

# Training the Trainers

NATURALLY, WE ARE OVERJOYED WITH THE RECENT HIGH SESAM SCORES. THESE HAVE LED US TO THE CONCLUSION OUR TECHNICIANS ARE TRAINED TO MEET HIGH STANDARDS, ALLOWING THEM TO OFFER SUCH EXCELLENT SERVICE. "THE TRAINERS THEMSELVES ARE TAUGHT VERY WELL AND THEREFORE, IN TURN, OFFER BETTER TRAINING TO THE TECHNICIANS," EXPLAINS LEO VAN DER NIET, MANAGER SERVICE TRAINING. "WE WANT TO MAKE SURE TECHNICIANS FEEL COMFORTABLE ABOUT THE PRODUCTS. IN THE PAST, TRAINING SESSIONS WERE PROVIDED BY THE DEVELOPMENT CENTRES OF THE BGS (BUSINESS GROUPS) AND WERE MAINLY FOCUSED ON 'HOW DOES IT WORK'. PARTICIPATING TRAINERS HAD TO DEVELOP THEIR OWN TRAINING PROGRAMMES FROM THE HAND-OUTS FOR THEIR NATIONAL ROLL-OUT TOWARDS THE NETWORK. DUE TO THE HUGE DEMAND AND ALSO TO OPERATE MORE EFFICIENTLY, PHILIPS DECIDED TO STRUCTURE THE SERVICE TRAINING IN A UNIFORM MANNER AND PROVIDE IT AS A STANDARD. FOR THIS PURPOSE EUROSERVICE DESIGNED A STANDARD TRAINING CREATION PROGRAM WHICH FOCUSES ON 'HOW TO DIAGNOSE/REPAIR'. WITH THIS THE TRAINER CAN ORGANISE A LOCAL ROLL-OUT WITH IN A MINIMUM PREPARATION TIME."

1 A course introduction with an overview of the contents, determining the purpose, ascertaining the participants level of knowledge and presenting a full program overview including the household rules.

2 A commercial part explains the specifics of the products along with information on installation and usage. Products in the same range are also explained to show how the product family is interrelated.

'Proud to be at your service'

Service training programmes are divided into 4 parts:

3 The technical part explains all mechanical and electrical schematics in detail, as well as all service menus and diagnostic possibilities.

4 In the Service part the participants bring the gained know-how into practice by operating the apparatus, do some disassembling and assembling exercises, make diagnoses using the various menus and error messages and repairing the defective examples.

"All NSO trainers receive a complete trainer kit including a CD-ROM and Instructor Manual," explains Leo van der Niet. "These include sample programmes, exercises and information about preparing errors for solving during training sessions. With this kit all trainers have so powerful tools in hand to execute the local service training to the service network. After every TTS (Train the Trainer Session) the trainers provide an evaluation. The evaluation forms contain 8 questions and an extra section for additional comments. I personally keep track of all the evaluation form outcomes for each country. I'm happy to state an average score of 8+."

## Planning the service training

Every 3 months, a team from BG (Business Group) development, Euro-service Eindhoven and Competence Centre Cologne will put together the training programmes for a period of 12 to 15 months ahead. TTS sessions will be scheduled for six months ahead so that the countries can schedule local roll-out according this TTS schedule. For the Year 2002 this planning has been finalised. Next the team will take a closer look at which products require training support, focusing on new products in particular. Service managers in the various countries can plan within their own network if they wish and make updates of their own planning chart. On the basis of these planned trainings per product, the schedule per country will be made.

Obviously, the training schedule has to coincide with the product release program, which varies per country. Therefore, each country is responsible for preparing its own network training rollout. Some countries employ full-time trainers. In others regions, training is combined with other job responsibilities. Though each country is responsible for its own rollout, Philips is quick to respond and help out where assistance is required! ■



Helping fix it across Europe with the SACD repair kit.

As ever, we've included a variety of interesting and practical repair tips. Please share your own findings with your colleagues across Europe! Simply send your repair tips to the editorial board address as printed in this publication. Furthermore, if there's any subject you'd particularly like to know more about, please tell us!

