X 1-1/2	AR						
	9413 994	NUT, HEX LK 5/16NC	AR						
1	475 932 C1	BRACKET, QUICK RELEASE VALVE MTG	1						
2		BODY NOT SERVICED SEPARATELY	1						
3	349 962 C1	%RING, GASKET	1						
4		%DIAPHRAGM, QUICK RELEASE VALVE	1						
5		COVER NOT SERVICED SEPARATELY	1						
	474 474 C91	%KIT, QUICK RELEASE VALVE REPAIR							

MISSING ITEM NUMBERS ARE NOT USED

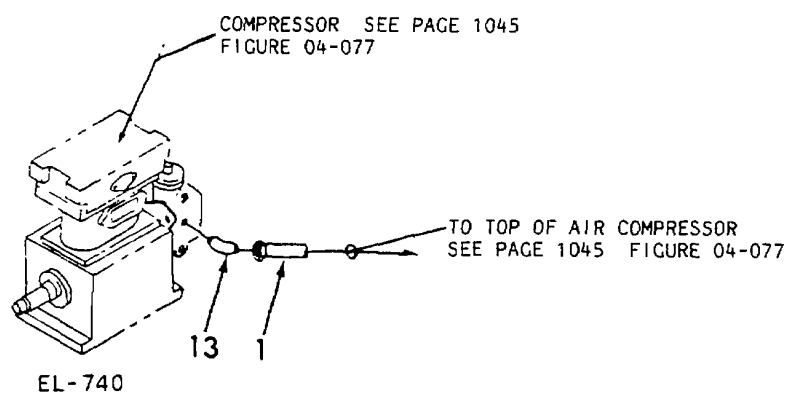
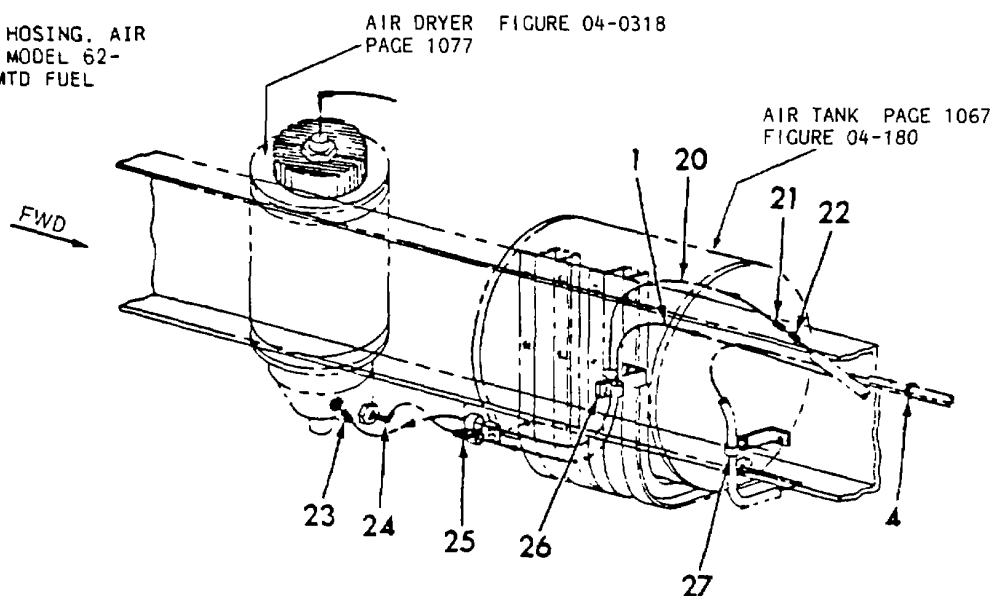
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 010



FIG. 04-317

DRYER, MTG AND HOISING, AIR
-BRAKEMASTER MODEL 62-
W/RT SIDE MTD FUEL
TANK



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

1075

PAGE 1



MT-145
BRAKES

GROUP

04

ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC/STK	ITEM NO	PART NUMBER	DESCRIPTION	Y R	QTY	REC
		FIG. 04-317				27	24 840 R1	BOLT, HEX HD 3/8-16 X 1 0	A		
		DRYER, MTG AND HOSING, AIR				27	3/8 R	WASHER, 3/8 LK			
		-BRAKEMASTER MODEL 62-				27	25 522 R1	NUT, HEX HD 3/8-16			
		W/RT SIDE MTD FUEL									
		TANK									
1	A040 920 020	HOSE, AFTERCOOLER TO GOV			1						
		REFER TO MT-90									
13	118 753	ELBOW, 90 DEG 1/8MPT X									
		7/16-20									
20	A100 600 000	HOSE, COMPR TO AFTERCOOLER	A	1							
21	144 461	CONNECTOR, 7/8-14 X 1/2FPT	A	1							
22	55 917 R1	CONNECTOR, 13/16-18 X		1							
		1/2MPT									
23	116 487	CONNECTOR, 7/8-14 X 1/2MPT		1							
24	262 992 R91	ELBOW, 90 DEG 7/16-20 X	A	1							
		1/4MPT									
25	193 755 R1	EXTENSION CLIP		1							
		MAKE LOCALLY									
25	299 412 C1	CLAMP, 13/16		1							
25	98 959 R1	CLAMP, 1/2	A	1							
25	25 493 R1	BOLT, HEX HD 5/16-18 X 1	A	1							
25	5/16 R	WASHER, 5/16 LK	A	1							
25	25 520 R1	NUT, HEX HD 5/16-18	A	1							
25	25 222 R1	BOLT, HEX HD 1/4-20 X 3/4	A	1							
25	1/4 R	WASHER, 1/4 LK	A	1							
25	25 519 R1	NUT, HEX HD 1/4-20	A	1							
26	252 409 C1	EXTENSION, CLIP	A	1							
26	101 983 R1	CLAMP, 13/16	A	1							
26	98 959 R1	CLAMP, 1/2	A	1							
26	25 222 R1	BOLT, HEX HD 1/4-20 X 3/4	A	1							
26	25 519 R1	NUT, HEX HD 1/4-20	A	1							
26	1/4 R	WASHER, 1/4 LK	A	1							
27		EXTENSION, CLIP	A	1							
		MAKE LOCALLY									
27	299 404 C1	CLAMP, 3/8	A	1							
27	25 483 R1	BOLT, HEX HD 1/4-20 X 1 0	A	1							
27	25 485 R1	BOLT, HEX HD 1/4-20 X	A	1							
		1-1/4									
27	26 110 R1	NUT, LK 1/4-20	A	1							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

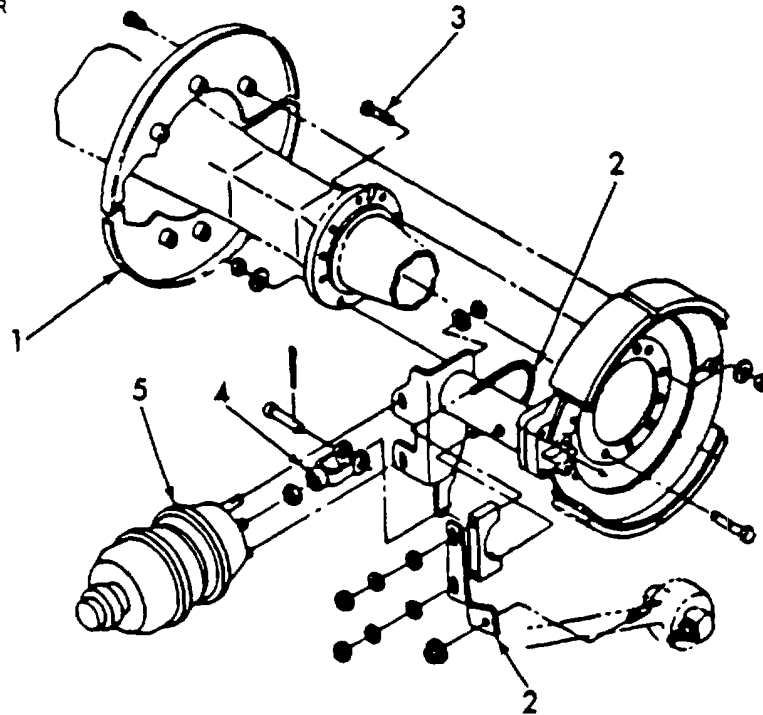
REVISION 01

1076



FIG. 04-319

BRAKE MOUNTING, REAR
-16-1/2 X 7-



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1		SHIELD, BRK DUST	2						
1	69 480 R91	BOLT, W/LK WASHER R/S A2X19	12						
2		BRACKET, BRK CAMSHAFT				503 007 C91	SET, BRK DUST SHIELD R/S A3736W907		
2	591 563 C1	LEFT	1						
2	591 564 C1	RIGHT	1						
2	452 993 C1	BOLT, U	2						
2	452 998 C1	SADDLE, CLAMP	2						
2	25 522 R1	NUT, 3/8 PHC TYPE 8	4						
2 3/8	R	WASHER, LK 3/8	4						
2	25 709 R1	WASHER, 406 X 812 X 089	4						
3	25 317 R1	BOLT, 9/16 X 2 PL TYPE 8	20						
3	27 293 R1	NUT, 9/16 PHC LK TYPE 8 R/S NL191	20						
3	584 488 C1	WASHER, FL SPEC	20						
4	379 388 C1	YOKE	2						
4	25 950 R1	NUT, 5/8 PHC JAM TYPE 8	2						
4	1/8X 1-1/4P	PIN, COTTER 1/8 X 1-1/4	2						
5		CHAMBER, AIR BRK REPLACES 456254C91 SEPARATE BREAKDOWN- SEE FIG 04-153 PG.1060							
5	596 003 C91	LEFT	1						
5	596 004 C91	RIGHT	1						
5	9412 231	NUT, 5/8 PHC P/T LK TYPE 8 R/S NL2101	4						
5	25 711 R1	WASHER, 656 X 1 312 X	4						



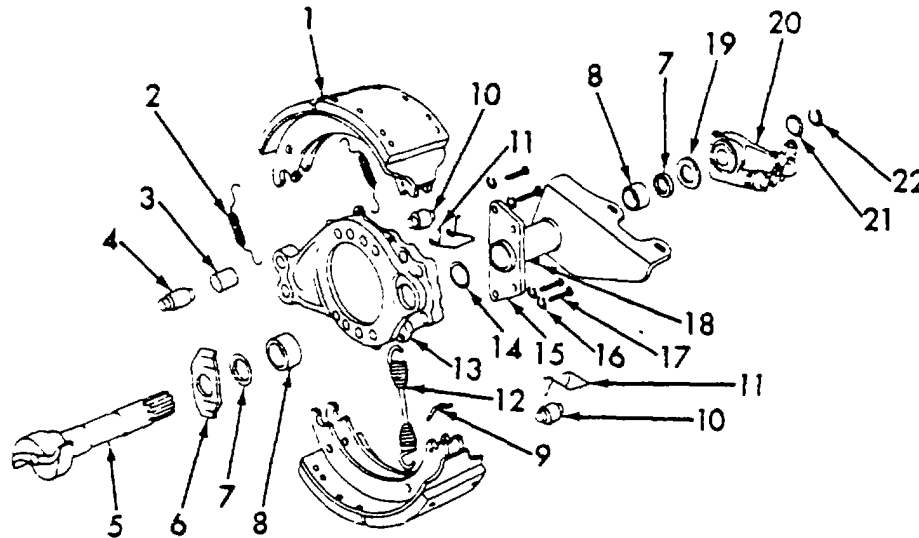
MT-145 BRAKES

GROUP

04

FIG. 04-377

BRAKE, REAR
-16-1/2 X 6 ROCKWELL-
W/RA39, 42, 199



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	580 989 C92	\$ SHOE, BRK W/LINING	1		15	596 594 C91	LEFT	1	
1	580 990 C92	\$ SHOE, BRK W/LINING	1		15	596 595 C91	RIGHT	1	
1	262 365 C1	R/S RV3109	48		16	103 323	DAN 50035713	4	
2	577 655 C1	\$ RIVET, BRK. SHOE	2				R/S WA18		
		R/S 22580515					WASHER, LK 1/2 MED		
3	577 650 C1	R/S 1225B496	2		17	77 013 R1	R/S S28121	4	
4	577 653 C1	BUSHING, ANCHOR PIN	2		18		BOLT, SPEC	1	
		R/S 1259N274					FITTING, GREASE		
5		PIN, ANCHOR			19	574 062 C1	OBTAIN LOCALLY		
5	588 999 C91	CAMSHAFT, BRK	1				R/S 1229S2697	1	
5	588 998 C91	LEFT	1		20		WASHER, FL		
		R/S 2210M5333S					ADJUSTER, SLACK		
		RIGHT							
6	577 654 C1	R/S 1229N2250	1		20		* AUTOMATIC		
7	56 121 R3	WASHER, CAMHEAD	2		20	580 413 C91	R/S A23275W595	1	
8	122 407 R1	R/S A1205/1556	2				LEFT		
		SEAL, SPIDER			20	580 412 C91	R/S A23275C601	1	
9	983 622 R1	R/S 1225N378	2				RIGHT		
		BUSHING, SPIDER			21	586 796 C1	R/S 1229G2971	3	
10	126 404 R1	R/S 1218G85	2				WASHER, FL		
		PIN, BRK SPG			22	586 797 C1	R/S 1229D2942	1	
		R/S 1779R18					RING, SNAP		
		ROLLER							
11	592 370 C1	RETAINER, ROLLER	2						
12	492 283 C1	R/S 2258U619	1						
		SPRING, BRK SHOE RETURN							
13		SPIDER, W/BUSH AND SEAL					* KIT, AUTOMATIC SLACK ADJ		
13	594 299 C91	R/S A3211R4412	1				REPAIR		
		LEFT					SEPARATE BREAKDOWN-		
13	594 300 C91	R/S A3211S4413	1				SEE FIG 04-239		
		RIGHT					PAGE 1071		
14	417 488 C1	R/S 1779J1024	1						
		SEAL, SPIDER				501 293 C91	R/S 963		
15		BRACKET, CAMSHAFT					MINOR		

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

1079

GROUP 04

MT-145
BRAKES

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 04-377							
		BRAKE, REAR							
		-16-1/2 X 6 ROCKWELL-							
		W/RA39, 42, 199							
	501 294 C91	R/S 1350							
		MAJOR							
	493 672 C93	SET, BRK LINING							
		NOTE BRAKE GROUP ASSY							
		0496879C92 LEFT							
		0496880C92 RIGHT							
		W/O AUTO-SLACK ADJ							
		0496881C92 LEFT							
		0496882C92 RIGHT							
		W/AUTO-SLACK ADJ							
		THESE PART NOS ARE							
		FOR REF ONLY AND ARE							
		SERVICED BY COMPONENTS							

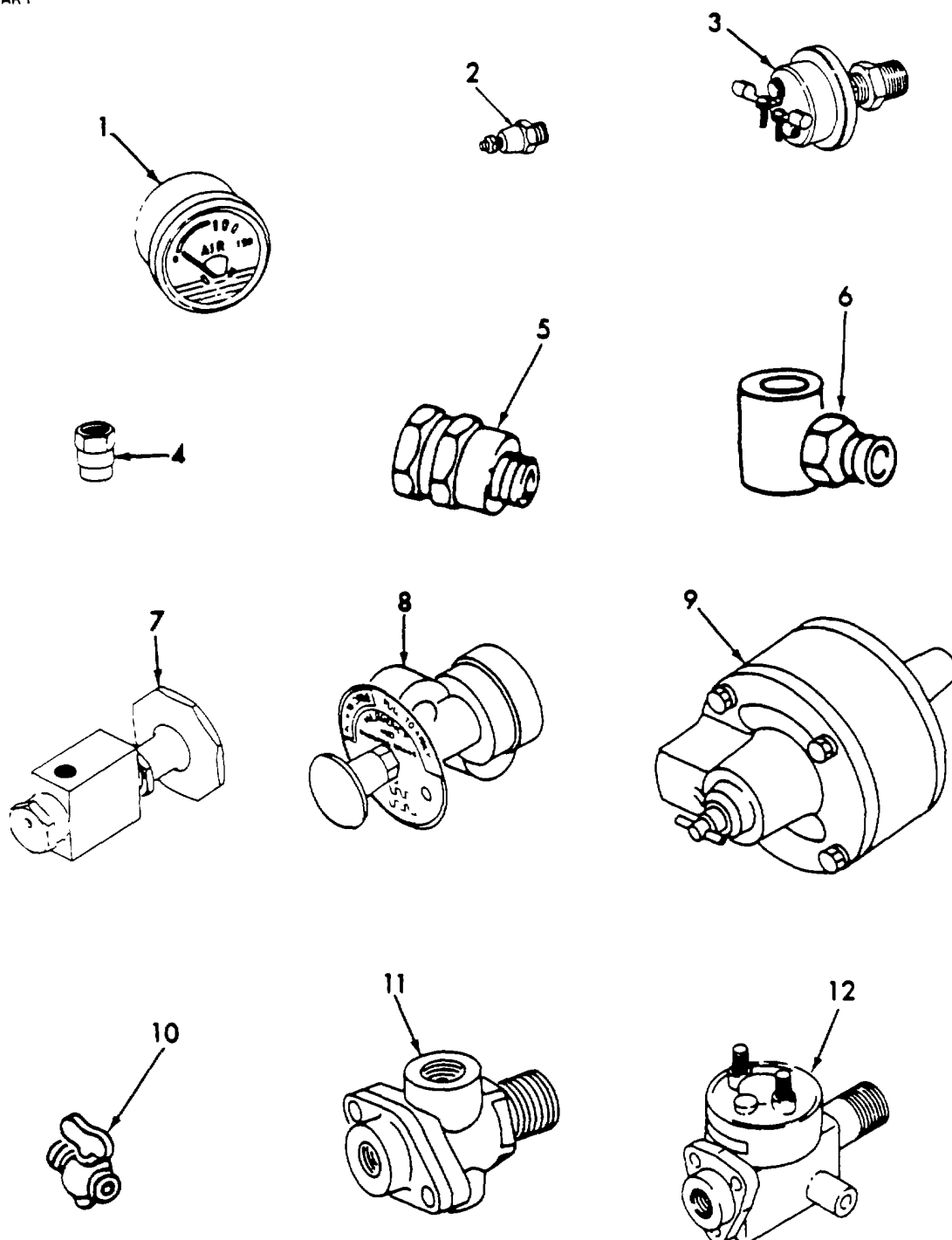
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01



FIG. 04-378
GAUGE, SWITCH, VALVE,
CHART



PRINTED IN THE UNITED STATES OF AMERICA



FIG. 04-378

GAUGE, SWITCH, VALVE,
CHART

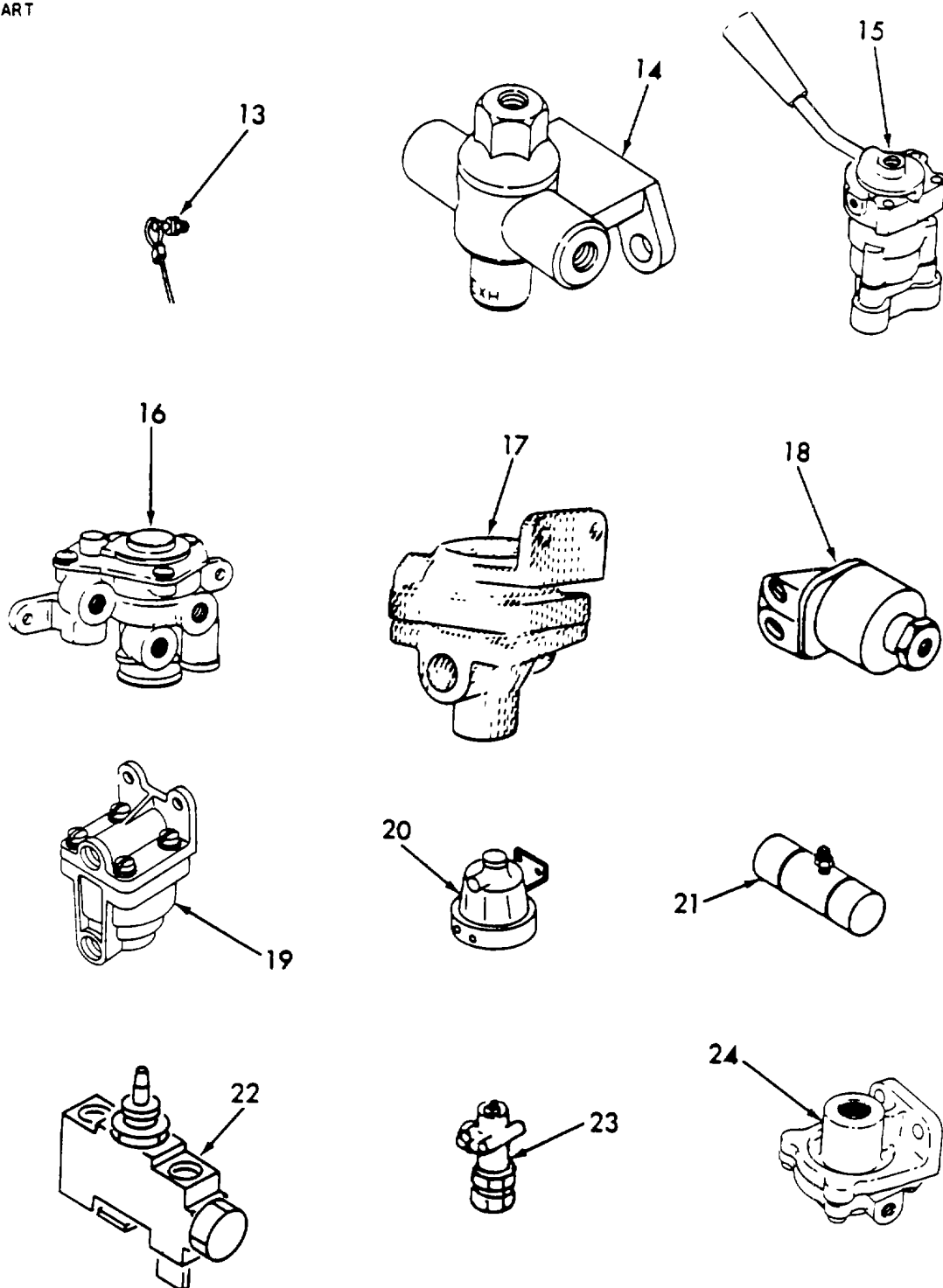
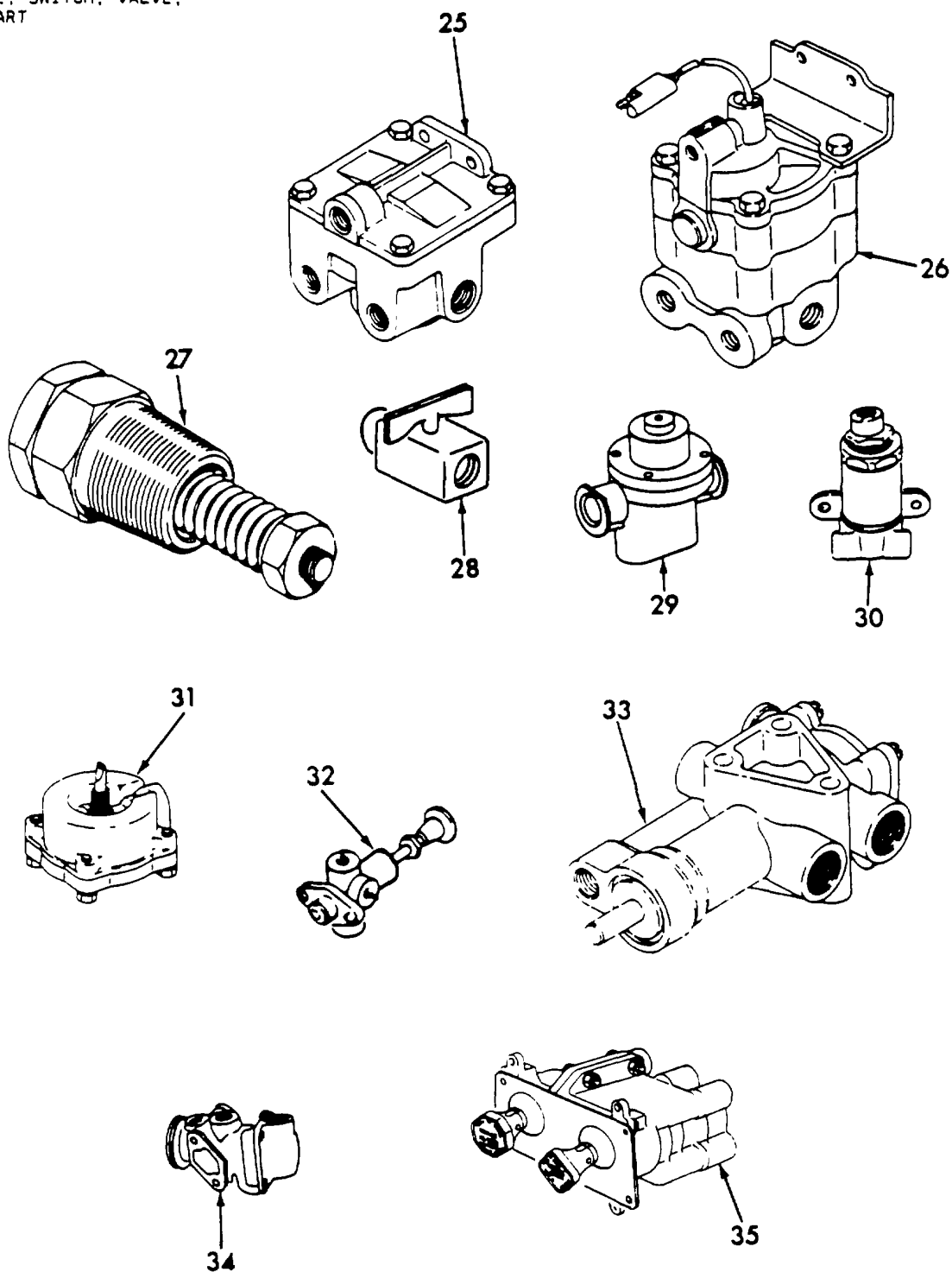




FIG. 04-378

GAUGE, SWITCH, VALVE,
CHART

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

1083

PAGE NO. 3



MT-145
BRAKES

GROUP

04

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 04-378				31		W/O HEATER			
		GAUGE, SWITCH, VALVE, CHART				31	778 063 C91	// W/SIDE ADAPT			
						31	777 915 C92	// W/TOP ADAPT			
						32	994 157 C91	# VALVE, TRACTOR PARKING			
						32	995 156 C1	NOB, TRACTOR PARKING VALVE			
1	450 687 C1	GAUGE, AIR PRESSURE				33		VALVE, TRACTOR PROTECTION			
2	505 027 C1	SWITCH, LOW PRESSURE						WILL WORK FOR 445177R92			
3	505 026 C1	SWITCH, STOP LGT				33	466 890 C91	●● CHASSIS BUILT PRIOR TO 8-05-81			
4	76 208	VALVE, CHK				33	571 754 C91	●● CHASSIS BUILT 8-05-81 AND LATER			
5	865 753 R92	VALVE, CHK				34	445 177 R92	VALVE, TRACTOR PROTECTION SEPARATE BREAKDOWN-SEE FIG 04-259			
6	483 144 C91	% VALVE, CHK -90 DEG-				35	503 140 C91	VALVE, TRACTOR AND TRAILER SEPARATE BREAKDOWN-SEE FIG 04-257			
7	416 646 C93	// VALVE, CON									
8		SEPARATE BREAKDOWN-SEE FIG 04-252									
8		VALVE, CON, BRK									
8	481 745 C91	% %PRODUCTION ONLY									
8	592 699 C1	SERVICE ONLY									
9	539 589 C1	VALVE, DRAIN									
		EXPELLO						● KIT			
10	25 450 H	VALVE, CHK									
11	764 368 C92	VALVE, DBL CHK				474 542 C91		VALVE REPAIR			
		SEPARATE BREAKDOWN-FIG 04-253				474 541 C91		SEAL REPAIR			
12	459 561 C91	VALVE, W/SW DBL CHK				486 853 C1		/ KIT, RELAY VALVE REPAIR			
13		VALVE, DRAIN W/PULL CHAIN				462 234 C92	% KIT, RELAY VALVE REPAIR				
13		FOR 1700 THRU 1900 MODEL				474 448 C91	# KIT, INVERSION VALVE REPAIR				
13	432 161 C91	W/STD AIR TANK									
13	530 924 C91	W/OPT AIR TANK				930 481 C91	\$ KIT, EXH VALVE REPAIR				
13	545 198 C91	FOR 2100 MODEL									
14	471 880 C91	\$ VALVE, EXH									
15		VALVE, HAND CON									
		SEPARATE BREAKDOWN-SEE FIG. 04-254									
15	476 356 C92	●● MIDLAND ROSS						●● KIT, TRACTOR PROTECTION VALVE REPAIR			
		WILL WORK FOR 476356C91				470 762 C92		FOR 466890C91 VALVE			
		CHASSIS BUILT PRIOR TO 3-23-83				571 295 C91		FOR 571754C91 VALVE			
15	594 574 C91	●● BENDIX TC-7				409 088 C91	// KIT, REPAIR DRAIN VALVE				
		CHASSIS BUILT 3-23-83 AND LATER				486 888 C1	% %KIT, 90 DEG CHK VALVE REPAIR				
16	459 271 C92	# VALVE, INVERSION				467 943 C91	# #KIT, TRACTOR PARKING VALVE REPAIR				
17	471 209 C91	VALVE, LIMITING				485 309 C91	\$ \$KIT, REPAIR DRAIN VALVE				
		SEPARATE BREAKDOWN-SEE FIG 04-255						●●● KIT, HAND CON VALVE REPAIR			
18	523 361 C91	● VALVE, LIMITING -AUTO-						MIDLAND ROSS			
19	540 171 C91	VALVE, LIMITING, FRT WHEEL				485 317 C92		FOR 476356C91 VALVE			
20	422 754 R91	VALVE, MOISTURE EJECTOR -BENDIX-				583 460 C91		FOR 476356C92 VALVE			
21	522 371 C91	\$ VALVE, MOISTURE EJECTOR				573 185 C91		BENDIX TC-7			
22	591 315 C91	VALVE, PRESSURE DIFF				486 780 C1	// KIT, CON VALVE REPAIR				
23	347 082 R92	VALVE, PRESSURE REDUCING				483 381 C91	% %KIT, BRK VALVE REPAIR				
24	473 794 C91	VALVE, QUICK RELEASE									
		SEPARATE BREAKDOWN-SEE FIG. 04-258									
25	455 975 C92	% VALVE, RELAY									
26	479 995 C92	/ VALVE, RELAY									
27	386 398 C91	VALVE, SAFETY									
28	575 366 C1	VALVE, SHUT-OFF									
29	356 596 C91	VALVE, SHUT-OFF, PRESSURE PROTECTION									
		SEPARATE BREAKDOWN-SEE FIG 04-248									
30	897 163 R92	VALVE, SLUDGE REMOVER									
31		VALVE, SLUDGE REMOVER -AUTO DRAIN-									
31	513 596 C91	/ / W/HEATER									

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

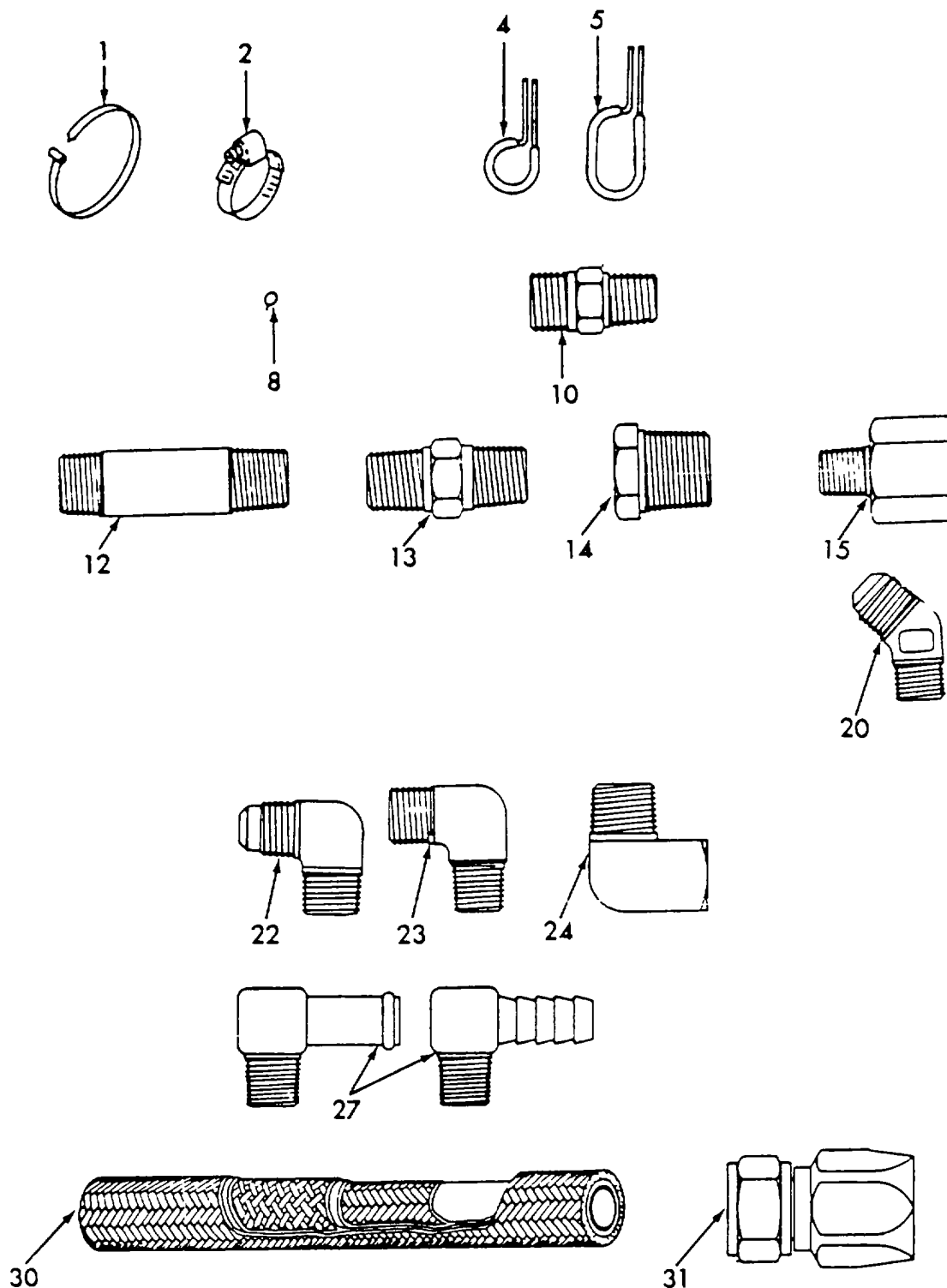
PAGE NO. 4

1084



FIG. 05-001

CHART, HOSES AND FITTING



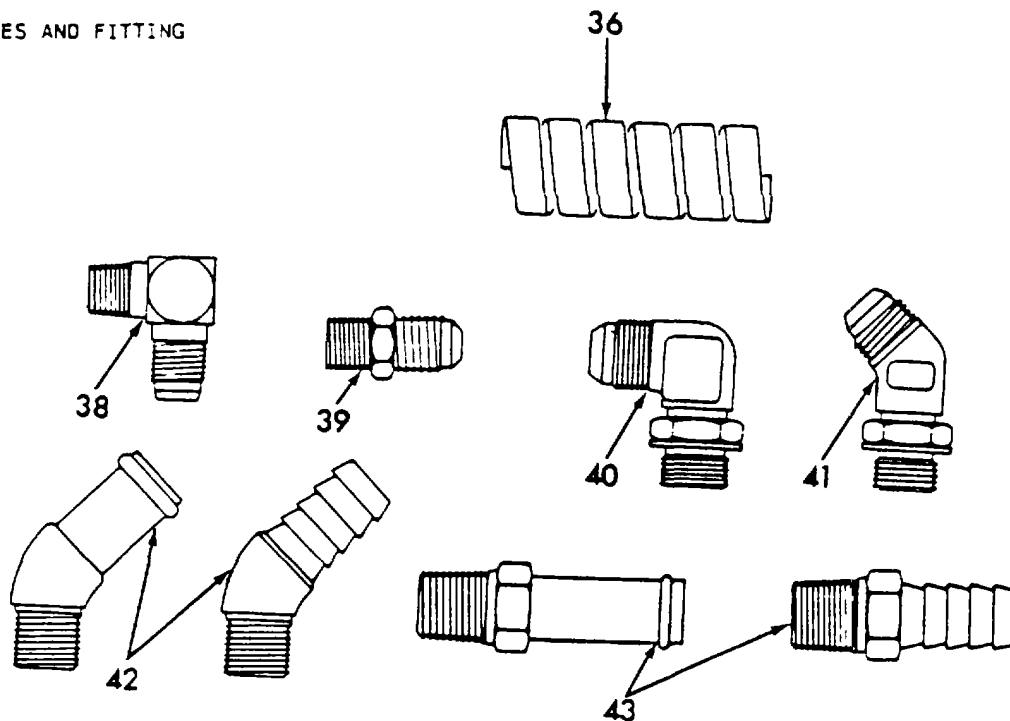
MT-145
STEERING GEAR

GROUP 05



FIG. 05-001

CHART, HOSES AND FITTING



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	289 862 C1	STRAP, CABLE LK			10		CONNECTOR, SPHERICAL SLEEVE		
1	327 097 C1	1/16 - 1 3/4 50 LB			10	487 785 C1	3/8 X 3/4		
1		WILL WORK FOR 291207C1			11		CONNECTOR, 45 DEG FLARED		
1	327 097 C1	1/16 - 4 120 LB							
1		WILL WORK FOR 366704C1							
2	311 164 C91	CLAMP, HOSE							
2	274 085 R91	CLAMP, HOSE							
4		CLAMP, SINGLE COATED			13		NIPPLE, AUTO PIPE		
4	299 566 C1	3/4			13	9403 216	3/4 X 3/4		
4	406 381 R1	WILL WORK FOR 299411C1			14		ADAPTER, AUTO PIPE		
4		1			14	9409 287	3/4 X 3/8		
4		WILL WORK FOR 101983C1			15		ADAPTER, AUTO		
4		299412C1, 299415C1			15	444 002	3/8 X 3/8		
5		CLAMP, DOUBLE COATED			15	520 523 C1	3/4 X 3/8		
5	365 215 C1	3/4 X 1/2							
5		WILL WORK FOR 493573C1							
5	445 138 C1	1 5/8 X 1 5/8							
5		WILL WORK FOR 367865C1							
5	500 877 C1	15/16 X 15/16							
8		FITTING, O-RING							
8	296 247 R1	1			20		ELBOW, 45 DEG - 45 DEG		
8	876 106 C1	3/4			20	231 379 R1	FLARED TUBE		
8	802 779 C1	1/2					5/8 X 1/2		

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

1086



MT-145
STEERING GEAR

GROUP 05

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 05-001 CHART, HOSES AND FITTING			31		FITTING, REUSABLE HOSE		
					31	375 018 C2	5/8		
					31	375 161 C2	1		
22		ELBOW, 90 DEG - 45 DEG FLARED TUBE							
22	109 429	5/8 X 1/2							
22	9402 869	1 X 1							
22	9402 865	1/2 X 3/8							
23		ELBOW, 90 DEG SPHERICAL SLEEVE							
23	437 084 C1	3/4 X 3/4			36		+ CONDUIT, CONVOLUTED		
24		ELBOW, 90 DEG AUTO PIPE			36	375 048 C1	W/375055C1 HOSE		
24	444 044	1/2 - 14			36	375 050 C1	W/375057C1 HOSE		
					38		FITTING, 90 DEG ADAPTER		
					38	312 064 C1	5/8 X 3/8		
					39		FITTING, ADAPTER		
					39	116 487	5/8 X 1/2		
27		ELBOW, 90 DEG HOSE CONNECTOR			40		ELBOW, 90 DEG - 37 DEG FLARED TUBE		
27	864 455 R1	1/2 X 3/8			40	9410 976	3/8		
27	864 457 R1	1/2 X 1/2			40	9410 977	1/2		
					40	9410 981	1		
					41		ELBOW, 45 DEG - 37 DEG FLARED TUBE		
					41	9411 104	3/8		
					41	9411 105	1/2		
					42		ELBOW, 45 DEG HOSE CONNECTOR		
					42	864 450 R1	3/4 X 1/2		
					42	864 446 R1	1/2 X 3/8		
					43		NIPPLE, HOSE CONNECTOR		
					43	864 439 R1	1/2 X 1/2		
30		+ HOSE, REUSABLE END REFER TO MT-90							
30	375 055 C2	1/2 X 13/16							
30	375 057 C2	7/8 X 1 3/16							
30		HOSE							
30	384 139 C1	PUMP TO GEAR 30 IN							
30	405 467 C1	PUMP TO GEAR							
30	416 435 C1	GEAR TO RESERVOIR TO IN							
30	437 774 C1	PUMP TO GEAR 40 IN							
30	444 217 C1	PUMP TO OPB 99 IN							
30	484 627 C1	GEAR TO GEAR							
30	490 873 C2	GEAR TO OPB 44 IN							
30	490 905 C1	GEAR TO HYPOWER UNIT 45 IN							
30	491 160 C1	GEAR TO HYPOWER UNIT 45 IN							
30	494 155 C1	GEAR TO OPB UNIT							
30	494 156 C1	PUMP TO GEAR							
30	497 470 C1	PUMP TO GEAR 115 IN							
30	497 471 C1	GEAR TO OPB 35 IN							
30	497 367 C1	PUMP TO GEAR 44 IN							
30	497 474 C2	GEAR TO HYPOWER UNIT 36 IN							
30	497 475 C1	PUMP TO GEAR 100 IN							
30	498 540 C1	PUMP TO GEAR							
30	504 922 C1	PUMP TO GEAR							
30	513 613 C1	PUMP TO GEAR 110 IN							
30	437 774 C1	PUMP TO GEAR 36 IN							
30	532 402 C1	PUMP TO GEAR 34 IN							
30	532 403 C1	PUMP TO GEAR 36 IN							
30	532 409 C1	PUMP TO GEAR 44 IN							
30	575 544 C1	PUMP TO GEAR 38 IN							
30	413 165 C1	PUMP TO GEAR 80 IN							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

05-001

1087

FIG. 1 is an exploded perspective view of the lamp assembly 10. The assembly includes a lamp housing 11, a lamp socket 12, a lamp base 13, a lamp body 14, a lamp cap 15, a lamp lens 16, a lamp reflector 17, a lamp shade 18, and a lamp fixture 19. The lamp fixture 19 is shown in a dashed line, indicating it is a separate component. The lamp housing 11 is shown in a dashed line, indicating it is a separate component. The lamp socket 12 is shown in a dashed line, indicating it is a separate component. The lamp base 13 is shown in a dashed line, indicating it is a separate component. The lamp body 14 is shown in a dashed line, indicating it is a separate component. The lamp cap 15 is shown in a dashed line, indicating it is a separate component. The lamp lens 16 is shown in a dashed line, indicating it is a separate component. The lamp reflector 17 is shown in a dashed line, indicating it is a separate component. The lamp shade 18 is shown in a dashed line, indicating it is a separate component. The lamp fixture 19 is shown in a dashed line, indicating it is a separate component.

FOR STATIONARY COLUMN

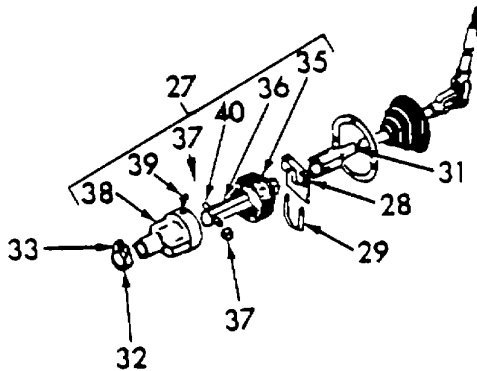
MT-145
STEERING GEAR

GROUP 05



FIG. 05-007

COLUMN, STRG. AND WHEEL
FOR STD LHD



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR
1	373 522 R1	RING, RET	1						
2	384 725 C1	NUT, SPEC 13/16-20UNF	1						
3		WHEEL STRG							
3	469 902 C3	20 IN DIA	1						
4	3/8 R	WASHER, LK 3/8	2		19	9413 979	NUT, LK HEX 3/8-16UNC	1	
4	433 351 C1	BOLT, SPEC 3/8-16 X 1-1/4	2		20	433 351 C1	BOLT, SPEC 3/8-16 X 1-1/4	1	
4	9413 979	NUT, LK 3/8-16	2		20	9413 979	NUT, LK 3/8-16	1	
		DEAERATION TANK							
8	24 840 R1	BOLT, HEX-HD 3/8-16UNC X 1	4		25	478 243 R1	COVER, HSG STRG COL	1	
8	9413 979	NUT, LK HEX 3/8-16UNC	4		26	27 328 R1	SCREW, MACH PAN-HD CR-RES	1	
8	140 483 H	BOLT, HEX-HD 3/8-16UNC X 1	4				NO 8-32UNC X 12		
9	474 661 C2	HOUSING, STRG COL	1		26	121 841	WASHER, LK NO 8	1	
10	469 878 C1	BUSHING, STRG COL	3		27		SHAFT, STRG GEAR U-JOINT	1	
11	468 796 C1	WASHER, STRG COL NYLON	2				USE COMPONENTS		
12	26 281 R1	SCREW, MACH PAN-HD CR-REC	4				NOTE COMPOSED OF ITEM		
		NO 8-32UNC X 3/4			27	252 577 C91	KIT, U-JOINT STRG GEAR	1	
12	121 841	WASHER, LK NO 8	4		28	681 971 R1	CLAMP	1	
13	474 663 C3	HOUSING, STRG COL	1		29	681 971 R1	CLAMP	1	
					29	25 523 R1	NUT, HEX 3/8 NF PHC TYPE 8	1	
					29	892 738 R1	U-BOLT	1	
					29	3/8 R	WASHER, LK 3/8 MED	2	
					31	489 573 C91	SHAFT, STRG COL	1	
							SPRINGFIELD BUILT		
					32	509 134 C1	CLAMP, STRG 13/16	1	
					33	592 637 C1	NUT, HEX-HD 3/8-16UNC	1	
					33	24 842 R1	BOLT, HEX-HD 3/8-16UNC X	1	
							1-3/4		
					35	892 759 R1	BOOT, STRG GEAR COUPLING	1	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

05-007

1089

REVISION 02
PAGE NO. 2



MT-145
STEERING GEAR

GROUP 05

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 05-007							
		COLUMN, STRG. AND WHEEL FOR STD LHD							
36	489 571 C1	SHAFT, STRG DR LWR	1						
37	270 288 C1	BUTTON, FLEX COUPLING	2						
37	225 218 R1	WASHER, FLEX COUPLING	2						
38	584 021 C91	SHELL, STRG	1						
38	172 558	PLUG, EXPANSION	1						
39	27 248 R1	BOLT, HEX-HD 1/4NF X 3/8	2						
39	227 110 R1	WASHER, STAR LK	2						
40	225 217 R1	PIN, STRG COL SHFT	1						
41	470 062 C92	BUTTON, HORN	1						
42	159 927	SCREW, MACH PAN-CR-REC NO. 10-24 X 1/2	2						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

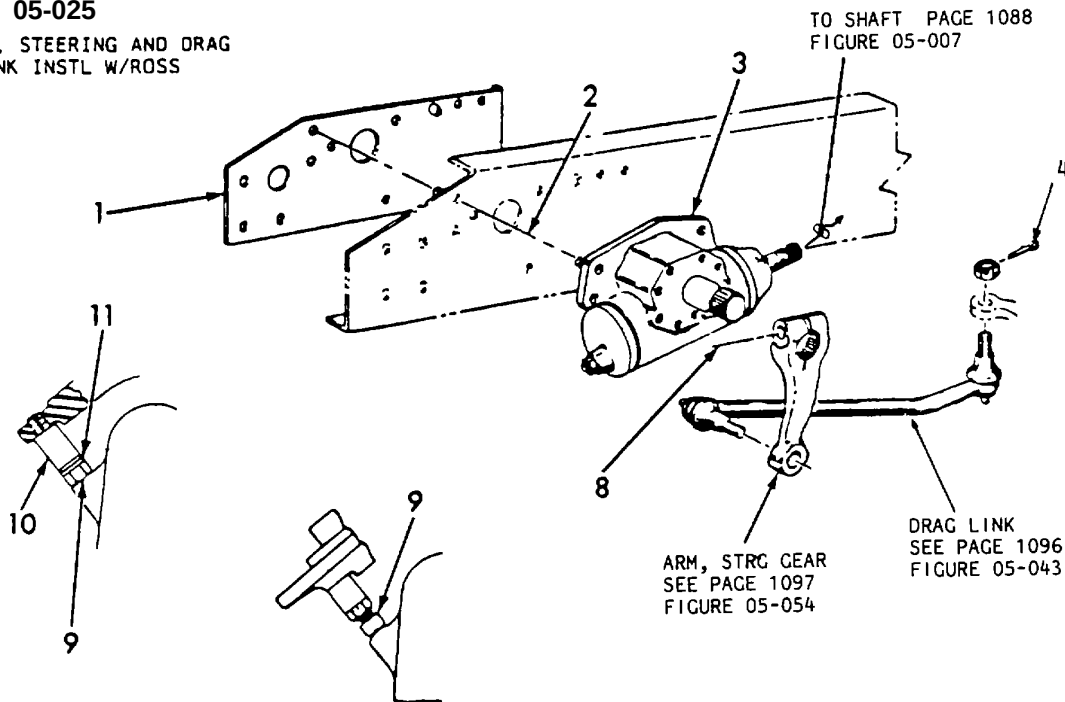
REVISION 02

05-007
1090

PAGE NO. 3

FIG. 05-025

GEAR, STEERING AND DRAG
LINK INSTL W/ROSS
64



ITEM NO	PART NUMBER	DESCRIPTION	Y A	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y A	QTY	REC STK
1	474 628 C1	REINFORCEMENT, INNER,STRG GEAR									
2	414 079 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 2-1/4		1							
2	414 083 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 3-1/4		1							
2	414 084 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 3-1/2		AR							
2	414 085 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 3-3/4		2							
2	414 086 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 4		2							
2	438 286 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 4-1/2		AR		4	11/8X 1-3/4P	PIN, COTTER 1/8 X 1-3/4		2	
2	491 036 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 6		1		4	137 204	PIN, COTTER 1/8 X 1-1/2		2	
2	481 795 C1	BOLT, HEX-HD FLG 5/8-18UNRF X 6-1/2		1							
2	414 089 C1	NUT, HEX LK FLG 5/8-18UNRF		AR							
3		GEAR, POWER STRG									
3	494 824 C92	ROSS HFB-64 W/FA 64,		1							
		SEPARATE BREAKDOWN SEE FIG 05-054 PAGE 1097				5		LINK, DRAG			

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

05-025

1091

REVISION 01

PAGE 1

GROUP 05

MT-145
STEERING GEAR

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 05-025									
		GEAR, STEERING AND DRAG									
		LINK INSTL W/ROSS-52,									
		64 AND SAGINAW 710									
8	414 085 C1	BOLT, HEX-HD FLG		1							
		5/8-18UNRF X 3-3/4									
8	416 742 C1	BOLT, HEX-HD FLG		1							
		3/4-16UNRF X 4 0									
8	414 080 C1	BOLT, HEX-HD FLG		1							
8	414 089 C1	NUT, HEX LK FLG 5/8-18UNF		1							
8	416 743 C1	NUT, HEX LK FLG 3/4-16UNF		1							
		X 4 0									
9	575 962 C1	BOLT, HEX-HD 1/2-13UNC X	B	2							
		3 0									
9	575 963 C1	BOLT, HEX-HD 1/2-13UNC X	A	2							
		2-1/8									
9	28 315 R1	BOLT, HEX-HD 1/2-13UNC X	Q	2							
		3-3/8									
9	24 862 R1	BOLT, HEX-HD 1/2-13UNC X		1							
		1-1/2									
10		SPACER, PIPE	Q	2							
		MAKE LOCALLY									
11	20 869 R1	WASHER, FL 531 ID X 150	Q	AR							
		THICK									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

05-025

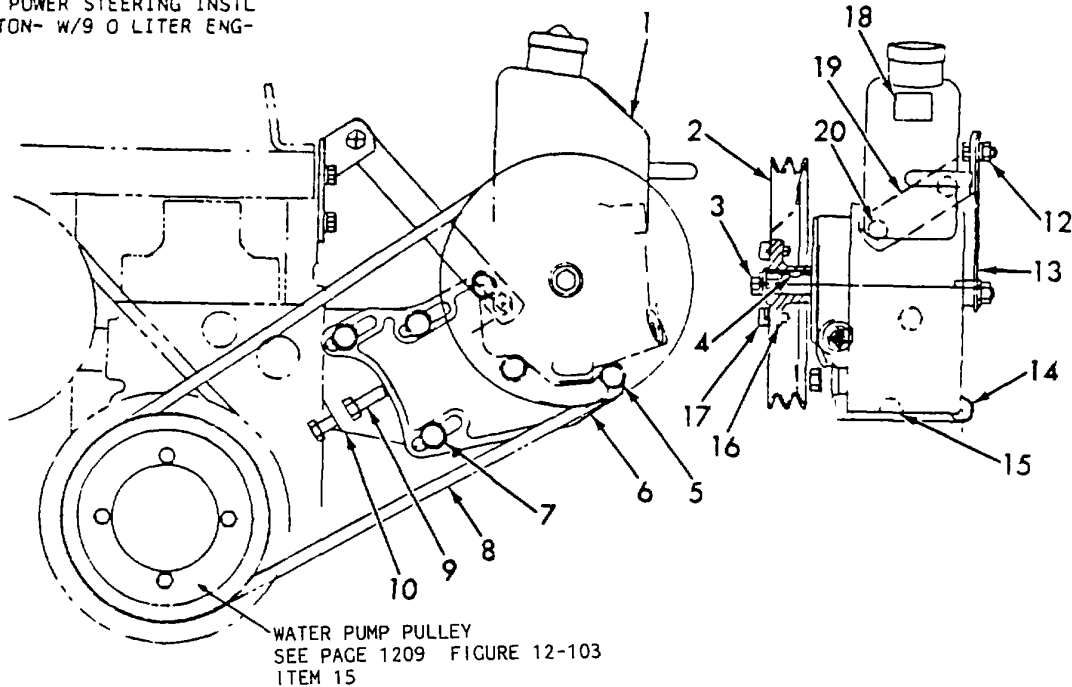


MT-145
STEERING GEAR

GROUP 05

FIG. 05-026

PUMP, POWER STEERING INSTL
-EATON- W/9 0 LITER ENG-



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	491 159 C92	PUMP, PWR STRG USE COMPONENTS SEPARATE BREAKDOWN- SEE FIG. 05-031 PAGE 1094	1		15	24 843 R1	BOLT, HEX-HD 375-16UNC X 2 0	2	
2	489 298 C1	PULLEY, 8 094 DIA GAGE	1		15 3/8	R	WASHER, LK 375	2	E
3	25 751 R1	BOLT, HEX-HD 312-18 X 1 25	1		16	1700 682 C2	HUB, HYD PUMP PULLEY	1	
3 5/16	R	WASHER, LK 312	1		17	25 228 R1	R/S S2561	4	
3	133 322 R1	WASHER, FL 1 0 0D X 344 ID X 188 THK	1				BOLT, HEX-HD 3125-18UNC X 75		
4	124 543	KEY, WOODRUFF 125 X 500	1		17 5/16	R	WASHER, LK 3125	4	
5	24 841 R1	BOLT, HEX-HD 375-16UNC X 1 50	3		18		PRODUCT GRAPHIC NON SERVICE- MAKE LOCALLY	1	
5 3/8	R	WASHER, LK 375	E 3		19	1701 137 C1	BRACKET, HYD PUMP	1	
6	489 260 C2	BRACKET, HYD PUMP ADJ	1		20	25 709 R1	WASHER, HARD 375	2	
7	25 553 R1	WASHER FL 406 X 1 125 X 134 HDN	3		20	24 839 R1	BOLT, HEX-HD 375-16UNC X 750	2	
7	140 483 H	BOLT, HEX-HD 375-16UNC X 1 25	3						
8	358 997 C31	BELT, 360 X 53 5	2						
9	25 522 R1	NUT, HEX 375	1						
9	489 286 C1	BOLT, HEX-HD 375-16UNC X 2 75 SPEC	1						
10	489 255 C2	BRACKET, HYD PUMP MTG	1						
12	24 840 R1	BOLT, HEX-HD 375-16UNC X 1	1						
12	25 522 R1	NUT, HEX 375	1						
12	25 709 R1	WASHER, FL 375	1						
12 3/8	R	WASHER, LK 375	E 1						
13	1700 187 C1	STRAP, HYD PUMP ADJ	G 1						
14	24 841 R1	BOLT, HEX-HD 375-16UNC X 1 50	1						
14 3/8	R	WASHER, LK 375	E 1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

05-026

1093

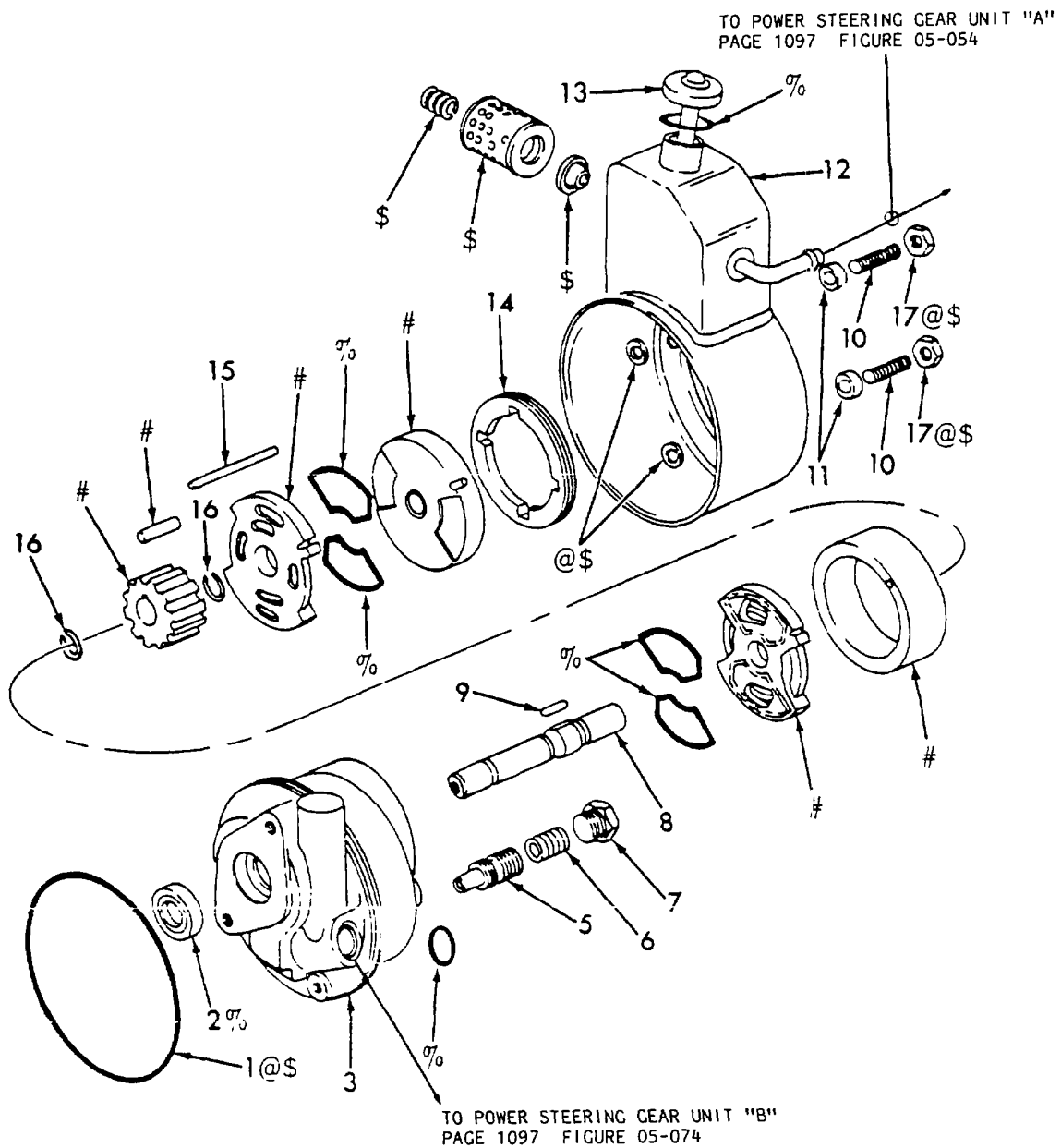


MT-145
STEERING GEAR

GROUP 05

FIG. 05-031

PUMP, POWER STEERING
2050 PSI -EATON 781-



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

05-031

1094

**MT-145
STEERING GEAR**



GROUP 05

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 05-031									
		PUMP, POWER STEERING 2050 PSI -EATON 781-									
	493 115 C91	PUMP, W/O RESERVOIR, ASSEMBLY									
1	343 943 R1	SEAL, O-RING		1							
2	549 712 R1	SEAL, OIL		1							
3		BODY, PUMP NOT SERVICED SEPARATELY		1							
5	493 621 C91	VALVE, POWER STRG PUMP CONTROL		1							
6	482 383 C1	SPRING, POWER STRG CONTROL VALVE		1							
7	482 384 C1	CAP, CONTROL VALVE		1							
8	482 382 C1	SHAFT, POWER STRG PUMP		1							
9	435 345 C1	PIN, SPLINE POWER STRG PUMP DRIVE		1							
10	58 597 C1	STUD, RESERVOIR MTG		2							
11	58 598 C1	SPACER, RESERVOIR MTG		2							
12		RESERVOIR, POWER STRG PUMP, ASSY									
12	497 724 C91	W/493115C91		1							
13	467 537 C91	CAP, RESERVOIR FILLER, ASSY		1							
14	482 385 C1	RETAINER, POWER STRG PUMP		1							
15	482 386 C1	PIN, CAM LOCATING		1							
16	62 385 C1	RING, SNAP		2							
17	476 074 C1	NUT, HEX LK		2							
	507 809 C91	\$ KIT, RESERVOIR FILTER		1							
	505 657 C92	@ KIT, GASKET AND SEAL		1							
	482 380 C91	# KIT, POWER STRG PUMP CARRIER		1							
	507 810 C91	% KIT, O-RING, SEAL		1							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

05-031

REVISION 01

1095

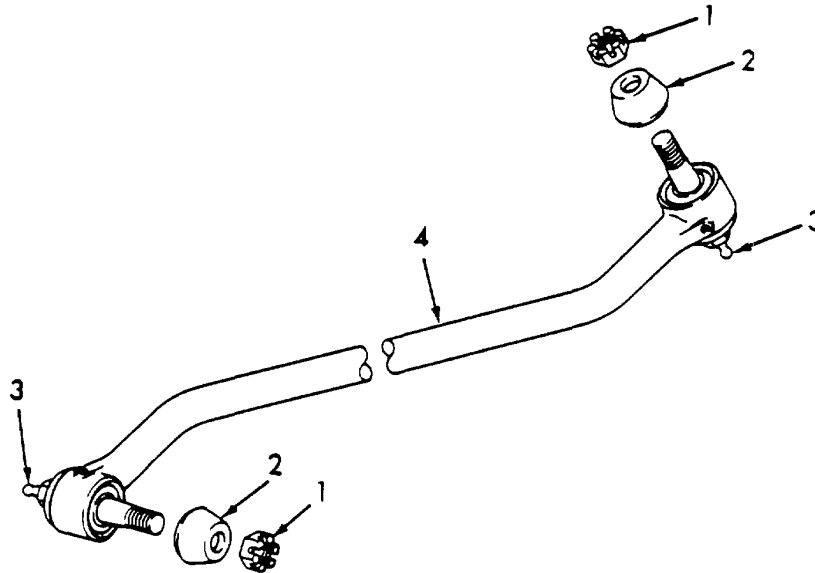


MT-145
STEERING GEAR

GROUP 05

FIG. 05-043

LINK, DRAG.



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	358 901 R1	NUT, SLOTTED 5/8NF 7/8NF	2		4	488 703 C91	LINK, DRAG LEFT HAND DR FOR CODES 02064	1	
1	427 645	TRW PIN, COTTER	2						
1	1/8X 1-1/2P	1/8 X 1-1/2	2						
1	1/8X 1-3/4P	1/8 X 1-3/4	2						
2		COVER, DUST							
2		LEFT HAND DR							
2		FOR CODES 02064,							
3	109 461	LUBRICATOR, STGHT 1/8	2						
3			2						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

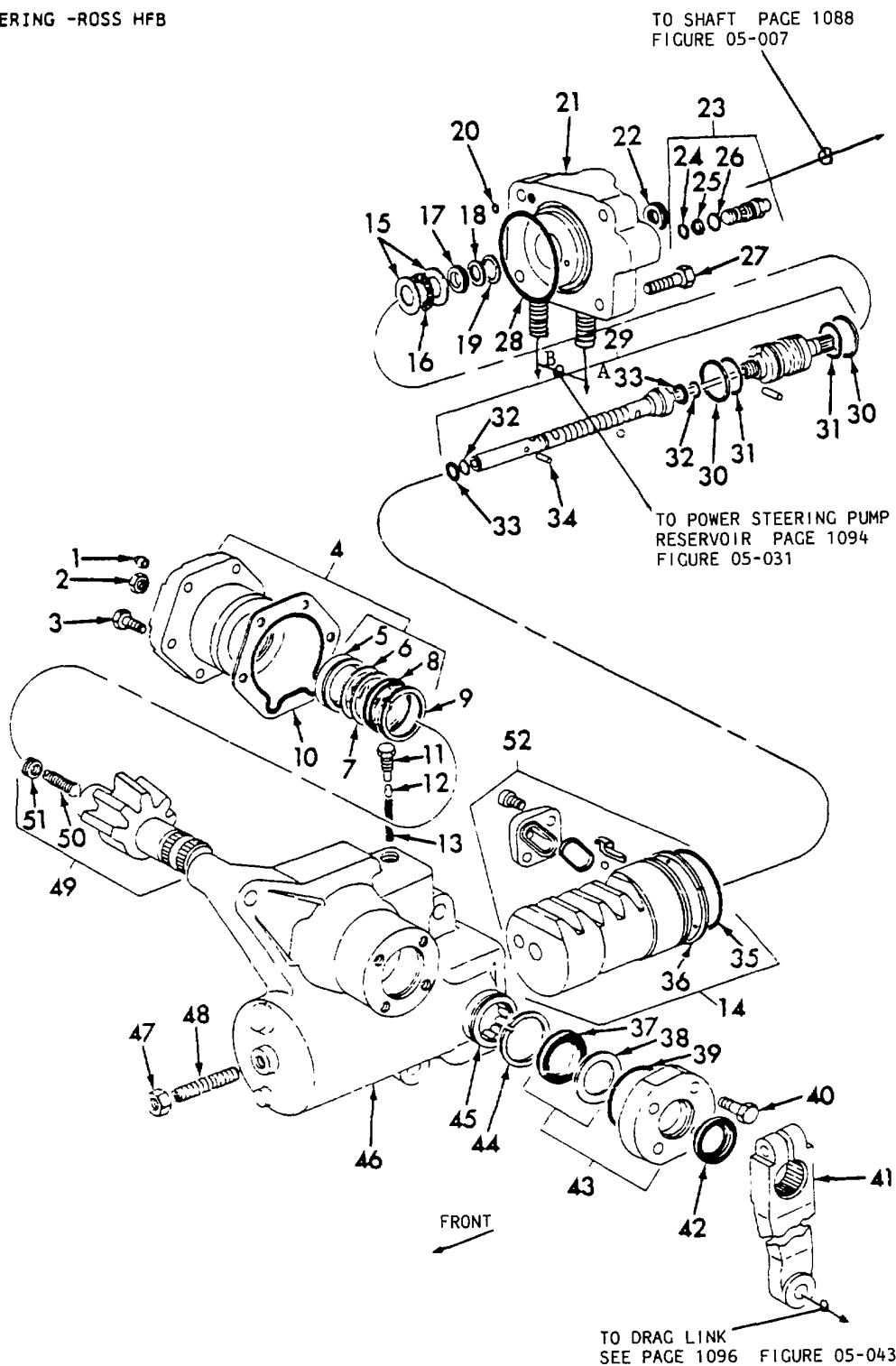
REVISION 02

1096

PAGE NO. 1



FIG. 05-054

GEAR, STEERING -ROSS HFB
64-

PRINTED IN THE UNITED STATES OF AMERICA

05-054

REVISION 01

1097

PAGE 1



MT-145
STEERING GEAR

GROUP 05

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 05-054			29	586 692 C91	W/492823C92, 494825C92 W/RHD		
		GEAR, STEERING -ROSS HFB 64-			30	487 327 C1	# SEAL, OIL RING	4	
					31	343 903 R1	# SEAL, O-RING	2	
					32	887 565 C1	SEAL, O-RING	2	
					33	487 325 C1	SEAL, OIL RING	2	
					34	487 326 C1	BEARING, ROLLER SINGLE	1	
					35	27 947 R1	# SEAL, OIL RING	1	
					36	487 334 C1	# RING, PISTON	1	
					37	487 351 C1	# SEAL, OUTPUT SHAFT, INNER	1	
					38	487 350 C1	# WASHER, BACK-UP	1	
					39	22 275 R1	# SEAL, OIL RING	1	
					40	25 493 R1	BOLT, HEX-HD 5/16NC X 15/16	4	
					41		ARM, STRG GEAR	1	
					41	488 704 C1	AXLE CODES 02064, 02078, 02081		
	491 010 C92	AXLE CODES 02064, 02078, 02127, 02139, 02329, 02339							
	414 085 C1	BOLT, HEX-FLG-HD 5/8NF X 3-3/4	2						
1	487 349 C1	BOLT, SIDE COVER	5						
2	124 934	NUT, SCREW ADJ	1						
3	435 693 C1	# PLUG, VENT	1						
4	487 345 C91	COVER, W/BRG, WASHERS SEAL AND SNAP RING, HSG SIDE	1						
5	487 320 C91	BEARING, ROLLER	1						
6	487 346 C1	WASHER, BACK-UP	1						
7	479 013 C1	# WASHER, BACK-UP	1		41	416 742 C1	BOLT, HEX-FLG-HD 3/4NF X 4	1	
8	487 347 C1	# SEAL, OIL UPPER HSG COVER,	1		41	416 743 C1	NUT, HEX-FLG LK 3/4NF	1	
9	23 869 R1	RING, SNAP	1		42	487 339 C1	# SEAL, OUTPUT SHAFT, OUTSIDE	1	
10	487 348 C1	# GASKET, HSG SIDE COVER	1		43	487 356 C91	COVER, STRG GEAR HSG LOWER		
11	487 323 C1	BOLT, SPEC	1		44	435 826 C1	RING SNAP		
12	487 322 C1	BEARING, ROLLER SINGLE	1		45	487 320 C91	BEARING, ROLLER HOUSING, STRG GEAR	1	
13	487 321 C1	SPRING, POWER STRG	1		46		NOT SERVICED SEPARATELY		
14	500 695 C91	PISTON, W/RING AND SEAL W/491010C92, 494824C92	1		47	487 343 C1	# NUT SEALING	1	
15	312 663 C1	WASHER, THRUST	2		48	487 342 C1	SCREW ADJ	1	
16	568 142 R91	BEARING, THRUST	1		49	487 344 C91	SHAFT, STRG GEAR OUTPUT,	1	
17	487 333 C1	# SEAL, OIL UPPER HSG COVER,	1		50	866 224 R1	SCREW ADJ	1	
18	487 341 C1	WASHER, BACK-UP	1		51	346 902 R1	RETAINER, ADJ SCREW	1	
19	327 316 R1	RING, SNAP	1		52	583 824 C91	KIT, CAP AND BALL GUIDE W/491010C92, 494824C92	1	
20	27 948 R1	# SEAL, OIL RING	1						
21		HOUSING, W/BALLS AND PIN, VALVE	1						
21	500 697 C91	W/491010C92, 494824C92							
21	500 698 C91	W/RHD							
22	487 340 C1	# SEAL, OIL STEERING GEAR HOUSING	1						
23		VALVE, RELIEF							
23	500 683 C91	W/491010C92							
24	887 056 C1	# SEAL, OIL RING	1						
25	500 686 C1	RING, BACK-UP	1						
26	500 684 C1	SEAL, O-RING	1						
27	24 864 R1	BOLT, HEX-HD 1/2NC X 2-1/8	4						
28	487 338 C1	# SEAL, OIL RING	1						
29		SHAFT, STRG GEAR ACUTATING	1						
29	586 693 C91	WILL WORK FOR W/491010C92							
							* NON-ILLUSTRATED		

MISSING ITEM NUMBERS ARE NOT USED

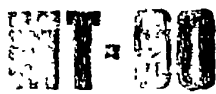
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 2

05-054

1098



SECTION 3

PROPELLER SHAFTS

	Page
Field Identification	3-2
Fabricating	3-2
Information Covering The Preparation And Welding Of Bulk Components	3-3
Procedures For Propeller Shaft Fabrication	3-3
Fractions To Decimals Conversion List	3-4
Explanation Of The Propeller Shaft Code Numbers (NOT METRIC)	3-5
Fabrication Section (NOT METRIC)	3-7
Components Section (NOT METRIC)	3-45
Explanation Of The Propeller Shaft Code Numbers (METRIC)	3-76
Millimeters To Inches Conversion List (METRIC To ENGLISH)	3-78
Conversion List Of Subtraction Values Used On Metric Code Sheets	3-79
Fabrication Section (METRIC)	3-80
Components Section (METRIC)	3-81
Slip Yokes	3-82
Bulk Tube	3-86
Deadner-Inserts	3-87
Tube Deadner Installation	3-87
Requirements	3-87
Special Notes	3-87
Weld Yokes	3-88
Stub Shafts	3-90
U-Joint Kits	3-94
Adapter (Front & Rear)	3-95
Center Bearing Application Chart & Components	3-96

INTRODUCTION

This publication supercedes all previous publications on replacement propeller shaft Fabrication.

Note:

On Assemblies marked NLA (no longer available) the components have been listed as reference only and the original subtraction length is listed in the special notes column for reference only.

This is to advise you that the Driveline Section of the MT 90 is to be used to determine components required to Driveline 10-digit assembly.

The Components Only should be ordered on the Parts Distribution Center

Complete Service Prop Shaft Assemblies can now be ordered from the Renewed Parts Centers. See Parts Letter G-1911.

We repeat, Only Components can be ordered as shown in the MT-90. The assembly will have to be assembled locally from material received

Printed in the United States of America	
	INTERNATIONAL TRUCKS 401 North Michigan Avenue Chicago, Illinois 60611
IN ORDER THAT PRODUCT IMPROVEMENT MAY BE INTRODUCED AT ALL TIMES, PART NUMBER IDENTIFICATIONS ARE SUBJECT TO CHANGE	



Explanation of the Ten Digit Propeller Shaft Production Number to Service Number and how to Identify chart Information:
This program consists of Three parts which includes the information to order completed prop shaft assemblies and how to fabricate a service tube assembly and the additional parts required for the complete or partial replacement of the production propeller shaft assembly

Complete service prop shaft assemblies are available only on a direct ship basis from renewed parts centers. These orders are to be placed via phone to the nearest renew center.

How to Use the Columns.

FIELD IDENTIFICATION

Production Number and Service Tube Columns

These columns identify the first 7-digits used in a 10-digit code; the last three digits are left blank. When you have identified the 10-digit code required, match the first 7-digits with the corresponding first 7-digits of the production number. Then add a T prefix to the 10-digit number and this becomes the part to be ordered for service.

If there is a regular part number in the service tube assembly column, this part number should be ordered. (These are solid prop shafts).

FABRICATING

To fabricate a service tube assembly from a production propeller shaft assembly number, identify as listed below. Then use the Sub Comp Lng. column. (This is the length of the weld ends to be subtracted from the overall length of the prop shaft.)

Example.

Lineset Ticket 10 Digit No.	Production Number On Listing	Service Number Req'd
-----------------------------	------------------------------	----------------------

2708721294	2708721XXX	T2708721294'
------------	------------	--------------

If the listing indicates T prefix number as different from the Production 7-digit number it is because the assembly has been up-dated to the current Service replacement numbers.

294 identifies the overall length	29.4
-----------------------------------	------

Shown in "Subtract from Last 3-digits" column of Fabrication Section	185
---	-----

This means the tube length required will be

10.9 inches	10.9
-------------	------

Identify the bulk tube, yoke and yoke or stub from their columns - 470577C1, 35659701 & 425866C1

No Comment in Special Notes.

This means you will need a piece of 470577C1 - 10.9 inches long and (1) each of 356597C1 and 425866C1 to assemble: T2708721294 - 10 digit service tube assembly.

PRODUCTION NUMBER	SUBTRACT FROM LAST 3 - DIGITS	SERVICE TUBE ASSEMBLY	BULK TUBE NUMBER	WELD COMPONENTS		
				YOKE OR STUB	YOKE OR STUB	SPECIAL NOTES
2708721XXX	18.5	T2708721294	470577C1	35697C1	425866C1	

Printed in the United States of America

INTERNATIONAL TRUCKS

401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE

THE FOLLOWING INFORMATION COVERS THE PREPARATION AND WELDING OF BULK COMPONENTS WHEN FABRICATING THE SERVICE TUBE ASSEMBLY FOR THE PRODUCTION PROPELLER SHAFT.

The bulk tube will be supplied in all diameters and wall thickness combinations to accommodate all possible propeller shaft replacements. The bulk tube will be within specifications for balance and straightness.

Through standardization the tubes with welded ends were eliminated and replaced by bulk tube and unwelded ends.

In no case will tube assemblies be smaller in diameter than the original equipment. In many instances the service tube assemblies used will have a larger tube diameter, which will be an advantage to the user.

When cutting the bulk tube for fabrication of service tube assemblies, it is important that the tube be cut to the proper length and that the ends of the tube are cut square in relation to the longitudinal center line of the bulk tube. If possible, cutting of tube should be done on a lathe.

PROCEDURES FOR PROPELLER SHAFT FABRICATION

Shafts are measured from the end of the spline or stub to the face of the yoke, or from the end of the spline or stub to the center line of the trunnion bearing bore.

1. Select desired tube from bulk stock and cut to correct length.
2. Chamfer ends of tube, Figure 1.
3. Remove weld flash on inside seam to permit entry of yokes or stub, Figure 1.
4. Align loose yoke or stub with slip joint placed on splined end, Figure 2.
5. Check assembled tube for "run-out", Figure 3.
6. Electric Weld yoke or stub to tube. Tackweld at 900 points then complete weld Figure 4.
7. Recheck tube for "run-out".

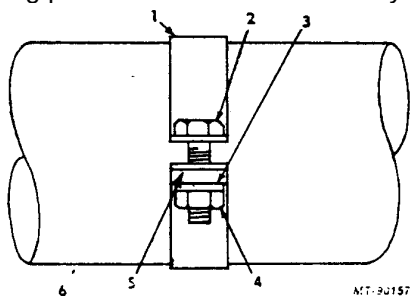
NOTE: Do not destroy 1,0002,428R3 Shaft Fabrication Listing as this was the last publication and record available for fabricating the tubes with ends. This will be an important record to utilize the surplus tubes with ends.

PROCEDURES FOR PROPELLER SHAFT WELDING

In order to apply a constant welding bead when mating a propeller shaft end to a propeller shaft tube, it is recommended that the welding process be what is commonly referred to as MIG welding.

PROCEDURES FOR BALANCING PROPELLER SHAFTS

Position the weight and clamp assembly to the installed propeller shaft as close to the center bearing assembly as possible (in single propeller, shafts start as close to the front end as possible). Road test or spin the driveline then, by moving the clamp with weight to various locations, find the point of least vibration. Tighten clamp securely at this point for permanent installation.



- | | |
|---|--|
| 1 | CLAMP |
| | For 2 1/2 inch Propeller Tube |
| | 96 285 R1 |
| | 96 286 R1 |
| | 96 207 R1 |
| | 196 441 R1 |
| | For 4 Inch Propeller Tube |
| 2 | BOLT, hex-hd 1/4NF x 1 Inch |
| 3 | WASHER, lock 1/4 medium |
| 4 | NUT, hex 1/4NF |
| 5 | 96 288 R1 WEIGHT, balance |
| 6 | TUBE, Assy (See Separate Illustration) |

Printed in the United States of America

	INTERNATIONAL TRUCKS	IN ORDER THAT PRODUCT IMPROVEMENT MAY BE INTRODUCED AT ALL TIMES, PART NUMBER IDENTIFICATIONS ARE SUBJECT TO CHANGE
	401 North Michigan Avenue Chicago, Illinois 60611	

FRACTIONS TO DECIMALS CONVERSION LIST

1/32	-	0
1/16	-	.1
3/32	-	.1
1/8	-	.1
5/32	-	.2
3/16	-	.2
7/32	-	.2
1/4	-	.2
9/32	-	.3
5/16	-	.3
11/32	-	.3
3/8	-	.4
13/32	-	.4
7/16	-	.4
15/32	-	.5
1/2	-	.5
17/32	-	.5
9/16	-	.6
19/32	-	.6
5/8	-	.6
21/32	-	.7
11/16	-	.7
23/32	-	.7
3/4	-	.8
25/32	-	.8
13/16	-	.8
27/32	-	.8
7/8	-	.9
29/32	-	.9
15/16	-	.9
31/32	-	1.0
1	-	1.0

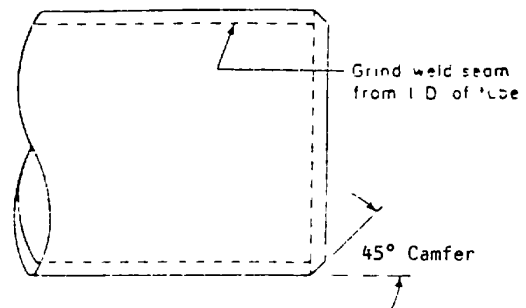


Fig. 1. - Chamfer.

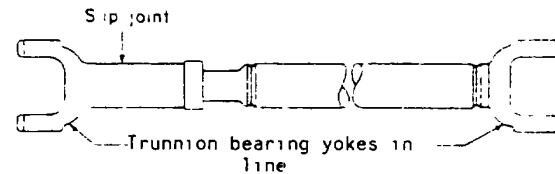


Fig. 2. -Trunnion bearing yokes.

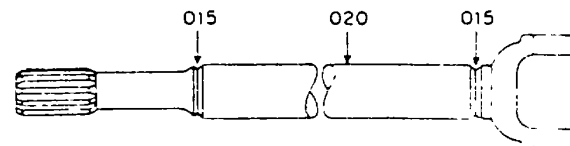
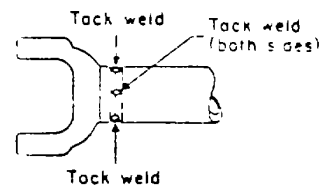


Fig. 3. -Run-out Check.



MT-90017

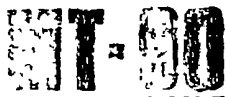
Fig. 4. -Tack weld joints.



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

Printed in the United States of America

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE



EXPLANATION OF THE PROPELLER SHAFT (NOT METRIC) CODE NUMBERS SHOWN ON CODE SHEETS

This code number actually describes the physical characteristics of the prop shaft assembly. The first digit identifies the design, the second and the third digits indicate the size of joint. the fourth digit indicates tube diameter, the fifth, sixth and seventh identifies the combination of ends and fittings. Of primary interest to parts men is the last three digits which indicate the pin-to-pin or pin-to-end of shaft (overall) length. For example, 362 would indicate 2 shaft approximately 35 2" long and 428 would indicate that a shaft was 42 8" long. A more complete explanation of this break down is shown below. All Dimensions Indicated in this section will be shown in even dimensions

1 2 3 4 5 6 7 8 9 10- (10 digit code no of production propeller shaft)

X - - - - - The first digit indicates type as follows:

1. Mechanics or Blood Brothers
2. Spicer
3. IH

X X - - - - - The 2nd and 3rd digits are the code no which indicates the size of the joint as follows:

Code No.	Series or Size of Joint		
	Mechanics or Rockwell	Spicer/IH	IH
20	2		T-55
21		1210	
26		1260	
28		1280	
30	3		S-55
31		1310	
35		1350	
40	4		P-55
41		1410	
48		1480	
50	5	1500	R-55
55	5	1550	
60	6	1600	O-55
65		1650	
70	7	1700	D-56
80	8	1800	U-56

X - - - - - The 4th digit indicates the tube diameter as follows:

TUBE DIAMETER

- 2= 1 1/4" Dia.
- 4= 2" Dia.
- 5= 2 1/2" Dia.
- 6= 3" Dia.
- 7= 3 1/2" Dia.
- 8= 4" Dia.
- 9= 4 1/2" Dia.
- 0= Solid

Printed in the United States of America



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE



X X X - - - The 5th, 6th and 7th digits indicate the combination of ends and fittings used 999 numbers for every design by size and tube diameter. (This listing is not included since it is quite lengthy and is the same information contained in the cross reference from the 10 digit production prop shaft code number to the service components.)

X X X - The last 3 digits show the approximate length of the shaft from "pin-to-pin" or "pin-to-end."

IMPORTANT: THE 8th and 9th DIGIT ARE INCHES AND THE 10th or LAST DIGIT IS IN TENTHS OF AN INCH.

Last position represents closest 1/10 of inch

To take a specific example, the production code number, part 2707013495 & 2708217496, used in building the C04070B would break down as follows:

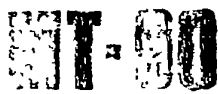
2708217496

- 2 - identifies a Spicer type shaft
- 70 - identifies a size 1700 Spicer joint
- 8 - indicates a 4" tube diameter
- 217 - indicates shaft style (not used for fabrication purposes)
- 496 - shows that the shaft is 49 6" long

IMPORTANT SUMMATION

All 10-digit propeller shaft assemblies that indicate NLA (No longer available) are shown only for your information stating that there is NO STOCK available in this system.

One assemblies marked NLA the components have been listed as reference only and the original subtraction length is listed in the special notes column for reference only.



For Metric Dimensioned Propeller
FARICATION SECTION (NOT METRIC) - Continued

For Metric Dimensioned Propeller
Shafts See Accompanying Chart

XXX Reference On Production Number Indicates An Unknown Production Length That Is Determined From Your Lineset Ticket 10-Digit Code.

IMPORTANT: When The Last 3 Digits Of Your --Digit Production Propeller Shaft Number Are Identified, Subtract The Value Shown In The Subtraction Column From These 3-Digits For The Bulk Tube Cut Length In Inches & Tenths Of An Inch Example: 11 6" (Eleven Inches & 6 Tenths Of An Inch)

PRODUCTION NUMBER	SUBTRACT FROM LAST 3 - DIGITS	SERVICE TUBE ASSEMBLY	BULK TUBE NUMBER	WELD COMPONENTS		SPECIAL NOTES
				YOKE OR STUB	YOKE OR STUB	
2487802XXX594= 55.2" LONG USE243301/XXX						
24SS8017XXX 130 T2488017XXX			470574C1	211254R1	877122R1	USE DEADNER

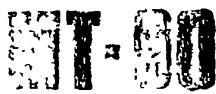
NLA MEANS "NO LONGER AVAILABLE"



Printed in the United States of America

INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE



FABRICATION SECTION (NOT METRIC) - Continued

For Metric Dimensioned Propeller
Shafts See Accompanying Chart

XXX Reference On Production Number Indicates An Unknown Production Length That Is Determined From Your Lineset Ticket 10-Digit Code.

IMPORTANT. When The Last 3 Digits Of Your 10-Digit Production Propeller Shaft Number Are Identified, Subtract The Value Shown in The Subtraction Column From These 3-Digits For The Bulk Tube Cut Length In Inches & Tenths Of An Inch Example: 11 6" (Eleven inches & 6 Tenths Of in Inch)

PRODUCTION NUMBER	SUBTRACT FROM LAST 3 - DIGITS	SERVICE TUBE ASSEMBLY	BULK TUBE NUMBER	WELD COMPONENTS		SPECIAL NOTES
				YOKE OR STUB	YOKE OR STUB	
2557179XXX		USE 2558378XXX				

2557801XXX = 44.0" LONG

USE 2557213XXX

NLA MEANS "NO LONGER AVAILABLE"



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

Printed in the United States of America

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE



COMPONENTS SECTION (NOT METRIC) - Continued

NLA MEANS
NO LONGER AVAILABLE"

Printed in the United States of America



IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.



COMPONENTS SECTION (NOT METRIC) - Continued

PRODUCTION NUMBER	SLIP YOKE	U-JOINT KIT		ADAPTER FRONT	ADAPTER REAR
		FRONT	REAR		
2557801XXX	890154R91	213882R91	213882R91		

NLA MEANS
"NO LONGER AVAILABLE"

Printed in the United States of America



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.



DEADNER - INSERTS

IH NUMBER	TUBE DIAMETER	INSERT DIAMETER	INSERT LENGTH
488 562 C1	3.5	3.48	12.0

TUBE DEADNER INSTALLATION

REQUIREMENTS:

FOR TUBE LENGTHS OF:

FOR 2487802594

30.6 And Up Inches Use Two 12" Inserts

For tube lengths of 12.0 inches and longer, insert must be at least 3.0 inches from end of tube.

Printed in the United States of America



INTERNATIONAL TRUCKS

401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.



WELD YOKES

IH NUMBER	TYPE	MANUFACTURER NUMBER	FLEETRITE NUMBER	SIZE
211 254 R1	1480	3-28-507		4.00 x .083
FOR 2487802594				
213 887 R1	1550	4-28-307		3.50 x .095
FOR 2557801440				

Printed in the United States of America



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.

STUB SHAFTS - Continued

[illegible]

497 460 C1

1550

4-40-701

3.50x.095

Printed in the United States of America



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.



STUB SHAFTS - Continued

IH NUMBER	TYPE	MANUFACTURER NUMBER	FLEETRITE NUMBER	SIZE
877 122 R1	1480	3-40-1551		4.00 x .983

Printed in the United States of America



INTERNATIONAL TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.

U-JOINT KITS

SIZE	IH NUMBER
1480	913774-R91
1550	213882-R91

SPIRER NO.	FLEETRITE	NEAPCO	KIT*
5-263X	ZAD 11588	28188X	Yes
5-155X	ZAD 11555	28155X	Yes

FOR 2487802594

FOR 2487802594

1480
1550

913774-R91
213882-R91

5-263X
5-155X

ZAD 11588
ZAD 11555

28188X
28155X

Yes
Yes

FOR 2557801440

*Kit contains all necessary mounting hardware.

Printed in the United States of America



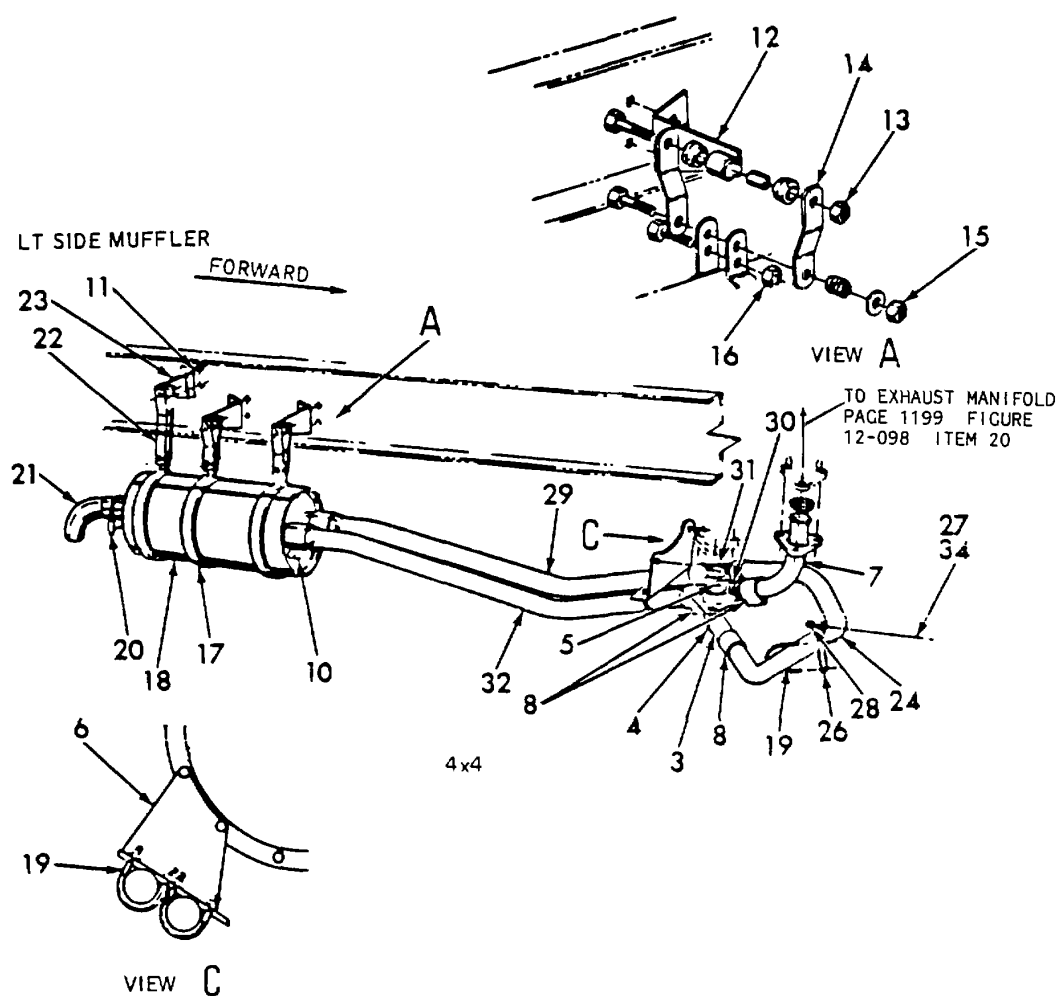
INTERNATIONAL® TRUCKS
401 North Michigan Avenue Chicago, Illinois 60611

IN ORDER THAT PRODUCT IMPROVEMENT
MAY BE INTRODUCED AT ALL TIMES, PART
NUMBER IDENTIFICATIONS ARE SUBJECT
TO CHANGE.



FIG. 07-029

MUFFLER, TAIL PIPE, EXH
AND MTG
9 OL ENG
W/O TRAVELCREW W/O
1853FC



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

07-029

PAGE 1

1114



MT-145
EXHAUST SYSTEM

Group 07

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 07-029 MUFFLER, TAIL PIPE, EXH AND MTG 9 OL ENG W/O TRAVELCREW			7	583 547 C91	W/6X4 W/AT552. W/4X4 AND 6X6 W/LT SIDE HORIZ MUFFLER AND TAILPIPE	1	
					10	549 565 C91	COUPLING ASSY, 2 /5 DIA EXH PIPE-WILL WORK FOR 583974C91 AND 508794C91-	2	
					11	24 861 R1	BOLT, HEX HD 1/2 UNC X 1 25 W/O REINF	4	
3		PIPE ASSY, EXH-RT FRT							
3	532 465 C1	W/4X2, 4X4, 6X6 AND 6X4 W/AT552, W/LT SIDE HORIZ MUFFLER AND VERT OR HORIZ TAILPIPE	1		12	481 731 C1	BRACKET ASSY, MUFFLER SUPT	1	
					13	24 843 R1	BOLT, HEX HD 3/8 UNC X 2	2	
					13	72 696 R1	INSULATOR	4	
					13	150 554 R1	SPACER, BUSHING	2	
					13	9413 979	NUT, HEX LOCK 3/8 UNC	2	
4	24 621 R1	BOLT, HEX HD 3/8 UNC X 2 25 W/CAST FLG	6		14	279 099 C11	LINK, MUFFLER HANGER 4X4.	AR	
4	9413 979	NUT, HEX LOCK 3/8 UNC W/SHEET METAL FLG	6						
5	72 093 R1	RING, EXH PIPE SEAL	2						
					15	24 621 R1	BOLT, HEX HD 3/8 UNC X 2 25	2	
					15	25 709 R1	WASHER, FLAT 3/8	2	
					15	64 899 H	SPRING	2	
					15	9413 979	NUT, HEX LOCK 3/8 UNC	2	
6	532 455 C1	BRACKET, EXH PIPE W/4X4 W/T325	1		16	140 483 H	BOLT, HEX HD 3/8 UNC X 1 25	2	
					16	9413 979	NUT, HEX LOCK 3/8 UNC	2	
7		PIPE ASSY, EXH-LH			17	492 565 C1	CLAMP, MUFFLER	2	
					18	578 069 C1	MUFFLER ASSY W/6X4 W/AT552, 4X4 AND 6X6, W/4X2 W/LT SIDE HORIZ MUFFLER AND TAILPIPE	1	
					19	336 885 C1	U-BOLT, 5/16UNC	AR	
					19	9413 977	NUT, HEX LK 5/16UNC	AR	
					19	25 708 R1	WASHER, FL 5/16	AR	
7		PIPE ASSY, EXH-LT			20	450 165 C1	U-BOLT, 7/16-14UNC W/HORIZ TAILPIPE	1	

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

07-029

PAGE 3

1115

**MT-145
EXHAUST SYSTEM**

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 01

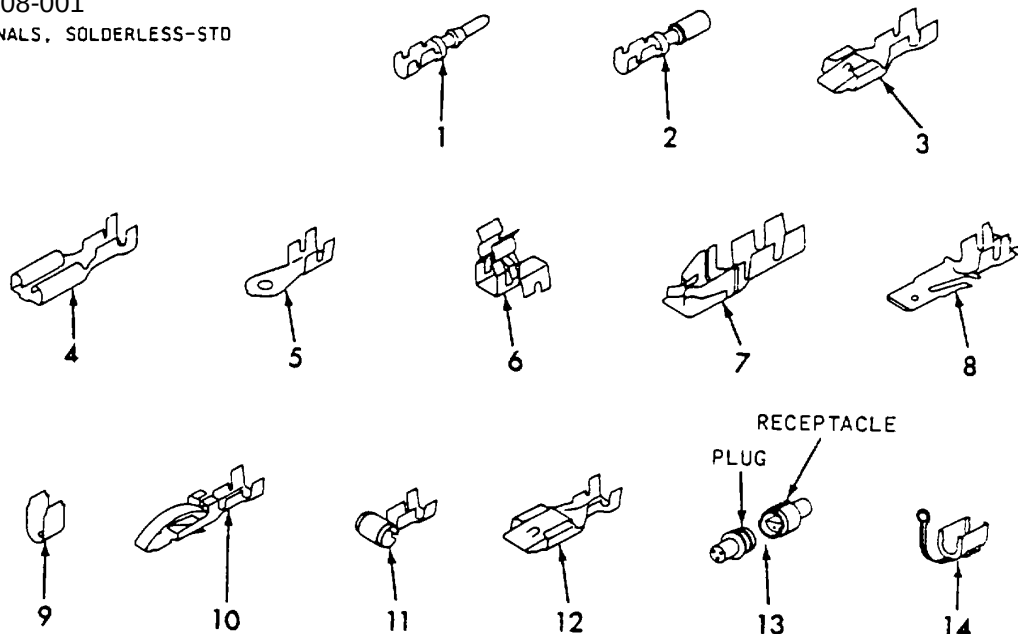


MT-145
ELECTRICAL SYSTEM

GROUP 08

FIG. 08-001

TERMINALS, SOLDERLESS-STD



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STR
1	508 655 C1	PIN							
2	508 656 C1	RECEPTACLE, PIN							
3	188 396 R1	EAT 57846							
		RECEPTACLE, BLADE							
4	239 805 R1	RECEPTACLE							
5	373 756 C2	RING, 400 HOLE DIA							
5	373 759 C2	RING, .275 HOLE DIA							
6	433 169 C1	FUSE							
7	435 266 C1	WEDGE BASE LAMP							
8	468 357 C1	MALE							
9	468 358 C1	SPLICE							
10	468 759 C1	PRINTED CIRCUIT							
11	474 027 C1	FEMALE AND SNAP-RING							
12	879 636 R1	FEMALE							
13	508 652 C1	HOUSING PLUG INSULATOR							
13	508 653 C1	HOUSING RECEPTACLE INSULATOR							
14	508 654 C1	CONNECTOR CLIP							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

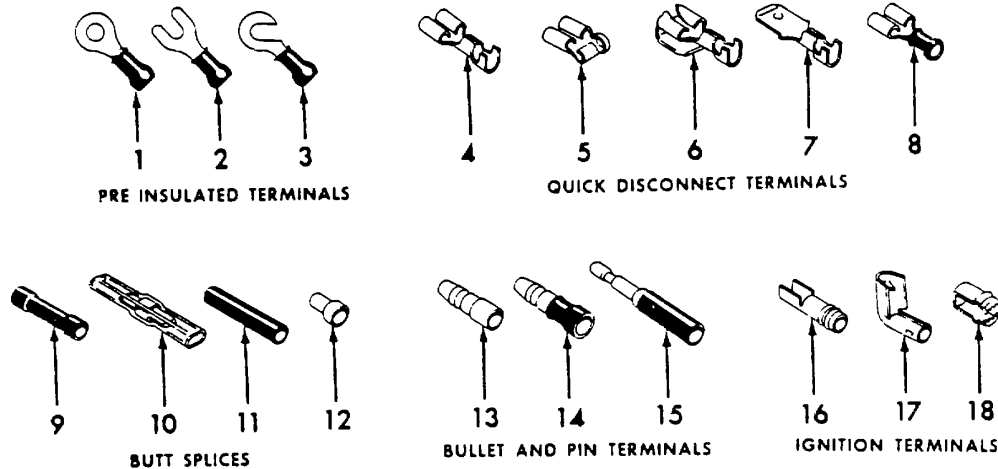
08-001

1

Revision 01



FIG. 08-002

TERMINALS, SOLDERLESS AND
BUTT SPLICES-STD

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	244 064 R1	TERMINALS, PRE-INSULATED RING, 22-16 WIRE NO 10			4	165 563 R1	TERMINAL, NON-INSULATED 22-18 WIRE		
1	54 771 R2	STUD RING, 16-14 WIRE NO 6			5	165 566 R1	TERMINAL, FLAG NON-INSULATED		
1	54 772 R2	STUD RING, 16-14 WIRE NO 10			6	238 101 R1	ADAPTER, NON-INSULATED		
1	54 773 R2	STUD RING, 16-14 WIRE 1/4			7	165 567 R1	BLADE, NON-INSULATED		
1	54 774 R2	STUD RING, 16-14 WIRE 5/16			8	238 100 R1	TERMINAL, INSULATED 22-16 WIRE		
1	54 775 R2	STUD RING, 16-14 WIRE 3/8			8	915 073 R1	TERMINAL, INSULATED 16-14 WIRE		
1	54 776 R2	STUD RING, 12-10 WIRE NO 6			9		BUTT SPLICES		
1	54 777 R2	STUD RING, 12-10 WIRE NO 10			9	915 046 R1	BUTT SPLICE, 22-16 WIRE		
1	54 778 R2	STUD RING, 12-10 WIRE 1/4			9	56 698 R1	BUTT SPLICE, 16-14 WIRE		
1	54 779 R2	STUD RING, 12-10 WIRE 5/16			9	56 699 R1	BUTT SPLICE, 12-10 WIRE		
1	54 780 R2	STUD RING, 12-10 WIRE 3/8			10	244 058 R1	CONNECTOR, BLADE		
2	56 955 R2	STUD SPADE, 16-14 WIRE NO 8			11	46 893 H	CONNECTOR, BULLET		
2	54 781 R2	STUD SPADE, 16-14 WIRE NO 10			12	915 081 R1	CONNECTOR, CLOSED END		
2	54 782 R2	STUD SPADE, 12-10 WIRE NO 10			13		BULLET AND PIN TERMINALS		
3	244 059 R1	STUD HOOK, 16-14 WIRE NO 10			13	46 894 H	TERMINAL, BULLET NON-INSULATED		
4		TERMINAL, QUICK DISCONNECT			14	244 063 R1	TERMINAL, BULLET INSULATED		
4	165 565 R1	TERMINAL, NON-INSULATED 16-12 WIRE			15	915 080 R1	TERMINAL, PIN INSULATED		
					16		IGNITION TERMINALS		
					16	103 232 H	TERMINAL, PLUG STRAIGHT		
					17	438 505 C1	TERMINAL, PLUG ANGLE		
					18	17 070 D	TERMINAL, DISTRIBUTOR CAP		

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

08-002

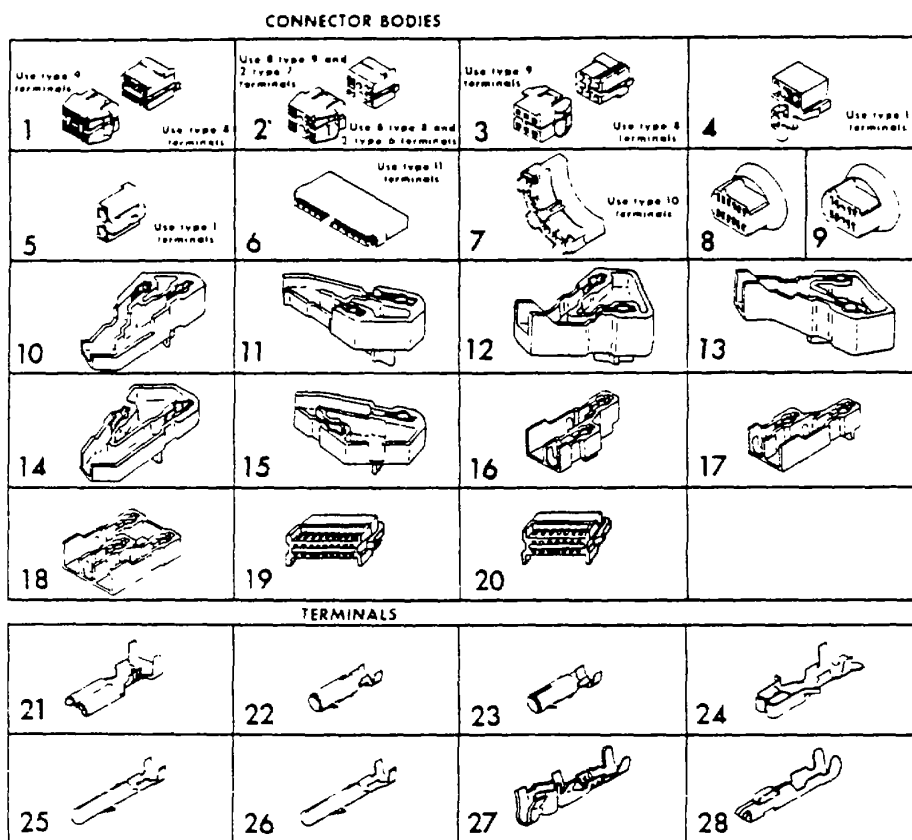
REVISION

PAGE 1

1118



FIG. 08-004
CONNECTOR BODIES AND
TERMINALS -STD-





ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 08-004							
		FIG. 08-004 AND							
		TERMINALS "STUD"							
1		CONNECTOR BODIES							
1	402 297 C1	FEMALE, 12 WAY							
1	402 296 C1	MALE, 12 WAY							
2	402 300 C1	FEMALE, 10 WAY							
2	402 299 C1	MALE, 10 WAY							
3	402 302 C1	FEMALE, 6 WAY							
3	402 301 C1	MALE, 6 WAY							
4	406 319 C1	IGNITION SWITCH							
		MATES W/1990084							
5	402 314 C1	USE TYPE 1 TERMINALS							
6	406 321 C1	USE TYPE 11 TERMINALS							
7	358 925 C1	USE TYPE 10 TERMINALS							
8	402 303 C1	12 CIRCUIT BOOT							
9	402 305 C1	10 CIRCUIT BOOT							
10	456 244 C1	ANTILOCK MODULE BOTTOM							
		LT							
11	456 245 C1	ANTILOCK MODULE, BOTTOM							
		RT							
12	456 246 C1	ANTILOCK MODULE, UPPER							
		LT							
13	456 247 C1	ANTILOCK MODULE, UPPER							
		RT							
14	459 382 C1	ANTILOCK MODULE, MIDDLE							
		LT							
15	459 383 C1	ANTILOCK MODULE, MIDDLE							
		RT							
16	505 460 C1	2-WAY STUD CONTACT LH							
17	505 461 C1	2-WAY STUD CONTACT RH							
18	505 459 C1	3-WAY STUD CONTACT							
19	500 477 C1	18 CIRCUIT							
20	500 478 C1	14 CIRCUIT							
21		TERMINALS							
21	407 628 C1	TYPE 10 2-18 OR 18-16							
		WIRE							
22	402 307 C1	TYPE 6 10-12 WIRE							
23	402 311 C1	TYPE 8 16-14, 2-20 OR							
		2-18 WIRE							
23	402 309 C1	TYPE 8 22-18 WIRE							
23	404 789 C1	TYPE 8 12 WIRE							
24	406 341 C1	TYPE 11 18-20 WIRE							
24	406 342 C1	TYPE 11 14-16 WIRE							
25	402 308 C1	TYPE 9 22-18 WIRE							
25	402 310 C1	TYPE 9 16-14 WIRE							
26	402 306 C1	TYPE 7 10-12 WIRE							
27	456 243 C1	ANTILOCK SPRING LOADED							
		18-14 WIRE							
28	500 593 C1	FEMALE P C 14-16							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

08-004

REVISION 01

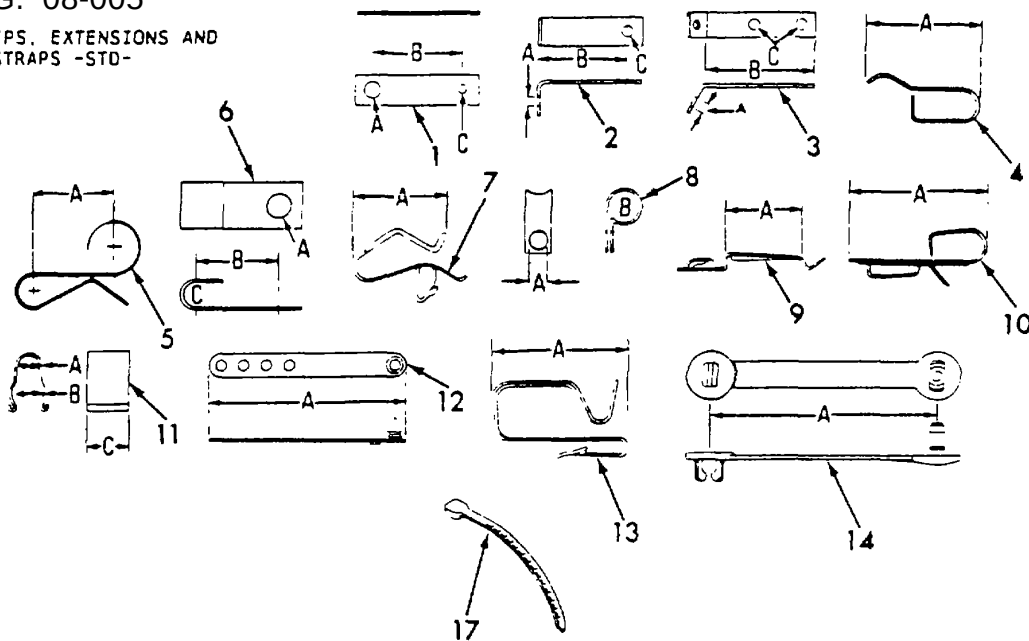
PAGE 2 1

1120



FIG. 08-005

CLIPS, EXTENSIONS AND
STRAPS -STD-



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	88 191 H	EXTENSION, CLIP A-13/32, B-3/4, C-13/32			2	427 922 R1	A-21/32, B-2-5/16, C-9/32		
1	70 369 R1	A-17/32, B-2, C-9/32			2	190 813 R1	A-11/16, B-1-7/8, C-11/32		
1	282 368 C1	A-19/32, B-2, C-9/32			3	878 043 R1	EXTENSION, CLIP A-21/32, B-3-1/2, C-9/32		
2	108 355 R1	EXTENSION, CLIP A-9/32, B-5/8, C-9/32			3	279 176 C1	A-21/32, B-5-1/2, C-9/32		
2	25 696 H1	A-9/32, B-3/4, C-9/32			4	85 059 R1	CLIP, CABLE A-1-23/32		
2	108 179 R1	A-9/32, B-13/16, C-9/32			5	119 702 R1	CLIP, CABLE A-5/8		
2	141 598 R1	A-9/32, B-1-1/4, C-13/32			5	109 549 H	A-1-1/2		
2	56 787 R1	A-9/32, B-1-5/8, C-13/32			6	114 219 P1	CLIP, CABLE A-9/32, B-1, C-3/4		
2	108 300 R1	A-9/32, B-2-1/8, C-15/32			6	84 022 R1	-TWISTED- A-9/32, B-25/32, C-1/2		
2	213 892 R1	A-9/32, B-2-1/4, C-11/32			6	114 215 R1	-STRAIGHT- A-9/32, B-1-5/32, C-3/8		
2	99 217 H	A-11/32, B-11/16 C-11/32			6	114 214 R1	A-11/32, B-7/8, C-5/16		
2	256 035 C1	A-11/32, B-1-5/16, C-9/32			6	101 381 H	A-11/32, B-1-1/32, C-5/8		
2	261 703 C1	A-11/32, B-2-1/4, C-9/32			6	100 770 H	A-13/32, B-29/32, C-5/16		
2	194 665 R1	A-11/32, B-2-3/4, C-9/32			6	114 216 R1	A-13/32, B-1-5/32, C-3/8		
2	138 954 R1	A-11/32, B-3-1/16, C-9/32			7	128 250 R1	CLIP, CABLE A-1		
2	137 230 H	EAT 33774 A-13/32, B-7/8, C-13/32			7	221 490 R1	A-1-5/64		
2	201 663 R1	A-13/32, B-1, C-13/32			7	878 734 R1	A-1-1/8		
2	88 173 H	A-13/32, B-1-1/8, C-9/32			8	137 194	CLIP, CABLE PLAIN A-9/32 X 3/8, B-1/2		
2	88 179 H	A-13/32, B-2, C-9/32			8	137 198	A-9/32 X 3/8, B-3/4		
2	123 295 H	A-13/32, B-2-1/8, C-9/32			8	140 766	A-11/32 X 1/2, B-3/4		
2	88 188 H	A-13/32, B-3-1/2, C-13/32			8	101 977 R1	RUBBER COATED A-9/32 X 3/8, B-3/16		
2	91 011 R1	A-15/16, B-2-7/16, C-9/32			8	96 739 R1	A-9/32 X 3/8, B-3/4		
2	140 526 H	A-17/32, B-13/16, C-9/32			8	981 993 R91	A-11/32, B-1/4		
2	57 690 R1	A-17/32, B-1-1/4, C-9/32							
2	423 975 R1	A-17/32, B-1-7/8, C-9/32							
2	55 022 R1	A-21/32, B-1-1/4, C-13/32							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

1121

08-005



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 08-005							
		CLIPS, EXTENSIONS AND STRAPS -STD-							
8	448 900 R1	A-11/32, B-1-1/2							
8	446 074 R91	A-13/32, B-3/8							
8	102 106 R1	A-13/32, B-9/16							
8	99 098 H	A-13/32, B-5/8							
8	985 650 R91	A-13/32, B-1-3/16							
9	145 540	CLIP, CABLE A-19/32							
10	867 092 R1	CLIP, CABLE A-1-3/4							
11	83 230 R1	CLIP, CABLE A-3/8 B-1/2							
		C-5/8							
12		STRAP, CABLE							
12	872 660 R1	A-3-5/8							
12	241 554 R91	A-10							
13	862 576 R1	CLIP, CABLE A-13/16							
14	264 501 C1	STRAP, CABLE A-2-3/4							
17	289 862 C1	STRAP, CABLE LK							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

08-005

PAGE 2

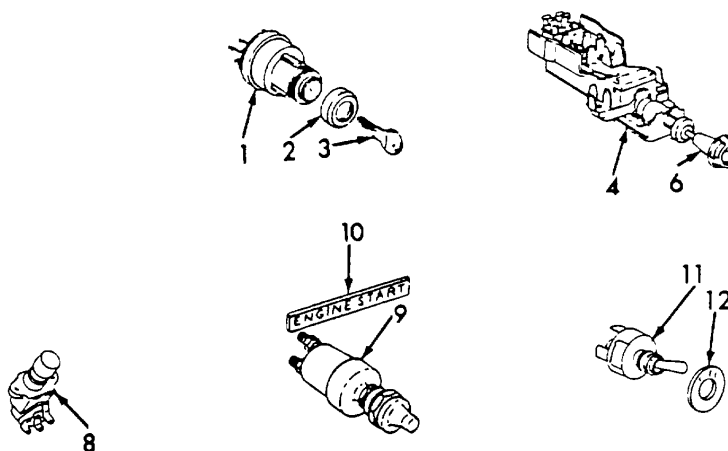
MT-145
ELECTRICAL SYSTEM

GROUP 08



FIG. 08-007

SWITCHES -STD-



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	463 032 C91	SWITCH, IGN STARTING			11	295 417 C91	FUEL PUMP, SUBMERGED		
1	429 047 C1	W/FLAT BACK COWL, CODE 16010 W/CYL AND 2 KEYS			11	291 706 C91	FUEL PUMP SELECTOR		
1	429 048 C1	W/REGULAR CAB, CODE 16030, W/O CYL			11	295 417 C91	GLOW PLUG		
1	589 813 C91	CYLINDER, W/KEY, SW							
1	474 621 C1	LOCK, DOOR							
1	992 995 C1	LEFT			11	470 249 C91	W/S WIPER		
2	440 421 C1	RIGHT			11	469 858 C1	KNOB, W/S WIPER SW		
3		ESCUTCHEON, SW			11	363 423 C1	NUT, W/S WIPER SW MTG		
4	393 442 C1	NUT, SW MTG KEY			12	500 970 C1	ESCUTCHEON		
		MAKE LOCALLY			12	468 111 C1	CARGO LGT		
		SWITCH, LGT					CHOKE		
6	469 859 C1	ROD, W/KNOB, LGT SW			12	579 635 C1	CHASSIS BUILT 8-29-80		
8	452 187 C1	SWITCH, DIMMER					AND LATER		
8	25 222 R1	BOLT, HEX-HD 1/4 X 3/4			12	468 112 C1	ETHER START		
8	26 110 R1	NUT, HEX LK 1/4NC			12	468 120 C1	FUEL PUMP PRIMER		
8	26 328 R1	SCREW, PAN-CR-REC-HD TAP 1/4-14 X 1/2			12	468 119 C1	FUEL TANK SELECTOR		
9	471 300 C1	SWITCH, PUSH BUTTON ENG			12	468 114 C1	GLOW PLUG		
10	468 113 C1	STARTING					LIGHTS		
11		ESCUTCHEON, STARTER BUTTON			12	579 631 C1	CHASSIS BUILT 8-29-80		
11		SWITCH					AND LATER		
		BACK-UP LGT			12		LIGHT		
		SEE STOP, TAIL AND			12	471 416 C1	ENG STOP		
		BACK-UP LGT			12	471 418 C1	FRT AXLE		
11	307 094 C91	CARGO LGT			12		THROTTLE		
11	217 555 R92	ENG STOP			12	468 116 C1	W/REGULAR CAB		
					12	468 123 C1	THROTTLE, LK		

