Service
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Simplified

Service Manual

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all DELL Company Equipment. The service procedures recommended by DELL and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. DELL could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, DELL has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by DELL must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, DELL Company will be referred to as DELL.

WARNING
Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from DELL. DELL assumes no liability, express or implied, arising out of any unauthorized modification of design.

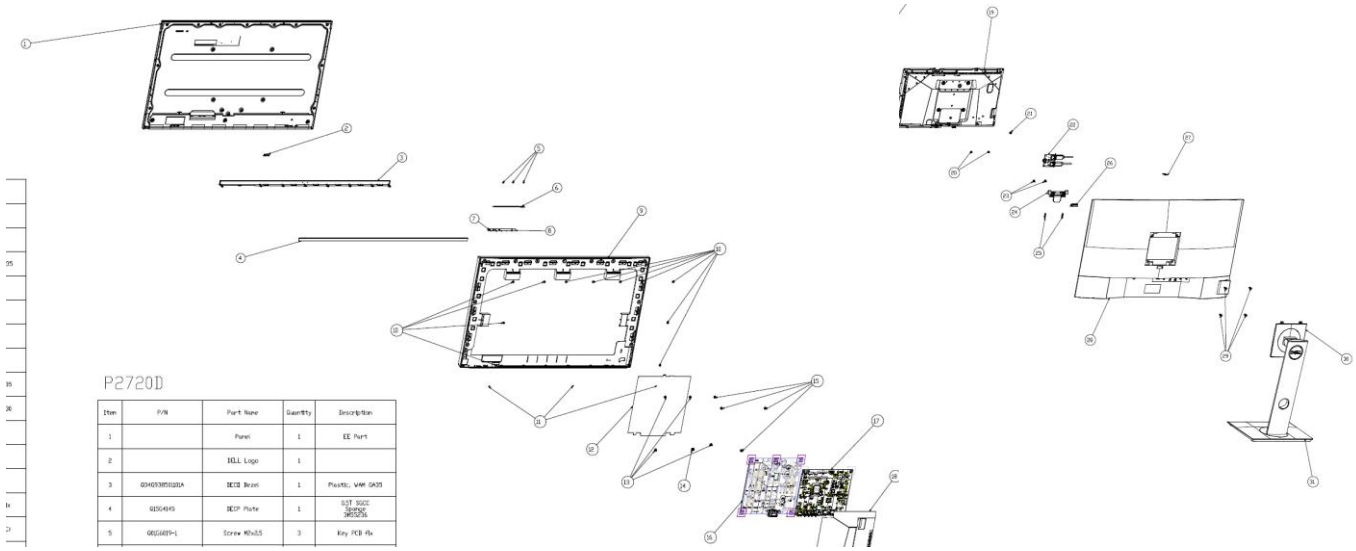
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