### TELEVISION

#### MG-family

Chassis: MG2.1E; MG3.1E; MG7.1E  
Reference number: HE-01/0023

#### Symptom Cure information

Fault area: A = Power-supply faults  
Symptom: Hum audible coming from the mains-harmonic coil.  
Cure: For MG2.1E and MG7.1E change position 5066 on the Mains Harmonic panel into 2422 549 44873. For MG3.1E change position 5066 on the Mains Harmonic panel into 2422 549 44872.  
Remarks: For MG2.1E and MG7.1E introduced in production from week 115 onwards. For MG3.1E, MG3.1A and MG4.1E introduced in production from week 118 onwards.  
Iris code: 1 144 PSU I A

#### A10E, A10E-DVD

Chassis: A10E, A10E-DVD  
Reference number: ST-01/0023

#### Symptom Cure information

Fault area: C = Picture faults  
Symptom: Black and red lines appear at approximately 10cm from the top of the screen.  
Cure: Check and replace position 3057 on the SSB [C] by 3k9 (4822 051 10392).  
Remarks: Introduction in production in week 0126.  
Iris code: 1 386 VPD R A

### AUDIO

#### AZ2760, AZ2765, AZ2785

Type numbers: AZ2760, AZ2765, AZ2785  
Reference number: SNL2001.03.06  
Information: The procedure how to change the tuning grid is not mentioned in the Instruction Manual. Please refer to below description:  
- Select Tuner mode and switch off the set.  
- To select 9kHz: Hold BAND and SEARCH << depressed while switching Power On.  
- To select 10kHz: Hold BAND and SEARCH >> depressed while switching Power On.  
Note: This procedure will clear all pre-set stations.  
Remarks: From week 0122 onwards, an addendum sheet has been added to the sets.  
Iris code: 1 211 TUN 14 U

#### ECO5, ECO6 Tuner Board

Type numbers: ECO5, ECO6 Tuner Board  
Reference numbers: SNL2001.03.11  
Symptom: Auto Search Mode does not function. Tuner does not stop at any station. When the tuner is tuned manually to a strong transmitter it does not switch to STEREO (DC voltage on pin 24 of the Radio IC7101 is 4.8V instead of 2V).  
Cure: Exchange capacitor 2141 100nF 10% 50V (4822 126 13838).  
Iris code: 1 262 TUN S I

Type numbers: AX2000, AX2001, AX2002, AX2003, AX2011, AX5000, AX5001, AX5002, AX5003, AX5004, AX5006, AX5011, AX5012, AX5013, AX5014, AX5015, AX5016, AX5017, AX5018, AX5019  
Reference numbers: SNL2001.03.01  
Information: Above mentioned type numbers are produced with different CD-drives: DA23LPH and DA23LNPH. (black lens holder) and DA23LNPH (white lens holder). DA23LPH is no longer available as service spare part and has been Standardised to the newer DA23LNPH - 3103 309 05320.

#### Attention when replacing DA23LPH by DA23LNPH!

The new drive requires different software parameters and will not work properly without the following hardware modification:

1. Remove pull-down resistor 3419L
2. Add pull-up resistor 3418LN

Iris code: 1 61X FPK A I

#### A10E

Chassis: A10E  
Reference number: ST-01/0037

#### Symptom Cure information

Fault area: D = Audio faults (IF + LF)  
Symptom: Sound distortion from DVD player connected to external.  
Cure: Check and replace position 7064 on the SSB [C] by:  
A10ED1-1.2 (9965 000 10425)  
A10EP1-1.6 (3111 250 54501)  
A10ET1-1.6 (3111 250 54511)  
Iris code: 1 553 APD R A

#### L9.1E

Chassis: L9.1E  
Type number: Check with 'remarks'.  
Reference number: ST-01/0025

#### Symptom Cure information

Fault area: E = Deflection or Sync. faults.  
Symptom: Set is hiccupping.  
Cure: Check and replace if needed position 7460 on the mono carrier by BU1508DX (4822 130 63569) and position 3462 by 6k8 (4822 117 12514).  
Remarks: 25PT5305/00 and -/58 from week 0047  
25PT5305/01 from week 0046 and 0047  
63TA5215/03 from week 0047  
63TA5215/11 and -/18 from week 0046 and 0047.  
Iris code: 1 310 DFL R A

Your Helpful Page



AT YOUR SERVICE

# @ Your Service *www.atyourservice.ce.philips.com*

AFTER SEVERAL MONTHS OF PLANNING AND IN-DEPTH ANALYSIS, PHILIPS SERVICE WILL ROLL OUT AN EFFICIENT EUROPEAN WEBSITE IN THE SECOND HALF OF THE YEAR 2000. THIS WEBSITE WILL COMBINE AN ON-LINE CATALOGUE WITH INTERACTIVE SPARES ORDERING AND IMMEDIATE CLAIMS SUBMISSION FOR REPAIRS DONE UNDER GUARANTEE. THE MAIN GOAL OF THIS NEW WEBSITE, AIMED AT SERVICE REPAIR SHOPS, IS TO INCREASE THE QUALITY OF SERVICING, ULTIMATELY PROVIDING BENEFITS FOR PHILIPS SERVICE PARTNERS AND CONSUMERS ALIKE.

