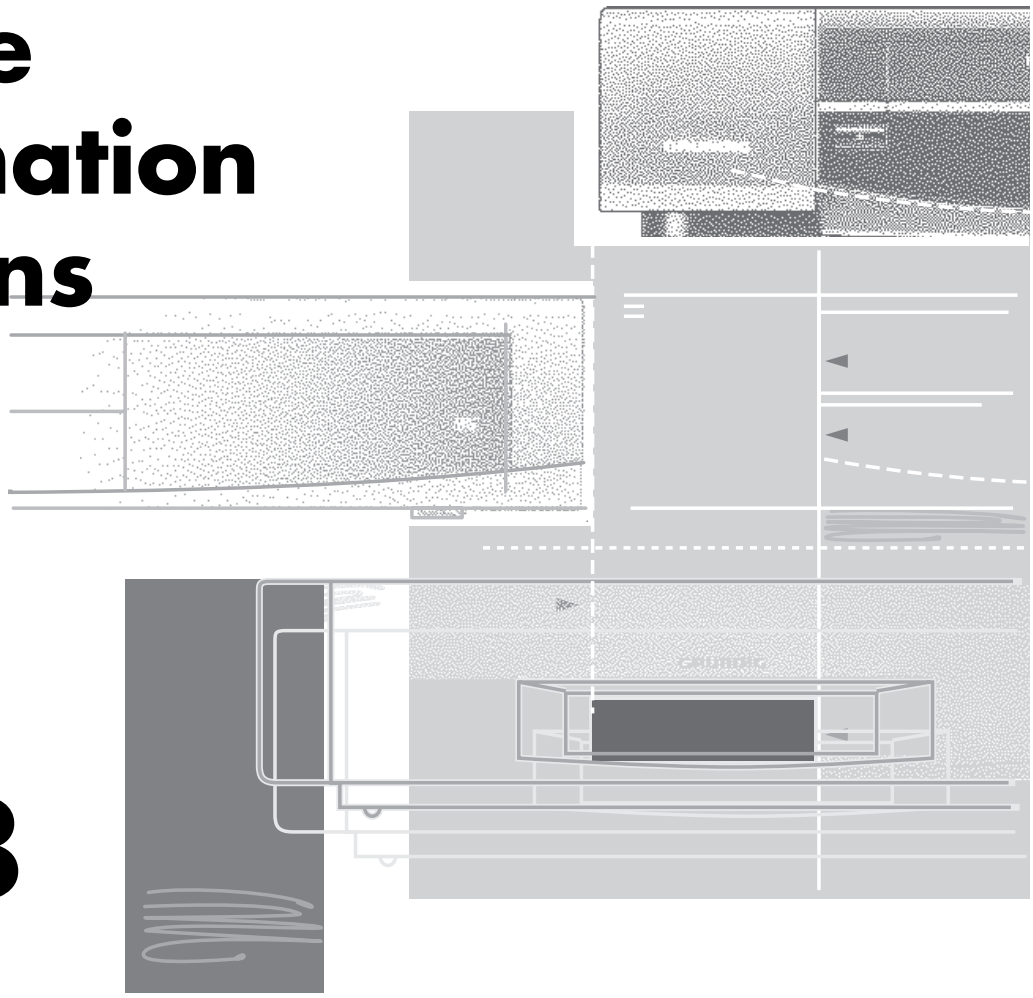
Service Information Bulletins



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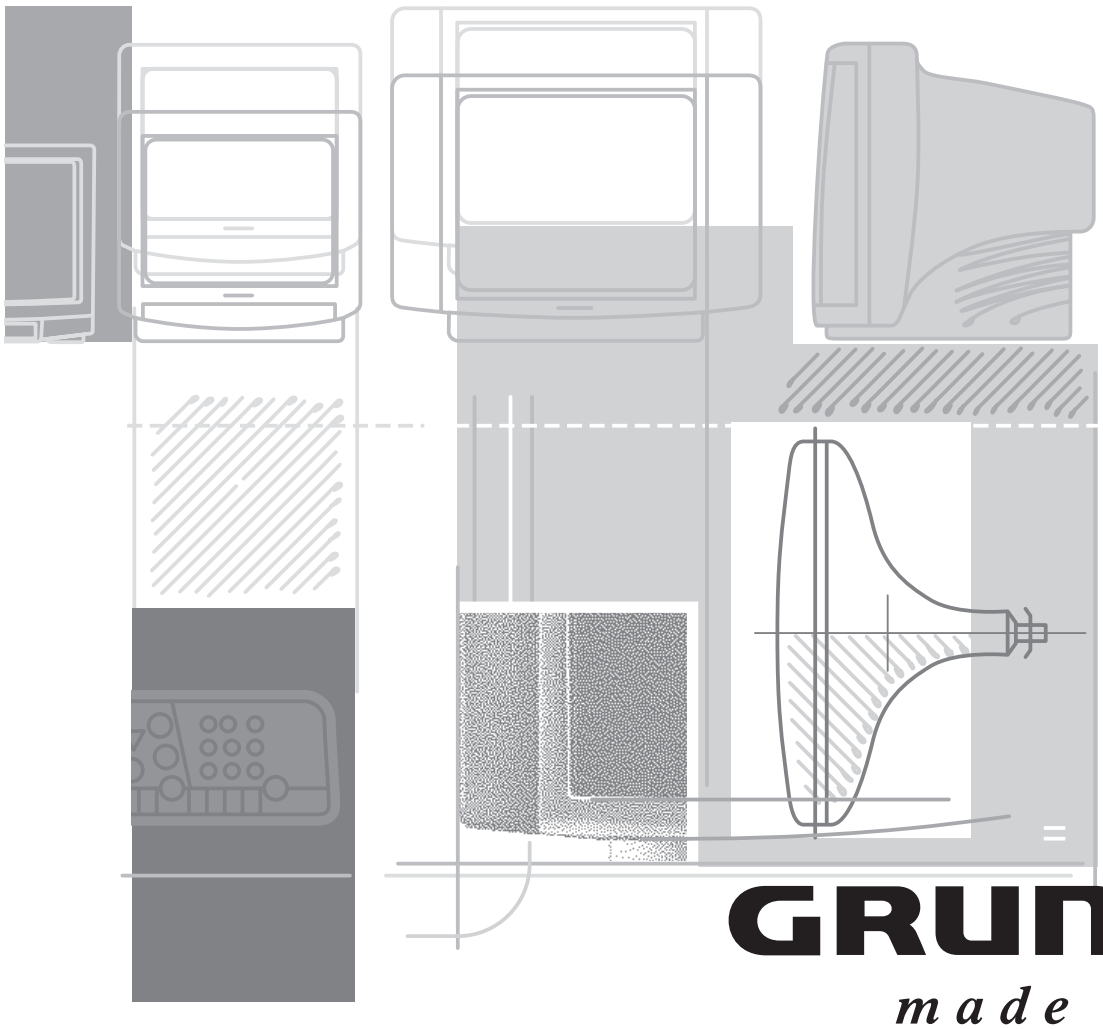

GRUNDIG

made for you

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TV

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TV

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Service Information

Subject **Technical Documentation**

The following Service Training documents are available and can be ordered like spare parts usually are.

