



Product: TV's with Digi Basic chassis

Television No. 1/97

Colour television receivers with Digi Basic chassis, e.g. ST 70-255 IDTV/LOG, M 70-280 IDTV/LOG, SE 7089 IDTV/LOG

Possible complaint:

Brown colouration of the circuit board near the diode D 60222 BZT 03D180. Simultaneously the "+Eco" voltage is approx. 5V too high.

Reason:

Coincidence of unfavourable component tolerances.

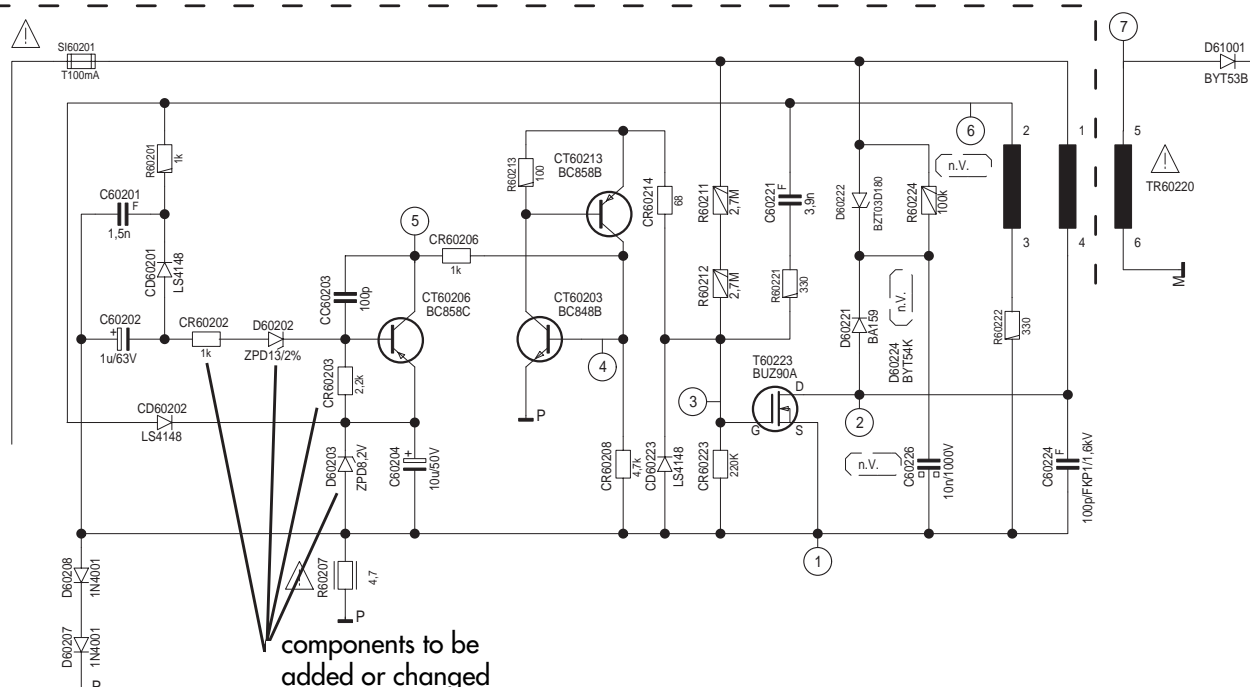
Cure:

Carry out the following changes in the stand-by mains stage:

- Change the Z-diode D 60203 from ZPD 9.1V to 8.2V.
- Change R 60202 from 68 k Ω to 1 k Ω .
- Connect an additional Z-diode ZPD 13 in series with R 60202. Connect the cathode of the diode to the base of the transistor CT 60206.
- Check the rating of the resistor CR 60203 to be 2.2 k Ω .

Workshop:

Check the "+Eco" voltage. Carry out the changes if this voltage is higher than +17 V.



Stores:

Z-diode ZPD 8.2 V part no. 8309-720-083

Z-diode ZPD 13 V part no. 8309-720-131

SMD resistor 1 k Ω part no. 8706-100-473

Technical Services / Information



Product: TVR 3701 SV

Television No. 2/97

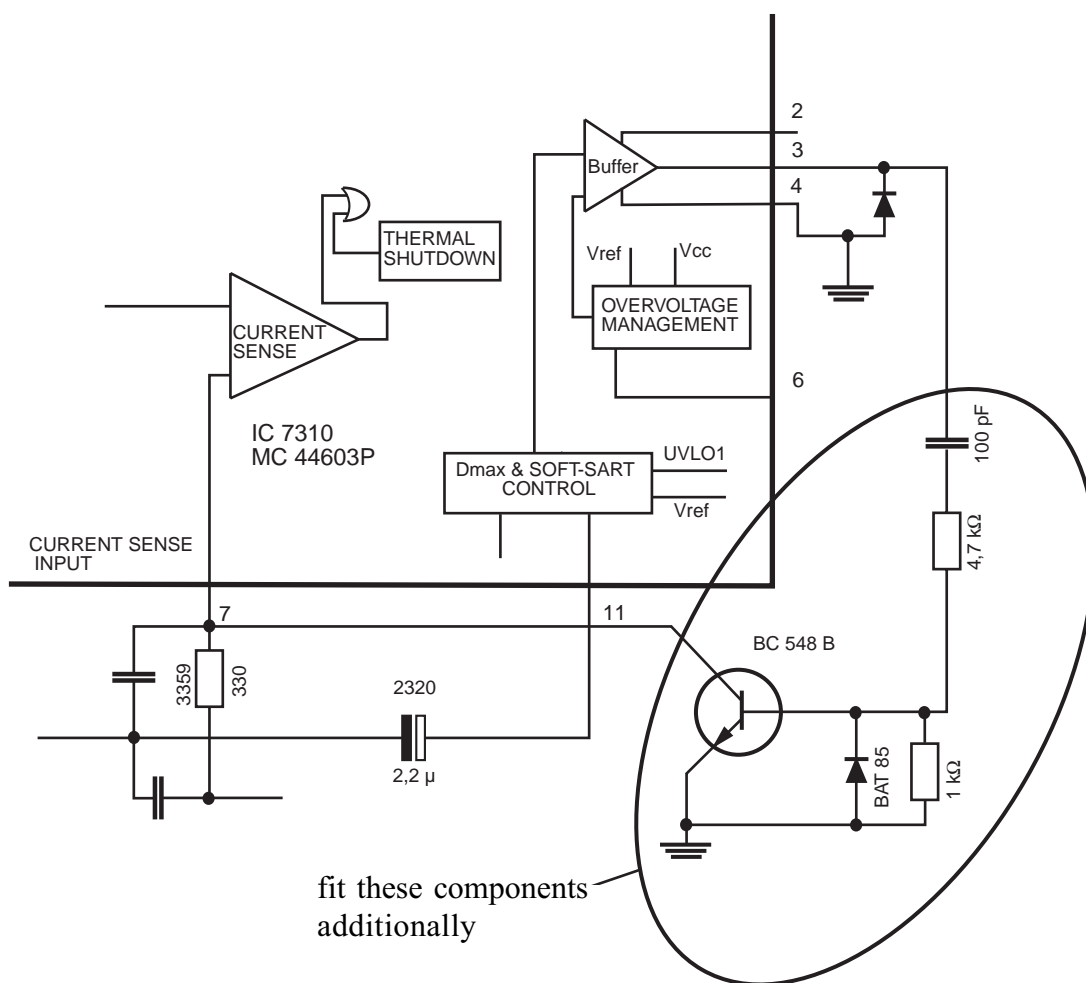
Portable mono TV/VCR combination TVR 3701 SV

Possible complaint:

Mains voltage dependent chirp audible in stand-by mode.

Cure:

Fit an additional transistor stage as shown below into the power supply unit at IC 7310 (MC 44603 P).



Workshop:

Carry out when complaints are received.

Stores:

Diode BAT 85 part no. 8309-198-085

Technical Services / Information

Product: CUC 7301

Television No. 3/97

37 cm colour television receivers with chassis CUC 7301 text e.g.: P 37-730 text

Possible complaint:

Teletext operation is not possible in "AV" programme position.

Reason:

The video switch-IC 2807 (TEA 2114) is not fitted in 37 cm television receivers.

Cure:

Retrofit the following components:

IC 2807 TEA 2114

C 2815 1 μ F

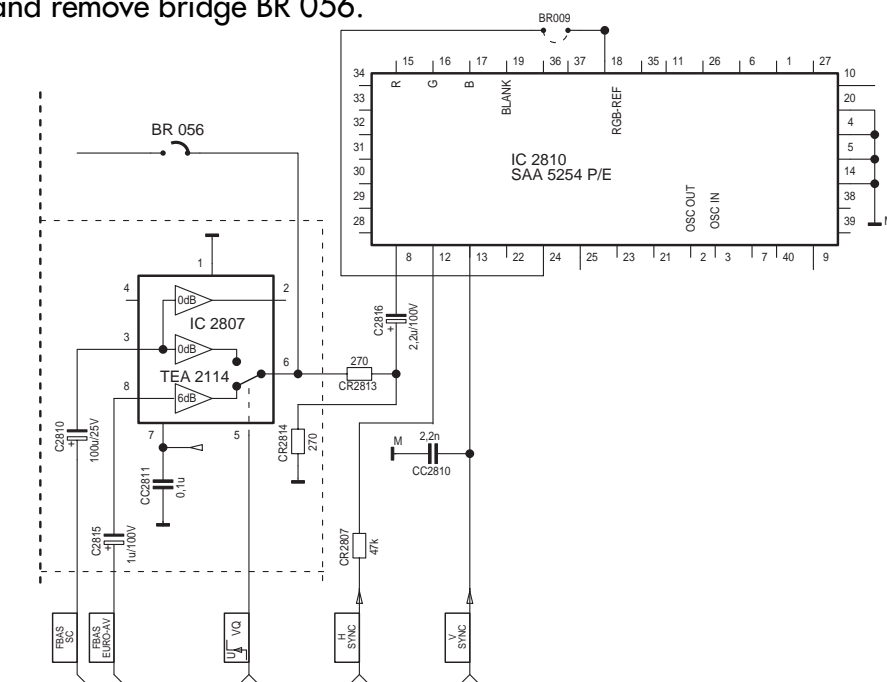
C 2810 100 μ F

C 2811 0.1 μ F

CR 2813 270 Ω

CR 2814 270 Ω

In addition, change the polarity of 2.2 μ F electrolytic capacitor C 2816 (negative terminal to pin 8 of IC 2810) and remove bridge BR 056.



Workshop:

Carry out when complaints are received.

The circuit board is already prepared to be fitted with these components.

Stores:

IC TEA 2114

part no. 8305-362-114

Electrolytic capacitor 1 μ F/100 V

part no. 8452-967-325

Electrolytic capacitor 100 μ F/25 V

part no. 8452-967-135

Capacitor 0.1 μ F

part no. 8555-267-173

SMD resistor 270 Ω

part no. 8706-297-059

Service Information

Product **Colour television receivers with chassis CUC 7303 and 7305, e.g. P 37-071, T 51-720 text, T 55-731 text**

Possible complaint:

After having replaced EEPROM IC 830 X24C02, the Automatic Tuning System does not find all stations.

Reason:

The EEPROM on this chassis contains information about so-called band limits in its memory cells 235 to 239. These values are programmed in the factory in a special alignment adapter and vary with the individual tuner and Z-diode D 683 (ZTK 33). When fitting a new EEPROM, any value is stored in the memory cells. Consequently, the ATS does not scan the complete frequency range.

Cure:

Clear the band limit values (content of the memory cells 235 to 239) as follows:

1. Call up the Service Menu (depress button „i“ on the remote control while switching on with the mains switch).
2. With the remote control buttons „P+/P-“ select line „AGC ALIGN“.
3. During a period of 5 seconds operate the buttons „AUX“ and „OK“ sequentially.

The ATS search function now scans the whole frequency range.

Note: When the band limits are cleared individual stations may be found twice!

Workshop:

Clear the band limit values when having replaced the tuner, Z-diode D 683 or EEPROM IC 830.

Stores:

none

Note to our Service Information 1/97 (subject: Digi Basic colour television receivers - „Eco“ voltage is about 5V too high)

Due to repeated inquiries we would like to point out that resistor R 60202 that is to be changed from 68 k Ω to 1 k Ω is a lead-type version and not a SMD component.



Serial No 5/97

Service Information

Product **Colour television receivers with chassis CUC 7350, e.g. ST 55-750 text**

Possible complaint:

Despite the modifications carried out according to our TV Service Information 9/96 the television sets switch occasionally to Standby after a prolonged time of operation.

Reason:

Temperature drift of the +E operating voltage by about 0.2 to 0.3V caused by Z-diode CD 61023. Consequently, IC 34015 TDA 8374 switches off with sudden black/white changes in the picture content or changing scenes.