## The website will deliver four key services:

- An on-line spares catalogue with multi-search capabilities
- Remote order entry for account customers
- Up-to-date repair information - available at the point of repair
- Immediate claim data transfer

The scope of Internet solutions will be widened over time and may ultimately be extended to include full technical and training support, service scenarios and software downloads. The new site will be available in eleven different languages and will initially cover sixteen European countries. This entails more than simply providing language versions for different countries. Each country's requirements will be assessed and the services will be tailored to meet these. This will enable us to continually improve the site's value and functionality, and offer information on local training and local news, for example.

## Check it out!

At this very moment we are offering you the chance to already take a look at our home page with the possibility to register yourself. Your registration enables you to receive up-to-date information about:

- the 'At Your Service' website will be available for your country
- regular updates on the development status of the site

Furthermore we would like you to assist us by indicating your priorities in this early stage, in order to provide you with the best possible services.

If you want to find out more, register now at [www.atyourservice.ce.philips.com](http://www.atyourservice.ce.philips.com)



See you at [www.atyourservice.ce.philips.com](http://www.atyourservice.ce.philips.com)!

# Your Helpful Page

In this section of the Service Magazine, we would like to present you with some practical repair tips. If you have any suggestions, which you want to share with your colleagues across Europe, let us know!

## MG2.1E CTV Chassis

Chassis / Type: MG2.1E CTV Chassis.  
 Symptom: Set switches off by itself and error 74 is present in the error buffer.  
 Cure: Check and replace position 6350 on the Small Signal Panel by A 27V zenerdiode, (4822 130 11414).  
 Remarks: This problem only occurs with SSP's produced between week 9929 and week 9936.

## L6.2 CTV Chassis

Chassis / Type: L6.2 CTV Chassis.  
 Information: During production, item 7504 (STP4NA40FI) on the mono carrier has been changed into the STP5NB60FP (9322 136 65687).  
 If you change the STP4NA40FI into the STP5NB60FP during repair the following items also have to be changed / removed. Change pos.3518 from 120kΩ into 100kΩ (4822 116 52234).  
 Change pos.6510 from BZX79-C12 into BZX79-C15 (4822 130 34281).  
 Remove pos. 2513.  
 Remarks: Introduced in production from week 9923 onwards.

## MG3.1E CTV Chassis

Chassis / Type: MG3.1E CTV Chassis.  
 Symptom: Pop can be heard from the surround speakers when the wireless transmitter is muted.  
 Cure: Add the following components:  
 Resistor 5.6kΩ between C2173 and C2142 (+4V).  
 Capacitor 22nF between C2173 and R3142.

## MG2.1E CTV Chassis

Chassis / Type: MG2.1E CTV Chassis  
 Symptom: Problems with search and autotuning or blue mute generated on scart inputs.  
 Cure: When new software (MG21E11.3\_01611, MG21E11.4\_01861 and MG21E11.5\_01941) is used it does not work. Check if a SECAM correction panel is present on position 1101 of the SSP. If no SECAM correction is required remove this panel. If SECAM correction is still required, replace this panel as follows:  
 1. Disconnect the wire on pin 4 of the SECAM correction panel (bottom).  
 2. Remove the other 2 wires.  
 3. Replace the SECAM correction panel with the new one (3104 328 03841).  
 4. Reconnect the wire on pin 4 of the SECAM correction panel (bottom).  
 5. Place the SSP with the scarts and tuner towards you.  
 6. Solder the first wire on pin 59 of the TDA 9320H (position 7501).  
 7. Solder the second wire on pin 52 of the TDA9320H (position 7501).  
 8. Replace the old software (position 7002) with the new software (4822 900 11275).  
 Remark: Take care that no short circuits are made during soldering.  
 To check the correct working of the SECAM correction panel, apply a SECAM signal on scart and measure on the second wire. During the sand castle pulse, a dip has to occur.