Video Engineering:

Service Training	Language	Part Number
GV 400 and similar	D	72010 525 1000
GV 500 and similar	D	72010 525 1500
GV 540/560 HiFi and similar	D	72010 525 2000
HSD Drive Mechanism	D	72010 525 2500
GV 640 and similar	D	72010 528 9000
GV 640 and similar	GB	72010 528 9100
GV 670-690	D	72010 528 9300
GV 7000	D	72010 531 4000
GV 7000	GB	72010 531 4100

Digital Video Engineering:

Service Training	Language	Part Number
DV (Fundamentals)	D	72010 532 3500

TV Engineering:

Service Training	Language	Part Number
CUC 6360/6365/7300	D	72010 350 0000
Digi IV/ 100Hz Engineering	D	72010 350 0500
Pal+ System Fundamentals	D	72010 350 1000
Digi Basic	D	72010 350 1500
Digi Basic	GB	72010 350 1600
Digi Basic ++	D	72010 350 1700
Digi 6 / CUC 1842	D	72010 350 3000
Digi 6 / CUC 1842	GB	72010 350 3100
CUC 2000/2010/2030	D	72010 350 3500
CUC 2000/2010/2030	GB	72010 350 3600

Audio/HiFi Engineering:

Service Training	Language	Part Number
Audio Engineering Fundamentals	D	72010 749 5000
FM Tuner T11 / T1000	D	72010 749 5500
CD Player CD11 / CD12	D	72010 749 6000

Telecommunications Enginnering:

Service Training	Language	Part Number
Telecommunications Fundamentals	D	72010 749 7000

GENERAL

Serial No. 1/98

GRUNDIG

Service Information

Product **UMS11, UMS12**

Audio/HiFi

Possible complaint:
No display illumination.

Reason:
Failure of La301, La302, La303 or La304.

Cure:
To extend the lifetime of the bulbs, replace the bridge JP626 by a 3.3Ω/ 0.33W resistor and a diode 1 N 4002 connected in series. Connect the anode of the diode to the emitter of Q531.

Afterwards, change the four bulbs La301, La302, La303 and La304.

This change was introduced in the factory from the serial numbers listed below:

UMS11:	serial number 25904
UMS12:	serial number 21721

Workshop:
Carry out this change in all systems coming in for repair.

Stores:

Resistor 3.3Ω / 0.33W	part no. 8765 097 01300
Diode 1 N 4002	part no. 8309 215 10400
Bulb 5.5V / 100mA	part no. 75954 505 0800

Serial No. 1/98

Product **General**

CAR AUDIO

Possible complaint:
When fitting a Grundig car radio into a motor car manufactured by VW (car models Golf and Passat from year of manufacture 4/98), the following fault symptoms may appear dependent on the type of radio:

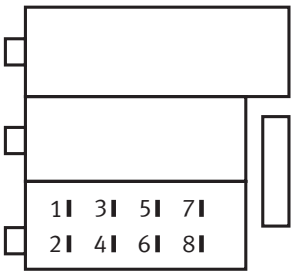
- The car battery is discharged by the car radio after the car has not been driven for a prolonged time.
- A radio with the conventional on/off switch cannot be switched off.
- When switched off, the display of the radio remains illuminated and the colour of the display may have changed.

Reason:
VW company have changed the pinning of the car's ISO power supply connector for the car radio. Contact 5 was previously provided for a positive voltage switched by the car radio (for antenna/booster). From 4/98 models onwards, an unswitched positive voltage may be applied to this contact.

Cure:
Please ensure that no unswitched positive voltage is applied to contact 5 of the motor car otherwise remove the contact from the connector block and insulate it appropriately.

Workshop:
Please note when fitting the car radio.

Car radio connector block



III
Power Supply
Connector Block

Serial No.1/98

Product **Colour television receivers with Digi Basic chassis - CUC 1825 and 1826, e.g. ST 63-255 IDTV/LOG, Boston ST 270 IDTV/LOG, ST 72-261 IDTV/LOG**

TV

Possible complaint:
Audible short noise building up when switching off with the mains switch.

Cure:
Solder an additional diode 1N4148 (cathode to pin 5) between pin 81 and pin 5 of the processor CIC 80050.

Workshop:
Carry out on request.

Stores:
Diode 1N4148 part no. 8309-215-045

Product **Colour television receivers with chassis CUC 2030 - ST 63-700 text and ST 70-700 text**

Possible complaint:
Vertical jittering of the videotext and menus displayed on the screen.

Reason:
The vertical sync pulse at the input of processor CIC 81050 pin 46 is compressed.

Cure:
Switch an additional 120 kΩ resistor from the base of CT 46009 to chassis.

Workshop:
Carry out on request. This modification has generally been introduced.

Stores:
None

Serial No. 1/98

TV

Product **Risks of failure of electric connections (solder pads) caused by ageing**

For reasons of thermal load and mechanical stress solder pads at positions where high voltages and /or currents are effective involve special technical problems.

In this connection we would like to refer you to our Service Information bulletin „General 1/95“ which dealt in great detail with this subject.

Solder pads which should be checked with special care in every set coming in for repair are for example:

- within the line output stage, the connections of line and diode split transformers, connecting pins of the yoke plug, components of the +A supply rail as well as the capacitors and coils within the deflection circuit.
- within the mains supply stage, the transformer connections, the connections of the rectifier and charging capacitor as well as the connections of the stabilizing ICs.

Product **Satellite Receivers - memory EEPROMs**

The part numbers of the memory ICs specified in the Service Manual are not correct.
The preprogrammed EEPROMs are available under the following part numbers:

Stores:

STR 641	IC 601	part no. 72008-668.6900
STR 642	IC 601	part no. 72008-688.7000
STR 642	IC 602	part no. 72008-688.7100
STR 100 DX	CIC 1420	part no. 72008-668.7200
STR 110	CIC 1420	part no. 72008-668.7300

Product **Correction of Service Information bulletin 12/97**
Colour television receivers with 82/70cm Toshiba picture tubes and Digi 6 chassis, e.g. M82-269/9 Ref, SE 8216/9 Ref/PIP, M 70-269/9 Ref, SE 7016/9 Ref/PIP Trento - Hum and buzzing noise

The part number of the loudspeaker with compensating coil specified in the Service Information is not correct. The correct number should read 19154-043.6100. Please correct your documents.

Serial No. 2/98

GRUNDIG

Service Information

Product **Colour television receivers P 37-731 text and P 45-731 text with CUC 7303 text**

TV

Possible complaint:
Teletext information cannot be received via the Euro-AV connection, for example when connecting a Grundig Micro-Sat Receiver.

Cure:
For activating the teletext mode in „AV“ progamme position retrofit the following components:

- IC 2807 TEA 2114
- C 2815 1µF/100V
- C 2810 100µF/25V
- CC 2811 0.1µF
- CR 2814 390Ω 5% (structural shape 0805)
- CR 2813 change from 0Ω to 270Ω 5% (structural shape 1206)
- Solder a wire bridge BR 077 (+B‘ voltage to IC 2807 pin 7)
- Unsolder the electrolytic capacitor C 2816 and re-solder it to position C 2817 (positive connection to pin 30 of processor IC 850).
- Remove the bridge BR 056.

