

**This Manual is provided by**  
**CBTricks.com**

Someone who wanted to help you repair your equipment  
scanned this manual.

If you would like to help us put more manuals online support us.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. to pay my costs. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). I all didn't do all this work for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.  
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.  
Thank you for any support you can give.

PHOTOFACT® Folder



ARKAY MODELS  
SQ-9, SQ-9W



MODEL SQ-9W

ARKAY MODELS  
SQ-9, SQ-9W

TRADE NAME	Arkay Models SQ-9, SQ-9W		
MANUFACTURER	Arkay International, Inc., 88 - 06 Van Wyck Expressway, Jamaica 18, N. Y.		
TYPE SET	AC-Battery Operated Crystal Controlled 8 Tube Citizens Band Transmitter-Receiver		
POWER SUPPLY	110 - 120 Volts AC, 60 Cycles	RATING	58 Watts, .58 Amp. @117 Volts AC
FREQ. RANGE	Any 3 of Citizens Band Channels		4 Amp. @12.6 Volts DC
	1 thru 22		

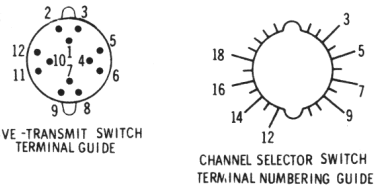
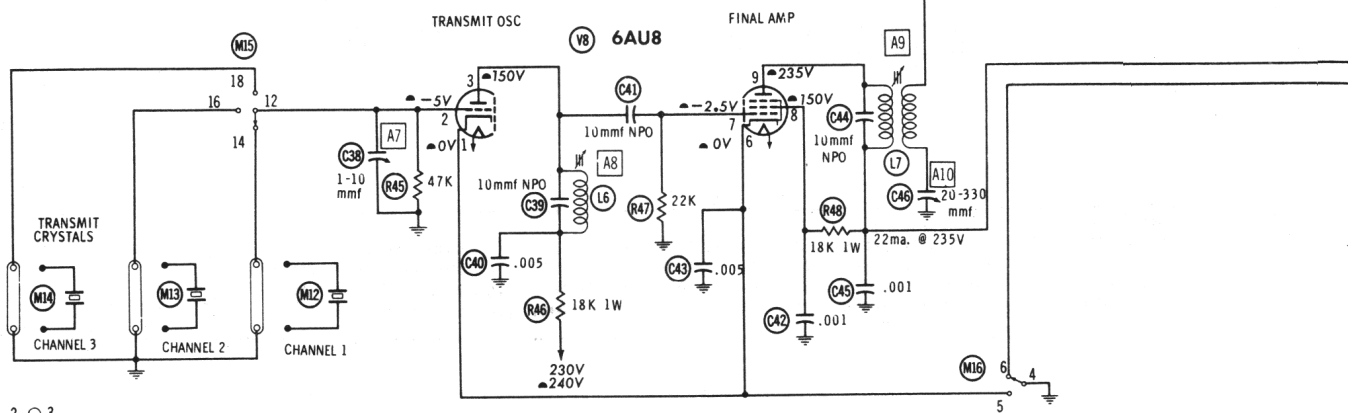
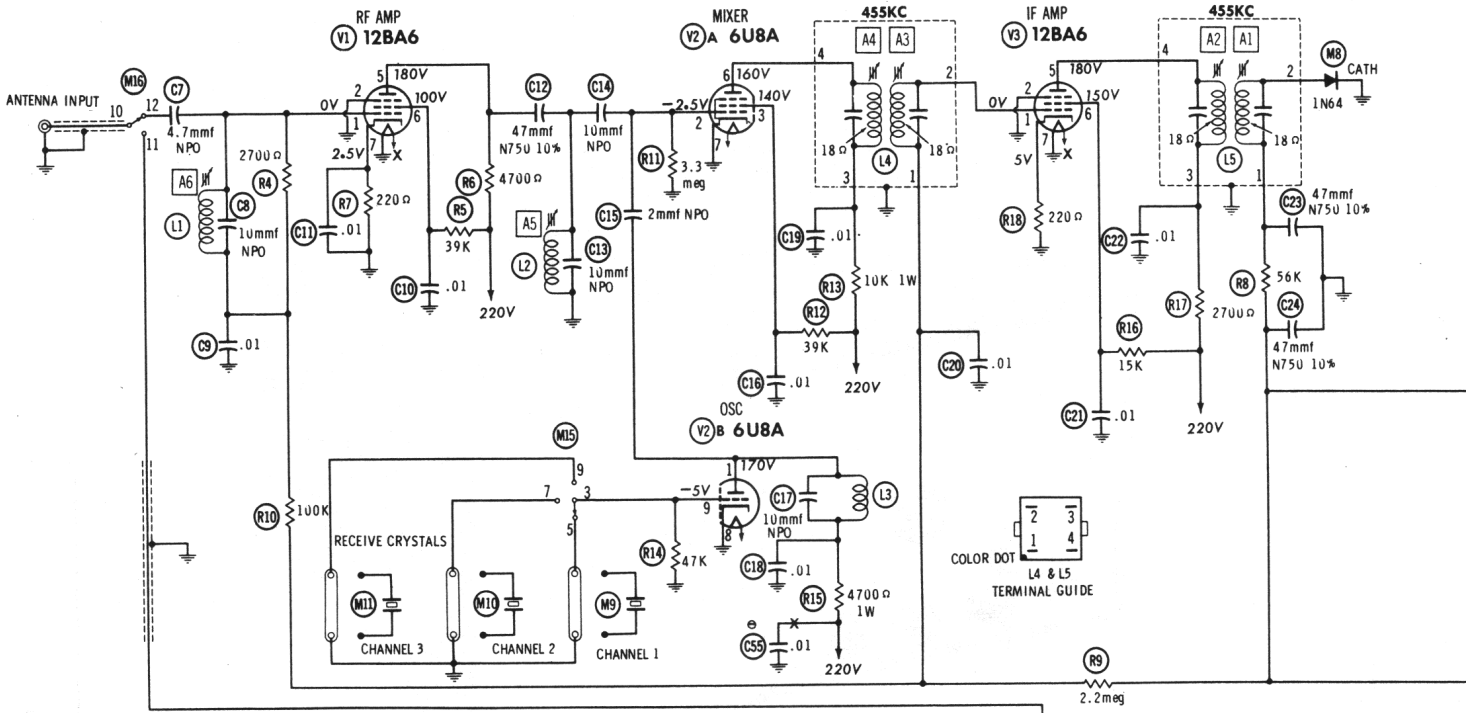
ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71).

