



MT500 SERIES

"Handie-Talkie" FM Two-Way Radios

403-512 MHz

SPECIFICATIONS

GENERAL

Model Series: H24BBU', H24BBB', H34BBU', H34BBB' Frequency: 403 - 512 MHz **Power Supply:** One rechargeable nickel-cadmium battery or one mercury battery

11 mA

"OMNI" "SLIM-LINE" Dimensions: less SHORT EXTENDED SHORT **EXTENDED** 6.97 x 2.73 x 1.85 antenna & knobs 7.62 x 2.73 x 1.85 6.97 x 2.73 x 1.59 7.62 x 2.73 x 1.59 (177 x 69 x 47 mm) (H x W x D in inches): (193 x 69 x 47 mm) (177 x 69 x 40 mm) (193 x 69 x 40 mm) Weight (ounces) 4W 1.5W 4W 1.5W 1.5W 1.5W Nickel-Cadmium Battery: 25.3 24.9 25.9 25.5 19.9 20 4 (717g) (706g) (734g) (723g) (564g) (578g) Mercury Battery: 26.8 26.4 27.4 27.0 20.9 21.4 (748g) (760g) (777g) (766q)(593g) (607g) Battery Life (hours) Nickel-Cadmium Battery: 14 or 9* 8 14 or 9* 8 8 8 Mercury Battery: 25 30* 25 30* 18 18 **Current Drain:** H24RRR H24BBU' (Using 15 Vdc Supply) H34BBB H34BBU' Transmit 1.5 W: 405 mA 425 mA 4.0 W: 970 mA 990 mA · **Receive: 70 mA 70 mA

FCC DESIGNATION: RECEIVER RC0150 **TRANSMITTER** 4 W CC4254 BBU' CC4253 BBB' 1.5 W CC4252 BBU' CC4251 BBB'

NUMBER

OF

CHANNELS

1

1

1

2

2

2

2

4

4

6

8

1

1

1

2

2

2

4

5

6

TYPE

OF

SQUELCH

Carrier

Tone PL

RECEIVER

**Standby:

Frequency Stability —	
(-30° C to +60° C; +25° C Ref):	± .0005%
Channel Spacing:	25 kHz
Sensitivity —	,
20 dB Quieting:	0.50 uV
12 dB SINAD:	0.35 uV
Squelch/PL:	0.25 uV
Modulation Acceptance:	7.5 kHz
Intermodulation (EIA SINAD):	70 dB
Spurious/Image Rejection:	70/60 dB
Selectivity (EIA SINAD):	70 dB
	75 dB (optional)
Frequency Separation —	
No Degradation:	1 MHz
3 dB Sensitivity Degradation:	2 MHz
Audio Output —	
(At less than 5% distortion):	500 mW
TRANSMITTER	

(No Degradation):

TRANSMITTER		
RF Power Output —	H24BBB' H24BBU'	H34BBB' H34BBU'
15 Vdc Nickel-Cadmium Battery:	1.5 W	4.0 W
12.7 Vdc Mercury Battery NLN6762, NLN6936:	1.0 W	2.0 W
12.0 Vdc Mercury Battery	1.0 11	2.0 W
NLN6683:	0.7 W	
Modulation:		16F3
Frequency Stability — (-30° C to +60° C; +25° C Ref):		± .0005%
FM Noise:		55 dB
Audio Distortion — (At 1000 Hz, 3 kHz deviation):		3%
Frequency Spacing —		

NOTE: All of the below-listed publications have been discontinued and are NLA.

Related Publications Available Separately:

Operating Instructions 68P81012C50 Theory/Maintenance Manual 68P81012C55 Digital PL (Model A) Supplement. . . 68P81018C45 :

11 mA

BBB SERIES

4 W

H34BBB'

- - -

1113A

1114A

. . .

1123A

1124A

1143A

1144A

1164A

1184A

3113A

3114A

3123A

3124A

3143A

3144A

3154A

3164A

3184A

1.5 W

H24BBB

1111A

1112A

1113A

1114A

1121A

1122A

1123A

1124A

1143A

1144A

1164A

1184A

3112A

3113A

3114A

3122A

3123A

3124A

3143A

3144A

3154A

3164A

3184A

MODEL TYPES

BBU SERIES

4 W

H34BBU'

- - -

1113A

1114A

1123A

1124A

1143A

1144A

1164A

1184A

3113A

3114A

3123A

3124A

3143A

3144A

3154A

3164A

3184A

1.5 W

H24BBU

1111A

1112A

1113A

1114A

1121A

1122A

1123A

1124A

1143A

1144A

1164A

1184A

3112A

3113A

3114A

3122A

3123A

3124A

3143A

3144A

3154A

31644

3184A

Service Manual 68P81012C58-B

THIS MANUAL HAS BEEN DISCONTINUED

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

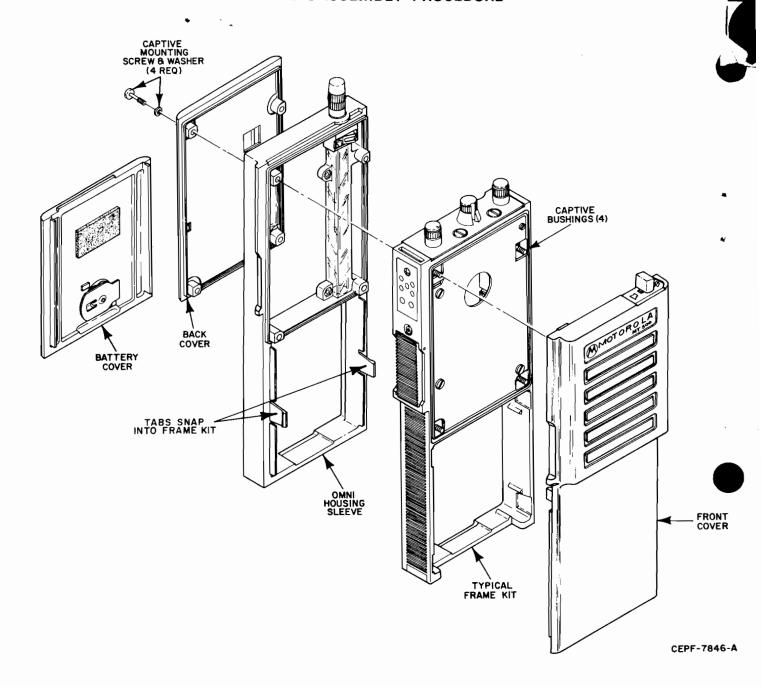
6 MHz

Digital PL (Model B) Supplement. . . 68P81018C40

^{* 10 - 10 - 80} duty cycle - all others have a 5 - 5 - 90 duty cycle.

^{**} Add 3 mA for Tone PL and 4 mA for Digital PL.

DISASSEMBLY PROCEDURE



PROCEDURE

- 1. TURN THE SLOTTED SCREW HEAD ON THE BATTERY COVER ONE QUARTER TURN COUNTERCLOCKWISE AND REMOVE THE BATTERY COVER.
- REMOVE THE BATTERY.
- 3. LOOSEN THE FOUR CAPTIVE SCREWS HOLDING THE BACK COVER AND
- REMOVE THE BACK COVER.

 4. REMOVE SNAP-ON SLEEVE (OMNI-HOUSING ONLY).

 5. LOOSEN THE FOUR CAPTIVE BUSHINGS HOLDING THE CHASSIS FRAME TO THE FRONT COVER.
- 6. SEPARATE THE FRONT COVER FROM THE FRAME.
 7. UNPLUG THE WIRES CONNECTING THE FRONT COVER TO THE CHASSIS FRAME.

EPF-7847-0



INSTRUCTION MANUAL REVISION

for

FMR-844 Issue-1

Service Sheet No. 68P81012C58-B MT500 SERIES "Handie-Talkie" FM Two-Way Radios 403-512 MHz

GENERAL

This revision outlines changes that have occurred since the printing of your service manual. Installation of these changes in earlier equipment is not necessary, except as recommended in Motorola Service and Repair Notes (SRN's).

REVISION DETAILS

Item	Change	Kit	New	
No.	Affects	Number	Suffix	
1	General Information			

CHANGES

On page 5 (Second Oscillator Crystal Frequencies), add the following table:

SECOND OSCILLATOR CRYSTAL FREQUENCIES

Carrier	First Oscillator	Second Oscillator
Frequency	Crystal Frequency	Crystal Frequency
fc	f 01	f02
403.000-405.410	48.1375-48.4399	17.865
405.420-406.299	48.4400-48.5499	17.935
406.300-410.459	48.5500-49.0699	17.865
410.460-411.419	49.0700-49.1899	17.935
411.420-417.659	49.1900-49.9699	17.865
417.660-418.539	49.9700-50.0799	17.935
418.540-422.379	50.0800-50.5599	17.865
422.380-423.259	50.5600-50.6699	17.935
423.260-425.819	50.6700-50.9899	17.865
425.820-426.699	50.9900-51.0999	17.935
426.700-428.469	51.1000-51.3199	17.865
428.460-429.259	51.3200-51.4199	17. 935
429.260-445.970	51.4200-53.5099	17.865
445.980-447.339	53.5100-53.6799	17.935
447.340-460.779	53.6800-55.3599	17.865

GENERAL

This radio has been factory aligned and does not require any adjustments. Realignment may be required if components are replaced or have aged. If it is necessary to realign the radio, perform the following procedures:

- 1. Remove the battery and disassemble the radio as shown in the "Disassembly Procedure." Do not disconnect the front cover receptacle from the interconnect board plug.
- 2. Connect a dc power supply to the front cover battery contacts: power supply negative to raidio negative charging contact and power supply positive to radio positive charging contact (see "Disassembly Procedure").
- 3. Adjust the power supply output for 15 volts dc.
- 4. Perform either the "Receiver Alignment" procedure or "Transmitter Alignment" procedure or both procedures as required.

RECEIVER ALIGNMENT

- Preliminary Adjustments: 1. Set PL switch S401 to its off () position (if applicable).
 - 2. Set squelch (4) control R201 to its maximum counterclockwise position.
 - 3. Set frequency switch S201 to the lowest frequency channel.
 - 4. Preposition slug of selector cavity Z1, Z2, Z3, Z4, Z5, Z6, and Z7 one-quarter inch above circuit board solder side.
 - 5. Preposition slug of L4 one turn out of the circuit board solder side.
 - 6. Connect an ac voltmeter to metering point M1 and a frequency sounter to the output of the ac volt-
 - 7. Inject a signal from a 17.9 MHz ±100 Hz crystal oscillator into FL1 to produce at least a -30 dBm output at M1; then adjust meter to pin the needle by turning output knob down two levels. This is
 - necessary in order to drive the frequency counter.

 8. Count the low i-f frequency through the ac voltmeter and frequency counter at M1. Record the reading within ±10 Hz; this reference must read 35 kHz ±1.5 kHz. Then turn off the 17.9 MHz

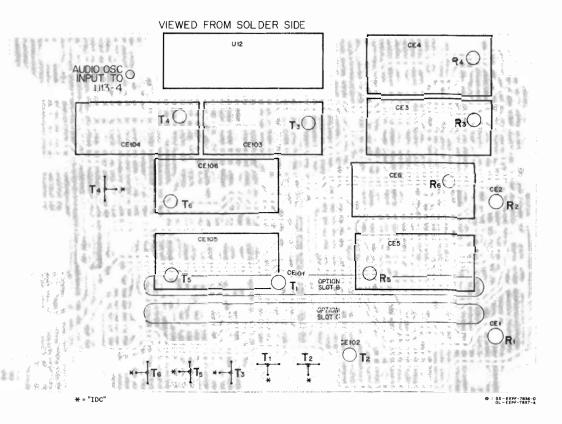
	STEP	ADJUST	FOR	MEASURED AT	USING	NOTE
	1	Service Monitor Frequency & Output Level Adjustment dials, & adjust L4, Z1 through Z5	Exact fre- quency marked on channel element and -30 dBm	M1	Service Monitor or Signal Gener- ator, AC Voltmeter, Frequency Counter	Adjust signal generator for maximum output; if output at M1 is not -30 dBm, adjust L4, Z1, Z2, Z3, Z4, and Z5 until it is, them adjust meter to pin the needle by turning output known two levels. This is necessary in order to drive the frequency counter.
PREFERRED METHOD	2	Lowest Frequency Channel Element Warp Coil	Recorded frequency in preliminary adjustment step (8) ±250 Hz	M1	Frequency Counter	
ALTERNATE	2A	Lowest Frequency Channel Element Warp Coil	Exact channel element frequency ±100 Hz	MI	AC Voltmeter, 17.9 MHz Oscillator, Signal Generator, Oscilloscope	Warp the unit to carrier frequency as follows: a. Set power supply to 15 V dc. b. Reduce signal generator output to minimum and inject signal from a 17.9 MHz ±100 Hz crystal oscillator at FL1 and adjust output level for a -30 dBm M1 reading. c. Connect the output of the ac voltmeter to the oscilloscope and set the time base to 5 ms per division and gain to display signal amplitude of approximately 3 divisions. d. Set the signal generator to the exact carrier frequency and increase the output until the waveform on the oscilloscope appears as an amplitude modulated signal. This signal is the resultant of 17.9 MHz crystal oscillator mixing with the first i-f signal which will not be exactly 17.9 MHz until the channel element is warped to the precise frequency by adjusting the channel element warp coil. e. Adjust warp coil while viewing the signal on the oscilloscope for ac zero beat or the lowest possible amplitude modulating frequency. This method will provide an accuracy of ±100 Hz adjustment of the channel element.
	2B	Lowest Frequency Channel Element Warp Coil	Exact channel element frequency	М1	AC Voltmeter, 17.9 MHz Oscillator, Signal Generator	Warp the unit to carrier frequency as follows: a. Set power supply to 15 V dc. b. Reduce signal generator output to minimum and inject a signal from the 17.9 MHz crystal oscillator at FL1 and adjust output level for a -30 dBm M1 reading. c. Adjust volume control to listen to the audio output. d. Set the signal generator to the exact carrier frequency and increase the output until an audio tone is heard. This tone is the product of the mixing signals described in step 2A, Note d. e. Adjust channel element CE1 for a zero beat (no audio tone is heard when properly adjusted).

STEP	ADJUST	FOR	MEASURED AT	USING	NO∵E
3	Volume Control R202	2.2 volts ac	Speaker Jack J201	AC Voltmeter, Tuneup Cable NKN6248	Establish reference noise level. Also make sure the 17.9 MHz oscillator is turned off.
4	Service Moni- tor Frequency & Output Adjustment Controls	Carrier frequency & maximum output	Antenna Jack J202	Service Monitor, Tuneup Cable NKN6248	
5	element in the the radio. Be	radio. When using	an alternate i equency switch	method, repeat th	repeat step 4 first and then seep 2 for each channel at step (2A or 2B) for each channel element in ing aligned (CE1/F1, CE2/)2, CE3/F3, CE4/F4,
6	L4, Z7, Z6, Z1, Z2, Z3, Z4, Z5	Best quieting (lowest ac voltage) with frequency switch S201 set to channel used in step 1.	Antenna Jack J202	Service Monitor, AC Voltmeter, Tuneup Cable NKN6248	Inject carrier frequency at antenna jack to produce 20 dB quieting. Adjust L4, Z7, Z6, Z1, Z2, Z3, Z4, Z5. Maintain the ac voltmeter reading for a 20 dB quieting by reducing the injected signal.
		20 d	B QUIETING	TEST (Perform o	n each channel)
1	Volume Control R202	2.2 volts ac	Speaker Jack J201	AC Voltmeter, Tuneup Cable NKN6248	Establishes reference noise level.
2	Service Monitor Frequency & Output Adjustment Controls	Carrier frequency & maximum output	Antenna Jack J202	Service Monitor, Tuneup Cable NKN6248	Reduce service monitor output level to zero after setting frequency.
3	Service Monitor Output Level	Slowly increase until noise de- creases 20 dB	Speaker Jack J201	AC Voltmeter, Tuneup Cable NKN6248	Signal level must be less than 0.5 uV for 20 dBquieting.

NOTE: CHANNEL ELEMENT (CE1, CE2, ETC.) FREQUENCY

 $f_{\rm C}$ = carrier frequency, $f_{\rm O}$ = oscillator frequency, $f_{\rm C}$ = $8f_{\rm O}$ + 17.9 MHz

EPF-7850-O



TRANSMITTER ALIGNMENT

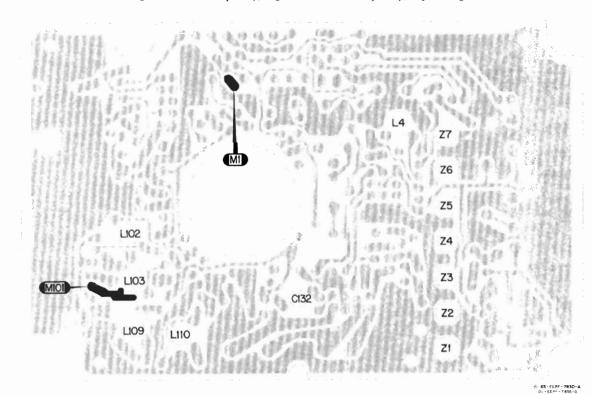
Preliminary Adjustments: 1. Connect a 50-ohm load to external antenna jack J202.

- Set frequency switch S201 to the lowest frequency channel.
- 3. Preposition slugs of L102, L103, L109, and L110 one-eighth inch above circuit board solder side.
- 4. Preposition "Instantaneous Deviation Control" (IDC) controls R206 through R213 to midrange.
- 5. Adjust Service Monitor to channel selected.6. Make all measurements with radio "keyed."

STEP	ADJUST	TEST E	QUIPMENT USED	N	MEASUREMENT	
SIEP	ADJUST	TYPE	CONNECTED AT	CONDITIONS	DESCRIPTION AND LEVEL	
1	L103, L102	DC Voltmeter	M101	Preliminary Adjustment	Tune for maximum dc voltage (typically 1.7 V dc).	
2	L110	Ammeter	Power Supply	Preliminary Adjustment	Tune for maximum radio current.	
3	C132	Ammeter	Power Supply	Preliminary Adjustment	Tune for maximum radio current.	
4	L109 and repeak	Ammeter	Power Supply	Preliminary Adjustment	Tune for maximum radio current.	
5	C132:	Ammeter	Power Supply	Readjust C132 only if after step 4 current is above rated specifications.	Adjust for rated current drain. NOTE For 1-watt models, if power output is greater than 1 watt, readjust C132 for 1 watt.	
6	Lowest Frequency Channel Element Warp Coil	Service Monitor	Antenna Jack J202 through a 30 dB attenuating pad and Tuneup Cable NKN6248	No change	Adjust for zero error (transmitter frequency)	
7	"Private-Line" Deviation Control (Tone PL - R504; Digital PL - R604), if applicable.	Service Monitor	Antenna Jack J202 through a 30 dB attenuating pad and Tuneup Cable NKN6248		On PL models, Tone or Digital PL deviation should be ±500 to ±1000 Hz (±750 Hz nominal).	
8	Repeat steps 6 and 7 for each channel in the radio; be sure to set the frequency switch to the channel being aligned (CE101/F1, CE102/F2, CE103/F3, CE104/F4, CE105/F5, CE106/F6, CE107/F7, and CE108/F8).					
9	F1 IDC Control R206	Service Monitor	Antenna Jack J202 through a 30 dB attenuating pad and Tuneup Cable NKN6248	Aúdio input signal of 50 mV rms (1000 Hz) at IDC Module U13, Pin 4	±5 kHz maximum carrier deviation	
10	Repeat step 9 for	each channel (R20)	7/F2, R208/F3, R209/F4, F	R210/F5, R211/F6, R2	212/F7, and R213/F8).	
11		RF Wattmeter	Antenna Jack J202 through a 30 dB attenuating pad and Tuneup Cable NKN6248		Check for rated power and rated current on all channels.	

