

July 2012



# SERVICE MANUAL ADDENDUM

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## IC-M423 IC-M424

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## PARTS LIST

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1150002470	IC RA33H1516M1-225	T	73.9/48.1
IC2	1110006670	S.IC NJM2730F-TE1-#ZZZB	T	65.9/16.0
IC101	1130016080	S.IC GP214D <SEI>	T	91.4/14.3
IC201	1110007320	S.IC NJM2591V-TE1-#ZZZB	T	97.0/18.6
IC202	1110006490	S.IC LMV321IDCKR	T	111.2/14.3
IC301	1110007320	S.IC NJM2591V-TE1-#ZZZB	B	32.0/28.3
IC502	1130011770	S.IC CD4066BPWR	B	54.0/20.3
IC503	1130011770	S.IC CD4066BPWR	B	74.5/10.3
IC504	1130011770	S.IC CD4066BPWR	B	74.2/16.7
IC505	1130007021	S.IC TC7S66FU(TE85LF)	B	63.7/10.3
IC506	1110006470	S.IC LMV324IPWR	B	8.2/46.4
IC511	1180003480	S.REG NJU7772F33-TE1-#ZZZB	B	
IC512	1180002781	REG KIA7805API-U/PF	B	
IC513	1110006470	S.IC LMV324IPWR	B	28.0/15.3
IC514	1190001350	S.IC M62364FP 600D	T	44.7/28.7
IC515	1110006740	S.IC LMV358IPWR	T	43.7/21.1
IC701	1110007900	IC LA4625-E	B	15.5/16.2
IC702	1110006740	S.IC LMV358IPWR	B	12.0/14.3
IC703	1130007021	S.IC TC7S66FU(TE85LF)	B	18.2/11.0
IC704	1130007021	S.IC TC7S66FU(TE85LF)	B	46.5/20.3
IC801	1130011760	S.IC CD4094BPWR	B	39.0/20.3
IC802	1130011760	S.IC CD4094BPWR	T	52.5/21.5
IC901	1130009981	S.IC TC7W53FK(TE85LF)	B	51.9/36.1
IC902	1190003240	S.IC LC70301W-UIC-H	B	37.7/34.9
IC903	1180003820	S.REG NJM2847F33-011-TE1-#HZZH	B	57.5/25.3
IC904	1130009981	S.IC TC7W53FK(TE85LF)	T	60.0/26.2
IC905	1110006490	S.IC LMV321IDCKR	T	
Q9	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	90.1/31.1
Q10	1510001090	S.TRA KTA2015Y-RTK/P	B	62.6/48.6
Q11	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	60.2/48.6
Q12	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	60.2/46.1
Q13	1530002881	S.TRA 2SC4226-T1 Y24 (R24)	T	65.1/46.9
Q14	1590004060	S.TRA LDTC114EET1G <SLVJ>	T	71.0/49.3
Q15	1590004060	S.TRA LDTC114EET1G <SLVJ>	T	76.8/46.1
Q21	1520000840	S.TRA KTA1664Y-RTF/P	B	105.0/29.6
Q22	1530003900	S.TRA KTC4075 BL-RTK/P	B	106.5/25.2
Q23	1510001090	S.TRA KTA2015Y-RTK/P	B	106.0/19.5
Q24	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	102.3/17.5
Q201	1580000751	S.FET 3SK294(TE85LF)	T	120.9/44.7
Q202	1580000731	S.FET 3SK293(TE85LF)	T	116.7/31.8
Q203	1530003950	S.FET KTC4080 Y-RTK/P	T	93.6/20.3
Q302	1580000731	S.FET 3SK293(TE85LF)	B	127.1/30.0
Q303	1530003950	S.FET KTC4080 Y-RTK/P	B	115.2/16.3
Q401	1580000751	S.FET 3SK294(TE85LF)	T	123.2/12.3
Q402	1580000731	S.FET 3SK293(TE85LF)	T	129.3/22.0
Q501	1520000380	TRA 2SB1143 S	B	9.7/51.7
Q502	1590003800	S.FET KTC811U-GR-RTK/P	B	78.2/17.8
Q503	1560000541	S.FET 2SK880-Y(T5R1COMF)	B	28.4/23.7
Q504	1590004050	S.TRA LDTA144EET1G <SLVJ>	B	28.1/26.4
Q505	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	78.3/10.8
Q506	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	9.7/41.4
Q511	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	8.2/38.2
Q512	1590004710	S.FET TPC6111(TE85LF)	B	82.8/13.1
Q701	1530003900	S.TRA KTC4075 BL-RTK/P	B	82.8/5.4
Q702	1530003900	S.TRA KTC4075 BL-RTK/P	B	
D7	1750001910	S.DIO HVD144AKRF-E	B	68.2/35.7
D8	1750001910	S.DIO HVD144AKRF-E	B	70.7/33.2
D11	1720000361	S.DIO HSU88TRF-E	T	78.6/49.6
D12	1790000691	S.DIO HSM88ASRTR-E	T	81.2/50.3
D13	1790000691	S.DIO HSM88ASRTR-E	T	83.3/47.0
D14	1750002060	S.DIO RN752TE-21	T	98.0/51.7
D16	1750002060	S.DIO RN752TE-21	T	110.3/47.0
D18	1790000691	S.DIO HSM88ASRTR-E	T	116.8/47.7
D19	1750001910	S.DIO HVD144AKRF-E	T	104.1/45.1
	1750001910	S.DIO HVD144AKRF-E [USA-01]	T	
	1750001910	S.DIO HVD144AKRF-E [AUS]	T	
	1750001910	S.DIO HVD144AKRF-E [AUS-01]	T	
D21	1750000771	S.VAR HVC376BTRF-E	T	62.8/5.2
D22	1750001810	S.DIO L1SS400T1G <SLVJ>	T	60.4/15.7
D501	1790001990	S.VAR EZJP0V080DA	T	43.5/43.4
D502	1790001990	S.VAR EZJP0V080DA	T	41.2/41.4
D503	1790001990	S.VAR EZJP0V080DA	T	39.6/52.6
D504	1790001990	S.VAR EZJP0V080DA	T	42.8/53.5
D601	1790000700	DIO DSA3A1	T	
FI201	2040002060	S.SAW HDF160F SMD-3 <SEI>	T	123.1/37.7
FI202	2030000930	S.MON 21L715A3(1MD) 21.7 MHz (FL-450)	T	106.1/27.3
FI203	2030000940	S.MON 21L715A3 21.7 MHz (FL-451)	T	97.3/27.3
FI204	2020002480	S.CER LTWC450E1 <JJE>	T	80.5/8.2
FI302	2030000950	S.MON 30L715A(1MD) 30.875 MHz (FL-452)	B	123.0/22.0
FI303	2030000960	S.MON 30L715A 30.875 MHz (FL-453)	B	113.8/22.0
FI304	2020002480	S.CER LTWC450E1 <JJE>	T	101.7/8.2
X101	6050013300	S.XTA CR-921(SX-53S 21.25 MHz) <SKD>	T	65.0/10.1
X201	6070000310	S.DIS JTBM450CX70 <JJE>	T	90.8/5.6
X301	6070000310	S.DIS JTBM450CX70 <JJE>	T	110.4/5.6
X302	6050013310	S.XTA CR-922(SX-32S 30.425 MHz) <SKD>	T	105.3/17.8

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
X401	6050013280	S.XTA CR-923 DSB321SCL 41.883333 MHz	T	118.0/10.9
X901	6060000880	S.CER CSTCE8M19G55	B	61.6/36.7
L6	6200013760	S.COI MLK1005S82NJT	T	73.7/17.9
L11	6200013750	S.COI MLK1005SR10JT	T	64.4/49.0
L19	6200010770	S.COI C2520C-R68G-A	T	92.4/45.2
L20	6200014320	S.COI 0.80-3.0-5TR 41.0N <COMO>	T	90.3/51.7
L21	6200014330	S.COI 0.80-2.7-5TR 35.0N <COMO>	T	111.3/54.2
L22	6200014330	S.COI 0.80-2.7-5TR 35.0N <COMO>	T	118.7/56.4
L23	6200012700	S.COI 0.50-2.0-6TL 35.0N <COMO>	T	104.4/49.9
L24	6200011210	S.COI C2012C-1R0J-A [USA]	T	101.5/44.6
	6200011210	S.COI C2012C-1R0J-A [USA-01]	T	
	6200011210	S.COI C2012C-1R0J-A [AUS]	T	
	6200011210	S.COI C2012C-1R0J-A [AUS-01]	T	
L201	6200009920	S.COI C2012C-R10G-A	T	116.0/44.9
L202	6200010320	S.COI C2012C-R15G-A	T	123.3/44.2
L203	6200011680	S.COI LQW18ANR12G00D	T	115.4/34.8
L204	6200011200	S.COI C2012C-R82J-A	T	115.2/28.4
L206	6200013750	S.COI MLK1005SR10JT	T	112.5/33.0
L207	6200009560	S.COI MLG1608B R10J-T	T	109.8/34.7
L211	6200009141	S.COI NLV25T-6R8J	T	84.3/17.0
L301	6200009920	S.COI C2012C-R10G-A	B	129.4/43.7
L302	6200009920	S.COI C2012C-R10G-A	B	129.4/39.4
L303	6200010330	S.COI C2012C-R18G-A	B	129.4/34.1
L304	6200007360	S.COI ELJND R47J	B	123.9/28.6
L305	6200013780	S.COI MLK1005S56NJT	B	128.9/26.9
L306	6200013780	S.COI MLK1005S56NJT	B	128.9/25.3
L401	6200010910	S.COI LQW18AN56NG00D	T	125.4/12.2
L402	6200010910	S.COI LQW18AN56NG00D	T	130.3/11.8
L403	6200010910	S.COI LQW18AN56NG00D	T	130.3/16.6
L404	6200009250	S.COI LQW18ANR22G00D (LQW1608AR22G00)	T	127.1/22.0
L901	6200005041	S.COI NLV25T-220J	B	41.0/37.4
L902	6200002861	S.COI NLV25T-4R7J	B	41.0/32.4
L903	6200002861	S.COI NLV25T-4R7J	B	41.0/34.9
R1	7030010040	S.RES ERJ2GEJ-JPW	T	71.9/16.8
R2	7030008370	S.RES ERJ2GEJ 561 X (560)	T	73.1/16.4
R3	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	78.3/18.9
R4	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	76.6/16.5
R35	7030007270	S.RES ERJ2GEJ 151 X (150)	B	70.7/28.7
R36	7030004980	S.RES ERJ2GEJ 101 X (100)	T	71.5/18.3
R51	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	62.4/46.4
R52	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	64.4/48.0
R53	7030005000	S.RES ERJ2GEJ 471 X (470)	B	60.5/44.1
R61	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	67.2/35.5
R62	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	69.7/47.1
R63	7030010040	S.RES ERJ2GEJ-JPW	T	69.2/45.9
R66	7030005530	S.RES ERJ2GEJ 100 X (10)	T	64.4/50.7
R67	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	65.3/49.3
R68	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	67.5/46.8
R69	7030004980	S.RES ERJ2GEJ 101 X (100)	T	68.0/49.0
R70	7030010040	S.RES ERJ2GEJ-JPW	T	63.0/49.0
R71	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	86.0/51.8
R72	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	84.4/51.8
R73	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	91.9/48.0
R74	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	90.2/48.0
R75	7030007240	S.RES ERJ12YJ680U (68)	T	87.5/43.9
R76	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80.3/47.6
R78	7030007280	S.RES ERJ2GEJ 331 X (330)	T	77.2/48.1
R79	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	76.9/49.4
R80	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	76.4/51.2
R82	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	74.6/51.2
R83	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	74.6/45.8
R84	7030007250	S.RES ERJ2GEJ 220 X (22)	T	72.9/45.8
R87	7030005000	S.RES ERJ2GEJ 471 X (470)	T	72.9/51.2
R88	7030010040	S.RES ERJ2GEJ-JPW	T	71.2/51.2
R91	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	115.5/62.0
R96	7030009200	S.RES ERJ2GEJ 390 X (39) [USA]	T	107.2/44.4
	7030009200	S.RES ERJ2GEJ 390 X (39) [USA-01]	T	
	7030009200	S.RES ERJ2GEJ 390 X (39) [AUS]	T	
	7030009200	S.RES ERJ2GEJ 390 X (39) [AUS-01]	T	
R97	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA]	T	98.9/43.8
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]	T	
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [AUS]	T	
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [AUS-01]	T	
R98	7030009280	S.RES ERJ2GEJ 391 X [UK]	T	111.9/44.3
	7030009280	S.RES ERJ2GEJ 391 X [EUR]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG]	T	
	7030009280	S.RES ERJ2GEJ 391 X [UK-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [EUR-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG-01]	T	

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R99	7030010040	S.RES ERJ2GEJ-JPW [USA]	T	112.4/43.0
	7030010040	S.RES ERJ2GEJ-JPW [USA-01]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [UK]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [EUR]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [HOL]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [FRG]		
	7030010040	S.RES ERJ2GEJ-JPW [CHN]		
	7030010040	S.RES ERJ2GEJ-JPW [AUS]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [UK-01]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [EUR-01]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [HOL-01]		
	7030010430	S.RES ERJ2GEJ 120 X (12) [FRG-01]		
	7030010040	S.RES ERJ2GEJ-JPW [CHN-01]		
	7030010040	S.RES ERJ2GEJ-JPW [AUS-01]		
R100	7030009280	S.RES ERJ2GEJ 391 X [UK]	T	112.9/44.3
	7030009280	S.RES ERJ2GEJ 391 X [EUR]		
	7030009280	S.RES ERJ2GEJ 391 X [HOL]		
	7030009280	S.RES ERJ2GEJ 391 X [FRG]		
	7030009280	S.RES ERJ2GEJ 391 X [UK-01]		
	7030009280	S.RES ERJ2GEJ 391 X [EUR-01]		
	7030009280	S.RES ERJ2GEJ 391 X [HOL-01]		
	7030009280	S.RES ERJ2GEJ 391 X [FRG-01]		
R101	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	104.7/25.7
R102	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	104.3/24.3
R103	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	104.0/19.6
R104	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	104.0/17.9
R116	7410001150	S.ARR EXB28V471JX	T	57.9/14.8
R117	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	69.8/11.8
R118	7030010040	S.RES ERJ2GEJ-JPW	T	68.5/12.2
R119	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	60.9/8.7
R120	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	61.3/10.1
R201	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	119.0/44.1
R202	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	119.0/46.9
R203	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	121.7/42.7
R204	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	120.8/42.7
R205	7030005710	S.RES ERJ2GEJ 121 X (120)	T	126.0/46.5
R206	7030004990	S.RES ERJ2GEJ 221 X (220)	T	125.8/44.5
R207	7030005580	S.RES ERJ2GEJ 560 X (56)	T	121.0/46.9
R211	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	118.9/31.7
R212	7030007350	S.RES ERJ2GEJ 393 X (39K)	T	118.9/32.6
R213	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	114.8/31.4
R214	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	114.3/33.0
R221	7030005530	S.RES ERJ2GEJ 100 X (10)	T	119.9/28.1
R222	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA]	T	111.8/28.4
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [UK]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [EUR]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [HOL]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [FRG]		
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [CHN]		
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [AUS]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [UK-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [EUR-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [HOL-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [FRG-01]		
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [CHN-01]		
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [AUS-01]		
R223	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	110.9/26.5
R224	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	93.1/23.9
R225	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	93.1/22.1
R226	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	94.9/22.1
R227	7030007280	S.RES ERJ2GEJ 331 X (330)	T	93.7/18.5
R229	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	107.2/33.5
R231	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	92.8/10.1
R232	7030005000	S.RES ERJ2GEJ 471 X (470)	T	94.2/9.7
R233	7030004970	S.RES ERJ2GEJ 470 X (47)	T	88.6/18.8
R234	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	88.2/17.6
R235	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	97.3/16.6
R236	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	99.7/18.1
R237	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	98.8/18.1
R238	7030004980	S.RES ERJ2GEJ 101 X (100)	T	100.6/18.1
R239	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	101.5/18.0
R242	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	71.5/12.7
R251	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	86.4/12.0
R252	7030009270	S.RES ERJ2GEJ 821 X (820)	T	86.8/8.9
R253	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	85.9/8.9
R261	7030003860	S.RES ERJ3GE JPW V	T	127.9/40.8
R262	7030003860	S.RES ERJ3GE JPW V	T	127.9/39.3
R263	7030003860	S.RES ERJ3GE JPW V	T	127.9/36.8
R264	7030003860	S.RES ERJ3GE JPW V	T	124.4/31.4
R301	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	127.2/34.0
R302	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	127.2/32.2
R303	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	128.9/28.6
R304	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	127.5/28.2
R305	7030005530	S.RES ERJ2GEJ 100 X (10)	B	124.7/33.6
R306	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	124.6/27.2
R311	7030005010	S.RES ERJ2GEJ 681 X (680)	B	126.0/25.8
R312	7030005010	S.RES ERJ2GEJ 681 X (680)	B	111.2/17.6
R313	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	113.4/16.3
R314	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	118.8/16.3
R315	7030007280	S.RES ERJ2GEJ 331 X (330)	B	116.6/14.8
R321	7030004970	S.RES ERJ2GEJ 470 X (47)	T	113.0/18.0
R322	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	112.5/10.1
R323	7030005000	S.RES ERJ2GEJ 471 X (470)	T	113.8/9.7
R324	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	110.0/18.0
R401	7030004970	S.RES ERJ2GEJ 470 X (47)	T	119.3/13.0
R402	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	120.9/13.9
R403	7030006610	S.RES ERJ2GEJ 394 X (390K)	T	122.2/14.4
R404	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	120.9/10.3
R405	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	123.2/10.3
R406	7030004980	S.RES ERJ2GEJ 101 X (100)	T	125.8/14.4
R407	7030004970	S.RES ERJ2GEJ 470 X (47)	T	123.1/14.4
R408	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	120.9/11.2
R411	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	128.3/18.6
R412	7030006610	S.RES ERJ2GEJ 394 X (390K)	T	129.8/19.5

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R413	7030005720	S.RES	ERJ2GEJ 563 X (56K)	T	131.2/21.6
R414	7030005240	S.RES	ERJ2GEJ 473 X (47K)	T	129.7/24.7
R415	7030005530	S.RES	ERJ2GEJ 100 X (10)	T	124.9/19.8
R416	7030004970	S.RES	ERJ2GEJ 470 X (47)	T	128.5/19.8
R417	7030005530	S.RES	ERJ2GEJ 100 X (10)	T	125.3/21.0
R501	7030012300	S.RES	ERJ2RKF 1502X (15K)	B	9.0/49.8
R502	7030011660	S.RES	ERJ2RKF 1002 (10K)	B	10.7/49.8
R503	7030011660	S.RES	ERJ2RKF 1002 (10K)	B	12.1/50.8
R504	7030007280	S.RES	ERJ2GEJ 331 X (330)	B	12.1/52.6
R505	7030007280	S.RES	ERJ2GEJ 331 X (330)	B	12.1/51.7
R506	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	10.7/48.9
R511	7030011150	S.RES	ERJ2GEJ 2R7 X (2.7)	T	42.2/43.6
R512	7030011150	S.RES	ERJ2GEJ 2R7 X (2.7)	T	37.7/43.6
R513	7030011150	S.RES	ERJ2GEJ 2R7 X (2.7)	T	41.2/43.6
R514	7030011150	S.RES	ERJ2GEJ 2R7 X (2.7)	T	40.7/51.0
R515	7030011150	S.RES	ERJ2GEJ 2R7 X (2.7)	T	41.7/51.0
R517	7030005240	S.RES	ERJ2GEJ 473 X (47K)	T	77.8/16.0
R521	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	30.9/33.5
R522	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	31.8/33.5
R523	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	30.0/33.5
R524	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	34.3/23.0
R525	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	32.5/23.0
R526	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	57.5/6.5
R527	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	34.4/34.0
R528	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	34.4/34.9
R529	7030005060	S.RES	ERJ2GEJ 333 X (33K)	B	65.4/7.7
R530	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	65.4/5.6
R531	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	28.7/30.8
R532	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	27.8/30.8
R533	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	67.5/7.1
R534	7030009140	S.RES	ERJ2GEJ 272 X (2.7K)	B	35.3/28.4
R535	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	33.4/23.0
R537	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	30.0/23.0
R539	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	53.0/25.1
R540	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	55.9/15.6
R541	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	57.8/21.4
R544	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	52.8/14.7
R545	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	50.7/23.9
R547	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	71.4/15.1
R548	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	78.1/9.1
R549	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	72.2/5.7
R550	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	60.1/8.5
R551	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	58.7/5.4
R552	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	60.3/4.5
R553	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	62.0/4.5
R554	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	62.0/5.6
R555	7030008290	S.RES	ERJ2GEJ 183 X (18K)	B	59.5/11.5
R556	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	60.4/11.5
R557	7030008300	S.RES	ERJ2GEJ 184 X (180K)	B	60.4/13.2
R558	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	60.4/14.9
R559	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	59.5/13.2
R560	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	59.5/14.9
R561	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	58.6/13.2
R562	7030008400	S.RES	ERJ2GEJ 182 X (1.8K)	B	63.4/16.9
R563	7030005100	S.RES	ERJ2GEJ 154 X (150K)	B	61.7/16.9
R564	7030008290	S.RES	ERJ2GEJ 183 X (18K)	B	61.7/16.0
R565	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	B	67.0/11.2
R566	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	67.0/12.9
R567	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	71.2/11.7
R568	7030005170	S.RES	ERJ2GEJ 474 X (470K)	B	63.8/19.1
R569	7030010040	S.RES	ERJ2GEJ-JPW	B	60.3/5.4
R571	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	70.5/17.8
R581	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	50.7/19.5
R582	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	50.7/22.2
R583	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	70.5/15.1
R584	7030005160	S.RES	ERJ2GEJ 105 X (1M)	B	69.6/15.1
R585	7030005070	S.RES	ERJ2GEJ 683 X (68K)	B	71.8/16.4
R601	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	10.4/39.5
R602	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	10.4/37.8
R611	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	24.9/28.8
R612	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	25.8/30.6
R621	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	24.7/21.0
R622	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	22.4/19.9
R623	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	26.9/20.0
R624	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	23.8/19.3
R625	7030005070	S.RES	ERJ2GEJ 683 X (68K)	B	23.8/17.6
R626	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	22.9/15.8
R627	7030012750	S.RES	ERJ2RHD 2202X (22.0K)	B	22.0/17.6
R628	7030011120	S.RES	ERJ2RHD 2702X (27.0K)	B	22.9/17.6
R629	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	22.0/15.8
R630	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	24.7/21.3
R632	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	27.7/10.7
R633	7030005170	S.RES	ERJ2GEJ 474 X (470K)	B	23.8/15.8
R634	7030005170	S.RES	ERJ2GEJ 474 X (470K)	B	24.7/16.7
R635	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	B	28.4/7.2
R641	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	31.7/17.5
R642	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	31.7/16.6
R643	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	32.5/19.3
R644	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	32.5/18.4
R645	7030010040	S.RES	ERJ2GEJ-JPW	B	31.2/18.8
R647	7030007340	S.RES	ERJ2GEJ 153 X (15K)	B	29.8/10.7
R661	7030005000	S.RES	ERJ2GEJ 471 X (470)	T	50.7/27.1
R662	7030009280	S.RES	ERJ2GEJ 391 X	T	55.6/31.9
R663	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	54.2/31.5
R664	7410001150	S.ARR	EXB28V471JX	T	51.3/29.2
R671	7030005220	S.RES	ERJ2GEJ 223 X (22K)	T	39.2/21.9
R672	7030005220	S.RES	ERJ2GEJ 223 X (22K)	T	38.3/21.9
R673	7030005110	S.RES	ERJ2GEJ 224 X (220K)	T	38.8/20.6
R676	7030005220	S.RES	ERJ2GEJ 223 X (22K)	T	48.1/20.7
R677	7030005220	S.RES	ERJ2GEJ 223 X (22K)	T	49.0/20.7
R678	7030005110	S.RES	ERJ2GEJ 224 X (220K)	T	48.5/19.4
R701	7030008290	S.RES	ERJ2GEJ 183 X (18K)	B	87.3/14.1
R702	7030005060	S.RES	ERJ2GEJ 333 X (33K)	B	85.5/12.4
R703	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	86.4/12.4
R704	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	85.5/10.7



## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R705	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.6/10.7
R706	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.9/10.7
R707	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	81.0/12.5
R708	7030004970	S.RES ERJ2GEJ 470 X (47)	B	86.4/14.1
R711	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	88.2/16.3
R712	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	85.5/4.7
R713	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	86.4/4.0
R714	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	85.5/3.0
R715	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.6/3.0
R716	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.9/3.0
R717	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	81.0/4.7
R718	7030004970	S.RES ERJ2GEJ 470 X (47)	B	87.3/6.3
R721	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	42.5/24.7
R722	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	39.3/14.1
R723	7510001661	S.THR NTCG16 4LH 473JT	T	66.5/7.0
R724	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	65.7/5.4
R733	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	43.1/13.8
R734	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	31.7/18.6
R735	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	33.0/19.0
R736	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	17.9/15.7
R737	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	17.9/14.1
R738	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.6/12.8
R739	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	14.7/11.6
R740	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	13.1/18.7
R751	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	20.5/21.8
R752	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	18.6/20.5
R753	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	15.6/21.6
R754	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	15.6/20.7
R755	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.3/20.7
R758	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	7.1/14.2
R761	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/30.5
R762	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/31.4
R763	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/23.9
R764	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/24.8
R765	7030011130	S.RES ERJ1TYJ 1R0U (1)	T	12.4/19.2
R766	7030011130	S.RES ERJ1TYJ 1R0U (1)	T	12.4/23.0
R901	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	50.6/19.5
R902	7410001140	S.ARR EXB28V104JX	B	47.2/44.8
R903	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	43.2/35.6
R904	7030011210	S.RES ERJ2GEJ 1R0 X (1)	B	38.1/33.1
R905	7030011210	S.RES ERJ2GEJ 1R0 X (1)	B	38.1/32.2
R906	7030005010	S.RES ERJ2GEJ 681 X (680)	B	60.1/40.6
R907	7030005000	S.RES ERJ2GEJ 471 X (470)	B	59.7/36.6
R911	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.7/40.2
R912	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.7/38.6
R921	7030011210	S.RES ERJ2GEJ 1R0 X (1)	T	60.2/22.0
R922	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	56.0/29.0
R923	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	58.2/28.6
R924	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	60.3/29.0
C1	4030016930	S.CER C1005 JB 1A 104K-T	T	74.0/16.4
C2	4550007520	S.TAN F931A106MAABMA	T	72.9/14.3
C3	4550000550	S.TAN TEESVA 1V 224M8R	B	78.0/20.5
Eqv.	4550008150	S.TAN F921V224MAA		
C10	4030016930	S.CER C1005 JB 1A 104K-T	T	71.0/15.9
C17	4030017460	S.CER C1005 JB 1H 102K-T	B	89.5/35.2
C18	4030017460	S.CER C1005 JB 1H 102K-T	T	91.9/32.0
C51	4030017610	S.CER C1005 CH 1H 090C-T	T	75.0/18.8
C52	4030017610	S.CER C1005 CH 1H 090C-T	T	72.4/18.3
C53	4030017460	S.CER C1005 JB 1H 102K-T	T	70.6/18.3
C61	4030017460	S.CER C1005 JB 1H 102K-T	B	62.4/45.5
C62	4030017460	S.CER C1005 JB 1H 102K-T	B	67.6/47.6
C63	4030020310	S.CER GRM31CB31C106KA88L	B	66.0/47.6
C71	4030017460	S.CER C1005 JB 1H 102K-T	T	83.0/43.4
C72	4030017570	S.CER C1005 CH 1H 040B-T	T	65.7/45.9
C75	4030017460	S.CER C1005 JB 1H 102K-T	T	67.5/50.4
C81	4030017420	S.CER C1005 CH 1H 470J-T	T	67.1/49.0
C82	4030017460	S.CER C1005 JB 1H 102K-T	T	66.2/49.0
C83	4030017620	S.CER C1005 CH 1H 100C-T	T	63.0/47.3
C84	4030017620	S.CER C1005 CH 1H 100C-T	T	61.7/47.7
C89	4550007090	S.TAN TEESVA 1A 226M8R	T	69.6/52.8
Eqv.	4550008160	S.TAN F931A226MAA		
C91	4030017440	S.CER C1005 CH 1H 221J-T	T	69.1/54.6
C92	4030017460	S.CER C1005 JB 1H 102K-T	T	70.0/54.6
C93	4030017420	S.CER C1005 CH 1H 470J-T	T	73.0/53.5
C94	4030017730	S.CER C1005 JB 1H 471K-T	T	73.0/52.6
C95	4030017460	S.CER C1005 JB 1H 102K-T	T	78.4/54.8
C96	4030011600	S.CER C1608 JB 1E 104K-T	T	72.6/54.6
C97	4030020240	S.CER GRM31CR11C475KA01L	B	80.0/53.2
C98	4030020240	S.CER GRM31CR11C475KA01L	B	55.6/55.9
C111	4030020380	S.CER GRM21A5C2E180JW01D	T	88.8/56.5
C112	4030020380	S.CER GRM21A5C2E180JW01D	T	91.5/56.5
C113	4030020420	S.CER GRM21A7U2E102JW31D	T	105.8/53.8
C114	4030020380	S.CER GRM21A5C2E180JW01D	T	106.8/56.9
C115	4030004810	S.CER C2012 CH 1H 040C-T	T	110.1/58.3
C116	4030020390	S.CER GRM21A5C2E270JW01D	T	113.5/59.3
C121	4030020390	S.CER GRM21A5C2E270JW01D	T	108.3/50.6
C122	4030017400	S.CER C1005 CH 1H 220J-T	T	107.4/49.2
C125	4030017460	S.CER C1005 JB 1H 102K-T	T	105.5/44.4
	4030017460	S.CER C1005 JB 1H 102K-T	[USA]	
	4030017460	S.CER C1005 JB 1H 102K-T	[USA-01]	
	4030017460	S.CER C1005 JB 1H 102K-T	[AUS]	
	4030017460	S.CER C1005 JB 1H 102K-T	[AUS-01]	
C126	4030017460	S.CER C1005 JB 1H 102K-T	[USA]	99.3/45.1
	4030017460	S.CER C1005 JB 1H 102K-T	[USA-01]	
	4030017460	S.CER C1005 JB 1H 102K-T	[AUS]	
	4030017460	S.CER C1005 JB 1H 102K-T	[AUS-01]	
C127	4030017460	S.CER C1005 JB 1H 102K-T	T	110.6/43.0
C130	4030017460	S.CER C1005 JB 1H 102K-T	T	94.5/44.3
C131	4030017460	S.CER C1005 JB 1H 102K-T	T	82.7/51.8
C132	4030017460	S.CER C1005 JB 1H 102K-T	T	88.5/48.0
C133	4030017460	S.CER C1005 JB 1H 102K-T	T	80.3/46.0
C134	4030017460	S.CER C1005 JB 1H 102K-T	T	83.4/49.5
C135	4030017460	S.CER C1005 JB 1H 102K-T	T	81.2/47.6
C136	4030017730	S.CER C1005 JB 1H 471K-T	T	77.4/44.5

