725 17238

A014

SERVICE MANUAL

SE-302
[CE-3434TY1]
[CE-3435TY1]

AM/FM ELECTRONIC TUNER and CASSETTE TAPE PLAYER
Model CW076A (TEN Model No. CE-3435TY1)
Model CW077A (TEN Model No. CE-3434TY1)

SPECIFICATIONS

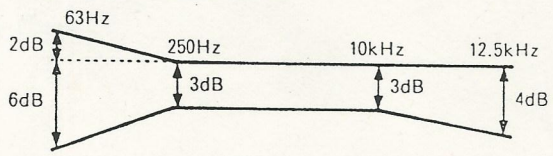
MAIN UNIT

(RADIO SECTION)	AM	FM
TUNING RANGE	522 to 1629 kHz (CE-3432)	87.5 to 108.0 MHz
SENSITIVITY	32 dB or better	15 dB or better (Stereo)
A G C	45 dB or better	
LIMITING SENSITIVITY		$5\ ^{+5}_{-10}$ dB
SEPARATION		20 dB or better
SENSITIVITY AT ELECTRONIC TUNING	Distant: 35 ± 8 dB Local: Distant plus 20 ± 5 dB	Distant: 25 ± 8 dB Local: Distant plus 25 ± 5 dB
SIGNAL TO NOISE RATIO	21 dB or better (35 dBμ input)	50 dB or better (54 dBμ input) Stereo: 30 dB or better (54 dBμ input)

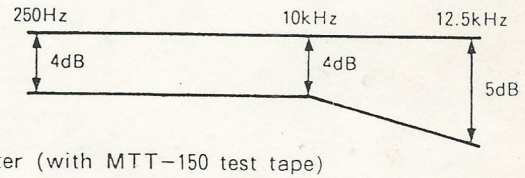
(CASSETTE DECK SECTION)

NUMBER OF TRACKS	4-track 2-channel
TAPE SPEED	4.76cm/sec.
WOW & FLUTTER	0.2% or better (RMS)
CROSSTALK	45 dB or better
SEPARATION	35 dB or better

FREQUENCY RESPONSE



DOLBY PROCESSOR FREQUENCY RESPONSE



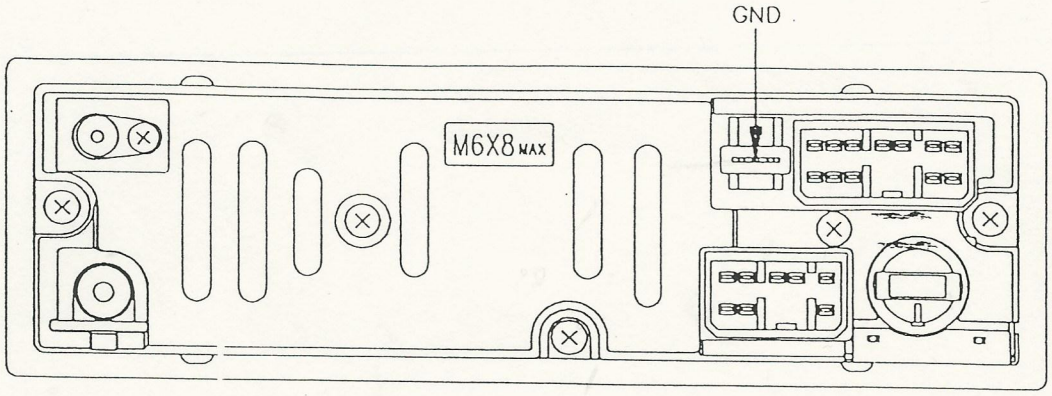
SIGNAL TO NOISE RATIO	50 dB or better (with MTT-150 test tape)
TAKE-UP TORQUE	40 to 75 g-cm

(COMMON SECTION)

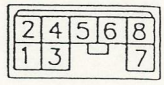
POWER OUTPUT (MAX.)	12 watts × 4 or better
SPEAKER IMPEDANCE	4 ohms
POWER INPUT	12-volt car battery, negative terminal to ground
Voltage	13.2 VDC
Current	Approx. 2.0 amperes (0.5 watts×4), MAX. 7 amperes
DIMENSIONS	188(W)×59(H)×167.5(D)mm
WEIGHT	Unit-1.4 kg

NOTES: Unless otherwise noted specification is measured with balance and fader control at center.

CONNECTIONS

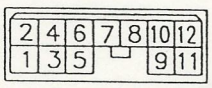


(PIN VIEW)



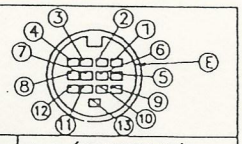
1	RL+
2	RL−
3	ACC (+B)
4	N.C.
5	RR+
6	RR−
7	N.C.
8	N.C.

(PIN VIEW)



1	ACC
2	N.C.
3	TO BATTERY
4	ANT. SW (+13.2V)
5	+TNS
6	ILL−(PANE−CONT)
7	N.C.
8	AMP CONT.(+13.2V)
9	FL+
10	FL−
11	FR+
12	FR−

(PIN VIEW)



1	L+ (OUTPUT)
2	L+ (INPUT)
3	R+ (OUTPUT)
4	R+ (INPUT)
5	GND (SIG.)
6	+TNS
7	ACC
8	TO BATTERY
9	CONT. ON(COMBI)
10	ILL−(PANE−CONT)
11	CONT. OFF(AUX)
12	SYSTEM CONT.(PLAY)
13	MUTE (INPUT)
E	SHIELD EARTH

(PIN VIEW)

Short connector
(RN−EJZ−1456)

