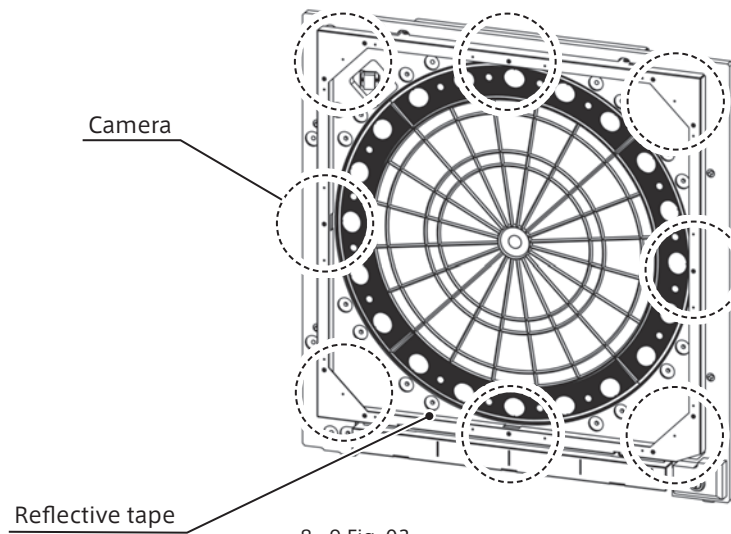**STEP 5** Refer to "5-1-3-1 Target Sensor" in OWNERS MANUAL and calibrate the target sensor. After conducting the calibration, conduct a reaction test for confirmation.

Camera

Reflective tape

8 - 9 Fig. 03

STOP **IMPORTANT**

The target sensor may not work if there is dust or uncleanness on its camera (indicated by eight dotted circles) and the reflective tapes on the four sides.

The camera and reflective tapes are precision instruments. If you spotted dust or uncleanness on them and touched them directly or wiped them away, it may cause failure. Remove them with air duster, etc.

8 - 10 Replacing Speed Sensor

STEP 1
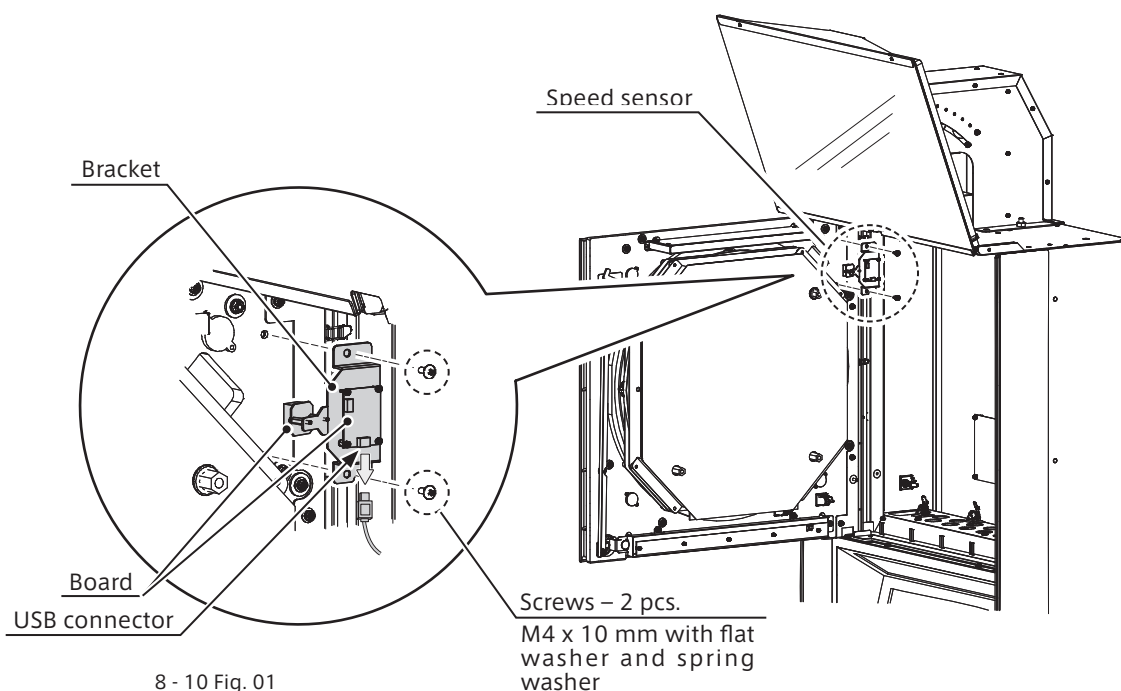Turn "OFF" the power switch. Open the target door with the maintenance key.

STEP 2
From the back of the target door, disconnect the USB connector connected to the speed sensor. Remove the two screws and dismount the speed sensor together with the bracket.

STEP 3
Remove the speed sensor and the board from the bracket and replace them. When you have completed the replacement, reassemble them in the reverse order.

8 - 10 Fig. 01

Bracket

Speed sensor

Board

USB connector

Screws – 2 pcs.
M4 x 10 mm with flat washer and spring washer

⚠ CAUTION

If you pull out or insert the USB cable forcibly or at some angle, you may damage the connector.
Be careful when attaching and detaching them.

(STOP) IMPORTANT

If multiple units are installed, the frequency bands of the sensors will be close to each other and may interfere with each other, which may cause an error in the environmental test or cause an error.
In that case, it may be improved by increasing the distance from the other machine or replacing the sensor with another machine.
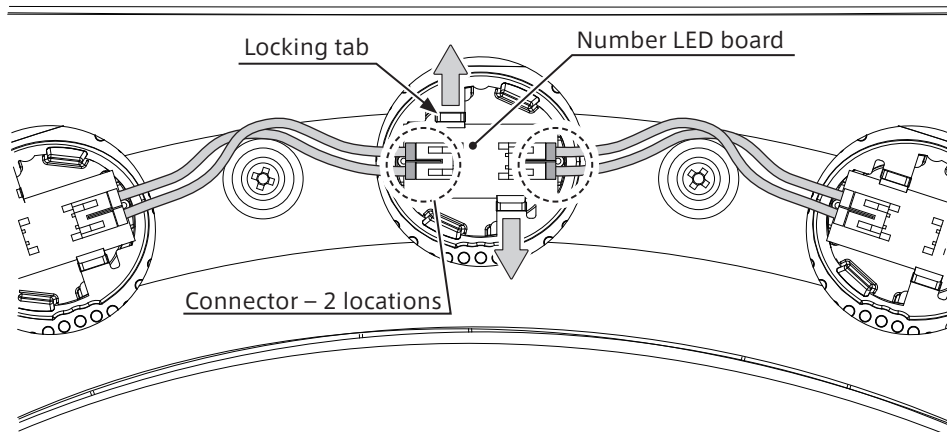
8 - 11 Replacing Number LED Board

STEP 1

Refer to "8-1-1 Replacing Segment" and dismount the target.

STEP 2

Disconnect the connectors on the left and right. Open the two locking tabs and remove the number LED board. When you have completed the replacement, reassemble them in the reverse order.

