

instruction manual revision

GENERAL:

This revision outlines changes that have occurred since the printing of your instruction manual. Use this information to correct your manual.

INSTRUCTION MANUAL AFFECTED:

68P02948C90-O GTX/GTX LTR/LTS 2000™ Portable Radio Service Manual

REVISION DETAILS:

1) On the front inside cover, replace the safety information with the following safety information.

SAFE AND EFFICIENT OPERATION OF MOTOROLA TWO-WAY RADIOS

This section provides information and instructions for the safe and efficient operation of Motorola Portable two-way Radios. This information supersedes the general safety information contained in your user guide.

For information regarding radio use in a hazardous atmosphere please refer to the Factory Mutual (FM) Approval Manual Supplement or Instruction Card, which is included with radio models that offer this capability.

Exposure to Radio Frequency Energy

National and International Standards and Guidelines

Your Motorola two-way Radio, which generates and radiates radio frequency (RF) electromagnetic energy (EME) is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- Federal Communications Commission Report and Order No. FCC 96-326 (August 1996) •American National Standards Institute (C95-1-1992)

- National Council on Radiation Protection and Measurements (NCRP - 1986)

- International Commission on Non-Ionizing Radiation Protection (ICNRP - 1986)

- European Committee for Electrotechnical Standardization (CENELEC)

- Env. 50166 -1 1995E - Human Exposure to Electromagnetic Fields Low Frequency (0 Hz to 10kHz)

- Env. 50166 -2 1995E - Human Exposure to Electromagnetic Fields High Frequency (10kHz to 300Ghz)

- Proceedings of SC211/8 1996 - Safety Considerations for Human International Commission on Non-Ionizing Radiation Protection (ICNRP-1986) Exposure to E.M.Fs from Mobile Tele-communications Equipment (M.T.E.) in the Frequency Range 30MHz - 6GHz (E.M.F - Electromagnetic Fields)



IMR414



MOTOROLA

8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322-9934

June, 1998

- To assure optimal radio performance and that human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

- When transmitting with a portable radio, hold the radio in a vertical position with its microphone 1 to 2 inches (2.5 to 5.0 centimeters) away from your mouth. Keep antenna at least 1 inch (2.5 centimeters) from your head and body.
- If you wear a portable two-way radio on your body ensure that the antenna is at least 1 inch (2.5 centimeters) from your body when transmitting.

ElectroMagnetic Interference/Compatibility

NOTE: Nearly every electronic device is susceptible to electro-magnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

- To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.
- When instructed to do so, turn off your radio when on board an aircraft. Any use of a radio must be in accordance with airline regulations or crew instructions.

OPERATIONAL WARNING

For Vehicles with AirBags

Do not place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your two-way radio when you are in any area with a potentially explosive atmosphere, unless it is a radio type especially qualified for use in such areas (for example, Factory Mutual Approved). Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Batteries

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

NOTE:

The areas with potentially explosive atmospheres referred to above include fueling areas such as: below decks on boats; fuel or chemical transfer or storage facilities; areas where the air contains chemical or particles, such as grain, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Damaged Antennas

Do not use any portable two-way radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touch exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

2) Replace the model charts which appear on page v and vi with the following Model Charts:

GTX Portable Radio Model Chart

GTX Portable Radio, H11WCD4CB1AN

FUF1194A	900 MHz 1.5 ppm Portable Radio
HNN9628	Battery (7.5 rechargeable)
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1194A 900 MHz 1.5ppm Portable Radio

FLN2436A	Front Unit
FUF1196A	1.5ppm RF Unit
FLN8577A	Miscellaneous Parts

FLN2436A Front Housing

FHN5873A	Housing
FEN1656A	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8574A	Miscellaneous Parts

FEN1650A Logic Board & I/O Unit

FLN8836A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 2.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

GTx LTR Portable Radio Model Chart

GTx LTR Portable Radio, H11WCD4CU1AN

FUF1199B	900 MHz 1.5 ppm Portable Radio
HNN9628	Battery (7.5 rechargeable)
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1199B 900 MHz 1.5ppm Portable Radio

FLN2540A	Front Unit
FUF1196A	1.5ppm RF Unit
FLN8577A	Miscellaneous Parts

FLN2540A Front Housing

FHN5873A	Housing
FEN1662A	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8574A	Miscellaneous Parts

