

E4982A-02

S E R V I C E N O T E

Supersedes:
NONE

E4982A – LCR Meter, 1MHz to 3GHz

Serial Numbers: MY52100001-MY52199999, MY52200001-MY52200593, SG52100001-SG52100002

E4982A LCD Touch Panel Display Assembly Replacement Part Change

Parts Required:

P/N	Description	Qty.
-----	-------------	------

[For E4982A – See Table 1-1](#)

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:	
INFORMATION ONLY	
<input type="checkbox"/> Calibration Required <input checked="" type="checkbox"/> Calibration NOT Required	PRODUCT LINE: WN AUTHOR: LS
ADDITIONAL INFORMATION: This service note communicates the support parts strategy for E4982A LCD Touch Panel display assembly.	

© AGILENT TECHNOLOGIES, INC. 2014
PRINTED IN U.S.A.

February 18, 2014

Rev. 21



For E4982A**Situation:**

For E4982A, due to the part discontinuance by LCD display manufacturer, the **E5061-60111 LCD-Touch Panel Assembly** (with LCD Display with CCFL backlight) is no longer supplied.

The replacing part would be an LCD Touch Panel Display Assembly with LED backlight. In ensuring hardware compatibilities, there would be a list of associated parts required to be replaced whenever the LCD T/P assembly (LCD Display with CCFL backlight) is defective.

Solution/Action**For defective LCD T/P Assembly E5061-60111**

In summary, whenever LCD T/P E5061-60111 is identified defective, replace the following parts altogether as they are mutually dependent:

1. LCD T/P assembly (with LED backlight display),
2. Inverter
3. Front Panel (label, panel sub, shield)
4. Cable assemblies,
5. Screws etc.

In this case, apart from replacing the LCD T/P assembly with the replacement part, the inverter is required to be replaced in ensuring the compatibility with the new LCD T/P assembly (with LED backlight). Front panel needs to be replaced as the dimension and the new LCD T/P assembly screw size and location differs on the new LCD T/P display assembly (with LED backlight). Refer to table 1-1 for details.

For other failures (other than LCD T/P assembly E5061-60111)

If the defective part does not include LCD Touch Panel Assembly, proceed to replace the individual defective parts directly as usual. For instances, if the inverter 0950-4420 is found to be defective, replace the inverter alone will be sufficient. Similar applies to Touch Panel controller. Those parts are continuously supported and supplied until further notice. Refer to service guide for detailed instructions.

LCD Removal

Refer to E4982A Replacement Procedure for E4982A LCR Meter (Chapter 1- LCD Replacement Procedure (pg 5- pg12) → for the step-by-step procedure.

Note: Kindly take note to keep the original parts as some of the assemblies are reusable and replacement is not necessary.

Table 1-1 Defective LCD T/P Assemblies - Support part strategy.

Table 1-1 depicts the support PN replacement strategy and their dependencies.

Identified Defective Part	Types	Current PN	Description	Qty.	New PN	Description	Qty.	Remarks
Inverter (0950-4420)	Assemblies, Modules	0950-4420	Inverter	1	0950-5396	Inverter	1	Direct replacement
Touch Panel Controller (0960-2972)	Assemblies, Modules	0960-2972	Touch Panel Controller	1	0960-2972	Touch Panel Controller	1	Common
LCD Touch Panel Assembly (E5061-60111)	Assemblies, Modules	E5061-60111	LCD Touch Panel Assembly	1	E5061-60112	LCD Touch Panel Assembly (With LED backlight)	1	Replace set
		E5061-00212	Panel, Front Sub (All Opt)	1	E5061-00232	Panel, Front Sub (All Opt)	1	Replace set
		E5061-00611	Cover Shield, Front Assembly	1	E5061-00612	Cover Shield, Front Assembly	1	Replace set
		E4982-00201	Front Panel	1	E4982-00201	Front Panel	1	Common
		0950-4420	Inverter	1	0950-5396	Inverter	1	Replace set
		E5061-00602	Inverter Bracket/ Plate	1	E5071-01241	Inverter Bracket/ Plate	1	Replace set
		E4982-87004	Label (Frequency label)	1	E4982-87004	Label (Frequency label)	1	Common
		0960-2972	Touch Panel Controller	1	0960-2972	Touch Panel Controller	1	Common
		E5061-66662	Printed Circuit Board Assembly, Pb-free ENA-L Front Panel	1	E5061-66662	Printed Circuit Board Assembly, Pb-free ENA-L Front Panel	1	Common