Fig 1

HOOK-UP

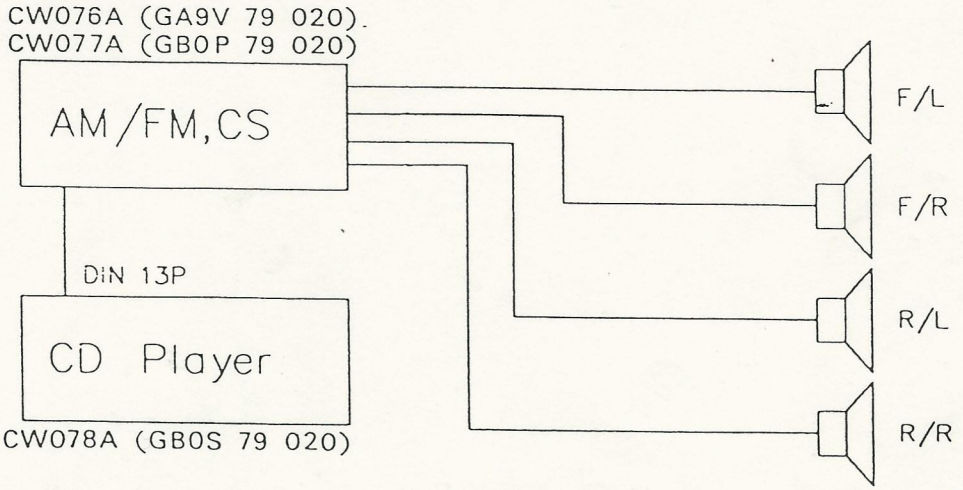
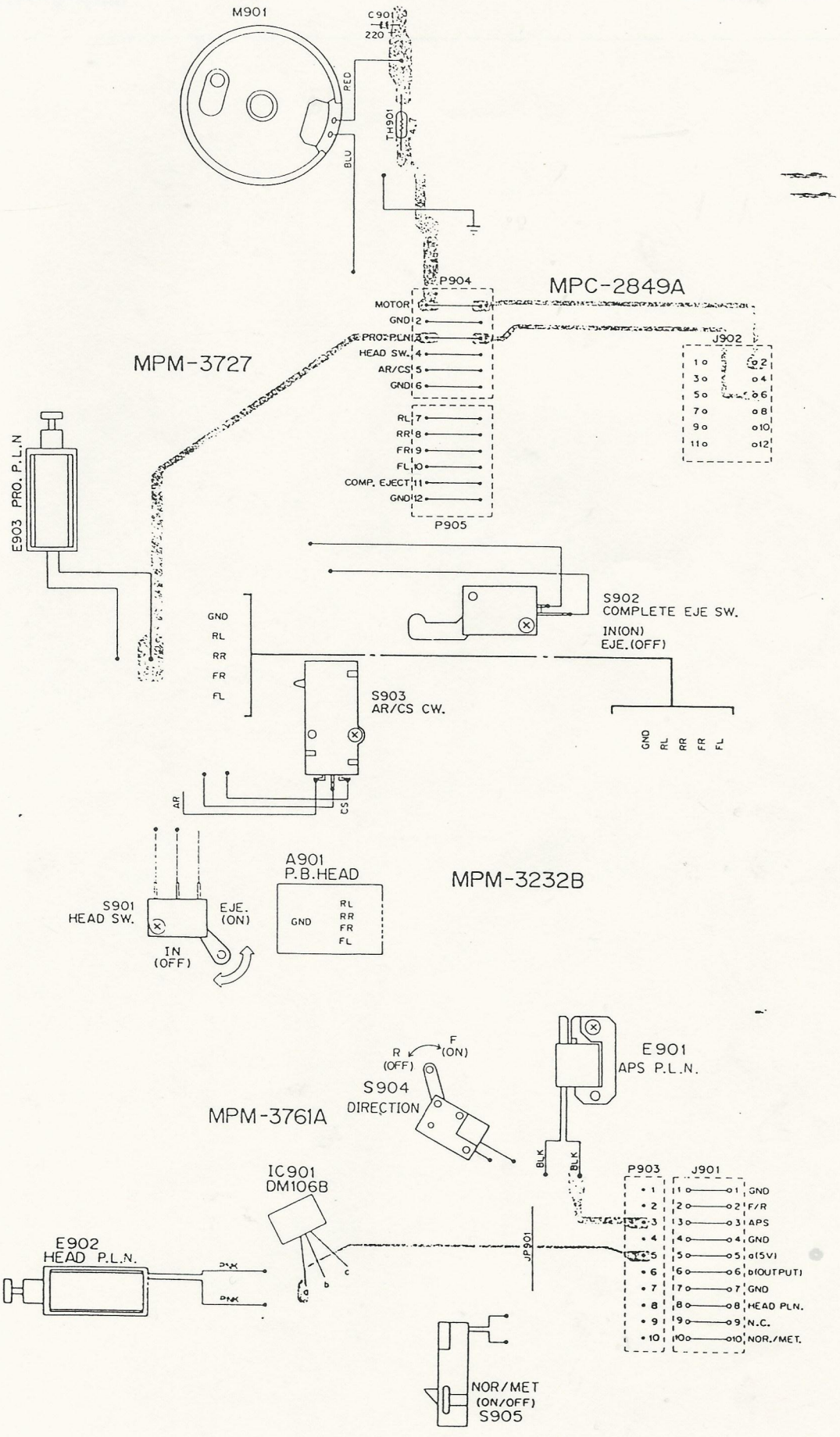


Fig 2

WIRING ON PC BOARD (MDK-80-24/S)



ALIGNMENT

NOTES : 1. Always use the test tape (MTT-150) for alignment
2. In alignment of Dolby N.R. circuit, only gain adjustment is required
3. Make sure that Dolby level falls with in the Dolby standards, when parts in the head or Dolby N.R. circuit being exchanged
4. Always use the parts listed in the parts list for Dolby circuit.

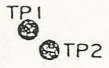
(1) Connections

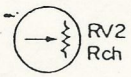
a VTVM·····Hot side [TP 1] or [TP 2] Cold side : chassis
b Test tape ·····MTT-150 (400 Hz, 0 dB full track recording)
c Power supply ·····13.2 VDC
d. Dolby N.R switch·····Out

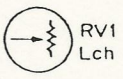
(2) Alignments

STEP	ADJUSTMENT POINT	PROCEDURE
1	RV1	Adjust to get 337 mV output of left channel with a volt meter
2	RV2	Adjust to get 337 mV output of right channel with a volt meter
3	———	Make sure that the output of left channel is equal to that of right channel, by using a volt meter.