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

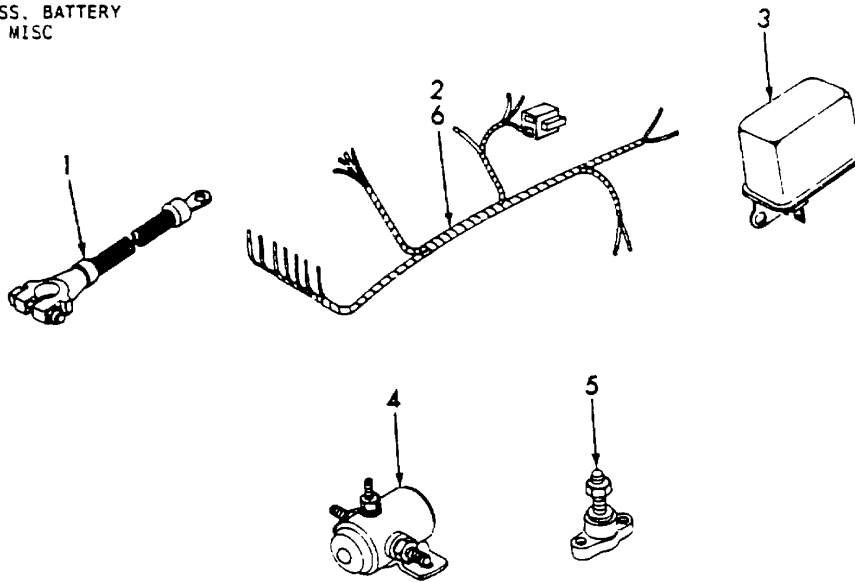
08-007

PAGE 1

1123



FIG. 08-009

WIRING HARNESS, BATTERY
CABLES AND MISC

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1		CABLE, DETERMINE GA AND LENGTH USE CHARTS IN MT-90 FOR LOCAL FABRICATION			2	163 303	SCREW, PAN-CR-REC-HD TAP 1/4-14 X 1/2		
1		GROUND, CAB AND ENG			2	470 184 C91	HARNESS, CLEARANCE/MARKER LIGHTS		
1	482 633 C92	12-1/2 IN LONG			2		HARNESS, ENG		
1	57 039 R91	14 IN. LONG							
1	878 013 R91	15 IN LONG							
1	70 735 R92	19 IN LONG							
1	482 256 C2	19 2 IN LONG							
1	57 040 R91	22 IN LONG							
1	K401 202 042	42 IN LONG							
2		HARNESS, CAB			2		09 01 ENG		
					2		LHD		
2		LHD							
					2	501 018 C92	W/REGULAR CAB		
2	509 119 C91	CHASSIS BUILT 1-22-81 AND LATER			2	483 104 C92	W/REGULAR CAB		
2	443 999	ADAPTER, 1/8MPT							
2	188 395 R1	CONNECTOR, BODY K-SLEEVE							
2	188 393 R1	CONNECTOR, BODY J-SLEEVE							
2	505 296 C1	PRODUCT GRAPHIC							
2	239 807 R1	EAT 64892							
		TERMINAL, BLADE							
2	487 223 C1	GROMMET, CAB HARN							
2	481 366 C1	RETAINER, CAB HARN GROM							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

08-009

REVISION 01

PAGE

1124



MT-145
ELECTRICAL SYSTEM

GROUP 08

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 08-009 WIRING HARNESS, BATTERY CABLES AND MISC					HOOD, HEADLIGHTS		
3		RELAY							
3	241 120 R91	HORN							
3	277 055 C91	HYD BRKS							
3	277 055 C91	MARKER LGT			6		HARNESS, INST PNL		
3	25 222 R1	BOLT, HEX-HD 1/4NC X 3/4							
3	167 263	SCREW, PAN-CR-REC-HD TAP 1/4NC X 3/4							
3	26 110 R1	NUT, HEX-LK UOJNC			6		LHD		
3	447 186 C1	SUBMERGED, FUEL PUMP			6	576 164 C92	W/O 1853FC MODEL		
3		BRACKET, RELAY MTG							
3	493 393 C1	RHD							
3	468 798 C1	LHD							
3	9413 994	NUT, HEX-LK 5/16NC							
					6		W/REGULAR CAB		
					6		CHASSIS BUILT 1-22-81 AND LATER MAKE LOCALLY		
4	121 613 C1	STARTING MOTOR			6	343 983 C1	SLEEVE, PROTECTIVE		
4	167 257	SCREW, PAN-CR-REC-HD TAP 1/4NC X 1/2			6	580 567 C92	HARNESS PLATFORM		
4	167 263	SCREW, PAN-CR-REC-HD TAP 1/4NC X 1/2			6	489 439 C91	HARNESS, SUBMERGED FUEL PUMP		
4	1/4	R WASHER, LK 1/4							
5	120 361	NUT, HEX NO 10NC							
5	3/8	V NUT, HEX 3/8NC							
5	26 667 R1	SCREW, PAN-CR-REC-HD NO 10NC X 3/4							
5	3/16	R WASHER, LK NO 10							
5	3/8	R WASHER, LK 3/8							
5	25 709 R1	WASHER FL 3/8							
5	468 647 C1	BLOCK, JUNC W/O 1853FC MODEL					* NON-ILLUSTRATED		
5	124 829	NUT, HEX-JAM 3/8NC							
5	163 303	SCREW, PAN-CR-REC-HD TAP 1/4-14 X 1/2							
5	25 709 R1	WASHER, FL 3/8							
5	468 651 C1	BAR, BUSS W/STUD							
5	1/4X 1	L BOLT, HEX-HD 1/4NC X 1							
5	124 818	NUT, HEX 1/4NC							
5	24 861 R1	NUT, HEX-LK 1/4NC							
6		HARNESS, FRT END							
6		AMMETER							
6		CHASSIS BUILT 1-22-81 AND LATER MAKE LOCALLY							
6		DASH							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

08-009

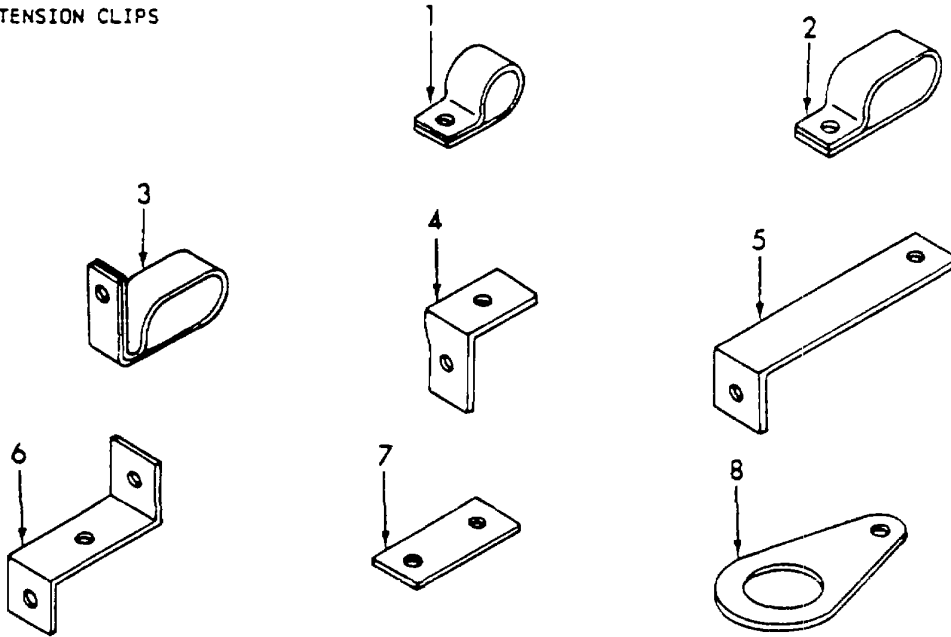
REVISION 01

PAGE 2

1125



FIG. 08-012

CLAMPS, EXTENSION CLIPS
-STD-

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	98 959 R1	CLAMP, SINGLE HOSE							
1	301 272 C1	RUBBER DIPPED							
1	406 381 C1	BATTERY NEG TERM							
1	299 403 C1	MEDIUM DUTY							
1	299 407 C1	3/8 DIA ZNP COATED							
1	299 566 C1	1/2 DIA ZNP COATED							
1	299 605 C1	3/4 DIA ZNP COATED							
1	575 365 C1	PLAIN							
1	27 179 R1	PLAIN							
1	299 414 C1	PLAIN							
2	365 215 C1	CLAMP, DOUBLE HOSE							
2	445 138 C1	PLAIN							
3	481 733 C1	CLAMP, DOUBLE HOSE ANGLE MOUNT							
4	174 043 R1	PLAIN							
4	312 106 C1	EXTENSION, CLIP							
4	318 721 C1								
4	423 203 C1								
4	894 313 R1								
5	147 453 R1	EXTENSION, CLIP							
5	300 787 C1								
5	181 023 R1								
5	872 375 R1								
6	320 955 C1	EXTENSION, CLIP							
7	453 519 C1	EXTENSION, CLIP							
8	493 838 C2	GROMMET, BATTERY CABLE							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

08-012

PAGE 1

MT-145
ELECTRICAL SYSTEM

GROUP 08



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 08-014									
		LAMPS, BULBS, INDICATORS -STD-									
		ILLUSTRATION NOT AVAILABLE AT PUBLICATION									
1		LAMP, WEDGE BASE									
1	26 617 R1	12V 2CP NO. 168									
2		LAMP, BAYONET BASE									
2	131 282	12V 1CP NO. 53									
5		LIGHT, INDICATOR									
5	387 604 C1	GREEN									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

1127

MT-145
ELECTRICAL SYSTEM



GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 08-015							
		HORNS, BUZZERS, WARNING							
		ILLUSTRATION NOT AVAILABLE AT PUBLICATION							
1		BUZZERS							
1	268 690 C91	LOW OIL PRESSURE/HIGH WATER TEMP							
2		HORNS							
2	543 130 C1	BACK-UP ALARM							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01



MT-145
ELECTRICAL SYSTEM

GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	VAR	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	VAR	QTY	REC STK
		FIG. 08-017 HARNESS AND CABLES -STD- ILLUSTRATION NOT AVAILABLE AT PUBLICATION									
1		CABLE									
1	489 568 C91	PARKING BRAKE									
1	541 745 C91	STARTER									
2		HARNESS									
2	572 848 C91	LOW OIL PRESSURE/HIGH WATER TEMP									
2	586 981 C91	ENGINE STOP CONTROL									
2	538 394 C91	ENGINE									
2	542 683 C91	RECTIFIER									
2	471 207 C91	HEATER LHD									
2	545 039 C91	LOW AIR PRESSURE WARNING SPRING PARKING BRAKE									

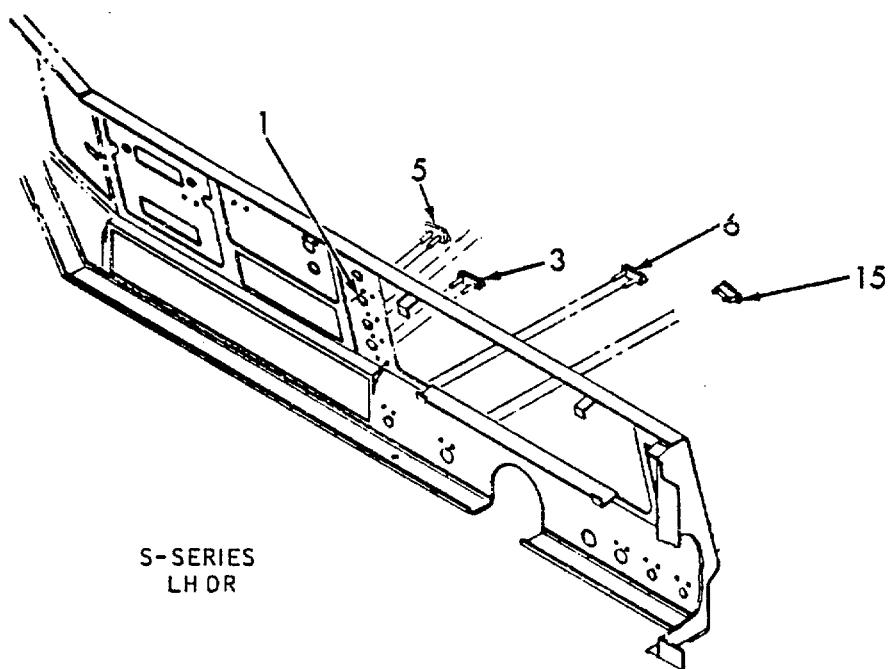
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01



FIG. 08-018

LIGHT, INST PNL, PRODUCT
GRAPHICS-SERIES
LH OR

08

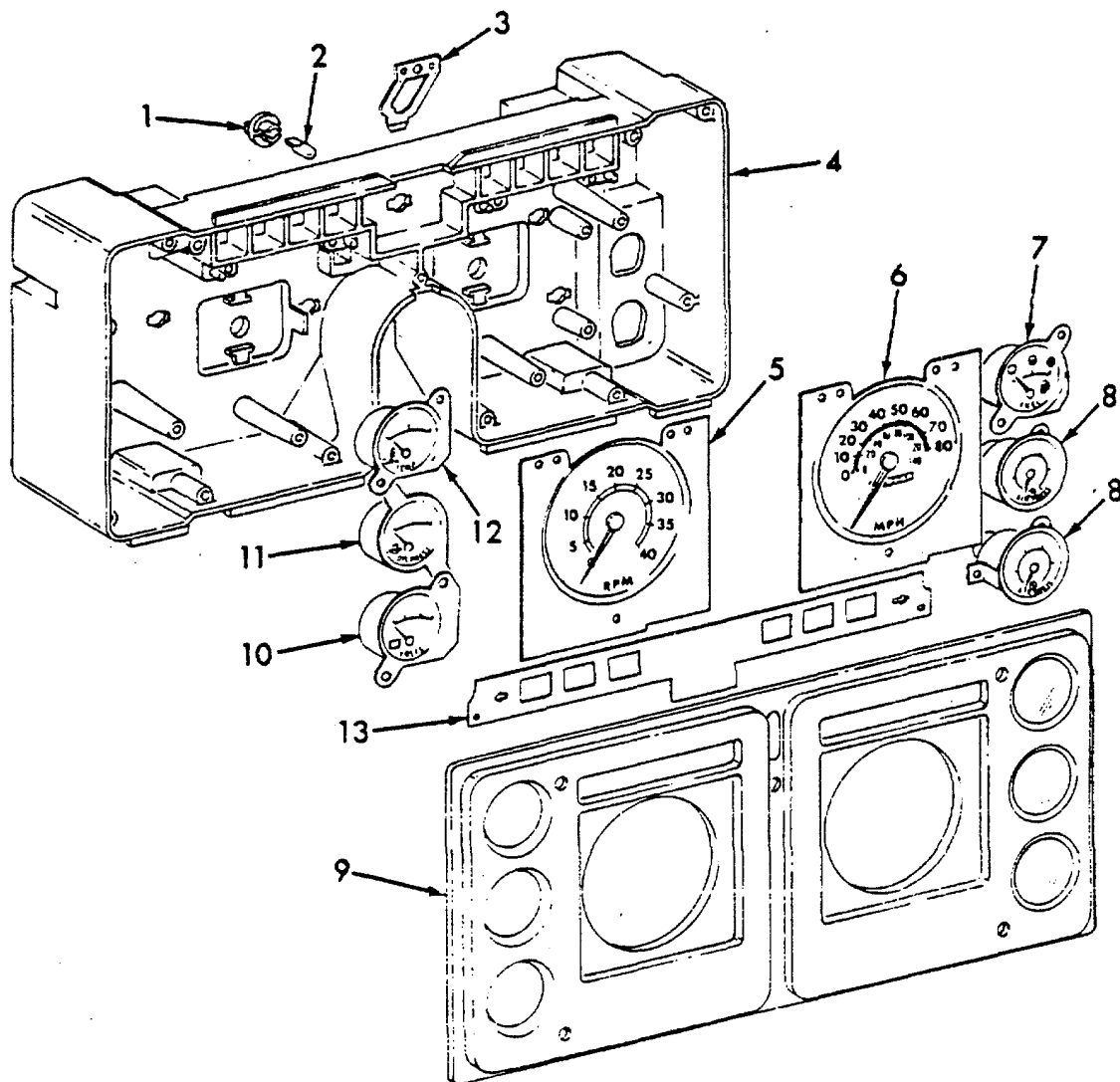
.....

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 08-029

PANEL, INST CLUSTER
W/ SPEEDOMETER,
TACHOMETER GAUGES AND
BEZELS



PRINTED IN THE UNITED STATES OF AMERICA

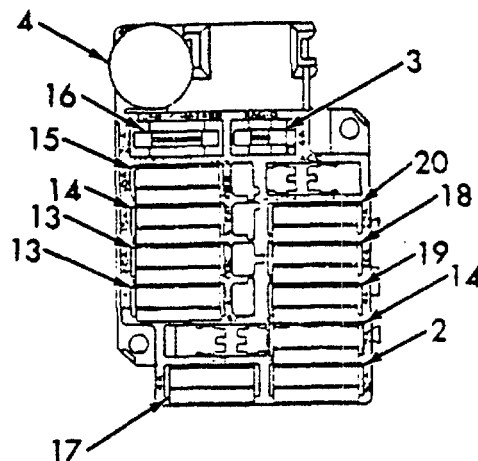
MT-145
ELECTRICAL SYSTEM

GROUP 08



FIG. 08-031

FLASHER, FUSES AND
CIRCUIT BREAKERS

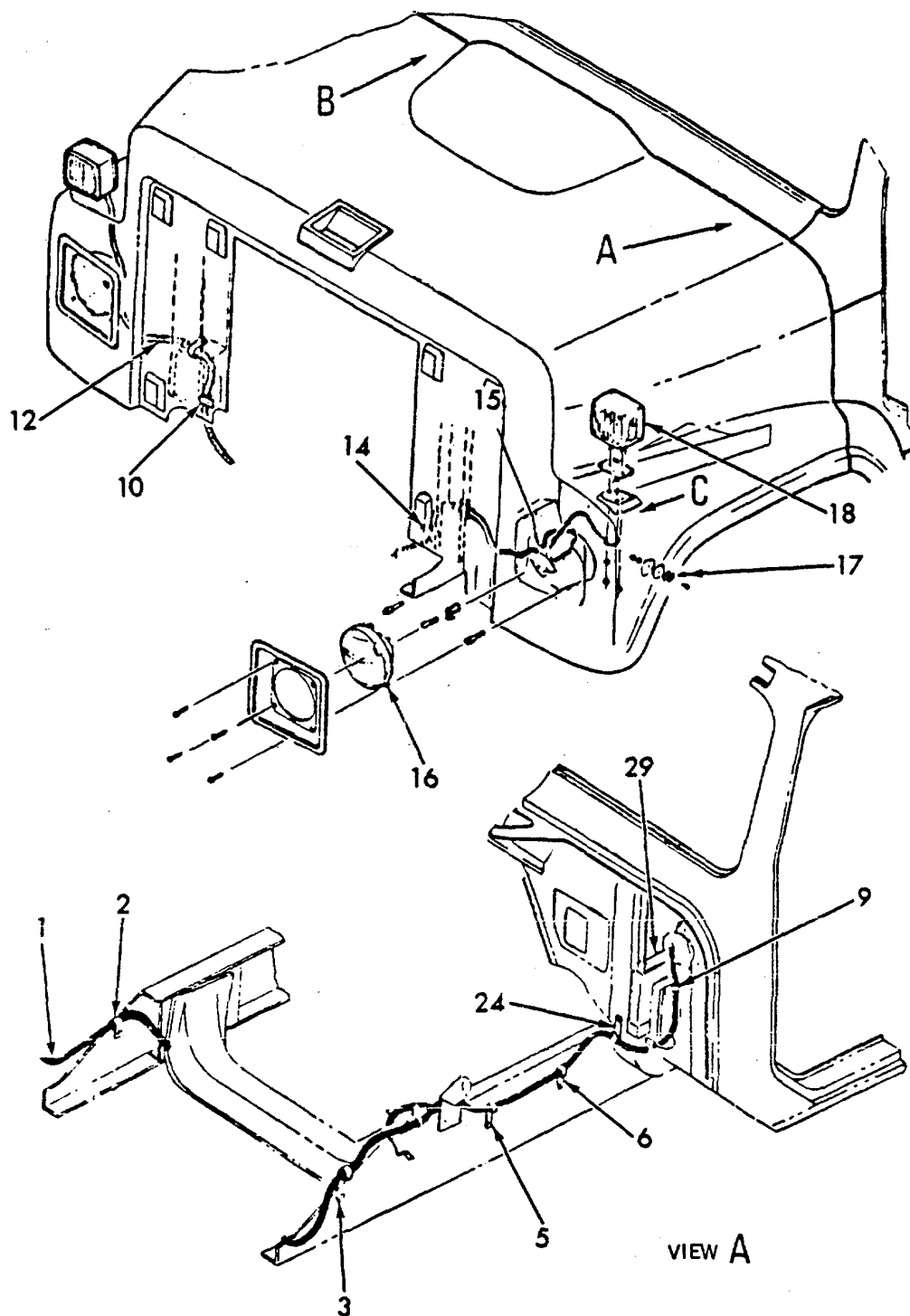


FUSE BLOCK
SHOWING CIRCUIT BREAKERS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.
2	433 178 C1	BREAKER, CIRCUIT, 30 AMP	1						
3	147 682	FUSE, SFE 4 AMP	AR						
4	501 707 C1	FLASHER	1						
13	433 177 C1	BREAKER, CIRCUIT, 20 AMP	2						
14	433 176 C1	BREAKER, CIRCUIT, 15 AMP	2						
15	433 178 C1	BREAKER, CIRCUIT, 30 AMP	1						
16	9428 126	FUSE, SFE 20 AMP	1						
17	433 175 C1	BREAKER, CIRCUIT, 4 AMP	1						
18	433 177 C1	BREAKER, CIRCUIT, 20 AMP	1						
19	433 175 C1	BREAKER, CIRCUIT, 4 AMP	1						
20	433 177 C1	BREAKER, CIRCUIT, 20 AMP	1						



FIG. 08-033

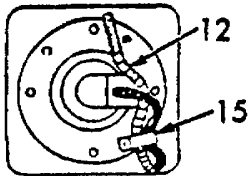
HARNES, TURN SIGNAL
LIGHT AND HORN HI-NOTE

PRINTED IN THE UNITED STATES OF AMERICA

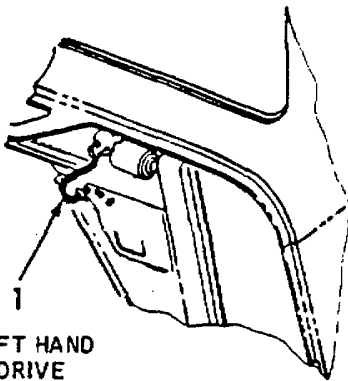


FIG. 08-033

HARNES. TURN SIGNAL
LIGHT AND HORN HI-NOTE



VIEW C



LEFT HAND
DRIVE

**MT-145
ELECTRICAL SYSTEM**

GROUP 08



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 08-033			17	492 898 C1	PAD, REFLECTOR MTG-RIGHT	1	
		HARNESS, TURN SIGNAL					W/900 NO. & UP FRONT		
		LIGHT AND HORN HI-NOTE			17	27 218 R1	SCREW, PAN HD CR REC MACH	2	
							NO. 10-24UNC X 1.0		
1	586 967 C91	HARNESS, FRONT END	1				W/900 NO. & UP FRONT		
		DASH			17	120 391	WASHER, FLAT NO. 10-24UNC	2	
2	299 566 C1	CLAMP	1				W/900 NO. & UP FRONT		
2	140 483 H	BOLT, HEX-HD 3/8-16UNC X	1				AXLE		
		1-1/4 IN.			17	19 910 R1	NUT, HEX LK NO. 10-24UNC	2	
2	9413 979	NUT, HEX LK 3/8-16UNC	1				W/900 NO. & UP FRONT		
3	299 566 C1	CLAMP	1				AXLE		
3	140 483 H	BOLT, HEX-HD 3/8-16UNC X	1		18	449 038 C1	PAD, TURN SIGNAL LIGHT	2	
		1-1/4 IN.					MOUNTING		
3	9413 979	NUT, HEX LK 3/8-16UNC	1		18	444 659 C91	LIGHT, TURN SIGNAL -RT-	1	
5	314 249 C91	CLAMP	1				W/O PARK LIGHT		
5	532 434 C1	BOLT, SPECIAL 1/4-20 X 1.5	1				SEPARATE BREAKDOWN-		
5	25 519 R1	NUT, 1/4-20 REG	1				SEE FIG. 08-037 PAGE 1145		
5	1/4 R	WASHER, LK 1/4	1		18	444 660 C91	LIGHT, TURN SIGNAL -LT-	1	
5	25 707 R1	WASHER, FLAT 1/4	1				W/O PARK LIGHT		
6	314 249 C91	CLAMP	1				SEPARATE BREAKDOWN-		
6	25 222 R1	BOLT, HEX-HD 1/4-20UNC X	1				SEE FIG. 08-037 PAGE 1145		
		3/4 IN.							
6	25 519 R1	NUT, HEX 1/4-20UNC	1						
6	1/4 R	WASHER, LK 1/4	1						
6	275 182 C1	EXTENSION, CLIP	1						
6	25 493 R1	BOLT, HEX-HD 5/16-18UNC X	1						
		1 IN.							
6	9413 977	NUT, HEX LK 5/16-18UNC	1						
9	289 862 C1	STRAP, CABLE LK	1						
					18	299 407 C1	CLAMP	2	
10	299 566 C1	CLAMP	1		18	411 597 R1	NUT, HEX LK 5/16-18UNC	4	
10	160 544	SCREW, PAN HD CR REC	1		18	25 708 R1	WASHER, FLAT 5/16	4	
		1/4-20D X 3/4 IN.			19	299 566 C1	CLAMP	2	
10	462 457 C1	NUT, CLINCH 1/4-20UNC	1		19	25 222 R1	BOLT, HEX-HD 1/4-20UNC X	2	
10	1/4 R	WASHER, LK 1/4	1				3/4 IN.		
12	571 013 C91	HARNESS, FRT END HOOD	2		19	25 519 R1	NUT, HEX 1/4-20UNC	2	
		W/O EBC OR BUS			19	25 707 R1	WASHER, FLAT 1/4	2	
					19	1/4 R	WASHER, LK 1/4	2	
14	299 566 C1	CLAMP	1						
14	160 544	SCREW, PAN HD CR REC	1						
		1/4-20D X 3/4 IN.							
14	462 457 C1	NUT, CLINCH 1/4-20UNC	1						
14	1/4 R	WASHER, LK 1/4	1						
15	365 215 C1	CLAMP	2						
15	473 148 C1	SCREW, PAN HD CR REC	2						
		9/32-16 X 1/2 IN.							
16	465 940 C2	SCREW, GROMMET	4		24	299 566 C1	CLAMP	1	
		HEADLIGHT ADJ							
16	450 157 C2	SPRING, HEADLAMP	2						
16	153 789	SCREW, FIL-HD CR-REC	2						
		1/4-20UNC X 3/4							
16	465 458 C91	HEADLAMP	2						
		SEPARATE BREAKDOWN-							
		SEE FIG. 08-038 PG. 1144							
16	576 296 C1	BEZEL, HEADLAMP	2		29	25 707 R1	WASHER, FLAT 1/4	1	
16	473 147 C1	SCREW, OVAL CR-REC-HD	8		30	291 207 C1	STRAP, CABLE LK	1	
		NO. 10-16UNC X 3/4							
17	479 666 C1	REFLECTOR	2						
		W/900 NO. & UP FRONT							
		AXLES							
17	492 897 C1	PAD, REFLECTOR MTG- LEFT	1						
		W/900 NO. & UP FRONT							
		AXLE							

PRINTED IN THE UNITED STATES OF AMERICA

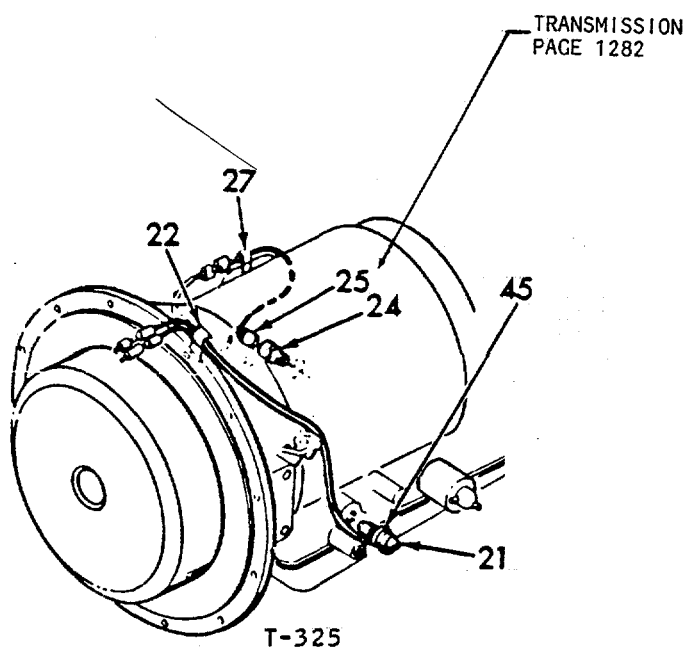
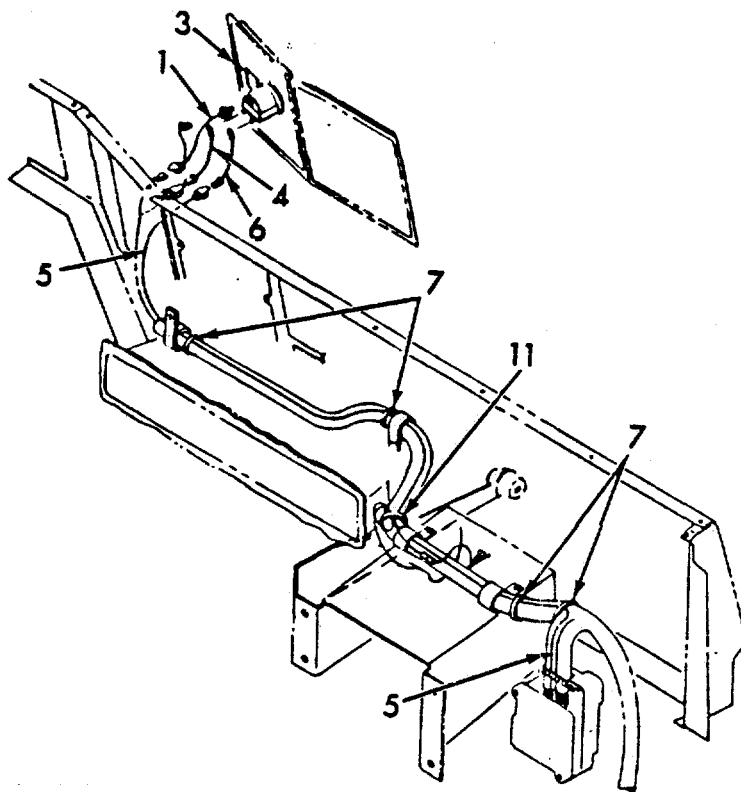
MISSING ITEM NUMBERS ARE NOT USED

REVISION 01



FIG. 08-034

HARNESS, AUTOMATIC
TRANSMISSION WIRING,
OIL TEMP GAUGE, SWITCHES
BACK-UP LIGHT, NEUTRAL
SAFETY



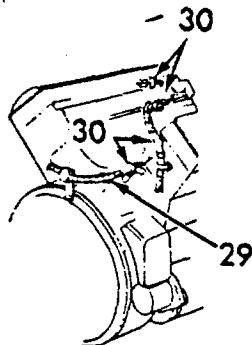
**MT-145
ELECTRICAL SYSTEM**

GROUP 08



FIG. 08-034

HARNESS, AUTOMATIC
TRANSMISSION WIRING,
OIL TEMP GAUGE, SWITCHES
BACK-UP LIGHT, NEUTRAL
SAFETY



D9.0L ENGINE

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
1	486 092 C91	HARNESS		1		22	299 404 C1	CLAMP, 3/8 ID		1	
1	131 282	LAMP, 1CP NO.53		1		24	416 372 C1	SWITCH, BACK-UP LIGHT		1	
		W/TRANS OIL TEMP GAUGE				25	468 360 C91	CABLE		1	
3	436 080 C1	PRODUCT GRAPHIC		1		27	299 404 C1	3/4 IN.		1	
		W/TRANS OIL TEMP GAUGE						CLAMP			
								W/T-325 AND 326			
4	509 292 C91	CABLE		1							
		W/TRANS OIL TEMP GAUGE									
		W/ENG OIL TEMP GAUGE									
5	509 291 C91	CABLE, RED		1		29	474 744 C91	CABLE		1	
6	509 294 C91	CABLE		1				W/TRANS OIL TEMP GAUGE			
		W/TRANS OIL TEMP GAUGE									
7		TAPE, PLASTIC 3/4 IN. WIDE						D9.0L			
		W/TRANS OIL TEMP GAUGE									
		NON SERVICE-									
		OBTAIN LOCALLY									
11		TAPE, PLASTIC 3/4 IN. WIDE				30	289 862 C1	STRAP, CABLE LK		AR	
		NON SERVICE -						W/TRANS OIL TEMP GAUGE			
		OBTAIN LOCALLY									
21	439 853 C1	SWITCH, NEUTRAL SAFETY		1							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01



MT-145
ELECTRICAL SYSTEM

GROUP

08

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 08-034 HARNESS, AUTOMATIC TRANSMISSION WIRING, OIL TEMP GAUGE, SWITCHES BACK-UP LIGHT, NEUTRAL SAFETY									
45	289 862 C1	STRAP, CABLE LK		1							

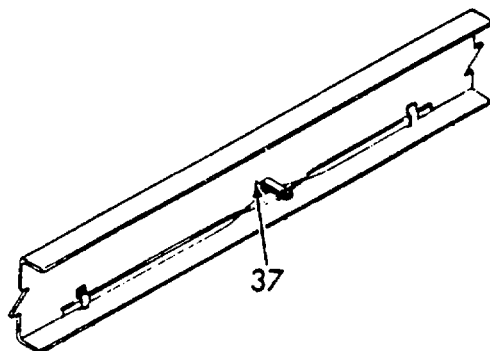
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

FIG. 08-036

This diagram shows an exploded view of a vehicle lighting assembly. The components are labeled with numbers: 1 points to a mounting bracket at the front; 2 points to a small electrical component; 3 points to a larger mounting bracket; 35 points to a bracket on the side of the main housing; 6 points to two internal mounting brackets; and 7 points to a long, thin mounting rail. The assembly is shown in a perspective view, illustrating how the components fit together.



PAGE 1



MT-145
ELECTRICAL SYSTEM

GROUP

08

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 08-036									
		HARNESS, STOP, TAIL, TURN AND BACK UP LIGHT									
1	252 409 C1	BRACKET, ANGLE W/O TRAVELCREW CAB		1							
1	25 483 R1	BOLT, HEX HD 1/4-20UNC X 1 IN W/O TRAVELCREW CAB		1							
1	26 110 R1	NUT, HEX 1/4-20UNC W/O TRAVELCREW CAB		1							
1	299 605 C1	CLAMP W/O TRAVELCREW CAB		1							
2		CABLE MAKE LOCALLY	T	1							
3	2643 098 R1	CONDUIT, CONVOLUTED TUBING 3/4 IN ID		1							
6	474 824 C1	CLAMP W/O DUAL RT SIDE MTD FUEL TANK LHD		1							
6	445 663	SCREW, HEX HD TAP 1/4-14B X 1-1/2 IN. W/O DUAL RT SIDE MTG FUEL TANK	AR								
6	451 617	SCREW, HEX HD TAP 1/4-14B X 1 IN. W/O DUAL RT SIDE MTG FUEL TANK	AR								
7	575 365 C1	CLAMP	AR								
7	451 617	SCREW, HEX HD TAP 1/4-14B X 1 IN. W/O FRAME REINF	AR								
8		CLAMP MAKE LOCALLY	AR								
8	451 617	SCREW, HEX HD TAP 1/4-14B X 1 IN. W/O FRAME REINF	AR								

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

**MT-145
ELECTRICAL SYSTEM**

GROUP 08



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 08-036 HARNESS, STOP, TAIL, TURN AND BACK UP LIGHT									
35	289 862 C1	STRAP, CABLE LK		1							
37	321 930 C1	EXTENSION, CLIP		1							
37	25 483 R1	BOLT, HEX-HD 1/4-20 X 1 LG		1							
37	26 110 R1	NUT, LK 1/4-20		1							
		+ PART NO. COVERS ONE FOOT BULK MATERIAL									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

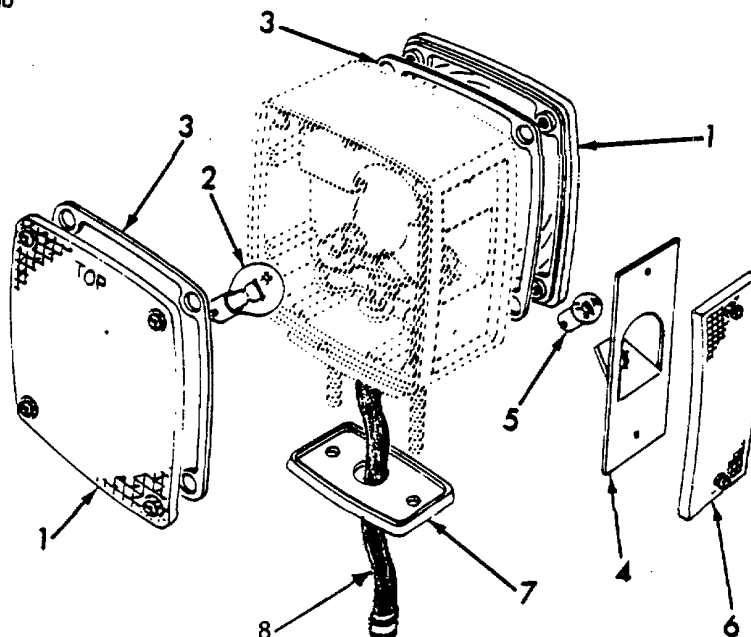
REVISION 01

1143



FIG. 08-037

LIGHT, TURN SIGNAL AND
PARKING

[illegible]

PRINTED IN THE UNITED STATES OF AMERICA

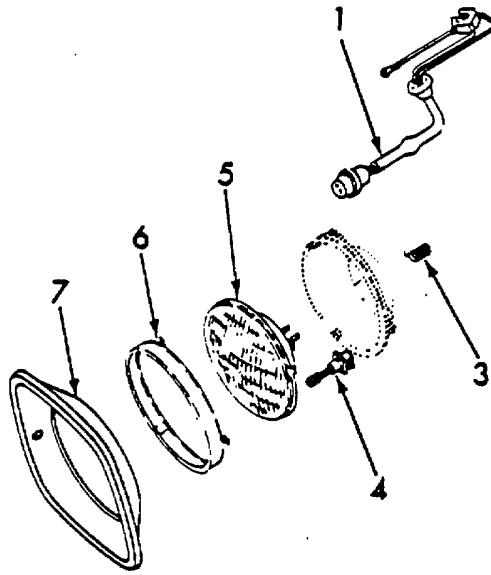
MISSING ITEM NUMBERS ARE NOT USED

ELECTRICAL SYSTEM

GROUP 08

FIG. 08-038

LIGHT, HEAD W/BEZEL



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
	465 458 C91	HEADLIGHT CONSISTS OF ITEM NOS. 5, 6 AND MTG RING LEFT HAND OR STANDARD							
1		HARNESS, HEADLIGHT	1						
1	572 979 C91	W/REGULAR CAB	1						
3	450 157 C2	SPRING, HEADLIGHT	2						
3	160 541	SCREW, FIL-CR-REC-HD 1/4NC X 3/4	2						
4	465 940 C2	SCREW, W/NUT, GROM	2						
5	5962 548	LAMP, HEADLIGHT NO. 6014	1						
6	466 857 C1	RETAINER, SEAL BEAM	1						
6	24 329 R1	SCREW, RET	3						
7		BEZEL, HEADLIGHT	1						
7	586 277 C1	EXC CODE 09573	2						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 02

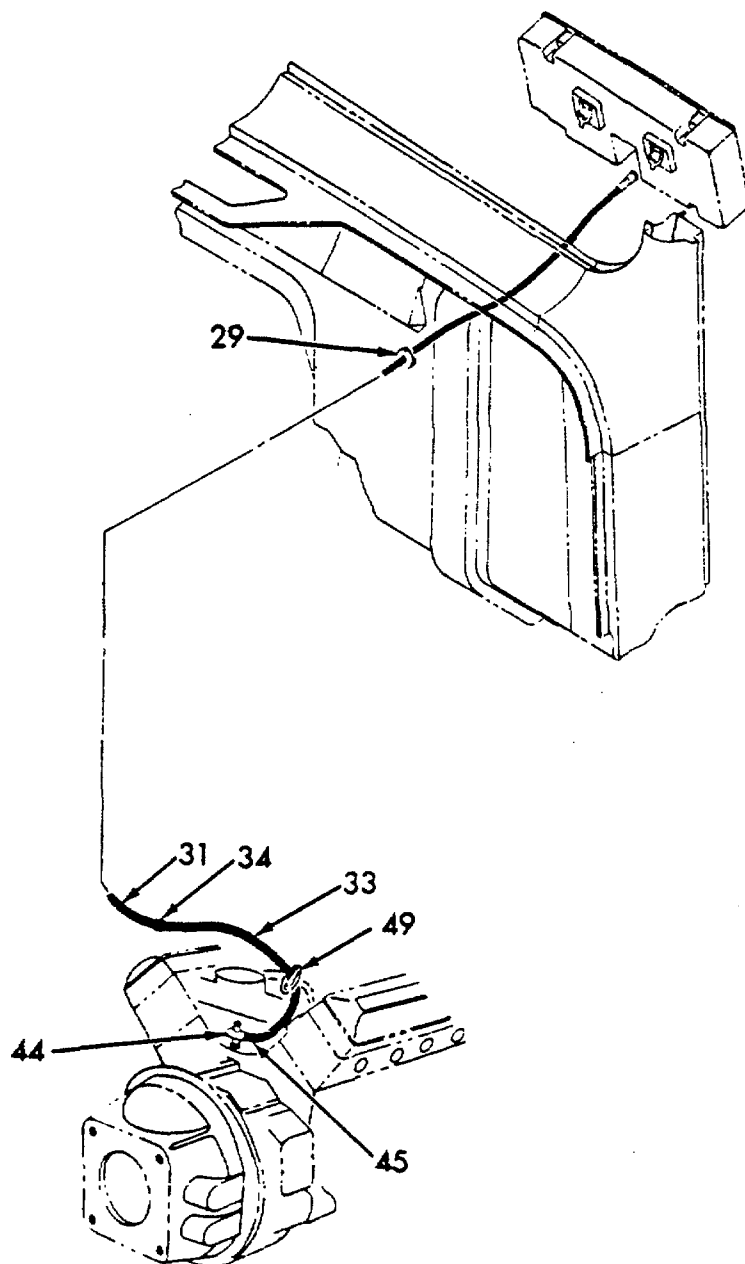
PAGE NO. 1

1145



FIG. 08-043

CABLE AND MTG, TACHOMETER



W/D-9.0L ENGINE



FIG. 08-043

CABLE AND MTG. TACHOMETER

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
			R		STK						STK
29	120 408	GROMMET			1						
31	577 729 C91	CABLE AND CORE ASSY	B		1						
33	385 083 C91	CABLE AND CORE ASSY	D		1						
34	477 517 C1	TIP, TACHOMETER DR			1						
44	468 543 C91	ADAPTER, TACHOMETER DR	B		1						
45	343 359 C91	TIP, TACHOMETER DR			1						
49	306 132 C1	STRAP, CABLE LK			1						

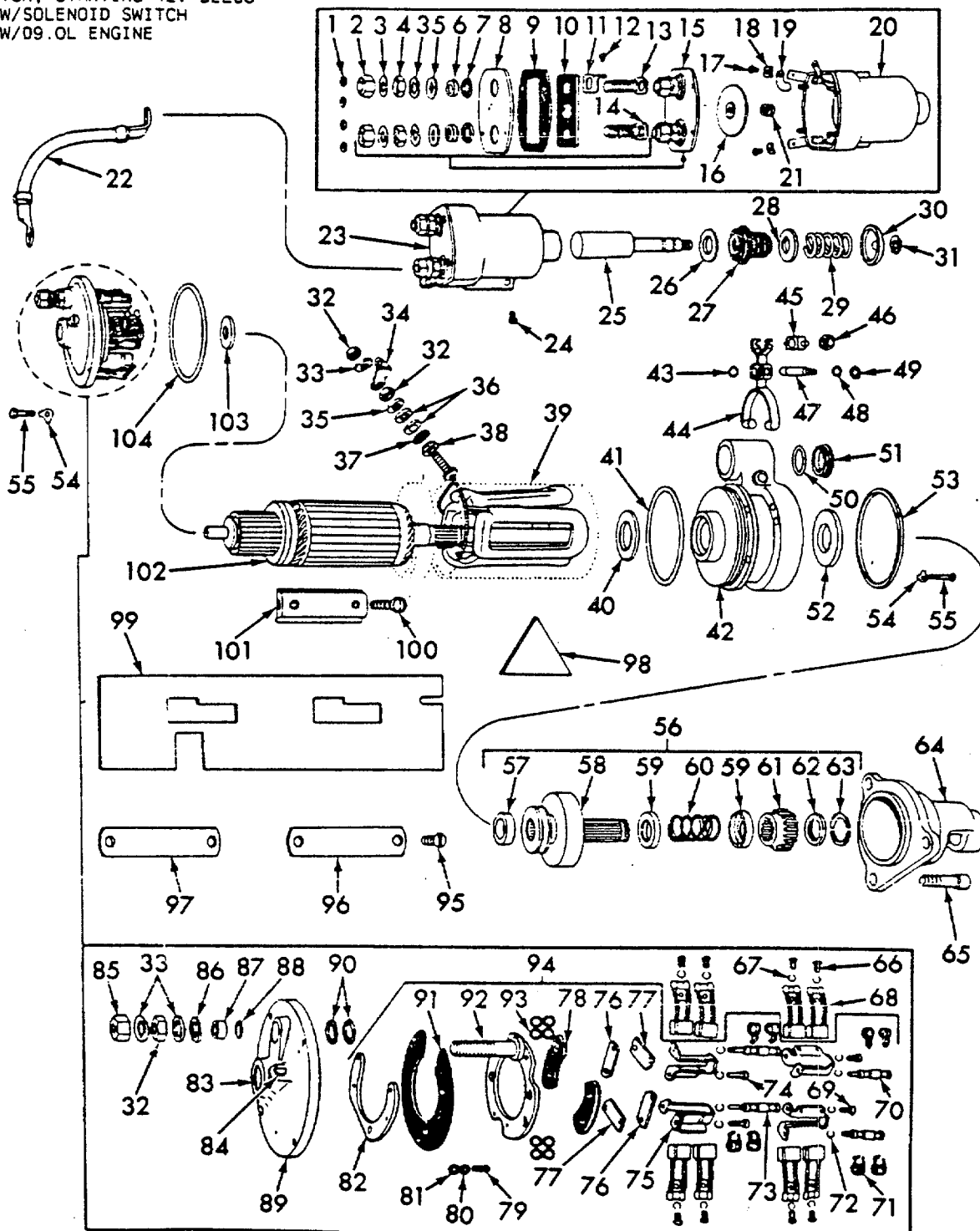


MT-145
ELECTRICAL SYSTEM

GROUP 08

Fig. 08-052

MOTOR, STARTING 12V DELCO
W/SOLENOID SWITCH
W/09.0L ENGINE



PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

Page 1

1148

MT-145
ELECTRICAL SYSTEM



GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		Fig. 08-052			42	125 947	PLUG, PIPE HDLS-SLT 1/8	1	
		MOTOR, STARTING 12V DELCO			42	1918 047	SEAL, LEVER HOUSING OIL	1	
		W/SOLENOID SWITCH			42	1916 439	WICK, LEVER HOUSING OIL	1	
		W/D9.OL ENGINE			43	1921 805	O-RING, SHIFT LEVER SHAFT	1	
							-1/2-		
	1114 120	MOTOR, STARTING			44	1945 484	LEVER, SHIFT	1	
		WILL WORK FOR 283804C91			45	1945 475	GUIDE, PLUNGER ROD	1	
	24 865 R1	R/S S28181	3		46	9412 305	NUT, PLUNGER ROD GUIDE	1	
		BOLT, HEX-HD 1/2NC X 2-1/4					ADJUSTING		
	131 101	WASHER, LOCK 1/2 HEAVY	3		47	1945 472	SHAFT, SHIFT LEVER		
	200 580 R1	SPACER, STARTING MOTOR TO	1		48	1914 373	O-RING, SHIFT LEVER SHAFT	1	
		ENGINE					-15/16-		
					49	9415 235	RING, SHIFT LEVER SHAFT	1	
							SNAP		
1	1945 161	NUT, W/WASHER	4		50	1916 320	GASKET, LEVER HOUSING PLUG	1	
2	453 285	NUT, HEX 1/2NC	2		51	1945 356	PLUG, LEVER HOUSING	1	
3	1902 494	WASHER, LOCK 1/2	4		52	1911 644	WASHER, BRAKE	1	
4	453 287	NUT, HEX 1/2NC	2		53	1945 476	GASKET, LEVER AND DRIVE	1	
5	1904 998	WASHER, TERMINAL 7/8 OD	2				HOUSING		
6	1944 836	BUSHING, TERMINAL STUD	2		54	9421 423	WASHER, LOCK 1/4 HEAVY	9	
		INSULATING			55	1914 869	SCREW, CE AND LEVER	9	
7	1942 969	WASHER, TERMINAL BUSHING	2				HOUSING ATTACHING		
		-RUBBER-			56	800 068	DRIVE, MOTOR	1	
8	1945 409	PLATE, TERMINAL	1		57	812 410	BUSHING, MOTOR DRIVE	1	
9	1906 053	GASKET, TERMINAL PLATE	1		58		DRIVE	1	
10	1931 673	INSULATOR, TERMINAL PLATE	1				NOT SERVICED		
11	1906 051	SUPPORT, LEAD	1				SEPARATELY		
12	1840 633	SCREW, COIL LEAD ATTACHING	1		59		CUP, DRIVE SPRING RETAINER	1	
13	1946 003	STUD, MOTOR TERMINAL	1		59	1968 229	INNER		
14	1946 004	STUD, BATTERY TERMINAL	1		59	1968 225	OUTER		
15	1946 002	PLATE, TERMINAL	1		60	800 065	SPRING, MOTOR DRIVE	1	
16	1954 861	DISC, CONTACT	1		61	800 153	PINION, MOTOR DRIVE	1	
17	1888 940	SCREW, TERMINAL	2		62	1945 490	CUP, PINION STOP	1	
18	1878 503	CLAMP, TERMINAL	2		63	801 208	PACKAGE, SPLIT WASHER	1	
19	1909 829	STRAP, GROUND	1		64	1946 575	HOUSING, W/BUSHING, MOTOR	1	
20	1952 956	CASE, W/COIL	1				DRIVE		
21		NOT USED			64	1945 509	BUSHING, DRIVE HOUSING	1	
22	1953 236	CABLE, SWITCH TO MOTOR	1		64	125 947	PLUG, PIPE HDLS-SLT 1/8	1	
23	1119 862	SWITCH, SOLENOID	1		64	273 913	PLUG, PIPE 1/4	1	
24	1930 611	SCREW, W/LW, SWITCH	1		64	1916 439	WICK, MOTOR DRIVE HOUSING	1	
		ATTACHING			65		SCREW, MOTOR DRIVE HOUSING	1	
25	1945 480	PLUNGER, SWITCH	1		65	1948 537	5/16NC X 1-55/64	1	
26	807 736	WASHER, PLUNGER SHAFT	1		65	1948 536	5/16NC X 1-1/2	5	
27	1942 257	BOOT, PLUNGER	1		66	453 461	SCREW, RD-HD NO.8NC X 3/8	8	
28	1942 256	RETAINER, PLUNGER SPRING	1		67		WASHER, LOCK NO.8 REGULAR	8	
		-13/64-			68	1906 988	BRUSH	8	
29	1948 521	SPRING, PLUNGER RETURN	1		69	453 468	SCREW, BRUSH HOLDER	2	
30	1942 282	RETAINER, PLUNGER SPRING	1				INSULATED -SHORT-		
		-13/32-			70	1928 500	SCREW, BRUSH HOLDER GROUND	2	
31	9415 235	RING, PLUNGER SPRING	1				-LONG-		
		RETAINER SNAP			71	1861 785	SPRING, BRUSH	8	
32		NUT, HEX JAM 1/2NC	3		72		WASHER, LOCK NO.10 REGULAR	8	
33	9421 427	WASHER, LOCK 1/2	3		73	1904 982	SCREW, BRUSH HOLDER	2	
34	1945 468	CONNECTOR, SWITCH TO FIELD	1				INSULATOR -LONG-		
		STUD			74	1914 642	SCREW, BRUSH HOLDER GROUND	2	
35	811 912	WASHER, FIELD TERMINAL	1				-SHORT-		
		STUD			75	1909 521	HOLDER, BRUSH	4	
36	1922 457	WASHER, FIELD TERMINAL	1		76	1874 848	PLATE, BRUSH HOLDER	1	
		INSULATING					SPACING -INSULATED-		
37	1945 469	GASKET, FIELD TERMINAL	1		77	1874 851	PLATE, BRUSH HOLDER	2	
		STUD -RUBBER-					SPACING -GROUNDED-		
38	1965 472	BUSHING, FIELD TERMINAL	1		78	1965 093	INSULATOR, BRUSH HOLDER	2	
		STUD INSULATING			79	9417 096	SCREW, RD-HD NO.8NC X 1/2	3	
39	1949 109	COIL, FIELD -SET OF FOUR-	1		80	1904 376	WASHER, LOCK NO.8 REGULAR	3	
40	1936 466	WASHER, SPACE	1		81	810 794	WASHER, FLAT	3	
41	1916 272	O-RING, LEVER HOUSING	1		82	1874 847	PLATE, SUPPORT	1	
42	1947 262	HOUSING, W/BUSHING AND	1		83	125 947	PLUG, PIPE HDLS 1/8	1	
		SEAL, LEVER			84	103 893	PLUG, EXPANSION	1	
42	1894 637	BUSHING, LEVER HOUSING	1		85		NUT, HEX 1/2NC	1	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 01

Page 2

1149

**MT-145
ELECTRICAL SYSTEM**

GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		Fig. 08-052							
		MOTOR, STARTING 12V DELCO W/SOLENOID SWITCH W/D9.0L ENGINE							
86	811 912	WASHER, COMMUTATOR END TERMINAL STUD	1						
87	1851 632	PACKAGE, TERMINAL STUD INSULATING BUSHING	1						
88	1909 531	O-RING, COMMUTATOR END TERMINAL STUD	1						
89	1945 514	FRAME, W/BUSHING, COMMUTATOR END	1						
89	826 462	BUSHING, COMMUTATOR END FRAME	1						
89	1916 439	WICK, COMMUTATOR END FRAME OIL	1						
90	1861 791	WASHER, COMMUTATOR END STUD	2						
91	1909 523	INSULATOR, BRUSH PLATE	1						
92	1945 518	PLATE, W/STUD	1						
93	1913 080	WASHER, BRUSH HOLDER SCREW INSULATOR	4						
94	1945 517	PLATE, W/O BRUSHES	1						
95	9414 397	SCREW, BRUSH COVER PLATE	4						
96	1945 478	PLATE, BRUSH COVER	1						
97	1945 477	GASKET, BRUSH COVER PLATE	1						
98	1868 835	INSULATOR, FIELD COIL TRIANGLE	2						
99	1955 990	INSULATOR, FIELD COIL	1						
100	1968 396	SCREW, POLE SHOE	8						
101	1934 478	SHOE, POLE	1						
102	1961 320	ARMATURE	1						
103	1905 014	WASHER, COMMUTATOR END THRUST	1						
104	1916 272	O-RING, COMMUTATOR END FRAME	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

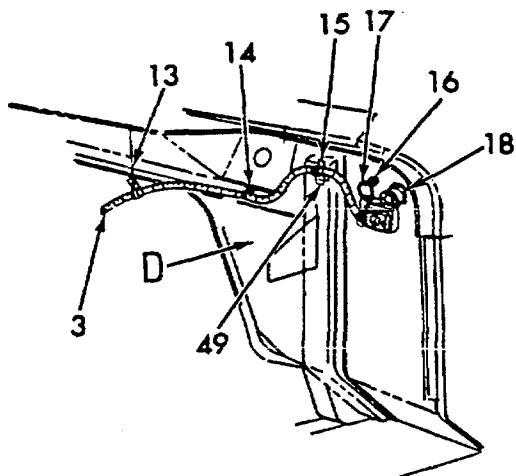
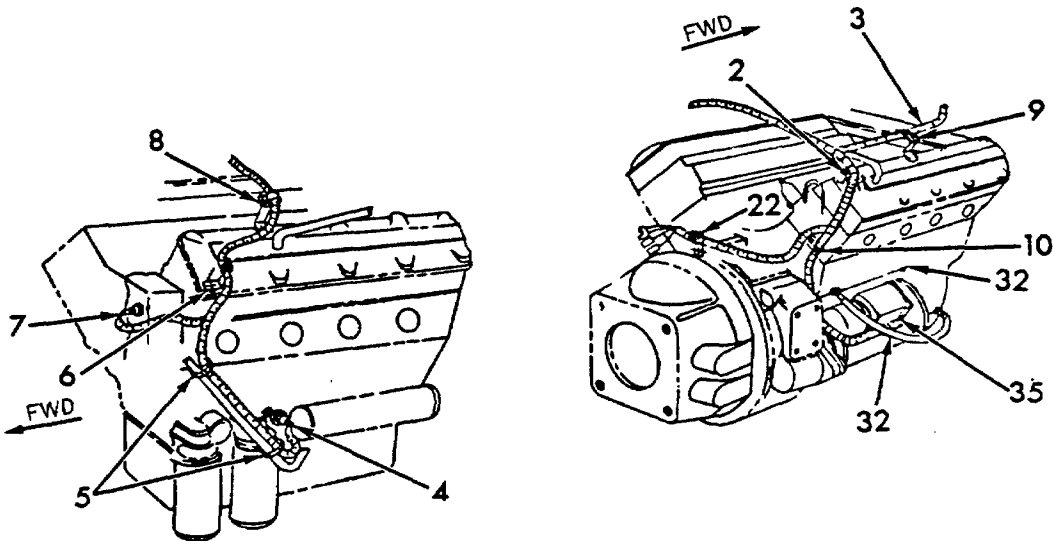
Page 3

1150



Fig. 08-053

HARNESS, ENG WIRING FOR
D9.0L ENG W/12 VOLT
START



DASH ROUTING FOR
LH DR



GROUP 08

Fig. 08-053

HARNESS, ENG WIRING FOR
D9.OL ENG W/12 VOLT
START

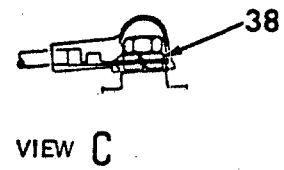
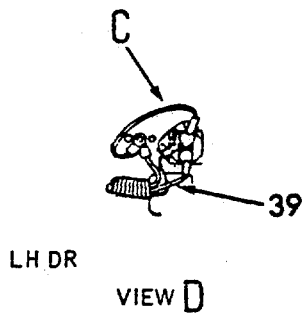
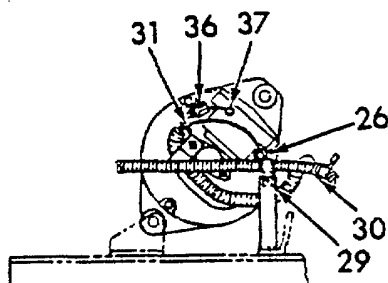




Fig. 08-053

HARNESS, ENG WIRING FOR
D9.OL ENG W/12 VOLT
START



65, 90, 105 OR 145 AMP
IH/LN GENERATOR
W/O AIR CONDITIONING

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
			A		STK				B		STK
2	406 381 C1	CLMAP, MED DUTY		1		13		CLAMP			
2	25 483 R1	BOLT, HEX-HD 1/4-20UNC X 1		1		13	406 381 C1	W/O 160 AMP GENERATOR	B	1	
2	25 519 R1	NUT, HEX 1/4-20UNC		1		13	160 544	SCREW, PAN HD CR REC TAP		1	
				1				1/4-20UNC X 3/4 IN.			
3	572 525 C92	W/O FBC, BUS		1		13	1/4	R WASHER, LK 1/4		1	
4	584 051 C2	SENDER, OIL PRESSURE	B	1		14	314 249 C1	CLAMP, J		1	
4	115 999	NUT, HEX NO.10-32UNF		1		14	9413 977	NUT, HEX LK 5/16-18UNC		1	
4	3/16	R WASHER, LK NO.10		1		15	406 381 C1	CLAMP	B	1	
5	289 862 C1	STRAP, CABLE LK	B	2		15	25 228 R1	R/S S2561		1	
6	299 407 C1	CLAMP, 1/2 DIA ZNP COATED		1				SCREW, HEX-HD TAP TYPE D			
		MED CLO						5/16-18UNC X 3/4 IN.			
6	25 483 R1	BOLT, HEX-HD 1/4-20UNC X 1		1		15	5/16	R WASHER, LK 5/16		1	
6	1/4	R WASHER, LK 1/4		1		16	3/8	V NUT, HEX 3/8-16UNC		1	
6	25 519 R1	NUT, HEX U/4-20UNC		1		16	3/8	R WASHER, LK 3/8		1	
7	479 758 C1	SENDER, WATER TEMP	B	1		17		CABLE		1	
7	115 999	NUT, HEX NO.10-32UNF		1		18	121 613 C1	MAKE LOCALLY	B	1	
7	3/16	R WASHER, LK NO.10		1		18	167 257	SWITCH, MAGNETIC		2	
8	98 959 R1	CLAMP, 1/2 DIA ZNP COATED		1				SCREW, PAN HD CR REC TAP			
		MED CLO						1/4-20UNC X 1/2 IN.			
8	25 483 R1	BOLT, HEX-HD 1/4-20UNC X 1		1		18	1/4	R WASHER, LK 1/4		2	
8	1/4	R WASHER, LK 1/4		1							
8	25 519 R1	NUT, HEX 1/4-20UNC		1							
9		CLAMP									
9	299 566 C1	W/O FBC OR BUS		1							
9	25 483 R1	BOLT, HEX-HD 1/4-20UNC X 1		1							
9	1/4	R WASHER, LK 1/4		1							
9	25 519 R1	NUT, HEX 1/4-20UNC		1							
10	406 381 C1	CLAMP	B	1							
10	24 838 R1	BOLT, HEX-HD 3/8-16UNC X		1							
		1/2 IN.									
10	3/8	R WASHER, LK 3/8		1							

MISSING ITEM NUMBERS ARE NOT USED

**MT-145
ELECTRICAL SYSTEM**



GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		Fig. 08-053									
		HARNESS, ENG WIRING FOR D9.0L ENG W/12 VOLT START									
22	299 566 C1	CLAMP	B	1							
26	1/4 R	WASHER, LK 1/4	B	1							
26	27 298 R1	NUT, HEX 1/4-20UNC		1							
26	571 690 C1	NUT, HEX M6		1							
26	121 743	NUT, HEX NO. 12-24UNC		1							
28	289 862 C1	STRAP, CABLE LK		1							
29	436 470 C1	EXTENSION, CLIP	B	1							
29	98 959 R1	CLAMP		1							
29	25 222 R1	BOLT, HEX-HD 1/4-20UNC X 3/4 IN.		1							
29	25 519 R1	NUT, HEX 1/4-20UNC		1							
29	1/4 R	WASHER, LK 1/4		1							
30	289 862 C1	STRAP, CABLE LK	B	1							
31	299 566 C1	CLAMP	B	1							
31	26 531 R1	BOLT, 5/16-18UNC X 1/2 IN.		1							
31	5/16 R	WASHER, LK 5/16		1							
31	30 518 R1	BOLT, HEX-HD M8 X 16MM		1							
31	7/16 R	WASHER, LK 7/16		1							
31	508 815 C1	BOLT, HEX-HD MID X 20MM		1							
32	24 866 R1	BOLT, HEX-HD 1/2-13UNC X 2-1/2		1							
32	25 710 R1	WASHER, FL 1/2		1							
35		MOTOR, STARTER									
35	1114 831	W/O POSITORQUE WIL WORK FOR 283804C91 SEPARATE BREAKDOWN- SEE FIG. 08-052 PAGE 1148		1							
36	572 821 C91	CABLE	Z	1							
37	115 999	NUT, HEX NO. 10-32	B	1							
37	3/16 R	WASHER, LK NO. 10		1							
38	5/16 R	WASHER, LK 5/16		1							
39	5/16 R	WASHER, LK 5/16		1							
49		EXTENSION, CLIP MAKE LOCALLY		1							
49	25 228 R1	R/S S2561 BOLT, HEX-HD 5/16-18UNC X 3/4		1							
49	5/16 R	WASHER, LK 5/16		1							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 01

1154

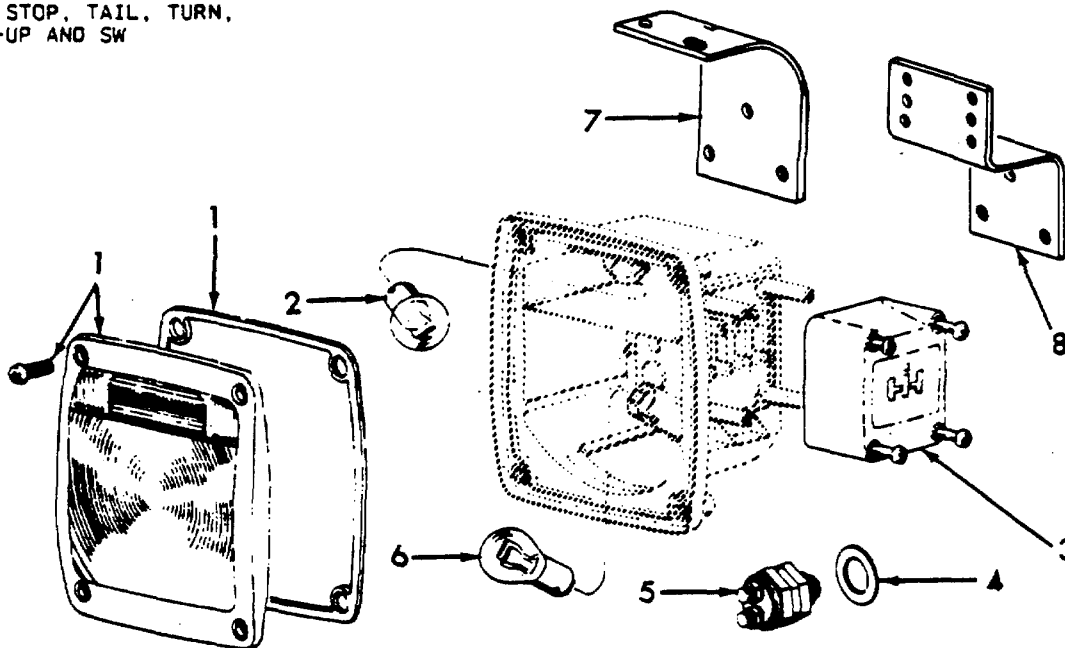


MT-145 ELECTRICAL SYSTEM

GROUP 08

Fig. 08-054

LIGHT, STOP, TAIL, TURN,
BACK-UP AND SW



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		LIGHT, STOP TAIL, BACK-UP INCLUDES ITEMS NOS. 1, 2 AND 6							
	590 158 C91	LIGHT, RT WILL WORK FOR 467708C91				435 005 C1	* +CONDUIT, CONVOLUTED TUBING		
	590 157 C91	LIGHT, LT WILL WORK FOR 467707C91					GROMMET		
	26 110 R1	NUT, HEX 1/4NC	6			876 158 R1	* EXC 6 X 4 AND 6 X 6		
	1/4 R	WASHER, LK 1/4 REGULAR	6						
1	437 850 C91	LENS, W/GASK AND SCREWS	1				NON-ILLUSTRATED		
2	9417 866	LAMP, BACK-UP LGT -32 CANDLE POWER-	1				* PART NO. COVERS ONE FOOT BULK MATERIAL		
3	424 541 C1	COVER, GT TERM.	2						
4	367 155 C1	GASKET, SW	1						
5		SWITCH, BACK-UP LGT	1						
5	416 372 C1	FOR ALLISON TRANS CABLE, BACK-UP LGT SW	1						
5	468 360 C91	FOR ALLISON TRANS LAMP, TAIL LGT -32/4							
6	9417 867	CANDLE POWER-							
7	428 274 C2	BRACKET, TAIL LGT	1						
7	25 222 R1	BOLT, HEX-HD 1/4-20UNC	2						
7	1/4 R	WASHER, LK 1/4	2						
7	25 519 R1	NUT, 1/4 PHC TYPE 8	2						
8	492 892 C1	BRACKET, TAIL LGT	1						
8	24 861 R1	BOLT, 1/2 X 1-1/4 PHC TYPE 8	6						
8	1/2 R	WASHER, LK 1/2	6						
8	25 526 R1	NUT, 1/2 PHC TYPE 8	6						

MISSING ITEM NUMBERS ARE NOT USED

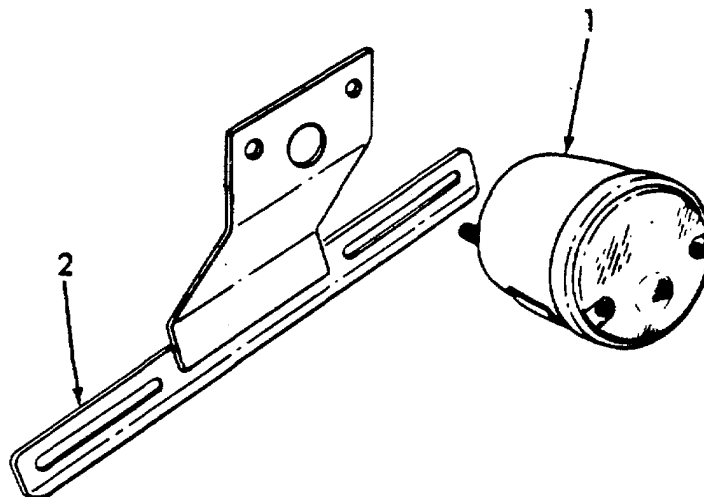
PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

1155



Fig. 08-055

LIGHT, LICENSE PLATE AT
FRAME

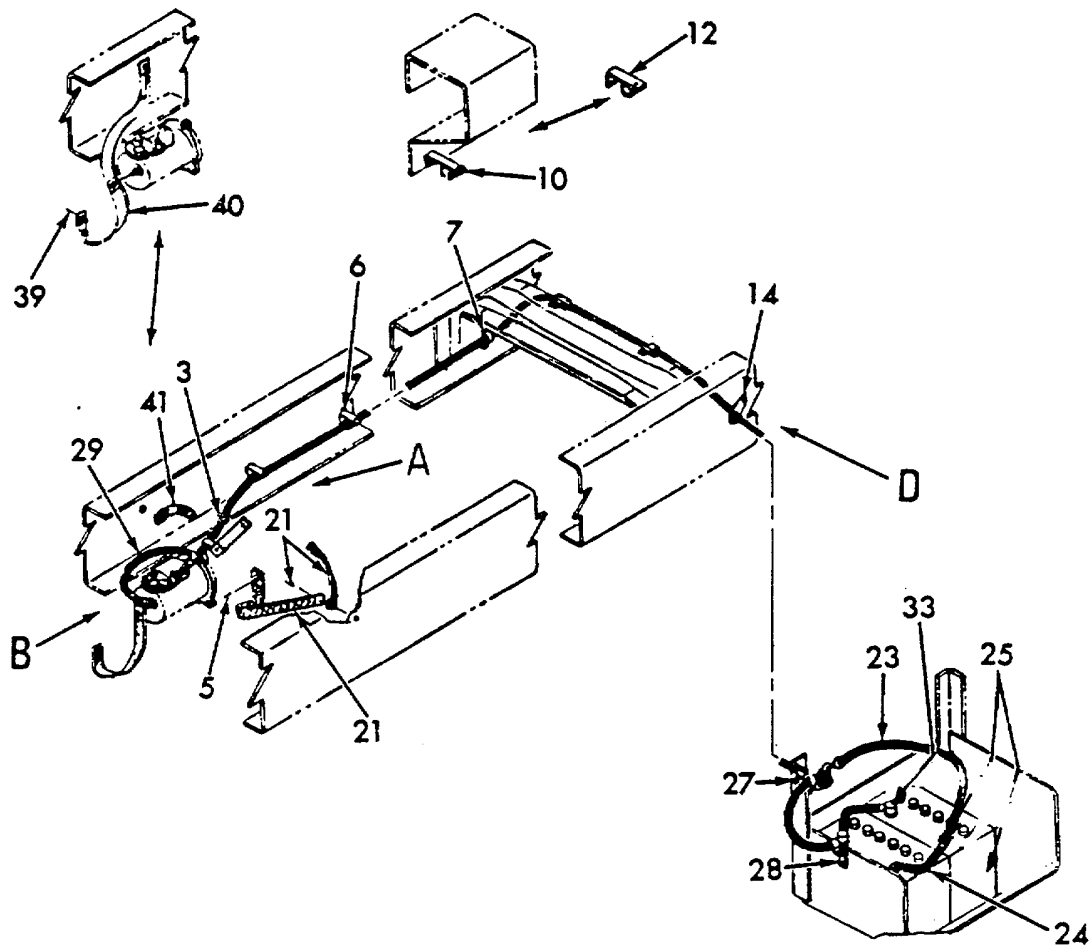
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	406 479 C91	LIGHT,	1						
1	25 222 R1	BOLT, 1/4-20UNC X 3/4	2						
1	26 110 R1	NUT, HEX LK 1/4-20UNC	2						
2		BRACKET, LICENSE PLATE							
2	424 536 C1	STANDARD	1						



GROUP 08

Fig. 08-057

BATTERY CABLE AND MOUNTING
W/FRAME MOUNTED
BATTERIES



PRINTED IN THE UNITED STATES OF AMERICA

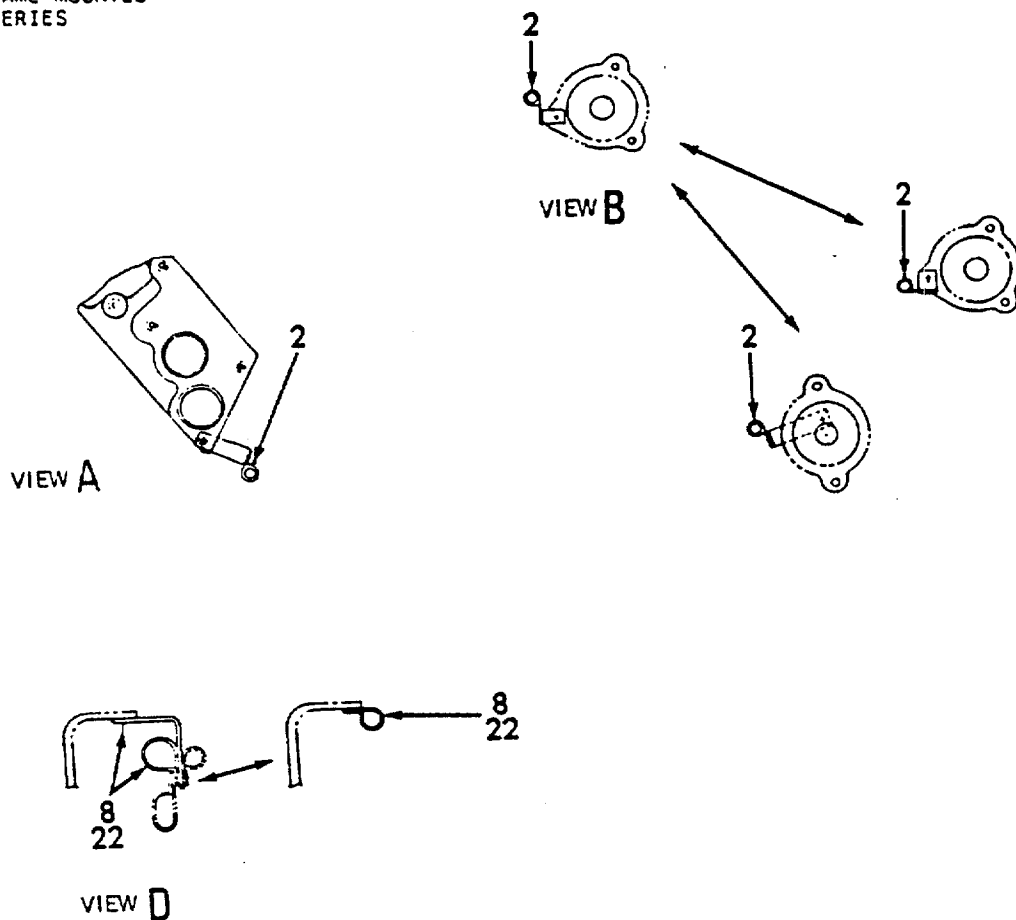
Revision 01

Page 1

1157



Fig. 08-057
BATTERY CABLE AND MOUNTING
W/FRAME MOUNTED
BATTERIES





MT-145
ELECTRICAL SYSTEM

GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		Fig. 08-057 BATTERY CABLE AND MOUNTING W/FRAME MOUNTED BATTERIES									
2		EXTENSION, CLIP MAKE LOCALLY	B	1		10		EXTENSION, CLIP MAKE LOCALLY	B	1	
2	26 110 R1	NUT, HEX LK 1/4-20UNC		1		10	406 381 C1	CLAMP		1	
2	25 222 R1	BOLT, HEX HD 1/4-20 UNC X 3/4 IN		1				W/D9.OL, CAT-3208 OR 3208T			
2	406 381 C1	CLAMP W/D9.OL, CAT3208		1		10	25 222 R1	BOLT, HEX HD 1/4-20UNC X 3/4 IN		1	
						10	26 110 R1	NUT, HEX LK 1/4-20UNC		1	
						10 1/2	R	WASHER, LK 1/2		1	
3	406 911 310	CABLE REFER TO MT-90 W/D9.OL,	B	1		10	118 627	R/S 13X15 NUT, HEX JAM 1/2-20UNF		1	
3	406 911 320	CABLE REFER TO MT-90 W/D9.OL,		1							
						12		EXTENSION, CLIP MAKE LOCALLY	B	1	
						12	406 381 C1	CLAMP		1	
5	24 839 R1	BOLT, HEX-HD 3/8-16 X 3/4	C	1				W/D9.OL, CAT-3208 OR 3208T			
5	25 724 R1	WASHER, FL 3/8		1		12	299 566 C1	CLAMP		1	
5 3/8	R	WASHER, LK 3/8		1				W/V-345 OR V-392 OR MV			
5	24 849 R1	BOLT, HEX-HD 7/16-14 X 1		1		12	25 483 R1	BOLT, HEX HD 1/4-20UNC X 1 IN.	B	1	
5	25 846 R1	WASHER, FL 7/16		26		12	25 222 R1	BOLT, HEX HD 1/4-20UNC X 3/4 IN.		1	
5 7/16	R	WASHER, LK 7/16		1		12	26 110 R1	NUT, HEX LK 1/4-20UNC		2	
6		EXTENSION, CLIP MAKE LOCALLY	B	1							
6	406 381 C1	CLAMP W/D9.OL, CAT-3208 OR 3208T		1							
6	24 861 R1	BOLT, HEX HD 1/2-13UNC X 1-1/4IN	B	1							
6 9412 230		NUT, HEX LK 1/2-13UNC	B	1		14	493 838 C2	GROMMET, BATTERY CABLE		1	
6	25 222 R1	BOLT, HEX HD 1/4-20UNC X 3/4 IN		1		14	140 483 H	BOLT, HEX HD 3/8-16UNC X 1-1/4 IN.		1	
6	26 110 R1	NUT, HEX HD 1/4-20UNC		1		14	25 553 R1	WASHER, FL 3/8		2	
7	299 608 C1	CLAMP W/D9.OL,	B	1		14	9413 979	NUT, HEX LK 3/8-16UNC		1	
8	406 381 C1	CLAMP W/D9.OL, CAT-3208 OR 3208T		1							
8	25 483 R1	BOLT, HEX HD 1/4-20UNC X 1 IN	B	1							
8	26 110 R1	NUT, HEX LK 1/4-20UNC		1							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

1159

**MT-145
ELECTRICAL SYSTEM**

GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		Fig. 08-057				27	24 840 R1	BOLT, HEX HD 3/8-16UNC X 1 IN		1	
		BATTERY CABLE AND MOUNTING W/FRAME MOUNTED BATTERIES				27	25 222 R1	BOLT, HEX HD 1/4-20 UNC X 3/4 IN		1	
						27	26 110 R1	NUT, HEX LK 1/4-20UNC		1	
						27	24 840 R1	BOLT, HEX HD 3/8-16UNC X 1 IN.		1	
						27	9413 979	NUT, HEX LK 3/8-16UNC		1	
						28		EXTENSION, CLIP		1	
						28	406 381 C1	MAKE LOCALLY CLAMP W/D9.0L.		1	
						28	25 222 R1	BOLT, HEX HD 1/4-20 UNC X 3/4 IN		2	
						28	26 110 R1	NUT, HEX LK 1/4-20UNC		2	
						29	70 736 R91	CABLE ASSY	C	1	
21		STRAP, GROUND	C	1		33	509 471 C1	INSULATOR, BAT TERM	AR		
21	318 876 C92	D9.0L ENGS									
21	25 553 R1	WASHER, FLAT 3/8		1							
21	3/8 R	WASHER, LK 3/8		1							
21	454 467	BOLT, HEX HD 3/8-16UNC X 1-3/4 IN		1							
21	433 972 C1	NUT, HEX 3/8-16UNC		1							
21	25 710 R1	WASHER, FLAT 1/2		1							
22	406 381 C1	CLAMP W/D9.0L.		1		39	21 335 R1	BOLT, HEX HD 3/8-16UNC X 3/4 IN		1	
22	25 483 R1	BOLT, HEX HD 1/4-20 X 1 IN	B	1		39	25 724 R1	WASHER, FL 3/8		1	
22	26 110 R1	NUT, HEX LK 1/4-20UNC		1		39	3/8 R	WASHER, LK 3/8		1	
23	KFT-014	CABLE (59556)	AR			40	575 361 C1	STRAP, GROUND		1	
23	433 972 C1	NUT, HEX 3/8-16UNC		1		40	433 971 C1	BOLT, HEX HD 3/8-16UNC X 1-3/4 IN		1	
23	3/8 R	WASHER, LK 3/8		1		40	25 724 R1	WASHER, FL 3/8		1	
23	25 553 R1	WASHER, FL 3/8		1		40	3/8 R	WASHER, LK 3/8		1	
23	454 467	BOLT, HEX HD 3/8-16UNC X 1-3/4 IN		1		40	433 972 C1	NUT, HEX 3/8-16UNC		1	
24	KFT-015	CABLE (59556)	AR			41	494 734 C2	STRAP, GROUND		1	
25		BATTERY		2		41	433 971 C1	BOLT, HEX HD 3/8-16UNC X 1-3/4		1	
25	476 074 C1	DEALER PURCHASE DIRECT NUT, FLG HEX 3/8-16UNC	BAR			41	25 724 R1	WASHER, FL 3/8		1	
						41	3/8 R	WASHER, LK 3/8		1	
						41	433 972 C1	NUT, HEX 3/8-16UNC		1	
27	406 381 C1	CLAMP W/D9.06L		1							

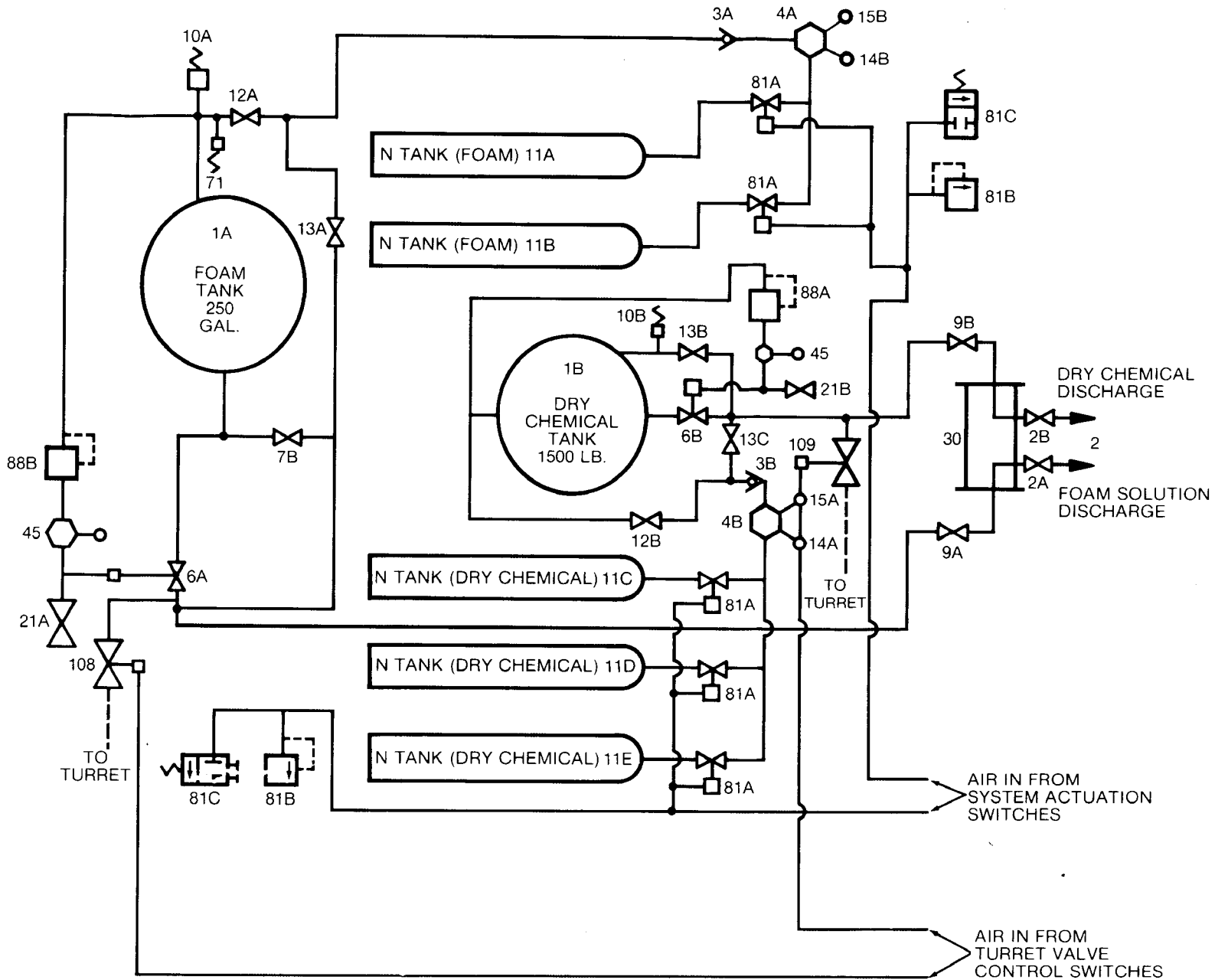
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 01

1160

ITEM	QTY	PART NO.	PART NAME
1A	1	510-1941-3	250 Gal. AFFF FOAM TANK
1B	1	510-1919-4	1500 Lb. DRY CHEMICAL TANK
2	1	510-1678-4	DUAL AGENT HANDLINE
3A, B	2	5457-8	1" CHECK VALVE
4A, B	2	6129-2	NITROGEN REGULATOR
5			
6A, B	2	509-0663-4	1½" BALL VALVE w/AIR ACTUATOR
7B	1	M802-662080	1" BALL VALVE
8	1	KFT-133	FILL CUP ASSEMBLY (SPOUT & TUBE)
9A, B	2	M802-662080	1" BALL VALVE
10A, B	2	508-0116-10	PRESSURE RELIEF VALVE
11A-E	5	510-1869-3	NITROGEN CYLINDER
12A, B	2	M802-662080	1" BALL VALVE
13A-C	3	M802-662040	½" BALL VALVE
14A, B	2	6156-15	PRESSURE GAUGE
15A, B	2	6156-12	PRESSURE GAUGE
21A, B	2	105-542020	¼" BALL VALVE
30	1	6185-1	HOSE REEL
45	2	6366-1	REGULATOR w/PRESSURE GAUGE
50	1	510-1772-3C	TWIN AGENT HOSE ASSY
71	1	6452-1	TEMPERATURE RELIEF VALVE
79A, B	2	6187-1	CAB ACTUATOR
80			PART OF ITEM 11
81			PART OF ITEM 11
88A, B	2	508-0116-5	PRESSURE RELIEF VALVE
108	1	509-0663-4	1¼" BALL VALVE w/AIR ACTUATOR
109	1	509-0663-4	1¼" BALL VALVE w/AIR ACTUATOR



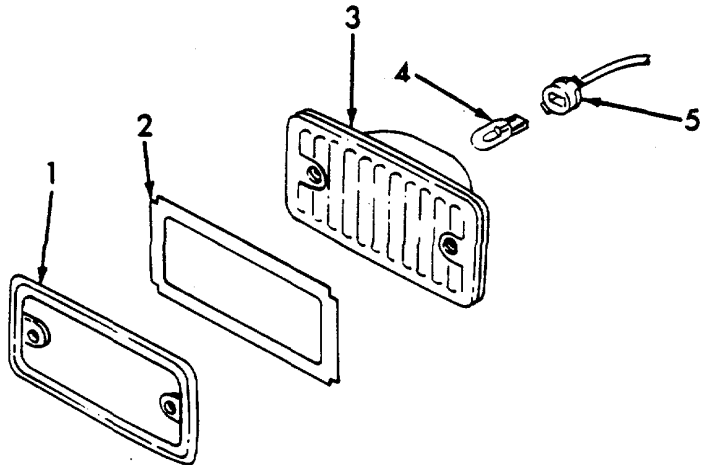
MT-145
ELECTRICAL SYSTEM



GROUP 08

Fig. 08-059

LIGHT, CLEARANCE, ROOF MTD



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
1	46 357 6C2	BEZEL, MARKER LIGHT		1							
2	487 621 C1	SEAL, MARKER LIGHT		1							
3	451 677 C92	LIGHT, W/LENS, CAB MARKER		1							
3	27 196 R1	SCREW, PAN-CR-REC-HD TAP. NO. 8-18 X 3/4		5							
4	26 617 R1	LAMP, 3 CANDLEPOWER		1							
5	470 184 C91	HARNESS		1							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 02

1161

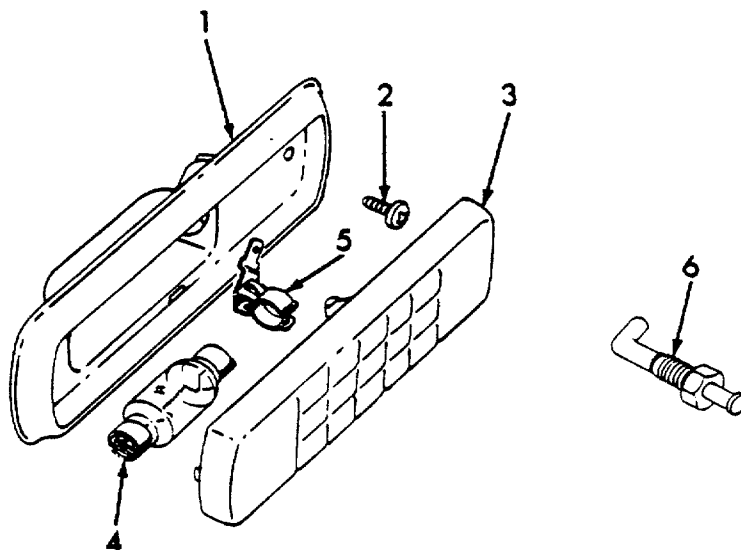


MT-145
ELECTRICAL SYSTEM

GROUP 08

Fig. 08-060

LIGHT, DOME



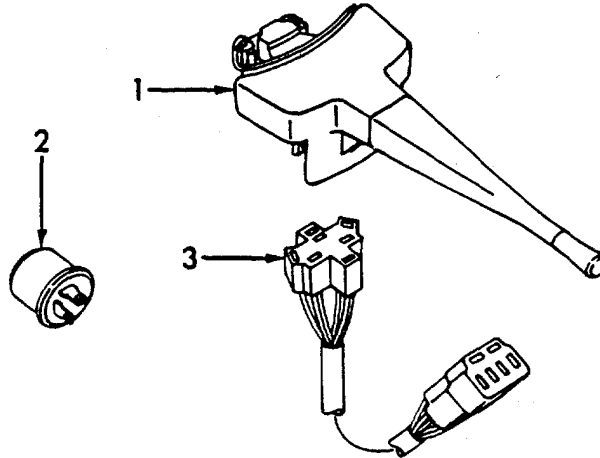
ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	463 179 C1	BASE, DOME LAMP		1							
2	26 282 R1	SCREW, PAN HD CR REC TAP NO. 6-20 X 3/4		2							
3	296 446 C1	LENS, DOME LIGHT		1							
4	294 436 C1	LAMP, 12 CANDLEPOWER		1							
5	300 853 C1	TERMINAL, CLIP		2							
6	485 588 C1	SWITCH, DOOR JAM		1							
6	27 198 R1	SCREW, TAP. NO. 10-16 X 5/8		2							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

Revision 02

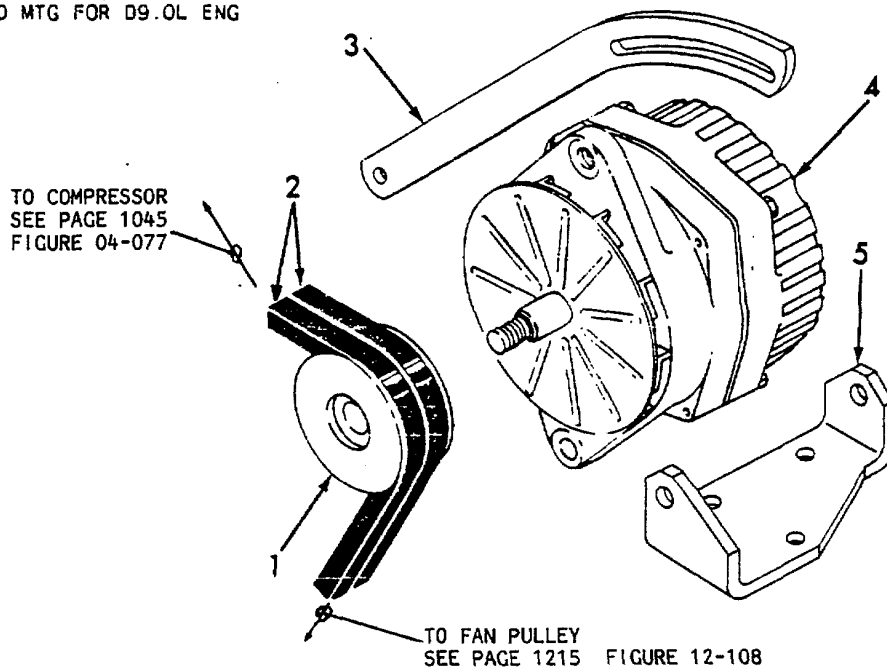
1162

FIG. 08-065
SWITCH, TURN SIGNAL

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	471 302 C93	SWITCH, TURN SIGNAL		1							
1	27 328 R1	SCREW, PAN-CR-REC-HD NO. 8NF X 1/2		2							
2	470 069 C1	FLASHER, TURN SIGNAL AND HAZARD LGT		1							
3		HARNESS, TURN SIGNAL SW									
3	586 653 C91	EXC 1853FC		1							



FIG. 08-090

PULLEY, BELT, ALTERNATOR
AND MTG FOR D9.0L ENG

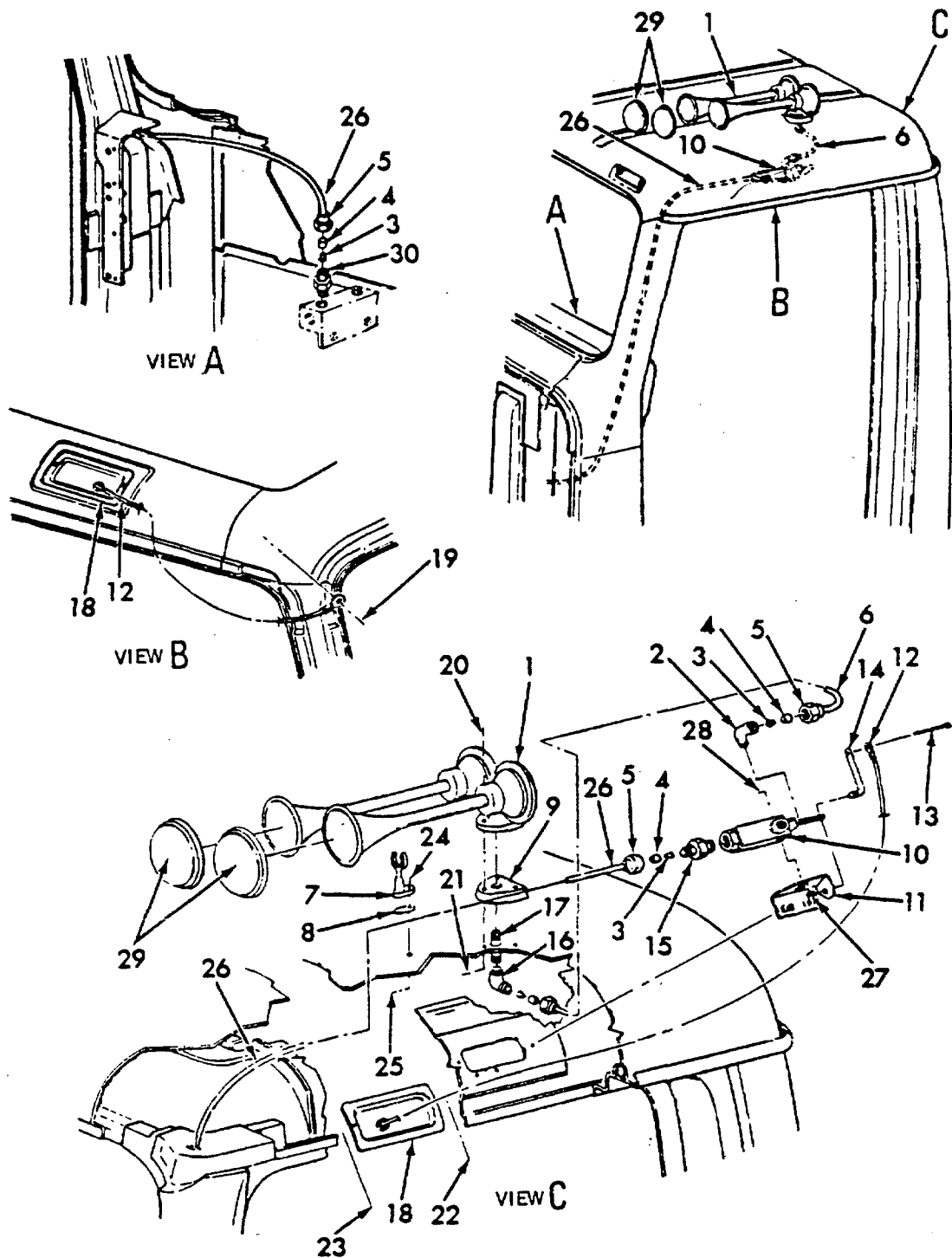
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		(59556)							
1	KFT-016	PULLEY, ALTERNATOR DRIVE	1						
2	KFT-023	BELT, V-ALTERNATOR DRIVE	2						
3	489 289 C1	STRAP, ALTERNATOR ADJUSTING	1						
3	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	1						
3	25 522 R1	NUT, HEX 3/8NC	1		4	140 483 H	BOLT, HEX-HD 1/2NC X 1-1/4	1	
3	25 709 R1	WASHER, FLAT 3/8	1		4	25 522 R1	NUT, HEX 3/8NC	1	
					4	25 709 R1	WASHER, FLAT 3/8	1	
					5	489 290 C1	BRACKET, ALTERNATOR MTG	1	
					5	140 483 H	BOLT, HEX-HD 1/2 X 1-1/4	3	
					5	24 863 R1	BOLT, HEX-HD 1/2 X 1-3/4	1	
					5	25 522 R1	NUT, HEX 3/8NC	1	
					5	25 709 R1	WASHER, FLAT 3/8	1	
					5	3/8 R	WASHER, LK 3/8	2	
4	4725J	ALTERNATOR, L/N 130 AMP (33510) SEPARATE BREAKDOWN - SEE PAGE 1397	1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

Revision 01

1164

FIG. 08-101
HORN, MTG DUAL AIR

PRINTED IN THE UNITED STATES OF AMERICA

Revision 01

1165



MT-145
ELECTRICAL SYSTEM

GROUP 08

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 08-101									
		HORN, MTG DUAL AIR									
1	244 283 R91	HORN, AIR DUAL		1							
2	141 966 H	ELBOW, TUBING 1/4 X 1/8		1							
3	414 504 C2	INSERT, TUBING 1/4		4							
4	30 774 V	SLEEVE, TUBING 1/4		4							
5	30 773 V	NUT, 1/4 SPHERICAL SLEEVE		4							
6	417 196 C2	TUBING, 1/4 OD X 15 IN LONG		1							
7	784 231 C1	PEDESTAL		1							
8	453 481 C1	SEAL, PEDESTAL		1							
9	272 009 C1	PAO, DUAL AIR HORN REAR MTG		1							
10	682 506 R91	VALVE, AIR HORN- CAB MTD		1							
11	403 405 C1	BRKT, MTG- AIR HORN VALVE		1							
12	384 629 C1	CABLE, HORN V PULL		1							
13	1/8 X 3/4 P	PIN, COTTER 1/8 X 3/4 LONG		1							
14	308 607 C1	LEVER, HORN VALVE OPERATING		1							
15	30 775 VX	CONNECTOR- TUBING 1/4 X 7/16	A	2							
16	91 913 R1	ELBOW, TUBING 1/4 X 1/8		1							
17	144 585	NIPPLE, PIPE 1/8X1-3/8		1							
18	466 776 C1	COVER, AIR HORN VALVE		1							
19	24 392 R1	SCREW, PN HD CR NO. 10-16 X 1/2 TYPE A8		1							
20	27 227 R1	SCREW, PN HD CR 1/4-20 X 1-1/2 SST		3							
21	25 519 R1	NUT, HEX 1/4-20		3							
21	25 707 R1	WASHER, PLAIN 1/4		3							
21	1/4 R	WASHER, LK 1/4		3							
22	27 004 R1	SCREW, PN HD NO. 10-24 X 1/2 TYPE D		2							
22	3/16 R	WASHER, LK NO. 10		2							
23	166 991	SCREW, PN HD NO 6-32 X 3/8 TYPE D		2							
24	26 959 R1	SCREW, PN HD CR 1/4-20 X 1 SST		1							
25	25 519 R1	NUT, HEX 1/4-20		1							
25	53 007 H	REINFORCEMENT, AIR HORN FRONT MTG		1							
25	1/4 R	WASHER, LK 1/4		1							
26	417 196 C2	TUBING, 1/4 OD 65 IN LONG		1							
27	30 499 R1	RETAINING RING		1							
28	27 162 R1	SCREW, PN HD NO. 10-24 X 1-1/2 TYPE D		2							
28	3/16 R	WASHER, LK NO. 10		2							
29	422 054 C1	SHIELD, SLOW AIR HORN		2							
30	30 775 VX	CONNECTOR, TUBING 1/4 X	A	2							

MISSING ITEM NUMBERS ARE NOT USED

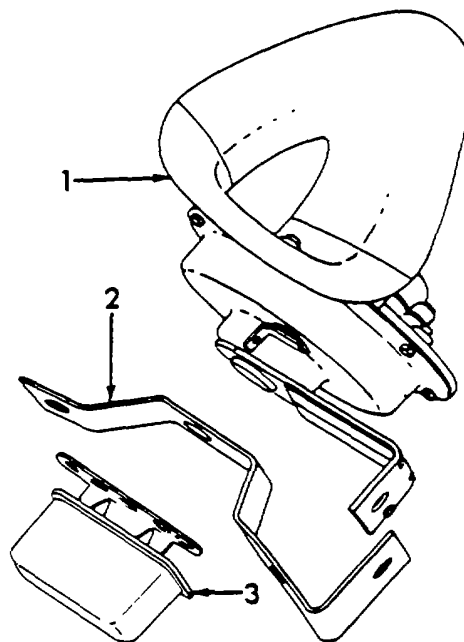
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

1166

FIG. 08-106

HORN, RELAY, AND BACK-UP



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1		HORN							
1	411 948 C91	HIGH NOTE	1						
		WILL WORK FOR 165519C91							
1	411 949 C91	LOW NOTE W/CODE 08540	1						
		WILL WORK FOR 166166R91							
1		BOLT, HEX-HD							
1	25 222 R1	1/4-20UNC X 3/4	1						
1	25 493 R1	5/16NC X 1 IN	2						
1		WASHER, FL							
1	25 707 R1	1/4 IN.	1				* NON-ILLUSTRATED		
1	25 708 R1	5/16 IN.	2						
1		NUT, HEX LK							
1	26 110 R1	1/4-20UNC	1						
1	9413 994	5/16NC X 1 IN	2						
2		BRACKET, RELAY MTG							
2		W/LHD							
2	468 798 C1	EXC HYD-POWER BRK	1						
2	120 376	NUT, HEX 5/16NC	2						
2	120 214	WASHER, LK 5/16 REGULAR	2						
3	241 120 R91	RELAY, HORN	1						
		* CABLE							
	586 965 C91	FOR REGULAR CAB	1						

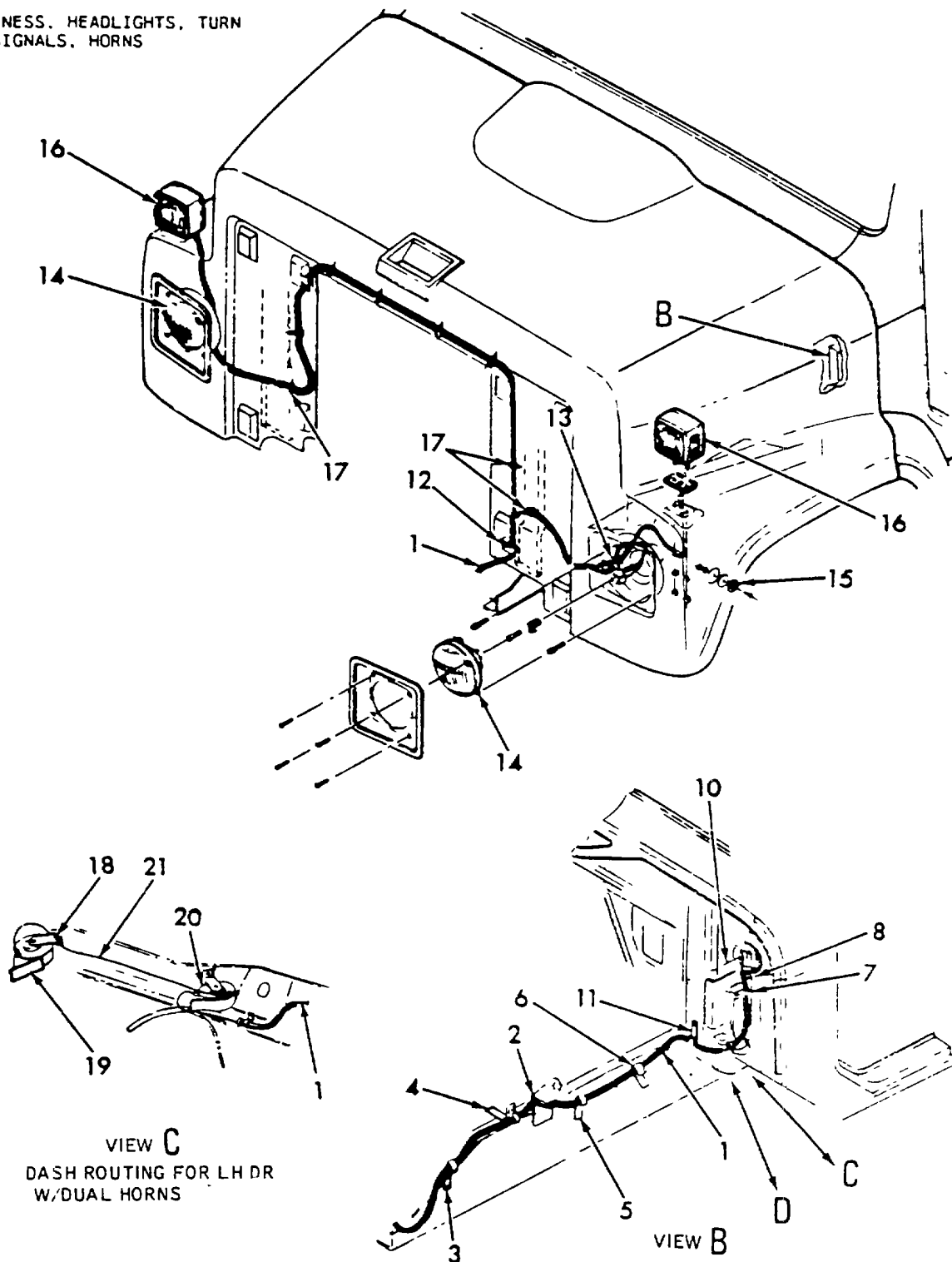
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 08-143

HARNES. HEADLIGHTS, TURN
SIGNALS, HORNS



PRINTED IN THE UNITED STATES OF AMERICA

GROUP 08

MT-145
ELECTRICAL SYSTEM

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 08-143			15	27 218 R1	SCREW, PAN HD CR REC MACH	2	
		HARNESS, HEADLIGHTS, TURN SIGNALS, HORNS			15	120 391	NO 10-24UNC X 1		
					15	19 910 R1	WASHER, FL NO 10	2	
					16	449 038 C1	NUT, HEX LK NO 10-24UNC	2	
1		HARNESS ASSY. FRT END			16		PAD, TURN SIGNAL LGT MTG	2	
1	572 979 C91	W/REGULAR CAB	1				LIGHT, TURN SIGNAL		
							SEPARATE BREAKDOWN-		
							SEE FIG 08-037 PAGE 1144		
2	291 207 C1	STRAP, CABLE LK	1		16		W/O PARK LIGHT		
3	455 016 C1	CLIP, OPEN	1		16	444 660 C91	LT	1	
3	140 483 H	BOLT, HEX-HD 3/8-18UNC X 1-1/4	1		16	444 659 C91	RT	1	
3	9413 979	NUT, HEX LK 3/8-16UNC	1						
4		EXTENSION, CLIP	1						
		MAKE LOCALLY							
4	24 860 R1	BOLT, HEX-HD 1/2-13UNC X 1	1						
4	25 222 R1	BOLT, HEX-HD 1/4-20UNC X 3/4	1						
4	1/4 R	WASHER, LK 1/4	1						
4	9412 230	NUT, HEX LK 1/2-13UNC	1		16	299 407 C1	CLAMP, 1/2	2	
4	25 519 R1	NUT, HEX 1/4-20UNC	1		16	25 708 R1	WASHER, FL 5/16	4	
4	314 219 C91	CLIP, OPEN	1		16	411 597 R1	NUT, HEX LK 5/16-18UNC	4	
5	406 381 C1	CLIP, OPEN	1		17	596 022 C1	RETAINER, CABLE	9	
5	532 434 C1	BOLT, SPEC 1/4-20UNC X 1.5	1		18	289 862 C1	STRAP, CABLE LK	AR	
5	1/4 R	WASHER, LK 1/4	1		19	166 166 R91	HORN, LOW NOTE	1	
5	25 707 R1	WASHER, FL 1/4	1		20	411 948 C91	HORN, HIGH NOTE	1	
5	25 519 R1	NUT, HEX 1/4-20UNC	1		21		CABLE ASSY		
6	455 016 C1	CLIP, OPEN	1		21	586 965 C91	W/REGULAR CAB	1	
6	25 493 R1	BOLT, HEX-HD 5/16-18UNC X 1 0	1						
6	9413 977	NUT, HEX LK 5/16-18UNC	1						
7	299 412 C1	CLAMP, 13/16 ID	1						
7	26 520 R1	SCREW, PAN HD CR REC 1/4-14AB X 3/4	1						
7	328 400 C1	SCREW, HEX-HD 1/4-14B X 3/4	1						
8	328 400 C1	SCREW, HEX-HD 1/4-14B X 3/4	1						
10	25 487 R1	BOLT, HEX-HD 1/4-20UNC X 1-1/2	1						
10	25 707 R1	WASHER, FL 1/4	1						
11	455 016 C1	CLIP, OPEN	1						
11	24 840 R1	BOLT, HEX HD 3/8-16UNC X 1 0	1						
11	3/8 R	WASHER, LK 3/8	1						
12	299 566 C1	CLAMP, 3/16 ID	1						
12	160 544	SCREW, PAN HD CR REC 1/4-20UNC X 3/4	1						
12	462 457 C1	NUT	1						
12	1/4 R	WASHER, LK 1/4	1						
13	365 215 C1	CLAMP	2						
13	473 148 C1	SCREW, PAN HD CR REC 9/32-16 X 1/2	2						
14	465 458 C91	LIGHT HD	2						
14		SEPARATE BREAKDOWN							
14		SEE FIG 08-038 PG. 1145							
14		BEZEL, HEADLAMP	1						
14	586 277 C1	W/O CODE 09573	2						
14	450 157 C2	SPRING, HD LAMP	4						
14	465 940 C2	SCREW, GROM	4						
14	153 789	SCREW, FILLISTER HD CR REC 1/4-20UNC X 3/4	2						
14	473 147 C1	SCREW, OVAL HD CR REC NO 10-16UNC X 3/4	8						
15	479 666 C1	REFLECTOR	2						
15	492 897 C1	PAD	1						
15	492 898 C1	PAD	1						

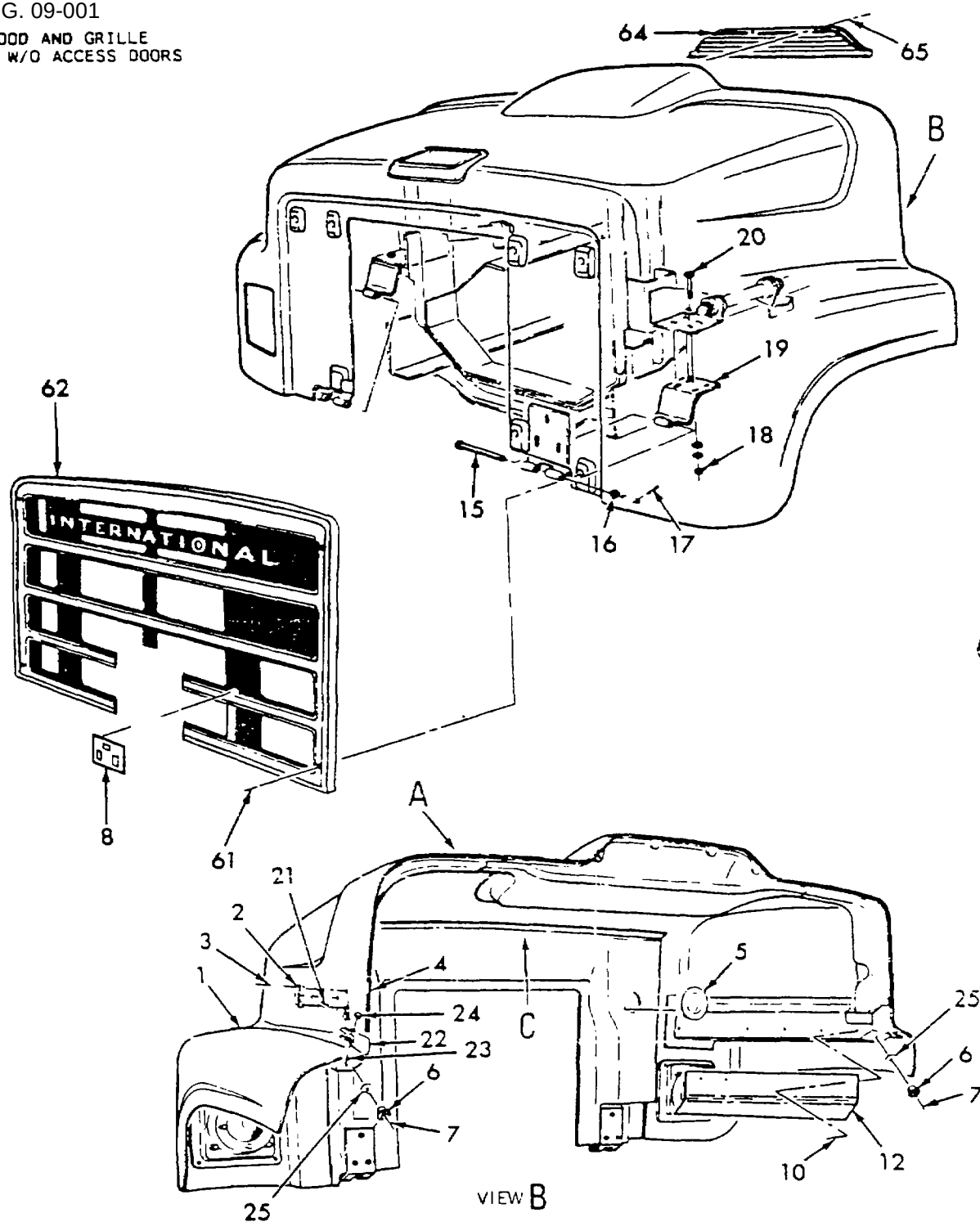
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 09-001