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C137	4030017460	S.CER	C1005 JB 1H 102K-T	T	76.3/48.1
C138	4030017460	S.CER	C1005 JB 1H 102K-T	T	76.9/50.3
C140	4030016790	S.CER	C1005 JB 1E 103K-T	T	71.5/47.3
C141	4030017460	S.CER	C1005 JB 1H 102K-T	T	70.6/47.3
C143	4030016790	S.CER	C1005 JB 1E 103K-T	T	74.6/44.9
C151	4030020310	S.CER	GRM31CB31C106KA88L	B	101.4/28.2
C152	4030017460	S.CER	C1005 JB 1H 102K-T	B	106.9/21.3
C153	4030019560	S.CER	GRM21BB31C106KE15L	B	106.2/22.7
C160	4030016790	S.CER	C1005 JB 1E 103K-T	T	61.2/17.5
C161	4030017460	S.CER	C1005 JB 1H 102K-T	T	60.3/17.5
C162	4030016930	S.CER	C1005 JB 1A 104K-T	T	67.3/19.3
C163	4030017680	S.CER	C1005 CH 1H 820J-T	T	69.0/10.9
C164	4030017500	S.CER	C1005 CH 1H 560J-T	T	67.2/12.6
C165	4030017640	S.CER	C1005 CH 1H 150J-T	T	62.9/7.6
C166	4030018070	S.CER	C1005 CH 1H 300J-T	T	60.9/7.6
C167	4030016790	S.CER	C1005 JB 1E 103K-T	T	60.4/10.1
C168	4030017550	S.CER	C1005 CH 1H 1R5B-T	T	62.9/6.6
C201	4030017650	S.CER	C1005 CH 1H 270J-T	T	113.8/43.7
C202	4030017620	S.CER	C1005 CH 1H 100C-T	T	115.2/43.3
C203	4030017360	S.CER	C1005 CH 1H 030B-T	T	118.6/45.4
C204	4030017460	S.CER	C1005 JB 1H 102K-T	T	119.9/42.7
C205	4030017400	S.CER	C1005 CH 1H 220J-T	T	120.1/46.9
C206	4030017370	S.CER	C1005 CH 1H 3R5B-T	T	124.9/44.5
C207	4030016930	S.CER	C1005 JB 1A 104K-T	T	123.8/46.9
C208	4030017460	S.CER	C1005 JB 1H 102K-T	T	124.7/46.9
C209	4030017400	S.CER	C1005 CH 1H 220J-T	T	121.9/46.9
C210	4030017760	S.CER	C1005 JB 1H 222K-T	T	122.8/46.9
C211	4030017590	S.CER	C1005 CH 1H 070C-T	T	123.6/42.0
C213	4030017360	S.CER	C1005 CH 1H 030B-T	T	125.3/43.1
C221	4030017360	S.CER	C1005 CH 1H 030B-T	T	117.8/35.3
C222	4030017460	S.CER	C1005 JB 1H 102K-T	T	117.3/34.0
C223	4030017560	S.CER	C1005 CH 1H 2R5B-T	T	115.9/33.7
C224	4030017760	S.CER	C1005 JB 1H 222K-T	T	119.8/30.8
C231	4030016790	S.CER	C1005 JB 1E 103K-T	T	120.8/29.1
C232	4030017500	S.CER	C1005 CH 1H 560J-T	T	113.6/28.4
C233	4030017550	S.CER	C1005 CH 1H 1R5B-T	T	112.7/28.4
C234	4030017400	S.CER	C1005 CH 1H 220J-T	T	116.8/28.4
C235	4030017460	S.CER	C1005 JB 1H 102K-T	T	117.7/28.4
C236	4030016930	S.CER	C1005 JB 1A 104K-T	T	118.6/28.4
C237	4030017460	S.CER	C1005 JB 1H 102K-T	T	110.9/28.4
C242	4030017360	S.CER	C1005 CH 1H 030B-T	[USA]	101.4/24.0
	4030017360	S.CER	C1005 CH 1H 030B-T	[USA-01]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[UK]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[EUR]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[HOL]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[FRG]	
	4030017360	S.CER	C1005 CH 1H 030B-T	[CHN]	
	4030017360	S.CER	C1005 CH 1H 030B-T	[AUS]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[UK-01]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[EUR-01]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[HOL-01]	
	4030017570	S.CER	C1005 CH 1H 040B-T	[FRG-01]	
	4030017360	S.CER	C1005 CH 1H 030B-T	[CHN-01]	
	4030017360	S.CER	C1005 CH 1H 030B-T	[AUS-01]	
C245	4030017460	S.CER	C1005 JB 1H 102K-T	T	93.1/23.0
C251	4030017640	S.CER	C1005 CH 1H 150J-T	T	94.9/23.0
C252	4030016790	S.CER	C1005 JB 1E 103K-T	T	92.1/18.5
C254	4030016790	S.CER	C1005 JB 1E 103K-T	T	93.7/17.6
C262	4030017380	S.CER	C1005 CH 1H 050B-T	T	111.6/33.3
C264	4030017460	S.CER	C1005 JB 1H 102K-T	T	107.6/34.7
C271	4030017420	S.CER	C1005 CH 1H 470J-T	T	92.8/11.0
C272	4030018910	S.CER	C1608 JB 0J 475K-T	T	89.7/10.8
C273	4030016790	S.CER	C1005 JB 1E 103K-T	T	91.5/10.5
C274	4030018890	S.CER	C1005 JB 0J 224K-T	T	97.3/15.7
C275	4030017460	S.CER	C1005 JB 1H 102K-T	T	94.6/11.0
C276	4030017460	S.CER	C1005 JB 1H 102K-T	T	95.1/9.7
C281	4030017450	S.CER	C1005 JB 1H 271K-T	T	86.8/10.6
C282	4030017450	S.CER	C1005 JB 1H 271K-T	T	85.9/10.6
C283	4030017400	S.CER	C1005 CH 1H 220J-T	T	86.4/7.6
C284	4030016930	S.CER	C1005 JB 1A 104K-T	T	86.4/13.4
C285	4030016930	S.CER	C1005 JB 1A 104K-T	T	86.4/14.3
C286	4030016930	S.CER	C1005 JB 1A 104K-T	T	86.4/15.2
C287	4030017460	S.CER	C1005 JB 1H 102K-T	T	89.9/17.6
C288	4030016930	S.CER	C1005 JB 1A 104K-T	T	89.9/18.5
C289	4030016930	S.CER	C1005 JB 1A 104K-T	T	95.2/18.0
C291	4030017350	S.CER	C1005 CH 1H 020B-T	T	81.1/15.9
C292	4030017350	S.CER	C1005 CH 1H 020B-T	T	82.0/18.0
C293	4030017460	S.CER	C1005 JB 1H 102K-T	T	69.8/12.7
C301	4030017550	S.CER	C1005 CH 1H 1R5B-T	B	128.1/42.0
C302	4030017360	S.CER	C1005 CH 1H 030B-T	B	129.8/42.0
C303	4030017380	S.CER	C1005 CH 1H 050B-T	B	129.0/41.0
C304	4030017540	S.CER	C1005 CH 1H 7R5B-T	B	127.2/39.6
C305	4030017540	S.CER	C1005 CH 1H 7R5B-T	B	127.2/37.9
C306	4030017350	S.CER	C1005 CH 1H 020B-T	B	128.6/37.8
C307	4030017380	S.CER	C1005 CH 1H 050B-T	B	128.6/36.9
C308	4030017340	S.CER	C1005 CH 1H 010B-T	B	127.2/36.2
C311	4030017460	S.CER	C1005 JB 1H 102K-T	B	128.6/32.5
C312	4030017460	S.CER	C1005 JB 1H 102K-T	B	126.3/32.2
C321	4030017500	S.CER	C1005 CH 1H 560J-T	B	124.7/30.0
C323	4030017400	S.CER	C1005 CH 1H 220J-T	B	124.7/30.9
C324	4030017460	S.CER	C1005 JB 1H 102K-T	B	124.7/31.8
C325	4030016930	S.CER	C1005 JB 1A 104K-T	B	124.7/32.7
C331	4030017460	S.CER	C1005 JB 1H 102K-T	B	126.0/27.5
C333	4030017610	S.CER	C1005 CH 1H 090C-T	B	120.5/18.6
C336	4030017460	S.CER	C1005 JB 1H 102K-T	B	112.9/17.6
C343	4030016790	S.CER	C1005 JB 1E 103K-T	B	117.0/16.3
C344	4030016790	S.CER	C1005 JB 1E 103K-T	B	113.9/14.8
C352	4030017640	S.CER	C1005 CH 1H 150J-T	B	127.5/26.4
C362	4030018910	S.CER	C1608 JB 0J 475K-T	T	109.3/10.8
C363	4030016790	S.CER	C1005 JB 1E 103K-T	T	111.2/10.5
C364	4030017420	S.CER	C1005 CH 1H 470J-T	T	112.5/11.0
C365	4030016930	S.CER	C1005 JB 1A 104K-T	T	115.9/15.8
C366	4030016930	S.CER	C1005 JB 1A 104K-T	T	116.8/15.8
C367	4030017460	S.CER	C1005 JB 1H 102K-T	T	114.2/11.0
C368	4030017460	S.CER	C1005 JB 1H 102K-T	T	114.7/9.7

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C371	4030017400	S.CER C1005 CH 1H 220J-T	T	108.2/18.0
C372	4030017660	S.CER C1005 CH 1H 330J-T	T	109.1/18.0
C374	4030016930	S.CER C1005 JB 1A 104K-T	T	111.2/18.0
C375	4030016930	S.CER C1005 JB 1A 104K-T	T	106.2/13.9
C376	4030016930	S.CER C1005 JB 1A 104K-T	T	106.2/15.3
C377	4030016930	S.CER C1005 JB 1A 104K-T	T	106.7/12.5
C401	4030016790	S.CER C1005 JB 1E 103K-T	T	117.6/13.0
C402	4030017460	S.CER C1005 JB 1H 102K-T	T	120.9/13.0
C403	4030016930	S.CER C1005 JB 1A 104K-T	T	125.8/19.8
C404	4030017460	S.CER C1005 JB 1H 102K-T	T	122.3/10.3
C405	4030017760	S.CER C1005 JB 1H 222K-T	T	124.0/14.4
C406	4030017410	S.CER C1005 CH 1H 240J-T	T	126.5/12.1
C407	4030017560	S.CER C1005 CH 1H 2R5B-T	T	127.4/12.1
C408	4030017760	S.CER C1005 JB 1H 222K-T	T	124.9/14.4
C411	4030017540	S.CER C1005 CH 1H R75B-T	T	128.3/12.1
C412	4030017410	S.CER C1005 CH 1H 240J-T	T	129.9/12.9
C413	4030017560	S.CER C1005 CH 1H 2R5B-T	T	129.9/13.8
C414	4030017540	S.CER C1005 CH 1H R75B-T	T	129.5/15.1
C415	4030017410	S.CER C1005 CH 1H 240J-T	T	130.8/18.6
C416	4030017340	S.CER C1005 CH 1H 010B-T	T	130.8/17.7
C417	4030017460	S.CER C1005 JB 1H 102K-T	T	129.6/18.1
C421	4030017460	S.CER C1005 JB 1H 102K-T	T	129.7/23.8
C422	4030017460	S.CER C1005 JB 1H 102K-T	T	126.7/19.8
C423	4030017460	S.CER C1005 JB 1H 102K-T	T	127.6/19.8
C424	4030017590	S.CER C1005 CH 1H 070C-T	T	128.4/24.2
C425	4030016790	S.CER C1005 JB 1E 103K-T	T	126.2/17.7
C501	4510010250	S.ELE 16 CE 22 LD	T	11.9/51.2
C502	4030017460	S.CER C1005 JB 1H 102K-T	T	44.3/50.6
C503	4030011600	S.CER C1608 JB 1E 104K-T	T	44.8/51.7
C504	4030017460	S.CER C1005 JB 1H 102K-T	T	5.9/52.8
C505	4030011600	S.CER C1608 JB 1E 104K-T	T	7.0/52.9
C506	4030017730	S.CER C1005 JB 1H 471K-T	B	42.5/53.8
C507	4030016790	S.CER C1005 JB 1E 103K-T	T	44.4/53.8
C508	4030017430	S.CER C1005 CH 1H 101J-T	T	44.3/49.7
C509	4030017730	S.CER C1005 JB 1H 471K-T	T	22.2/53.8
C510	4030016790	S.CER C1005 JB 1E 103K-T	T	23.1/53.8
C511	4030016790	S.CER C1005 JB 1E 103K-T	T	43.5/42.5
C512	4030016790	S.CER C1005 JB 1E 103K-T	T	39.6/44.0
C513	4030020250	S.CER GRM21BB11A225KA01L	T	37.7/40.0
C514	4030017460	S.CER C1005 JB 1H 102K-T	T	38.1/42.4
C521	4030017490	S.CER C1608 JB 1A 105K-T	B	32.9/34.0
C522	4030018890	S.CER C1005 JB 0J 224K-T	B	28.7/32.5
C523	4030018890	S.CER C1005 JB 0J 224K-T	B	28.7/29.2
C524	4030018910	S.CER C1608 JB 0J 475K-T	B	67.2/9.0
C525	4030017460	S.CER C1005 JB 1H 102K-T	B	68.3/8.7
C526	4030017460	S.CER C1005 JB 1H 102K-T	B	35.7/29.7
C527	4030017490	S.CER C1608 JB 1A 105K-T	B	35.4/26.1
C528	4030017490	S.CER C1608 JB 1A 105K-T	B	64.9/3.6
C530	4030017490	S.CER C1608 JB 1A 105K-T	B	58.1/4.3
C531	4030019620	S.CER GRM188B31C225KE14D	B	59.7/6.5
C532	4030017760	S.CER C1005 JB 1H 222K-T	B	60.4/9.8
C533	4030018080	S.CER C1005 JB 1H 182K-T	B	60.1/7.6
C535	4030018890	S.CER C1005 JB 0J 224K-T	B	58.6/11.5
C536	4030017030	S.CER C1005 JB 1A 273K-T	B	58.6/14.9
C537	4030017030	S.CER C1005 JB 1A 273K-T	B	61.7/15.1
C538	4030016930	S.CER C1005 JB 1A 104K-T	B	57.7/14.9
C539	4030017490	S.CER C1608 JB 1A 105K-T	B	68.8/10.9
C541	4030006900	S.CER C1608 JB 1H 103K-T	T	63.7/20.4
C560	4030019620	S.CER GRM188B31C225KE14D	B	57.4/18.7
C571	4030016790	S.CER C1005 JB 1E 103K-T	B	77.8/12.8
C576	4030018890	S.CER C1005 JB 0J 224K-T	B	71.8/17.3
C578	4030017460	S.CER C1005 JB 1H 102K-T	B	69.6/17.1
C602	4030016790	S.CER C1005 JB 1E 103K-T	B	7.4/44.1
C603	4030016930	S.CER C1005 JB 1A 104K-T	B	7.4/43.2
C604	4030016930	S.CER C1005 JB 1A 104K-T	B	12.9/46.0
C605	4030016790	S.CER C1005 JB 1E 103K-T	B	12.9/46.9
C607	4030020310	S.CER GRM31CB31C106KA88L	B	11.0/46.0
C611	4510009920	S.ELE 16 CE 100 LH	T	12.5/44.7
C612	4030016790	S.CER C1005 JB 1E 103K-T	T	6.4/40.8
C613	4030016930	S.CER C1005 JB 1A 104K-T	T	5.5/40.8
C614	4030011600	S.CER C1608 JB 1E 104K-T	T	6.6/34.1
C615	4030016790	S.CER C1005 JB 1E 103K-T	T	7.7/34.1
C616	4510009920	S.ELE 16 CE 100 LH	T	12.5/37.6
C620	4030017460	S.CER C1005 JB 1H 102K-T	B	9.7/43.0
C621	4510010300	S.ELE 16 CE 470 AX	T	28.0/53.0
C622	4030011600	S.CER C1608 JB 1E 104K-T	T	20.6/46.1
C623	4030017440	S.CER C1005 CH 1H 221J-T	T	19.5/46.6
C624	4030017460	S.CER C1005 JB 1H 102K-T	T	18.6/46.6
C625	4030017430	S.CER C1005 CH 1H 101J-T	B	45.1/52.0
C626	4030017420	S.CER C1005 CH 1H 470J-T	B	44.2/52.0
C627	4030017730	S.CER C1005 JB 1H 471K-T	B	51.1/46.6
C628	4030017400	S.CER C1005 CH 1H 220J-T	B	50.2/46.6
C629	4030017400	S.CER C1005 CH 1H 220J-T	B	57.2/56.0
C630	4030017430	S.CER C1005 CH 1H 101J-T	B	58.1/56.0
C631	4030017730	S.CER C1005 JB 1H 471K-T	B	13.7/39.1
C636	4030016790	S.CER C1005 JB 1E 103K-T	T	30.4/21.3
C637	4510010250	S.ELE 16 CE 22 LD	T	28.7/26.5
C640	4030017460	S.CER C1005 JB 1H 102K-T	B	25.6/21.0
C641	4030017510	S.CER C1005 CH 1H 680J-T	B	27.4/20.9
C642	4030018920	S.CER C1005 JB 1H 392K-T	B	24.7/19.3
C643	4030017460	S.CER C1005 JB 1H 102K-T	B	22.4/19.0
C644	4030016790	S.CER C1005 JB 1E 103K-T	B	26.4/10.3
C649	4030017460	S.CER C1005 JB 1H 102K-T	B	27.7/9.8
C650	4030018910	S.CER C1608 JB 0J 475K-T	B	27.4/8.7
C651	4030016790	S.CER C1005 JB 1E 103K-T	B	27.5/7.2
C662	4030020270	S.CER GRM188B11A105KA61D	B	33.9/16.7
C663	4030017460	S.CER C1005 JB 1H 102K-T	B	29.0/20.4
C664	4030016790	S.CER C1005 JB 1E 103K-T	T	27.0/20.1
C669	4030017460	S.CER C1005 JB 1H 102K-T	B	29.8/8.0
C681	4030016790	S.CER C1005 JB 1E 103K-T	T	52.0/27.4
C682	4030018910	S.CER C1608 JB 0J 475K-T	T	51.6/25.6
C683	4030016790	S.CER C1005 JB 1E 103K-T	T	39.1/30.4
C686	4030019460	S.CER C1608 JB 0J 106M-T	T	57.1/31.0
C701	4030016930	S.CER C1005 JB 1A 104K-T	B	87.3/12.4
C702	4030017790	S.CER C1005 JB 1H 682K-T	B	86.4/10.7

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C703	4030016970	S.CER C1005 JB 1E 223K-T	B	82.8/10.7
C704	4030017760	S.CER C1005 JB 1H 222K-T	B	83.7/10.7
C705	4030017790	S.CER C1005 JB 1H 682K-T	B	81.0/10.7
C706	4030016790	S.CER C1005 JB 1E 103K-T	B	80.1/10.7
C707	4030016790	S.CER C1005 JB 1E 103K-T	B	85.5/14.1
C708	4030016930	S.CER C1005 JB 1A 104K-T	B	84.6/14.1
C711	4030016930	S.CER C1005 JB 1A 104K-T	B	88.7/5.1
C712	4030017790	S.CER C1005 JB 1H 682K-T	B	86.4/3.0
C713	4030016970	S.CER C1005 JB 1E 223K-T	B	82.8/3.0
C714	4030017760	S.CER C1005 JB 1H 222K-T	B	83.7/3.0
C715	4030017790	S.CER C1005 JB 1H 682K-T	B	81.0/3.0
C716	4030016790	S.CER C1005 JB 1E 103K-T	B	80.1/4.7
C717	4030016790	S.CER C1005 JB 1E 103K-T	B	85.5/6.3
C718	4030016930	S.CER C1005 JB 1A 104K-T	B	84.6/6.3
C721	4030017680	S.CER C1005 CH 1H 820J-T	B	88.2/14.1
C722	4030016790	S.CER C1005 JB 1E 103K-T	B	89.1/6.3
C724	4030017730	S.CER C1005 JB 1H 471K-T	T	33.2/13.3
C725	4030017680	S.CER C1005 CH 1H 820J-T	T	60.0/4.8
C726	4030017460	S.CER C1005 JB 1H 102K-T	T	86.5/3.2
C727	4030017460	S.CER C1005 JB 1H 102K-T	T	38.3/14.1
C728	4030016790	S.CER C1005 JB 1E 103K-T	T	37.3/14.1
C731	4030017440	S.CER C1005 CH 1H 221J-T	T	36.3/14.1
C732	4030017460	S.CER C1005 JB 1H 102K-T	T	36.7/4.5
C733	4030017460	S.CER C1005 JB 1H 102K-T	T	35.3/14.1
C734	4030017440	S.CER C1005 CH 1H 221J-T	T	35.7/4.5
C741	4030016930	S.CER C1005 JB 1A 104K-T	B	44.8/13.8
C742	4030011600	S.CER C1608 JB 1E 104K-T	B	19.0/14.0
C743	4030017440	S.CER C1005 CH 1H 221J-T	T	31.7/17.7
C744	4030011600	S.CER C1608 JB 1E 104K-T	B	11.2/10.8
C745	4030017460	S.CER C1005 JB 1H 102K-T	B	7.1/9.2
C746	4030017490	S.CER C1608 JB 1A 105K-T	B	18.1/18.4
C748	4030017460	S.CER C1005 JB 1H 102K-T	T	5.0/9.4
C751	4030017440	S.CER C1005 CH 1H 221J-T	B	19.6/20.5
C752	4030011600	S.CER C1608 JB 1E 104K-T	B	17.8/21.9
C753	4030011600	S.CER C1608 JB 1E 104K-T	B	9.3/12.7
C754	4030017460	S.CER C1005 JB 1H 102K-T	B	8.0/14.2
C761	4030017460	S.CER C1005 JB 1H 102K-T	B	7.1/11.8
C762	4510009920	S.ELE 16 CE 100 LH	T	11.2/13.7
C763	4030020310	S.CER GRM31CB31C106KA88L	T	5.2/15.1
C764	4030017480	S.CER C1608 JB 1A 474K-T	B	7.9/20.3
C765	4510010300	S.ELE 16 CE 470 AX	T	13.3/29.6
C766	4030011600	S.CER C1608 JB 1E 104K-T	T	6.5/28.8
C767	4030017460	S.CER C1005 JB 1H 102K-T	T	7.6/27.1
C768	4030017460	S.CER C1005 JB 1H 102K-T	T	7.6/26.2
C769	4030017460	S.CER C1005 JB 1H 102K-T	B	11.5/39.1
C770	4030011600	S.CER C1608 JB 1E 104K-T	B	12.6/39.2
C772	4030011600	S.CER C1608 JB 1E 104K-T	B	8.9/29.5
C773	4030011600	S.CER C1608 JB 1E 104K-T	B	8.9/32.3
C775	4030017440	S.CER C1005 CH 1H 221J-T	B	21.4/33.6
C776	4030017440	S.CER C1005 CH 1H 221J-T	B	21.4/32.1
C777	4030017440	S.CER C1005 CH 1H 221J-T	B	24.5/33.6
C778	4030017440	S.CER C1005 CH 1H 221J-T	B	24.5/32.1
C782	4030011600	S.CER C1608 JB 1E 104K-T	B	8.9/22.9
C783	4030011600	S.CER C1608 JB 1E 104K-T	B	8.9/25.7
C785	4030017440	S.CER C1005 CH 1H 221J-T	B	13.1/24.5
C786	4030017440	S.CER C1005 CH 1H 221J-T	B	13.8/26.8
C787	4030017440	S.CER C1005 CH 1H 221J-T	B	16.4/32.1
C788	4030017440	S.CER C1005 CH 1H 221J-T	B	18.1/32.1
C791	4030017460	S.CER C1005 JB 1H 102K-T	T	5.5/10.7
C792	4030016930	S.CER C1005 JB 1A 104K-T	T	6.4/10.7
C806	4030017460	S.CER C1005 JB 1H 102K-T	T	37.7/4.5
C811	4030017460	S.CER C1005 JB 1H 102K-T	T	40.3/14.1
C812	4030017460	S.CER C1005 JB 1H 102K-T	T	40.7/4.5
C813	4030017460	S.CER C1005 JB 1H 102K-T	T	41.7/15.3
C814	4030017460	S.CER C1005 JB 1H 102K-T	T	41.7/4.5
C816	4030017460	S.CER C1005 JB 1H 102K-T	T	42.7/4.5
C818	4030017460	S.CER C1005 JB 1H 102K-T	T	43.7/4.5
C820	4030017460	S.CER C1005 JB 1H 102K-T	T	44.7/4.5
C821	4030017460	S.CER C1005 JB 1H 102K-T	T	45.3/14.1
C823	4030017460	S.CER C1005 JB 1H 102K-T	T	46.3/14.1
C825	4030017460	S.CER C1005 JB 1H 102K-T	T	47.3/14.1
C827	4030017460	S.CER C1005 JB 1H 102K-T	T	48.3/14.1
C830	4030017400	S.CER C1005 CH 1H 220J-T	T	49.7/4.5
C832	4030017400	S.CER C1005 CH 1H 220J-T	T	50.7/4.5
C834	4030017460	S.CER C1005 JB 1H 102K-T	T	51.7/4.5
C836	4030017460	S.CER C1005 JB 1H 102K-T	T	52.7/4.5
C838	4030017460	S.CER C1005 JB 1H 102K-T	T	53.7/4.5
C841	4030017490	S.CER C1608 JB 1A 105K-T	B	40.8/25.9
C842	4030017460	S.CER C1005 JB 1H 102K-T	B	50.7/25.6
C843	4030016930	S.CER C1005 JB 1A 104K-T	B	42.3/21.4
C901	4030016930	S.CER C1005 JB 1A 104K-T	T	53.3/23.3
C902	4030017460	S.CER C1005 JB 1H 102K-T	T	51.5/19.5
C903	4030016930	S.CER C1005 JB 1A 104K-T	B	44.1/31.8
C904	4030016930	S.CER C1005 JB 1A 104K-T	B	51.0/28.2
C905	4030016930	S.CER C1005 JB 1A 104K-T	B	49.2/28.2
C906	4030016930	S.CER C1005 JB 1A 104K-T	B	43.2/31.8
C907	4030019620	S.CER GRM188B31C225KE14D	B	38.5/37.4
C908	4030016790	S.CER C1005 JB 1E 103K-T	B	36.1/37.0
C910	4030019560	S.CER GRM21BB31C106KE15L	B	41.6/29.3
C911	4550006970	S.TAN TEESVA 0G 476M8R	B	40.3/39.7
Eqv.	4550008240	S.TAN F930G476M4A		
C912	4030016930	S.CER C1005 JB 1A 104K-T	B	59.7/34.7
C913	4030016930	S.CER C1005 JB 1A 104K-T	B	60.1/41.5
C914	4030016930	S.CER C1005 JB 1A 104K-T	B	52.1/43.9
C915	4030017770	S.CER C1005 JB 1H 332K-T	B	59.7/39.3
C916	4030017040	S.CER C1005 JB 1A 333K-T	B	61.5/40.2
C917	4030016930	S.CER C1005 JB 1A 104K-T	B	43.2/37.4
C918	4030016930	S.CER C1005 JB 1A 104K-T	B	44.1/35.6
C919	4030019560	S.CER GRM21BB31C106KE15L	B	46.6/27.8
C921	4030016930	S.CER C1005 JB 1A 104K-T	B	52.6/28.2
C922	4030016930	S.CER C1005 JB 1A 104K-T	B	59.7/33.0
C923	4030016930	S.CER C1005 JB 1A 104K-T	B	60.6/39.3
C924	4030016930	S.CER C1005 JB 1A 104K-T	B	54.6/43.9
C925	4030019560	S.CER GRM21BB31C106KE15L	B	53.6/26.8
C931	4030018920	S.CER C1005 JB 1H 392K-T	T	57.3/28.6

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C932	4030018080	S.CER C1005 JB 1H 182K-T	T	59.1/28.6
C933	4030020010	S.CER C1005 CH 1H 271J-T	T	60.3/28.1
C934	4030016790	S.CER C1005 JB 1E 103K-T	T	60.2/23.3
J1	6510025142	S.CON 10FLT-SM2-TB(LF)(SN)(M)	T	40.9/47.3
J2	6510022472	S.CON 40FLT-SM2-TB(LF)(SN)(M)	T	45.0/9.3
J3	6510018971	S.CON B4B-PH-SM4-TB(LF)(SN)	B	20.7/25.8
F1	5210001160	S.FUS ERBRE3R00V	T	3.8/48.8
W1	7030012290	JUM RDS2T0R0		
W3	8900020400	CAB OPC-2216 <TJM>		
EP401	6910016330	S.BEA MMZ1005S 601CT-S	T	123.7/21.0
EP701	6910016330	S.BEA MMZ1005S 601CT-S	B	8.2/10.1
EP702	6910016330	S.BEA MMZ1005S 601CT-S	B	8.9/14.2
EP703	6910019100	S.BEA MPZ1608S101AT	B	20.0/33.0
EP704	6910019100	S.BEA MPZ1608S101AT	B	23.1/33.0
EP705	6910019100	S.BEA MPZ1608S101AT	B	12.7/26.4
EP706	6910019100	S.BEA MPZ1608S101AT	B	17.6/33.2

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1140016241	S.IC STM32F100ZET6B(FX3338A1) AMSC [USA]	B	79.0/30.0
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [USA-01]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [UK]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [EUR]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [HOL]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [FRG]		
	1140016242	S.IC STM32F100ZET6B(FX3338A2) <AMSC> [CHN]		
	1140016242	S.IC STM32F100ZET6B(FX3338A2) <AMSC> [AUS]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [UK-01]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [HOL-01]		
	1140016241	S.IC STM32F100ZET6B(FX33381) AMSC [FRG-01]		
	1140016242	S.IC STM32F100ZET6B(FX3338A2) <AMSC> [CHN-01]		
	1140016242	S.IC STM32F100ZET6B(FX3338A2) <AMSC> [AUS-01]		
IC2	1110006740	S.IC LMV3581PWR	B	37.0/36.0
IC3	1130009981	S.IC TC7W53FK(TE85LF)	B	38.5/31.8
IC4	1180003570	S.REG NJM2830U1-33-TE1-#ZZZB	B	33.0/10.5
IC5	1130016110	S.IC TC7WH14FK(TE85LF)	B	54.6/13.3
IC6	1130008711	S.IC TC7SET04FU(T5LJF)	B	47.7/40.2
IC7	1130016110	S.IC TC7WH14FK(TE85LF)	B	54.5/39.0
IC8	1170000352	S.IC PC357N6J000F	B	127.0/36.0
IC9	1130016310	S.IC BR24T256FJ-WE2	B	84.0/49.5
IC10	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	43.3/11.2
IC11	1110003650	S.IC NJM2211M-TE1-#ZZZB	B	34.5/45.5
IC12	1130009301	S.IC TC7SET08FU(T5LJF)	B	46.1/53.7
Q1	1520000651	S.TRA 2SB1201S-TL-E	B	129.4/45.9
Q2	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	123.2/41.4
Q3	1590001330	S.TRA DTA114EUA T106	B	54.9/16.9
Q4	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	53.9/20.8
Q5	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	50.2/36.5
Q6	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	47.4/36.8
Q7	1560000541	S.FET 2SK880-Y(T5RICOMF)	B	53.0/35.3
Q8	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	132.9/39.2
Q9	1590000710	S.TRA DTC124EUA T106	B	130.2/40.1
D1	1750002030	S.ZEN DZ2J068M0L	B	123.6/44.4
D3	1750001810	S.DIO L1SS400T1G <SLVJ>	B	55.9/19.6
D4	1750001810	S.DIO L1SS400T1G <SLVJ>	B	130.5/33.2
D5	1750001180	S.DIO KDS122 RTK/P	B	134.2/36.1
D7	1790001990	S.VAR EZJP0V080DA	B	134.5/32.0
X1	6050012460	S.XTA CR-834(SMD-49/7.9872 MHz) <JJE>	B	97.5/27.5
R1	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	65.3/34.8
R2	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	65.3/35.8
R3	7410001130	S.ARR EXB28V102JX	B	49.5/30.5
R5	7030004970	S.RES ERJ2GEJ 470 X (47)	B	61.5/22.1
R8	7030012350	S.RES ERJ2GEJ 335 X (3.3M)	B	72.2/48.0
R9	7410001140	S.ARR EXB28V104JX	B	57.5/44.5
R11	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	72.0/43.3
R12	7410001230	S.ARR EXB28V101JX	B	58.5/32.5
R16	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.4/43.7
R17	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	46.3/51.8
R21	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	72.3/16.7
R22	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	73.7/16.3
R23	7410001130	S.ARR EXB28V102JX	B	58.8/26.0
R24	7410001140	S.ARR EXB28V104JX	B	64.0/24.4
R25	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	79.1/16.7
R26	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	86.3/16.7
R27	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA]	B	86.9/14.7
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]		
	7030009290	S.RES ERJ2GEJ 562 X (5.6K) [UK]		
	7030008010	S.RES ERJ2GEJ 123 X (12K) [EUR]		
	7030009710	S.RES ERJ2GEJ 203 X (20K) [HOL]		
	7030005060	S.RES ERJ2GEJ 333 X (33K) [FRG]		
	7030005720	S.RES ERJ2GEJ 563 X (56K) [CHN]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [AUS]		
	7030009290	S.RES ERJ2GEJ 562 X (5.6K) [UK-01]		
	7030008010	S.RES ERJ2GEJ 123 X (12K) [EUR-01]		
	7030009710	S.RES ERJ2GEJ 203 X (20K) [HOL-01]		
	7030005060	S.RES ERJ2GEJ 333 X (33K) [FRG-01]		
	7030005720	S.RES ERJ2GEJ 563 X (56K) [CHN-01]		
	7030005090	S.RES ERJ2GEJ 104 X (100K) [AUS-01]		
R28	7030011670	S.RES ERJ2RK 3902 (39K)	B	85.1/12.9
R29	7030012320	S.RES ERJ2RK 2203X (220K)	B	85.1/11.9
R34	7030004980	S.RES ERJ2GEJ 101 X (100)	B	92.8/27.2
R41	7030007510	S.RES ERJ12YJ270U (27)	B	115.2/42.1
R42	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	121.2/41.2
R43	7030004990	S.RES ERJ2GEJ 221 X (220)	B	122.0/43.6
R45	7030005000	S.RES ERJ2GEJ 471 X (470)	B	112.5/57.6
R46	7030005000	S.RES ERJ2GEJ 471 X (470)	B	125.4/38.6
R47	7030005000	S.RES ERJ2GEJ 471 X (470)	B	79.0/4.0
R48	7030005000	S.RES ERJ2GEJ 471 X (470)	B	7.8/6.0
R49	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/64.2
R50	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/63.2

