Maintenance and Service Guide

524sf Monitor

N75879

524sw Monitor

N75888

524sh Monitor

N75903

524sa Monitor

N75897

527sf Monitor

N75882

527sw Monitor

N75891

527sh Monitor

N75900

527sa Monitor

N75894

SUMMARY

This guide provides information about spare parts, removal and replacement of parts, diagnostic tests, problem troubleshooting, and more.

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N75894

Product notice

Only trained service personnel familiar with this product should service it. Before performing any maintenance or service, be sure to read “Important Safety Information”.

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1 Getting started

Read this chapter to learn about safety information and where to find additional HP resources.

Important safety information

Carefully read the cautions and notes within this document to minimize the risk of personal injury to service personnel. The cautions and notes are not exhaustive. Proper service methods are important to the safe, reliable operation of equipment. Improper service methods can damage equipment.

The service procedures recommended and described in this service manual provide effective methods of performing service operations. Service engineers should have prior repair knowledge and experience as well as appropriate training for the product before performing service procedures.

- Be sure your working environment is dry and clean and meets all government safety requirements.
- Be sure that other persons are safe while you are servicing the product.
- Do not perform any action that can cause a hazard to the customer or make the product unsafe.
- Use proper safety devices to ensure your personal safety.
- Always use approved tools and test equipment for servicing.
- Never assume the product's power is disconnected from the main power supply. Check that it is disconnected before opening the product's cabinet.
- Modules containing electrical components are sensitive to electrostatic discharge (ESD). Follow ESD safety procedures while handling these parts.
- Some products contain more than one battery. Do not disassemble or expose a battery to high temperatures, such as throwing into fire, or the battery may explode.
- Refer to government requirements for battery recycling or disposal.

This information provides general service information for the monitor. Adherence to the procedures and precautions is essential for proper service.

IMPORTANT: Only trained service personnel who are familiar with this HP product should perform service or maintenance for it. Before performing any service or maintenance, personnel must read the important safety information.

IMPORTANT: You must disconnect the power cord from the power source before opening the monitor to prevent component damage.

Important service information and precautions

- Repair must be performed by professional service technicians in a repair center. End users should not perform these procedures.

- Please note during servicing that the primary side is the high voltage area.
- This monitor meets ROHS requirements. Be sure to use lead-free solder wire when soldering.
- If you must change a capacitor, be sure to match the polarity as printed on the PCB.
- If you must replace a capacitor, make sure the specification and part number match the BOM and location.
- If you must replace a capacitor, insert new parts carefully to avoid a short circuit caused by the near pin.
- Do not get the board wet. Water and moisture can cause a short circuit that causes malfunctions.
- To avoid damage, be sure to use lead-free solder.
- When soldering, work quickly to avoid overheating the circuit board.
- Keep the soldering iron tip clean and well tinned when replacing parts.
- After repair, perform a close inspection of the circuit board to confirm it is in good condition.
- After repair, perform a function test to confirm the power supply is working properly.

ERP Lot5 requirement

1. A professional repairer must have the technical competence to repair electronic displays and comply with the applicable regulations for repairers of electrical equipment in the Member States where the repairer operates. Reference to an official registration system as professional repairer, where such a system exists in the Member States, shall be accepted as proof of compliance.

2. A professional repairer must have insurance that covers liabilities resulting from repairs, regardless of whether required by the Member State.

RoHS (2002/95/EC) requirements

Applied to all countries that require RoHS.

The RoHS (Restriction of Hazardous Substance in Electrical and Electronic Equipment Directive) is a legal requirement by the EU (European Union) for the global electronics industry sold in the EU and other countries. Any electrical and electronics products launched in the market after June 2006 should meet this RoHS requirement. Products launched in the market before June 2006 are not required to be compliant with RoHS parts. If the original parts are not RoHS complaint, the replacement parts can be non-ROHS complaint. If the original parts are RoHS compliant, the replacement parts MUST be RoHS complaint.

If product service or maintenance requires replacing parts, confirm the RoHS requirement before replacement.

General descriptions

This manual contains general information. There are two levels of service:

Level 1: Cosmetic/appearance/alignment service

Level 2: Circuit board or standard parts replacement

Firmware updates

Firmware updates for the monitor are available at support.hp.com. If no firmware is posted, the monitor does not need a firmware update.

Before returning the repaired product to the customer

Perform an AC leakage current check on exposed metallic parts to be sure the product is safe to operate without the potential of electrical shock. Do not use a line isolation transformer during this check.

Measurements that are not within specified limits present a possible shock hazard. You must check and repair the product before returning it to the customer.

2 Monitor features

This chapter provides an overview of the monitor's features.

Features

Depending on the model, your monitor might include the following features:

- 60.5 (23.8 in) diagonal viewable screen area with 1920 × 1080 FHD plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- 68.6 cm (27.0 in) diagonal viewable screen area with 1920 × 1080 FHD resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- Liquid crystal display (LCD) with active matrix and in-plane switching (IPS)
- Refresh Rate Range up to 100Hz
- Wide color gamut to provide coverage of sRGB color spaces
- Anti-glare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- High–Definition Multimedia Interface (HDMI), and VGA video inputs
- Tilt adjustment capability
- Audio build in (select models)
- Height adjustment capability (select models)
- Four on-screen display (OSD) buttons, three that you can reconfigure to quickly allow selection of the most commonly used operations
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- Energy saver feature to meet requirements for reduced power consumption
- Security cable slot on the rear of the monitor for an optional security cable
- Cable management feature for placement of cables and cords

NOTE: For safety and regulatory information, refer to the Product Notices provided in your documentation kit. To access the latest user guide, go to http://www.hp.com/support, and follow the instructions to find your product. Then select User Guides.

Front components

To identify the components on the front of the monitor, use this illustration and table.

524sf/524sw/524sa/527sf/527sw/527sa	524sh/527sh
	

Table 1-1 Front components and their descriptions

Component		Function
1	Power button	Turns the monitor on or off.
2	Menu button	Press to open the OSD menu. When the OSD menu is open, the Menu light turns on.
3	OSD buttons (assignable)	When the OSD menu is open, press the buttons to navigate through the menu. The function light icons indicate the default button functions. You can reassign the function buttons to quickly select the most commonly used operations.

NOTE: You can reconfigure the Function buttons in the OSD menu to quickly select the most commonly used operations. Press the Menu button to open the OSD, and then select Menu Control. Select Assign buttons, and then select one of the available options for the button you want to assign.

Rear components

To identify the components on the rear of the monitor, use this illustration and table.

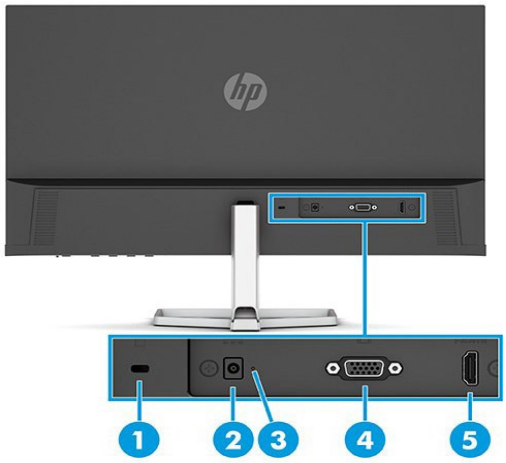
524sf/524sw/524sh/527sf/527sw/527sh	524sa/527sa
	

Table 1-2 Rear components and their descriptions

Component		Description
1	Security cable slot	Connects an optional security cable
2	Power connector	Power connector
3	Power Light	On: The monitor is on Off: Depending on your monitor model, monitor is off or in sleep mode
4	VGA connector	Connects the VGA cable to the source device.
5	HDMI port 1	Connects the HDMI cable to the source device
	HDMI port 2 (select models)	Connects the HDMI cable to the source device

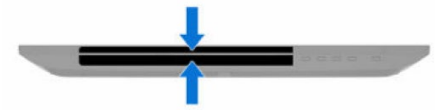
Table 1-3 Rear components and their descriptions (524sa, 527sa)

Component		Description
1	Security cable slot	Connects an optional security cable
2	Power connector	Power connector
3	Power Light	On: The monitor is on Off: Depending on your monitor model, monitor is off or in sleep mode

4	Audio-in (microphone) jack	Connects the audio cable to a source device such as a computer or game console
5	Audio-out (headphone) jack	Connects headphones, earbuds or an audio cable
6	VGA connector	Connects the VGA cable to the source device.
7	HDMI port 1	Connects the HDMI cable to the source device
	HDMI port 2 (select models)	Connects the HDMI cable to the source device

Locating the serial number and product number

Depending on the product, the serial number and product number are located on a label on the rear of the monitor or on a label under the front bezel of the monitor head. You might need these numbers when contacting HP for support.



For worldwide models (except China Sku):

Barcode label





For China:

Bar code label



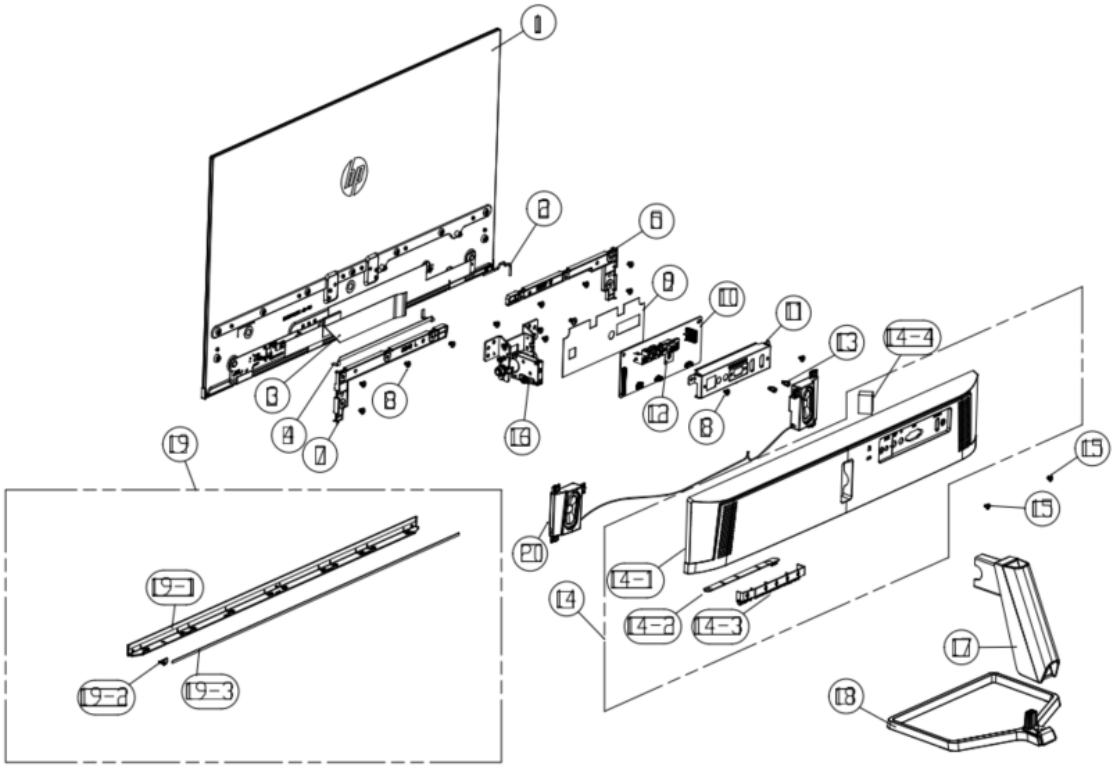
Safety label



3 Illustrated parts catalog

To identify the monitor major components, use this illustration and table.

