

Service Manual

PIONEER®
The Art of Entertainment
RENAULT

ORDER NO.
CRT2233

SYSTEM CONTROL UNIT

SCU-2056ZRN2 X1BEW

- This additional service manual is designed to be used together with Model SCU-2056ZRN/EW Service Manual CRT1908. Refer to it for finding parts numbers and adjustment, etc. which are not shown in this manual.

VEHICLE	DESTINATION	PRODUCED AFTER	PART No.	ID No.	PIONEER MODEL No.
ESPACE	EUROPE	FEBRUARY 1998	6025310671	—	SCU-2056ZRN2/X1BEW

ELECTRICAL PARTS LIST (Page 10)

● Parts List

Tuner Amp Unit

Symbol and Description	Part No.	
	X501 Crystal 4.5MHz	SCU-2056ZRN/EW CSS1011

EXPLODED VIEW AND PARTS LIST (Page 28)

● Parts List

Mark No.	Description	Part No.	
		9 Tuner Amp Unit	SCU-2056ZRN/EW CWM3724
10	Equalizer Unit	CWM3733	UWM3733

PACKING METHOD

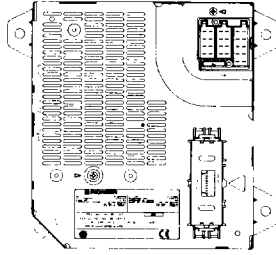
*:Non spare part

Mark	Description	Part No.
		SCU-2056ZRN2/X1BEW
	Polyethylene Bag	UEG-012
*	Cover	UHD-026
	Contain Box	UHD-031
*	Protector	UHP-018
*	Protector	UHP-019
*	Protector	UHP-020

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ORDER NO.
CRT1908

SYSTEM CONTROL UNIT

SCU-2056ZRN EW

VEHICLE	DESTINATION	PRODUCED AFTER	RENAULT PART No.	ID No.	PIONEER MODEL No.
MATRA ESPACE	EUROPE	JULY 1996	6025 30 1081	—	SCU-2056ZRN/EW

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K-FFS. JULY 1996 Printed in Japan

1. SPECIFICATIONS

General

Power source 14.4V DC(10.5-16.0V allowable)
Ground system Negative type
Weight 1.1kg

Amplifier

Maximum power output 15W
Continuous power output 7W
Load impedance 4 Ω (4-8 Ω allowable)
Tone controls
 (Bass) ± 10 dB(100Hz)
 (Middle) ± 10 dB(1kHz)
 (Treble) ± 10 dB(10kHz)

FM tuner

Frequency range 87.5 - 108MHz
Usable sensitivity 9dBf(1.0 μ V/75 Ω ,mono,S/N:30dB)
40dB quieting sensitivity 13dBf(1.7 μ V/75 Ω ,mono)
Signal-to-noise ratio More than 50dB
Distortion Less than 1.0%(at 65dBf,1kHz)
Stereo separation 25dB(at 65dBf,1kHz)

MW tuner

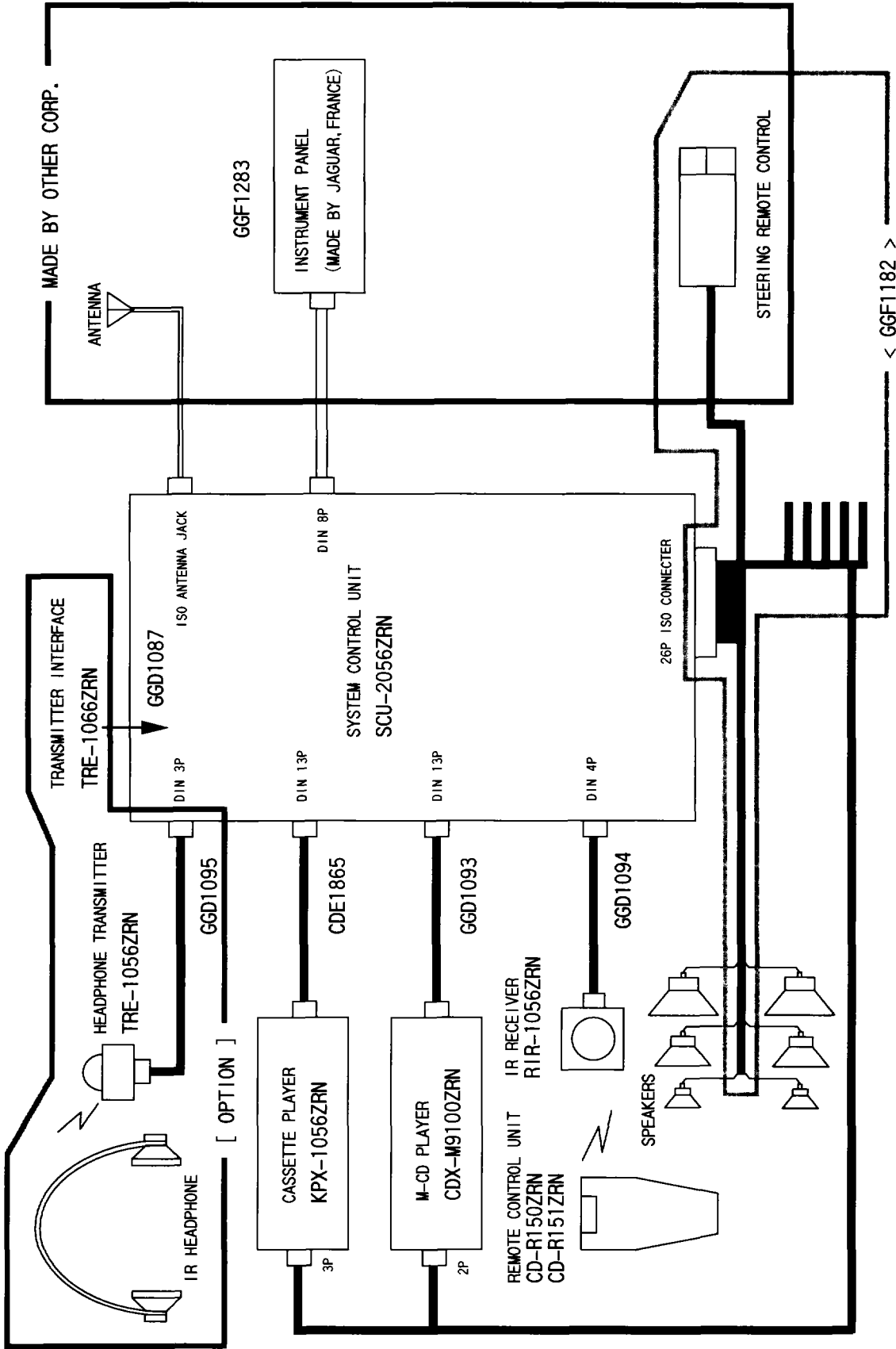
Frequency range 531 - 1,602kHz
Usable sensitivity 30dB(S/N:20dB)
Selectivity 50dB(± 9 kHz)

LW tuner

Frequency range 153 - 281kHz
Usable sensitivity 33dB(S/N:20dB)
Selectivity 50dB(± 9 kHz)

2. CAR AUDIO SYSTEM

CAR AUDIO SYSTEM FOR RENAULT ESPACE



3. CONNECTOR FUNCTION DESCRIPTION

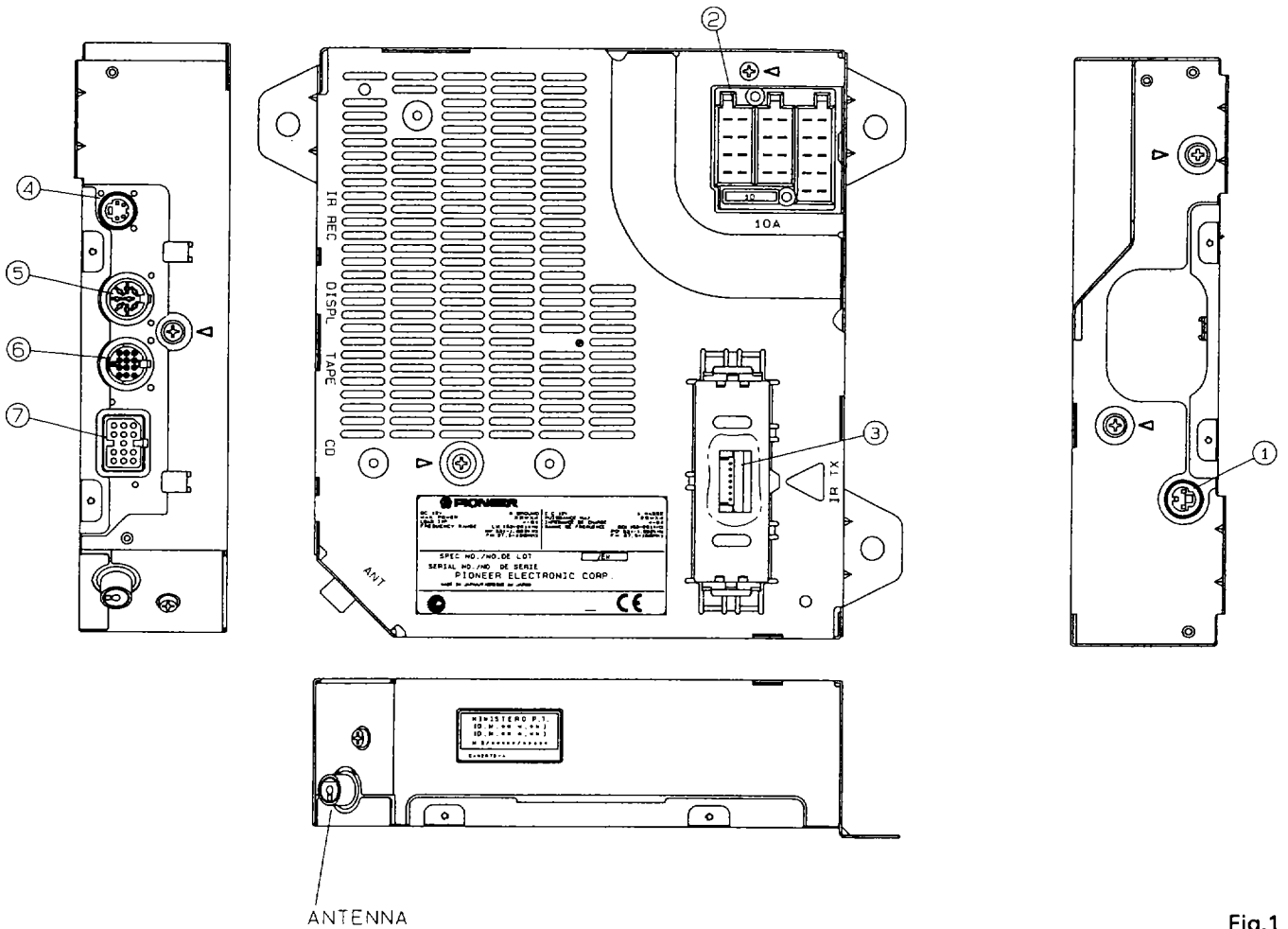
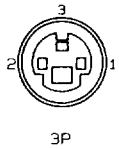
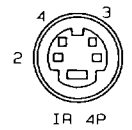


