MAINTENANCE MANUAL
406-512 MHz, 100 WATT POWER AMPLIFIER ASSEMBLY
19D424888G14-17, G31-34, G37 AND G38 (MOBILE AND STATION)
19D424895G14-17, G31-34, G38, G39, AND G40-43 (CONTINUOUS DUTY STATION)

TABLE OF CONTENTS

DESCRIPTION

The PA assembly uses two amplifier modules to provide rated output power. The PA Driver module uses four RF power transistors to provide RF drive to the PA module. The Power Amplifier module consists of four paralleled RF Power Transistors connected by a transmission line splitter arrangement at the input, and a combiner arrangement at the output. R213, located on the PA Driver module, is used to adjust the output power over a range of 30 Watts to rated output power. The power control circuit consists of R213, Q215 and Power Control IC (U201). Included in the PA assembly, is a Low Pass Filter/Antenna Switch module used to suppress undesired harmonic frequency components and provide antenna switching for the receiver and the transmitter.

SUPPLY VOLTAGE

Supply voltage for the PA is connected through power leads from the system board to feed through capacitors C297 and C298 on the bottom of the PA assembly (See Schematic Diagram). C297, C298, C299 prevent RF from getting on the power leads. Diodes CR295 will cause the main fuse assembly to blow if the polarity of the power leads is reversed, providing reverse voltage protection for the radio.

The PA assembly is insulated from vehicle ground to permit operation in positive or negative ground vehicles.

NOTE

In positive ground vehicles, A- "hot" with respect to vehicle ground. Shorting the transmitter PA printed wiring board ground pattern to the radio case may cause one of the in-line fuses to blow.

Centralized metering jack J205 is provided for use with GE Test Set Model 4EX3A11 or Test Kit 4EX8K12. The Test Set meters the Ampl-1 drive (exciter output), power control voltage, driver current, PA current and PA voltage.

CIRCUIT ANALYSIS

RF POWER AMPLIFIER ASSEMBLY

The exciter output is coupled through at 50 ohm RF cable to the PA Drive module input jack J201. The 50 ohm RF input is coupled through a matching network comprised of C207, C208 and W202 to the base of power amplifier Q201.

Part of the RF input is rectified by CR201 and metered at J205-4 through resistor R201. The rectified RF is also applied to the power control IC (U201).

Collector voltage for Q201 is applied direct from the DC power input through collector stabilizing network R205 and L202 and collector feed network L203 and C210.

The 500 milliwatt, 50 ohm output of Q201 is coupled to the base of a second power amplifier Q202 through a matching network consisting of T201, C214, C215, C216 and L204.

Collector voltage to Q202 is controlled by power control IC (U201), Q215 and R213, and is applied through a collector stabilizing network L206 and R206 and collector feed network L205 and C218.

The 6 Watt, 50 ohm output of Q202 is coupled to the base of Q203 through C219 and the matching network of T202, C222, C224, C225 and L207. The collector voltage to Q203 is coupled through collector stabilizing network L209 and R214 and collector feed network L208 and C228.

The 20-Watt output of Q203 is coupled through an impedance matching network (C229, C230, C233 and T203) that matches the output impedance of Q203 to the input impedance of driver amplifier Q204 through a 50-ohm micro strip (W204) and input impedance matching network T204, C234, C235 and C236.

The collector voltage for Q204 is coupled through collector stabilizing network L212 and R208 and collector feed network C239 and L211. Collector current for Q204 is metered across tapped manganin resistor R212. The reading taken in position F on the 15-Volt scale with the High Sensitivity button pressed and read as 0-15 amperes full scale.

Following Driver amplifier Q204 is 50-ohm a matching network (C237, C238, and T205) that matches the 40 Watt output of Q204 to the 50-ohm input of the PA module, through 50-ohm micro strip W207 and a 50-ohm strap W211.

NOTE

For MASTR® II High Power Solid State applications where "Combining" is used, four new Power Amplifiers (19D424895G40-G43) have been added. The new PA's do not use the 40 Watt modules. Two separate PA's are used with a combiner panel to sum the power output of each PA.

On the PA module, the RF input is applied to the RF power splitter board. The RF power splitter consisting of micro strip transmission line W4201, C4265, C4266, R4201, R4202 and R4203, and has a 50-ohm input and output impedance. The outputs of the power splitter are applied to the four identical Class C Power Amplifiers (Q216 through Q219) via their respective identical matching networks.

Supply voltage for Q216 through Q219 is coupled through identical stabilizing networks and the collector feed networks. Supply voltage is measured in position G on the 15-volt range with the polarity switch in the (-) position (read as 15 volts full scale).

Collector current for Q216 through Q219 is metered across paralleled tapped manganin resistors R210 and R211 located on the PA Driver module. The reading is taken in Position G in the Test 1 position on the 3-Volt scale with the "High" Sensitivity Button pressed, and read as 30 amperes full scale.

The outputs of Q216 through Q219 are coupled through identical matching networks to the RF power combiner board. The RF power combiner consists of micro strip transmission line W4202, R4208, R4209, and R4210, and has a 50-ohm input and output impedance. The combiner adds the outputs of Q216 through Q219, and applies the combined RF output to the Low Pass Filter/Antenna Switch module via W4216. Capacitors C4243 through C4252 provide isolation for ± ground operation.

The input to the Low Pass Filter and to the antenna switch K201 is coupled through the 50-ohm micro strip W4280. The output is applied to the antenna at J203.

WARNING

The RF Power Transistors used in the transmitter contain Beryllium Oxide, a TOXIC substance. If the ceramic, or other encapsulation is opened, crushed, broken or abraded, the dust may be hazardous if inhaled. Use car in placing transistors of this type.

POWER CONTROL CIRCUIT

The Power Control Circuit, located on the PA Driver module, consists of CR201, Power Control IC (U201), RT201, Q215, and R213.

When the transmitter is keyed, rectified RF from CR201 is applied to Switch Q1 of Power Control IC (U201), turning it on (See Figure 1). Turning on Q1 turns on voltage regulator Q2, supplying a constant voltage via Pin 14 to Power Adjust potentiometer R213. R213 through Pin 12 connect to the base of Q5. Q5, Q6 and Q215 operate as an amplifier chain to supply voltage to the collector of Q202 (Ampl-2). The setting of R213 determines the voltage applied to the base of Q5. The higher the voltage at the base of Q5, the harder the amplifiers conduct, supplying more

collector voltage to Q202. The lower the voltage at the base of Q5, the less collector voltage is supplied to Q202. Reducing the supply voltage to Q202 reduces the drive to Q203 and Q204, thereby reducing the power output of the PA. The power output can be adjusted by R213 from 30 Watts to rated power output.

Temperature protection is provided by Q3, Q4 in IC U201 and thermistor RT201 which is mounted on the PA heatsink. Under normal operating conditions, the circuit is inactive (Q3 is on and Q4 is off). When the heatsink temperature reaches approximately 115°C the resistance of RT201 decreases. This increases the base voltage applied to Q3, turning it off. Turning off Q3 allows Q4 to turn on, decreasing the voltage at Power Adjust potentiometer R213. This reduces the base voltage to Q5 which causes Q6 and Q215 to conduct less, reducing the collector voltage to Q202 (Ampl-2). This reduces the transmitter output power, keeping the heatsink at a maximum of approximately 115°C. When the heatsink temperature decreases below 115°C, the temperature control circuit turns off, allowing the normal transmitter power output.

ANTENNA MATCHING UNIT

The Antenna Matching Unit is used only in continuous duty duplex stations to optimize impedance matching between the power amplifier and the load. It consists of a Pi network (C2-C5 and L1) and a reverse directional coupler. RF from the low pass filter is applied to the Pi network through the reverse directional coupler and then to the duplexer load. The reverse directional coupler permits monitoring the reflected power by connecting a DC voltmeter across TP1 (+) and ground (-). C2 and C4 are tuned for minimum DC voltage which represents minimum reflected Power. L1 may also be pushed toward or away from the filter cover wall to further reduce the DC voltage. C2, C4 and L1 should be alternately tuned until an absolute minimum voltage reading is obtained. The residual voltage reading after tuning may vary from one transmitter to the next depending on output power level, operating frequency and the load.

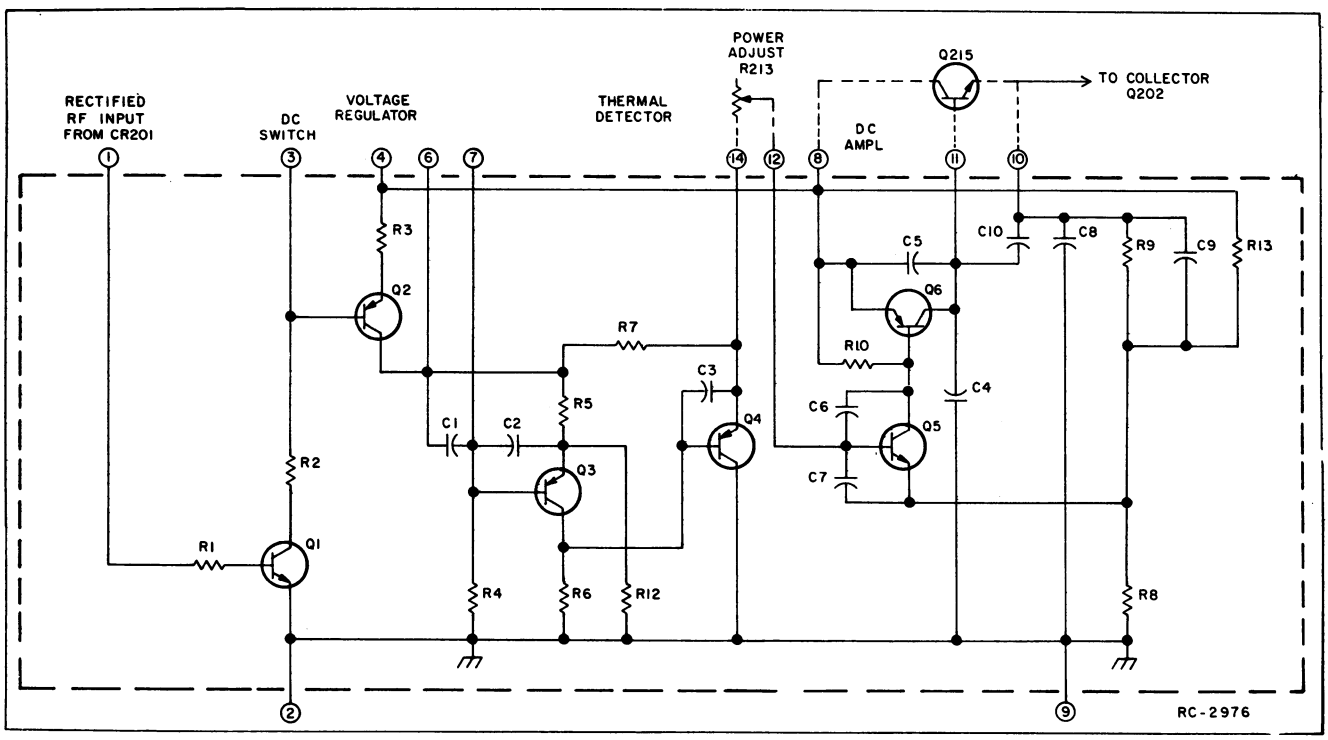
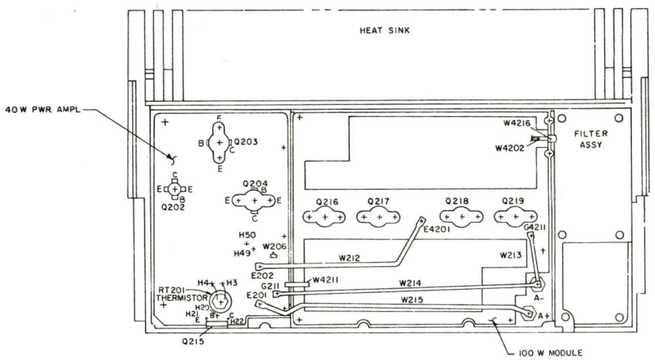


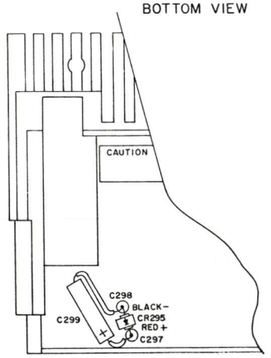
Figure 1 - Power Control IC-U201

PA ASSEMBLY

TOP VIEW



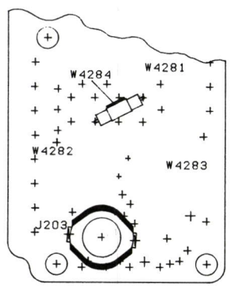
BOTTOM VIEW



(19D424161, Rev. 5)

RUNS ON SOLDER SIDE
RUNS ON BOTH SIDES
RUNS ON COMPONENT SIDE

DUPLEX STATION FILTER BOARD

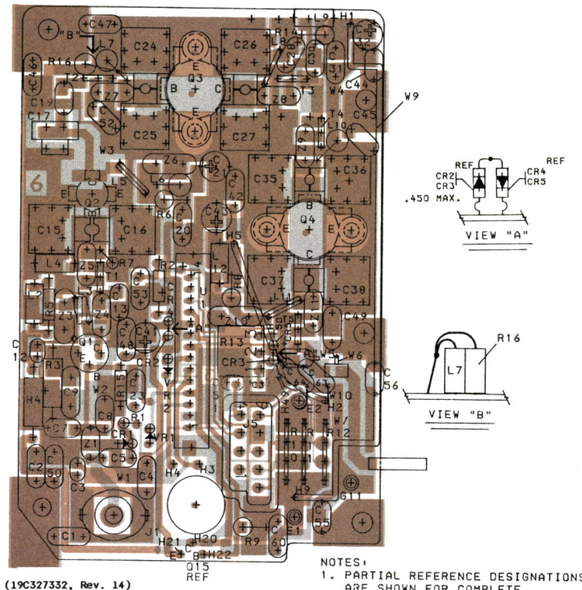


OUTLINE DIAGRAMS

100 WATT UHF MOBILE AND INTERMITTENT DUTY STATION POWER AMPLIFIER

40 WATT MODULE

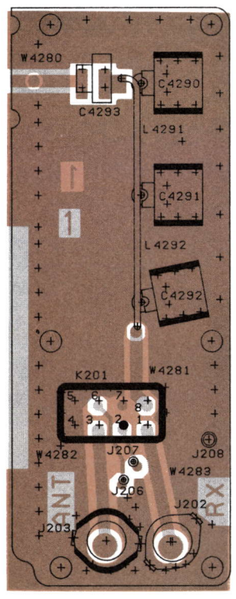
TOP



(19C327332, Rev. 14)
(19B226633, Sh. 1, Rev. 6)
(19B226633, Sh. 2, Rev. 3)

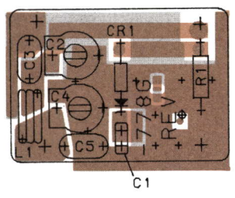
NOTES:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN.FOR COMPLETE DESIGNATION, PREFIX WITH 200 SERIES.EXAMPLE: C1-C201, R1-R201, ETC.
2. C9 USED IN GROUP 5 ONLY. DA JUMPER IN C9 MTG HOLESFOR GROUP 6, 7 & 8.
3. Q2,Q3 AND Q4 ARE PART OF HIGHER ASM (PA).

