



Final release date:01/27/02

DV-C600,

Ref: 112200-3

Service Tip and Troubleshooting:

Make sure static free work environment is observed at all times when working with Laser Pickup.

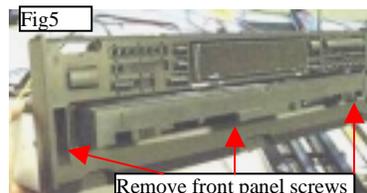
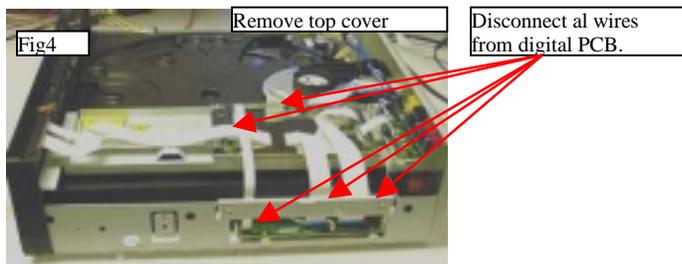
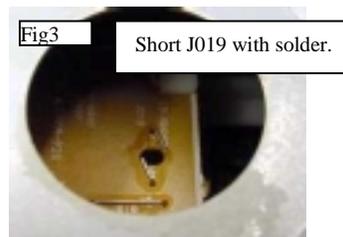
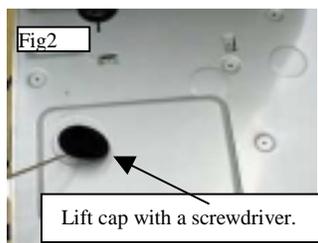
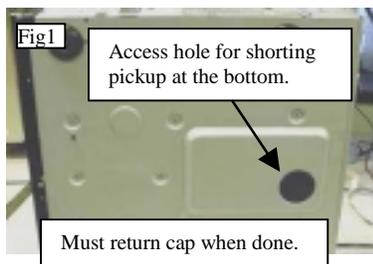
- Symptoms:**
- (1) Disk Starts, Spins and DISK ERROR comes up.
 - (2) Disk plays with intermittent picture breaking up.
 - (3) Disk fails to initialize, or locks up trying to read disk.
 - (4) Plays DVD but fails to play CD or plays CD but not DVD.

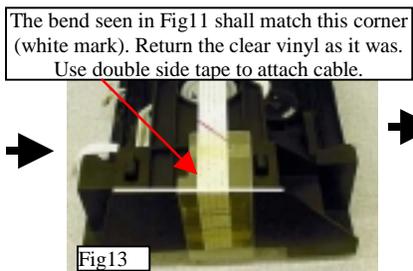
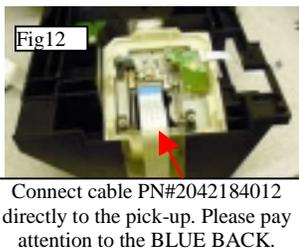
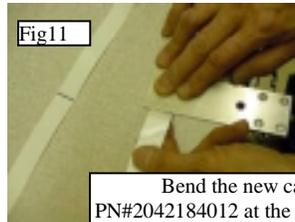
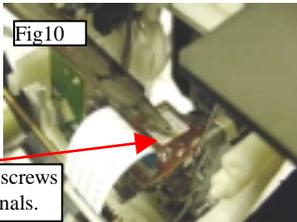
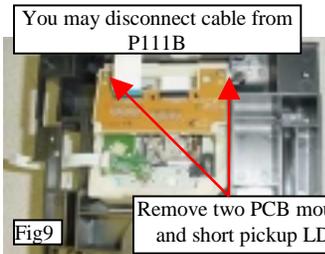
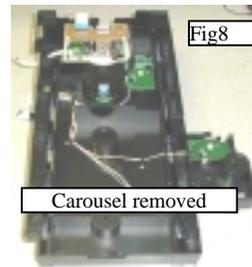
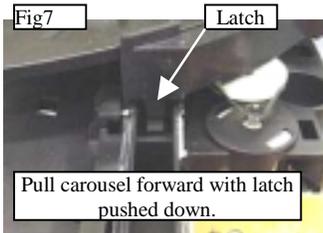
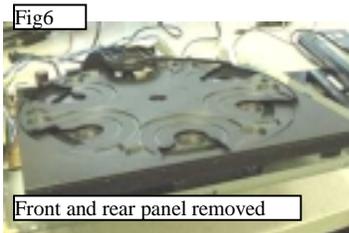
Mandatory Solution: Replace pickup connector cables, Remove pick-up connector intermediate PCB, update firmware with most recent version.

