





Foreword

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Document History

The following major changes have been implemented in this manual since the previous edition:

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Commercial Warranty

Limited Warranty

MOTOROLA COMMUNICATION PRODUCTS

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x Commercial Warranty

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- C. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
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- F. Product which has had the serial number removed or made illegible.
- G. Rechargeable batteries if:
 - any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
 - the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- H. Freight costs to the repair depot.
- A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- J. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- K. Normal and customary wear and tear.

Commercial Warranty xi

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- B. that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- C. should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes noninfringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

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VII. Governing Law

This Warranty is governed by the laws of the State of Illinois, USA.

Battery and Charger Warranty

Workmanship Warranty

The workmanship warranty guarantees against defects in workmanship under normal use and service.

Lithium-Ion (Li-Ion) Batteries	One (1) Years
Chargers	Two (2) Years

Capacity Warranty

The capacity warranty guarantees 80% of the rated capacity for the warranty duration.

Lithium-Ion (Li-Ion) Batteries	12 Months
--------------------------------	-----------

Chapter 1 Introduction

1.1 Notations Used in This Manual

Throughout the text in this publication, you will notice the use of note and caution notations. These notations are used to emphasize that safety hazards exist, and due care must be taken and observed.

NOTE An operational procedure, practice, or condition that is essential to emphasize.



CAUTION indicates a potentially hazardous situation which, if not avoided, might result in equipment damage.



WARNING indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in death or injury.

1.2 Pager Description

The Motorola MINITOR VI pager is an easy-to-use, compact alert monitor, powered by rechargeable Li-ion and/ or Alkaline batteries (for non-Intrinsically Safe models only). The pager can operate on selected UHF and VHF frequencies.

The MINITOR VI pager uses the most advanced self-contained, sealed, and custom-integrated circuits to perform the complex functions involved in radio paging. The pager is housed in a high-impact resistant case that offers excellent protection against dust intrusion, vibration, and shock. Lightweight and small in size, the unit can be carried comfortably in a pocket or purse, or clipped onto a belt.

The pager offers the following models:

- Single Channel Stored Voice (Intrinsically Safe (IS))
- Five Channel Stored Voice (IS)
- · Single Channel Stored Voice (non-Intrinsically Safe (non-IS))
- Five Channel Stored Voice (non-IS)

The MINITOR VI pager is available in various frequency ranges. See "Summary of Bands Available" on page 1-3 for Radio Frequency Ranges.

1.2.1 MINITOR VI

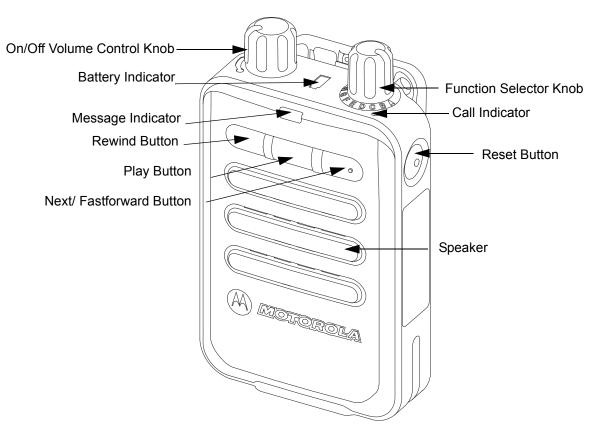


Figure 1-1. MINITOR VI

- ON/ OFF/ VOLUME Control Knob Rotate clockwise until click is heard to turn on pager; rotate counter-clockwise until click is heard to turn off pager. Rotate clockwise to increase volume level; rotate counter-clockwise to decrease volume level.
- LED INDICATORS Red (Message Indicator) and yellow (Call Indicator) light-emitting diodes indicate operating status.
- BATTERY INDICATOR Red, green and yellow light-emitting diodes indicate status of battery.
 - Solid Green indicates battery level is high.
 - Solid Yellow indicates battery level is medium.
 - Solid Red indicates battery level is low.
 - Blinking Red indicates battery level is critically low.
- RESET BUTTON TURN OFF audio, alert, battery status indicators.
- FUNCTION SELECTOR KNOB Rotate clockwise and counter clockwise to select preprogram function modes.
- PLAY BUTTON Play message stored in memory.
- NEXT/ FASTFORWARD BUTTON Skip to next message or fastforward current message.
- REWIND BUTTON Skip to previous message or rewind current message.
- SPEAKER Outputs all tones and audio generated by the pager.

1.3 Summary of Bands Available

Table below lists all the bands available in this manual. For details, please refer to the Model Charts section.

Frequency Band	Bandwidth
VHF	143–174 MHz
UHF	406–430, 450–486, 476–512 MHz

1.4 Model Charts

1.4.1 VHF Tanapa Chart

Model Number	Tanapa	Description
A03JAC8JA2AN	RLD1047_	143-174 MHZ SGL CH NON-IS MINITOR VI PAGER
A03JAC8JA1AN	RLD1048_	143-174 MHZ SGL CH IS MINITOR VI PAGER
A03JAC9JA2AN	RLD1049_	143-174 MHZ FIVE CH NON-IS MINITOR VI PAGER
A03JAC9JA1AN	RLD1050_	143-174 MHZ FIVE CH IS MINITOR VI PAGER

