

A

B

C

D

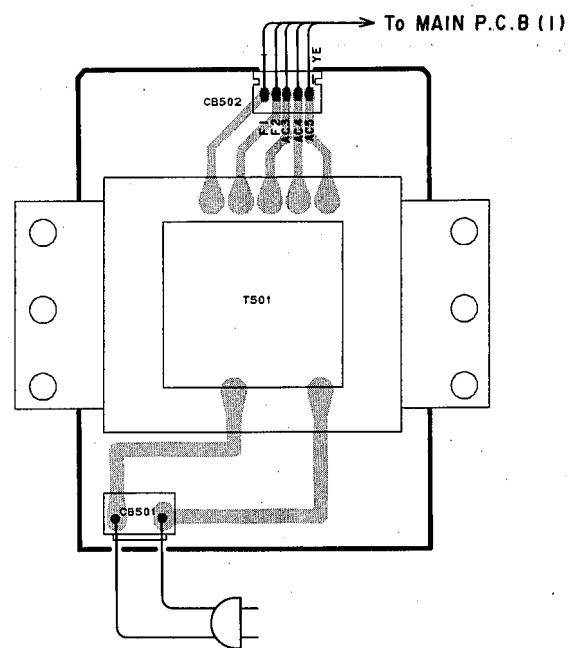
E

PRINTED CIRCUIT BOARD (Pattern side view)

KX-390

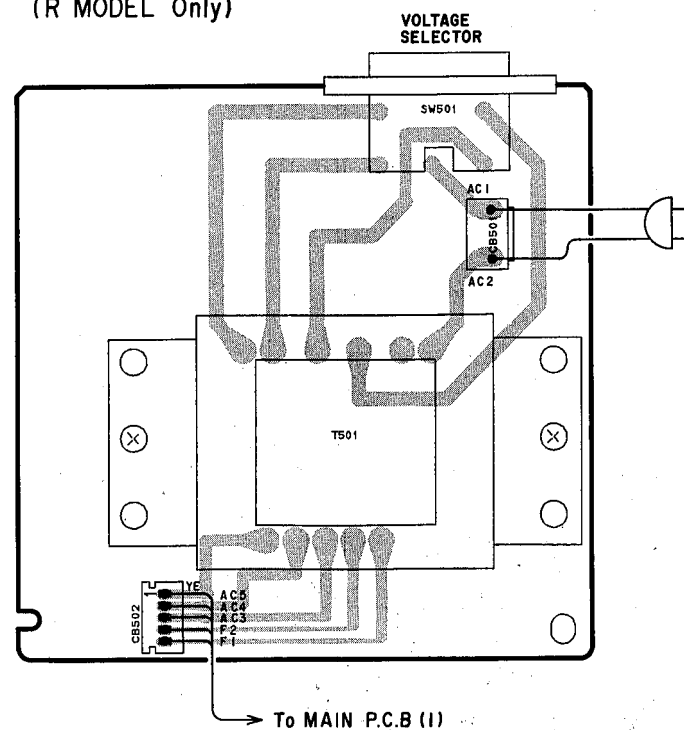
TRANSFORMER P.C.B

(Except R MODEL)



TRANSFORMER P.C.B

(R MODEL Only)



A

B

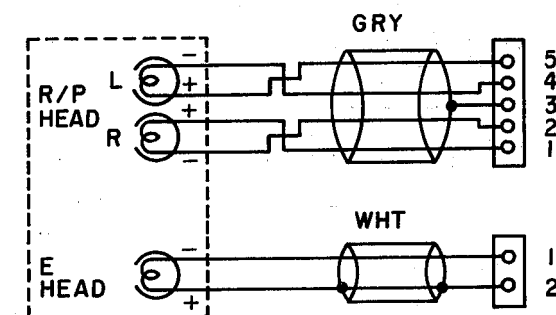
C

D

E

SCHEMATIC DIAGRAM (Cassette Mechanism)

