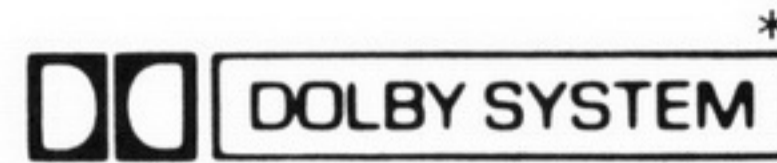


# Service Manual

Mini Cassette

Stereo Cassette Player



## RQ-X20

Colour

(K)... Black Type

Area

Suffix for Model No.	Area	Colour
(E)	Europe.	(K)
(EB)	Great Britain.	



### MECHANISM SERIES : AR20

#### ■ SPECIFICATIONS

Power Requirement:	Battery; DC 1.5V one "AA" size (R6/LR6) battery Rechargeable battery; DC 1.2V (included rechargeable battery) AC; with optional AC adaptor RP-AC11
Power Output:	5 mW + 5 mW
Input:	DC IN; 1.5V (⊖ ⊕)
Output:	Headphones; 20 Ω (φ3.5)
Dimensions:	109.7(W) × 80.9(H) × 28.6(D)mm
Weight:	181g (with rechargeable battery)
Frequency Response:	31.5 ~ 14,000Hz (Normal/CrO <sub>2</sub> /Metal) (-6dB)
Tape Speed:	4.8cm/S
Track System:	4-track 2-channel stereo playback
Charger	
Input:	AC 230V(For UK, 230 ~ 240V) 50Hz, 4W
Output:	DC 350mA, 1.2V

Notes:

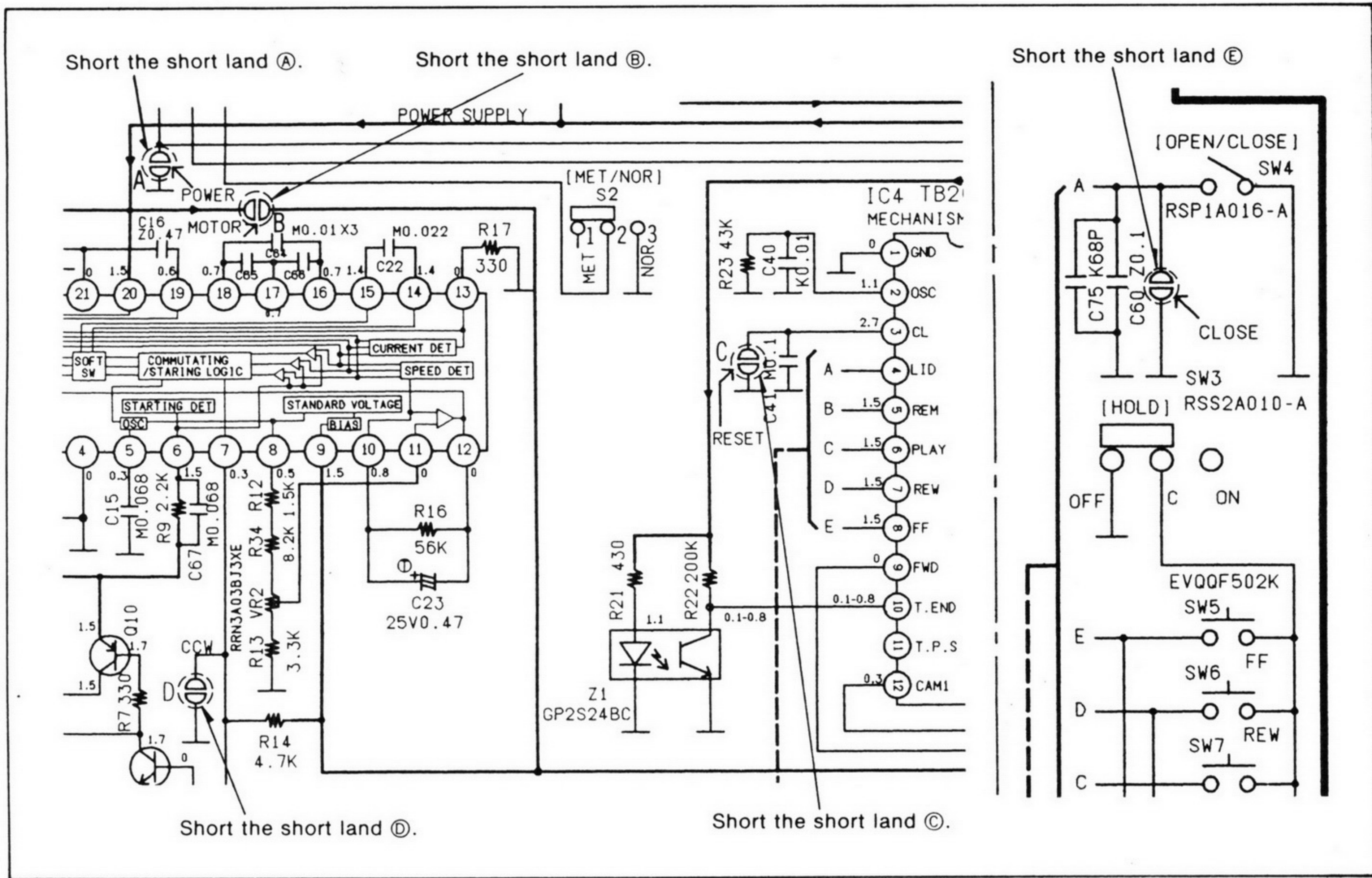
1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

※ Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

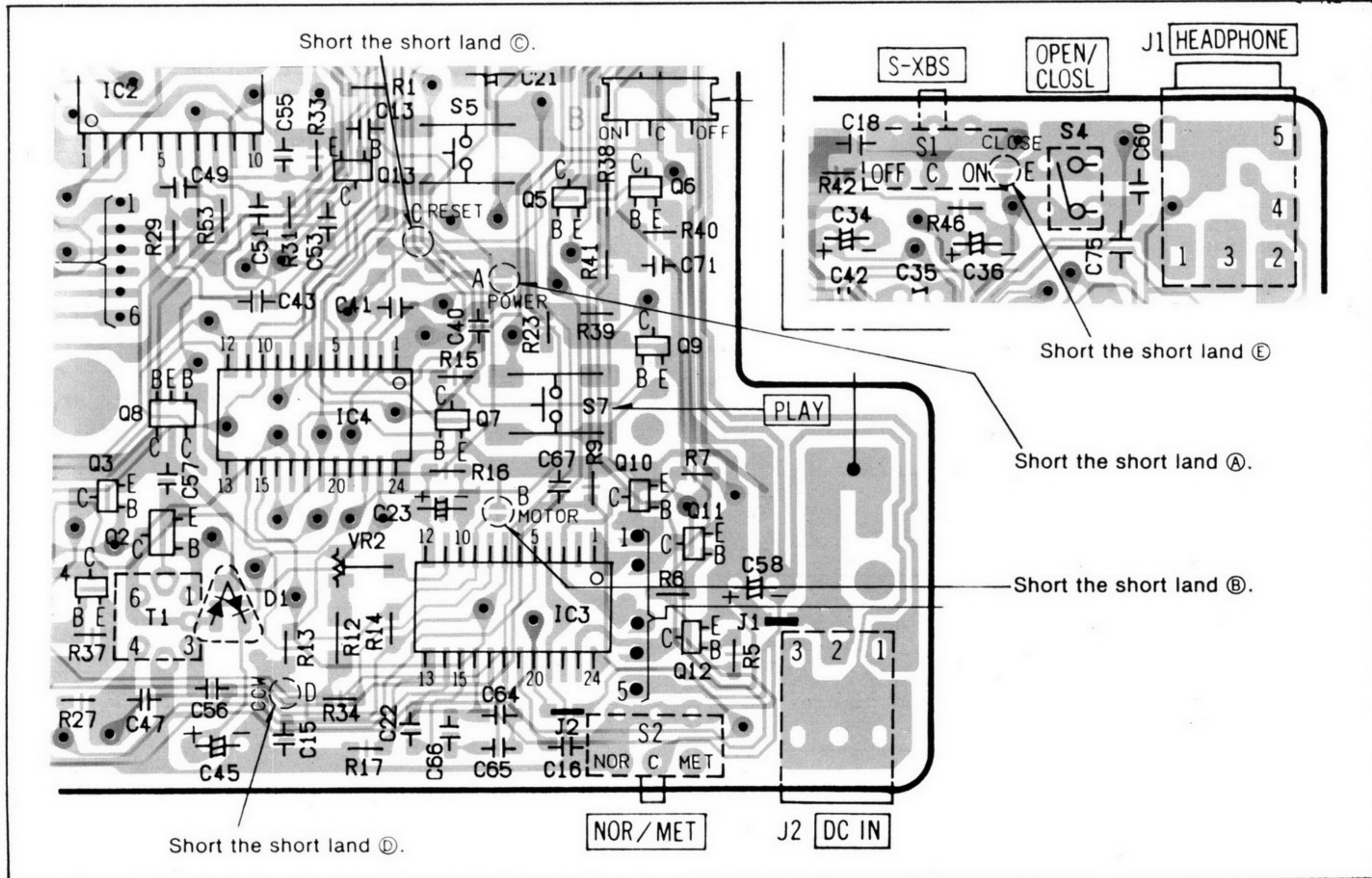
# Panasonic®

• Short points

SCHEMATIC DIAGRAM