MOBILE & STATION FILTER BOARD



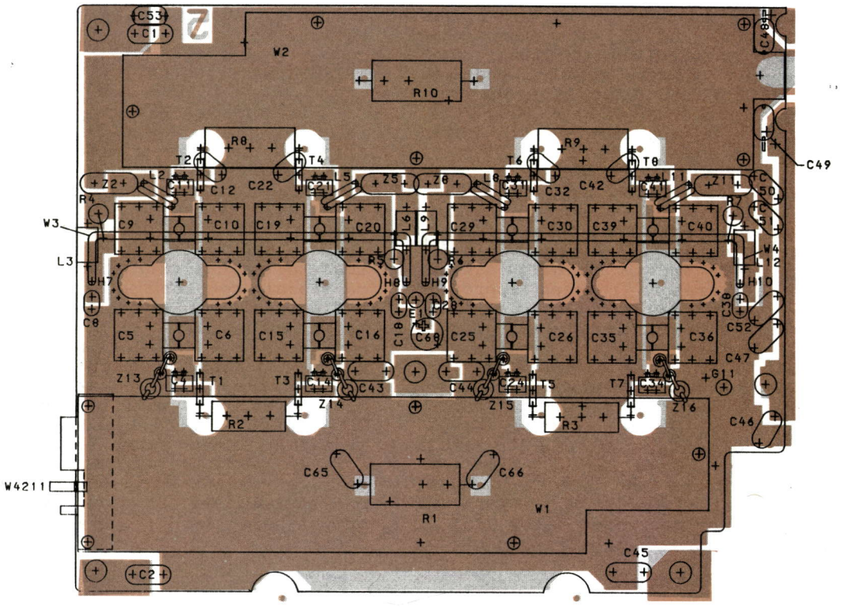
(19C327643, Rev. 1)
(19B227265, Sh. 1, Rev. 1)
(19B227265, Sh. 2, Rev. 1)

ANTENNA MATCHING UNIT



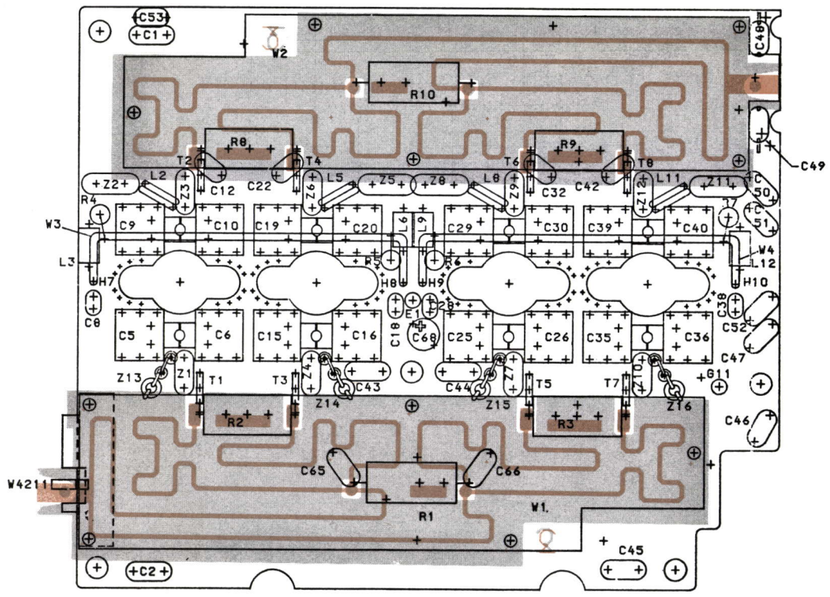
(19B233800, Rev. 0)
(19A143200, Sh. 1, Rev. 0)
(19A143200, Sh. 2, Rev. 0)

100 WATT MODULE

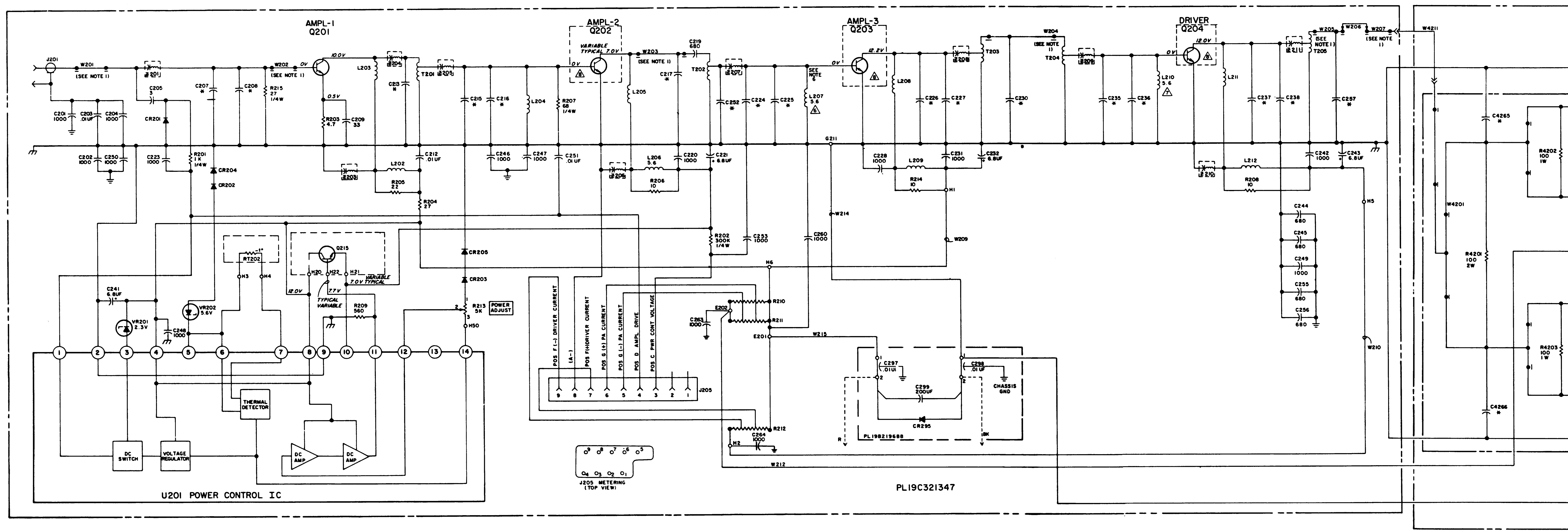


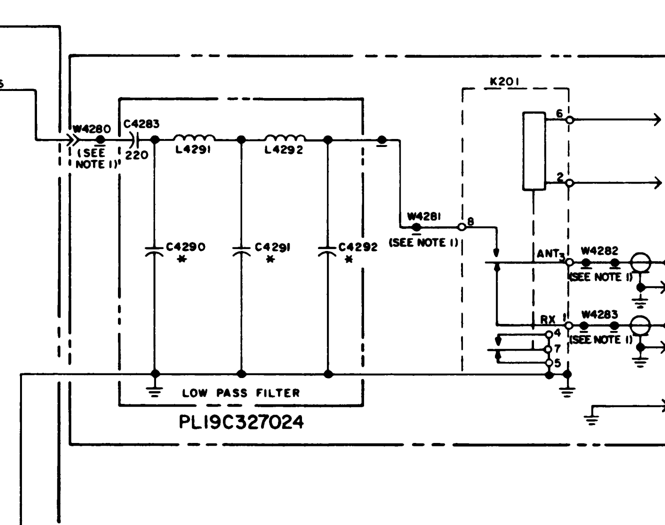
(19C327331, Rev. 12)
(19B226639, Sh. 1, Rev. 7)
(19B226639, Sh. 2, Rev. 5)

NOTE:
1. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN, FOR COMPLETE DESIGNATIONS PREFIX WITH 4200 SERIES. EXAMPLE:C15-C4215,R1-R4201, ETC.



(19C327331, Rev. 11)
(19B226642, Sh. 1, Rev. 3)
(19B226642, Sh. 2, Rev. 3)





NOTE:
CHANGES TO THIS DIAG MAY AFFECT 19R622150, 19R622151, 19R622152, 19R622185, 19R622186, 19R622187, 19R622188

* COMPONENT VALUES AS FOLLOWS

COMP IDENT	LL 406-450MHZ	L 450-470MHZ	M 470-494MHZ	H 494-512MHZ	LM 420-450MHZ
C207	8	9	7	6	8
C208	8				8
C215	47	47	43	43	47
C216	51	43	43	39	51
C217	18	16	15	13	18
C224	41	35	35	32	41
C225	43	35	33	32	43
C226	47	43	37	35	47
C227	43	37	37	35	43
C230	7		4	3	7
C235	47	37	35	33	47
C236	47	35	33	33	47
C237	47	39	37	35	47
C238	47	43	43	39	47
C257	5				5
C4205	39	35	32	28	39
C4206	41	35	32	28	41
C4209	41	37	35	32	41
C4212	4	1			4
C4214	33	24	24	24	33
C4215	39	35	32	28	39
C4216	41	35	32	28	41
C4219	41	37	35	32	41
C4220	43	37	35	28	43
C4222	4	1			4
C4225	39	35	32	28	39
C4226	41	35	32	28	41
C4229	41	37	35	32	41
C4230	43	37	35	28	43
C4232	4	1			4
C4235	39	35	32	28	39
C4236	41	35	32	28	41
C4239	41	37	35	32	41
C4240	43	37	35	28	43
C4242	4	1			4
C4265		3	2.2	2.2	
C4266		3	2.2	2.2	
C4290	10	9	9	9	10
C4291	20	18	18	18	20
C4292	13	12	12	12	13
C252	5	7	4	3	
Z213	X				X
Z203	X	X	X	X	X
Z204	X	X	X	X	X
Z205	X	X	X	X	X
Z207	X	X	X	X	X
Z208	X	X	X	X	X
Z209	X	X	X	X	X
Z210	X	X	X	X	X
Z211	X	X	X	X	X
Z4202	X	X	X	X	X
Z4205	X	X	X	X	X
Z4208	X	X	X	X	X
L207		5.6	5.6	5.6	
L210		5.6	5.6	5.6	
Z4211	X	X	X	X	X
Z214	X				X
C213	5				5

	PA ASSEMBLY	REV LTR	DESCRIPTION	HEAT SINK ASM	REV LTR
STD. PKG.	PL19D424888G14	C	406-420 MHZ	PL19B219688G7	
STD. PKG.	PL19D424888G15	C	450-470 MHZ	PL19B219688G7	
STD. PKG.	PL19D424888G16	C	470-494 MHZ	PL19B219688G7	
STD. PKG.	PL19D424888G17	C	494-512 MHZ	PL19B219688G7	
STD. PKG.	PL19D424888G37	B	420-450 MHZ	PL19B219688G7	
SYSTEM PKG	PL19D424888G31	C	406-420 MHZ	PL19B219688G19	
SYSTEM PKG	PL19D424888G32	C	450-470 MHZ	PL19B219688G19	
SYSTEM PKG	PL19D424888G33	C	470-494 MHZ	PL19B219688G19	
SYSTEM PKG	PL19D424888G34	C-	494-512 MHZ	PL19B219688G19	
SYSTEM PKG	PL19D424888G38	B	420-450 MHZ	PL19B219688G19	

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS.

40 WATT MODULE	REV LTR	100 WATT MODULE	REV LTR	FILTER MODULE	REV LTR	FREQUENCY	
PL19C321347G5	N	PL19D423006G5	E	PL19C327024G13	A	406-420 MHZ	STD PKG
PL19C321347G6	M	PL19D423006G6	E	PL19C327024G4		450-470 MHZ	STD PKG
PL19C321347G7	H	PL19D423006G7	E	PL19C327024G4		470-494 MHZ	STD PKG
PL19C321347G8	H	PL19D423006G8	E	PL19C327024G4		494-512 MHZ	STD PKG
PL19C321347G9	F	PL19D423006G5	E	PL19C327024G3		420-450 MHZ	STD PKG
PL19C321347G5	N	PL19D423006G5	E	PL19C327024G13	A	406-420 MHZ	SYSTEM PKG
PL19C321347G6	M	PL19D423006G6	E	PL19C327024G4		450-470 MHZ	SYSTEM PKG
PL19C321347G7	H	PL19D423006G7	E	PL19C327024G4		470-494 MHZ	SYSTEM PKG
PL19C321347G8	H	PL19D423006G8	E	PL19C327024G4		494-512 MHZ	SYSTEM PKG
PL19C321347G9	F	PL19D423006G5	E	PL19C327024G3		420-450 MHZ	SYSTEM PKG

VOLTAGE READINGS

VOLTAGE READINGS ARE TYPICAL READINGS MADE WITH TRANSMITTER KEYED, AND MEASURED WITH A 20,000 OHMS-PER-VOLT METER WITH REFERENCE TO A- AND NOT CHASSIS GROUND. AN RF CHOKE (25-50 MICROHENRYS) IS USED IN THE HOT METER LEAD TO AVOID DETUNING RF CIRCUITS.
NOTE: READINGS AT Q202 COLLECTOR AND IN THE POWER CONTROL CIRCUIT WERE TAKEN WITH THE TRANSMITTER ADJUSTED FOR 100 WATTS OUTPUT. THESE READINGS WILL VARY DEPENDING ON THE SETTING OF POWER ADJUST CONTROL R213.

NOTES
1. MICROSTRIP PART OF PWB
2. ALL COMPONENTS MARKED WITH (*) ASTERISK, SEE COMPONENT VALUE TABLE
3. (A- symbol) INDICATES A-
   (ground symbol) INDICATES VEHICLE GROUND.

