# Lenovo

## motorola one



Lenovo motorola one Level 2 – Service and Repair Manual



# **REVISION HISTORY**

Revision	Date	Notes
1	09/13/2018	Initial draft



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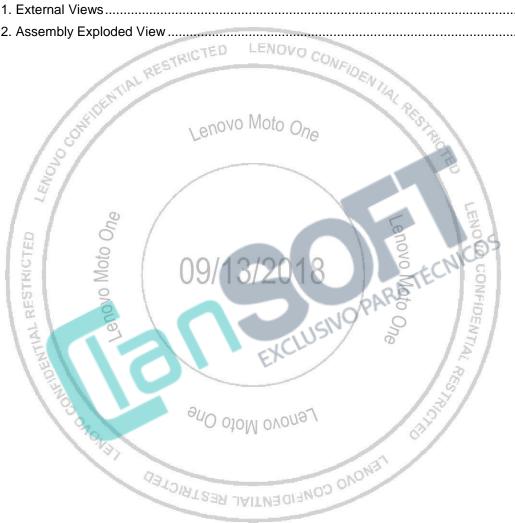


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## **SAFETY INFORMATION**

## **Cautions and Warnings**

#### **Electrostatic Discharge**

The phone components may be damaged by electrostatic discharge (ESD). Always use an ESD mat and ground strap when working with internal components.

### **Battery Safety Guidelines**

Handle Battery with care. Ensure Battery edges and surfaces are not dented or deformed. If the Battery Pack is dropped to the floor, it may be internally damaged and must be scrapped.

Ensure all surfaces, fixtures, and phone components contacting the Battery are smooth and clean.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer.



## INTRODUCTION

### **External Views**



Figure 1. External Views

VEV



**Table 1. External Views Parts List** 

Reference #	Description
1	Sim Tray
2	Headset Jack
3	Secondary MIC
4	Loud Speaker
5	USB Port
6	Front Facing Flash
7	Earpiece Speaker
8	Volume Key
9	Power Key
10	Display Lenovo Woto One
11 / 🐉 /	Front Housing
12	Rear-Facing Camera
13	Flash Lens
14 🔒	Finger Print Sensor
15 5	Battery Inlay
12 DOWNING RESTRIC	Battery Inlay  O otoM ovorial  Excrisive by the state of
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## **Main Exploded Views**

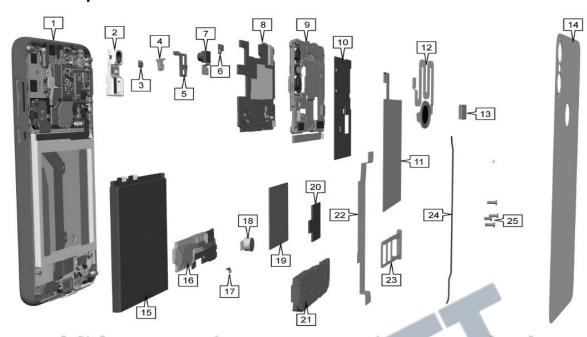


Figure 2. Assembly Exploded View

Table 2. Assembly Exploded View Parts List

Reference #	Description	Recovery Part
1	XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	YES
2	LC+2640SK000015+L3520 bk cam 13+2 XL	YES
3	XT1941 Receiver&2626AA000002 CS	No
4	XT1941 MIC1 Rubber&5061AA000061 CS	YES
5	LC+5061SK000059+L3520 ear_rubb(DP)	YES
6	LC+5061SK000058+L3520 gg_rub(DP)	YES
7	MDL,CAMR,8MP,OFILM L4H7F70 COB FF 30PIN	YES
8	XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	YES
9	XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	YES
10	LC+5460SK000046+L3520 bat cover film(YH)	YES
11	LC+5022SK000028+L3520 NFC(JW)	NO
12	MDL,FNGRPRT,K9S,ET516,CTG FG,BLK,SLVR,BL MDL,FNGRPRT,K9S,ET516,CTG FG,WHT,SLVR,SL	YES
13	LC+5090SK000043+L3520 zhiwen sheet	NO

