

section 4

maintenance

4.1 GENERAL

Maintenance of the 516F-2 AC Power Supply consists of checking and replacing the electrolytic capacitors and tubes as needed, periodic voltage and current checks against those listed in the following specifications (section 5), and removing dust from the

equipment when needed. When replacing electrolytic capacitors, observe the proper polarity as indicated in the schematic diagram.

4.2 CABINET REMOVAL

For cabinet removal, refer to paragraph 1.1, step d.

section 5

specifications

5.1 SPECIFICATIONS

Size (overall dimensions) 196.85 mm (7-3/4 in) high,
250.83 mm (9-7/8 in) wide,
292.10 mm (11-1/2 in) deep.

Weight 13.62 kg (30 lb).

Ambient temperature range 0 to +50 °C.

Input requirements 115 or 230 volts, 50 to 400 Hz, 4 or 2 amperes.
(Remove capacitor C1 when using a line frequency higher than 60 Hz.)

Output voltages

Heater power 6.3 ±0.3 volts ac.

Low-voltage B+ 275 volts dc. Transmit
NLT 250 volts dc; receive
NMT 310 volts dc.

High-voltage B+ 800 volts dc. Transmit
NLT 690 volts dc; receive
NMT 970 volts dc.

Bias voltage -55 to -80 volts, adjustable.

section 6

parts list

6.1 INTRODUCTION

6.1.1 General

The purpose of this parts list is for identification, requisition, and issuance of parts.

Part numbers listed in this parts list meet critical equipment design specification requirements. Use only the part numbers specified in this parts list for replacement of parts.

6.1.2 Group Assembly Parts List

FIG - ITEM Column — Digits preceding the dash refer to the figure number. Digits following the dash are the item numbers assigned in sequence to correspond with the item numbers on the illustration.

PART NO Column — Listed are MIL standard, vendor, or Collins Radio Company part numbers. Collins part numbering system consists of 10 digits as follows: a 3-digit family number, a 4-digit serial number, and a 3-digit dash number.

INDENT Column — Items are coded 1, 2, 3, etc, to indicate the relationship to the next higher assembly.

DESCRIPTION Column — Lists the noun name, modifier, required descriptive information, federal manufacturer code, reference designation, attaching part (AP), reference to other figures, and effectivities.

Attaching parts are identified by (AP) following the part or parts they attach.

Effectivities are identified by the following methods: MCN (Manufacturer Control Number) 101 and up, CI (Configuration Identifier) 5-digit number, REV (Revision Identifier) dash (-) de-

notes original, letter A first change, letter B second change, etc. One of the above identifiers is listed on each chassis and/or replaceable assembly. Service Bulletins are identified by SB-1, SB-2, etc.

USABLE ON CODE Column — Part variations within the groups of equipment are indicated by a letter code (A, B, C, etc). The absence of the code indicates parts apply to all models.

UNITS PER ASSY Column — Quantities specified are per item number. The letters AR denote the selection of parts as required. The letters RF refer to an assembly completely assembled on a preceding figure and illustration.

6.1.3 Numerical Index

PART NUMBER Column — Part numbers are listed in alphanumeric sequence.

FIG - ITEM Column — Digits preceding the dash refer to the figure number. Digits following the dash are the item numbers.

TTL REQ Column — Listed is the total quantity of parts or assemblies covered in the group assembly parts list.

6.1.4 Reference Designation Index

REFERENCE DESIGNATION Column — Reference designations are listed in alphanumeric sequence.

FIG - ITEM Column — Digits preceding the dash refer to the figure number. Digits following the dash are the item numbers.

PART NUMBER Column — Part numbers listed are for items that have reference designations assigned.

HOW TO USE THIS PARTS LIST

1. FIND PAGE NO. IN LIST OF ILLUSTRATIONS

5. FIND PART NO. IN NUMERICAL INDEX

2. FIND PART AND ITS ITEM NO.

7. LOCATE PART ON ILLUSTRATION

The diagram illustrates the process of finding a part number from an illustration. It consists of four main components:

- Reference Designation Index:** A table with columns for 'REFERENCE DESIGNATION', 'PART NO.', and 'ITEM NO.'. It lists various part numbers and their corresponding item numbers.
- Numerical Index:** A table with columns for 'PART NO.', 'ITEM NO.', and 'PART NO.'. It lists part numbers and their corresponding item numbers.
- Group Assembly Parts List:** A table with columns for 'PART NO.', 'ITEM NO.', and 'DESCRIPTION'. It lists part numbers and their corresponding descriptions.
- Illustration:** A technical drawing of a mechanical assembly with numbered callouts (1 through 11) pointing to various components.

Arrows indicate the flow of information: from the illustration to the Group Assembly Parts List (Step 2), from the Group Assembly Parts List to the Numerical Index (Step 3), from the Numerical Index to the Reference Designation Index (Step 4), and from the Reference Designation Index back to the illustration (Step 7). Step 5 shows finding the part number in the Numerical Index.

HOW TO FIND THE PART NUMBER IF THE SECTION OR SYSTEM OF THE EQUIPMENT IN WHICH THE PART IS USED IS KNOWN:

HOW TO FIND THE ILLUSTRATION FOR A PART IF THE PART NUMBER IS KNOWN:

- (1) Refer to the List of Illustrations and find the page number for the Major Assembly or System in which the part is used.
- (2) Locate the part item number and/or reference designation on the illustration.
- (3) Find the item number on the Group Assembly Parts List page to determine complete description.
- (4) If only the reference designation is known, refer to the Reference Designation Index to find the part number.