6. ON PL19C321347G5 & G9 DELETE L207 & ADD Z213.
7. ON PL19C321347G5 & G9 DELETE L210 & ADD Z214.
8. PART OF NEXT LEVEL HIGHER ASM. (PA)

(19B622153, Rev. 39)

SCHEMATIC DIAGRAM

100 WATT UHF MOBILE & INTERMITTENT DUTY STATION
POWER AMPLIFIER

PARTS LIST

LBI30203J

406-512 MHz, 100 WATT POWER AMPLIFIER
19D424888G14-G17, ("M" SERIES MOBILE, INT. DUTY STATION) - REV C
19D424888G37, ("M" SERIES MOBILE, INT. DUTY STATION) - REV B
19D424888G31-G34, ("E" SERIES MOBILE) - REV C
19D424888G38, ("E" SERIES MOBILE) - REV B

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - - TRANSISTORS - - - - - - - - - -
Q202	19A134164P2	Silicon, NPN; sim to Type 2N5945.
Q203LL	19A134239P3	Silicon, NPN.
Q203L	19A134239P1	Silicon, NPN.
Q203M	19A134239P1	Silicon, NPN.
Q203H	19A134239P1	Silicon, NPN.
Q204LL and Q204L	19A134242P3	Silicon, NPN.
Q204H	19A134242P4	Silicon, NPN; 50 Watt.
Q215	19A116742P1	Silicon, NPN.
Q216 thru Q219	19A134171P2	Silicon, NPN; sim to Type 2N5945.
		- - - - - - - - - - - THERMISTORS - - - - - - - - - -
RT201	19A129379G1	Thermistor: 40K ohms ±20%, color code white; sim to Carborundum Type M0806J-5.
		- - - - - - - - - - - CABLES - - - - - - - - - -
W212	19A130486G1	Jumper.
W213	19B227092G1	Jumper.
W214	19B226725G1	Jumper.
W215	19B227074G1	Jumper.
W4216	19A130479P3	Strap.
		40 WATT MODULE 19C321347G5 406-420 MHz (LL) 19C321347G6 450-470 MHz (L) - REV L 19C321347G7 470-494 MHz (M) 19C321347G8 494-512 MHz (H) 19C321347G9 420-450 MHz (LL)
		- - - - - - - - - - - CAPACITORS - - - - - - - - - -
C201 and C202	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C203	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C204	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C205	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C206*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G6 by REV K. Deleted in G7 & G8 by REV H. Deleted in G9 by REV D.
		In REV E & earlier in G5, in REV C & earlier in G6-G8:
	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C207LL	19A116656P8J0	Ceramic disc: 8 pF ±0.5 pF, 500 VDCW; temp coef 0 PPM.
C207L*	19A116656P9J0	Ceramic disc: 9 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In REV D & earlier:
	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C207M*	19A116656P7J0	Ceramic disc: 7 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In REV E & earlier:
	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C207H	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C208LL	19A116656P8J0	Ceramic disc: 8 pF ±0.5 pF, 500 VDCW; temp coef 0 PPM.
C208L*	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Deleted by REV E.
C208M*	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Deleted by REV F.
C208H*	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Deleted by REV F.
C209LL*	7489162P15	Silver mica: 33 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. Deleted by REV C. Added by REV D. Deleted by REV G.
C209L*	7489162P11	Silver mica: 22 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. Deleted by REV C.
C209M*	7489162P11	Silver mica: 22 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. Deleted by REV C.
C209H*	7489162P13	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. Deleted by REV C.
C209*	19A116656P33J0	Ceramic disc: 33 pF ±5%, 500 VDCW, temp coef 0 PPM. Added to G5 by REV G, G6 by REV E, G7 & G8 by REV F.
C210LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C210L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C210M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C210H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C211LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C211L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C211M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C211H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C212	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C213*	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Deleted by REV E.
C213LL*	19A116656P5J0	Ceramic disc: 5 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Added by REV E. Deleted in G5 by REV M. Deleted in G9 by REV E. Added to G5 by REV N. Added to G9 by REV F.
C214LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C214L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C214M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C214H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C215LL	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
C215L	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
C215M	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C215H	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C216LL	19A700131P51	Metallized teflon: 51 pF ±2%, 250 VDCW.
C216L	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C216M	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C216H	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C217LL	19A116679P18D	Metallized teflon: 18 pF ±0.5 pF, 250 VDCW.
C217L	19A116679P16D	Metallized teflon: 16 pF ±0.5 pF, 250 VDCW.
C217M	19A116679P15D	Metallized teflon: 15 pF ±0.5 pF, 250 VDCW.
C217H	19A116679P13D	Metallized teflon: 13 pF ±0.5 pF, 250 VDCW.
C218*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G6 by REV K. Deleted in G7 & G8 by REV H. Deleted in G9 by REV D.
C219	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C220	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C221	19B209723P4	Tantalum: 6.8 uF ±20%, 35 VDCW.
C222LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C222L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C222M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C222H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C223	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C224LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C224L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C224M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C224H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C225LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C225L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C225M	19A700131P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C225H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C226LL	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
C226L	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C226M	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C226H	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C227LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C227L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C227M	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C227H	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C228	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C229LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C229L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C229M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C229H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C230LL*	19A116656P7J0	Ceramic disc: 7 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In G5 of REV K & earlier: In G9 of REV C & earlier:
	19A116656P8J0	Ceramic disc: 8 pF ±0.5 pF, 500 VDCW; temp coef 0 PPM.
C230M	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C230H	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C231	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C232	19B209723P4	Tantalum: 6.8 uF ±20%, 35 VDCW.
C233L*	19A134100P20	Ceramic disc: 2.2 pF ±0.1 pF, temp coef 0 ±120 PPM. Deleted by REV B.
C233H*	19A134100P20	Ceramic disc: 2.2 pF ±0.1 pF, temp coef 0 ±120 PPM. Deleted by REV B.
C234LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C234L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C234M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C234H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C235LL*	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
		In G5 of REV K & earlier: In G9 of REV C & earlier:
	19A116952P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C235L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C235M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C235H	19A700131P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C236LL*	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
		In G5 of REV K & earlier: In G9 of REV C & earlier:
	19A116952P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C236L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C236M	19A700131P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C236H	19A700131P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C237LL	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
C237L	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C237M	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C237H*	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
		In REV D & earlier:
	19A116952P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C238LL	19A700131P47	Metallized teflon: 47 pF ±2%, 250 VDCW.
C238L	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C238M*	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
		In REV D & earlier:
	19A116952P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C238H*	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
		In REV D & earlier:
	19A116952P33	Metallized teflon: 33 pF ±2%, 250 VDCW.
C239*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV H. Deleted in G6 by REV K. Deleted in G7 & G8 by REV H.
C239LL*	7489162P13	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. Added by REV H. Deleted in G5 by REV L, G9 by REV D.
C240LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G5 by REV L. Deleted in G9 by REV D.
C240L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G6 by REV K.
C240M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G7 by REV H.
C240H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted in G8 by REV H.
C241	19A134202P15	Tantalum: 6.8 uF ±20%, 35 VDCW.
C242	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C243	19A134202P15	Tantalum: 6.8 uF ±20%, 35 VDCW.
C244 and C245	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C246 thru C250	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C251	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C252LL*	19A116656P5J0	Ceramic disc: 5 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In G5 of REV H-M:
	19A116656P9J0	Ceramic disc: 9 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In REV B-G:
	19A116656P6J0	Ceramic disc: 6 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In REV A & earlier:
	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C252L*	19A116656P7J0	Ceramic disc: 7 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In REV C-H:
	19A116656P5J0	Ceramic disc: 5 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Added by REV B.
C252M*	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Added by REV B.
C252H*	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Added by REV B.
C253	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C255 and C256	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C257LL*	19A116656P5J0	Ceramic disc: 5 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In G5 of REV M: In G9 of REV E:
	19A116656P7J0	Ceramic disc: 7 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
		In G5 of REV L & earlier: In G9 of REV D & earlier:
	19A116656P5J0	Ceramic disc: 5 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C257L*	19A134100P20	Ceramic disc: 2.2 pF ±0.1 pF, temp coef 0 ±120 PPM. Deleted by REV B.
C257M*	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM. Deleted by REV B.
C257H*	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM. Deleted by REV B.
C258L*	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Deleted by REV C.
C260	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C262*	19A116114P2044	Ceramic: 27 pF ±5%, 100 VDCW; temp coef -80 PPM. Added to G6 by REV F. Deleted from G6 by REV G.
C263* and C264*	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap. Added to G5 by REV K. Added to G6 by REV H. Added to G7, G8 by REV G. Added to G9 by REV C.
		- - - - - - - DIODES AND RECTIFIERS - - - - - - -
CR201	19A116052P1	Silicon, hot carrier: Fwd drop .350 volts max.
CR202 and CR203	19A115250P1	Silicon, fast recovery, 225 mA, 50 PIV.
CR204* and CR205*	19A115250P1	Silicon, fast recovery, 225 mA, 50 PIV. Added by REV A.
		- - - - - - - - - - - TERMINALS - - - - - - - - - -
E201 and E202	19A134263P1	Contact, electrical: sim to Selectro 229-1082-00-0-590.
G211	19A134263P1	Contact, electrical: sim to Selectro 229-1082-00-0-590.
		- - - - - - - JACKS AND RECEPTACLES - - - - - - -
J201	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058.
J205	19B219374G1	Connector: 9 contacts.
		- - - - - - - - - - - INDUCTORS - - - - - - - - - -
L202	19A701091G1	Coil.
L203	19A129774P1	Coil.
L204	19A701091G1	Coil.
L205	19B219457P6	Coil.
L206	19A700000P120	Coil, RF: 5.6 uH ±10%; sim to Jeffers 4422-1K.
L207*	19A700000P20	Coil, RF: 5.6 uH ±10%; sim to Jeffers 4421-4K. Deleted in G5 by REV M, G9 by REV E.
L208LL	19B219457P6	Coil.
L208L	19A130650P1	Coil.
L208M	19A130650P1	Coil.
L208H	19A130650P1	Coil.
L209	19A701091G1	Coil.
L210LL*	19A700000P25	Coil, RF: 15 uH ±10%; sim to Jeffers 4421-9K. Deleted in G5 by REV M, G9 by REV E.
L210L	19A700000P20	Coil, RF: 5.6 uH ±10%; sim to Jeffers 4421-4K.
L210M	19A700000P20	Coil, RF: 5.6 uH ±10%; sim to Jeffers 4421-4K.
L210H	19A700000P20	Coil, RF: 5.6 uH ±10%; sim to Jeffers 4421-4K.
L211	19B219457P6	Coil.
L212	19A701091G1	Coil.
		- - - - - - - - - - - TRANSISTORS - - - - - - - - - -
Q201	19A134237P1	Silicon, NPN.
		- - - - - - - - - - - RESISTORS - - - - - - - - - -
R201	19A700106P63	Composition: 1K ohms ±5%, 1/4 w.
R202	3R152P304J	Composition: 300K ohms ±5%, 1/4 w.
R203*	19A700113P7	Composition: 4.7 ohms ±5%, 1/2 w. Deleted by REV C. Added by REV D. Added to G6 by REV E, to G7 & G8 by REV F.
R204*	19A700113P25	Composition: 27 ohms ±5%, 1/2 w.
		In REV B & earlier:
	3R77P220J	Composition: 22 ohms ±5%, 1/2 w.
R205	19A700106P23	Composition: 22 ohms ±5%, 1/4 w.
R206	19A700113P15	Composition: 10 ohms ±5%, 1/2 w.
R207	19A700106P35	Composition: 68 ohms ±5%, 1/4 w.
R208	19A700113P15	Composition: 10 ohms ±5%, 1/2 w.
R209	19A700113P57	Composition: 560 ohms ±5%, 1/2 w.
R210 thru R212	19C850605P1	Shunt resistor.
R213	19A116559P102	Variable cermet: 5000 ohms ±20%, 1/2 w; sim to CTS Series 360.
R214	19A700113P15	Composition: 10 ohms ±5%, 1/2 w.
R215	19A700106P25	Composition: 27 ohms ±5%, 1/4 w.
R216*	19A700113P15	Composition: 10 ohms ±5%, 1/2 w. Added to G6 by REV F.
		- - - - - - - - - - TRANSFORMERS - - - - - - - - - -
T201 thru T205	19A130446G1	Coil.
		- - - - - - - - - INTEGRATED CIRCUITS - - - - - - -
U201	19D423127G1	Power Control.
		- - - - - - - - - VOLTAGE REGULATORS - - - - - - -
VR201	4036887P1	Zener: 500 mW, 2.3 v. nominal.
VR202	4036887P5	Zener: 500 mW, 5.4 v. nominal.
		- - - - - - - - - - - CABLES - - - - - - - - - -
W201 thru W205		(Part of printed board 19D423005P1).
W206	19A701093P1	Strap.
W207		(Part of printed board 19D423005P1).
W209	19B226733G1	Jumper.
W210	19B226734G1	Jumper.
		- - - - - FREQUENCY SELECTING NETWORKS - - - - -
Z201*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G5 by REV L. Added to G6 by REV K. Added to G7 & G8 by REV H. Added to G9 by REV D.
Z203LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z203L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z203M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z203H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z204LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z204L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z204M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z204H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z205LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z205L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z205M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z205H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z206*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G5 by REV L. Added to G9 by REV D. Added to G6 by REV K. Added to G7 & G8 by REV H.
Z207LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z207L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z207M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z207H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z208LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z208L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z208M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z208H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z209LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z209L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z209M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z209H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z210*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G5 by REV L. Added to G9 by REV D. Added to G6 by REV K.
Z211LL*	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC. Added to G5 by REV L. Added to G9 by REV D.
Z211L*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G6 by REV K.
Z211M*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G7 by REV H.
Z211H*	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC. Added to G8 by REV H.
Z213* and Z214*	19A143581G1	Network assembly. Added to G5 by REV M. Added to G9 by REV E.
		100 WATT MODULE 19D423006G5 406-450 MHz (LL) 19D423006G6 450-470 MHz (L) 19D423006G7 470-494 MHz (M) 19D423006G8 494-512 MHz (H) (REV E)
		- - - - - - - - - - - CAPACITORS - - - - - - - - - -
C4201 and C4202	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C4204LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4204L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4.04M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4204H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4205LL	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C4205L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4205M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4205H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4206LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4206L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4206M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4206H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4207*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4208	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C4209LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4209L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

SYMBOL	GE PART NO.	DESCRIPTION
C4209M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4209H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4210LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C4210L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4210M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4210H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4211LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4211L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4211M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4211H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4212LL	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4212L	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM
C4214	19A701413P32	Mica: 82 pF ±5%, 100 VDCW.
C4214LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4214L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4214M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4214H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4215LL	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C4215L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4215M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4215H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4216LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4216L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4216M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4216H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4217*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4218	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C4219LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4219L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4219M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4219H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4220LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C4220L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4220M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4220H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4221LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4221L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4221M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4221H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4222LL	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4222L	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM
C4224LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4224L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4224M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.