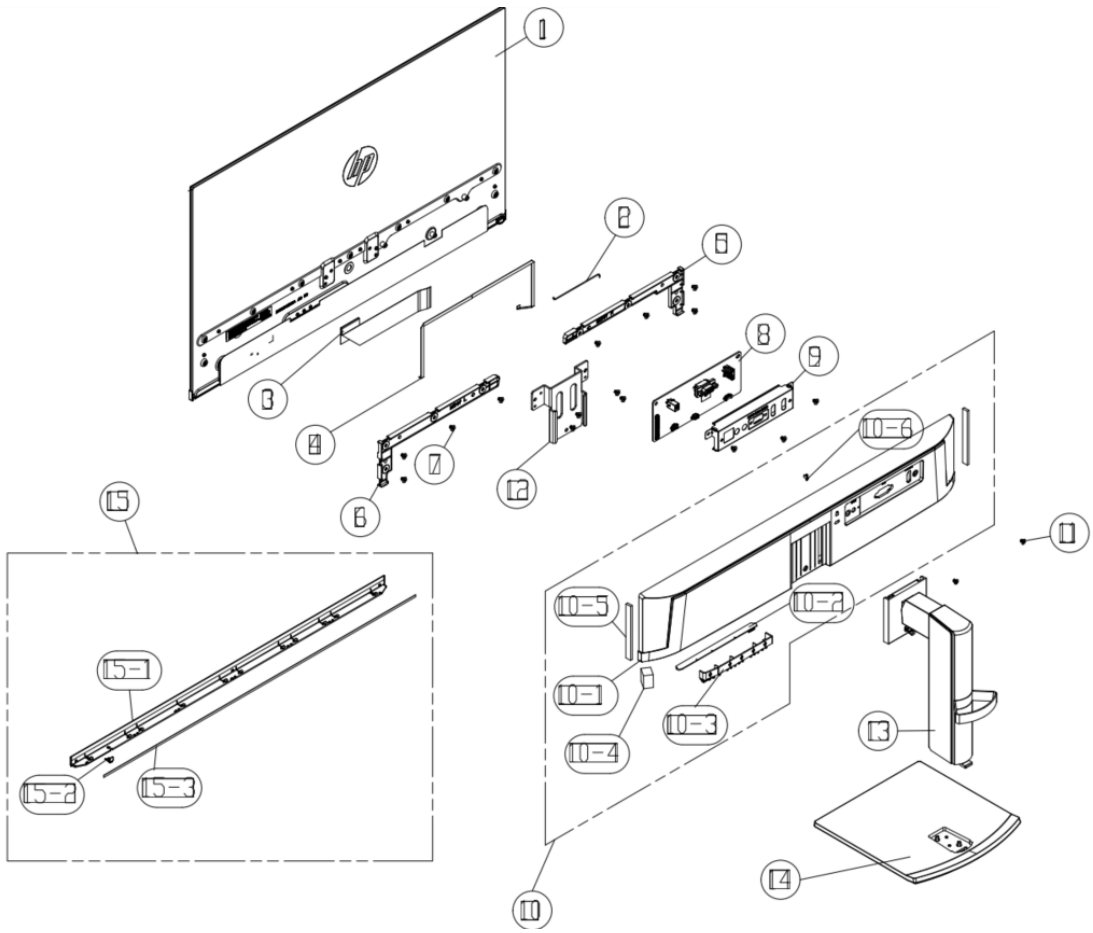
- 524sf/524sw/524sa



item	Description	Qty
1	Encore 3.5 524sf 524sh	1
	Encore 3.5 524sw 524sa	1
2	WH A1007H00-6P-2L/A1257H00-6P-L #28 75mm(Delete pin4) W/B HF	1
	WH A1007H00-6P-2L/A1257H00-6P-L #28 95mm+ACETATE(Delete pin4) W/B HF	1
3	WH FFC 30P(1.0mm)180mm(1FOLD+PRO)60V G/F W/CONN(A15+BC)+AL HFPOWER LENS (PC/TRANSPARENT)(OCEAN 20)	1
4	WH FFC 8P(0.5mm)270mm(3FOLD)60V G/F (A8+A6) HF21.5 LCM for HP Ocean'2021.5 HP Ocean LM215WF9-HSAN1	1
5	Audio BD ASS'Y HP Encore 3.5 TTS Board (MT9052) 2LMID FRAME FOR LHD (ABS+85% recycle ABS /JACK BACK (6009-0337))(OCEAN 20 P22 G5)	1
6	REAR SUPPORT-L(PCR-85% ABS+5% PET/JACK BLACK (6009-0337))WH FFC 30P(1.0mm) 380mm(2FOLD) 60V G/F W/CONN (A15+BC)+AL(AA) HF	1
7	REAR SUPPORT-R(PCR-85% ABS+5% PET/JACK BLACK (6009-0337))WH FFC 8P(0.5mm) 560mm(2FOLD+1PRO) 60V G/F (A8+A5) HF	1
8	MAC. SCREW-MI M3.0*4.0L,NI WH A1007H00-6P-L/KY1251HS05-06 #28 450mm W/B HF	16
9	MYLAR BLACK(150*40*0.325t) (ENCORE 3-M24F LGD PANEL)MAIN BD ASS'Y HP P22 G5 (M215HCA) 2L	1
	MYLAR BLACK(16.5*15*0.325t) (ENCORE 3-SHIELDING MIDDLE SCREW)	1
10	MAIN BD ASS'Y HP Encore 3.5 524sf (LM238WF8-SJA1) 2LPower BD ASS'Y (HP Ocean 20 25W POWER BD)	1
	MAIN BD ASS'Y HP Encore 3.5 524sw (LM238WF8-SJA1) 2L	1

	MAIN BD ASS'Y HP Encore 3.5_V2 524sa (LM238WF8-SJA1) 4L	1
11	MAIN BD ASS'Y HP Encore 3.5 524sa TTS (LM238WF8-SJA1) 4LMYLAR BLACK FOR SHIELDING BOT (125.7*94.4*0.5t) (OCEAN 20)	1
11	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)-C	1
	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)MYLAR BLACK FOR SHIELDING TOP (57.3*50*0.2t) (OCEAN 20)	1
	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3.5 FOR TTS)MAIN SHIELDING(OCEAN 20 P22 G5 & P22H G5) ASS'Y	1
12	MYLAR BLACK(16.5*15*0.325t) (ENCORE 3-SHIELDING MIDDLE SCREW)	1
13	MAC. SCREW-MH #4-40*5.0L,Ni OSD KEY EXTERNAL PARTS (ABS+85% recycle ABS /JACK BACK (6009-0337)) (OCEAN 20 P22 G5)	21
14	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(ENCORE 3-M24F)ASS'YOSD KEY INTERNAL PARTS (ABS+85% recycle ABS /JACK BACK (6009-0337))(OCEAN 20 P22 G5)	1
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M24FW)ASS'YWALL MOUNT BKT(SGCC 1.2t)(VX2363)	2
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M24FWA)ASS'YREAR COVER (ABS+85% recycle ABS /JACK BACK (6009-0337))(OCEAN 20 P22 G5)	1
14-1	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(ENCORE 3-M24F)ASS'YVESA COVER (ABS+85% recycle ABS /JACK BACK (6009-0337))(OCEAN 20 P22 G5)	1
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M24FW)	1
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M24FWA)	1
14-2	DISPLAY BD ASS'Y HP Encore III	1
14-3	DISPLAYKEY(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(ENCORE 3)	1
	DISPLAYKEY(VIRGIN ABS+5% PET/CERAMIC WHITE)(ENCORE 3)	1
14-4	SPONGE PU(24.0*12.0*11.0t)(ENCORE2_23F)(BLK)	1
15	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)	2
	MAC. SCREW-MI M3.0*6.0L,NI(HEAD DIAMETER 7.0)	2
16	HINGE(ENCORE3-M27f)(Sliver) GT MAC. SCREW-MF M3.0*4.0L,NI	19
17	NECK(ENCORE3-M27f)(Sliver) ASS'Y GT TAP. SCREW-TF #3.0*6.0L,Ni	12
18	BASE(ENCORE3-M24f)(Sliver) GT TAP. SCREW-TB #2.5*5.0L,Ni	12
19	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sf)TAP.SCREW-T1 M2.0*3.0L,NI	13
	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sw)ASS'Y	1
	FRONT DECO(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3.5-524sa)ASS'Y	1
19-1	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sf)	1
	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sw)	1
	FRONT DECO(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3.5-524sa)	1
19-2	LENS(PC122/TRANSPARENT)(ENCORE 3)	1
19-3	FOAM TAPE (L534*W2*0.6t EXP060-D33-S)	1
20	SPK BOX 2W 4ohm 50*72*18.34mm (R420mm/L130mm) IEC for HP Encore3.5 HFMAC. SCREW-MI M3.0*4.0L,BLK-ZnNi	1