1-4 Introduction: Model Charts

1.4.2 UHF Tanapa Chart

Model Number	Tanapa	Description
A04QAC8JA2AN	RLE1125_	406–430 MHZ SGL CH NON-IS MINITOR VI PAGER
A04QAC8JA1AN	RLE1124_	406–430 MHZ SGL CH IS MINITOR VI PAGER
A04QAC9JA2AN	RLE1123_	406–430 MHZ FIVE CH NON-IS MINITOR VI PAGER
A04QAC9JA1AN	RLE1122_	406–430 MHZ FIVE CH IS MINITOR VI PAGER
A04RAC8JA2AN	RLE1121_	450-486 MHZ SGL CH NON-IS MINITOR VI PAGER
A04RAC8JA1AN	RLE1120_	450-486 MHZ SGL CH IS MINITOR VI PAGER
A04RAC9JA2AN	RLE1119_	450-486 MHZ FIVE CH NON-IS MINITOR VI PAGER
A04RAC9JA1AN	RLE1118_	450-486 MHZ FIVE CH IS MINITOR VI PAGER
A04SAC8JA2AN	RLE1117_	476–512 MHZ SGL CH NON-IS MINITOR VI PAGER
A04SAC8JA1AN	RLE1116_	476–512 MHZ SGL CH IS MINITOR VI PAGER
A04SAC9JA2AN	RLE1115_	476–512 MHZ FIVE CH NON-IS MINITOR VI PAGER
A04SAC9JA1AN	RLE1114_	476–512 MHZ FIVE CH IS MINITOR VI PAGER

1-5

1.5 Specifications

1.5.1 VHF

	Specification	Remarks
Model Series 1 Channel 5 Channel	A03JAC8JA2AN, A03JAC8JA1AN A03JAC9JA2AN, A03JAC9JA1AN	
Frequency	143.0 – 174.0 MHz	
Channel Spacing	12.5 kHz/ 25 kHz per frequency	Programmable feature
Max. Freq. Separation	31 MHz	
Sensitivity Alerting (On body ¹)		
*On Body (typ)	3.5 μV/m @ 25kHz	
*On Body (typ)	4.5 μV/m @ 12.5kHz	
*On Body (max)	4.5 μV/m @ 25kHz	
*On Body (max)	5.5 μV/m @ 12.5kHz	
Free Field	10.0 μV/m	
8-position avg.	$<13.0 \mu V/m$ (on body)	
Selectivity	>65 dB	TIA603-D
Spurious & Image	>70 dB	TIA603-D
Intermodulation	>65 dB	TIA603-D
Spurious Emissions (all bands)		
Conducted	>55 dB	TIA603-D
Radiated	>55 dB	TIA603-D
Co-channel rejection	> - 8 dB	
First Oscillator Stability	+ / - 10 ppm	
High level blocking	>84 dB	ETSI
	>90 dB	Motorola Procedure
Audio SPL @ 12"		
Alert Tone	96 dB	Anechoic chamber
Voice average	94 dB	Anechoic chamber
Audio Distortion: Real Time Audio		
Electrical	< 4%	TIA603-D

Acoustic	< 5%	Anechoic chamber
Audio Distortion: Stored-Voice Playback		
Electrical	< 6%	TIA603-D
Acoustic	< 7%	Anechoic chamber
Battery Life ²		
Rechargeable	>80 hours	
Alkaline	>24 hours	
Battery Type	Li - Ion and Alkaline Package ³	
Weight (With Batterys)	6.2 oz. (176 g)	
Dimensions	4.15" x 2.4" x 1.45"	

NOTE:

- 1. On Body equivalent at waist line.
- 2. Battery life is based on the receipt of five 30 second calls per 8-hour day. Pager is set at rated audio and scan is disabled.
- 3. Battery Package model number:

IS Li-ion Battery : PMNN4438_, Non-IS Li-ion Battery : PMNN4451_, Alkaline Battery Tray : RLN6526_

All Specifications are subject to change without notice.

1.5.2 UHF

		Specification	Remarks
	1 Channel 5 Channel	A04QAC8JA2AN, A04QAC8JA1AN A04QAC9JA2AN, A04QAC9JA1AN	
	1 Channel 5 Channel	A04RAC8JA2AN, A04RAC8JA1AN A04RAC9JA2AN, A04RAC9JA1AN	
	1 Channel 5 Channel	A04SAC8JA2AN, A04SAC8JA1AN A04SAC9JA2AN, A04SAC9JA1AN	
Frequency	UHF1 UHF2 UHF3	406.0 – 430.0 MHz 450.0 – 486.0 MHz 476.0 – 512.0 MHz	
Channel Spacing		12.5 kHz/ 25 kHz per frequency	Programmable feature
Max. Freq. Separation	UHF1 UHF2 UHF3	24 MHz 36 MHz 36 MHz	
Sensitivity Alerting (On body ¹)			
*On l	Body (typ)	3.0 μV/m @ 25kHz	
*On Body (typ)		4.0 μV/m @ 12.5kHz	
*On Body (max)		4.0 μV/m @ 25kHz	
*On B	ody (max)	5.0 μV/m @ 12.5kHz	
	Free Field	12.0 μV/m	
8-po	sition avg.	$<14.0 \mu V/m$ (on body)	
Selectivity		>65 dB	TIA603-D
Spurious & Image		>70 dB	TIA603-D
Intermodulation		>65 dB	TIA603-D
Spurious Emissions (all ban	ds)		
Conducted		>55 dB	TIA603-D
	Radiated	>55 dB	TIA603-D
Co-channe	el rejection	> - 8 dB	
First Oscillator Stability		+ / - 5 ppm	
High level blocking		>84 dB	ETSI
		>90 dB	Motorola Procedure