- (5) Refer to the Numerical Index and find the part number.
- (6) Turn to the Group Assembly Parts List and find the first figure and item number indicated in the Numerical Index for that part. If this figure shows the part in a section or system of the equipment other than the one desired, refer to the other figure numbers listed in the Numerical Index.
- (7) On the illustration, find item number determined in step (6).

6.1.5 *Manufacturer's Code, Name, and Address*

CODE	MANUFACTURER'S NAME AND ADDRESS	CODE	MANUFACTURER'S NAME AND ADDRESS
A1334	Toyner Corp Ocoess, MN	49671	RCA Corp. 30 Rockefeller Plaza New York, NY 10020
02660	Bunker-Ramo Corp., The Amphenol Connector Div. 2801 S. 25th Ave. Broadview, IL 60153	56289	Sprague Electric Co. North Adams, MA 01247
04222	Aerovox Corp. Aerovox Rd. Myrtle Beach, SC 29577	70494	New Britain Div. of Emhart Corp. 102 Washington St. New Britain, CT 06050
08556	Bell Electric Co. 2600 W. 50th St. Chicago, IL 60632	70674	ADC Products Div. of Magnetic Controls Co. 4900 W. 78th St. Minneapolis, MN 55435
09922	Burndy Corp. Richards Ave. Norwalk, CT 06852	70903	Belden Corp. 415 S. Kilpatrick Chicago, IL 60644
12014	Chicago Rivet and Machine Co. 950 S. 25th Ave. Bellwood, IL 60104	71400	Bussman Mfg. Div. of McGraw-Edison Co. 2536 W. University St. St. Louis, MO 63107
28520	Heyman Mfg. Co. 147 N. Michigan Ave. Kenilworth, NJ 07033	71450	CTS Corp. 1142 W. Beardsley Ave. Elkhart, IN 46514
33173	General Electric Co. Tube Dept. 316 E. 9th St. Owensboro, KY 42301	71590	Centralab - Electronics Div. of Globe Union, Inc. 5757 N. Green Bay Ave. Milwaukee, WI 53201
37942	Mallory, P. R., and Co., Inc. 3029 E. Washington St. Indianapolis, IN 46206	71785	TRW Electronic Components Cinch Connector Operations 1501 Morse Ave. Elk Grove Village, IL 60007
44655	Ohmite Mfg. Co. 3601 W. Howard St. Skokie, IL 60026	73386	Freed Transformer Co., Inc. 1736 Weirfield St. Brooklyn, NY 11227
45722	U.S.M. Corp. Parker-Kalon Fastener Div. 1 Peekay Dr. Clifton, NJ 07014	75543	Lavelle Rubber Co. 424 N. Wood Chicago, IL 60622
46384	Penn Engineering and Mfg. Corp. Old Easton Hwy. Doylestown, PA 18901		

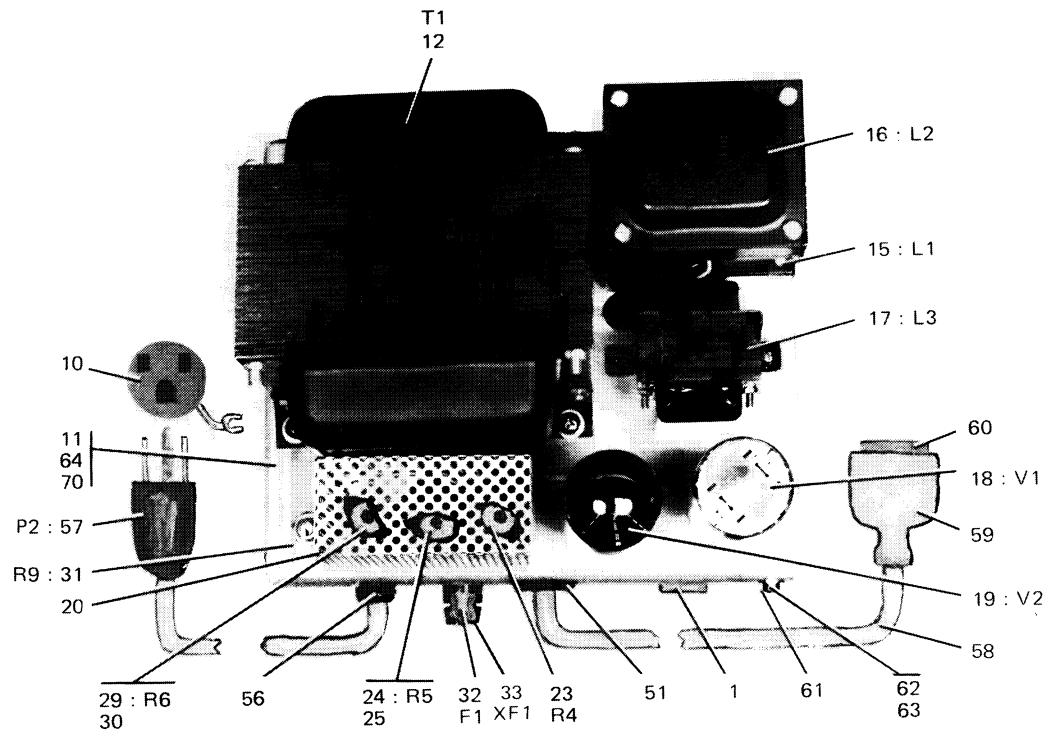
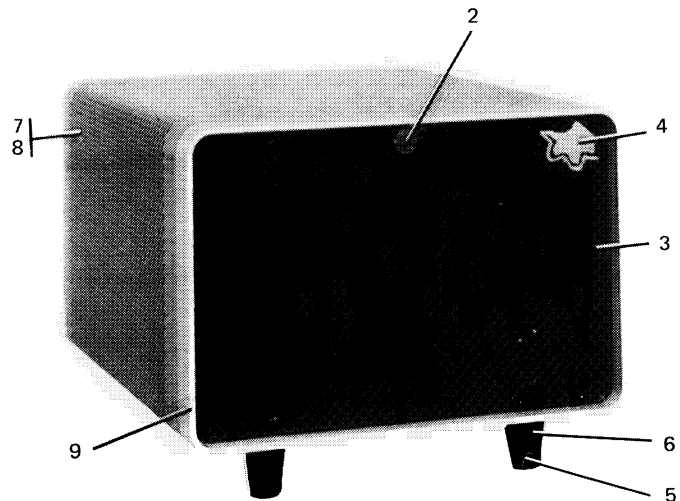
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6.1.6 Configuration Identifiers

