

Service Manual

Supplement

Colour Television EURO 2 Chassis

TX-25MD2C

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Service Manual



SUPPLEMENT - 1

**Colour Television
TX-25MD2C**

EURO 2 Chassis

NOTE:

THIS SUPPLEMENT SHOULD BE USED IN CONJUNCTION WITH THE TX-25MD1C SERVICE MANUAL

BEMERKUNG:

DIESES SUPPLEMENT GILT IM ZUSAMMENHANG MIT DEN SERVICE MANUALS FÜR DIE MODELLE TX-25MD1C.

Specifications

| | |
|--|---|
| Power Source : | 220 - 240 V AC, 50Hz |
| Power Consumption : | 92W |
| Aerial Impedance : | 75Ω unbalanced, Coaxial Type |
| Receiving System : | PAL B/G, D/K H PAL - 60 SECAM B/G, D/K |
| Receiving Channels : | VHF E2 - E12 VHF A - H (ITALY) VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 CATV S1 - S10 (M1 - M10) CATV S11 - S20 (U1 - U10) CATV S21 - S41 (HYPERBAND) |
| Intermediate Frequency : | Video 38.9MHz Sound 33.4MHz, 33.16MHz 32.4MHz, 33.05MHz 35.07MHz, 34.47MHz, 34.5MHz |
| Colour | |
| Video / Audio Terminals : | |
| AUDIO MONITOR OUT | Audio (RCA x 2) 500 mV rms 1kΩ |
| AV1 IN | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 10kΩ RGB (21 pin) |
| AV1 OUT | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 1kΩ |
| AV2 IN | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 10 kΩ S-Video IN Y : 1 Vp-p 75Ω (21 pin) C : 0.3 Vp-p 75Ω |
| AV2 OUT | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 1kΩ |
| AV3 IN | S-Video IN Y : 1 Vp-p 75Ω (4-pin) C : 0.3 Vp-p 75Ω Audio (RCA x 2) 500 mV rms 10kΩ Video (RCA x 1) 1 Vp-p 75Ω |
| High Voltage : | 28kV ± 1kV at zero beam current |
| Picture Tube : | A59ECF50X12 |
| Visible screen size: | 63 cm |
| Audio Output : | |
| Internal Speaker | 2 x 15 W (Music Power) 8 Ω Impedance |
| Headphones | 8 Ω Impedance |
| Accessories supplied : | Remote Control R6 (UM3) Battery |
| Dimensions : | Height : 531mm Width : 601mm Depth : 440mm |
| Net Weight | 25kg |
| Specifications are subject to change without notice. Weight and dimensions shown are approximate. | |

Technische Daten

| | |
|--|--|
| Netzspannung : | 220 - 240 V AC, 50Hz |
| Leistungsaufnahme : | 92W |
| Antennenimpedanz : | 75Ω asymmetrisch, Koaxial-Typ |
| Empfangssystem : | PAL B/G, D/K H PAL - 60 SECAM B/G, D/K |
| Empfangsbereiche : | VHF E2 - E2 VHF A - H (ITALY) VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 CATV (S01 - S05) CATV S11 - S20 (U1 - U10) |
| Zwischenfrequenz : | Video 38.9MHz Sound 33.4MHz, 33.16MHz 32.4MHz, 33.05MHz 35.07MHz, 34.47MHz, 34.5MHz |
| Colour | |
| Video / Audio Anschlüsse : | |
| AUDIO MONITOR AUSGANG | Audio (RCA x 2) 500 mV rms 1kΩ |
| AV1 EINGANG | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 10kΩ RGB (21 pin) |
| AV1 AUSGANG | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 1kΩ |
| AV2 EINGANG | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 10 kΩ S-Video IN Y : 1 Vp-p 75Ω C : 0.3 Vp-p 75Ω (21 pin) |
| AV2 AUSGANG | Video (21 pin) 1 Vp-p 75Ω Audio (21 pin) 500 mV rms 1kΩ |
| AV3 EINGANG | S-Video IN Y : 1 Vp-p 75Ω (4-pin) C : 0.3 Vp-p 75Ω Audio (RCA x 2) 500 mV rms 10kΩ Video (RCA x 1) 1 Vp-p 75Ω |
| Hochspannung : | 28kV ± 1kV bei Nullstrahlstrom |
| Bildrohre : | A59ECF50X12 |
| Visuelle Diagonale : | 63 cm |
| Ton Ausgangsleistung : | 2 x 15W (Musikleistung) 8 Ω Impedanz |
| Kopfhörer | 8 Ω Impedanz |
| Mittel. Zubehör | Fernbedienung R6 (UM3) Batterien |
| Abmessungen : | Höhe : 531mm Breite : 601mm Tiefe : 440mm |
| Gewicht | 25kg |
| Änderungen der technischen Daten vorbehalten. Gewichte und Abmessungen sind Näherungsangaben. | |

