

USEFUL INFO.

Power supply circuit.

PRODUCTION CHANGES

This circuit has successively been made in two versions, with different parts, according to the following table:

POSITION CIRCUIT 1st VERSION

CP22	470 μ F
CP28	330pF
TP29	BUH515
LP36	Transformer 401530-00 (433TX0859)
CP16	220nF
CP19	220nF
CP29	3.3nF
RP06	39Kohm
RP18	47ohm
RP19	33ohm
RP21	4.7ohm
RP27	3.3Kohm

POSITION CIRCUIT 2nd VERSION

CP22	1000 μ F (code 207 TX 1317)
CP28	1nF
TP29	BUH713 (code 270 TX 2463)
LP36	Transformer 473100-02 (433 TX 0889)
CP16	47nF
CP19	330nF
CP29	2.2nF
RP06	27Kohm
RP18	22ohm
RP19	220ohm
RP21	10ohm
RP27	15Kohm

Important Observation :

For appliances fitted with a circuit of the first version, we recommend you replace CP22, CP28 and TP29. The new value of CP28 (1nF 50V) represents a protection against undesired shutdowns, and must be replaced jointly with CP22 (1000 μ F) and TP29 (BUH713).

Video circuit production changes.

At a later time these appliances have been fitted with two different video amplifiers and associated circuits :

- 1st type : Video amplifier board with discrete elements
 - CRT board 7000 (part no.: 596 TX 2647)
 - CDI board 7000 (part no.: 196 TX 3961)
 - delay line 390nS 1K2 in VV28.
- 2nd type : Video amplifier board with IC (TEA5101A)
 - CRT board 8010/8011 (part no.: 596 TX 2955)
 - CDI board 8000 (part no.: 196 TX 4092)
 - added in SV01:
 - SUB VIDEO board 8310 (S-VHS) part no.: 196 TX 4133
 - or SUB VIDEO board 8110 (without S-VHS) part no.: 196 TX 4134
 - (with modified lay out: TV27/65 circuits removed,
 - VV28 replaced by a strap, etc.).

REMARKS: Some appliances equipped with CRT 7000 and CDI 7000 only include modification with addition of SUB VIDEO board (with modified lay out).

New connectors with 2.5mm pitch.

Connections have been improved due to a new technology. For this reason, later on two types of connectors have been used on these appliances. Therefore two technologies will exist simultaneously:

Comparison Table (Partial list)

Boards equipped with old type connectors:

Desc.: CDI: CDI 8000 Code : 196TX4092
" DVT: DVT 2013 " : 596TX2923
" DVT: DVT 7000 " : 596TX2886
" FCB: FCB 8006 " : 596TX3024
" N/S: NS 8000 " : 596TX2891
" N/S: NS 8002 " : 596TX2849
" RIR: RIR 4000M " : 196TX2583
" SCI: SCI 7040 " : 596TX2843

Boards equipped with new type connectors:

Desc.: CDI: CDI8000U Code: 596TX3020
" DVT: DVT2013U " : 596TX3080
" DVT: DVT7000U " : 596TX3078
" FCB: FCB8006U " : 596TX3028
" N/S: NS8000U " : 596TX3094
" N/S: NS8002U " : 596TX3095
" RIR: RIR7000M " : 596TX3023
" SCI: SCI7040U " : 596TX3027

Improvement of line blanking.

Add a 33V zener (273TX1205) in series with RL42, cathode to RL42 and anode at point CL42-DL42.

How to make ambiophonic base SBX02 with HRC1000 TVs.

Fit a bridge on AM-FM board 8315 between feedback of loudspeakers (C582-C583) and the ground.

To improve the reliability of TL19.

Replace TL19 (S2000AF3) by 2SD1546 (270TX2340). Replace RL21 (0R33 or 0R47) by 0R68/3W (207TX3256).

Adaptation to K' (K1) standard.

This may be carried out by substituting standard K' (intercarrier 6.5MHz) by standard K1 (intercarrier 6MHz). Check modification kit 925TX1431.

Access to the Service Mode.