PRINTED CIRCUIT BOARD



# SCHEMATIC DIAGRAM

1

2

3

4

5

A

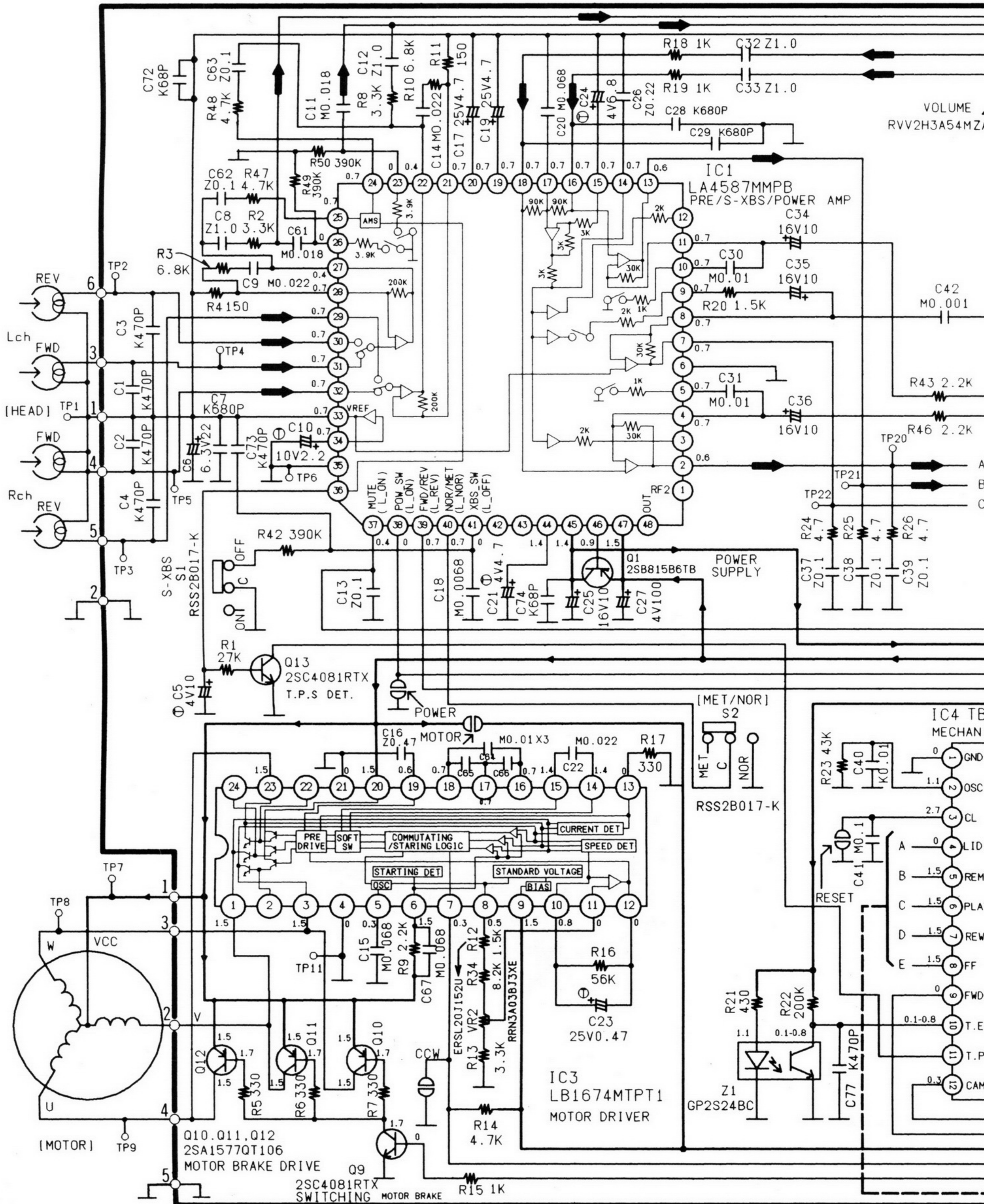
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