KX-390



COM-

MTR +

PLAY SW

+5V SENSOR

SENSOR OUT

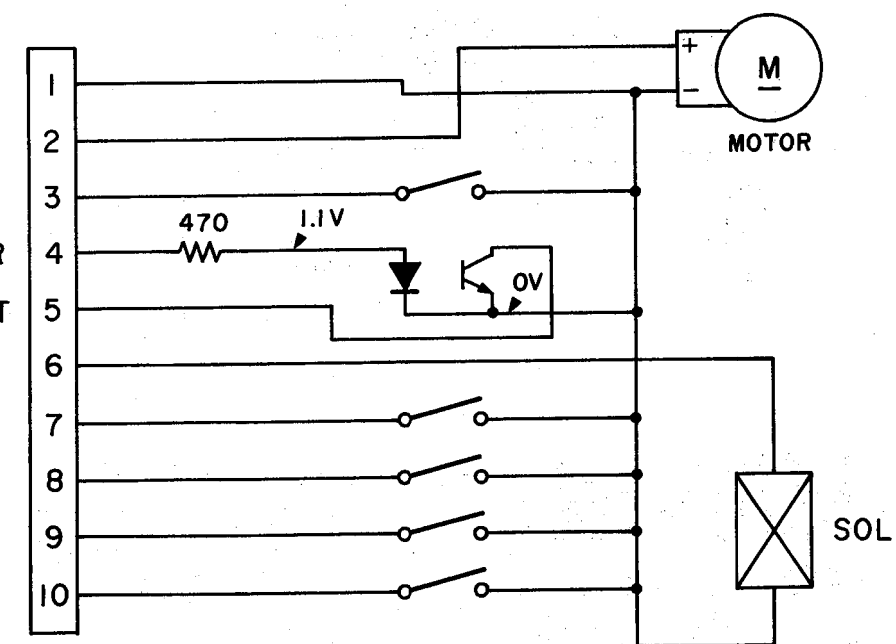
SOL +

CrO₂

CASS IN

F-REC

METAL



1

2

3

4

5

6

7

14

1

2

3

4

5

6

7

15

SCHEMATIC DIAGRAM KX-390

RESISTOR		CAPACITOR	
REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P-5)	NO MARK	ELECTROLYTIC CAPACITOR
□	CARBON FILM RESISTOR (P-10)	□	TANTALUM CAPACITOR
△	METAL OXIDE FILM RESISTOR	□	CERAMIC CAPACITOR
○	METAL FILM RESISTOR	□	CERAMIC TUBULAR CAPACITOR
□	METAL PLATE RESISTOR	□	POLYESTER FILM CAPACITOR
□	FINE PROOF CARBON FILM RESISTOR	□	POLYPROPYLENE FILM CAPACITOR
□	CEMENT WOUND RESISTOR	□	MICA CAPACITOR
□	SEMI VARIABLE RESISTOR	□	POLYPROPYLENE FILM CAPACITOR
□	CHTP RESISTOR	●	SEMICONDUCTIVE CERAMIC CAPACITOR