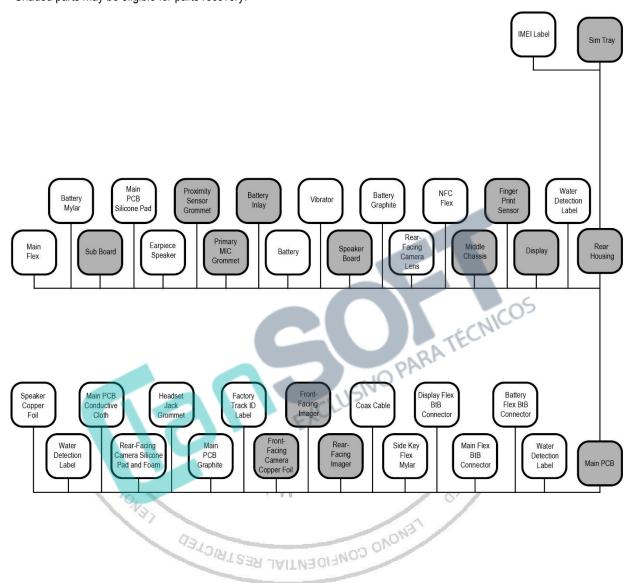
14         LC+5023SK000003+L3520 bat cover(WH WG)         YES           15         ASSY,BAT,LI POLY,HE50,AMPEREX TYP5000MAH         NO           16         XT1941-4 Sub Board&6818AA00132 CS         YES           16         XT1941-3 Sub Board&6818AA00132 CS         YES           17         XT1941-3 Sub Board&6818AA001 CS         YES           18         XT1941 MIC2 Rubber&5061AA000060 CS         YES           18         XT1941 MIC2 Rubber&5061AA000060 CS         NO           19         LC+5460SK000087-bat thermal film(YH)         NO           20         LC+5470SK000025+L3520 BOX cu foil(YH)         NO           21         LC+5016SK000016+L3520 SPK BOX(HS+HT)         YES           22         XT1941 Min FPC&6680AA0000047 CS         NO           23         LC+50175K000074+L3520 SIM tray(SL M DU)         YES           23         LC+50175K000074+L3520 SIM tray(SL M DU)         YES           24         XT1941 SIM TRAY_SS_BL&5017AA00095 CS         YES           25         LC+4610SK000069+L3520 SOTEW_M1.4_3.5(BK)         NO           -         LC+5480SK000069+L3520 SOTEW_M1.4_3.5(BK)         NO           -         LC+5480SK000059+L3520 SOTEW_M1.4_3.5(BK)         NO           -         LC+5480SK0000058+L3520 thermal rub1(YH)         NO </th <th>Reference #</th> <th>Description</th> <th>Recovery Part</th>	Reference #	Description	Recovery Part
ACCY,BAT,ACCESSORY,BATTERY,3000mAh,JE40;	14		YES
16       XT1941-3 Sub Board&6818AA00 CS       XT1941-3 BR DS CKD SUB PCBA FOR MP         17       XT1941 MIC2 Rubber&5061AA000060 CS       YES         18       XT1941 Motor&2623AA0000060 CS       NO         19       LC+5460SK000087+bat thermal film(YH)       NO         20       LC+5470SK000025+L3520 BOX cu foli(YH)       NO         21       LC+5016SK000016+L3520 SPK BOX(HS+HT)       YES         22       XT1941 Main FPC&6680AA000047 CS       NO         23       LC+5017SK000076+L3520 SIM tray(SI LM DU) XT1941 SIM TRAY_SS_WH&5017AA000092 CS       YES         24       XT1941 RF Cable&5234AA000005 CS       NO         25       LC+4610SK000026+L3520 screw_M1.4_3.5(BK)       NO          LC+5480SK000069+L3520 bat_mylar       NO          LC+5450SK000088+L3520 FP elec foam       NO          LC+5480SK000053+L3520 thermal rub1(YH)       NO          LC+5460SK000050+L3520 thermal rub2(YH)       NO          LC+5460SK000052+L3520 thermal rub2(YH)       NO          LC+5460SK000049+L3520 f_cam foil(YH)       NO          LC+5460SK000049+L3520 f_cam foil(YH)       NO          LC+5460SK0000112+L3520 MB rear film(YH)       NO          LC+5450S	15		NO
18	16	XT1941-3 Sub Board&6818AA00 CS	YES
19	17	XT1941 MIC2 Rubber&5061AA000060 CS	YES
20         LC+5470SK000025+L3520 BOX cu foil(YH)         NO           21         LC+5016SK000016+L3520 SPK BOX(HS+HT)         YES           22         XT1941 Main FPC&6680AA000047 CS         NO           23         LC+5017SK000074+L3520 SIM tray(SI LM DU)	18	XT1941 Motor&2623AA000006 CS	NO
20         LC+5470SK000025+L3520 BOX cu foil(YH)         NO           21         LC+5016SK000016+L3520 SPK BOX(HS+HT)         YES           22         XT1941 Main FPC&6680AA000047 CS         NO           23         LC+5017SK000074+L3520 SIM tray(SI LM DU)	19	LC+5460SK000087+bat thermal film(YH)	NO
22       XT1941 Main FPC&6680AA000047 CS MOLO One       NO         23       LC+5017SK000074+L3520 SIM tray(SI LM DU) LC+5017SK000076+L3520 SIM tray(BK LM DU) XT1941 SIM TRAY_SS_WH&5017AA000095 CS XT1941 SIM TRAY_SS_BL&5017AA000092 CS       YES         24       XT1941 RF Cable&5234AA000005 CS NO       NO         25       LC+4610SK000026+L3520 screw_M1.4_3.5(BK) NO       NO          LC+5480SK000069+L3520 bat mylar NO       NO          LC+5450SK000088+L3520 FP elec foam NO       NO          LC+5480SK000053+L3520 side key mylar NO       NO          LC+5480SK000050+L3520 thermal rub1(YH) NO       NO          LC+5460SK000050+L3520 thermal rub2(YH) NO       NO          LC+5460SK000052+L3520 thermal rub3(YH) NO       NO          LC+5460SK000049+L3520 f_cam foil(YH) NO       NO          LC+5460SK000049+L3520 rear LED rub(YH) NO       NO          LC+5430SK000101+L3520 rear led poron NO       NO          LC+5430SK000111+L3520 r_CAM&MB elec foam NO       NO          LC+5430SK000114+L3520 r_CAM&MB elec foam NO       NO          LC+5430SK000114+L3520 S_MIC poron NO       NO	20	LC+5470SK000025+L3520 BOX cu foil(YH)	NO
23       LC+5017SK000074+L3520 SIM tray(SI LM DU) LC+5017SK000076+L3520 SIM tray(BK LM DU) XT1941 SIM TRAY_SS_WH&5017AA000095 CS XT1941 SIM TRAY_SS_BL&5017AA000095 CS       YES         24       XT1941 RF Cable&5234AA000005 CS       NO         25       LC+4610SK000026+L3520 screw_M1.4_3.5(BK)       NO          LC+5480SK000069+L3520 bat_mylar       NO          LC+5450SK000088+L3520 FP elec foam       NO          LC+5480SK000053+L3520 side key mylar       NO          LC+5460SK000050+L3520 thermal rub1(YH)       NO          LC+5460SK000056+L3520 thermal rub2(YH)       NO          LC+5460SK000052+L3520 thermal rub3(YH)       NO          LC+5460SK000052+L3520 f_cam foil(YH)       NO          LC+5460SK000049+L3520 f_cam foil(YH)       NO          LC+5460SK000047+L3520 MB rear film(YH)       NO          LC+5430SK000101+L3520 rear led poron       NO          LC+5450SK000112+L3520 r_cAM&MB elec foam       NO          LC+5430SK000117+L3520 r_CAM&MB elec foam       NO          LC+5430SK000147+L3520 S_MIC poron       NO	21	LC+5016SK000016+L3520 SPK BOX(HS+HT)	YES