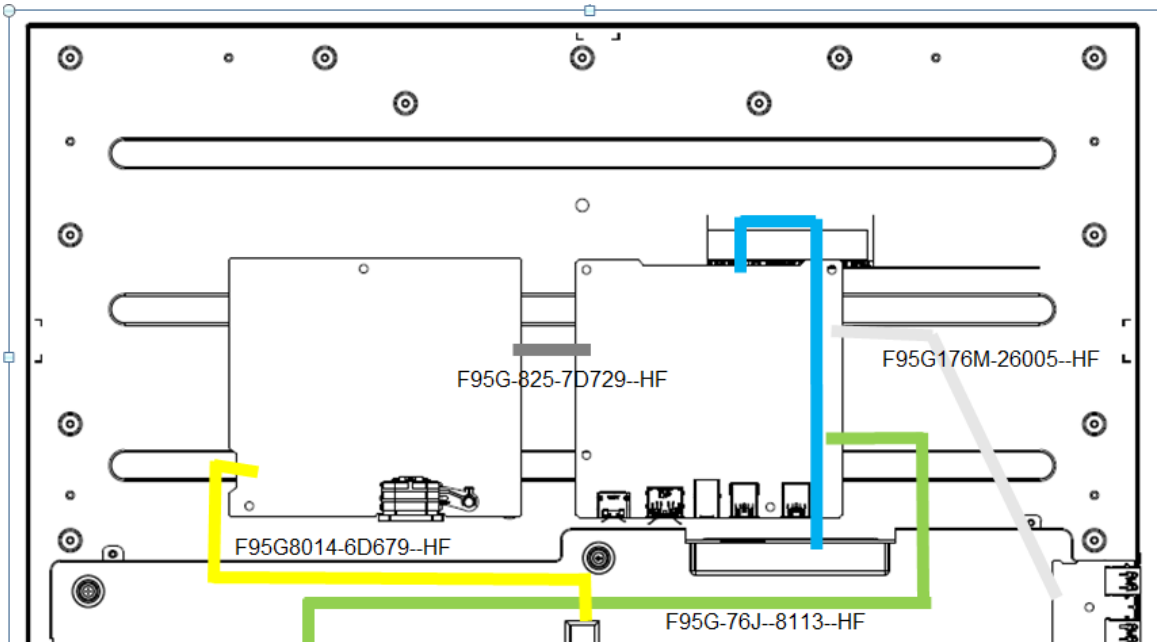
1. Exploded view diagram with list of items



P2720D

Item	P/N	Part Name	Quantity	Description
1		Panel	1	EE Part
2		DELL Logo	1	
3	Q34G938501101A	DECO Bezel	1	Plastic, WAM GA35
4	Q15G4145	DECP Plate	1	0.5T SGCC Sponge 3M55236
5	Q01G6019-1	Screw M2x2.5	3	Key PCB fix
6		Key PCB	1	EE Part
7	Q33G141101101A	Key_Power	1	Plastic PC+WAM GA35
8	Q33G141001101A	Key-Function	1	Plastic WAM GA35
9	Q34G938401101A	Middle Frame	1	Plastic WAM NC30
10	0M1G3030-4-47-CR3	Screw M3x4	11	Panel Fix
11	Q01G6019-1	Screw M2x2.5	3	DECO Fix
12				
13	0D1G1030-6-120	Screw M3x6	2	Power Board Fix
14	0M1G3840060120OARA	Screw M4x6	1	Power Board(AC)
15	0D1G1030-6-120	Screw M3x6	4	Scalar Board Fix
16		Power Board	1	EE Part
17		Scalar Board	1	EE Part
18	Q52G1801A320HF0A**	P2x20D Security Mylar	1	0.4T PC
19	Q15G4118	P2720D Mainframe	1	SGCC
20	0M1G3030-6-120	Screw M3x6	2	Mainframe Fix
21	0Q1G2030-6-120	Screw M3x6	1	USB PCB Fix
22		USB PCB	1	EE Part
23	0Q1G2030-6-120	Screw M3x6	2	Latch Fix
24	Q33G140901101A	Latch	1	Plastic PA66+20GF
25		Latch Spring	2	
26	Q33G096301101A	Stand Button	1	Plastic WAM GA35
27	Q15G023300200000AJ	Security Plate	1	SGCC Hot melting to Rear Cover
28	Q34G938301101A	P2720D Rear Cover	1	Plastic WAM GA35
29	0M1G2940-10-47-CR3	Screw M4x10	4	VESA
30		P2720D Stand	1	Vendor Jally/Han Hai
31		P2720D Base	1	Vendor Jally/Han Hai

