STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-R03
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGIN/STRUT				007	APR 22/06

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
REPLACE	PNEUMATIC STARTER		ALL	4000

ZONES	ACCESS PANELS
410 420	417AL 418AR 427AL 428AR

MECH	INSP	MPD ITEM NUMBER

REPLACE THE PNEUMATIC STARTER. N80-11-01-4A

THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT,D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.

1. Remove the Starter

A. References

(1) AMM 71-11-04/201, Fan Cowl Panels

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

(4) AMM 80-11-02/401, Starter Control Valve

B. Prepare for the Removal of the Starter

(1) For the left engine, open this circuit breaker on the overhead panel P11 and attach a DO-NOT-CLOSE tag:

(a) 11D19, ENGINE START CONT LEFT

(2) For the right engine, open this circuit breaker on the overhead panel P11 and attach a DO-NOT-CLOSE tag:

(a) 11D20, ENGINE START CONT RIGHT

(3) Open the fan cowl panels (AMM 71-11-04/201).

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(5) Open the core cowl panels (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT COULD OCCUR.

(6) Open the thrust reversers (AMM 78-31-00/201).

C. Procedure

(1) Remove the starter control valve (AMM 80-11-02/401).

(2) Remove the starter (Fig. 401):

(a) Remove the coupling V-band clamp (4) that connects the pneumatic interconnect duct (5) to the starter (3).

(b) Remove the pneumatic interconnect duct (5) and the seal (6).

WARNING: BE CAREFUL WHEN YOU REMOVE THE STARTER FROM THE MAIN GEARBOX. THE STARTER WEIGHS APPROXIMATELY 40 POUNDS (18 KILOGRAMS). INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN THE STARTER FALLS.

CAUTION: DO NOT LIFT THE STARTER BY THE DRIVE SHAFT. DAMAGE TO THE INTERNAL OF THE STARTER CAN OCCUR.

(c) Remove the QAD clamp (1) that connects the starter (3) to the QAD adapter.

(d) Remove the starter (3) from the QAD adapter.

1) Remove and discard the packing (2) from the starter (3).

2. Install the Starter

A. Consumable Materials

(1) D00068 or D00071 Lubricant -Oil, MIL-L-23699 or MIL-L-7808

(2) D50033 Grease, Fluorinated Lubricant - Krytox 283 (P06-059)

B. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	2	Packing	80-11-01	10	40
				11	190
				13	190
	3	Starter	80-11-01	10	55
				11	215
				13	215

C. References

(1) AMM 12-13-02/301, Engine Starter Servicing

(2) AMM 71-00-00/201, Power Plant

(3) AMM 71-11-04/201, Fan Cowl Panels

(4) AMM 71-11-06/201, Core Cowl Panels

(5) AMM 78-31-00/201, Thrust Reverser System

(6) AMM 79-21-10/601, Magnetic Chip Detector

(7) AMM 80-11-02/401, Starter Control Valve

D. Prepare for the Installation of the Starter

MECH | INSP

CAUTION: BEFORE YOU INSTALL THE PNEUMATIC STARTER, LOOK FOR LOOSE OR MISSING BOLTS ON THE GEARBOX TO STARTER COUPLING. IF A BOLT HAS COME LOOSE, DAMAGE TO THE GEARBOX CAN OCCUR.

(1) Do the steps that follow to examine the gearbox to starter coupling:

(a) Look for loose or missing bolts on the gearbox to starter coupling.

(b) If a bolt has come loose, do the steps that follow:

1) Look for circular gouging or scoring on the front face of the starter output shaft.

2) Examine the gearbox chip detector for spalled bearing material (AMM 79-21-10/601).

a) If no bearing material is found, replace the loose bolt with a new bolt.

E. Procedure

(1) Install the starter:

(a) Lubricate the new packing (2) with engine oil.

(b) Install the new packing on the starter drive shaft.

WARNING: BE CAREFUL WHEN YOU INSTALL THE STARTER ON THE MAIN GEARBOX. THE STARTER WEIGHS APPROXIMATELY 40 POUNDS (18 KILOGRAMS). INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN THE STARTER FALLS.

CAUTION: DO NOT LIFT THE STARTER BY THE DRIVE SHAFT. DAMAGE TO THE INTERNAL OF THE STARTER CAN OCCUR.

(c) Install the starter on the main gearbox with the steps that follow:

NOTE: Make sure the starter, pneumatic interconnect duct and the starter control valve are correctly aligned. This is necessary for access to the manual override of the starter valve through the access hole in the core cowl panel.

1) Apply a thin layer of grease to the splines of the starter drive shaft.

2) Put the starter (3) in position on the QAD adapter on the main gearbox.

3) Move the starter (3) forward until the drive pad coupling and the splines on the starter drive shaft engage.

4) If necessary turn the starter (3) until the index spline on the starter is in line with the index spline on the QAD adapter.

5) Continue to push the starter (3) forward until it stops.

6) Install the QAD clamp (1) to connect the starter (3) to the QAD adapter.

a) Measure the run-on torque value of the QAD clamp (1) and make a note of the value.

b) Tighten the QAD clamp (1) to a value equal to the run-on torque added to 65-75 pound-inches (7.3-8.5 newton-meters).

(d) Connect the pneumatic interconnect duct (5) to the starter (3) with the steps that follow:

1) Install the pneumatic interconnect duct (5) with the seal (6) to the starter (3).

2) Install the coupling V-band clamp (4).

a) Tighten the coupling V-band clamp (4) to 100-115 pound-inches (11.3-13.0 newton-meters).

(2) Install the starter control valve (AMM 80-11-02/401).

MECH | INSP

(3) Fill the starter with oil (AMM 12-13-02/301).

F. Return the Aircraft to Its Usual Condition

WARNING: OBEY THE INSTUCTIONS IN AMM 78-31-00/201 WHEN YOU CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Close the thrust reversers (AMM 78-31-00/201).

(2) Close the core cowl panels (AMM 71-11-06/201).

(3) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).

(4) Close the fan cowl panels (AMM 71-11-04/201).

(5) For the left engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the overhead P11 panel:

(a) 11D19, ENGINE START CONT LEFT

(6) For the right engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the overhead P11 panel:

(a) 11D20, ENGINE START CONT RIGHT

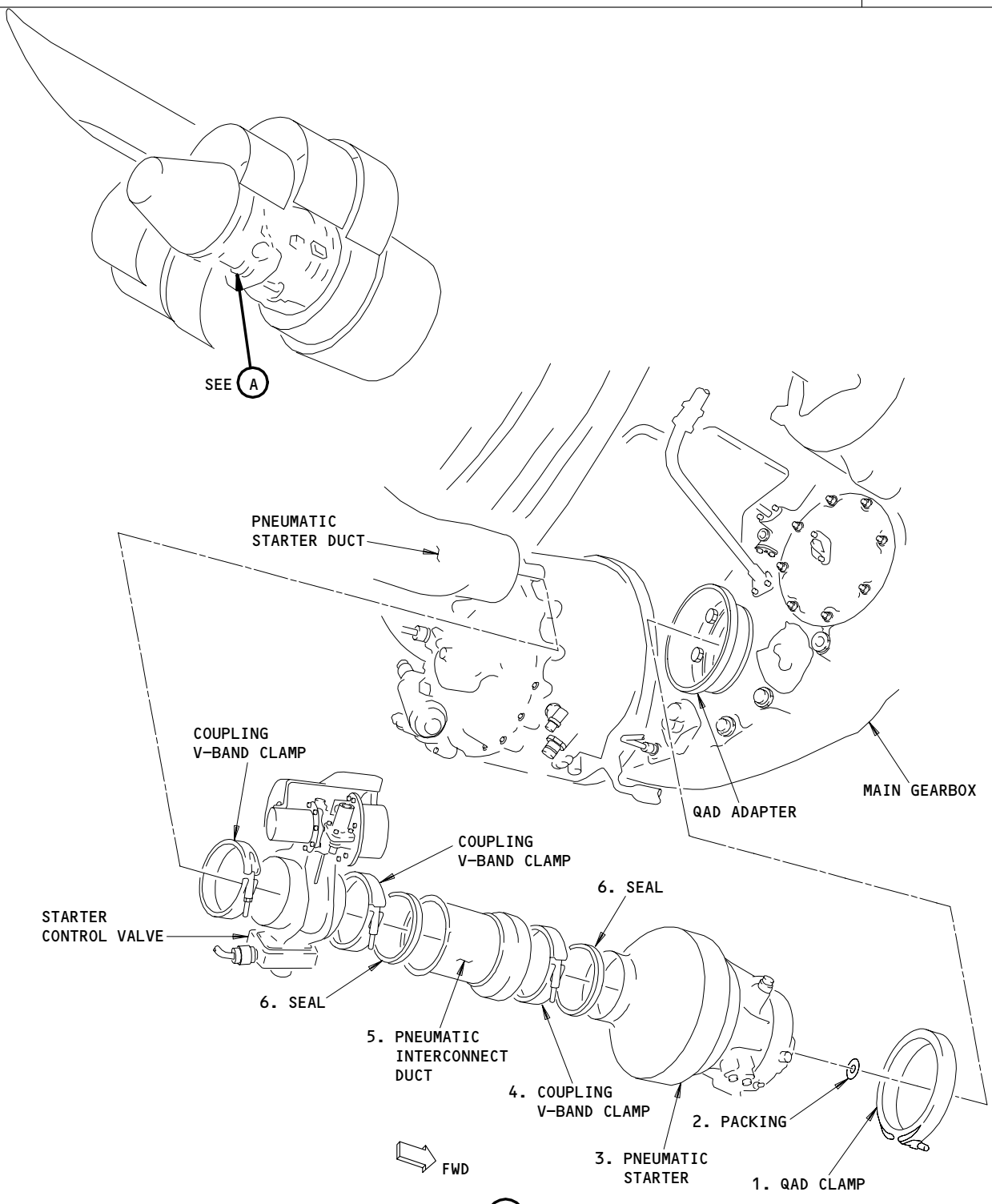
CAUTION: MAKE SURE THE N2 TACHOMETER OPERATES CORRECTLY. DAMAGE TO THE STARTER CAN OCCUR BECAUSE OF AN OVERSPEED CONDITION IF THE N2 TACHOMETER DOES NOT OPERATE CORRECTLY.