Part Location	Old Part number	New part Number	Reason For change
E103	2042183512	2042184012	Improved RF (Eye Pattern)
E101	2042180512	Eliminated (Remove)	RF Loss improved
U09	1H412554-2	Eliminated (Remove)	RF Loss improved
E210	None	230957	RF Noise improved

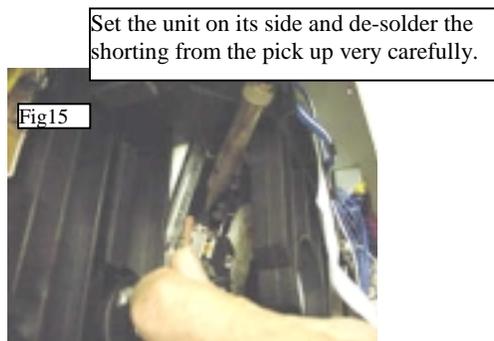
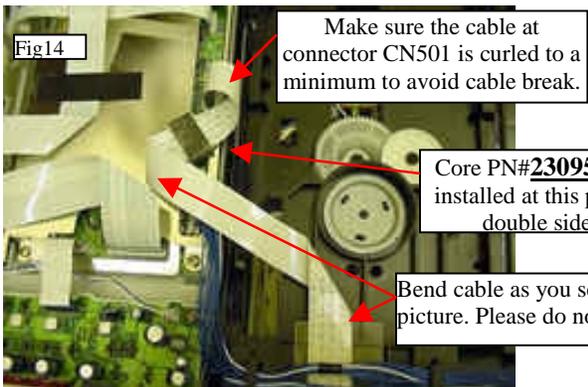
Before you start work, the following process must be addressed in order to avoid damage to the pickup assembly.
Your finding may resemble the followings:

- a. Powers, rotates carousel, chucks, (clamps) and LD is not ON, and immediately un-chuck.
- b. Powers, chucks, and LD is on spins for a few seconds and unclamps goes to next disk.
- c. Powers, chucks, LD is on, spins and spins trying to read TOC. Endless loop.
- d. DVD plays but not CD or plays CD not DVD.
- e. Picture breakup problem.

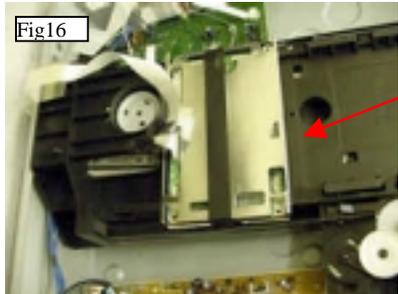




Re-assemble the unit back and attach the cable as illustrated next Fig14. It is important to keep the pickup shorted until last.



Solution: Replace pickup connector cable. "Second time around".



If the shorting PCB seen in Fig 3 is not in place, you will need to keep the DSP still connected to CN501 connector until pick-up shorting is done as seen on figure 10. Keep DSP attached to the frame with an electrical tape.

Test points and references:

A: make sure static free work environment is observed at all times when working with Laser Pickup.

With the unit totally turned OFF, confirm the impedance of the Focus Coil and the tracking coil at CN501. Between pin 10 and 13, 8.2ohm for Focus coil and across pin 11 and 12, 8.3ohm for the Tracking Coil.

Check and verify procedure as given on page 43,44 of service manual. For disk to be recognized while carousel is rotating but fail to spin and focus is a result of missing LD ON. This happens when one of the connectors at any of the three points (Fig1 A, B and or Fig2 C) is lacking good contact to the ribbon.

*****The laser pick needs no adjustment!!! *****

The troubleshooting guide given between pages of 43 and 50 is extremely helpful to determine the condition of the PICKUP.

B: Disregarded Step 3 of page 45 and make correction as follows.