## MD1.2E CTV Chassis, 16:9 Dolby versions only

Chassis / Type: MD1.2E CTV Chassis, 16:9 Dolby versions only.  
 Symptom: Set switches to Stand-By.  
 Cure: Check and replace (if necessary) the following components:

| Item | Module    | Old component    | New component | Service code   |
|------|-----------|------------------|---------------|----------------|
| 7353 | Audio [P] | MSP3410B         | MSP3410D      | 4822 209 16803 |
| 7600 | SSP [B]   | uP (old version) | uP M12DO1-1.6 | 4822 900 11241 |

## Add the following components:

| Location       | Module    | New component | Service code   |
|----------------|-----------|---------------|----------------|
| paral. to 2367 | Audio [P] | 100uF cap.    | 4822 124 40255 |
| paral. to 2368 | Audio [P] | 100uF cap.    | 4822 124 40255 |

## 02.03 TYPE NUMBER(S): CDR200, CDR538, CDR560, CDR760, CDR765

Symptom: 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        | Code number    | Article description |
|------------|----------------|---------------------|
| 6210       | 9340 205 70127 | PBYR10100           |
| 7125       | 9322 126 65687 | STP5                |
| IRIS code: | 1566           |                     |

## 02.08 TYPE NUMBER(S): FW748P, FW-P73, FW-P75

Symptom: In DPL mode the volume increases spontaneously and returns to normal level later (especially at the centre 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).  
 IRIS code: C52X



## Coming Soon: *ComPair Version 1.4 Update!*

IN THE LAST ISSUE OF AT YOUR SERVICE, WE SPOKE OF THE COMPAIR FAULT FINDING TOOL, WHICH ENABLES FASTER, MORE EFFICIENT REPAIRS THROUGH AUTOMATED FAULT FINDING. FURTHERMORE, THIS WINDOWS-BASED PROGRAM AND INTERFACE BOX SPEED UP THE LEARNING CURVE AND KNOWLEDGE TRANSFER ASSOCIATED WITH NEW PRODUCTS. COMPAIR IS AIMED AT YOU, THE EXPERTS, AND HAS BEEN CREATED TO ACHIEVE HIGHER REPAIR EFFICIENCY AND COPE WITH INCREASINGLY COMPLEX REPAIRS. HOWEVER, SMALLER REPAIR OUTLETS MAY ALSO BENEFIT FROM THIS SOLUTION, WHICH IS AVAILABLE IN ENGLISH, FRENCH, SPANISH, ITALIAN AND GERMAN.

This month, the updated Compair Version 1.4 will become available. This can be ordered using code 4822 727 21637. If you do not yet have ComPair, you will first need to install the starter package (version 1.2), which includes faultfinding databases for TV: MD2.2x, MG2.1E, MG3.1E, L9.1E, for VCR: Apollo 20, for TVCR Delta 99, for DVD the digital board and can be ordered under number 4822 727 21634. After installation of the starter package new faultfinding databases and updates of the ComPair software can be loaded. Presently, TV product groups L9/MG2.1 and MG3.1 are supported.

### PLEASE NOTE:

To work with new version 1.4, you must have version 1.2 already installed. If you do NOT have this version installed, it can be ordered under number 4822 727 21634.

In addition to the products above, products supported previously in version V1.4:

FTV1.9EE  
EM2E  
A10E (only GB)  
L9.3E  
3rd Generation CDR (only GB)

Now also supported, in addition to the products above:

FTV1.9DE  
MG1.1E  
L9.2E  
DVD Mono board models  
Apollo 20 VCR  
Delta 99 TVCR

Note: the last 4 types are introduced with version V1.3.



## SearchMan: *Frequently Asked Questions*

Nr: Question / Problem: Answer:

### 1.1 Error 31037 after calling Settings, Installation, Audio or Video

Run Patch1.exe in in directory 31037 on the Upgrade 1.1 floppy. See also the file Readme.txt in this directory.

### 1.2 Help file cannot be found.

When prompted specify the location of the help file. It can be found in the ComPair application directory (default "C:" in Windows 3.x). The filename of the help file is COMPAIR.HLP.

### 1.4 An error message appears when a (red) link to SearchMan (schematic, PCB or testpoint overview) clicked:

Error [2.1], An error occurred while trying to run SearchMan, [53] File not found.

There are two possible causes:

1. SearchMan has not been (properly) installed. (Re-) install SearchMan.
2. The path where SearchMan has been installed is stored in "long filename format" in the WIN.INI file. To check this, open the WIN.INI file which can be found in the Windows directory (usually this is "C:\Windows"). Look for the following text:

[Philips]

SearchManPath=C:\program files\searchmn

Language=U.S. English

ComPairPath=C:\PROGRA-1\COMPAIR

ComPairLang=U.S. English



In some cases the text may be slightly different. Change the value for SearchManPath from "C:\Program Files\Searchmn" to "C:\Progra-1\Searchmn".

