

5.0 PARTS LIST

5.1 Introduction

This Section of the manual provides a list of parts for each assembly covered by this manual. The list contains a break down of each assembly by component part number, component description and reference designation. Figure 5-1 shows an exploded view of the ATM-1600 and identifies major subassemblies. Parts location diagrams, Figure 5-2 for the Audio Modulator, Figure 5-3 For the Video Modulator and Figure 5-4 for the Aural Subcarrier Processor have been provided to assist in locating individual components.

The parts lists contain many abbreviations. Some of the abbreviations used in this list are as follows:

BD	Board
STL	Steel
ASSY	Assembly
CER	Ceramic
FXD	Fixed
MET	Metal
VAR	Variable
RAL	Radial
ADJ	Adjustable

5.2 Ordering Information

When ordering replacement parts, give the quantity, reference designator, part number and description for each item ordered. The part that will be supplied against an order for a replacement item may not be an exact duplicate of the original part; however, it will be a satisfactory replacement differing only in minor mechanical or electrical characteristics. Such differences will not impair the operation of the equipment.

Catel maintains a complete stock of replacement parts for your Catel equipment. We recommend ordering all replacement parts from Catel to ensure compatibility of components and having your order filled promptly.

Order from:
Catel Telecommunications
4050 Technology Place
Fremont, CA 94537-5122

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
9001-2031-XX ATM-1600, FINAL ASSY.		
2832-0802	NUT, KEP. 6-32X5/16A/F. STEEL/CAD. PL.	
6012-0365-XX	PANEL ATM-1600	
6014-0084-VV	MODULE ASSY, CHASSIS, T.V. MODULATOR	
6033-0116	FAB HANDLE AM MODULATION	
6820-0421	NUT, HEX 4-40 STD. PATT STL/ZINC	
6910-0003	LABEL. MODEL/SERIAL NO.	
7112-0408	SCR. PAN/PHIL. #4-40X1/2 STL/ZN.P	
7122-0403	SCR. FLAT/PHIL. #4-40X3/16 STL/ZN.P	
7122-0606	SCR. FLT/PHIL. #6-32X3/8 STL/ZN.P	
7212-0605	SCR. PHIL/PAN 6-32X5/16 STL/Z IN/WS	
7923-0023	CABLE POWER CORD 3-COND DETACHABLE	
8000-4055-YY	ASSY MODULE POWER SUPPLY, ATM-1600	
8000-2610	ACCESSORY KIT	
9001-2031-XX	ATM-1600 FINAL ASSY. DWG	

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5602-0041 ASSY. POWER SUPPLY, SGL OUT 18V/1.25A 90-260 VIN (Cont.)		
	RESISTOR CARBON FILM 3K3 1/4W	R13
	RESISTOR CARBON FILM 3K9 1/4W	R15
	RESISTOR CARBON FILM 5K1 1/4W	R6,8,9
	RESISTOR CARBON FILM 27K 1/4W	R17
	RESISTOR CARBON FILM 2K2 1/4W	R11
	RESISTOR CARBON FILM 4R7 1/2W	R21
	RESISTOR METAL FILM 330R 2W	R16,20
	RESISTOR WIRE WOUND NF OR56 1W	R3
	VR 2K	VR1
	NTS 5R0	R1
	CAPACITOR EL SM 47 μ 25V	C8
	CAPACITOR EL KME 1000 μ 25V	C17,18
	CAPACITOR EL SME 1000 μ 25V	C20,21
	CAPACITOR "TANTA" 1 μ 16V	C15
	CAPACITOR EL SMG 100 μ 400V	C7
	CAPACITOR "X" .1 μ 250V	C1
	CAPACITOR "Y" 2200P 400V	C6
	CAPACITOR POLYESTER 152 50V	C4
	CAPACITOR POLYESTER 103 50V	C11,12,13,14
	CAPACITOR CREAMIC 102 1KV	C22
	CAPACITOR CERAMIC 103 1KV	C3
	CAPACITOR CERAMIC 471 2KV	C10
	INDUCTOR	L4
	INDUCTOR	L1
	TRANSFORMER	T2
	C-M CHOKE	T1
	BRIDGE DIODE	DB1
	ZENER DIODE 18V 1W	DZ1
	SCR	SCR1
	FAST RECOVERY DIODE	D4
	FAST RECOVERY DIODE	D7, D6
	MOSFET	Q1
	IC	IC3
	IC (CTR:60-130%) PC713	IC1
	IC	IC2
	CONNECTOR-PIN HEADER 5273-04	TB2
	CONNECTOR-PIN HEADER 5277-02	TB1
	FUSE CLIP	(F1)
	FUSE 2A 250V	F1
	TRANSISTOR SOCKET	(IC2)
	TRANSISTOR SOCKET	(SCR1)
	SONY BOND	(L1)

