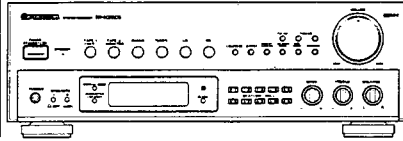


Service Manual

PIONEER
The Art of Entertainment



The illustration shows model SX-403RDS.

ORDER NO.
ARP2859

STEREO RECEIVER

SX-403RDS

SX-303RDS

SX-203RDS

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	The voltage can be converted by the following method.
	SX-403RDS	SX-303RDS	SX-203RDS		
HEXK	○	○	○	AC220-230V	AC240V, *
HBXK	—	○	○	AC240V	AC220-230V, *
HEWZXX	○	○	○	AC220-230V	AC240V, *

*: Alter the wiring of the Power-supply block at the primary winding of Power transformer referring to the "Line Voltage Selection" described in Service Manual.

- For the following: SX-403RDS/HEWZXX; SX-303RDS/HBXK and HEWZXX; SX-203/HBXK and HEWZXX, refer to page 40.

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SX-403RDS, SX-303RDS, SX-203RDS

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

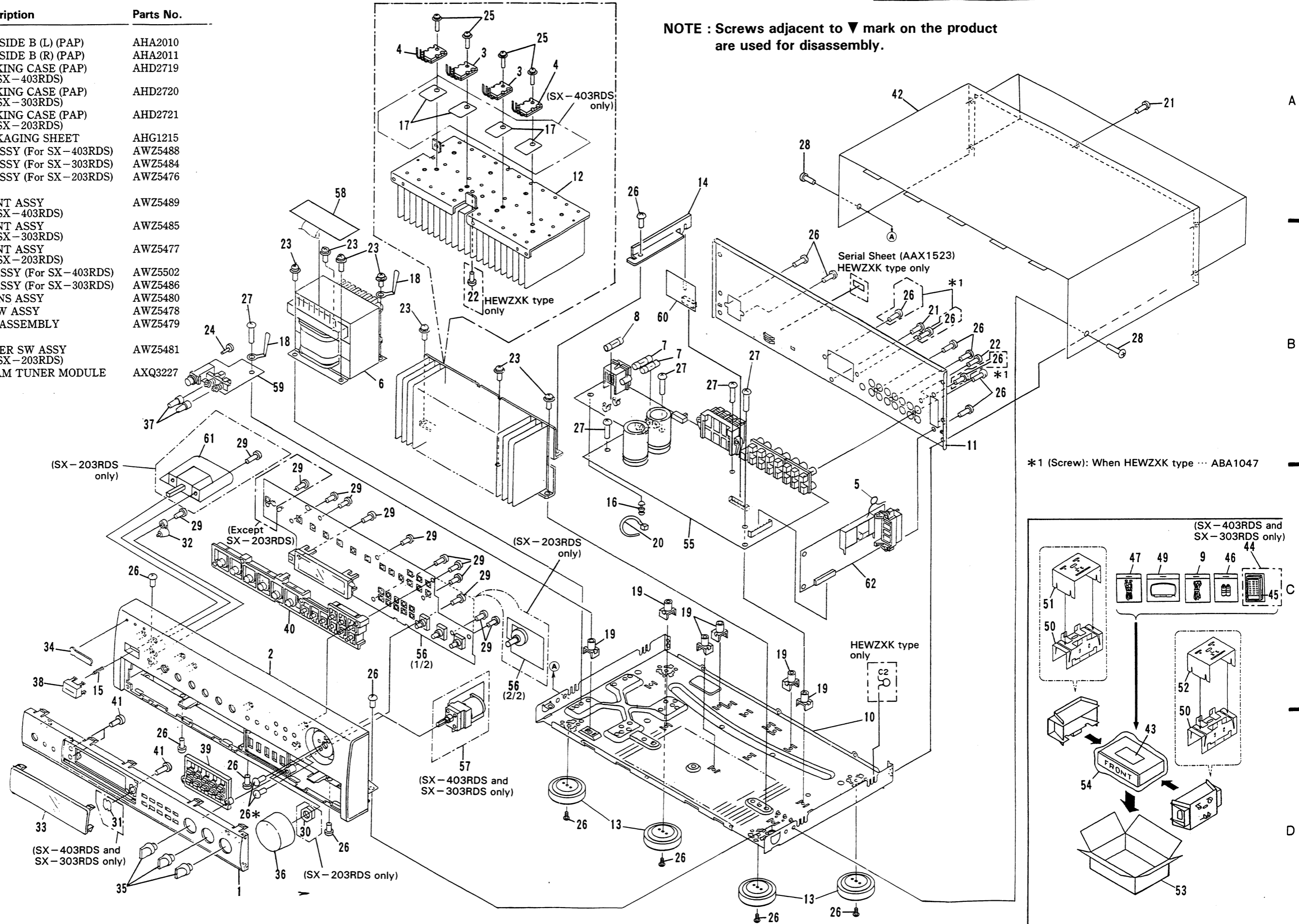
Parts List of Exterior and Packing (For SX-403RDS/HEXK, SX-303RDS/HEXK and SX-203RDS/HEXK)

