

Service Information

Already published Service Informations: **none**

CORRECTION TO THE SERVICE MANUAL

- **MECHANICAL PARTSLIST**

Correct code number for pos. 225 WORDMARK PHILIPS reads 3104 120 00290.

CHANGES IN COURSE OF PRODUCTION

- **NEW SOFTWARE**

- From production week 0152 onwards following new software versions have been implemented in the sets:

CDR80x:

Main µP 7414: **V46**

CDR module: **MO2021, B0042** (MO stands for "Mozart Board", B stands for "Basic Engine")

CDR82x:

Main µP 7414: **V34**

CDR module: **MO2021, B3201** (MO stands for "Mozart Board", B stands for "Basic Engine")

The upgrade of the CDR module addresses the following issues:

- Playback of Audio CD's which do not comply with the Red Book standard
- New features in Service Testprogram
- Detection of corrupted mp3 files and proper handling of CRC errors
- Better track time prediction for VBR encoded mp3 files
- Improved CD-TEXT indexing
- Automatic Loader Detection during startup
- Several minor improvements

Software versions V34 (CDR82x) respectively V46 (CDR80x) of the main µP 7414 enable the extended Service Testprogram which is already indicated in the Service Manual.

For updated flow charts of the Service Testprogram see attached sheets.

- From production week 0207 onwards the software of the Mozart Board has been upgraded to MO3001.

This upgrade addresses a major problem with the "Disc Recover Mode" of models CDR820, CDR822 and a few minor problems valid for all sets.

Problem "Disc Recover Mode":

After a power failure during recording, the set enters the "Disc Recover Mode" but it does never return from this mode. The display shows "Disc Recover" even after disconnecting/reconnecting mains.

The faulty disc cannot be removed because the set does not react on any button (i.e. Open/Close).

The problem can be solved by a software upgrade of the Mozart Flash ROM to "MO3001".

To remove the faulty disc from the tray proceed as follows:

1. Remove Top Cover
2. Connect mains → set will enter Recover Mode
3. Stop the disc manually until an error message is displayed
4. Press Open/Close

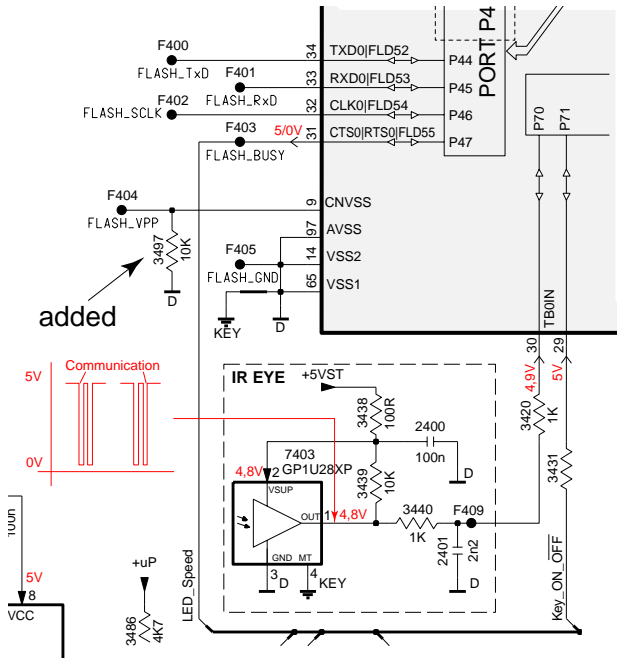
• DISPLAY BOARD

The copper pattern has been changed to layout stage .7.

