(This LBI applies to Mastr II, Exec II, and Custom MVP. Non-NB version is LBI-4989.)

MOBILE RADIO

LBI-4991C
(DEF1107)

MAINTENANCE MANUAL

25--50 MHz RF ASSEMBLY 19D416478G1 - G4

AND

MIXER/IF/NOISE BLANKER BOARD 19D416562G1 - G4

TABLE OF CONTENTS

DESCRIPTION

The RF Assembly uses two tuned helical resonators and four L-C tuned circuits to provide front end selectivity.

The Mixer/IF/Noise Blanker board (MIF/NB) uses the RF input from the RF Assembly and the mixer injection frequency from the oscillator/multipler board to generate the IF frequency. The noise blanker eliminates undesirable noise interference in the received audio.

CIRCUIT ANALYSIS

RF ASSEMBLY

ANTENNA INPUT A301A/A301B

An RF signal is applied from the antenna input circuit (L551) of the noise blanker section of the MIF/NB board to A301-J1. The antenna input circuit provides an AC ground between vehicle ground and receiver A-. Resistor R1 prevents a static charge from building up on the vehicle antenna. The output of A301 is coupled through two high-Q helical resonators (L301, C301 and L302, C302) to the RF amplifier. The coils are tuned to the incoming frequency by C301 and C302. Lamp DS1 protects the RF amplifier stage against an excessive RF input.

RF AMPLIFIER A302

RF Amplifier Q1 is a Field-Effect Transistor (FET). Q1 operates as a grounded gate amplifier, with the RF input applied to the "source" terminal. This method of operation provides a low impedance input to the amplifier. The amplified output is taken from the "drain" terminal and coupled through four L-C tuned circuits (L1-C7, L2-C8, L3-C9 and L4-C10) to the mixer. The four tuned circuits and the two helical resonators provide the receiver front end selectivity.

MIXER/IF/NOISE BLANKER

MIXER & CRYSTAL FILTER

The mixer uses a FET (Q501) as the active device. The FET mixer provides a high input impedance, high power gain, and an output relatively free of harmonics (low in intermodulation products).

In the mixer stage, RF from the RF amplifier stage is coupled through tuned circuit L501 and C502 which matches the RF output to the gate of mixer Q501. Injection voltage from the multiplier-selectivity stages is inductively coupled through L502 to the source of the mixer. The mixer IF output signal is coupled from the drain of Q501 through a tuned circuit (L504 and C511) to the first FET noise blanker gate Q502. The IF signal is then coupled through a tuned circuit (L506 and C517) to the second FET noise blanker gate Q503.

During the presence of impulse noise from the antenna, the noise blanker circuit (U551) provides a positive pulse to the gates of Q502 and Q503 which attenuates the IF signal during the noise pulse period (see Noise Blanker description for details). This eliminates undesirable noise interference in the received audio without degrading receiver performance.

The mixer IF output signal is then coupled to the input of the four-pole monolithic crystal filter. The highly selective crystal filter (FL501 and FL502) provides the first portion of the receiver IF Selectivity. The output of the crystal filter is coupled through impedance-matching network Z502 (L520 and C501) to IF Amplifier Q520.

Service Note: Variable capacitor C521 does not require adjustment when performing normal alignment. If the four-pole monolithic crystal filter is replaced, then adjustment of C521 is necessary for optimum IF response.

IF AMPLIFIER

IF amplifier Q520 is a dual-gate FET. The crystal filter output is applied to Gate 1 of the amplifier, and the output is taken from the drain. The biasing on Gate 2 and the drain load determines the gain of the stage. The amplifier provides approximately 20 dB of IF gain. The output of Q520 is coupled through a network (L521 and C528) that matches the amplifier output to the next IF stage. The output of the MIF/NB board is applied through feed-through capacitor C305 to the next IF stage or to the MIF switch when a dual front end is used.

Supply voltage for the RF amplifier and MIF/NB board is supplied through feed-through capacitor C306.

NOISE BLANKER

An RF signal and noise pulse from the antenna (J551) fed simultaneously to the Noise Blanker 1st RF Amplifier and the RF Assembly (A302) RF Amplifier. The signal and noise is transformer coupled through L551 to the 1st RF amplifier Q551 (dual-gate FET). The input signal is applied to Gate 1 of the amplifier, and the output is taken from the drain. The biasing of Gate 2 and the drain load determines the gain of the stage. The signal is then coupled through tuned circuits L552/C558 and L553/C560 to the 2nd RF amplifier Q552, which is also a dual-gate FET. The combined gain of Q551 and Q552 is approximately 50 dB.

The amplified signal is coupled through tuned circuit L554/C564 to pulse detector/amplifier/switch IC (U551). IC (U551) is a custom hybrid integrated circuit which contains a pulse detector, pulse amplifier, pulse amplifier/switch, intermodulation detector and a blanker disable switch. The IC functions as a pulse detector and processing circuit for the noise blanker. Regulated 10 VDC, which powers U551, is applied through pin 3. The associated capacitors (C571, C572 and C574) provide emitter decoupling for various stages of the IC.

Pulse Detector

The impulse noise from the RF amplifier is applied to pin 6 of U551 through tuned circuit L554/C564 to the pulse detector. Bias for the detector is established by R563, R564 and CR551. Diode CR551 is normally conducting, thus biasing the pulse detector. A positive pulse applied to the pulse detector causes it to conduct heavily. The output of the detector is a negative going pulse that is relatively free of any RF components. The pulse detector metering point (Blanker Meter) connects from pin 2 of U551 thru P553 to J605 on the next IF stage (J2305 on MIF switch when a DFE is used) and serves as a convenient measuring point when performing alignment.

Pulse Amplifier and Noise Blanker Disable Switch

The negative pulse output from the pulse detector turns the pulse amplifier on, producing a positive output pulse. The threshold point of the pulse amplifier and the RF gain of the 1st and 2nd RF amplifier stages (Q551 and Q552) in the noise blanker circuit prevent noise blanking due to any low-level inherent receiver noise.

A noise blanker disable switch provides a means for manually disabling the noise blanker circuits. Connecting pin 4 of U551 to A- turns the disable switch on, which in turn inhibits the pulse amplifier. The blanker disable function is also provided at pin 5 of the system plug (P904) for external control.

Pulse Amplifier/Switch

The positive output pulse from the pulse amplifier is fed to the pulse amplifier/switch. This circuit functions as a constant width pulse generator whose output is a positive 6 Volt pulse with a duration of 2 microseconds. This pulse is applied from pin 11 of U551 to the noise blanker gates (Q502 and Q503).

Noise blanker gates Q502 and Q503 are turned ON (conducting) during the presence of the noise blanking pulse. These gates present a low impedance RF path to A- for the pulse duration (approximately 3 microseconds), providing approximately 60 dB attenuation of the IF signal and the impulse noise present. As the noise signal from the antenna is applied to the noise blanker circuits, the RF signal is also applied to

the receiver RF input. The inherent delay presented to the received RF signal and the impulse noise by the helical resonators in the receiver RF assembly (L301 and L302) and the four tuned circuits (L1/C7 through L4/C10) allows the noise blanking pulse to turn on the blanking gates. This attenuates the received signal just prior to the arrival of the impulse noise.

Intermodulation (IM) Detector

The output of the pulse amplifier is also applied to the IM detector. The IM detector does not respond to noise pulses appearing at its input because of the circuit design utilized, but the detector is activated during the presence of a sinusoidal signal. This sinusoidal signal is the beat frequency difference of two signals present in the noise blanker channel.

