

Service Manual

Cassette Deck
RS-M45
(Silver Face)
(Black Face)

Metal Tape Compatible Direct-Drive Stereo Cassette Deck with
Peak-Hold, 2-Color FL Meters, and Feather-Touch Controls,
Full Function Remote Control Optionally Available

Supplement



RS-M85 MECHANISM SERIES

For additional information, please refer to the Service Manual for Model No. RS-M45 order No. ARD-7912106C.
Please file this manual with the Service Manual for Model No. RS-M45 (original).

DOLBY SYSTEM

This is the Service Manual for the following areas.
[D] For All European areas except United Kingdom.
[B] For United Kingdom.

Specifications

Track system:	4-track 2-channel stereo recording and playback	Inputs:	MIC; sensitivity 0.25 mV, input impedance 100 kΩ applicable microphone impedance 400Ω—10 kΩ
Tape speed:	4.8 cm/s	Outputs:	LINE; sensitivity 60 mV, input impedance 47 kΩ LINE; output level 700 mV, output impedance 2.5 kΩ or less load impedance 22 kΩ over
Wow and flutter:	0.035% (WRMS), ±0.10% (DIN)		HEADPHONE; output level 125 mV, load impedance 8—25 kΩ
Frequency response:	Metal tape; 20—20,000 Hz 30—18,000 Hz (DIN) 30—17,000 Hz ±3 dB CrO ₂ /Fe-Cr tape; 20—18,000 Hz 30—18,000 Hz (DIN) 30—16,000 Hz ±3 dB Normal tape; 20—17,000 Hz 30—16,000 Hz (DIN) 30—15,000 Hz ±3 dB	Rec/pb connection:	5p DIN type; input sensitivity 0.25 mV, impedance 5.6 kΩ output level 700 mV, impedance 2.5 kΩ
Signal-to-noise ratio:	Dolby NR in; 68 dB (above 5 kHz) Dolby NR out; 58 dB (signal level = max. recording level, Fe-Cr/CrO ₂ type tape)	Bias frequency:	85 kHz
Fast forward and rewind time:	Approx. 85 seconds with C-60 cassette tape	Motor:	FG servo DD motor
		Head:	2-head system 1-SX (Sendust Extra) head for rec/playback 1-sendust/ferrite double-gap head for erasure
		Power requirements:	AC; 110/125/220/240V, 50—60 Hz Preset power voltage; 240V for United Kingdom.
		Power consumption:	28 W
		Dimensions:	43 cm (W) × 9.8 cm (H) × 34.5 cm (D)
		Weight:	6.1 kg

Specifications are subject to change without notice.
* 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories.

Technics

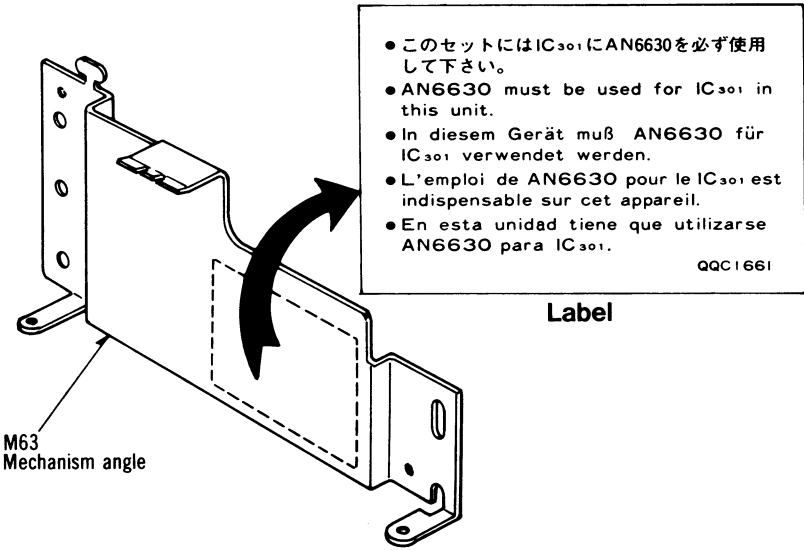
Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka Japan

PARTS COMPARISON TABLE:

Please revise the original parts list in the Service Manual to conform to the changes shown herein.
If new part numbers are shown, be sure to use them when ordering parts.

Ref. No.	Description	Part Number		Remarks
		Old	New	
M98	Washer	XWG26		Deleted
M113	Screw ⊕2.6×8		XSS26+8	Added
*** F4 [D] Δ	Fuse T500mA		XBAQ0003	Added
※For All European areas except United Kingdom.				
[B] Δ	Fuse T500mA		XBAQ0003	Added
※For United Kingdom.				
E1	Record/Playback Head	WY4123Z	QWY4123Z	
** E12 [D] Δ	Fuse Holder		QTF1040	
*** [D] Δ	Fuse Holder		QTF1039	Added
※For All European areas except United Kingdom.				
[B] Δ	Fuse Holder	QTF1040	QTF1039	
※For United Kingdom.				
** G18 [D]	Main Name Plate		QGS2780	
*** [D]	Main Name Plate		QGS2779	Added
※For All European areas except United Kingdom.				