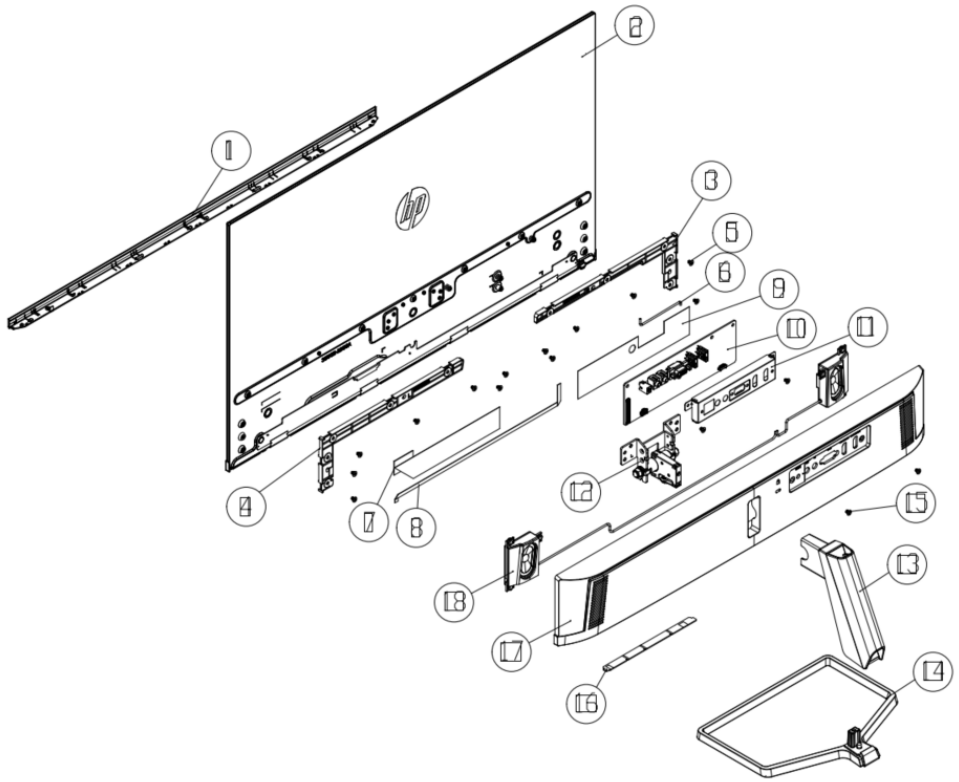
524sh



item	Description	Qty
1	Encore 3.5 524sf 524sh	1
2	WH A1007H00-6P-2L/A1257H00-6P-L #28 75mm(Delete pin4) W/B HF	1
3	WH FFC 30P(1.0mm)180mm(1FOLD+PRO)60V G/F W/CONN(A15+BC)+AL HF	1
4	WH FFC 8P(0.5mm)270mm(3FOLD)60V G/F (A8+A6) HF21.5 LCM for HP Ocean'2021.5 HP Ocean LM215WF9-HSAN1	1
5	REAR SUPPORT-L(PCR-85% ABS+5% PET/JACK BLACK (6009-0337))	1
6	REAR SUPPORT-R(PCR-85% ABS+5% PET/JACK BLACK (6009-0337))	1
7	MAC. SCREW-MI M3.0*4.0L,NI	16
8	MAIN BD ASS'Y HP Encore 3.5 524sh (LM238WF8-SJA1) 2L	1
9	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)-C	1
10	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(Hp M24h)ASS'Y	1
10-1	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(Hp M24h)	1
10-2	DISPLAY BD ASS'Y HP Encore III	1
10-3	DISPLAYKEY(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(ENCORE 3)	1
10-4	SPONGE PU(15*12*13t)(BLK)	21
10-5	SPONGE PU(80*3.0*8.0T)(BLK)	1
10-6	POWER LENS(PC/TRANSPARENT)(2213xi)	1
11	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)	1
12	HINGE-HOLDER BKT(SGCC 2T) (Hp M24h&M27h)	2
13	NECK(Hp M24h)(Sliver)_CX	1
14	BASE(Hp M24h)(Sliver)_CX	1

13	NECK(Hp M24h)(Sliver)_FFT	1
14	BASE(Hp M24h)(Sliver)_FFT	1
15	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sh)ASS'Y	1
15-1	FRONT DECO(ABS 85% PCR +5% OBP/PHI NATURAL SILVER)(ENCORE 3.5-524sh)	1
15-2	LENS(PC122/TRANSPARENT)(ENCORE 3)	1
15-3	FOAM TAPE (L534*W2*0.6t EXP060-D33-S)	1

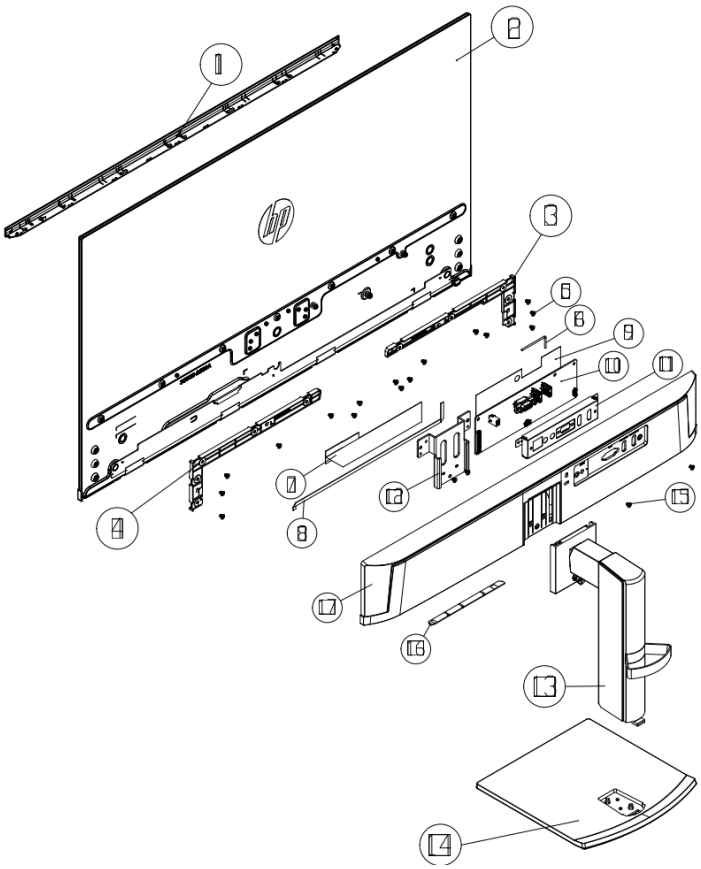
- 527sf/527sw/527sa



item	Description	Qty
1	FRONT DECO(ABS 85% PCR +5% OBP/NATURAL SILVER)(ENCORE 3.5-527sf)ASS'Y	1
	FRONT DECO(ABS 85% PCR +5% OBP/NATURAL SILVER)(ENCORE 3.5-527sw)ASS'Y	1
	FRONT DECO(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3.5-527sa)ASS'Y	1
2	Bare LCM, LM270WFD-HSAK1	1
	Bare LCM, LM270WFD-HSAY1	1
3	REAR SUPPORT-L(PCR-85% ABS+5% PET/JACK BLACK (6009-0337)) ENCORE 3-M27f	1
4	REAR SUPPORT-R(PCR-85% ABS+5% PET/JACK BLACK (6009-0337)) ENCORE 3-M27f	1
5	MAC. SCREW-MI M3.0*4.0L,NI	16
6	WH A1007H00-6P-2L/A1257H00-6P-L #28 75mm(Delete pin4) W/B HF	1
7	WH FFC 30P(1.0mm)180mm(1FOLD+PRO)60V G/F W/CONN(A15+BC)+AL HF	1
8	WH FFC 8P(0.5mm)270mm(3FOLD)60V G/F (A8+A6) HF	1
9	MYLAR BLACK(185*40*0.325t) (ENCORE 3-M27F)	1
	MYLAR BLACK(185*40*0.325t) (ENCORE 3-527sa TTS)	1
10	MAIN BD outer preelaboration for HP 527sf Lehui (LM270WFD-SJA1)	
	MAIN BD outer preelaboration for HP 527sw Lehui (LM270WFD-SJA1)	1

	MAIN BD outer preelaboration for HP 527sa Lehui (LM270WFD-SJA1) TTS	
11	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)-C	1
	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)	1
12	HINGE(ENCORE3-M27f)(Sliver) CX	1
13	NECK(ENCORE3-M27f)(Sliver) ASS'Y CX	1
14	BASE(ENCORE3-M27f)(Sliver) CX	1
12	HINGE(ENCORE3-M27f)(Sliver) GT	1
13	NECK(ENCORE3-M27f)(Sliver) ASS'Y GT	1
14	BASE(ENCORE3-M27f)(Sliver) GT	1
15	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)	2
	MAC. SCREW-MI M3.0*6.0L,NI(HEAD DIAMETER 7.0)	2
16	DISPLAY BD ASS'Y HP Encore III	1
17	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(ENCORE 3-M27F)ASS'Y	1
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M27FW)ASS'Y	1
	REAR COVER(ABS 85% PCR +5% OBP/CERAMIC WHITE)(ENCORE 3-M27FWA)ASS'Y	1
18	SPK BOX 2W 4ohm 50*72*18.34mm (R420mm/L130mm) IEC for HP Encore3.5 HF	1

- 527sh



item	Description	Qty
1	FRONT DECO(ABS 85% PCR +5% OBP/NATURAL SILVER)(ENCORE 3.5-527sh)ASS'Y	1
2	Bare LCM, LM270WFD-HSAK1	1
3	REAR SUPPORT-L(PCR-85% ABS+5% PET/JACK BLACK (6009-0337)) ENCORE 3-M27f	1
4	REAR SUPPORT-R(PCR-85% ABS+5% PET/JACK BLACK (6009-0337)) ENCORE 3-M27f	1
5	MAC. SCREW-MI M3.0*4.0L,NI	16
6	WH A1007H00-6P-2L/A1257H00-6P-L #28 75mm(Delete pin4) W/B HF	1
7	WH FFC 30P(1.0mm)180mm(1FOLD+PRO)60V G/F W/CONN(A15+BC)+AL HF	1
8	WH FFC 8P(0.5mm)270mm(3FOLD)60V G/F (A8+A6) HF	1
9	MYLAR BLACK(185*40*0.325t) (ENCORE 3-M27F)	1
10	MAIN BD ASS'Y HP Encore 3.5_V2 527sh (LM270WFD-SJA1) 2L BOT	1
11	SHIELDING (SECC 0.5T)(1A2H-AUDIO)(ENCORE3)-C	1
12	HINGE-HOLDER BKT(SGCC 2T) (Hp M24h&M27h)	1
13	NECK(Hp M27h)(Sliver)_CX	1
14	BASE(Hp M27h)(Sliver)_CX	1
13	NECK(Hp M27h)(Sliver)_FFT	1
14	BASE(Hp M27h)(Sliver)_FFT	1
15	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)	4
16	DISPLAY BD ASS'Y HP Encore III	1
17	REAR COVER(ABS 85% PCR +5% OBP/JACK BLACK (6009-0337))(HP M27hF)ASS'Y	1

How to order parts

External adapter

Description	HP spare part number	Manufacturer part number
A-D adapter 1.28A 19.5V	M46471-001	ADS-25PE-19-3 19525E
A-D adapter 2.05A 19.5V	M46472-001	ADS-45PE-19-3 19540E
A-D adapter 2.31A 19.5V	M54540-003	ADP-45FE FBC

Connectors by manufacturer

LHD P/N	SPEC.	Matching P/N	Difference
R030410000210	HDMI: 19P 180' H=13mm SMD	900-0476591100TR-ND 900-0476591100CT-ND 900-0476591100DKR-ND	H=8.5mm
	0476591100 Molex | Connectors, Interconnects | DigiKey		
R030012105155	VGA: 180' 15P H=10.5mm	2092-K86X-ED-15S-BR-ND	H=6mm
	K86X-ED-15S-BR Kycon, Inc. | Connectors, Interconnects | DigiKey		

NOTE: The connector may need to be modified to meet functionality, regulatory and safety requirements if it is not an exact match.