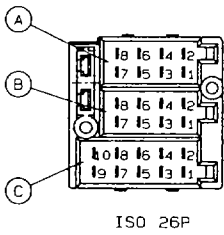
Fig.1



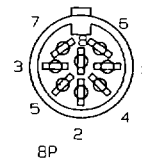
1. IR TX	
1	L OUT
2	R OUT
3	SW +B



4. IR REC	
1	GND
2	SW VDD
3	REMIN
4	N.C



2	
A1	N.C
A2	N.C
A3	TEL MUTE
A4	BACK UP
A5	N.C
A6	N.C
A7	ACC+
A8	GND
B1	R.R+
B2	R.R-
B3	F.R+
B4	F.R-
B5	F.L+
B6	F.L-
B7	R.L+
B8	R.L-
C1	N.C
C2	N.C
C3	N.C
C4	GND
C5	L0
C6	IN2
C7	L1
C8	INO
C9	L5
C10	IN1



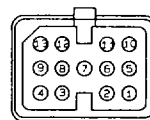
5. DISPL	
1	GND
2	BDATA
3	BSCK
4	BRXEN
5	BSET
6	BINH
7	GND
8	GND



6. TAPE	
1	DK_GND
2	DK_L
3	DK_GND
4	DK_R
5	BUS_GND
6	BUS_GND
7	DMUTE
8	GND
9	BSRQ
10	BRST
11	BRXEN
12	BDATA
13	BSCK



3	
7	LFB -B 5V
6	R OUT
5	L OUT
4	GND
3	SGND
2	R IN
1	L IN



7. CD	
6	CD_GND
5	CD_L
11	CD_GND
10	CD_R
1	BUS_GND
2	BUS_GND
7	SW +B
3	BUS_GND
4	BSRQ
8	BRST
9	BRXEN
12	BSCK
13	BDATA

Fig.2

4. ADJUSTMENT

● 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.

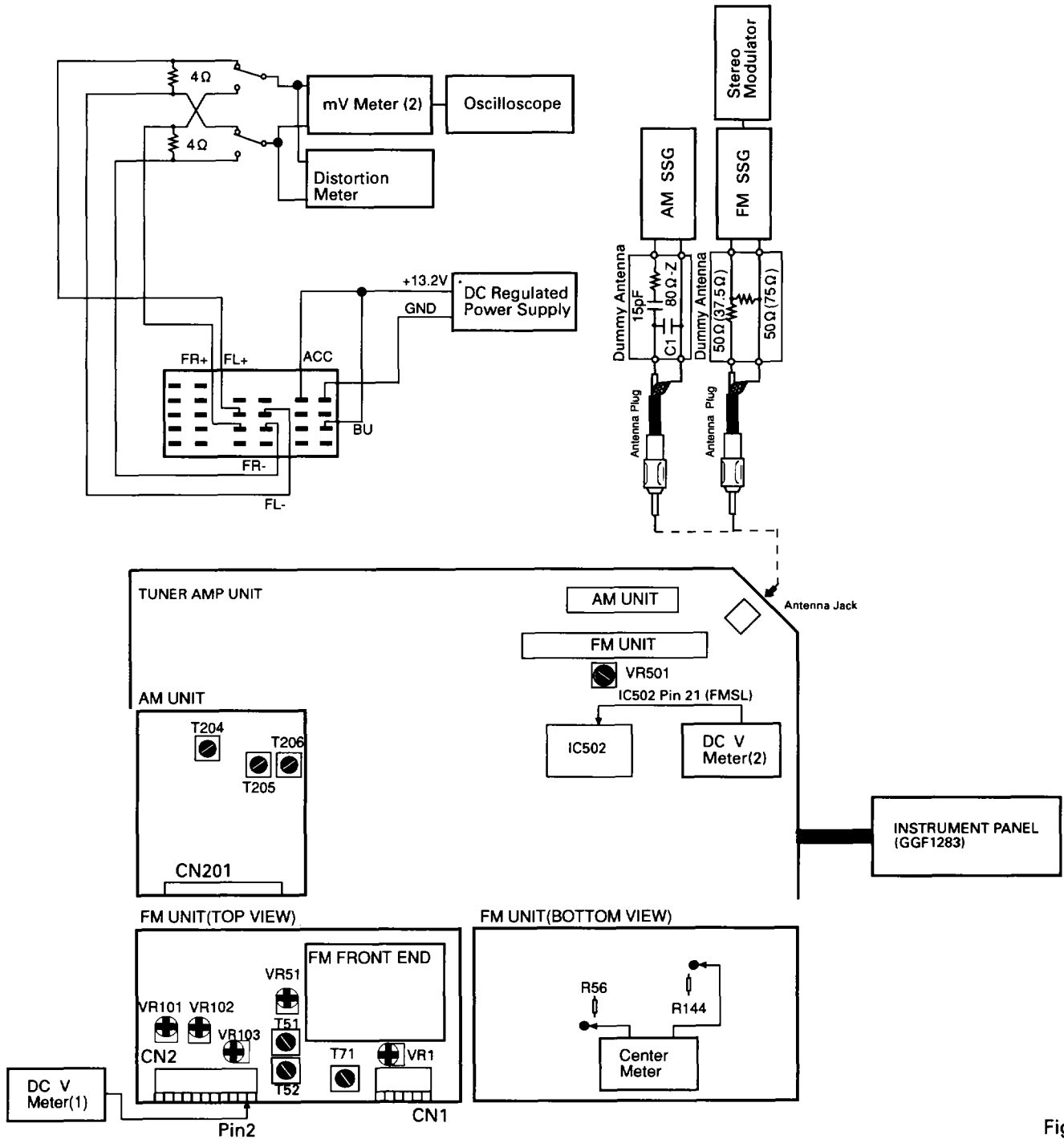


Fig.3

AM ADJUSTMENT

	No.	AM SSG(400Hz,30%)		Displayed Frequency(kHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(kHz)	Level(dBμV)			
IF	1	999	15	999	T204,T205 T206	mV Meter(2) : Maximum

FM ADJUSTMENT

Modulation M1:MONO MOD., 400Hz 30%(22.5kHz Dev.)
M2:MONO MOD., 400Hz 100%(75kHz Dev.)
S1:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)
S2:STEREO MOD., 1kHz, L or R=90%(60.75kHz+7.5kHz Dev.)

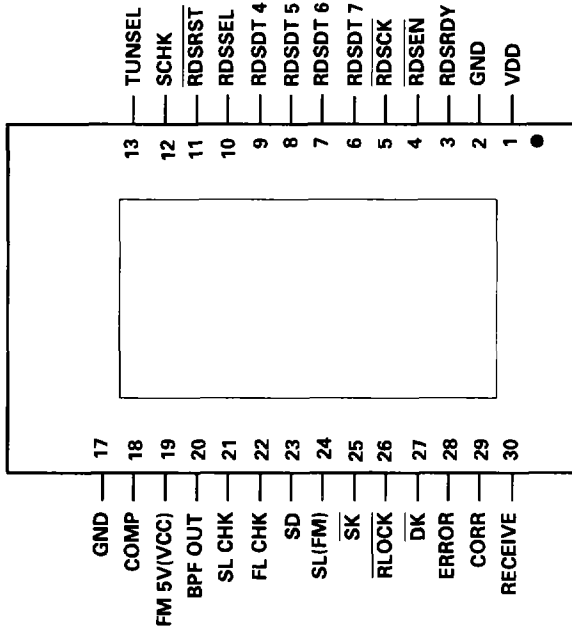
	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
IF	1	98.1 M2	65	98.1	T51	Center Meter : 0
	2	98.1 M2	65	98.1	T52	Distortion Meter : minimum
	3	Repeat No.1-2 alternately so that the center meter indicates the 0 output and distortion meter indicates the minimum output.				
	4	98.1 S2	65	98.1	T71	Distortion Meter : minimum
Max. Mute	1	98.1 M1	65	98.1	-	mV Meter(2) : A
	2	98.1 M1	-∞	98.1	VR102	mV Meter(2) : A-20dB
ARC Separation	1	98.1 S1	38	98.1	VR101	mV Meter(2) : Separation 5dB
	2	98.1 S1	65	98.1	VR103	mV Meter(2) : Separation Maximum
SD	1	98.1 M1	22 ± 1	98.1	VR51	DC V Meter(1) : Approx. 5V (SEEK ON)
LOC.H ATT.	1	98.1 M1	34 ± 1	98.1	VR1	DC V Meter(1) : Approx. 5V (LOC.H ON, SEEK ON)

FMSL ADJUSTMENT MONO MOD., 400Hz 100%(75kHz Dev.)