# Your Helpful Page

In this section of the Service Magazine, we will present you with some new practical repair tips. Don't forget: if you have any suggestions you want to share with your pan-European colleagues, let us know!

### MG2.1E CTV Chassis

Chassis / Type: MG2.1E CTV Chassis.  
Symptom: Buzzing noise can be heard from the supply, depending on picture content.  
Cure: Check position C2522 on the large signal panel. If a resistor is present on this position, replace it with a capacitor of 1nF 100V (5322 122 32331).  
Remarks: This problem only occurs with sets produced in week 9940.

Symptom: After some minutes the set goes into standby mode.  
Cure: Replace the zenerdiode BZX79-C22 pos.6541.

### AZ1005

Chassis / Type: AZ1005  
Symptom: CD or Tuner doesn't function. Sometimes, there is only one channel available.  
Cure: Replace the Tuner tape Switch 4822 277 11885.

### VR900 from Apollo range

Chassis / Type: VR900 from Apollo range.  
Symptom: Initialisation is more than 15 sec. Or when you use rental tapes the initialisation occurs in an endless loop.  
Cure: To overcome this please upgrade the main control software pos. 7451 on the mother board, to a new version ACOP6-U.0023. With 12NC 4822 209 17511.

### VR747

Chassis / Type: VR747  
Symptom: The function reverse playback in not working.  
Cure: Replace the trading motor.

### CDR general CDL3610

Chassis / Type: CDR general CDL3610  
Symptom: What is the code number of the clasper of the CDR loader CDL361/01.  
Cure: The 12NC is 9352 622 02112.

### DVD general

Chassis / Type: DVD general  
Symptom: Some titles are not playable.  
Cure: New software is available.  
Remarks: First generation disc V2.18 order nr. 4822 397 10145  
2A generation disc V9.23 order nr. 4822 785 90180  
2B generation disc V6.2 order nr. 4822 785 90190

### TVCR

Chassis / Type: TVCR  
Symptom: The deflection IC pos. 7510 which is normally delivered with the repair kit 4822 209 16781. Can be also delivered separate.  
Cure: The 12NC the IC (TDA8356/N6) is 9352 622 02112.

### TVCR DELTA 99

Chassis / Type: TVCR DELTA 99  
Symptom: The code number of capacitor 2970 on the RUBAD is 4822 124 40184.

### 25PV720/02

Chassis / Type: 25PV720/02  
Symptom: There is no Audio on both channels. The voltage on pin 9 and 10 of IC 7450 are high. The driven signals ASTB and AMT are correct.  
Cure: Look at the voltage level and shape of "Mainsoff" from the power supply on the TV board. If this is not correct the capacitor C2383 is interrupted.  
Remarks: The Circuit diagram has been changed from week 9947 onwards.

### FW748P

Chassis / Type: FW748P  
Symptom: In DPL mode the volume increases spontaneously and returns to normal level later (especially at the centre 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).

### VR800, VR805, VR850 Apollo 20

Chassis / Type: VR800, VR805, VR850 Apollo 20  
Symptom: Modulator switch is on every 10 min. At that moment you can see a kind of disturbance on the screen.  
Cure: Change IC pos. 7451 for the new software version ACOP5-U.0036 with 12NC number 4822 209 16854.

### A8.0E

Chassis / Type: A8.0E  
Symptom: Set does not start up at first switch on.  
Cure: 1) Change C2814 on the mono carrier (4822 126 13473, SMD 0805 220nF/50V) to 4822 124 42234, Elco 100uF/6.3V (connect '+' to IC7150 pin 39).  
2) If method 1) does not work, replace BIMOS IC7000 (see Product Survey for code numbers).

### 20PV220/01 Combi TV

Chassis / Type: 20PV220/01 Combi TV

ORDER NOW THE NEW SYMPTOM CURE CD-ROM / ORDER CODE 9965 000 04386



# Designing for the Future

LIGHTS, CAMERA, ACTION! PHILIPS TOOK CENTRE STAGE BEING AWARDED 20 GOOD INDUSTRIAL DESIGN AWARDS 2001.

CREATED BY THE ASSOCIATION DESIGNLINK OF THE NETHERLANDS, THE OBJECTIVES THE AWARD PROGRAM ARE TO MAKE VISIBLE, IMPROVE AND ENLARGE THE CONTRIBUTION OF INDUSTRIAL DESIGN IN THE DEVELOPMENT OF PRODUCTS AND SERVICES. THE AWARDS PRIMARILY TARGET ON TRADE AND INDUSTRY, INDUSTRIAL DESIGNERS AND THE MEDIA, AS WELL AS THE GENERAL PUBLIC.

