



MOTOROLA

Level 1-2 Service Manual

6809521A14

W260g/W270 Dual Band Wireless Telephone



WW LT
(Tracfone)



WW MT
(Generic)

W260g
GSM 850/1900

W270
GSM 900/1800
GSM 850/1900

Table of Contents

Introduction	3
Product Identification	3
Product Names	3
Product Changes	3
Regulatory Agency Compliance	3
Computer Program Copyrights	4
About This Service Manual	4
Warranty Service Policy	5
Parts Replacement	6
Specifications	7
Product Overview	9
Features	9
General Functions	11
Controls, Indicators, and Input/Output (I/O) Connectors	11
User Interface Menu Structure	13
Battery Function	14
Operation	14
Tools and Test Equipment	14
Disassembly	15
Removing and Replacing the Battery	16
Removing and Replacing the T-flash Card	17
Removing and Replacing the SIM Card	17
Removing and Replacing the Bottom Housing	18
Removing and Replacing the Main Board, Keypad	19
Removing and Replacing the vibrator, Microphone, Antenna Module	20
Removing and Replacing the Top Housing	22
Removing and Replacing Sub-Board module (with LCM) and Receiver	22
Removing and Replacing the Top Clamshell	24
Subscriber Identity Module (SIM) and Identification Label	25
SIM	25
Identification	25
Troubleshooting	27
Manual Test Mode	27
Manual Test Mode Commands	27
Troubleshooting Chart	28
Programming: Software Upgrade and Flexing	29
Part Number Charts (W260g)	30
Exploded View Diagram	30
Exploded View Parts List	31
Part Number Charts (W270)	33
Exploded View Diagram	33
Exploded View Parts List	34
Accessories	36
Index	1

Introduction

Motorola® Inc. maintains a worldwide organization that is dedicated to provide responsive, full-service customer support. Motorola products are serviced by an international network of company-operated product care centers as well as authorized independent service firms.

Available on a contract basis, Motorola Inc. offers comprehensive maintenance and installation programs that enable customers to meet requirements for reliable, continuous communications. To learn more about the wide range of Motorola service programs, contact your local Motorola products representative or the nearest Customer Service Manager.

Product Identification

The model number on a label (usually on the housing) identifies Motorola products. Use the entire model number when inquiring about the product. Numbers are also assigned to chassis and kits.

Use these numbers when requesting information or ordering replacement parts.

Product Names

Product names are listed on the front cover. Product names are subject to change without notice. Some product names, as well as some frequency bands, are available only in certain markets.

Product Changes

When electrical, mechanical or production changes are incorporated into Motorola products, a revision letter is assigned to the chassis or kit affected, for example: -A, -B, or -C, and so on. The chassis or kit number, complete with revision number is imprinted during production. The revision letter is an integral part of the chassis or kit number and is also listed on schematic diagrams, and printed circuit board layouts.

Regulatory Agency Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- This device may not cause any harmful interference, and
- this device must accept interference received, including interference that may cause undesired operation

This class B device also complies with all requirements of the Canadian Interference-Causing Equipment Regulations (ICES-003).

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Computer Program Copyrights

The Motorola products described in this manual may include Motorola computer programs stored in semiconductor memories or other media that are copyrighted with all rights reserved worldwide to Motorola. Laws in the United States and other countries preserve for Motorola, Inc. certain exclusive rights to the copyrighted Introduction computer programs, including the exclusive right to copy, reproduce, modify, decompile, disassemble, and reverse-engineer the Motorola computer programs in any manner or form without Motorola's prior written consent. Furthermore, the purchase of Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license or rights under the copyrights, patents, or patent applications of Motorola, except for a nonexclusive license to use the Motorola product and the Motorola computer programs with the Motorola product.

About This Service Manual

Using this service manual and the suggestions contained in it assures proper installation, operation, and maintenance of W260g/W270 telephones. Refer questions about this manual to the nearest Customer Service Manager. This manual contains mechanical service information required for the equipment described and is current as of the printing date.

Audience

This document aids service personnel in testing and repairing W260g/W270 telephones. Service personnel should be familiar with electronic assembly, testing, and troubleshooting methods, and with the operation and use of associated test equipment.

Scope

This manual provides basic information relating to W260g/W270 telephones, and also provides procedures and processes for repairing the units at Level 1 and 2 service centers, including:

- Unit swap out
- Repairing of mechanical faults
- Basic modular troubleshooting
- Testing and verification of unit functionality
- Initiate warranty claims and send faulty modules to Level 3 or 4 repair centers.

Conventions

Special characters and typefaces, listed and described below, are used in this publication to emphasize certain types of information.



Note: Emphasizes additional information pertinent to the subject matter.




Caution: Emphasizes information about actions that may result in equipment damage.



Warning: Emphasizes information about actions that may result in personal injury.



Keys to be pressed are represented graphically. For example, instead of "Press the Menu Key", you will see "Press ".

Information from a screen is shown in text as similar as possible to what appears in the display. For example, ALERTS or ALERTS.

Information that you need to type is printed in **boldface type**.

Warranty Service Policy

The product is sold with the standard 12-month warranty terms and conditions. Accidental damage, misuse, and extended warranties offered by retailers are not supported under warranty.

Non-warranty repairs are available at agreed fixed repair prices.

Out of Box Failure Policy

The standard out of box failure criteria applies. Customer phones that fail very early on after the date of sale are to be returned to Manufacturing for root cause analysis, to guard against epidemic criteria. Manufacturing to bear the costs of early life failure.

Product Support

The customer's original phones will be repaired but not refurbished as standard. Appointed Motorola Service Hubs will perform warranty and non-warranty field service for level 2 (assemblies) and level 3 (limited Transceiver component). Motorola High Tech Centers will perform level 4 (full component) repairs.

Customer Support

Customer support is available through dedicated Call Centers and in-country help desks. Product-Service training should be arranged through the local Motorola Support Center.

Parts Replacement

When ordering replacement parts or equipment, include the Motorola part number and description used in the service manual. 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, Inc. on your TTY, call: 800-793-7834

Accessories and Aftermarket Division (AAD)

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

U.S.A.

Phone: 800-422-4210

FAX: 800-622-6210

Outside U.S.A.

Phone: 847-538-8023

FAX: 847-576-3023

For EMEA spare parts call +49 461 803 1638.

For Asia spare parts call +65 648 62995.

Specifications

General Functions	Specification
Dimensions	95mm x 45mm x 17mm
Weight	92.7g
LCD Display	65K Color CSTN, Active Area: 28.79mm x 28.79mm, Hardware pixels: 128 x 128
Band	GSM900/1800 or GSM850/PCS1900
Battery	940 mAh Li Ion Battery
Product type	Clamshell type
Antenna	Internal Antenna
Frequency Range (EGSM)	880-915 MHz Tx, 925-960 MHz Rx
Frequency Range (DCS)	1710 – 1785 MHz Tx, 1805-1880 MHz Rx
Frequency Range (GSM850)	824-849 MHz Tx, 869-894 MHz Rx
Frequency Range (PCS)	1850-1910MHz Tx, 1930-1990 MHz Rx
Channel Spacing	200KHz
Channels	174 EGSM, 374 DCS, 124 GSM850, 299 PCS
Modulation	GMSK at BT=0.3
Transmitter Phase Accuracy	5 Degrees RMS, 20 Degrees peak
Duplex spacing	45MHz EGSM, 95MHz DCS, 45MHz GSM850, 80MHz PCS
Frequency Stability	±0.1PPM of the downlink frequency (Rx)
Operating voltage	3.53V ~4.2V
Average Transmit Current	Power Level 5@DTX 50%: 170mA Power Level 19@DTX 50%: 90mA
Average Standby Current	DRX2: 4mA DRX9: 1.9mA
Temperature Range	-20°C to 55°C
Battery Life	Talk Time: 250~500 Mins; Stand by Time: 150~300 Hours
Battery Charge Time	4 Hours to 90% of 940mAH capacity
Alert Volume	Max 95dB@ 5cm, 0.5 watts input

Transmitter Functions	Specification
RF Power Output	33 dBm typical GSM850/GSM900 30 dBm typical DCS1800/PCS1900
Output Impedance	50 ohms nominal
Spurious Emissions	-36 dBm from 0.1 to 1GHz, -30 dBm from 1 to 4 GHz

Receiver Functions	Specification
Receiver Sensitivity	-105 dBm typical GSM 850/GSM900 -105 dBm typical DCS1800/PCS1900
RX Bit Error Rate (100K bits) type II	<2%
Channel Hop Time	500 microseconds
Time to Camp	Approximately 6~10 Second

Speech Coding Functions	Specification
Speech Coding Type	Regular pulse excitation/linear predictive coding with long term prediction (PRE LPC with LTP)
Bit Rate	13.0 Kbps
Frame Duration	20 ms
Block Length	260 bits
Classes	Class 1 bits = 182 bits; Class 2 bits = 78 bits
Bit Rate with FEC Encoding	22.8 Kbps

Product Overview

The Motorola W260g/W270 features a global system for mobile communications wireless interface technology. It also features a simplified icon and graphical user interface (UI) for easier operation in addition to short message service text messaging (SMS), speed dialing, quick dialing, an alarm, a calculator, games, and an address book.

