PICTURE

Picture distortion on teletext (right side, bottom of picture).
Fault 1: Different contrast and brightness with teletext than with normal picture. Fit a 1N4148 diode on the TXT interface panel in series with R3786, cathode to R3786, anode to 6170. Fit a 100K resistor between PIN20 IC7700 (SAA5246) on the TXT panel and PIN17 of IC7280 (TDA3504) on the monocarrier.

Picture and sound are ok. Flyback raster at the top of the screen.
Fault 1: Check sandcastle on pin 6 of TDA3504. Erasing of raster is done on the inside of the TDA3504.

After a power supply fault, the TV searches but there is no picture. No varicap voltage.
Fault 1: In the power supply first of all check: the +13V on 2443 (220µF), +12C on 2015 (680µF) and 26V on 2453 (330µF). Follow the signal on pin 17 of the UHF tuner, on pin 15 and 21 (AFC) of the TDA4504.

No picture, the BUT11AF are ok, no 5V, 13V or 26V. 95V OK.
Fault 1: Check 6570, 6568, 3566 and check signal on BUT11.

Picture pumps on high contrast scenes (power supply fails). Adjustment of the AGC has no effect on this phenomenon, which gets worse if brightness or contrast is increased.
Fault 1: Change line transformer.

No picture or sound only whistling from the power supply.
Fault 1: Short in the Line transformer (4822 140 10406).

Blue screen, sound OK, 5V flyback line OK.
Fault 1: Change zener 6565 (4.7V) and check reset signal on VP7600. Also check the +5A and possibly change 6562. If power supply 100V=70V check D6549 which is leaky.

Blue screen, zener 6565 and 6562 have been changed. Microprocessor has been changed, signal TP32 is missing.
Fault 1: Unsolder the base 7658, check signal on 7600 pin 23. If missing, check on 27 and 26. If ok, suspect 7600. Check 7658, 6658, 12V on 3659.

White screen with flyback lines. No sound or picture, no functions. TV victim of a storm.
Fault 1: Check the G2, 163 on 6470. If not defective, check 3470 and 2470. Check the 12V on 6205. If not defective, check 296 and 2296. suspect line transformer.

No picture, sound normal.
Fault 1: Check IC7280 (TDA3504/V2; 4822 209 32647).
Fault 2: No G2 voltage on picture tube socket. C2237 (33nF) is defective.

After a while no picture. Only sound. TXT and OSD are OK.
Fault 1: Check whether DC voltage pin 11 IC7280 (TDA3504) is 3V. If not, check, replace C2255 (100nF; 4822 122 33496).

White distorted picture. Noise in sound. TXT wrong characters.
Fault 1: Check, replace IC7015 (TDA4504B; 4822 209 63107).

Bright picture, fly-back lines.
Check/replace LOT 5445 (4822 140 10406).

A blue vertical line in the middle; not visible in black and white.
Fault 1: Check, replace delay line IC7221 (TDA4660; 4822 209 63108).

No picture, sound and OSD are O.K.
Fault 1: Check C2460 (33nF/100V).

After a while no brightness.
Fault 1: Check LOT L5445 (AT2079/40; 4822 140 10406).

No picture (CVBS SCART-out is OK).
Fault 1: Check IC7400 (TDA3653B/N1; 4822 209 60955) and R3449 (1 Ohm; 4822 052 10108).

Only noise in picture and ERROR 2.
Fault 1: Check, replace IC7702 (PCF84C81AP/098; 4822 209 31069).

Flyback raster problem, picture is correct.
Fault 1: Check the G2 voltage. Suspect 2415, 7400, power supply pin 9: 26V of 7400. Check CRT board.

Flyback raster problems on 2/3 of the screen. TDA3504 has been changed, sandcastle correct.
Fault 1: Check voltage G2. Check 7400 pin 9 and 6: 26V.

No menu, no display. 5cm horizontal line, weak sound. Same via scart.
Fault 1: Check 5V on 2561, 95V on 6530, 13V on 6443, 26V on 6449. Suspect E/W circuit.

USEFUL INFO.

Auto contrast tracking.
The following production change was introduced from week 9242:-

Pos.	Old	New	Code No.
3633	100K	270K	4822 051 10274
3681	27K	30K	4822 116 52267

Reason: To improve tracking between auto contrast and ambient lighting.