NOTE: CHANNEL ELEMENT (CE101, CE102, ETC.) FREQUENCY

EPF-7851-B



ALIGNMENT PROCEDURE

Typical Transmitter-Receiver Alignment Points

Electrical Parts List 450-482 MHz (M) 482-512 MHz (H)

PLF-1269-B

482-512 MHz (H		PLF-1269-
REFERENCE	MOTOROLA	DECODINE TON
SYMBOL	PART NO.	DESCRIPTION
		PRESELECTOR:
Al	5105177D55	450-482 MHz
	5105177D56	482-512 MHz
		CAPACITOR, Fixed; pF ±10%;
		75 V unless stated
C1	2182358G23	68 ±5%; 100V; N4700
C2	2100861429	8; N150
C3, 4, 5	2182358G95	30; N750
C6	2100861428 2184008H16	6; N150
C7 C10	2182213E21	.01 uF ±5%; 50 V; Y5F .002 uF
C11	2182877B52	11 ±5%; 50 V; N150 (NUE6242A
		& NUE6243A)
	or 2182358G66	18 ±5%; 50 V; N150 (NUE6292A
-10		& NUE6293A)
C13 C15,16	2305612E02 2305612E01	68 uF ±20%; 2 V 22 uF ±20%; 2 V
C17	2382397D28	3.3 uF ±20%; 20 V
C19	2382397D36	1 uF; 20 V
C20	2382397D16	22 uF ±20%; 15 V
C22	2382397D04	15 uF ±20%; 15 V
C23	2382397D17	15 uF ±20%; 20 V
C25	2182213E03	.0055 uF -0+100%; 75 V
C26, 27 C29	2182358G95 2184008H16	30; N750 .01 uF ±5%; 50 V; Y5F
C30	2182358G23	68 ±5%; 100 V; N4700
C31	2182213E08	1000 ±5%; 100 V; Y5D
C32	2182358G23	68 ±5%; 100 V; N4700
C33	2382397D28	3.3 uF ±20%; 20 V
C34	2182358G95	30; N750
C35	2182877B09	3.8 ±0.25 pF; NPO (NUE6292A
C36	2182358G66	& NUE6293A) 18 ±5%; 50 V; N150 (NUE6292A
C36	2102330000	& NUE 6293A)
C101	2100861429	8; N150 (M)
	or 2100861428	6; N150 (H)
C102	2182358G95	30; N750
C103	2100861429	8; N150 (M only)
C104	2105311E04 or 2100861429	10 ±5%; 100 V; N150 (M)
C105	2182213E29	8; N150 (H) 100 ±20%; 100 V
C106	2382397D19	2. 2 uF -20+40%; 10 V
C107	2105311E11	40; 100 V; N150
C108	2182450B22	0.75; 500 V (M)
	or 2182450B40	0.56; 500 V (H)
C109 C110	2105311E09	120; 100 V; N150 22 ±5%; 25 V (M)
CIIO	2105311E29 or 2105311E15	17 ±5%; 25 V (H)
C111	2105311E11	40 ±10%; 50 V (M)
	or 2182358G95	30; N750 (H)
C112	2182358G61	13.5; N150 (M)
C113	or 2182877B52 2182213E29	11; N150 (H)
C113	2182358G95	100 ±20%; 100 V 30; N750
C116	2100861462	15; N150 (M)
	or 2100861432	20; N150 (H)
C118	2182450B41	0, 62; 500 V (M)
0110	or 2182450B24	0. 47; 500 V (H)
C119	2100861603 or 2105311E18	3.3 ±0.25 pF; NPO (M) 7 ±5%; 25 V; N150 (H)
C120	2182358G97	2.4 ±0.1 pF; 100 V; NPO (M)
	or 2182877B07	2.2 ±0.25 pF; N150 (H)
C121	2100861429	8; N150 (M)
C122	or 2105311E18	7 ±5%; 25 V; N150 (H)
C122 C124	2382397D36	1 uF; 20 V
C124	2182213E21 2182213E30	.002 uF -20+100%; K6000 220; 100 V
C127	2182358G95	30; N750
C130	2100861427	4; N150 (M)
	or 2100861603	3.3 ±0.25 pF; NPO (H)
C131	2182358G95	30; N750
C132 C134	2005372C03 2182358G84	trimmer, 2-10; 100 V
C134	2100861428	1.7±0.1 pF; 50 V; N150 (M) 6; N150 (M)
	or 2100861429	8; N150 (H)
C136	2100861603	3.3 ±0.25 pF; NPO (M)
~~~	or 2182358G97	2.4 ±0.1 pF; 100 V; NPO (H)
C201 C202	2182213E21 2182358G95	.002 uF -20+100%; K6000 30; N750
C202	2184008H14	.0047 uF ±10%; 100 V
C204	2382397D12	0.12 uF; 20 V
C205	2184008H01	.01 uF; 50 V; Y5F
C206	2182358G95	30; N750
C207	2182213E21	.002 uF ~20+100%; K6000
C210	2182358G95	30; N750 5 +0 25 pF: N150 (M only)
C217 C218	2182877B17 2182358G86	5 ±0.25 pF; N150 (M only) 1.5 ±0.1 pF; 50 V; N150 (M only)
C219	2105271F02	340 (M)
	or 2105271F01	120 (H)
C220, 222, 225	2182358G95	30; N750
C226	2382397D09	6.8 uF ±20%; 10 V
.C227,228	2182358G95	30 pF ±10%: 75 V N750

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1	CEl thru 8	KXN1034A	CHANNEL ELEMENT:
1	CEIthras	KAN1034A	Receiver, use as required depending on model
1	CE101thru	KXN1035A	Transmitter, use as required
1	108		depending on model
ı			DIODE: See Note I
ı	CRI	4882363E0:	Silicon
ı	CR2	4805275E0	Step Recovery
ı	CR3	4882363E0:	Silicon
ı	CR203	4882466H01	Silicon
ı	CR401	4882466H1	Silicon
1			gon m
ı	E1 2 2	7683960 B0 m	CORE: Ferrite Bead
ı	E1, 2, 3 E104, 105, 107,		Ferrite Bead
ı	108, 109, 110,	100370020.5	reffite Beau
ı	111		
ı	E106	7683960 B0	Ferrite Bead
ı			
ı			FUSE:
1	F401	6505214E0	2-Amp
ı		ł	
ı	ET 1 121 2 0	4905015000	FILTER: See Note II
1	FL1, FL2, & FL3 package	4805915D0:3	Crystal, 6-pole; (silver can),
1	L Do package		Matched set (NUE6242A & NUE6243A)
1	or	or 4805269F0:3	Crystal, 6-pole; (gold faced),
		1	Matched set (NUE6242A &
ı			NUE6243A)
1	FL1, FL2,	4805259F0:3	Crystal, 8-pole; (silver can),
	FL3, & FL4		Matched set (NUE6292A &
	package		NUE6293A)
1	T1	01050505	JACK:
1	J1	0105959C40	Interconnect Board Connector
1	ј2	0105950D3i2	Blocks, 10-pin Interconnect Board Connector
ı	J.2	01057501572	Blocks, 8-pin
ı	J201	0905657G0:1	Micro, speaker
ı	J202	0905657G0)1	Micro, antenna
	J401	0105958C817	Receptacle, Conn Assy CS
1			Extended
1		0105956C6:3	Receptacle, Conn Assy CS Short
ı		0105958C846	Receptacle, Conn Assy PL
ı		A1050575015	Extended
1		0105957C9!5	Receptacle, Conn Assy PL Short
1			COIL, RF: unless stated
ı	Ll	2484545H0	1-1/4 turns airwound
ı	L2	2482723H218	0.29 uH choke
ı	L3	2484565H0	2-3/4 turns airwound
1	L4	2405262E072	Coded: CLEAR, 8-1/4 turns
ı			closewound; includes:
1			7605374B03 CORE
1	L5	2482723H2'7	1.2 uH choke
1	L6,7	2482723H218	0.29 uH choke
1	L101 L102, 103	2482723H2*7 2405262E018	1.2 uH choke Coded: YEL, 4-1/2 turns
1	2102, 103	STO JE DE EU (1)	spacewound; includes:
1			7605374B03 CORE
1	L104	2482723H218	0.29 uH choke
1	L105	2405652E072	0.085 uH choke
1	L106	2482723H218	0.29 uH choke
1	L109	2405262E1(0)	Coded: BRN, 3-3/4 turns
1			closewound; includes:
ı		or 2405262E1-4	7683419G02 CORE (M)
1		OF 6403606E1-4	Coded: CLEAR, 2-3/4 turns closewound; includes:
1			7683419G02 CORE (H)
1	L110	2405262E0	Coded: GRN, 4-1/4 turns
ı		0 10 Ju 00 150 1	closewound; includes:
			7683419G02 CORE (M)
ı		or 2405262E1.2	Coded: BLK, 3-3/4 turns
ı			closewound; includes:
			7683419G02 CORE (H)
	L113,114	2482723H1	0.2 uH choke
	L115	2405027E2.1	2-1/2 turns airwound (M)
		or 2405027E2/4	2-1/2 turns airwound (H)
1	L116	2482723H2'7	1.2 uH choke
	L117	2482723H218	0.29 uH choke
	L118 L119	2405027E1 7 2482723H1-8	5-1/2 turns airwound
1	D117	6-1MC3130F3	.085 uH choke
	L121	2405486C3/1	4 turns airwound
	L201	2482723H04	0.29 uH choke
1	L202	2482723H016	6.2 uH choke
1	L203	2405027E1 9	5-1/2 turns airwound
	L204	2482723H044	0.29 uH choke
			SPEAKER:
	LS401	5005334D0±	Dynamic, 2"; frequency
			response: 300 to 3500 Hz
			MICROPHONE:
1	MK401	5982575J0 <i>u</i> :	MICROPHONE:
1	1417.401	3784313JUG	Cartridge, res: $700 \pm 20\%$ ; Impedance: $5000 \pm 30\%$
_			**************************************

	4	
}	1	PLUG:
Pl	0105958C97	Interconnect Bd Conn Block;
PZ	0105958С9ъ	10-pin Interconnect Bd Conn Block;
		8-pin
P201	0105953E40	Front Cover Connector Block
01	4805235012	TRANSISTOR: See Note I NPN; Silicon
Q1 Q3, 4	4800869899	NPN; type M9899
Q102	4800869757	NPN; type M9757
Q103	4800869927	NPN; type M9927
1	1	RESISTOR, Fixed: // ±10%;
		1/8 W unless stated
RI	0600185A70	7.5 k ±5% 1.8 k ±5%
R2 R3	0600185A55 0600185A85	33 k ±5%
R4	0600185A53	1.5 k ±5%
R6	0600185B57	15
R7 R8	0600185B67 0600185B64	100 56
R9	0600185B71	220
R10	0600185B68	120
R11 R12	0600185C05 0600185B83	120 k 2.2 k
R13	0600185B55	10
R14	0600185A41	470 ±5%
R16 R17	0600185B83 0600185B77	2.2 k 680
R101	0600185B80	1,2 k
R103	0600185B83	2.2 k
R104	0600185B66 or 0600185B67	82 (M) 100 (H)
R107	0600185B64	56
R108	0600185B60	27
R201 R202	1805333E01 1805370E01	Pot., 25 k; squelch control Pot., 25 k; vol. control; p/o S203
R203	0600185B64	56
R204	1705787D01	39. 2 ±1%; 1/2 W
R205	0600185B93 0600185B95	15 k ±10%; 1/8 W (C1R1) 22 k ±10%; 1/8 W (C2R2)
R206-213	1805501C04	Pot., 50 k
R214	0600185B96	27 k
		SWITCH:
S201	4005120E01	Toggle, DPDT (2-freq. models)
	or 4005119E01 or 4005053E01	Rotary, 5-pos. (4-freq. models) Rotary, 8-pos. (6- & 8-freq.
	01 10030332201	models)
S202	4005265E01	Micro, PTT
S203 S401	4005061E01	ON-OFF (p/o R202) Toggle, SPDT, "PL"
Ul	5105177D07	HYBRID, Encapsulated: Mixer
U2	5184333G07	I-F Amplifier
U3	5184333G08	Low Conversion
U4 U5	5184333G37 5105177D22	Detector Squelch
U6	5105177D02	Audio Pre-Amplifier
U7	5105177D05	Audio Injection (M)
U8	5105177D16 or 5105177D36	Injection (M) Injection (H)
U9	5105177D20	Regulator
U10 U12	5105177D21 NLE8362A	Buffer Tripler 1.5 W Power Amplifier
012	NLE 0302A	450-482 MHz
	or NLE8363A	1.5 W Power Amplifier
	or NLE8372A	482-512 MHz 4 W Power Amplifier
	OT HEEDSTER	450-482 MHz
	or NLE8373A	4 W Power Amplifier 482-512 MHz
U13	5105177D04	IDC
		DIODE: See Note I
VRl	4882256C61	5.8 V Zener
		CRYSTAL: See Note II
Y1	4805713B01	17.865 MHz
	or 4805713B02	17.935 MHz
		NCED ITEMS
	2605685B01 2605820D05	SHIELD (for Detector U4) SHIELD, Coil (for L102, 103,
	2/0/0007703	109,110) SHIELD, Coil (for L4)
	2684800H03 1505895D01	COVER (for Buffer Tripler Ul0)
	1505941 D01	COVER (for Regulator U9)
	1505165D01	COVER (for Mixer Ul) SCREW, Special; 2 req'd (Ul)
	0305627D01 0300138643	SCREW, Special; 2 req'd (UI) SCREW, Machine; 2-56 x 3/16";
1		2 req'd (Al)
	7505295B03	PAD, Insulator (for FL1, FL2,

# NUE6242A & NUE6243A (Viewed from Solder Side)

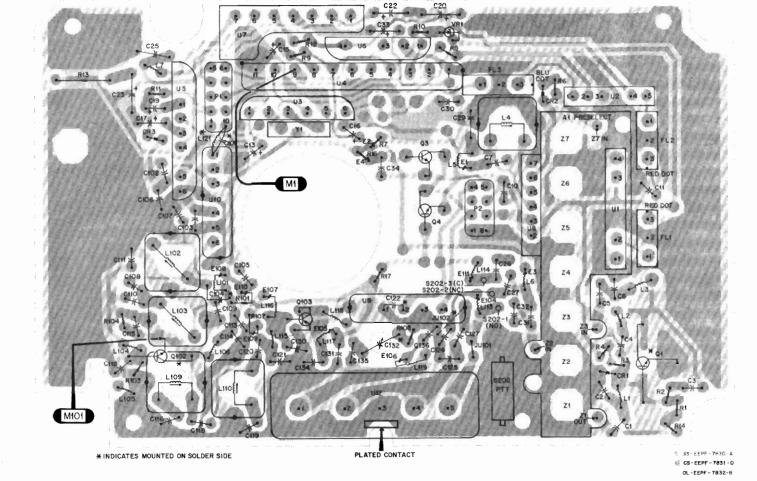
7505176E01 7505248G01 3905806E01 4205229F01 1505894D01 7505506D02 7505506D03 7505506D06 7505506D06 7505506D08 7505506D09 1405575F01 1405611F01 7584257401	PAD, Foam(for channel elements) PAD, Lg. Foam(channel elements) CONTACT, Plated (U12) STRAP, Ground (A1) COVER, IDC (p/o Interconnect Board MODULE PAD (for U4) MODULE PAD (for U2) MODULE PAD (for U6) MODULE PAD (for U7) MODULE PAD (for U7) MODULE PAD (for U8, U10) MODULE PAD (for U8, U10) MODULE PAD (for U9) BOOT, Crystal Filter (for FL1, FL2, FL3, & Y1) INSULATOR (for U13) PAD, Insulator (for Y1)

NOTES: 1. For optimum performance, order replacement diodes and transistors by botorola part number only.

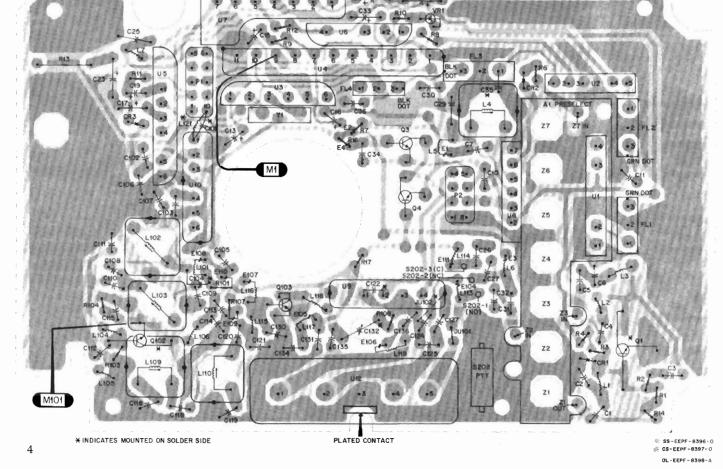
II. When ordering crystal units, specify crystal frequency and Motorola part number. Gold faced FL1, FL2 and FL3 crystal filters unnot be mixed with silver can FL1, FL2, and FL2 crystal filters.

#### BACK-DATING INFORMATION

SUFFIX NO.	SYM	CHANGE
NHE6041A, NHE6051A		Interconnect Circuit Board
NHE6061A, NHE6071A	]	Part No. was 8405062E01-O
NHE6111A, NHE6121A		1 att 110: was 0403002E01-0
NHE6131A, NHE6141A	1	
NHE6001A, NHE6011A	1	
NHE6081A, NHE6091A		
NHE6151A, NHE6161A		
NHE6021A, NHE6031A	636	
NHE6041A - 1, NHE6051A - 1	C2C	Was Part No. 2382397D12:
NHE6061A-1, NHE6071A-1	1	0.12 uF, 20 V
NHE6111A-1, NHE6121A-1		
NHE6131A-1, NHE6141A-1		
NHE6001A-1, NHE6011A-1		
NHE6081A-1, NHE6091A-1		
NHE6151A-1, NHE6161A-1		
NHE6021A-1, NHE6031A-1	ļ	
NHE6041A-2, NHE6051A-2	C2C	Change to 2184008H14
NHE6061A-2, NHE6071A-2		
NHE6111A-2, NHE6121A-2		
NHE6131A-2, NHE6141A-2		
NHE6001A-2, NHE6011A-2		
NHE6081A-2, NHE6091A-2		
NHE6151A-2, NHE6161A-2		
NHE 6021A - 2, NHE 6031A - 2		
NHE6001A-3	C22-	Added
	C223	
NHE6011A-3	P2(	Was 0105953E40
NHE 6021A-3		, do 0103/33210
NHE 6031A - 3		
NHE 608 1A - 3		
NHE 6091A - 3		
NHE6151A-3		
NHE 61 61 A - 3		
NHE6041A-3	C227	Added
111120041A-3	C22.3	Added
NHE 6051A-3	022.5	
NHE 60 61A - 3		
NHE6071A-3		
NHE6111A-3	i i	
NHE6121A - 3		
NHE 6131A - 3		
NHE 6141A - 3		
NHE6041A-4	CR214	Deleted was located in parallel
NHE6051A-4		with CR204 (univ).
NHE6061A-4		
NHE6071A-4		
NHE6111A-4	P2(.	Was 0105953E40
NHE6121A-4		
NHE6131A-4		
NHE6141A-4		
NUE6232A-1	C12:	Added
NUE 6233A-1	0	
NUE6242-1		
NUE6243-1		
NUE6282-1		
NUE6283-1		
NUE6292-1		
	-	
NUE 6293-1	C11)	Was 2100861432
NUE6242A-1	101	Was 2105311E10
NUE6242A-1 NUE6292A-1	Cl.	
NUE6242A-1 NUE6292A-1 NUE6242A-2	L121	Deleted was located in parallel
NUE6242A-1 NUE6292A-1 NUE6242A-2 NUE6292A-2		Deleted was located in parallel with JU101.
NUE6242A-1 NUE6292A-1 NUE6242A-2 NUE6292A-2 NUE6232-1		
NUE6242A-1 NUE6292A-1 NUE6242A-2 NUE6292A-2	L121	

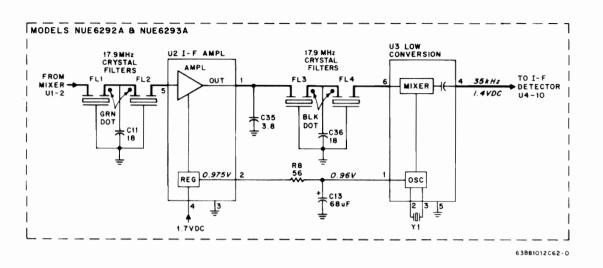


# NUE6292A & NUE6293A (Viewed from Solder Side)



"BBB" SERIES CIRCUIT BOARD DETAIL AND PARTS LIST

# NUE6292A AND NUE6293A

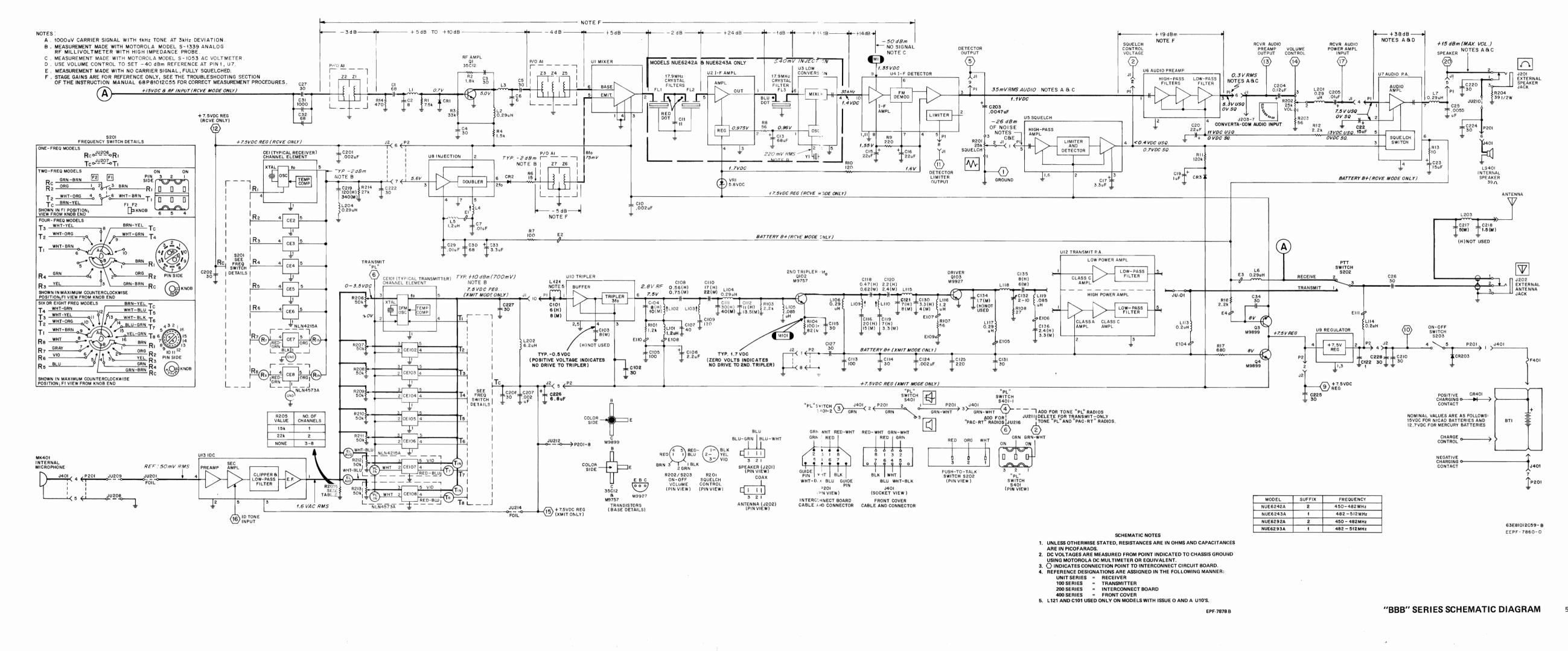


#### SECOND OSCILLATOR CRYSTAL FREQUENCIES

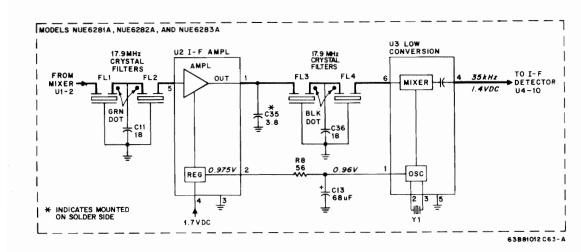
CARRIER FREQUENCY fol         FIRST OSCILLATOR CRYSTAL FREQUENCY fol         SECOND OSCILLATOR CRYSTAL FREQUENCY fol           450.0 - 460.8         54.0125 - 55.3625         17.865           460.8 - 461.0         55.3625 - 55.3875         17.935           461.0 - 462.4         55.3875 - 55.5625         17.865           462.4 - 462.6         55.5625 - 55.5875         17.935           462.6 - 464.4         55.5875 - 55.8125         17.865           464.4 - 464.6         55.8125 - 55.8375         17.935           464.6 - 467.0         55.8375 - 56.1625         17.935           467.0 - 467.2         56.1375 - 56.1625         17.935           467.2 - 470.4         56.1625 - 56.5625         17.865           470.6 - 475.1         56.5825 - 57.1500         17.865           475.1 - 475.4         57.1500 - 57.1875         17.935           475.4 - 478.3         57.1875 - 57.5500         17.865           478.5 - 482.3         57.5750 - 58.0500         17.865           482.3 - 482.5         58.0500 - 58.0750         17.935           487.6 - 489.5         58.7125 - 58.9500         17.865           487.6 - 489.5         58.7125 - 58.9500         17.865           489.5 - 490.0         58.9500 - 59.0125         17.935 <td< th=""><th colspan="5"></th></td<>					