The following CI's were used in compiling data for this manual:

CODE	MANUFACTURER'S NAME AND ADDRESS	<u>CI</u>	<u>UNIT PART NUMBER</u>	<u>FIG-ITEM</u>
77147	Patton-MacGuyer Co. Div. of Avid Corp. 17 Virginia Ave. Providence, RI 02905			
77250	Pheoll Mfg. Co. Div of Allied Products Corp. 5700 W. Roosevelt Rd. Chicago, IL 60650	72292 72292 74343 71514 65013	522-1170-000 544-2868-005 544-2856-000 544-2855-000 544-2864-003	1- 1-7 1-11 1-58 1-64
78189	Illinois Tool Works, Inc. Shakeproof Div. St. Charles Rd. Elgin, IL 60126			
78553	Linnerman Products, Inc. 8700 Brookpark Rd. Cleveland, OH 44129			
79807	Wrought Washer Mfg. Co. 2100 S. Bay St. Milwaukee, WI 53207			
80008	Electro Engineering Works, Inc. 401 Preda St. San Leandro, CA 94577			
80033	Prestole Everlock, Inc. 1345 Miami St. Toledo, OH 43605			
81349	Military Specifications			
84970	Sarkes Tarzian, Inc. Broadcast Eqpt. Div. E. Hillside Dr. Bloomington, IN 47401			
92825	Whitso, Inc. 9330 Byron St. Schiller Park, IL 60176			
96906	Military Standards			