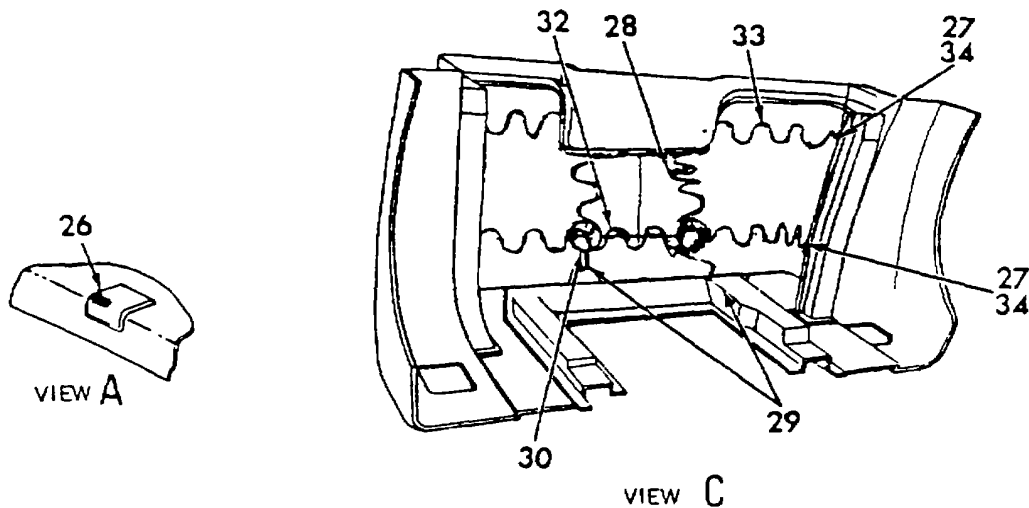
HOOD AND GRILLE
W/O ACCESS DOORS



PRINTED IN THE UNITED STATES OF AMERICA



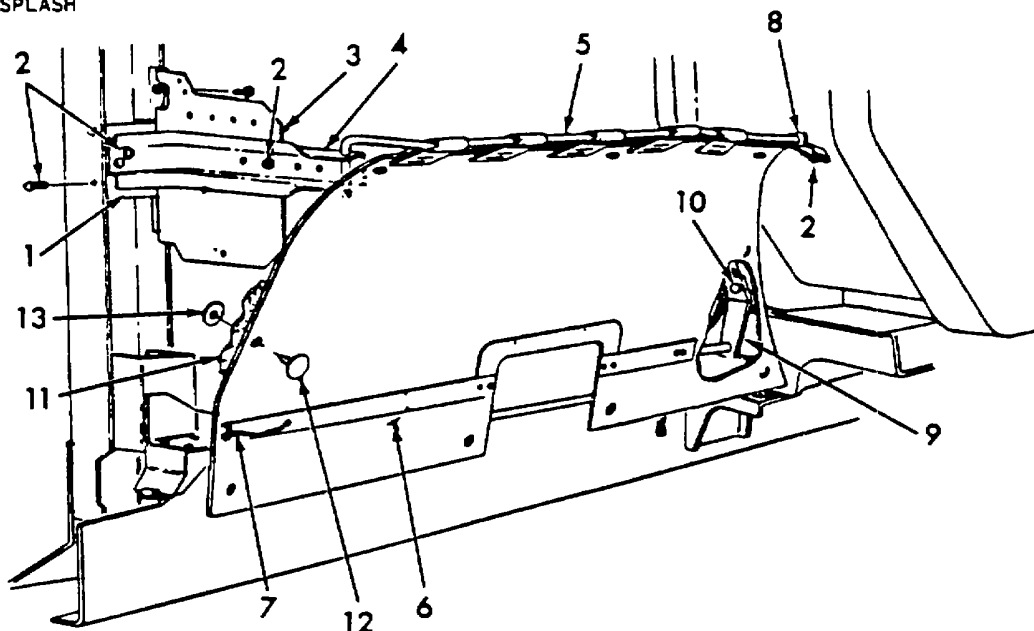
FIG. 09-001

HOOD AND GRILLE
W/O ACCESS DOORS

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1		HOOD ASSY, TILT 1600-1900 MODELS			21	499 523 C2	STRAP, HOOD LATCH	2	
1					22	500 269 C1	HANDLE, HOOD LATCH	2	
1	487 787 C3	W/O INTEGRAL FRAME EXTN	1		23	500 273 C2	PIN, HOOD LATCH	2	
2	500 270 C1	RETAINER, HOOD LATCH	2		24	500 274 C1	NUT, PUSH-ON	2	
3	26 959 R1	SCREW, PAN-HD-CR-REC 1/4-20 X 1 SST	6		25	23 043 R1	WASHER, FL	2	
4	27 298 R1	NUT, HEX 1/4-20	6		26	583 267 C1	MOULDING, RUBBER GRAB	1	
4	27 303 R1	WASHER, LK 1/4	6		27	403 061 C1	RIVET, POP	10	
4	178 474	WASHER, FL 1/4	6		28	580 560 C1	INSULATOR, SOUND-HOOD	1	
5	497 462 C1	SEAL ASSY, AIR INTAKE	1		29	580 562 C1	SPRING, HOOD RET	2	
6	472 698 C1	GUIDE, HOOD LOCATOR	2		30	869 707 C1	STRAP, CABLE LK	2	
7	411 431 C2	BOLT, HEX-HD SEMS ASSY 5/16-18 X 1-1/2	2		32	580 561 C1	SPRING, HOOD RET	1	
8	594 954 C1	PRODUCT GRAPHIC, IH	1		33	580 562 C1	SPRING, HOOD RET	2	
10	575 362 C1	FASTENER, PUSH	12		34	299 398 C1	CLAMP, SINGLE-COATED	10	
12	487 168 C1	SEAL, SPLASH PNL	2		61	588 200 C1	SCREW, 1/4-20 X 1 BLACK	4	
15	27 883 R1	PIN, HOOD HINGE 7/16 X 4	2		61	483 654 C3	SCREW, 1/4-20 X 1 PL	4	
16	25 846 R1	WASHER, FL 7/16	2		62	KFT-011	GRILLE (59556) 1600-1900 MODELS	1	
17	121 222	PIN, COTTER 3/32 X 3/4	2						
18	25 520 R1	NUT, 5/16-18	8		64	578 196 C2	W/REGULAR CAB	1	
18	25 552 R1	WASHER, FL 5/16 X 1 O	8		65		SCREW, PAN-HD SPEC H1-LOW NO 10-16 X 1	4	
18	25 708 R1	WASHER, FL 5/16	16		65	335 062 C1	SCREW, PAN-HD-CR-REC-SELF OR NO.8-18 X 1/2	4	
18	5/16 R	WASHER, LK 5/16	8						
19	483 996 C3	LEAF ASSY, HINGE TO CORE SUPT	2			462 457 C1	* NUT, CLINCH 1/4-20	8	
19	393 014 C91	SCREW, HEX-HD 5/16-18 X 3/4	2				* NON-ILLUSTRATED		
19	25 708 R1	WASHER, FL 5/16	2						
19	25 520 R1	NUT, HEX 5/16-18	2						
20	25 751 R1	BOLT, HEX-HD 5/16-18 X 1-1/4	8						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

FIG. 09-005
GUARD, SPLASH

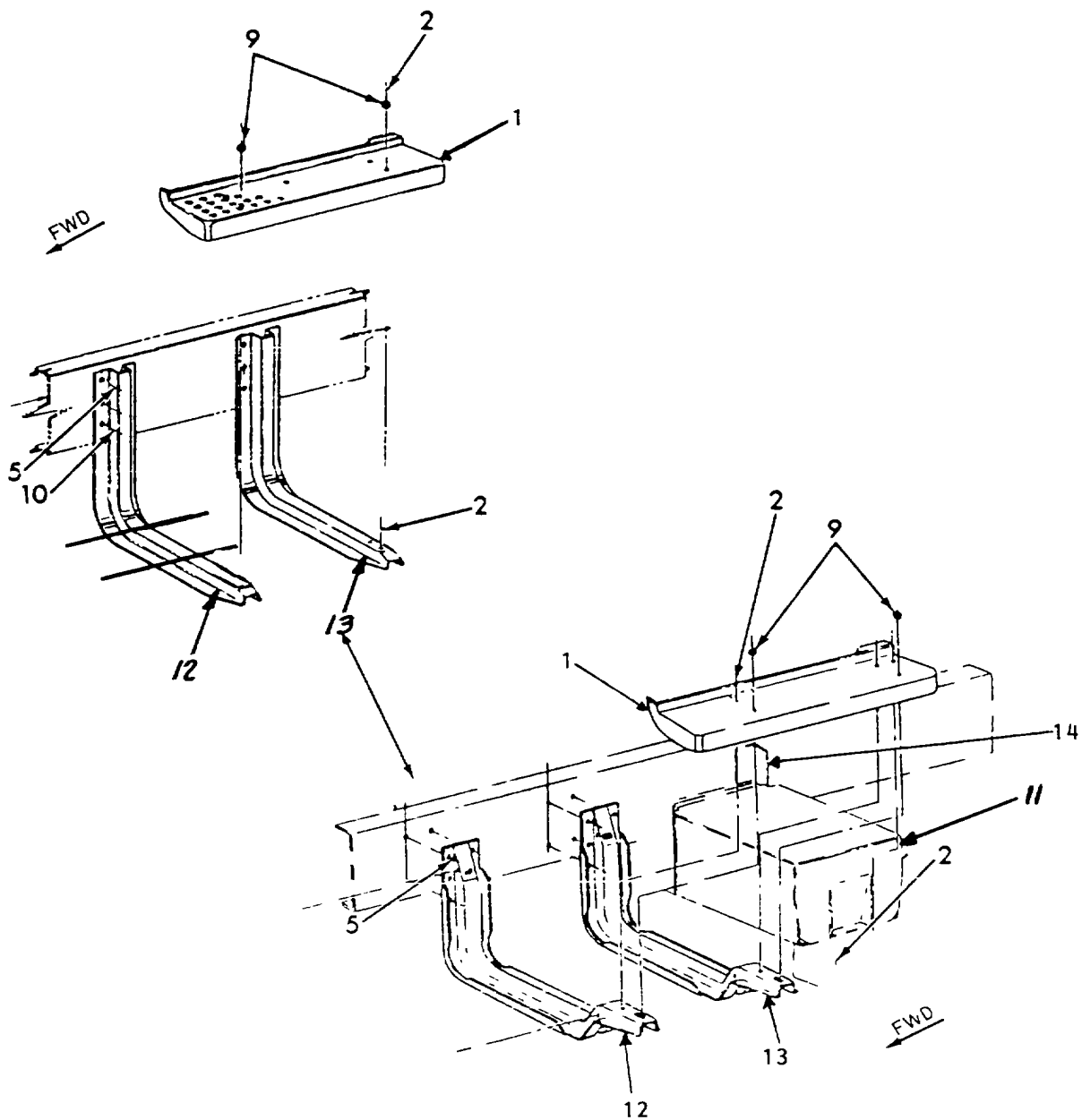
ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	492 577 C3	CHANNEL, SUPT MTG	2		8	494 296 C1	REGULAR CAB	2	
2	25 228 R1	R/S S2561	17						
	5/16	BOLT, HEX-HD 5/16-18 X 3/4	AR		9	494 298 C2	BRACKET, SPLASH SHIELD		
2	25 708 R1	WASHER, LK 5/16	AR				LEFT	1	
2	24 839 R1	WASHER, FL 5/16	AR		9	494 299 C1	RIGHT	1	
2	94 13 979	BOLT, HEX-HD 3/8-16 X 3/4	AR		10	172 463	SCREW, TAPPING 5/16-18 X 1	1	
3		NUT, HEX LK 3/8-16	AR		10	5/16	WASHER, LK 5/16	2	
3		FILLER, SPLASH SHIELD			11		INSULATOR		
3	489 885 C6	LEFT	1		11	505 334 C1	LEFT	1	
3	489 887 C5	RIGHT	1		11	505 335 C1	RIGHT	1	
4	491 507 C2	SUPPORT, SPLASH SHIELD	2		12	489 348 C1	RETAINER, INSULATOR	18	
5		ROD, HANGER SPLASH GUARD			13	466 035 C1	WASHER, RET	18	
5		W/1600 THRU 1900 MODELS							
5	488 743 C1	RIGHT	1						
5	488 744 C1	LEFT	1						
6		GUARD, SPLASH							
6		W/1600 THRU 1900 MODELS							
6		AIR BRAKES							
6	498 550 C3	LEFT	1						
6	498 551 C3	RIGHT	1						
7	494 295 C1	PIN, WIRE SPG	2						
8		BRACKET, SPLASH SHIELD MTG							
8		W/1600 THRU 1900 MODELS							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 09-007
STEP. W/MODESTY PNL
W/BAT BOX



PRINTED IN THE UNITED STATES OF AMERICA



MT-145
FRONT SHEET METAL

GROUP 09
GROUP 09

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STR	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STR
		FIG. 09-007									
		STEP, W/MODESTY PNL W/BAT. BOX									
1	KFT-020	PANEL ASSY. STEP (59556)									
1		AIR BRKS									
1	471 598 C3	W/2 BAT	H	1							
2	24 839 R1	BOLT, HEX-HD 3/8-16UNC X 3/4	E	8							
2	24 840 R1	BOLT, HEX-HD 3/8-16UNC X	E	8							
2	9413 979	NUT, HEX LK 3/8-16UNC	E	8							
5	414 051 C1	BOLT, FLG HD 1/2-20UNRF X 1 25	L	7							
5	414 052 C1	BOLT, FLG HD 1/2-20UNRF X 1 50	L	7							
5	414 053 C1	BOLT, FLG HD 1/2-20UNRF X 1-3/4	N	7							
5	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	L	7							
6	471 447 C1	W/AIR BRKS	N	1							
9	3/8 R	WASHER, LK 3/8		2							
10	414 052 C1	BOLT, FLG HD 1/2-20UNRF X 1 50	L	1							
10	414 053 C1	BOLT, FLG HD 1/2-20UNRF X 1 75	N	1							
10	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	L	1							
11	KFT-009A	BATTERY BOX, BODY		1							
11	KFT-009B	BATTERY BOX, TOP		1							
12	KFT-019A	BRACKET, AIR TANK		1							
13	KFT-019B	BRACKET, BATTERY BOX, FRT (59556)		1							
14	KFT-019C	BRACKET, BATTERY BOX, REAR (59556)		1							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

09-007

REVISION 01

PAGE 2

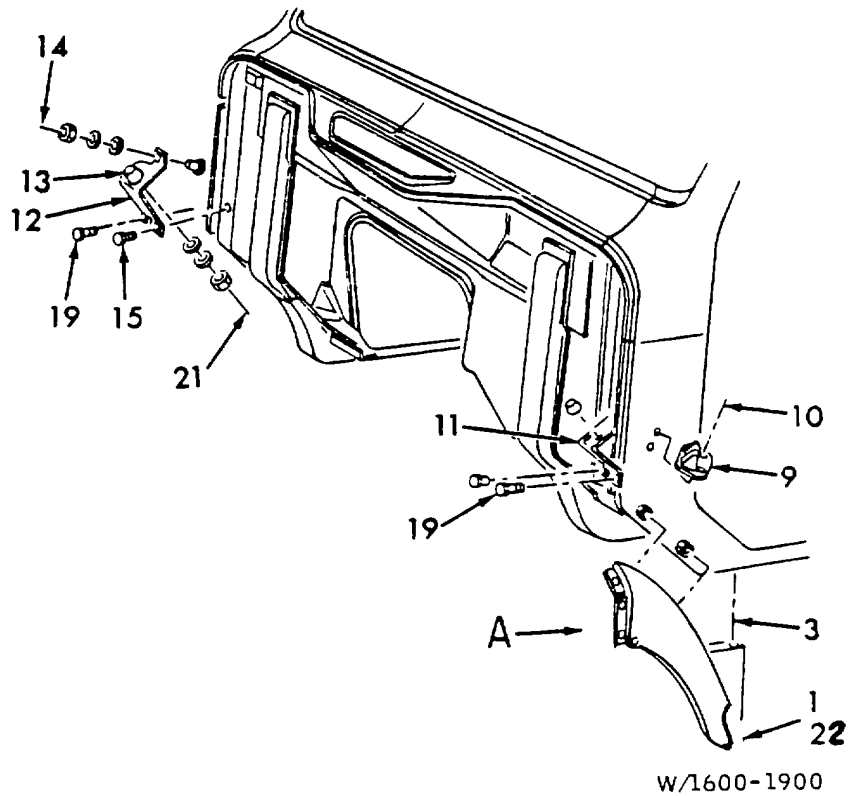
1174



GROUP 09

FIG. 09-008

FENDER EXTENSION AND HOOD
BUMPER INSTL



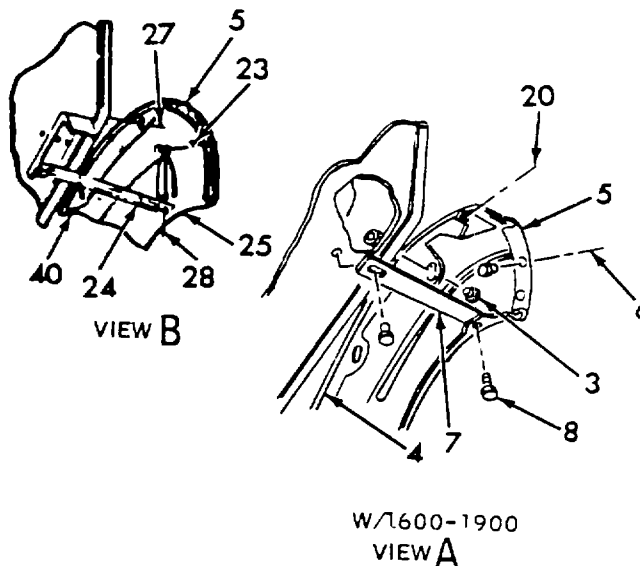


MT-145
FRONT SHEET METAL

GROUP 09

FIG. 09-008

FENDER EXTENSION AND HOOD
BUMPER INSTL



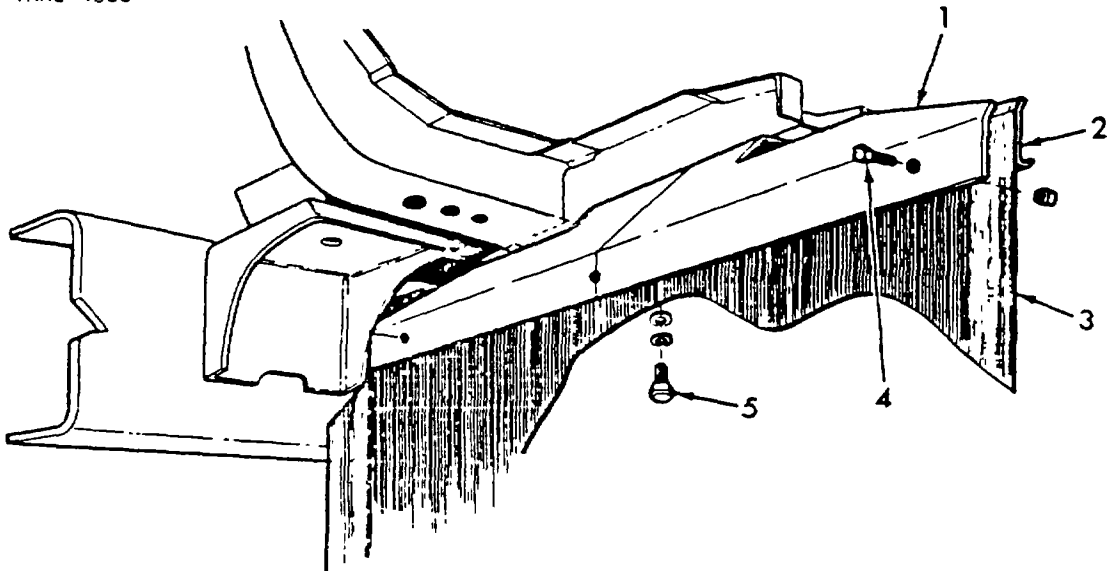
ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	KFT-012	PANEL ASSY. FENDER EXTN. LT (59556)	B	1		20	328 388 C1	SCREW, PAN-HD-CR-SELF-DR NO 10-16 X 1/2	A		
2	456 335 C1	PANEL ASSY. FENDER EXTN. RT	B	1		21	5/16 R	WASHER, LK 5/16		2	
3	393 014 C91	BOLT, HEX-HD SEMS 5/16-18 X 3/4 TYPE F		6		21	25 520 R1	NUT, HEX 5/16-18		2	
4		SEALER, STRING BUTYL 1/8 NON SERVICE - MAKE LOCALLY	AR			21	668 569 R1	WASHER, FL 5/16NOM		2	
5	474 651 C2	SEAL, FENDER EXTN		2		22	KFT-013	FENDER, GASKET (59556)		1	
6	486 149 C2	RIVET, 3/16		6							
7		BRACE ASSY. FENDER EXTN NON SERVICE - MAKE LOCALLY	B	2							
8	393 014 C91	BOLT, HEX-HD SEMS 5/16-18 X 3/4 TYPE F		4							
9	500 271 C1	CATCH, HOOD LATCH		2							
10	27 231 R1	SCREW, PAN-HD-CR-REC 5/16-18 X 3/4 -SST-		4							
10	27 304 R1	WASHER, LK 5/16		4							
11	488 994 C2	BRACKET, HOOD STOP, LT		1							
12	488 995 C3	BRACKET, HOOD STOP, RT		1							
13	472 697 C1	BUMPER, HOOD LOCATOR		2							
14	5/16 R	WASHER, LK 5/16		2							
14	25 520 R1	NUT, HEX 5/16-18		2							
14	25 708 R1	WASHER, FL 5/16		2							
15	393 014 C91	BOLT, HEX-HD SEMS 5/16-18 X 3/4 TYPE F	AR								
19	26 520 R1	SCREW, PAN-HD 1/4-14 X 3/4 TYPE AB		2							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 09-009

DEFLECTOR, STONE
W/1600 THRU 1900

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1		BRACKET, STONE DEFLECTOR							
1	506 023 C1	LEFT	B	1					
1	506 024 C1	RIGHT	B	1					
2		REINFORCEMENT, STONE DEFLECTOR	B	2					
		NON SERVICE-MAKE LOCALLY							
3		DEFLECTOR, STONE	B	2					
		MAKE LOCALLY							
4	25 483 R1	BOLT, HEX-HD 1/4-20 X 1	B	6					
4	26 110 R1	NUT, LK 1/4-20	B	6					
5	24 861 R1	BOLT, HEX-HD 1/2-13 X 1-1/4	B	4					
5	25 710 R1	WASHER FL 1/2	B	4					
5	2	WASHER, LK 1/2	B	4					

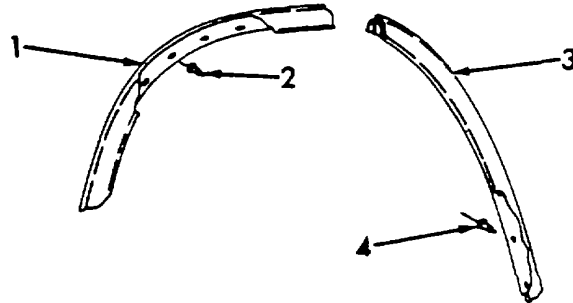
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 09-013

FENDER, RUBBER EXTENSION



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1		EXTENSION, FENDER FRT							
1	492 657 C1	LT	1						
1	492 658 C1	RT	1						
2	492 490 C2	RIVET, POP OPEN FACE 3/4	18						
2	27 306 R1	WASHER, 188 X 438 X 036 PLN	18						
3		EXTENSION, FENDER REAR							
3	492 654 C91	LT	1						
3	492 656 C91	RT	1						
4	492 490 C2	RIVET, POP OPEN FACE 3/4	14						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

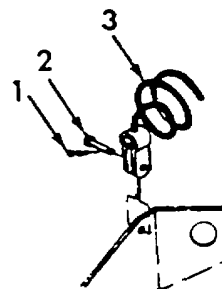
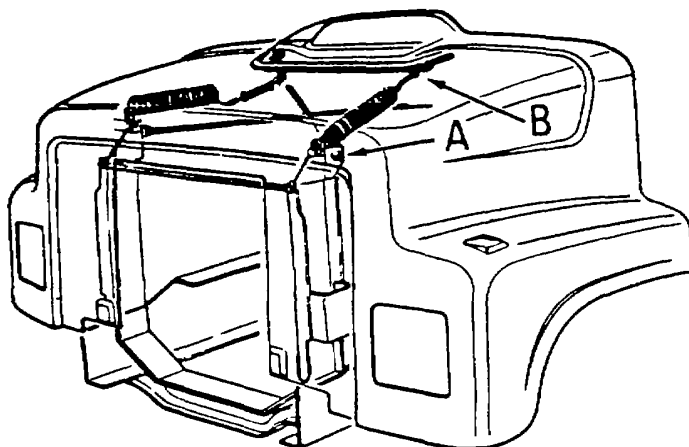


MT-145 FRONT SHEET METAL

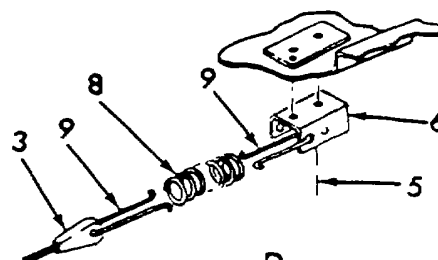
GROUP 09

FIG. 09-017

CABLE, HOOD



VIEW A



VIEW B

ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	549 899 R1	PIN, WIRE SPG		2							
2	20 155 R1	PIN, 3/16 X 719 CLEVIS		2							
3	500 827 C1	CABLE ASSY, HOOD SAFETY		2							
5	25 222 R1	BOLT, 1/4 X 3/4 PHC TYPE 8		4							
5	1/4 R	WASHER, LK 1/4		4							
6	484 240 C2	BRACKET, HOOD STOP ANCHOR		2							
8		\$ SPRING, HOOD CABLE		2							
9		\$ SPRING, HOOD CABLE		4							
		\$ SERVICED AS AN ASSY- 500828C1 ONL									

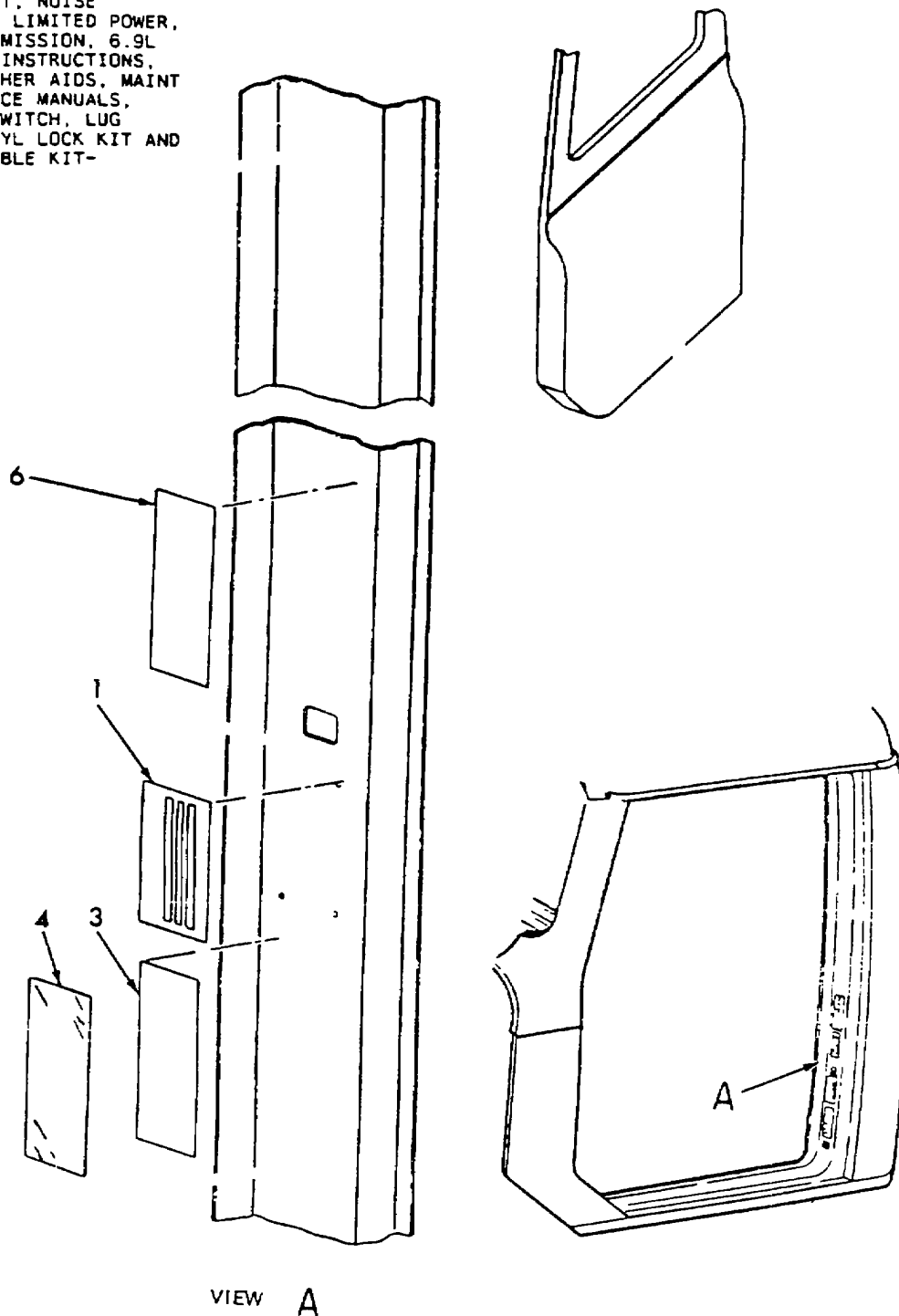
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 10-002

PRODUCT GRAPHIC AND
MISCELLANEOUS -SAFETY
COMPL CERT, NOISE
EMISSION, LIMITED POWER,
EXHAUST EMISSION, 6.9L
STARTING INSTRUCTIONS,
DANGER ETHER AIDS, MAINT
AND SERVICE MANUALS,
STARTER SWITCH, LUG
WRENCH, CYL LOCK KIT AND
SPEEDO CABLE KIT-



PRINTED IN THE UNITED STATES OF AMERICA

GROUP 10

MT-145
SPEEDOMETER

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 10-002					* MANUAL, OWNER OPERATOR NON SERVICE -		
1		PRODUCT GRAPHIC AND MISCELLANEOUS -SAFETY COMPL CERT, NOISE EMISSION, LIMITED POWER, EXHAUST EMISSION, 6 9L STARTING INSTRUCTIONS, DANGER ETHER AIDS, MAINT AND SERVICE MANUALS, STARTER SWITCH, LUG WRENCH, CYL LOCK KIT AND SPEEDO CABLE KIT-	1						
3	421 197 C2	PRODUCT GRAPHIC, SERIAL NO PLATE NON SERVICE-	1						
4	435 654 C1	PRODUCT GRAPHIC, SAFETY COMPLI CERT	1						
5	436 030 C1	COVER, PROTECTIVE	1						
6		PRODUCT GRAPHIC, SAFETY COMPLI CERT	1						
		PRODUCT GRAPHIC, NOISE EMISSION - 1982 NON SERVICE-	1						
		* MANUAL, EMISSION CONT SYS NON SERVICE -							
		* MANUAL, MAINTENANCE AND WARRANTY NON SERVICE -							
		* MANUAL CIRCUIT DIAG NON SERVICE -							

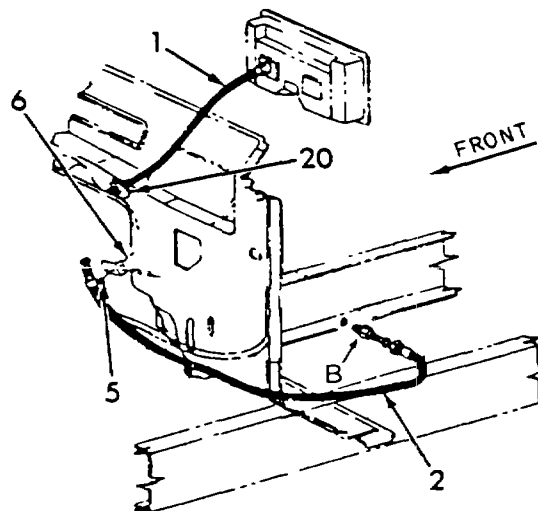
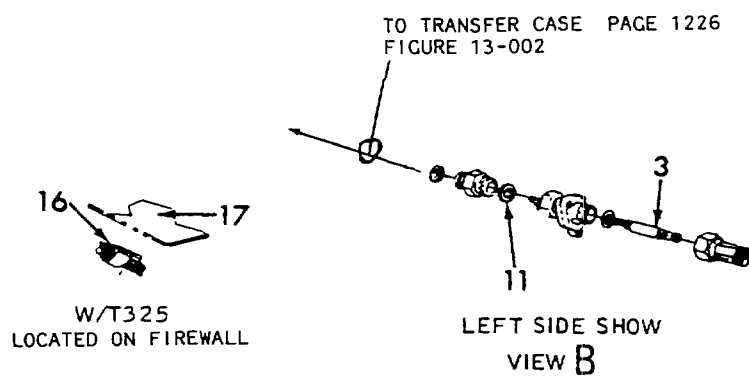
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 10-003

CABLE, SPEEDOMETER DRIVE
W/80 X 100 CAB



PRINTED IN THE UNITED STATES OF AMERICA



MT-145
SPEEDOMETER

GROUP 10

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1		FIG. 10-003 CABLE, SPEEDOMETER DRIVE W/80 X 100 CAB							
1		SPEEDO CABLE AND CORE	1	AR					
1	577 729 C91	TYPE X 25 OIN W/TRUCK	1	AR					
2		SPEEDO CABLE AND CORE	1	AR	5	406 381 C1	CLAMP	1	A
					6	25 222 R1	BOLT, HEX HD 1/4-20UNC X 3/4	1	A
					6	1/4 R	W/O 2-SPEED AXLE WASHER, LK 1/4MED	1	
					6	25 519 R1	NUT, HEX 1/4-20UNC	1	A
					11	491 323 C1	GASKET, SPEEDO CABLE	4	
					16	406 381 C1	CLAMP	1	A
					17	25 222 R1	BOLT, HEX HD 1/4-20UNC X 3/4	1	A
					17	25 519 R1	NUT, HEX HD 1/4-20UNC	1	A
					17	1/4 R	WASHER, LK 1/4MED	1	
					18	98 959 R1	CLAMP	1	C
					20	480 686 C2	GROMMET, SPEEDO CABLE	1	
					20	481 366 C1	RETAINER, GROMMET	2	
					20	163 303	SCREW, PAN HD CR REC TAP 1/4-14 X 1/2, TYPE B	2	
2	385 090 C91	TYPE II 65 O INCHES W/T465	1	CAR					
3		END, FLOATING TIP		AR					
3	343 361 C1	126 SQ-UPPER END 103 SQ-LOWER END							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

10-003

REVISION 01

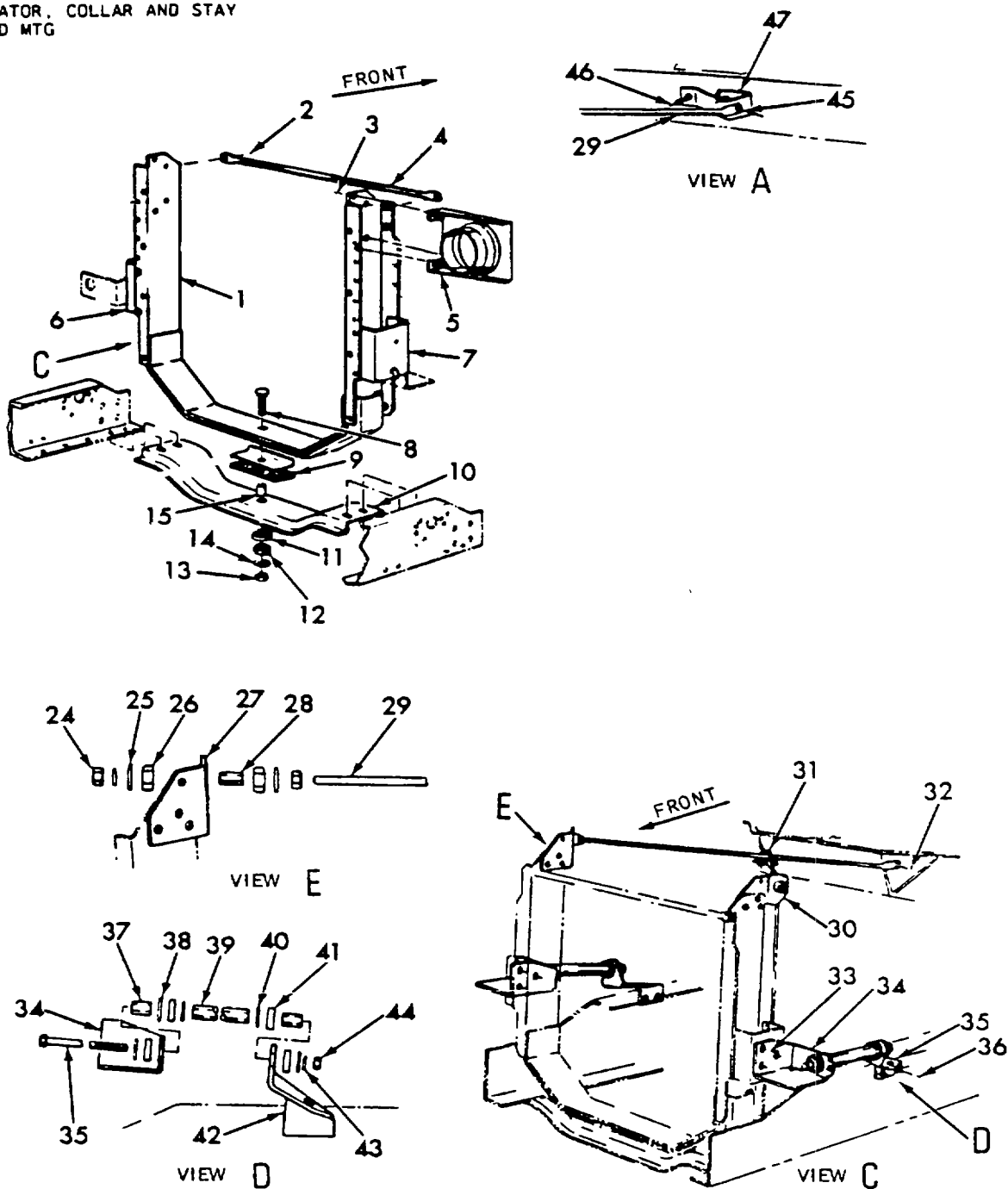
PAGE 3

1183



FIG. 12-017

RADIATOR, COLLAR AND STAY
ROD MTG



PRINTED IN THE UNITED STATES OF AMERICA

GROUP 12

MT-145
ENGINES

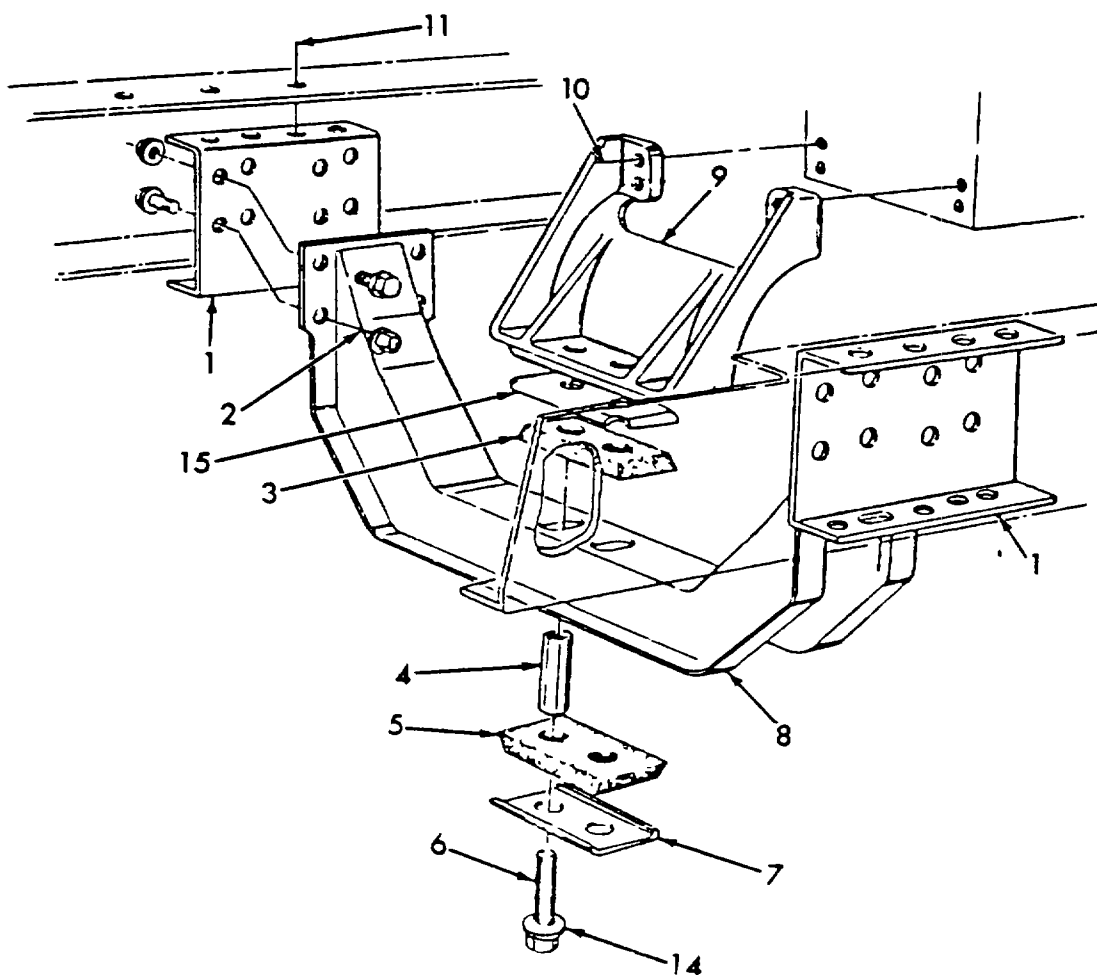
ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-017			27	491 499 C4	W/1600 THRU 1900	1	
		RADIATOR, COLLAR AND STAY			27	25 228 R1	R/S S2561	3	
		ROD MTG					BOLT, HEX-HD 5/16-18 X 3/4		
1	483 533 C5	SUPPORT, RADIATOR	1		27	25 520 R1	NUT, HEX 5/16-18	3	
2	25 493 R1	BOLT, HEX-HD 5/16-18UNC X 1.0	2		27	5/16 R	WASHER, LK 5/16	3	
2	5/16 R	WASHER, LK 5/16	2		28	299 340 C1	SPACER, PIPE- UPPER	2	
3	25 228 R1	R/S S2561	4		29		ROD, RADIATOR- UPPER- STAY		
		BOLT, HEX-HEAD 5/16-18 X 3/4			29	483 513 C2	W/1600 THRU 1900 ALL MODELS	2	
3	5/16 R	WASHER, LK 5/16	4		30		BRACKET, RADIATOR STAY ROD LEFT		
4	483 512 C1	ROD, CORE SUPT	1		30	491 497 C4	W/1600 THRU 1900	1	
5	483 532 C2	BRACKET, AIR INTAKE	1						
6	483 521 C3	BRACKET, HINGE TILT HOOD LEFT	1		30	25 228 R1	R/S S2561	3	
6	24 840 R1	BOLT, HEX HD 3/8	4				BOLT, HEX-HD 5/16-18 X 3/4		
6	3/8 R	WASHER, LK 3/8	4		30	25 520 R1	NUT, HEX 5/16-18	3	
7	483 523 C3	BRACKET, HINGE TILT HOOD RIGHT	1		30	5/16 R	WASHER, LK 5/16	3	
7	24 840 R1	BOLT, HEX HD 3/8	4		31	264 230 C1	U-BOLT	1	
7	3/8 R	WASHER, LK 3/8	4		31	264 231 C1	PLATE, U-BOLT	1	
8	27 463 R1	BOLT, CARRIAGE 1/2-13UNC X 3-3/4	1		31	118 624	NUT, HEX JAM 5/16-24	2	
9	471 478 C1	INSULATOR, CORE SUPT MTG	1		31	5/16 R	WASHER, LK 5/16	2	
10		CROSSMEMBER, RAD			32	25 493 R1	BOLT, HEX HD 5/16-18 UNC X 1 0	2	
10	468 349 C2	W/O FRT SEMI TRAILER CONN LPO	1		32	5/16 R	WASHER, LK 5/16	2	
					33	140 483 H	BOLT, HEX-HD 3/8-16 UNC X 1-1/4	6	
					33	3/8 R	WASHER, LK 3/8	6	
11	471 475 C1	RETAINER, INSULATOR	1		34	483 791 C2	BRACKET, STAY ROD LOWER-LT	1	
12	471 477 C1	INSULATOR, CORE SUPPORT	1		34	483 792 C2	BRACKET, STAY ROD LOWER-RT	1	
13	9412 230	NUT, HEX HD LOCK 1/2-13 UNC	1		35	483 916 C1	BRACKET, CAB AND RAD STAY ROD-LT	1	
14	22 191 R1	WASHER, FLAT 1/2	1		35	483 918 C1	BRACKET, CAB AND RAD STAY ROD-RT	1	
15	487 704 R1	SPACER	1		36	414 052 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X 1-1/2	4	
							W/O FRT FRAME EXTN		
					36	414 053 C1	BOLT, FLG HEX-HD 1/2-20 UNRF X-1 3/4	4	
							W/FRT FRAME EXTN		
					36	414 087 C1	NUT FLG HEX 1/2-20 UNF	4	
					37		SPACER, PIPE- LOWER	4	
							NOM SERVICE - OBTAIN LOCALLY		
					38	103 348	WASHER, FLAT 1 0	2	
					39		SPACER, PIPE	2	
							MAKE LOCALLY		
					40	5/8 T	WASHER, FLAT 5/8	8	
					41	459 591 C1	INSULATOR, STAY ROD- LOWER	8	
					42	27 955 R1	BOLT, HEX-HD 5/8-11 X 10-1/2	2	
					43	5/8 R	WASHER, LOCK 5/8	2	
					44	25 528 R1	NUT, HEX HD 5/8-11UNC	2	
					45	25 493 R1	BOLT, HEX HD-5/16-18UNC X 1 0	2	
					45	25 520 R1	NUT, HEX HD- 5/16-18UNC	2	
					45	5/16 R	WASHER, LOCK- 5/16	2	
					46	25 520 R1	NUT, HEX-HD- 5/16-18UNC	4	
					46	5/16 R	WASHER, LOCK- 5/16	4	
					47	488 542 C2	BRACKET, STAY ROD MTG	2	
24	25 524 R1	NUT, HEX 7/16-14 UNC	4						
24	7/16 R	WASHER, LK 7/16	2						
25	23 043 R1	WASHER, FL 7/16	4						
26	299 341 C1	INSULATOR, STAY ROD- UPPER	4						
27		BRACKET, RADIATOR STAY ROD RIGHT							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-020

CROSSMEMBER. ENG MTG FRT
STD



MT-145 ENGINES

GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-020			11	414 053 C1	BOLT, FLG HEX-HD 1/2-20UNRF	8	6
		CROSSMEMBER, ENG MTG FRT STD			11	414 087 C1	NUT, HEX 1/2-20UNF	6	
1		BRACKET, XMBR MTG -LT			14	25 710 R1	WASHER, FLAT 1/2	2	1
1	471 630 C2	854-4X4	1		15	422 650 C1	RETAINER, FRT ENG MTG	1	
1	494 192 C2	W/D9.OL W/1600 THRU 1900	1						
1		BRACKET, XMBR MTG -RT							
1	471 631 C2	1854-4X4-	1						
1	494 193 C3	W/D9.OL W/1600 THRU 1900	1						
2	414 052 C1	BOLT, FLG HEX HD 1/2-20 UNF X 1-1/2	8						
2	414 087 C1	NUT, FLG HEX 1/2-20UNF	8						
3	286 236 C2	INSULATOR, ENG MTG UPPER	1						
4	371 623 C2	SPACER, PIPE	2						
5	286 235 C2	INSULATOR, ENG MTG LOWER	1						
6	414 062 C1	BOLT, FLG HEX HD 1/2-20 X 4.0	2						
6	414 087 C1	NUT, FLG HEX HD 1/2-20	2						
6	415 029 C1	BOLT, FLG HEX HD 1/2-20 X 4.5	2						
6	24 868 R1	1/2-13UNC X 4.0	2						
6	428 997 C1	1/2-20 X 4.25	2						
6	9412 230	NUT, LK 1/2-13UNC	2						
7	286 234 C2	RETAINER, INSULATOR ENG MTG	1						
8		CROSSMEMBER, ENG FRT MTG 4X4,	1						
8	492 077 C2	MODELS	1						
8		NON SERVICE-MAKE LOCALLY							
9		BRACKET, ENG FRT MTG							
9		D9.OL FURNISHED W/ENG	1						
10	24 842 R1	BOLT, HEX-HD 3/8-16UNC X 1-3/4	2						
10		WASHER, FL HARDENED 3/8	4						
10	25 709 R1	1/2	2						
10	25 710 R1	5/8	4						
10	25 711 R1	BOLT, HEX-HD R/S S210261	2						
10	25 340 R1	5/8-11UNC X 3-1/4	2						
10	24 840 R1	3/8-16UNC X 1.0	2						
10	24 875 R1	5/8-11UNC X 2	2						
10	24 860 R1	1/2-13UNC X 1.0	2						
11	414 052 C1	BOLT, FLG HEX HD 1/2-20UNRF X 1-1/2	8						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

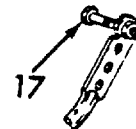
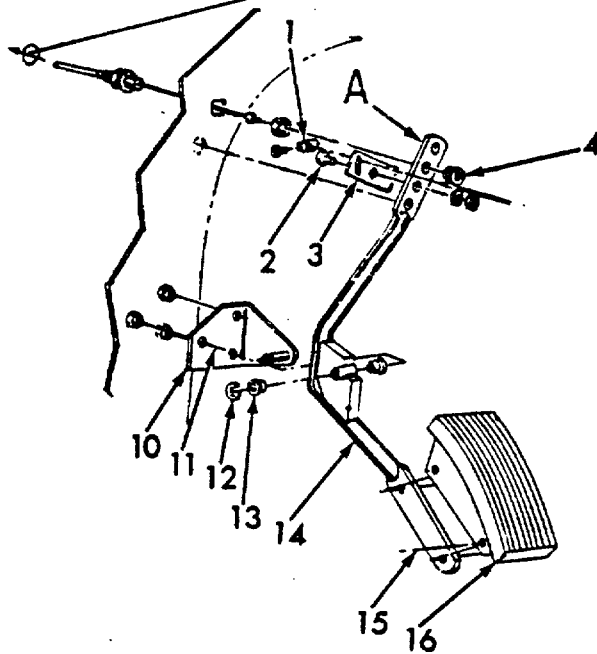


GROUP 12

FIG 12-022

ACCELERATOR, CONTROL
THROTTLE
W/LEFT HAND DRIVE

TO LINKAGE PAGE 1203
FIGURE 12-100



VIEW A

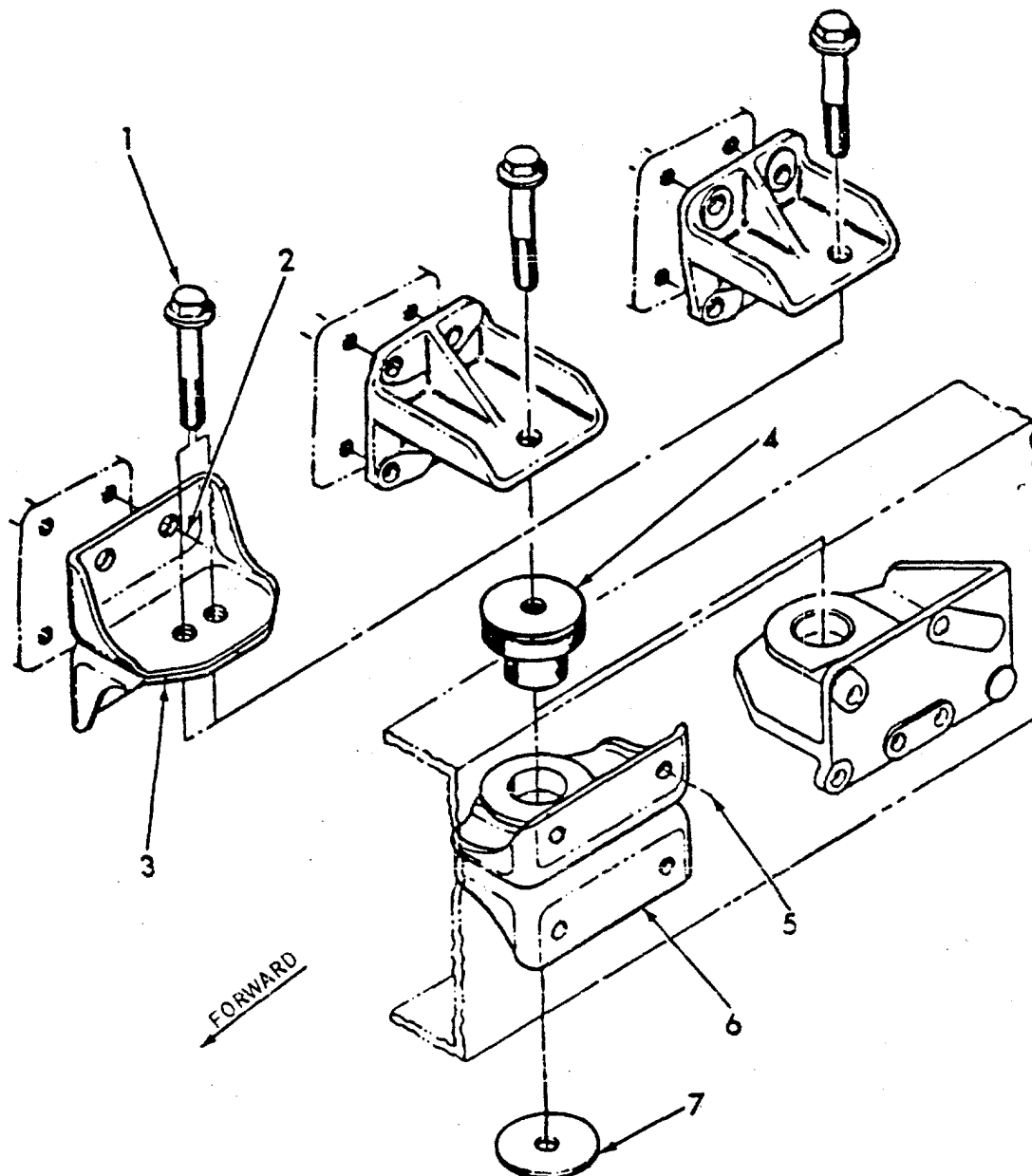
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	288 219 C1	STOP, THROTTLE W/HAND THROTTLE	1						
1	436 747	SCREW, PAN HD NO. 10 32UNF X 5/16 IN. LG	1		10	495 395 C1	BRACKET ASSY, ACCEL PIVOT	1	
2	25 228 R1	R/S S2561 BOLT, HEX-HD 5/16-18UNC X 0.75 IN LG	1		11	25 751 R1	BOLT, HEX HD 5/16-18 UNC X 1-1/4 LG	3	
2	25 220 R1	NUT, HEX-HD 5/16-18UNC	1		11	5/16 R	WASHER, LOCK 5/16	3	
2	5/16 R	WASHER, LK 5/16	1		12	110 668 R1	RING, RET 1-1/4 LG	1	
3	592 568 C1	BRACKET, THROTTLE CABLE W/HAND THROTTLE	1		13	479 220 C1	BUSHING	2	
4	480 460 C2	RETAINER, CABLE SLUG	1		14	495 433 C1	ROD ASSY, ACCEL PEDAL W/O 1853 MODEL	1	
					15	27 095 R1	SCREW, PAN HD NO. 10-24 X 1.0	2	
5	592 570 C91	CABLE ASSY, HAND THROTTLE CON W/VERNIER THROTTLE	1		15	3/16 R	WASHER, LK NO. 10	2	
					15	120 361	NUT, HEX NO. 10-24	2	
6	592 571 C1	BRACKET, HAND THROTTLE W/VERNIER THROTTLE	1		16	482 606 C1	PEDAL, ACCEL X 1.0	1	
					17	25 232 R1	BOLT, HEX-HD 5/16-18UNC X 2.0 IN. LG	1	
7	472 280 C1	NUT, FACE W/GAS ENGINES W/HAND CHOKE	1		17	25 520 R1	NUT, HEX-HD 5/16-18UNC W/O HAND THROTTLE	1	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-048

BRACKET, ENG MTG REAR
W/O V345, 392 ENG



MT-145 ENGINES

GROUP 12

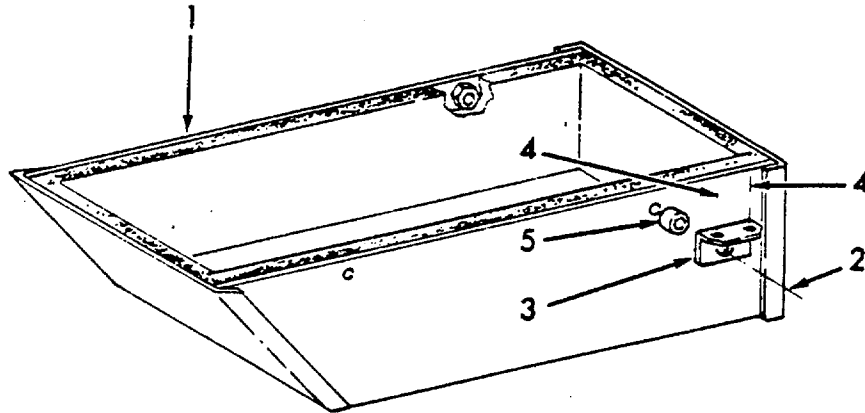
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-048							
		BRACKET, ENG MTG REAR W/O V345, 392 ENG							
1	414 085 C1	BOLT, FLG HEX HD 5/8-18 UNRF X 3 3/4 LG	2						
1	414 089 C1	NUT, FLG HEX HD 5/8-18 UNF	2						
2	24 873 R1	BOLT, HEX HD 5/8-18 UNC X 1-1/2 W/MV8, 6.9L & D9.OL ENGS	8						
2	25 711 R1	WASHER, FLAT 5/8 W/MV8, 6.9L & D9.OL ENGS	8						
3		BRACKET ASSY, REAR ENG MTG-LT-	1						
3	479 389 C2	W/D9.OL ENG							
3		BRACKET ASSY, REAR ENG MTG-RT	1						
3	479 390 C2	W/D9.OL ENG							
4	479 237 C1	INSULATOR, ENG MTG W/ALL W/O 6.9L & D9.OL ENG	2						
4	583 955 C1	INSULATOR, ENG MTG W/6.9L & D9.OL ENG	2						
5	414 052 C1	BOLT, FLG HEX HD 1/2-20UNRF X 1-1/2 W/O REINF	4						
5	414 087 C1	NUT, FLG HEX HD 1/2-20 UNF	8						
5	414 055 C1	BOLT, FLG HEX HD 1/2-20UNRF X 2-1/4LG W/DT466B	2						
5	414 052 C1	BOLT, FLG HEX-HD 1/2-20UNRF X 1-1/2LG W/O REINF W/DT466B	6						
6	479 387 C1	BRACKET ASSY-FRAME REAR ENG MTG W/ALL W/O D358 ENG	2						
7	5/8 T	WASHER, FLAT	2						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



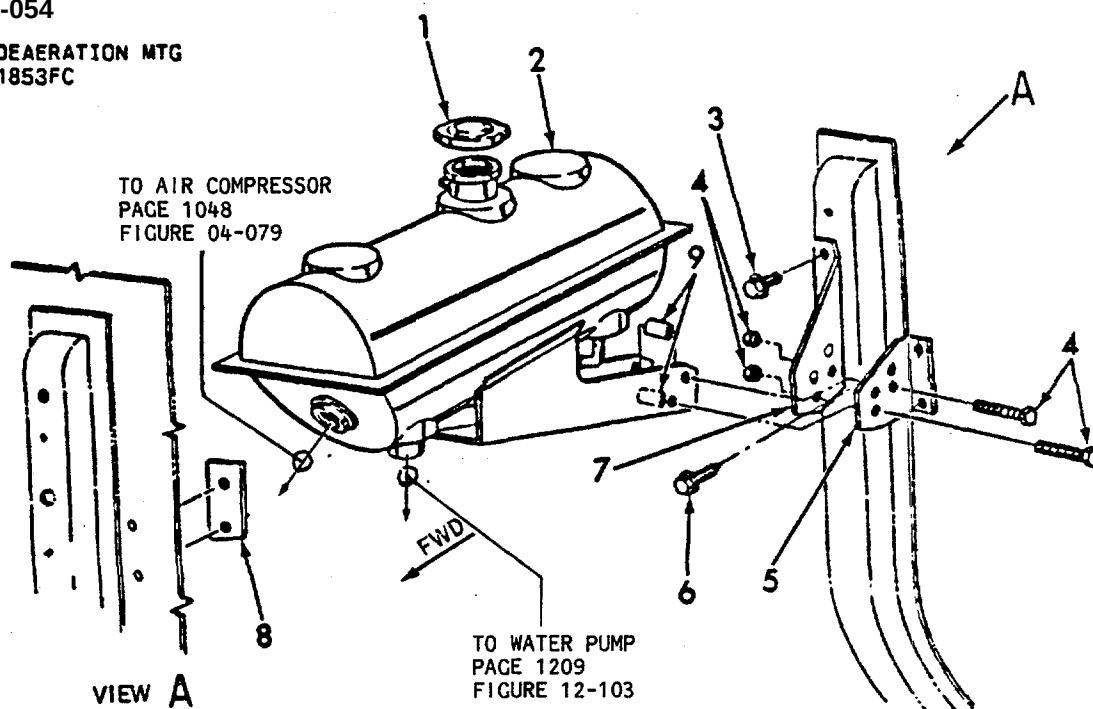
FIG. 12-051

COVER, OIL PAN INSULATOR
9.0L ENG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	1700 517 C1	COVER, OIL PAN INSULATOR	1						
2	26 678 R1	BOLT, W/PATCH HEX-HD 5/16NC X 1	4						
2	5/16 R	WASHER, LK 5/16 REG	4						
2	25 552 R1	WASHER, FL 5/16 -HARDENED-	4						
3	1700 511 C1	BRACKET, OIL PAN COVER HANGER	4						
4	25 493 R1	BOLT, HEX-HD 5/16-18 X 1	8						
4	5/16 R	WASHER, LK 5/16	8						
5	469 480 C1	GROMMET, RUBBER	4						



FIG. 12-054

TANK, DEAERATION MTG
W/O 1853FC

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
1	530 874 R1	CAP. TANK FILL		1							
2	586 531 C1	TANK ASSY. DEAERATION		1							
3	403 810 C91	BOLT ASSY. SEMS HEX HD 5/16-18UNC X 1.00		2							
4	24 845 R1	BOLT, HEX HD 3/8-16UNC X 1.0		4							
4	9413 979	NUT, HEX LOCK 3/8-16UNC		4							
5	483 128 C2	BRACKET, TANK SUPT LT W/LHD		1							
6	3/8 R	WASHER, LOCK 3/8		2							
6	140 483 H	BOLT, HEX HD 3/8-16UNC X 1.25		2							
6	403 859 C92	BOLT ASSY. SEMS HEX HD 3/8-16 UNC X 1.12		2							
7	483 127 C2	BRACKET, TANK SUPPORT RT W/LHD		1							
8		BAR ASSY. REINF NON SERVICE- OBTAIN LOCALLY		1							
9	371 623 C2	SPACER, 2.70 IN. LONG		2							

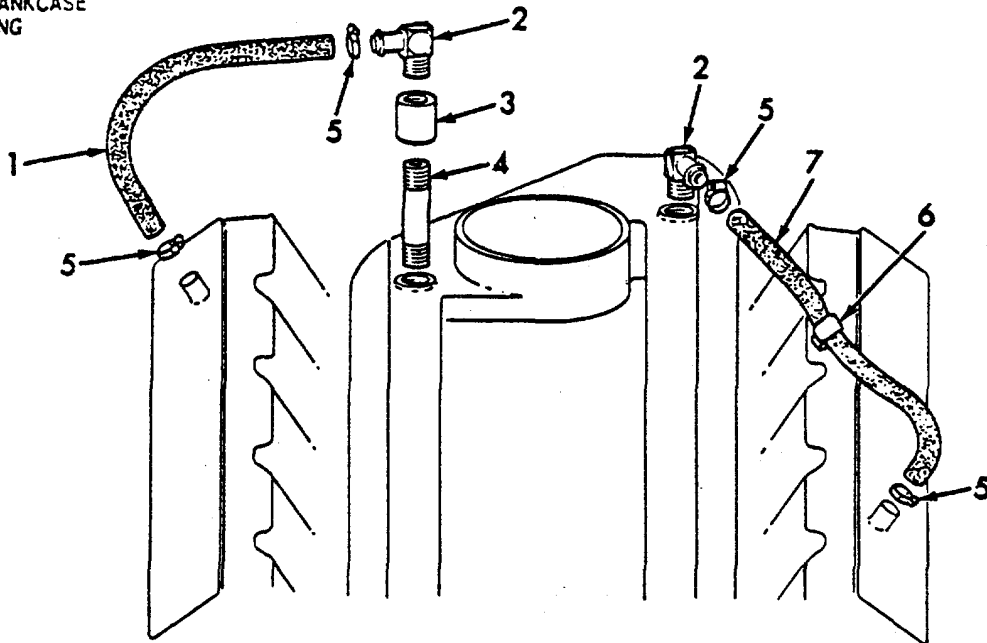
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 12-073

VENT, CRANKCASE
9.0L ENG



ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	684 162 R1	HOSE		1							
2	899 720 R1	ELBOW, 90 DEG 1/2NPTF X 5/8 ID HOSE		2							
3	140 813	COUPLING, PIPE 1/2		1							
4	121 664	NIPPLE, STEEL		1							
5	274 085 R91	CLAMP, HOSE 9/16 TO 1-1/16		4							
6	173 576 H1	CLAMP, CLOSED HOSE		1							
7	202 221 R1	HOSE		1							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



MT-145 ENGINES

GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 12-094									
		GASKET SETS, ENG									
		9.0L ENG									
	1700 548 C96	GASKET SET, ENG UPR		1							
		-CONSISTS OF-									
	1701 207 C1	GASKET, WATER OUTLET		2							
	489 168 C1	GASKET, CROSSOVER TO INT		2							
		MANF									
	489 159 C1	GASKET, INTAKE MANF		2							
	259 117 C3	GASKET, EXH MANF		8							
	489 105 C1	GASKET, CYL HEAD COVER		2							
	489 104 C3	GASKET, CYL HEAD EXTN		2							
	489 253 C3	GASKET, CYL HEAD		2							
	111 024 R1	SEAL, VALVE STEM		16							
	489 239 C2	GASKETS, INJECTION PUMP DR		1							
		COVER									
	397 613 C1	O-RING, INJECTION PUMP MTG		1							
	489 256 C1	GASKET, NOZZLE		8							
	489 120 C1	SEAL, NOZZLE		8							
	133 577 R4	GASKET, CRKCASE COVER-		2							
		TAPPET									
	293 739 R1	O-RING, WATER CROSSOVER		4							
		TUBE									
		-NOT SERVICED									
		SEPARATELY-									
	1700 549 C91	GASKET SET, ENG, LWR		1							
		-CONSISTS OF-									
	348 714 C2	GASKET, FRT COVER TO		1							
		CRKCASE									
	448 428 C1	GASKET, OIL PAN		1							
	1701 264 C1	GASKET, PUMP BODY TO WATER		1							
		PUMP BRG HSG									
	1701 207 C1	GASKET, WATER OUTLET AND		3							
		REAR CAM BRG COVER									
	489 244 C1	GASKET, INJECTION PUMP		1							
		ADAP TO FRT COVER									
	489 239 C2	GASKET, INJECTION PUMP DR		1							
		GEAR COVER									
	293 739 R1	O-RING, WATER CROSSOVER		4							
	258 122 C2	SEAL, REAR BRG CAP		2							
	348 713 C1	GASKET, WATER OUTLET		1							
	448 427 C1	GASKET, OIL FILTER AND		1							
		COOLER BASE TO CRKCASE									
	489 193 C1	GASKET, THERMO HSG		1							
	427 884 C1	GASKET, OIL COOLER TO		2							
		COOLER BASE									

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

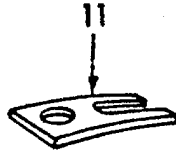


GROUP 12

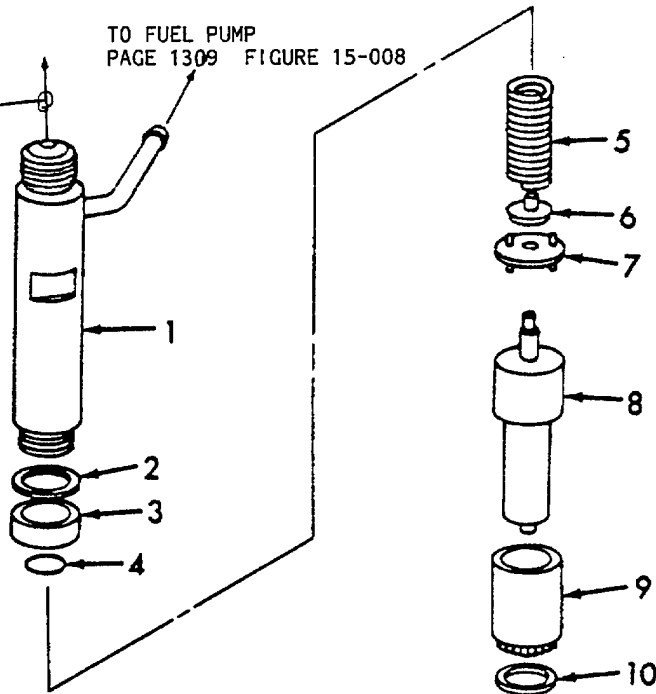
FIG. 12-095

INJECTOR, FUEL NOZZLE
AND NOZZLE HOLDER
9.0L ENG

TO VALVE RETAINER
PAGE 1196
FIGURE 12-096



TO FUEL PUMP
PAGE 1309 FIGURE 15-008



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		INJECTOR, W/BODY, FUEL ASSY -INCLUDES ITEM NOS. 1, 4 THRU 10-			11	1701 235 C1	CLAMP, FUEL INJECTOR -WILL WORK FOR 489117C1-	1	
	1701 170 C91	TRANSMISSIONS ENG SERIAL NO. 12181 AND UP							
1		BODY	1						
		NOT SERVICED SEPARATELY							
2	489 119 C1	WASHER, INJECTOR SEAL	1						
3	489 120 C1	SEAL, INJECTOR	AR						
4		SUPPORT, FUEL FILTER	AR						
4	680 415 C1	.002 THICK							
4	680 416 C1	.007 THICK							
4	680 418 C1	.010 THICK							
4	680 419 C1	.025 THICK							
4	680 421 C1	.028 THICK							
4	680 422 C1	.030 THICK							
4	680 423 C1	.035 THICK							
4	680 420 C1	.375 THICK							
5	680 424 C1	SPRING, PRESSURE	1						
6	680 433 C1	GUIDE, SPG SEAT	1						
7	680 434 C1	SPACER, VALVE STOP	1						
7	680 414 C1	SPACER, NOZZLE	1						
8	1701 169 C1	NOZZLE, INJECTOR -WILL WORK FOR 1700522C1-	1						
9	680 435 C1	NUT, NOZZLE CAP	1						
10	489 256 C1	GASKET, INJECTOR TO CYL HEAD	1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

PUMP, FUEL INJECTION



[illegible]

MISSING ITEM NUMBERS ARE NOT USED



MT-145 ENGINES

GROUP 12

FIG. 12-097

FILTER, FUEL MTG
9.0L ENG

TO PUMP SUPPLY ASSY "C"
PAGE 1196 FIGURE 12-096

TO PUMP SUPPLY ASSY "B"
PAGE 1196 FIGURE 12-096

TO PUMP SUPPLY
ASSY "A"
PAGE 1196
FIGURE 12-096

2

3

FRONT
FILTER

TO FUEL TANK PAGE 1308
FIGURE 15-007

5

REAR
FILTER

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1	1700 378 C1	BASE, FUEL FILTER FINAL	1						
2	1700 379 C1	ADAPTER, FUEL FILTER TO BASE	1						
3	672 603 C2	FILTER, FINAL FUEL	1						
4	489 311 C2	SUPPORT, FUEL FILTER	1						
4	24 840 R1	BOLT, HEX-HD 3/8NC X 1	3						
4	25 493 R1	BOLT, HEX-HD 5/16NC X 1	1						
4	25 520 R1	NUT, HEX 5/16NC	1						
4	3/8	WASHER, LK 3/8	3						
4	5/16	WASHER, LK 5/16	1						
4	25 708 R1	WASHER, FLAT 5/16 HARDENED	1						
5	625 625 C1	FILTER, FUEL PRIMARY	1						
6	612 277 C2	BASE, FUEL FILTER W/ADAP	1						
6	24 845 R1	BOLT, HEX-HD 3/8NC X 4	1						
6	26 586 R1	BOLT, HEX-HD 5/16NC X 4	1						
6	25 522 R1	NUT, HEX 3/8NC	1						
6	25 520 R1	NUT, HEX 5/16NC	1						
6	3/8	WASHER, LK 3/8	1						
6	5/16	WASHER, LK 5/16	1						
6	25 709 R1	WASHER, FLAT 3/8 HARDENED	1						
6	25 708 R1	WASHER, FLAT 5/16 HARDENED	2						
6	444 614	PLUG, HEX-HD 1/8 PIPE	1						
6	20 988 R1	PLUG, HEX-HD 1/4 PIPE FUEL							

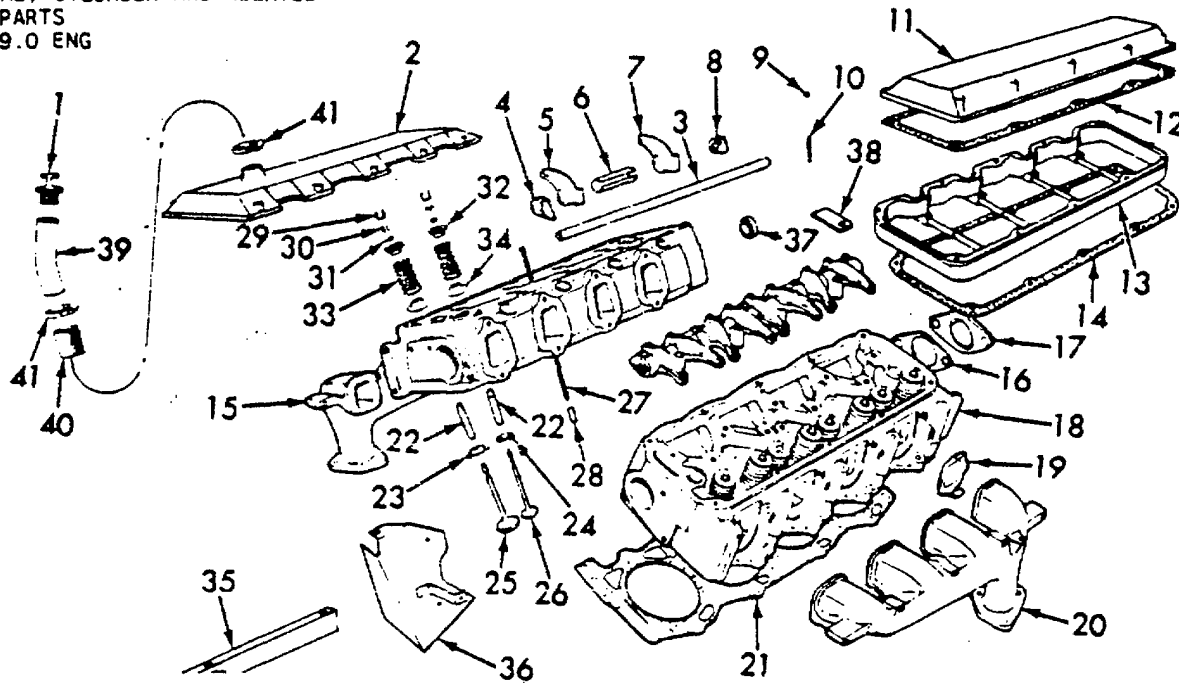
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 12-098

HEAD, CYLINDER AND RELATED
PARTS
9.0 ENG



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	336 079 R91	CAP, OIL FILLER	1		13	24 843 R1	BOLT, HEX-HD 3/8NC X 2	8	
2	489 112 C2	COVER, CYL HD ASSY -RIGHT-	1		13	489 115 C1	BOLT, HEX-EXTN	8	
2	26 057 R1	BOLT, HEX-HD 5/16NC X 3-1/2	6		13	131 402 H	WASHER, FLAT	8	
2	25 942 R1	BOLT, HEX-HD 5/16NC X 7/8	4		13	25 709 R1	WASHER, FLAT 3/8	8	
2	25 708 R1	WASHER, FLAT 5/16	9		14	489 104 C3	GASKET, CYL HD EXT	2	
2	146 327 R1	CLIP, PUSH ON	6		15		NOT SERVICED SEPARATELY		
3	489 109 C1	SHAFT, W/PLUGS, ROCKER ARM	2		16	1701 207 C1	GASKET, REAR COVER, -WILL WORK FOR 258168C1-	2	
3	25 222 R1	BOLT, HEX-HD 1/4NC X 3/4	2		17	317 726 C3	COVER, REAR	2	
3 1/4	R	WASHER, LK 1/4	2		17	24 840 R1	BOLT, HEX-HD 3/8NC X 3/4	4	
3	169 071 R1	PLUG, ROCKER ARM SHAFT	4		17	3/8	WASHER, LK 3/8 REGULAR	4	
4	341 286 C92	BRACKET, ROCKER ARM SHAFT -OIL SUPPLY-	2		18	489 097 C93	HEAD, W/VALVES CYL. ASSY -INCLUDES ITEM NOS. 15, 18, 22 THRU 26, 30 THRU 34-	2	
4	24 843 R1	BOLT, HEX-HD 3/8NC X 2	2		18	1701 218 C1	BOLT, 2-3/4 LONG	8	
4	25 709 R1	WASHER, FLAT 3/8	2		18	1701 219 C1	BOLT, 3-1/2 LONG	8	
5	294 204 C21	ARM, W/SCREW AND NUT, EXH ROCKER	8		18	258 195 C2	BOLT, 5-1/4 LONG	20	
6	1700 277 C2	SPACER, ROCKER ARM	8		18	1701 230 C1	WASHER, FLAT	28	
7	294 203 C21	ARM, W/SCREW AND NUT, INTAKE ROCKER	8		18	28 179 R1	PLUG, CUP 5/16	8	
8	281 681 C1	BRACKET, ROCKER ARM SHAFT	8		18	25 377 R1	PLUG, CUP 3/4	8	
8	24 843 R1	BOLT, HEX-HD 3/8NC X 2	8		18	444 575	PLUG, PIPE	2	
8	25 709 R1	WASHER, FLAT 3/8	8		19	259 117 C3	GASKET, EXH MANF	8	
9	446 473 C2	NUT, VALVE TAPPET ADJ WILL WORK FOR 133093R1	16		20	353 921 C2	MANIFOLD, EXH	2	
10	280 625 C1	SCREW, VALVE TAPPET ADJ	16		20	24 843 R1	BOLT, HEX-HD 3/8NC X 2	4	
11	489 114 C2	COVER, W/CLIP, CYL HD, ASSY -LEFT-	1		20	24 866 R1	BOLT, HEX-HD 1/2NC X 2-1/2	6	
11	25 492 R1	BOLT, HEX-HD 5/16NC X 7/8	4		20	159 689 R1	WASHER, TAB LK 3/8	4	
11	26 057 R1	BOLT, HEX-HD 5/16NC X 3-1/2	6		20	353 938 C1	WASHER, TAB LK 1/2	6	
11	25 708 R1	WASHER, FLAT 5/16	8		20	320 181 C1	PLUG, SQ-HD 1/4 PIPE	2	
11	146 327 R1	CLIP, PUSH ON	6		21	489 253 C3	GASKET, CYL HD	2	
12	489 105 C1	GASKET, CYL HD COVER	2		22	428 046 C1	GUIDE, INTAKE AND EXH VALVE	16	
13	489 103 C5	EXTENSION, CYL HD	2		23		SEAT, INTAKE VALVE .002 O/S	8	
					23	1700 591 C1			

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



MT-145 ENGINES

GROUP 12 2

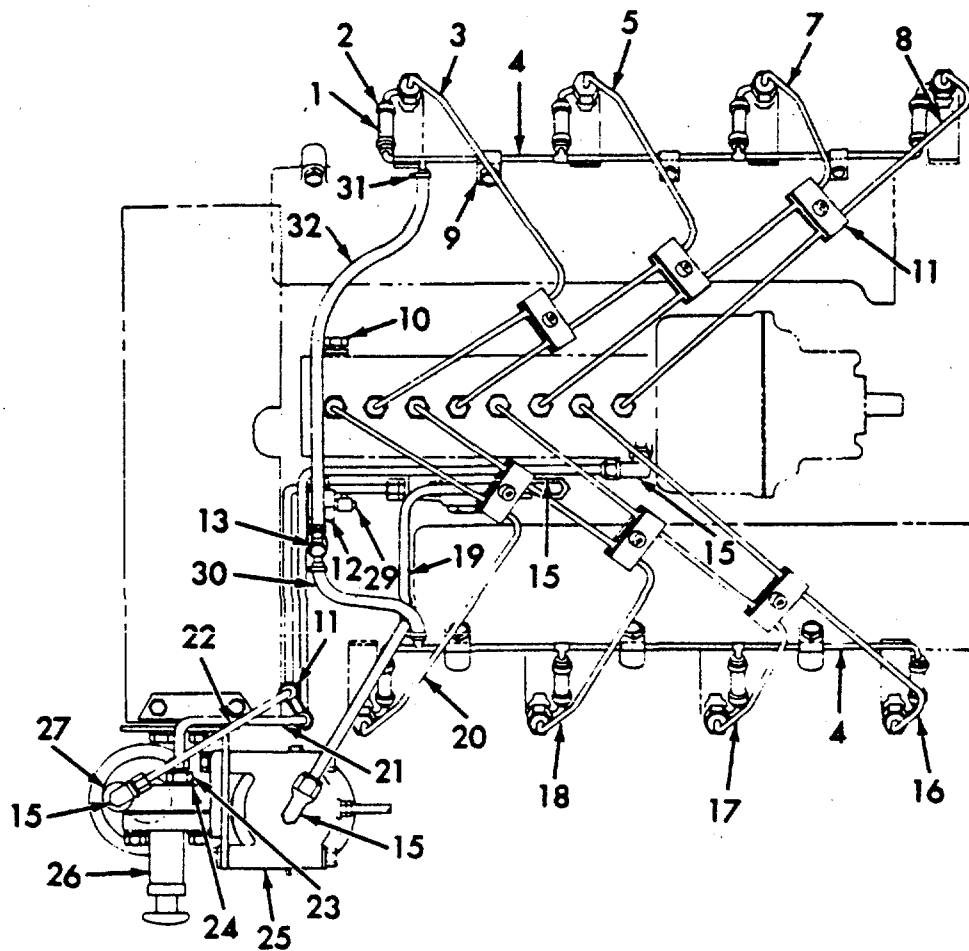
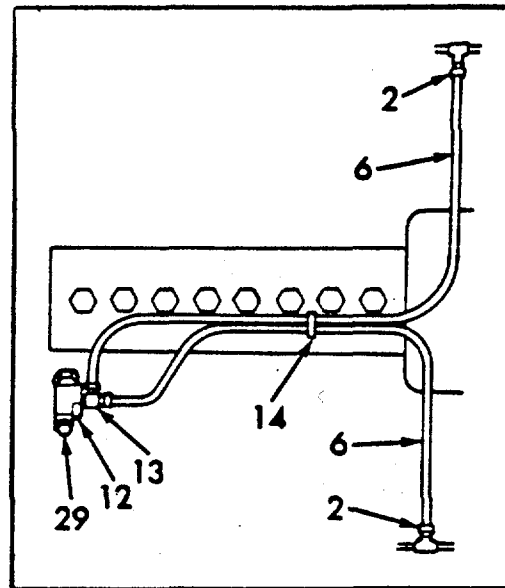
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 12-098							
		HEAD, CYLINDER AND RELATED PARTS							
		9.0 ENG							
23	1700 608 C1	.030 O/S							
24		SEAT, EXH VALVE	8						
24	1700 609 C1	.002 O/S							
24	1700 610 C1	.015 O/S							
24	1700 611 C1	.030 O/S							
25	489 101 C4	VALVE, INTAKE	8						
26	489 102 C2	VALVE, EXH	8						
27	280 623 C91	ROD, VALVE LIFTER	16						
28	259 070 C92	TAPPET, VALVE, ASSY	16						
29	291 017 C2	CAP, VALVE	16						
30	41 339 D	RETAINER, VALVE SPG	32						
31	111 024 R1	SEAL, VALVE STEM	16						
32	151 167 R3	CUP, VALVE SPG	16						
33	317 365 C11	SPRING, VALVE, ASSY	16						
34	443 128 C2	CAP, VALVE ROTATOR, ASSY	16						
35	332 919 C1	SHIELD, HEAT, STARTING MOTOR FRONT	1						
36		SHIELD, HEAT, STARTING MOTOR REAR	1						
36	494 372 C3	W/4X4 MODELS							
36	24 859 R1	BOLT, HEX-HD 1/2NC X 3/4	2						
36	25 492 R1	BOLT, HEX-HD 5/16NC X 7/8	3						
36	25 520 R1	NUT, HEX 5/16NC	1						
36		WASHER, LK	1						
36	5/16 R1	5/16 REGULAR	3						
36	1/2 R1	1/2 REGULAR	2						
36		WASHER, FLAT							
36	25 708 R1	5/16	3						
36	25 710 R1	1/2	1						
37	22 263 R1	PLUG, CUP 1-5/8 RIGHT REAR	1						
38		SUPPORT	8						
38		MAKE LOCALLY							
38	24 843 R1	BOLT, HEX-HD 3/8NC X 2	8						
39	296 481 C11	TUBE, OIL FILL -1853FC	1						
		MODEL-							
40	407 008 R1	HOSE, CONNECTOR -1853FC	1						
		MODEL-							
41	995 220 R1	CLAMP, HOSE -1853FC MODEL-	2						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 12-099

PIPING, FUEL INJECTOR
W/D9.OL ENG

MT-145 ENGINES

GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-099							
		PIPING, FUEL INJECTOR							
		W/09.0L ENG							
1	680 246 C1	HOSE, FUEL LEAK-OFF 3/16ID	1		21	995 063 R1	+ PIPE, W/NUTS AND SLEEVES		
2	1802 453 C1	CLAMP, LEAK-OFF HOSE	16		21	9403 527	-FINAL FILTER TO		
3		PIPE, W/NUTS AND SLEEVES	1		21	265 205 R1	INJECTION PUMP- 3/8OD		
		FULE ASSY -INJECTION			21	265 204 R1	NUT, 3/8 TUBE FLARED	1	
		PUMP TO CYL NO.2-			21	9403 449	NUT, FLEX 3/8 TUBE	1	
		W/O CODE 12836			22	995 063 R1	SLEEVE, 3/8 TUBE	1	
3	489 331 C91						+ PIPE, W/NUTS AND SLEEVES	1	
							-TRANSFER PUMP TO FINAL		
							FILTER- 3/8OD		
4	1700 814 C1	PIPE, INJECTOR LEAK-OFF	2		22	265 205 R1	NUT, FLEX 3/8 TUBE	1	
		-WILL WORK FOR 489261C1-			22	265 204 R1	SLEEVE, 3/8 TUBE	1	
5		PIPE, W/NUTS AND SLEEVES,	1		23	674 681 R1	CONNECTOR, 3/8 TUBE	1	
		FUEL ASSY -INJECTION			24	369 384 R1	O-RING, 5/16 X .072	1	
		PUMP TO CYL NO.4-			25		FILTER, ASSY. PRIMARY		
5	489 335 C91	W/O CODE 12836					SEE PAGE 1198 FIG. 12-097		
					26	489 944 C91	PUMP, FUEL PRIMARY ASSY	1	
6	680 246 C1	HOSE, FUEL LEAK-OFF 3/16ID	2		26	25 751 R1	BOLT, HEX-HD 5/16NC X	1	
		TO OVERFLOW VALVE					1-1/4		
7		PIPE, W/NUTS AND SLEEVES,	1		26	25 485 R1	BOLT, HEX-HD 1/4NC X 1-1/4	1	
		FUEL ASSY -INJECTION			26	25 708 R1	WASHER, FLAT 5/16	1	
		PUMP TO CYL NO.6-			26	25 707 R1	WASHER, FLAT 1/4	1	
7	1700 024 C91	W/O CODE 12836			26	5/16 R	WASHER, LOCK 5/16 REGULAR	1	
					26	1/4 R	WASHER, LOCK 1/4 REGULAR	1	
8		PIPE, W/NUTS AND SLEEVES,	1		26	489 945 C1	GASKET, PRIMING PUMP	1	
		FUEL ASSY -INJECTION			27		FILTER, FUEL FINAL, ASSY		
		PUMP TO CYL NO.8-					SEE PAGE 1198 FIG. 12-097		
8	1700 028 C91	W/O CODE 12836			28	606 819 C1	CONNECTOR, 3/8 X 1/4NPT	1	
9	299 404 C1	CLAMP, PIPE -WILL WORK FOR	6		30	680 246 C1	HOSE, 3/16ID X 9.6LG	1	
		299398C1-					-LEAK-OFF TO LEFT BANK-		
10	39 677 DA	VALVE, AIR BLEED	1		31	244 713 R1	CLAMP, LEAK-OFF HOSE		
11	673 527 C1	CLAMP, PIPE	14		32	680 246 C1	HOSE, 3/16ID X 16.3LG		
11	684 548 C1	NUT, SPRING 1/4NC	7				-LEAK-OFF TO RIGHT BANK-		
11	113 957	SCREW, RD-HD 1/4NC X 3/4	7						
11	258 079 C1	GROMMET, FUEL PIPE	14						
12		NOT USED -ORDER ITEM							
		NO.13-							
13	1701 197 C1	TEE, HOUSE CONNECTOR -WILL	1				+ PART NO. COVERS ONE FOOT		
		WORK FOR 1701029C1-					BULK MATERIAL		
14	289 862 C1	STRAP, FUEL HOSES	1						
15	606 845 C1	ELBOW, 90 DEG 3/8 TUBE X	4						
		1/4NPT							
16		PIPE, W/NUTS AND SLEEVES,	1						
		FUEL ASSY -INJECTION							
		PUMP TO CYL NO.7-							
16	1700 026 C91	W/O CODE 12836							
17		PIPE, W/NUTS AND SLEEVES,	1						
		FUEL ASSY -INJECTION							
		PUMP TO CYL NO.5-							
17	1700 022 C91	W/O CODE 12836							
18		PIPE, W/NUTS AND SLEEVES,	1						
		FUEL ASSY -INJECTION							
		PUMP TO CYL NO.3-							
18	489 333 C91	W/O CODE 12836							
19	995 063 R1	+ PIPE, W/NUTS AND SLEEVES	1						
		-PRIMARY FILTER TO							
		TRANSFER PUMP- 3/8OD							
19	265 205 R1	NUT, FLEX 3/8 TUBE	2						
19	265 204 R1	SLEEVE, 3/8 TUBE	2						
20		PIPE, W/NUTS AND SLEEVES,	1						
		FUEL ASSY -INJECTION							
		PUMP TO CYL NO.1-							
20	489 329 C91	W/O CODE 12836							

MISSING ITEM NUMBERS ARE NOT USED

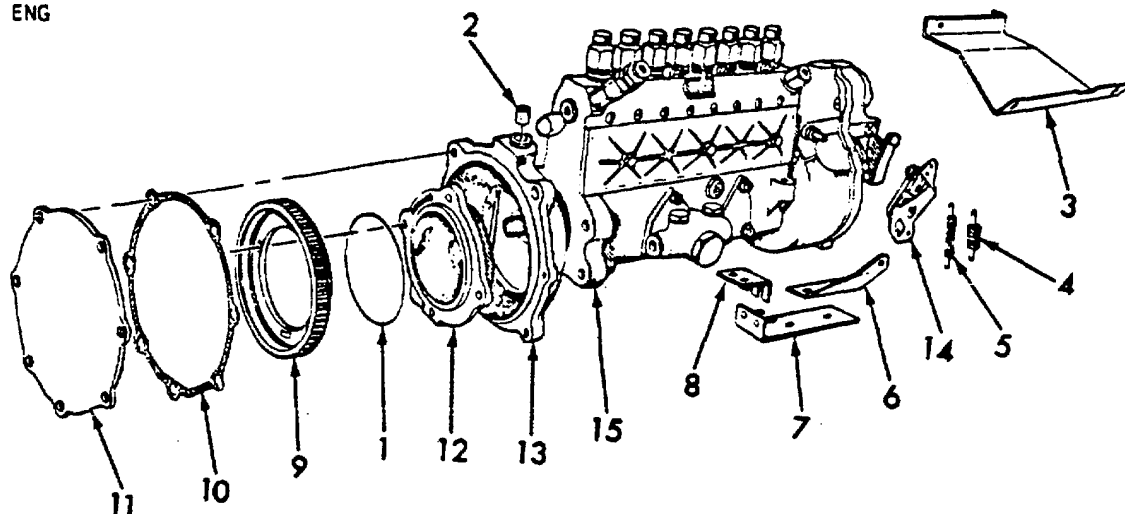
PRINTED IN THE UNITED STATES OF AMERICA



GROUP 12

FIG. 12-100

PUMP, FUEL INJECTION DRIVE
AND MTG
9.0L ENG



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
1	489 244 C1	GASKET, INJECTION PUMP ADAP TO FRT COVER		1		12		HUB		1	
2	444 705	PLUG, PIPE 1/2NFT ADAPTER		1				NOT SERVICED SEPARATELY			
3	570 995 C1	BRACKET, ACCEL CON		1		13		ADAPTER		1	
4	466 227 C1	SPRING, RETURN ACCEL -OUTER-		1				SEE FUEL INJECTION PUMP			
5	493 985 C1	SPRING, RETURN ACCEL -INNER-		1		14	1700 392 C92	LEVER, THROTTLE, ASSY		1	
6	1700 412 C1	BRACKET, SPG ANCHOR		1		15		PUMP		1	
6	25 493 R1	BOLT, HEX-HD 5/16NC X 1		2				SEE FUEL INJECTION PUMP			
6	5/16 R	WASHER, LK 5/16		2							
7	1700 033 C1	BRACKET, W/STUDS, INJECTION PUMP SUPT		1							
7	25 522 R1	NUT, HEX-HD 3/8NC		2							
7	25 709 R1	WASHER, FLAT 3/8		2							
8	1700 034 C1	BRACKET, INJECTION PUMP SUPT		1							
8	24 840 R1	BOLT, HEX-HD 3/8NC X 1		2							
8	25 709 R1	WASHER, FLAT 3/8		2							
8	3/8 R	WASHER, LK 3/8		2							
9		GEAR, INJECTION PUMP DR NOT SERVICED SEPARATELY SEE CRANKCASE AND RELATED PARTS		1							
9	24 840 R1	BOLT, HEX-HD 3/8NC X 1		4							
9	25 553 R1	WASHER, FLAT 13/32 HARDENED		4							
10	489 239 C2	GASKET, INJECTION PUMP DR COVER		1							
11	489 240 C1	COVER, INJECTION PUMP DR		1							
11	26 677 R1	DAN 5450052		7							
11	5/16 R	BOLT, HEX-HD 5/16NC X 3/4		7							
		WASHER, LK 5/16		7							

PRINTED IN THE UNITED STATES OF AMERICA

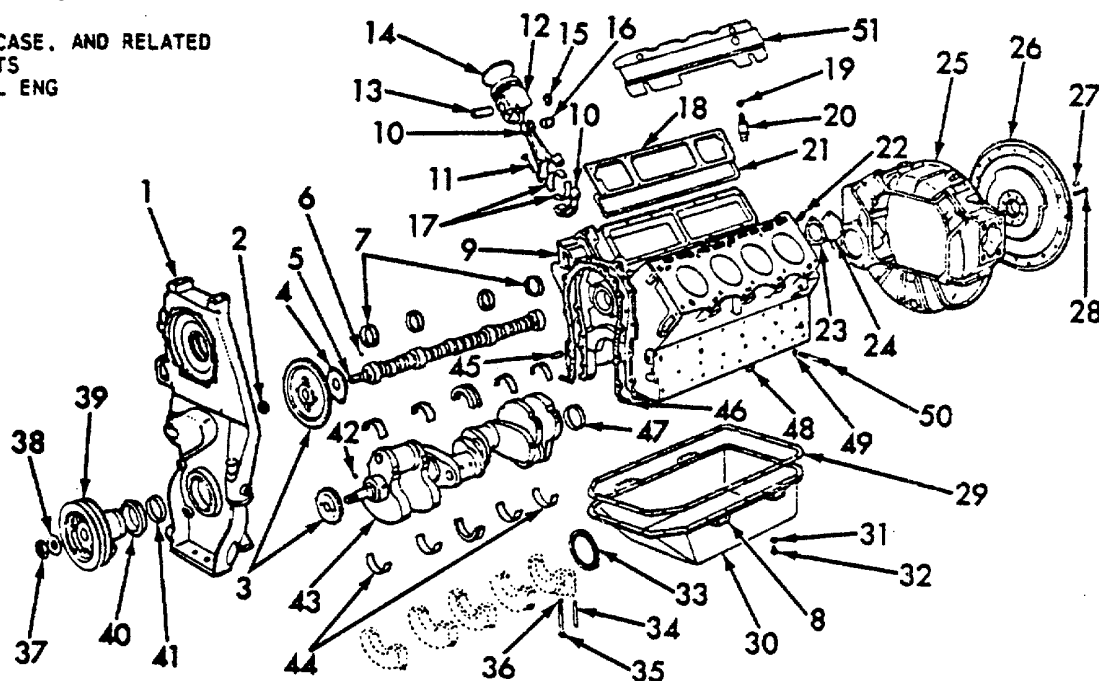
MISSING ITEM NUMBERS ARE NOT USED



MT-145 ENGINES

GROUP 12

FIG. 12-101

CRANKCASE, AND RELATED
PARTS
9.0L ENG

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STRK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	489 202 C3	COVER, CRKCASE FRT	1		9	444 577	PLUG, SQ-HD 1/4 DRAIN	2
1		BOLT, HEX-HD			10	489 301 C91	ROD, CONN -INCLUDES ITEM NOS. 11 AND 16-	8
1	27 347 R1	3/8NC X 1-1/8	2		11	351 008 C2	BOLT, BRG CAP	16
1	21 318 R1	3/8NC X 2-1/2	4		11	259 056 C1	NUT, BRG CAP	16
1	275 804 R1	3/8NC X 3	4		11	281 878 C1	WASHER, BRG CAP	16
1	3/8 R	WASHER, LK 3/8 REGULAR	6		12		PISTON, W/ PIN AND RING	8
1	398 197 C1	INDICATOR, TIMING	1		12	1700 236 C92	STANDARD SIZE	
1	438 159	EAT 90894	1		12	1700 237 C92	.010 O/S	
2		PLUG, PIPE 1/2 SQ-HD			12	1700 238 C92	.020 O/S	
2	215 617 R1	NUT, HEX JAM INF	1		12	1700 239 C92	.030 O/S	
2	25 550 R1	WASHER, FL 1 REGULAR	1		13	427 231 C1	PIN, PISTON	8
3	1700 456 C91	GEAR SET, CRKSHFT, CAMSHFT AND FUEL INJECTION PUMP OR GEAR	1		14		RING SET, PISTON -INCLUDES 3 RINGS-	8
3	489 226 C1	SPACER, CRKSHFT GEAR	1		14	434 466 C93	STANDARD SIZE	
3	489 182 C1	SPACER, CAMSHAFT GEAR	1		14	434 467 C93	.010 O/S	
4	133 564 R1	FLANGE, THRUST	1		14	434 468 C93	.020 O/S	
4	70 425 R1	BOLT, HEX-HD LK 3/8NC X 3/4	2		14	434 469 C93	.030 O/S	
5	489 172 C1	CAMSHAFT, ASSY	1		15	160 094 R1	RING, RET	16
6	431 787	KEY, WOODRUFF 3/16 X 5/8	1		16	427 218 C1	BUSHING, PIN	6
7	448 139 C92	BEARING SET, CAMSHAFT	1		17		BEARING, CONN ROD	8
8	1700 510 C1	BRACKET, W/NUT, OIL PAN NOISE COVER	4		17	1700 248 C91	STANDARD SIZE	
8	25 492 R1	BOLT, HEX-HD 5/16NC X 7/8	8		17	1700 702 C91	.010 O/S	
8	25 708 R1	WASHER, FL 5/16	8		17	1700 703 C91	.020 O/S	
8	5/16 R	WASHER, LK 5/16 REGULAR	8		17	1700 704 C91	.030 O/S	
9	489 083 C92	CRANKCASE, ASSY -INCLUDES ITEM NOS. 7, 19, 20, 22, 23, 24-	8		18	133 575 R3	COVER, TAPPET, ASSY	2
9					18	282 245 C1	BOLT, HEX-HD 5/16NC X 5/8	28
9	17 244 R1	PIN, SLOTTED SPG	4		19	26 114 HO	CAP, BUSH, UPR	1
9	444 612	PLUG, PIPE HEX-HD 1/8	4		19	891 524 R1	GASKET, CAP	1
9	444 618	PLUG, PIPE HEX-HD 1/4	4		20	283 053 C3	BUSHING, OIL PUMP AND TACH SHFT -UPPER-	1
9	438 159	EAT 90894	2		21	133 577 R4	GASKET, TAPPET COVER	2
		PLUG, PIPE SQ-SKT 1/2			22	133 452 R1	SLEEVE, DOWEL	
					23	258 168 C1	GASKET, COVER PLATE	
					24	258 091 C3	PLATE, CAMSHAFT COVER	

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

**MT-145
ENGINES**



GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-101			47	339 965 C1	SLEEVE, CRKSHFT WEAR	1	
		CRANKCASE, AND RELATED PARTS			48	312 942 C1	PLUG, EXPANSION	6	
		9.0L ENG			49	345 466 C1	WASHER, CRKCASE TIE BOLT	10	
					50	277 167 C1	BOLT, CRKCASE TIE	10	
					51		COVER, SOUND-TAPPET COVER	1	
							-ENGINE SERIAL NOS. 8960 TO 8966, 9006 AND UP-		
24	24 839 R1	BOLT, HEX-HD 3/8NC X 3/4	3		51	1700 813 C1	ODD BANK		
24	3/8 R	WASHER, LK 3/8 REGULAR	3		51	1700 833 C1	EVEN BANK		
25	483 458 C91	HOUSING, FLYWHEEL, ASSY	1		51	25 927 R1	BOLT, HEX-HD	7	
25	25 311 R1	BOLT, HEX-HD 9/16NC X 1-9/16	2		51	25 552 R1	WASHER, FL	7	
		W/O CODE 12836			51	1701 220 C1	GROMMET, -WILL WORK FOR 1700806C1 AND 469480C1-	7	
25	25 318 R1	R/S S29181	2						
		BOLT, HEX-HD 9/16NC X 2-1/4							
		W/O CODE 12836			489 228 C92	* PULLEY, CRSHAFT DAMPER		AR	
25	25 324 R1	BOLT, HEX-HD 9/16NC X 5-1/4	2						
25	26 610 R1	WASHER, FL 9/16	6						
25	17 158 R1	PIN, ROLL	2						
25	438 494 C1	PLATE, FLYWHEEL HSG COVER	1				* NON ILLUSTRATED		
25	483 461 C1	COVER, FLYWHEEL HSG	1						
25	25 752 R1	BOLT, HEX-HD 1/4NC X 1/2	3						
25	1/4 R	WASHER, LK 1/4 REGULAR	3						
25	446 839 C1	GASKET, LIQUID -5 OZ TUBE-	AR						
26	433 067 C92	FLYWHEEL, W/ RING GEAR	1						
26	258 125 C1	GEAR, FLYWHEEL RING	1						
27	18 265 R1	PIN, DOWEL	1						
28	414 052 C1	BOLT, FLYWHEEL TO CRKSHFT	7						
29		GASKET, OIL PAN	1						
29	448 428 C1	W/O CODE 12836							
30		PAN, W/ PLUG, OIL, ASSY	1						
30	494 377 C91	W/ 4 X 4, 6 X 6 MODELS							
30	282 245 C1	BOLT, HEX-HD 5/16NC X 9/16	15						
		-PAN TO CRANKCASE-							
31	1701 212 C1	GASKET, OIL PAN DRAIN PLUG	1						
		-WILL WORK FOR 3405H-							
32		PLUG, DRAIN HEX-HD 7/8							
32	445 096	STANDARD	1						
32	113 933 H	MAGNETIC -CODE 12781-	1						
33	317 749 C92	SEAL, CRKSHFT REAR BRG	1						
34	258 122 C1	SEAL, REAR BRG CAP	2						
35	258 061 C1	BOLT, 9/16NC X 4-1/2	10						
		-CRANKSHAFT BEARING CAP-							
36	258 180 C1	WASHER, CAP BOLT	10						
37	104 007 R1	NUT, CRKSHFT PULLEY	1						
38	116 451 H	WASHER, CRKSHFT PULLEY	1						
39	489 228 C92	PULLEY, CRKSHFT, ASSY	1						
40	282 131 C1	SLEEVE, CRKSHFT, PULLEY WEAR	1						
41	300 845 C91	SEAL, CRKSHFT, FRT OIL	1						
42	218 211	KEY, WOODRUFF 1/4 X 3/4	1						
43	1700 466 C91	CRANKSHAFT, W/BEARINGS, WEAR SLEEVES, ASSY 4-1/2	10						
44		BEARING, CRKSHFT	1						
44		BEARING NOS. 1, 2, 4, 5	4						
44	417 609 C1	STANDARD SIZE							
44	417 611 C1	.010 O/S							
44	417 612 C1	.020 O/S							
44	417 613 C1	.030 O/S							
44		BEARING NO. 3	1						
44	448 064 C92	STANDARD SIZE							
44	448 065 C92	.010 O/S							
44	448 066 C92	.020 O/S							
44	448 067 C92	.030 O/S							
45	141 260	DOWEL, 7/16 X 3/4	2						
46	348 714 C2	GASKET, FRT COVER	1						

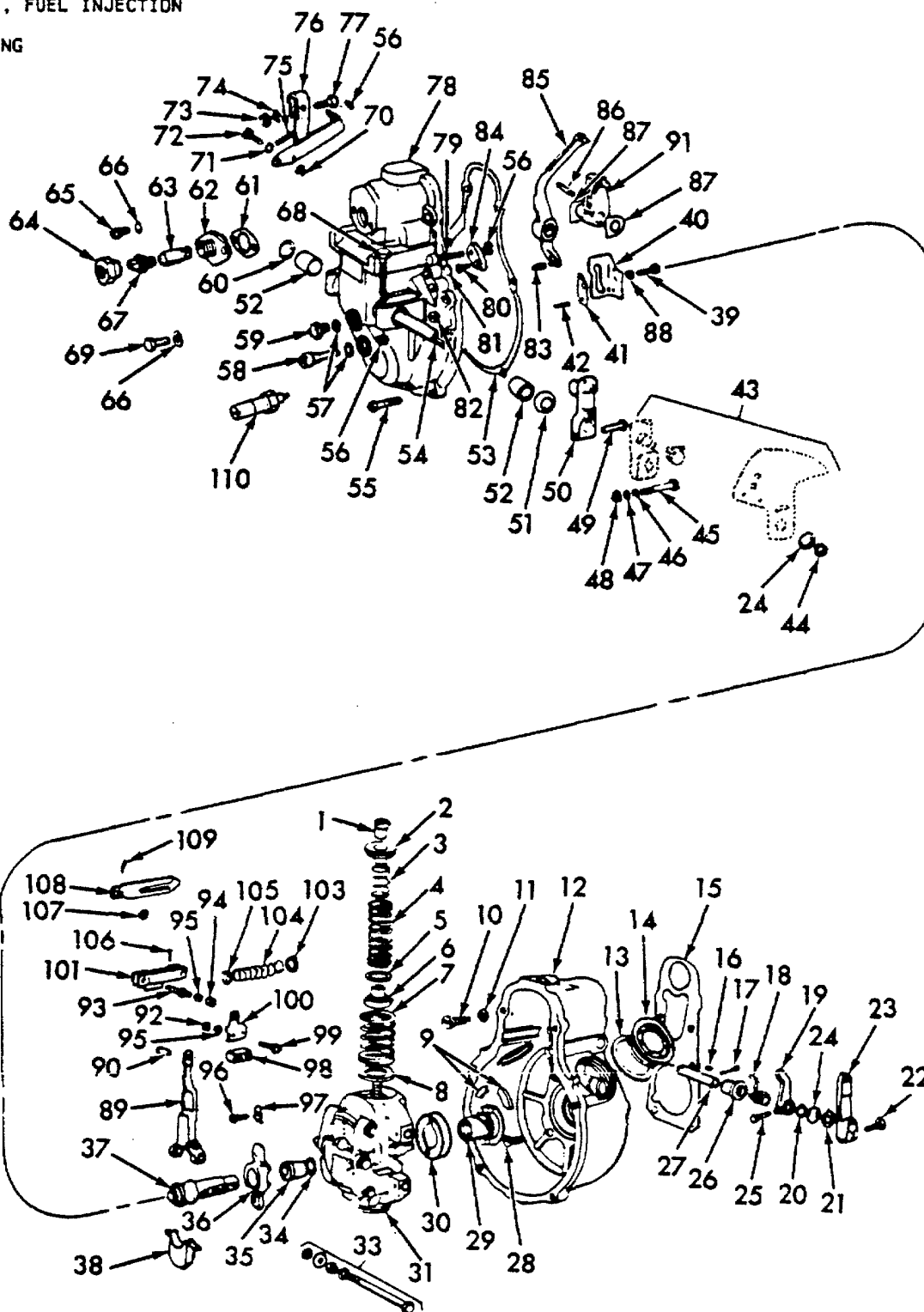
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-102

GOVERNOR, FUEL INJECTION
PUMP
9.0L ENG



**MT-145
ENGINES**



GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-102			34	397 677 C1	.081		
		GOVERNOR, FUEL INJECTION			34	397 678 C1	.083		
		PUMP			35	397 679 C1	NUT, GOV	1	
		9.0L ENG			36	397 703 C1	BUSHING, GOV	1	
					37	397 701 C1	PIN, GOV ADJ	1	
					38	397 702 C1	GUIDE, GOV PIN	1	
					39	30 194 R1	BOLT, GOV	1	
	1700 620 C91	GOVERNOR, ASSY	1		40	419 131 C1	BRACKET, CAM MTG	1	
					41		SHIM, GOV BRKT	AR	
1	1700 622 C1	NUT, CYL	2		41	397 773 C1	.008		
2	1700 621 C1	SEAT, SPG OUTER	2		41	397 774 C1	.012		
3	684 884 C1	SPRING, GOV MAXIMUM SPEED	2		41	397 776 C1	.020		
		INNER -WILL WORK FOR			41	397 775 C1	.032		
		397765C1-			42	397 777 C1	PIN, GOV	1	
3	1700 623 C1	SHIM, GOV INNER SPG	1		43	1700 392 C92	LEVER, W/CLAMP, GOV -ITEM	1	
4	397 764 C1	SPRING, GOV MAXIMUM SPEED	2				NOS. 44 THRU 48-		
		CENTER			44	934 030 R1	RING, SNAP	1	
5	397 769 C1	SHIM, GOV CENTER SPG	1		45	397 745 C1	BOLT, HEX-HD	1	
6		SEAT, GOV SPG	1		46	397 746 C1	WASHER, FLAT	1	
6	425 988 C1	INNER -WILL WORK FOR			47	680 201 C1	WASHER, LK	1	
		1700913C1-			48	397 748 C1	NUT, HEX	1	
		MUST ORDER 1701014C1			48	425 987 C1	WASHER, GOV LEVER CLAMP	1	
		OUTER SEAT					BOLT		
6	1701 014 C1	OUTER -WILL WORK FOR			49	670 879 C1	BOLT, CLAMP	1	
		1700913C1-			50	1700 921 C1	LEVER, GOV CON	1	
		MUST ORDER 425988C1			51	691 300 C1	SEAL, GOV SHAFT OIL	1	
		INNER SEAT			52	397 725 C1	BUSHING, GOV SHAFT	2	
7	684 872 C1	SPRING, GOV, IDLE OUTER	2		53	1700 923 C1	GASKET, GOV HSG	1	
		-WILL WORK FOR 684302C1-			54	1700 632 C1	SHAFT, GOV	1	
8		SHIM, GOV IDLE OUTER SPG	1		55	691 301 C1	SCREW, COVER	6	
8	1700 914 C1	.012			56	933 985 R1	NUT, HEX	2	
8	397 771 C1	.020			57	933 697 R1	GASKET	1	
9	397 682 C1	BUMPER, GOV WEIGHT	4		58	397 749 C1	SCREW, GOV	1	
10	397 699 C1	SCREW	1		59	625 565 C1	PLUG, GOV OIL	1	
11	933 983 R1	WASHER, LK	1		60	397 738 C1	PLUG, GOV	1	
12	1700 579 C91	HOUSING, GOV	1		61	397 818 C1	GASKET, CON RACK STOP	1	
12	439 184 C1	PLUG, HEX-SOCKET-HD 1 IN.	1		62	1700 582 C91	STOP, CON RACK, ASSY -ITEM	1	
13	397 721 C1	GASKET, GOV HSG PLUG	2				NOS. 63, 64, 67, 108,		
14	397 720 C1	PLUG, GOV HSG	2				109-		
15	397 722 C2	GASKET, GOV TO PUMP	1		62	1700 637 C1	FLANGE, CON RACK STOP	1	
16	397 695 C1	KEY, WOODRUFF	1		63	425 990 C1	PIN, CON RACK STOP	1	
17	397 694 C1	PIN, COTTER	2		64	425 991 C1	NUT, CON RACK STOP ADJ	1	
18	1700 627 C1	SPRING, GOV LEVER	1				SCREW		
19	1700 626 C1	LEVER, GOV	1		65	439 189 C1	SCREW, GOV	1	
20	1802 048 C1	O-RING, GOV	2		66	433 987 R1	WASHER, LK	2	
21	397 693 C1	SHIM, GOV LEVER	1		67	425 993 C1	SCREW, CON RACK STOP ADJ	1	
22	397 697 C1	BOLT, GOV CON LEVER	1		68	397 735 C1	BOLT, GOV	1	
23	397 696 C1	LEVER, GOV CON	1		69	425 992 C1	SCREW, SPEC	1	
24	691 083 C1	WASHER, SPACING	2		70	406 409 C1	WASHER, SPACING	1	
25	397 689 C1	SCREW, SET	1		71	406 411 C1	WASHER, LK	3	
26	1700 915 C1	BUSHING, GOV SHAFT	2		72	406 408 C1	BOLT, MTG	2	
27	1700 625 C1	SHAFT, GOV	1		73	397 792 C1	NUT, SPEC	1	
28	1700 916 C1	SCREW, GOV MTG	6		74	406 411 C1	WASHER, LK	1	
29	1802 061 C1	HUB, GOV	1		75	1700 925 C1	SCREW, SPEC -SLOTTED-	1	
30	684 108 C1	RETAINER, GOV WEIGHT	1		76	1700 583 C1	LEVER, ASSY -ITEM NOS. 70	1	
31	1802 056 C91	WEIGHT, GOV FLYWHEEL -ITEM	1				THRU 72, 77-		
		NOS. 1 THRU 8, 32-			77	406 408 C1	BOLT, MTG	1	
33	397 643 C91	BOLT, W/NUTS AND WASHER,	1		78	1700 631 C91	COVER, ASSY -ITEM NOS. 39	1	
		GOV					THRU 43, 49 THRU 52, 54,		
34		WASHER, GOV NUT	AR				56, 57, 59, 68, 82, 83,		
							85 THRU 88, 91-		
34	397 668 C1	.063			79	397 751 C1	SCREW, STOP	1	
34	397 669 C1	.065			79	933 988 R1	NUT, LK	1	
34	397 670 C1	.067			80	684 858 C1	SCREW, SPEC	1	
34	397 671 C1	.069			81	397 755 C1	SEAL, BAR SC	1	
34	397 672 C1	.071			82	932 618 R1	KEY, WOODRUFF	1	
34	397 673 C1	.073			83	397 783 C1	SPRING, LEVER	1	
34	397 674 C1	.075			84	1700 636 C1	BAR, SECURING	1	
34	397 675 C1	.077			85	397 782 C1	LEVER, GOV ROCKER	1	
34	397 676 C1	.079			86	397 731 C1	PIN, GOV LEVER	1	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



