

3. Disassembly and Reassemble

This section of the service manual describes the disassembly and reassembly procedures for the LED TV.



1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully.
 - Use the Samsung Service tool to disassemble the cabinet.
 - Recommend to use the Samsung Service tool
 - Recommended Torque for Cabinet/Stand screws : 10 ~ 12kgf.
 - A strength of Torque can be changed depending on the situation.

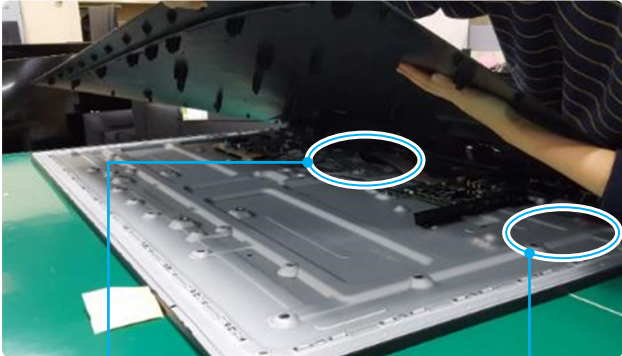
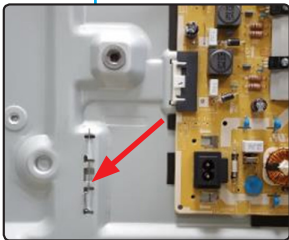
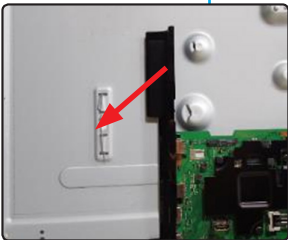
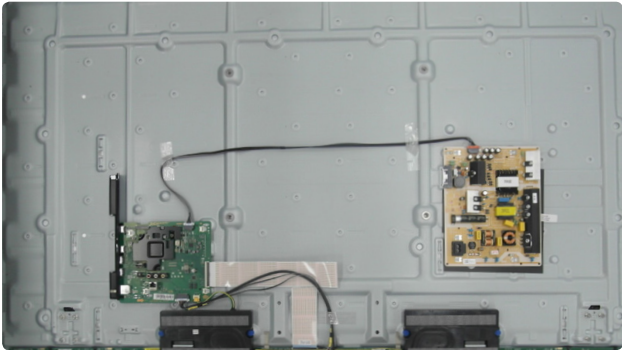
3-1. TV Disassembly

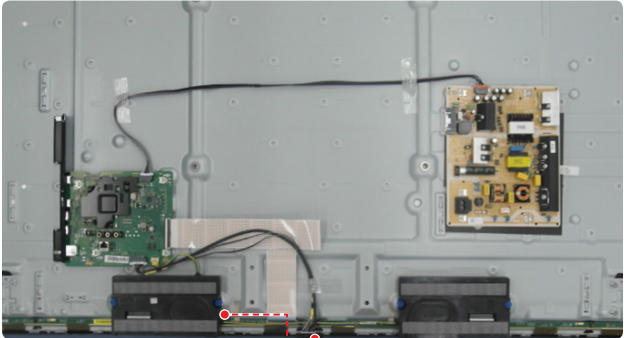
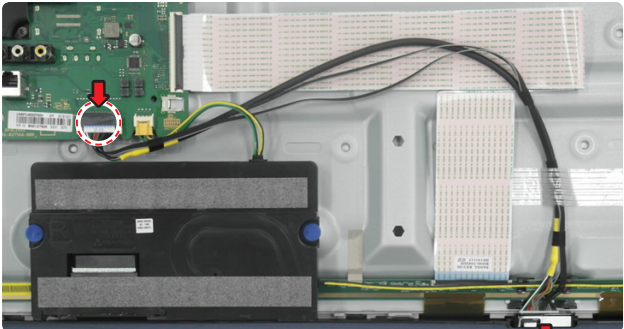
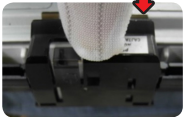
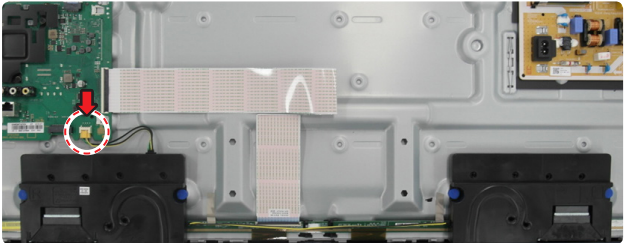
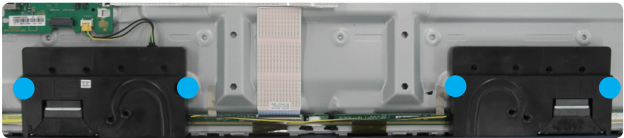
Description	Picture Description
1 Remove Power cord and connections and place the TV down onto a protected surface.	
2 Remove the stands with pulling down.	