f _c f ₀₁ f ₀₂ 450.0 - 460.8         54.0125 - 55.3625         17.865           460.8 - 461.0         55.3625 - 55.3875         17.935           461.0 - 462.4         55.3875 - 55.5625         17.865           462.4 - 462.6         55.5625 - 55.875         17.935           462.6 - 464.4         55.5875 - 55.8125         17.865           464.4 - 464.6         55.8125 - 55.8375         17.935           464.6 - 467.0         55.8375 - 56.1375         17.865           467.0 - 467.2         56.1375 - 56.1625         17.935           467.2 - 470.4         56.1625 - 56.5625         17.865           470.4 - 470.6         56.5625 - 56.5875         17.935           470.6 - 475.1         56.5875 - 57.1500         17.865           475.1 - 475.4         57.1500 - 57.1875         17.935           475.4 - 478.3         57.1875 - 57.5500         17.865           478.3 - 478.5         57.5500 - 57.5750         17.935           478.5 - 482.3         57.5750 - 58.0500         17.865           482.3 - 482.5         58.0500 - 58.0750         17.935           487.6 - 489.5         58.7125 - 58.7125         17.935           487.6 - 489.5         58.7125 - 58.5375         17.865 </th <th></th> <th></th> <th></th>					
450.0 - 460.8					
460.8 - 461.0       55.3625 - 55.3875       17.935         461.0 - 462.4       55.3875 - 55.5625       17.865         462.4 - 462.6       55.5625 - 55.5875       17.935         462.6 - 464.4       55.5875 - 55.8125       17.865         464.4 - 464.6       55.8125 - 55.8375       17.935         464.6 - 467.0       55.8375 - 56.1375       17.865         467.0 - 467.2       56.1375 - 56.1625       17.935         467.2 - 470.4       56.1625 - 56.5625       17.935         470.4 - 470.6       56.5625 - 56.5875       17.935         470.6 - 475.1       56.5875 - 57.1500       17.865         475.1 - 475.4       57.1500 - 57.1875       17.935         475.4 - 478.3       57.1875 - 57.5500       17.865         478.3 - 478.5       57.5500 - 57.5750       17.935         478.5 - 482.3       57.5750 - 58.0500       17.865         482.3 - 482.5       58.0500 - 58.0750       17.935         482.5 - 487.4       58.0750 - 58.6875       17.935         487.4 - 487.6       58.6875 - 58.7125       17.935         487.6 - 489.5       58.7125 - 58.9500       17.865         489.5 - 490.0       58.9500 - 59.0125       17.935         494.2 - 494.4       59.5375 - 59.5625		'01	'02		
461.0 - 462.4 55.3875 - 55.5625 17.865 462.4 - 462.6 55.5625 - 55.5875 17.935 462.6 - 464.4 55.5875 - 55.8125 17.865 464.4 - 464.6 55.8125 - 55.8375 17.935 464.6 - 467.0 55.8375 - 56.1375 17.865 467.0 - 467.2 56.1375 - 56.1625 17.935 467.2 - 470.4 56.1625 - 56.5625 17.865 470.4 - 470.6 56.5625 - 56.5625 17.865 470.6 - 475.1 56.5875 - 57.1500 17.865 475.1 - 475.4 57.1500 - 57.1875 17.935 475.4 - 478.3 57.1875 - 57.5500 17.865 482.3 - 482.3 57.5750 - 58.0500 17.865 482.3 - 482.5 58.0500 58.0750 17.935 487.6 - 489.5 58.7125 - 58.7125 17.935 487.6 - 489.5 58.7125 - 58.7125 17.935 489.0 - 494.2 59.0125 - 59.5375 17.865 50.2 500.2 - 500.3 60.2875 - 60.3000 17.935 500.3 - 500.1 60.7500 61.0250 17.935 500.3 - 506.1 60.7500 61.0250 17.935 500.3 - 506.1 60.7500 61.0250 17.865 507.8 500.0 17.865 507.8 500.3 500.3 - 506.1 60.7500 61.0250 17.935 500.3 - 506.1 60.7500 61.0250 17.935 500.0 51.935 500.0 51.935 500.0 50.0 50.0 50.0 50.0 50.0 50.0 5	450.0 - 460.8	54.0125 - 55.3625	17.865		
462.4 - 462.6       55.5625 - 55.5875       17.935         462.6 - 464.4       55.5875 - 55.8125       17.865         464.4 - 464.6       55.8125 - 55.8375       17.935         464.6 - 467.0       55.8375 - 56.1375       17.865         467.0 - 467.2       56.1375 - 56.1625       17.935         467.2 - 470.4       56.1625 - 56.5625       17.935         470.4 - 470.6       56.5625 - 56.5875       17.935         470.6 - 475.1       56.5875 - 57.1500       17.865         475.1 - 475.4       57.1500 - 57.1875       17.935         475.4 - 478.3       57.1875 - 57.5500       17.865         478.3 - 478.5       57.5500 - 57.5750       17.935         478.5 - 482.3       57.5750 - 58.0500       17.865         482.3 - 482.5       58.0500 - 58.0750       17.935         482.5 - 487.4       58.0750 - 58.6875       17.935         487.6 - 489.5       58.7125 - 58.7125       17.935         487.6 - 489.5       58.7125 - 58.9500       17.865         489.5 - 490.0       58.9500 - 59.0125       17.935         494.2 - 494.4       59.5375 - 59.5625       17.935         494.2 - 494.4       59.5375 - 59.5625       17.865         500.2 - 500.3       60.2875 - 60.3000	460.8 - 461.0	55.3625 - 55.3875	17.935		
462.6 · 464.4       55.5875 · 55.8125       17.865         464.4 · 464.6       55.8125 · 55.8375       17.935         464.6 · 467.0       55.8375 · 56.1375       17.865         467.0 · 467.2       56.1375 · 56.1625       17.935         467.2 · 470.4       56.1625 · 56.5625       17.865         470.4 · 470.6       56.5625 · 56.5875       17.935         470.6 · 475.1       56.5875 · 57.1500       17.865         475.1 · 475.4       57.1500 · 57.1875       17.935         475.4 · 478.3       57.1875 · 57.5500       17.865         478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.6 · 489.5       58.7125 · 58.7125       17.935         487.6 · 489.5       58.7125 · 59.5375       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250	461.0 - 462.4	55.3875 - 55.5625	17.865		
464.4 - 464.6 55.8125 - 55.8375 17.935 464.6 - 467.0 55.8375 - 56.1375 17.865 467.0 - 467.2 56.1375 - 56.1625 17.935 467.2 - 470.4 56.1625 - 56.5625 17.865 470.4 - 470.6 56.5625 - 56.5875 17.935 470.6 - 475.1 56.5875 57.1500 17.865 475.4 - 475.4 57.1500 - 57.1875 17.935 475.4 - 478.3 57.1875 - 57.5500 17.865 478.3 - 478.5 57.5500 57.5750 17.935 478.5 - 482.3 57.5750 58.0500 17.865 482.3 - 482.5 58.0500 - 58.0750 17.935 482.5 - 487.4 58.0750 - 58.6875 17.935 487.4 - 487.6 58.6875 - 58.7125 17.935 487.4 - 487.6 58.6875 - 58.7125 17.935 489.5 - 490.0 58.9500 59.0125 17.935 490.0 - 494.2 59.0125 - 59.5375 17.865 494.2 - 494.4 59.5375 - 59.5625 60.2875 17.865 500.2 - 500.3 60.2875 60.3000 17.935 503.7 60.3000 - 60.7250 17.935 503.9 - 506.1 60.7500 61.0250 17.935 506.3 - 507.8 61.0500 61.2375 61.2625 17.935 508.0 - 510.1 61.2625 - 61.5250 17.865 508.0 - 510.1 61.2625 - 61.5500 17.865 508.0 510.1 510.1 - 510.3 61.5250 - 61.5500 17.935	462.4 - 462.6	55.5625 - 55.5875	17.935		
464.6 · 467.0		55.5875 - 55.8125	17.865		
467.0 - 467.2 56.1375 - 56.1625 17.935 467.2 - 470.4 56.1625 - 56.5625 17.865 470.4 - 470.6 56.5625 - 56.5625 17.865 470.6 - 475.1 56.5875 - 57.1500 17.865 475.1 - 475.4 57.1500 - 57.1875 17.935 475.4 - 478.3 57.1875 57.5500 17.865 478.3 - 478.5 57.5500 57.5750 17.935 478.5 - 482.3 57.5750 58.0500 17.865 482.3 - 482.5 58.0500 58.0750 17.935 482.5 - 487.4 58.0750 - 58.6875 17.935 487.4 - 487.6 58.6875 - 58.7125 17.935 487.6 - 489.5 58.7125 58.7125 17.935 489.5 - 490.0 58.9500 59.0125 17.935 490.0 - 494.2 59.0125 - 59.5375 17.865 494.2 - 494.4 59.5375 - 59.5625 17.935 500.2 - 500.3 60.2875 60.3000 17.935 500.3 - 503.7 60.3000 - 60.7250 17.935 503.9 - 506.1 60.7500 61.0250 17.935 506.3 - 507.8 61.0250 - 61.0250 17.935 508.0 - 510.1 61.2625 - 61.5250 17.865 508.0 - 510.1 61.2625 - 61.5250 17.865 508.0 - 510.1 61.2625 - 61.5500 17.935		55.8125 - 55.8375	17.935		
467.2 · 470.4       56.1625 · 56.5625       17.865         470.4 · 470.6       56.5625 · 56.5875       17.935         470.6 · 475.1       56.5875 · 57.1500       17.865         475.1 · 475.4       57.1500 · 57.1875       17.935         475.4 · 478.3       57.1875 · 57.5500       17.865         478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         506.1 · 506.3       61.0250 · 61.0250       17.935         506.3 · 507.8       61.0250 · 61.0250       17.935         507.8 · 508.0       61.2375 · 61.2625	464.6 - 467.0	55.8375 - 56.1375	17.865		
470.4 · 470.6       56.5625 · 56.5875       17.935         470.6 · 475.1       56.5875 · 57.1500       17.865         475.1 · 475.4       57.1500 · 57.1875       17.935         475.4 · 478.3       57.1875 · 57.5500       17.865         478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.7 · 503.9       60.7500 · 60.7500       17.935         506.1 · 506.3       61.0250 · 61.0250       17.865         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625	467.0 - 467.2	56.1375 - 56.1625	17.935		
470.6 · 475.1       56.5875 · 57.1500       17.865         475.1 · 475.4       57.1500 · 57.1875       17.935         475.4 · 478.3       57.1875 · 57.5500       17.865         478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0250       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250	467.2 - 470.4	56.1625 - 56.5625	17.865		
475.1 - 475.4       57.1500 - 57.1875       17.935         475.4 - 478.3       57.1875 - 57.5500       17.865         478.3 - 478.5       57.5500 - 57.5750       17.935         478.5 - 482.3       57.5750 - 58.0500       17.865         482.3 - 482.5       58.0500 - 58.0750       17.935         482.5 - 487.4       58.0750 - 58.6875       17.935         487.4 - 487.6       58.6875 - 58.7125       17.935         487.6 - 489.5       58.7125 - 58.9500       17.865         489.5 - 490.0       58.9500 - 59.0125       17.935         489.5 - 490.0       58.9500 - 59.5375       17.865         494.2 - 494.4       59.5375 - 59.5625       17.935         494.2 - 494.4       59.5375 - 59.5625       17.935         500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.9 - 506.1       60.7500 - 61.0250       17.865         506.1 - 506.3       61.0250 - 61.0500       17.935         506.3 - 507.8       61.0500 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500	470.4 - 470.6	56.5625 - 56.5875	17.935		
475.4 · 478.3       57.1875 · 57.5500       17.865         478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0500       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250       17.865         510.1 · 510.3       61.5250 · 61.5500       17.935	470.6 - 475.1	56.5875 - 57.1500	17.865		
478.3 · 478.5       57.5500 · 57.5750       17.935         478.5 · 482.3       57.5750 · 58.0500       17.865         482.3 · 482.5       58.0500 · 58.0750       17.935         482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0500       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250       17.865         510.1 · 510.3       61.5250 · 61.5500       17.935	475.1 - 475.4	57.1500 - 57.1875	17.935		
478.5 - 482.3       57.5750 - 58.0500       17.865         482.3 - 482.5       58.0500 - 58.0750       17.935         482.5 - 487.4       58.0750 - 58.6875       17.865         487.4 - 487.6       58.6875 - 58.7125       17.935         487.6 - 489.5       58.7125 - 58.9500       17.865         489.5 - 490.0       58.9500 - 59.0125       17.935         490.0 - 494.2       59.0125 - 59.5375       17.865         494.2 - 494.4       59.5375 - 59.5625       17.935         494.4 - 500.2       59.5625 - 60.2875       17.865         500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.7 - 503.9       60.7250 - 60.7500       17.935         506.1 - 506.3       61.0250 - 61.0500       17.935         506.3 - 507.8       61.0500 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500       17.935	475.4 - 478.3	57.1875 - 57.5500	17.865		
482.3 - 482.5       58.0500 - 58.0750       17.935         482.5 - 487.4       58.0750 - 58.6875       17.865         487.4 - 487.6       58.6875 - 58.7125       17.935         487.6 - 489.5       58.7125 - 58.9500       17.865         489.5 - 490.0       58.9500 - 59.0125       17.935         490.0 - 494.2       59.0125 - 59.5375       17.865         494.2 - 494.4       59.5375 - 59.5625       17.935         494.4 - 500.2       59.5625 - 60.2875       17.865         500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.7 - 503.9       60.7250 - 60.7500       17.935         503.9 - 506.1       60.7500 - 61.0250       17.865         506.1 - 506.3       61.0250 - 61.0500       17.935         507.8 - 508.0       61.0200 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500       17.935	478.3 - 478.5	57.5500 - 57.5750	17.935		
482.5 · 487.4       58.0750 · 58.6875       17.865         487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.7 · 503.9       60.7250 · 60.7500       17.935         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0500       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250       17.865         510.1 · 510.3       61.5250 · 61.5500       17.935	478.5 - 482.3	57.5750 - 58.0500	17.865		
487.4 · 487.6       58.6875 · 58.7125       17.935         487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.7 · 503.9       60.7250 · 60.7500       17.935         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0500       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250       17.865         510.1 · 510.3       61.5250 · 61.5500       17.935	482.3 - 482.5	58.0500 - 58.0750	17.935		
487.6 · 489.5       58.7125 · 58.9500       17.865         489.5 · 490.0       58.9500 · 59.0125       17.935         490.0 · 494.2       59.0125 · 59.5375       17.865         494.2 · 494.4       59.5375 · 59.5625       17.935         494.4 · 500.2       59.5625 · 60.2875       17.865         500.2 · 500.3       60.2875 · 60.3000       17.935         500.3 · 503.7       60.3000 · 60.7250       17.865         503.7 · 503.9       60.7250 · 60.7500       17.935         503.9 · 506.1       60.7500 · 61.0250       17.865         506.1 · 506.3       61.0250 · 61.0500       17.935         506.3 · 507.8       61.0500 · 61.2375       17.865         507.8 · 508.0       61.2375 · 61.2625       17.935         508.0 · 510.1       61.2625 · 61.5250       17.865         510.1 · 510.3       61.5250 · 61.5500       17.935	482.5 - 487.4	58.0750 - 58.6875	17.865		