A resultant AGC voltage (approximately +3 VDC) is developed through the integrating action of C573 and is applied from pin 13 of U551 to the 2nd RF amplifier (Q552) of the noise blanker circuit. This action sufficiently reduces the gain of the noise blanker RF stage (Q552) so that receiver performance is not degraded by blanking pulses which would create receiver intermodulation close to the receiver operating frequency.

GENERAL ELECTRIC COMPANY • MOBILE COMMUNICATIONS DIVISION
WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 U.S.A.

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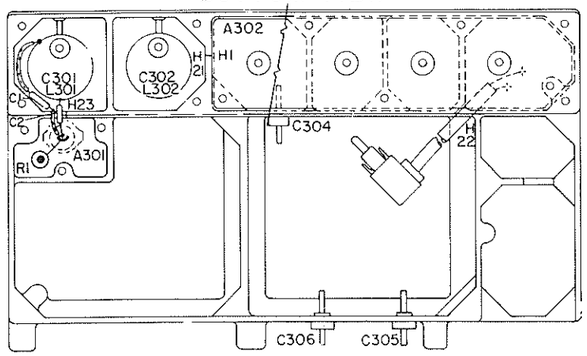
RF ASSEMBLY BOTTOM VIEW



CENTER CONDUCTOR IN H4 FOR GROUPS 1 THRU 4

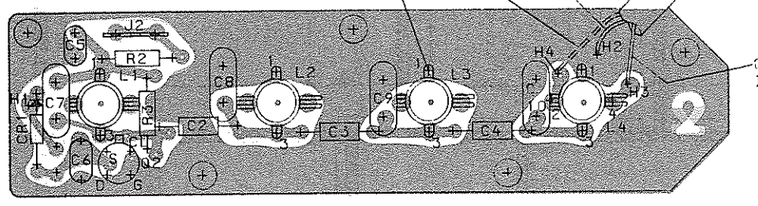
RAISED TAB ON COIL FORM INDICATES PIN 1 ON L1 - L4

P1

TWISTED SHIELD

W1

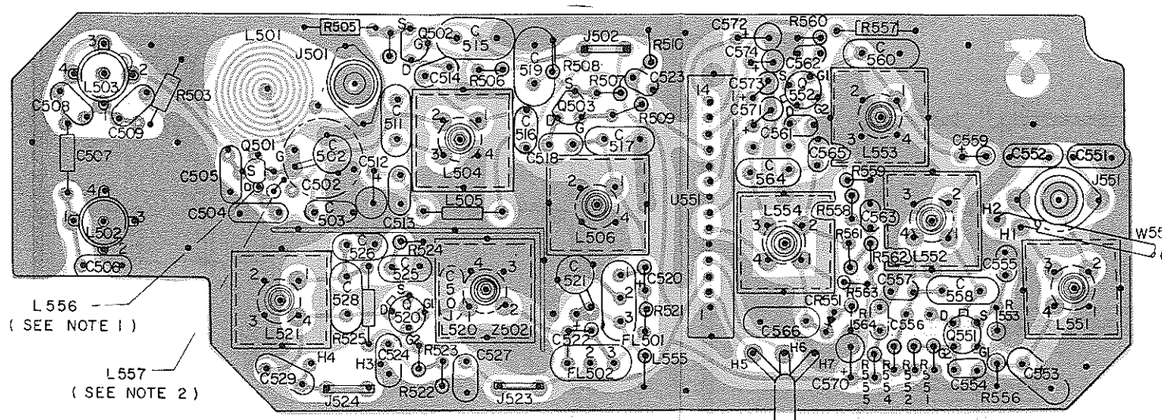
A302 RF PRE-SELECTOR



CENTER CONDUCTOR IN H3 FOR GROUPS 8 & 9

(19C327759, Rev. 1)
(19B219444, Sh. 1, Rev. 2)
(19B219444, Sh. 2, Rev. 2)

MIXER/IF BLANKER BOARD 19D416562

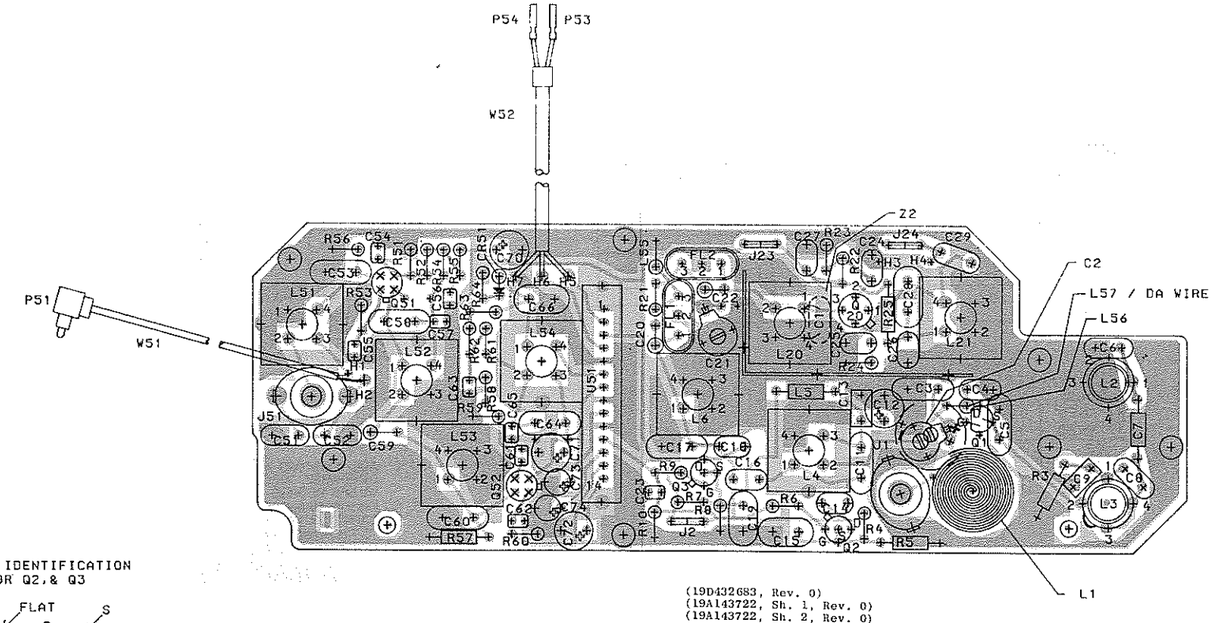


L556 (SEE NOTE 1)

L557 (SEE NOTE 2)

(19D423627, Rev. 6)
(19D417704, Sh. 2, Rev. 2)
(19D417704, Sh. 3, Rev. 2)

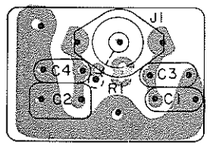
MIXER/IF BLANKER BOARD 19D432681



(19D432683, Rev. 0)
(19A143722, Sh. 1, Rev. 0)
(19A143722, Sh. 2, Rev. 0)

A301A ANT INPUT

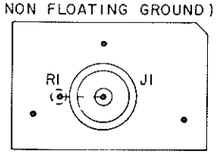
(FLOATING GROUND)



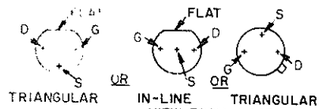
(19B219449, Sh. 1, Rev. 3)
(19B219449, Sh. 2, Rev. 3)

A301B ANT INPUT

(NON FLOATING GROUND)

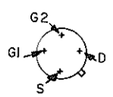


LEAD IDENTIFICATION FOR Q501



NOTE: LEAD ARRANGEMENT, AND NOT CASE SHAPE, IS DETERMINING FACTOR FOR LEAD IDENTIFICATION.