MT-145
ENGINES

GROUP 12

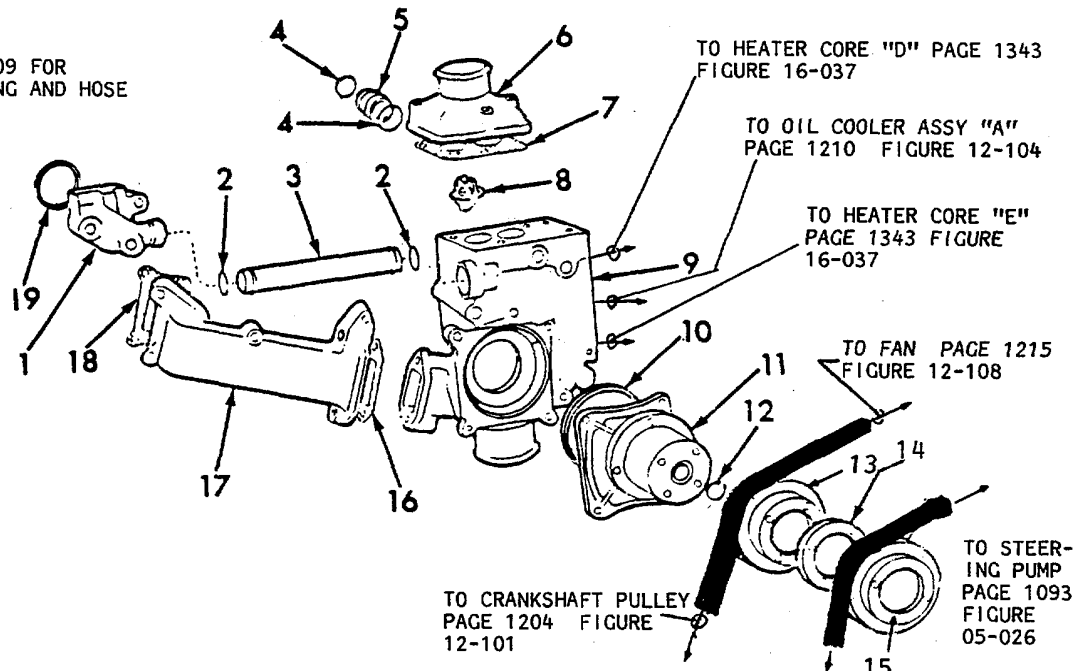
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 12-102							
		GOVERNOR, FUEL INJECTION PUMP 9.0L ENG							
87	397 730 C1	WASHER, GOV LEVER	2						
88	1700 920 C1	PLATE, LK	2						
89	397 706 C1	LEVER, GOV	1						
90	1700 581 C1	PIN, LEVER	1						
90	1700 629 C1	PIN, COTTER	1						
91	1700 633 C1	LEVER, GOV ASSY	1						
92	397 713 C1	NUT, HEX	1						
93	1700 580 C1	PIN, GOV	1						
94	397 813 C1	NUT, HEX	1						
95	933 986 R1	WASHER, LK	2						
96	397 704 C1	BOLT, LK PLATE	2						
97	397 705 C1	PLATE, LK	2						
98	468 963 C1	BAR, SPACER BRKT	1						
99	397 711 C1	BOLT, BRKT	1						
100	1700 630 C1	BRACKET, GOV	1						
101	468 962 C1	LINK, GOV LEVER	1						
101	1700 917 C1	SCREW, LINK ADJ	1						
101	30 281 R1	NUT, SC	1						
101	933 987 R1	WASHER, LK	1						
103	397 719 C1	RING, GOV SPG GUIDE	1						
104	397 717 C1	SPRING, GOV	1						
105	397 718 C1	SEAT, GOV SPG	1						
106	1700 629 C1	PIN, COTTER	1						
107	1700 912 C1	PIN, GUIDE	1						
108	1700 924 C1	LINK, STOP	1						
109	1700 926 C1	PIN, STOP	1						
110	1700 030 C91	DAMPER, SURGE	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 12-103

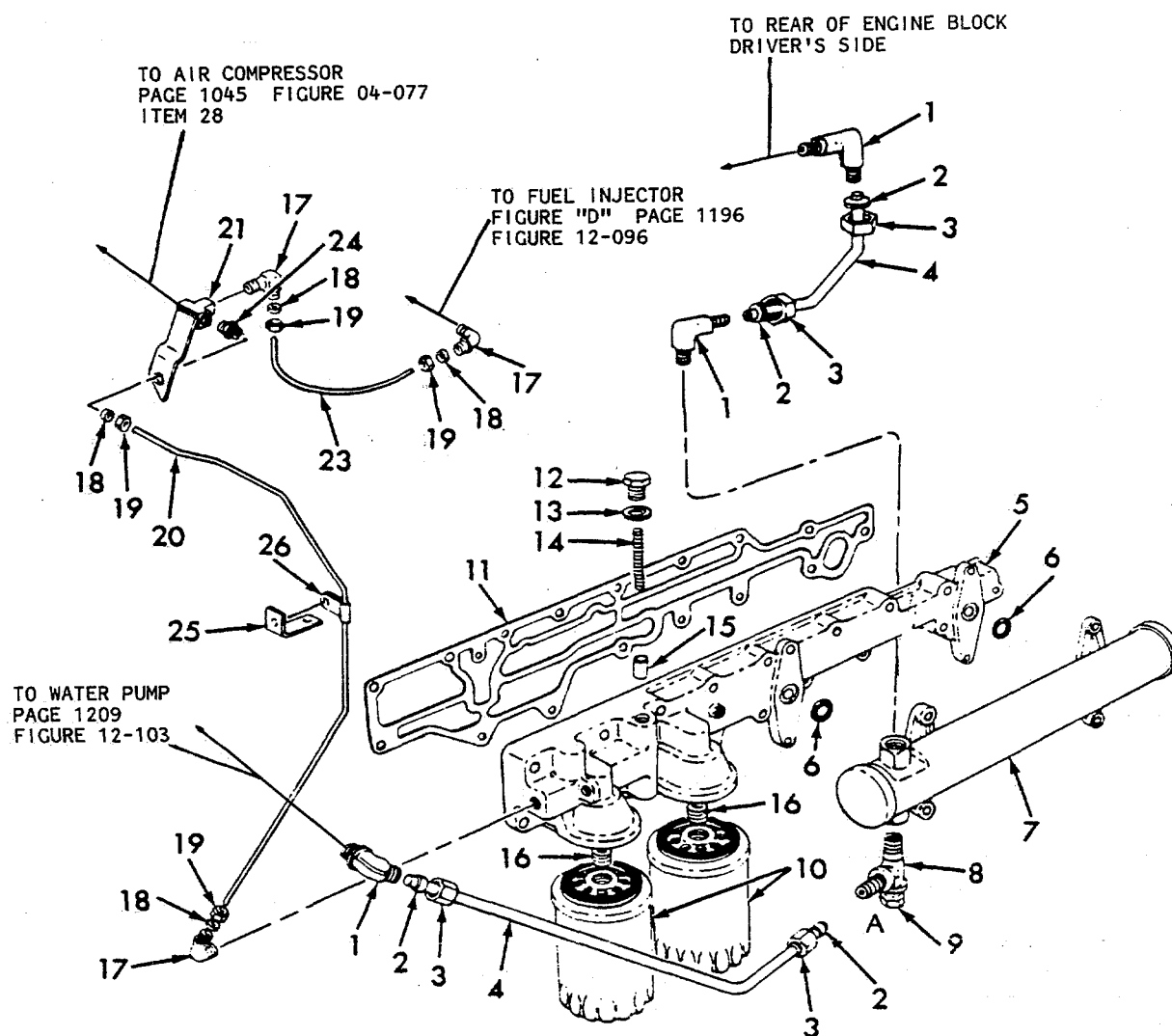
PUMP, WATER OUTLET AND
THERMOSTAT
9.0L ENGSEE FIGURE 12-109 FOR
ADDITIONAL TUBING AND HOSE
ROUTING

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1	489 198 C4	OUTLET, WATER, ASSY	1		11	1700 594 C91	PUMP, WATER ASSY W/HUB AND GASKET	1	
1	24 842 R1	BOLT, HEX-HD 3/8NC X 1-3/4	2		11	25 228 R1	R/S S2561	4	
1	3/8	WASHER, LK 3/8 REGULAR	2		11	5/16	BOLT, HEX-HD 5/16NC X 3/4	4	
1	444 632	PLUG, HEX-HD 1/2NPT	1		11	1700 158 C1	WASHER, LK 5/16 REGULAR	1	
2	293 739 R1	O-RING, WATER RETURN, RIGHT	2		12		HUB, WATER PUMP	1	
3	489 191 C2	TUBE, WATER RETURN, RIGHT	1		12		NOT USED		
4	293 739 R1	O-RING, WATER RETURN, LEFT	2		13	489 189 C1	PULLEY, WATER PUMP OR	1	
5	489 192 C3	TUBE, WATER RETURN, LEFT	1		13	27 587 R1	BOLT, 12 PT 5/16NC X 1	4	
6	489 194 C1	HOUSING, THERMO	1		13	5/16	WASHER, LK 5/16 REGULAR	4	
6	24 621 R1	BOLT, HEX-HD 3/8NC X 2-1/2	3		14	1700 155 C1	SPACER, ACCESSORY OR	1	
6	3/8	WASHER, LK 3/8 REGULAR	3		15	489 190 C1	-W/POWER STEERING OR		
7	489 193 C1	GASKET, THERMO HSG	1		15	27 587 R1	PULLEY, ACCESSORY OR	1	
8	258 087 C91	THERMOSTAT, ASSY -180 DEGREES-	1		16	549 917 C2	BOLT, 12 PT 5/16NC X 1	4	
9	489 308 C91	HOUSING, WATER PUMP, ASSY	9		17	489 195 C1	GASKET, ELIMINATOR LIQUID	AR	
9	25 501 R1	BOLT, HEX-HD 3/8NC X 3-3/4	1		17	140 483 H	MANIFOLD, WATER PUMP TO		
9	25 784 R1	BOLT, HEX-HD 3/8NC X 4-1/4	4		17	24 843 R1	CRKCASE		
9	3/8	WASHER, LK 3/8 REGULAR	5		17	3/8	BOLT, HEX-HD 3/8NC X 1-1/4	1	
9	445 686	R/S P16	1		18	348 713 C1	BOLT, HEX-HD 3/8NC X 2	3	
9	444 632	PLUG, SQ-HD 3/8NPT	1		19	1701 207 C1	WASHER, LK 3/8 REGULAR	4	
9	444 788	PLUG, HEX-SOC 1/2NPT	5				GASKET, WATER MANIFOLD	1	
9	273 469	PLUG, HEX-SOC 3/4NPT	1				GASKET, WATER OUTLET TO	1	
9	549 917 C2	GASKET, ELIMINATOR LIQUID	1				CRKCASE -WILL WORK FOR		
9	367 972 C92	-HOUSING TO CRANKCASE-					258168C1-		
9	864 445 R1	VALVE, WATER SHUT-OFF	2						
9	444 655	-HEATER- -1853FC MODEL-							
9	444 687	NIPPLE, 3/4NPT X 100	1						
10	1701 264 C1	PLUG, PIPE 1/4	2						
		PLUG, PIPE 1/8	1						
		GASKET, WATER PUMP MTG	1						
		-WILL WORK FOR 258169C1-							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

COOLER, OIL FILTER
9.0L ENG



MT-145
ENGINES



GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 12-104 COOLER, OIL FILTER 9.0L ENG							
1	447 988 C1	ELBOW, 90 DEG 5/8 TUBE X 1/2NPT	3						
2	291 789 R1	SLEEVE, FLEX 5/8 TUBE	4						
3	291 788 R1	NUT, FLEX 5/8 TUBE	4						
4	995 509 R1	+ TUBING, 5/8OD WATER INLET AND OUTLET	2						
5	1700 265 C91	BASE, ASSY OIL COOLER -ITEM NOS. 12 TO 16-	1						
5	24 840 R1	BOLT, HEX-HD 3/8NC X 1	3						
5	24 841 R1	BOLT, HEX-HD 3/8NC X1-1/2	2						
5	24 843 R1	BOLT, HEX-HD 3/8NC X 2	11						
5	25 709 R1	WASHER, FLAT 3/8	16						
5	444 612	PLUG, HEX-HD 1/8NPT PIPE	1						
5	444 618	PLUG, HEX-HD 1/4NPT PIPE	1						
6	427 884 C1	RING, SEAL	2						
7	417 858 C92	COOLER, OIL ASSY	1						
7	24 840 R1	BOLT, HEX-HD 3/8NC X 1	4						
7	3/8 R	WASHER, LK 3/8	4						
8	448 426 C1	ELBOW, 90 DEG 1/2NPT X 5/8 TUBE	1						
9	445 684	R/S PLD6271 R/S P12	1						
		PLUG, SQ-HD 1/8NPT PIPE							
10	427 207 C2	FILTER, OIL, ASSY	2						
11	448 427 C1	GASKET, BASE	11						
12	61 263 VA	PLUG, HEX-HD 7/8	1						
13	105 456	GASKET, ANNULAR 7/8	1						
14	428 044 C1	SPRING, PISTON RELIEF VALVE	1						
15	133 735 R1	PISTON, RELIEF VALVE	1						
16	481 863 C1	ADAPTER, FILTER TO BASE	1						
17	322 296 C1	ELBOW, 90 DEG TUBE	3						
18	144 526 H1	SLEEVE, 3/16 TUBE	4						
19	681 180 R1	NUT, FLEX 3/16 TUBE	4						
20	990 093 C1	+ TUBE, 3/16OD COOLER TO TEE	1						
21	1700 837 C1	TEE, W/BACKET, LUBE OIL	1						
23	990 093 C1	+ TUBE, 3/16OD PUMP TO TEE	1						
24	322 292 C1	CONNECTOR, 3/16 TUBE X 1/8 TUBE	1						
25	148 404 R1	CLIP, EXT	1						
25	25 493 R1	BOLT, HEX-HD 5/16NC X 1	1						
26	299 398 C1	CLAMP, CLOSED 3/16 DIA	1						
26	25 752 R1	BOLT, HEX-HD 1/4NC X 1/2	1						
26	25 519 R1	NUT, HEX-HD 1/4	1						
26	1/4 R	WASHER, LK 1/4 REGULAR	1						
		+ PART NO. COVERS ONE FOOT BULK MATERIAL							

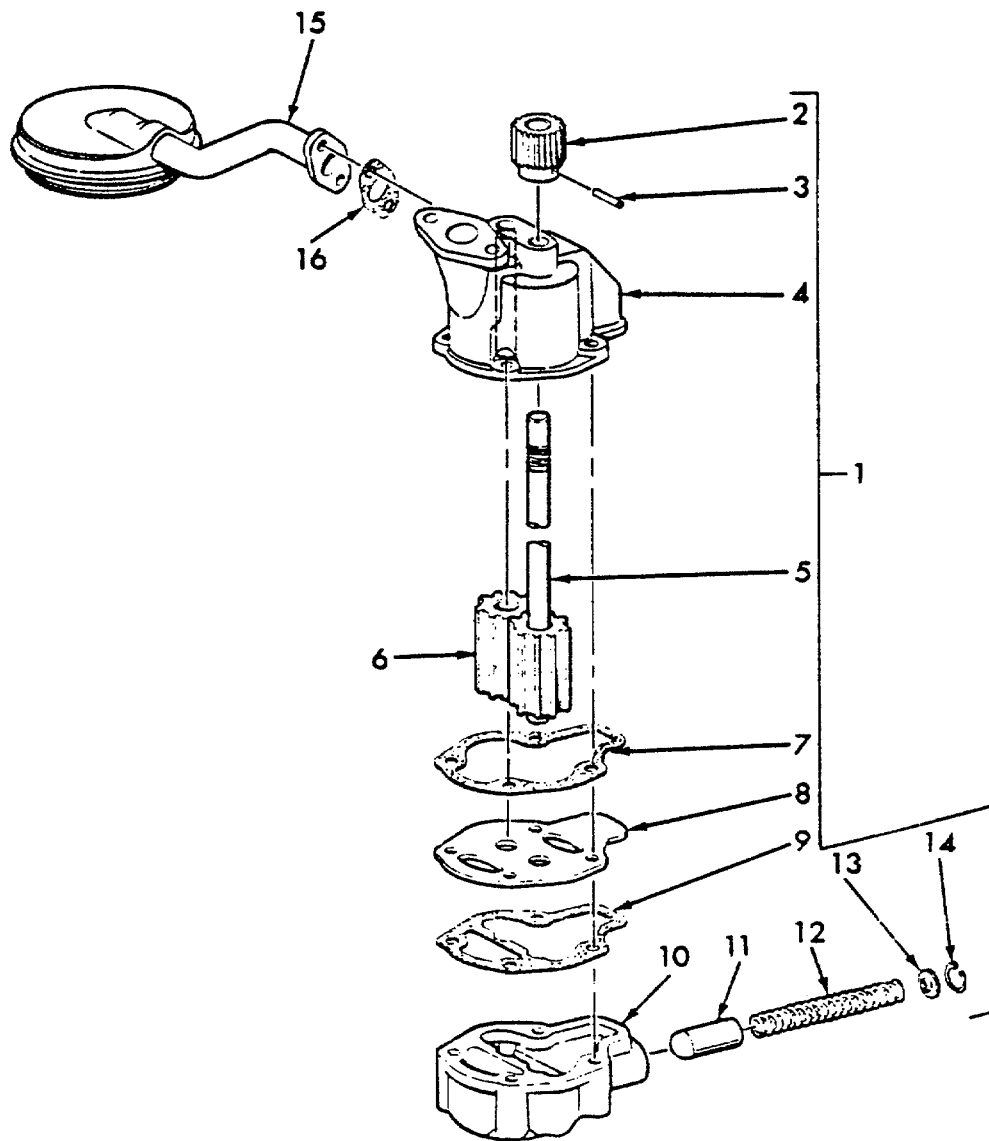
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-105

PUMP, OIL
9.0L ENG



MT-145
ENGINES



GROUP 12

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 12-105							
		PUMP, OIL							
		9.0L ENG							
1	476 145 C91	PUMP, OIL, ASSY	1						
1	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	2						
1	384 891 C2	BOLT, SHOULDER	1						
1	25 522 R1	NUT, HEX 3/8-16	1						
1	3/8 R	WASHER, LK 3/8 REGULAR	2						
2		GEAR	1						
		NOT SERVICED							
		SEPARATELY							
3		PIN	1						
		NOT SERVICED							
		SEPARATELY							
4		BODY, W/SHAFT	1						
		NOT SERVICED							
		SEPARATELY							
5		SHAFT, OIL PUMP DR	1						
		NOT SERVICED							
		SEPARATELY							
6		GEAR, OIL PUMP DR AND	2						
		IDLER							
		NOT SERVICED							
		SEPARATELY							
7	258 140 C1	GASKET, PLATE TO BODY	AR						
8		PLATE, COVER	1						
		NOT SERVICED							
		SEPARATELY							
9	258 138 C1	GASKET, PLATE TO COVER	1						
10		COVER, OIL PUMP BASE	1						
		NOT SERVICED							
		SEPARATELY							
10	25 234 R1	BOLT, HEX-HD 5/16NC X	4						
		2-1/4							
10	5/16 R	WASHER, LOCK 5/16	4						
11	283 759 C1	VALVE, OIL PRESSURE RELIEF	2						
12	283 757 C1	SPRING, RELIEF VALVE	2						
13	384 593 C1	GUIDE, SPG	2						
14	243 019 R1	RING, RETAINER	2						
15	476 139 C3	TUBE, OIL PICK UP FLOAT	1						
15	25 492 R1	BOLT, HEX-HD 5/16NC X 7/8	2						
15	5/16 R	WASHER, LK 5/16	2						
16	479 687 C1	GASKET, OIL PICKUP MTG	1						

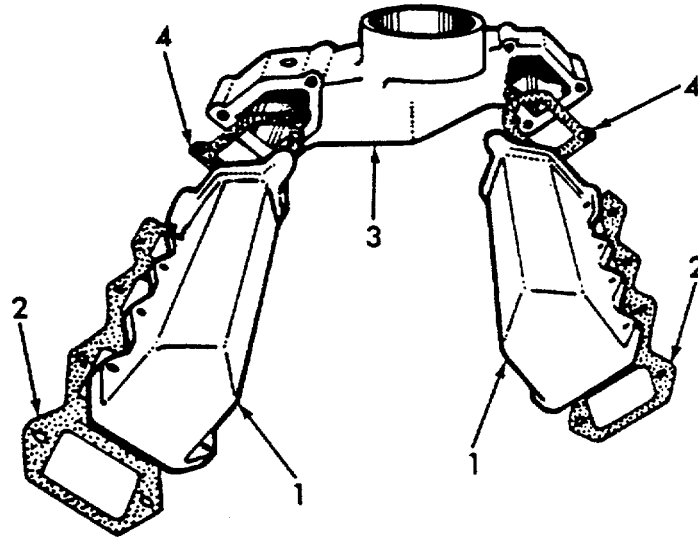
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-107

MANIFOLD, INTAKE AND
CROSSOVER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	489 166 C2	MANIFOLD, INTAKE	2						
1	24 841 R1	BOLT, HEX-HD 3/8NC X 1-1/2	16						
1	1 597	WASHER, FLAT 3/8 SPEC	14						
2	489 159 C1	GASKET, INTAKE MANIFOLD	2						
3	489 269 C93	CROSSOVER, INTAKE MANIFOLD	1						
3	25 234 R1	BOLT, HEX-HD 5/16NC X 2-1/4	2						
3	26 043 R1	BOLT, HEX-HD 5/16 NC X 3-3/4	4						
3	25 708 R1	WASHER, FLAT 5/16	4						
3	444 612	PLUG, HEX-HD 1/8NPT	1						
3	438 159	EAT 90894 PLUG, SQ-HD	1						
4	489 168 C1	GASKET, CROSSOVER TO MANIFOLD	2						

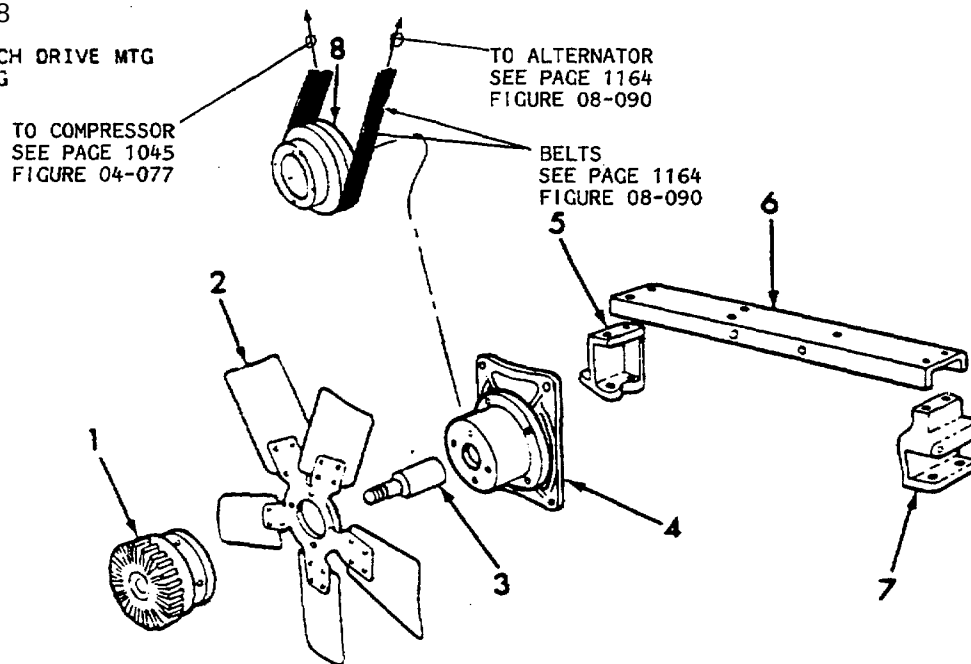
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-108

FAN, CLUTCH DRIVE MTG
9.0L ENG



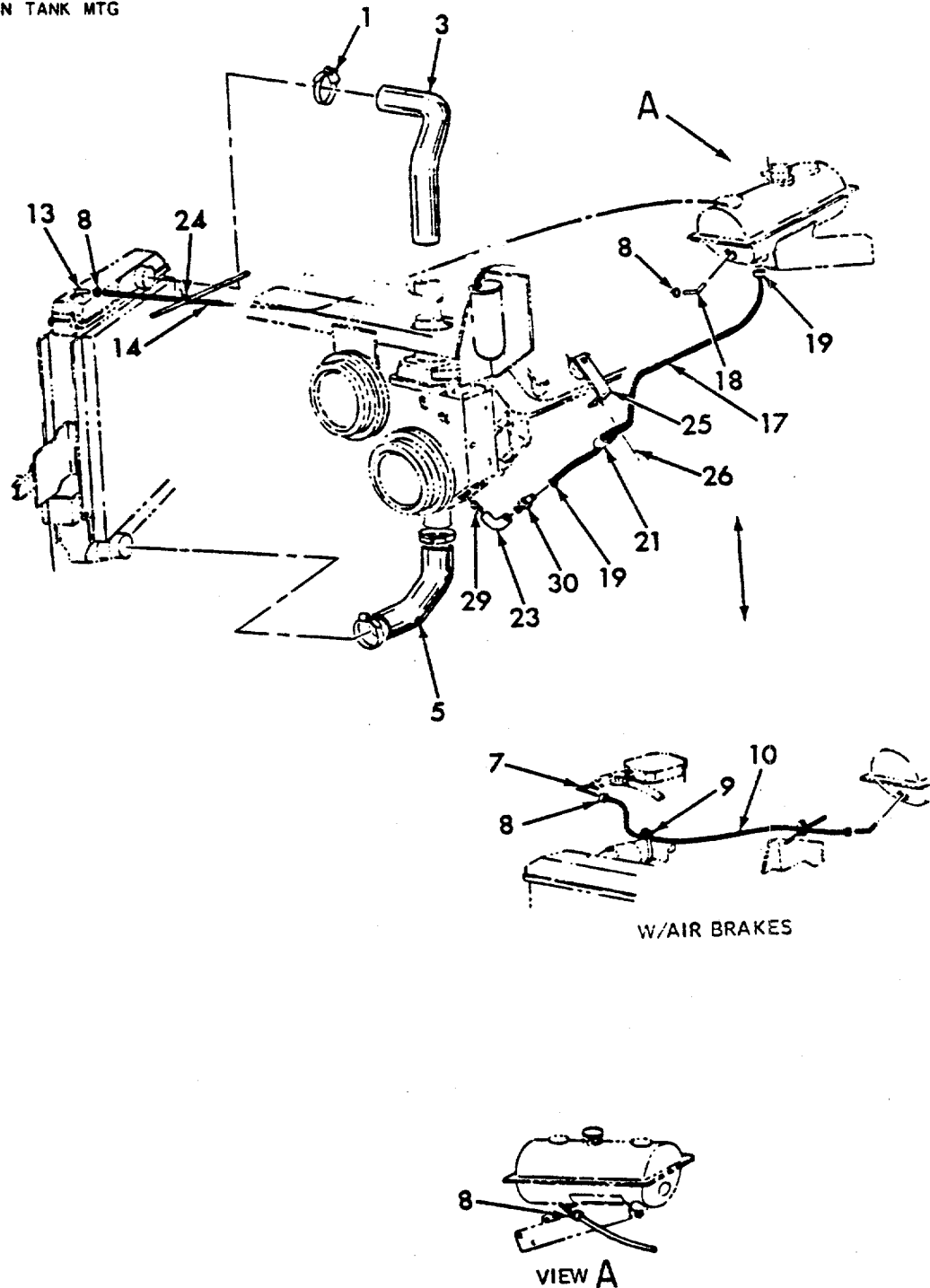
ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC
1	489 271 C1	DRIVE, FAN ASSY	1						
1	25 521 R1	NUT, HEX 5/16NF	4						
1	5/16 R	WASHER, LOCK 5/16	4						
1	50 705 DA	STUD, 5/16NC X 1-1/4	4						
1	1700 707 C1	FAN, ASSY	1						
2	24 839 R1	BOLT, HEX-HD 3/8NC X 3/4	4						
2	3/8 R	WASHER, LOCK 3/8	4						
3	1700 156 C91	BEARING, ASSY	1						
3	269 181 R1	RING, RETAINER	1						
4	1700 720 C92	DRIVE, W/HUB AND PULLEY, FAN ASSY	1						
4	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	4						
4	25 522 R1	NUT, HEX 3/8NC	2						
4	3/8 R	WASHER, LOCK 3/8	4						
4	25 709 R1	WASHER, FLAT 3/8	2						
5	489 272 C1	BRACKET, ACCESSORY MTG, RT	1						
5	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	3						
5	3/8 R	WASHER, LOCK 3/8	3						
6	489 273 C1	BRACKET, ACCESSORY MTG	1						
6	24 890 R1	BOLT, HEX-HD 3/8NC X 1	4						
6	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	4						
6	25 709 R1	WASHER, FLAT 3/8	8						
7	489 312 C1	BRACKET, ACCESSORY MTG, LT	1						
7	140 483 H	BOLT, HEX-HD 3/8NC X 1-1/4	2						
7	3/8 R	WASHER, LOCK 3/8	2						
8	489 189 C1	PULLEY, FAN DRIVE	1						
8	27 586 R1	BOLT, 12 POINT 5/16NC X 3/4	4						
8	5/16 R	WASHER, LOCK 5/16	4						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 12-109

HOSEING, RADIATOR AND
DEAERATION TANK MTG
9.0L ENG

MT-145
ENGINES



GROUP 12

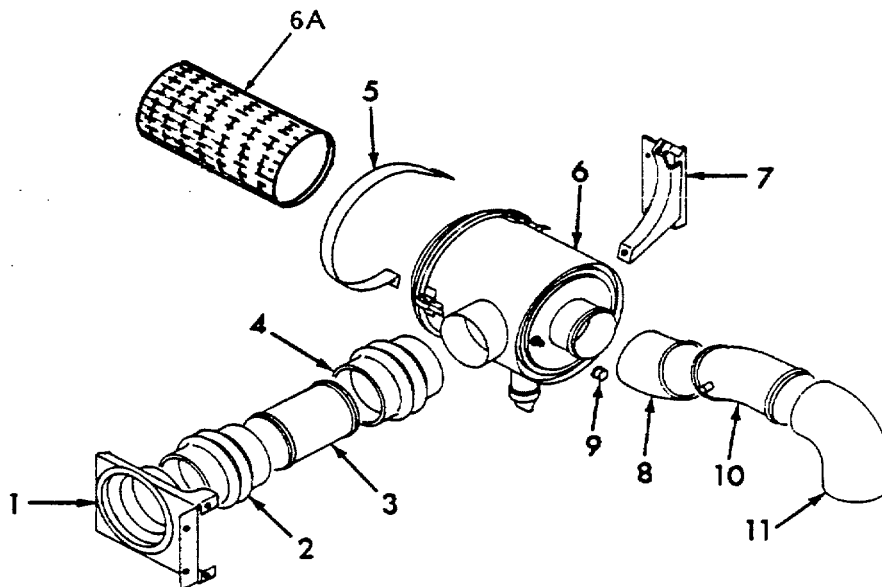
ITEM NO.	PART NUMBER	DESCRIPTION	V	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	V	QTY	REC STK
		FIG. 12-109									
		HOSING, RADIATOR AND DEAERATION TANK MTG 9.0L ENG									
1	279 029 R91	CLAMP, NO. 48		4							
3	571 963 C1	HOSE, UPPER		1							
3	571 946 C1	HOSE, UPPER-SILICONE		1							
5	494 229 C92	HOSE, LWR		1							
5	533 469 C2	HOSE, LWR SILICONE		1							
7	482 731 C1	ELBOW, 90DEG 1/4NPT X 1/4OD		1							
8	279 025 R91	CLAMP, HOSE		4							
8	27 860 R1	CLAMP, HOSE NO. 6		5							
9	380 300 R1	STRAP, LK		1							
10	382 997 C1	+ HOSE		1							
		W/ATR BRAKES									
11		EXTENSION, CLIP MAKE LOCALLY	N	1							
12	299 566 C1	CLAMP, 11/16 OD HOSE	N	1							
13	465 108 C1	ELBOW, SPECIAL		1							
14	364 357 C1	+ HOSE	M	1							
14		HOSE MAKE LOCALLY		1							
17	364 361 C1	+ HOSE		1							
17	512 349 C1	+ HOSE		1							
18	321 276 C1	ELBOW, 45DEG 1/4NPT X 1/4OD		1							
19	311 164 C91	CLAMP		2							
19	681 896 C1	CLAMP, NO. 20		2							
21	299 608 C1	CLAMP		1							
23	444 074	ELBOW, 90 DEG 3/4NPT		1							
24	289 862 C1	STRAP, LK		4							
25	390 193 C1	EXTENSION, CLIP		1							
26	25 222 R1	BOLT, HH 1/4-20 X 3/4		2							
29	192 082	NIPPLE, 3/4 PIPE THD X 1.5		1							
30	864 445 R1	NIPPLE, HOSE CONN 3/4PT X 1.0 ID HOSE		1							
9413 979		* NUT, LK 3/8-16		1							
1200 999 C1		* PIPE, RAD UPR 2.5 O.D. X 3.0 LONG		1							
413 680 C1		* HOSE, RAD UPR 2.5 I.D. X 4.75 LONG		1							
		* NON-ILLUSTRATED									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-110

CLEANER, AIR MTG AND
PIPING
9.0L ENGS

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		CAUTION-TO BE SURE THAT THE PROPER ELEMENT HAS BEEN SUPPLIED. THE LENGTH OF THIS ELEMENT SHOULD BE COMPARED WITH THE DEPTH OF THE HOUSING			6	492 921 C91	STANDARD COVER, AIR CLEANER	1	
					6	476 742 C1	ELEMENT, AIR CLEANER	1	
					6A	478 974 C1			
1	483 532 C2	BRACKET, AIR INTAKE	1						
1	25 228 R1	R/S S2561	4		6	496 716 C1	VALVE, EJECTION	1	
		BOLT, HEX HD 5/16NC X 3/4			7	482 736 C1	BRACKET, AIR CLEANER LEFT	1	
1	5/16	WASHER, LK 5/16 REG	4						
2		HOSE, BRKT TO PIPE W/O PRECLEANER			7	482 478 C1	RIGHT W/STANDARD		
2	586 552 C1	W/1600-1900	1						
2	371 677 R91	CLAMP, HOSE	2						
3		PIPE, AIR INTAKE							
3	482 757 C1	SPRINGFIELD BUILT	1						
4	319 119 C1	HOSE, AIR CLEANER TO PIPE	1		7	25 228 R1	R/S S2561	2	
4	371 677 R91	CLAMP, HOSE	1						
5	484 003 C2	STRAP, AIR CLEANER MTG	2		7	9413 994	BOLT, HEX HD 5/16NC X 3/4	AR	
5	454 467	BOLT, HEX HD 3/8NC X 1-3/4	2		7		NUT, HEX LK 5/16NC		
5	21 318 R1	BOLT, HEX HD 3/8NC X 2-1/2	2				INSULATOR, AIR CLEANER		
5	277 232 R1	BOLT, HEX HD 3/8NC X 2-3/4	2		7	593 394 C1	BRKT MTG SPRINGFIELD BUILT	2	
5	9413 979	NUT, HEX LK 3/8NC	2						
5	25 709 R1	WASHER, FL 3/8	2						
5		INSULATOR, AIR CLEANER							
5		STRAP MTG			8		HOSE, AIR CLEANER TO PIPE		
5	593 395 C1	SPRINGFIELD BUILT	2		8	501 482 C1	STANDARD	1	
6		CLEANER ASSY, AIR							
					8	327 094 R91	CLAMP, HOSE	2	
					9	105 410	CAP, 1/8-27NPT		
					10		PIPE, AIR CLEANER		

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

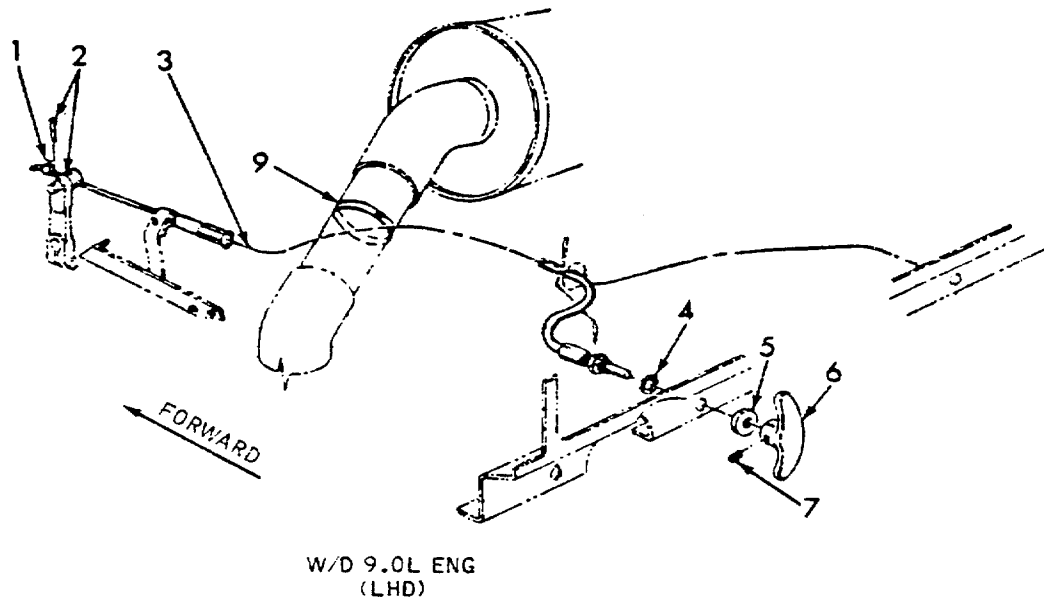
MT-145 ENGINES

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-112
ENGINE SHUTDOWN
W/D9.0L ENG



PRINTED IN THE UNITED STATES OF AMERICA

GROUP 12

MT-145
ENGINES

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 12-112							
		ENGINE SHUTDOWN							
		W/D9.OL ENG							
1	288 219 C1	STOP, CABLE WIRE	1						
1	436 747	SCREW, NO. 10-32 X 5/16	1						
		PAN HD							
2	109 420 R2	SWIVEL	1						
2	3/16	WASHER, FL 1/4	1						
2	449 787 C1	PIN, COTTER 1/16 X 3/4	1						
3	302 709 C92	CABLE, ENG SHUTDOWN	1						
4	7/16	WASHER, LK 7/16 MED	1						
5	363 423 C1	NUT, SPECIAL	1						
6	371 146 C1	KNOB, ENG SHUTDOWN CON	1						
7	370 782 C1	SCREW, SET	1						
9	386 170 C1	STRAP, CABLE LK	1						
		W/D9.OL LH DR							

PRINTED IN THE UNITED STATES OF AMERICA

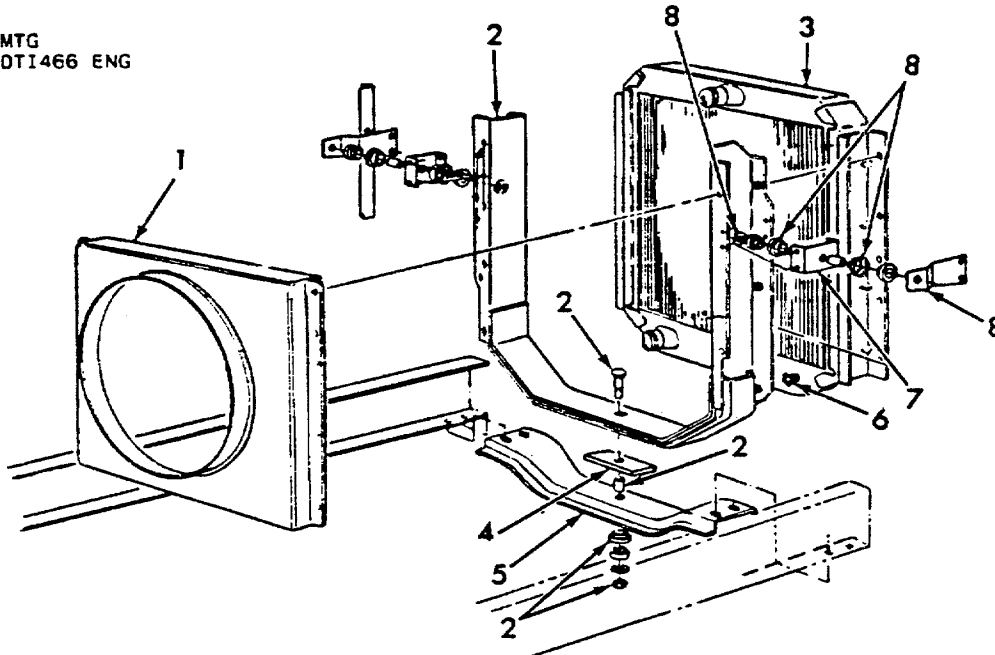
MISSING ITEM NUMBERS ARE NOT USED



GROUP 12

FIG. 12-115

RADIATOR, MTG
90, DT, DTI466 ENG



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	494 318 C3	SHROUD, FAN D9 OL ENG	1						
1	25 493 R1	BOLT, HEX HD 5/16-18UNC X 1.0	9		6	444 028	BUSHING, REDUCER 3/8PTF X 1/4PTF	1	
1	25 708 R1	WASHER, FLAT 5/16	9		7	572 532 C1	CHANNEL, RADIATOR SUPPORT	2	
1	5/16	WASHER, LOCK 5/16	9		7	25 493 R1	BOLT, HEX HD 5/16-18UNC X 1.0	8	
2	483 533 C5	SUPPORT ASSY, RADIATOR	1		7	9413 977	NUT, HEX LOCK 5/16-18UNC	8	
2	487 704 R1	SPACER	1		8	572 533 C2	BRACKET, RADIATOR MTG	4	
2	471 475 C1	RETAINER, INSULATOR	1		8	24 840 R1	BOLT, HEX HD 3/8-16UNC X 1	2	
2	471 477 C1	INSULATOR, CORE SUPPORT	1		8	9413 979	NUT, HEX LOCK 3/8-16UNC	2	
2	27 463 R1	BOLT, CARRIAGE 1/2-13UNC X 3 3/4	1		8	24 866 R1	BOLT, HEX HD 1/2-13UNC X 2-1/2	2	
2	9412 230	NUT, HEX LOCK 1/2-13	1		8	9412 230	NUT, HEX LOCK 1/2-13UNC	2	
2	22 191 R1	WASHER, FLAT 1/2	1		8	471 475 C1	RETAINER, INSULATOR	4	
3		RADIATOR ASSY			8	471 477 C1	INSULATOR, CORE SUPPORT	4	
3	493 353 C3	D9 OL ENG W/AUTO TRANS	1		8	572 533 C2	BRACKET, RADIATOR MTG	2	
					8	22 191 R1	WASHER, FLAT 1/2	2	
					8	552 920 R2	SPACER, RAD MTG	2	
3	25 493 R1	BOLT, HEX HD 5/16-18UNC X 1.0	9						
3	25 708 R1	WASHER, FLAT 5/16	9						
3	5/16	WASHER, LOCK 5/16	9						
4	471 478 C1	INSULATOR, CORE SUPPORT MTG	1						
5	468 349 C2	CROSSMEMBER, RADIATOR	1						
5	414 052 C1	BOLT, FLG HD 1/2-20UNRF X 1 1/2	4						
5	414 087 C1	NUT, FLG HD 1/2-20UNF	4						
6	125 407 H1	DRAIN, COCK 1/4PTF	1						
		DEALER PURCHASE DIRECT							

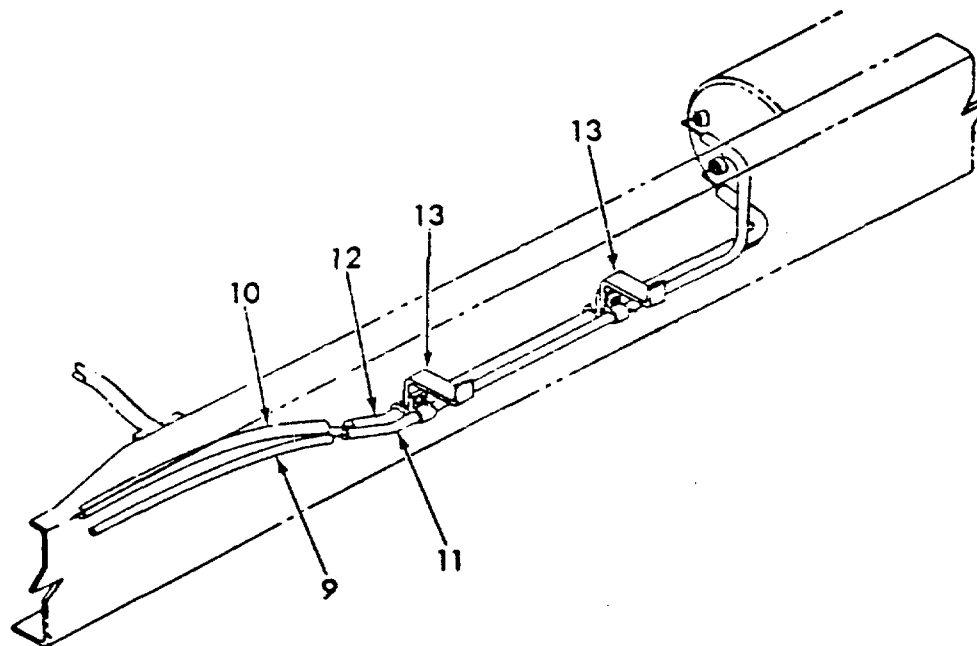
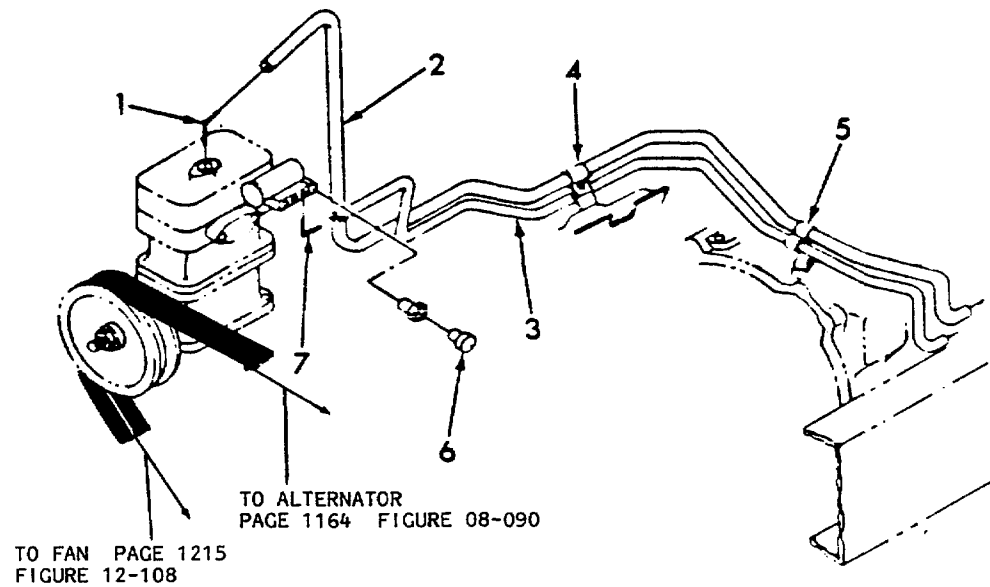
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-119

PIPING, AIR COMPRESSOR AND
GOV
9.0L ENG



PRINTED IN THE UNITED STATES OF AMERICA

MT-145
ENGINES

GROUP 12



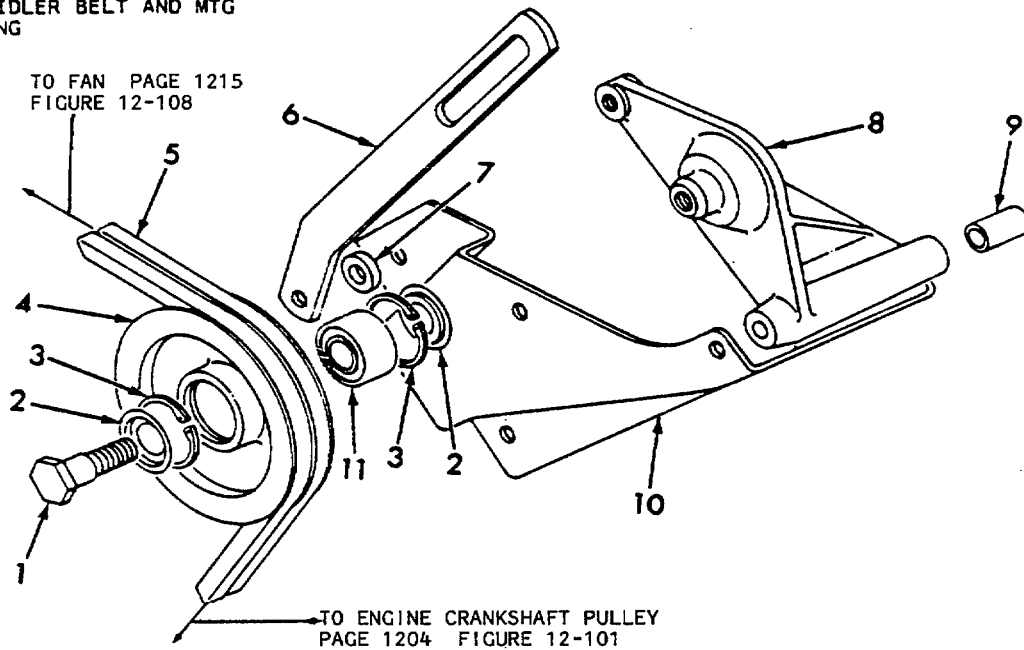
ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		*FIG. 12-119				13	25 483 R1	BOLT, HEX-HD 1/4-20UNC X 1/2 W/152.		12	AR
		PIPING, AIR COMPRESSOR AND GOV				13	25 519 R1	NUT, HEX 1/4-20UNC W/152.			AR
		9.0L ENG				13 1/4	R	WASHER, LK 1/4 W/152.			AR
1	429 523 C1	ELBOW, 90DEG 1/2MPT X 5/8 TUBE		1							
2		PIPE, AIR 5/8IN.OD		1							
		MAKE LOCALLY									
		W/COMPR TO HOSE									
2	55 897 R1	NUT, 5/8 TUBE		2							
2	55 896 R1	SLEEVE, 5/8 TUBE		2							
3		PIPE, AIR 3/8IN.OD		1							
		W/HOSE TO GOV									
		W/EL-1300									
		MAKE LOCALLY									
3	30 644 V	SLEEVE, 3/8 TUBE		2							
3	30 643 V	NUT, 3/8 TUBE		2							
4	309 382 C1	EXTENSION, CLIP		1							
4	299 403 C1	CLAMP, 3/8IN.		1							
4	299 410 C1	CLAMP, 5/8IN.		1							
4	25 222 R1	BOLT, HEX-HD 1/4-20X3/4IN.		1							
4	25 519 R1	NUT, HEX 1/4-20		1							
4 1/4	R	WASHER, LK 1/4IN		1							
5	318 981 C1	EXTENSION, CLIP		1							
5	299 410 C1	CLAMP, 5/8IN.		1							
5	25 222 R1	BOLT, HEX-HD 1/4-20 X		1							
5	25 519 R1	NUT, HEX 1/4-20		1							
5 1/4	R	WASHER, LK 1/4IN.		1							
5	299 403 C1	CLAMP, 3/8IN.		1							
5	24 839 R1	BOLT, HEX-HD 3/8-16UNC X 3/4IN.		1							
5 3/8	R	WASHER, LK 3/8IN.		1							
6	444 012	REDUCER, 1/8MPT X 1/4FPT		1							
6	505 027 C1	SWITCH, AIR PRESSURE		1							
7	57 059 HX	ELBOW, 90DEG 1/8MPT X 3/8TUBE		1							
9	48 059 HX	CONNECTOR, 1/8FPT X 3/8 TUBE		2							
9	127 537 R92	HOSE ASSY, AIR -GOV-		1							
10	384 792 C91	HOSE ASSY, AIR -COMPR-		1							
11		PIPE, AIR 3/8IN.OD		3							
		W/									
		152 WB									
		MAKE LOCALLY									
11	30 644 V	SLEEVE, 3/8IN. TUBE		2							
11	30 643 V	NUT, 3/8IN. TUBE		2							
12		PIPE, AIR 5/8IN.OD		3							
		W/									
		152 WB									
		MAKE LOCALLY									
12	55 897 R1	NUT, 5/8IN. TUBE		2							
12	55 896 R1	SLEEVE, 5/8IN. TUBE		2							
12	572 778 C1	PIPE, AIR 5/8IN.OD-HOSE TO TANK		2							
		MAKE LOCALLY									
13		EXTENSION, CLIP		2	AR						
		W/152.									
		MAKE LOCALLY									
13	299 410 C1	CLAMP			AR						
		W/152.									
13	299 403 C1	CLAMP			AR						
		W/152.									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 12-204

PULLEY, IDLER BELT AND MTG
9.0L ENG

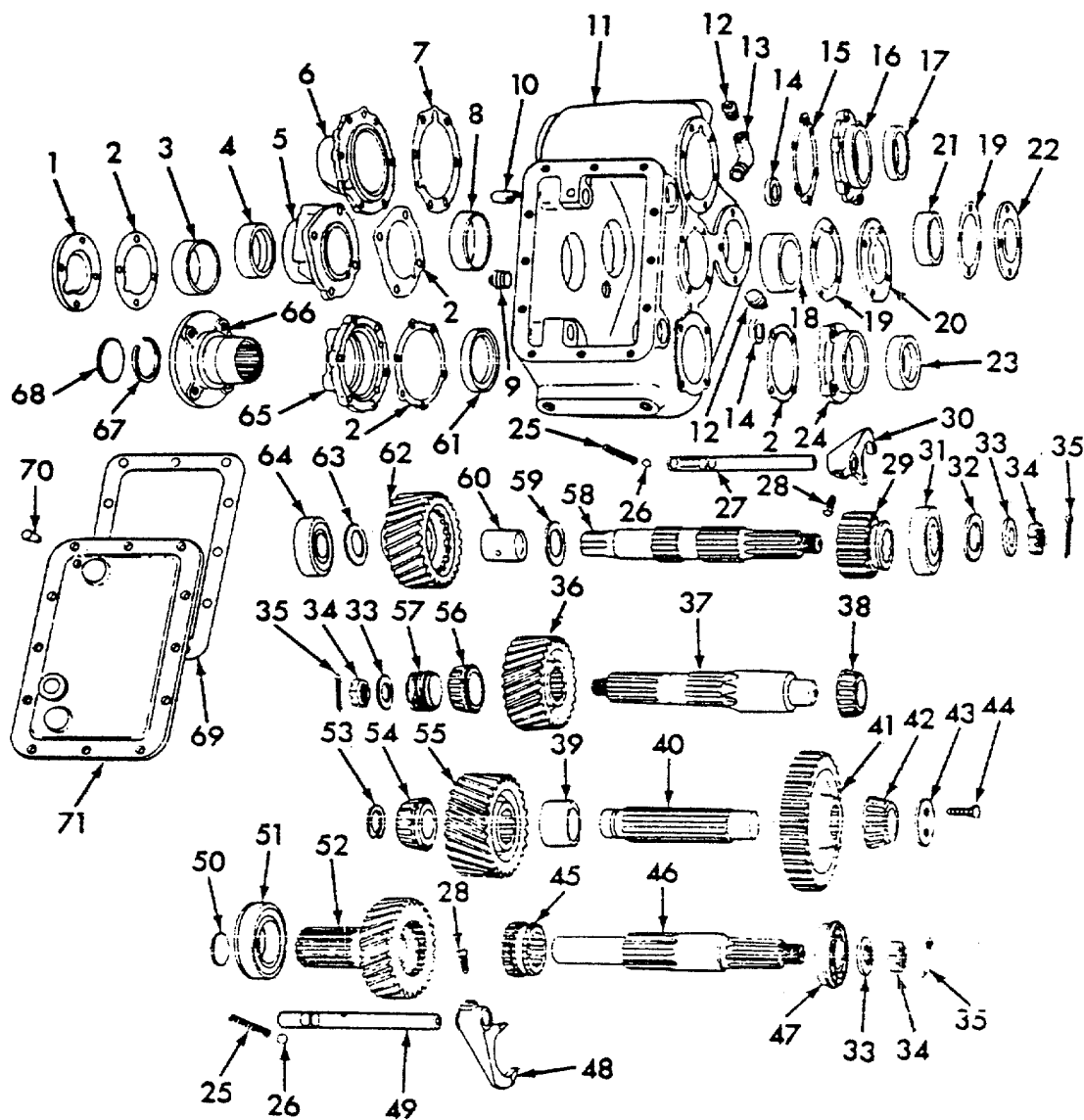
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1	465 320 C91	FUL K1416	1						
1	9412 230	SHAFT, IDLER BEARING 1/2NC	1						
2	282 364 C1	NUT, LOCK .500-UNC	2						
3	273 025 C92	SHIELD, BEARING	2						
4	485 603 C92	RING, SNAP	1						
5		PULLEY ASSY, IDLER	1						
		BELT, DRIVE -MATCHED SET-							
5	358 311 C92	W/9.0L ENG	1						
6	446 712 C1	STRAP, ADJ	1						
6	24 840 R1	BOLT, HH .375-UNC X 1.00	1						
6	24 841 R1	BOLT, HH .375-UNC X 1.50	1						
6	25 709 R1	WASHER, HARD .375	2						
7	446 755 C1	SPACER, STRAP MOUNTING	1						
8	446 809 C1	BRACKET, IDLER PULLEY MTG	1						
8	24 846 R1	BOLT, HH .375-UNC X 4.50	1						
8	9413 979	NUT, LOCK .375	1						
9	25 709 R1	WASHER, HARD .375	1						
9	446 756 C1	SPACER, SUPT MOUNTING	1						
10	446 737 C1	SUPPORT, IDLER MTG BRKT	1						
10	24 839 R1	BOLT, HH .375-UNC X .75	1						
10	24 843 R1	BOLT, HH .375-UNC X 2.00	1						
10	25 709 R1	WASHER, HARD .375	2						
11	365 480 C91	BEARING, IDLER PULLEY ASSY	AR						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 13-002

TRANSFER CASE.
ROCKWELL STD T-223H



MT-145
TRANSMISSIONS

GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STR	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STR
		FIG. 13-002			18	865 270 R1	R/S HM89411	1	
		TRANSFER CASE.			19		# BEARING, IDLER SHFT FRT CUP	1	
		ROCKWELL STD T-223H			19	165 790 R1	SHIM, BRG ADJ	1	
					19	165 791 R1	R/S 280321846	1	
					19	165 792 R1	.003 THICK	1	
		CASE ASSY. TRANSFER			19	165 792 R1	R/S 2803A1847	1	
	313 723 C92	FUL T223H32			19	165 792 R1	.005 THICK	1	
		CODE 13155/T-223H32			20	865 261 R1	R/S 2803B1848	1	
		W/O PARKING BRK CODE			20	865 261 R1	.010 THICK	1	
		04036			20	865 261 R1	R/S 3866N794	1	
1	865 261 R1	R/S 3866N794	1		20	101 896 R1	COVER, IDLER SHFT FRT	4	
1	101 896 R1	COVER, IDLER SHFT REAR	4		20	3/8 R	BOLT, HEX-HD 3/8NC X 1-1/8	4	
1	3/8 R	BOLT, HEX HD 3/8NC X 1-1/8	4		21	165 964 R1	WASHER, LK 3/8 REGULAR	4	
2		WASHER, LK 3/8 REGULAR	1		21	165 964 R1	DAN 550228	1	
2		\$ GASKET -ORDER GASKET SET-	1				# BEARING, REAR OUTPUT SHFT	1	
3	165 961 R1	# BEARING, IDLER SHFT REAR	1		22	165 789 R1	FRT CUP	1	
3		CUP	1		22	165 789 R1	R/S 3866C731	1	
4	923 561 C1	R/S A1805A573	1		22	101 896 R1	COVER, REAR OUTPUT SHFT	4	
4		# SEAL, REAR OUTPUT SHFT OIL	1		22	3/8 R	FRT	4	
5	894 458 R11	RETAINER, W/SEAL, REAR	1		23	378 673 C91	BOLT, HEX HD 3/8NC X 1-1/8	4	
5		OUTPUT SHFT REAR	1		23	378 673 C91	WASHER, LK 3/8 REGULAR	4	
5	101 896 R1	BOLT, HEX-HD 3/8NC X 1-1/8	4				R/S A1805P354	1	
5	3/8 R	WASHER, LK 3/8 REGULAR	4				R/S A1805R408	1	
5	15 912 H	DAN 4752	1		24	165 805 R11	# SEAL, OIL	1	
		R/S 1199M1105	1		24	165 805 R11	R/S A3866B730	1	
6	165 780 R1	BUSHING, SPEEDO GEAR	1		24	101 896 R1	RETAINER, W/SEAL, FRT	4	
6		R/S 3838N196	1		24	3/8 R	OUTPUT SHFT FRT	4	
6	101 896 R1	CAGE, INPUT SHFT REAR BRG	8		25	218 014 R1	BOLT, HEX HD 3/8NC X 1-1/8	4	
6	3/8 R	BOLT, HEX-HD 3/8NC X 1-1/8	8		25	218 014 R1	WASHER, LK 3/8 REGULAR	2	
7	165 781 R1	WASHER, LK 3/8 REGULAR	1		26	16 014 R1	R/S 2858C237	2	
7		R/S 2808B886	1		27	865 258 R1	SPRING, SHIFT BAR LK	2	
		\$ GASKET, INPUT SHFT BRG	1		27	865 258 R1	BALL, SHIFT BAR LK	1	
		CAGE	1		27	172 540	R/S 2843K453	1	
8	ST 987	# BEARING, REAR OUTPUT SHFT	1		27	172 540	BAR, TRANSFER CASE SHIFT	1	
9	143 997	REAR CUP	1		27	172 540	HI-LO	1	
10	865 253 R1	PLUG, PIPE SQ-HD 1/4	1		28	165 829 R1	PLUG, SHIFT BAR EXPANSION	2	
10		R/S 1898X856	1		28	165 829 R1	7/8	2	
10		TUBE, INPUT SHFT REAR BRG	1		29	298 606 C1	R/S 26X54	1	
10		OIL CATCH	1		29	298 606 C1	SCREW, SHIFT BAR FORK	1	
11	867 924 R1	R/S 3875A521	1		30	298 605 C1	R/S 3892W2441	1	
12		CASE, TRANSFER	1		30	298 605 C1	GEAR, INPUT SHAFT SLIDING	1	
12	273 469	PLUG, PIPE, FILLER/DRAIN	1		30	298 605 C1	-15 SPLINES-	1	
12		W/O PARKING BRK CODE	1		31	ST 209	R/S 2849V282	1	
12		04036	1		31	ST 209	FORK, SHIFT HI-LO	1	
13	140 798	R/S 1898X258	1		32	865 250 R1	# BEARING, INPUT SHFT FRT	1	
13		ELBOW, 45 DEG 3/4	1		32	865 250 R1	R/S 1829U333	1	
14	177 431 H1	# SEAL, OIL, TRANSFER CASE	2		33	165 783 R1	SHIM, BRG ADJ	3	
15		SHIM, BRG ADJ	1		33	165 783 R1	R/S 1829V100	3	
15	865 254 R1	R/S 2803G1931	1		34	104 078 H1	WASHER, SHFT NUT	3	
15		.003 THICK	1		34	104 078 H1	R/S 13399	3	
15	865 255 R1	R/S 2803H1932	1		35	1/8X 1-1/2P	NUT, SHFT	3	
15		.005 THICK	1		35	1/8X 1-1/2P	PIN, COTTER 1/8 X 1-1/2	3	
15	865 256 R1	R/S 2803J1934	1		36	165 804 R1	R/S 3892A1550	1	
15		.010 THICK	1		36	165 804 R1	R/S 3892P1550	1	
16	865 262 R11	R/S A3866X804	1		37	165 802 R1	GEAR, REAR OUTPUT SHFT	1	
16		RETAINER, W/SEAL, INPUT	1		37	165 802 R1	R/S 3880V724	1	
16		SHFT FRT	1		38	165 963 R91	SHAFT, REAR OUTPUT	1	
16	101 896 R1	BOLT, HEX-HD 3/8NC X 1-1/8	6		38	165 963 R91	# BEARING, REAR OUTPUT SHFT	1	
16	3/8 R	WASHER, LK 3/8 REGULAR	6		39	165 796 R1	FRT CONE	1	
16	272 976	PLUG, PIPE, SQ-SOCKET 1/8	1		39	165 796 R1	R/S 1844L480	1	
17	873 158 R91	R/S A1805W439	1		40	865 265 R1	SPACER, IDLER GEAR	1	
17		# SEAL, OIL	1		40	865 265 R1	R/S 3880A807	1	
					41	865 268 R1	SHAFT, IDLER	1	
					41	865 268 R1	R/S 3892K1805	1	
					42	313 814 R91	GEAR, IDLER SHFT	1	
					42	313 814 R91	LOW-SPEED	1	
							# BEARING, IDLER SHFT FRT	1	
							CONE	1	

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 2

1227

**MT-145
TRANSMISSIONS**

GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 13-002 TRANSFER CASE, ROCKWELL STD T-223H			66	165 812 R1	R/S 3897F1332 W/O PARKING BRK CODE 04036		
					66	388 916 C1	R/S 3897R3008 W/PARKING BRK CODE 04036		
43	865 251 R1	R/S 1829H788	1		66	388 918 C1	R/S 4X840	6	
		PLATE, IDLER SHFT FRT BRG			67	165 814 R1	STUD, FLG W/O4036	1	
44	865 249 R1	R/S S267D1	2		68	16 684 R1	R/S 1854W257	1	
44	3/8 R	BOLT, BRG PLATE			69	865 257 R1	R/S 2808E967	1	
44	3/8 R	WASHER, LK 3/8 REGULAR	2				\$ GASKET, TRANSFER CASE		
45	165 810 R1	R/S 2848E161	1				COVER		
		CLUTCH, FRT OUTPUT SHFT			70	61 991 R91	BREATHER, OIL, ASSY	1	
		SLIDING			71	865 260 R1	R/S 3855J270	1	
46	594 297 C91	R/S A3880U1217	1				COVER, TRANSFER CASE		
		SHAFT, FRT OUTPUT,			71	101 896 R1	BOLT, HEX-HD 3/8NC X 1-1/8	14	
		W/SNAP RING			71	3/8 R	WASHER, LK 3/8 REGULAR	14	
47	ST 256	# BEARING, FRT OUTPUT SHFT	1		71	141 242	PIN, DOWEL	2	
		FRT CONE							
48	165 826 R1	R/S 2849L220	1						
		FORK, SHIFT							
49	165 856 R1	R/S 2843C393	1						
		BAR, TRANSFER CASE SHIFT			393 292 C1	R/S 3819E525		1	
49	172 540	PLUG, SHIFT BAR EXPANSION	1			* DRUM, HAND BRK			
		7/8			194 567 R1	* BOLT, 3/8 X 3/4 NF		4	
50	172 575	PLUG, FRT OUTPUT SHFT GEAR	1		876 867 C1	R/S 3X374		4	
		EXPANSION				* BOLT, BRKT MTG			
51	ST 266	# BEARING, FRT OUTPUT SHFT	1		120 369	* NUT, HEX 3/8 NF		6	
		REAR CONE			927 445 C1	R/S 1229K1597		6	
52	165 809 R1	R/S 3892A1639	1			* WASHER, LK 3/8 MED			
		GEAR, FRT OUTPUT SHFT			594 906 C1	R/S 2847Q849		1	
53	865 252 R1	R/S 1854E187	1			* SLINGER, OIL TRANSFER CASE			
		RING, IDLER SHFT			594 907 C1	R/S 10X830		1	
54	165 960 R91	# BEARING, IDLER SHFT REAR	1			* BOLT, SPEC OIL SLINGER			
		CONE							
55	165 795 R1	R/S 3892C1641	1			* BEARING, INPUT SHF FRT			
		GEAR, IDLER SHFT			21 465 V	TAPERED			
56		# BEARING, REAR OUTPUT SHFT	1		21 466 V	CUP			
		REAR							
56	ST 2 069	CONE	1			* BEARING, INPUT SHFT REAR			
56	130 503 H	DAN 510255206	1		8 905 H	TAPERED			
		DAN 550375			ST 882	CUP			
		R/S 25520			983 504 R91	* BEARING			
		CUP							
57	206 333 R1	GEAR, SPEEDO DR	1						
57	196 578 R1	R/S 1844J166	1						
		SPACER, SPEEDO GEAR							
58	298 604 C1	R/S 3880U931	1			* NON-ILLUSTRATED			
		SHAFT, INPUT -15 SPLINES-							
59	165 787 R1	R/S 1829P380	1						
		WASHER, DIRECT DR							
60	165 786 R1	R/S 1825R200	1		352 619 C93	# KIT, TRANS BRG AND SEAL			
		BUSHING, DIRECT DR							
61	399 736 C91	R/S A1805R356	1		167 301 R91	R/S K1T448			
		# SEAL, OIL				\$ GASKET SET, TRANSFER CASE			
62	865 269 R11	GEAR, W/BUSH, DIRECT DR	1						
63	165 784 R1	R/S 1829S721	1		588 654 C91	R/S MPS2316			
		WASHER, INPUT SHFT REAR				KIT, TRANSFER CASE CONV			
		BRG				OIL PUMP			
64	ST 291	# BEARING, INPUT SHFT BAR	1						
65		RETAINER, W/SEAL, FRT	1						
		OUTPUT REAR							
65	165 807 R11	R/S A3866D732							
		W/O PARKING BRK CODE							
		04036							
65	101 896 R1	BOLT, HEX HD 3/8NC X 1-1/8	6						
65	3/8 R	WASHER, LK 3/8 REGULAR	6						
66		FLANGE, BRK DRUM	1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

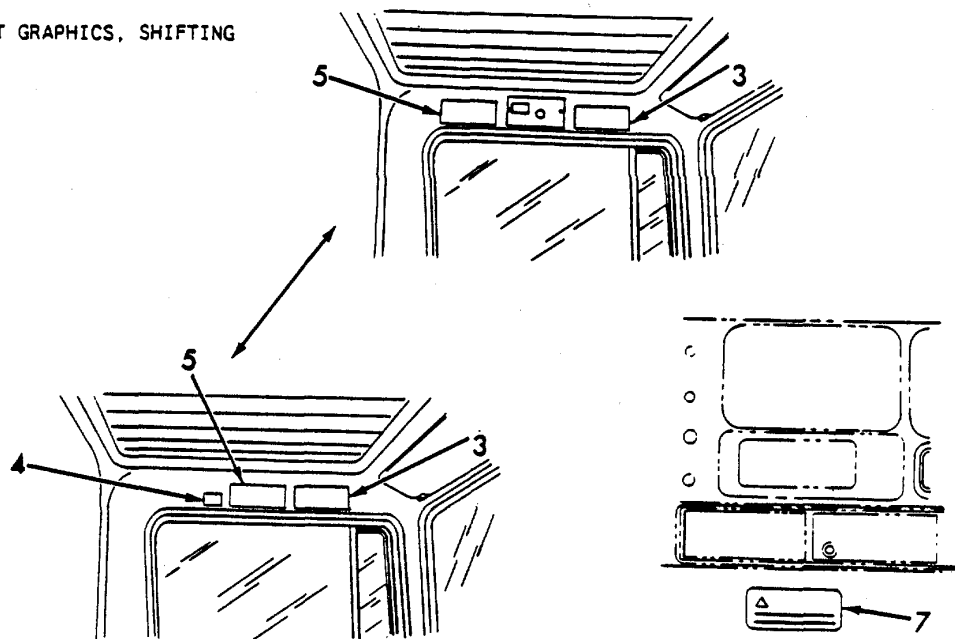
PAGE 3

1228

GROUP 13

MT-145
TRANSMISSIONS

FIG. 13-003

PRODUCT GRAPHICS, SHIFTING
DIAG

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
						5	493 961 C2	W/T-325, 326, 327, 328, 451, 454, 464, 465 AUTO TRANS		1	
						7	579 102 C1	LABEL, SHIFTING DIAG W/AUTO TRANS W/AUX TRANS		1	
3		LABEL, SHIFTING DIAG DEALER PURCHASE DIRECT W/O 2 OR 3 SPEED REAR AXLE						* PRODUCT GRAPHICS, PATTERN -ON HANDLE-			
3	468 187 C1	W/T-325, 326, 327, 328, 451, 454 AUTO TRANS		1		2751 811 R3		W/T-17, 18, 425 TRANS		1	
						2751 813 R3		W/T-237, 243, 301, 310, 311, 312, 443, 444, 672, 673, 674, 676, 677, 678, 692, 696, 697 TRANS		1	
4		LABEL, SHIFTING DIAG				533 952 C1		W/T-315 TRANS		1	
						2751 814 R3		W/T-448 TRANS		1	
						2751 162 R3		W/T-495, 496, 698, 699 TRANS		1	
4	2750 177 R1	W/TC-155, 181, 187, 188 TRANSFER CASE		1				* NON-ILLUSTRATED			
5		LABEL, SHIFTING DIAG W/2 OR 3 SPEER REAR AXLE									

MISSING ITEM NUMBERS ARE NOT USED

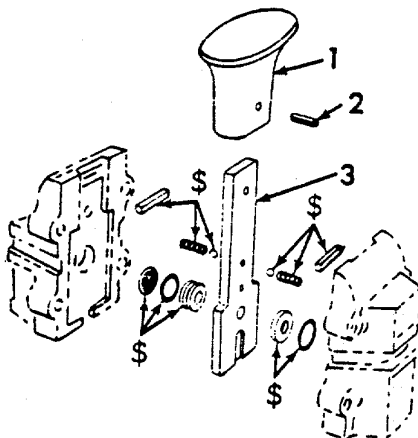
REVISION 01
1229

PAGE NO. 1



FIG. 13-035

VALVE, AIR SHIFT SEL

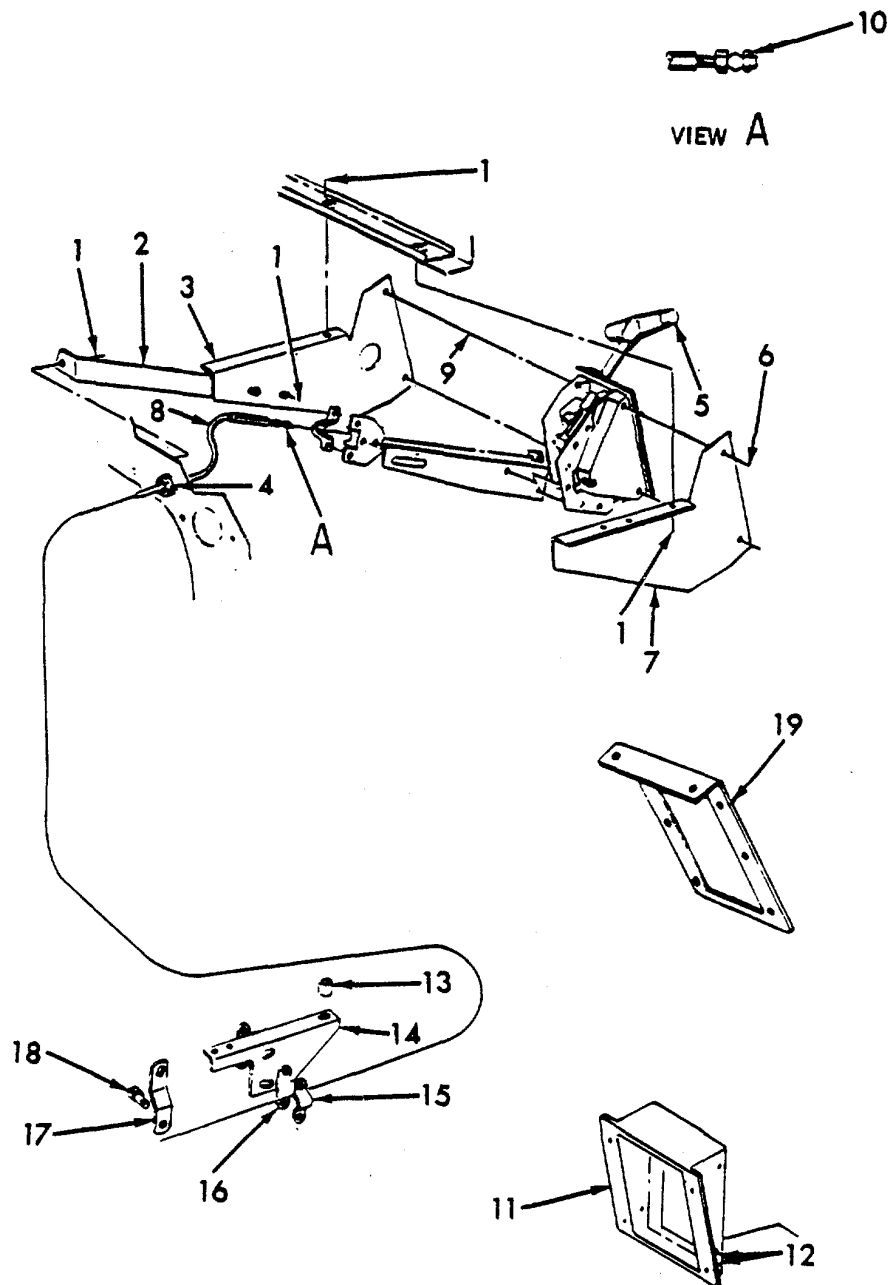


ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
	265 211 C94	FUL A3546							
	132 919	VALVE, SHIFT SEL, ASSY							
		SCREW, RD-HD NO.10NF X 7/8	4						
	115 999	NUT, HEX NO.10NF	4						
	138 534	WASHER, LK NO.10 INTERNAL	4						
1	317 814 C1	KNOB, CON	1						
2	17 172 R1	FUL 62504	1						
		PIN, ROLL							
3	317 813 C1	SLIDE, CON	1						
	317 810 C92	FUL K1566							
		\$ KIT, SEL VALVE REPAIR							



FIG. 13-049

CONTROL, AUTO TRANS, MTG



PRINTED IN THE UNITED STATES OF AMERICA

MT-145
TRANSMISSIONS

GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STX	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STX
		FIG. 13-049			12	451 510 C1	SCREW, MACH PAN-HD-CR-REC 1/4-20UNC X 1-1/2 W/BUS, FBC	8	
		CONTROL, AUTO TRANS, MTG			13	878 986 R1	SPACER, 5/8 LONG	2	
1	25 222 R1	BOLT, HEX-HD 1/4-20UNC X 3/4	5		14		BRACKET, CABLE MTG		
1	26 110 R1	NUT, HEX 1/4-20UNC	3		14	437 158 C1	EXC CODES 13327, 13328	1	
1	25 707 R1	WASHER, FL 1/4	5		14	273 622 R91	BOLT, HEX-HD 5/16-18UNC X 1-1/2	2	
2		BRACKET, SHIFT CON SUPT W/QUADRASTAT	1		14		WASHER		
2	480 883 C2				14	25 708 R1	FLAT 5/16	1	
3		BRACKET, SHIFT CON -RT- W/QUADRASTAT	1		14	5/16 R	LOCK 5/16	2	
3	480 894 C3				15	328 637 C1	CLAMP, SHIFT CABLE	1	
4	120 408	GROMMET, RUBBER	1		16	359 033 C1	SHIM, CABLE CLAMP	1	
5		CONTROL, TRANS SHIFT QUADRASTAT			17		LEVEL, SEL		
5		SEPARATE BREAKDOWN- SEE FIG. 13-053			17	8681 00C 1	FOR CODES 13325, 13326, 13327 AND 13328	1	
5		STD CAB			17	9413 979	NUT, HEX LK 3/8-16UNC	1	
5	481 747 C93	W/MT-643	1		18		SWIVEL		
					18	294 227 C1	FOR CODES 13325, 13326, 13327 AND 13328	1	
					18	3/32 X1 P	PIN, COTTER 3/32 X 1	1	
					18	25 709 R1	WASHER, FL 3/8	3	
					19		BRACKET, SHIFT CON W/1853FC MODEL		
					19	579 894 C2	FOR DS.OL ENG	1	
6	25 752 R1	BOLT, HEX-HD 1/4-20UNC X 1/2	AR						
6	1/4 R	WASHER, LK 1/4							
7		BRACKET, SHIFT CON -LT- W/QUADRASTAT	1						
7	480 893 C2								
8		CABLE							
8	344 267 C91	60 IN. LONG	1						
8	463 510 C1	75 IN. LONG	1						
8	439 100 C1	91 IN. LONG	1						
8	503 607 C91	158 IN. LONG	1						
8	98 959 R1	CLAMP	2						
9	25 220 R1	BOLT, HEX-HD 1/4-20UNC X 3/8	2						
9	1/4 R	WASHER, LK 1/4	2						
10	118 623	NUT, JAM 1/4-28UNF W/O 1853FC MODEL	1						
11	500 052 C1	BRACKET, SHIFT CON W/BUS. FBC	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

1232

PAGE NO. 2

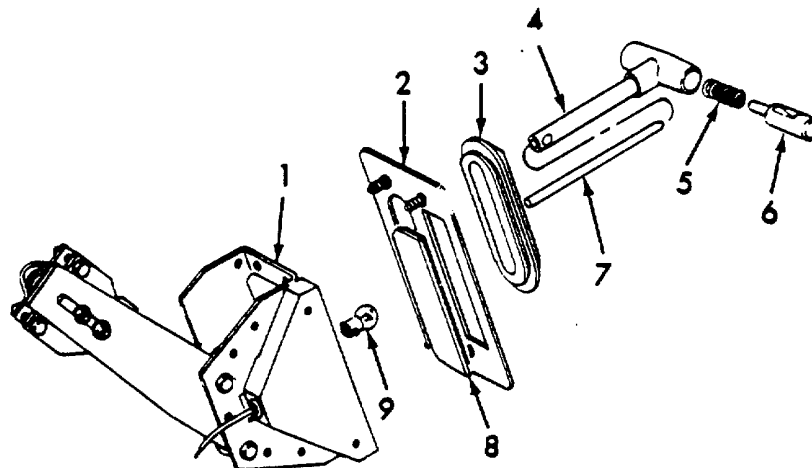


MT-145 TRANSMISSIONS

GROUP 13

FIG. 13-053

CONTROL, AUTO TRANS LEVER
-QUADRATAT-



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
	481 747 C93	CONTROL, AUTO TRANS EXC 8US AND FBC CODE 16010 EXC 1853FC MODELS EXC CODE 13465			6		PLUNGER, CON LEVER NOT SERVICED SEPARATELY	1	
					7		ROD, CON LEVER PUSH NOT SERVICED SEPARATELY	1	
					8		LENS, SHIFT INDICATOR LIGHT	1	
					8	581 040 C1	CON W/481747C93 CON	1	
					9	193 067	LAMP	1	
1		CONTROL, HSG NOT SERVICED SEPARATELY	1		3/32 X3/4 P		PIN, COTTER	1	
2	581 047 C1	GATE, PLATE W/481746C93, 481747C93, 5000053C92, 500054C92, 545689C91 CON	1		27 122 R1		NUT, SELF-LOCKING 1/4-20 R/S NL141	AR	
2					440 055		SCREW, 1/4-28 X 1/2 FL HD	2	
					21 025 R1		BOLT, HEX-HD 1/4-20 X 3/8	2	
					180 018		BOLT, HEX-HD 1/4-20 X 5/8	2	
					25 482 R1		BOLT, HEX-HD 1/4-20 X 7/8	2	
					25 483 R1		BOLT, HEX-HD 1/4-20 X 1	2	
					121 753		WASHER, LK 1/4	2	
3	483 330 C1	BOOT, CON LEVER W/545689C91, 580118C91 CON	1		378 531 R1		NUT, LK 1/4-20	4	
4	505 641 C1	LEVER, T-BAR	1		27 288 R1		BOLT, HEX-HD 5/16-24 X 1	1	
5		SPRING, CON LEVER PLUNGER NOT SERVICED SEPARATELY	1		27 036 R1		NUT, HEX SELF LK 5/16-24	1	
							* NON-ILLUSTRATED		

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02
1233

PAGE NO. 1

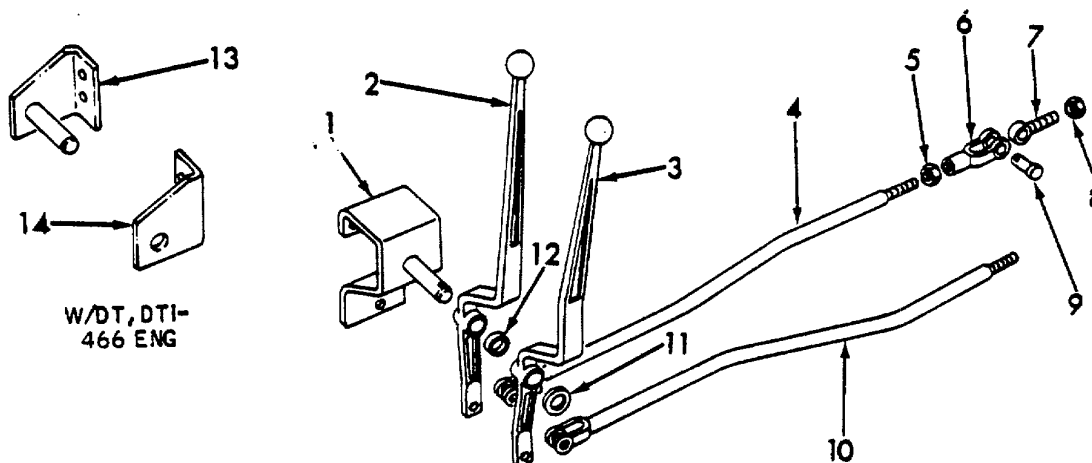


MT-145 TRANSMISSIONS

GROUP 13

FIG. 13-059

CONTROL, TRANSFER CASE
LEVER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	RECYCLED	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	RECYCLED
1	486 469 C2	BRACKET, LEVEL MTG FOR MV8, D9.OL AND D-SERIES ENGS	1						
1	517 686 C2	SHAFT, LEVEL MTG FOR MV8, D9.OL AND D-SERIES ENGS	1						
1	414 051 C1	BOLT, FLG-HEX-HO 1/2-20UNF X 1-1/4	2						
1	414 052 C1	1/2-20UNF X 1-1/2	2						
1	414 054 C1	1/2-20UNF X 2	1						
1	414 055 C1	1/2-20UNF X 2-1/4	1						
1	414 087 C1	NUT, FLG HEX 1/2-20UNF	3						
2	581 842 C91	LEVEL, TRANSFER CASE CON	1		5	118 627	NUT, HEX JAM R/S 13X15	2	
2	298 401 R1	BEARING, SINTERED	1		6	144 256	YOKE, ROD END	2	
3	581 844 C91	LEVEL, TRANSFER CASE CON FOR MV8, D9.OL AND D-SERIES ENGS	1		7	93 301 R1	EYE, ROD END FUL 1884	2	
3	298 401 R1	BEARING, SINTERED	1		8	272 125	NUT, HEX JAM 7/16-20UNF	2	
4	487 005 C2	EXC DT-466 ENG	1		9	16 619 R1	PIN, CLEVIS	4	
					9	1/8X 1	PIN, COTTER 1/8 X 1	4	
					10		ROD, TRANSFER CASE CON FOR CODE 13155		
					10	487 003 C92	EXC DT-466 ENG	1	

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

1234

PAGE NO. 1

MT-145
TRANSMISSIONS

PRINTED IN THE UNITED STATES OF AMERICA
13-058

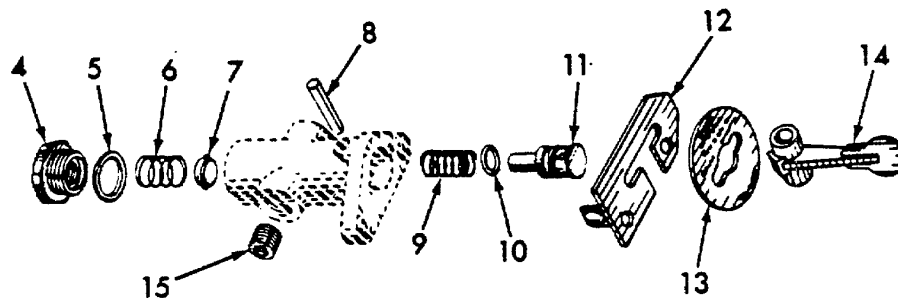
MISSING ITEM NUMBERS ARE NOT USED

PAGE NO. 2



FIG. 13-062

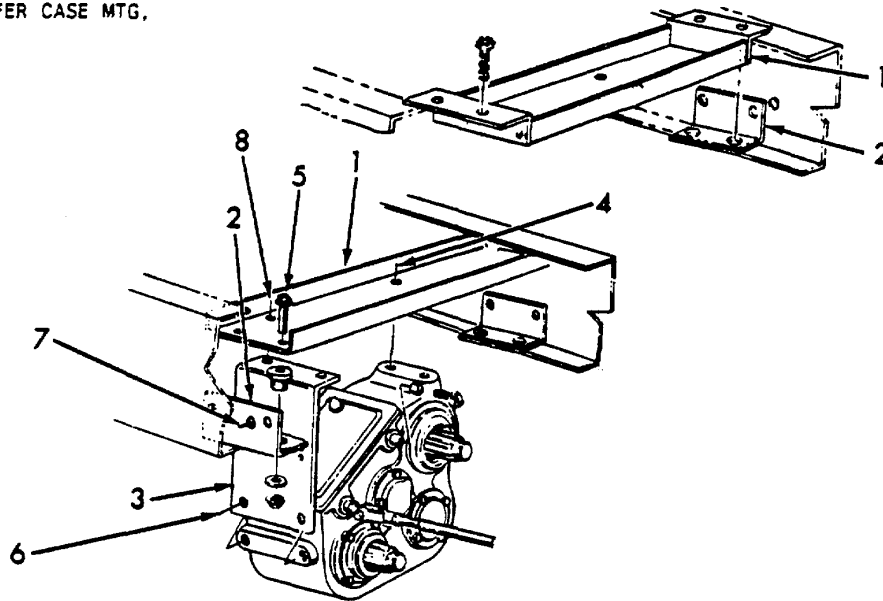
VALVE, TRANSFER CASE CON



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
	468 786 C91	VALVE, CON. -INCLUDES ITEM NOS. 4 THRU 11 AND 14, FOR SERVICE REORDER 584368C1 VALVE-	1						
4		NUT NOT SERVICED SEPARATELY	1						
5		SEAL NOT SERVICED SEPARATELY	1						
6		SPRING NOT SERVICED SEPARATELY	1						
7		VALVE NOT SERVICED SEPARATELY	1						
8	306 116 R1	PIN, CON LEVER	1						
9		SPRING NOT SERVICED SEPARATELY	1						
10	359 158 R1	R/S 1430M65 FUL 15115	1						
11		SEAL, O-RING PLUNGER PLUNGER NOT SERVICED SEPARATELY	1						
12	492 091 C1	SWITCH, WARNING LIGHT GROUNDING	1						
12	157 712	SCREW, PAN-CR-REC-HD NO. 10NC X 1/2	2						
13	436 031 C1	ESCUTCHEON, CON VALVE	1						
14	309 024 R1	LEVER, CON	1						
15	444 572	PLUG, PIPE 1/8	1						



FIG. 13-065

ANGLE, TRANSFER CASE MTG,
CODE 13155

PART NUMBER	DESCRIPTION	QTY	REC	ITEM	PART NUMBER	DESCRIPTION	QTY	REC	ITEM
1 541 206 C2	CROSSMEMBER, TRANSFER CASE MTG	1							
2 484 109 C2	BRACKET, TRANSFER CASE	2							
3 484 110 C1	BRACKET, TRANSFER CASE EXC HYD BRK CODES 04011, B 04044, 04055 AND 04058	1							
4 24 873 R1	BOLT, HEX-HD 5/8-11UNC X 1-1/2	2							
4 5/8 R	WASHER, LK 5/8	2							
5 470 031 C2	INSULATOR, RUBBER	4							
5 414 082 C1	BOLT, FLG HEX-HD 5/8-18UNF X 3	4							
5 414 089 C1	NUT, FLG HEX 5/8-18UNF	4							
5 107 813 R1	WASHER, FL 3/16 X 5/8 ID X 2-1/2 OD	4							
6 24 873 R1	BOLT, HEX-HD 5/8-11UNC X 1-1/2	2							
6 5/8 R	WASHER, LK 5/8	2							
7	BOLT, FLG HEX 5/8-18UNF X 1-1/2	4							
7 414 076 C1	5/8-18UNF X 1-1/2	4							
7 414 077 C1	5/8-18UNF X 1-3/4	4							
7 414 089 C1	NUT, FLG HEX 5/8-18UNF	4							
8 24 873 R1	BOLT, HEX-HD 5/8-11UNC X 1-1/2								
8 9412 231	NUT, HEX LK 5/8-11UNC R/S NL2101								

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

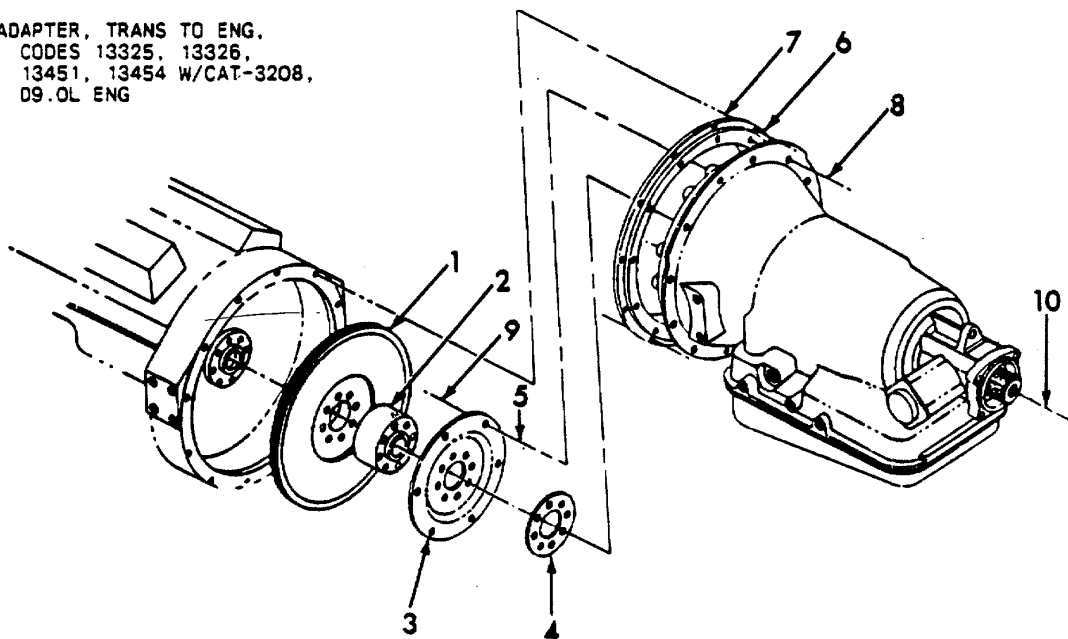
REVISION 02
1237

PAGE NO. 1



FIG. 13-070

ADAPTER, TRANS TO ENG.
CODES 13325, 13326,
13451, 13454 W/CAT-3208,
D9.0L ENG



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1		FLYWHEEL							
1		D9.0L ENG SEE FIG. 12-101 ITEM 26 PG. 1204	1						
2		ADAPTER, FLYWHEEL							
2	483 506 C1	D9.0L ENG	1						
3		PLATE, INPUT DR							
3	483 507 C3	D9.0L ENG	1						
4		RING, REINF							
4	483 508 C1	9.0L ENG	1						
5	220 554 R1	BOLT, HEX-HD 7/16UNF X 4.0	10						
5	25 813 R1	BOLT, HEX-HD 1/2UNF X 4.25	7						
6	480 861 C1	ADAPTER, FLYWHEEL HSG SAE NO.3 TO SAE NO.2 DEALER PURCHASE DIRECT	1						
7	24 840 R1	BOLT, HEX-HD 3/8UNC X 1.00	12						
8	24 841 R1	BOLT, HEX-HD 3/8UNC X 1.50	11						
8	25 709 R1	WASHER, HARDENED FL 3/8	11						
9	505 314 C1	BOLT, HEX HD FLG M10 1.5-6G X 14.6MM	AR						
10		BOLT, HEX PATCH LK 1/2UNF X 1.50 NOT USED IN THIS APPLICATION							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 02
1238

PAGE NO. 1

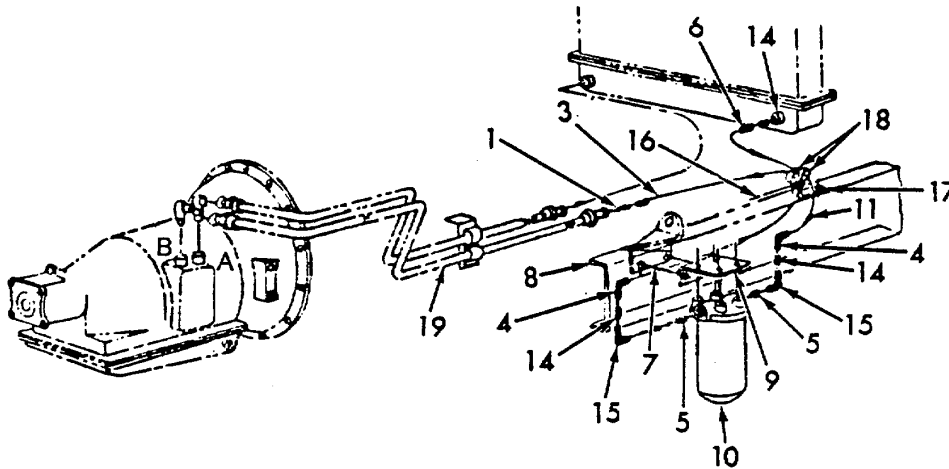


MT-145
TRANSMISSIONS

GROUP 13

FIG. 13-093

HOSING, OIL FILTER,
W/AT-545



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1	9402 787	CONNECTOR, 3/4-16 37 DEG X 3/4-16 37 DEG FLARED TUBE	1		15	444 046	ELBOW, 90 DEG X 3/4 STREET	1	
		W/O D9.OL ENG			16	25 483 R 1	BOLT, HEX HD 1/4-20 X 1.0	1	
3	A080 390 000	HOSE ASSY, FILTER TO PIPE REFER TO MT-90	1		16	25 519 R 1	NUT, HEX HD 1/4-20	1	
		W/O D9.OL ENG			16	1/4	WASHER, LK 1/4	1	
3	A080 640 000	HOSE ASSY, RETURN TO TRANS REFER TO MT-90	1		17		EXTENSION, CLIP	1	
		W/O D9.OL ENG			18	299 566 C 1	CLAMP, SINGLE COATED	2	
4	300 892 R 1	ELBOW, 90 DEG-1/2MPT X 3/4-16 45 DEG FLARED TUBE	2		19	384 139 C 1	HOSE ASSY	1	
5	117 219	ADAPTER, REDUCER 1MPT X 3/4FPT	2						
6	319 377 C 1	ELBOW, 45 DEG-1/2MPT X 3/4-16 45 DEG FLARED TUBE	1						
7	414 053 C 1	BOLT, FLG HEX HD X 1 3/4	2						
7	414 054 C 1	BOLT, FLG HEX HD X 2	2						
7	414 057 C 1	NUT, FLG HEX 1/2-20UNRF	2						
8	24 639 R 1	BOLT, HEX HD 3/8-16X3/4	4						
8	3/8	WASHER, LK 3/8	4						
9		BRACKET, FILTER MTG MAKE LOCALLY	1						
10	475 605 C 91	FILTER ASSY, OIL SEPARATE BREAKDOWN-SEE FIG. 13-096 PAGE 1240	1						
11	A080 240 000	HOSE ASSY, RADIATOR TO FILTER REFER TO MT-90	1						
14	24 466 R 1	ADAPTER, REDUCER 3/4MPT X 1/2FPT	3						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1239

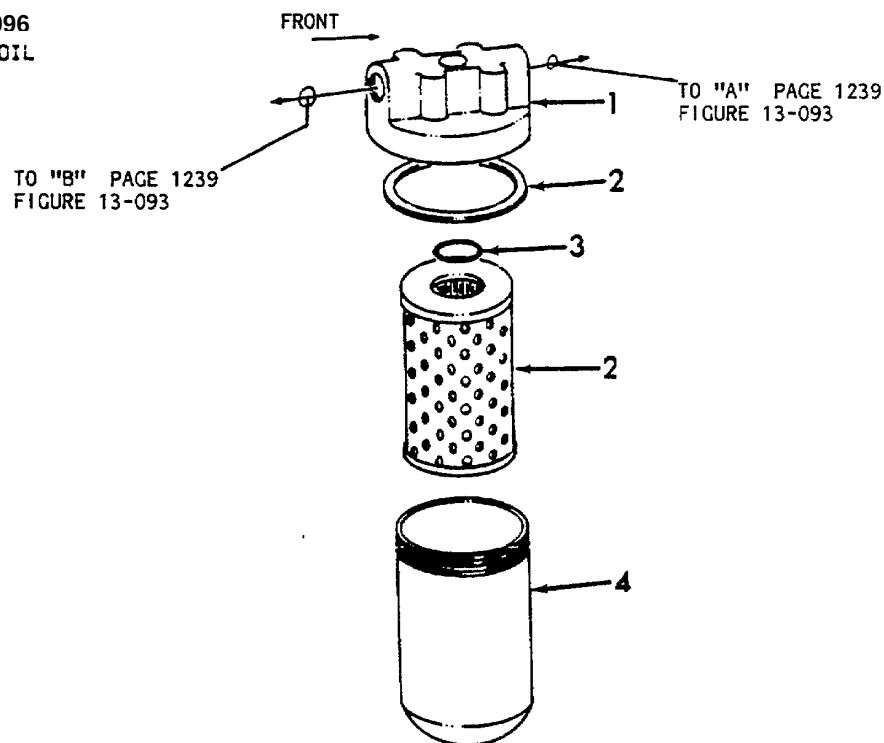
PAGE 1



MT-145 TRANSMISSIONS

GROUP 13

FIG. 13-096
FILTER, OIL



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
	475 605 C91	FILTER ASSY. OIL							
	24 839 R1	BOLT, HEX HD 3/8NC X 3/4	4						
	3/8 R	WASHER, LOCK 3/8 REGULAR	4						
1		HEAD, OIL FILTER NOT SERVICED SEPARATELY	1						
2	475 606 C2	ELEMENT, W/GASKET, OIL FILTER	1						
3	876 071 C1	O-RING	1						
4		CASE, OIL FILTER NOT SERVICED SEPARATELY	1						

MISSING ITEM NUMBERS ARE NOT USED

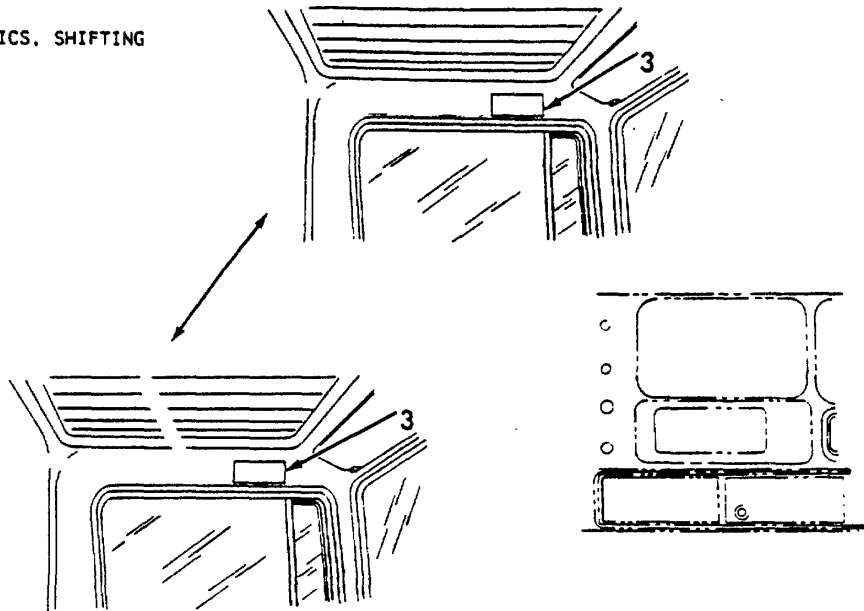
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1240



FIG. 13-104

PRODUCT GRAPHICS, SHIFTING
DIAGRAM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.
3		LABEL, SHIFTING DIAGRAM DEALER PURCHASE DIRECT W/O 2 OR 3 SPEED REAR AXLE							
3	468 187 C1	W/T325.		1					

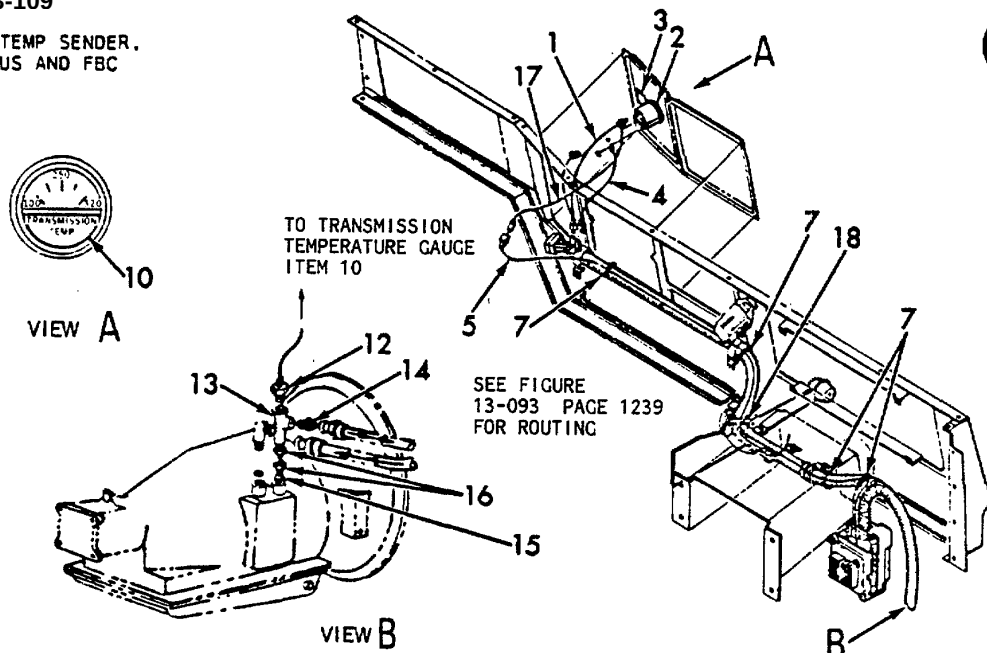
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1241



FIG. 13-109

GAUGE, TEMP SENDER.
W/O BUS AND FBC



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1		HARNESS	1						
		MAKE LOCALLY							
1	131 282	LAMP, 1 CP NO. 53	1						
2	486 091 C91	GAUGE, TEMP	1						
3	436 080 C1	PRODUCT GRAPHIC, OIL TEMP GAUGE	1						
4		CABLE	C 1						
		MAKE LOCALLY							
5		CABLE	1						
		MAKE LOCALLY							
7		TAPE, PLASTIC 3/4IN WIDE NON SERVICE- OBTAIN LOCALLY	AR						
10	2753 438 R1	PRODUCT GRAPHIC-TRANS TEMP	1						
12	479 758 C1	GAUGE, TEMP SENDER	1						
12	115 999	NUT, HEX NO. 10-32UNF	1						
12	3/16	WASHER, LK NO. 10	1						
13	218 243	TEE, REDUCING 1/2FPT X 3/8 FPT X 3/8FPT	1						
14	118 752	CONNECTOR, 45 FLARED TUBE .50D, 3/8NPTF X 3/4-16 W/D9.0L ENG	A 1						
14	9402 709	ADAPTER, 3/8MPT X 3/4-16 W/O D9.0L ENG	1						
15	570 828 R1	O-RING	1						
16	443 980	NIPPLE, AUTOMOTIVE PIPE, 3/8-18	1						
16	9409 287	CONNECTOR, HYD FLARELESS TUBE, .50D, 3/8-18NPTF	1						
17		CABLE	1						
18		TAPE, PLASTIC 3/4IN WIDE NON SERVICE - OBTAIN LOCALLY							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1242

PAGE 1



MT-145
TRANSMISSIONS

GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
						408 068 C11		CODE 13325/AT-545 FLANGE FLANGE, TRANSFER CASE CODE 13155/T-223H FORWARD INPUT DAN 347361 1480 SERIES - YOKE - 381 645 C1 DAN 443641 1550 SERIES - YOKE - 204 136 R1 DAN 343711 FORWARD OUTPUT REAR OUTPUT DAN 347361 1480 SERIES - YOKE - 381 645 C1 DAN 443641 1550 SERIES - YOKE - ADAPTER, MAIN TRANS 1480 SERIES			

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1243

**MT-145
TRANSMISSIONS**

GROUP 13



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 13-114 FLANGES							
	587 967 C1	DAN 348781 W/MGM PARKING BRK 1550 SERIES					ADAPTER, TRANSFER CASE		
	587 968 C1	DAN 444491 W/DDM AND MGM PARKING BRAKE 1600 SERIES				213 880 R1	DAN 42669 R/S 155NF2 1550 SERIES		
							PLATE, COMPANION FLG LK		
						865 849 R1	DAN 98741 1550, 1600 SERIES		
							BOLT, TRUNNION 1480, 1550 SERIES		
						294 612 C1	5/16NF X 1		
						52 334 R1	1/2NF X 1-3/8		

PRINTED IN THE UNITED STATES OF AMERICA
42 444

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01
1244

PAGE 5



MT-145
TRANSMISSIONS

GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 13-114 FLANGES							
	204 138 R1	DAN 39429 U-BOLT, TRUNNION 1480, 1550 SERIES							
		STRAP, TRUNNION BRG							
	294 615 C1	DAN 37079 R/S D566 R/S REBC148 1480 SERIES							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

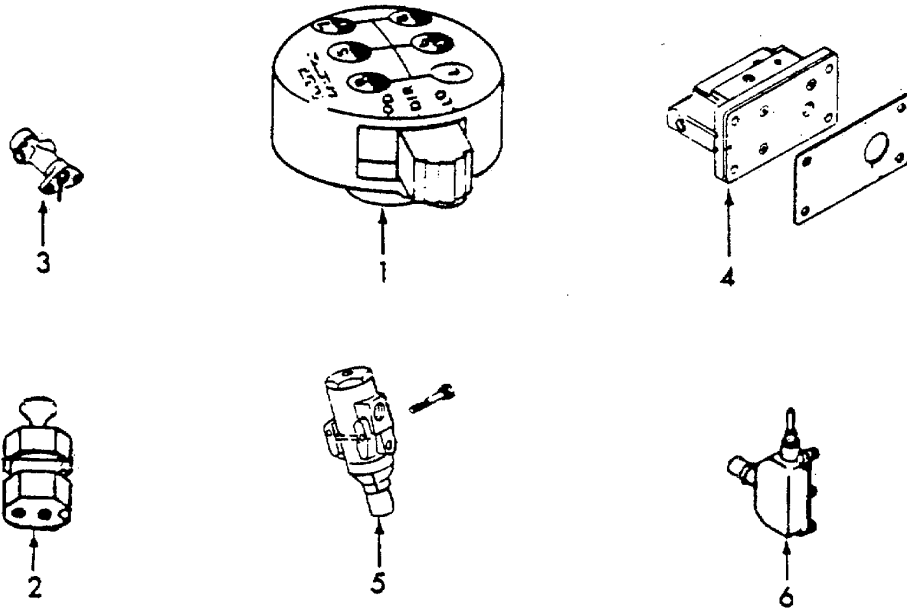


MT-145
TRANSMISSIONS

GROUP 13

FIG. 13-120

VALVE, CHART



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	RECI STR	ITEM NO.	PART NUMBER	DESCRIPTION	RECI STR
1	490 695 C91	FUL A4490						
2	265 211 C94	\$ VALVE, SPLITTER CON						
		FUL A3546						
		VALVE, SHIFT SEL						
		SEPARATE BREAKDOWN-						
		SEE FIG. 13-035 PAGE 1230						
3	468 786 C91	VALVE, CON						
		-FOR SERVICE REORDER						
		584368C1 VALVE-						
		SEPARATE BREAKDOWN-						
		SEE FIG. 13-062 PAGE 1236						
4	563 848 C91	FUL 19470						
		VALVE, SLAVE						
4	534 685 C1	FUL 19481						
		GASKE", SLAVE VALVE						
5	584 863 C91	FUL A-1740						
		# VALVE, AIR FILTER						
		REGULATOR						
5	25 672 R1	BOLT, HEX HD 1/4NC X 2-1/4						
6		VALVE, MODULATOR						
6	435 820 C92	VACUUM						
		DEALER PURCHASE DIRECT						
6	472 846 C91	MECHANICAL						
	469 268 C93	FUL K1550						
		\$ KIT, CON VALVE REPAIR						
	585 001 C91	FUL K1698						
		# KIT, AIR FILTER REG VALVE						

MISSING ITEM NUMBERS ARE NOT USED

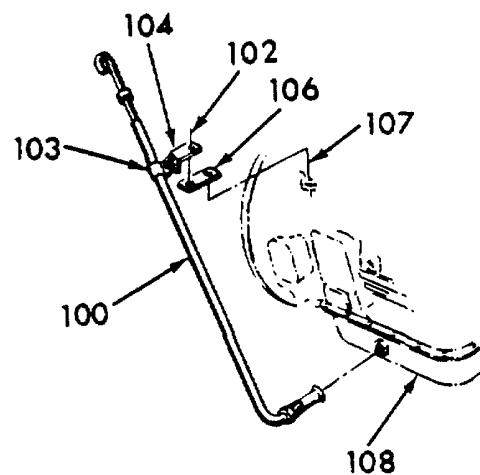
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
1246



FIG. 13-121

GAUGE, OIL LEVEL,
CODES 13325, 13326



W/V-392 & MV8,D SERIES & D9, OL
4 X 4

**MT-145
TRANSMISSIONS**



GROUP 13

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 13-121									
		GAUGE, OIL LEVEL, CODES 13325, 13326									
100		TUBE, TRANS FILL									
100	488 588 C92	D9.OL AND MV8	C	1							
100	190 236	NUT, TUBE INVERTED FLARE		1							
101	24 839 R1	BOLT, HEX HD 3/8-16UNC X 3/4		1							
101	3/8 R	WASHER, LK 3/8		1							
102	25 222 R1	BOLT, HEX-HD 1/4-20 X 3/4		1							
102	25 485 R1	BOLT, HEX-HD 1/4-20 X 1-1/4		1							
102	25 519 R1	NUT, HEX 1/4-20UNC		AR							
102	1/4 R	WASHER, LK 1/4		2							
103	299 566 C1	CLAMP		1							
104		EXTENSION, CLIP									
104		MV8, D9.OL -4X4- MAKE LOCALLY		1							
105		GAUGE, TRANS OIL LEVEL									
105	494 814 C2	D9.OL, MV8 -4X4-	C	1							
105		STRAP, OIL GAUGE									
105	494 813 C2	W/494814C2 GAUGE		1							
105	153 305 R1	CAP, OIL GAUGE		1							
106		EXTENSION, CLIP FL MAKE LOCALLY	C	1							
107	24 842 R1	BOLT, HEX-HD 3/8-16 X 1-3/4		1							
107	9413 979	NUT, HEX LK		1							
107	25 709 R1	WASHER, FL 3/8		2							
108	581 762 C1	PAN, OIL W/CODE 13325 DEALER PURCHASE DIRECT		1							
108	501 911 C1	GASKET, OIL PAN TRANS DEALER PURCHASE DIRECT	C	1							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 02

1248

PAGE NO. 2

**Parts
Catalog**

**Allison Transmissions
AUTOMATIC MODELS**

AT 545

1 MAY 1984

Detroit Diesel Allison
Division of General Motors Corporation
Indianapolis. Indiana 46206

NOTE:

This printed parts catalog is published annually. Interim revisions are available only on Microfiche. Either may be purchased from authorized Detroit Diesel Allison service outlets. See your yellow pages under Engines- Diesel or Transmission--Trucks, Tractor, etc.

Printed in U.S.A

© 1984 General Motors Corp.