(7) If you think that starter damage occured because of an overspeed condition without a "STARTER CUTOUT" EICAS message, do the steps that follow:

(a) Do the Airborne Vibration Monitor Interrogation Procedure (FIM 77-31-00, Fig. 104).

(b) Look for an "N2 Tach Loss" fault message for the applicable engine or the applicable fault code bits and do the necessary corrective action.

(8) Dry motor the engine (AMM 71-00-00/201).



Pneumatic Starter Installation
Figure 401

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-R04
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGIN/STRUT				007	APR 22/06

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
REPLACE	STARTER CONTROL VALVE		ALL	4000

ZONES	ACCESS PANELS
410 420	418AR 428AR

MECH	INSP	MPD ITEM NUMBER

REPLACE THE STARTER CONTROL VALVE. N80-11-02-4A

THIS CARD IS NOT A SCHEDULED MAINTENANCE TASK. IT IS A COMPONENT CHANGE CARD AND IT IS PROVIDED FOR OPERATOR CONVENIENCE DURING UNSCHEDULED MAINTENANCE ACTIVITIES. SEE APPENDIX A OF THE 767 MAINTENANCE PLANNING DATA (MPD) DOCUMENT,D622T001, FOR A DESCRIPTION OF THE COMPONENT CHANGE CARDS.

A. References

(1) AMM 36-00-00/201, Pneumatic Power

(2) AMM 71-11-04/201, Fan Cowl Panels

(3) AMM 71-11-06/201, Core Cowl Panels

(4) AMM 78-31-00/201, Thrust Reverser System

B. Prepare for the Removal of the Starter Control Valve (Fig. 401)

(1) Remove pneumatic power (AMM 36-00-00/201).

(2) For the left engine, open this circuit breaker on the overhead panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11D19, ENGINE START CONT LEFT

(3) For the right engine, open this circuit breaker on the overhead panel, P11, and attach a DO-NOT-CLOSE tag:

(a) 11D20, ENGINE START CONT RIGHT

MECH | INSP

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Do this task: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(5) Open the fan cowl panels (AMM 71-11-04/201).

(6) Open the core cowl panels (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(7) Open the thrust reversers (AMM 78-31-00/201).

C. Procedure

(1) Remove the starter control valve:

(a) Disconnect the electrical connector from the manual override for the starter control valve.

1) Install protection caps on the electrical connector and the receptacle on the manual override for the starter control valve.

(b) Remove the nut (4), the washer (5) and the screw (6) that attach the jumper to the starter control valve (1).

(c) Hold the starter control valve (1) and remove the coupling V-band clamps (2) that attach the starter control valve (1) to the pneumatic ducts.

(d) Remove the starter control valve (1) with the seals (3).

1. Install the Starter Control Valve (Fig. 401)

A. Parts

AMM		NOMENCLATURE	AIPC		
FIG	ITEM		SUBJECT	FIG	ITEM
401	1	Valve - Starter Control	80-11-01	10 11 13	57 220 220
	3	Seal		10 11 13	52 210 210

B. References

(1) AMM 20-10-21/601, Electrical Bonding

(2) AMM 36-00-00/201, Pneumatic Power

(3) AMM 70-24-05/201, Electrical Harnesses

(4) AMM 71-11-04/201, Fan Cowl Panels

(5) AMM 71-11-06/201, Core Cowl Panels

(6) AMM 78-31-00/201, Thrust Reverser System

(7) AMM 80-11-00/501, Engine Starting System

C. Procedure

(1) Install the starter control valve.

(a) Clean the mating (bonding) flanges between the pneumatic interconnect duct and the starter control valve (1).

(b) Hold the seals (3) in position against the flanges of the starter control valve (1).

MECH	INSP

(c) Install the starter control valve (1) with the seals (3) between the pneumatic ducts.

NOTE: Make sure you align the index pin on the starter control valve (1) with the index hole in the pneumatic interconnect duct. This is necessary for access to the manual override of the starter control valve (1) through the access hole in the core cowl panel.

Also make sure that access to the manual override is clear of obstructions (such as the cooling tube).

(d) Install the two coupling V-band clamps (2) which attach the starter control valve (1) to the pneumatic ducts.

1) Tighten the nuts to 100-115 pound-inches (11.3-13.0 newton-meters).

(e) Clean the bonding surfaces of the jumper and the starter control valve (1).

(f) Connect the jumper to the starter control valve (1) with the screw (6), the washer (5) and the nut (4).

(g) Do a check of the bonding resistance between the starter control valve (1) and the jumper bracket on the flange (AMM 20-10-21/601).

1) The bonding resistance must not be more than 0.005 ohms.

(h) Remove the protection caps from the electrical connector and the receptacle on the manual override for the starter control valve.

CAUTION: USE THE CORRECT ASSEMBLY PROCEDURE, AND TOOLS, FOR THE HARNESS CONNECTOR INSTALLATION (AMM 70-24-05/201). IF YOU USE THE INCORRECT ASSEMBLY PROCEDURE, OR TOOLS, A DAMAGED OR LOOSE CONNECTOR CAN OCCUR. A LOOSE CONNECTOR PERMITS VIBRATION, WHICH CAUSES THE CONTACTS TO WEAR AND DECREASES THE LIGHTNING PROTECTION.

(i) Connect the electrical connector to the receptacle on the manual override for the starter control valve (AMM 70-24-05/201).

MECH | INSP

1) Safety the electrical connector with lockwire.

D. Return the Aircraft to Its Usual Condition.

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(1) Close the thrust reversers (AMM 78-31-00/201).

(2) Close the core cowl panels (AMM 71-11-06/201).

(3) Close the fan cowl panels (AMM 71-11-04/201).

(4) Do the activation procedure for the thrust reversers (AMM 78-31-00/201).

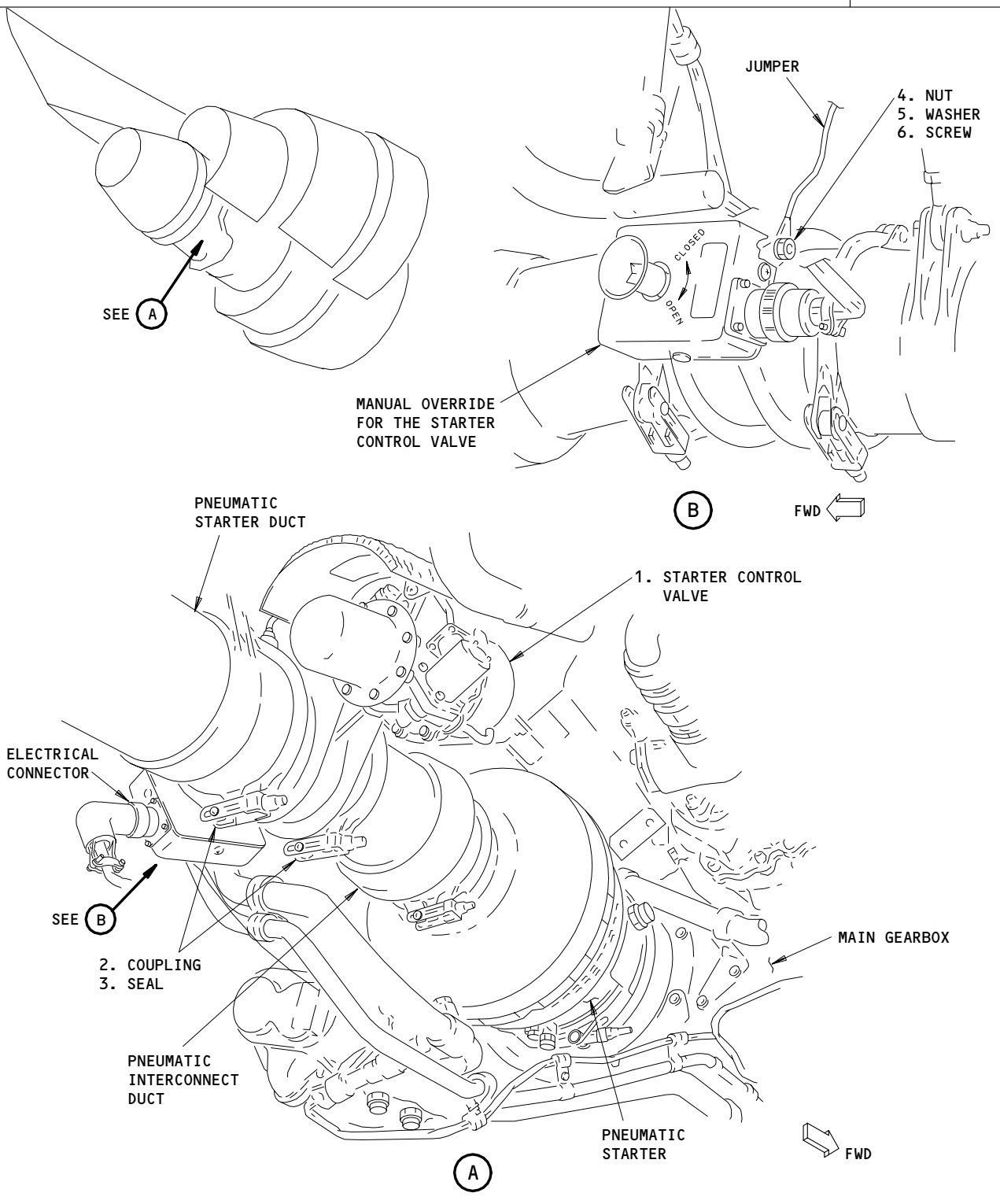
(5) For the left engine, remove the DO-NOT-CLOSE tag and close this circuit breaker in the P11 overhead panel:

(a) 11D19, ENGINE START CONT LEFT

(6) For the right engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 overhead panel:

(a) 11D20, ENGINE START CONT RIGHT

(7) Do the Test of the Engine Starter System (Motoring) (AMM 80-11-00/501).



Starter Control Valve Installation
Figure 401

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-312-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 1		00500 HRS	10101	013	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	ENGINE 1 STARTER OIL		ALL	4000

ZONES	ACCESS PANELS
411	413AL 414AR 415AL 416AR 417AL 418AR

MECH	INSP	MPD ITEM NUMBER

CHECK THE ENGINE 1 ENGINE STARTER OIL LEVEL AND SERVICE AS REQUIRED. 12-13-02-3A

ENGINE STARTER - SERVICING (OIL REPLENISHING)

A. The starter is a high speed unit. Keep the correct quantity of oil in the starter oil sump to keep the starter correctly lubricated. An incorrect oil level in the starter can cause the starter to become too hot. Damage can occur if the starter becomes too hot.