FEN1662A Logic Board & I/O Unit

FLN9952A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 2.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

Not all kits on this page will be available from the Americas Parts Division

LTS 2000 Portable Radio Model Chart

LTS 2000 Portable Radio, H10WCH4DC5AN

FUF1195A	900 MHz 1.5 ppm Portable Radio
HNN9628	Battery (7.5 rechargeable)
HLN8255	Belt Clip
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1195A 900 MHz 1.5ppm Portable Radio

FLN2437A	Front Unit
FUF1196A	1.5ppm RF Unit
FLN8665A	Miscellaneous Parts

FLN2437A Front Housing

FHN5874A	Housing
FEN1651A	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8576A	Miscellaneous Parts

FEN1651A Logic Board & I/O Unit

FLN8836A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 1.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

Not all kits on this page will be available from the Americas Parts Division

LTS 2000 (SmartNet Plus) Portable Radio Model Chart

LTS 2000 (SmartNet Plus) Portable Radio, H10WCH4DC5BN

FUF1195B	900 MHz 1.5 ppm Portable Radio
HNN9628	Battery (7.5 rechargeable)
HLN8255	Belt Clip
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1195B 900 MHz 1.5ppm Portable Radio

FLN2591A	Front Unit
FUF1196A	1.5ppm RF Unit
FLN9171A	Miscellaneous Parts

FLN2591A Front Housing

FHN6001A	Housing
FEN1664A	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8576A	Miscellaneous Parts

FEN1664A Logic Board & I/O Unit

FLN9054A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 1.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

Not all kits on this page will be available from the Americas Parts Division

NOTE: Items with suffix may be upgraded in the future

LTS 2000 (SmartZone) Portable Radio Model Chart

LTS 2000 (SmartZone) Portable Radio, H10WCH4DC5BN

FUF1495A	900 MHz 1.5 ppm Portable Radio
HNN9628	Battery (7.5 rechargeable)
HLN8255	Belt Clip
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1495A 900 MHz 1.5ppm Portable Radio

FLN2437B	Front Unit
FUF1196A	1.5ppm RF Unit
FLN8665B	Miscellaneous Parts

FLN2437B Front Housing

FHN5978A	Housing
FEN1651B	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8576A	Miscellaneous Parts

FEN1651B Logic Board & I/O Unit

FLN9054A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 1.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

Not all kits on this page will be available from the Americas Parts Division

NOTE: Items with suffix may be upgraded in the future

LTS 2000 (Tomba) Portable Radio Model Chart

LTS 2000 (Tomba) Portable Radio, H10WCH4DC5BN

FUF1496A	900 MHz 1.5 ppm Portable Radio for Tomba
HNN9628	Battery (7.5 rechargeable)
HLN8255	Belt Clip
NAF5038	900 MHz 1/2 Wavelength Whip

KIT BREAKDOWN

FUF1496A 900 MHz 1.5ppm Portable Radio for Tomba

FLN2607A	Front Unit
FUF1196A	1.5ppm RF Unit
FLN8665B	Miscellaneous Parts

FLN2607A Front Housing

FHN5978A	Housing
FEN1668A	Logic Board & I/O Unit
FSN5509A	Speaker & Microphone Assembly
FLN8576A	Miscellaneous Parts

FEN1668A Logic Board & I/O Unit

FLN9054A	Logic Board
FLN8515A	I/O Hardware

FUF1196A 1.5 ppm RF Unit

FUF5690A	1.5 ppm RF Unit
FLN2394A	Chassis Assembly
FLN8575A	Shields & Parts

FLN2394A Chassis Assembly

FLN8517A	Battery Filter Board
FLN8518A	Chassis Hardware

Not all kits on this page will be available from the Americas Parts Division

NOTE: Items with suffix may be upgraded in the future

3) On page viii under “Chargers Pick-ups” change the part number of HTN9630 to HTN9042.

4) On page viii under “Antenna Pick-ups” change the part number of NAF5039 to NAF5038.

5) On page viii under “Audio/RF Accessories” change the part number of HMN9725 to HMN9030.