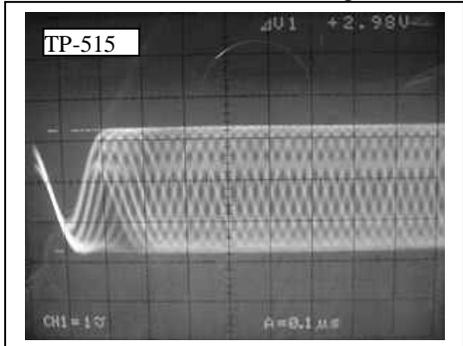
The reference should be:

$$\text{lop} = \frac{\text{Voltage between E522 and E523}}{3.3\text{ohm}}$$

The voltage drop across R505 (3.3ohm) resistor is higher than 218~238mvDC in normal operating condition and the LD is not on, connection (Fig1 A, B and or Fig2 C) may be loose or poor. This indicates the LD is not present as load to the voltage rail R505.

The Individual optical output level may be monitored at the pickup connector point using an oscilloscope with no more than 10pf input capacitance.

For location refer to manual Page 50.

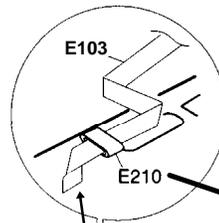


D: To help reduce the break up of the video signal, remount **CORE #230957**. The installation of this core should be as illustrated on Fig14.

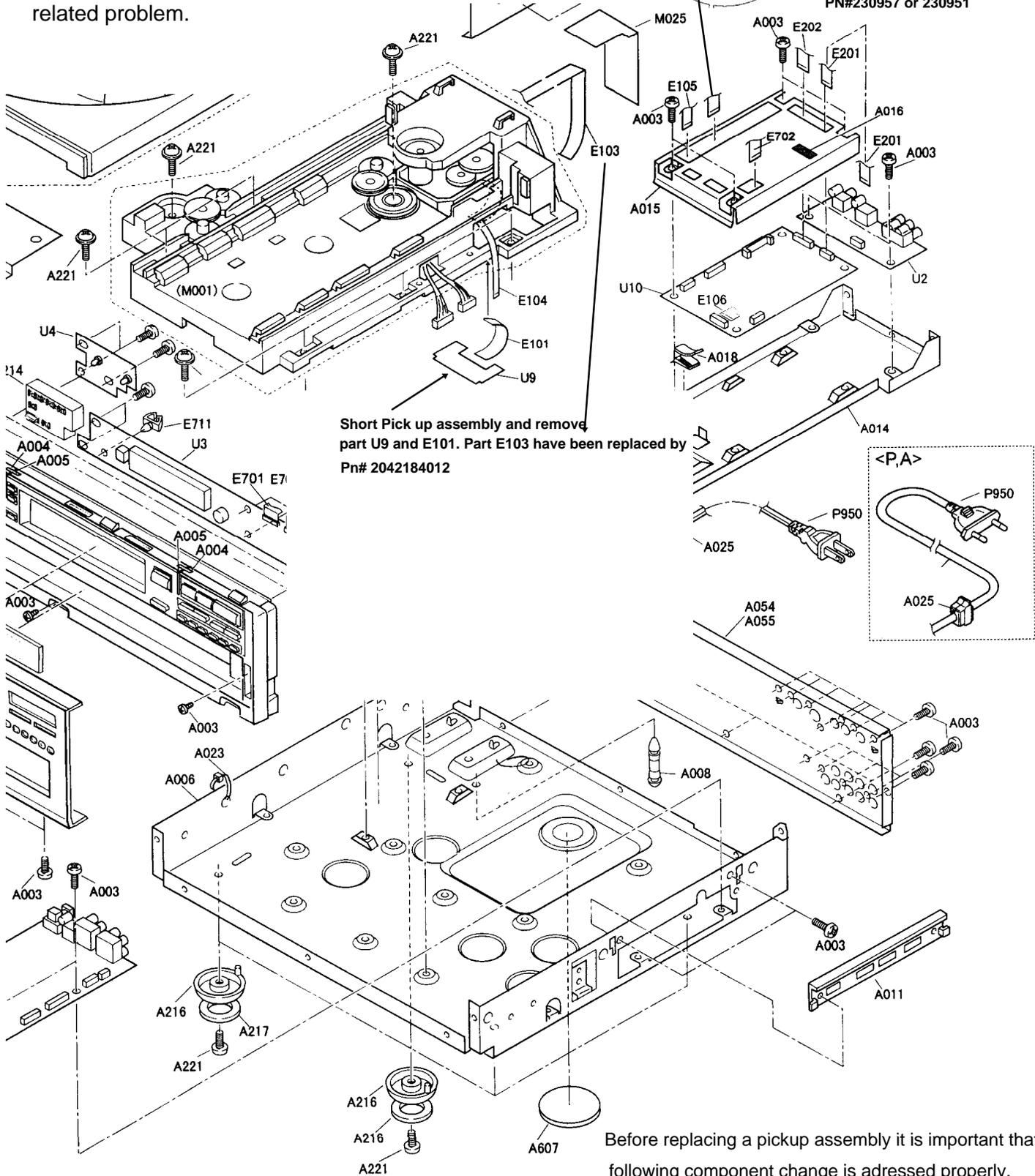
**** Since the root cause for the failure of DV-C600 and DV-C601 is mainly noisy pick-up signal do to poor connector terminals, it is very important all of the necessary steps mentioned are exhausted before attempting to replace the PICKUP.**