1. Engine Starter Servicing (Oil Replenishing) (Fig. 301)

A. General

(1) This procedure gives the steps to do a gravity fill of the starter.

B. Equipment

(1) Container - 30 ounces minimum capacity for oil

C. Consumable Materials

(1) D00071 Lubricant - MIL-PRF-7808 (optional to MIL-PRF-23699).

(2) D00068 Lubricant - MIL-PRF-23699 (optional to MIL-PRF-7808).

D. References

(1) AMM 71-11-04/201, Fan Cowl Panels

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

E. Fill the Engine Starter

MECH	INSP

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(2) Open the fan cowl panel (AMM 71-11-04/201).

(3) Open the core cowl panels (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the thrust reverser (AMM 78-31-00/201).

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(5) Do the steps that follow to do the gravity fill of the starter:

(a) To release the caps from the oil fill plug and the overflow plug, push the caps in and turn counterclockwise.

(b) Remove the caps.

MECH | INSP

(c) Add oil to the starter until oil flows from the overflow port.

NOTE: You can use a plastic bottle with a plastic tube in the oil fill port to slowly fill the starter. This will let the air come out of the starter and prevent an incorrect full indication.

NOTE: The starter is full when approximately 22.5 fluid ounces (0.665 liters) of oil is added to the starter and oil starts to flow from the oil overflow port.

(d) Install the caps on the oil fill plug and the overflow plug.

NOTE: For reference only, the torque value is 40-70 pound-inches (4.5-7.9 newton-meters) for the oil fill plug, and 20-40 pound-inches (2.3-4.5 newton-meters) for the overflow plug.

1) Put the caps on the plugs.

2) Push the caps in and turn clockwise until they lock.

(6) Clean all unwanted oil from the surface of the starter.

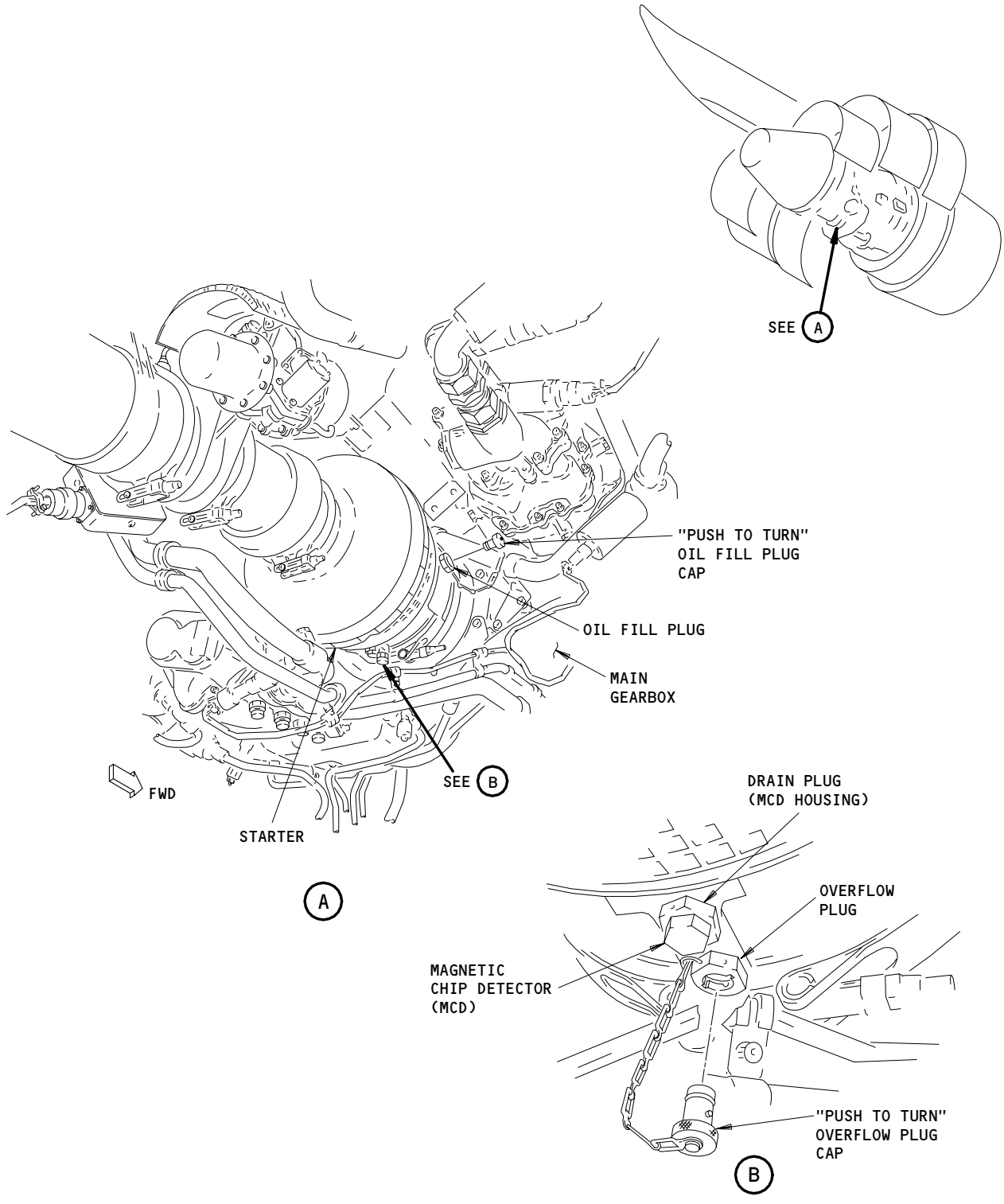
WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00 WHEN YOU CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(7) Close the thrust reverser (AMM 78-31-00/201).

(8) Close the core cowl panel (AMM 71-11-06/201).

(9) Close the fan cowl panel (AMM 71-11-04/201).

(10) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Starter Servicing - Oil Replenish
Figure 301

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-312-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 2		00500 HRS	10101	013	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	ENGINE 2 STARTER OIL		ALL	4000

ZONES	ACCESS PANELS
421	423AL 424AR 425AL 426AR 427AL 428AR

MECH | INSP

MPD ITEM NUMBER

CHECK THE ENGINE 2 ENGINE STARTER OIL LEVEL AND SERVICE AS REQUIRED. 12-13-02-3A

ENGINE STARTER - SERVICING (OIL REPLENISHING)

A. The starter is a high speed unit. Keep the correct quantity of oil in the starter oil sump to keep the starter correctly lubricated. An incorrect oil level in the starter can cause the starter to become too hot. Damage can occur if the starter becomes too hot.

1. Engine Starter Servicing (Oil Replenishing) (Fig. 301)

A. General

(1) This procedure gives the steps to do a gravity fill of the starter.

B. Equipment

(1) Container - 30 ounces minimum capacity for oil

C. Consumable Materials

(1) D00071 Lubricant - MIL-PRF-7808 (optional to MIL-PRF-23699).

(2) D00068 Lubricant - MIL-PRF-23699 (optional to MIL-PRF-7808).

D. References

(1) AMM 71-11-04/201, Fan Cowl Panels

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

E. Fill the Engine Starter

MECH	INSP

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(1) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(2) Open the fan cowl panel (AMM 71-11-04/201).

(3) Open the core cowl panels (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00/201 WHEN YOU OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the thrust reverser (AMM 78-31-00/201).

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(5) Do the steps that follow to do the gravity fill of the starter:

(a) To release the caps from the oil fill plug and the overflow plug, push the caps in and turn counterclockwise.

(b) Remove the caps.

MECH | INSP

(c) Add oil to the starter until oil flows from the overflow port.

NOTE: You can use a plastic bottle with a plastic tube in the oil fill port to slowly fill the starter. This will let the air come out of the starter and prevent an incorrect full indication.

NOTE: The starter is full when approximately 22.5 fluid ounces (0.665 liters) of oil is added to the starter and oil starts to flow from the oil overflow port.

(d) Install the caps on the oil fill plug and the overflow plug.

NOTE: For reference only, the torque value is 40-70 pound-inches (4.5-7.9 newton-meters) for the oil fill plug, and 20-40 pound-inches (2.3-4.5 newton-meters) for the overflow plug.

1) Put the caps on the plugs.

2) Push the caps in and turn clockwise until they lock.

(6) Clean all unwanted oil from the surface of the starter.

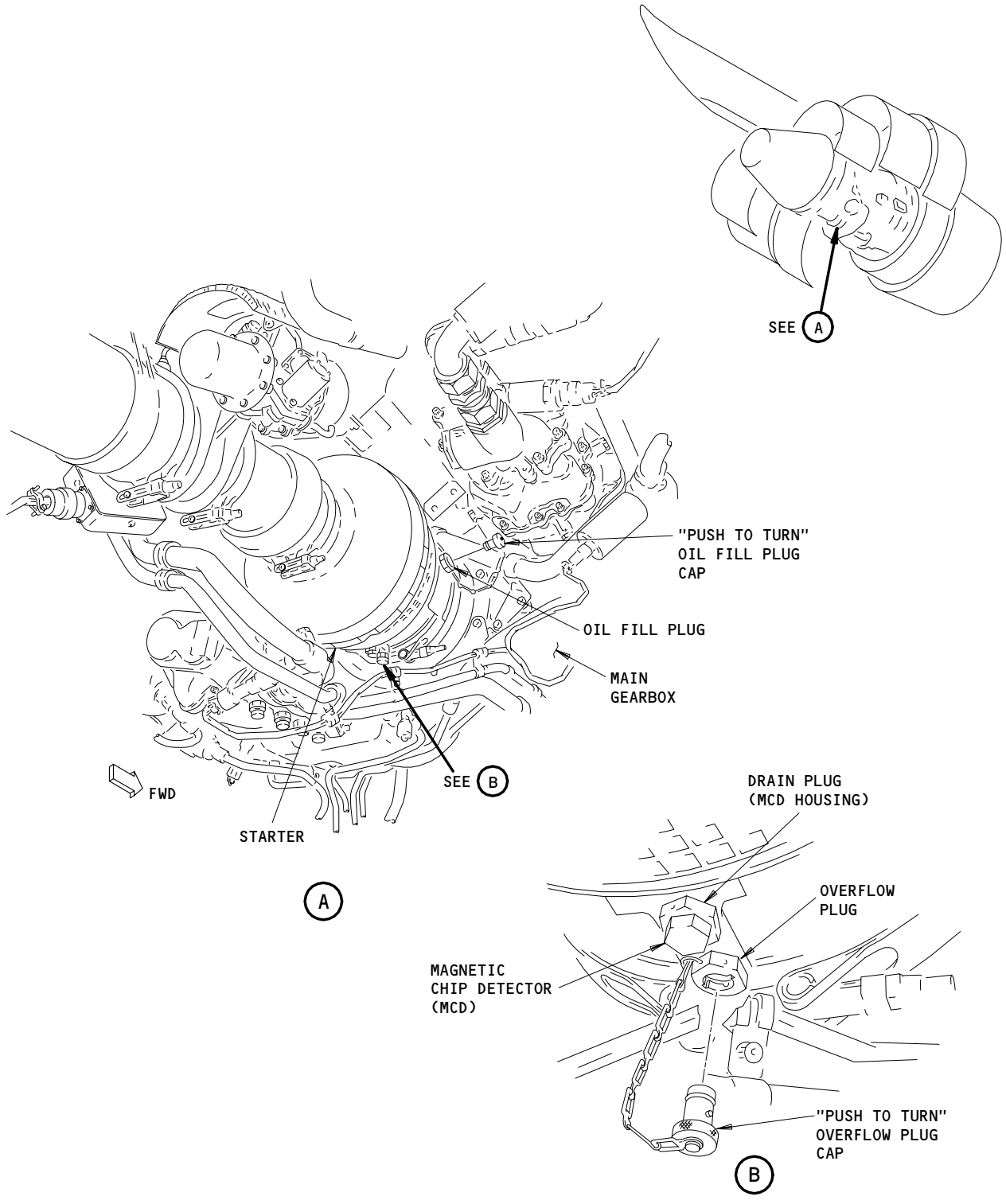
WARNING: OBEY THE INSTRUCTIONS IN AMM 78-31-00 WHEN YOU CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR.