1. Switch off the TV by the ON/OFF switch.
2. Keep pressed in the VOLUME "+" and "-" buttons on the control panel, activating the ON/OFF switch, until the TV indicates that it has gone into the Service Mode.

Menu screen (ICC8-B33)

B33 00100000

L/R 10 -/+

DTB/CSD DOB/HG

The third line is specifically attributed to the microprocessor ICC8-B33 (ST6395B1-B33 code 276 TX 4402).

Service Mode Menu.

1) First line: TV Configuration

uP Version

B33 00100000

bit 7 6 5 4 3 2 1 0

(can be modified using keys

0 to 7 on the RCU)

Bit 0 to 3

Bit 3 2 1 0 FLOF TELETEXT LANGUAGE

0000 Western Europe

0 0 0 1 Eastern Europe
0 0 1 0 Turkey
0 0 1 1 Iceland (specific B33)

Bit 4

Bit 4 CLOCK OF THE TDA6612
0 Line synchronisation
1 Quartz synchronisation

Bit 5 (version ICC8-B30)

Bit 5 TUBE FORMAT
0 4 / 3
1 16 / 9

Bit 5 (version ICC8-B33)

Bit 5 DCC CIRCUIT (CONTOUR)
options
0 DCC disactivated
1 activated

Bit 6 STANDARD

0 Multistandard
1 BG

Bit 7 CONTRAST PREREGULATION (*)

0 Low rate (1:1)
1 High rate (2:1)

(*) Observations: The prerregulation indicated represents medium values which take account of the differences between ZOOM mode (expected on some appliances), standards I and BG, DK, L, M.
Low rate: at the medium level (50%) corresponds to a 75% rate in ZOOM mode.
High rate: at medium level (50%) corresponds to a 100% rate in ZOOM mode.

2) Second line: Crosstalk correction (audio circuit TDA6612)

L/R 1 0 -/+
(value can be modified by +/- keys
adjustable +-3dB at intervals of
0.2dB)

3) Third line: Reserved display information (factory)

DTB/CSD DOB/HG

Conclude by exiting the Service Mode by using the stand-by key or OSD on the RCU.
TV=, display TV, TV O.

Demo Mode (available with version ICC8-B33).

1) Preliminary adjustments:

: assign a transmission to program PR01, PR06 and PR60;
: bring all adjustments (personal adjustments included) to a middle value of 50%;
: to make demonstration more attractive, it is advisable to give a channel name to programs from PR01 to PR10.

2) Demo Mode activation

Put TV into Service Mode;

Exit Service Mode with "MIDDLE VALUE" button on RC.

Now TV goes into demonstration mode with unchangeable chaining. (What is this LC ?)

3) Demonstration chaining

1. Audio and headphone level adjustment menu
2. Picture adjustment menu
3. "Middle value" function

4. Personal adjustment menu
 5. Volume level display
 6. Indications relating to one channel
 7. PR01
 8. PR06
 9. PR60
 10. TV clock programming menu
 11. Programme list
 12. Channel programming menu
(return to starting point)
- During the demonstration, RC and key panel are inoperative and sound is muted.

4) Demo Mode interruption
Switch off appliance with ON/OFF switch.

General info.

. Appliance manufactured in 1994.

Contents of Thomson power supply repair kit.
Part number: 35029300.

DESCRIPTION	CIRC REF NO	QTY
680pF/50V (MELF)	CP28*	1
2.2nF/1K	CP29	1
220uF/25V	CP55	1
IN4148	DP54-DP67	2
ZPD5/6V	DP55	1
ZPD5/1V (BZX55C5V1)	DP55	1
BAV21	DP69	1
1A6AT fuse	FP01	1
TEA2261	IP01	1
BUH516TH16	TP29	1

*CP28 is a MELF component and is located on the solder side of the PCB.

Contents of Thomson frame output stage repair kit.
Part number: 35029310.

