



Instructions

THOUS TO HUMAN

This manual is written for the purpose of maintenance and service by persons who are familiar with the principles and dangers of handling electric circuits. It does not purport to give a complete statement of the safety practices which should be observed in the use of other electronic equipment or in the servicing of this equipment by untrained or inexperienced personnel. It is intended for such personnel and

This information is provided for your aid; it should not be used to modify earlier equipments to incorporate new features except under specific instructions. Please mention the revision number when writing for correspondence.

REPLACEMENT PARTS

The parts list contained in this manual includes all principal replacement parts. The symbol numbers are the same as those appearing on elementary and



GENERAL ELECTRIC

If You Didn't Get This From My Site,
Then It Was Stolen From...

www.SteamPoweredRadio.Com

GENERAL SERVICE INFORMATION

SAFETY NOTICE

WARNING

VOLTAGES USED FOR THE OPERATION OF THIS EQUIPMENT ARE DANGEROUS TO HUMAN LIFE.

This instruction manual is written for the general guidance of maintenance and service personnel who are familiar with and aware of the dangers of handling electric and electronic circuits. It does not purport to include a complete statement of the safety precautions which should be observed in servicing this or other electronic equipment. The servicing of this equipment by inadequately trained or inexperienced personnel involves risks to such personnel and to the equipment for which the manufacturer can not accept responsibility. Personnel servicing this equipment should familiarize themselves with first-aid treatment for electrical burns and electrical shock.

PRODUCTION CHANGES

From time to time it becomes necessary to make changes in the equipment described in this book. Such changes are made to improve performance or meet component shortages and are identified by a revision letter following the model number stamped on the nameplate. The changes in the equipment as they affect the instruction book are listed

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

on a Production Change Sheet included in the book. If no Production Change Sheet is included, no changes have been made. The revision letter appearing on the title page indicates the equipment revision to which the book corresponds.

This information is provided as a servicing aid; it should not be used to modify earlier equipments to incorporate later revisions except under specific instructions. Please mention the revision letter in any correspondence.

REPLACEMENT PARTS

The parts list contained in this book includes all principal replacement parts. The symbol numbers are the same as those appearing on elementary and other drawings. Whenever possible, replacement parts should be obtained from a local electronics supply dealer. If it is necessary to order a part (other than a tube) from the General Electric Company, please include the symbol number, description, and drawing number of the part and model number of the unit. Orders may be sent to the nearest Electronics Division office appearing on the list at the end of this book or the General Electric Company, Technical Products Department, Electronics Park, Syracuse, N.Y.

REPLACEMENT TUBES

In all cases replacement tubes must be ordered from a local tube distributor.

INDUSTRIAL ELECTRONICS DIVISION

GENERAL  **ELECTRIC**

ELECTRONICS PARK, SYRACUSE, N. Y.

WARRANTY

The General Electric Company (hereinafter called the Company) warrants to the Purchaser that the equipment will be free from defects in material, workmanship, and title, and will be of the kind and quality designated or described in the contract. The foregoing warranty is exclusive of all other warranties whether written, oral, or implied (including any warranty of merchantability or fitness for purpose). If it appears within one year from the date of shipment by the Company that the equipment described in this instruction book does not meet the warranties specified above and the Purchaser notifies the Company promptly, the Company shall thereupon correct any defect, including non-conformance with the specifications, at its option, either by repairing any defective part or parts or by making available at the Company's plant, a repaired or replacement part. In lieu of the foregoing, the standard published tube warranties in effect on the date hereof shall apply to new electronic tubes. If the equipment is installed, or its installation supervised, by the Company, said one year shall run from the completion of installation provided same is not unreasonably delayed the Purchaser. The conditions of any test shall be mutually agreed upon

and the Company shall be notified of and may be represented at all tests that may be made. The liability of the Company to the Purchaser (except as to title) arising out of the supplying of the said equipment, or its use, whether on warranty, contract or negligence, shall not in any case exceed the cost of correcting defects in the equipment as herein provided and upon the expiration of said one year, all such liability shall terminate. The foregoing warranty does not apply to any used equipment supplied under contract or any equipment supplied under contract which bears a trademark of a manufacturer other than that of the Company. Because of the more restrictive warranties expressed by other manufacturers, the Company under contract can only make available to the Purchaser the warranty of the manufacturer on all such equipment. The Company will secure for the Purchaser at his request copies of the manufacturer's standard published warranty applicable to all such equipment. Used equipment is sold as is without warranty unless otherwise specifically provided in writing in the sales contract. The foregoing shall constitute the sole remedy of the Purchaser and the sole liability of the Company.

SAFETY TO HUMAN LIFE

Since the use of high voltages which are dangerous to human life is necessary to the successful operation of the FM broadcast transmitting equipment covered by these instructions, certain reasonable precautionary measures must be carefully observed by the operating personnel during the preliminary adjustment and the operation of the equipment.

The equipment is self-contained within steel cabinets which provide protection to personnel. The cabinets are provided with access doors fitted where necessary with safety interlock switches which shut off dangerous voltages within the cabinets when access doors are opened.

Additional switch enclosures that are noninterlocked and normally unattended should be kept locked. Rules 1 and 2, below, apply particularly to this type of equipment.

While every practicable safety precaution has been incorporated in this equipment, the following rules must be strictly observed:

1. KEEP AWAY FROM LIVE CIRCUITS. It is recommended that input power to the equipment be disconnected when any work is performed within a cabinet. When input power is connected to the equipment, no person should be permitted to handle any portion of the equipment supplied with power, or to reach within, or in any manner gain access to a cabinet interior with the interlocked doors closed.

2. DON'T SERVICE OR ADJUST ALONE. Under no circumstances should any person reach within the enclosure for the purpose of servicing or adjusting the equipment without the immediate presence or assistance of another person capable of rendering aid.

3. DON'T TAMPER WITH INTERLOCKS. Under no circumstances should any door or safety interlock switch be removed, short-circuited, or tampered with in any way, nor should reliance be placed upon the interlock switches for removing voltages from the equipment.

IMPORTANT

It is highly recommended that a schedule for routine preventive maintenance be set up and followed. The frequency of inspections may vary with different components and with operating conditions.

Some maintenance, such as inspection for accumulated dust, should probably occur daily, while other checks and adjustments need only be made weekly, monthly or quarterly. Where uncertainty exists, it is recommended that checks be made at frequent intervals at first. Experience will then indicate what frequency of inspection and maintenance is necessary.

Refer to MAINTENANCE section.

PARTS LIST

250 W.F.M. BROADCAST EQUIPMENT 4BT1AL

This list includes all principle replacement parts. The symbol numbers used are the same as those appearing on schematic and other diagrams.

When ordering parts from the General Electric Co., it is requested that as much of the following information as possible be furnished.

TRANSMITTER

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- BLOWER ----

1BM1	Cooling Blower Motor: P-A Tubes and Cabinet Motor: rated 1/20 HP, 1725 RPM, 230 Volts A-C. single phase, 50/60 cycles. GE Motor 5KH23AC258 Blower: clockwise rotation; down-blast discharge; free delivery 171 CFM; 2220 OV; 0.033 BHP. American Blower Corp. type #OCW-DBD	P-7767980-P2
------	--	--------------

---- CAPACITORS ----

* 1C1	Filter Capacitor: Audio Input Preemphasis Mica; 10,000 mmfd $\pm 10\%$, 300 vdcw. RCM35L1002K3	P-3R28-P9
1C2	Filter Capacitor: Audio Input Preemphasis Same as 1C1.	
*1C3	Feedback Capacitor: 2nd-LV2-to 1st-LV1 Audio Paper; 0.03 mmfd $\pm 10\%$, 600 vdcw Sprague Cat. #PPX24B15	M-7478026-P11

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- CAPACITORS CONTINUED ----		
1C4	Feedback Capacitor: 2nd-1V2-to 1st-1V1 Audio. Same as 1C3.	
1C5	Coupling Capacitor: 1st-1V1-to 2nd-1V2-Audio. Paper; .05 mfd $\pm 30\%$ -10%, 600 vdcw. Sprague Co. Cat. #PPX24B17	P-7768969-P35
1C6	Coupling Capacitor: 1st-1V1-to 2nd-1V2-Audio. Same as 1C5.	
*1C7	R.F. Bypass Capacitor: Crystal-1Y1- Heater Mica, <u>i</u> 500 mmfd $\pm 10\%$ 500 vdcw.	P-3R28-P3
1C8	R.F. Bypass Capacitor: 1st Audio- 1V1-Grid. Mica; 100 mmfd $\pm 10\%$, 500 vdcw.	P-3R26-P12
1C9	R.F. Bypass Capacitor: 1st Audio- 1V1-Grid. Same as 1C8.	
1C10	Frequency Compensating Capacitor for Crystal-1Y1. Air-trimmer; 25/ mmfd.	P-3R47-P33
1C11	Voltage Dividing Capacitor for Crystal-1Y1. Silver mica; 27 mmfd $\pm 5\%$, 500 vdcw.	P-3R26-P65
1C12	Voltage Dividing Capacitor for Crystal-1Y1. Silver mica; 330 mmfd $\pm 2\%$, 500 vdcw.	P-7768436-P20
*1C13	Bypass Capacitor: Crystal Oscillator-1V4-Screen. Mica; 8200 mmfd $\pm 10\%$, 300 vdcw. RCM35L8201K3	P-3R28-P8
*1C14	Coupling Capacitor: Crystal Oscillator-1V4-to Crystal Amplifier- 1V5. Mica; 470 mmfd $\pm 10\%$, 500 vdcw RCM20L4700K5	P-3R26-P16
1C15	Bypass Capacitor: Crystal Amplifier-1V5-Screen Same as 1C13.	

*This item or equivalent can often be obtained from a local
Radio Dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
---- CAPACITORS CONTINUED ----		
1C16	Bypass Capacitor: Crystal Amplifier-1V5-Plate. Same as 1C13.	
1C17	Boosting Capacitor: 1st-1V1-Audio, High Frequency Gain. Mica, 3,300 mmfd $\pm 10\%$, 500 vdcw.	P3R28-P5
1C18	Not used.	
1C19	Bypass Capacitor: Modulator-1V3- First Anode Dropping Resistor-1R50. Same as 1C13.	
1C20	Bypass Capacitor: Modulator-1V3- Anode Tank. Same as 1C13.	
1C21	Bypass Capacitor: 1st Doubler -1V9-Grid Tank. Same as 1C13.	
1C22	Bypass Capacitor: 1st Doubler -1V9-Cathode. Same as 1C13.	
1C23	Bypass Capacitor: 1st Doubler -1V9-Plate Tank. Same as 1C13.	
1C24	Bypass Capacitor: 2nd Doubler -1V10-Grid Tank. Same as 1C13.	
1C25	Bypass Capacitor: 2nd Doubler -1V10-Plate Tank. Same as 1C13.	
1C26	Bypass Capacitor: 3rd Doubler -1V11-Grid Tank, Same as 1C13.	
1C27	Not used.	
1C28	Not used.	