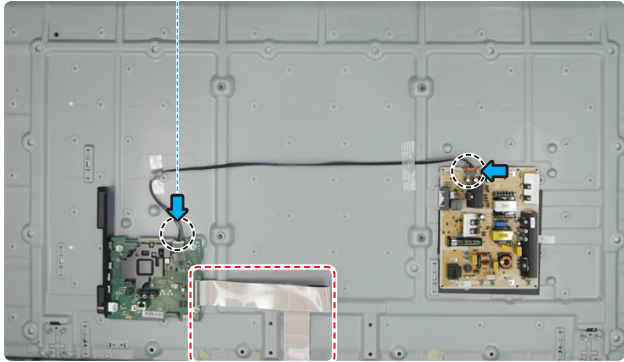
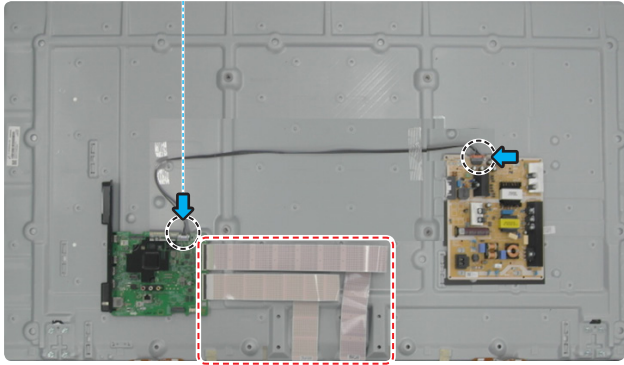
Description	Picture Description
3 Insert the Open Jig completely into the tab of the rear cover's left side bottom corner and following directions ①→②→③. Assembly Misc P-jig-2017 BN81-14946A Locking Part • 43 inches - Top : 8 point - Left/Right : 4 point - Bottom : 6 point - Cover Rear : 1 point • 50 inches - Top : 8 point - Left/Right : 4 point - Bottom : 10 point - Cover Rear : 2 point	

Description	Picture Description
55 inches - Snap Hooks : 2 point - Top : 10 point - Left/Right : 4 point - Bottom : 10 point - Cover Raer : 3 point	The diagram shows the back of a 55-inch television with its cover removed. Red rectangular outlines indicate the locations for the back cover: 'Top' (horizontal bar at the top), 'Bottom' (horizontal bar at the bottom), 'Left' (vertical bar on the left), and 'Right' (vertical bar on the right). A central 'Cover Rear' label points to the main back panel area. Two blue squares at the top corners are labeled 'Snap Hooks' with a line connecting them.
58 inches - Top : 9 point - Left/Right : 5 point - Bottom : 12 point - Cover Raer : 5 point	The diagram shows the back of a 58-inch television. Red rectangular outlines indicate the locations for the back cover: 'Top', 'Bottom', 'Left', and 'Right'. A central 'Cover Rear' label points to the main back panel area.
65 inches - Snap Hooks : 2 point - Top : 10 point - Left/Right : 6 point - Bottom : 12 point - Cover Raer : 5 point	The diagram shows the back of a 65-inch television. Red rectangular outlines indicate the locations for the back cover: 'Top', 'Bottom', 'Left', and 'Right'. A central 'Cover Rear' label points to the main back panel area. Two blue squares at the top corners are labeled 'Snap Hooks' with a line connecting them.