2. Wiring connectivity diagram



3. Tools Required

List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

- Screwdriver (Phillip head) #1
- Screwdriver (Phillip head) #2
- Penknife

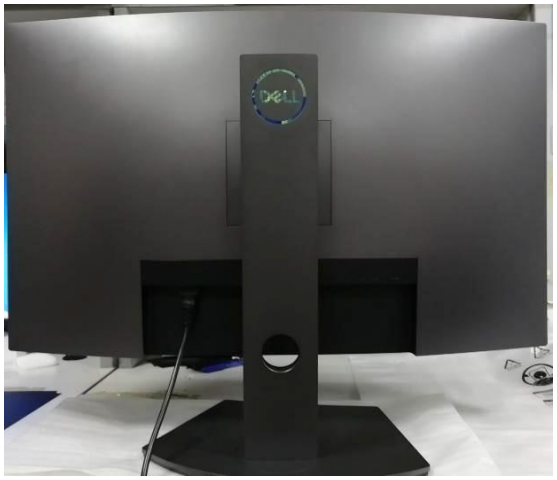
3.1Disassembly Procedures

1.Mechanical Instruction

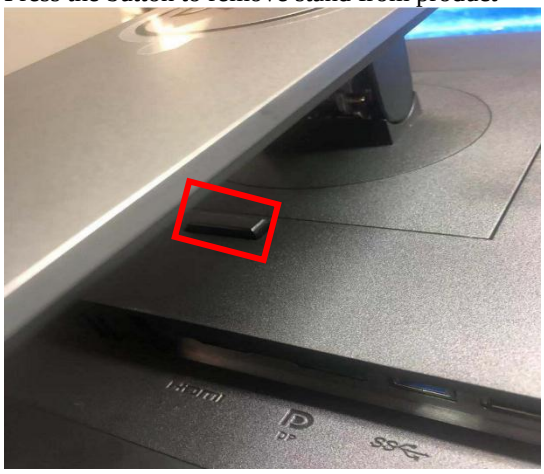
1.1Disassembly Procedures

S1 Turn off power

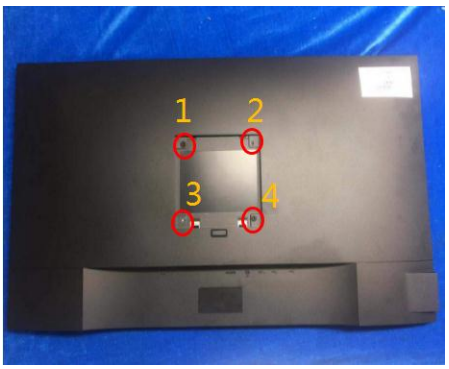
S2 Unplug external cables from product



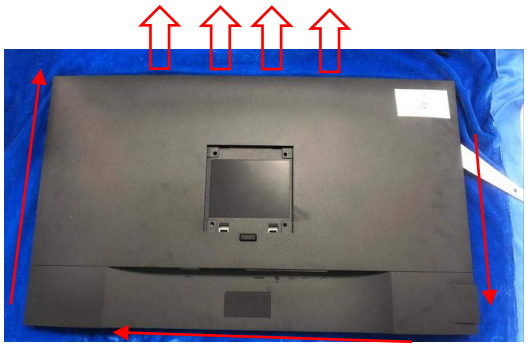
S3 Press the button to remove stand from product



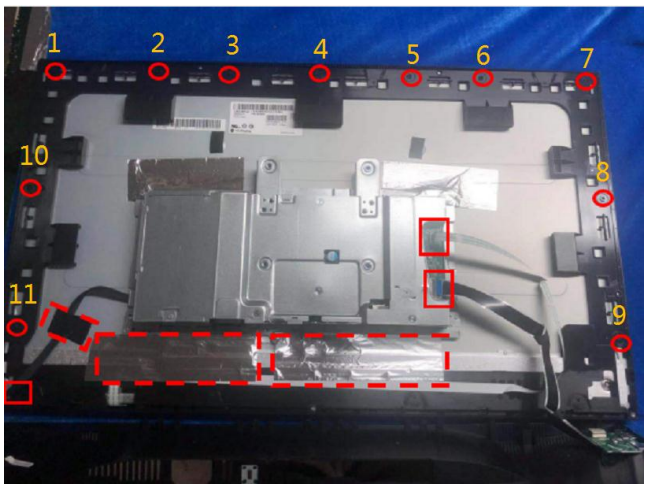
S4 Use a Philips-head screwdriver to remove four screws for unlocking mechanisms.
(No.1~4 screw size=M4x10; Torque: 12±2kgf.cm)



S5 Wedge your fingers between the rear cover and the middle bezel on the corners of the top side of the monitor to release the rear cover, then use Scraper
to separate the rear cover in the below 3direction of the arrow.