Q520,Q551,Q552



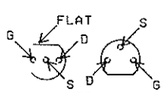
LEAD IDENTIFICATION FOR Q502, Q503

NOTE: LEAD ARRANGEMENT, AND NOT CASE SHAPE, IS DETERMINING FACTOR FOR LEAD IDENTIFICATION.

LEAD IDENTIFICATION FOR Q1

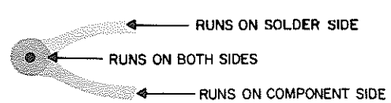
BOTTOM VIEW

LEAD IDENTIFICATION FOR Q2,& Q3



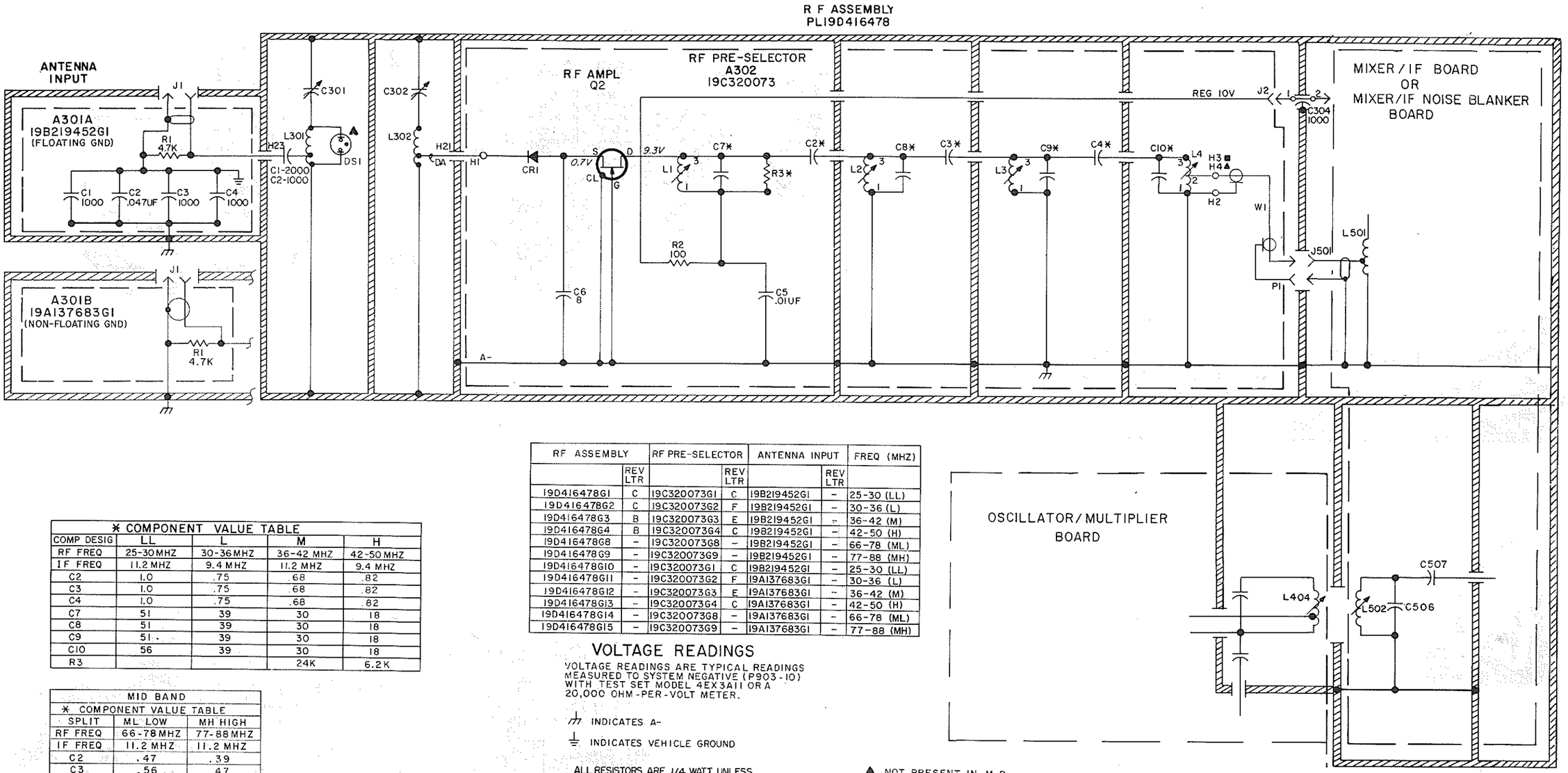
TOP VIEW

NOTE: LEAD ARRANGEMENT, AND NOT CASE SHAPE, IS DETERMINING FACTOR FOR LEAD IDENTIFICATION.



OUTLINE DIAGRAM

25—50 MHz RF ASSEMBLY AND MIXER/IF/NOISE BLANKER



RF ASSEMBLY		RF PRE-SELECTOR		ANTENNA INPUT		FREQ (MHZ)
	REV LTR		REV LTR		REV LTR	
19D416478G1	C	19C320073G1	C	19B219452G1	–	25-30 (LL)
19D416478G2	C	19C320073G2	F	19B219452G1	–	30-36 (L)
19D416478G3	B	19C320073G3	E	19B219452G1	–	36-42 (M)
19D416478G4	B	19C320073G4	C	19B219452G1	–	42-50 (H)
19D416478G8	–	19C320073G8	–	19B219452G1	–	66-78 (ML)
19D416478G9	–	19C320073G9	–	19B219452G1	–	77-88 (MH)
19D416478G10	–	19C320073G1	C	19B219452G1	–	25-30 (LL)
19D416478G11	–	19C320073G2	F	19A137683G1	–	30-36 (L)
19D416478G12	–	19C320073G3	E	19A137683G1	–	36-42 (M)
19D416478G13	–	19C320073G4	C	19A137683G1	–	42-50 (H)
19D416478G14	–	19C320073G8	–	19A137683G1	–	66-78 (ML)
19D416478G15	–	19C320073G9	–	19A137683G1	–	77-88 (MH)

* COMPONENT VALUE TABLE				
COMP DESIG	LL	L	M	H
RF FREQ	25-30MHZ	30-36MHZ	36-42 MHZ	42-50 MHZ
IF FREQ	11.2 MHZ	9.4 MHZ	11.2 MHZ	9.4 MHZ
C2	1.0	.75	.68	.82
C3	1.0	.75	.68	.82
C4	1.0	.75	.68	.82
C7	51	39	30	18
C8	51	39	30	18
C9	51	39	30	18
C10	56	39	30	18
R3			24K	6.2K

MID BAND		
* COMPONENT VALUE TABLE		
SPLIT	ML LOW	MH HIGH
RF FREQ	66-78MHZ	77-88MHZ
IF FREQ	11.2 MHZ	11.2 MHZ
C2	.47	.39
C3	.56	.47
C4	1.0	.82
C7	15	10
C8	18	13
C9	18	13
C10	18	13
R3	6.8K	6.8K

VOLTAGE READINGS

VOLTAGE READINGS ARE TYPICAL READINGS MEASURED TO SYSTEM NEGATIVE (P903-10) WITH TEST SET MODEL 4EX3A11 OR A 20,000 OHM-PER-VOLT METER.