(7) Close the thrust reverser (AMM 78-31-00/201).

(8) Close the core cowl panel (AMM 71-11-06/201).

(9) Close the fan cowl panel (AMM 71-11-04/201).

(10) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Starter Servicing - Oil Replenish
Figure 301

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-401-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 1		00500 HRS	10101	012	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
REPLACE	ENGINE 1 STARTER OIL		ALL	4000

ZONES	ACCESS PANELS
411	413AL 414AR 415AL 416AR 417AL 418AR

MECH	INSP	MPD ITEM NUMBER

CHANGE THE ENGINE 1 ENGINE STARTER OIL. 12-22-02-3A

ENGINE STARTER - SERVICING (OIL CHANGE)

1. Engine Starter Servicing (Oil Change)

A. General

(1) This procedure includes the steps to do a gravity fill of the starter.

B. Equipment

(1) Container - 30 ounces minimum capacity for oil.

C. Consumable Materials

(1) D00071 Lubricant - MIL-PRF-7808 (optional to MIL-PRF-23699).

(2) D00068 Lubricant - MIL-PRF-23699 (optional to MIL-PRF-7808).

D. References

(1) AMM 71-11-04/201, Fan Cowl Panels

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

(4) AMM 80-11-01/601, Pneumatic Starter

E. Prepare for the Servicing of the Engine Starter

MECH | INSP

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).

(2) Open the fan cowl panel (AMM 71-11-04/201).

(3) Open the core cowl panel (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO THE EQUIPMENT CAN OCCUR.

(4) Open the thrust reverser (AMM 78-31-00/201).

F. Do the Engine Starter Servicing (Fig. 301).

(1) Put the container below the starter.

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(2) Do the steps that follow to drain the oil from the starter.

(a) Remove the magnetic chip detector from the oil fill plug.

1) Discard the packing.

2) Carefully examine the magnetic chip detector for metal particles.

a) Refer to AMM 80-11-01/601 if you find particles that are larger than 0.10 inch (2.54 mm) in their largest dimension.

(b) Remove the drain plug and the packing.

(c) Drain the oil into a clean container.

(d) Discard the packing.

(e) Examine the drained oil for metal particles (AMM 80-11-01/601).

NOTE: Small metal particles show normal wear. Large metal particles show internal damage. You must replace the starter if you find large metal particles.

CAUTION: REPLACE THE STARTER IF THE QUANTITY OF OIL THAT WAS DRAINED IS LESS THAN 17 FLUID OUNCES (503 ML). THE STARTER IS NOT SERVICEABLE ANYMORE IF YOU DRAIN LESS THAN THIS QUANTITY.

(f) Make sure the quantity of the drained oil in the container is not less than 17 fluid ounces (503 ml).

(g) Install a new packing, lubricated with oil, on the drain plug.

(h) Install the drain plug.

1) Tighten the drain plug to 70-80 pound-inches (7.9-9.0 newton-meters).

(i) Install a new packing, lubricated with engine oil, on the magnetic chip detector.

(j) Install the magnetic chip detector.

1) Tighten the magnetic chip detector to 8-24 pound-inches (0.9-2.7 newton-meters).

(k) Install lockwire on the drain plug and the magnetic chip detector.

MECH | INSP

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(3) Do the steps that follow to gravity fill the starter with oil.

(a) To release the caps from the oil fill plug and the overflow plug, push the caps in and turn counterclockwise.

(b) Remove the caps.

(c) Add oil to the starter until oil flows from the overflow port.

NOTE: You can use a plastic bottle with a plastic tube in the oil fill port to slowly fill the starter. This will let the air come out of the starter and prevent an incorrect full indication.

The starter is full when approximately 22.5 fluid ounces (665 ml) of oil is added to the starter and oil starts to flow from the oil overflow port.

(d) Install the caps on the oil fill plug and the overflow plug.

NOTE: For reference only, the torque value is 40-70 pound-inches (4.5-7.9 newton-meters) for the oil fill plug, and 20-40 pound-inches (2.3-4.5 newton-meters) for the overflow plug.

1) Put the caps on the plugs.

2) Push the caps in and turn clockwise until they lock.

(4) Clean all unwanted oil from the surface of the starter.

MECH	INSP

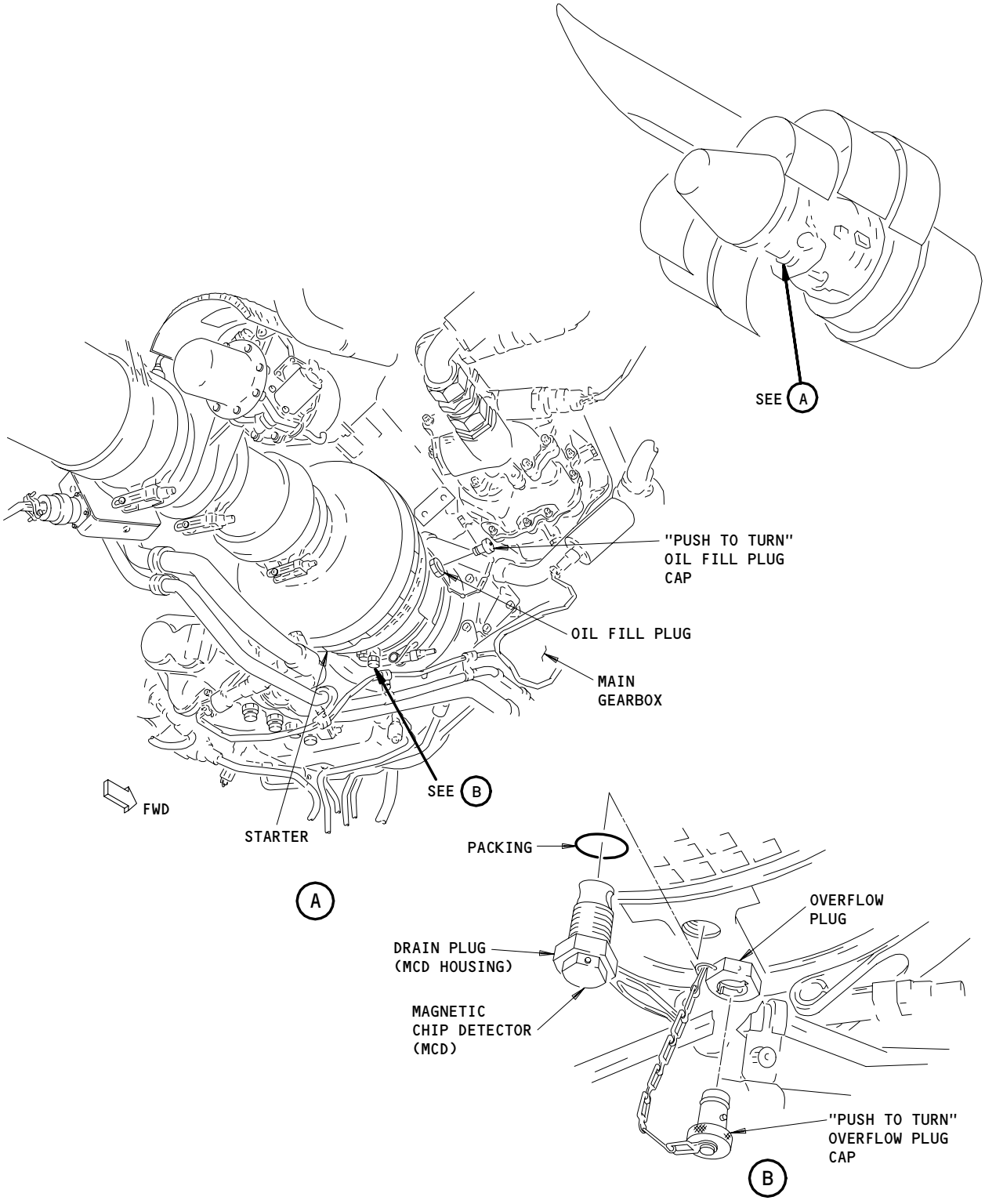
WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(5) Close the thrust reverser (AMM 78-31-00/201).

(6) Close the core cowl panel (AMM 71-11-06/201).

(7) Close the fan cowl panel (AMM 71-11-04/201).

(8) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Engine Starter Oil Change
Figure 301

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-401-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 2		00500 HRS	10101	012	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
REPLACE	ENGINE 2 STARTER OIL		ALL	4000

ZONES	ACCESS PANELS
421	423AL 424AR 425AL 426AR 427AL 428AR

MECH	INSP	MPD ITEM NUMBER

CHANGE THE ENGINE 2 ENGINE STARTER OIL. 12-22-02-3A

ENGINE STARTER - SERVICING (OIL CHANGE)

1. Engine Starter Servicing (Oil Change)

A. General

(1) This procedure includes the steps to do a gravity fill of the starter.