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0344 ASSY PCB AUDIO MODULATOR, ATM-1600 (cont.)		
2055-4360	ES FXD CARB FILM 1/4W 3.6K OHM 5%	R37
2055-4390	ES FXD CARB FILM 1/4W 3.9K OHM 5%	R78
2055-4430	ES FXD CARB FILM 1/4W 4.3K OHM 5%	R73
2055-4470	ES FXD CARB FILM 1/4W 4.7K OHM 5%	R42,45,49
2055-5100	ES FXD CARB FILM 1/4W 10K OHM 5%	R3,4,7,10,11,12,17, R21- 25,32,33,39,40 R43,48,63,64,67 R71,72,77
2055-5220	RES FXD CARB FILM 1/4W 22K OHM 5%	R68
2055-5270	RES FXD CARB FILM 1/4W 27K OHM 5%	R60
2055-5330	RES FXD CARB FILM 1/4W 33K OHM 5%	R76
2055-5470	RES FXD CARB FILM 1/4W 47K OHM 5%	R20,26,27
2055-5910	RES FXD CARB FILM 1/4W 91K OHM 5%	R30
2055-6100	RES FXD CARB FILM 1/4W 100K OHM 5%	R5,6,8,9,19,65,69,74
2055-6150	RES FXD CARB FILM 1/4W 150K OHM 5%	R55
2055-6180	RES FXD CARB FILM 1/4W 180K OHM 5%	R28,29
2061-3121	RES FXD MET FILM 1/8W 121 OHM 1%	R66
2061-3511	RES FXD MET FILM 1/8W 511 OHM 1%	R14
2061-4130	RES FXD MET FILM 1/8W 1.3K OHM 1%	R83
2061-4178	RES FXD MET FILM 1/8W 1.78K OHM 1%	R61
2061-4274	RES FXD MET FILM 1/8W 2.74K OHM 1%	R75
2061-5133	RES FXD MET FILM 1/8W 13.3K OHM 1%	R13
2061-5200	RES FXD MET FILM 1/8W 20K OHM 1%	R53
2061-5332	RES FXD MET FILM 1/8W 33.2K OHM 1%	R15
2061-5402	RES FXD MET FILM 1/8W 40.2K OHM 1%	R54
2061-6100	RES FXD MET FILM 1/8W 100K OHM 1%	R51,52
2226-0014	RES VAR CER 1-TRN 1/2W 10KOHM 10%	R38,44
2226-0025	POT 10K	R1
2326-0006	RES VAR M-TRN 1/2W 10K OHM10% T/ADJ	R58
2326-0104	RES VAR M-TRN 1/2W 100KOHM10% T/ADJ	R56
2601-0005	RES 1.0 OHM 1% 1W WIREWOUND	R16
3120-0003	DIODE 1N4154	CR3,4,5,6
3120-0006	DIODE 1N4148	CR1
3151-0026	DIODE VARACTOR MV409 26-32PF 20VR	CR2
3231-1004	TRANS SILICON NPN GENL PRP 2N3904	Q6
3231-2026	TRANS SILICON NPN UHF-VHF NE41632	Q3,5
3241-1006	TRANS SILICON PNP GNL PRP 2N3906	Q4
3311-0008	IC LIN VREG +5V LM7805CT VS=35V	Q2
3311-0028	IC LIN VREG +15V LM7815CT VS=35V	Q1
3312-0053	IC LIN OP AMP LF353N DUAL VS=18	U1
3312-0074	IC LIN OP AMP LM358N DUAL	U6
3313-0034	IC LIN FREQ SYN MB1504P PLL	U4
3322-0020	IC DIG FF DUAL D 74AC74PC CMOS	U2

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR (cont.)		
1015-4114	CAP MICA DIPPED 1100PF 5% 100V	C86
1043-2107	CAP CER NPO DISC 10 PF 5 % 1 KV	C64,67
1044-1153	CAP CER NPO DISC 1.5 PF .25 50 V	C16,59
1045-2126	CAP CER NPO DISC 12 PF 5% 500V	C46
1045-2133	CAP CER NPO DISC 13 PF 5% 50V	C82
1045-2156	CAP CER NPO DISC 15 PF 5% 50 V	C121
1045-2186	CAP CER NPO DISC 18 PF 5% 500V	C37,38
1106-2227	CAP CER N750 DISC 22 PF 10% 1KV	C47
1186-4153	CAP POLY MET MLD RECT.0015UF 10%63V	C87
1191-2916	CAP MICA DIPPED 91 PF 1% 500V	C14,81,85
1219-0015	CAP AL 1000UF 20% 16V 1000H/85C	C92
1219-0023	CAP AL 100 UF 20% 25V 2000H/85C	C13,21,22
1256-1106	CAP TANT PLZD SOL DIPP 1 UF 10%35V	C20,40,41
1256-2106	CAP TANT PLZD SOL DIPP 10 UF 10%35V	C25,39,71,76,90
1256-2227	CAP TANT PLZD SOL DIPP 22 UF 10%50V	C91
1287-4103	CAP CER ML X7R DIPPED 1000PF 10%50V	C23,24,42 43,44,45,48 50,51,54,55 56,58,63 110,111,112 113,116,118, 143,124,125 127,128,130 131,132, 134 135,136,137 138,139,140 141,142,144 C18,61,62 70,72,73,88 89,129
1287-5103	CAP CER ML Z5U DIPPED .01UF 20%50V	C122
1295-2474	CAP CER ML NPO 47 PF 5% 100V	C75
1295-3394	CAP CER ML NPO 390 PF 5% 100V	C120
1400-0010	CAP VAR AIR 2-10PF 125V	T10
152036-3	TRANSFORMER	L37
152069-12	INDUCTOR,VARIABLE	L36
152069-6	INDUCTOR,VARIABLE	T3,4,13
152089-6	TRANSFORMER	L3
152492-10	INDUCTOR,POT CORE	L2,5
152492-11	INDUCTOR,POT CORE	L6
152492-12	INDUCTOR,POT CORE	L4
152492-16	INDUCTOR POT CORE	L7
152492-9	INDUCTOR,POT CORE	T2
152493-5	TRANSFORMER,ADJ,POT CORE	T1
152493-6	TRANSFORMER,ADJ,POT CORE	L10,12
153316-16	INDUCTOR,ADJUSTABLE,16.5T	T7
153343-5	TRANSFORMER,OUTPUT	T6
153344-4	TRANSFORMER,MODULE	C123
1650-0007	CAP 5-50PF TEFLON VAR	R138
2015-7180	RES FXD CARB COMP 1/8W 1.8M OHM 5%	R57,137
2025-4150	RES FXD CARB COMP 1/4W 1.5K OHM 5%	R213,177
2055-1470	RES FXD CARB FILM 1/4W 4.7 OHM 5%	R12,77,199
2055-2100	RES FXD CARB FILM 1/4W 10 OHM 5%	