6) On page ix under Documentation Kits add:

68P02945C85-B LTS 2000 Portable Radio User’s Guide

7) On page ix under Radio Service Software (RSS) change:

RVN4150B to RVN4150D and

RVN4156B to RVN4156F

8) On page xi under Service Aids:

Delete RLN4460 including the description and application

9) On page xviii change the address of the Motorola

From 3651 South Central Avenue to 3761 South Central Avenue

10) Section 3: Accessories change the following:

On page 3-1 under “Description” change the Model number of the Remote Speaker Microphone to HMN9030

On page 3-2 under “Electrical Parts List” change HMN9725 to HMN9030 and replace the complete electrical part list with the following:

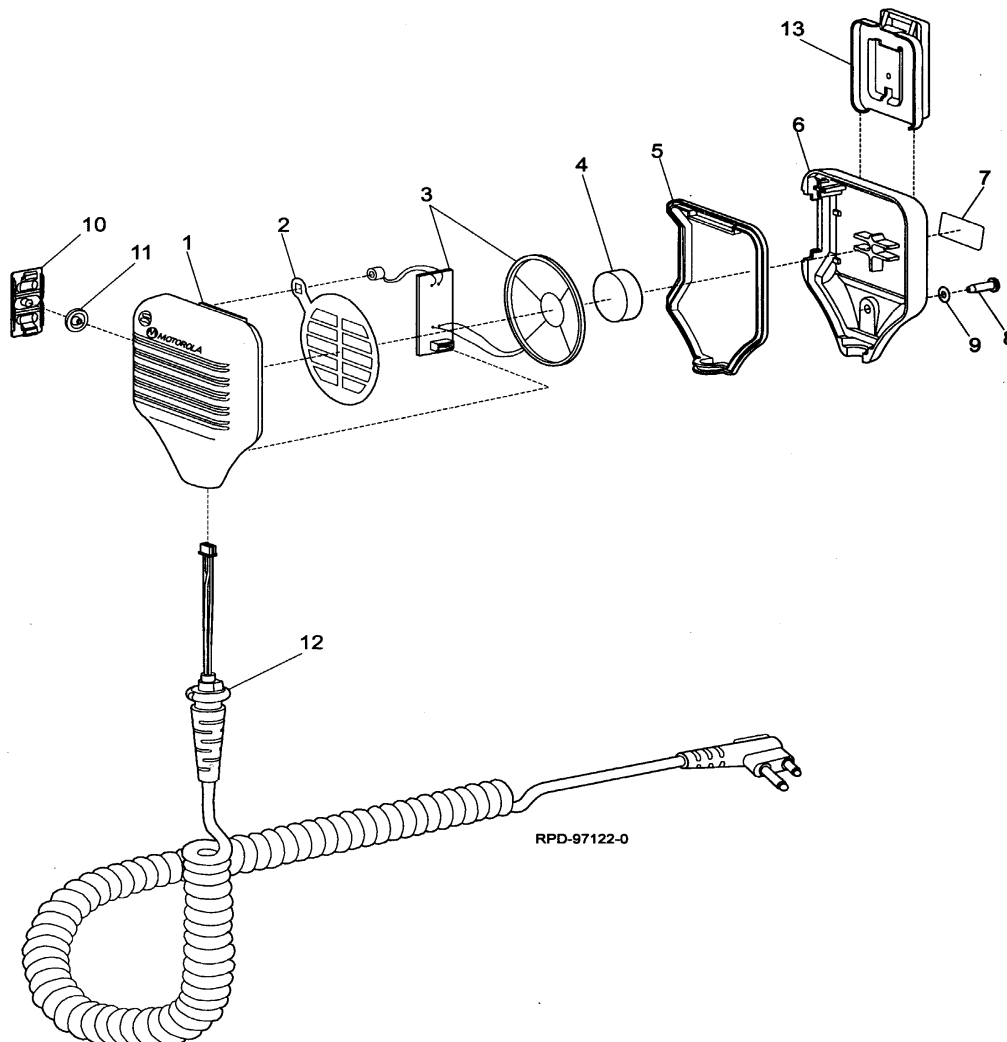
HMN9030 Electrical Parts List

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
capacitor, fixed:		
C1	2113740A53	82 pF, ±30%, 50V
C2	2113740A67	330 pF, ±30%, 50 V
C3	2113741A53	.022 uF, ±5%, 50V
C4	2113741B69	0.1 uF, ±5%, 50V
coil, inductor:		
L1 thru 4	2462575A02	680 nH, ±10%
header:		
	0909897T02	4-pin
switch:		
S1	3905834K06	Dome, PTT
miscellaneous:		
MK1	0180706Y83	Microphone assembly
LS1	5005910P05	Speaker