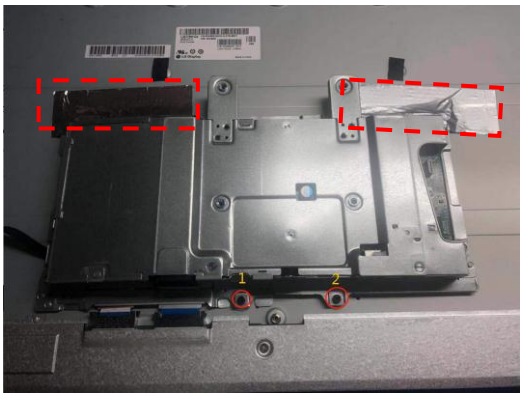
S6 Tear out all the cable to remove the rear cover and put it on a protective cushion. Use a Philips-head screwdriver to remove 11 screws for unlocking the middle plastic bezel with the whole unit, and then remove the middle plastic bezel carefully.
(No.1~20 screw size=M3x4, Torque=3±0.5kgfxcm)



S7

Tear off 2 pieces of aluminum foil. Use a Philips-head screwdriver to remove 2 screws for unlocking the mainframe

(No.1~2 Screw size=M3x4, Torque: 3±0.5kgf.cm)

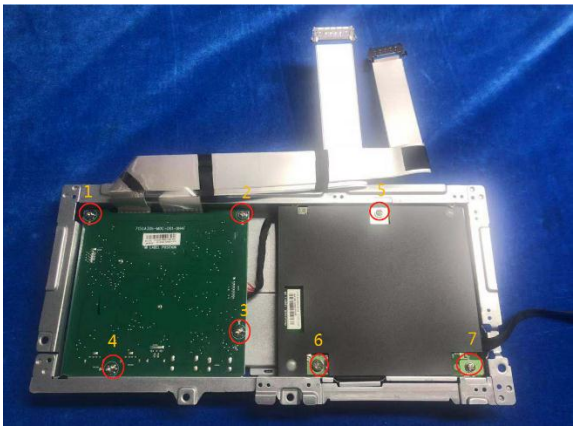


S8

Use a Philips-head screwdriver to remove 7 screws for unlocking the main board and the adapter board

(No.1~7 screw size=D3x6, Torque: 6±1kgf.cm)

(No.9 screw size=M4x6, Torque: 6±1kgf.cm)