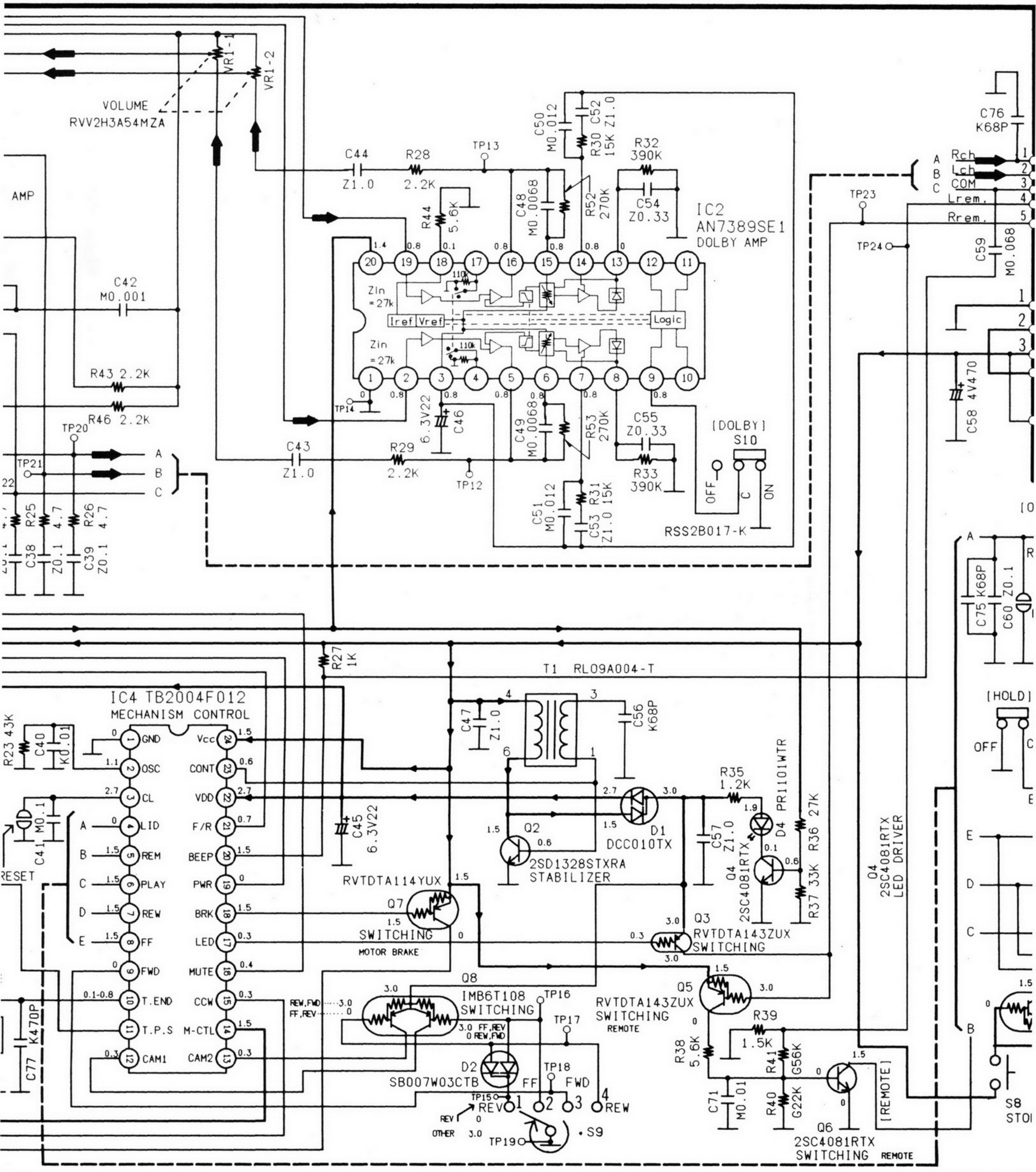
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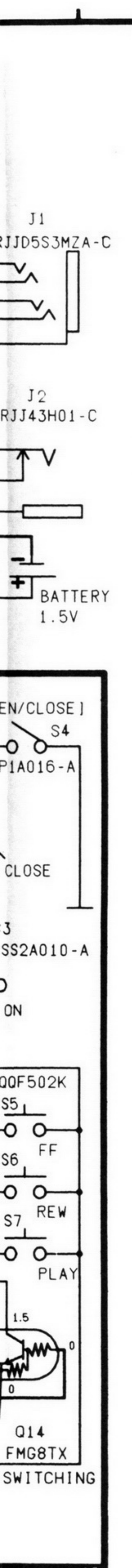
D