Description	Picture Description
75 inches - Top : 12 point - Left/Right : 7 point - Bottom : 12 point - COVER REAR : 5 point	A diagram showing the back cover of a 75-inch TV. The cover is rectangular with a central panel labeled 'Cover Rear'. The top edge is labeled 'Top', the bottom edge is labeled 'Bottom', the left edge is labeled 'Left', and the right edge is labeled 'Right'. The cover is shown with a red outline and a grey background.
82 inches Snap Hooks : 2 point - Top : 12 point - Left/Right : 7 point - Bottom : 12 point - Cover Raer : 5 point	A diagram showing the back cover of an 82-inch TV. The cover is rectangular with a central panel labeled 'Cover Rear'. The top edge is labeled 'Top', the bottom edge is labeled 'Bottom', the left edge is labeled 'Left', and the right edge is labeled 'Right'. The cover is shown with a red outline and a grey background. Two blue lines labeled 'Snap Hooks' point to the top corners of the cover.
85 inches - Top : 14 point - Left/Right : 8 point - Bottom : 16 point - COVER REAR : 7 point	A diagram showing the back cover of an 85-inch TV. The cover is rectangular with a central panel labeled 'Cover Rear'. The top edge is labeled 'Top', the bottom edge is labeled 'Bottom', the left edge is labeled 'Left', and the right edge is labeled 'Right'. The cover is shown with a red outline and a grey background.

Description	Picture Description
4 Gently lift up the rear cover from the middle to prevent inside clips damaged.  NOTE • Straighten ALL Locking Wires before reattaching cover.	  
5 Remove the ASSY COVER P-REAR.	

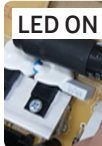
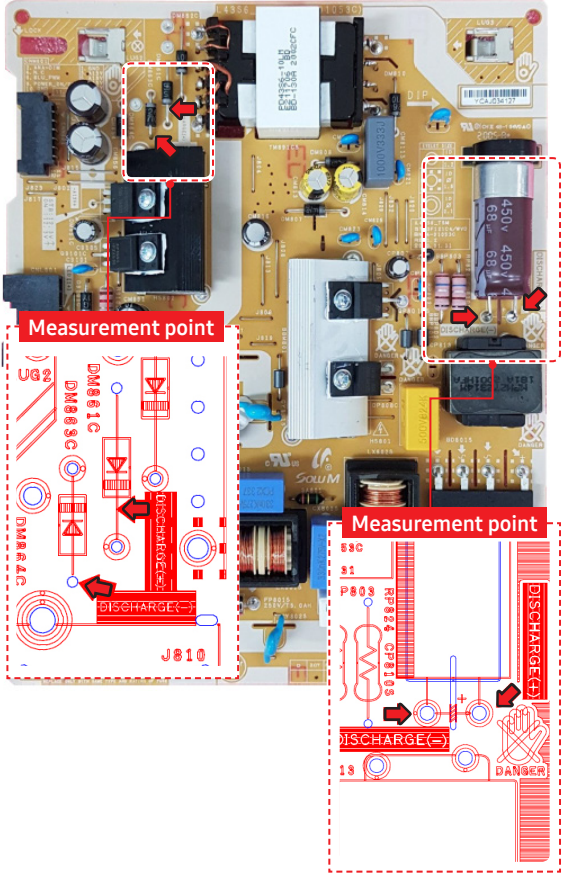
Description	Picture Description
6 Remove the Speaker and BT/WIFI/IR Function. BT/WIFI/IR/FUNCTION (❶) - Remove the cable from ASSY PCB MAIN. ➡ LEAD CONNECTOR-SUB ASSY - Remove from panel. ASSY SPEAKER P-FRONT (❷) - Remove the cable from ASSY PCB MAIN. - Remove from the displayed Panel Hole.	 SPEAKER(❷) BT/WIFI/IR Function(❶)  <Cable removal>  BT/WIFI/IR Function  <Cable removal>  <Panel Hole 4 Points>

