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BUSINESS CREATION UNIT AUDIO

SERVICE NEWSLETTER

08.01 TYPENUMBER(S): **AZ1030, AZ1035, AZ1040, AZ1045, AZ1120, AZ1550, AZ1560, AZ1565, AZ2000, AZ2010, AZ2020, AZ2025**

INFORMATION : Correction to the Service Manual, Mechanical Partslist
The codenumber for Motor (item 115) of the Tape Deck should read
4822 361 21656.

REMARKS :

08.02 TYPENUMBER(S): **AZ1040, AZ1045**

INFORMATION : Correction to the Service Manual, Mechanical Partslist
The codenumber of the CD Mechanism (DA11N) is missing.
It is available with codenumber 3103 309 05290.

REMARKS :

08.03 TYPENUMBER(S): **AZ1560, AZ1565**

INFORMATION : During production, the tuner module has been changed from "ECO5" to "ECO6". For repair information of the ECO6 tuner board assembly refer to Service Information A00-560 (3140 785 22440).

REMARKS : ECO6 tuner board assemblies are used in production from week 0034 onwards.

08.04 TYPENUMBER(S): **AZ2020, AZ2025**

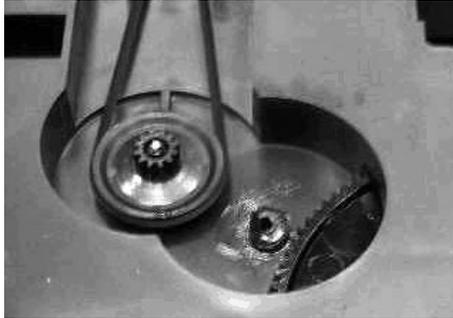
INFORMATION : In order to solve accidental mute problems on /01, /11 and /16 versions, the AF & POWER BOARD has been modified.
For servicing the new AF & POWER BOARD assembly refer to Service Information A00-561 (3140 785 22560).

REMARKS : New AF & POWER BOARD assemblies are used in production from week 0037 onwards.

08.05 TYPENUMBER(S): **CDC775, CC3000, CC4000**

SYMPTOM : **IRIS CODE 1 1 6 X**

CDC Tray does not open, the spindle for the Gearwheel (pos 95) is broken (see picture below).



CURE : For integral cost reasons it is advised to exchange the complete set.

REMARKS : Sets affected were produced before production week 0026.

08.06 TYPENUMBER(S): **CDR570, CDR770, CDR775, CDR776, CDR785, CDR786, CDR930, CDR950, CDR951, FW-R7, FW-R8**

INFORMATION : For service purpose an extension flexfoil for the connection of CDR mainboard connector 1000 to CD-drive has been taken on stock. It is available with codenumber 3104 157 11510.

The extension flexfoil enables measurements on the top side of the mainboard without disconnecting or damaging the flex-connection from the mainboard. Please note that all important measuring points are positioned on the bottom side of the mainboard.

REMARKS : Take care to remove the extension flexfoil before returning the set to the customer.

08.07 TYPENUMBER(S): **CDR775**

SYMPTOM : **IRIS CODE C 5 5 1**

In dubbing mode, the first milliseconds of the track are not recorded.

CURE : New software version 3.6 for CD-mainboard.
Programmed IC 7202 (soldered) can be ordered with codenumber 3104 123 85630.

REMARKS : The built-in CD software version can be read out by the electrical service diagnostics. This mode can be entered by holding <PLAY/PAUSE> & <FFWD> keys depressed while switching power on.

The new software has been implemented in production with factory change code VN05 from week 0037 onwards.

08.08 TYPENUMBERS : CDR570, CDR770, CDR771, CDR775, CDR776

SYMPTOM : IRIS CODE C 1 1 X

The set is switched to stand-by after power on.

CURE : The problem occurs only with the recently introduced new power supply unit "PSU CDR3 ECONOMY".

It can be fixed with the following modification:

- change item 3127 (current sense resistor) from 1.5Ω to 1Ω (4822 116 80176)
- change item 6141 (zener diode) from 18V to 20V (4822 130 10656)

REMARKS : The above modification has been implemented in production from week 0034 onwards.

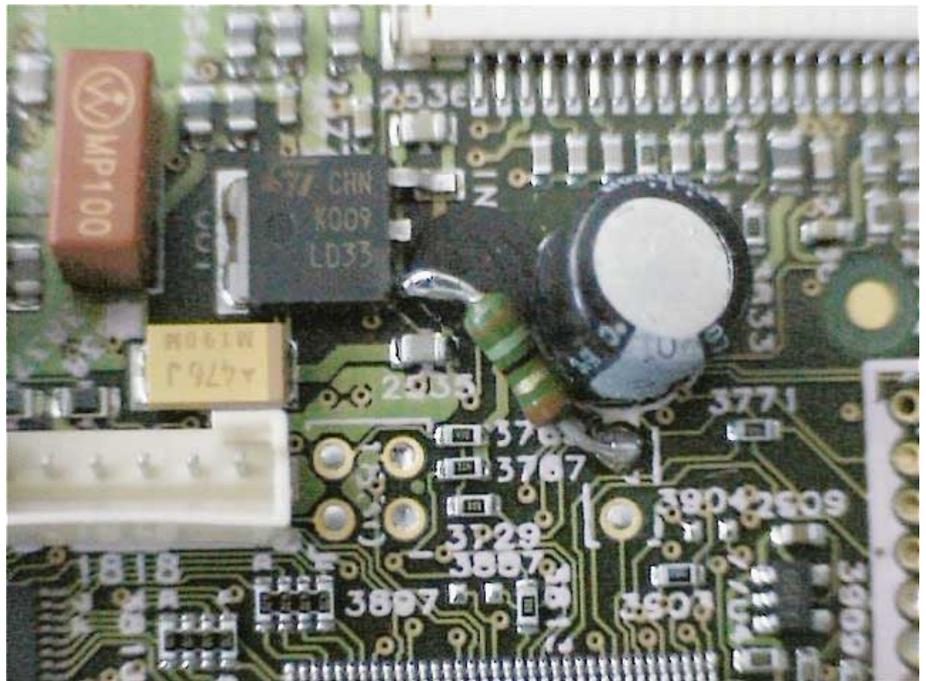
08.09 TYPENUMBER(S): CDR785, CDR786, FW-R7, FW-R8

SYMPTOM : IRIS CODE 2 5 6 1

Clock jitter in DASP-IC item 7701 on CDR Mainboard can result in hang-up of the microprocessor. After Power off, Power on the set will normally start but the phenomenon might return again.

CURE : To solve this problem in running production and as service solution, the power supply of D3V3 has been improved by adding a resistor of 27Ω (CRB 1/6W A PM5 and codenumber 4822 116 52188) between "disconnected" pin 1 of item 7535 and ground (hole 2 of item 1701).

See part of the main board (top side view) for location of the resistor.



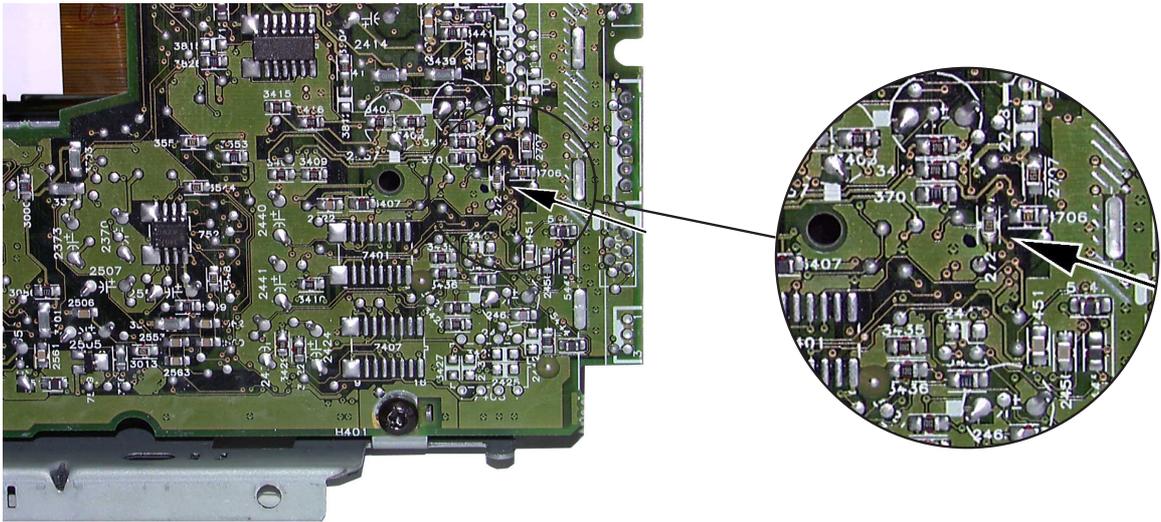
REMARKS : With release of the A9 version of CDR Mainboard this resistor is implemented in printed board layout and mounted in production.

08.10 TYPENUMBER(S): **CDR785, CDR786, FW-R7, FW-R8**

SYMPTOM : **IRIS CODE F 5 4 9**

When source "AUX DIGITAL" is selected and no source is connected or it is switched off, there is a burst of noise audible through the speakers every 3 seconds. If a digital source is connected and switched on, the noise disappears.

- CURE :
- change SMD resistor
3300 on Interface Board (CDR785, CDR786) resp.
3358 on Digital Switch Board (FW-R7, FW-R8)
to 6.8k Ω (4822 117 11507)
 - add resistor 2721 (6.8k Ω 4822 117 11507) on the bottom side of CDR Main Board → see picture below



REMARKS : This solution will also be implemented in production as a running change.

08.11 TYPENUMBER(S): **EXP101, EXP103**

INFORMATION : Correction to the Instruction For Use
The description of chapter "Remote Control" is not clear.
The Remote Control AY3767 will work with EXP101 only.
It cannot be used with EXP103.