The telephones are made of polycarbonate plastic. The display and speaker, as well as the 23-key keypad and 3 side key, transceiver printed circuit board (PCB), microphone, charger and headphone connectors, and power button are contained within Bar form-factor housing. The user replaceable 940 mAh Lithium-Ion (Li-Ion) battery provide up to 250~500 Mins of talk time with up to 150~300 Hours of standby time. The phone accepts 1.8V/3V mini subscriber identity module (SIM) cards that fit into the SIM holder next to the battery. These telephones feature a 128 x 128 pixel color graphics display and an internal antenna.

Features

W260g/W270 telephones use advanced, self-contained, sealed, custom integrated circuits to perform the complex functions required for GSM communication. Aside from the space and weight advantage, microcircuits enhance basic reliability, simplify maintenance, and provide a wide variety of operational functions.

Features available in this family of telephones include:

- A 128 x 128 pixel color graphics display
- Internal antenna
- Lower voltage technology that provides increased standby and talk times
- Extended GSM (EGSM) channels
- Display animation
- VibraCall® vibrating alert
- 5-Way navigation key® 3 side key
- SIM Toolkit™ Class 2 (STK) (Network, subscription and SIM card or service provider dependent feature. Not available in all areas.)
- Backlight
- Speed-, Quick- and One-Touch dialing
- Call Forwarding and Holding
- Customized Menus
- Personal management tools calculator with currency converter, and clock with date
- Other features

Caller Line Identification

Upon receipt of a call, the calling party's phone number is compared to the phone book. If the number matches a phone book entry, that name will be displayed. If there is no phone book entry, the incoming phone number will be displayed. In the event that no caller identification information is available, an incoming call message is displayed.

SIM Toolkit™ - Class 2

SIM Application Toolkit is a value-added service delivery mechanism that allows GSM operators to customize the services they offer their customers, from the occasional user who requests sports news and traffic alerts, to a high call time business user who receives stock alerts and checks flight times. Operators can now create their own value-added services menu quickly and easily in the phone.

The customized menu will appear as the first menu and may be updated over-the-air with new services when customers request them.

Wildwood Comparison Chart

Wildwood	Model name	Band	FM Radio	GPRS	Web Browsing
WWLT (Tracfone version)	W260g	GSM 850/1900	No	NO	NO
WW MT (Generic & Premium & Mandarin Accent versions)	W270	GSM 900/1800 GSM 850/1900	Yes	Yes	Yes

Wildwood	T-Flash card access	MP3 Playback	Send/End key function	Memory
WWLT (Tracfone version)	NO	NO	64MB(ROM)	16MB(PSRAM)
WW MT (Generic & Premium & Mandarin Accent versions)	Yes	Yes	128MB(ROM)	64MB(PSRAM)

General Functions

Controls, Indicators, and Input/Output (I/O) Connectors

The W260g/W270 phone's controls are located on the front side of the device and on the keyboard as shown in below. Indicators icons are displayed on the LCD.

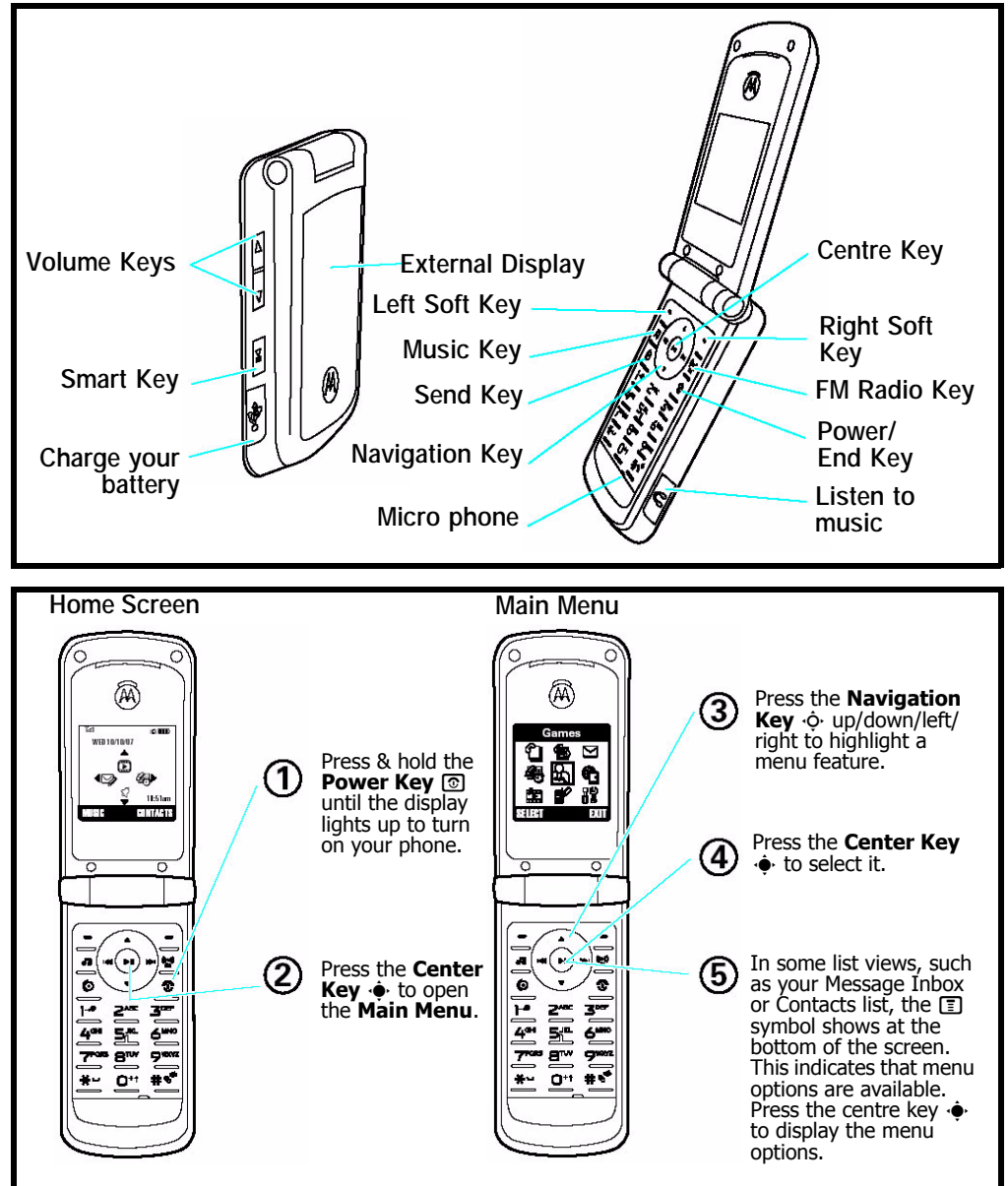



Figure 1. W260g/W270 Telephone Control Locations

Menu Navigation


W260g/W270 telephones are equipped with a simplified icon and graphical-based user interface. See the table below for details of the W260g/W270 menu structure. A five-way navigation key allows you to move easily through menus and confirm your selection.

Liquid Crystal Display (LCD)

The LCD provides a 700 square millimeter multicolor backlit color display with user-adjustable contrast settings for optimum readability in all light conditions. The bit-map 128 x 128 pixel display includes up to 3 lines of text, 1 line of icons, and 1 line of prompts.

When you turn on your phone, it displays the home screen. To dial a number from the home screen, press number keys and .



Note: Your home screen might look a little different from this example. *Soft key labels* show the current soft key functions. For soft key locations, see page 2. Press the *navigation key*  up, down, left, or right to select items in the home screen. Status indicators can appear across the top of the home screen:













indicator		
	Signal Strength	Vertical bars show the strength of the network connection.
	Roaming	Indicates phone is in a digital coverage area and is roaming off network.
	Missed Call	Indicates that you received an unanswered call.
	Voice Call/ Incoming Call	Shows during an active voice call.
	Battery Level	Shows battery charge level. The more bars, the greater the charge.
	Loud Ring	Indicates Style (in Ring Styles) is set to Loud .
	Soft Ring	Indicates Style (in Ring Styles) is set to Soft .
	All Sounds Off	Indicates Style (in Ring Styles) is set to Silent .
	Vibrate then Ring	Indicates Style (in Ring Styles) is set to Vibe then Ring .
	Vibrate	Indicates Style (in Ring Styles) is set to Vibrate .
	New Text or MMS Message	Appears when you receive a new text message or multimedia message.
	New Voicemail Message	Appears when you receive a new voicemail message.

Figure 2. W260g/W270 Display Icon Indicators

User Interface Menu Structure

The table below shows a portion of the W260g/W270 telephone menu structure.

* Optional Network, SIM card, or subscription-dependent features.

