

## TV Repair Database



## Philips MD2.21 & MD2.22

		Check pins of connector O55 on the combfilter panel. Look for badly soldered (oxidated) pins. Resolder the pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.21E	No picture. Sound, menu and TXT are OK.	
MD2.21E	No sound in headphone after switching to Canal+	When switching from a channel to Canal+, the sound on the headphone disappears. There is still sound in the loudspeakers of the set. After switching to another channel the sound in the headphone comes back again. This problem only occurs when the decoder
MD2.21E	No sound, picture OK	Check voltage of pin 2 of IC7761 (TDA2616) on the Large Signal Panel. When this voltage is not correct check and replace if necessary D6754 (BZX79-C18; 4822 130 31024).
MD2.21E	No TXT, no menu, no OSD	Check and replace if necessary X-tal position 1201 on the TXT&control panel (27MHz; 4822 242 81191).
MD2.21E	Noise (humming or low frequency whistle) coming from the picture tube	Mount a bleeder (HT capacitor) between the LOT and the picture tube. This bleeder is supplied as a service kit (4822 310 11113) and include all material and an instruction note.  REMARKS :IRIS symptom code 2145
MD2.21E	Noise (humming or low frequency whistle) coming from the picture tube	Mount bleeder (4822 310 11113) between LOT and picture tube. If problem still exist Anti Crackling Coating (ACC) can be applied. The code number for this ACC is 4822 390 10166.  The ACC is supplied with complete instructions how to apply.  REMARKS
MD2.21E	Noise from power supply transformer	Add a capacitor of 100pF (4822 121 51288) in parallel to position 2531 (1nF) on the Large Signal Panel.  REMARKS : IRIS symptom code 1144
MD2.21E	Picture distortions on canal+ and FR2	Change resistor R3141 on the IF module into 180 ohm (4822 117 11448).
MD2.21E	Picture rotated in 28" WS sets	The following service solution can be applied to solve the rotation problem:  1. Add the North/South panel: 4822 212 11287  2. Mount rotation coil on the picture tube neck: 4822 157 70615 and connect it to the free connector (Y90) on the North/South pa
MD2.21E	S1, S2 and S3 channels unselectable	S1, S2 and S3 channels are unselectable in channel mode. Replace position 7202 on the TXT & control module with: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRI
MD2.21E	Seagull effect in the top of the screen	Add North South panel 4822 212 11564 on position L91 of the LSP. Remove bridge wire 9621. Add bridge wires 9431, 9442 and 9443.  REMARKS : This is only a service solution and will not be implemented in production.
MD2.21E	Service hint	Service hint ----- Check the VDR on the mainsfilter panel. If this is defective, replace the old VDR (4822 116 21217) by a new one (4822 116 10065).  REMARKS : Introduced in production from week 9752 onwards.
MD2.21E	Set can go into protection by switching on.	Change capacitor C2524 (parallel to C2525) into 10uF (4822 124 41579).
MD2.21E	Set in protection with several error codes in the error buffer	Errors caused by intermittent I2C communication problems. Usually one of the error codes is related to the MSP34x0 sound processor.  Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 1
MD2.21E	Set inoperative. Red LED flashing. Err 47 44 48 69 88	Check and replace if necessary resistor R3609 (4K7; 4822 052 10472) on the LSP.