REMARKS :

**08.13 TYPENUMBER(S): FW850C, FW855C, FW860P, FW880P, FW880W
(European versions only)**

- SYMPTOM : **IRIS CODE C 2 8 5**
Display shows "no RDS text" although the set is tuned to a radio station transmitting RDS text messages.
- CURE : The problem can be solved by upgrading microprocessor 7461 to software version v27 (or higher).
New microprocessors can be ordered with codenumber 9965 000 06763 TMP87PS71F-FW850 V27
- REMARKS : Microprocessor 7461 is located on the Front-Sandwich board.
The software version can be read out via the Service Test Program.

08.14 TYPENUMBER(S): MC118, MC148

- INFORMATION : Correction to the Service Manual, Mechanical Partslist
The Cassette Door and CD Door are pre-assembled by the factory.
The new codenumbers are:
- CD Door Assembly (Items 442 + 443)
3140 117 59420 For MC118 and MC148
- Cassette Door Assembly (Items 401 + 402)
3140 117 59430 For MC118
3140 117 59470 For MC148
- REMARKS :

08.15 TYPENUMBER(S): MC118, MC148, MC-10, MC-20

- INFORMATION : During production, the LCD (item 1425) has been changed to 3140 110 51000. To compensate the deviation of the LCD, resistor 3404 has also been changed.
- | | | |
|------|----------------|---------|
| 1425 | 9360 280 30112 | LCD OLD |
| 3404 | 4822 051 20182 | 1.8kΩ |
| 1425 | 3140 110 51000 | LCD NEW |
| 3404 | 4822 051 20332 | 3.3kΩ |
- REMARKS : The new LCD has been implemented in production from week 0044 onwards.

08.16 TYPENUMBER(S): MZ-3

- INFORMATION : In course of production, the IR Receiver (item 7600) has been changed to 9322 155 22667.
- REMARKS : The new IR-Receiver 9322 155 22667 can replace the old one without further modifications.

08.17 TYPENUMBER(S): **MZ7**

SYMPTOM : **IRIS CODE C 5 1 4**
CD does not play and display shows "DISC NOT FINALIZED".

CURE : This problem is resolved by upgrading the software of the Front microprocessor IC. The service code for the new IC reads 9965 000 06733.

REMARKS :

08.18 TYPENUMBER(S): **SA100, SA101, SA107, SA125, SA126**

INFORMATION : Correction to the Service Manual, Accessories
In the Service Manual, some accessories are missing.
They are available with following codenumbers:

9965 000 06658	Headphone SBC HE-550
9965 000 06659	Carrying Case

REMARKS :

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07.01 TYPENUMBER(S): **AJ3935, AJ3936**

- SYMPTOM : **IRIS CODE 2 6 1 9**
The Compact Disc gets stuck onto the CD-Clamper assembly.
- CURE : Replace the old Clamper assembly (items 434, 436 and 437) by the new one 3140 117 59800.
- REMARKS : New CD-Clamper assemblies are used in production from week 0025 onwards.

07.02 TYPENUMBER(S): **AS800C, AS801C, FW-C28, FW-C38, FW-C39, FW-C40, FW-C55, FW-C58, FW-C71, FW-C72, FW-P75, FW-P78, FW-C80, FW-C83, FW-C85, FW-M55, FW-V28, FW-V55, FW545C/34, FW548C/21K/34, FW590C/34, FW595C/21K, FW830C/22/34, FW840C/22, FW850C, FW855C, FW860P, FW870C/22, FW878C/34, FW880P, FW880W, FW890P/22, FW898W/34, MZ7**

- INFORMATION : Service Manual, Partslist
The Cam Gear (pos 25) of the Tape mechanism has been added as service spare part. The codenumber reads 9965 000 06443.
- REMARKS :

07.03 TYPENUMBER(S): **AZ1030**

- INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD part of the Combi board assembly had to be redesigned for LA6530. The new Combi board assemblies are used in production alternatively.
- For repair information on new Combi board assembly see Service Information A00-558 (3140 785 22460).
- REMARKS : Alternative Combi board assemblies are used in production from week 0028 onwards.

07.04 TYPENUMBER(S) : AZ2402, AZ2407, AZ2420, AZ2425

SYMPTOM : IRIS CODE 2 7 2 X

The set cannot read the TOC at low battery supply.

CURE : Change transistor 7217 from BC557B to BC337-25 (4822 130 41246).

REMARKS : The modification has been implemented in production from week 0025 onwards.

07.05 TYPENUMBER(S): AZ7902, AZ9001, AZ9002, AZ9003, AZ9011, AZ9101, AZ9102, AZ9103, AZ9104, AZ9106, AZ9111, AZ9113, AZ9141, AZ9142, AZ9143, AZ9201, AZ9202, AZ9203, AZ9211, AZ9213, AZ9214, AZ9218

INFORMATION : Correction to the Service Manual, Service Test Program
The correct procedure to enter the Service Test Program is as follows:

- Disconnect the AC/DC-adaptor and remove batteries
- Open the CD-Door
- Hold the buttons "MODE" & "STOP" depressed
- Connect the AC/DC-adaptor or insert batteries

The display shows the software version number (i.e. "S-13").

REMARKS :

07.06 TYPENUMBER(S): AZ9001, AZ9002, AZ9003, AZ9011, AZ9101, AZ9102, AZ9103, AZ9104, AZ9106, AZ9111, AZ9113, AZ9141, AZ9142, AZ9143, AZ9201, AZ9202, AZ9203, AZ9211, AZ9213, AZ9214, AZ9218

INFORMATION : Service Manual, Partslist
The following parts have been added as service spare part:
3103 308 84070 LCD-2 DORIS (WK-TZA065)
3103 304 68010 ZEBRA-STRIP-2
3103 304 68020 MEMBRANE-KEYBOARD-2

REMARKS :

07.07 TYPENUMBER(S): AZ9214

INFORMATION : Service Manual, Table of Accessories
The missing service codenumbers for the Pouch and the Cord Remote Control are available now:
3140 113 10360 AY3266/00 Pouch
3103 309 72380 AY3767/00 Cord Remote Control

REMARKS :

07.08 TYPENUMBER(S): **CDR570, CDR770, CDR775, CDR776, CDR785, CDR930, CDR950, CDR951, FW-R7, FW-R8**

INFORMATION : Introduction of COMPAIR for CDR 3rd generation recorders
CDR570, CDR770, CDR775, CDR776, CDR785, CDR930, CDR950,
CDR951, FW-R7, FW-R8

With the new release COMPAIR 1.4 (ordernumber 4822 727 21637) the existing COMPAIR Tool (starter kit with order number 4822 727 21634) has been extended to be applied for the CDR 3rd generation Recorders. With this tool the diagnosing of the set can be done in an interactive way. In the tool also the adjustment procedure has been implemented. This is absolutely necessary in case the CDR-mainboard and/or (CDR-loader) CDM is disconnected from the matched production combination.

For Authorised service workshops which have installed COMPAIR 1.4 the following CDR-modules

3104 129 52511 for CDR570 and CDR930,
3104 129 52521 for CDR770,
3104 129 52530 for CDR775 and CDR776,
3104 129 52540 for CDR950 and CDR951,
3104 129 52580 for CDR785,
3104 129 52590 for FW-R7 and FW-R8

can be repaired on component level as explained in the Cologne Training session (held in week 0019 and 0020).

In the Cologne Training we have explained the need of the interface board to be used with COMPAIR. The codenumber for this board reads 7104 086 91110, the connection cable to the module is available with 3104 157 11120.

Based on the feedback from the Competence Centres a new simple board will be introduced within a few weeks. The codenumber for this board plus module connection cable reads 3122 785 90200.

Upgrading SW with the help of COMPAIR is not possible yet.

To have all modifications during production implemented on the CDR-mainboard the following actions have to be taken:

Software version 1.04 & 91.48:

It is advised to replace mainboards stamped A2 or A3 by at least production stamp A7 and **always adjust via COMPAIR**.

For CDR570 and CDR930 the ordernumber for the CDR mainboard reads 3104 128 05840.

For CDR770 the ordernumber reads 3104 128 05850.

Other models have never been produced with stamp A2 or A3.

Software version 1.23 & 91.63:

- Update to the latest SW version (see SNL2000.03.09)
- Replace capacitors 2725, 2726 and 2727 by 100nF 50V (see SNL2000.07.10)
- Replace capacitor 2322 by 1.5nF (see SNL2000.07.12)
- Add resistor 27Ω (see SNL2000.07.13)
- **Always adjust via COMPAIR**

Software version 1.34 & 91.80:

- Update to the latest SW version (see SNL2000.03.09)
- Replace capacitors 2725, 2726 and 2727 by 100nF 50V (see SNL2000.07.10)
- Replace capacitor 2322 by 1.5nF (see SNL2000.07.12)
- Add resistor 27Ω (see SNL2000.07.13)
- **Always adjust via COMPAIR**

Software version 1.43 & 91.91

- Update to the latest SW version (see SNL2000.03.09)
- Replace capacitors 2725, 2726 and 2727 by 100nF 50V (see SNL2000.07.10)
- Replace capacitor 2322 by 1.5nF (see SNL2000.07.12)
- Add resistor 27Ω (see SNL2000.07.13)
- **Only adjust via COMPAIR if servo components have been changed**

Software version 1.47 & 91.96

- Update to the latest SW version (see SNL2000.03.09)
- Replace capacitors 2725, 2726 and 2727 by 100nF 50V (see SNL2000.07.10)
- Replace capacitor 2322 by 1.5nF (see SNL2000.07.12)
- Add resistor 27Ω (see SNL2000.07.13)
- **Only adjust via COMPAIR if servo components have been changed**

Solved phenomena with the following software version:

Version 1.23

- improvement and shortening startup procedure
- CD-sync start procedure improved

Version 1.34

- further improving and shortening startup procedure

Version 1.43

- does not start : display shows insert disc
- does not start : display shows OPC error
- does not start finalising / unfinalising
- extra track increments during analog and digital recording
- does not start erase
- does not start analog recording
- bad audio
- player in standby during recording or finalising

Version 1.47

- does not start: set in hangup
- in hangup after finalising / unfinalising

Version 1.51

- does not recognize the Philips HR100 CDR disc

REMARKS

: Only modules of the 3rd generation CDR can be repaired via COMPAIR. For 1st and 2nd generation modules the central repair on modules will be continued. It is our goal to minimize the central repair activities for 3rd generation and future models.