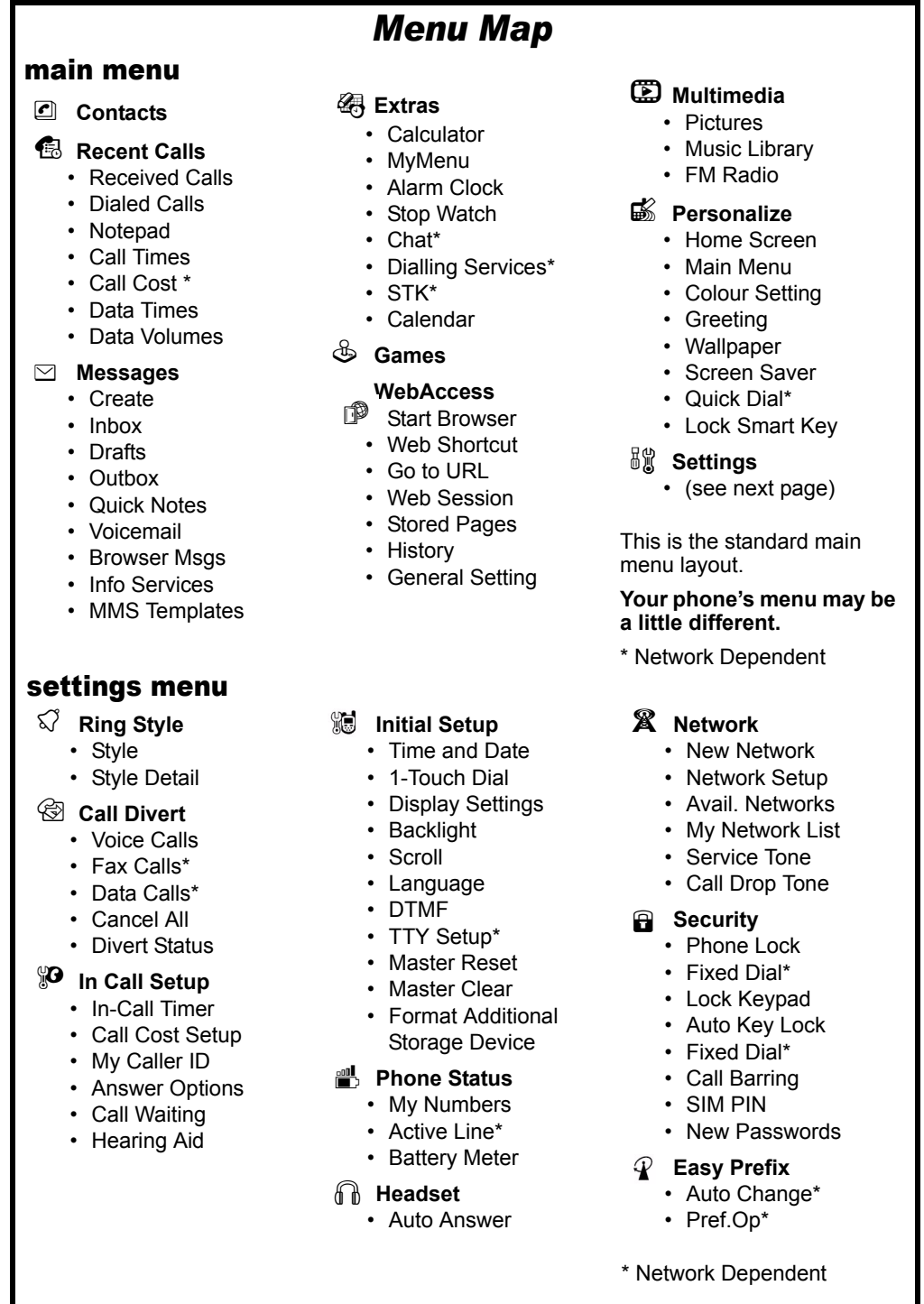


Figure 3. W260g/W270 Menu Structure

Battery Function

The telephone displays a battery charge indicator icon in the idle screen to indicate the battery charge level. The gauge shows four levels: 50%, 20%, 5%, and Low Battery.

Removing the battery causes the phone to shut down immediately and lose any pending work (partially entered phone book entries or outgoing messages, for example).



Note: All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touches 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.



If the battery is removed while receiving a message, the message is lost.



To ensure proper memory retention, turn the phone OFF before removing the battery. Immediately replace the old battery with a fresh battery.

Operation

For detailed operating instructions, refer to the appropriate User Guide.

Tools and Test Equipment

The table below lists the tools and test equipment used on W260g/W270 telephones. Use either the listed items or the equivalent.

Table 1: General Test Equipment and Tools

Motorola Part Number ¹	Description	Application
See Table 3	Charger	Used to charge battery and power phone
0180386A82	Antistatic Mat Kit (includes 66-80387A95 antistatic mat, 66-80334B36 ground cord, and 42-80385A59 wrist band)	Provides protection from damage to phone caused by electrostatic discharge (ESD)
-	Antistatic Gloves	Provides protection from damage to phone caused by electrostatic discharge (ESD)
0-00-00-3005 (AMS)	Disassembly tool, plastic with flat and pointed ends (manual opening tool)	Used during assembly/disassembly
0-00-00-40861 (AMS)	Camera disassembly Jig tool	
6680388B01	Tweezers, plastic	Used during assembly/disassembly
-	T5 Screw driver	Used with Screw Driver
HP34401A ²	Digital Multimeter	Used to measure battery voltage

1. To order in North America, contact Motorola Aftermarket and Accessories Division (AAD) by phone at (800) 422-4210 or FAX (800) 622-6210. Internationally, AAD can be reached by calling (847) 538-8023 or by fax (847) 576-3023.

2. Not available from Motorola. To order, contact Hewlett Packard at (800) 452-4844.



Figure 4. A screwdriver (T5), a pair of tweezers

Disassembly

This section describes how to disassemble a W260g/W270 telephone. Tools and equipment used are listed on the preceding page.



Many of the integrated devices used in this phone are vulnerable to damage from electrostatic discharge (ESD). Ensure adequate static protection is in place when handling, shipping, and servicing any internal components.



Avoid stressing the plastic in any way to avoid damage to either the plastic or internal components.

Removing and Replacing the Battery

1. Ensure the phone is turned off.
2. Push the latch and pop out the battery cover.



Figure 5. Removing the battery cover

3. Press the tab to pop out the battery.



Figure 6. Replace the battery

4. To replace, insert the battery with 2 tabs on its bottom end into the battery slot.
5. Click the battery into place, then slip the battery cover over it.