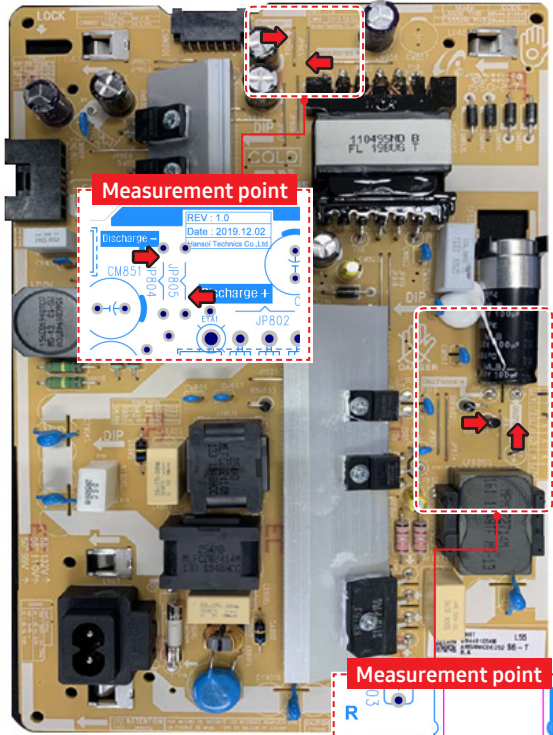
Description	Picture Description
7 Remove LEAD CONNECTOR-POWER Cables and FFC Cables. LEAD CONNECTOR-POWER (SMPS - MAIN) FFC Cables (1 EA)	[1CNT] LEAD CONNECTOR-POWER Cables  FFC Cables [2CNT] LEAD CONNECTOR-POWER Cables  FFC Cables

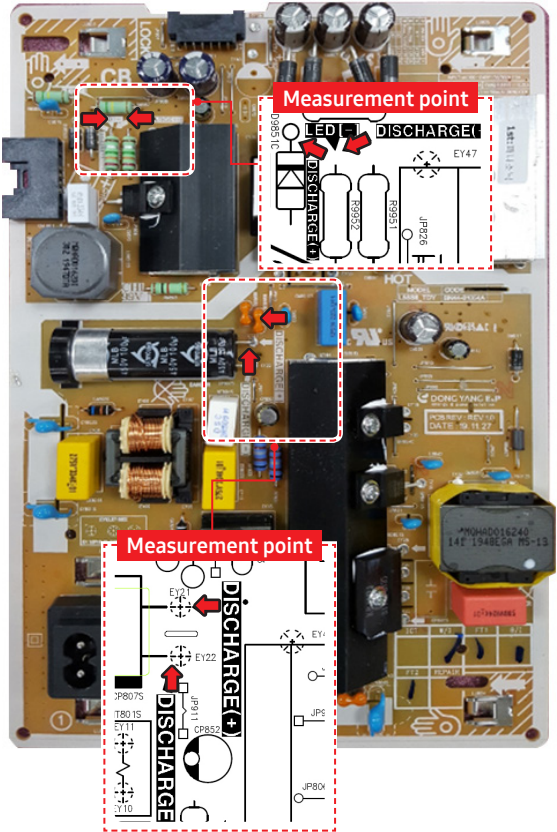
LEAD CONNECTOR-POWER (SMPS - MAIN)

FFC Cables (2 EA)