NOTE: Δ indicates that only parts specified by the manufacturer be used for safety.
** represents the parts applicable to the units with sealed serial No. CL90051 to CL903065.
*** represents the parts applicable to the units with sealed serial No. CL903066 and up.



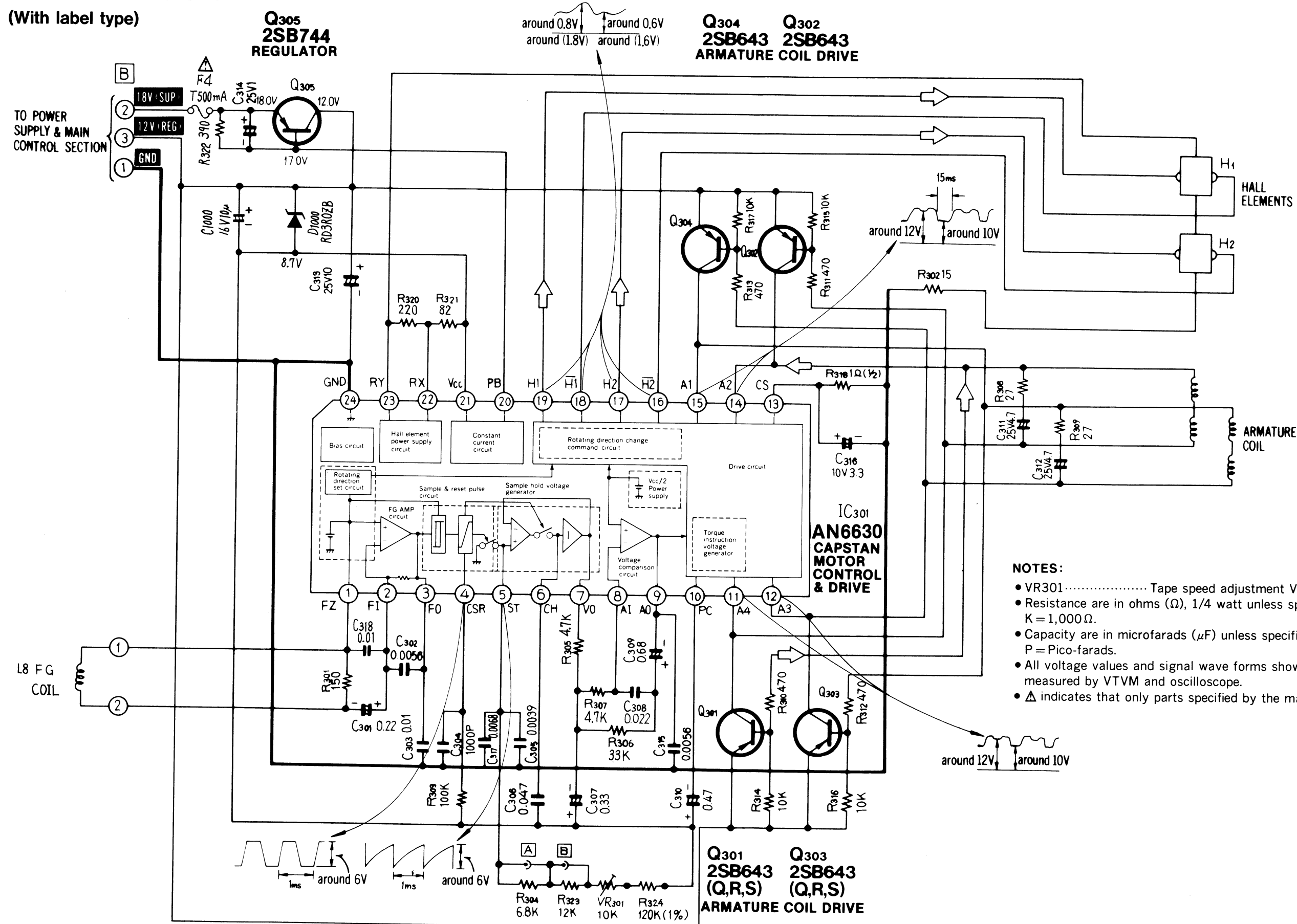
NOTE:
● For the capstan motor of the unit labelled on the mechanism angle (M63) as illustrated in the diagram, use the following parts comparison table refer to the schematic diagram and circuit board on page 3.