Removing and Replacing the T-flash Card

1. Remove the T-flash from its holder by sliding it in the direction shown below.

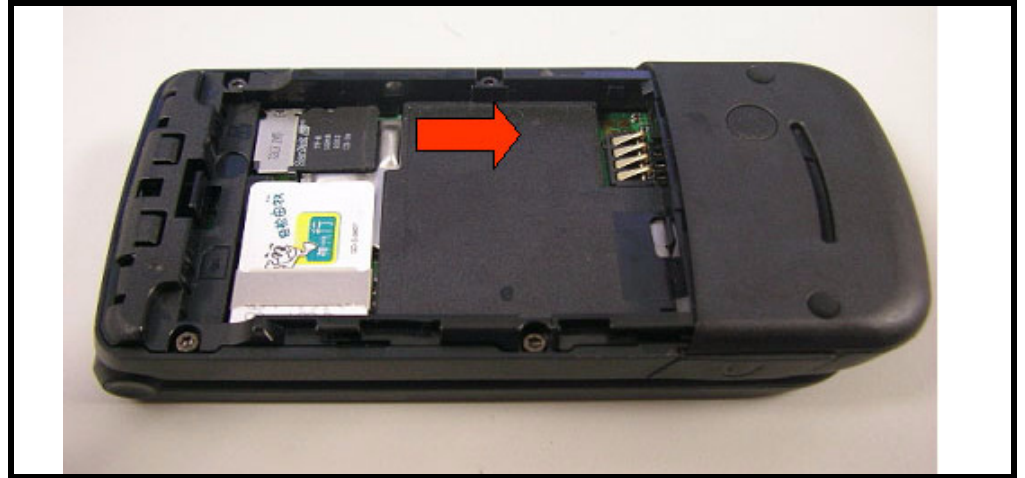


Figure 7. Removing the T-flash card

2. To replace, carefully slide the T-flash into position in its socket.

Removing and Replacing the SIM Card

1. Remove the SIM from its holder by sliding it in the direction shown below.

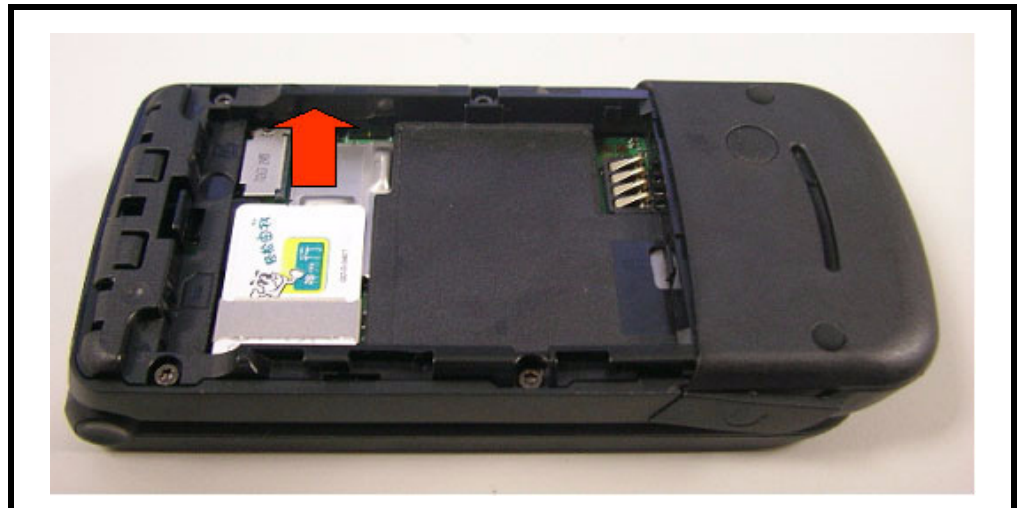


Figure 8. Removing the SIM card

2. To replace, carefully slide the SIM into position in its socket.

Removing and Replacing the Bottom Housing

1. Removing 6 screws and pull open the top of the bottom housing.



Figure 9. Removing 6 screws

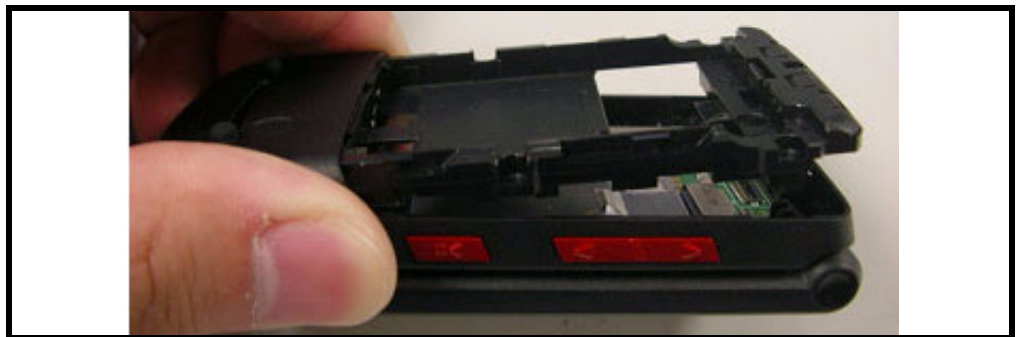


Figure 10. Remove the bottom housing

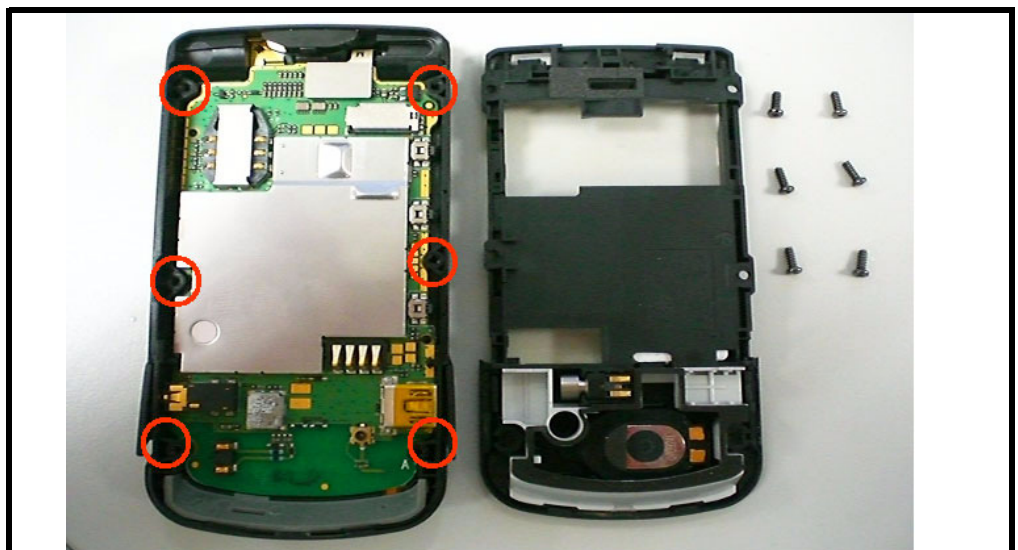


Figure 11.

Removing and Replacing the Main Board, Keypad

1. Remove the bottom housing as described earlier.
2. Pry off the FPC connector and remove the main board.

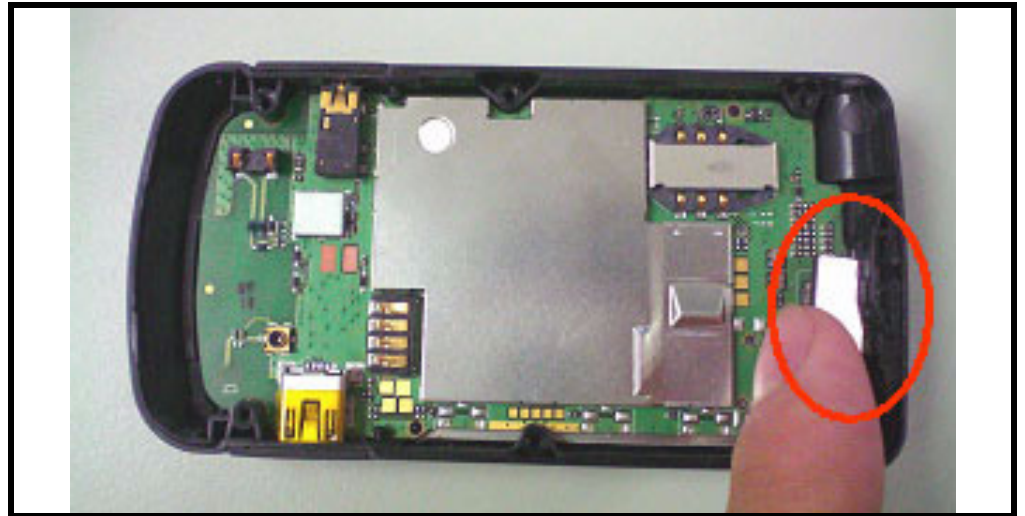


Figure 12. Pry off the FPC connector



Figure 13. Remove the main board

3. Remove the keypad.



Figure 14.

Removing and Replacing the vibrator, Microphone, Antenna Module

1. Removing the vibrator module.



Figure 15. Disengaging the side hooks

2. Removing the Microphone module.

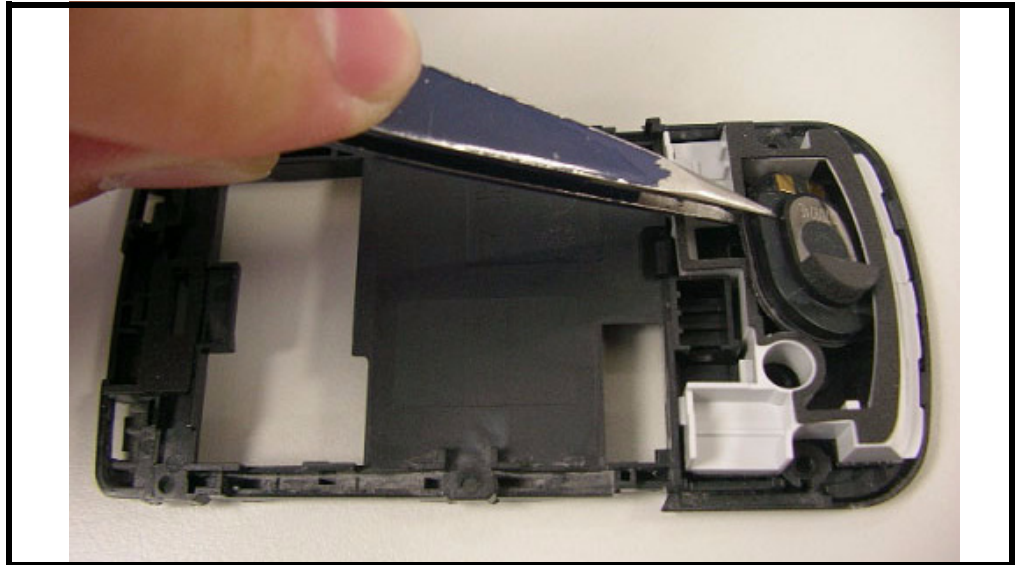


Figure 16.