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
----CAPACITORS CONTINUED ----		
1C29	Not Used.	
1C30	Bypass Capacitor: 3rd Doubler -1V11- Plate Tank Same as 1C13.	
1C31	Bypass Capacitor: 1st Tripler -1V12- Grid Tank Same as 1C13.	
1C32	Bypass Capacitor: 1st Tripler -1V12- Plate Tank Same as 1C13.	
1C33	Bypass Capacitor: 2nd Tripler -1V13- Grid Tank Same as 1C13.	
1C34	Bypass Capacitor: 2nd Tripler -1V13- Plate Tank Same as 1C13.	
1C35	Bypass Capacitor: 2nd Tripler -1V13- Plate Supply Same as 1C13.	
1C36	Bypass Capacitor: 4th Doubler -1V14- Grid Tank Same as 1C13.	
1C37 thru 1C39	Not Used.	
1C40	Bypass Capacitor: 4th Doubler -1V14- Cathode Same as 1C7.	
1C41	Bypass Capacitor: 4th Doubler -1V14- Screen Same as 1C7.	
1C42	Bypass Capacitor: 4th Doubler -1V14- Plate Tank Same as 1C7.	

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

----- CAPACITORS CONTINUED -----

- 1C43 Bypass Capacitor: Final Tripler
-1V15- Grid Meter- 1M8
Same as 1C7.
- 1C44 Bypass Capacitor: Final Tripler
-1V15- Filament
Same as 1C7.
- 1C45 Bypass Capacitor: Final Tripler
-1V15- Cathode Meter- 1M7
Same as 1C7.
- 1C46 Bypass Capacitor: Final Tripler
-1V15- Screen
Same as 1C7.
- 1C47 Not Used.
- 1C48 Bypass Capacitor: Final Tripler
-1V15- Cathode
Same as 1C7.
- 1C49 Bypass Capacitor: Final Tripler
-1V15- Grid
Same as 1C7.
- 1C50 Bypass Capacitor: Phasitron- 1V3-
2nd Focus Supply
Same as 1C13.
- 1C51 Bypass Capacitor: Phasitron- 1V3-
1st Focus Supply
Same as 1C13.
- 1C52 Bypass Capacitor: Phasitron- 1V3-
Neutral Plane Supply
Same as 1C13.
- 1C53 Bypass Capacitor: Phasitron- 1V3-
Neutral Plane Supply
Same as 1C13.
- 1C54 Bypass Capacitor: Tuning Indicator
Meter- 1M9
Same as 1C13.

SYMBOL	DESCRIPTION	G.E. DWG.
---- CAPACITORS CONTINUED ----		
1C55	Not Used.	
1C56	Filter Capacitor: Phasitron- 1V3- Filament Supply Electrolytic; 2000 mfd, 15 volts. Mallory Cat. #WP041	M-7473661-P12
1C57	Filter Capacitor: Phasitron- 1V3- Filament Supply Same as 1C56.	
✓ 1C58	Bypass Capacitor: Modulator Panel Regulated Supply Pyranol; 1 mfd $\pm 10\%$, 500 vdcw. GE Cat. #23F320	P-3R48-P1
1C59	Not Used.	
1C60	R-F Filter Capacitor: Crystal Heater Supply Same as 1C13.	
1C61	R-F Filter Capacitor: Crystal Heater Supply Same as 1C13.	
1C62 thru 1C103	Not Used.	
1C104	Tuning Capacitor: Final Tripler Final Tripler-1V15- Plate Tank Variable; 35 mmfd. Hammarlund Cat. #HFAD-35-B	M-2R26-P5
* 1C105	Bypass Capacitor: I-P-A-Grid Meter- 1M6 Mica; 680 mmfd $\pm 10\%$, 500 vdcw RCM30L6800K5	P-3R28-P1
1C106	Tuning Capacitor: I-P-A Grid Tank Variable; 50 mmfd. Hammarlund Co. Cat. #HFAD-50-B	M-2R26-P6

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
----- CAPACITORS CONTINUED -----		
LC107	Bypass Capacitor: I-P-A Cathode Meter- 1M5 Same as LC105.	
LC108	I-P-A Cathode Bypass Capacitor Same as LC105.	
LC109 & LC110	Not Used.	
LC111	Tuning Capacitor: I-P-A Plate Tank Same as LC106.	
LC112	Tuning Capacitor: P-A Grid Tank Same as LC106.	
LC113	Not Used.	
LC114	Bypass Capacitor: P-A Grid Meter -1M4 Same as LC105.	
LC115	Bypass Capacitor: P-A Grid Same as LC105.	
LC116	Bypass Capacitor: P-A Filament Same as LC105.	
LC117	Bypass Capacitor: P-A Filament Same as LC105.	
LC118 thru LC120	Not Used.	
LC121	Bypass Capacitor: P-A Voltmeter -1M3 Same as LC105.	
LC122	Bypass Capacitor: P-A Plate Current Meter- 1M2 Same as LC105.	
*LC123	Bypass Capacitor: P-A Plate Supply Mica; 470 mmfd $\pm 10\%$, 2500 vdcw. RCM55L4700K25	P-3R32-P9

SYMBOL	DESCRIPTION	G.E.DWG.
----- CAPACITORS CONTINUED -----		
1C124	Tuned Bypass Capacitor: P-A Screen; Series Resonates Screen Inductance Variable; 100 mmmfd. Hammarlund Co. Cat. #HFAD-100-B	M-2R26-P7
1C125	By-pass Capacitor: P-A Plate Current Meter-1M2. Same as 1C123.	
1C126		
1C130	Not used.	
1C131	Voltage Dividing Capacitor: R-F Voltmeter- 1V30 Air-trimmer: 10/ ⁴ mmmfd.	P-3R47-P31
1C132	Bypass Capacitor: R-F Output Meter- 1M1 Same as 1C105.	
*1C133	Load Capacitor: R-F Voltmeter -1V30 Mica; 470 mmmfd $\pm 5\%$, 500 vdcw.	P-3R26-P56
1C134	Bypass Capacitor: R-F Voltmeter -1V30 Filament Ceramic; 470 mmmfd $\pm 10\%$, 500 vdcw.	M-7478611-P10
1C135	Bypass Capacitor: R-F Voltmeter -1V30- Filament Same as 1C134.	
1C136 thru 1C140	Not Used.	
✓ 1C141	Filter Capacitor: Low Voltage Supply Pyranol; 10 mfd $\pm 10\%$, 600 vdcw.	P-3R24-P5
✓ 1C142	Filter Capacitor: Low Voltage Supply Same as 1C141.	
✓ 1C143	Filter Capacitor: Voltage Regulators- 1V34, 1V35, 1V36- Grids Pyranol; 1 mfd $\pm 10\%$, 500 vdcw. G.E. Cat. #23F326	P-3R48-P11

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
----- CAPACITORS CONTINUED -----		
✓ 1C144	Coupling Capacitor: Hum to Regulating Control- 1V37- Grid Same as 1C143.	
✓ 1C145	Bypass Capacitor: Regulating Control- 1V37- Screen Same as 1C143.	
1C146	R-F Filter Capacitor: Regulated Supply to Modulator Panel Same as 1C13.	
1C147	R-F Filter Capacitor: Regulated Supply to Modulator Panel Same as 1C13.	
1C148 thru 1C150	Not Used.	
1C151	R-F Filter Capacitor: Filament Supply to Modulator Panel Same as 1C13.	
1C152	R-F Filter Capacitor: Filament Supply to Modulator Panel Same as 1C13.	
✓ 1C153	Filter Capacitor: High Voltage Supply Pyranol: 10 mfd $\pm 10\%$, 2500 vdcw G.E. Cat. #25F826-G2	P-3R22-P8
✓ 1C154	Filter Capacitor: High Voltage Supply Same as 1C153.	
1C155 thru 1C160	Not Used.	
✓ * 1C161	Bypass Capacitor: Power Input Line Pyranol: 0.5 mfd $\pm 10\%$, 1000 vdcw. G.E. Cat. #23F325	P-3R48-P6
✓ 1C162	Bypass Capacitor: Power Input Line Same as 1C161.	

*This item or equivalent can often be obtained from a local radio dealer.

(C-?) 10uf 600vdc PyRANOL
Bottom of Driver Cabinet

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

----- RECTIFIER -----

*1CR1	Disk Rectifier: Phasitron -1V3- Filament. Selenium; bridge type GE model #6RS41AB1	K-7115183-P1
-------	---	--------------

----- FUSES -----

*1F1	Input Fuse: Crystal Heater Power. Cartridge type; 3 amps, 250 volts. GE Cat. #3167	K-1R11-P1
1F2	Input Fuse: Crystal Heater Power Same as 1F1.	

----- INDICATING DEVICES -----

*1IL1	Pilot Indicating Light: Crystal Heater On-Off (Thermo-Controlled) GE Type 47 Mazda	Mazda #47
1IS1	Control Indicating Switch; Plate "On" Push-button type: translucent green button; Mazda Lamp #46. GE Cat. #2280664G-3	K-7107849-P6
1IS2	Control Indicating Switch; Plate "Off" Push-button type: translucent red button; Mazda Lamp #46. GE Cat. #2280664G-2	K-7107849-P5

----- JACKS AND RECEPTACLES -----

*1J1	Output Connector: Final Tripler -1V15 Bakelite; single contact, female. Amphenol Cat. #83-1R	M-2R22-P3
------	---	-----------

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
--------	-------------	-----------

----- JACKS AND RECEPTACLES -----
CONTINUED

1J2	Not Used.	
1J3	Input Connector; I-P-A Grid Same as 1J1.	
1J4	Output Connector: Station-Mon- itor Coupling Loop Same as 1J1.	
1J5	Not Used.	
1J6	Monitoring Jack: Regulated Supply Voltage Phone tip: high voltage, female, standard size. Insuline Corp. Cat. #1889	K-7107869-Pl
1J7	Output Connector: Station Monitor Double end: sleeve contact; female. Amphenol Cat. #83-1F	M-2R22-P6
1J8	Input Connector: R-F Voltmeter -1V30 Same as 1J1.	
1J9	Output Connector: Transmission- Line Voltage Divider (for R-F Voltmeter- 1V30) Same as 1J1.	