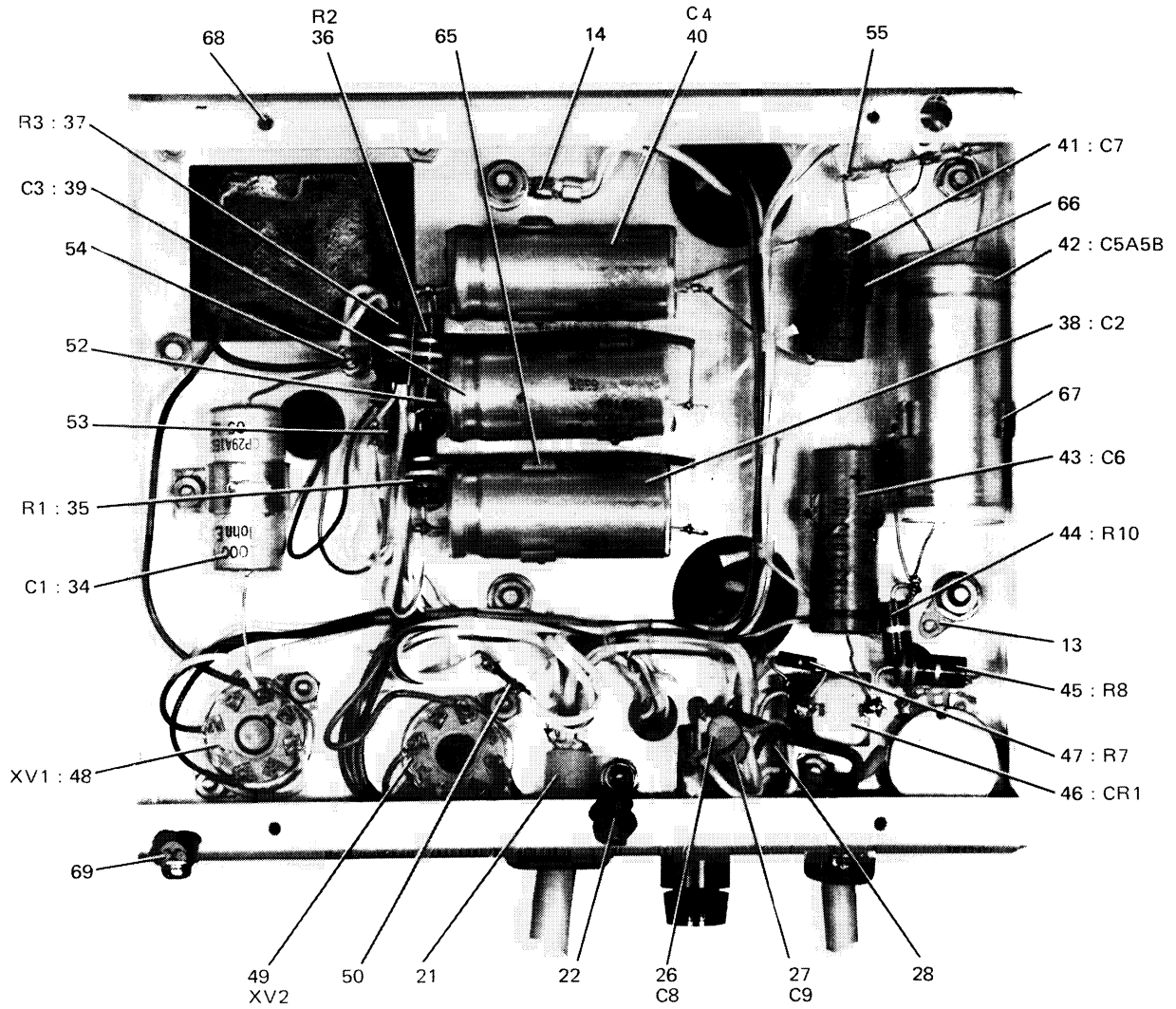
6.2 GROUP ASSEMBLY PARTS LIST



TP4-0553-027

516F-2 AC Power Supply
Figure 6-1 (Sheet 1 of 2)

GROUP ASSEMBLY PARTS LIST



TP4-0553-027

516F-2 AC Power Supply
Figure 6-1 (Sheet 2)

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
6-1	522-1170-000	1	AC POWER SUPPLY, 516F-2		1
	1 757-4779-000	2	PLATE, IDENT		1
	2 280-2972-000	2	INSIGNIA 280-2972-000 (EFF TO CI 68113)		1
	2 280-3423-00	2	INSIGNIA (VA1334) 280-3423-000 (EFF CI 68113,		1
	C13388SS010	2	PUSH ON NUT (V78553) 334-1331-000 (AP)		1
	3 544-2861-003	2	PANEL, FRONT		1
	4 544-2860-003	2	PAD, POWER SUPPLY		1
	MS35649-264	2	NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP FOR 3-4)		4
	310-6360-000	2	WASHER,FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP FOR 3-4)		4
	P330-2420-000	2	SCREW,MACH, BRS, 6-32 X 3/8 (V77250) 330-2420-000 (AP FOR 3-4)		4
	5 543-8101-002	2	FOOT, CABINET		2
	6 747RBLACK	2	BUMPER,RBR (V75543) 200-5010-000		4
	MS35649-264	2	NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP FOR 5-6)		2
	310-6360-000	2	WASHER,FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP FOR 5-6)		2
	310-0055-000	2	WASHER,FLAT, BRS, 0.147 ID X 0.312 OD (V79807) 310-0055-000 (AP FOR 5-6)		4
	MS51957-31	2	SCREW,MACH, SST, 6-32 X 5/8 (V96906) 343-0173-000 (AP FOR 5-6)		2
	MS51957-35	2	SCREW,MACH, SST, 6-32 X 1-1/4 (V96906) 343-0178-000 (AP FOR 5-6)		2
	7 544-2868-005	2	CABINET, POWER SUPPLY		1
	MS35649-264	2	NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		2
	310-6360-000	2	WASHER,FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP)		4
	MS35338-136	2	WASHER,LOCK, SST, 0.141 ID X 0.250 OD (V96906) 310-0282-000 (AP)		2
	543-8116-002	2	SCREW, MACHINE (AP)		2
	MS51957-28	2	SCREW,MACH, SST, 6-32 X 3/8 (V96906) 343-0169-000 (AP)		2
	8 544-2867-005	3	WRAPRD		1
	9 609-0580-001	3	FRAME, STYLE (EFF TO CI 72292)		1
	9 609-1251-001	3	FRAME, STYLE (EFF CI 72292)		1
	10 350	2	ADAPTER,CONN (V08556) 368-0138-000		1
	11 544-2856-000	2	CHASSIS, ASSY		1
	12 38578	3	TRANSFORMER,PWR (V73386) 662-0249-010 T1		1
	MS35650-304	3	NUT,PLAIN,HEX, SST, 10-32 (V96906) 313-0019-000 (AP)		4
	310-0049-000	3	WASHER,FLAT, SST, 0.203 ID X 0.500 OD (V79807) 310-0049-000 (AP)		8
	MS35338-138	3	WASHER,LOCK, SST, 0.194 ID X 0.334 OD (V96906) 310-0284-000 (AP)		4
	MS51958-64	3	SCREW,MACH, SST, 10-32 X 5/8 (V96906) 343-0229-000 (AP)		4
	13 4035-12	3	TERMINAL,LUG (V77147) 304-0084-000		1
	14 2041-10-032HT	3	TERMINAL,LUG (V77147) 304-1300-000		1
	15 E13662	3	REACTOR,DUAL, 8H (V80008) 668-0300-000 L1		1
	16 E13662	3	REACTOR,DUAL, 8H (V80008) 668-0300-000 L2		1
	MS35649-284	3	NUT,PLAIN,HEX, SST, 8-32 (V96906) 313-0017-000 (AP)		4
	MS35338-137	3	WASHER,LOCK, SST, 0.168 ID X 0.296 OD (V96906) 310-0072-000 (AP)		4
	310-0048-000	3	WASHER,FLAT, SST, 0.172 ID X 0.437 OD (V79807) 310-0048-000 (AP)		4
	17 A15390	3	INDUCTOR, 0.92H (V70674) 668-0322-000 L3		1
	MS35649-264	3	NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		2
	310-6360-000	3	WASHER,FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP)		1