**HOWARD W. SAMS & CO., INC.** Indianapolis 6, Indiana



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of KZ983

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

RESISTANCE READINGS

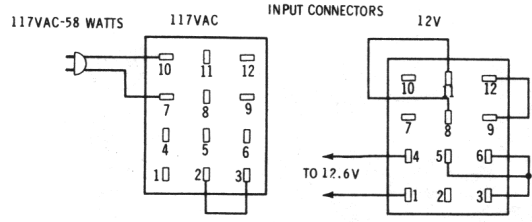
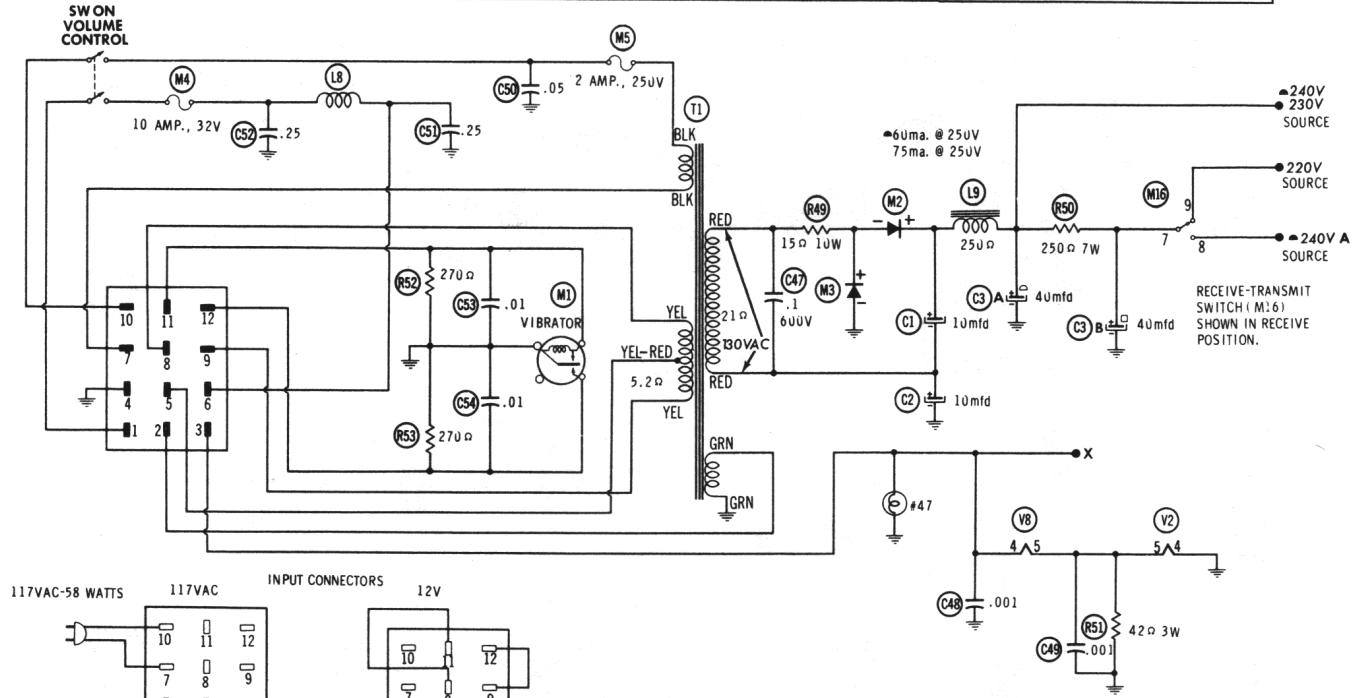
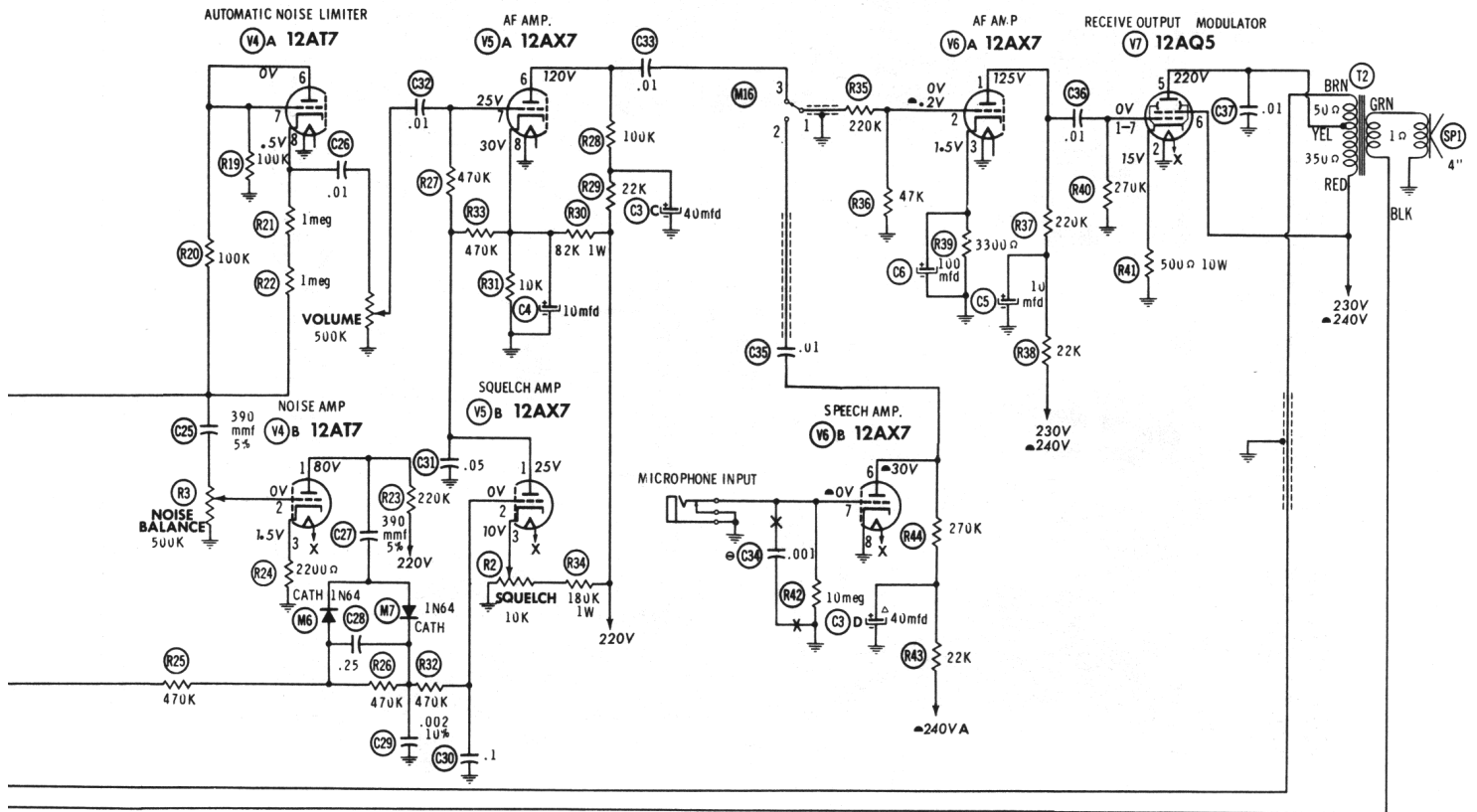
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12BA6	2.4 meg	0 Ω	FIL	FIL	+5200 Ω	+39K	220 Ω		
V2	6U8A	+5200 Ω	3.3 meg	+39K	FIL	FIL	+10K	0 Ω	0 Ω	47K
V3	12BA6	2.3 meg	0 Ω	FIL	FIL	+3200 Ω	+15K	220 Ω		
V4	12A7	+220K	400K	2200 Ω	FIL	FIL	80K	80K	2.1 meg	NC
V5	12AX7	480K	1.1 meg	7000 Ω	FIL	FIL	+122K	950K	10K	NC
V6	12AX7	+242K	47K	3300 Ω	FIL	FIL	+292K	0 Ω	0 Ω	NC
V7	12AQ5	NC	500 Ω	FIL	FIL	+600 Ω	+250 Ω	270K		
V8	6AU8	0 Ω	47K	+18K	FIL	FIL	0 Ω	22K	+18K	+650 Ω