----- CONTACTORS AND RELAYS -----

1K1	Timing Relay: Power Application to Plate Voltage Application Delay (For Filament Heating) Adjustable: 0-100 seconds delay, 115 volts, 60 cycles. Paragon Model 815	M-7474528-Pl
1K2	Main Contactor: Plate Voltage Application 110 volts, 60 cycles, 4 poles. 2 interlocks, left N.O., right N.C. GE Cat. #4986958N2; GE type #CR2810- 1811N2X13	P-7767981-Pl5

* This item or equivalent can often be obtained from a
local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- CONTACTORS AND RELAYS CONTINUED ----		
1K3	Control Relay: Plate "On" 115 volts, 60 cycles; 2 N O, 2 N C, DPDT contacts. GE type #12HMA11B11	P-7767982-P1
1K4	Control Relay: Plate "Off" Same as 1K3.	
1K5	Auxiliary Relay: Shorts Out Surge Resistor- 1R185 Coil rating 115 volts, 60 cycles. Leach Relay type #1521.	M-7477542-P1*
1K6	Auxiliary Relay: Controls 1K5 and P.A. Screen.(Energized by PA Grid Current) Coil resistance 2000ohms approx., current break 60 ma d-c, inductive 500 vdc; 1 form A, 1 form B contact. Automatic Elec. Co. Series BQA, single wound.	P-7766441-P15
1K7	Overload Relay: Low Voltage Supply Coil resistance 10 ohms or less, pull in 600 ma /25; current break 1/2 amp. inductive 115 vac; 1 form A, 2 form B contacts. Automatic Elec. Co. Series BQA, single wound.	P-7766441-P12
1K8	Overload Relay: High Voltage Supply Same as 1K7.	
1K9	Auxiliary Relay: Removes Power from and Ties Across Timed Contact of 1K1. Same as 1K3.	

---- INDUCTORS ----

1L1	Modulation Coil Produces Axial Field in Phasitron 1V3.	ML-7478020-G1
-----	---	---------------

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- INDUCTORS CONTINUED ----		
1L2	D-C Return Choke Coil: Cathode of Crystal Oscillator- 1V4 Inductance 25.0 mh 45% ; max. current 75 ma; resistance 159 ohms. F. W. Sickles SC-104A	K-1R15-P8
1L3	R-F Load Choke Coil: Crystal Oscillator- 1V4. Inductance 2 1/2 mh; distributed capacitance 1 mfd; d-c resistance 50 ohms; current rating 125 ma.	K-7107898
1L4	Filter Reactor: Phasitron- 1V3- Filament Supply Inductance 0.25 henry min. at 0.3 amp. d-c; resistance 10 ohms.	M-7477908
1L5	Tank Coil: Final Tripler- 1V15- Plate 2 turns of .080" dia. copper wire; r.h. wound; 7/16" I.D.	K-7114893
1L6	Coupling Coil: Final Tripler- 1V15- Output 1 turn of .064" copper wire, 7/8" I.D. x 1 5/16" lg.	K-7114894
1L7	Coupling Coil: I-P-A Grid Tank 1 turn of .064" copper wire 11/16" dia.	K-7114873
1L8	Tank Coil: I-P-A Grid 3 turns .102" dia. copper wire; l.h. wound; 21/32" I.D.	K-7114871-P2
1L9	R-F Choke Coil: D-C Supply, I-P-A Plate 20 turns .040" dia. copper wire; 5/16" I.D. x 1 1/2" lg.	K-7114875-P1
1L10	Tank Coil: I-P-A Plate 3 turns .102" dia. wire; r.h. wound; 21/32" I.'	K-7114871-P1

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
---- INDUCTORS CONTINUED ----		
LL11	Coupling Coil: Link, I-P-A Plate Tank to P-A Grid Tank Coil assembly.	ML-7114874-G1
LL12	Not Used.	
LL13	Tank Coil: P-A Grid 2 turns .102" dia. copper wire; l.h. wound; 21/32" I.D.	K-7114872-Pl
LL14	R-F Choke Coil: P-A Grid Same as LL9.	
LL15	Coupling Coil: P-A Plate Tank to Station Monitor 2 1/4" coil made of .080" dia. copper wire, 3/8" gap.	K-7114896
LL16	Tank Coil: P-A Plate Inductor, variable.	ML-7766898-G1
LL17	R-F Choke Coil: D-C Supply, P-A Plate 16 turns .064" copper wire; 1/2" I.D. x 2" lg.	K-7114876-Pl
LL18	Coupling Coil: P-A Plate Tank to Output Transmission Line 1 turn .080" dia. copper wire- tinned, 2 5/16" I.D.; 1/4" gap.	K-7114545
LL19	D-C Return Choke Coil: R-F Voltmeter- 1V30- Diode Current 15 turns .040" dia. copper wire; r.h. wound; 1/4" I.D. x 1 3/16" lg.	K-7114895
LL20	R-F Filter Coil: Crystal Heater Input to Modulator Panel 20 turns .0658" copper wire; 1/2" I.D. x 1 7/8" lg.	K-7108220-Pl
LL21	R-F Filter Choke Coil: Regulated Supply Input to Modulator Panel Inductance 1 mh; distributed capac- itance 1 mmfd; resistance 10 ohms; current rating 300 ma. National Co. Cat. # R-300	K-7108402-Pl

* This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

----- INDUCTORS CONTINUED -----

1L22	R-F Filter Coil: Filament Supply to Modulator Panel. Same as 1L20.	
1L23	R-F Choke Coil: D-C Supply, P-A Screen. 11 turns of .064" copper wire r.h. wound; 1 1/8" lg. x 1/2" I.D.	K-7116144-P1
1L24	R-F Choke Coil: D-C Supply, P-A Screen. Same as 1L3.	
1L25	Filter Reactor: Low-voltage Supply. Inductance 12 henries min. at 0.4 amp. DC; resistance 100 ohms max.	M-7475226
1L26	Filter Reactor: Low-voltage Supply. Same as 1L25.	
1L27	Filter Reactor: High-voltage Supply. Inductance 12 henries min. at 0.3 amp; resistance 165 ohms max.	M-7475225
1L28	Filter Reactor: High-voltage Supply. Same as 1L27.	

----- METERS -----

1M1	Indicating Meter: RF Output, Relative Level. 3 1/2"; DC rating/ma. G.E. type D053.	M-7475091-P2
1M2	Indicating Meter: P-A Plate Current. 3 1/2"; DC rating 500 ma.	K-7108892-P1
1M3	Meter: P-A Plate Voltage. 3 1/2"; DC rating 3 KV; resistance 1000 ohms per volt. (supplied with external resistor)	P-3R42-P24
1M4	Indicating Meter: P-A Grid Current. 3 1/2"; DC rating 30 ma.	P-3R43-P29

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
--------	-------------	-----------

---- METERS CONTINUED ----

1M5	Indicating Meter: I-P-A Cathode Current. 3 1/2"; DC rating 300 ma.	P3R35-P35
1M6	Indicating Meter: I-P-A Grid Current. 3 1/2"; DC rating 5 ma.	P3R35-P24
1M7	Indicating Meter: Final Tripler-1V15-Cathode Current. 3 1/2"; DC rating 100 ma.	P3R35-P32
1M8	Indicating Meter: Final Tripler-1V15-Grid Current. Same as 1M6.	
1M9	Indicating Meter: Multivoltage. (Voltage Indicator) 3 1/2"; DC rating 50-0-50 microamps. G.E. type D0-53.	M-7476192-P2
1M10	Indicating Meter: A-C Transmitter-operating Voltage. 3 1/2"; AC rating 300 volts G.E. type A0-25.	M-7475041-P2

---- PLUGS ----

1P1	90° Direction Changing Connector: 1J1 to 1P2, 3rd Tripler-1V15-Output. Coaxial angle plug adapter; pin contact, one angle; socket sleeve contact the other; Amphenol Cat. #83-1AP.	M2R22-P2
1P2	Cable Connector: Final Tripler-1V15-Output. High frequency; straight; pin contact, Amphenol Cat. #83-1SP.	M2R22-P1
1P3	Cable Connector: I-P-A Grid Input. Same as 1P2.	
1P4	Cable Connector: Station-Monitor Loop Output. Same as 1P2.	
1P5	Cable Connector: Station-Monitor Loop Output. Same as 1P2.	

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
--------	-------------	-----------

----- PLUGS CONTINUED-----

1P6	Not Used
1P7	Cable Connector: Station-Monitor Input. (Cable Furnished by Customer) Same as 1P2.
1P8	Cable Connector: R-F Voltmeter-1V30-Input. Same as 1P2.
1P9	Cable Connector: Transmission-line Voltage Divider Output. (For R-F Voltmeter-1V30) Same as 1P2.