| | | TX – 25MD1C | TX – 25MD2C |
|---------------------|---|--------------|--------------|
| DESCRIPTION | | ORIGINAL | NEW |
| 2) CABINET | Δ | TKY8E040 | TKY8E040-4 |
| 3) CRT | Δ | A59ECF20X12 | A59ECF50X12 |
| 4) CRT FIXING SCREW | | THE492-4 | THT8E001 |
| 5) Y PCB | Δ | TNP117070AA | TNP117070AC |
| 6) B/COVER LABLE | | TBM8E1450-2 | TBM8E1560 |
| 7) BACKCOVER | Δ | TKU8E00200 | TKU8E00200-1 |
| 9) E PCB | Δ | TNP197091AP | TNP197091BC |
| 16) DEAUSS COIL | | TLK8E05115 | TLK8E05120-1 |
| SCHEM DIAG | | TQA8E2001 | TQA8E2016 |
| ALIGN SHEET | | TQB8E2032 | TQB8E2175 |
| INST BOOK GERMAN | Δ | TQB8E2028A-1 | TQB8E2174A |
| INST BOOK DUTCH | Δ | TQB8E2028B-2 | TQB8E2174B |
| INST BOOK ITALIAN | Δ | TQB8E2028C-2 | TQB8E2174C |
| CARTON | | TPC8E4481 | TPC8E4552 |

| CR No | DESCRIPTION | ORIGINAL | NEW |
|--------|-------------|--------------|--------------|
| C464 | WIRE LINK | NIL | T3A205016 |
| C606 | CAPACITOR | NIL | ECUV1H040CCX |
| C607 | CAPACITOR | NIL | ECUV1H040CCX |
| C625 | CAPACITOR | ECEA1HNR22UB | ECEA1HNR33SB |
| C3026 | CAPACITOR | ECEA1HMR47GB | ECEA1CM470B |
| C3027 | CAPACITOR | ECEA1HMR47GB | ECEA1CM470B |
| C3056 | CAPACITOR | NIL | ECUV1H101JCX |
| D904 | DIODE | T3A205016 | MA165TA5VT |
| D906 | DIODE | NIL | RLS72TE-11 |
| D1210 | DIODE | NIL | MA165TA5VT |
| IC601 | VIDEO I.C. | VDP3108-25 | VDP3108APPA1 |
| IC1203 | EAROM | ST24C08CB1 | ST24C16CB1 |
| IC2101 | AUDIO I.C. | MSP3400-15 | MSP3400CPPC6 |
| JA39 | WIRE LINK | NIL | ERJ6GEY0R00V |
| JSE31 | WIRE LINK | NIL | ERJ6GEY0R00V |
| JSE031 | WIRE LINK | NIL | ERJ6GEY0R00V |
| JSE036 | WIRE LINK | NIL | ERJ6GEY0R00V |
| JSE038 | WIRE LINK | NIL | ERJ6GEY0R00V |
| JSY5 | WIRE LINK | NIL | T3A206022 |
| J21 | WIRE LINK | NIL | T3A205016 |
| J26 | WIRE LINK | NIL | T3A205016 |
| J181 | WIRE LINK | T3A206022 | NIL |
| J182 | WIRE LINK | T3A206022 | NIL |
| CR No | DESCRIPTION | ORIGINAL | NEW |

