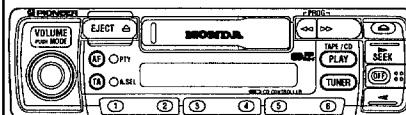


Service Manual

PIONEER®
The Art of Entertainment
HONDA

● KEH-M7016ZH/EW



ORDER NO.
CRT1913

MULTI-CD CONTROL FM/MW/LW RDS TUNER DECK AMPLIFIER

KEH-M7016ZH EW

KEH-M7116ZH EW

VEHICLE	DESTINATION	PRODUCED AFTER	HONDA PART No.	ID No.	PIONEER MODEL No.
—	EUROPE	August 1996	08A01-376-210T	7000	KEH-M7016ZH/EW
—	EUROPE	August 1996	08A01-376-210	7000	KEH-M7116ZH/EW

NOTE:

- See the separate manual CX-644(CRT1800) for the cassette mechanism description.
- The cassette mechanism assy employed in this model is one of X-2M series.

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1. SAFETY INFORMATION

During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING METHOD

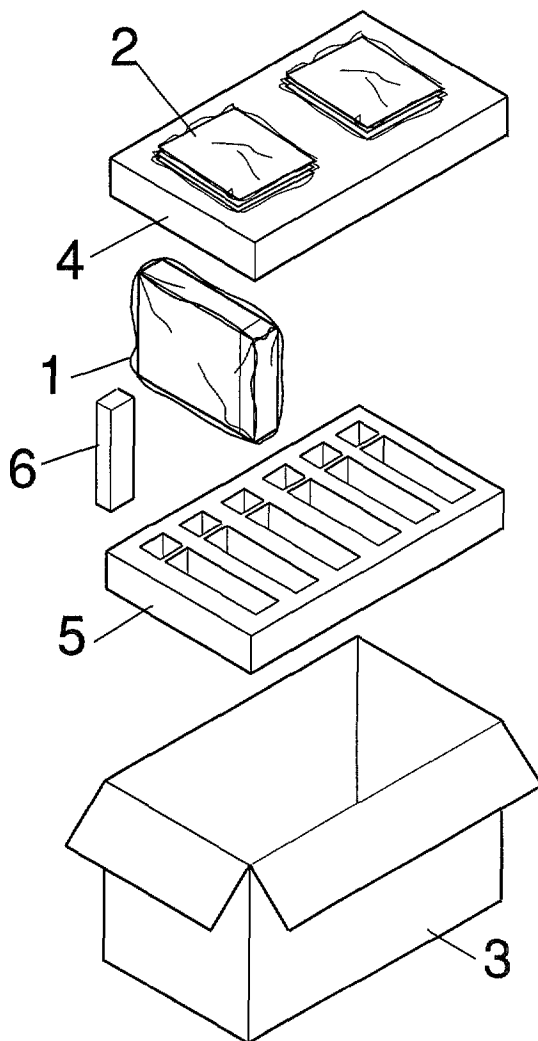


Fig.1

● Parts List(KEH-M7016ZH/EW)

Mark No.	Description	Part No.
1	Polyethylene Bag	CEG-162
2-1	Polyethylene Bag	CEG1116
2-2	Owner's Manual	CRD2190
3	Contain Box	CHL3086
4	Protector	CHP1852

Mark No.	Description	Part No.
5	Protector	CHP1853
6	Case Assy	CXA7080

● Owner's Manual

Part No.	Language
CRD2190	English,French,German,Dutch

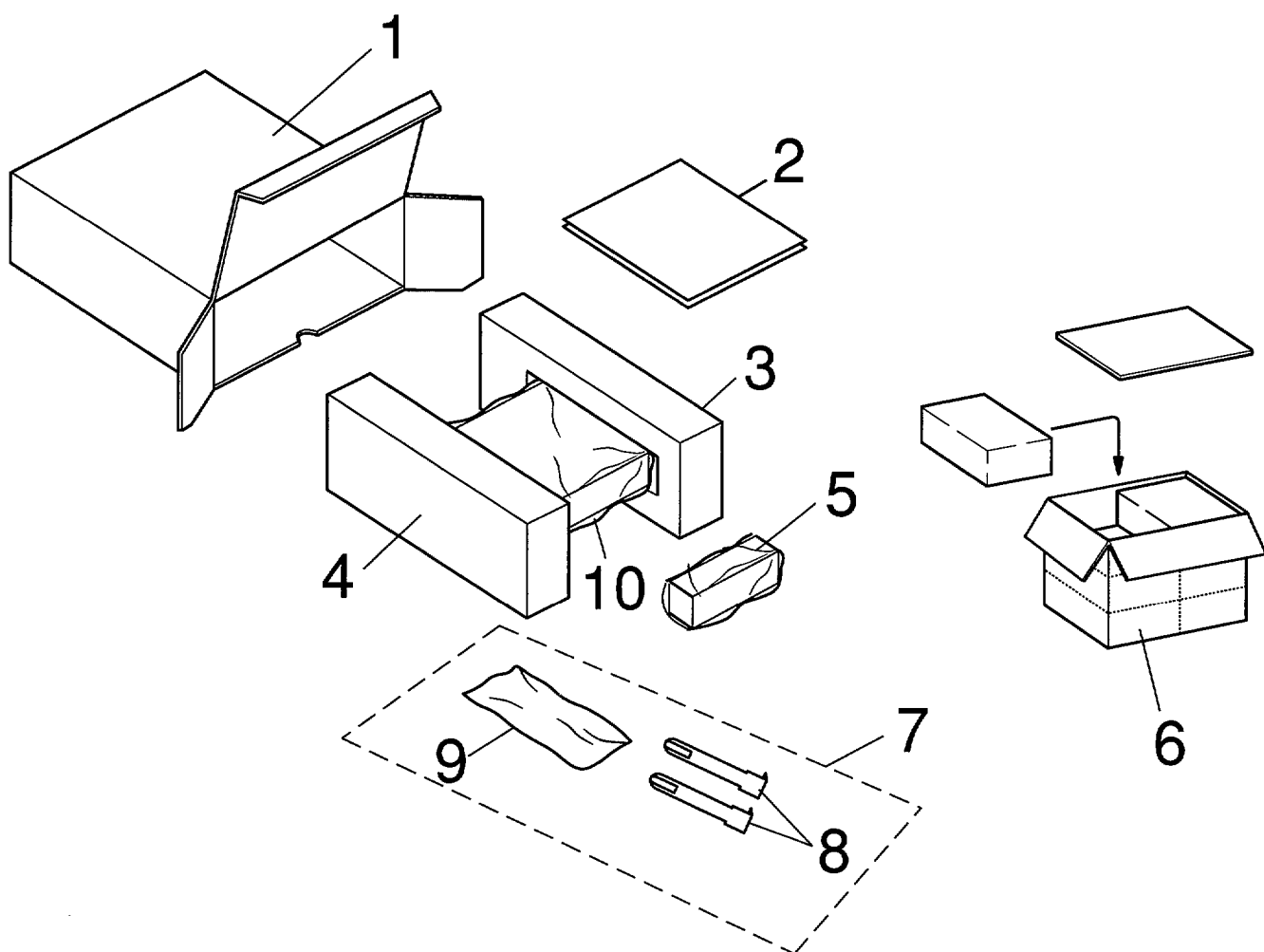


Fig.2

NOTE: Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.

● **Parts List(KEH-M7116ZH/EW)**

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Carton	CHG3102	5	Case Assy	CXA7080
2-1	Owner's Manual	CRD2190	6	Contain Box	CHL3102
2-2	Owner's Manual	CRD2191	7	Accessory Assy	CEA2027
3	Protector	CHP1871	8	Handle	CNC5395
4	Protector	CHP1872	*	9 Polyethylene Bag	E36-615
			10	Polyethylene Bag	CEG-162

● **Owner's Manual**

Part No.	Language
CRD2190	English,French,German,Dutch
CRD2191	Spanish,Portuguese,Italian,Swedish

2.2 CHASSIS

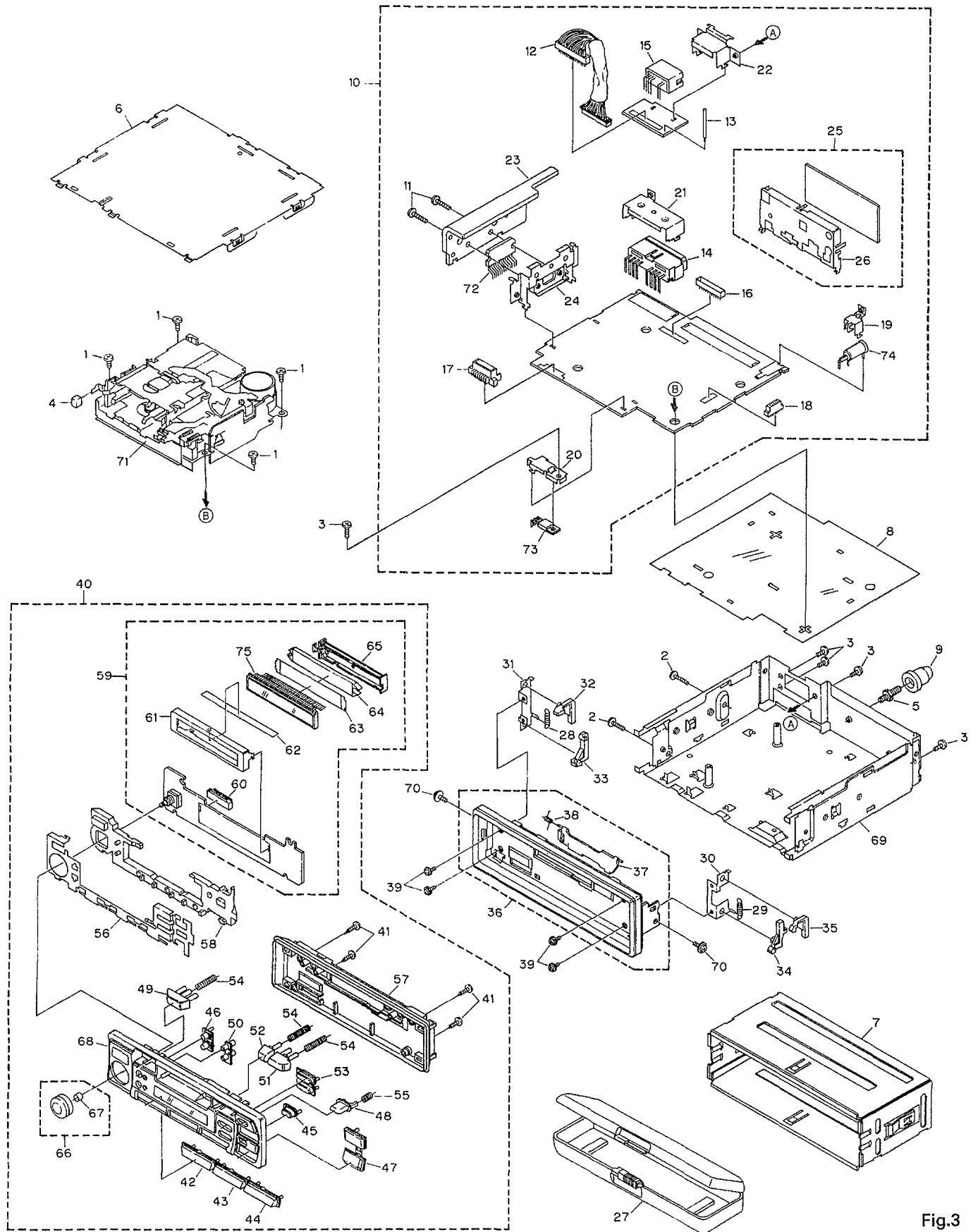
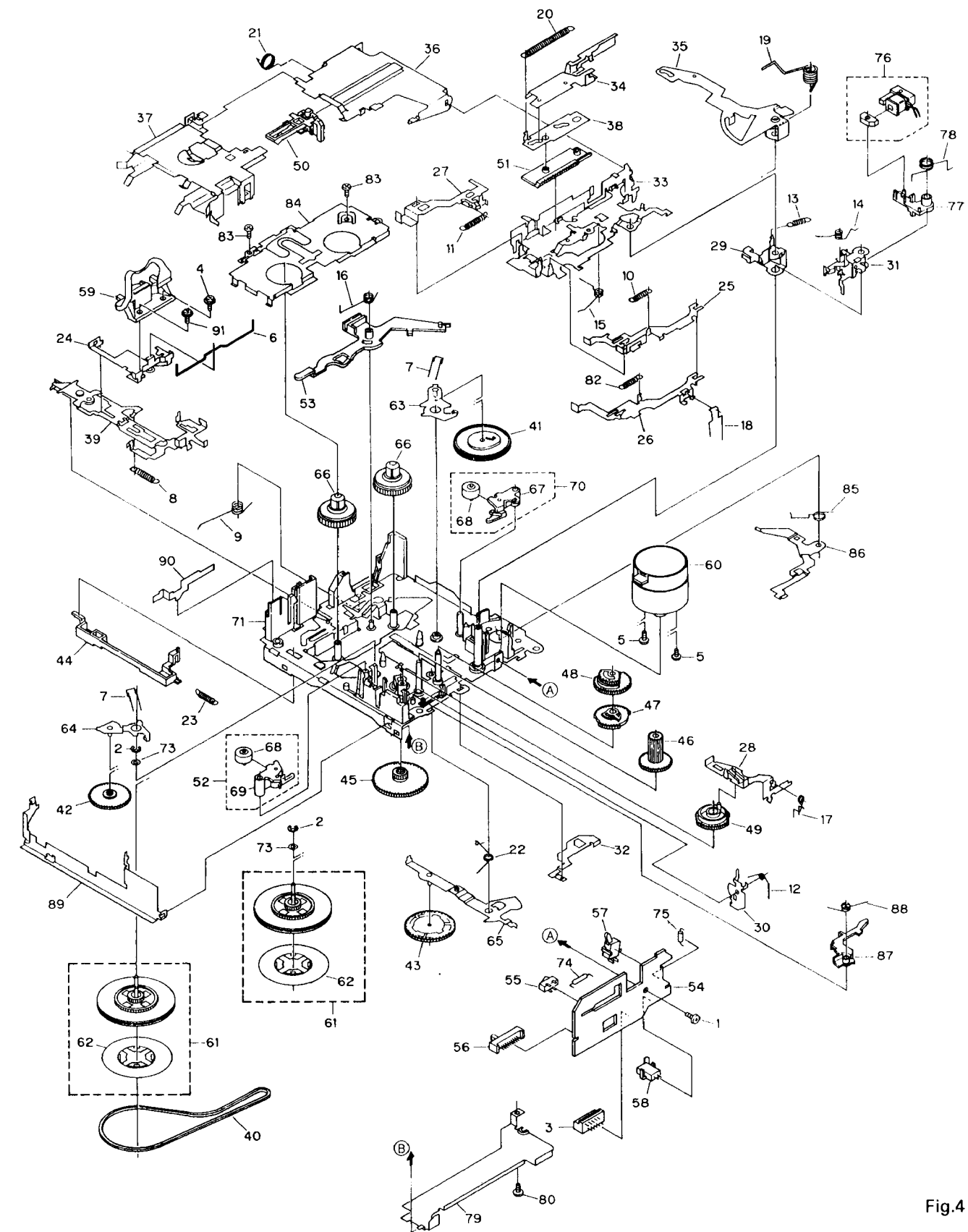