ALL MEASUREMENTS MADE IN "RECEIVE" POSITION UNLESS OTHERWISE DESIGNATED.  
 ▲ MEASURED IN "TRANSMIT" POSITION.  
 † MEASURED FROM OUTPUT OF M2.

NC NO CONNECTION

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION  
 DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

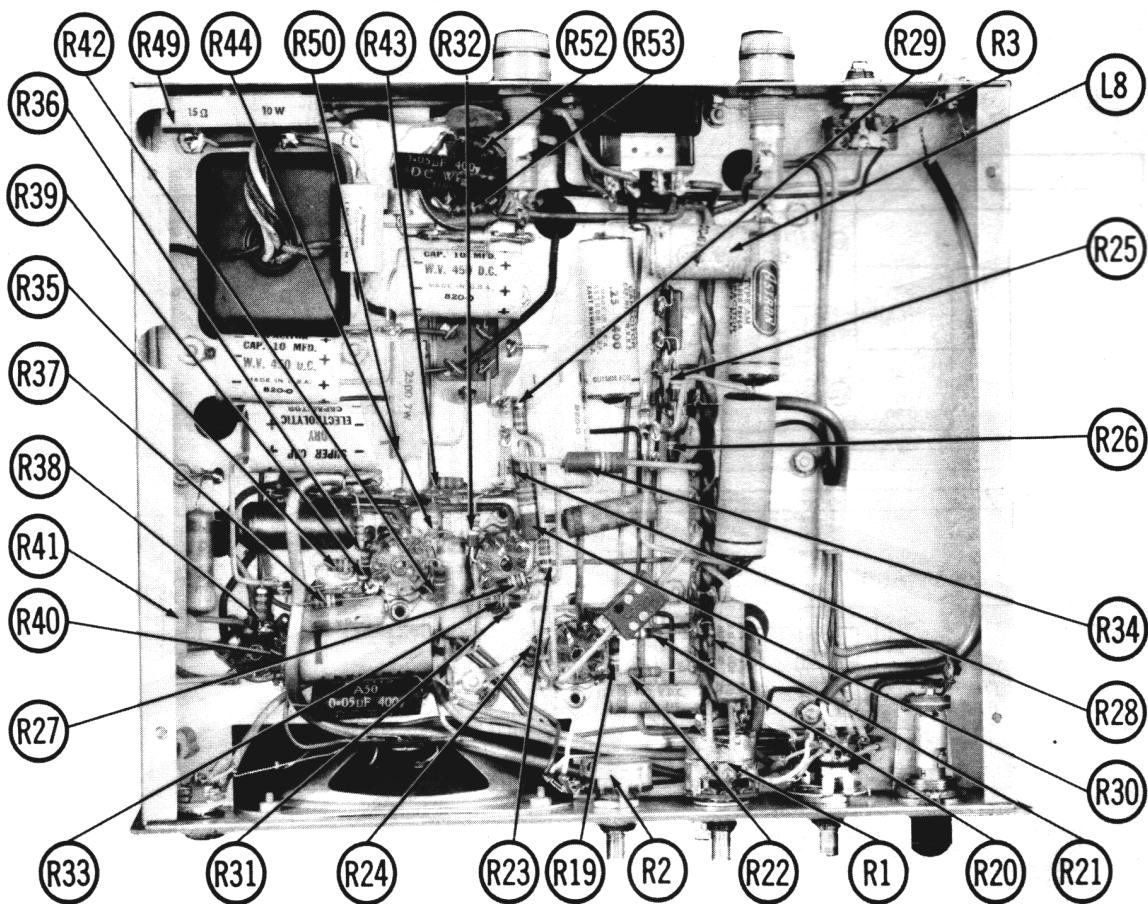
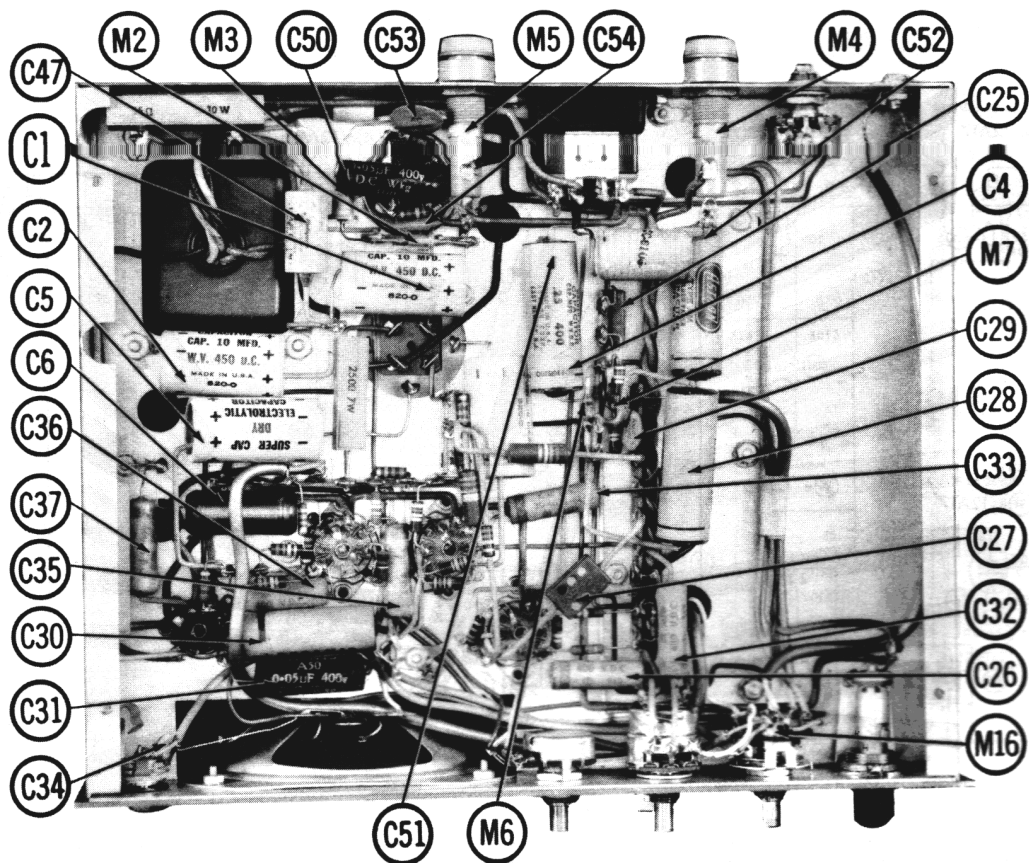
A PHOTOFAC STANDARD NOTATION SCHEMATIC  
 © Howard W. Sams & Co., Inc. 1962



NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

**NOTICE**  
 ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71).

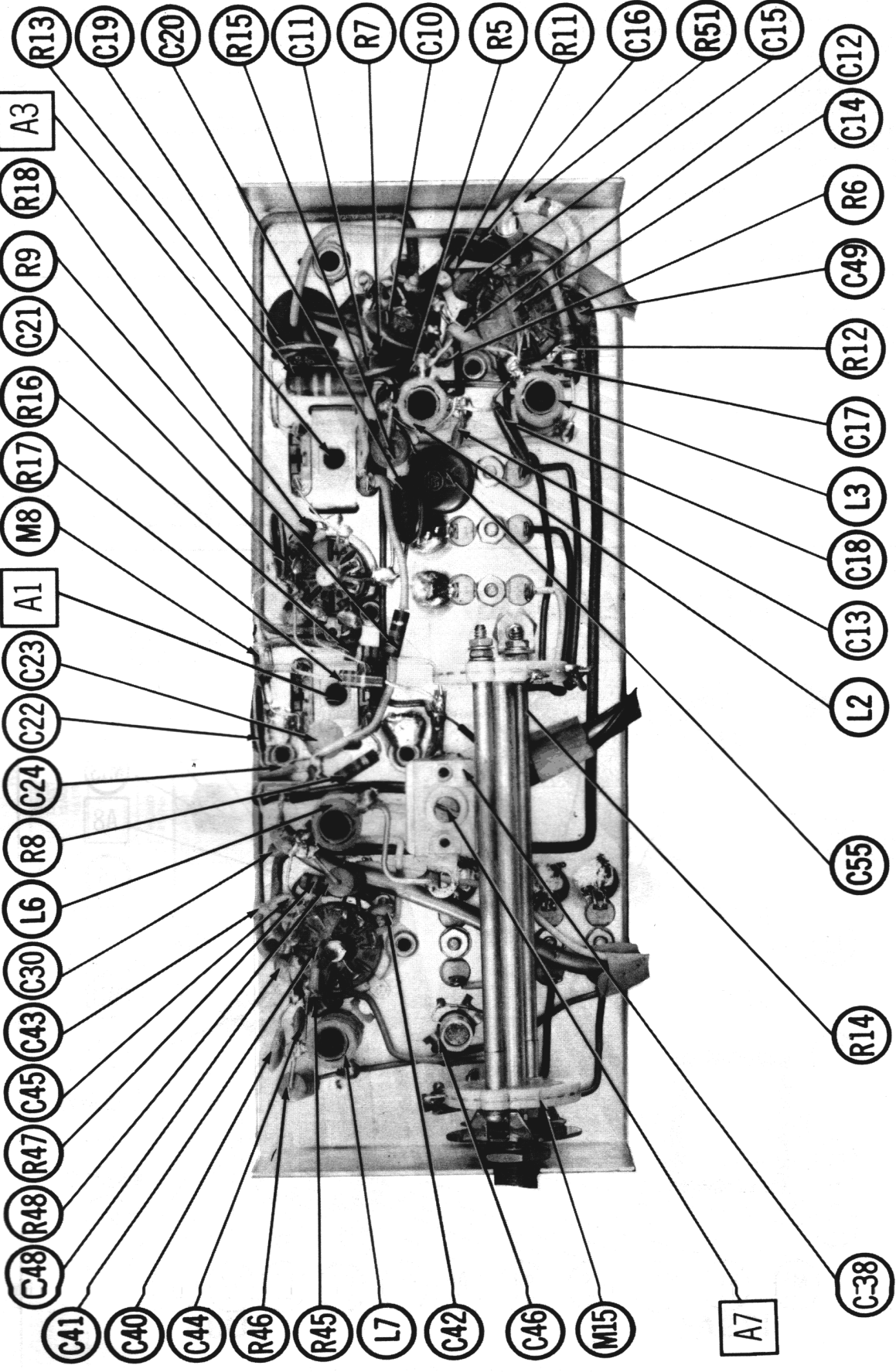