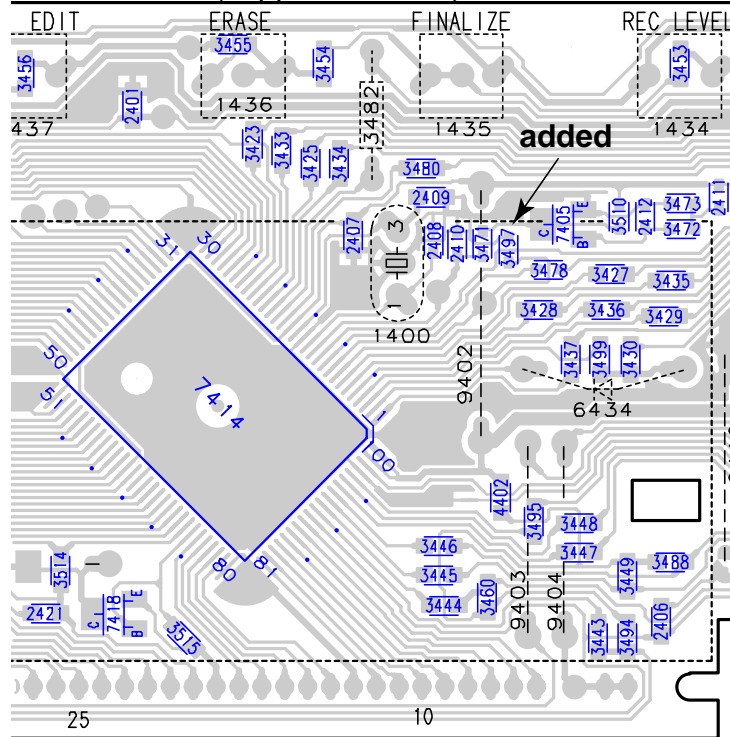
(The layout stage can be identified by the last digit of the 12-figure number, located at the upper left corner of the copper pattern)

Reason: To ensure a reliable startup with the flash-version of the µP over all tolerances, resistor 3497 has been added between pin 9 of µP 7414 and ground.

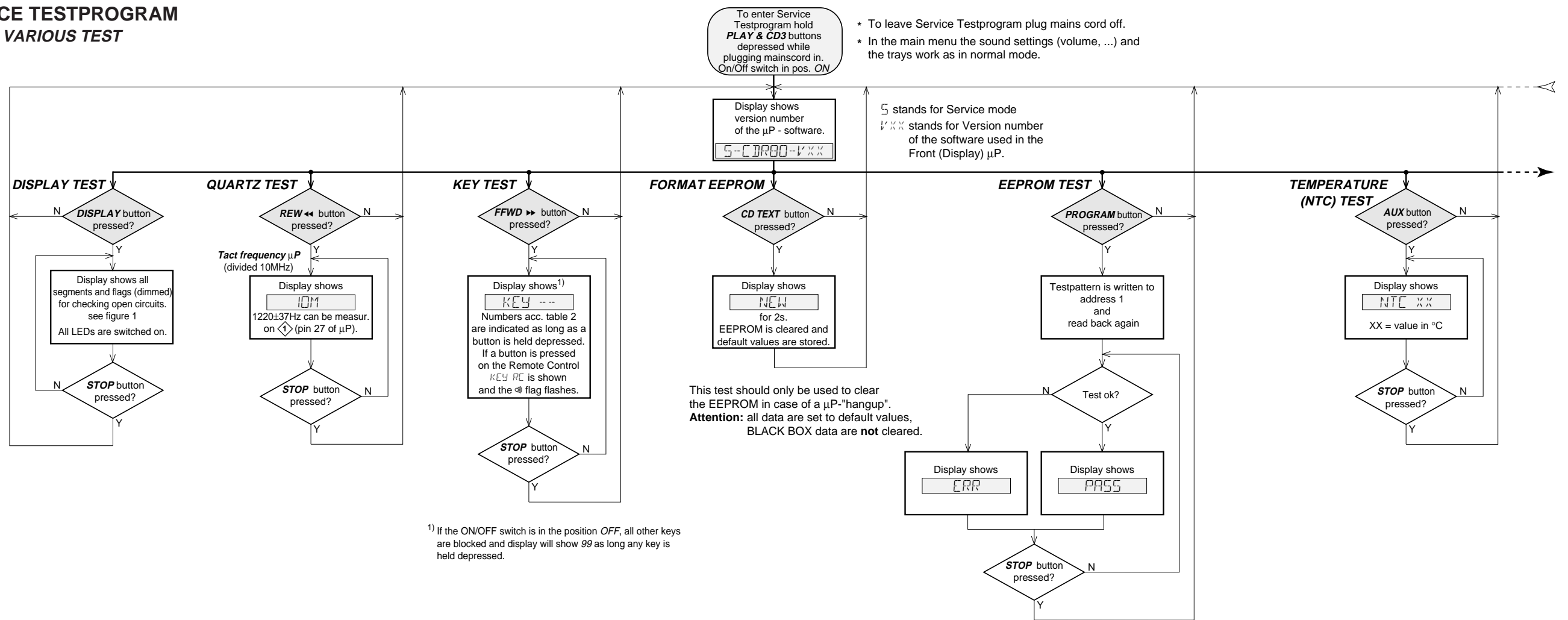
3497© 4822 051 30103 10k 5% 0.06W



Portion of Display Board layout stage .7 (copperside view)