3. Removing the Antenna module.

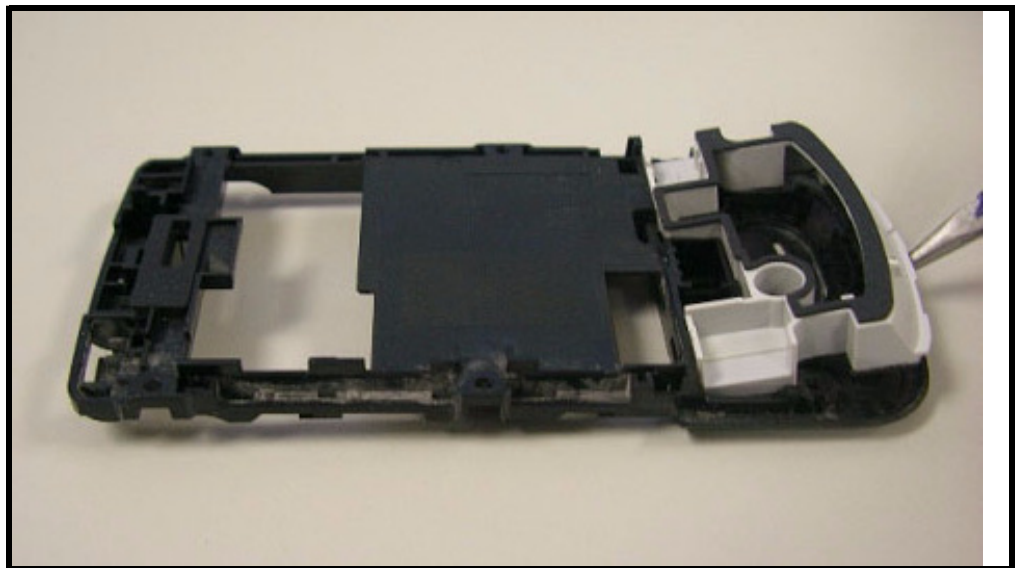


Figure 17.

Removing and Replacing the Top Housing



Figure 18.

Removing and Replacing Sub-Board module (with LCM) and Receiver

1. Pry off the FPC connector and remove the Sub-Board module.

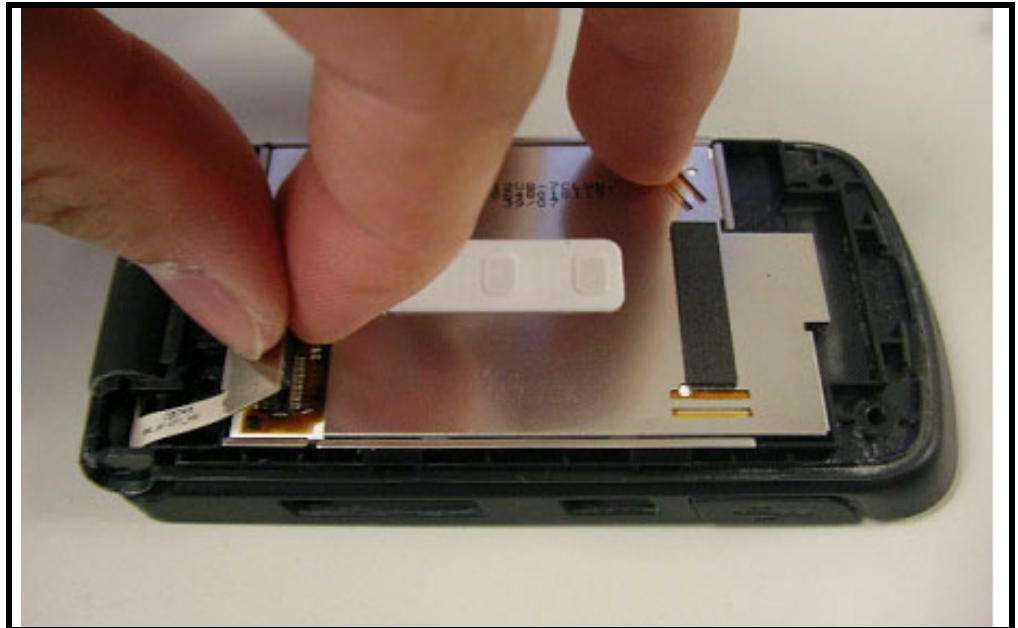


Figure 19. Pry off the FPC connector



Figure 20. Remove the Sub-Board module

2. Removing the Receiver.

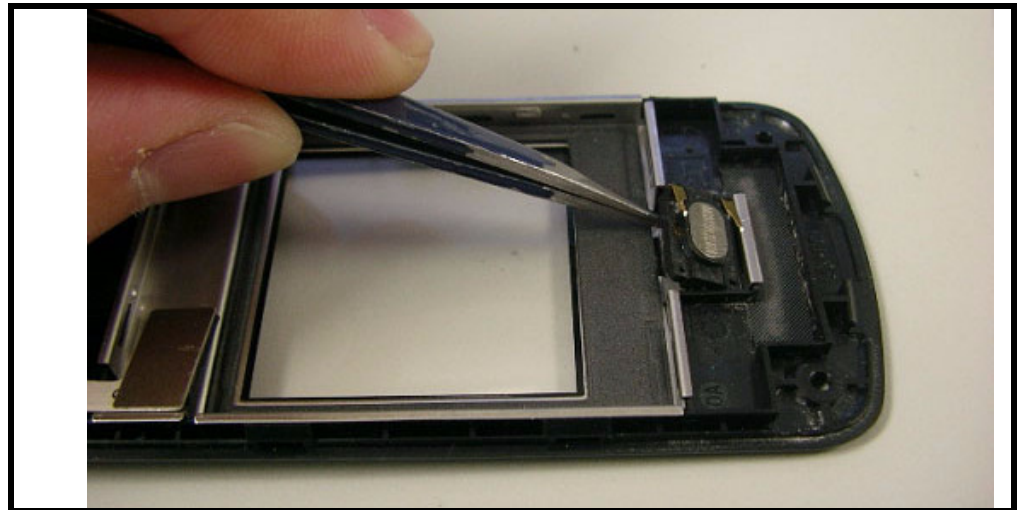


Figure 21.

Removing and Replacing the Top Clamshell

1. Use hand tooling remove the Hinge and Replacing the Top Clamshell.

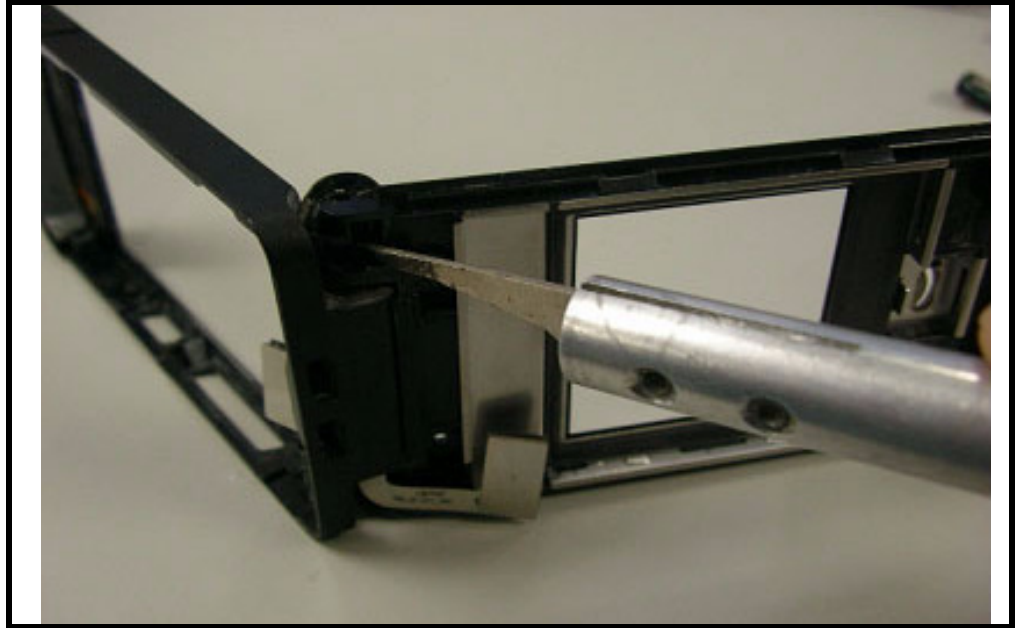


Figure 22. Remove the Hinge



Figure 23. Replacing the Top Clamshell

Subscriber Identity Module (SIM) and Identification Label

SIM

A SIM is required to access the existing local GSM network, or remote networks when traveling (if a roaming agreement has been made with the provider).

The SIM contains:

- All the data necessary to access GSM services
- The ability to store user information such as phone numbers
- All information required by the network provider to provide access to the network

Identification

Each Motorola GSM phone is labeled with a variety of identifying numbers. The following information describes the current identifying labels.

Mechanical Serial Number (MSN)

- The MSN is an individual unit identity number and remains with the unit throughout its life.
- The MSN can be used to log and track a phone on Motorola's Service Center Database.
- The MSN is divided into 4 sections as shown in Figure 24.