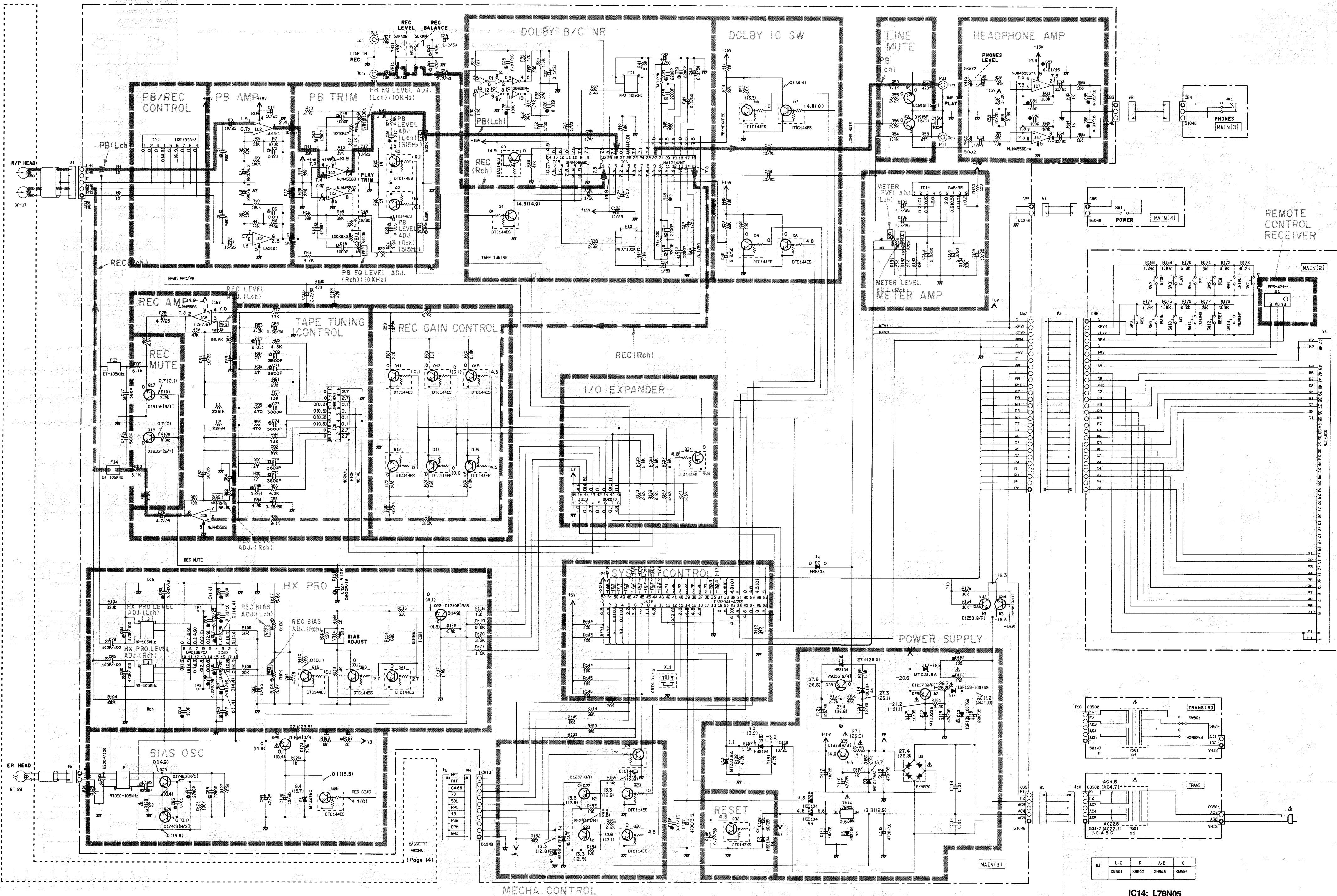
NOTICE
 (J)..... Japanese model
 (U)..... U.S.A. model
 (C)..... Canadian model
 (A)..... Australian model
 (G)..... European model
 (B)..... British model
 (F)..... German model
 (P)..... FR model

Interchangeable Parts at Manufacture-Stage

Mark	Reference Parts Number	Parts Name	Mark	Reference Parts Number	Parts Name
K1			K5	104	TC4069BP
K2	027-28-36	25B1337(a/r)	K6		UPD4099C
K3	025-57-36	25D1809(a/r)	K7		
K4	02-7-14-17	25C1931(a/r)			

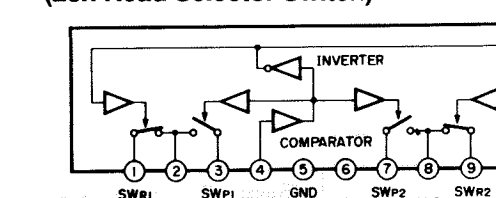
→ PB SIGNAL
 → REC SIGNAL

● The voltages are measured using LH tape in the PLAY mode (no signal condition).
 Only the voltage in () are at the REC mode.

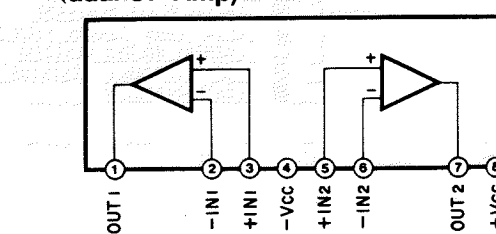


IC BLOCK

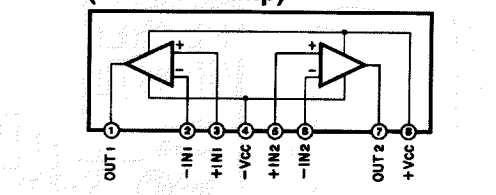
IC1: μ PC1330HA
 (2ch Head Selector Switch)