SERVICE TESTPROGRAM
VARIOUS TEST



KEY CODES

KEY	KEY CODE	KEY	KEY CODE
OPEN/CLOSE (CDC)	0	CD1	14
CD CHANGE	1	COPY CD	15
AUX	2	COMPILE CD	16
CDR	3	RECORD	17
DISPLAY	4	PLAY/PAUSE	18
SHUFFLE	5	◀	20
PROGRAM	6	NO /CANCEL	21
CD TEXT /EDIT	7	▶	22
A-B EDIT	8	YES /ENTER	23
ERASE CD	9	SPEED (CDR820 only)	24
FINALIZE CD	10	OPEN/CLOSE (CDR)	25
REC LEVEL	11	ON/OFF	99
CD3	12	STOP	exit test
CD2	13		

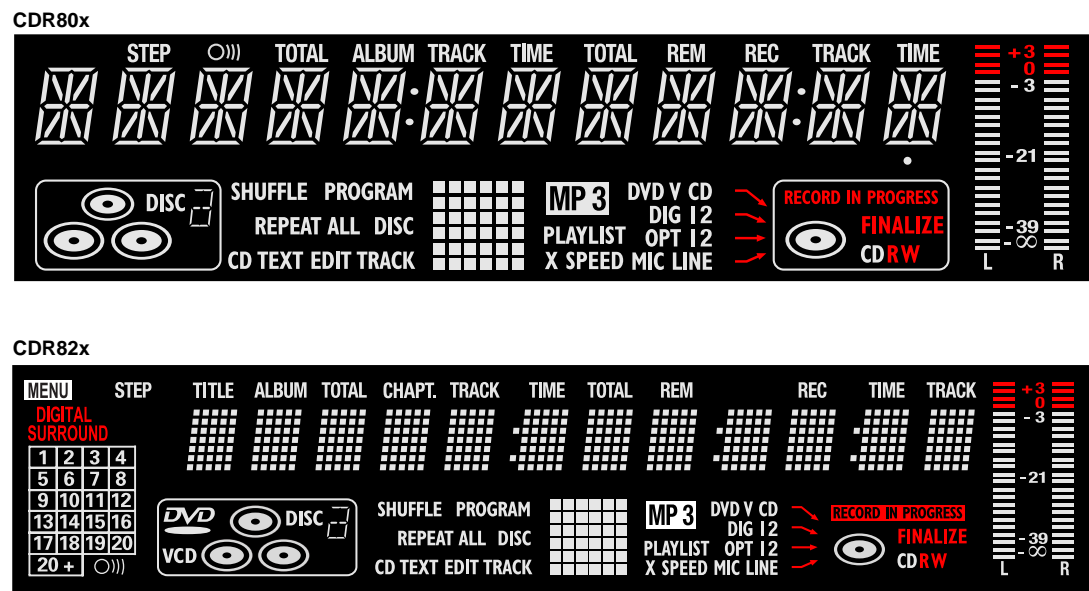


fig. 1

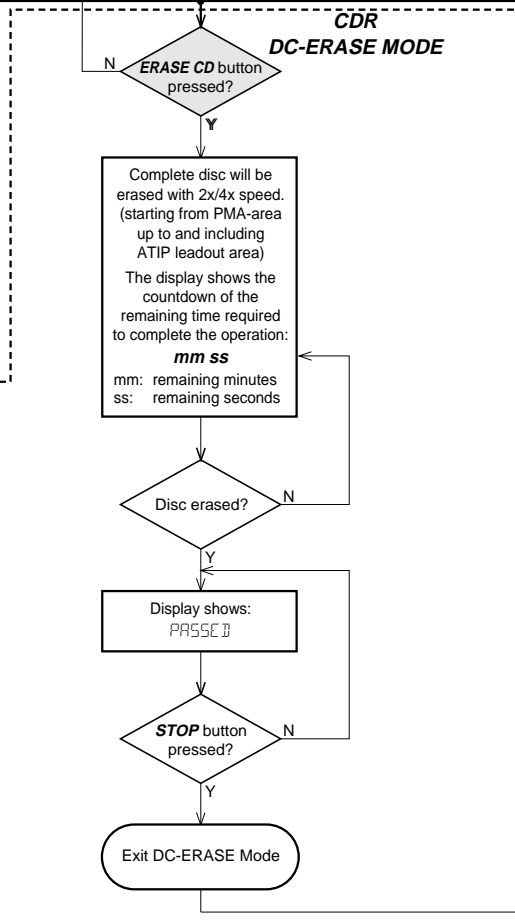
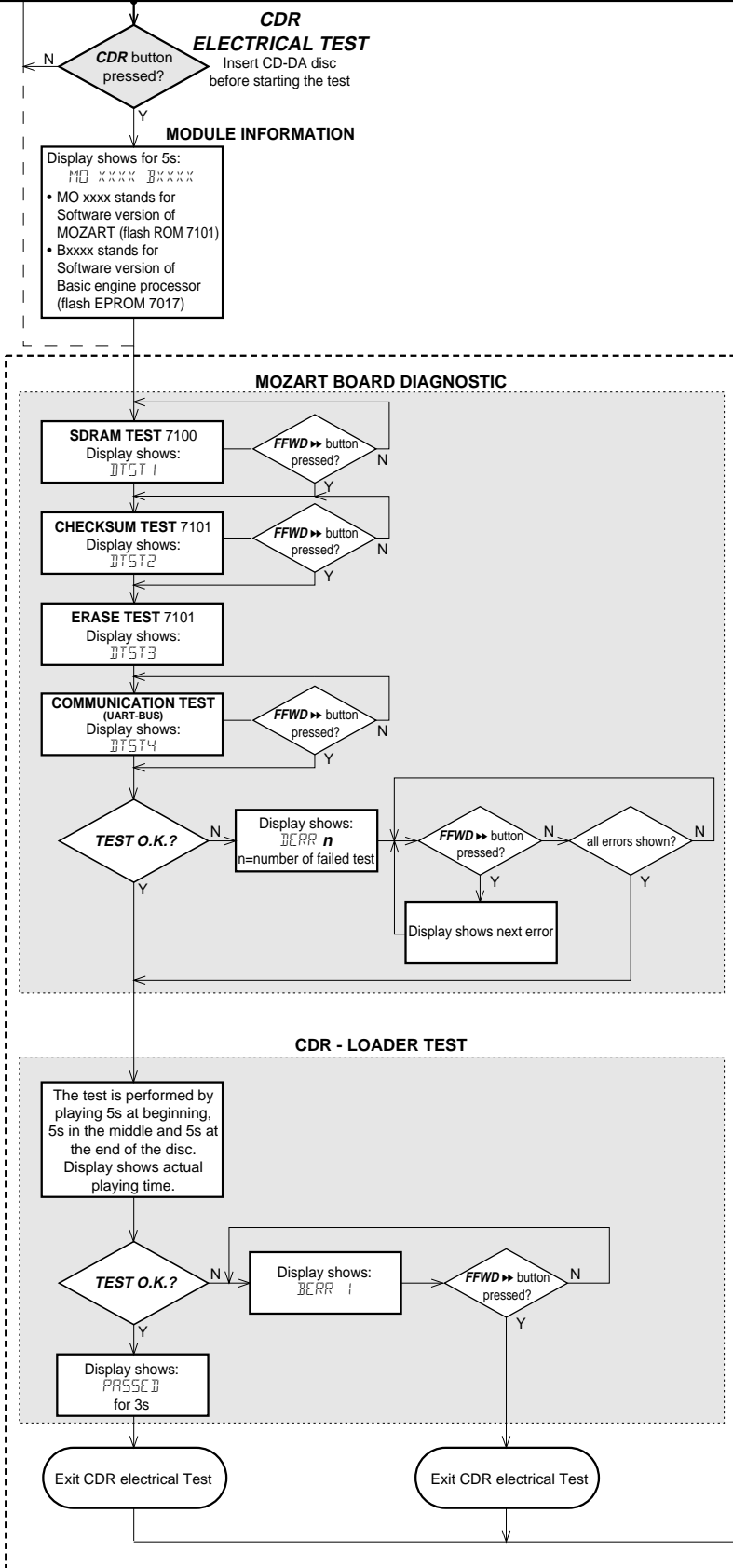
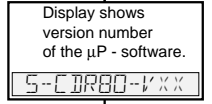
table 2