New hotel mode.
Note: A new hotel mode has been introduced since production code PM09 and ZB09. This feature is not mentioned in the instruction manual.
Activate: select pr. 38, set at desired max. vol. press local control mode/install button and, at the same time, the sleep timer or OSD on RC until H+ lights up (ca. 3 sec.) after stand by or off position.
De-activate: As above, except adjusting max. vol., H- indicator lights up.

New hotel mode microprocessors.
Microprocessors new hotel mode code numbers;
-App. with 5 local control buttons: TMP47C434N-R217 4822 209 32171 -App. with 3 local control buttons: TMP47C434N-3146 4822 209 32117
-App. with teletext .....: TMP47C434N-R132 4822 209 32139
Introduced since production code PM09 and ZB09.
Operating instructions, see "new hotel mode".

Microprocessors with/without hotel mode.
Note: Since production code PM07 9209 and ZB07 9215, anubis-A appliances with model design /R or /B have a different µp without hotel mode.
Code number 4822 209 31071. For the time being, from the mentioned production codes onwards, a /V version is supplied that does have a hotel mode. The µp with hotel mode code number. 4822 209 63948 is available as usual.

Zener diode D6517 sops.
Note: Zener diode in sops supply D6517, BZV85C5V1 4822 130 31456.

Line transformer 5445 correction documentation.
Note: The connection by line transformer 5445 is drawn incorrectly in the orginal documentation of the Anubis A (not de AB and AC version) on page 5.3. The winding drawn from pin 7 to pin 2 should run from pin 7 to pin 3.

Connection of a loop system to the TV.
Note: A problem usually occurs when connecting a loop system to a modern TV. A solution is available from the hearing aid suppliers in the form of a specific loop system amplifier which is supplied from the mains and which functions with a scart or phono plug signal. With the advice of a specialist a large part of the cost is usually covered by insurance.

CRT types.
Some receivers were fitted with a CRT type A34JFQ40X04 in production. The standardized replacement for all 14" receivers with these chassis is the A34EAC01X45. Spacers may have been used when mounting the A34JFQ40X04 in the cabinet. These should be discarded when fitting an A34EAC01X45 in its place. In addition, the wiring of the deflection coils is different. Comparison of the connections is included with the new tube. Code no. for A34EAC01X45 is 4822 131 20316.

Hotel mode.
Control microprocessors are available for these chassis with or without the "hotel" mode feature. Original production included "hotel" mode but the feature was deleted to reduce the number of "nuisance" service calls generated by misuse of the feature.

Processor	Introduction	Code no.
TMP47C434N/3121 with	start prod.	4822 310 31846
TMP47C434N/3123 without	PM079211 ZB079215	4822 209 31071

Repeat repair after defective mains fuse 1500.
Restriction: ALL ANUBIS-A SETS
In case only the mains fuse 1500 (4822 070 32002) is replaced to repair an ANUBIS-A set, it is strongly recommended to replace the PTC 3501 (4822 116 40137) also. Especially PTCs with printed week no. 317, 341, 346 and 406 can be damaged in case the fuse 1500 has blown.

Spare part info: values of R3522 and R3521 (BUT11 has blown).
R3521/R3522: 20R.
Note: If power supply problems arise it is recommended that you fit an self oscillating kit SBC7021 Philips.

Option diodes for software R165.
Note: For software version R165 in ANUBIS A AC chassis:
-Option diode D6607 available for PQI (sharpness control).
-D6606 for 4 pag. TXT
-D6603 for UHF only.
-D6604 for 1 pag. TXT.
-D6605 for multi system sets.

How to activate Hotel Mode for 14" appliances with serial no. PM08 and higher.
1. Select channel 38
2. Press simultaneously selector button "Volume/Programme" on TV and End Program button on RC for 4 secs.
3. "H" appears on screen. Put TV in standby and then switch on. Hotel Mode is now activated and "H" disappears.

How to deactivate Hotel Mode for 14" appliances with serial no. PM08 or higher.
1. Select channel 38
2. Simultaneously press selector button "Volume/Programme" on TV and "End Program" button on RC for 4 secs.
3. "H" appears on screen. Put TV in standby and then switch on. Hotel Mode is now activated and "H" disappears.

How to deactivate Hotel Mode for 15", 17" and 21" appliances with serial no. PM09 and higher.
1. Select channel 38.
2. Simultaneously press "Menu" button on TV and "End Program" button on RC for 4 secs.

3. "H" appears on screen. Put TV in standby and then switch on. Hotel Mode is now deactivated and "H" disappears.