Workshop:
The circuit board is already prepared for fitting the components.
The steps for retrofitting television receivers with chassis CUC 7301 are described in our Service Information TV 3/97.

Stores:

IC TEA 2114	part no. 8305-362-11400
Electrolytic capacitor 1µF/100V	part no. 8452-967-32500
Electrolytic capacitor 100µF/25V	part no. 8452-967-13500
SMD capacitor 0.1µF	part no. 8672-167-18700

Serial No. 3/98

GRUNDIG

Service Information

TV

Product **Colour television receivers with chassis Digi Basic (CUC 1805/1825), Basic+ (1826/1827) and Basic++ (1806/1828/1829/1830)**
e.g. M 70-280 IDTV/LOG, ST 72-261/8 IDTV/LOG, M 72-100, Atlanta SE 7220 IDTV/LOG, ST 70-270 IDTV

Possible complaint:
When switching on with the mains switch the television receiver goes to Standby and cannot be switched on again with the remote control handset.

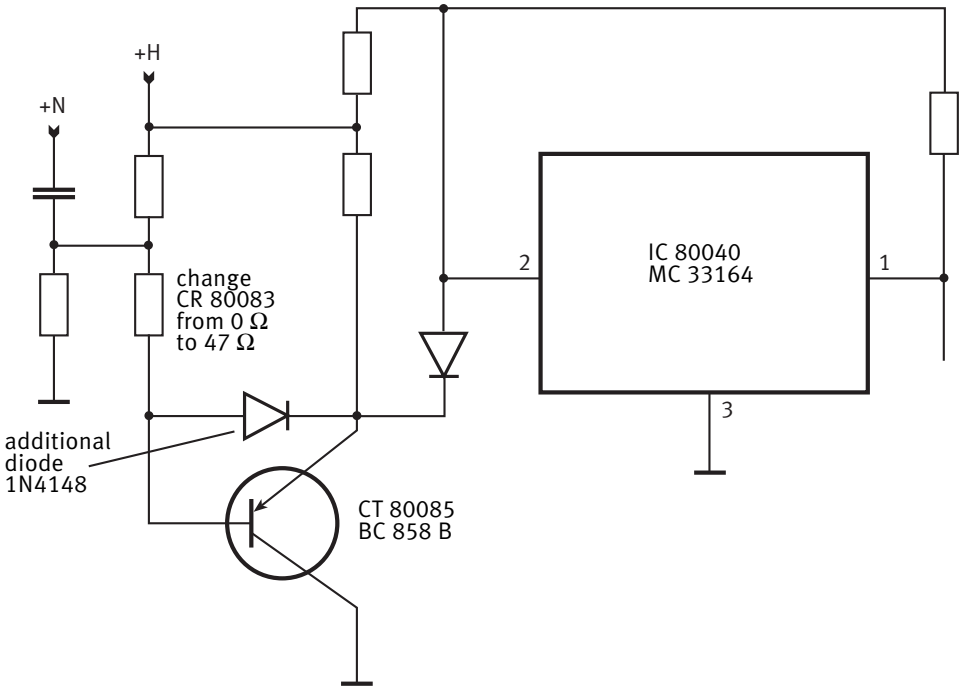
Reason:
Failure of transistor CT 80085 BC 858B (position X=148, Y=18).

Cure:
On replacement of the transistor, solder an additional diode 1N4148 from the base to the emitter (anode to base) of CT 80085 and change the resistor CR 80083 from 0 Ω to 47 Ω 5% (structural shape 0805).

Workshop:
The additional diode can be fitted to the solder side between the base of CT 80085 and the cathode of diode CD 80081.

Stores:

Transistor BC 858B	part no. 8301-003-85800
Diode 1N4148	part no. 8309-215-04500



Serial No. 4/98

GRUNDIG

Service Information

TV

Product **Colour television receivers with chassis CUC 2030, 2031, and 2040**
e.g. ST 63-700 text, ST 63-710, Melbourne SE 7210 TOP, ST 70-700 NIC/text

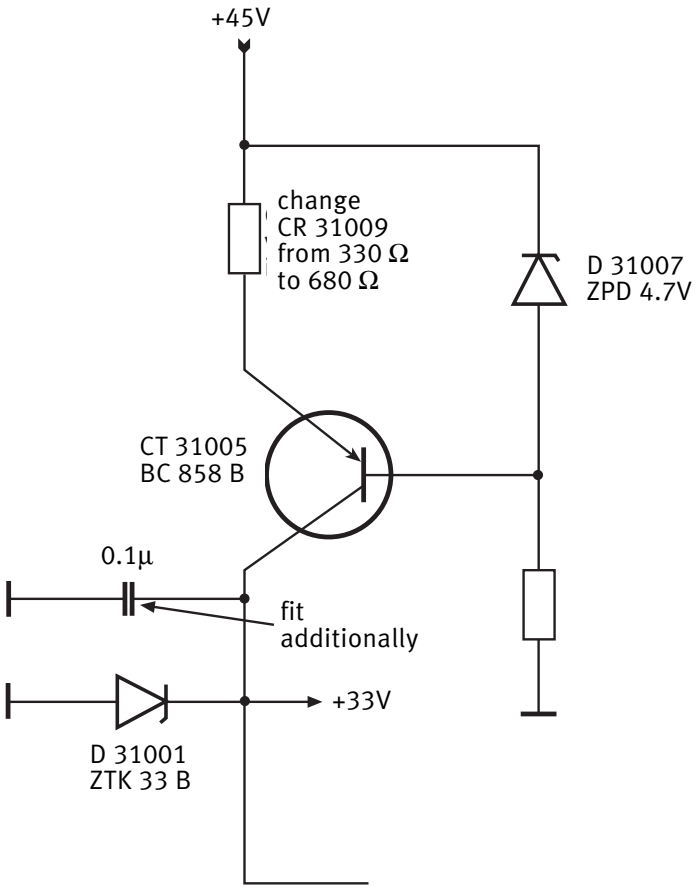
Possible complaint:
No programmes receivable.

Reason:
Failure of diode D 31001 ZTK 33B caused by too high a Zener current.

Cure:
On replacement of the the Z-diode ZTK 33B, change additionally the SMD resistor CR 31009 from 330 Ω to 680 Ω 5% (structural shape 0805) and solder an additional 0.1µF foil capacitor in parallel with Z-diode ZTK 33B.

Workshop:
When the Z-diode failed, change the resistor (position X=78, Y=10) and solder an additional capacitor.