**ARKAY MODELS SQ-9, SQ-9W**



CHASSIS-BOTTOM VIEW

455KC

455KC



RF-IF SUBCHASSIS-BOTTOM VIEW



# ALIGNMENT INSTRUCTIONS

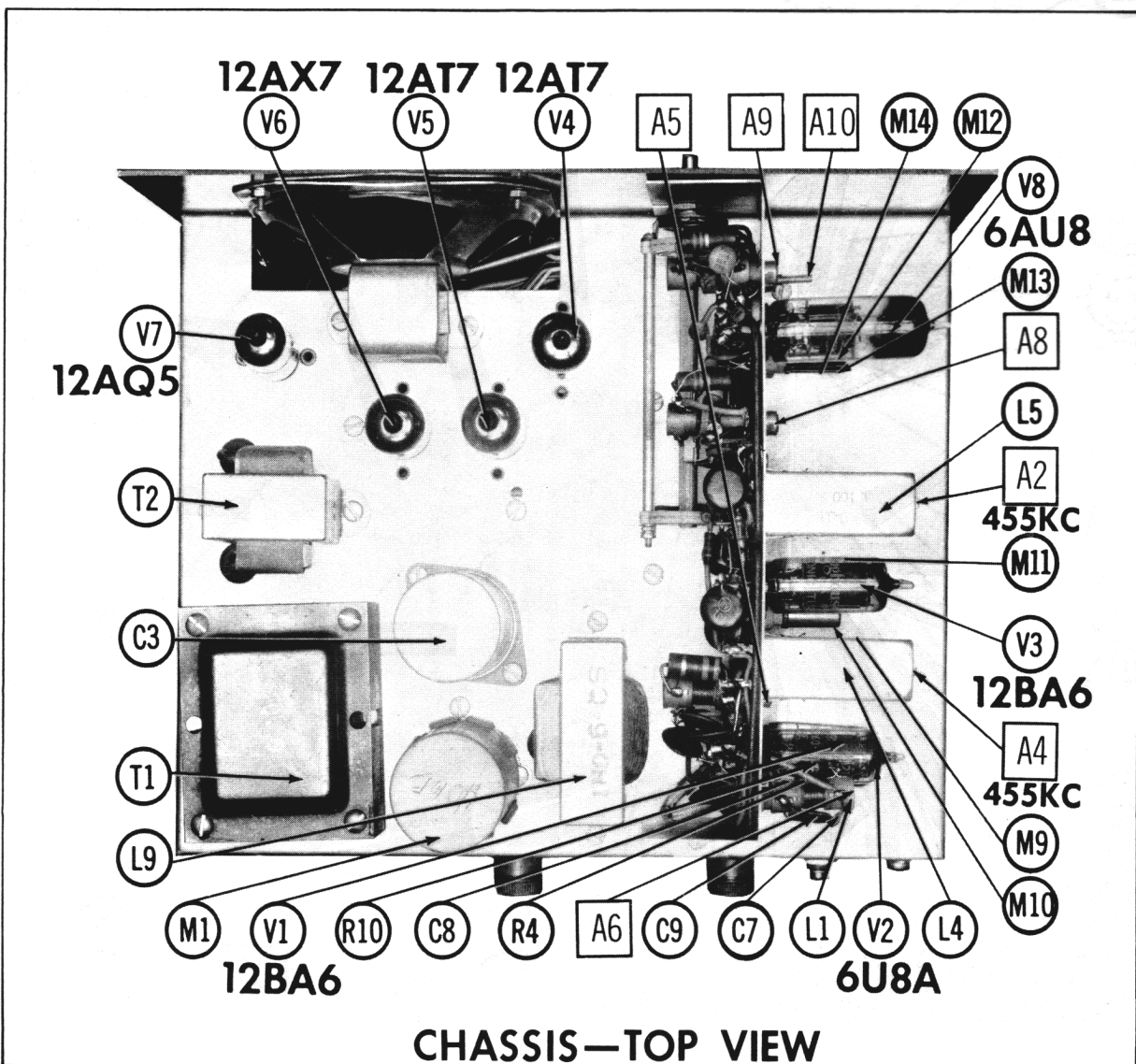
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