23       LC+5017SK000076+L3520 SIM tray(BK LM DU) XT1941 SIM TRAY_SS_WH&5017AA000095 CS XT1941 SIM TRAY_SS_BL&5017AA000092 CS       YES         24       XT1941 RF Cable&5234AA000005 CS       NO         25       LC+4610SK000026+L3520 screw_M1.4 3.5(BK)       NO          LC+5480SK000069+L3520 bat_mylar       NO          LC+5450SK000088+L3520 FP elec foam       NO          LC+5480SK000053+L3520 side key mylar       NO          LC+5460SK000050+L3520 thermal rub1(YH)       NO          LC+5460SK000056+L3520 thermal rub2(YH)       NO          LC+5460SK000052+L3520 thermal rub3(YH)       NO          LC+5460SK000026+L3520 f_cam foil(YH)       NO          LC+5460SK000049+L3520 rear LED rub(YH)       NO          LC+5460SK000047+L3520 mear led poron       NO          LC+5430SK00011+L3520 rear led poron       NO          LC+5450SK000112+L3520 r_ke&MB elec foam       NO          LC+5450SK000117+L3520 r_CAM&MB elec foam       NO          LC+5430SK000147+L3520 S_MIC poron       NO	22	XT1941 Main FPC&6680AA000047 CS VIOLO One	NO
25       LC+4610SK000026+L3520 screw_M1.4_3.5(BK)       NO          LC+5480SK000069+L3520 bat_mylar       NO          LC+5450SK000088+L3520 FP elec foam       NO          LC+5480SK000053+L3520 side key mylar       NO          LC+5460SK000050+L3520 thermal rub1(YH)       NO          LC+5460SK000056+L3520 thermal rub2(YH)       NO          LC+5460SK000052+L3520 thermal rub3(YH)       NO          LC+5470SK000026+L3520 f_cam foil(YH)       NO          LC+5460SK000049+L3520 rear LED rub(YH)       NO          LC+5460SK000047+L3520 MB rear film(YH)       NO          LC+5430SK00011+L3520 rear led poron       NO          LC+5450SK000112+L3520 r_ke&MB elec foam       NO          LC+5430SK000117+L3520 r_CAM&MB elec foam       NO          LC+5430SK000147+L3520 S_MIC poron       NO	23	LC+5017SK000076+L3520 SIM tray(BK LM DÚ) XT1941 SIM TRAY_SS_WH&5017AA000095 CS	YES
LC+5480SK000069+L3520 bat_mylar         NO            LC+5450SK000088+L3520 FP elec foam         NO            LC+5480SK000053+L3520 side key mylar         NO            LC+5460SK000050+L3520 thermaL rub1(YH)         NO            LC+5460SK000056+L3520 thermaL rub2(YH)         NO            LC+5460SK000052+L3520 thermaL rub3(YH)         NO            LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5430SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO	24	XT1941 RF Cable&5234AA000005 CS	NO
LC+5450SK000088+L3520 FP elec foam         NO            LC+5480SK000053+L3520 side key mylar         NO            LC+5460SK000050+L3520 thermaL rub1(YH)         NO            LC+5460SK000056+L3520 thermaL rub2(YH)         NO            LC+5460SK000052+L3520 thermaL rub3(YH)         NO            LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000112+L3520 r_ke&MB elec foam         NO            LC+5450SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO	25	LC+4610SK000026+L3520 screw_M1.4_3.5(BK)	NO
LC+5480SK000053+L3520 side key mylar         NO            LC+5460SK000050+L3520 thermaL rub1(YH)         NO            LC+5460SK000056+L3520 thermaL rub2(YH)         NO            LC+5460SK000052+L3520 thermaL rub3(YH)         NO            LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5430SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO	-	LC+5480SK000069+L3520 bat_mylar	NO
LC+5460SK000050+L3520 thermaL rub1(YH) NO LC+5460SK000056+L3520 thermaL rub2(YH) NO LC+5460SK000052+L3520 thermaL rub3(YH) NO LC+5470SK000026+L3520 f_cam foil(YH) NO LC+5460SK000049+L3520 rear LED rub(YH) NO LC+5460SK000047+L3520 MB rear film(YH) NO LC+5430SK000101+L3520 rear led poron NO LC+5450SK000112+L3520 r_ke&MB elec foam NO LC+5450SK000110+L3520 r_CAM&MB elec foam NO LC+5430SK0001147+L3520 S_MIC poron NO		LC+5450SK000088+L3520 FP elec foam	NO
LC+5460SK000056+L3520 thermaL rub2(YH)         NO            LC+5460SK000052+L3520 thermaL rub3(YH)         NO            LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5430SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO		LC+5480SK000053+L3520 side key mylar	NO
LC+5460SK000052+L3520 thermaL rub3(YH)         NO            LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5430SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO		LC+5460SK000050+L3520 thermaL rub1(YH)	NO
LC+5470SK000026+L3520 f_cam foil(YH)         NO            LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5450SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO		LC+5460SK000056+L3520 thermaL rub2(YH)	NO
LC+5460SK000049+L3520 rear LED rub(YH) NO LC+5460SK000047+L3520 MB rear film(YH) NO LC+5430SK000101+L3520 rear led poron NO LC+5450SK000112+L3520 r_ke&MB elec foam NO LC+5450SK000110+L3520 r_CAM&MB elec foam NO LC+5430SK000147+L3520 S_MIC poron NO		LC+5460SK000052+L3520 thermaL rub3(YH)	NO
LC+5460SK000049+L3520 rear LED rub(YH)         NO            LC+5460SK000047+L3520 MB rear film(YH)         NO            LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5450SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO		LC+5470SK000026+L3520 f_cam foil(YH)	NO
LC+5430SK000101+L3520 rear led poron         NO            LC+5450SK000112+L3520 r_ke&MB elec foam         NO            LC+5450SK000110+L3520 r_CAM&MB elec foam         NO            LC+5430SK000147+L3520 S_MIC poron         NO		LC+5460SK000049+L3520 rear LED rub(YH)	NO
LC+5450SK000112+L3520 r_KeaMB electroam NO LC+5450SK000110+L3520 r_CAM&MB electroam NO LC+5430SK000147+L3520 S_MIC poron NO		LC+5460SK000047+L3520 MB rear film(YH)	NO
LC+5450SK000112+L3520 r_KeaMB electroam NO LC+5450SK000110+L3520 r_CAM&MB electroam NO LC+5430SK000147+L3520 S_MIC poron NO		LC+5430SK000101+L3520 rear led poron	NO
LC+5430SK000147+L3520 S_MIC poron NO		LC+5450SK000112+L3520 r_ke&MB elec foam	NO
		LC+5450SK000110+L3520 r_CAM&MB elec foam	NO
LC+Y70151569+LXF_L3600_A01LDI_LABEL NO		LC+5430SK000147+L3520 S_MIC poron	NO
		LC+Y70151569+LXF_L3600_A01LDI_LABEL	NO