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR (cont.)		
2061-3825	RES FXD MET FILM 1/8W 825 OHM 1%	R44,45
2061-4110	RES FXD MET FILM 1/8W 1.1K OHM 1%	R33,202
2061-4150	RES FXD MET FILM 1/8W 1.5K OHM 1%	R116,128
2061-4178	RES FXD MET FILM 1/8W 1.78K OHM 1%	R39
2061-4200	RES FXD MET FILM 1/8W 2K OHM 1%	R72
2061-4232	RES FXD MET FILM 1/8W 2.32K OHM 1%	R51
2061-4249	RES FXD MET FILM 1/8W 2.49K OHM 1%	R118
2061-4392	RES FXD MET FILM 1/8W 3.92K OHM 1%	R115
2061-4432	RES FXD MET FILM 1/8W 4.32K OHM 1%	R22
2061-4470	RES FXD MET FILM 1/8W 4.7K OHM 1%	R74,81,117 129,201
2061-4499	RES FXD MET FILM 1/8W 4.99K OHM 1%	R46
2061-4634	RES FXD MET FILM 1/8W 6.34K OHM 1%	R108
2061-5113	RES FXD MET FILM 1/8W 11.3K OHM 1%	R136
2061-5261	RES FXD MET FILM 1/8W 26.1K OHM 1%	R132
2135-3330	RES FXD CARB FILM 1/2W 330 OHM 5%	R54,187
2226-0004	RES VAR CFR 500 OHMS	R6
2226-0007	RES VAR CER 1-TRN 1/2W 5K OHM 10%	R127
2226-0014	RES VAR CER 1-TRN 1/2W 10KOHM 10%	R42,106
2226-0023	RES VAR MLD 1W 1K OHM 10% PNL MT	R15,205
2226-0026	RESISTOR VAR. PC MTG 1K 10%	R7
2226-0029	RES 200 OHM 1/2W	R105,176
2226-0030	RES VAR PC MT CERMT 100R 1/2W 10%	R113
2226-0031	RES VAR 1-TRN 1/2W 50 OHM10%T/ADJ	R100
2326-0016	RES VAR M-TRN 1/2W 1K OHM 10% T/ADJ	R50,52
2601-0005	RES 1.0 OHM 1% 1W WIREWOUND	R48,188
3120-0003	DIODE 1N4154 CR1,2,4,5	CR6,7
3231-1004	TRANS SILICON NPN GENL PRP 2N3904	Q15,16,25,27
3231-2023	TRANS SILICON NPN AMPLIFIER MPS3563	Q17
3231-2027	TRANS SILICON NPN AMPLIFIER MPS6521	Q1,3,5,7 Q9,10,12,13
3232-4002	TRANS SILICON NPN POWER AMP PT4579	Q14,18,19,20,21 Q40,42
3241-2006	TRANS SILICON PNP AMPLIFIER MPS6523	Q2,4,6,8,11,22
3251-0017	TEANS JEFT N-CHAN LN 30V 2N4222	Q26
3311-0008	IC LIN VREG +5V LM7805CT VS=35V	U2
3311-0028	IC LIN VREG +15V LM7815CT VS=35V	U3
3312-0074	IC LIN OP AMP LM358N DUAL	U4
3312-0093	IC LIN VIDEO AMP NE592N	U10
3313-0031	IC LIN SYNC SEP LM1881N	U11
3400-0012	AMPL,HYB.500MHZ MWA-120	U20,21
4200-0001	PKG,CAN,AL.,51SQINTL.,906H	L36,37
4500-0007	TRANSFORMER SPLITTER	T5
4500-0015	TRANSFORMER 6T 4:1	T12

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR (cont.)		
900075-2	CAPACITOR,207PF	C10,11
900075-24	CAPACITOR MICA,110PF	C5
900075-3	CAPACITOR,233PF	C7,8
900075-4	CAPACITOR,427PF	C12
900075-5	CAPACITOR,575PF	C9
900075-9	CAPACITOR,550PF	C6
900095-1	SAW FILTER 44.025 MHZ,CTI151	FL1
2061-5243	RESISTOR,24.3K,1/4W,1%	R109
2061-6280	RESISTOR,280K,1/4W,1%	R107
2061-3432	RESISTOR,432 OHMS,1/8W	R21
9001-2037 ASSY PCB BB ENCODER INTERFACE FOR ATM-1600		
153525-2	BASEBAND ENCODER	
5101-0251	ASSY CABLE 4 PIN CONNECTOR	
6820-0421	NUT,HEX 4-40 STD.PATT STL/ZINC	
6842-0002	WASHER FLAT #4 STL	
6851-0017	STANDOFF 4-40 1/4 HEX 1/2 LG.THRD.	
6852-0039	SPACER 1/4ID 3/8 OD.,.016 THK.	
7112-0414	SCR.PAN/PHIL.#4-40X7/8 STL/ZN.P	
7162-0404	SCR BINDER/PHIL 4-40X1/4 STL/ZINC	
153662-2	ASSY CABLE,2 PIN CONN.	
153525-1 BASEBAND ENCODER INTERFACE		
1015-3206	CAP MICA DIPPED 200PF 5% 500V	C2,4
1015-4104	CAP MICA DIPPED 1000PF 5% 100V	C3,5
1219-0023	CAP AL 100 UF 20% 25V 2000H/85C	C1
153526-1	BD,BASE BAND ENC INTRFACE	
153527	SCHEMATIC,BASE BD ENC INTERFACE	
153661-1	CONN ASY,4 PIN	
153662-1	COMM ASY,2 PIN	
2055-4220	RES FXD CARB FILM 1/4W 2.2K OHM 5%	R4
2055-4300	RES FXD CARB FILM 1/4W 3K OHM 5%	PR1
2055-4560	RES FXD CARB FILM 1/4W 5.6K OHM 5%	R10,11,17
2055-5100	RES FXD CARB FILM 1/4W 10K OHM 5%	R2,5,6,7,8
2055-5150	RES FXD CARB FILM 1/4W 15K OHM 5%	R18
2055-5270	RES FXD CARB FILM 1/4W 27K OHM 5%	R9
2055-5750	RES FXD CARB FILM 1/4W 75K OHM 5%	R14
2055-6160	RES FXD CARB FILM 1/4W 160K OHM 5%	R13
2226-0016	POT 5K 1/2W 10%	
3120-0003	DIODE 1N4154	CR1
3323-0014	IC DIG MULTIVIB MC14528B DUAL CMOS	U2
3332-0003	IC DIG ANALOG SW CD4066 QUAD MOS	U5