B. Equipment

(1) Container - 30 ounces minimum capacity for oil.

C. Consumable Materials

(1) D00071 Lubricant - MIL-PRF-7808 (optional to MIL-PRF-23699).

(2) D00068 Lubricant - MIL-PRF-23699 (optional to MIL-PRF-7808).

D. References

(1) AMM 71-11-04/201, Fan Cowl Panels

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

(4) AMM 80-11-01/601, Pneumatic Starter

E. Prepare for the Servicing of the Engine Starter

MECH | INSP

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).

(2) Open the fan cowl panel (AMM 71-11-04/201).

(3) Open the core cowl panel (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO THE EQUIPMENT CAN OCCUR.

(4) Open the thrust reverser (AMM 78-31-00/201).

F. Do the Engine Starter Servicing (Fig. 301).

(1) Put the container below the starter.

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(2) Do the steps that follow to drain the oil from the starter.

(a) Remove the magnetic chip detector from the oil fill plug.

1) Discard the packing.

2) Carefully examine the magnetic chip detector for metal particles.

MECH | INSP

a) Refer to AMM 80-11-01/601 if you find particles that are larger than 0.10 inch (2.54 mm) in their largest dimension.

(b) Remove the drain plug and the packing.

(c) Drain the oil into a clean container.

(d) Discard the packing.

(e) Examine the drained oil for metal particles (AMM 80-11-01/601).

NOTE: Small metal particles show normal wear. Large metal particles show internal damage. You must replace the starter if you find large metal particles.

CAUTION: REPLACE THE STARTER IF THE QUANTITY OF OIL THAT WAS DRAINED IS LESS THAN 17 FLUID OUNCES (503 ML). THE STARTER IS NOT SERVICEABLE ANYMORE IF YOU DRAIN LESS THAN THIS QUANTITY.

(f) Make sure the quantity of the drained oil in the container is not less than 17 fluid ounces (503 ml).

(g) Install a new packing, lubricated with oil, on the drain plug.

(h) Install the drain plug.

1) Tighten the drain plug to 70-80 pound-inches (7.9-9.0 newton-meters).

(i) Install a new packing, lubricated with engine oil, on the magnetic chip detector.

(j) Install the magnetic chip detector.

1) Tighten the magnetic chip detector to 8-24 pound-inches (0.9-2.7 newton-meters).

(k) Install lockwire on the drain plug and the magnetic chip detector.

MECH | INSP

WARNING: DO NOT LET THE OIL STAY ON YOUR SKIN FOR A LONG PERIOD OF TIME. YOU CAN ABSORB POISONOUS MATERIALS FROM THE OIL THROUGH YOUR SKIN.

CAUTION: IMMEDIATELY CLEAN ALL THE OIL THAT FALLS ON AIRCRAFT PARTS. THE OIL CAN CAUSE DAMAGE TO THE PAINT AND RUBBER PARTS.

CAUTION: DO NOT MIX OIL OF DIFFERENT TYPES OR BRAND NAMES. SOME OILS WILL CHEMICALLY CHANGE WHEN YOU MIX THEM. THIS CAN CAUSE DAMAGE TO THE STARTER.

(3) Do the steps that follow to gravity fill the starter with oil.

(a) To release the caps from the oil fill plug and the overflow plug, push the caps in and turn counterclockwise.

(b) Remove the caps.

(c) Add oil to the starter until oil flows from the overflow port.

NOTE: You can use a plastic bottle with a plastic tube in the oil fill port to slowly fill the starter. This will let the air come out of the starter and prevent an incorrect full indication.

The starter is full when approximately 22.5 fluid ounces (665 ml) of oil is added to the starter and oil starts to flow from the oil overflow port.

(d) Install the caps on the oil fill plug and the overflow plug.

NOTE: For reference only, the torque value is 40-70 pound-inches (4.5-7.9 newton-meters) for the oil fill plug, and 20-40 pound-inches (2.3-4.5 newton-meters) for the overflow plug.

1) Put the caps on the plugs.

2) Push the caps in and turn clockwise until they lock.

(4) Clean all unwanted oil from the surface of the starter.

MECH	INSP

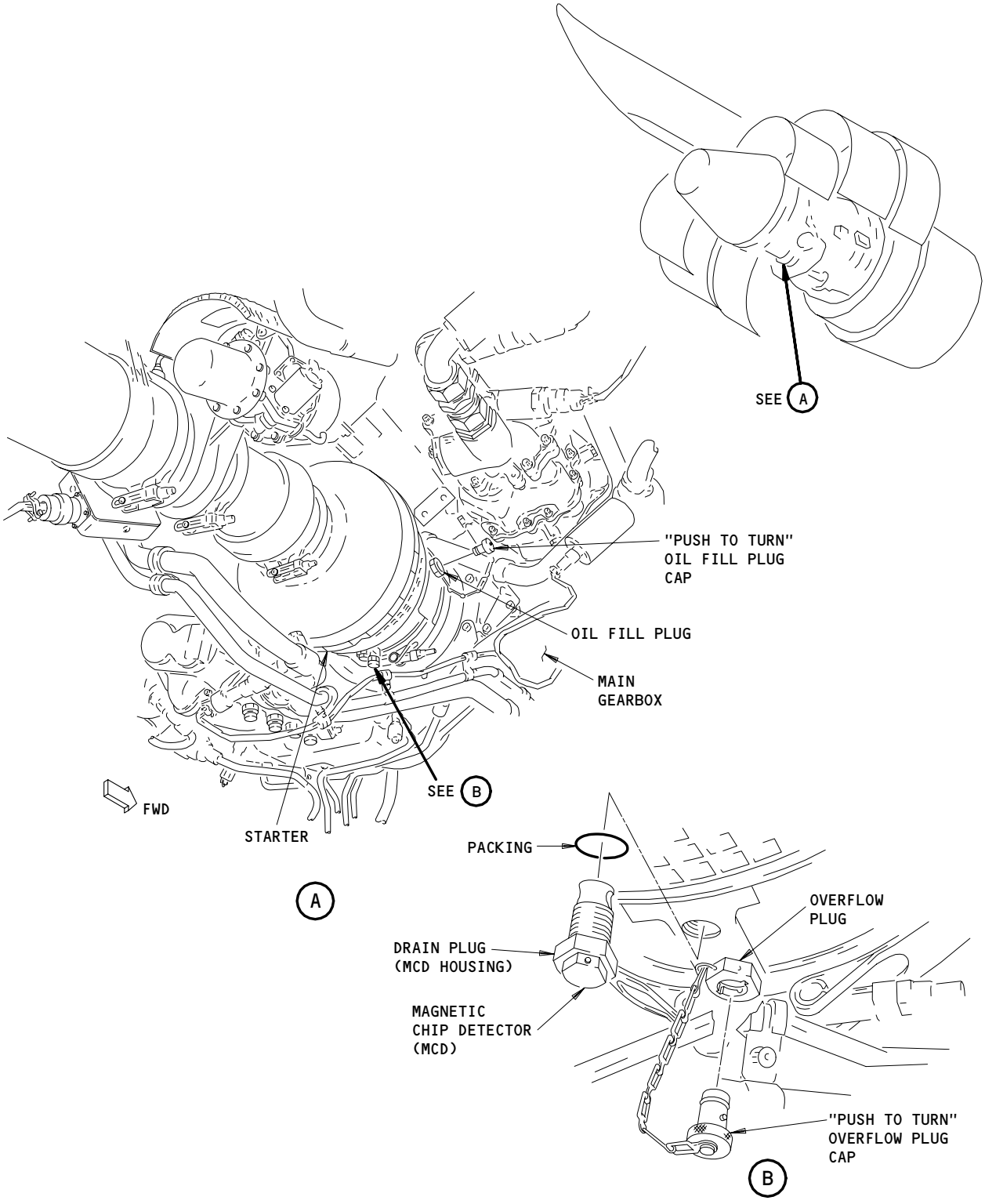
WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(5) Close the thrust reverser (AMM 78-31-00/201).

(6) Close the core cowl panel (AMM 71-11-06/201).

(7) Close the fan cowl panel (AMM 71-11-04/201).

(8) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Engine Starter Oil Change
Figure 301

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-402-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 1		00500 HRS	10101	005	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	ENG 1 STARTER MAGNETIC CHIP DETECTOR		ALL	4000

ZONES	ACCESS PANELS
411	414AR 416AR 418AR

MECH | INSP

MPD ITEM NUMBER

CHECK THE ENGINE 1 STARTER MAGNETIC CHIP DETECTOR. N80-11-01-6A

1. Inspection of the Pneumatic Starter

A. Consumable Materials

(1) D00137 Engine Oil - PWA 521

B. References

(1) AMM 12-13-02/301, Starter Servicing (Add Oil)

(2) AMM 12-22-02/301, Starter Servicing (Oil Change)

(3) AMM 71-11-04/201, Fan Cowl Panels

(4) AMM 71-11-06/201, Core Cowl Panels

(5) AMM 78-31-00/201, Thrust Reverser System

(6) AMM 80-11-01/401, Pneumatic Starter

C. Prepare for the Procedure

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).

(2) Open the right fan cowl panel (AMM 71-11-04/201).

(3) Open the right core cowl panel (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the right thrust reverser (AMM 78-31-00/201).

D. Procedure

(1) Do the steps that follow to make an inspection of the magnetic chip detector:

(a) Remove the magnetic chip detector from the drain plug in the starter.

(b) Look for metal particles on the magnetic chip detector.

1) Make sure no metal particle is larger than 0.1 inches (2.5 mm) in the largest dimension.

NOTE: The oil in the starter does not have to be drained to remove the magnetic chip detector. A spring loaded seal will close the opening when the magnetic chip detector is removed.

a) If large particles are found, replace the starter (AMM 80-11-01/401).

2) Look for large metal parts such as pins, lockwire, or casting chips (Fig. 602).

NOTE: Small amounts of metal flakes or slivers indicate normal wear.

a) If the unwanted material in the step before are found, replace the starter (AMM 80-11-01/401).

(2) Do the steps that follow to install the magnetic chip detector:

(a) Clean the magnetic chip detector.

(b) Install a new packing on the magnetic chip detector.