Fig.3

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ26P050FMC	46	Button(AF,TA)	CAC3992
2	Screw	BMZ26P080FMC	47	Button(SEEK)	CAC3994
3	Screw	BMZ30P080FMC	48	Button(EJECT)	CAC4730
4	Button	CAC4177	49	Button(EJECT)	CAC4731
5	Screw	CBA1002	50	Button(PHY,A.SEL)	CAC4732
6	Case	CNB2058	51	Button(FF)	CAC4777
7	Holder	CNC5349	52	Button(REW)	CAC4778
8	Insulator	CNM4744	53	Button(PLAY,TUNER)	CAC4831
9	Bush	CNV3839	54	Spring	CBH1742
10	Tuner Amp Unit	CWM4701	55	Spring	CBH1942
11	Screw	BMZ26P140FMC	56	Conductor	CNC5363
12	Cord	CDE5052	57	Cover	CNS3974
13	Clamper	CEF1008	58	Lens	CNV3904
14	Connector(CN551)	CKM1078	59	Key Board Unit	CWM4704
15	Connector(CN603)	CKM1208	60	Connector(CN951)	CKS2883
* 16	Plug(CN601)	CKS1047	61	Conductor	CNC6444
17	Connector(CN651)	CKS2884	62	Insulator	CNM4735
18	Connector(CN251)	CKS3362	63	Plate	CNM4736
19	Holder	CNC4569	64	Lighting Conductor	CNV4547
20	Holder	CNC5013	65	Holder	CNV4549
21	Holder	CNC6451	66	Knob Assy	CXA7112
22	Holder	CNC6452	67	Spring	CBL-108
23	Heat Sink	CNC6453	68	Grille Assy	CXA9301
24	Holder	CNC6454	69	Chassis Unit	CXA8840
25	FM/AM Tuner Unit	CWE1466	70	Screw	IMS30P050FMC
26	Holder	CNC6554	71	Cassette Mechanism Unit	EXK3545
27	Case Assy	CXA7080	72	IC(IC551)	TDA7385
28	Spring	CBH1834	73	Transistor(Q903)	2SD1267A
29	Spring	CBH1835	74	Antenna Jack	CKX1006
30	Bracket	CNC6442	75	LCD	CAW1358
31	Bracket	CNC6780			
32	Arm	CNV4692			
33	Arm	CNV4693			
34	Arm	CNV4694			
35	Arm	CNV4695			
36	Panel Unit	CXA8824			
37	Door	CAT1759			
38	Spring	CBH1838			
39	Screw	IMS20P030FZK			
40	Detach Grille Assy	CXA8768			
41	Screw	BPZ20P100FZK			
42	Button(1,2)	CAC3988			
43	Button(3,4)	CAC3989			
44	Button(5,6)	CAC3990			
45	Button(OFF)	CAC3991			

2.3 CASSETTE MECHANISM UNIT

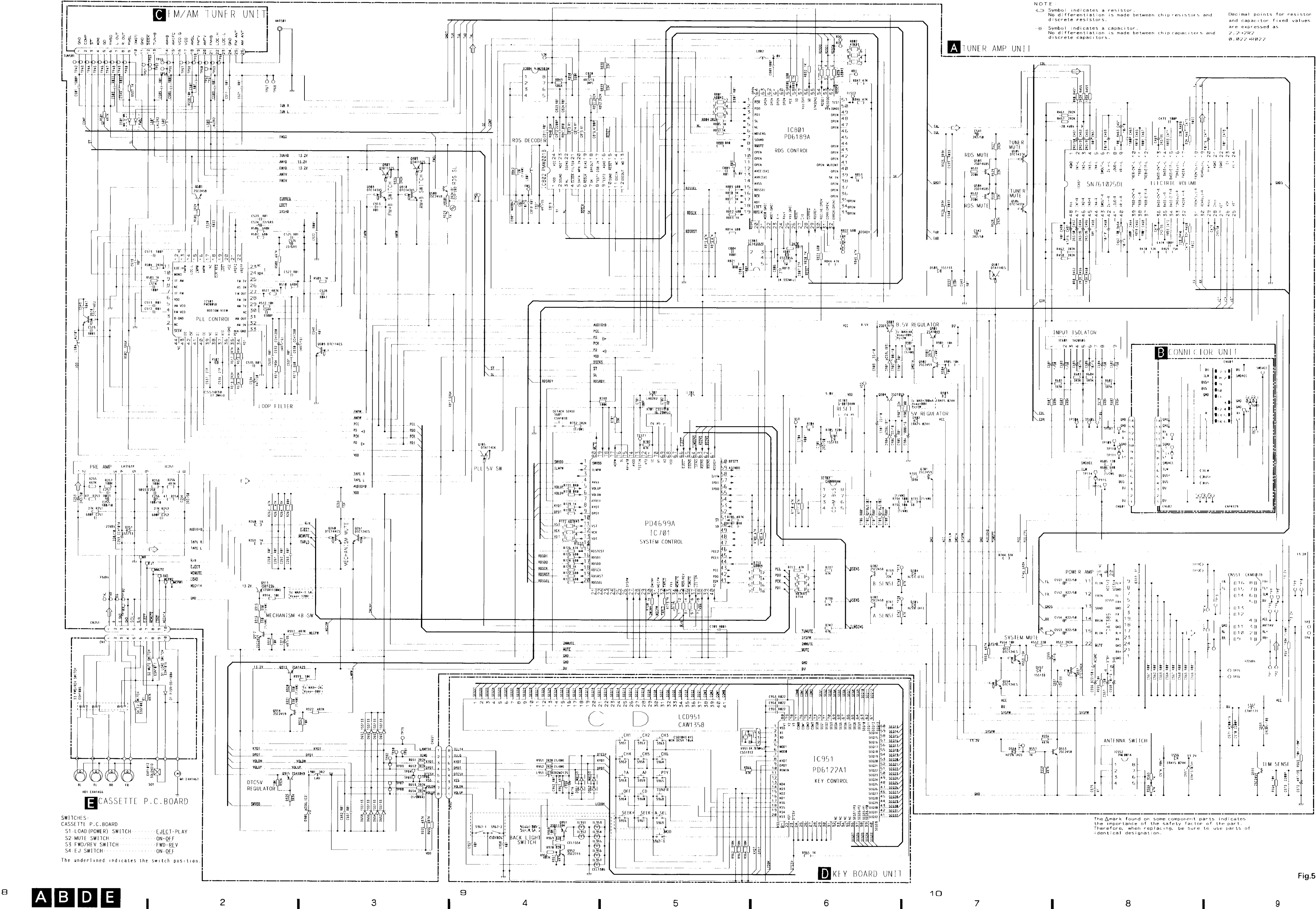


● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ23P050FMC	46	Gear	ENV1475
2	Washer	CBG1003	47	Gear	ENV1495
3	Connector(CN1)	CKS2829	48	Gear	ENV1477
4	Screw(M2x5)	EBA1028	49	Gear	ENV1502
5	Screw(M2x2.5)	EBA1037	50	Lever	ENV1480
6	Spring	EBH1554	51	Lever	ENV1487
7	Spring	EBH1555	52	Roller Unit	EXA1483
8	Spring	EBH1556	53	Arm	ENV1489
9	Spring	EBH1557	* 54	P.C.Board	ENP1148
10	Spring	EBH1591	55	Switch(Eject)(S4)	ESG1002
11	Spring	EBH1559	56	Switch(FWD/REV)(S3)	ESH1006
12	Spring	EBH1560	57	Switch(Load)(S1)	ESN1016
13	Spring	EBH1561	58	Switch(Mute)(S2)	ESN1017
14	Spring	EBH1562	59	Head Assy(HD1)	EXA1466
15	Spring	EBH1563	60	Motor Unit(M1)	EXA1467
16	.....		61	Flywheel Unit	EXA1468
17	Spring	EBH1565	62	Plate	ENC1423
18	Spring	EBH1566	63	Arm Unit	EXA1447
19	Spring	EBH1567	64	Arm Unit	EXA1448
20	Spring	EBH1568	65	Arm Unit	EXA1470
21	Spring	EBH1569	66	Reel Unit	EXA1450
22	Spring	EBH1571	67	Pinch Holder	ENV1466
23	Spring	EBH1579	68	Pinch Roller	ENV1501
24	Head Base	ENC1475	69	Pinch Holder	ENV1467
25	Lever	ENC1460	70	Roller Unit	EXA1482
26	Lever	ENC1461	71	Chassis Unit	EXA1471
27	Lever	ENC1462	72	.....
28	Lever	ENC1432	73	Washer	HBF-179
29	Arm	ENC1433	74	Resistor(R1)	RD1/4HM472J
30	Arm	ENC1434	75	Diode(D1)	FISR-35-100A
31	Arm	ENC1435	76	Solenoid(SO1)	EXP1012
32	Arm	ENC1476	77	Arm	ENV1497
33	Bracket	ENC1477	78	Spring	EBH1582
34	Lever	ENC1438	79	Cover	ENC1452
35	Arm	ENC1439	80	Screw	BSZ23P050FMC
36	Frame	ENC1440	81	.....
37	Holder	ENC1441	82	Spring	EBH1592
38	Lever	ENC1446	83	Screw	BSZ23P050FMC
39	Lever Unit	EXA1469	84	Cover	ENC1468
40	Belt	ENT1027	85	Spring	EBH1588
41	Gear	ENV1504	86	Arm	ENC1459
42	Gear	ENV1470	87	Arm	ENV1496
43	Gear	ENV1471	88	Spring	EBH1586
44	Lever	ENV1472	89	Arm	ENC1464
45	Gear	ENV1474	90	Lever	ENC1463
			91	Screw	BSZ20P040FMC

Fig.4

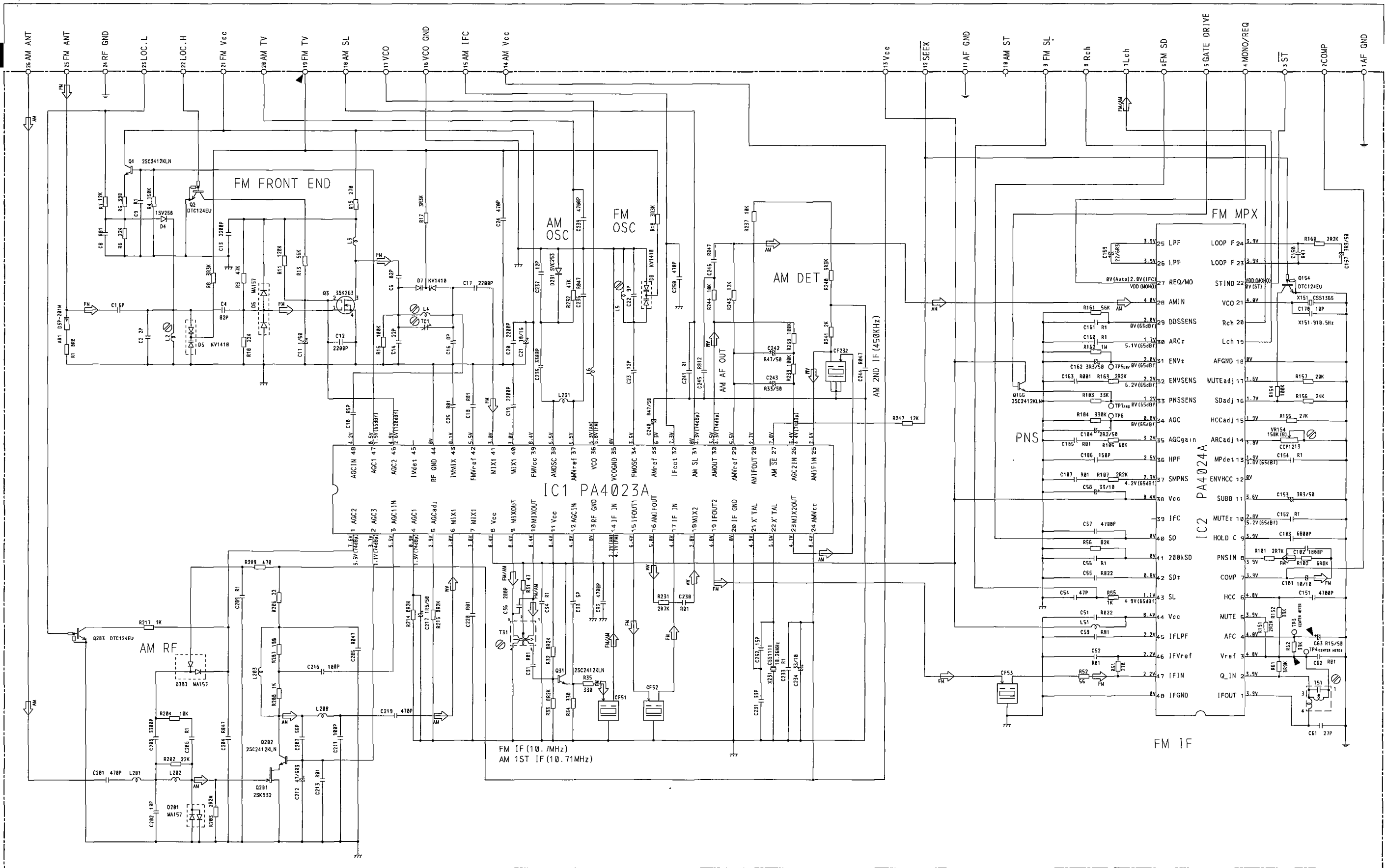
3. SCHEMATIC DIAGRAMS
3.1 OVERALL CONNECTION DIAGRAM



3.2 FM/AM TUNER UNIT

A

C



4.1 TUNER AMP UNIT

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.