Stores:
Z-diode ZTK 33B part no. 8305-306-00100



Serial No. 5/98

TV

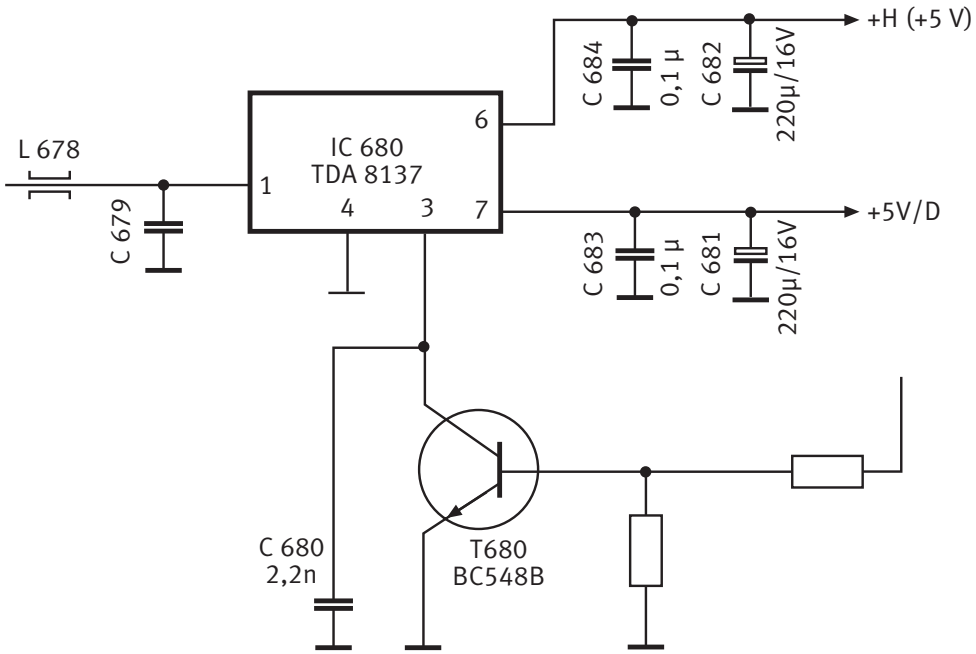
Product **Colour television receivers with chassis CUC 6360 and 6365**
e.g. SE 6376, ST 63-761 TOP, ST 70-755 TOP, XS 70/1, ST 72-761 TOP

Possible complaint:
Tearing of the displayed menus and teletext pages.

Reason:
Failure of the capacitors C 683 and C 684 of 0.1 µF each.

Cure:
Change the electrolytic capacitors C 681 and 682 of 220 µF/16 V each in addition to the capacitors C 683/684.

Stores:
None.



Serial No. 6/98

TV

Product **Colour television receivers with chassis Digi Basic/Basic+/Basic++**
CUC 1805, 1806, 1825, 1826, 1827, 1828, 1829 and 1830
e.g. ST 63-255 IDTV/LOG, ST 72-261 IDTV/LOG, Boston SE 7090 IDTV/LOG, Atlanta SE 7220 IDTV/LOG

Possible complaint:
Jittering of the displayed menus or teletext pages when the television receiver has warmed up.

Reason:
Lack of stability of the oscillator circuit at processor-IC IC 80050.

Cure:
Change the SMD capacitors CC 46021/46022 to a 56 pF version each (structural shape 0805).

Workshop:
Carry out this change when complaints are received.
Position CC 46021 X=93, Y=81
Position CC 46022 X=96, Y=81

Stores:
None.

Product **Colour television receivers with chassis CUC 2030 and 2031**
e.g. ST 63-700 text, ST 70-780 text, Melbourne ST 7210 TOP, ST 70-700 NIC/FT

Possible complaint:
Jittering of the displayed menus and teletext pages.

Reason:
Limited vertical sync pulse on pin 46 of the processor-IC IC 81050.

Cure:
Connect an additional 120 kΩ resistor from the base of CT 46009 (BC 848, position X=146, Y=63) to chassis.

Workshop:
Carry out this change when complaints are received.

Stores:
None.

Serial No. 7/98

Product **Colour television receivers with chassis CUC 63xx, 64xx, 20xx and Digi Basic/ Digi 6 - new plug-in systems**

TV

The television receivers with above mentioned chassis are partly fitted with new plug-in systems between the modules and the chassis. As a consequence of this conversion, the modules with the new systems can no longer be pulled out of the chassis as usual. When trying to do so damages may be caused to the module or the chassis.
The following figures show the different systems and how they can be dismounted.

1. The traditional black socket terminal strips of the modules are additionally provided with locking lugs which, in addition to a module holder, prevent the module from slipping out. The module can be dismounted from above or below by pressing the locking lugs together.

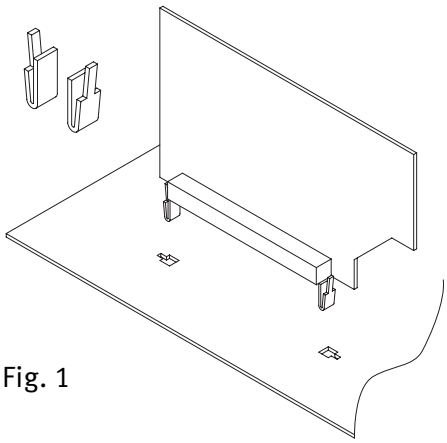
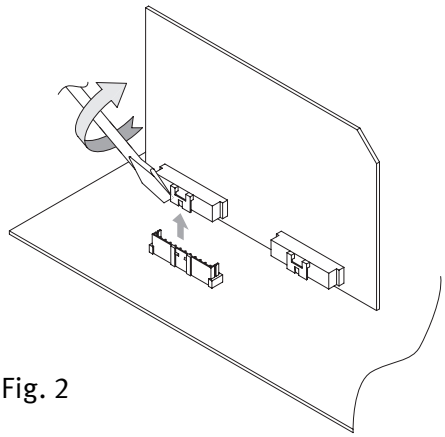


Fig. 1

2. The modules of the colour television receivers with chassis CUC 20xx are fitted with a new plug-in system. They can be dismounted by disengaging the locking lug with a screw driver. In future, it will also be possible to release the lugs from below through additional drilled holes in the chassis.



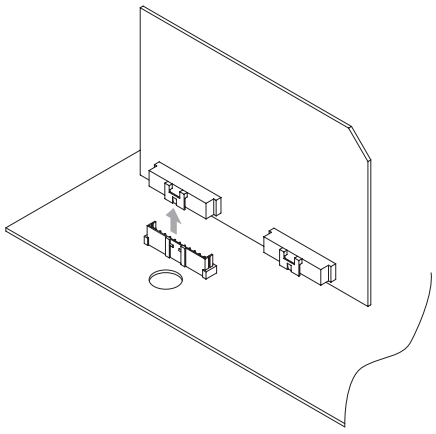


Fig. 2

3. Concerning the Feature Boxes on the Digi Basic and Digi 6 chassis: Please note that in contrast to our earlier Digi chassis (Digi 3, 4 and 5) the two earth lugs of the Box for interference protection are soldered in. In the case of any defect, these lugs must be unsoldered!

Serial No. 8/98

Product **Colour television receivers with chassis CUC 2030 and 2031**
e.g. ST 63-700 text, ST 70-780 text, Melbourne SE 7210 TOP, ST 70-700 NIC/FT

TV

Possible complaint:
Programme position number (e.g. „P 14“) is continuously displayed on the screen.