07.09 TYPENUMBER(S): CDR570, CDR770, CDR775, CDR776, CDR930, CDR950, CDR951

INFORMATION : Temporary from production start onwards item 2101 with value 100nF 16V has been applied. Due to filament voltage, the 16V spec is too low. The capacitor has to be replaced by 100nF 50V (4822 126 13838).

REMARKS :

07.10 TYPENUMBER(S): CDR570, CDR770, CDR775, CDR776, CDR930, CDR950, CDR951

INFORMATION : Temporary from production start onwards item 2725, 2726, 2727 with value 100nF 16V have been applied. Due to filament voltage, the 16V spec is too low. The capacitors have to be replaced by 100nF 50V (4822 126 13838).

REMARKS :

07.11 TYPENUMBER(S): CDR570, CDR770, CDR771, CDR775, CDR776

INFORMATION : The Power Supply Unit of above mentioned sets has been changed from "PSU CDR3 SINGLE RANGE" to "PSU CDR3 ECONOMY".

The codenumbers of the complete assemblies read as follows:

For **/00/10/14 (EURO)** : PSU CDR-3 ECONOMY EURO 20PS202
with codenumber 3122 427 22000

For **/01/06/13 (WR)** : PSU CDR-3 ECO WR 20PS315
with codenumber 3122 427 22020

For **/17 (USA)** : PSU CDR-3 ECO USA
with codenumber 3122 427 22010

REMARKS : The functionality of both power supplies is equal and backwards compatible. For details see Service Information A00-254 (3104 125 40180) with circuit description, circuit diagrams and trouble shooting.

07.12 TYPENUMBER(S): CDR570, CDR770, CDR775, CDR776, CDR930, CDR950, CDR951

SYMPTOM : **IRIS CODE C 5 6 1**
The CD-Recorder does not recognize the Philips HR100 CDR ("No disc" is shown on the display).

CURE : The problem can be solved by the following hardware and software modification:

1. Hardware modification at the topside of the Main Board
 - Change capacitor 2322 from 3.3nF to 1.5nF (4822 126 14247)

2. Software modification at the topside of the Main Board
 - Update software version of item 7208 (in socket) to version 92.01. Programmed flash with version 92.01 or higher can be ordered with codenumber 3104 123 94850.
 - Update software version of item 7703 (soldered) to version 1.51. Programmed flash with version 1.51 or higher can be ordered with codenumber 3104 123 85760.

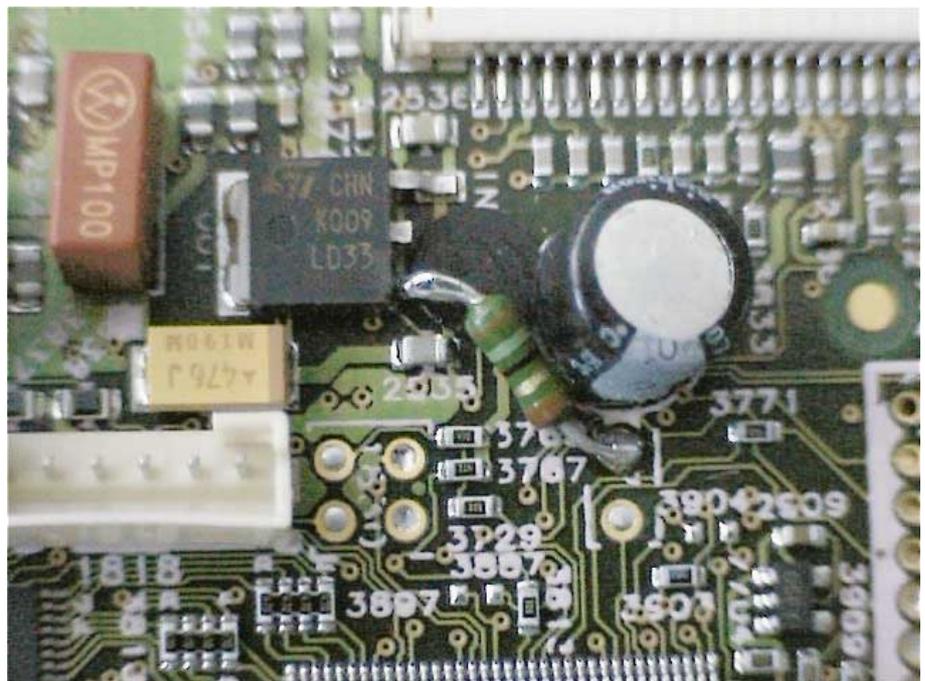
REMARKS : Software versions lower than 1.43 & 91.91 which have been updated to the latest version **must always be re-adjusted with the COMPAIR Tool**. Workshops which do not use COMPAIR have to replace these 3rd generation CDR-modules. See also Service Newsletter SNL2000.07.08.

07.13 TYPENUMBER(S): **CDR570, CDR770, CDR775, CDR776, CDR930, CDR950, CDR951**

SYMPTOM : **IRIS CODE 2 5 6 1**
 Clock jitter in DASP-IC item 7701 on CDR Mainboard, this can result in hang-up of the microprocessor. After Power off, Power on the set will normally start but the phenomenon might return again.

CURE : To solve this problem in running production and as service solution, the power supply of D3V3 has been improved by adding a resistor of 27Ω (CRB 1/6W A PM5 and ordernumber 4822 116 52188) between “disconnected” pin 1 of item 7535 and mass (hole 2 of item 1701).

See part of the main board (top side view) for location of the resistor.



REMARKS : With release of the A9 version of CDR Mainboard this resistor is implemented in printed board layout and mounted in production.

07.14 TYPENUMBER(S): CDR570, CDR770, CDR775, CDR776, CDR930, CDR950, CDR951

INFORMATION : All returned discs, causing complaints on the CDR sets of the 3rd generation, have been investigated. This results in the following conclusion:

The Philips Megalife disc has been produced by Ricoh and Mitsui. Most of the problems have been found with discs produced by Mitsui.

How to recognize the production centre?

Ricoh : made in USA printed on the jewel box

Mitsui : made in Europe printed on the jewel box.

Please note: Discs packed in a carton box (5pcs/carton) are marked with made in USA!

Ricoh : Marked Audio HR100

Mitsui : Marked Audio100

Ricoh : serial number on inner circle consists of 4 character + 12 digits (e.g. ALXH 06109902214 3)

Mitsui : serial number on inner circle consists of 12 digits (e.g. 9287 2217 4953)

It is not advised to apply the Mitsui disc in 3rd generation CDR recorders up to software version 1.51.

REMARKS :

07.15 TYPENUMBER(S): CDR785, CDR786

INFORMATION : The sets are equipped with a special DEALER MODE. This mode blocks the trays of the CDC- and CDR module to prevent customers from fetching out CDs from exhibition sets. The dealer mode can be switched on/off as follows:
1) Switch the set with the Remote Control to standby mode
2) Press the [DISPLAY] key for longer than 5s
→ Display shows "DEALER MODE ON" respectively "DEALER MODE OFF"

REMARKS :

07.16 TYPENUMBER(S): CDR785, CDR786

INFORMATION : On the black versions CDR785/00 and CDR785/17 the feet pos. 22 have been changed from silver to anthracite metallic. The codenumbers read as follows:
old: 4822 462 42159 foot silver
new: 4822 462 11174 foot anthracite metallic

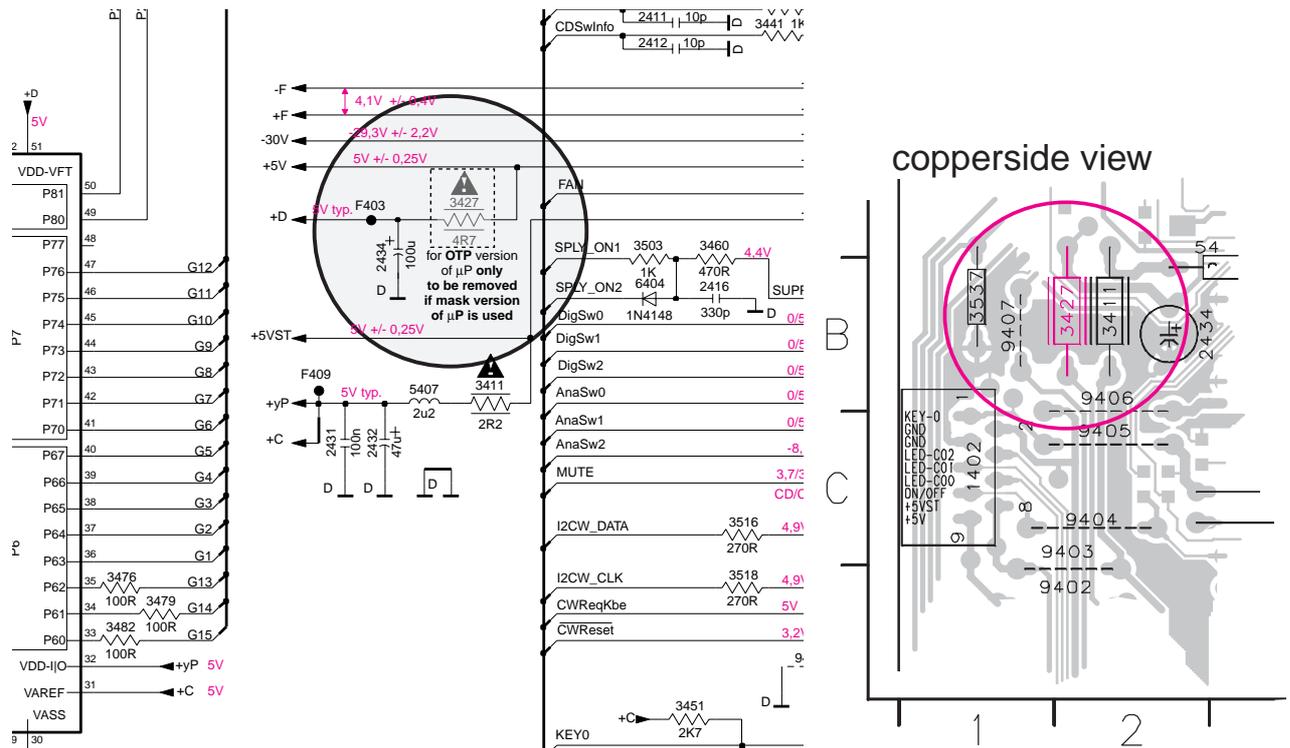
REMARKS : The modification has been implemented in production from week 0032 onwards.