----- RESISTORS -----

*1R1	Line Terminating Resistor: Modulator Panel Audio Input. Composition; 300 ohms, $\pm 5\%$ 1/2 watt.	P3R11-P146
1R2	Line Terminating Resistor: Modulator Panel Audio Input. Same as 1R1.	
1R3	Not Used	
1R4	Not Used	
1R5	Filter Resistor: Audio Input Preemphasis Adjustment. Variable, composition, 4700 ohms $\pm 20\%$, Allen Bradley type J.	M2R25-P93
*1R6	Filter Resistor: Audio Input Preemphasis. Composition, 5100 ohms $\pm 5\%$, 1/2 watt.	P3R11-P176
1R7	Filter Resistor: Audio Input Preemphasis Adjustment. Same as 1R5.	
1R8	Filter Resistor: Audio Input Preemphasis. Same as 1R6.	
*1R9	Audio Input Transformer - 1T1 - Primary Loading Resistor. Composition, 2000 ohms, $\pm 5\%$, 1/2 watt.	P3R11-P166

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
----RESISTORS CONTINUED----		
*1R10	Grid Resistor: 1st Audio-1V1. Composition, 27000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P193
1R11	Grid Resistor: 1st Audio-1V1. Same as 1R10.	
1R12	Not Used	
1R13	Cathode Resistor: 1st Audio-1V1. Same as 1R9.	
*1R14	Feedback Resistor: 2nd-1V2-to 1st- 1V1-Audio. Composition, 0.13 meg. $\pm 5\%$, 1/2 watt.	P3R11-P210
1R15	Feedback Resistor: 2nd-1V2-to 1st- 1V1-Audio. Same as 1R14.	
1R16	Cathode Resistor: 1st Audio-1V1. Same as 1R9.	
*1R17	Load Resistor: 1st Audio-1V1. Composition, 51000 ohms $\pm 5\%$, 1 watt.	P3R13-P200
1R18	Load Resistor: 1st Audio-1V1. Same as 1R17.	
1R19	Not Used	
1R20	Not Used	
*1R21	Grid Resistor: 2nd Audio-1V2 Composition, 1.0 meg, $\pm 5\%$, 1/2 watt.	P3R11-P231
1R22	Grid Resistor: 2nd Audio-1V2. Same as 1R21.	
*1R23	Cathode Resistor: 2nd Audio-1V2. Composition, 330 ohms $\pm 10\%$, 2 watt.	P3R67-P56
1R24 thru 1R34	Not Used	

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- RESISTORS CONTINUED ----

*1R35	Voltage Dropping Resistor: Crystal- LY1-Heater. Composition, 22 ohms $\pm 10\%$, 2 watt.	P3R67-P42
1R36	Voltage Dropping Resistor: Crystal- LY1-Heater. Same as 1R35.	
*1R37	Grid Resistor: Crystal Oscillator- 1V4. Composition, 1.0 meg, $\pm 10\%$, 1/2 watt.	P3R11-P98
*1R38	Voltage Dropping Resistor: Crystal Oscillator-1V4-Screen. Composition, 0.22 meg $\pm 10\%$, 1 watt.	P3R13-P90
*1R39	Grid Resistor: Crystal Amplifier- 1V5. Composition, 9100 ohms $\pm 5\%$, 1/2 watt.	P3R11-P182
*1R40	Isolating and Voltmeter Multiplying Resistor: Crystal Amplifier-1V5- Grid Voltage. Composition, 0.10 meg. $\pm 10\%$, 1/2 watt.	P3R11-P86
*1R41	Voltage Dropping Resistor: Crystal Amplifier-1V5-Screen. Composition, 47000 ohms $\pm 10\%$ 1 watt.	P3R13-P82
*1R42	Decoupling Resistor: Crystal Amplifier-1V5-Plate. Composition, 1000 ohms $\pm 10\%$, 2 watt.	P3R67-P62
1R43 thru 1R46	Not Used	
*1R47	Loading Resistor: 1st Doubler- 1V9-Grid. Composition, 68000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P203
*1R48	Loading Resistor: 1st Doubler- 1V9-Grid. (Not used with carrier frequencies above approximately 100 mc/s). Composition; 0.20 meg. $\pm 5\%$, 1/2 watt.	P3R11-P214

*This Item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- RESISTORS CONTINUED ----

* 1R49	Decoupling Resistor: Phasitron-1V3-Anode. Composition, 1000 ohms $\pm 10\%$, 1 watt.	P3R13-P62
* 1R50	Voltage Dropping Resistor: Phasitron-1V3-First Anode. Composition, 47000 ohms $\pm 10\%$, 1/2 watt.	P3R11-P82
1R51	Grid Resistor: 1st Doubler-1V9. Same as 1R40.	
* 1R52	Cathode Resistor 1st Doubler-1V9. Composition, 4700 ohms $\pm 10\%$, 1/2 watt.	P3R11-P70
* 1R53	Decoupling Resistor: 1st Doubler-1V9-Plate. Composition, 22000 ohms $\pm 10\%$, 2 watt.	P3R67-P78
1R54	Grid Resistor: 2nd Doubler-1V10. Same as 1R40.	
1R55	Decoupling Resistor: 2nd Doubler-1V10-Plate. Same as 1R53.	
1R56	Grid Resistor: 3rd Doubler-1V11. Same as 1R40.	
* 1R57	Loading Resistor: 3rd Doubler-1V11-Grid. (Not used with carrier frequencies above approximately 100 mc/s). Composition; 0.15 meg. $\pm 5\%$, 1/2 watt.	P3R11-P211
* 1R58	Loading Resistor: 3rd Doubler-1V11-Grid. Composition, 56000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P201
* 1R59	Loading Resistor: 2nd Doubler-1V10-Grid. (Not used with carrier frequencies above approximately 100 mc/s). Composition; 0.30 meg. $\pm 5\%$, 1/2 watt.	P3R11-P218
* 1R60	Loading Resistor: 2nd Doubler-1V10-Grid. Composition, 0.10 meg, $\pm 5\%$, 1/2 watt.	P3R11-P207

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
----- RESISTORS CONTINUED -----		
1R61	Decoupling Resistor: 3rd Doubler-1V11-Plate. Same as 1R53.	
1R62	Grid Resistor: 1st Tripler-1V12. Same as 1R40.	
1R63	Not Used	
1R64	Loading Resistor: 1st Tripler-1V12-Grid. (Not used with carrier frequencies above approximately 100 mc/s). Same as 1R14.	
1R65	Decoupling Resistor: 1st Tripler-1V12-Plate. Same as 1R53.	
1R66	Loading Resistor: 2nd Tripler-1V13-Grid. Same as 1R60.	
1R67	Not Used	
1R68	Grid Resistor: 2nd Tripler-1V13. Same as 1R40.	
1R69	Not Used	
1R70	Decoupling Resistor: 2nd Tripler-1V13-Plate. Same as 1R53.	
1R71	Grid Resistor: 4th Doubler-1V14. Same as 1R40.	
1R72	Not Used	
1R73	Cathode Resistor: 4th Doubler-1V14. Same as 1R23.	
* 1R74	Voltage Dropping Resistor: 4th Doubler-1V14-Screen. Composition, 10000 ohms $\pm 10\%$, 2 watt.	P3R67-P74
1R75	Decoupling Resistor: 4th Doubler-1V14-Plate. Wire wound, 1000 ohms $\pm 5\%$, 10 watt. Ward Leonard Cat. #K41382-1.	M2R12-P31

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	GE. Dwg.
----RESISTORS CONTINUED----		
*1R76	Grid Resistor: Final Tripler-1V15. Composition, 47000 ohms $\pm 5\%$, 1 watt.	P3R13-P199
1R77	Voltage Dropping Resistor: Final Tripler-1V15-Screen. Same as 1R53.	
1R78	Decoupling Resistor: Final Tripler- 1V15-Plate. Same as 1R75.	
1R79 thru 1R83	Not used.	
1R84	Voltage Dividing Resistor: Phasitron- 1V3-First Focus. Composition, 27,000 ohms $\pm 10\%$, 2 watt.	P3R67-P79
1R85	Voltage Dividing Resistor: Phasitron- 1V3-Neutral Plane. Same as 1R40.	
*1R86	Voltage Dividing Resistor: Phasitron- 1V3-First Focus. Same as 1R84.	
1R87	Voltage Dividing:Resistor: Phasitron- 1V3-Second Focus. Same as 1R84	
1R88	Voltage Dividing Resistor: Phasitron- 1V3-Deflectors. Same as 1R41.	
1R89	Voltage Dividing and Adjusting Resistor: Phasitron-1V3-Neutral Plane. Variable: composition, 33,000 ohms, $\pm 20\%$, Allen Bradley type J.	M2R25-P98
1R90	Voltage Dividing and Adjusting Resistor: Phasitron-1V3-First Focus. Same as 1R89.	
1R91	Voltage Dividing and Adjusting Resistor: Phasitron-1V3-Second Focus. Variable, composition, 47,000 ohms, $\pm 20\%$. Allen Bradley type J.	M2R25-P99

* This item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E. DWG.
---- RESISTORS CONTINUED ----		
1R92	Voltage Dividing and Adjusting Resistor: Phasitron-1V3-Deflectors. Same as 1R91.	
1R93 thru 1R95	Not Used	
1R96	Voltage Dropping and Adjusting Resistor: Phasitron-1V3-Filament. Variable; 2500 ohms $\pm 20\%$, 25 watt. International Resistor Corp. type PR-25.	M2R47-P81
*1R97	Loading Resistor: Phasitron-1V3-Filament Rectifier-1CR1. Composition, 100 ohms $\pm 10\%$, 2 watt.	P3R67-P50
1R98	Not Used	
*1R99	Voltmeter Multipling Resistor: Multivoltage Voltage Indicator Meter-1M9. Composition, 51000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P200
1R100	Not Used	
*1R101	Voltmeter Multipling Resistor: 1st Audio-1V1-Cathode Voltage. Composition, 39000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P197
1R102	Voltmeter Multipling Resistor: 1st Audio-1V1-Cathode Voltage. Same as 1R101.	
*1R103	Voltmeter Multipling Resistor: 2nd Audio-1V2-Cathode Voltage. Composition, 0.22 meg $\pm 5\%$, 1/2 watt.	P3R11-P215
*1R104	Voltmeter Multipling Resistor: Crystal Amplifier-1V5-Grid Voltage. Composition, 0.75 meg, $\pm 5\%$, 1/2 watt.	P3R11-P228

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- RESISTORS CONTINUED ----		
* 1R105	Voltmeter Multipling Resistor: Phasitron-1V3-Neutral Plane Voltage. Composition, 0.9 meg, $\pm 5\%$, 1/2 watt.	P3R11-P230
* 1R106	Voltmeter Multipling Resistor: Phasitron-1V3-First Focus Voltage. Same as 1R105.	
1R107	Voltmeter Multipling Resistor: Phasitron-1V3-Second Focus Voltage. Composition, 3.9 meg. $\pm 5\%$, 1/2 w.	P3R11-P245
1R108	Voltmeter Multipling Resistor: Phasitron-1V3-Deflector Voltage. Same as 1R107.	
* 1R109	Voltmeter Multipling Resistor: 1st Doubler 1V9-Cathode Voltage. Comp. osition, 0.51 meg, $\pm 5\%$, 1/2 watt.	P3R11-P224
* 1R110	Voltmeter Multipling Resistor: 2nd Doubler-1V10-Grid Voltage. Comp. osition, 2.7 meg, $\pm 5\%$, 1/2 watt.	P3R11-P241
* 1R111	Voltmeter Multipling Resistor: 3rd Doubler-1V11-Grid Voltage. Comp. osition, 3.6 meg, $\pm 5\%$, 1/2 watt.	P3R11-P244
* 1R112	Voltmeter Multipling Resistor: 1st Tripler-1V12-Grid Voltage. Comp. osition, 4.7 meg, $\pm 5\%$, 1/2 watt.	P3R11-P247
* 1R113	Voltmeter Multipling Resistor: 2nd Tripler-1V13-Grid Voltage. Comp. osition, 3.3 Meg, $\pm 5\%$, 1/2 watt.	P3R11-P243
1R114	Voltmeter Multipling Resistor: 4th Doubler-1V14-Grid Voltage. Same as 1R105.	
* 1R115	Voltage Dividing Resistor: Regulated Supply to Multivolatge Meter-1M9. Composition, 1.6 meg, $\pm 5\%$, 1/2 watt.	P3R11-P236