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0356 ASSY. PCB AURAL SUBCARRIER PROCESSOR (CONT.)		
1015-3364	CAP MICA 360 PF	C7
1011-3476	CAP MICA 470 PF	C15
1015-3516	CAP MICA 510 PF	
1182-4393	CAP POLY 3900 PF	C8
900044-19	CAP 0.68 PF	C31,C33
2601-0005	RES 1 Ω 1% 1W	R55
2055-2750	RES 75 Ω	R23
2055-3200	RES 200 Ω	R36
2055-3220	RES 220 Ω	R7
2055-3300	RES 300 Ω	R45
2055-3470	RES 470 Ω	R4,5
2055-3510	RES 510 Ω	R9
2055-3560	RES 560 Ω	R44,19
2055-4100	RES 1K Ω	R6,8,,22,25,26,27,31,37,53,54
2055-3100	RES 100 Ω	R48,13
2055-4150	RES 1.5K Ω	R24
2055-4360	RES 3.6K Ω	R41
2055-4430	RES 4.3K Ω	R42
2055-4470	RES 4.7K Ω	R30,50,52
2055-4330	RES 3.3K Ω	R47
2055-4680	RES 6.8K Ω	R38
2055-5100	RES 10K Ω	R35,39,40,43,46,49
2055-5150	RES 15K Ω	R32,33
2055-5470	RES 47K Ω	R29
2055-6100	RES 100K Ω	R28,34
20612750	RES 75 Ω 1%	R1,16,20
2226-0026	VAR RES 1K Ω	R2
2226-0014	VAR RES 10K Ω	R51
4612-2106	IND FXD MOLD 10 UH	L17
4602-1226	IND FXD MOLD 2.2 UH	L15
4612-2475	IND FXD MOLD 47 UH	L11
4612-2825	IND FXD MOLD 82 UH	L10
151757-17	IND AIR CORE 17T	L16
4701-2006	IND AIR 6T 1/8D 20 AWG	L1
4850-7535	35T #30 BIFILAR TWIST, 27.7 UH	L4
4852-2820	20 1/2T #28, 2 UH	L5,6
4852-3235	35 1/2T #32, 5.6 UH	L7
152492-13	IND POT CORE	L8
152492-16	IND POT CORE	L9
153316-16	IND VAR 16.5 T	L12,13,14
152492-8	IND POT CORE	L2

- 1 6014-0084-VV Module Assy. Chassis
- 2 6012-0385-XX Front Panel
- 3 6033-0116 Fab Handle. AM Modulator
- 4 8000-4055-YY Assy Module. Power Supply
- 5 9001-2036 Assy. Audio Module
- 6 9001-2035 Assy. Video Module
- 7 9001-2037 Assy. PCB BB Encoder Interface