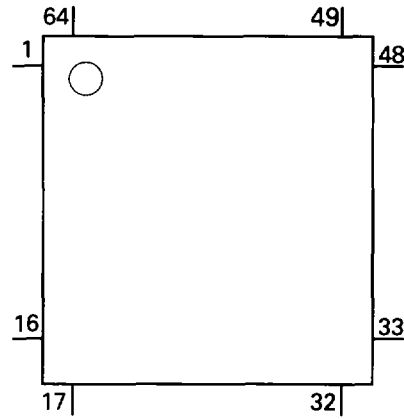
	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
FMSL	1	106.1	45	106.1	VR501	DC V Meter(2) : 2.25V ± 0.05V

5. IC INFORMATION

CWV1065



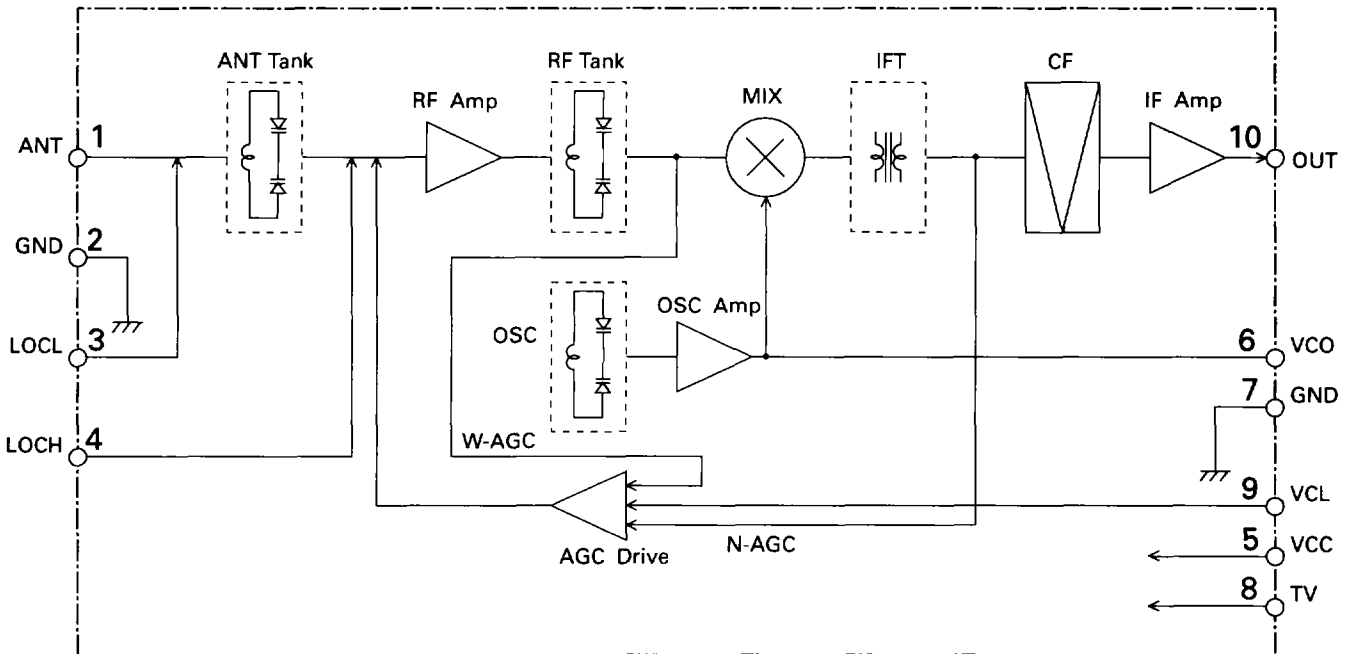
*PD4528B



Format	Meaning
C	C MOS

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

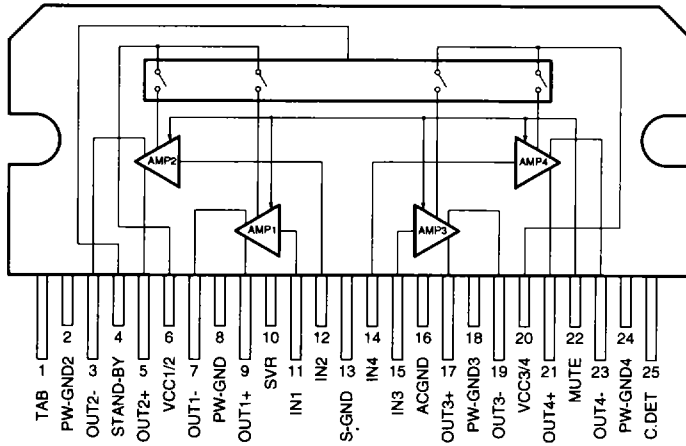
FM Front End(CWB1074)



● Pin Functions (PD4528B)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	AVPW	O	C	A Vref watching terminal
2	PEE	O	C	Beep tone output
3	BRXEN	I/O	C	Communication reception enable input/output
4	BINH	O	C	Communication data input inhibit
5	A/B	I		Model select
6	AUXMUTE	O	C	AUX mute
7	MUTE	O	C	Synthesis mute output
8	BSET	O	C	BUS communication reset output
9	VSS			GND
10-12	NC			Not used
13	BRST	O	C	Reset output
14	ACCMUTE	O	C	ACC off mute
15	SYSPW	O	C	System power control output
16	PCE	O	C	PLL chip enable output
17	AM/FM	O	C	AM/FM select output
18	BSRQ	I		BUS serial pole request input
19	RDSSEL	O	C	Select output for RDS IC
20	RDSRST	O	C	Reset output for RDS IC
21	RDSEN	O	C	Enable output for RDS IC
22,23	KDT0,1	I		Key data 0,1
24	VSS			GND
25	KDT2	I		Key data 2
26	NC			Not used
27-29	KST0-2	O	C	Key strobe 0-2
30	NC			Not used
31	VDT	O	C	Data output for electronic volume
32	VST	O	C	Strobe pulse output for electronic volume
33	VCK	O	C	Clock output for electronic volume
34	TMUTE	O	C	Tuner mute output
35	RESET	I		Reset
36	REMIN	I		Remote control pulse input
37	BSENS	I		Back up power sense input
38	ASENS	I		ACC power sense input
39	8VSENS	I		8V sense input
40	VDD			Power supply
41	X2			Crystal oscillator connection pin
42	X1			Crystal oscillator connection pin
43	IC			Connect to GND
44	NC			Not used
45	XT1			Connect to GND
46	AVSS			A/D GND
47	SDLEV	I		Tuner SD level detector input
48	NC			Not used
49	NC			Not used
50	PDI	I		Data input from PLL IC
51	RDSRDY	I		Ready input from RDS IC
52	SD	I		SD input
53	TESTIN	I		Test program mode input
54	TELMUT	I		Telephone mute signal input
55	AVDD			Positive power supply terminal for analog circuit
56	AVREF	I		Reference voltage
57	RDSDTI	I		Serial data input for RDS IC
58	RDSDTO	O		Serial data output for RDS IC
59	RDSCK	I/O	C	Serial clock input/output for RDS IC
60	PDO	O	C	Data output for PLL IC
61	PCK	O	C	Serial clock output for PLL IC
62	BSI	I		Communication serial data input
63	BSO	O		Communication data output
64	BSCK	I/O	C	Communication serial clock input/output

TDA7385



6. 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/OSOOOJ,RS1/OOSOOOJ

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

====Circuit Symbol & No. Part Name====	Part No.	====Circuit Symbol & No. Part Name====	Part No.
Unit Number : CWA1089		RESISTORS	
Unit Name : AM Unit		R 201	RS1/10S220J
MISCELLANEOUS		R 202 232	RS1/10S102J
IC 201	PAF001A	R 203	RS1/10S222J
Q 201	2SK435	R 204	RS1/10S473J
Q 202	2SC4116	R 205 209	RS1/10S470J
Q 203 231	DTC124EU	R 207	RS1/10S822J
Q 204	2SC2412K	R 211 237	RS1/16S103J
D 201	MA157	R 212	RS1/10S103J
D 204	MA157	R 214	RS1/16S222J
D 205	SVC203CP	R 231	RS1/10S823J
L 201	Inductor	R 233	RS1/16S222J
L 202	Coil	R 235	RS1/10S104J
L 203	Inductor	R 236 238 241 242	RS1/10S103J
L 204	Ferri-Inductor	R 239	RS1/10S152J
L 205	Ferri-Inductor	R 240	RS1/10S333J
L 206	Inductor	R 243	RS1/16S152J
T 203	Coil	R 244	RS1/16S242J
T 204	Coil	R 249	RS1/10S225J
T 205	Coil	CAPACITORS	
T 206	Coil	C 201	CKSQYB103K25
CF 201	Filter	C 202	CKSRYB332K50
CF 202	Filter	C 203	CSZA3R3M16
X 201	Crystal Resonator 10.26MHz	C 204 208	CKSRYB223K25
	CSS1111	C 205	CCSRCH120J50

====Circuit Symbol & No. Part Name====	Part No.	====Circuit Symbol & No. Part Name====	Part No.
C 206	CCSQCH560J50	R 106 154 172	RS1/10S104J
C 207	CCSQCH680J50	R 108	RS1/10S333J
C 211 235	CEAR47M50LL	R 111	RS1/10S183J
C 212	CKSQYB332K50	R 121	RS1/10S473J
C 213	CCSQCH330J50	R 122	RS1/10S104J
C 215 233	CKSQYB473K16	R 123	RS1/10S154J
C 216 232 241	CKSRYB103K50	R 127	RS1/10S333J
C 220	CCSQCH430J50	R 143	RS1/10S393J
C 221	CCSQCH120J50	R 144	RS1/10S333J
C 224 229	CEA470M16LL	R 146 174	RS1/10S153J
C 225 226	CKSQYB333K25	R 151 152	RS1/10S392J
C 231	CCSQCH100D50	R 153	RS1/10S222J
C 234 244	CKSQYB103K25	R 180	RS1/10S105J
C 236	CEA0R1M50LL		
C 237	CEA4R7M35LL		
C 238	CEA3R3M50LL		
C 239	CKSQYB223K25		
C 242	CCSQCH030C50		
Unit Number : CWE1437			
Unit Name : FM Unit			
MISCELLANEOUS			
IC 51	PA4021A	C 1 111	CEA100M16LL
Q 1	DTC124EU	C 2 59 74 129	CKSQYB473K16
Q 2	DTC124EU	C 5	CKSQYB472K50
Q 3	2SA1586	C 10 54	CCSQCH101K50
Q 5 51	DTC124EU	C 21 72 73 80 104 172	CKSQYB103K25
Q 71 171	2SC4116	C 51	CKSQYB473K16
Q 123	2SC4116	C 52 53 61	CKSRYB223K25
L 1 51	LAU150K	C 57	CSZSR33M35
L 2	LCTBR33K2125	C 58	CCSQCH040C50
L 71	LAU3R9K	C 60	CEA100M10NPLL
L 101	LCTA102K4532	C 101	CKSRYB682K50
T 51	CTE1111	C 102	CKSQYB682K50
T 52	CTE1022	C 103	CKSQYB272K50
T 71	CTE1043	C 105	CEA1R5M50LL
TH 51	CCX1024	C 106	CEA0R1M50LL
TH 102	CCX1015	C 107	CKSRYB222K50
CF 52 53	CTF1057	C 108	CKSQYB222K50
X 151	CSS1055	C 110	CKSYB224K16
VR 1	CCP1183	C 112	CKSYB183K25
VR 51	CCP1181	C 122	CKSQYB104K16
VR 101	CCP1186	C 124	CSZS1R5M10
VR 102	CCP1184	C 128	CKSQYB332K50
VR 103	CCP1175	C 151 152	CKSQYB153K25
	CWB1074	C 153	CKSYB474K16
		C 154 155 156	CEA3R3M50LL
		C 157	CEA101M10LL
		C 171	CKSQYB563K25
		C 173	CKSQYB104K16
		C 180	CEA2R2M50LL
		Unit Number : CWM3726	
		Unit Name : Tuner Amp Unit	
RESISTORS		MISCELLANEOUS	
R 3	RS1/10S123J	IC 451 452	UPC4570G
R 4 75	RS1/10S102J	IC 501	LC72140M
R 5	RS1/10S223J	IC 502	CWV1065
R 6 10 12	RS1/10S0R0J	IC 553	TDA7385
R 7	RD1/4PU560J	IC 701	PD4528B
R 23 61	RS1/10S682J	IC 751	PMJ002A
R 24 72 105	RS1/10S123J	IC 901	PA2023A
R 25	RS1/10S243J	IC 902	PAJ001A
R 54	RS1/10S822J	Q 451 452 453 454	DTC143TK
R 56 173	RS1/10S473J	Q 455 456 701 702 703	DTA114EK
R 57	RS1/10S472J	Q 458 459 856 857 858 859	DTC343TK
R 58	RS1/16S203J	Q 502 504 507	2SC2712
R 59	RS1/16S331J	Q 503	2SK208
R 60	RS1/10S273J	Q 505	2SK208
R 73	RS1/10S103J	Q 506 851 907	DTC124EK
R 74	RS1/10S331J	Q 508 509 510	2SC2712
R 76	RS1/10S121J	Q 511 855	DTA114EK
R 101	RS1/16S681J	Q 512	DTC124EK
R 102	RS1/16S223J	Q 852 853	DTC343TK
R 104	RS1/10S103J	Q 861 862	DTC343TK