Ref. No.	Description	Part Number		Remarks
		Without label type	With label type	
R320	Resistor	ERD25FJ391	ERD25FJ221	
R321	Resistor	ERQ14AJ680	ERD25FJ820	
C1000	Capacitor		ECEA1HS100	Added
D1000	Diode		RD3R0ZB	Added
IC301	Integrated Circuit	AN6633	AN6630	

SCHEMATIC DIAGRAM

CAPSTAN MOTOR SECTION

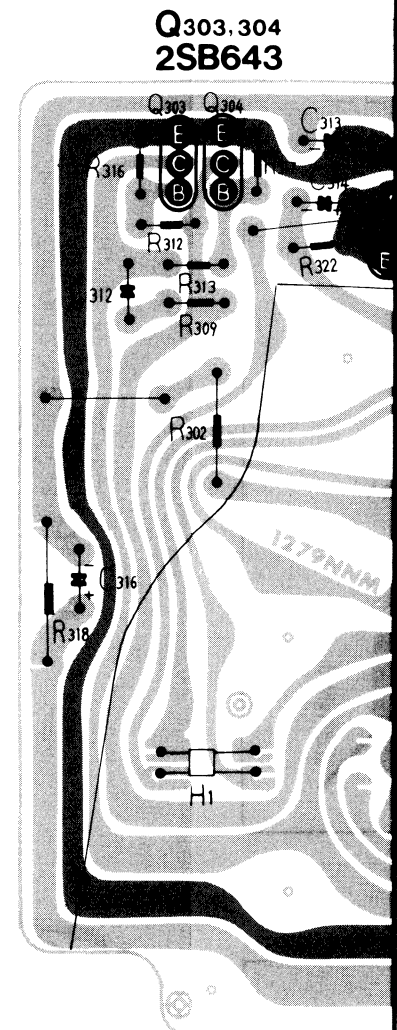
(With label type)