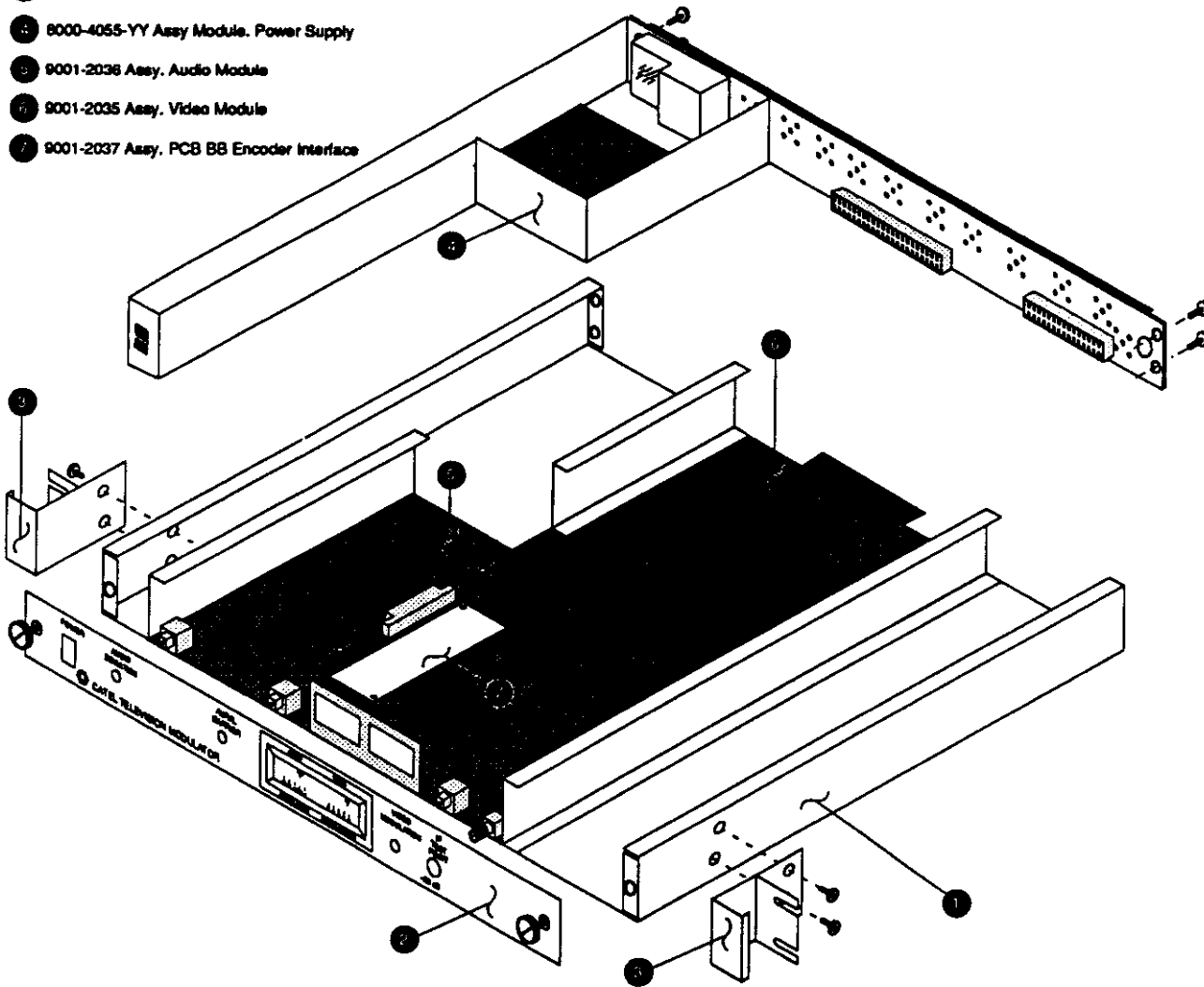


Figure 5-1
ATM-1600 Final Assembly
Internal View

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
8000-2611 ATM-1600 ACCESSORY KIT (BNC CONN)		
5120-2050	CABLE, COAX 6.00" (2) BNC CONN	
5211-0026	TERMINATOR MALE BNC (2)	
6910-0015	PACKING SLIP	
7157-1010	SCR. PHIL W/NYLON WSHR 10-32 X 5/8"	
7600-0029	PLASTIC BAG, 9" X 12" X 4 MIL RECLOSABLE	

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
-------------	-------------	----------------------

5901-0356 ASSY. PCB AURAL SUBCARRIER PROCESSOR (CONT.)

152492-11	IND POT CORE	L3
5610-0198-1	TRANSFORMER POT CORE	T1
152330-1	TRANSFORMER	T2
150186-1	TRANSFORMER	T3
3231-2027	TRANS MPS 6521	Q1,7
3241-2006	TRANS MPS 6523	Q2,4,6
2N5088	TRANS 2N5088	Q8,9,10,11
3311-0008	IC LIN VREG LM 7815	U3
3312-0009	IC MULTIPLIER MC 1496	U1
860049-111	IC LIN AMP CA3028	U2
5601-0020	FILTER 4.5 MHZ BPF	FL1
5222-0037	JUMPER JACK 3 POST	J2
5222-0005	JUMPER	J2
5900-0356	FAB PCB ATM-1600 AURAL SUBCARRIER PROCESSOR	
2055-4240	RES 2.4K Ω	R3,8,11
2055-4120	RES 1.2K Ω	R12,10,21
2055-4180	RES 1.8K Ω	R18
2055-3390	RES 390 Ω	R17
2055-1680	RES 6.8K Ω	R14
2061-3453	RES 453 Ω 1%	R15
1176-5333	CAP .033 UF	C50
1219-0029	CAP ELECT 100 UF	C51
1256-1477	CAP TANT 4.7 UF	C53
133--0002	CAP ADJ 10-40 PF	C48
4601-0226	IND FXD MOLD .22 UH	L18
EL2020	IC VIDEO AMP	U4
3164-1626	DIODE 1N4735A	D1

8000-2610 ATM-1600 ACCESSORY KIT (F CONN)

5120-1060	CABLE, COAX 6.00" (2) F CONN
5211-0026	TERMINATOR MALE BNC
6910-0015	PACKING SLIP
7157-1010	SCR. PHIL W/NYLON WSHR 10-32 X 5/8"
7600-0029	PLASTIC BAG, 9" X 12" X 4 MIL RECLOSABLE
5218-0028	TERMINATION, 75 OHM, F DC-550 MHZ

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
153525-1 BASEBAND ENCODER INTERFACE (cont.)		
860010-115	CAP CER ML X7R DIPD .01 UF,10% 50V	C7
860010-119	CAP ELECT,RADIAL,1UF,50V	C6
860010-24	CAPACITOR,0.1UF,100V	C8
860010-84	CAPACITOR,0.33UF	C9
860049-112	IC DIG MULTIVIB 74C221 DUAL CMOS	U1
860049-113	IC LIN OP AMP LM359N	U4
860049-114	IC LIN OP AMP OP081-1P VS=18V	U6
860049-50	IC DIG NAND 2-IN CD4011AE QUAD	U3
860085-10	SOCKET,16 PIN DIP	
860085-9	SOCKET,14 PIN DIP	
900034-124	RES FXD CARB FILM 1/4W 120K OHM 5%	R3
900048-37	CAP CER NPO DISC 33 PF 5% 500V	C10
900048-57	CAP CER X5F DISC 220 PF 10% 500V	C11
9001-2038 FINAL ASSY. AURAL SUBCARRIER PROCESSOR		
4200-001	SHIELD CAN	
6822-0620	NUT	
7112-0604	SCREW	
5901-0356	ASSY. PCB AURAL SUBCARRIER PROCESSOR	
5120-2050	BNC CABLE	
5901-0356 ASSY. PCB AURAL SUBCARRIER PROCESSOR		
1156-4107	CAP CER 1000 PF	C22,25,26,27,28,36,37,38,41, 42,43,52
1256-1106	CAP TANT IUF 35V	C44,47
1219-0015	CAP ELECT 1000 UF 16V	C1,49,12,13
1095-1826	CAP CER 8.2 PF	C19
900048-28	CAP CER 13 PF	C18
1011-2156	CAP MICA 15PF	C21,32
900048-32	CAP CER 20 PF	C30,34
1045-1686	CAP CER 6.8 PF	C16
1011-2276	CAP MICA 27 PF	C2,46
1011-2366	CAP MICA 36 PF	C3,23,24
1046-2396	CAP CER 39 PF	C17,20
1011-2476	CAP MICA 47 PF	C5,14,39
1011-2826	CAP MICA 82 PF	C29
1011-2916	CAP MICA 91 PF	C4,40
1011-2686	CAP MICA 68 PF	C6,45
1015-3106	CAP MICA 100 PF	C10
1011-3126	CAP MICA 120 PF	C35