Audio SPL @ 12"		
Alert Tone	96 dB	Anechoic chamber
Voice average	94 dB	Anechoic chamber
Audio Distortion: Real Time Audio		
Electrical	< 4%	TIA603-D
Acoustic	< 5%	Anechoic chamber
Audio Distortion: Stored-Voice Playback		
Electrical	< 6%	TIA603-D
Acoustic	< 7%	Anechoic chamber
Battery Life ²		
Rechargeable	>80 hours	
Alkaline	>24 hours	
Battery Type	Li - Ion and Alkaline Package ³	
Weight (With Batterys)	6.2 oz. (176 g)	
Dimensions	4.15" x 2.4" x 1.45"	

NOTE:

- 1. On Body equivalent at waist line.
- 2. Battery life is based on the receipt of five 30 second calls per 8-hour day. Pager is set at rated audio and scan is disabled.
- 3. Battery Package model number:

IS Li-ion Battery: PMNN4438_, Non-IS Li-ion Battery: PMNN4451_, Alkaline Battery Tray: RLN6526_

All Specifications are subject to change without notice.

Chapter 2 Test Equipment and Service Aids

2.1 Recommended Test Equipment

The list of equipment contained in Table 2-1 includes most of the standard test equipment required for servicing MINITOR VI. Use equivalent whenever possible.

Table 2-1. Recommended Test Equipment

Equipment	Example	Application
RF Communications Test Set	HP8920 or equivalent	Tone Sensitivity test

2.2 Service Aids

Table 2-2 lists the service aids recommended for working on the pager. While all of these items are available from Motorola, most are standard workshop equipment items, and any equivalent item capable of the same performance may be substituted for the item listed.

Table 2-2. Service Aids

Motorola Part No.	Description	Application
TC-5062_ from TESCOM Co. Ltd	TEM CELL	Provide RF isolation for Tone sensitivity test
6686119B01	Pry Opener	Separate Back Housing Assembly from Front Housing Assembly.
PMDN4038_R	Knob Opener	Remove knobs.
PMDN4039_R	Crab Eye Nut Opener	Remove the nuts from the Volume and Channel switch.

Chapter 3 Receive Performance Check

3.1 General

The pagers meet published specifications through their manufacturing process by utilizing high-accuracy laboratory-quality test equipment. The recommended field service equipment approaches the accuracy of the manufacturing equipment with few exceptions. This accuracy must be maintained in compliance with the manufacturer's recommended calibration schedule.

3.2 Tone Sensitivity

- 1. Connect the TEM cell and HP8920 or equivalent equipment as shown in Figure 3-1. below.
- 2. Put the pager into a TEM Cell, set up the function switch to test frequency.
- 3. Set up the amplitude of the signal generator according to a known signal.
- 4. In this state, the HP8920 (or equivalent equipment) should be set up as follows.
 - a. QC2 signal should be sent to the pager by clicking "Send", and make sure that the Alert tone is OK.
 - b. Repeat step 4a., lowering the amplitude each time until 4 out of 5 Alerts are received.

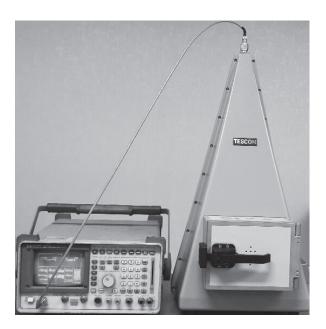


Figure 3-1. Tone Sense Check Setup

NOTE: Tone Sensitivity results may vary based on pager position and orientation in TEM cell.

3.2.1 HP8920 Encoder

Set HP8920 Encoder as below:

• SIGNALING ENCODER (AF GENERATOR 2)

• Symbol Sequence:12

Symbol

Definition

Table 3-1. Initial Equipment Control Settings

Seq. Num.	ON Time (ms)	OFF Time (ms)	Sym	Freq. (Hz)	Amptd (%)
1	1000	0.0	0	0.0	100.0
2	3000	0.0	1	288.5	100.0
3	33.0	0.0	2	2468.2	100.0

NOTE: Symbol sequence: sequence of two tones of QC2.

On Time: transmission time of tone

Freq: Tone frequency.

Above setting means that HP8920 transmits 288.5 Hz for 1 second and 2468.2 Hz for 3 seconds in a row.

3.2.2 HP8920 RX Test Window

Go to HP8920 RX test window:

RX TEST

RF Gen Freq.	476.025 MHz
AFGen1 Freq.	1.000 kHz
AFGen2 Freq.	Send: Stop: Hz
Filter 1	50Hz HPF
Amplitude	-107 dBm
AFGen1 To FM	Off kHz
AFGen2 To FM	1.5 kHz
Filter 2	15 kHz LPF
Atten Hold	ON/ <u>OFF</u>
Ext Load R	8.00 Ω
Output Port	RF Out/ Dupl

- 1. Set RF Gen Freq as pager RX frequency.
- 2. Set AF Gen2 TO 1.5 kHz for 12.5 kHz Channel Spacing, 3 kHz for 25 kHz Channel Spacing.
- 3. Push 'Send' in AFGen2 Freq to send QC2 tones to pager.
- 4. If pager decoded QC2 signal, it will sound an Alert tone.

3.2.3 Tone Sensitivity Specification

Tone sensitivity is dependent on various test conditions such as path losses, orientation of the unit, type of source antenna, test equipment etc. A user may compare measurements to a known good unit. +-2 dB variation in Tone sensitivity measurement is expected from unit to unit measured.