CIRCUIT BOARD

CAPSTAN MOTOR

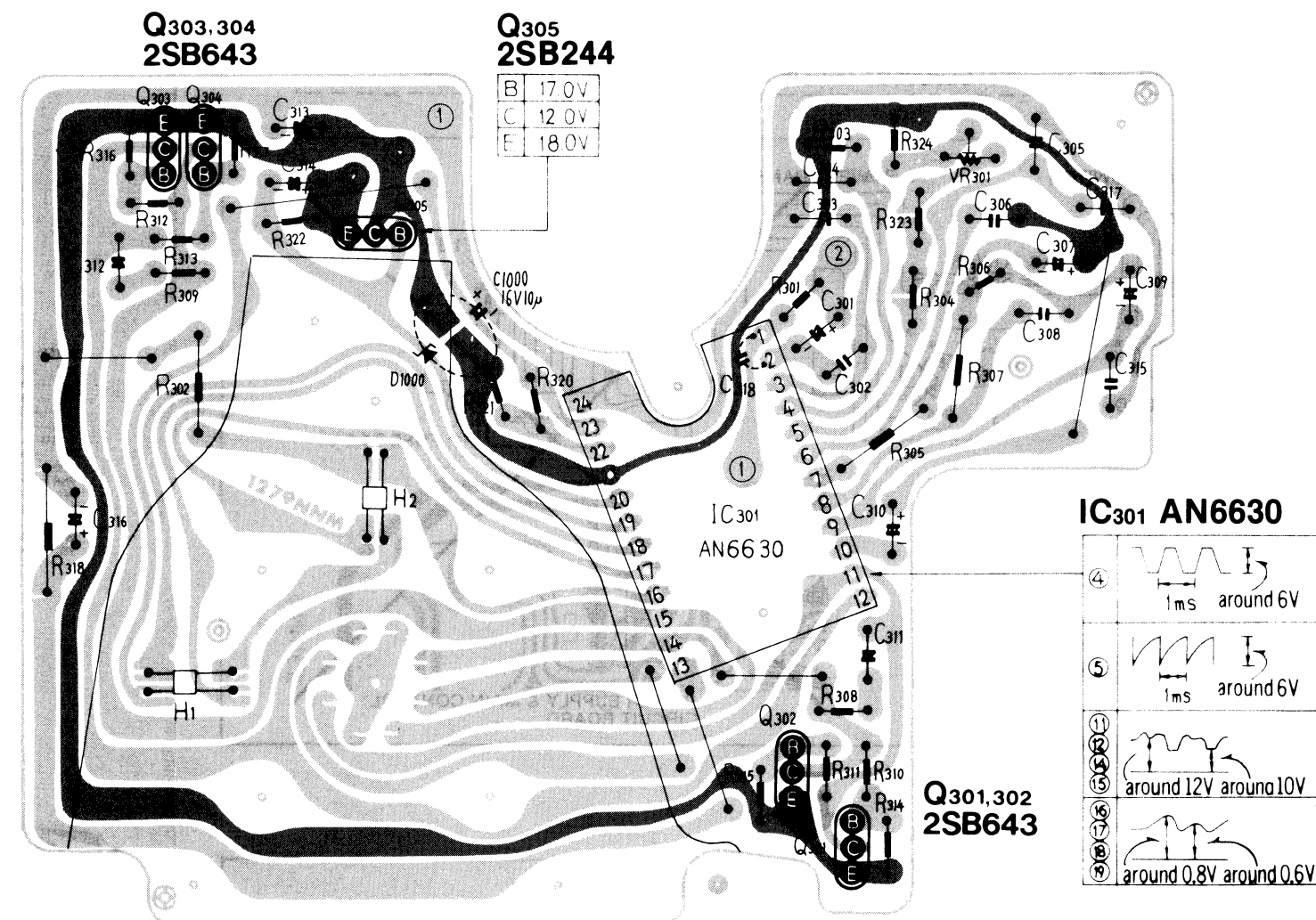
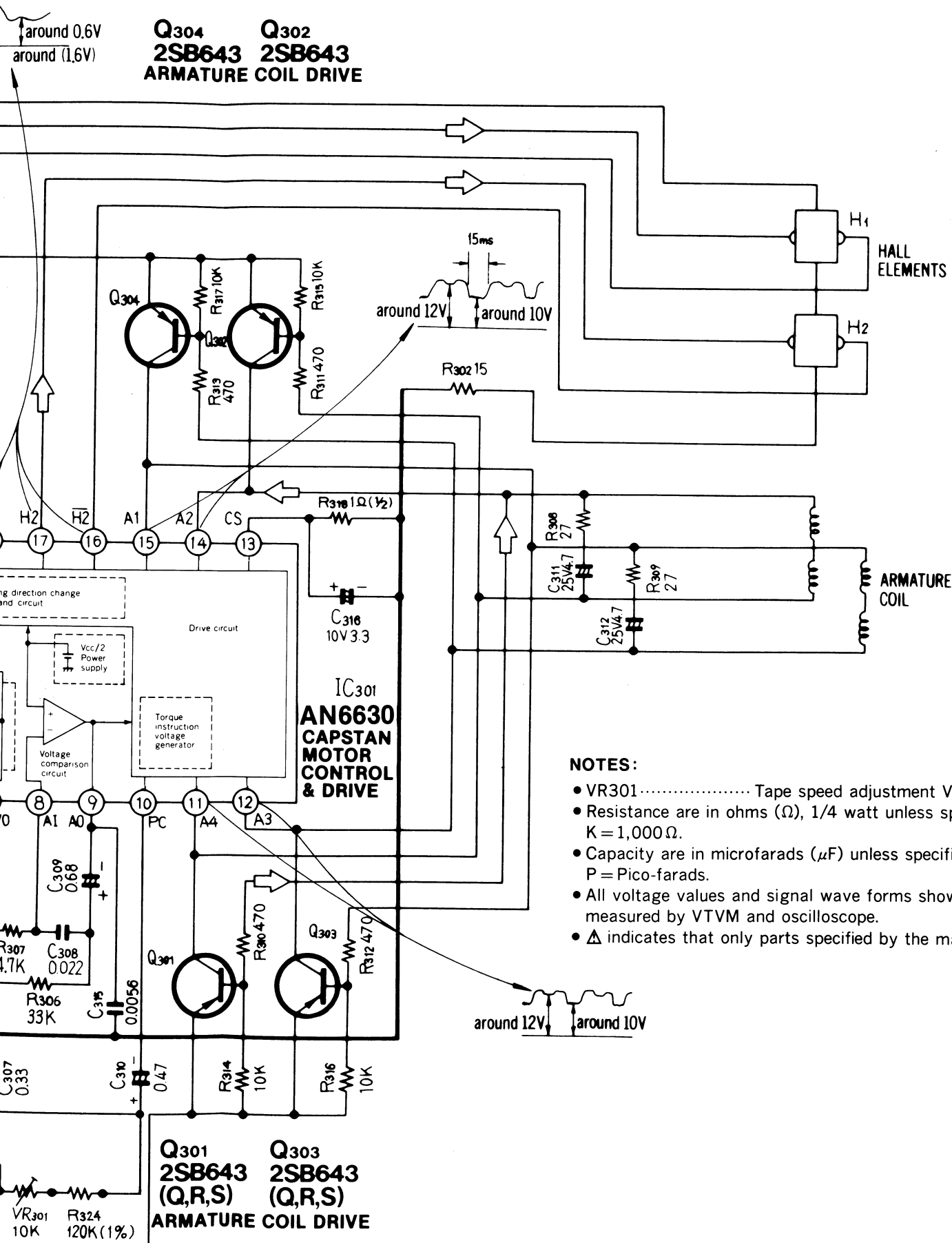
(With label type)



CIRCUIT BOARD

CAPSTAN MOTOR

(With label type)



NOTE:

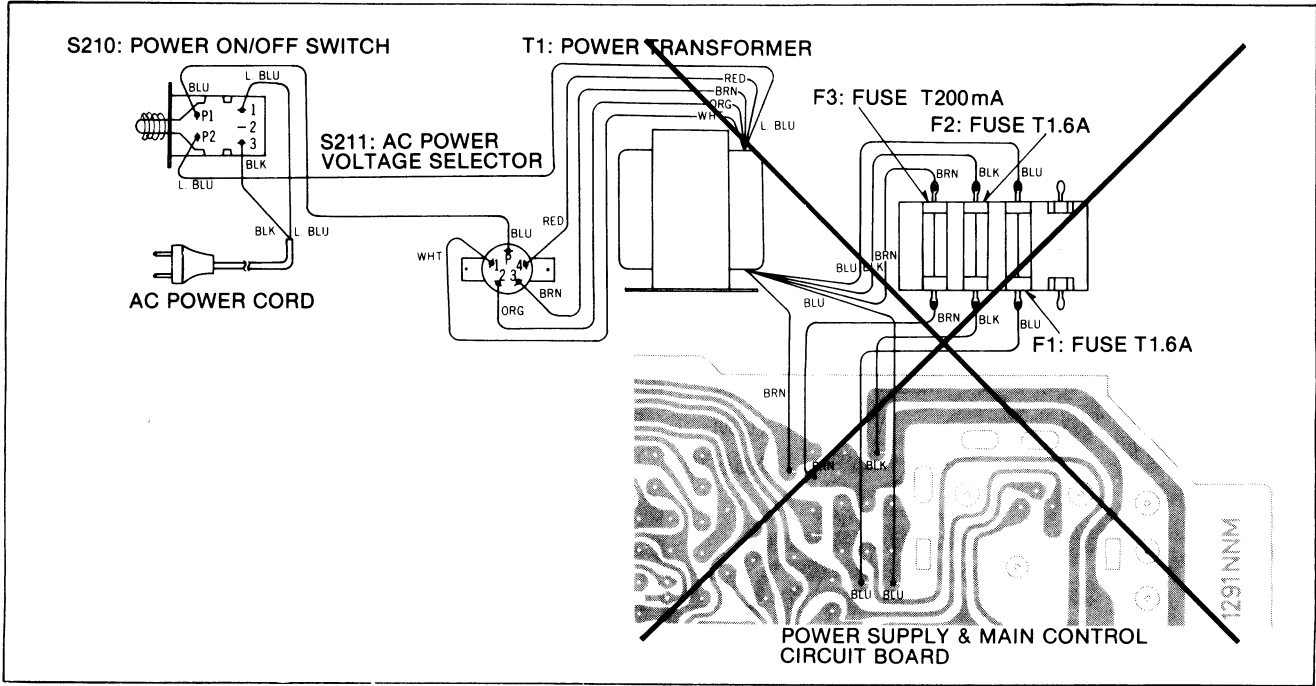
The circuit shown in red on the conductor is + B (bias) circuit. Values indicated in are DC voltage between the chassis and electrical parts.

NOTE:

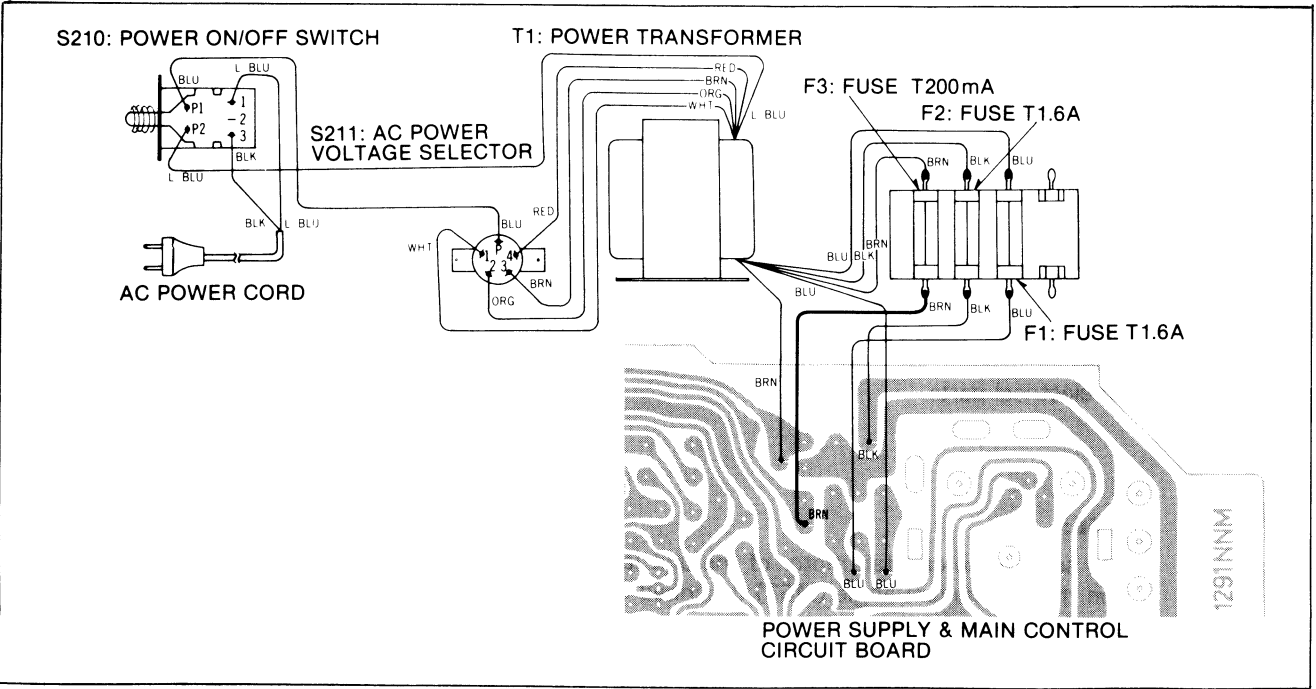
- To service the capstan motor of the unit labelled on the mechanism angle (M63) described on page 1 of this supplement.