SCU-2056ZRN

====Circuit Symbol & No. Part Name====	Part No.	====Circuit Symbol & No. Part Name====	Part No.
Q 904 908	2SC2712	R 710	RS1/10S391J
Q 905	DTC114TK	R 720	RS1/10S105J
Q 906	2SA1358	R 722 723	RS1/8S181J
D 458 852 853	MA151WA	R 730	RS1/10S473J
D 501 502	MA3027	R 751 752	RS1/10S101J
D 503 504 505 906	MA151WK	R 753 754	RS1/10S273J
D 506 908	MA3047	R 755 756	RS1/10S681J
D 560 561 563 901	ERA15-02VH	R 763 764	RS1/10S332J
D 562	ERC05-10BE3	R 766 767 768	RS1/10S472J
D 651 652 653 654 655 656 657 701	MA153	R 769	RS1/10S153J
D 702 907	MA151A	R 770	RS1/10S123J
D 851	MA151WA	R 773	RS1/10S471J
D 854	MA151WK	R 796	RS1/10S0R0J
D 904	MA3043	R 857 858	RS1/10S104J
D 905	MA151A	R 859 860	RS1/10S332J
L 501	Inductor	LCTA101K4532	R 866
L 502 503	Inductor	LPSQ2R2K	R 867 868
L 552	Choke Coil0.3mH	CTH1075	R 872 873 874
L 601	Inductor	LPSQ2R2K	R 878
L 701	Inductor	LPSQ2R2K	R 879 880
L 703	Inductor	LPSQ2R2K	R 881 882
X 501	Crystal 4.5MHz	CSS1011	R 883
X 701	Ceramic Resonator4.190MHz	CSS1361	R 884 885
VR 501	Semi-fixed 2.2kΩ (B)	CCP1150	R 886
	AM Unit	CWA1089	R 901 905
	FM Unit	CWE1437	R 902
	Fuse 10A	CEK1136	R 903 907
AR 501		DSP-201M	R 904
			R 906
			R 913
RESISTORS			
R 451 452 514 539 919	RS1/10S102J	R 914	RS1/10S153J
R 453 454 541 542 671 704 705 918	RS1/10S473J	R 915	RS1/10S152J
R 455 456 771	RS1/10S152J	R 916	RS1/10S223J
R 457 458	RS1/10S682J	R 917	RS1/10S472J
R 461 462 463 464 467 468 479 480 702 871	RS1/10S223J	R 920	RS1/10S272J
R 465 466	RS1/10S122J	R 921	RS1/10S122J
R 469 470	RS1/10S273J		
R 477 478 709	RS1/10S273J	CAPACITORS	
R 485 622	RS1/10S223J	C 451 452 856	CEAS2R2M50
R 506 509 521 522 546	RS1/10S472J	C 453 454 506 775 776	CCSQCH101J50
R 507 511 516 517 518 519 537 540 909	RS1/10S102J	C 461 462 523 753 754 759 760 777 778 779	CEAS100M50
R 508	RS1/10S152J	C 504 515 519	CCSQCH101J50
R 510	RS1/10S103J	C 507	4.7 μF/16V CCH1005
R 512	RS1/10S222J	C 508 511 517 525 527	CKSQYB103K50
R 513 531 532 604 605 606 607 875 876 877	RS1/10S222J	C 509 914 916	CKSQYB473K50
R 523	RS1/10S0R0J	C 510	CFTNA474J50
R 530 601 602 603 608 620 621 623 624	RS1/10S473J	C 512	CEASR47M50
R 533	RS1/10S393J	C 513 514	CCSQCH120J50
R 534	RS1/10S153J	C 516 794	CEAS4R7M50
R 538 549	RS1/10S151J	C 518 520	CKSQYB223K50
R 543 544	RS1/10S182J	C 522	CKSQYB102K50
R 545 908	RS1/10S683J	C 524 871 872 873 874 907	CEASR22M50
R 548	RS1/10S393J	C 531 532	CKSQYB103K50
R 555 701 864 865	RS1/10S103J	C 551 863 864 865 866 905	CEAS010M50
R 565	RS1/8S103J	C 555	CEAS100M50
R 566 567 568 569 570 571 651 652 653 654	RS1/10S471J	C 556	CEASR22M50
R 572	RS1/2S102J	C 566	CKCYF473Z50
R 612	RS1/10S563J	C 567 568	CEAS332M16
R 617 656 657 721	RS1/10S471J	C 569 576	CKCYF473Z50
R 625 703 716 717 718 719 772	RS1/10S473J	C 570 571 572 573 574 575	CKSQYB102K50
R 655	RS1/10S471J	C 651 652 653	CKSQYF104Z25
R 658 661 662 663	RS1/10S103J	C 701 710 711 712	CKSQYB473K50
R 659 660	RS1/10S682J	C 707	CKSQYB222K50
R 664 665 666 667 668 669 670	RS1/10S221J		
R 672 673 674 675 676	RS1/10S2R2J		

====Circuit Symbol & No. Part Name=====	Part No.
C 751 752	CKSQYB152K50
C 755 756	CKSQYB272K50
C 757 758	CEAS2R2M50
C 761 762	CKSQYB183K25
C 763 764	CCSQCH221J50
C 765 766	CKSQYF224Z25
C 767 768	CKSQYB332K50
C 771 772 790 791 792 793	CEA2R2M50NPLL
C 773 774	CKSQYB333K25
C 780 781	CKSQYF104Z25
C 782	CKSQYB103K50
C 795	CEAS100M16
C 855 876 877	CEAS100M50
C 861	CEAS3R3M50
C 878 879	CKSQYB104K16
C 901	CEAS331M10
C 902	CASA680K10
C 903	CEAS101M16
C 904 909 911	CEAS470M10
C 906	CEAS222M16
C 912	CASA2R2M16
C 913	CASA220M10
C 917	CEAS330M10
C 918	CEAS470M10

Unit Number : CWM3733
Unit Name : Equalizer Unit

MISCELLANEOUS

IC 251 252 253 254	NJM2068MD1
Q 251 252 255 256 259 260 261 262	2SC2412KLN
Q 257 258 263 264	2SC2412KLN

RESISTORS

R 251 252 289 290	RS1/10S473J
R 253 254 288 291 292	RS1/10S472J
R 255 256	RS1/10S123J
R 257 258 295 296 303 304 319	RS1/10S683J
R 259 260 297 298 305 306	RS1/10S122J
R 261 262 299 300 307 308	RS1/10S332J
R 263 264	RS1/10S222J
R 265 266 321 322	RS1/10S472J
R 267 268	RS1/10S182J
R 271 272	RS1/10S103J
R 273 274 281 282 311 312 320	RS1/10S683J
R 275 276 283 284 313 314	RS1/10S122J
R 277 278 279 280 285 286 315 316	RS1/10S332J
R 287 317 318	RS1/10S472J
R 293 294	RS1/10S821J
R 301 302	RS1/10S101J
R 309 310	RS1/10S152J
R 323 324	RS1/10S152J

CAPACITORS

C 251 252	CQEA274J63
C 253 254	CKSQYB183K25
C 255 256	CKSQYB821K50
C 257 258	CKSQYB821K50
C 259 260 261 262 273 274	CQEA154J63
C 263 264	CKSQYB272K50
C 265 266	CKSQYB392K50
C 267 282	CKSQYB821K50
C 268 281	CKSQYB821K50
C 269 270	CQEA474J63
C 271 272 275 276	CKSQYB333K50
C 277 278	CKSQYB822K50
C 279 280	CKSQYB103K50