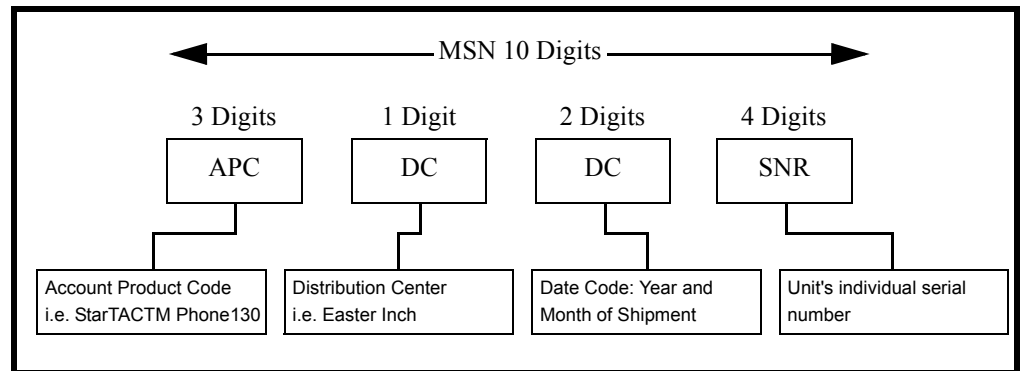


Figure 24. MSN Label Breakdown

International Mobile Station Equipment Identity (IMEI)

The International Mobile Station Equipment Identity (IMEI) number is an individual number unique to the Transceiver and is stored within the unit's memory. The IMEI uniquely identifies an individual mobile station and thereby provides a means for controlling access to GSM networks based on mobile station types or individual units. The full IMEI structure is listed in the table below.

Table 2: IMEI Number Breakdown

TAC	Serial Number	Check Digit
NNXXXXXX	ZZZZZZ	A

Where

TAC Type Allocation Code, formerly known as Type Approval Code

NN Reporting Body Identifier (BABT or CTIA)

XXXXXX Type Identifier (defined by BABT or CTIA)

ZZZZZZ Individual unit serial number

Phase 1 = 0.

A Phase 2 & 2+= check digit and is defined as a function of all other IMEI digits

Other label number configurations present are:



- **TRANSCEIVER NUMBER:** Identifies the product type. Normally the SWF number. (i.e. V100).
- **PACKAGE NUMBER:** Identifies the equipment type, mode, and language in which the product is shipped.

Troubleshooting

Manual Test Mode

Motorola W260g/W270 telephones are equipped with a manual test mode capability. This allows service personnel to verify functionality and perform fault isolation by entering keypad commands.

To enter the manual test command mode, a GSM/DCS/PCS test SIM must be used.

1. Press and hold  to turn the phone OFF.
2. Remove the battery as described in the procedures.
3. Remove the customer's SIM card from the phone as described in the procedures.
4. Insert the test SIM into the SIM slot.
5. Replace the battery as described in the procedures.
6. Press and hold  to turn the phone ON.

Manual Test Mode Commands

Table 3: Manual Test Commands

Key Sequence	Test Function/Name	Remarks
#02#	Handset information	
#03#	RF information	
#04#	ADC information	
#09#	Simple Test mode	
**0102#	FFS format	
**0105#	Disable EFEM mode	
*#06#	IMEI number	

Troubleshooting Chart

Table 4: Level 1 and 2 Troubleshooting Chart

Symptom	Probable Cause	Verification and Remedy
1. Telephone will not turn on or stay on.	a) Battery either discharged or defective.	Measure battery voltage across a 50 ohm (>1 Watt) load. If the battery voltage is <3.25 Vdc, recharge the battery using the appropriate battery charger. If the battery will not recharge, replace the battery. If battery is not at fault, proceed to b.
	b) Battery terminals open or misaligned.	Visually inspect the battery terminals on both the battery and the telephone. Realign and, if necessary, either replace the battery or refer to a Level 3 Service Center for the battery connector replacement. If battery terminals are not at fault, proceed to c.
	c) keypad defective.	Replace the keypad. Temporarily connect a +3.6 Vdc supply to the battery terminals. Press and hold the PWR button. If unit turns on and stays on, disconnect the dc power source and reassemble with the new keypad.
2. Telephone exhibits poor reception or erratic operation such as calls frequently dropping or weak or distorted audio.	Connections to or from lower PCB defective.	Check connection between the antenna and the lower PCB.
3. Display is erratic, or provides partial or no display.	LCM defective.	Replace the LCM. Verify that the fault has been cleared and reassemble the unit with the new LCM.
4. Incoming call alert transducer audio distorted or volume is too low.	Speaker defective.	Replace the speaker as described in the procedures. Verify that the fault has been cleared and reassemble the unit with the new speaker.
5. Telephone transmit audio is weak. (usually indicated by called parties complaining of difficulty in hearing voice).	Microphone defective.	Replace the microphone as described in the procedures. Verify that the fault has been cleared and reassemble the unit with the new microphone.
6. Receive audio from earpiece speaker is weak or distorted.	a) Connections to or from lower PCB defective.	Check connection between the antenna and the lower PCB. If the connection is OK, proceed to b.
	b) Speaker defective.	Temporarily replace the speaker with a known good speaker. Ensure good connection. Place a call and verify improvement in earpiece audio. If fault is cleared, reassemble the telephone with the good speaker.

Table 4: Level 1 and 2 Troubleshooting Chart (Continued)

Symptom	Probable Cause	Verification and Remedy
7. Telephone will not recognize or accept SIM card.	SIM card defective.	Check the SIM card contacts for dirt. Clean if necessary, and check if fault has been cleared. If the contacts are clean, insert a known good SIM card into the telephone. Power up the unit and confirm that the card has been accepted. If the fault no longer exists, replace the defective SIM card.
8. Keypad not functioning.	Keypad defective.	Use alcohol to wipe the keypad metal dome. Check if fault has been cleared. If the fault is still present, either replace the keypad or refer to a Level 3 Service Center for the keypad metal dome replacement.
9. Vibrator feature not functioning.	a) Vibrator faulty.	Check general condition of vibrator. If it is good, proceed to b.
	b) Vibrator defective.	Replace the defective vibrator.
10. No or weak audio when using headset.	Headset plug not fully pushed.	Ensure the headset plug is fully seated in the jack.

Programming: Software Upgrade and Flexing

Contact your local technical support engineer for information about equipment and procedures for flashing and flexing.

Part Number Charts (W260g)

The following section provides a reference for the parts associated with W260g telephones.