⏥ INDICATES A-

⏚ INDICATES VEHICLE GROUND

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.

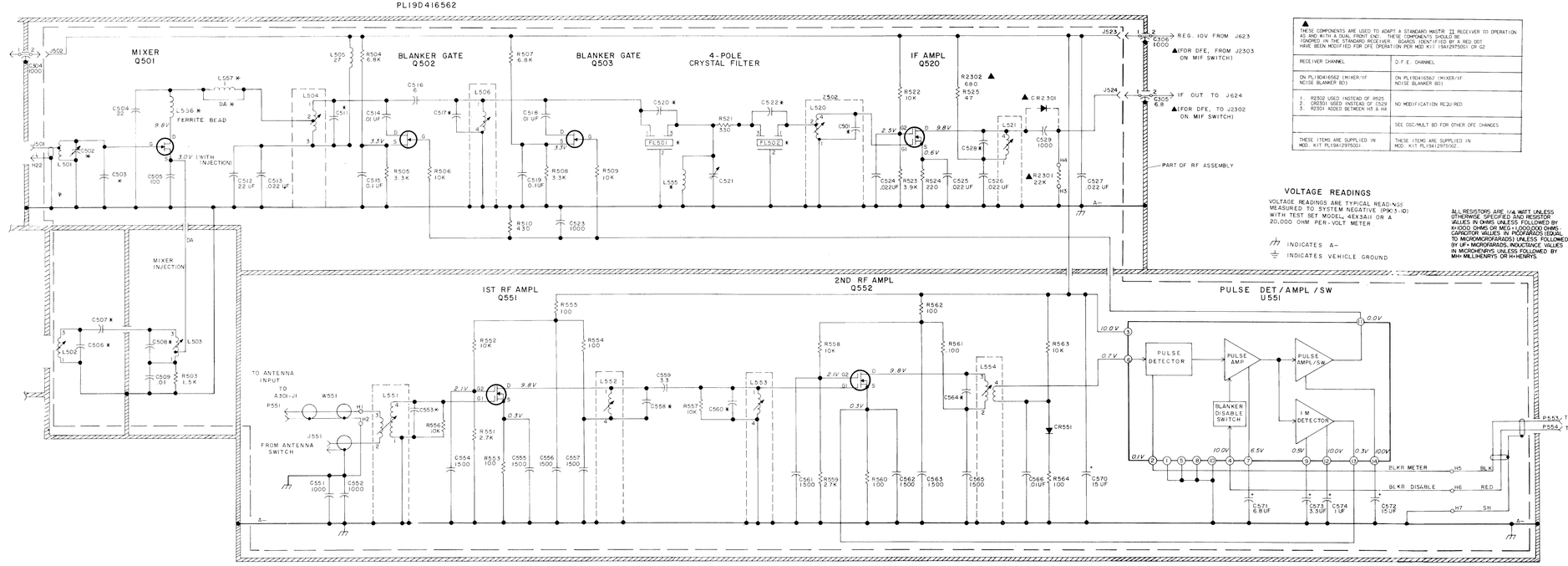
CPD 310A

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

▲ NOT PRESENT IN M.B.
■ NOT PRESENT IN L.B.

SCHEMATIC DIAGRAM

25—50 MHz RF AMPLIFIER ASSEMBLY



▲ THESE COMPONENTS ARE USED TO ADAPT A STANDARD MASTR II RECEIVER TO OPERATION AS AND WITH A DUAL FRONT END. THESE COMPONENTS SHOULD BE IGNORED IN THE STANDARD RECEIVER BOARDS IDENTIFIED BY A RED DOT HAVE BEEN MODIFIED FOR DFE OPERATION PER MOD KIT 19A129750G1 OR G2

RECEIVER CHANNEL	D.F.E. CHANNEL
ON PL19D416562 (MIXER/IF NOISE BLANKER BD)	ON PL19D416562 (MIXER/IF NOISE BLANKER BD)
1. R2302 USED INSTEAD OF JB25 2. 2N2301 USED INSTEAD OF Q529 3. R2301 ADDED BETWEEN H3 & H4	NO MODIFICATION REQUIRED
	SEE OSC/MULT BD FOR OTHER DFE CHANGES
THESE ITEMS ARE SUPPLIED IN MOD. KIT PL19A129750G1	THESE ITEMS ARE SUPPLIED IN MOD. KIT PL19A129751G2

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

	REV LETTER	FREQ RANGE (MHZ)	IF FREQ (MHZ)
MIXER/IF NB BD			
19D416562G01	H	25-30 (LL)	11.2
19D416562G2	G	30-36 (L)	9.4
19D416562G3	H	36-42 (M)	11.2
19D416562G4	G	42-50 (H)	9.4

VOLTAGE READINGS

VOLTAGE READINGS ARE TYPICAL READINGS MEASURED TO SYSTEM NEGATIVE (PIN 3-10) WITH TEST SET MODEL 4EX38AII OR A 20,000 OHM PER-VOLT METER.

⏚ INDICATES A-

⏚ INDICATES VEHICLE GROUND

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.

* COMPONENT VALUE TABLE

COMP DESIG	L L	L	M	H
RF FREQ	25-30MHZ	30-36MHZ	36-42 MHZ	42-50 MHZ
IF FREQ	11.2 MHZ	9.4 MHZ	11.2 MHZ	9.4 MHZ
C502	8-50	8-50	2-20	2-20
C503	5.6	39	27	15
C506	27	24	15	12
C507	10	82	68	56
C508	27	22	15	12
C511	47	82	47	82
C517	68	100	68	100
C520	47	56	47	56
C522	47	56	47	56
C528	330	360	330	360
C553	68	47	68	47
C558	68	47	68	47
C560	68	47	68	47
C564	68	47	68	47
L555	15	18	15	18
R3		30K	15K	6.2K
FL501	FL501LL	FL501L	FL501M	FL501H
FL502	FL502LL	FL502L	FL502M	FL502H
L556	FERR BEAD	FERR BEAD	NOT USED	NOT USED
L557	DA	DA	I	I

SCHEMATIC DIAGRAM

25—50 MHz MIXER/IF/NOISE BLANKER

Issue 5

(19B622195, Rev. 4)