Channel for Hotel mode.
Hotel mode is only on channel 38.

DEFLECT

Horizontal linearity not optimal.
Fault 1: Change C2450 into 560nF (4822 121 42442).
REMARKS: Introduced in production for factory code: PM079220 and higher.

No EHT. No signal on B or C. BUT ok, 95V ok on C of BUT.
Fault 1: [2448, 2470, 2452, 2443 and 2453 checked]. Check CVBS signal on pin 28 of IC7015 for 1.8Vpp, TDA4504B, output on pin 29 then start up pulse for driver command of T7440. On T7440 check base: 1Vpp square wave, C: 115Vpp. On T7445 check B: 15Vpp, C: 780Vpp. Check IC7015.

Poor picture width and/or horizontal linearity.
Fault 1: Replace C2450 with 560nF, code number: 4822 121 42442.

Vertical and horizontal picture reduction and no synchronisation.
Fault 1: Check 100V. If only at 90V check if D6549 is leaky.

Field collapse. No picture. Sound OK.
Fault 1: Replace field chip TDA3653.

COLOUR

Colour varies at the top (green).
Fault 1: Fit a 22pF capacitor parallel to R3308 (pt.5 TDA4660).

Colour develops poorly.
Fault 1: Replace capacitor 2267 with one of 150nF code number 4822 122 33812. Replace capacitor 2268 with one of 22nF code number 4822 126 11544.

Poor colour sync.
The following production changes have been introduced to improve colour synchronisation.
1) From week 9136 :
Capacitor C2267 (100nF) is changed to 150nF 4822 122 33812.
Capacitor C2268 (47nF) is changed to 22nF 4822 126 11544.
2) From week 9148 :
A 100nF capacitor 4822 122 33496 is soldered in place of link 9268.
NOTE: In cases of specific complaint affecting earlier models, these changes can be applied as a service solution.

Totally saturated colour.
Replace IC7221 - TDA4660, Chroma delay IC.

Overshoot in RGB.
Fault 1: Change C2204, C2217 and C2230 into 270pF (4822 122 32142).
REMARKS: Introduced in production for factory code PM069148, ZB069203 and higher.

Blue picture with flyback lines.
Fault 1: Check IC7280 (TDA3504/V2; 4822 209 32647).

Sometimes green picture.
Fault 1: Check potentiometer R3213 (2K2) on interruption R3213 (2K2)

(4822 100 11637).

Dark yellow picture.
Check connector L3 (picture tube panel).

Chroma flickering with play-back of copy protected tapes.
On the sync part:
- change C 2350 into 47 nF 4822 122 32542
- change C 2351 into 4,7 uF 4822 124 40246
- change R 3350 into 75 kOhm 4822 051 10753
- change R 3351 into 1,5 kOhm 4822 116 52243

On the Chroma part:
- add a capacitor of 47 nF (4822 121 43526) between pin 12 of IC 7260 and earth.
- replace C 2267 by 1 uF (4822 121 51319).
- replace jumper 9268 by a resistor of 5,1 kOhm (4822 116 52286).
- replace C 2310 by a resistor of 10 kOhm (4822 051 10103).
- replace R 3306 by a jumper wire.

After 5 minutes colour disappears.
Fault 1: Check sandcastle puls. If distorted: Check R3456 (330KOhm; 4822 053 20334).

No colour.
Fault 1: Track between pin 12 (IC7260) TDA4510 (4822 209 30389), C2252 (47nF; 4822 121 43526) and jumper R3306 (3k3; 4822 051 10332) interrupted.
Fault 2: Check on 7280 pin 12 the colour variation 2V to 4.6V. If ok, check the RGB on pin 19, 20, 1. Check on 7221 pin 12 and 11, and on 5 the sandcastle 4Vpp.
Fault 3: No colour identification from IC7260. Fit C2331 (27pF; part no. 4822 122 31825) between pin 15 of IC7250 and the earth. Replace wire bridges 9268 by a 100nF (4822 122 33496). Change C2267 to 150nF (4822 122 33812) and C2268 to 22nF (4822 126 11544).
NB: Introduced into manufacture for factory code PM059141, ZB069148 and higher.

Color missing due to wrong color identification of TDA4510.
Fault 1: Add capacitor 2321 27pF (4822 122 31825) between Pin 15-IC7250 and earth. Add capacitor 2310 100nF (4822 122 33496) mounted instead of wire 9268.
REMARKS :
Introduced in production for factory code PM059141, ZB069148 and higher.