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parts list

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
6-1	MS35338-136	3	WASHER, LOCK, SST, 0.141 ID X 0.250 OD (V96906) 310-0282-000 (AP)		2
	MS51957-28	3	SCREW, MACH, SST, 6-32 X 3/8 (V96906) 343-0169-000 (AP)		2
18	5R4GYA	3	ELECTRON TUBE (V33173) 257-0142-000 V1		1
19	5U4GB	3	ELECTRON TUBE (V49671) 257-0109-000 V2		1
20	544-2862-003	3	SHIELD, HIGH VOLTAGE		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		2
	MS35333-71	3	WASHER, LOCK, SST, 0.150 ID X 0.285 OD (V96906) 373-0001-000 (AP)		2
21	HP6N	3	CLAMP, LOOP (V09922) 150-1543-000		1
22	18A18697	3	TERMINAL BOARD (V71785) 306-0168-000		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP FOR 21-22)		1
	310-6360-000	3	WASHER, FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP FOR 21-22)		1
23	0219	3	RESISTOR, FXD, WW 25K, 5%, 25W (V44655) 710-4783-000 R4		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		2
	310-6360-000	3	WASHER, FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP)		1
	1210	3	WASHER, SHLDR, GRA FBR, 0.195 ID X 0.243 OD (V70494) 302-0216-000 (AP)		2
	544-2858-002	3	STUD (AP)		1
24	0219	3	RESISTOR, FXD, WW 25K, 5%, 25W (V44655) 710-4783-000 R5		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		2
	310-6360-000	3	WASHER, FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP)		1
	1210	3	WASHER, SHLDR, GRA FBR, 0.195 ID X 0.243 OD (V70494) 302-0216-000 (AP)		2
	P312-0062-000	3	STUD, CONT THD, BRS, 6-32 X 3 (V77250) 312-0062-000 (AP)		1
25	544-2857-002	3	PIN, LOCATING		1
26	2DDH63N103M	3	CAPACITOR, FXD, CER DIEL, 10000PF, 20%, 1000V (V71590) 913-3922-000 C8		1
27	2DDH63N103M	3	CAPACITOR, FXD, CER DIEL, 10000PF, 20%, 1000V (V71590) 913-3922-000 C9		1
28	1532A	3	TERMINAL BOARD (V71785) 306-9032-000		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		1
	MS35338-136	3	WASHER, LOCK, SST, 0.141 ID X 0.250 OD (V96906) 310-0282-000 (AP)		1
29	2K40F24KPORM5PCT	3	RESISTOR, FXD, WW 24K, 5%, 25W (V44655) 710-0374-000 R6		1
	MS35649-264	3	NUT, PLAIN, HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		4
	310-6360-000	3	WASHER, FLAT, SST, 0.147 ID X 0.375 OD (V79807) 310-6360-000 (AP)		2
	1210	3	WASHER, SHLDR, GRA FBR, 0.195 ID X 0.243 OD (V70494) 302-0216-000 (AP)		2
	544-2858-002	3	STUD (AP)		1
30	4021	3	TERMINAL, LUG (V77147) 304-0087-000		1
31	LQ8338	3	RESISTOR, VAR, 5K, 10%, 2W (V71450) 376-2376-000 R9		1
	P334-4120-00	3	NUT, PLAIN, HEX, SST, 3/8-32 (V77250) 334-4120-000 (AP)		1
	1220-02	3	WASHER, LOCK, CD PL STL, 0.391 ID X 0.507 OD (V78189) 373-0081-000 (AP)		1
32	MDX4	3	FUSE, CRTG (V71400) 264-0217-000 F1		1

GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
6-1	33		3 FUSEHOLDER (V71400) 265-1002-000 XF1		1
	34		3 CAPACITOR,FXD, PPR DIEL, 0.05UF, 10%, 1000V (V81349) 961-4646-000 C1		1
	35		3 RESISTOR,FXD, CMPSN, 0.27MEGO, 10%, 2W (V81349) 745-5754-000 R1		1
	36		3 RESISTOR,FXD, CMPSN, 0.27MEGO, 10%, 2W (V81349) 745-5754-000 R2		1
	37		3 RESISTOR,FXD, CMPSN, 0.27MEGO, 10%, 2W (V81349) 745-5754-000 R3		1
	38		3 CAPACITOR,FXD, ELCTLT, 30UF, M10%P50%, 400V (V56289) 183-1771-000 C2		1
	39		3 CAPACITOR,FXD, ELCTLT, 30UF, M10%P50%, 400V (V56289) 183-1771-000 C3		1
	40		3 CAPACITOR,FXD, ELCTLT, 30UF, M10%P50%, 400V (V56289) 183-1771-000 C4		1
	41		3 CAPACITOR,FXD, ELCTLT, 10UF, M10%P100%, 150V (V04222) 183-1040-000 C7		1
	42		3 CAPACITOR,FXD, ELCTLT, 15UF,30UF, M10%P100%, 400V, 2 SECT (V56289) 183-1781-000 C5A5B		1
	43		3 CAPACITOR,FXD, ELCTLT, 10UF, M15%P50%, 250V (V37942) 183-1046-000 C6		1
	44		3 RESISTOR,FXD, CMPSN, 5.6K, 10%, 2W (V81349) 745-5684-000 R10		1
	45		3 RESISTOR,FXD, CMPSN, 3.3K, 10%, 2W (V81349) 745-5673-000 R8		1
	46		3 RECTIFIER,MTLC (V84970) 353-0153-000 CR1		1
		MS35649-264	3 NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP)		1
		MS35338-136	3 WASHER,LOCK, SST, 0.141 ID X 0.250 OD (V96906) 310-0282-000 (AP)		1
	47		3 RESISTOR,FXD, CMPSN, 100 OHMS, 10%, 1/2W (V81349) 745-1310-000 R7		1
	48		3 SOCKET,ELECTRON (V02660) 220-1155-000 XV1		1
	49		3 SOCKET,ELECTRON (V02660) 220-1155-000 XV2		1
	50		3 TERMINAL BOARD (V71785) 306-0587-000		1
		MS35649-264	3 NUT,PLAIN,HEX, SST, 6-32 (V96906) 313-0002-000 (AP FOR 48-50)		4
		MS35338-136	3 WASHER,LOCK, SST, 0.141 ID X 0.250 OD (V96906) 310-0282-000 (AP FOR 48-50)		4
		MS51959-28	3 SCREW,MACH, SST, 6-32 X 3/8 (V96906) 342-0062-000 (AP FOR 48-50)		4
	51		3 GROMMET,RBR (V96906) 201-0024-000		1
	52		3 GROMMET,RBR (V96906) 201-0020-000		1
	53		3 TERMINAL BOARD (V71785) 306-0001-000		1
	54		3 TERMINAL STDF (V92825) 306-0233-000		1
		MS35649-244	3 NUT,PLAIN,HEX, SST, 4-40 (V96906) 313-0043-000 (AP FOR 53-54)		1
		MS35338-135	3 WASHER,LOCK, SST, 0.115 ID X 0.209 OD (V96906) 310-0279-000 (AP FOR 53-54)		1
		P343-0287-000	3 SCREW,MACH, NP BRS, 4-40 X 3/8 (V77250) 343-0287-000 (AP FOR 53-54)		1
	55		3 TERMINAL BOARD (V71785) 306-9032-000		1
		330-0735-000	3 SCREW,TPG,THD, CD PL STL, 6-20 X 1/4 (V45722) 330-0735-000 (AP)		1
	56		3 BUSHING,STRAIN (V28520) 150-0050-000		1
	57		3 CABLE ASSY,PWR (V70903) 426-1464-000 P2		1
	58		3 CABLE ASSY		1
	59		4 SHELL, SOCKET		1
	60		4 SOCKET,TUBE (V02660) 372-1952-000		1
	61		3 SCREW,MACH, NP BRS, 8-32 X 1/2 (V77250) 343-0311-000		1

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GROUP ASSEMBLY PARTS LIST

FIG - ITEM	PART NO	INDENT	DESCRIPTION	USABLE ON CODE	UNITS PER ASSY
6-1	62	310-0058-000	3 WASHER,FLAT, BRS, 0.172 ID X 0.437 OD (V79807) 310-0058-000		1
	63	MS35338-99	3 WASHER,LOCK, BRZ, 0.168 ID X 0.296 OD (V96906) 310-0079-000		1
	64	544-2864-003	3 CHASSIS, PRSD		1
	65	E50007-041	4 RETAINER,CAP (V80033) 139-0089-000		3
	66	E50003-041	4 RETAINER,CAP (V80033) 139-0087-000		2
	67	E50008-041	4 RETAINER,CAP (V80033) 139-0090-000		1
		R3307X1-8CADPL	4 RIVET TUBULAR, CD PL STL, 1/8 DIA X 1/8 (V12014) 305-2012-000 (AP)		6
	68	CL632-2C	4 NUT,PLAIN, CD PL STL, 6-32 (V46384) 334-0066-000		4
	69	CL832-2C	4 NUT,PLAIN, CD PL STL, 8-32 (V46384) 334-0559-000		1
	70	544-2865-004	4 CHASSIS, POWER SUPPLY		1