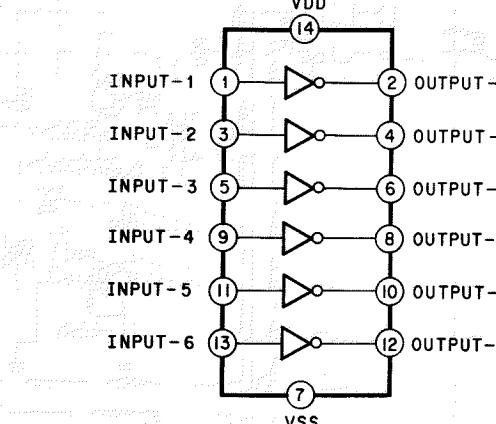
IC2: LA3161
 (dual OP-Amp)



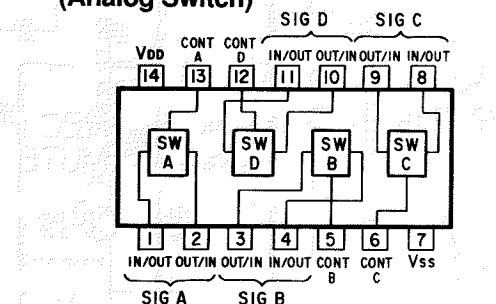
IC3,6: NJM4558L
 IC7: NJM4556AL
 (Dual OP-Amp)



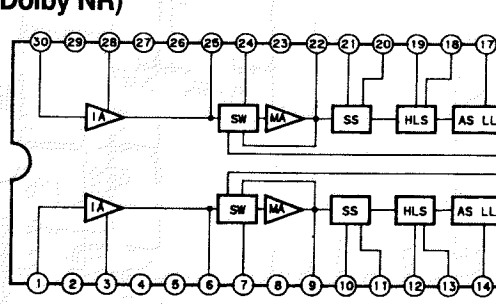
IC4: TC4069UBP
 (Hex. Inverter)



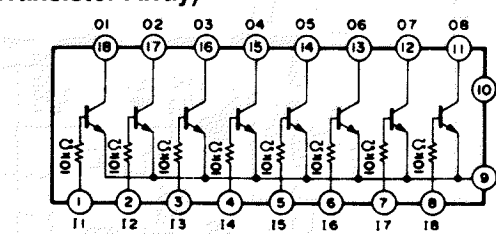
IC5: μ PD4066BC
 (Analog Switch)



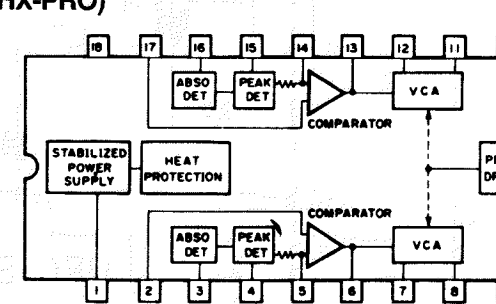
IC6: HA12142NT
 (Dolby NR)



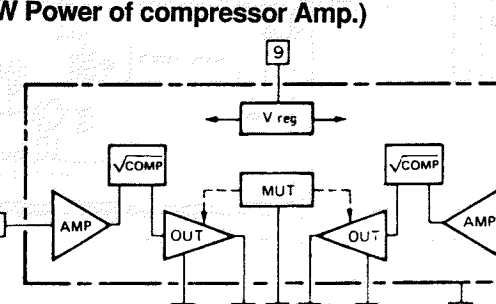
IC8: AN90B20
 (Transistor Array)



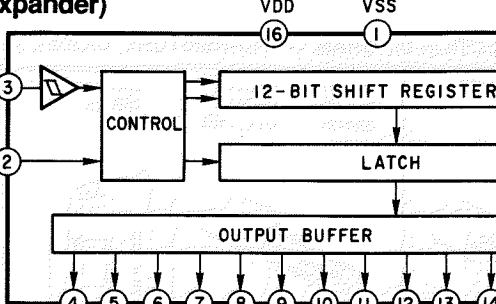
IC10: μ PC1297CA
 (HX-PRO)