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount



## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R51	7030005530	S.RES ERJ2GEJ 100 X (10)	B	38.3/40.4
R52	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	108.2/27.5
R53	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	35.3/39.8
R54	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	33.7/50.4
R55	7030012740	S.RES ERJ2RHD 1602X (16.0K)	B	35.1/50.8
R56	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	34.1/51.8
R57	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.9/50.4
R58	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/62.2
R59	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/61.2
R60	7030007280	S.RES ERJ2GEJ 331 X (330)	B	74.4/60.2
R61	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.7/46.3
R62	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.7/45.3
R65	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	45.7/8.3
R66	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	39.8/12.1
R67	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	40.2/10.7
R73	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.5/36.2
R74	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	35.8/33.6
R75	7030004980	S.RES ERJ2GEJ 101 X (100)	B	34.0/32.1
R76	7030004980	S.RES ERJ2GEJ 101 X (100)	B	42.0/37.4
R81	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	57.4/13.8
R82	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	56.9/16.9
R83	7030005530	S.RES ERJ2GEJ 100 X (10)	B	58.1/20.9
R84	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	54.4/18.7
R85	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	52.8/13.3
R90	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	50.9/39.4
R91	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	49.5/39.0
R92	7030004970	S.RES ERJ2GEJ 470 X (47)	B	48.7/35.0
R95	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	54.0/32.5
R96	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	54.0/33.5
R97	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	55.5/35.8
R101	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	121.7/38.3
R102	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	122.2/35.1
R103	7030009270	S.RES ERJ2GEJ 821 X (820)	B	129.6/32.0
R106	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	134.7/39.2
R107	7030010430	S.RES ERJ2GEJ 120 X (12)	B	132.4/35.6
R108	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	134.5/31.0
R111	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	3.7/17.5
R112	7030005530	S.RES ERJ2GEJ 100 X (10)	B	3.7/15.7
R113	7030003520	S.RES ERJ3GEYJ 472 V (4.7K)	B	5.7/18.0
R114	7030005530	S.RES ERJ2GEJ 100 X (10)	B	5.7/15.7
R115	7030010040	S.RES ERJ2GEJ-JPW	B	9.6/15.3
R116	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.0/54.2
C1	4030016930	S.CER C1005 JB 1A 104K-T	B	70.5/16.7
C2	4030016930	S.CER C1005 JB 1A 104K-T	B	65.8/38.5
C3	4030016930	S.CER C1005 JB 1A 104K-T	B	87.7/43.3
C4	4030016930	S.CER C1005 JB 1A 104K-T	B	88.1/16.7
C5	4030016930	S.CER C1005 JB 1A 104K-T	B	92.3/31.0
C6	4030016930	S.CER C1005 JB 1A 104K-T	B	80.5/15.0
C7	4030016930	S.CER C1005 JB 1A 104K-T	B	75.5/16.7
C8	4030016930	S.CER C1005 JB 1A 104K-T	B	65.7/26.5
C9	4030016930	S.CER C1005 JB 1A 104K-T	B	65.3/32.0
C10	4030016930	S.CER C1005 JB 1A 104K-T	B	76.0/43.3
C11	4030016930	S.CER C1005 JB 1A 104K-T	B	81.0/43.3
C12	4030016930	S.CER C1005 JB 1A 104K-T	B	92.3/36.0
C13	4030017460	S.CER C1005 JB 1H 102K-T	B	70.5/15.7
C14	4030017460	S.CER C1005 JB 1H 102K-T	B	64.8/38.5
C15	4030017460	S.CER C1005 JB 1H 102K-T	B	87.7/44.3
C16	4030017460	S.CER C1005 JB 1H 102K-T	B	88.7/15.7
C17	4030016790	S.CER C1005 JB 1E 103K-T	B	93.3/31.0
C18	4030016790	S.CER C1005 JB 1E 103K-T	B	80.5/14.0
C19	4030016790	S.CER C1005 JB 1E 103K-T	B	64.7/26.5
C20	4030016790	S.CER C1005 JB 1E 103K-T	B	76.0/44.3
C21	4030019550	S.CER C1608 JB 1E 334K-T	B	72.7/49.2
C22	4550007750	S.TAN TEESVA 1V 225M8R	B	73.8/50.9
Eqv. C23	4550008330	S.TAN F931V225MAA	B	73.8/53.7
Eqv. C23	4550007750	S.TAN TEESVA 1V 225M8R	B	73.8/53.7
Eqv. C24	4550008330	S.TAN F931V225MAA	B	73.8/53.7
C24	4030017460	S.CER C1005 JB 1H 102K-T	B	67.0/45.2
C25	4030016930	S.CER C1005 JB 1A 104K-T	B	63.8/45.2
C26	4030020300	S.CER GRM21BB31C475KA87L	B	92.8/20.9
C27	4030016790	S.CER C1005 JB 1E 103K-T	B	94.2/20.4
C31	4030016950	S.CER C1005 JB 1A 473K-T	B	85.5/15.3
C32	4030016950	S.CER C1005 JB 1A 473K-T	B	84.5/16.3
C33	4030016950	S.CER C1005 JB 1A 473K-T	B	85.1/13.9
C35	4030016950	S.CER C1005 JB 1A 473K-T	B	92.8/23.2
C36	4030016950	S.CER C1005 JB 1A 473K-T	B	92.8/24.2
C37	4030016950	S.CER C1005 JB 1A 473K-T	B	92.8/25.2
C38	4030016950	S.CER C1005 JB 1A 473K-T	B	92.8/26.2
C43	4030017410	S.CER C1005 CH 1H 240J-T	B	94.3/28.5
C44	4030017410	S.CER C1005 CH 1H 240J-T	B	94.3/26.7
C51	4030017460	S.CER C1005 JB 1H 102K-T	B	122.2/47.6
C52	4030016930	S.CER C1005 JB 1A 104K-T	B	120.2/41.2
C53	4030017460	S.CER C1005 JB 1H 102K-T	B	122.0/45.4
C54	4030019990	S.CER C1005 JB 1C 104K-T	B	49.6/64.4
C55	4030017460	S.CER C1005 JB 1H 102K-T	B	49.6/63.4
C56	4030017460	S.CER C1005 JB 1H 102K-T	B	74.4/65.2
C57	4030016930	S.CER C1005 JB 1A 104K-T	B	87.3/48.5
C61	4030016790	S.CER C1005 JB 1E 103K-T	B	106.8/27.1
C62	4030017760	S.CER C1005 JB 1H 222K-T	B	39.3/41.3
C63	4030019990	S.CER C1005 JB 1C 104K-T	B	40.3/41.3
C64	4030016790	S.CER C1005 JB 1E 103K-T	B	37.0/40.4
C65	4030018890	S.CER C1005 JB 0J 224K-T	B	35.3/40.8
C66	4030017760	S.CER C1005 JB 1H 222K-T	B	30.5/50.8
C67	4030016930	S.CER C1005 JB 1A 104K-T	B	29.1/50.4
C68	4030016790	S.CER C1005 JB 1E 103K-T	B	32.8/51.8
C69	4340000310	S.MYL ECHU 1C 333JX5	B	38.2/50.7
C71	4030017920	S.CER C1005 JB 1A 683K-T	B	43.0/13.3
C72	4030017480	S.CER C1608 JB 1A 474K-T	B	41.4/11.2
C74	4030017460	S.CER C1005 JB 1H 102K-T	B	44.0/9.1
C81	4030016930	S.CER C1005 JB 1A 104K-T	B	37.6/33.6
C82	4030017460	S.CER C1005 JB 1H 102K-T	B	39.2/30.0
C83	4030019990	S.CER C1005 JB 1C 104K-T	B	34.0/33.1
C84	4030017460	S.CER C1005 JB 1H 102K-T	B	33.6/34.1

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C85	4030020300	S.CER GRM21BB31C475KA87L	B	38.8/8.8
C86	4030017460	S.CER C1005 JB 1H 102K-T	B	40.3/8.9
C87	4030016790	S.CER C1005 JB 1E 103K-T	B	38.4/11.6
C88	4030020240	S.CER GRM31CR11C475KA01L	B	36.8/10.5
C89	4030017460	S.CER C1005 JB 1H 102K-T	B	41.5/33.8
C91	4030016930	S.CER C1005 JB 1A 104K-T	B	56.4/13.8
C92	4030017460	S.CER C1005 JB 1H 102K-T	B	57.1/20.0
C95	4030016790	S.CER C1005 JB 1E 103K-T	B	49.5/40.8
C96	4030016930	S.CER C1005 JB 1A 104K-T	B	55.5/34.8
C101	4030017460	S.CER C1005 JB 1H 102K-T	B	120.2/36.9
C102	4030016930	S.CER C1005 JB 1A 104K-T	B	121.2/36.9
C103	4030016790	S.CER C1005 JB 1E 103K-T	B	122.2/32.0
C104	4030017920	S.CER C1005 JB 1A 683K-T	B	131.4/32.0
C105	4030017460	S.CER C1005 JB 1H 102K-T	B	131.4/30.0
C106	4030017460	S.CER C1005 JB 1H 102K-T	B	128.2/30.6
C107	4030016930	S.CER C1005 JB 1A 104K-T	B	135.7/39.2
C108	4030017460	S.CER C1005 JB 1H 102K-T	B	134.5/30.0
C111	4030016790	S.CER C1005 JB 1E 103K-T	B	45.8/26.5
C112	4030020310	S.CER GRM31CB31C106KA88L	B	44.6/29.6
C113	4030016790	S.CER C1005 JB 1E 103K-T	B	26.3/19.4
C114	4030017460	S.CER C1005 JB 1H 102K-T	B	27.3/19.2
C115	4030017460	S.CER C1005 JB 1H 102K-T	B	24.1/26.2
C116	4030017460	S.CER C1005 JB 1H 102K-T	B	23.2/22.1
C155	4030016790	S.CER C1005 JB 1E 103K-T	B	27.7/26.9
C162	4030016930	S.CER C1005 JB 1A 104K-T	B	7.2/16.3
C165	4030017460	S.CER C1005 JB 1H 102K-T	B	16.2/15.3
C166	4030017460	S.CER C1005 JB 1H 102K-T	B	16.2/16.3
J1	6510022472	S.CON 40FLT-SM2-TB(LF)(SN)(M)	B	35.0/23.0
J2	6510018921	S.CON B8B-PH-SM4-TB(LF)(SN)	B	10.7/9.5
J3	6510015541	S.CON B4B-ZR-SM4-TF(LF)(SN)	B	114.0/23.5
J4	6510018971	S.CON B4B-PH-SM4-TB(LF)(SN)	B	127.0/22.5
J5	6510028220	S.CON AYF532265	B	62.0/48.5
DS1	5030003500	LCD 8803L21012 <SKD>	T	130.3/52.0
DS2	5040003310	S.LED L-C191KYCT <KOU>	T	114.0/60.3
DS3	5040003310	S.LED L-C191KYCT <KOU>	T	135.5/37.2
DS4	5040003310	S.LED L-C191KYCT <KOU>	T	111.6/37.2
DS5	5040003310	S.LED L-C191KYCT <KOU>	T	102.6/11.0
DS6	5040003310	S.LED L-C191KYCT <KOU>	T	79.3/7.8
DS7	5040003310	S.LED L-C191KYCT <KOU>	T	44.5/7.8
DS8	5040003310	S.LED L-C191KYCT <KOU>	T	9.0/2.2
DS9	5040003310	S.LED L-C191KYCT <KOU>	T	9.0/2.2
S1	2260002740	S.SWI LS8J2M-T	T	35.8/7.0
S2	2260002740	S.SWI LS8J2M-T	T	53.2/7.0
S3	2260002740	S.SWI LS8J2M-T	T	70.6/7.0
S4	2260002740	S.SWI LS8J2M-T	T	88.0/7.0
S5	2260002740	S.SWI LS8J2M-T	T	131.9/29.9
S6	2260002740	S.SWI LS8J2M-T	T	115.1/29.9
S7	2260002740	S.SWI LS8J2M-T	T	109.1/6.8
S8	2260002740	S.SWI LS8J2M-T	T	9.0/9.2
S9	2260002740	S.SWI LS8J2M-T	T	123.5/63.6
S10	2260002740	S.SWI LS8J2M-T	T	111.7/52.0
S11	2260002740	S.SWI LS8J2M-T	T	123.5/52.0
S12	2260002740	S.SWI LS8J2M-T	T	135.3/52.0
S13	2260002740	S.SWI LS8J2M-T	T	123.5/40.4
W1	7030012290	JUM RDS2TOR0		
W2	7030012290	JUM RDS2TOR0		
W3	8900014871	CAB OPC-1332A-1(P0.5N40L100) TJM		
EP11	6910016330	S.BEA MMZ1005S 601CT-S	B	129.6/31.0
EP12	6910016330	S.BEA MMZ1005S 601CT-S	B	11.7/15.7

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

## [CONNECT UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C1	4030016790	S.CER C1005 JB 1E 103K-T	B	2.1/11.9
J1	6510022440	CON LTW-8MP-C NUTGASKET <LIA>	B	4.3/15.0
J2	6510025142	S.CON 10FLT-SM2-TB(LF)(SN)(M)		
EP2	6910019100	S.BEA MPZ1608S101AT	B	4.5/19.1

## [VCO UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
Q2	1590004070	S.TRA LDTC144EET1G <SLVJ>	T	13.4/9.3
Q3	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	T	11.9/2.8
Q4	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	T	18.6/2.3
Q5	1530003950	S.TRA KTC4080 Y-RTK/P	T	7.1/6.9
Q6	1530003950	S.TRA KTC4080 Y-RTK/P	T	4.9/2.6
Q7	1530003950	S.TRA KTC4080 Y-RTK/P	T	5.4/11.3
Q8	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	11.4/12.5
D1	1750001700	S.DIO HSC277TRF-E	T	11.5/10.0
D2	1750001700	S.DIO HSC277TRF-E	T	13.3/7.7
D3	1750001780	S.VAR HVB350BYPTL-E	T	14.4/5.6
L1	6200003711	S.COI NLV25T-2R7J	T	18.2/9.2
L2	6200011410	S.COI C2520C-82NG-A	T	17.9/5.9
L3	6200013750	S.COI MLK1005SR10JT	T	5.7/8.3
L4	6200013750	S.COI MLK1005SR10JT	T	3.5/4.0
L5	6200013750	S.COI MLK1005SR10JT	T	4.0/12.7
R6	7030009320	S.RES ERJ2GEJ 4R7 X (4.7)	T	7.5/10.8
R7	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	16.4/11.0
R8	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	16.2/9.8
R9	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	16.2/8.9
R11	7030005000	S.RES ERJ2GEJ 471 X (470)	T	10.0/12.0
R12	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.5/13.7
R13	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	15.5/13.3
R14	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.5/12.8
R15	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	13.4/12.8
R16	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	9.4/13.2
R21	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	9.9/1.4
R22	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	20.7/1.7
R23	7030009160	S.RES ERJ2GEJ 181 X (180)	T	15.6/2.2
R25	7030005000	S.RES ERJ2GEJ 471 X (470)	T	9.9/3.2
R26	7030005010	S.RES ERJ2GEJ 681 X (680)	T	6.9/9.6
R27	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	7.6/5.1
R31	7030005000	S.RES ERJ2GEJ 471 X (470)	T	4.3/5.6
R32	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	6.8/1.7
R33	7030007270	S.RES ERJ2GEJ 151 X (150)	T	2.9/5.3
R34	7030009200	S.RES ERJ2GEJ 390 X (39)	T	1.8/4.4
R41	7030005000	S.RES ERJ2GEJ 471 X (470)	T	3.5/9.5
R42	7030007350	S.RES ERJ2GEJ 393 X (39K)	T	5.1/9.5
R43	7030003860	S.RES ERJ3GE JPW V	T	16.1/3.7
C4	4030017460	S.CER C1005 JB 1H 102K-T	T	18.3/11.3
C6	4030016790	S.CER C1005 JB 1E 103K-T	T	3.5/7.5
C8	4030017460	S.CER C1005 JB 1H 102K-T	T	15.2/10.8
C9	4030017460	S.CER C1005 JB 1H 102K-T	T	15.0/9.5
C11	4030017460	S.CER C1005 JB 1H 102K-T	T	12.8/10.8
C12	4030017460	S.CER C1005 JB 1H 102K-T	T	14.0/11.3
C13	4030018860	S.CER C1005 JB 0J 105K-T	T	13.4/13.7
C14	4030017460	S.CER C1005 JB 1H 102K-T	T	14.6/13.3
C15	4030017460	S.CER C1005 JB 1H 102K-T	T	17.3/13.3
C16	4030011810	S.CER C1608 JB 1A 224K-T	T	10.3/9.9
C21	4030018010	S.CER C1005 CH 1H 360J-T	T	16.2/8.0
C22	4030017670	S.CER C1005 CH 1H 390J-T	T	15.0/7.6
C24	4030017760	S.CER C1005 JB 1H 222K-T	T	11.6/7.0
C31	4030017350	S.CER C1005 CH 1H 020B-T	T	12.2/4.7
C32	4030017550	S.CER C1005 CH 1H 1R5B-T	T	20.4/3.3
C33	4030017440	S.CER C1005 CH 1H 221J-T	T	15.6/1.3
C34	4030017460	S.CER C1005 JB 1H 102K-T	T	9.9/4.1
C35	4030006860	S.CER C1608 JB 1H 102K-T	T	14.1/2.7
C36	4030017340	S.CER C1005 CH 1H 010B-T	T	9.9/2.3
C37	4030017460	S.CER C1005 JB 1H 102K-T	T	7.0/8.7
C41	4030017380	S.CER C1005 CH 1H 050B-T	T	6.8/3.3
C42	4030017460	S.CER C1005 JB 1H 102K-T	T	4.8/4.4
C43	4030017400	S.CER C1005 CH 1H 220J-T	T	2.5/3.1
C46	4030017630	S.CER C1005 CH 1H 120J-T	T	4.8/8.3
C47	4030017460	S.CER C1005 JB 1H 102K-T	T	3.5/8.4
C48	4030017460	S.CER C1005 JB 1H 102K-T	T	5.4/13.1
C49	4030017650	S.CER C1005 CH 1H 270J-T	T	3.3/11.3
J1	6910003831	CON IMSA-9230B-1-04Z003-PT1		
J2	6910003831	CON IMSA-9230B-1-04Z003-PT1		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

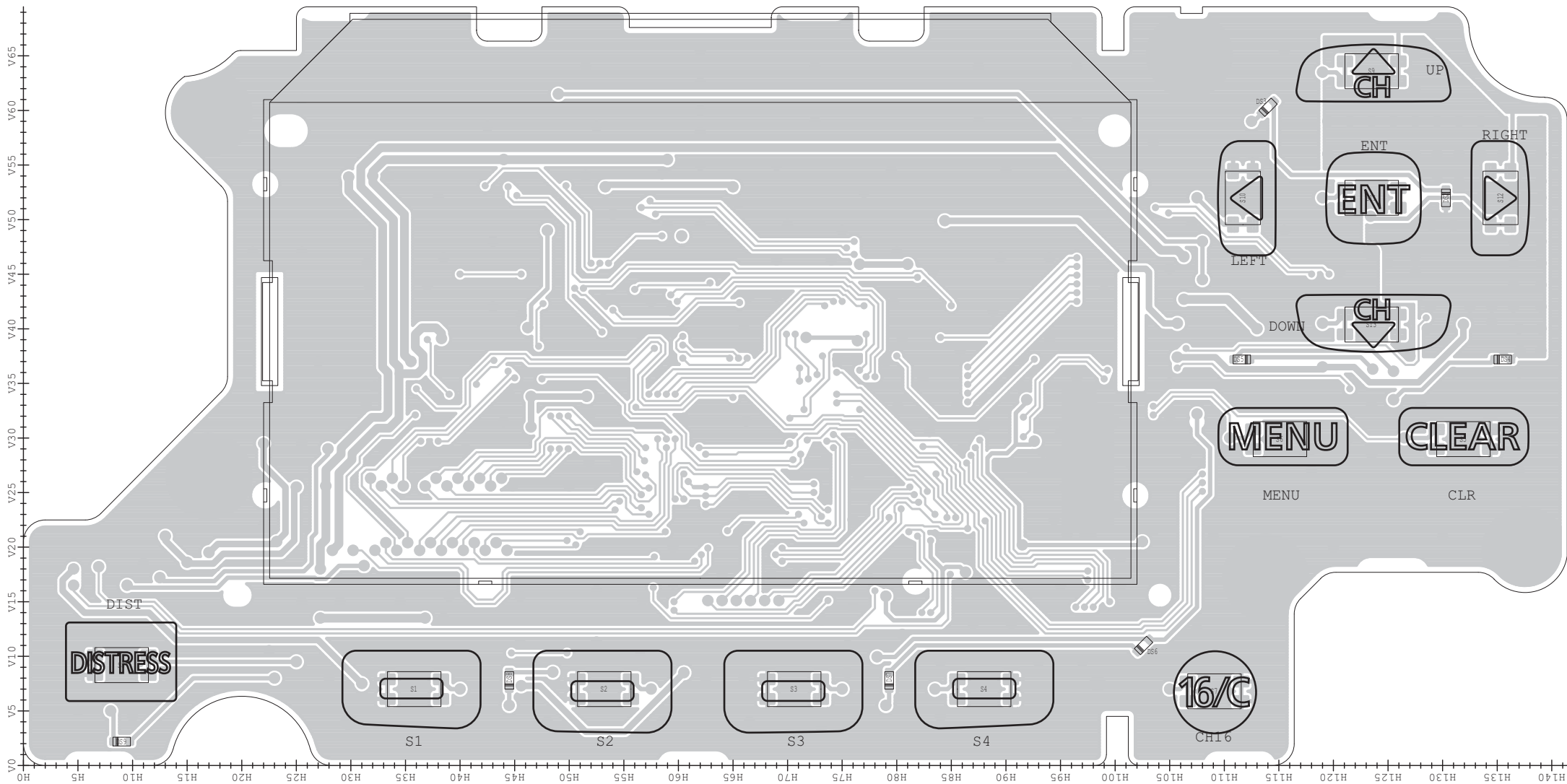
M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount



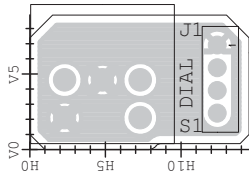
BOARD LAYOUTS

The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

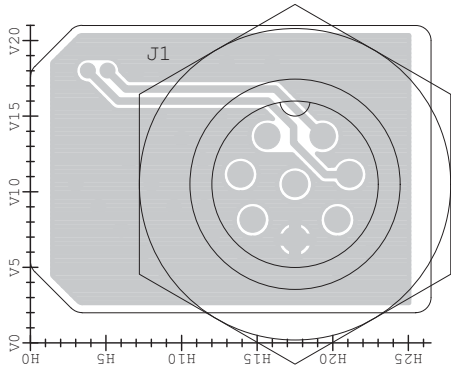
• LOGIC UNIT  
(TOP VIEW)



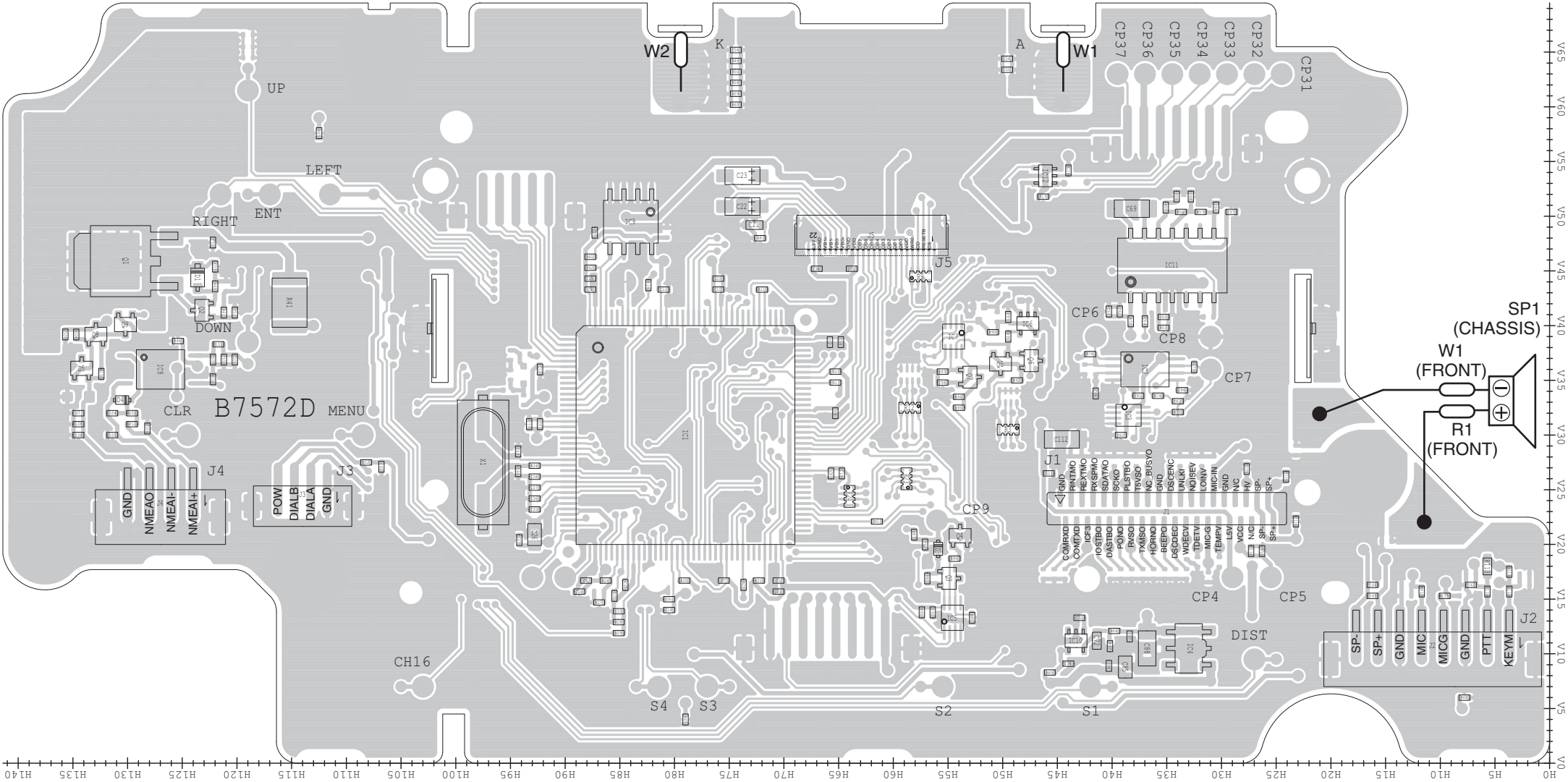
• DIAL UNIT  
(TOP VIEW)



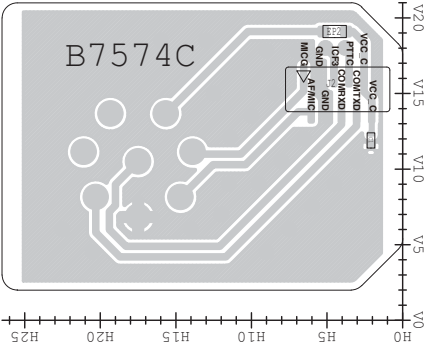
• CONNECT UNIT  
(TOP VIEW)



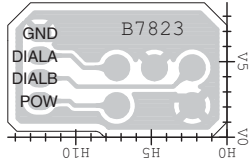
• LOGIC UNIT  
(BOTTOM VIEW)



• CONNECT UNIT  
(BOTTOM VIEW)

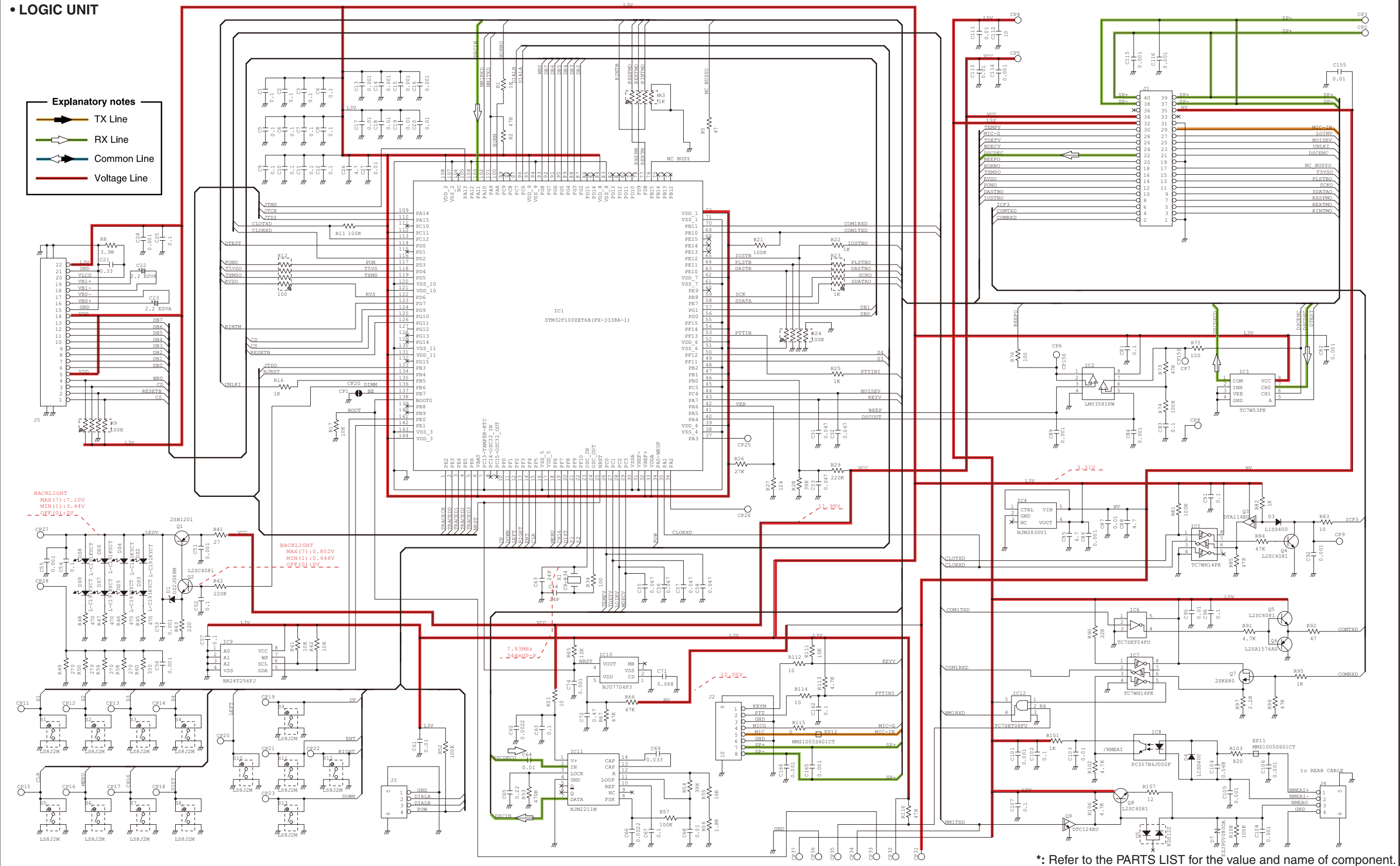
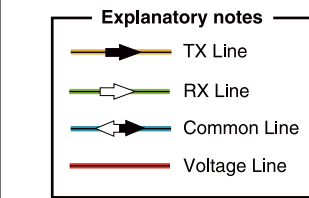


• DIAL UNIT  
(BOTTOM VIEW)

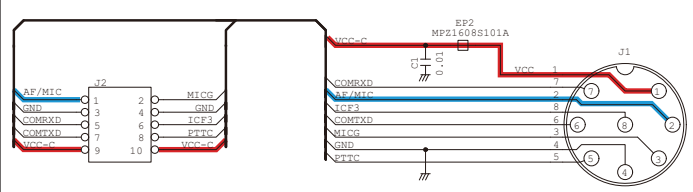


# VOLTAGE DIAGRAM

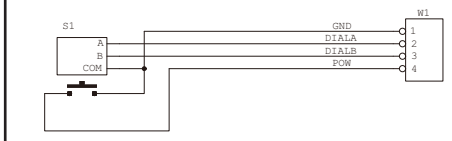
## • LOGIC UNIT



## • CONNECT UNIT



## • DIAL UNIT







# SERVICE MANUAL

VHF MARINE TRANSCEIVER

**IC-M423**  
**IC-M424**

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S-14905XZ-C1  
May. 2012

## INTRODUCTION

This service manual describes the latest technical information for the **IC-M423/IC-M424** VHF MARINE TRANSCEIVER, at the time of publication.

MODEL	VERSION	COLOR
IC-M424	USA	Black
	USA-01	Super white
IC-M423	UK	Black
	EUR	
	HOL	
	FRG	
	CHN	
	AUS	
	UK-01	Super white
	EUR-01	
	HOL-01	
	FRG-01	
	CHN-01	
	AUS-01	

## CAUTION

**NEVER** connect the transceiver to an AC outlet or to a DC power supply that uses more than the specified voltage. This will ruin the transceiver.

**DO NOT** reverse the polarities of the power supply when connecting the transceiver.

**DO NOT** apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.



(IC-M423)

## ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom part number
2. Component name
3. Equipment model name and unit name
4. Quantity required

### <ORDER EXAMPLE>

1110003491	S.IC	TA31136FNG	IC-M423	MAIN UNIT	5 pieces
8820001210	Screw	2438 screw	IC-M424	Top cover	10 pieces

Addresses are provided on the inside back cover for your convenience.

## REPAIR NOTES

1. Make sure that the problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer, when using such test equipment.
8. **READ** the instructions of the test equipment thoroughly before connecting it to the transceiver.