NOTE : Adjust to get equal output of right and left channels in either track







EXPLODED VIEW (MAIN UNIT)

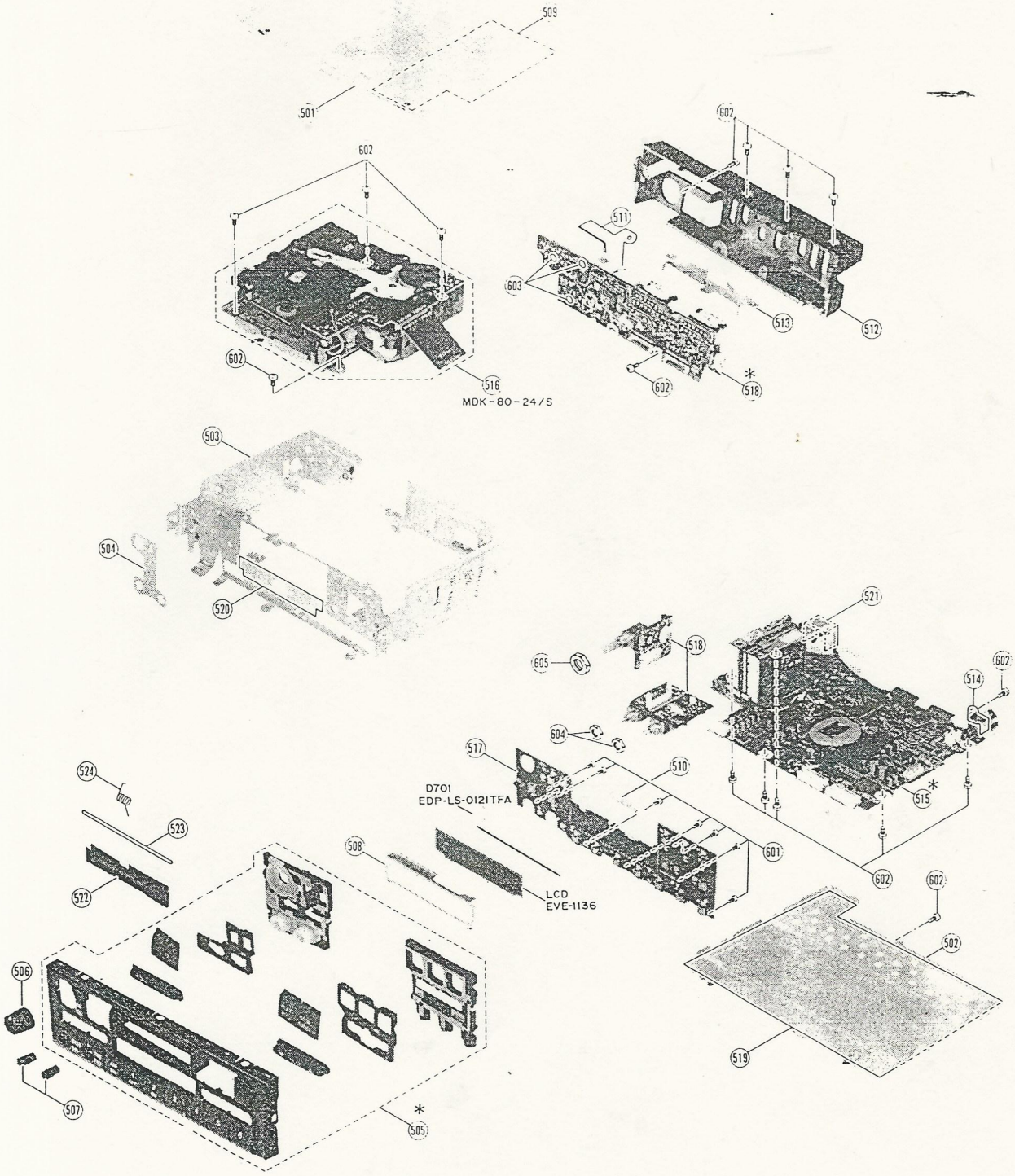
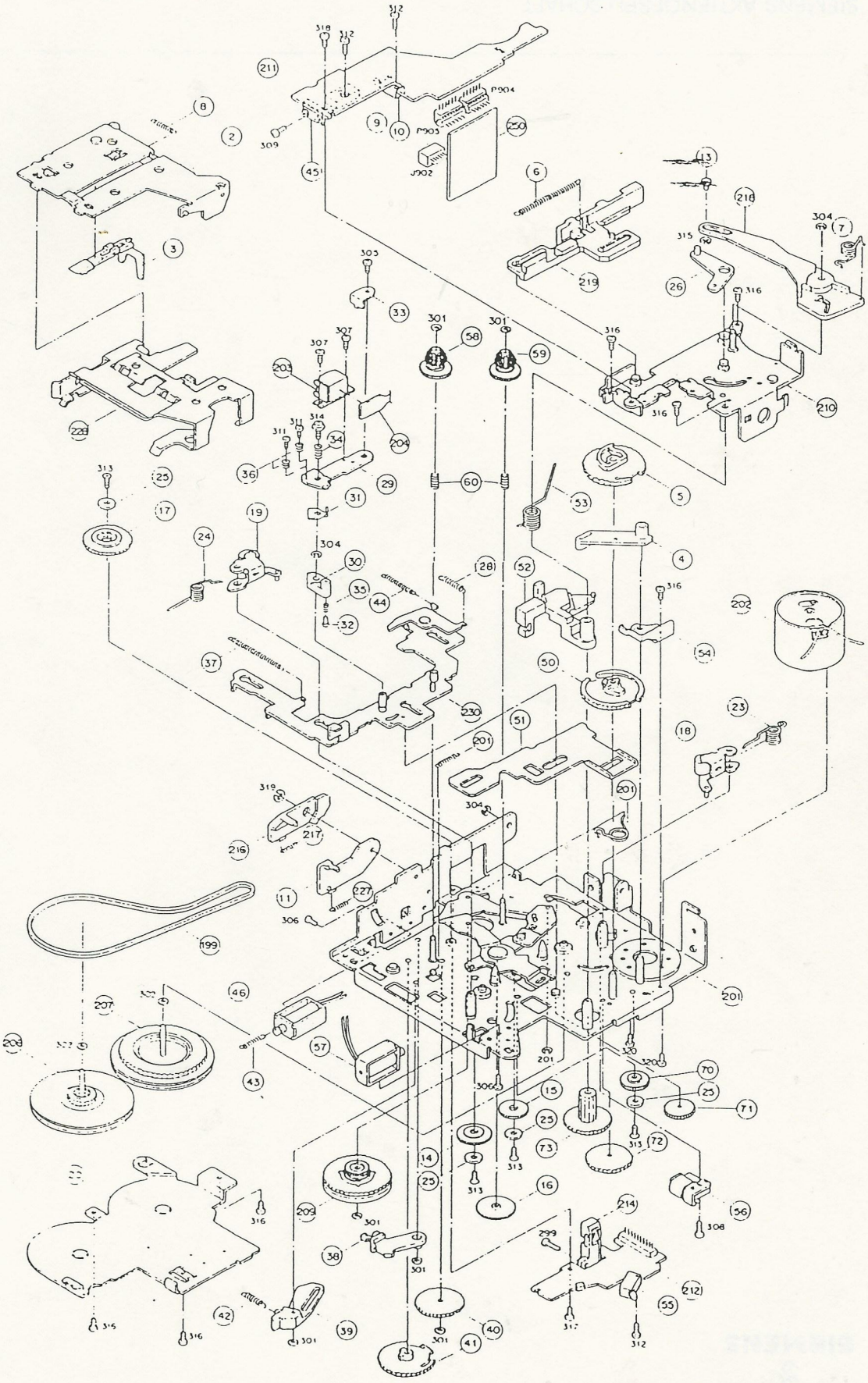