(c) Install the magnetic chip detector.

MECH | INSP

1) Tighten the magnetic chip detector to 8-24 pound-inches (0.9-2.7 newton-meters).

2) Install lockwire on the magnetic chip detector.

(3) Do the steps that follow to make an inspection of the starter for oil leakage:

(a) Replace the starter if oil leakage is found around the starter housing (AMM 80-11-01/401).

(b) If leakage is found around the oil drain plug, drain the oil and replace the packing on the oil drain plug (AMM 12-22-02/301).

NOTE: The torque value for the oil drain plug is 10-25 inch-pounds (1.1-2.8 newton-meters).

(4) If it is necessary, fill the starter with oil (AMM 12-13-02/301).

(5) Make sure the starter is installed correctly.

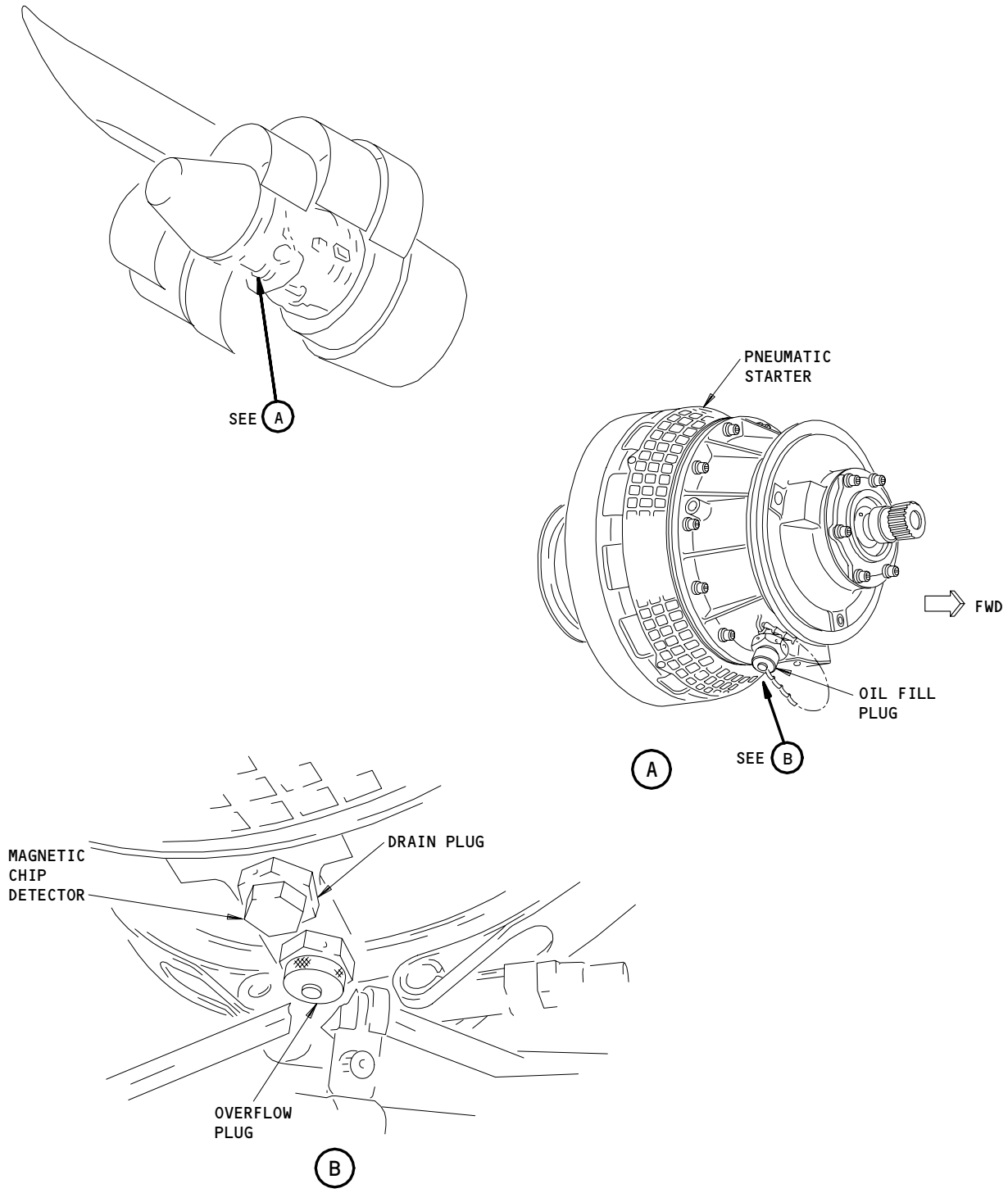
WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(6) Close the right thrust reverser (AMM 78-31-00/201).

(7) Close the right core cowl panel (AMM 71-11-06/201).

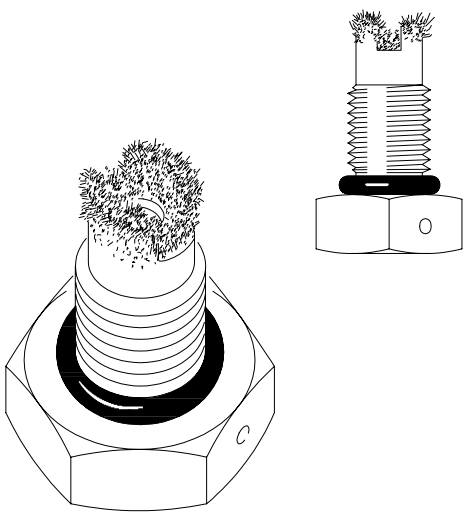
(8) Close the right fan cowl panel (AMM 71-11-04/201).

(9) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Pneumatic Starter Inspection
Figure 601

ACCEPTABLE



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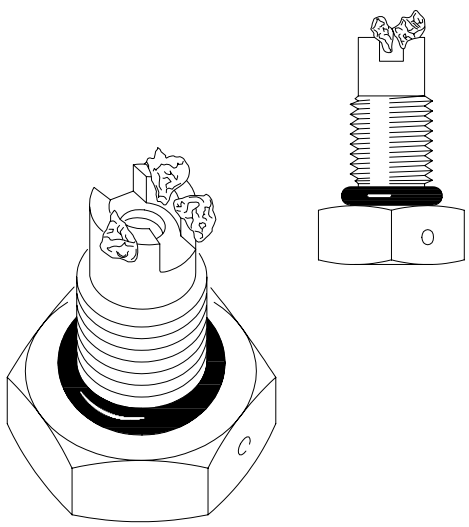


Magnetic Chip Detector Inspection
Figure 602

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-402-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 2		00500 HRS	10101	005	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CHECK/INSP	ENG 2 STARTER MAGNETIC CHIP DETECTOR		ALL	4000

ZONES	ACCESS PANELS
421	424AR 426AR 428AR

MECH	INSP	MPD ITEM NUMBER

CHECK THE ENGINE 2 STARTER MAGNETIC CHIP DETECTOR. N80-11-01-6A

1. Inspection of the Pneumatic Starter

A. Consumable Materials

(1) D00137 Engine Oil - PWA 521

B. References

(1) AMM 12-13-02/301, Starter Servicing (Add Oil)

(2) AMM 12-22-02/301, Starter Servicing (Oil Change)

(3) AMM 71-11-04/201, Fan Cowl Panels

(4) AMM 71-11-06/201, Core Cowl Panels

(5) AMM 78-31-00/201, Thrust Reverser System

(6) AMM 80-11-01/401, Pneumatic Starter

C. Prepare for the Procedure

WARNING: DO THE DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT.

(1) Do the deactivation procedure for the thrust reverser for ground maintenance (AMM 78-31-00/201).

(2) Open the right fan cowl panel (AMM 71-11-04/201).

(3) Open the right core cowl panel (AMM 71-11-06/201).

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO OPEN THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(4) Open the right thrust reverser (AMM 78-31-00/201).

D. Procedure

(1) Do the steps that follow to make an inspection of the magnetic chip detector:

(a) Remove the magnetic chip detector from the drain plug in the starter.

(b) Look for metal particles on the magnetic chip detector.

1) Make sure no metal particle is larger than 0.1 inches (2.5 mm) in the largest dimension.

NOTE: The oil in the starter does not have to be drained to remove the magnetic chip detector. A spring loaded seal will close the opening when the magnetic chip detector is removed.

a) If large particles are found, replace the starter (AMM 80-11-01/401).

2) Look for large metal parts such as pins, lockwire, or casting chips (Fig. 602).

NOTE: Small amounts of metal flakes or slivers indicate normal wear.

a) If the unwanted material in the step before are found, replace the starter (AMM 80-11-01/401).

(2) Do the steps that follow to install the magnetic chip detector:

(a) Clean the magnetic chip detector.

(b) Install a new packing on the magnetic chip detector.

(c) Install the magnetic chip detector.

MECH | INSP

1) Tighten the magnetic chip detector to 8-24 pound-inches (0.9-2.7 newton-meters).

2) Install lockwire on the magnetic chip detector.

(3) Do the steps that follow to make an inspection of the starter for oil leakage:

(a) Replace the starter if oil leakage is found around the starter housing (AMM 80-11-01/401).

(b) If leakage is found around the oil drain plug, drain the oil and replace the packing on the oil drain plug (AMM 12-22-02/301).

NOTE: The torque value for the oil drain plug is 10-25 inch-pounds (1.1-2.8 newton-meters).

(4) If it is necessary, fill the starter with oil (AMM 12-13-02/301).

(5) Make sure the starter is installed correctly.