WIRING CONNECTION DIAGRAM I

- NOTES:
- For All European areas except United Kingdom.
 - The following wiring connection diagram replaces that on page 16 of the Service Manual for Model No. RS-M45 order No. ARD-7912106C.
 - The following corrected wiring connection diagram and the wiring connection diagram in the Service Manual for Model No. RS-M45 order No. ARD-7912106C apply to the units with serial No. CL900501 to CL903065 sealed on their bottom cases.



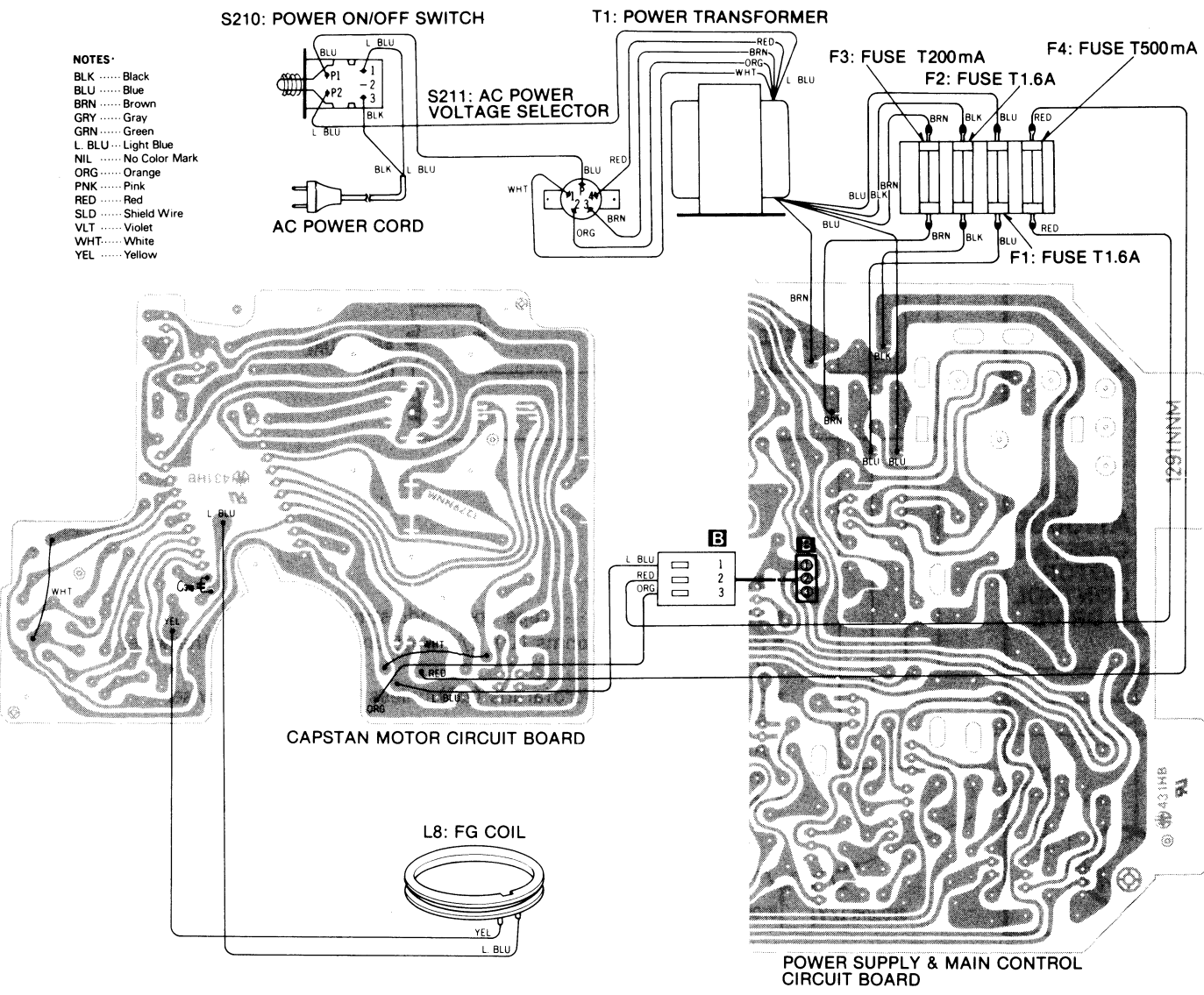
Mis-wiring



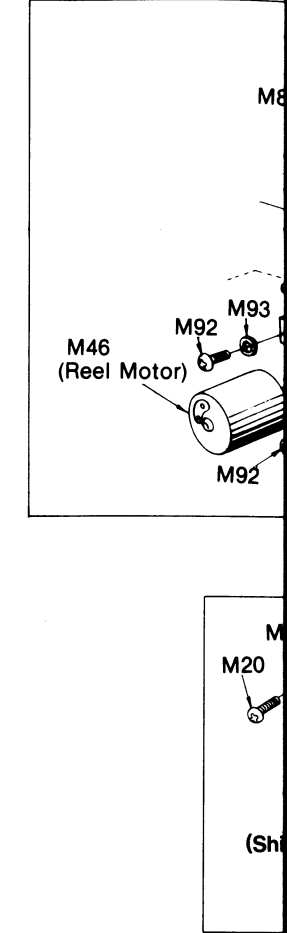
Corrected wiring

WIRING CONNECTION DIAGRAM II (MODIFICATION)

- NOTES:
- For All European areas except United Kingdom.
 - The following diagram and the wiring connection diagram in the Service Manual for Model No. RS-M45 order No. ARD-7912106C apply to the units with sealed serial No. CL903066 and up.
 - For United Kingdom.
 - The following diagram and the wiring connection diagram in the Service Manual for Model No. RS-M45 order No. ARD-7912106C are applicable.



EXPLODE



ELECTRIC

NOTES:

WIRING CONNECTION DIAGRAM II (MODIFICATION)

NOTES:

For All European areas except United Kingdom.

- The following diagram and the wiring connection diagram in the Service Manual for Model No. RS-M45 order No. ARD-7912106C apply to the units with sealed serial No. CL903066 and up.

For United Kingdom.

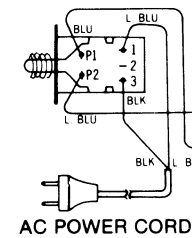
- The following diagram and the wiring connection diagram in the Service Manual for Model No. RS-M45 order No. ARD-7912106C are applicable.

NOTES:

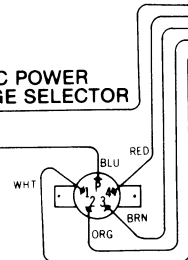
BLK Black
BLU Blue
BRN Brown
GRY Gray
GRN Green
L. BLU Light Blue
NIL No Color Mark
ORG Orange
PNK Pink
RED Red
SLD Shield Wire
VLT Violet
WHT White
YEL Yellow