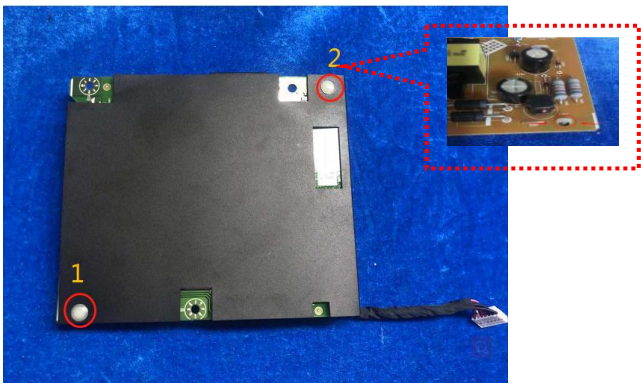


S9

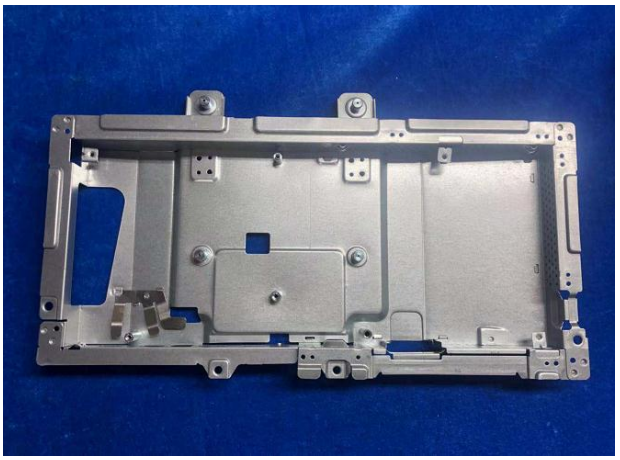
Disconnect all of the cables to separate the power board and main board.

S10

Hold the plastic button on the power board to separate the Mylar from the power board.



The Mainframe

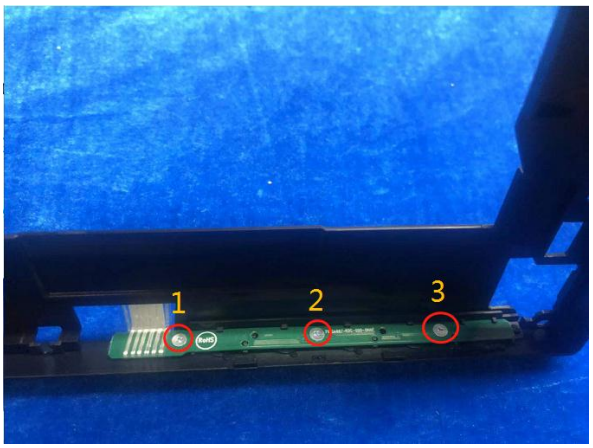


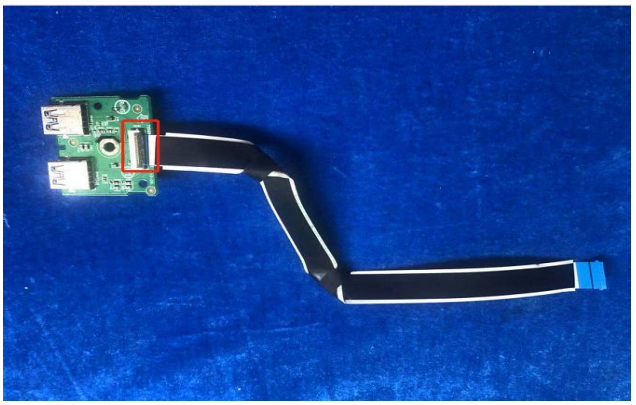
S11

Use a Philips-head screwdriver to remove 3 screws for unlocking the bezel and the middle frame.

(No.1~3 screw size=M2X2.5, Torque: 6±1kgf.cm)

S12 Use a Philips-head screwdriver to remove 3 screws for unlocking the key board and the middle frame.
(No.1~3 screw size=M2X2.5, Torque: 6 ±1kgf.cm)





The USB Board

S13 Use a Philips-head screwdriver to remove 1 screws to remove the USB board. Disconnect the cables of the USB board
(No.1 screw size=M3x6, Torque=4 ±1kgf.cm)