3.3 Test Mode

- 1. Rotate the Function Switch to position D.
- 2. Press and hold the Reset Button while powering on the unit.
- 3. An audible alert and red LED will indicate that you have entered to the I/O Test Mode. Release the Reset Button.
- 4. Press the Reset Button, the red LED turns off and the amber LED turns on.
- 5. Press the Reset Button, the amber LED turns off and the Battery Indicator LED turns on red.
- 6. Press the Reset Button, the Battery Indicator LED turns green.
- 7. Press the Reset Button, all LEDs turn on, the Battery Indicator LED is amber.
- 8. Press the Reset Button, all LEDs turn off and unit enters Pulsed Vibrate Mode.
- 9. Press the Reset Button, the unit enters Constant Vibrate Mode.
- 10. Press the Reset Button, a high pitched tone is heard.
- 11. Press the Reset Button, a louder high pitched tone is heard.
- 12. Press the Reset Button, a high pitch tone is heard and unit enters Constant Vibrate Mode.
- 13. Press the Reset Button, the unit enters Open Squelch Mode.
- 14. To exit Test Mode, power off the unit.

Chapter 4 Disassembly/Reassembly Procedures



Only Motorola Service Centers or Authorized Motorola Service Dealers can perform this function.

4.1 Disassembling and Reassembling the Pager – General

When disassembling and reassembling the pager, it is important to pay particular attention to the snaps and tabs, and how parts align with each other.

The following tools are required for disassembling the radio:

- TORX[™] T6 and screwdriver
- Pry Opener (6686119B01)
- Crab Eye Nut Tool (PMDN4039 R)
- Knob Remover (PMDN4038_R)

The following item and tools are required for reassembling the radio:

Screw fastener: 3 bond (TB1401B)



Only use TB1401B (Manufacturer; Threebond) paint. Do not to use other lock paint as they might harm the PC resin of the pager.

- Crab Eye Nut Opener (PMDN4039 R)
- Grease (1180369B40)
- TORX[™] T6 and screwdriver

If a unit requires further testing or service than is customarily performed at the basic level, please send the radio to a Motorola Service Center listed in Appendix A.

4.2 Maintenance

The procedures in this section provide instructions for the disassembly of the MINITOR VI pager.

This product contains static-sensitive devices. Use anti-static handling procedures to prevent electrostatic discharge and component damage.

4.3 Pager Disassembly - Detailed

4.3.1 Removing Back Cover



Once the front housing and back cover are disassembled, the IS Intrinsic Safety Rating is voided. **Any warranty or repair work must be done by a IS approved repair facility**. The unit must be resealed during reassembly in order for the unit to maintain the IS Intrinsic Safety Rating for Hazardous Locations.

4.3.1.1 Removing Belt Clip

- 1. Press the belt clip tab away from the back housing.
- 2. Gently pull the belt clip out.

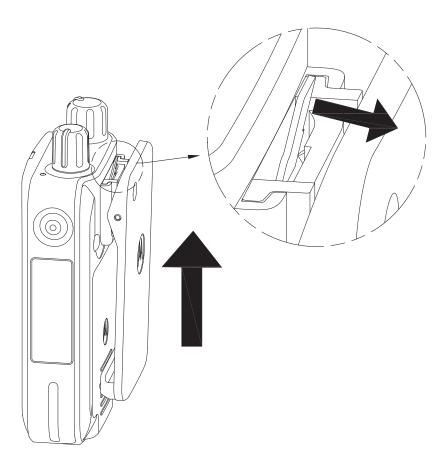


Figure 4-1. Removing Belt Clip.

4.3.1.2 Removing Back Housing

- **1.** Turn the pager off.
- 2. Unlock the battery latch.

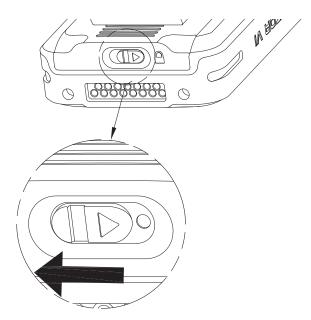


Figure 4-2. Unlocking Battery Latch

3. Remove the battery pack.

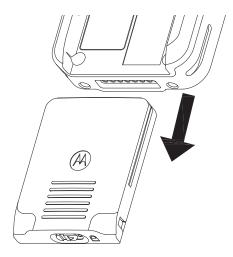


Figure 4-3. Removing Battery

- **4.** Remove the four protective rubber caps (32,33,34) from the Back Housing.
- **5.** Remove the four screws (31) with a TORX[™] T6 screwdriver.

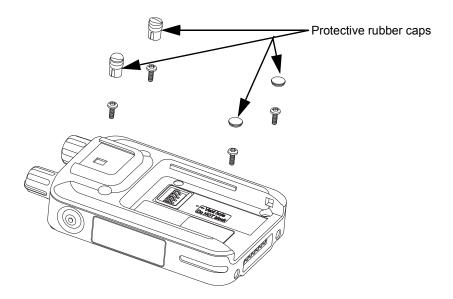


Figure 4-4. Removing Screws and Protective Rubber Caps from Back Housing

6. Separate Back Housing Assembly from Front Housing Assembly with the Pry Opener (Figure 4-5.).

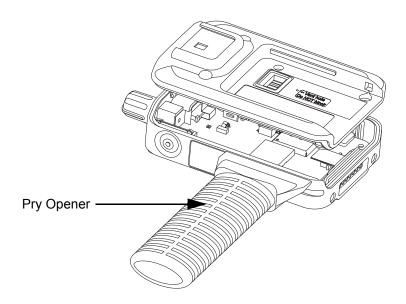


Figure 4-5. Seperate Back Housing Assembly from Front Housing Assembly

4.3.1.3 Back Housing Disassembly

1. Remove the Vibrator (Figure 4-6.).



Be careful not to damage the terminals of the Vibrator (40) and ventilation felt when removing the vibrator.