Locking tab   Number LED board

Connector – 2 locations

8 - 11 Fig. 01

⚠ CAUTION

When mounting the target onto the target door, be careful not to pinch the wiring of the number LED board or the impact sensor. It may cause malfunction or fire.
If wiring is placed in the shaded area, it will be pinched. Mount the target onto the target door after confirming that there is no wiring in the shaded area.

No wiring shall be in the shaded area

8 - 12 Replacing Outer Board Segment

STEP 1 Refer to "8-8 Replacing Sensor Cover and Sensor Cover Cylinder" and remove the sensor cover.

STEP 2 Refer to "8-11 Replacing Number LED Board" and remove the number LED board.

STEP 3 Remove the four screws and dismount the outer board segment. After the replacement, reassemble in the reverse order.

Outer board segment

Screw – 4 pcs.
M4 x 12 mm
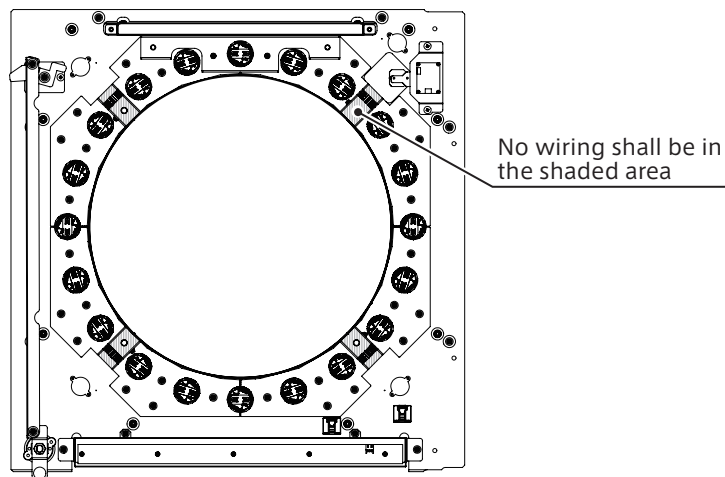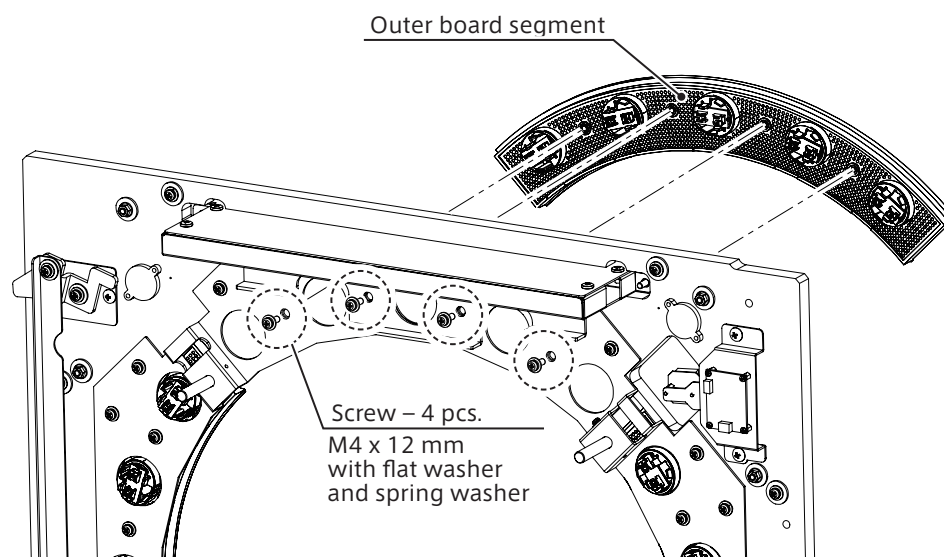with flat washer
and spring washer
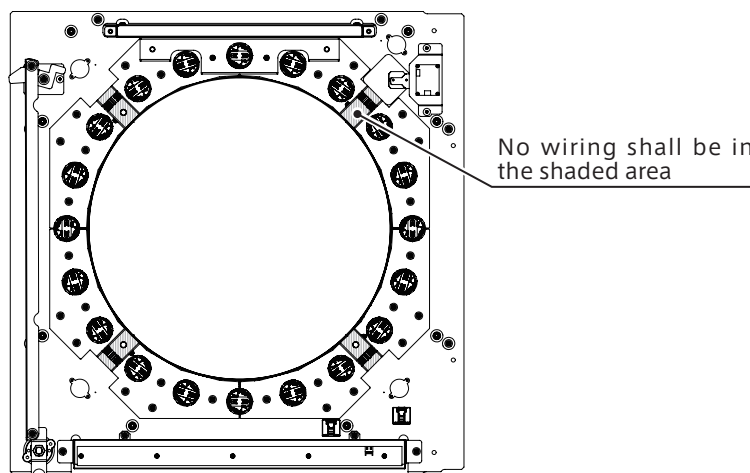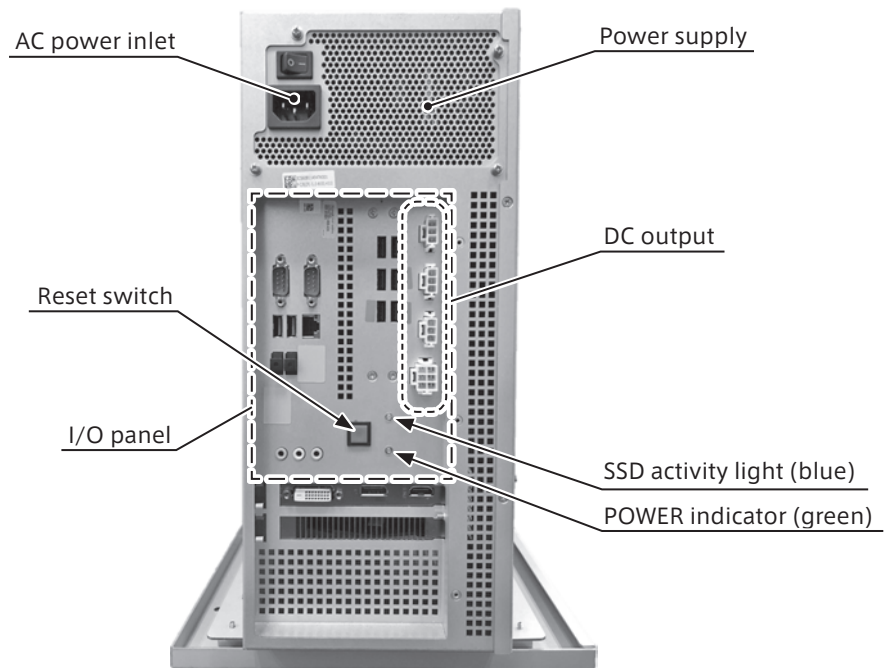
8 - 12 Fig. 01

⚠ CAUTION

When mounting the target onto the target door, be careful not to pinch the wiring of the number LED board or the impact sensor. It may cause malfunction or fire.
If wiring is placed in the shaded area, it will be pinched. Mount the target onto the target door after confirming that there is no wiring in the shaded area.