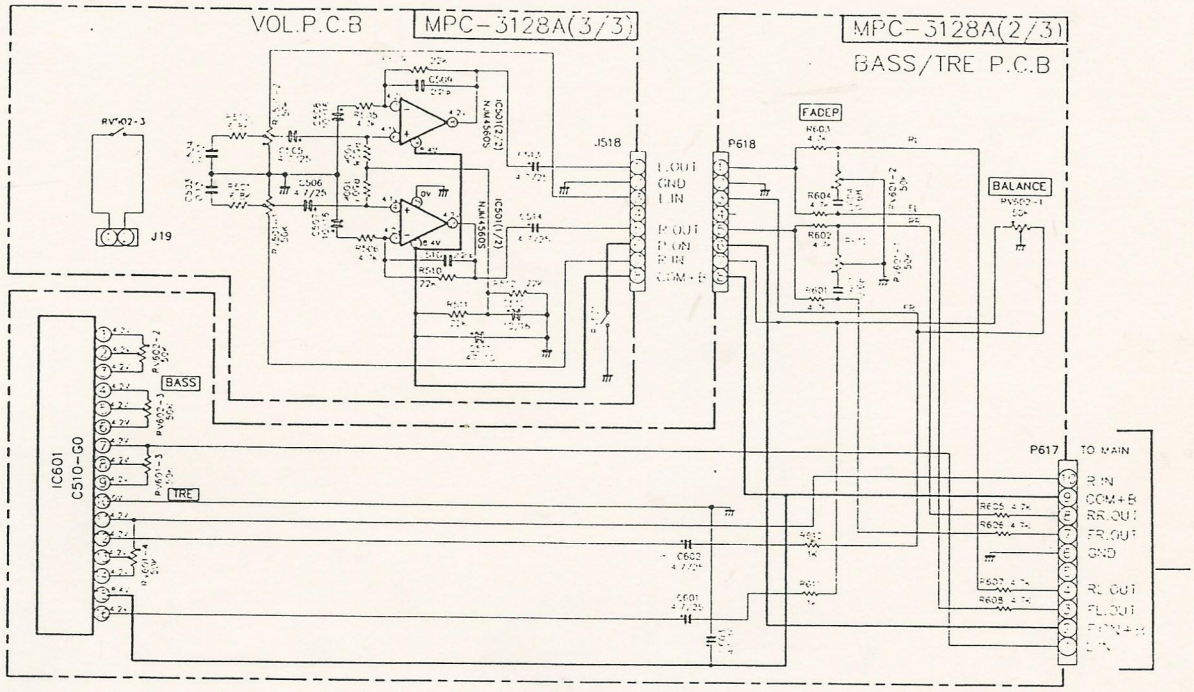
PHOTO : CE-3434TY1A

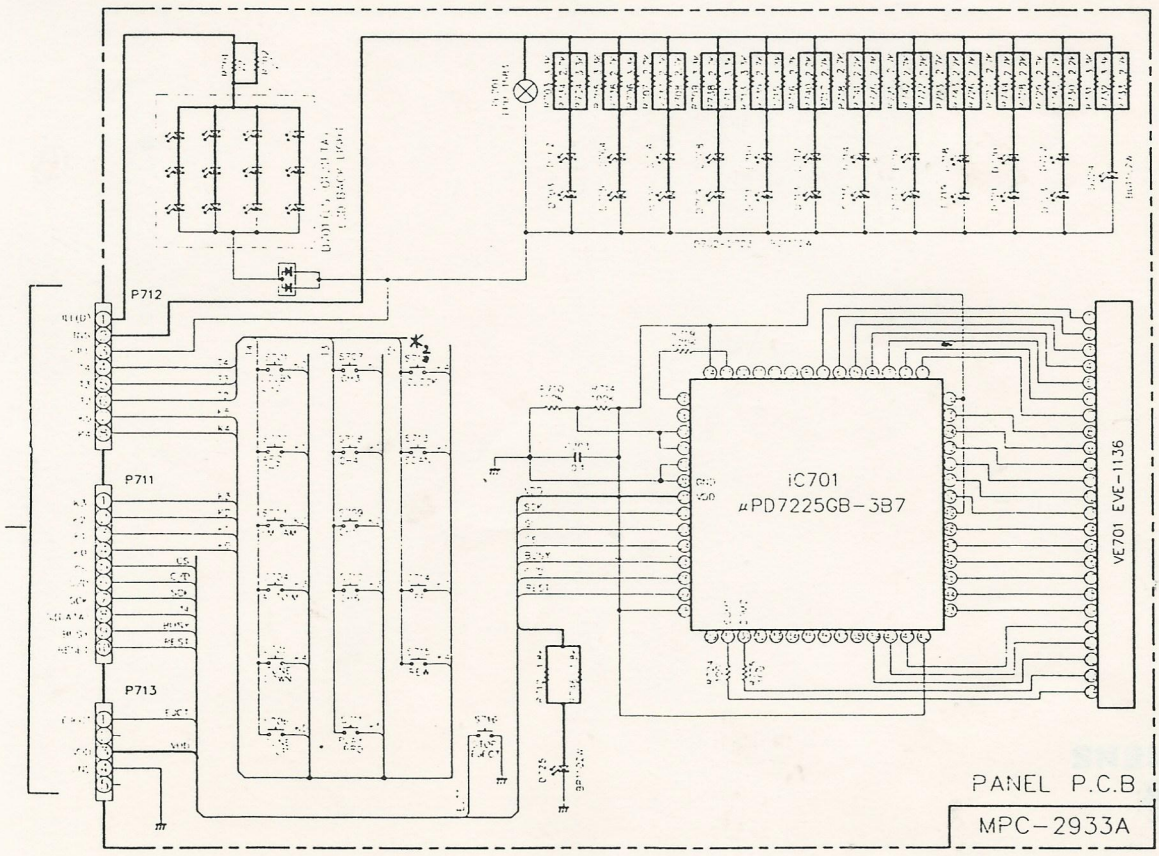
NOTE : 1. Printed circuit board does not include component parts to be mounted.
2. *-marked parts are different from model to model.