7. BLOCK DIAGRAM

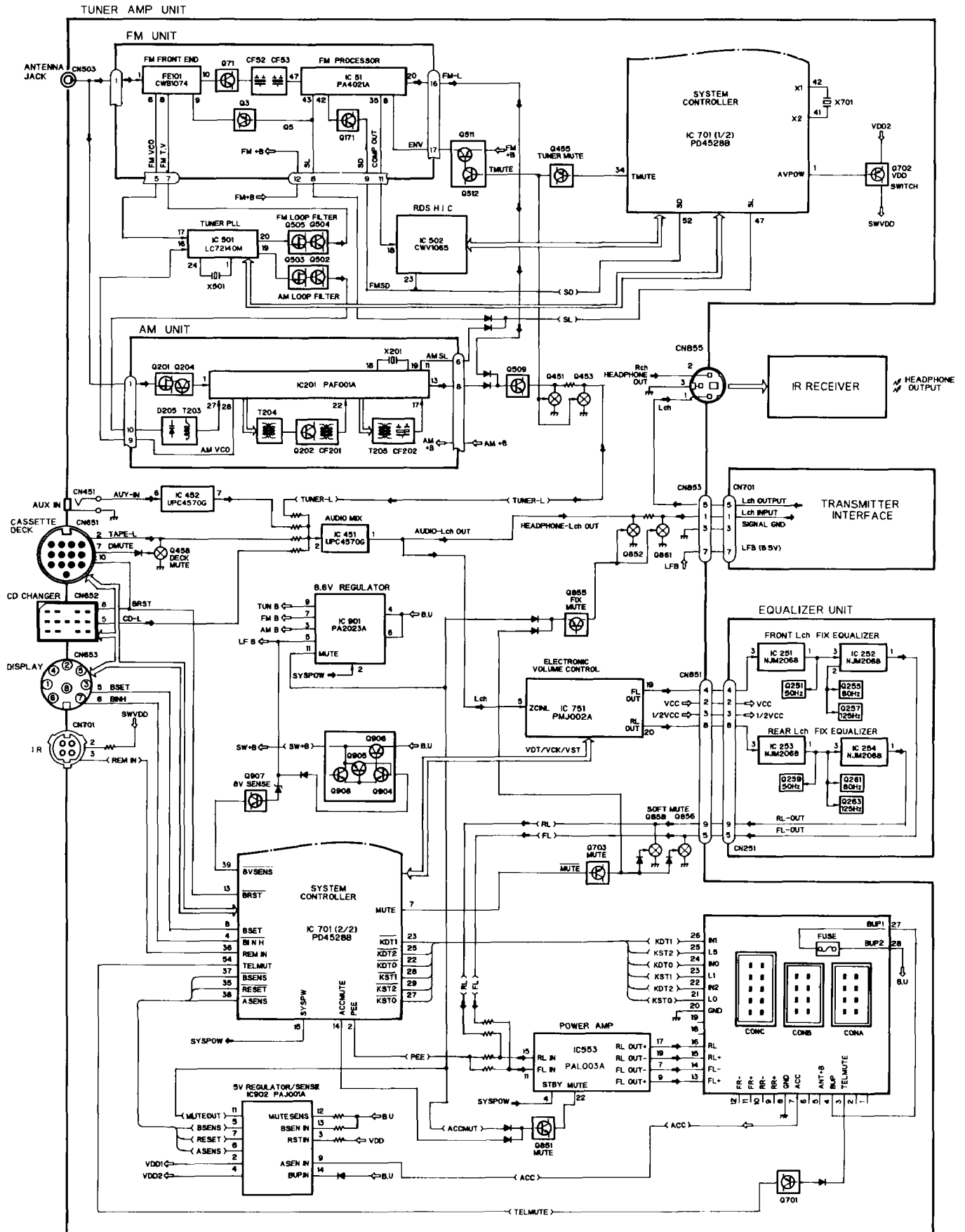


Fig.4

8. CONNECTION DIAGRAM

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.

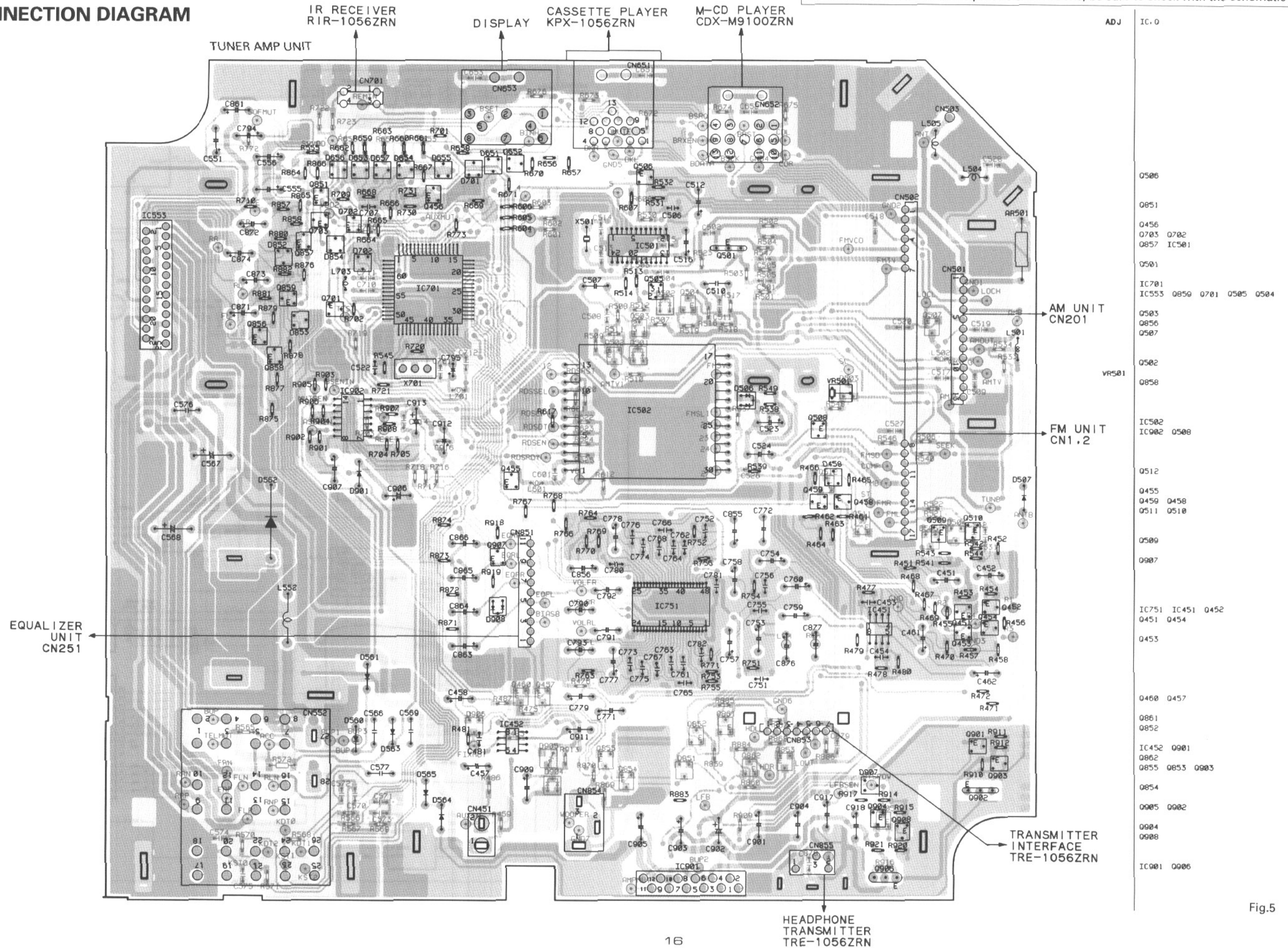
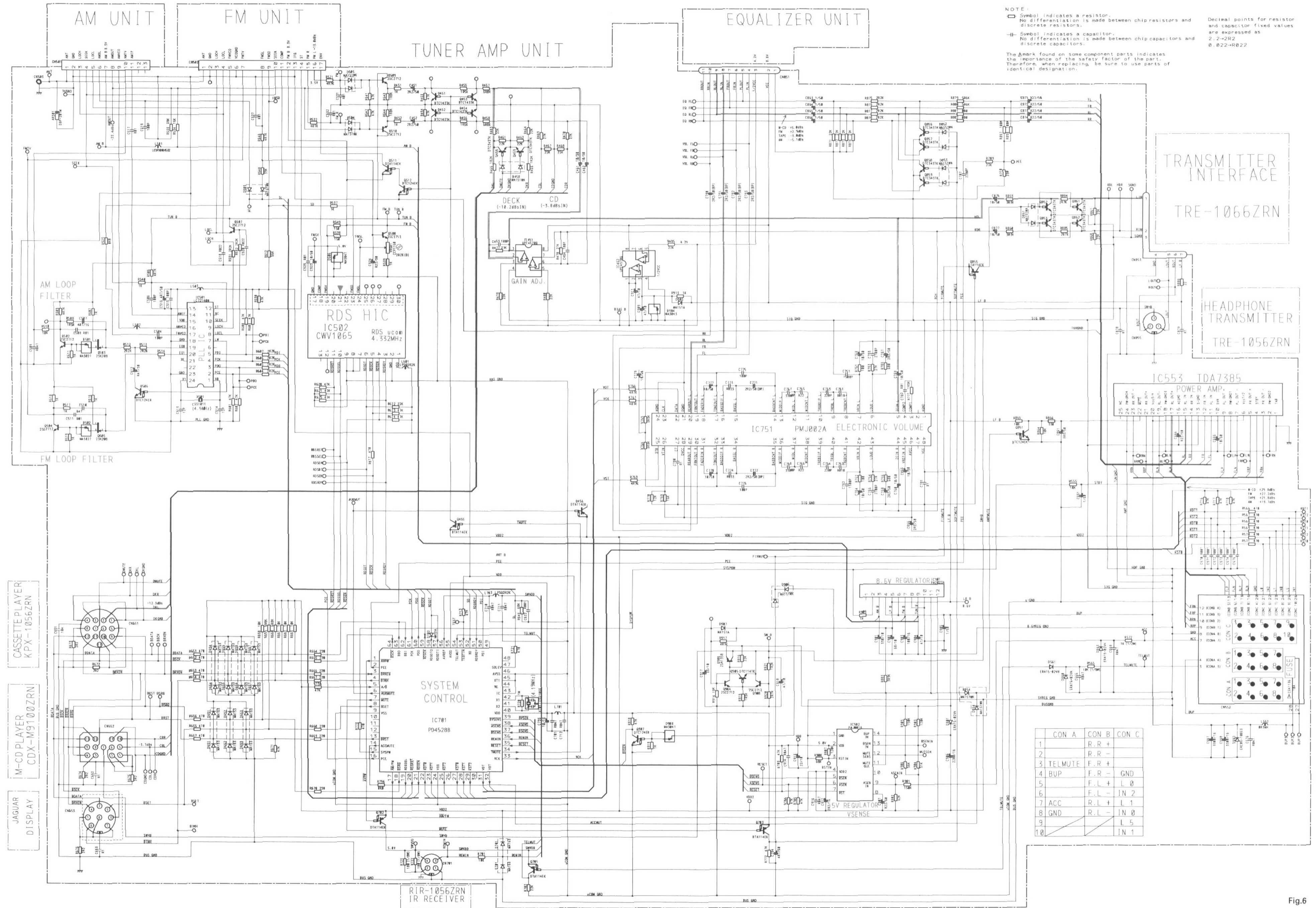