Exploded View Diagram

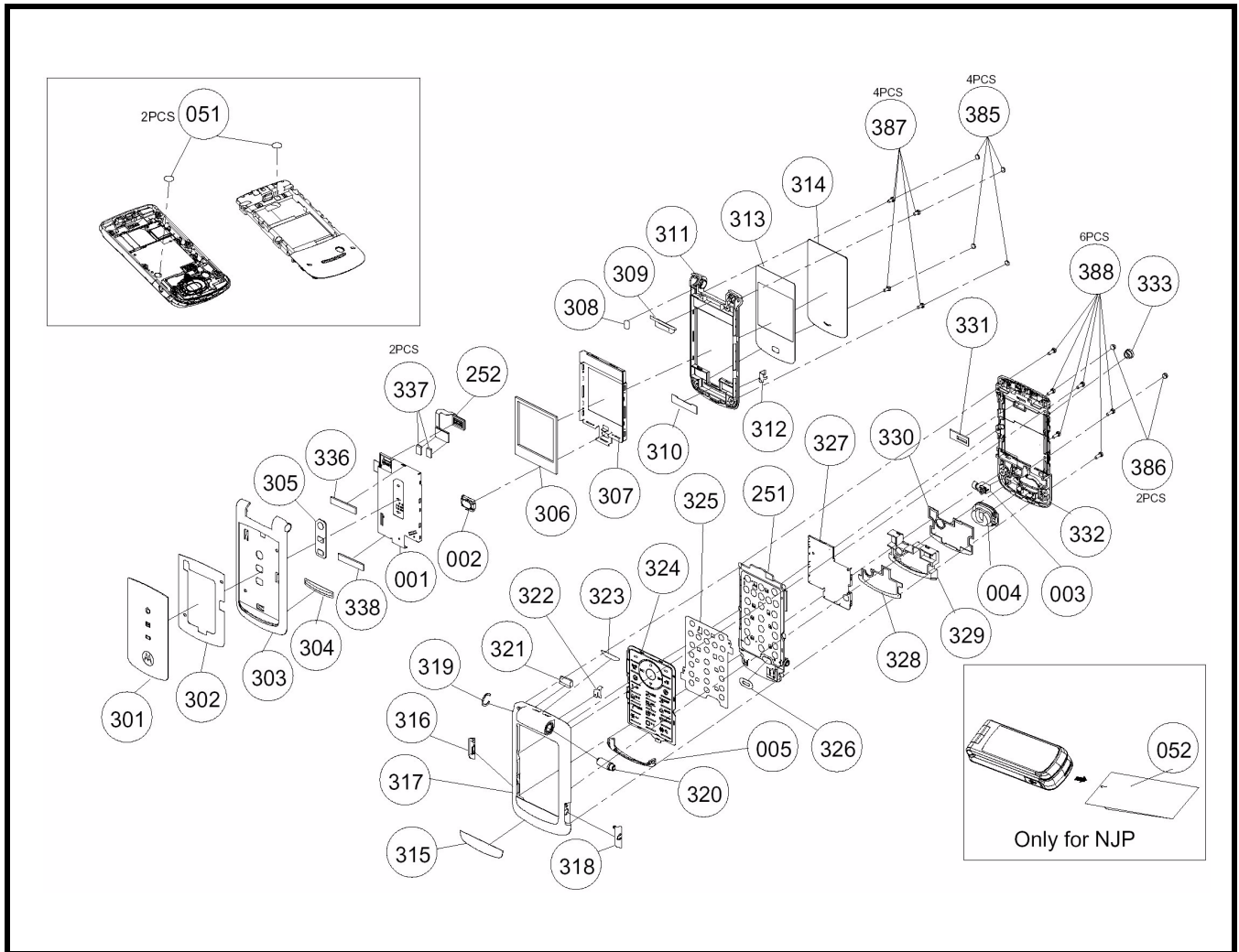


Figure 25. W260g Exploded View Diagram

Exploded View Parts List

Table 5: W260g Exploded View Parts List

Part Number	Item Number	Description	Specification
001	7630121259W	LCM	WD-Y1212VB-7CLW 128*128 65K WI
002	2240071104W	RECEIVER	SDRP0711KJ01-F3-G AAC 10115
003	3930507105W	SPR-VIB	φ5*L7.15 1.3V LA4-458HC COPAL
004	2250142001W	SPEAKER	DMSP1420C-01-FB5-G AAC
005	2300H66A01W	I-ANTENNA	H66A ANT+HOLDER US
051	82E5800003W	LABEL	E58 WATERPROOF 3M5559 φ 4mm
251	6911140021W	F/WMB 33	M61A GA-151
252	21H66030D1W	PCB-ASSY	H66 GF-077 REV:0D FB
300	5501820001W	ME/PT 33	M61/M61A LICORICE
301	254AH66001W	LED-LENS	H66-MR58-TRANSPARENT-SUB
302	8609H66002W	ADHESIVE	H66-NITTO5635-SUB LENS
303	2525H66001W	DIS LOW-C	H66-PC-LICORICE
304	3061H66002W	DUST-PRO	H66-MESH-BLACK-26.2*5.77*0.2-A
305	302AH66003W	RUBBER	H66-RUBBER-WHITE-LED
306	3038H66001W	LCM-SPON	H66-PORON-42.75*37.68*1.2
307	3057H66001W	LCM-BRACK	H66-SUS304-62.2*39.8*4
308	3056H58001W	MAGNET	H58-ND-5*3*2-BT 20971
310	3061H66001W	DUST-PRO	H66-MESH-BLACK-22.7*5.78*0.2-B
312	3041H66002W	SPRING	H66-C5191-6.3*4.7*5.1-DIS
313	8609H66001W	ADHESIVE	H66-NITTO5635-MAIN LENS
315	3062M61A01W	NAMEPLATE	M61A-PC-LICORICE
316	302BH66002W	RUBBERPAD	H66-TPU-BLACK-USB
318	302BH66001W	RUBBERPAD	H66-TPU-BLACK-AUDIO
319	3064H66002W	MYLAR	H66- φ 8.9*0.35-HINGE
320	3405141001W	HINGE	H66-FE+AU- φ 5*14.1-4.5KG
321	302AH66001W	RUBBER	H66-9.32*5.41*3.01-HINGE
322	3041H66001W	SPRING	H66-C5191-5.39*7.85*0.15-KB
323	3064H66001W	MYLAR	H66-15.19*3.34*0.1-LANYARD

Table 5: W260g Exploded View Parts List

Part Number	Item Number	Description	Specification
324	3101M61A11W	DIAL-KEY	M61A-RUBBER-LICORICE-E-21
325	3109M61A01W	MET-DOME	M61A- ϕ 4*160g-21KEY
326	3023H66002W	MIC-HOLD	H66-PORON-BLACK-W/MESH
327	3052M61A02W	SHIELD-C	M61A-SUS304-43.58*35.65*1.55-Y
328	303MH66001W	SPONGE	H66-SRS40P-36.8*22*0.3-SPK_SEA
329	3022H66001W	SPK-HOLD	H66-PC-GRAY
330	303MH66002W	SPONGE	H66-SRS24P-38*25*0.5-SPK_HOLD
331	303LH66001W	BTB-SPON	H66-PORON-15.52*6.34*1.55 MB
333	3028H80002W	RF-COV	H80-RUBBER-BLACK 20759
336	303MH66003W	SPONGE	H66-SRS40P-22*5*1.05-LCM-BTB
337	303LH66002W	BTB-SPON	H66-PORON-6.5*3.5*1.6-LCM
338	303MH66004W	SPONGE	H66-SRS40P-36*5*1.05-LCM-REC
386	254CH66002W	SCREW-COV	H66-RUBBER-LICORICE
387	3501733201W	SCREW_G	TORX M1.7*3.3-SILVER-NI KL 20048
388	3501745102W	SCREW_G	TORX M1.7*4.5-BLACK-NI KL-PC

Part Number Charts (W270)

The following section provides a reference for the parts associated with W270 telephones.