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	SUB PANEL (PLS)	AAP1465	21	SCREW (For SX-403RDS)	VCT30P080FZK	
	2	FRONT PANEL (PLS) (For SX-403RDS)	AMB2222	21	SCREW (For SX-303RDS and SX-203RDS)	BCZ30P080FZK	
	2	FRONT PANEL (PLS) (For SX-303RDS)	AMB2226	22	SCREW (STEEL)	ABA1047	
	2	FRONT PANEL (PLS) (For SX-203RDS)	AMB2227	23	SCREW	ABA1054	
	3	TRANSISTOR (Q3, Q4) (For SX-403RDS)	2SA1302	24	SCREW (STEEL)	ABA1095	
Δ	3	POWER TRANSISTOR (Q3, Q4) (For SX-303RDS)	2SA1804	25	SCREW (STEEL)	ABA1194	
Δ	3	POWER TRANSISTOR (Q3, Q4) (For SX-203RDS)	2SA1803	26	SCREW	BBZ30P080FMC	
Δ	4	TRANSISTOR (Q1, Q2) (For SX-403RDS)	2SC3281	27	SCREW	BBZ30P200FMC	
Δ	4	POWER TRANSISTOR (Q1, Q2) (For SX-303RDS)	2SC4689	28	SCREW	BCZ30P080FZK	
Δ	4	POWER TRANSISTOR (Q1, Q2) (For SX-203RDS)	2SC4688	29	SCREW	BPZ26P080FMC	
	5	CERAMIC CAPACITOR (C1)	CKDYB102K50	30	NUT (SX-203RDS only)	NK90FUC	
Δ	6	POWER TRANSFORMER (T1) (For SX-403RDS)	ATS1544	31	IR FILTER (PLS) (SX-403RDS and SX-303RDS only)	AAK2551	
Δ	6	POWER TRANSFORMER (T1) (For SX-303RDS)	ATS1543	32	LED LENS (PLS)	AAK2553	
Δ	6	POWER TRANSFORMER (T1) (For SX-203RDS)	ATS1542	33	FL PANEL (PLS) (For SX-403RDS and SX-303RDS)	AAK2556	
Δ	7	FUSE (T800MA/250V, FU3, FU4)	AEK-507	33	FL PANEL (PLS) (For SX-203RDS)	AAK2557	
Δ	8	FUSE (T2A/250V, FU1) (For SX-403RDS)	AEK-511	34	NAME PLATE	PAM1608	
Δ	8	FUSE (T1.6A/250V, FU1) (For SX-303RDS)	AEK-510	35	ROUND KNOB S (PLS)	AAB1389	
Δ	8	FUSE (1.25A/250V, FU1) (For SX-203RDS)	AEK-509	36	ROUND KNOB L (PLS)	AAB1390	
Δ	9	AC POWER CORD	ADG1135	37	PUSH BUTTON (PLS)	AAD2530	
NSP	10	CHASSIS (MET)	ANA1481	38	POWER BUTTON (PLS)	AAD2531	
	11	REAR PANEL (MET) (For SX-403RDS)	ANC2213	39	STATION BUTTON (PLS)	AAD2532	
	11	REAR PANEL (MET) (For SX-303RDS)	ANC2164	40	HINGE BUTTON (PLS) (For SX-403RDS)	AAD2534	
	11	REAR PANEL (MET) (For SX-203RDS)	ANC2165	40	HINGE BUTTON (PLS) (For SX-303RDS and SX-203RDS)	AAD2533	
NSP	12	RADIATOR (MET) (For SX-403RDS)	ANH1475	41	PUSH BUTTON (PLS)	AAD2535	
NSP	12	RADIATOR (MET) (For SX-303RDS)	ANH1476	42	BONNET CASE (MET)	ANE1502	
NSP	12	RADIATOR (MET) (For SX-203RDS)	ANH1477	43	OPERATING INSTRUCTIONS (English, French, German, Italian, Dutch, Swedish, Spanish, Portuguese)	ARE1312	
	13	INSULATOR	PNW1912	44	REMOTE CONTROL UNIT (CU-SX087) (SX-403RDS and SX-303RDS only)	AXD1397	
	14	HOLDER (MTL)	ANG1928	45	BATTERY COVER (SX-403RDS and SX-303RDS only)	AZA7031	
	15	SPRING (FE)	ABH1095	NSP 46	BATTERY (R6P, AA) (SX-403RDS and SX-303RDS only)	AEX-010	
	16	PCB SUPPORT	AEC1581	47	FM ANTENNA ASS'Y	ADH1019	
	17	SHEET (SX-403RDS only)	AEE1014	48	.....	
	18	BINDER	AEP-215	49	LOOP ANTENNA (L8042)	ATB1011	
	19	PCB MOLD (PP)	AMR2533	50	PAD SIDE A (PAP)	AHA2009	
NSP	20	BINDER (BK-1)	Z09-057				