489.5 - 490.0       58.9500 - 59.0125       17.935         490.0 - 494.2       59.0125 - 59.5375       17.865         494.2 - 494.4       59.5375 - 59.5625       17.935         494.4 - 500.2       59.5625 - 60.2875       17.865         500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.7 - 503.9       60.7250 - 60.7500       17.935         503.9 - 506.1       60.7500 - 61.0250       17.865         506.1 - 506.3       61.0250 - 61.0500       17.935         506.3 - 507.8       61.0500 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500       17.935	487.4 - 487.6	58.6875 - 58.7125	17.935		
490.0 - 494.2       59.0125 - 59.5375       17.865         494.2 - 494.4       59.5375 - 59.5625       17.935         494.4 - 500.2       59.5625 - 60.2875       17.865         500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.7 - 503.9       60.7250 - 60.7500       17.935         503.9 - 506.1       60.7500 - 61.0250       17.865         506.1 - 506.3       61.0250 - 61.0500       17.935         506.3 - 507.8       61.0500 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500       17.935	487.6 - 489.5	58.7125 - 58.9500	17.865		
494.2 - 494.4     59.5375 - 59.5625     17.935       494.4 - 500.2     59.5625 - 60.2875     17.865       500.2 - 500.3     60.2875 - 60.3000     17.935       500.3 - 503.7     60.3000 - 60.7250     17.865       503.7 - 503.9     60.7250 - 60.7500     17.935       503.9 - 506.1     60.7500 - 61.0250     17.865       506.1 - 506.3     61.0250 - 61.0500     17.935       506.3 - 507.8     61.0500 - 61.2375     17.865       507.8 - 508.0     61.2375 - 61.2625     17.935       508.0 - 510.1     61.2625 - 61.5250     17.865       510.1 - 510.3     61.5250 - 61.5500     17.935	489.5 - 490.0	58.9500 - 59.0125	17.935		
494.4 - 500.2     59.5625 - 60.2875     17.865       500.2 - 500.3     60.2875 - 60.3000     17.935       500.3 - 503.7     60.3000 - 60.7250     17.865       503.7 - 503.9     60.7250 - 60.7500     17.935       503.9 - 506.1     60.7500 - 61.0250     17.865       506.1 - 506.3     61.0250 - 61.0500     17.935       506.3 - 507.8     61.0500 - 61.2375     17.865       507.8 - 508.0     61.2375 - 61.2625     17.935       508.0 - 510.1     61.2625 - 61.5250     17.865       510.1 - 510.3     61.5250 - 61.5500     17.935	490.0 - 494.2	59.0125 - 59.5375	17.865		
500.2 - 500.3       60.2875 - 60.3000       17.935         500.3 - 503.7       60.3000 - 60.7250       17.865         503.7 - 503.9       60.7250 - 60.7500       17.935         503.9 - 506.1       60.7500 - 61.0250       17.865         506.1 - 506.3       61.0250 - 61.0500       17.935         506.3 - 507.8       61.0500 - 61.2375       17.865         507.8 - 508.0       61.2375 - 61.2625       17.935         508.0 - 510.1       61.2625 - 61.5250       17.865         510.1 - 510.3       61.5250 - 61.5500       17.935	494.2 - 494.4	59.5375 - 59.5625	17.935		
500.3 - 503.7     60.3000 - 60.7250     17.865       503.7 - 503.9     60.7250 - 60.7500     17.935       503.9 - 506.1     60.7500 - 61.0250     17.865       506.1 - 506.3     61.0250 - 61.0500     17.935       506.3 - 507.8     61.0500 - 61.2375     17.865       507.8 - 508.0     61.2375 - 61.2625     17.935       508.0 - 510.1     61.2625 - 61.5250     17.865       510.1 - 510.3     61.5250 - 61.5500     17.935	494.4 - 500.2	59.5625 - 60.2875	17.865		
503.7 · 503.9     60.7250 · 60.7500     17.935       503.9 · 506.1     60.7500 · 61.0250     17.865       506.1 · 506.3     61.0250 · 61.0500     17.935       506.3 · 507.8     61.0500 · 61.2375     17.865       507.8 · 508.0     61.2375 · 61.2625     17.935       508.0 · 510.1     61.2625 · 61.5250     17.865       510.1 · 510.3     61.5250 · 61.5500     17.935			17.935		
503.9 - 506.1     60.7500 - 61.0250     17.865       506.1 - 506.3     61.0250 - 61.0500     17.935       506.3 - 507.8     61.0500 - 61.2375     17.865       507.8 - 508.0     61.2375 - 61.2625     17.935       508.0 - 510.1     61.2625 - 61.5250     17.865       510.1 - 510.3     61.5250 - 61.5500     17.935			1		
506.1 - 506.3     61.0250 - 61.0500     17.935       506.3 - 507.8     61.0500 - 61.2375     17.865       507.8 - 508.0     61.2375 - 61.2625     17.935       508.0 - 510.1     61.2625 - 61.5250     17.865       510.1 - 510.3     61.5250 - 61.5500     17.935	503.7 - 503.9	60.7250 - 60.7500	17.935		
506.3 · 507.8     61.0500 · 61.2375     17.865       507.8 · 508.0     61.2375 · 61.2625     17.935       508.0 · 510.1     61.2625 · 61.5250     17.865       510.1 · 510.3     61.5250 · 61.5500     17.935			1		
507.8 · 508.0     61.2375 · 61.2625     17.935       508.0 · 510.1     61.2625 · 61.5250     17.865       510.1 · 510.3     61.5250 · 61.5500     17.935					
508.0 - 510.1 61.2625 - 61.5250 17.865 510.1 - 510.3 61.5250 - 61.5500 17.935					
510.1 - 510.3 61.5250 - 61.5500 17.935			1717-0		
1 1111			1		
510.3 - 512.0 61.5500 - 61.7625 17.865			1		
	510.3 - 512.0	61.5500 - 61.7625	17.865		

CRYSTAL FORMULA: f_c = 8f₀₁ + 17.9 MHz

EPF-820



# NUE6281A, NUE6282A AND NUE6283A

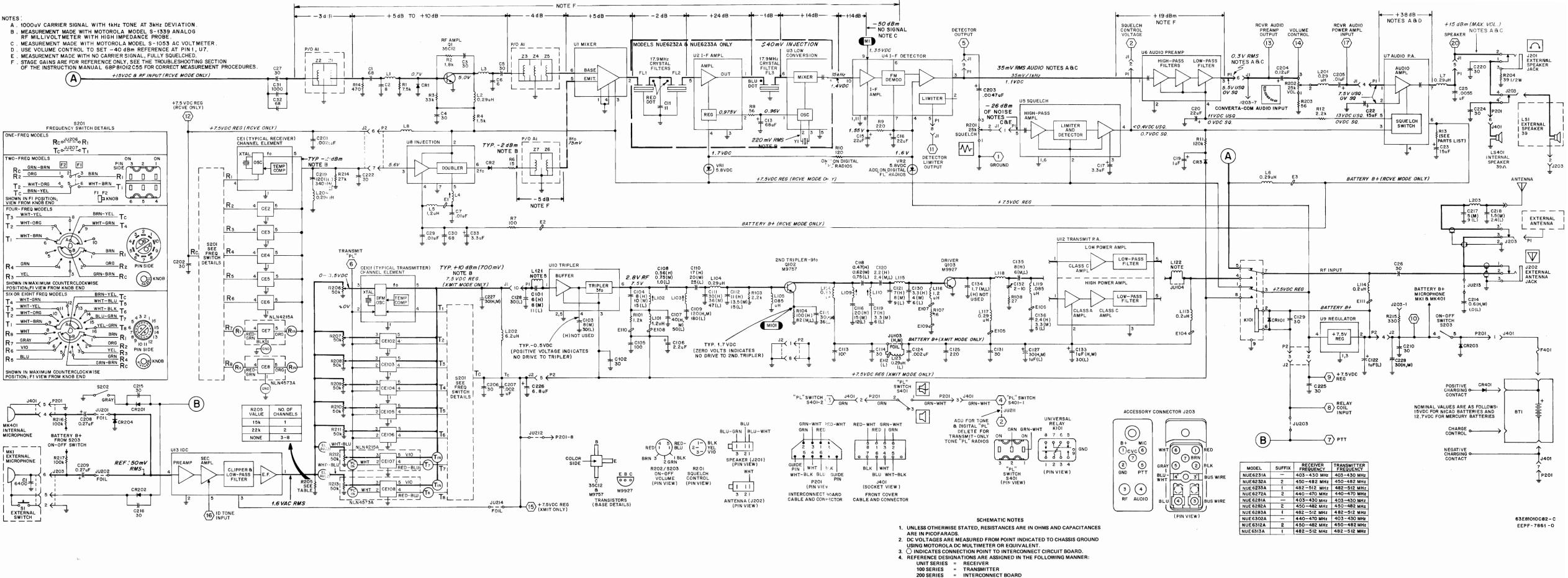


#### SECOND OSCILLATOR CRYSTAL FREQUENCIES

	Γ	
CARRIER	FIRST OSCILLATOR	SECOND OSCILLATOR
FREQUENCY	CRYSTAL FREQUENCY	CRYSTAL FREQUENCY
f _c	f01	f02
450.0 - 460.8	54.0125 - 55.3625	17.865
460.8 - 461.0	55.3625 - 55.3875	17.935
461.0 - 462.4	55.3875 - 55.5625	17.865
462.4 - 462.6	55.5625 - 55.5875	17.935
462.6 - 464.4	55.5875 - 55.8125	17.865
464.4 - 464.6	55.8125 - 55.8375	17.935
464.6 - 467.0	55.8375 - 56.1375	17.865
467.0 - 467.2	56.1375 - 56.1625	17.935
467.2 - 470.4	56.1625 - 56.5625	17.865
470.4 - 470.6	56.5625 - 56.5875	17.935
470.6 - 475.1	56.5875 - 57.1500	17.865
475.1 - 475.4	57.1500 - 57.1875	17.935
475.4 - 478.3	57.1875 - 57.5500	17.865
478.3 - 478.5	57.5500 - 57.5750	17.935
478.5 - 482.3	57.5750 - 58.0500	17.865
482.3 - 482.5	58.0500 - 58.0750	17.935
482.5 - 487.4	58.0750 - 58.6875	17.865
487.4 - 487.6	58.6875 - 58.7125	17,935
487.6 - 489.5	58.7125 - 58.9500	17.865
489.5 - 490.0	58.9500 - 59.0125	17,935
490.0 - 494.2	59.0125 - 59.5375	17.865
494.2 - 494.4	59.5375 - 59.5625	17.935
494.4 - 500.2	59.5625 - 60.2875	17.865
500.2 - 500.3	60.2875 - 60.3000	17,935
500.3 - 503.7	60.3000 - 60.7250	17.865
503.7 - 503.9	60.7250 - 60.7500	17.935
503.9 - 506.1	60.7500 - 61.0250	17.865
506.1 - 506.3	61.0250 - 61.0500	17.935
506.3 - 507.8	61.0500 - 61.2375	17.865
507.8 - 508.0	61.2375 - 61.2625	17.935
508.0 - 510.1	61.2625 - 61.5250	17.865
510.1 - 510.3	61.5250 - 61.5500	17.935
510.3 - 512.0	61.5500 - 61.7625	17.865

CRYSTAL FORMULA: f_c = 8f₀₁ + 17.9 MHz

EPF-8201-O



5. L121 AND C101 USED ONLY ON MODELS WITH ISSUE O AND A U10'S.

6. L122 USED ONLY ON 403-420 MHz MODELS: JU104 USED ON ALL OTHER

"BBU" SERIES SCHEMATIC DIAGRAM

Electrical Parts List 403-430 MHz (L) 450-482 MHz (M)

450-482 MHz (M) 482-512 MHz (H)			PLF-12	
	REFERENCE SYMBOL	MOTOROLA PART NO,	DESCRIPTION	
		#105155D/6	PRESELECTOR:	
_	A1	5105177D65 5105177D55	403-430 MHz 450-482 MHz	
		5105177D56	482-512 MHz	
			CIPICITOR DI LI DILI	
			CAPACITOR, Fixed: pF ±10 ^t 75 V unless stated	
	C1	2182358G23	68 ±5%; 100 V; N4700	
	C2	2100861429	8; N150	
	C3,4,5 C6	2182358G95 2100861428	30; N750 6; N150	
	C7	2184008H16	.01 uF ±5%; 50 V; Y5F	
	C11	2182877B52	11 ±5%; 50 V; N150	
		or 2182358G66	18 ±5%; 50 V; N150 (NUE 628) NUE 6282A & NUE 6283A)	
	C13	2305612E02	68 uF ±20%; 2 V	
	C15,16 C17	2305612E01	22 uF ±20%; 2 V 3.3 uF ±20%; 20 V	
	C17	2382397D28 2382397D36	1 uF; 20 V	
	C20	2382397D16	22 uF ±20%; 15 V	
	C22 C23	2382397D04 2382397D17	15 uF ±20%; 15 V 15 uF ±20%; 20 V	
	C25	2182213E03	.0055 uF -0+100%; 75 V	
	C26, 27	2182358G95	30: N750	
	C29 C30	2184008H16 2182358G23	.01 uF ±5%; 50 V; Y5F 68 ±5%; 100 V; N4700	
	C31	2182213E08	1000 ±5%; 100 V; Y5D	
	C32	2182358G23	68 ±5%; 100 V; N4700	
	C33 C35	2382397D28 2182877B09	3.3 uF ±20%; 20 V 3.8 ±0.25 pF; NPO (NUE628	
-	033	2102011207	NUE6282A, & NUE6283A)	
1	C36	2182358G66	18 ±5%; 50 V; N150 (NUE628	
	C101	2812877B52	NUE6282A & NUE6283A) 11 ±5%; 50 V; N150 (L)	
		or 2100861429	8; N150 (M)	
	G143	or 2100861428	6; N150 (H)	
	C102 C103	2182358G95 2182358G95	30: N750 30: N750 (L)	
1		or 2100861429	8; N150 (M)	
	6104	or =========	Not Used (H)	
	C104	2100861462 or 2105311E04	15; N150 (L) 10; N150 (M)	
1	ſ	or 2100861429	8; N150 (H)	
	C105 C106	2182213E29	100 ±20%; 100 V	
	C106	2382397D19 2182358B15	2. 2 uF -20 + 40%; 10 V 50; 100 V; N3300 (L)	
		or 2105311E11	40; 100 V; N150 (M), (H)	
-	C108	2182450B28 or 2182450B22	1.0; 500 V; (L) 0.75; 500 V (M)	
1		or 2182450B40	0.56; 500 V (H)	
ļ	C109	2183162H31	180; 100 V; NPO (L)	
Ì	C110	or 2105311E09 2100865197	120; 100 V; N150 (M), (H) 25; N150 (L)	
	0110	or 2105311E29	22 ±5%; 25 V (M)	
	6111	or 2105311E15	17 ±5%; 100 V; NPO (H)	
	C111	2105529BH or 21053HEH	47 ±5%; 50 V; N150 (L) 40 ±10%; 50 V (M)	
ı		or 2182358G95	30: N750 (H)	
ı	C112	2100861462 or 2182358G61	15; N150 (L)	
ı		or 2182877B52	13.5; N150 (M) 11; N150 (H)	
	C113	2182213E29	100 ±20%; 100 V	
1	C114 C115	2182358G95 2105311E10	30; N750 36; 100 V; N220 (L)	
,	0113	or 2182358G95	30; N750 (M), (H)	
1	"C116	2182358G91	12; N150 (L)	
ı		or 2100861462 or 2100861432	15; N150 (M) 20; N150 (H)	
ı	C118	2182450B22	0.75; 500 V; (L)	
١		or 2182450B41	0. 62; 500 V (M)	
ı	C119	or 2182450B24 2100861428	0.47; 500 V (H) 6; N150 (L)	
١		or 2100861603	3.3 ±0.25 pF; NPO (M)	
1	C120	or 2105311E18	7 ±5%; 25 V; N150 (H)	
	G120	2182358G97 or 2182877B07	2.4 ±0.1 pF; 100 V; NPO(L); 2.2 ±0.25 pF; N150 (H)	
I	C121	2182358G80	9 ±0.25; 25 V; N150 (L)	
		or 2100861429	8; N150 (M) 7 +5%: 25 V: N150 (H)	
1	C122	or 2104211E18 2382397D36	7 ±5%; 25 V; N150 (H) 1 uF; 20 V (L)	
1	C124	2182213E21	.002 uF -20+100% K6000	
	C125 C127	2182213E30 2382397D36	220; 100 V 1 uF; 20 V (L)	
1	0127	or 218235G95	30; N750 (M), (H)	
	C128	218235G95	30; N750 (L only)	
1	C129 C130	218235G95 2100861428	30; N750 6; N150 (L)	
١	5155	or 2100861427	4; N150 (M)	
I		or 2100861603	$3.3 \pm 0.25 pF; N \pm 0 (H)$	

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION	
		20 N75 N	
C131	2182358G95	30; N7510	
C132	2005372C03	Trimmter; 2+10; 100 V	
C133	2182358G95	30; N75(0 (L)	
	2382397D36	1 uF; 20 V (M), (H)	
C134	2182358G84	1.7 ±0.   pF; 50 V; N150	
		(L and :M only)	
C135	2100861428	6; N150 (L), (M)	
	or 2100861429	8; N150 (H)	
C136	2182877B17	5±0.25 pF; N150 (L)	
0150	or 2100861603	3.3 ±0. 25 pF; NPO (M)	
	or 2182358G97	2.4 ±0. 1 pF; 100 V; NPO (H)	
C201	2182213E21	.002 uF -20+100%; K6000	
C202	2182358G09	30; N7510	
C203	2184008H14	.0047 uF ±10%; 100 V	
C204	2382397D12	0,12 uF : 20 V	
C205	2184008H01	.01 uF: 50 V; Y5F	
C206	2182358G95	30; N7510	
C207	2182213E21	.002 ui -20+100%; K6000	
C208,209	2382397D25	0.27 ui ; 20 V	
		30; N750	
C210	2182358G95		
C214	2182358G77	1.0 ±.   pF; 50 V; NPO (L)	
	or 2105930A02	0.6 ±0.1 pF; 50 V; NPO (M)(H)	
C215,216	2182358G95	30; N75-i0	
C217	2182358G80	9 ±.25 nF; 25 V; N150 (L)	
	or 2182877B17	5 ±0.2! pF; N150 (M)	
	or	(H) Not Used	
C218	2182358G97	2.4 ±0, 1 pF; 100 V; NPO (L)	
0210	or 2182358G86	1.5 ±0. 1 pF; 50 V; N150 (M)	
	1		
	or	(H) Not Used	
C219	2105271F02	340 (L ₁ , (M)	
	or 2105271F01	120 (H)	
C220, 222,	2182358G95	30; N7 ^r i0	
224,225		1	
C226	2382397D09	6.8 uF ±20%; 10 V	
C227, 228	2182358G95	30 pF == 10%; 75 V, N750	
		CHANNIEL ELEMENT:	
CEl thru 8	KXN1034A	Receiver, use as required	
CE1 thru o	KKIVIOJ4A	depending on model	
0.731.01.01	1/3/N/3 0 3 // A		
CE101 thru	KXN1035A	Transmitter, use as required	
108		dependiing on model	
	1 1		
	1 1	DIODE.: See Note I	
CRI	4882363E03	Silicon	
CR2	4805275E01	Step Rescovery	
CR3	4882363E03	Silicon	
CR101	4883654H01	Silicon	
CR201,202	4883461E26	Silicon	
CR203	4882466H03	Silicon	
CR204	4883641E12	Silicon	
CR401	4882466H13	Silicon	
		CORE:	
E1,2,3	7683960B06	Ferrito Bead	
	7683960B06	Ferrito Bead	
E104, 105,		rerrac bead	
107, 108, 109			
110,111			
E106	7683960B04	Ferritte Bead	
E112	7683960B06	Ferritce Bead (L)	
		FUSE:	
F401	6505214E01	2-Amp	
		FILTE:R: See Note II	
E11 2 5	4805915D03		
FL1,2 &	1 1	Crystail, 6-pole; (silver can),	
FL3 package		Matched set	
	or 4805269F03	Crystail, 6-pole; (gold faced),	
		Matched set	
or FL1,2	4805259F03	Crystail, 8-pole; (silver can),	
FL3 & FL4		Matcheed set (NUE6281A,	
package		NUE6:82A & NUE6283A)	
L			
		JACK:	
f.3	03.05.05.05.40		
J1	0105959C40	Interconnect Board Connector	
		Block: 10-pin	
J2	0105950D32	Intercionnect Board Connector	
		Block: , 8-pin	
J201	0905657G01	Micro, speaker	
J202	0905657G01	Micro. antenna	
J203	0905677D01		
3203	0.000011001	Receptacle, Universal	
*		connector	
J401	0105958C87	Recepttacle, Conn Assy,	
		CS Long	
		December 1 Commit	
	or 0105456C63	Recepuacie, Conn Assv.	
	or 0105456C63	Receptacle, Conn Assy, CS Short	
		CS Short	
	or 0105956C63 or 0105957C95	CS Short Receptacle, Conn Assy.	
	or 0105957C95	CS Short Receptacle, Conn Assy. PL Long	
		CS Short Receptacle, Conn Assy.	

REFERENCE	MOTOROLA		
SYMBOL	PART NO.	DESCRIPTION	