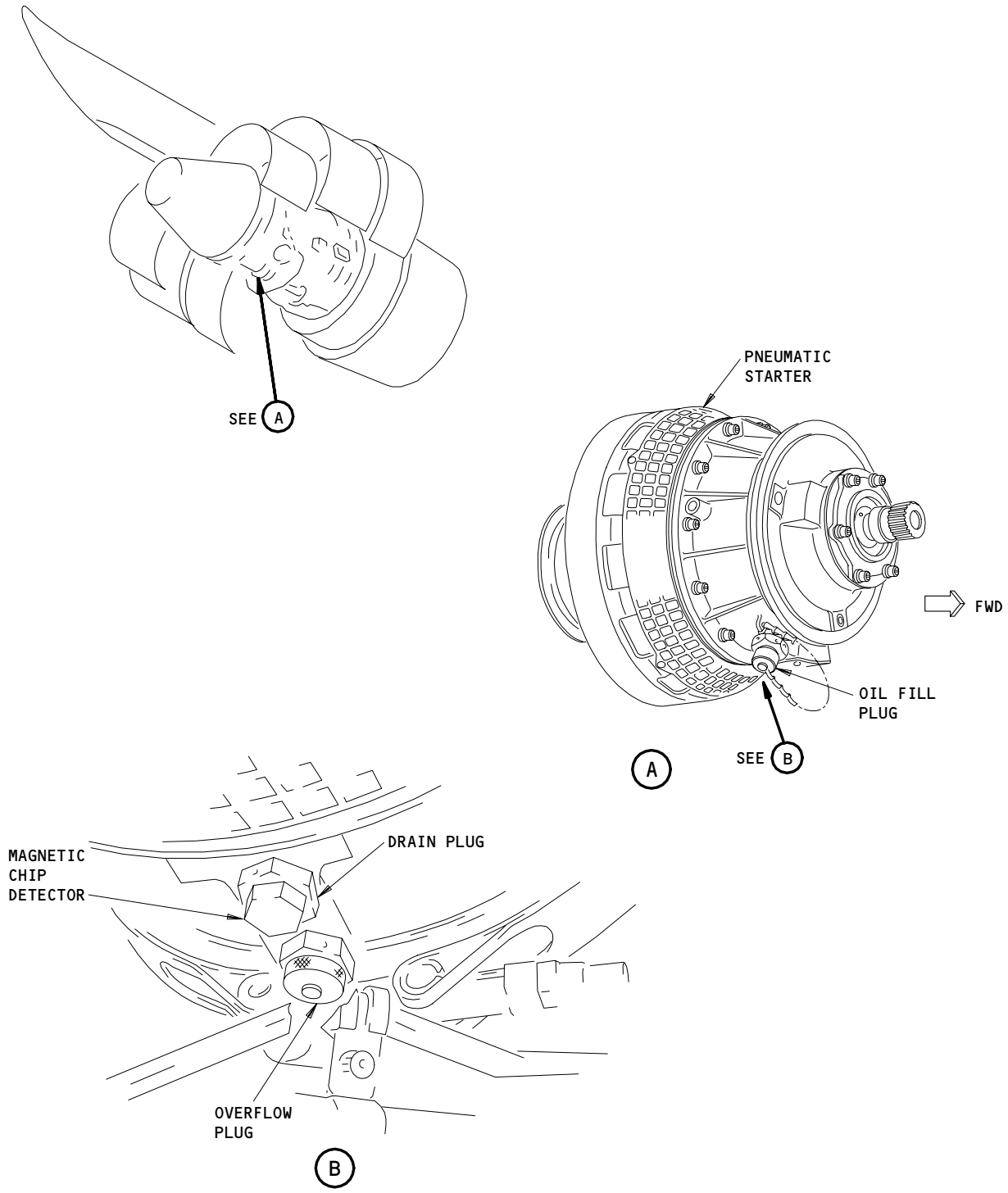
WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSERS. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(6) Close the right thrust reverser (AMM 78-31-00/201).

(7) Close the right core cowl panel (AMM 71-11-06/201).

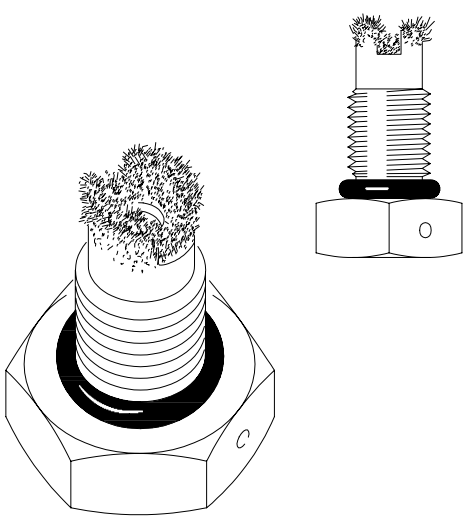
(8) Close the right fan cowl panel (AMM 71-11-04/201).

(9) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).



Pneumatic Starter Inspection
Figure 601

ACCEPTABLE



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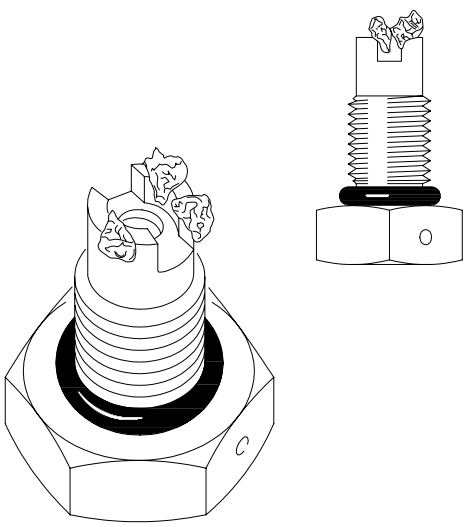


Magnetic Chip Detector Inspection
Figure 602

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-403-01-1
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 1		1C	11212	005	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CLEAN	ENG 1 STARTER CONTROL VALVE FILTER		NOTE	4000

ZONES	ACCESS PANELS
411	417AL 418AR

MECH	INSP	MPD ITEM NUMBER

CLEAN THE ENGINE 1 STARTER CONTROL VALVE FILTER. N80-11-04-2A

NOTE: TASK APPLICABLE TO VALVES WITH AIR FILTERS INSTALLED.

1. Remove the Starter Control Valve Filter

A. References

(1) AMM 36-00-00/201, Pneumatic Power

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

(4) AMM 80-11-02/401, Starter Control Valve

B. Prepare for the Removal of the Filter.

(1) Remove pneumatic power (AMM 36-00-00/201).

(2) Open this circuit breaker on the overhead panel, P11, and attach the DO-NOT-CLOSE tag:

(a) 11D19, ENGINE START CONT LEFT

(3) Open this circuit breaker on the overhead panel, P11, and attach the DO-NOT-CLOSE tag:

(a) 11D20, ENGINE START CONT RIGHT

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

(4) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(5) Open the core cowl panels (AMM 71-11-06/201).

C. Procedure

(1) Remove the filter (Fig. 201).

(a) Remove the starter control valve (AMM 80-11-02/401).

(b) Do the steps that follow to remove the filter:

1) Remove the filter tube from the body section and from the valve flow section.

a) Discard the packing.

2) Remove the filter from the boss on the valve flow section.

3) If the filter is dirty, clean the filter.

2. Install the Starter Control Valve Filter

A. Consumable Materials

(1) D00111 Lubricant - Dry Film, MIL-L-23398

B. References

(1) AMM 71-11-06/201, Core Cowl Panels

(2) AMM 78-31-00/201, Thrust Reverser System

(3) AMM 80-11-02/401, Starter Control Valve

C. Procedure

(1) Install the filter.

(a) Do the steps that follow to install the filter:

1) Install the filter in the boss on the valve flow section.

2) Install the new packing, with lubricant, on the filter tube.

3) Install the filter tube in the valve flow section and the body section.

(b) Install the starter control valve (AMM 80-11-02/401).

D. Return the Aircraft to Its Usual Condition.

(1) Close the core cowl panels (AMM 71-11-06/201).

(2) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).

(3) For the left engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:

(a) 11D19, ENGINE START CONT LEFT

(4) For the right engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:

(a) 11D20, ENGINE START CONT RIGHT

3. Clean the Starter Control Valve Filter

A. Consumable Materials

(1) B00074 Solvent - Degreasing MIL-PRF-680 (Supersedes P-D-680)

B. Procedure

(1) Clean the starter control-valve filter (Fig. 201):

(a) Remove the starter control-valve filter.

WARNING: DO NOT GET THE SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE SOLVENT. PUT PROTECTIVE SPLASH GOGGLES AND GLOVES ON WHEN YOU USE THE SOLVENT. KEEP THE SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. THIS SOLVENT IS POISONOUS AND FLAMMABLE, AND CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE YOU USE THE CORRECT PROCESS TO CLEAN THE PARTS. IF YOU DO NOT DO THIS, YOU CAN CAUSE DAMAGE TO THE COMPONENT PARTS.

MECH	INSP

(b) Clean the filter with the solvent.

WARNING: USE GOGGLES WHEN YOU USE COMPRESSED AIR. PARTICLES WHICH ARE BLOWN BY THE COMPRESSED AIR CAN CAUSE INJURY.

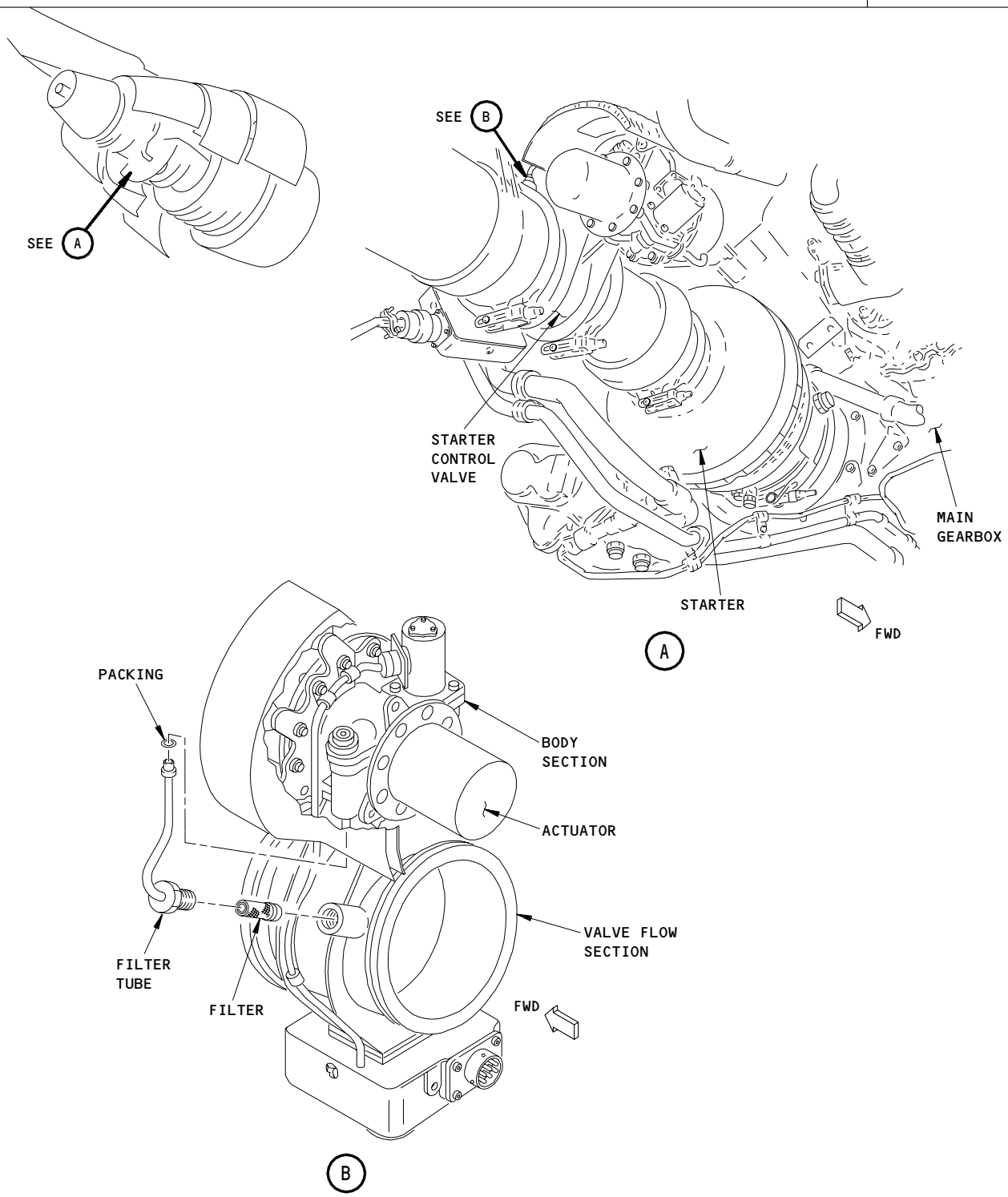
CAUTION: BE CAREFUL WHEN YOU USE COMPRESSED AIR TO CLEAN THE MESH OF THE FILTER SCREEN. COMPRESSED AIR CAN CAUSE DAMAGE TO THE MESH OF THE FILTER SCREEN.