4.2 KEY BOARD UNIT

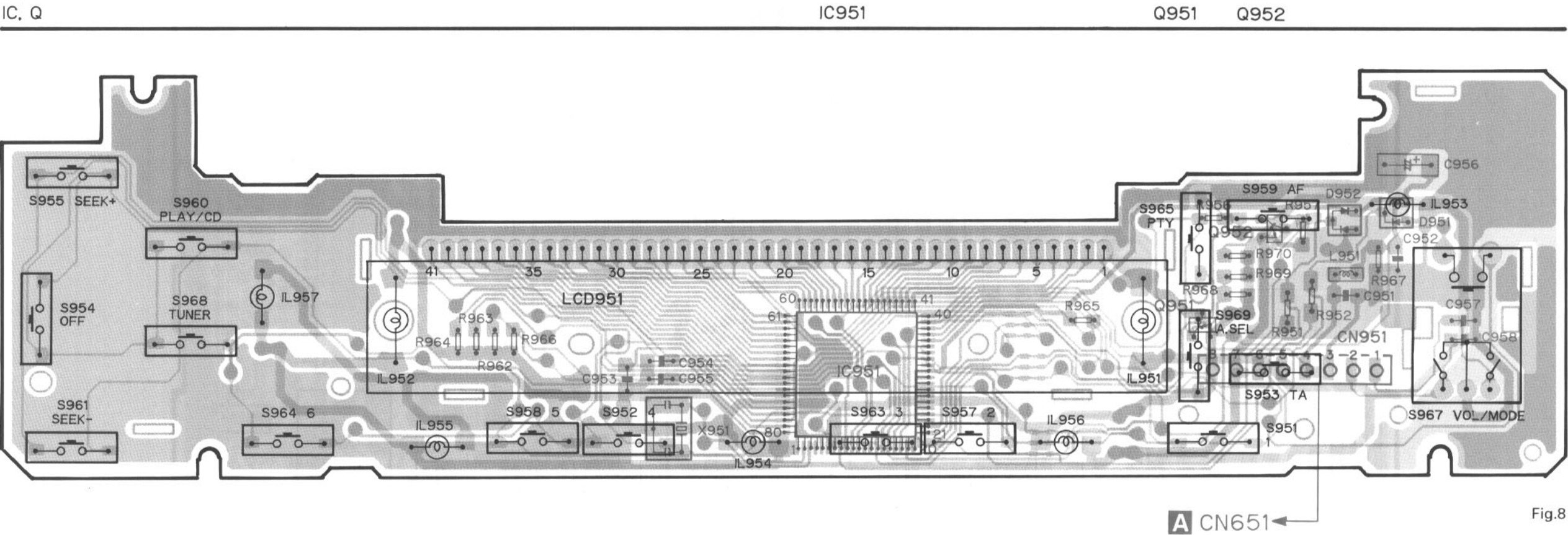


Fig.8

NOTE:
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

4.3 FM/AM TUNER UNIT

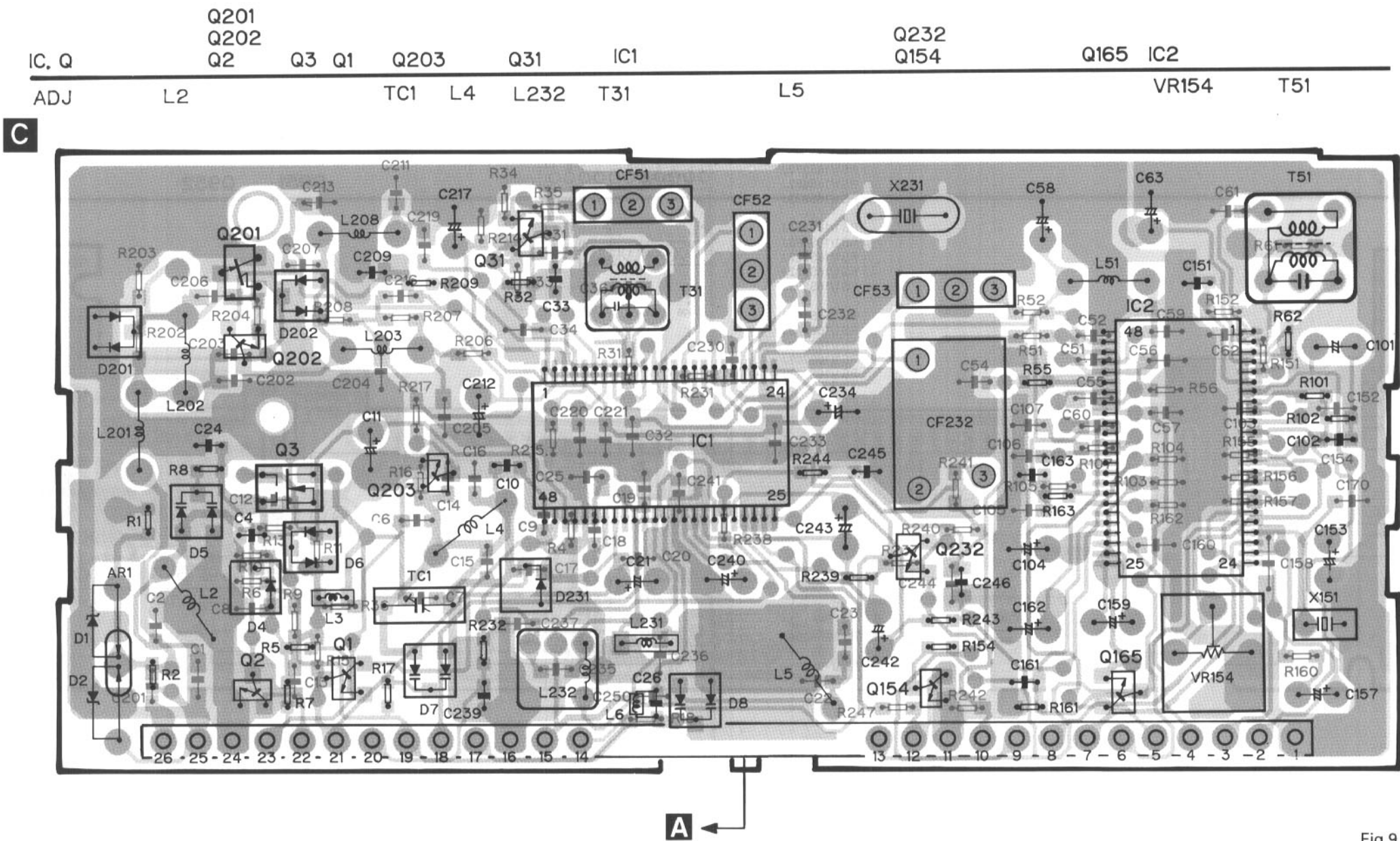


Fig.9

NOTE:
The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

4.4 CONNECTOR UNIT,CASSETTE P.C.BOARD

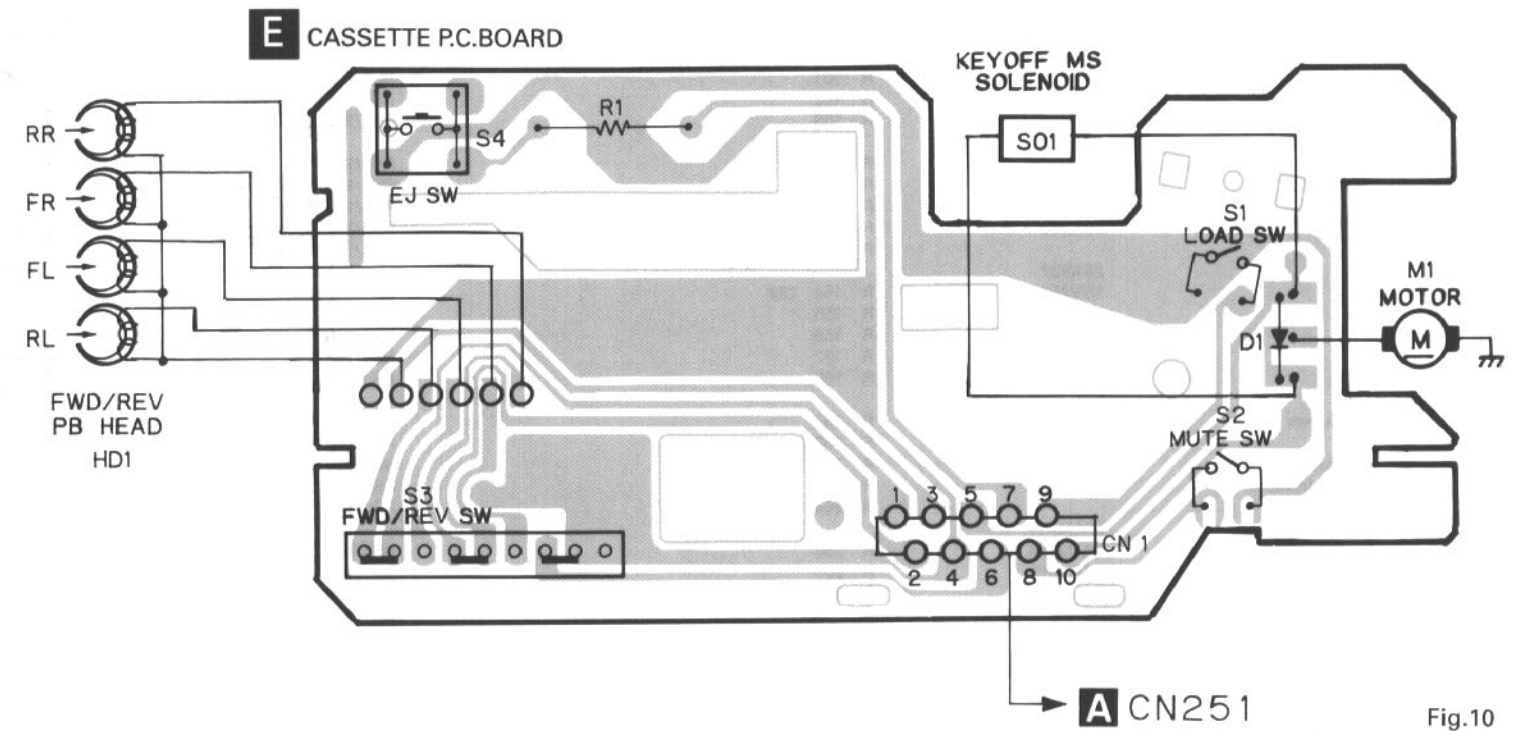
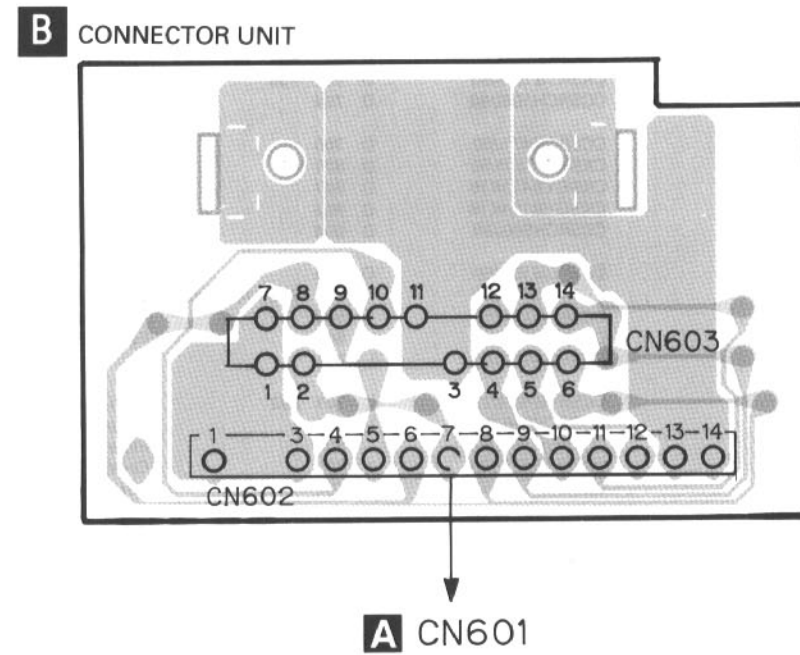


Fig.10

NOTE:

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

5. ELECTRICAL PARTS LIST

- NOTE:
- Parts whose parts numbers are omitted are subject to being not supplied.
 - The part numbers shown below indicate chip components.

Chip Resistor
RS1/○S○○○○J,RS1/○○S○○○○J
Chip Capacitor (except for CQS.....)
CKS....., CCS....., CSZS.....