Mark	No.	Description	Parts No.
	51	PAD SIDE B (L) (PAP)	AHA2010
	52	PAD SIDE B (R) (PAP)	AHA2011
	53	PACKING CASE (PAP) (For SX-403RDS)	AHD2719
	53	PACKING CASE (PAP) (For SX-303RDS)	AHD2720
	53	PACKING CASE (PAP) (For SX-203RDS)	AHD2721
	54	PACKAGING SHEET	AHG1215
	55	AF ASSY (For SX-403RDS)	AWZ5488
	55	AF ASSY (For SX-303RDS)	AWZ5484
	55	AF ASSY (For SX-203RDS)	AWZ5476
	56	FRONT ASSY (For SX-403RDS)	AWZ5489
	56	FRONT ASSY (For SX-303RDS)	AWZ5485
	56	FRONT ASSY (For SX-203RDS)	AWZ5477
	57	VR ASSY (For SX-403RDS)	AWZ5502
	57	VR ASSY (For SX-303RDS)	AWZ5486
	58	TRANS ASSY	AWZ5480
	59	SP SW ASSY	AWZ5478
	60	RDS ASSEMBLY	AWZ5479
	61	POWER SW ASSY (For SX-203RDS)	AWZ5481
	62	FM/AM TUNER MODULE	AXQ3227

Note : No. 12 illustration shows SX-403RDS.