07.17 TYPENUMBER(S): CDR785, CDR786

INFORMATION : Production started with the OTP-version “TMP88PU77F” of the microprocessor.
 Service will deliver final mask version “TMP88CU77F-CDR785.2” (3103 308 84170).

In case an OTP-version has to be replaced by the mask version resistor 3427 has to be removed.

Reason: The mask version has an internal connection between the supply pins 32 (+µP) and 51 (+D).



REMARKS :

07.18 TYPENUMBER(S): EXP101, EXP103

INFORMATION : Following components have been changed to improve the CD start-up and EMC behaviour:

- RP36 changed from 47kΩ to 100kΩ (4822 117 13632)
- RM87 and RM88 changed from 100Ω to 330Ω (4822 051 10331)
- RD28, RD29 and RD30 changed from 100Ω to 1kΩ (4822 051 30102)
- RD41, RD42 and RD43 changed from 22Ω to 1kΩ (4822 051 30102)

REMARKS : Modifications are implemented since production start.

07.19 TYPENUMBER(S) : FW-C1, FW-C3, FW-C10, FW-C30, FW-C-35

SYMPTOM : **IRIS CODE 2 5 6 X**
After record, there is no (or wrong) output when playing back the tape.

CURE : Replace the Erase Head if there is no oscillation at jumper 9730 (test point 5) although the erase oscillator is working normally (no defective components).

REMARKS : The problem is caused by a poor batch of Erase Heads. It is resolved from production week 0009 onwards.

07.20 TYPENUMBER(S) : FW-C1, FW-C3, FW-C10, FW-C28, FW-C30, FW-C35, FW-C38, FW-C39, FW-C40, FW350C, FW390C, FW391C, FW396C, FW398C, FW540C, FW545C, FW548C, FW555C, FW585C, FW590C, FW595C, FW748P, FW768P, FW798W, FW830C, FW840C, FW870C, FW878C, FW890P, FW898W, FW910R, FW930, MZ7

INFORMATION : Correction to Service Manual, Mechanical Partslist 3CDC99 module
Some of the published codenumbers are wrong.

Pos no.	Description	should read
3	Guiding left	4822 463 11235
4	Guiding right	4822 463 11236
12	Rubber	4822 446 12146
13	Rubber	4822 446 12146
21	Drawer	3104 304 66800
22	Bracket Tumbler	4822 402 11236
23	Spring	4822 492 11721
40	Slide	4822 463 11237
115	Carousel	3103 304 66810

REMARKS :

07.21 TYPENUMBER(S): FW-C10/21

INFORMATION : Correction to the Service Manual, Partslist
The codenumber for the Mains transformer 5001 should read 4822 146 10956.

REMARKS :

07.22 TYPENUMBER(S): **FW-R7, FW-R8**

INFORMATION : The sets are equipped with a special DEALER MODE.
This mode blocks the trays of the CDC- and CDR module to prevent customers from fetching out CDs from exhibition sets.
The dealer mode can be switched on/off as follows:
1) Switch the set with the stanby-button to standby mode
2) Press the [DISPLAY] key for longer than 5s
→ Display shows "*DEALER MODE ON*" respectively "*DEALER MODE OFF*"

REMARKS :

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06.01 TYPENUMBER(S): **AQ5460**

- SYMPTOM : **IRIS CODE 1 5 4 2**
Hiss is audible on recordings.
- CURE : Phenomenon is caused by unstability of the bias oscillator.
Change resistor 3732 from 10Ω to 15Ω (4822 116 52182).
- REMARKS : Modification has been implemented in production from week 0014 onwards.

06.02 TYPENUMBER(S): **AZ1030, AZ1035**

- INFORMATION : To solve the problem "*skips tracks due to acoustic feedback*" the CD-clamper assembly (items 428, 429 and 431) has been replaced by the new clamper assembly (3140 117 59800) .
- REMARKS : New CD-clamper assemblies are used in production from week 0024 onwards.

06.03 TYPENUMBER(S): **AZ1040, AZ1045, AZ1120**

- INFORMATION : To solve the problem "*skips tracks due to acoustic feedback*" the CD-clamper assembly (items 436, 437 and 438) has been replaced by the new clamper assembly (3140 117 59800) .
- REMARKS : New CD-clamper assemblies are used in production from week 0024 onwards.

06.04 TYPENUMBER(S): **AZ1040, AZ1045, AZ1550, AZ1560, AZ1565**

- SYMPTOM : **IRIS CODE 1 5 4 2**
Hiss is audible on recordings.
- CURE : Phenomenon is caused by unstability of the bias oscillator.
Change resistor 3732 from 10Ω to 15Ω (4822 116 52182).
- REMARKS : Modification has been implemented in production from week 0014 onwards.

06.05 TYPENUMBER(S): **AZ1045**

INFORMATION : During production, the IR receiver 7407 has been changed from TSOP2836 (9322 139 51667) to TSOP2236 (9322 155 82667). The electronic circuit has been adapted by changing 3451 from 470kΩ to 330kΩ (4822 051 20334).

REMARKS : Modification has been implemented in production from week 0024 onwards.

06.06 TYPENUMBER(S): **AZ1550, AZ1560, AZ1565**

INFORMATION : To solve the problem "*skips tracks due to acoustic feedback*" the CD-clamper assembly (items 443, 444 and 446) has been replaced by the new clamper assembly (3140 117 59800) .

REMARKS : New CD-clamper assemblies are used in production from week 0024 onwards.

06.07 TYPENUMBER(S): **FW399V,FW548V**

SYMPTOM : **IRIS CODE 1 5 5 X**
Interruptions during playing a VCD when singing along a session on Karaoke.

CURE : The problem is due to high acoustic feedback (high volume) into the main unit via the adjacent loudspeakers.
Place the loudspeaker boxes at least 60cm away from the main unit or place a rubber mat (size: 26cm x 30cm, thickness: ≥8mm) below the main unit to absorb any acoustic vibrations.

REMARKS :

06.08 TYPENUMBER(S): **FW399V,FW548V**

SYMPTOM : **IRIS CODE 1 5 1 X**
The first piece of new tracks is skipped when playing a NON-STOP Audio CD.

CURE : The momentary music break between tracks is caused by the software. When there is no Pause recorded on the disc and a new track is recognized the software automatically mutes for a few seconds.
The problem is solved with the new MPEG software version_13 for IC 7202 on the MPEG board.
The new OTP is available under service code: 9965 000 02715.

REMARKS :

06.09 TYPENUMBER(S): **MC118, MC148**

INFORMATION : To solve the problem "*skips tracks due to acoustic feedback*" the CD-clamper assembly (items 437, 438 and 439) has been replaced by the new clamper assembly (3140 117 59800).

REMARKS : New CD-clamper assemblies are used in production from week 0024 onwards.

06.10 TYPENUMBER(S): **SD100/01M**

INFORMATION : Some of the service code numbers published in the Service Manual (page 1-1) are stated wrong. The correct code numbers are as follows:

Pos	Service code	Article description
200	3141 017 72470	Front Cabinet Assembly
203	3141 017 72500	Play Button
206	3141 017 72340	Power Button
208	3141 014 23550	Volume Knob
209	3141 017 72480	Cover, Window
233	3141 017 72490	Cover, CD Tray

REMARKS :

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05.01 TYPENUMBER(S): **AJ3935**

SYMPTOM : **IRIS CODE 2 1 4 4**

Transformer hum is audible.

CURE : The hum is caused by vibration of the metal transformer bracket (item 502). For service purpose the metal bracket can be removed without substitution.

REMARKS : In production, a rubber foam of 20 x 25 x 26 mm will be placed between top of transformer and Top Cabinet (item 427). This will protect the printed board from being damaged during transit.

The modification has been implemented in production from week 0014 onwards.

05.02 TYPENUMBER(S): **AZ1005, AZ1007**

INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD module had to be redesigned for IC TCA0372DP1. The new modules are used in production alternatively.

For repair information on new CD modules see Service Information A00-551 (3140 785 22310).

REMARKS : Alternative CD modules are used in production from week 0013 onwards.

05.03 TYPENUMBER(S): **AZ1100, AZ1101, AZ1102, AZ1103, AZ1104**

INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD module had to be redesigned for IC TCA0372DP1. The new modules are used in production alternatively.

For repair information on new CD modules see Service Information A00-552 (3140 785 22320).

REMARKS : Alternative CD modules are used in production from week 0013 onwards.

05.04 TYPENUMBER(S): AZ1110, AZ1111, AZ1112, AZ1113, AZ1114

INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD module had to be redesigned for IC TCA0372DP1. The new modules are used in production alternatively.

For repair information on new CD modules see Service Information A00-553 (3140 785 22330).

REMARKS : Alternative CD modules are used in production from week 0013 onwards.

05.05 TYPENUMBER(S): AZ1116, AZ1117, AZ1118, AZ1119

INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD module had to be redesigned for IC TCA0372DP1. The new modules are used in production alternatively.

For repair information on new CD modules see Service Information A00-555 (3140 785 22360).

REMARKS : Alternative CD modules are used in production from week 0013 onwards.

05.06 TYPENUMBER(S): AZ2750, AZ2755

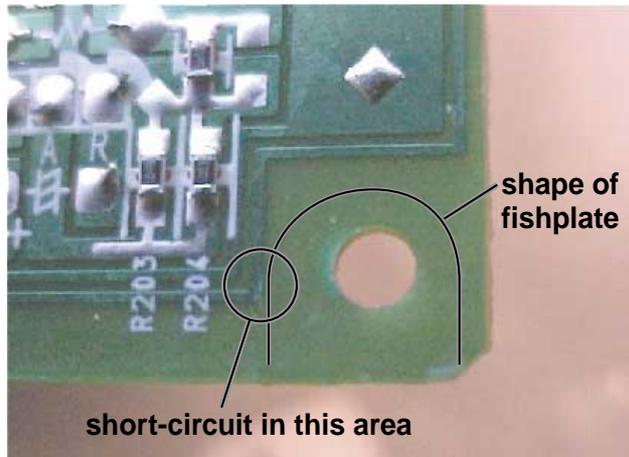
INFORMATION : Due to supply shortfall of servo IC TDA7073A, the CD module had to be redesigned for IC TCA0372DP1. The new modules are used in production alternatively.