SYMBOL	GE PART NO.	DESCRIPTION
C4224H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4225LL	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C4225L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4225M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4225H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4226LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4226L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4226M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4226H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4227*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4228	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C4229LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4229L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4229M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4229H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4230LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C4230L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4230M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4230H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4231LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4231L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4231M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4231H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4232LL	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4232L	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM
C4234LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4234L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4234M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4234H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4235LL	19A700131P39	Metallized teflon: 39 pF ±2%, 250 VDCW.
C4235L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4235M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4235H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4236LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4236L	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4236M	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4236H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4237*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4238	19A116192P1	Ceramic: 0.01 uF ±20%, 50 VDCW; sim to Erie 8121 Special.
C4239LL	19A700131P41	Metallized teflon: 41 pF ±2%, 250 VDCW.
C4239L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4239M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.
C4239H	19A700131P32	Metallized teflon: 32 pF ±2%, 250 VDCW.
C4240LL	19A700131P43	Metallized teflon: 43 pF ±2%, 250 VDCW.
C4240L	19A700131P37	Metallized teflon: 37 pF ±2%, 250 VDCW.
C4240M	19A700131P35	Metallized teflon: 35 pF ±2%, 250 VDCW.

SYMBOL	GE PART NO.	DESCRIPTION
C4240H	19A700131P28	Metallized teflon: 28 pF ±2%, 250 VDCW.
C4241LL*	19A134666P3	Silver mica: 27 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4241L*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4241M*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4241H*	19A134666P1	Silver mica: 18 pF ±5%, 500 VDCW; sim to Electro Motive Type DM154CR. Deleted by REV C.
C4242LL	19A116656P4J0	Ceramic disc: 4 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4242L	19A134100P19	Ceramic disc: 1 pF ±0.1 pF, temp coef 0 ±250 PPM
C4243 thru C4245	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C4246	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C4247	19A116655P20	Ceramic disc: 1000 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C4248 thru C4253	19A116655P18	Ceramic disc: 680 pF ±10%, 1000 VDCW; sim to RMC Type JF Discap.
C4265L	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4265M and C4265H	19A134100P20	Ceramic disc: 2.2 pF ±0.1 pF, temp coef 0 ±120 PPM.
C4266L	19A116656P3J0	Ceramic disc: 3 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM.
C4266M and C4266H	19A134100P20	Ceramic disc: 2.2 pF ±0.1 pF, temp coef 0 ±120 PPM.
C4268*	19B209723P4	Tantalum: 6.8 uF ±20%, 35 VDCW. Added by REV B
		- - - - - - - - - - TERMINALS - - - - - - - - - -
E4201	19A134263P1	Contact, electrical: sim to Selectro 229-1082-00-0-590.
G4211	19A134263P1	Contact, electrical: sim to Selectro 229-1082-00-0-590.
		- - - - - - - - - - INDUCTORS - - - - - - - - - -
L4202	19A130447G2	Coil.
L4203	19A701091G1	Coil.
L4205	19A130447G1	Coil.
L4206	19A701091G1	Coil.
L4208	19A130447G2	Coil.
L4209	19A701091G1	Coil.
L4211	19A130447G1	Coil.
L4212	19A701091G1	Coil.
		- - - - - - - - - - RESISTORS - - - - - - - - - -
R4201	19A700111P39	Composition: 100 ohms ±5%, 2 w.
R4202 and R4203	19A700112P39	Composition: 100 ohms ±5%, 1 w.
R4204 thru R4207	19A700113P15	Composition: 10 ohms ±5%, 1/2 w.
R4208* and R4209*	19A700111P39	Composition: 100 ohms ±5%, 2 w. Earlier than REV A:
	3R78P101J	Composition: 100 ohms ±5%, 1 w.
R4210	19A700111P39	Composition: 100 ohms ±5%, 2 w.
		- - - - - - - - - - TRANSFORMERS - - - - - - - - - -
T4201 thru T4208	19A130446G1	Coil.

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - CABLES - - - - - - - - - -
W4201 and W4202		(Part of printed board 19C321425G1).
W4203 and W4204	19B226708G1	Jumper.
W4211	19A130479P2	Strap.
		- - - - - FREQUENCY SELECTING NETWORKS - - - - -
Z4201LL	19A134666P3	Frequency Network: selective, 400-500 MHz res. freq, 500 VDCW; simm to Dilectron TC501:NPO:330J:SLAC.
Z4201L	19A134666P1	Frequency Network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4201M	19A134666P1	Frequency Network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4201H	19A134666P1	Frequency Network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4202	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4203LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC5001:NPO:330J:SLAC.
Z4203L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4203M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4203H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4204LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4204L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4204M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4204H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4205	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4206LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4206L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4206M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4206H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4207LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4207L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4207M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4207H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4208	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.

SYMBOL	GE PART NO.	DESCRIPTION
Z4209LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4209L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4209M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4209H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4210LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4210L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4210M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4210H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4211	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4212LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:330J:SLAC.
Z4212L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4212M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4212H	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4213* thru Z4216*	19A143581G1	Network assembly. Added to G5 by REV M. Added to G9 by REV E.
		LOW PASS FILTER 19C327024G3 420-450 MHz (LL) 19C327024G4 450-512 MHz (H) (Added to 19D424888 by REV A)
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C4290LL	19A700014P4	Teflon/mica: 10 pF ±5%, 250 VDCW.
C4290H	19A700131P9	Metallized teflon: 9 pF ±0.5 pF, 250 VDCW.
C4291LL	19A700131P20	Metallized teflon: 20 pF ±0.5 pF, 250 VDCW.
C4291H	19A700131P18	Metallized teflon: 18 pF ±0.5 pF, 250 VDCW.
C4292LL	19A700131P13	Metallized teflon: 13 pF ±0.5 pF, 250 VDCW.
C4292H	19A700131P12	Metallized teflon: 12 pF ±0.5 pF, 250 VDCW.
C4293	19A700015P37	Teflon/Mica: 220 pF ±5%, 250 VDCW.
		- - - - - - - - - - INDUCTORS - - - - - - - - - -
L4291LL	19B226709G2	Jumper. (Includes L4292LL).
L4291H	19B226709G1	Jumper. (Includes L4292H).
L4292LL		(Part of L4291LL).
L4292H		(Part of L4291H).
		- - - - - - - - JACKS AND RECEPTACLES - - - - - - - -
J202 and J203	19A700049P2	Connector, receptacle: 500 VDCW maximum; sim to NTTF-1058.
J206 and J207	19A134263P2	Contact, electrical: sim to Selectro 229-1071.
J208	4033513P4	Contact, electrical: sim to Bead Chain L93-3.

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - RELAYS - - - - - - - - - -
K201	19A700061P1	Hermetic sealed: 180 to 341 ohms coil res, 8-16.3 VDC; sim to GE 3SAV1760A2, CP Clare HFH-1201558, or Potter-Brumfield HCM6160.
		- - - - - - - - - - CABLES - - - - - - - - - -
W4280 thru W4283		(Part of printed board 19D424367P1).
		LOW PASS FILTER MODULE 19C321424G4 (Deleted from 19D424888 by REV A)
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C4280H	19A700131P9	Metallized teflon: 9 pF + or 0.5 pF, 250 VDCW.
C4281H	19A700131P18	Metallized teflon: 18 pF + 0.5 pF, 250 VDCW.
C4282H	19A700131P12	Metallized teflon: 12 pF ±0.5 pS, 250 VDCW.
C4283H	19A700015P37	Teflon/Mica: 220 pF ±5%, 250 VDCW.
		- - - - - - - - - - INDUCTORS - - - - - - - - - -
L4281 and L4282	19B226709G1	Jumper.
		- - - - - - - JACKS AND RECEPTACLES - - - - - - -
J202 and J203	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058.
J206 and J207		(Part of K201).
J208	4033513P4	Contact, electrical: sim to Bead Chain L93-3.
		- - - - - - - - - - RELAYS - - - - - - - - - -
K201	19A116722P1	Hermetic sealed: 125 ohms ±20%, 1 form C contact, 9.6 to 15.8 VDC (over the temperature range indicated). (Includes J206 & J207).
		- - - - - - - - - - CABLES - - - - - - - - - -
W4280 thru W4283		(Part of printed board 19D423111P1).
		HEAT SINK 19B219688G7 ("M" SERIES) 19B219688G19 ("E" SERIES)
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C297 and C298	19A116708P1	Ceramic, feed-thru: 0.01 uF +100-0%; sim to Erie Style 327050X-5W0103P.
C299	19A115680P10	Electrolytic: 200 uF +150-10%, 18 VDCW; sim to Mallory Type TTX.
		- - - - - - - DIODES AND RECTIFIERS - - - - - - -
CR295	19A116783P1	Silicon.
		- - - - - - - - - MISCELLANEOUS - - - - - - - - -
	5492178P2	Washer, spring tension: sim to Wallace Barnes 375-20. (Used with Q202).
	19A702182P1	Spacer. (Used with Q202).
	19A702782P5	Nut, hex, brass: No. 8-32. (Used with Q202).
	N44P9010C6	Machine screw: No. 4-40 x 5/8. (Used with Q203)
	19A700068P1	Insulator, bushing. (Used with Q215).
	19A116023P1	Insulator, plate. (Used with Q215).
	19B201074P312	Tap screw, Phillips POZIDRIV®: No. 6-32 x 3/4. (Secures Filter Assembly).
	19B201074P306	Tap screw, Phillips POZIDRIV®: No. 6-32 x 3/8. (Secures Filter Board & jumper between 100 Watt Module & Filter Board).
	19C321442P1	Insulator. (Located under 100 Watt Module).

SYMBOL	GE PART NO.	DESCRIPTION
	19C321441P1	Insulator. (Located under 40 Watt Module).
	19A701332P4	Insulator, washer: nylon. (Used with Q201).
	N80P9006C6	Machine screw, phillips: No. 4-40 x 3/8. (Secures Q215).
	7141225P2	Hex nut: No. 4-40. (Secures Q215).
	N402P35C6	Lockwasher, steel: No. 4. (Secures Q215).
	N80P13010C6	Machine screw, phillips head: No. 6-32 x 5/8 (Secures 40 Watt Module).
	19A129434P1	Washer, fiber. (Located on terminals of C297 & C298).
	19D416732G7	Heat sink. ("M" SERIES).
	19D417105G7	Heat sink. ("E" SERIES).
	19A129639P1	Cover. (Located on "E" SERIES Heat Sink).
	19B201074P305	Tap screw, Phillips POZIDRIV®: No. 6-32 x 5/16. (Secures 19A129639P1 cover).

PRODUCTION CHANGES

Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter," which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

REV. A - PA Assembly 19D424888G14-17 & G31-34
To incorporate new low-pass filter. Deleted 19C321424. Added 19C327024.

REV. A - 40 Watt Module 19C321347G5-8
To improve power output at cold temperatures. Added CR204 & CR205.

REV. B - 40 Watt Module 19C321347G5-8
To improve operation.
In 19C321347G5: deleted C213 and changed C252LLB.
In 19C321347G6: deleted C233L, C257L and added C252LB.
In 19C321347G7: deleted C257M and added C252MB.
In 19C321347G8: deleted C233H, C257H and added C252HB.

REV. C - 40 Watt Module 19C321347G5-8
To improve operation. Deleted C209 and R203. Changed R204.

REV. D - 40 Watt Module 19C321347G5
To improve operation. Added C209 and R203.

REV. E - 40 Watt Module 19C321347G5
To improve station operation. Added C213.

REV. D - 40 Watt Module 19C321347G6-8
To improve operation. Changed C206.

REV. F - 40 Watt Module 19C321347G5
To improve operation. Changed C206.

REV. E - 40 Watt Module 19C321347G7 & G8
To improve RF Output: In 19C321347G7, 8: Changed C238.
In 19C321347G8 : Changed C237.

REV. E - 40 Watt Module 19C321347G6
REV. F - 40 Watt Module 19C321347G7, 8
REV. G - 40 Watt Module 19C321347G5
To improve operation. Changed C207L & C207M. Deleted C208L, C208M and C208H. Changed C209LL designation to C209. Added R203 to groups 6, 7 and 8.

REV. H - 40 Watt Module 19C321347G5
To increase output at 406 MHz. Changed C252LLB. Deleted C239. Added C239LLB.

REV. A - 100 Watt Module 19D423006G5-8
To improve performance. Changed R4208 and R4209.

REV. B - To improve stability. Added C4268.

REV. F - 40 Watt Module 19C321347G6
To improve stability if PA impedance mismatch occurs. Added R216 and C262.

REV. G - To improve operation. Deleted C262.

REV. H - 40 Watt Module 19C321347G6
REV. K - 40 Watt Module 19C321347G5
REV. G - 40 Watt Module 19C321347G7, 8
REV. J - 40 Watt Module 19C321347G5
REV. A - 40 Watt Module 19C321347G9
To correct Parts List. Added C240LL.

REV. B - 40 Watt Module 19C321347G9
To improve stability. Changed Q203LL.

REV. C - 40 Watt Module 19C321347G9
To improve operation of Power Control Circuit when used as driver for 100 Watt PA. Added C263 and C264.

REV. J - 40 Watt Module 19C321347G6
To improve power output at low end of 450-470 MHz range. Changed C219.

REV. L - 40 Watt Module 19C321347G5
REV. K - 40 Watt Module 19C321347G6
REV. H - 40 Watt Module 19C321347G7
REV. H - 40 Watt Module 19C321347G8
REV. D - 40 Watt Module 19C321347G9
To incorporate new nomenclature for frequency selection networks.

REV. M - 40 Watt Module 19C321347G5
REV. E - 40 Watt Module 19C321347G8
To improve Power output. Deleted C213LL, L207 & L210LL. Changed C257LL, C252LLB (Group 5 only), and Q203LLB. Added Z213 and Z214.

REV. N - 40 Watt Module 19C321347G5
REV. F - 40 Watt Module 19C321347G8
To improve Power output. Changed C230LL, C235LL, C236LL & C257LL. Added C213LL.

REV. C - 100 Watt Module 19D423006G5-8
To improve operation. Changed C2.

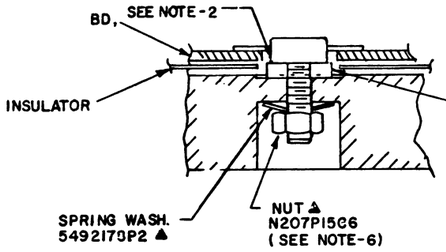
REV. D - 19D423006G5-8
To improve operation. Deleted L4201, L4204, L4207 and L4210. Added Z4213 - Z4216.

REV. B - PA Assembly 19D424888G14-G17, G31-G34
To improve operation in hot environments and to eliminate potential shots. Changed printed wire board.