Reason:
When having pressed the „i“ button on the remote control handset no further command is entered during a period of about 6 seconds. As a result, the TV set switches over to the continuous display mode so that the programme position number is continuously visible on the screen. As this function is not mentioned in the product descriptions, it may happen in a few cases that consumers think it to be a fault.

Cure:
Cancelling the continuous display mode:
Call up the „Dialog Center“ menu with button „i“ and press this button a second time during a period of 6 seconds.

Stores:
None

Serial No. 9/98

GRUNDIG

Service Information

TV

Product **Colour television receivers with chassis Digi Basic, Basic+ and Basic++**
CUC 1805, 1825, 1826, 1827, 1828
e.g. ST 63-255 IDTV/LOG, M 70-280 IDTV/LOG, Atlanta SE 7220 IDTV/LOG, Sydney 100 SE 7020 IDTV/LOG

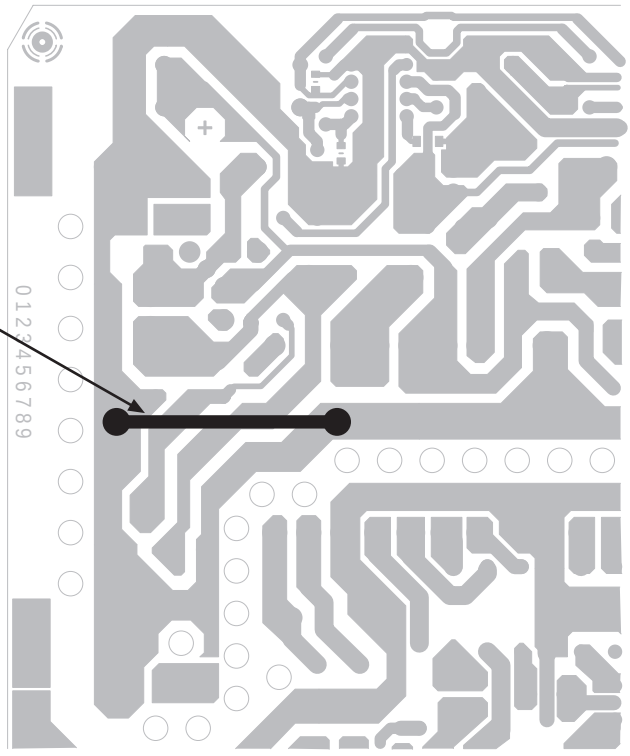
Possible complaint:
Interference in FM reception in the immediate vicinity (approx. 2m) of a switched on television receiver.

Cure:
The interference level can be reduced noticeably by soldering in an additional ground-to-ground connection.

Workshop:
Solder an insulated wire of approx. 35mm (2.5mm²) in length on to the solder side of the mains supply section (between pos. R60007 and C60001) as shown below. This additional wire is used to short-circuit the ground loop which has been found to be the source of interference.
Carry out this change with extreme care (primary side - VDE safety regulations!) and fix the wire additionally with a heat-set adhesive!

Stores:
None

Solder in a bridge between these points and fix it with a heat-set adhesive



Serial No. 10/98

Product **Colour television receivers with chassis CUC 2030**
e.g. ST 63-780 text, ST 70-700 NIC/TOP, ST 70-780 text, Greenville 7003 text, Melbourne SE 7210 TOP

TV

Possible complaint:
Moiré patterning / interferences similar to pearl strings visible in the picture of stations in the lower special channels (S05, S06, S07).

Reason:
Harmonics from the switched mode power supply entering via insufficiently screened or defective aerial connecting cables.

Cure:
Use an aerial cable with double screening! In special cases, an absorber cable („100 Hz aerial connecting cable), order number 29210 435 0100, may be necessary.
If the fault is not yet completely eliminated, carry out the following changes in the circuit:

1. Solder the „hot“ contact of the capacitor C 60009 (220pF/2kV) directly to pin 1 of the transformer TR 61001.
2. Connect the earthing area on the upper side (component side) within the power supply section with the earth tag on the solder side.
   For this solder a short piece of wire to the earth connection of R 60014 (not fitted) and contact it with the earthing area on the upper side. To ensure that the wire is reliably in contact with the earth, remove the solder resist and bend the wire down by a length of about 5mm.

Workshop:
To connect the capacitor C 60009 directly to pin 1 of the transformer TR 61001 proceed as follows:

- Interrupt the circuit path between C 60009 and L 60006.
- Fit the wire bridge „BR 145“. It is located between C 60009 and L 60006 (sometimes also designated „BR 6008) and connect the separated end of the capacitor with the bridge (bend the connecting wire of the bridge towards the capacitor).

Carry out these changes with extreme care (VDE safety regulations)!

Stores:
None

Serial No. 11/98

GRUNDIG

Service Information

Product **Defective modules returned for repair within our repair exchange system**

TV

A relatively great number of the defective modules coming in for repair is returned without the fault tag!
This makes work more difficult for us because the defect complained of could be a hidden fault that shows only occasionally. Please help us discovering hidden faults by sending in the defective module together with the fault tag. A fault tag is enclosed with each replacement module.

In this connection we want to point out to the observance of the generally known MOS safety instructions („Safety“ Service Manual).
These instructions apply also to the handling of defective modules.

- When returning defective modules please use generally the MOS protective packing enclosed with the replacement module.
- Even defective MOS components must never be stored or transported in styroper material or in plastic magazines.
- Persons handling MOS components must first discharge any electrostatic charge on their body or clothing by touching a grounded object.

Stores:

„Safety“ Service Manual	part no. 72010 800 0000

Serial No. 12/98

Product **Grundig built-in Satellite Receivers SER 150, SER 151E and SER 150ET**
Differences and possible use of the receivers for colour television receivers with chassis Digi Basic, Basic+, Basic++ and Digi 6

TV

Common to all of the satellite retrofitting kits SER 150, SER 151E and SER 150ET is the Sat module 29504-106.24. The differences are the EPROM‘s included in the delivery of the retrofitting kits.

SER 150	no EPROM included (no longer available)
SER 151E	one EPROM included for TV‘s with Digi Basic chassis
SER 150ET	two EPROM‘s enclosed; one each for TV‘s with chassis Digi Basic/Basic+ and chassis Digi 6

The retrofitting kits SER 150 and SER 151E were replaced by SER 150ET and are no longer available.
The EPROM‘s of SER 150ET, the only version available, can be used for the following chassis:

1. EPROM with order no. 19798-300.xx for the chassis Digi Basic/Basic+ CUC 1805, 1825, 1826, and CUC 1827
2. EPROM with order no. 19798-311.xx for the Digi 6 chassis CUC 1842, 1894, 1952, 1983, and CUC 1984

Attention!
The EPROM in television receivers with the chassis Digi Basic++ CUC 1806, 1828, 1829, 1830, 1836 and CUC 1929 needs not to be replaced.
None of the EPROM‘s enclosed must be fitted to these chassis!

Serial No. 13/98

GRUNDIG

Service Information

Product **Colour television receivers M 84-210/8a IDTV/LOG - CUC 1829 (Digi Basic++)**

TV

Possible complaint:
Dependent on the picture content (black/white changes) these TV sets switch occasionally to Standby.

Cure:
Change the resistor CR 21234 from 220 Ω to 390 Ω.