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

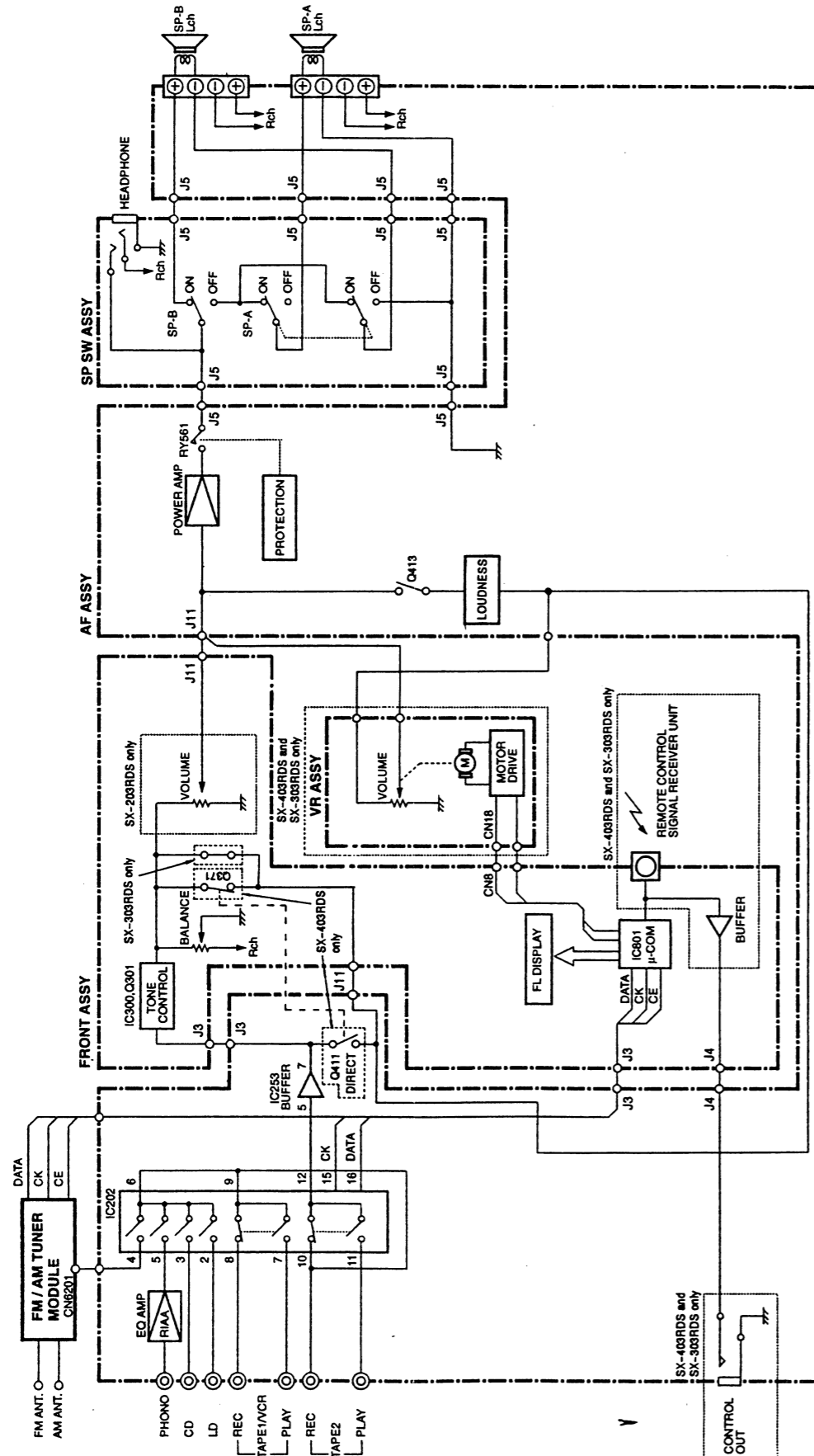


*1 (Screw): When HEWZXC type ... ABA1047

(SX-403RDS and SX-303RDS only)

* : SX-403RDS and SX-303RDS only

2. BLOCK DIAGRAM



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

NOTE FOR SCHEMATIC DIAGRAMS

Type 1A

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. **RESISTORS:**
Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

4. **CAPACITORS:**
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. **COILS:**
Unit: m:mH or μH unless otherwise noted.

6. VOLTAGE AND CURRENT:

AF AMPLIFIER SECTION :

: Signal voltage at rated output.

or - V :

DC voltage (V) at no input signal unless otherwise noted.
Value in () is DC voltage at rated power.

TUNER SECTION :

: Signal voltage at FM 1kHz, 100% MOD.

or - V :

or - mA :

DC current at no input signal unless otherwise noted.

7. OTHERS:

• or : Adjusting point.

• : Measurement point.

• The mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SCH-□ ON THE SCHEMATIC DIAGRAM:

• SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. SWITCHES (Underline indicates switch position):

FRONT assy

S801	0	S816	LOUDNESS
S802	9	S817	TUNING +
S803	8	S818	TUNING -
S804	7	S819	FM/AM
S805	6	S820	CD
S806	5	S821	LD
S807	4	S822	TUNER
S808	3	S823	PHONO
S809	2	S824	TAPE2
S810	1	S825	TAPE1/VCR
S811	MEMORY	S826	RECEIVER
S812	MPX MODE	S827	CLASS
S813	MEMORY SCAN	S828	CHARACTER/SEARCH
S814	DIRECT ACCESS	S829	DISPLAY MODE
S815	DIRECT (SX-403RDS ONLY)		
S815	RF ATT (EXCEPT SX-403RDS)		

NOTE FOR PCB DIAGRAMS:

- Part numbers in PCB diagrams match those in the schematic diagrams.
- A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

- The transistor terminal marked with E or shows the emitter.
- The diode terminal marked with or shows cathode side.
- The capacitor terminal marked with or shows negative terminal.