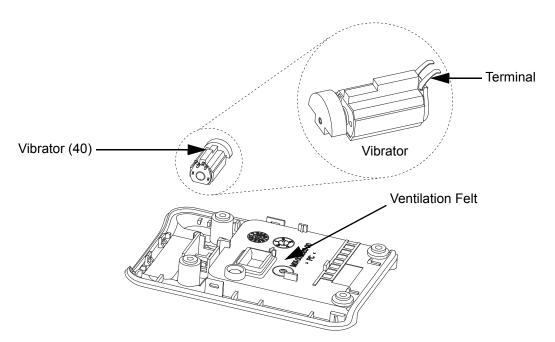


Figure 4-6. Back Housing Disassembly

4.3.2 Front Housing Disassembly

4.3.2.1 Switch PCB Asssembly Disassembly

- 1. Remove the Volume Knob Kit (38 & 39) and Channel Knob Kit (36 & 37) from their shafts using the Chassis Opener.
- **2.** Remove the nuts from the Volume and Channel switch with the Crab Eye Nut Opener (Figure 4-7.).

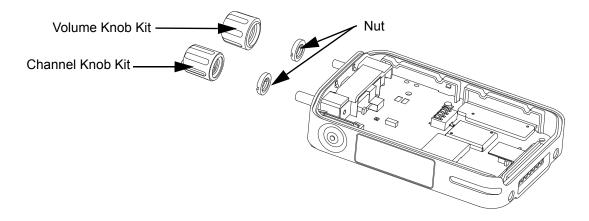


Figure 4-7. Removing Knobs

- 3. Pull the latch on the Main PCB Assembly (35) to release the Flex from the connector.
- 4. Remove the Switch PCB Assembly from the Main PCB Assembly (Figure 4-8.).

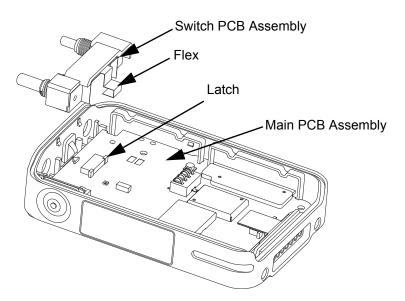


Figure 4-8. Removing Switch PCB Assembly

4.3.2.2 Main Circuit Board Disassembly

- Remove the (+) Machine Screw (31) holding the Main PCB Assembly (35) with a TORX[™] T6 screwdriver.
- 2. Pull the latch on the Main PCB Assembly to release the Flex from the connector and remove the Main PCB Assembly (Figure 4-9.).

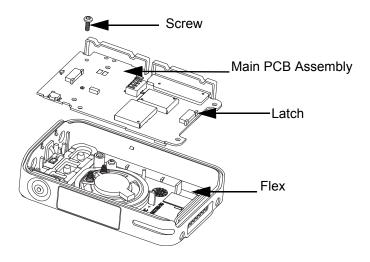


Figure 4-9. Removing Main PCB

4.3.2.3 IO Connector Assembly Disassembly

- 1. Remove the Bracket IO (29) with Bumper IO (30) from the IO Connector Assembly (25,26,27,28) (Figure 4-10.).
- 2. Remove the IO Connector Assembly from the Front Housing Assembly.

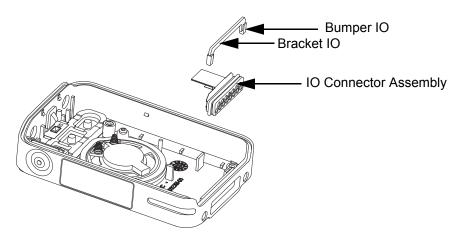
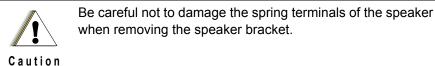


Figure 4-10. Removing IO Connector Assembly

4.3.2.4 Speaker & Front Key Disassembly

- 1. Remove the (+) Machine Screw (18) holding the Speaker Bracket (17) with a screwdriver.
- 2. Remove the Speaker Bracket.



3. Remove the Speaker (15) and Speaker Bumper (16) from the Front Housing Assembly.

4. Remove the Front Keypadpad (41) (Figure 4-11.).

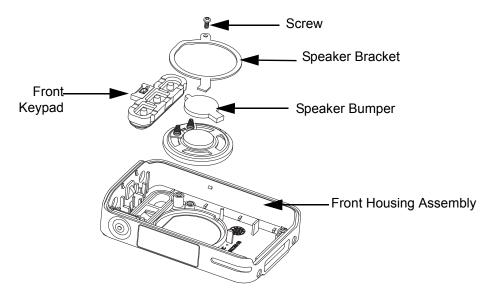


Figure 4-11. Removing Speaker and Front Key

4.3.2.5 Reset Button Disassembly

- 1. Remove the Bracket Reset button (7).
- 2. Remove the Insulation Sheet (6) and Reset button (5) (Figure 4-12.).