			Interface, without Probe Power			Interface, without Probe Power		
Cables	E5061-61633	LCD Display - Flat Cable assembly	1	E5070-61699	LCD Display - Flat Cable assembly	1	Replace set	
	E5071-61608	Wire assembly, (Inverter to PCA Keyboard)	1	E5061-61654	Wire assembly, LED Driver (Inverter to PCA Keyboard)	1	Replace set	
	(None)	(None) Original cable is pre-fitted with LCD T/P assembly	-	E5061-61653	Wire assembly, (Display backlight power)	1	New	
	E5061-61651	Wire assembly, (From T/P controller to clip)	1	E5061-61651	Wire assembly, (From T/P controller to clip)	1	Common	
	E5061-61627	Power Switch Cable Assembly	1	E5061-61627	Power Switch Cable Assembly	1	Common	
Gasket	0363-0170	RFI-Gasket Strip-Fingers	59	0363-0170	RFI-Gasket Strip-Fingers	59	Common	
Cable Tie	1400-0249	Cable tie (To tie the display cable assembly and Power Switch Cable)	1	1400-0249	Cable tie (To tie the display cable assembly and Power Switch Cable)	1	Common	
Cable Clamp	(None)	Cable Clamp (Back of the LCD T/P Assembly)	-	1400-1334	Cable Clamp (Back of the LCD T/P Assembly)	4	New	
	1400-3415	Cable Clamp (Back of the front panel assembly)	1	1400-3415	Cable Clamp (Back of the front panel assembly)	1	Common	
	1400-1391	Cable clamp (back of the front panel assembly)	1	1400-1391	Cable clamp (back of the front panel assembly)	1	Common	
	1400-3337	Cable clamp (back of the front panel assembly)	1	1400-1391	Cable clamp (back of the front panel assembly)	1	Replace set	
	1400-3156	Cable clamp (Back of the front panel assembly)	2	1400-3156	Cable clamp (Back of the front panel assembly)	2	Common	
Screws	(None)	Screw M4x0.7 - securing LCD Flat cable assembly	-	0515-5711	Screw M4x0.7 - securing LCD Flat cable assembly	2	New	

		0515-1402	Screw M3x0.6 (Back of LCD T/P assembly)	4	0515-0430	Screw M3x0.5 (Back of LCD T/P assembly)	4	Replace set
		0515-0430	Screw M3x0.5 (Back of Front panel assembly cover shield)	6	0515-0430	Screw M3x0.5 (Back of Front panel assembly cover shield)	6	Common
		0515-1974	Screw M2.5.x0.45 (Bottom of inverter – hidden)	2	0515-0430	Screw M3.x0.5 (Bottom of inverter – hidden)	2	Replace set
		0515-1946	Screw M3x0.5 (Top of inverter)	2	0515-1946	Screw M3x0.5 (Top of inverter)	2	Common
		0515-0430	Screw M3x0.5 (On the power switch)	2	0515-0430	Screw M3x0.5 (On the power switch)	2	Common
		0515-0430	Screw M3x0.5 (Front Keyboard PCA)	13	0515-0430	Screw M3x0.5 (Front Keyboard PCA)	13	Common
		0515-1974	Screw M2.5x0.45 (To secure T/P controller board)	2	0515-1974	Screw M2.5x0.45 (To secure T/P controller board)	2	Common

1. Reuse and install the keyboard, keyboard PCA and power switch PCA on the new front panel sub as shown in figure 1-1.

Note: The front panel, panel sub and cover shield are required to be replaced due to dimension changes. Front panel frequency label has to be purchased separately according to unit frequency options.