Poor colors, PAL lines.
Fault 1: Check, replace delay line IC7221 (TDA4660; 4822 209 63108).

AUDIO

No picture or sound only whistling from the power supply.
Fault 1: Short in the Line transformer (4822 140 10406).

Volume Changes depending on station.
Fault 1: It is possible that appliances with 3 local control buttons may need volume reset for each program.
As follows: switch appliance on or press PP button. Choose program to which you want to set volume, open memory, set wished volume and store.
Note: PP settings occur via menu, to set volume press on open/store once.

Fault 1: It is possible that appliances with 3 local control buttons may need volume reset for each program.
As follows: switch appliance on or press PP button. Choose program to which you want to set volume, open memory, set wished volume and store.
Note: PP settings occur via menu, to set volume press on open/store once.

Fault 1: Check signal on 7157 which decreases. Check if 6135, 2137, 7156, 7158 normal, check 2157, 2160, 2161. Suspect jack socket.

Set is motorboating after 15 minutes.
Check C2545 (4u7/100V; 4822 124 40769).

No sound.
Fault 1: Check or replace D6135 (LLZ-C4V7; 4822 130 80883).
Fault 2: Transistor TR7156 (BC848) is leaky.

50Hz hum from speakers in standby.
Fault 1: With anubis-A appliances with 3W RMS (IC7157 TDA7056), replace the sops transformer with: 4822 148 60299.
Fault 2: Instead of bridge 9517 or in series with R3529 fit a series connection of a coil 4U7 (4822 157 70458) and diode BYD33D (4822 130 42488), cathode to C2161. In stubborn cases connect in series an electrolytic 100-220µF parallel to C2161 and/or a second BYD33D.

No sound in aerial and scart. LF amplifier ok, simply thermal tube noise at the output.
Fault 1: Check audio signal 7125 pin 6: 1Vpp. If poor, check on 16: 50mVpp. If ok, suspect 2126, 2127 and 2128; on 11: 12V.

No sound in SECAM, only thermal tube noise. No possibility in channel search to fix the sought channel.
Fault 1: Check on 7600 pin 16: without aerial: 0V, with aerial: 5V. If ok, check on 26: sandcastle, for the search on 7672 0V to 9V.

Beats in the speaker. Voltage are low, line transformer has been changed. Power supply voltages ok if line BU lifted but noise in the power supply transformer.
Fault 1: Check on 7455 base: 15Vpp, collector: 780Vpp. On pin 1 of the line transformer: 95V. Check 2445, 2446, 2451 and 6451.

No menu, no display. 5cm horizontal line, weak sound. Same via scart.
Fault 1: Check 5V on 2561, 95V on 6530, 13V on 6443, 26V on 6449. Suspect E/W circuit.

Blank raster and no sound, OSD ok.
Fault 1: Check T7877.

No picture. No sound. PSU whistles softly.
Fault 1: S/C between pin 1 and earth on the line transformer. Change line transformer which is S/C between pin 1 and 3, 4, 5, 6 and 7.
Desc. Part no.
Line transformer 4822 140 10406

POWER

BUT 11AF line blows. s/c in E/B. TDA4504 has been changed but this does not achieve anything and it blows each time.
Fault 1: With a fictitious (for test reasons) load check the signal on the collector of the line driver and the BU launching signal. Check C2246, D6446 on the power supply transformer.

BUT11AF jumps occasionally.
Fault 1: Change power supply kit SBC7021 ref 482231020491.

Dead. Power supply transformer whistles. Power supply kit has been changed, BUT11AF OK, 95V OK, when CNX83 removed 2A fuse blows.
Fault 1: Check 95V must be adjustable. Change CNX and clean printed circuit, the whistling is due to an electrolytic on the power supply.

No EHT.

Fault 1: [BUT11AF ok]. On 7445 check 95V on C and B signal. Check 2448, 2470, 2452, 2443 and 2453.
Fault 2: [BUT ok, 95V on C ok. 2448, 2470, 2452, 2443 and 2453 checked]. Check CVBS signal on pin 28 of IC7015 (TDA4504B) for 1.8Vpp, output on pin 29, start up of driver command on T7440. On T7440 check base: 1Vpp square waves, C: 115Vpp. On T445 check B: 15Vpp, C: 780Vpp. Check IC7015.