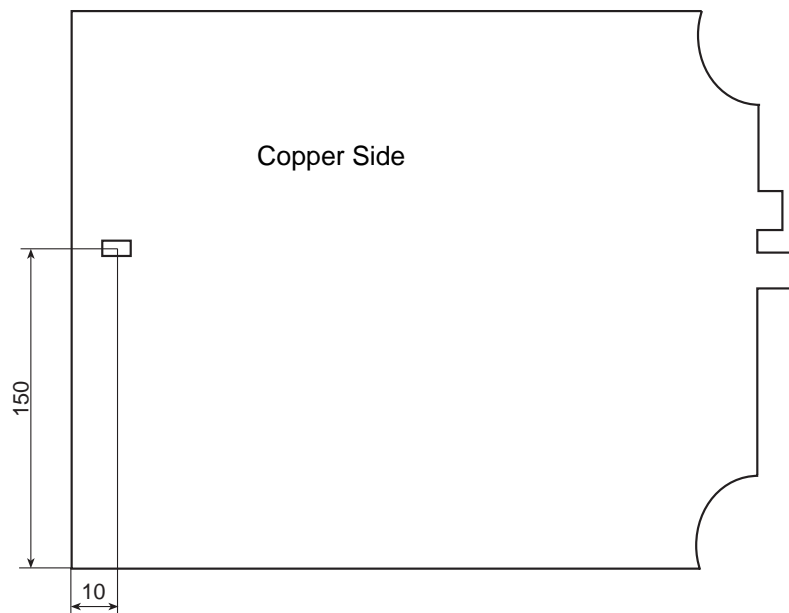
This Z-diode has been introduced later and therefore is drawn in only in the 1st Supplement to the CUC 7350 Service Manual.

Cure:

The position of the Z-diode is X=10, Y=150. Unsolder this diode and insert a SMD resistor 1206 1.2Ω 1% in this place.

Stores

SMD resistor 1206 1.2Ω 1% part no. 8706-297-475



Serial No 6/97

Service Information

Product Colour television receivers with chassis CUC 7300, e.g. P 37-740 SAT, and all sets retrofitted with the built-in satellite receiver SER 7300

Possible complaint:

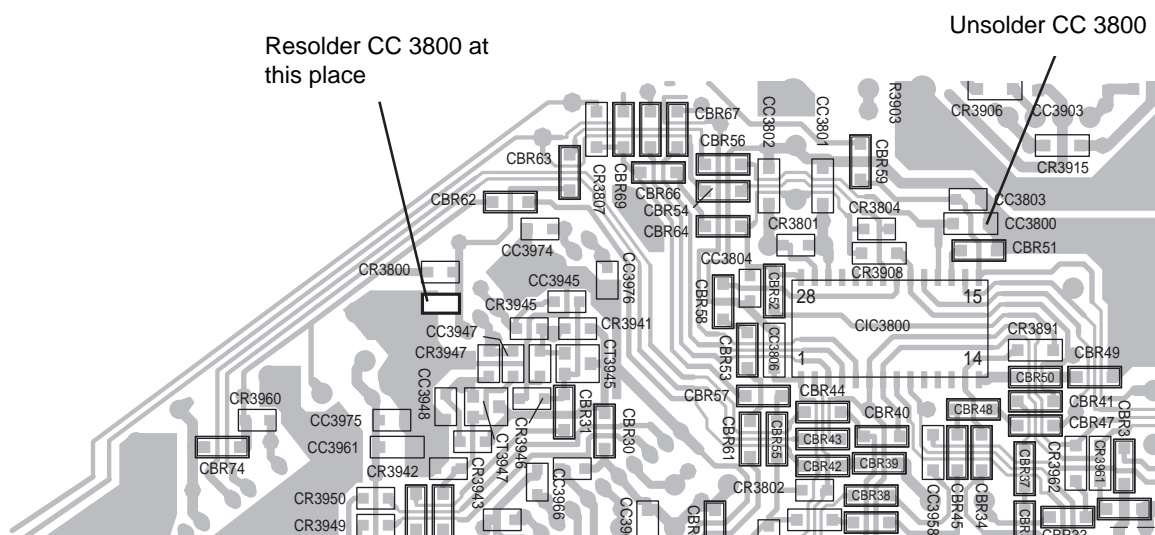
The sound disappears suddenly during the reception of a satellite programme and is audible again only when changing the programme or switching the TV off and on again.

Reason:

IC MSP 3400 on the SAT Module hangs up by static charges entering the Reset input of the IC.

Cure:

Unsolder the SMD capacitor CC 3800 from its place on the SAT Module and resolder it at the place indicated on the figure below.



Stores:

none

Serial No.7/97

Service Information

Product **Colour television receivers with chassis Digi Basic CUC 1825, 1826 and 1827, e.g. ST 63-255 IDTV/LOG, M 70-281 IDTV/LOG, SE 7089 IDTV/LOG**

Possible complaint:

The TV receiver can be switched on only with the remote control handset. When switching on with the mains switch, the receiver always goes to Standby mode.

Reason:

Unwanted activation of the protection circuit at the moment the TV receiver is switched on.

Cure:

Change the electrolytic capacitor C 58004 (on pin 6 of IC 58010) from 10 μ F to 22 μ F/25V.

Workshop:

Carry out when complaints are received.

Important note: Since the Digi Basic TV receivers work without a wiper contact in the mains switch the EEPROM stores the operating mode (Standby or „On“) at the time the set is switched off with the mains switch. That is why the set will only start with „On“ the next time it is switched on (power on) if it was switched off from this mode.

Stores:

Electrolytic capacitor 22 μ F/25V part no. 8452-967-126



Serial No 8/97

Service Information

Product **Colour television receivers with Digi 6 chassis - CUC 1952, 1983, 1984 with built-in SER 150/SER 150 ET Satellite Receiver - e.g. Denver SE 8216/9 Ref./PIP, M 82-269/9 Reference**

Possible complaint:

On reception of the channel Premiere via satellite the connected decoder does not operate while this station is decoded perfectly when received via a cable installation.

Reason:

The video crossbar IC TDA 6417 is overloaded on satellite reception.

Cure:

Change the SMD resistor CR 43209 from 1 M Ω to 470 k Ω . It is also possible to connect another 1 M Ω resistor in parallel when carrying out repairs.

Workshop:

The position of the SMD resistor is X=102, Y=187.

Stores:

SMD resistor 470 k Ω 0805	part no. 8706-100-337
SMD resistor 1 M Ω 0805	part no. 8706-100-145



Serial No 9/97

Service Information

Product **Mono TV Recorders TVR 3710, 5100 and 5500**



Possible complaint:

TV Recorder does not operate.

Reason:

Defect in transistor 7352 (MTP 3055E) caused by static discharges in the TV Recorder.

Cure:

Fit an additional Z-diode BZX 83B15 between gate and source to suppress voltage peaks at the gate.

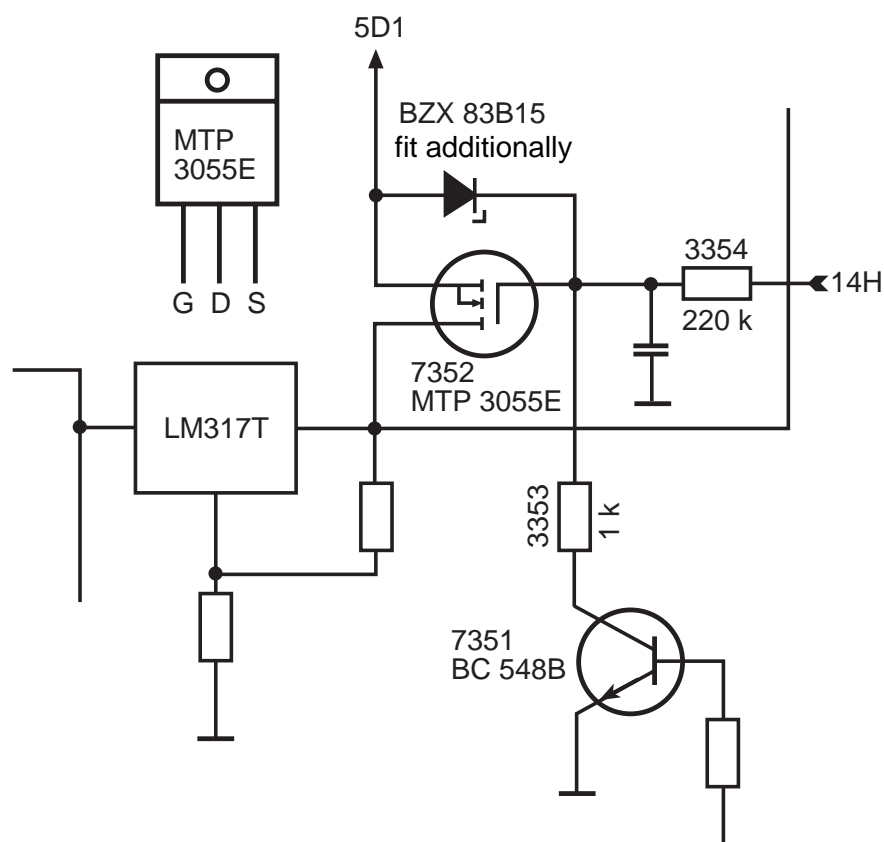
Workshop:

The Z-diode must strictly be retrofitted if the transistor 7352 fails. This change is carried out already in the factory.

Stores:

Z-diode BZX 83B15

part no. 8309-720-115



Serial No 10/97

Service Information

Product **Colour television receivers with Digi IV chassis - CUC 1821/1851/1881/1892 and 1981, e.g. M 70-781 IDTV, M 70-791 IDTV, M 82-102 IDTV, M 95-102 IDTV, M 82-169 PALplus**



Possible complaint:

Mains supply switching transistor fails occasionally.

Reason:

Breaks may be found after a long time of use at the solder pads in the area of the mains supply stage especially at the connections of the mains supply transformer.

Cure:

Re-solder the connections in this area.

Workshop:

For reasons of operational reliability and irrespective of the fault, re-solder the 1.5Ω resistor R 622 and the choke L 663 (both components are in the area of the mains supply) with great care using ample tin.

Stores:

None

Serial No 11/97

Service Information

Product **Colour television receivers with 82/70 cm Toshiba picture tube and Digi 6 chassis - e.g. M 82-269/9 Ref, SE 8216/9 Ref/PIP, M 70-269/9 Ref, SE 7016/9 Ref/PIP Trento**

Possible complaint:

Audible hum or buzzing noise from the bass loudspeaker.

Reason:

Magnetic radiation from the deflection yoke into the loudspeaker.

Cure:

To reduce the radiation from the yoke exchange the bass box loudspeaker for a type with compensating coil.

Workshop:

Carry out when complaints are received.

Stores:

Loudspeaker with compensating coil, part no. 19154-031.61

Product **Colour television receivers with Digi Basic chassis CUC 1805/1825/1826 and 1827, eg. ST 63-255 IDTV/LOG, ST 72-261 IDTV/LOG, Boston SE 7090 IDTV/LOG**

Possible complaint:

TV set does not start occasionally.

Reason:

„Cold“ solder connection of the wire bridge „BR 129“ with the earthing pad on the component side in the area of the mains supply stage. Consequently, the standby power supply does not start up reliably.

Workshop:

Re-solder the chassis connection in every television receiver coming in for repair using ample solder tin.

Stores:

None

Serial No. 12/97

Service Information

Product **Colour television receivers with chassis CUC 7301/7301F, e.g. P 37-070, T 51-730 text, T 55-730/5 text**

Possible complaint:

No picture. High tension is available.

Reason:

The transistors CT 181, CT 186, CT 191 and CT 193 failed because of high voltage sparks inside the picture tube.

Cure:

Replace the defective transistors and solder an additional diode 1N4148 from pin 7 of the „RGB“ lead (to picture tube panel) to the ground pin 4 on the chassis. Connect the anode of the diode with pin 4.

Workshop:

Fit the additional diode when the transistors failed.

Stores:

Diode 1N4148 part no. 8309-215-045

Product **Correction of Service Information 9/97
Colour television receivers with Digi 6 chassis 1952, 1983, 1984 and built-in satellite receiver SER 150/SER 150 ET - e.g. Denver SE 8216/9 Ref./PIP, M 82-269/9 Reference**

Possible complaint:

On reception of the channel Premiere via satellite the connected decoder does not operate while this station is decoded perfectly when received via a cable installation.

Reason:

The video crossbar IC TDA 6417 is overloaded on satellite reception.

Cure:

The change of the resistor CR 43209 from 1 M Ω to 470 k Ω as described in our Service Information 9/97 does not produce the desired effect in every case. Therefore change the resistor CR 43209 from 1 M Ω to 330 k Ω when carrying out repairs. It is also possible to connect a 560 k Ω resistor in parallel with the 1 M Ω .

Workshop:

The position of the SMD resistor is X = 102, Y = 187.

Stores:

SMD resistor 330 k Ω 0805 part no. 8706-100-333
SMD resistor 560 k Ω 0805 part no. 8706-100-139



Service Information



Product Colour television receivers with chassis CUC 7303, e.g. P 37-731 text, P 45-731 text, T 55-731 text

Possible complaint:

Pronounced NF crackling when switching off with the mains switch.