====Circuit Symbol & No. Part Name=====	Part No.	====Circuit Symbol & No. Part Name=====	Part No.
<div><div>C</div><div>Unit Number : CWE1416 Unit Name : FM/AM Tuner Unit</div></div>		R 61 R 62 R 101 R 102 R 103	RS1/16S392J RS1/16S393J RS1/16S272J RS1/16S682J RS1/16S333J
MISCELLANEOUS		R 104 R 105 R 107 R 151 R 152	RS1/16S334J RS1/16S683J RS1/16S222J RS1/16S222J RS1/16S393J
IC 1 IC 2 Q 1 31 165 202 Q 2 154 203 Q 3	PA4023A PA4024A 2SC2412KLN DTC124EU 3SK263	R 154 239 R 155 R 156 R 157 R 160	RS1/16S104J RS1/16S273J RS1/16S243J RS1/16S203J RS1/16S222J
Q 201 D 4 D 5 7 8 D 6 201 202 D 231	2SK932 1SV250 KV1410 MA157 SVC253	R 161 R 162 R 163 R 203 R 204	RS1/16S563J RS1/16S105J RS1/16S222J RS1/16S225J RS1/16S103J
L 2 4 L 3 L 5 L 6 L 51	CTC1108 LCTB2R2K2125 CTC1107 LCTBR15K1608 LAU150K	R 206 R 207 R 208 217 R 209 R 214	RS1/16S220J RS1/16S101J RS1/16S102J RS1/16S471J RS1/16S822J
L 201 L 202 L 203 L 208 L 231	Ferri-Inductor Ferri-Inductor Inductor Inductor Inductor	R 215 R 231 R 232 R 237 R 238	RS1/16S822J RS1/16S272J RS1/16S473J RS1/16S103J RS1/16S104J
T 31 T 51 TC 1 CF 51 52 53 CF 232	Coil Coil Ceramic Filter Ceramic Filter	R 240 R 241 R 244 R 247	RS1/16S332J RS1/16S202J RS1/16S103J RS1/16S123J
X 151 X 231 VR 154 AR 1	Ceramic Resonator 918.5Hz Crystal 10.26MHz Semi-fixed 150kΩ(B) Capacitor with Discharge Gap		
RESISTORS		CAPACITORS	
R 1 R 4 R 5 R 6 10 202 R 7 243	RS1/16S0R0J RS1/16S154J RS1/16S391J RS1/16S223J RS1/16S123J	C 1 C 2 C 4 C 6 C 8 25 31 52 59 62 105 107 213 220	CCSQCH060D50 CCSRCH020C50 CCSRCH820J50 CCSRCH820J50 CKSRYB103K25
R 8 17 R 9 R 11 R 13 R 15	RS1/16S332J RS1/16S473J RS1/16S124J RS1/16S563J RS1/16S271J	C 9 34 56 152 160 241 C 10 C 11 C 12 13 17 19 20 C 14	CKSQYB104K16 CCSRCH0R5C50 CEA010M50LL CKSRYB222K50 CCSRCH220J50
R 16 R 18 R 31 R 32 R 33	RS1/16S104J RS1/16S332J RS1/16S470J RS1/16S822J RS1/16S822J	C 16 C 18 C 21 C 22 C 23	CCSRCH080D50 CKSRYB103K25 CEA100M16LL CCSRTH090D50 CCSRTH120J50
R 34 35 R 51 R 52 R 55 R 56	RS1/16S331J RS1/16S271J RS1/16S560J RS1/16S102J RS1/16S823J	C 24 C 32 C 33 C 36 C 51	CCSRCH471J50 CKSQYB472K50 CCSRCH050C50 CCSRRH201J50 CKSRYB223K25

====Circuit Symbol & No. Part Name=====	Part No.	====Circuit Symbol & No. Part Name=====	Part No.
C 54 C 55 C 57 C 58 234 C 61	CCSRCH470J50 CKSQYB223K25 CKSRYB472K50 CEA330M10LL CCSRCH270J50	Q 510 Q 551 Q 555 701 902 912 914 Q 705 Q 901	DTC114EU DTC124EK 2SC2459 DTA114EK 2SA1049
C 63 C 101 C 102 C 103 C 104	CEAR15M50LL CEA100M10NPLL CKSRYB182K50 CKSRYB682K25 CEA2R2M50LL	Q 903 Q 904 Q 907 909 Q 908 910 Q 911	2SD1267A 2SD1859 DTB113ZS DTC143XS 2SB1236
C 106 C 151 C 153 157 C 154 C 158	CCSRCH151J50 CKSRYB472K50 CEA3R3M50LL CKSQYB104K16 CKSYB474K16	Q 913 Q 915 D 251 503 551 552 651 652 653 654 655 656 D 501 D 554	2SA1429 2SA1049 1SS133 MA151WK HZS9L(A2)
C 159 C 161 209 C 162 C 163 C 170 202	CEA220M6R3LL CKSQYB104K16 CEA3R3M50LL CKSRYB102K50 CCSRCH100D50	D 556 557 903 D 559 D 657 658 701 D 702 703 D 704	ERA15-02VH ERC05-10B 1SS133 RD18JS(B2) HZS7L(C3)
C 201 C 203 235 C 204 205 244 C 206 233 C 207	CCSRCH471J50 CKSRYB332K50 CKSQYB473K16 CKSQYB104K16 CCSRCH560J50	D 705 D 801 D 901 D 902 D 904	HZS9L(A1) MA8047 HZS9L(B3) ERA15-02VH HZS6L(B1)
C 211 C 212 C 216 C 217 C 219	CCSRCH101J50 CEA470M6R3LL CCSRCH101J50 CEA1R5M50LL CCSRCH471J50	D 905 L 501 503 702 901 L 502 L 504 L 551	HZS6L(C2) LAU2R2K CTF-157 LAU101K CTH1171
C 230 C 231 C 232 C 236 C 237	CKSRYB103K25 CCSRCH330J50 CCSRCH150J50 CKSQYB473K16 CCSRCH120J50	L 701 802 L 801 L 803 X 501 X 701	LAU101K LCTA101J3225 LCTB2R2K2125 CSS1030 CSS1310
C 239 C 240 242 C 243 C 245 C 246	CKSRYB472K50 CEAR47M50LL CEAR33M50LL CKSRYB123K25 CKSQYB473K16	X 801 S 601 VR 501	Crystal Resonator 4.332MHz Switch(Detach Sense) Semi-fixed 2.2kΩ(B) FM/AM Tuner Unit
C 250	CCSRCH471J50	RESISTORS	
A	Unit Number : CWM4701 Unit Name : Tuner Amp Unit	R 251 252 R 253 254 R 255 256 508 511 917 922 R 257 258 265 748 R 260 261 523 537 805 810 811 813 820 837	RS1/10S273J RS1/10S470J RS1/10S472J RS1/10S104J RS1/10S102J
MISCELLANEOUS		R 262 710 711 712 737 738 747 815 816 844 R 263 R 264 R 266 469 R 451 452 707 841 R 455 456 504 505 518 804	RS1/10S473J RS1/10S473J RS1/10S333J RS1/10S153J RS1/10S0R0J RS1/10S222J
IC 251 IC 451 IC 501 IC 551 IC 552	LA3161P SN761025DL PM2005B TDA7385 PML001A	R 457 458 461 462 527 528 551 819 R 459 460 514 R 463 464 R 465 466 R 467 468	RS1/10S222J RS1/10S152J RS1/10S101J RS1/10S221J RS1/10S823J
IC 601 IC 701 IC 702 IC 703 IC 801	TA2050S PD4699A CA0008AM S-80734AN PD6189A	R 470 R 501 559 655 656 706 R 502 817 R 503 509 565 R 506 510	RS1/10S123J RS1/10S472J RS1/10S562J RS1/10S102J RS1/10S682J
IC 802 IC 803 IC 804 Q 260 Q 261 552 554	PMW001B SC14SU69F NJM2903M DTC144ES DTC124ES	R 507 806 809 812 814 822 823 R 512 538 554 555 564 924 R 513 R 515 516 601 602 603 604 R 517	RS1/10S681J RS1/10S103J RS1/10S561J RS1/10S392J RS1/10S272J
Q 501 508 553 702 703 Q 503 504 Q 505 506 Q 507 Q 509	2SC2458 2SD1468S DTC143TK DTA114ES DTC114ES		

====Circuit Symbol & No. Part Name=====	Part No.	====Circuit Symbol & No. Part Name=====	Part No.
R 525 526	RS1/10S332J	C 477 605 606 817	CEA100M16LL
R 529 530 838 839	RS1/10S223J	C 481	CEA470M16LL
R 531 532	RS1/10S224J	C 503 546	CKSQYB223K50
R 533	RS1/10S824J	C 505 511 521 811 823 913	CKSQYB103K50
R 552	RS1/10S221J	C 506 522 561 562 563 564 565 566 567 568	CKSQYB102K50
R 553	RS1/10S153J	C 509	CKSQYB103K50
R 556 558	RD1/4PU472J	C 520	CKSQYB223K50
R 557 704	RD1/4PU102J	C 524 526	CEA220M6R3LL
R 560 730 731 808	RS1/10S0R0J	C 528	CKLSR473K16
R 561	RD1/4PU182J	C 530 532	CCH1280
R 563	RS1/8S103J	C 534	CEAR47M50LL
R 566 702 708 709 726 740 742	RS1/10S473J	C 535 543 548	CKSQYB103K50
R 605	RS1/10S121J	C 536 537 806 807	CCSQCH270J50
R 606	RD1/2PS681JL	C 539 540	CKSQYB333K50
R 607 608 609 610 746	RS1/10S682J	C 544	CKSQYB332K50
R 651 652 653 654	RS1/8S222J	C 549	CKSQYB473K50
R 701	RS1/10S393J	C 551 552 553 554 556	CEAR22M50LL
R 705	RS1/10S124J	C 555	CEA100M16LL
R 713	RA4C681J	C 557 601 602 603 604	CEA010M50LL
R 714 727	RA3C472J	C 558	CEHAR100M16
R 718	RA4C102J	C 559	CKSYB104K50
R 719 720 723 728 729	RS1/10S102J	C 570 573 812	CKSQYB222K50
R 721 722 724 725	RS1/10S681J	C 571	CEAS472M16
R 732	RS1/8S222J	C 572 821 912	CEA4R7M35LL
R 733	RS1/10S392J	C 574	CKSQYB473K50
R 734 736 906	RD1/4PU101J	C 575 815	CKSQYB104K50
R 735	RD1/4PU680J	C 701	CCSQSL101J50
R 739	RS1/10S223J	C 704 804 809	CKSQYB102K50
R 741	RS1/10S104J	C 709	CKSQYB102K50
R 744 840	RS1/10S333J	C 801 803 818 824 901 905	CKSQYB103K50
R 801 828	RA3C681J	C 805	CCSQSL101J50
R 802	RA3C473J	C 813	CKSYB104K16
R 818	RD1/4PU105J	C 814	CKSYB105K16
R 821	RS1/8S0R0J	C 816	CKSQYB472K50
R 832 836	RS1/10S102J	C 819	CKSQYB104K50
R 842	RD1/4PU121J	C 820	CEA4R7M16NPLL
R 845 846 847	RS1/10S473J	C 903 906 907	CEA220M10LL
R 849	RS1/10S562J	C 904	CEAS102M16
R 850	RS1/10S564J		
R 851 852	RS1/10S222J	<div><div>D</div><div>Unit Number : CWM4704 Unit Name : Key Board Unit</div></div>	
R 853	RS1/10S102J	MISCELLANEOUS	
R 901 904 914 918 919	RD1/4PU103J	IC 951	PD6122A1
R 902	RD1/4PU221J	Q 951	2S81198K
R 903	RD1/4PU272J	Q 952	2SC2713
R 905	RS1/10S103J	D 951 952	MA153
R 907	RD1/4PU223J	L 951	LCTB2R2K2125
R 915 916 920 921	RD1/4PU331J		
R 923	RD1/4PU103J		
R 925	RS1/10S332J	X 951	Ceramic 4.97MHz
R 926	RS1/10S222J	S 951 952 953 954 955	Switch
		S 957 958 959 960 961	Switch
		S 963 964 965 968 969	Switch
		S 967	Switch
CAPACITORS			
C 251 252	CKSQYB681K50	IL 951 952	Lamp 14V40mA
C 253 254 451 452 479 541 542 705	CEA2R2M50LL	IL 953 954 955 956 957	Lamp 14V40mA
C 255 256 902	CEA101M10LL	LCD951	LCD
C 257 258 471 472	CKSQYB333K50		
C 259	CCH1014		
C 260 261 262 263 478 518 523 525 527 531	CKSQYB103K50	RESISTORS	
C 453 454 455 456 469 470	CEA2R2M35NPLL	R 951 952	RS1/8S222J
C 457 458 480 507 512 513 533 651 652 702	CKSQYB103K50	R 956 957 967	RS1/10S472J
C 459 460 461	CEA100M10NPLL	R 962 963 964	RS1/10S394J
C 462	CEA100M16NPLL	R 965	RS1/10S102J
		R 966	RS1/10S473J
C 463 464 501	CKSQYB152K50		
C 465 466	CKSQYB183K50	R 968	RS1/10S103J
C 467 468 515 706 707 708	CKSQYB102K50	R 969 970	RS1/10S821J
C 473 474 514 519	CCSQSL101J50		
C 475 476	CKSQYB223K50		

====Circuit Symbol & No. Part Name===== Part No.

CAPACITORS

C 952 957 958	CKSQYB103K50
C 953 954 955	CKSQYB223K50
C 956	CSZSC100M16

====Circuit Symbol & No. Part Name===== Part No.

E Unit Number :
Unit Name : Cassette P.C.Board

S 1	Switch(Load)	ESN1016
S 2	Switch(Mute)	ESN1017
S 3	Switch(FWD/REV)	ESH1006
S 4	Switch(Eject)	ESG1002
R 1		RD1/4HM472J

Miscellaneous Parts List

HD 1	Head Assy	EXA1466
M 1	Motor Unit	EXA1467

6. ADJUSTMENT

6.1 TUNER SECTION

FM ADJUSTMENT

Modulation M1:MONO MOD., 400Hz 30%(22.5kHz Dev.)

M2:MONO MOD., 1kHz 30%(22.5kHz Dev.)

S1:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)

NOTE:Before proceeding to further adjustments after switching power ON, let the tuner run for ten minutes to allow the circuits to stabilize.

	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
TUN Volt	1	.....	.....	108.0	L5	DC V Meter(1) : 6V
IF	1	98.1 M1	60	98.1	T51	Center Meter : 0
ANT Coil	1	98.1 M1	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	1	98.1 M1	5	98.1	L4	mV Meter(1) : Maximum
Image	1	129.3 M1	60—80	107.9	TC1	mV Meter(1) : Minimum
IFT	1	98.1 M1	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	1	98.1 S1	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

RDS SL ADJUSTMENT

	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
	1	98.1 M2	35	98.1	VR501	DC V Meter(2) : 1.75±0.05V

● Connection Diagram

NOTE:
Select C1 so that total capacity of 80pF is attained from the direction of the receiver jack.
Z: Output impedance of SSG.