DESCRIPTION	CIRC REF NO	QTY
100uF/100V	CL09*	1
47uF/100V	CL09*	1
BA157 (BY201)	DF16-DF17	2
BAV21	DF18-DF19	2
BA157 (BY210)	DL09	1
1R8/1W 10%	RF33*	1
0R1/0.10W 5%	RF33*	1
0R27/0.40W 5%	RF33*	1

* CL09 and RF33 are safety components and their value depends upon model number. Please refer to the service manual for the correct value of these components.

DEFLECT

No vertical scanning, horizontal line. All the voltages are ok, IF01 and TDA8178 ok.

Fault 1: Check the raster signal on IF01 pin 1: 4Vpp. If poor, check TF25: on the base 0.7Vpp. If missing, check 4Vpp on the emitter of TF08. Check RF29, RF27, CF16, DF19 and IF01.

Picture foldover at top of screen.

Fault 1: [Raster amplifier (TDA8178) and RF33 (1R8)]. Check control signal on TF08 E: 4VPP. If OK, check pin 5 of IF01: 70VPP. If not, check DF16, DF18, DF17 and DF19 pin 2: 24V, on 3: 65V. Suspect CF16 and RF27.

Raster IC TDA8178 is destroyed. Fuse resistor 24V O/C. Driver TL17 leaky and TDA 8178 leaky.

Fault 1: Check DF19, DF18, DF16, DF17. Check pin 1: 4Vpp and 5:70Vpp.

Picture is rolling.

Fault 1: Check IV01 (TA8659CN).

Field collapse, too bright, width reduced and missing sound.

Fault 1: Check LL16 and RV20 - UL3a rail.

Field collapse and sound is missing.

Fault 1: Check RC37 (1ohm) for open circuit.

Field collapse.

Fault 1: [Standby LED is lit]. Check RV20 for open circuit.

Fault 2: Check D09 (BA157), IF01 (TDA8178) and RF33 (1.8ohm).

Top has field foldover.

Fault 1: Check SMD 4.7ohm (not on diagram).

Field rolling.

Fault 1: Check jungle chip IV01 (TH8659CN).

Top of picture, field is displaced by 2 inches. Video signal is flashing.

Fault 1: Check zener DR61 for leaks which causes lock up of ohm and zero analogue output.

Flyback lines.

Fault 1: Check DR61.

Height is reduced with foldover at top.

Fault 1: Check 0.47ohm from 64V to field output stage.

No vertical deflection.

Fault 1: IF 01-TDA 8178F is defective. A vertical repair set must be fitted.

Part no: 10235760

Poor N/S adjustment.

Fault 1: Check TG84 (BD137) and RG8 (2R2).

COLOUR

When switched on picture turns red but you can make out the individuals.

Fault 1: Check the red video amplifier TT11, TT12, DT06. Check the output signal of pin 30 IC ID01. Check CD04.

Picture has too much colour, possibly with flyback lines.

Fault 1: Colour output stage IC is defective.

Warning: you must fit a TCE repair kit.

Order no: 103.283.80

Picture is too bright and too green.

Fault 1: IC TA 8751 on the CUT Off module is defective.

Colour cast over the picture but varies as the TV warms up.
Fault 1: Check ID12 (MC14053).

Screen is completely blue.

Fault 1: [TA8659 and blue video amplifier have been changed]. Check on video amplifier IT01 pin 4, 3 and 1 RGB. On 5:200V, 2:12V. If ok, check pin 7, 10, 13:110Vpp. If ok, suspect IT01 (TEA6101A).
Fault 2: Check TT32 (BF423) for leaks and RT27 (1K 1/4W) for O/C.

No green. Green signal enters ID01 but does not come out. Still the same after changing ID01.

Fault 1: [TEA5101 has been changed]. Green signal vert pin 4 IN, pin 26 OUT. If not good, unsolder pin 3 of IT01. If the same, suspect CD06 and CD02.

No colour.

Fault 1: Resolder TXT board, especially the connectors.
Fault 2: Clean and adjust switch SE50 in centre of TXT panel.

Incorrect colour.

Fault 1: Check feedback resistors RT24, RT44 and RE64 (all 39K) on CRT base panel.