Fig.5

9. SCHEMATIC CIRCUIT DIAGRAM



NOTE:
 □ Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
 ▭ Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.
 The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 Decimal points for resistor and capacitor fixed values are expressed as:
 2.2-2R2
 0.022-R022

	CON A	CON B	CON C
1		R.R +	
2		R.R -	
3	TELMUTE	F.R +	
4	BUP	F.R - GND	
5		F.L + L 0	
6		F.L - IN 2	
7	ACC	R.L + L 1	
8	GND	R.L - IN 0	
9		L 5	
10		IN 1	

Fig.6

10. CIRCUIT DIAGRAM AND PATTERN

10.1 EQUALIZER UNIT

● Circuit Diagram

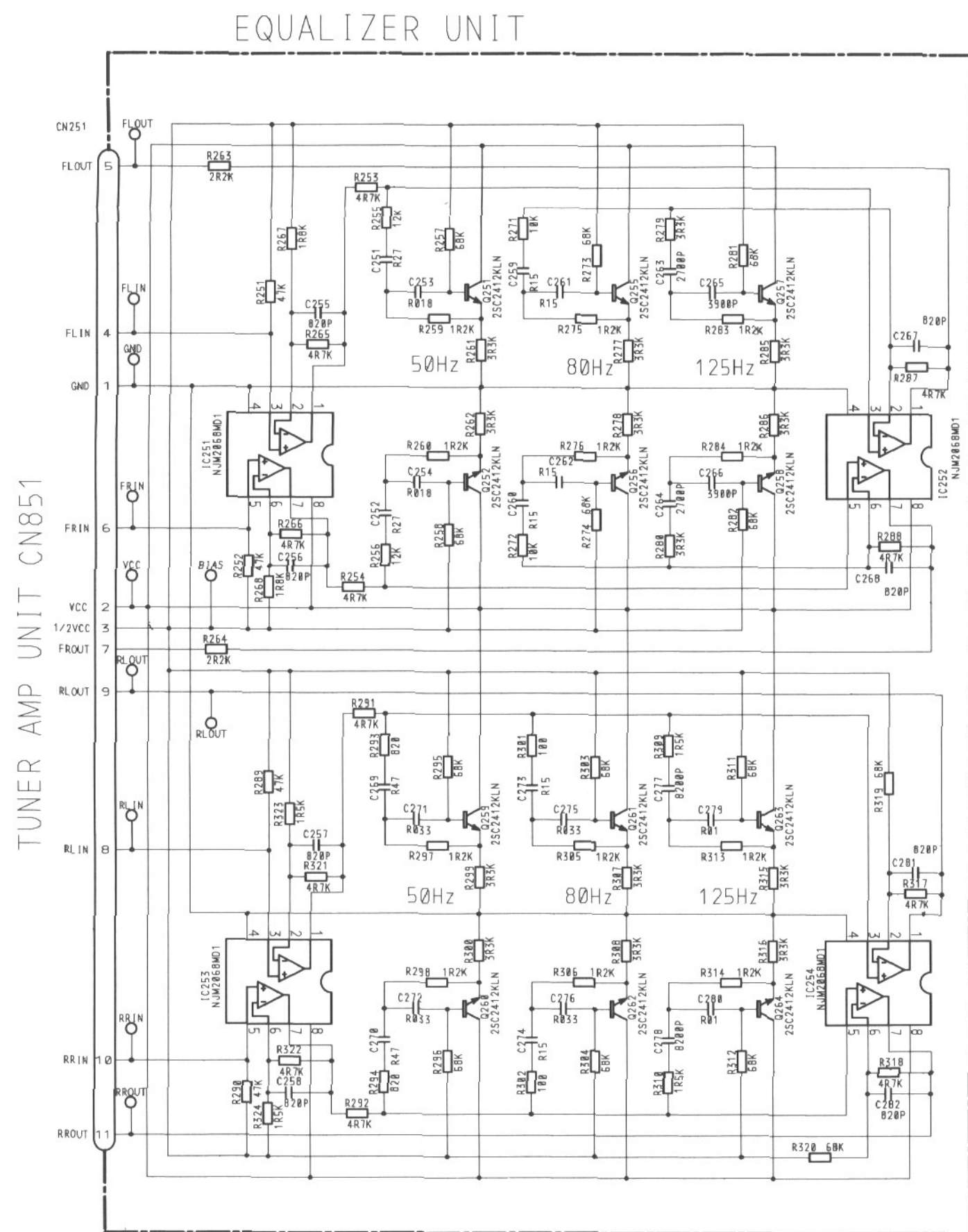


Fig.7

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.