No wiring shall be in the shaded area

■ 8 - 13 - 1 Description of PC Unit

AC power inlet

Power supply

DC output

Reset switch

I/O panel

SSD activity light (blue)

POWER indicator (green)

8 - 13 - 1 Fig. 01

STOP IMPORTANT

Press and holding the reset switch on the PC unit shuts down the unit, and pressing it once starts the unit. In normal circumstance, you should use the power switch of the main unit only, and avoid using this switch.
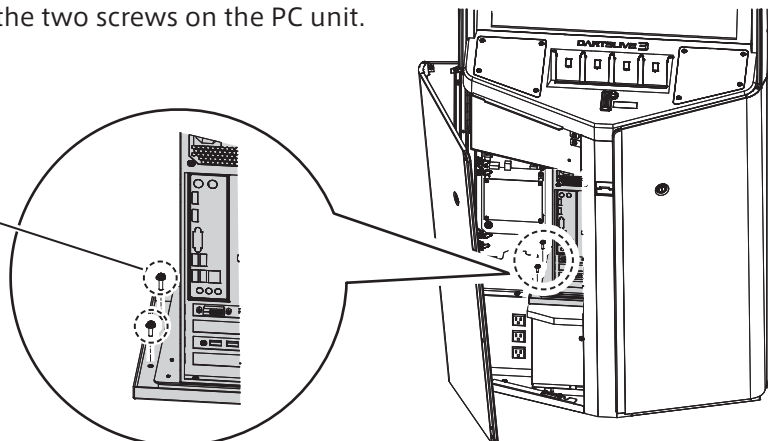
■ 8 - 13 - 2 Replacing PC Unit

STEP 1
Turn "OFF" the power switch. Open the lower door (L) with the maintenance key.

STEP 2
Disconnect all cables connected to the PC unit.

STEP 3
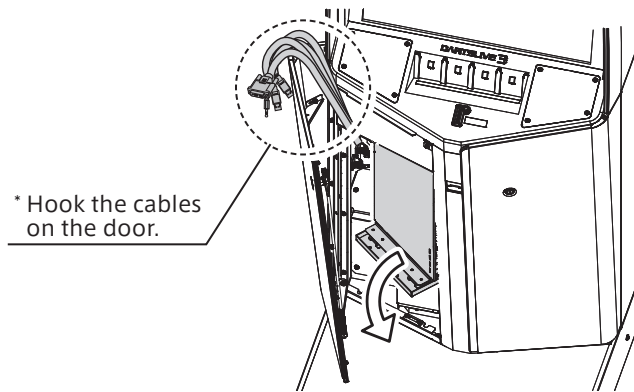Remove the two screws on the PC unit.

Screws – 2 pcs.
M4 x 12 mm with flat washer and spring washer

8 - 13 - 2 Fig. 01

STEP 4

Hook the cables on the door so that they do not get in the way. Slowly pull out the PC unit to the diagonally front. When doing this, be careful not to damage the board or wire harness behind it.

* Hook the cables on the door.

8 - 13 - 2 Fig. 02

STEP 5

Mount the new PC unit in the reverse order of that described in STEP 4. When doing this, be careful not to damage the board or wire harness behind it.

STEP 6

Look at the tag attached to each cable and connect the cables to the locations on the PC unit described in the "I/O Panel Layout" affixed to the lower cabinet, in order from the bottom.

PC PANEL LAYOUT(ICS-60B1)

MATRIX MAIN I/O
TARGET   R/W
T.PANEL DOPP
T. CAMERA
P. CAMERA
XRK 1
XRK 2
NETWORK
DC 1
DC 2
DC 3
DC 4

If the unit has DARTSLIVE Credit Unit, connect "DLCR" here.

STEREO
HDD LED
PWR LED
24   PWR SW   27
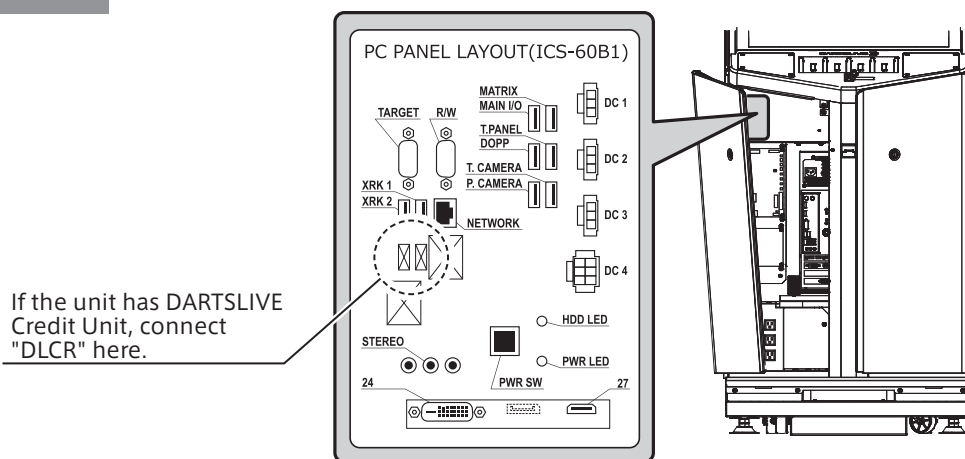
8 - 13 - 2 Fig. 03

STEP 7

If the cables are placed too much in the front, they interfere with the lower door (L) when it opens and closes, causing damage or contact failure. When you connected all the cables, bundle them neatly, pull them to the back, and secure them with the clamps (at two locations) on the left side of the PC unit. Close and lock the lower door (L).

* Pull in the cables behind this section.
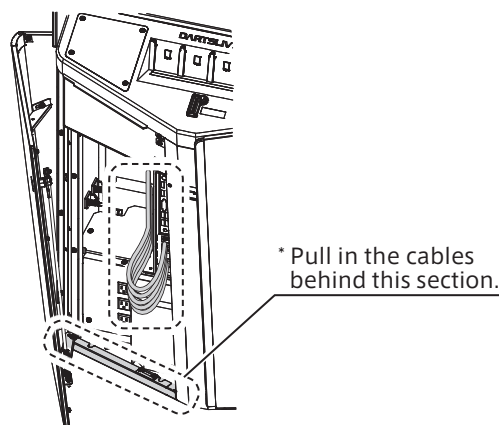
8 - 13 - 2 Fig. 04

9 Periodic Inspection

In order to maintain the performance of this product and to conduct business operation safely, regularly conduct inspection and maintenance on the following.

* In particular, the periodic inspection of software is explained in another document, OWNERS MANUAL. Please refer to it also.