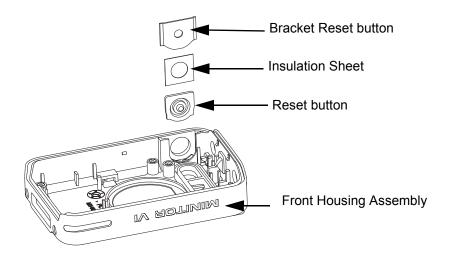


Figure 4-12. Removing Reset Button

4.4 Pager Reassembly – Detailed

4.4.1 Front Housing Reassembly

4.4.1.1 Reset Button Reasassembly

Follow the reverse of Section 4.3.2.5 "Reset Button Disassembly" on page 4-8.

4.4.1.2 Speaker and Front Key Reasassembly

- 1. Align the guide rib of the Speaker (15) to the guide slot of the Front Housing Assembly.
- 2. Install the Speaker Bracket (17) and Speaker Bumper (16).
- 3. Tighten the (+) Machine Screw (18) holding Speaker Bracket to the housing to a torque of 2.0 kgf~2.5kgf.
- **4.** Align the Front Keypad (41) onto the key slot. Apply force around the Front Keypad and ensure the Front Key sealing rib is perfectly set onto the key slot (Figure 4-13.).

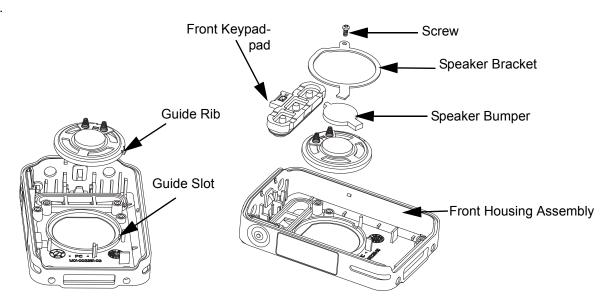


Figure 4-13. Speaker and Front Key Assembly

4.4.1.3 IO Terminal Reasassembly

Follow the reverse of Section 4.3.2.3 "IO Connector Assembly Disassembly" on page 4-7.

4.4.1.4 Main Circuit Board Reasassembly

- 1. Insert the Flexible cable into the respective connector on the Main PCB Assembly (35).
- 2. Push both latches into the connector.
- 3. Tighten the (+) Machine Screw (31) holding th Main PCB Assembly to the housing with a torque of 3.0 kgf~3.5 kgf (Figure 4-14.).

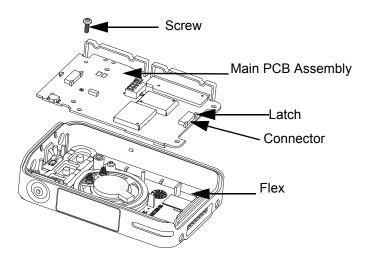


Figure 4-14. Main PCB Assembly

4.4.1.5 Switch PCB Assembly Reasassembly

- 1. Insert the Flex into the respective connector on the Main PCB Assembly (35).
- 2. Push both latches into the connector.

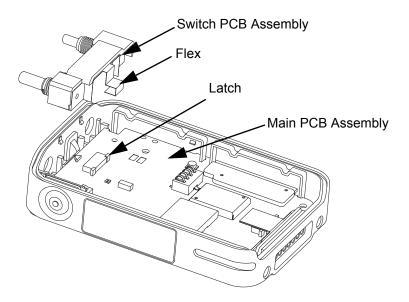


Figure 4-15. Assembling Switch PCB Assembly

- **3.** Apply the Screw fastener (3bond, TB1410B) around the thread of both Channel/ Volume switches (Figure 4-16.).
- **4.** Tighten the Nut for Ch/Vol (24) holding the Channel/ Volume switches to the housing with Crab Eye Nut Tool torque to 4.0 kgf~5.0 kgf.
- **5.** Assemble the Volume Knob Kit (38, 39) and Channel Knob Kit (36, 37) (Figure 4-17.).

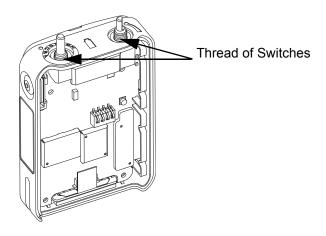


Figure 4-16. Thread of Switches

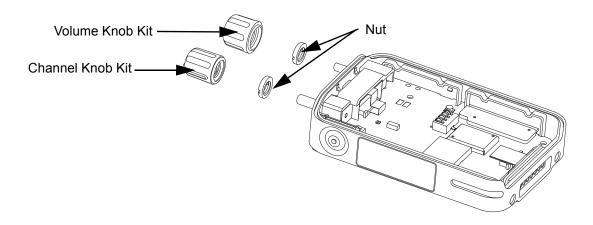


Figure 4-17. Assembling Knobs

4.4.2 Pager Reassembly

4.4.2.1 Back Housing Reasassembly

Follow the reverse of Section 4.3.1.3 "Back Housing Disassembly" on page 4-5.

4.4.2.2 Front Housing and Back Housing Reasassembly

1. Apply grease at the corners of the sealing area (Figure 4-18.).

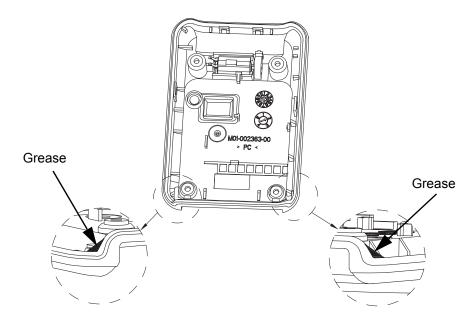
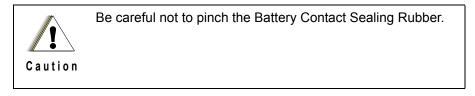


Figure 4-18. Applying Grease

2. Assemble the Back Housing Assembly (11, 12, 13, 14) to the Front Housing Assembly. Use screw kit RLN6520_. Do not reuse original screws or screw caps. The thread lock on the screws is degraded after removing and the caps may have been damaged when removed.