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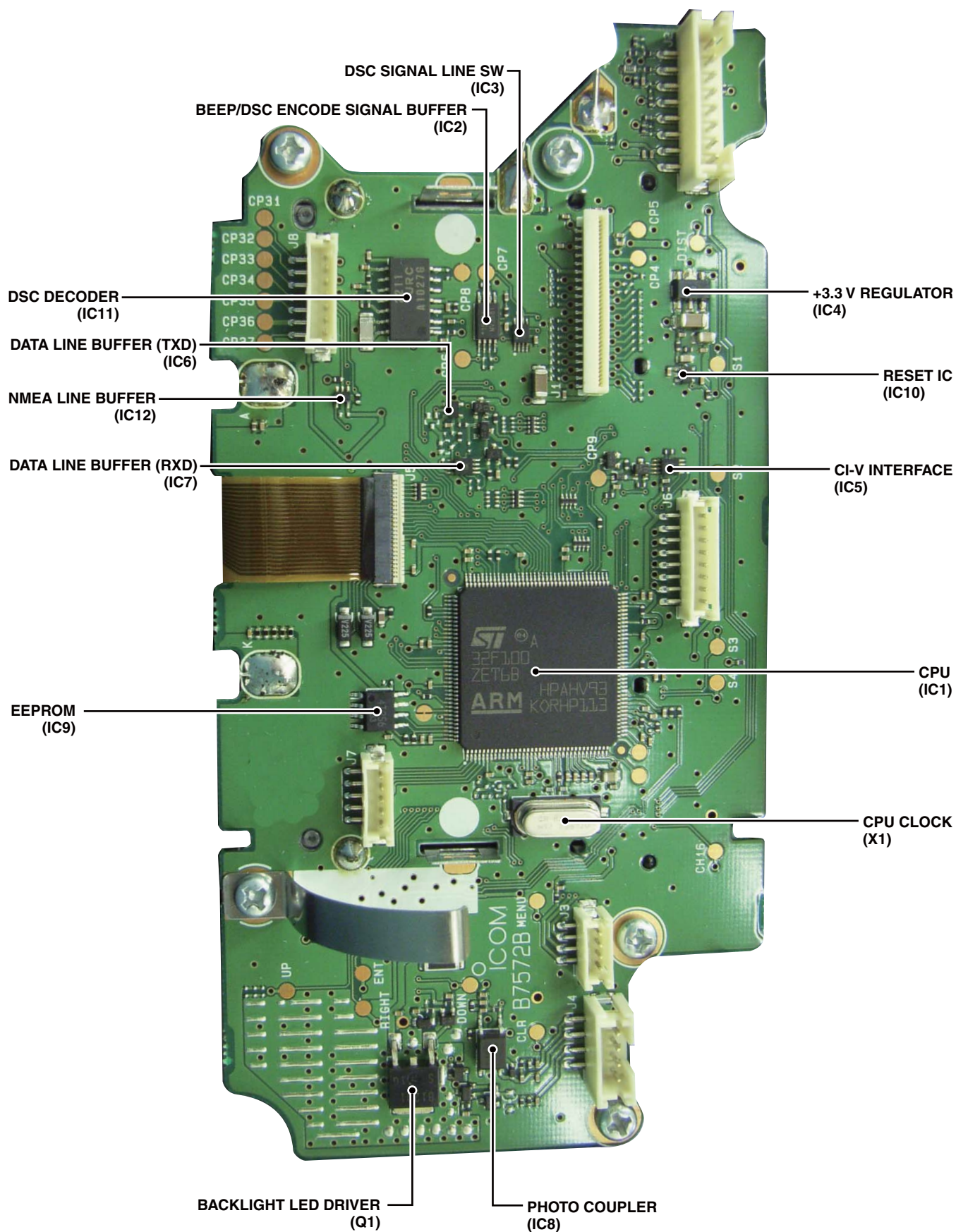
# SECTION 1

# SPECIFICATIONS

			[UK], [UK-01], [EUR], [EUR-01], [HOL], [HOL-01], [FRG], [FRG-01]	[USA], [USA-01], [CHN], [CHN-01], [AUS], [AUS-01]
GENERAL	• Frequency coverage	TX	156.000–161.450 MHz	156.025–157.425 MHz
		RX	156.000–163.425 MHz	156.050–163.275 MHz [USA], [USA-01], [AUS], [AUS-01] 156.050–162.025 MHz [CHN], [CHN-01]
			156.525 MHz (CH70)	
	• Mode		FM (16K0G3E), DSC (16K0G2B)	
	• Operating temperature range		–20°C to +60°C; –4°F to 140°F	
	• Current drain (at 12.0 V)		TX high 5.5 A maximum Maximum audio 5.0 A maximum	
	• Power supply requirement (negative ground)		13.8 V DC (10.8–15.6 V DC) nominal	13.8 V DC (11.7–15.9 V DC) nominal
	• Frequency stability		±1.5 kHz (–20°C to +60°C; –4°F to 140°F)	±10 ppm
	• Antenna impedance		50 Ω nominal	
	• Dimensions (approximately)		180(W) × 82(H) × 119.9(D) mm; 7.1(W) × 3.2(H) × 4.7(D) in	
	• Weight (approximately)		1.2 kg; 2.6 lb	
TRANSMITTER	• Output power		25 W/1 W	
	• Modulation system		Variable reactance frequency modulation	
	• Maximum frequency deviation		±5.0 kHz	
	• Spurious emissions		Less than 0.25 µW	Less than –70 dBc (High power) Less than –56 dBc (Low power)
	• Adjacent channel power		More than 70 dB	
	• Audio harmonic distortion		Less than 10% (at 60% deviation)	
	• Residual modulation		More than 40 dB	
	• Audio frequency response		+1 dB to –3 dB of 6 dB octave from 300–3000 Hz	
	• Microphone impedance		2 kΩ	
RECEIVER (Main channels)	• Receive system		Double conversion superheterodyne	
	• Sensitivity		–5 dBµ emf (typical) (20 dB SINAD)	–13 dBµ (typical) (12 dB SINAD)
	• Squelch sensitivity		Less than –2 dBµ emf	Less than –10 dBµ
	• Intermediate frequency		1st 21.7 MHz, 2nd 450 kHz	
	• Intermodulation rejection ratio		More than 68 dB	More than 70 dB
	• Spurious response rejection ratio		More than 70 dB	
	• Adjacent channel selectivity		More than 70 dB	
	• Hum and noise		More than 40 dB	
	• Audio frequency response		+1 dB to –3 dB of –6 dB octave from 300–3000 Hz	
	• Audio output power (at 10% distortion with a 4 Ω load)		More than 10 W	10 W (typical)
RECEIVER (CH70)	• Sensitivity (1% BER)		–4 dBµ emf (typical)	–5 dBµ emf (typical)
	• Intermediate frequency		1st 30.875 MHz, 2nd 450 kHz	
	• Intermodulation rejection ratio		More than 68 dB (1% BER)	
	• Spurious response rejection ratio		More than 73 dB (1% BER)	
	• Adjacent channel selectivity		More than 73 dB (1% BER)	

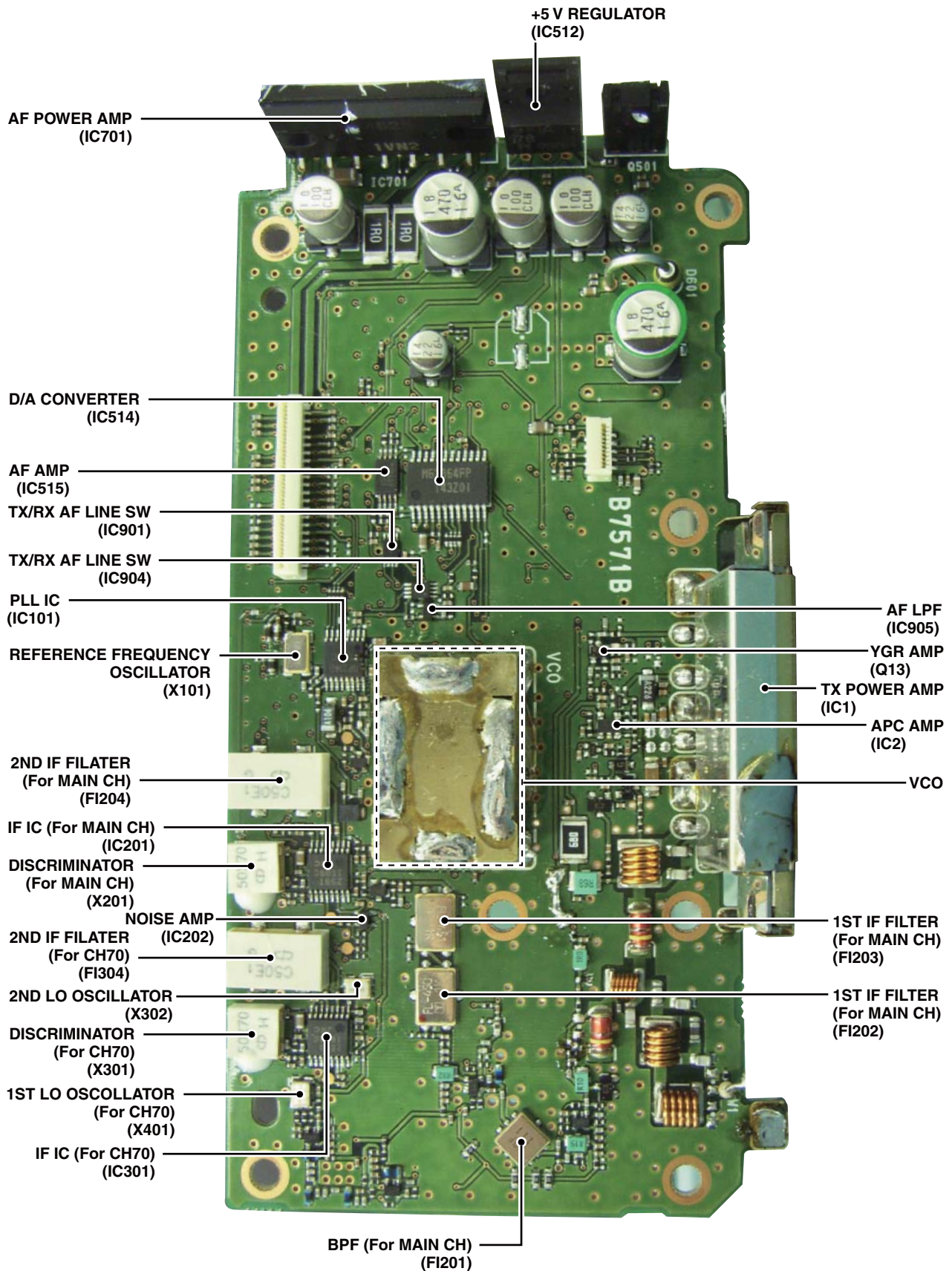
All stated specifications are subject to change without notice or obligation.

## • LOGIC UNIT



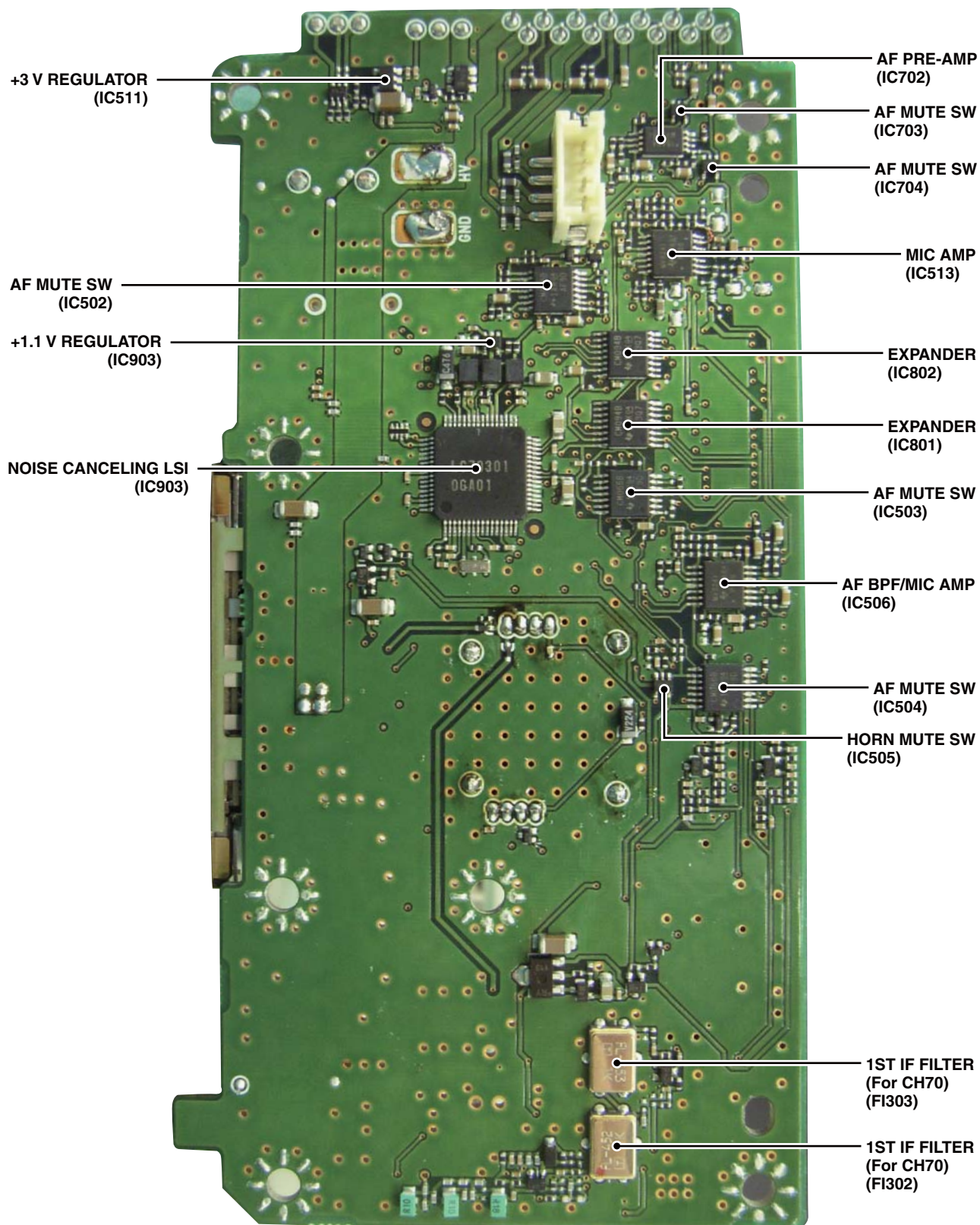


• MAIN UNIT  
(TOP VIEW)





• MAIN UNIT  
(BOTTOM VIEW)

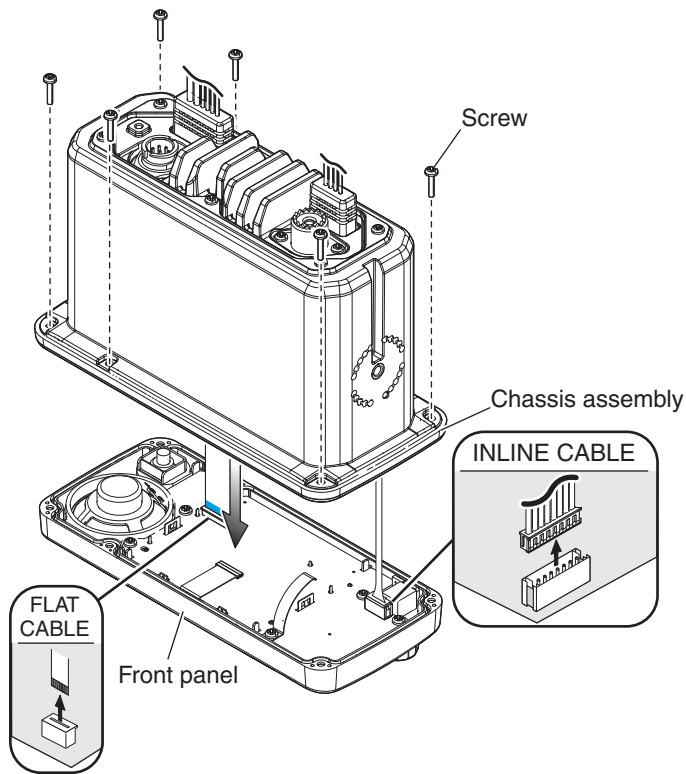


## SECTION 3 DISASSEMBLY INSTRUCTION

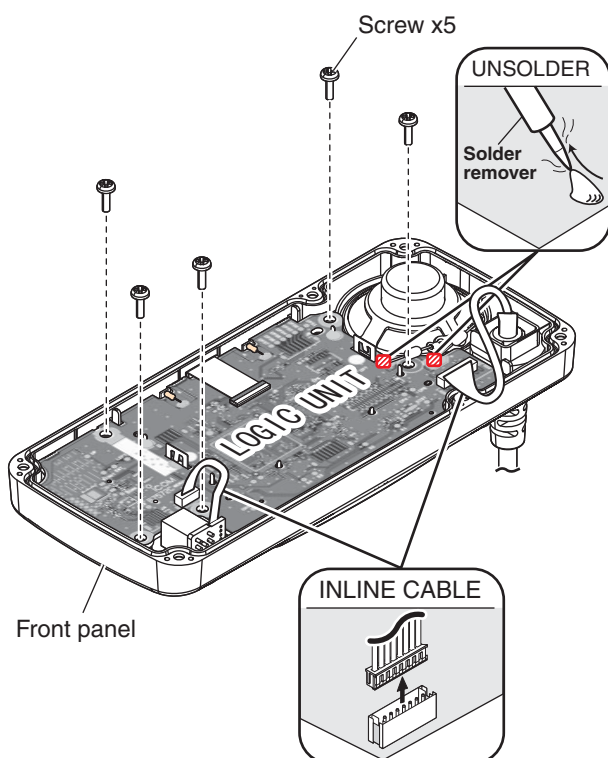
### 1. Removing the FRONT UNIT

- 1) Remove 6 screws from the rear.
- 2) Disconnect the flat cable and inline cable from the LOGIC UNIT.
- 3) Separate the front panel from the chassis assembly.

**BE CAREFUL** about the **flat cable** and **connector** when separating the front panel from the chassis assembly.

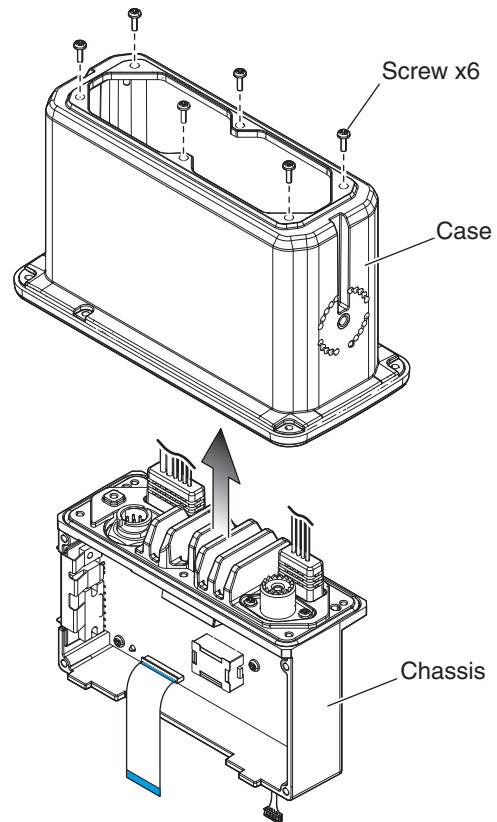


- 4) Remove 5 screws from the LOGIC UNIT.
- 5) Unsolder 2 points at the speaker.
- 6) Remove the LOGIC UNIT.

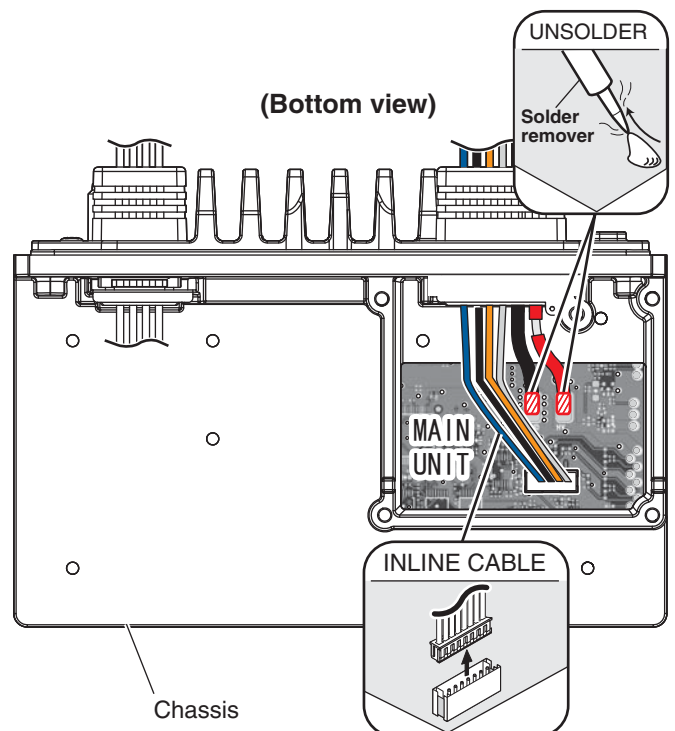


### 2. Removing the MAIN UNIT

- 1) Remove 6 screws from the rear.
- 2) Remove the case from the chassis.



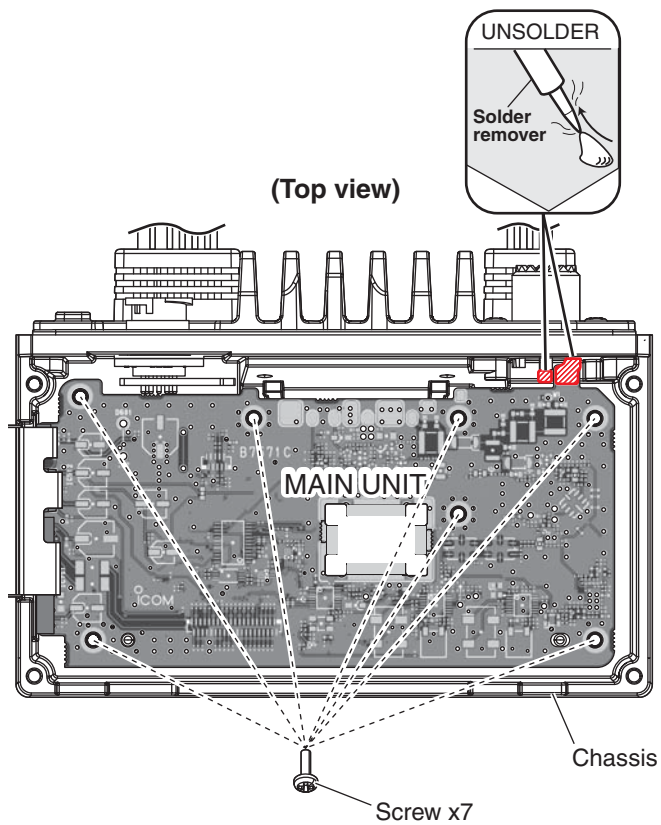
- 3) Disconnect the inline cable from the bottom of MAIN UNIT.
- 4) Unsolder 2 points at the power supply cable.



(Continued on next page.)

## 2. Removing the MAIN UNIT (Continued)

- 5) Remove 7 screws from the top of MAIN UNIT.
- 6) Unsolder 2 points at the antenna connector.
- 7) Remove the MAIN UNIT from the chassis.



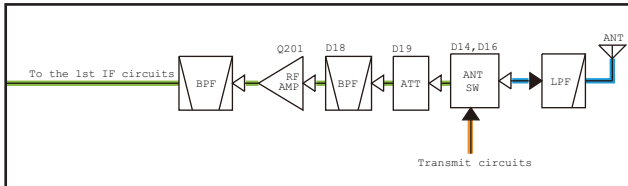
## 4-1 RECEIVE CIRCUITS

### RF CIRCUITS (MAIN UNIT)

The RX signal from the antenna is passed through the LPF (L21, L22, and C114–C116), ANT SW (D16), attenuator (D19, R96) and BPF (L201, C201 and C202), and then applied to the RF AMP (Q201).

The amplified signal is divided and applied to the 1st IF circuits for MAIN CH or CH70, through another BPF (FI201: for MAIN CH; L301–L303 and C301–C308: for CH70).

#### • RF CIRCUITS

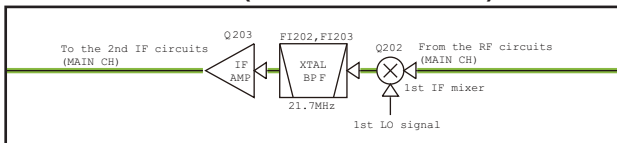


### 1ST IF CIRCUITS FOR MAIN CHANNELS (MAIN UNIT)

The RX signal from the RF circuits is applied to the 1st IF mixer (Q202), and mixed with the 1st LO signal from the VCO (Q3, Q4 and D1–D3), resulting in a 21.7 MHz 1st IF signal.

The 1st IF signal is filtered by the 1st IF filter (FI202 and FI203), and then applied to the 1st IF AMP (Q203). The amplified signal is applied to the 2nd IF circuits.

#### • 1ST IF CIRCUITS (For main channels)



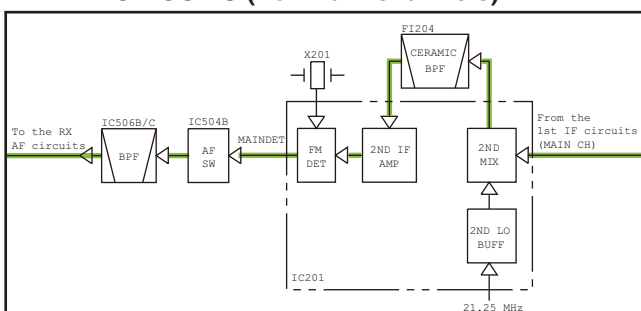
### 2ND IF CIRCUITS FOR MAIN CHANNELS (MAIN UNIT)

The 1st IF signal from the 1st IF circuits is applied to the IF IC (IC201, pin 16). The IF IC contains the 2nd IF mixer, 2nd IF AMP, detector, and so on, in its package.

The 1st IF signal is mixed with the 21.25 MHz 2nd LO signal from the reference frequency oscillator (TCXO: X101), resulting in a 450 kHz 2nd IF signal. The 2nd IF signal is passed through the 2nd IF filter (FI204) to remove sideband noise. The filtered signal is amplified by the 2nd IF AMP, and demodulated by the quadrature detector with discriminator (X201).

The demodulated AF signal is applied to the RX AF circuits, through the AF SW (IC504B, pins 4, 3).

#### • 2ND IF CIRCUITS (For main channels)

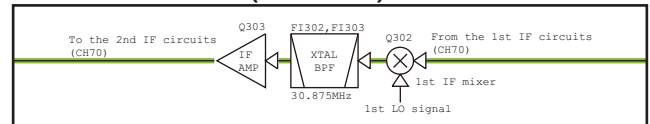


### 1ST IF CIRCUITS FOR CH70 (MAIN UNIT)

The RX signal from the RF circuits is applied to the 1st IF mixer (Q302), and mixed with the 125.649 MHz 1st LO signal which is generated by the TCXO (X401) and tripled by the BPF (L402, L403 and C412–C416), resulting in a 30.875 MHz 1st IF signal.

The 1st IF signal is filtered by the 1st IF filters (FI302 and FI303), and then applied to the 1st IF AMP (Q303). The amplified signal is applied to the 2nd IF circuits.

#### • 1ST IF CIRCUITS (For CH70)



### 2ND IF CIRCUITS FOR CH70 (MAIN UNIT)

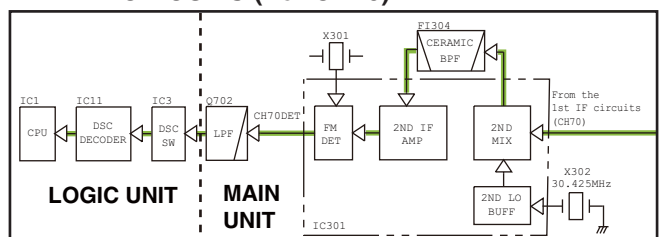
The 1st IF signal from the 1st IF circuits is applied to the IF IC (IC301, pin 16). The IF IC contains the 2nd IF mixer, 2nd IF AMP, detector, and so on, in its package.

The 1st IF signal is mixed with the 30.425 MHz 2nd LO signal which is generated by 2nd LO oscillator (X302), resulting in a 450 kHz 2nd IF signal. The 2nd IF signal is passed through the 2nd IF filter (FI304) to remove sideband noise. The filtered signal is amplified by the 2nd IF AMP, and demodulated by the quadrature detector with discriminator (X301).

The demodulated AF (FSK; Frequency Shift Keying) signal is applied to the DSC decoder (LOGIC UNIT: IC11, pin 2) which converts the sub audible tone signal into serial data, through the LPF (Q702) and DSC SW (LOGIC UNIT: IC3, pins 7, 1).

The serial data is applied to the CPU (LOGIC UNIT: IC1, pin 103) to control the transceiver (emergency alarm, DSC indication and so on.).

#### • 2ND IF CIRCUITS (For CH70)





## RX AF CIRCUITS (MAIN UNIT)

The demodulated AF signal from the AF SW (IC504B) is passed through the BPF (IC506B, IC506C) and AF SW (IC901, pins 7, 1), and then applied to the noise canceller IC (IC902).

The processed AF signal is passed through the LPF (IC905, pins 1, 4) and AF SW (IC904, pins 1, 7).

### • When the AF signal is output to the front panel or HM-196

The RX AF signal from the AF SW (IC904, pins 1, 7) is passed through the AF MUTE SW (IC503B, pins 3, 4) and amplified by the AF AMP (IC515B). The amplified signal is applied to the D/A converter (IC514, pins 1, 2) to be adjusted in level.

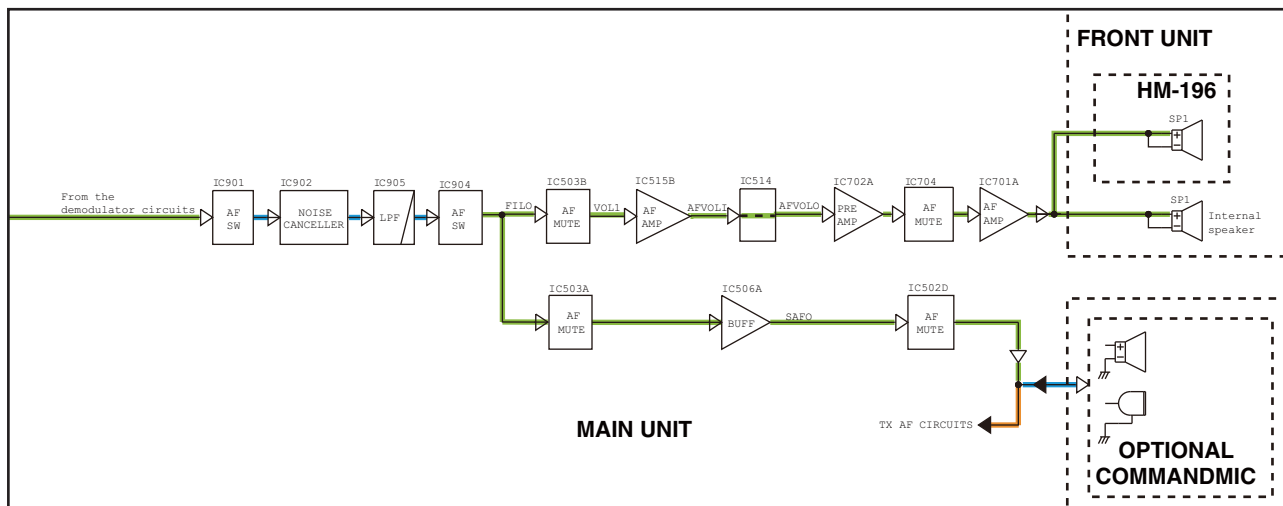
The level-adjusted AF signal is amplified by the AF AMP (IC702A), and then applied to the AF power AMP (IC701A, pin 1), through the AF mute SW (IC704, pins 3, 1).

The amplified signal is output to the internal speaker (CHASSIS: SP1) or HM-196, through the LOGIC UNIT.

### • When the AF signal is output to the optional COMMANDMIC™

The RX AF signal from the AF SW (IC904, pins 1, 7) is passed through the AF MUTE SW (IC503A, pins 2, 1) and amplified by the buffer (IC506A), and then output to the COMMANDMIC™, through the AF mute SW (IC502D, 11, 10).

## • RX AF CIRCUITS



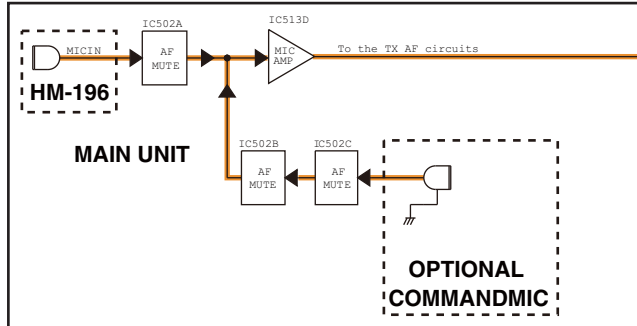
## 4-2 TRANSMIT CIRCUITS

### TX AF CIRCUITS (MAIN UNIT)

The AF signal from the microphone (MIC signal) is passed through the MIC mute SW (IC502A, pins 1, 2), and then applied to the MIC AMP (IC513D).

The MIC signal from the COMMANDMICIV™ is passed through the MIC mute SWs (IC502C, pins 9, 8 and IC502B, pins 4, 3), and then applied to the MIC AMP (IC513D).

#### • MIC AMP CIRCUITS



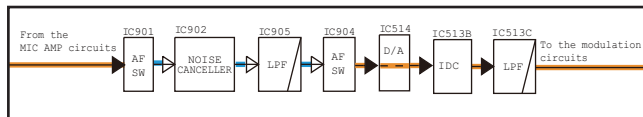
### TX AF CIRCUITS (MAIN UNIT)

The amplified AF signal is passed through the AF SW (IC901, pins 6, 1) and applied to the noise canceller IC (IC902, pin 36).

The processed AF signal is passed through the LPF (IC905, pins 1, 4) and AF SW (IC904, pins 1, 6), and then applied to the D/A converter (IC514, pins 13, 14) to be adjusted in level.

The level-adjusted AF signal is applied to the IDC AMP (IC513B) which limits the amplitude of MIC signal to prevent over deviation. The amplitude-limited signal is passed through the LPF (IC513C), and then applied to the modulation circuits.

#### • TX AF CIRCUITS

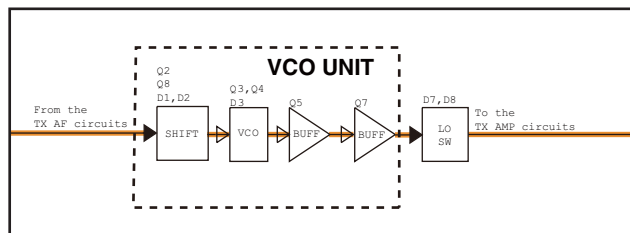


### MODULATION CIRCUITS (MAIN UNIT)

The MIC signal from the TX AF circuits is applied to the VCO (Q3, Q4 and D1–D3). The modulation signal is applied to D2, to obtain Frequency Modulation.

The modulated VCO output signal is passed through the buffers (Q5 and Q7), and then applied to the TX AMP circuits as a TX signal, through the LO SW (D7).

#### • MODULATION CIRCUITS



### TX AMP CIRCUITS (MAIN UNIT)

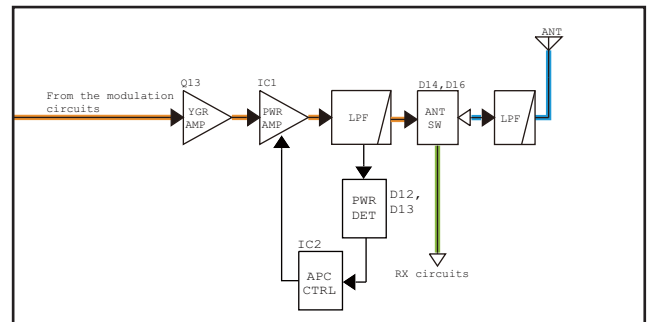
The TX signal is amplified by the YGR (Q13) and power AMP (IC1), and then passed through the LPF (L2, C111 and C112), TX output power detector (D12 and D13), ANT SW (D14), and two LPF (L21, L22, and C114–C116), before being sent to the antenna.

### APC CIRCUITS (MAIN UNIT)

The voltage produced at the LPF (L20, C111, and C112) is rectified by D12 and D13, and is used as the TX power sensing voltage.

The voltage is applied to the APC AMP (IC2, pin 3), and the output voltage controls the gate bias voltage of power AMP (IC1) to keep the TX output power constant.

#### • TX AMP CIRCUITS



## 4-3 FREQUENCY SYNTHESIZER (MAIN UNIT)

### • VCO

The VCO (Q3, Q4, and D1–D3) generates both 1st LO signal for MAIN channels and the TX signal.  
The output of buffer (Q7) is used as the TX or RX LO signal.

While receiving, the LO signal is applied to the 1st IF mixer for MAIN channels (Q202), through the LO SW (D8) and LPF (L206 and L207).

While transmitting, the LO signal is applied to the TX AMP circuits, through the LO SW (D7).