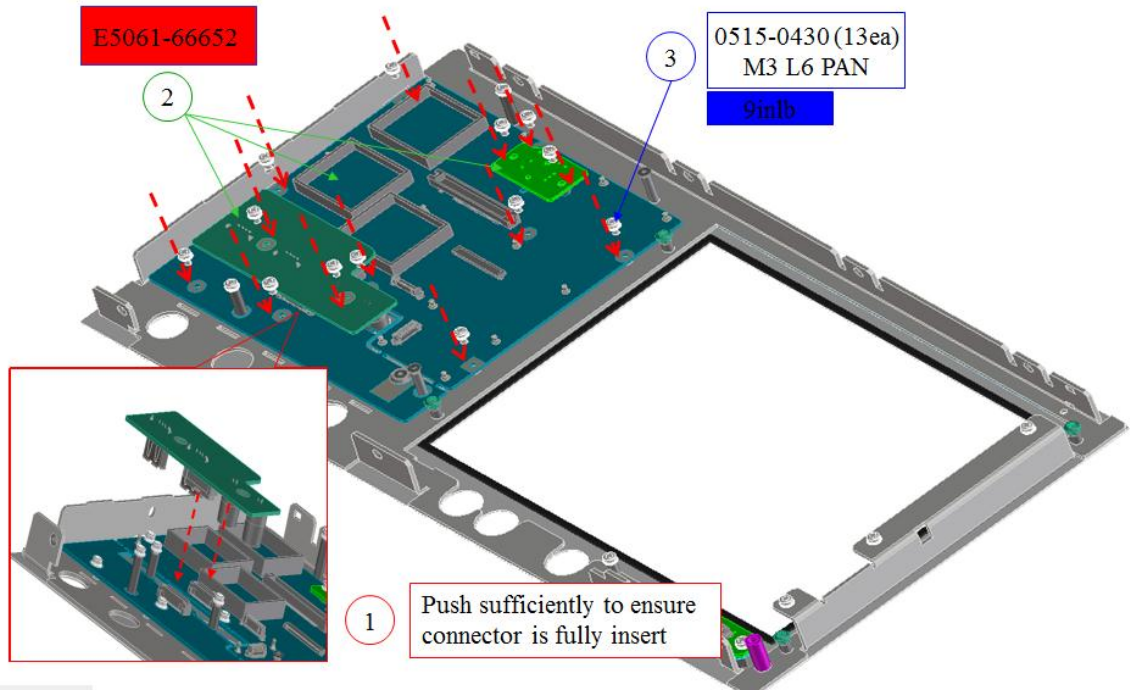


Figure 1-1

2. Install the gaskets as shown in Figure 1-2. Figure 1-3 illustrates the Front panel with the keyboard installed.

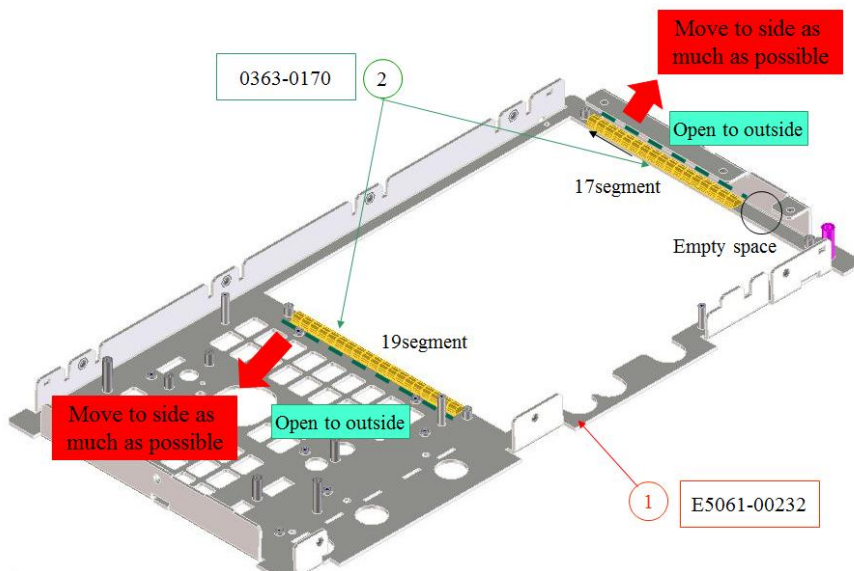


Figure 1-2

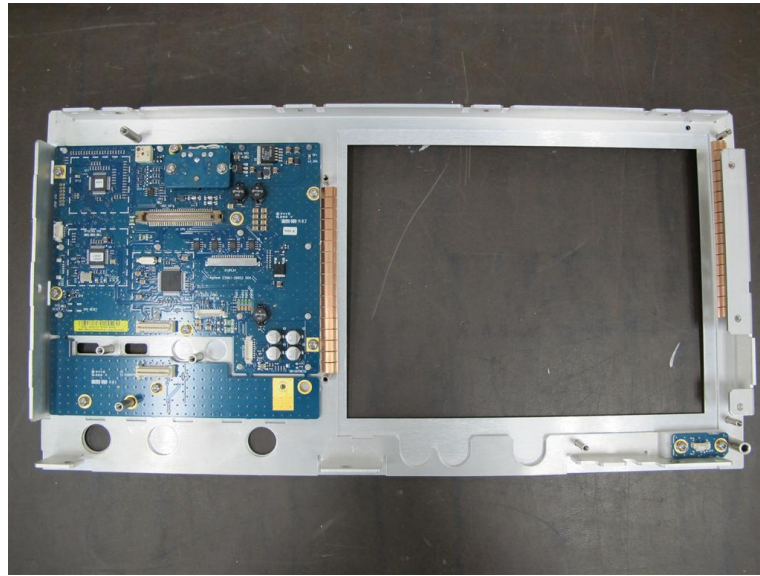


Figure 1-3