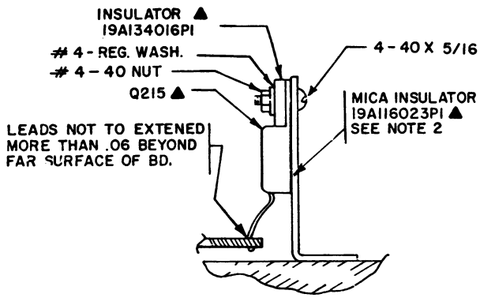
REV. L - 40-Watt PA Module 19C321347G6
To increase output power. Changed C252LB and C237. Deleted R216 and C230L.
R216 Was: 19A700113P15, Composition: 10 ohms ±5%, 1/2 W.
C230L Was: 19A116656P4J0, Ceramic disc: 4 pf, ±0.5 pf, 500 VDCW, temp coef 0 PPM.

REV. M - To improve output power over 450-470 MHz range. Deleted C219L. Changed C252LB. Added C219.
C219L Was: 19A116656P24J0, Ceramic disc 24 pf, ±5%, 500 VDCW, temp coef 0 PPM.
C252LB Was: 19A116656P3J0, Ceramic disc: 3 pf, ±0.5 pf, 500 VDCW, temp coef 0 PPM.

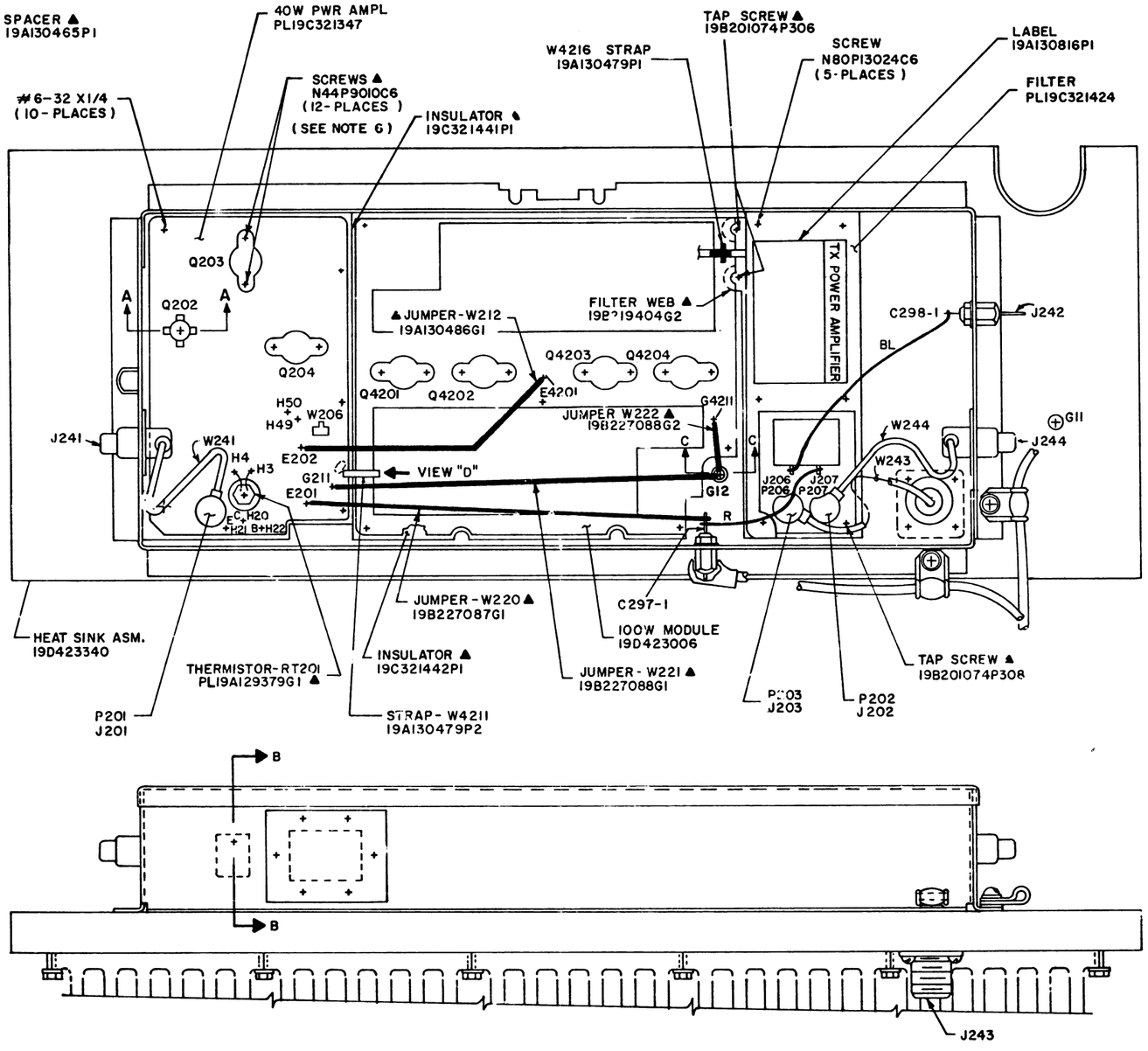
REV. A - TX PA FILTER 19D424888G14, 31
To improve operation. Changed C4290LL

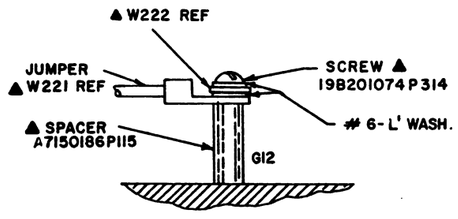


SECTION A-A
TYP. MTG FOR Q202 (SEE NOTE 2)



SECTION B-B



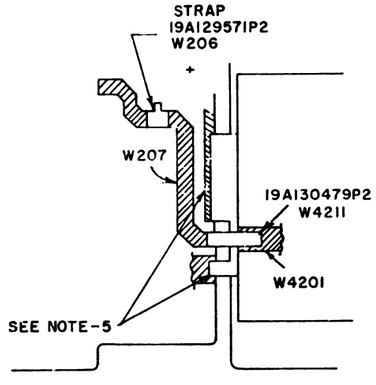


SECTION C-C

(19D423350, Sh. 4, Rev. 5)

(4) NOTES:

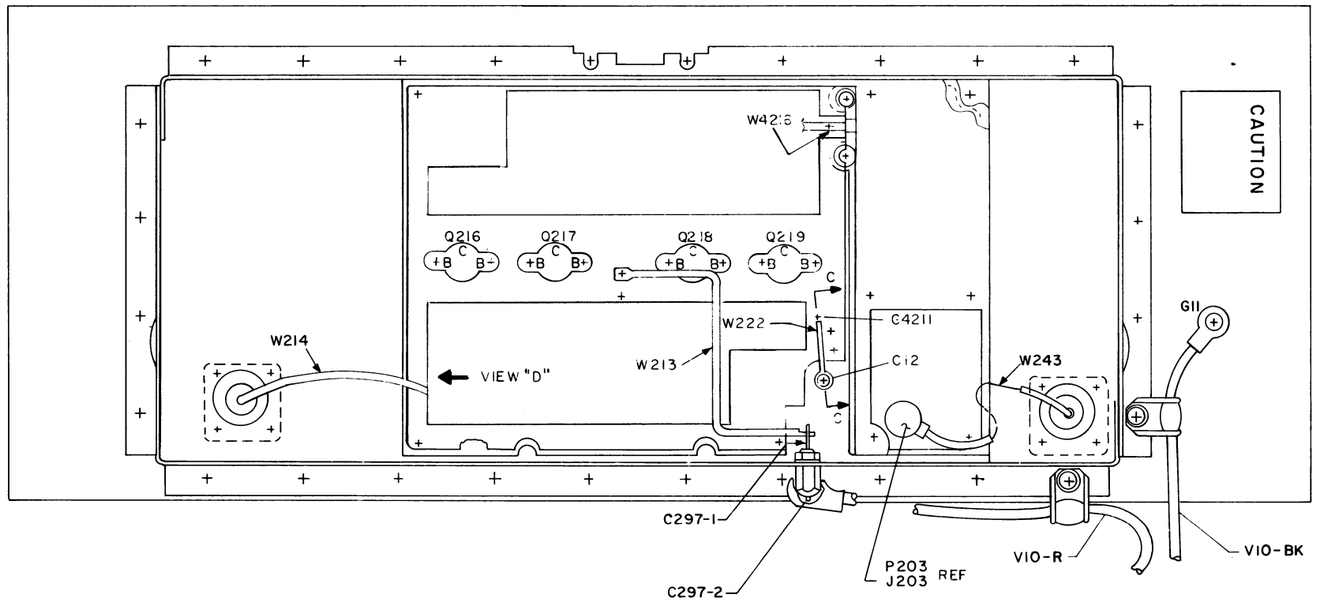
1. ▲ PART OF KIT 19A130484.
2. APPLY SILICONE GREASE TO BOTH SURFACES OF TRANSISTOR INSULATOR (19A116023P1), BETWEEN BOTH MTG SURFACES OF SPACER (19A130465P1) & BETWEEN MTG. SURFACE OF RT201 Q203, Q204, Q4201, Q4202, Q4203, Q4204 & HEAT SINK PER CPD PROCESS P6A-EA111. CARE MUST BE USED SO THAT NO GREASE IS APPLIED TO THE THREADED PORTION OF THE MTG. STUD OF Q202.
3. SOLDER ALL ELECTRICAL CONNECTIONS.
5. SOLDER STRAP TO GROUND ON 40 WATT MODULE (19C321347) AS SHOWN IN VIEW D.
6. TIGHTEN TRANSISTOR MTG. HARDWARE TO WITHIN 8 ± 1 IN. LBS. FOR #8 HARDWARE & 6 ± 1 IN LBS FOR #4 HARDWARE.
7. RECOMMENDED INSTALLATION PROCEDURE OF 40 WATT MODULE (PL19C321347) IS: ASSEMBLE ALL HARDWARE LOOSE, THEN TORQUE Q203 AND Q204 THEN TIGHTEN MOUNTING HARDWARE.
8. RECOMMENDED INSTALLATION PROCEDURE OF 100 WATT MODULE (PL19D423006) IS ASSEMBLE ALL HARDWARE LOOSE, THEN TORQUE Q4201, Q4202, Q4203, AND Q4204, THEN TIGHTEN MOUNTING HARDWARE.
9. SEE INTERCONNECTION DIAG. 19R622188.

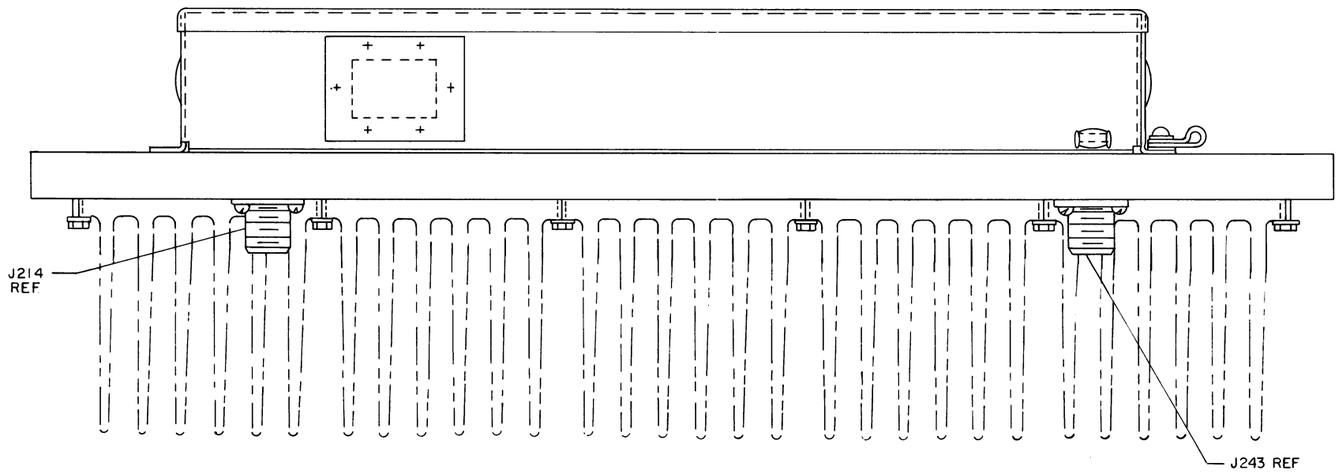


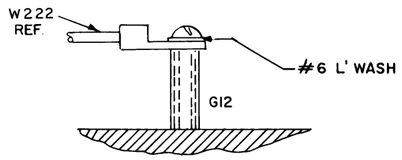
VIEW "D"

OUTLINE DIAGRAM

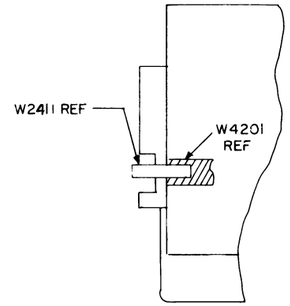
100 WATT UHF CONTINUOUS DUTY STATION POWER AMPLIFIER

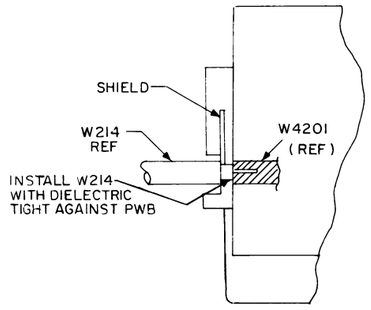






SECTION C-C
ROTATED APPROX. 90° CCW





VIEW "D"

OUTLINE DIAGRAM

19D424895G40-G43 POWER AMPLIFIER
USED FOR COMBINING

(19D433142, Rev. 0)

PL19C321347

	PA ASM	REV LTR	DESCRIPTON
NON DUPLEX	PL19D424895G14	G	406-420MHZ
	PL19D424895G15	F	450-470 MHZ
	PL19D424895G16	F	470-494 MHZ
	PL19D424895G17	F	494-512 MHZ
	PL19D424895G38	C	420-450 MHZ
DUPLEX	PL19D424895G31	G	406-420 MHZ
	PL19D424895G32	F	450-470 MHZ
	PL19D424895G33	F	470-494 MHZ
	PL19D424895G34	F	494-512 MHZ
	PL19D424895G39	D	420-450 MHZ

40 WATT MODULE	REV LTR	100 WATT MODULE	REV LTR	FILTER MODULE / W MATCHER	REV LTR	FILTER MODULE	REV LTR	FREQUENCY
PL19C321347G5	N	PL19D423006G5	E			PL19C327024G13	A	406-420 MHZ
PL19C321347G6	M	PL19D423006G6	E			PL19C327024G4		450-470 MHZ
PL19C321347G7	H	PL19D423006G7	E			PL19C327024G4		470-494 MHZ
PL19C321347G8	H	PL19D423006G8	E			PL19C327024G4		494-512 MHZ
PL19C321347G9	F	PL19D423006G5	E			PL19C327024G3		420-450 MHZ
PL19C321347G5	N	PL19D423006G5	E	PL19C327024G15		PL19D432247G5	A	406-420 MHZ
PL19C321347G6	M	PL19D423006G6	E			PL19C327024G6		450-470 MHZ
PL19C321347G7	H	PL19D423006G7	E			PL19C327024G6		470-494 MHZ
PL19C321347G8	H	PL19D423006G8	E			PL19C327024G6		494-512 MHZ
PL19C321347G9	F	PL19D423006G5	E			PL19C327024G5		420-450MHZ

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF=MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH=MILLIHENRYS OR H=HENRYS.