Cure:

Change the Z-diode D 323 from ZPD 8.2V to 9.1V 2%. Additionally, solder a diode 1N 4148 in parallel with the resistor CR 323. Connect the cathode of this diode with the +B voltage.

Workshop:

Carry out on request. This change has already been introduced in production.

Stores:

Z-diode ZPD 9.1V 2% part no. 8309-720-092
Diode 1N4148 part no. 8309-215-045

Product Colour television receivers with chassis CUC 7303/7305/7350 and the picture tube panels 29305-022.16/-022.17, e.g. P 37-731 text, P 45-731 text, T 55-731 text, P 37-731/12 text, ST 55-750 text, XS 55/1, Lissabon SE 5576 text

Possible complaint:

Failure of the RGB output stages (picture tube panels 29305-022.16 and -022.17) or of the teletext function.

Reason:

The semiconductors are destroyed by high-voltage sparks within the picture tube.

Cure:

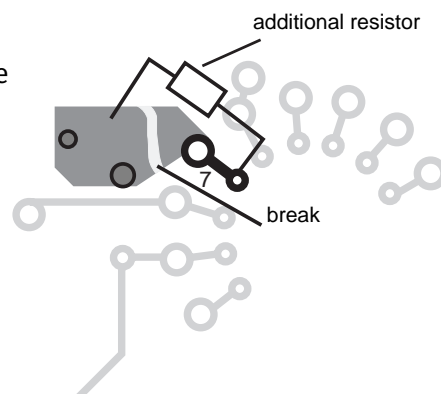
On the picture tube panels -022.16/-022.17, insert an additional 1.5 k Ω composite carbon resistor (do not use a carbon film resistor!) into the circuit path to the screen grid connection of the picture tube socket. Ensure that the break is 2mm wide at least (see figure) to avoid sparking.

Workshop:

Refit the resistor in any case if the above mentioned semiconductors failed.

Stores:

Only altered picture tube panels 29305-022.16/-022.17
Composite carbon resistor 1.5 k Ω , part no. 8702-401-077.



Serial No 14/97

Service Information

Product **Colour television receivers with Digi 6 chassis CUC 1842, 1894, 1952, 1962 and 1983, e.g. M 72-410 Ref., Denver SE 8216/9 PAL Plus, M 70-269/9 Ref.**

Possible complaint:

Vertical output stage TDA 4173 fails or thin white lines similar to retrace stripes are visible.

Reason:

Inherent instability of the vertical output stage IC TDA 4173 AF.

Cure:

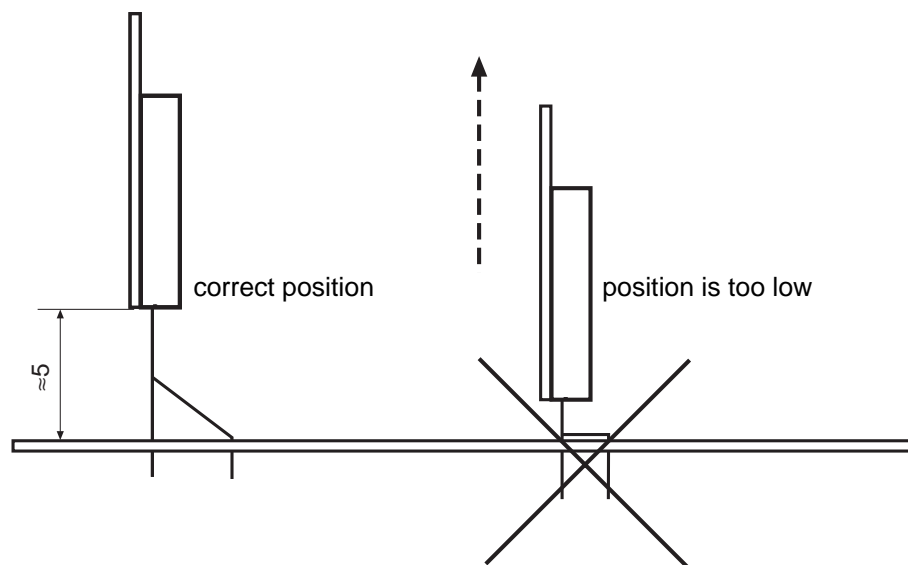
- Should above mentioned symptoms appear do not fail to exchange TDA 4173 AF and solder additionally a 1 nF foil capacitor from pin 1 and from pin 7 each to pin 4 (-K voltage) on the copper side.
- Check the mounting position of the vertical output-IC. If the position of the IC is too low, the pins may temporarily come into contact with the chassis connection on the upper side causing the IC to fail. Additionally, the circuit may already be damaged by the building up force of pressure resulting in a long-term failure. Therefore replace TDA 4173 AF also if it has not been fitted correctly!

Workshop:

When fitting the new IC TDA 4173 AF take care of the correct position of the holding clamp and solder in the additional capacitors!
This change has been generally introduced.

Stores:

Foil capacitor 1 nF	part no. 8555-367-525
IC TDA 4173 AF	part no. 8305-344-173



Serial No 15/97

Service Information

Product Colour television receivers with Digi Basic and Digi 6 chassis - CUC 1805, 1825, 1826, 1827, 1828, 1842, 1894, 1952, 1962 and 1983
e.g. M 72-410 Ref., Denver SE 8216/9 PAL Plus, M 70-269/9 Ref.

Possible complaint:

Interference lines in the picture or complete failure of the tuner.

Reason:

Failure of the PLL-IC TY 44860 within the tuner.

Cure:

After having replaced the tuner, solder an additional Z-diode ZPD 33 B (2% tolerance) on the copper side of the chassis board from pin 1 to the multipoint connector of the signal module to chassis (anode to chassis).

Workshop:

Retrofit the Z-diode if the tuner failed.

Stores:

Z-diode ZPD 33 B (2%) part no. 8309-707-135



Serial No 16/97

Service Information

Product Colour television receivers with Digi Basic chassis - CUC 1806, 1825, 1826, 1827, 1829, 1830 with the picture tube panels 29305-122.04/-122.10/-122.12 and -122.17
e.g. ST 70-255 IDTV/LOG, ST 72-261 IDTV/LOG, Atlanta SE 7220 IDTV/LOG, ST 72-261 IDTV/LOG

Possible complaint:

Failure of the RGB output IC's TDA 6111.

Reason:

The RGB output IC's are destroyed by high voltage sparks.

Cure:

Directly from the outputs (pin 8) of the three output IC's TDA 6111 connect one additional diode BAV 21 each to chassis and one diode each to the +200 voltage (see figure).

Workshop:

The insertion of the three diodes which are to be connected to +200 is already prepared on the picture tube panel by the diodes D 734, D 754 and D 774.

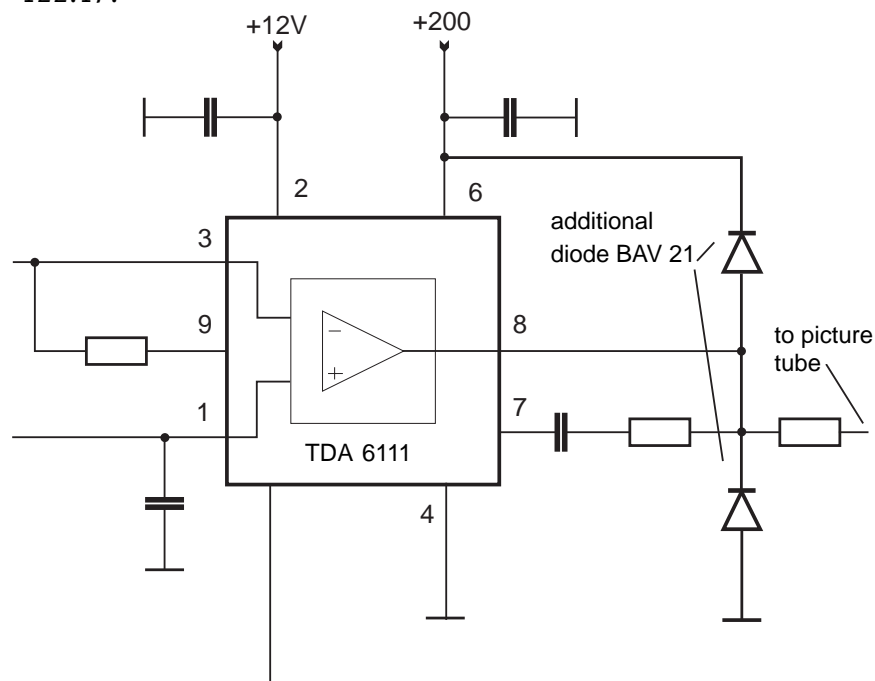
The three diodes which are to be connected to chassis are to be soldered on to the copper side from pin 8 to pin 4 (anode to pin 4).

Stores:

Diode BAV 21 part no. 8309-200-021

IC TDA 6111 part no. 8305-336-111

Only modified picture tube panels 29305-122.04/-122.10/-122.12 and -122.17.



Serial No 17/97

Service Information

Product **Colour television receivers ST 72-261 IDTV/LOG and ST 72-261/8 IDTV/LOG with Toshiba picture tube**

Possible complaint:

Picture seems to be unsharp or the TV switches occasionally to Standby.

Reason:

Short circuit in the serially connected capacitors C 64001 and C 64002 (150pF/6kV each) on the dynamic focusing board.

Cure:

1. Replace the capacitors C 64001 and C 64002 on the dynamic focusing board.
2. Check the Ug2/focus control unit on the picture tube socket board 29305-122.12.
If the TV is fitted with version 29201-361.01 or -361.11, this focus control unit must be replaced by version 29201-361.04. Version 29201-361.20 needs not to be replaced but can remain in the TV set.
3. Attention: When fitting the new Ug2/focus control unit, please note the following wiring instructions:
 - Insert the blue lead - provided with a white mark - of the Ug2/focus control unit into the focus voltage connection of the diode split transformer.
 - Solder the shorter blue lead of the Ug2/focus control on to the focus voltage connection of the focusing board.
 - Route this lead from the focusing board to the focus voltage connection of the picture tube socket.
 - Re-attach the cover of the focusing board.
4. Replace the diode split transformer 29201-680.01. Due to the failure of the capacitor C 64001 or C 64002 the resistance of the focus resistor in the diode split transformer changes so that an optimum adjustment of the picture sharpness is no longer possible.

Workshop:

Please check the wiring of the focus leads according to point 3 of every TV receiver of type ST 72-261 IDTV/LOG and ST 72-261/8 IDTV/LOG coming in for repair!

Focus adjustment:

- Feed in a convergence test pattern.
Set contrast to maximum. Set the brightness so that the black background of the test pattern just becomes visible.
- With the focus control on the picture tube socket board, adjust the horizontal lines for maximum sharpness.
- Afterwards, adjust the vertical lines with the focus control on the focusing board for maximum sharpness.
- Repeat this adjustment to achieve the best result possible.

Stores:

Capacitor 150pF/6kV	part no. 8502-200-066
Ug2/focus control unit	part no. 29201-361.04
Diode split transformer	part no. 29201-680.01
Dynamic focusing board	part no. 29305-025.26



Service Information

Product **Satellite Receivers STR 631/632/641 and 642**

Possible complaint:

No sound after the receiver has been operated in standby mode for a prolonged period of time. The sound is audible again only on disconnecting the mains plug and switching the satellite receiver on again.

Reason:

As advised by our Service Information 4/97, this phenomenon is caused by IC STV 400 STV 0056A but cannot be limited to certain IC lots.

Cure:

Solder one SMD Z-diode 8.2V each in parallel with the electrolytic capacitors C 427 (pin 49 IC400) and C 436 (pin 38 IC400) which are connected to chassis.

Workshop:

The additional Z-diodes can be soldered on to the copper side directly between the connections of the electrolytic capacitors (anode to negative connection of the electrolytic capacitor).

Retrofit the diodes in every satellite receiver coming in for repair.

Stores:

SMD Z-diode 8.2 C part no. 8309-455-082



Serial No. 19/97

Service Information

Product **Colour television receivers MW 70-100/8, M 72-100 and M 72-100/8**

Possible complaint:

Audible buzzing noise that does not come out from the loudspeaker.

Reason:

The mains suppressor chokes on the mains switch module may be in contact with the protective screen producing vibrations thereby.

Cure:

Unsolder the protective screen and the mains suppressor choke and fit a suppressor choke with part number 29500-834.97. Since this choke is provided with an additional compensating coil the protective screen is no more needed.

Workshop:

Carry out on request.