- 3. Tighten the (+) Machine Screw (31) with a TORX[™] T6 screwdriver torque to 3.0 kgf~3.5 kgf.
- **4.** Assemble the Rubber Cap-Small (34), Rubber Cap_R (32) and Rubber Cap_L (33) (Figure 4-19.).

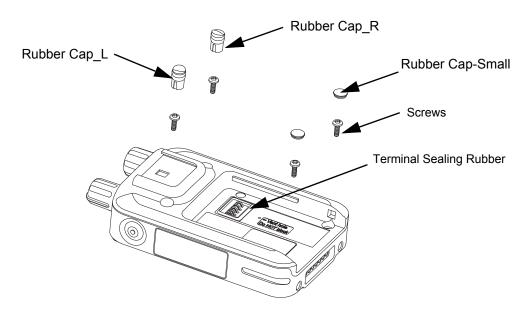


Figure 4-19. Assembling the Back Housing Kit to the Front Housing Kit NOTE: Ensure the Left and Right Rubber Caps are not reversed.

4.5 Pager Exploded Mechanical View and Parts Lists

4.5.1 MINITOR VI Exploded View and Parts List

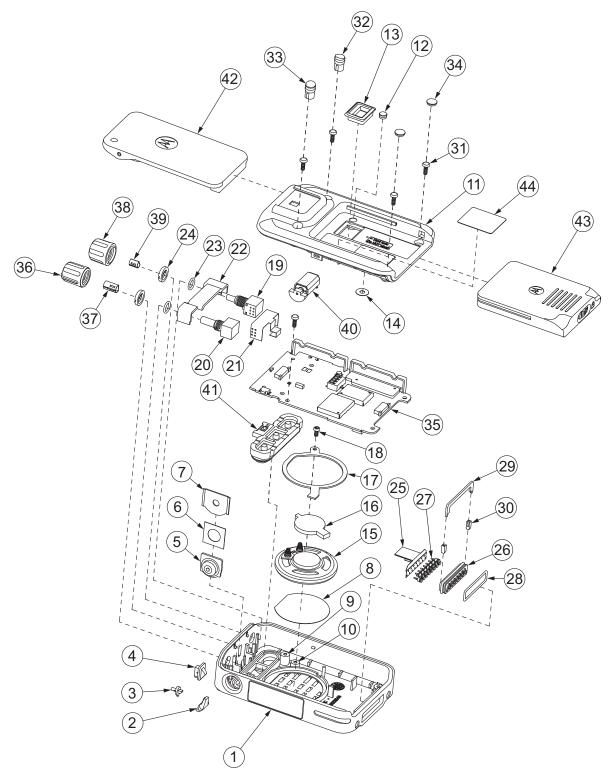


Figure 4-20. MINITOR VI Exploded View

Table 4-1. MINITOR VI Exploded View Parts List

Part Number	Description	Part Description	Item No.	Quantity
RHN1006_	COVER KIT, FRONT HOUSING	Front Housing	1	1
		Light Pipe Message	2	1
		Light Pipe Receive	3	1
		Light Pipe Batt	4	1
		Reset button	5	1
		Insulation Sheet	6	1
		Bracket Reset button	7	1
		Felt (SPK)	8	1
		Insert Screw 1	9	5
		Insert Screw 2	10	1
RHN1007_	BACK HOUSING KIT	Back Housing	11	1
		Connector Cap	12	1
		Sealing Batt. Terminal	13	1
		Ventilation Felt	14	1
RSN4006_	REPAIR, KIT, SPEAKER	Speaker	15	1
		Speaker Bumper	16	1
		Speaker Bracket	17	1
		(+) Machine Screw for Speaker	18	1
RLN6518_	SWITCH, KIT, SWITCH, VOL/CHN	Switch Volume	19	1
		CH Switch	20	1
		Flexible PCB	21	1
		Bracket Switch	22	1
		O-ring Switch	23	2
		Nut for Ch/Vol	24	2

Table 4-1. MINITOR VI Exploded View Parts List (Continued)

Part Number	Description	Part Description	Item No.	Quantity
RLN6519_	CONNECTOR STANDARD-AUDIO, MM, KIT, CONNECTOR, IO	Flexible PCB	25	1
		Housing IO	26	1
		Pin Terminal	27	15
		Sealing IO	28	1
		Bracket IO	29	1
		Bumper IO	30	2
RLN6520_	SCREW, KIT	(+) Machine Screw	31	5
		Rubber Cap_R	32	1
		Rubber Cap_L	33	1
		Rubber Cap-Small	34	2
		Connector Cap	12	1

Table 4-1. MINITOR VI Exploded View Parts List (Continued)