Dead with power supply whistling.
Fault 1: No voltage on line transformer, S/C.

+95 to 40V instead of 100V, pin 1 of 5445 is grounded.
Fault 1: Replace line transformer.

Power supply OK but no line transformer. Voltage on pin 12 TDA4504 fails at start up. Pin 12 is unsoldered, voltage OK. IC TDA4504 and 12V zener have been changed.
Fault 1: Measure 100V on pin 1 of the line transformer and driver signal on the base of 7445. If not defective, check pin 29 of TDA4504, if ok check 3440, 2370, 3370, 7440 and 3447. Check line transformer secondary.

Set still defective after replacing SOPS repair kit.
Fault 1: Check, replace thyristor 6570 (SFOR5D43; 4822 130 20245) and D6569 (LL4148; 4822 130 80446).
REMARKS: SOPS repair kit is SBC7021; 4822 310 20491.

When switching to stand-by, picture flickers and the red LED blinks.
Fault 1: Check, replace Zenerdiode D6568 (LLZ-F6V2; 4822 130 81147).

Humm in stand-by.
Fault 1: Check SOPS transformer L5525 (4822 148 81121).

Blinking led. Supply in protection.
Fault 1: Check LOT 5445 (4822 140 10406).

Supply in protection.
Fault 1: Check, replace LOT (L5445; 4822 140 10406) (short circuit between several coils).

+ 95V is too low.
Fault 1: Check/replace TS7445 (BUT11AF;4822 130 42679).

After changing the power supply kit and the line transformer. With the varica, start up but R3551 and T7537 blow.
Fault 1: Check D6537, T7552.

Line transformer starts up and stops. Secondary components are ok.
Fault 1: Check the line transformer outputs one after the other. Suspect the line transformer, 7404 and 2415.

+95 at 30V, +5 at 0V.
Fault 1: T7554 (BC337/40) in the safety circuit is s/c.

Power supply U system at 84V instead of 92V. Sound and picture pumps. With a lamp, power supply may regulate AOR 92V.
NB: if 13V or 26V on line transformer is disconnected power supply regulates.
Fault 1: [Changed D6513, D6514, D6549, D6537, CNX83, line transformer]. Check D6549 and R3549 (33R).

With variac 95V is at more than 105V and R3557 is red hot. . , No S/C measured, manip lim bt continu OK.
Cnx remplacé Contrôler 7563 (BC858), 6562/6565 (BZU55) puis voir 7554 (BC817), 7555(BC847), 7556(BC857). Voir enfin 6555 (BZV55-F18).

Power supply does not function, even after fitting power supply repair kit.
Fault 1: Check C2505 and power supply transformer.

Dead.
Fault 1: BUT11A was S/C, there is a service kit from philips to cure this, reference number (SBC7021) part number (4822 310 20491).
Fault 2: [95V rail S/C]. Check line output transformer for S/C.
Fault 3: Transistor 7525 (BUT11F) S/C. After replacing transistor, no switch on but switch on when shorting pin 4 and 5 of optoinsulator 7514/2A. Replace optoinsulator CNX83A.
Fault 4: Check track between pin 1 LOT 5445 and collector of T7445 on interruption.
Fault 5: [53V instead of 100V at power supply output and 0V instead of 5.1V. 0V on collector of T7561. FBT and power supply kit replaced]. Check 7445. If OK, check driver signal on pin 29 of 7015. If not, unsolder pin of FBT and check for 95V ON and for 40V in standby. Check 2560, 2561, 6562, 6565 and 7514.
Fault 6: [HT present but no line drive]. Check for pulses at pin 29 of IC7015, if missing, IC7015 is defective. If pulses present, check line output transformer.
Fault 7: [HT low at 40V, should be 95V]. Check TR7537 (BC848C) error sense for leaks.
Fault 8: Fit SOPS repair kit (SBC 7021; part no.: 4822 310 20491).
Fault 9: [Control loop in the PSU does not work, R3551 in the PSU is burnt]. Check C2545 (4.7uF/100V; part no.:4822 124 40769) and R3551 (150R; part no.: 4822 051 10151).

A squeaking noise comes from the line output transformer and the Ht is low at about 40V.
Fault 1: Try disconnecting the scan coils. If the voltage comes up the scans are faulty.

HSP crackles, after 10 seconds BUT11 goes defective.
Fault 1: Check line transformer.
Fault 2: S/C HT cable.