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR (cont.)		
4602-0337	INDUCTOR FXD MOLDED .33 UH 20%	L19,13
4602-1476	INDUCTOR FXD MOLDED 4.7 UH 10%	L11,39,43
4602-2106	INDUCTOR FXD MOLDED 10 UH 10%	L8,14,15,18 L30,31,32 L40,42
4611-1156	INDUCTOR FXD MOLDED 1.5 UH 10%	L34
4611-1336	INDUCTOR FXD MOLDED 3.3 UH 10%	L20
4611-2156	INDUCTOR FXD MOLDED 15 UH 10%	L41
4612-3105	INDUCTOR FXD MOLDED 100 UH 5%	L23
4614-1009	INDUCTOR FXD MOLDED .33 UH 5% /SCD	L16
4614-1013	INDUCTOR .47UH 5% MOLDED /SCD	L17
5216-0040	CONNECTOR F FEMALE RT ANGLE PC M	J4
5216-0104	CONN CARD EDGE RCPT 20 DL .156RTANG	J3
5222-0035	JUMPER MINI FOR	J2,5,6,7,8,10
5222-0037	3 POST JACK	J5,6,7,10
5222-0038	2 POST JACK	J9,16
5222-0039	JACK, CONNECTOR	J8,2
5413-1001	CRYSTAL 45.751 MHZ PER S.C.D	Y1
5900-0343	FAB PCB ATM-1600 VIDEO MODULATOR	
6163-0001	PAD TRANS FOR	Q14,18,19,20,40, 42
6820-0421	NUT,HEX 4-40 STD.PATT STL/ZINC	FOR J3
7114-0410	SCR,PAN,PHIL#4-40X5/8LG SS	FOR J3
7921-0014	CABLE,COAX,RG187A/U. TEFLON	
860010-118	CAP,MONO.,.1UF,50V,20%	C2,77
860010-66	CAP.,VAR.,2-5PF	C60
860010-79	CAP AL 4.7UF 20% 35V 2000/85 RADIAL	C19,15,83
860020-3	CORE,BEAD B1,2,3	FOR Q17,21 AND R213
860026-13	DIODE	CR21,20
860026-29	DIODE	CR8,9,10,11
860049-115	IC LIN OP AMP CA3240AE VS=36V	U6,13
860049-32	IC LIN IF/RF AMP CA3028AS	U1
860049-64	IC LIN DRIVER LM3914N DISPLAY	U9
860049-86	IC LIN DRIVER LM3915N GRAPH DIS	U8
860100-15	THERMISTOR,100 OHMS	RT1
860101-1	HEATER,CRYSTAL	HR1
900048-32	CAP CER NPO DISC 20 PF 5% 500V	C17
900048-40	CAP CER N330 DISC 43 PF 5% 500V	C119
900048-44	CAP CER N750 DISC 62 PF 5% 500V	C52
900048-46	CAP CER N750 DISC 75 PF 5% 500V	C53,65
900048-49	CAP CER X5F DISC 100 PF 10% 500V	C1,84,115
900048-85	CAP CER X5F DISC 3300PF 10% 500V	C114,117,133
900066-1	SWITCH,SLIDE T.V.	SW1
900075-13	CAPACITOR,1675PF	C4
900075-18	CAPACITOR,MICA,125PF	C3