3. Install the inverter on the bracket before connect the cable assembly to both ends as shown in figure 1-4

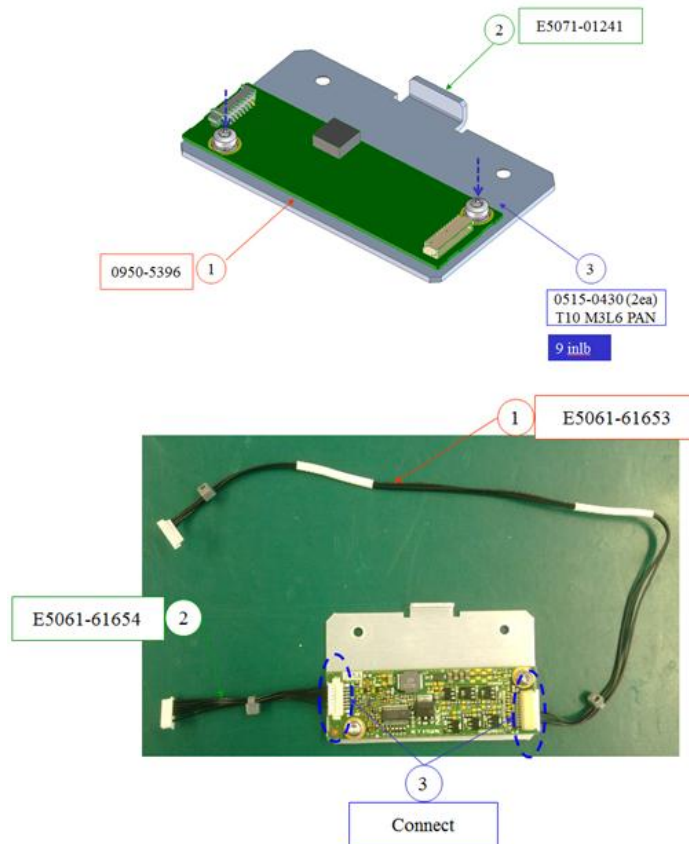


Figure 1-4

4. Install the inverter assembly onto the new LCD T/P display assembly (with LED backlight). Refer to figure 1-5 for details.

