

SONY

Car Stereo Service Bulletin

Sony Service Company - Technical Services
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Model: CDX-5040/5080/7520/7540/7560/7580

No. 270

Subject: Operational Tests Available In The Service Mode

Date: December 30, 1992

Symptom:
(**)

The service mode includes several operational tests which were not shown in the Service Manuals.

Solution:

The following information describes the various tests available in the service mode.

1. Entering the service mode:

CPU IC-501 TYPE	PROCEDURE
μ PD75516GF-107-3B9	PRESS RESET WHILE HOLDING MUTE & PRESET #1
μ PD75516GF-160-3B9	PRESS RESET WHILE HOLDING MUTE & LOUD

The service mode can be cancelled at any time by pressing the RESET button or the OFF button. Removing power does not cancel the service mode.

2. LCD Display Test:

When the service mode is entered, the display test is entered automatically. First, all segments connected to COMMON 1 are illuminated. Then, all segments connected to COMMON 2 are illuminated. Finally, all segments are illuminated simultaneously. Pressing the DISPLAY or MUTE keys will repeat the display test from the beginning.

3. Electronic Volume Control Test:

The setting of the volume level when the service mode is entered is dependent upon the selected audio source. The following table describes the different volume settings:

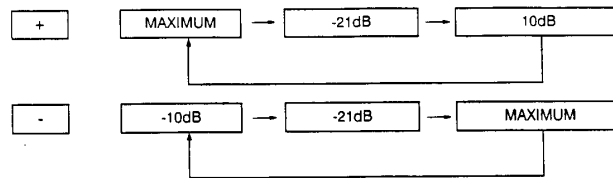
SOURCE	VOLUME LEVEL	BASS/TREBLE/BALANCE/FADE
CD	-10dB	CENTERED
TUNER (FM)	-10dB	CENTERED
TUNER (AM)	-21dB	CENTERED
AUX	-10dB	CENTERED

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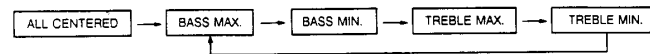


CAUTION: The service mode sets the volume to high levels! It is recommended to connect speaker outputs and line outputs to load resistors of adequate power handling capabilities rather than speakers or amplifiers. This will prevent damage to the speakers, amplifiers, and your hearing.

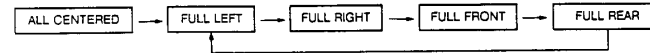
3.1 The volume level is changed by pressing the + and - keys as follows:



3.2 The bass and treble settings are changed by pressing the SELECT key as follows:



3.3 The balance and fader settings are changed by pressing the mute or DSPL keys as follows:



4. CD Test:

4.1 Optical Pick-up Operation Without A Disc Loaded:

The MANUAL + key moves the pick-up outwardly. The MANUAL - key moves the pick-up inwardly. The PLAY/PAUSE key turns on the laser diode and initiates FOCUS SEARCH.

4.2 CD Aging Mode With Disc Loaded:

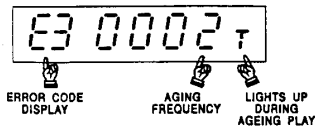
Loading a disc during the service mode initiates normal play mode. Pressing the PLAY/PAUSE key while a disc is playing, initiates the CD aging mode. Subsequent pressing of the PLAY/PAUSE key toggles the mode between CD aging and normal play. The aging mode operates as follows:

1. First track plays for approximately 10 seconds.
2. Play stops and then mechanism is locked.
3. The mechanism unlocks and the first track is played again for approximately 10 seconds.
4. The last track is played for approximately 10 seconds.
5. The first track is played again for approximately 10 seconds.
6. Play stops and the mechanism is locked.
7. The disc is ejected.
8. The disc is reloaded and the aging mode repeats from Step #1.

(continued)

If any operational errors are encountered during the aging mode, the aging mode stops and a corresponding error code is displayed on the LCD. The following table describes the various error codes:

ERROR CODE	DESCRIPTION
E1	CLOSING OF THE LIMIT SWITCH WAS NOT DETECTED.
E2	T.O.C. UNREADABLE
E3	CLOSING OF THE LOCK SWITCH WAS NOT DETECTED.
E4	ACCESS TIME (TRACK 1 TO LAST TRACK) EXCEEDED 16 SECONDS.
E5	ACCESS TIME (LAST TRACK TO TRACK 1) EXCEEDED 16 SECONDS.
E6	DISC LOADING TIME EXCEEDED 16 SECONDS.
E7	DISC EJECT TIME EXCEEDED 16 SECONDS.
E8	HIGH TEMPERATURE



During normal play mode while in the service mode, direct track access is possible as follows:

PRESET key →	1	2	3	4	5	6
μPD75516GF-107-3B9	2	3	4	6	8	10
μPD75516GF-160-3B9	2	3	6	7	8	10