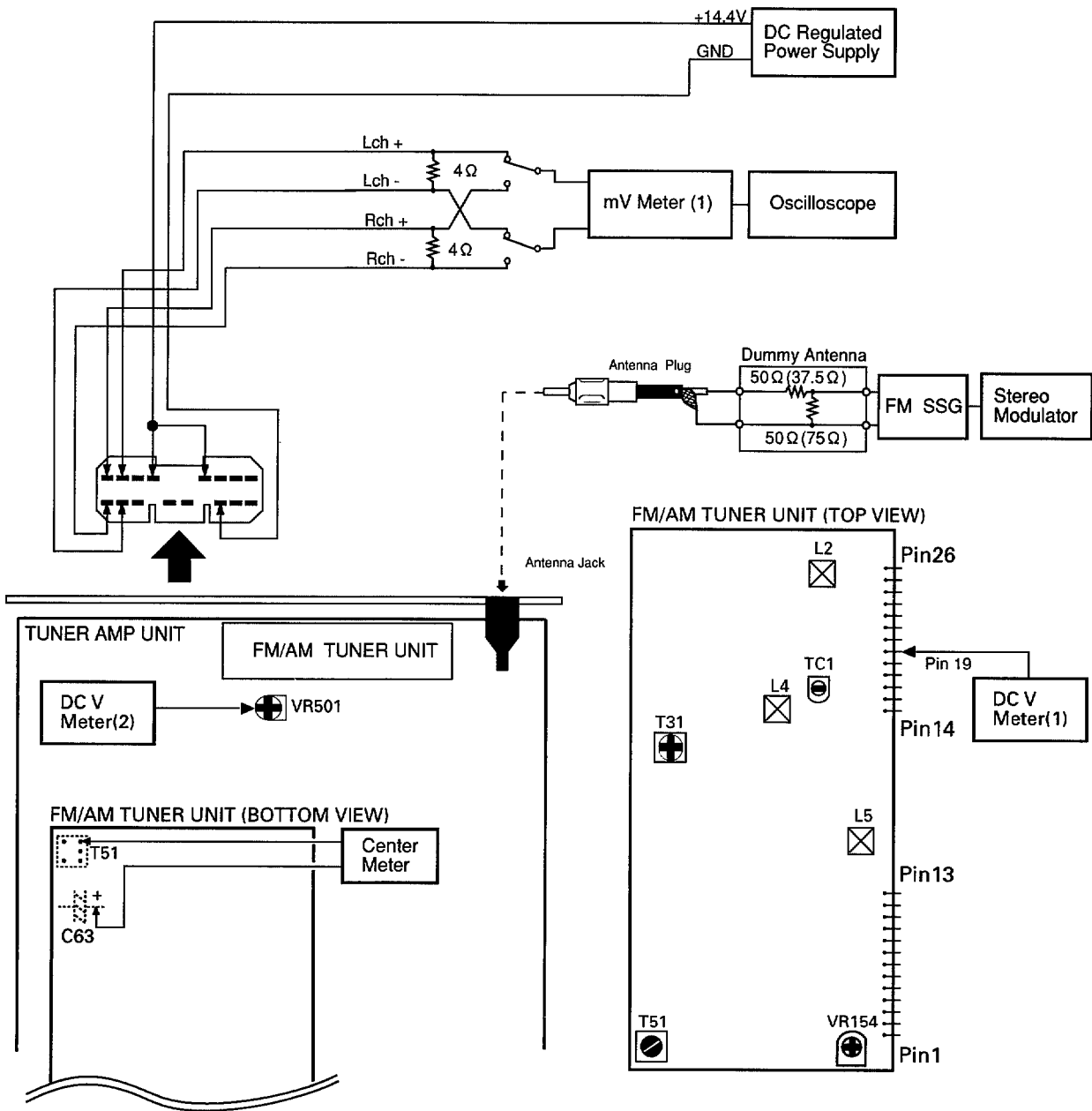
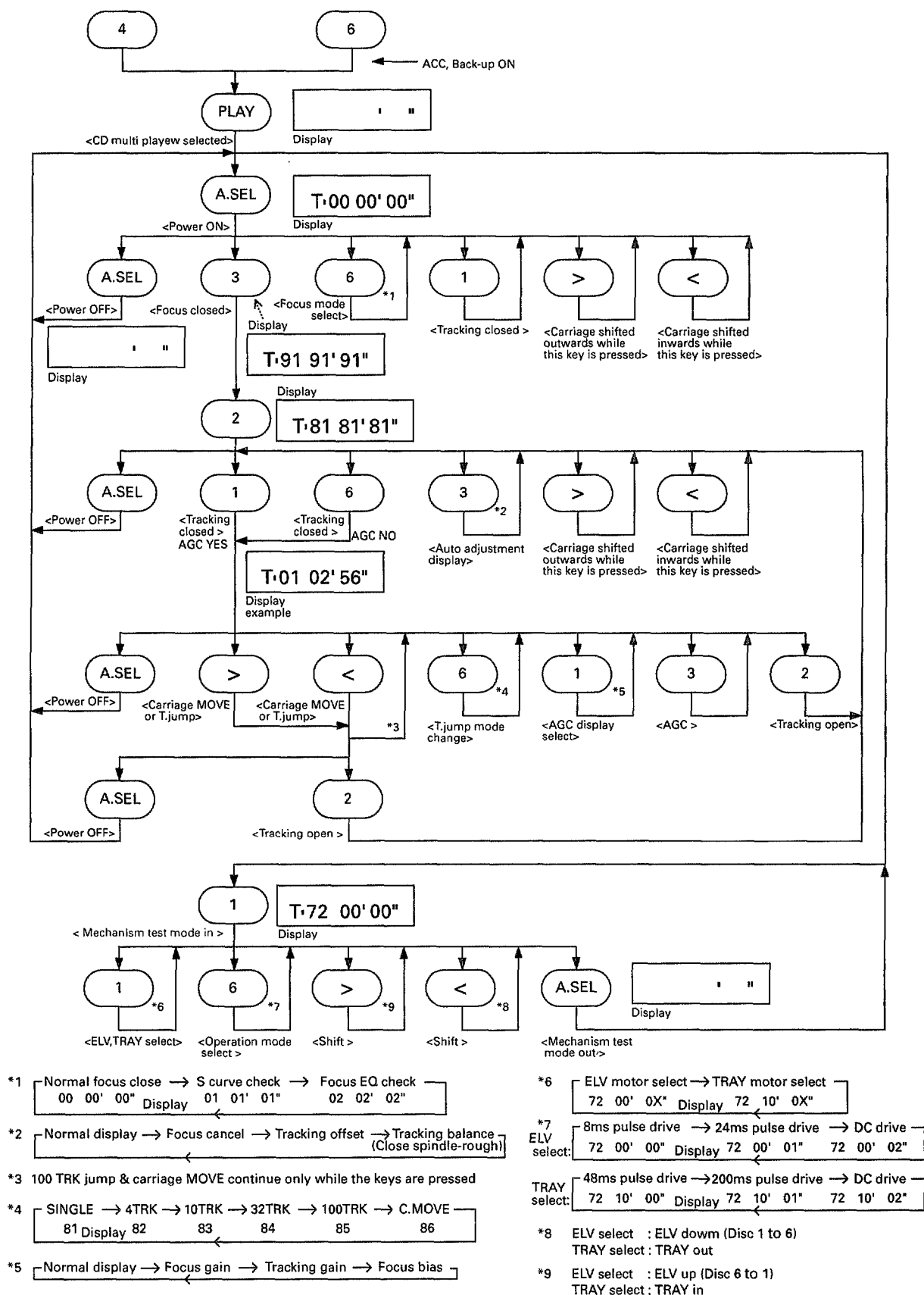


Fig.11

6.2 TEST MODE

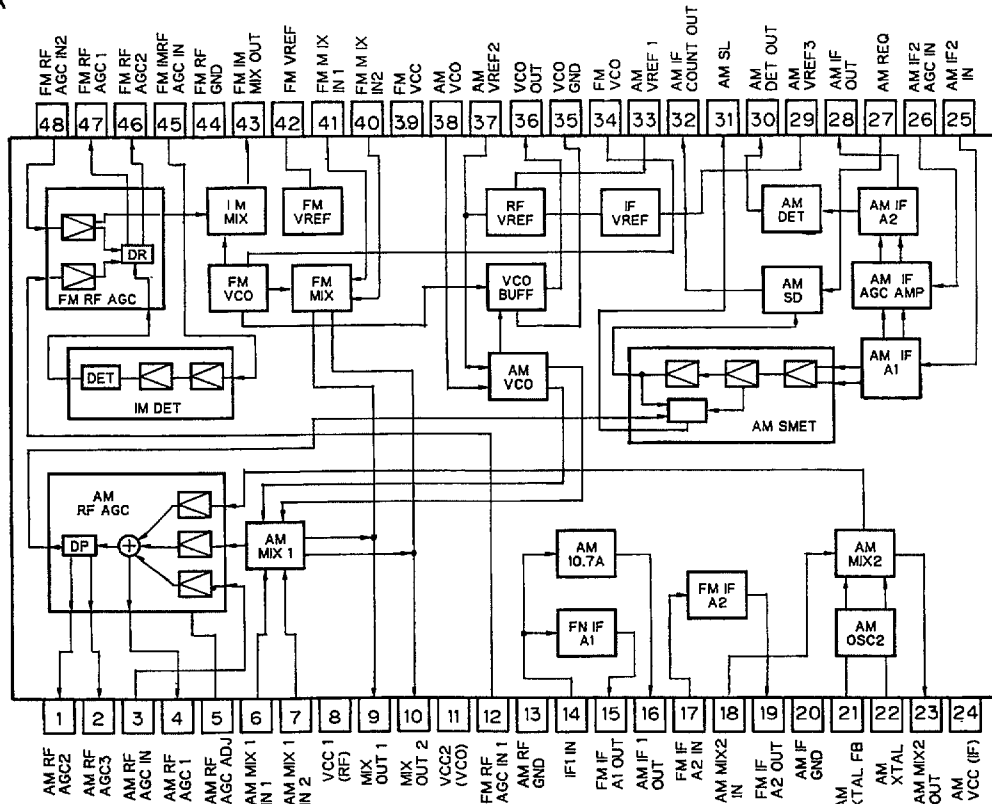


7. GENERAL INFORMATION

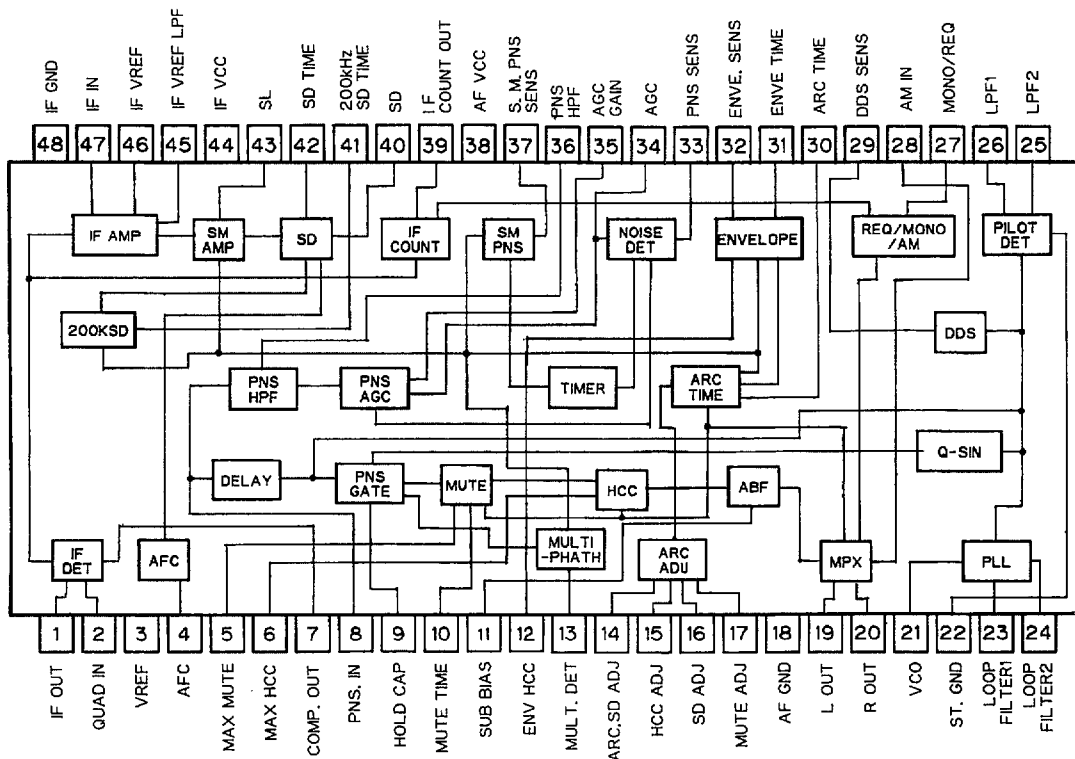
7.1 PARTS

7.1.1 IC

PA4023A



PA4024A

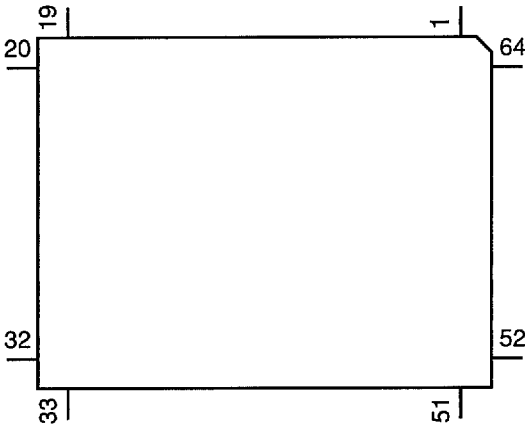


● Pin Functions(PD6189A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	PCK	O	N	Serial clock output for PLL IC
2	PDO	O	N	Data output for PLL IC
3	PDI	I		Data input from PLL IC
4	SL	I		Signal level input from tuner
5	NL	I		Noise level input
6	MDSSENS	I		Modulation detect input
7	SOUND	I		Composite signal input
8	RMUTE	O	N	RDS mute output
9-11	NC			Not used
12	AVCC			Analog power supply
13	AVR			5V power supply
14	AVSS			GND
15	IRSEL	I		Select input
16	RCK	I		RDS demodulation clock input
17	RDT	I		RDS demodulation data input
18	LDET	I		PLL lock sense input
19	RDSLK	I		RDS LK signal input
20	IRrst	I		Reset input
21	MOD0			Connect to GND
22	MOD1			Connect to GND
23	XIN	I		Crystal oscillating element connection pin
24	XOUT	O		Crystal oscillating element connection pin
25	VSS			GND
26	DRST	O	C	Decoder reset output
27	L/S	O	C	Sensitivity of noise level select
28	CURRO	O	C	PLL-TV-Fix output
29	IRRDY	O	C	Communication ready output
30	RECIVE	O	C	During RDS data reception output
31	CORR	O	C	Disapprove of error correction output
32	ERROR	O	C	Error output
33-37	NC			Not used
38	DK	I		DK signal input
39	SK	I		SK signal input
40-49	NC			Not used
50	VSS			GND
51	TEST	I		Test terminal
52	IRCK	I		Clock input
53	IRDO	O	C	Communication data output
54	IRDI	I		Communication data input
55	RDS57K	I		57kHzBP-OUT sense input
56	GD	O	C	Gate drive control output
57	VCC			5V
58	SD	I		SD signal input
59	PCE	O	C	Chip enable output for PLL IC
60-64	NC			Not used

Format	Meaning
C	C MOS
N	N channel open drain

*PD6189A

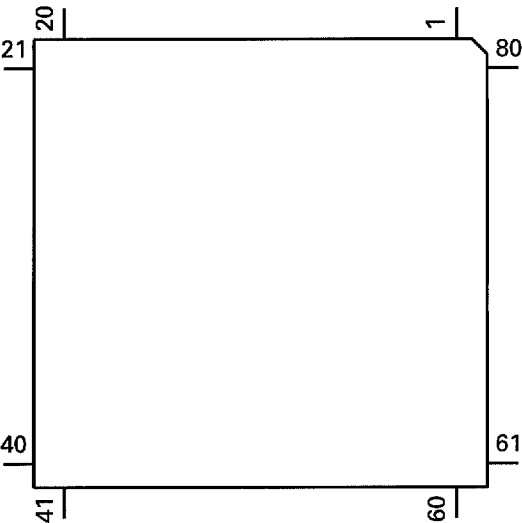


IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

● Pin Functions(PD6122A1)