● Connection Diagram

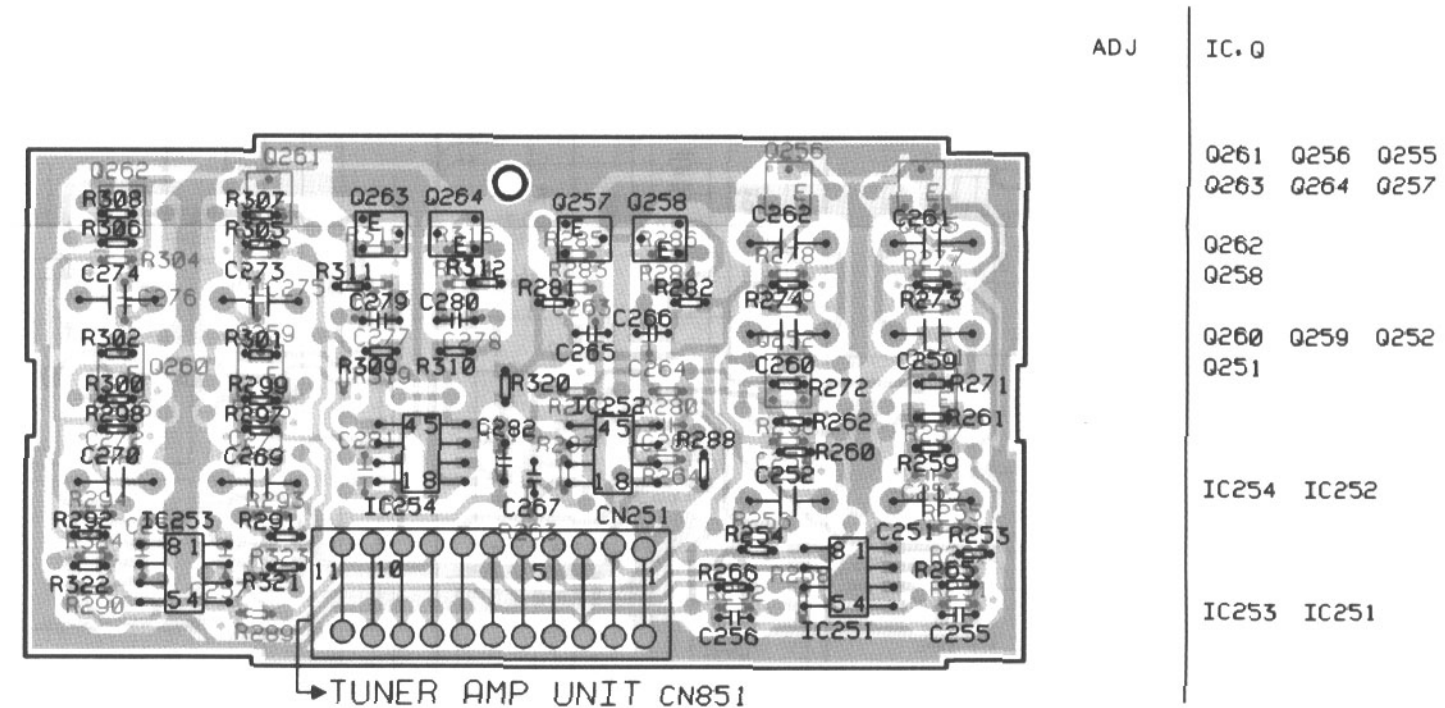


Fig.8

10.2 FM UNIT

● Connection Diagram

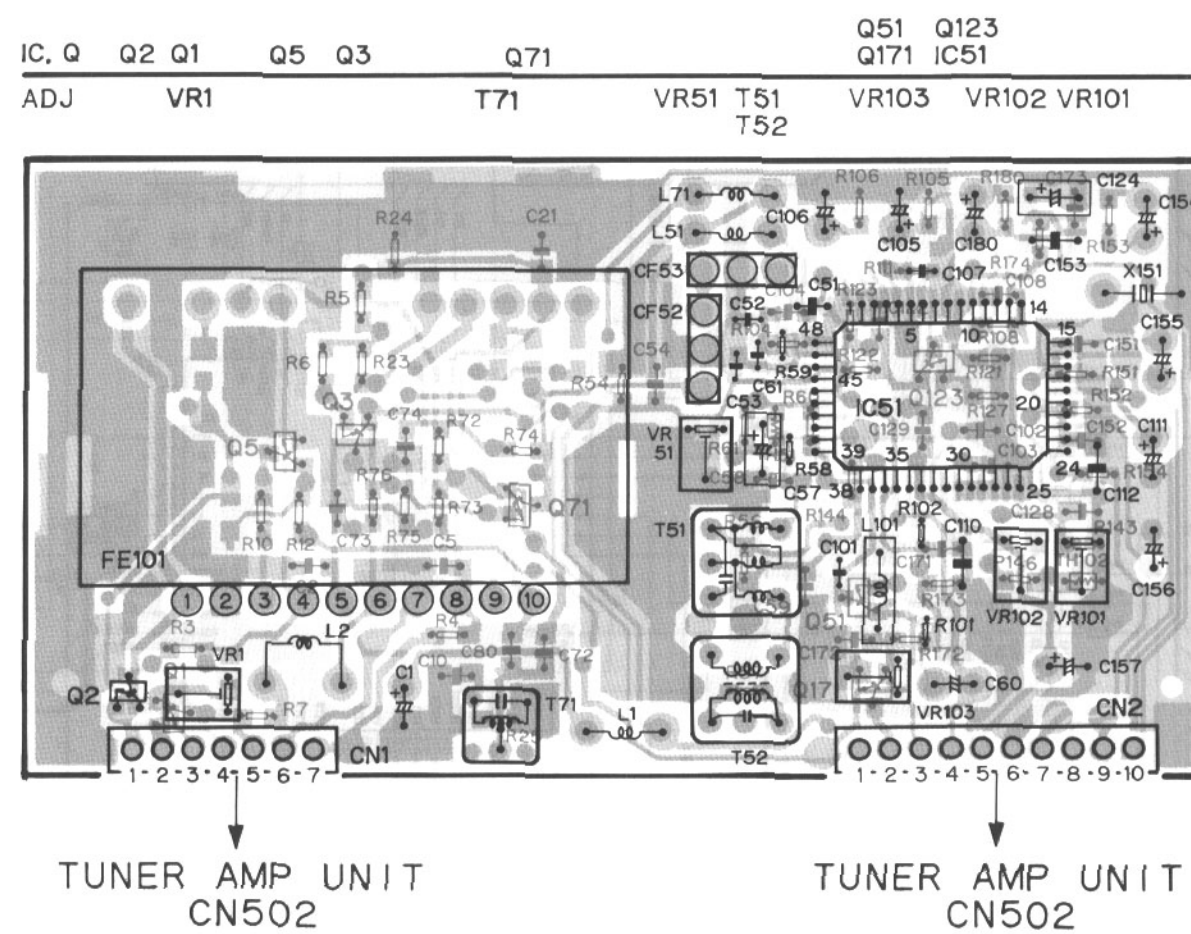
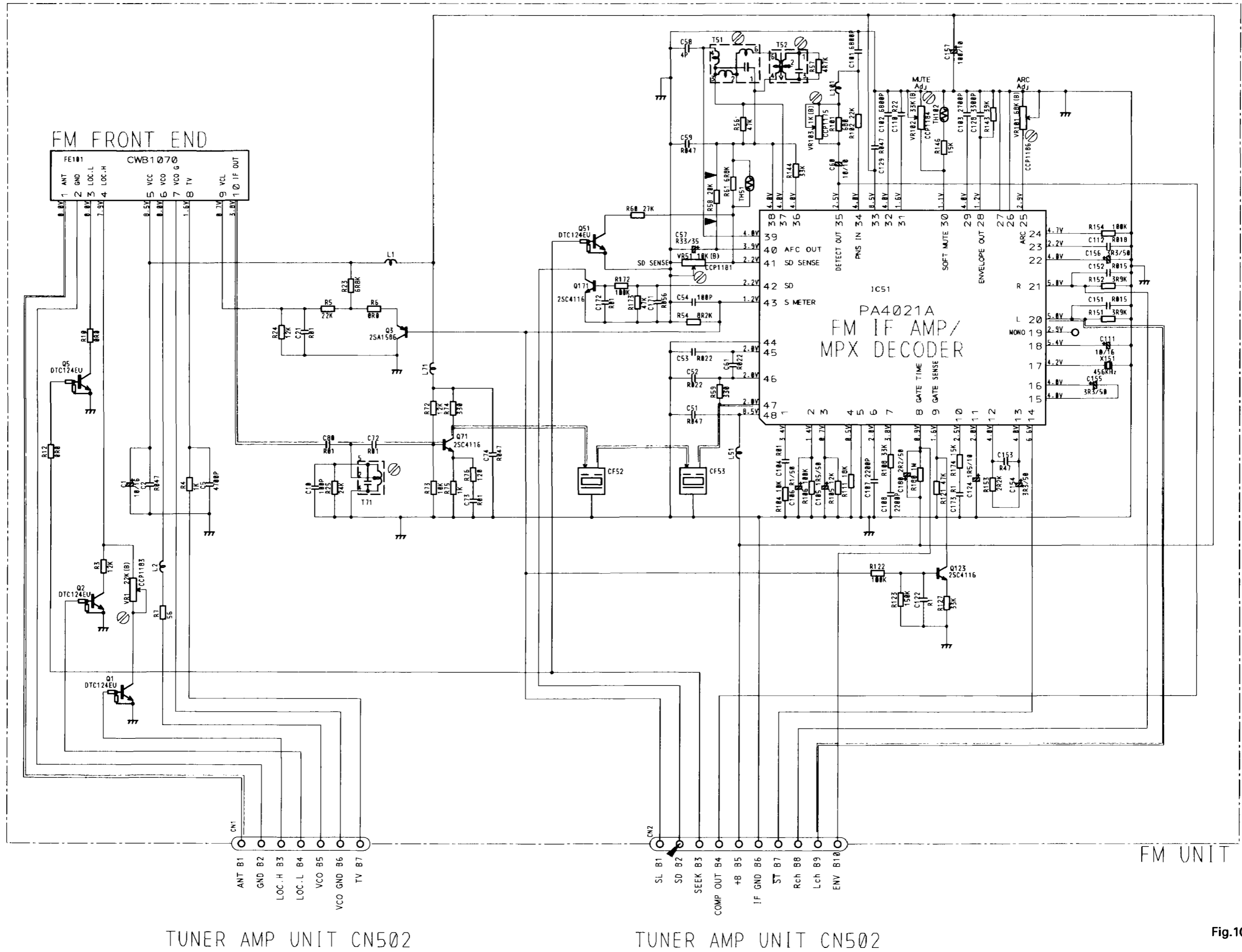


Fig.9

● Circuit Diagram



TUNER AMP UNIT CN502

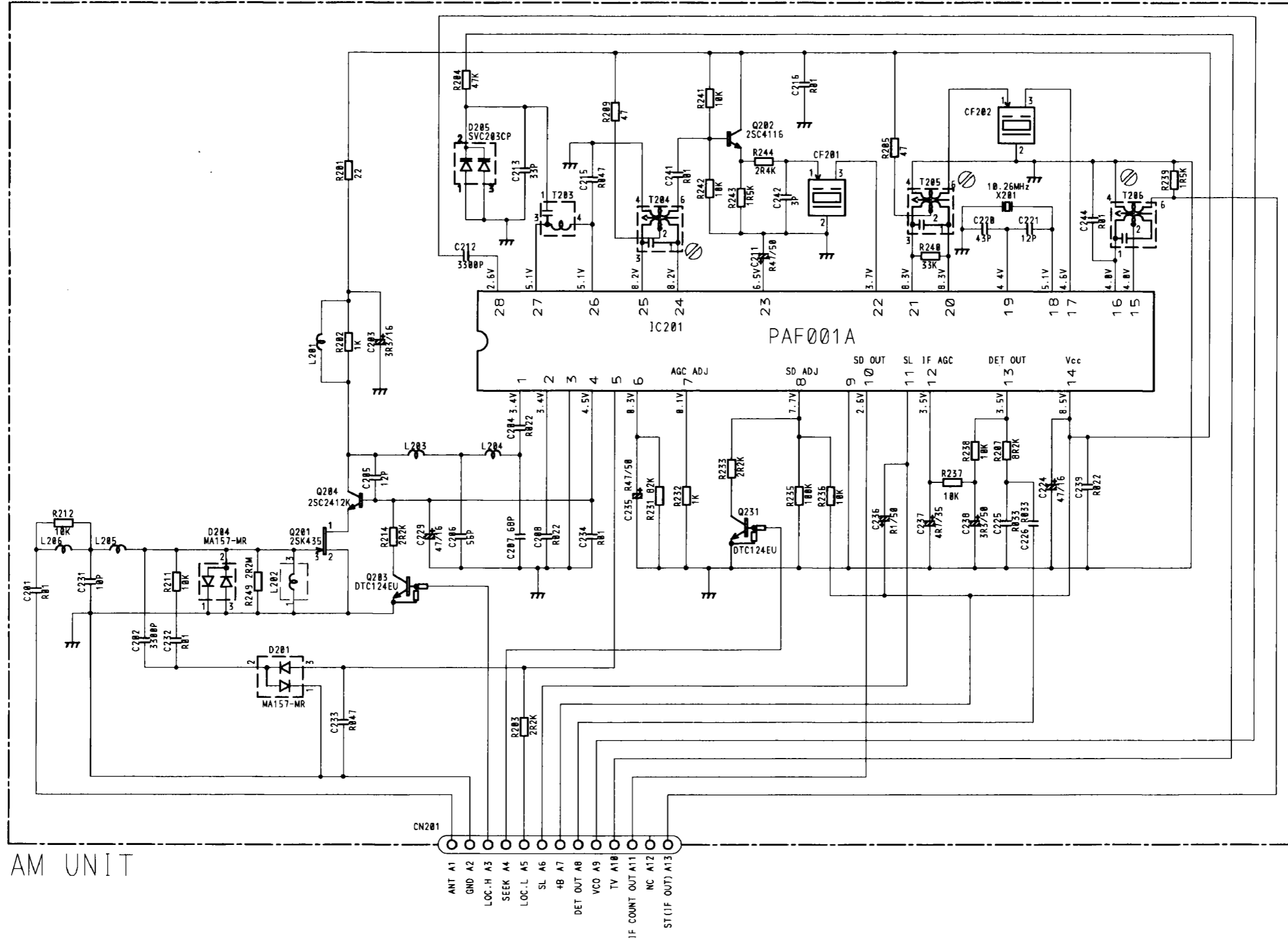
TUNER AMP UNIT CN502

FM UNIT

Fig.10

10.3 AM UNIT

● Circuit Diagram

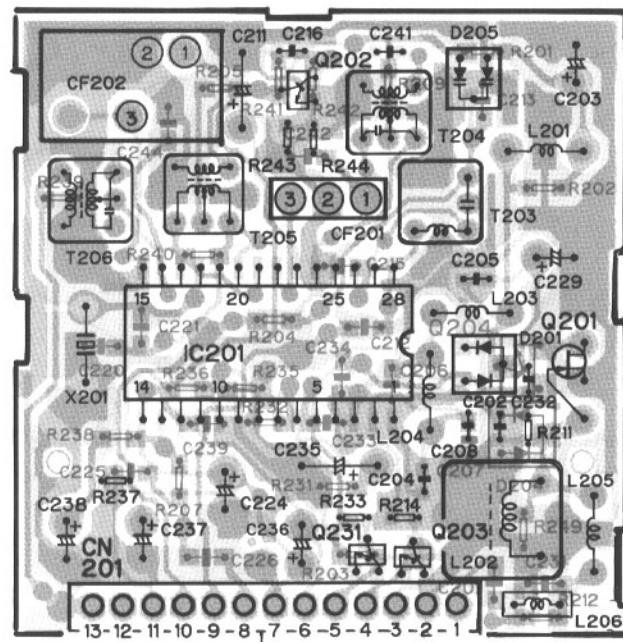


TUNER AMP UNIT CN501

Fig.11

● Connection Diagram

				Q202		
IC, Q		IC201	Q231	Q203	Q204	Q201
ADJ	T206	T205		T204	T203	L202



TUNER AMP UNIT
CN501

Fig.12

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.