Stores:

Mains suppressor choke part no. 29500-834.97



Serial No. 20/97

Service Information

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**

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 k Ω 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

Service Information



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

Service Information

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

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“ programme position retrofit the following components:

- IC 2807 TEA 2114
- C 2815 1 μ F/100V
- C 2810 100 μ F/25V
- CC 2811 0.1 μ F
- CR 2814 390 Ω 5% (structural shape 0805)
- CR 2813 change from 0 Ω to 270 Ω 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 1 μ F/100V	part no. 8452-967-32500
Electrolytic capacitor 100 μ F/25V	part no. 8452-967-13500
SMD capacitor 0.1 μ F	part no. 8672-167-18700



Serial No. 3/98

Service Information

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:

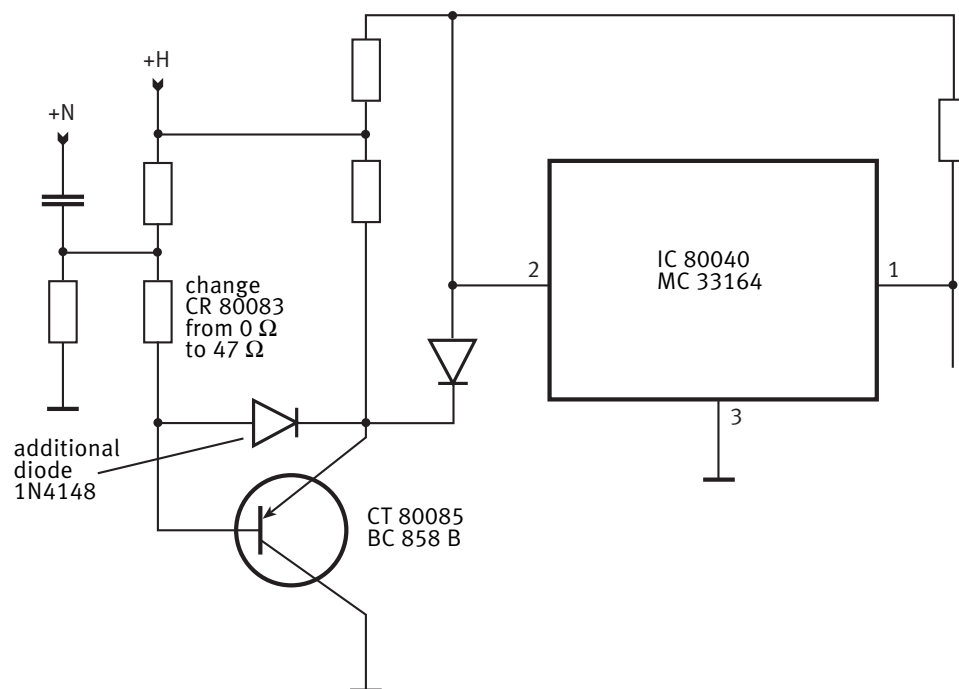
On replacement of the transistor, solder an additional diode 1N4148 from the base to the emitter (anode to base) of CT 80085 and change the resistor CR 80083 from 0 Ω to 47 Ω 5% (structural shape 0805).

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

Service Information

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:

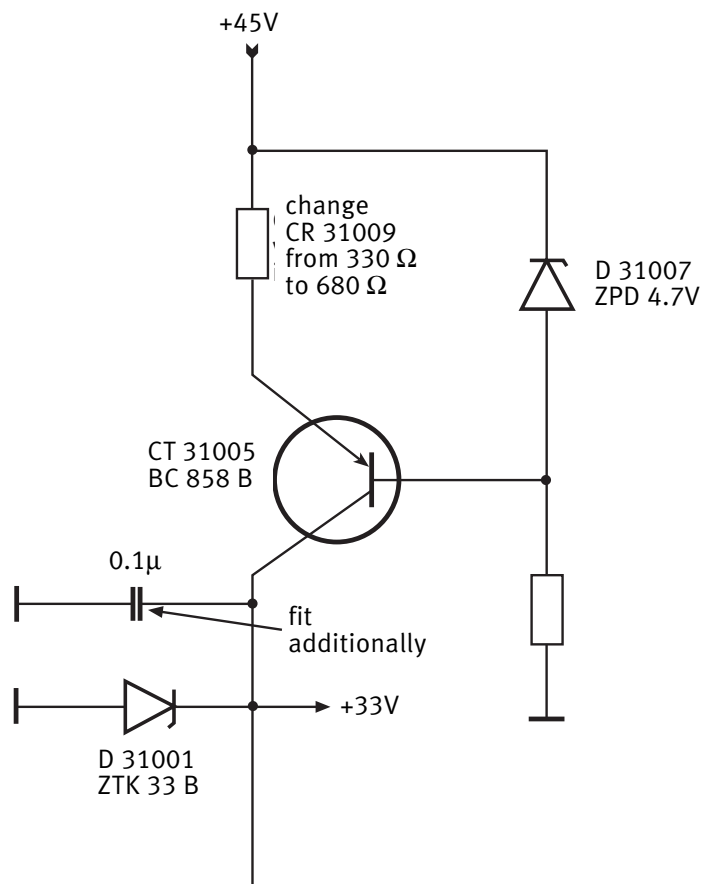
On replacement of the the Z-diode ZTK 33B, change additionally the SMD resistor CR 31009 from 330 Ω to 680 Ω 5% (structural shape 0805) and solder an additional 0.1 μ F foil capacitor in parallel with Z-diode ZTK 33B.

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

Service Information

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:

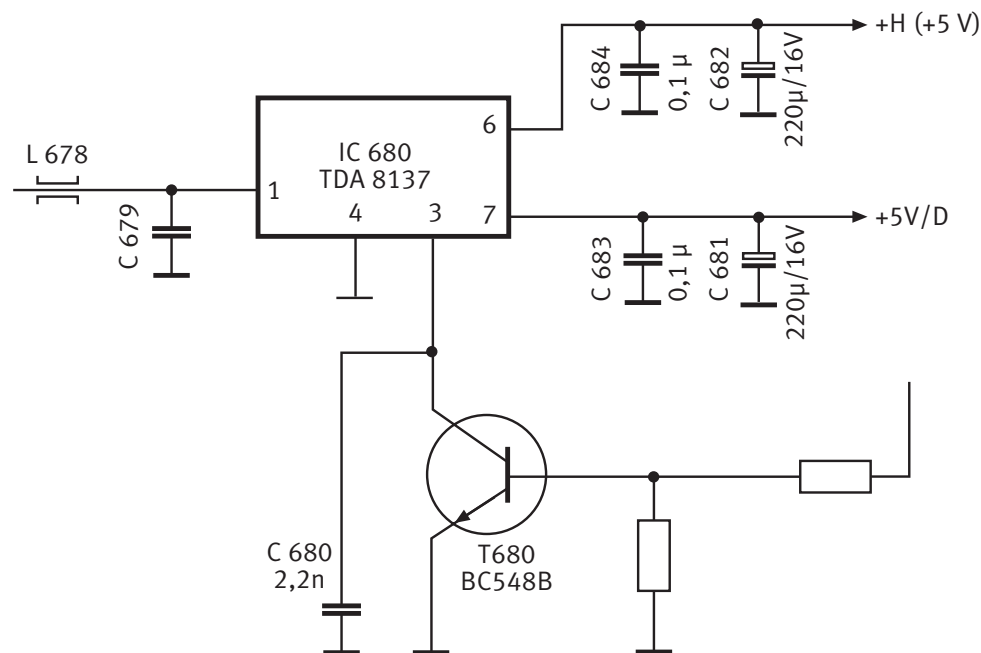
Failure of the capacitors C 683 and C 684 of 0.1 μ F each.

Cure:

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

Stores:

None.



Serial No. 6/98

Service Information



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 k Ω 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

Service Information

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

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 dismantled.

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 dismantled from above or below by pressing the locking lugs together.

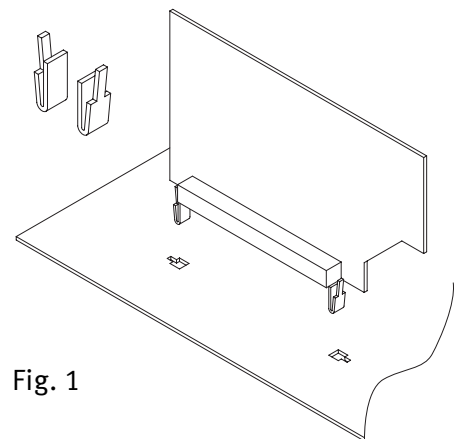


Fig. 1

2. The modules of the colour television receivers with chassis CUC 20xx are fitted with a new plug-in system. They can be dismantled 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.

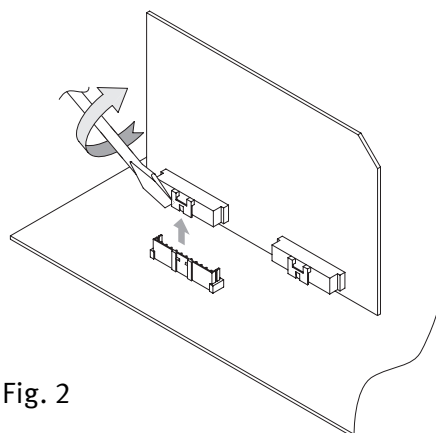
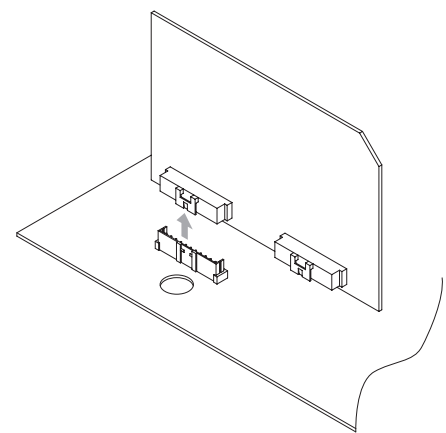


Fig. 2



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

Service Information

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

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

Service Information

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:

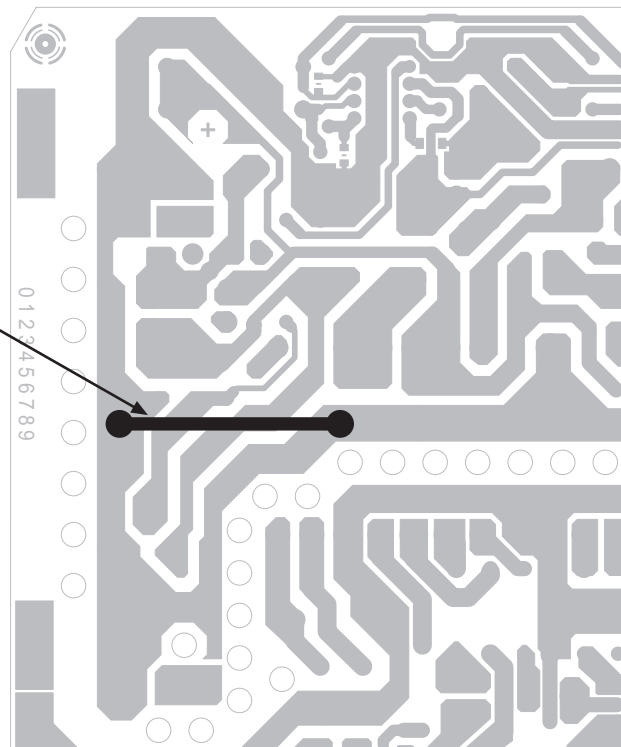
Solder an insulated wire of approx. 35mm (2.5mm²) in length on to the solder side of the mains supply section (between pos. R60007 and C60001) as shown below. This additional wire is used to short-circuit the ground loop which has been found to be the source of interference.

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

Service Information

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

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

Service Information

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

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

Service Information

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

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

Service Information

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

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



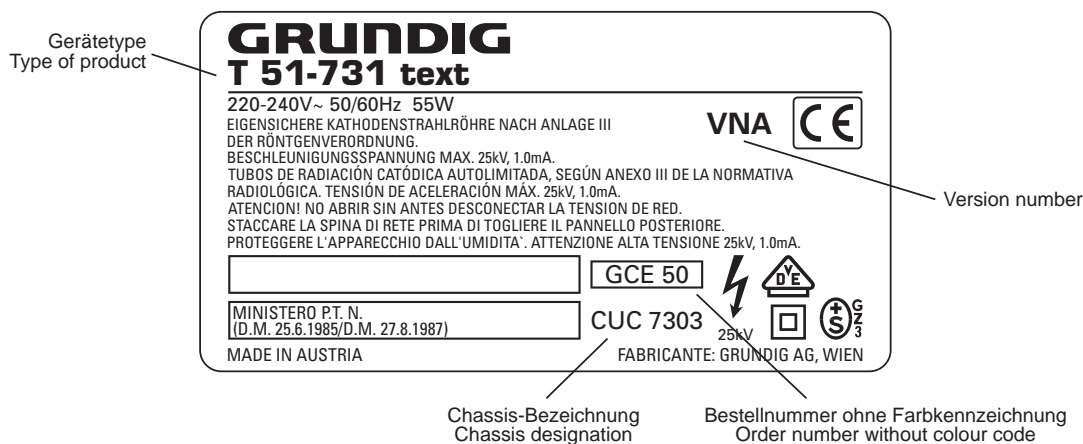
Serial No. 14/98

Service Information

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

Service Information

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

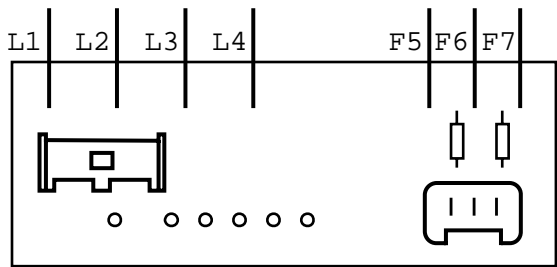
Service Information



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 0.5 μ F	to 0.41 μ F part no. 8515 722 24600
C 53071 from 13nF	to 12.5nF part no. 8515 911 70200
C 53073 from 0.47 μ F	to 0.56 μ F part no. 8515 724 09300
L 53074	to 260 μ H part no. 0924 685 96200
C 58011 from 0.47 μ F	to 0.56 μ F 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 250 μ H part no. 0924 685 95300

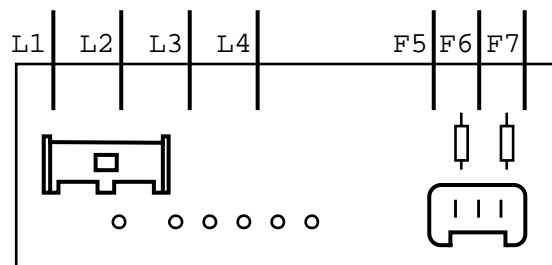
Service Information

New type of picture tube for 72cm colour television receivers with chassis CUC 6365 / 6331

The picture tubes A 68 ESF 002X11, A 68 ESF 002X011 (without coating) and A 68 ESF 202X11, A 68 ESF 202X011 (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 002X111 / A 68 ESF 202X111.