Part Number	Description	Part Description	Item No.	Quantity
RLN6514_	PCB Ass'y (VHF), IS, Single Channel	PCB (VHF), IS, SGL (RLD1048_)	35	1
RLN6515_	PCB Ass'y (VHF), Non IS, Single Channel	PCB (VHF), Non IS, SGL (RLD1047_)		
RLN6516_	PCB Ass'y (VHF), IS, Five Channel	PCB (VHF), IS, Five (RLD1050_)		
RLN6517_	PCB Ass'y (VHF), Non IS, Five Channel	PCB (VHF), Non IS, Five (RLD1049_)		
RLN6528_	PCB Ass'y (UHF1), IS, Single Channel	PCB (UHF1), IS, SGL (RLE1124_)		
RLN6529_	PCB Ass'y (UHF1), Non IS, Single Channel	PCB (UHF1), Non IS, SGL (RLE1125_)		
RLN6530_	PCB Ass'y (UHF1), IS, Five Channel	PCB (UHF1), IS, Five (RLE1122_)		
RLN6531_	PCB Ass'y (UHF1), Non IS, Five Channel	PCB (UHF1), Non IS, Five (RLE1123_)		
RLN6532_	PCB Ass'y (UHF2), IS, Single Channel	PCB (UHF2), IS, SGL (RLE1120_)		
RLN6533_	PCB Ass'y (UHF2), Non IS, Single Channel	PCB (UHF2), Non IS, SGL (RLE1121_)		
RLN6534_	PCB Ass'y (UHF2), IS, Five Channel	PCB (UHF2), IS, Five (RLE1118_)		
RLN6535_	PCB Ass'y (UHF2), Non IS, Five Channel	PCB (UHF2), Non IS, Five(RLE1119_)		
RLN6536_	PCB Ass'y (UHF3), IS, Single Channel	PCB (UHF3), IS, SGL (RLE1116_)		
RLN6537_	PCB Ass'y (UHF3), Non IS, Single Channel	PCB (UHF3), Non IS, SGL (RLE1117_)		
RLN6538_	PCB Ass'y (UHF3), IS, Five Channel	PCB (UHF3), IS, Five (RLE1114_)		
RLN6539_	PCB Ass'y (UHF3), Non IS, Five Channel	PCB (UHF3), Non IS, Five (RLE1115_)		
RLN6521_	KNOB KIT, CHANNEL	CH Knob	36	1
		D Spring (4.0)	37	1
RLN6522_	KNOB KIT, VOLUME	Volume Knob	38	1
		D Spring (3.5)	39	1

Table 4-1. MINITOR VI Exploded View Parts List (Continued)

Part Number	Description	Part Description	Item No.	Quantity
RLN6523_	VIBRATOR KIT	ATOR KIT Vibrator		1
RLN6524_	KEYPAD KIT	Front Keypad	41	1
RLN6509_	MINITOR VI BELT CLIP	Belt Clip	42	1
PMNN4438_	LI-ION Battery Pack (IS)	IS Li-Ion	43	1
PMNN4451_	LI-ION Battery Pack (Non IS)	Non- IS Li-ion		
LB000117A01	IS Label, MINITOR VI	IS Label (Motorola Repair Center only)	44	1
LB000118A01	Non IS Label, MINITOR VI	Non- IS Label		

Chapter 5 Accessories

5.1 Introduction

Motorola provides the following approved accessories to improve the productivity of your pager.

5.1.1 Batteries

Part No.	Description
PMNN4438_	Battery IP56 Li-Ion, IS
PMNN4451_	Battery Std IP56 Li-lon, Non-IS
RLN6526_	MINITOR VI Alkaline Battery Tray

5.1.2 Chargers

Part No.	Description
25009298001	Standard Charger Power Supply 5V
EPNN9288_	Amplified Charger Power Supply
RLN6505_	Standard Charger Kit
RLN6506_	Amplified Charger Kit
RLN6507_	Amplified Charger Antenna VHF (143 – 174 MHz)
RLN6508_	Amplified Charger Antenna UHF (406 – 512 MHz)

5.1.3 Carrying Accessories

Part No.	Description
PMLN6725_	MINITOR VI Nylon Carry Case, Plain
RLN6509_	Belt Clip

5.1.4 Programming

Part No.	Description
RLN6527_	MINITOR VI Programming Cradle

5-2 Accessories: Introduction

Notes

Appendix A Replacement Parts & Kits

A.1 Level 1 and 2 Maintenance

This manual covers Level 1 and 2 Maintenance:

Level 1 maintenance is the assessment and/or repair of fault in terms of faulty accessory or physical aspect of product; not including opening of the unit. Limited to replacement of battery, external knobs, all related frequency programming to customers' and in some cases alignment/tuning, by Pager Programming software (PPS).

Level 2 maintenance includes all Level I activities plus: Assessment that require opening the Subscriber Product and rectifying a fault by replacement of a board or module, or replacement of major mechanical parts (like Front Housing Kit or Control Head Board), followed by alignment/tuning to ensure the replacement of board/module/major mechanical parts are within Subscriber Product's specifications as per the service manual. It does not incorporate discrete component replacement.

A.1.1 Replacement Parts Ordering

When ordering replacement parts or equipment, include the Motorola part number and description used in the service manual or supplement.

When ordering crystals or channel elements, specify the Motorola part number, description, crystal frequency, and operating frequency desired.

When the Motorola part number of a component is not known, use the product model number or other related major assembly along with a description of the related major assembly and of the component in question.

In the U.S.A., to contact Motorola Solutions, Inc. on your TTY, call: 800-793-7834.

A.2 Accessories and Aftermarket Division (AAD)

Replacement parts, test equipment, and manuals can be ordered from AAD.

U.S.A Outside U.S.A.

Phone: 800-422-4210 Phone: 847-538-8023

FAX: 800-622-6210 FAX: 847-576-3023

Notes





Motorola Solutions, Inc. 1303 East Algonquin Road Schaumburg, Illinois 60196 U.S.A.

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