SERVICE TESTPROGRAM
CDR MODULE

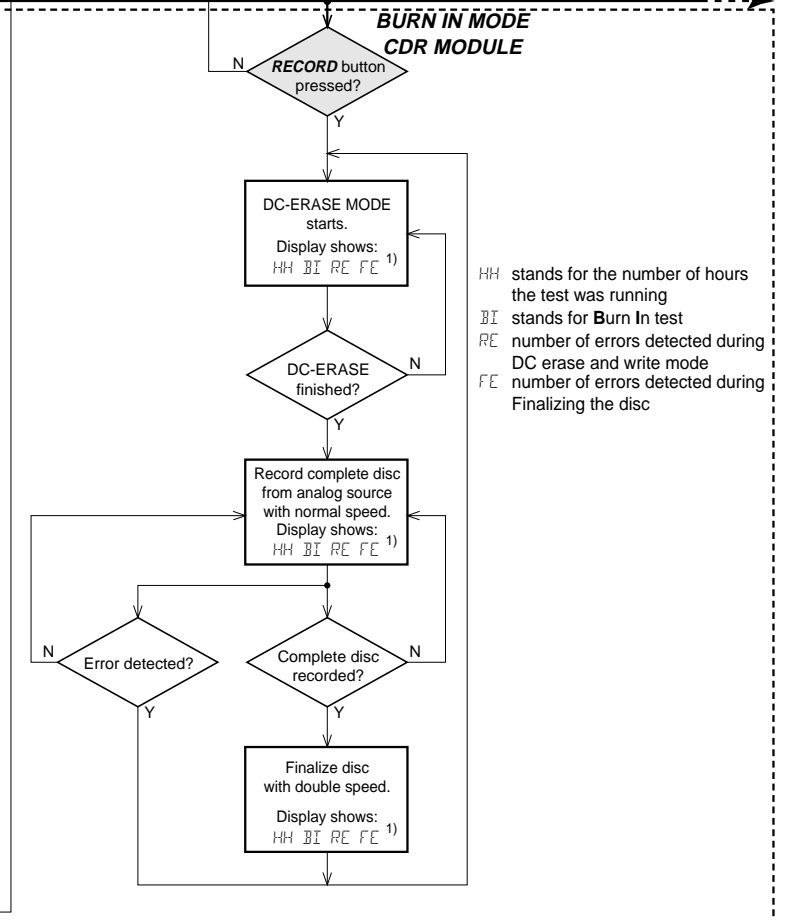
- * To leave Service Testprogram plug mains cord off.
- * In the main menu the sound settings (volume, ...) and the trays work as in normal mode.

To enter Service Testprogram hold **PLAY & CD3** buttons depressed while plugging mainscord in. On/Off switch in pos. ON

5 stands for Service mode
VXXX stands for Version number of the software used in the Front (Display) µP.



Note: With the DC-Erase mode the CD-RW can be changed back in its original state, like a new disc. Stopping the erase-function by switching power off will leave the disc in an unpredictable status!



HH stands for the number of hours the test was running
BI stands for Burn In test
RE number of errors detected during DC erase and write mode
FE number of errors detected during Finalizing the disc

Note: The BURN-IN mode is an endless cycle of
* DC erase, to erase the CD-RW disc with max. laser power
* Recording a CD-RW disc with speed N=1
* and Finalizing with double speed
This test is intended to check the quality of a CDR loader and to detect intermittent failures.

1) With the DISPLAY button the info on the display can be toggled to indicate either the status of burn in test or the temperature measured via the NTC.