### • PLL

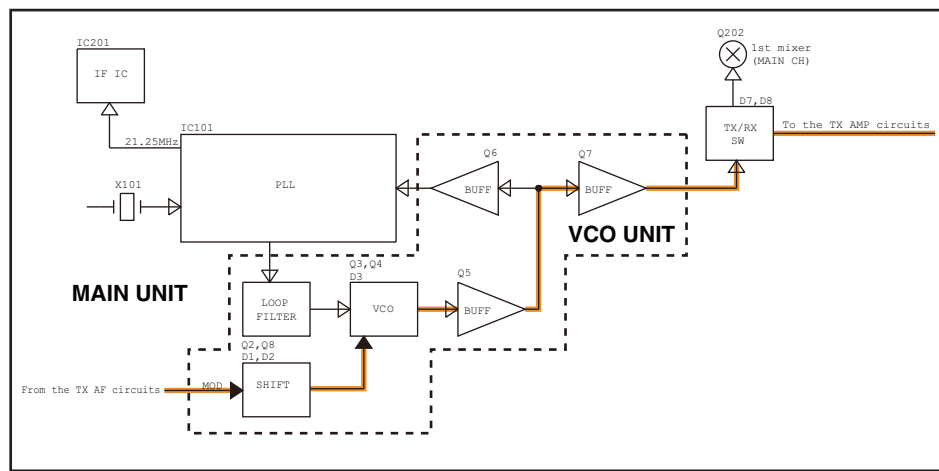
A portion of VCO output signal is passed through two buffers (Q5 and Q6), and then fed back to the PLL IC (IC101, pin 16).

The PLL IC (IC101) phase-compares the outputs of the reference frequency oscillator (TCXO; X101) and VCO, and the phase-difference is output as the charge pump current.

The current is passed through the loop filter (R1–R3, C1–C3, and C10) to be converted into the lock voltage, which controls the oscillating frequency of VCO.

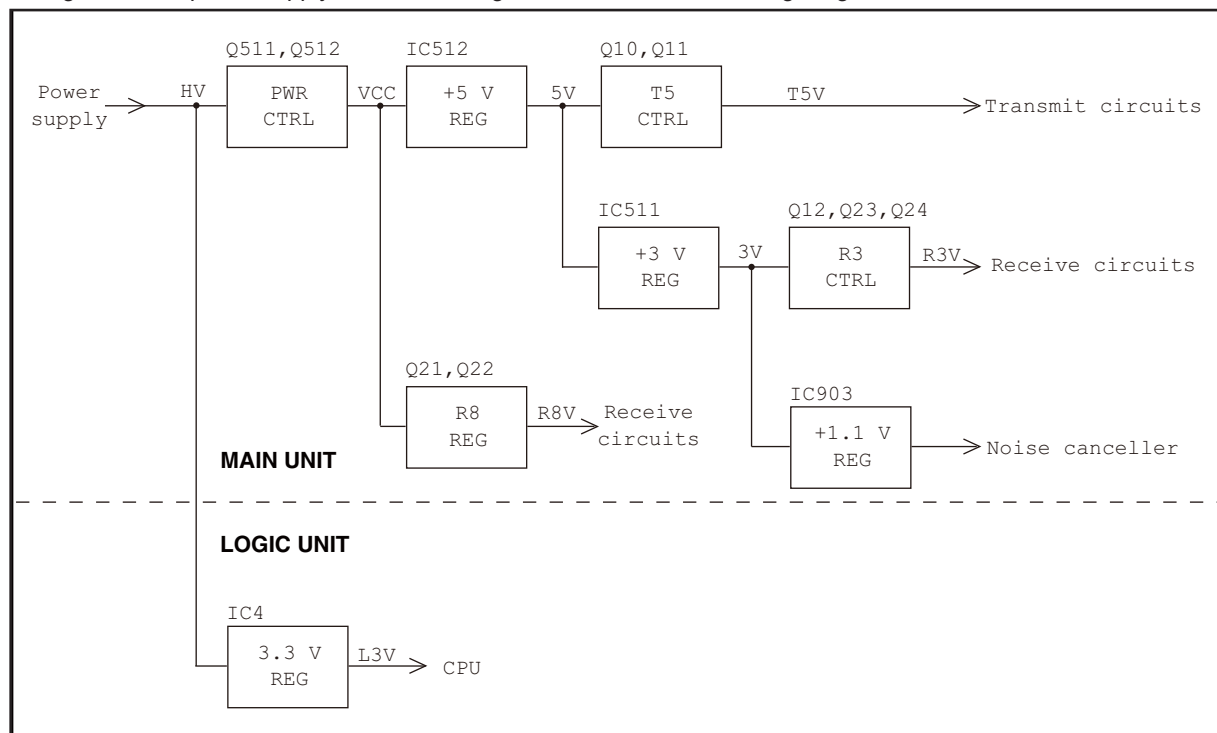
When the oscillation frequency drifts, its phase changes from that of the reference frequency, causing a lock voltage change to compensate for the drift in the VCO oscillating frequency.

### • FREQUENCY SYNTHESIZER CIRCUITS



## 4-4 VOLTAGE BLOCK DIAGRAM

Voltage from the power supply is routed throughout the transceiver, through regulators and switches.



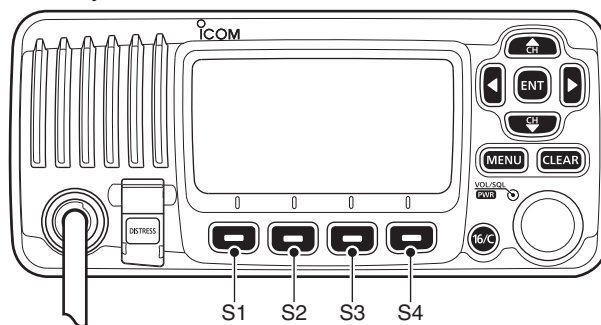
## 4-5 PORT ALLOCATIONS

### • CPU (LOGIC UNIT: IC1)

PIN No.	LINE NAME	DESCRIPTION	I/O
10	UP	[▲] key input. L=Pushed.	I
11	DN	[▼] key input. L=Pushed.	I
12	LEFT	[◀] key input. L=Pushed.	I
13	RIGHT	[▶] key input. L=Pushed.	I
14	ENT	[ENT] key input. L=Pushed.	I
15	CLR	[CLEAR] key input. L=Pushed.	I
18	MENU	[MENU] key input. L=Pushed.	I
19	CH16	[16/C] key input. L=Pushed.	I
20	DIST	[DISTRESS] key input. L=Pushed.	I
21	S1	Soft key (LOGIC UNIT: S1*) input. L=Pushed.	I
22	S2	Soft key (LOGIC UNIT: S2*) input. L=Pushed.	I
26	TEMPV	Temperature sensing voltage.	I
27	TDETV	Transmit output power sensing voltage.	I
28	LOINV	Lock voltage input.	I
29	WDECV	Weather alert signal detect.	I
34	POW	Power switch input. L=Pushed.	I
40	DSCOUT	DSC signal encoding output.	O
41	BEEP	Beep audio. (Square waves)	O
43	KEYV	[▲] and [▼] (HM-196) key input.	I
44	NOISEV	Noise level detect.	I
46	LBAT	Power supply voltage.	I
49	S3	Soft key (LOGIC UNIT: S3*) input. L=Pushed.	I
50	S4	Soft key (LOGIC UNIT: S4*) input. L=Pushed.	I
53	PTTIN	[PTT] (HM-196) input. L=Pushed.	I
56	DB0	LCD driver control signal.	I/O
57	DB1		
58	SDATA	Common serial data.	I
59	SCK	Common serial clock.	I
63	DASTB	D/A converter (MAIN UNIT: IC514) strobe.	I
64	PLSTB	PLL (MAIN UNIT: IC101) strobe.	I
65	IOSTB	Expander (MAIN UNIT: IC801 and IC802) strobe.	I
69	COM1TXD	Serial data to the COMMANDMICIV™.	O
70	COM1RXD	Serial data from the COMMANDMICIV™.	I
77	REXTM	RX AF mute switch (MAIN UNIT: IC504) control. (For COMMANDMICIV™) L=AF mute.	O
78	RXSPM	RX AF mute switch (MAIN UNIT: IC504) control. (For HM-196) L=AF mute.	O

PIN No.	LINE NAME	DESCRIPTION	I/O
87–92	DB2–DB7	LCD driver (LOGIC UNIT: DS1) control signal.	O
93	WR0	LCD driver (LOGIC UNIT: DS1) write mode switch.	O
96	DIALA	Rotary encoder pulse input (phase-A).	I
97	DIALB	Rotary encoder pulse input (phase-B).	I
101	NM1TXD	NMEA output.	O
102	NM1RXD	NMEA input.	I
103	DSCIN	Decoded DSC signal input.	I
113	CLOTXD	Cloning data.	O
114	DTEST	DSC loop back testing signal.	O
116	CLORXD	Cloning data.	I
117	PON	Power supply line VCC control. L=While transceiver's power is ON.	O
125	CS	LCD driver (LOGIC UNIT: DS1) chip select.	O
126	RESETB	LCD driver (LOGIC UNIT: DS1) reset signal. L=The LCD driver is reset.	O
135	UNLKI	PLL unlock detect. L=Unlocked.	I
136	DIMM	LCD brightness control.	O
141	ECK	EEPROM (LOGIC UNIT: IC9) serial clock.	O
142	EDATA	EEPROM (LOGIC UNIT: IC9) serial data.	I/O

\*, Soft key location



### • D/A CONVERTER (MAIN UNIT: IC514)

PIN No.	LINE NAME	DESCRIPTION
2	AFVOLO	AF output level adjustment. (RX signal)
3	FCON	Reference frequency adjustment.
11	SQL	Noise squelch level adjustment.
14	MSSENS	MIC sensitivity adjustment.
15	PCON	TX output power adjustment.
23	PAVOLO	AF output level adjustment. (Public address signal)



## SECTION 5

## PARTS LIST

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1150002470	IC RA33H1516M1-225	T	91.4/14.3
IC201	1110007320	S.IC NJM2591V-TE1-#ZZZB	T	97.0/18.6
IC202	1110006490	S.IC LMV321IDCKR	T	111.2/14.3
IC301	1110007320	S.IC NJM2591V-TE1-#ZZZB	B	32.0/28.3
IC502	1130011770	S.IC CD4066BPWR	B	54.0/20.3
IC503	1130011770	S.IC CD4066BPWR	B	74.5/10.3
IC504	1130011770	S.IC CD4066BPWR	B	74.2/16.7
IC505	1130007021	S.IC TC7S66FU(TE85LF)	B	63.7/10.3
IC506	1110006470	S.IC LMV324IPWR	B	8.2/46.4
IC511	1180003480	S.REG NJU7772F33-TE1-#ZZZB	B	15.5/16.2
IC512	1180002781	REG KIA7805API-U/PF	B	12.0/14.3
IC513	1110006470	S.IC LMV324IPWR	B	18.2/11.0
IC514	1190001350	S.IC M62364FP 600D	T	46.5/20.3
IC515	1110006740	S.IC LMV358IPWR	T	39.0/20.3
IC701	1110007900	IC LA4625-E	T	52.5/21.5
IC702	1110006740	S.IC LMV358IPWR	B	51.9/36.1
IC703	1130007021	S.IC TC7S66FU(TE85LF)	B	37.7/34.9
IC704	1130007021	S.IC TC7S66FU(TE85LF)	B	57.5/25.3
IC801	1130011760	S.IC CD4094BPWR	T	60.0/26.2
IC802	1130011760	S.IC CD4094BPWR	B	90.1/31.1
IC901	1130009981	S.IC TC7W53FK(TE85LF)	B	62.6/48.6
IC902	1190003240	S.IC LC70301W-UI-C-H	B	60.2/48.6
IC903	1180003820	S.REG NJM2847F3-011-TE1-#HZZH	B	60.2/46.1
IC904	1130009981	S.IC TC7W53FK(TE85LF)	T	65.1/46.9
IC905	1110006490	S.IC LMV321IDCKR	T	71.0/49.3
Q9	1590004070	S.TRA LDTCT144EET1G <SLVJ>	B	76.8/46.1
Q10	1510001090	S.TRA KTA2015Y-RTK/P	B	105.0/29.6
Q11	1590004070	S.TRA LDTCT144EET1G <SLVJ>	B	106.5/25.2
Q12	1590004070	S.TRA LDTCT144EET1G <SLVJ>	B	106.0/19.5
Q13	1530002881	S.TRA 2SC4226-T1 Y24 (R24)	T	102.3/17.5
Q14	1590004060	S.TRA LDTCT114EET1G <SLVJ>	T	120.9/44.7
Q15	1590004060	S.TRA LDTCT114EET1G <SLVJ>	T	116.7/31.8
Q21	1520000840	S.TRA KTA1664Y-RTF/P	T	93.6/20.3
Q22	1530003900	S.TRA KTC4075 BL-RTK/P	B	127.1/30.0
Q23	1510001090	S.TRA KTA2015Y-RTK/P	B	115.2/16.3
Q24	1590004070	S.TRA LDTCT144EET1G <SLVJ>	T	123.2/12.3
Q201	1580000751	S.FET 3SK294(TE85LF)	T	129.3/22.0
Q202	1580000731	S.FET 3SK293(TE85LF)	B	9.7/51.7
Q203	1530003950	S.TRA KTC4080 Y-RTK/P	T	78.2/17.8
Q302	1580000731	S.FET 3SK293(TE85LF)	B	28.4/23.7
Q303	1530003950	S.TRA KTC4080 Y-RTK/P	B	28.1/26.4
Q401	1580000751	S.FET 3SK294(TE85LF)	B	78.3/10.8
Q402	1580000731	S.FET 3SK293(TE85LF)	B	9.7/41.4
Q501	1520000380	TRA 2SB1143 S	B	8.2/38.2
Q502	1590003800	S.TRA KTC811U-GR-RTK/P	B	82.8/13.1
Q503	1560000541	S.FET 2SK880-Y(T5R1COMF)	B	82.8/5.4
Q504	1590004050	S.TRA LDTA144EET1G <SLVJ>	B	68.2/35.7
Q505	1590004070	S.TRA LDTCT144EET1G <SLVJ>	B	70.7/33.2
Q506	1590004070	S.TRA LDTCT144EET1G <SLVJ>	B	78.6/49.6
Q511	1590004070	S.TRA LDTCT144EET1G <SLVJ>	T	81.2/50.3
Q512	1590004710	S.FET TPC6111(TE85LF)	T	83.3/47.0
Q701	1530003900	S.TRA KTC4075 BL-RTK/P	T	110.3/47.0
Q702	1530003900	S.TRA KTC4075 BL-RTK/P	T	116.8/47.7
D7	1750001910	S.DIO HVD144AKRF-E	B	104.1/45.1
D8	1750001910	S.DIO HVD144AKRF-E	B	62.8/5.2
D11	1720000361	S.DIO HSU488TRF-E	T	60.4/15.7
D12	1790000691	S.DIO HSM88ASRTR-E	T	43.5/43.4
D13	1790000691	S.DIO HSM88ASRTR-E	T	41.2/41.4
D14	1750002060	S.DIO RN752TE-21	T	39.6/52.6
D16	1750002060	S.DIO RN752TE-21	T	42.8/53.5
D18	1790000691	S.DIO HSM88ASRTR-E	T	
D19	1750001910	S.DIO HVD144AKRF-E	T	
D21	1750000771	S.DIO HVD144AKRF-E	T	
D22	1750001810	S.DIO L1SS400T1G <SLVJ>	T	
D501	1790001990	S.VAR EZJP0V080DA	T	
D502	1790001990	S.VAR EZJP0V080DA	T	
D503	1790001990	S.VAR EZJP0V080DA	T	
D504	1790001990	S.VAR EZJP0V080DA	T	
D601	1790000700	DIO DSA3A1	T	
FI201	2040002060	S.SAW HDF160F SMD-3 <SEI>	T	123.1/37.7
FI202	2030000930	S.MON 21L715A3(1MD) 21.7 MHz (FL-450)	T	106.1/27.3
FI203	2030000940	S.MON 21L715A3 21.7 MHz (FL-451)	T	97.3/27.3
FI204	2020002480	S.CER LTWC450E1 <JJE>	T	80.5/8.2
FI302	2030000950	S.MON 30L715A(1MD) 30.875 MHz (FL-452)	B	123.0/22.0
FI303	2030000960	S.MON 30L715A 30.875 MHz (FL-453)	B	113.8/22.0
FI304	2020002480	S.CER LTWC450E1 <JJE>	T	101.7/8.2
X101	6050013300	S.XTA CR-921(SX-53S 21.25 MHz) <SKD>	T	65.0/10.1
X201	6070000310	S.DIS JTBM450CX70 <JJE>	T	90.8/5.6
X301	6070000310	S.DIS JTBM450CX70 <JJE>	T	110.4/5.6
X302	6050013310	S.XTA CR-922(SX-32S 30.425 MHz) <SKD>	T	105.3/17.8
X401	6050013280	S.XTA CR-923 DSB321SCL 41.883333 MHz	T	118.0/10.9
X901	6060000880	S.CER CSTCE8M19G55	B	61.6/36.7

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
L6	6200013760	S.COI MLK1005S82NJT	T	73.7/17.9
L11	6200013760	S.COI MLK1005SR10JT	T	64.4/49.0
L19	6200010770	S.COI C2520C-R68G-A	T	92.4/45.2
L20	6200014320	S.COI 0.80-3.0-5TR 41.0N <COMO>	T	90.3/51.7
L21	6200014330	S.COI 0.80-2.7-5TR 35.0N <COMO>	T	111.3/54.2
L22	6200014330	S.COI 0.80-2.7-5TR 35.0N <COMO>	T	118.7/56.4
L23	6200012700	S.COI 0.50-2.0-6TL 35.0N <COMO>	T	104.4/49.9
L24	6200011210	S.COI C2012C-1R0J-A [USA]	T	101.5/44.6
	6200011210	S.COI C2012C-1R0J-A [USA-01]	T	
L201	6200009920	S.COI C2012C-R10G-A	T	116.0/44.9
L202	6200010320	S.COI C2012C-R15G-A	T	123.3/44.2
L203	6200011680	S.COI LQW18ANR12G00D	T	115.4/34.8
L204	6200011200	S.COI C2012C-R82J-A	T	115.2/28.4
L206	6200013750	S.COI MLK1005SR10JT	T	112.5/33.0
L207	6200009560	S.COI MLG1608B R10J-T	T	109.8/34.7
L211	6200009141	S.COI NLV25T-6R8J	T	84.3/17.0
L301	6200009920	S.COI C2012C-R10G-A	B	129.4/43.7
L302	6200009920	S.COI C2012C-R10G-A	B	129.4/39.4
L303	6200010330	S.COI C2012C-R18G-A	B	129.4/34.1
L304	6200007360	S.COI ELJND R47J	B	123.9/28.6
L305	6200013780	S.COI MLK1005S56NJT	B	128.9/26.9
L306	6200013780	S.COI MLK1005S56NJT	B	128.9/25.3
L401	6200010910	S.COI LQW18AN56NG00D	T	125.4/12.2
L402	6200010910	S.COI LQW18AN56NG00D	T	130.3/11.8
L403	6200010910	S.COI LQW18AN56NG00D	T	130.3/16.6
L404	6200009250	S.COI LQW18ANR22G00D (LQW1608AR22G00)	T	127.1/22.0
L901	6200005041	S.COI NLV25T-220J	B	41.0/37.4
L902	6200002861	S.COI NLV25T-4R7J	B	41.0/32.4
L903	6200002861	S.COI NLV25T-4R7J	B	41.0/34.9
R1	7030010040	S.RES ERJ2GEJ-JPW	T	71.9/16.8
R2	7030008370	S.RES ERJ2GEJ 561 X (560)	T	73.1/16.4
R3	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	78.3/18.9
R4	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	76.6/16.5
R35	7030007270	S.RES ERJ2GEJ 151 X (150)	B	70.7/28.7
R36	7030004980	S.RES ERJ2GEJ 101 X (100)	T	71.5/18.7
R51	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	62.4/46.4
R52	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	64.4/48.0
R53	7030005050	S.RES ERJ2GEJ 471 X (470)	B	60.5/44.1
R61	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	67.2/35.5
R62	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	69.7/47.1
R63	7030010040	S.RES ERJ2GEJ-JPW	T	69.2/45.9
R66	7030005530	S.RES ERJ2GEJ 100 X (10)	T	64.4/50.7
R67	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	65.3/49.0
R68	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	67.5/46.8
R69	7030004980	S.RES ERJ2GEJ 101 X (100)	T	68.0/49.4
R70	7030010040	S.RES ERJ2GEJ-JPW	T	63.0/49.8
R71	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	86.0/51.0
R72	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	84.4/51.8
R73	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	91.9/48.0
R74	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	90.2/48.0
R75	7030007240	S.RES ERJ12YJ680U (68)	T	87.5/43.9
R76	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	80.3/47.6
R78	7030007280	S.RES ERJ2GEJ 331 X (330)	T	77.2/48.1
R79	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	76.9/49.4
R80	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	76.4/51.2
R82	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	74.6/51.2
R83	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	74.6/45.8
R84	7030007250	S.RES ERJ2GEJ 220 X (22)	T	72.9/45.8
R87	7030005000	S.RES ERJ2GEJ 471 X (470)	T	72.9/51.2
R88	7030010040	S.RES ERJ2GEJ-JPW	T	71.2/51.2
R91	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	115.5/62.0
R96	7030009200	S.RES ERJ2GEJ 390 X (39) [USA]	T	107.2/49.4
	7030009200	S.RES ERJ2GEJ 390 X (39) [USA-01]	T	
R97	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA]	T	98.9/43.8
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]	T	
R98	7030009280	S.RES ERJ2GEJ 391 X [UK]	T	111.9/44.3
	7030009280	S.RES ERJ2GEJ 391 X [EUR]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG]	T	
	7030009280	S.RES ERJ2GEJ 391 X [UK-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [EUR-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG-01]	T	
R99	7030010040	S.RES ERJ2GEJ-JPW [USA]	T	112.4/43.0
	7030010040	S.RES ERJ2GEJ-JPW [USA-01]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [UK]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [EUR]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [HOL]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [FRG]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [UK-01]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [EUR-01]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [HOL-01]	T	
	7030010430	S.RES ERJ2GEJ 120 X (12) [FRG-01]	T	
R100	7030009280	S.RES ERJ2GEJ 391 X [UK]	T	112.9/44.3
	7030009280	S.RES ERJ2GEJ 391 X [EUR]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG]	T	
	7030009280	S.RES ERJ2GEJ 391 X [UK-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [EUR-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [HOL-01]	T	
	7030009280	S.RES ERJ2GEJ 391 X [FRG-01]	T	
R101	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	104.7/25.7
R102	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	104.3/24.3
R103	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	104.0/19.6
R104	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	104.0/17.9

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R116	7410001150	S.ARR EXB28V471JX	T	57.9/14.8
R117	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	69.8/11.8
R118	7030010040	S.RES ERJ2GEJ-JPW	T	68.5/12.2
R119	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	60.9/8.7
R120	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	61.3/10.1
R201	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	119.0/44.1
R202	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	119.0/46.9
R203	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	121.7/42.7
R204	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	120.8/42.7
R205	7030005710	S.RES ERJ2GEJ 121 X (120)	T	126.0/46.5
R206	7030004990	S.RES ERJ2GEJ 221 X (220)	T	125.8/44.5
R207	7030005580	S.RES ERJ2GEJ 560 X (56)	T	121.0/46.9
R211	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	118.9/31.7
R212	7030007350	S.RES ERJ2GEJ 393 X (39K)	T	118.9/32.6
R213	7030008300	S.RES ERJ2GEJ 184 X (180K)	T	114.8/31.4
R214	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	114.3/33.0
R221	7030005530	S.RES ERJ2GEJ 100 X (10)	T	119.9/28.1
R222	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	111.8/28.4
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [UK]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [EUR]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [HOL]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [FRG]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [UK-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [HOL-01]		
	7030007300	S.RES ERJ2GEJ 332 X (3.3K) [FRG-01]		
R223	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	T	110.9/26.5
R224	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	93.1/23.9
R225	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	93.1/22.1
R226	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	T	94.9/22.1
R227	7030007280	S.RES ERJ2GEJ 331 X (330)	T	93.7/18.5
R229	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	T	107.2/33.5
R231	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	92.8/10.1
R232	7030005000	S.RES ERJ2GEJ 471 X (470)	T	94.2/9.7
R233	7030004970	S.RES ERJ2GEJ 470 X (47)	T	88.6/18.8
R234	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	T	88.2/17.6
R235	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	97.3/16.6
R236	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	99.7/18.1
R237	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	98.8/18.1
R238	7030004980	S.RES ERJ2GEJ 101 X (100)	T	100.6/18.1
R239	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	101.5/18.1
R242	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	T	71.5/12.7
R251	7030005170	S.RES ERJ2GEJ 474 X (470K)	T	86.4/12.0
R252	7030009270	S.RES ERJ2GEJ 821 X (820)	T	86.8/8.9
R253	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	85.9/8.9
R261	7030003860	S.RES ERJ3GE JPW V	T	127.9/40.8
R262	7030003860	S.RES ERJ3GE JPW V	T	127.9/39.3
R263	7030003860	S.RES ERJ3GE JPW V	T	127.9/36.8
R264	7030003860	S.RES ERJ3GE JPW V	T	124.4/31.4
R301	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	127.2/34.0
R302	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	127.2/32.2
R303	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	128.9/28.6
R304	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	127.5/28.2
R305	7030005530	S.RES ERJ2GEJ 100 X (10)	B	124.7/33.6
R306	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	124.6/27.2
R311	7030005010	S.RES ERJ2GEJ 681 X (680)	B	126.0/25.8
R312	7030005010	S.RES ERJ2GEJ 681 X (680)	B	111.2/17.6
R313	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	113.4/16.3
R314	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	118.8/16.3
R315	7030007280	S.RES ERJ2GEJ 331 X (330)	B	116.6/14.8
R321	7030004970	S.RES ERJ2GEJ 470 X (47)	T	113.0/18.0
R322	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	T	112.5/10.1
R323	7030005000	S.RES ERJ2GEJ 471 X (470)	T	113.8/9.7
R324	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	110.0/18.0
R401	7030004970	S.RES ERJ2GEJ 470 X (47)	T	119.3/13.0
R402	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	120.9/13.9
R403	7030006610	S.RES ERJ2GEJ 394 X (390K)	T	122.2/14.4
R404	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	120.9/10.3
R405	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	123.2/10.3
R406	7030004980	S.RES ERJ2GEJ 101 X (100)	T	125.8/14.4
R407	7030004970	S.RES ERJ2GEJ 470 X (47)	T	123.1/14.4
R408	7030009290	S.RES ERJ2GEJ 562 X (5.6K)	T	120.9/11.2
R411	7030005160	S.RES ERJ2GEJ 105 X (1M)	T	128.3/18.6
R412	7030006610	S.RES ERJ2GEJ 394 X (390K)	T	129.8/19.5
R413	7030005720	S.RES ERJ2GEJ 563 X (56K)	T	131.2/21.6
R414	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	129.7/24.7
R415	7030005530	S.RES ERJ2GEJ 100 X (10)	T	124.9/19.8
R416	7030004970	S.RES ERJ2GEJ 470 X (47)	T	128.5/19.8
R417	7030005530	S.RES ERJ2GEJ 100 X (10)	T	125.3/21.0
R501	7030012300	S.RES ERJ2RKF 1502X (15K)	B	9.0/49.8
R502	7030011660	S.RES ERJ2RKF 1002 (10K)	B	10.7/49.8
R503	7030011660	S.RES ERJ2RKF 1002 (10K)	B	12.1/50.8
R504	7030007280	S.RES ERJ2GEJ 331 X (330)	B	12.1/52.6
R505	7030007280	S.RES ERJ2GEJ 331 X (330)	B	12.1/51.7
R506	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	10.7/48.9
R511	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	42.2/43.6
R512	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	37.7/43.6
R513	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	41.2/43.6
R514	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	40.7/51.0
R515	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	41.7/51.0
R517	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	77.8/16.0
R521	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	30.9/33.5
R522	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	31.8/33.5
R523	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	30.0/33.5
R524	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	34.3/23.0
R525	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	32.5/23.0
R526	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	57.5/6.5
R527	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	34.4/34.0
R528	7030005530	S.RES ERJ2GEJ 100 X (10)	B	34.4/34.9
R529	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	65.4/4.7
R530	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	65.4/5.6
R531	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	28.7/30.8
R532	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	27.8/30.8
R533	7030005530	S.RES ERJ2GEJ 100 X (10)	B	67.5/7.1

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R534	7030009140	S.RES ERJ2GEJ 272 X (2.7K)	B	35.3/28.4
R535	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	33.4/23.0
R537	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	30.0/23.0
R539	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	53.0/25.1
R540	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	55.9/15.6
R541	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	57.8/21.4
R544	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	52.8/14.7
R545	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	50.7/23.9
R547	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	71.4/15.1
R548	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	78.1/9.1
R549	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	72.2/5.7
R550	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	60.1/8.5
R551	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	58.7/5.4
R552	7030005530	S.RES ERJ2GEJ 100 X (10)	B	60.3/4.5
R553	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	62.0/4.5
R554	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	62.0/5.6
R555	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	59.5/11.5
R556	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	60.4/11.5
R557	7030008300	S.RES ERJ2GEJ 184 X (180K)	B	60.4/13.2
R558	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	60.4/14.9
R559	7030005530	S.RES ERJ2GEJ 100 X (10)	B	59.5/13.2
R560	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	59.5/14.9
R561	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	58.6/13.2
R562	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	63.4/16.9
R563	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	61.7/16.9
R564	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	61.7/16.0
R565	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	67.0/11.2
R566	7030007300	S.RES ERJ2GEJ 332 X (3.3K)	B	67.0/12.9
R567	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	71.2/11.7
R568	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	63.8/19.1
R569	7030010040	S.RES ERJ2GEJ-JPW	B	60.3/5.4
R571	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	70.5/17.8
R581	7030005530	S.RES ERJ2GEJ 100 X (10)	B	50.7/19.5
R582	7030005530	S.RES ERJ2GEJ 100 X (10)	B	50.7/22.2
R583	7030005530	S.RES ERJ2GEJ 100 X (10)	B	70.5/15.1
R584	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	69.6/15.1
R585	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	71.8/16.4
R601	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	10.4/39.5
R602	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	10.4/37.8
R611	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	24.9/28.8
R612	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	25.8/30.6
R621	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	24.7/21.0
R622	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	22.4/19.9
R623	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	26.9/20.0
R624	7030005080	S.RES ERJ2GEJ 823 X (82K)	B	23.8/19.3
R625	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	23.8/17.6
R626	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	22.9/15.8
R627	7030012750	S.RES ERJ2RHD 2202X (22.0K)	B	22.0/17.6
R628	7030011120	S.RES ERJ2RHD 2702X (27.0K)	B	22.9/17.6
R629	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	22.0/15.8
R630	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	24.7/13.1
R632	7030005530	S.RES ERJ2GEJ 100 X (10)	B	27.7/10.7
R633	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	23.8/15.8
R634	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	24.7/16.7
R635	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	28.4/7.2
R641	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	31.7/17.5
R642	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	31.7/16.6
R643	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	32.5/19.3
R644	7030005530	S.RES ERJ2GEJ 100 X (10)	B	32.5/18.4
R645	7030010040	S.RES ERJ2GEJ-JPW	B	31.2/18.8
R647	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	29.8/10.7
R661	7030005000	S.RES ERJ2GEJ 471 X (470)	T	50.7/27.1
R662	7030009280	S.RES ERJ2GEJ 391 X	T	55.6/31.9
R663	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	54.2/31.5
R664	7410001150	S.ARR EXB28V471JX	T	51.3/29.2
R671	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	39.2/21.9
R672	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	38.3/21.9
R673	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	38.8/20.6
R676	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	48.1/20.7
R677	7030005220	S.RES ERJ2GEJ 223 X (22K)	T	49.0/20.7
R678	7030005110	S.RES ERJ2GEJ 224 X (220K)	T	48.5/19.4
R701	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	87.3/14.1
R702	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	85.5/12.4
R703	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	86.4/12.4
R704	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	85.5/10.7
R705	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.6/10.7
R706	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.9/10.7
R707	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	81.0/12.5
R708	7030004970	S.RES ERJ2GEJ 470 X (47)	B	86.4/14.1
R711	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	88.2/6.3
R712	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	85.5/4.7
R713	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	86.4/4.7
R714	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	85.5/3.0
R715	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	84.6/3.0
R716	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.9/3.0
R717	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	81.0/4.7
R718	7030004970	S.RES ERJ2GEJ 470 X (47)	B	87.3/6.3
R721	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	42.5/24.7
R722	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	T	39.3/14.1
R723	7510001661	S.THR NTCG16 4LH 473JT	T	66.5/7.0
R724	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	65.7/5.4
R733	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	43.1/13.8
R734	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	31.7/18.6
R735	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	33.0/19.0
R736	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	17.9/15.7
R737	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	17.9/14.1
R738	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.6/12.8
R739	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	14.7/11.6
R740	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	13.1/18.7
R751	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	20.5/21.8
R752	7030005060	S.RES ERJ2GEJ 333 X (33K)	B	18.6/20.5
R753	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	15.6/21.6
R754	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	15.6/20.7
R755	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.3/20.7
R758	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	7.1/14.2



## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R761	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/30.5
R762	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/31.4
R763	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/23.9
R764	7030011150	S.RES ERJ2GEJ 2R7 X (2.7)	B	7.4/24.8
R765	7030011130	S.RES ERJ1TYJ 1R0U (1)	T	12.4/19.2
R766	7030011130	S.RES ERJ1TYJ 1R0U (1)	T	12.4/23.0
R901	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	50.6/19.5
R902	7410001140	S.ARR EXB28V104JX	B	47.2/44.8
R903	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	43.2/35.6
R904	7030011210	S.RES ERJ2GEJ 1R0 X (1)	B	38.1/33.1
R905	7030011210	S.RES ERJ2GEJ 1R0 X (1)	B	38.1/32.2
R906	7030005010	S.RES ERJ2GEJ 681 X (680)	B	60.1/40.6
R907	7030005000	S.RES ERJ2GEJ 471 X (470)	B	59.7/36.6
R911	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.7/40.2
R912	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	43.7/38.6
R921	7030011210	S.RES ERJ2GEJ 1R0 X (1)	T	60.2/22.0
R922	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	56.0/29.0
R923	7030005080	S.RES ERJ2GEJ 823 X (82K)	T	58.2/28.6
R924	7030005060	S.RES ERJ2GEJ 333 X (33K)	T	60.3/29.0
C1	4030016930	S.CER C1005 JB 1A 104K-T	T	74.0/16.4
C2	4550007520	S.TAN F931A106MAABMA	T	72.9/14.3
C3	4550000550	S.TAN TEESVA 1V 224M8R	B	78.0/20.5
Eqv.	4550008150	S.TAN F921V224MAA		
C10	4030016930	S.CER C1005 JB 1A 104K-T	T	71.0/15.9
C17	4030017460	S.CER C1005 JB 1H 102K-T	B	89.5/35.2
C18	4030017460	S.CER C1005 JB 1H 102K-T	T	91.9/32.0
C51	4030017610	S.CER C1005 CH 1H 090C-T	T	75.0/18.8
C52	4030017610	S.CER C1005 CH 1H 090C-T	T	72.4/18.3
C53	4030017460	S.CER C1005 JB 1H 102K-T	T	70.6/18.3
C61	4030017460	S.CER C1005 JB 1H 102K-T	B	62.4/45.5
C62	4030017460	S.CER C1005 JB 1H 102K-T	B	67.6/47.6
C63	4030020310	S.CER GRM31CB31C106KA88L	B	66.0/47.6
C71	4030017460	S.CER C1005 JB 1H 102K-T	T	83.0/43.4
C72	4030017570	S.CER C1005 CH 1H 040B-T	T	67.5/45.9
C75	4030017460	S.CER C1005 JB 1H 102K-T	T	65.7/50.4
C81	4030017420	S.CER C1005 CH 1H 470J-T	T	67.1/49.0
C82	4030017460	S.CER C1005 JB 1H 102K-T	T	66.2/49.0
C83	4030017620	S.CER C1005 CH 1H 100C-T	T	63.0/47.3
C84	4030017620	S.CER C1005 CH 1H 100C-T	T	61.7/47.7
C89	4550007090	S.TAN TEESVA 1A 226M8R	T	69.6/52.8
Eqv.	4550008160	S.TAN F931A226MAA		
C91	4030017440	S.CER C1005 CH 1H 221J-T	T	69.1/54.6
C92	4030017460	S.CER C1005 JB 1H 102K-T	T	70.0/54.6
C93	4030017420	S.CER C1005 CH 1H 470J-T	T	73.0/53.5
C94	4030017730	S.CER C1005 JB 1H 471K-T	T	73.0/52.6
C95	4030017460	S.CER C1005 JB 1H 102K-T	T	78.4/54.8
C96	4030011600	S.CER C1608 JB 1E 103K-T	T	72.6/54.6
C97	4030020240	S.CER GRM31CR11C475KA01L	T	80.0/53.2
C98	4030020240	S.CER GRM31CR11C475KA01L	B	55.6/55.9
C111	4030020380	S.CER GRM21A5C2E180JW01D	T	88.8/56.5
C112	4030020380	S.CER GRM21A5C2E180JW01D	T	91.5/56.5
C113	4030020420	S.CER GRM21A7U2E102JW31D	T	105.8/53.8
C114	4030020380	S.CER GRM21A5C2E180JW01D	T	106.8/56.9
C115	4030004810	S.CER C2012 CH 1H 040C-T	T	110.1/58.3
C116	4030020390	S.CER GRM21A5C2E270JW01D	T	113.5/59.3
C121	4030020390	S.CER GRM21A5C2E270JW01D	T	108.3/50.6
C122	4030017400	S.CER C1005 CH 1H 220J-T	T	107.4/49.2
C125	4030017460	S.CER C1005 JB 1H 102K-T	T	105.5/44.4
	4030017460	S.CER C1005 JB 1H 102K-T	[USA]	
	4030017460	S.CER C1005 JB 1H 102K-T	[USA-01]	
C126	4030017460	S.CER C1005 JB 1H 102K-T	[USA]	
	4030017460	S.CER C1005 JB 1H 102K-T	[USA-01]	
C127	4030017460	S.CER C1005 JB 1H 102K-T	T	110.6/43.0
C130	4030017460	S.CER C1005 JB 1H 102K-T	T	94.5/44.3
C131	4030017460	S.CER C1005 JB 1H 102K-T	T	82.7/51.8
C132	4030017460	S.CER C1005 JB 1H 102K-T	T	88.5/48.0
C133	4030017460	S.CER C1005 JB 1H 102K-T	T	80.3/46.0
C134	4030017460	S.CER C1005 JB 1H 102K-T	T	83.4/49.5
C135	4030017460	S.CER C1005 JB 1H 102K-T	T	81.2/47.6
C136	4030017730	S.CER C1005 JB 1H 471K-T	T	77.4/44.5
C137	4030017460	S.CER C1005 JB 1H 102K-T	T	76.3/48.1
C138	4030017460	S.CER C1005 JB 1H 102K-T	T	76.9/50.3
C140	4030016790	S.CER C1005 JB 1E 103K-T	T	71.5/47.3
C141	4030017460	S.CER C1005 JB 1H 102K-T	T	70.6/47.3
C143	4030016790	S.CER C1005 JB 1E 103K-T	T	74.6/44.9
C151	4030020310	S.CER GRM31CB31C106KA88L	B	101.4/28.2
C152	4030017460	S.CER C1005 JB 1H 102K-T	B	106.9/21.3
C153	4030019560	S.CER GRM21BB31C106KE15L	B	106.2/22.7
C160	4030016790	S.CER C1005 JB 1E 103K-T	T	61.2/17.5
C161	4030017460	S.CER C1005 JB 1H 102K-T	T	60.3/17.5
C162	4030016930	S.CER C1005 JB 1A 104K-T	T	67.3/19.3
C163	4030017680	S.CER C1005 CH 1H 820J-T	T	69.0/10.9
C164	4030017500	S.CER C1005 CH 1H 560J-T	T	67.2/12.6
C165	4030017640	S.CER C1005 CH 1H 150J-T	T	62.9/7.6
C166	4030018070	S.CER C1005 CH 1H 300J-T	T	60.9/7.6
C167	4030016790	S.CER C1005 JB 1E 103K-T	T	60.4/10.1
C168	4030017550	S.CER C1005 CH 1H 1R5B-T	T	62.9/6.6
C201	4030017650	S.CER C1005 CH 1H 270J-T	T	113.8/43.7
C202	4030017620	S.CER C1005 CH 1H 100C-T	T	115.2/43.3
C203	4030017360	S.CER C1005 CH 1H 030B-T	T	118.6/45.4
C204	4030017460	S.CER C1005 JB 1H 102K-T	T	119.9/42.7
C205	4030017400	S.CER C1005 CH 1H 220J-T	T	120.1/46.9
C206	4030017370	S.CER C1005 CH 1H 3R5B-T	T	124.9/44.5
C207	4030016930	S.CER C1005 JB 1A 104K-T	T	123.8/46.9
C208	4030017460	S.CER C1005 JB 1H 102K-T	T	124.7/46.9
C209	4030017400	S.CER C1005 CH 1H 220J-T	T	121.9/46.9
C210	4030017760	S.CER C1005 JB 1H 222K-T	T	122.8/46.9
C211	4030017590	S.CER C1005 CH 1H 070C-T	T	123.6/42.0
C213	4030017360	S.CER C1005 CH 1H 030B-T	T	125.3/43.1
C221	4030017360	S.CER C1005 CH 1H 030B-T	T	117.8/35.3
C222	4030017460	S.CER C1005 JB 1H 102K-T	T	117.3/34.0
C223	4030017560	S.CER C1005 CH 1H 2R5B-T	T	115.9/33.7
C224	4030017760	S.CER C1005 JB 1H 222K-T	T	119.8/30.8
C231	4030016790	S.CER C1005 JB 1E 103K-T	T	120.8/29.1

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C232	4030017500	S.CER C1005 CH 1H 560J-T	T	113.6/28.4
C233	4030017550	S.CER C1005 CH 1H 1R5B-T	T	112.7/28.4
C234	4030017400	S.CER C1005 CH 1H 220J-T	T	116.8/28.4
C235	4030017460	S.CER C1005 JB 1H 102K-T	T	117.7/28.4
C236	4030016930	S.CER C1005 JB 1A 104K-T	T	118.6/28.4
C237	4030017460	S.CER C1005 JB 1H 102K-T	T	110.9/28.4
C242	4030017360	S.CER C1005 CH 1H 030B-T	[USA]	
	4030017360	S.CER C1005 CH 1H 030B-T	[USA-01]	
	4030017570	S.CER C1005 CH 1H 040B-T	[UK]	
	4030017570	S.CER C1005 CH 1H 040B-T	[EUR]	
	4030017570	S.CER C1005 CH 1H 040B-T	[HOL]	
	4030017570	S.CER C1005 CH 1H 040B-T	[FRG]	
	4030017570	S.CER C1005 CH 1H 040B-T	[UK-01]	
	4030017570	S.CER C1005 CH 1H 040B-T	[EUR-01]	
	4030017570	S.CER C1005 CH 1H 040B-T	[HOL-01]	
	4030017570	S.CER C1005 CH 1H 040B-T	[FRG-01]	
C245	4030017460	S.CER C1005 JB 1H 102K-T	T	93.1/23.0
C251	4030017640	S.CER C1005 CH 1H 150J-T	T	94.9/23.0
C252	4030016790	S.CER C1005 JB 1E 103K-T	T	92.1/18.5
C254	4030016790	S.CER C1005 JB 1E 103K-T	T	93.7/17.6
C262	4030017380	S.CER C1005 CH 1H 050B-T	T	111.6/33.3
C264	4030017460	S.CER C1005 JB 1H 102K-T	T	107.6/34.7
C271	4030017420	S.CER C1005 CH 1H 470J-T	T	92.8/11.0
C272	4030018910	S.CER C1608 JB 0J 475K-T	T	89.7/10.8
C273	4030016790	S.CER C1005 JB 1E 103K-T	T	91.5/10.5
C274	4030018890	S.CER C1005 JB 0J 224K-T	T	97.3/15.7
C275	4030017460	S.CER C1005 JB 1H 102K-T	T	94.6/11.0
C276	4030017460	S.CER C1005 JB 1H 102K-T	T	95.1/9.7
C281	4030017450	S.CER C1005 JB 1H 271K-T	T	86.8/10.6
C282	4030017450	S.CER C1005 JB 1H 271K-T	T	85.9/10.6
C283	4030017400	S.CER C1005 CH 1H 220J-T	T	86.4/7.6
C284	4030016930	S.CER C1005 JB 1A 104K-T	T	86.4/13.4
C285	4030016930	S.CER C1005 JB 1A 104K-T	T	86.4/14.3
C286	4030016930	S.CER C1005 JB 1A 104K-T	T	86.4/15.2
C287	4030017460	S.CER C1005 JB 1H 102K-T	T	89.9/17.6
C288	4030016930	S.CER C1005 JB 1A 104K-T	T	89.9/18.5
C289	4030016930	S.CER C1005 JB 1A 104K-T	T	95.2/18.0
C291	4030017350	S.CER C1005 CH 1H 020B-T	T	81.1/15.9
C292	4030017350	S.CER C1005 CH 1H 020B-T	T	82.0/18.0
C293	4030017460	S.CER C1005 JB 1H 102K-T	T	69.8/12.7
C301	4030017550	S.CER C1005 CH 1H 1R5B-T	B	128.1/42.0
C302	4030017360	S.CER C1005 CH 1H 030B-T	B	129.8/42.0
C303	4030017380	S.CER C1005 CH 1H 050B-T	B	129.0/41.0
C304	4030017540	S.CER C1005 CH 1H 7R5B-T	B	127.2/39.6
C305	4030017540	S.CER C1005 CH 1H 7R5B-T	B	127.2/37.9
C306	4030017350	S.CER C1005 CH 1H 020B-T	B	128.6/37.8
C307	4030017380	S.CER C1005 CH 1H 050B-T	B	128.6/36.9
C308	4030017340	S.CER C1005 CH 1H 010B-T	B	127.2/36.2
C311	4030017460	S.CER C1005 JB 1H 102K-T	B	128.6/32.5
C312	4030017460	S.CER C1005 JB 1H 102K-T	B	126.3/32.2
C321	4030017500	S.CER C1005 CH 1H 560J-T	B	124.7/30.0
C323	4030017400	S.CER C1005 CH 1H 220J-T	B	124.7/30.9
C324	4030017460	S.CER C1005 JB 1H 102K-T	B	124.7/31.8
C325	4030016930	S.CER C1005 JB 1A 104K-T	B	124.7/32.7
C331	4030017460	S.CER C1005 JB 1H 102K-T	B	126.0/27.5
C333	4030017610	S.CER C1005 CH 1H 090C-T	B	120.5/18.6
C336	4030017460	S.CER C1005 JB 1H 102K-T	B	112.9/17.6
C343	4030016790	S.CER C1005 JB 1E 103K-T	B	117.0/16.3
C344	4030016790	S.CER C1005 JB 1E 103K-T	B	113.9/14.8
C352	4030017640	S.CER C1005 CH 1H 150J-T	B	127.5/26.4
C362	4030018910	S.CER C1608 JB 0J 475K-T	T	109.3/10.8
C363	4030016790	S.CER C1005 JB 1E 103K-T	T	111.2/10.5
C364	4030017420	S.CER C1005 CH 1H 470J-T	T	112.5/11.0
C365	4030016930	S.CER C1005 JB 1A 104K-T	T	115.9/15.8
C366	4030016930	S.CER C1005 JB 1A 104K-T	T	116.8/15.8
C367	4030017460	S.CER C1005 JB 1H 102K-T	T	114.2/11.0
C368	4030017460	S.CER C1005 JB 1H 102K-T	T	114.7/9.7
C371	4030017400	S.CER C1005 CH 1H 220J-T	T	108.2/18.0
C372	4030017660	S.CER C1005 CH 1H 330J-T	T	109.1/18.0
C374	4030016930	S.CER C1005 JB 1A 104K-T	T	111.2/18.0
C375	4030016930	S.CER C1005 JB 1A 104K-T	T	106.2/13.9
C376	4030016930	S.CER C1005 JB 1A 104K-T	T	106.2/15.3
C377	4030016930	S.CER C1005 JB 1A 104K-T	T	106.7/12.5
C401	4030016790	S.CER C1005 JB 1E 103K-T	T	

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C513	4030020250	S.CER GRM21BB11A225KA01L	T	37.7/40.0
C514	4030017460	S.CER C1005 JB 1H 102K-T	T	38.1/42.4
C521	4030017490	S.CER C1608 JB 1A 105K-T	B	32.9/34.0
C522	4030018890	S.CER C1005 JB 0J 224K-T	B	28.7/32.5
C523	4030018890	S.CER C1005 JB 0J 224K-T	B	28.7/29.2
C524	4030018910	S.CER C1608 JB 0J 475K-T	B	67.2/9.0
C525	4030017460	S.CER C1005 JB 1H 102K-T	B	68.3/8.7
C526	4030017460	S.CER C1005 JB 1H 102K-T	B	35.7/29.7
C527	4030017490	S.CER C1608 JB 1A 105K-T	B	35.4/26.1
C528	4030017490	S.CER C1608 JB 1A 105K-T	B	64.9/3.6
C530	4030017490	S.CER C1608 JB 1A 105K-T	B	58.1/4.3
C531	4030019620	S.CER GRM188B31C225KE14D	B	59.7/6.5
C532	4030017760	S.CER C1005 JB 1H 222K-T	B	60.4/9.8
C533	4030018080	S.CER C1005 JB 1H 182K-T	B	60.1/7.6
C535	4030018890	S.CER C1005 JB 0J 224K-T	B	58.6/11.5
C536	4030017030	S.CER C1005 JB 1A 273K-T	B	58.6/14.9
C537	4030017030	S.CER C1005 JB 1A 273K-T	B	61.7/15.1
C538	4030016930	S.CER C1005 JB 1A 104K-T	B	57.7/14.9
C539	4030017490	S.CER C1608 JB 1A 105K-T	B	68.8/10.9
C541	4030006900	S.CER C1608 JB 1H 103K-T	T	63.7/20.4
C560	4030019620	S.CER GRM188B31C225KE14D	B	57.4/18.7
C571	4030016790	S.CER C1005 JB 1E 103K-T	B	77.8/12.8
C576	4030018890	S.CER C1005 JB 0J 224K-T	B	71.8/17.3
C578	4030017460	S.CER C1005 JB 1H 102K-T	B	69.6/17.1
C602	4030016790	S.CER C1005 JB 1E 103K-T	B	7.4/44.1
C603	4030016930	S.CER C1005 JB 1A 104K-T	B	7.4/43.2
C604	4030016930	S.CER C1005 JB 1A 104K-T	B	12.9/46.0
C605	4030016790	S.CER C1005 JB 1E 103K-T	B	12.9/46.9
C607	4030020310	S.CER GRM31CB31C106KA88L	B	11.0/46.0
C611	4510009920	S.ELE 16 CE 100 LH	T	12.5/44.7
C612	4030016790	S.CER C1005 JB 1E 103K-T	T	6.4/40.8
C613	4030016930	S.CER C1005 JB 1A 104K-T	T	5.5/40.8
C614	4030011600	S.CER C1608 JB 1E 104K-T	T	6.6/34.1
C615	4030016790	S.CER C1005 JB 1E 103K-T	T	7.7/34.1
C616	4510009920	S.ELE 16 CE 100 LH	T	12.5/37.6
C620	4030017460	S.CER C1005 JB 1H 102K-T	B	9.7/43.0
C621	4510010300	S.ELE 16 CE 470 AX	T	28.0/53.0
C622	4030011600	S.CER C1608 JB 1E 104K-T	T	20.6/46.1
C623	4030017440	S.CER C1005 CH 1H 221J-T	T	19.5/46.6
C624	4030017460	S.CER C1005 JB 1H 102K-T	T	18.6/46.6
C625	4030017430	S.CER C1005 CH 1H 101J-T	B	45.1/52.0
C626	4030017420	S.CER C1005 CH 1H 470J-T	B	44.2/52.0
C627	4030017730	S.CER C1005 JB 1H 471K-T	B	51.1/46.6
C628	4030017400	S.CER C1005 CH 1H 220J-T	B	50.2/46.6
C629	4030017400	S.CER C1005 CH 1H 220J-T	B	57.2/56.0
C630	4030017430	S.CER C1005 CH 1H 101J-T	B	58.1/56.0
C631	4030017730	S.CER C1005 JB 1H 471K-T	B	13.7/39.1
C636	4030016790	S.CER C1005 JB 1E 103K-T	T	30.4/21.3
C637	4510010250	S.ELE 16 CE 22 LD	T	28.7/26.5
C640	4030017460	S.CER C1005 JB 1H 102K-T	B	25.6/21.0
C641	4030017510	S.CER C1005 CH 1H 680J-T	B	27.4/20.9
C642	4030018920	S.CER C1005 JB 1H 392K-T	B	24.7/19.3
C643	4030017460	S.CER C1005 JB 1H 102K-T	B	22.4/19.0
C644	4030016790	S.CER C1005 JB 1E 103K-T	B	26.4/10.3
C649	4030017460	S.CER C1005 JB 1H 102K-T	B	27.7/9.8
C650	4030018910	S.CER C1608 JB 0J 475K-T	B	27.4/8.7
C651	4030016790	S.CER C1005 JB 1E 103K-T	B	27.5/7.2
C662	4030020270	S.CER GRM188B11A105KA61D	B	33.9/16.7
C663	4030017460	S.CER C1005 JB 1H 102K-T	B	29.0/20.4
C664	4030016790	S.CER C1005 JB 1E 103K-T	T	27.0/20.1
C669	4030017460	S.CER C1005 JB 1H 102K-T	B	29.8/8.0
C681	4030016790	S.CER C1005 JB 1E 103K-T	T	52.0/27.4
C682	4030018910	S.CER C1608 JB 0J 475K-T	T	51.6/25.6
C683	4030016790	S.CER C1005 JB 1E 103K-T	T	39.1/30.4
C686	4030019460	S.CER C1608 JB 0J 106M-T	T	57.1/31.0
C701	4030016930	S.CER C1005 JB 1A 104K-T	B	87.3/12.4
C702	4030017790	S.CER C1005 JB 1H 682K-T	B	86.4/10.7
C703	4030016970	S.CER C1005 JB 1E 223K-T	B	82.8/10.7
C704	4030017760	S.CER C1005 JB 1H 222K-T	B	83.7/10.7
C705	4030017790	S.CER C1005 JB 1H 682K-T	B	81.0/10.7
C706	4030016790	S.CER C1005 JB 1E 103K-T	B	80.1/10.7
C707	4030016790	S.CER C1005 JB 1E 103K-T	B	85.5/14.1
C708	4030016930	S.CER C1005 JB 1A 104K-T	B	84.6/14.1
C711	4030016930	S.CER C1005 JB 1A 104K-T	B	88.7/5.1
C712	4030017790	S.CER C1005 JB 1H 682K-T	B	86.4/3.0
C713	4030016970	S.CER C1005 JB 1E 223K-T	B	82.8/3.0
C714	4030017760	S.CER C1005 JB 1H 222K-T	B	83.7/3.0
C715	4030017790	S.CER C1005 JB 1H 682K-T	B	81.0/3.0
C716	4030016790	S.CER C1005 JB 1E 103K-T	B	80.1/4.7
C717	4030016790	S.CER C1005 JB 1E 103K-T	B	85.5/6.3
C718	4030016930	S.CER C1005 JB 1A 104K-T	B	84.6/6.3
C721	4030017680	S.CER C1005 CH 1H 820J-T	B	88.2/14.1
C722	4030016790	S.CER C1005 JB 1E 103K-T	B	89.1/6.3
C724	4030017730	S.CER C1005 JB 1H 471K-T	T	33.2/13.3
C725	4030017680	S.CER C1005 CH 1H 820J-T	T	60.0/4.8
C726	4030017460	S.CER C1005 JB 1H 102K-T	T	86.5/3.2
C727	4030017460	S.CER C1005 JB 1H 102K-T	T	38.3/14.1
C728	4030016790	S.CER C1005 JB 1E 103K-T	T	37.3/14.1
C731	4030017440	S.CER C1005 CH 1H 221J-T	T	36.3/14.1
C732	4030017460	S.CER C1005 JB 1H 102K-T	T	36.7/4.5
C733	4030017460	S.CER C1005 JB 1H 102K-T	T	35.3/14.1
C734	4030017440	S.CER C1005 CH 1H 221J-T	T	35.7/4.5
C741	4030016930	S.CER C1005 JB 1A 104K-T	B	44.8/13.8
C742	4030011600	S.CER C1608 JB 1E 104K-T	B	19.0/14.0
C743	4030017440	S.CER C1005 CH 1H 221J-T	T	31.7/17.7
C744	4030011600	S.CER C1608 JB 1E 104K-T	B	11.2/10.8
C745	4030017460	S.CER C1005 JB 1H 102K-T	B	7.1/9.2
C746	4030017490	S.CER C1608 JB 1A 105K-T	B	18.1/18.4
C748	4030017460	S.CER C1005 JB 1H 102K-T	T	5.0/9.4
C751	4030017440	S.CER C1005 CH 1H 221J-T	B	19.6/20.5
C752	4030011600	S.CER C1608 JB 1E 104K-T	B	17.8/21.9
C753	4030011600	S.CER C1608 JB 1E 104K-T	B	9.3/12.7
C754	4030017460	S.CER C1005 JB 1H 102K-T	B	8.0/14.2
C761	4030017460	S.CER C1005 JB 1H 102K-T	B	7.1/11.8
C762	4510009920	S.ELE 16 CE 100 LH	T	11.2/13.7

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C763	4030020310	S.CER	GRM31CB31C106KA88L	T	5.2/15.1
C764	4030017480	S.CER	C1608 JB 1A 474K-T	B	7.9/20.3
C765	4510010300	S.ELE	16 CE 470 AX	T	13.3/29.6
C766	4030011600	S.CER	C1608 JB 1E 104K-T	T	6.5/28.8
C767	4030017460	S.CER	C1005 JB 1H 102K-T	T	7.6/27.1
C768	4030017460	S.CER	C1005 JB 1H 102K-T	T	7.6/26.2
C769	4030017460	S.CER	C1005 JB 1H 102K-T	B	11.5/39.1
C770	4030011600	S.CER	C1608 JB 1E 104K-T	B	12.6/39.2
C772	4030011600	S.CER	C1608 JB 1E 104K-T	B	8.9/29.5
C773	4030011600	S.CER	C1608 JB 1E 104K-T	B	8.9/32.3
C775	4030017440	S.CER	C1005 CH 1H 221J-T	B	21.4/33.6
C776	4030017440	S.CER	C1005 CH 1H 221J-T	B	21.4/32.1
C777	4030017440	S.CER	C1005 CH 1H 221J-T	B	24.5/33.6
C778	4030017440	S.CER	C1005 CH 1H 221J-T	B	24.5/32.1
C782	4030011600	S.CER	C1608 JB 1E 104K-T	B	8.9/22.9
C783	4030011600	S.CER	C1608 JB 1E 104K-T	B	8.9/25.7
C785	4030017440	S.CER	C1005 CH 1H 221J-T	B	13.1/24.5
C786	4030017440	S.CER	C1005 CH 1H 221J-T	B	13.8/26.8
C787	4030017440	S.CER	C1005 CH 1H 221J-T	B	16.4/32.1
C788	4030017440	S.CER	C1005 CH 1H 221J-T	B	18.1/32.1
C791	4030017460	S.CER	C1005 JB 1H 102K-T	T	5.5/10.7
C792	4030016930	S.CER	C1005 JB 1A 104K-T	T	6.4/10.7
C806	4030017460	S.CER	C1005 JB 1H 102K-T	T	37.7/4.5
C811	4030017460	S.CER	C1005 JB 1H 102K-T	T	40.3/14.1
C812	4030017460	S.CER	C1005 JB 1H 102K-T	T	40.7/4.5
C813	4030017460	S.CER	C1005 JB 1H 102K-T	T	41.7/15.3
C814	4030017460	S.CER	C1005 JB 1H 102K-T	T	41.7/4.5
C816	4030017460	S.CER	C1005 JB 1H 102K-T	T	42.7/4.5
C818	4030017460	S.CER	C1005 JB 1H 102K-T	T	43.7/4.5
C820	4030017460	S.CER	C1005 JB 1H 102K-T	T	44.7/4.5
C821	4030017460	S.CER	C1005 JB 1H 102K-T	T	45.3/14.1
C823	4030017460	S.CER	C1005 JB 1H 102K-T	T	46.3/14.1
C825	4030017460	S.CER	C1005 JB 1H 102K-T	T	47.3/14.1
C827	4030017460	S.CER	C1005 JB 1H 102K-T	T	48.3/14.1
C830	4030017400	S.CER	C1005 CH 1H 220J-T	T	49.7/4.5
C832	4030017400	S.CER	C1005 CH 1H 220J-T	T	50.7/4.5
C834	4030017460	S.CER	C1005 JB 1H 102K-T	T	51.7/4.5
C836	4030017460	S.CER	C1005 JB 1H 102K-T	T	52.7/4.5
C838	4030017460	S.CER	C1005 JB 1H 102K-T	T	53.7/4.5
C841	4030017490	S.CER	C1608 JB 1A 105K-T	B	40.8/25.9
C842	4030017460	S.CER	C1005 JB 1H 102K-T	B	50.7/25.6
C843	4030016930	S.CER	C1005 JB 1A 104K-T	B	42.3/21.4
C901	4030016930	S.CER	C1005 JB 1A 104K-T	T	53.3/23.3
C902	4030017460	S.CER	C1005 JB 1H 102K-T	T	51.5/19.5
C903	4030016930	S.CER	C1005 JB 1A 104K-T	B	44.1/31.8
C904	4030016930	S.CER	C1005 JB 1A 104K-T	B	51.0/28.2
C905	4030016930	S.CER	C1005 JB 1A 104K-T	B	49.2/28.2
C906	4030016930	S.CER	C1005 JB 1A 104K-T	B	43.2/31.8
C907	4030019620	S.CER	GRM188B31C225KE14D	B	38.5/37.4
C908	4030016790	S.CER	C1005 JB 1E 103K-T	B	36.1/37.0
C910	4030019560	S.CER	GRM21BB31C106KE15L	B	41.6/29.3
C911	4550006970	S.TAN	TEESVA OG 476M8R	B	40.3/39.7
Eqv.	4550008240	S.TAN	F930G476MAA		
C912	4030016930	S.CER	C1005 JB 1A 104K-T	B	59.7/34.7
C913	4030016930	S.CER	C1005 JB 1A 104K-T	B	60.1/41.5
C914	4030016930	S.CER	C1005 JB 1A 104K-T	B	52.1/43.9
C915	4030017770	S.CER	C1005 JB 1H 332K-T	B	59.7/39.3
C916	4030017040	S.CER	C1005 JB 1A 333K-T	B	61.5/40.2
C917	4030016930	S.CER	C1005 JB 1A 104K-T	B	43.2/37.4
C918	4030016930	S.CER	C1005 JB 1A 104K-T	B	44.1/35.6
C919	4030019560	S.CER	GRM21BB31C106KE15L	B	46.6/27.8
C921	4030016930	S.CER	C1005 JB 1A 104K-T	B	52.6/28.2
C922	4030016930	S.CER	C1005 JB 1A 104K-T	B	59.7/33.0
C923	4030016930	S.CER	C1005 JB 1A 104K-T	B	60.6/39.3
C924	4030016930	S.CER	C1005 JB 1A 104K-T	B	54.6/43.9
C925	4030019560	S.CER	GRM21BB31C106KE15L	B	53.6/26.8
C931	4030018920	S.CER	C1005 JB 1H 392K-T	T	57.3/28.6
C932	4030018080	S.CER	C1005 JB 1H 182K-T	T	59.1/28.6
C933	4030020010	S.CER	C1005 CH 1H 271J-T	T	60.3/28.6
C934	4030016790	S.CER	C1005 JB 1E 103K-T	T	60.2/23.3
J1	6510025142	S.CON	10FLT-SM2-TB(LF)(SN)(M)	T	40.9/47.3
J2	6510022472	S.CON	40FLT-SM2-TB(LF)(SN)(M)	T	45.0/9.3
J3	6510018971	S.CON	B4B-PH-SM4-TB(LF)(SN)	B	20.7/25.8
F1	5210001160	S.FUS	ERBRE3R00V	T	3.8/48.8
W1	7030012290	JUM	RDS2T0R0		
W3	8900020400	CAB	OPC-2216 <TJM>		
EP401	6910016330	S.BEA	MMZ1005S 601CT-S	T	123.7/21.0
EP701	6910016330	S.BEA	MMZ1005S 601CT-S	B	8.2/10.1
EP702	6910016330	S.BEA	MMZ1005S 601CT-S	B	8.9/14.2
EP703	6910019100	S.BEA	MPZ1608S101AT	B	20.0/33.0
EP704	6910019100	S.BEA	MPZ1608S101AT	B	23.1/33.0
EP705	6910019100	S.BEA	MPZ1608S101AT	B	12.7/26.4
EP706	6910019100	S.BEA	MPZ1608S101AT	B	17.6/33.2



## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1140016241	S.IC STM32F100ZET6B(FX3338A1) <AMSC>	B	79.0/30.0
IC2	1110006740	S.IC LMV358IPWR	T	73.9/48.1
IC3	1130009981	S.IC TC7W53FK(Te85LF)	B	38.5/31.8
IC4	1180003570	S.REG NJM2830U1-33-TE1-#ZZZB	B	33.0/51.8
IC5	1130016110	S.IC TC7WH14FK(Te85LF)	B	54.6/13.3
IC6	1130008711	S.IC TC7SET04FU(T5LJF)	B	47.7/40.2
IC7	1130016110	S.IC TC7WH14FK(Te85LF)	B	54.5/39.0
IC8	1170000352	S.IC PC357N6J000F	B	127.0/36.0
IC9	1130016310	S.IC BR24T256FJ-WE2	B	84.0/49.5
IC10	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	43.3/11.2
IC11	1110003650	S.IC NJM2211M-TE1-#ZZZB	B	34.5/45.5
IC12	1130009301	S.IC TC7SET08FU(T5LJF)	B	46.1/53.7
Q1	1520000651	S.TRA 2SB1201S-TL-E	B	129.4/45.9
Q2	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	123.2/41.4
Q3	1590001330	S.TRA DTA114EUA T106	B	54.9/16.9
Q4	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	53.9/20.8
Q5	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	50.2/36.5
Q6	1510001151	S.TRA L2SA1576AST1G <SLVJ>	B	47.4/36.8
Q7	1560000541	S.FET 2SK880-Y(T5RICOMF)	B	53.0/35.3
Q8	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	132.9/39.2
Q9	1590000710	S.TRA DTC124EUA T106	B	130.2/40.1
D1	1750002030	S.ZEN DZ2J068MOL	B	123.6/44.4
D3	1750001810	S.DIO L1SS400T1G <SLVJ>	B	55.9/19.6
D4	1750001810	S.DIO L1SS400T1G <SLVJ>	B	130.5/33.2
D5	1750001180	S.DIO KDS122 RTK/P	B	134.2/36.1
D7	1790001990	S.VAR EZJP0V080DA	B	134.5/32.0
X1	6050012460	S.XTA CR-834(SMD-49/7.9872 MHz) <JJE>	B	97.5/27.5
R1	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	65.3/34.8
R2	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	65.3/35.8
R3	7410001130	S.ARR EXB28V102JX	B	49.5/30.5
R5	7030004970	S.RES ERJ2GEJ 470 X (47)	B	61.5/22.1
R8	7030012350	S.RES ERJ2GEJ 335 X (3.3M)	B	72.2/48.0
R9	7410001140	S.ARR EXB28V104JX	B	57.5/44.5
R11	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	72.0/43.3
R12	7410001230	S.ARR EXB28V101JX	B	58.5/32.5
R16	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	82.4/43.7
R17	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	46.3/51.8
R21	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	72.3/16.7
R22	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	73.7/16.3
R23	7410001130	S.ARR EXB28V102JX	B	58.8/26.0
R24	7410001140	S.ARR EXB28V104JX	B	64.0/24.4
R25	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	79.1/16.7
R26	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	86.3/16.7
R27	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA]	B	86.9/14.7
	7030007290	S.RES ERJ2GEJ 222 X (2.2K) [USA-01]		
	7030009290	S.RES ERJ2GEJ 562 X (5.6K) [UK]		
	7030008010	S.RES ERJ2GEJ 123 X (12K) [EUR]		
	7030009710	S.RES ERJ2GEJ 203 X (20K) [HOL]		
	7030005060	S.RES ERJ2GEJ 333 X (33K) [FRG]		
	7030009290	S.RES ERJ2GEJ 562 X (5.6K) [UK-01]		
	7030008010	S.RES ERJ2GEJ 123 X (12K) [EUR-01]		
	7030009710	S.RES ERJ2GEJ 203 X (20K) [HOL-01]		
	7030005060	S.RES ERJ2GEJ 333 X (33K) [FRG-01]		
R28	7030011670	S.RES ERJ2RKF 3902 (39K)	B	85.1/12.9
R29	7030012320	S.RES ERJ2RKD 2203X (220K)	B	85.1/11.9
R34	7030004980	S.RES ERJ2GEJ 101 X (100)	B	92.8/27.2
R41	7030007510	S.RES ERJ12YJ270U (27)	B	115.2/42.1
R42	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	121.2/41.2
R43	7030004990	S.RES ERJ2GEJ 221 X (220)	B	122.0/43.6
R45	7030005000	S.RES ERJ2GEJ 471 X (470)	B	112.5/57.6
R46	7030005000	S.RES ERJ2GEJ 471 X (470)	B	125.4/38.6
R47	7030005000	S.RES ERJ2GEJ 471 X (470)	B	79.0/4.0
R48	7030005000	S.RES ERJ2GEJ 471 X (470)	B	7.8/6.0
R49	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/64.2
R50	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/63.2
R51	7030005530	S.RES ERJ2GEJ 100 X (10)	B	38.3/40.4
R52	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	108.2/27.5
R53	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	35.3/39.8
R54	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	33.7/50.4
R55	7030012740	S.RES ERJ2RHD 1602X (16.0K)	B	35.1/50.8
R56	7030008400	S.RES ERJ2GEJ 182 X (1.8K)	B	34.1/51.8
R57	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	31.9/50.4
R58	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/62.2
R59	7030008280	S.RES ERJ2GEJ 271 X (270)	B	74.4/61.2
R60	7030007280	S.RES ERJ2GEJ 331 X (330)	B	74.4/60.2
R61	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.7/46.3
R62	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	87.7/45.3
R65	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	45.7/8.3
R66	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	39.8/12.1
R67	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	40.2/10.7
R73	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	32.5/36.2
R74	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	35.8/33.6
R75	7030004980	S.RES ERJ2GEJ 101 X (100)	B	34.0/32.1
R76	7030004980	S.RES ERJ2GEJ 101 X (100)	B	42.0/37.4
R81	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	57.4/13.8
R82	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	56.9/16.9
R83	7030005530	S.RES ERJ2GEJ 100 X (10)	B	58.1/20.9
R84	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	54.4/18.7
R85	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	52.8/13.3
R90	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	50.9/39.4
R91	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	49.5/39.0
R92	7030004970	S.RES ERJ2GEJ 470 X (47)	B	48.7/35.0
R95	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	54.0/32.5
R96	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	54.0/33.5
R97	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	55.5/35.8