95V at 107V. Impossible to regulate 95V, R3554 heats up. 95V isolated from secondary for testing.
Fault 1: Remove thyristor T6570 and switch TV on: LED becomes orange and standby function no longer works. From there deduct if fault is located around T6570. Also check D6562, 6565, 6555, 6549 and T7563, 7554, 7556 and 7555.

Power supply BUT blows at switch on.
Fault 1: Check PTC. Check if collector is grounded. Suspect micro breaks which interfere with regulation. Also suspect capacitors C2526, C2525 and C2505.

At start up signal on C of line BU is damped when FBT attempts to come on. Severe noise in loudspeaker. Voltages seem ok.
Fault 1: [FBT changed but fault persists]. Unsolder line BU. Check power supply. If ok, unplug LF module and check. If ok, suspect 2157, 7156 and 7157.

Power supply whistles in standby and crackles when on.
Fault 1: Check or replace 7514, 7554, 7555, 7556, 2545, 2561 and 6565.

Power supply whistles.
Fault 1: [Power supply kit changed. Electrolytic capacitors remain the same]. Unsolder pin 2 of FBT and check power supply with oscilloscope. If power supply still whistles check power supply transformer and mains filter 5500. If ok, check outputs of FBT.

19V only on collector of line BU.
Fault 1: Unsolder pin 2 of FBT and check 95V on 5531. If low, check 6570, 7537 and 6537. If ok, suspect FBT and secondary voltage of FBT.

No 5V. R3557 heats up excessively. R3557 previously at 35V, currently at 13V. T7554 and T7561 ok.
Fault 1: Check R3337 (270R), C2545, IC7514, T7552, T7555 and T7556. Suspect thyristor T6570.

No start up. 312V on C2505. Power supply transformer whistles. C2505 ok.

Fault 1: [Power supply kit changed]. Unsolder pin 2 of FBT. Check secondary power supply. If incorrect, check diodes LL4148, R3515, R3523, R5321 and R5322 in primary. Suspect 2445 and 2415.

No power.
Fault 1: Check line output transformer.

100V is at 70V. If line BU removed the 100V returns.
Fault 1: [Power supply kit changed]. Check line transformer which is very often S/C.

Dead. Whining. PSU OK on dummy load.
Fault 1: Check line output transformer.

No function. LED flashes.
Fault 1: Line transformer is defective.

FUNCTION

Hole in the hyperband (300- 470 Mhz).
Fault 1 : Replace the following components:
:C2017 (100uF) by a 33uF,
:Part no: 4822 124 42058
:C2005 (470nF) by a 330nF
:Part no: 5322 121 42661
:C2450 470nF by a 560nF
:Part no: 4822 121 42442

Channels lose frequency when you pass your hand over TV chassis.
Fault 1: Check tuner screening can and ground of 33V. Check identification signal from pin 14 of 7015 via D6053 and AFC (6.5V) on pin 21 of 7015 and 9.2V on pin 25 of 7015.

Channel search stops on station with no sound and a black and white picture which has shifted. uP, memories and tuner ok.
Fault 1: IC7015 (TDA4504) is at 6.5V AFC on pin 21 with signal and at 10.5V without it, transferred via 3631 on pin 9 of 7600. It changes from 6.9V in SEARCH to 0.1V on pin 41. Check the following chain: +12A on 3687, 7686, 33V VARICAP. Check if any improvement when pressing tuner +-. Check TDA4504.

Channel frequency drifts when TV is moved.
Fault 1: Suspect dry joints on board near IC7600 (TMP47C434). Suspect quartz 1679 and 7685 (ST24CO2P). Check sensitivity of receiver.

White screen with flyback lines. No sound, picture or functions. TV affected by storm.
Fault 1: Check G2, 163V on 6470. If not, check 3470 and 2470. Check 12V on 6205. If not, check 3296 and 2296. Suspect EHT.

Cannot switch off Hotel Mode after replacement of the micro processor.
Restriction: non remote control sets.
Fault 1: For the new software version of the micro processor it is required to switch off the hotel mode feature with the aid of the remote control. However the non remote control set cannot receive the RC signals.
Two possible solutions:
1) Make use of an temporary connected RC receiver unit.
2) Replace also the EEPROM: item 7685, 4822 209 62098, ST24C02A, but now all the programs and settings have to be re-installed.
REMARKS: To switch off the hotel mode (e.g. software R217):
Select program 38, press simultaneously "install" on the local keyboard and "sleep timer" on the remote control for at least 4 seconds.