SX-403RDS, SX-303RDS, SX-203RDS

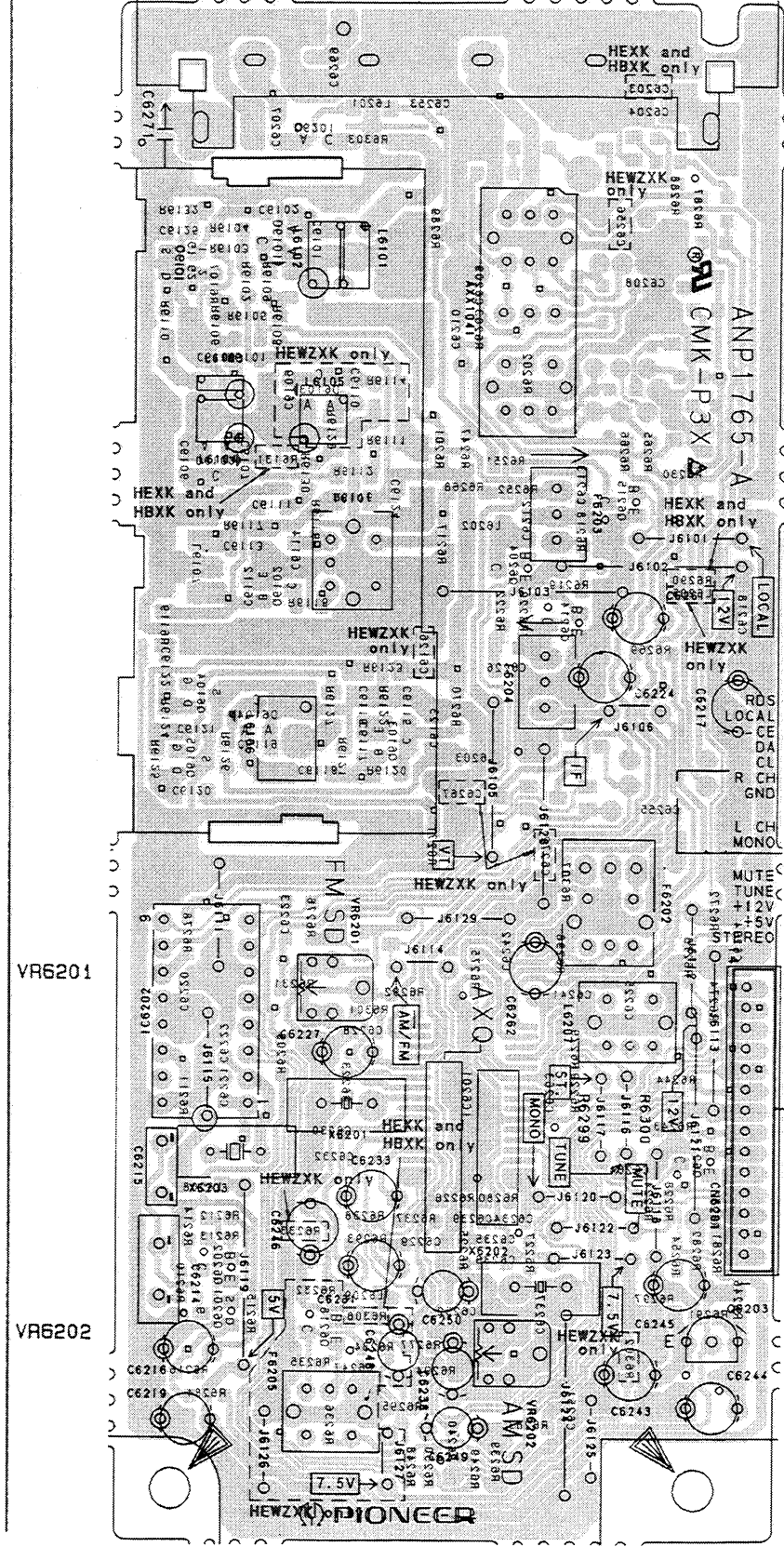
PCB-1

• This diagram is viewed from the mounted parts side.