<sup>\*</sup>Refer to this table as a reference to parts listed in the <u>Assembly</u> section.

## DISASSEMBLY AND RECOVERY

### **Disassembly and Recovery Map**

\*Shaded parts may be eligible for parts recovery.



## **Tools Required for Disassembly**

The following tools are required to disassemble the motorola one phone.

Description	Part #	Picture / Drawing
Robusta S Battery Inlay Removal Insert	MR-M2-001-032	
Heating Plate  Heating Plate  Lenovo Mo	3-00-V5-10000 to One	
Moto Display/Inlay Removal Fixture	MR-M2-001	Janovon Line
3 mm Allen Wrench	XCIUSIVO PAR	
Hot blate Anoto One		Towns Towns Distance of The Control
Thin Plastic Spudger	0-00-00-40826	

Description	Part #	Picture / Drawing
SIM/SD Tray Removal Tool		
	ENOVO CONFIDENTIA	
Torque Driver	oto One	
PHO LOLIX Bit ONO Moto Ono Mot	2018 PAR	NOVO MECNICOS
Shim OUO OJOM	4-00-5L-10000	
Tweezer (Plastic)	ENONO CONEIDEN	-
ESD Mat	NEGIEN	
Wrist Strap		
Gloves or Finger Collets		

## **SIM Tray Removal**



## **IMEI Label Removal**



## **Water Detection Label Inspection**



## **Battery Inlay Removal**

Preheating for Battery Inlay Removal

#### **NOTE**

The Battery Inlay can be recovered and reused after removal.



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#### **NOTE**

Battery Inlay Removal Methods A and B have the same preheating steps, as shown below.

### // CAUTION //

Do not set the Hot Plate temperature higher than 80 °C (176 °F). Damage to the phone may occur.

1. Set the Hot Plate to 80 °C (176 °F).

#### **NOTE**

Preheating with an oven is also acceptable if the oven is set to the same temperature.

2. Place the phone in the Heating Plate, with the Battery Inlay side down.



3. Wait 10 minutes for the Battery Inlay Adhesive to warm up.

3. Wait 10 minutes for the Battery Inlay Adhesive to warm up.

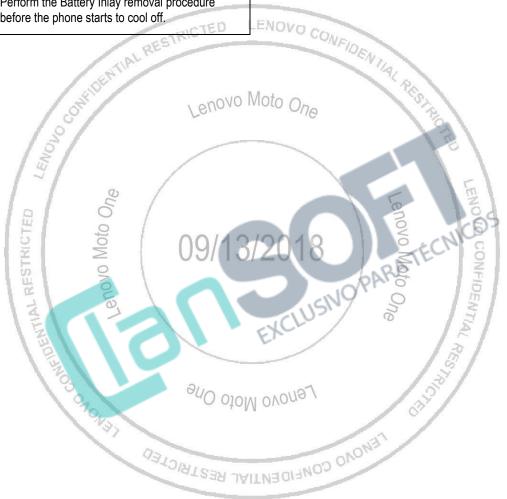
Remove the phone from the Heating Plate or the oven.

#### // CAUTION //

Wear protective gloves when handling heated phones.

#### **NOTE**

Perform the Battery Inlay removal procedure before the phone starts to cool off.



### Battery Inlay Removal Method A

1. Use the 3 mm Allen Wrench to loosen the screws holding the side rails on the Battery Inlay Fixture. Do not remove the rails.



Use the 3 mm Allen Wrench to remove the 2 center screws.



 Orient the Battery Inlay Removal Insert in relation to the Display Removal Fixture as shown. Place the Insert in the Battery Removal Fixture.

ofoM ofoM

CTED



Use fingers to remove the pin from the Fixture.