Eligibility guidelines for the award require that products must comply with a series of professional design standards, including technical functionality, safety, ergonomics, originality, design and environmental soundness. A jury of 19 prominent professionals led by an independent chairman grants the recognition. Each category has its own professional jury and every product is collectively evaluated.



## Products receiving the award include the following.

- Philips 32" Plasma Flat Television
- Philips eXpanium eXp 401
- Philips SBC SC150 'Sweet Dreams' Cradle Player
- Philips eXpanium AZ 1155
- Philips Wireless FM Stereo Headphone SBC HC 8650
- Philips eXpanium AZ 4000
- Philips ProntoPro
- Philips SBC VL 1200 Wireless TV Link

Good Industrial Design Award



The eXpanium AZ 4000 MP3-CD Soundmachine was nominated for a Special Award for Excellence and received unusual praise. The Soundmachine is a combination of the CD-player and MP3-player. It can store 15 hours of music on one CD and is compatible with the latest 8 to 12 cm CDs. The trendy design of this product was also noted.

Philips' designers are brought together in Philips Design, a global organisation of some 500 professionals representing more than 30 countries. This team provides a full range of design services to a highly diverse portfolio of internal and external consumers. The mission of the Philips Design professionals is to design solutions that humanise technology. The department's expertise is kept up-to-the-minute through research exploring the latest technology. Congratulations to all! ■

Your Helpful Page

As ever, we've included a variety of interesting and practical repair tips. Please share your own findings with your colleagues across Europe! Simply send your repair tips to the editorial board address as printed in this publication. Furthermore, if there's any subject you'd particularly like to know more about, please tell us!

Television MG2.1E, MG3.1E, MG4.1E, MG5.1E, MG7.1E  
Chassis: MG2.1E, MG3.1E, MG4.1E, MG5.1E, MG7.1E  
Reference number: HE-01/0024

### Symptom Cure information:

Fault area: B = Function or Programming or Tuning faults.  
Symptom: Set in protection (error 5) after replacement of the tuner.  
Cure: For service the following tuners are replaced:

| Original     | Code           | Replacement  | Code           |
|--------------|----------------|--------------|----------------|
| UV1316/A I-2 | 4822 210 10841 | UV1316/A I-3 | 3139 147 16611 |
| UV1316/A P-2 | 3139 147 14121 | UV1316/A P-2 | 3139 147 16621 |

Important: When the old tuner is replaced by the new one position 3103 and 3104 (location: SDA and SCL- connection line to the tuner) on the SSP must also be replaced by a jumper (4822 051 20008).

Iris code: F 310 TUN Y A

Television MG2.1E, MG3.1E, MG4.1E, MG7.1E  
Chassis: MG2.1E, MG3.1E, MG4.1E, MG7.1E  
Reference number: HE-01/0023

### Symptom Cure information:

Fault area: A = Power supply faults  
Symptom: Hum audible from the mains harmonic coil.  
Cure: For MG2.1E and MG7.1E change position 5066 on the Mains Harmonic panel into 2422 549 44873. For MG3.1E and MG4.1E change position 5066 on the Mains Harmonic panel into 2422 549 44872.

Remarks: or MG2.1E and MG7.1E introduced in production from week 115 onwards.

For MG3.1E and MG4.1E introduced in production from week 118 onwards.

Iris code: 1 144 PSU J A

### AE2380

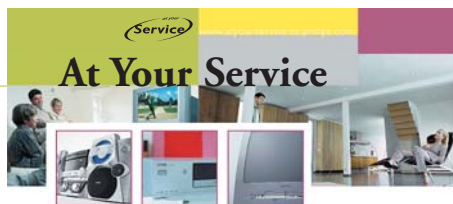
Type number(s): AE2380  
Symptom: Reception is poor in all bands.  
Cure: The problem might be caused by defective capacitors C37 and C38. Exchange capacitors C37 and C38, 100nF (4822 126 13838).  
Remarks: Improved capacitors are used in production from week 0118 onwards.  
IRIS Code: 1 25X IFC N A.

### AX2000, AX2001, AX2002, AX2003, AX2011, AX5000-AX5004, AX5006, AX5011-AX5018, AX5021-AX5027

Type number(s): AX2000, AX2001, AX2002, AX2003, AX2011, AX5000-AX5004, AX5006, AX5011-AX5018, AX5021-AX5027  
Symptom: Fuse 1251 is blown.  
Cure: The problem might be caused by an unstable supply regulation circuit. Solution is to change 2262 from 3.3nF to 100pF 2262 100pF 5% 50V (4822 122 31765).  
Remarks: The modification has been implemented in production from week 0127 onwards.