You can purchase cables from the HP part store at https://partsurfer.hp.com/Search.aspx.

NOTE: HP continually improves and changes product parts. For complete and current information about supported parts for your computer, go to http://partsurfer.com, select your country or region, and then follow the on-screen instructions.

Internal and External Power Supplies are available for purchase from the following EU distributor: EET

https://www.eetgroup.com/en-eu/

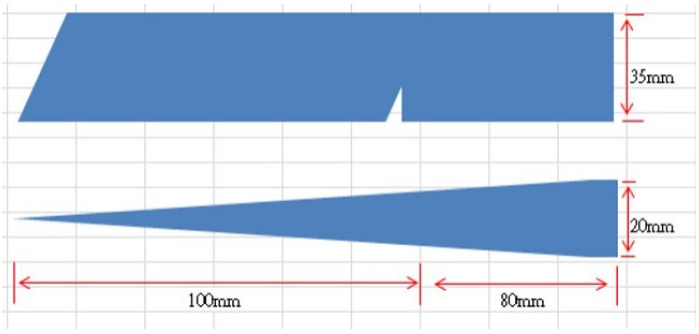
4 Removal and replacement procedures

Adherence to these procedures and precautions is essential for proper service.

Preparation for disassembly

Use this information to properly prepare to disassemble and reassemble the monitor.

1) Read the "Important safety information" and "Important service information and precautions" sections in the "Getting started" chapter of this guide.
2) Clean the room for disassembly.
3) Identify the disassembly area.
4) Check the position that the monitors are to be placed along with the number of monitors. Prepare the area for material flow according to the disassembly layout.
5) Be sure to have the following equipment and materials:
    - Press fixture
    - Working table
    - Screwdriver
    - Knife
    - Gloves
    - Cleaning cloth
    - ESD protection
    - Scraper bar in the following dimensions:



Rear Cover

Before removing the Rear Cover, follow these steps:

▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 16.

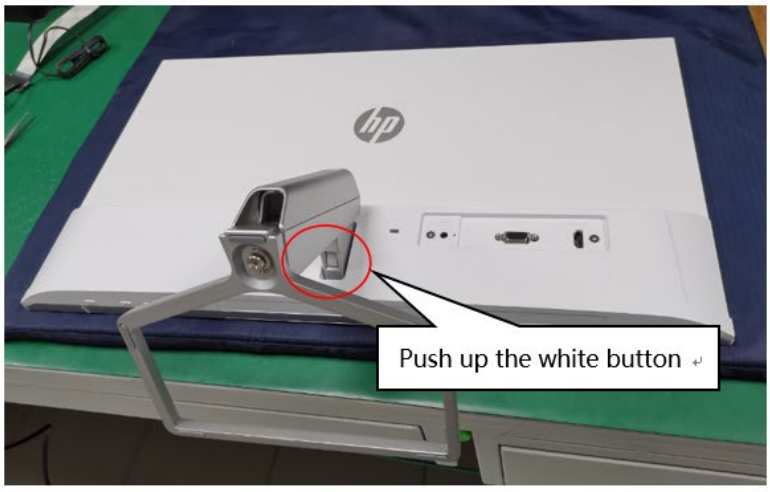
Remove the Rear Cover:

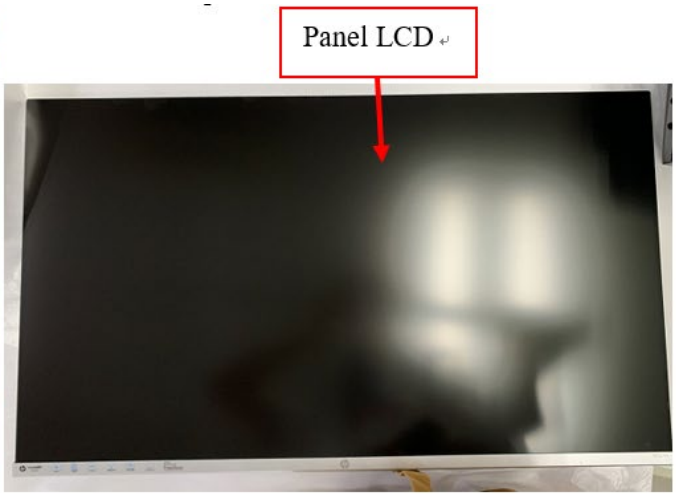
For 524sf, 524sw, 527sf, 527sw

1. Lay the display on soft desk and press the button of stand to unlock the stand, then pull out the stand from the monitor head.