 Slide both side rails on the Display Removal Fixture firmly against the Battery Inlay Insert. Use the 3 mm Allen Wrench to tighten the 4 outside screws on the underside of the Display Removal Fixture.

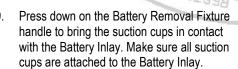


- 6. Follow preheating steps described on Page 18.
- 7. Slide the phone into the Battery Removal Fixture as shown. Center the phone in the Fixture.



 User fingers to insert the pin into the phone and the Fixture.







STRICTED

Use care when pressing down on the Battery Remover Fixture handle. Damage to the phone may occur.

### **NOTE**

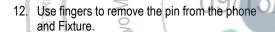
Begin this step before the phone starts to cool off.

10. As the Battery Inlay begins to release from the phone, use the Thin Plastic Spudger to gently pry the Battery Inlay as shown.

#### // CAUTION //

Do not insert the Thin Plastic Spudger more than 1 prevent damaging internal components.





13. Use the Thin Plastic Spudger to break the suction on the suction cups attached to the Battery Inlay.

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14. After all the suction cups have been released, carefully slide the phone out of the Battery Removal Fixture.





### Battery Inlay Removal Method B

- 1. Follow preheating steps described on page 18.
- 2. Use a Suction Cup tool to hold the Battery Inlay firmly and create a gap between the Battery Inlay and the phone.



 Use the Thin Plastic Spudger to disengage the Battery Inlay from the all sides of the Rear Housing.

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#### // CAUTION //

Do not insert the Thin Plastic Spudger more than 10 mm to prevent damaging internal components.







## **Battery Inlay Removal Completion**

1. Use the Torque Driver with ph0 Torx Bit to loosen the screw holding the rail on the Display Flex Shield as shown.



Use the plastic Tweezer to remove the Steel Sheet as shown.



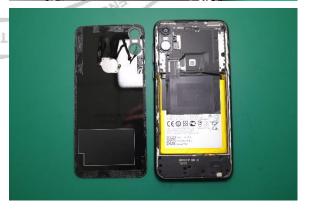
3. Use the flat end of the Black Stick to remove the FPS Flex.

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4. Remove the Battery Inlay from the phone.



## **Battery Mylar Removal**



## **Finger Print Sensor Removal**



## **Middle Chassis Removal**



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The Middle Chassis can be recovered and reused after removal.



1. Use the Torque Driver with ph0 Torx Bit to loosen the screws shown.



Use the flat end of the Black Stick to lift up the Middle Chassis.



3. Use fingers to lift the Middle Chassis from the Rear Housing as shown.



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**NOTE** 

### **NFC Flex Removal**



Remove the NFC Flex only if necessary. After you remove it, you cannot reuse it.

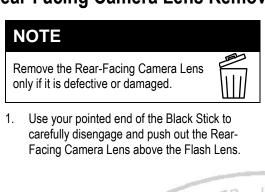


1. Use the flat end of the Black Stick to disengage the NFC Flex from the pocket on the Middle Chassis.



Use your fingers to remove the NFC Flex from the Middle Chassis as shown. Lenovo Mi LENOVOCO RESTRICTED ONFIDENTIAL RESTRICTED KCLUSINO PARE Sho otoM ovons DETONO CONFIDENTIAL RESTRICTED

## **Rear-Facing Camera Lens Removal**

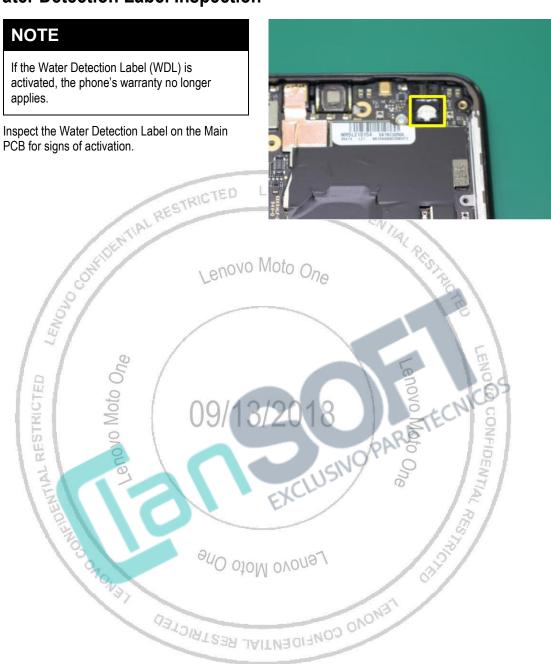




## **Battery Inlay Graphite Removal**



## **Water Detection Label Inspection**



### **Main PCB Removal**

## NOTE

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The Main PCB can be recovered and reused after removal.



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 Use the flat end of the Black Stick to remove the Battery Flex BtB Connector from the pocket on the Main PCB.



Use the flat end of the Black Stick to disengage the Main Flex BtB Connector from the Main PCB.



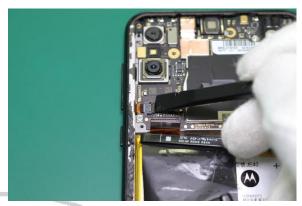
Use the flat end of the Black Stick to remove the Display Flex BtB Connector.



Use the plastic Tweezer to remove the Side Key Flex Mylar as shown.