		257.17	
K101	8005300E01	RELAY: 1/6 Crystal Can, DPDT	
11101	1	17 o orystar oan, Br Br	
	24045457703	COIL, RF: unless stated	
L1 L2	2484545H01 2482723H28	1-1/4 turns airwound 0.29 uH choke	
L3	2484565H01	2-3/4 turns airwound	
L4	2405262E02	Coded: CLEAR, 8-1/4 turns	
	ì	closewound; includes:	
L5	2482723H27	7605374B03 CORE 1.2 uH choke	
L6, 7	2482723H28	0.29 uH choke	
L8	2405711B05	3-turn bead	
L101	2482723H27	1.2 uH choke	
L102,103	2405262E08	Coded: YEL, 4-1/2 turns spacewound; includes:	
		7605374B03 CORE	
L104	2482723H28	0.29 uH choke	
L105	2405652E02	0.085 uH choke	
L106	2482723H28	0.29 uH choke	
L109	2405262E01	Coded: GRN, 4-1/4 turns closewound; includes:	
	ļ	7683419G02 CORE (L)	
	2405262E10	Coded: BRN, 3-3/4 turns	
		closewound: includes:	
	or 2405262E14	7683419G02 CORE (M) Coded: CLEAR, 2-3/4 turns	
	01 2403202114	closewound; includes:	
		7683419G02 CORE (H)	
L110	2405262E01	Coded: GRN, 4-1/4 turns	
	}	closewound; includes: 7683419G02 CORE (M),(L)	
	or 2405262E12	Coded: BLK, 3-3/4 turns	
		spacewound; includes:	
		7683419G02 CORE (H)	
L113,114 L115	2482723H11 2405027E38	0.2 uH choke 3-1/2 turns airwound (L)	
L115	2405027E38	2-1/2 turns airwound (L)	
	or 2405027E24	2-1/2 turns airwound (H)	
L116	2482723H27	1.2 uH choke	
L118	2405027E37	7-1/2 turns airwound (L)	
L119	or 2405027E17 2482723H18	5-1/2 turns airwound (M), (H) .085 uH choke	
L121	2405486C31	4 turns airwound	
L122	2405027E06	2 turns airwound (1.5 W models	
	2405028530	only) (L)	
	or 2405027E30	3 turns airwound (1,5 W models only) (M), (H)	
L123	2482723H28	0,29 uH choke (L)	
L201	2482723H28	0.29 uH choke	
L202	2482723H06	6.2 uH choke	
1.203 i.204	2405027E19 2482723H28	5-1/2 turns airwound 0.29 uH choke	
1,204	24021231120	0.29 un choke	
	1	SPEAKER:	
LS401	5005334 <b>D</b> 01	Dynamic, 2"; frequency	
		response: 300 to 3500 Hz	
		MICROPHONE:	
MK401	5982575J02	Cartridge, res: 700 n ±20%;	
		Impedance: 5000 A ±30%	
		PLUG:	
P1	0105958C97	Interconnect Board Connector	
		Block, 10-pin	
P2	0105958C96	Interconnect Board Connector	
P201	0105953H40	Block, 8-pin Front Cover Connector Block	
		TRANSISTOR: See Note 1	
Q1	4805235C12	NPN; Silicon	
Q102 Q103	4800869757 4800869927	NPN; type M9757 NPN; type M9427	
		RESISTOR, Fixed: 6 ±10%;	
R1	0400105170	1/8 W unless stated	
R2	0600185A70 0600185A55	7.5 k ±5% 1.8 k ±5%	
R3	0600185A85	33 k ±5%	
R4	0600185A53	1.5 k ±5%	
R 6	0600185B57	15	
R 7 R 8	0600185B67 0600185B64	100 56	
R9	0600185B64	220	
R10	0600185B68	120 (Delete for DPL)	
D 1 1	0600185C05	120 k	
R11 R12	0600185E83	2.2 k	

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
R13	0600185B55	10 (NUE6231A, NUE6232A,
		NUE6233A, NUE6281A, NUE6282A, & NUE6283A)
		Jumper (NUE6312A &
		NUE6313A)
R14 R101	0600185A41 0600185B80	470 ±5% 1.2 k
R103	0600185B80	2. 2 k
R104	0600185B66	82 (M), (L)
D.LO.	or 0600185B67	100 (H)
R107 R108	0600185B64 0600185B60	56 27
R201	1805333E01	Pot., 25 k; squelch control
R202	1805370E01	Pot., 25 k; vol. control;
R203	0600185B64	p/o <b>S2</b> 03
R204	1705787D01	39.2 ±1%; 1/2 W
R205	0600185B93	15 k ±10%; 1/8 W (C1R1)
	or 0600185B95	22 k ±10%; 1/8 W (C2R2)
R206-213 R214	1805501C04 0600185B96	Pot., 50 k 27 k
R215	0600185B78	330
R216,217	0600185A97	100 k
		auumau
S201	4005120E01	SWITCH: Toggle, DPDT (2-freq. models
5201	or 4005199E01	Rotary, 5-pos. (4-freq. models
	or 4005053E01	Rotary, 8-pos. (6-&8-freq.
6202	2005/04501	models)
S202	3905684E01 3905681E01	CONTACT, Disc CONTACT, Feed-Thru
S203	3703001201	ON-OFF (p/o R202)
S401	4005061E01	Toggle, SPDT, "PL"
		HYBRID, Encapsulated:
U1	5105177D07	Mixer
U2	5184333G07	I-F Amplifier
U3 U4	5184333G08	Low Conversion
U5	5184333G37 5105177D22	Detector Squelch
U6	5105177D02	Audio Pre-Amplifier
U7	5105177 <b>D</b> 05	Audio
U8	5105177D63	Injection (L)
	or 5105177D16 or 5105177D36	Injection (M) Injection (H)
U9	5105177D20	Regulator
U10	5105177D21	Buffer Tripler
U12	NLE8361A	1.5 W Power Amplifier
	NLE8362A	403-420 MHz 1.5 W Power Amplifer
		450-482 MHz
	or NLE8363A	1.5 W Power Amplifer
	or NLE8371A	482-512 MHz 4 W Power Amplifer
	OF NEEDSTIA	403-430 MHz
	or NLE8372A	4 W Power Amplifer
	or NLE8373A	450-482 MHz
	or NLL83/3A	4 W Power Amplifier 482-512 MHz
U13	5105177D04	IDC
		DIODE: See Note 1
VR1,2	4882256C61	DIODE: See Note I  5.8 V Zener (VR2 used only
		with DPL)
		CRYCTAL C. Y. W
Y1	4805713B01	CRYSTAL: See Note II 17.865 MHz
	or 4805713B02	17. 135 MHz
Address .	NONREFERE	NCED ITEMS
	1405601C01	PAD Inculator (for K101)
	2605685B01	PAD, Insulator (for K101) SHIELD (for Detector U4)
	2605820D05	SHIELD, Coil (for L102, 103,
		139,110)
	2684800H03 1505895D01	SHIELD, Coil (for L4) COVER (for Buffer Tripler
	13036731201	U10)
	1505941D01	COVER (for Regulator U9)
	1505165D01	COVER (for Mixer U1)
	0305627D01 0300131323	SCREW, Special; 2 req'd(U1) SCREW, Machine: 2-56x3/16";
	0.700131323	2 req'd (A1)
	7505295B03	PAD, Insulator (for FL1, FL2,
		FL3, & Y1)
	00000 10 1 110 1	
	7505176E01	PAD, Foam (for channel elements)
	7505176E01 3905806E01	PAD, Foam (for channel elements) CONTACT, Plated (U12)

	NUE6232A & NUE6233A (Viewed from Solder Side)
- AND	***************************************

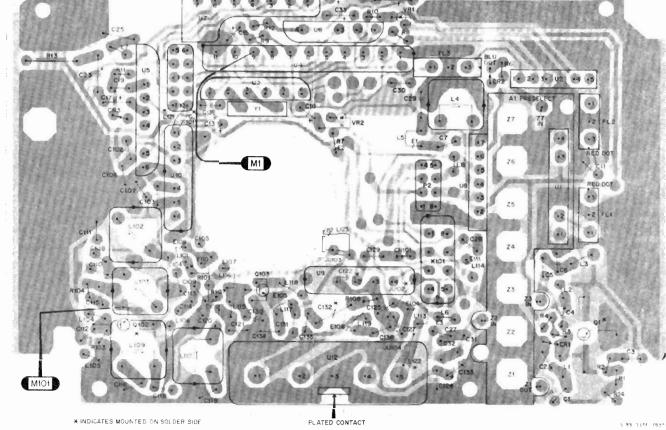
1505894D01	COVER, IDC (p/o Interconnec
1	Board)
7505506 <b>D</b> 02	MODULE PAD (for U4)
7505506D03	MODULE PAD (for U3)
7505506D04	MODULE PAD (for U2)
7505506D06	MODULE PAD (for U6)
7505506 <b>D</b> 07	MODULE PAD (for U7)
7505506D08	MODULE PAD (for U8, U10)
7505506D09	MODULE PAD (for U9)
1405575F01	BOOT, Crystal Filter
	(for FL1, 2, 3)
1405611F01	INSULATOR (for U13)

- "OTE: I. For optimum performance, order replacement diodes and transistors by Motorola part number only.

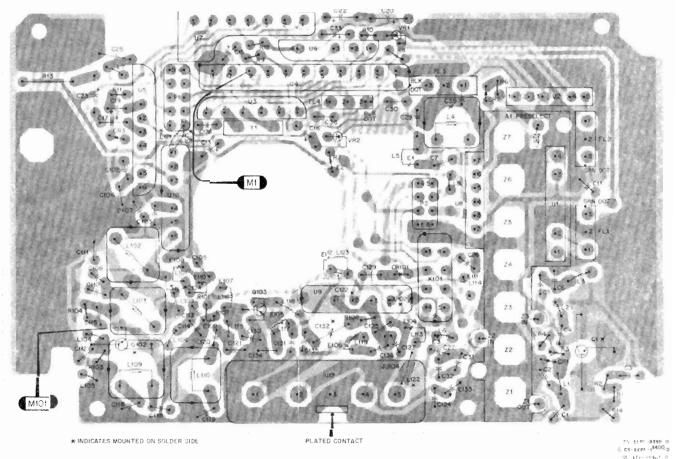
  II. When ordering crystal units, specify crystal frequency and Motorola part number. Gold faced FL1, FL2, and FL3 crystal filters cannot be mixed with silver can FL1, FL2, and FL3 crystal filters.

#### BACK-DATING INFORMATION

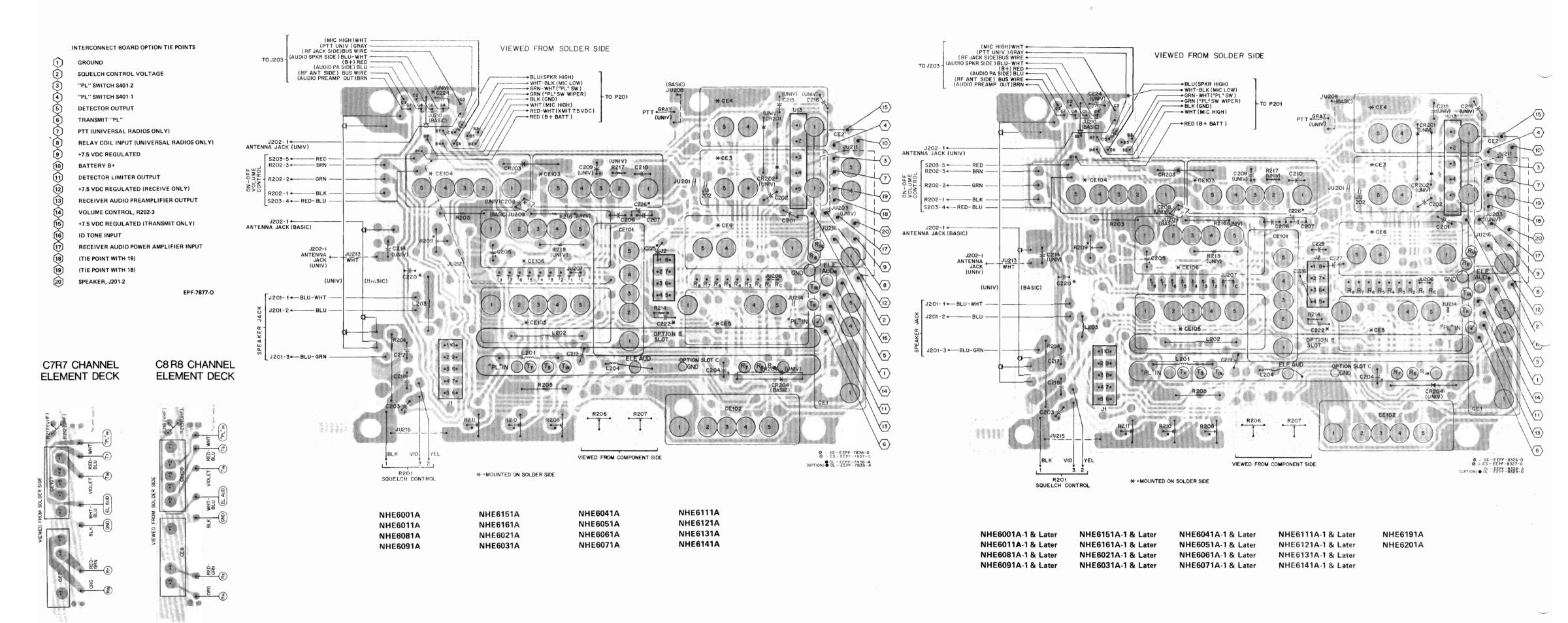
KIT AND SUFFIX NO.	REF SYM	CHANGE
"HE6041A, NHE6051A		Interconnect Circuit Board
"HE6061A, NHE6071A		Part No. was 8405062E01-O
"HE6111A, NHE6121A		
"HE6131A, NHE6141A		
HE6001A, NHE6011A		
"HE6081A, NHE6091A		
HE6151A, NHE6161A		
HE6021A, NHE6031A		****
"HE6041A-1, NHE6051A-1	C203	Was Part No. 2382397D12:
HE6061A-1, NHE6071A-1		0.12 uF; 20 V
'HE6111A-1, NHE6121A-1		
"HE6131A-1, NHE6141A-1		
'HE6001A-1, NHE6011A-1		
"HE6081A-1, NHE6091A-1 "HE6151A-1, NHE6161A-1		
HE6021A-1, NHE6031A-1		
HE6041A-2, NHE6051A-2	C203	Change to 2184008H14
HE6061A-2, NHE6071A-2	0203	Change to 2104000H14
HE6111A-2, NHE6121A-2		
HE6131A-2, NHE6141A-2		
HE6001A-2, NHE6011A-2	l l	
"HE6081A-2, NHE6091A-2		
"HE6151A-2, NHE6161A-2		
HE 6021A-2, NHE 6031A-2		
VHE6001A-3	C227,	Added
	C228	
VHE 6011A-3	P201	Was 0105953E40
VHE 6021A - 3		
VHE6031A-3		
HE6081A-3		
VHE 6091A - 3		
VHE6151A-3		
VHE6161A-3		
VHE 6041A - 3	C227,	Added
VITE (OF 1A 2	C228	
VHE 6051A - 3		
VHE6071A-3	1	
VHE6111A-3		
VHE6121A-3		
VHE 6131A - 3		
VHE 6141A - 3		
VHE6041A-4	CR204	Deleted was located in parallel
VHE6051A-4	CIGOT	with CR204 (univ).
VHE6061A-4		with Oit204 (univ).
VHE6071A-4		
NHE6111A-4	P201	Was 0105953E40
NHE6121A-4		
NHE6131A-4		
NHE6141A-4		
VUE6232A-1	C122	Added
NUE 6233A - 1		
NUE6242-1		
NUE6243-1		
NUE6282-1		
NUE6283-1		
NUE6292-1	1	
NUE6293-1	-	
NUE6242A-1	C110	Was 2100861432
NUE 62 92 A - 1	C111	Was 2105311E10
NUE6242A-2	L120	Deleted was located in parallel
NUE6292A-2	6116	with JU101.
NUE6232-1	C110	Was 2100861432
NUE6282-1	CHI	Was 2105311E10
NUE6212-1	<b></b>	



# NUE6282A & NUE6283A (Viewed from Solder Side)



"BBU" SERIES CIRCUIT BOARD DETAIL AND PARTS LIST



8 INTERCONNECT CIRCUIT BOARD DETAIL

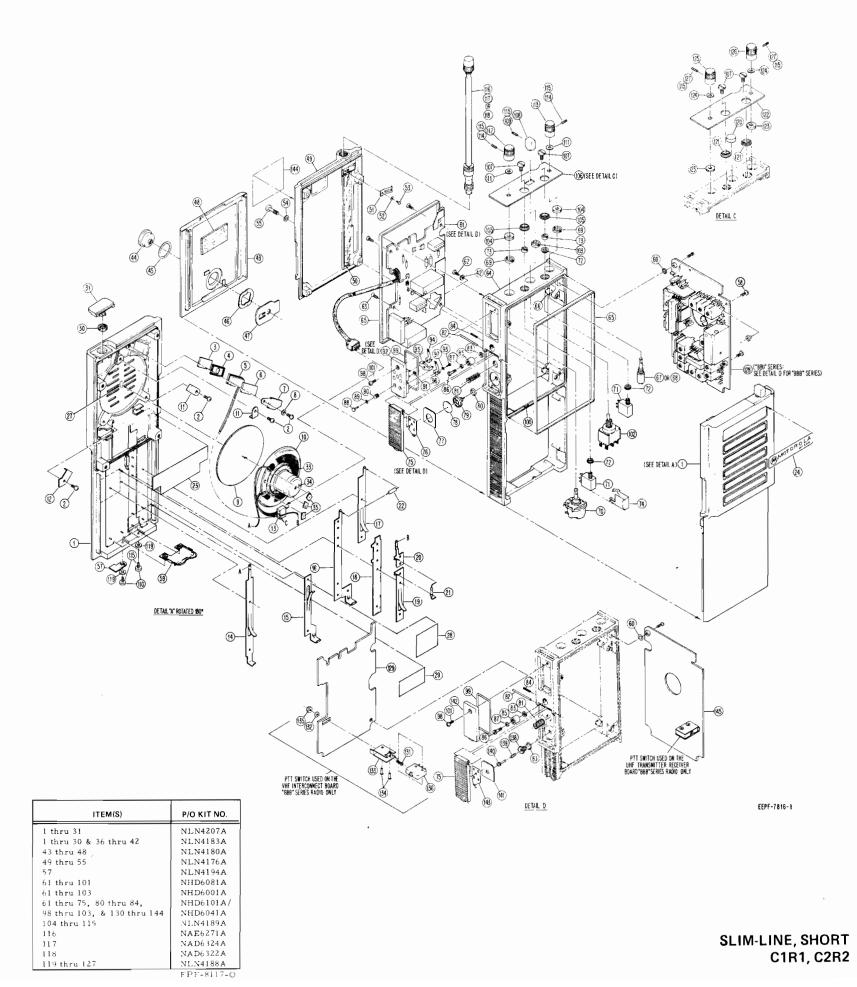
# **PARTS LIST**

Exploded View Parts List

PLF-1303-B

ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
1	COVER, Front, Extended	1505633D01
2 3	SCREW, Mach(2-56x1/8 Phil Pan) PAD, Mic	0300138651 7505577F01
4	PAD, Mic	7505577F01
5	CARTRIDGE, Mic	5982575J02
6 7	PAD, Clamp BRACKET. Mic	7582745J01 0705672D01
8	WASHER, Spring	0405314E01
9	CLOTH, Felt Grill	3505370C01
10	SPEAKER CLAMB Sandyan	5005334D01 4205670D01
11	CLAMP, Speaker CLAMP, Speaker	4205671D01
13	RECEPT, Conn Assy, CS	0105956C63
14	STRAP, Contact, Neg	4205573A01 4205575A01
16	STRAP, Contact, Sen STRAP, Contact, Charge	4205283E01
17	STRAP, Contact	4205576A01
18	INSULATOR, Contact	1405282E01 4205269G01
19 20	STRAP, Contact, Pos STRAP, Contact, Pos	4205270G01
21	FUSE	6505214E01
22	RECTIFIER, Silicon	4882466H13 1405547G01
23	INSULATOR, Paper NAMEPLATE	3305537E01
25	Not Used	
26	Not Used	1110019A88
27 28	ADHES, Silicone Rubber LABEL, Patent	1305436E01
29	LABEL, FCC	5400865436
30		3205315E01
31 32	PLUG, Cover Not Used	3805115E01
33	INSULATOR, Speaker	1405311G01
34	TAPE, Insulator	1110003E58
35 36	INSULATOR, Paper Not Used	1482392E05
37	Not Used	
38	Not Used	
39 40	Not Used Not Used	
41	Not Used	
42	WASHER, Insulated	0400474215
43 44	COVER, Battery BUTTON	1505697D01 3805908D01
45	WASHER, Button	0405910D01
46	WASHER, Spring	0405316E01
47 48	LATCH PAD	5505907D01 7505083E01
49	COVER, Rear	1505698D01
50	SHIELD, Antenna Tube	2605045E01
51 52	CLIP, Antenna WASHER, Spring	4205860D01 0405314E03
53	SCREW, Antenna Clip	0305044E01
54	WASHER, Seal	0484345A06
55 56	SCREW, Captive Not Used	0305662D09
57	INSULATOR, Contact	1405359E01
58	SCREW, Captive	0305864D01
59 60	LATCH Assy	NLN4181A 3205082E06
61	INTERCONNECT Bd. Assy	
62	SCR, Mach(#2-56 x 3/16Phl Pan)	0300138661 0300136666
63 64	SCR, Mach(#2-56x1/4SlotFltHd) FRAME, Short	0705547D03
65	GASKET, Frame	3205520G01
66	BUSHING, Cover Mtg	4305661D01 1805055E01
67	POT, Cermet POT, Cermet Alternate	1805333E01
69	NUT, Special	0282653D03
70	POTENTIOMETER, Control Sw.	1805370£01 0905657G01
71 72	JACK, Micro BUSHING, Shoulder	4305052E01
73	NUT, Special	0205050E01
74	SHIELD, Antenna	2605054E01 4505784D01
75 76	LEVER SPRING, Actuator (PTT)	4105783D03
77	GASKET (PTT)	3205378G01
78	CONTACT, Disc (PTT)	3905196G01 3905195G01
79 80	CONTACT, Feed-Thru (PTT) SEAL, "O" Ring	3205082E02
81	SPRING, Compression (PTT)	4105267E01
82	PIN, Spring	2205084E01 0405249E01
83 84	WASHER, Insert SCREW, Set	0305246E01
85	INSERT, Threaded	4305781D01
86	STUD	4605154E01 0405248E01
87	WASHER, Stud	2402540501

TEM NO.	NOMENCLATURE	MOTOROLA PART NO.
88	PIN, Contact	3905456F01
89	GASKET, 'O' Ring	3205082E03
90	SPRING, Compression	4105424F01
91 92	RING, Retaining RECEPTACLE	4205463E02 0905677D01
93	SCREW (#0-80 x 1/8 Fill Hd)	0300139684
94	CONTACT	4105197G03
95	BLOCK	4605072E01
96	CONTACT	4105197G01
97	WASHER	0400134190
9 <b>8</b> 99	SCR, Mach(#2-56x3/16SST) SEAL, "O" Ring	0300138661 3205661G01
100	ADHESIVE,	3203001G01
100	RTV Silicone Rubber	1110019A88
101	SEALANT, Compound (PURP)	1110019A63
102	SWITCH, Toggle	4005120E01
103	NUT, Special	0282653D07 7583562H02
104 105	PAD, Rubber BUSHING, Insulator	4305051E01
106	ESCUTCHEON, 2 freq	1305621D03
107	SCREW, Jack	0310129A24
108	KNOB, Switch	3605114E01
109	SCREW, Set	0383174C04
110	SCREW, Latch	0300139982 0405935F01
111	WASHER, Nylon KNOB, Vol	3605927D01
113	KNOB, Squelch	3605927D03
114	SCREW	0383174C02
115	GLYPTOL	1100008675
116	ANTENNA, Telescopic (2 Section)	8505550E01
117	ANTENNA, Telescopic (5 Section) ANTENNA, Telescopic (6 Section)	8505549E01 8505509E01
119	WASHER, Latch	0400120581
120	PAD, Rubber	7583562H01
121	BUSHING, Insulating	4305051E01
122	ESCUTCHEON, 1 freq	1305621D01
123	PAD, Rubber	7583562H02 0405935F01
124	WASHER, Nylon KNOB, Voi	3605927D01
126	KNOB, Squelch	3605927D03
127	SCREW, Set	0383174C02
128	TRANSCEIVER Bd Assy	NUE6231A
- 1	("BBU" Series)	NUE6232A NUE6233A
		NUE6272A
		NUE6281A
		NUE 6282A
		NUE6283A
		NUE6302A NUE6312A
		NUE6312A NUE6313A
129	INTERCONNECT Bd Assy	1,010111
130	Not Used	
131	SCREW, Special	0305525G01
132	WASHER	0400140015
133	BRACKET, Switch	0705261E01 0505095E09
134	EYELET NUT	0505095E09 0200400865
135	SWITCH, Mirco	4005265E01
137	Not Used	
138	NUT, PTT	0205250E01
139	SPRING, PTT	4105252E01
140	ACTUATOR, PTT	4705251E01 3205077E01
141	GASKET, Switch COVER, Receptacle	1505212E01
142	SPRING, Actuator	4105783D01
144	PLATE, Information	6405538E01
145	TRANSCEIVER Bd Assy	NUE6242A
	("BBB" Series)	NUE6243A
		NUE6292A



SLIM-LINE, SHORT C1R1, C2R2

# **PARTS LIST**

Exploded View Parts List

PLF-1304-B

	Exp	loded View Parts List	PLF-13
	ITEM NO.	NOMENCLATURE	MOTOROLI PART NO.
	1	COVER, Front, Extended	1505660D01
	2	SCREW, Mach 2-56x1/8Phl Pan	
	3 4	PAD, Mic GASKET, Mic	3505450B01 7505577F01
	5	CARTRIDGE, Mic	5982575J02
	6	PAD, Clamp	7582745J01
	7 8	BRACKET, Mic WASHER, Spring	0705672D01 0405314E01
	9	CLOTH, Felt Grill	3505370C01
	10	SPEAKER	5005334D01
	11 12	CLAMP, Speaker CLAMP, Speaker	4205670D01 4205671D01
	13	RECEPT, Conn Assy (PL)	0105958C8
	14 15	STRAP, Contact, Neg STRAP, Contact, Sen	4205573A01 4205575A01
	16	STRAP, Contact, Charge	4205283E01
	17	STRAP, Contact	4205576A01
	18 19	INSULATOR, Contact STRAP, Contact, Pos	1405282E01 4205269G01
	20	STRAP, Contact, Pos	4205270G01
	21	FUSE	6505214E01
	22 23	RECTIFIER, Silicon INSULATOR, Paper	4882466H13
	24	NAMEPLATE	3305537E01
	25 26	Not Used	
	26	Not Used ADHES, Silicone Rubber	1110019A88
	28	LABEL, Patent	1305436E01
	29 30	LABEL, FCC GASKET, Plug	5400865436 3205315E01
	31	PLUG, Cover	3805115E01
1	32	RECEPT, Conn Assy CS	0105958C87
	33 34	INSULATOR, Speaker TAPE, Insulator	1405311G01 1110003E58