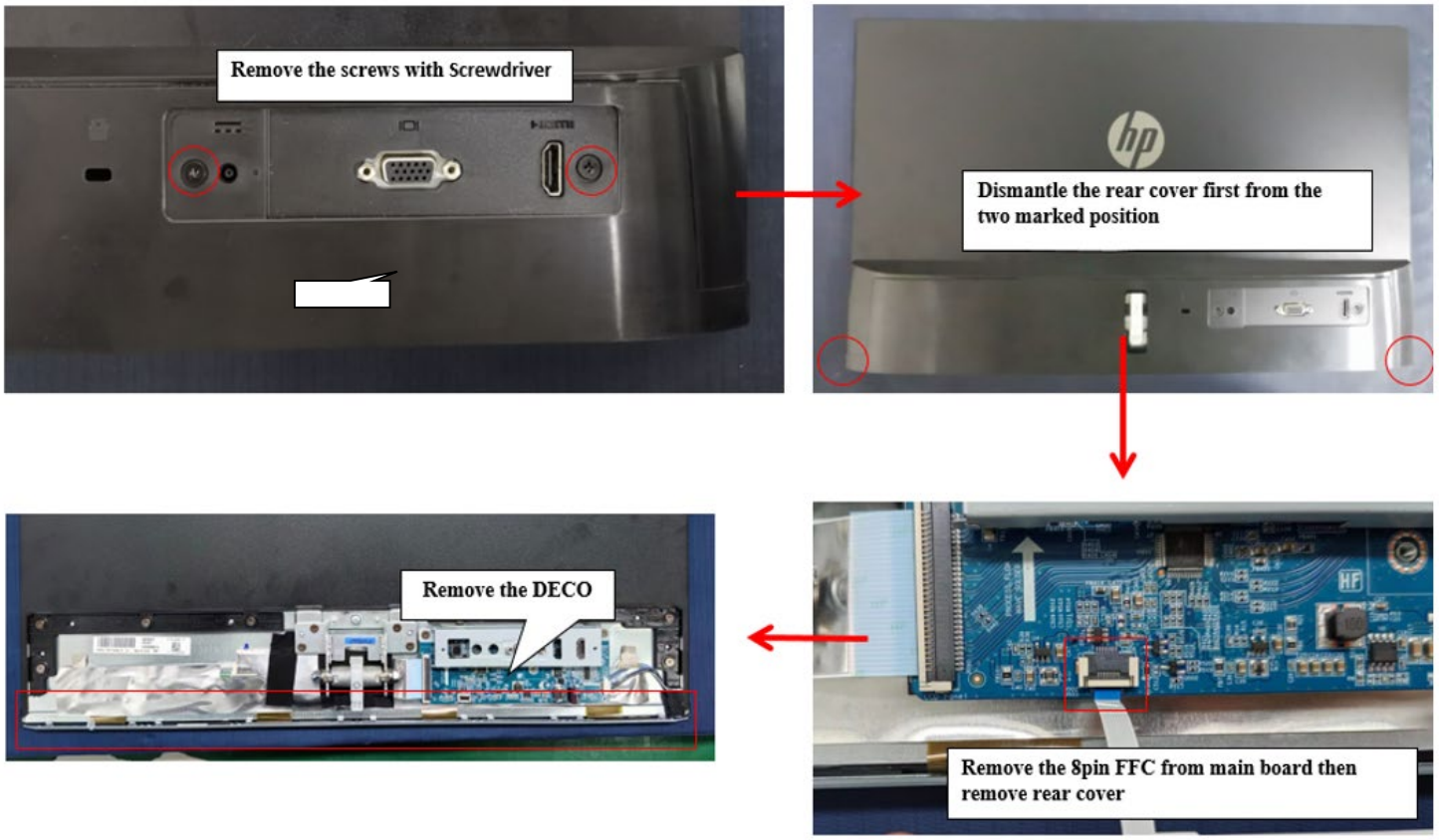


2. Twist out the screw and separate base and stand.

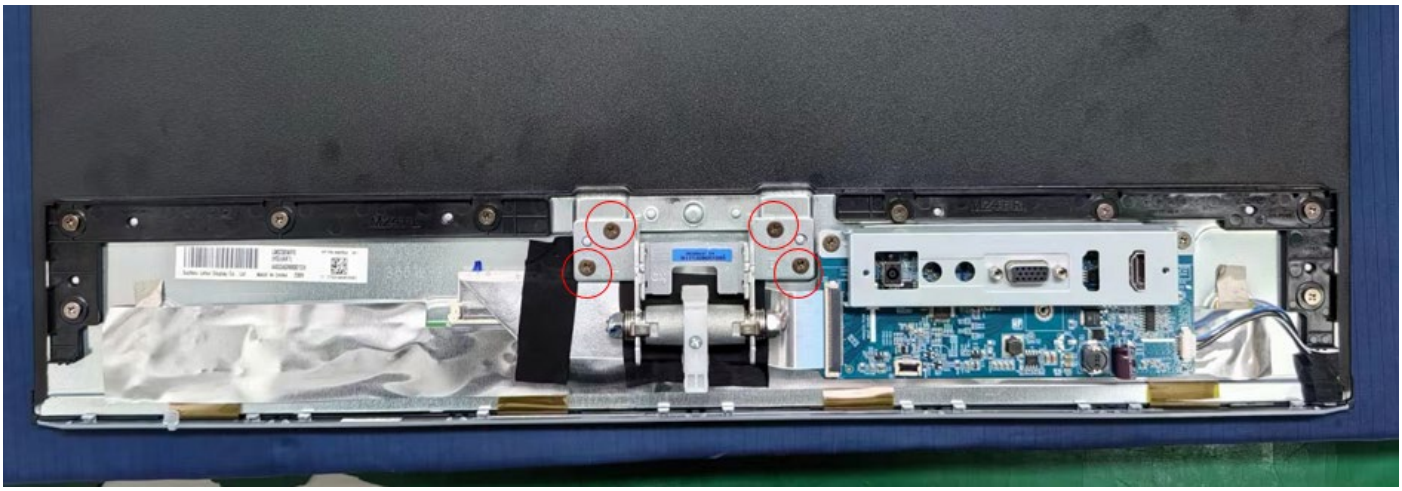


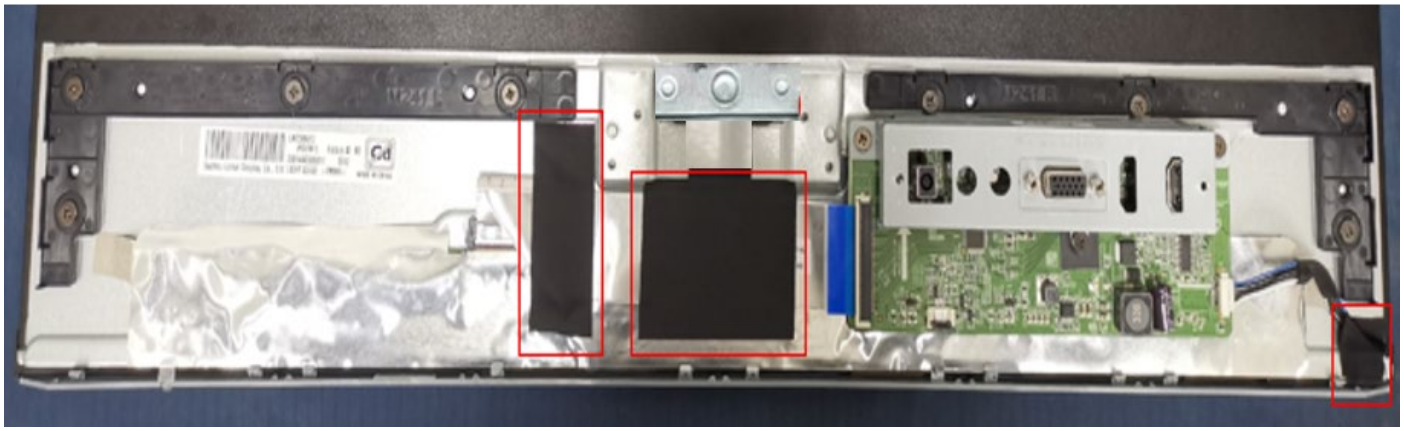


3. Strip two screws from the rear cover, then move rear cover follow the below way.

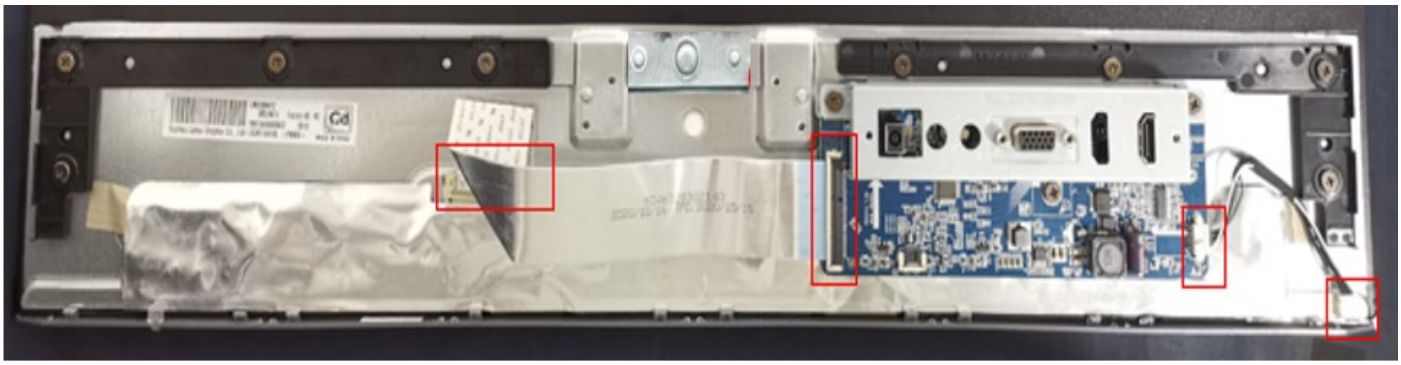


4. Strip four screws from the hinge.





5. Remove the acetate tapes from the LVDS/ LED cable.



6. Pull out the LVDS/ LED cable to panel and MB.
7. Strip ten screws from the rear cover supporter and M/B







MAIN BD



Remove key board

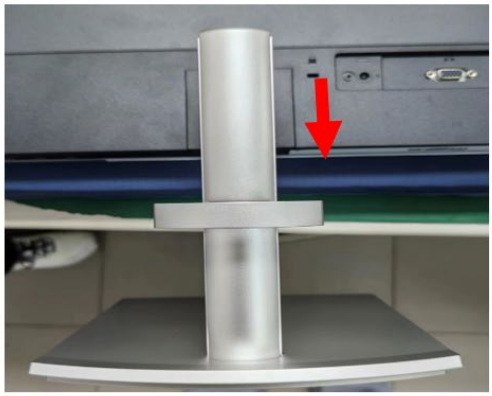


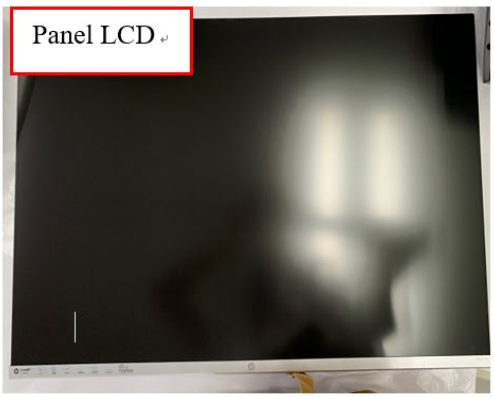
key board

For 524sh, 527sh

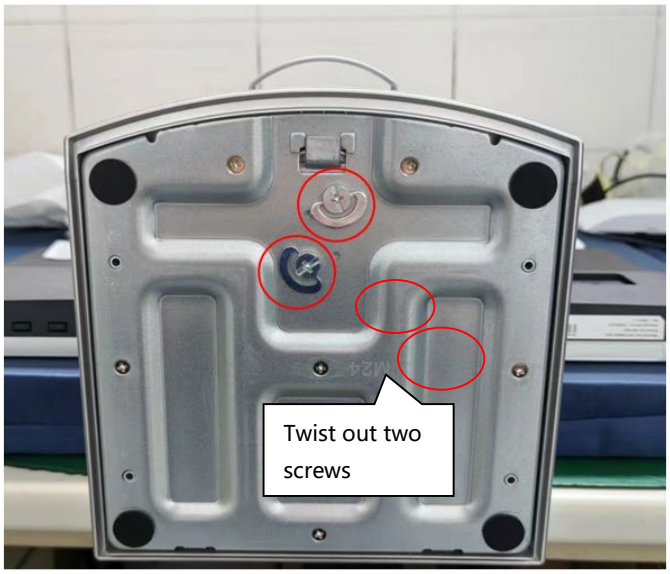
1. Lay the display on soft desk and twist out the screw to unlock the stand, then pull out the stand from the monitor head.