- changed yoke connections:

The figure below shows the connections of the deflection unit for the new picture tubes A 68 ESF 002X111 and A 68 ESF 202X111.



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 additionally the following changes:

CRT fitted in the TV set

Changes when fitting the replacement tube

A 68 ESF 002X11 A 68 ESF 202X11	A 68 ESF 002X111 A 68 ESF 202X111 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 002X011 A 68 ESF 202X011	A 68 002X111 A 68 202X111 No change. Connect the picture tube as shown in the figure.

Serial No. 1/99

Service Information

Colour television receivers with Digi Basic++ chassis - CUC 1806, 1828, 1830, 1836, 1929

e.g. ST 70-869 IDTV/LOG, M 70-281 IDTV/LOG, M 63-281 IDTV/LOG, ST 70-270 IDTV



Possible complaint:

Pronounced rattling noise.

Reason:

1. Magnetic radiation from the deflection yoke to the AF branch circuit.
2. The line interference suppression chokes may be in contact with the metal screen causing vibrations.

Cure:

to point 1

Change the following resistors within the AF output stage:

Picture tube	CR 40013 (0805)	CR 40023 (1206)	CR 40012/ CR40022(0805)
55cm (21") PHI	to 150 Ω	to 180 Ω	to 2.2 k Ω each
63cm (25") PHI	to 150 Ω	to 180 Ω	to 2.2 k Ω each
70cm (28") PHI	to 150 Ω	to 180 Ω	to 2.2 k Ω each
72cm (29") PHI	to 150 Ω	to 180 Ω	to 2.2 k Ω each
82cm (33") PHI 16:9 PHI	to 150 Ω	to 180 Ω	to 2.2 k Ω each

to point 2

Unsolder the metal screen and the line interference suppression choke and insert a suppression choke with part no. 29500 834 9700. Since this choke is fitted with an additional compensating coil, the metal screen is no longer necessary.

Stores:

Line interference suppression choke part no. 29500 834 9700

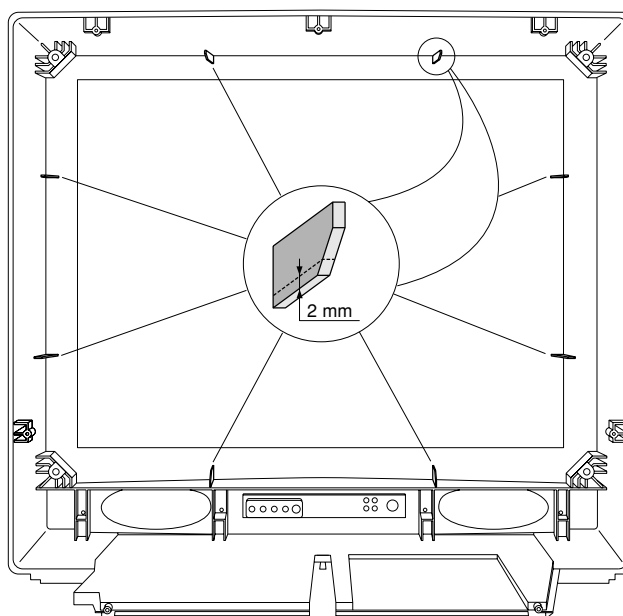
Serial No. 2/99

Service Information

1. Colour television receivers ST 84-796/9 TOP/LOG, M 84-210/8 IDTV/LOG, M 84-210/8 A IDTV/LOG

The picture tubes A80 EFF 002X11 (ST 84-796/9 TOP/LOG) and A80 EFF 002X42 (M 84-210/8 IDTV/LOG, M 84-210/8 A IDTV/LOG) fitted to a.m. models are no longer available. These tubes are mechanically not fully compatible with the replacement tubes A80 EFF 272X11 / A80 EFF 272X43.

Due to the slightly larger overall dimension, the picture tube touches the fixing ribs within the cabinet. Consequently, when changing the tube, these ribs must be cut by about 2mm (see figure).



Stores:

CRT A80 EFF 272X11 part no. 8300 0208 0500 (50Hz version)

CRT A80 EFF 272X43 part no. 8300 0208 0600 (100Hz version)

2. Satellite Retrofit Kit SER 150 ET for chassis CUC 1805, 1825, 1826, 1827 (Digi Basic), 1806, 1828, 1829, 1830, 1836 (Digi Basic++), 1929, 1952, 1983, 1984, 1894 and 1842 (Digi 6)

From now on, the SER 150 ET Retrofit Kit will be delivered without the EPROMs previously enclosed with the delivery for TV sets with Digi 6 and Digi Basic TV chassis.

The TV sets have already been provided with a software covering all the functions of the SER 150 ET since 4/97. As a result, the EPROM of the currently delivered TV sets needs not to be exchanged. Should you receive a TV set manufactured before 1997 for retrofitting, check the software version (call up the version pressing the buttons „i“ -> „OK“ -> „AUX“). If the version for the chassis:

CUC 1805, 1825, 1826 and 1827 (Digi Basic) is lower than 19798-300.20, and for the chassis Digi 6 CUC 1842, 1894, 1984, 1952 and 1983 is lower than 19798-311.20, the EPROM needs to be replaced. The EPROM of TV sets with Digi Basic++ needs not to be replaced.

The required IC is available from the Central After-Sales Service under part number 19798 300 2400 (Digi Basic) or 19798 311 4700 (Digi 6).

Serial No. 3/99

Service Information

1. **Colour television sets with chassis CUC 7303 and 45 cm Samsung or 51 cm Samsung/Videocolor picture tubes - e.g. P 45-830 text, P 45-847 FR/text, T 51-720 text, T 51-731 text, T 51-071, T 51-732/4 text, T 51-732/5 text**

Possible complaint:

No operation - failure of the switched mode power supply (transistor / drive-IC / other components).

Cause:

Due to tolerances of the mains transformer 29201 513 9700 the collector current of transistor T 665 (MJF 1800) may reach limit values and consequently cause the power supply to fail.

Cure:

On replacement of the defective components change additionally the resistor R 666 from 0.82 Ohm to 0.91 Ohm. As a result limitation of the collector current is activated earlier so that the limit values will not be exceeded.

Workshop:

Carry out this change when the power supply unit fails.

Stores:

Resistor 0.91 Ohm part no. 8765 0980 0000

2. **Colour television sets with chassis 7303 - e.g. P 37-071, P 37-731 text, P 45-731 text, T 51-720 text, T 51-732/5 text**

Possible complaint:

Failure of vertical output IC TDA 3653.

Reason:

Static discharges to the deflection windings.

Cure:

1. For protecting the IC, change the capacitor C422 from 47nF to 0.1µF/100V.
Note: This 47nF capacitor is not inserted in all television receivers with 37cm Philips picture tube. However the circuit board is prepared for later insertion of this capacitor.
2. Solder an additional diode BAV 21 on to the foil side from the negative terminal of the electrolytic capacitor C412 to pin 5 (cathode to pin 5) of the vertical output IC TDA 3653.

Workshop:

Carry out this change when the vertical output stage failed.

Stores:

Diode BAV 21 part no. 8309 200 02100



Serial No. 4/99

Service Information

Product: **Colour television receivers with Digi Basic++ chassis, e.g. Sydney 100 SE 7020, Sydney 100 SE 7021, MW 82-50/8, M 70-290 IDTV Davio, M 84-211/8 IDTV**

Possible complaint:

Economy mains switch is not reliably released - release relay flutters.

Reason:

Relay current is too low to release the economy mains switch because of the lower upper limit voltage (+Eco) of the new Standby mains stage 29304 050 8200.

Cure:

Change the resistor R81503 (either inserted in the keyboard control or the mains switch board dependent on the type of TV set) from 22 kOhm to 15 kOhm.

Workshop:

Carry out on request.

Stores:

Resistor 15 kOhm, part no. 8700 011 30100.



Serial No. 5/99

Service Information

Colour TV sets fitted with the chassis Digi Basic 3 - CUC 1930, 1931, 1832, e.g. Sydney SE 7230 Dolby, Xentia 72 M 72-400 Dolby, Arganto 82 MW 82-510/8 DPL

Possible complaint:

A short time after switching on (about 20-30 sec.) the TV set cannot be operated any more.

Cause:

Unfavourable constellation of the received station identifications.

Remedy:

Software change to version „18“ by replacing the EPROMS IC 80070.

Workshop:

On every incoming repair set with a software version below „18“ replace the Eproms with one of the new version.

The software version of the TV set can be called up via the „Dialogcenter“ (button „i“ -> „OK“) by pressing the „AUX“ button. In doing this, the indication 29798-101.xx (the „xx“ positions indicate the software version) appears at the top border of the picture screen.

If the software is updated from a version below „14“ to „18“, the following points must be observed in addition:

1. After changing the software carry out an ATS reset. This is done by switching on with the mains button with the L+ button held down (L+ button on the TV set!). Keep pressed the L+ button until the „ATS Rest“ window appears in the picture. When switching the TV set on the next time, the set will prompt for entering the OSD language and the country. Then it will start a new station search. Do not abort the station search!
2. Check and correct if necessary via the protected menu for the specialized dealer (code „8500“) under menu item „Picture tube type“ the current setting. The table below shows the setting depending on the picture tube:

Indication in the "Picture tube type" menu item	Picture tube designation
P 72	A68ESF 202X143
T 72	A68LBT 696X99
T 72 RF	A68LQP 356X97
P 70/16:9	W66ESF 202X44
P 82/16:9	W76ESF 231X44
T 82 RF/16:9	W76LPF 350X99
P 70 RF/16:9	W66ERF 031X044
P 82 RF/16:9	W76ERF 031X044

Stockkeeping:

Eprom IC 80070

part no. 29798 101 1800



Serial No. 1/00

Service Information

Colour TV sets Atlanta SE 7250 PIP/Dolby, Atlanta SE 7250/8 Dolby, and Sydney SE 7230 Dolby with Toshiba A 68LBT696X99 picture tube.

Possible complaints:

Unsharp picture, changing picture sharpness or buzzing noise from the picture tube.

Cause:

Defect of the base focus control R 64006 on the dynamic focus board. In the case of this defect, only a minimum reaction can be observed when aligning with the control R 64006.

Remedy:

Replace the control R 64004.

Workshop:

Replace the control if necessary. In addition fix the new control with a clamp, part number 29700 640 0100.

Stockkeeping:

Focus control 90/120 MOhm

Part number 29303 552 1100.

Clamp for control

Part number 29700 640 0100.



Serial No. 2/00

Service Information

Colour sets with chassis Basic ++
CUC 1806, 1828, 1829, 1929, and equivalent sets.

Colour sets with chassis Basic 3
CUC 1832, 1930, 1931, and equivalent sets.

Possible complaint:

The set shows a brief flashing before the Eco switch unlocks.

Cause:

Through the attraction of the Eco switch the standby power supply unit is charged too highly and causes a reset of the processor module. This reset in turn causes briefly before the release of the Eco switch a temporary rise of the operating voltages and thus a brief flashing of the picture tube (brief building up of the high tension).

Remedy:

Replace the standby transformer with the 29201 619 9700 type.

Workshop:

Carry out the replacement if applicable.

Stockkeeping:

Standby transformer, material no.: 29201 619 9700.



Serial No. 3/00

Service Information

Colour TV sets ST 70-789 NIC/Dolby and ST 70-898 NIC/Dolby - CUC 2032

Possible complaint:

After fitting the satellite retrofit kit SER 251, no satellite reception is possible.