For repair information on new CD modules see Service Information A00-554 (3140 785 22340).

REMARKS : Alternative CD modules are used in production from week 0014 onwards.

05.07 TYPENUMBER(S): **CDR785/17**

- SYMPTOM** : **IRIS CODE 1 1 1 X**
The Standby-LED is inoperative.
The power consumption in standby is higher than specified and close to the power consumption in STOP-mode.
- CURE** : The problem is caused by the fishplate supporting the Power Supply Unit. In some cases the fishplate can touch a copper track of the Power Board close to resistor R204 (see picture below).



This will short-circuit parts of the power supply circuitry to the ground potential of the bottom frame.
As a result, the display will switch off, but the LED does not light.

Solution: Place an insulating layer (i.e. friction tape or piece of Fuller board) between printed board and holder.

- REMARKS** : The green protection lacquer on the printed board normally ensures proper insulation of copper tracks. However, due to transportation or rough handling, the critical area can get exposed.
- In production, the bottom frame has been modified.
The modified parts are used from week 0020.4 onwards.

05.08 TYPENUMBER(S): **FW830C, FW840C, FW870C, FW878C, FW890P, FW898W**

- INFORMATION** : Additional information to Service Newsletter items AS99.08.03 and AS99.10.02:
The reliability of EEPROM data can be improved further by changing the value of resistor 3611 to 2.2k Ω 5% 0.1W (4822 117 11449).

REMARKS :

05.09 TYPENUMBER(S): **MC118**

- INFORMATION** : Correction to Service Manual, partslist
The codenumber of the CD Door Switch (item 1025) is missing.
The switch is available with codenumber 4822 276 13963.

REMARKS :

05.10 TYPENUMBER(S): **MZ-3, MZ-33**

SYMPTOM : **IRIS CODE 6 5 1 0**
No sound output, resistor 3363 is blown.

CURE : • Change resistor 3363 from 22Ω to a 10Ω NFR-type
(4822 052 11109)
• Change capacitor 2362 from 100μF to 22μF (4822 124 81151)

REMARKS : The modification has been implemented in production from week
0018 onwards.

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04.01 TYPENUMBER(S): **CD713, CD723, CD753**

SYMPTOM : **IRIS CODE C 5 1 4**

The set does not recognize CD-R/CD-RW discs with extremely high jitter value (i.e. high-speed recordings from computer-CD-Writers).

CURE : The problem can be solved by the following modification on the CD-SL Mk3 Board:

- Remove resistor 3806
- Remove capacitor 2810

REMARKS :

04.02 TYPENUMBER(S): **CDR570, CDR770, CDR775, CDR930, CDR950**

INFORMATION : Additional information to the 2nd line Service Manual CDR570, CDR770, CDR775, CDR930, CDR950 (3104 125 40110).

CDR Main Board, Circuit Diagram 6:
In course of production, fuse resistors 3411 and 3439 (4R7) have been replaced by coils.

Pos	Codenummer	Article description
3411	4822 157 11717	COIL 50µH
3439	4822 157 11717	COIL 50µH

REMARKS : The modification will improve the temperature behaviour.

04.03 TYPENUMBER(S): **FW-P73, FW-P75**

SYMPTOM : **IRIS CODE 1 5 4 4**
Ticking sound (similar to that of a clock) is audible from the center speaker during quiet portions of music.

CURE : The problem is caused by crosstalk from flex-cable 1681 to wire 1572.
The problem can be solved by routing wire 1572 outside the wire catches of flex-cable 1572 as shown in the right picture below.

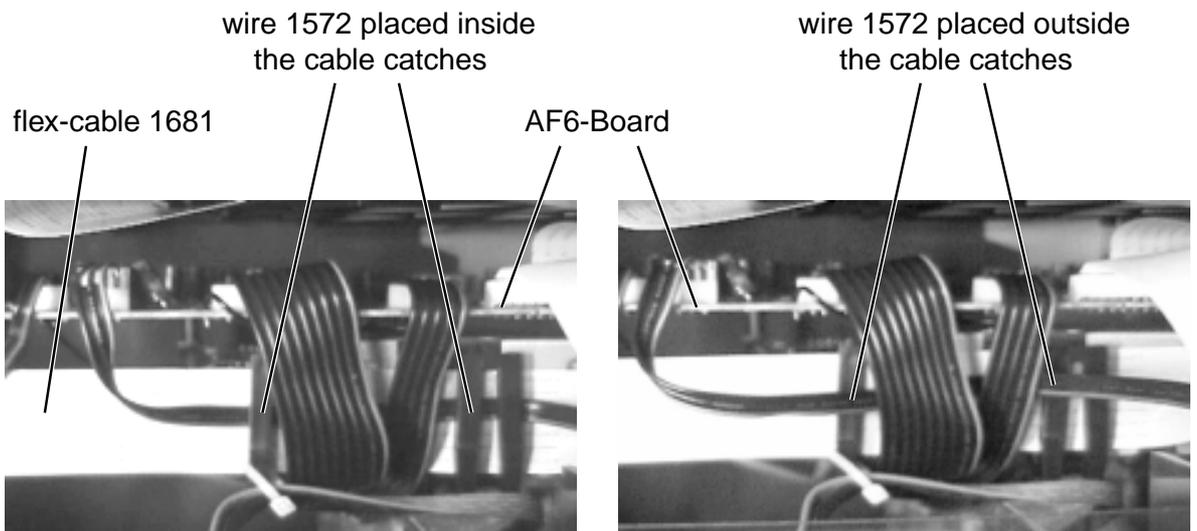


fig.1 – wire position in a problem set

fig.2 – wire position in a good set

REMARKS :

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03.01 TYPENUMBER(S): **AQ4150**

- SYMPTOM : **IRIS CODE 2 5 3 2**
Poor recordings from Tuner (FM) on normal tape (unstable output level).
- CURE :
• Change R8 from 15kΩ to 12kΩ (4822 116 51254)
• Change R14 from 2.2MΩ to 1.5MΩ (4822 050 21505)
• Change R18 from 820Ω to 390Ω (4822 050 28201)
• Change C11 from 0.22μF to 10μF (4822 124 40248)
• Change C21 from 0.22μF to 1μF (4822 124 40746)
- REMARKS : Modification has been implemented in production from week 0010 onwards.

03.02 TYPENUMBER(S): **AQ6455**

- INFORMATION : For environmental reasons the original motor "MMN-6S9RX" has been replaced by "EG-530YD-9FH".
The codenumber of the new motor reads:
9965 000 04407 Motor EG-530YD-9FH
- REMARKS : The new motor is used in production from week 0013 onwards.

03.03 TYPENUMBER(S): **AZ1116, AZ1117, AZ1118, AZ1119, AZ8084, AZ8085, AZ8086, AZ8087**

- INFORMATION : Correction to the Service Manual, Mechanical Partslist
The codenumber of the DBB Knob (item 409) is wrong.
It should read 4822 410 12536.
- REMARKS :

03.04 TYPENUMBER(S): **AZ2750, AZ2755**

- INFORMATION : The codenumber of the CD Door Switch is missing.
The switch is available with codenumber 4822 276 13963.
- REMARKS :

03.05 TYPENUMBER(S): AZ7894

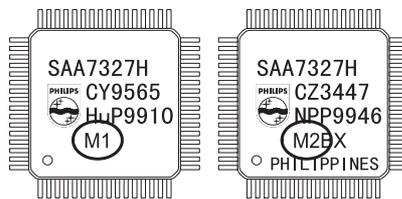
INFORMATION : Correction to the Service Manual, Mechanical Partslist
The codenumber of the CD Door Assembly is wrong.
It should read 3140 119 02730.

REMARKS :

03.06 TYPENUMBER(S): AZ9899

SYMPTOM : **IRIS CODE 2 3 5 A**
During Video CD playback the picture is frozen or skipping.

CURE : • Upgrade IC QD01 SAA7327H from version "M1" to version "M2BX"
(9352 616 71557)
• Change resistor RD39 from 22kΩ to 1kΩ (4822 051 30102)



REMARKS : Modification has been implemented in production from LOT 05 onwards.

03.07 TYPENUMBER(S): CD6660, D6560

INFORMATION : The impedance of the loudspeakers 1000 and 1001 has been changed from 4Ω to 6Ω in order to reduce click noise at low frequency.
The codenumbers of the new loudspeakers are:
1000 2422 264 00382 Woofer 6.5"
1001 2422 264 00383 Tweeter 2.5"

REMARKS : Modification has been implemented in production from week 0004 onwards.
The output power remains unchanged at AC supply mode.

03.08 TYPENUMBER(S): CDR200, CDR538, CDR560, CDR760, CDR765

INFORMATION : For price reasons the power supply service kit 3122 785 90130, mentioned in Service Newsletter AS2000.02, will not be delivered.
Please order defective parts separately.