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- RESISTORS CONTINUED ----		
* 1R116	Voltage Dividing Resistor: Regulated Supply to Multivoltage Meter-1M9. Composition, 10000 ohms $\pm 5\%$, 1/2 watt.	P3R11-P183
1R117	Voltmeter Multipling Resistor: Phasitron-1V3-Filament Voltage. Same as 1R57.	
1R118 thru 1R144	Not Used	
* 1R145	Parasitic Resistor: I-P-A Grid. Composition, 10 ohms $\pm 10\%$, 1/2 watt.	P3R11-P38
1R146	Parasitic Resistor: I-P-A- Grid. Same as 1R145.	
1R147 thru 1R151	Not Used	
1R152	Grid Resistor: I-P-A. Same as 1R74.	
1R153	Parasitic Resistor: I-P-A Grid. Same as 1R145.	
1R154	Parasitic Resistor: I-P-A Grid. Same as 1R145.	
1R155	Cathode Resistor: I-P-A. Wire wound, 160 ohms $\pm 5\%$, 25 watt. Ward Leonard Cat. #K41383-1.	M2R14-P2
1R156	Voltage Dropping Resistor: I-P-A Screen. Wire wound, 12000 ohms $\pm 5\%$, 25 watts. Ward Leonard Cat. #K41383-1.	M2R14-P42
1R157 thru 1R160	Not Used	
1R161	Grid Resistor: P-A. Same as 1R156.	

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- RESISTORS CONTINUED ----		
1R162	Not Used	
1R163	Balancing Resistor: P-A Filament Hum. Adjustable; wire wound, 50 ohms $\pm 10\%$, 25 watt. Ohmite Cat. #0366.	K-7107846-P1
1R164A	Voltmeter Multiplying Resistor: P-A Plate Voltage Meter-1M3. Multiplier, 1 meg, $\pm 0.2\%$, rating 1KV. (Supplied with 1M3)	M-7475042-P5 Fig. 1
1R164B	Voltmeter Multiplying Resistor: P-A Plate Voltage Meter-1M3, Multiplier, 2 meg, $\pm 0.2\%$, rating 2 KV (Supplied with 1M3)	M-7475042-P5 Fig. 2
*1R165	Load and Voltmeter Multiplying Resistor: R-F Voltmeter-1V30-and R-F Output Meter-1M1. Composition, 82000 ohms, $\pm 5\%$, 1/2 watt.	P3R11-P205
1R166 thru 1R169	Not Used	
* 1R170	Filter Resistor: Voltage Regulators-1V34, 1V35, 1V36, -Grids. Composition: 6800 ohms $\pm 5\%$, 1 watt.	P3R13-P179
* 1R171	Filter Resistor: Voltage Regulators-1V34, 1V35, 1V36, -Grids. Composition: 0.10 meg, $\pm 10\%$, 2 watt.	P3R67-P86
* 1R172	Isolating Resistor: Regulator-1V34-Grid. Composition, 1000 ohms $\pm 10\%$, 1/2 watt.	P3R11-P62
1R173	Isolating Resistor: Regulator-1V35-Grid. Same as 1R172.	
1R174	Isolating Resistor: Regulator-1V36-Grid. Same as 1R172.	
* 1R175	Voltage Dividing Resistor: Regulator Control-1V37-Screen. Composition, 18000 ohms $\pm 5\%$, 2 watt.	P3R67-P189

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- RESISTORS CONTINUED ----

1R176	Voltage Dividing Resistor: Regulator Control-1V37-Screen. Same as 1R175	
1R177	Voltage Dividing Resistor: Regulator Control-1V37-Screen. Same as 1R175	
1R178	Isolating Resistor: Regulator Control -1V37-Grid. Same as 1R40.	
*1R179	Voltage Dividing Resistor: Regulator Control-1V37-Grid. Composition, 68000 ohms, $\pm 10\%$, 1 watt.	P3R13-P84
1R180	Voltage Dividing Resistor: Regulator Control-1V37-Grid. Same as 1R91.	
*1R181	Voltage Dividing Resistor: Regulator Control-1V37-Grid. Composition; 0.12 meg, $\pm 10\%$, 1 watt.	P3R13-P87
1R182	Current Limiting Resistor: Regulator Reference Bias Tube-1V38. Wire wound, 8000 ohms $\pm 5\%$, 25 watt. Ward Leonard Cat. #K41383-1.	M2R14-P40
*1R183	Voltage Dividing Resistor: Regulator Control-1V37-Cathode. Composition, 220 ohms $\pm 10\%$, 1 watt.	P3R13-P54
1R184	Voltage Dividing Resistor: Regulator Control-1V37-Cathode. Wire wound; 5000 ohms $\pm 5\%$, 10 watt. Ward Leonard Cat. #K41382-1.	M2R12-P38
1R185	Surge Current Limiting Resistor: High-voltage Supply. Wire wound; 5000 ohms $\pm 5\%$, 115 watt.	M-7464826-P38
1R186	Voltage Dividing Resistor: P-A Screen. M-7464826-P45 (Also Serves as Part of Bleeder on High-voltage Supply.) Wire wound; 25000 ohms, $\pm 5\%$, 115 watt.	

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- RESISTORS CONTINUED ----

- *1R187 Voltage Dividing Resistor: P-A Screen. M-7464826-P43
(Also Serves as Part of Bleeder on
High-voltage Supply) Wire wound;
16000 ohms $\pm 5\%$, 115 watt.
- 1R188 Voltage Dividing Resistor: P-A
Screen. (Also Serves as Part of
Bleeder on High-voltage Supply.)
Same as 1R187.

---- SWITCHES ----

- *1S1 Safety Switch: Rear Door Interlock. ML-7460330-G4
Single circuit, normally open,
10 amp. 250 volts.
- 1S2 Safety Switch: Rear Handle Interlock. K-7870464
Momentary contact normally open,
single circuit, 3 amps at 125 volts
(Included in 1S4) G.E. Cat. #1GA19A30.
- 1S3 Power Circuit Breaker; Transmitter Supply. P-7768829-PS
2 pole, rating 10 amp;
250 volts max. AC, 25 to 60 cycles;
max. interrupting rating 5000 amps.
Heineman Cat. #2263S-10.
- 1S4 Safety Switch: High-voltage Grounding. ML-7474516-G1
Grounding switch assembly, Includes
1S2.
- 1 S5 Selector Switch: Multivoltage Voltage Indicator 1M5. K-7108896-PI
Wafer,
1 circuit, 17 position, non-shorting,
adjustable stop.

---- TRANSFORMERS ----

- 1T1 Input Transformer: 1st Audio-LV1. M-7475674
Audio; primary impedance 50/125/200/
250/333/500 ohms; secondary impedance
50000 ohms; Thordarson Transformer
type T-49796.

*This item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
---- TRANSFORMERS CONTINUED ----		
1T2	Output Transformer: 2nd Audio-1V2, Drives Modulation Inductor-1L1. Audio; Thordarson type T-49232B.	M-7475659
1T3	Phase-splitting Transformer: Single to Biphasic, Used with 1T4 to Split to three Phase. RF. Includes tuning Capacitors.	M-7478004
1T4	Phase-splitting Transformer: Single to Quarter-phase, Use with 1T3 to Split to Three Phase. RF. Includes tuning capacitor.	M-7478003
1T5	Not Used	
1T6	Rectifier Stepdown Transformer: Phasitron-1V3-Filament. Filament; primary 200 v, 50/60 cycles; secondary 14.5 v.	M-7477907
1T7 thru 1T8	Not Used	
1T9	Coupling Transformer: Phasitron- 1V3- to 1st Doubler-1V9. RF. Includes tuning capacitors.	P-7766849-P10
1T10	Coupling Transformer: 1st Doubler- 1V9-to 2nd Doubler-1V10. RF. Includes tuning capacitors.	P-7766849-P11
1T11	Coupling Transformer: 2nd Doubler- 1V10 to 3rd Doubler-1V11. RF. Includes tuning capacitors.	P-7766849-P5
1T12	Coupling Transformer: 3rd Doubler- 1V11-to 1st Tripler-1V12. RF. Includes tuning capacitors.	P-7768620-P3
1T13	Coupling Transformer: 1st Tripler- 1V12-to 2nd Tripler-1V13. RF. Includes tuning capacitors.	P-7768620-P4

*This item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- TRANSFORMERS CONTINUED ----

1T14	Coupling Transformer: 2nd Tripler- 1V13-to 4th Doubler-1V14. RF. Includes tuning Capacitors.	P-7768620-P5
1T15	Coupling Transformer: 4th Doubler- 1V14-to Final Tripler-1V15. RF. Includes tuning capacitors.	P-7768620-P6
1T16 thru 1T30	Not Used	
1T31	Stepdown Transformer: Green Plate 'On" Indicating Switch-1IS1. Rating 50/60 cycles 0.003KVA; primary 115 volts; secondary 4 volts. G.E. Cat. #74G657.	M-7467402
1T32	Stepdown Transformer: Red Plate 'Off" Indicating Switch 1IS2. Same as 1T31.	
1T33	Isolating Stepdown Transformer: Control Circuits. Primary 200 v, 50/60 cycles; secondary 115/96 v <u>±4%</u> , 1 amp. G.E. Cat. #M-7475658.	M-7475658
1T34	Bucking Transformer: Line to Transmitter-Operating Voltage Reducing. Primary-230 v, 50/60 cycles; secondary-60 v, <u>±2%</u> , 7.5 amps, G.E. Cat. #7475624.	M-7475624
1T35	Adjusting Transformer: Transmitter- Operating Voltage. Powerstat; input rating 230 volts 60 cycles, output 0-270 volts 30 amps. Superior Electric Co. type #216-U.	P-7768970-P2
1T36	Stepdown Transformer: Crvstal Heater. Primary-115 v, 50/60 cycles; secondary-11 v, 0.6 amps.	M-7475244

*This item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- TRANSFORMERS CONTINUED ---