5. Use the flat end of the Black Stick to open the ZIF Connector Door.



6. Use the plastic Tweezer to remove the Side Key Flex from the Main PCB carefully.



7. Use the plastic Tweezer to remove the Coax Cable from the location on the Main PCB as shown.



8. Use Torque Driver with ph0 Torx Bit to loosen the screws shown.



9. Use the flat end of the Black Stick to remove Main PCB from the Rear Housing. ON CONFIDENTIAL RESTRICTED LENOVO CONFIDENTIA Lenovo Moto One EXCLUSIVO PARO TO DUOT RESTRICTED CONFIDENTIAL RESTRICTED enO otoM ovoneJ LENONO CONFIDENTIAL RESTRICTED

# **Rear-Facing Imager Removal**



### Front-Facing Imager Removal

#### **NOTE**

The Front-Facing Imager can be recovered and reused after removal.



1. Use the plastic Tweezer to remove the Front-Facing Camera Copper Foil.





### Front-Facing Camera Copper Foil Removal



### **Factory Track ID Label Removal**



### **Main PCB Graphite Removal**



### **Headset Jack Grommet Removal**



### Rear-Facing Camera Silicone Pad and Foam Removal

#### **NOTE**

Rear-Facing Camera Silicone Pad and Foam cannot be recovered and reused after removal.



 Use the flat end of the Black Stick to remove the Rear-Facing Camera Silicone Pad from the Main PCB.



2. Use the plastic Tweezer to remove the Rear-Facing Camera Foam as shown.

Opposite the plastic Tweezer to remove the Rear-Facing Camera Foam as shown.

Opposite the plastic Tweezer to remove the Rear-Facing Camera Foam as shown.

Opposite the plastic Tweezer to remove the Rear-Facing Camera Foam as shown.

# **Main PCB Conductive Cloth Removal**



### **Speaker Board Removal**



# **Water Detection Label Inspection**



If the Water Detection Label (WDL) is activated,



### **Speaker Copper Foil Removal**



### **Sub Board Removal**



The Sub Board can be recovered and reused after removal.



 Use the flat end of the Black Stick to carefully remove the Connector from the location on the Sub Board.



Use the plastic Tweezer to remove Coax Cable as shown.



3. Use the flat end of the Black Stick to lift the Sub Board from the Rear Housing.

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### **Vibrator Removal**



### **Primary MIC Grommet Removal**



### **Proximity Sensor Grommet Removal**



# **Earpiece Speaker Removal**



### Main PCB Silicone Pad Removal



### **Battery Graphite Removal**



### **Battery Removal**

#### Preheating for Battery Removal

#### **NOTE**

Remove the Battery only if necessary. After you remove it, you cannot reuse it.



#### // CAUTION //

Do not set the Hot Plate temperature higher than 80 °C (176 °F). Damage to the phone may occur.

1. Set the Hot Plate to 80 °C (176 °F), enovo Moto One

#### **NOTE**

Preheating with an oven is also acceptable if the oven is set to the same temperature.

2. Place the phone in the Heating Plate, with the Display side down.



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- 3. Wait 10 minutes for the Display Adhesive to warm up.
- 4. Remove the phone from the Heating Plate or the oven.

### // CAUTION //

Wear protective gloves when handling heated phones.

#### **NOTE**

Perform the Battery removal procedure before the phone starts to cool off.

### **Battery Removal Procedure**

1. Use the Thin Plastic Spudger to cut the



### **Main Flex Removal**



### **Secondary MIC Grommet Removal**



# Parts Refresh

# **Tools Required for Parts Refresh**

The following tools are required for parts refresh of the motorola one phone.

Description	Part #	Image
Black Stick	LENOVO CONA	FIDEN
Plastic Tweezer	l	T. P.E.
ESD Mat Leno	NO MOTO OVE	12
Wrist Strap		- 7
Isopropyl (ISP) Alcohol	-	
Cotton Swabs		- 5
Cleaning Pads	-	1 2
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# **Battery Inlay Cleaning**



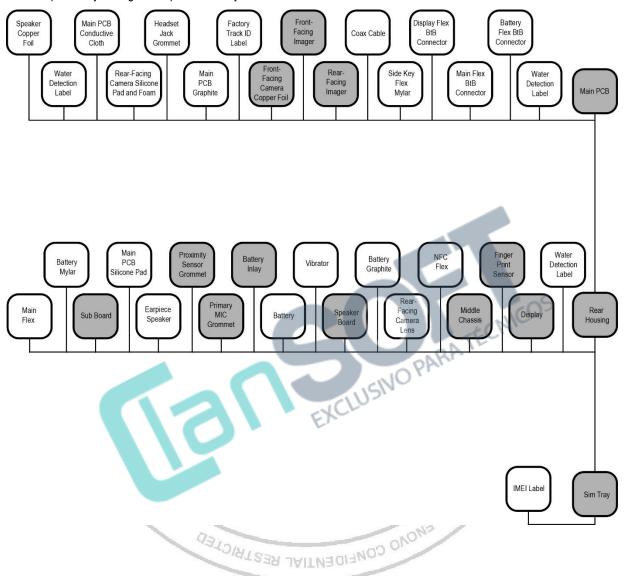
# **Rear Housing Cleaning**



# **ASSEMBLY**

### **Assembly Map**

\*Shaded parts may be eligible for parts recovery.



# **Tools Required for Assembly**

The following tools are required to assemble the motorola one phone.

Description	Part #	Picture / Drawing
Black Stick		
ph00 Bit (Adjustable)	LENOVO CONFI	DEN
3 mm Allen Wrench	0/13/2018	20000000000000000000000000000000000000
Torque Driver	EXCLUSIVE	
Manual Roller	Cenora avoid	- /3/
Tweezers (Plastic)		/ & /
Gloves or Finger Collets	O CONFIDENTIAL RE	CINET

# **Primary MIC Grommet Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 MIC1 Rubber&5061AA000061 CS	4



### **Main Flex Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Main FPC&6680AA000047 CS	22
XT1941 Main FPC Adhes&5450AA000163 CS	-

1. Peel the Main Flex from the carrier.



### **Battery Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
ASSY,BAT,LI POLY,HE50,AMPEREX TYP5000MAH ACCY,BAT,ACCESSORY,BATTERY,3000mAh,JE40;	15
XT1941 Batt Adhes_1&5420AA000172 CS	-
XT1941 Batt Adhes_2&5420AA000171 CS	-

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#### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

#### **NOTE**

Use the Fixture to assemble the Battery.