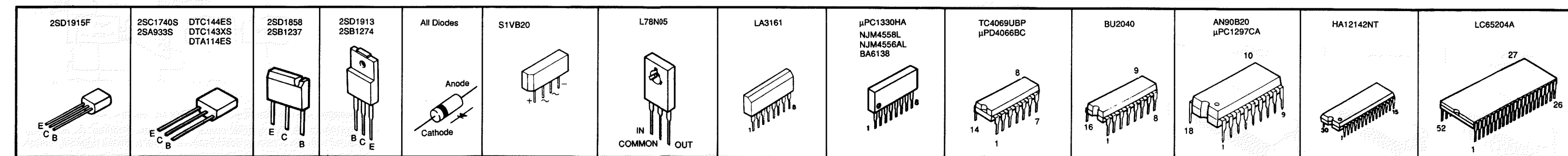
IC11: BA6138
 (1/2W Power of compressor Amp.)



IC13: BU2040
 (I/O Expander)



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



All voltages are measured with a 10M Ω /V DC electric volt meter.
 Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 Schematic diagram is subject to change without notice.

RESISTOR		CAPACITOR	
REMARKS	PARTS NAME	REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (1/4W)	NO MARK	ELECTROLYTIC CAPACITOR
△	METAL OXIDE FILM RESISTOR	△	TANTALUM CAPACITOR
□	METAL FILM RESISTOR	○	NO MARK CERAMIC CAPACITOR
◇	METAL PLATE RESISTOR	◎	AXIAL LEAD CERAMIC CAPACITOR
■	FIRE PROOF CARBON FILM RESISTOR	⊙	POLYESTER FILM CAPACITOR
○	CEMENT MOUNTED RESISTOR	⊖	POLYPROPYLENE FILM CAPACITOR
◇	SEMI VARIABLE RESISTOR	⊕	MICA CAPACITOR
■	CHIP RESISTOR	⊙	POLYPROPYLENE FILM CAPACITOR
		●	SEMICONDUCTIVE CERAMIC CAPACITOR

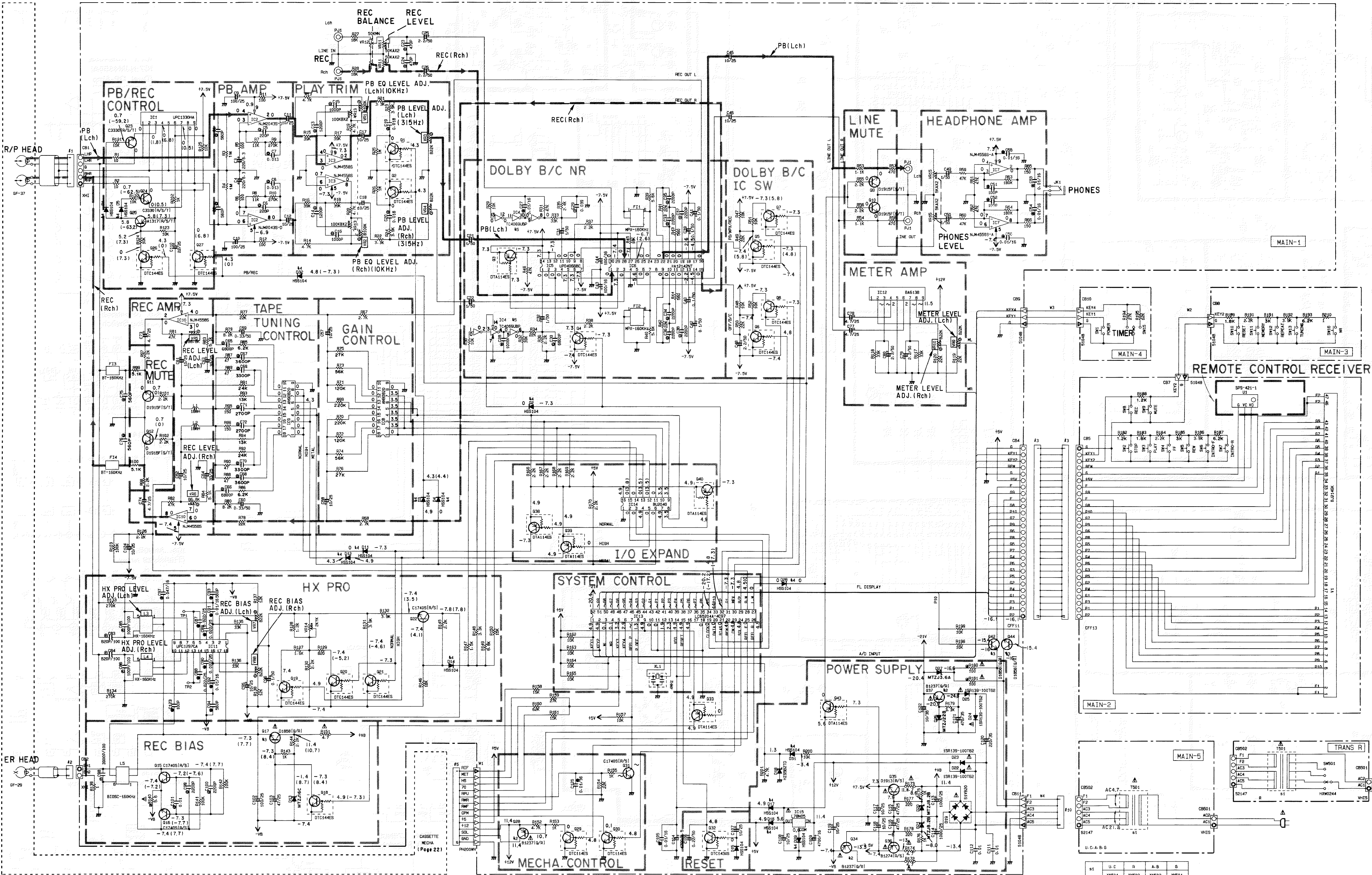
NOTICE
 (J)..... Japanese model
 (U)..... U.S.A. model
 (C)..... Canadian model
 (A)..... Australian model
 (E)..... European model
 (S)..... Spanish model
 (R)..... General model
 (P)..... PP model