		Change software into the V_3104 317 00890 (4822 900 11058)
MD2.21E	Set switches to stand-by	REMARKS : Introduced in production from week 9737 onwards.
MD2.21E	Sometimes still picture occurs	Check and replace if necessary IC7400/IC7441 (TDA8753AN; 4822 209 90528) on the feature box.
MD2.21E	Stand-by LED flashing after start up	Errors 47, and possible 69 are indicated. Solution: on LSP probably HFB signal not present caused of defective R3609, 4k7, 4822 052 10472.
MD2.21E	Subpages not stored/updated in menubar	Check whether jumper 4400 is present on TXT-control panel. If not present, mount jumper. The location is between X-tal 1201 and TXT IC7400. Codenummer jumper: 4822 051 20008.
MD2.21E	Switching off and on of the wireless surround speakers	Check and replace the following components on the power supply + amplifier panel in the active surround speaker if necessary: - position 2280 into 220uF (4822 124 40196) - position 3280 into 330k (4822 116 52272)  REMARKS : IRIS symptom code 6544
MD2.21E	The bottom left side of picture shows a green teletext symbol	The bottom left side of picture shows a green teletext symbol whether or not the teletext is switched on.  Subtitling is selected, but the subtitling page is not stored. Switch off the subtitle function by pressing the subtitle knob on the remote cont
MD2.21E	The colours are switching during playback of mounted video tapes	The colours are switching during playback of mounted video tapes on several camcorders.  In case a TDA9143 is present on position 7352 on the SSP: - change position 7352 into a TDA9141 (4822 209 90328) - remove position R3377 and R3378 (20M) from the SSP
MD2.21E	The time from TXT is not read or with mistakes	Replace position 7202 on the TXT & control module with: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRIS symptom code 1286
MD2.21E	Totally dead	If the mains fuse (2 amp; 1501 on the mainsfilter panel) is defective, replace it by a 6.3 Ampere hard break (4822 253 30467)
MD2.21E	Totally inoperative, red LED slowly flashing; +5V is 2,2V	Check/replace diode D6520 (1N5822; 5322 130 32677) on the +5V panel.
MD2.21E	Two vertical grey bars in picture	Bent flatcables S10/L10 and S15/L15 away from TDA9143 (pos. 7352 on the SSP)
MD2.21E	Unstable moving, "waving" picture	Check on +5 V panel the soldering of C2530. Also check and resolder pin 1,2,3, and 10,11,12 of connector V50 on the LSP.
MD2.21E	Vertical shift and amplitude not stable (jumps).	Check pins of connector J13 on the DDP. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.21E	Vertical stripes in picture	On the right side a 2.5 cm width dark band and on the left side a vertical stripe can be seen. Check if the wires S11-L11 and S10-L10 do not touch C2368 on the SSP. If they touch C2368 bend them away from C2368.
MD2.21E	Wrong TXT characters on subtitles	Replace position 7202 on the TXT & control module by: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRIS symptom code 1286
MD2.22AA	Dead - LED goes green for 15 secs then turns constant red	Micro 7200 faulty - not a job to get involved with if at all possible!
MD2.22AA	lines on pic	syscon/txt module connections to main pcb dry jointed
MD2.22E	"Digital scan" does not appear in the picture menu	In the direction for use is mentioned that in the picture menu the function 'Digital Scan' can be switched off. However during the picture modes; Super Zoom, 14/9, 16/9, subtitles an automatic the function 'Digital Scan' does not appear in the picture me
MD2.22E	+5 V stand-by defective (also fuse 1580 defect)	First check the +5 V supply panel before replacing the fuse. When the +5 V panel is defective, it could be that the +5 V becomes too high, which will damage the circuitry.
MD2.22E	ACI table filling stops when National Geographic Channel is found	Replace position 7202 on the TXT & control module by: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Softwrae for EPG sets  REMARKS : IRIS symptom code 1262
		Alternating noise when (moving) objects are between the TV set and the