ALLISON AUTOMATIC TRANSMISSION AT 540 SERIES PARTS CATALOG

MODELS COVERED

On the first page(s) of each section of this catalog, the Allison AT 540 Series transmission models covered in that particular section are listed in numerical sequence by Transmission Assembly Part Number (A/N). A complete A/N listing of all models covered by this catalog can be found in Section I, starting on page I-I.I.

YOU MUST KNOW TRANSMISSION ASSEMBLY PART NUMBER (A/N)

To use this catalog you must know the Allison transmission assembly part number (A/N) found on the transmission name plate. The name plate is attached to the rear of the right side of the housing.

SERVICE KITS

Available service parts kits are listed on page 5.

NUMERICAL INDEX

A numerical Index is included in the rear of this catalog. This Index is cross-referenced to indicate the history of parts. Parts, both current and superseded, appear in numerical order in the Part No. column. Current part numbers refer to the figure and reference numbers of the parts. Parts replacing older parts are followed by the older part number in the history column. Parts that have been replaced are followed by the part number of the replacing part. Footnote symbols show when a part is replaced by (RB), or when a part replaces (R) an older part.

CROSS SECTION

A typical cross sectional view of the transmission is shown on foldouts at the back of this catalog.

HOW TO ORDER PARTS

If an assembly or subassembly is ordered, all subassemblies and detail parts indented beneath it will be included.

If a detail part is ordered, only the detail part will be sent unless its part number is starred (*). A starred (*) part number means that such a part is not serviced alone. This is necessary because certain parts require factory installation or adjustment. If an order is received for a starred (*) part, the assembly or subassembly under which it is indented will be sent.

NOTE

All parts orders must be directed to your dealer -- do not send them to Detroit Diesel Allison. Always include the transmission model, the transmission assembly number, and serial number when ordering parts. Be sure to include part name and part number.

WARRANTY

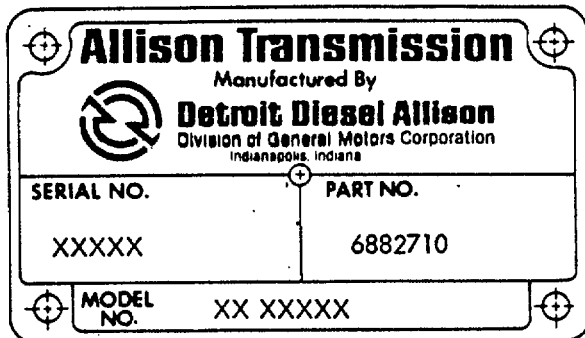
Detroit Diesel Allison sincerely believes it offers the finest parts warranty in the industry. It is constantly reviewed to assure it remains competitive. We urge you to ask about it at your local Detroit Diesel Allison Distributor.

ALLISON AUTOMATIC TRANSMISSION AT 540 SERIES PARTS CATALOG

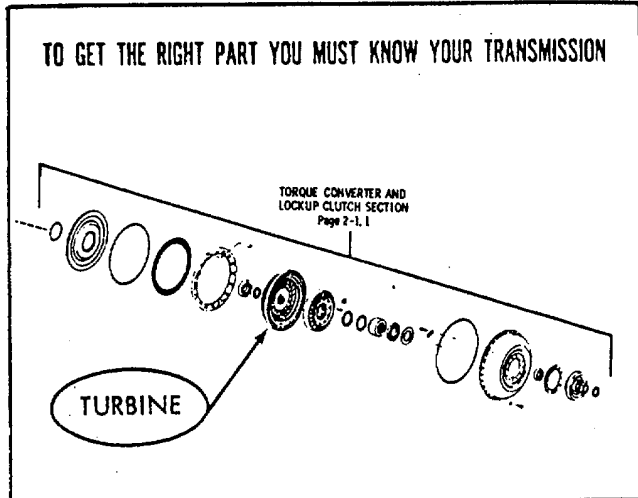
HOW TO USE THIS CATALOG

Example: To find the part number of the torque converter turbine, follow the procedure outlined below:

1. Obtain the transmission assembly part number (P/N or A/N) and serial number shown on the name plate. As illustrated, it reads 6882710.



2. Turn to the pictorial index of exploded parts. The torque converter turbine is shown in the Torque Converter and Lockup Clutch Section which is referenced to page 2-1.1.



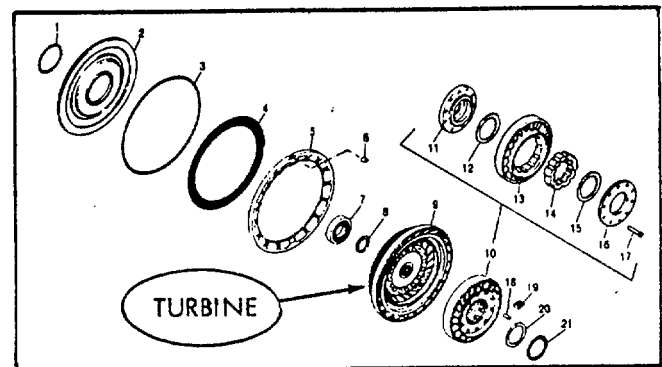
3. Beginning on page 2-1.1, listed in numerical sequence, are the transmission assembly numbers (A/N) of the various models. Under the

A/N column you will find the A/N 6882710. Opposite this number under the group listing column, you will find the group letter A.

A/N	MODEL	GROUP	A/N	MODEL	GROUP
6881390	XX XXX	A	23010841	XX XXX	A
6882255	XX XXX	B	23010848	XX XXX	A
6882256	XX XXX	B	23010942	XX XXX	A
6882710	XX XXX	A	23010944	XX XXX	A
6882746	XX XXX	A	23010946	XX XXX	A
6882886	XX XXX	A	23010948	XX XXX	A
			23010950	XX XXX	A
			23010959	XX XXX	F

4. Turning to Group A, the group illustration is referenced as Figure 2; the torque converter turbine is referenced as item 9 on the illustration the part number is listed as 6839975. Opposite the part number, on the right side of the page, is a quantity recommended for spare parts, based on the quantity of units (transmission) indicated on the heading.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMEND SPARES FOR UNITS
				1-50 51-100 101-500
1	RING, SEAL, PISTON 10	6170492	1	3 6 15
2	PISTON, LOCKUP CLUTCH	23011093	1	2 4 10
3	RING, SEAL, PISTON 00	6138740	1	3 6 15
4	PLATE, LOCKUP CLUTCH	23010437	1	3 6 15
5	PLATE, LOCKUP CLUTCH BACKING	23010300	1	2 4 10
6	KEY	6172552	1	
7	BEARING, BALL	954528	1	3 6 15
8	SPACER, TURBINE THRUST BEARING, 0.015 - GOLD	6839976	AR	15 30 120
9	SPACER, TURBINE THRUST BEARING, 0.030 - SILVER	6839977	AR	15 30 120
10	SPACER, TURBINE THRUST BEARING, 0.042 - PLAIN	6839978	AR	15 30 120
11	SPACER, TURBINE THRUST BEARING, 0.060 - BLACK	6839979	AR	15 30 120
9	TURBINE, TORQUE CONVERTER	6839975	1	2 4 10
11	WASHER, STATOR THRUST	6172295	1	

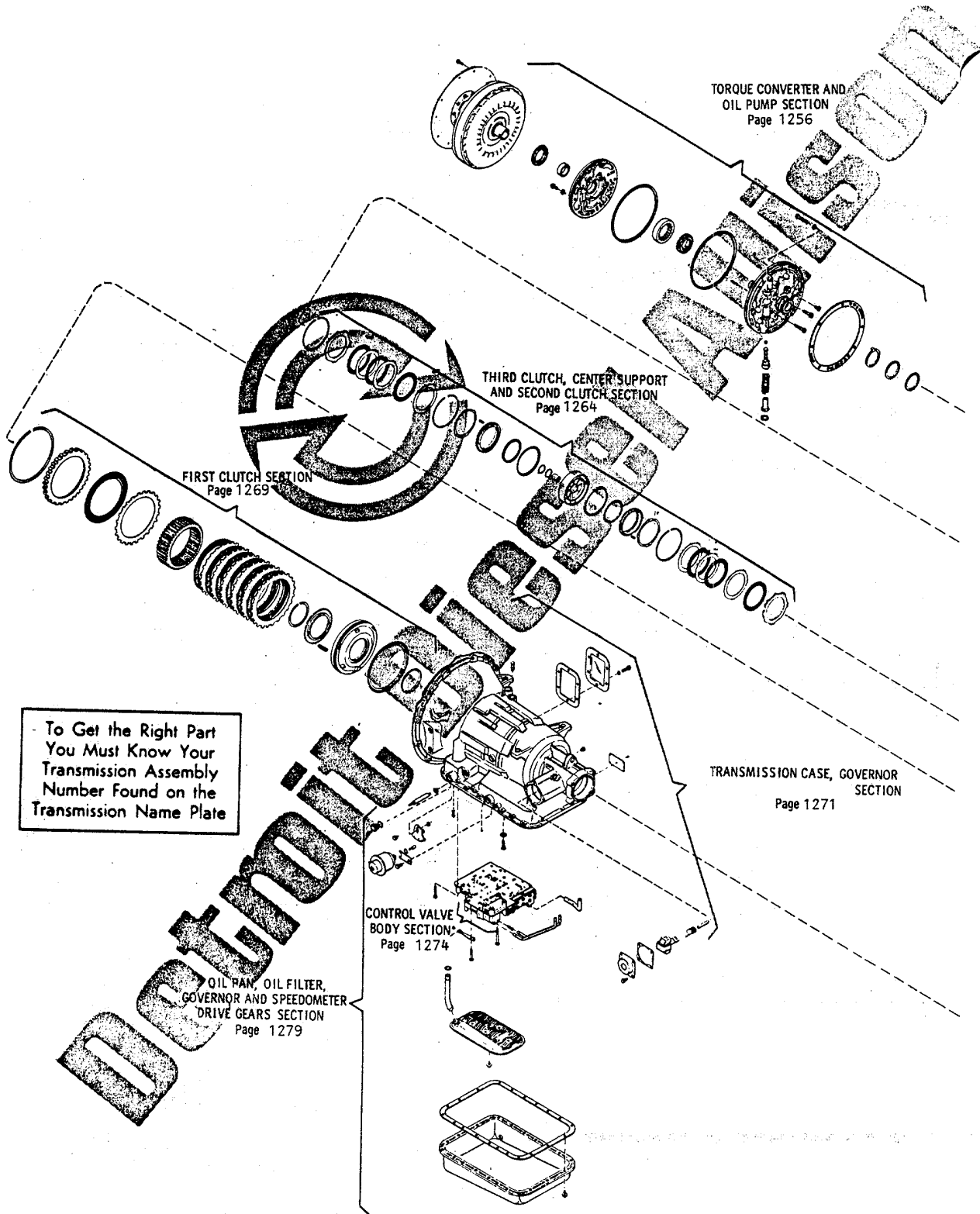


NOTE

Use the basic procedure explained above to locate any part number required. Also, refer to the opposite page for numerical usage and additional parts ordering information.

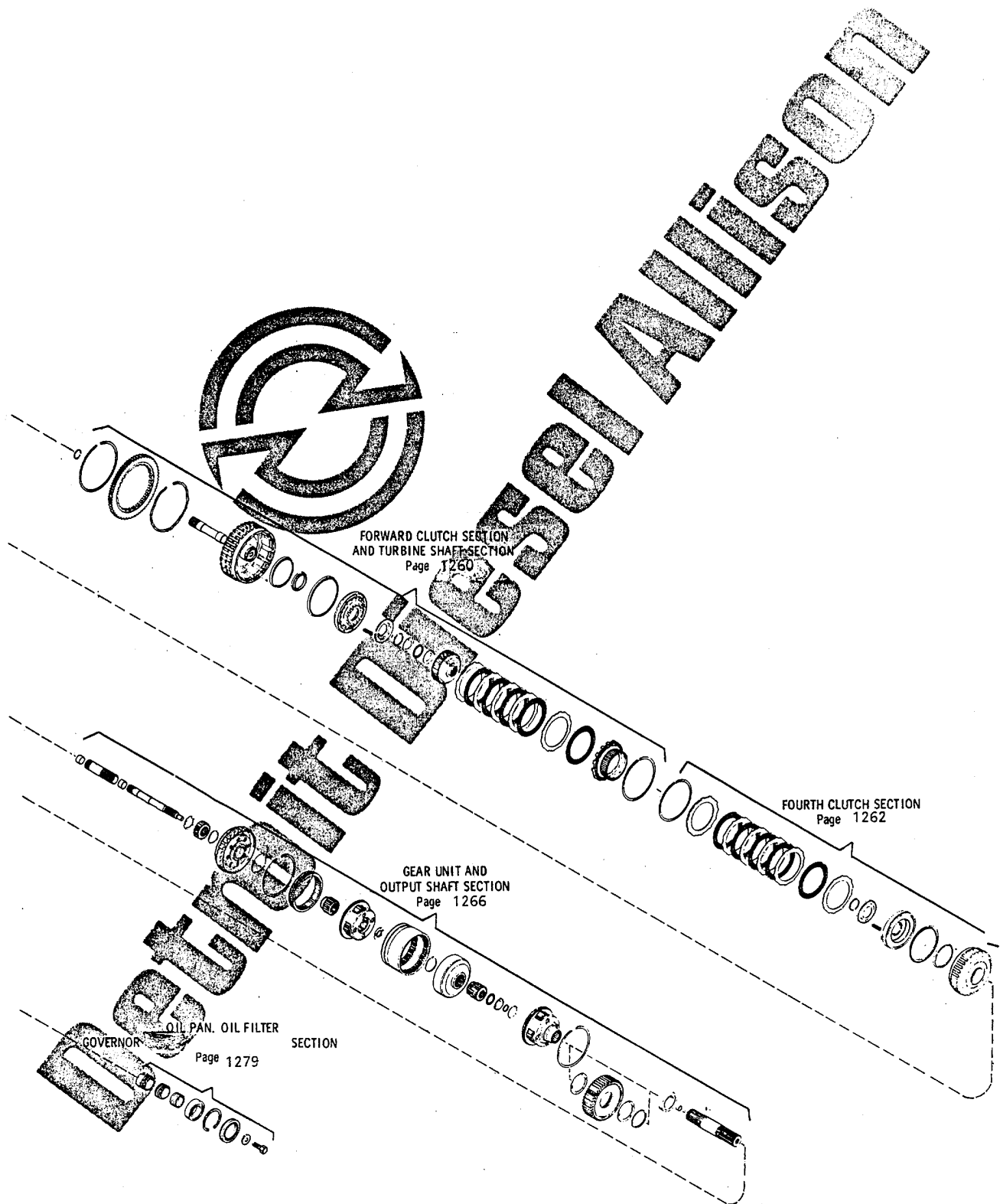
ALLISON AUTOMATIC TRANSMISSION AT 540 SERIES PARTS CATALOG

TO GET THE RIGHT PART YOU MUST KNOW YOUR TRANSMISSION



ALLISON AUTOMATIC TRANSMISSION AT 540 SERIES PARTS CATALOG

ASSEMBLY NUMBER FOUND ON THE TRANSMISSION NAME PLATE



ALLISON AUTOMATIC TRANSMISSION AT 540 SERIES PARTS CATALOG

MODEL DESIGNATION CODE (Stamped on the Transmission Name Plate)

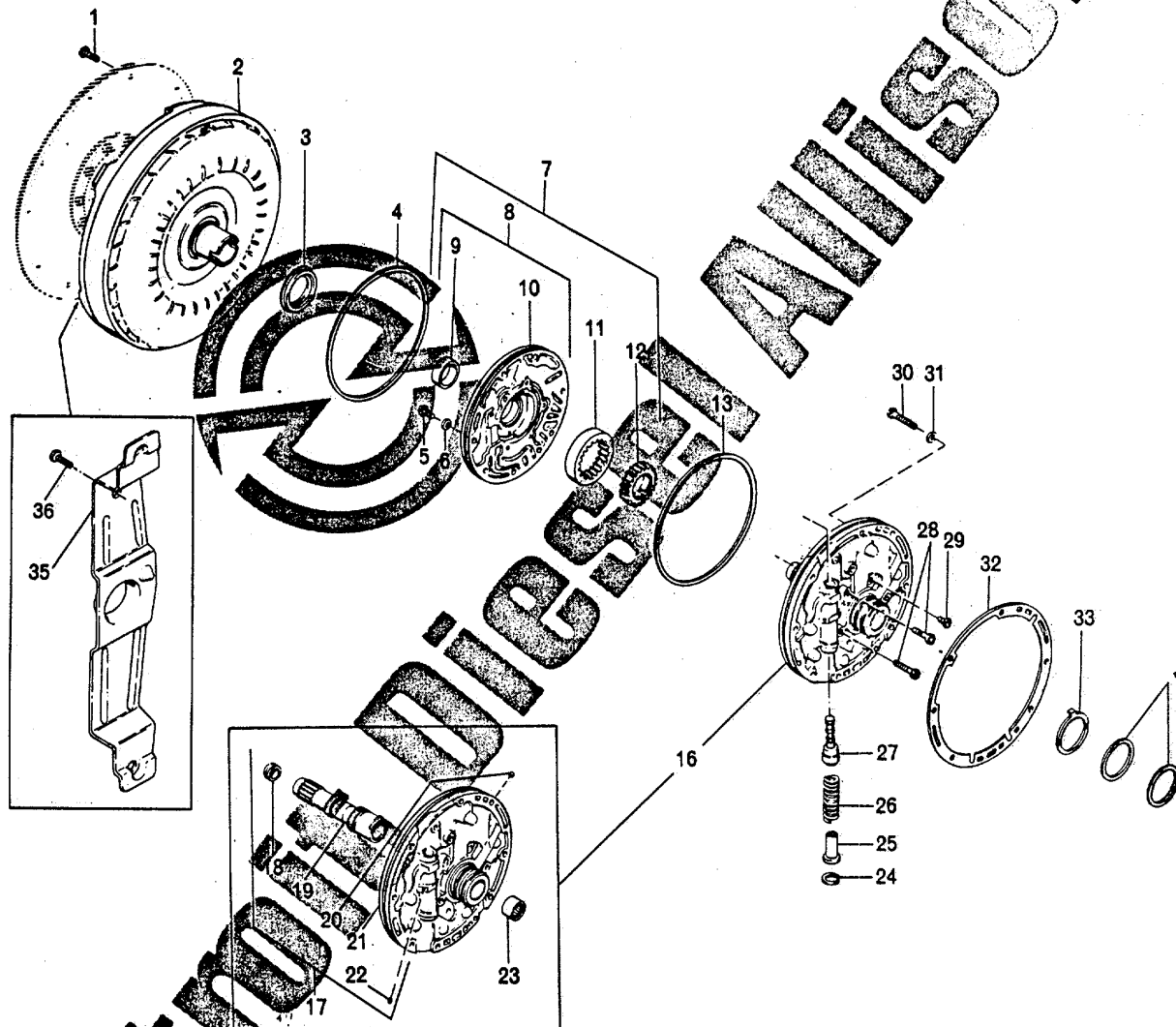
AT 540:

AT	Letter designation (planetary gear type automatic transmission with hydraulic torque converter)
5	Transmission Series 500
4	Number of forward speeds (four speeds forward, one speed reverse)
0	Major- modification

ALLISON AUTOMATIC TRANSMISSION.AT 540 SERIES PARTS CATALOG

LISTED BELOW ARE THE SERVICE KITS AVAILABLE FOR THE AT 540 SERIES AUTOMATIC TRANSMISSIONS

	RECOMMENDED SPARES FOR UNITS		
	1-50	51-100	101-500
SEAL AND GASKET KIT - P/N 23012438 Contains all seals and gaskets necessary for complete transmission rebuild.	5	10	30
OIL FILTER AND OIL PAN GASKET KIT - P/N 23019201	13	26	125
Used starting with S/N 3210278021. Contains one 6883044 oil filter, one 23016682 oil pan gasket and one 1363951 sealring.			
SEPARATOR PLATE KIT - P/N 6881103			
Contains one 6881062 separator plate and instruction sheet. Used with 23011777 Main Case Assy on transmissions prior to S/N 34501.			
REPLACEMENT PARTS KIT - P/N 23012708			
Contains bearings, clutch plates, seals, gaskets, etc., necessary for major overhaul of AT 545 transmissions.			
EXTERNAL OIL FILTER KIT - P/N 23012365			
Contains oil filter, hoses and fittings for installation into oil cooler return line.			



7560G

FIG. 1. TORQUE CONVERTER AND OIL PUMP

COPYRIGHT 1982, 1983 GENERAL MOTORS CORP.

GROUP A
TORQUE CONVERTER AND OIL PUMP, FIGURE 1
TC 270 SERIES - 2.08 TO INSTALL TORQUE RATIO

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	BOLT KIT - CONSISTING OF SIX 1261968 HX HD BOLTS (METRIC THREAD) AND SHIPPING SACK.	23010915	1	26	52	250
3	SEAL ASSY	23015975	1	13	26	125
4	SEAL, OIL	23016599	1	13	26	125
5	BOLT, HX HD. 5/16-18 X 1.1	9419875	6	78	156	750
6	WASHER, WITH SYN. RUBBER COATING.	8626281	6	78	156	750
7	PUMP ASSY. OIL (WITH BRONZE BUSHING).	23015921	1	5	10	30
8	BODY ASSY, PUMP	23015920 *	1			
9	BUSHING, PREBORED - SERVICE ONLY	6880917	1			
10	BODY, PUMP	23015919*	1			
11	GEAR, PUMP DRIVEN	8624063	1			
12	GEAR, PUMP DRIVE	8624062	1			
13	RING, SEAL	23016600	1	13	26	125
16	FRONT SUPPORT AND BEARING ASSY SEE SP1 12-TR-7723014020		1	5	10	30
17	FRONT SUPPORT ASSY	23014021	1			
18	BUSHING, CONVERTER GROUND SLEEVE. (STATOR SHAFT) (MUST BE MACHINED AFTER INSTALLATION) - SEE SP1 14-TR-83.	23015807	1	13	26	125
19	KIT, CONVERTER GROUND SLEEVE (STATOR) . SHAFT) - CONSISTING OF 23014019 CONVERTER GROUND SLEEVE (STATOR SHAFT), 23015807 BUSHING, 148415 ROLLER BEARING AND INSTRUCTION SHEET.	23014304				
20	PLUG, TAPERED EXPANSION	6836577	1			
21	SUPPORT, FRONT	23013699 *				
22	PLUG, TAPERED (0.340 LARGER DIA X 0.320 . SMALLER DIA) EXPANSION.	6836577	1	13	26	125
23	BEARING, ROLLER	148415	1	26	52	250
24	RING, RETAINER	9413377	1	5	10	30
25	STOP, SPRING	6833777	1	5	10	30
26	SPRING, MAIN PRESSURE REGULATOR VALVE	6833294	1	5	10	30
27	VALVE, MAIN PRESSURE REGULATOR	6833778	1	5	10	30
28	BOLT, HX HD, SELF-LOCKING, 5/16-18 X 1 3/4	220426	3	13	26	125
29	BOLT, HX HD, SELF-LOCKING, 5/16-18 X 1	192347	2	26	52	250
30	BOLT, IHX HD, SELF LOCKING, 5/16-18 X 1 3/4	9429510	9	117	234	1125
31	WASHER, WITH SYN. RUBBER COATING	626281	9	117	234	1125
32	GASKET, PUMP COVER TO CASE	23015883	1	13	26	125
33	WASHER, THRUST, 0.056-0.060 THK., SELECTIVE, IDENTIFIED WITH NO.0.	6831620	AR	13	26	125
33	WASHER, THRUST, 0.072-0.076 THK., SELECTIVE, IDENTIFIED WITH NO.1. (COLOR CODE - RED)	6831621	AR	13	26	125
33	WASHER, THRUST, 0.089-0.093 THK., SELECTIVE, IDENTIFIED WITH NO. 2. (COLOR CODE - BLUE)	6831622	AR	13	26	125
33	WASHER, THRUST, 0.105-0.109 THK., SELECTIVE, IDENTIFIED WITH NO.3. (COLOR CODE - GREEN)	6831623	AR	13	26	125

CONTINUED ON NEXT PAGE

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

COPYRIGHT 1983, 1984 GENERAL MOTORS CORP.

GROUP A
TORQUE CONVERTER AND OIL PUMP, FIGURE 1
TC 270 SERIES - 2.08 TO INSTALL TORQUE RATIO

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
33	WASHER, TIRUST, 0.121-0.125 THK., SELECTIVE, IDENTIFTED WITH NO.4. (COLOR CODE - WHITE)	6831624	AR	13	26	125
33	WASHER, THRUST, 0.138-0.142 THK., SELECTIVE, IDENTIFIED WITH NO.5.	6831625	AR	13	26	125
34	RING, HOOK TYPE SEAL	8621075	2	26	52	250
35	STRAP, SHIPPING USED TO RETAIN TORQUE CONVERTER WHEN REMOVING, SHIPPING OR STORING TRANSMISSION	6831602	AR			
36	BOLT, HX HD W/METRIC THREAD.	1261968	1			

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

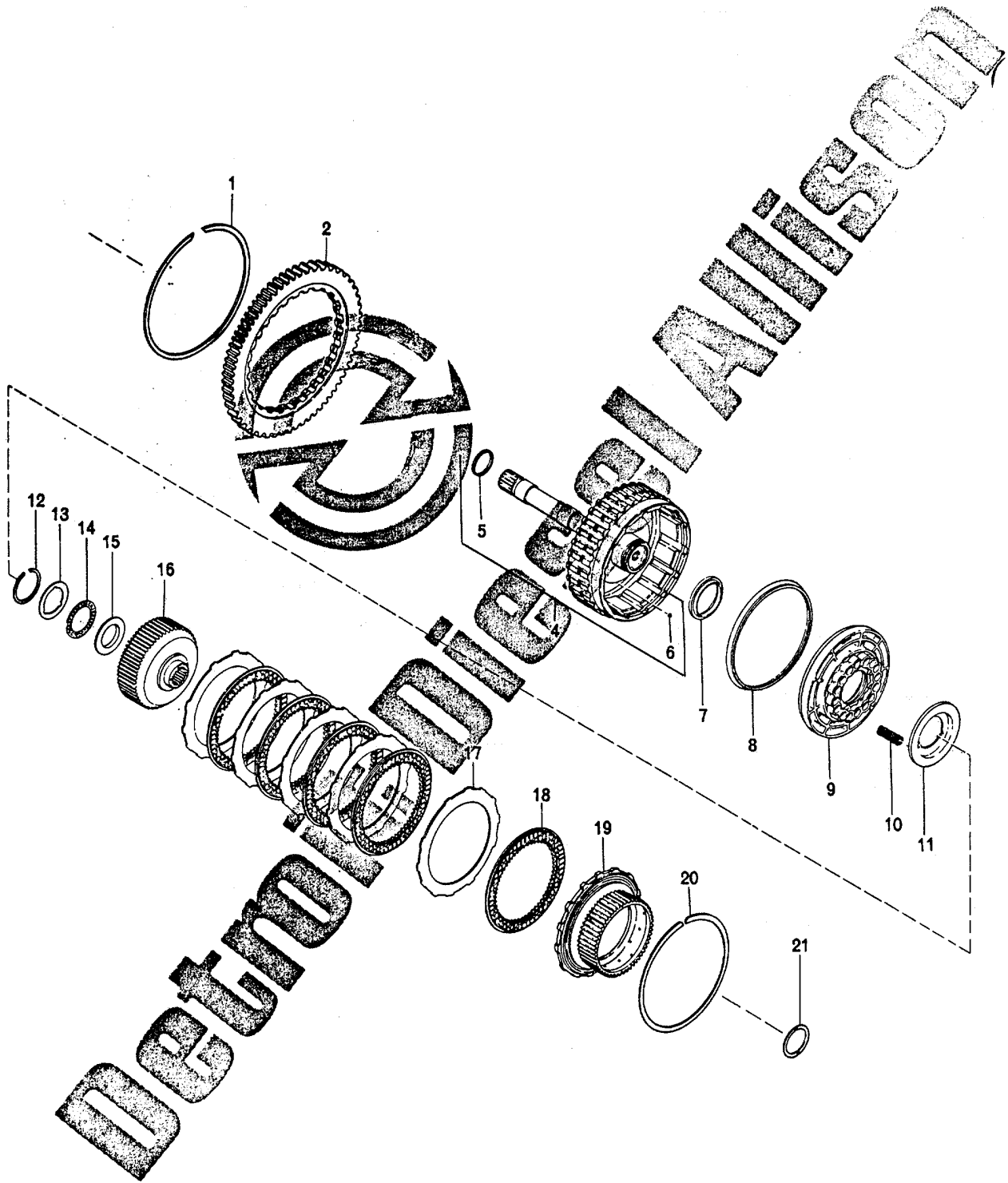
NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
			1-50	51-100	101-500

GROUP F
TORQUE CONVERTER AND OIL PUMP, FIGURE 1
TC 290 SERIES - 1.76 TO 1 STALL TORQUE RATIO

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW

2	CONVERTER KIT, TORQUE - CONSISTING OF 23017706 TORQUE CONVERTER ASSY, 23010915 BOLT KIT AND INSTRUCTION SHEET.	23019672	1	5	10	30
---	--	----------	---	---	----	----

* SERVICED AS AN ASSY - NOT AS A DETAIL PART



7559E

FIG. 2. FORWARD CLUTCH AND TURBINE SHAFT

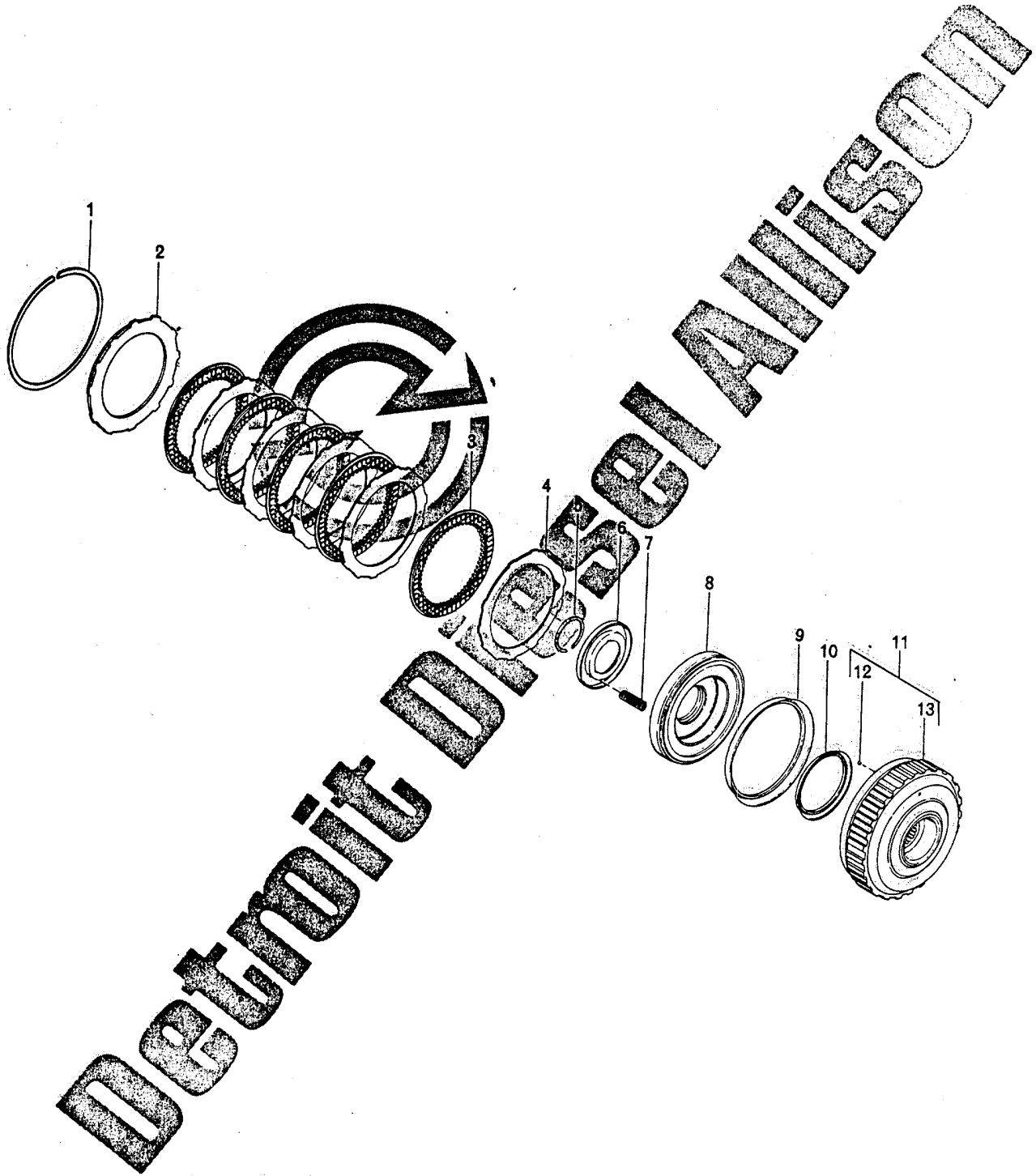
3-15-83

COPYRIGHT 1982, 1983 GENERAL MOTORS CORP.

1260

GROUP A
FORWARD CLUTCH AND TURBINE SHAFT, FIGURE 2

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	RING, INTERNAL SNAP	6838361	1	5	10	30
2	GEAR, PTO DRIVE	6885145	1	5	10	30
4	FORWARD CLUTCH HOUSING AND TURBINE SHAFT ASSY PISTONS 6884278, 6884279 OR 6884280 MUST BE USED WITH 23015574 FWD CLU HSG AND TURBINE SHAFT ASSY. SEE SPI 39-TR-81.	23015574	1	3	6	18
5	RING, HOOK TYPE OIL SEAL	8616052	1	13	26	125
6	BALL, CARBON STEEL, 0.1875 DIA	8622757	1	5	10	30
7	SEAL, LIP TYPE, CLUTCH INNER	8623102	1	13	26	125
8	SEAL, LIP TYPE, CLUTCH OUTER	8623101	1	13	26	125
9	PISTON, FORWARD CLUTCH, 0.700-0.710 THK SELECTIVE, IDENTIFIED WITH LETTER A.	6884278	AR	5	10	30
9	PISTON, FORWARD CLUTCH, 0.726-0.736 THK SELECTIVE, IDENTIFIED WITH LETTER B.	6884279	AR	5	10	30
9	PISTON, FORWARD CLUTCH, 0.752-0.762 TK SELECTIVE, IDENTIFIED WITH LETTER C.	6884280	AR	5	10	30
10	SPRING, CLUTCH PISTON RELEASE	8624073	16	80	160	480
11	RETAINER, SPRING	8623104	1	5	10	30
12	RING, SNAP	6884730	1	5	10	30
13	RACE, THRUST BEARING	6831667	1	13	26	125
14	BEARING, NEEDLE 9	9414211	1	13	26	125
15	RACE, THRUST BEARING	6831733	1	13	26	125
16	HUB, FORWARD CLUTCH	6831634	1	5	10	30
17	R.ATE, FORWARD CLUTCH, EXTERNAL TANGED	6836518	5	25	50	150
18	PLATE, FORWARD CLUTCH, INTERNAL SPLINED	6835151	5	25	50	150
19	HUB, FOURTH CLUTCH DRIVING	23015732	1	5	10	30
20	RING, SNAP	23015985	1	5	10	30
21	WASHER, THRUST, BRONZE	23013454	1	13	26	125



75530

FIG. 3. FOURTH CLUTCH

2-15-82

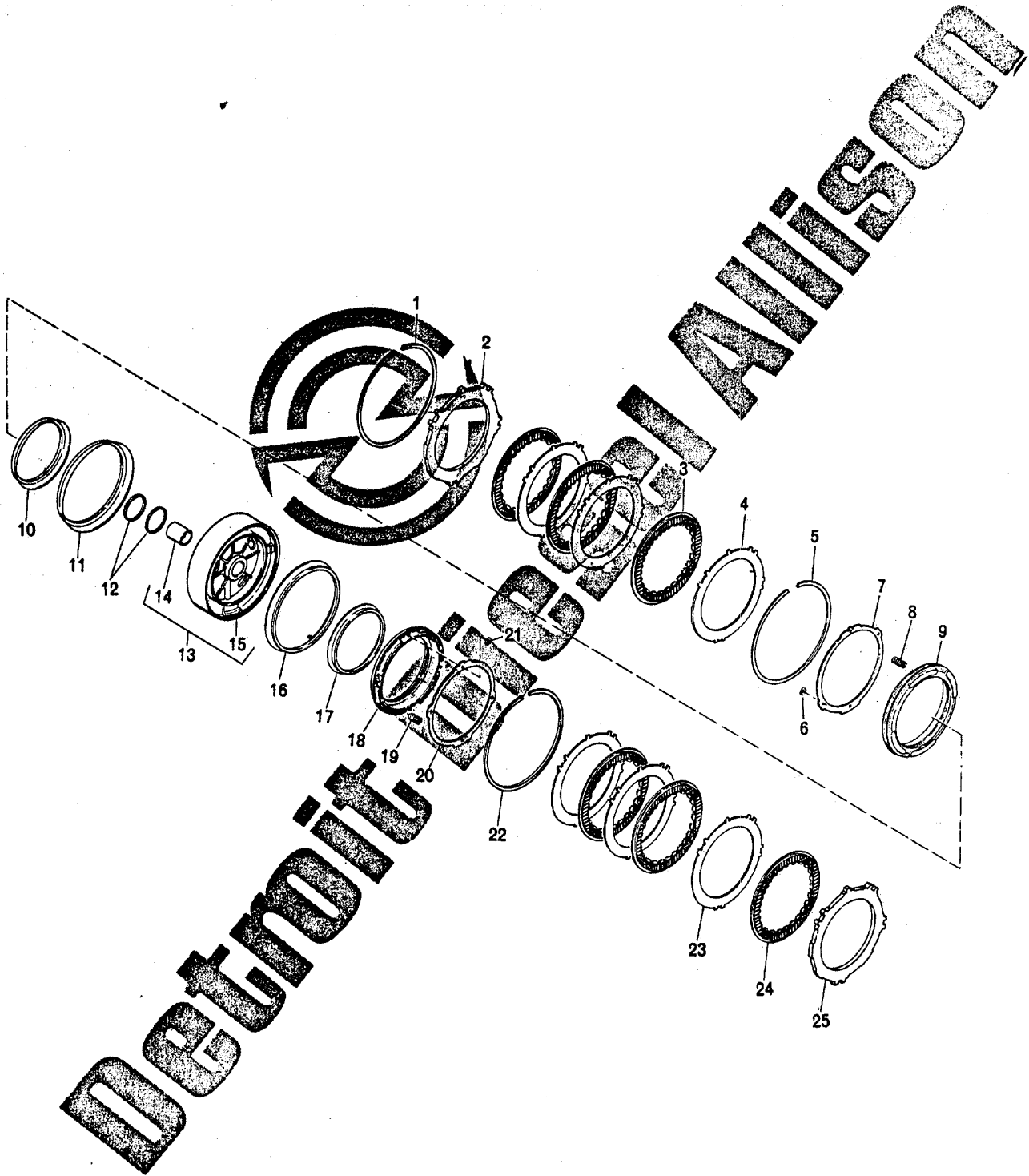
COPYRIGHT 1982 GENERAL MOTORS CORP.

GROUP A
FOURTH CLUTCH, FIGURE 3

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	RING, SNAP	23015985	1	5	10	30
2.	PLATE, FOURTH CLUTCH BACKING.	8623122	1	5	10	30
3	PLATE, FOURTH CLUTCH INTERNAL SPLINED	6835151	5	25	50	150
4	PLATE, FOURTH CLUTCH EXTERNAL TANGED	6836518	5	25	50	150
5	RING, SNAP	6884730	1	5	10	30
6	RETAINER, CLUTCH PISTON RELEASE SPRING	8623104	1	5	10	30
7	SPRING, FOURTH CLUTCH PISTON RELEASE	8624073	16	80	160	480
8	PISTON, FOURTH CLUTCH, 0.700-0.710 THK	6884278	AR	5	10	30
	SELECTIVE IDENTIFIED WITH LETTER A.					
8	PISTON, FOURTH CLUTCH, 0.726-0.736 THK., SELECTIVE, IDENTIFIED WITH LETTER B.	6884279	AR	5	10	30
8	PISTON, FOURTH CLUTCH, 0.752-0.762 THK., SELECTIVE, IDENTIFIED WITH LETTER C,	6884280	AR	5	10	30
9	SEAL, CLUTCH PISTON OUTER	8623101	1	13	26	125
10	SEAL, CLUTCH HOUSING	8623121	1	13	26	125
11	HOUSING ASSY, FOURTH CLUTCH PISTONS 6884278, 6884279 OR 6884280 MUST BE USED WITH 23015573 FOURTH CLU HSG ASSY. SEE SPI 39-TR-81.	23015573	1	5	10	30
12	BALL, CARBON STEEL, 0.1875 DIA	8622757	1	5	10	30
13	HOUSING, FOURTH CLUTCH	23015570 *				

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

COPYRIGHT 1983 GENERAL MOTORS CORP.



7554B

FIG. 4. THIRD CLUTCH, CENTER SUPPORT AND SECOND CLUTCH

2-15-82

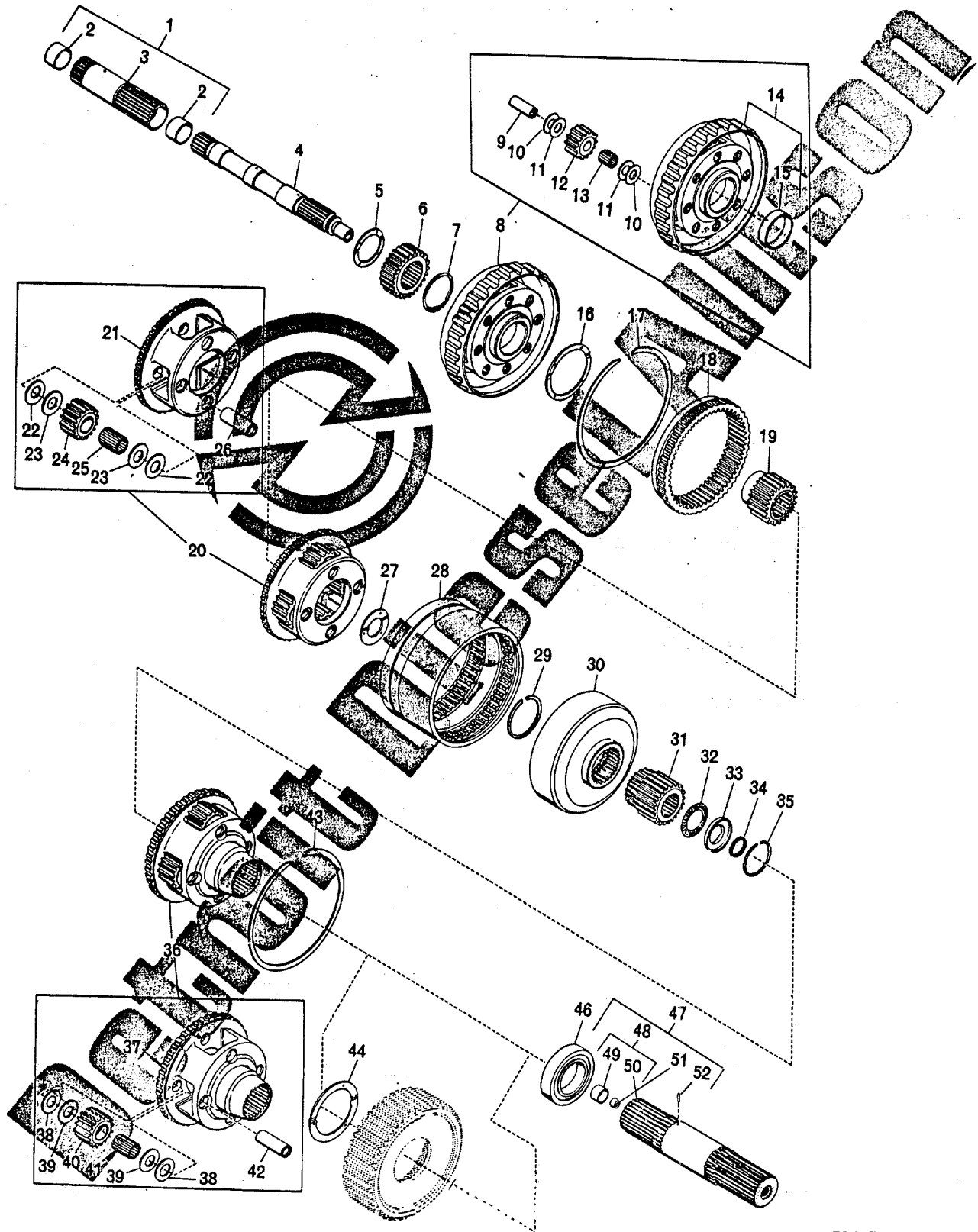
COPYRIGHT 1982 GENERAL MOTORS CORP.

GROUP A
THIRD CLUTCH, CENTER SUPPORT AND SECOND CLUTCH, FIGURE 4

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	RING, SNAP, 0.155-0.157 THK., COLOR CODE GREEN.	6884275	1	5	10	30
2	PLATE, THIRD CLUTCH BACKING, 0.416-0.426 THK., IDENTIFIED WITH NO. 2.	6831644	1	5	10	30
3	PLATE, THIRD CLUTCH INTERNAL SPLINED	6884958	3	15	30	90
4	PLATE, THIRD CLUTCH EXTERNAL TANGED	6831641	3	15	30	90
5	RING, SNAP, 0.148 - 0.150 THK., SELECTIVE, COLOR CODE WHITE.	6884274	AR	5	10	30
5	RING, SNAP, 0.152 - 0.154 THK., SELECTIVE, COLOR CODE YELLOW.	6836546	AR	5	10	30
5	RING, SNAP, 0.155-0.157 THK., SELECTIVE, COLOR CODE GREEN	6884275	AR	5	10	30
5	RING, SNAP, 0.158-0.160 THK., SELECTIVE, COLOR CODE RED	6884276	AR	5	10	30
6	NUT, PUSH-ON .	3909063	4	52	104	500
7	RING, SPRING RETAINER	6834129	1	5	10	30
8	SPRING, THIRD CLUTCH PISTON RETURN	6831656	12	60	120	360
9	PISTON, THIRD CLUTCH .	6834817	1	5	10	30
10	SEAL, THIRD CLUTCH PISTON, INNER .	23011475	1	13	26	125
11	SEAL, THIRD CLUTCH PISTON, OUTER	23011456	1	13	26	125
12	RING, HOOK TYPE SEAL	8621075	2	26	52	250
13	SUPPORT AND BUSHING ASSY	23013015	1	5	10	30
14	BUSHING, CENTER SUPPORT (SERVICE ONLY)	23012990	1			
15	SUPPORT, CENTER	6834127*	1			
16	SEAL, SECOND CLUTCH PISTON, OUTER .	23011456	1	13	26	125
17	SEAL, SECOND CLUTCH PISTON, INNER .	23011475	1	13	26	125
18	PISTON, SECOND CLUTCH .	6834817	1	5	10	30
19	SPRING, SECOND CLUTCH PISTON RETURN .	6831656	12	60	120	360
20	RING, SPRING RETAINER .	6834129	1	5	10	30
21	NUT, PUSH-ON.	3909063	4	52	104	500
22	RING, SNAP, 0.155-0.157 THK., COLOR CODE GREEN.	6884275	1	5	10	30
23	PLATE, SECOND CLUTCH EXTERNAL TANGED	6831641	3	15	30	90
24	PLATE, SECOND CLUTCH INTERNAL SPLINED.	6884958	3	15	30	90
25	PLATE, SECOND CLUTCH BACKING, 0.442-0.452 THK SELECTIVE, IDENTIFIED WITH NO.1.	6837603	AR	5	10	30
25	PLATE, SECOND CLUTCH BACKING, 0.416-0.426 THK SELECTIVE, IDENTIFIED WITH NO.2.	6831644	AR	5	10	30

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

COPYRIGHT 1983, 1984 GENERAL MOTORS CORP.



7561E

FIG. 5. GEAR UNIT AND OUTPUT SHAFT
COPYRIGHT 1982 GENERAL MOTORS

GROUP A

GEAR UNIT AND OUTPUT SHAFT, FIGURE 5

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	SHAFT ASSY, SUN GEAR	6835937	1	5	10	30
2	BUSHING - SERVICE ONLY	6836272	2	10	20	60
3	SHAFT, SUN GEAR.....	6835938 *	1			
4	SHAFT, TRANSMISSION MAIN	23013474	1	5	10	30
5	WASHER, THRUST	6831658	1	13	26	125
6	GEAR, FRONT SUN	6835732	1	5	10	30
7	WASHER, THRUST, 0.064-0.068 THK., SELECTIVE - COLOR CODE - RED	23013451	AR	5	10	30
7	WASHER, THRUST, 0.083-0.087 THK., SELECTIVE - COLOR CODE - GREEN	23013452	AR	5	10	30
7	WASHER, THRUST, 0.102-0.106 THK., SELECTIVE..	23013453	AR	5	10	30
8	CARRIER ASSY, FRONT PLANETARY	6835768	1			
9	PIN	684309	4			
10	WASHER, THRUST (BRONZE).....	6839514	8			
11	WASHER, PINION THRUST (STEEL)	6833991	8			
12	PINION SET. (MATCHED SET OF 4 PINIONS) ..	6882798	1 SET			
13	BEARING, NEEDLE.....	9426919	80			
14	FLANGE AND CARRIER ASSY	6835767	1	5	10	30
15	BUSHING (MUST BE MACHINED AFTER ... INSTALLATION.)	6831689	1			
16	WASHER, THRUST	6831673	1	13	26	125
17	RING, INTERNAL SNAP	6755007	1	5	10	30
18	GEAR, FRONT INTERNAL	6831675	1	5	10	30
19	GEAR, CENTER SUN	6835936	1	5	10	30
20	CARRIER ASSY, CENTER PLANETARY.....	6831676	1			
21	CARRIER.....	6831677	1	5	10	30
22	WASHER, THRUST (BRONZE).....	6839376	8			
23	WASHER, PINION THRUST (STEEL)	6831680	8			
24	PINION SET (MATCHED SET OF 4 PINIONS) ...	6882799	1 SET			
25	BEARING, NEEDLE ROLLER.....	9426920	76			
26	PIN, PLANETARY PINION.....	6831679	4			
27	WASHER, THRUST	6831692	1	13	26	125
28	DRUM, REAR CARRIER	6831674	1	5	10	30
29	RING, EXTERNAL SNAP	6831601	1	5	10	30
30	GEAR, CENTER INTERNAL	6831687	1	5	10	30
31	GEAR, REAR SUN.....	6884902	1	5	10	30
32	BEARING, NEEDLE.	6884900	1	13	26	125
33	RACE, THRUST.	6884901	1	13	26	125
34	RING, EXTERNAL SPIRAL RETAINING	6831603	1	5	10	30
35	RING, EXTERNAL RETAINING	6836599	1	5	10	30
36	CARRIER ASSY, REAR PLANETARY	6837719	1			
37	CARRIER.....	6835933	1	5	10	30
38	WASHER, THRUST (BRONZE).....	6839376	8			
39	WASHER, PINION THRUST (STEEL)	6831680	8			

CONTINUED ON NEXT PAGE

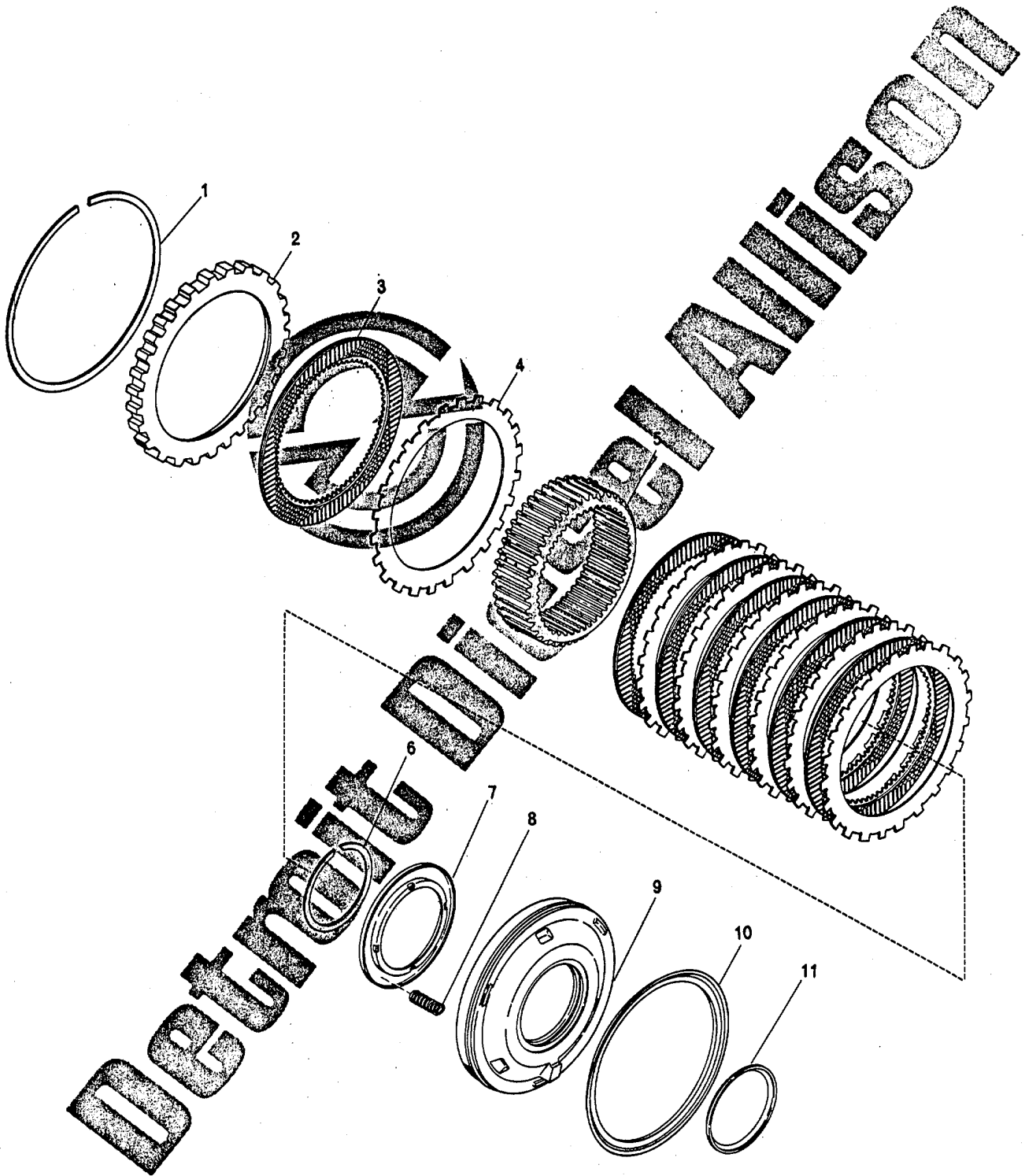
* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP A CONT

GEAR UNIT AND OUTPUT SHAFT, FIGURE 5

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
40	PINION SET (MATCHED SET OF 4 PINIONS) ...	6882799	1 SET			
41	ROLLER, NEEDLE	9426920	76			
42	PIN, PINION	6831679	4			
43	RING, INTERNAL SNAP	6755007	1	5	10	30
46	BEARING, BALL	903009	1	13	26	125
47	SHAFT ASSY, OUTPUT	6835915	1	5	10	30
48	SHAFT AND BUSHING ASSY.....	6835916 *	1			
49	BUSHING	8622947	1	13	26	125
50	SHAFT.....	6835917 *	1			
51	PLUG, 0.340 DIA.	8623484	1			
52	PIN, SPRING	454512	1	13	26	125

* SERVICED AS AN ASSY - NOT AS A DETAIL PART



7555A

FIG. 6. FIRST CLUTCH

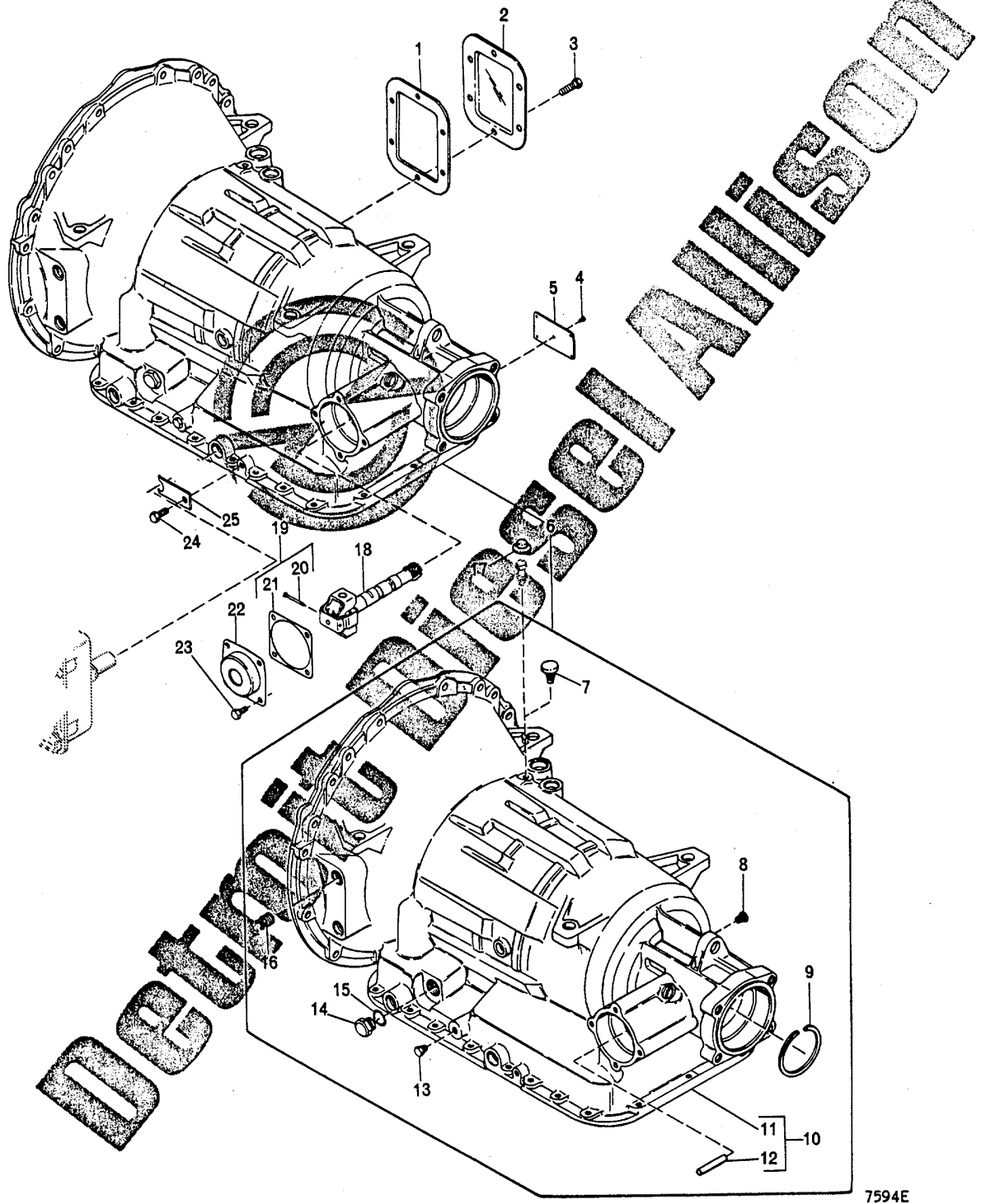
COPYRIGHT 1982 GENERAL MOTORS CORP.

2-15-82

GROUP A

FIRST CLUTCH, FIGURE 6

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	RING, INTERNAL SNAP	6884272	1	5	10	30
2	PLATE, FIRST CLUTCH BACKING, 0.683-0.693 THK., SELECTIVE, IDENTIFIED WITH NO. 1.	6831707	AR	5	10	30
2	PLATE, FIRST CLUTCH BACKING, 0.647-0.657 THK., SELECTIVE, IDENTIFIED WITH NO. 2.	6831708	AR	5	10	30
2	PLATE, FIRST CLUTCH BACKING, 0.611-0.621 THK., SELECTIVE, IDENTIFIED WITH NO. 3.	6831709	AR	5	10	30
3	PLATE, FIRST CLUTCH INTERNAL SPLINED	6835152	7	35	70	210
4	PLATE, FIRST CLUTCH EXTERNAL TANGED	6831705	7	35	70	210
5	GEAR, REAR RING. SEE SPI 55-TR-83	6837643	1	5	10	30
6	RING, EXTERNAL SNAP	6831704	1	5	10	30
7	RETAINER, FIRST CLUTCH PISTON RELEASE SPRING	6834681	1	5	10	30
8	SPRING, FIRST CLUTCH PISTON RELEASE	6880251	22	110	220	660
9	PISTON, FIRST CLUTCH	6834816	1	5	10	30
10	SEAL, FIRST CLUTCH PISTON OUTER LIP TYPE	23011474	1	13	26	125
11	SEAL, FIRST CLUTCH PISTON INNER LIP TYPE	23011457	1	13	26	125



7594E

FIG. 7. TRANSMISSION CASE, GOVERNOR

COPYRIGHT 1982 GENERAL MOTORS CORP.

2-15-82

GROUP A

TRANSMISSION CASE, FIGURE 7

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	GASKET, POWER TAKEOFF COVER	23016683	1	13	26	125
2	COVER, POWER TAKEOFF.....	6774322	1	5	10	30
3	BOLT, .FLANGED HX HO, /8-16 X 0.74.....	23017737	6	30	60	180
4	SCREW, TRUSS HEAD DRIVE	8622361	1	5	10	30
5	NAMEPLATE	6838494	1	5	10	30
6	MAIN CASE ASSY - SERVICE ONLY	23015086	1	3	6	18
7	VENI ASSY, TRANSMISSION	6882757	1	5	10	30
8	PLUG, HX HO PIPE, 1/8 NPTF, BACKUP LIGHT . SWITCH HOLE.	23012036	1	5	10	30
9	RING, INTERNAL SNAP	6831704	1	5	10	30
10	CASE AND PIN ASSY	23016645 *	1			
11	CASE, TRANSMISSION	23016642 *	1			
12	PIN, 5/16 X 2	141231				
13	PLUG, HX HD PIPE, 1/8 NPTF	23012036	1	5	10	30
14	PLUG, NEUTRAL START SWITCH, 3/4-16	445090	1	5	10	30
15	WASHER, NEUTRAL START SWITCH PLUG....	6839761	1	13	26	125
16	NOT USED IN THIS GROUP.					
17	SHROUD, NEOPRENE BREATHER. USED. WITH 3750810 BREATHER ASSY ONLY. SEE SIL I-TR-76.	6883025				
18						
19	KIT, GOVERNOR SERVICE. CONTAINS TWO 8623232 PIN, ONE 23011670 GASKET AND 6880354 INSTRUCTION SHEET.	6880353	1			
20	PIN, GOVERNOR WEIGHT	8623232	2			
21	GASKET, GOVERNOR COVER	23018625	1	13	26	
22	COVER, GOVERNOR	8623262	1	5	10	
23	BOLT, HEX HD, 5/16-18 X 9/16.....	115658	4	40	80	240
24	BOLT, HEX.HD, 5/16-18 X 3/4.....	179816	1	10	20	60
25	RETAINER, MODULATOR TO CASE	8627650	1	5	10	30

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP D

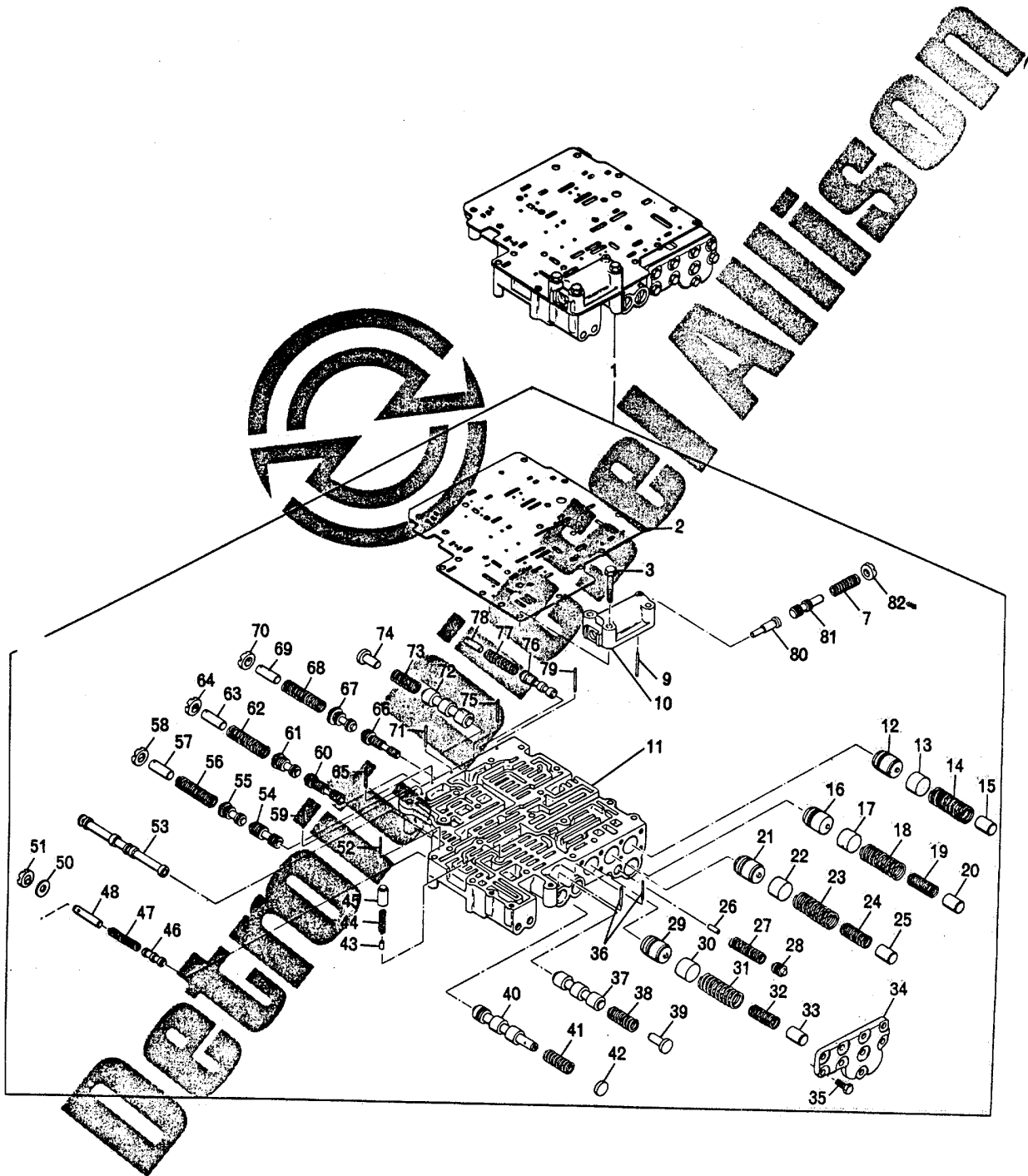
TRANSMISSION CASE, FIGURE 7
SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
18 26-28	GOVERNOR ASSY-I.D. NO. 461 NOT USED IN THIS GROUP.	6885570	1	5	10	30

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

COPYRIGHT 1983 GENERAL MOTORS CORP.

08-01-83



7593L

FIG. 8. CONTROL VALVE BODY ASSEMBLY

COPYRIGHT 1983 GENERAL MOTORS CORP.

08-01-83

GROUP A

CONTROL VALVE BODY ASSEMBLY, FIGURE 8
3600-3700 ENGINE RPM

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1			1	3	6	18
2	PLATE, SEPARATOR.	23013804	1	5	10	30
3	BOLT, H(X HD, 1/4-20 X 1 3/4	445567	3	15	30	90
9 10	PIN, STRAIGHT	9428493	1	5	10	30
11	BODY. CONTROL VALVE.	23013051	1	5	10	30
12	VALVE, THIRD CLUTCH TRIMMER	6835920	1	5	10	30
13	PLUG, TRIMMER	6835921	1	5	10	30
14	SPRING, THIRD CLUTCH TRIMMER VALVE	23012937	1	5	10	30
15	STOP, VALVE	6835734	1	5	10	30
16	VALVE, FIRST CLUTCH TRIMMER	6835920	1	5	10	30
17	PLUG, TRIMMER	6835921	1	5	10	30
18	SPRING, FIRST CLUTCH TRIMMER VALVE - OUTER	6880045	1	5	10	30
19	SPRING, FIRST CLUTCH TRIMMER VALVE - INNER USED STARTING WITH S/N 34501.	6885166	1	5	10	30
20	STOP, VALVE	6839122	1	5	10	30
21	VALVE, SECOND CLUTCH TRIMMER	6835920	1	5	10	30
22	PLUG, TRIMMER	6835921	1	5	10	30
23	SPRING, SECOND CLUTCH TRIMMER VALVE - OUTER..	23017086	1	5	10	30

CONTINUED ON NEXT PAGE

1275

GROUP A CONT

CONTROL VALVE BODY ASSEMBLY, FIGURE 8
3600-3700 ENGINE RPM

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
24	SPRING, SECOND CLUTCH TRIMMER VALVE - INNER USED STARTING WITH S/N 3210267780.	6883300	1	5	10	30
25	STOP, VALVE.....	6839122	1	5	10	30
26	STOP, VALVE. USED STARTING WITH S/N-3210274682.	141223	1	5	10	30
27	SPRING, ACCUMULATOR VALVE. USED STARTING WITH S/N 3210274682s	23013744	1	5	10	30
28	VALVE, ACCUMULATOR. USED STARTING WITH S/N. 3210274682.	23013053	1	5	10	30
29	VALVE, FOURTH CLUTCH TRIMMER	6835920	1	5	10	30
30	PLUG, TRIMMER.....	6835921	1	5	10	30
31	SPRING, FOURTH CLUTCH TRIMMER VALVE.- OUTER	6839271	1	5	10	30
32	SPRING, FOURTH CLUTCH TRIMMER VALVE - INNER USED STARTING WITH S/N 34501.	6880118	1	5	10	30
33	STOP, VALVE.....	6839122	1	5	10	30
34	COVER. TRIMMER VALVE.....	23013052	1	5	10	30
35	BOLT, HEX HD, 1/4-20 X 3/4.....	443603	9	45	90	270
36	PIN, STRAIGHT	6703169	2	10	20	60
37	VALVE, 2-3 RELAY.....	6833888	1	5	10	30
38	SPRING, 2-3 RELAY VALVE.....	6832462	1	5	10	30
39	STOP, 2-3 RELAY VALVE. 6834530 STOP & 6834445 SPACER REPLACED BY 6839829 STOP.	6839829	1	5	10	30
40	VALVE, 1-2 RELAY.....	6835928	1	5	10	30
41	SPRING, 1-2 RELAY VALVE.....	6834528	1	5	10	30
42	SPACER, 1-2 RELAY VALVE SPRING	6835930	1	5	10	30
43	PIN, PRIORITY VALVE STOP	6838429	1	5	10	30
44	SPRING, PRIORITY VALVE	6835729	1	5	10	30
45	VALVE, PRIORITY	6835929	1	5	10	30
46	VALVE, HOLD REGULATOR.....	6831737	1	5	10	30
47						
48	PIN, HOLD REGULATOR VALVE.....	6884905	1	5	10	30
50	WASHER. USED STARTING WITH S/N 113786	6833949	1	5	10	30
51	RING, SPRING ADJUSTING. USED STARTING WITH S/N 113786.	6833891	1	5	10	30
52	PIN, STRAIGHT	9426920	1	5	10	30
53	VALVE, RANGE SELECTOR.....	23013501	1	5	10	30
54	VALVE, 1-2 SHIFT	6880998	1	5	10	30
55	VALVE. 1-2 MODULATOR.....	6838246	1	5	10	30
56						
57	STOP, 1-2 SHIFT VALVE.....	6833896	1	5	10	30
58	RING, SPRING ADJUSTING	6833891	1	13	26	125
59	PIN, STRAIGHT	9428493	1	5	10	30
60	VALVE, 2-3 SHIFT	6880999	1	5	10	30
61	VAIVE, 2-3 MODULATOR	6835924	1	5	10	30
62						
63	STOP, 2-3 SHIFT VALVE.....	6833896	1	5	10	30
64	RING, SPRING ADJUSTING	6833891	1	13	26	125
65	PIN, STRAIGHT	9428493	1	5	10	30
66	VALVE, 3-4 SHIFT	6882294	1	5	10	30
67	VALVE. 3-4 MODULATOR.....	6835925	1	5	10	30
68						
69	STOP, SHIFT VALVE.....	6833896	1	5	10	30
70	RING, SPRING ADJUSTING	6833891	1	13	26	125
71	PIN, STRAIGHT	9428493	1	5	10	30
72	VALVE, 3-4 RELAY.....	6833888	1	5	10	30

CONTINUED ON NEXT PAGE

GROUP A CONT

CONTROL VALVE BODY ASSEMBLY, FIGURE 8
3600-3700 ENGINE RPM

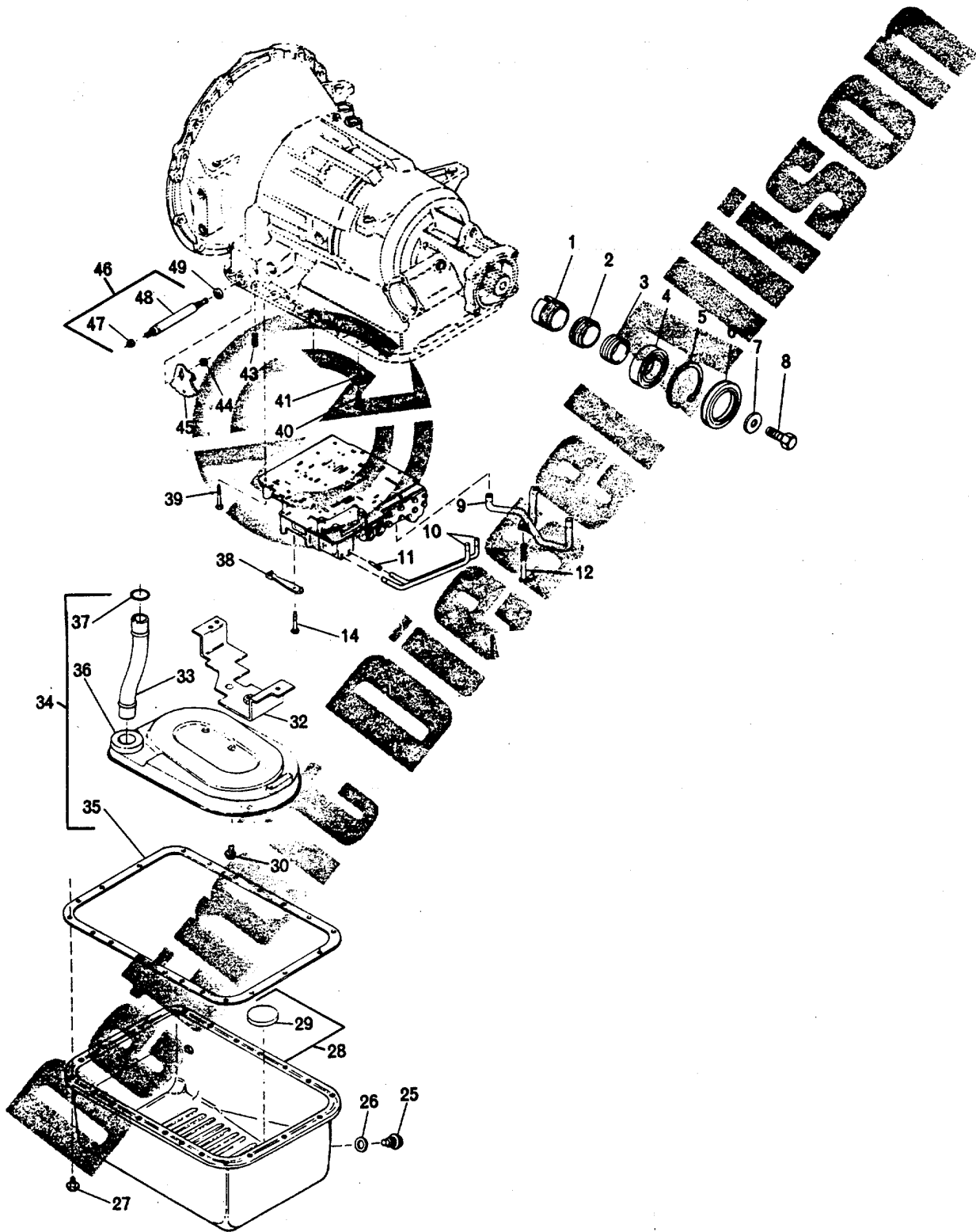
REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
73	SPRING, 3-4 RELAY VALVE.....	6832462	1	5	10	30
74	STOP, RELAY VALVE 3-4. 6834530 STOP & 6834445 SPACER REPLACED BY 6839829 STOP.	6839829	1	5	10	30
75	PIN, STRAIGHT	6703169	1	5	10	30
76	VALVE, TRIMMER REGULATOR. USED STARTING WITH S/N 34501.	6833889	1	5	10	30
77	SPRING, TRIMMER REGULATOR VALVE. USED STARTING WITH S/N 34501.	23018424	1	5	10	30
78	STOP, TRIMMER REGULATOR VALVE. USED STARTING WITH S/N 34501.	6880158	1	5	10	30
79	PIN, STRAIGHT. USED STARTING WITH S/N 34501.	9428493	1	5	10	30
80	ROD, MODULATOR VALVE ACTUATING. USED STARTING WITH S/N 3210258791. (SEE FIG. 7 REF. 29.)	6839083	1	5	10	30
81.	VALVE, MODULATOR. USED STARTING WITH S/N 3210258791.	23013764	1	5	10	30
82	RING, SPRING ADJUSTING. USED STARTING WITH S/N 3210258791.	23014098	1	5	10	30

GROUP F

CONTROL VALVE BODY ASSEMBLY, FIGURE 8
2800-2900 ENGINE RPM

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	KIT, CONTROL VALVE BODY AND GOVERNOR ASSY (WITH 23017582 TRIM 'BOOST ACCUMULATOR) - CONSISTING OF 23012498 (NOT SERVICED) CONTROL VALVE BODY ASSY AND 1.D. NO. 461 MATCHING GOVERNOR ASSY.		1	3	6	18
10	BODY, MODULATOR VALVE.....	230161888	1	5	10	30
47	SPRING, HOLD REGULATOR VALVE.....	6837953	1	5	10	30
56	SPRING, 1-2 SHIFT VALVE.....	23012946	1	5	10	30
62	SPRING, 2-3 SHIFT VALVE.....	6880992	1	5	10	30
68	SPRING, 3-4 SHIFT VALVE.....	6880991	1	5	10	



7592N

FIG. 9. OIL PAN, OIL FILTER, GOVERNOR AND SPEEDOMETER DRIVE GEARS

COPYRIGHT 1983, 1984 GENERAL MOTORS CORP.

01-16-84

GROUP A

OIL PAN, OIL FILTER, GOVERNOR AND SPEEDOMETER DRIVE GEARS, FIGURE 9

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
1	GEAR, GOVERNOR DRIVE.....	23017188	1	5	10	30
2	GEAR, SPEEDOMETER DRIVE W/5 TEETH	6831716	1	5	10	30
3	SPACER, SELECTIVE W/ONE GROOVE, .9833-.9873 INCH LONG	6834648	AR	5	10	30
3	SPACER, SELECTIVE W/TWO GROOVES, .9968-1.0008. INCH LONG	6834649	AR	5	10	30
3	SPACER, SELECTIVE W/THREE GROOVES, 1.0103-1.0143 INCH LONG	23017125	AR	5	10	30
3	SPACER, SELECTIVE W/FOUR GROOVES, 1.0238-1.0278 INCH LONG	6834651	AR	5	10	30
3	SPACER, SELECTIVE W/FIVE GROOVES, 1.0373-1.0413 INCH LONG	23017127	AR	5	10	30
3	SPACER, SELECTIVE W/SIX GROOVES, 1.0508-1.0548 INCH LONG	6834653	AR	5	10	30
4	BEARING, BALL	903209	1	13	26	125
5.	RING, INTERNAL SNAP, TYPE TA BEVELED	9418788	1	5	10	30
6	SEAL, OIL	6778050	1	13	26	125
7	WASHER, OUTPUT FLANGE. WHEN REPLACING 6752556 WASHER WITH 9411417 WASHER, 23014159 BOLT MUST ALSO BE USED.	9411417	1			
8	BOLT, HX HO, 1/2-20 X 1 1/2. OUTPUT FLANGE..... RETAINING. WHEN REPLACING 9409060 BOLT WITH 23014159 BOLT, 9411417 WASHER MUST ALSO BE USED.	23014159	1			
9	TUBE. FIRST CLUTCH.	23013939	1	5	10	30
10	TUBE, GOVERNOR.....	6833892	2	10	20	60
11	SCREEN, GOVERNOR TUBE	8624471	1	13	26	125
12	BOLT, HX HD, 1/4-20 X 3, USED STARTING..... WITH S/N 3210274682	23016247	2	10	20	60
14	BOLT, HEX HD, 1/4-20 X 1 3/4.....	445567	1	10	20	60
38	ROLLER AND SPRING ASSY, DETENT.....	8625431	1	5	10	30
39	BOLT, HX HD, 1/4-20 X 2 1/4.....	445568	16	80	160	480
40	BOLT, HEX HD, 3/8-16 X 1, CASE TO CENTER SUPPORT.	6836587	1	5	10	30
41	WASHER, PLAIN	23014094	1	13	26	125
43	PIN, RANGE SELECTOR SHAFT RETAINING	6831774	1	5	10	30
44	NUT, HX LOCK, TYPE LJ 3/8-24	117212	1	13	26	125
45	LEVER AND PIN ASSY, INSIDE DETENT	6834105	1	5	10	30
46	KIT, ' SELECTOR SHAFT AND NUT.....	6885213	1	5	10	

CONTINUED ON NEXT PAGE

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

COPYRIGHT 1983, 1984 GENERAL MOTORS CORP.

1-16-84

GROUP A CONT

OIL PAN, OIL FILTER, GOVERNOR AND SPEEDOMETER DRIVE GEARS, FIGURE 9

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-50	51-100	101-500
47	NUT, SELECTOR SHAFT (W/METRIC THREAD) - USED STARTING WITH S/N 126740.	11501033	1			
48	SHAFT, SELECTOR,	23017610 *	1			
49	SEAL	23010610	1	13	26	125

GROUP C

*OIL PAN, OIL FILTER, GOVERNOR AND SPEEDOMETER DRIVE GEARS, FIGURE 9

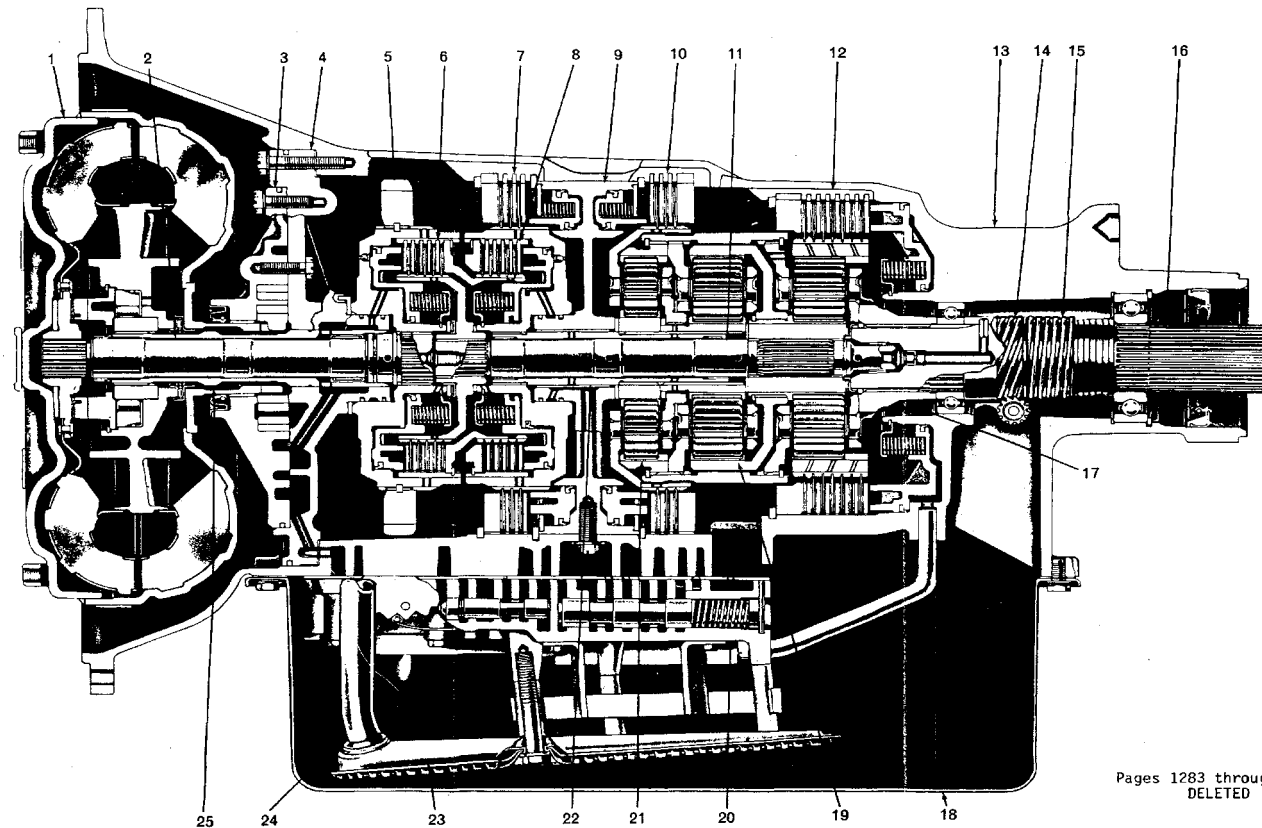
SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

25	PLUG, OIL PAN DRAIN	3921988	1	5	10	30
	WASHER, DRAIN PLUG.....	3921989	1	5	10	30
	SCREW, WASHER HEAD, 5/16-18 X 5/8.....	3829139	21	100	200	600
	PAN ASSY- TRANSMISSION OIL (DEEP)	23017523	1	5	10	30
29	MAGNET	6775703	1	5	10	30
30	SCREW, WASHER HEAD, 5/16-18 X 5/8.....	3829139	1	10	30	
		9420759	1	5	10	30
32	SPACER, FILTER	23017522	1	5	10	30
33	TUBE, OIL FILTER.....	23017521	1	5	10	30
34	KIT, TRANSMISSION OIL FILTER AND GASKET	23019201	1	13	26	125
35	GASKET TRANSMISSION OIL PAN (SECTIONALIZED)	23016682	1	13	26	125
36	FILTER ASSY, OIL	6883044 *	1			
37	RING, SEAL	1363951	1	13	26	125

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

AT 545 CROSS SECTION

1. Torque converter assembly.
2. Turbine shaft.
3. Oil pump assembly.
4. Front support.
5. PTO drive gear.
6. Forward clutch.
7. Third clutch.
8. Fourth clutch.
9. Center support.
10. Second clutch.
11. Transmission main shaft.
12. First clutch.
13. Transmission main case.
14. Governor drive gear.
15. Speedometer drive gear.
16. Output shaft.
17. Rear planetary.
18. Oil pan.
19. Center planetary.
20. Control valve body assembly.
21. Front planetary.
22. Sun gear shaft.
23. Oil filter.
24. Intake pipe.
24. Stator shaft.



Pages 1283 through 1301
DELETED

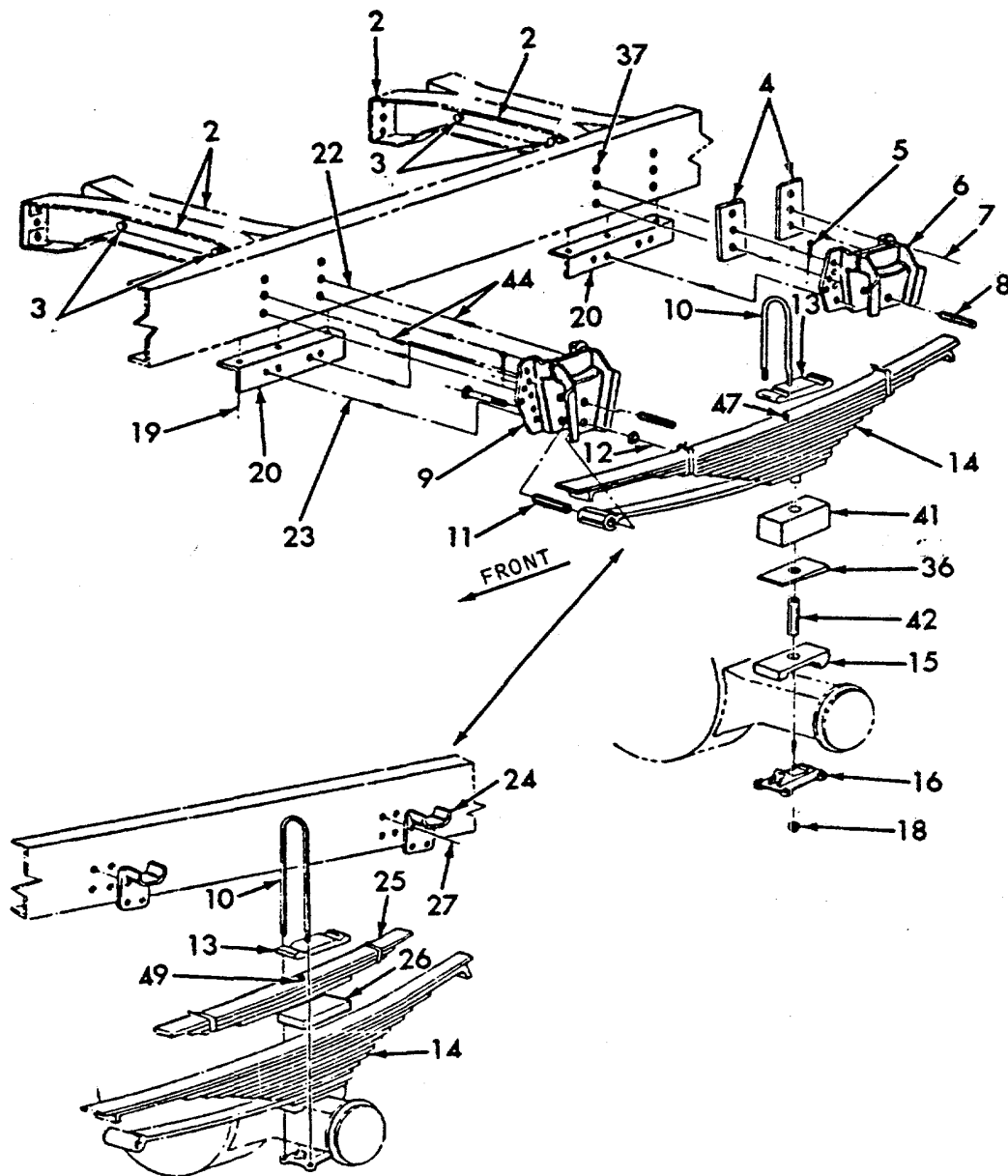
Foldout 2. Model AT 545 transmission - cross section

Pages 1283 through 1301 DELETED



FIG. 14-003

CROSSMEMBER, REAR SPG
AND MTG



W/AUXILIARY SPRING

MT-145
REAR AXLE



GROUP 14

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 14-003							
		SUSPENSION, REAR SPG W/XMBER W/4X2, 4X4							
2		CROSSMEMBER, RR SPRING							
2	473 369 C2	W/ALL 4X4 REAR		AR					
3	12 014 R1	RIVET, RD-HQ 1/2 X 1-1/4		ARI					
4	581 847 C1	SHIM, REAR SPG REAR BRKT	Q 4		15		SEAT, SPG		
5	1/8X 1-3/4P	PIN, COTTER 1/8 X 1 3/4	4				W/RA		
6	483 612 C1	BRACKET, REAR SPG REAR	2				39.		
7	414 052 C1	BOLT, FLG HEX HD 1/2-20 UNRF X 1-1/2	P AR		15	473 398 C1	LEFT	1	
7	414 054 C1	BOLT, FLG, HEX HD 1/2-20 UNRF X 2	Q AR		15	473 399 C1	RIGHT	1	
7	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	ARI						
9	483 611 C2	BRACKET, REAR SPG FRT		2					
10		U-BOLT, W/NUT							
10	465 915 C1	23 LONG	4						
10	416 743 C1	NUT, HEX FLG LK 3/4NF	8						
11	471 569 C2	SPACER, REAR SPG BUSH.	2		16		PLATE, U-BOLT		
12	460 719 C1	BOLT, HEX HD 1 IN.-8UNC	2		16	467 990 C3	W/RA	AR	
12	9413 986	NUT, HEX LK 1 IN.-8UNC	2				39.		
13		SEAT, U-BOLT, TOP							
13	469 890 C2	W/RA29.							
14		SPRING, REAR							
14	143 086 R91	LEAF NO. 1 W/BUSH.	2						
14	143 087 R1	LEAF NO. 2	2						
14	143 088 R1	LEAF NO. 3	2						
14	471 287 C91	-RADIUS ROD- W/P 39.	2		18	416 743 C1	NUT, FLG HEX LK 3/4-16UNF	8	
14	471 288 C1	LEAF NO. 1	2		18	144 426 H	NUT, LK 1-14UNF W/1.0 U-BOLT	8	
14	471 289 C1	LEAF NO. 2	2		18	25 847 H	WASHER, FL W/1.0 U-BOLT	8	
14	492 807 C91	LEAF, W/BUSH. NO. 13	2		18	144 425 H	NUT, LK 1-14UNF W/7/8 U-BOLT	8	
14	471 290 C1	-RADIUS ROD- LEAF NO. 3	2		18	26 070 R1	WASHER, FL W/7/8 U-BOLT	8	
14	471 291 C91	LEAF, W/BUSH. NO. 12	2		19	414 087 C1	NUT, FLG, HEX LK 1/2-20UNF	12	
		-RADIUS ROD-			19	414 051 C1	BOLT, FLG HEX-HD 1/2-20UNRF X 1-1/4	12	
					20	501 912 C1	SUPPORT, REAR SPG W/O REINF	4	
					20	501 912 C1	W/O REINF	4	
					22	414 052 C1	BOLT, FLG HEX HD 1/2-20UNRF X 1-1/2	P 14	
					22	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	14	
					22	414 053 C1	BOLT, FLG HEX-HD 1/2-20UNRF X 1-3/4	14	
					23	414 052 C1	BOLT, FLG HEX HD 1/2-20UNRF X 1-1/2	P 6	
					23	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	6	

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



MT-145
REAR AXLE

GROUP 14

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 14-003 SUSPENSION, REAR SPG W/XMBER 4X4									
24	113 113 R92	BRACKET, AUX REAR SPG		4							
24	892 262 R1	W/4X2		4							
24	454 798 C2	W/4X4		4							
25	473 725 C91	SPRING, AUX -MULTI LEAF-		2							
25	473 726 C1	LEAF NO.1		2							
25	473 727 C1	LEAF NO.2		2							
25	473 728 C1	LEAF NO.3		2							
25	63 320 H	BUSHING, SPG PIN		1							
26	473 411 C1	SPACER, REAR SPG		2							
27	414 052 C1	BOLT, FLG HD	P	12							
		1/2-20UNRF X 1-1/2									
27	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	9	12							
27	9413 979	NUT, HEX LK 3/8-16UNC		16							
27	12 068 R1	RIVET, RD-HD 3/8 X 1-3/8		16							
		1/2-20UNRF X 1-1/4									
36	495 364 C1	WEDGE, REAR AXLE	J	2							
37	414 052 C1	BOLT, FLG HEX HD	P	2							
		1/2-20UNRF X 1-1/2									
37	414 087 C1	NUT, FLG HEX LK 1/2-20UNF		2							
37	414 051 C1	BOLT, FLG HEX-HD		2							
		1/2-20UNRF X 1-1/4									
41	501 923 C1	SPACER, REAR SPG		2							
42	19 969 R1	PIN, REAR SPG SEAT		2							
44	414 054 C1	BOLT, FLG HEX HD	Q	4							
		1/2-20UNRF X 2									
44	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	9	4							
44	414 053 C1	BOLT, FLG HEX-HD		4							
		1/2-20UNRF X 1-3/4									
47	58 694 R1	BOLT, CTR		2							
49	53 032 R1	NUT, CTR BOLT		2							
	16 653 R1	* RIVET, 3/8 X 1-5/8 PLN RD-HD CSK									
		* NON-ILLUSTRATED									

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

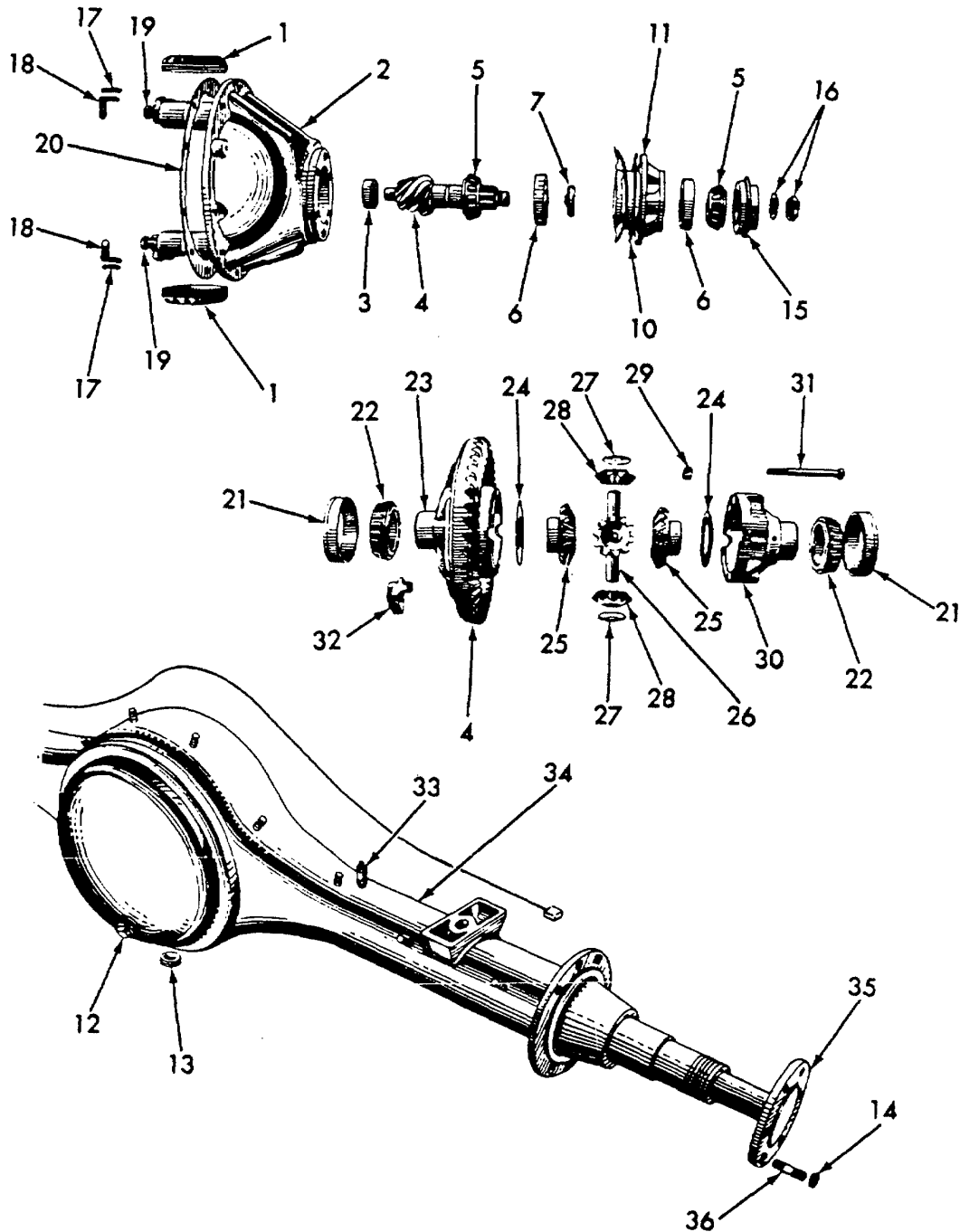
MT-145
REAR AXLE



GROUP 14

FIG. 14-007

AXLE, REAR IH/DANA
RA-39/F170-S 17000 LB



PRINTED IN THE UNITED STATES OF AMERICA

14-007

REVISION 01

PAGE 1

1305 (PAGE 1306 DELETED)



MT-145
REAR AXLE

GROUP 14

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 14-007			30		\$ CASE, DIFF PL HALF	1	
		AXLE, REAR IH/DANA			31	68 909 R1	EAT 33409	8	
		RA-39/F170-S 17000 LB					\$ BOLT, DIFF CASE		
					32	113 272 R1	SCOOP, DIFF CASE OIL	1	
					32	25 485 R1	BOLT, HEX-HD 1/4NC X 1-1/4	1	
					32 1/4 R		WASHER, LK 1/4 REGULAR	1	
1	54 528 HA	EAT 13191	1		33	968 936 R91	EAT 25110	1	
		ADJUSTER, DIFF BRG					BREATHING, AXLE HSG VENT		
2	68 951 R94	CARRIER, W/CAPS DIFF	1		34	589 026 C92	HOUSING, AXLE	1	
2	589 703 C1	BOLT, 1/2NF X 1-3/8	6				PRE-AUTOMATED AXLE SHFT		
2	589 705 C1	BOLT, 1/2NF X 2-1/2	8						
2 1/2	R	WASHER, LK 1/2 REGULAR	14						
3	383 271 C91	& BEARING, PINION REAR	1						
4		GEAR SET, RING AND PINION							
					35	571 348 C1	SHAFT, AXLE 1-7/8 IN. DIA		
							X 36 SPLINES		
							AUTOMATED AXLE SHFT		
					35	500 016 C1	GASKET, AXLE SHFT FLG	2	
					36		STUD, WHEEL FLG	16	
							SEE GROUP 17 INDEX		
4	68 908 R94	7.17-1 RATIO 43-6 TEETH	1		37	572 179 C91	DIFFERENTIAL, N/S	1	
4	113 271 R1	EAT 37663	12		37		NOTE: ITEM 37 REPLACES		
		RIVET, RING GEAR TO DIFF					ITEMS 24 THRU 28 WHEN		
		CASE					NO-SPIN DIFF IS USED		
5	288 321 C91	& BEARING, PINION CONE	2						
6	59 008 H	EAT 12495	2						
		& BEARING, PINION CUP							
7		SPACER, PINION FRT BRG							
7	68 914 R2	.625 THICK	AR						
7	68 916 R2	.631 THICK	AR						
7	68 918 R2	.636 THICK	AR						
7	68 920 R2	EAT 35015	AR						
		.643 THICK							
7	68 923 R2	EAT 35018	AR						
		.652 THICK							
							DIFFERENTIAL, 1-7/8 IN.		
							DIA X 36 SPLINES		
							AUTOMATED AXLE SHFT		
10		SHIM, PINION BRG CAGE							
10	890 091 R1	.005 THICK	AR						
10	68 929 R2	.010 THICK	AR						
10	68 930 R2	.032 THICK	AR						
11	454 713 C91	CAGE, W/CUPS PINION BRG	1						
11	584 255 C1	BOLT, CAGE TO CARR	8						
12	586 045 C1	PLUG, PIPE CSK 3/4 FILLER	1						
13	586 049 C1	PLUG, PIPE MAGNETIC DRAIN	1						
14	19 632 R1	NUT, HEX LK 9/16NF	16						
15	454 706 C1	& SEAL, OIL PINION	1						
16	117 804 H	NUT, COMPANION FLG	1						
16	54 557 H	EAT 13220	1						
		WASHER, COMPANION FLG NUT			572 177 C91	7.17-1 RATIO N/S		1	
16 1/8 X 1-3/4P		PIN, COTTER 1/8 X 1-3/4	1						
17 3/16 X 1 P		PIN, COTTER 3/16 X 1	2						
18	116 163 H	EAT 90186	2						
		LOCK, DIFF BRG ADJ			450 083 C93	& KIT, DIFF BRG AND SEAL			
19	68 924 R1	EAT 33415	4						
		BOLT, DIFF CARR BRG CAP			493 203 C91	\$ CASE, DIFF W/BOLTS			
20	68 963 R1	& GASKET, DIFF TO HSG	1						
21 ST	963	& BEARING, DIFF CASE CUP	2		493 194 C91	# GEAR SET, DIFF SIDE AND			
22 ST	2 007 A	& BEARING, DIFF CASE CONE	2			PINION 1-7/8 IN. DIA			
23		\$ CASE, DIFF FLG HALF	1			X 36 SPLINES			
						PRE-AUTOMATED AXLE SHFT			
					585 703 C91	# GE-R SET, DIFF SIDE AND			
						PINION 1-7/8 IN. DIA			
						X 36 SPLINES			
						AUTOMATED AXLE SHFT			
29	9411 648	DAN H503030	8						
		R/S NL181							
		\$ NUT, DIFF CASE BOLT HEX							
		1/2NF							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

14-007

PAGE 2

1307 (PAGE 1306 DELETED)

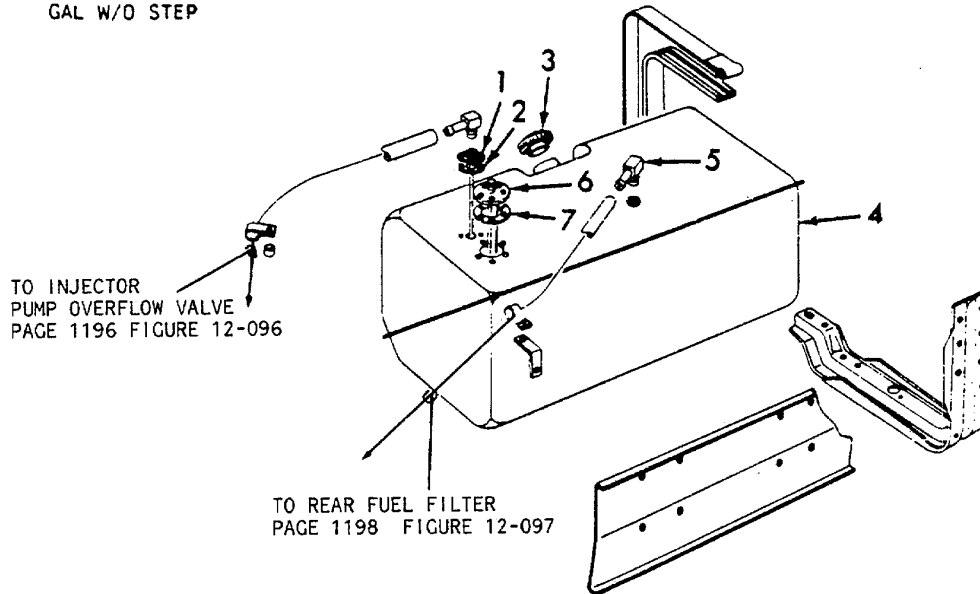
MT-145
FUEL TANKS



GROUP 15

FIG. 15-007
FIG. 15-007

TANK, FUEL 30.
GAL W/O STEP



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	509 045 C1	OUTLET, FUEL TANK 30 GAL TANK	1	1	6	27 199 R1	SCREW, PAN-CR-REC-HD TAP NO. 10-16 X 5/8	5	5
2	489 700 C1	GASKET, FUEL OUTLET 30 GAL TANK	1	1	7	345 253 C1	GASKET, FUEL SENDER GAUGE	1	1
3	490 683 C1	CAP, FILLER 30 GAL TANK	1	1					
3	111 142 R1	GASKET, FILLER CAP TANK, FUEL	1	1					
4	464 762 C91	30 GAL TANK	1	1					
5	447 151 C1	BREATHER, BALL CHECK GAUGE, FUEL SENDER	AR						
6	473 817 C1	30 GAL TANK	1	1					
6	26 627 R1	SCREW, PAN-CR-HD TAP NO. 10-16 X 3/4 SST	5	5					
6	27 199 R1	NO. 10-16 X 5/8	5	5					
6	336 024 C1	PLATE, FUEL SENDER GAUGE HOLE 30 GAL TANK	1	1					
6		COVER, FUEL GAUGE SENDER HOLE							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

15-007

REVISION 01
PAGE 1

1308

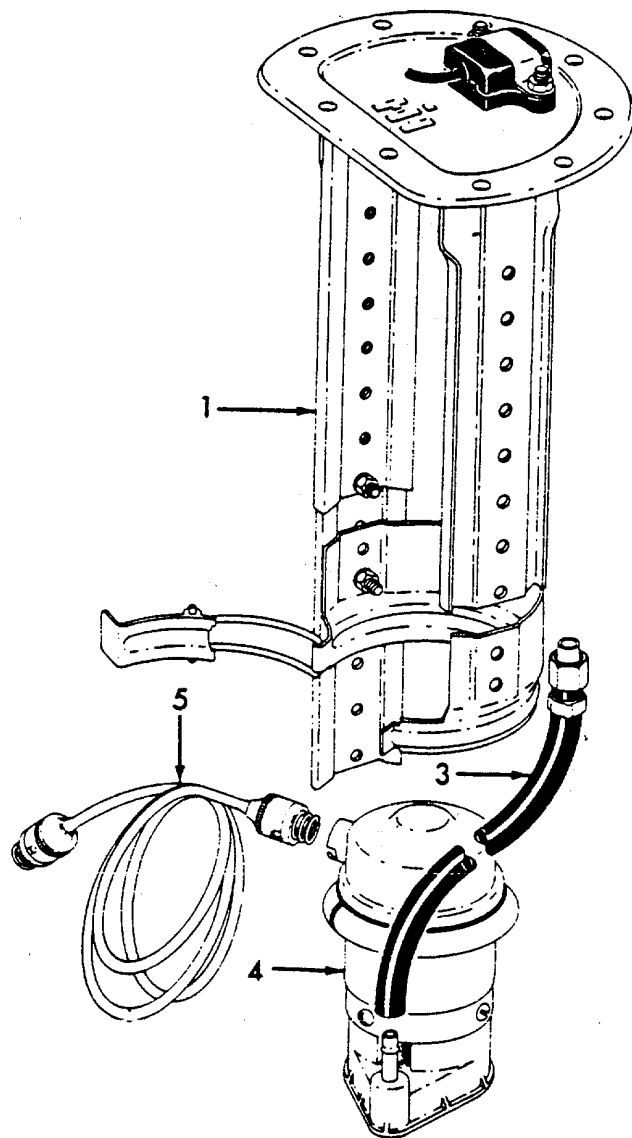


MT-145
FUEL TANKS

GROUP 15

FIG 15-00808

PUMP, SUBMERGED FUEL
W/PRESSURE VALVE



MT-145
FUEL TANKS



GROUP 15

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 15-008							
		PUMP, SUBMERGED FUEL W/PRESSURE VALVE							
	423 110 C91	PUMP, W/BACKET, FUEL							
	171 613	SCREW, RD-SLT-HD TAP 1/4NF X 3/4	9						
	217 639 R1	GASKET, PUMP							
1	467 749 C91	BRACKET, PUMP MTG	1						
2		NOT USED							
3	319 652 C91	HOSE ASSY, PUMP DISCHARGE	1						
		REFER TO MT-90							
4	218 232 R92	PUMP ASSY, FUEL	1						
5	319 653 C91	CABLE ASSY, PUMP	1						
		* NON-ILLUSTRATED							
	217 554 R91	* VALVE, PRESSURE-FUEL PUMP							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01
PAGE 2

15-008
1310

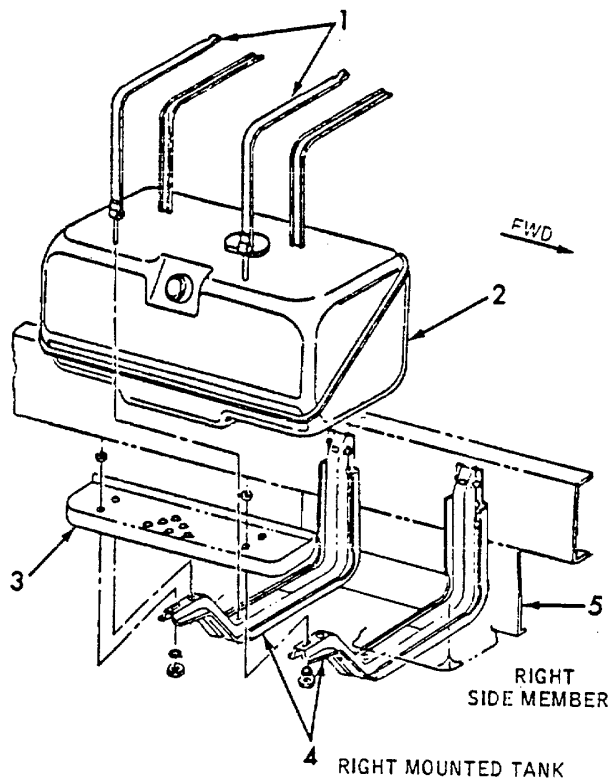
MT-145
FUEL TANKS



GROUP 155

FIG. 15-012
FIG. 15-012

TANK, FUEL 30. GAL RT
45 GAL LT OR 51 GAL LT
DUAL INSTL W/STEP



SEE FIGURE 15-007 PAGE 1308 FOR DETAILS

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
PAGE 1

15-012
1311



MT-145
FUEL TANKS

GROUP 15

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 15-012			4	414 087 C1	NUT, FLG HEX LK 1/2-20UNF	AR	
		TANK, FIHF 30. GAL RT			4	24 862 R1	BOLT, HH 1/2-13UNC X 1-1/2	AR	
		DUAL INSTL W/STEP			4	9412 230	NUT, HEX LK 1/2-13UNC	AR	
1		STRAP, FUEL TANK			5		SHIELD, FUEL TANK HEAT MAKE LOCALLY	1	
1	471 501 C1	W/30 GAL	2		5	25 493 R1	BOLT, HH 5/16-18UNC X 1	4	
1	471 444 C1	LINING, FUEL TANK STRAP WILL WORK FOR 334150C2 AND 471868C1	2		5	9413 977	NUT, HEX LK 5/16-18UNC	4	
1	275 804 R1	BOLT, HH 3/8-16UNC X 3 W/RT FRT SUPT W/30 GAL	1		5	25 708 R1	WASHER, FL 5/16	4	
1	24 844 R1	BOLT, HH 3/8-16UNC X 3-1/2 W/RT REAR SUPPORT W/30 GAL	1						
1	9413 979	NUT, HEX LK 3/8-16UNC W/30 GAL	4						
2		TANK, FUEL COMPLETE							
2	464 761 C93	30 GAL DIESEL W/MECH OR ELEC FUEL PUMP SEPARATE BREAKDOWN-SEE FIG. 15-008 PAGE 1309	1						
3	471 599 C3	STEP, RUNNING BOARD	1						
3	24 839 R1	BOLT, HH 3/8-16UNC X 3/4	4						
3	9413 979	NUT, HEX LK 3/8-16UNC	4						
3	25 709 R1	WASHER, FLAT 3/8	2						
4		SUPPORT, FUEL TANK	2						
4	464 585 C1	FRONT	1						
4	532 401 C2	W/30 GAL REAR	1						
		W/30 GAL							
4	414 051 C1	BOLT, HH FLG	AR						
4	414 052 C1	BOLT, FLG HH 1/2-20UNRF X 1-1/2	AR						

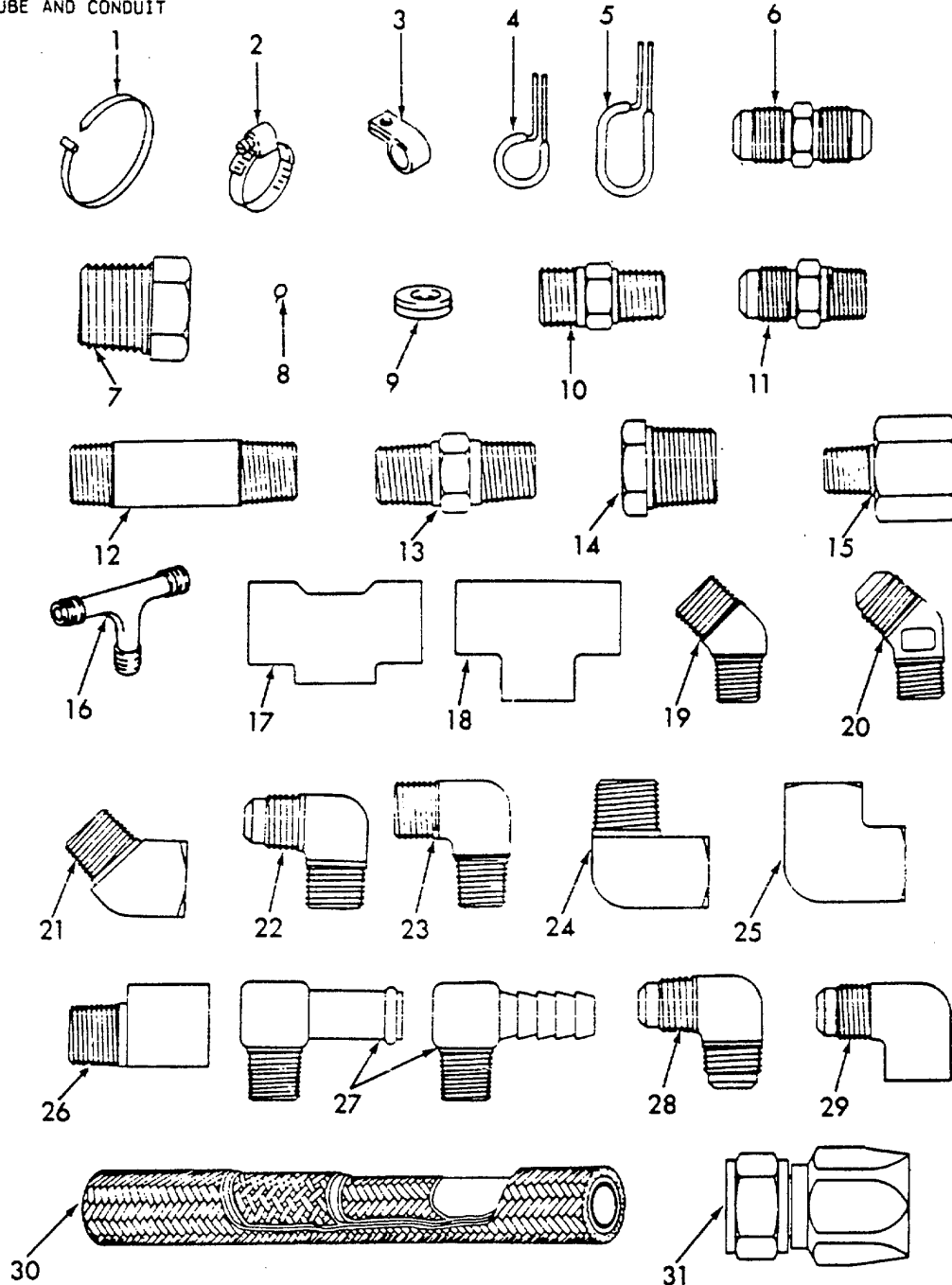
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 15-057