1T37	Filament Transformer; Low-Voltage Rectifiers, Voltage Regulators, and Control Tube. Primary 200 v, 50/60 cycles; secondaries 6.3 volts at 0.3 amp; 6.3 volts at 3.0 amp with CT; 5.0 volts at 6.0 amp with CT. G.E. Cat. #7475626.	M-7475626
1T38 thru 1T40	Not Used	
1T41	Rectifier Stepup Transformer; Low Voltage Supply. Plate; single phase: primary, 200 v with taps to give 95%, 100% & 105% of secondary, 50/60 cycles; secondary, 1260/630 volts, 0.30 KVA. G.E. Cat. #7475623.	M-7475623
1T42 thru 1T43	Not Used	
1T44	Filament Transformer: P-A. Primary, 200 volts, 50/60 cycles; secondary, 5 v, 30 amp. G.E. Cat. #7475621.	M-7475621
1T45	Filament Transformer: High Voltage Rectifiers. Primary, 200 v, 50/60 cycles; secondary, 2.5 v-0 /4%, 10 amp /5%. G.E. Cat. #7475625.	M-7475625
1T46	Rectifier Stepup Transformer: High Voltage Supply. Single phase; primary: 200 v with taps to give 50, 90, 100 & 110% of secondary voltage; 50/60 cycles; secondary, 5150/2575 volts, 1.2 KVA. G.E. Cat. #7475622.	M-7475622
1T47	Filament Transformer: I-P-A and Modulator Panel. Primary: 200 volts, 50/60 cycles; secondary: 6.3 volts, 12.5 amps. G.E. Cat. #7475627.	M-7475627

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	GE. DWG.
--------	-------------	----------

----- TUBES -----

- | | |
|----------------------|--|
| *1V1 | Amplifying Tube: 1st Audio.
Type 6SL7/GT. |
| *1V2 | Amplifying Tube: 2nd Audio.
Type 6SN7/GT. |
| 1V3 | Modulation Tube: Phasitron.
Type GL-2H21. |
| *1V4 | Oscillating Tube: Crystal.
Type 6SJ7. |
| 1V5 | Amplifying Tube: Crystal Phase-
splitting Transformer Driver.
Same as 1V4. |
| 1V6
thru
1V8 | Not Used. |
| 1V9 | Doubling Tube: 1st. Same as 1V4. |
| 1V10 | Doubling Tube: 2nd. Same as 1V4. |
| 1V11 | Doubling Tube: 3rd. Same as 1V4. |
| 1V12 | Tripling Tube: 1st. Same as 1V4. |
| 1V13 | Tripling Tube: 2nd. Same as 1V4. |
| *1V14 | Doubling Tube: 4th. Type 6V6. |
| *1V15 | Tripling Tube: Final. Type GL-815. |
| 1V16
thru
1V26 | Not Used. |
| *1V27 | Amplifying Tube: Intermediate Power.
Type GL-829B. |
| *1V28 | Amplifying Tube: Final Power. Type
GL-5D24, or Type 4-250-A. |
| 1V29 | Amplifying Tube: Final Power.
Same as 1V28. |

* This item or equivalent can often be obtained from a local
radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- TUBES CONTINUED ----

- | | | |
|-------|---|--|
| *1V30 | Rectifying Tube: R-F Voltmeter.
Type 6H6. | |
| 1V31 | Not Used | |
| *1V32 | Rectifying Tube: Low-voltage Supply.
Type 5R4GY. | |
| 1V33 | Rectifying Tube: Low-voltage Supply.
Same as 1V32. | |
| *1V34 | Regulating Tube: Regulated Supply.
Type 6B4G. | |
| 1V35 | Regulating Tube. Regulated Supply.
Same as 1V34. | |
| 1V36 | Regulating Tube: Regulated Supply.
Same as 1V34. | |
| 1V37 | Amplifying Tube: Regulated Supply
Control. Same as 1V4. | |
| *1V38 | Biasing Tube: Constant Voltage, 1V37
Cathode. Type OC3/VR105 | |
| *1V39 | Rectifying Tube: High-voltage
Supply. Type GL-866-A/866. | |
| 1V40 | Rectifying Tube; High-voltage
Supply. Same as 1V39. | |

---- SOCKETS ----

- | | | |
|-----|---|------------|
| 1X1 | Socket for 1V1. Octal, Amphenol
Type #M1P8T. | K-1R14-P2t |
| 1X2 | Socket for 1V2. Same as 1X1. | |
| 1X3 | Socket for 1V3 Ceramic 11 contacts.
American Phenolic Corp. 49-SS11-L. | K-7115095 |
| 1X4 | Socket for 1V4. Same as 1X1. | |

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- SOCKETS CONTINUED ----

1X5	Socket for 1V5. Same as 1X1.	
1X6 thru 1X8	Not Used	
1X9	Socket for 1V9. Same as 1X1.	
1X10	Socket for 1V10. Same as 1X1.	
1X11	Socket for 1V11. Same as 1X1.	
1X12	Socket for 1V12. Same as 1X1.	
1X13	Socket for 1V13. Same as 1X1.	
1X14	Socket for 1V14. Same as 1X1.	
1X15	Socket for 1V15. Same as 1X1.	
1X16 thru 1X26	Not Used	
1X27	Socket for 1V27. Minature size with built in by-pass capacitors, 5 contacts. RCA type UT-107.	K-7107794-P1
1X28	Socket for 1V28. Jumbo size, 5 contact. National Radio Products Cat. # H.X. 100.	K-7107795-P1
1X29	Socket for 1V29. Same as 1X28.	
1X30	Socket for 1V30. Same as 1X1.	
1X31	Not Used	
1X32	Socket for 1V32. Octal; Amphenol type #R.S.S.8.	K1R13-P47
1X33	Socket for 1V33. Same as 1X32.	
1X34	Socket for 1V34. Same as 1X1.	
1X35	Socket for 1V35. Same as 1X1.	

*This item or equivalent can often be obtained from a local radio dealer.

SYMBOL	DESCRIPTION	G.E.DWG.
--------	-------------	----------

---- SOCKETS CONTINUED ----

1X36	Socket for 1V36. Same as 1X1.	
1X37	Socket for 1V37. Same as 1X1.	
1X38	Socket for 1V38. Same as 1X1.	
1X39	Socket for 1V39. Jumbo size, 4 contacts, E.F. Johnson Cat. #211B.	M-7475054-P1
1X40	Socket for 1V40. Same as 1X39.	
1X41	Not Used	
1X42	Socket for 1Y1. Same as 1X1.	
1X43	Not Used	
1X44	Socket for 1I1. Pilot Light; green jewel. Drake Mfg. Co. type #80.	K-7108403-P3

---- CRYSTALS ----

1Y1	Frequency Controlling Crystal and Thermocell; Transmitter Carrier. Thermocell; heater 6.3 volts 50-60 cycles. (When ordering replacements specify frequency used)	M-7478021
-----	---	-----------

*This item or equivalent can often be obtained from a local radio dealer.

PARTS LIST

This list includes all principal replacement parts. The symbol numbers used are the same as those appearing on the Elementary Drawing and other diagrams.

When ordering a replacement part, please include description, symbol designation and G-E drawing number of the part and model number of the equipment. Orders may be sent to the nearest General Electric Office or to the General Electric Company, Transmitter Division, Electronics Department, Syracuse, New York.

Symbol	Description	G-E Dwg.	Symbol	Description	G-E Dwg.
BLOWER MOTOR					
3BM1	Blower: Centrifugal vane; electric motor driven. Motor: $\frac{1}{4}$ H.P., 1425/1725 RPM, 230 volt, 1 phase, 50/60 cycle, ball bearing. (3S10 included.) General Electric Model #5KC49AB693, or equivalent.	P-7768648-P1	*3C15	Meter RF By-pass. Same as 3C13.	
CAPACITORS			*3C16	Meter RF By-pass. Same as 3C13.	
3C1	Power Failure Reclosure Storage Capacitor. Electrolytic, 90 mfd $\pm 20\%$ -10%, 150 VDCW.	M-7478063-P2	*3C17	Meter RF By-pass. Mica, 330 mmfd $\pm 10\%$, 2,500 VDCW.	P-3R32-P8
V 3C2	Automatic Reclosure Storage Capacitor. Pyranol, 20 mfd $\pm 10\%$, 600 VDCW. General Electric Cat. #23F357, or equivalent.	K-7116341-P1	*3C18	Meter RF By-pass. Same as 3C13.	
V 3C3	Screen Supply Filter. Pyranol, 10 mfd $\pm 10\%$, 1,000 VDCW. General Electric Cat. #23F361, or equivalent.	P-3R88-P9	3C19	Not Used.	
V 3C4	Screen Supply Filter. Same as 3C3.		*3C20	Meter RF By-pass. Mica, 330 mmfd $\pm 10\%$, 500 VDCW.	P-3R26-P15
V 3C5	Plate Supply Filter. Pyranol, 2 mfd $\pm 10\%$, 5,000 VDCW. General Electric Cat. #23F418, or equivalent.	P-3R87-P17	*3C21	Meter RF By-pass. Same as 3C20.	
V 3C6	Plate Supply Filter. Same as 3C5.		*3C22	Meter RF By-pass. Same as 3C20.	
3C7	Plate Supply Filter. <i>- Not Used</i>		*3C23	Meter RF By-pass. Same as 3C20.	
3C8	Not Used.		*3C24	Grid Tuning. Variable: 7.8 mmfd open, 32 mmfd meshed. Hammarlund Cat. #MCD-35-MX, or equivalent.	M-7478027-P1
3C9	Not Used.		*3C25	Filament RF By-pass. Bakelite, 500 mmfd $\pm 10\%$, 2,500 VDCW.	P-7769372-P1
3C10	Not Used.		*3C26	Filament RF By-pass. Bakelite, 500 mmfd $\pm 10\%$, 2,500 VDCW.	P-7769372-P2
*3C11	Diode Filament By-pass. Ceramic, 470 mmfd 20%, 350 VDCW. Electrical Reactance Corp. Cat. #BCF.	K-7119809-P5	*3C27	Filament RF By-pass. Bakelite, 500 mmfd $\pm 10\%$, 2,500 VDCW.	P-7769372-P3
*3C12	Diode Filament By-pass. Same as 3C11.		*3C28	Filament RF By-pass. Bakelite, 500 mmfd $\pm 10\%$, 2,500 VDCW.	P-7769372-P4
*3C13	Diode Voltmeter Integrating Capacitor. Mica, 330 mmfd $\pm 10\%$, 500 VDCW.	P-3R26-P15	*3C29	Filament RF By-pass. Same as 3C28.	
*3C14	Meter RF By-pass. Same as 3C13.		*3C30	Filament RF By-pass. Same as 3C27.	
CAPACITORS CONTINUED			3C31	Screen RF By-pass.	ML-7352420-P12
			3C32	Plate Tuning.	K-7119344-P1
			3C33	Plate By-pass. Ceramic, 1,000 mmfd $+30\%$, -10%, 9,600 volts peak. RF current at 100 ma. Cornell-Dubilier type #108B.	M-7478064-P1
			3C34	Diode Voltmeter Pickup.	K-7117134-P1
			*3C35	Capacitor ring assembly.	
			*3C36	Screen RF By-pass. Bakelite, 500 mmfd $\pm 10\%$, 2,500 VDCW. Screen RF By-pass. Same as 3C35.	P-7769372-P5

* This item or equivalent can often be obtained from a local radio dealer.