FM/AM TUNER MODULE

A
B
C
D

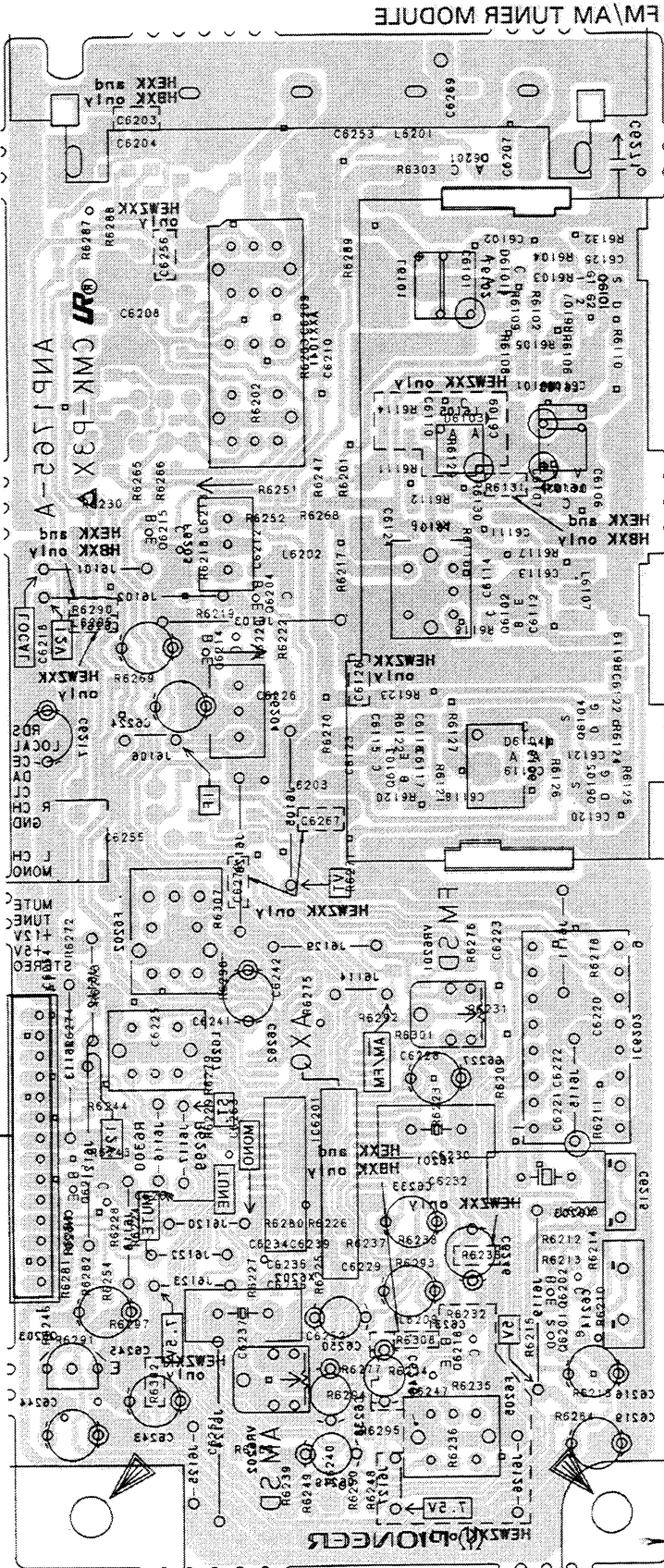
- Q6101
- Q6215
- Q6204
- Q6102 Q6214
- Q6104
- Q6103 Q6105
- IC6202
- IC6201
- Q6217
- Q6202
- Q6201 Q6203
- Q6218



To AF assy

● This diagram is viewed from the foil side.