PARTS LIST

LBI4992C

23-50 MHz.
RF ASSEMBLY 19041487R1-G4, G10-G13
WIDE/IF/NOISE BLANKER
19041858C01-G4

SYMBOL	GE PART NO.	DESCRIPTION
		RF ASSEMBLY
		19041487R3 25-30 MHz (LL) FLOATING GRD.
		19041487R2 30-36 MHz (L) FLOATING GRD.
		19041487R3 36-42 MHz (M) FLOATING GRD.
		19041487R4 42-50 MHz (H) FLOATING GRD.
		19041487R20 25-30 MHz (LL) NON FLOATING GRD.
		19041487R21 30-36 MHz (L) NON FLOATING GRD.
		19041487R22 36-42 MHz (M) NON FLOATING GRD.
		19041487R23 42-50 MHz (H) NON FLOATING GRD.
A300A		COMPONENT BOARD 19B209435G01
C1	19A116655G19	Ceramic disc: 1000 pF ±20%, 1000 VDCW; sim to EMC Type JF Discap.
C2	19A116684G05	Polyester: 0.047 µF ±10%, 50 VDCW.
C3 thru C4	19A116655G19	Ceramic disc: 1000 pF ±20%, 1000 VDCW; sim to EMC Type JF Discap.
J1	T10494P20	Connector, jack: sim to Rational Tel.
R1	3R152P472J	Composition: 4.7K ohm ±5%, 1/4 w.
A302		COMPONENT BOARD A302L: 19C320973G1 25-30 MHz (LL) A302L: 19C320973G2 30-36 MHz (L) A302M: 19C320973G3 36-42 MHz (M) A302H: 19C320973G4 42-50 MHz (H)
C2LL*	5491603P20	Phenolic: 1.0 pF ±5%, 500 VDCW. In REV A & earlier: Phenolic: 1.2 pF ±5%, 500 VDCW.
C2L*	5491603P218	Phenolic: 0.75 pF ±5%, 500 VDCW. In REV B & earlier: Phenolic: 1.0 pF ±5%, 500 VDCW.
C2*	5491603P211	Phenolic: 0.68 pF ±5%, 500 VDCW. In REV C & earlier: Phenolic: 0.82 pF ±5%, 500 VDCW.
C3*	5491603P218	Phenolic: 0.82 pF ±5%, 500 VDCW. In REV A & earlier: Phenolic: 1.0 pF ±5%, 500 VDCW.
C3L*	5491603P220	Phenolic: 1.0 pF ±5%, 500 VDCW. In REV A & earlier: Phenolic: 1.2 pF ±5%, 500 VDCW.
C3LL*	5491603P218	Phenolic: 0.75 pF ±5%, 500 VDCW. In REV B & earlier: Phenolic: 1.0 pF ±5%, 500 VDCW.
C4	5491603P220	Phenolic: 1.0 pF ±5%, 500 VDCW.
C4A*	5491603P128	Phenolic: 0.75 pF ±5%, 500 VDCW. In REV A & earlier: Phenolic: 0.82 pF ±5%, 500 VDCW.
C4B*	5491603P117	Phenolic: 0.68 pF ±5%, 500 VDCW. In REV C & earlier: Phenolic: 0.82 pF ±5%, 500 VDCW.
C4BA*	5491603P119	Phenolic: 0.82 pF ±5%, 500 VDCW. In REV A & earlier:
C4BB*	5491603P120	Phenolic: 1.0 pF ±5%, 500 VDCW.
C5	19A116099P101	Polyester: 0.01 µF ±10%, 50 VDCW.
C6	19A116650P6KR	Ceramic: 8 pF ±1 pF ±10%, +80 PPM.
C7LL	5496219P256	Ceramic disc: 51 pF ±5%, 500 VDCW, temp coef +80 PPM.
C7L	5496219P253	Ceramic disc: 39 pF ±5%, 500 VDCW, temp coef +80 PPM.
C7M	5496219P250	Ceramic disc: 33 pF ±5%, 500 VDCW, temp coef +80 PPM.
C7H	5496219P245	Ceramic disc: 18 pF ±5%, 500 VDCW, temp coef +80 PPM.
C8LL	5496219P256	Ceramic disc: 51 pF ±5%, 500 VDCW, temp coef +80 PPM.
C8L	5496219P253	Ceramic disc: 39 pF ±5%, 500 VDCW, temp coef +80 PPM.
C8M	5496219P250	Ceramic disc: 33 pF ±5%, 500 VDCW, temp coef +80 PPM.
C8H	5496219P245	Ceramic disc: 18 pF ±5%, 500 VDCW, temp coef +80 PPM.
C9LL*	5496219P256	Ceramic disc: 51 pF ±5%, 500 VDCW, temp coef +80 PPM.
C9L*	5496219P253	Ceramic disc: 39 pF ±5%, 500 VDCW, temp coef +80 PPM.
C9M*	5496219P250	Ceramic disc: 33 pF ±5%, 500 VDCW, temp coef +80 PPM.
C9H*	5496219P245	Ceramic disc: 18 pF ±5%, 500 VDCW, temp coef +80 PPM.
C10LL*	5496219P257	Ceramic disc: 56 pF ±5%, 500 VDCW, temp coef +80 PPM.
C10L*	5496219P253	Ceramic disc: 39 pF ±5%, 500 VDCW, temp coef +80 PPM.
C10M*	5496219P250	Ceramic disc: 30 pF ±5%, 500 VDCW, temp coef +80 PPM.
C10H*	5496219P245	Ceramic disc: 18 pF ±5%, 500 VDCW, temp coef +80 PPM.
CR1	19A116053P2	Silicon, Hot Carrier: Fwd. drop .455 volts max.
J2	19A116975P1	Receptacle, wire spring.
L1* thru L5*	19C307170P306	Coil, RF: variable; sim to Paul Smith 071774-xXG-5, 28-50. In 19C320973G1 REV A & earlier: In 19C320973G2 REV A & earlier: In 19C320973G3 REV A & earlier: In 19C320973G4 REV A & earlier:
	19B219419G1	Coil, Includes:
	349179P5	Tuning slug.
		- - - - - - - - - - PLUGS - - - - - - - - - -
P1		(Part of W1).
		- - - - - - - - - - TRANSISTORS - - - - - - - -
Q2	19A116990P1	N Type, field effect: sim to 2N4416.
		- - - - - - - - - - RESISTORS - - - - - - - - - -
R2	3R152P101J	Composition: 100 ohms ±5%, 1/4 w.
R3L*	3R152P303J	Composition: 30K ohms ±5%, 1/4 w. Deleted by REV B.
R3M*	3R152P243J	Composition: 24K ohms ±5%, 1/4 w. Added by REV C.
R3H*	3R152P153J	Composition: 15K ohms ±5%, 1/4 w. Deleted by REV B.
R3H	3R152P022J	Composition: 0.2K ohms ±5%, 1/4 w.
		- - - - - - - - - - CABLES - - - - - - - - - -
W1	5491589P85	Cable, RF: approx 4 inches long. (Includes P1).
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C301		(Part of L301).
C302		(Part of L302).
C304	19B209868P2	Ceramic, feed-thru: 1000 pF +100 -0, 500 VDCW; sim to Sim-Gradley Style FA30.
C305	19B209868P5	Ceramic, feed-thru: 6.8 pF ±20, 500 VDCW; sim to Sim-Gradley Style FA30.
C306	19B209868P2	Ceramic, feed-thru: 1000 pF +100 -0, 500 VDCW; sim to Sim-Gradley Style FA30.
		- - - - - - - - - - INDUCTORS - - - - - - - - - -
L301LL and L301L	19B219455G1	Coil. Includes:
C1*	5494481P13	Capacitor, ceramic disc: 2000 pF ±20, 1000 VDCW; sim to EMC Type JF Discap.
	5494481P21	Capacitor, ceramic disc: 1000 pF ±20, 1000 VDCW; sim to EMC Type JF Discap.
D31	19B209804P2	Lamp, glow: 0.7 ma; sim to GE NE2ET.
L301M and L301H	19B219455G2	Coil. Includes:
C2	5494481P11	Capacitor, ceramic disc: 1000 pF ±20, 1000 VDCW; sim to EMC Type JF Discap.
D31	19B209804P1	Lamp, glow: 0.3 ma; sim to GE NE2ET.
L302LL and L302L	19B219455G3	Coil.
L302M and L302H	19B219455G4	Coil.
		- - - - - - - - - - MISCELLANEOUS - - - - - - - -
	19B209209P14	Tap screw, Phillips Pan(SEMS - No. 6-32 x 9/16, (Secures A301 & A302).
		WIDE/IF/NOISE BLANKER BOARD 19B416585G1 25-30 MHz (LL) 19B416585G2 30-36 MHz (L) 19B416585G3 36-42 MHz (M) 19B416585G4 42-50 MHz (H)
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C501LL		(Part of 25021L).
C501L		(Part of 25021L).
C501M		(Part of 25021M).
L4*	19C307170P308	Coil, RF: variable; sim to Paul Smith 071774-xXG-5, 28-50. In 19C320973G1 REV A & earlier: In 19C320973G2 REV A & earlier: In 19C320973G3 REV A & earlier: In 19C320973G4 REV A & earlier:
	19B219419G1	Coil. Includes:
	349179P5	Tuning slug.
		- - - - - - - - - - PLUGS - - - - - - - - - -
P4		(Part of W1).
		- - - - - - - - - - TRANSISTORS - - - - - - - -
Q3	19A116990P1	N Type, field effect: sim to 2N4416.
		- - - - - - - - - - RESISTORS - - - - - - - - - -
R4	3R152P101J	Composition: 100 ohms ±5%, 1/4 w.
R5L*	3R152P303J	Composition: 30K ohms ±5%, 1/4 w. Deleted by REV B.
R5M*	3R152P243J	Composition: 24K ohms ±5%, 1/4 w. Added by REV C.
R5H*	3R152P153J	Composition: 15K ohms ±5%, 1/4 w. Deleted by REV B.
R5H	3R152P022J	Composition: 0.2K ohms ±5%, 1/4 w.
		- - - - - - - - - - CABLES - - - - - - - - - -
W2	5491589P85	Cable, RF: approx 4 inches long. (Includes P4).
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C501		(Part of L501).
C502		(Part of L502).
C503	19A116655P23	Ceramic, feed-thru: 47 pF ±5%, temp coef +80 PPM.
C504	19A116655P22	Ceramic: 22 pF ±5%, temp coef +80 PPM.
C505	19A116655P15	Ceramic: 15 pF ±5%, temp coef +80 PPM.
C506	19A116655P12	Ceramic: 12 pF ±5%, temp coef +80 PPM.
C507L	5491603P120	Phenolic: 1.0 pF ±5%, 500 VDCW.
C507L	5491603P119	Phenolic: 0.82 pF ±5%, 500 VDCW.
C507K	5491603P117	Phenolic: 0.68 pF ±5%, 500 VDCW.
C507H	5491603P115	Phenolic: 0.56 pF ±5%, 500 VDCW.
C508L	19A116654P153J3	Ceramic: 15 pF ±5%, temp coef +80 PPM.
C508M	19A116654P123J1	Ceramic: 12 pF ±5%, temp coef +80 PPM.
C509	19A116654P102J	Ceramic: 0.001 µF ±10%, 50 VDCW.
C511LL	5490008P219	Silver mica: 47 pF ±5%, 300 VDCW; sim to Electro Motive Type DM-15.
C511L	5490008P225	Silver mica: 82 pF ±5%, 300 VDCW; sim to Electro Motive Type DM-15.
C511M	5490008P219	Silver mica: 47 pF ±5%, 300 VDCW; sim to Electro Motive Type DM-15.
C511H	5490008P225	Silver mica: 82 pF ±5%, 300 VDCW; sim to Electro Motive Type DM-15.
C512	5492067P10	Tantalum: 22 µF ±20%, 15 VDCW; sim to Sprague Type 150D.
C513	19A116080P01	Polyester: 0.022 µF ±20%, 50 VDCW.
C514	19A116080P01	Polyester: 0.01 µF ±10%, 50 VDCW.
C515	19A116080P107	Polyester: 0.1 µF ±10%, 50 VDCW.
C516	19A116654P620	Ceramic disc: 6 pF 5% 5 pF, 500 VDCW, temp coef 0 PPM.
C5111L*	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. In REV G & earlier:
	5490008P219	Silver mica: 47 pF ±5%, 300 VDCW; sim to Electro Motive Type DM-15.
C517L	5490008P127	Silver mica: 100 pF ±10%, 500 VDCW; sim to Electro Motive Type DM-15.
C5178*	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15. In REV G & earlier:
	5490008P219	Silver mica: 47 pF ±10, 500 VDCW; sim to Electro Motive Type DM-15.
C517M	5490008P127	Silver mica: 100 pF ±10%, 500 VDCW; sim to Electro Motive Type DM-15.
C518	19A116080P103	Polyester: 0.01 µF ±10%, 50 VDCW.
C519	19A116080P107	Polyester: 0.1 µF ±10%, 50 VDCW.
C520LL	5491601P113	Phenolic: 0.47 pF ±5%, 500 VDCW.
C520L	5491601P115	Phenolic: 0.56 pF ±5%, 500 VDCW.
C520M	5491601P113	Phenolic: 0.47 pF ±5%, 500 VDCW.
C520H	5491601P115	Phenolic: 0.56 pF ±5%, 500 VDCW.
C521	19B209935P2	Variable: 2.5 to 20 pF, 200 VDCW, +250 -700 PPM/°C; sim to Matsushita ECV-1Z20P32.
C5211L	5491601P113	Phenolic: 0.47 pF ±5%, 500 VDCW.
C5211M	5491601P115	Phenolic: 0.56 pF ±5%, 500 VDCW.