<table>
<tr><td colspan="2" align="center">⚠ WARNING</td></tr>
<tr><td colspan="2">● Check the power cable every six months for any damages, if its plug is firmly inserted, or if it has dusts accumulated between the outlet and the power plug. Using it with dust left accumulated may cause fire or electric shock.
● Deterioration of the insulation of electronic and electrical components due to aging may cause accidents involving short-circuit or smoke. Check if there is any abnormality such as burning smell.</td></tr>
</table>

■ Periodic inspection chart

Inspection point	Detail	Term	Reference
Cabinet	How the adjusters are landed.	Daily	6-1
Target	Removing jammed tips. *1	Monthly	8-1-2
	Inspection on the sensors.	Monthly, or when *1 is conducted.	OWNERS MANUAL 5-1
	Inspection for any missing rubber foot.	Every 3 months	8-1
	Inspection for wear on the rubber feet.	Every 3 months	8-1
	Cleaning the sensor cover cylinder.	Daily	8-8
Card reader	Inspection.	Every week	OWNERS MANUAL 5-1
Coin selector (There are some units such as those for China, which were manufactured on specification without coin selector.)	Inspection on the coin switch.	Monthly	8-5
	Coin insertion test	Monthly	8-5
	Cleaning coin selector	Every 3 months	8-5
Electronic/electric components	Inspection and cleaning.	Annually	
	Cleaning.	Every 6 months	
Power Cable	Inspection and cleaning.	Every 6 months	6-1
Upper monitor	Cleaning.	As needed	
Lower touch Screen monitor	Cleaning	As needed	
	Check for scratch or crack.	Daily	
Surfaces of the cabinet	Cleaning	As needed	

Note: To clean the sensor cover cylinder, wipe it with a dry soft cloth. If you use detergent, the transparency of the sensor cover cylinder will deteriorate and the unit may not work properly.

10 Troubleshooting

Description of trouble	Cause	Action to take
Turning "ON" power switch does not start the unit.	No power supplied.	Insert the power plug securely into the outlet. (Refer to 6-1.)
	Power supplied with incorrect voltage.	Supply power with correct voltage. (Refer to Chapter 3.)
	Momentary overload has activated the circuit protector.	Eliminate the cause of the overload and reconnect the circuit protector of the AC unit. (Refer to the circuit protector later in this chapter.)
	Power switch turned OFF.	Turn ON the power switch.
The screen shows an error message.	Software error or poorly connected connector.	Take note of the message on the screen and contact your product retailer.
It does not output audio.	Incorrect volume adjustment.	Adjust the volume in the maintenance mode. (Refer to 5-1 in OWNERS MANUAL.)
	Failure of speaker, woofer or amplifier.	Contact your product retailer.
It outputs audio, but the monitor remains blank.	Poorly connected connector.	Plug in the AC cable and video signal line firmly. (Refer to 6-1.)
	Failure of the LCD monitor.	Replace the LCD monitor. (Refer to 8-3 and 8-4.)
The images on the upper and lower monitors are switched.	This may occur when the monitors are replaced.	Switch their output in the maintenance mode. (Refer to Chapter 5 in OWNERS MANUAL.)
There is some problem when inserting a coin. It returns the inserted coin.	Poorly connected connector.	Check the connection of the connector. (Refer to 8-5.)
	Software configuration.	Configure the software properly in the maintenance mode. (Refer to 5-2 in OWNERS MANUAL.)
	Failure of the selector.	Replace the selector. (Refer to 8-5.)
LEDs do not light up.	Software configuration.	Configure the software properly in the maintenance mode. (Refer to 5-1 in OWNERS MANUAL.)
	Failure of the LED board.	Contact your product retailer.
Camera not producing image.	Poorly connected connector.	Check the connection of the USB cable and connectors. (Refer to 6-1.)
	Failure of the camera.	Replace the camera. (Refer to 8-6 and 8-7.)
The images of the player camera and target camera are switched.	This may occur when the cameras are replaced.	Switch their output in the maintenance mode. (Refer to Chapter 5-1 in OWNERS MANUAL.)
Card reader not responding.	Poorly connected connector.	Check the connection of the connector. (Refer to 6-1.)
	Failure of the card reader.	Replace the card reader. (Refer to 8-2.)

Description of trouble	Cause	Action to take
Membrane switch not responding.	Poorly connected connector.	Check the connection of the connector. (Refer to 6-1.)
	Failure of the membrane switch.	Replace the membrane switch. (Refer to 8-1.)
Membrane switch responding incorrectly or with poor sensitivity.	Target assembled improperly.	Assemble the target correctly. (Refer to 8-1.)
Impact sensor not responding or over responding.	Improperly adjusted sensitivity.	Configure the software properly in the maintenance mode. (Refer to 5-1 in OWNERS MANUAL.)
	Poorly connected connector.	Check the connection of the connector.
	Failure of the impact sensor.	Replace the impact sensor.
Speed sensor not responding or incorrectly responding.	Something affecting the sensor (air conditioner, ventilation fan, etc.) positioned unfavorably to the sensor.	Change the position and orientation of the machine. Install it at a position where it tests OK in the environmental test in the maintenance mode. (Refer to 5-1 in OWNERS MANUAL)
	Poorly connected connector.	Check the connection of the connector. (Refer to 6-1.)
	Failure of the speed sensor.	Replace the speed sensor. (Refer to 8-10.)
Target sensor not responding.	Unclean sensor cover cylinder or tip left on the target.	Clean the sensor cover. If there is tip left on it, remove it.
	Poorly connected connector.	Check the connection of the connector. (Refer to 6-1.)
	Deteriorated transparency of the sensor cover cylinder due to scratches, etc.	Replace the sensor cover cylinder. (Refer to 8-8.)
	Failure of the target sensor.	Replace the target sensor. (Refer to 8-9.)
Target sensor not detecting correct position.	Incorrect configuration.	After performing calibration in the maintenance mode, confirm it with input test. (Refer to 5-1 in OWNERS MANUAL.)
	Unclean sensor cover cylinder or tip left on the target.	Clean the sensor cover. If there is tip left on it, remove it.
	Deteriorated transparency of the sensor cover cylinder due to scratches, etc.	Replace the sensor cover cylinder. (Refer to 8-8.)
	Failure of the target sensor.	Replace the target sensor. (Refer to 8-9.)
PC unit does not start.	Poorly connected connector.	Check the connection of the connector. (Refer to 6-1.)
	Failure of the PC unit.	Replace the PC unit. (Refer to 8-13.)

http://www.dartslive.jp/info/support/

(Circuit protector)

The circuit protector activates its bimetal to cut off the circuit. Therefore, it cannot be turned on again until the bimetal has cooled down. Wait at least one minute before start it up. (Turn the button "ON".)