A



A

08101

08512

08504

08105 08514

08104

08103

08102

Y8501

IC8505

IC8501

08517

08505

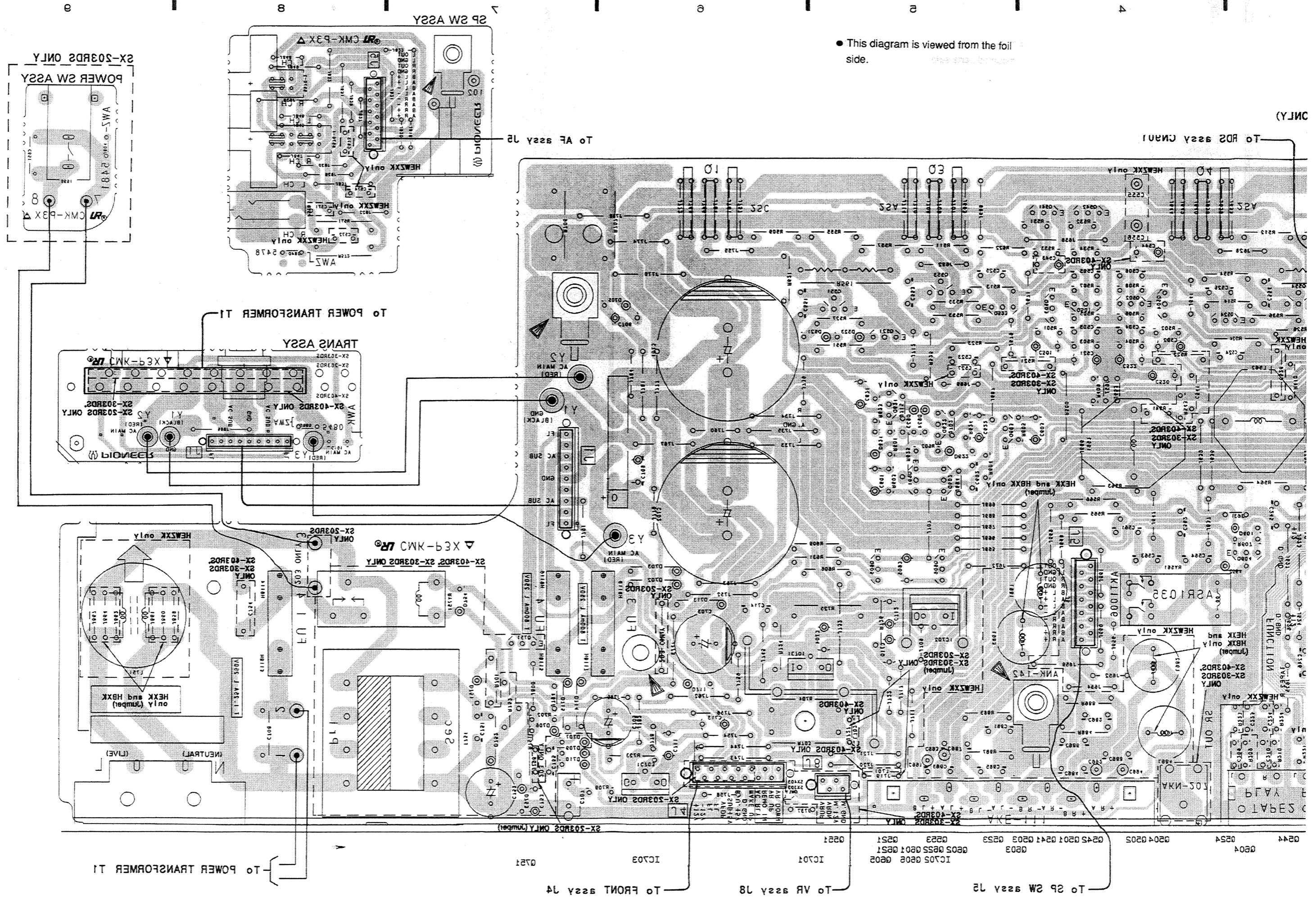
08501 08503

08518

Y8505

TO AF assy

● This diagram is viewed from the foil side.



A

B

C

D

8

7

6

5

4

3

8

7

6

5

4

3

(ONLY)