3.2 Assembly Procedures

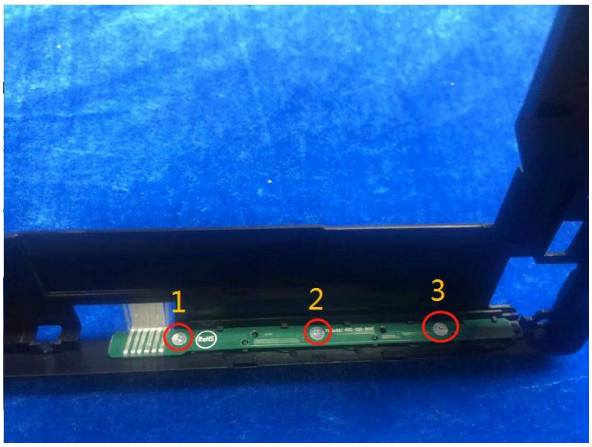
Use a Philips-head screwdriver to lock1 screws to assemble the USB board and connect the cables of the USB board

(No.1 screw size=M3x6, Torque=4 ±1kgf.cm)

S2

Use a Philips-head screwdriver to lock 3 screws for assembling the key board and the middle frame.

(No.1~3 screw size=M2X2.5, Torque: 6 ±1kgf.cm)



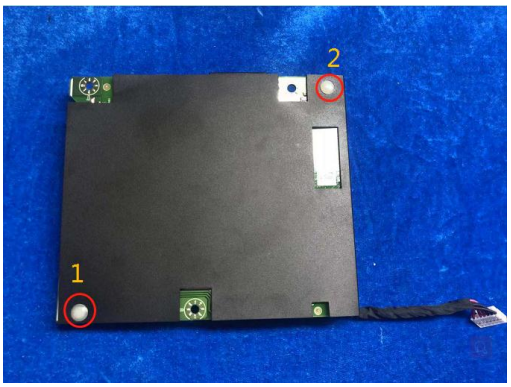
S3

Use a Philips-head screwdriver to lock 3 screws for assembling the bezel and the middle frame.

(No.1~3 screw size=M2X2.5, Torque: 6 ±1kgf.cm)

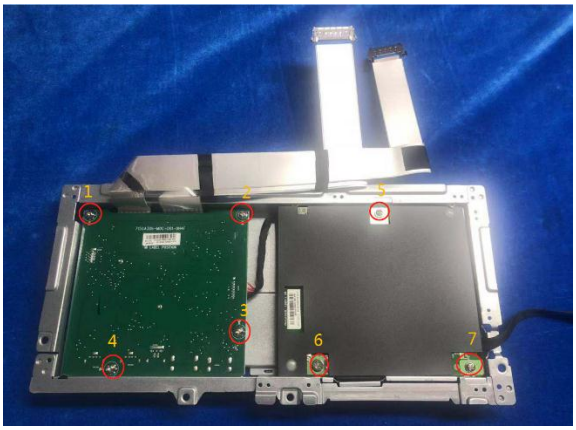
S4

Assemble the mylar on the powerboard and connect all of the cables between the power board and main board.



S5 Use a Philips-head screwdriver to lock 7 screws for assembling the main board and the adapter board

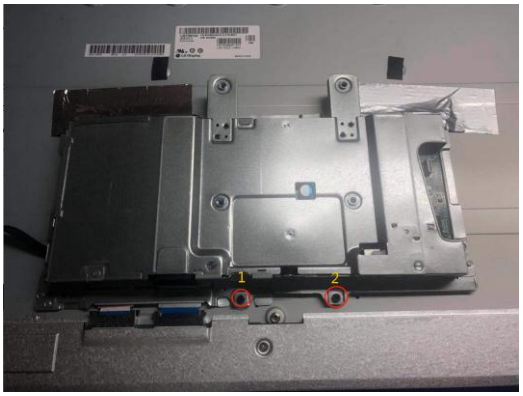
(No.1~7 screw size=D3x6, Torque: 6±1kgf.cm) (No.9 screw size=M4x6, Torque: 6±1kgf.cm)