(c) Use filtered compressed air at not more than 30 psig to make the filter dry.

(d) Make sure there is no unwanted material in the filter.

1) If you find unwanted material in the filter, clean the filter again.

(e) Install the starter control valve filter.



Starter Control Valve Filter Installation
Figure 201

STATION		BOEING CARD NO.
TAIL NO.	SAS BOEING 767 TASK CARD	80-403-01-2
DATE		AIRLINE CARD NO.

SKILL	WORK AREA	RELATED TASK	INTERVAL	PHASE	MPD REV	TASK CARD REVISION
ENGIN	ENGINE 2		1C	11212	005	DEC 22/07

TASK	TITLE	STRUCTURAL ILLUSTRATION REFERENCE	APPLICABILITY AIRPLANE	APPLICABILITY ENGINE
CLEAN	ENG 2 STARTER CONTROL VALVE FILTER		NOTE	4000

ZONES	ACCESS PANELS
421	427AL 428AR

MECH	INSP	MPD ITEM NUMBER

CLEAN THE ENGINE 2 STARTER CONTROL VALVE FILTER. N80-11-04-2A

NOTE: TASK APPLICABLE TO VALVES WITH AIR FILTERS INSTALLED.

1. Remove the Starter Control Valve Filter

A. References

(1) AMM 36-00-00/201, Pneumatic Power

(2) AMM 71-11-06/201, Core Cowl Panels

(3) AMM 78-31-00/201, Thrust Reverser System

(4) AMM 80-11-02/401, Starter Control Valve

B. Prepare for the Removal of the Filter.

(1) Remove pneumatic power (AMM 36-00-00/201).

(2) Open this circuit breaker on the overhead panel, P11, and attach the DO-NOT-CLOSE tag:

(a) 11D19, ENGINE START CONT LEFT

(3) Open this circuit breaker on the overhead panel, P11, and attach the DO-NOT-CLOSE tag:

(a) 11D20, ENGINE START CONT RIGHT

WARNING: DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. THE ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT.

MECH | INSP

(4) Do this procedure: Thrust Reverser Deactivation for Ground Maintenance (AMM 78-31-00/201).

(5) Open the core cowl panels (AMM 71-11-06/201).

C. Procedure

(1) Remove the filter (Fig. 201).

(a) Remove the starter control valve (AMM 80-11-02/401).

(b) Do the steps that follow to remove the filter:

1) Remove the filter tube from the body section and from the valve flow section.

a) Discard the packing.

2) Remove the filter from the boss on the valve flow section.

3) If the filter is dirty, clean the filter.

2. Install the Starter Control Valve Filter

A. Consumable Materials

(1) D00111 Lubricant - Dry Film, MIL-L-23398

B. References

(1) AMM 71-11-06/201, Core Cowl Panels

(2) AMM 78-31-00/201, Thrust Reverser System

(3) AMM 80-11-02/401, Starter Control Valve

C. Procedure

(1) Install the filter.

(a) Do the steps that follow to install the filter:

1) Install the filter in the boss on the valve flow section.

2) Install the new packing, with lubricant, on the filter tube.

3) Install the filter tube in the valve flow section and the body section.

(b) Install the starter control valve (AMM 80-11-02/401).

D. Return the Aircraft to Its Usual Condition.

(1) Close the core cowl panels (AMM 71-11-06/201).

(2) Do the activation procedure for the thrust reverser (AMM 78-31-00/201).

(3) For the left engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:

(a) 11D19, ENGINE START CONT LEFT

(4) For the right engine, remove the DO-NOT-CLOSE tag and close this circuit breaker on the P11 panel:

(a) 11D20, ENGINE START CONT RIGHT

3. Clean the Starter Control Valve Filter

A. Consumable Materials

(1) B00074 Solvent - Degreasing MIL-PRF-680 (Supersedes P-D-680)

B. Procedure

(1) Clean the starter control-valve filter (Fig. 201):

(a) Remove the starter control-valve filter.

WARNING: DO NOT GET THE SOLVENT IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM THE SOLVENT. PUT PROTECTIVE SPLASH GOGGLES AND GLOVES ON WHEN YOU USE THE SOLVENT. KEEP THE SOLVENT AWAY FROM SPARKS, FLAME AND HEAT. THIS SOLVENT IS POISONOUS AND FLAMMABLE, AND CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

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MECH	INSP

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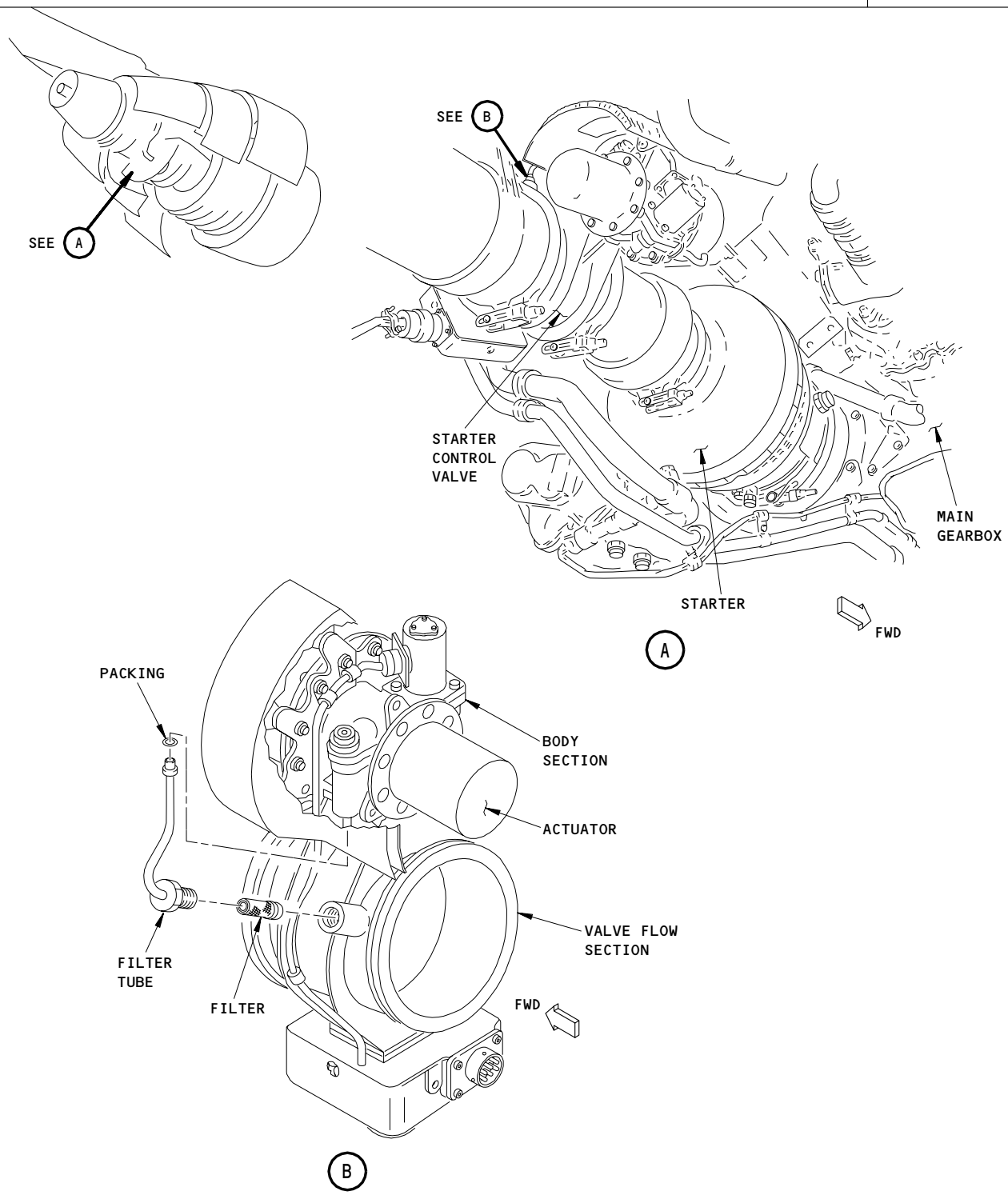
(c) Use filtered compressed air at not more than 30 psig to make the filter dry.

(d) Make sure there is no unwanted material in the filter.

1) If you find unwanted material in the filter, clean the filter again.

(e) Install the starter control valve filter.



Starter Control Valve Filter Installation
Figure 201