AFC control is slowly. Station unstable.

Fault 1: Check tuner (UV917/IEC; 4822 210 10405).

TXT does not work.
Fault 1: Change the value of capacitor C2703 on decoder plate to 56pF
(4822 122 31774).

No start up. 12V collapses at switch on.
Fault 1: Measure 100V on pin 1 of FBT and driver signal on base of 7445. If poor, check pin 29 of TDA4504. If ok, check 3440, 2370, 3370, 7440 and 3447.

Impossible to increase sound by control panel or RC. Sound reduction ok from control panel and RC.
Fault 1: TV is in Hotel Mode

Does not stop in station search. 4.5V on pin 16 of 7600, 9.2V on pin 25 of 7015, 12V on pin 12, correct signal on pin 28, 5.7V on pin 14 on station.
Fault 1: [TMP47C and TDA4504 changed]. On pin 16 of 7600 check for presence of identification signal from pin 14 of 7015 via D6053. Check pin 21 of 7015 for AFC (6.5V),and there must be 9.2V on pin 25 of 7015.
Fault 2: Diode 6042 is leaky.

No start up. Power supply pulsates and standby LED flickers.
Fault 1: [Power supply kit changed]. Disconnect 7445 and check power supply secondary. Suspect 7400 and 2415 and check line transformer secondary.

No start up. 100V on collector of line BU.
Fault 1: Check 5V on C2561, 9V on V2540, 9.2V on C2452, 163V on C2470, 13V on C2446, 26V on C2453. Check start up pulse for T7445 (1.5Vpp) and its collector (780Vpp). Suspect uP and memory. If standby LED lit remove thyristor T6570 to check if TV starts up. If standby does not work, check T6570 and its surrounding circuitry.

No start up. 312V on C2505. Power supply transformer whistles. C2505 ok.
Fault 1: [Power supply kit changed]. Unsolder pin 2 of FBT. Check secondary power supply. If incorrect check diodes LL4148, R3515, R3523, R5321 and R5322 in primary. Suspect 2445 and 2415.

At start up whistling of the FBT and goes into standby followed by intermittently going into PAL.
Fault 1: Check electrolytics around the FBT. Suspect FBT.

TUNING/MEMORY

Memory has been replaced but it is impossible to go into the programming menu.
Fault 1: Check if appliance is locked. If not choose channel 38. Press Install and keep the key pressed down and press on Search key at the same time.

Off station.
Fault 1: Check voltage on zener diode 6370 at pin. 12 IC7015 (TDA4504), look at diagram B. If much lower than 10.6V, Replace D6370, llz F12 code number: 4822 130 82304.

Loss of VCR RF channel.
Fault 1: A production change has been introduced from week 9237 adding 3 components in the AFC circuit. Reason: To ensure correct pull-in when changing channel to VCR. In cases of specific complaint affecting earlier sets, the following service solution can be applied-
1) Connect a zener diode BX79C6V2 and a 1N4148 diode in series (anode to anode) between pins 14 and 21 of 7015 (TDA4505). Ensure that the zener diode cathode is connected to pin 21.
2) The components should be mounted on the print side of the panel and sleeved to avoid short circuits.

:Component Type
:Zener diode BRV55-F6V2
:Resistor 1K
:Diode BAS32L or LL4148

:Zener diode BZX79-C6V2
:Diode 1N4148
:Component Code number
:Zener diode 4822 130 81147
:Resistor 4822 051 10102
:Diode 4822 130 80446
:Zener diode 4822 130 34167
:Diode 4822 130 30621.

Does not lock on to a station in sweep tune.
Fault 1: Also an unstable picture, AFC hunting type fault, when a picture is present. Check/replace D6052 - status diode. Voltage on pin 14 of IC7015 (TDA4504) is too low (< 6.3V). Check voltage on the zener diode D6370 (LLZ-F12; 4822 130 82304) at pin 12. If it is much lower than 10.6V, replace D6370.

Poor tuning - drifting off tune, station unstable.
Check/replace D6052 - LL1N4148 SMD, off IDENT line.

No UHF reception.
Fault 1: No band voltage for UHF present on channel selector, replace IC7002 LA7910.

Tuner drift.
Fault 1: Check tuner. Is the 33V voltage stable? Check AFC (6.5V) on 21/ 7015. Check 9.2V on 25/ 7015. Check identification signal on 14/ 7015 via D6053.