| | | | |
|------|------------|--------------|--------------|
| J188 | WIRE LINK | T3A206022 | NIL |
| J194 | WIRE LINK | NIL | T3A206022 |
| J197 | WIRE LINK | NIL | T3A206022 |
| J360 | WIRE LINK | NIL | T3A206027 |
| L002 | COIL | TLT047K991R | ELESN4R7KA |
| L251 | COIL | NIL | EXCELSA35T |
| L801 | COIL | 298-19711 | EXCELSA24T |
| Q908 | TRANSISTOR | 2SA1535ARLB | 2SB940APLB |
| Q909 | TRANSISTOR | 2SC3944ARLB | 2SD1264APLB |
| R005 | RESISTOR | ERD25TCOT | NIL |
| R302 | RESISTOR | ERJ6GEYJ391V | ERJ6GEYJ471V |
| R306 | RESISTOR | ERJ6GEYJ391V | ERJ6GEYJ471V |
| R310 | RESISTOR | ERJ6GEYJ391V | ERJ6GEYJ471V |
| R702 | RESISTOR | ERQ12HJ330P | ERQ12HJ220P |
| R706 | RESISTOR | ERJ6GEYJ332V | ERJ6GEYJ222V |
| R707 | RESISTOR | ERJ6GEYJ122V | ERJ6GEYJ911V |
| R710 | RESISTOR | ERJ6GEYJ183V | ERJ6GEYJ273V |
| R813 | RESISTOR | ERD50FJ334P | ERD50FJ274P |
| R815 | RESISTOR | NIL | ERDS1TJ563T |
| R818 | RESISTOR | ERD50FJ564P | ERD50FJ104P |
| R819 | RESISTOR | ERD50FJ564P | ERD50FJ184P |
| R904 | RESISTOR | ERJ6GEYJ102V | ERJ6GEYJ222V |
| R928 | RESISTOR | ERDS2TJ2R7T | ERDS2TJ5R6T |
| R930 | RESISTOR | ERDS2TJ2R7T | ERDS2TJ5R6T |