MD2.22E	Alternating noise in wireless surround speakers	wireless surround box can be solved by deleting R3153 (1k5) of module 1403 of the transmitter panel in the TV set. The components on module 1403 are not indicated but pointing the modu
MD2.22E	Audio supply repair kit MD2.2	Audio supply repair kit MD2.2 ----- For service now there is an audio supply repair kit available. This repair kit can be ordered with codenumber 4822 310 11086.
MD2.22E	Background noise audible in the wireless surround speakers	Change on the receiver module in the active surround loudspeaker the following components: - delete position 3731 - add position 3729 (4k7; 4822 051 20472) - change position 3730 into 4k7 (4822 051 20472)  REMARKS : IRIS symptom code 1542
MD2.22E	Bad focus or focus varies in a new set or after CRT replacement	Possible solution: Short circuit the focus and the G2 pins of the picture tube with the aquadag coating. Switch the set on for approximately 5 seconds. After this return the set to its original condition. Check if the focus adjusted normally. If not repla
MD2.22E	Bad start behaviour, ON and ST.BY LED flashing	Change mains input voltage by a variac. When start problem increases with an input voltage that is only about 10% below normal, check or replace the supply optocoupler. With a good optocoupler an average set easily starts on 60% of normal mains voltage.
MD2.22E	Blinking LED (set in protection)	Set in I2C software protection due to problems with the I2C communication.  Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 12 if required.
MD2.22E	Change in OSD function	Change in OSD function ----- During production the OSD function of the MD2.2xE sets has been changed with the introduction of new software.  The old situation was that by pressing the OSD button for 5 seconds it was possible to change bet
MD2.22E	Code number of position 7207 of the TXT-Control pa	Code number of position 7207 of the TXT-Control panel ----- The code number of position 7207 (UM62256EM-55LL) of the control panel is missing in the service manual. The code number is 4822 209 15179.
MD2.22E	Codenumber information	Codenumber information ----- Codenummer software IC7202 on TXT control panel  Sets without full EPG (nextview) is 4822 900 11102 Sets with EPG (nextview) is 4822 900 11058 /58 sets with East Europe language cluster is 4822 900 11066
MD2.22E	Colour shift of negative colours	During program changing or with start-up from standby it is possible that the situation of colour shift of negative colours appears. This phenomenon only disappears after switching off and on and is difficult to reproduce. Solution: Change position 7505 o
MD2.22E	Coloured circles in picture after switching on	Replace on the LSP the following components: - R3502 from 10 Ohm into 2.2 Ohm (4822 052 11228) - R3531 from 2k2 into 4k7 (4822 116 52283) - C2513 from 100nF into 10uF (4822 124 41579) mounted with the - to the base of T7514  REMARKS : Introduce
MD2.22E	Control knobs of sets with top control does not work	Check the soldering of connector B45 of the top control panel (W or X) If required resolder the pins of this connector and relief connector B45.
MD2.22E	Correction to styling 130 of Product Survey 1997-4	Correction to styling 130 of Product Survey 1997-4 ----- The description of the code numbers 4822 466 10933 and 4822 466 10934 of position 3 of styling 130 in product survey 1997-4 is not correct. The correct d
MD2.22E	Correction to styling 152 of Product Survey 1997-3	Correction to styling 152 of Product Survey 1997-3 (4822 727 21552) ----- The code number of the tuner cable mentioned in the parts list is not correct. The code number mentioned is of a tuner
MD2.22E	Correction to the MD2.21E/MD2.22E/MD2.23E service	Correction to the MD2.21E/MD2.22E/MD2.23E service manual ----- The code number of the Line Repair kit as mentioned on page 67 of the service manual MD2.21E/MD2.22E/MD2.23E AA is not correct. The correct c
MD2.22E	Crackling noise coming from the picture tube	Crackling noise coming from the picture tube during light/dark changes of the picture contents. Mount bleeder (4822 310 11113) between LOT and picture tube. If problem still exist Anti Crackling Coating (ACC) can be applied. The code number for this AC
MD2.22E	Crackling noise coming from the picture tube during program switching	Service solution; change the picture tube into 4822 131 11279  REMARKS :IRIS symptom code 2145
		To reduce the ringing phenomenon change the following positions on the Small Signal Panel:

MD2.22E	Curtain effect just after a white vertical line (ringing phenomenon)	Position 4508 into 1k (4822 051 10102) Position 3537 into 1k (5322 117 12487) Position 3538 into 1k (5322 117 12487) Position 3565 into 1k (4822 051 10102) Po
MD2.22E	Digital picture when dynamic contrast is on.	Check and replace if necessary AI panel. AI S/L 4822 212 11202 AI S/P 4822 212 11161 AI S/L/P 4822 212 11203 AI P 4822 212 11162 AI L 4822 212 11378 AI S/L/P PALPLUS 4822 212 11205 AI S/P PALPLUS 4822 212 11209
MD2.22E	Distortion in top of picture	Check pins of connector J13 on the DDP. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	Does not start, during 15 sec. green LED ON, then red LED ON.	Replace software IC7202 on TXT/Control panel codenr.: 4822 900 11058 and 4822 900 11066 for /58 sets.
MD2.22E	Extension cables	Extension cables ----- Service extension cables 4822 310 10674 can be used for servicing LSP and also for the feature box.
MD2.22E	Feature boxes in the repair procedure	Feature boxes in the repair procedure ----- The following feature boxes are now also in the repair procedure: 4822 212 11143 FBX3 smartic panic 4822 212 11198 FBX3 smartic limeric 4822 212 11204 FBX4 smartic limeric panic 4
MD2.22E	Flashing red LED, protection, intermitting failures.	Check on +5 V panel the soldering of C2350. Also check and resolder pin 1,2,3, and 10,11,12 of connector V50 on the LSP.
MD2.22E	Greek characters in Teletext.	Change software into the following version: Non EPG sets: V_3104 317 00860; 4822 900 11102 EPG sets : V_3104 317 00890; 4822 900 11058 -/58 sets : V_3104 317 00870; 4822 900 11066  REMARKS : Introduced in production from week 9737 onwards.
MD2.22E	Horizontal (colour or black/white) stripes	Check the connector (O55) of the combfilter. Resolder on the small signal panel but also at the comb-filter PCB.
MD2.22E	Horizontal jitter or sync faults during text-dualScreen mode.	1. Switch the set on and let the set warm-up for about 1 hour with the rear cover mounted and eventually covered with a cloth. 2. Adjust L5465 in the following way: - turn L5465 to the left till the picture is out of sync. - turn L5465 to the rig
MD2.22E	Horizontal lines in picture	Check pins of connector J13 on the DDP. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	Horizontal stripes in picture on high volume or ticking against set	Check pins on connector O55 on the combfilter panel. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	How to access "Customer Service Mode"	Press "mute" (on Remote Control) and "menu" on the TV-set at the same time for 4 seconds. On screen a survey will be given with the status of the various settings of the current transmitter.
MD2.22E	How to enable/disable "Child Lock"	Press "MENU" button on Remote Control. When the menu appears on the screen, you select "FEATURES" (this expression is language dependent) Within "FEATURES", the "CHILD LOCK" can be enabled or disabled.
MD2.22E	Influence from wireless dolby on channel 3	Cause: The wireless dolby transmitter influences the 55.25 MHz on channel 3. The local oscillator from the tuner interferes with the wireless dolby transmitter frequency and this results in a cross pattern on channel 3 (55.25 MHz).  Solution: - Add on pos
MD2.22E	Interference from VCR visible in picture	- Respect the distance of 20cm as mentioned in the DFU of the VCR. - Use a special antenna cable: 4822 321 61224 or 4822 320 11091 for PA 4822 321 61226 for SECAM  REMARKS : IRIS symptom code 134X