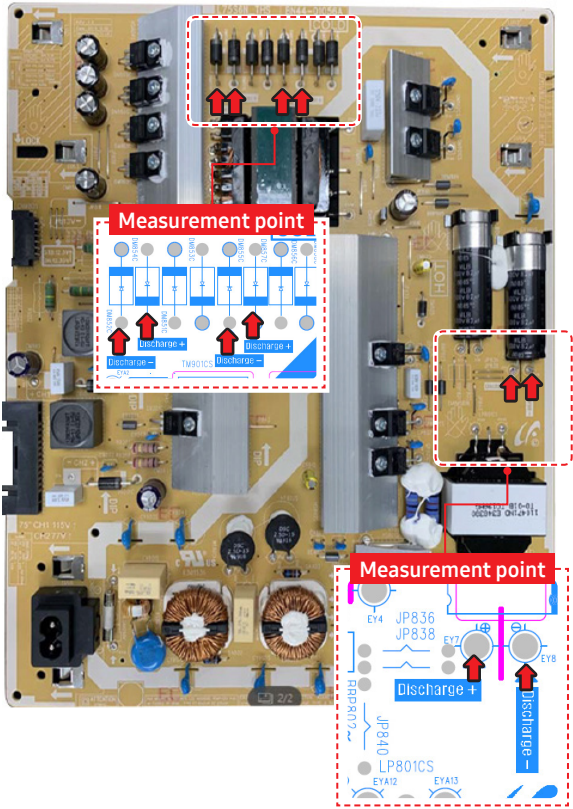
Description	Picture Description
8 Remove the ASSY PCB MAIN. - Gently lift up (Top Right corner) to release the lock. - Use both hands to hold the board and slide to the left to release the board. NOTE - When installing the Main board, verify the board is properly positioned in all 4 mounting slots. ① Lift up (2EA) Locking ← ② Mounting slots (4EA) Fixing Hole ←	← Slide to the left to release the board

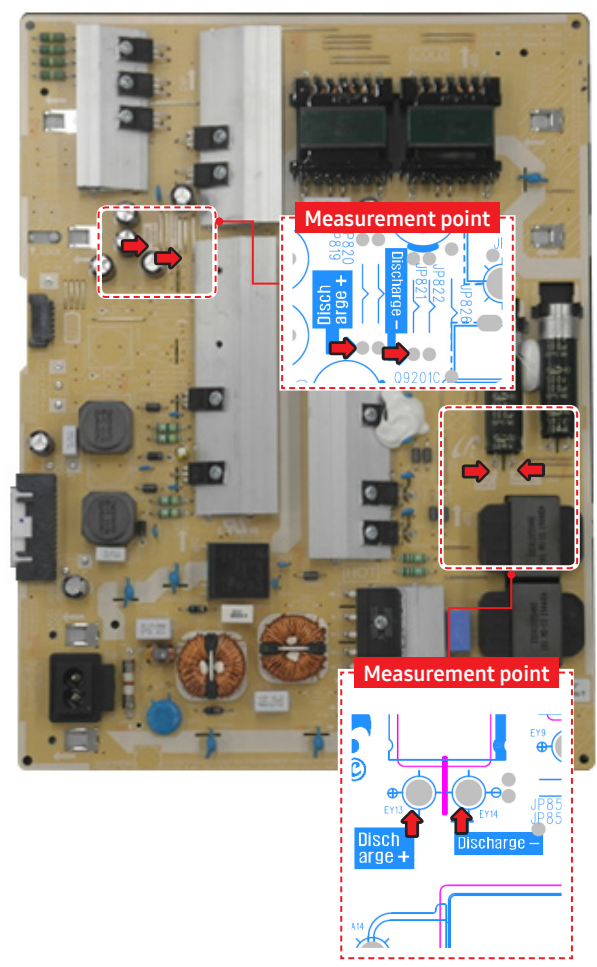
Description	Picture Description
9-1 Before Removing SMPS board, Discharge Capacitors 43 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed.  BN81-16292A   <Before discharging> <After discharging> ✓ Then verify voltage is less than 10Vdc across leads with Volt Meter.	 Measurement point Measurement point