JK3102
TUB16675

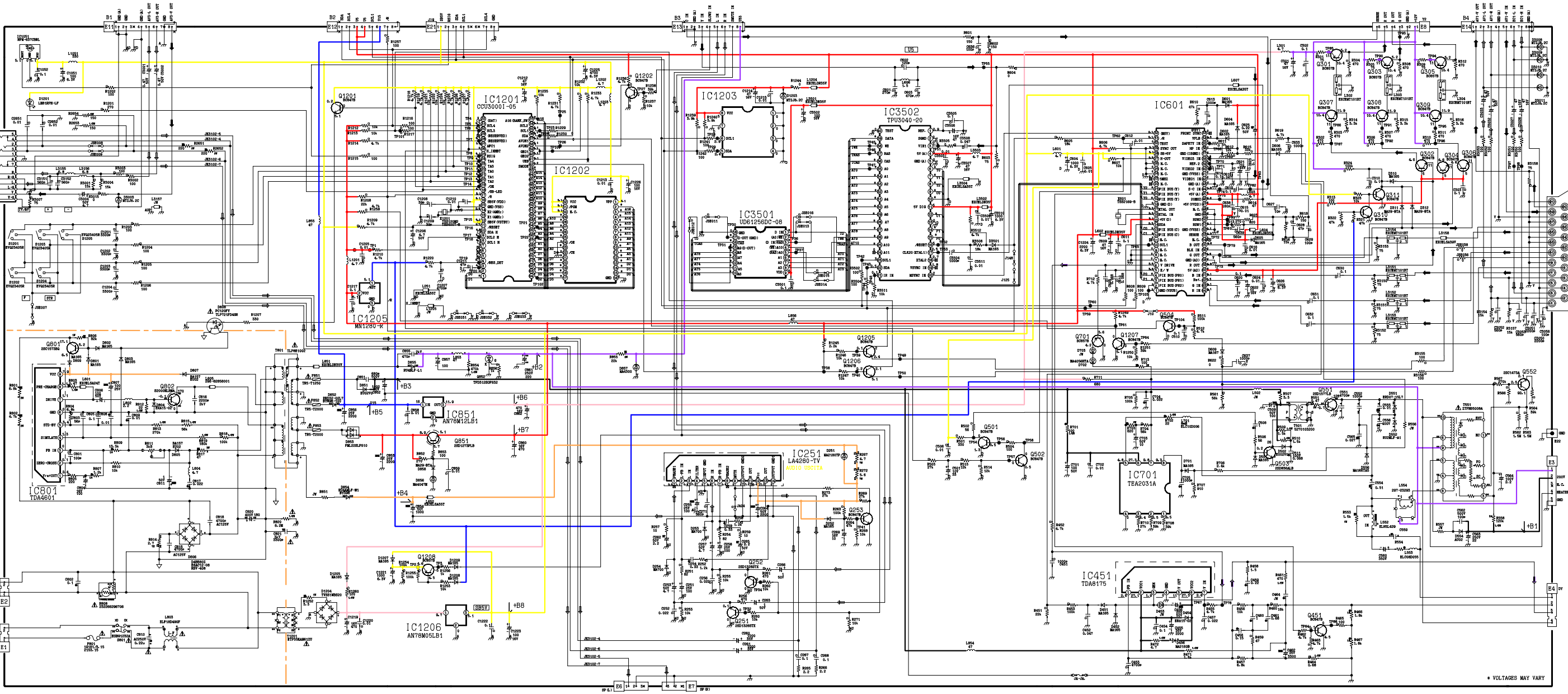
AV3

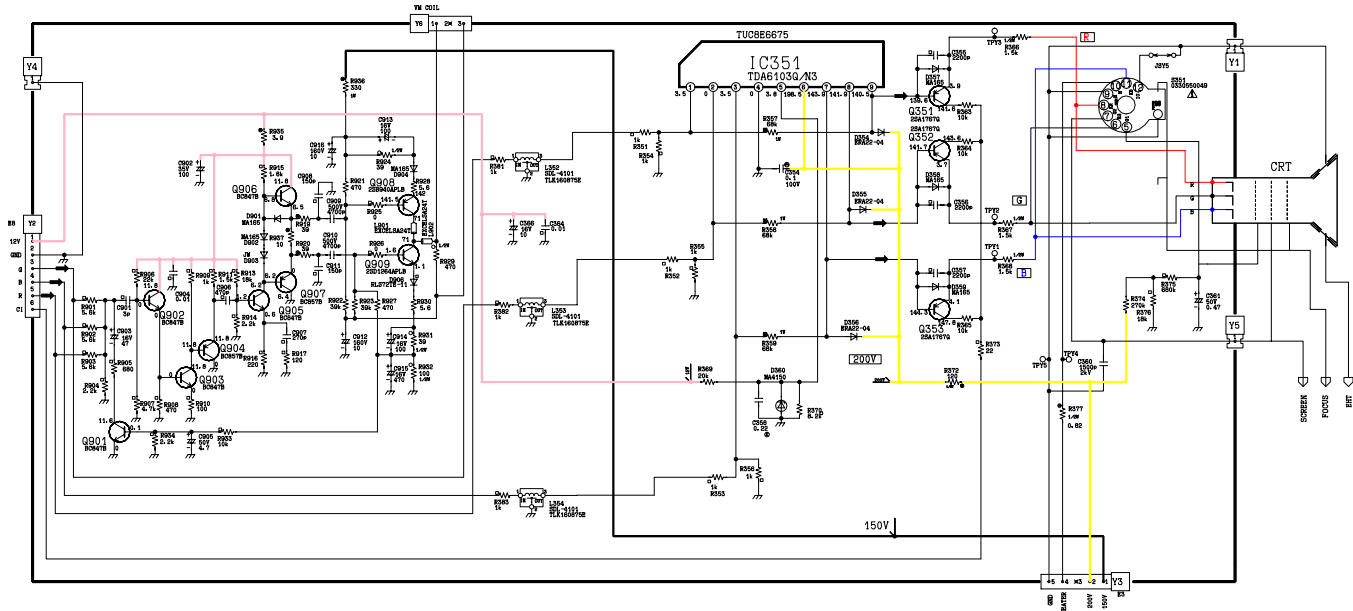
AC CORD
TSX8E0017 (UK)

JK3101
T358E007

AV1

* VOLTAGES MAY VARY





TECHNICAL INFORMATION

Colour Television

Model:- See Page 2
Chassis:- Euro-1, Euro-2L & Euro-2S
Date:- 10/06/02

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Subject: TDA8175 Frame Output IC.

Background: Due to supplier problems this IC is no longer available and the alternative TDA8177 will have to be used as a replacement.

Remedy: Modification of Deflection circuitry.

Method: Using the modification kit **TZS9EK026**, diagrams & Table carry out the modifications listed.
 (All components needed are supplied in the modification kit, use the parts needed for the particular chassis requirement listed in table).

Section 1.

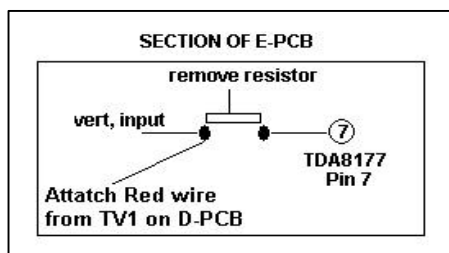
Referring to the table on page 2, add or delete components listed under the relevant chassis (**Check model list to confirm chassis type**)

Note:- Push the legs of TDA8177 as far through the E-PCB as possible.

Section 2.