Pin No.	Pin Name	I/O	Function and Operation
1	VSS		GND
2	X1		Crystal oscillator connection pin
3	X0		Crystal oscillator connection pin
4	NC		Not used
5,6	MODEL1,2	I	Model select
7	NC		Not used
8	KYDT	O	Key data output
9	DPDT	I	Display data input
10	REMIN	I	Remote control pulse input
11,12	NC		Not used
13-16	KD4-1	O	Matrix key return
17,18	NC		Not used
19-22	KST4-1	O	Key strobe output
23-31	VDD		Power supply
32-48	NC		Not used
49-73	SEG25-1	O	LCD segment output
74-77	COM1-4	O	LCD common output
78-80	V3-1		Power supply

*PD6122A1

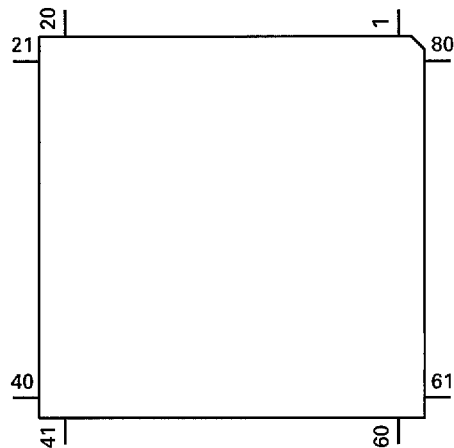


● Pin Functions(PD4699A)

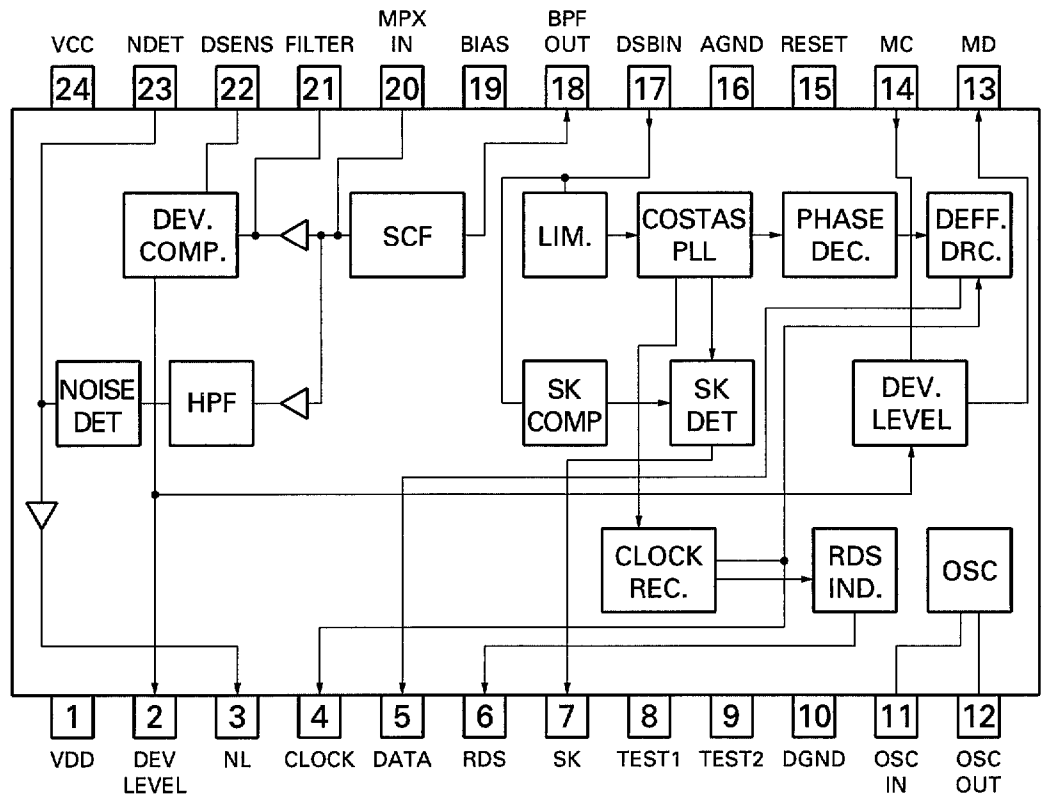
Pin No.	Pin Name	I/O	Function and Operation
1	SWVDD	O	Grille power supply control output
2	ILMPW	O	Illumination power supply control output
3	NC		Connect to GND
4	AVSS		A/D GND
5	VOLUP	I	Volume up input from encoder
6	VOLDN	I	Volume down input form encoder
7	AVREF		A/D converter reference voltage
8	KYDT	I	Key data input
9	DPDT	O	Display data output
10	NC		Connect to GND
11	VST	O	Strobe pulse output for electronic volume
12	VCK	O	Clock output for electronic volume
13	VDI	O	Data output for electronic volume
14	NC	O	Connect to GND
15	RDSTEST	I	RDS test input
16	RDSDI	I	Serial data input for RDS IC
17	RDSDO	O	Serial data output for RDS IC
18	RDSCK	O	Serial clock output for RDS IC
19	RDSRST	O	Reset output for RDS IC
20	RDSSEL	O	Select output for RDS IC
21-25	NC		Not used
26	SYSPW	O	System power supply control output
27-29	NC		Connect to GND
30	DMINH	O	Mechanism mute off output
31	MECPW	O	Cassette mechanism power output
32	TAPLD	I	Tape loading sense input
33	VSS		GND
34	MECMUTE	I	Cassette mechanism mute input
35	FWD/REV	I	FWD/REV sense input
36	TMUTE	O	Tuner mute output
37	LDETEN	O	"L" output when back up , Acc , detach ON
38,39	NC		Connect to GND
40	PDI	I	PLL data input
41	PCK	O	PLL clock output
42	PDO	O	Data output for PLL IC
43	PCE	O	Chip enable output for PLL IC
44	NC		Connect to GND
45	PEE1	O	Beep tone output
46	PEE2	O	Beep tone output
47-49	NC		Connect to GND
50	SD	I	SD input
51	ST	I	FM stereo input
52-55	NC		Connect to GND
56	IPDO	O	IP driver data output
57	IPDI	I	IP driver data input
58	IPPW	O	Power supply control output for IP BUS interface IC
59	ASENBO	O	Slave power supply control output
60	RESET	I	Reset Input
61	RDSRDY	I	Ready input from RDS IC
62	BSNS	I	Back up power sense input
63	ASNS	I	ACC power sense input
64	ISNS	I	Illumination sense input
65	DSNS	I	Grille detach sense
66	EJECT	I	Eject key input pin
67	NC		Connect to GND
68	VDD		Power supply
69	X2		Crystal oscillator connection pin

Pin No.	Pin Name	I/O	Function and Operation
70	X1		Crystal oscillator connection pin
71	IC		GND
72	XT2		Not used
73	TESTIN	I	Test program mode input
74	AVDD		Positive power supply terminal for analog circuit
75	AVREF0		Not used
76	SL	I	Signal level input
77	ADPW	O	AD power output
78	NC		Connect to GND
80	MUTE	O	System mute output

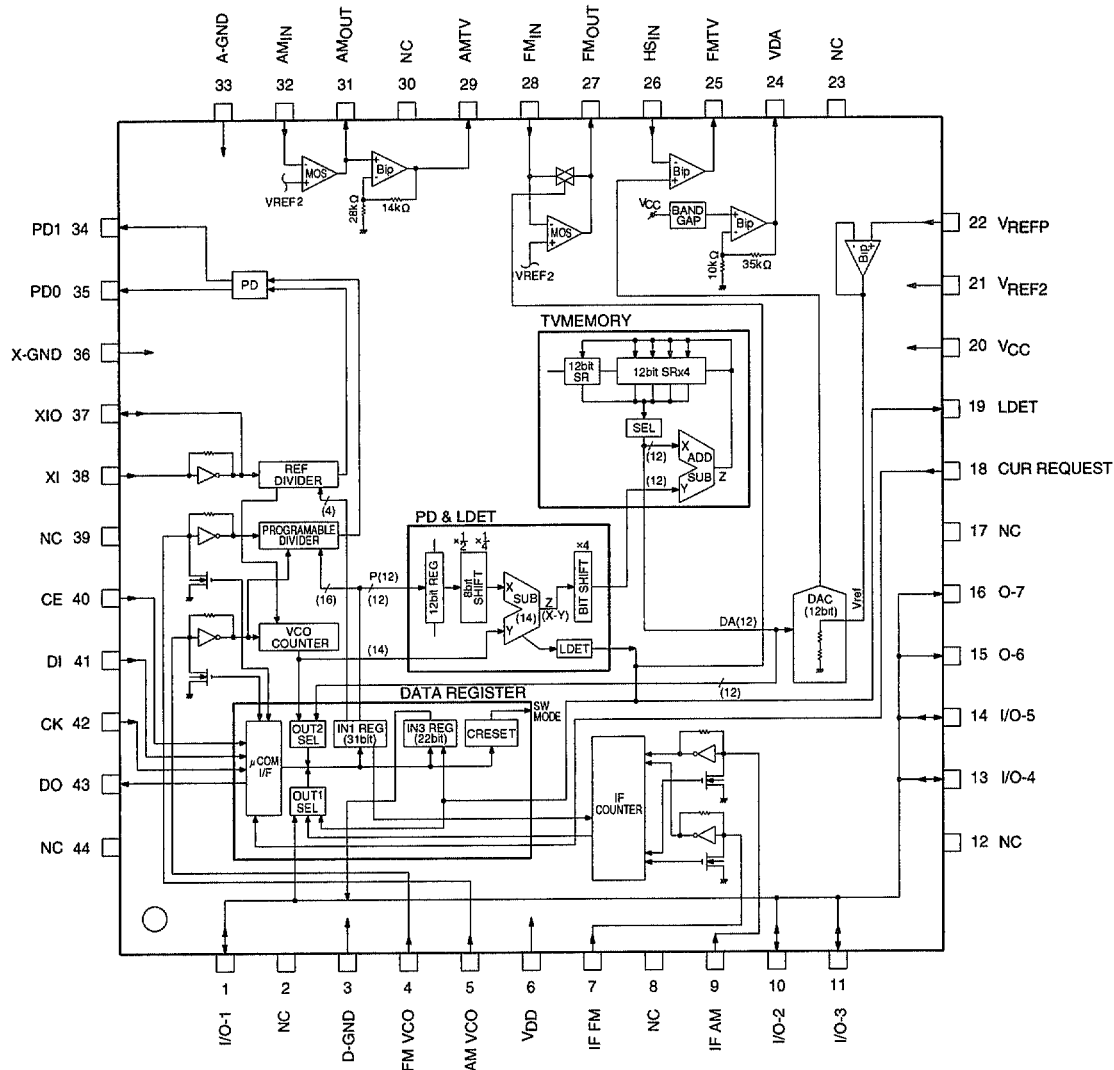
*PD4699A



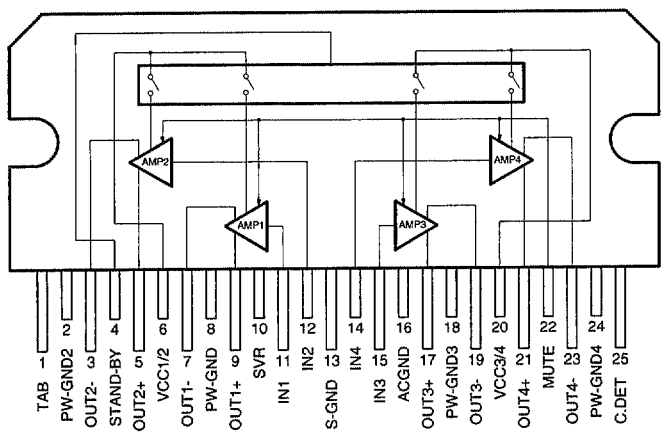
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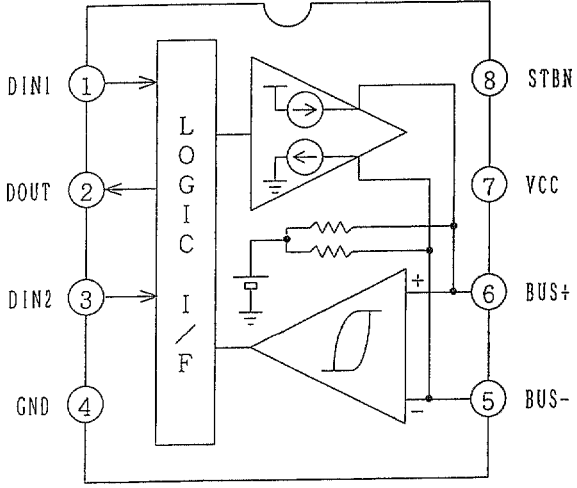
PM2005B