Workshop:
Carry out this change when complaints are received.

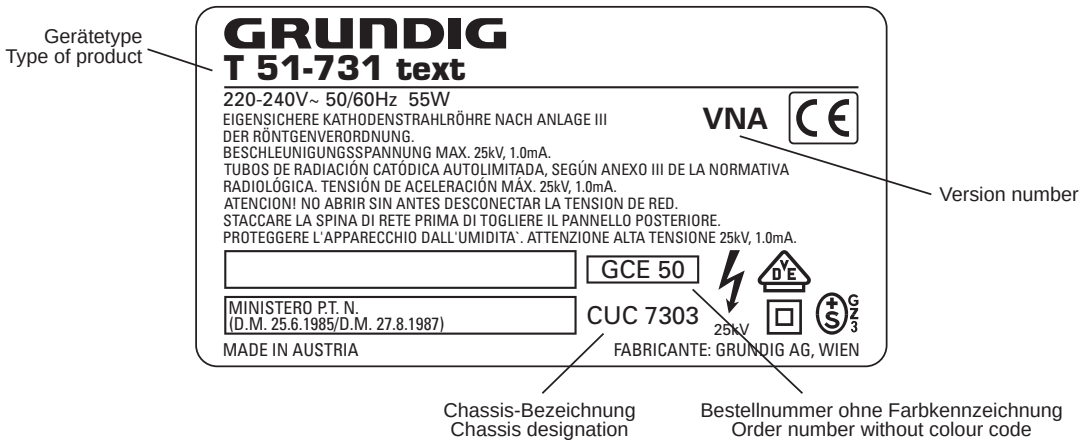
Stores:
SMD resistor 390 Ω 5% 0805 part no. 8706 100 06300

Serial No. 14/98

TV

Product **Colour television receivers with chassis CUC 7303, e.g. P 37-830 text, T 51-071, T 51-731 text, T 55-830/4 text**

From September 1998 onwards, colour television receivers with the CUC 7303 chassis have been fitted with a reworked chassis CUC 7303. It is provided with a new processor and a few changes were made in the peripheral circuit of the computer.
The television receivers with the reworked chassis are marked with a Version Number „VN...“ printed on the label on the back of the receiver (see figure).



This additional identification will be introduced for all current and newly started up types of chassis.
The version number will also be printed on the supplementary documents for these television receivers.
Please note that full particulars (type of TV, chassis and version number) must be given when ordering spare parts in future.

Serial No. 15/98

GRUNDIG

Service Information

TV

Product **Colour television receivers with chassis CUC 2030 (N) / 2031 (N) / 2040 (N) / 2050 (N), e.g. ST 63-700 text, ST 63-780 text, ST 70-780 NIC/TOP, Melbourne SE 7210 TOP**

Possible complaint:
On replacement of the EEPROM IC82005 X24C04 the television receiver does not accept all commands or no commands at all although the emergency data set has been loaded.

Workshop:
When fitting a new EEPROM X24C04, the following options/settings are to be carried out:

1. Loading the emergency data set	Press and hold down the „P-“ button on the remote control handset while switching the TV on with the mains button.
2. Cancelling the Hotel mode	Press and hold down the „i“ button while switching on with the mains button. Under the „Service“ menu, set „Hotel“ to „OFF“.
3. Changing the background colour of the displayed menu (white/ light-blue)	Move the bar to „OSD horizontal“ in the Service Menu and press the buttons „AUX“, „OK“ in this order.
4. Cancelling the band limits	Move the bar to „AGC“ in the Service Menu and press the buttons „AUX“, „OK“ in this order.
5. „Switch on with P1/AV“	Select „Switch on with P1“ in the „Special functions“ menu.
6. AGC adjustment	Carry out as described in the Service Manual
7. AFC adjustment	Carry out as described in the Service Manual

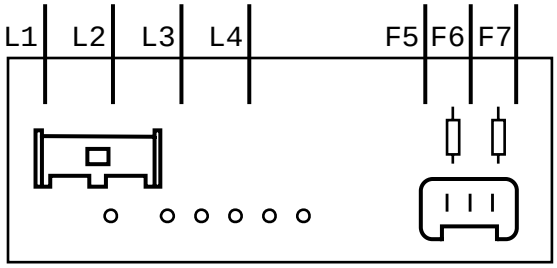
Stores:
EEPROM X24C04 Part No. 8305 602 40500

Serial No. 16/98

New type of picture tube for 72cm colour television receivers with chassis Digi Basic+, Basic++, Digi 5 and Digi 6

The picture tubes A 68 ESF 002X43 (without coating) and A 68 ESF 202X43 (with coating) fitted into television receivers with above mentioned chassis are no longer available. These picture tubes are not fully compatible with the replacement tubes A 68 ESF 002X143 / A 68 ESF 202X143.

- changed yoke connections:
  The figure below shows the connections of the deflection unit for the new picture tubes A 68 ESF 002X143 part no. 8300 068 24300 and A 68 ESF 202X143 part no. 8300 068 20400.



L1 - red yoke connecting lead (horizontal)
L2 - black yoke connecting lead (horizontal)
F5 - green yoke connecting lead (vertical)
F7 - white yoke connecting lead (vertical)

The different types of chassis require different changes:

Chassis Digi 5 CUC 1822, 1852

CRT fitted in the TV set	Changes when fitting the replacement tube
A 68 ESF 002X43 A 68 ESF 202X43	A 68 ESF 002X143 A 68 ESF 202X143 An existing seagull correction board is to be removed. The yoke connecting leads are soldered directly to the deflection unit (see figure).
A 68 ESF 002X043 A 68 ESF 202X043	A 68 002X143 A 68 202X143 No change. Connect the picture tube as shown in the figure.

Serial No. 17/98

Chassis Digi Basic + CUC 1826

CRT fitted in the TV set	Changes when fitting the replacement tube
A 68 ESF 002X043 A 68 ESF 202X043	A 68 ESF 002X143 A 68 ESF 202X143 No change. Connect the picture tube as shown in the figure.

Chassis Digi Basic ++ CUC 1830

CRT fitted in the TV set	Changes when fitting the replacement tube	
A 68 ESF 002X043 A 68 ESF 202X043	A 68 ESF 002X143 A 68 ESF 202X143 Connect the picture tube as shown in the figure.	
+A voltage from 140V	to 138V	
C 53006 from 0.5µF	to 0.41µF	part no. 8515 722 24600
C 53071 from 13nF	to 12.5nF	part no. 8515 911 70200
C 53073 from 0.47µF	to 0.56µF	part no. 8515 724 09300
L 53074	to 260µH	part no. 0924 685 96200
C 58011 from 0.47µF	to 0.56µF	part no. 8555 267 29100
CR 58011 from 1.8kOhm	to 1.2 kOhm	part no. 8706 100 27500
R 50007 from 1.6 Ohm	to 1.5 Ohm	part no. 8766 327 40500
R 50008 from 1.6 Ohm	to 1.5 Ohm	part no. 8766 327 40500