CHART. CLAMP, CABLE STRAP,
UNION, PLUG, FITT,
GROMMET, CONN, NIPPLE,
ADAP. TEE, ELBOW, HOSE,
TUBE AND CONDUIT



PRINTED IN THE UNITED STATES OF AMERICA

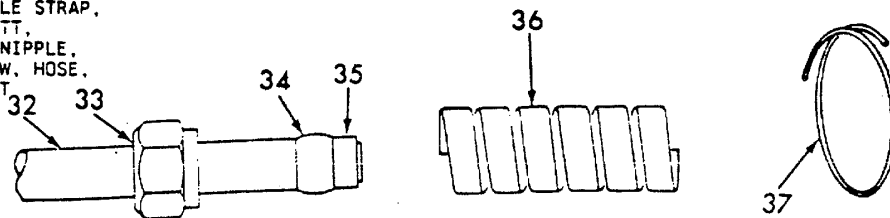


MT-145
FUEL TANKS

GROUP 15
GROUP 15

FIG. 15-057

CHART, CLAMP, CABLE STRAP,
UNION, PLUG, FITT,
GROMMET, CONN, NIPPLE,
ADAP, TEE, ELBOW, HOSE,
TUBE AND CONDUIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1	306 132 C1	STRAP, CABLE LK 1/16 TO 4 IN. 120 LB WILL WORK FOR 291207C1			5	297 363 C1	5/8 X 1/2 DIA WILL WORK FOR 313445C1		
1	386 170 C1	1/16 TO 8 IN. 120 LB			6	118 801	UNION, 45 DEG FLARED TUBE		
1	289 862 C1	1/16 TO 1-3/4 IN. 50 LB WILL WORK FOR 470492C1			6	118 802	5/16 TUBE		
1	533 959 R1	1/16 TO 3 IN. 50 LB			7	20 988 R1	3/8 TUBE		
1	473 321 C1	1/16 TO 2 IN. 18 LB			7	444 614	PLUG, AUTO PIPE		
1	327 097 C1	1/16 TO 4 IN. 120 LB			7	144 226	1/4-18		
2	553 791 C1	CLAMP, HOSE 7/16 TO 25/32 IN. WILL WORK FOR 279025R91			8	871 294 C1	1/8-27		
3	120 521	CLAMP, BARE 1/4 DIA			9	144 226	FITTING, O-RING		
3	120 522	5/16 DIA			10	95 552 R11	GROMMET, 1/4 X 5/8 X 5/16		
4	299 566 C1	CLAMP, SINGLE COATED 3/4 DIA WILL WORK FOR 299411C1			10	59 595 DX	CONNECTOR, SPHERICAL		
4	299 410 C1	5/8 DIA WILL WORK FOR 984984R91			11	425 364 R1	SLEEVE 1/2 TUBE X 1/2 PIPE		
4	299 408 C1	1/2 DIA WILL WORK FOR 98959R1			11	118 750	1/2 TUBE X 1/4 PIPE		
4	299 403 C1	3/8 DIA WILL WORK FOR 299605C1			11	300 914 R1	CONNECTOR, 45 DEG FLARED TUBE		
4	406 381 C1	1.0 DIA WILL WORK FOR 299605C1			11	110 200	1/4 TUBE X 1/4 PIPE		
4	299 399 C1	1/4 DIA 5/16 DIA			12	189 611	3/8 TUBE X 1/4 PIPE		
4	299 401 C1	WILL WORK FOR 299402C1			12	189 611	1/2 TUBE X 1/4 PIPE		
4	299 409 C1	9/16 DIA			13	443 976	1/2 TUBE X 2-1/2 PIPE		
5	365 215 C1	CLAMP, DOUBLE COATED 3/4 X 1/2 DIA WILL WORK FOR 412501C1			14	444 033	NIPPLE, AUTO PIPE		
5	358 018 C1	1/2 X 1/2 DIA WILL WORK FOR 290094C1			14	444 024	1/2 TUBE X 2-1/2 PIPE		
5	343 539 C1	3/8 X 1/4 DIA			14	444 034	NIPPLE, AUTO PIPE 1/8-27		
					15	444 033	ADAPTER, AUTO PIPE		
					15	444 012	1/2MPT X 1/4FPT		
					15	444 014	WILL WORK FOR 444032		
					16	402 698 C1	1/4MPT X 1/8FPT		
					17	173 182	1/2MPT X 3/8FPT		
							ADAPTER, AUTO PIPE		
							1/8MPT X 1/4FPT		
							1/4MPT X 3/8FPT		
							WILL WORK FOR 55541R1		
							TEE, CONN		
							TEE, INVERTED FLARED TUBE		
							5/16		

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

**MT-145
FUEL TANKS**



GROUP 165

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
		FIG. 15-057				33	414 509 C2	3/8 TUBE OD			
		CHART, CLAMP, CABLE STRAP,				34		SLEEVE			
		UNION, PLUG, FITT.				34	47 126 H	1/2 TUBE OD			
		GROMMET, CONN, NIPPLE,				34	30 644 V	3/8 TUBE OD			
		ADAP, TEE, ELBOW, HOSE,				35		INSERT			
		TUBE AND CONDUIT				35	414 506 C1	1/2 TUBE OD			
						35	414 505 C1	3/8 TUBE OD			
						36		+ CONDUIT, CONVOLUTED			
18	9409 935	TEE, AUTO PIPE 1/8-27				36	450 016 C1	3/4 ID			
19		ELBOW, 45 DEG SPHERICAL				36	441 734 C1	1/2 ID			
		SLEEVE				37		+ HOSE, RUBBER			
19	152 952 R11	1/2 TUBE X 1/2 PIPE				37	990 686 C1	5/16 ID X 9/16 OD			
19	136 830 HX	1/2 TUBE X 3/8 PIPE				37	990 711 C1	WILL WORK FOR 427684C1			
20		ELBOW, 45 DEG-45 DEG				37	990 710 C1	1/2 ID X 25/32 OD			
		FLARED TUBE						WILL WORK FOR 427686C1			
20	319 377 C1	1/2 TUBE X 1/2 PIPE						3/8 ID X 5/8 OD			
20	229 060 R1	3/8 TUBE X 1/4 PIPE						WILL WORK FOR 2643545R1			
20	418 065 C1	1/2 TUBE X 1/4 PIPE									
21		ELBOW, AUTO PIPE									
21	444 054	1/4-18									
21	9409 927	1/8-27									
22		ELBOW, 90 DEG-45 DEG									
		FLARED TUBE									
22	300 892 R1	1/2 TUBE X 1/2 PIPE									
22	189 385 R1	3/8 TUBE X 1/2 PIPE									
22	109 429	5/8 TUBE X 1/2 PIPE									
22	28 420 H	1/4 TUBE X 1/4 PIPE									
22	118 755	3/8 TUBE X 1/4 PIPE									
22	162 135 R1	3/8 TUBE X 3/8 PIPE									
22	425 122 R1	1/4 TUBE X 3/8 PIPE									
22	106 946 R1	3/8 TUBE X 1/8 PIPE									
22	118 757	1/2 TUBE X 3/8 PIPE									
23		ELBOW, 90 DEG SPHERICAL									
		SLEEVE									
3	698 559 R91	1/2 TUBE X 1/2 PIPE									
		WILL WORK FOR 86634R1									
23	281 902 R1	1/2 TUBE X 1/4 PIPE									
23	53 305 HX	1/2 TUBE X 3/8 PIPE									
23	30 761 VX	3/8 TUBE X 1/2 PIPE									
23	71 466 HX	3/8 TUBE X 3/8 PIPE									
24	444 044	ELBOW, 90 DEG AUTO PIPE									
		1/2-14									
25	444 072	ELBOW, 90 DEG AUTO PIPE									
		3/4-14									
26	9432 245	ELBOW, 90 DEG INVERTED									
		FLARED TUBE 5/16 TUBE X									
		1/4 PIPE									
27		ELBOW, 90 DEG HOSE CONN									
27	481 695 C1	5/16 TUBE X 1/4 PIPE									
27	433 045 C1	3/8 TUBE X 1/4 PIPE									
27	350 703 C1	5/16 TUBE X 1/8 PIPE									
28	118 811	ELBOW, 90 DEG-45 DEG									
		FLARED TUBE 5/16									
29	118 576	ELBOW, 90 DEG-45 DEG									
		FLARED TUBE 3/8 TUBE X									
		1/4 PIPE									
30		+ HOSE, REUSABLE END									
30	375 053 C2	3/8 ID X 5/8 OD									
30	375 054 C2	1/2 ID X 11/16 OD									
30	375 051 C2	1/4 ID X 1/2 OD									
31		FITTING, REUSABLE END HOSE									
31	375 016 C2	3/8 TUBE									
31	375 017 C2	1/2 TUBE									
31	375 014 C2	1/4 TUBE									
32		+ TUBE, NYLON									
32	417 200 C2	1/2 OD									
32	417 199 C2	3/8 OD									
33		NUT									
33	414 511 C2	1/2 TUBE OD									

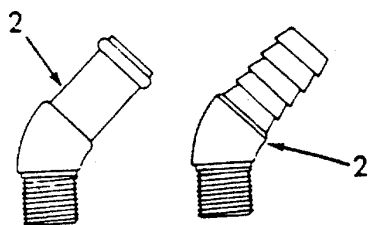
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 166001

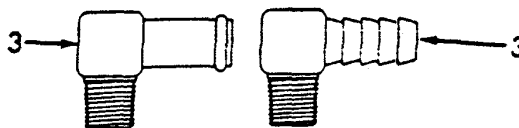
FITTINGS, CLAMPS, HOSES,
CONDUIT, CABLE STRAPS,
SHUT-OFF VALVES, BUTTON
PLUGS, GROMMETS AND
O-RINGS



OPTIONAL DESIGN
USE HOSE CLAMPS



OPTIONAL DESIGN
USE HOSE CLAMPS



OPTIONAL DESIGN
USE HOSE CLAMPS

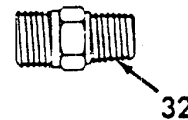
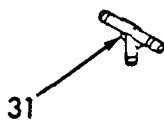
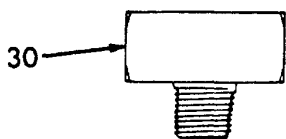
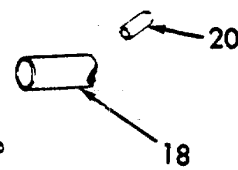
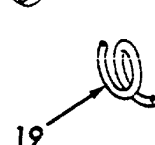
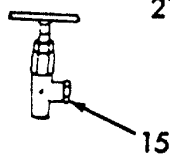
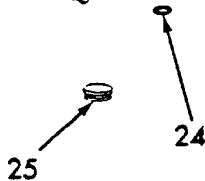
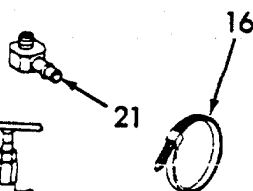
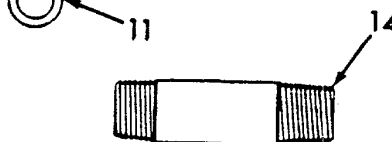
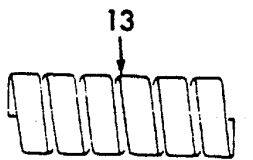
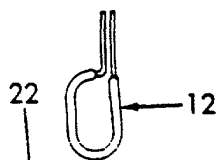
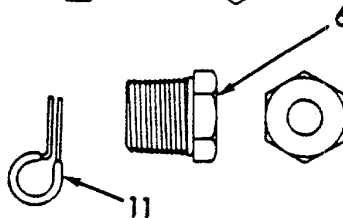
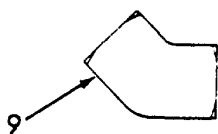
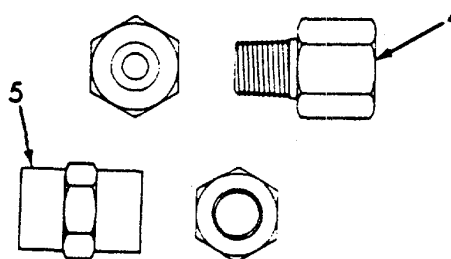
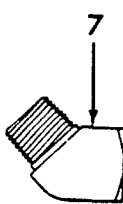
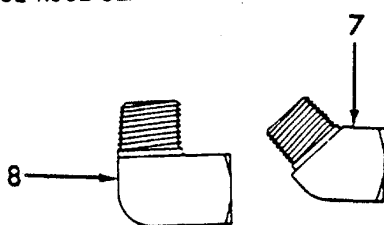
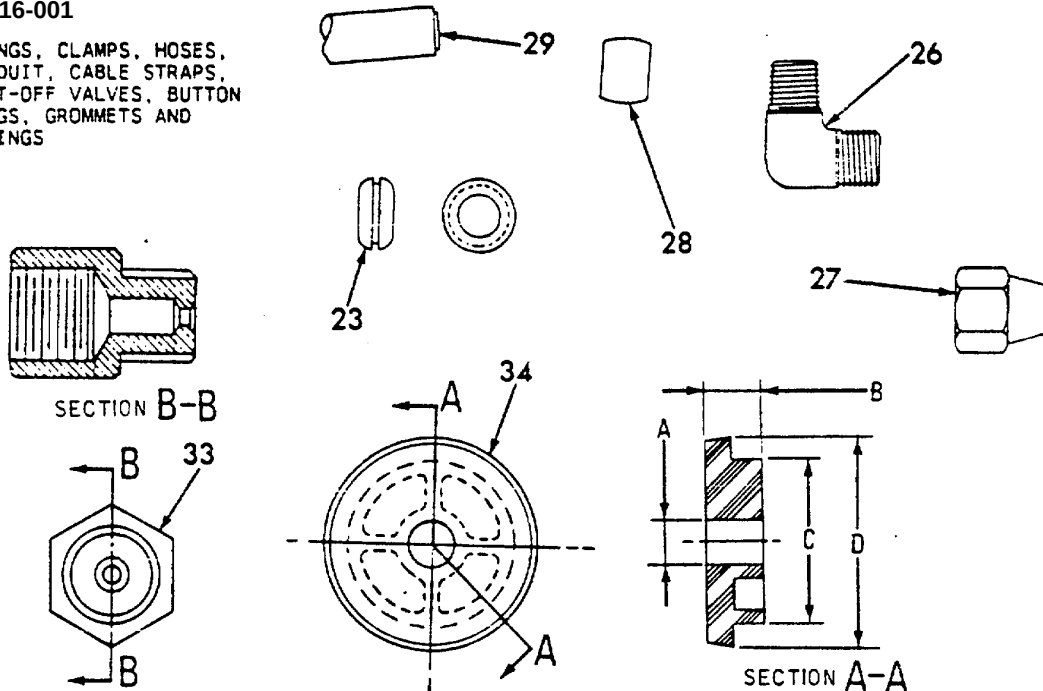




FIG. 16-001

FITTINGS, CLAMPS, HOSES,
CONDUIT, CABLE STRAPS,
SHUT-OFF VALVES, BUTTON
PLUGS, GROMMETS AND
O-RINGS



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
1	899 900 R1	NIPPLE, HOSE CONN			11	299 410 C1	5/8 IN.		
1	864 441 R1	5/8 HOSE X 1/2NPT			12		CLAMP, DBL COATED		
2	864 449 R1	3/4 HOSE X 1/2NPT			12	445 137 C1	1-5/16 X 5/8		
2	864 452 R1	ELBOW, 45 DEG HOSE CONN			12	365 042 C1	1-1/2 X 3/4		
2	864 453 R1	5/8 HOSE X 1/2NPT			13		CONDUIT		
2	416 281 C1	5/8 HOSE X 3/4NPT			13	441 736 C1	1 IN. ID		
3	864 458 R1	3/4 HOSE X 3/4NPT			13	450 016 C1	3/4 IN. ID		
3	864 459 R1	1/4 HOSE X 1/8MPT			13	441 735 C1	5/8 IN. ID		
3	864 462 R1	ELBOW, 90 DEG HOSE CONN			14		NIPPLE, AUTO PIPE		
3	96 644 R11	5/8 HOSE X 1/2NPT			14	189 611	1/2-14 X 2-1/2		
4	444 004	3/4 HOSE X 1/2NPT			14	188 132	1/2-14 X 3-1/2		
4	443 998	3/4 HOSE X 3/4NPT			14	219 336	1/2-14 X 9		
5	444 100	1/4 HOSE X 1/4MPT			15		VALVE, HEATER SHUT OFF		
6	144 061	ADAPTER, AUTO PIPE			15	367 972 C92	1/2NPTF X 3/4		
6	24 466 R1	1/2-14 X 1/2-14			15	369 512 C92	1/2NPTF X 5/8		
7	444 058	1/8-27 X 1/8-27			16		STRAP, CABLE LK		
8	444 044	COUPLING, AUTO PIPE 1/2-14			16	306 132 C1	4 IN. MAX BUNDLE		
8	9409 931	ADAPTER, AUTO PIPE			16	386 170 C1	8 IN. MAX BUNDLE		
9	444 086	1-14 X 1/2-14			16	533 959 R1	3 IN. MAX BUNDLE		
10	444 072	3/4-14 X 1/2-14			16	289 862 C1	1-3/4 IN. MAX BUNDLE		
11	406 381 C1	ELBOW, 45 DEG AUTO PIPE			17		CLAMP, HOSE		
11	299 401 C1	1/2-14			17	995 219 R1	1-1/16 TO 2 SILICONE		
11	299 403 C1	ELBOW, 90 DEG AUTO PIPE			17	27 702 R1	1-1/16 TO 1-1/4 SILICONE		
11	299 566 C1	1/2-14			17	27 723 R1	1-3/16 TO 1-1/2 SILICONE		
11	299 407 C1	1/8-27			17	995 218 R1	NO. 12 TYPE F HOSE		
		ELBOW, 45 DEG AUTO PIPE			18		HOSE		
		3/4-14			18	512 347 C1	5/8 ID SILICONE		
		ELBOW, 90 DEG AUTO PIPE			18	364 359 C1	5/8 ID		
		1/2-14			18	512 348 C1	3/4 ID SILICONE		
		CLAMP, SINGLE COATED			18	364 360 C1	3/4 ID		
		1 IN.			19		TUBE		
		5/16 IN.			19	990 016 C1	5/32 ID		
		3/8 IN.			19	417 196 C2	1/4 OD		
		3/4 IN.			20	437 693 C1	CAP. TUBE		
		1/2 IN.			21	437 692 C1	JUNCTION BLOCK, ELBOW		

MADE IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

**MT-145
CAB AND BODIES**

GROUP 16

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 16-001									
		FITTINGS, CLAMPS, HOSES, CONDUIT, CABLE STRAPS, SHUT-OFF VALVES, BUTTON PLUGS, GROMMETS AND O-RINGS									
22	437 693 C1	JUNCTION BLOCK, TEE									
23		GROMMET									
23	144 226	1/4 X 5/8 X 5/16									
23	142 350	7/8 X 1-9/16 X 3/4									
23	112 743	1/2 X 7/8 X 1/4									
24	875 520 R1	O-RING, 7/16 X 9/16 CLASS 3									
25		PLUG, BUTTON									
25	466 711 C1	1/2									
25	23 720 R1	25/32									
25	432 428	11/32									
25	432 527	3/8									
26	141 966 H	ELBOW, 90 DEG SPHERICAL SLEEVE 1/4 TUBE X 1/8MPT									
27	30 773 V	NUT, SPHERICAL SLEEVE 1/4									
28	30 774 V	SLEEVE, SPHERICAL 1/4									
29	414 504 C2	INSERT, SPHERICAL SLEEVE 1/4									
30		TEE, AUTO PIPE									
30	444 134	1/4-18									
30	306 409 C1	1/4-18 USE UNTIL SUPPLY IS EXHAUSTED									
31	301 711 R1	TEE, HOSE 1/4 X 1/4 X 1/4									
32		CONNECTOR, SPHERICAL SLEEVE									
32	142 064 H	1/4 TUBE X 1/8 PIPE									
32	30 775 VX	1/4 TUBE X 1/4 PIPE									
33	443 374 C1	ORIFICE, W/S SHIELD									
34		GROMMET									
34	480 689 C1	A= 10.00MM, B= 13.00MM, C= 38.00MM, D= 48.00MM									
34	480 690 C1	A= 19.00MM, B= 13.00MM, C= 38.00MM, D= 48.00MM									

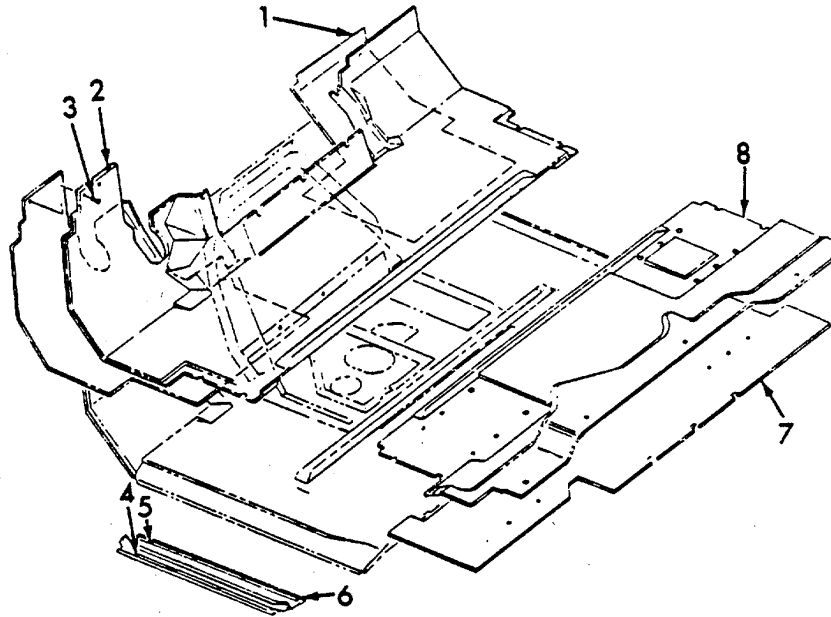
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG 16-004
FIG. 16-004

MAT. FLOOR



PRINTED IN THE UNITED STATES OF AMERICA



MT-145
CAB AND BODIES

GROUP 16
16

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 16-004									
		MAT, FLOOR									
1	990 692 C1	INSULATOR, SOUND DEADNER		1							
2		MAT, FLOOR, FRT									
2		ONE PIECE									
2		REGULAR CAB, LHD									
2		STANDARD									
2	492 608 C1	W/D9.OL.		1							
3	435 292 C1	FASTENER, MAT		8							
4	27 306 R1	WASHER, FL NO.8		8							
4	335 062 C1	SCREW, PN-HD-CR NO.8-18 X		8							
		1/2									
5	27 204 R1	SCREW, OV-HD-CR NO.8-18 X	AR								
		3/4									
5	456 297 C1	WASHER, FINISH NO.8	AR								
6	471 847 C1	PLATE, SCUFF		2							
7	990 692 C1	INSULATOR, SOUND DEADNER		1							
8		MAT, FLOOR, REAR									
8		REGULAR CAB									
8	489 484 C1	STANDARD		1							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01
PAGE 02

16-004
1320

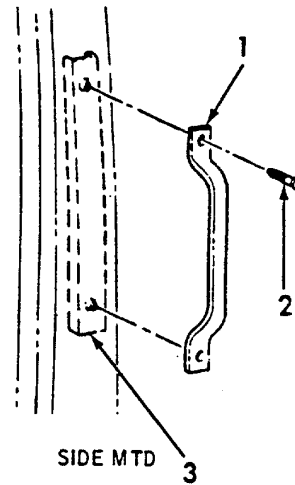


MT-145
CAB AND BODIES

GROUP 16
GROUP 16

FIG. 16-012

HANDLE, GRAB



ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	506 891 C1	HANDLE, GRAB			AR						
2	27 231 R1	SCREW, PAN HD SST 5/16-18 X 3/4			AR						
3	538 105 C1	REINFORCEMENT, GRAB HANDLE			AR						
	27 244 R1	* SCREW, 5/16 X 1 PLN O/HDCR MACH W/816300.9217			AR						
		* NON-ILLUSTRATED									

MISSING ITEM NUMBERS ARE NOT USED

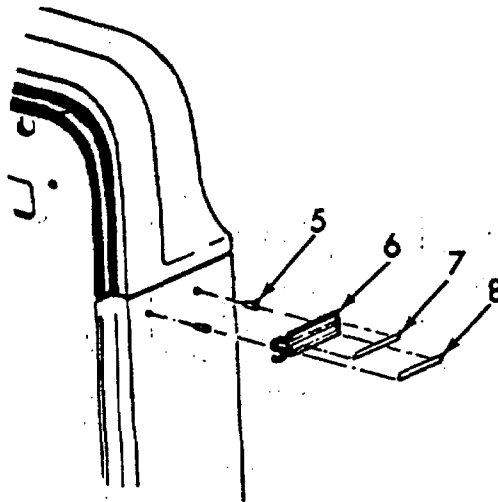
PRINTED IN THE UNITED STATES OF AMERICA

140
CAB AND BODIES

GROUP 16
GROUP 16
FIG. 16-014

FIG. 16-014

EMBLEM, MODEL DESIGNATION



ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
5	288 327 C1	CLIP, SPEED		4							
6	487 154 C1	PRODUCT GRAPHIC, S-SERIES		2							
7		PRODUCT GRAPHIC, ENG DESIGNATION									
7	576 272 C1	D9.0L		2							
8		PRODUCT GRAPHIC, MODEL DESIGNATION									
8	488 036 C1	1800 SERIES		2							

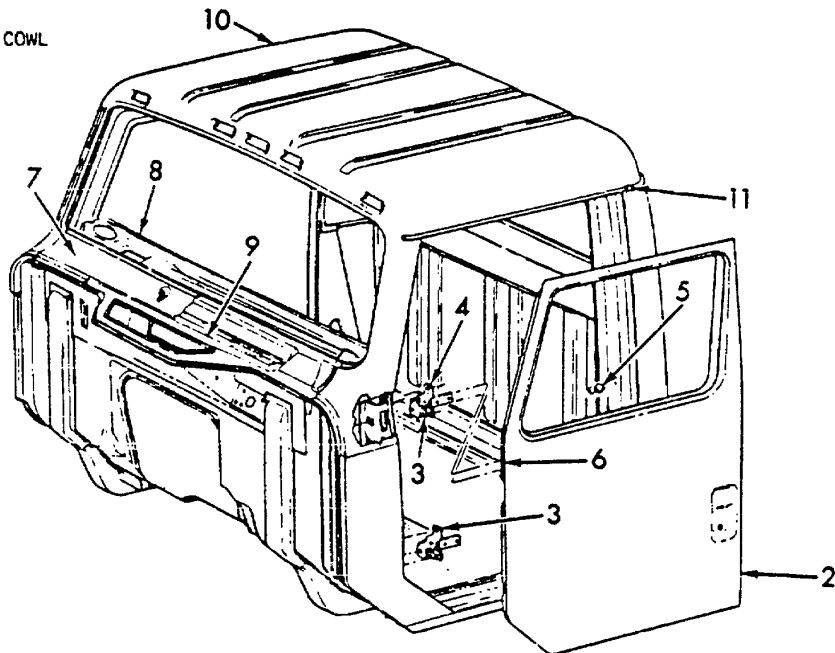
PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED



FIG. 16-020

PANEL, ROOF AND COWL



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
2		DOOR		2				* INSULATOR, DASH			
		SEPARATE BREAKDOWN- SEE FIG. 16-027									
3		HINGE									
3		UPPER									
3	475 340 C91	LEFT		1			462 522 C6	W/80 X 90 CAB		1	
3	475 341 C91	RIGHT		1			771 854 C1	* RETAINER, DASH INSULATOR		AR	
3		LOWER					572 094 C2	* SEAL, COWL TO HOOD		1	
3	475 342 C91	LEFT		1			990 693 C1	* MAT, SOUND DEADNER BULK		AR	
3	475 343 C91	RIGHT		1			594 979 C1	* FASTENER, TRIM, BLACK		AR	
4	586 627 C1	SCREW, 5/16-18 X 1-1/4		12							
5	454 216 C3	PIN, LATCH STRIKER		2							
5	492 082 C1	SHIM, WASHER LATCH STRIKER		AR							
		PIN						* NON-ILLUSTRATED			
6	472 683 C1	SCREW, 3/16-16 X 1-1/4		8							
7		PANEL, COWL TOP INSERT									
7	444 007 C2	LHD		1							
7	27 204 R1	SCREW, OV-CR-REC-HD		3							
		NO. 8-18 X 1/2									
8		PANEL, COWL REAR									
8	444 043 C2	LHD		1							
9		PANEL, COWL TOP INNER									
9	444 042 C2	LHD		1							
10	443 974 C1	PANEL, ROOF OTR		1							
11	444 034 C2	CLIP, DRIP MOULDING		2							
	484 087 R92	* PLUG, BUTTON		3							
	497 321 C1	* RETAINER, DRAIN TUBE		1							
	497 314 C1	* TUBE, DRAIN		1							
	24 392 R1	* SCREW, PAN-HD-CR-REC NO. 10		2							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

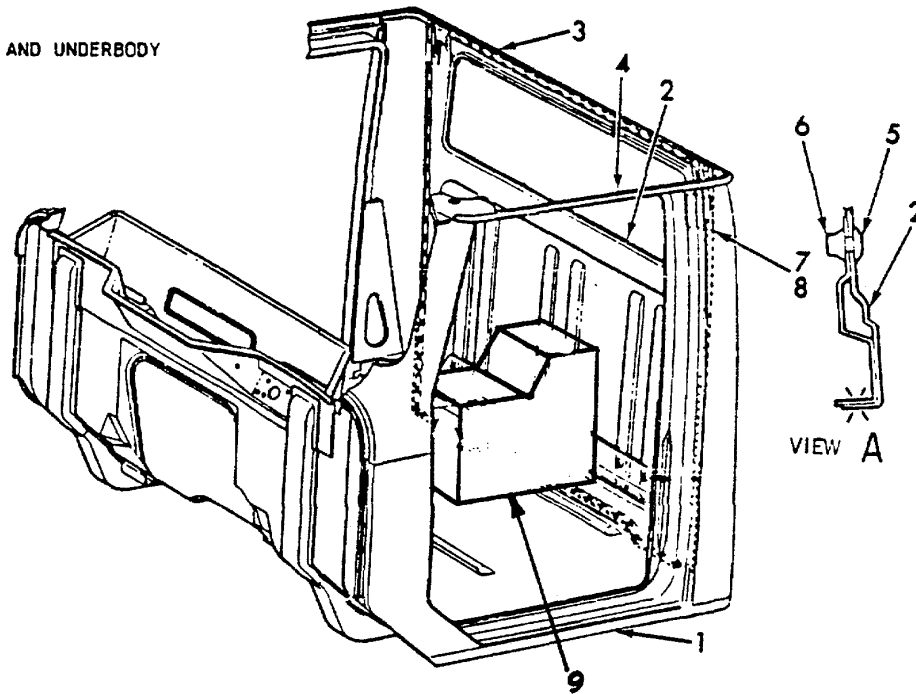


MT-145
CAB AND BODIES

GROUP 16

FIG. 16-021

PANEL, BACK AND UNDERBODY



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
1		UNDERBODY NOT SERVICED SEPARATELY		1							
2	443 978 C1	PANEL, BACK OTR		1							
3	443 993 C2	MOULDING, DRIP REAR		1							
4		PANEL, SIDE SEPARATE BREAKDOWN- SEE FIG. 16-023		2							
5	456 382 C1	FASTENER, BACK PNL LWR		6							
6	472 307 C1	RIVET, COLLAR		6							
7	579 514 C91	REINFORCEMENT, CORNER MUFFLER		AR							
8	257 926 C1	WELDNUT, 5/16-18		2							
9	KFT-006A	CONSOLE, TOP (59556)		1							
9	KFT-006B	CONSOLE, BOTTON (59556)		1							

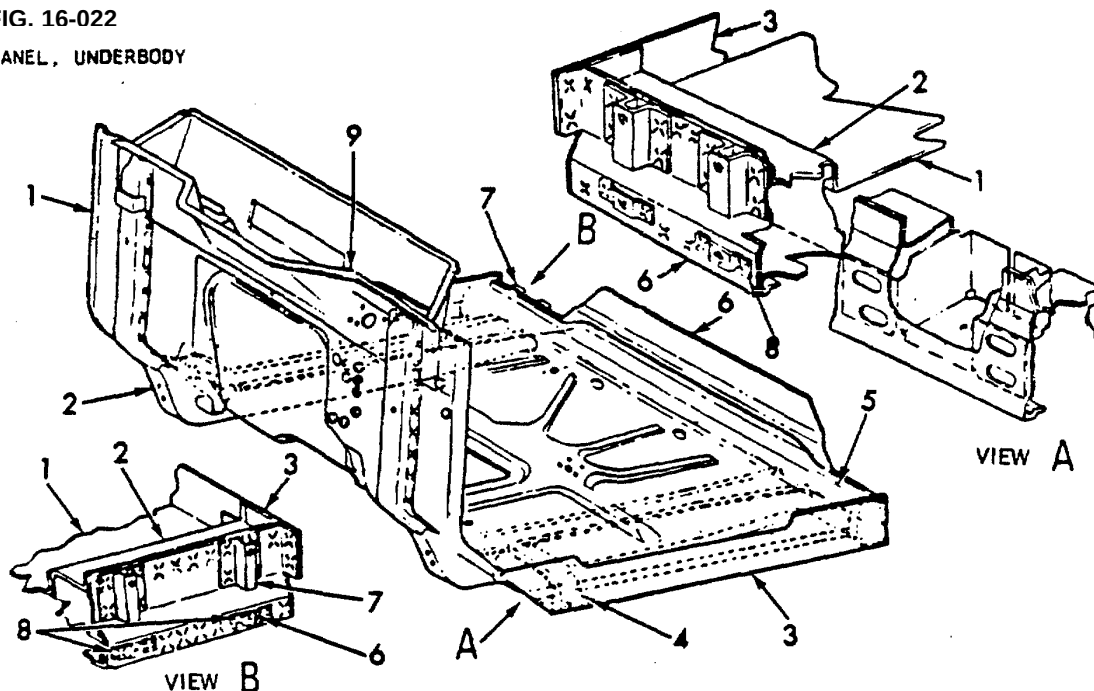
MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA



FIG. 16-022

PANEL, UNDERBODY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1		PANEL, DASH AND FLOOR NOT SERVICED SEPARATELY	1						
2	489 994 C5	SILL, UNDERBODY LEFT	1						
2	489 995 C4	RIGHT	1						
3	444 044 C1	SILL, SIDE INNER LEFT	1						
3	444 045 C1	RIGHT	1						
4	257 926 C1	WELDNUT, 5/16-18	2						
5	443 998 C2	SILL, REAR	1						
6	489 497 C1	REINFORCEMENT, REAR SILL	1						
8	473 865 C1	BRACKET, ACCESS MTG	AR						
9	444 052 C1	PANEL, AIR INTAKE LHD	1						
	444 077 C2	* PANEL, FLOOR ENG OPENING LEFT	1						
	444 078 C2	RIGHT	1						
	504 965 C1	* REINFORCEMENT, HAND BRK LEVER	1						
		* NON-ILLUSTRATED							

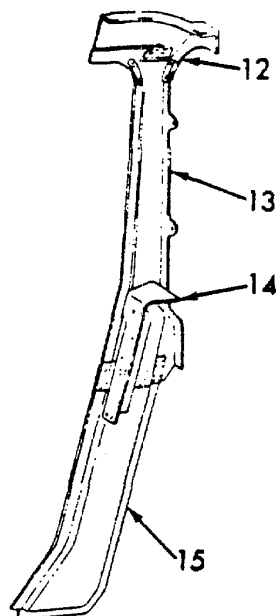
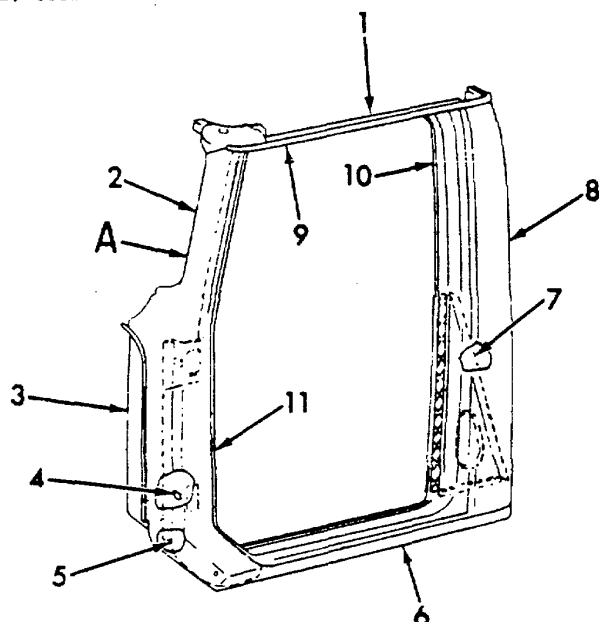
D IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

PAGE 1

1325

FIG. 16-023
PANEL, SIDE

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1		PANEL, SIDE WELDED			12	449 679 C2	RIGHT	1	
1	475 737 C2	LEFT	1		13		PANEL, SIDE INNER W/S		
1	475 738 C2	RIGHT	1				OPENING		
2		PANEL, SIDE OTR W/S			13	449 684 C2	LEFT	1	
		OPENING			13	449 685 C2	RIGHT	1	
2	443 987 C2	LEFT	1		14		BRACKET, COWL REAR	2	
2	444 986 C2	RIGHT	1				NON SERVICE-		
3		PANEL, DASH FILLER					MAKE LOCALLY		
3	489 877 C2	LEFT	1		15		PANEL, SIDE INNER LWR		
3	489 878 C2	RIGHT	1		15	444 046 C1	LEFT	1	
4	344 724 C1	WELDNUT, 5/16-18	1		15	444 047 C1	RIGHT	1	
5		PILLAR, BODY HINGE							
5	444 039 C2	LEFT	1						
5	444 040 C2	RIGHT	1						
6		PANEL, ROCKER SIDE OTR							
6	443 976 C1	LEFT	1						
6	443 977 C1	RIGHT	1						
7		REINFORCEMENT, LK PILLAR							
7	449 694 C1	LEFT	1						
7	449 695 C1	RIGHT	1						
8		PANEL, CORNER REAR OTR							
8	443 972 C1	LEFT	1						
8	443 973 C1	RIGHT	1						
9		MOULDING, DRIP SIDE							
9	443 991 C2	LEFT	1						
9	443 992 C2	RIGHT	1						
10		FRAME, DOOR OPENING							
10	444 026 C2	LEFT	1						
10	444 027 C2	RIGHT	1						
11		PANEL, COWL SIDE OTR							
11	443 979 C2	LEFT	1						
11	443 980 C2	RIGHT	1						
12		PANEL, SIDE INNER W/S							
		OPENING, UPR							
12	449 678 C2	LEFT	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

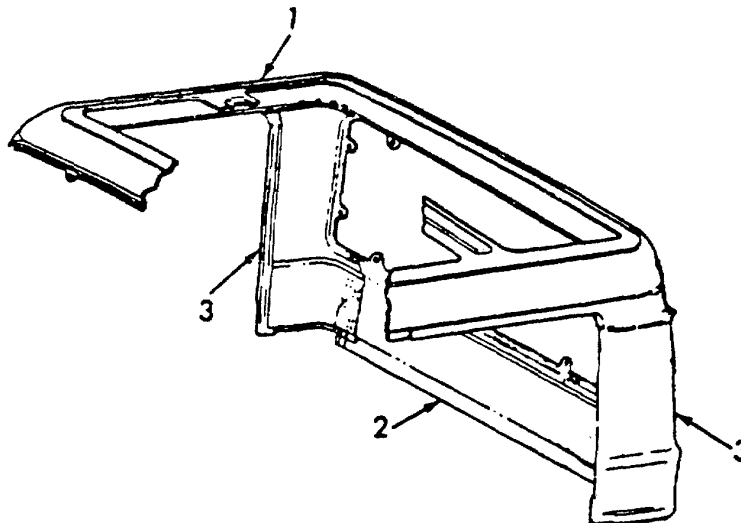
1326

GROUP 16

MT-145
CAB AND BODIES

FIG. 16-024

PANEL, ROOF, INNER



ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	498 387 C2	PANEL, ROOF INNER									
1	449 709 C3	W/ROOF INSULATION		1							
2	444 068 C3	W/O ROOF INSULATION		1							
2	444 068 C3	PANEL, BACK INNER		1							
3		PANEL, INNER CORNER									
3	444 073 C3	LEFT		1							
3	444 074 C3	RIGHT		1							

PRINTED IN THE UNITED STATES OF AMERICA
40 004

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

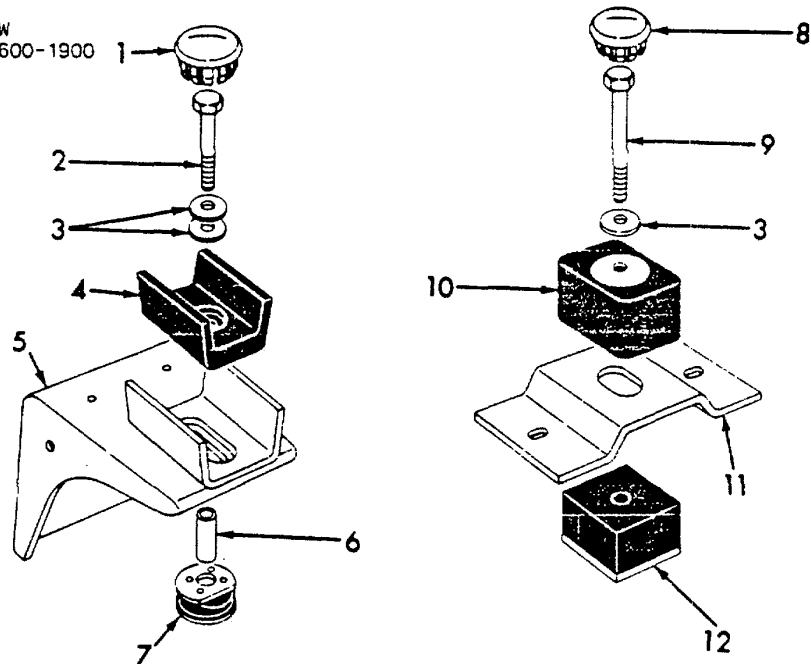
PAGE 1

1327

GROUP 16

MT-145
CAB AND BODIES

FIG. 16-026

MOUNTING, CAB, LOW
W/REGULAR CAB 1600-1900

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	432 449	PLUG, BUTTON 1-1/2 DIA	4						
2	25 285 R1	BOLT, HEX-HD 1/2NC X 3-1/4	2						
3	474 211 C1	WASHER, FL 17/32	4						
4	449 713 C2	INSULATOR, CAB FRT MTG	2						
5		BRACKET, CAB FRT MTG							
5	466 781 C1	LEFT	1						
5	480 219 C1	RIGHT	1						
5	414 052 C1	BOLT, FLG-HEX-HD 1/2NF X 1-1/2	8						
5	414 053 C1	BOLT, FLG-HEX-HD 1/2NF X 1-3/4	8						
5	414 087 C1	NUT, FLG, LK 1/2NF	8						
6		BUSHING							
7	473 987 C3	MAKE LOCALLY	2						
7	9412 230	INSULATOR, CAB MTG	2						
8	432 564	NUT, LK 1/2	4						
9	25 507 R1	PLUG, BUTTON	4						
10	475 941 C1	BOLT, HEX-HD 1/2NC X 3-3/4	8						
11	477 525 C1	INSULATOR, BODY MTG	2						
11	414 052 C1	BRACKET, CAB REAR MTG	2						
11	414 052 C1	BOLT, FLG-HEX-HD 1/2NF X 1-1/2	4						
11	414 087 C1	NUT, LK 1/2NF	4						
12	473 935 C1	INSULATOR, CAB REAR MTG	2						
12	9412 230	NUT, LK 1/2-13	2						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

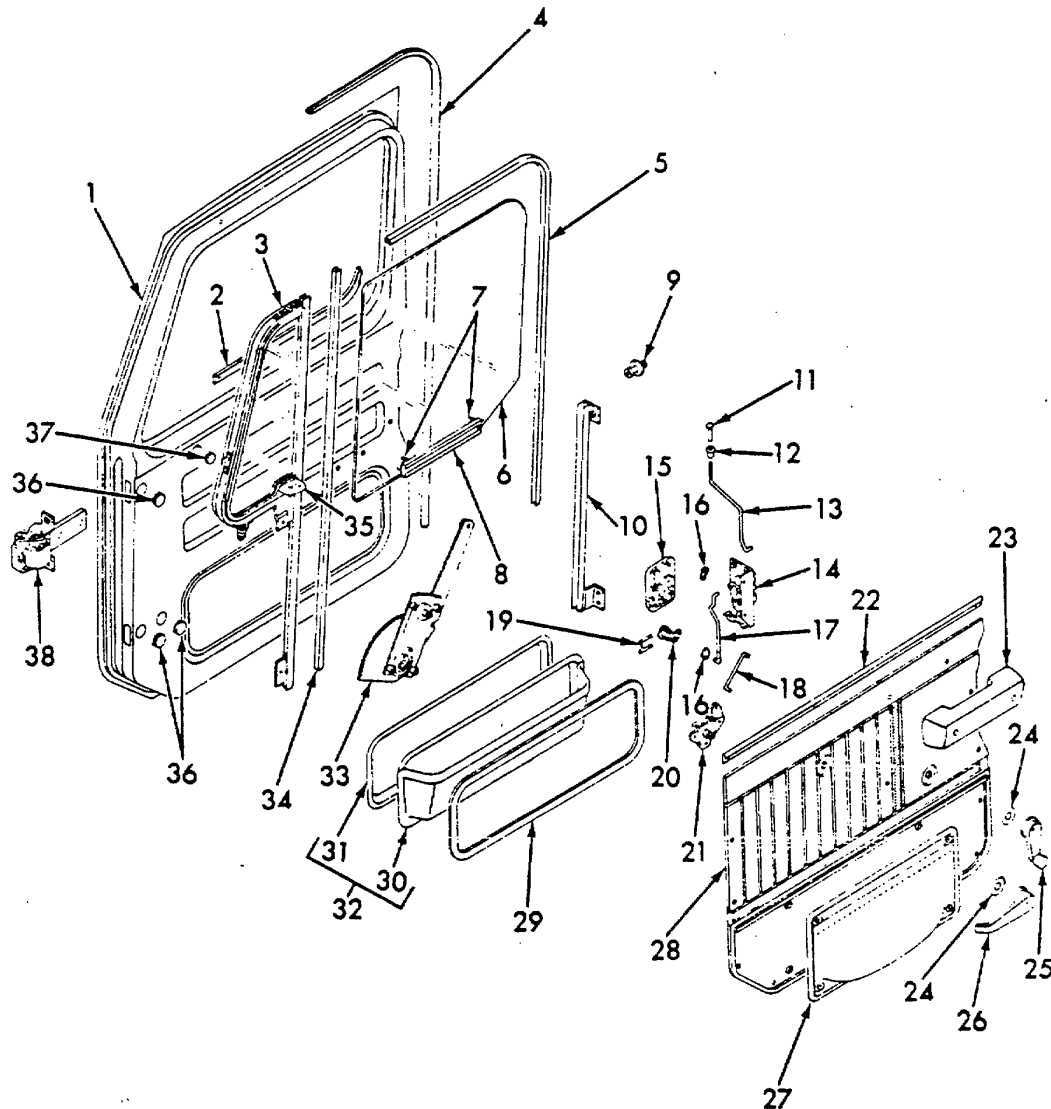
PAGE 1

1328



FIG. 16-027

DOOR, CAB



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

GROUP 16

MT-145
CAB AND BODIES

NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
		FIG. 16-027			22	335 062 C1	SCREW, PAN-CR-REC-HD NO.8-18 X 1/2	8	
		DOOR, CAB			23		REST, ARM		
		DOOR			23	490 768 C91	STD. CHESTNUT	2	
1	487 999 C91	LEFT	1		23	160 544	SCREW, PAN-CR-REC-HD 1/4NC X 3/4	4	
1	488 000 C91	RIGHT	1		24	286 578 C1	WASHER, DOOR INSIDE HANDLE	4	
1	443 983 C1	PANEL, DOOR OTR	1		25	475 196 C1	HANDLE, REC	2	
1	443 984 C1	LEFT	1		25	286 565 C1	SCREW, SOCKET, HEX-HD NO.10-24 X 5/8	2	
2		RIGHT	1		26	454 252 C1	HANDLE, DOOR REMOTE	2	
2	449 681 C2	SEAL, WIN.	1		26	286 565 C1	SCREW, SOCKET, HEX-HD NO.10-24 X 5/8	2	
2	449 682 C2	LEFT	1		27		POCKET, MANIFEST		
		RIGHT	1		27	486 510 C2	STD. CHESTNUT	2	
3		GLASS, VENT WIN. SERVICED BY NAGS NO.2724T	1		27	328 391 C1	SCREW, OV-CR-REC-HD NO.8-18 X 1/2	8	
3	442 807	SCREW, PAN-SLT-HD NO.10-32 X 1/4	4		28		PANEL, DOOR TRIM, SIERRA TAN		
3	172 431	SCREW, TAP HEX-HD 1/4NC X 3/4	4		28	578 109 C1	LEFT	2	
3	1/4 R	WASHER, LK 1/4	4		28	578 110 C1	RIGHT	2	
3	25 707 R1	WASHER, FL 1/4	4		28	28 440 R1	SCREW, OV-CR-REC-HD NO.8-18 X 3/4	14	
4	444 058 C1	SEAL, DOOR	2		29	449 680 C1	RETAINER, ACCESS DOOR CASE	2	
5	449 683 C1	CHANNEL, GLASS	2		30		NOT SERVICED SEPARATELY	1	
6		GLASS, DOOR WIN. TINTED SERVICED BY NAGS NO.4647T	1		31	575 473 C1	COVER, ACCESS DOOR INNER PNL	2	
7	480 900 C1	FASTENER, DOOR GLASS	4		32	466 717 C1	CASE ASSY, DOOR DISPATCH REGULATOR, WIN.	1	
7	480 901 C1	RETAINER, FASTNR	4		33		LEFT	1	
8	454 215 C1	GUIDE, DOOR WIN.	2		33	449 766 C93	RIGHT	1	
8	23 769 R1	SCREW, PAN-CR-REC-HD 1/4-20 X 5/8, W/LW	4		33	449 767 C93	SCREW, PAN-HD-CR NO.10-24 X 1/2	4	
9	454 216 C1	PIN, LATCH STRIKER	2		33	160 221	BOLT, HEX-HD NO.10-24 X 1/2	4	
9	492 082 C1	SHIM, WASHER LATCH STRIKER PIN	AR		33	412 283 C1	WASHER, LK	8	
10		RETAINER, W/BRKTS, GLASS RUN CHANNEL	1		33	125 774	CHANNEL, GLASS RUN	1	
10	466 753 C1	LEFT	1		34	454 229 C1	HANDLE, VENT	2	
10	466 754 C1	RIGHT	1		35	162 300 R1	PLUG, BUTTON	20	
10	444 075 C1	RETAINER, GLASS RUN CHANNEL	2		36	475 212 C1	PLUG, BUTTON	2	
10	512 550 C1	SCREW, HEX-HD 1/4-20 X 7/8	6		37	406 391 C1	HINGE, DOOR UPPER		
11	330 411 C1	KNOB, DOOR LK	2		38		LEFT	1	
12	475 926 C1	ESCUTCHEON, LK KNOB	2		38	475 340 C91	RIGHT	1	
13		ROD, REMOTE DOOR LK	1		38	475 341 C91	LOWER	1	
13	484 299 C1	LEFT	1		38	475 342 C91	LEFT	1	
13	484 300 C1	RIGHT	1		38	475 343 C91	RIGHT	1	
14		LATCH, DOOR	1		38	472 683 C1	SCREW, SEMS 3/8-16 X 1-1/4	8	
14	477 257 C94	LEFT	1		38	393 014 C91	SCREW, HEX-HD 5/16NC X 3/4	12	
14	477 258 C94	RIGHT	1		38	133 322 R1	WASHER, FL 11/32 X 1 X 3/16	12	
15	475 930 C92	HANDLE, DOOR OTR	2		38		BRACKET, UPR HINGE REINF		
15	428 075 C1	NUT, HEX NO.10-24, W/LW	8		38	449 700 C1	LEFT	1	
16	482 755 C91	CLIP, ROD END	4		38	449 701 C1	RIGHT	1	
17		ROD, DOOR LK KEY CYL	1						
17	477 024 C3	LEFT	1						
17	477 025 C3	RIGHT	1						
18		ROD, REMOTE DOOR LK HANDLE	2						
19	423 745 C1	RETAINER, CYL HSG LK	2						
20	474 621 C1	LOCK	1			196 983 R92	* BOX, ASH, REAR DOOR MTD. CODE 16196	1	
21		CONTROL, REMOTE	1			505 317 C1	* RETAINER, ASH BOX	1	
21	449 768 C91	LEFT	1			335 062 C1	* SCREW, PAN-HD-CR, SELF DRILL NO.8-18 X 1/2	3	
21	449 769 C91	RIGHT	1						
21	191 983	SCREW, FLAT-CR-REC-HD 1/4NC X 5/8	16						
22	475 697 C1	RETAINER, DOOR TRIM PANEL	2						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

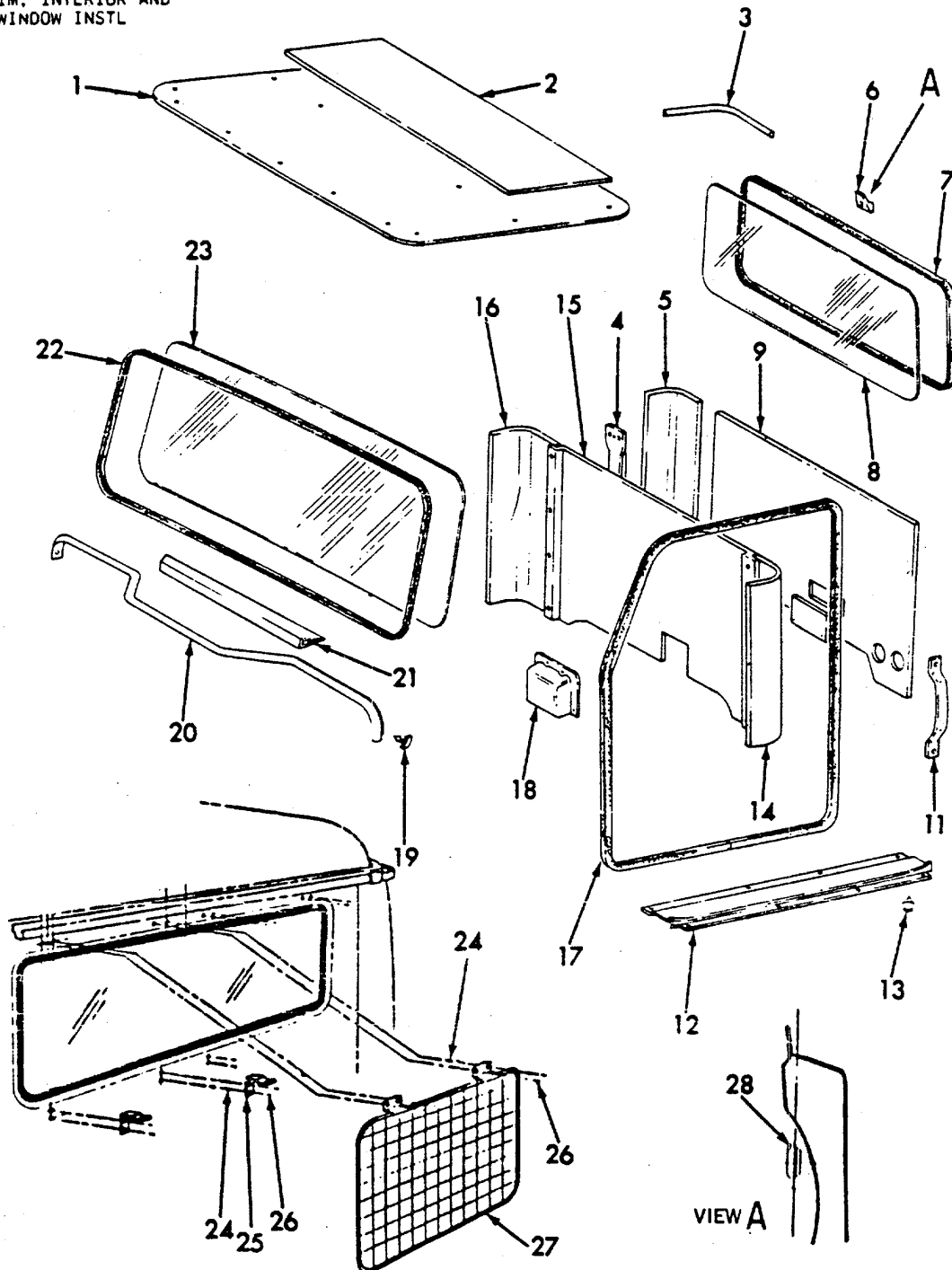
REVISION 01

PAGE 2

1330



FIG. 16-028
TRIM, INTERIOR AND
WINDOW INSTL



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

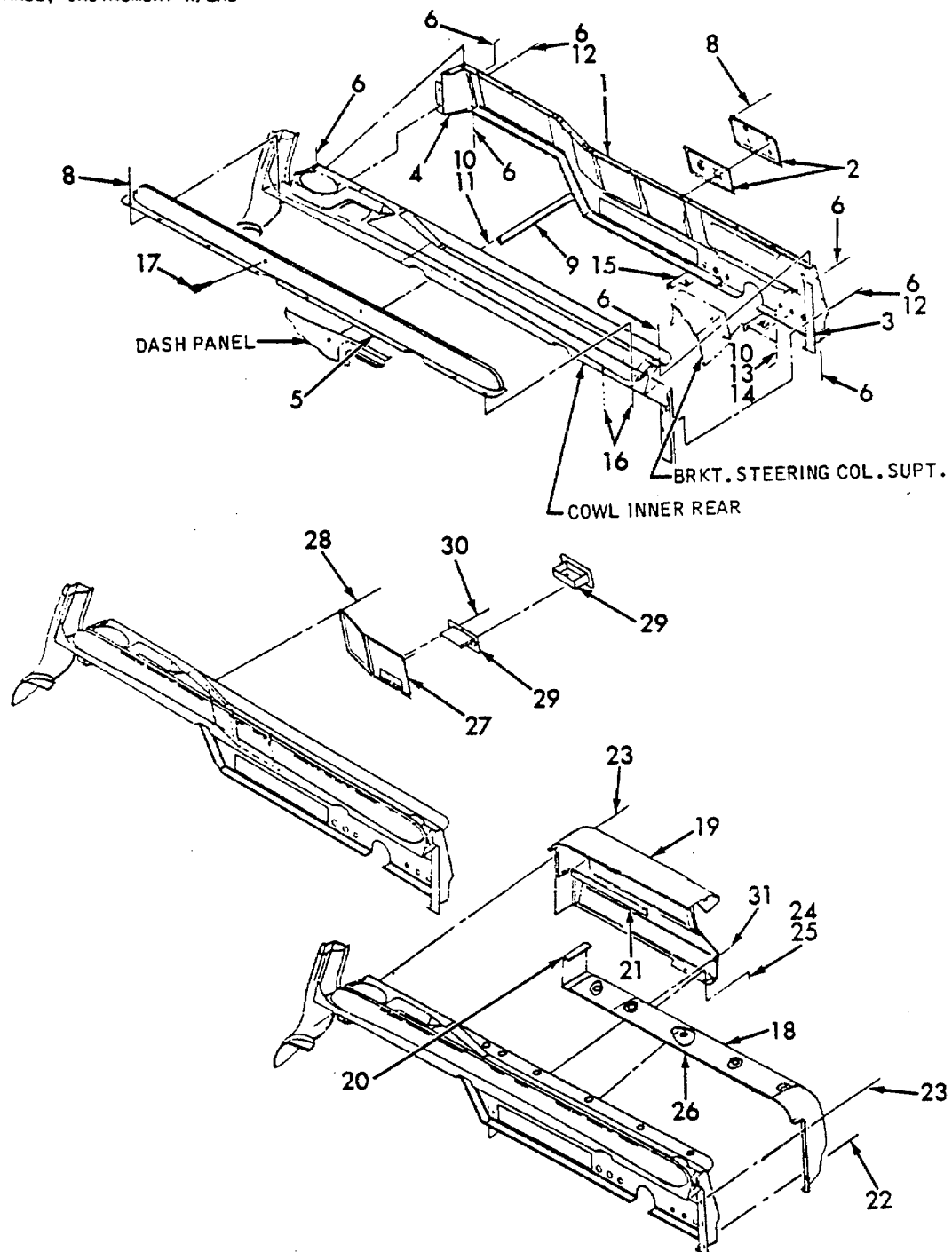
PAGE 1

1332



FIG. 16-029

PANEL, INSTRUMENT W/LHD



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

1334



MT-145
CAB AND BODIES

GROUP 16

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 16-029			31	592 559 C1	SCREW, SELF DR TAP NO.10-16 X 3/4	2	
1		PANEL, INSTRUMENT W/LHD							
		FRAME, INSTRUMENT PNL							
1	489 489 C1	W/U A/C	1						
1	452 944 C1	BRACE, INSTRUMENT PNL	1						
3		BRACKET, INSTRUMENT PNL, LT	1						
		NON SERVICE - MAKE LOCALLY							
4		BRACKET, INSTRUMENT PNL, RT	1						
		NON SERVICE - MAKE LOCALLY							
5	452 588 C2	PANEL, DEFROSTER DUCT	1						
6	24 390 R1	SCREW, PAN-HD-CR NO.10-16 X 1/2	31						
8	24 379 R1	SCREW, PAN HD CR NO.8-18 X 1/2	11						
9	466 223 C1	BRACE, INSTRUMENT PNL TO DASH	1						
10	1/4 R	WASHER, LK 1/4	6						
11	25 222 R1	BOLT, 1/4-20 X 3/4	2						
12	120 391	WASHER, FL NO.10	5						
13	25 707 R1	WASHER, FL 1/4	4						
14	25 222 R1	BOLT, 1/4-20 X 3/4	4						
15		BRACE, INSTRUMENT PNL TO PEDAL SUPT	2						
		NON SERVICE - MAKE LOCALLY							
16	437 693 C1	CAP, TUBE	2						
17	193 176 R1	BUMPER, W/S RET	2						
18		COVER, INSTRUMENT PNL, LT							
18	490 700 C1	CHESTNUT	1						
19		COVER, INSTRUMENT PNL, RT							
19		W/O A/C							
19	490 702 C1	CHESTNUT	1						
20	452 885 C1	SEAL, INSTRUMENT PNL	1						
21	443 164 C1	SEAL, COVER TO REAR COWL	1						
23	456 107 C1	SCREW, PAN-HD-CR SELF DR NO.10-16 X 1/2	5						
24	120 391	WASHER, FL NO.10	1						
25	456 107 C1	SCREW, PAN-HD-CR SELF DR NO.10-16 X 1/2	1						
26	456 107 C1	SCREW, PAN-HD-CR SELF DR NO.10-16 X 1/2	6						
27	451 498 C1	PANEL, CLUSTER	1						
28	24 379 R1	SCREW, PAN HD CR NO.8-18 X 1/2	6						
29	481 384 C91	TRAY, ASH	1						
30	27 573 R1	SCREW, OVAL HD CR REC NO.6-20 X 1/2	3						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

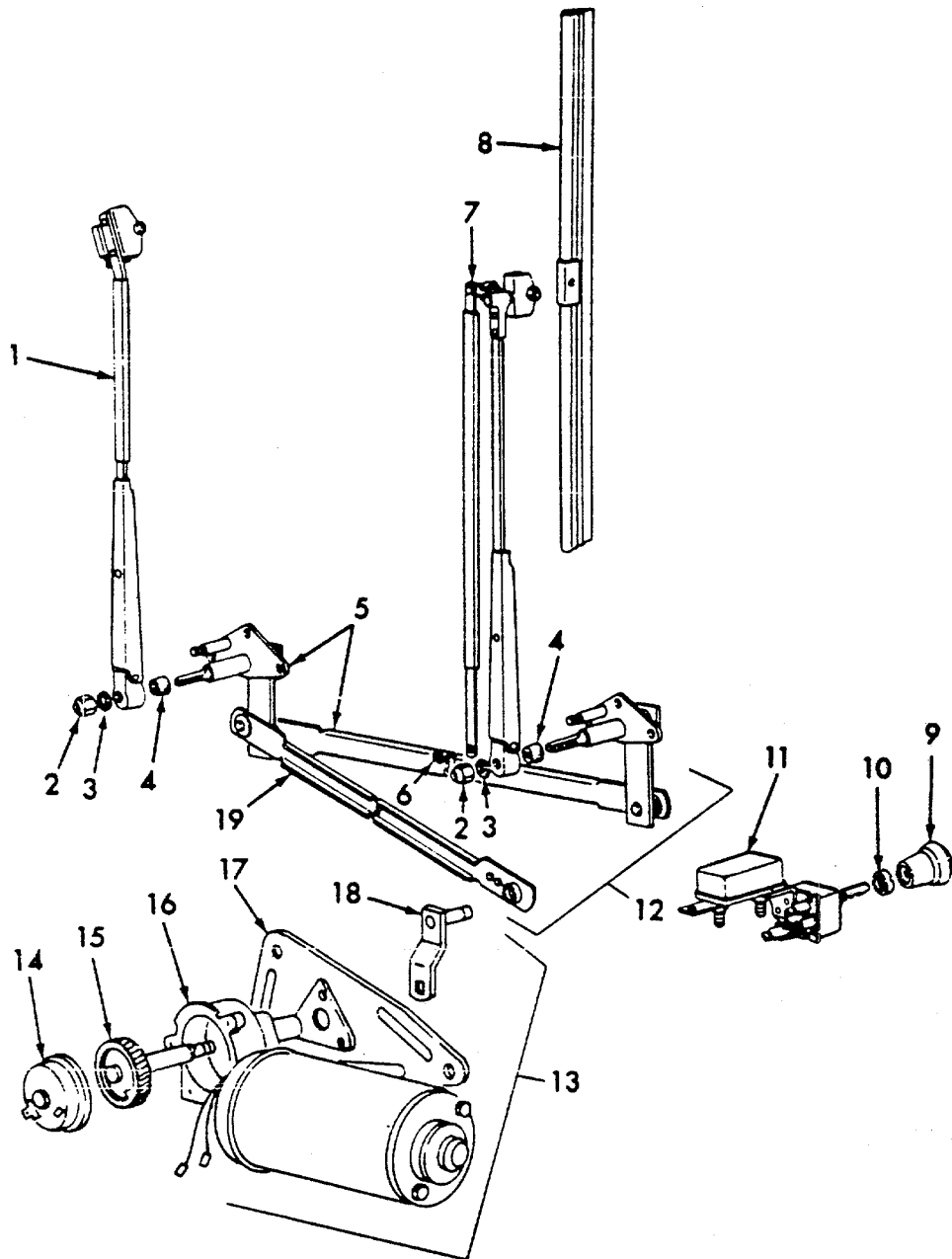
REVISION 01

PAGE 2

1335



FIG. 16-030

WIPER, W/S, ELECT. W/LHD.
AMERICAN BOSCH

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 1

1336



MT-145
CAB AND BODIES

GROUP 16

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.
		FIG. 16-030							
		WIPER, W/S. ELECT. W/LHD, AMERICAN BOSCH							
1		ARM, WIPER, RT							
1	584 479 C91	W/LATCH-LOCK FEATURE	1						
1	582 529 C1	NOZZLE, WIPER, RT	1						
2	339 544 C1	NUT, CAP	2						
3	138 542	WASHER, LK	2						
4	966 782 R1	DRIVER, KNURLED	2						
5	508 914 C1	ARM, PIVOT	1						
6	148 194 R1	CLIP, WIPER BODY PIVOT	1						
7		ARM, WIPER, LT							
7	584 478 C91	W/LATCH-LOCK FEATURE	1						
7	582 528 C1	NOZZLE, WIPER, LT	1						
7	494 729 C1	CLIP, LOCK, ON AUX ARM	1						
8		BLADE, WIPER							
8	475 925 C1	STANDARD	2						
8	537 474 C1	W/816030.6800, .9207	2						
9	469 858 C1	KNOB, SW	1						
10	363 423 C1	NUT, MTG	1						
11	470 249 C91	SWITCH, W/S WIPER	1						
12		BODY, W/S WIPER							
		INCLUDES ITEMS 2 THRU 5.							
		19							
12	584 475 C91	W/LATCH-LOCK FEATURE	1						
12	25 752 R1	BOLT, HEX-HD 1/4NF X 1/2	6						
12	1/4 R	WASHER, LK 1/4	6						
13	471 496 C92	MOTOR, W/S WIPER, ELECT.	1						
13	25 653 R1	BOLT, 5/16-18 X 1/2	3						
13	5/16 R	WASHER, LK 5/16	3						
14	571 276 C1	COVER, W/SPG AND TERM	1						
14	26 000 R1	SCREW, HEX-HD NO.8-32 X 3/8	3						
14	131 015	WASHER, FL NO.10	3						
15	588 811 C1	GEAR	1						
16		MOTOR	1						
		NOT SERVICED SEPARATELY							
17		BRACKET	1						
		NOT SERVICED SEPARATELY							
18	491 673 C1	LEVER, DR	1						
19	508 915 C1	ARM, CONN DR	1						
19	162 340 C1	CLIP, SPG	2						

MISSING ITEM NUMBERS ARE NOT USED

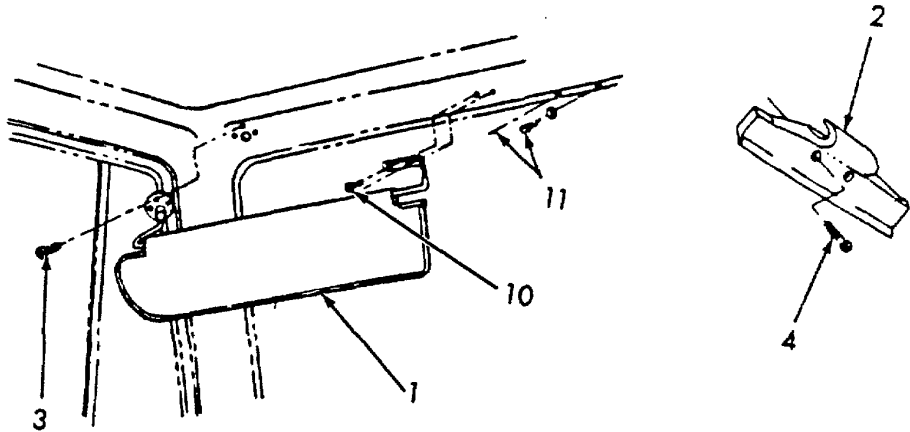
PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE 2



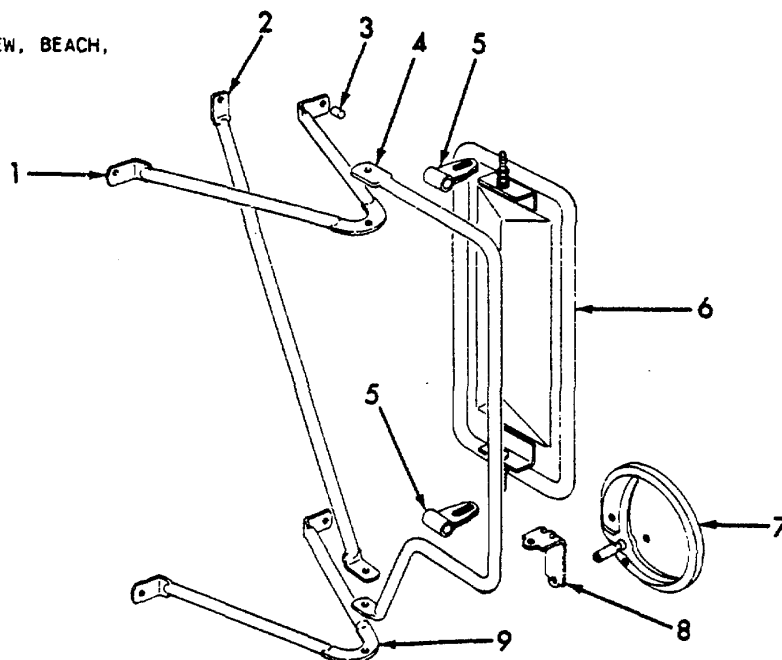
FIG. 16-031
VISOR, SUN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1		VISOR, SUN							
1	490 686 C91	W/O HEADER MTD W/S WIPER STANDARD-CHESTNUT	2						
2	579 900 C1	BRACKET, SUN VISOR	1						
3	495 764 C1	SCREW, SPEC NO. 10-32 X 3/4	AR						
4	26 627 R1	SCREW, NO. 10-16 X 3/4 PLN	2						
10	26 627 R1	SCREW, NO. 10-16 X 3/4 PLN	AR						
11	27 209 R1	SCREW, NO. 10-16 X 3/4 PLN	2						
11	140 260	WASHER, TRIM NO. 10	2						
	466 712 C2	* PLUG, BUTTON, W/O PASSENGER VISOR	1						
		* NON-ILLUSTRATED							



FIG. 16-032

MIRROR, REAR VIEW, BEACH,
PAINTED, STD

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO	PART NUMBER	DESCRIPTION	QTY	REC STK
	482 238 C91	MIRROR, W/ARM, BRACE, BRKT AND HEAD			8	477 868 C1	BRACKET, MIRR MTG	1	
					9	480 715 C1	BRACKET, LWR MTG	1	
					9	27 231 R1	SCREW, PAN-CR-REC-HD 5/16-18 X 3/4	2	
1	480 714 C1	BRACKET, UPR MTG	1		9	27 304 R1	WASHER, LK 5/16	2	
1	22 470 R1	BOLT, HEX-HD 1/4NC X 3/4	3		9	27 309 R1	WASHER, FL 5/16	2	
1	453 074 C1	NUT, HEX LK 1/4NC	3						
1	178 474	WASHER, LK 1/4	3						
2	480 716 C1	BRACE, DIAGONAL	1						
2	22 470 R1	BOLT, HEX-HD 1/4NC X 3/4	1						
2	453 074 C1	NUT, HEX LK 1/4NC	1						
2	178 474	WASHER, LK 1/4	1						
3	480 895 C1	NUT, 1/4 PLASTIC DOME	3						
4	480 705 C1	ARM, MIRR SUPT	1						
4	22 732 R1	BOLT, HEX-HD 5/16NC X 1-1/4	2						
4		NUT, HEX 5/16NC	2						
4	28 027 R1	WASHER, LK 5/16 EXT/INT	2						
4		WASHER, FL 5/16	2						
5		CLAMP, MIRR ARM							
5	480 897 C1	W/O DUPLEX MIRR	2						
6		HEAD, W/GLASS, MIRR							
6	480 701 C91	W/O DUPLEX MIRR	1						
6		BOLT, T-HEAD 5/16NC X 2	2						
6		NUT, HEX 5/16NC	6						
6		WASHER, FL 5/16	4						
6	480 896 C1	NUT, 5/16 PLASTIC DOME	2						
6	996 687 R1	GLASS, MIRR, CLEAR	1						
7	477 869 C1	MIRROR, HEAD	1						
7	19 912 R1	SCREW, PAN-CR-REC-HD 1/4-28 X 3/4	1						
7	27 303 R1	WASHER, LK 1/4	2						

NOTE: MIRR
0531495C91-DUPLEX RT
0531496C91-DUPLEX LT
0544536C91-816685.9200
THESE PART NOS. ARE
FOR REF ONLY AND ARE
SERVICED BY COMPONENTS

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA
16-032

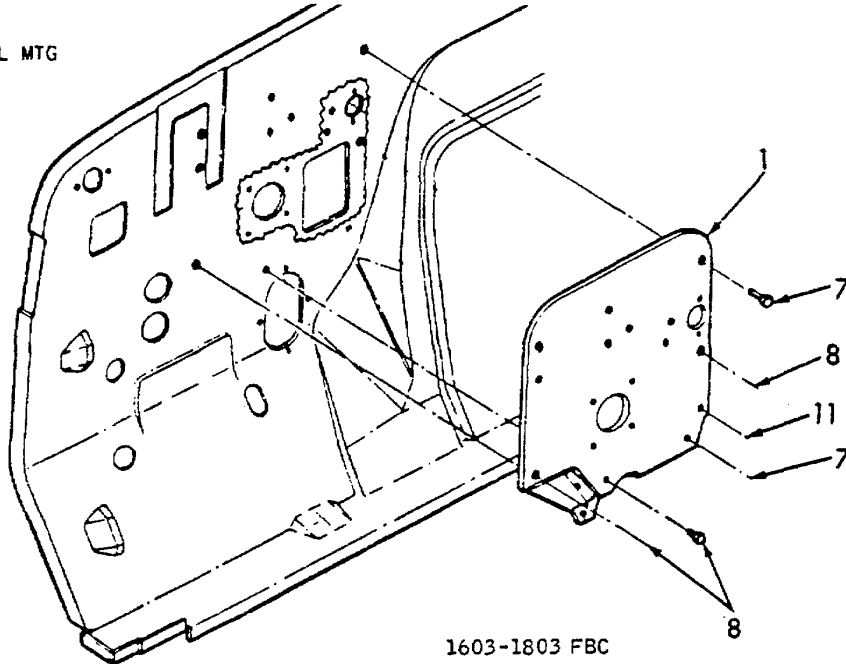
REVISION 01

PAGE 1



FIG. 16-035

PLATE, MAS CYL MTG



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
1		PLATE, MAS CYL MTG							
1		80 X 100							
1	472 356 C1	W/ATR BRKS	1						
7	140 483 H	BOLT, HEX-HD 3/8-16 X 1-1/4	2						
7	3/8	R WASHER, LK 3/8	2						
8	172 482	BOLT, HEX HD 3/8-16 X 3/4	3						
8	3/8	R WASHER, LK 3/8	3						
9	25 493 R1	BOLT, HEX-HD 5/16-18 X 1	9						
9	5/16	R WASHER, LK 5/16	9						
11	3/8	R WASHER, LK 3/8	1						
11	140 483 H	BOLT, HEX-HD 3/8-16 X 1-1/4	1						
	176 022	* BOLT, 3/8-16 X 1-1/2	AR						
	24 839 R1	* BOLT, HEX-HD 3/8-16 X 3/4	2						
	433 351 C1	* BOLT, SPEC 3/8-16 X 1-1/4	2						
	25 709 R1	* WASHER, 3/8	2						
	25 493 R1	* BOLT, HEX-HD 5/16-18 X 1	9						
	5/16	R * WASHER, LK 5/16	9						
		* NON-ILLUSTRATED							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

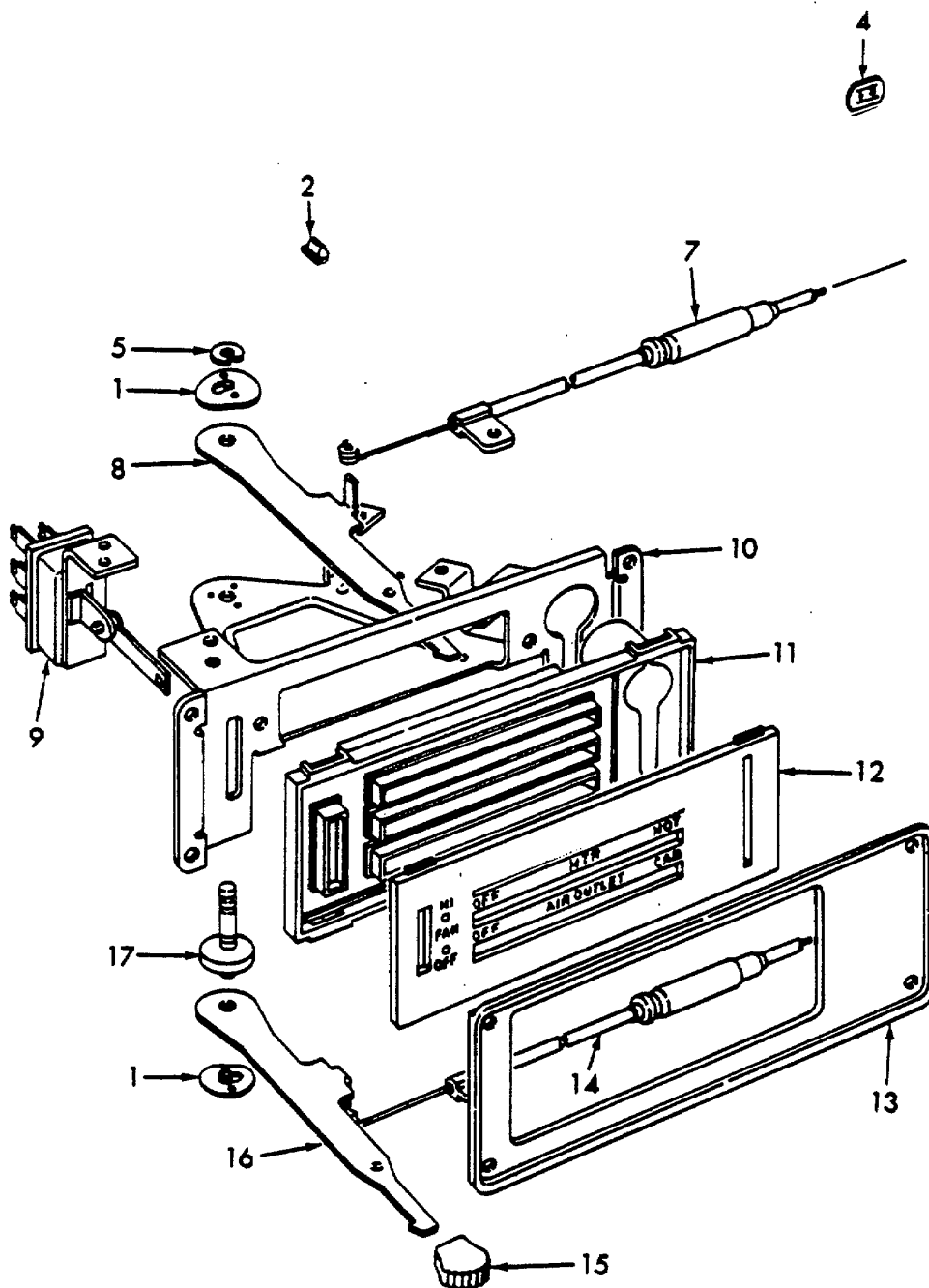
REVISION 01

PAGE 1



FIG. 16-036

CONTROL, HEATER AND A/C



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

PAGE NO. 1

GROUP 16

MT-145
CAB AND BODIES

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 16-036						AND 496057C92			
		CONTROL, HEATER AND A/C						THESE PART NOS. ARE			
								FOR REF ONLY AND ARE			
								SERVICED BY COMPONENTS			
1	472 244 C1	CLIP, SPG LEVER RET	AR								
2	472 236 C1	NUT, RET		3							
4	146 327 R1	CLIP, PEDAL LINK	AR								
5	379 310 R1	RING, RET, A/C		1							
7		CABLE, CON									
7		W/HEATER									
7	581 705 C1	LHD		1							
7	496 059 C1	RHD		1							
7	474 099 C1	W/HEATER-A/C		1							
7	24 390 R2	SCREW, TAP, PAN-CR-REC-HD		1							
		NO. 10-16 X 1/2									
7	581 717 C1	CLIP, CABLE LINK		1							
8	472 237 C1	LEVER, HEATER		1							
9	472 253 C1	SWITCH, PAN		1							
9	24 390 R1	SCREW, TAP PAN-CR-REC HD		2							
		NO. 10-16 X 1/2									
10	472 248 C1	SUPPORT, CON		1							
10	24 390 R1	SCREW, TAP PAN-CR-REC HD		2							
		NO. 10-16 X 1/2									
11		MASK, LGT REFLECTOR									
11	472 246 C1	W/HEATER		1							
11	472 247 C1	W/HEATER-A/C		1							
12		PLATE, LIGHT DIFFUSER									
12		W/HEATER									
12	472 241 C1	LHD		1							
12	496 067 C1	RHD		1							
12	472 242 C1	W/HEATER-A/C		1							
13	472 245 C2	BEZEL, CON		1							
13	24 379 R1	SCREW, TAP PAN-CR-REC-HD		4							
		NO. 8-18 X 1/2									
14		CABLE, CON									
14		W/HEATER									
14	581 703 C1	LHD		1							
14	496 058 C1	RHD		1							
14	474 097 C1	W/HEATER-A/C		1							
14	24 390 R1	SCREW, TAP PAN-CR-REC-HD		1							
		NO. 10-16 X 1/2									
14	581 717 C1	CLIP, CABLE LINK		1							
15		KNOB, CON LEVER									
15	474 087 C1	LHD	AR								
15	492 518 C1	RHD	AR								
15	472 280 C1	NUT, FACE	AR								
16	472 219 C1	LEVER, AIR		1							
17	472 240 C1	PIN, CON LEVER		1							
	472 271 C1	• LINK, VENT DOOR		1							
	146 327 C1	• CLIP, PEDAL LINK		2							
		• NON-ILLUSTRATED									
		NOTE: CONTROL									
		472249C92, 472250C92,									

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

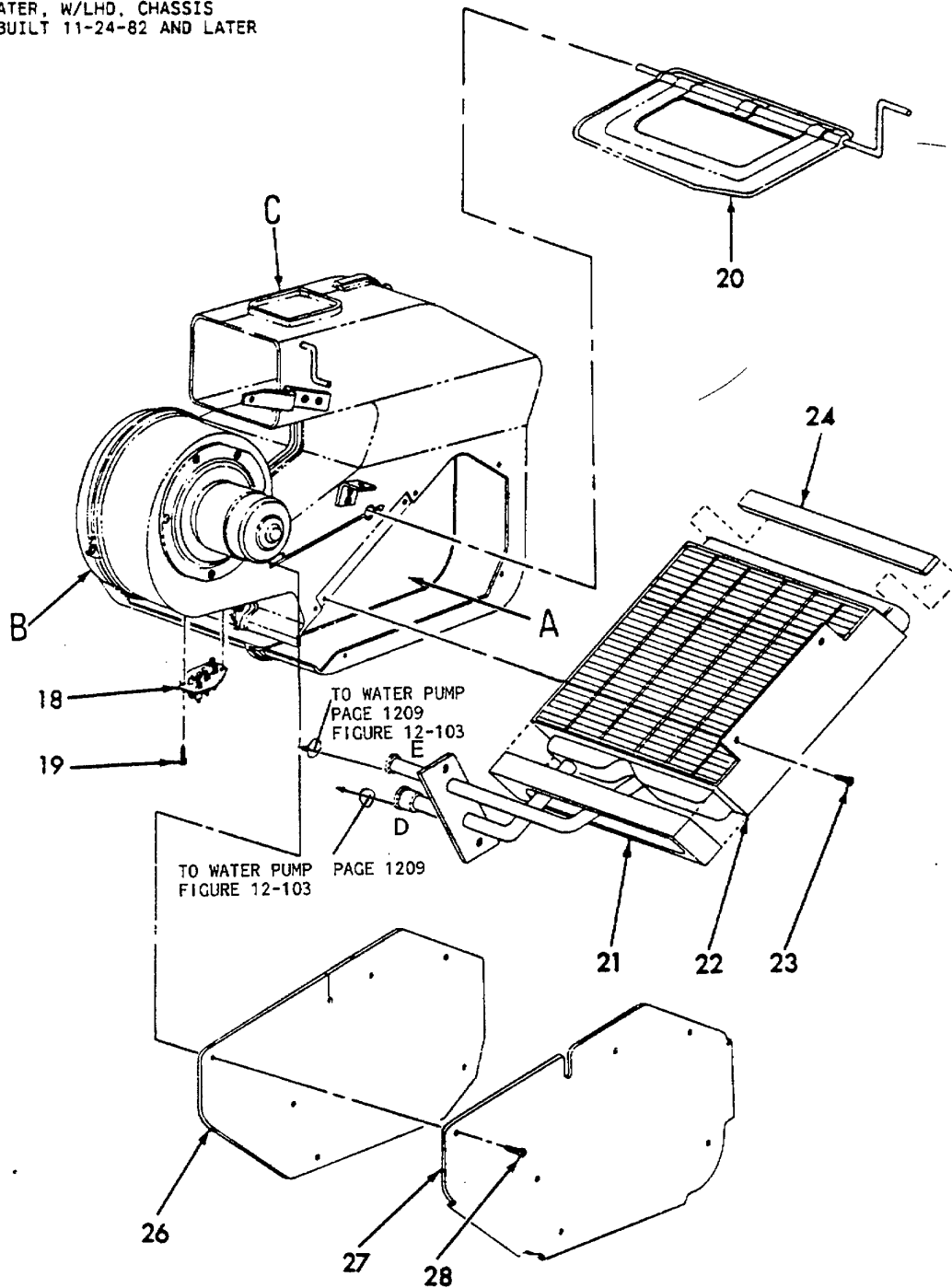
REVISION 02

PAGE NO. 2

1342



FIG. 16-037

HEATER, W/LHD, CHASSIS
BUILT 11-24-82 AND LATER

PRINTED IN THE UNITED STATES OF AMERICA

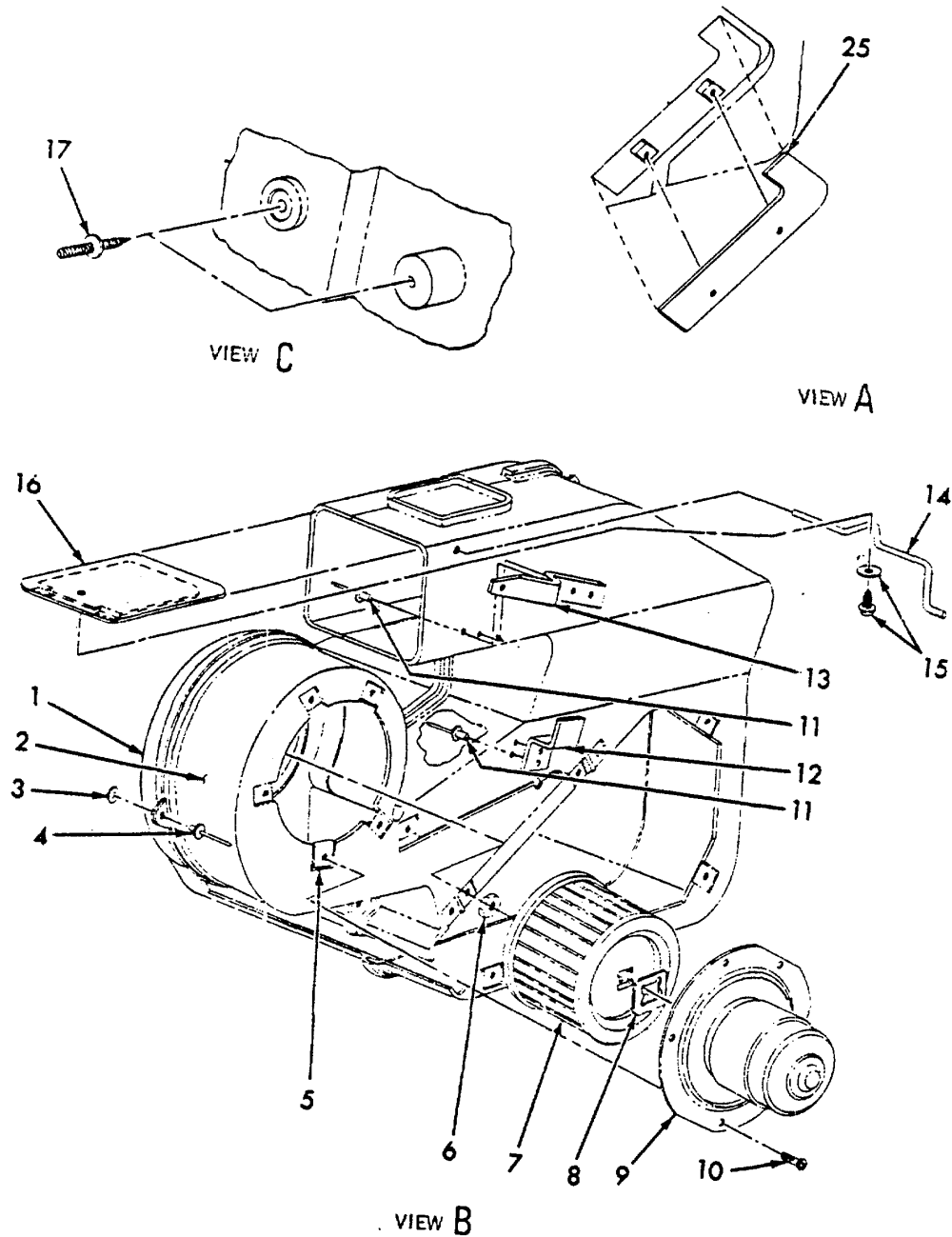
REVISION 01

PAGE NO. 1



FIG. 16-037

HEATER, W/LHD, CHASSIS
BUILT 11-24-82 AND LATER



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

PAGE NO. 2

**MT-145
CAB AND BODIES**

GROUP 16

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC
		FIG. 16-037							
		HEATER, W/LHD, CHASSIS BUILT 11-24-82 AND LATER							
1	581 722 C1	CASE, FRT	1						
2	581 723 C1	CASE, REAR	1						
3	578 917 C1	WASHER, FL	7						
4	359 182 C1	RIVET, POP 0.125 DIA X 0.63 LONG	8						
5	445 424 C1	U-NUT, NO.10-16	15						
6	144 562	NUT, NO.10-32	1						
7	465 502 C1	BLOWER, WHEEL	1						
8	469 453 C1	SPACER, BLOWER WHEEL	1						
9	469 455 C1	MOTOR, BLOWER	1						
10	24 304 R1	SCREW, NO.10-16 X 0.75	5						
11	403 061 C1	RIVET, POP 0.188 DIA X 0.25 IN LG	4						
12	581 700 C1	BRACKET, BLEND DOOR CON	1						
13	581 701 C1	BRACKET, DEFROSTER DOOR CON	1						
14	585 956 C1	ROD, DEFROSTER DOOR	1						
15	24 392 R1	SCREW, PAN-HD-CR-REC NO.10-16 X 0.50 TYPE AB	1						
15	25 707 R1	WASHER, PL 1/4 X 5/8	1						
16	452 234 C1	DOOR, DEFROSTER	1						
17	454 184 C1	STUD, DOUBLE END HI-LO	4						
18	469 458 C1	RESISTOR	1						
19	473 146 C1	SCREW, HI-LO NO.10-16 X 1/2	2						
20	581 699 C1	DOOR, BLEND AIR	1						
21	480 796 C2	SEAL, HEATER CORE BOTTOM	1						
22	581 702 C1	CORE, HEATER	1						
23	24 304 R1	SCREW, NO.10-16 X 0.75	4						
24	2643 342 R1	SEAL, HEATER CORE TOP 0.38 X 0.75 X 7.9 IN LG	1						
25	581 712 C1	SEAL, HEATER CORE FRT	1						
26	581 715 C1	SEAL, HEATER COVER	1						
27	581 716 C1	COVER, ACCESS	1						
28	24 304 R1	SCREW, NO.10-16 X 0.75	6						
		 NOTE: HEATER 581724C91 THIS PART NO. IS FOR REF ONLY AND IS SERVICED BY COMPONENTS							

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

16-037

REVISION 01

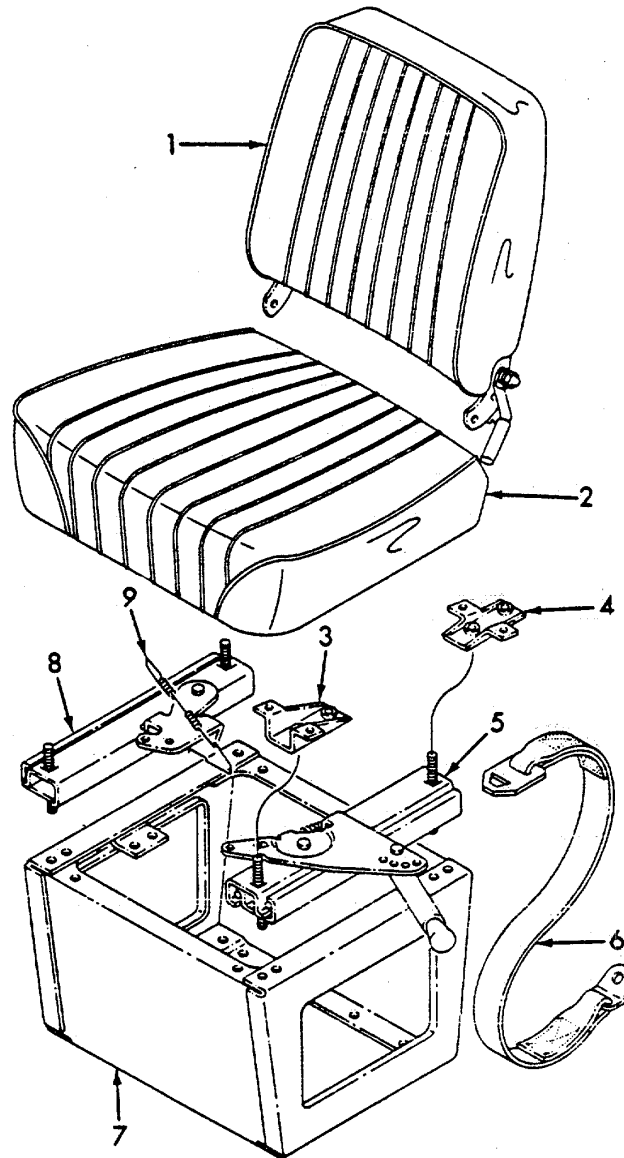
PAGE 3

1345



FIG. 16-045

SEAT, DRIVER AND
PASSENGER, IH



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

16-045

**MT-145
CAB AND BODIES**

GROUP 16

ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC STK
		FIG. 16-045				7	449 743 C3	RISER, SEAT		1	
		SEAT, DRIVER AND PASSENGER, IH				7	504 554 C1	BOLT, HEX-HD 5/16-18 X 1-1/8		6	
						7	133 322 R1	WASHER, FL 5/16		6	
						8		ADJUSTER, SEAT RT W/LHD		1	
		SEAT DRIVER AND PASSENGER, CHESTNUT W/REGULAR CAB				8	434 955 C91				
	489 904 C91					8	5/16	NUT, HEX 5/16NF		4	
						8	5/16	WASHER, LK 5/16		4	
						9	467 845 C1	WIRE, SEAT RELEASE		1	
1		CUSHION, BACK CHESTNUT W/REGULAR CAB									
1	489 908 C91				1						
1		COVER, BACK CUSH CHESTNUT W/REGULAR CAB			1						
1	490 661 C1				1						
1	501 460 C1	W/TRAVELCREW CAB			1						
1	490 657 C1	SIERRA TAN			1						
1	467 458 C1	ROD, ADJ BACK			1						
1	467 462 C1	PAWL, BACK CUSH ADJ			2						
1	467 455 C1	HANDLE, SEAT BACK ADJ			1						
1		SPRING, SEAT BACK ADJ LATCH									
1	467 463 C1	LEFT			1						
1	467 464 C1	RIGHT			1						
1	467 428 C1	SPACER, SEAT BACK ADJ LATCH			1						
1	48 193 K	SPACER, 1/2 X 3/4			1						
1	27 576 R1	NUT, LOW CROWN 1/2-13			1						
1	467 414 C1	WASHER, SEAT BACK ADJ LATCH			2						
1	1/2	WASHER, LK 1/2			1						
2		CUSHION, SEAT CHESTNUT			1						
2	489 906 C92				1						
2		COVER, SEAT CUSH CHESTNUT			1						
2	490 662 C1				1						
2	467 415 C1	BOLT, SHOULDER 5/16NC X 7/16			2						
2	411 431 C2	BOLT, HEX-HD 5/16NC X 1-1/2			2						
2	286 578 C1	WASHER, FL 5/16 PLASTIC			2						
2	487 657 C1	WASHER, PLASTIC			2						
2	467 455 C1	HANDLE, BACK ADJ			1						
3	467 380 C1	BRACKET, SUPT. REAR			2						
3	474 773 C1	SCREW, HEX-HD TAPTITE 1/4NC X 3/4			4						
3	474 774 C1	SCREW, HEX-HD TAPTITE 5/16NC X 1/2			2						
4	467 879 C1	BRACKET, FRAME SUPT. FRT			2						
4	474 773 C1	SCREW, HEX-HD TAPTITE 1/4NC X 3/4			4						
4	474 774 C1	SCREW, HEX-HD TAPTITE 5/16NC X 1/2			2						
5		ADJUSTER, SEAT LT. W/HANDLE AND SPG W/LHD			1						
5	467 842 C91				1						
5	494 536 C1	ADJUSTER, SEAT LT W/RIGHT HAND DRIVE			1						
5	5/16	NUT, HEX 5/16NF			2						
5	5/16	WASHER, LK 5/16			2						
6		BELT, SEAT									
		SEE FIG.16-049 PAGE 1348									

MADE IN THE UNITED STATES OF AMERICA
16-045

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

PAGE 2

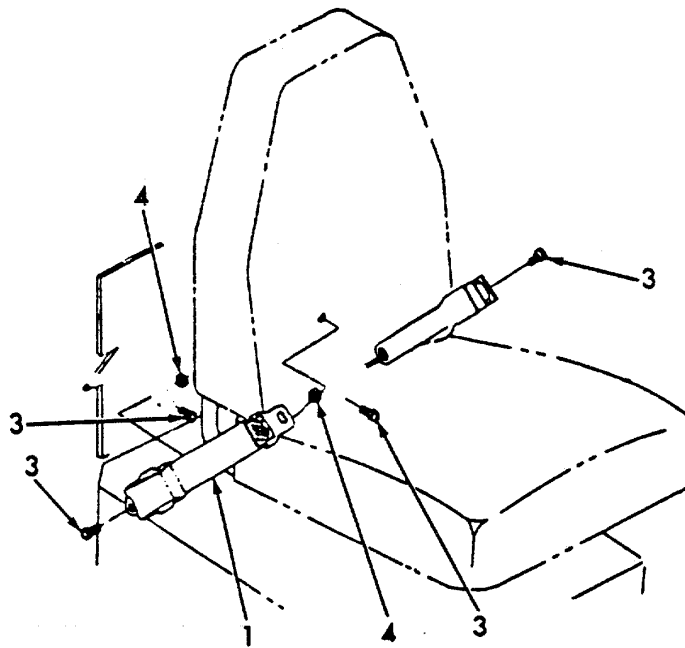
1347

MT-145
CAB AND BODIES

GROUP 16

FIG. 16-049

BELT, SEAT



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
1		BELT, SEAT									
1							348 130 C91	* RETRACTOR, SET, SEAT BELT			
								* NON-ILLUSTRATED			
1		1H INDIVIDUAL DRIVER AND PASSENGER									
1	244 845 R2	W/O RETRACTOR			1						
3		BOLT, SEAT BELT ANCHOR HEX-HD 1/2-13	AR								
4	409 480 C1	BOLT, SEAT BELT ANCHOR HEX-HD 1/2-13		2							

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

16-049

REVISION 01

PAGE 1

1348

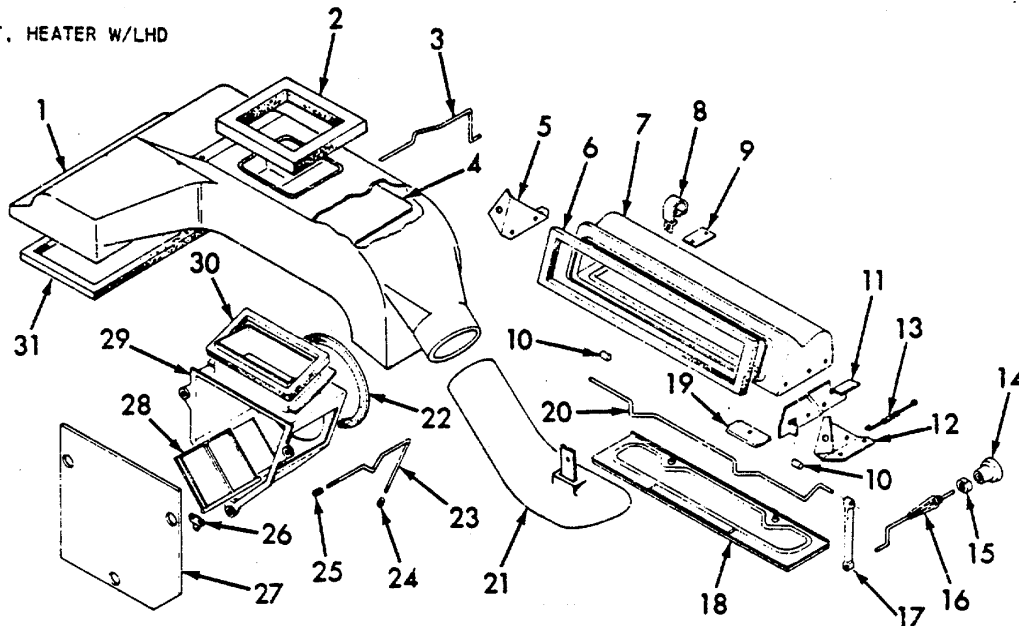


MT-145
CAB AND BODIES

GROUP 16

FIG. 16-084

DUCT, HEATER W/LHD



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
1	501 107 C91	DUCT, HEATER-RT	1		17	146 327 R1	CLIP, PEDAL LINK DOOR, FRESH AIR	2	
2	501 040 C1	SEAL, HEATER TO DEFROSTER CHAMBER	1		18	571 724 C91	CHASSIS BUILT 8-5-81 AND LATER	1	
3	452 231 C1	ROD, DOOR	1		18	19 910 R1	NUT, HEX LK NO. 10	2	
3	26 304 R1	SCREW, PAN-CR-REC-HD NO. 10-16 X 3/4	1		18	120 391	WASHER, FL NO. 10	2	
3	25 707 R1	WASHER, PL 1/4 X 5/8	1		19	466 313 C1	RETAINER, DOOR ROD	2	
4	452 234 C1	DOOR, DEFROSTER	1		20	466 315 C1	ROD, DOOR AIR	1	
5	453 002 C1	BRACKET, MTG	1		20	189 093 R1	NUT, PUSH-ON	1	
6		SEAL	1		21	501 072 C1	DUCT, LWR CTR	1	
		MAKE LOCALLY					WILL WORK FOR 487894C1		
7	472 220 C2	DUCT, UPR	1		22	469 502 C1	SEAL, AIR INTAKE-LWR	1	
7	403 061 C1	RIVET, DOME HD 3/8	6		23	474 017 C1	ROD, DUCT	1	
7	25 520 R1	NUT, HEX 5/16NC	2		23	19 910 R1	NUT, HEX LK NO. 10	1	
7	5/16 R	WASHER, LK 5/16 REGULAR	2		23	120 391	WASHER, FL NO. 10	2	
8	469 968 C1	CLAMP, CABLE	2		24		TIP	1	
8	403 061 C1	RIVET, DOME HD 3/8	2				NOT SERVICED SEPARATELY		
9		BAR, MTG	1		25	239 870 R1	SPRING, DUCT DOOR	1	
		MAKE LOCALLY			26	469 503 C1	PIVOT, DOOR	2	
9	403 061 C1	RIVET, DOME HD 3/8	2		27		SEAL	1	
10		SPACER	2				NON SERVICE OBTAIN LOCALLY		
		MAKE LOCALLY			28	469 512 C92	DOOR	3	
11	476 141 C2	BRACKET, SPG	1		29	474 039 C1	DUCT, AIR INTAKE	1	
12		BRACKET, MTG			29	160 562	SCREW, PAN-CR-REC-HD 1/4NC X 1	3	
12	571 723 C2	CHASSIS BUILT 8-5-81 AND LATER	1		29	25 707 R1	WASHER, PL 1/4	3	
13	476 140 C1	SPRING, FRESH AIR DOOR	1		30	469 510 C1	SEAL, AIR INTAKE-UPR	1	
14	492 518 C1	KNOB	1		31		SEAL	1	
15	472 280 C1	NUT, CON	1				MAKE LOCALLY		
16	472 219 C1	CONTROL, VENT	1						
17	472 271 C1	LINK, DOOR VENT	1						

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

16-084

REVISION 01

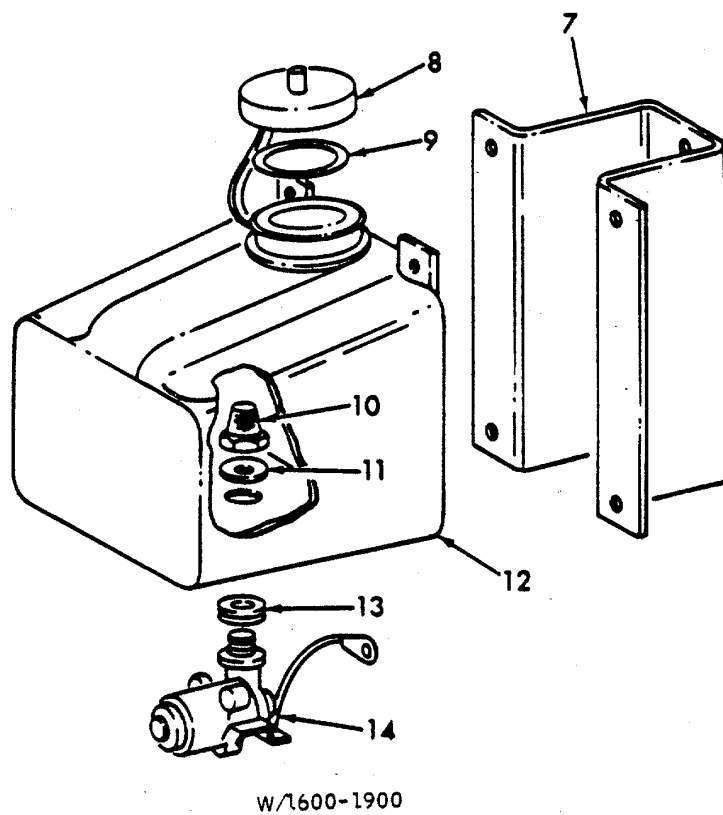
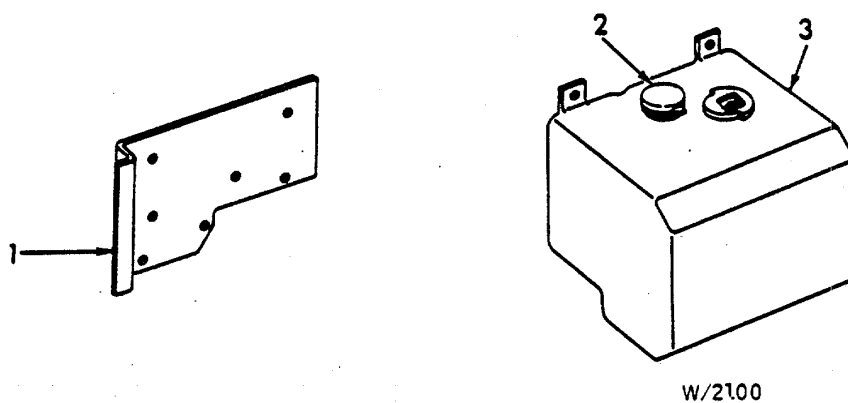
PAGE 1

1349

MT-145
CAB AND BODIES

GROUP 16

FIG. 16-085
WASHER, W/S



PRINTED IN THE UNITED STATES OF AMERICA

REVISION 02

PAGE NO. 1

1350

GROUP 16

MT-145
CAB AND BODIES



PART NUMBER	DESCRIPTION	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STK
FIG. 16-085								
	WASHER, W/S							
1 485 207 C3	BRACKET, WASHER BOTTLE	1						
1 25 228 R1	BOLT, HEX 5/16-18 X 3/4 R/S S2561	AR						
1 25 520 R1	NUT, HEX 5/16-18UNC	AR						
1 5/16 R	WASHER, LK 5/16	AR						
2 312 690 C91	CAP, RESERVOIR	1						
3 468 885 C91	RESERVOIR, W/PUMP AND CAP	8						
3 167 263	BOLT, HEX-HD 1/4NC X 3/4	3						
3 1/4 R	WASHER, LK 1/4	3						
3 25 707 R1	WASHER, FL 1/4	3						
7 488 737 C1	BRACKET, WASHER BOTTLE	1						
7 25 228 R1	BOLT, HEX-HD 5/16NC X 3/4 R/S S2561	2						
7 5/16 R	WASHER, LK 5/16	2						
8 312 690 C91	CAP, RESERVOIR	1						
9 404 619 C1	GASKET, CAP	1						
10 404 621 C1	FILTER, TANK	1						
11 404 620 C1	WASHER, NYLON	1						
12 394 120 C91	TANK, W/PUMP	1						
12 167 263	BOLT, HEX-HD 1/4NC X 3/4	4						
12 25 707 R1	WASHER, FL 1/4	4						
12 1/4 R	WASHER, LK 1/4 MED	4						
13 404 617 C1	GROMMET, TANK	1						
14 404 618 C1	PUMP, W/S WASHER	1						

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

REVISION 02

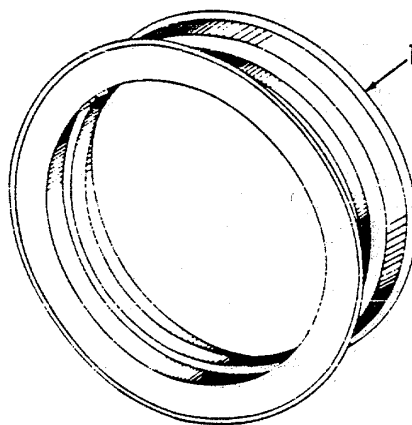
PAGE NO. 2

1351



FIG. 17-002

RIM, TUBELESS TIRES
-CAST-



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STR	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC STR
1		RIM, SOLID							
1	163 198 R2	22.5 X 8.25		1					

PRINTED IN THE UNITED STATES OF AMERICA

MISSING ITEM NUMBERS ARE NOT USED

17-002:

REVISION 01

PAGE

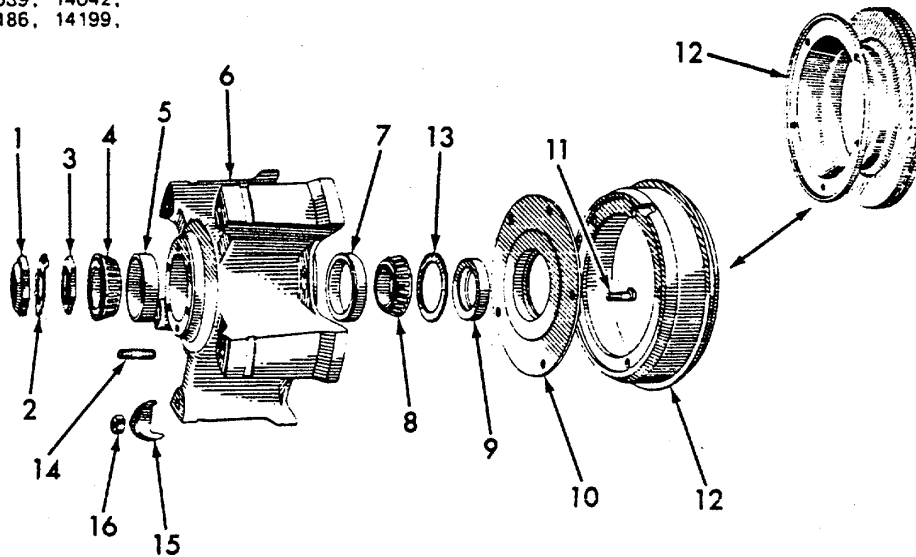
1352

MT-145
WHEELS

GROUP 17

FIG. 17-037

WHEELS, DRUM OR ROTOR/
RELATED PARTS -REAR-
-CODES 14039, 14042,
14044, 14186, 14199,
14341-



ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC. STK.
1	36 415 HB	EAT 9126 NUT, BRG ADJ OTR WILL WORK FOR 53395H	4		12	303 799 C1	15 X 6 IN. BRKS ROUND HD MTG BOLTS	4	
2	36 416 HB	\$ LOCK, BRG ADJ NUT	4		12	581 665 C1	HEX HD MTG BOLTS	4	
3	36 415 HB	EAT 9126 NUT, BRG ADJ INNER	4		12	275 149 C1	15 X 7 IN. BRKS ROUND HD MTG BOLTS	4	
4	ST 2 016 A	\$ BEARING, CONE OTR	4		12	581 666 C1	HEX HD MTG BOLTS	4	
5	ST 967	\$ BEARING, CUP OTR	4		12		AIR BRKS		
6	595 989 C91	WHEEL, W/CUPS AND STUDS -5 SPOKE-	4		12	875 831 R1	16-1/2 X 6 IN. BRKS ROUND HD MTG BOLTS	4	
6	474 517 C2	GASKET, ELIMINATOR -50CC TUBE-	AR		12	581 662 C1	HEX HD MTG BOLTS	4	
7	ST 969	\$ BEARING, CUP INNER	4		12	682 879 R2	16-1/2 X 7 IN. BRKS ROUND HD MTG BOLTS	4	
8	ST 2 112	\$ BEARING, CONE INNER	4		12	581 663 C1	HEX HD MTG BOLTS	4	
9		SEAL, GREASE	4		12	579 021 C1	DRUM, BRK W/CODE 19060.9201	4	
9	337 711 C92	EAT 29382 STANDARD			12	24 675 R1	W/HEX HD MTG BOLTS		
9	380 019 C91	CODE 29581			12	248 756 R1	BOLT, HEX HD 5/8NC X 2	10	
10	228 291 R2	GUARD, GREASE	2				BOLT, HEX HD	10	
11		BOLT, BRK DRUM			12	574 424 C1	W/579021C1 DRUM SLINGER, W/AIR BRKS AND	2	
11	457 610 C1	ROUND HD -W/303799C1, 275149C1, 875831R1	20				ANTILOCK, EXCITER RING WILL WORK FOR 457643C1		
11		DRUMS- HEX HD			12	509 158 C1	ROTOR, DISC BRK	2	
11	24 876 R1	R/S S210181 R/S 10X1272	20		13	24 868 HA	WASHER, GREASE SEAL W/337711C92	4	
		5/8NC X 2-1/4 W/581662C1, 581663C1, 581665C1 DRUMS-			14	54 494 R1	EAT 44723 STUD, RIM CLAMP	20	
11	579 019 C1	5/8NC X 2-1/2 W/581666C1 DRUM	20		15	868 367 R2	CLAMP, RIM	20	
11	25 528 R1	NUT, HEX LK 5/8NC	20		15	868 368 R1	3-5/8 IN. RIM SPACER	20	
11	5/8 R	WASHER, LK 5/8 REGULAR	20		16	54 495 R2	4-1/4 IN. RIM SPACER	20	
12		DRUM, BRK	20		17	364 15H B	NUT, RIM CLAMP STUD	20	
12		HYDRAULIC BRKS					\$ SEAL, BRG ADJ NUT GREASE	4	

MISSING ITEM NUMBERS ARE NOT USED

PRINTED IN THE UNITED STATES OF AMERICA

REVISION 01

17-037

MT-145
WHEELS

GROUP 17



ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC	ITEM NO.	PART NUMBER	DESCRIPTION	Y	QTY	REC
		FIG. 17-037 WHEELS, DRUM OR ROTOR/ RELATED PARTS -REAR- -CODES 14039, 14042, 14044, 14186, 14199, 14341-									
	360 606 C92	\$ KIT, BRG AND SEAL -FOR ONE WHEEL-									

PRINTED IN THE UNITED STATES OF AMERICA
17-037

MISSING ITEM NUMBERS ARE NOT USED

REVISION 01

PAGE 2

1354

ROCKWOOD TWIN AGENT
1500/250 DRY CHEMICAL/AFFF UNIT

ROCKWOOD INSTRUCTIONS
LOG NO. RIM 1554

KOVATCH CORPORATION
500-600 WEST CATAWISSA ST.
NESQUEHONING, PA 18240
SALES ORDER C100360

ILLUSTRATED PARTS BREAKDOWN INCLUDING ALL SPARE PARTS LISTS

MARCH, 1985

REVISED:
JULY, 1985

FSCM 52659

ROCKWOOD SYSTEMS CORPORATION
640 East Main Street
Lancaster, Texas 75146

1355

SECTION I
TWIN AGENT UNIT

Proven under pressure around the world

ROCKWOOD

SYSTEMS

CORPORATION

SELF CONTAINED DRY CHEMICAL SYSTEM

**ROCKWOOD INSTRUCTION MANUAL
LOG NO. RIM-1426**

APRIL, 1982

FIRE PROTECTION AND VALVE PRODUCT DIVISION
80 Second Street South Portland Maine 04106 Telephone (207) 799-334 /TWX 710-221-1668

1357

7.0 SPARE PARTS

The following items are the recommended list of spare parts:

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	509-0327	Repair Kit: i" M802 B.V.	1
2	509-0329	Repair Kit: 1" M802 B.V.	1
3	509-0331	Repair Kit: 1½" M802 B.V.	1
4	6129-2	Nitrogen Regulator	1
5	6156-15	High Pressure Gage	1
6	6156-12	Low Pressure Gage	1
7	110-3736-1	Gasket	1

Proven under pressure around the world

ROCKWOOD

SYSTEMS

CORPORATION

**SELF CONTAINED
AFFF (AQUEOUS FILM FORMING FOAM)
SYSTEM**

ROCKWOOD INSTRUCTION MANUAL

LOG NO. RIM:-1431

MAY, 1982

FIRE PROTECTION AND VALVE PRODUCT DIVISION

80 Second Street, South Portland. Maine 04106 Telephone (207) 799-3341 /TWX 710-221-1668

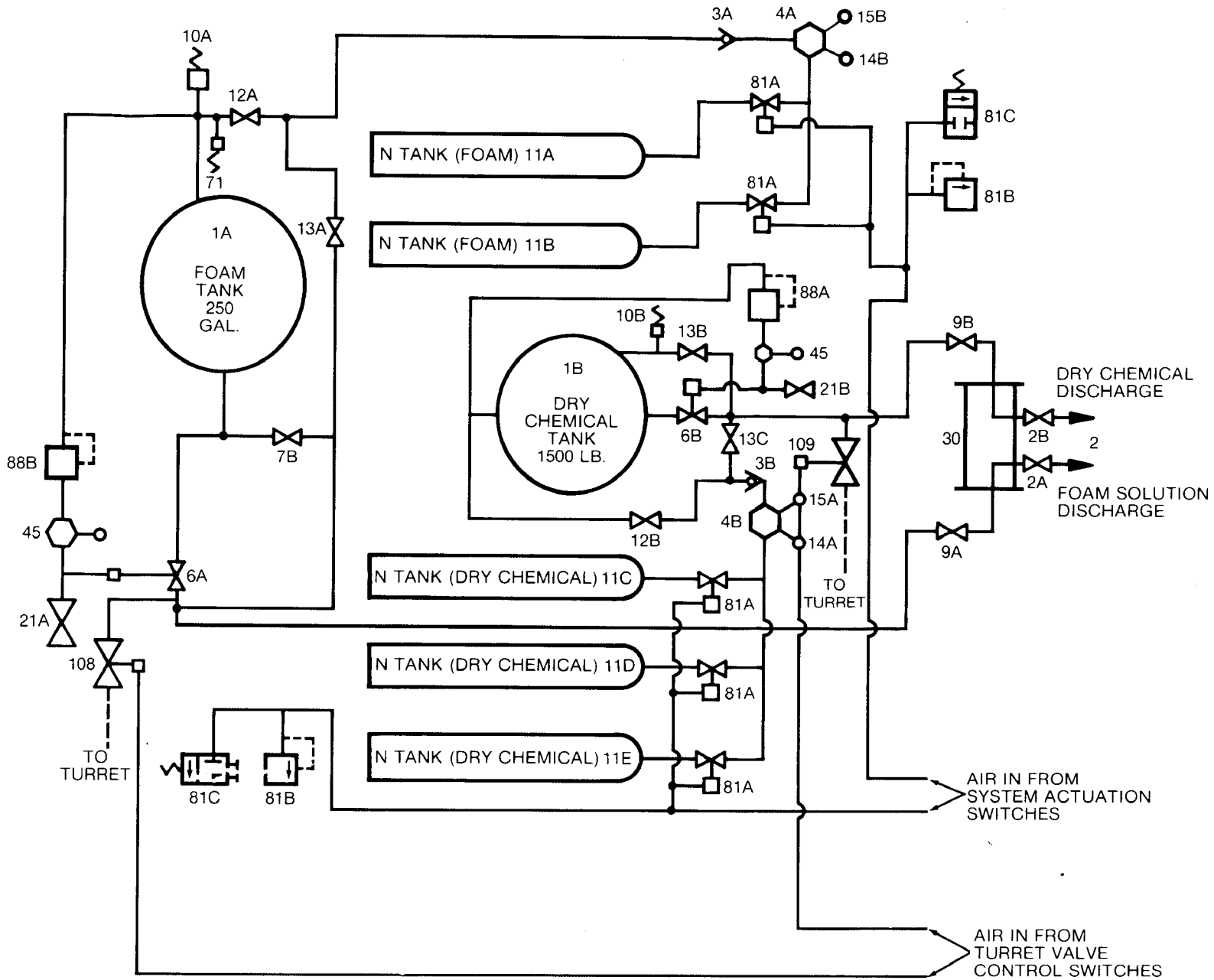
1359

7.0 SPARE PARTS

The following items are the recommended list of spare parts:

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	509-0327	Repair Kit: ½" M802 B.V.	1
2	509-0329	Repair Kit: 1" M802 B.V.	1
3	509-0332	Repair Kit: 2" M802 B.V.	1
4	6129-2	Nitrogen Regulator	1
5	6156-15	High Pressure Gage,	1
6	6156-12	Low Pressure Gage	1

ITEM	QTY	PART NO.	PART NAME
1A	1	510-1941-3	250 Gal. AFFF FOAM TANK
1B	1	510-1919-4	1500 Lb. DRY CHEMICAL TANK
2	1	510-1678-4	DUAL AGENT HANDLINE
3A, B	2	5457-8	1" CHECK VALVE
4A, B	2	6129-2	NITROGEN REGULATOR
5			
6A, B	2	509-0663-4	1½" BALL VALVE w/AIR ACTUATOR
7B	1	M802-662080	1" BALL VALVE
8	1	KFT-133	FILL CUP ASSEMBLY (SPOUT & TUBE)
9A, B	2	M802-662080	1" BALL VALVE
10A, B	2	508-0116-10	PRESSURE RELIEF VALVE
11A-E	5	510-1869-3	NITROGEN CYLINDER
12A, B	2	M802-662080	1" BALL VALVE
13A-C	3	M802-662040	½" BALL VALVE
14A, B	2	6156-15	PRESSURE GAUGE
15A, B	2	6156-12	PRESSURE GAUGE
21A, B	2	105-542020	¼" BALL VALVE
30	1	6185-1	HOSE REEL
45	2	6366-1	REGULATOR w/PRESSURE GAUGE
50	1	510-1772-3C	TWIN AGENT HOSE ASSY
71	1	6452-1	TEMPERATURE RELIEF VALVE
79A, B	2	6187-1	CAB ACTUATOR
80			PART OF ITEM 11
81			PART OF ITEM 11
88A, B	2	508-0116-5	PRESSURE RELIEF VALVE
108	1	509-0663-4	1¼" BALL VALVE w/AIR ACTUATOR
109	1	509-0663-4	1¼" BALL VALVE w/AIR ACTUATOR



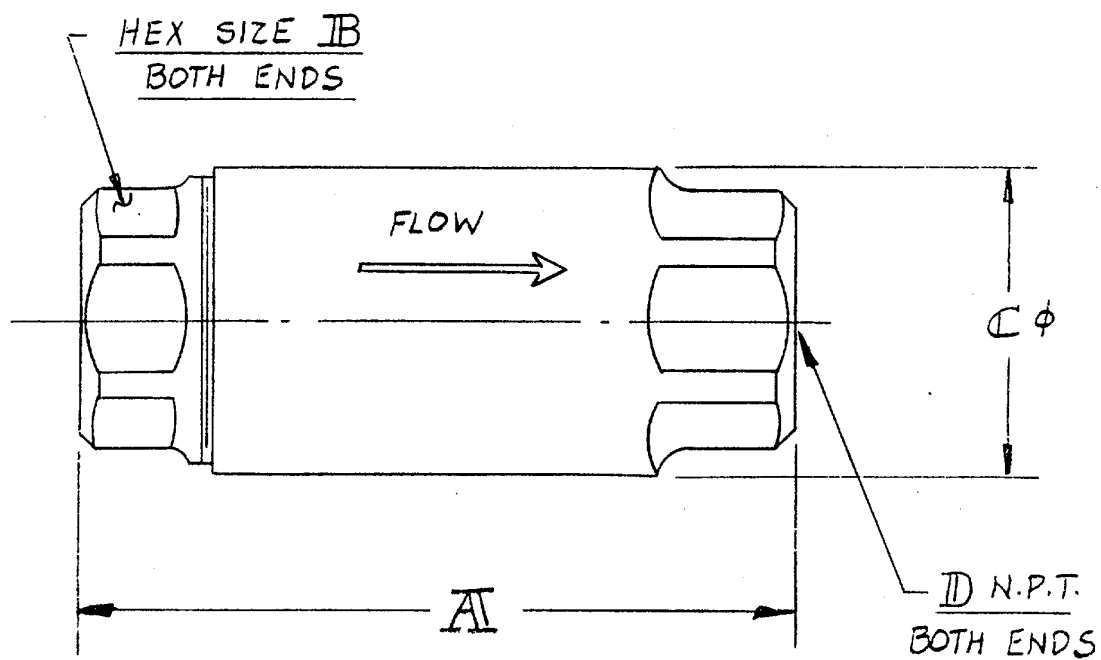
SECTION II
DATA SHEETS FOR COMPONENTS SUPPLIED

ROCKWOOD FIRE PROTECTION SYSTEMS

ENGINEERING DATA SHEET

JET-X + WaterFOG + FogFOAM + FOAM

BALL TYPE CHECK VALVE
PRESSURE RATING 200 P.S.I. @ 200° F.