On page 3-3 change the mechanical parts list and Figure 3-3, exploded view with the following:

HMN9030 Mechanical Parts List

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
1	1580617U01	HOUSING, front
2	3580619U01	BAFFLE, felt
3	0180709Y90	ASSY, microphone, speaker, & PCB
4	7580418D04	BUSHING, retainer
5	3280621U01	GASKET
6	1580618U01	HOUSING, rear
7	5480622U01	LABEL
8	0310945A12	SCREW, thread forming
9	0484345A06	WASHER
10	3880620U01	PTT, pushbutton
11	3805248Q01	ACTUATOR, PTT
12	3080417E21	CORD
13	4205823V01	CLIP, slide-on



11) Section 6: Maintenance:

Page 6-2 after “Rigid Circuit Boards” add the following:

RF Board (Main Board) Replacement Procedures

- 1) Disassemble the radio as given in Section 1: Radio Disassembly/Assembly - Main Board Removal.
- 2) Replace the old RF Board with the new one.
- 3) Reassemble the RF Board as given in Section 1: Radio Disassembly/Assembly - Chassis Reassembly.
- 4) Reassemble the radio as given in Section 1: Radio Disassembly/Assembly - Radio Reassembly.
- 5) Turn the radio ON.
- 6) Tune the radio as given in section 7: Radio Tuning Procedure.

Logic Board and I/O Unit (Front Housing Board) Replacement Procedures

- 1) Disassemble the radio as given in Section 1: Radio Disassembly/Assembly - Front Housing Board Removal.
- 2) Replace the old Logic Board and I/O Unit with the new one.
- 3) Reassemble the Front Housing as given in Section 1: Radio Disassembly/Assembly - Front Housing Reassembly.
- 4) Reassemble the radio as given in Section 1: Radio Disassembly/Assembly - Radio Reassembly.
- 5) Turn the radio ON.

Note: The radio will display “ERROR 06” with an illegal continuous tone.

- 6) Carry out the “Blank Board Initialization” Procedure as given in the LCS/LTS 2000 Radios RSS User’s Guide (page 24)

or in the GTX/LTR Radios RSS User’s Guide (page 24).

- 7) Make the calibrations according to the “Logic or RF Board Replacement” Procedure as given in the RSS User’s Guide mentioned in item 6.

12) Section 7: Radio Tuning Procedure:

On page 7-3, after the ‘Squelch Description’ add the following RSSI (Received Signal Strength Indicator) tuning procedure for the SmartZone and Tomba Models:

1. Press F2 to select LOGIC OR RF BOARD.
2. Press F8 to select SQUELCH/RSSI.
3. Press F10 to select RSSI.
4. Set Signal Generator to 941.5 MHz.
5. Set RF level to -106dBm.
6. Press F4 to read the RSSI digital value displayed on the top right side of the screen.
7. Type this value in the appropriate place on the screen.

8. Repeat steps 6 to 7 with RF levels of -90dBm and -74dBm.

9. Press F8 to program the values.

13) Section 7: Radio Tuning Procedure: under “Transmitter Deviation Limit”

Change the part number of the Test Box from 4460A to Test Box RTX4005.

14) Schematic Diagrams, Circuit Board Details & Parts List Section change the following:

On page 7 and 8 under “**FUF5690A RF Board**” change the part number of the following components:

C225 from 2311049J12 to 2311049J11

C563 from 2113741A33 to 2113741A25 and the description from 3.3.nF to 1500 μ F

C564 from 2113741A33 to 2113741A25 and the description from 3.3.nF to 1500 μ F

J5 from 0180159R03 to 0180195R03

U101 from 5108038H16 to 5105385Y13

U220 from 5105457W46 to 5105457W80

U420 from 5113816A23 to 5113816A29

PB1 -PB3 from 4080485C05 to PB401-PB403 4080447U05

On page 9 under “**FLN8517A Battery Filter Board**” change the part number of F1 from 6580561D01 to 6580561D02

On page 10 under “**FLN8836A Logic Board**” change the part number of the following components:

U705 from 5105662U54 to 5108444S61

U706 from 5108444S41 to 5108444S67.