11. EXPLODED VIEW AND PARTS LIST

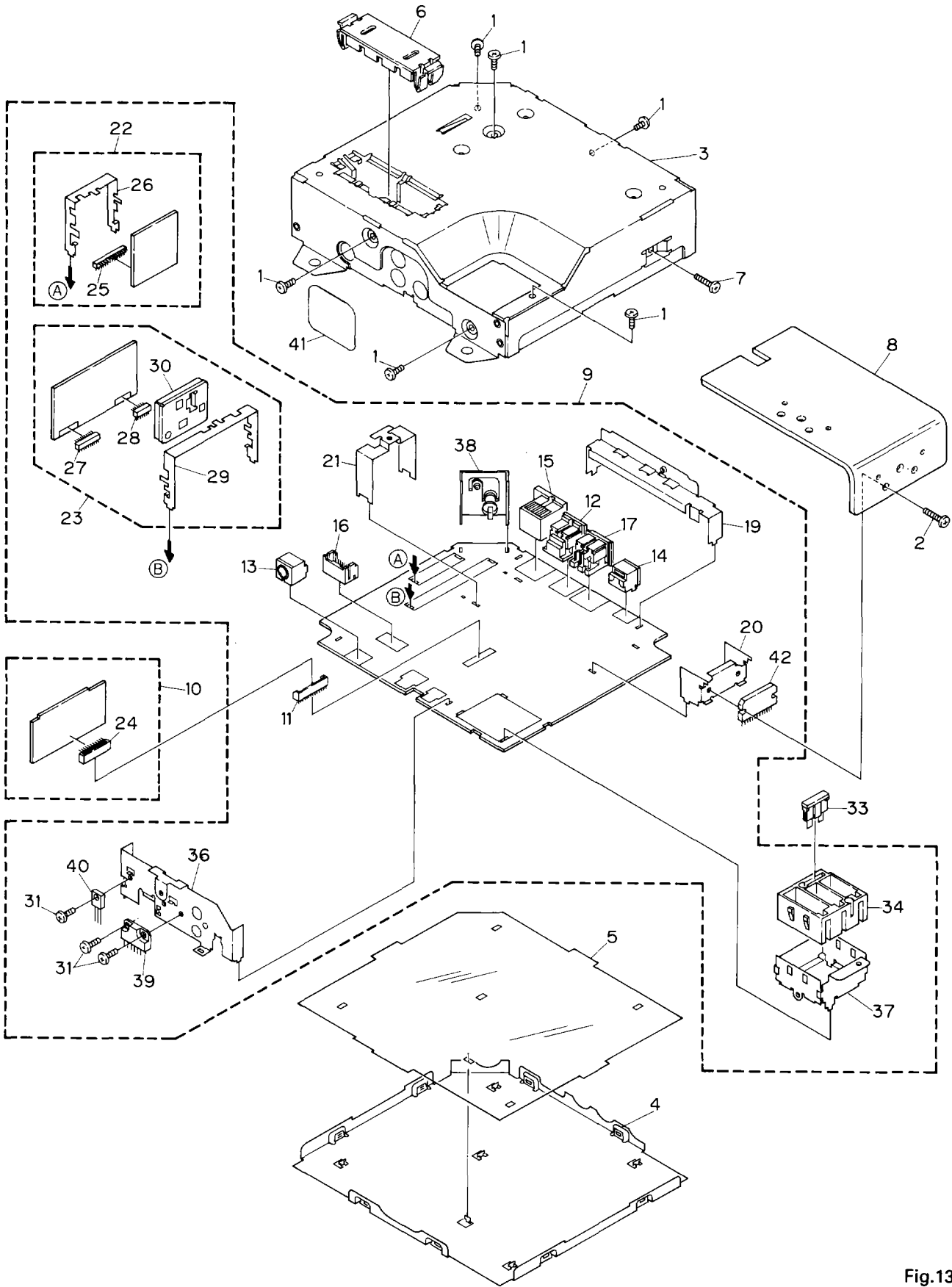


Fig.13

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ30P060FMC	26	Holder	CNC4667
2	Screw	BMZ30P140FMC	27	Plug(CN2)	CKS1607
3	Chassis	CNA1570	28	Plug(CN1)	CKS1616
4	Case	CNB1780	29	Holder	CNC4666
5	Insulator	CNM3864	30	FM Front End	CWB1074
6	Cover	CNS4018	31	Screw	BMZ30P060FMC
7	Screw	BMZ30P140FMC	32	
8	Heat Sink	CNC5434	33	Fuse(10A)	CEK1136
9	Tuner Amp Unit	CWM3724	34	Connector(CN552)	CKM1088
10	Equalizer Unit	CWM3733	35	
11	Plug(CN851)	CKS-650	36	Holder	CNC5106
12	Connector(CN651)	CKS3180	37	Holder	CNC5435
13	Connector(CN855)	CKS3181	38	Holder Unit	CXA6151
14	Connector(CN701)	CKS3182	39	IC(IC901)	PA2023A
15	DIN Socket(CN652)	CKS3185	40	Transistor(Q906)	2SA1358
16	Connector(CN853)	CKS3186	41	Cover	CNM4166
17	DIN Socket(CN653)	CKS3189	42	IC(IC553)	TDA7385
18				
19	Holder	CNC5105			
20	Holder	CNC5107			
21	Holder	CNC5433			
22	AM Unit	CWA1089			
23	FM Unit	CWE1437			
24	Connector(CN251)	CKS-669			
25	Plug(CN201)	CKS1621			

12. PACKING METHOD

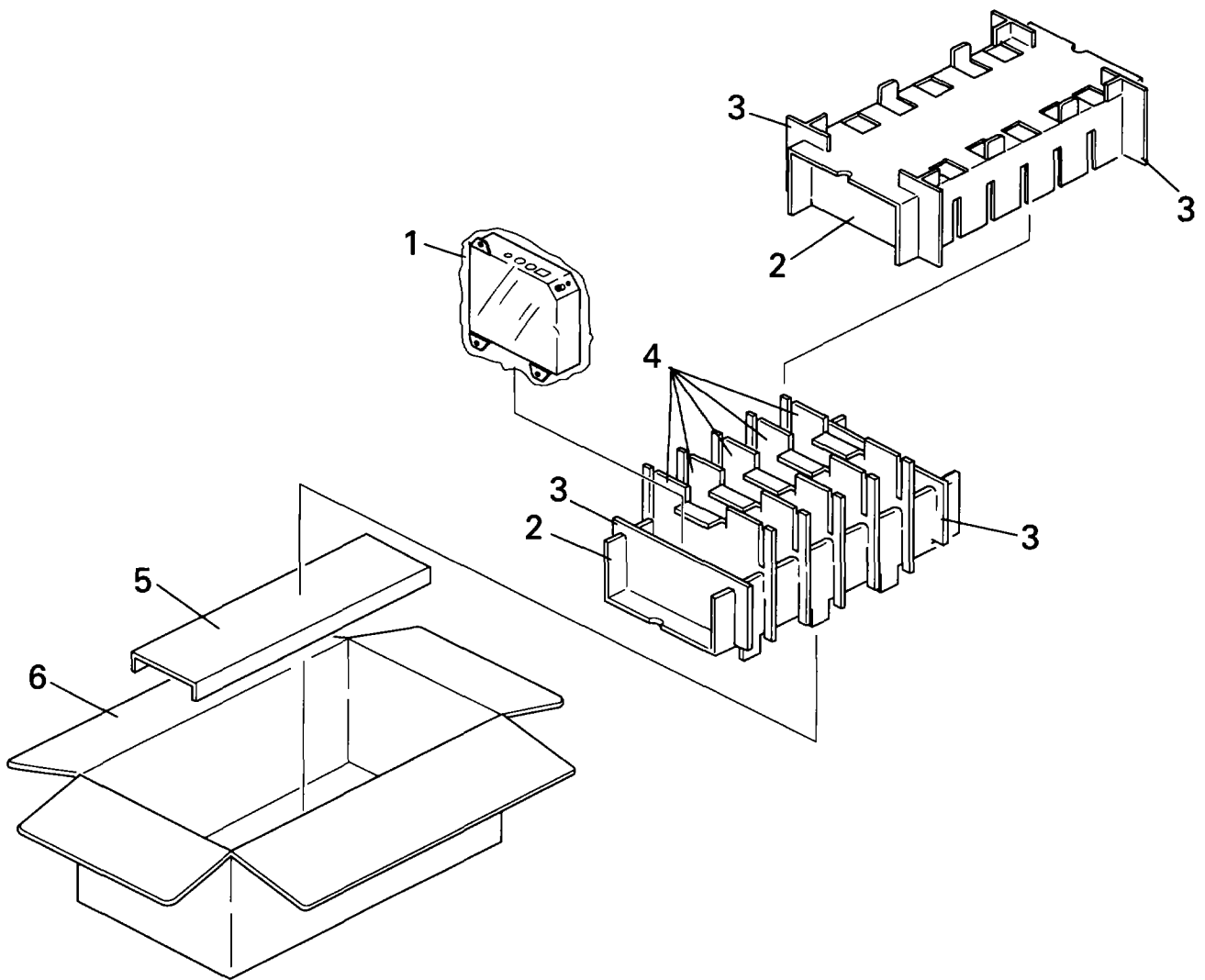


Fig.14

● Parts List

*:Non Spare Part

Mark No.	Description	Part No.
1	Polyethylene Bag	CEG-162
2	Protector	CHP1723
3	Protector	CHP1844
4	Protector	CHP1845
*	5 Protector	CHP1857
6	Contain Box	CHL3074