PART NO.	SIZE	AI	IB	Cφ	ID
5457-6	3/4"	2 7/8	1 3/8	1 1/2	3/4-14
5457-8	1"	3 1/2	1 3/4	1 15/16	1"-11 1/2
5457-10	1 1/4	4 3/16	2 1/8	2 3/8	1 1/4-11 1/2
5457-12	1 1/2	4 15/16	2 1/2	2 13/16	1 1/2-11 1/2
5457-16	2"	6	3	3 11/16	2"-11 1/2
5457-24	3"	8 1/8	4 1/8	5 5/16	3"-8

MATERIAL - BRONZEMAY BE USED IN HORIZONTAL OR VERTICAL POSITION

ROCKWOOD FIRE PROTECTION SYSTEMS

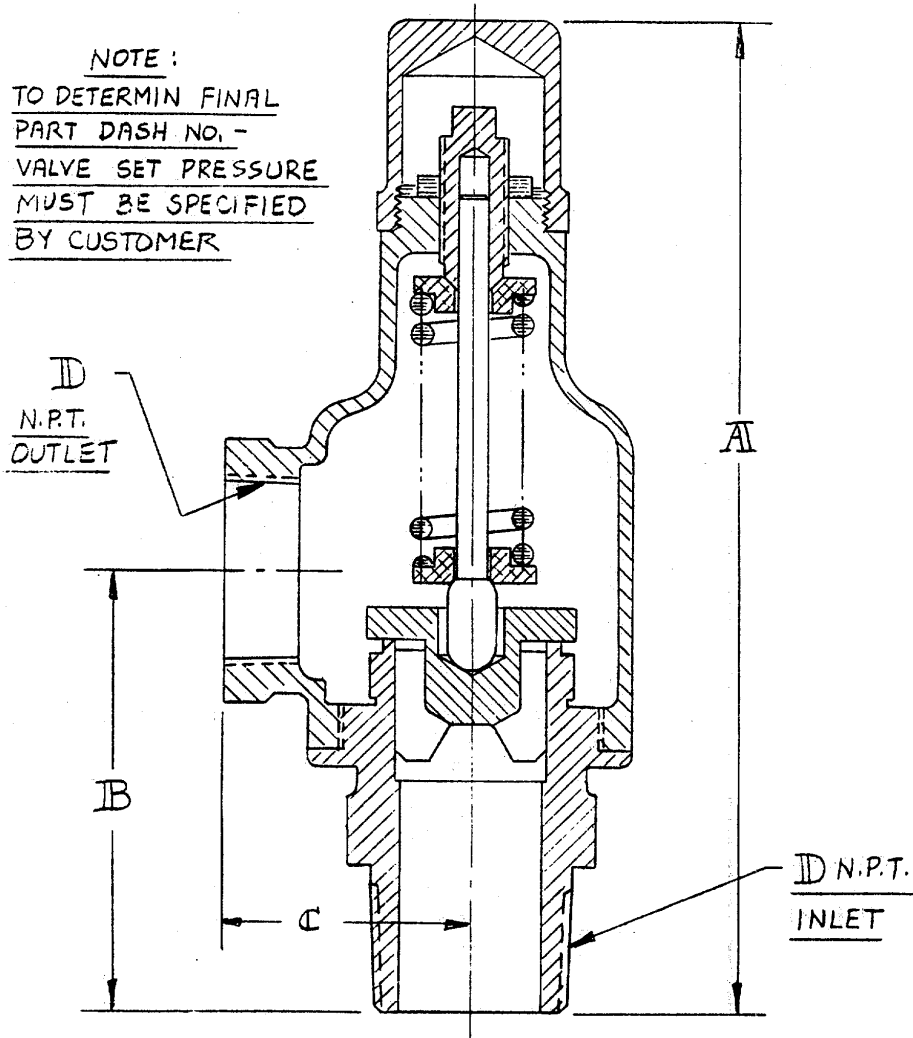
ENGINEERING DATA SHEET

JET - X + WaterFOG + FogFOAM

LIQUID PRESSURE RELIEF VALVE

MATERIAL - BRASS & BRONZE

NOTE :
TO DETERMIN FINAL
PART DASH NO. -
VALVE SET PRESSURE
MUST BE SPECIFIED
BY CUSTOMER



PART NO.	SIZE (SEAT Ø)	A	B	C	D
50B-0024-X	1/2	5 27/32	2 3/8	1 1/4	1/2"-14
50B-0009-X	3/4	5 31/32	2 1/2	1 1/4	3/4"-14
50B-0011-X	1"	6 1/32	2 31/32	1 5/8	1"-11 1/2
50B-0037-X	1 1/4	8 1/8	3 7/16	2 5/32	1 1/4"-11 1/2
50B-0013-X	1 1/2	9 7/16	3 9/16	2 7/16	1 1/2"-11 1/2
50B-0015-X	2"	9 3/4	3 3/4	2 5/8	2"-11 1/2

ROCKWOOD SYSTEMS CORP.

Ball Valves

by

Rockwood

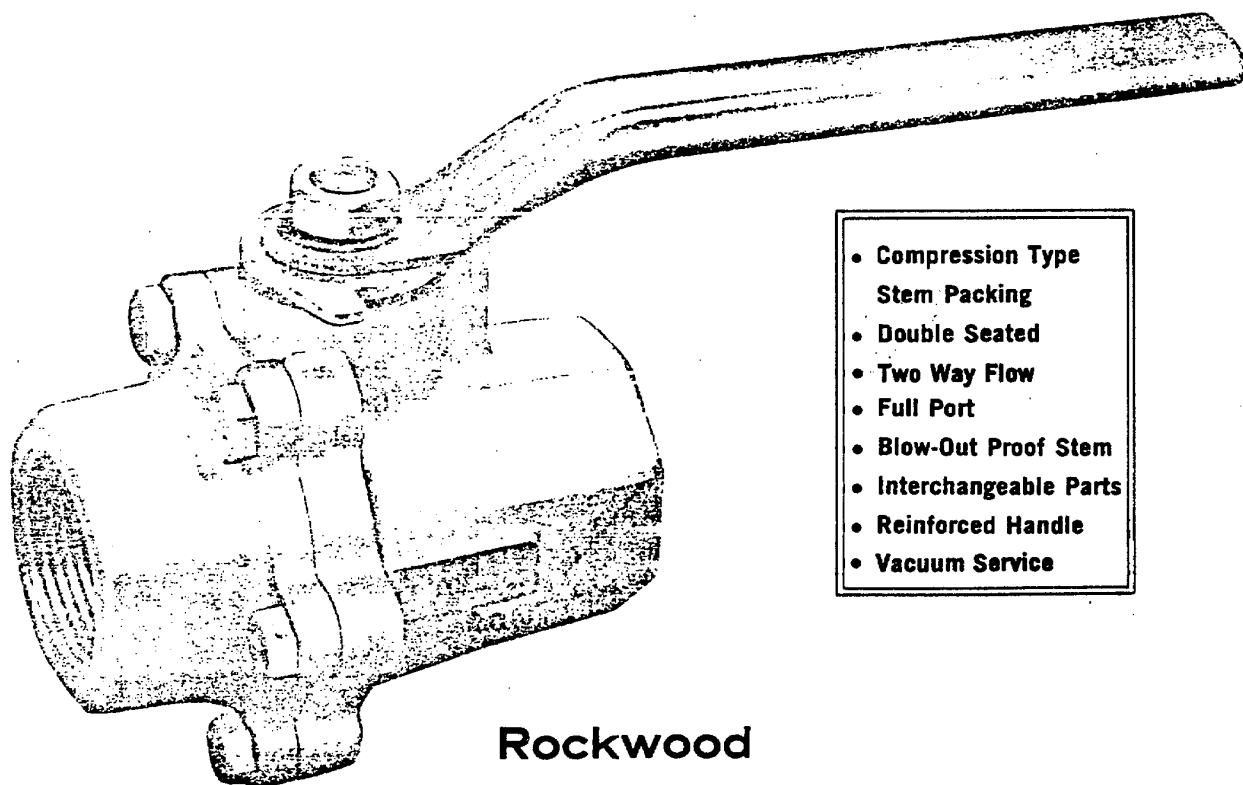
Full Port-Forged Brass

M 101 Buna "N"

M 302 Steam

M 802 Teflon

Sizes $\frac{3}{8}$ " to 2"



- Compression Type Stem Packing
- Double Seated
- Two Way Flow
- Full Port
- Blow-Out Proof Stem
- Interchangeable Parts
- Reinforced Handle
- Vacuum Service

Rockwood

M Series Ball Valves

Forged Naval Brass Sizes $\frac{3}{8}$ " to 2"

Full Port Flow

Seals: Teflon — Buna "N" — Graphited Asbestos

Seats: Teflon — Buna "N"

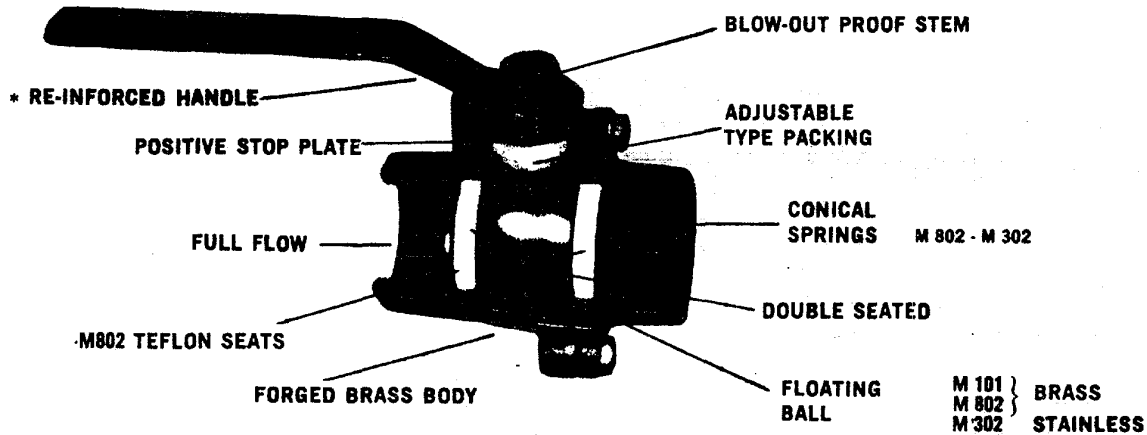
Blow-Out Proof Stem

Reinforced Handle

1365



TEST AND LISTED BY UNDERWRITER'S LABORATORIES INC.
FM TESTED AND APPROVED BY FACTORY MUTUAL RESEARCH



M-802

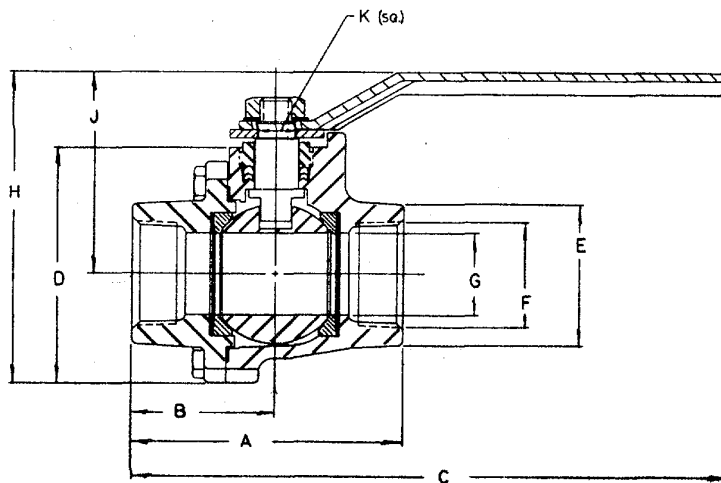
* All M-Series Valves Are Now Supplied With Heavy Malleable Handle.

In valve sizes $\frac{3}{8}$ " to 1" the appearance of the valve is slightly different. A coupling nut joins the body and cap for extra strength.

	A	B	C	D	E	F	G	H	J	K	Weight
$\frac{3}{8}$	2 $\frac{1}{2}$	1 $\frac{5}{8}$	6 $\frac{1}{2}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	$\frac{3}{8}$ -18	$\frac{1}{2}$	3 $\frac{3}{4}$	2 $\frac{3}{4}$	$\frac{3}{8}$	1.2
$\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{5}{8}$	6 $\frac{1}{2}$	1 $\frac{3}{4}$	1 $\frac{3}{4}$	$\frac{1}{2}$ -14	$\frac{1}{2}$	3 $\frac{3}{4}$	2 $\frac{3}{4}$	$\frac{3}{8}$	1.2
$\frac{3}{4}$	3 $\frac{1}{2}$	1 $\frac{3}{4}$	6 $\frac{1}{2}$	2 $\frac{1}{4}$	1 $\frac{7}{8}$	$\frac{3}{4}$ -14	$\frac{3}{4}$	3 $\frac{7}{8}$	2 $\frac{7}{8}$	$\frac{1}{2}$	2.0
1	3 $\frac{1}{2}$	1 $\frac{3}{4}$	6 $\frac{1}{2}$	2 $\frac{5}{8}$	1 $\frac{7}{8}$	1 -11 $\frac{1}{2}$	$\frac{1}{2}$	4 $\frac{3}{4}$	2 $\frac{3}{4}$	$\frac{1}{2}$	3.1
1 $\frac{1}{4}$	4 $\frac{1}{8}$	2 $\frac{1}{8}$	9 $\frac{1}{8}$	3 $\frac{3}{4}$	2 $\frac{1}{8}$	1 $\frac{1}{4}$ -11 $\frac{1}{2}$	1 $\frac{1}{4}$	4 $\frac{3}{4}$	3 $\frac{3}{4}$	.525	4.9
1 $\frac{1}{2}$	4 $\frac{1}{8}$	2 $\frac{3}{4}$	9 $\frac{1}{2}$	4 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{1}{2}$ -11 $\frac{1}{2}$	1 $\frac{1}{2}$	5 $\frac{3}{4}$	3 $\frac{3}{4}$	.525	5.9
2	5 $\frac{3}{8}$	2 $\frac{5}{8}$	9 $\frac{3}{4}$	4 $\frac{1}{2}$	2 $\frac{1}{8}$	2 -11 $\frac{1}{2}$	1 $\frac{7}{8}$	5 $\frac{3}{4}$	3 $\frac{1}{2}$	.525	9.1

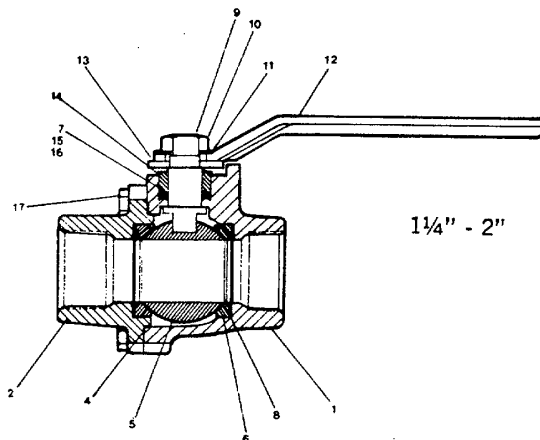
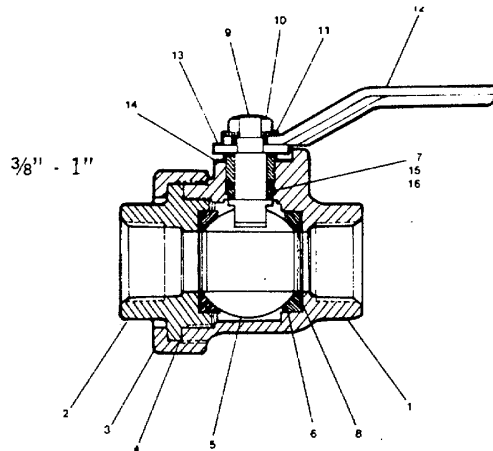
Ordering Information

When ordering these valves, only the M number designation should be given along with the quantity and size.



ROCKWOOD ENGINEERING DATA SHEET 12.8.2

M - SERIES PARTS LIST



REF. No.	PART NAME	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
1	Body	109-0019	109-0021	109-0023	109-0025	109-0027	109-0029	109-0031
2	Body Cap	109-0033	109-0035	109-0037	109-0039	109-0041	109-0043	109-0045
3	Coupling Nut	20-00053	20-00053	20-00078	20-00103	—	—	—
4	Gasket	20-01596	20-01596	109-0353	109-0097	20-01820	20-01777	20-01891
5	Ball	M-101 21-00054 M-802 20-01742 M-302	21-00054 20-01742	21-0079 20-01743	21-00104 20-01744	21-00129 20-01745	21-00154 20-01746	21-00204 20-01747
6	Seat	M-101 20-05628 M-302 20-02739 M-802	20-05628 20-02739	20-05643 20-02758	20-05648 20-08903	20-05653 20-02767	20-05658 20-02456	20-05147 20-02461
7	Packing	M-101 4326-1 M-802 20-08916 M-302	4326-1 20-08916	4326-2 20-08917	4326-3 21-00905	4326-4 20-08935	4326-4 20-08935	4326-4 20-08935
8	Spring	M-802 20-02738 M-302 — M-101	20-02738 —	20-02778 —	20-09065 —	20-02769 —	20-02483 —	20-02485 —
9	Stem	109-0559	109-0559	109-0564	109-0565	109-0566	109-0568	109-0569
10	Nut	MS-35691-2	MS-35691-2	MS-35691-10	MS-35691-18	MS-35691-34	MS-35691-34	MS-35691-34
11	Lockwasher	MS-35333-40	MS-35333-40	MS-35333-41	MS-35333-42	MS-35333-44	MS-35333-44	MS-35333-44
12	Handle	109-0560	109-0560	109-0561	109-0562	109-0563	109-0563	109-0563
13	Stop Plate	109-0315	109-0315	109-0316	109-0317	109-0318	109-0318	109-0318
14	Packing Nut	109-0076	109-0076	109-0077	109-0078	109-0079	109-0079	109-0079
15	Upper Adapter	M-302 109-0067 M-802 — M-101	109-0067 —	109-0068 —	109-0069 —	109-0070 —	109-0070 —	109-0070 —
16	Lower Adapter	M-302 109-0071 M-802 109-0075 M-101	109-0071 109-0075	109-0072 —	109-0073 —	109-0074 —	109-0074 —	109-0070 —
17	Cap Screw	—	—	—	—	MS-90725-33	MS-90725-33	MS-90725-60

ROCKWOOD SYSTEMS CORP.
80 SECOND STREET
SOUTH PORTLAND, MAINE 04106

ROCKWOOD BALL VALVES

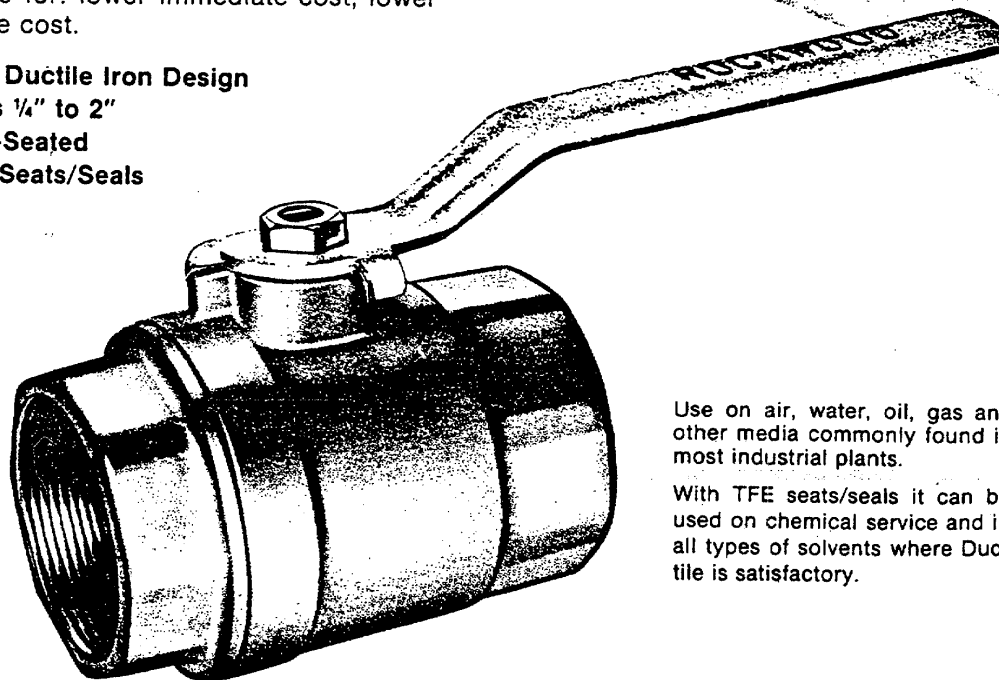
105DT

12-8-3

DUCTILE IRON

A metal for now. A metal for the future. It combines high strength and corrosion resistance for: lower immediate cost; lower ultimate cost.

- Cast Ductile Iron Design
- Sizes 1/4" to 2"
- Two-Seated
- TFE Seats/Seals



Use on air, water, oil, gas and other media commonly found in most industrial plants.

With TFE seats/seals it can be used on chemical service and in all types of solvents where Ductile is satisfactory.

Sizes: 1/4" to 2"
Type: ,Cast, End Entry
Body: Ductile Iron
Seals: TFE, Buna, Graphited Asbestos
Ends: Threaded, NPTF

SPECIFICATIONCS

Figure 105DT

Temperature: -65°F to +400° F

Pressure: 600 W.O.G.

Figure 105DS 150 PSI Steam

In applications where extreme temperatures and pressures are both present, the factory should be consulted for the correct valve selection.

MATERIALS

Body: Cast Ductile iron, ASTM-A395, Class60-45-15

Ball: Chrome Plated Steel, ASTM-A29, GR 1214 or 1215

Seats: TFE, Buna

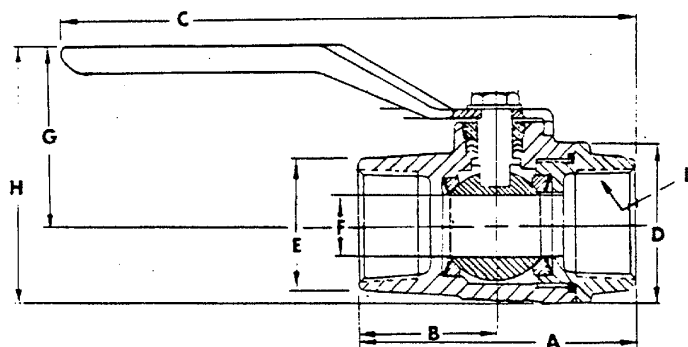
Seat Springs: 316 Stainless Steel (Equiv. to ASTM-A 177)

Stem: Cadmium Plated Steel ASTM-A29, GR. 1213

Stem Seals: TFE, Graphited Asbestos

Handle: Steel

Fastenings: Cadmium Plated Steel



Size	A	B	C	D (φ)	E*	F (φ)	G	H	L (NPS)	Wt. (lb)
¼	2.88	1.41	6.50	1.50	.94	.36	2.06	2.88	¼-18	1.4
⅜	2.88	1.41	6.50	1.50	1.13	.50	2.06	2.88	⅜-18	1.2
½	2.88	1.41	6.50	1.50	1.13	.50	2.06	2.88	½-14	1
¾	2.91	1.45	6.50	1.56	1.19	.56	2.06	2.88	¾-14	1
1	3.14	1.56	6.63	1.88	1.50	.75	2.19	3.13	1 -11½	1.5
1¼	3.97	1.98	7.00	2.25	1.88	.94	2.38	3.50	1¼-11½	2.9
1½	4.22	2.09	9.13	2.88	2.38	1.25	2.88	4.38	1½-11½	4.5
2	4.63	2.31	9.38	3.19	2.75	1.50	3.00	5.63	2 -11½	5.8

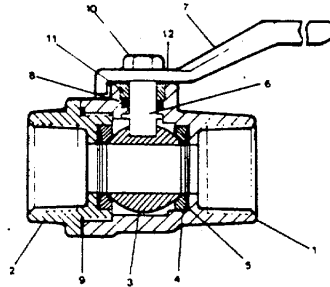
Size	A	B	C	D (φ)	E*	F (φ)	G	H	L (NPS)	Wt. (kg)
6	73	36	165	38	24	9	52	73	¼-18	.6
10	73	36	165	38	29	13	52	73	⅜-18	.6
15	73	36	165	38	29	13	52	73	½-14	.5
20	74	37	165	40	30	14	52	73	¾-14	.5
25	80	40	168	48	38	19	56	80	1 -11½	.7
32	101	50	178	57	40	24	60	89	1¼-11½	1.3
40	107	53	232	73	60	32	73	111	1½-11½	2.0
50	118	59	238	81	70	38	76	143	2 -11½	2.6

*Across Flats

Dimensions are nominal. For tolerance, consult factory.

ROCKWOOD ENGINEERING DATA SHEET 12.8.3

**FIGURE
105DT
PARTS
LIST**



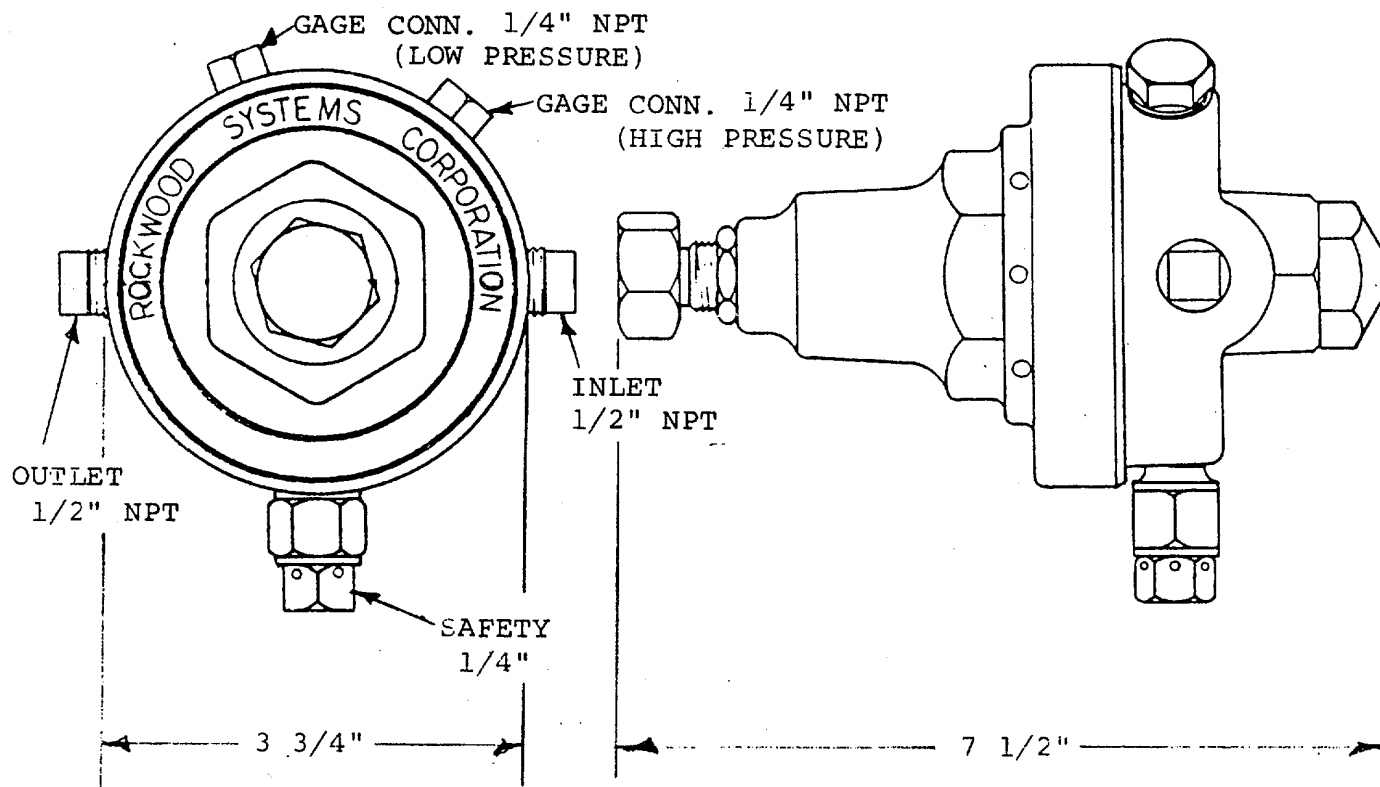
SIZES 3/8" TO 2"

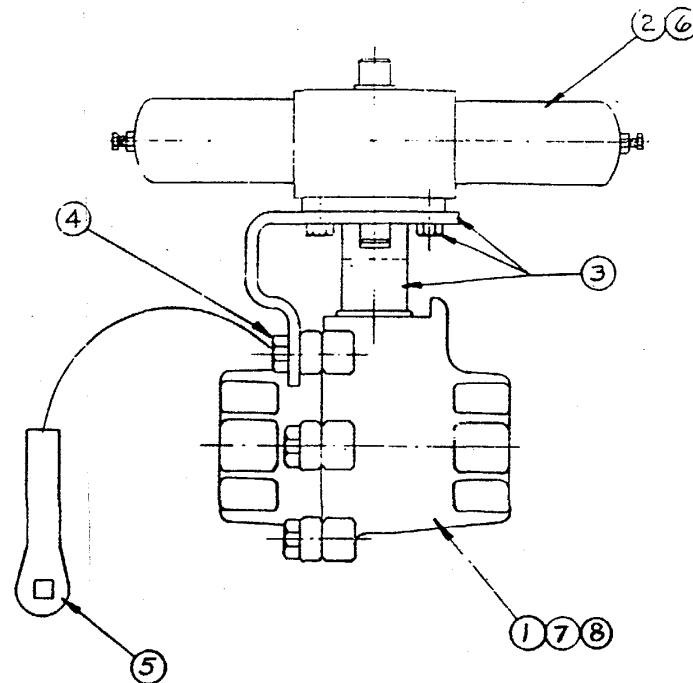
REF. No	PART NAME	QTY.	PART NUMBER							
			1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
1	BODY	1	J-2596	J-2598	J-2600	J-2602	J-2604	J-2606	J-2608	J-2610
2	CAP	1	J-2597	J-2599	J-2601	J-2603	J-2605	J-2607	J-2609	J-2611
3	BALL	1	J-1010	J-1010	J-1010	J-1011	J-1012	J-1013	J-1014	J-1015
4	SEAT	2	20-02739	20-02739	20-02739	20-08892	20-02758	20-08903	20-02767	20-02456
5	SPRING	2	20-02738	20-02738	20-02733	20-08901	20-02778	20-09065	20-02769	20-02483
6	STEM	1	J-1001	J-1001	J-1001	J-1001	J-1002	J-1003	J-1004	J-1005
7	HANDLE	1	20-09858	20-09858	20-09858	20-09858	20-09857	21-00901	20-09856	20-09856
8	STEM SEAL	2	4326-1	4326-1	4326-1	4326-1	4326-2	4326-3	4326-4	4326-4
9	JOINT SEAL	1	20-08718	20-08718	20-08718	20-08896	20-08738	20-08905	20-08782	20-08693
10	NUT	1	0151036	0151036	0151036	0151036 *	0151056	0151056	0151140	0151140
11	NUT, PACKING	1	J-1006	J-1006	J-1006	J-1006	J-1007	J-1008	J-1009	J-1009
12	WASHER	1	015117	0157117	0157117	0157117	0157121	0157121	0157125	0157125
13	TH. WASHER		Discontinued 20-01536	Discontinued 10-01536	Discontinued 20-01536	Discontinued 20-01536	-----*	-----*	-----*	-----*

*Note: Where dashes are shown, parts are not included with this valve.

ROCKWOOD SYSTEMS CORP.
80 SECOND STREET
SOUTH PORTLAND, MAINE 04106

JET-X + WaterFOG + FogFOAM + FOAM

HIGH CAPACITY FIRE CONTROL
NITROGEN REGULATORPART NO. 6129-2SAFETY SET PRESSURE: 400 PSI
MATERIAL: BRASS



NOTE :
 THE FOLLOWING PART NOS.
 MAY BE USED WITH AIR, HYDRAULIC
 FLUID OR WATER TO POWER
 THE VALVE ACTUATORS

- 509-0663-1
- 509-0663-2
- 509-0663-3
- 509-0663-4

ASSEMBLY PROCEDURE

1. ORIENT ACTUATOR SHAFT TO CLOSED POSITION.
2. VERIFY THAT BALL VALVE IS CLOSED.
3. ASSEMBLE ACTUATOR, BRACKET, COUPLING, & VALVE IN ANY CONVENIENT SEQUENCE.
4. ADJUST STOPS ON ACTUATOR FOR CORRECT TRAVEL TO GIVE FULL OPEN & TOTAL CLOSE OF VALVE.

REVISIONS			509-0663	REV
ED No	SYM	DESCRIPTION	SHEET	APP'D
34	A	REDRAWN FROM 509-0663 REV. 1/10	1	
4102		1/2" DRE DWG. - NOTE ADDED		
		ITEM #4 WAS - QUANTITY 4		
		ADDED PART NOS. 509-0663-2 & 3		
FF043	E	152-05016 WAS 152-05021		
	C	ADDED 4 ASSY FF11682		

1	-	-	-	8	M802-6321-0	1 1/2" M802 BALL VALVE		
-	1	-	-	7	M302-6331-0	1 1/2" M302 BALL VALVE		
1	1	1	-	6	6026-2	AIR ACTUATOR		
1	1	1	1	5	509-0604-2	HANDLE ASSY.		
2	2	2	2	4	152-05035	CAP SCREW - 5/16-18 X 1 1/4" LG.		
1	1	1	1	3	6083-1	ACTUATOR MOUNTING KIT		
-	-	-	1	2	6084-2	AIR ACTUATOR W/SOLENOID - 12 V.D.C. - NEMA 3		
-	-	1	1	1	M101-661120	1 1/2" M101 BALL VALVE		
-	2	-	2	-	152-05016	CAP SCREW 5/16-18 X 7/8 LG.		
-	1	-	1	-	109-0318	STOP PLATE		
-	1	-	1	-	109-0563	HANDLE		
-	1	-	1	-	161-12013	HANDLE LOCKWASHER		
-	1	-	1	-	161-08014	HANDLE NUT		
-	4	-	3	-	1			

QUANTITY REQ'D.		ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATIONS OR REFERENCES
LIST OF MATERIAL OR PARTS LIST						
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			DRAWN R. HUFF			
FRACTIONS DECIMALS ANGLES			DATE 10-27-81			
± ± ±			CHK			
ALL SURFACES Y			DATE			
MATERIAL			APPROVED			
			DESIGN			
			ENGR			
			MFR			
THIS DRAWING, INCLUDING ALL INFORMATION CONTAINED THEREON IS THE EXCLUSIVE PROPRIETARY PROPERTY OF ROCKWOOD. IT IS DISCLOSED WITH THE UNDERSTANDING IT WILL BE RETURNED BY CONSIGNEE AND WILL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THAT FOR WHICH DISCLOSED. THIS DRAWING IS TO BE RETURNED OR SHOWN TO ROCKWOOD.			SCALE NONE		WGT. ACTUAL	
			CODE		SHE	

ROCKWOOD Systems Corporation 80 Second Street South Portland, Maine 04106		NEXT ASSY OR USED TO MAKE	
1 1/2" M SERIES BALL VALVE W/AIR ACTUATOR		E.O. #	
C 509-0663		REV C	

SECTION III

DISCHARGE DEVICES



Proven under pressure around the world

ROCKWOOD

**SYSTEMS
CORPORATION**

TWIN AGENT HANDLINE

ROCKWOOD INSTRUCTION MANUAL
RIM 1434

P/N 510-1678

JUNE, 1982

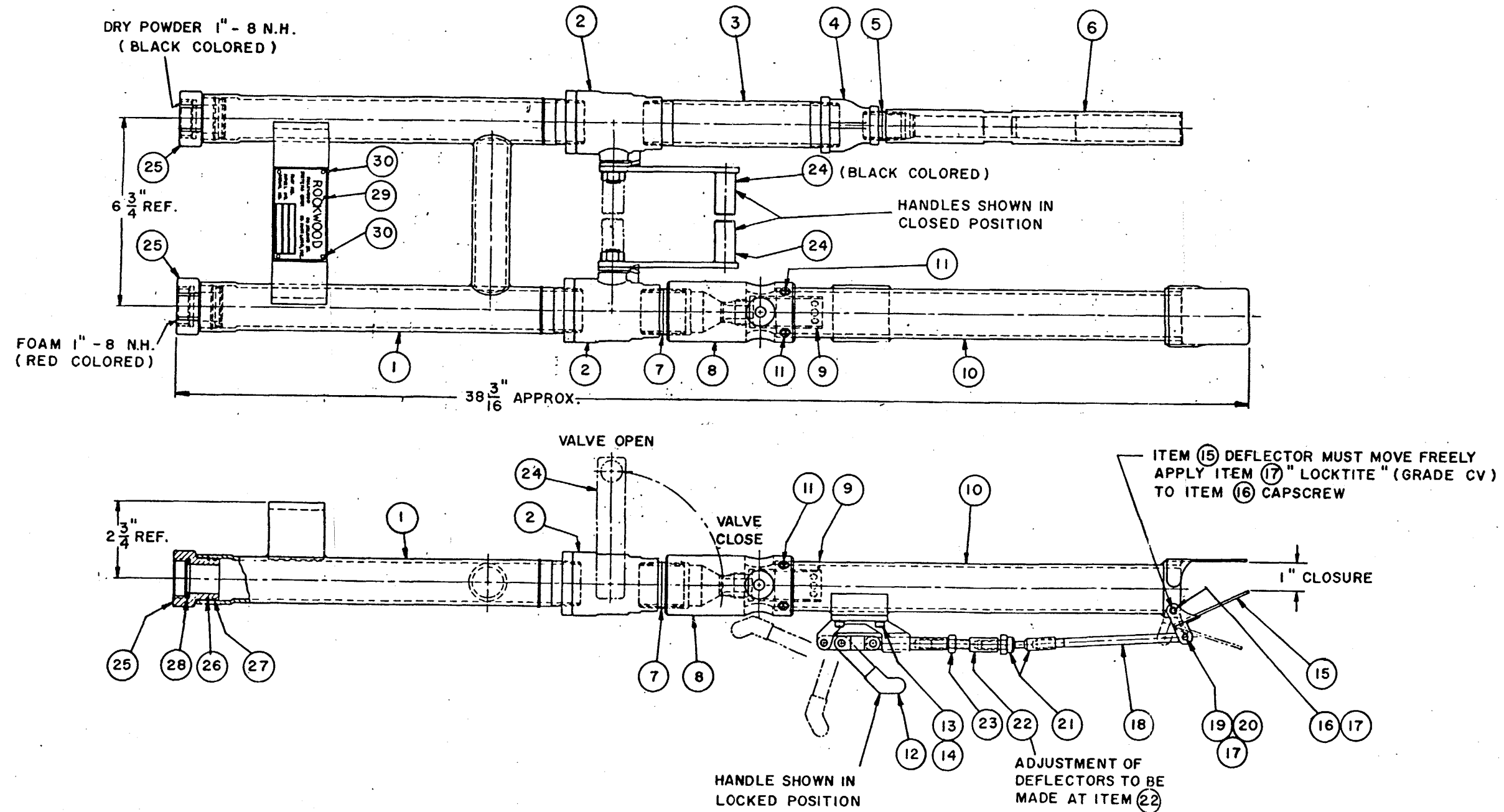
FIRE PROTECTION AND VALVE PRODUCT DIVISION

80 Second Street. South Portland, Maine 04106 Telephone (207) 799-3341/ TWX 710-221-1668

6.0 SPARE PARTS

The following list of items are the recommended list of spare parts.

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
6110-6	1½" Ball Valve	1
6118-1	Toggle Clamp	1
6119-4	Swivel	1
110-3702-1	Adjustment Adapter	1
10-06665	Hose End Gasket	2



Rockwood Systems Corporation

80 Second Street
South Portland, Maine 04106

RIM-1434

TITLE: DUAL AGENT HANDLINE - FOAM/DRY POWDER PART NO. 510-1678			FIG. I
ITEM	QTY	PART NO.	PART NAME
1	1	510-1749-1	HANDLE
2	2	6110-6	1½" BALL VALVE
3	1	4803-156H	1½" NIPPLE
4	1	4426-12	1½" x 3/4" REDUCING COUPLING
5	1	4803-97H	3/4" CLOSE NIPPLE
6	1	110-0942-3	DRY POWDER NOZZLE
7	1	4803-145	1½" CLOSE NIPPLE
8	1	110-3691-1	BREECH
9	1	10-08441-2	FOAM TIP
10	1	510-1763-1	SHAPER WELD ASSY
11	4	251-10003	MACHINE SCREW
12	1	6118-1	TOGGLE CLAMP
13	4	152-10006	CAPSCREW
14	4	167-12007	LOCKWASHER
15	1	110-3704-2	DEFLECTOR, ACTIVE
16	2	152-08101	CAPSCREW
17	A/R	4259-7	LOCKTITE
18	1	110-3703-1	ROD
19	1	152-54001	CAPSCREW
20	1	162-04001	MACHINE NUT
21	1	6119-4	SWIVEL, STRAIGHT
22	1	110-3702-1	ADAPTER, ADJUSTMENT
23	1	161-05007	HEX NUT
24	2	510-1762-1	VALVE HANDLE
25	2	110-3687-1	SWIVEL COUPLING
26	2	284-15000	RETAINING RING
27	2	780-01125	"o" RING
28	2	10-06665	GASKET
29	1	10-04421	NAMEPLATE
30	4	254-02002	DRIVE SCREW
DATE	REV	PREPARED BY	APPROVED BY 1377
			PAGE 2 OF 2

Rockwood Systems Corporation

80 Second Street
South Portland, Maine 04106

RIM-1434

TITLE: DUAL AGENT HANDLINE - FOAM/DRY POWDER PART NO. 510-1678			FIG. 1A
ITEM	QTY	PART NO.	PART NAME
1	1	510-1749-1	HANDLE
2	2	6110-6	1½" BALL VALVE
3	1	4803-156H	1½" NIPPLE
4	1	4426-12	1½" x 3/4" REDUCING COUPLING
5	1	4803-97H	3/4" CLOSE NIPPLE
6	1	110-0942-3	DRY POWDER NOZZLE
7	1	4803-145	1½" CLOSE NIPPLE
8	1	110-3691-1	BREECH
9	1	10-08441-2	FOAM TIP
10	1	510-1763-1	SHAPER WELD ASSY
11	4	251-10003	MACHINE SCREW
12	1	6118-1	TOGGLE CLAMP
13	4	152-10006	CAPSCREW
14	4	167-12007	LOCKWASHER
15	1	110-3704-2	DEFLECTOR, ACTIVE
16	2	152-08101	CAPSCREW
17	A/R	4259-7	LOCKTITE
18	1	110-3703-1	ROD
19	1	152-54001	CAPSCREW
20	1	162-04001	MACHINE NUT
21	1	6119-4	SWIVEL, STRAIGHT
22	1	110-3702-1	ADAPTER, ADJUSTMENT
23	1	161-05007	HEX NUT
24	2	510-1762-1	VALVE HANDLE
25	2	110-3687-1	SWIVEL COUPLING
26	2	284-15000	RETAINING RING
27	2	780-01125	"o" RING
28	2	10-06665	GASKET
29	1	10-04421	NAMEPLATE
30	4	254-02002	DRIVE SCREW
DATE	REV	PREPARED BY	APPROVED BY
			PAGE



Proven under pressure around the world

ROCKWOOD

**SYSTEMS
CORPORATION**

REMOTE MANUAL TWIN AGENT TURRET
FOAM/DRY POWDER

PART NO, 510-1679
LOG. No. RIM-1433

MAY, 1982

REVISED: AUG., 1982

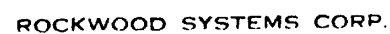
FIRE PROTECTION AND VALVE PRODUCT DIVISION

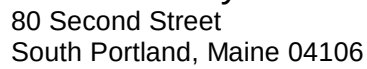
80 Second Street, South Portland, Maine 04106 Telephone (207) 799-3341 / TWX 710-221-1668

6.0 SPARE PARTS

The following list is the suggested spare parts for P/N 510-1679; Remote Manual Twin Agent Turret.

PART NUMBER	DESCRIPTION	QUANTITY
10-06917	Clamp	1
4793-80	Clamp	1
510-0353-4	Hose Assembly	1
4748-341	Quad. Ring	1
10-02975	Gasket	1
780-01228	"O" Ring	1
780-01326	"O" Ring	1
780-01224	"O" Ring	1
10-07732	Head Seal	2
780-01237	"O" Ring	2
780-01234	"O" Ring	2
10-07122	Wearing Ring	2
185-03140	Retaining Ring	4
10-02864-1	Auto Drain Valve	1
334-10001	Tube Connector	1
780-11014	U Packing	2
10-06051	Nyliner	2



[illegible]

ENGINEERING DATA SHEET

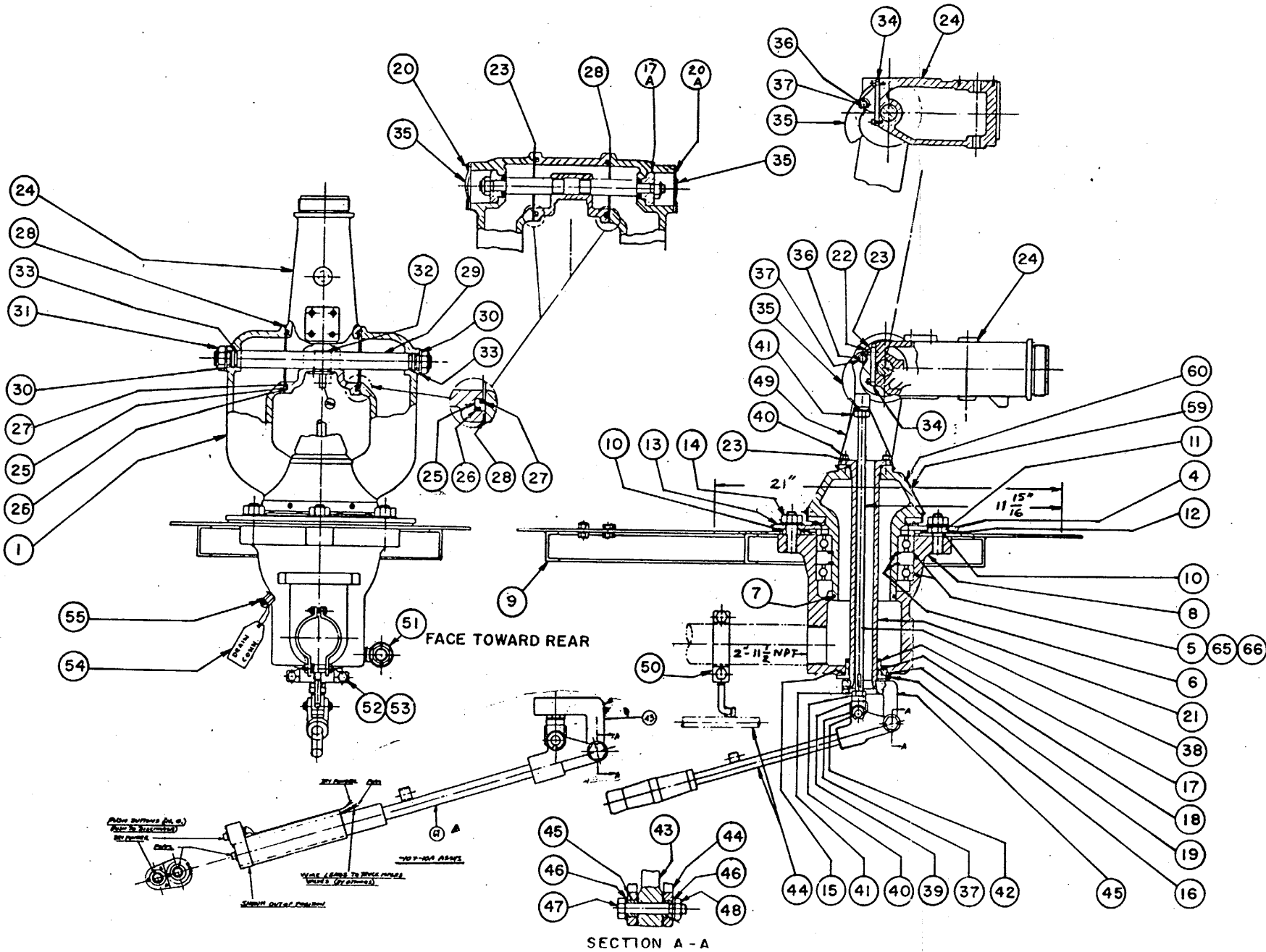
ROCKWOOD FIRE PROTECTION SYSTEMS

JET-X • WaterFOG • FogFOAM • FOAM

RIM 1433

REMOTE MANUAL TURRET

P/N 10-09170-9, -10



REV. 9-2-82

ROCKWOOD SYSTEMS CORP.

Rockwood Systems Corporation

80 Second Street
South Portland, Maine 04106

RIM-1433

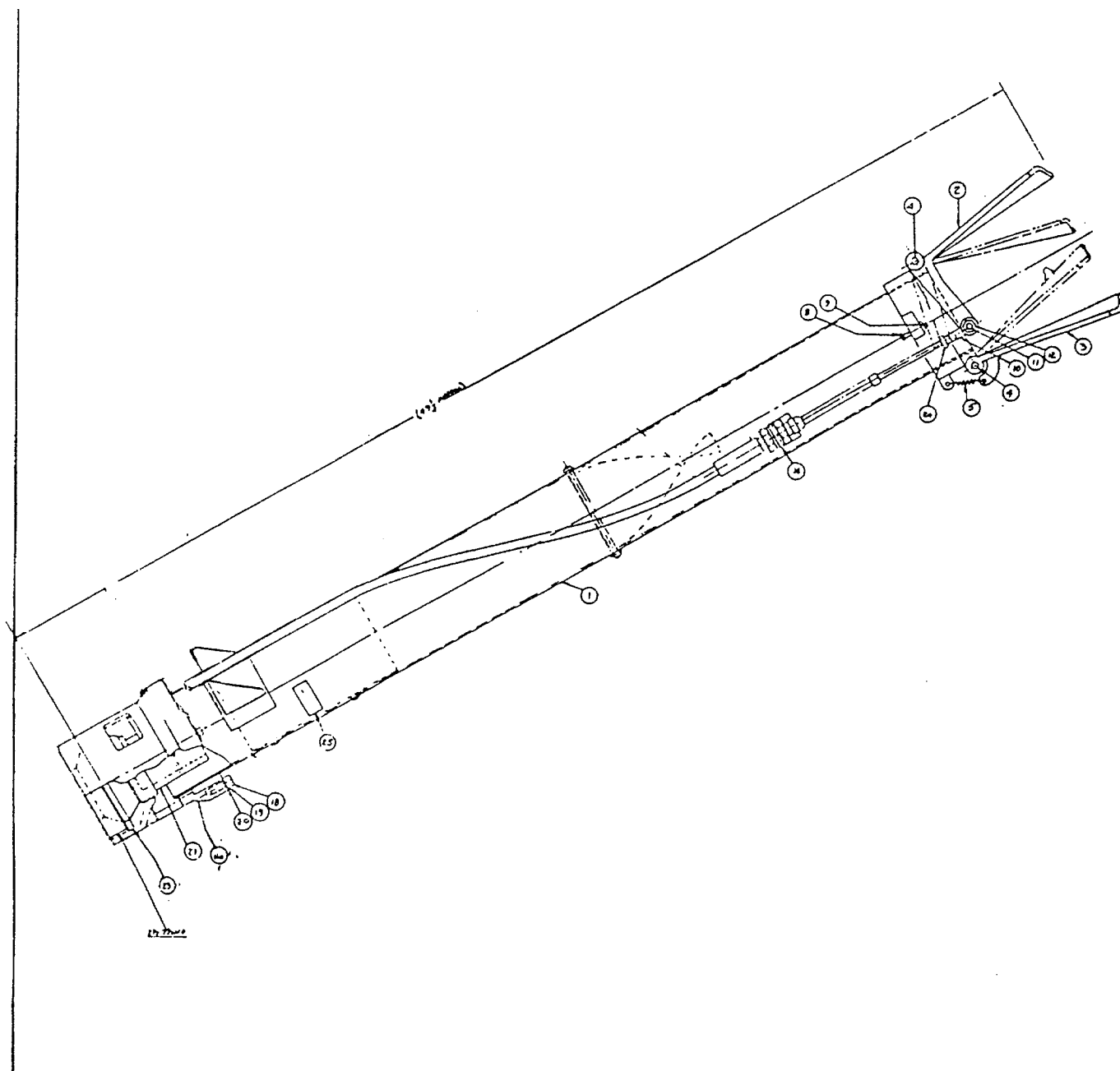
TITLE: REMOTE MANUAL TURRET PART NO. 10-09170-9				FIG. II
ITEM	QTY	PART NO.	PART NAME	
1	1	10-04526	YOKE (BODY): BRONZE	
2				
3				
4	1	10-02969	BODY RET. RING ASSY	
5	2	10-02580	BEARING: STEEL	
6	2	185-39330	RETAINING RING	
7	1	4748-341	QUARD RING	
8	1	10-04556	BASE ASSY	
9	1	10-09106-2	MOUNTING PLATE	
10A	4	11-02973	SPACER COLLAR	
10	8	167-11013	LOCKWASHER	
11	2	161-10008	HEX NUT	
12	1	10-02975	GASKET	
13	6	165-40004	WASHER	
14	6	161-10009	HEX NUT	
15	1	780-01228	"O" RING	
16	1	10-04531	DRIVE SHAFT BUSHING	
17A	2	10-07119	BODY BEARING	
17	1	780-01326	"O" RING	
18	1	10-04536	DRIVE SHAFT BEARING	
19	6	151-08008	MACHINE SCREW	
20A	2	161-10012	HEX NUT	
20	1	780-01224	"O" RING	
21	1	10-04532	DRIVE SHAFT	
22	8	152-04009	CAPSCREW	
23	8	167-12009	LOCKWASHER	
24	1	110-0129-2	HEAD	
25	2	10-07732	HEAD SEAL	
26	2	780-01237	"O" RING	
27	2	780-01234	"O" RING	
28	2	10-07122	WEARING RING	
29	1	10-07222	BODY SHAFT	
30				
31	2	161-10012	HEX NUT ESNA	
DATE	REV	PREPARED BY	APPROVED BY	PAGE 2 OF 3

Rockwood Systems Corporation
80 Second Street
South Portland, Maine 04106

RIM-1433

REMOTE MANUAL TURRET			FIG. II		
TITLE: PART NO. 10-09170-9					
ITEM	QTY	PART NO.	PART NAME		
32	2	10-06051	NYLINER		
33	2	780-11014	U PACKING		
34	1	10-07776	CLEVIS PLATE		
35A	2	10-05093	BODY CAP		
35	1	10-04529	ELEV. ROD CLEVIS		
36	1	10-04546	ELEV. ROD CLEVIS PIN		
37	4	185-03140	RETAINING RING		
38	1	10-04544	ELEVATION ROD		
39	1	10-04543	ELEVATION ROD CONN.		
40	2	167-12013	LOCKWASHER		
41	2	161-08014	HEX NUT		
42	1	10-04545	CONNECTOR PIN		
43	1	10-04555-2	CLEVIS HANGER		
44	1	10-04542	MANUAL HANDLE		
45	2	10-05105	BUSHING, ELEV. LINK		
46	2	10-05182	CLEVIS WASHER		
47	1	152-05041	CAPSCREW		
48	1	161-05005	HEX NUT		
49	1	10-07406	ELEV. ROD BOOT		
50	1	10-04547	HANDLE LATCH		
51	1	510-0370-2	AUTO. DRAIN VALVE		
52	2	152-05018	CAPSCREW		
53	2	167-12010	LOCKWASHER		
54	1		PAPER TAG		
55	1	334-10001	TUBE CONNECTOR		
56					
57					
58					
59	1	10-04421	NAMEPLATE		
60	4	154-02003	SELF TAP SCREW		
65	A/R	4438	DRY FILM LUBRICANT		
66	A/R	4474	WATER REPELLANT GREASE		
67	1	510-1875-1	MANUAL HANDLE ASSY		
DATE 9/2/82		REV A	PREPARED BY	APPROVED BY 1385	PAGE 3 OF 3

SHAPER - AFFF
PART No. 510-1591



DRAWN: GPL

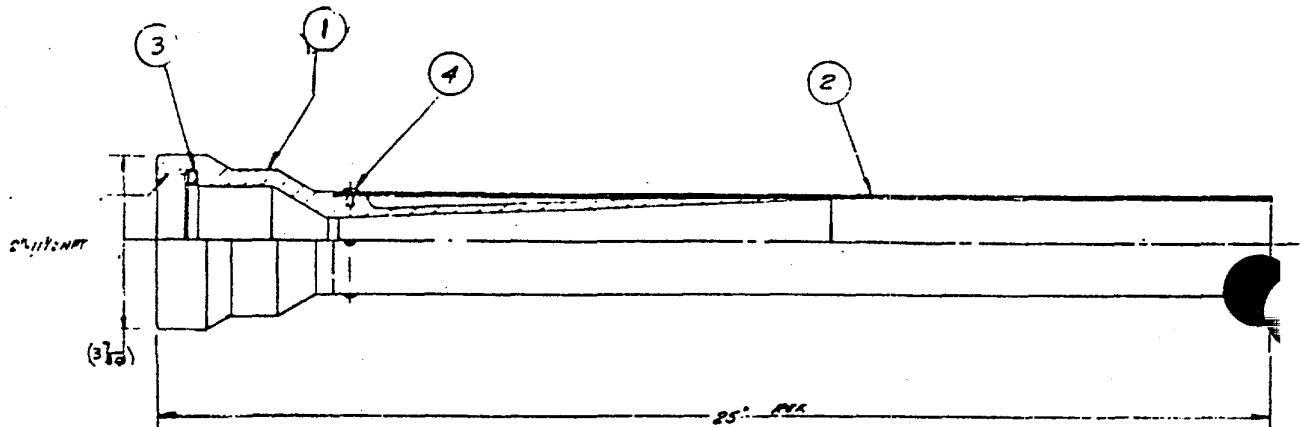
RIM- 1433

PAGE 2 of 2

ENGINEERING DATA SHEET ROCKWOOD FIRE PROTECTION SYSTEMS
JET-X + WaterFOG + FogFOAM + FOAM

DRY CHEMICAL NOZZLE

PART NO. 510-0288

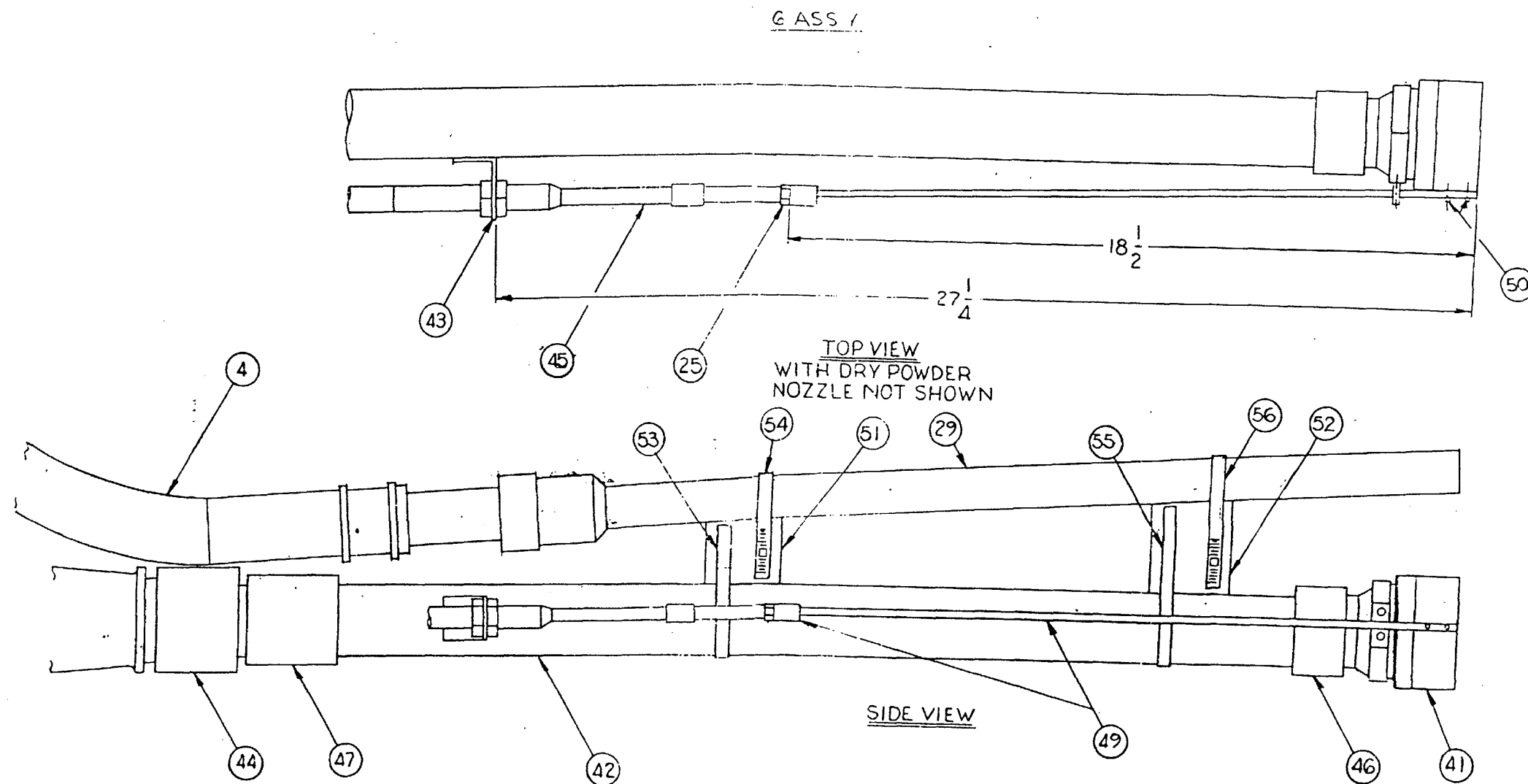


Rockwood Systems Corporation
80 Second Street
South Portland, Maine 04106

[illegible]

TURRET REMOTE MANUAL TWIN AGENT

-6 ASSY



Rockwood Systems Corporation
80 Second Street
South Portland, Maine 04106

RIM 1433

TITLE: REMOTE MANUAL TWIN AGENT TURRET PART NO. 510-1679-6 TURRET W/FOAM NOZZLE			FIG. 1A
ITEM	QTY	PART NO.	PART NAME
1			
2			
3			
4	1	510-0353-4	HOSE ASSY, DRY POWDER
5	1	110-0716	SPRING BRACKET
6	1	110-0587	C' BALANCE SPRING
7	1	10-08469	ANCHOR BRACKET
8	2	152-04004	CAPSCREW
9	2	167-12009	LOCKWASHER
10	1	4354-1	EYEBOLT
11	1	161-04012	HEX NUT
22	1	10-08466	NAMEPLATE
23	4	152-05026	CAPSCREW
24	4	167-12010	LOCKWASHER
25	1	161-04013	HEX NUT, JAM
29	1	510-0288-2	DRY CHEMICAL NOZZLE
32A	1	10-04421	GENERAL NAMEPLATE
32B	4	154-02003	SELF TAP SCREW
41	1	510-2148-1	APFF NOZZLE
42	3.33 FT.	245-10102	PIPE
43	1	110-0332-8	CABLE BRACKET
44	1	6192-6	ADAPTER
45	1	4593-7	PUSH PULL CABLE W/VERNIER CONTROL
46	1	4523-12	COUPLING
47	1	6454-1	ADAPTER
48			
49	1	510-2186-1	ACTUATOR ROD CONNECTOR
50	2	252-60002	SCREW
51	1	10-09170-11	REMOTE MANUAL TURRET
DATE	REV	PREPARED BY	APPROVED BY
			PAGE 2 OF 2

17-10



CLIFFORD B. HANNAY & SON, INC., 600 EAST MAIN STREET
WESTERLO, NEW YORK 12193 • TELEPHONE (518) 797-3791

PARTS LIST

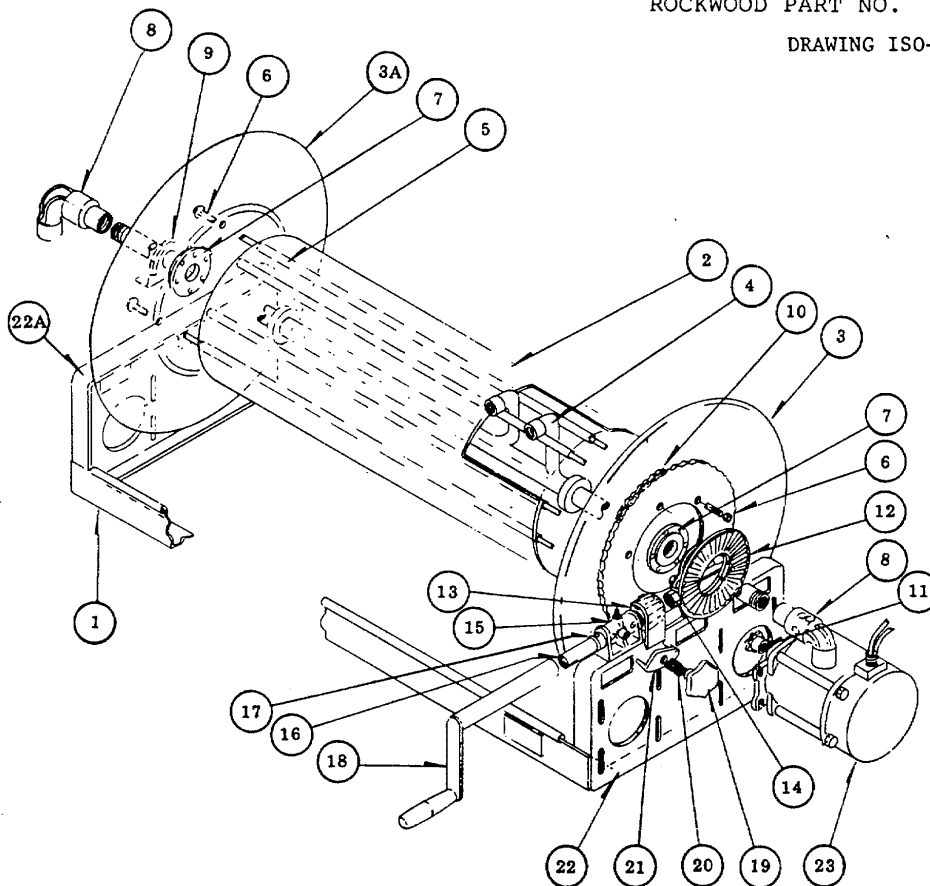
SERIES 7000

Dual Inlet & Outlet Reel

EFFECTIVE AUGUST 1, 1983

ROCKWOOD PART NO. 6185-1

DRAWING ISO-72



When ordering parts,

BE SURE TO SPECIFY COMPLETE MODEL NUMBER and SERIAL NUMBER OF REEL.

Part No.	Description	Quantity	Part No.	Description	Quantity
ISO-72- 1	Front Foot	1	ISO-72-12	Ring Gear (H-26)	1
ISO-72- 1A	Rear Foot (Not Shown)	1	ISO-72-13	Pinion Gear	1
ISO-72- 2	Drum, 10 1/2" Diameter	1	ISO-72-14	5/8"-18 SAE Hex Nut	1
ISO-72- 3	Front Disc (23-24 Series)	1	ISO-72-15	H-2A Pinion Shaft Bearing	1
ISO-72- 3A	Back Disc (23-24 Series)	1	ISO-72-16	Pinion Shaft	1
ISO-72- 3	Front Disc (30-31 Series)	1	ISO-72-17	Pinion Shaft Collar W/Set Screw	1
ISO-72- 3A	Back Disc (30-31 Series)	1	ISO-72-18	H-18 Crank Handle	1
ISO-72- 4	Dual 1" Hub Assembly W/Risers	1	ISO-72-19	H-30 Brake Wheel	1
ISO-72- 5	3/8" Spacer Pipes	6	ISO-72-20	H-31 Brake Spring	1
ISO-72- 6	3/8" Carriage Bolts	6	ISO-72-21	H-3 Brake Pad	1
ISO-72- 7	EH-936 Washer	1 Per Disc	ISO-72-22	Front Frame (23-24 Series)	1
ISO-72- 8	1" 90° Swivel Joint	2	ISO-72-22A	Rear Frame (23-24 Series)	1
ISO-72- 9	1" S.A. Pillow Block Bearing	2	ISO-72-22	Front Frame (30-31 Series)	1
ISO-72-10	#35 Chain	1	ISO-72-22A	Rear Frame (30-31 Series)	1
ISO-72-11	11T35 Motor Sprocket	1	ISO-72-23	12 Volt Motor	1

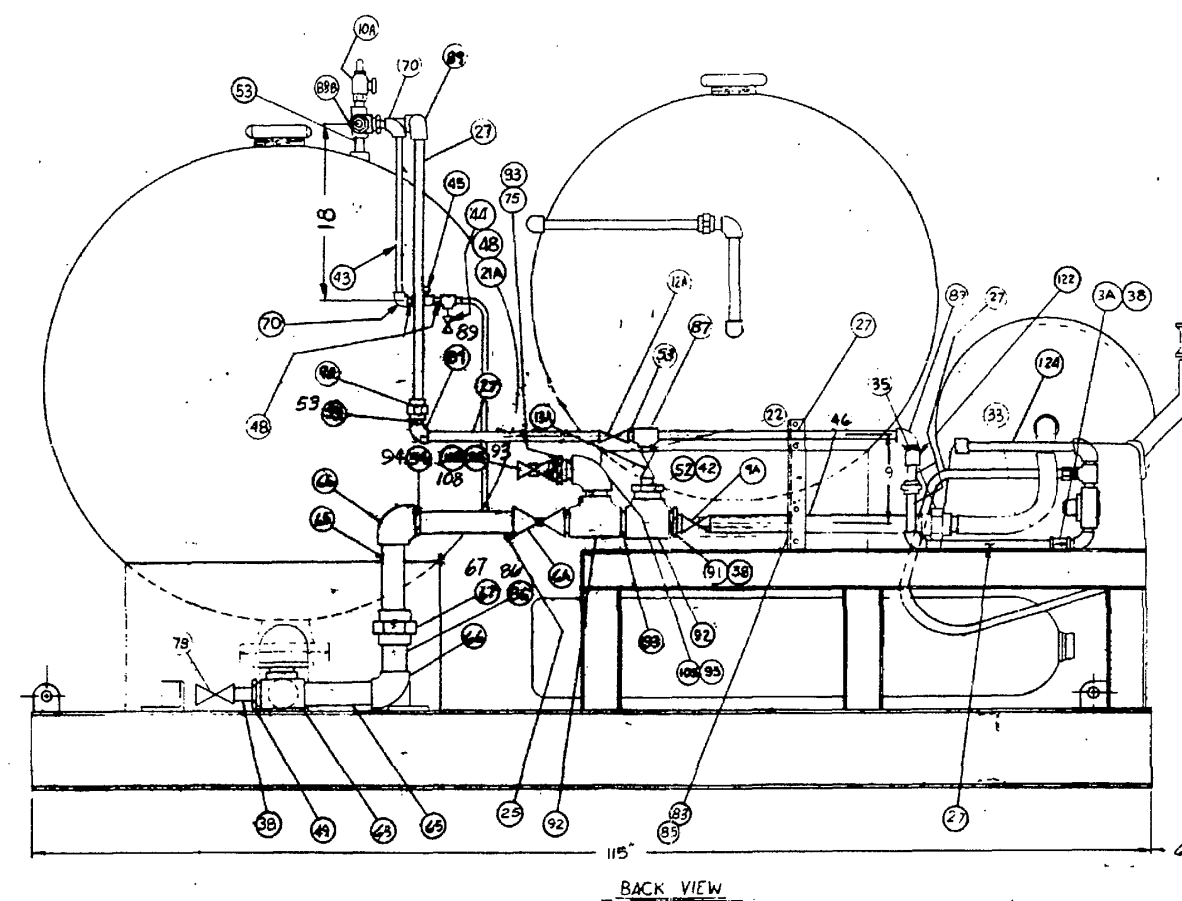
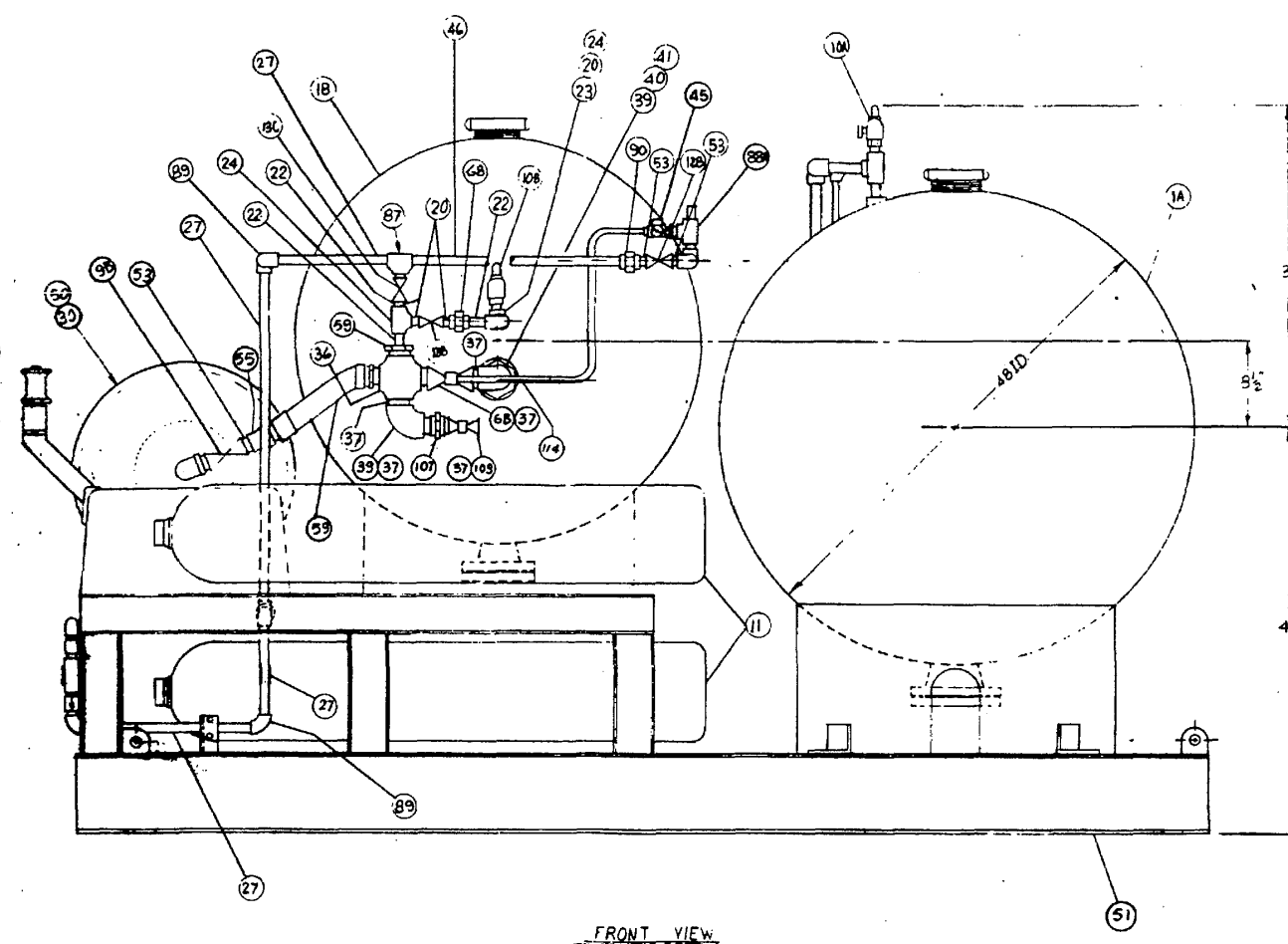
1000 HP 2/84

H-8108-P-L

REVISION RECORD		REV BY	APPR'D
E.O. #	REV	DESCRIPTION	DATE
	1	SEE SHEET 1 FOR REV	

BILL OF MATERIAL			
QUANTITY REQ'D	ITEM NO.	PART NUMBER	DESCRIPTION
1	1		
1	2		
1	3		
1	4		

- NOTES:
1. PAINT ALL EXPOSED SURFACES (EXCEPT NAMEPLATES AND BALL VALVES) PER ROCKWOOD STANDARD PAINT SPECIFICATION NO. RSC-358 STEPS 1 & 2 ONLY.
 2. ODD LENGTHS OF PIPE MUST BE CUT AND THREADED AS REQ'D AT ASSEMBLY. CUT AND THREAD FROM STOCK SUPPLIED AS ITEMS 22, 40, 43, 68.
 3. MARK NAMEPLATE (TANK) ITEM NO. 1 & 2.
 4. SET REGULATORS AS NOTED.
 5. SUPPORT PIPE AS REQUIRED USING ITEMS 82, 83, 84, 85 & 125.
 6. SECURE HOSE REELS W/ (4) 3/8-1/4 BOLTS LOCATED FROM HOLES IN HOSE REEL FRAME W/ ITEMS (101) & (102) (DRILL 4-3/16 DIA HOLES).
 7. USE (2) BETWEEN (54) & (20).



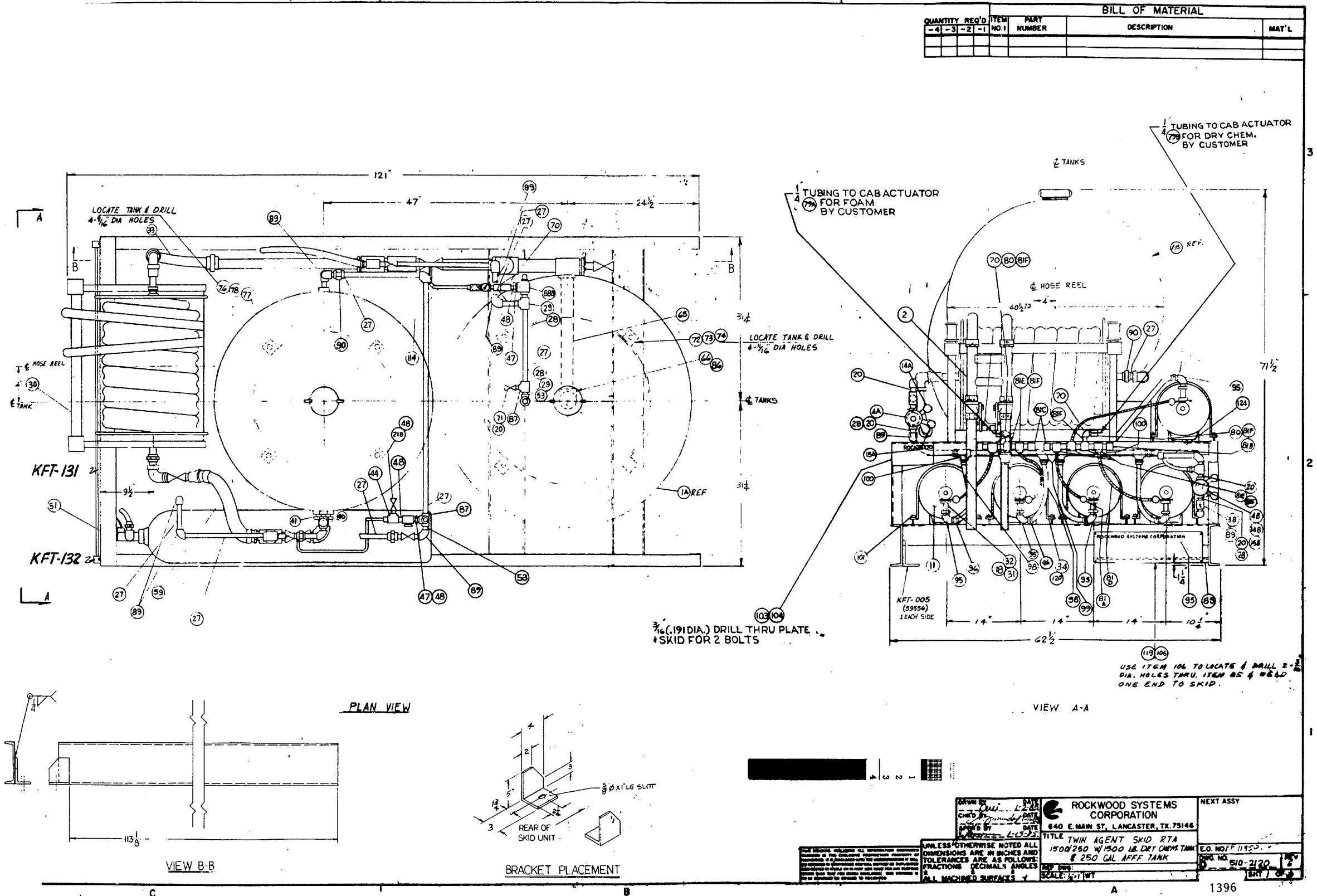
DRAWN BY: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> DATE: 12/2/83	ROCKWOOD SYSTEMS CORPORATION 840 E. MAIN ST., LANCASTER, TX 75146 TITLE: TWIN AGENT SKID RTA 1500/250 W/1500 LB. DRY CHEM TANK & 250 GAL. AFFF TANK SCALE: 3/4" = 1'-0"	NEXT ASSY: C100360 KOVNTCH E.O. NO. FF 1150 Dwg. No. 510-2120 REV E SHEET 2 OF 4
---	--	--

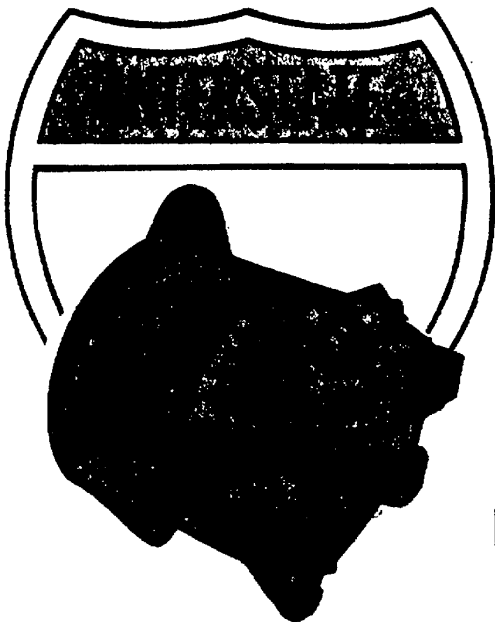
QUANTITY REQ'D.	-4	-3	-2	-1	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATIONS OR REMARKS
					(2) 816	—	RED. BUSHING 1/4" x 1/8"	BRASS	PART OF 510-1869-3
					2 81F	4439-29	NIPPLE 1/4" x 1/2" LONG	BRASS	
					(7) 81E	—	TEE, 1/4"	BRASS	
					(5) 81D	—	HOSE, 18" LONG	—	THESE PARTS INCLUDED IN 510-1869-3 ASSY. (1111)
					(2) 81C	—	POPPET VALVE 1/8"	BRASS	
					(2) 81B	—	SAFETY RELIEF VALVE	—	
					(5) 81A	—	QUICK RELEASE VALVE	—	
					(2) 80	—	1/4" CHECK VALVE	BRONZE	
					2 79	6187-1	CAB ACTUATOR	—	SHIP LOOSE
					4 78	161-08001	HX. NUT 1/2"-13	STEEL	
					4 77	166-32001	LOCK WASHER (SPR.) 1/2"	STEEL	
					4 76	152-08021	CAP SCREW, HX. HD	STEEL	1/2-13 x 1 1/2 LG.
					1 75	4652-12E	UNION, 1 1/2"	BRASS	
					4 74	4911-7	HX. NUT HEAVY 5/8"-11	STEEL	
					4 73	166-40001	LOCK WASHER SPRING	STEEL	5/8"
					4 72	152-10109	CAP SCREW 5/8"-11 x 1 1/2 LG.	STEEL	
					1 71	6452-1	TEMP RELIEF VALVE	S.S.	(FUSIBLE PLUG)
					4 70	4204-2	ELBOW 90, 1/2"	STEEL	
					69	—	—	—	
					1 68	4936-4	UNION 1/2"	M.I.	
					1 67	4652-16E	UNION, 2"	BRASS	
					3 66	4649-16E	ELBOW 90, 2"	BRASS	
					63 65	445-10040	PIPE, 2"	BRASS	
					64	—	—	—	
					1 63	4648-16E	TEE, 2"	BRASS	
					62	—	—	—	
					61	—	—	—	
					60	—	—	—	
					1 59	6486-1	HOSE ASSEMBLY	BRASS	
					58	—	—	—	
					57	—	—	—	
					56	—	—	—	
					1 55	4468-19	REDUCER, 1 1/2" x 1"	STEEL	
					54	—	—	—	
					17 53	4202-121	CLOSE NIPPLE, 1"	STEEL	
					1 52	4771-424	BUSHING 1 1/2" x 1/2"	BRASS	
					1 51	510-2147-1	SKID FABRICATION	STEEL	
					1 50	510-1772-3C	HOSE ASSY. TWIN	—	1" x 1" x 100'
					1 49	4771-429	BUSHING 2" x 1"	BRASS	
					6 48	4202-25	CLOSE NIPPLE 1/2"	STEEL	
					2 47	4771-109	BUSHING 3/4" x 1/4"	STEEL	
					3.0 46	445-01072	PIPE, 1"	BRASS	
					2 45	6366-1	REGULATOR W/PRESS GAUGE	ALUM	SET AT 120 PSI
					2 44	4205-2	TEE, 1/2"	M.I.	
					6.0 43	145-10076	PIPE, 1/2"	STEEL	
					1 42	4439-73	CLOSE NIPPLE 1/2"	BRASS	
					1 41	4771-142	BUSHING, 3" x 1 1/2"	M.I.	
					1.0 40	145-10072	PIPE, 1 1/2"	STEEL	

REVISIONS					C 510-2120		REV E
EO No	SYM	DESCRIPTION	DATE	APPROVAL	SHEET OF		
DRAWN <i>Qui</i>					NEXT ASSY OR USED TO MAKE		
DATE 1-4-85					E.O. 1		
CHK <i>J. J. J.</i>					C 510-2120		
DATE 1-11-85					REV E		
DESIGN <i>Qui</i>					SHEET 3 OF 4		
ENGR <i>Qui</i>							
MFG <i>Qui</i>							
SCALE							
WT. CALC. ACTUAL							
CODE							
REF DWG NO.							
ROCKWOOD Systems Corporation							
80 Second Street							
South Portland, Maine 04106							
TWIN AGENT SKID RTA							
1500/250 W/1500 LB. DRY CHEM							
TANK & 250 GAL. AFFT TANK							
2 21B					NPT		
1 13A					BALL VALVE 1/2"		
1 13B					BALL VALVE 1/2"		
2 39					ELBOW 90, 1 1/2"		
2 38					CLOSE NIPPLE, 1"		
5 37					CLOSE NIPPLE 1 1/2"		
1 36					CROSS, 1 1/2"		
1 35					UNION, 1"		
10 34					STAP, NITROGEN TANK		
1 33					HOSE ASSY, 1"		
5 32					GLAND NIPPLE (CGA 580)		
5 31					GLAND NUT (CGA 580)		
1 30					TWIN HOSE REEL		
2 29					TEE, 1"		
4 28					BUSHING, 1" x 1/2"		
28 27					PIPE, 1" SCH 40		
26					—		
1 25					PIPE NIPPLE, 1 1/2"		
2 24					TEE, 1/2"		
1 23					ELBOW 90, 1/2"		
4.1 22					PIPE, 1/2" SCH 40		
14 20					CLOSE NIPPLE 1/2"		
1 19					BUSHING, 1 1/2" x 1/2"		
5 18					BUSHING 1/2" x 1/4"		
16					—		
2 15B					PRESSURE GAUGE		
2 14B					PRESSURE GAUGE		
1 13					BALL VALVE, 1/2"		
2 12B					BALL VALVE, 1"		
5 11A					NITROGEN CYLINDER		
2 10B					RELIEF VALVE, RISO 1/2"		
2 9B					BALL VALVE, 1"		
8					—		
1 7B					BALL VALVE - 1"		
1 6B					BALL VALVE, 1 1/2"		
1 6A					BALL VALVE, 1 1/2"		
5					—		
2 4B					REGULATOR, NITROGEN		
2 3B					CHECK VALVE, 1"		
1 2					DUAL AGENT HAND LINE		
1 1B					1500 LB. DRY CHEM. TANK		
1 1A					250 GAL. FOAM TANK		

LIST OF MATERIAL OR PARTS LIST

1395





GROUP "S"

FORM: 3507-4 Rev.
File: Alternator Parts
List Section
Orig. Rel.: Oct., 1972
Rev.: April, 1979

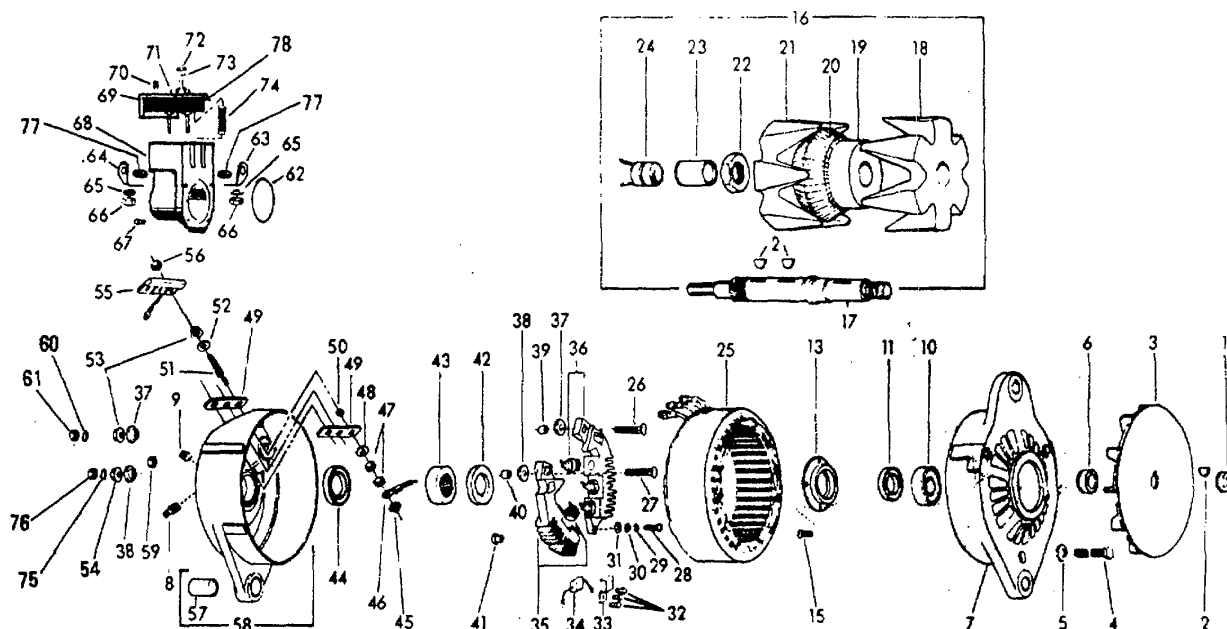
COMPOSITE PARTS LIST

For

INTERSTATE ALTERNATORS

FSCM 33510





MAJOR PARTS COMMON TO ALL UNITS

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
10	*78895	1	Bearing, Ball 305	26	79313	1	Screw, Terminal (-)
11	*79405	1	Oil Seal	42	79404	1	Oil Seal
17	*79422	1	Shaft	43	*79406	1	Roller Bearing
18		1	D.E. Rotor Half (See Note)	44	79403	1	Oil Seal
19	75570	1	Hub	55	*79480	1	Diode Trio
21		1	S.R.E. Rotor Half(See Note)	68	*78524	1	Brush Holder
23	79424	1	Race, Inner Bearing	74	*77302	2	Brush
24	*71193	1	Slip Ring Assembly				

* Suggested Service Parts

MAJOR PARTS - NOT COMMON

Ref. No.	Description	Qty.	4725J
3	Fan Assembly	1	79035
7	*Housing, D.E.	1	78983
16	Rotor Assembly	1	79501
20	Coil Assembly	1	79476
25	*Stator	1	78278
27	Screw, Terminal (+)	1	79314
35	*Rectifier Assy. (+)	1	79193
36	*Rectifier Assy. (-)	1	79415
58	*Housing Assy.S.R.E.	1	71194
68	*Regulator	1	77973
74	*Brush	2	77302

NOTE: Rotor Half Replacement Recommended Only When Adequate Machining and Balancing Equipment Available.

*Suggested Service Parts

**MINOR PARTS
COMMON TO ALL UNITS**

Ref. No.	Part No.	Qty.	Description	Ref. No.	Part No.	Qty.	Description
1	76985	1	Nut, Self Lock	48	4492	3	Washer, Guard
2	6399	3	Key, Woodruff No.8	49	79436	2	Insulator
4	78991	3	Screw, 10-32x5.44 Hex.Hd.St.	50	79435	3	Installation Bushing
5	75451	3	Washer, Belleville	51	79444	3	Stud, Terminal
6	59225	1	Spacer, Fan	52	2073	3	Washer, Guard
15	58754	4	Scw.10-32x.44 Fl.Hd.St.	53	59982	4	Nut, Tenz 1/4-20
22	30806	1	Nut, 1-14 Hex. St.	56	32172	3	Nut, 1/4-20 Hex. St. Lock
28	78337	2	Scw, 10-32x.75 Pan.Hd.St.	57	*77916	1	Bushing, Slideable
29	2434	2	Lockwasher, No.10	59	26175	3	Nut, Elastic Stop
30	2385	2	Washer, Guard	60	2523	1	Lockwasher, 1/4
31	*52066	2	Washer, Insulation	61	2771	1	Nut, 1/4-20 Hex St.
32	73543	3	Scw, 6-32 Hex.Hd.S*Tap	62	*57611	1	Ring, Sealing
33	73760	1	Clamp	63	78705	1	Jumper
34	*73541	1	Capacitor Assembly	65	13676	2	Lockwasher, No.6 S*Proof
37	*73545	2	Bushing, Insulation	66	5622	2	Nut, 6-32 Hex.Hd. Br.
38	*73546	2	Bushing, Insulation	67	13622	4	Scw, 8-32x.44 Rd.Hd.St.
39	*79431	1	Bushing, Insulation	70	97287	1	Plastic Screw
40	*79432	1	Bushing, Insulation	71	78527	2	Protective Cap
41	*73547	2	Bushing, Insulation	72	4340	1	Nut, 10-24 Hex. Hd. St.
45	79024	3	Nut, 10-32 Tenz	73	2434	1	Lockwasher, No. 10
46	73656	3	Lead, Terminal Wire	77	97671	2	Washer, Sealing
47	2313	6	Nut, 10-32 Hex.	78	97679	1	Gasket Regulator

* Suggested Service Parts

MINOR PARTS - NOT COMMON

Ref. No.	Description	Qty.								4725J	
13	Vent Plug Pipe Plug "O" Ring Retainer, Bearing	1								79486	
54	Roll, Pin	1								59982	
64	Nut, Tenz	1								79489	
75	Jumper	1								2523	
76	Lockwasher	1								2771	
	Nut	1									

FORM 3507-4 Rev. April, 1979

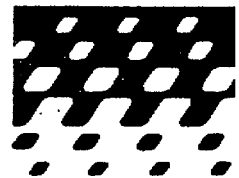
OWNER'S INSTALLATION/ OPERATION/ SERVICE MANUAL

**"A" Series
Dynamic Inverters**

COMPLETE ILLUSTRATED PARTS BREAKDOWN INCLUDING SPARE PARTS KITS

FSCM 57054

DYNAMOTE



DYNAMOTE CORPORATION 1200 W. Nickerson
Seattle, WA 98119
(206) 282-1000

Figure 3.0.3A
HARDWARE KIT

Part #	Qty.	Description	Included With:	
			A30	
2283-00014	1	Harness - Input - Power	x	
4283-00010	1	Harness - Control	x	
	1	Field Grounding #16 White Wire (1')	x	
4200-06400	2	Fuses, ABU 40	x	
4200-02150	3	Fuses AGC 15	x	
4282-00006	2	Holder, Spare Fuse	x	
3056-11451	4	Brackets, Tie Down	x	
4442-60920	2	Lugs, RB-257	x	
4442-15200	2	Lugs, B-71	x	
4442-14200	4	Lugs, B-87	x	
4323-00417	1	Rubber Cap	x	
4722-37008	1	1/2-20 x 3/8" Bolt	x	
4520-27000	1	1/2-20 Kept Nut	x	
4722-40008	4	#14 x 1" Screws	x	
4442-16600	3	Lugs F-72	x	
4-7211	1	Relay, High Amp. Bypass	*	
4760-14000	5	Ty Raps	x	

* Optional

Figure 3.0.3A HARDWARE KIT CONTENTS

3.0.4 Start your installation with the first step and follow each step through in sequence to successful final testing. As it is completed, check off each step in the space provided adjacent to the step number of the test/warranty registration card.

DO NOT PROCEED TO ANOTHER STEP UNTIL ALL PREVIOUS STEPS HAVE BEEN SUCCESSFULLY COMPLETE.

© Copyright 1981, DYNAMOTE CORP.