Mandatory:

Picture freeze, does not play DVD, or CD or Both related problem.



Must add ferrite core
PN#230957 or 230951



Short Pick up assembly and remove
part U9 and E101. Part E103 have been replaced by
Pn# 2042184012

Before replacing a pickup assembly it is important that the following component change is adressed properly.
Do Not Attempt to Remove Optical Ribbon cable before shorting the landing found on the pick-up Assembly.

REPLACED ROM ICS OR UPGRADED FIRMWARE

To check the Firmware version before update is done follow this process.

Using the remote controll Press [ZOOM] ----> [606] -----> [ZOOM]

The display will show the version on the display panel.

If the dsiplay indicates a firmware of curent version need not update, unless PCB has been replaced.

**** Firmware runs in DOS mode only.**

4. Confirmation of content of writing (all destinations)

- 4-1. The power supply is turned on, and press the STANDBY/ON button to turn on the DVD player.
- 4-2. The "STOP" key and the "SKIP-DOWN" key are pushed at the same time in the state of No Disc. (|◀◀)
- 4-3. It is confirmed that the display of monitor is as follow.

MD area

ROM1	Version	V*.*	-R1
ROM2	Version	V*.*	
OSD	Eng/Fre/spa		
VCD	On	BUZZER	Off
A.3D	Off	RANDOM	On
KARA	Off	DTS	On
VOCAL	Setup	DIMMER	3typ
V.3D	Off	V-FMT	Ntsc
JOG	Off	MPEG-A	On

MP area

ROM1	Version	V*.*	-R2
ROM2	Version	V*.*	
OSD	Eng/Fre/spa		
VCD	On	BUZZER	Off
A.3D	Off	RANDOM	On
KARA	Off	DTS	On
VOCAL	Setup	DIMMER	3typ
V.3D	Off	V-FMT	Ntsc
JOG	Off	MPEG-A	On

MPA area

ROM1	Version	V*.*	-R2
ROM2	Version	V*.*	
OSD	Eng/Fre/spa		
VCD	On	BUZZER	Off
A.3D	Off	RANDOM	On
KARA	Off	DTS	On
VOCAL	Setup	DIMMER	3typ
V.3D	Off	V-FMT	Ntsc
JOG	Off	MPEG-A	On

5. Display confirmation of FL tube

All lighting of the FL tube only while "STOP" is being pushed when "STOP" key is pushed while pushing "SKIP-UP" key to the main body key.

6. Setting of the first setup screen mode

- 6-1. The "STOP" key and the "DIMMER" key on the main body key are pushed at the same time in the state of No Disc.
- 6-2. It is confirmed that the Setup screen goes out, and the character of "First Setup ON" has come out in lower right.
- 6-3. The power supply again by On after turning off the power supply, and it is confirmed that the first setup screen goes out by Standby/ON mode. (Never push the Setup key here)
- 6-4. The power supply is turned off, and the AC cord is pulled out.

7. Others

Factory setting confirmation

"SETUP" as follows each setting of the screen is confirmed.