	35	INSULATOR, Paper	1482392E05
	36 37	SWITCH, Toggle, SPDT GASKET, "O" Ring	4005061E01 3205082E01
	38	WASHER, Special	0405081E01
	39	NUT, Mtg	0205050E03
	40 41	ESCUTCHEON, Switch KNOB, Switch	1305057E01 3605114E01
	42	SCREW, Set	0383174C04
	43	COVER, Battery	1505697D01
	44 45	BUTTON WASHER	3805908D01 0405910D01
	46	WASHER, Spring	0405316E01
	47 48,	LATCH PAD	5505907D01 7505083E01
	49	COVER, Rear, Extended (SL)	1505039E01
	50 51	SHIELD, Antenna Tube CLIP, Antenna	2605045E01 4205860D01
	52	WASHER, Spring	0405314E03
	53	SCREW, Antenna Clip	0305044E01
	5 <b>4</b> 55	WASHER, Seal SCREW, Captive	0484345A06 0305662D09
	56	Not Used	
	57 58	INSULATOR, Contact SCREW, Captive	1405359A01 0305864D01
	59	LATCH Assy	NLN4181A
	60	"O" Ring	3205082E06
	61 62	INTERCONNECT Bd. Assy SCR, Mach(#2-56x3/16Phl Pan)	0300138661
	63	SCR, Mach(#2-56x1/4Slot Flt Hd	0300136666
	64 65	FRAME, Extended GASKET, Frame	0705640D03 3205520G01
	66	BUSHING, Cover Mtg	4305661D01
	67 68	POT, Cermet POT, Cermet Alternate	1805055E01 1805333E01
	69	NUT, Special	0282653D03
	70	POTENTIOMETER, Control Sw.	1805370E01
	71 72	JACK, Micro BUSHING, Shoulder	0905657G01 4305052E02
	73	NUT, Special	0205050E01
	74 75	SHIELD, Antenna LEVER	260505E01 4505784D01
	76	SPRING, Actuator (PTT)	4105783D03
	77	GASKET (PTT)	3205378G01
	78 79	CONTACT, Disc (PTT) CONTACT, Feed-Thru (PTT)	3905196G01 3905195G01
	80	SEAL "O" Ring	3205082E02
	81 82	SPRING, Compression (PTT) PIN, Spring	4105267E01 2205084E01
	83	WASHER, Insert	0405249E01
	84	SCREW, Set	0305246E01
	85 86	INSERT, Threaded STUD	4305781D01 4605154E01
	87	WASHER, Stud	0405248E01
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NO.	NOMENCLATURE	MOTORQLA PART NO.
88	PIN, Contact	3905456F01
89	GASKET, 'O' Ring	3205082E03
90 91	SPRING, Compression RING, Retaining	4105424F01
91	RECEPTACLE	4205463E02 09 <b>0</b> 5677D01
93	SCREW(#0-80x1/8 Fill Hd.)	0300139684
94	CONTACT	4105197G03
95	BLOCK	4605072E01
96 97	CONTACT WASHER	4105197G01 0400134190
98	SCR, Mach(#2-56x3/16 SST)	0300138661
99	SEAL "O" Ring	3205661G01
100	ADHESIVE, RTV Silicone Rubber	1110019A63
101	SEALANT, Compound (PURP)	1110019A63
102	SWITCH, Toggle NUT, Special	4005120E01 0282653D07
104	PAD, Rubber	7583562H02
105	BUSHING, Insulator	4305051E01
106	ESCUTCHEON, 2 freq	1305621D03
107 108	SCREW, Jack KNOB, Switch	0310129A24
108	SCREW, Set	3605114E01 0383174C04
110	SCREW, Latch	0300139982
111	WASHER, Nylon	0405935F01
112	KNOB, Vol	3605927D01
113	KNOB, Squelch SCREW, Set	3605927D03 0383174C02
115	GLYPTOL	1100008675
116	ANTENNA, Telescopic	8505550E01
117	ANTENNA, Telescopic (5 Section)	8505549E01
118	ANTENNA, Telescopic (6 Section	8505509E01
119 120	WASHER, Latch PAD, Rubber	0400120581 7 <b>5</b> 83562H01
121	BUSHING, Insulating	4305051E01
122	ESCUTCHEON	1305621D01
123	PAD, Rubber	7583562H02
124 125	WASHER, Nylon KNOB, Vol	0405935F01 3605927D01
126	KNOB, Squelch	3605927D03
127	SCREW, Set	0383174C02
128	TRANSCEIVER Bd. Assy	NUE6242A
IJ	("BBB" Series)	NUE6243A NUE6292A
		NUE6292A
129	INTERCONNECT Bd. Assy	
130	WASHER, Insulated	0400474215
131 132	SCREW, Special WASHER	0305525G01 0400140015
133	BRACKET, Switch	0705261E01
134	EYELET	0505095E09
135	NUT	0200400865
136 137	SWITCH, Micro Not Used	4005265E01
138	NOT Used NUT, PTT	0205250E01
139	SPRING, PTT	4105252E01
140	ACTUATOR, PTT	4705251E01
141	GASKET, Switch	3205077E01
142 143	COVER, Receptacle SPRING, Actuator	1505212E01 4105783D01
144	Not Used	4103103701
145	PLATE, Information	6405538E01
146	OPTION Deck (Tone PL)	NLN4211A
147	OPTION Deck (Digital PL)	NLN4646A NLN4212A
148	OPTION Deck (Selective Call)	NLN4212A NLN4213A
149	OPTION Deck (Single-Tone)	NLN4723A
150	Not Used	
151	SCREW, Hex (#2-56x3/16)	0305493F01
152	TRANSCEIVER Bd. Assy ("BBU" Series)	NUE6231A NUE6232A
	,	NUE6233A
		NUE6272A
		NUE6281A
		NUE6282A NUE6283A
		NUE6302A
		NUE6312A
		NUE6313A

ITEM(S)	P/O KIT NO.						
1 thru 29 & 36 thru 41 1 thru 31	NLN4184A NLN4208A					(26)	(1)
43 thru 48 49 thru 55	NLN4180A NLN4176A			Θ		(R)	
57 60 thru 101	NLN4194A NHD6091A					<b>A</b>	<b>6-</b> @ -
60 thru 75, 80 thru 84, 98 thru 103, & 130 thru 144	NHD6111A/ NHD6051A						
104 thru 115 116	NLN4189A NAE6271A				(B)		
117 118	NAD6324A NAD6322A						<b>\$</b> -@
119 thru 127 145	NLN4188A NLN4196A		49				
151	NLN4190A EPF-8118-O			(3)	(i) (i) (ii) (iii)	SEE DETAIL C)	
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			7	900		(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	CBBU" SERIES: SEE DETAIL D FOR 1888" SERIES)
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<b>%</b> — <b>5</b>			(3)	(15)(SEE DETAIL D)		(SEE DETAIL A)	1 (24)
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	0-		(F)				
	(g) (Z)				<b>(9)</b>		
	(19) <b>&amp;</b>	(10) (59)	(B)		4.		
	DETAIL "A" ROTATED 180"	(A)					
			and 9				
		~		(39)			
			(3)	99	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		
	31		(1)	9900	30 00 00 00 00 00 00 00 00 00 00 00 00 0		
	30—						
	(Fig.				0	PTT SWITCH USED ON THE UHF TRANSMITTER RECEIVER BOARD, "B88" SERES RADIO ONLY	
		igr-	PTT SWITCH USED ON THE VHE INTERCONNECT ROARD			BOARD, BBBT SERIES RADIO ONLY	
	DETAIL B				(41) 143) DETAIL D		EEPF-7817-B

# PARTS LIST -

Exploded View Parts List PLF-1305-B

TEM   NOMENCLATURE	Expl	oded View Parts List	PLF-1305-B
SCREW_Mach(2-56x1/8 Phil Pan) JPAD, Mic GASKET, Mic CARTRIDGE, Mic PAD, Clamp BRACKET, Mic PAD, Clamp TBRACKET, Mic CARTRIDGE, Mic PAD, Clamp TBRACKET, Mic CARTRIDGE, Mic PAD, Clamp TBRACKET, Mic PAD, CLOTH, Felt Grill CLOTH, Felt Grill SPEAKER CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker STRAP, Contact, Neg STRAP, Contact, Sen STRAP, Contact, Charge STRAP, Contact, Charge STRAP, Contact, Pos STRAP		NOMENCLATURE	
SCREW_Mach(2-56x1/8 Phil Pan) JPAD, Mic GASKET, Mic CARTRIDGE, Mic PAD, Clamp BRACKET, Mic PAD, Clamp TBRACKET, Mic CARTRIDGE, Mic PAD, Clamp TBRACKET, Mic CARTRIDGE, Mic PAD, Clamp TBRACKET, Mic PAD, CLOTH, Felt Grill CLOTH, Felt Grill SPEAKER CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker CLAMP, Speaker STRAP, Contact, Neg STRAP, Contact, Sen STRAP, Contact, Charge STRAP, Contact, Charge STRAP, Contact, Pos STRAP	1	COVER Front Short	1505633D01
PAD, Mic			
CARTRIDGE, Mic   5982575,002			
PAD, Clamp	4	GASKET, Mic	7505577 <b>F</b> 01
BRACKET, Mic   0705672D01		_	
WASHER, Spring			
CLOTH, Felt Grill			
10			
CLAMP, Speaker		,	
CLAMP, Speaker			
STRAP, Contact, Neg			4205671D01
STRAP, Contact, Sen	13		0105956C63
STRAP, Contact, Charge			
STRAP, Contact			
18			
STRAP, Contact, Pos			
STRAP, Contact, Pos			
FUSE   6505214E01   4882466H13   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   180147601   1801476			
1405447G01   3305537E01   3305436E01   3405436E01   3405436E01   3405436E01   3405311E01   340	21		6505214E01
NAMEPLATE	22	RECTIFIER, Silicon	4882466H13
25			
Not Used			3305537E01
ADHES. Silicone Rubber			
28         LABEL, Patent         1305436E01           29         LABEL, FCC         54865436           30         GASKET, Plug         3205315E01           31         PLUG, Cover         3805115E01           32         RECEPT, Conn Assy PL         1005957C95           33         INSULATOR, Speaker         1405311G01           34         TAPE, Insulator         1110003E58           35         INSULATOR, Paper         1482392E05           36         SWITCH, Toggle SPDT         4005061E01           37         GASKET, "O" Ring         3205082E01           38         WASHER, Special         0405081E01           NUT, Mtg         02050505E03           38         WASHER, Special         0405081E01           NUT, Mtg         02050505E03           40         ESCUTCHEON, Switch         1305057E01           41         KNOB, Switch         3605114E01           42         SCREW, Set         0383174C04           43         COVER, Battery         1505697D01           44         BUTTON         3805998B01           47         LATCH         50597D01           48         PAD         7505083E01           50			1110010400
ABBEL, FCC			
GASKET, Plug			
RECEPT, Conn Assy PL   INSULATOR, Speaker   1405311G01   14053011G01   14053			
INSULATOR, Speaker			
TAPE, Insulator			
1482392E05   SWITCH, Toggle SPDT			
36         SWITCH, Toggle SPDT         4005061E01           37         GASKET, "O" Ring         3205082E01           38         WASHER, Special         0405081E01           39         NUT, Mtg         0205050E03           40         ESCUTCHEON, Switch         1305057E01           41         KNOB, Switch         3605114E01           42         SCREW, Set         0383174C04           43         COVER, Battery         1505697D01           44         BUTTON         3805908D01           45         WASHER         0405910D01           46         WASHER, Spring         0405316E01           47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         1505699D01           50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         1505699D01           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Latch         0300139982           56         SCREW, Latch         0300139982           57 </td <td></td> <td></td> <td></td>			
GASKET, "O" Ring			
38         WASHER, Special         0405081E01           39         NUT, Mtg         0205050E03           40         ESCUTCHEON, Switch         1305057E01           41         KNOB, Switch         3605114E01           42         SCREW, Set         0383174C04           43         COVER, Battery         1505697D01           44         BUTTON         3805908D01           45         WASHER         0405910D01           46         WASHER, Spring         0405910D01           47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         5005907D01           50         Not Used         7505533F02           51         COVER, Rear, Short         1505699D01           52         Not Used         0305662D10           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0300139982           56         Not Used         0300139982           57         SCREW, Latch         0300139982           58         WASHER, Insulated         0400474215           61			
NUT, Mtg			
KNOB, Switch   3605114E01   42   SCREW, Set   0383174C04   43   COVER, Battery   1505697D01   3805908D01   44   BUTTON   3805908D01   45   WASHER   0405910D01   46   WASHER, Spring   0405316E01   5505907D01   47   LATCH   5505907D01   48   PAD   7505083E01   49   Not Used   50   Not Used   51   COVER, Rear, Short   1505699D01   52   Not Used   53   PAD, Cover   7505533F02   54   WASHER, Seal   0484345A06   0305662D10   56   Not Used   57   SCREW, Captive   0300139982   0400474215   SCREW, Latch   0400120581   LATCH, Assy   NLN4182A   0400474215   INTERCONNECT Bd Assy   62   SCR, Mach(#2-56x1/4 Slot Flt Hd)   63   SCR, Mach(#2-56x1/4 Slot Flt Hd)   64   FRAME, Short   1805333E01   65   GASKET, Frame   1805333E01   66   BUSHING, Cover Mtg   1805055E01   1805333E01   1805333E01   1805370E01   1805370E01   1805784D01   1805784D01   1805784D01   1805784D01   1805784D01   1805784D01   1805785D01   1805784D01   1805784D01   1805785D01   1805784D01   1805784D01   1805785D01   1805785D			
42         SCREW, Set         0383174C04           43         COVER, Battery         1505697D01           44         BUTTON         3805908D01           45         WASHER         0405910D01           46         WASHER, Spring         0405910D01           47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         1505699D01           50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         0305662D10           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0300139982           56         Not Used         0400120581           57         SCREW, Latch         0300139982           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         NLN4182A           62         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666	40	ESCUTCHEON, Switch	1305057E01
43         COVER, Battery         1505697D01           44         BUTTON         3805908D01           45         WASHER         0405910D01           46         WASHER, Spring         0405316E01           47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         1505699D01           50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         0305662D10           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         01040474215           61         INTERCONNECT Bd Assy         SCR, Mach(#2-56x1/4 Slot Flt Hd)           62         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)			
### BUTTON			
45 WASHER 46 WASHER, Spring 47 LATCH 47 LATCH 48 PAD 49 Not Used 50 Not Used 51 COVER, Rear, Short 52 Not Used 53 PAD, Cover 54 WASHER, Seal 55 SCREW, Captive 56 Not Used 57 SCREW, Latch 58 WASHER, Insulated 61 INTERCONNECT Bd Assy 62 SCR, Mach(#2-56x3/16 Phl Pan) 63 SCR, Mach(#2-56x3/16 Phl Pan) 64 FRAME, Short 65 GASKET, Frame 66 BUSHING, Cover Mtg 67 POT, Cermet Alternate 68 POT, Cermet Alternate 69 NUT, Special 70 POTENTIOMETER, Control Sw. 71 JACK, Micro 72 BUSHING, Shoulder 73 NUT, Special 74 SHELD, Antenna 75 LEVER 76 SPRING, Actuator (PTT) 77 GASKET (PTT) 78 CONTACT, Feed-Thru (PTT) 79 CONTACT, Feed-Thr			