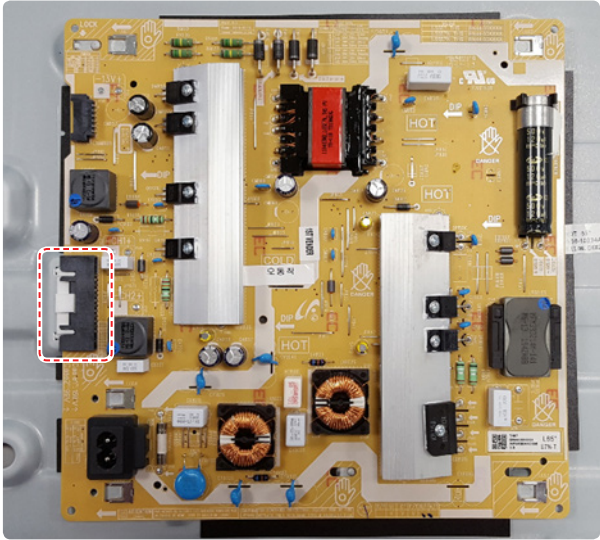
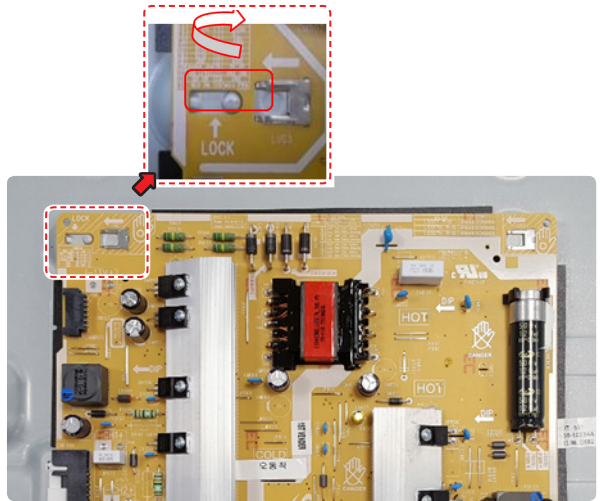
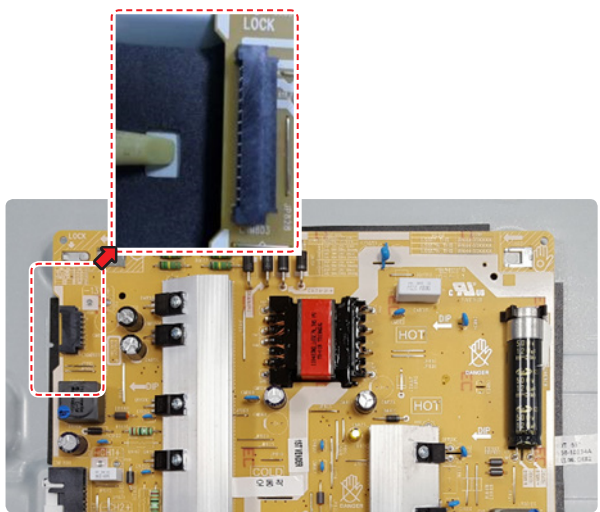
Description	Picture Description
9-2 Discharge Capacitors 50 / 58 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed.  BN81-16292A   LED ON LED OFF <Before discharging> <After discharging> - Then verify voltage is less than 10Vdc across leads with Volt Meter.	 The main board photo shows two red dashed boxes indicating measurement points. The top box is labeled 'Measurement point' and shows a diagram of the top section of the board with labels for JP805, JP804, JP802, and JP801. The bottom box is also labeled 'Measurement point' and shows a diagram of the bottom section of the board with labels for JP825, JP824, JP823, JP822, JP821, JP820, JP819, JP818, JP817, JP816, JP815, JP814, JP813, JP812, JP811, JP810, JP809, JP808, JP807, JP806, JP805, JP804, JP803, JP802, JP801, JP800, JP799, JP798, JP797, JP796, JP795, JP794, JP793, JP792, JP791, JP790, JP789, JP788, JP787, JP786, JP785, JP784, JP783, JP782, JP781, JP780, JP779, JP778, JP777, JP776, JP775, JP774, JP773, JP772, JP771, JP770, JP769, JP768, JP767, JP766, JP765, JP764, JP763, JP762, JP761, JP760, JP759, JP758, JP757, JP756, JP755, JP754, JP753, JP752, JP751, JP750, JP749, JP748, JP747, JP746, JP745, JP744, JP743, JP742, JP741, JP740, JP739, JP738, JP737, JP736, JP735, JP734, JP733, JP732, JP731, JP730, JP729, JP728, JP727, JP726, JP725, JP724, JP723, JP722, JP721, JP720, JP719, JP718, JP717, JP716, JP715, JP714, JP713, JP712, JP711, JP710, JP709, JP708, JP707, JP706, JP705, JP704, JP703, JP702, JP701, 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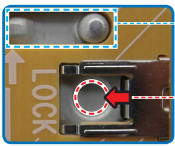
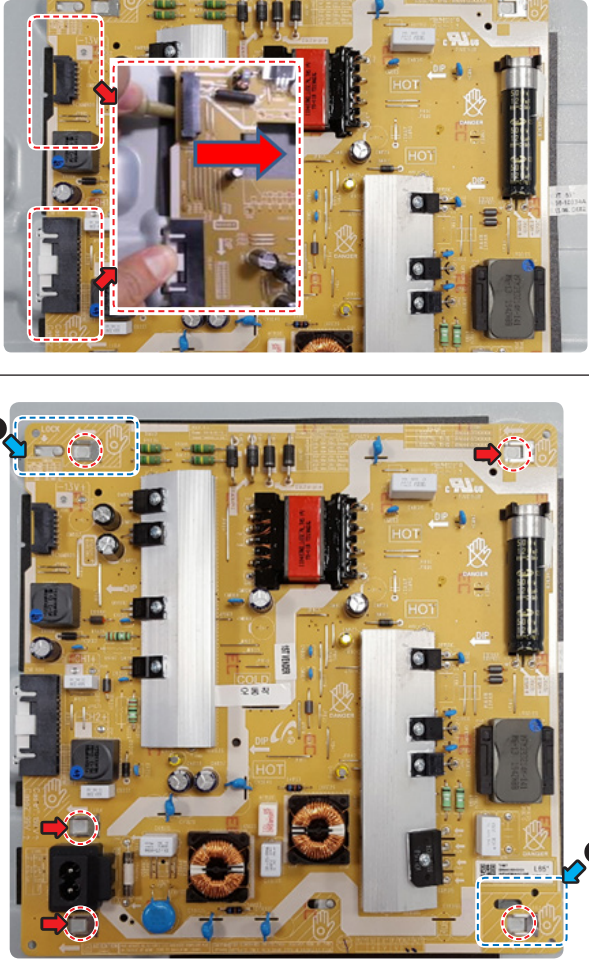
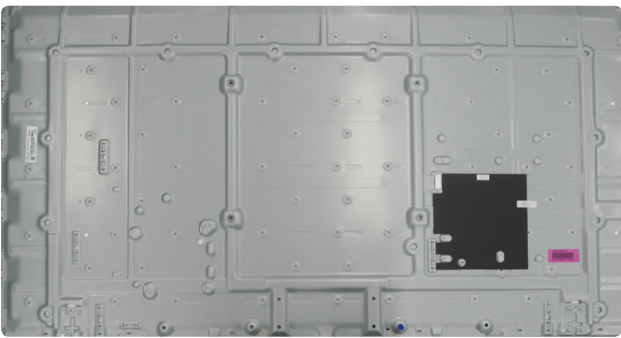
Description	Picture Description
9-3 Discharge Capacitors 55 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed. BN81-16292A LED ON LED OFF <Before discharging> <After discharging> ✓ Then verify voltage is less than 10Vdc across leads with Volt Meter.	 The image shows a main PCB with two red dashed boxes highlighting measurement points. The top box is labeled 'Measurement point' and shows a diagram with 'LED' and 'DISCHARGE' labels. The bottom box is also labeled 'Measurement point' and shows a diagram with 'DISCHARGE' and 'LED' labels. Red arrows point to specific components on the PCB corresponding to these diagrams.