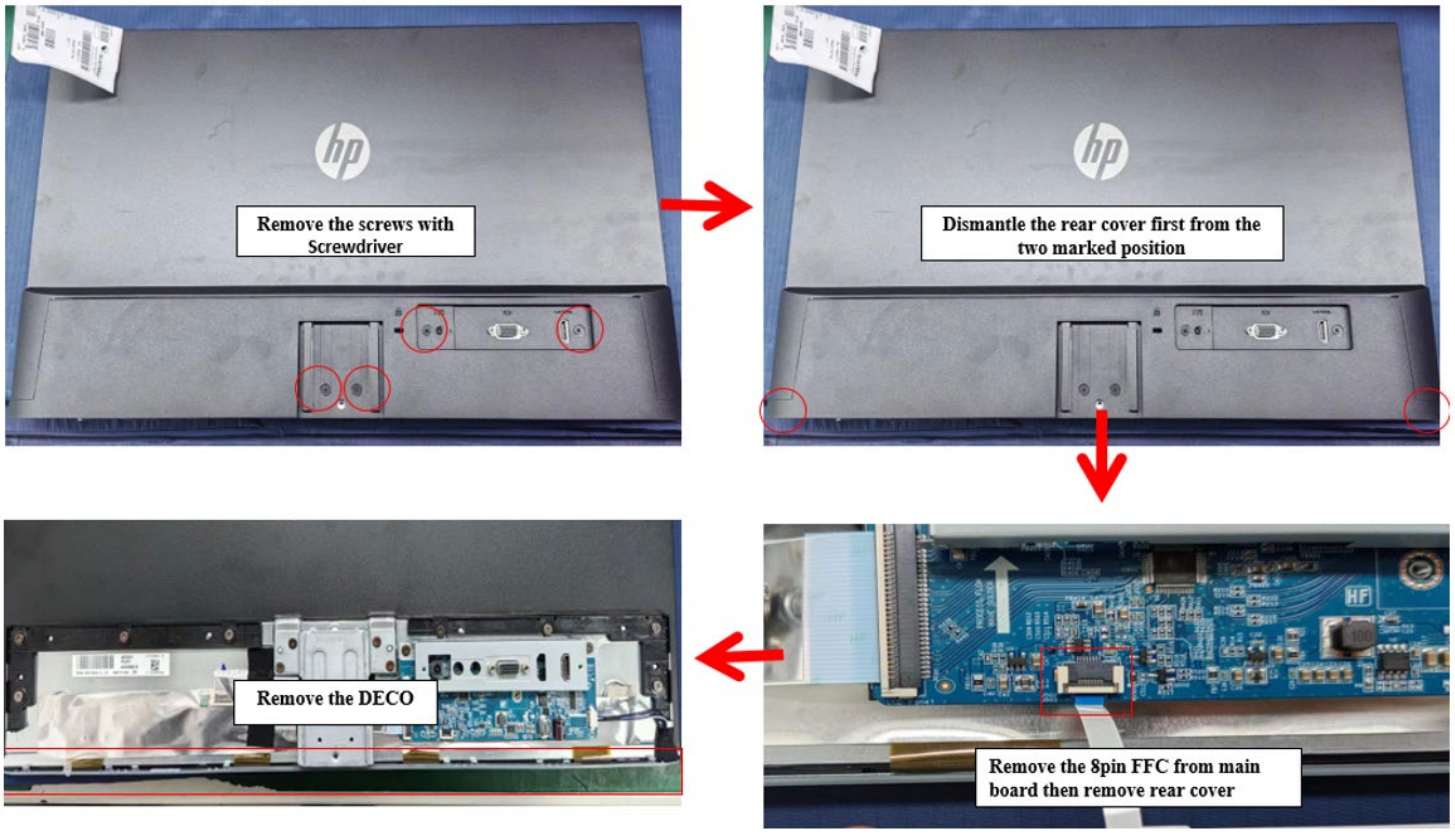


2. Twist out the screws and separate base and stand.





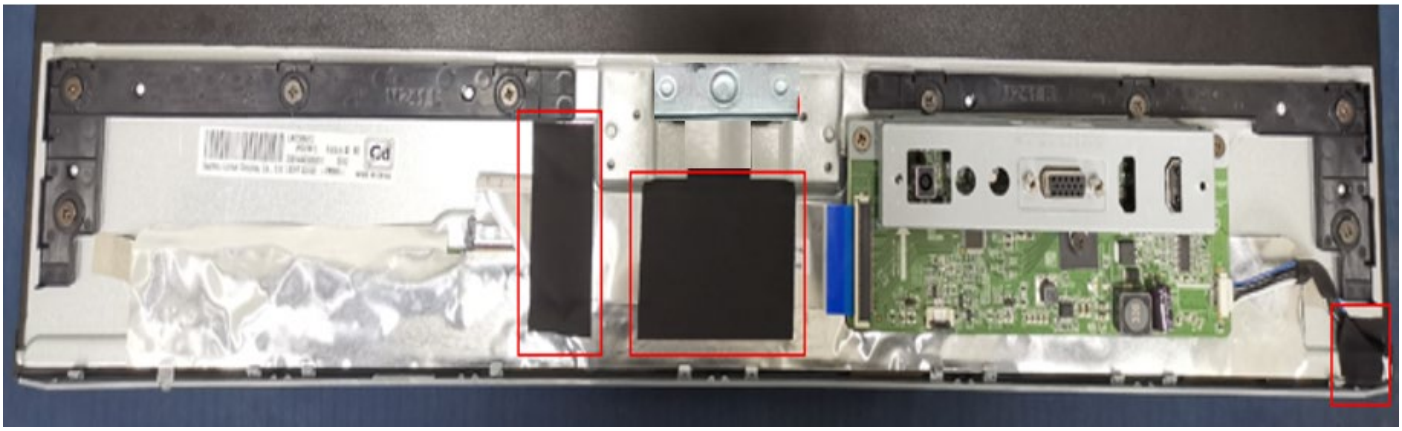
3. Strip four screws from the rear cover, then move rear cover follow the below way.

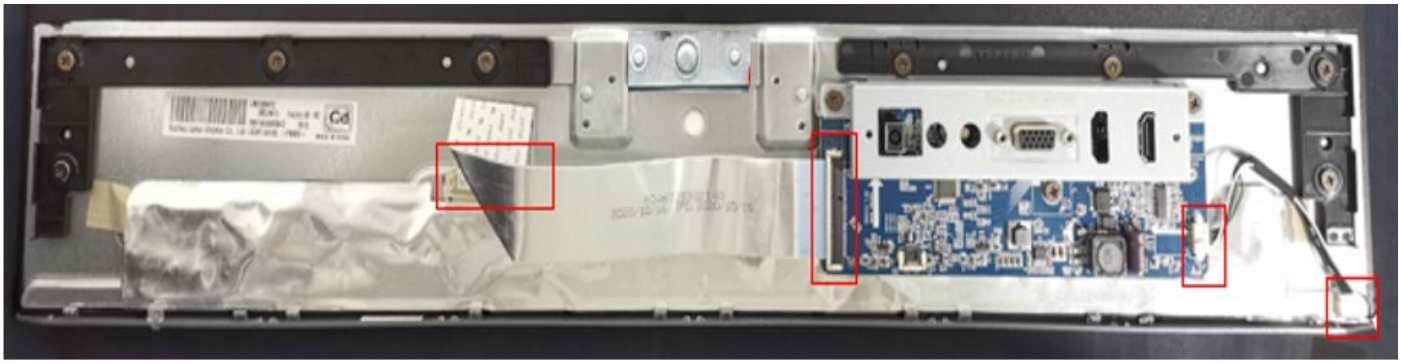


4. Strip four screws from the hinge.

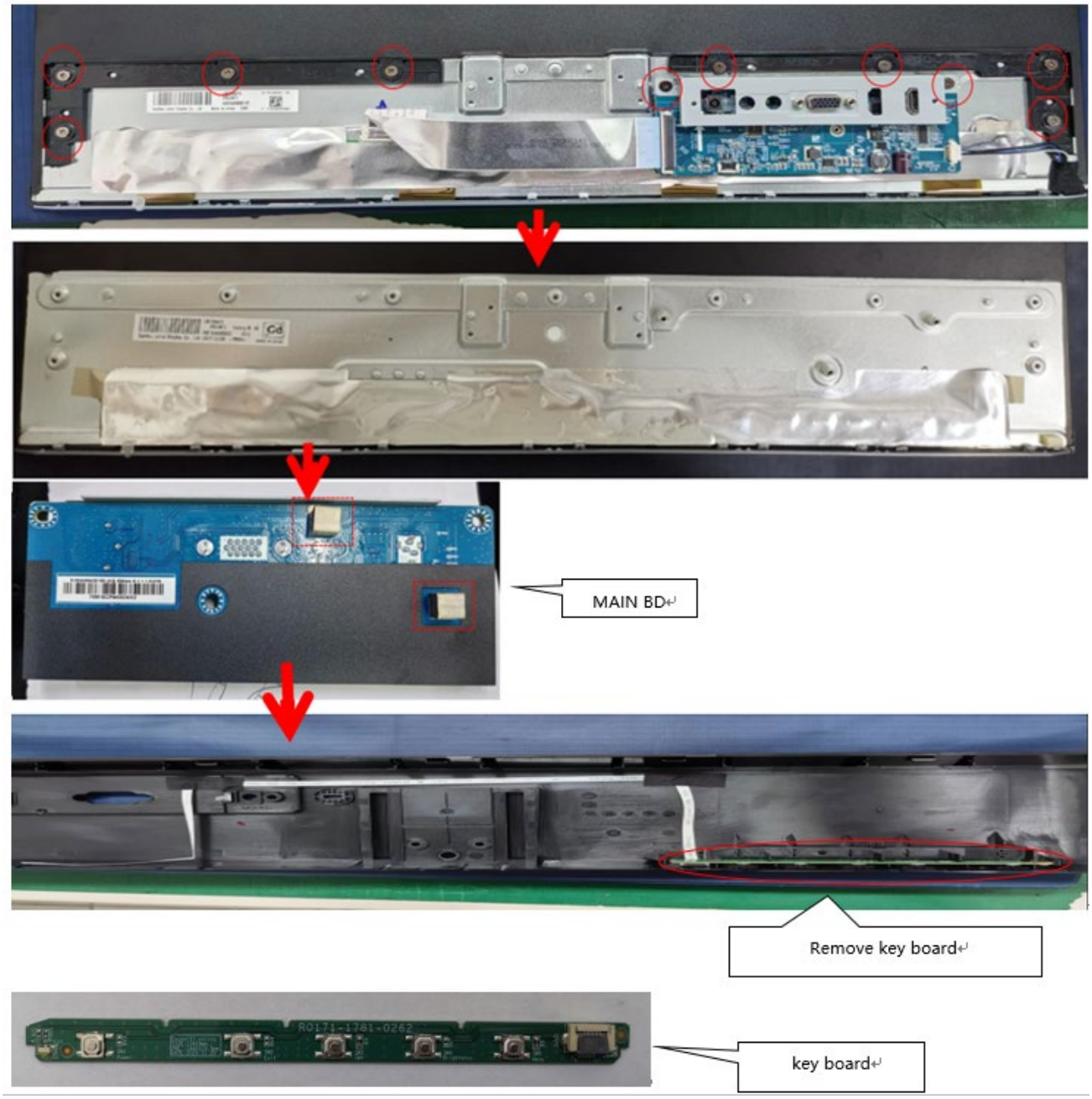


5. Remove the acetate tapes from the LVDS/ LED cable.



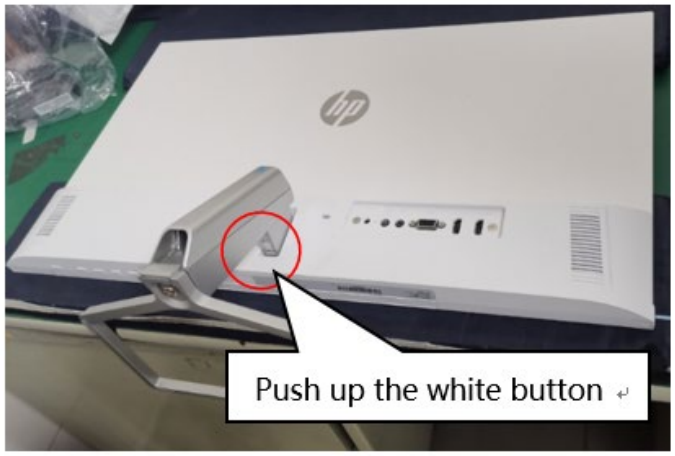


6. Pull out the LVDS/ LED cable to panel and MB.



For 524sa, 527sa

1. Lay the display on soft desk and press the button of stand to unlock the stand, then pull out the stand from the monitor head.