 Place the Battery Adhesive on the location on the Rear Housing as shown and peel off the liner.

Use fingers to place the Battery on the Rear Housing as shown.

#### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.





3. Use the Manual Roller to roll over the Battery for 10 cycles to secure the Battery on the Rear Housing.

#### **NOTE**

For each cycle roll the Manual Roller from top to bottom of the Battery and vice versa.

#### **NOTE**

Each cycle should last for 3 seconds.





# **Battery Graphite Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
ASSY,BAT,LI POLY,HE50,AMPEREX TYP5000MAH ACCY,BAT,ACCESSORY,BATTERY,3000mAh,JE40;	15
LC+5460SK000087+bat thermal film(YH)	19



# **Earpiece Speaker Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Receiver&2626AA000002 CS	3



# **Proximity Sensor Grommet Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
LC+5061SK000058+L3520 gg_rub(DP)	6



# **Secondary MIC Grommet Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 MIC2 Rubber&5061AA000060 CS	17
LC+5430SK000147+L3520 S_MIC poron	-



# **Sub Board Adhesive Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Sub board Adhes&5450AA000162 CS	-



## **Vibrator Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Motor&2623AA000006 CS	18
XT1941 Motor Adhes&5450AA000164 CS	-



## **Sub Board Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941-4 Sub Board&6818AA00132 CS XT1941-3 Sub Board&6818AA00 CS XT1941-3 BR DS CKD SUB PCBA FOR MP	16
LC+4610SK000026+L3520 screw_M1.4_3.5(BK)	25



## **Coax Cable Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941-4 Sub Board&6818AA00132 CS XT1941-3 Sub Board&6818AA00 CS XT1941-3 BR DS CKD SUB PCBA FOR MP	16
XT1941 RF Cable&5234AA000005 CS	24



## **Speaker Copper Foil Assembly**

Description	Reference #
LC+5470SK000025+L3520 BOX cu foil(YH)	20
LC+5016SK000016+L3520 SPK BOX(HS+HT)	21



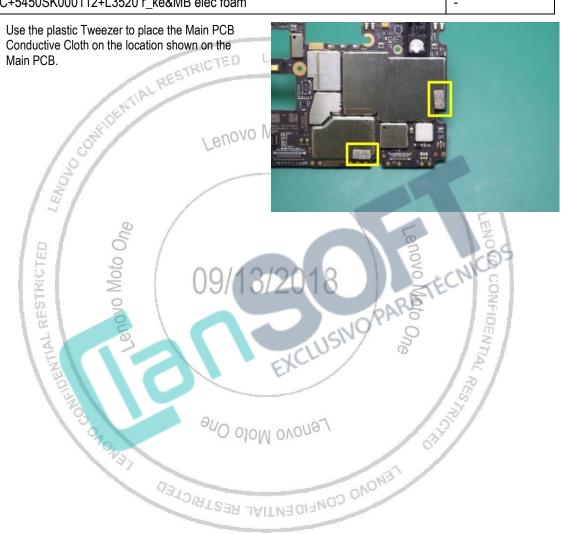
## **Speaker Board Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941-4 Sub Board&6818AA00132 CS XT1941-3 Sub Board&6818AA00 CS XT1941-3 BR DS CKD SUB PCBA FOR MP	16
LC+5016SK000016+L3520 SPK BOX(HS+HT)	21



## **Main PCB Conductive Cloth Assembly**

Description	Reference #
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
LC+5450SK000112+L3520 r_ke&MB elec foam	-



## Rear-Facing Camera Silicone Pad and Foam Assembly

Description	Reference #
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
LC+5460SK000049+L3520 rear LED rub(YH)	-
LC+5450SK000110+L3520 r_CAM&MB elec foam	-



## **Headset Jack Grommet Assembly**

Description	Reference #
LC+5061SK000059+L3520 ear_rubb(DP)	5
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
LC+5420SK000117+L3520 audiojack adh	-



## **Main PCB Graphite Assembly**

Description	Reference #
LC+5061SK000059+L3520 ear_rubb(DP)	5
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
LC+5420SK000117+L3520 audiojack adh	-



# **Front-Facing Imager Assembly**

Description	Reference #
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
MDL,CAMR,8MP,OFILM L4H7F70 COB FF 30PIN	7
LC+5470SK000026+L3520 f_cam foil(YH)	-



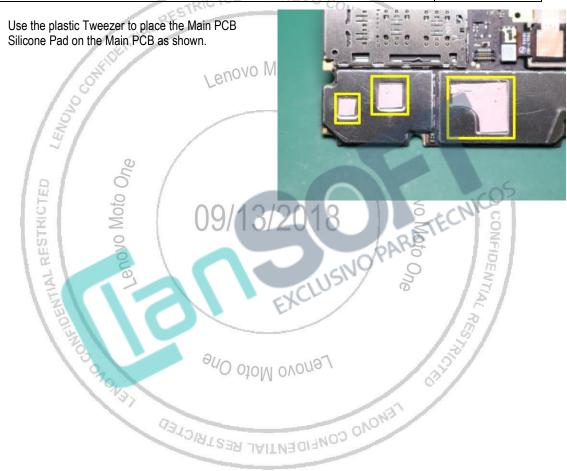
## **Rear-Facing Imager Assembly**

Description	Reference #
LC+2640SK000015+L3520 bk cam 13+2 XL	2
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8