On page 10 after “**FLN8836A Logic Board**” parts list, add:

FLN9054A Logic Board

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
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All parts listed for FLN9054A are identical to those listed for FLN8836A except for the following change:

integrated circuits: (see note 1)

U703	5108444S71	X253320
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FLN9952A Logic Board

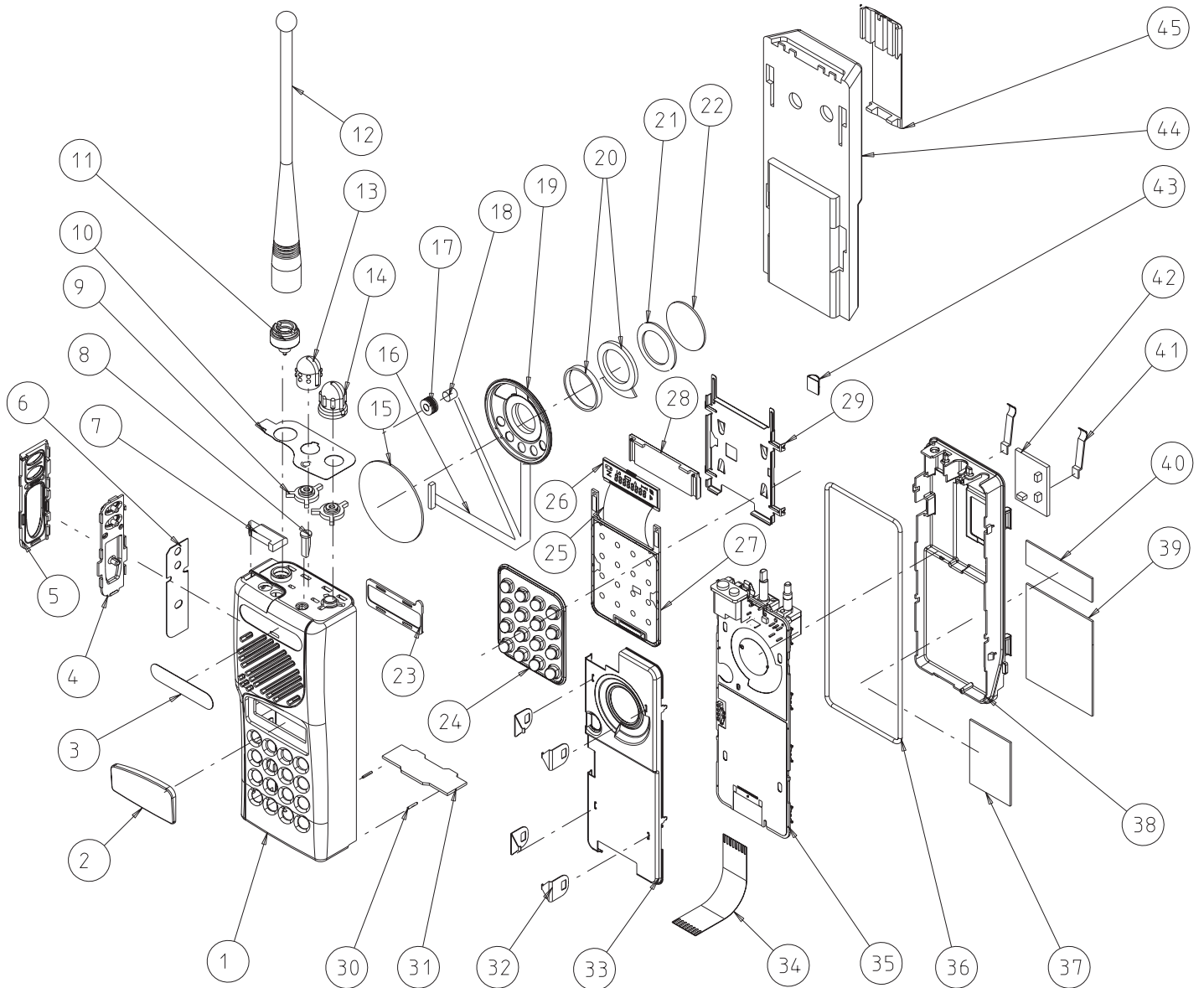
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
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All parts listed for FLN9952A are identical to those listed for FLN8836A except for the following change:

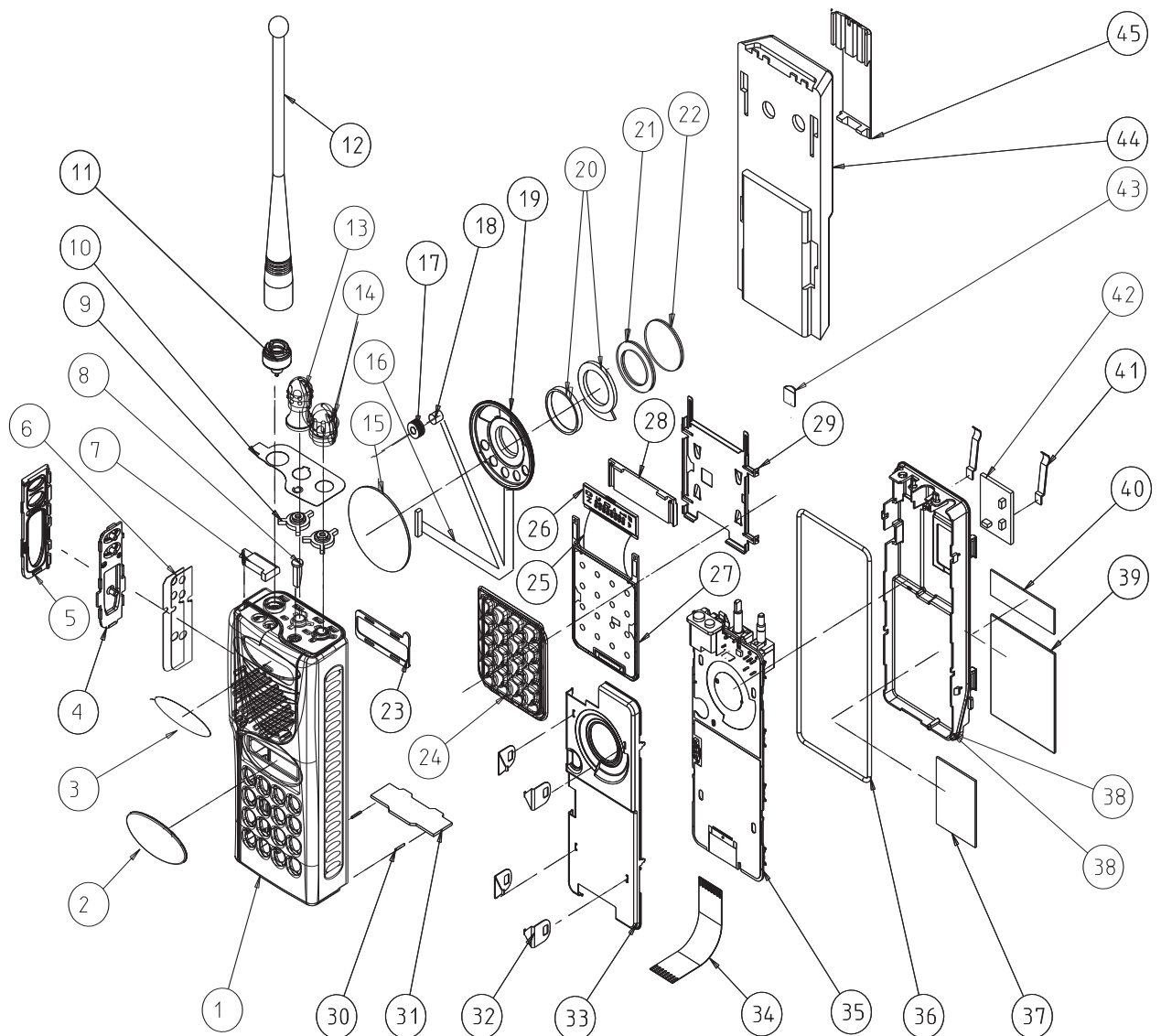
integrated circuits: (see note 1)

C716	2113743F12	0.33 pF
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On page 13 replace the GTX/GTX LTR Radio Exploded View with the Exploded View given below:



On page 15 replace the LTS 2000 Radio Exploded View with the exploded view given below:



On page 12 replace the GTX/GTX LTR Mechanical Parts list with the parts list given below:

On page 14 replace the LTS 2000 Mechanical Parts list with the parts list given below:

GTX/GTX LTR Mechanical Parts List

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
1	1580421K01	front housing
2	lens	cannot be ordered separately
3	3380425K01	name plate
4	7580437C01	PTT keypad
5	1380159S01	PTT bezel
6	3286074C01	PTT chim
7	3880428C01	dust cap
8	6180968Y01	light pipe
9	3280960Y01	seal, 2 used
10	1386080C01	escutcheon
11	5880636V01	antenna adapter
12	8505241U04	antenna whip
13	3680448K01	frequency knob
14	3680447K01	volume knob
15	3580998Z04	speaker felt
16	3080560D01	speaker/mic cable
17	1480577C01	microphone boot
18	5013920A03	microphone
19	5005589U05	speaker
20	7580506C02	speaker pad
21	3286062C01	speaker chim
22	3980546B02	front-shield ground contact
23	7580685K01	pad
24	7580427K01	keypad
25*	8408050Y01	heat-sealed flexible cable
26*	7204616J01	LCD
27	FLN8836A	logic board, assembled (used in FUF1194A)
	FLN9952A	logic board, assembled (used in FUF1199B)
28	6180687K01	reflector
29	2680402K01	logic board shield
30	4105944K01	battery latch spring, 2 used
31	5580438B01	latch
32	4280190R04	shield clip, 4 used
33	2680532C01	front shield
34	8408051Y01	RF-to-Logic flexible circuit
35	FUF5690A	RF board, assembled
36	3286063C01	O-ring gasket
37	1480610B01	chassis insulator
38	2780549B01	chassis
39	3286213C01	handie talkie label
40	5480673K02	FCC label
41	3980188R01	contact, B+/B-
42	FLN8517A	battery filter board, assembled
43	3202386L03	shield RFI
44	HNN9628	battery
45	HLN9724/ HLN8255	standard belt clip

* Not field repairable

LTS 2000 Mechanical Parts List

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
1	1580422K02	front housing
2	-----LENS	cannot be ordered separately
3	3380455K01	name plate
4	7580430K01	PTT keypad
5	1380431K01	PTT bezel
6	3286074C01	PTT chim
7	3880428C01	dust cap
8	6180968Y01	light pipe
9	3280960Y01	seal, 2 used
10	1380463K01	escutcheon (8 positions) (used in FUF1195A & FUF1195B)
	1380463K02	escutcheon (16 positions) (used in FUF1495A & FUF1496A)
11	5880636V01	antenna adapter
12	8505241U04	antenna whip
13	3680433K01	frequency knob (8 positions) (used in FUF1195A & FUF1195B)
	3680433K02	frequency knob (16 positions) (used in FUF1495A & FUF1496A)
14	3680432K01	volume knob
15	3580998Z04	speaker felt
16	3080560D01	speaker/mic cable
17	1480577C01	microphone boot
18	5013920A03	microphone
19	5005589U05	speaker
20	7580506C02	speaker pad
21	3286062C01	speaker chim
22	3980546B02	front-shield ground contact
23	7580685K01	pad
24	7580428K02	keypad
25*	8408050Y01	heat-sealed flexible cable
26*	7204616J01	LCD
27	FLN8836A	logic board, assembled (used in FUF1195A)
	FLN9054A	logic board, assembled (used in FUF1195B, FUF1495A & FUF1496A)
28	6180687K01	reflector
29	2680402K01	logic board shield
30	4105944K01	battery latch spring, 2 used
31	5580438B01	latch
32	4280190R04	shield clip, 4 used
33	2680532C01	front shield
34	8408051Y01	RF-to-logic flexible circuit
35	FUF5690A	RF board, assembled
36	3286063C01	O-ring gasket
37	1480610B01	chassis insulator
38	2780549B01	chassis
39	3286213C01	handie talkie label
40	5480673K02	FCC label
41	3986132F01	contact, B+/B-
42	FLN8517A	battery filter board
43	3202386L03	shield RFI
44	HNN9628	battery
45	HLN9724/ HLN8255	standard belt clip

* Not field repairable

Replace the Miscellaneous Parts List located on page 16 and 17, with the following:

miscellaneous parts lists

FHN5873A Housing (GTX/GTX LTR)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1380159S01	PTT bezel
1	1386080C01	escutcheon
1	1580421K01	housing
2	3280960Y01	seal
1	3286074C01	PTT chim
1	3380425K01	logo
1	3580998Z04	speaker felt
1	3880428C01	dust cap
2	4105944K01	battery latch spring
1	5580438B01	latch
1	5880376L01	adapter antenna
1	6180968Y01	light pipe led
1	7580437C01	PTT keypad