REMARKS :

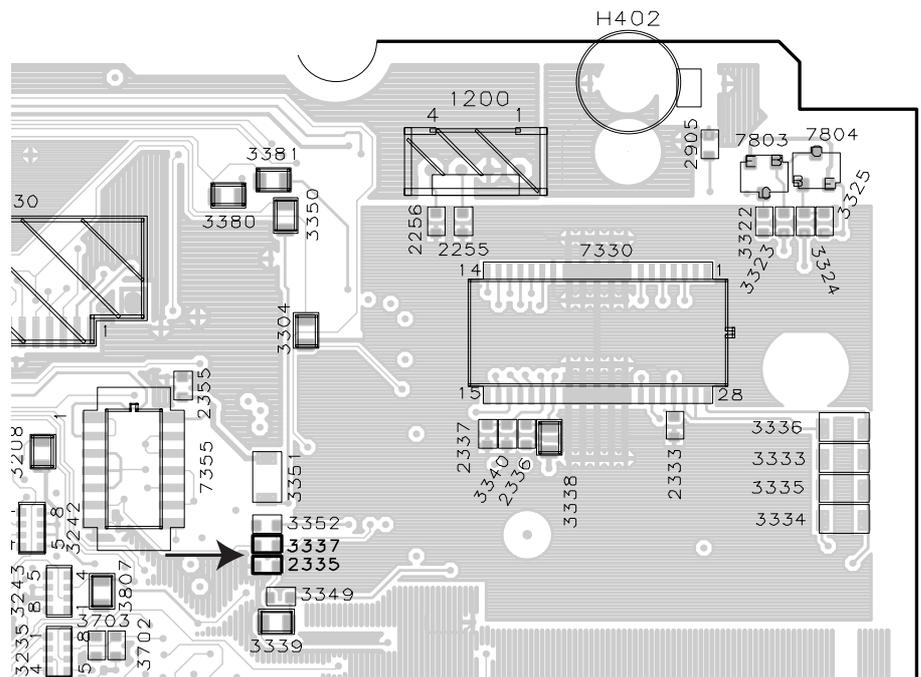
03.09 TYPENUMBER(S): CDR570, CDR770, CDR930

SYMPTOM : **IRIS CODE 1 5 6 X**
Stops during recording
Motor noise while recording CDR/W disc

CURE : Above problems can be solved by a hardware (1) and a software (2) modification. Note that both changes must be implemented at the same time.

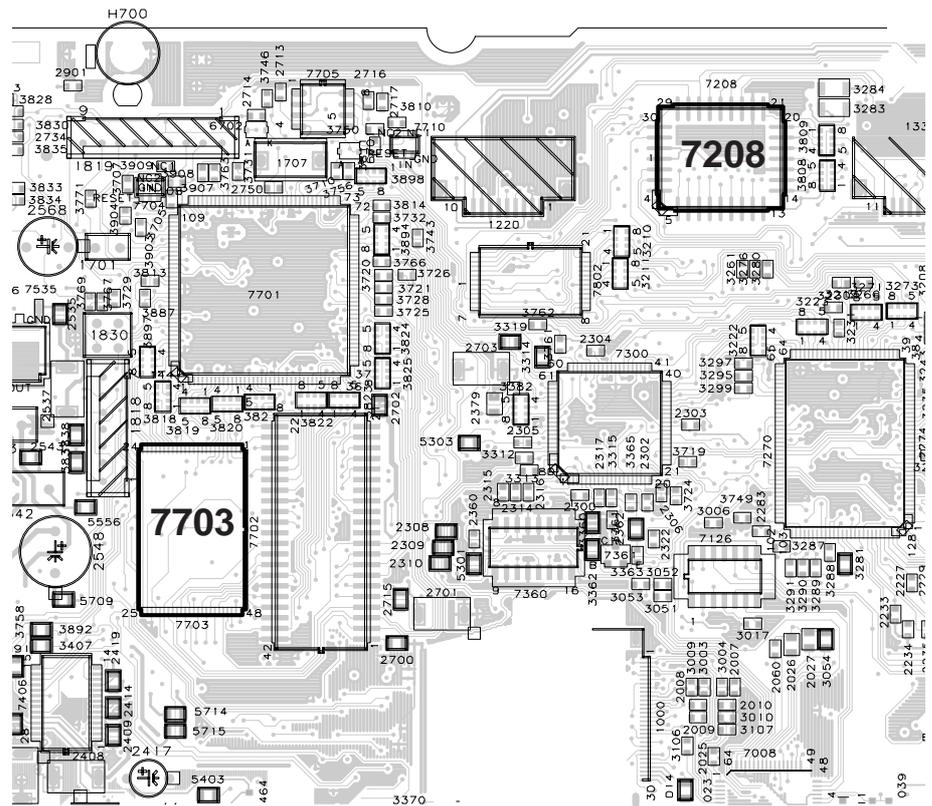
1. Hardware modification at the topside of the main board
- Change item 2335 from 10nF to 47nF (3198 017 34730)
 - Change item 3337 from 68kΩ to 56kΩ (4822 051 30563)

Portion of Main Board (top side) for location of 2335 / 3337



2. Software modification
- The software version of item 7208 at the topside (in socket) has to be changed to version 91.80 or higher.
Programmed flash memory with version 91.80 can be ordered with codenumber 3104 123 94850.
 - The software version of item 7703 at the top side (soldered) has to be changed to version R-1.34 or higher.
Programmed flash memory with version R-1.34 can be ordered with codenumber 3104 123 85760.

Portion of Main board for location of flash memories 7208 / 7703



REMARKS : The status of the main-board can be identified by the board label.
 For board label F and lower : change 2335/3337, replace 7208/7703
 For board label G : change 3337, replace 7208/7703
 For board label H : replace 7208/7703
 For board label I : no changes necessary

03.10 TYPENUMBER(S): FW350C, FW396C, FW545C, FW548C, FW555C, FW585C, FW590C

SYMPTOM : **IRIS CODE 1 6 7 X**
 Skips tracks periodically or slide motor does not start-up at all.

CURE : In regions with high environmental pollution the problem might be caused by erosion of the slide motor's collector. Erosion will permanently worsen the start-up behaviour of the slide motor, up to an extent where the slide servo does not respond fast enough to recover the track actuator from its outer position → tracks will be skipped periodically.

Defective sets should be repaired as follows:

1. Replace CD-drive VAM2201 (4822 691 10772)
2. Increase the gain of the slide servo loop in order to increase the start-up voltage at the slide motor (preventive action)
 - Change resistor 3849 to 82kΩ 5% 1/6W (4822 116 52304)
 - Change resistor 3850 to 5.6kΩ 5% 1/6W (4822 116 52289)

REMARKS :

03.11 TYPENUMBER(S): FW388V, FW399V, FW548V

INFORMATION : The Flex Foil Cable 15p, 19cm for connection between the Servo Board connector 1805 and the Connector Board connector 1806 in the 3-Video CD Module has been added to the partslist.

Pos	Codenumber	Article description
8002	4822 320 11974	Flex Foil Cable 15p, 19cm

REMARKS :

03.12 TYPENUMBER(S): FW748P, FW768P, FW798W, FW-P73, FW-P75, FW-P78

SYMPTOM : **IRIS CODE 1 5 3 2**
DPL test tone is distorted (“motor-boating” & lower frequency).

CURE : The problem is caused by insufficient capacitor value at pin 1 (noise sequencer) of the DPL IC M62460FP.
It is solved by changing capacitor 2769 to 47µF 20% 25V (4822 124 40433)

REMARKS :

03.13 TYPENUMBER(S): FW890P, FW898W

INFORMATION : Correction to Service Manual, Electrical Partslist page 11-12.
The article description of item 7930 should read:
4822 209 16166 STK407-040B

REMARKS :

03.14 TYPENUMBER(S): MC136

INFORMATION : Correction to the Service Manual, Mechanical Partslist
The codenumber of the Control Panel (item 52) is wrong.
It should read 4822 426 10655.

REMARKS :

03.15 TYPENUMBER(S): MC165, MC175

SYMPTOM : **IRIS CODE 2 6 5 A**
The CD Tray cannot be closed and the display shows “BLOCK”.

CURE : The gears of the CD loader are out of coupling because of external force or physical block of the tray during sliding out.
If it cannot be resumed, the gears must be re-aligned as shown on page 14-2 of Service Manual 4722 725 26195 resp. 4822 725 26213.

REMARKS :

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02.01 TYPENUMBER(S): **CDR200, CDR538, CDR560, CDR760, CDR765**

INFORMATION : For repair of the power supply unit a special service kit containing the most sensitive components has been created.
It can be ordered with service codenumber 3122 785 90130.

The service kit contains the following parts:
1120, 3109, 3113, 3126, 3127, 3128, 6113, 6210, 7110, 7125, 7200

REMARKS :

02.02 TYPENUMBER(S): **CDR200, CDR538, CDR560, CDR760, CDR765**

SYMPTOM : **IRIS CODE 1 1 1 1**
Power supply is defective.

CURE : It is advised to replace the following items:
• pos. 7125 (STP4 or STP3) by STP5
• pos. 6210 (PBYR745) by PBYR10100

REMARKS : For repair of the power supply unit a special service kit 3122 785 90130 is available (see 02.01 for details).

Items 6210 and 7125 can also be ordered separately:

Pos	Codenumber	Article description
6210	9340 205 70127	PBYR10100
7125	9322 126 65687	STP5

02.03 TYPENUMBER(S): CDR200, CDR538, CDR560, CDR760, CDR765

SYMPTOM : **IRIS CODE 1 5 6 6**
Short interruptions in recordings.

CURE : The problem is most probably caused by unstable operation of the power supply. It is advised to replace the following items:

- pos. 7125 (STP4 or STP3) by STP5
- pos. 6210 (PBYR745) by PBYR10100

REMARKS : For repair of the power supply unit a special service kit 3122 785 90130 is available (see 02.01 for details).

Items 6210 and 7125 can also be ordered separately:

Pos	Codenummer	Article description
6210	9340 205 70127	PBYR10100
7125	9322 126 65687	STP5

02.04 TYPENUMBER(S): CDR770

INFORMATION : The correct codenummer for the complete (and adjusted) CDR-Module reads 3104 129 52521.
For this module a central repair procedure has been initiated.

The loader assembly, pos. 81 in the partslist (9305 043 20901), cannot be used for repair because the CDL4009 needs an extra adjustment on the mainboard which cannot be carried out on first level. Please do not order these loaders, as they are reserved for the central repairshop only.

REMARKS :

02.05 TYPENUMBER(S): FW-C1, FW-C3, FW-C10, FW-C30, FW-C35

SYMPTOM : **IRIS CODE 1 6 7 X**
The cassette door will not open completely when a cassette is inside the cassette compartment.