TESTS WORKING FROM FOLLOWING SOFTWARE VERSIONS ONWARDS:
V46, M2021 B0042 CDR80x
V34, M2021 B3201 CDR82x

SERVICE TESTPROGRAM
3CDC MODULE

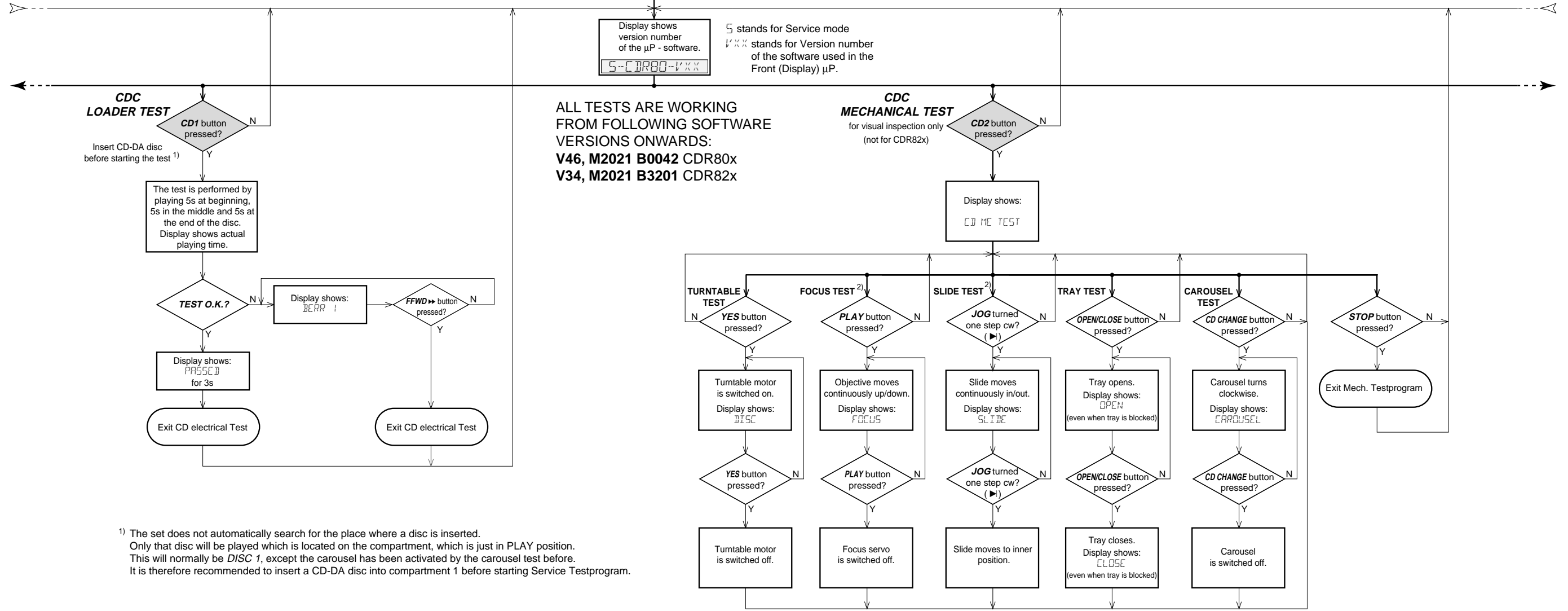
To enter Service Testprogram hold **PLAY & CD3** buttons depressed while plugging mainscord in. On/Off switch in pos. **ON**

- * To leave Service Testprogram plug mains cord off.
- * In the main menu the sound settings (volume, ...) and the trays work as in normal mode.

Display shows version number of the μ P - software.
S--CDR80-VXXX

S stands for Service mode
VXXX stands for Version number of the software used in the Front (Display) μ P.

ALL TESTS ARE WORKING FROM FOLLOWING SOFTWARE VERSIONS ONWARDS:
V46, M2021 B0042 CDR80x
V34, M2021 B3201 CDR82x



1) The set does not automatically search for the place where a disc is inserted. Only that disc will be played which is located on the compartment, which is just in PLAY position. This will normally be DISC 1, except the carousel has been activated by the carousel test before. It is therefore recommended to insert a CD-DA disc into compartment 1 before starting Service Testprogram.

2) Open tray to get free insight to the CD drive.