Intermittently picture goes dark with change in grey scale.

Fault 1: Check RT24 (39R).

At switch off goes into black and white and spot on screen.

Fault 1: Check TV01 (BC558C).

Mainly red and green picture. Blue only on highlights.

Fault 1: Check resistor RT64 in output stage feedback circuit.

PICTURE

DL16 S/C changed. Starts up with shrunken picture in the raster and foldover at the top of the page.

Fault 1: Check DL16, TV01, DV02, DL18 and TL17. Check if signal on DL17 is ok. Suspect LL19.

Flyback line visible on a dark picture but too pronounced.

Fault 1: Check G2 adjustment. If fault persists, check the signal on the TL19 base: 14VPP, collector: 1440VPP. If the same, check video amplifier IT01.

No picture in HF or in scart. Sound ok, dark screen.

Fault 1: Check resistor 20 22R on the scart board.

Picture has disappeared (sound and screen display ok). The same via scart followed by raster fault then CTV then dead. Standby light power supply flashes with noise in the power supply.

Fault 1: Check 65V on DL09 and 13V on DL13. If low, suspect CL09 and CL14. If ok, check IF01 of the raster circuit.

Narrowed picture in the raster. Veiled and foldover on the top 15cm of the screen, giving rise to pictures the wrong way round. MELF on the plus of CL09 and C of DF16 burnt, what is its value?

Fault 1: [TDA8178, DF15, TF08, CL09 have been replaced]. The faulty chip is a 4R7. This chip supplies 65V on the pin of the raster amplifier. The 65V come from pin 12 of the FBT via DU09.

No picture, no sound.

Fault 1: On pin 16 of the IC TEA 2261 no operating voltage (13.5V). s/c to the ground of pin 16. Diode DP28 (BA157) is s/c.

Green lines are flashing on the screen.

Fault 1: Check for dry joint on CV51.

The top of the picture is flickering which looks like a field jitter. Luma and chroma are flashing on/off.

Fault 1: Check DR61 (5.1V zener) on main PCB behind CD1 daughter board.

Picture distortion, resembles gull wings.

Fault 1: Check DG38 and RG87 on raster PCB.

Picture has shifted vertically and is flashing.

Fault 1: DR61 is leaky.

Raster is blank with flyback lines, RCU does not function.

Fault 1: Check zener DR61 for leaks which causes lock up of ohm and zero analogue output.

Top of picture, field is displaced by 2 inches. Video signal is flashing.

Fault 1: Check zener DR61 for leaks which causes lock up of ohm and zero analogue output.

Top of picture flickers.

Fault 1: Check zener DR61 for leaks which causes lock up of ohm and zero analogue output.

Poor picture with predominant colour.

Fault 1: Check RT24, RT44 and RT64 on IT01.

No contrast.

Fault 1: PV58 is O/C.

High text brightness with shifted text.

Fault 1: Check TP03 and TP04.

No picture. Red LED comes on, then green. High voltage builds up for a short time only then no LED indication.

Fault 1: DL11 (BA157) S/C, RL11/15R O/C. No 200V for the RGB IC on the picture tube board.

Focus is poor but improves after some time.

Fault 1: Replace focus control unit and CRT base panel. If no results, replace line output transformer.

No picture. Sound ok. Brightness control ok. Picture ok in scart socket. Video signal ok on pin 58 of IV01.

Fault 1: Change IV01.

Intermittently picture goes dark with change in grey scale.

Fault 1: Check RT24 (39R).

No picture.

Fault 1: [[Tube heater and EHT supplies OK]. Check CD41, RD42 and CD12 for dry joints.

Intermittently no picture.

Fault 1: Check CD41, RD42 and CD12 for dry joints on video drive PCB (CD17000).

Dark green with streaking.

Fault 1: Check RT24, RT44, RT64 (39K/1W) on CRT base for O/C.

Brightness variance with flyback lines and streaking.

Fault 1: Check focus/screen assembly.

Fault 2: Check resistor DT04 (1K5) on tube base, for high resistance.