Exploded View Diagram

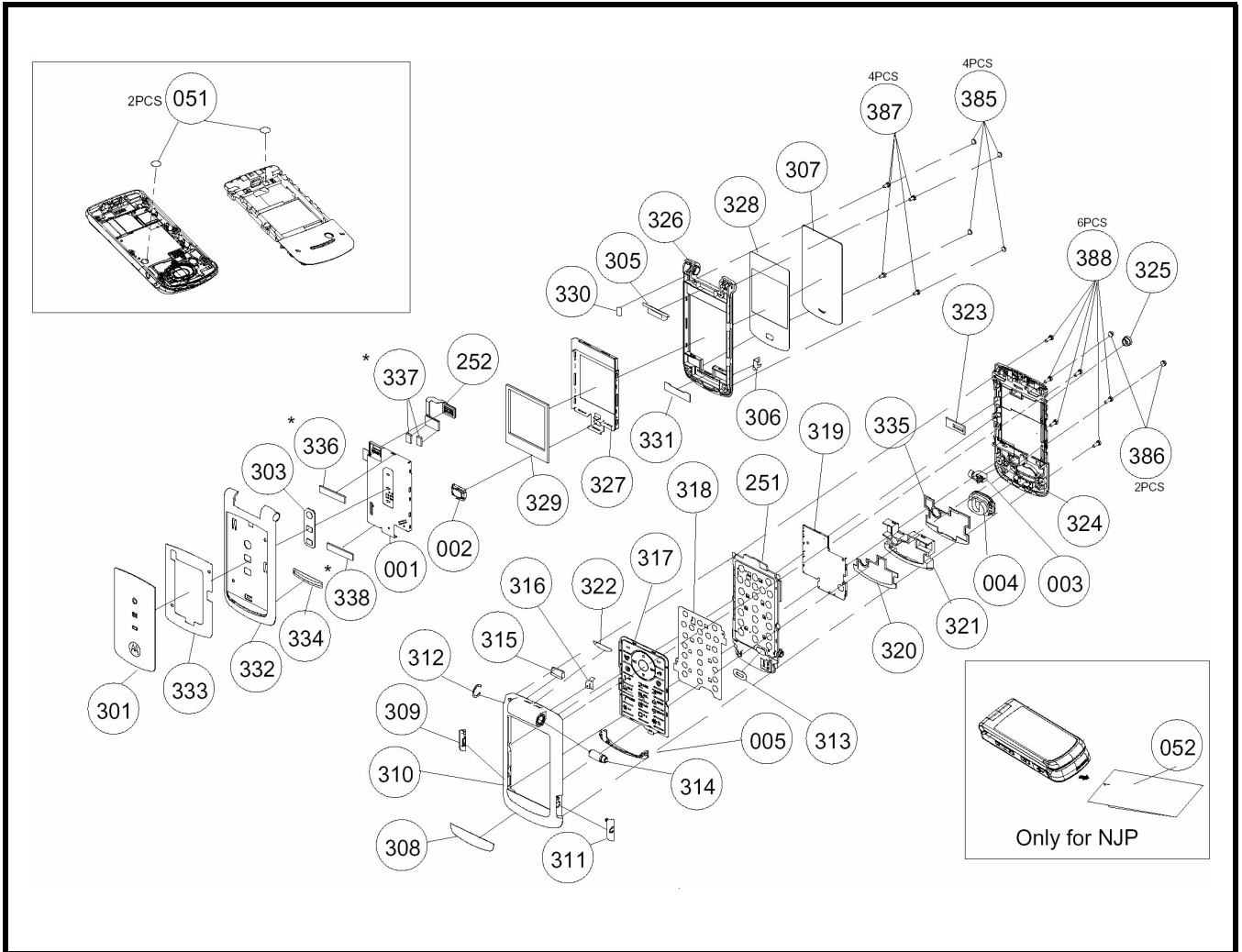


Figure 26. W270 Exploded View Diagram

Exploded View Parts List

Table 6: W270 Exploded View Parts List

Part Number	Item Number	Description	Specification
001	7630121259W	LCM	WD-Y1212VB-7CLW 128*128 65K WI
002	2240071104W	RECEIVER	SDRP0711KJ01-F3-G AAC 10115
003	3930507105W	SPR-VIB	$\phi 5 * L7.15$ 1.3V LA4-458HC COPAL
004	2250142001W	SPEAKER	DMSP1420C-01-FB5-G AAC
005	2300H66001W	I-ANTENNA	H66 ANT+HOLDER EU
051	82E5800003W	LABEL	E58 WATERPROOF 3M5559 $\phi 4$ mm
251	6911140001W	F/WMB 33	H66/M65 GA-151
252	21H66030D1W	PCB-ASSY	H66 GF-077 REV:0D FB
300	5501810001W	ME/PT 33	H66/H66A LICORICE
301	254AH66001W	LED-LENS	H66-MR58-TRANSPARENT-SUB
303	302AH66003W	RUBBER	H66-RUBBER-WHITE-LED
305	254BH66001W	PLATE	H66-POM-BLACK STOP
306	3041H66002W	SPRING	H66-C5191-6.3*4.7*5.1-DIS
307	2541H66001W	LCD-LENS	H66-MR58-TRANSPARENT-MAIN
308	3062H66001W	NAMEPLATE	H66-PC-LICORICE
309	302BH66002W	RUBBERPAD	H66-TPU-BLACK-USB
310	2526H66001W	KB UPP-C	H66-PC-LICORICE
311	02BH66001W	RUBBERPAD	H66-TPU-BLACK-AUDIO
312	3064H66002W	MYLAR	H66- $\phi 8.9 * 0.35$ -HINGE
313	3023H66002W	MIC-HOLD	H66-PORON-BLACK-W/MESH
314	3405141001W	HINGE	H66-FE+AU- $\phi 5 * 14.1-4.5$ KG
315	302AH66001W	RUBBER	H66-9.32*5.41*3.01-HINGE
316	3041H66001W	SPRING	H66-C5191-5.39*7.85*0.15-KB
317	3101H66011W	DIAL-KEY	H66-RUBBER-LICORICE-E-23+3
318	3109H66001W	MET-DOME	H66- $\phi 4 * 160$ g-23KEY
319	3052M61A02W	SHIELD-C	M61A-SUS304-43.58*35.65*1.55-Y
320	303MH66001W	SPONGE	H66-SRS40P-36.8*22*0.3-SPK_SEA
321	3022H66001W	G2780480	SPK-HOLD H66-PC-BLACK

Table 6: W270 Exploded View Parts List

Part Number	Item Number	Description	Specification
322	3064H66001W	MYLAR	H66-15.19*3.34*0.1-LANYARD
323	303LH66001W	BTB-SPON	H66-PORON-15.52*6.34*1.55 MB
324	2527H66001W	LOW-C	H66-PC-LICORICE
325	3028H80002W	RF-COV	H80-RUBBER-BLACK 20759
326	2524H66001W	DIS UPP-C	H66-PC-LICORICE
327	3057H66001W	LCM-BRACK	H66-SUS304-62.2*39.8*4
328	8609H66001W	ADHESIVE	H66-NITTO5635-MAIN LENS
329	3038H66001W	LCM-SPON	H66-PORON-42.75*37.68*1.2
330	3056H58001W	MAGNET	H58-ND-5*3*2-BT 20971
331	3061H66001W	DUST-PRO	H66-MESH-BLACK-22.7*5.78*0.2-B
332	2525H66001W	DIS LOW-C	H66-PC-LICORICE
333	8609H66002W	ADHESIVE	H66-NITTO5635-SUB LENS
334	3061H66002W	DUST-PRO	H66-MESH-BLACK-26.2*5.77*0.2-A
335	303MH66002W	SPONGE	H66-SRS24P-38*25*0.5-SPK_HOLD
336	303MH66003W	SPONGE	H66-SRS40P-22*5*1.05-LCM-BTB
337	303LH66002W	BTB-SPON	H66-PORON-6.5*3.5*1.6-LCM
338	303MH66004W	SPONGE	H66-SRS40P-36*5*1.05-LCM-REC
385	254CH66001W	SCREW-COV	H66-RUBBER-BLACK
386	254CH66002W	SCREW-COV	H66-RUBBER-LICORICE
387	3501733201W	SCREW_G	TORX M1.7*3.3-SILVER-NI KL
388	3501745102W	SCREW_G	TORX M1.7*4.5-BLACK-NI KL-PC



There is a danger of explosion if the Lithium ion battery pack is replaced incorrectly. Replace only with the same type of battery or equivalent as recommended by the battery manufacturer. Dispose of used batteries according to the manufacturer's instructions.

To order parts please use the following Link:

<https://servicelink3.motorola.com>

(Password is required)

For information on ordering parts please contact EMEA at +49 461 803 1638.

Accessories

Table 7: List of Accessories

Accessory	Motorola Kit Number
Charger / Mini-USB plug Accessories	
EMU Switch Mode Midrate (PRC)	SPN5188
EMU Switch Mode Midrate (US)	SPN5185
EMU Switch Mode Midrate (Taiwan)	SPN5216
EMU Switch Mode Midrate (Euro)	SPN5189
EMU Switch Mode Midrate (HK/UK)	SPN5190
EMU Switch Mode Midrate (Australia)	SPN5193
EMU Switch Mode Midrate (India)	SPN5194
EMU Switch Mode Midrate (Mexico)	SPN5186
EMU Switch Mode Midrate (Brazil)	SPN5187
EMU Switch Mode Midrate (Arg)	SPN5192
EMU Switch Mode Midrate (Japan)	SPN5274
EMU Switch Mode Midrate (Korea)	SPN5351
EMU Switch Mode Dual Rate (Brazil)	SPN5196
EMU Switch Mode Dual Rate (Arg)	SPN5197
EMU Switch Mode Dual Rate (PRC)	SPN5198
EMU Switch Mode Dual Rate (HK)	SPN5199
EMU Switch Mode Dual Rate (Mex)	SPN5200
EMU Switch Mode Dual Rate (US)	SPN5202
EMU Switch Mode Dual Rate (Twn)	SPN5270
EMU Switch Mode Dual Rate (Japan)	SPN5275
P790 Portable Charger	SPN5353
Charger Adapter - Aust / NZ Plug	SYN8127
Charger Adapter - Euro Plug	SYN7456
Charger Adapter - UK Plug	SYN7455
Travel Charger BASE ONLY Standard- PRC COMMON USBA	SPN5440A
Data Cable Mini USB/USB/Serial	SKN6371
Mini USB Data Charging cable	SKN6253
512MB microSD card & Mot SD adapter	SYN1405
1GB microSD card & Mot SD adapter	SYN1406
2GB microSD card & Mot SD adapter	SYN1407
In-Vehicle Accessories	
Hi Performance VPA	SPN5401
P310 EMU MidRate	SYN1630
VC700 EMU Power Adapter	SYN0847
Audio Accessories	
Mono Earbud Headset (Black)	SYN8390
S212 Wired Stereo HS (2.5mm barrel)	SYN1462
Headset One Touch w/ Send-End	SYN8419
Stereo One-Touch Earbud	CHYN4516
Batteries	
Battery BQ50 Li-Ion 940 mAh	SNN5804A

Index

A

About

Audience 4

Conventions 5

Scope 4

Accessories and Aftermarket Division 6

Audience 4

B

Back Housing

Removing and Replacing 20

Battery

Function 14

Operation 14

Removing and Replacing 16

C

Caller Line Identification 10

Controls 11

Conventions 5

Customer Support 5

D

Disassembly 15

E

Electrostatic Discharge 15

G

General Functions 11

H

Headset Connector Port 11

I

Indicators 11

Input/Output (I/O) Connectors 11

International Mobile Station Equipment Identity (IMEI) 25

Number Breakdown 25

L

- Left Soft Key 11
- Liquid Crystal Display (LCD) 12
 - LCD Shielding Case 25
 - Removing and Replacing 24

M

- Mechanical Serial Number 25
- Menu Key 11
- Menu Navigation 11
- Microphone 11

N

- Navigation Key 11

O

- Out of Box Failure Policy 5

P

- Part Number Charts 30
- Parts Replacement 6
 - Accessories and Aftermarket Division 6
- Power Connector Port 11
- Power/End Key 11
- Product Overview 9
 - Caller Line Identification 10
 - Features 9
 - SIM Toolkit™ - Class 2 10
- Product Support 5

R

- Right Soft Key 11

S

- Scope 4
- Send/Answer Key 11
- Signal Strength Indicator 12
- SIM Card 25
 - Identification Label 25
 - International Mobile Station Equipment Identity (IMEI) 25
 - Mechanical Serial Number 25
- SIM Toolkit™ - Class 2 10
- Specifications 7

T

- Troubleshooting 27

U

USB Connector Port 11

User Interface Menu Structure 13

W

Warranty Service Policy 5

 Customer Support 5

 Out of Box Failure Policy 5

 Product Support 5

MOTOROLA, the Stylized M Logo, and all other trademarks indicated as such herein are trademarks of Motorola, Inc.
All other product or service names are the property of their respective owners.

® Reg. U.S. Pat. & Tm. Off.

© 2005 Motorola, Inc.

All rights reserved.

Personal Communications Sector,
Sawgrass International Concourse
789 International Parkway Room S2C
Sunrise, FL 33323