† For replacement use G.E. Drawing number K-7108873-P1, Cornell-Dubilier type #112-LOR, or equivalent.

3-KW FM TRANSMITTER

Symbol	Description	G-E Dwg.	Symbol	Description	G-E Dwg.
CAPACITORS CONTINUED					
†3C37	Screen RF By-pass. Same as 3C35.		3K4	Plate Contactor. AC, 230 volts, 60 cycles; 3 pole; 2 NO, 3NC interlocks. General Electric type #CR2811-C22DN. General Electric Cat. #8664211G2, or equivalent.	P-7768645-P1
†3C38	Screen RF By-pass. Same as 3C35.		3K5	Power Failure Reclosure. Quick acting DC; coil resistance 6,500 ohms $\pm 10\%$, pull in 5 ma $\pm 10\%$, drop out 2 ma $\pm 10\%$, operating voltage 90 volts; 2 form A contacts.	P-7768647-P6
3C39	Output Coupling Loop Tuning.	ML-7352419-P14	3K6	Power Failure Reclosure. 115 volts, 60 cycles; 2 NO, 2 NC, DPDT contacts. General Electric type #12HMA11B11, or equivalent.	P-7767982-P1
3C40	Fixed Neutralizer.	ML-7352420-P21	3K7	Power Failure Reclosure. Quick acting AC; coil operating voltage, 115 volts, 60 cycles; 4 form A contacts.	P-7768647-P9
*3C41	Grid By-pass. Mica, 330 mmfd $\pm 5\%$, 2,500 VDCW.	P-3R32P38	3K8	Plate "On". Quick acting AC; coil operating voltage 115 volts, 60 cycles; 3 form A contacts.	P-7768647-P12
RECTIFIERS					
3CR1	Control Circuit Rectifier. Selenium, full wave bridge recti- fier; 150 ma.	M-7478636-P1	3K9	Plate "Off". Quick acting AC; coil operating voltage, 115 volts, 60 cycle; 2 form A, 1 form B contacts.	P-7768647-P15
INDICATING DEVICES					
3IS1	Plate "On" Switch. Push button type, green trans- lucent button; lamp type #46. General Electric Cat. #2280664G3, or equivalent.	K-7107849-P6	3K10	Power Failure Reclosure. Same as 3K6.	
3IS2	Plate "Off" Switch. Push button type, red trans- lucent button; lamp type #46. General Electric Cat. #2280664G2, or equivalent.	K-7107849-P5	3K11	Plate Overload Reclosure. Quick acting DC; coil resistance 11,300 ohms $\pm 10\%$; pull in 1.4 ma. $\pm 10\%$; drop out 0.8 ma. $\pm 10\%$; operating voltage 90 volts; 1 form A contact.	P-7768647-P21
RECEPTACLES					
*3J1A	Monitor Cable Connector. High Frequency co-axial con- nector, female. Amphenol Cat. #83-1R, or equivalent.	M-2R22-P3	3K12	Step-Start Time Delay. Coil resistance 2,500 ohms $\pm 10\%$; operating voltage 75 VDC; 1 form B contact.	P-7766441-P21
*3J1B	Monitor Cable Connector. Co-axial angle plug adapter, pin contact one angle, socket sleeve contact the other. Am- phenol Cat. #83-1AP, or equiv- alent.	M-2R22-P2	3K13	Step-Start. Pick up 90 VAC max; drop out below 70 VAC; coil rating, 115 volts, 60 cycles. Leach relay type #1521.	M-7477542-P1
*3J2	Monitor Cable Connector. High frequency co-axial con- nector, double ended, female. Amphenol Cat. #83-1F, or equivalent.	M-2R22-P6	3K14	Screen Overload. Quick acting DC; pull in 350 ma ± 25 ma; 1 form A, 2 form B, contacts.	P-7768647-P27
RELAYS					
3K1	Filament Time Delay. Operating voltage 115 volts, 60 cycles; 30 seconds $\pm 10\%$ time delay; contact rating 10 amps, 125 volts NIAC and 5 amps, 250 volts NIAC. Price Brothers type #4052, or equivalent.	M-7478040-P1	3K15	Plate Overload. Quick acting DC; pull in 3 amp, ± 0 , -0.3 amp; 1 form A, 2 form B contacts.	P-7768647-P24
3K2	Door Interlock. Quick acting AC; coil operating voltage 115 volts, 60 cycles; 1 form A, 1 form B contact.	P-7768647-P3	3K16	Excitation Relay. Quick acting DC; pull in 80 ma ± 5 ma; drop out 50 ma ± 5 ma; 1 form A contact.	P-7768647-P30
3K3	Auxiliary for Plate Contactor. 115 volts, 60 cycles; 2 NO, 2 NC, DPDT contacts. General Elec- tric type #12HMA11B11, or equivalent.	P-7767982-P1	3K17	Plate Overload Reclosure Auxil- iary. Quick acting AC; coil operating voltage 115 volts, 60 cycles; 3 form A contacts.	P-7768647-P12

* This item or equivalent can often be obtained from a local radio dealer.

† For replacement use G.E. Drawing number K-7108873-P1, Cornell-Dubilier type #112-LOR, or equivalent.

Symbol	Description	G-E Dwg.	Symbol	Description	G-E Dwg.
COILS			PLUGS		
3L1	Screen Filter. Inductance 12 henries min. at 0.3 amp. DC; resistance 165 ohms max.	M-7475225	*3P1	Monitor Cable Connector. High frequency co-axial plug, straight, pin contact. Am- phenol Cat. #83-1SP, or equivalent.	M-2R22-P1
3L2	Screen Filter. Same as 3L1.		*3P2	Monitor Cable Connector. Same as 3P1.	
3L3	Plate Filter. Inductance 5 henries min. at 2 amps DC; resistance 15 ohms.	M-7477937	*3P3	Monitor Cable Connector. Same as 3P1.	
3L4	Not Used.				
3L5	Screen RF Choke. 8 turns 0.080" dia. copper wire; 1 1/2" lg. x 5/8" ID.	K-7118592-P1			
3L6	Grid RF Choke. 7 turns 0.100" dia. copper wire; 1 5/8" lg. x 3/4" ID.	K-7118577-P1	*3R1	Current Limiting for 3C1. Composition, 4,700 ohms $\pm 10\%$, 2 watt.	P-3R67-P70
3L7	Grid Input Coupling Loop.	K-7116958-P1	*3R2	Current Limiting Discharge for 3C2.	M-2R12-P17
3L8	Grid Tank Circuit.	M-7478154-P32		Wirewound, 40 ohms $\pm 5\%$, 10 watt. Ward Leonard Cat. #K-41382-1, or equivalent.	
3L9	Plate Tank Circuit. (Included in 3C32.)	ML-7352419-P145, 154, 192, 193	*3R3	Charging Resistor for 3C2. Composition, 0.75 meg. $\pm 5\%$, 1 watt.	P-3R13-P228
3L10	Plate Current RF Choke. 10 turns, equally spaced, of .080" dia. copper wire; 1 7/8" lg. x 7/8" ID.	K-7116996-P1	3R4	Step-Start Current Limiting. Wirewound, 5,000 ohms $\pm 5\%$, 160 watts.	M-7464825-P38
3L11	RF Output Coupling Loop.	ML-7352419-P161, 171	3R5	Plate Supply Bleeder. Wirewound, 50,000 ohms $\pm 5\%$, 160 watts.	M-7464825-P48
3L12	Monitor Pickup Loop. 1 turn .080" dia. copper wire; 2 5/8" ID.	K-7118578-P1	3R6	Plate Supply Bleeder. Same as 3R5.	
3L13	Diode Voltmeter Choke. 13 1/2 turns .040" dia. copper wire; 1 5/8" lg x 1 1/2" ID.	K-7117135-P1	*3R7	Calibrating Potentiometer for RF Voltmeter. 47,000 ohms $\pm 20\%$. Allen Brad- ley type J, 1/2" shaft, screw- driver control.	M-2R24-P59
METERS			*3R8	3V9 Cathode Resistor. Composition, 18,000 ohms $\pm 10\%$, 1/2 watt.	P-3R11-P77
3M1	Not Used.		*3R9	Plate Voltmeter Multiplier. 3 units 5 meg. $\pm 0.2\%$, 5 KV. (3R9A through 3R9E in- cluded.) (External resistor for 3M3.)	M-7475042-P7
3M2	Plate Current. 3 1/2" square case, panel am- meter; 2 amp DC.	K-7108892-P6	3R10	Not Used.	
3M3	Plate Voltage. 3 1/2" square case, panel kilovolt- meter. 5 kilovolts DC. (Sup- plied with external resistor 3R9.)	P-3R42-P26	3R11	Not Used.	
3M4	RF Output Voltage. 3 1/2" square case, panel milliam- meter, 1 ma DC General Electric Cat. #DO53.	M-7475091-P2	*3R12	Screen Supply Bleeder. Wirewound, 12,500 ohms $\pm 5\%$, 115 watts.	M-7464826-P42
3M5	Screen Voltage. 3 1/2" square case, panel volt- meter; 800 volts DC.	P-3R34-P17	3R13	Not Used.	
3M6	Screen Current. 3 1/2" square case, panel milliam- meter, 300 ma DC.	P-3R35-P35	3R14	Cathode Meter Shunt. Wirewound, 10 ohms $\pm 5\%$, 25 watts.	M-7464829-P11
3M7	3V11 Cathode Current. 3 1/2" square case, panel am- meter, 2 amp DC.	P-3R36-P3	3R15	Cathode Meter Shunt. Same as 3R14.	
3M8	3V10 Cathode Current. Same as 3M7.		3R16	Grid Bias Resistor. Wirewound, 1,000 ohms $\pm 5\%$, 160 watts.	M-7464825-P31
3M9	Grid Current. 3 1/2" square case, panel milliam- meter, 300 ma DC.	P-3R43-P35	3R17	Damping Resistor. Composition, 430 ohms $\pm 5\%$, 2 watts.	P-3R67-P150
3M10	Filament Voltage. 3 1/2" square case, panel volt- meter, 10 volts AC General Electric Cat. #AO-25, or equivalent.	M-7475041-P3	3R18	PA Tube Balancing Potentiom- eter. Variable, wirewound, 50 ohms $\pm 10\%$, 50 watts, linear taper. Ohmite Model J Cat. #0318, or equivalent.	M-2R34-P36

* This item or equivalent can often be obtained from a local radio dealer.