Description	Picture Description
9-4 Discharge Capacitors 65 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed. LED ON LED OFF BN81-16292A LED ON LED OFF <Before discharging> <After discharging> ✓ Then verify voltage is less than 10Vdc across leads with Volt Meter.	Measurement point DISCHARGE(-) CHARGE(+) LED ON JP901 JP902 R9902 Measurement point SCHARGE(+) DISCHARGE(-) E144 E122 E121 CP8075 E18026 E105 LX8025 Measurement point SCHARGE(+) DISCHARGE(-) E144 E122 E121 CP8075 E18026 E105 LX8025

Description	Picture Description
9-5 Discharge Capacitors 75 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed. BN81-16292A LED ON LED OFF <Before discharging> <After discharging> ✓ Then verify voltage is less than 10Vdc across leads with Volt Meter.	 The main board photo shows the SMPS section with red dashed boxes highlighting discharge points. Red arrows indicate the connection of the service jig to the capacitor leads. Two inset diagrams provide detailed views of the measurement points and discharge connections. Measurement point The top inset diagram shows a row of capacitors with measurement points labeled 'Discharge +', 'Discharge -', 'Discharge +', and 'Discharge -'. Red arrows indicate the connection of the service jig to these points. Measurement point The bottom inset diagram shows a detailed view of the discharge points, including labels for JP836, JP838, JP840, LP801CS, EY412, EY413, EY4, EY7, EY8, and EY9. Red arrows indicate the connection of the service jig to the 'Discharge +' and 'Discharge -' points.

Description	Picture Description
9-6 Discharge Capacitors 82 / 85 inches You have to discharge the SMPS by using service JIG across leads of Large Capacitors as pictured below. If LED ON -> LED OFF, Discharge is completed. Then verify voltage is less than 10Vdc across leads with Volt Meter. Service Jig-Capacitor Discharge - If LED ON > LED OFF discharge is completed.  BN81-16292A  <Before discharging> <After discharging> ✓ Then verify voltage is less than 10Vdc across leads with Volt Meter.	 The image shows a yellow PCB with various components. Two red dashed boxes highlight measurement points. The top box is labeled 'Measurement point' and shows a diagram with 'Discharge +', 'Discharge -', and 'JP822'. The bottom box is also labeled 'Measurement point' and shows a diagram with 'Discharge +', 'Discharge -', and 'JP805'. Red arrows indicate the measurement points on the PCB.

Description	Picture Description
10 Remove the SMPS. 1. Push and hold down BLU connector tab to release it's panel lock connection. 2. Lift to release the lock tab on upper left side of Board. (Step 4 will assist) 3. Locate a notch in insulation sheet. (not all models)	 <LEAD CONNECTOR-BLU >  

Description	Picture Description
10 4. Use Open Jig in notch to help release & smoothly slide SMPS to the Right. (While pushing BLU Tab & Releasing Lock Tab) 5. Gently lift the ① edge to unlock the SMPS board.  ① Lift up (2EA) Locking → ② Mounting slots (5EA) Fixing Hole → Remove the board by holding it with both hands and sliding it to the Right (② →).	 Slide to the right to release the board →
11 Completed the disassembly.	



NOTE

Reassembly procedures are in the reverse order of disassembly procedures.