Chassis Digi 6 CUC 1842

CRT fitted in the TV set	Changes when fitting the replacement tube	
A 68 ESF 202X043	A 68 ESF 202X143 Connect the picture tube as shown in the figure.	
+A voltage from 145V	to 143V	
C 53071 from 10.5nF	to 10nF	part no. 8515 911 40900
L 53074	to 250µH	part no. 0924 685 95300

GRUNDIG

Service Information

SAT

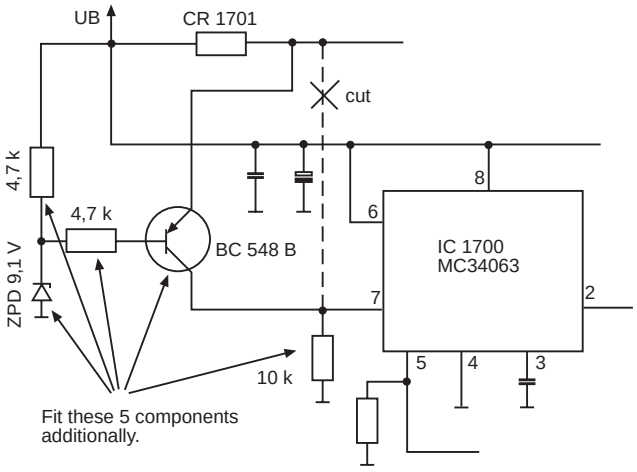
Product **Satellite Receiver STR 100 DX microSAT**

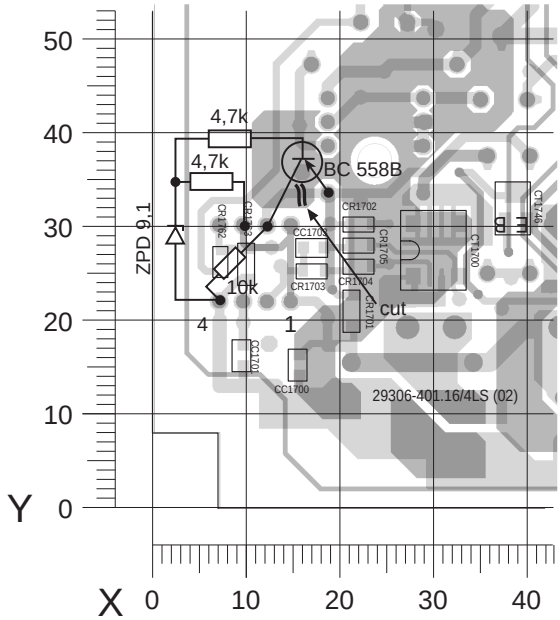
Possible complaint:
No operation.

Reason:
Failure of the transistor CT 1700 Si 9955 caused by a voltage supply (battery operation) below 9V.

Cure:
- Change the capacitor C 1736 from 270pF to 100pF/1kV.
- By fitting an additional transistor stage (protective circuit), the STR 100 DX switches off if the supply falls below 9V.

Workshop:
When CT 1700 failed, fit the following additonal components (see diagram):





This change is generally carried out in production.

Stores:

BC 548B	part no. 8302 201 57900
Z-diode ZPD 9.1V	part no. 8309 720 09200
Capacitor 100pF 1kV	part no. 8650 067 04600

Serial No. 1/98

GRUNDIG

Service Information

SAT

Product **Satellite Receivers STR 622 and STR 600 AP**

Possible complaint:
On switching the satellite receiver on, the IR remote control level 2 or the parental lock (although none was entered) is activated. These problems occur especially at ambient temperatures below 20 °C.

Reason:
Memory EEPROM‘s M24C64 with the Date Codes 722 and 727 (printed on the IC) are not reliably read out at temperatures below 20 °C.

Cure:
Replace the EEPROM. IC lots with a Date Code higher than 737 work reliably.

Workshop:
This change is being carried out already in production. Check all satellite receivers coming in for repair, irrespective of the fault, for the Date Code of the EEPROM. Replace IC‘s with Date Code 722 or 727. Receivers with replaced EEPROM can be re-programmed by means of Data Link.

Stores:
Deliver only SMD-IC‘s M24C64 with Date Code 737 or higher!
SMD-IC M24C64 part no. 8305 960 06500

Serial No. 2/98

Product **New SAT Boxes for STC 880 and STC 80 Head Stations**

SAT

As of now Grundig delivers the new boxes (cassettes) HDM 100C, HDM 100P, HRM 824/2 ADR and HCM 826/4 FM.

Box HDM 100C:
SAT input: 950 - 2150 MHz output: channels S 21 - S 41
Box for conversion of a digital programme package. A complete transponder is converted from QPSK (Quadrature Phase Shift Keying) to QAM (Quadrature Amplitude Modulation). QPSK is a digital modulation and is transmitted via the satellite (36 MHz per transponder). Since a lower bandwidth (8 MHz) is needed to be fed into the cable network, the QAM modulation is employed. To receive this converted programme package, every subscriber needs a Cable-Set-Top-Box.

Box HDM 100P:
SAT input: 950 - 2150 MHz output: C 5 - C 12, S 3 - S 30
This box makes it possible to convert a programme from a non-PayTV digital programme package into an analog PAL programme.

Box HRM 824/2 ADR:
SAT input: 950 - 2150 MHz output: 87.5 - 108 MHz
With this box, up to 2 ADR (Astra Digital Radio) programmes or 2 radio programmes or one ADR programme and one radio programme can be converted according to the Panda Wegener noise reduction and with highest quality sound to the FM range. With ADR stations, the RDS programme code is converted to Standard. A RDS programme code can be entered for Panda Wegener stations.

Box HCM 826/4:
Input: 87.5 - 108 MHz output: 87.5 - 108 MHz
With this box, 4 stereo or mono FM stations can be converted selectively to another frequency in the range 87.5 - 108 MHz. All signals, stereo, mono, RDS and other data are passed through in original condition.

Workshop:
The new cassettes can only be used on condition that the software version of the keyboard control computer (STC 80 on chassis) is >25. The software version can be called up by pressing and holding down any two buttons on the keyboard simultaneously. In this mode, all pixels of the display are driven first (display dark) and subsequently the version number is indicated. The last two figures of this number stand for the software version („I x 01-306.**25**“).

Stores:
Keyboard control units 29501 079 0300 with control processor, part no. 19798 306 2500 only.

Serial No. 4/98

SAT

Product **Grundig Quattro Universal LNC UNI Q1**

The LNC UNI Q1 is a Universal Quattro LNC for connection to multi-switch and channel processing systems. One of the two polarities of the Low and High band respectively is definitely allocated to one of the LNC outputs. This LNC is therefore ideal for the reception of the analog and digital programmes of satellites like ASTRA and EUTELSAT for example transmitting in the 11 and 12 GHz range.

Technical Data:

Input frequency range	10.7 - 11.8 GHz / 11.7 - 12.75 GHz
Output frequency	950 - 1950 MHz / 1100 - 2150 MHz
Oscillator frequency	9.75 GHz / 10.6 GHz
Internal noise at 20 °C	0.7 dB typ. / 0.7 dB typ.
Gain	58 dB typ.
Decoupling of polarity	> 20 dB
Connections	4 x F connector
Power consumption	250 mA typ.
LNC supply	11.5 - 19.0 V on each output

Connections (position of LNC see figure above)

from left to right: vertical lower band
vertical upper band
horizontal lower band
horizontal upper band

Order numbers:

New part: GAC 8600
Replacement: 9.28016-4053

Serial No. 4/98

GRUNDIG

Service Information

Product **GV 670S and colour television receivers with Digi 6 chassis (see list)**

VIDEO

Possible complaint:
No colour.