VOLTAGE READINGS

VOLTAGE READINGS ARE TYPICAL READINGS MADE WITH TRANSMITTER KEYED AND MEASURED WITH A 20,000 OHMS-PER-VOLT METER WITH REFERENCE TO A- AND NOT CHASSIS GROUND AN RF CHOKE (25-50 MICROHENRYS) IS USED IN THE HOT METER LEAD TO AVOID DETUNING RF CIRCUITS NOTE READINGS AT Q202 COLLECTOR AND IN THE POWER CONTROL CIRCUIT WERE TAKEN WITH THE TRANSMITTER ADJUST FOR 100 WATTS OUTPUT THESE READINGS WILL VARY DEPENDING ON THE SETTING OF POWER ADJUST CONTROL R213

NOTES:

1. MICROSTRIP PART OF PWB.
2. ALL COMPONENTS MARKED WITH (*) ASTERISK, SEE COMPONENT VALUE TABLE.
3. ⏚ INDICATES A-
   ⏚ INDICATES CHASSIS GROUND.
4. CALLED FOR ON 19D417526.
5. CALLED FOR ON 19D424895
6.
7.
8. ON PL19C321347G5 & G9 DELETE L207 & ADD Z213
9. ON PL19C321347G5 & G9 DELETE L210 & ADD Z214
10. PART OF NEXT LEVEL HIGHER ASM. (PA)

* COMPONENT VALUES

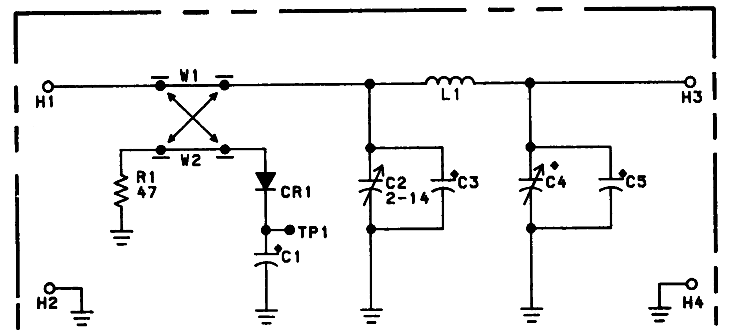
COMP IDENT	LL 406-420 MHZ	L 450-470 MHZ	M 470-494 MHZ	H 494-512 MHZ	LM 420-450MHZ
C207	8	9	7	6	8
C208	8				8
C213	5				5
C215	47	47	43	43	47
C216	51	43	43	39	51
C217	18	16	15	13	18
C224	41	35	35	32	41
C225	43	35	33	32	43
C226	47	43	37	35	47
C227	43	37	37	35	43
C230	7		4	3	7
C235	47	37	35	33	47
C236	47	35	33	33	47
C238	47	43	43	39	47
C252	5	7	4	3	
C257	5				5
C4205	39	35	32	28	39
C4206	41	35	32	28	41
C4209	41	37	35	32	41
C4210	43	37	35	28	43
C4212	4	2.2			4
C4214	33	24	24	24	33
C4215	39	35	32	28	39
C4216	41	35	32	28	41
C4219	41	37	35	32	41
C4220	43	37	35	28	43
C4222	4	2.2			4
C4225	39	35	32	28	39
C4226	41	35	32	28	41
C4229	41	37	35	32	41
C4230	43	37	35	28	43
C4232	4	2.2			4
C4235	39	35	32	28	39
C4236	41	35	32	28	41
C4239	41	37	35	32	41
C4240	43	37	35	28	43
C4242	4	2.2			4
C4265		3	2.2	2.2	
C4266		3	2.2	2.2	
C4290	10	9	9	9	10
C4291	20	18	18	18	20
C4292	13	12	12	12	13
C237	47	39	37	35	47
Z203	X	X	X	X	X
Z204	X	X	X	X	X
Z205	X	X	X	X	X
Z207	X	X	X	X	X
Z208	X	X	X	X	X
Z209	X	X	X	X	X
Z210	X	X	X	X	X
Z211	X	X	X	X	X
Z213	X				X
Z214	X				X
Z4202	X	X	X	X	X
Z4205	X	X	X	X	X
Z4208	X	X	X	X	X
Z4211	X	X	X	X	X
L207		5.6	5.6	5.6	
L210		5.6	5.6	5.6	

CHANGES TO THIS DWG MAY AFFECT 19R622150, 19R622152, 19R622153 19R622185, 19R622186, 19R622187, 19R622151

(19R622188, Rev. 43)

SCHEMATIC DIAGRAM

100 WATT UHF CONTINUOUS DUTY STATION POWER AMPLIFIER



ALL RESISTORS ARE 1/4 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K-1000 OHMS OR MEG-1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF-MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH-MILLIHENRYS OR H-HENRYS.

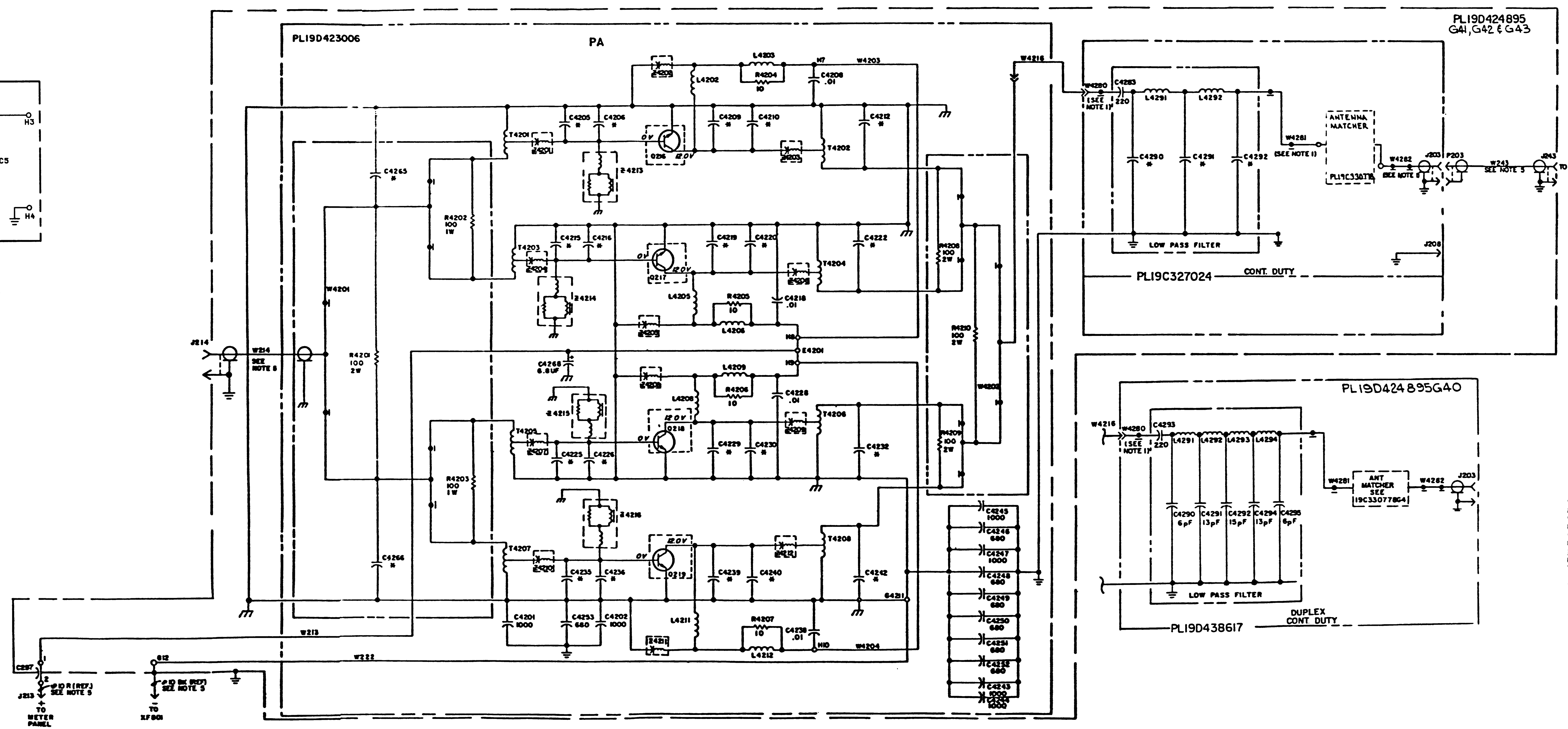
MODEL NO.	REV. LETTER
19C330778G1	
19C330778G2	
19C330778G3	

◆ COMPONENT VALUE CHART		
COMPONENT DESIGNATION	A 138-174MHZ	B 406-512MHZ
C1	1000	470
C4	2-14	2-10
C3	15	
C5	10	

(19B233613, Rev. 1)

SCHEMATIC DIAGRAMS

19D424895G40-G43 POWER AMPLIFIERS
USED FOR COMBINING 19C330778G1-G3
ANTENNA MATCHER



PA ASM	REV LTR	DESCRIPTION
PL19D424895G40	B	406-420 MHZ
PL19D424895G41	A	450-470 MHZ
PL19D424895G42	A	470-494 MHZ
PL19D424895G43	A	494-512 MHZ

	REV LTR	100 WATT MODULE	REV LTR	FILTER MODULE	REV LTR	FREQUENCY
		PL19D42300668	D	PL19D438617G1		406-420 MHZ
		PL19D42300666	D	PL19C327024G6		450-470 MHZ
		PL19D42300667	D	PL19C327024G6		470-494 MHZ
		PL19D42300668	D	PL19C327024G6		494-512 MHZ

(19R601694, Sh. 1, Rev. 3)

* COMPONENT VALUES

COMP IDENT	LL 406-420 MHZ	L 450-470 MHZ	M 470-494 MHZ	H 494-512 MHZ
C4205	39	35	32	28
C4206	41	35	42	28
C4209	41	37	35	32
C4210	43	37	35	28
C4212	4	1		
C4214	33	24	24	24
C4215	39	35	32	28
C4216	41	35	32	28
C4219	41	37	35	32
C4220	43	37	35	28
C4222	4	1		
C4225	39	35	32	28
C4226	41	35	32	28
C4229	41	37	35	32
C4230	43	37	35	28
C4232	4	1		
C4235	39	35	32	28
C4236	41	35	32	28
C4239	41	37	35	32
C4240	43	37	35	28
C4242	4	1		
C4265		3	2.2	2.2
C4266		3	2.2	2.2
C4290	10	9	9	9
C4291	20	18	18	18
C4292	13	12	12	12
Z4201	X	X	X	X
Z4202	X	X	X	X
Z4203	X	X	X	X
Z4204	X	X	X	X
Z4205	X	X	X	X
Z4206	X	X	X	X
Z4207	X	X	X	X
Z4209	X	X	X	X
Z4210	X	X	X	X
Z4212	X	X	X	X

CHANGES TO THIS DWG MAY AFFECT 19R622150, 19R622152, 19R622153 19R622185, 19R622186, 19R622187, 19R622181 19R622188

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS

VOLTAGE READINGS

VOLTAGE READINGS ARE TYPICAL READINGS MADE WITH TRANSMITTER KEYED AND MEASURED WITH A 20,000 OHMS-PER-VOLT METER WITH REFERENCE TO A- AND NOT CHASSIS GROUND AN RF CHOKE (25-50 MICROHENRYS) IS USED IN THE HOT METER LEAD TO AVOID DETUNING RF CIRCUITS NOTE READINGS AT Q202 COLLECTOR AND IN THE POWER CONTROL CIRCUIT WERE TAKEN WITH THE TRANSMITTER ADJUST FOR 100 WATTS OUTPUT THESE READINGS WILL VARY DEPENDING ON THE SETTING OF POWER ADJUST CONTROL R213

NOTES:
1. MICROSTRIP PART OF PWB.
2. ALL COMPONENTS MARKED WITH (*) ASTERISK. SEE COMPONENT VALUE TABLE.
3. INDICATES A-. INDICATES CHASSIS GROUND.
4.
5. CALLED FOR ON 19D424895

PARTS LIST

LBI-30531L
406-512 MHZ 100 WATT STATION POWER AMPLIFIER
19D424895G14-17 (CONTINUOUS DUTY) - REV F
19D424895G38 (CONTINUOUS DUTY) - REV C
19D424895G31-34 (CONTINUOUS DUTY-DUPLEX) - REV F
19D424895G39 (CONTINUOUS DUTY-DUPLEX) - REV D
19D424895G40-43 (CONTINUOUS DUTY FOR COMBINING)

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - CAPACITORS - - - - - -
C297 and C298	19A116708P1	Ceramic: 0.01 uF -0 +100%, 500 VDCW, rated 20 amps; sim to Erie 327050X5W0103P.
C300	19A116708P1	Ceramic: 0.01 uF -0 +100%, 500 VDCW, rated 20 amps; sim to Erie 327050X5W0103P.
		- - - - - - JACKS - - - - - -
J213		Connector. Includes:
	19B701869P1	Connector.
	19B701869P2	Connector.
J214		Part of W214.
J243		Part of W243.
		- - - - - - PLUGS - - - - - -
P206 and P207	4036634P1	Contact, electrical; sim to AMP 42428-2.
		- - - - - - TRANSISTORS - - - - - -
Q202	19A134164P2	Silicon, NPN; sim to Type 2N5945.
Q203LLB	19A134239P3	Silicon, NPN.
Q203LB	19A134239P1	Silicon, NPN.
Q203MB	19A134239P1	Silicon, NPN.
Q203HB	19A134239P1	Silicon, NPN.
Q204LL	19A134242P3	Silicon, NPN.
Q204L	19A134242P3	Silicon, NPN.
Q204H	19A134242P4	Silicon, NPN; 50 Watt.
Q215	19A116753P1	Silicon, NPN.
Q216 thru Q219	19A134171P2	Silicon, NPN; 35 Watt.
		- - - - - - THERMISTOR - - - - - -
RT201	19A129379G1	Thermistor: 40K ohms + or - 20%, color code white; sim to Carborundum Type M0806J-5.
		- - - - - - CABLES - - - - - -
W212	19A130486G1	Jumper.
W213	19A143696P1	Jumper.
W214	19A129312G13	Cable.
W220	19B227087G1	Jumper: 6 inches long.
W221	19B227088G1	Jumper.
W222	19B227088G2	Jumper.
W243	19A129312G6	Cable.
W244	5491689P104	Cable, RF: approx 4 inches long, 350 VRMS, 500 VDC operating voltage.
W245	19A705906G1	Cable.
W4216	19A701006P1	Strap.
		40 WATT MODULE 19C321347G5 406-420 MHz (LL) 19C321347G6 450-470 MHz (L) - REV L 19C321347G7 470-494 MHz (M) 19C321347G8 494-512 MHz (H) 19C321347G9 420-450 MHz (LL)
		- - - - - - CAPACITORS - - - - - -
C201 and C202	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