MD2.22E	Intermittent no audio	Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 12 if required.
MD2.22E	Intermittent no picture	Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 12 if required.
MD2.22E	Intermittent no picture	Check pins of connector O55 on the Combfilter panel. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	Intermittent no picture and/or sound	Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 12 if required.
MD2.22E	Interruption of MOSAIC mode when using decoders connected to external	When the set is in MOSAIC mode and the preset from the decoder appears on the screen (eg. CANAL+), the MOSAIC mode is interrupted and the set switches back to the last preset before switching on the MOSAIC mode. This problem is caused by a wrong setting
MD2.22E	Introduction of DNR; Removal of Multi-PIP	Introduction of DNR; Removal of Multi-PIP ----- During production Automatic DNR has been introduced in the MD2.2xE sets. At the same time the Multi-PIP function has been removed because these 2 functions can not be avai
MD2.22E	New service software for the MD2.2x sets	New service software for the MD2.2x sets ----- From week 9816 onwards new software is available for the MD2.x sets. This software is only available for service.  The differences between the old software and the new one i
MD2.22E	No mosaic function available	In the newer 4/3 sets the mosaic function is not available anymore. Instead of the mosaic menu, the auto-DNR function is added. Those sets are supplied with an Instruction for use according to the new status of featuring. There are no changes in type or
MD2.22E	No or slow reaction to RC / Not to standby	Slow response due to problems with I2C communication.  Check pin 12 of connector I46 on the Audio Module (SCL line). Look fo a badly soldered (oxidated) pin 12. Resolder pin 12 if required.
MD2.22E	No picture and no tuning	Check pins of connector O55 on the Combfilter panel. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	No picture, sound OK	Check the "customer service mode": press mute (remote control) and menu (local control) at the same time for 3 seconds. If the PP values are at zero then these values should be changed.
MD2.22E	No picture. Sound, menu and TXT are OK.	Check pins of connector O55 on the combfilter panel. Look for badly soldered (oxidated) pins. Resolder the pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	No sound from left, right, centre and subwoofer speakers	Check on audio supply panel (AB, page 39) 7302, BU508AF, 4822 130 61265 3300, 6E8 5W, 4822 117 12681 If one or both are defective also check production code on transformer 5305. If production code on 5305 is between or equal to OP9802 and OP9824 then al
MD2.22E	No sound in headphone after switching to Canal+	When switching from a channel to Canal+, the sound on the headphone disappears. There is still sound in the loudspeakers of the set. After switching to another channel the sound in the headphone comes back again. This problem only occurs when the decoder
MD2.22E	No sound, picture OK	Check voltage of pin 2 of IC7761 (TDA2616) on the Large Signal Panel. When this voltage is not correct check and replace if necessary D6754 (BZX79-C18; 4822 130 31024).
MD2.22E	No TXT, no menu, no OSD	Check and replace if necessary X-tal position 1201 on the TXT&control panel (27MHz; 4822 242 81191).
MD2.22E	Noise (humming or low frequency whistle) coming from the picture tube	Mount a bleeder (HT capacitor) between the LOT and the picture tube. This bleeder is supplied as a service kit (4822 310 11113) and include all material and an instruction note.  REMARKS :IRIS symptom code 2145
MD2.22E	Noise (humming or low frequency whistle) coming from the picture tube	Mount bleeder (4822 310 11113) between LOT and picture tube. If problem still exist Anti Crackling Coating (ACC) can be applied. The code number for this ACC is 4822 390 10166.  The ACC is supplied with complete instructions how to apply.  REMARKS
MD2.22E	Noise from power supply transformer	Add a capacitor of 100pF (4822 121 51288) in parallel to position 2531 (1nF) on the Large Signal Panel.  REMARKS : IRIS symptom code 1144
MD2.22E	Picture distortions on canal+ and FR2	Change resistor R3141 on the IF module into 180 ohm (4822 117 11448).