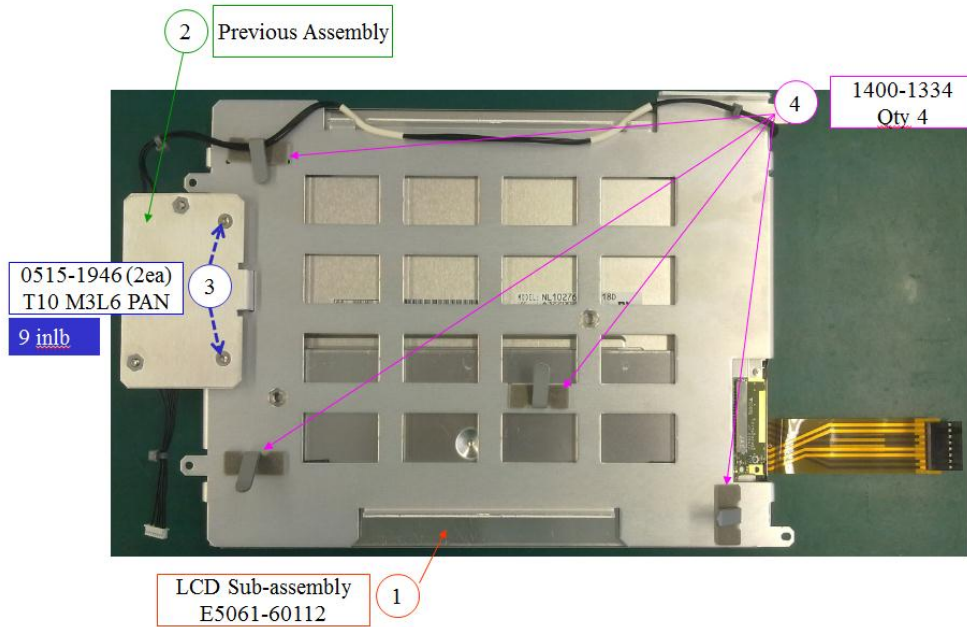


Figure 1-5

5. Connect and route the LCD display assembly cables accordingly.

Note: Wire routing condition

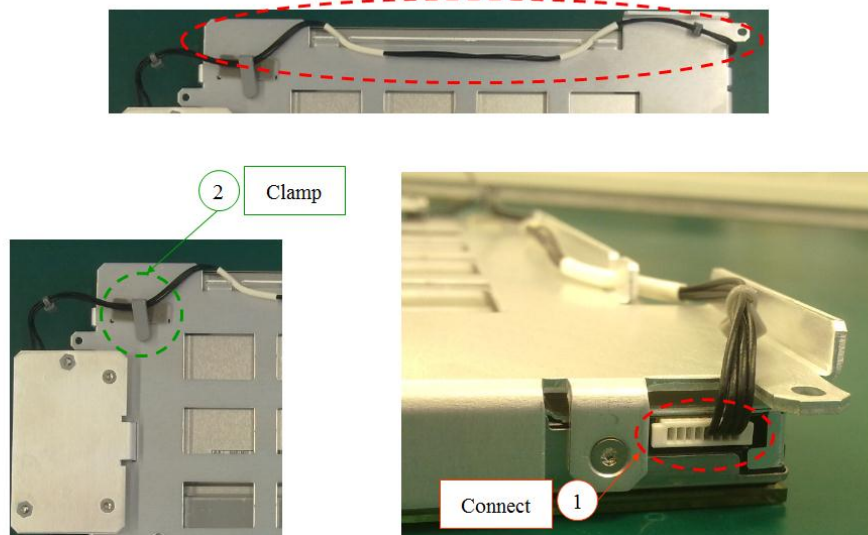


Figure 1-6

6. Install the LCD T/P Display Assembly onto the LCD Front Panel. Fasten the screws according to the following sequence. Connect all cable assemblies as shown in figure 1-7.