SYMBOL	GE PART NO.	DESCRIPTION
C203	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C204	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C205	19A116656P3J0	Ceramic disc: 3 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM.
C207LL	19A116656P8J0	Ceramic disc: 8 pF + or -0.5 pF, 500 VDCW; temp coef 0 PPM. (Used in G5 and G9).
C207L	19A116656P9J0	Ceramic disc: 9 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G6).
C207M	19A116656P7J0	Ceramic disc: 7 pF + or - 0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G7).
C207H	19A116656P6J0	Ceramic disc: 6 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G8).
C208LL	19A116656P8J0	Ceramic disc: 8 pF + or -0.5 pF, 500 VDCW; temp coef 0 PPM. (Used in G5 and G9).
C209	19A116656P33J0	Ceramic disc: 33 pF + or -5%, 500 VDCW, temp coef 0 PPM.
C212	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C213LL	19A116656P5J0	Ceramic disc: 5 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G5 and G9).
C215LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in G5 and G9).
C215L	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in G6).
C215M	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G7).
C215H	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G8).
C216LL	19A700131P51	Metallized teflon: 51 pF + or -2%, 250 VDCW, temp coef -130 PPM (Used in G5 and G9).
C216L	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G6).
C216M	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G7).
C216H	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in G8).
C217LL	19A116679P18D	Metallized teflon: 18 pF + or -0.5 pF, 250 VDCW. (Used in G5 and G9).
C217L	19A116679P16D	Metallized teflon: 16 pF + or -0.5 pF, 250 VDCW. (Used in G6).
C217M	19A116679P15D	Metallized teflon: 15 pF + or -0.5 pF, 250 VDCW. (Used in G7).
C217H	19A116679P13D	Metallized teflon: 13 pF + or -0.5 pF, 250 VDCW. (Used in G8).
C219	19A116655P18	Ceramic disc: 680 pF + or -10%, 1000 VDCW; sim to RMC Type JF Discap.
C220	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C221	19A701534P16	Tantalum: 6.8 uF + or -20%, 35 VDCW.
C223	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C224LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5 and G9).
C224L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C224M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C224H	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C225LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G5 and G9).
C225L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C225M	19A700131P33	Metallized teflon: 33 pF + or -2%, 250 VDCW. (Used in G7).
C225H	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C226LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in G5 and G9).
C226L	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G6).
C226M	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G7).

SYMBOL	GE PART NO.	DESCRIPTION
C226R	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in C83).
C227LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in C5 and C9).
C227L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in C6).
C227M	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in C7).
C227R	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in C8).
C228	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C230LL	19A116656P720	Ceramic disc: 7 pF + or - 0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C5 and C9).
C230M	19A116656P420	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C7).
C230N	19A116656P320	Ceramic disc: 3 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C8).
C231	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C232	19A701534P16	Tantalum: 6.8 uF + or -20%, 35 VDCW.
C235LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in C5 and C9).
C235L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in C6).
C235M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in C7).
C235N	19A700131P33	Metallized teflon: 33 pF + or -2%, 250 VDCW. (Used in C8).
C236LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in C5 and C9).
C236L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in C6).
C236M	19A700131P33	Metallized teflon: 33 pF + or -2%, 250 VDCW. (Used in C7).
C236R	19A700131P33	Metallized teflon: 33 pF + or -2%, 250 VDCW. (Used in C8).
C237LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in C5 and C9).
C237L	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in C6).
C237M	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in C7).
C237R	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in C8).
C238LL	19A700131P47	Metallized teflon: 47 pF + or -2%, 250 VDCW. (Used in C5 and C9).
C238L	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in C6).
C238M	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in C7).
C238N	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in C8).
C241	19A134202P15	Tantalum: 6.8 uF + or -20%, 35 VDCW.
C242	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C243	19A134202P15	Tantalum: 6.8 uF + or -20%, 35 VDCW.
C244 and C245	19A116655P18	Ceramic disc: 680 pF + or -10%, 1000 VDCW; sim to RMC Type JF Discap.
C246 thru C250	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C251	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C252LLR	19A116656P520	Ceramic disc: 5 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C5).
C252LR	19A116656P720	Ceramic disc: 7 pF + or - 0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C7).
C252MR	19A116656P420	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C6).
C252NR	19A116656P320	Ceramic disc: 3 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C8).
C253	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.

SYMBOL	GE PART NO.	DESCRIPTION
C255 thru C256	19A116655P18	Ceramic disc: 680 pF + or -10%, 1000 VDCW; sim to RMC Type JF Discap.
C257LL	19A116656P520	Ceramic disc: 5 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in C5 and C9).
C260	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C263 and C264	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
		- - - - - - - - - - DIODES - - - - - - - - - -
CR201	19A116052P1	Silicon, hot carrier: Fwd drop .350 volts max.
CR202 thru CR205	19A115250P1	Silicon, fast recovery, 225 mA, 50 PIV.
		- - - - - - - - - - TERMINALS - - - - - - - - - -
E201 thru E202	19A134263P1	Contact, electrical.
E211	19A134263P1	Contact, electrical.
		- - - - - - - - - - JACKS - - - - - - - - - -
J201	19A700044P2	Connector, receptacle; 500 VDCW maximum; sim to MTTP-109B.
J205	19B219374G1	Connector: 9 contacts.
L202	19A701091G1	Coil.
L203	19A135774P1	Coil.
L204	19A701091G1	Coil.
L205	19B219457P6	Coil.
L206	19A700009P120	Coil, RF: 5.6 uH + or -10%; sim to Jeffers 4422-1K.
L207	19A700000P20	Coil, RF: 5.6 uH + or -10%; sim to Jeffers 4421-4K. (Used in G6,G7 and G8).
L208LL	19B219457P6	Coil. (Used in G5 and G9).
L208L	19A130650P1	Coil. (Used in G6).
L208M	19A130650P1	Coil. (Used in G7).
L208N	19A130650P1	Coil. (Used in G8).
L209	19A701091G1	Coil.
L210L	19A700000P20	Coil, RF: 5.6 uH + or -10%; sim to Jeffers 4421-4K. (Used in G6).
L210M	19A700000P20	Coil, RF: 5.6 uH + or -10%; sim to Jeffers 4421-4K. (Used in G7).
L210N	19A700000P20	Coil, RF: 5.6 uH + or -10%; sim to Jeffers 4421-4K. (Used in G8).
L211	19B219457P6	Coil.
L212	19A701091G1	Coil.
		- - - - - - - - - - TRANSISTORS - - - - - - - - - -
Q201	19A134237P1	Silicon, NPN.
Q202	19A134164P2	Silicon, NPN; sim to Type 2N5945.
Q203LLB	19A134239P3	Silicon, NPN. (Used in G5 and G9).
Q203LB	19A134239P1	Silicon, NPN. (Used in G6).
Q203MB	19A134239P1	Silicon, NPN. (Used in G7).
Q203NB	19A134239P1	Silicon, NPN. (Used in G8).
Q204LL	19A134242P3	Silicon, NPN. (Used in G5 and G9).
Q204L	19A134242P3	Silicon, NPN. (Used in G6).
Q204M	19A134242P4	Silicon, NPN. 50 Watt. (Used in G7 and G8).
		- - - - - - - - - - RESISTORS - - - - - - - - - -
R201	19A700106P63	Composition: 1K ohms + or - 5%, 1/4 w.
R202	3R152P304J	Composition: 300K ohms + or -5%, 1/4 w.
R203	19A700113P7	Composition: 4.7 ohms + or - 5%, 1/2 w.
R204	19A700113P25	Composition: 27 ohms + or - 5%, 1/2 w.
R205	19A700106P23	Composition: 22 ohms + or - 5%, 1/4 w.
R206	19A700113P15	Composition: 10 ohms + or - 5%, 1/2 w.

SYMBOL	GE PART NO.	DESCRIPTION
R207	19A700106P35	Composition: 68 ohms + or - 5%, 1/4 w.
R208	19A700113P15	Composition: 10 ohms + or - 5%, 1/2 w.
R209	19A700113P57	Composition: 560 ohms + or - 5%, 1/2 w.
R210 thru R212	19C850605P1	Shunt resistor.
R208LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G5 and G9).
R208L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G6).
R208M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G7).
R208N	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G8).
R209LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:3302:SLAC. (Used in G5 and G9).
R209L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G6).
R209M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G7).
R209N	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G8).
R210	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G6).
R211	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:3302:SLAC. (Used in G9).
R211LL	19A134666P3	Frequency network: selective, 400-500 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:3302:SLAC. (Used in G5 and G8).
R211L	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G6).
R211M	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G7).
R211N	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:RPO:2402:SLAC. (Used in G8).
E213	19A134581G1	Network assembly. (Used in G5 and G9).
E214	19A134581G1	Network assembly. (Used in G5 and G9).
		100 WATT MODULE 19D423006G5 406-450 MHz (LL) 19D423006G6 450-470 MHz (L) 19D423006G7 470-494 MHz (M) 19D423006G8 494-512 MHz (N)
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C4201 and C4202	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C4204LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4204L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4204M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4204N	19A701413P33	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4205LL	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in G5).
C4205L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4205M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4205N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4206LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4206L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4206M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).

SYMBOL	GE PART NO.	DESCRIPTION
C4206N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4208	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C4209LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4209L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4209M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4209N	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C4210LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G5).
C4210L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4210M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4210N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4211LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4211L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4211M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4211N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4212LL	19A116656P420	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G5).
C4212L	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G6).
C4214LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4214L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4214M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4214N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4215LL	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in G5).
C4215L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4215M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4215N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4216LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4216L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4216M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4216N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4218	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C4219LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4219L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4219M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4219N	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C4220LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G5).
C4220L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4220M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4220N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4221LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4221L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4221M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4221N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).

SYMBOL	GE PART NO.	DESCRIPTION
C4222LL	19A116656P420	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G5).
C4222L	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G6).
C4224LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4224L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4224M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4224N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4225LL	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in G5).
C4225L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4225M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4225N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4226LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4226L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4226M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4226N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4228	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.
C4229LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4229L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4229M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4229N	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C4230LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G5).
C4230L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4230M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4230N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4231LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4231L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4231M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4231N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4232LL	19A116656P420	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G5).
C4232L	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G6).
C4234LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4234L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4234M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4234N	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4235LL	19A700131P39	Metallized teflon: 39 pF + or -2%, 250 VDCW. (Used in G5).
C4235L	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4235M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4235N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4236LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4236K	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G6).
C4236M	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G7).
C4236N	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4238	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special.

SYMBOL	GE PART NO.	DESCRIPTION
C4239LL	19A700131P41	Metallized teflon: 41 pF + or -2%, 250 VDCW, temp coef 0 -130 PPM. (Used in G5).
C4239L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4239M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4239H	19A700131P32	Metallized teflon: 32 pF + or -2%, 250 VDCW. (Used in G8).
C4240LL	19A700131P43	Metallized teflon: 43 pF + or -2%, 250 VDCW. (Used in G5).
C4240L	19A700131P37	Metallized teflon: 37 pF + or -2%, 250 VDCW. (Used in G6).
C4240M	19A700131P35	Teflon/mica: 35 pF + or -2%, 250 VDCW. (Used in G7).
C4240H	19A700131P28	Metallized teflon: 28 pF + or -2%, 250 VDCW. (Used in G8).
C4241LL	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G5).
C4241L	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G6).
C4241M	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G7).
C4241H	19A701413P32	Mica: 82 pF + or -5%, 100 VDCW. (Used in G8).
C4242LL	19A116656P4J0	Ceramic disc: 4 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G5).
C4242L	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G6).
C4243 thru C4245	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C4246	19A116655P18	Ceramic disc: 680 pF + or -10%, 1000 VDCW; sim to RMC Type JF Discap.
C4247	19A116655P20	Ceramic disc: 1000 pF + or - 10%, 1000 VDCW; sim to RMC Type JF Discap.
C4248 thru C4253	19A116655P18	Ceramic disc: 680 pF + or -10%, 1000 VDCW; sim to RMC Type JF Discap.
C4265L	19A116656P3J0	Ceramic disc: 3 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G6).
C4265M	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G7).
C4265H	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G8).
C4266L	19A116656P3J0	Ceramic disc: 3 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G6).
C4266M	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G7).
C4266H	19A134100P20	Ceramic disc: 2.2 pF + or -0.1 pF, temp coef 0 + or -120 PPM. (Used in G8).
C4268	19A701534P16	Tantalum: 6.8 uF + or -20%, 35 VDCW.
		- - - - - - - - - - - TERMINALS - - - - - - - - - - -
E4201	19A134263P1	Contact, electrical.
G4211	19A134263P1	Contact, electrical.
		- - - - - - - - - - - INDUCTORS - - - - - - - - - - -
L4202	19A130447G2	Coil.
L4203	19A701091G1	Coil.
L4205	19A130447G1	Coil.
L4206	19A701091G1	Coil.
L4208	19A130447G2	Coil.
L4209	19A701091G1	Coil.
L4211	19A130447G1	Coil.
L4212	19A701091G1	Coil.
		- - - - - - - - - - - RESISTORS - - - - - - - - - - -
R4201	19A700111P39	Composition: 100 ohms + or - 5%, 2 w.
R4202 and R4203	19A700112P39	Composition: 100 ohms + or - 5%, 1 w.
R4204 thru R4207	19A700113P15	Composition: 10 ohms + or - 5%, 1/2 w.