		The following service solution can be applied to solve the rotation problem: 1. Add the North/South panel: 4822 212 11287 2. Mount rotation coil on the picture tube neck: 4822 157 70615 and connect it to the free connector (Y90) on the North/South pa
MD2.22E	Picture rotated in 28" WS sets	
		Picture tubes A68ESF002X43 and A68ESF002X043 ----- +++++++ ONLY FOR 29" +++++++ The picture tubes A68ESF002X43 (4822 131 20585) and A68ESF002X043 (4822 131 11232) are no longer available for service. Th
MD2.22E	Picture tubes A68ESF002X43 and A68ESF002X043	
		S1, S2 and S3 channels are unselectable in channel mode. Replace position 7202 on the TXT & control module with: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRI
MD2.22E	S1, S2 and S3 channels unselectable	
		Add North South panel 4822 212 11564 on position L91 of the LSP. Remove bridge wire 9621. Add bridge wires 9431, 9442 and 9443.  REMARKS : This is only a service solution and will not be implemented in production.
MD2.22E	Seagull effect in the top of the screen	
		Service hint ----- Check the VDR on the mainsfilter panel. If this is defective, replace the old VDR (4822 116 21217) by a new one (4822 116 10065).  REMARKS : Introduced in production from week 9752 onwards.
MD2.22E	Service hint	
		Change capacitor C2524 (parallel to C2525) into 10uF (4822 124 41579).
MD2.22E	Set can go into protection by switching on.	
		Check and replace if necessary capacitor C2420 on the LSP 1nF (4822 121 70594) for 25", 28" WS, 29", 32" 1.2nF (4822 121 70595) for 24" WS, 25" BL-S, 28" BL-S 1.5nF (4822 121 70581) for 24" WS VGA
MD2.22E	Set in protection	
		Errors caused by intermittent I2C communication problems. Usually one of the error codes is related to the MSP34x0 sound processor.  Check pin 12 of connector I46 on the Audio Module (SCL line). Look for a badly soldered (oxidated) pin 12. Resolder pin 1
MD2.22E	Set in protection with several error codes in the error buffer	
		Check and replace if necessary resistor R3609 (4K7; 4822 052 10472) on the LSP.
MD2.22E	Set inoperative. Red LED flashing. Err 47 44 48 69 88	
		Change software into the V_3104 317 00890 (4822 900 11058)  REMARKS : Introduced in production from week 9737 onwards.
MD2.22E	Set switches to stand-by	
		Check and replace if necessary IC7400/IC7441 (TDA8753AN; 4822 209 90528) on the feature box.
MD2.22E	Sometimes still picture occurs	
		Errors 47, and possible 69 are indicated. Solution: on LSP probably HFB signal not present caused of defective R3609, 4k7, 4822 052 10472.
MD2.22E	Stand-by LED flashing after start up	
		Check whether jumper 4400 is present on TXT-control panel. If not present, mount jumper. The location is between X-tal 1201 and TXT IC7400. Codenummer jumper: 4822 051 20008.
MD2.22E	Subpages not stored/updated in menubar	
		Check and replace the following components on the power supply + amplifier panel in the active surround speaker if necessary: - position 2280 into 220uF (4822 124 40196) - position 3280 into 330k (4822 116 52272)  REMARKS : IRIS symptom code 6544
MD2.22E	Switching off and on of the wireless surround speakers	
		The bottom left side of picture shows a green teletext symbol whether or not the teletext is switched on.  Subtitling is selected, but the subtitling page is not stored. Switch off the subtitle function by pressing the subtitle knob on the remote cont
MD2.22E	The bottom left side of picture shows a green teletext symbol	
		The colours are switching during playback of mounted video tapes on several camcorders.  In case a TDA9143 is present on position 7352 on the SSP: - change position 7352 into a TDA9141 (4822 209 90328) - remove position R3377 and R3378 (20M) from the SSP
MD2.22E	The colours are switching during playback of mounted video tapes	
		Replace position 7202 on the TXT & control module with: 4822 900 11102 Software for non EPG sets

		4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRIS symptom code 1286
MD2.22E	The time from TXT is not read or with mistakes	
MD2.22E	Totally dead	If the mains fuse (2 amp; 1501 on the mainsfilter panel) is defective, replace it by a 6.3 Ampere hard break (4822 253 30467)
MD2.22E	Totally inoperative, red LED slowly flashing; +5V is 2,2V	Check/replace diode D6520 (1N5822; 5322 130 32677) on the +5V panel.
MD2.22E	Two vertical grey bars in picture	Bent flatcables S10/L10 and S15/L15 away from TDA9143 (pos. 7352 on the SSP)
MD2.22E	Unstable moving, "waving" picture	Check on +5 V panel the soldering of C2530. Also check and resolder pin 1,2,3, and 10,11,12 of connector V50 on the LSP.
MD2.22E	Vertical shift and amplitude not stable (jumps).	Check pins of connector J13 on the DDP. Look for badly soldered (oxidated) pins. Resolder pins if required.  REMARKS : Improved connectors introduced in production from week 9742 onwards.
MD2.22E	Vertical stripes in picture	On the right side a 2.5 cm width dark band and on the left side a vertical stripe can be seen. Check if the wires S11-L11 and S10-L10 do not touch C2368 on the SSP. If they touch C2368 bend them away from C2368.
MD2.22E	Wrong TXT characters on subtitles	Replace position 7202 on the TXT & control module by: 4822 900 11102 Software for non EPG sets 4822 900 11066 Software for -/58 sets 4822 900 11058 Software for EPG sets  REMARKS : IRIS symptom code 1286

Note the Data Held on the **Repair Database** is information that only should only be used by a qualified technician.

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