Cause:

Contrary to brochure statements, these TV sets have been manufactured without retrofit option.

Remedy:

Through effecting the following changes, the retrofit option is achieved:

1. Remove the chip resistances CR 32131 and CR 32129.
2. Fit the following components:

<i>Position</i>	<i>Component</i>
CT 32128	BC 848 B
CR 32128	4.7 kOhm
D 32128	1 N4148

Workshop:

If retrofitting is required, make the required changes.

The components are to be found in the circuit diagram of the Service Manual CUC 2032 (Mat. No. 72010 024 8000) on the pages 3-27.

Sets which are already prepared for retrofitting at the factory are marked with „VNX“.

Storekeeping:

BC 848 B	Mat. No. 8301 004 84800
4.7 kOhm (0805)	Mat. No. 8706 100 08900
1 N4148	Mat. No. 8309 215 04500



Service Information

Colour TV sets with chassis Basic ++
CUC 1806, 1828, 1829, 1929 and similar
Colour TV sets with chassis Basic 3
CUC 1832, 1930 und 1931 and similar



Possible complaints:

The eco switch does not release.

Cause:

Through the attraction of the eco switch the standby power supply undergoes a too high load and causes a reset of the processor unit. This reset causes just before the attraction of the eco switch a brief rise of the operating voltage and may therefore prevent the release of the eco switch.

Remedy:

Replace the standby transformator with the version 29201 619 9700. In addition, the complete standby power supply unit can be replaced with the version 29304 050 8500 on the chassis Basic 3.

Workshop:

Carry out the replacement if necessary.

Stockkeeping:

Standby transformator, material No.:	29201 619 9700.
Standby power supply unit, material No.:	29304 050 8500.

Serial No. 5/00

Service Information

Colour TV sets wit the chassis Digi Basic 3 - CUC 1832, 1930 and 1931

e.g.: Sydney SE 720 Dolby, Xentia M 72-400 Dolby, Denver SE 8250/8 PIP/Dolby

Possible complaint:

No picture, no sound.

Cause:

Failure of the power supply transistor T 60006 (IRF PC50 or 2SK2699).

Remedy:

In addition to replacing the power supply transistor change the SMD capacitor CC 60014 from 3.3 nF to 10 nF. This results in a better softstart function of the power supply.

Workshop:

In the event of a defective power supply transistor replace in addition the capacitor.

Stockkeeping:

SMD capacitor 10 nF 0805	Part no. 867219817300
Transistor IRF PC 50/2SK2699	Part no. 830280505000



Service Information

Gerät: **Colour TV sets Digi 100**

Flash programming for the new Digi 100 generation

For the above stated series of sets, no completely programmed EPROM has been used for the device software. The software is stored in a Flash-Eprom that can be externally loaded. In this way it is possible to update the software without opening the housing of the TV set.

To do this, the new software is downloaded into the TV set via the serial interface of a PC and the programming socket located at the rear of the TV set using a download programme and a RS232 converter (Flash-Programmer F-Prog 1).

Required equipment

Flash-Programmer F-Prog 1, part no. 759880740000

Required hardware (minimum)

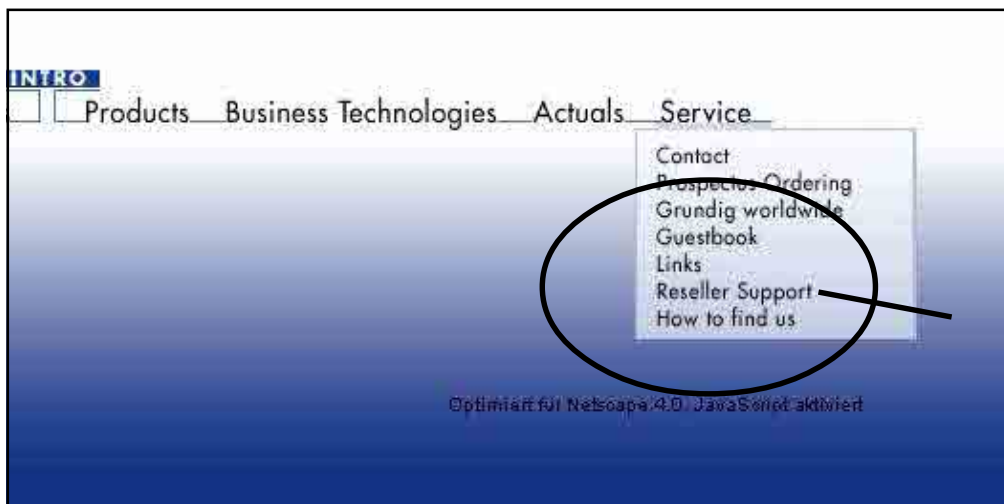
- PC with processor 486/66 and operating system Windows Version 3.11 or higher
- 8 MB free main memory
- Free fixed disk capacity of 20 MB
- Internet access or InfoTip-System

Calling up the current device software

The software can be called up from a protected area of the Grundig Internet Homepage after entering your customer number and a password, or it can be called up via the InfoTip-System (under „Service Tips“).

Example for calling up the software from the Internet:

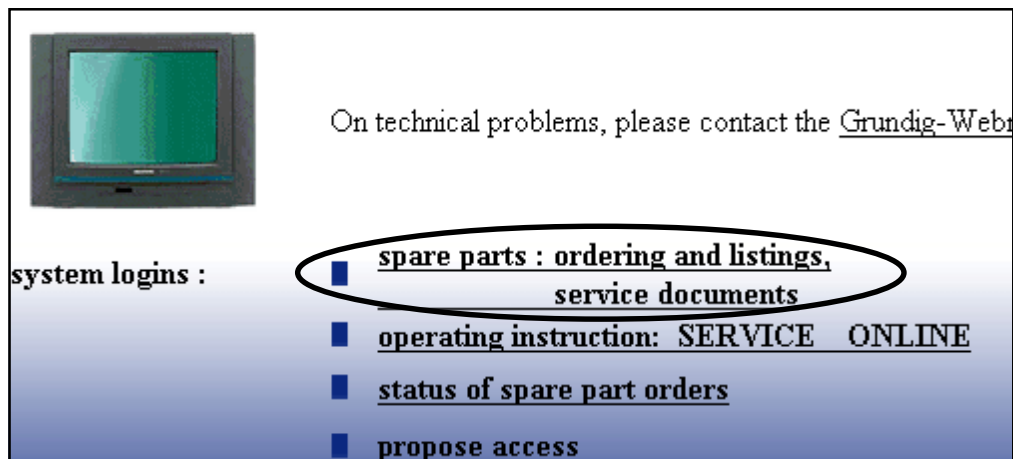
- Start the Microsoft Internet Explorer or Netscape Navigator.
- Enter **http://www.grundig.com** and confirm.
- Click to **Info + Products** on the Grundig Home-Page.
- Position the mouse pointer to **Service**.
- Click to **Reseller Support**.



Serial no. 02/01

Note: In the retailer support menu, you may apply for access by entering your customer number and your address.

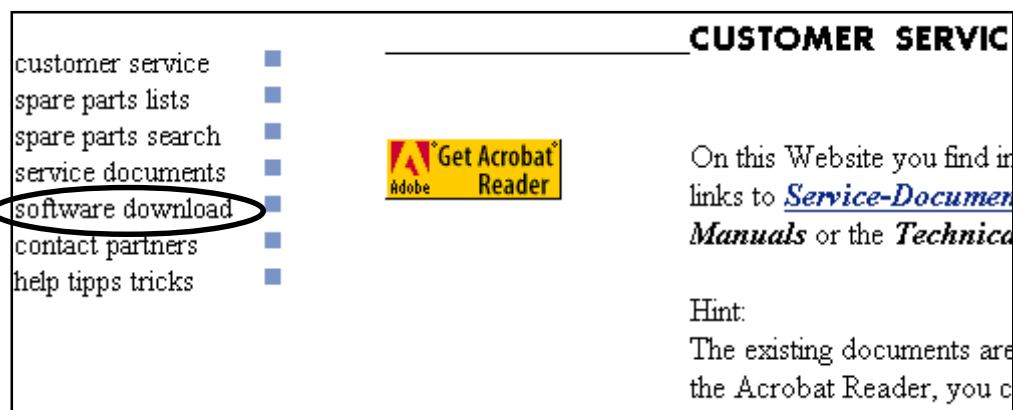
- Click to **spare parts: ordering and listings, service documents**.
- Enter your customer number and password.



- Click to **login**.



- Click to **spare parts lists and service documents**.



Service Information TV 02/01

- Select the desired software under **software download**.
- Copy the selected device software into the folder *C:\GRUNDIG\Software* of your PC which has been created when installing the F-Prog 1-PC software.

advice!

In order to download please click onto the material number of the desired software.

Caution: First you must decompress the ZIP-Files!

Advice: [Operating instruction Flash-Programmer](#)
[Advice for DIGI 100](#)
[Advice for PlanatronII](#)

Category: Software

Product group: DIGI 100

Status:

MaterialNo	Description:	Version
297981110400	West/400-Seitentext	Ver 1.0
297981110401	West/2000-Seitentext	Ver 1.0

The downloaded packed file (*.zip) then must be unpacked by an appropriate unpacker for „ZIP“ files (appropriate unpackers can be found, for example, under www.winzip.com).

ZIP files cannot directly be loaded into the TV set!

Additional hints/particularities for programming with the „F-PROG 1“:

- Before connecting the Flash Programmer, switch the TV set off with its mains button then connect the programmer when the operating LED has gone out!
- After starting programming, the operating LED first remains dark then starts flashing as soon as the Flash memory is deleted.

Service Information

Setting hints and special functions (options) for the colour TV sets with the chassis Digi 100 (CUC 1807, 1837, 1838, 1839, 1934, 1935)

e.g.: Elegance 70 M 70-300 Dolby, Elegance 70 MW 70-150/8 Dolby, Hamburg SE 8240 Dolby, M84-212/8 Dolby, Toronto SE 7216 Dolby

Below you find setting hints and explanations for various functions of the TV sets with the chassis Digi 100.

1. Power-on behaviour of the set

In the „Special functions“ menu you can select under the „Power on“ menu item between „automatic“ and „Programme position 1“.

automatic: the set is switched on with the last power-on mode. For this, the last recognized programme position and operating mode (standby or normal operating mode) are stored.

Note: if the set has been switched off with the mains button in standby mode, it goes again in standby mode after power on and must definitely be switched on using the remote control.

Programme position 1: the set selects programme position 1 each time it is switched on.

2. Settings in the „Programme table“ menu

In this menu, further presettings can be programmed in addition to the channel setting for every programme position.

Note: direct channel entry is only possible in the programme table.

„P+“ reversion point: the reversion point is the limitation of the programme positions for programme selection using the „P+“ button. This reversion point is marked with an orange line in the programme table. To shift the reversion point, it is necessary to shift the programme position above or below this line according to the direction of shift.

1-/2-/3- digit programme position selection (3-digit only with a retrofitted satellite module): for 1-digit programme position selection you must place the reversion point in the programme table between the programme positions 1 and 10. For 2-digit programme position selection place the reversion point between the positions 10 and 100.

Forced settings (forced colour standard, forced mono, fixed assignment of a multi-channel sound, RF time constant, AFC):

In the „Channel settings“ menu (menu guide: „i“ -> „Programme table“ -> „Edit“ -> „Change channel settings“) you can carry out various forced settings.

Note: it is also possible to set a forced colour standard for the AV programme positions in this menu.



3. Volume adjustment:

You can store a volume setting deviating from the basic volume separately for every programme position in the „Sound“ menu (blue button) under the menu item „Volume adjustment“. This adjustment is allowed by the software only if the basic volume is higher than 7 of the 64 steps of the control range.

4. Picture settings (brightness, contrast, colour, etc.):

The desired picture settings are carried out in the „Picture“ menu (red button). Changing the contrast is only possible with the „manual“ presetting. The presettings „During the day“ and „In the evening“ are stored with fixed contrast settings. To get a better overview, it is possible to reduce the large menu scale after selecting the desired menu item by pressing the „OK“ button. In doing so, more menu content is visible and the setting, e.g. colour contrast, is highly facilitated.

5. Sat radio (only with satellite retrofit kit SER 300A):

Via the menu guide „i“ -> „Infothek“ -> „Sat-Radio“, about 40 pre-stored sat radio stations can be called up (dark picture screen, only the station name is visible). In this operating mode, the programme table can be displayed after pressing the „i“ button in order to select/change the sat radio stations.

6. Time and date:

Each time the set is powered on, the internal software clock is set when receiving a station broadcasting Teletext.

If only stations without Teletext are received after power on, no clock time can be called up. In this case, the clock and time can manually be set via „i“ -> „Installation“ -> „Time and date“.