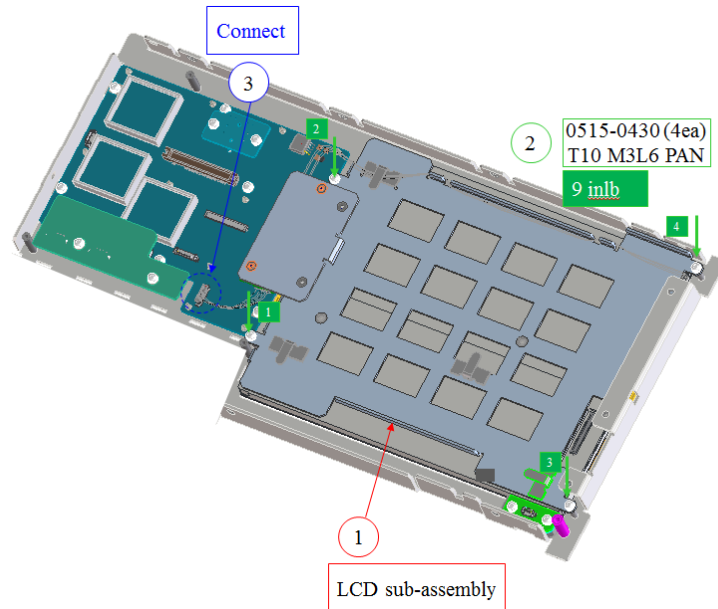


Figure 1-7

7. Connect, route and clamp the power switch cable assembly as shown in figure 1-8

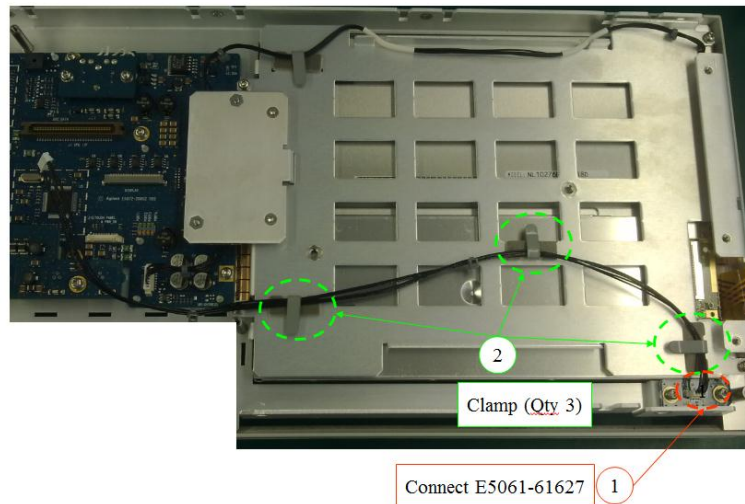


Figure 1-8

8. Connect the cable assemblies to the keyboard PCA as shown in figure 1-9.

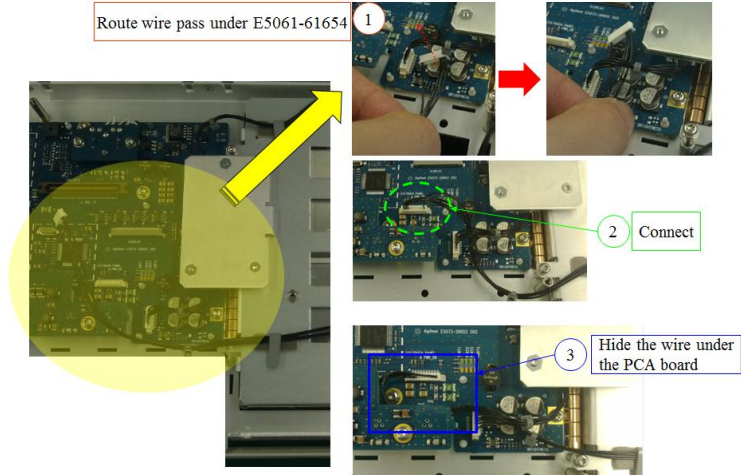


Figure 1-9

9. Connect the LCD T/P display cable assembly as shown. Fasten the screws in securing the cable. Tie the LCD T/P Display cable assembly to the Power switch cable assembly as shown in figure 1-10.