Referring to the diagram 1 below remove the resistor shown, the list with diagram relates to the resistor to be removed for each chassis type.

Diagram 1



| |
|------------------------------------|
| Euro-1 chassis remove R566 |
| Euro-2L chassis remove R455 |
| Euro-2S chassis remove R566 |

Panasonic

TECHNICAL INFORMATION

Colour Television

Model:- See Lists Below

Chassis:- Euro-1, Euro-2L & Euro-2S

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Date:- 10/06/02

Section 3.

Attach D-PCB as described below

1. With the components uppermost from the E-PCB align the holes in the D-PCB over the TDA8177 already soldered into place on the E-PCB.
2. Locate the D-PCB on the pins of the TDA8177 and solder into place (See diagram2).

Note:- **(Ensure D-PCB does not touch E-PCB)**

3. Connect the Red wire attached to the D-PCB to the position shown on diagram1.

Note:- Some alignment may have to be carried out in the service mode after modification.

Diagram 3 Showing D-PCB Circuitry Shaded

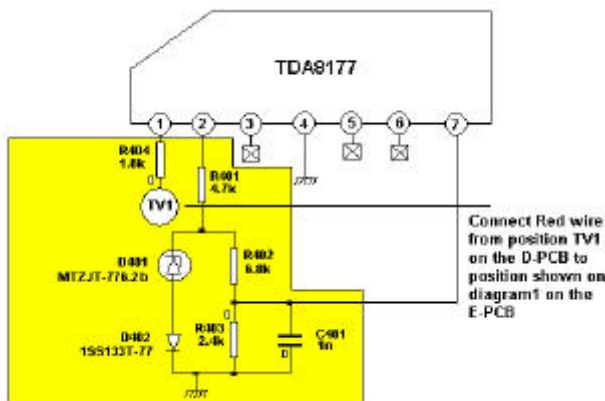
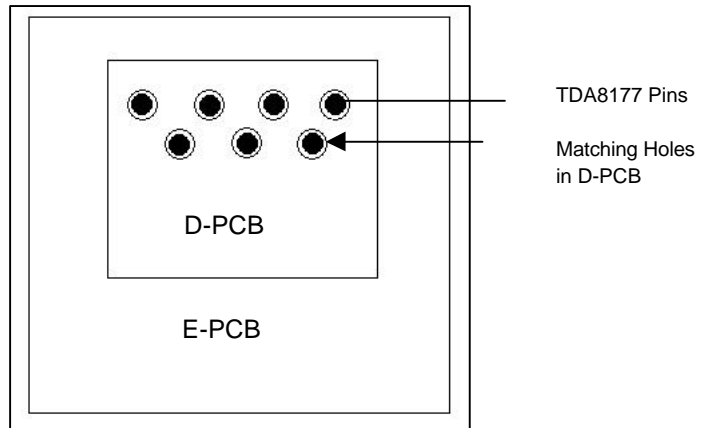


Diagram 2



MODEL & CHASSIS LIST

Euro-1 Models

TX-25 & 29A3 Series
TX-25 & 28W3 Series

Euro-2L Models

TX-21 & 25MD1 Series
TX-25MD2 Series
TX-25MD5E
TX-25 & 28S1 Series
TX-28LD1 Series
TX-28LD2 Series
TX-28LD5E
TX-28LD7C

Euro-2S Models

TX-29,25 & 21AD2 Series
TX-25 & 29AD1 Series
TX-25 & 28XD1 Series
TX-25 & 28XD2 Series
TX-28WD1 Series
TX-28XD5 Series
TX-28XD6 Series
TX-28XDP1 Series
TX-28XDP2 Series
TX-29AD2 Series

Component Alteration Table

| Chassis Type | Circuit Ref. | Before | After |
|--------------|--------------|--------------|-------------|
| Euro- 2L | IC451 | TDA8175 | TDA8177 |
| | R457 | ER6GEYJ682 | ERJ6GEYJ392 |
| | R455 | ERJ6GEYJ472 | NIL |
| Euro-2S | IC561 | TDA8175 | TDA8177 |
| | R579 | ERD25TJ332 | ERD25TJ392 |
| | R566 | ERJ6GEYJ472 | NIL |
| | R576 | ERDS1TJ682 | ERDS1TJ183 |
| Euro-1 | IC561 | TDA8175 | TDA8177 |
| | R566 | ER025CKF4701 | NIL |
| | R576 | ER025CKF2202 | ERD25TJ333 |
| | R569 | ERDS1TJ221 | ERDS1TJ471 |

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