■ For basic troubleshooting, go to "Product Support Page" from the URL or QR code on the two stickers attached to the cabinet.
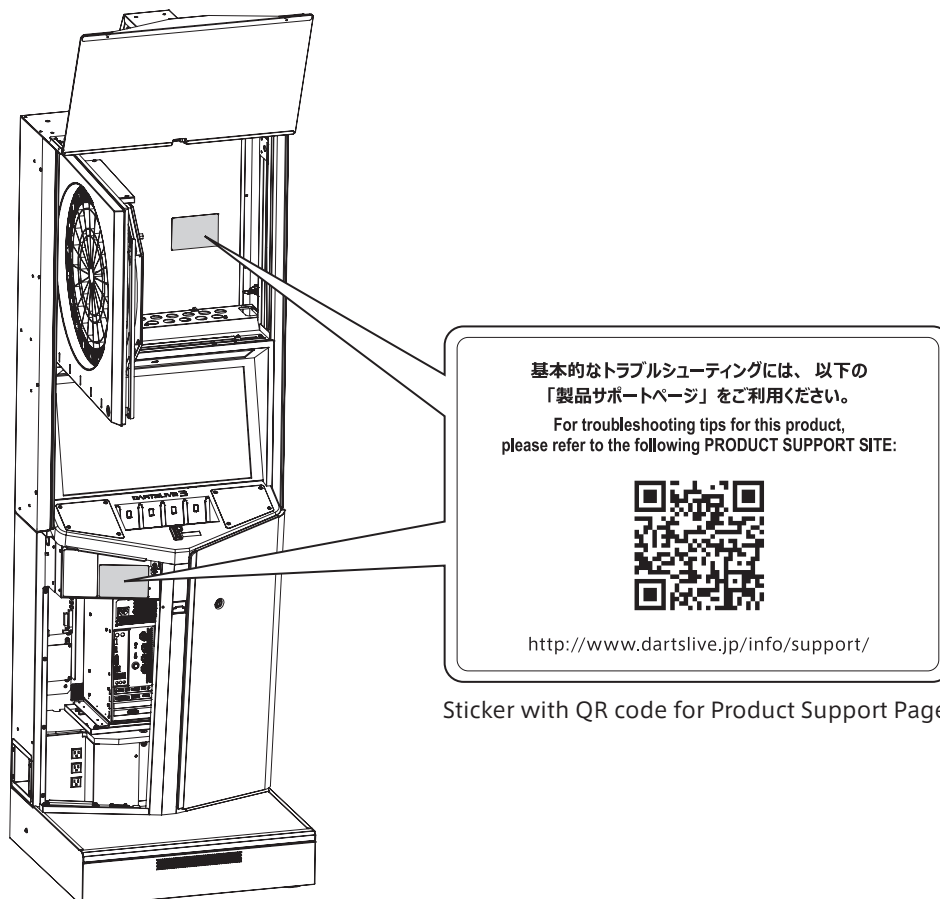
基本的なトラブルシューティングには、以下の
「製品サポートページ」をご利用ください。
For troubleshooting tips for this product,
please refer to the following PRODUCT SUPPORT SITE:

http://www.dartslive.jp/info/support/

Sticker with QR code for Product Support Page

11 Parts List

```
(1) TOP ASSY DL3 ──── (2) ASSY LCD ──────── (3) LCD UNIT
    DL3-0000              DL3-0500               DL3-0550

                     (4) ASSY UPPER CABI ──── (5) ASSY PLAYER CAMERA
                         DL3-1000                 DL3-0600

                                             (6) ASSY TARGET CAMERA
                                                 DL3-0700

                                             (7) ASSY SIDE LED L
                                                 DL3-1050

                                             (8) ASSY SIDE LED R
                                                 DL3-1080

                                             (9) ASSY TARGET DOOR ──── (10) ASSY TARGET
                                                 DL3-1150                   DL3-1200

                                            (11) ASSY SPEAKER
                                                 DL3-1300

                                            (12) ASSY TOUCH PANEL DISPLAY
                                                 DL3-1410

                     (13) ASSY LOWER CABI ──── (14) ASSY CONTROL PANEL ──── (25) ASSY DL CREDIT
                          DL3-1500                  DL3-1630                     DL3-1650

                                             (15) ASSY COIN SELECTOR
                                                  (DL3-1700 / 1710)

                                             (16) ASSY COUNTER
                                                  DL3-1760

                                             (17) ASSY LOWER DOOR L
                                                  DL3-1800

                                             (18) ASSY LOWER DOOR R
                                                  DL3-1850

                                             (19) ASSY WOOFER
                                                  DL3-1900

                                             (20) ASSY AC PANEL
                                                  DL3-2050

                                             (21) ASSY CASH BOX
                                                  DL3-2100

                                             (22) ASSY CENTER RIB
                                                  DL3-2250

                                             (23) ASSY MAIN IO BD
                                                  DL3-4100

                                             (24) ASSY PCB ENNOCONN
                                                  ICS-60B1-1A/GTX1650
```
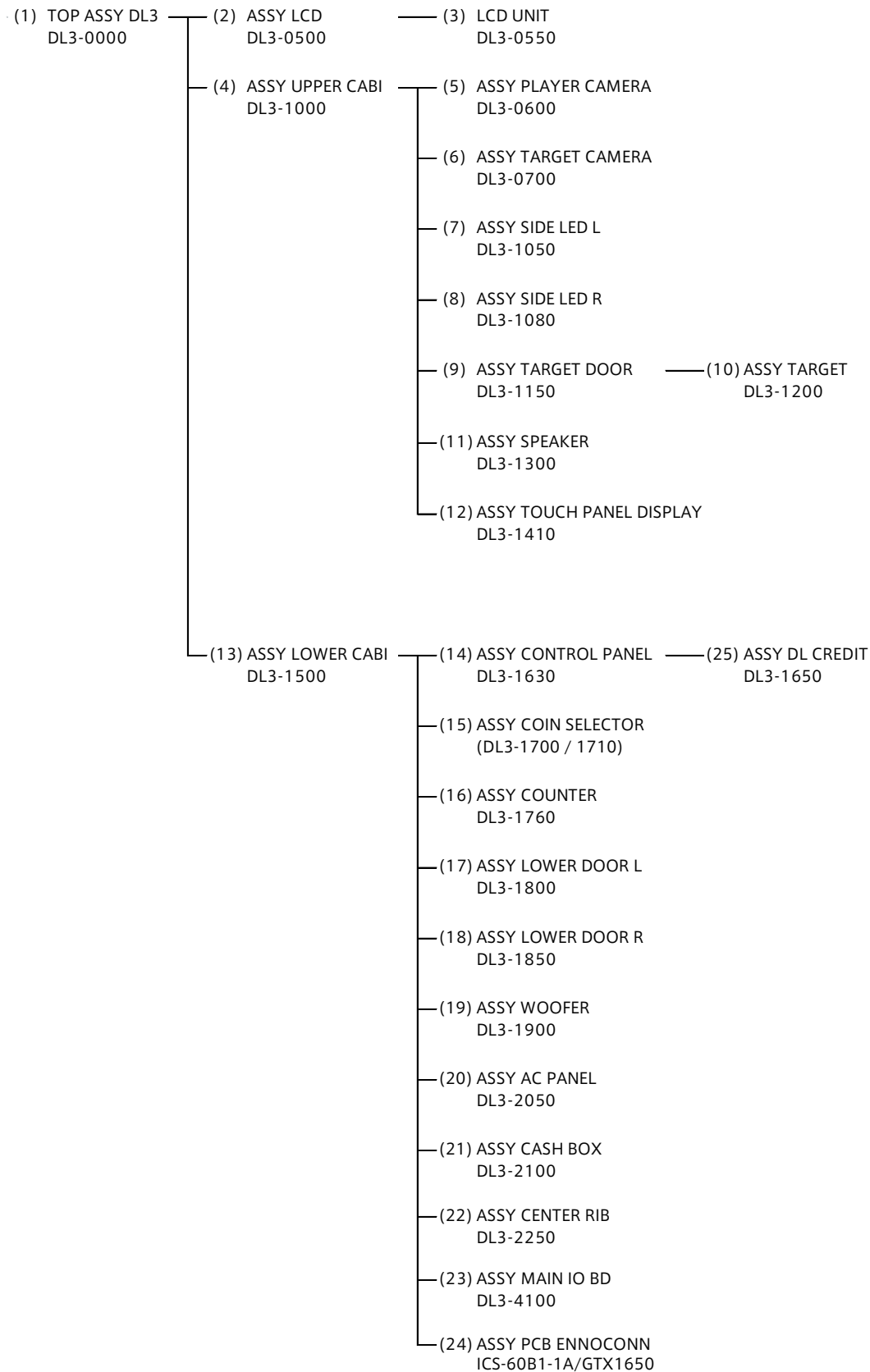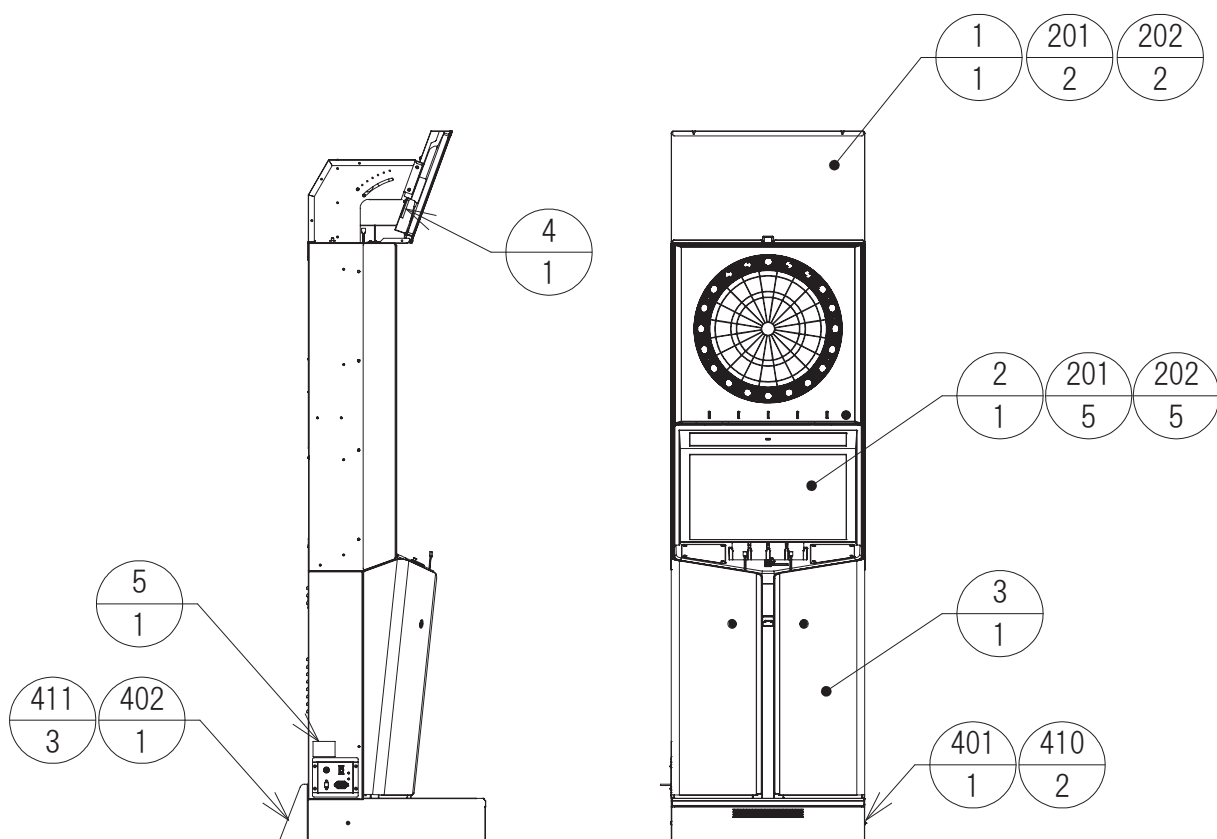
(1) TOP ASSY DL3 (DL3-0000)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	DL3-0500	ASSY LCD	
2	DL3-1000	ASSY UPPER CABI	
3	DL3-1500	ASSY LOWER CABI	
4	DL3-0003	STICKER SERIAL NUMBER	
5	DL3-0004	STICKER ELEC SPEC	
6	DL3-0006	STICKER CERTIFCATE	
7	DL3-7002	PARTS MGMT STICKER	
201	WING BLT M8X20	WING BOLT M8X20MM	
202	FLT WASHER 22-8.0-1.6	FLAT WASHER 22-8.0-1.6	
401	DL3-0001	PROTECT COVER	
402	DL3-0002	LOWER L BRKT	
403		POWER CABLE	
404		LAN CABLE 10m	
405	DL3-7001	THROWLINE STICKER	
406	DL3-7101EG	INSTRUCTION MANUAL	
407	DL3-7102EG	OWNERS MANUAL	
408	220-5793-2-A001	KEY MASTER A001	
409	220-5793-2-A002	KEY MASTER A002	
410	M SCR TH BLK M5X10	TRUSS HEAD MACHINE SCREW M5X10MM. TRIVALENT BLACK	
411	UPSET BLT W/FS BLK M8X16	CROSS RECESSED UPSET BOLT M8X16MM. TRIVALENT BLACK	