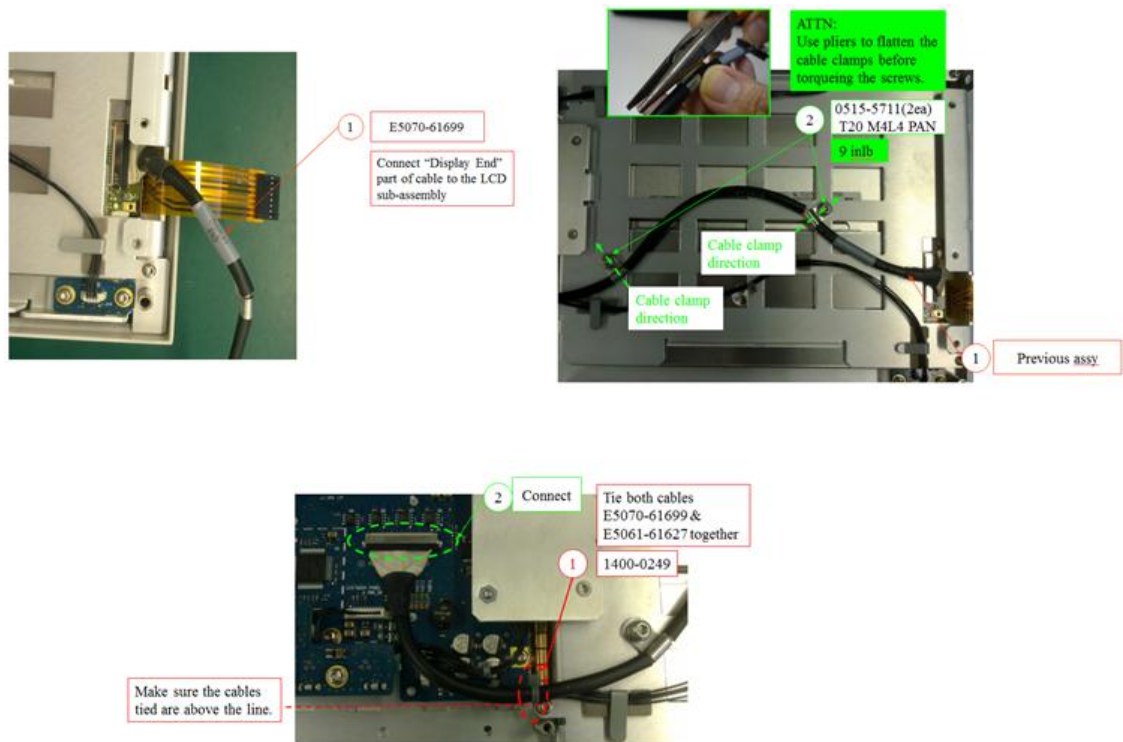


Figure 1-10

10. On the Front Panel back cover shield, install the cable clamp as shown in figure 1-11

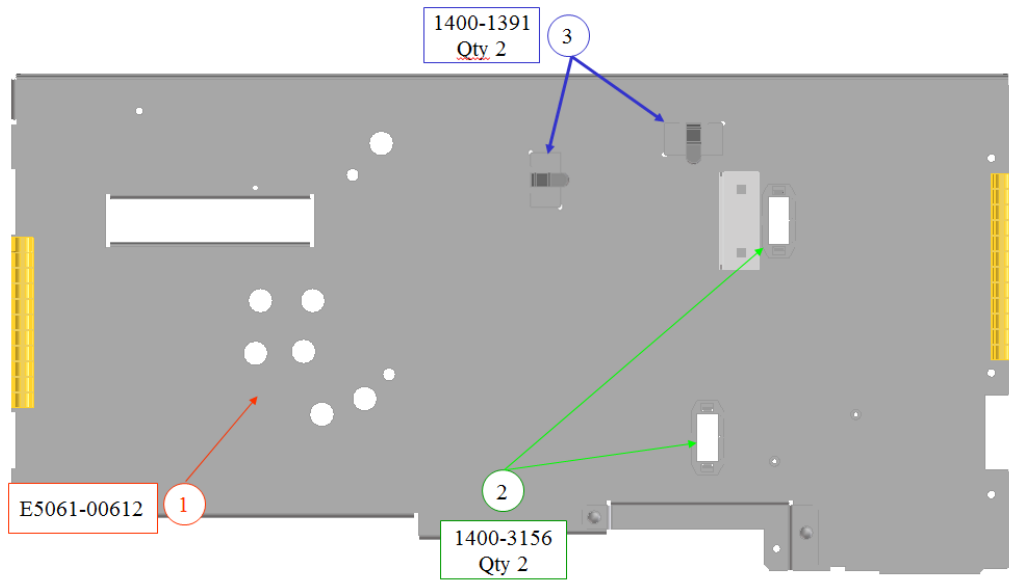


Figure 1-11

11. Install the cable clamps and Gasket (RFI fins) on the back cover as shown in figure 1-12.

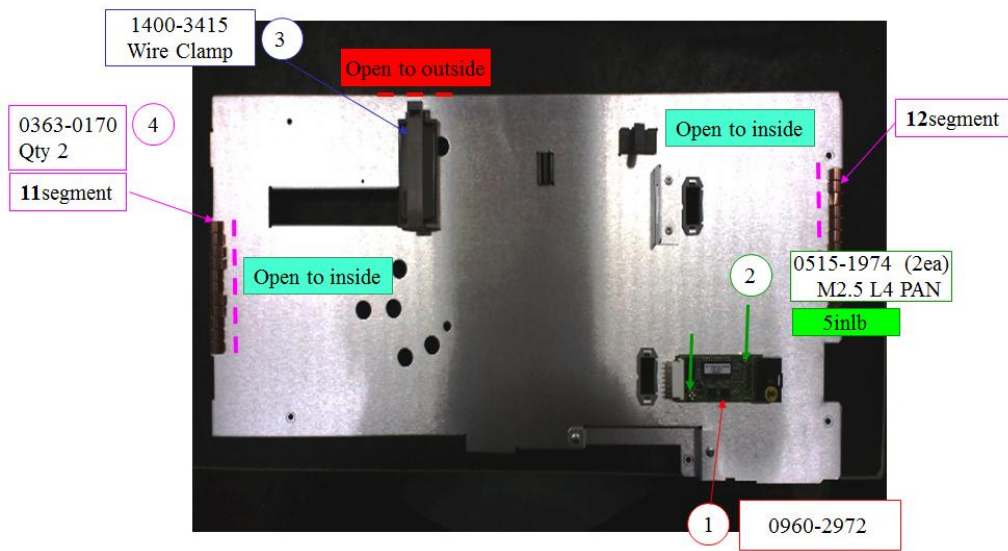


Figure 1-12

12. Install the LCD T/P controller and connect it with cables. Refer to figure 1-13



Figure 1-13

13. Shown would be the completed installation of the assemblies. Kindly ensure the connections of the cable assemblies are good and properly