S210: POWER ON/OFF SWITCH

T1: POWER TRANSFORMER



S211: AC POWER
VOLTAGE SELECTOR

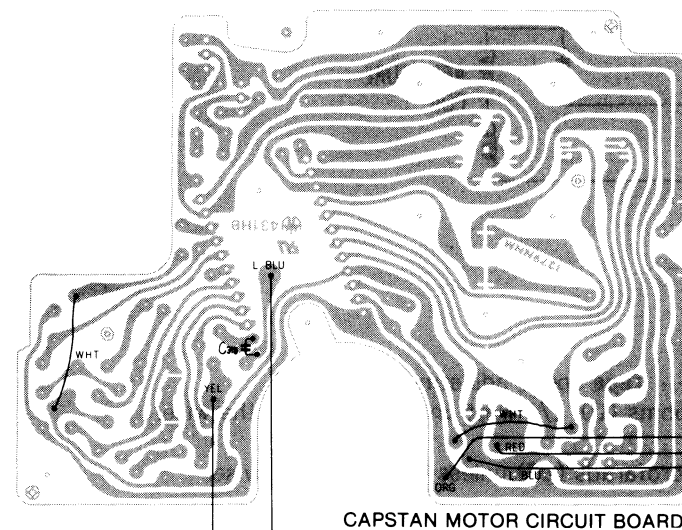


F3: FUSE T200mA

F4: FUSE T500mA

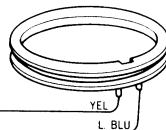
F2: FUSE T1.6A

F1: FUSE T1.6A



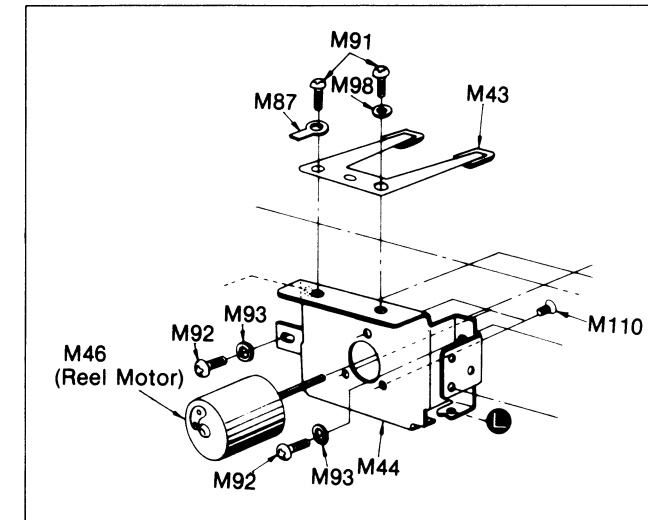
CAPSTAN MOTOR CIRCUIT BOARD

L8: FG COIL

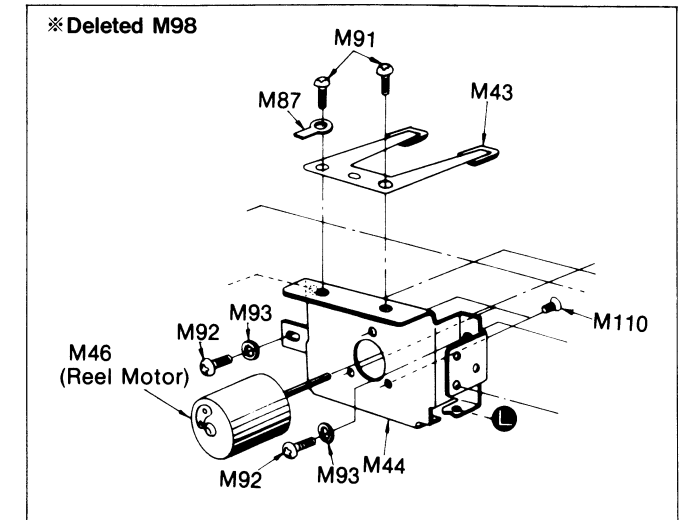


POWER SUPPLY & MAIN CONTROL
CIRCUIT BOARD

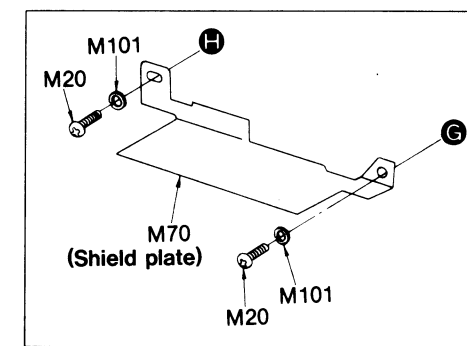
EXPLODED VIEWS (MODIFICATION)



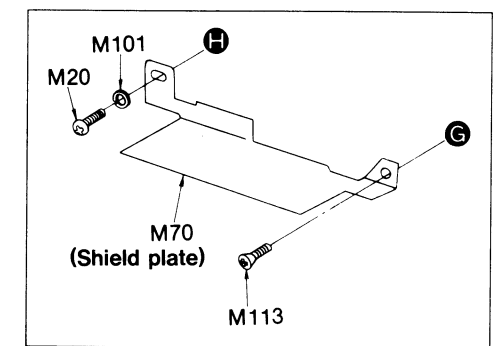
Old



New

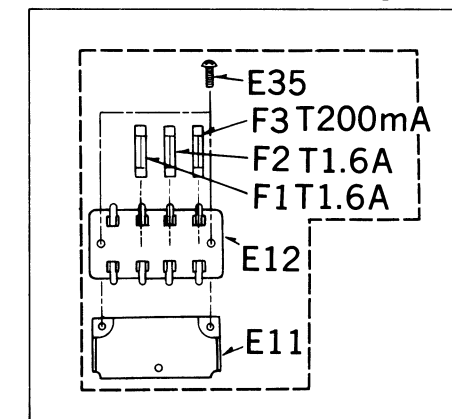


Old

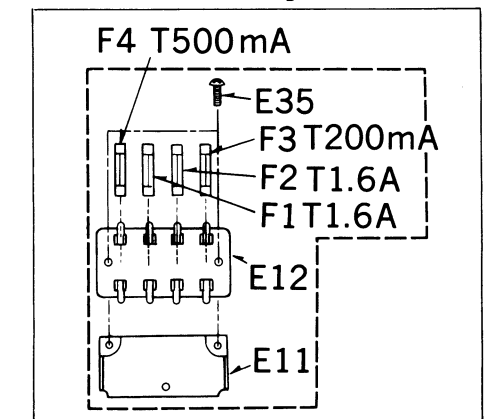


New

ELECTRICAL PARTS (COMPARISON)



Type (A)



Type (B)

NOTES:

For All European areas except United Kingdom.

- Type (A) in the above electrical parts diagram applies to the units with serial No. CL900501 to CL903065 sealed on their bottom cases.
- Type (B) diagram applies to the units with sealed serial No. CL903066 and up.

For United Kingdom.

- Type (A) diagram is described in the Service Manual for Model No. RS-M45 order No. ARD-7912106C. Due to modification, however, Type (B) diagram is replaced for Type (A).