(2) ASSY LCD (DL3-0500)
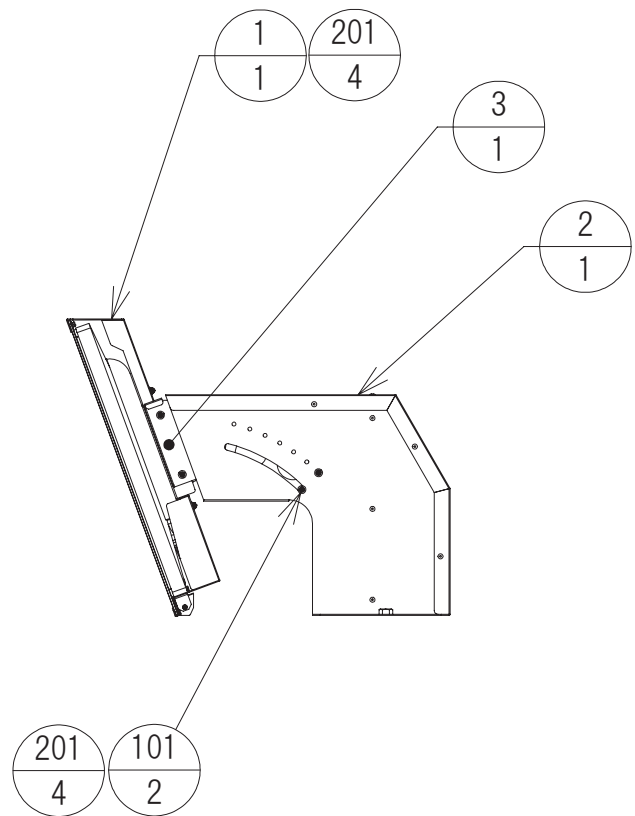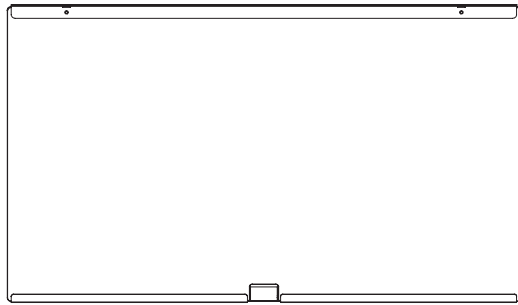
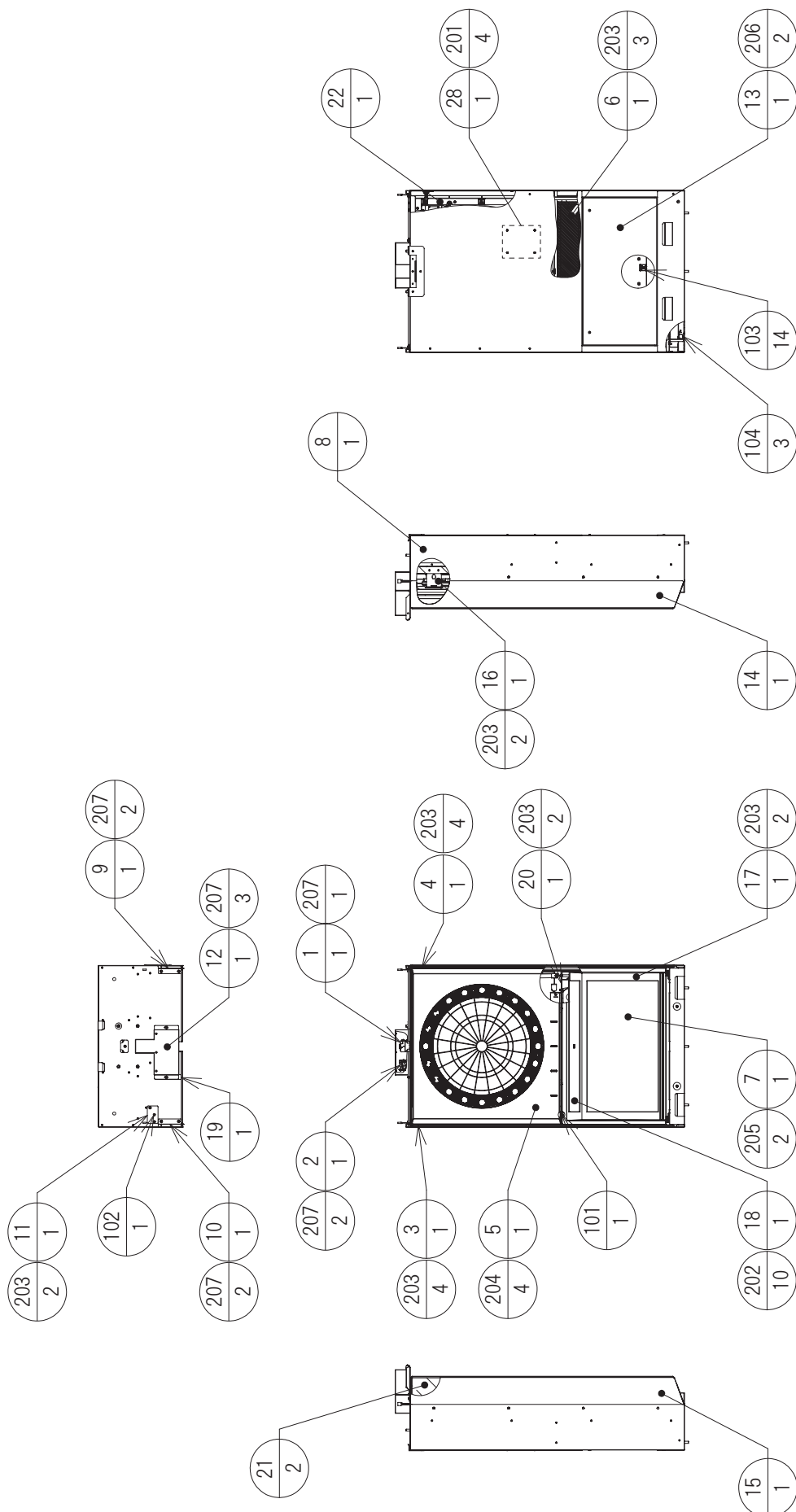| ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	DL3-0550	LCD UNIT	
2	DL3-0504	LCD MOUNT BASE	
3	DL3-0505	LCD ADJUST BRKT	
101	DSL01-015100-10	SPACER STEEL	
201	M SCR PH M4X8 P3 BLK	PAN HEAD MACHINE SCREW M4X8MM P3 FS WITH WASHER. TRIVALENT BLACK	