SYMBOL	GE PART NO.	DESCRIPTION
C5221L	5490008P39	Silver mica: 330 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C522L	5490008P240	Silver mica: 300 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C522M	5490008P39	Silver mica: 330 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C522H	5490008P240	Silver mica: 300 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C523	19A116198P3	Polyester: 0.022 µF ±20%, 50 VDCW.
C524L thru C524M	19A116080P0	Polyester: 0.022 µF ±20%, 50 VDCW.
C525LL	5490008P39	Silver mica: 330 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C525L	5490008P240	Silver mica: 300 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C525M	5490008P39	Silver mica: 330 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C525H	5490008P240	Silver mica: 300 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C526	19A116655P219	Ceramic disc: 1000 pF ±20%, 1000 VDCW; sim to EMC Type JF Discap.
C527	19A116655P19	Ceramic: 27 pF ±5%, temp coef +80 PPM.
C531 and C532	19A116655P19	Ceramic disc: 1000 pF ±20%, 1000 VDCW; sim to EMC Type JF Discap.
C533LL	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C533L	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C533M	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C533H	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C534 thru C535	19A116192P10	Ceramic: 1500 pF ±10, 50 VDCW; sim to Erie 8121-A050-W4A-152K.
C536LL	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C536L	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C536M	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C536H	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C538LL	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C538M	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C538H	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C539	19A116192P130	Phenolic: 3.3 pF ±5%, 500 VDCW.
C540LL	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C540L	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C540M	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C540H	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C541 thru C543	19A116192P10	Ceramic: 1500 pF ±10, 50 VDCW; sim to Erie 8121-A050-W4A-152K.
C544LL	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C544L	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C544M	5490008P23	Silver mica: 68 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C544H	5490008P19	Silver mica: 47 pF ±5%, 500 VDCW; sim to Electro Motive Type DM-15.
C545	19A116192P10	Ceramic: 1500 pF ±10%, 50 VDCW; sim to Erie 8121-A050-W4A-152K.
C546	19A116080P107	Polyester: 0.1 µF ±10%, 50 VDCW.
C547	5492027P14	Tantalum: 15 µF ±20%, 20 VDCW; sim to Sprague Type 150D.
C572	5492021P1	Tantalum: 0.8 µF ±20%, 6 VDCW; sim to Sprague Type 150D.
C572	5492021P14	Tantalum: 15 µF ±20%, 20 VDCW; sim to Sprague Type 150D.
C573	5492021P39	Tantalum: 3.3 µF ±20%, 15 VDCW; sim to Sprague Type 150D.
C574	5492021P17	Tantalum: 1.0 µF ±20%, 35 VDCW; sim to Sprague Type 150D.
CR531	19A115371P1	Silicon, fast recovery, 225 mA, 50 PIV.