EXPLODED VIEW (MDK-80-24/S)

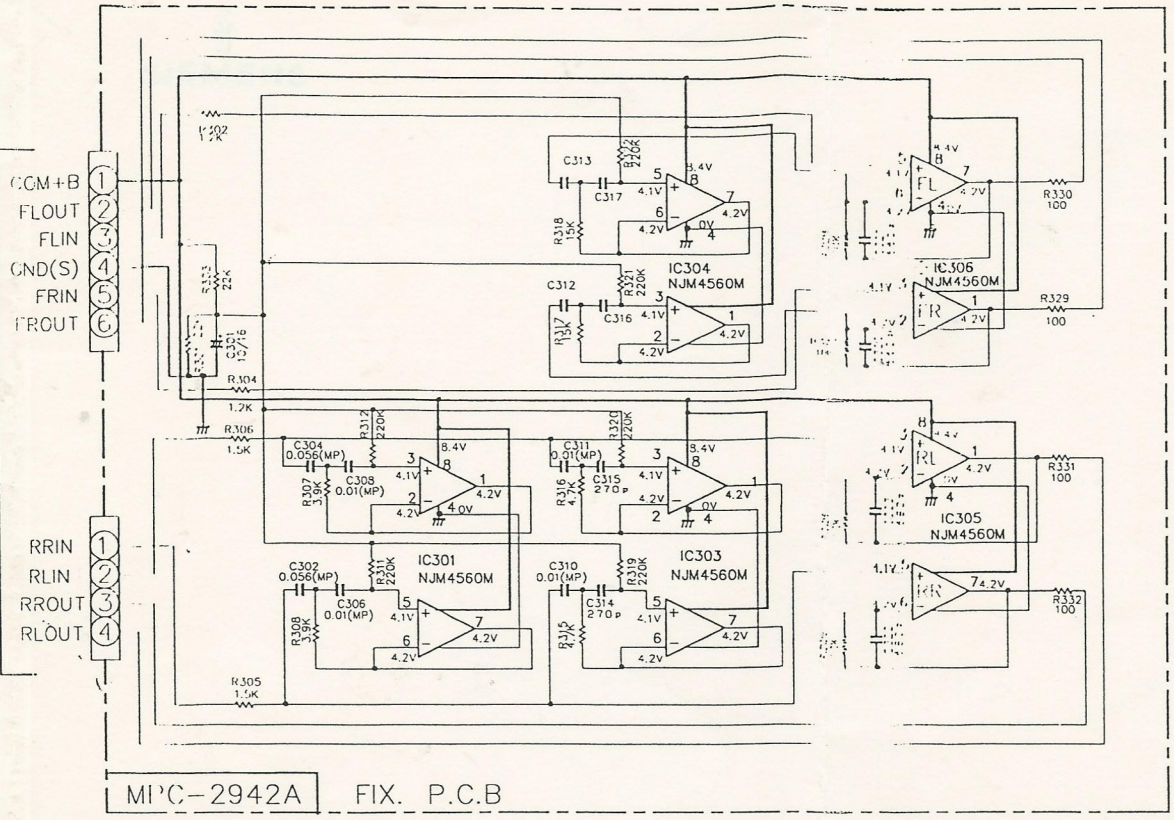


SCHEMATIC

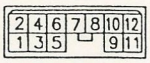




NOTE: *-marked parts are different from model to model.