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR (cont.)		
2055-2160	RES FXD CARB FILM 1/4W 16 OHM 5%	R166,195
2055-2180	RES FXD CARB FILM 1/4W 18 OHM 5%	R161,190
2055-2220	RES FXD CARB FILM 1/4W 22 OHM 5%	R168
2055-2270	RES FXD CARB FILM 1/4W 27 OHM 5%	R184
2055-2330	RES FXD CARB FILM 1/4W 33 OHM 5%	R101,102
2055-2560	RES FXD CARB FILM 1/4W 56 OHM 5%	R211,94
2055-2620	RES FXD CARB FILM 1/4W 62 OHM 5%	R112
2055-2750	RES FXD CARB FILM 1/4W 75 OHM 5%	R89,90,91 169,170,197 198,209
2055-3100	RES FXD CARB FILM 1/4W 100 OHM 5%	R25,26,29,30 R61,82,85,131
2055-3130	RES FXD CARB FILM 1/4W 130 OHM 5%	R175
2055-3150	RES FXD CARB FILM 1/4W 150 OHM 5%	R186
2055-3180	RES FXD CARB FILM 1/4W 180 OHM 5%	R103
2055-3220	RES FXD CARB FILM 1/4W 220 OHM 5%	R5,10,18,20,32 R36,196,206,134 139,167,210,212
2055-3270	RES FXD CARB FILM 1/4W 270 OHM 5%	R93,95
2055-3300	RES FXD CARB FILM 1/4W 300 OHM 5%	R11,164,70,194
2055-3330	RES FXD CARB FILM 1/4W 330 OHM 5%	R207
2055-3360	RES FXD CARB FILM 1/4W 360 OHM 5%	R98
2055-3430	RES FXD CARB FILM 1/4W 430 OHM 5%	R178,183,185, 14
2055-3470	RES FXD CARB FILM 1/4W 470 OHM 5%	R3,4,9,17,43 24,27,28,88,99
2055-3620	RES FXD CARB FILM 1/4W 620 OHM 5%	R120,160 R162,189,191
2055-3680	RES FXD CARB FILM 1/4W 680 OHM 5%	R122
2055-3820	RES FXD CARB FILM 1/4W 820 OHM 5%	R19,104
2055-4100	RES FXD CARB FILM 1/4W 1K OHM 5%	R2,8,13,16,60,68 69,83,123,171
2055-4130	RES FXD CARB FILM 1/4W 1.3K OHM 5%	R163,192
2055-4200	RES FXD CARB FILM 1/4W 2K OHM 5%	R165,193
2055-4220	RES FXD CARB FILM 1/4W 2.2K OHM 5%	R73,84,97,172,200
2055-4240	RES FXD CARB FILM 1/4W 2.4K OHM 5%	R203
2055-4270	RES FXD CARB FILM 1/4W 2.7K OHM 5%	R133,208
2055-4330	RES FXD CARB FILM 1/4W 3.3K OHM 5%	R31,96,173
2055-4360	RES FXD CARB FILM 1/4W 3.6K OHM 5%	R119
2055-5100	RES FXD CARB FILM 1/4W 10K OHM 5%	R1,23,34,35 40,41,55,80 86,87,140
2055-5120	RES FXD CARB FILM 1/4W 12K OHM 5%	R56,204
2055-5220	RES FXD CARB FILM 1/4W 22K OHM 5%	R37,59,143
2055-5470	RES FXD CARB FILM 1/4W 47K OHM 5%	R58,126
2055-6200	RES FXD CARB FILM 1/4W 200K OHM 5%	R142
2055-6680	RES FXD CARB FILM 1/4W 680K OHM 5%	R121
2055-7100	RES FXD CARB FILM 1/4W 1M OHM 5%	R75,76
2061-3453	RES FXD MET FILM 1/8W 453 OHM 1%	R49
2061-3523	RES FXD MET FILM 1/8W 523 OHM 1%	R71
2061-3562	RES FXD MET FILM 1/8W 562 OHM 1%	R53
2061-3619	RES FXD MET FILM 1/8W 619 OHM 1%	R38

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5901-0344 ASSY PCB AUDIO MODULATOR, ATM-1600 (cont.)		
3325-0035	IC DIG COUNTER 74HC4040N 12-STAGE	U3
3542-1013	DIODE RED LED	DS1
4602-1476	INDUCTOR FXD MOLDED 4.7 UH 10%	L5,6
4611-1156	INDUCTOR FXD MOLDED 1.5 UH 10%	L2
4612-2106	INDUCTOR FXD MOLDED 10 UH 10%	L1,8,9
5222-0037	3 POST JACK	J6
5222-0038	2 POST JACK	J2,3,4,5
5701-0001	ATM1600 AUDIO PLD	U5
5900-0344	FAB PCB ATM-1600 AUDIO MODULATOR	
7921-0014	CABLE,COAX.RG187A/U. TEFLON	
860010-119	CAP,ELECT,RADIAL,1UF,50V	C16,32,33 C56,62
860010-121	CAP,ELECT,RAD,3.3UF,50V	C55
860010-123	CAP,EL,RAD,10UF,16V+75-10	C54
860049-115	IC LIN OP AMP CA3240AE VS=36V	U9,10
860049-32	IC LIN IF/RF AMP CA3028AS	U7,8
900048-103	CAP CER N330 DISC 5.1 PF 5% 500V	C44
900048-104	CAP CER N750 DISC 5.1 PF 5% 500V	C47
900048-32	CAP CER NPO DISC 20 PF 5% 500V	C48
900048-49	CAP CER X5F DISC 100 PF 10% 500V	C63
900048-9	CAP CER NPO DISC 2.2 PF .25 500V	C39,46
900066-1	SWITCH,SLIDE T.V.	SW1,2
1287-4103	CAP CER 1000PF PER MIL-C-11015	C14,15,36,37 C38,43,45,49 C50,51
2061-5165	RES 16.5K 1/8W 1%	R59
1N751A	DIODE,ZENER	CR1
2055-41802	RES FXD CARB FILM 1/4W 1.8K OHM 5%	R1
5220-00122	HDR ASSY 1X22 .025 SQ .100 RT ANG	J1
5900-0348	FAB PCB BAR GRAPH	
860026-27	I.C. LED DISPLAY	U1,2
9001-2035 FINAL ASSY. VIDEO BD.,ATM-1600		
5901-0343	ASSY PCB ATM-1600 VIDEO MODULATOR	
5901-0348	ASSY PCB BAR GRAPH	
6822-0421	EA NUT,KEP 4-40 1/4AF STD PATT STL/Z	
7112-0406	EA SCR.PAN/PHIL.#4-40X3/8 STL/ZN.P	
7921-0014	CABLE,COAX.RG187A/U. TEFLON	
5901-0343 ASSY PCB ATM-1600 VIDEO MODULATOR		
1011-2476	CAP MICA DIPPED 47 PF 1% 500 V	C66
1011-3226	CAP MICA DIPPED 220 PF 1% 500 V	C57
1015-3106	CAP MICA DIPPED 100PF 5% 500V	C49

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
5602-0041 ASSY. POWER SUPPLY, SGL OUT 18V/1.25A 90-260 VIN (Cont.)		
	HEAT SINK	HS1
	HEAT SINK CLIP	(HSQ1)
	LABEL "S/N"	(C7)
	LABEL "SPECIFICATION"	(C18)
	PCB (88, 18)	
	SILICON RUBBER	(R2,16)
	SILICON RUBBER TUBE	(HS1-Q1)

9001-2036 FINAL ASSY. AUDIO BD., ATM-1600

5901-0344	ASSY PCB AUDIO MODULATOR, ATM-1600
6822-0421	NUT, KEP 4-40 1/4AF STD PATT STL/Z
7112-0406	SCR.PAN/PHIL.#4-40X3/8 STL/ZN.P
7921-0014	CABLE, COAX.RG187A/U. TEFLON