## RECEIVER ALIGNMENT

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
High side thru .001mfd to antenna input jack. Low side to chassis.	455KC (400% Mod.)	Channel 11	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output.
"	Channel 11 Freq.	Channel 11	"	A5, A6	Adjust for maximum output. If crystals are closely spaced, use center channel frequency.

## TRANSMITTER ALIGNMENT

Adjust A7 to center channel frequency using a Frequency meter.  
 Connect the DC probe of VTVM to pin 7 (grid) of Final. Common to Chassis. Adjust A8 for maximum deflection. Recheck A7.  
 Adjust A9 and A10 for maximum output using a Field Strength meter.



CHASSIS—TOP VIEW

# PARTS LIST AND DESCRIPTIONS

## FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.
C51	.25 4.00V		P488N-25	CUBAP25	4DP-5-254	GEM-4025	4TM-P25
C52	.25 400V		P488N-25	CUBAP25	4DP-5-254	GEM-4025	4TM-P25
C53	.01		BFD-01	DD-103	CCD-103	B-110	5HK-S10
C54	.01	Note 1	BFD-01	DD-103	CCD-103	B-110	5HK-S10
C55	.01		BFD-01	DD-103	CCD-103	B-110	5HK-S10

Note 1. Not used in some versions.

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING	CAP.	VOLT.	REPLACEMENT DATA						
				ARKAY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	450	10	450	BR1045	PR81720	BR1045	QTI-6	TC72	TD-10-450	TVA-1705
C2	450	10	450	BR1045	PR81720	BR1045	QTI-6	TC72	TD-10-450	TVA-1705
C3A	450	40	450		AFR3-39		XC3-40			TVL-3764
C3B	450	40	450		PR81750		QTI-14			TVA-3740
C4	450	40	450	BR1045	PR81720	BR1045	QTI-6	TC72	TD-10-450	TVA-1705
C5	450	10	450	BR1045	PR81720	BR1045	QTI-6	TC72	TD-10-450	TVA-1705
C6	25	100	25	EBR100-25	PR81270	EBR100-25	QTI-23	TC3501	TD-100-25	TVA-1207

## CONTROLS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						INSTALLATION NOTES
			ARKAY PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	MALLORY PART No.	
R1A	500K	1/2	CM25966	B-40-8	A47-500K-Z	Q13-133	Q13-133	U48	Volume
B	Shaft			Not Req.	RS-2	76-2	76-2	Not Req.	Power Off-On
C	Switch			Not Req.	SWE-20	Q13-116	Q13-116	U18	Squelch
R2A	10K	1/2		B-15	A47-10K-Z	Q1-133	Q1-133	U50	Noise Balance
R3A	500K	1/2		B-59	A47-500K-S	Not Req.	Not Req.	Not Req.	
B	Shaft			Not Req.	PKS-1/4	Not Req.	Not Req.	Not Req.	

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C7	4.7 NPO		NFO-DI 4.7	DTZ-4R7	C10V47C	CCTO-4R7	CNO-547	10TCC-V47
C8	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C9	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C10	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C11	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C12	47 N750 10%		N750-DI 47	DTZ-47	C10Q47U	CCTN-470	CNO-447	10TCC-U-47
C13	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C14	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C15	2 NPO		NFO-DI 2.0	DTZ-2R2	C10V2C	CCTO-2R2	CNO-522	10TCC-V22
C16	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C18	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C19	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C20	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C21	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C22	.01		BFD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C23	47 N750 10%		N750-DI 47	DTZ-47	C10Q47U	CCTN-470	CNO-447	10TCC-U-47
C24	47 N750 10%		N750-DI 47	DTZ-47	C10Q47U	CCTN-470	CNO-447	10TCC-U-47
C25	390 5%		1469-00039	DTN-47	5R5739	CM-19B-391J	MS-339	
C26	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C27	390 5%		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C28	25 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C29	1.400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C30	.05 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C31	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C32	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C33	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C34	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C35	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C36	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C37	.01 400V		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C38	1-10		1469-00039	D6-103	CUB4S1	4DP-1-103	GEM-411	MS-339
C39	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C40	.005		BFD-005	DD-502	BYA10D5	CCD-502	CNO-410	5HK-D50
C41	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C42	.001		BFD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C43	.005		BFD-005	DD-502	BYA10D5	CCD-502	CNO-410	5HK-D50
C44	10 NPO		NFO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C45	.001		BFD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C46	20-330		P488N-1	DF-104	CUB6F1	6DP-4-104	GEM-601	6TM-P10
C47	1.600V		P488N-1	DF-104	CUB6F1	6DP-4-104	GEM-601	6TM-P10
C48	.001		BFD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C49	.001		BFD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C50	.05 400V		P488N-05	DD-503	CUB4S5	4DP-3-503	GEM-415	4TM-S5