SYMBOL	GE PART NO.	DESCRIPTION
FL501LL	19B219573G3	- - - - - - - - - - FILTER - - - - - - - - - - Crystal, freq: Resonator A: 11290.000 KHz, Resonator B: 11296.024 KHz.
FL501L	19B219574G3	Crystal, freq: Resonator A: 9400.300 KHz, Resonator B: 9396.324 KHz.
FL501M	19B219573G3	Crystal, freq: Resonator A: 11290.000 KHz, Resonator B: 11296.024 KHz.
FL501H	19B219574G3	Crystal, freq: Resonator A: 9400.300 KHz, Resonator B: 9396.324 KHz.
FL502LL		(Part of FL501LL).
FL502L		(Part of FL501L).
FL502M		(Part of FL501M).
FL502H		(Part of FL501H).
J501	19A130929G1	- - - - - - - - - - JACKS AND RECEPTACLES - - - - - - - Receptacle, coaxial: jack; sim to Cinch 14B11613,
J502	19A116975P1	Receptacle, wire spring.
J503 thru J504	19A116975P1	Receptacle, wire spring.
J551	19A130929G1	Receptacle, coaxial: jack; sim to Cinch 14B11613,
L501		- - - - - - - - - - INDUCTORS - - - - - - - - - - (Part of printed board 19D417704P1).
L502	19B219419G2	Coil. Includes:
	349179P5	Tuning slug.
L503	19B219419G4	Coil. Includes:
	349179P35	Tuning slug.
L504	19C320416G26	Coil. Includes:
	349318RP12	Tuning slug.
L505	19B209420P130	Coil, RF: 27.0 uh ±10%, 3.60 ohms DC res max; sim to Jeffers 4418-18-6K.
L506	19C320416G23	Coil. Includes:
	349318RP9	Tuning slug.
L530LL		(Part of 2360L).
L530L		(Part of 2360L).
L530M		(Part of 2360M).
L530H		(Part of 2360H).
L531	19C320416G6	Coil. Includes:
	349318RP9	Tuning slug.
L532 and L533	19C320416G3	Coil. Includes:
	349318RP9	Tuning slug.
L534	19C320416G13	Coil. Includes:
	349318RP9	Tuning slug.
L550LL	19B209420P27	Coil, RF: 15.0 uh ±5%, 2.75 ohms DC res max; 500 VDC operating voltage.
L550L	19B209420P28	Coil, RF: 18.0 uh ±7, 3.00 ohms DC res max; sim to Jeffers 1918-7.
L550M	19B209420P27	Coil, RF: 15.0 uh ±5%, 2.75 ohms DC res max; sim to Jeffers 1918-5.
L550H	19B209420P28	Coil, RF: 18.0 uh ±5%, 3.00 ohms DC res max; sim to Jeffers 1918-5A.
L554*	19A116149P1	Toroidal coil. Added to G1 and G2 by REV G. Added to G3 and G4 by REV F.
L557*	19B209420P113	Coil, RF: 1.00 µh ±10%, 0.14 ohms DC res max; sim to Jeffers 4426-6K. Added to G7, G8 by REV G.

SYMBOL	GE PART NO.	DESCRIPTION
P551 P553 and P554		- - - - - - - - - - PLUGS - - - - - - - - - - (Part of W551). (Part of W552).
Q501	19A116634P1	- - - - - - - - - - TRANSISTORS - - - - - - - - - - N Type, field effect.
Q502* and Q505*	19A134133P9	N Type, field effect. In REV D & earlier: N Channel, field effect; sim to Type 2N3819.
	19A116818P1	N Channel, field effect; sim to Type 3N187.
Q551 and Q552	19A116818P1	N Channel, field effect; sim to Type 3N187.
R503	3R152P152K	- - - - - - - - - - RESISTORS - - - - - - - - - - Composition: 1.5K ohms ±10%, 1/4 w.
R504	3R152P682J	Composition: 6.8K ohms ±5%, 1/4 w.
R505	3R152P332J	Composition: 3.3K ohms ±5%, 1/4 w.
R506	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R507	3R152P682J	Composition: 6.8K ohms ±5%, 1/4 w.
R508	3R152P332J	Composition: 3.3K ohms ±5%, 1/4 w.
R509	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R510	3R152P431J	Composition: 430 ohms ±5%, 1/4 w.
R521	3R152P331J	Composition: 330 ohms ±5%, 1/4 w.
R522	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R523	3R152P392J	Composition: 3.9K ohms ±5%, 1/4 w.
R524	3R152P221J	Composition: 220 ohms ±5%, 1/4 w.
R525	3R152P470J	Composition: 47 ohms ±5%, 1/4 w.
R551	3R152P272J	Composition: 2.7K ohms ±5%, 1/4 w.
R552	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R553	3R152P331J	Composition: 330 ohms ±5%, 1/4 w.
R556 thru R558	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R559	3R152P272J	Composition: 2.7K ohms ±5%, 1/4 w.
R560	3R152P101J	Composition: 100 ohms ±5%, 1/4 w.
R561 thru R562	3R152P103J	Composition: 10K ohms ±5%, 1/4 w.
R563	3R152P101J	Composition: 100 ohms ±5%, 1/4 w.
R564	3R152P101J	Composition: 100 ohms ±5%, 1/4 w.
U551	19D417J18G2	- - - - - - - INTEGRATED CIRCUITS - - - - - - - Noise Blanker.
W551	19D203P879G1	- - - - - - - - - - CABLES - - - - - - - - - - Cable, RF: approx 2-1/4 inches long; 350 VRMS, 500 VDC operating voltage.
W552	19D219704G3	Cable: approx 6 inches long.
J5051L		- - - - - - - - - - NETWORKS - - - - - - - - - - COIL ASSEMBLY 19C307141G16
C501LL	19A116149P063	- - - - - - - - - - CAPACITORS - - - - - - - - - - Ceramic: 91 pF ±5%, 100 VDCW; temp coef -3300 PPM.
L520LL	19C320141P06	- - - - - - - - - - INDUCTORS - - - - - - - - - - Coil. Includes:
	19D209674P5	Tuning slug.