Only snow on screen. Impossible to exit channel 02.

Fault 1: [uP and associated quartz replaced but fault persists.] Check operating conditions of uP. If ok, disconnect both digital link lines ("I_C BUS", line of data transmitted in series "SDA" and timer oscillator clock line transmitted in series "SCL") which control operation of the IV02 (SDA5243) on TXT circuit and replace IV02.

AUDIO

No sound. No picture.

Fault 1: At pin 16 of the IC TEA 2261 there is no operating voltage (13.5V). S/c to the ground from pin 16. Diode DP28 (BA157) is s/c.

Crackling on sound.

Fault 1: The QS02 crystal on the NICAM panel is defective.

Field collapse, too bright, width reduced and missing sound.

Fault 1: Check LL16 and RV20 - UL3a rail.

Field collapse and sound is missing.

Fault 1: Check RC37 (1ohm) for open circuit.

Sound is missing.

Fault 1: Check zener DR61 for leaks which causes lock up of ohm and zero analogue output.

Fault 2: CM08 defective.

Noise in the speakers when TV is switched off.

Fault 1: Check RA17 (22K).

Clicks with Nicam.

Fault 1: IR01 defective.

Popping Nicam. Fault 1: Change the IF module.

POWER

At switch on, light is on, EHT present then everything stops, no light or secondary power supply.

Fault 1: Check safety circuit TV01, TV02, DV02, DV08. Check is there is a S/C on the line transformer secondary. Suspect IF01 and IG01.

High voltage sparking causing breaks and IC to blow.

Fault 1: [Line transformer and BU replaced, existing groundings checked.] Check signals on TL19 on collector (1440Vpp), base 14Vpp (ok). Check connection between line transformer and tube. Check screening of tube. Suspect CL22, CLL21.

RP62 burns, S/C on 23V. IF01 and IG01 have been changed but fault persists. TV01, TV02 have been changed.

Fault 1: Unsolder pin 2 of IF01. Check DF19, DF16, DF18. Disconnect connector BR06. Suspect CL18, RL18.

TP29 blows.

Fault 1: DP50 is S/C.

US=150V, 24V=20V, no command signal on the line BU base.

Fault 1: Check TV01, TV02, DV08, DV02, IG01, IV01.

After switch on switches off again. At first LED lights up red then green. High voltage built up for a short time.

After deactivating primary protective circuit, appliance runs with reduced output voltages.

Fault 1: To deactivate the primary protective circuit: open LP42 on the primary and short CP20.

Fault 2: Check secondary TP53, TP54, DP54 and DP55 and replace if necessary.

Fault 3: If necessary check precision resistors RP51-RP53.

Power supply starts up with EHT and stops.

Fault 1: Remove RV02 and CV02 to stop the safety circuit and check the voltages. Suspect CP22 and CP24.

Dead.

Fault 1: [No voltage at pin 9 on IV01]. Check TR18 (BC636) b/e for S/C.
Fault 2: [Low 24V, other supplies high]. Check RP62 (1R) for correct value.
Fault 3: Check CP22 (1000 μ F).
Fault 4: Check line driver RL15 for O/C.
Fault 5: [No start-up voltage at pin 9 of jungle IC]. Check TR18 (BC636 for S/C.
Fault 6: Check line output transistor BU508AF for S/C and RP62 for O/C. Replace field output chip TDA8178FS and DF16.
Fault 7: Check for 10V on standby if 6V on TV06 (IV01).
Fault 8: [LED lit]. Check focus pin on base of connector on CRT panel for corrosion. Check the focus/A1 control for arcing.
Fault 9: [1.6A fuse O/C]. BUH515 chopper S/C; HT rectifier diode DP50 (BY399) S/C - fit repair kit which includes above parts and CP29 (2.2nF), TEA2261, CP55 (220uF) and other various diodes.
Fault 10: Check RP01 and RP02 (1R2) for O/C; check CP04 (4.7nF/1kV) across mains rectifier for S/C.

Appliance goes dead after coming on with sound for 3-5 seconds.