7. AV settings:

The sets with the chassis Digi 100 provide the possibility of individually configuring all available AV programme positions. The factory settings are:

AV 1 for the connection of a Megallogic video recorder,

AV 2 for the connection of a DVD player (via RGB),

AV 3 (if available) for the connection of a VHS video recorder (a switching voltage is necessary at the Euro-AV socket Pin 8),

AV 4 for the connection of a VHS camera.

If you wish to change these presettings, you can individually configure all AV connections via „i“ -> „Installation“ -> „Connections“. In this menu, various units are preset which can be activated if they are required. A connection diagram can be displayed by pressing the yellow button.

In addition own unit profiles can be created via the menu item „Manual AV settings“. These unit profiles are indicated with „manual“ in the connection diagram. Please note that settings in the „Manual AV settings“ must correctly be effected in any case, and that preset units at AV 1, AV 2 etc. are deactivated at the same time (see connection diagram). For example, an incorrectly set time constant would result in a black/white picture with a VCR signal source.

Service Information

1. Chassis Digi 100 - Flash-Programmer FProg1,
2. Chassis CUC 21... - Service Documents

1. Chassis Digi 100 - Flash-Programmer FProg1 Additional function through software change (version 1.1)

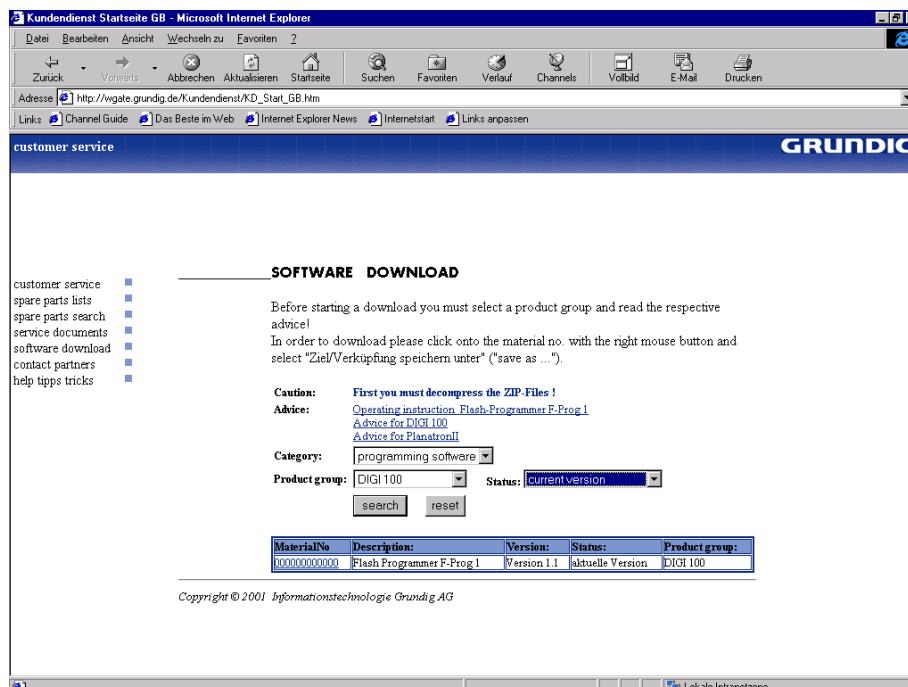
After replacing the Feature module, the unit-specific settings like colour registration, noise reduction, picture sharpness, white balance, CRT type, PIP position, picture geometry, and the customer-specific programme data must be set up.

The extension of the FProg1 software now makes it possible to read out this data and to write it into the new module.

This means a considerable decrease of expenditure of work.

For reading out and programming the operating software and the unit-specific data you need the Flashprogrammer FProg1, part no. 759880740000. Please consult for this also the Service Information "General, serial no. 01/01".

The Flash-Programmer comes with the software version 1.0. Please load the current software, version 1.1, directly from the Internet (see Online Service brochure). This is to be found under "Reseller Support", "Software Download" in the **category** "Programming software", **Product group** "DIGI 100". The updated description of the FProg1, V1.1 software is to be found under **Advice** "Operating instructions Flash-Programmer F-Prog1".



Serial no. 04/01

Stockkeeping: Flash-Programmer FProg1, part no. 759880740000.

Returns
analysis

2. Chassis CUC 21... - Service Documents
Service Manual 720100407000
Service Manual, 1st supplement 720100407100

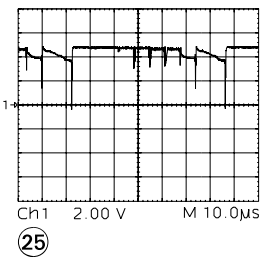
Dear business partner,

despite multiple checks of the printing data we are not immune against printing errors. For this reason please correct the above documents according to the following information.

- **Service Manual 720100407000**
The following alignment points replace the corresponding alignment points in the Service Manual, page 2-1.

Alignment	Preparations	Alignment Process
2. Tuner AGC	100MHz oscilloscope: Channel A: Tuner contact 10 or 11. Ground: Tuner Colour video generator: Feed in a colour scale (with switched-off sound carrier) via the aerial, $\geq 80\text{dB}\mu\text{V}$. Call up the dialog line "AGC" via "i" (Dialog Center) -> Service -> "OK" -> Service Code "8500".	Adjust 300mV_{pp} with button ◀ or ▶. Terminate the dialog line "End" "with mem" -> "OK".
8. Screen grid voltage U_{G2}	Colour video generator: Feed in a black test pattern. Adjust the screen brightness so that the test pattern just turns dark. High-resistance volt-meter via $220\text{K}\Omega$: Test points R, G, B (picture tube plate). Determine the test point having the highest voltage.	Use the UG2 control (splitter transformer) to adjust at the test point having the highest voltage potential a voltage of $112.5\text{V} \pm 2.5\text{V}$ for 14" picture tubes, and a voltage of $150\text{V} \pm 2.5\text{V}$ for 15"...21" picture tubes.

The following oscillogram ②⑤ replaces the oscillogram ⑦⑧ on page 3-26 (CRT plate) of the Service Manual.



- **Service Manual, 1st supplement 720100407100**
The following hint replaces the corresponding hint on page 3.

Software version number

Press the "i" button to call up the "DIALOG CENTER" menu -> OK.
Press "AUX" to display the software version number.

Service Information

Colour TV sets with the chassis CUC 2103 and CUC 2121

e.g.: P 37-4101 TOP Davio, T 55-4101 TOP Davio, T 55-4104 TOP Lemaxx

Listed below are the unit types on which the option of retrofitting a satellite retrofit kit SER 2100 has been omitted. In the new GRUNDIG main catalogue, this is not considered in the technical data. In order to distinguish the retrofit option, the version marking at the rear panel has been changed from „VNM“ (retrofitable) into „VNA“ (not retrofitable).

The following unit types are concerned::

CUC 2103

Arcance 37 P 37-2101 MV
 Davio 37 P 37-4101 TOP
 Davio 37 P 37-4101 TOP/1
 Davio 37 P 37-4101 TOP/TR
 Davio 37 P 37-4101 GB
 P 45-4101 TOP
 P 45-4101 MV/TOP
 Arcance 51 T 51-2101 MV
 Davio 51 T 51-3101 TOP
 Davio 51 T 51-3101 TOP/1
 Davio 51 T 51-3101 TOP/TR
 Davio 51 T 51-3101 MV
 Arcance 55 T 55-2101 MV
 Davio 55 T 55-4101 GB
 Davio 55 T 55-4101 MV
 Davio 55 T 55-4101 TOP
 Davio 55 T 55-4101 TOP/1
 Davio 55 T 55-4101 TOP/TR
 Leemaxx 55 T 55-4104 TOP
 S 55-806 TOP/TR

CUC 2121

Davio 55 ST 55-854/8 Dolby
 Greenville SE 5592 MV/Dolby
 Leemaxx 55 ST 55-4105 MV/Dolby
 ST 55-839/8 Dolby
 ST 55-908/8 Dolby
 ST 55-908/8 FR/Dolby
 Xentia 55 ST 55-405/8 Dolby

The units

ST 55-734 GB/Dolby and
 ST 55-934 GB/Dolby can be
 retrofitted with the „VNM“
 and „VNA“ marking. With the
 „VNX“ marking the retrofit
 option is omitted.

Workshop:

On a small number of the Davio 37 P 37-4101 TOP sets with the version identification „VNM“ (retrofitable), the processor has not been fitted with a socket but has directly been soldered in. So that the processor board can be fitted in the event of a SAT retrofitting, you must solder in an IC socket in place of the soldered-in processor.

Stockkeeping:

IC socket, 56-pin Part no. 813090012900



Serial no. 5/01

Service Information



Necessary settings after replacing the memory EEPROMs for colour TV sets with the chassis CUC 2103, 2105, 2121, and 2130

e.g.: P 37-4101 TOP Davio, T 55-4101 TOP Davio, T 55-4104 TOP Leemaxx, ST 55-854/8 Dolby

Possible complaint:

After replacing the EEPROM CIC82501 (M24C08) the set is not fully operative despite of loading the emergency data set. Especially the teletext function is restricted.

Workshop:

The following settings must be carried out after fitting a new EEPROM M24C08.

1. Loading the configuration data for the teletext decoder.	Switch the set on with the mains switch then switch it off again when the picture appears on the screen. Note: the menu display is shifted to the left!
2. Loading the emergency data set.	Press and hold down the „P-“ button on the remote control while switching the set on with the mains switch.
3. Setting the menu colours.	Set the menu item „OEM“ in the Service menu (access with the code „8500“) to „off“.
4. Geometry, white balance, AFC, and AGC alignment.	Carry out these settings according to the Service Manual.
5. Configuration of the Euro-AV socket „AV 1“	In the „AV 1“ programme position you can select between „VHS“ and „SVHS“ under the „Video“ menu item in the „Special Functions“ menu.

Note: it is absolutely necessary to keep the order of the first two points to guarantee the proper functioning of the teletext!

Stockkeeping:

SMD IC M24C08

Part no. 830596000800

Serial no. 7/01

Service Information

Number: E/08/01; e_tv081e

Burned battery socket or battery connecting cable P 37-830/12 and P 37-840/12 SAT, and equivalent units

Possible complaint:

Failure of the 12V power supply due to burned battery sockets or battery connecting cables.

Cause :

Contact resistance between the battery socket and the plug of the battery connecting cable.

Remedy:

To ensure the proper fitting accuracy, the battery socket must be replaced along with the battery connecting cable with the new version.

Stockkeeping:

Battery connection set FFS (battery socket and battery connecting cable).
Part no. 759550410700



Service Information

Number: E/09/01; e_tv091e

Damage to the bottom corners and edges of the TV sets Lenaro MFW 84 - 6110 and MFW 92 - 6110

Possible complaint:

Damage to the bottom corners and edges on the front side.

Cause:

Due to the small bottom clearance of the front trim, the corners and edges of the trim can be damaged when putting down the TV set in an inexperienced way.

Remedy:

When transporting the TV set make absolutely sure to put it always down in horizontal position and not to tilt it to the front to prevent the vulnerable corners and edges from being dented.



Service Information

Number: O/01/01; o_tv011e

TV sets with Digi 100 chassis

Possible complaint:

The TV set switches at times to standby and then after several seconds back to normal operation.

Cause:

This failure may be caused by an uncontrolled oscillation of the CVBS input and a faulty software library of the processor.

Remedy:

To eliminate this failure it is generally necessary to update the unit's software. For this consult the table 1 (software assignment).

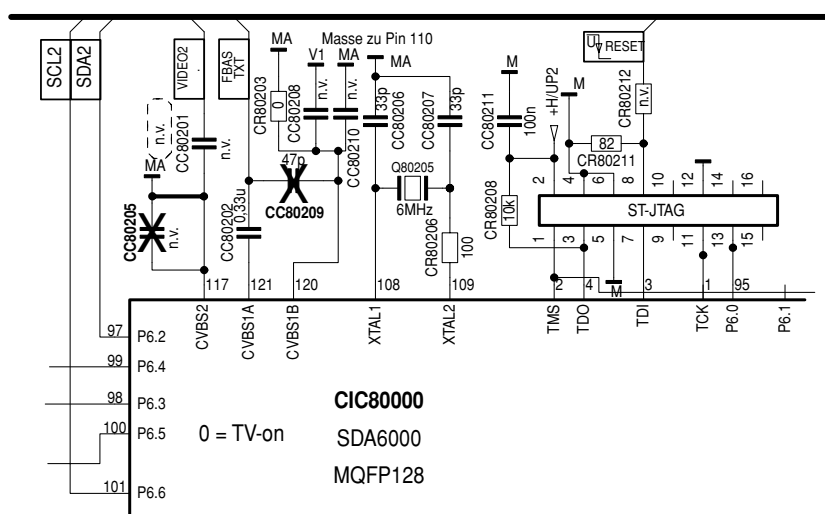
- Update the operating software of the TV set. The software required can be downloaded from the Internet.

For this consult also the Service Informationen "General 01/01" and "TV 04/01" (external).

In addition it is necessary to check and change if necessary the circuit of the Feature module of older TV sets. TV sets and chassis which **do not** require a change of the circuit are listed in the tables 2 and 3. The positions of the serial numbers of the TV sets and chassis are described on page 4.