### MC-20, MC-30, MC-45, MC-50, MC-70, MC145, MC145C, MC148

Type number(s): MC-20, MC-30, MC-45, MC-50, MC-70, MC145, MC145C, MC148  
Symptom: On the ETF6 mechanism, the lever (item 23) is deformed due to overheating of Solenoid (item 20). The transistors 7612 and 7614 are also burnt.  
Cure: The problem is resolved by replacing:  
1. Transistors 7612 and 7614 with higher current rating type PMBT2907, code number (4822 130 11201).  
2. Solenoid assembly with improved version, code number (9965 000 10778).  
Remarks: New Solenoids are used in production from week 0131 onwards.  
IRIS Code: 1 16X TDM A A

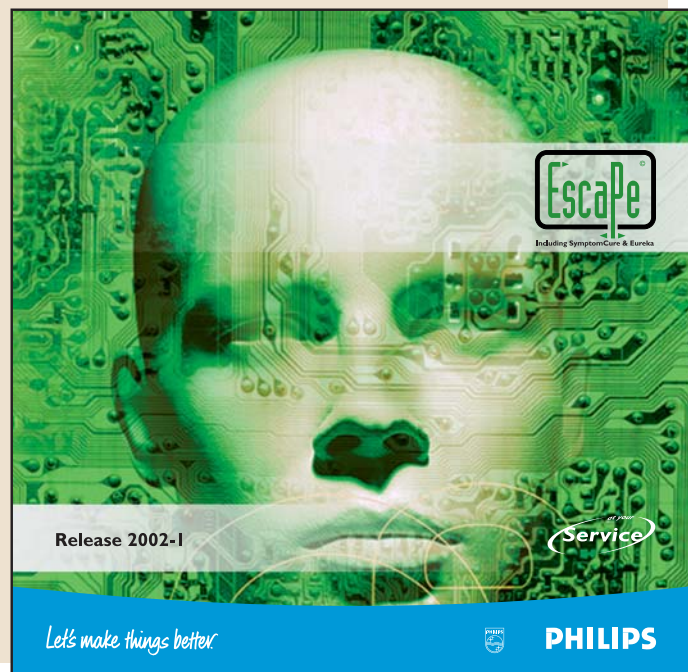


# EscaPe: Two popular products now on one CD

AN EXCITING AND VALUABLE NEW CD, COMBINING EUREKA AND SYMPTOMCURE, IS RELEASED BEGINNING OF APRIL 2002. THE INFORMATION FORMERLY CONTAINED ON THE CD KNOWN AS EUREKA, A PRODUCT CONTAINING THE SPARE PART CATALOGUE OF PHILIPS PRODUCTS, AND THE DATA SYMPTOMCURE ARE NOW AVAILABLE ON ONE CD, CALLED ESCAPE.

"Because of technology advances, it is now possible to download all the data from this CD to a hard drive, making the process of accessing the information faster and more accessible," says Felix Gil Diaz, Product Manager Tools. Having both products on one CD also allows for more frequent updates. Previously for SymptomCure there was a wait while enough new changes occurred before the CD was reissued. Eureka has historically been updated more often. The new EscaPe CD will allow Eureka updates to be issued as often as Symptom/Cure is updated, this way having enough new data is no issue anymore.

To come up with a name for the new product, the team thought of the 'Esc' (Escape) key on the computer keyboard that is typed when help is needed or when someone is stuck. The name Escape also has the 'E' from Eureka, the 'S' and 'C' from SymptomCure and the 'E' & 'S' of EuroService. The EscaPe CD should also help workshops "escape" slower processing time and working with 2 different CDs. ■



The new EscaPe CD

As ever, we've included a variety of interesting and practical repair tips. Please share your own findings with your colleagues across Europe! Simply send your repair tips to the editorial board address as printed in this publication. Furthermore, if there's any subject you'd particularly like to know more about, please tell us!