Poor tuning; unstable picture.
Fault 1: Check, replace D6052 (1N4148 ; 4822 130 30621)- status diode. Check, replace D6370 (LLZ-F12; 4822 130 82304).
REMARKS: The cure is applicable for poor tuning and for unstable picture,
AFC hunting type fault, when a picture is present.

Missing of Hyper channels during search.
Fault 1: Change C2017 into 33uF (4822 124 42058).
Fault 2: Change C2005 into 330nF (5322 121 42661).
Note: Introduced in production for factory code:
Solution 1: PM069203, ZB079219 and higher
Solution 2: PM069207, ZB069212 and higher.

Does not lock several stations. (AFC is too slow).
Fault 1: Check/replace and adjust IF detection coil L5040 (4822 157 63064).

Programs lost after initial programming of replaced EEPROM.
Fault 1: After EEPROM replacement the programs stored in FRANCE system
disappear after the switch-off. This is because the OSD showed FRANCE system but the microprocessor was in EUROPE system (due to a software bug)
To solve this, after replacing the EEPROM, either:
- do an autosearch (so automatically all programs will be stored with the correct system).
- or manually scroll through all TV SYSTEMS, from FRANCE to EUROPE to UK and to FRANCE again (without storing any programs) and then start the storing procedure as usual.

Install or store not possible, sound volume may be too low.
Fault 1: Check whether "Hotel mode" is disabled.

Loss of memory when EEPROM replaced.
Fault 1: Select autosearch and the channels memory will return to normal.

GEOMETRY

Vertical and horizontal picture reduction and no synchronisation.

Fault 1: Check 100V. If only at 90V check if D6549 is leaky.

OTHER

Sleep timer runs too fast.
Fault 1: [Appliances with 3 switch control: sleep timer skips tens so that set time is run through too quickly]. Replace uP IC7600 by TMP47C834-R165.
Part no.: 4822 900 10508.

E3 displayed at start up.
The following component changes have been introduced in production after PM09248:

Ref	Old	New	Desc.	Part no.
C2560	680uF	1000uF	Safety	4822 124 40214
R3452	10R	1R0		4822 052 10108
R3782*	12R	18R		4822 053 10189

* Teletext versions only
Reason: To prevent random display of E3 at start up.

Luminant fleck on picture tube after switched off for a while.
Fault 1: Replace C2470 with 4.7µF/350V, code no. 4822 124 22449.

Channel frequency drifts when TV is moved.
Fault 1: Check for dry joints. If ok, check stability of 6.5V (AFC) on pin 25 of 7015, which should be at 9.2V. Try gently hitting board to locate fault.

Sleep-timer timer skips 1 minute every 10 minutes.
Fault 1: Replace item 7600 with new software TMP47C834N-R165; 4822 900 10508.
REMARKS: Introduced in production in week 9413 or 9420 depending on the version.

E3 displayed at start up.
The following component changes have been introduced in production after PM09248:

Ref	Old	New	Desc.	Part no.
C2560	680uF	1000uF	Safety	4822 124 40214
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Sleep-timer timer skips 1 minute every 10 minutes.
Fault 1: Replace item 7600 with new software TMP47C834N-R165; 4822 900 10508.
REMARKS: Introduced in production in week 9413 or 9420 depending on the version.

No reaction from RC5 remote control. Remote control O.K.
Fault 1: Check RC5 receiver LTM8848A-1P Pos.1685 (4822 218 20981).

Timer not OK, no 10min/20min etc.
Fault 1: Replace IC7600 by new software version TMP47C834N-R165 (4822 900 10508).

Flap front does not lock.
Fault 1: Replace door lock pos.7 (4822 278 10088).

All LEDs in display blinking.
Check LOT 5445 (4822 140 10406).

Squeeking sound from CTV chassis.
Fault 1: Check, replace LOT L5445 (4822 140 10406). Check for short circuit between coil 7 and 4 of LOT.

No menu, no display. 5cm horizontal bar, low sound. Same in scart.
Fault 1: Check 5V on 2561, 95V on 6530, 13V on 6443, 26V on 6449. Suspect E/W circuit.

A squeaking noise came from the line output transformer.
Fault 1: [Low HT at approx 40V]. Check scan coils and the CRT.

Menu settings.
Reqs RC8611 remote.
1) Select last channel by pressing TV+ or -.
2) Press VOL/P button on set then press VOL on RC for more than 4 secs.