TDA7385

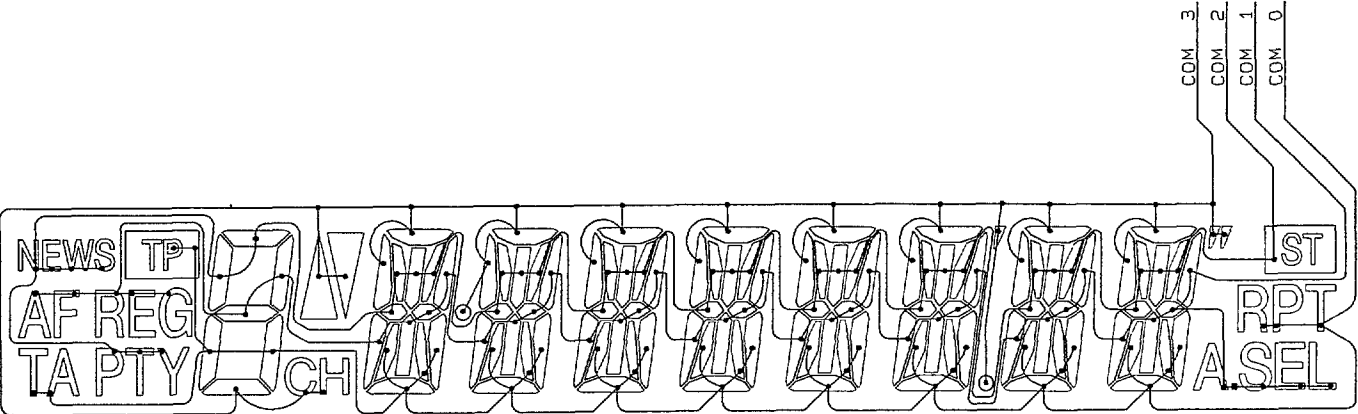


CA0008AM



7.1.2 DISPLAY

COMMON



SEGMENT

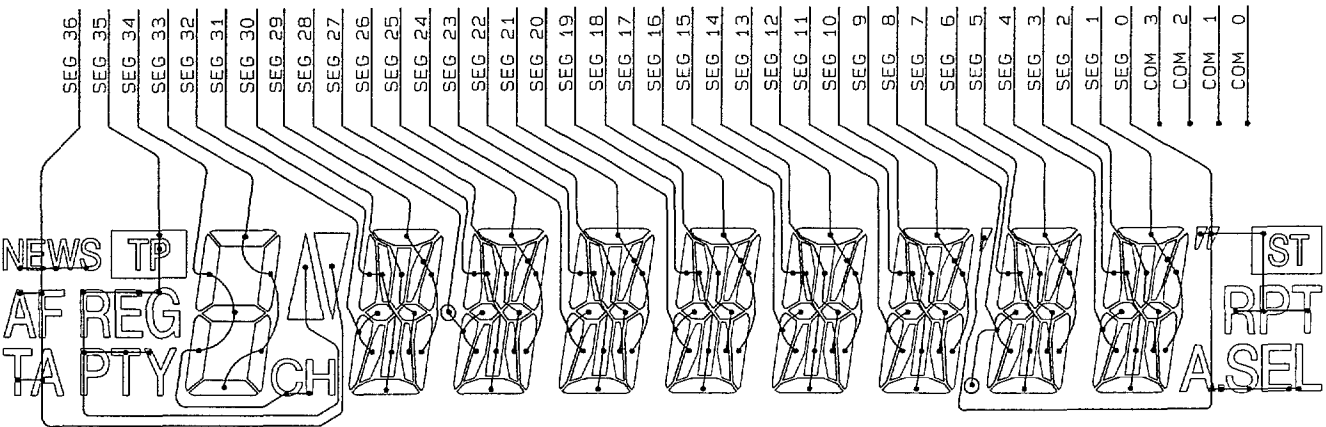
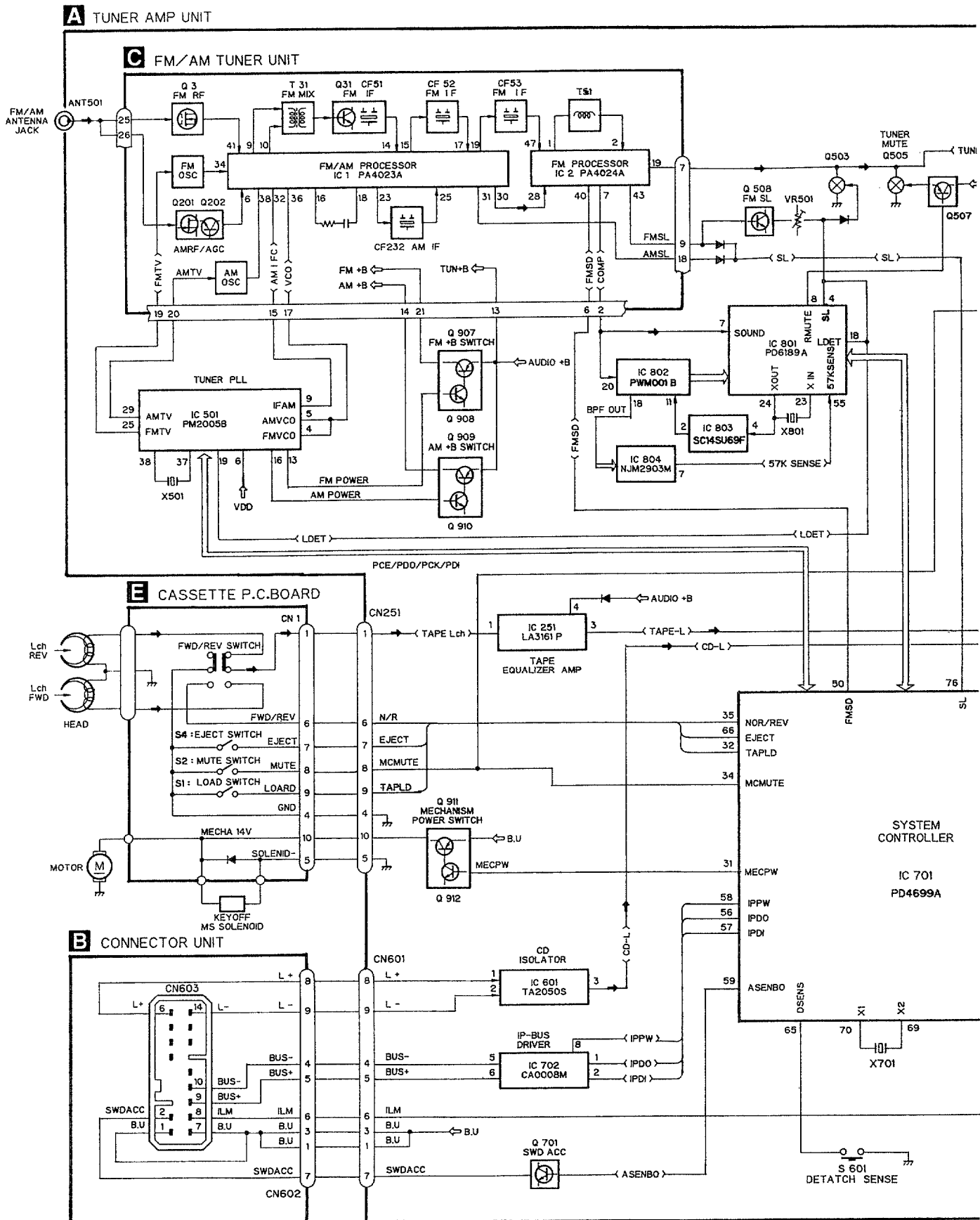


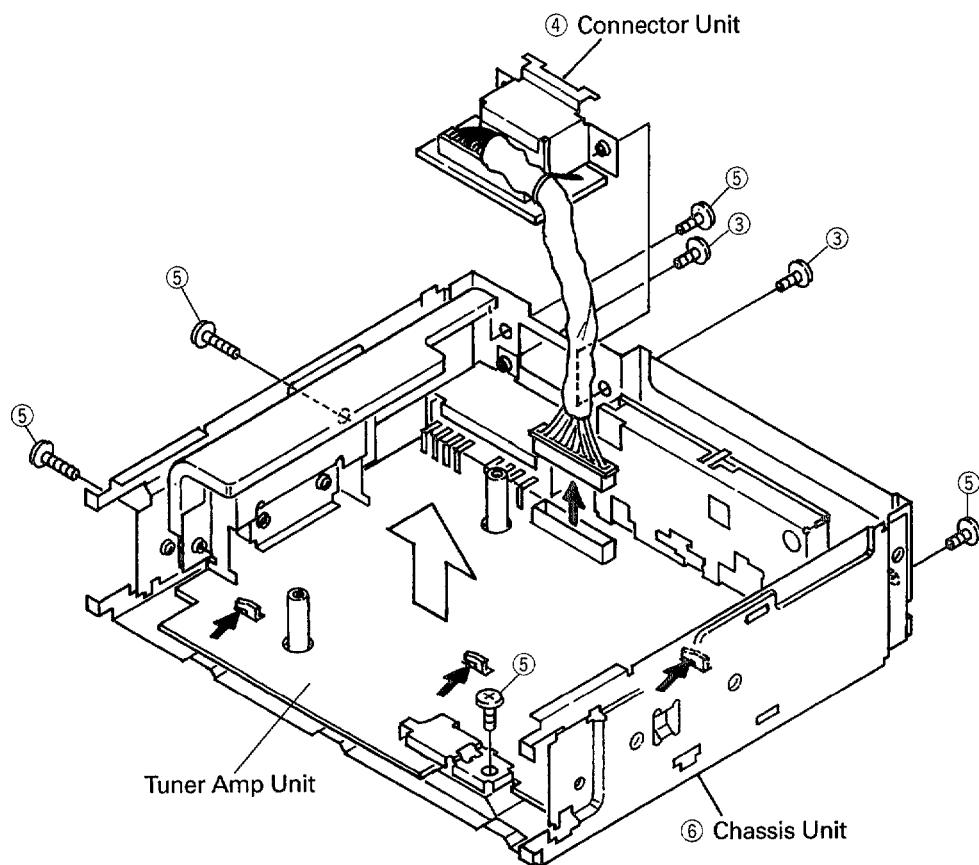
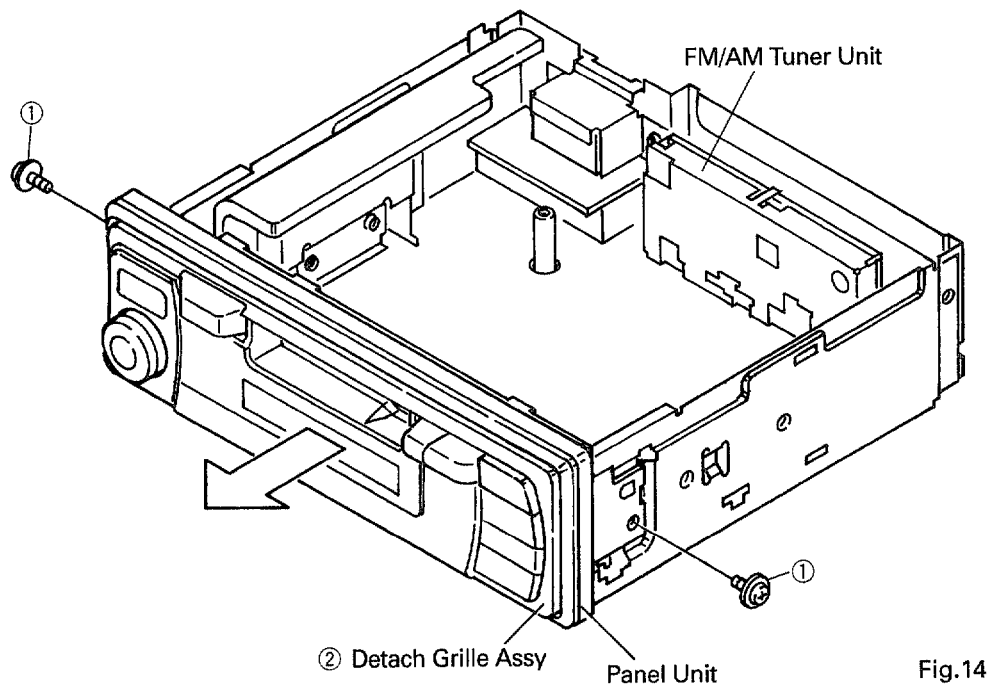
Fig.12

7.2 BLOCK DIAGRAM



7.3 DISASSEMBLY

- Remove in the order of the circled numbers in the disassembly diagram.