Interchangeable Parts at Manufacture Stage

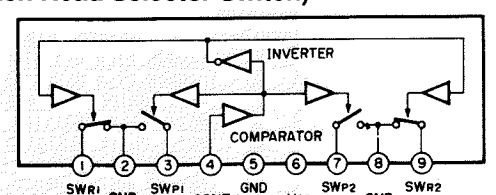
Mark	Reference Parts Number	Parts Name
K1	098-34-37	25D1915F
K2	017-42-44	25C3330
K3	015-5-11-12-14-17-20-29-31-32	DTA114ES

Mark	Reference Parts Number	Parts Name
K4	015-5-11-12-14-17-20-29-31-32	HSB104
K5	015-5-11-12-14-17-20-29-31-32	HSB133
K6	015-5-11-12-14-17-20-29-31-32	HSB176

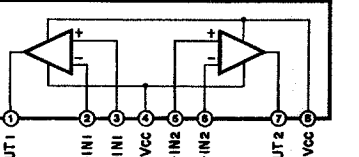
→ PB SIGNAL ● The voltages are measured using LH tape in the PLAY mode (no signal condition).
 → REC SIGNAL Only the voltage in () are at the REC mode.



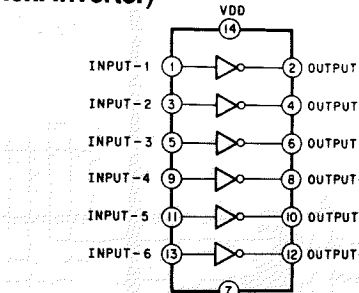
IC BLOCK
 IC1: μPC1330HA
 (2ch Head Selector Switch)



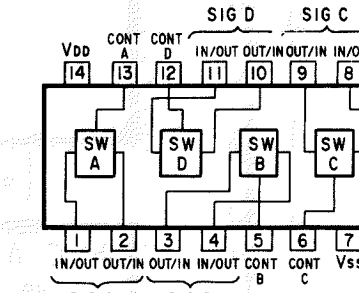
IC2: NJM2043LD
 IC3, 6: NJM4558L
 IC7: NJM4556AL
 (Dual OP-Amp)



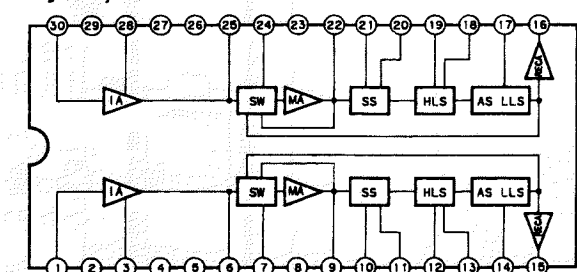
IC4: TC4069UBP
 (Hex. Inverter)