46         WASHER, Spring         0405316E01           47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         7505083E01           50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         7505533F02           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0300139982           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         NLN4182A           62         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           64         FRAME, Short         0305547D03           65         GASKET, Frame         1805055201           66         BUSHING, Cover Mtg         4			
47         LATCH         5505907D01           48         PAD         7505083E01           49         Not Used         7505083E01           50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         7505533F02           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         0400474215           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet Alternate			
Not Used   Not Used   South Cover   South			
50         Not Used         1505699D01           51         COVER, Rear, Short         1505699D01           52         Not Used         7505533F02           53         PAD, Gover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Latch         0400474215           61         INTERCONNECT Bd Assy         NLN4182A           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805370E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71	48	PAD	7505083E01
51         COVER, Rear, Short         1505699D01           52         Not Used         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         0400474215           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         POT, Cermet Alternate         1805370E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         18055370E01           <			
52         Not Used         7505533F02           53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         0400474215           62         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         18053370E01           70         POTENTIOMETER, Control Sw.         18053370E01           71         JACK, Micro         9905657G01           72			1505/00001
53         PAD, Cover         7505533F02           54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         NLN4182A           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055201           68         POT, Cermet Alternate         1805333201           69         NUT, Special         10282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         20205050E01           72         BUSHING, Shoulder         4305052E02           73			1505699D01
54         WASHER, Seal         0484345A06           55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         0400474215           62         SCR, Mach(#2-56x3/16 Ph1 Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138661           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75<			7505533F02
55         SCREW, Captive         0305662D10           56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         0300138661           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300136666           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         18055370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           7		-	
56         Not Used         0300139982           57         SCREW, Latch         0400120581           58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         020040474215           62         SCR, Mach(#2-56x1/4 Slot Flt Hd)         030013666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Germet Alternate         1805333E01           69         NUT, Special         1805333E01           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         20205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3905195G01           77			
58         WASHER, Latch         0400120581           59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Germet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3905196G01           79         CONTACT, Disc (PTT)         3905196G01           79 <td< td=""><td>56</td><td></td><td></td></td<>	56		
59         LATCH, Assy         NLN4182A           60         WASHER, Insulated         0400474215           61         INTERCONNECT Bd Assy         320752666           62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3905196G01           77         GASKET (PTT)         3905196G01           78         CONTACT, Disc (PTT)         3905196G01	57		
60 WASHER, Insulated 61 INTERCONNECT Bd Assy 62 SCR, Mach(#2-56x3/16 Phl Pan) 63 SCR, Mach(#2-56x1/4 Slot Flt Hd) 64 FRAME, Short 65 GASKET, Frame 66 BUSHING, Cover Mtg 67 POT, Cermet 1805055201 68 POT, Cermet Alternate 69 NUT, Special 70 POTENTIOMETER, Control Sw. 71 JACK, Micro 72 BUSHING, Shoulder 73 NUT, Special 74 SHIELD, Antenna 75 LEVER 76 SPRING, Actuator (PTT) 77 GASKET (PTT) 78 CONTACT, Disc (PTT) 79 CONTACT, Feed-Thru (PTT) 80 SPRING, Compression (PTT) 81 SEAL "O" Ring 82 PIN, Spring 83 WASHER, Insert 84 SCREW, Set 1NSERT, Threaded 86 STUD 80030138661 03000138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300138661 0300136666 0400138661 0300138661 0300136666 0400138661 0300138661 0300136666 040013666 040013666 040013666 040013666 0400138661 0400138661 040013666 040013666 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 040053320 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 0400138661 040013866			
61       INTERCONNECT Bd Assy         62       SCR, Mach(#2-56x3/16 Ph1 Pan)         63       SCR, Mach(#2-56x1/4 Slot Flt Hd)         64       FRAME, Short       705547D03         65       GASKET, Frame       3205520G01         66       BUSHING, Cover Mtg       4305661D01         67       POT, Cermet       18053532B01         68       POT, Germet Alternate       1805333E01         69       NUT, Special       0282653D03         70       POTENTIOMETER, Control Sw.       1805370E01         71       JACK, Micro       0905657G01         72       BUSHING, Shoulder       4305052E02         73       NUT, Special       0205050E01         74       SHIELD, Antenna       2605054E01         75       LEVER       4505784D01         76       SPRING, Actuator (PTT)       3205578501         77       GASKET (PTT)       3205578501         78       CONTACT, Disc (PTT)       3905196G01         79       CONTACT, Feed-Thru (PTT)       3905196G01         80       SPRING, Compression (PTT)       4105267E01         81       SEAL "O" Ring       3205082E02         82       PIN, Spring       2205084E01			
62         SCR, Mach(#2-56x3/16 Phl Pan)         0300138661           63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300138666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3205378G01           77         GASKET (PTT)         3905196G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01			0400474215
63         SCR, Mach(#2-56x1/4 Slot Flt Hd)         0300136666           64         FRAME, Short         705547D03           65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3905196G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         410527801           80         SPRING, Compression (PTT)         410527601           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01			0300138661
64 FRAME, Short 705547D03 65 GASKET, Frame 3205520G01 66 BUSHING, Cover Mtg 4305661D01 67 POT, Cermet 1805055E01 68 POT, Cermet 18050333E01 69 NUT, Special 0282653D03 70 POTENTIOMETER, Control Sw. 1365370E01 71 JACK, Micro 0905657G01 72 BUSHING, Shoulder 4305052E02 73 NUT, Special 20205050E01 74 SHIELD, Antenna 2605054E01 75 LEVER 4505784D01 76 SPRING, Actuator (PTT) 4105783D03 77 GASKET (PTT) 3905195G01 78 CONTACT, Feed-Thru (PTT) 79 CONTACT, Feed-Thru (PTT) 80 SPRING, Compression (PTT) 81 SEAL "O" Ring 2205084E01 82 PIN, Spring 2205084E01 83 WASHER, Insert 0405249E01 84 SCREW, Set 0305246E01 85 INSERT, Threaded 4305781D01 86 STUD			
65         GASKET, Frame         3205520G01           66         BUSHING, Cover Mtg         4305661D01           67         POT, Cermet         1805055E01           68         POT, Germet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         32055378G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86			
67         POT, Cermet         1805055E01           68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805373E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3205378G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         410527E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01		GASKET, Frame	
68         POT, Cermet Alternate         1805333E01           69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3205378G01           77         GASKET (PTT)         3905196G01           79         CONTACT, Disc (PTT)         3905196G01           80         SPRING, Compression (PTT)         3905195G01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
69         NUT, Special         0282653D03           70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3205378G01           77         GASKET (PTT)         3905196G01           78         CONTACT, Disc (PTT)         3905196G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
70         POTENTIOMETER, Control Sw.         1805370E01           71         JACK, Micro         0905657G01           72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         3205378G01           77         GASKET (PTT)         3905196G01           79         CONTACT, Disc (PTT)         3905196G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
71 JACK, Micro 0905657G01 72 BUSHING, Shoulder 4305052E02 73 NUT, Special 0205050E01 74 SHIELD, Antenna 2605054E01 75 LEVER 4505784D01 76 SPRING, Actuator (PTT) 4105783D03 77 GASKET (PTT) 3205378G01 78 CONTACT, Disc (PTT) 3905196G01 79 CONTACT, Feed-Thru (PTT) 80 SPRING, Compression (PTT) 4105267E01 81 SEAL "O" Ring 3205082E02 82 PIN, Spring 2205084E01 84 SCREW, Set 0305246E01 85 INSERT, Threaded 4305781D01 86 STUD 4605154E01			
72         BUSHING, Shoulder         4305052E02           73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3205378G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         4105267E01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
73         NUT, Special         0205050E01           74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3205378G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
74         SHIELD, Antenna         2605054E01           75         LEVER         4505784D01           76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3205378G01           78         CONTACT, Disc (PTT)         3905196G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
76         SPRING, Actuator (PTT)         4105783D03           77         GASKET (PTT)         3205378G01           78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			2605054E01
77 GASKET (PTT) 3205378G01 78 CONTACT, Disc (PTT) 3905196G01 79 CONTACT, Feed-Thru (PTT) 3905195G01 80 SPRING, Compression (PTT) 4105267E01 81 SEAL "O" Ring 3205082E02 82 PIN, Spring 2205084E01 83 WASHER, Insert 0405249E01 84 SCREW, Set 0305246E01 85 INSERT, Threaded 4305781D01 86 STUD 4605154E01			
78         CONTACT, Disc (PTT)         3905196G01           79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
79         CONTACT, Feed-Thru (PTT)         3905195G01           80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
80         SPRING, Compression (PTT)         4105267E01           81         SEAL "O" Ring         3205082E02           82         PIN, Spring         2205084E01           83         WASHER, Insert         0405249E01           84         SCREW, Set         0305246E01           85         INSERT, Threaded         4305781D01           86         STUD         4605154E01			
81     SEAL "O" Ring     3205082E02       82     PIN, Spring     2205084E01       83     WASHER, Insert     0405249E01       84     SCREW, Set     0305246E01       85     INSERT, Threaded     4305781D01       86     STUD     4605154E01			
82     PIN, Spring     2205084E01       83     WASHER, Insert     0405249E01       84     SCREW, Set     0305246E01       85     INSERT, Threaded     4305781D01       86     STUD     4605154E01			
83       WASHER, Insert       0405249E01         84       SCREW, Set       0305246E01         85       INSERT, Threaded       4305781D01         86       STUD       4605154E01			
84     SCREW, Set     0305246E01       85     INSERT, Threaded     4305781D01       86     STUD     4605154E01			
86 STUD 4605154E01	84	SCREW, Set	
I I			
o/ WASHER, Stud J 0405248E01			
	87	WASHER, Stud	0405248E01

	1	
NO.	NOMENCLATURE	MOTOROLA PART NO.
88	PIN, Contact	3905456F01
89	GASKET "O" Ring	3205082E03
90 91	SPRING, Compression	4105424F01
92	RING, Retaining RECEPTACLE	4205463E02 0905677D01
93	SCREW, (#0-80 x 1/8 Fill Hd)	0300139684
94	CONTACT	4105197G03
95	BLOCK	4605072E01
96 97	CONTACT WASHER	4105197G01 0400134190
98	SCR, Mach(#2-56x3/16 SST)	0300138661
99	SEAL "O" Ring	3205075E01
100	ADHESIVE, RTV Silicone Rubber	1110019A88
101 102	SEALANT, Compound SWITCH, Rotary, 4 freq	1110019A63 4005119E01
102	or. SWITCH, Rotary 5 freq	4005119E01 4005119E02
	or, SWITCH, Rotary 6 freq	4005053E03
	or, SWITCH, Rotary 8 freq	4005053E01
103	NUT, Special	0282653D05
104	PAD, Rubber	75835 <b>62H</b> 02