7.4 CONNECTOR FUNCTION DESCRIPTION

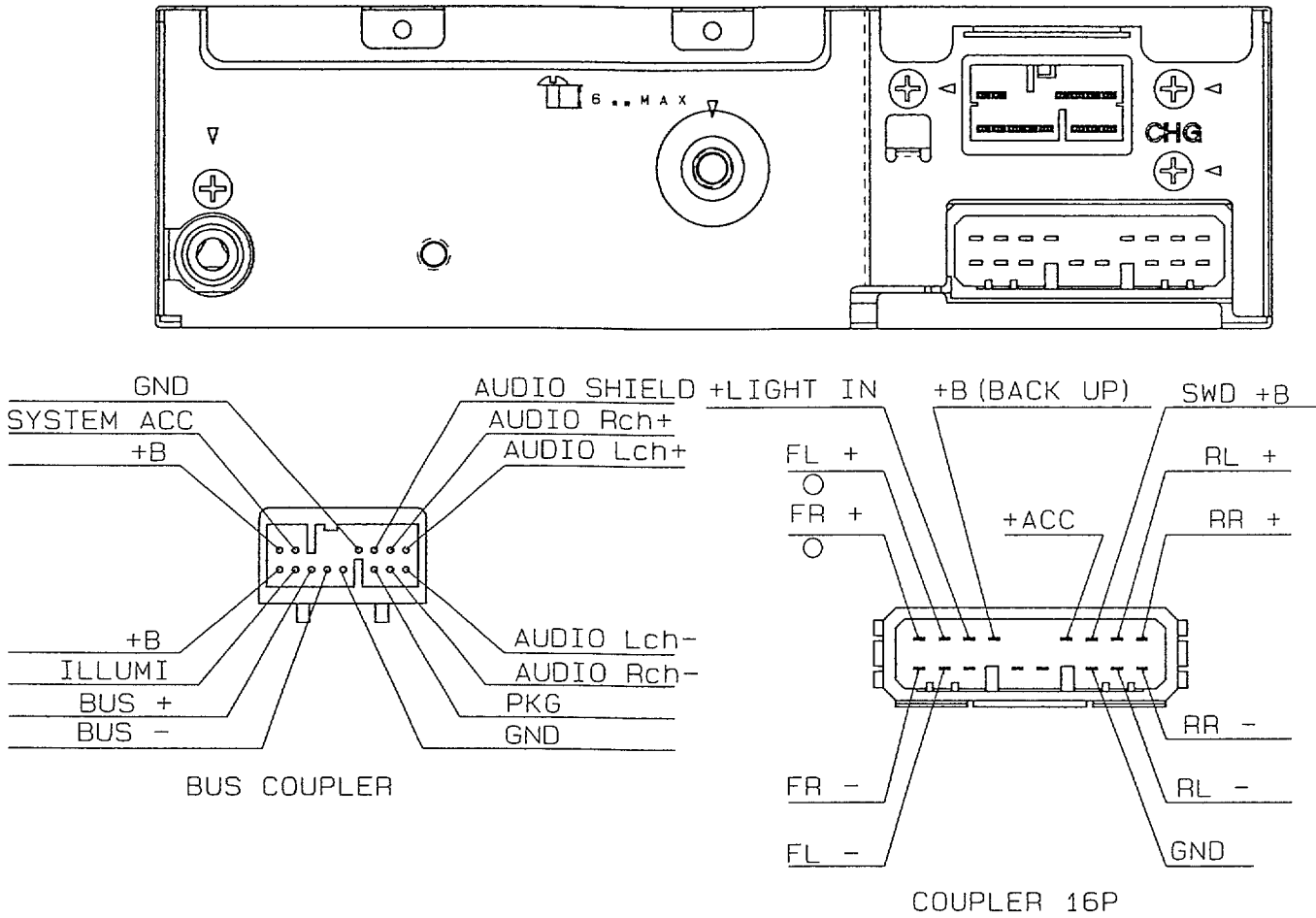
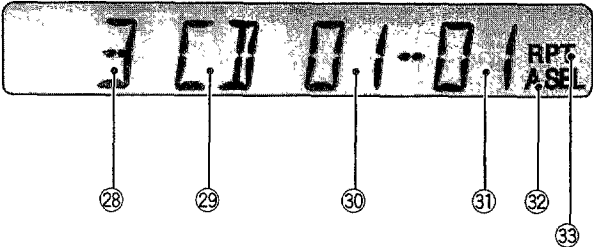
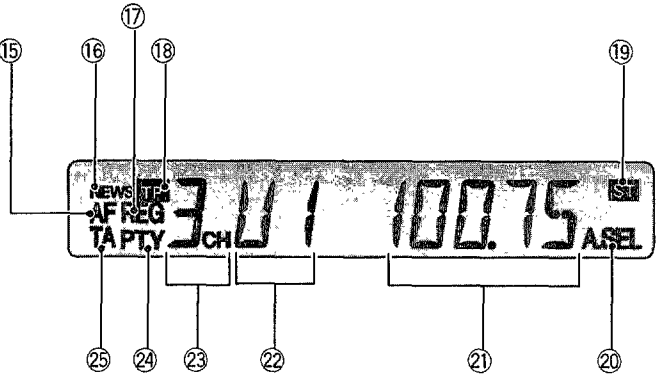
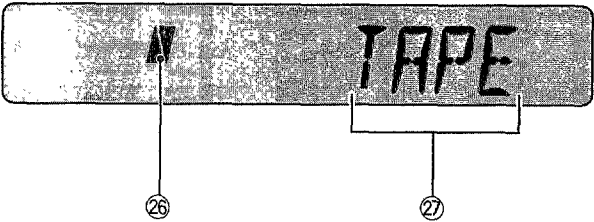
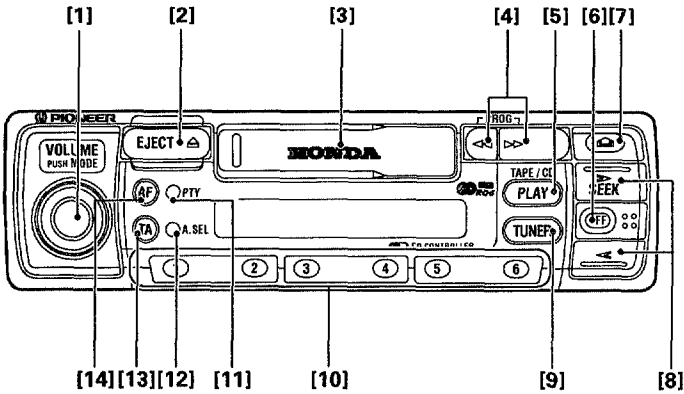
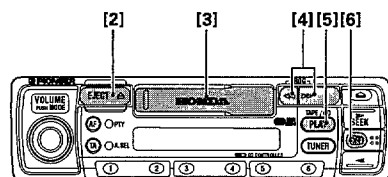


Fig.16

8. OPERATIONS AND SPECIFICATIONS



BASIC OPERATIONS



SWITCHING POWER ON

Radio [9][6]

When button [9] is pressed, the radio power is turned on. To turn off, press button [6].

Tape [6][5][2]

When a cassette is inserted in the cassette door [3], it is loaded and starts playing automatically. It can be stopped by pressing button [6], and restarted by pressing button [5]. To remove the cassette, press button [2].

Advice

- When the proper Honda CD (MD) changer (sold separately) is used, pressing button [5] will alternate between tape and CD (MD) playback.

CD (MD) [5][6]

- The proper Honda CD (MD) changer (sold separately) is required to play CDs (MDs).

Playing of a CD (MD) is started by pressing button [5], and stopped by pressing button [6].

Advice

- When a cassette is inserted, pressing button [5] will alternate between tape and CD (MD) playback.

SWITCHING POWER ON [1]

If button [1] is pressed when the power is off, the power supply of the source before power was turned off is turned on.

ADJUSTING VOLUME [1]

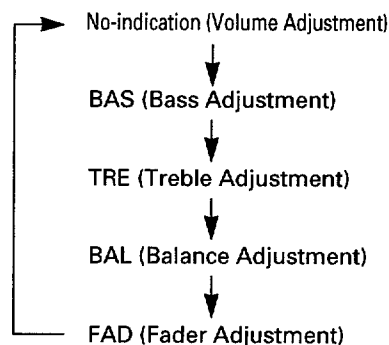
The volume is increased by turning dial [1] to the right, and decreased by turning it to the left. (Display shows "VOL 00" ~ "VOL 30").

Advice

- When driving, a volume level should be selected that allows sounds outside the vehicle to be heard.

ADJUSTING AUDIO [1]

Press button [1] to switch to the mode in which you want to make the adjustment, and turn the dial to make the adjustment. The adjustment mode changes each time the dial is pressed, as shown below.



Advice

- When bass, treble, balance and fader adjustments are made, a beep will be heard at the center position. The adjustment mode is canceled approximately 5 seconds after an adjustment is made.

Adjusting Bass

Select the bass adjustment mode. Bass intensity is gradually increased by turning dial [1] to the right, and decreased by turning dial [1] to the left. (Display shows "BAS -6" ~ "BAS 6").

Adjusting Treble

Select the treble adjustment mode. Treble intensity is gradually increased by turning dial [1] to the right, and decreased by turning dial [1] to the left. (Display shows "TRE -6" ~ "TRE 6").

Adjusting Balance

Select the balance adjustment mode. The balance is gradually changed to left speaker sound only, by turning dial [1] to the left, and to right speaker sound only, by turning it to the right. (Display shows "BAL L9" ~ "BAL R9").

Adjusting the Fader

Select the fader adjustment mode. The balance is gradually changed to front speaker sound only, by turning dial [1] to the right, and to rear speaker sound only, by turning it to the left. (Display shows "FAD F9" ~ "FAD R9").

Advice

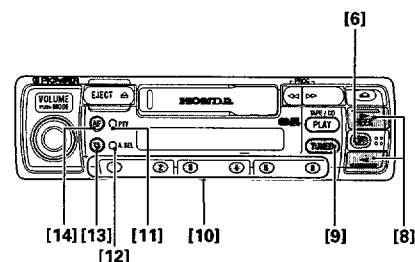
- When a two-speaker system is used, you should set "FAD 0".

OTHER FUNCTION

Illumination

The radio illumination is linked to the car light switch, and the button area lights up when the car lights are turned on.

USING THE RADIO



LISTENING TO THE RADIO

..... [9][6]

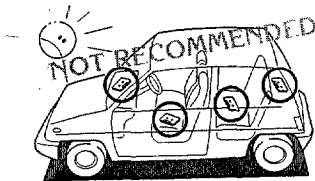
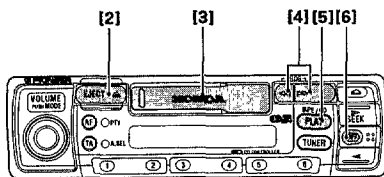
When button [9] is pressed, the radio power is turned on and the Band ② and Frequency ② are displayed. To turn the radio off, press button [6].

CHANGING THE BAND [9]

The band is selected by pressing button [9] repeatedly. Each time the button is pressed, the band changes in the following order.

U1 (FM1) → U2 (FM2) → UT (FMT) → M/L (MW/LW)

USING THE TAPE DECK



BEFORE USING THE TAPE DECK

About Cassette Tape

- Tapes used should be no longer than C-90 (90 minutes). Tapes of longer length than that, such as C-120, may damage the tape drive mechanisms.
- Cassettes with loose or wavy labels on them may damage the unit's eject mechanism, which will prevent the cassette from being removed. Do not use cassettes like these or remove the labels from them.
- Don't store cassette tapes where they would be exposed to direct sunlight or subject to high temperatures. That may warp the cassettes and tapes and cause damage to the tape feed mechanisms.

- When not listening to tapes, place them in the cassette case for storage to prevent them from getting bent or dusty.

Cleaning the Head

The head is the all important sound pickup. If the head gets dirty, sound reproduction will be poor and the tape itself may be damaged. Periodically, once or twice a month clean the head with a cleaning tape to remove all dirt.

- Before using a cleaning tape available on the market, thoroughly read the instructions that come with it and any other cautions that may be written on the cleaning tape.

LISTENING TO A TAPE ... [6][5][2]

When a cassette is inserted in the cassette door [3], it is loaded and starts playing automatically. The tape direction Ⓢ and TAPE Ⓢ indications are displayed. To stop tape playback,

press button [6], and to start tape playback again, press button [5]. To eject the cassette, press button [2].

Advice

- When the proper Honda CD changer (sold separately) is used, pressing button [5] will alternate between tape and CD playback.

Changing Program [4]

Pressing the two [4] buttons simultaneously will switch from side A to side B of the tape (or vice versa). "▲" in Ⓢ on the display means that side A is being played, and "▼", side B.

USING FAST FORWARD AND REWIND [4]

When playing side A ("▲" Ⓢ lit)

Press the ►► side of button [4] to fast-forward, and the ◀◀ side to rewind.

When playing side B ("▼" Ⓢ lit)

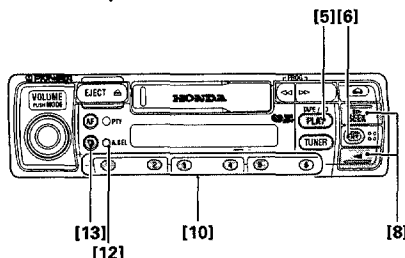
Press the ◀◀ side of button [4] to fast-forward, and the ►► side to rewind.

Advice

- Fast-forward/rewind can be canceled by lightly pressing the opposite button to the one pressed.

PLAYING CD (MD)

- The proper Honda CD (MD) changer (sold separately) is required to play CDs (MDs).
- Since the CD changer and the MD changer can be operated in the same way though there are some differences in indication between them, the following explains operation of the CD changer by way of example.



LISTENING TO A CD [5][6]

When button [5] is pressed, CD playback starts and the disc number Ⓢ, track number Ⓢ appear on the display. Playback is stopped by pressing button [6].

Advice

- When a cassette is inserted, pressing button [5] will alternate between tape and CD playback.
- If there is no magazine in the CD changer, "CD EJECT" will appear on the display.
- When two or more CD changers are connected, press button [5] to select a desired one. The number of selected changer appears in Ⓢ.

SELECTING A DISC [10]

Press the button in [10] with the same number as the number of the disc you want to play.

Advice

- There is a delay of several seconds before the music starts after pressing the button, due to the disc changeover operation.
- When CD changer of 12-discs loading type is connected, switch over between two disc groups as mentioned below. Press button [10] momentarily (within 0.5 second) to select the 1st to 6th discs for playing. Press button [10] for longer than 0.5 second to select the 7th to 12th discs for playing.

TRACK SELECTION (TRACK NUMBER SEARCH) [8]

Press the (<) or (>) side of button [8] for a moment (less than 0.5 seconds), and press the button repeatedly until you reach the track you want to play.

Advice

- If you press the button for longer than 0.5 seconds, fast forward/rewind will operate, and it will not be possible to perform a track number search.

FAST FORWARD AND REVERSE[8]

Press the (<) or (>) side of button [8] until you hear a beep (0.5 seconds or more).

Advice

- Playback can be heard during fast-forwarding or rewinding.
- Fast-forwarding or rewinding is performed only as long as the button is pressed.

AUTOMATIC MUSIC SELECTION [12]

Press button [12] for about 2 seconds, and "A SEL" ② will light. To cancel this setting, press button [12] once again, and "A SEL" ② will disappear.

Advice

- The microcomputer in the CD changer can select and play tracks from the CD randomly.
- The track to be played is selected randomly, and the same track may be played twice in succession.

AUTO ANTENNA OPERATION

When this unit is used in an auto antenna vehicle, the radio antenna will be extended automatically in the following cases.

- When the radio power is turned on.

REPEATED PLAYING OF THE SAME TRACK (REPEAT PLAY) [12]

Press button [12] (for less than 2 seconds) while the track you want to repeat is playing, and "RPT" ③ will light. To cancel this setting, press button [12] again, and "RPT" ③ will disappear.

ELAPSED TIME OF PLAY INDICATION.....[13]

Continue to press button [13] (about 2 seconds) until the set sounds beep. With beep the display indicates elapsed time of play. For cancelling elapsed time indication, press button [13] once again.

SPECIFICATIONS**GENERAL**

Power source13.2 V DC (10.8 — 15.2 V allowable)
Grounding system.....Negative type
Max. current consumption7.5 A
Dimensions (chassis).....178 (W) × 50 (H) × 160 (D) mm
(nose)190 (W) × 60 (H) × 11.8 (D) mm
Weight1.3 kg

AMPLIFIER

Maximum power output25 W × 4
Continuous power output .14 W × 4 (DIN453241, +B = 14.4 V)
Load impedance.....4Ω (4 — 8Ω allowable)
Tone controls (bass)±12 dB (100 Hz)
(treble).....±12 dB (10 kHz)

TAPE PLAYER

TapeCompact cassette tape (C-30 — C-90)
Tape speed4.76 cm/sec.(+0.14 cm/sec.,-0.05 cm/sec.)
Fast forward/rewind timeApprox. 100 sec. for C-60
Wow & flutter0.13% (WRMS)
Frequency response40 — 14,000 Hz (±3 dB)
Stereo separation45 dB
S/N ratio52 dB (IEC-A network)

FM TUNER

Frequency range87.5 — 108 MHz
Usable sensitivity.....11 dBf (mono. S/N: 30 dB)
50 dB quieting sensitivity16 dBf (mono)
S/N ratio.....70 dB (IEC-A network)
Distortion0.3% (at 65 dBf, 1 kHz, stereo)
Stereo separation.....40 dB (at 65 dBf, 1 kHz)

MW TUNER

Frequency range.....531 — 1,602 kHz
Usable sensitivity25dBμV (S/N: 20dB)
Selectivity50 dB (±9 kHz)

LW TUNER

Frequency range.....153 — 281 kHz
Usable sensitivity30 dBμV (S/N: 20 dB)
Selectivity50 dB (±9 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.