## **Main PCB Silicone Pad Assembly**

Description	Reference #
LC+5460SK000050+L3520 thermaL rub1(YH)	-
LC+5460SK000056+L3520 thermaL rub2(YH)	-
LC+5460SK000052+L3520 thermaL rub3(YH)	-
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8



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#### **Main PCB Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941-4 4+64G MB_DS&6818AA000134 CS XT1941-3 4+64G MB_DS&6818AA000131 CS XT1941-5 4+64G MB_SS&6818AA000133 CS XT1941-3 BR DS CKD PCBA FOR MP	8
LC+5480SK000053+L3520 side key mylar	-
LC+5480SK000069+L3520 bat_mylar	-
LC+4610SK000027+L3520 screw_M1.4_2.5(SL)	-

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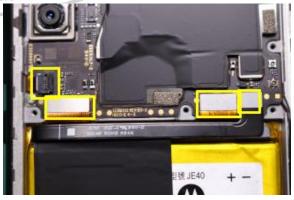
 Use fingers to place the Main PCB in the location on the Rear Housing.



2. Use Torque Driver with ph0 Torx Bit to tighten the screws shown.



3. Use fingers to connect the Battery Flex BtB
Connector, Main Flex BtB Connector, and
Display Flex BtB Connector on the Main PCB.





## **Rear-Facing Camera Lens Assembly**

Description	Reference #
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
LC+5030SK000031+L3520 back cam lens(IS)	-
XT1941 Cam lens Adhes&5420AA000173 CS	-



## **Battery Inlay Graphite Assembly**

Description	Reference #
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
LC+5460SK000046+L3520 bat cover film(YH)	10



## **NFC Flex Assembly**

Description	Reference #
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
LC+5460SK000046+L3520 bat cover film(YH)	10
LC+5022SK000028+L3520 NFC(JW)	11



## **Middle Chassis Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
LC+5460SK000046+L3520 bat cover film(YH)	10
LC+5022SK000028+L3520 NFC(JW)	11

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1. Use fingers to place the Middle Chassis in the pocket on the Rear Housing as shown.



Use fingers to attach the rest part of the graphite to the battery.



Use Torque Driver with ph0 Torx Bit to tighten the screws shown.



## **Finger Print Flex Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
MDL,FNGRPRT,K9S,ET516,CTG FG,BLK,SLVR,BL MDL,FNGRPRT,K9S,ET516,CTG FG,WHT,SLVR,SL	12
LC+5090SK000043+L3520 zhiwen sheet	13
LC+5450SK000088+L3520 FP elec foam	-
LC+5420SK000086+L3520 FP adhhesive	-







### **Battery Mylar Assembly**



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## **Battery Inlay Assembly**

Description	Reference #
LC+5023SK000003+L3520 bat cover(WH WG) LC+5023SK000002+L3520 bat cover(BK WG)	14

1 Use the Plastic Tweezer to place the to position the Battery Inlay Adhesive to the Inlay in place, aligning the adhesive liner with the opening and the edges of the inlay as shown.



2 Use fingers to attach the Finger Print Sensor to the Battery Inlay.

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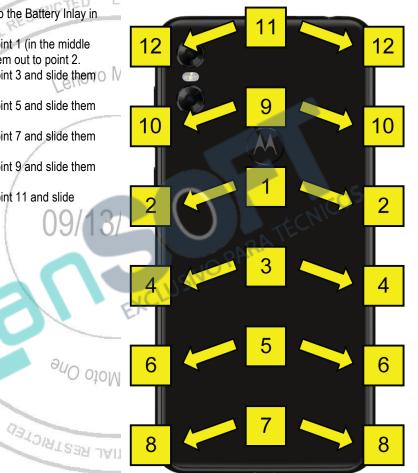
- Verify the liners on the Battery Inlay and Imager Deco have been removed, if present.
- Beginning at the top corners, attach the Battery to the Phone. Verify the Rear-Facing Camera fits through the hole in the Battery
- Verify the Inlay is seated in all 4 corners and not overlapping any of the Front Housing Edges.



- Apply manual pressure to the Battery Inlay in the following sequence:
- Place both thumbs on point 1 (in the middle 7 of the Inlay) and slide them out to point 2.
- Place both thumbs on point 3 and slide them out to point 4.
- Place both thumbs on point 5 and slide them out to point 6.
- 10 Place both thumbs on point 7 and slide them out to point 8.
- 11 Place both thumbs on point 9 and slide them out to point 10.

  12 Place both thumbs on point 11 and slide
- them out to point 12.

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### **IMEI Label Assembly**

Description	Reference #
LC+5017SK000074+L3520 SIM tray(SI LM DU) LC+5017SK000076+L3520 SIM tray(BK LM DU) XT1941 SIM TRAY_SS_WH&5017AA000095 CS XT1941 SIM TRAY_SS_BL&5017AA000092 CS	23



## **Sim Tray Assembly**

Description	Reference #
XT1941 TP+LCM ASSY_WH&5079AA000041 CS XT1941 TP+LCM ASSY_BL&5079AA000042 CS	1
XT1941 Rear Housing_WH&7601AA000071 CS XT1941 Rear Housing_BL&7601AA000072 CS	9
LC+5017SK000074+L3520 SIM tray(SI LM DU) LC+5017SK000076+L3520 SIM tray(BK LM DU) XT1941 SIM TRAY_SS_WH&5017AA000095 CS XT1941 SIM TRAY_SS_BL&5017AA000092 CS	23