S6

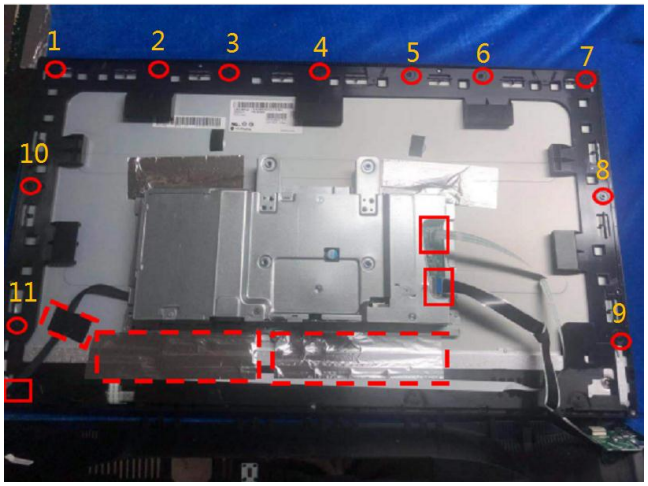
Stick 2 pieces of aluminum foil. Use a Philips-head screwdriver to lock 2 screws for locking the mainframe

(No.1~2 Screw size=M3x4, Torque: 3±0.5kgf.cm)



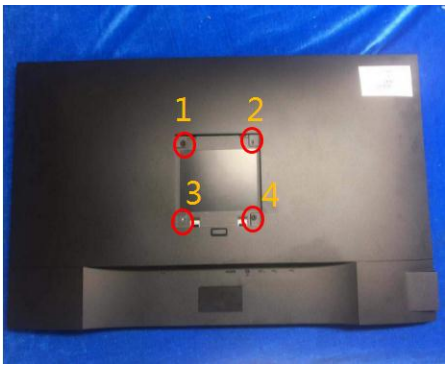
S7 Connect all the cable to assemble the rear cover and put it on a protective cushion. Use a Philips-head screwdriver to lock 11 screws for locking the middle plastic bezel with the whole unit.

(No.1~20 screw size=M3x4, Torque=3±0.5kgfxcm)



S8 Use a Philips-head screwdriver to lock four screws for assembling the rear cover .

(No.1~4 screw size=M4x10; Torque: 12±2kgf.cm)



S9 Assemble the stand

4. Trouble shooting instructions

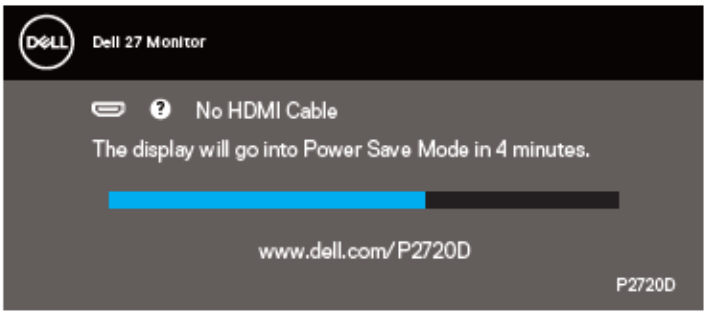
⚠ **WARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.**

Self-Test

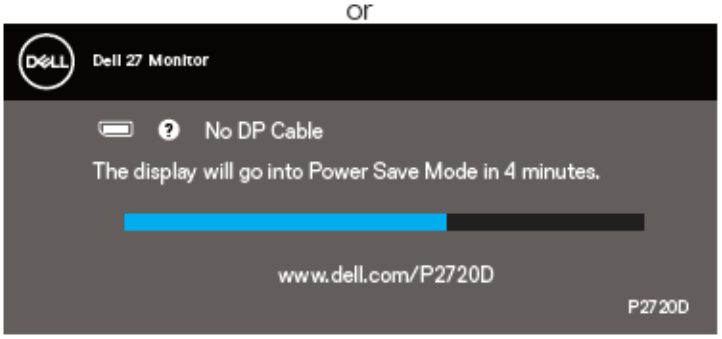
Your monitor provides a self-test feature that allows you to check if your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

1. Turn off both your computer and the monitor.
2. Disconnect all video cables from the monitor. This way, the computer doesn't have to be involved.
3. Turn on the monitor.