CURE : The capstan pin (pos. 41) of the tape mechanism will not disengage fully from the cassette tape. The problem is caused by a combination of the following:

- a) Leaf springs (pos. 199) which are responsible to create a rotating movement for the cassette during "door eject" are too weak to push the cassette out of the capstan pin.
- b) Mis-matched housing parts of the cassette (see fig. 1) rub/scratch against the support ribs of the cassette door (pos. 200).
- c) Uneven cassette door support ribs create an additional friction to the rotating movement of the cassette.

The problem is resolved by:

- 1) Cutting 2 ribs (both sides) on the cassette door in order to enable a bigger rotational movement for the door during eject (see figure 2 & 3).
- 2) Increasing the spring force on the cassette by pulling the spring in the direction and up to the level shown in figure 3.

Caution: Ensure that the cassette is able to smoothly slide into the cassette door before returning the set to the customer !

Mis-match cassette tape housing (bare tape side)

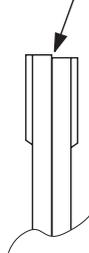


Figure 1. Portion of Problem Cassette Tape

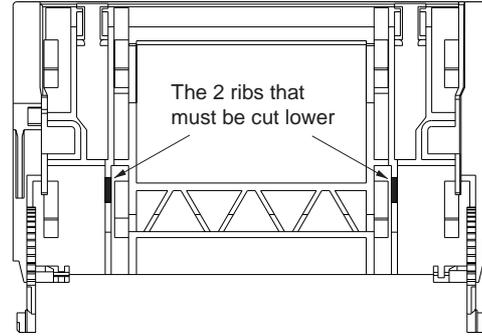


Figure 2. Location of the ribs for rework

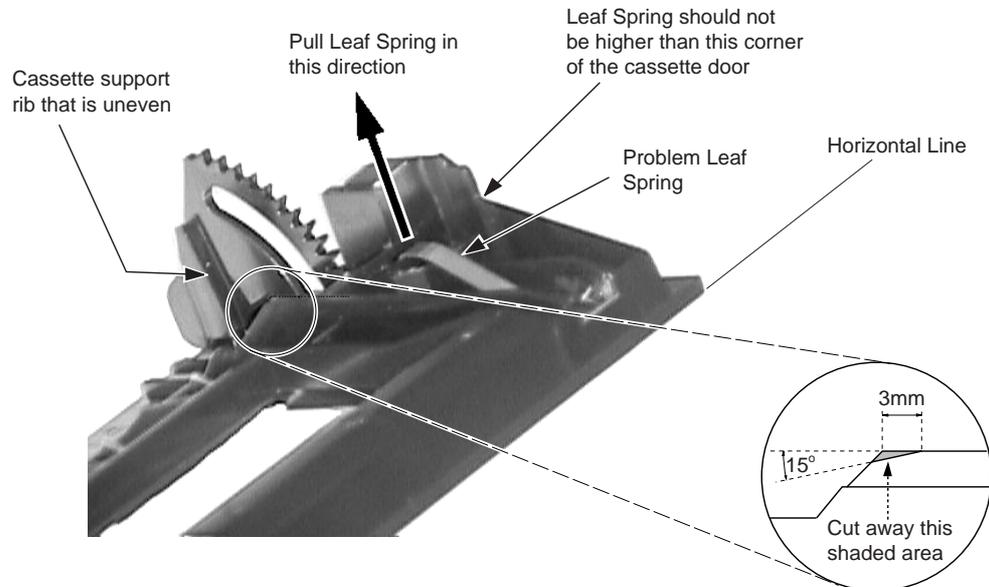


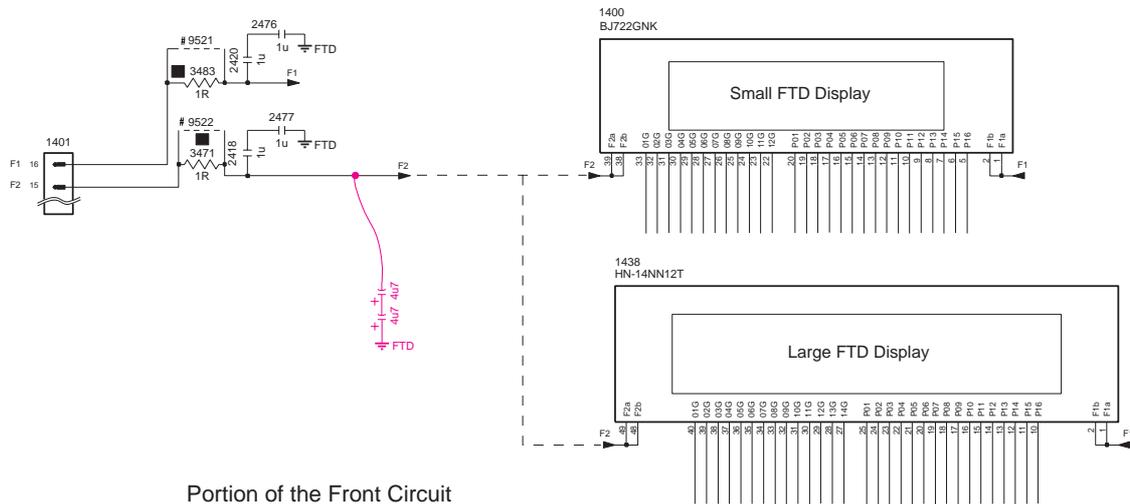
Figure 3. Portion of the Cassette door

REMARKS :

02.06 TYPENUMBER(S): FW-C1, FW-C3, FW-C10, FW-C28, FW-C30, FW-C35, FW-C38, FW-C39

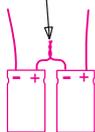
SYMPTOM : **IRIS CODE 1 1 4 X**
 A high frequency pitch (around 4kHz - 5kHz) is audible from the front display panel in quiet environment.

CURE : The source of the noise comes from the filtering SMD capacitors 2418, 2420, 2476 and 2477.
 The problem is resolved by adding 2 elcaps of 4,7 μ F (4822 124 40769) in series across the existing SMDs capacitors of the -F2 supply line.
 The elcaps can be soldered onto the copper side of the Front board as indicated in the circuit and SMD layout view below.

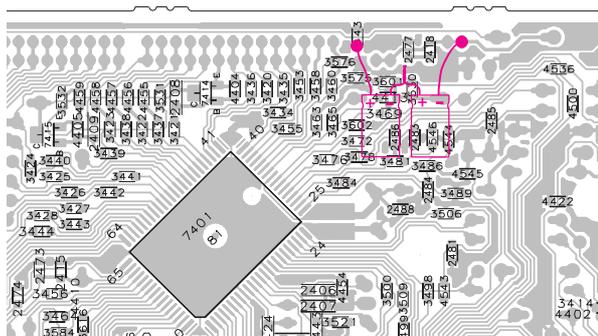


Portion of the Front Circuit

Twist & soldered together



Pre-prepared elcos in series



Portion of the Front Board (SMD side)

Rework procedure:

- 1) Dismantle the Cover CDC and Front assembly.
- 2) Prepare the 2 elcaps of 4,7 μ F (4822 124 40769) in series.
- 3) Place an insulation tape onto the Front board (area under the elcaps) to prevent the elcaps and their leads from short-circuiting to the surrounding SMD components and pads.
- 4) Position the elcaps horizontally over the insulation tape and solder them to the copper pads as shown.
 Make sure that the elcaps are close to the Front board so that there is no contact to the moving parts of the CDC module.
- 5) Re-assemble the Front assembly and Cover CDC.

REMARKS :

02.07 TYPENUMBER(S): FW-C50, FW-C55, FW-C58, FW-C70, FW-C71, FW-C72, FW-P73, FW-P-75, FW-P78

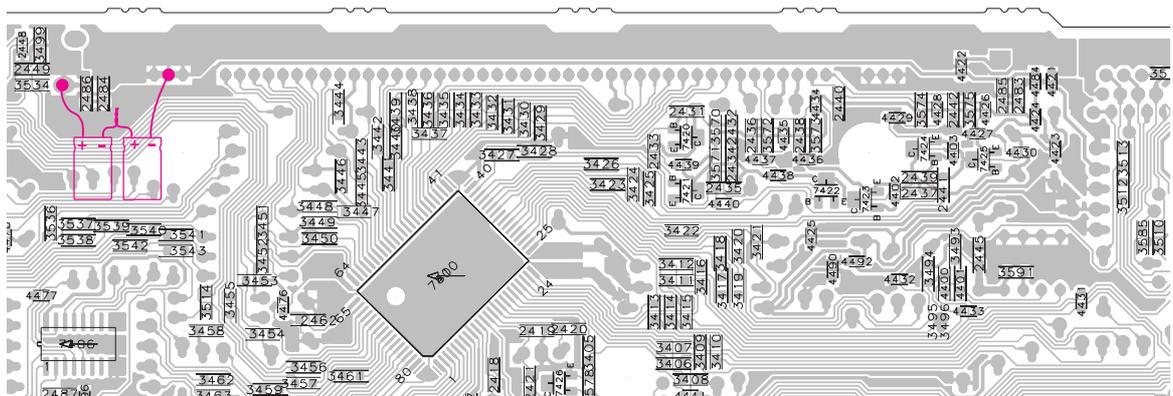
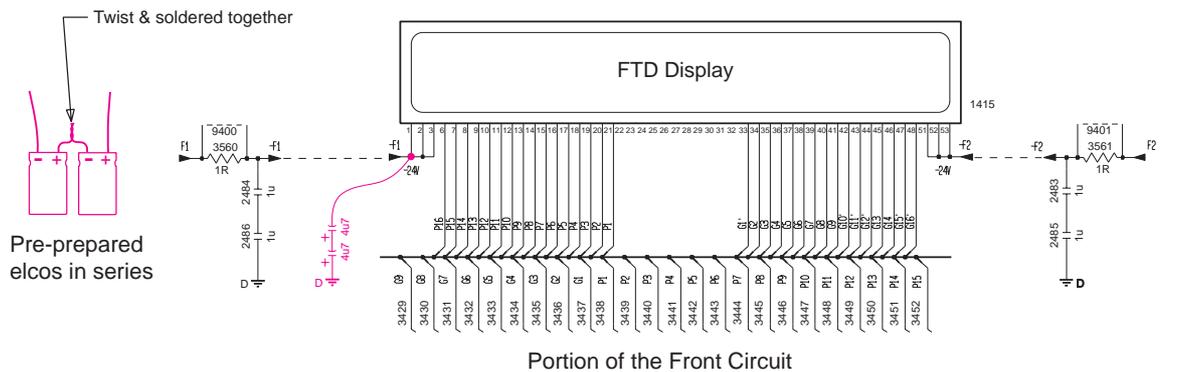
SYMPTOM : IRIS CODE 1 1 4 X

A high frequency pitch (around 4kHz - 5kHz) is audible from the front display panel in quiet environment.