secured. Fasten the six screws in securing the shield (back cover) to the Front Panel Assembly. Refer to figure 1-14 for details.

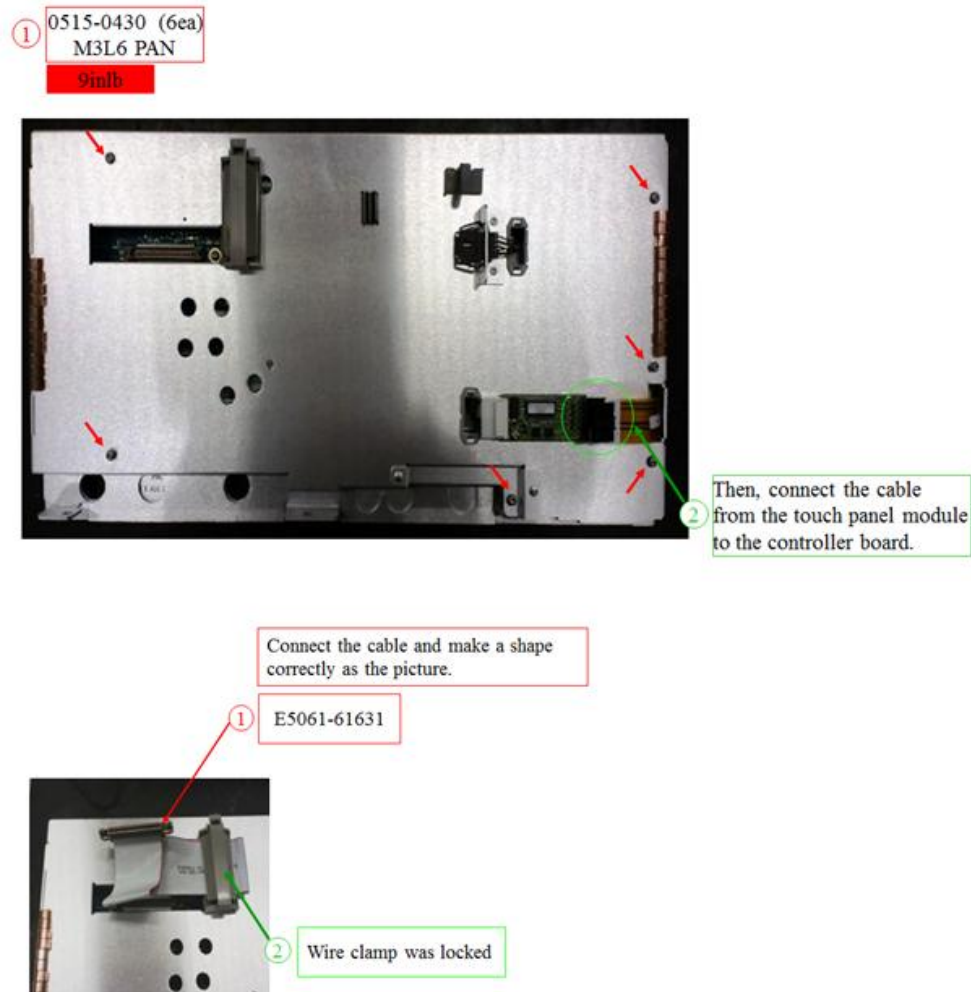


Figure 1-14

Post-repair requirements

Reinstall the front panel assembly by inverse procedure of removal.

Perform Touch Screen calibration and inspect on booting process. Execute the diagnostics test in verifying the functionality of Touch Panel and LCD display.

Refer to E4982A Troubleshooting Guide for further information.

Revision History:

Revision Number	Date	Author	Reason For Change
1.0	Feb 14, 2014	LS	As published