105 106	BUSHING, Insulator	4305051E01
106	Not Used SCREW, Jack	0310129A24
108	KNOB, Control	3605926D05
109	SCREW, Latch	0300139982
110	GLYPTOL	1100008675
111	WASHER, Nylon	0405935F01
112 113	KNOB, Vol KNOB, Squelch	3605927D01 3605927D03
114	SCREW, Set	0383174C02
115	Not Used	
116	ANTENNA, Telescopic (2 Section)	8505550E01
117	ANTENNA, Telescopic (5 Section)	8505549E01
118 119	ANTENNA, Telescopic (6 Section) ESCUTCHEON, 4 freq	8505509E01 1305621D09
120	ESCUTCHEON, 5 freq	1305621D05
121	ESCUTCHEON, 6 freq	1305621D15
122	ESCUTCHEON, 8 freq	1305621D07
123	"O" Ring	3205082E06
124 125	SCREW, Captive TRANSCEIVER Bd. Assy	0305864D01 NUE6231A
100	("BBU" Series)	NUE6232A
	· ·	NUE6233A
		NUE6272A
		NUE6281A
		NUE6282A NUE6283A
		NUE6302A
		NUE6312A
126	Not Hood	NUE6313A
127	Not Used Not Used	
128	TRANSCEIVER Bd. Assy	NUE6242A
	("BBB" Series)	NUE6243A
		NUE6292A
129	INTERCONNECT Bd. Assy	NUE6293A
130	Not Used	
131	SCREW, Special	0305525G01
132	WASHER,	0400140015
133 134	BRACKET, Switch EYELET	0705261E01 0505095E09
134	NUT	0505095£09 0200400865
136	SWITCH, Micro	4005265E01
137	Not Used	
138	NUT, PTT	0205250E01
139	SPRING, PTT	4105252E01
140 141	ACTUATOR, PTT GASKET, Switch	4705251E01 3205077E01
142	COVER, Receptacle	1505212E01
143	SPRING, Actuator	4105783D01
144	Not Used	/
145	PLATE, Information	6405538E01 1505651D01
146	HOUSING, Sleeve, Short ADHESIVE, RTV Silicon Rubber	1110019A76
148	GASKET, Frame	3205520G01
149	CLIP, Antenna	4205860D01
150	WASHER, Spring	0405314E03
151 152	SCREW, Special	0305044E01 1505651D02
152	HOUSING, Sleeve SCREW, Mach	0300115356
	(2-56 x 5/16 Slot Bnd)	
154	LK Wash (#2 Split)	0400400139
155	NUT (#2 Hex)	0200115676
156	POST, Guide	4605798E01 0205797E01
157 158	NUT CLIP, Option Bd.	0205797E01 4205445E04
159	CLIP, Option Bd.	4205445E03
160	CLIP, Option Bd.	4205445E02
ш		

NO. NOMENCLATURE PART NO.	
161 CLIP, Option Bd. 4205445E01	
163 Not Used 164 Not Used 165 TONE PL Deck NLN4645A	
166 DPL-TPL Deck NLN4476A	
167 TIME Out Timer Deck NLN4475A (S)	
INTERVALED BOY	
1 thru 31 NLN4207A	PTT SWITCH USED ON THE BURN TRANSMITTER RECEPRER ROADO ONLY
1 thru 29 & 36 thru 42 NLN4183A PTT SWITCH USED ON THE 43 thru 48 NLN4180A WE INTERCONNECT BOAR	UNIT TRANSMETTER RECEPTER AUDIO ONLY
51 thru 55 NLN4178A '888' SERIES RADIO OMLY 61 thru 103 NHD6141A 61 thru 75, 80 thru 84, NHD6121A	DETAIL D EEPF-7818-B
98 thru 103, & 129 thru 144 104 thru 114 NLN4643A	
116 NAE6271A 117 NAD6324A 118 NAD6322A	
118 NAD6322A 145 NLN4196A 146 thru 151 NLN4172A	
147 thru 152 NLN4173A 153 thru 157 & 160, 161 NLN4187A	OMNI, SHORT
153 thru 159 NLN4195A EPF-8119-0	C4R4, C6R6, C8R8

PARTS LIST
Exploded View Parts List

TEM	NO FIGURE	MOTOROL
NO.	NOMENCLATURE	PART NO.
1	COVER, Front, Extended	1505660D0
2	SCREW, Mach(2-56x1/8 Phl-Pan) PAD, Mic	0300138651 3505450B0
4	GASKET, Mic	7505577F0
5	CARTRIDGE, Mic	5982575J02
6	PAD, Clamp	7582745J01
7 8	BRACKET, Mic WASHER, Spring	0705672D0 0405314E0
9	CLOTH, Felt Grill	3505370C0
10	SPEAKER	5005334D0
11	CLAMP, Speaker	4205670D0
12 13	CLAMP, Speaker RECEPT, Conn Assy CS	4205671D0 0105956C8
14	STRAP, Contact, Neg	4205573A0
15	STRAP, Contact, Sen	4205575A0
16	STRAP, Contact, Charge	4205283E0 4205576A0
17 18	STRAP, Contact INSULATOR, Contact	1405282E0
19	STRAP, Contact, Pos	4205269G0
20	STRAP, Contact, Pos	4205270G0
21	FUSE	6505214E0 4882466H1
22 23	RECTIFIER, Silicon INSULATOR, Paper	1405547G0
24	NAMEPLATE	3305537E0
25	Not Used	
26	INSULATOR, Speaker	1405311G0
27 28	ADHES, Silicone Rubber LABEL, Patent	1110019A8 1305436E0
29	LABEL, FCC	54865436
30	GASKET, Plug	3205315E0
31	PLUG, Cover	3805115E0
32 33	RECEPT, Conn Assy PL INSULATOR, Speaker	0105958C8 1405311G0
34	TAPE, Insulator	1110003E5
35	INSULATOR, Paper	1482392E0
36	SWITCH, Toggle, SPDT	4005061E0
37 38	GASKET, "O" Ring WASHER, Special	3205082E0 0405081E0
39	NUT, Mtg	0205050E0
10	ESCUTCHEON, Switch	1305057E0
1	KNOB, Switch	3605114E0
12 13	SCREW, Set COVER, Battery	0383174C0- 1505697D0
14	BUTTON	3805908D0
15	WASHER	0405910D0
16	WASHER, Spring	0405316E0 5505907D0
17 18	LATCH PAD	7505083E0
19	PAD Not Used Not Used COVER, Rear	
50	Not Used	1505042700
51	COVER, Rear Not Used	1505943D0
53	PAD, Cover	7505533F0
54	WASHER, Seal	0484345A0
55	SCREW, Captive	0305662D1
56 57	Not Used Not Used	
58	Not Used	
59	LATCH Assy	NLN4182A
60	"O" Ring	3205082E0
61 62	INTERCONNECT Bd Assy SCR, Mach(#2-56x3/16Phl Pan)	0300138661
53	SCR, Mach(#2-56x1/4Slot Flt Hd)	0300138661
54	FRAME, Long	705640D03
65	GASKET, Frame	3205520G0 4305661D0
66 57	BUSHING, Cover Mtg POT, Cermet	1805055E0
58	POT, Cermet Alternate	1805333E0
59	NUT, Special	0282653D0
70	POTENTIOMETER, Control Sw.	1805370E01
71	JACK, Micro BUSHING, Shoulder	0905657G03 4305052E02
13	NUT, Special	0205050E0
74	SHIELD, Antenna	2605054E0
75	LEVER	4505784D0
76 77	SPRING, Actuator (PTT) GASKET (PTT)	4105783D03 3205378G03
78	CONTACT, Disc (PTT)	3905196G0
79	CONTACT, Feed-Thru (PTT)	3905195G0
30	SPRING, Compression (PTT)	4105267E0
31 32	SEAL "O" Ring PIN, Spring	3205082E02 2205084E03
33	WASHER, Insert	0405249E0
34	SCREW, Set	0305246E0
35	INSERT, Threaded	4305781D0
	STUD	4605154E0
36 37	WASHER, Stud	0405248E0

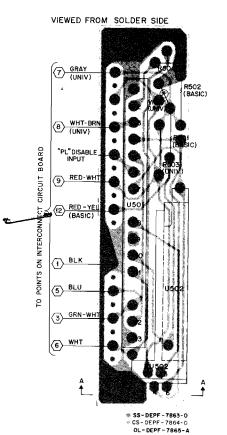
ITEM NO.	NOMENCLATURE	MOTOROLA PART NO.
88	PIN, Contact	3905456F01
89 90	GASKET, "O" Ring SPRING, Compression	3205082E03 4105424F01
91	RING, Retaining	4205463E02
92	RECEPTACLE	0905677D01
93	SCR, Mach(#0-80x1/8 Fill Hd)	0300139684
94	CONTACT	4105197G03 4605072E01
95 96	BLOCK CONTACT	4105197G01
97	WASHER	0400134190
98	SCREW, Mach(#2-56 x 3/16 SST)	0300138661
99	SEAL ''O'' Ring	3205661G01
100	ADHESIVE, RTV Silicone Rubber	1110019A88 1110019A63
101 102	SEALANT, Compound SWITCH, Rotary, 4 freq	4005119E01
102	or SWITCH, Rotary, 5 freq	4005119E02
	or SWITCH, Rotary, 6 freq	4005053E03
	or SWITCH, Rotary, 8 freq	4005053E01
103	NUT Special	0282653D05
104	WASHER, Rubber	7583562H02
105 106	BUSHING, Insulator WASHER, Insulated	4305051E01 0400474215
106	SCREW, Jack	0310129A24
108	KNOB, Control	3605927D05
109	SCREW, Latch	
110	GLYPTOL	1100008675
111	WASHER, Nylon	0405935F01
112	KNOB, Vol	3605927D01 3605927D03
11-3 114	KNOB, Squelch SCREW, Set	0383174C02
115	WASHER, Latch	0400120581
116	ANTENNA, Telescopic (2 Section)	8505550E01
117	ANTENNA, Telescopic (5 Section)	8505549E01
118	ANTENNA, Telescopic (6 Section)	8505762A01
119	ESCUTCHEON, 4 freq	1305621D09 1305621D05
120 121	ESCUTCHEON, 5 freq ESCUTCHEON, 6 freq	1305621D05
122	ESCUTCHEON, 8 freq	1305621D07
123	Not Used	
124	SCREW, Captive	0305864D01
125	TRANSCEIVER Bd. Assy	NUE6231A
	("BBU" Series)	NUE6232A NUE6233A
		NUE6272A
1		NUE6281A
ĺ		NUE6282A
		NUE6283A
l		NUE6302A
		NUE6312A NUE6313A
126	Not Used	NOEGSTSA
127	Not Used	
128	TRANSCEIVER Bd. Assy	NUE6242A
	("BBB" Series)	NUE6243A
		NUE6292A
1,20	DUTER CONNECT Rd Assu	NUE6293A
129	INTERCONNECT Bd. Assy Not Used	
131	SCREW, Special	0305525G01
132	WASHER	0400140015
133	BRACKET, Switch	0705261E01
134	EYELET	0505095E09
135	NUT	0200400B65 4005265E01
136 137	SWITCH, Micro Not Used	4002503E01
138	NUT, PTT	0205250E01
139	SPRING, PTT	4105252E01
140	ACTUATOR, PTT	4705251E01
141	GASKET, Switch	3205077E01
142	COVER, Receptacle	1505212E01
143	SPRING, Actuator	4105783D01
144	Not Used PLATE, Information	6405538E01
145	HOUSING, Sleeve, Extended	1505858D02
147	ADHESIVE, RTV Silicone Rubber	1110019A88
148	GASKET, Frame	3205520G01
149	CLIP, Antenna	4205860D01
150	WASHER, Spring	0405314E03
151	SCREW, Special	0305044E01 1505858D01
152	HOUSING, Sleeve MACH.Screw(2-56x3/8Slot Bind)	
153 154	LK Wash (#2 Split)	0400400139
154	NUT (#2 Hex)	0200115676
-00	POST, Guide	A605798E01
156		I A
156 157	NUT	0205797E01
157 158	CLIP, Option Bd.	4205445E04
157		

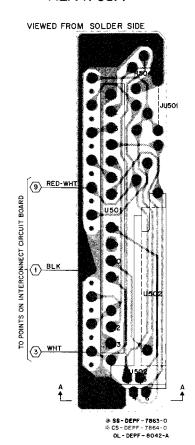
ITEM	NOMENCLATURE	MOTOROLA	• .	ITEM(S)	P/O KIT NO.
172 173	SCREW, Guide CLIP, Option Bd. C7R7 Deck TONE PL Deck  DPL &TPL Deck OPTION Deck (Tone PL)  OPTION Deck (Selective Call) OPTION Deck (Single-Tone) TIME Out Timer SEL Call (4 Tone) SEL Call (Long Tone) MULTI Single-Tone	PART NO.  4605800E01 04205529F01 NLN4215A NLN4645A NLN4645A NLN4476A NLN4211A NLN4212A NLN4212A NLN4273A NLN4273A NLN4475A NLN4475A NLN4475A NLN4475A NLN4475A NLN4477A NLN4727A NLN4777A		1 thru 29 & 36 thru 42 1 thru 31 43 thru 48 51 thru 55 59 61 thru 103 61 thru 75, 80 thru 84, 98 thru 103, & 129 thru 144 116 117 118 145 146 thru 151 147 thru 152 153 thru 159 & 160, 161 153 thru 159 162	NLN4184A NLN4208A NLN4180A NLN4182A NHD6031A/21A NHD6071A/61A NLN4191A NAE6271A NAD6322A NLN4196A NLN4174A NLN4175A NLN4175A NLN4187A NLN4187A NLN4187A NLN4187A NLN4186A EPF-8120-O
	33 (SEE DE TAIL B) (40) — 33 — 33 — 32 — 32 — 32 — 32 — 32 — 3			SEE DE INAL AN O	STEED TAIL D FOR TORE STEED AND TORE
			PTT SWITCH USED ON THE WAY INTERCONNECT BOARD 1986F SCHRES PAUDO ONLY	PTT SWITCH USE UNE TRANSMITTER BOARD, "BBF" SERIES	ON THE RECEIVER RANDO ONLY  EEPF-T819-8

OMNI, EXTENDED C4R4, C6R6, C8R8

# NLN4211A, NLN4644A, NLN4645A, NLN4646A

## NLN4768A





NLN4211A "BBU" Series Extended Frame

NLN4644A "BBB" Series Short Frame

NLN4645A "BBU" Series Short Frame

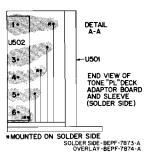
NLN4646A "BBB" Series Extended Frame NLN4768A "BBB" Series Extended Frame (PAC•RT)

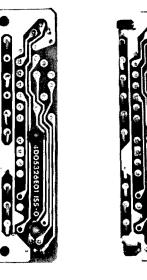
NLN5487A "BBB" Series Extended Frame (Low Band)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
R501	0600185C04	RESISTOR, Fixed: \(\times\) 100 k ±10%; 1/8 W (NLN4644A, NLN4646A, & NLN5487A)
R502	0600185C06	150 k ±10%; 1/8 W (NLN4644A,
R503	0600185B87	NLN4646A, & NLN5487A) 4.7 k ±10%; 1/8 W (NLN4211A, NLN4645A, & NLN5696A)
R504	1805501C04	Pot., 50 k
U501	5105177D23	INTEGRATED CIRCUIT: PL Processor and Low-Pass Filter
U502	NFN6010A	PL Tone Filter (Not part of Tone PL Decks)
VR501	4883461 <b>E2</b> 6	<u>DIODE:</u> See Note 23 V Zener (NLN4211A, NLN4645A, & NLN5696A)
_	NONREFERENC	CED ITEMS
	0105950D70	Assembly, Adapter; contains circuit board & bracket
	0105959C02	(NLN4644A, NLN4645A) Assembly, Adapter; contains circuit bd. & bracket (NLN4211A, NLN4646A,
		NLN4768A, NLN5487A, & NLN5696A)
	0905287C05	SOCKET, Berg; circuit board
	0905604C06	SOCKET, Spring
	3005373E01	CABLE, Circuit Board (NLN4644A, NLN4645A)
	4205796E01	CLIP (NLN4644A, NLN4645A)
	8405335E01	CIRCUIT, Module mounting

NOTE: For optimum performance, order replacement diodes by Motorola part number only.

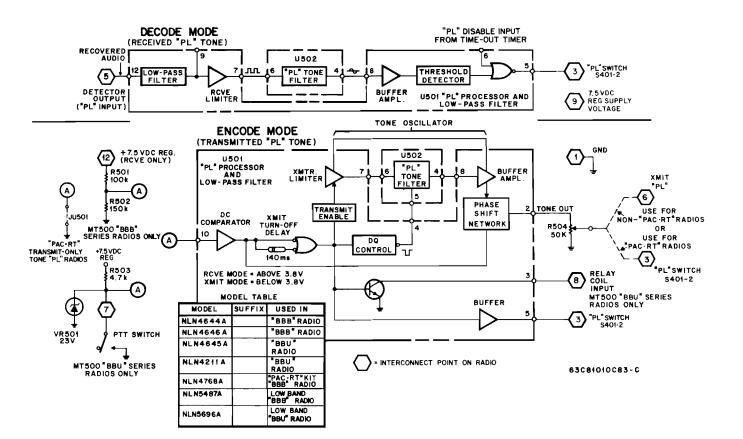
#### VIEWED FROM SOLDER SIDE





**EXTENDED** FRAME

**SHORT FRAME** 



# **TEST MEASUREMENTS**

PIN	EN	CODE	DECC	DDE
NO.	DC VOLTS	AC VOLTS	DC VOLTS	AC VOLTS
	PL	Processor and Lo	ow Pass Filter U501	
2		250 mV (3)	•••	
3	<1.5		15	
5			< 0.6 (open) > 0.8 (closed) (1)	
7	7.4	100 mV rms (<-15 dBm)	7.2 (2)	350 mV rms (>-15 dBm)
8	1.7	80 mV rms (3)	1.7	160 mV rms (3)
9				280 mV rms (typical)
10	< 3.8		> 3.8	
11	7.5	·	7.5	
		PL Tone F	ilter U502	
3	7.5		7.5	
4	1.7		1.7	
5	>6		>6	***
6	7.4	• • •	7.2 (2)	

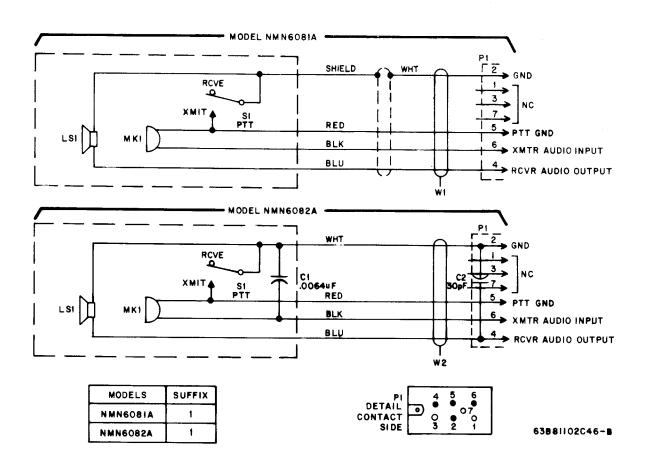
Test measurements are nominal. DC voltages are with 15 VDC power supply, and AC voltages are with radio fully quieted and 500 Hz deviation on generator. PL switch is on or off and no carrier input.

- Numbers in ( ) refer to the following notes:
- (1) PL switch on (A).
- (2) No modulation; radio fully quieted.
- (3) Depends upon PL Tone Filter U502.

# "PL" SQUELCH SENSITIVITY CHECK

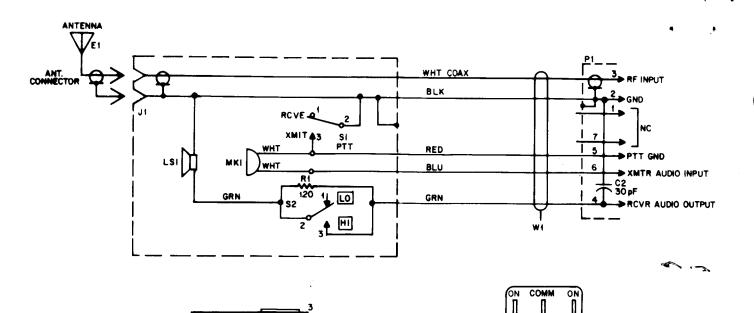
#### {"PL" MODELS ONLY}

- 1. SET THE SQUELCH CONTROL (R201) TO THE THRESHOLD POSITION WITH THE "PL" SWITCH OFF ( ₫ ).
  2. TURN THE "PL" SWITCH ON ( ♣), AND APPLY AN ON-FREQUENCY CARRIER SIGNAL FROM THE SIGNAL GENERATOR. MODULATE THE SIGNAL GENERATOR WITH THE PROPER "PL" TONE, AT ±0.5 kHz
- 3. THE SQUELCH CIRCUIT SHOULD "OPEN" WHEN THE SIGNAL GENER-ATOR OUTPUT IS INCREASED ABOVE 0.18 uV (VHF) OR 0.25 uV (UHF).



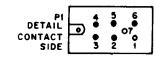
Speaker-Microphone Kits: NMN6081A Straight Cord NMN6082A Coiled Cord

NMN608ZA Coll	ed Cord	PLF-1238-B
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C1	2184008H05	CAPACITOR, Fixed: .0064 uF ±10%; 50 V (NMN6082A only)
C2	2182358G95	30 pF ±10%; 75 V; N750 SPEAKER, Dynamic:
LSl	5005334D01	39 a, 2-inch diameter
MK1	5982575J02	MICROPHONE: Minature; Res: 700 A. Imped: 5000 A ±30%
Pl	2805646F02	PLUG: Connector, 7-contact
S1	4082159D02	SWITCH: Micro; PTT, SPDT
W1 W2	3084048H02 3084123H02	CORD: Straight, 48" Coiled



INSIDE OF SPEAKER-MICROPHONE HOUSING IS ELECTRICALLY CONDUCTIVE, COAXIAL SHIELD OF CABLE IS ELECTRICALLY GROUNDED TO SHROUD.

MODELS	SUFFIX
NMN6083A	1



S2 DETAIL

63B81102C50-A

NMN6083A Extern	al Speaker-Microphone-Antenna	PLF-1251-
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REFERENCE SYMBOL	MOTOROL A PART NO.	DESCRIPTION
E1*	NAE6132A	ANTENNA: ANTENNA, Helical; 440-470 MHz
	NAE6133A	ANTENNA, Helical; 470-512 MHz
C2	2182358G95	<u>CAPACITOR</u> : 30 pF ±10%; 75 V; N750 JACK:
<b>J</b> 1	0905261 B01	Connector, RF SPEAKER, Dynamic:
LS1	5083466D02	2", 300-3500 Hz, res: 39 0 ±10%
MK1	5082162 <b>D</b> 01	MICROPHONE: Cartridge; res: 585a, imped: 1650 a @ 1 kHz
Pl	2805646F02	PLUG: Connector, 7-contact
R I	0600125A27	RESISTOR, Fixed: 120 n ±5%; 1/2 W
S1 S2	4084289H01 4082085J03	SWITCH: PTT, SPDT Toggle, SPDT
W 1	3005652F01	CABLE: Multi-Conductor

^{*} Not part of PSR Speaker-Microphone Kit, order separately

**END OF DOCUMENT** 

**EXTERNAL SPEAKER-MICROPHONES**