CURE : The source of the noise comes from the filtering SMD capacitors 2483 - 2486 for the FTD display supply -F1 and -F2.

The problem is resolved by adding 2 elcaps of 4,7µF (4822 124 40769) in series across the existing SMDs capacitors of the -F1 supply line.

The elcaps can be soldered onto the copper side of the Front board as indicated in the circuit and SMD layout view below.



Rework procedure:

- 1) Dismantle the Rear Cover, Cover CDC and CDC Module.
- 2) Prepare the 2 elcaps of 4,7µF (4822 124 40769) in series.
- 3) Place an insulation tape onto the Front board (area under the elcaps) to prevent the elcaps and their leads from short-circuiting to the surrounding SMD components and pads.
- 4) Position the elcaps horizontally over the insulation tape and solder them to the copper pads as shown.
Make sure that the elcaps are close to the Front board so that there is no contact to the moving parts of the CDC module.
- 5) Re-assemble the CDC Module, Cover CDC and Rear Cover.

REMARKS :

02.08 TYPENUMBER(S): **FW748P, FW-P73, FW-P75**

SYMPTOM : **IRIS CODE C 5 2 X**
In DPL mode the volume increases spontaneously and turns back to normal level later (especially at the center loudspeaker).

CURE : The problem is caused by insufficient current on the VOL_CLK (DPL_V_CLK) line to drive pin 5 of the Volume IC 7712 M62429FP on the AF board.

This is solved by changing resistor 3416 on the Front Board from 2,2kΩ to 680Ω (4822 117 10361).

REMARKS :

02.09 TYPENUMBER(S): **SD100**

INFORMATION : On special request the MPEG Board has been added to the service parts list.

Pos	Codenummer	Article description
1001	3141 018 01780	MPEG Board for SD100/00M
1001	3141 018 01890	MPEG Board for SD100/01M

REMARKS :

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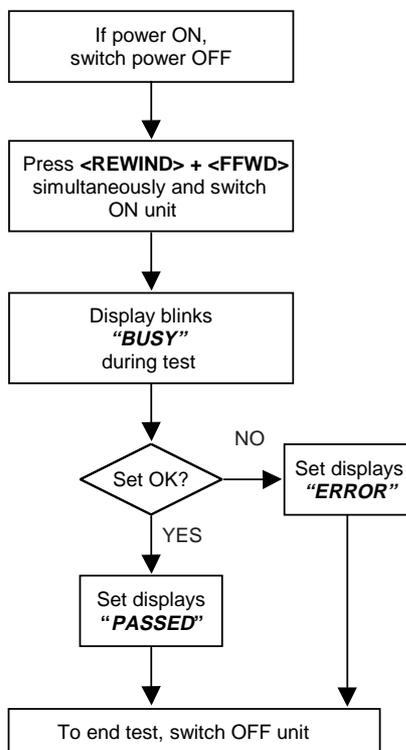
LINE OF BUSINESS AUDIO SYSTEMS

SERVICE NEWSLETTER

01.01 TYPENUMBER(S): **CDR570, CDR930, CDR770**

INFORMATION : Correction to the Service Manual, Dealer Diagnostics Figure 6.1 is wrong. The correct buttons for entering the test are "REWIND" + "FFWD" (instead of "PLAY" + "STOP").

DEALER DIAGNOSTICS
(status of player)



REMARKS :

01.02 TYPENUMBER(S): **FW320C/21, FW380C/21, FW390C/21, FW545C/21, FW548C/21, FW768P/21, FW870C/21, FW890P/21, FW898W/21**

INFORMATION : The following part has been added to the service parts list:

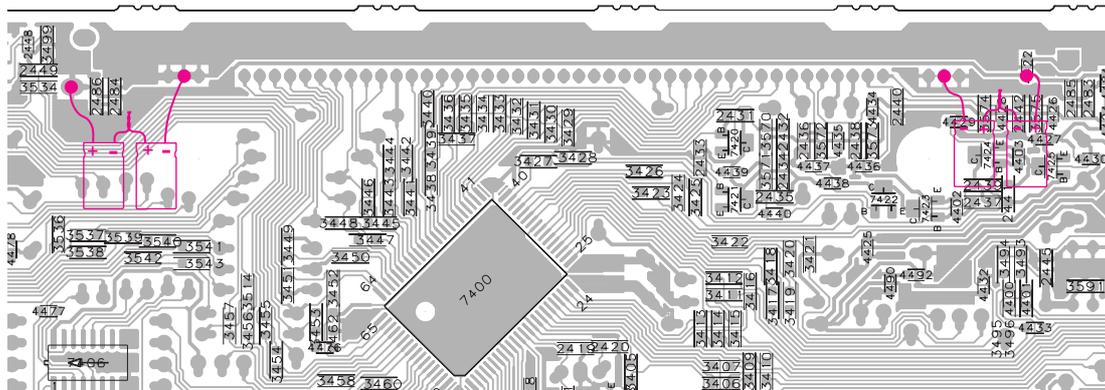
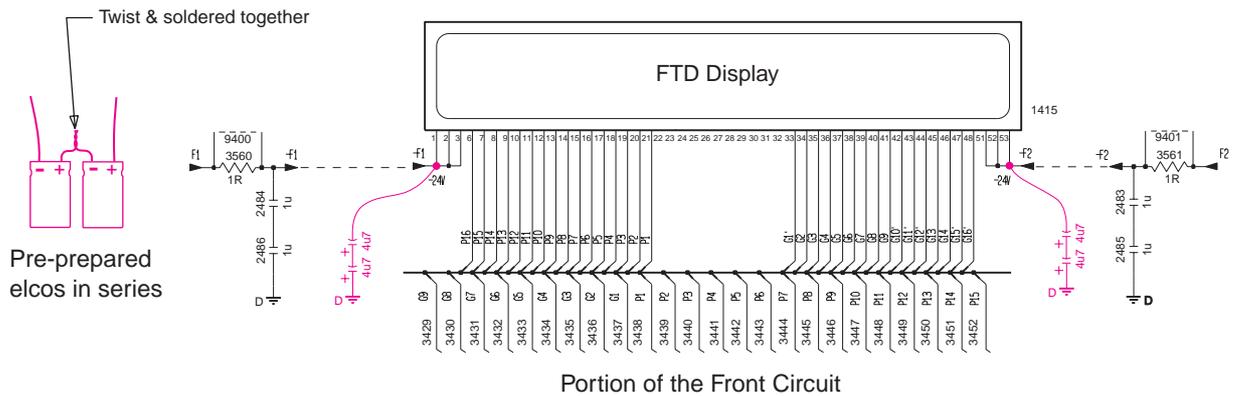
Pos	Service code	Article decription
386	4822 263 21092	ADAPTOR PLUG 6A 250V

REMARKS :

01.03 TYPENUMBER(S): FW540C, FW545C, FW548C, FW548V, FW555C, FW585C, FW590C, FW595C, FW748P, FW768P, FW798W

SYMPTOM : **IRIS CODE 1 1 4 X**
 Digital hum (whistling tone) is audible from the display in quiet environment.

CURE : The source of the noise comes from the filtering SMD capacitors 2483 - 2486 for the FTD display supply -F1 and -F2. The problem is resolved by adding 2 x 2 elcaps of 4,7 μ F (4822 124 40769) in series across the existing SMDs capacitors. The capacitors can be soldered onto the copper side of the Front board as indicated in the circuit and SMD layout view below.



Rework procedure:

- 1) Dismantle the Rear Cover, Cover CDC & CDC Module.
- 2) Prepare 2 sets of 2 x 4,7 μ F elcaps (4822 124 40769) in series.
- 3) Place an insulation tape onto the Front board (area under the elcaps) to prevent the elcaps and their leads from short-circuiting to the surrounding SMD components and pads.
- 4) Position the elcaps horizontally over the insulation tape and solder them to the copper pads as shown.
 Make sure that the elcaps are close to the Front board so that there is no contact to the moving parts of the CDC module.
- 5) Re-assemble the CDC Module, Cover CDC and Rear Cover.

REMARKS :

01.04 TYPENUMBER(S): FW548V/21K, FW548V/21M

INFORMATION : The following part has been added to the service parts list:

Pos	Service code	Article description
1106	3139 118 77600	MODULE MPEG99 ECO

REMARKS :

01.05 TYPENUMBER(S): FW680V

INFORMATION : Correction to Service Manual, Electrical partslist page 6-6

Codenummer for the microprocessor pos. 7401 should read:
4822 209 13243 microprocessor not for /22
4822 209 13242 micropocessor only for /22

REMARKS :

01.06 TYPENUMBER(S): FW830C, FW840C, FW870C, FW878C, FW890P, FW898W

INFORMATION : The following resistor has been changed on the front board to improve the data reliability to the EEPROM:
3596 4822 117 12521 68Ω 1% 0,1W

REMARKS :

01.07 TYPENUMBER(S): FW830C, FW840C, FW870C, FW878C, FW890P, FW898W

SYMPTOM : **IRIS CODE C 5 1 4**
CD does not play and the display shows "DISC NOT FINALIZED".

CURE : The problem happens mainly with Brazil's Millennium disc and is resolved by upgrading the software of the Front microprocessor IC (pos. 7413) to version 20.
The service code for the new IC reads 9965 000 02901.

REMARKS :

01.08 TYPENUMBER(S): FW830C, FW840C, FW870C, FW878C, FW890P, FW898W

INFORMATION : Correction of Service Newsletter, item AS99.10.02

The correct buttons for entering the Service Test Program are "AUX" + "PRESET UP" instead of "AUX" + "PLAY".

REMARKS :