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R101	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	121.7/38.3
R102	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	122.2/35.1
R103	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	129.6/32.0
R106	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	134.7/39.2
R107	7030010430	S.RES	ERJ2GEJ 120 X (12)	B	132.4/35.6
R108	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	134.5/31.0
R111	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	3.7/17.5
R112	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	3.7/15.7
R113	7030003520	S.RES	ERJ3GEYJ 472 V (4.7K)	B	5.7/18.0
R114	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	5.7/15.7
R115	7030010040	S.RES	ERJ2GEJ-JPW	B	9.6/15.3
R116	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	44.0/54.2
C1	4030016930	S.CER	C1005 JB 1A 104K-T	B	70.5/16.7
C2	4030016930	S.CER	C1005 JB 1A 104K-T	B	65.8/38.5
C3	4030016930	S.CER	C1005 JB 1A 104K-T	B	87.7/43.3
C4	4030016930	S.CER	C1005 JB 1A 104K-T	B	88.1/16.7
C5	4030016930	S.CER	C1005 JB 1A 104K-T	B	92.3/31.0
C6	4030016930	S.CER	C1005 JB 1A 104K-T	B	80.5/15.0
C7	4030016930	S.CER	C1005 JB 1A 104K-T	B	75.5/16.7
C8	4030016930	S.CER	C1005 JB 1A 104K-T	B	65.7/26.5
C9	4030016930	S.CER	C1005 JB 1A 104K-T	B	65.3/32.0
C10	4030016930	S.CER	C1005 JB 1A 104K-T	B	76.0/43.3
C11	4030016930	S.CER	C1005 JB 1A 104K-T	B	81.0/43.3
C12	4030016930	S.CER	C1005 JB 1A 104K-T	B	92.3/36.0
C13	4030017460	S.CER	C1005 JB 1H 102K-T	B	70.5/15.7
C14	4030017460	S.CER	C1005 JB 1H 102K-T	B	64.8/38.5
C15	4030017460	S.CER	C1005 JB 1H 102K-T	B	87.7/44.3
C16	4030017460	S.CER	C1005 JB 1H 102K-T	B	88.7/15.7
C17	4030016790	S.CER	C1005 JB 1E 103K-T	B	93.3/31.0
C18	4030016790	S.CER	C1005 JB 1E 103K-T	B	80.5/14.0
C19	4030016790	S.CER	C1005 JB 1E 103K-T	B	64.7/26.5
C20	4030016790	S.CER	C1005 JB 1E 103K-T	B	76.0/44.3
C21	4030019550	S.CER	C1608 JB 1E 334K-T	B	72.7/49.2
C22	4550007750	S.TAN	TEESVA 1V 225M8R	B	73.8/50.9
Eqv.	4550008330	S.TAN	F931V225MAA		
C23	4550007750	S.TAN	TEESVA 1V 225M8R	B	73.8/53.7
Eqv.	4550008330	S.TAN	F931V225MAA		
C24	4030017460	S.CER	C1005 JB 1H 102K-T	B	67.0/45.2
C25	4030016930	S.CER	C1005 JB 1A 104K-T	B	63.8/45.2
C26	4030020300	S.CER	GRM21BB31C475KA87L	B	92.8/20.9
C27	4030016790	S.CER	C1005 JB 1E 103K-T	B	94.2/20.4
C31	4030016950	S.CER	C1005 JB 1A 473K-T	B	85.5/15.3
C32	4030016950	S.CER	C1005 JB 1A 473K-T	B	84.5/16.3
C33	4030016950	S.CER	C1005 JB 1A 473K-T	B	85.1/13.9
C35	4030016950	S.CER	C1005 JB 1A 473K-T	B	92.8/23.2
C36	4030016950	S.CER	C1005 JB 1A 473K-T	B	92.8/24.2
C37	4030016950	S.CER	C1005 JB 1A 473K-T	B	92.8/25.2
C38	4030016950	S.CER	C1005 JB 1A 473K-T	B	92.8/26.2
C43	4030017410	S.CER	C1005 CH 1H 240J-T	B	94.3/28.5
C44	4030017410	S.CER	C1005 CH 1H 240J-T	B	94.3/26.7
C51	4030017460	S.CER	C1005 JB 1H 102K-T	B	122.2/47.6
C52	4030016930	S.CER	C1005 JB 1A 104K-T	B	120.2/41.2
C53	4030017460	S.CER	C1005 JB 1H 102K-T	B	122.0/45.4
C54	4030019990	S.CER	C1005 JB 1C 104K-T	B	49.6/64.4
C55	4030017460	S.CER	C1005 JB 1H 102K-T	B	49.6/63.4
C56	4030017460	S.CER	C1005 JB 1H 102K-T	B	74.4/65.2
C57	4030016930	S.CER	C1005 JB 1A 104K-T	B	87.3/48.5
C61	4030016790	S.CER	C1005 JB 1E 103K-T	B	106.8/27.1
C62	4030017760	S.CER	C1005 JB 1H 222K-T	B	39.3/41.3
C63	4030019990	S.CER	C1005 JB 1C 104K-T	B	40.3/41.3
C64	4030016790	S.CER	C1005 JB 1E 103K-T	B	37.0/40.4
C65	4030018890	S.CER	C1005 JB 0J 224K-T	B	35.3/40.8
C66	4030017760	S.CER	C1005 JB 1H 222K-T	B	30.5/50.8
C67	4030016930	S.CER	C1005 JB 1A 104K-T	B	29.1/50.4
C68	4030016790	S.CER	C1005 JB 1E 103K-T	B	32.8/51.8
C69	4340000310	S.MYL	ECHU 1C 333JX5	B	38.2/50.7
C71	4030017920	S.CER	C1005 JB 1A 683K-T	B	43.0/13.3
C72	4030017480	S.CER	C1608 JB 1A 474K-T	B	41.4/11.2
C74	4030017460	S.CER	C1005 JB 1H 102K-T	B	44.0/9.1
C81	4030016930	S.CER	C1005 JB 1A 104K-T	B	37.6/33.6
C82	4030017460	S.CER	C1005 JB 1H 102K-T	B	39.2/30.0
C83	4030019990	S.CER	C1005 JB 1C 104K-T	B	34.0/33.1
C84	4030017460	S.CER	C1005 JB 1H 102K-T	B	33.6/34.1
C85	4030020300	S.CER	GRM21BB31C475KA87L	B	38.8/8.8
C86	4030017460	S.CER	C1005 JB 1H 102K-T	B	40.3/8.9
C87	4030016790	S.CER	C1005 JB 1E 103K-T	B	38.4/11.6
C88	4030020240	S.CER	GRM31CR11C475KA01L	B	36.8/10.5
C89	4030017460	S.CER	C1005 JB 1H 102K-T	B	41.5/33.8
C91	4030016930	S.CER	C1005 JB 1A 104K-T	B	56.4/13.8
C92	4030017460	S.CER	C1005 JB 1H 102K-T	B	57.1/20.0
C95	4030016790	S.CER	C1005 JB 1E 103K-T	B	49.5/40.8
C96	4030016930	S.CER	C1005 JB 1A 104K-T	B	55.5/34.8
C101	4030017460	S.CER	C1005 JB 1H 102K-T	B	120.2/36.9
C102	4030016930	S.CER	C1005 JB 1A 104K-T	B	121.2/36.9
C103	4030016790	S.CER	C1005 JB 1E 103K-T	B	122.2/36.9
C104	4030017920	S.CER	C1005 JB 1A 683K-T	B	131.4/32.0
C105	4030017460	S.CER	C1005 JB 1H 102K-T	B	131.4/30.0
C106	4030017460	S.CER	C1005 JB 1H 102K-T	B	128.2/30.6
C107	4030016930	S.CER	C1005 JB 1A 104K-T	B	135.7/39.2
C108	4030017460	S.CER	C1005 JB 1H 102K-T	B	134.5/30.0
C111	4030016790	S.CER	C1005 JB 1E 103K-T	B	45.8/26.5
C112	4030020310	S.CER	GRM31CB31C106KA88L	B	44.6/29.6
C113	4030016790	S.CER	C1005 JB 1E 103K-T	B	26.3/19.4
C114	4030017460	S.CER	C1005 JB 1H 102K-T	B	27.3/19.4
C115	4030017460	S.CER	C1005 JB 1H 102K-T	B	24.1/26.2
C116	4030017460	S.CER	C1005 JB 1H 102K-T	B	23.2/22.1
C155	4030016790	S.CER	C1005 JB 1E 103K-T	B	27.7/26.9
C162	4030016930	S.CER	C1005 JB 1A 104K-T	B	7.2/16.3
C165	4030017460	S.CER	C1005 JB 1H 102K-T	B	16.2/15.3
C166	4030017460	S.CER	C1005 JB 1H 102K-T	B	16.2/16.3
J1	6510022472	S.CON	40FLT-SM2-TB(LF)(SN)(M)	B	35.0/23.0

## [LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
J2	6510018921	S.CON B8B-PH-SM4-TB(LF)(SN)	B	10.7/9.5
J3	6510015541	S.CON B4B-ZR-SM4-TF(LF)(SN)	B	114.0/23.5
J4	6510018971	S.CON B4B-PH-SM4-TB(LF)(SN)	B	127.0/22.5
J5	6510028220	S.CON AYF532265	B	62.0/48.5
DS1	5030003500	LCD 8803L21012 <SKD>		
DS2	5040003310	S.LED L-C191KYCT <KOU>	T	130.3/52.0
DS3	5040003310	S.LED L-C191KYCT <KOU>	T	114.0/60.3
DS4	5040003310	S.LED L-C191KYCT <KOU>	T	135.5/37.2
DS5	5040003310	S.LED L-C191KYCT <KOU>	T	111.6/37.2
DS6	5040003310	S.LED L-C191KYCT <KOU>	T	102.6/11.0
DS7	5040003310	S.LED L-C191KYCT <KOU>	T	79.3/7.8
DS8	5040003310	S.LED L-C191KYCT <KOU>	T	44.5/7.8
DS9	5040003310	S.LED L-C191KYCT <KOU>	T	9.0/2.2
S1	2260002740	S.SWI LS8J2M-T	T	35.8/7.0
S2	2260002740	S.SWI LS8J2M-T	T	53.2/7.0
S3	2260002740	S.SWI LS8J2M-T	T	70.6/7.0
S4	2260002740	S.SWI LS8J2M-T	T	88.0/7.0
S5	2260002740	S.SWI LS8J2M-T	T	131.9/29.9
S6	2260002740	S.SWI LS8J2M-T	T	115.1/29.9
S7	2260002740	S.SWI LS8J2M-T	T	109.1/6.8
S8	2260002740	S.SWI LS8J2M-T	T	9.0/9.2
S9	2260002740	S.SWI LS8J2M-T	T	123.5/63.6
S10	2260002740	S.SWI LS8J2M-T	T	111.7/52.0
S11	2260002740	S.SWI LS8J2M-T	T	123.5/52.0
S12	2260002740	S.SWI LS8J2M-T	T	135.3/52.0
S13	2260002740	S.SWI LS8J2M-T	T	123.5/40.4
W1	7030012290	JUM RDS2T0R0		
W2	7030012290	JUM RDS2T0R0		
W3	8900014871	CAB OPC-1332A-1(P0.5N40L100)		
EP11	6910016330	S.BEA MMZ1005S 601CT-S	B	129.6/31.0
EP12	6910016330	S.BEA MMZ1005S 601CT-S	B	11.7/15.7

## [DIAL UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
S1	2250000730	ENC TP90N245AE20PY-14.5F-3338		
W1	8900020410	CAB OPC-2217 <TJM>		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

## [CONNECT UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C1	4030016790	S.CER C1005 JB 1E 103K-T	B	2.1/11.9
J1	6510022440	CON LTW-8MP-C NUTGASKET <LIA>	B	4.3/15.0
J2	6510025142	S.CON 10FLT-SM2-TB(LF)(SN)(M)		
EP2	6910019100	S.BEA MPZ1608S101AT	B	4.5/19.1

## [VCO UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
Q2	1590004070	S.TRA LDTC144EET1G <SLVJ>	T	13.4/9.3
Q3	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	T	11.9/2.8
Q4	1530002921	S.TRA 2SC4226-T1 Y25 (R25)	T	18.6/2.3
Q5	1530003950	S.TRA KTC4080 Y-RTK/P	T	7.1/6.9
Q6	1530003950	S.TRA KTC4080 Y-RTK/P	T	4.9/2.6
Q7	1530003950	S.TRA KTC4080 Y-RTK/P	T	5.4/11.3
Q8	1590004050	S.TRA LDTA144EET1G <SLVJ>	T	11.4/12.5
D1	1750001700	S.DIO HSC277TRF-E	T	11.5/10.0
D2	1750001700	S.DIO HSC277TRF-E	T	13.3/7.7
D3	1750001780	S.VAR HVB350BYPTL-E	T	14.4/5.6
L1	6200003711	S.COI NLV25T-2R7J	T	18.2/9.2
L2	6200011410	S.COI C2520C-82NG-A	T	17.9/5.9
L3	6200013750	S.COI MLK1005SR10JT	T	5.7/8.3
L4	6200013750	S.COI MLK1005SR10JT	T	3.5/4.0
L5	6200013750	S.COI MLK1005SR10JT	T	4.0/12.7
R6	7030009320	S.RES ERJ2GEJ 4R7 X (4.7)	T	7.5/10.8
R7	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	16.4/11.0
R8	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	16.2/9.8
R9	7030005120	S.RES ERJ2GEJ 102 X (1K)	T	16.2/8.9
R11	7030005000	S.RES ERJ2GEJ 471 X (470)	T	10.0/12.0
R12	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.5/13.7
R13	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	15.5/13.3
R14	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	18.5/12.8
R15	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	13.4/12.8
R16	7030005050	S.RES ERJ2GEJ 103 X (10K)	T	9.4/13.2
R21	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	9.9/1.4
R22	7030008010	S.RES ERJ2GEJ 123 X (12K)	T	20.7/1.7
R23	7030009160	S.RES ERJ2GEJ 181 X (180)	T	15.6/2.2
R25	7030005000	S.RES ERJ2GEJ 471 X (470)	T	9.9/3.2
R26	7030005010	S.RES ERJ2GEJ 681 X (680)	T	6.9/9.6
R27	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	7.6/5.1
R31	7030005000	S.RES ERJ2GEJ 471 X (470)	T	4.3/5.6
R32	7030005070	S.RES ERJ2GEJ 683 X (68K)	T	6.8/1.7
R33	7030007270	S.RES ERJ2GEJ 151 X (150)	T	2.9/5.3
R34	7030009200	S.RES ERJ2GEJ 390 X (39)	T	1.8/4.4
R41	7030005000	S.RES ERJ2GEJ 471 X (470)	T	3.5/9.5
R42	7030007350	S.RES ERJ2GEJ 393 X (39K)	T	5.1/9.5
R43	7030003860	S.RES ERJ3GE JPW V	T	16.1/3.7
C4	4030017460	S.CER C1005 JB 1H 102K-T	T	18.3/11.3
C6	4030016790	S.CER C1005 JB 1E 103K-T	T	3.5/7.5
C8	4030017460	S.CER C1005 JB 1H 102K-T	T	15.2/10.8
C9	4030017460	S.CER C1005 JB 1H 102K-T	T	15.0/9.5
C11	4030017460	S.CER C1005 JB 1H 102K-T	T	12.8/10.8
C12	4030017460	S.CER C1005 JB 1H 102K-T	T	14.0/11.3
C13	4030018860	S.CER C1005 JB 0J 105K-T	T	13.4/13.7
C14	4030017460	S.CER C1005 JB 1H 102K-T	T	14.6/13.3
C15	4030017460	S.CER C1005 JB 1H 102K-T	T	17.3/13.3
C16	4030011810	S.CER C1608 JB 1A 224K-T	T	10.3/9.9
C21	4030018010	S.CER C1005 CH 1H 360J-T	T	16.2/8.0
C22	4030017670	S.CER C1005 CH 1H 390J-T	T	15.0/7.6
C24	4030017760	S.CER C1005 JB 1H 222K-T	T	11.6/7.0
C31	4030017350	S.CER C1005 CH 1H 020B-T	T	12.2/4.7
C32	4030017550	S.CER C1005 CH 1H 1R5B-T	T	20.4/3.3
C33	4030017440	S.CER C1005 CH 1H 221J-T	T	15.6/1.3
C34	4030017460	S.CER C1005 JB 1H 102K-T	T	9.9/4.1
C35	4030006860	S.CER C1608 JB 1H 102K-T	T	14.1/2.7
C36	4030017340	S.CER C1005 CH 1H 010B-T	T	9.9/2.3
C37	4030017460	S.CER C1005 JB 1H 102K-T	T	7.0/8.7
C41	4030017380	S.CER C1005 CH 1H 050B-T	T	6.8/3.3
C42	4030017460	S.CER C1005 JB 1H 102K-T	T	4.8/4.4
C43	4030017400	S.CER C1005 CH 1H 220J-T	T	2.5/3.1
C46	4030017630	S.CER C1005 CH 1H 120J-T	T	4.8/8.3
C47	4030017460	S.CER C1005 JB 1H 102K-T	T	3.5/8.4
C48	4030017460	S.CER C1005 JB 1H 102K-T	T	5.4/13.1
C49	4030017650	S.CER C1005 CH 1H 270J-T	T	3.3/11.3
J1	6910003831	CON IMSA-9230B-1-04Z003-PT1		
J2	6910003831	CON IMSA-9230B-1-04Z003-PT1		

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

# SECTION 6

# MECHANICAL PARTS

## [CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510004881	MR-DSE-01-1 <GA>	1
W1**	8900020380	OPC-2214	1
W2**	8900020390	OPC-2215	1
MP1	8510020530	3338 CASE ASS.Y (UD-45058) [Black]	1
	8510020570	3338 CASE (A)ASS.Y (UD45058) [Super white]	1
	8510020530	3338 CASE ASS.Y (UD-45058) [Black]	1
	8510020530	3338 CASE ASS.Y (UD-45058) [Black]	1
	8510020530	3338 CASE ASS.Y (UD-45058) [Black]	1
	8510020530	3338 CASE ASS.Y (UD-45058) [Black]	1
	8510020570	3338 CASE (A)ASS.Y (UD45058) [Super white]	1
	8510020570	3338 CASE (A)ASS.Y (UD45058) [Super white]	1
	8510020570	3338 CASE (A)ASS.Y (UD45058) [Super white]	1
MP3	8930049040	INSULATION SHEETFQ	1
MP4	8930058780	2577 SHEET	1
MP5	8930083960	3338 R-PACKING	1
MP6	8930083920	3338 F-PACKING	1
MP7	8930083990	3338 R-BUSH PLATE	1
MP8	8930084000	3338 A-R-BUSH PLATE Y1260	1
MP9	8510020500	3338 A-MODULE PLATE	1
MP10	8930084010	3338 IC CLIP	1
MP11	8010022280	3338 CHASSIS	1
MP12	8930034300	1542 ANT SEAL <JST>	1
MP13	8810010610	PHB0 M3 X 8 SUS S (BT)	2
MP14	8810010021	PH BT M2.6X 8 NI-ZC3	2
MP15	8810008661	PHBT M3 X 8 NI-ZC3	7
MP16	8810010610	PHB0 M3 X 8 SUS S (BT)	6
MP17	8810010620	PHB0 M3 X12 SUS S	6
MP18	8510020340	3338 MODULE COVER [UK]	1
	8510020340	3338 MODULE COVER [EUR]	1
	8510020340	3338 MODULE COVER [HOL]	1
	8510020340	3338 MODULE COVER [FRG]	1
	8510020340	3338 MODULE COVER [UK-01]	1
	8510020340	3338 MODULE COVER [EUR-01]	1
	8510020340	3338 MODULE COVER [HOL-01]	1
	8510020340	3338 MODULE COVER [FRG-01]	1
MP32	8930055040	2438 CAP <JST>	1

## [MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6510025142	10FLT-SM2-TB (LF) (SN) (M)	1
J2*	6510022472	40FLT-SM2-TB (LF) (SN) (M)	1
J3*	6510018971	B4B-PH-SM4-TB (LF) (SN)	1
F1*	5210001160	ERBRE3R00V	1
W1*	7030012290	RDS2T0R0	1
W3**	8900020400	OPC-2216	1

## [FRONT UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
MC1	0800012850	HM-196B [Black]	1
	0800012860	HM-196SW [Super white]	1
	0800012850	HM-196B [Black]	1
	0800012850	HM-196B [Black]	1
	0800012850	HM-196B [Black]	1
	0800012850	HM-196B [Black]	1
	0800012860	HM-196SW [Super white]	1
	0800012860	HM-196SW [Super white]	1
	0800012860	HM-196SW [Super white]	1
SP1	2510001350	045P0806-7-1	1
W1*	7030012290	RDS2T0R0	1
MP1	8210027970	3338 FRONT PANEL WP+SN [USA]	1
	8210027980	3338 FRONT PANEL (A) WP+SN [USA-01]	1
	8310080220	3338 FRONT PANEL (B) WP+SN [UK]	1
	8310080220	3338 FRONT PANEL (B) WP+SN [EUR]	1
	8310080220	3338 FRONT PANEL (B) WP+SN [HOL]	1
	8310080220	3338 FRONT PANEL (B) WP+SN [FRG]	1
	8210027990	3338 FRONT PANEL (C) WP+SN [UK-01]	1
	8210027990	3338 FRONT PANEL (C) WP+SN [EUR-01]	1
	8210027990	3338 FRONT PANEL (C) WP+SN [HOL-01]	1
	8210027990	3338 FRONT PANEL (C) WP+SN [FRG-01]	1
MP4	8930085200	3338 A-7-KEY <YAM>	1
MP5	8930085190	3338 A-6-KEY <YAM>	1
MP6	8110010141	3338 D-COVER-1	1
MP7	8930084110	3338 SHAFT	1
MP8	8860000880	E-RING 1.2 STACK	1
MP9	8930084281	3338 SPRING-1	1
MP10	8930084290	3338 F-BUSH PLATE	1
MP12	8930084300	O-RING (CN)	1
MP15	8610014490	KNOB N402 ASS.Y (BLACK) [Black]	1
	8610014500	KNOB N402 (A) ASS.Y (SW) [Super white]	1
	8610014490	KNOB N402 ASS.Y (BLACK) [Black]	1
	8610014490	KNOB N402 ASS.Y (BLACK) [Black]	1
	8610014490	KNOB N402 ASS.Y (BLACK) [Black]	1
	8610014490	KNOB N402 ASS.Y (BLACK) [Black]	1
	8610014500	KNOB N402 (A) ASS.Y (SW) [Super white]	1
	8610014500	KNOB N402 (A) ASS.Y (SW) [Super white]	1
	8610014500	KNOB N402 (A) ASS.Y (SW) [Super white]	1
	8610014500	KNOB N402 (A) ASS.Y (SW) [Super white]	1
MP16	8810008661	PHBT M3 X 8 NI-ZC3	4
MP21	8930055841	2490 EARTH SPRING-1	1
MP22	8810008661	PHBT M3 X 8 NI-ZC3	1

## [LOGIC UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6510022472	40FLT-SM2-TB (LF) (SN) (M)	1
J2*	6510018921	B8B-PH-SM4-TB (LF) (SN)	1
J3*	6510015541	B4B-ZR-SM4-TF (LF) (SN)	1
J4*	6510018971	B4B-PH-SM4-TB (LF) (SN)	1
J5*	6510028220	AYF532265	1
DS1	5030003500	8803L21012 <SKD>	1
S1*	2260002740	LS8J2M-T	1
S2*	2260002740	LS8J2M-T	1
S3*	2260002740	LS8J2M-T	1
S4*	2260002740	LS8J2M-T	1
S5*	2260002740	LS8J2M-T	1
S6*	2260002740	LS8J2M-T	1
S7*	2260002740	LS8J2M-T	1
S8*	2260002740	LS8J2M-T	1
S9*	2260002740	LS8J2M-T	1
S10*	2260002740	LS8J2M-T	1
S11*	2260002740	LS8J2M-T	1
S12*	2260002740	LS8J2M-T	1
S13*	2260002740	LS8J2M-T	1
W1*	7030012290	RDS2T0R0	1
W2*	7030012290	RDS2T0R0	1
W3**	8900014871	OPC-1332A-1 (P0.5N40L100) TJM	1
MP1	8930085030	DOUBLE SIDE TAPE (BO)	2

\*: Refer to "BOARD LAYOUTS" for the location.

\*\*\*: Refer to "GENERAL WIRING" for the connection

Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless



### [DIAL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
S1	2250000730	TP90N245AE20PY-14.5F-3338	1
W1**	8900020410	OPC-2217	1

### [CONNECT UNIT]

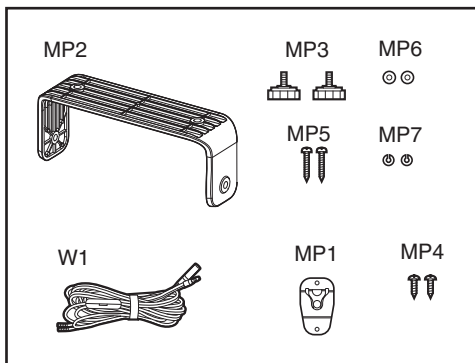
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510022440	LTW-8MP-C NUTGASKET <LIA>	1
J2*	6510025142	10FLT-SM2-TB (LF) (SN) (M)	1

### [VCO UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6910003831	IMSA-9230B-1-04Z003-PT1	1
J2*	6910003831	IMSA-9230B-1-04Z003-PT1	1
MP1	8510020510	3338 VCO CASE Y1269	1
MP2	8510020520	3338 VCO COVER Y1270	1

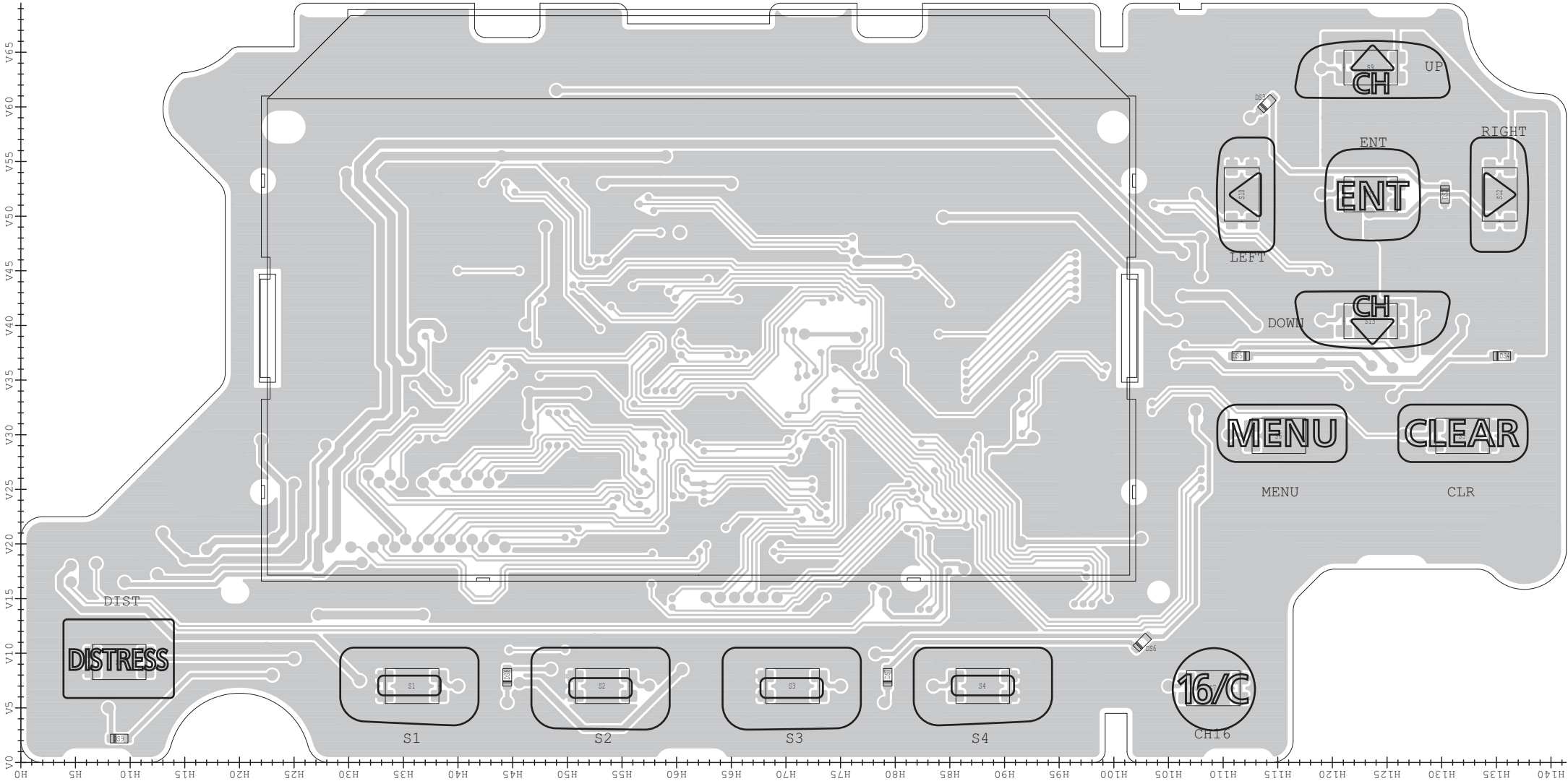
### [ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
W1	8900009041	OPC-891A	1
MP1	8950007250	3054 MIC HANGER	1
MP2	8010022290	3338 MOBILE BRACKET (PE) [Black]	1
	8010022310	3338 MOBILE BRACKET (A) PE [Super white]	1
	8010022290	3338 MOBILE BRACKET (PE) [Black]	1
	8010022290	3338 MOBILE BRACKET (PE) [Black]	1
	8010022290	3338 MOBILE BRACKET (PE) [Black]	1
	8010022290	3338 MOBILE BRACKET (PE) [Black]	1
	8010022310	3338 MOBILE BRACKET (A) PE [Super white]	1
	8010022310	3338 MOBILE BRACKET (A) PE [Super white]	1
	8010022310	3338 MOBILE BRACKET (A) PE [Super white]	1
	8010022310	3338 MOBILE BRACKET (A) PE [Super white]	1
MP3	8820001460	3054 KNOB BOLT [Black]	2
	8820001500	3054 KNOB BOLT(A) [Super white]	2
	8820001460	3054 KNOB BOLT [Black]	2
	8820001460	3054 KNOB BOLT [Black]	2
	8820001460	3054 KNOB BOLT [Black]	2
	8820001460	3054 KNOB BOLT [Black]	2
	8820001500	3054 KNOB BOLT(A) [Super white]	2
	8820001500	3054 KNOB BOLT(A) [Super white]	2
	8820001500	3054 KNOB BOLT(A) [Super white]	2
	8820001500	3054 KNOB BOLT(A) [Super white]	2
MP4	8810010710	PHBT A0 3X16 SUS	2
MP5	8810010720	PHBT A0 5X20 SU	2
MP6	8850002850	PLAIN WASHER M5 SUS	2
MP7	8850002860	SPRING WASHER M5 SUS	2

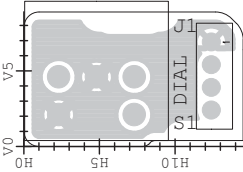




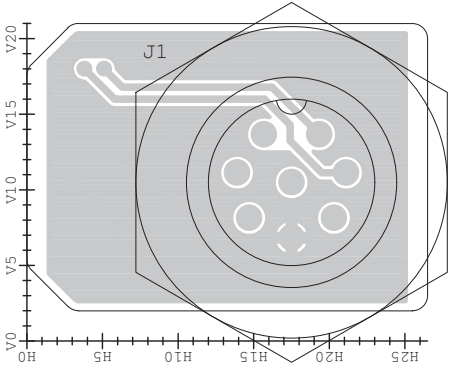
• LOGIC UNIT  
(TOP VIEW)