Note 1

## RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			REPLACEMENT DATA				
			IRC PART No.	WORKMAN PART No.	REMARKS	ITEM No.	RATING	IRC PART No.	WORKMAN PART No.	REMARKS
R4	2700Ω					R29	22K			
R5	39K					R30	82K 1W			
R6	4700Ω					R31	10K			
R7	220Ω					R32	470K			
R8	56K					R33	470K			
R9	2.2meg					R34	180K 1W			
R10	100K					R35	220K			
R11	3.3meg					R36	47K			
R12	39K					R37	270K			
R13	10K 1W					R38	22K			
R14	47K					R39	3300Ω			
R15	47K 1W					R40	270K			
R16	15K					R41	500Ω 10W			
R17	2700Ω					R42	22K			
R18	220Ω					R43	270K			
R19	100K					R44	47K			
R20	100K					R45	47K			
R21	1meg					R46	18K 1W			
R22	1meg					R47	22K			
R23	250K					R48	18K 1W			
R24	470K					R49	15Ω 10W			
R25	470K					R50	15Ω 10W			
R26	470K					R51	250Ω 1W			
R27	470K					R52	493 3W			
R28	100K					R53	270Ω			

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		ARKAY PART No.	Merit PART No.	Stancor PART No.	
L1	Ant.				
L2	RF				
L3	Osc. Plate	BC-352	12-C1	RTC-8832	T607
L4	Input IF	BC-353	12-C2	RTC-8833	T608
L5	Output IF				
L6	Osc. Plate				
L7	Final Plate				
L8	Hash Choke				



# PARTS LIST AND DESCRIPTIONS (Continued)

## FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA				NOTES
	CURRENT (Measured)	INDUCTANCE DC RES. 1000 Ω	ARKAY PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
L9	.075A	250Ω	9.5 HY	C-1709			C-7X

## TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1 SEC. 2	ARKAY PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	117V ④ 5.8A or 12.8VCT ④ 2.2A DC	12.6V ④ 1.8A AC (AC Only)					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	ARKAY PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T2	7500Ω Tap	3-4Ω					

## SPEAKER

ITEM No.	TYPE		REPLACEMENT DATA		NOTES
	SIZE	FIELD	ARKAY PART No.	GUAM PART No.	
SP1	4"	PM	3-4Ω	4A15	

## VIBRATOR

ITEM No.	TYPE	INPUT VOLTS/FREQUENCY	REPLACEMENT DATA				NOTES
			ARKAY PART No.	CORNELIUS-DABLER PART No.	MALLORY PART No.	RADIART PART No.	
M1	Interrupter	12 115%	6301	G1601	6301	6301	

## POWER RECTIFIERS

ITEM No.	RATING CURRENT (Measured)	ARKAY PART No.	REPLACEMENT DATA		NOTES
			RCA PART No.	SARKES TARIAN PART No.	
M2	075A		INI763	F6	
M3	075A		INI763	F6	

## FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				BUSS PART No.
			ARKAY PART No.	FUSE	HOLDER	FUSE HOLDER	
M4	3AG	10A 32V		311010 (3AG 10A 32V)	155020	AGC 10	HKP
M5	3AG	2A 250V		312002 (3AG 2A 250V)	342001	AGC 2	HKD

## SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		ARKAY PART No.	GENERAL ELECTRIC PART No.	
M6	1N84			Squench Rect. Squench Rect. Detector
M7	1N84		1N84	
M8	1N84		1N84	

## MISCELLANEOUS

ITEM No.	PART NAME	ARKAY PART No.	NOTES
M9	Crystal		Receive
M10	Crystal		Receive
M11	Crystal		Receive
M12	Crystal		Transmit
M13	Crystal		Transmit
M14	Crystal		Channel Selector (Rotary Type)
M15	Switch		Transmit - Receive (Rotary Type)
M16	Switch		Transmit - Receive (Rotary Type)

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
8524 (Stranded) Available in Ten Colors  
Power Cord ..... Use BELDEN No. 1785-B (6 Ft. Length)  
1725-K (1½ Ft. Length.)