FHN5874A Housing (LTS 2000)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1380431K01	PTT bezel
1	1380463K01	top esc
1	1580422K02	housing
1	3280960Y01	seal
1	3286074C01	PTT chim
1	3380455K01	logo
1	3580998Z04	speaker felt
1	3880428C01	dust cap
2	4105944K01	battery latch spring
1	5580438B01	latch
1	5880376L01	adapter antenna
1	6180968Y01	light pipe led
1	7580430K01	PTT keypad

FHN5978A Housing (LTS 2000 Full SmartZone and Tomba)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1380431K01	PTT bezel
1	1380463K02	top escutcheon 16 pos.
1	1580422K02	housing, front hsng
2	3280960Y01	seal vol
1	3286074C01	PTT chim
1	3380455K01	logo
1	3580998Z04	speaker felt
1	3880428C01	dust cap
2	4105944K01	battery latch spring
1	5580438B01	latch
1	5880376L01	adapter antenna
1	6180968Y01	light pipe led
1	7580430K01	PTT keypad

FHN6001A Housing (LTS 2000 SmartNet Plus)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1380431K01	PTT bezel
1	1380463K01	top escutcheon16 pos.
1	1580422K02	HOUSING, front hsng
2	3280960Y01	seal vol
1	3286074C01	PTT chim
1	3380455K01	logo
1	3580998Z04	speaker felt
1	3880428C01	dust cap
2	4105944K01	battery latch spring
1	5580438B01	latch
1	5880376L01	adapter antenna
1	6180968Y01	light pipe led
1	7580430K01	PTT keypad

FLN8515A I/O Hardware

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	7204616J01	lcd display
1	8408050Y01	flexible circuit

J01FLN8518A Chassis Hardware

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1480610B01	insulator, chassis
1	2780549B01	chassis
1	3286213C01	label
2	3986132f01	contact, B+/B-

miscellaneous parts lists (cont.)

FLN8574A Housing Miscellaneous Parts (GTX/GTX LTR)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	2680402K01	logic board shield
0.2	3202386L03	RFI shield
1	6180687K01	LCD light reflector
1	7580427K01	main keypad
1	7580685K01	pad

FLN8576A Housing Miscellaneous Parts (LTS 2000)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	2680402K01	logic board shield
0.2	3202386L03	RFI shield
1	6180687K01	LCD light reflector
1	7580428K02	main keypad
1	7580685K01	pad

FLN8575A Shield & Parts

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	2680532C01	front shield
4	4280190R04	shield clip

FLN8577A Miscellaneous Parts (GTX/GTX LTR)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	3286063C01	O-ring, gasket
1	3380184R01	FCC label
1	3680447K01	volume knob
1	3680448K01	frequency knob
1	8408051Y01	rf-to-logic flexible circuit

FLN8665A Miscellaneous Parts (LTS 2000)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	3286063C01	O-ring, gasket
1	3380184R01	FCC label
1	3680432K01	volume knob
1	3680433K01	frequency knob
1	8408051Y01	rf-to-logic flexible circuit

FLN9171A Miscellaneous Parts (LTS 2000 SmartNet Plus)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	3286063C01	O-ring gasket
1	3380184R01	FCC label
1	3680432K01	volume knob
1	3680433K01	frequency knob
1	8408051Y01	rf-to-logic flexible circuit

FLN8665B Misc.Parts (LTS 2000 Full SmartZone and Tomba)

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	3286063C01	O-ring gasket
1	3380184R01	FCC label
1	3680432K01	volume knob
1	3680433K02	frequency knob 16 pos.
1	8408051Y01	rf-to-logic flexible circuit

F5N5509A Speaker & Microphone Assembly

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced items:	
1	1480577C01	microphone boot
1	2113740F41	chip capacitor, 39 μ F \pm 5% 50V
1	3080560D01	speaker mic cable
1	3286062C01	speaker chim
1	3980546B01	front shield ground contact
1	5005589U05	speaker
1	5013920A03	microphone
1	7580506C02	speaker pad

NAF5038A Antenna

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
Qty	non-referenced item:	
1	8505241U04	whip antenna, 900 MHz