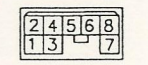


P403
(PIN VIEW)

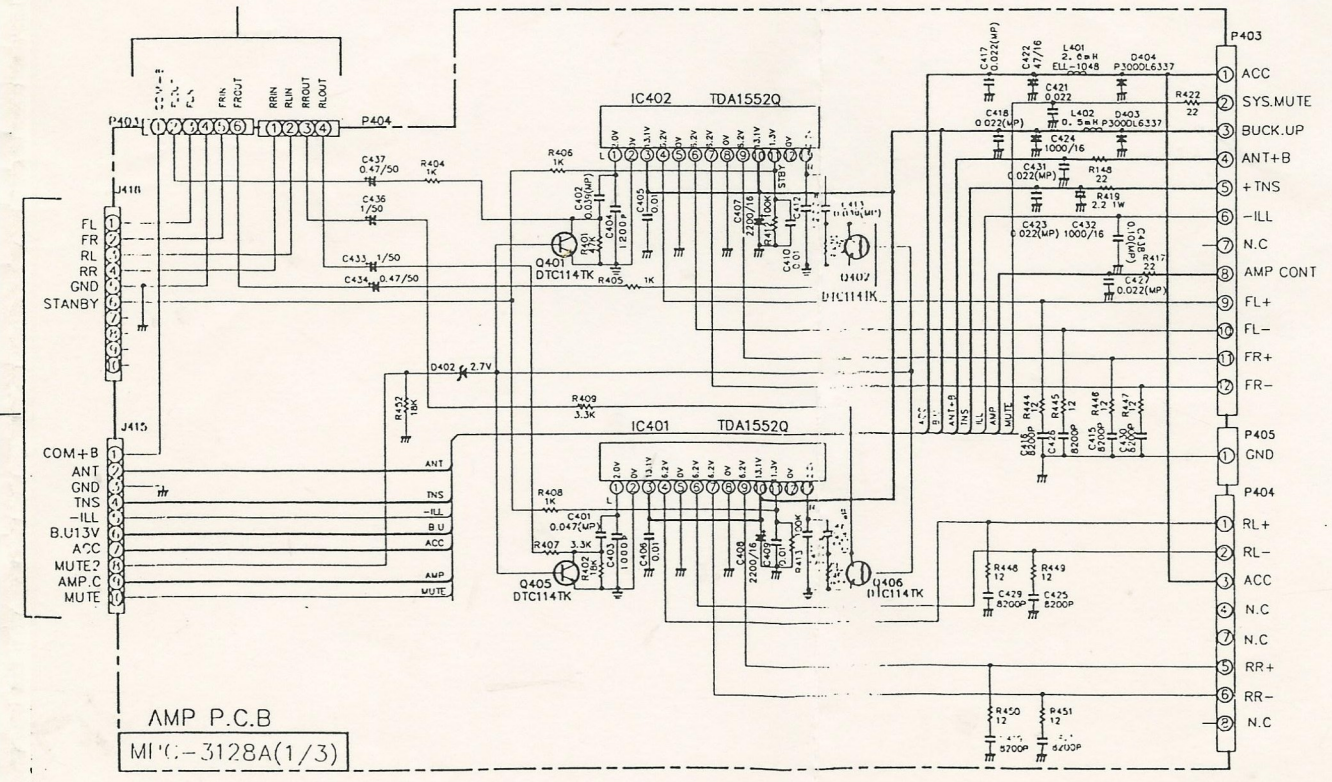


1	ACC
2	SYSTEM MUTE(OUT PUT)
3	TO BATTERY
4	ANT. SW (+13.2V)
5	+TNS
6	ILL-(PANE-CONT)
7	N.C.
8	AMP CONT.(+13.2V)
9	FL+
10	FL-
11	FR+
12	FR-

P404
(PIN VIEW)