Fig. 4.5.0 G DYNAMIC INVERTER PARTS LIST

Circuit Designation	Dynamote Part #	Description	Used In:	
			BOOSTED	A30
C1	4092-40502	Output Capacitor	x	
C2	4092-40502	Output Capacitor	x	
C3	4092-40502	XFMR Input Capac.	x	
C4	4095-24712	Commutation Capac.	x	
C5	4093-10147	Contactor Suppression Capacitor	x	
C6,C7	4093-10147	Circuit Board Filter	x	
C9	4095-74606	AC Output Capacitor	x	
C10	4093-10825	Boosted Field Capacitor	x	
C11	4093-10825	DC Input Capacitor	x	
D1	4121-43700	Unit Isolation Diode	x	
D2	4121-14005	K2 Relay Hold-in Diode	x	
D3,D4	4121-11183	Battery Charging Diode	x	
D5,D6	4121-11186	AC Blocking Diode	x	
D8,D9	4121-14005	Spike Suppression Diode	x	
D10,D12	4121-22030	Reverse Parallel Diode		
D13	4121-10751	Isolation Diode	x	
D14,D15	4121-20410	Rectification Diode	x	
R1,R2	4681-10025	Stabilizing Resistors	x	
R3	4681-00247	Current Limit Resistor	x	
R4	4681-08020	VR Stabilizing Resis.	x	
R9	4602-20110	Meter Adjustment Potentiometer	x	
F1,F2	4200-06400	Fuses ABU40	x	
F3,F4	4200-02150	Fuses AGC15	x	
F5	4200-02150	Fuses AGC15	x	
F1,F2	4282-00005	Fuse Holders Large HPC	x	
F3,F4	4282-00003	Fuse Holders Small HKP	x	
F5	4282-00003	Fuse Holders Small HKP	x	
K1	4685-43051	Power Relay	x	
K2	4685-01156	Control Relay	x	
K4	4685-02030	VVR Relay	x	
K3	4685-43051	High Amperage Bypass Relay		*

* Optional

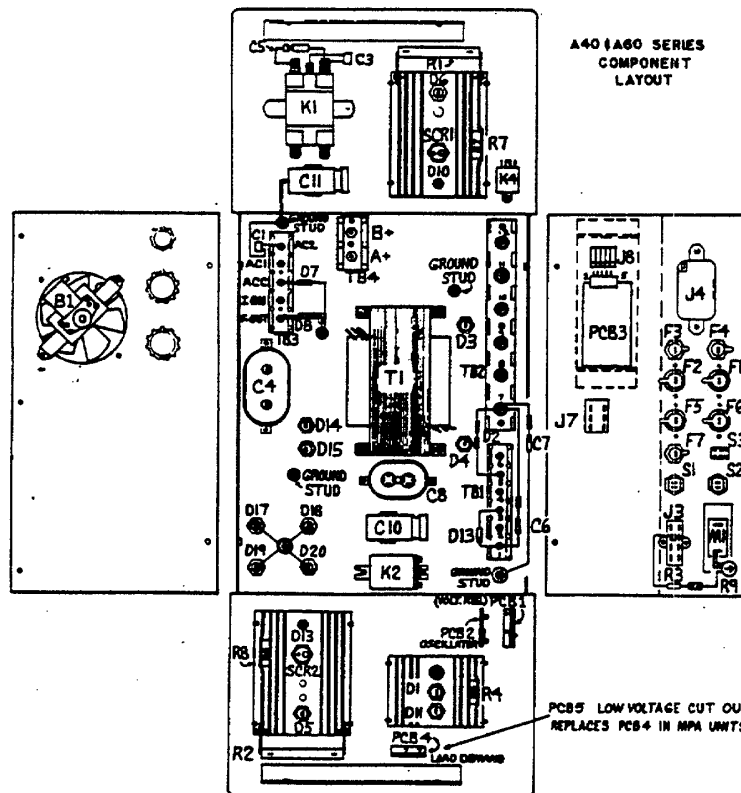
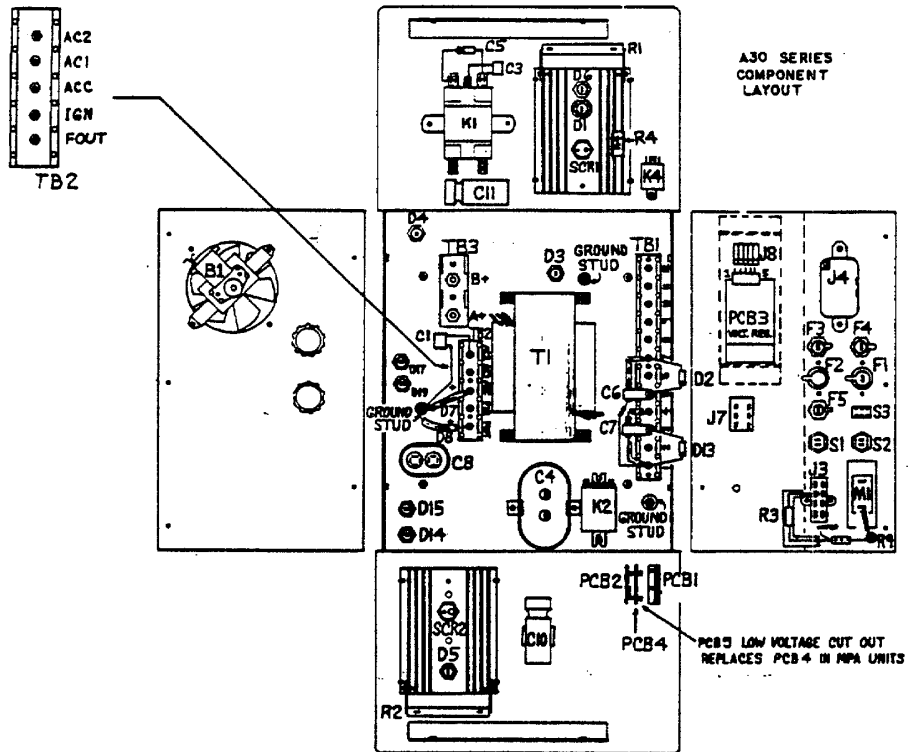
1402

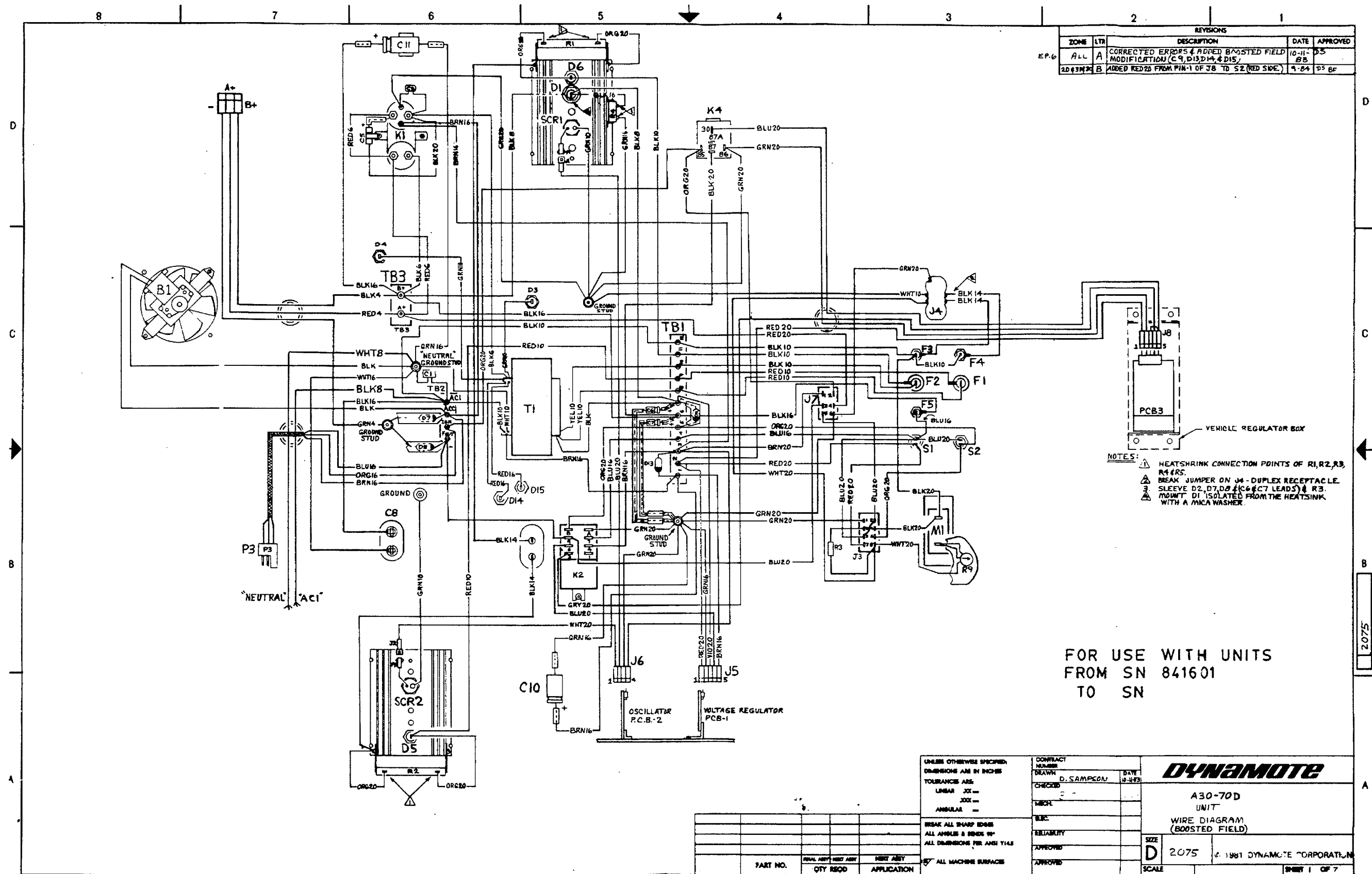
Fig. 4.5.0

DYNAMIC INVERTER PARTS LIST (continued)

Circuit Designation	Dynamote Part #	Description	Used In:	
			A30	BOOSTED
S1,S2	4721-08411	Start/Stop Switch	x	
B1	4046-12337	Fan Motor	x	
M1	4481-20123	Voltmeter	x	
PCB1	2081-00005	Regulator (Unit)	x	
PCB2	2081-00930	Oscillator	x	
PCB3	2081-00005	Regulator (Vehicle)	x	
PCB4	2081-00200	Load Demand	*	
PCB5	2081-02407	Low Voltage Cutout		
T1	2764-02007	Transformer/Isolated	x	
SCR1,SCR2	2720-40125	Main SCRs	x	
J3	4080-03080	Control Head Receptacle	x	
J7	4683-25320	Output Receptacle	x	
	4080-30160	Test Module Receptacle	x	
X1	4080-04014	Quick Disconnect-Black	x	
X2	4080-04013	Quick Disconnect-Red	x	
X3	4080-04015	Quick Disconnect-Green	x	
X1,X2,X3	4442-90000	Quick Disconnect-Lugs	x	

*-LD Units Only





Instruction Manual



HURST
FIRE RESCUE
SYSTEMS

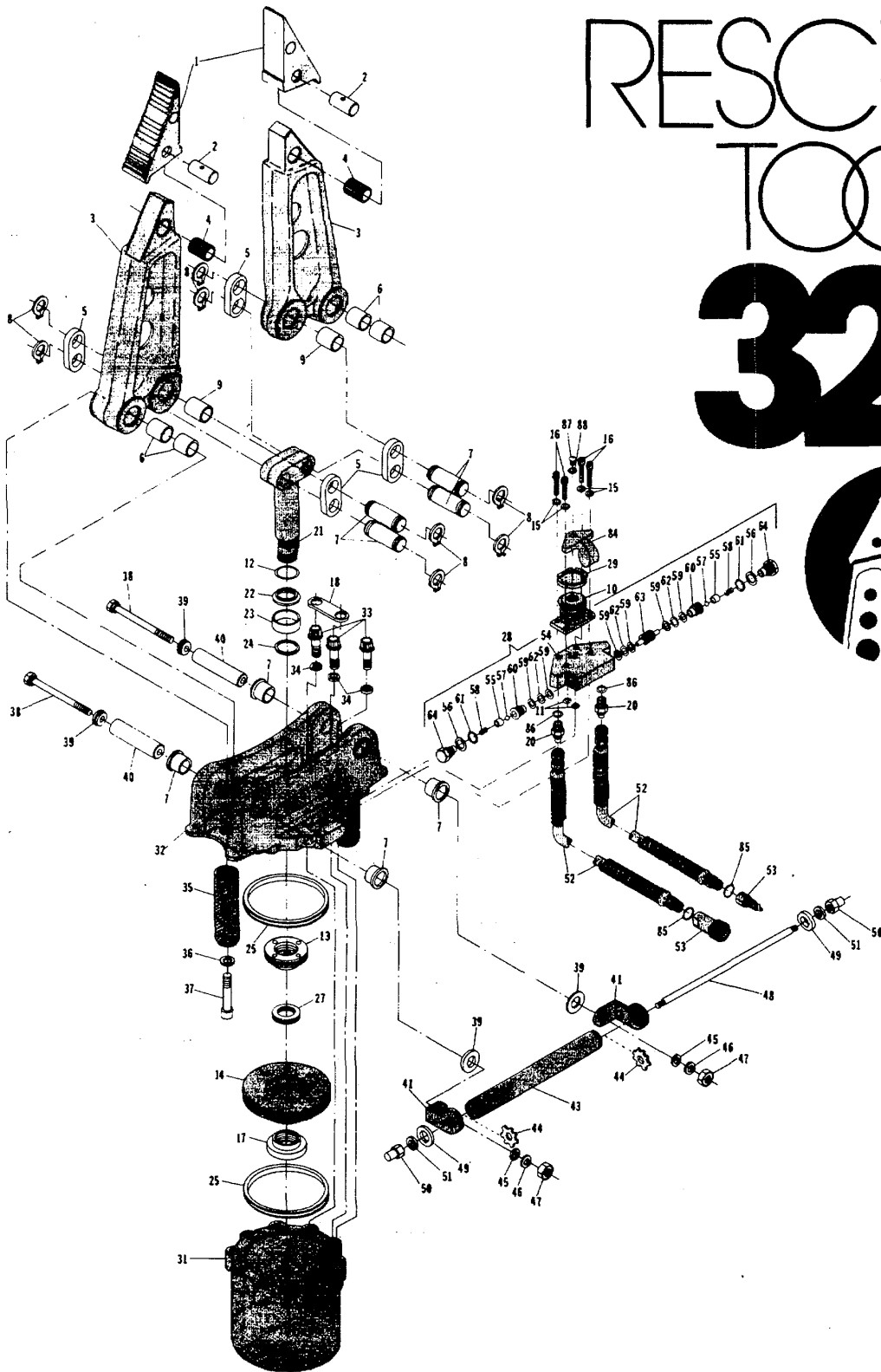
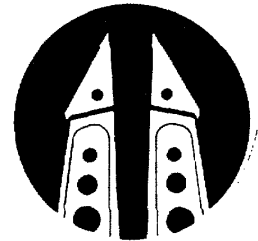
& COMPLETE ILLUSTRATED PARTS BREAKDOWN INCLUDING SPARE PARTS KITS



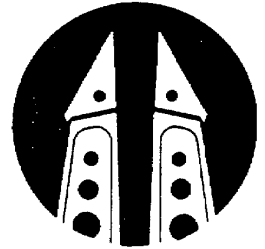
FSCM 98903

JANS OF LIFE®

RESCUE TOOL 32b

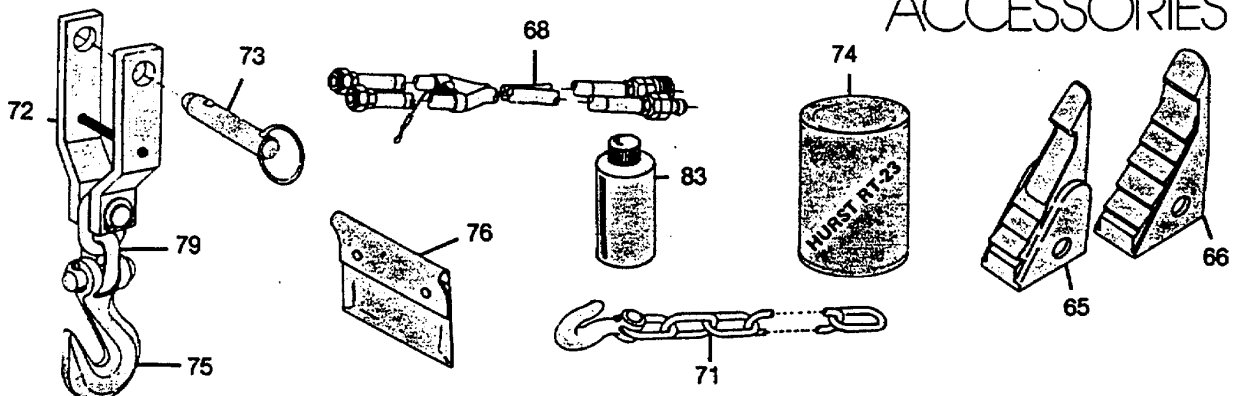


320 PARTS LIST



Part No.	Description	Part No.	Description	Part No.	Description
1	347-R012 Jaw Automotive	33	215-0050 12 Point Cap Screw	62	337-0017 "O" Ring
2	189-0015 Jaw Retainer Pin	34	267-0037 Flat Washer	63	350-R001 Piston, Pilot Ck. Valve
3	105-R002 Arm	35	349-8650 Handle	64	357-R001 Plug
4	118-0009 Jaw Pin Bushing	36	267-8745 Flat Washer	65	347-R006 A.C. Cutting Jaw
5	171-R007 Link	37	215-0046 Socket Hd. Cap Screw	66	347-R007 A.C. Spreading Jaw
6	118-R001 Arm Bushing, Pivot Pin	38	215-0047 Cap Screw	67	353-0013 Hose W/Strain Relief 16'
7	189-0029 Link Pin	39	228-0043 Bracket Spacer	68	353-0014 Hose W/S.R. & Conn. 16'
8	211-0018 Retainer Ring	40	189-0024 Pivot Pin	69	353-0012 Hose 16' Twinned
9	118-R002 Arm Bushing, Link Pin	41	117-0066 Handle Bracket, L.H.	70	353-0016 Hose W/2 Conn. 16'
10	266-R007 Valve W/Hard Pin	42	117-0065 Handle Bracket, R.H.	71	364-8881 Chain & Hook Assy.
11	337-R005 "O" Ring, Valve Base	43	404-0007 Handle	72	305-0002 Clevis Link
12	337-R018 "O" Ring, Piston Rod	44	267-0040 Ext. Tooth Lock Washer	73	189-0018 Clevis Link Pin (Fas Pin)
13	208-R003 Piston Retainer, Upper	45	267-8742 Lock Washer	74	180-8751 Hydraulic Fluid/Qts.
14	350-R003 Piston, Aluminum	46	267-8818 Flat Washer	75	305-0003 Grab Hook
15	267-R006 Lock Washer Split	47	179-3491 Hex Nut	76	257-0003 Tool Kit
16	215-R022 Socket Hd. Cap Screw	48	213-0060 Handle Rod	77	364-0003 Chain & Shackle Pkg.
17	208-R004 Piston Retainer, Lower	49	267-8745 3/8" Flat Washer	77a	364-0008 12' Chain W/Hooks
18	244-0004 Locking Plate	50	179-0023 Acorn Hex. Lock Nut	78	353-0022 30' Hose W/2 Conn.
20	142-0049 Male Fitting, 37" x 7/16-20	51	267-3464 Lock Washer	79	364-0004 Two Link Chain
21	213-R004 Piston Rod	52	353-0033 Hose, Pressure & Return, 15"	80	347-R008 Aircraft Jaw Set (2)
22	216-8732 Piston Rod Wiper	53	128-0008 Connector Set, 1M 1F	81	337-R001 Connector "O" Ring
23	118-8663 Piston Rod Bushing	54	112-R001 Valve Block	83	180-0006 Pist N Lube (Case)
24	216-8712 Piston Rod Seal	55	208-R001 Cup	84	335-R002 Thumb Control
25	216-8711 "T" Ring Piston Seal	56	211-R002 Retainer Ring	85	337-0024 "O" Ring
27	216-R004 "T" Ring Piston Rod	57	318-R001 By Pass Valve Ball	86	337-R005 "O" Ring, Valve Base
28	112-R002 Dual Pilot Check Valve	58	230-R002 Spring	87	271-0001 Truss Head Screw
29	243-R001 Trigger Stop (Valve Ring)	59	211-R001 Retainer Ring	88	267-4074 Flat Washer
31	392-0009 Housing Assembly	60	313-R001 Seat		
32	145-0014 Frame Assembly	61	337-R012 "O" Ring		

ACCESSORIES





**HURST
FIRE /RESCUE
SYSTEMS**

Hurst Performance, Inc. • 50 W. Street Rd. • Warminster, PA 18974 • (215) 672-5000



PRINTED IN USA • 159-R022 00 • 5M1183 • PATENT PENDING

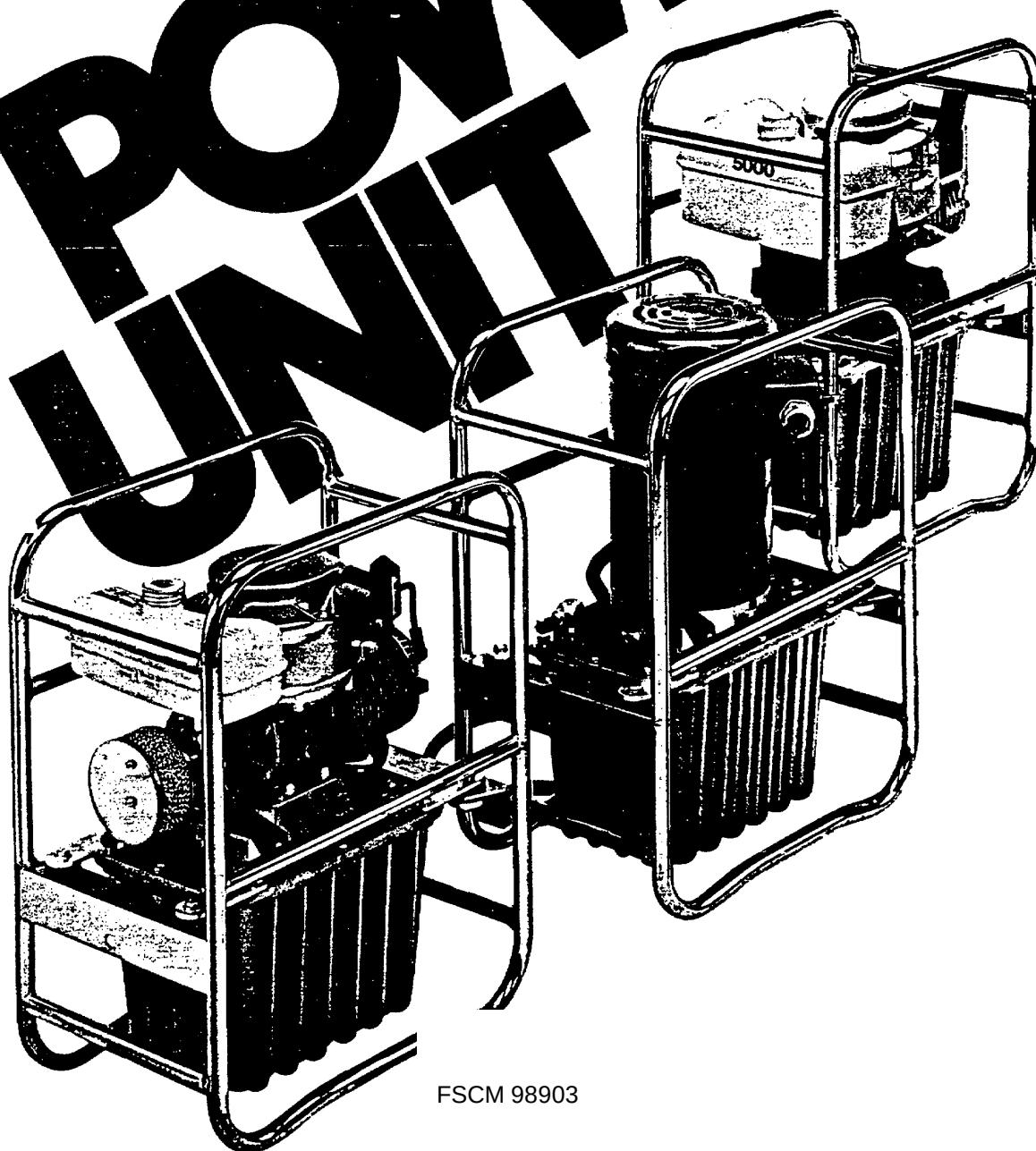
Hurst Products, reserves the right to make changes at any time, without notice or obligation, in prices, materials, equipment or specifications, and to change or discontinued models. Check with distributor for Current information.

COMPLETE ILLUSTRATED PARTS BREAKDOWN INCLUDING SPARE PARTS KITS

Instruction Manual



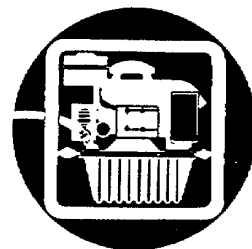
POWER UNIT



FSCM 98903

PARTS LIST

4 CYCLE



Part No.	Description	Part No.	Description	Part No.	Description
1	33027B Cylinder Assy. (Incl. Nos. 2, 4 & 113)	35	30588A Spool, Governor	83	650548 Screw, Hex Washer Hd., 8-32 x 5/16
2	26727 Pin, Dowel	36	31335 Clamp, Governor Lever	94	32264A Control Assy., Speed (Incl. Nos. 71, 72 & 77)
4	32600 Seal, Oil	37	30589 Rod, Governor	95	30200 Screw, Hex Washer Hd. Sems, self-tap, 10-24 x 9/16
5	32644A Valve, Intake (Std.) (Incl. No. 10)	38	27275 Clip, Hi-Tension Wire	96	32410 Knob, Speed Control
5	32645A Valve, Intake (1/32" oversize) (Incl. No. 10)	39	32651 Lever, Governor	97	31495 Decal, Instruction
6	29313C Valve, Exhaust (Std.) (Incl. No. 10)	42	610961 Key, Flywheel	98	33738C Housing, Blower
6	29315C Valve, Exhaust (1/32" oversize) (Incl. No. 10)	45	650516 Screw, Hex Hd. Sems, 1/4-20 x 1-1/8	99	650561 Screw, Hex Hd. Sems, 1/4-20 x 5/8
8	31671 Cap, Upper Valve Spring	46	*33015 Gasket, Cylinder Head	101	32671 Tank, Fuel (Incl. No. 102)
9	31672 Spring, Valve	47	33016 Head, Cylinder	102	33032 Cap, Fuel
10	31673 Cap, Lower Valve Spring	48	650691 Washer, Flat	103	34796 Bracket, Tank Retaining
11	34567 Crankshaft	48A	650818 Screw, Special Hex Hd., 5/16-18 x 1-1/2	104	650665 Screw, Hex Washer Hd. Sems, self-tap, 1/4-14 x 7/8
12	9556 Plug, Pipe	49	6021A Screw, Hex Flange Hd., 5/16-18 x 1-1/2	105	34357 Line, Fuel
13	34851 Piston, Pin & Ring Assy. (Std.) (Incl. Nos. 14A, 15 & 16)	50	650694A Screw, Hex Flange Hd., 5/16-18 x 2	106	650815 Washer, Belleville
14A	32603B Piston & Pin Assy. (Std.) (Incl. No. 16)	51	33636 Plug, Spark (Champion J-8 or equivalent) (Except for Canada)	107	650816 Nut, Flywheel
15	34854 Ring Set, Piston (Std.)	51	34251 Resistor Spark Plug (Canadian Regulations require RJ-17LM resistor spark plug)	110	26460 Clamp, Fuel Line
15	34855 Ring Set, Piston (.010 oversize)	52	*27234 Gasket, Valve Spring Box	111	34214A Breather Assy.
15	34856 Ring Set, Piston (.020 oversize)	53	32755 Cover, Valve Spring Box	112	33734 Element, Breather
16	20381 Ring, Piston Pin Retaining	56	28277 Washer, Flat	113	*33735 Gasket, Breather
17	32875 Rod Assy., Connecting (Incl. No. 18)	57	650128 Screw, Fil. Hd. Sems, 10-24 x 1/2	114	33886 Tube, Breather
18	32610A Bolt, Connecting Rod	59	*32649 Gasket, Intake	115	30200 Screw, Hex Washer Hd. Sems, self-tap, 10-24 x 9/16
21	27241 Lifter, Valve	60	32650 Pipe, Intake	116	34346 Decal, Name & Instruction
22	33154 Camshaft (Compression Release)	62	650664 Screw, Fil. Hd. Sems, 1/4-20 x 1-19/32	117	33876 Gasket, Stator
23	29914 Pump Assy., Oil	63	610118 Cover, Spark Plug	118	30590A Washer, Flat
24	*26750A Gasket, Mounting Flange	69	34316 Decal, Name	120	32648A Muffler
25	32612 Flange Assy., Mounting (Incl. Nos. 26, 27, 28 & 32)	71	31342 Spring, Compression	121	650774 Screw, Hex Hd., 1/4-20 x 2-3/8
26	27897 Seal, Oil	72	650549 Screw, Fil. Hd., 5-40 x 7/16	122	8345 Washer, Flat
27	*28833 Gasket, Oil Drain Plug	73	31386 Spring, Governor	123	30688 Screw, Hex Hd. Sems, 1/4-20 x 1/2
28	27244 Plug, Oil Drain	74	34337 Link, Governor Spring	124	27625 Plug Assy., Oil Fill (Incl. No. 125)
29	650488 Screw, Hex Hd. Sems, 1/4-20 x 1-1/4	75	34336 Link, Governor-to-throttle	125	*29673 Gasket, Oil Fill
30	30574 Shaft, Mechanical Governor	76	29443 Clip, Spring	130	29752 Nut & Lockwasher, 1/4-28
31	30591 Gear Assy., Governor (Incl. No. 118)	77	610973 Terminal Assy.	131	34694 Cup, Starter
34	29193 Ring, Retaining	79	30593 Clip, Wire	132	33668 Screen, Starter
		80	34231 Wire, Ground	133	*26754 Gasket, Muffler
		83	*26756 Gasket, Carburetor	135	611027 Magneto (The complete magneto is not available as an assembly. The magneto number is shown for reference purposes only. Order component parts individually, as shown in parts list.)
		85	6201 Screw, Hex Hd., 1/4-28 x 7/8		
		86	650707 Screw, Fil. Hd. Sems, 10-32 x 5/8		
		87	29752 Nut, Hex w/washer, 1/4-28		
		88	*33051 Gasket, Cleaner Bracket-to-Carburetor	136	631597 Carburetor
		89	33007 Cover, Air Cleaner	137	590420 Starter, Rewind
		90	33006 Element, Air Cleaner	138	33238C Gasket Set (Incl. items marked *)
		91	33008 Tube, Air Cleaner		
		92	33005 Body, Air Cleaner		

* Indicates Parts Included in Gasket Set, Ref. No. 138.



50 WEST STREET RD., WARMINSTER, PA 18974
(215) 672-1700 • TWX 510-665-5425



PRINTED IN USA • 159-R029 00 • 2M1281 • PATENT PENDING

Hurst Safety Products, reserves the right to make changes at any time, without notice or obligation, in prices, materials, equipment or specifications, and to change or discontinue models. Check with distributor for current information.



SIGNAL DIVISION
Federal Signal Corporation

Model

*PA300**

ELECTRONIC

SIREN

COMPLETE ILLUSTRATED PARTS BREAKDOWN AND SPARE PARTS KITS



FSCM 98905

INSTALLATION AND SERVICE INSTRUCTIONS

1415

Warranty

The Federal Signal Corporation warrants each of its new electronic sirens to be free from defective material and workmanship for a period of two years from date of purchase. Federal Signal Corporation will remedy any defect which under normal installation and operation discloses such defect; provided the unit is delivered, transportation prepaid by owner, to our factory for examination and such examination reveals that in our judgment a defect in material and/or workmanship exists. In all cases, Federal Signal Corporation will be sole judge of what constitutes defective material and workmanship.

Defects of workmanship and material under this warranty will be corrected at no cost to you for labor and material.

This warranty does not extend to any electronic siren which has been subjected to abuse, misuse; improper installation or violation of any instructions supplied by us, nor extended to units which have been serviced or modified at any facility other than our factory.

This warranty takes precedence over all other warranties expressed or implied and no representative or other person is authorized to assume for Federal Signal Corporation any other liability in connection with the sale of our electronic sirens.

2904389C



FEDERAL SIGNAL CORPORATION

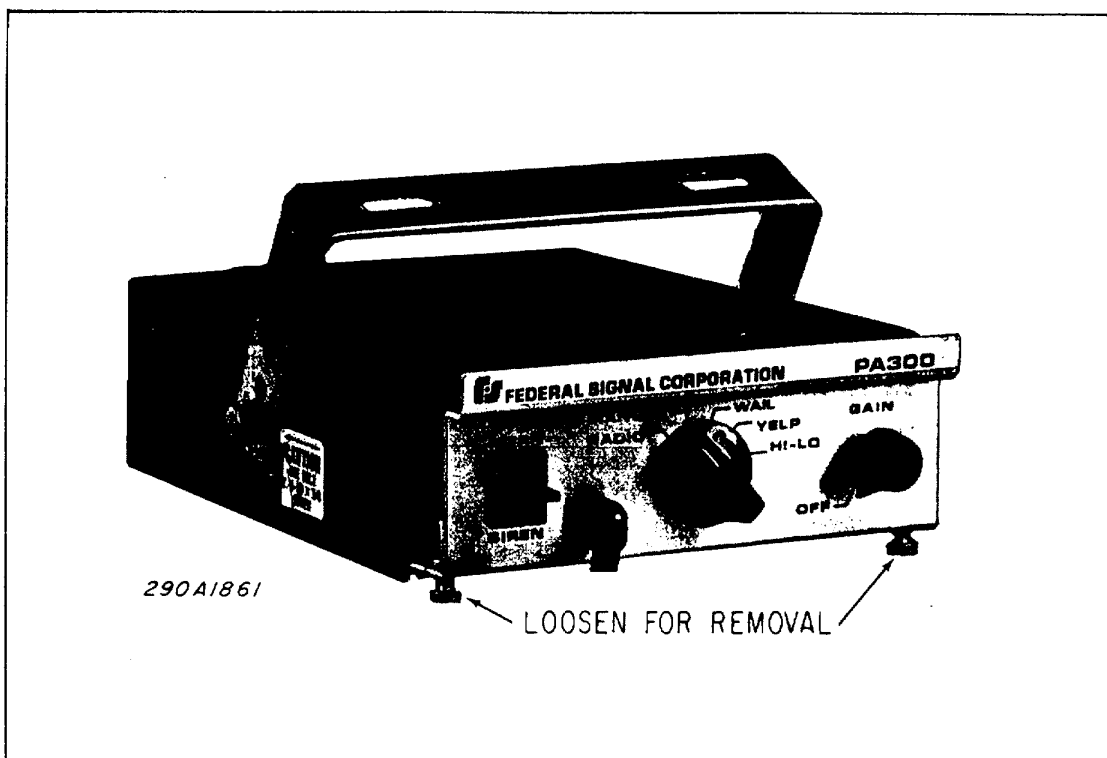


Figure 6-1. Chassis Removal.

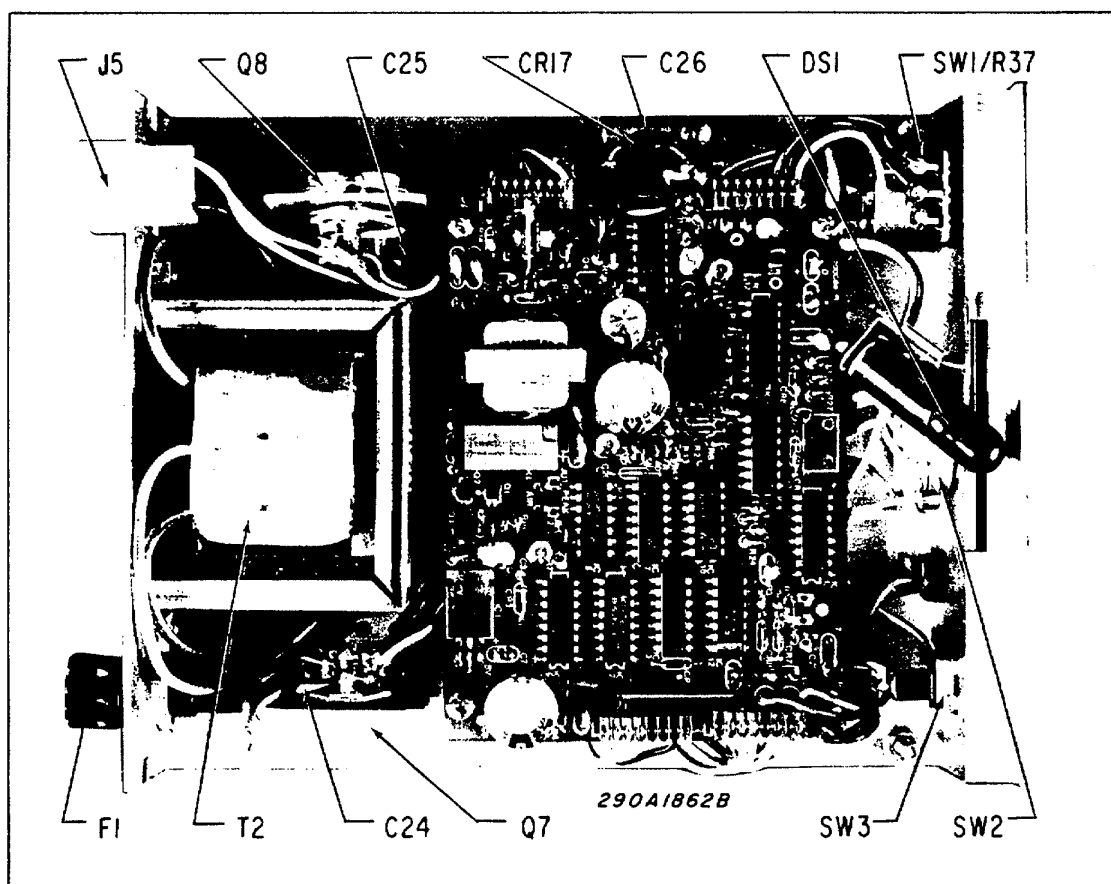


Figure 6-2. Internal View.

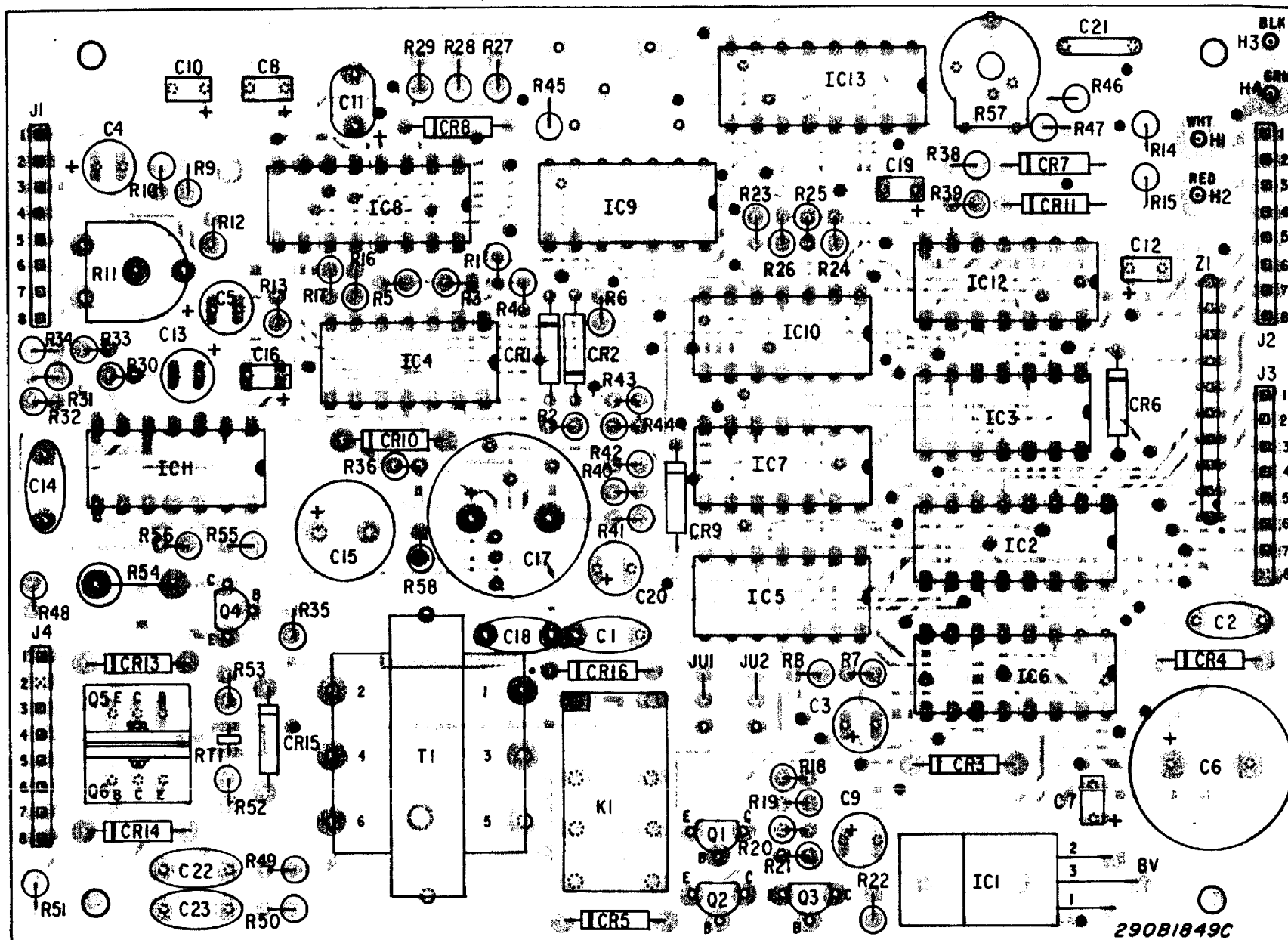


Figure 6-3. Component Location Diagram.

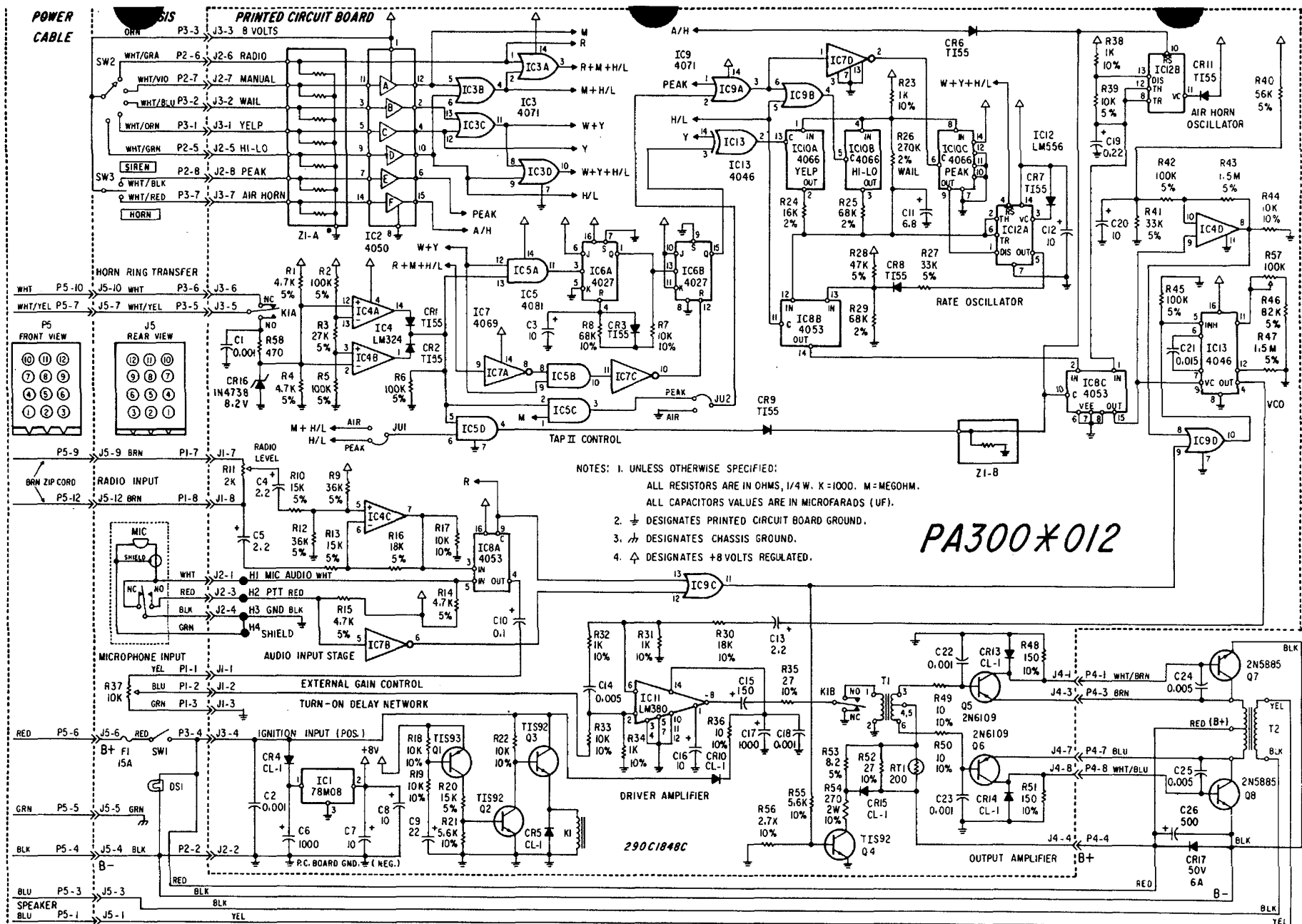


Figure 6-4. Schematic Diagram.

PARTS LIST

Schematic Symbol	Description	Part No.	Schematic Symbol	Description	Part No.
*RESISTORS			INTEGRATED CIRCUITS		
R1, 4, 14, 15	4700 Ohm, 5%	100A298	IC1	UA78MO8CKC	128A097
R2, 5, 6, 42, 45	100K Ohm, 5%	100A262	IC2	CD4050BE	128A092A-01
R3	27K Ohm, 5%	100A244	IC3, IC9	MC14071BCP	128B082
R7, 17, 18, 19, 22, 33, 44	10K Ohm	100A207	IC4	LM324N	128A098
R8	68K Ohm	100A235	IC5	MC14081BCP	128A077
R9, 12	36K Ohm, 5%	100A709	IC6	MC14027BCP	128A044
R10, 13, 20	15K Ohm, 5%	100A239	IC7	MC14069UBCP	128A100
R11	2K Ohm, Potentiometer	106A203A-01	IC8	MC14053BCP	128A099
R16, 30	18K Ohm, 5%	100A258	IC10	MC14066BCP	128A047
R21, 55	5600 Ohm	100A253	IC11	LM380N	128A046
R23, 31, 32, 34, 38	1000 Ohm	100A233	IC12	NAT LM556	128A038-01
R24	16K Ohm, 2%	100A723	IC13	MC14046BCP	128B079
R25, 29	68K Ohm, 2%	100A775	TRANSISTORS		
R26	270K Ohm, 2%	100A720	Q1	TIS93, PNP	125B133
R27, 41	33K Ohm, 5%	100A771	Q2, 3, 4	TIS92, NPN	125B132
R28	47K Ohm, 5%	100A701	Q5, 6	2N6109, PNP	125B431
R35	27 Ohm	100A250	Q7, 8	2N5885, NPN, Power	125B432
R36, 49, 50	10 Ohm	100A251	MISCELLANEOUS		
R37	10K Ohm, Potentiometer	106A116	J1, 2, 3, 4	Connector, Wafer	140A170
R39	10K Ohm, 5%	100A257	J5	Connector, 12-pin	139A152
R40	56K Ohm, 5%	100A704	H1, 2, 3, 4	Terminal, Male	233A106
R43, 47	1.5 Megohm, 5%	100A726	P5	Plug, 12-pin	140A154
R46	82K Ohm, 2%	100A750	K1	Relay, 180 Ohm, 12V, DPDT	131A130A-01
R48, 51	150 Ohm	100A238	Z1	Resistor Network, 9 x 10K	100A801
R52	27 Ohm	100A250	RT1	Termistor, 200 Ohm	104A111
R53	8.2 Ohm, 5%	100A724	T1	Transformer, Driver	120B145
R54	270 Ohm, 2 watt, Wirewound	103A128	T2	Transformer, Output	120C151A-01
R56	2700 Ohm	100A206	F1	Fuse, 15A, 3AG, 32V	148A107
R57	100K Ohm, Potentiometer	106A203A-02	DS1	Lamp, 14V, #1893	8107A085
R58	470 Ohm	100A255	SW2	Switch, Rotary	122B215
*Unless otherwise specified, all RESISTORS are carbon type, $\pm 10\%$, 1/4 watt.			SW3	Switch Paddle	122A214
CAPACITORS			TB1	Terminal, Strip	229A127
C1, 2, 18, 22, 23	0.001UF, 500V, Disc	107A263	Microphone		
C3, 20	10UF, 16V, Electrolytic	108A143	Socket, Transistor (Q7, Q8)		
C4, 5, 13	2.2UF, 25V, Electrolytic	108A142	Socket, Lamp (DS1)		
C6, 17	1000UF, 35V, Electrolytic	108A149	Holder, Fuse (F1)		
C7, 8, 12, 16	10UF, 10V, Tantalum	107A634	Knob, GAIN control		
C9	22UF, 16V, Electrolytic	108A144	Knob, Selector		
C10	0.1UF, 35V, Tantalum	107A1103	Insulator (Q7, Q8)		
C11	6.8UF, 15V, Tantalum	107A604	Circuit Board (without parts)		
C14	0.005UF, 100V, Disc	107A211	Circuit Board (with parts installed)		
C15	150UF, 16V, Electrolytic	108A147	Standoff		
C19	0.22UF, Radial Tantalum	107A1101	Bracket, Lamp		
C21	0.15UF, 5%, 100V, Poly	107A766	Bracket, Mounting		
C24, 25	0.005UF, 100V, Disc	107A211	Bracket, Transistor (Q7, Q8)		
C26	500UF, 15V, Electrolytic	108A122			
DIODES					
CR1, 2, 3, 6, 7, 8, 9, 11	TI55	115B101			
CR4, 5, 10, 13, 14, 15	ED3002S	115B301			
CR16	1N4738, 8.2V, Zener	115A232			
CR17	Rectifier, 6 amp, 50V	115A317			



SIERRA Aircraft Rescue Crash Tool Kit

- As Developed and Manufactured for U.S. AIR FORCE
- Recommended by NFPA for AIRPORTS and FIRE DEPTS.

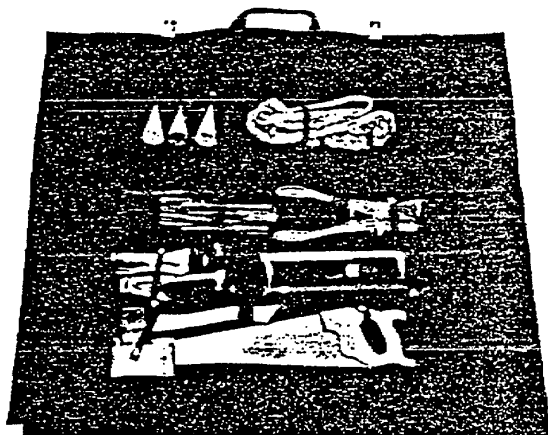


Used by the U.S. Air Force and recommended by NFPA for car, plane, train and truck crashes. Contains every tool necessary to quickly cut through metal, webbing, wood, belts, rope, etc., to remove pinned-in victims. Carry tools in weatherproof canvas roll 28" x 6", wt. 18 lb. FSN 4210-00-900-8557.

COMPLETE CONTENTS: SIERRA RESCUE CRASH KIT

Aircraft Cable Cutter, 14", capacity to $\frac{1}{4}$ ".
Lineman's Pliers, heavy duty, 8" long.
Grappling Hook and Rope Sling, 40" long.
Hack Saw Frame, adjustable 8" to 12".
3 Fuel Line Plugs: 3 hardwood, 3 neoprene.
Heavy Canvas Roll, treated, with every tool
stencil outlined & in a tool pocket or strap.

Rescue Knife with "V" blade &
Serrated-Edge Axe (See below).
Vise Grip Wrench, 10" long.
3 Hack Saw Blades, 10" steel.
Metal Cutting Saw, 20" blade.
2 Slot Screwdrivers, 4" & 6".
2 Phillips Screwdrivers, same.



CRK5. SIERRA Crash Kit COMPLETE

PORTNER Saws & Accessories

Gasoline Cutting & Rescue Saws Price- List
Effective 5/1/83

PART NO. DESCRIPTION

800287 K1200 12" Cutting & Rescue Kit complete with the following:

1	800285	K120012 Saw	1	'700235	Goggles
1	098200	Aluminum Carrying Case	1	700225	Gasoline Stabilizer
1	098306	Tool Kit	1	700200	12" 12 Tooth Carbide Blade
1	305240	Drive Belt	1	700100	12' Steel Abrasive Wheel
1	315533	Pre-Air Filter	1	700150	12" Concrete Abrasive Wheel
1	315530	Main Air Filter	1	098156	Hearing Protector
1	700230	1 qt. 2-Cycle Oil	1	701042	Instruction Book,
1	700219	1. gal. Safety Gas Can			Shipping Wt.-90 lbs.-L36" X W15" XH17"

FSCM 30978

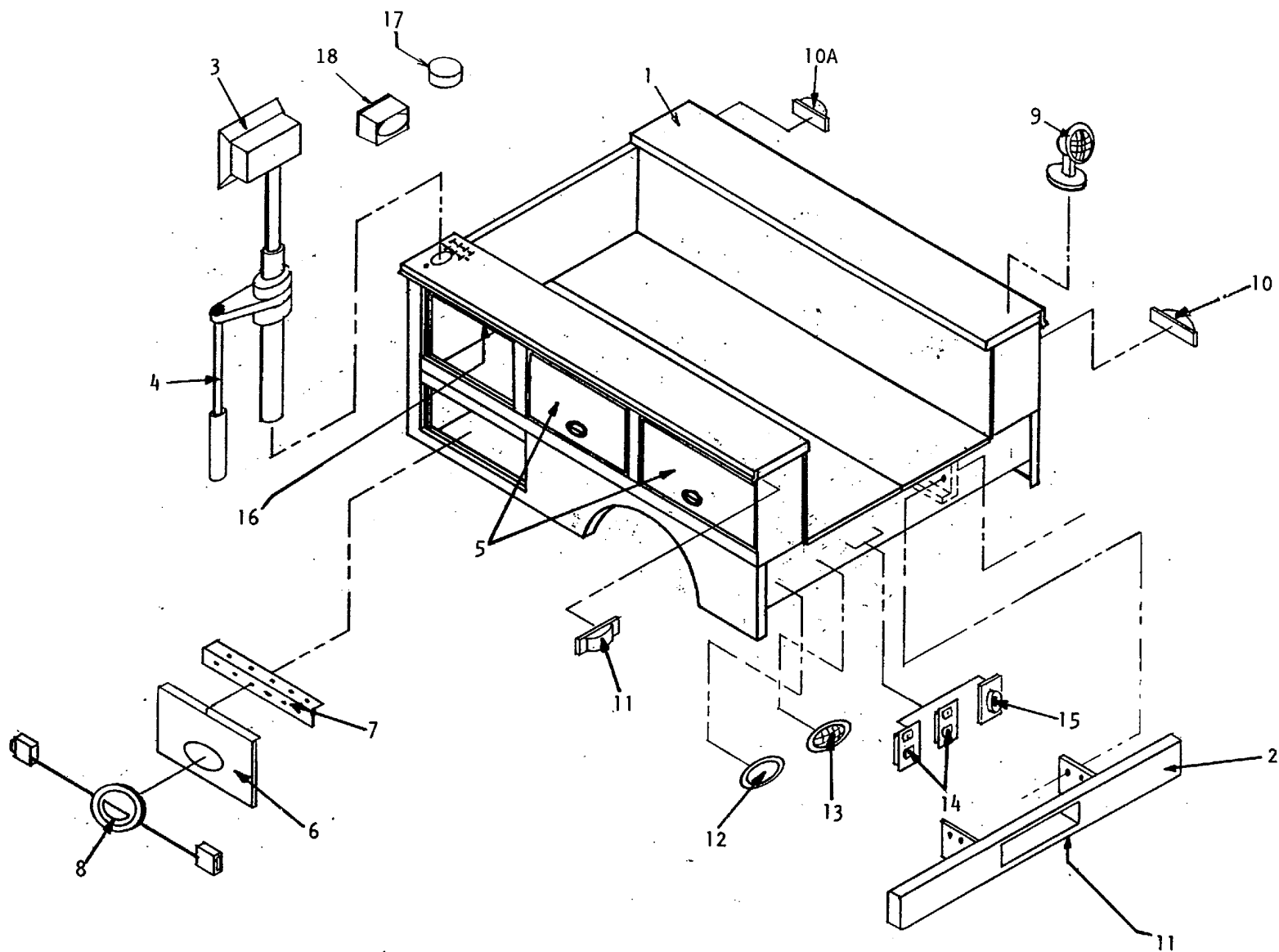


Figure 1 Body

Figure 1 Body

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REC SYK	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	
1	KFT-001	Body (FSCM 59556)	1		13	4122	Lamp, Stop/Tail/Turn/Park (FSCM 77977)	2	
	Comm.	Bolt, 5/8"x1½" LG	12			20-00512-00000	Body (FSCM 77977)	2	
	Comm.	Washer, Flat, 5/8"	24			05-01157-40000	Bulb, 32 Candlepower (FSCM 77977)	2	
	Comm.	Washer, Lock, 5/8"	12			24-00492-10000	Lens, Red (FSCM 77977)	2	
	Comm.	Nut, Hex Hd., 5/8"	12			15-00200-00000	Gasket, Lens (FSCM 77977)	2	
2	KFT-002	Bumper, Rear (FSCM 59556)	1			Comm.	Screw 10X32X½" LG	4	
	Comm.	Bolt, 5/8"x1½" LG	4		14	5800-1	Receptacle (FSCM 75582)	4	
	Comm.	Washer, Flat, 5/8"	8			Comm.	Screw 6X1½" LG	8	
	Comm.	Nut, Hex Hd., 5/8"	4			15	4621-B	Receptacle (FSCM 60481)	1
3	305-500	Lamp, Quartz w/Telescoping Pole (See Fig. 5 for detail breakdown. FSCM 7F200)	2			MS3506-1	Screw 6X1½" LG (FSCM 96906)	4	
4	KFT-008	Anti-Rotate Spotlight Device (FSCM 59556)	2			R65-G3B	Plug, Rubber (FSCM 60481)	1	
	KFT-008A	Frame, Main (FSCM 59556)	1			Comm.	Chain, Retaining	1	
	KFT-008B	Collar, Lower (FSCM 59556)	1			Comm.	Screw 6-32X½" LG	1	
	KFT-008C	Collar, Upper (FSCM 59556)	1		16	391C	Light, Compartment (FSCM 59556)	8	
	KFT-008D	Pipe, Inner (FSCM 59556)	1			391-99	Body (FSCM 12662)	8	
	KFT-008E	Pipe, Outer (FSCM 59556)	1			1141	Bulb (FSCM 12662)	8	
	Comm.	Screw, Set, Hex Hd., 5/8"-18NFX1" LG	1			391-25-CL	Lens (FSCM 12662)	8	
	Comm.	Screw, Set, Hex Hd., 5/16-24NFX½" LG	2			Comm.	Screw 6X1½" LG	16	
5	KFT-004A	Door (FSCM 59556)	6		17	SW4-RGH	Light, Signal (FSCM 76123)	1	
	Comm.	Bolt, ½"x½" LG	36			SW-4C	Body (FSCM 76123)	1	
	Comm.	Nut, Lock, Hex Hd., ½"	36			4416	Bulb, Sealed Beam 35,000 Candlepower (FSCM 76123)	1	
6	KFT-004B	Door (FSCM 59556)	2			SW-25R	Lens (FSCM 76123)	1	
	Comm.	Bolt, ½"x½" LG	14			Comm.	Bolt ½"x1" LG	4	
	Comm.	Nut, Lock, Hex Hd., ½"	14			Comm.	Washer, Flat ½"	4	
7	KFT-021U	Hinge, Upper Door (FSCM 59556)	6			Comm.	Nut, Lock, Hex Hd., ½"	4	
	KFT-021L	Hinge, Lower Door (FSCM 59556)	2		18	TS-100	Speaker, 100 Watt (FSCM 98905)	1	
8	KFT-022U	Latch, Upper Door (FSCM 59556)	6		19	225V	Spotlight (FSCM 78977)	1	
	KFT-022L	Latch, Lower Door (FSCM 59556)	2				See Fig. 6 for detail breakdown.)		
9	AG-R	Lamp, (FSCM 78977) Bulb, Sealed Beam, 75,000 Candlepower, 30 Watts	2						
	7178	Body (FSCM 78977)	2						
	7036	Bracket & Pivot Assy (FSCM 78977)	2						
	Comm.	Bolt, ½"x1" LG	16						
	Comm.	Washer, Flat, ½"	16						
	Comm.	Nut, Lock, Hex Hd., ½"	16						
10A	057-00-712	Lamp, Clearance, Amber (FSCM 70418)	2						
	96-13822-7	Body (FSCM 70418)	2						
	96-27069-0	Bulb, 12V (FSCM 70418)	2						
	96-20087-1	Lens (FSCM 70418)	2						
10	057-00-722	Lamp, Clearance, Red (FSCM 70419)	2						
	96-13822-7	Body (FSCM 70418)	2						
	96-27069-0	Bulb (FSCM 70418)	2						
	96-20087-2	Lens (FSCM 70418)	2						
11	052-00-722	Lamp, Clearance, Red (FSCM 70418)	5						
	96-13719-7	Body (FSCM 70418)	5						
	96-27053-0	Bulb (FSCM 70418)	5						
	96-20066-2	Lens (FSCM 70418)	5						
	Comm.	Screw, 10X32X½" LG	10						
12	2693W	Lamp, Back-Up (FSCM 77977)	2						
	00-00265-00001	Body (FSCM 77977)	2						
	05-01156-40000	Bulb, 32 Candlepower (FSCM 77977)	2						
	24-00279-40000	Lens, White (FSCM 77977)	2						
	Comm.	Screw, 10X32X½" LG	4						

Figure 1 Body

Figure 1 Body

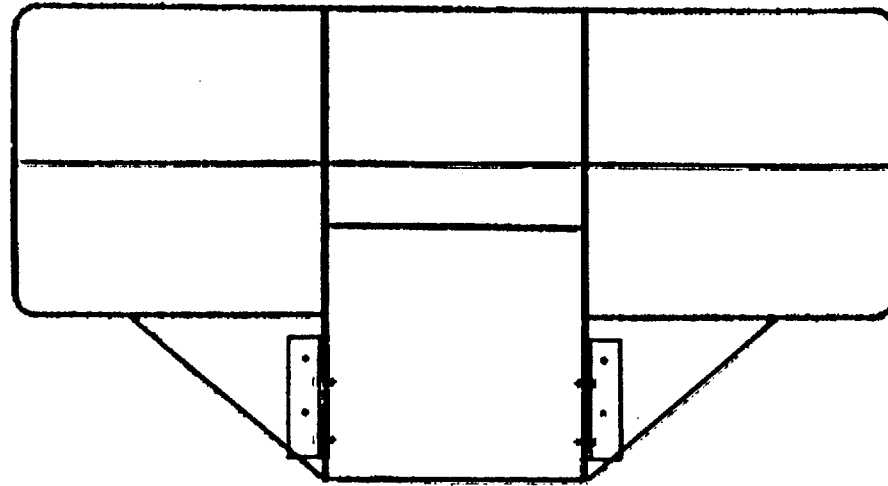
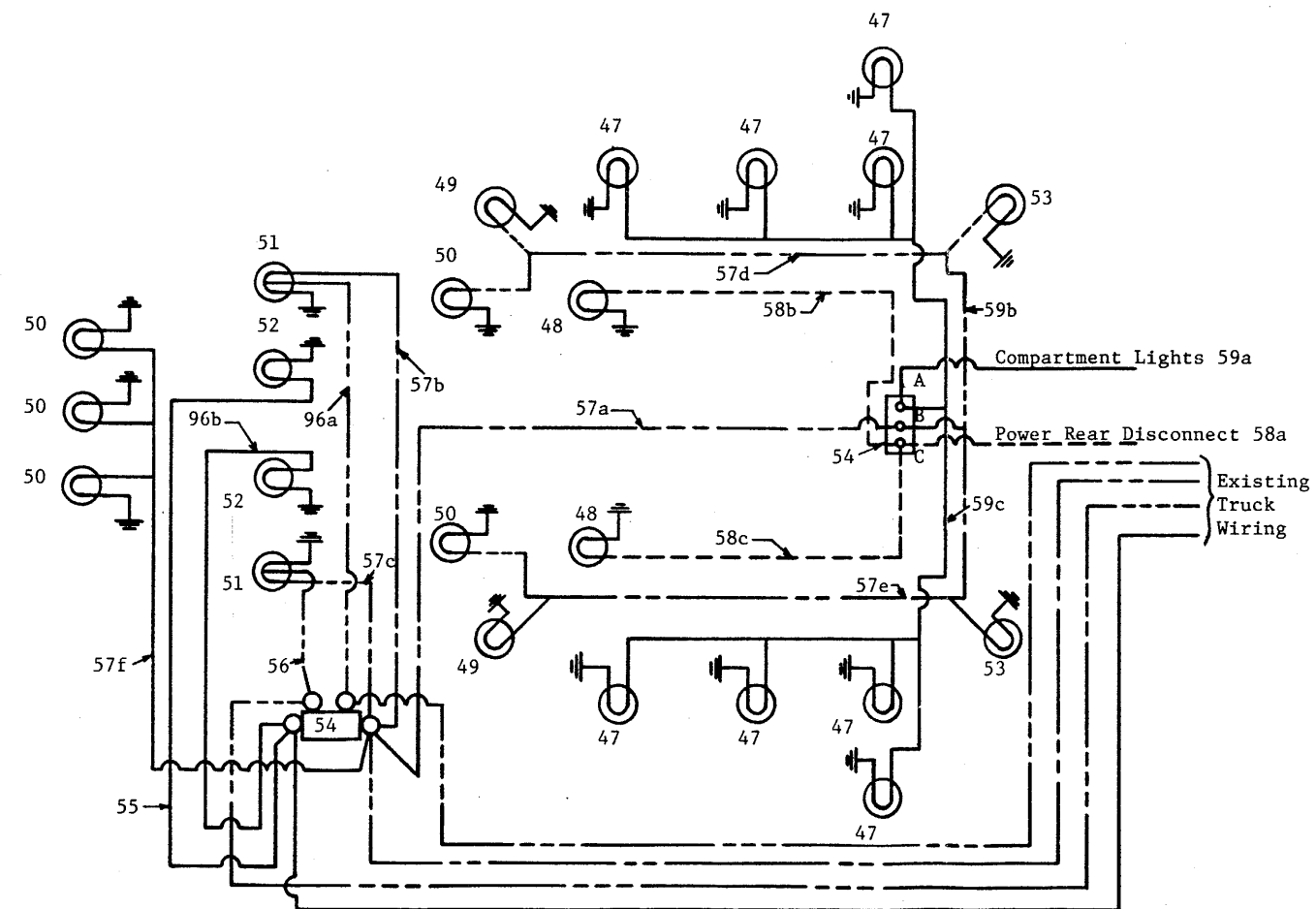


Figure 2 BRUSH GUARD

KFT-003

FIGURE 2 BRUSH GUARD

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	KFT-003	Guard, Brush		1							
2	Comm.	Bolt, $\frac{1}{2}$ IN x 1-3/4 IN		2							
3	Comm.	Washer, Flat, $\frac{1}{2}$ IN		6							
4	Comm.	Washer, Lock, $\frac{1}{2}$ IN		2							
5	Comm.	Nut, Hex Hd., $\frac{1}{2}$ IN		2							
Figure 2 Brush Guard											



- 47. Lamp, Compartment
- 48. Spotlight, Rear
- 49. Lamp, Clearance, Red
- 50. Lamp, Clearance, Red
- 51. Lamp, Tail, Stop & Turn
- 52. Lamp, White
- 53. Lamp, Clearance
- 54. Block, Terminal
- 55. Wire, 04, Harness "H"
- 56. Wire, 03, Harness "I"
- 57a. Wire, 01D, Harness "D"
- 57b. Wire, 01H, Harness "H"
- 57c. Wire, 01I, Harness "I"
- 57d. Wire, 01L, Harness "L"
- 57e. Wire, 01M, Harness "M"
- 57f. Wire, 01S, Harness "S"
- 58a. Wire, 06C, Harness "C"
- 58b. Wire, 06L, Harness "L"
- 58c. Wire, 06M, Harness "M"
- 59a. Wire, 05C, Harness "C"
- 59b. Wire, 05L, Harness "L"
- 59c. Wire, 05M, Harness "M"
- 96a. Wire, 02H, Harness "H"
- 96b. Wire, 02I, Harness "I"

Figure 3 Electrical Schematic
Sheet 1 of 5

DC Body Wiring Schematic

Figure 3 Electrical Schematic

Sheet 1 of 5

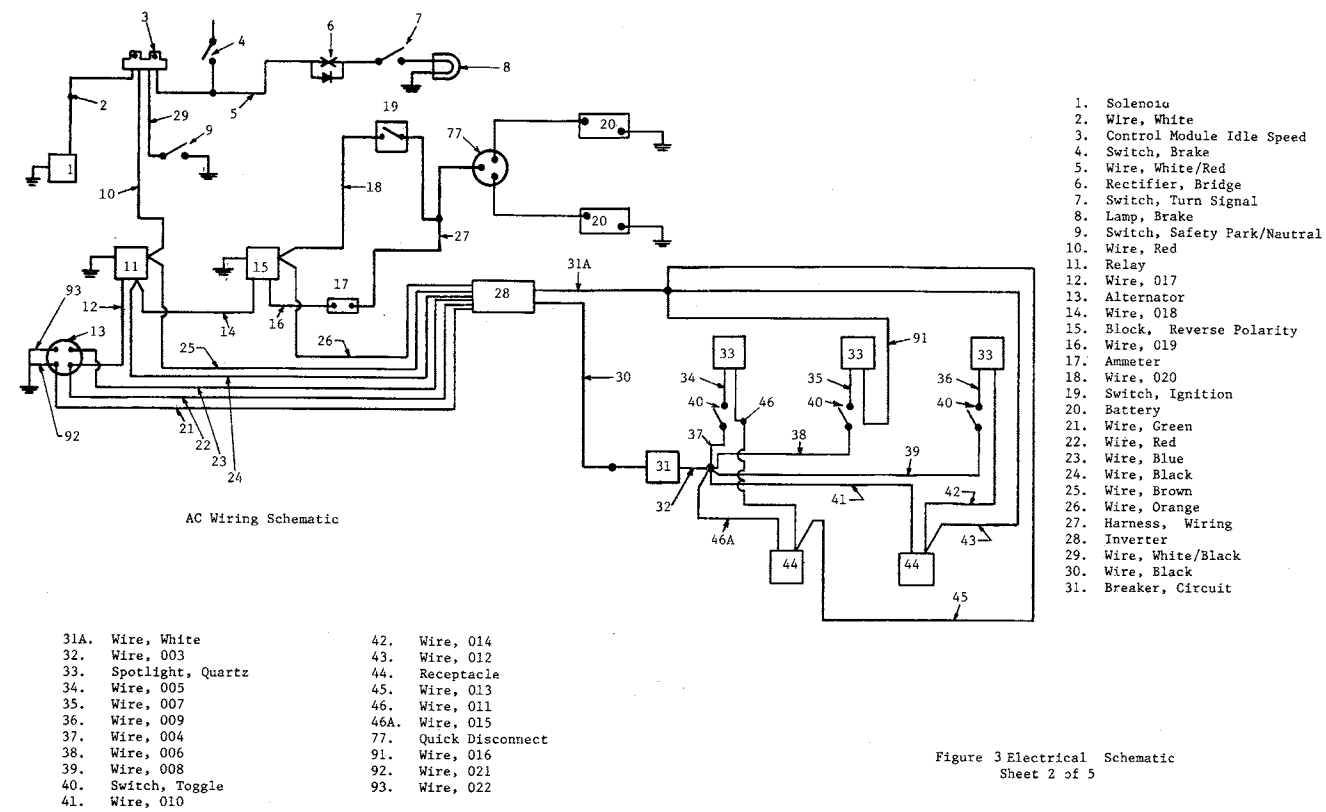


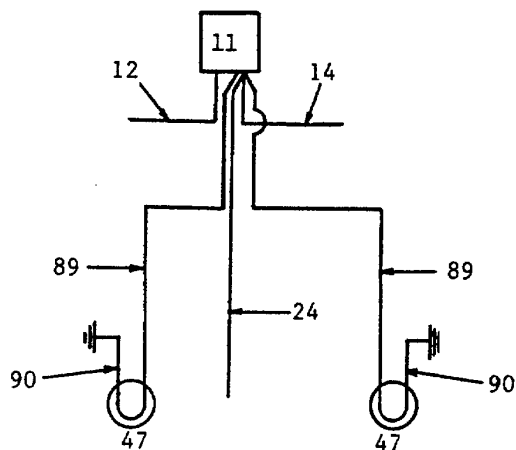
Figure 3 Electrical Schematic
Sheet 2 of 5

1428

426

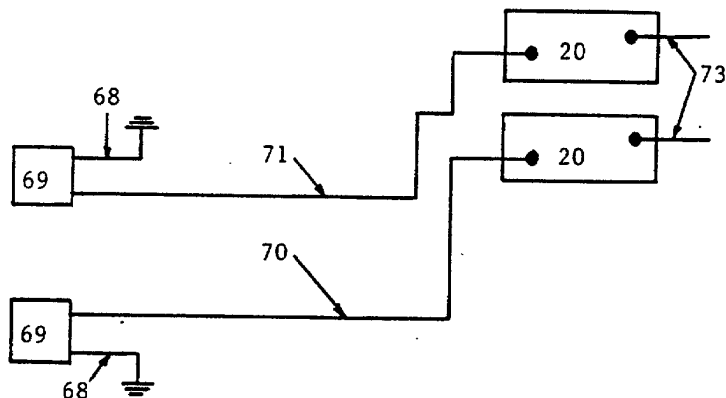
Figure 3 Electrical Schematic

Sheet 2 of 5



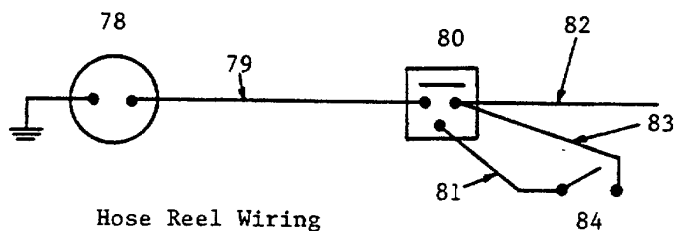
Engine Compartment Lights

- 11. Relay
- 12. Wire, 017, Red
- 14. Wire, 018, Black
- 24. Wire, Black
- 47. Lamp, Compartment
- 89. Wire, 18, Harness "A"
- 90. Wire, 24



Battery Charging System

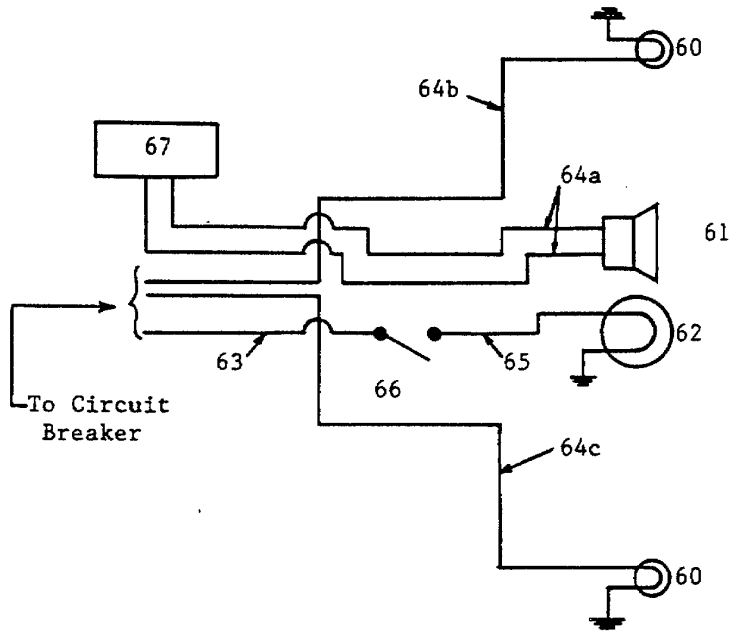
- 20. Battery
- 68. Wire, 12, Harness "G"
- 69. Plug, Charging
- 70. Wire, 11, Harness "F"
- 71. Wire, 10, Harness "F"
- 73. Cable, Ground, 21, Harness "P"



Hose Reel Wiring

- 78. Motor, Hose Reel
- 79. Wire, Black
- 80. Relay
- 81. Wire, 16, Harness "E"
- 82. Wire, 15, Harness "E"
- 83. Wire, 17, Harness "E"
- 84. Wire, Starter

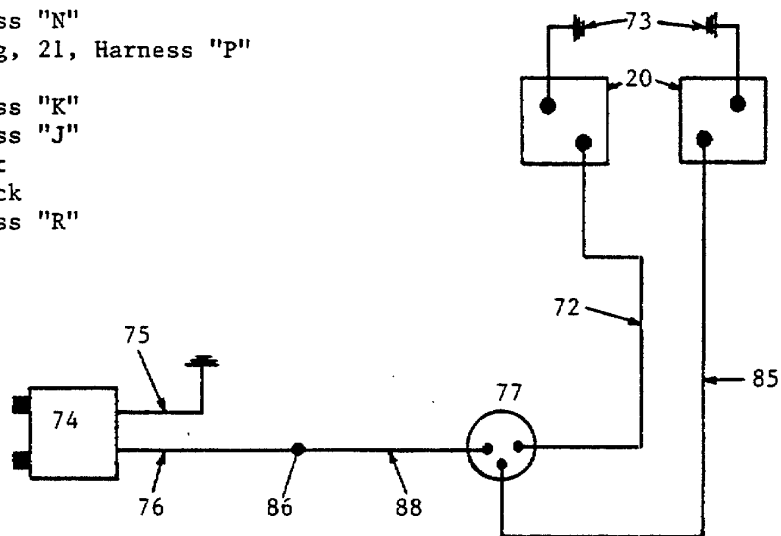
Figure 3 Electrical Schematic



Truck Cab Wiring

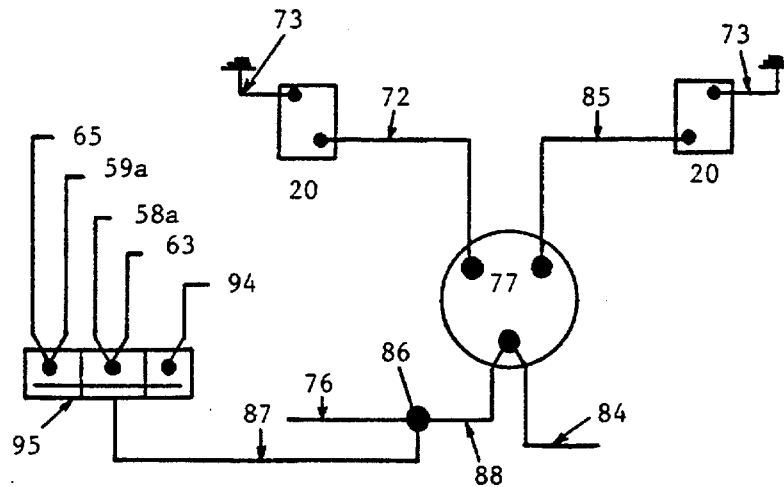
- 60. Spotlight
- 61. Siren
- 62. Beacon
- 63. Wire, 07, Harness "B"
- 64a. Wire, 09a, Harness "B"
- 64b. Wire, 09b, Harness "B"
- 64c. Wire, 09c, Harness "B"
- 65. Wire, 08, Harness "B"
- 66. Switch, Toggle
- 67. Siren and PA Control

- 20. Battery
- 72. Wire, 19, Harness "N"
- 73. Cable, Grounding, 21, Harness "P"
- 74. Plug, Jumper
- 75. Wire, 13, Harness "K"
- 76. Wire, 14, Harness "J"
- 77. Quick Disconnect
- 86. 3/8" Common Block
- 88. Wire, 22, Harness "R"



Jump Start Wiring

Figure 3 Electrical Schematic Sheet 4 of 5



Quick Disconnect Wiring

- 20. Battery
- 58a. Wire, 06c, Harness "C"
- 59a. Wire, 05c, Harness "C"
- 63. Wire, 07, Harness "B"
- 65. Wire, 08, Harness "B"
- 72. Wire, 19, Harness "N"
- 73. Cable, Grounding, 21, Harness "p"
- 76. Wire, 14, Harness "J"
- 77. Quick Disconnect
- 84. Wire, Starter
- 85. Wire, 20, Harness "O"
- 86. 3/8" Common Block
- 87. Wire, 23, Harness "Q"
- 88. Wire, 22, Harness "R"
- 94. Wire, 25
- 95. Board, Circuit Breaker

Figure 3 Electrical Schematic

Sheet 5 of 5

FIGURE 3

ITEM NO.	PART NO.	FSCM NO.	DESCRIPTION	QTY.
1	4685-43051	57054	Solenoid	1
2	2283-00014	57054	Harness, Input, Power	1
2a	REFERENCE	57054	*Wire, White, 14 Awg.	1
3	4-308	57054	Idle Speed, Control Module	1
4	460-578-C1	31007	Switch Brake	1
5	REFERENCE	57054	*Wire, White/Red, 14 Awg.	1
6	2-32	57054	Rectifier, Bridge	1
7	471 302 C93	31007	Switch, Turn Signal	1
8	CE-650-ST	77977	Lamp, Brake	2
9	KFT-055	59556	Switch, Safety Park/Neutral	1
10	REFERENCE	57054	*Wire, Red, 14 Awg.	1
11	4-7211	57054	Relay	1
12	KFT-056	59556	Wire, 017, Red, 4 Awg. (Relay to Alternator)	1
13	4725J	33510	Alternator	1
14	KFT-057	59556	Wire, 018, Black, 4 Awg. (Relay to Reverse Polarity Block)	1
15	9-4	57054	Block, Reverse Polarity	1
16	KFT-058	59556	Wire, 019, Black, 4 Awg. (Reverse Polarity Block to Ammeter)	1
17	15402	57054	Ammeter	1
18	KFT-059	59556	Wire, 020, Red, 14 Awg. (Reverse Polarity Block to Ignition Switch)	1
19	429-621-C1	31007	Switch, Ignition	1
20	KFT-024	59556	Battery Titan B168D	2
21	REFERENCE	57054	*Wire, Green, 4 Awg.	1
22	REFERENCE	57054	*Wire, Red, 4 Awg.	1
23	REFERENCE	57054	*Wire, Blue, 14 Awg.	1
24	REFERENCE	57054	*Wire, Black, 4 Awg.	3
25	REFERENCE	57054	*Wire, Brown, 14 Awg.	1
26	REFERENCE	57054	*Wire, Orange, 14 Awg.	1
27	STANDARD	31007	Harness, Wiring	1
28	A30-70D	57054	Inverter	1
29	REFERENCE	57054	*Wire, White/Black, 14 Awg.	1
30	KFT-060	59556	Wire, Black, 8 Awg. (Inverter to Circuit Breaker)	1
31	KFT-061	59556	Breaker, Circuit, 30 Amp	1

FIGURE 3

ITEM NO.	PART NO.	FSCM NO.	DESCRIPTION	QTY.
31a	KFT-062	59556	Wire, White, 8 Awg. (Inverter to Receptacle)	1
32	KFT-063	59556	Wire, 003, Black, 8 Awg. (Circuit Breaker to Receptacles and Lights)	1
33	605	*****	Spotlight, Quartz	2
34	KFT-064	59556	Wire, 005, Black, 14 Awg. (Spotlight to Toggle Switch)	1
35	KFT-065	59556	Wire, 007, Black, 14 Awg. (Spotlight to Toggle Switch)	1
36	KFT-066	59556	Wire, 009, Black, 14 Awg. (Spotlight to Toggle Switch)	1
37	KFT-067	59556	Wire, 004, Black, 14 Awg. (Toggle Switch to 3/8" Common Block)	1
38	KFT-068	59556	Wire, 006, Black, 14 Awg. (Toggle Switch to 3/8" Common Block)	1
39	KFT-069	59556	Wire, 008, Black, 14 Awg. (Toggle Switch to 3/8" Common Block)	1
40	KFT-070	59556	Switch, Toggle	3
41	KFT-071	59556	Wire, 010, Black, 12 Awg. (Receptacle to 3/8" Common Block)	1
42	KFT-072	59556	Wire, 014, White, 14 Awg. (Spotlight to Receptacle)	1
43	KFT-073	59556	Wire, 012, White, 12 Awg. (Inverter to Receptacle)	1
44	LEV5800	75582	Receptacle	3
45	KFT-074	59556	Wire, 013, White, 12 Awg. (Inverter to Receptacle)	1
46	KFT-075	59556	Wire, 011, Black, 12 Awg. (Receptacle to Spotlight)	1
46a	KFT-076	59556	Wire, 015, White, 14 Awg. (Receptacle to 3/8" Common Block)	1
47	391C	77977	Lamp, Compartment	8
48	KFT-026	59556	Spotlight, Rear (AG-R)	2
49	057-00-722	77977	Lamp, Clearance, Red	3
50	057-00-722	77977	Lamp, Clearance, Red	2
51	4122	77977	Lamp, Tail, Stop/Turn	2
52	2693W	76123	Lamp, White	2
53	057-00-712	77977	Lamp, Clearance, Amber	2
54	KFT-077	59556	Block, Terminal	1
55	KFT-078	59556	Wire, 04, White, 14 Awg. (Harness "H")	1

FIGURE 3

ITEM NO.	PART NO.	FSCM NO.	DESCRIPTION	QTY.
56	KFT-079	59556	Wire, 03, White, 14 Awg. (Harness "I")	1
57a	KFT-080	59556	Wire, 01D, White, 14 Awg. (Harness "D")	1
57b	KFT-081	59556	Wire, 01H, White, 14 Awg. (Harness "H")	1
57c	KFT-082	59556	Wire, 01I, White, 14 Awg. (Harness "I")	1
57d	KFT-083	59556	Wire, 01L, White, 14 Awg. (Harness "L")	1
57e	KFT-084	59556	Wire, 01M, White, 14 Awg. (Harness "M")	1
57f	KFT-085	59556	Wire, 01S, White, 14 Awg. (Harness "S")	1
58a	KFT-086	59556	Wire, 06C, White, 14 Awg. (Harness "C")	1
58b	KFT-087	59556	Wire, 06L, White, 14 Awg. (Harness "L")	1
58c	KFT-088	59556	Wire, 06M, White, 14 Awg. (Harness "M")	1
59a	KFT-089	59556	Wire, 05C, White, 14 Awg. (Harness "C")	1
60	225-V	78977	Spotlight	2
61	TS-100	98905	Siren, Speaker	1
62	SW-4	76123	Beacon	1
63	KFT-092	59556	Wire, 07, White, 14 Awg. (Harness "B")	1
64a	KFT-093	59556	Wire, 09a, White, 14 Awg. (Harness "B")	1
64b	KFT-094	59556	Wire, 09b, White, 14 Awg. (Harness "B")	1
64c	KFT-095	59556	Wire, 09c, White, 14 Awg. (Harness "B")	1
65	KFT-096	59556	Wire, 08, White, 14 Awg. (Harness "B")	1
66	KFT-097	59556	Switch, Toggle	1
67	PA-300*	98905	Siren and PA Control	1
68	KFT-098	59556	Wire, 12, White, 12 Awg. (Harness "G")	2
69	4621B	60481	Plug, Charging	1
70	KFT-099	59556	Wire, 11, White, 12 Awg. (Harness "F")	1

FIGURE 3

ITEM NO.	PART NO.	FSCM NO.	DESCRIPTION	QTY.
71	KFT-100	59556	Wire, 10, White, 12 Awg. (Harness "F")	1
72	KFT-101	59556	Wire, 19, ¹ / ₀ (Harness "N")	1
73	KFT-102	59556	Cable, Grounding, 21, ¹ / ₀ (Harness "P")	2
74	KFT-103	59556	Plug, Jumper	1
75	KFT-104	59556	Wire, 13, ¹ / ₀ (Harness "K")	1
76	KFT-105	59556	Wire, 14, ¹ / ₀ (Harness "J")	1
77	KFT-106	59556	Disconnect, Quick	1
78	ISO-72-23	52659	Motor, Hose Reel	1
79	COMMERCIAL	52659	Wire, Black, 4 Awg.	1
80	COMMERCIAL	52659	Relay	1
81	KFT-107	59556	Wire, 16, White, 4 Awg. (Harness "E")	1
82	KFT-108	59556	Wire, 15, White, 4 Awg. (Harness "E")	1
83	KFT-109	59556	Wire, 17, White, 4 Awg. (Harness "E")	1
84	572-525-C92	31007	Wire, Start	1
85	KFT-110	59556	Wire, 20, ¹ / ₀ (Harness "O")	1
86	364-852-C2	31007	3/8" Common Block	1
87	KFT-111	59556	Wire, 23, 12 Awg. (Harness "Q")	1
88	KFT-112	59556	Wire, 22, ¹ / ₀ Awg. (Harness "R")	1
89	KFT-113	59556	Wire, 18, 14 Awg. (Harness "A")	2
90	REFERENCE	57054	Wire, 24, 14 Awg.	1
91	KFT-114	59556	Wire, 016, 14 Awg. (3/8" Common Block to Spotlight)	1
92	KFT-115	59556	Wire, 021, 14 Awg. (Alternator to Ground)	1
93	KFT-116	59556	Wire, 022, 4 Awg.	1
94	REFERENCE	98905	Wire, 25, 14 Awg.	1
95	KFT-117	59556	Broad, Circuit Breaker	1
96a	KFT-118	59556	Wire, 02H, 14 Awg. (Harness "H")	1
96b	KFT-119	59556	Wire, 02I, 14 Awg. (Harness "I")	1

FIGURE 3

DC Wiring

Item No.	Harness
55	H
56	I
57a	D
57b	H
57c	I
57d	L
57e	M
57f	S
58a	C
58b	L
58c	M
59a	C
59b	L
59c	M
63	B
64a	B
64b	B
64c	B
65	B
68	G
70	F
71	F
72	N
73	P
75	K
76	J
81	E
82	E
83	E
85	O
87	Q
88	R
89	A
96a	H
96b	I

90 Light
 94 Siren
 79 Motor

Supplied with
Equipment.

FIGURE 3

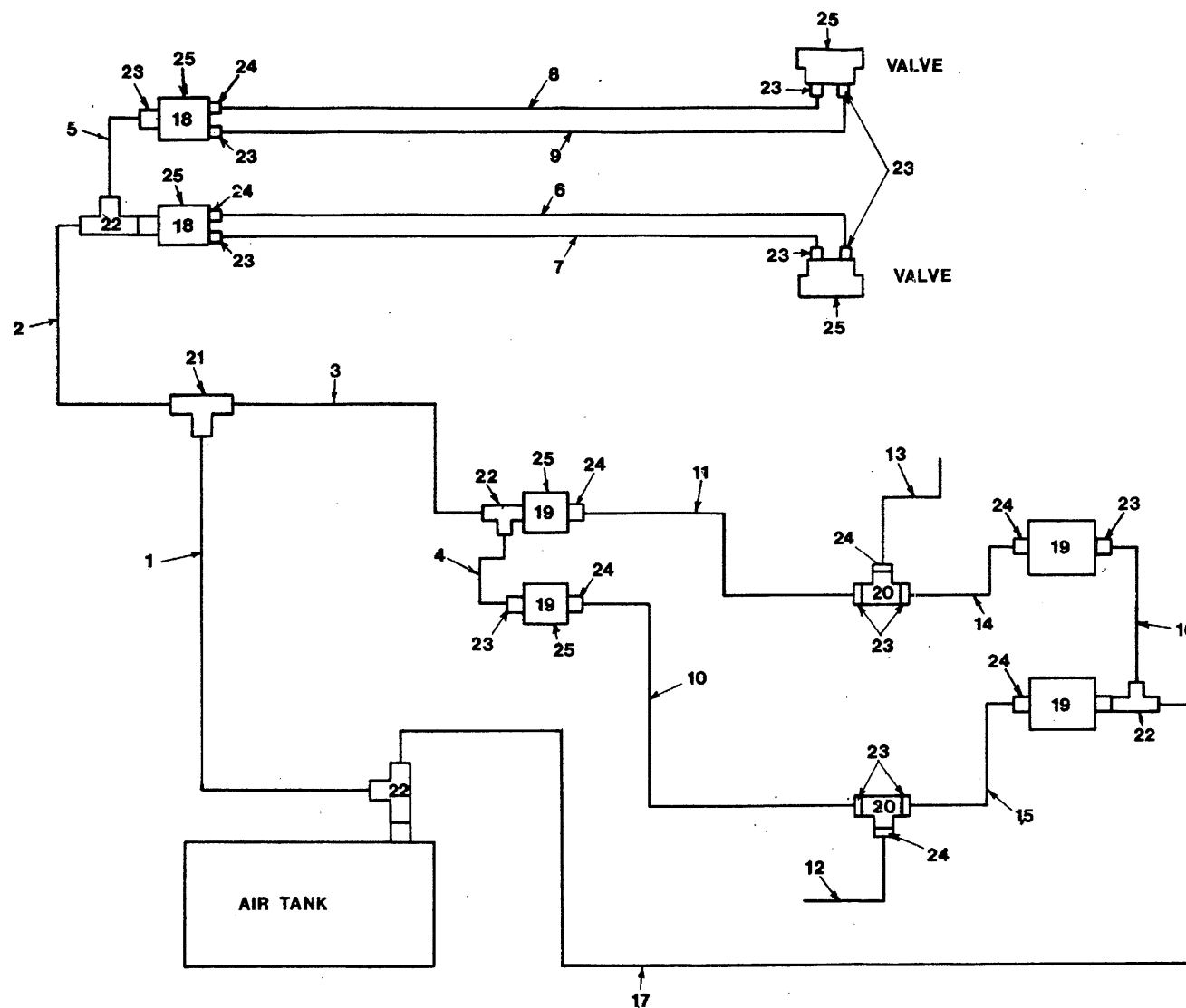
QTY. HARNESSES PER TRK.	HARNESSES	NO. WIRES PER HNS.	WIRE GAGE	WIRE NO.	WIRE LENGTH	D.C. HARNESS DESCRIPTION	LOOM	MANUAL PART NO.
2	A	1	14	18	56"	Engine Compartment Lights	48"	89
1	B	1 2 1 1 1	14 14 14 14 14	08 09a 07 09b 09c	168" 168" 168" 132" 132"	Console to Cab Roof	142" 12"	65 64a 63 64b 64c
1	C	1 1	14 14	05C 06C	108" 108"	Console to Center Terminal Strip	78"	59a 58a
1	D	1	14	01D	84"	Ctr. Terminal Strip to Rear T.S.	78"	57a
1	E	1 1 1	4 4 4	15 16 17	120" 78" 78"	Hose Reel Power and Switch	112" 20"	82 81 83
1	F	1 1	12 12	10 11	180" 180"	Charging Plug (Power)	156"	71 70
1	G	2	12	12	12"	Charging Plug (Ground)	8"	68
1	H	1 1 1	14 14 14	01H 02H 04	60" 60" 60"	Tail Lights (Left Side)	48"	57b 96a 55
1	I	1 1 1	14 14 14	01I 02I 03	102" 60" 60"	Tail Lights (Right Side)	52" 52"	57c 96b 56
1	J	1	1/0	14	216"	Jumper Plug (Power)	204"	76
1	K	1	1/0	13	16"	Jumper Plug (Ground)	12"	75
1	L	1 1 1	14 14 14	01L 05L 06L	254" 197" 214"	Main Body (Left Side)	152"- $\frac{1}{4}$ " 40 $\frac{1}{2}$ "-5/16" 59"-3/16"	57d 59b 58b
1	M	1 1 1	14 14 14	01M 05M 06M	218" 161" 178"	Main Body (Right Side)	116"- $\frac{1}{4}$ " 40 $\frac{1}{2}$ "-5/16" 59"-3/16"	57e 59c 58c

FIGURE 3

FIGURE 3

QTY. HARNESSES PER TRK.	HARNESSES	NO. WIRES PER HNS.	WIRE GAGE	WIRE NO.	WIRE LENGTH	D.C. HARNESS DESCRIPTION	LOOM	MANUAL PART NO.
1	N	1	1/0	19	93"	Battery to Disconnect (Power)	90"-5/8"	72
1	O	1	1/0	20	93"	Battery to Disconnect (Power)	90"-5/8"	85
2	P	1	1/0	21	36"	Battery to Frame (Ground)	33"-5/8"	73
1	Q	1	12	23	16"	3/8" Common Post to Ckt. Bkrs.	---	87
1	R	1/0	22	24"	24"	Disconnect to 3/8" Common Post	---	88
1	S	1	14	01S	60"	To Rear Lights	52"	57f

FIGURE 3



1. Airline marked "A"
2. Airline marked "B"
3. Airline marked "C"
4. Airline marked "D"
5. Airline marked "E"
6. Airline marked "F"
7. Airline marked "G"
8. Airline marked "H"
9. Airline marked "I"
10. Airline marked "J"
11. Airline marked "K"
12. Airline marked "AA"
13. Airline marked "BB"
14. Airline marked "CC"
15. Airline marked "DD"
16. Airline marked "EE"
17. Airline marked "FF"
18. Air switch
19. Air switch
20. Shuttle valve tee
21. Brass tee
22. Tee fitting
23. Straight fitting
24. 90° fitting
25. Safety cover switch

FIGURE 4 SKID UNIT AIR CHARGING SYSTEM

FIGURE 4 SKID UNIT AIR CHARGING SYSTEM

ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK	ITEM NO.	PART NUMBER	DESCRIPTION	Y R	QTY	REC STK
1	KFT-029	Airline, 1/4 IN. "A"		1							
2	KFT-030	Airline, 1/4 IN. "B"		1							
3	KFT-031	Airline, 1/4 IN. "C"		1							
4	KFT-032	Airline, 1/4 IN. "D"		1							
5	KFT-033	Airline, 1/4 IN. "E"		1							
6	KFT-034	Airline, 1/4 IN. "F"		1							
7	KFT-035	Airline, 1/4 IN. "G"		1							
8	KFT-036	Airline, 1/4 IN. "H"		1							
9	KFT-037	Airline, 1/4 IN. "I"		1							
10	KFT-038	Airline, 1/4 IN. "J"		1							
11	KFT-039	Airline, 1/4 IN. "K"		1							
12	KFT-040	Airline, 1/4 IN. "AA"		1							
13	KFT-041	Airline, 1/4 IN. "BB"		1							
14	KFT-042	Airline, 1/4 IN. "CC"		1							
15	KFT-043	Airline, 1/4 IN. "DD"		1							
16	KFT-044	Airline, 1/4 IN. "EE"		1							
17	KFT-045	Airline, 1/4 IN. "FF"		1							
18	KFT-046	Switch, Air, Clippard MJTV-4		2							
19	KFT-047	Switch, Air, Clippard MJTV-3		4							
20	KFT-048	Tee, Valve, Shuttle Clippard MJSV-1		2							
21	KFT-049	Tee, Brass, 1/4 IN.		1							
22	KFT-050	Fitting, Tee, 271-NTA-4-2		4							
23	KFT-051	Fitting, Straight 68-NTA-4-2		13							
24	KFT-052	Fitting, 90° 269-NTA-4-2		8							
25	KFT-053	Safety Cover, Switch MS-2S2241		6							
Skid Unit Air Charging System											
Figure 4											

FIGURE 5
305-500 LAMP,
QUARTZ
With Telescoping Pole

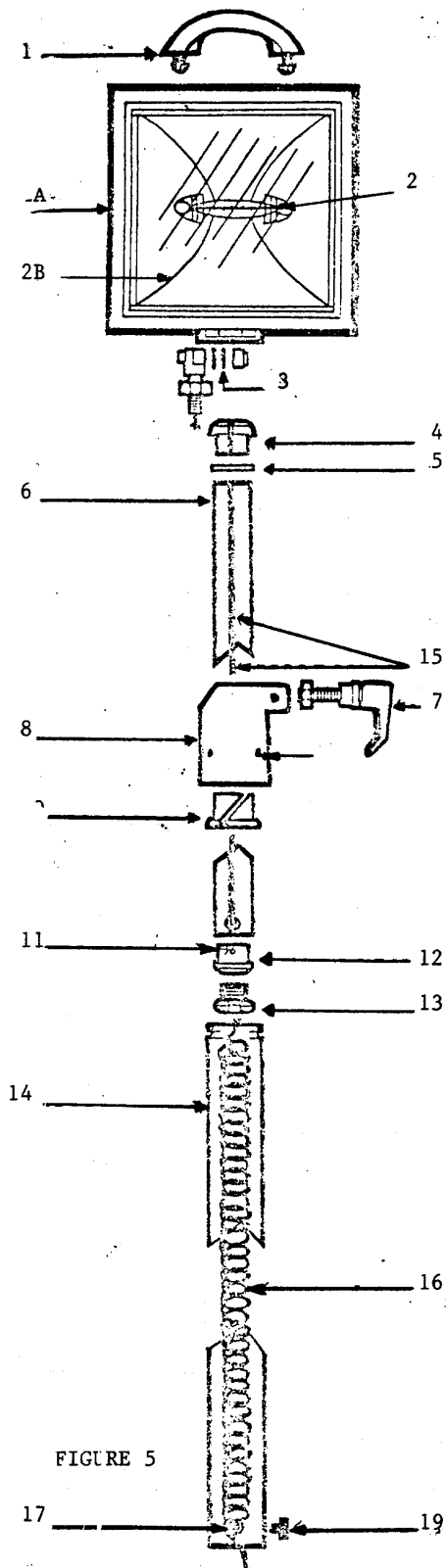


FIGURE 5

NO.	PART NO.	PART
1	1-1	handle
2	1-2A	fixture lite 500 watt fixture
2A	05	Fixture Head (Includes Lens, Bulb, Housing)
2B	1-500-G	Lens, Glass
3	1-3	nylon washers
4	1-4	top bushing - inner pole
5	1-5	rubber "o" ring
*	6	inner pole / 4' standard length
7	1-7	kwik release handle - with nut
8	1-8	clamp casting
9	1-9	set screws 1/4 X 20 X 1/4
10	1-10	nyliner inner top pole sleeve
11	1-11	set screws CS 8 X 32
12	1-12	lower bushing top pole
13	1-13	strain relief
**	14	outer pole / 5' standard length
15	1-15	16/3 SJO 36" straight cord
16	1-16	coil cord 16/3 SJO < 12' length
17	1-17	strain relief outer bottom pole
19	1-9	set screws 1/4 X 20 X 1/4
→ Not Shown :		
	100	Bracket, Bottom, Mounting
	1-500	500 watt replacement bulb
* standard length 4'; if special length required... ...please indicate length when ordering.		
** standard length 5'; if special length required... ...please indicate length when ordering.		

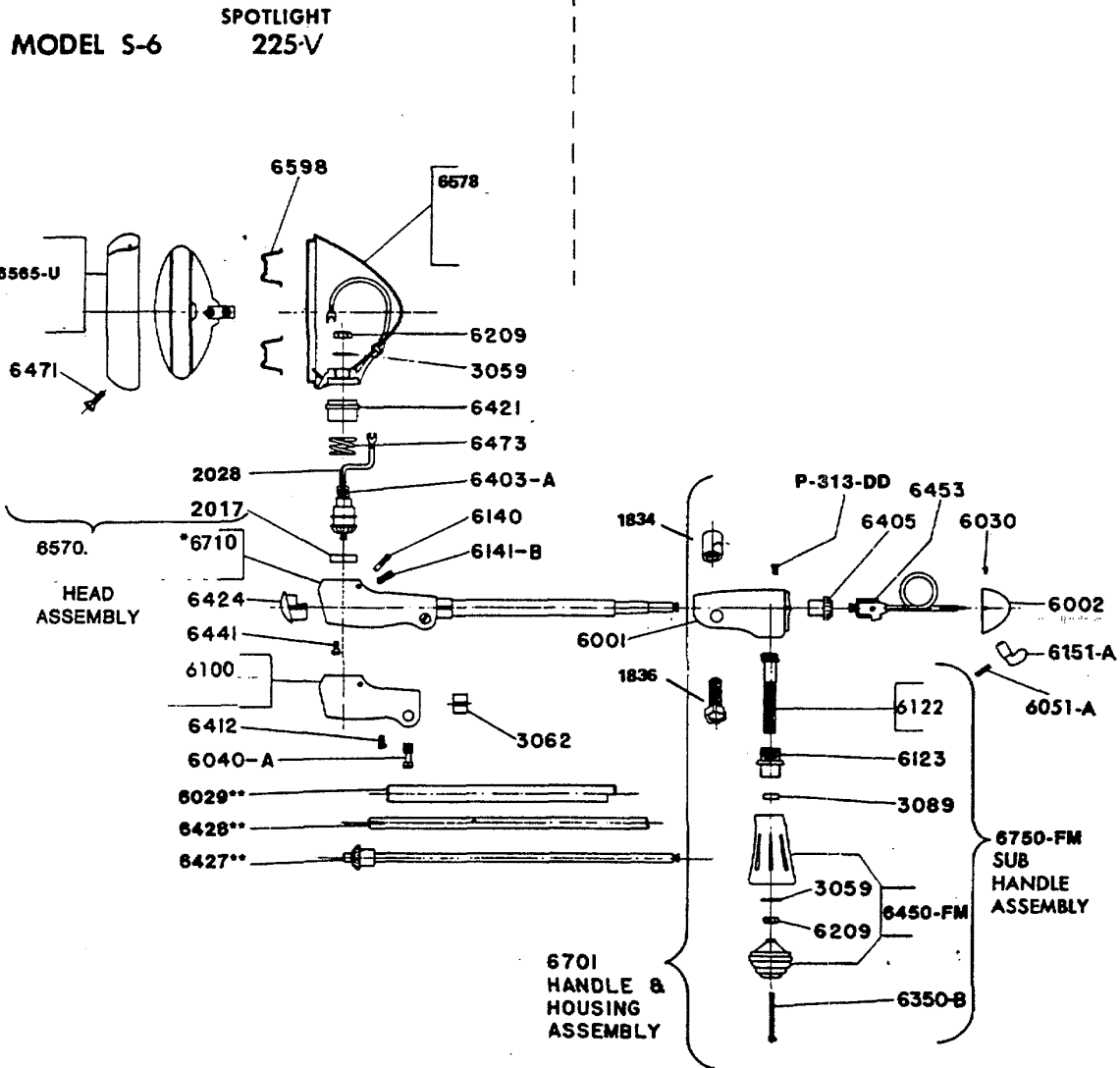
FSCM 7F200

FIGURE 6 SPOTLIGHT



UNITY MANUFACTURING CO • 1260 N. CLYBOURN AVE. • CHICAGO, IL 60610 • PHONE: 312-943-5200

PARTS SHEET



FSCM 78977

FIGURE 6 SPOTLIGHT

PART
NUMBER DESCRIPTION

PART
NUMBER DESCRIPTION

P-313-DD Screw

2017 Nylon Washer
2028 Wire Assy.

3059 Washer
3062 Bushing
3089 Felt Washer

6002-V SW. Cap
6029-V Tube
6030 Screw
6040-A Screw

6100 Housing-Long

6122 Pinion
6123 Bushing
6140 Pin
6141-B Screw

6209 Nut
6350-B Screw
6403-A Headpost Assy.
6405 Gear
6412 Screw
6421 Bushing
6424 Plug
6427-V Rod & Gear
6428-V Tube
6441 Screw
6450-FM Upper-Lower Handle
(Black)
6453 Switch & Wire
6471 Screw
6473 Spring
6565-U Ring Assy. 225.

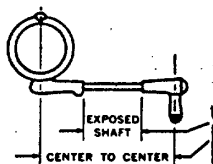
6570 Head Assy. 225

6578 Shell Assy. 225

6598 Spring
6701 Handle & Housing Assy
6710-V Housing & Tube Assy

6750-FM Sub Handle Assy

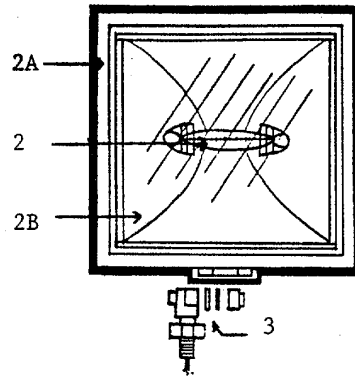
1834 Wedge
1836 Wedge Screw



SPOTLIGHT LENGTHS

V
7 1/4"
13"

FIGURE 7
605-500 LAMP, QUARTZ
500 WATT



NO.	PART NO.	PART
2	1-2A	Fixture B 500 Watt
2A	05	Fixture Head (Includes Lens, Bulb and Housing)
2B	1-500-G	Lens, Glass
3	1-3	Nylon Washers

*NOT SHOWN:

1-500	500 Watt Replacement Bulb
-------	---------------------------

FSCM 7F200

BLACKHAWK**Porto-Power. RESCUE EQUIPMENT** ILLUSTRATED PARTS BREAKDOWN

Porto-Power rescue equipment is being used today by fire, police and rescue squads...also in industrial plants and in military applications to save lives when minutes and seconds are important!



New 65066 Porto-Power "SS" 10-Ton Deluxe Rescue Set features "SS" tubing and attachments

This new deluxe 10-ton rescue set with the capability for providing big power in compact spaces. Spreader toes lift heavy machinery, elevators, etc. "Wedgie" and "Spred" rams open car doors, move steering columns, bumpers and obstructing metal. With this set, you push and spread various materials to facilitate fast and efficient rescue operations. Three powerful rams are included — the "Wedgie" ram, the "Spred" ram and a powerful 10-ton ram with a 6" stroke which is used with attachments and tubing to provide powerful force application where it is needed. Durable wooden case included.

- 65073 - Case, Wood
- 65420 - Pump, Manual
- 65445 - Ram, Wedgie
- 65447 - Ram, Spread
- 65452 - Ram, SS
- 65531 - Connector, Tube, Lock-on
- 65543 - Toe, Ram
- 65593 - Hose, Hydraulic 6 Feet
- 65605 - Tube, Extension, SS 5"
- 65610 - Tube, Extension, SS 10"
- 65618 - Tube, Extension, SS 18"
- 65628 - Tube, Extension, SS 28"
- 65637 - Saddle, Serrated, SS 10-T
- 65638 - Base, V, 90°, SS 10-T



23

INDEX

-A-

Accelerator, Control Throttle	1188
Adapter, Transmission to Engine	1238
Adjuster, Auto-Slack Repair Kits - Rear Axle	1071
Alternator, 130 AMP Leece-Neville	1397
Angle, Transfer Case Mounting	1237
AT545 Transmission Pictorial Index	1249
Axle, Front, Driving, Dana FA 64 9000 lbs	1031
Axle, Rear, IH/Dana	1305

-B-

Battery Cable and Mounting with Frame Mounted Batteries	1157
Belt, Seat.....	1348
Body Schematic.....	1423
Bracket, Engine Mounting Rear	1189
Bracket, Manifold Block, Button Plug, Chart	1059
Brake, Mounting, Rear	1078
Brake, Rear	1079
Brakes.....	1043
Brush Guard.....	1425
Bumper, Front.....	1026

-C-

Cab and Body	1316
Cable and Mounting, Tachometer	1146
Cable, Hood.....	1179
Cable, Speedometer Drive.....	1182
Chamber, Air Brake MGM 30 in. - Emergency	1060
Chamber, Air Brake MGM 30 in. - Service	1072
Chart, Clamp, Cable Strap, Union, Plug, Fittings, Grommet, Connectors, Nipple, Adapter, Tee, Elbow, Hose, Tube and Conduit	1313
Chart, Connections, Elbows and Fittings.....	1062
Chart, Hoses and Fittings.....	1085
Chassis Springs	1042
Clamps, Extension Clips - Standard	1126
Cleaner, Air Mounting and Piping	1218
Clips, Extensions and Straps - Standard	1121
Column, Steering and Wheel - Standard	1088
Compressor, Air Midland Ross EL 740	1048
Compressor, Mounting and Hosing Air Midland Ross EL 740	1053
Compressor, Mounting and Piping, Air	1045
Compressor, Piping, Air and Governor Mounting	1043
Connector Bodies and Terminals - Standard	1119
Consolidation of Control Valve Body	1300
Control Valve Body and Separator Plate Reference	1297
Control Valve Body Assembly	1274
Control Valve Body Rework	1295

-C CONTINUED -

Control, Auto Transmission Mounting	1231
Control, Transfer Case Lever	1234
Cooler, Oil Filter	1210
Cover, Oil Pan Insulator	1191
Crankcase and Related Parts	1204
Crossmember, Engine Mounting Front - Standard	1186
Crossmember, Intermediate	1028
Crossmember, Rear Spring Mounting	1302

-D-

Deflector, Stone	1177
Door, Cab	1329
Dry Chemical Nozzle	1388
Dry Chemical/AFFF System Schematic	1361
Dryer, Air-Breakmaster Model 62	1077
Dryer, Mounting and Hosing, Air-Breakmaster Model 62	1075
Duct, Heater	1349
Dynamote Inverter	1400

-E-

Electrical	1117
Electronic Schematic	1427
Emblem, Model Designation	1322
Engine	1184
Engine Shutdown.....	1220
Engine Warning Light Installation	1041
Exhaust.....	1114

-F-

Fan, Clutch Drive Mounting	1215
Fender Extension and Hood Bumper Installation	1175
Fender, Rubber Extension.....	1178
Filter, Fuel Mounting	1198
Filter, Oil	1240
First Clutch	1269
Fittings, Clamps, Hoses, Conduit, Cable Straps, Shut-Off Valves, Button Plugs, Grommets and O-Rings	1316
Flanges.....	1038
Flanges	1243
Flasher, Fuses and Circuit Breakers	1134
Forward Clutch and Turbine Shaft	1260
Fourth Clutch	1262
Fourth Clutch Housing Assembly	1291
Fourth Clutch Trim in Reverse	1294
Frame	1026
Front Axle	1031
Front Sheet Metal.	1170
Front Support	
Fuel Tanks	1308

-G-

Gasket Sets, Engine	1194
Gauge, Oil Level	1247
Gauge, Switch Valve Chart.....	1081
Gauge, Temperature Sender.....	1242
Gear Unit and Output Shaft	1266
Gear, Steering - Ross HFB 64	1097
Gear, Steering and Drag Link Installation	1091
General Information, S-Series Chassis	1002
Governor, Air Compressor	1050
Governor, Fuel Injection Pump	1206
Guard, Splash.....	1172

-H-

Handle, Grab	1321
Harness and Cables - Standard.....	1129
Harness, Automatic Transmission Wiring, Oil Temperature Gauge, Switches, Back-Up Light, Neutral Safety	1138
Harness, Engine Wiring for D9.OL Engine with 12V Start	1151
Harness, Headlights, Turn Signals, Horns	1168
Harness, Stop, Tail, Turn and Back-Up Light	1141
Harness, Turn Signal Light and Horn Hi-Note	1135
Head, Cylinder and Related Parts.....	1199
Heater.....	1341
Hood and Grille.....	1170
Horn, Mounting, Dual Air.....	1165
Horns, Buzzers, Warning.....	1128
Hose Reel.....	1392
Hoses, Tubes, Clamps, Chart	1069
Hosing, Oil Filter	1239
Hosing, Radiator and Deaeration Tank Mounting.....	1216
Hurst Jaws of Life.....	1407
Hurst Power Unit.....	1411
Hydraulic Rescue Kit, 10 Ton	1445

-I-

Index, Chassis Group.....	1001
Injector, Fuel Nozzle and Nozzle Holder	1195

-K-

Kit, Service	1255
--------------------	------

-L-

Lamp, Quartz with Telescoping Pole	1441
Lamp, Quartz, 500 Watt	1444
Lamps, Bulbs, Indicators - Standard.....	1127
Light, Clearance, Roof Mounting	1161
Light, Dome	1162

-L CONTINUED -

Light, Head with Bezel	1145
Light, Instrument Panel, Product Graphic	1130
Light, License Plate.....	1156
Light, Stop, Tail, Turn.....	1155
Light, Turn Signal and Parking	1144
Light, Warning, Installation.....	1039
Light, Warning, Installation.....	1041
Link, Drag	1096

-M-

Manifold, Intake and Crossover	1214
Mat, Floor	1319
Mirror, Rear View, Beach - Standard	1339
Motor, Starting 12V Delco	1148
Mounting, Cab, Low	1328
Muffler, Tail Pipe, Exhaust and Mounting	1114
MY'79 Metric Converter	1288

-O-

Oil Pan, Oil Filter, Governor and Speedometer Drive Gears	1279
---	------

-P-

Panel, Back and Underbody	1324
Panel, Instrument	1334
Panel, Instrument Cluster with Speedometer, Tachometer, Gauges, and Bezels	1132
Panel, Roof and Cowl.....	1323
Panel, Roof, Inner.....	1327
Panel, Side	1326
Panel, Underbody	1325
Partner Saw and Attachments	1422
Piping, Air Compressor and Governor	1223
Piping, Fuel Injector	1201
Plate, Master Cylinder Mounting	1340
Product Graphic and Miscellaneous Graphics	1180
Product Graphics, Shifting	1229
Products Graphic, Shifting Diagram	1241
Propeller Shafts	1099
Pulley, Belt, Alternator and Mounting for D9.OL Engine	1164
Pulley, Idler Belt and Mounting	1225
Pump, Fuel Injection	1196
Pump, Fuel Injection and Mounting	1203
Pump, Oil	1212
Pump, Power Steering 2050 psi - Eaton 781	1094
Pump, Power Steering Installation	1093
Pump, Submerged Fuel	1309
Pump, Water Outlet and Thermostat	1209

-R-

Radiator, Collar and Stay Rod Mounting	1184
Radiator, Mounting.....	1222
Rear Axle.....	1302
Remote Manual Twin Agent Turret	1379
Rescue Crash Tool Kit	1421
Rim, Tubeless, Tires	1352
Rockwood Twin Agent 1500/250 Dry Chemical AFFF Unit	1355

-S-

Schematic, Brake System Diagram.....	1058
Seat, Driver and Passenger	1346
Section I - Twin Agent Unit	1356
Section II - Data Sheets for Components Supplied	1362
Section III - Discharge Devices	1373
Self Contained AFFF System	1359
Self Contained Dry Chemical System	1357
Shaper - AFFF	1386
Shield, Heat	1055
Shock Absorber, Installation	1042
Sidemember, Chart	1030
Signal Model PA300* Electronic Siren	1415
Skid Unit Air Charging System	1439
Speedometer	1180
Spotlight.....	1442
Spring, Front, Mounting, Dana FA64 9000 lb	1036
Stator Shaft Bushing Replacement	1298
Steering Gear	1085
Step	1173
Strainer, Air Compressor	1047
Supplemental Parts Information	1283
Switch, Stoplight	1057
Switch, Turn Signal.....	1163
Switches - Standard.....	1123

-T-

Tank, Deaeration Mounting	1192
Tank, Fuel, 30 Gallon.....	1308
Tank, Fuel, 30 Gallon with Step	1311
Tank, Mounting and Hosing, Air	1067
Terminals, Solderless - Standard	1117
Terminals, Solderless and Butt Splices - Standard	1118
Third Clutch, Center Support and Second Clutch	1264
Torque Converter and Oil Pump	1257
Transfer Case - Rockwell - Standard	1226
Transmission.....	1226
Transmission Case, Governor and Vacuum Modulator	1271
Transmission Vent Assembly and Breather Shroud	1284
Trim, Interior and Window Installation	1332
Twin Agent Handline	1374
Twin Agent Skid System Schematics	1393 -1396

-V-

Valve, Air Shift Selector	1230
Valve, Brake Pedal and Control	1052
Valve, Chart	1246
Valve, Check	1061
Valve, Double Check.....	1056
Valve, Parking Brake Control	1051
Valve, Quick Release	1074
Valve, Safety	1073
Valve, Transfer Case Control	1236
Vent, Crankcase.....	1193
Visor, Sun	1338

-W-

Washer, W/S	1350
Wheels.....	1352
Wheels, Drum or Rotor	1353
Wiper, Electric	1336
Wiring Harness, Battery Cables and Miscellapneous	1124

By Order of the Secretary of the Army:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with Special List.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE
DOPE ABOUT IT ON THIS FORM.
CAREFULLY TEAR IT OUT, FOLD IT
AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE
NO.

PARA-
GRAPH

FIGURE
NO.

TABLE
NO.

IN THIS SPACE, TELL WHAT IS WRONG
AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 2028-2
1 JUL 79

PREVIOUS EDITIONS
ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR
RECOMMENDATION MAKE A CARBON COPY OF THIS
AND GIVE IT TO YOUR HEADQUARTERS.

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters . 1000 Millimeters ~ 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram . 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram . 1000 Grams - 2.2 Lb
 1 Metric Ton ~ 1000 Kilograms ~ 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters . 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters - 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches
 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet
 1 Sq Kilometer = 1,000,000 Sq Meters = 0.386 Sq Miles

CUBIC MEASURE

1 Cu Centimeter = 1000 Cu Millimeters = 0.06 Cu Inches
 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

TEMPERATURE

$5/9(F - 32) = C$
 212 Fahrenheit is equivalent to 100 Celsius
 90 Fahrenheit is equivalent to 32.2 Celsius
 32 Fahrenheit is equivalent to 0 Celsius
 $9/5 C + 32 = F$

APPROXIMATE CONVERSION FACTORS

TO CHANGE

Inches
 Feet
 Yards
 Miles
 Square Inches
 Square Feet
 Square Yards
 Square Miles
 Acres
 Cubic Feet
 Cubic Yards
 Fluid Ounces
 Pints
 Quarts
 Gallons
 Ounces
 Pounds
 Short Tons
 Pound-Feet
 Pounds Per Square Inch
 Miles Per Gallon
 Miles Per Hour

TO

Centimeters
 Meters
 Meters
 Kilometers
 Square Centimeters
 Square Meters
 Square Meters
 Square Kilometers
 Square Hectometers
 Cubic Meters
 Cubic Meters
 Milliliters
 Liters
 Liters
 Liters
 Grams
 Kilograms
 Metric Tons
 Newton-Meters
 Kilopascals
 Kilometers Per Liter
 Kilometers Per Hour

MULTIPLY BY

2.540
 0.305
 0.914
 1.609
 6 451
 0.093
 0.836
 2.590
 0.405
 0.028
 0.765
 29.573
 0.473
 0.946
 3.785
 28.349
 0.454
 0.907
 1.358
 6.895
 0.425
 1.609

TO CHANGE

Centimeters
 Meters
 Kilometers
 Square Centimeters
 Square Meters
 Square Meters
 Square Kilometers
 Square Hectometers.
 Cubic Meters
 Cubic Meters
 Milliliters
 Liters
 Liters
 Liters
 Grams
 Kilograms
 Metric Tons
 Newton-Meters
 Kilopascals
 Kilometers per Liter
 Kilometers per Hour

TO

Inches
 Feet
 Miles
 Square Inches
 Square Feet
 Square Yards
 Square Miles
 Acres
 Cubic Foot
 Cubic Yards
 Fluid Ounces
 Pints
 Quarts
 Gallons
 Ounces
 Pounds
 Short Tons
 Pound-Feet
 Pounds per Square Inch
 Miles per Gallon
 Miles per Hour

MULTIPLY BY

0.394
 3.280
 0.621
 0.155
 10.764
 1.196
 0.386
 2.471
 35.315
 1.308
 0.034
 2.113
 1.057
 0.264
 0.035
 2.205
 1.102
 0.738
 0.145
 2.354
 0.621

PIN : 059725-000