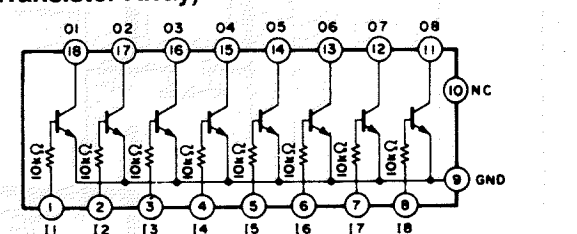
IC5, 19: μPD4066BC
 (Analog Switch)



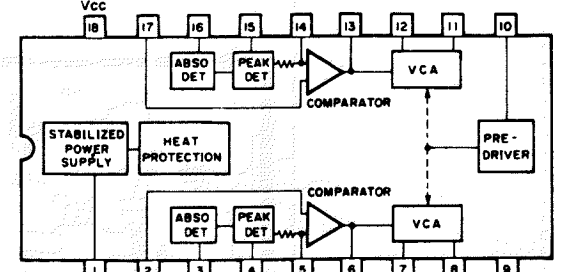
IC6: HA12142NT
 (Dolby NR)



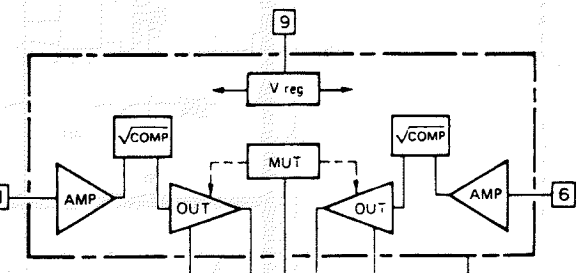
IC8, 9: AN90B20
 (Transistor Array)



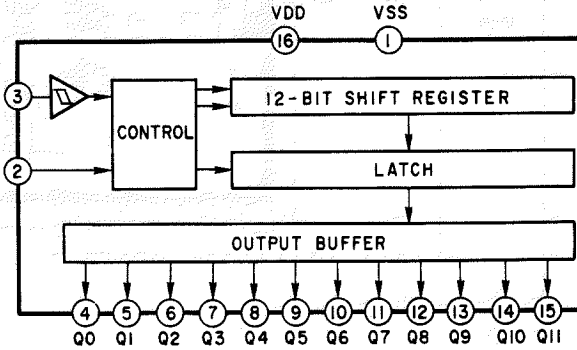
IC11: μPC1297CA
 (HX-PRO)



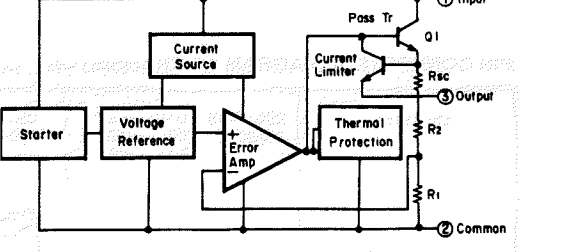
IC12: BA6138
 (1/2W Power of Compressor Amp.)



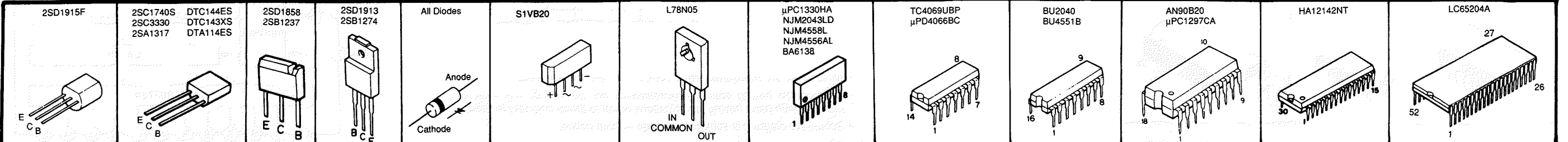
IC14: BU2040
 (IO Expander)



IC15: L78N05
 (+5V Regulator)



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



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 Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.
 Schematic diagram is subject to change without notice.

■ SCHEMATIC DIAGRAM (Cassette Mechanism)