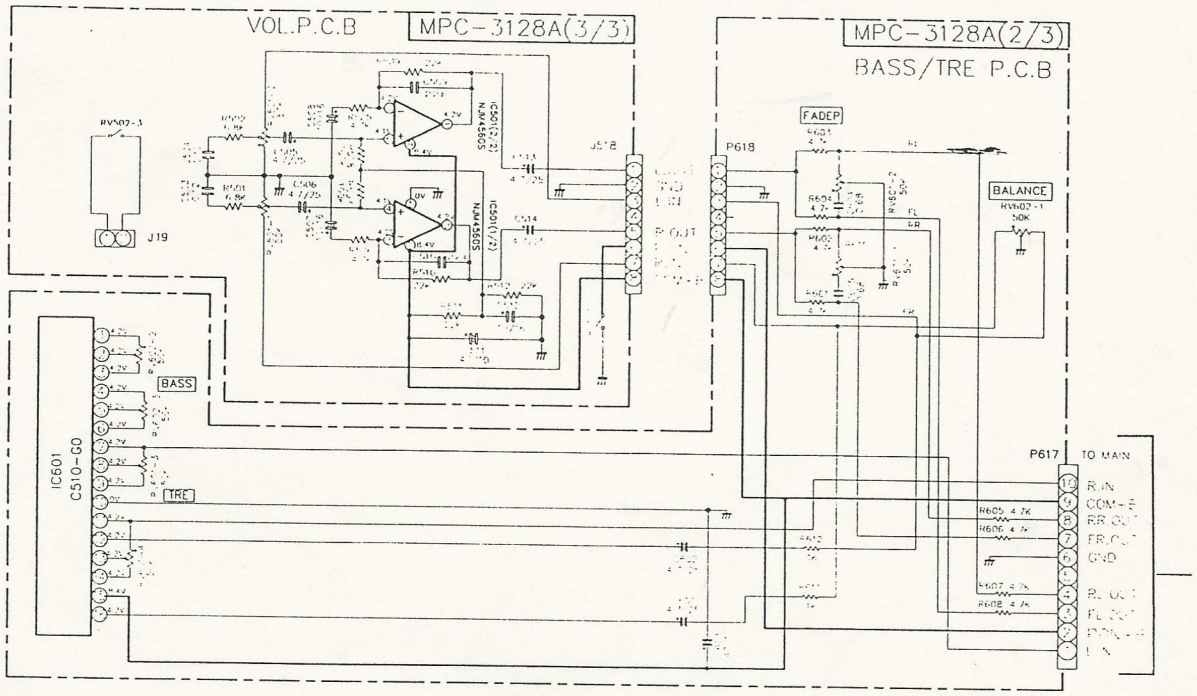


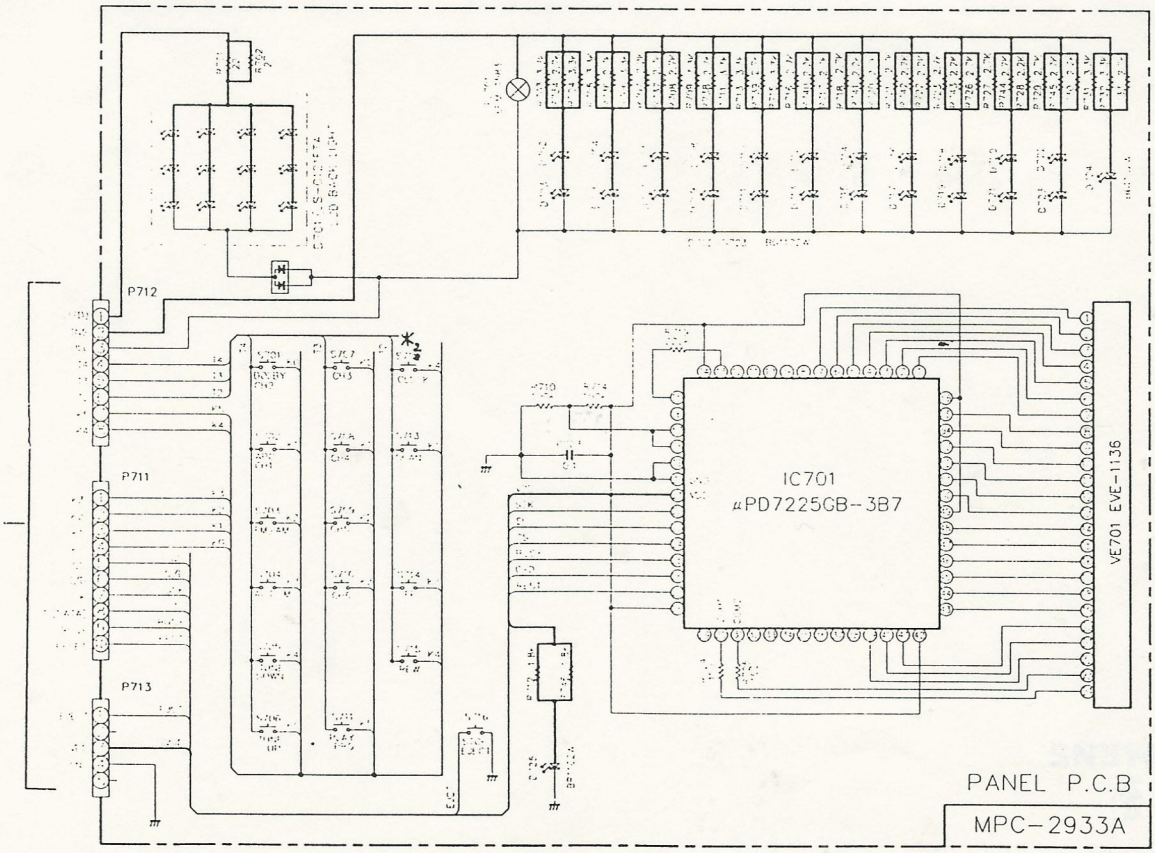
1	RL+
2	RL-
3	ACC (+B)
4	N.C.
5	RR+
6	RR-
7	N.C.
8	N.C.



NOTES:
1. All capacitance in Micro farad, P=10^{-12}
2. All resistance in ohm, K=10^{3}
3. All inductance in henry, m=10^{-3}, μ=10^{-6}
4. DC voltages against the chassis measured with 10M ohms digital volt meter, power supply set at +13.2 VDC, no signal input.