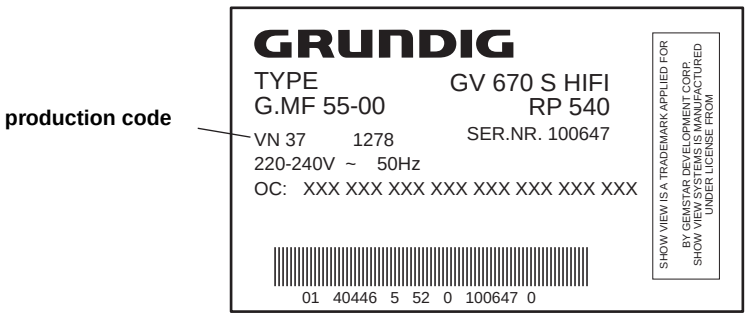
Reason:
Disagreement when setting the Video/S-Video option on above mentioned units via the Megalogic connection so that one unit is set to Video and the other to S-Video mode.

Cure:
Replacement of the EPROMs in the television receiver and the video recorder.

Stores:

EPROM PCVG8-4U (GV 670S)	part number: 27599-007.77
EPROM (Digi 6)	part number: 19798-311.35

Note:
From production code **VN 05** onwards, the GV 670S video recorders are already fitted with a software version PCVG8-4U or higher.



Television receivers with Digi 6 chassis:

M70-269/9 Ref	M82-269/Ref	Trento SE7016/9 Ref PIP
MW70-269 PALplus	M82-269 PALplus/LOG	Trento SE7026 PALplus
M72-410 Ref	M82-269/9 Ref	Denver SE8216/9 PALplus
M72-410 Ref/PIP	MW82-100/9	Denver SE8216/9 Ref/PIP
M72-410/9 Ref	M95-410/9 Ref/PIP	

Serial No. 1/98

GRUNDIG

Service Information

Product **TV/VCR combinations TVR 3701SV, 3705, 3710, 3720, 5100, 5120, 5500 and variants**

VIDEO

The above mentioned TVR combinations are being fitted with a new scanner driver-IC (pos. 7301) in current production.

For this reason, the following components have changed:

1. **Scanner assembly (headwheel and head drum)**
2. **Head amplifier**
3. **Ribbon cable (7-pin/8-pin)**

The state of the components assembled can be identified by the production code „AB“, „AC“, or „AD“ on the type label of the TVR.

For the part numbers of the components corresponding to the production codes „AB“, „AC“ and „AD“, please see the table on the reverse side.

When ordering spare parts, please indicate also the production code.

Serial No. 2/98

Model	Signal Chassis	Code	Head Amplifier	Headwheel	Head Drum	7pin Cable	Code	Head Amplifier	Headwheel	Head Drum	6pin Cable
3701 SV	27599-101.32 - PSSMG1/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV	27599-101.33 - PSSMG3/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV	27599-101.34 - PSSMG2/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV/FR	27599-101.35 - PSSMG1/GL	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV	27599-101.47 - KSMDG1/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV	27599-101.48 - KSMDG3/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV	27599-101.49 - KSMPG2/GV	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3701 SV/FR	27599-101.50 - KSMDG1/GL	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3705	27599-101.51 - KSPDG1/GVF	**AB**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3705	27599-101.52 - KSPDG1/GF	**AB**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3705	27599-101.53 - KSPDG2/GF	**AB**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3705FR	27599-101.54 - KSPDG1/GLF	**AB**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3710	75988-018.70 - PSSPG1/GVXF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3710	27599-101.37 - KSPDG1/GVXF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3710FR	75988-018.77 - PSSPG1/GLPVTF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3710GB	75988-018.78 - PSSPG1/ILPPVXT	**AC**	27599-004.08	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.21	27599-005.23	75988-023.08	75988-041.50
3720	27599-101.55 - KSPDG2/GVXT	**AB**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
3720GB	27599-101.56 - KSPDG1/ILPPVXTF	**AB**	27599-004.08	27599-005.07	75988-001.33	75988-324.35	**AC**	27599-004.21	27599-005.23	75988-023.08	75988-041.50
5100	75988-018.71 - PSSPG1/GPVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100	75988-018.72 - PSSPG2/GPVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100	75988-018.75 - PSSPG1/GVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100	27599-101.42 - KSPDG1/GVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100	27599-101.43 - KSPDG1/GPVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100	27599-101.45 - KSPDG2/GPVX	**AC**	27599-004.07	27599-005.07	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100FR	75988-018.73 - PSSPG1/GLPVXTF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AC**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5100GB	27599-101.22 - PSSG1	**AC**	27599-004.08	27599-005.07	75988-001.33	75988-324.35	**AD**	27599-004.21	27599-005.23	75988-023.08	75988-041.50
5120FR	27599-101.36 - KSPDG1/GLT	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5500	75988-018.76 - PSSPG1/GVXTF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50
5500FR	75988-018.74 - PSSPG1/GLPVXTF	**AC**	27599-004.07	27599-005.08	75988-001.33	75988-324.35	**AD**	27599-004.20	27599-005.22	75988-023.08	75988-041.50

GRUNDIG

Service Information

Product **GV 6xx HiFi range and variants, GV 740, GV 7497, SE 7106, SE 7104**

VIDEO

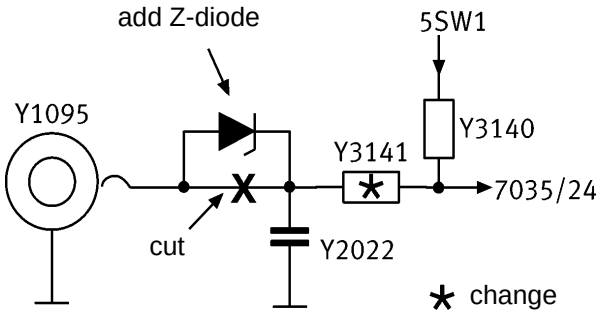
Possible complaint:
When connecting one of the above mentioned video recorders with a satellite receiver using the Sat Control Cable and the video recorder is in „Low Power Standby“ mode, the following symptom appears:

The satellite receiver can no longer be controlled via its remote control handset.

Reason:
The IR receiver of the satellite receiver is blocked by pulses on the Sat Control Cable.
The keys on the satellte receiver remain operative.

Cure:
Change Y 3141 from 4.7kΩ to 470Ω.
Cut the circuit path (inner conductor) between the Cinch socket Y 1095 and CR-Y 3141.
Add a 3.3V Z-diode (e.g. BZX 84 C 3V3), anode to Cinch socket.

Extract from the circuit diagram in Service Manual
72010-527.35, page 4-47



Stores:
Components are commonly available.

Serial No. 3/98