3-KW FM TRANSMITTER

Symbol	Description	G-E Dwg.	Symbol	Description	G-E Dwg.
SWITCHES			TRANSFORMERS CONTINUED		
3S1	Main Power. 3 pole; 250 volts AC, 25 to 60 cycles, 50 amps. Heineman Cat. #3363S-50, or equivalent.	P-7768830-P21	3T4	Screen Power. Primary: 208/230 volts, 50/60 cycles, 0.224 KVA; secondary: 1,600 volts, 0.316 KVA.	M-7478159
3S2	Control Power. Single pole; 250 volts max. AC, 25 to 60 cycles; 10 amps. Heineman Cat. #1163S-10, or equivalent.	P-7768828-P16	*3T5	PA Filament Adjustable Transformer. Powerstat; Input rating 230 volts 60 cycles; output rating 0-270 volts 3 amps. Superior Electric Co. type #216-U, or equivalent.	P-7768970-P2
3S3	Screen Power. Single pole; 250 volts max. AC, 25 to 60 cycles; 5 amps. Heineman Cat. #1163S-10, or equivalent.	P-7768828-P15	3T6	PA Filament Buck-Boost. Primary: 230 volts 50/60 cycles; secondary: 55 volts 3.5 amps.	M-7477951
3S4	Door Handle Interlock. Push button type, single circuit, NO momentary contact; 3 amp. at 125 volts. (Included in 3S9.) General Electric Cat. #1GA19A30, or equivalent.	K-7870464	3T7	Plate Power. Primary: 50/60 cycles, 8 KVA, 4 taps; secondary: 8 KVA.	M-7477934
3S5	Door Interlock. Double break, continuous capacity 10 amps at 110 or 220 volts, AC or DC.	ML-7460330-G4	3T8	Screen Rectifier Filament. Primary: 208/230 volts, 50/60 cycles; secondary: 2.5/1.25 volts, 10 amps.	M-7477938
3S6	Door Handle Interlock. Push button type, single circuit, NO momentary contact; 3 amp at 125 volts. (Included in 3S8.) General Electric Cat. #1GA19A30, or equivalent.	K-7870464	3T9	Plate Rectifier Filament. Primary: 230/208 volts, 50/60 cycles; secondary: 5 volts, 7.5 amps.	M-7477922
3S7	Door Interlock. Same as 3S5.		3T10	Plate Rectifier Filament. Same as 3T9.	
3S8	Plate Supply Shorting. Grounding switch. (Includes 3S6.)	ML-7478173-G1	3T11	Plate Rectifier Filament. Same as 3T9.	
3S9	Plate Supply Shorting. Latch Assembly and grounding switch. (Includes 3S4.)	ML-7769366-G1	3T12	Plate Rectifier Filament. Same as 3T9.	
3S10	Air Interlock. (Included in 3BM1.)		3T13	Plate Rectifier Filament. Same as 3T9.	
*3S11	PA Filament. Toggle; 20 amps 125 or 250 volts. Arrow-Hart and Hegeman Cat. #80421, or equivalent.	K-7116143	3T14	Plate Rectifier Filament. Same as 3T9.	
3S12	Delta-Wye.	M-7478066-P1	3T15	RF Voltmeter Diode Filament. Primary: 208/230 volts, 50/60 cycles; secondary: 6.3 volts, 0.3 amp.	M-7477952
TRANSFORMERS			3T16	PA Filament. Primary: 230/208 volts, 50/60 cycles; secondaries #1 and 2: center tap, 6.3 volts 30 amps.	M-7477923
3T1	Control Power. Primary: 208/230 volts, 50/60 cycles; secondary: 115/96 volts, 1.75/2.1 amps.	M-7477950	*3T17	Adjustable Transformer for Screen Supply Primary. Powerstat; Input rating 230 volts 60 cycles; output rating 0-270 volts 3 amps. Superior Electric Co. type #216-U, or equivalent.	P-7768970-P2
3T2	Dial Light. Rating 50/60 cycles, 0.003 KVA, primary: 115 volts, secondary: 4 volts. General Electric Cat. #74G657, or equivalent.	M-7467402	TUBES		
3T3	Dial Light. Rating 50/60 cycles, 0.003 KVA, primary: 115 volts, secondary: 4 volts. General Electric Cat. #74G657, or equivalent.	M-7467402	*3V1	Screen Supply Rectifier. Type GL-866-A/866.	
			*3V2	Screen Supply Rectifier. Same as 3V1.	
			*3V3	Plate Supply Rectifier. Type GL-8008.	
			*3V4	Plate Supply Rectifier. Same as 3V3.	
			*3V5	Plate Supply Rectifier. Same as 3V3.	
			*3V6	Plate Supply Rectifier. Type GL-8008.	

* This item or equivalent can often be obtained from a local radio dealer.

Symbol	Description	G-E Dwg.	Symbol	Description	G-E Dwg.
TUBES CONTINUED					SOCKETS CONTINUED
*3V7	Plate Supply Rectifier. Same as 3V6.		*3X3	Socket for 3V3. Ceramic, large, 4 pin. E. F. Johnson Co. type #244, or equivalent.	K-7115212-P1
*3V8	Plate Supply Rectifier. Same as 3V6.		*3X4	Socket for 3V4. Same as 3X3.	
*3V9	RF Voltmeter Diode. Type 6H6.		*3X5	Socket for 3V5. Same as 3X3.	
*3V10	Power Amplifier. Type GL-7D21.		*3X6	Socket for 3V6. Same as 3X3.	
*3V11	Power Amplifier. Same as 3V10.		*3X7	Socket for 3V7. Same as 3X3.	
SOCKETS			*3X8	Socket for 3V8. Same as 3X3.	
*3X1	Socket for 3V1. High voltage, 4 contacts. E. F. Johnson Cat. #209B, or equivalent.	M-7475054-P1	*3X9	Socket for 3V9. Octal, Amphenol Cat. #MIP8T, or equivalent.	K-1R14-P26
*3X2	Socket for 3V2. Same as 3X1.		3X10	Not Used.	
			3X11	Socket for 3C1. Octal, Amphenol type #MIP8, or equivalent.	K-7108408-P1

* This item or equivalent can often be obtained from a local radio dealer.

WHERE TO OBTAIN SERVICE

Requests for Broadcast Equipment engineering service information may be directed to the nearest office listed below or to the General Electric Company, Broadcast Service Engineering, Technical Products Department, Electronics Park, Syracuse, N.Y.

Requests for replacement parts not obtainable from a local radio dealer should be directed to the General Electric Company, Broadcast Service Engineering, Service Parts, Technical Products Department, Electronics Park, Syracuse, N.Y.

ATLANTA	Room 517 1330 W. Peachtree St. N.W.	TRinity 5-6691
CHICAGO	Room 811 Engineering Bldg. 205 W. Wacker Dr.	ANdover 3-7830
CLEVELAND	1013 Williamson Bldg.	SUperior 1-6822
DALLAS	3200 Maple Ave. Room 108	Riverside 7-4296
DETROIT	16247 Wyoming Ave.	DIamond 1-1459
HOUSTON	1204 Prudential Bldg. 1100 E. Holcombe Blvd.	JAckson 8-0657
KANSAS CITY, MO	2826 Main St.	LOgan 1-8872
LOS ANGELES	Suite 210, North Lake Bldg. 232 North Lake Ave. Pasadena, Calif.	SYcamore 5-1209
NEW YORK	2801 Graybar Bldg. 420 Lexington Ave.	PLaza 1-1311, Ext. 2663
SAN FRANCISCO	235 Montgomery St.	DOuglas 2-3740
SCHENECTADY	201 S. Brandywine Ave.	EXpress 3-9110
SEATTLE	220 Dawson St.	PArkway 5-6800
SYRACUSE	Broadcast Service Engineering Technical Products Department Electronics Park	GRanite 6-4411
WASHINGTON	927 Wyatt Bldg. 777 14th St.	EXecutive 3-3600, Ext. 210

WHERE TO OBTAIN SERVICE

Requests for Broadcast Equipment engineering service information may be directed to the nearest office listed below or to the General Electric Company, Broadcast Service Engineering, Technical Products Department, Electronics Park, Syracuse, N.Y.

Requests for replacement parts not obtainable from a local radio dealer should be directed to the General Electric Company, Broadcast Service Engineering, Service Parts, Technical Products Department, Electronics Park, Syracuse, N.Y.

ATLANTA	Room 517 1330 W. Peachtree St. N.W.	TRinity 5-6691
CHICAGO	Room 811 Engineering Bldg. 205 W. Wacker Dr.	ANdover 3-7830
CLEVELAND	1013 Williamson Bldg.	SUperior 1-6822
DALLAS	3200 Maple Ave. Room 108	RIverside 7-4296
DETROIT	16247 Wyoming Ave.	DIamond 1-1459
HOUSTON	1204 Prudential Bldg. 1100 E. Holcombe Blvd.	JAckson 8-0657
KANSAS CITY, MO	2826 Main St.	LOgan 1-8872
LOS ANGELES	Suite 210, North Lake Bldg. 232 North Lake Ave. Pasadena, Calif.	SYcamore 5-1209
NEW YORK	2801 Graybar Bldg. 420 Lexington Ave.	PLaza 1-1311, Ext. 2663
SAN FRANCISCO	235 Montgomery St.	DOuglas 2-3740
SCHENECTADY	201 S. Brandywine Ave.	EXpress 3-9110
SEATTLE	220 Dawson St.	PArkway 5-6800
SYRACUSE	Broadcast Service Engineering Technical Products Department Electronics Park	GRanite 6-4411
WASHINGTON	927 Wyatt Bldg. 777 14th St.	EXecutive 3-3600, Ext. 210