SYMBOL	GE PART NO.	DESCRIPTION
R4208 thru R4210	19A700111P39	Composition: 100 ohms + or - 5%, 2 w.
		- - - - - - - - - - - TRANSFORMERS - - - - - - - - -
T4201 thru T4208	19A130446G1	Coil.
		- - - - - - - - - - - - CABLES - - - - - - - - - - -
W4203 and W4204	19B226708G1	Jumper.
W4211	19A130479P2	Strap.
		- - - - - - - - - - - - FILTER - - - - - - - - - - -
Z4202	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4205	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4208	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4211	19A134666P1	Frequency network: selective, 470-630 MHz res. freq, 500 VDCW; sim to Dilectron TC501:NPO:240J:SLAC.
Z4213 thru Z4216	19A143581G1	Network assembly.
		LOW PASS FILTER 19C327024G3 406-450 MHz (LL) 19C327024G4 450-512 MHz (H) 19C327024G5 406-450 MHz (LL) DUPLEX 19C327024G6 450-512 MHz (H) DUPLEX 19C327024G9 406-450 MHz (LL) MATCHER 19C327024G10 450-512 MHz (H) MATCHER
		- - - - - - - - - - - CAPACITORS - - - - - - - - - -
C4290LL	19A700014P4	Metallized teflon: 10 pF + or - 5%, 250 VDCW. (Used in G3 and G5).
C4290H	19A700131P9	Metallized teflon: 9 pF + or -0.5 pF, 250 VDCW. (Used in G4 and G6).
C4291LL	19A700131P20	Metallized teflon: 20 pF + or -0.5 pF, 100 VDCW. (Used in G3 and G5).
C4291H	19A700131P18	Metallized teflon: 18 pF + or -0.5 pF, 250 VDCW. (Used in G4 and G6).
C4292LL	19A700131P13	Metallized teflon: 13 pF + or -0.5 pF, 250 VDCW. (Used in G3 and G5).
C4292H	19A700131P12	Metallized teflon: 12 pF + or -0.5 pF, 250 VDCW. (Used in G4 and G6).
C4293	19A700015P37	Teflon/Mica: 220 pF + or -5%, 250 VDCW. (Used in G3,G4,G5 and G6).
		- - - - - - - - - - - - JACKS - - - - - - - - - - - -
J202	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058. (Used in G3 and G4).
J203	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058. (Used in G3,G4,G5 and G6).
J206 and J207	19A134263P2	Contact, electrical: sim to Selectro 229-1071. (Used in G3 and G4).
J208	4033513P4	Contact, electrical: sim to Bead Chain L93-3. (Used in G3 and G4).
		- - - - - - - - - - - - RELAYS - - - - - - - - - - -
K201	19A700061P1	Hermetic sealed: 180 to 341 ohms coil res, 8-16.3 VDC; sim to GE 3SAV1760A2, CP Clare HFW-1201558, or Potter-Brumfield HCM6160. (Used in G3 and G4).
		- - - - - - - - - - - INDUCTORS - - - - - - - - - - -
L4291LL	19B226709G2	Jumper.
L4291H	19B226709G1	Jumper.
L4292LL		Part of L4291LL.
L4292H		Part of L4291H.

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - - - CABLES - - - - - - - - - - -
W4280 thru W4283		Part of Printed Wire Board 19D424367P1.
W4284	19A130607G3	Cable, RF: approx .7 of an inch. (Used in G5 and G6).
		LOW PASS FILTER 19D438617G1 406-420 MHz MATCHER 19D438617G2 406-420 MHz MOBILE
		- - - - - - - - - - - CAPACITORS - - - - - - - - - -
C4290	19A700131P6	Metallized teflon: 6 pF + or -0.5 pF, 250 VDCW.
C4291	19A700131P13	Metallized teflon: 13 pF + or -0.5 pF, 250 VDCW.
C4292	19A700131P15	Metallized teflon: 15 pF + or -0.5 pF, 250 VDCW.
C4293	19A700015P37	Teflon/Mica: 220 pF + or -5%, 250 VDCW.
C4294	19A700131P13	Metallized teflon: 13 pF + or -0.5 pF, 250 VDCW.
C4295	19A700131P6	Metallized teflon: 6 pF + or -0.5 pF, 250 VDCW.
C4296 and C4297	19A701624P4	Ceramic, disc: 6 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM + or -60. (Used in G2).
		- - - - - - - - - - - - JACKS - - - - - - - - - - - -
J202	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058. (Used in G2).
J203	19A700049P2	Connector, receptacle; 500 VDCW maximum; sim to NTTF-1058.
J206 and J207	19A134263P2	Contact, electrical: sim to Selectro 229-1071. (Used in G2).
J4201 thru J4204	19A116364P2	Contact, electrical; sim to AMP 86182-7. (Used in G1).
		- - - - - - - - - - - - RELAYS - - - - - - - - - - -
K201	19A700061P1	Hermetic sealed: 180 to 341 ohms coil res, 8-16.3 VDC; sim to GE 3SAV1760A2, CP Clare HFW-1201558, or Potter-Brumfield HCM6160. (Used in G2).
		- - - - - - - - - - - INDUCTORS - - - - - - - - - - -
L4291 thru L4294		Part of Printed Wire Board 19D438616P1.
		- - - - - - - - - - - - CABLES - - - - - - - - - - -
W4280 thru W4282		Part of Printed Wire Board.
W4283		Part of Printed Wire Board.
		- - - - - - - - - - MISCELLANEOUS - - - - - - - - - -
	19A701332P4	Insulator, washer: nylon. (Used with Q201).
	19A702182P1	Spacer. (Used with Q202).
	5492178P2	Washer, spring tension: sim to Wallace Barnes 375-20. (Used with Q202).
	19C321442P1	Insulator. (Located under 100 watt module).
	19C321441P1	Insulator. (Located under 40 watt module).
	N44P9010B6	Machine screw: No. 4-40 x 5/8. (Used with Q203).
	19A702782P5	Nut, hex, brass: No. 8-32. (Used with Q202).
	19B201074P314	Tap screw, Phillips POZIDRIV: No. 6-32 x 7/8. (Secures W221 & W222 to spacer).
	N80P13016B6	Machine screw, panhead: No. 6-32 x 1. (Secures filter assembly).
	19B219404G1	Web filter.
	7139898P3	Nut, hex, brass: No. 1/4-28. (Secures C297 & C298).
	19B226212G1	Heat sink. (Center sections - Quantity 3).
	19B226212G2	Heat sink. (W241 end - Quantity 1).
	19B226212G3	Heat sink. (Caution nameplate end - Quantity 1).

SYMBOL	GE PART NO.	DESCRIPTION
	19B201074P204	Tap screw, phillips POZIDRIV: No. 4-40 x 1/4. (Secures W241).
	19D417513G1	Cover, Heat Sink Assembly.
	19B201074P306	Tap screw, Phillips POZIDRIV: No. 6-32 x 3/8. (Secures Filter Board & jumper between 100 watt module and Filter Board).
	19A134260P1	Insulator cover. (Used with Q215).
	4029974P1	Insulator, plate: aluminum. (Used with Q215).
	4036994P1	Terminal, solderless. (Used with Q215).
	19A115222P3	Washer, shield. (Secures Q215).
	N210P9B6	Hex nut, steel: No. 4-40. (Secures Q215).

PARTS LIST

ANTENNA MATCHING UNIT
19C330778G1 HIGH BAND
19C330778G2 UHF LOW POWER
19C330778G3 UHF HIGH POWER
19C330778G4 UHF HIGH POWER
ISSUE 2

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - - CAPACITORS - - - - - - - - - -
C1A	19A116192P1	Ceramic: 0.01 uF + or -20%, 50 VDCW; sim to Erie 8121 Special. (Used in G1).
C1B	19A116192P2	Ceramic: 470 pF + or -20%, 50 VDCW; sim to Erie 811-A050-W5R-471M. (Used in G2 and G3).
C2	19A700008P2	Variable: 2.28 to 14.13 pF; sim to EF Johnson 187-0109-005.
C3A	19A116656P15J0	Ceramic disc: 15 pF + or -5%, 500 VDCW, temp coef 0 PPM. (Used in G1).
C4A	19A700008P2	Variable: 2.28 to 14.13 pF; sim to EF Johnson 187-0109-005. (Used in G1).
C4B	19A700008P1	Variable: 2.04 to 9.9 pF, 250V peak. (Used in G2,G3 and G4).
C5A	19A116656P10J0	Ceramic disc: 10 pF + or -0.5 pF, 500 VDCW, temp coef 0 PPM. (Used in G1).
		- - - - - - - - - - - - DIODES - - - - - - - - - - -
CR1	19A700047P3	Silicon: 100 mW; sim to 1N6263. (Used in G1,G2 and G3).
		- - - - - - - - - - - INDUCTORS - - - - - - - - - - -
L1A	19A143343P1	Coil. (Used in G1).
L1B	19A143342P1	Coil. (Used in G2,G3 and G4).
		- - - - - - - - - - - RESISTORS - - - - - - - - - - -
R1	19A700106P31	Composition: 47 ohms + or - 5%, 1/4 w. (Used in G1,G2 and G3).

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

PRODUCTION CHANGES

Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter," which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

REV. A - - PA Assembly 19D424895G40-G43
Incorporated in initial shipment.

REV. A-D - 100 Watt Module 19D423006G5-G8
Incorporated in initial shipment.

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REV. A - PA Assembly 19D424888G14-17 & G31-34
To incorporate new low-pass filter. Deleted 19C321424. Added 19C327024.

REV. A - 40 Watt Module 19C321347G5-8
To improve power output at cold temperature. Added CR204 & CR205.

REV. B - 40 Watt Module 19C321347G5-8
To improve operation.
In 19C321347G5: deleted C213 and changed C252LLB.
In 19C321347G6: deleted C233L, C257L and added C252LB.
In 19C321347G7: deleted C257M and added C252MB.
In 19C321347G8: deleted C233H, C257H and added C252HB.

REV. C - 40 Watt Module 19C321347G5-8
To improve operation. Deleted C209 and R203. Changed R204.

REV. D - 40 Watt Module 19C321347G5
To improve operation. Added C209 and R203.

REV. E - 40 Watt Module 19C321347G5
To improve station operation. Added C213.

REV. D - 40 Watt Module 19C321347G6-8
To improve operation. Changed C206.

REV. F - 40 Watt Module 19C321347G5
To improve operation. Changed C206.

REV. E - 40 Watt Module 19C321347G7, 8
To improve RF output.
In 19C321347G7, 8: Changed C238.
In 19C321347G8 : Changed C237.

REV. E - 40 Watt Module 19C321347G6
REV. F - 40 Watt Module 19C321347G7, 8
REV. G - 40 Watt Module 19C321347G5
To improve operation. Changed C207L & C207M. Deleted C208L, C208M & C208H. Changed C209LL designation to C209. Added R203 to groups 6, 7 and 8.

REV. H - 40 Watt Module 19C321347G5
To increase output at 406 MHz. Changed C252LLB. Deleted C239. Added C239LLB.

REV. A - 100 Watt Module 19D423006G5-8
To improve performance. Changed R4208 and R4209.

REV. B - To improve stability. Added C4268.

REV. F - 40 Watt Module 19C321347G6
To improve stability if PA impedance mismatch occurs. Added C262 and R216.

REV. G - To improve operation. Deleted C262.

REV. A - 40 Watt Module 19C321347G9
To correct Parts List. Added C240LL.

REV. H - 40 Watt Module 19C321347G6
REV. K - 40 Watt Module 19C321347G5
REV. G - 40 Watt Module 19C321347G7, 8
REV. C - 40 Watt Module 19C321347G9
To improve operation of Power Control Circuit when used as driver for 100 Watt PA. Added C263 and C264.

REV. J - 40 Watt Module 19C321347G5
REV. B - 40 Watt Module 19C321347G9
To improve stability. Changed Q203LL.

REV. A - PA Assembly 19D424895G14-17, G31-34
Incorporated in initial shipment.

REV. B - To improve ground between 40 Watt and 100 Watt Module. Added interconnecting DA Jumper wire between grounds.

REV. J - 40 Watt Module 19C321347G6
To improve power output at low end of 450-470 MHz range. Changed C219.

REV. L - 40 Watt Module 19C321347G5
REV. K - 40 Watt Module 19C321347G6
REV. H - 40 Watt Module 19C321347G7
REV. H - 40 Watt Module 19C321347G8
REV. D - 40 Watt Module 19C321347G9
To incorporate new nomenclature for frequency selection networks.

REV. M - 40 Watt Module 19C321347G5
REV. E - 40 Watt Module 19C321347G9
To improve Power output. Deleted C213LL, L207 & L210LL. Changed C257LL, C252LLB (Group 5 only), and Q203LLB. Added Z213 and Z214.

REV. N - 40 Watt Module 19C321347G5
REV. F - 40 Watt Module 19C321347G9
To improve Power output. Changed C230LL, C235LL, C236LL and C257LL. Added C213LL.

REV. C - 100 Watt Module 19D423006G5-8
To improve operation. Changed C2.

REV. D - 19D423006G5-8
To improve operation. Deleted L4201, L4204, L4207 and L4210. Added Z4213 - Z4216.

REV. A - PA Assembly 19D424895G39
To incorporate new transistor. Changed Q215.

REV. B - PA Assembly 19D424895G14-17, G31-34
To improve ground between 40 Watt Module and 100 Watt Module. Added DA Jumper wire to interconnect grounds on the 40 and 100 Watt modules.

REV. C - To incorporate new transistor. Changed Q215.

REV. B - PA Assembly 19D424895G39
REV. D - PA Assembly 19D424895G31-34
To improve operation in duplex applications. Change Low Pass Filter.

REV. D - PA Assembly 19D424895G14-G17
To improve operation in hot environments. Changed printed wire board.

REV. E - PA Assembly 19D424895G14-G17
To improve operation in hot environments and to eliminate potential shorts. Changed printed wire board.

REV. L - 40 Watt Module 19C321347G6
To increase power output. Deleted C230L and R216. Changed C237 and C252LB.
C230L was: 19A116656P4J0, Ceramic disc: 4 pf ±0.5 pf, 500 VDCW, temp coef 0 PPM.
C237L was: 19A116952P47, Metallized teflon: 47 pf ±2%, 250 VDCW.
C252LB was: 19A116656P7J0, Ceramic disc: 7 pf ±0.5 pf, 500 VDCW, temp coef 0 PPM.
R216 was: 19A700113P15, 10 ohms ±5%, 1/2 W.

REV. M - To improve output power in 450-470 MHz range. Deleted C219L. Changed C252LB. Added C219.
C219L was: 19A116656P4J0, Ceramic disc: 24 pf ±5%, 500 VDCW, temp coef 0 PPM.
C252LB was: 19A116656P3J0, Ceramic disc: 3 pf ±0.5 pf, 500 VDCW, temp coef 0 PPM.

REV G - PA Assembly 19D424895G14 & G31
To reduce spurious radiation, added C300 and W245.

REV B - PA Assembly 19D424895G40
To improve operation.

This addendum provides revision letter changes not yet incorporated in this publication.

REV. F - 100 WATT MODULE 19D423006G8
To improve power out at high end of split. Added C4212H, C4222H, C4232H, C4242H, C4269, C4270, C4271 and C4272.

C4212H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4222H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4232H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4242H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4269H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4270H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4271H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.
C4272H is 19A701624P1 - Ceramic, disc: 3 pF ±0.5 pF.