Fault 1: [13V supply being pulled down]. Check DP55 (5.1V zener).

Intermittently dead.

Fault 1: Check CP55.

Fault 2: Check chopper heatsink for dry joints.

Appliance trips after starting up.

Fault 1: Check RL11 (15R) for O/C.

Fault 2: Replace DL13 (BY397) with fast type, less than 50V.

After several minutes appliance trips.

Fault 1: Check CP57.

When warm appliance trips.

Fault 1: Check DV08 (13V).

After approximately 5 seconds the appliance trips.

Fault 1: [Chopper secondary output is missing]. Check IF01 (TDA8187F).

TV does not start up.

Fault 1: DP70 (BAV21) is leaky.

Goes into safety mode at start up.

Fault 1: Remove the cell RV02-CV02.

Regulation is defective.

Fault 1: [DP54 (1N4148) and zener DP55 5V1 destroyed. Track between DP69 and DP55 is also destroyed]. DP69 (BAV21) is S/C. .

Failure to start up.

Fault 1: TV02 s/c.

EHT rustles when set is turned on, then dies before set comes on.

Fault 1: DL13 which supplies the 13V rail is dead short, replace its smoothing cap CL14 which has likely dropped from 1000 μ fd to about 800 μ fd in value. DL13 is mounted on the left hand side off the LOPT as you look from the back of the set near the ferrite LOPT former and has two ferrite beads on its leads.

UL1 90V, RL25 heats up and TL19 fails.

Fault 1: Check DL21, RL25, CL25 and DL22. Suspect IG01, LG08 and DG01.

TV blows with noise.

Fault 1: [DP69, DP54, DP55, tracks cut and redone but fault persists]. Unsolder line BU and check power supply. DP63:40V, DP66:7V, DP65:24V. If ok, check TP69, TP54 and TP53. Suspect IP01.

EHT comes in then switches off immediately. EHT ok if base of line transistor disconnected. Base signal trembles. Signal ok on pin 39 of TA8569. TL17 new. Fault persists if protection neutralized.
Fault 1: Check IG01, DG01 and CG12. If ok, check 24V on RP62. If ok, suspect IF01 and DF19.

PSU cuts out after going into standby.

Fault 1: Check 24V on RP62. Check on TR82 E:5.4V. If ok, check TP54, TP69, DP57, TR16, TR17 and TR18.

Standby light red. No EHT. 150V at collector of line BU. 9V on pin 40 of IV01.

Fault 1: TV01 (BC858) S/C on right of CDI module in the middle of the châssis.

TV does not start, only a single plop noise from the line supply.

Fault 1: [Line transformer has been replaced, no measurable shorts. The power supply voltage is 45V.]. Raster ICTDA8178 (IF01) is Defective. Replace DL09, DF16, DF17, DF19 and check RP62 0.27ohm in the power supply.

Dead. Slight noise at switch on. No standby light. 150V on collector of line BU. No 5V on pin 42 of uP.

Fault 1: Check DP65 and RP62 (0R27). If RP62 burns, check frame amplifier TDA8178.

Functions correctly then cuts our intermittently and goes dead 2-5 times a day. Impossible to restart by switch.

Fault 1: Replace TP20 on power supply primary. Fit a metal ring from the deflector to the earth. Adjust power supply to 145V (110°) or 155V (planar). Redo horizontal and vertical amplitudes.

Remains in standby.

Fault 1: 5V on pin 20 of IR01 ie. in low position. Check TR16, TR18, TR17. If ok, check 24V on DP65. If ok check RP62 and CP59.

Fault 2: [0V on pin 40 of TDA8659. 5V on pin 42 of uP IR01]. Replace uP IR01 (ST6395).

NB: uP varies according to the version and is not compatible.

No start up of line transformer. Standby light comes on for one sec then cuts out. No 8V on pin 40 of TA8659. 0V on pin 20 of uP IR01.

Fault 1: Check TR16, TR17 and TR18.

Goes into safety mode 5-10 mins after start up. No sound.

Fault 1: [TP54 changed, signals ok on this transistor. 13V on DL13 ok]. Remove RV02 and CV02.