(3) LCD UNIT (DL3-0550)
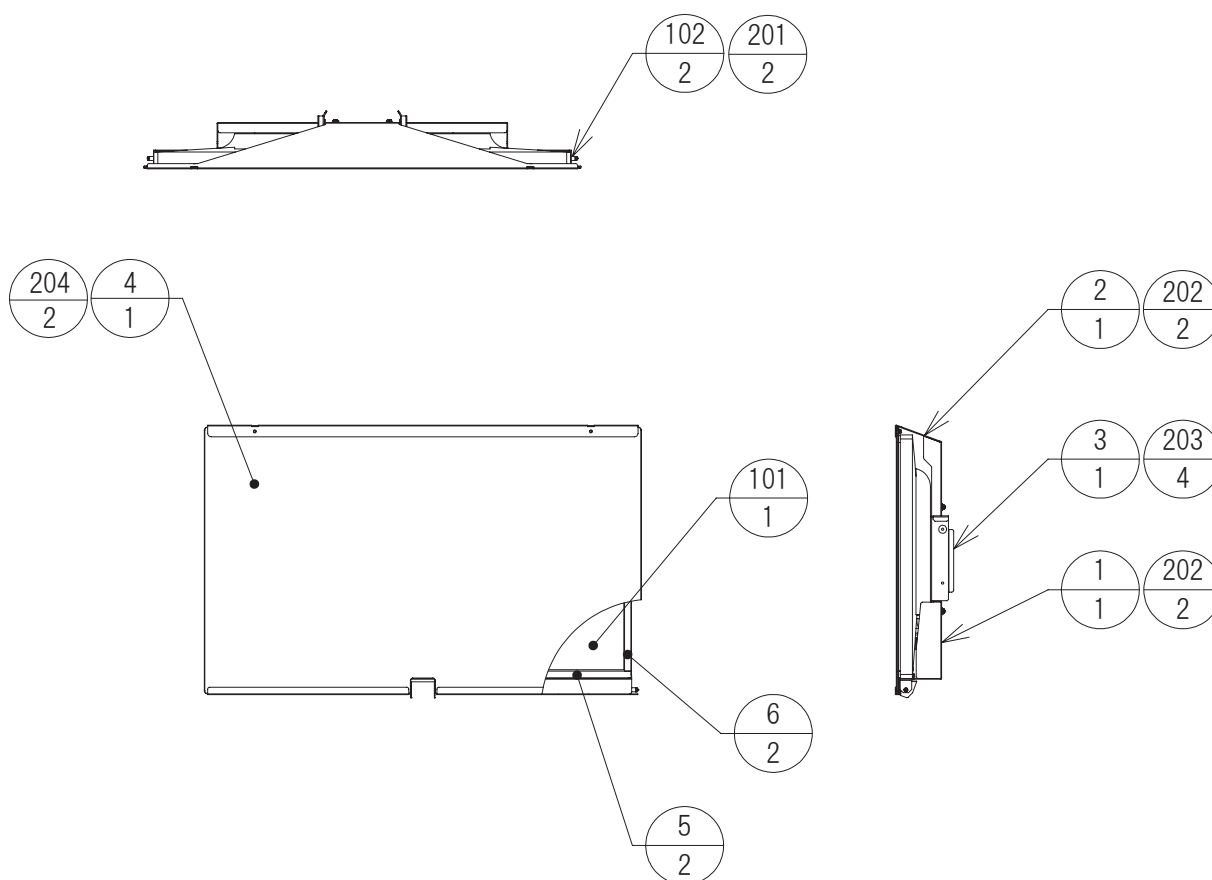
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	DL3-0501	LCD FRAME LOWER	
2	DL3-0502	LCD FRAME UPPER	
3	DL3-0503	LCD VESA MOUNT TYPE I	
4	DL3-0506	UPPER LCD ACRYLIC TYPE I	
5	DL3-0507	RUBBER L FOR LCD	
6	DL3-0508	RUBBER S FOR LCD	
101	VA2719-SMH-7	VIEWSONIC 27inch LCD	
102	DSL01-009700-10	SPACER STEEL	
201	M SCR PH M3X8 BLK	PAN HEAD MACHINE SCREW M3X8MM. TRIVALENT BLACK	
202	M SCR PH M4X8 P3 BLK	PAN HEAD MACHINE SCREW M4X8MM P3 FS WITH WASHER. TRIVALENT BLACK	
203	M SCR PH M4X12 P3 BLK	PAN HEAD MACHINE SCREW M4X12MM P3 FS WITH WASHER. TRIVALENT BLACK	
204	FLG NUT M3	FLANGE NUT M3	

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	DL3-0600	ASSY PLAYER CAMERA	
2	DL3-0700	ASSY TARGET CAMERA	
3	DL3-1050	ASSY SIDE LED L	
4	DL3-1080	ASSY SIDE LED R	
5	DL3-1150	ASSY TARGET DOOR	
6	DL3-1300	ASSY SPEAKER	
7	DL3-1410	ASSY TOUCH PANEL DISPLAY	
8	DL3-1001	UPPER CABI	
9	DL3-1002	LCD AXIS SUPPORT R	
10	DL3-1003	LCD AXIS SUPPORT L	
11	DL3-1004	TARGET DOOR UPPER AXIS	
12	DL3-1005	CAMERA BASE COVER	
13	DL3-1006	BACK LID	
14	DL3-1007	SIDE DECO PLATE R	
15	DL3-1008	SIDE DECO PLATE L	
16	DL3-1009	TARGET DOOR KEY CATCH	
17	DL3-1010	LCD ESCUTCHEON	
18	DL3-1011	SPEAKER NET	
19	DL3-1012	CAMERA ACRYLIC TYPE T	
20	DL3-1013	KEY LOCK PLATE	
21	DL3-1014	SIDE REFLECTION STICKER	
22	DL3-1102	TARGET DOOR AXIS PLATE	
23	DL3-1015	CABLE TAG 24	
24	DL3-1016	CABLE TAG 27	
25	DL3-1017	CABLE TAG T.PANEL	
26	DL3-1018	CABLE TAG MATRIX	
27	DL3-1019	CABLE TAG DOPP	
28	DL3-4210	MEMBRANE IO BD	
29	DL3-1515EG	STICKER URL BARCORD ENG	
30	DL3-1023	PACKING RUBBER ESCUTCEHON 530	
31	DL3-1024	PACKING RUBBER ESCUTCEHON 300	
101	DSL01-003600-11	BUSH POM	
102	DSL01-003700-12	BUSH POM	
103		CLAMP	
104		CLAMP	
105		CLAMP	
106		CORD KEEP	
107	5DW32D1R8	DVI CABLE W/FERRITECORE 2000MM	
108	MV00003800610	HDMI-HDMI CABLE W/FERRITECORE 3000MM	
109	MV00003800420	USB2.0 CABLE A-MICRO B TYPE 1800MM	
110	MV00003800370	AC CABLE 3P PLUG-SOCKET	
111	SS-15N	SPIRAL TUBE 15 φ 025CM	
112	TE-012-0050	EDGING BUSH 1.2	
113		CABLE TIE	
114	S6B UH 26X29.2X13(LF-1330R)	FERRITE CORE	

(4) ASSY UPPER CABI (DL3-1000) (D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
201	M SCR PH M3X6 P3	PAN HEAD MACHINE SCREW M3X6MM P3 FS WITH WASHER. TRIVALENT BLACK	
202	M SCR PH M3X16 P3 BLK	PAN HEAD MACHINE SCREW M3X16MM P3 FS	
203	M SCR PH M4X8 P3 BLK	PAN HEAD MACHINE SCREW M4X8MM P3 FS WITH WASHER. TRIVALENT BLACK	
204	M SCR PH M4X16 P3	PAN HEAD MACHINE SCREW M4X16MM P3 FS	
205	M SCR PH M5X10 P3	PAN HEAD MACHINE SCREW M5X10MM P3 FS	
206	M SCR TH M4X6 BLK	TRUSS HEAD MACHINE SCREW M4X6MM. TRIVALENT BLACK	
207	FLG NUT M4	FLANGE NUT M4	
208	PITACK M SCR PH M4X8 P3	PITACK PAN HEAD MACHINE SCREW M4X8MM P3 FS WITH WASHER	
301	DL3-6100	ASSY WH UPEER PANEL	
302	DL3-6028	WH TARGET LED FLAT	
303	DL3-6030	WH DSUB TARGET	
304	DL3-6020	WH EARTH DOOR	
305	DL3-6024	WH EARTH SPEAKER NET CABI	
306	DL3-6025	WH EARTH SPEAKER NET	

1

2

3

4

5

6

7

8

9

10

11

12

13