If the monitor is working correctly, it detects that there is no signal and one of the following message appears. While in self-test mode, the power LED remains white.



or



NOTE: This box also appears during normal system operation, if the video cable is disconnected or damaged.

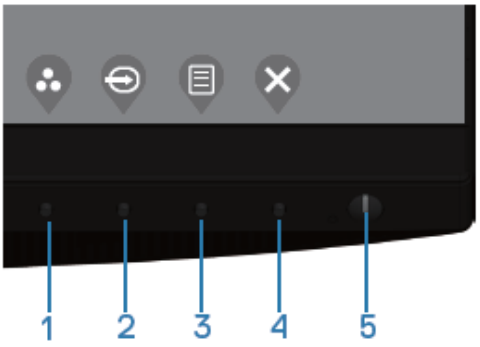
4. Turn Off your monitor and reconnect the video cable; then turn on your computer and the monitor.

If your monitor remains dark after you reconnect the cables, check your video controller and computer.

Built-in diagnostics

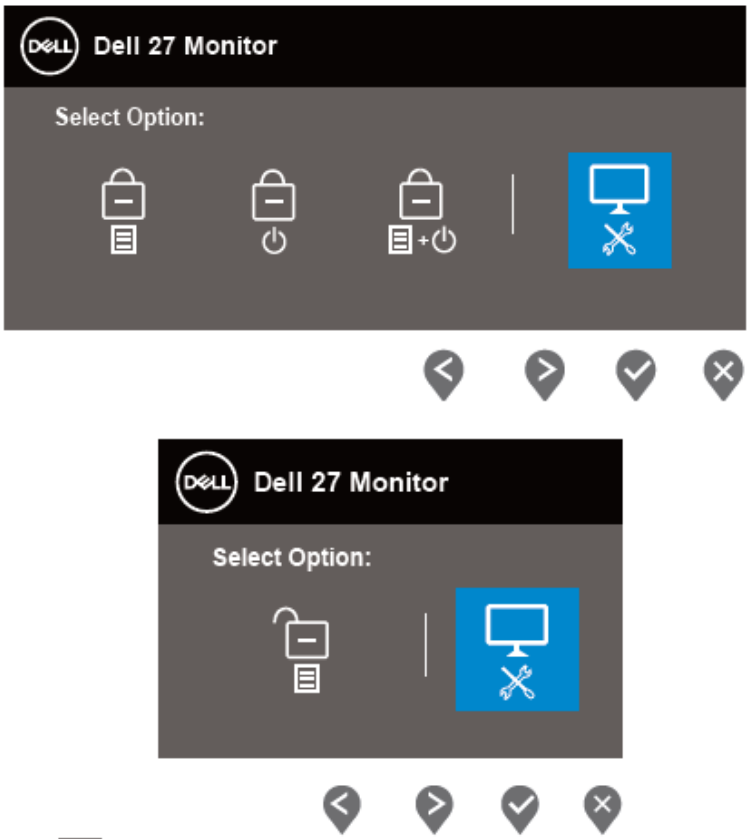
Your monitor has a built-in diagnostic tool that helps you determine if any screen abnormality you experience is an inherent problem with your monitor, or with your computer and video card.

NOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.



To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Unplug the video cable (s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
3. Press and hold the Exit key (button 4) for 4 seconds to enter the OSD lock/ unlock menu.



4. Select the icon to enable the built-in diagnostics.
5. Carefully inspect the screen for abnormalities.
6. Press the Up key (button 1) on the back cover again. The color of the screen changes to grey.
7. Inspect the display for any abnormalties.
8. Repeat step 6 and 7 to inspect the display in red, green, blue, black, white and text pattern screens.

The test is complete when the text pattern screen appears. To exit, press the Up key (button 1) again.

If you do not detect any screen abnormalties upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.