6.3 NUMERICAL INDEX

PART NUMBER	FIG - ITEM	TTL REQ	PART NUMBER	FIG - ITEM	TTL REQ
A15390	6-1-17	1	R3307X1-8CADPL	6-1-67	6
CL632-2C	6-1-68	4	SR6P4	6-1-56	1
CL832-2C	6-1-69	1	TC52	6-1-43	1
CP29A1EG503K	6-1-34	1	0219	6-1-23	1
C13388SS010	6-1-2	1		6-1-24	1
D28166	6-1-38	1	1210	6-1-23	2
	6-1-39	1		6-1-24	2
	6-1-40	1		6-1-29	2
D28167	6-1-42	1	1220-02	6-1-31	1
E13662	6-1-15	1	1529A	6-1-50	1
	6-1-16	1	1532A	6-1-28	1
E26A817	6-1-41	1		6-1-55	1
E50003-041	6-1-66	2	168-013-1000	6-1-48	1
E50007-041	6-1-65	3		6-1-49	1
E50008-041	6-1-67	1	18A18697	6-1-22	1
HKP1 1-4X1-4	6-1-33	1	2B1DB12	6-1-54	1
HP6N	6-1-21	1	2DDH63N103M	6-1-26	1
KH3491	6-1-57	1		6-1-27	1
LQ8338	6-1-31	1	2K40F24KPORM5PCT	6-1-29	1
MDX4	6-1-32	1	2041-10-032HT	6-1-14	1
MS35333-71	6-1-20	2	280-2972-000	6-1-2	1
MS35338-135	6-1-54	1	280-3423-00	6-1-2	1
MS35338-136	6-1-7	2	310-0048-000	6-1-16	4
	6-1-17	2	310-0049-000	6-1-12	8
	6-1-28	1	310-0055-000	6-1-6	4
	6-1-46	1	310-0058-000	6-1-62	1
	6-1-50	4	310-6360-000	6-1-4	4
MS35338-137	6-1-16	4		6-1-6	2
MS35338-138	6-1-12	4		6-1-7	4
MS35338-99	6-1-63	1		6-1-17	1
MS35489-35	6-1-52	1		6-1-22	1
MS35489-43	6-1-51	1		6-1-23	1
MS35649-244	6-1-54	1		6-1-24	1
MS35649-264	6-1-4	4		6-1-29	2
	6-1-6	2	330-0735-000	6-1-55	1
	6-1-7	2	332-1403-165	6-1-53	1
	6-1-17	2	350	6-1-10	1
	6-1-20	2	38578	6-1-12	1
	6-1-22	1	4021	6-1-30	1
	6-1-23	2	4035-12	6-1-13	1
	6-1-24	2	5R4GYA	6-1-18	1
	6-1-28	1	5U4GB	6-1-19	1
	6-1-29	4	50	6-1-46	1
	6-1-46	1	522-1170-000	6-1-	1
	6-1-50	4	543-8101-002	6-1-5	2
MS35649-284	6-1-16	4	543-8116-002	6-1-7	2
MS35650-304	6-1-12	4	544-2855-000	6-1-58	1
MS51957-28	6-1-7	2	544-2856-000	6-1-11	1
	6-1-17	2	544-2857-002	6-1-25	1
MS51957-31	6-1-6	2	544-2858-002	6-1-23	1
MS51957-35	6-1-6	2		6-1-29	1
MS51958-64	6-1-12	4	544-2860-003	6-1-4	1
MS51959-28	6-1-50	4	544-2861-003	6-1-3	1
P312-0062-000	6-1-24	1	544-2862-003	6-1-20	1
P330-2420-000	6-1-4	4	544-2864-003	6-1-64	1
P334-4120-00	6-1-31	1	544-2865-004	6-1-70	1
P343-0287-000	6-1-54	1	544-2867-005	6-1-8	1
P343-0311-000	6-1-61	1	544-2868-005	6-1-7	1
RCR20G101KS	6-1-47	1	609-0580-001	6-1-9	1
RCR42G274KS	6-1-35	1	609-1251-001	6-1-9	1
	6-1-36	1	609-1608-001	6-1-60	1
	6-1-37	1	747RBLACK	6-1-6	4
RCR42G332KS	6-1-45	1	757-4779-000	6-1-1	1
RCR42G562KS	6-1-44	1	78S11M1005	6-1-59	1

6.4 REFERENCE DESIGNATION INDEX

REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER	REFERENCE DESIGNATION	FIG - ITEM	PART NUMBER
CR1	6-1-46	50			
C1	6-1-34	CP29A1EG503K			
C2	6-1-38	D28166			
C3	6-1-39	D28166			
C4	6-1-40	D28166			
C5A5B	6-1-42	D28167			
C6	6-1-43	TC52			
C7	6-1-41	E26A817			
C8	6-1-26	2DDH63N103M			
C9	6-1-27	2DDH63N103M			
F1	6-1-32	MDX4			
L1	6-1-15	E13662			
L2	6-1-16	E13662			
L3	6-1-17	A15390			
P2	6-1-57	K83491			
R1	6-1-35	RCR42G274KS			
R10	6-1-44	RCR42G562KS			
R2	6-1-36	RCR42G274KS			
R3	6-1-37	RCR42G274KS			
R4	6-1-23	0219			
R5	6-1-24	0219			
R6	6-1-29	2K40F24KPORM5PCT			
R7	6-1-47	RCR20G101KS			
R8	6-1-45	RCR42G332KS			
R9	6-1-31	LQ8338			
T1	6-1-12	38578			
V1	6-1-18	5R4GYA			
V2	6-1-19	SU4GB			
XF1	6-1-33	HKP1 1-4X1-4			
XV1	6-1-48	168-013-1000			
XV2	6-1-49	168-013-1000			

section 7

illustrations

Note

The period covered by this instruction book is February 1968 to the date on the book title page.

Each equipment circuit change made during the period of time covered by this instruction book has the changes identified on the schematic diagram and in the parts list. Circuit changes are flagged on the schematic with a change identifier



pointed at the component, group of compo-

nents, or a circuit enclosed by a broken line. The identifier indicates that the component or circuit has been changed, and the number in the identifier indexes the specific change. If several components are affected by the same equipment change, there may be more than one identifier with the same index number.

The indexed changes are listed on schematic changes and equipment differences sheets inserted in front of the schematic sheet to which they are indexed.

The identifier-description describes the differences and reasons for changes and includes a

recommendation as to what action should be followed during repair or maintenance.

The reason for identifying changes in this manner is that the manufacturer has "scrambled" serial numbers on his amateur products during the period covered by this instruction book. Therefore, changes cannot be identified by conventional methods.

Caution

None of the changes have been made because the equipment has failed to meet the equipment specifications; the changes are not recommended for all units. Equipment changes have been made to improve performance or reliability of radios that are built using different fabrication processes.