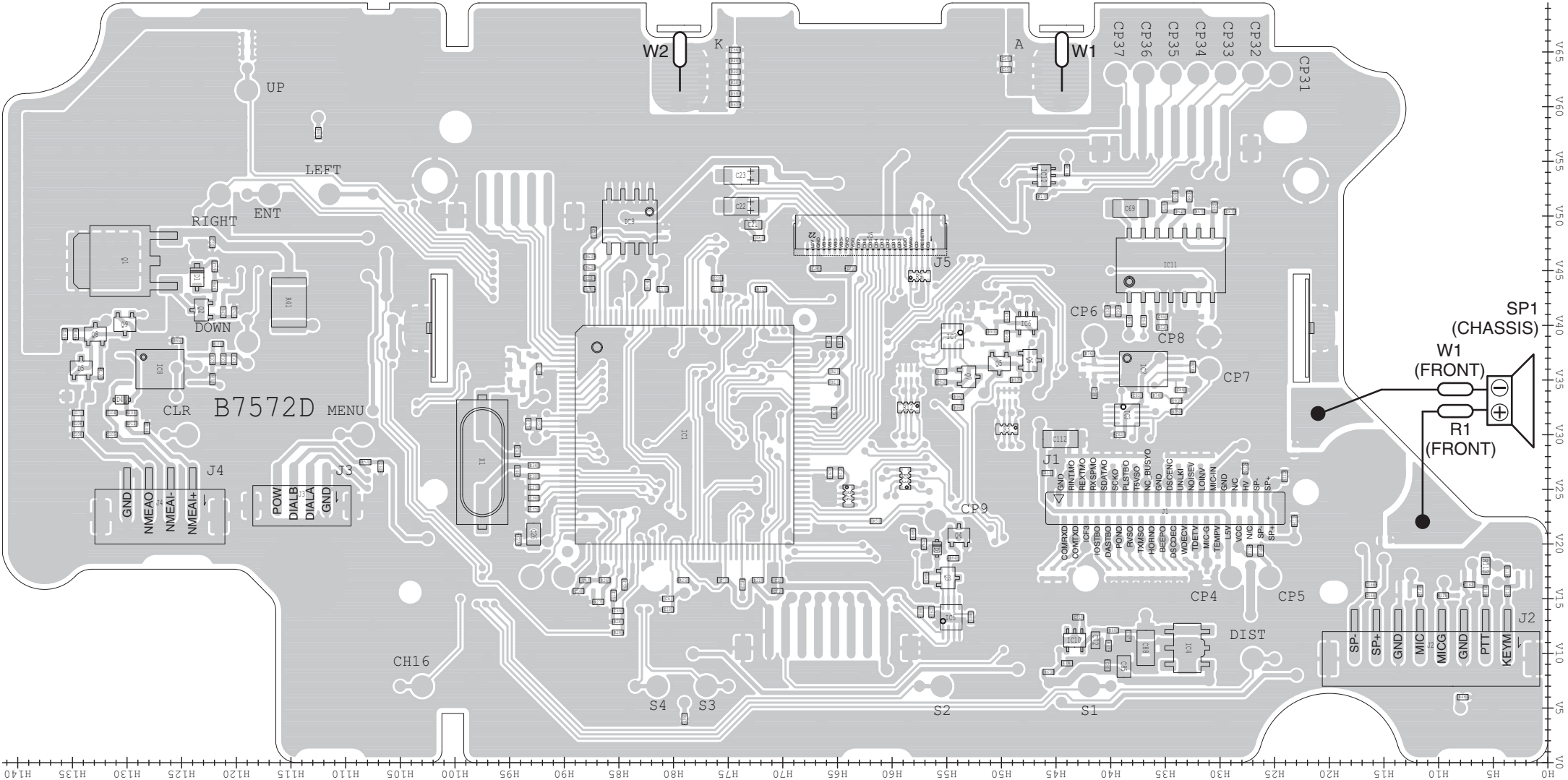
• DIAL UNIT  
(TOP VIEW)



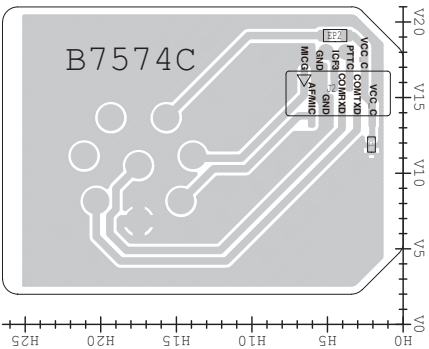
• CONNECT UNIT  
(TOP VIEW)



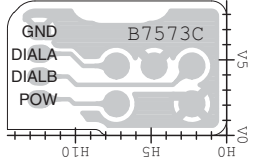
• LOGIC UNIT  
(BOTTOM VIEW)



• CONNECT UNIT  
(BOTTOM VIEW)



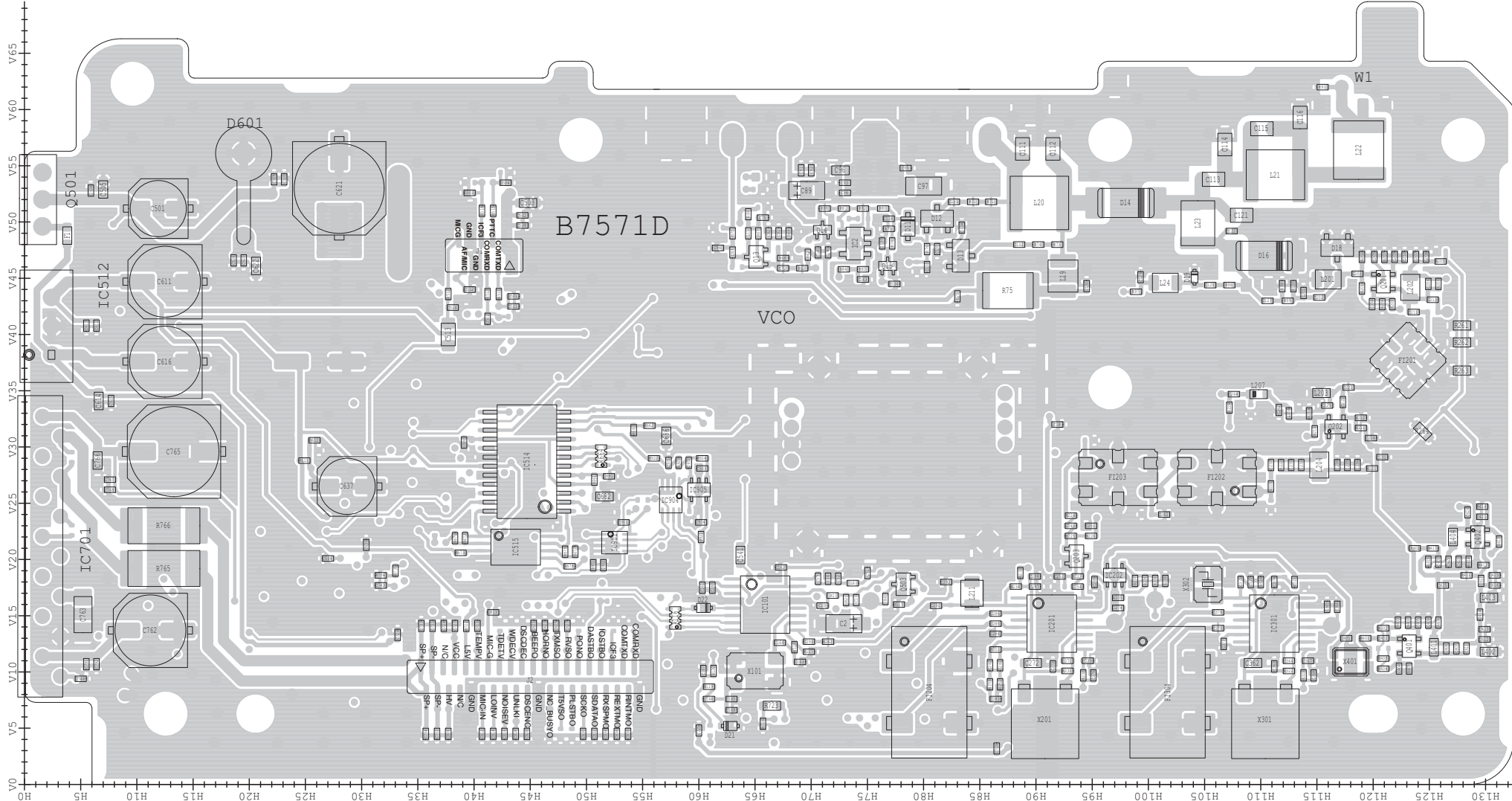
• DIAL UNIT  
(BOTTOM VIEW)



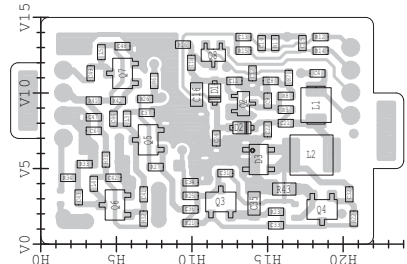


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• **MAIN UNIT  
(TOP VIEW)**

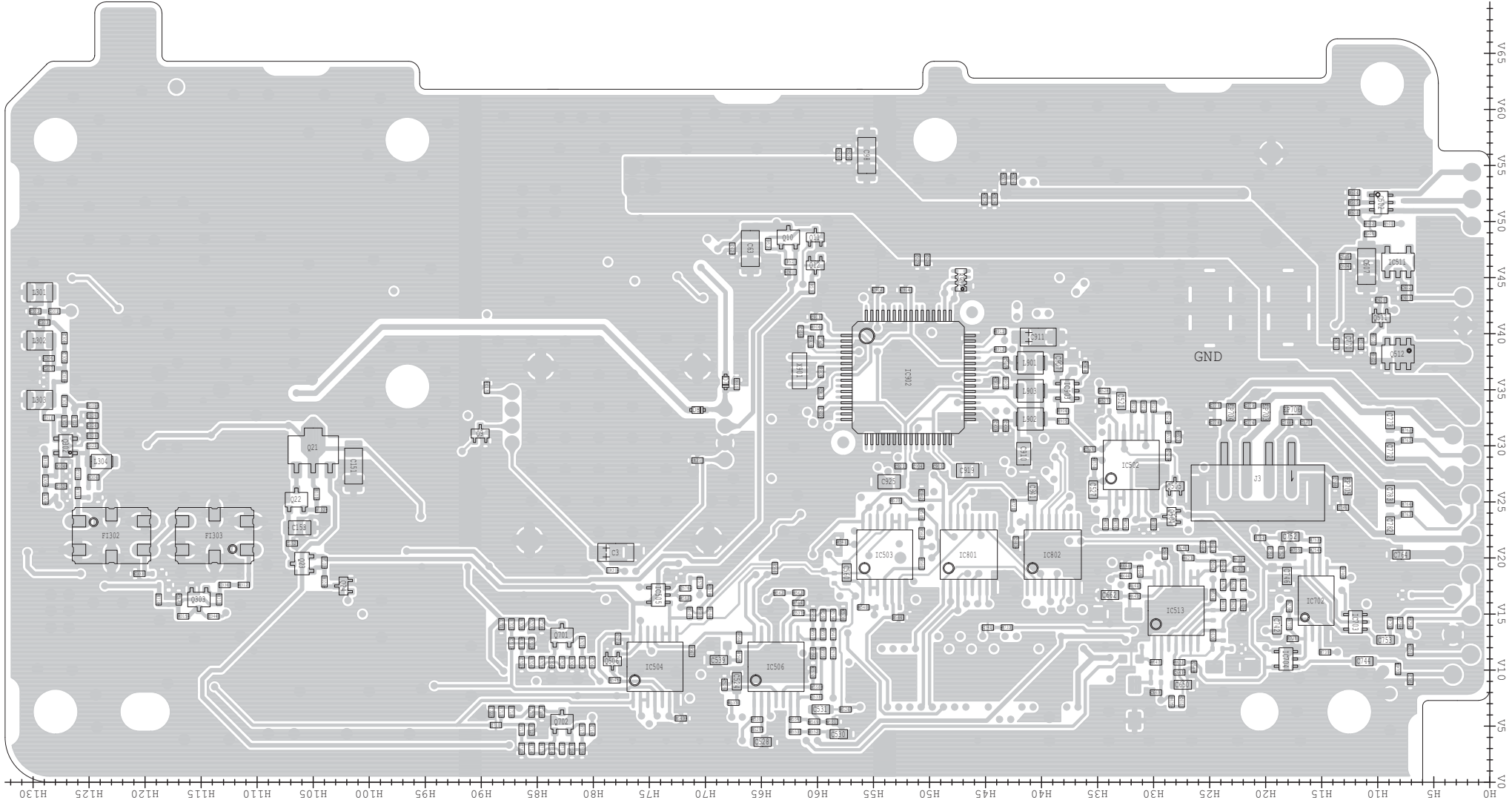


- **VCO UNIT  
(TOP VIEW)**

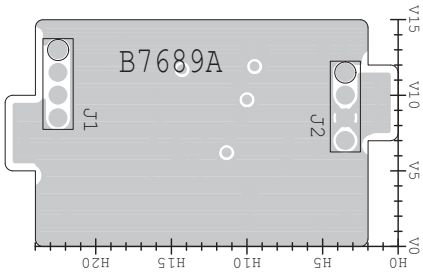


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• **MAIN UNIT  
(BOTTOM VIEW)**

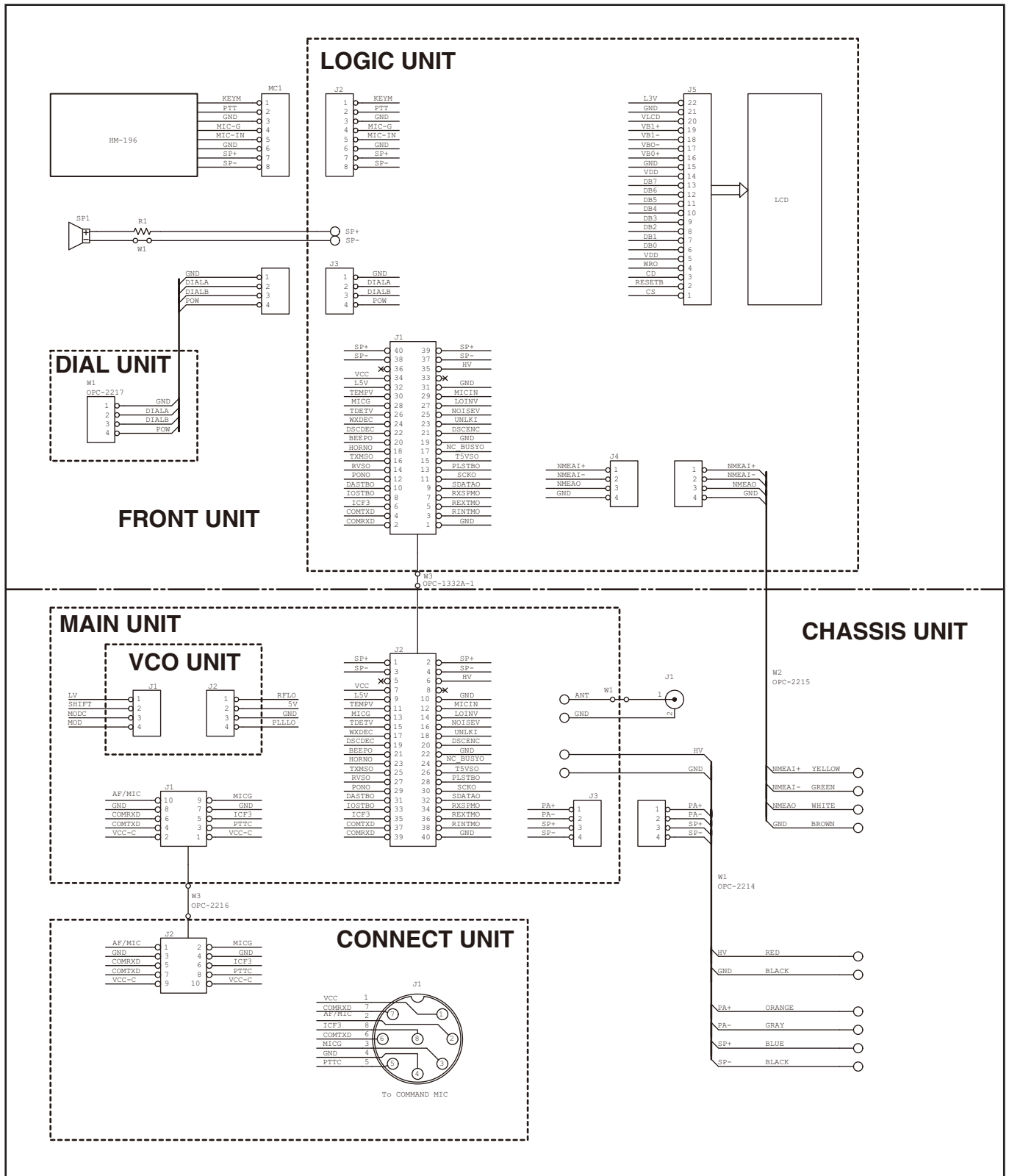


- **VCO UNIT  
(BOTTOM VIEW)**



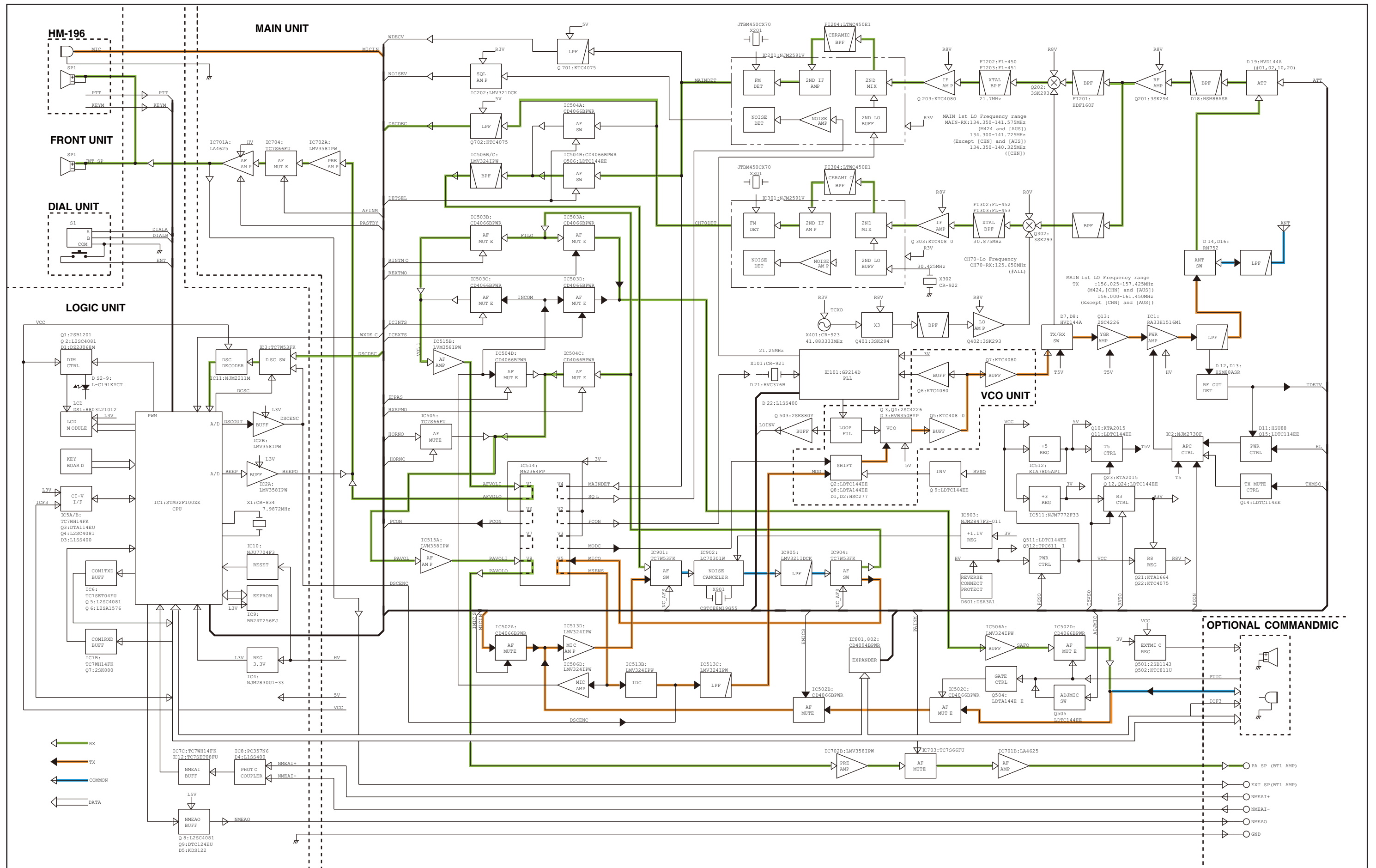
# SECTION 8

# GENERAL WIRING



# SECTION 9

# BLOCK DIAGRAM

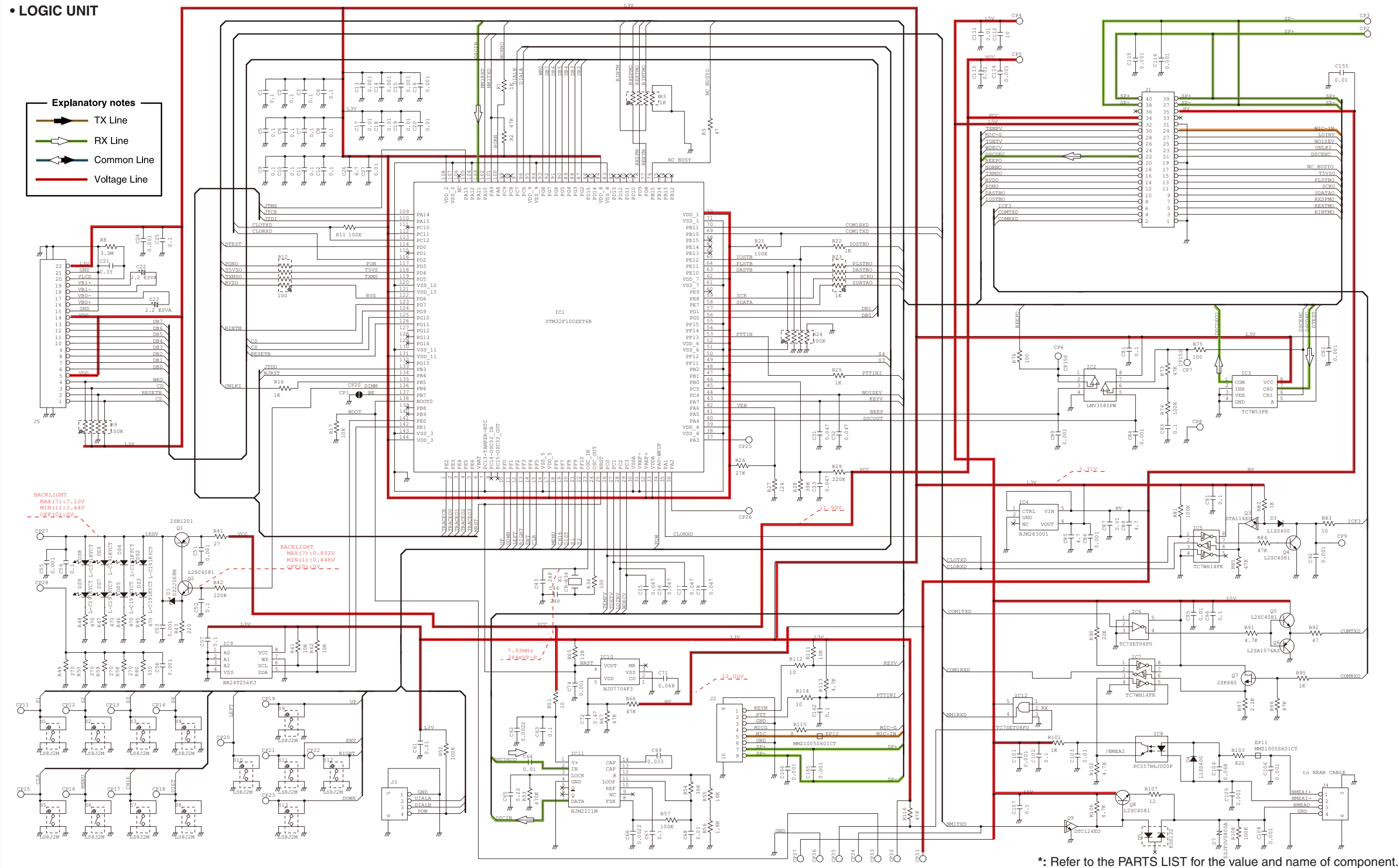




## VOLTAGE DIAGRAM

**Explanatory notes**

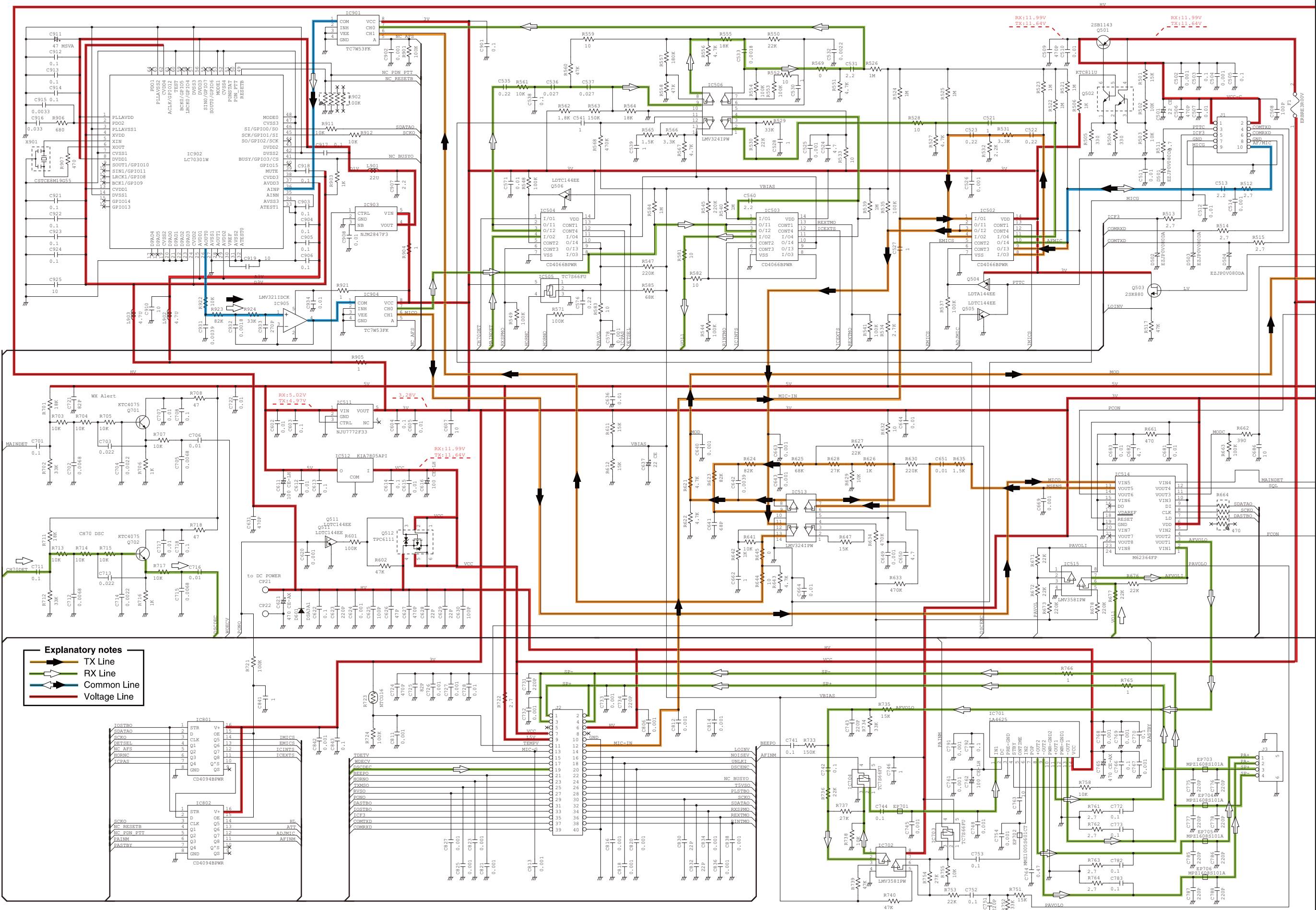
- TX Line
- RX Line
- Common Line
- Voltage Line



\*: Refer to the PARTS LIST for the value and name of component.

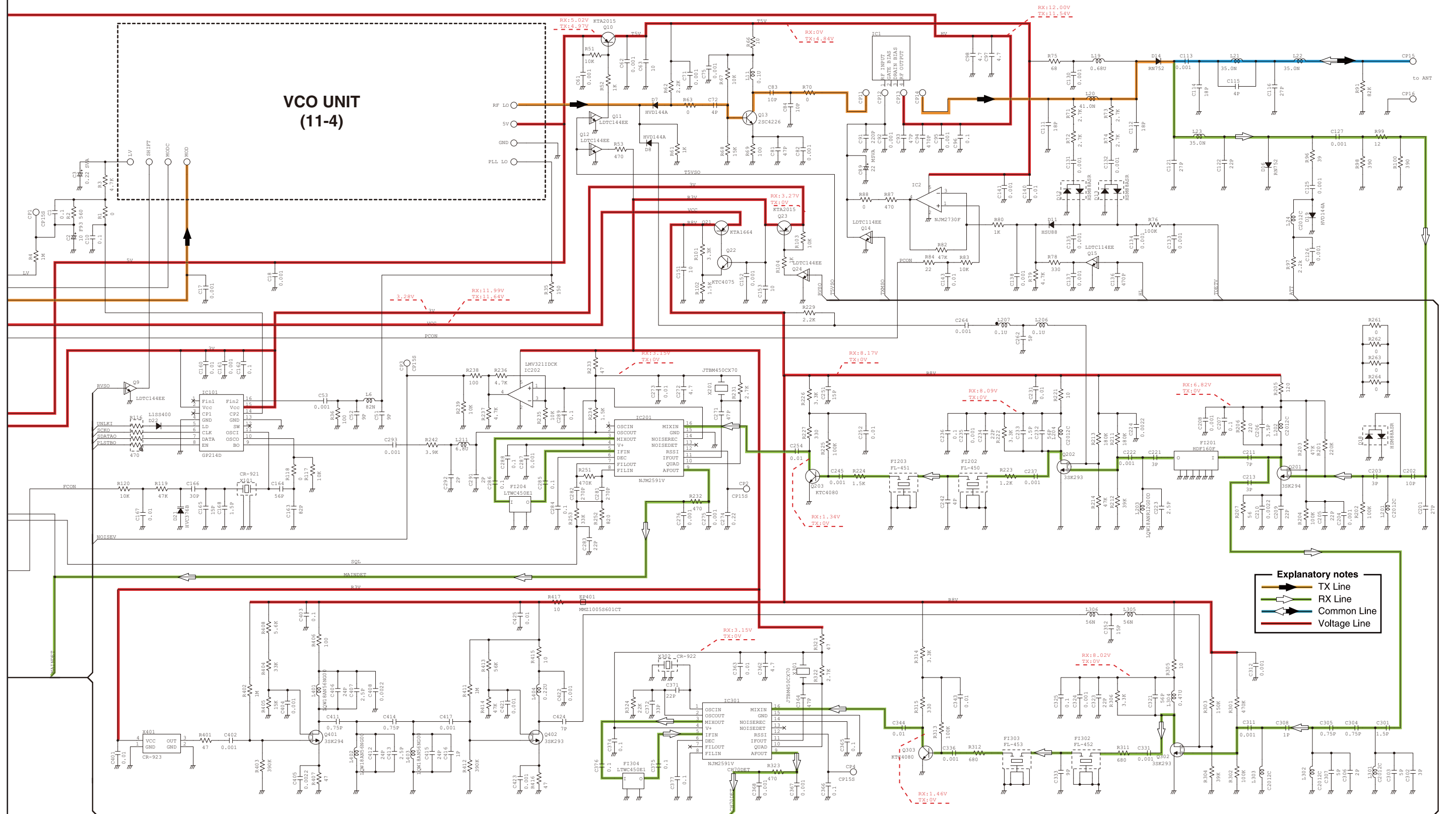
The schematic diagram illustrates the internal circuitry of the MP2160S101A module. It features a transformer (T1) with a 12V primary and a 0.01F capacitor. A diode (D1) and a MOSFET (M1) are also shown. The module is connected to a 12V input and a 0.01F capacitor. The output is connected to a 12V output terminal. The module is labeled 'MP2160S101A' and 'EP2'.

• MAIN UNIT (1/2)



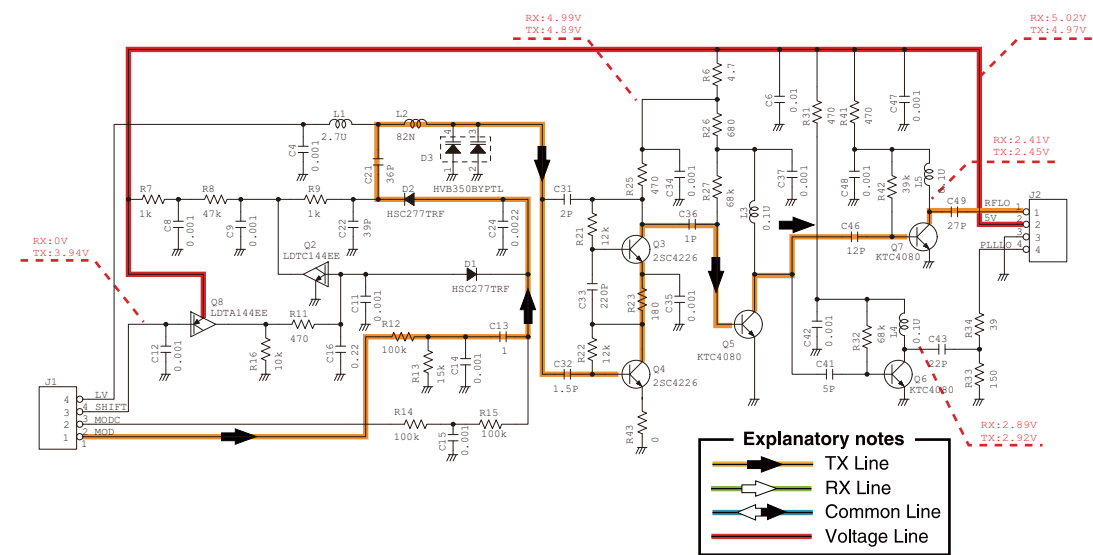
\*: Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (2/2)



\*: Refer to the PARTS LIST for the value and name of component.

• VCO UNIT



\*: Refer to the PARTS LIST for the value and name of component.



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