5901-0344 ASSY PCB AUDIO MODULATOR, ATM-1600

1011-2826	CAP MICA DIPPED 82 PF 1% 500 V	C53
1045-2186	CAP CER NPO DISC 18 PF 5% 500V	C52
1156-3277	CAP CER X5F DISC 270 PF 10% 1KV	C1,2,3,8
1182-4754	CAP POLSTRN FILM TBL 7500PF2.5%125V	C12
1219-0002	CAP AL 100 UF 80/20% 35V	C11
1219-0014	CAP AL 22 UF 20% 35V 2000H/85C	C6,7,10,18,22,42,9
1256-1226	CAP TANT PLZD SOL DIPP 2.2UF 10%35V	C26
1256-1686	CAP TANT PLZD SOL DIPP 6.8UF 10%35V	C4,5
1287-5103	CAP CER ML Z5U DIPPED .01UF 20%50V	C57,58,59,66,68 C17,21,29,67,
1287-6103	CAP CER ML Z5U DIPPED .1 UF 20% 50V	C13,27,28,34,35 C60,61,64,65,41
1287-7103	CAP CER ML Z5U DIPPED 1 UF 20% 50V	C23,24,30
1295-2474	CAP CER ML NPO 47 PF 5% 100V	C31
1295-3333	CAP CER ML NPO 330 PF 5% 50V	C19,20
1300-0016	CAP VAR CER 1.2-6.5PF 250V	C40
1366-6333	CAP CER ML X7R .33 UF 10% 100V	C25
152089-6	TRANSFORMER	T1
153316-16	INDUCTOR, ADJUSTABLE, 16.5T	L4,7
2045-2430	RES FXD CARB COMP 1W 43 OHM 5%	R62
2055-2100	RES FXD CARB FILM 1/4W 10 OHM 5%	R70
2055-2750	RES FXD CARB FILM 1/4W 75 OHM 5%	R2,50
2055-3100	RES FXD CARB FILM 1/4W 100 OHM 5%	R35,47
2055-3220	RES FXD CARB FILM 1/4W 220 OHM 5%	R18
2055-3470	RES FXD CARB FILM 1/4W 470 OHM 5%	R31
2055-3510	ES FXD CARB FILM 1/4W 510 OHM 5%	R57
2055-4100	ES FXD CARB FILM 1/4W 1K OHM 5%	R34,41
2055-4150	ES FXD CARB FILM 1/4W 1.5K OHM 5%	R36
2055-4200	ES FXD CARB FILM 1/4W 2K OHM 5%	R46,79

PART NUMBER	DESCRIPTION	REFERENCE DESIGNATOR
8000-4055-YY ASSY MODULE POWER SUPPLY, ATM-1600		
5901-0340-YY	ASSY PCB, BACK PLANE, ATM-1600	
5501-0040	SWITCH, ROCKER SPDT 5A120V PNLMT	
5601-0023	CONN., AC POWER, FILTERED 6J4	
5602-0041	PWR SPLY, SGL OUT 18V/1.25A 90-260 VIN	
6012-0366-ZZ	REAR PANEL FAB, T.V. MODULATOR	
7612-0404	SCR, BINDER/PHIL 4-4-X1/4 STL/ZINC	
6014-0083	CHASSIS, BKT. CRS, TV MDULATOR	
7112-0204	SCR, PAN HD. PHL #2-56X1/4LGN ZN.PL	
5101-0255	ASSY CABLE, 2 CONDUCTORS	
5105-0256	ASSY CABLE, 2 CONDUCTORS	
7301-0003	TUBING, HEAT SHRINK. 1/8D BLACK	
7910-2005	WIRE, STRANDED, 20CA, 7/28 PVC GRN	
5227-0020	TERMINALS SOLDER	
6821-0004	NUT 3/8" X 32 X 3 1/2 THK. STL/CAD.PL	
5562-0001	FUSE, 1/2A SLOW BLOW	
5901-0340-YY ASSY PCB BACK PLANE, ATM-1600		
1007-5103	CAP CER Z5V DISC .01 UF 20% 50V	C1
4612-2106	INDUCTOR FXD MOLDED 10 UH 10%	L1
4707-0531-08	INDUCTOR AIR CORE 8T 1/4 22GA	L3
5216-0022	CLIP LOCKING 2 PIN	J1
5216-0039	CONNECTOR "F" PCB	J7,8,9,10,11,12, 13,17
5216-0092	CONN.COAX.,RF,PCB,PRESS-FIT,COM.BNC	J3,4,5,6
5216-0105	CONN CARD EDGE RCPT 2X22 .156 ST	J15
5216-0107	CONN CARD EDGE 20 PIN DUAL	J14
5223-0012	TERMINAL BLOCK 3POS .250C/C ST	J2
5223-0036	TERMINAL BLOCK 2POS SCR CONN	J16
5900-0340	FAB PCB BACK PLANE	
7921-0012	CABLE COAX SEMI-RGD.75 OHM.085DIA	
5602-0041 ASSY. POWER SUPPLY, SGL OUT 18V/1.25A 90-260 VIN		
(Non-Catel assembly, information provided for reference only; may only be ordered from Catel as a complete assembly under P/N 5602-0041)		
	JUMPER WIRE	J2
	JUMPER WIRE	J1
	RESISTOR CARBON FILM, 57K, 2W	R2
	RESISTOR CARBON FILM, 10R, 1/4W	R19
	RESISTOR CARBON FILM, 15R, 1/4W	R52
	RESISTOR CARBON FILM, 100R, 1/4W	R7,12
	RESISTOR CARBON FILM 330R 1/4W	R10
	RESISTOR CARBON FILM 470R 1/4W	R14