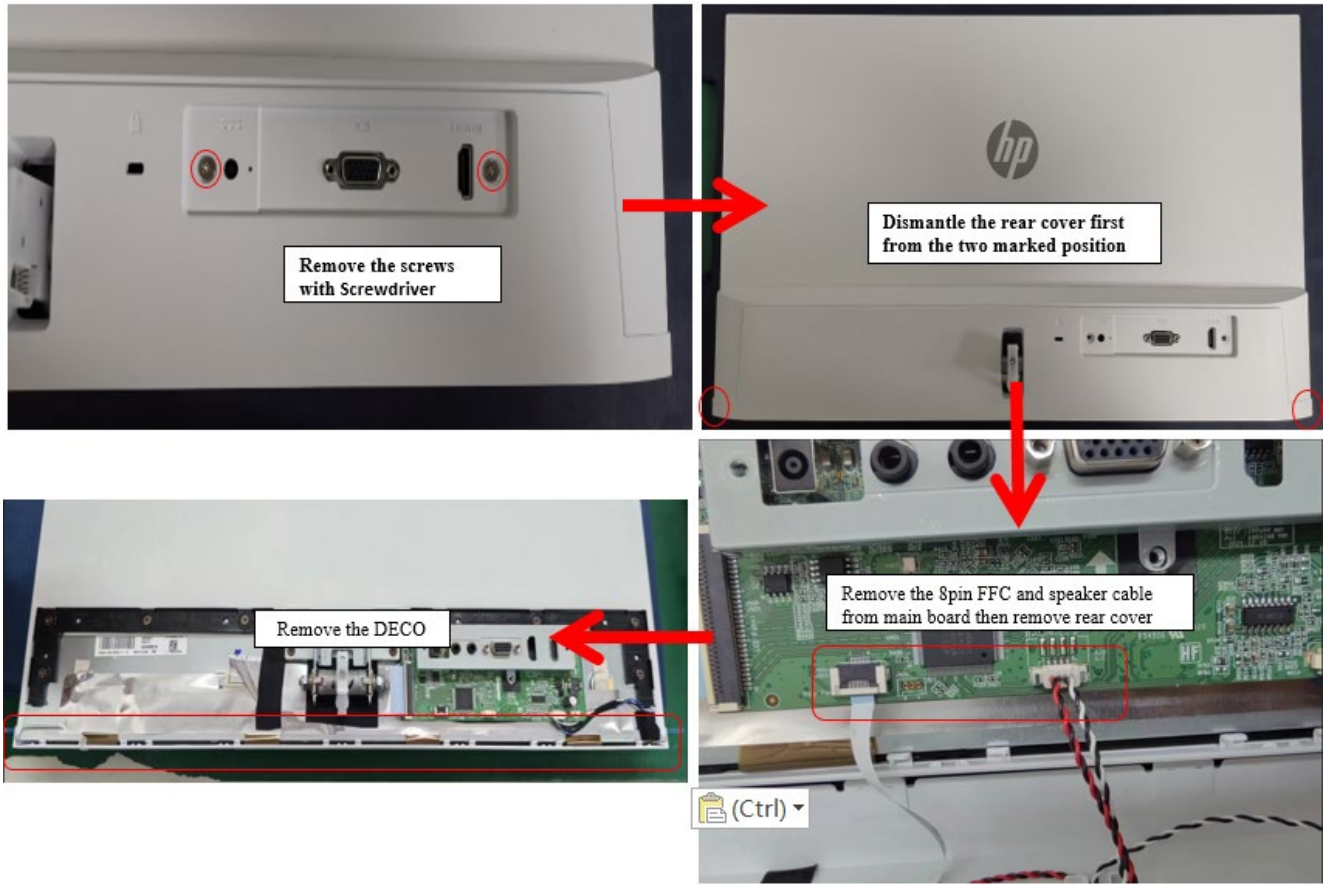


2. Twist out the screw and separate base and stand.

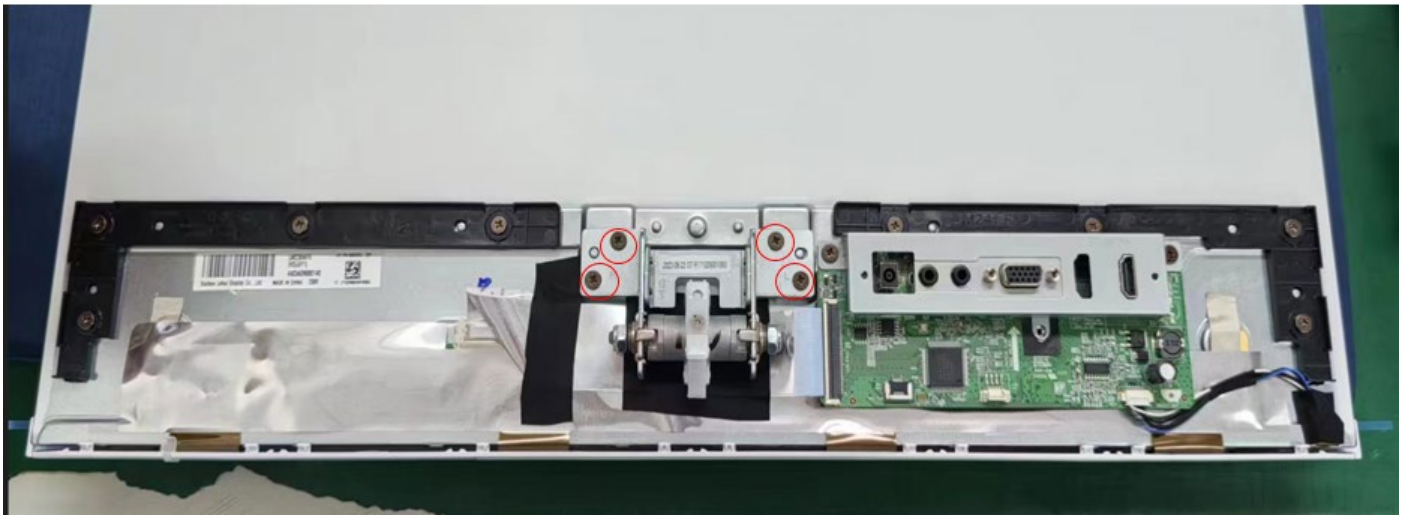




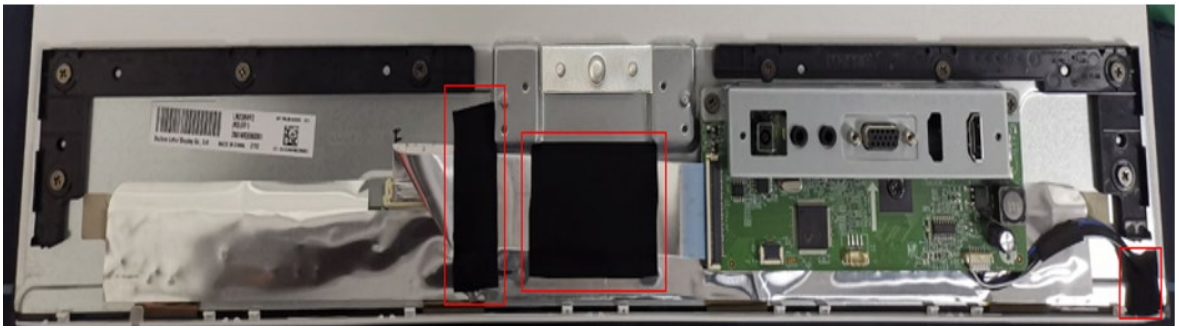
3. Strip two screws from the rear cover, then move rear cover follow the below way.



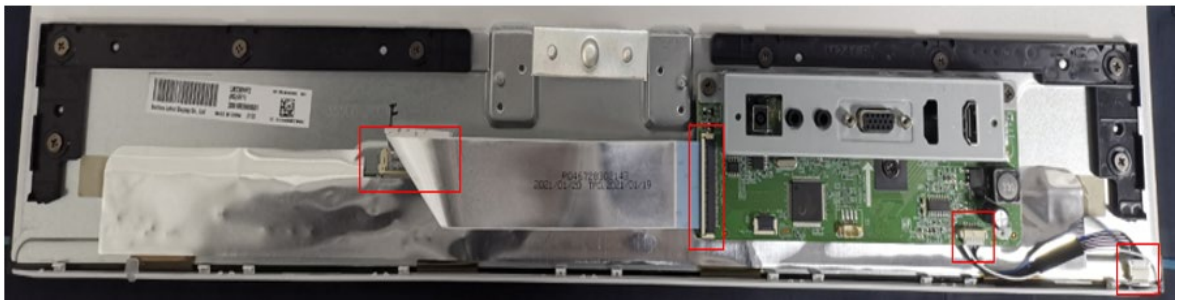
4. Strip four screws from the hinge.



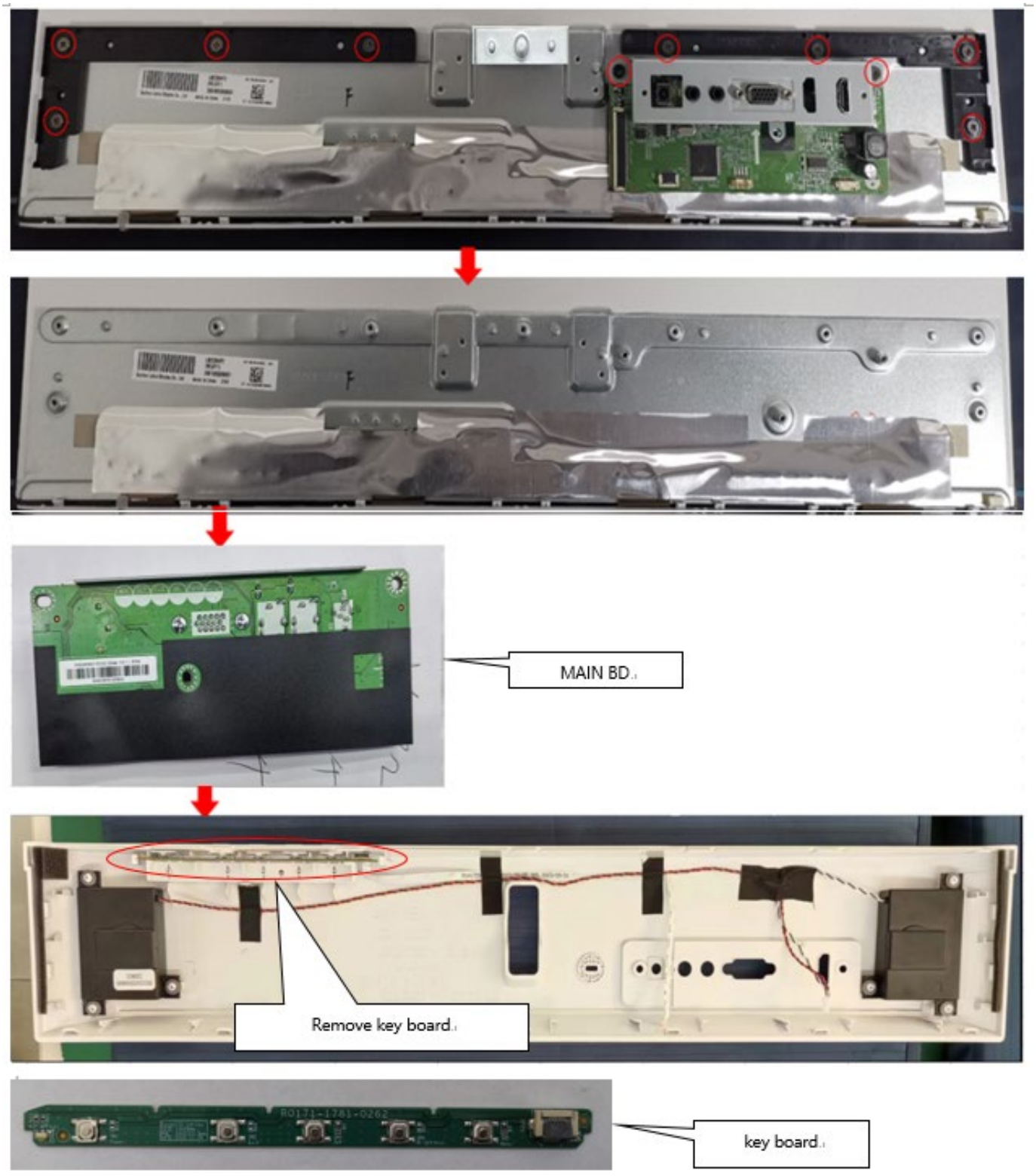
5. Remove the acetate tapes from the LVDS/ LED cable.