The change identifier number is also used in the parts list section of this instruction book. However, in the parts list the identifier is enclosed in slashes (for example, /6/) instead of the



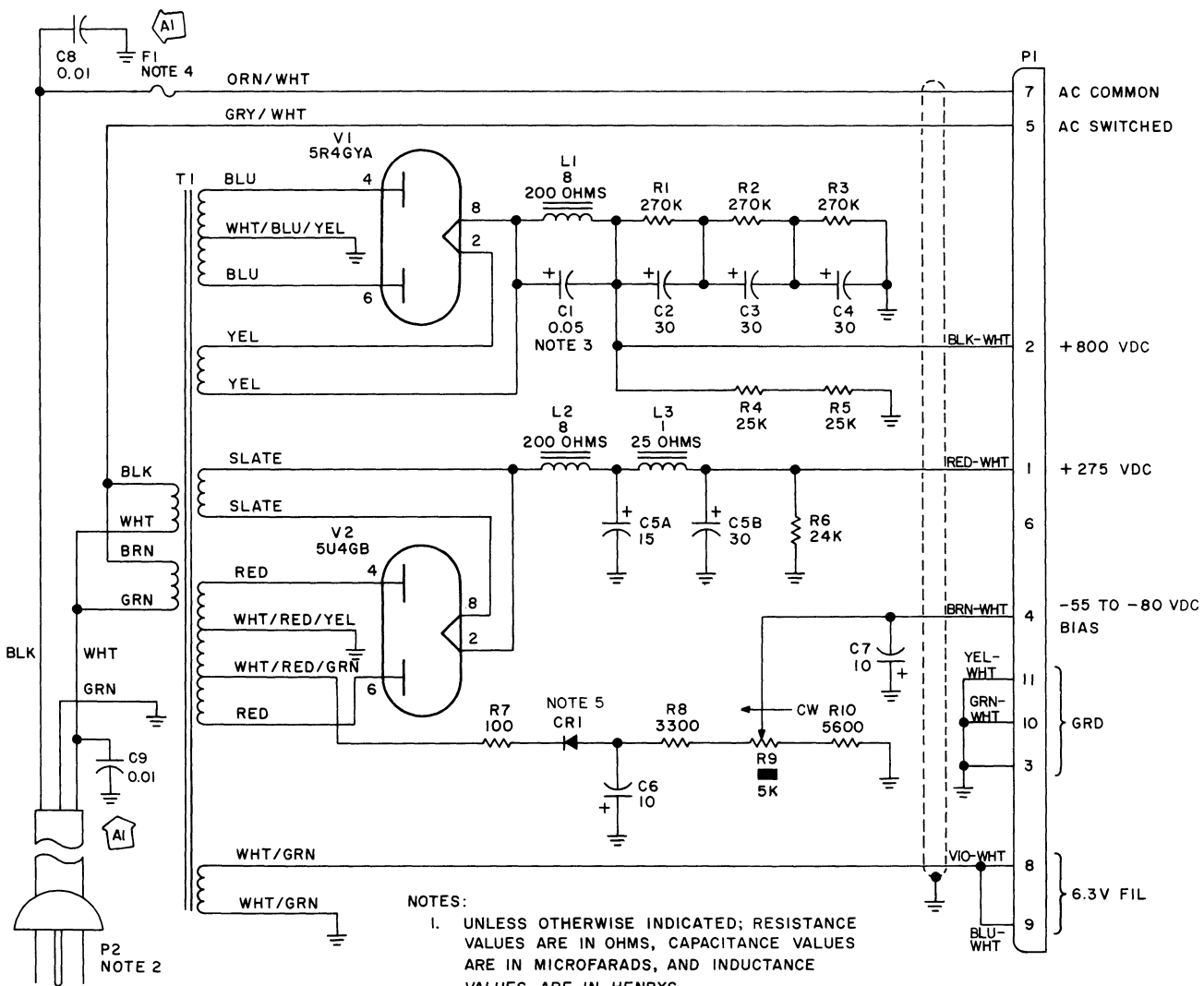
symbol.

No service bulletins have been written against the 516F-2 AC Power Supply.

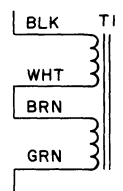
SCHMATIC CHANGES AND EQUIPMENT DIFFERENCES

IDENTIFIER	DESCRIPTION
A1	Capacitors C8 and C9, 0.01 μ F, were installed on the power supply ac input lines for rf filtering.

516F-2 AC Power Supply, Schematic Diagram
Figure 7-1 (Sheet A)



- NOTES:
1. UNLESS OTHERWISE INDICATED; RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS, AND INDUCTANCE VALUES ARE IN HENRYS.
 2. SHOWN WIRED FOR 115 VAC. ROUND PIN ON P2 IS GROUND. IF MATING TYPE AC SOCKET NOT AVAILABLE, USE ADAPTER AND GROUND GREEN WIRE.
 3. REMOVE C1 WHEN USING A LINE FREQUENCY HIGHER THAN 60 HZ.
 4. F1 IS 4 AMPERES FOR 115 VAC INPUT, FOR 230 VAC INPUT, CHANGE F1 TO 2 AMPERES AND CONNECT PRIMARIES IN SERIES AS FOLLOWS:



5. CRI IS SARKES-TARZIAN MODEL 50.

516F-2 AC Power Supply, Schematic Diagram
Figure 7-1

TP2-1307-014