SYMBOL	GE PART NO.	DESCRIPTION
J505L		COIL ASSEMBLY 19C320416G27
C501L	19A116149P1064	- - - - - - - - - - CAPACITORS - - - - - - - - - - Ceramic: 100 pF ±20%, 100 VDCW; temp coef -3300 PPM.
L520L	19C320141P06	- - - - - - - - - - INDUCTORS - - - - - - - - - - Coil. Includes:
	19D209674P5	Tuning slug.
J502M		COIL ASSEMBLY 19C320416G18
C501M	19A116149P1064	- - - - - - - - - - CAPACITORS - - - - - - - - - - Ceramic: 91 pF ±5%, 100 VDCW; temp coef -3300 PPM.
L520M	19C320141P06	- - - - - - - - - - INDUCTORS - - - - - - - - - - Coil. Includes:
	19D209674P5	Tuning slug.
J502H		COIL ASSEMBLY 19C320416G28
C501H	19A116149P1064	- - - - - - - - - - CAPACITORS - - - - - - - - - - Ceramic: 100 pF ±10%, 100 VDCW; temp coef +3300 PPM.
L520H	19C320141P06	- - - - - - - - - - INDUCTORS - - - - - - - - - - Coil. Includes:
	19D209674P5	Tuning slug.
		- - - - - - - - - - MISCELLANEOUS - - - - - - - - - -
	19D219470P2	Shield.
C530*	19A116942G1	Cap. (Used with 1504, 2504, 1520, 1521, 1551-1554).
	19A116942G2	Cap. (Used with 1505, 2505). To prevent oscillations in xlator. Replace L556 with L557. Connected C504 to QA501c.
	19A116080P107	Insulator. (Used with C501).
	9000300P23	Insulator, filter. (Used with J501).
		DUAL FRONT END MOD KIT 19A129753G1 RECEIVER 19A129753G2 DTR
		- - - - - - - - - - CAPACITORS - - - - - - - - - -
C2300*	19A116650P6J0	Ceramic disc: 8 pF ±0.5 pF, 500 VDCW, temp coef 0 PPM. Added by REV G.
CR2301	19A116925P5	- - - - - - - DIODES AND RECTIFIERS - - - - - - - Silicon, pin: 35 volt Reverse Breakdown, 400 mW.
R2301	3R152P223J	- - - - - - - - - - RESISTORS - - - - - - - - - - Composition: 22K ohms ±5%, 1/4 w.
R2302	3R152P081K	Composition: 680 ohms ±10%, 1/4 w.
R2303	3R152P911J	Composition: 910 ohms ±5%, 1/4 w.
W2301	19A219999G2	- - - - - - - - - - CABLES - - - - - - - - - - Cable: approx 10-1/2 inches long.

PRODUCTION CHANGES

Changes to the equipment to improve performance or to simplify circuits are identified by a "Revision Letter", which is stamped after the model number on the name plate. 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 thru E - Wiser/IF/Noise Blanker Board 19D416585G1,2

REV. A thru D - Wiser/IF/Noise Blanker Board 19D416585G3,4

REV. A - RF Filter Board 19C320973G1-4
The above revisions incorporated in initial shipment.

REV. B - RF Filter Board 19C320973G2 & 3
To improve receiver sensitivity. Deleted R3L and R3H.

REV. C - RF Filter Board 19C320973G3
To prevent oscillations. Added R3M.

REV. D - RF Filter Board 19C320973G3
To improve receiver sensitivity. Changed C8, C9 and C4 and L1 thru L4.

REV. F - Wiser/IF/Noise Blanker Board 19D416585G1, 2

REV. E - Wiser/IF/Noise Blanker Board 19D416585G3, 4
To improve blanker operation. Changed Q502 and Q505.

REV. G - Wiser/IF/Noise Blanker Board 19D416585G1, 2

REV. F - Wiser/IF/Noise Blanker Board 19D416585G3, 4
To improve operation. Added L556.

REV. A & B - RF Assembly 19D416478G1-4
Incorporation in initial shipment.

REV. C - RF Assembly 19D416478G1, 2
To improve sensitivity in 25-30 MHz range. Changed C1 (part of L301).

REV. D - RF Filter Board 19C320973G3
To prevent oscillations in pre-selector board added R5M.

REV. G - Wiser/IF/Noise Blanker 19D416585G3, 4
Cap. (Used with 1504, 2504, 1520, 1521, 1551-1554).

REV. C - RF Assembly 19D416478G1-4

REV. E - RF Filter Board 19C320973G5, Q6
To standardize components. Deleted Q3 and PWB 19C350972. Added Q3 and PWB 19C320782P1.

REV. H - Wiser/IF/Noise Blanker 19D416585G1 & G2
To improve operation in the 25-30 MHz and 36-42 MHz range. Changed C517.

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

SYMBOL	GE PART NO.	DESCRIPTION
Z502H		COIL ASSEMBLY 19C320141G27
		- - - - - - - - - - CAPACITORS - - - - - - - - -
C501H	19A700220P64	Ceramic: 100 pf ±10%, 100 VDCW; temp coef -3300 PPM.
		- - - - - - - - - - INDUCTORS - - - - - - - - -
L520H	19C320141P26	Coil. Includes:
	19B209674P2	Tuning slug.
		- - - - - - - - - MISCELLANEOUS - - - - - - - - -
	19B219470P2	Shield.
	19A129424G1	Can. (Used with L504, L506, L520, L521, L551-L554).
	4031594P1	Insulator. (Used with C521).
	4035306P23	Insulator, fiber. (Used with J501).
	4035306P59	Insulator, fiber. (Used with L501).
		DUAL FRONT END MOD KIT 19A129750G1 RECEIVER 19A129750G2 DFE
		- - - - - - - - - - CAPACITORS - - - - - - - - -
C2301*	19A116656P8J0	Ceramic disc: 8 pf ±0.5 pf, 500 VDCW, temp coef 0 PPM. Deleted by REV B.
		- - - - - - - - DIODES AND RECTIFIERS - - - - - -
CR2301	19A116925P1	Silicon, pin: 35 volt Reverse Breakdown, 400 mw.
		- - - - - - - - - - RESISTORS - - - - - - - - - -
R2301	19A700106P95	Composition: 22K ohms ±5%, 1/4 w.
R2302	19A700106P59	Composition: 680 ohms ±5%, 1/4 w.
R2303	3R152P911J	Composition: 910 ohms ±5%, 1/4 w.
		- - - - - - - - - - - CABLES - - - - - - - - - - -
W2301	19B219999G2	Cable: approx 10-1/2 inches long.

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 thru E - Mixer/IF/Noise Blanker Board 19D416562G1,2

REV. A thru D - Mixer/IF/Noise Blanker Board 19D416562G3,4

REV. A - RF Filter Board 19C320073G1-4

The above revisions incorporated in initial shipment.

REV. B - RF Filter Board 19C320073G2 & 3

To improve receiver sensitivity. Deleted R3L and R3M.

REV. C - RF Filter Board 19C320073G3

To prevent oscillation. Added R3M.

REV. B - RF Filter Board 19C320073G1, 4

REV. C - RF Filter Board 19C320073G2

REV. D - RF Filter Board 19C320073G3

To improve receiver sensitivity. Changed C2, C3 and C4 and L1 thru L4.

REV. F - Mixer/IF/Noise Blanker Board 19D416562G1, 2

REV. E - Mixer/IF/Noise Blanker Board 19D416562G3, 4

To improve blanker operation. Changed Q502 and Q503.

REV. G - Mixer/IF/Noise Blanker Board 19D416562G1, 2

REV. F - Mixer/IF/Noise Blanker Board 19D416562G3, 4

To improve operation. Added L556.

REV. A & B - RF Assembly 19D416478G1-4

Incorporated in initial shipment.

REV. C - RF Assembly 19D416478G1, 2

To improve sensitivity in 25-30 MHz range. Changed C1 (part of L301).

REV. D - RF Filter Board 19C320073G2

To prevent oscillations in pre-selector board Added R3L.

REV. G - Mixer/IF/Noise Blanker 19D416562G3, 4

To prevent oscillations in mixer. Replace L556 with L557. Connected C504 to Q501D.

REV. C - RF Filter Board 19C320073G1, G4

REV. E - RF Filter Board 19C320073G2, G3

To standardize components. Deleted Q1 and PWB 19C320072. Added Q2 and PWB 19C327760P1.

REV. H - Mixer/IF/Noise Blanker 19D416562G1 & G3

To improve operation in the 25-30 MHz and 36-42 MHz range. Changed C517.