For the positions of the components concerned on the Feature module please see the circuit diagram excerpt and the PCB illustrations on page 2.

- Remove the chip capacitor CC80209 (coordinates x71/y78) if provided.
- Connect CIC80000, Pin 117 with ground (e.g. chip capacitor CC80205 (coordinates x71/y81), replace with a chip jumper, or solder in a wire bridge from Pin 117 to ground).



[illegible]

Chip jumper (0 Ω)
Feature module with
updated software

Part no. 295042032100/2200/2300/2400/3100/3200/3300/4100/
4200/4300/4400/4600

Service Information

Number: O/01/01; o_tv011e

Table 1: Software assignment

The table below shows the unit-specific assignment of the Feature modules and the part number of the associated software, the positions marked with xxxx being variable and indicating the version (e.g. 29798111**0800**).



TV set	Feature module	Software
ARGANTO 70 MW 70-515 MV/DOLBY	295042032200	29798111xxxx
ARGANTO 82 MW 82-515 MV/DOLBY	295042032300	29798113xxxx
ATLANTA FLAT SE 7260 DOLBY	295042034300	29798117xxxx
BOSTON SE 7012 DOLBY	295042034200	29798115xxxx
DAVIO 70 ST 70-292 DOLBY	295042032200	29798111xxxx
DAVIO 70 ST 70-292/8 DOLBY	295042032200	29798111xxxx
DAVIO 70 ST 70-5210 DOLBY	295042032200	29798111xxxx
DAVIO 70 ST 70-5210/8 DOLBY	295042032200	29798111xxxx
ELEGANCE 63 ST 63-300 DOLBY	295042032200	29798111xxxx
ELEGANCE 63 ST 63-300/8 DOLBY	295042032200	29798111xxxx
ELEGANCE 70 M 70-300 DOLBY	295042032200	29798111xxxx
ELEGANCE 70 M 70-3110 DOLBY	295042032200	29798111xxxx
ELEGANCE 70 MW 70-150/8 DOLBY	295042032200	29798111xxxx
ELEGANCE 70 ST 70-300 DOLBY	295042032200	29798111xxxx
ELEGANCE 70 ST 70-300/8 DOLBY	295042032200	29798111xxxx
ELEGANCE 82 MFW 82-3110 MV/DOLBY	295042032100	29798113xxxx
ELEGANCE 82 MW 82-150/8 DOLBY	295042032200	29798111xxxx
HAMBURG SE 8240 DOLBY	295042034200	29798115xxxx
LEEMAXX 72 MF 72-9110/8 DOLBY	295042032100	29798113xxxx
M 70-879/8 DOLBY	295042032100	29798113xxxx
M 72-109 MV/DOLBY	295042032200	29798111xxxx
M 72-798 DOLBY	295042032200	29798111xxxx
M 84-212/8 DOLBY	295042032200	29798111xxxx
MW 82-3112 MV/DOLBY	295042032200	29798111xxxx
SEDANCE 70 M 70-284 DOLBY	295042032200	29798111xxxx
SEDANCE 70 ST 70-284 DOLBY	295042032200	29798111xxxx
SEDANCE 70 ST 70-284/8 DOLBY	295042032200	29798111xxxx
SEDANCE 72 M 72-2110 DOLBY	295042032200	29798111xxxx
SEDANCE 72 M 72-2110 MV/DOLBY	295042032200	29798111xxxx
ST 70-265/8 DOLBY	295042032200	29798111xxxx
ST 70-398 DOLBY	295042032200	29798111xxxx
SYDNEY SE 7240 DOLBY	295042034100	29798117xxxx
TORONTO SE 7216 DOLBY	295042034200	29798115xxxx
TORONTO SE 7216/8 DOLBY	295042034200	29798115xxxx
WIEN SE 6340 DOLBY	295042034200	29798115xxxx
XENTIA 55 M 55-420/8 DOLBY	295042032200	29798111xxxx
XENTIA 63 M 63-420/8 DOLBY	295042032200	29798111xxxx
XENTIA 70 FLAT MFW 70-430/8 DOLBY	295042032100	29798113xxxx
XENTIA 72 FLAT MF 72-430 DOLBY	295042032300	29798113xxxx
XENTIA 72 FLAT MF 72-430/8 DOLBY	295042032300	29798113xxxx
XENTIA 72 M 72-420 DOLBY	295042032200	29798111xxxx
XENTIA 72 M 72-420/8 DOLBY	295042032200	29798111xxxx
XENTIA 82 FLAT MFW 82-430/8 DOLBY	295042032900	29798121xxxx

Service Information

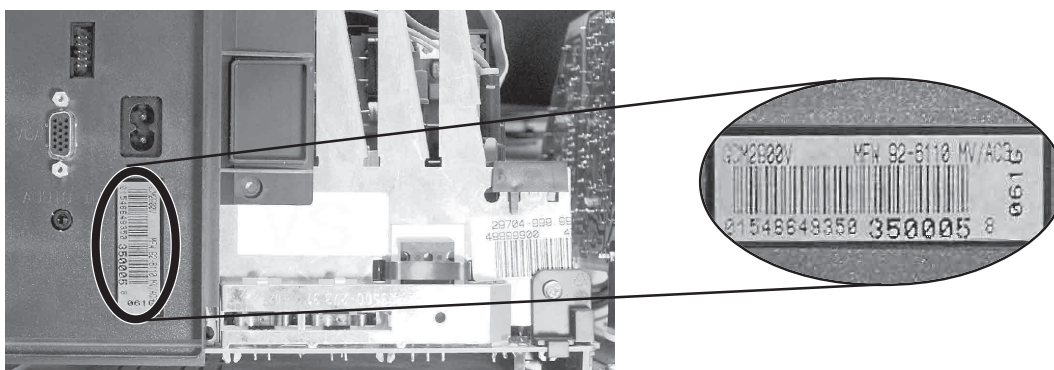
Number: O/01/01; o_tv011e

TV sets not requiring a hardware change

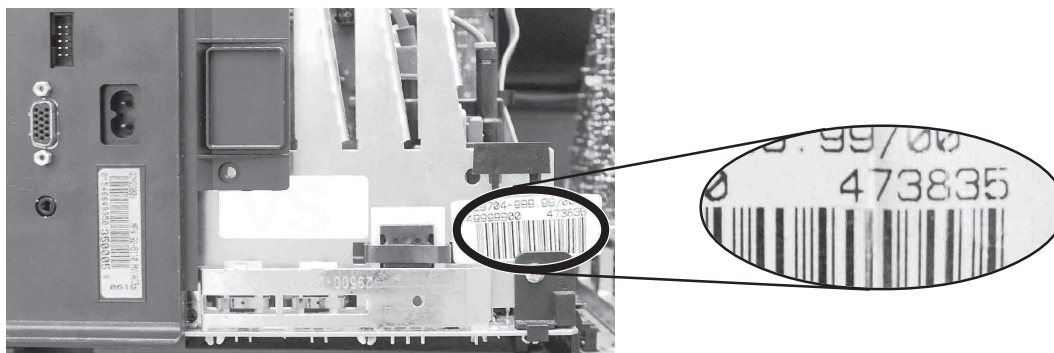
For the TV sets listed below from the indicated serial number of the TV set (Made in Austria) or of the chassis (Made in Germany) no hardware change is required.

The serial number of the TV set is to be found on the adhesive barcode label below the barcode at the rear of the set. The serial number corresponds with the positions 12 to 17 of the 18-digit paging code.

Example: XX XXXXX XXXX **111111** X.



The serial number of the chassis is to be found at the right chassis side after removing the rear panel.



Service Information

Number: O/01/01; o_tv011e

Table 2: TV set production „Made in Austria“

Unit type	Order number	Chassis name	from unit serial number
Boston SE 7012 DOLBY	GCI2375	CUC 1837	500001
Boston SE 7012 DOLBY	GCI2324	CUC 1837	500001
ELEGANCE 70 M 70-300 DOLBY	GCK9742	CUC 1837	510800
ELEGANCE 70 M 70-3110 DOLBY	GCN6400	CUC 1837	500001
ELEGANCE 70 MW 70-150/8 DOLBY	GCI9142	CUC 1934	500001
ELEGANCE 70 ST 70-300 DOLBY	GCM8310	CUC 1837	502300
ELEGANCE 70 ST 70-300 DOLBY	GCM8300	CUC 1837	507700
ELEGANCE 70 ST 70-300/8 DOLBY	GCL0692	CUC 1837	500300
ELEGANCE 70 ST 70-300/8 DOLBY	GCL0600	CUC 1837	500300
ELEGANCE 70 ST 70-300/8 DOLBY	GCL0642	CUC 1837	509300
M 70-879/8 DOLBY	GCM5100	CUC 1837	504700
M 72-109 MV/DOLBY	GCM5300	CUC 1838	501700
M 72-798 DOLBY	GCM5200	CUC 1838	501600
SEDANCE 70 ST 70-284 DOLBY	GCK6500	CUC 1837	500700
SEDANCE 70 ST 70-284 DOLBY	GCK6592	CUC 1837	507400
SEDANCE 70 ST 70-284/8 DOLBY	GCK6675	CUC 1837	501300
SEDANCE 70 ST 70-284/8 DOLBY	GCK6692	CUC 1837	503800
SEDANCE 72 M 72-2110 DOLBY	GCM2700	CUC 1838	504130
SEDANCE 72 M 72-2110 MV/DOLBY	GCM1900	CUC 1838	501000
ST 70-265/8 DOLBY	GCM5400	CUC 1837	501450
ST 70-398 DOLBY	GCM3300	CUC 1837	501500
Sydney SE 7240 DOLBY	GCM5710	CUC 1838	500001
Sydney SE 7240 DOLBY	GCM5700	CUC 1838	500001
Toronto SE 7216/8 DOLBY	GCK6775	CUC 1838	500001
Wien SE 6340 DOLBY	GCM5500	CUC 1837	504100
XENTIA 63 M 63-420/8 DOLBY	GCI8300	CUC 1837	500001
XENTIA 63 M 63-420/8 DOLBY	GCI8377	CUC 1837	504300

Table 3: TV set production „Made in Germany“

Unit type	Order number	Chassis name	Chassis part number 29704011	from chassis serial number
ARGANTO 70 MW 70-515 MV/DOLBY	GCM5800	CUC 1934	3700	000001
ARGANTO 82 MW 82-515 MV/ DOLBY	GCM5900	CUC 1935	3300	000051
Atlanta Flat SE 7260 DOLBY	GCK6475	CUC 1838	2200	000001
Boston SE 7012 DOLBY	GCI2375	CUC 1837	1600	007586
Boston SE 7012 DOLBY	GCI2324	CUC 1837	1600	007586
DAVIO 70 ST 70-292 DOLBY	GCI8572	CUC 1837	2500	010106
DAVIO 70 ST 70-292/8 DOLBY	GCI8472	CUC 1837	0200	001556
DAVIO 70 ST 70-292/8 DOLBY	GCI8452	CUC 1837	0200	001556
ELEGANCE 70 MW 70-150/8 DOLBY	GCI9142	CUC 1934	1000	005291
ELEGANCE 82 MW 82-150/8 DOLBY	GCI9200	CUC 1935	1100	008903
ELEGANCE 82 MW 82-150/8 DOLBY	GCI9242	CUC 1935	1100	008903
ELEGANCE 82 MW 82-150/8 DOLBY	GCI9292	CUC 1935	1100	008903
ELEGANCE82Flat MFW 82-3110 MV/DOLBY	GCL8540	CUC 1935	1900	004181
Hamburg SE 8240 DOLBY	GCL7900	CUC 1935	2300	001556
M 84-212/8 DOLBY	GCI9090	CUC 1839	1700	002451
MW 82-3112 MV/DOLBY	GCM9800	CUC 1935	3600	000751
Sydney SE 7240 DOLBY	GCM5710	CUC 1838	2600	005251
Sydney SE 7240 DOLBY	GCM5700	CUC 1838	2600	005251
Toronto SE 7216 DOLBY	GCK6875	CUC 1838	3900	007016
XENTIA 72 Flat MF 72-430 DOLBY	GCL6777	CUC 1838	0400 / 2000	000021 / 000001
XENTIA 72 M 72-420 DOLBY	GCL6977	CUC 1838	0600	009251
XENTIA 72 M 72-420/8 DOLBY	GCL7077	CUC 1838	0700	001751

Service Information

Number: O/02/01; o_tv021e

TP 750/715 and equivalent units

Possible complaint:

Missing hints to battery polarity in battery compartment.

Remedy:

Insert the batteries as shown in the figure below.



Service Information

Number: O/03/01; o_tv031e

ST 70-2103 SAT retrofitting not possible

Cause:

Plug base ST-V3 missing on several chassis.

Remedy:

Retrofit the plug base ST-V3 (5-pin), part no. 293038700500.

Stockkeeping:

Plug base ST-V3 (5-pin), part no. 293038700500