Dead, red LED lit.

Fault 1: Replace focus pin on CRT panel and focus/A1 control.

HT high.

Fault 1: Check zener DP55 (5V1).

Circuit diagram.

For circuit diagram please click on the "Display circuit diagram" button in the top left-hand corner.

Shrill twittering noise at switch on.

Fault 1: Check TP25 (BC548) for O/C.

Trips off at switch on then goes dead.

Fault 1: Check 13V supply rectifier DL13 (BY397) for S/C.

Shuts down at switch on.

Fault 1: Check print between 150V supply and resistor that feeds base of TP53 (1M) in control circuit for O/C.

Dead, line transistor S/C.

Fault 1: Check TL17 (BSR51). After fitting new line transistor, also check DF16 (BA157).

TL19 blows immediately.

Fault 1: Check IG01, DL22, DL21 and CL22. Check if secondary of line transformer S/C. Suspect line transformer and frame circuit.

Intermittently blows fuse.

Fault 1: Check bridge rectifier diode and protection capacitors for intermittent S/C.

Dead red LED lit, or attempts to start but immediately reverts to standby.

Fault 1: Check focus pin, at base connector on CRT panel.

FUNCTION

Teletext picture is very bright and has moved to the right hand side of the screen.

Fault 1: Check TP03 (5V reg).

Appliance comes on ok then switches to standby.

Fault 1: Check TV01 and TV02.

Reception is poor in Teletext mode.

Fault 1: Change original head IF213301 by IF2133F01 (503TX0445).

No reception.

Fault 1: Check command microprocessor DXST6391B1/AM.

Remains in standby.

Fault 1: 5V on pin 20 of IR01 therefore in low position. Check TR16, TR18, TR17. If ok, check 24V on DP65. If ok, check RP62 and CP59.

Fault 2: [0V on pin 40 of TDA8659. 5V on pin 42 of uP IR01]. Replace uP IR01 (ST6395).

Note: uP varies according to versions and is not compatible.

Dead. Slight noise at switch on. No standby light. 150V on collector of line BU. No 5V on pin 42 of uP.

Fault 1: Check DP65 and RP62 (0R27). If RP62 burns, check frame amplitude TDA8178.

Functions correctly then cuts out intermittently and goes dead 2-5 times a day. Impossible to restart by switch.

Fault 1: Replace TP20 on power supply primary. Fit a metal ring from the deflector to the earth. Adjust power supply to 145V (110°) or 155V (planar). Redo horizontal and vertical amplitudes.

Picture appears then power supply goes into safety mode.

Fault 1: [Line transformer, IF01, IG01 changed. Safety removed.] Remove RV02 and CV02. Unsolder pin 3 from line transformer. Check power supply and CP24, CP20 and CP22.

Goes into standby after a few mins. No sound but picture ok with RV02 and CV02 removed. 13V on DL13 and signals on TP54 ok.

Fault 1: Suspect DP70 (BAV21) and diodes 1N4148. Check safety circuit TV01, DV02, DV08. Check that there is no S/C on secondary. Suspect IF01 and IG01.

TUNING/MEMORY

Appliance is stuck on Channel 2.

Fault 1: Check IV02 (SDA5243).

GEOMETRY

DL09 blown. Narrow picture vertically with foldover. TDA8178 has been changed, OK for a few days then again compressed picture with foldover. TDA8178 is defective.

Fault 1: Replace CL09. Check DF16 to DF19. Check the raster control signal on TF08.

E/W adjustment does not work. Power supply ok.

Fault 1: [IC (TDA 4950), zener diode 8V2 and DZ 2V7 (DL41) changed]. Check LG08, DL22, RG09, DG10.
Fault 2: Coil LG87 O/C.

Barrel effect in N/S, picture is narrowed vertically towards the middle.

Fault 1: [TDA8178 has been changed but to no avail]. Check RF22, RF24, RF23, RF12, CF24< cf04 and RF21.
Check 24V on DF17. Check signal TF08 E:4VPP.