SCHEMATIC





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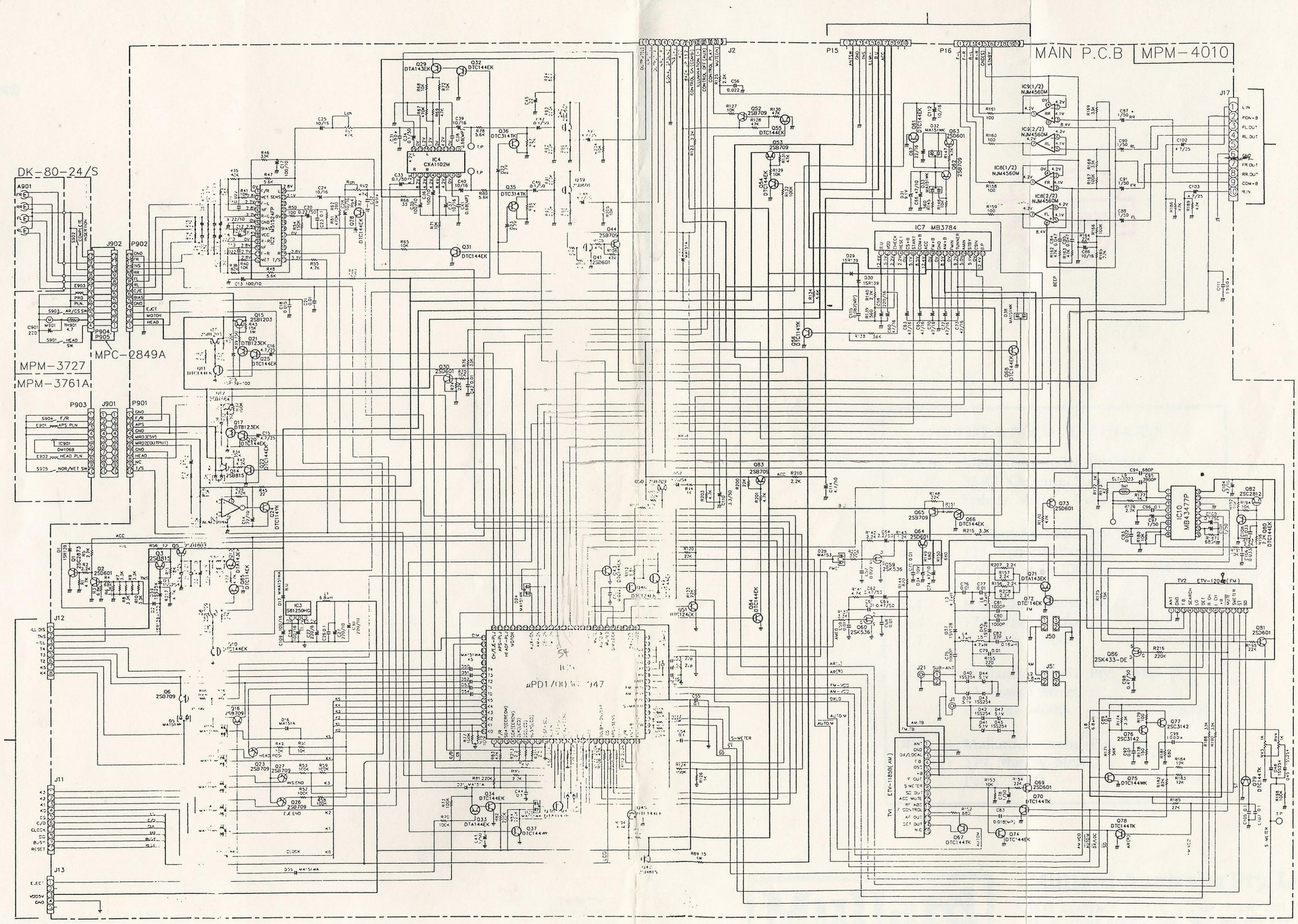
MAIN P.C.B
MPM-4010
DK-80-24/S
MPC-2849A
MPM-3727
MPM-3761A
IC7 MB3784
IC10 MB43477P
IC4 CXA1102M
IC3 S81250HG
IC2 M51524FP
IC9(1/2) NJM4560M
IC9(2/2) NJM4560M
IC8(1/2) NJM4560M
IC8(2/2) NJM4560M
TV1 ETV-1185B(AM)
TV2 ETV-1202(FM)
J2
P15
P16
J17
J12
J11
J13
J50
J51
J21
J1
P902
P903
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P904
P905
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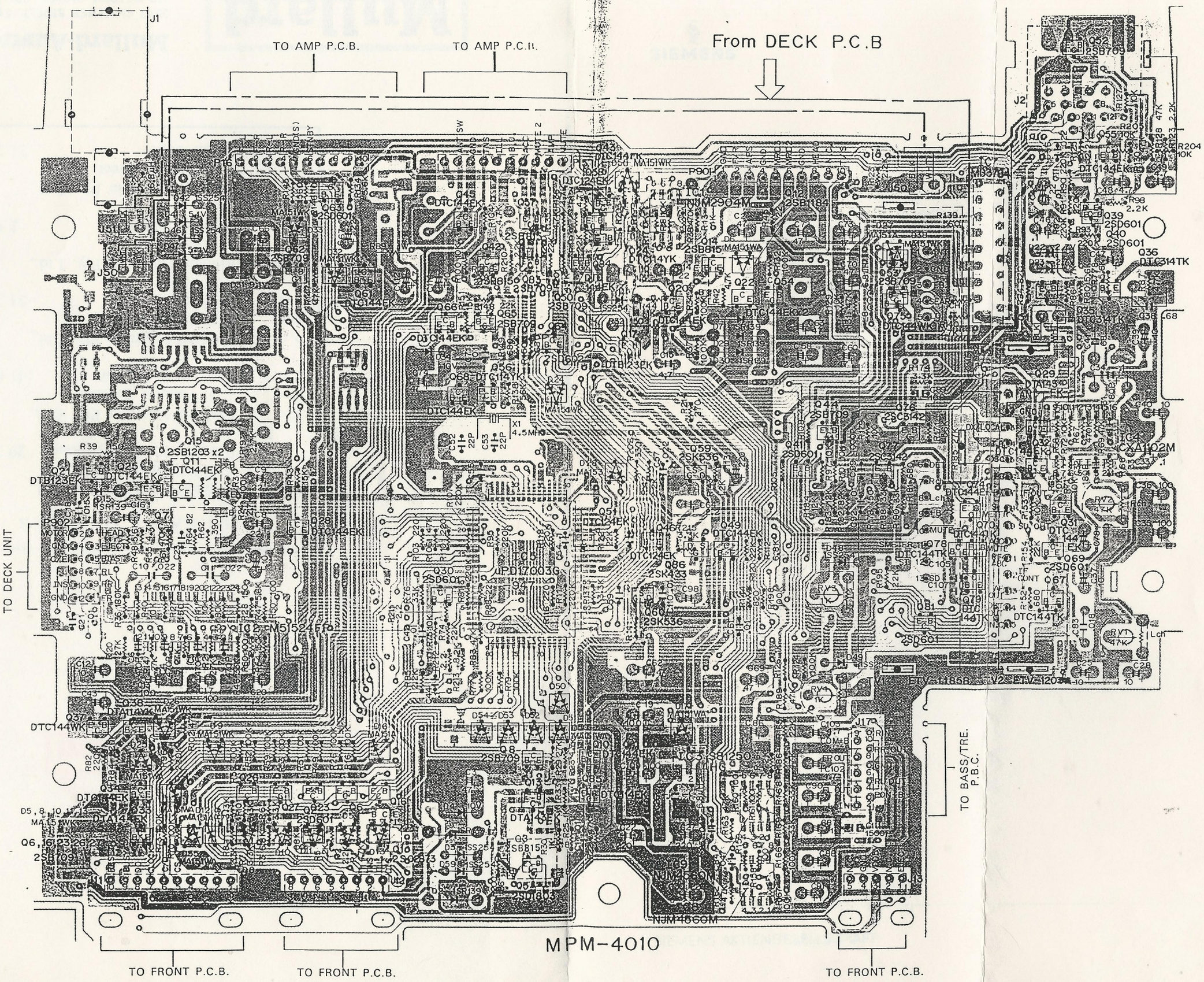
A901

WIRING ON PC BOARD