Your Helpful Page

## Portable Audio AZ2030, AZ2035

**Type numbers:** AZ2030, AZ2035  
**Symptom:** No reception in FM band.  
**Cure:** The problem can be caused by defective capacitors 2165 and 2139.  
**Exchange capacitors:**

| Position      | 12NC           | Description |
|---------------|----------------|-------------|
| 2165 and 2139 | 4822 126 13838 | 100nF       |

**Remarks:** Improved capacitors are used in production from week 0135 onwards.  
**Iris code:** 2 33X TUN Q A

**Cause:** When line output transistor TS7421 warms up, the 'V<sub>be</sub>' will decrease. As a result of this, the pulse amplitude on the base (STANDBY-signal) will decrease. This signal is used to start-up the power supply. In some sets, this signal became so small that transistor TS7529 kept on conducting, making it impossible for the set to start-up (TS7504 is switched off).  
**Iris code:** 3 119 PSU Y G

## Audio Systems FW-C280, FW-C290

**Type numbers:** FW-C280, FW-C290  
**Symptom:** The set reacts on Philips TV remote controls triggering unwanted response.  
**Cure:** The problem can be resolved by a software upgrade of the Front Board microprocessor. The code number for the new microprocessor (version 07) reads 9965 000 11076.  
**Iris code:** 1 15X SYS 1 A

## DVD and SACD STEP2001/ SACD2001

**Chassis:** STEP2001/ SACD2001  
**Type numbers:** DVDQ50/17X, DVDQ50/69X, DVDQ50/75X, DVDQ50/78X, SACD900/171, DVD962SA/001, DVD962SA/691  
**Reference number:** DVD-02/0004

### Symptom Cure information

**Fault area:** A = Power supply faults.  
**Symptom:** Dead set.  
**Cure:** Check and replace if necessary IC4 of power supply 313924870851 with new regulator AMC 7588 with code number 996500012300.  
**Remarks:** The new regulator is introduced in production from Wk150 onwards.  
**Iris code:** 1 110 PSU Q A  
**Chassis:** SD3.0 Monoboard  
**Type numbers:** SD3.0  
**Reference number:** DVD-01/0037 CORRECTION

## DVD Receivers MX1015D, MX1050D, MX1055D, MX1060D

**Type numbers:** MX1015D, MX1050D, MX1055D, MX1060D  
**Symptom:** Mains Socket fuse blows or House circuit breaker trips when the set is switched on.  
**Cure:** The problem is resolved by replacing the existing bare wire (position R20) with NTC thermistor F504EL (9965 000 11658) as shown in the following drawings.  
**Iris code:** 1 11X PSU Y I

## General Service Information

**Information:** Introduction of DVD Module SD3.0 L4 Monoboard. The reasons for the introduction of L4 are mainly for:  
 - To cater for the introduction of SD3.1 and SD3.3 using STi5580 and STi5519 respectively.  
 - To improve EMC and Jitter.  
 - To correct the video filter value.  
 - To change diode (6601) to LF25C regulator (7601/7602) for 2.5V supply to STi chip.  
 - To cater for an option PCM\_Out3 line to conn.1603.  
**Remarks:** The service information is available with code number 3122 785 40490 at LOPCS. SD3.0 L4 monoboard has been introduced from the start of production for the following models.

## Television A10E

**Chassis:** A10 E  
**Restrictions:** ONLY sets with integrated DVD.  
**Reference number:** ST-02/0018

### Symptom Cure information

**Fault area:** A = Power-supply faults  
**Symptom:** Humming noise from speaker if set is in Std.-By.  
**Cure:** Check and if necessary replace jumper on position 4271 of the Large Signal Panel [A] to diode BAS 316 (4822 1301 1397). Add diode BAS 316 (4822 1301 1397) to position 6278 (with the cathode to resistor 4272) on the Large Signal Panel [A]. Add resistor 47k (4822 117 10834) to position 4272 on the Large Signal Panel [A].  
**Iris code:** H 541 APA Y I

## VFM2001

**EU models:** DVD612/0X2;DVD612S/002;DVD622/0X2;DVD712/0X1;DVD722/0X ;DVD752/0X1; DVD762/0X1;DVD870/0X1;DVD870P/0X1;DVD870L/0X1  
**Non-EU models:** DVD703/032;DVD703/692;DVD703/752;DVD703/783;DVD712/171; DVD712/172; DVD870P/171

## Television EM2E

**Chassis:** EM2E  
**Reference number:** HE-02/0006

### Symptom Cure information

**Fault area:** A = Power supply faults.  
**Symptom:** Set will not start anymore after warming up (via Standby or Switch).  
**Cure:**  
 - Check if diode 6517 on the LSP is a BAT85 (4822 130 31983).  
 - Check if resistor R3530 on the LSP is 27 kOhm (4822 116 52264).  
**Remarks:** This problem can be valid for both Real Flat as Super Flat sets, with production date from August 2001 onwards.

## STEP2001

**EU- models:** DVD952/0X1;DVDQ40/0X1;DVDQ50/0X1  
**Non-EU models:** DVDQ50/691;DVDQ50/751;DVDQ50/781