E

F







**Notes:**

- S1 : S-XBS switch in "OFF" position.
- S2 : Metal/normal switch in "METAL" position.
- S3 : Hold switch in "OFF" position.
- S4 : Open/close switch in "OPEN" position.
- S5 : Fast forward switch in "OFF" position.
- S6 : Rewind switch in "OFF" position.
- S7 : Play switch in "OFF" position.
- S8 : Stop switch in "OFF" position.
- S9 : Rotary switch in " REV " position.  
1...REV, 2...FF, 3...FWD, 4...REW.
- S10 : Dolby NR switch in "ON" position.
- VR1-1, VR1-2 : Volume control VR.
- VR2 : Tape speed adjustment VR.
- DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.  
No mark...Playback.
- Battery current: No signal.....190 mA (VR: MIN)  
Maximum output.....210 mA (VR: MAX)
- This schematic diagram may be modified at any time with the development of new technology.



**REPLACEMENT PARTS LIST**

Notes:(T)Indicates parts that are supplied by TAMACO

Ref No.	Part No.	Part Name & Description	Per Set	Remarks (T):TAMACO
INTEGRATED CIRCUITS, TRANSISTORS AND DIODES				
IC1	LA4587MMPB	I.C.PRE/S-XBS/POWER AMP	1	(T)
IC2	AN7389SE1	I.C.DOLBY	1	(T)
IC3	LB1674MTPT1	I.C.MOTOR DRIVE	1	(T)
IC4	TB2004F012	I.C.MECH.CONTROL	1	(T)
Q1	2SB815B6TB	Transistor	1	(T)
Q2	2SD1328STXRA	Transistor	1	(T)
Q3,5	RVTDTA143ZUX	Transistor	2	(T)
Q4,6,9,13	2SC4081RTX	Transistor	5	(T)
Q7	RVTDTA114YUX	Transistor	1	(T)
Q8	1MB6T108	Transistor	1	(T)
Q10,11,12	2SA1577QT106	Transistor	3	(T)
Q14	FMG8TX	Transistor	1	(T)
D1	DCC010TX	Diode	1	(T)
D2	SB007W03CTB	Shottcky Diode	1	(T)
D4	PR1101WTR	Chip L.E.D	1	(T)
TRANSFORMERS				
T1	RL09A004-T	Transformer	1	(T)
VARIABLE RESISTOR				
VR1	RVV2H3A54MZA	V.R.Volume	1	(T)
VR2	RRN3A03BJ3XE	V.R.Tape Speed	1	(T)
PHOTO COUPLER				
Z1	GP2S24BC	Photo Coupler	1	(T)
SWITCHES				
S1	RSS2B017-K	SW,S-XBS	1	(T)
S2	RSS2B017-K	SW,Tape(Met/Nor)	1	(T)
S3	RSS2A010-A	SW, Hold	1	(T)
S4	RSP1A016-A	SW, (Open/Close)	1	(T)
S5	EVQQF502K	SW,FF	1	(T)
S6	EVQQF502K	SW,Rew	1	(T)
S7	EVQQF502K	SW,Play	1	(T)
S8	EVQQF502K	SW,Stop	1	(T)
S9	RSR5D001-A	SW,Rotary	1	(T)
S10	RSS2B017-K	SW,Dolby	1	(T)
JACKS				
J1	RJJD5S3MZA-C	Jack, Headphones	1	
J2	RJJ43H01-C	Jack, DC IN	1	