6. Pull out the LVDS/ LED cable to panel and MB.



7. Strip ten screws from the rear cover supporter and M/B.



Connector repair

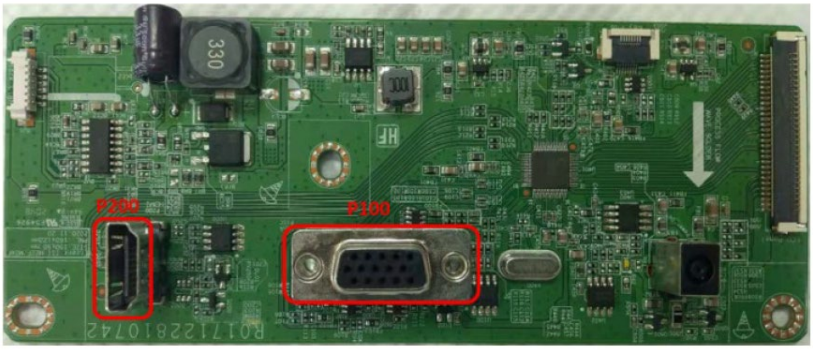
524sf, 524sw, 524sh

This procedure includes HDMI and VGA connectors.

The connectors are on the main board

The connectors identifiers are as follows:

Connector	Location
VGA	P100
HDMI	P200



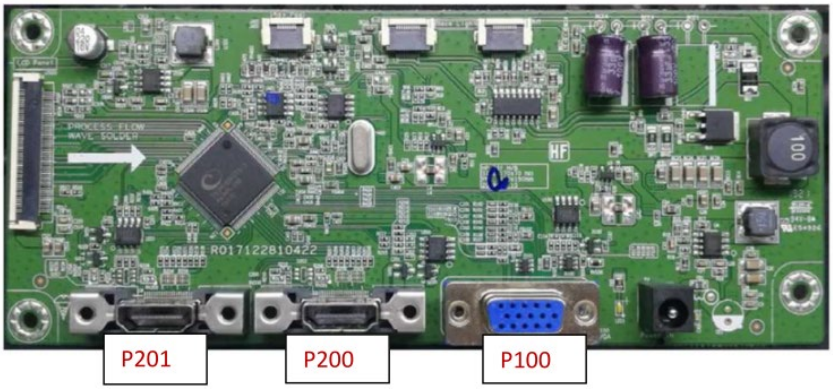
527sf, 527sw, 527sh

This procedure includes HDMI and VGA connectors.

The connectors are on the main board

The connectors identifiers are as follows:

Connector	Location
VGA	P100
HDMI 1/2	P200/P201



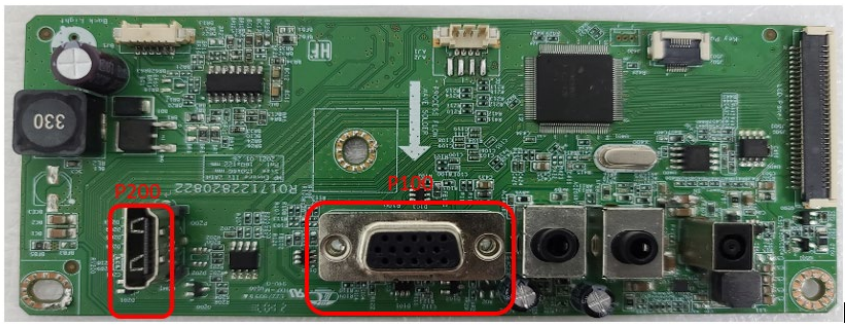
524sa

This procedure includes HDMI and VGA connectors.

The connectors are on the main board

The connectors identifiers are as follows:

Connector	Location
VGA	P100
HDMI 1/2	P200



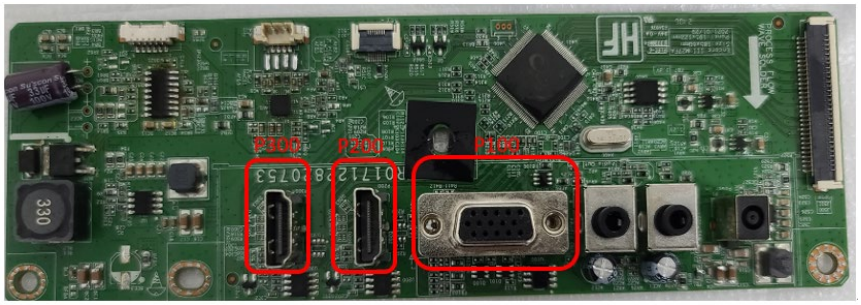
527sa

This procedure includes HDMI and VGA connectors.

The connectors are on the main board

The connectors identifiers are as follows:

Connector	Location
VGA	P100
HDMI 1/2	P200/P300



Before repairing connectors, follow these steps:

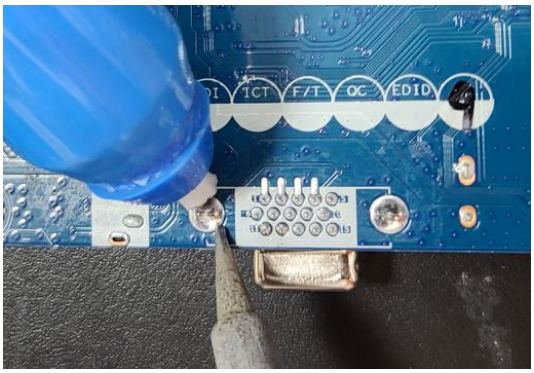
▲ Prepare the monitor for disassembly. See Preparation for disassembly on page 16.

VGA connector P100

524sf, 524sw, 524sh, 524sa, 527sf, 527sw, 527sh, 527sa

Repair the VGA connector:

1) Use a hot air gun to melt the solder on the pins. Pin solder with soldering iron and absorber. You can gently push down with the soldering iron once everything is molten to move the P100 out of the through holes.



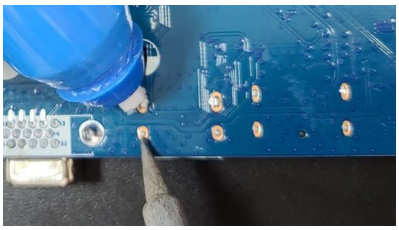
2) Lift the P100 connector from the PCB..
3) Place the new component on the PCB. Be sure that it matches the PCB footprint.
4) Solder the new component

HDMI connector P200

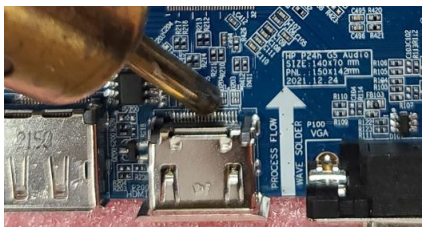
524sf, 524sw, 524sh, 524sa, 527sf, 527sw, 527sh, 527sa

Repair the HDMI connector:

1) Use a soldering iron and a desoldering pump to remove as much solder as possible from the pin.



2) Use a soldering iron or hot air gun to melt the solder on the pins.



3) Lift the P200 connector from the PCB.

4) Place the new component on the PCB. Be sure that it matches the PCB footprint.

5) Solder the new component.

Function test

After repair, be sure to confirm that all functions are working.

524sf, 524sw, 524sh, 527sf, 527sw, 527sh

Table 4-1: Function test

Test item	Operating description	Tool used
HDMI test	Confirm whether image displays correctly on the monitor.	Computer or DVD player
VGA test	Confirm whether image displays correctly on the monitor.	Computer or DVD player

524sa, 527sa

Table 4-2: Function test

Test item	Operating description	Tool used
HDMI test	Confirm whether image displays correctly on the monitor.	Computer or DVD player
VGA test	Confirm whether image displays correctly on the monitor.	Computer or DVD player
Audio test	Change volume and balance to confirm whether volume is smooth and loud enough.	Speaker

Support and troubleshooting

The following table lists possible problems, the possible cause or each problem, and the recommended solutions.

Table 4-3: Solving common problems

Problem	Possible cause	Solution

Screen is blank or video is flashing.	Power cord is disconnected.	Connect the power cord.
	Monitor is off.	Power the power button. NOTE: If pressing the Power button has no effect, press and hold the power button for 10 seconds to disable the Power button lockout feature.
	Video cable is improperly connected.	Connect the video cable properly.
	System is in Sleep mode.	Press any key on the keyboard or move the mouse to exit Sleep mode.
	Video card is incompatible.	Open the OSD menu and select the Input Control menu. Set Auto-Switch Input to Off and manually select the input
Image appears blurred, indistinct, or too dark.	Brightness is too low.	Open the OSD menu and select **Brightness** to adjust the brightness scale as needed.
Check Video Cable is displayed on screen.	Monitor video cable is disconnected.	Connect the appropriate video signal cable between the computer and monitor. Be sure that the computer power is off while you connect the video cable.
Input Signal Out of Range is displayed on screen.	Video resolution and/or refresh rate are set higher than what the monitor supports.	Change the settings to a supported setting.
The monitor is off, but it did not seem to enter into Sleep mode.	The monitor's power saving control is disabled.	Open the OSD menu and select **Power Control > Auto-Sleep Mode** and set auto-sleep to **On**.
On-Screen Menus are Locked is displayed.	The monitor's OSD lock function is enabled.	Press and hold the **Menu** button on the front bezel to 10 seconds to disable the OSD lockout function.
Power Button is Locked is Displayed	The monitor's power button is locked.	Press and hold the power button for 10 seconds to disable the power button lock function.

No low-power sleep mode	The monitor's power button is locked.	Press and hold the power button for 10 seconds to disable the power button lock function.

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