3.3 AF ASSY, SP SW ASSY, POWER SW ASSY AND TRANS ASSY

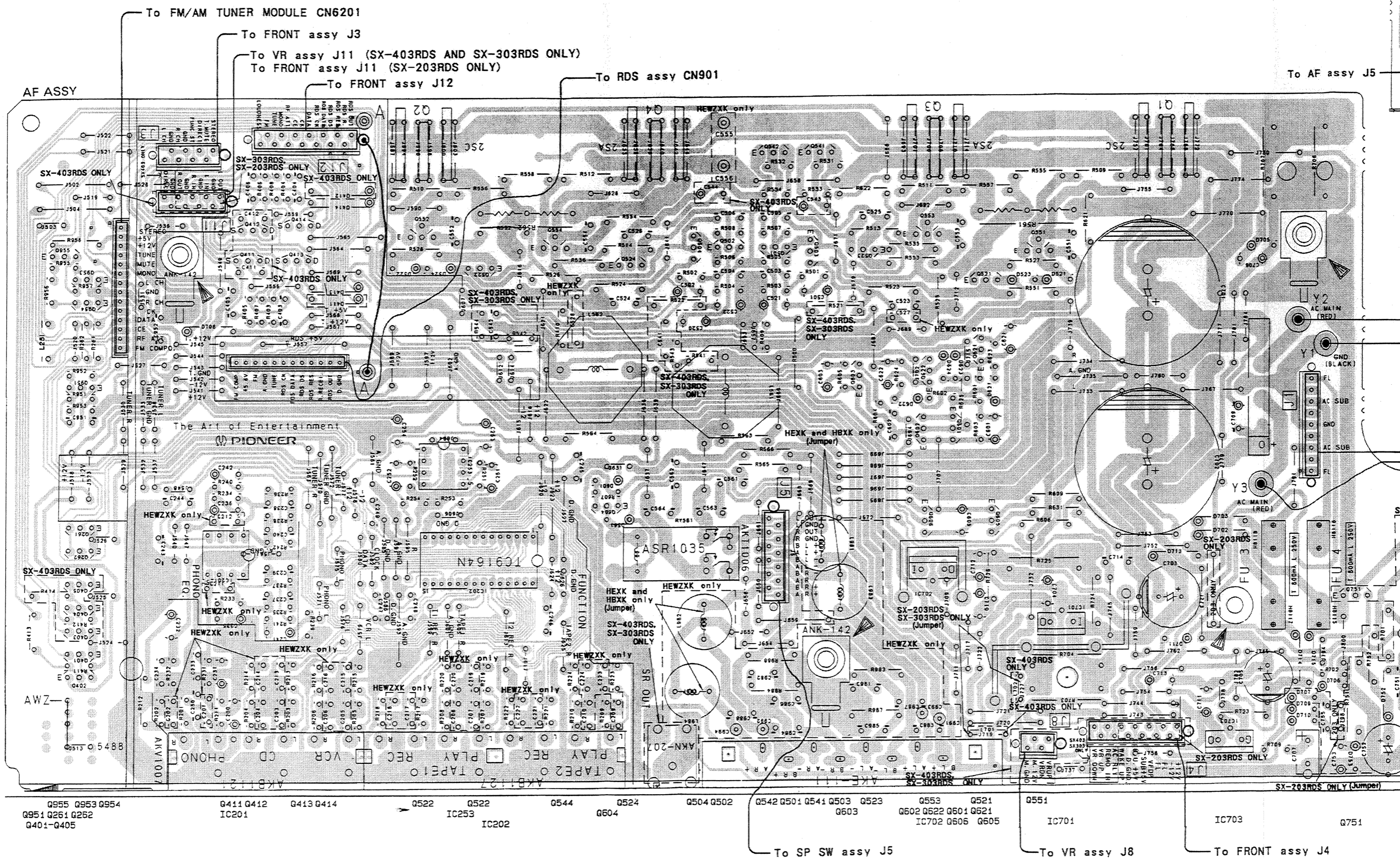
This diagram is viewed from the mounted parts side.

A

B

C

D



Q955 Q953 Q954
 Q951 Q261 Q262
 Q401-Q405

Q411 Q412
 IC201

Q522 Q522 Q544 Q524 Q504 Q502
 IC253 IC202 Q604

Q542 Q501 Q541 Q503 Q523
 Q603 Q553 Q521
 Q602 Q622 Q601 Q621
 IC702 Q606 Q605

IC701

IC703

Q751

To SP SW assy J5

To VR assy J8

To FRONT assy J4

• This diagram is viewed from the mounted parts side.

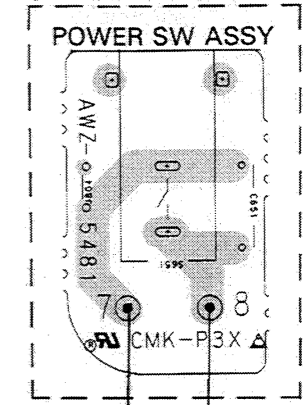
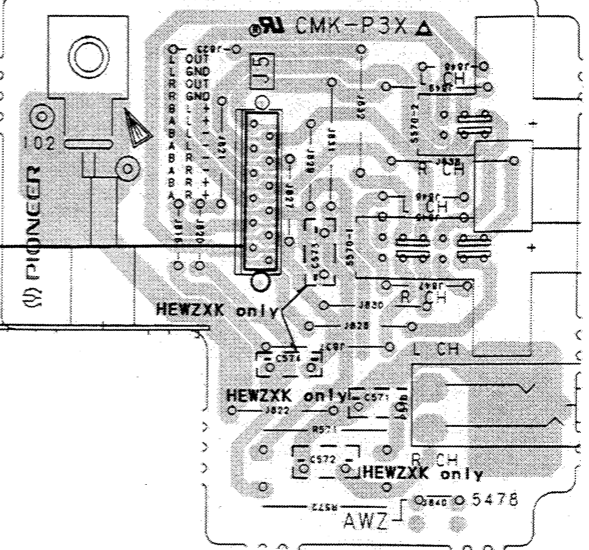
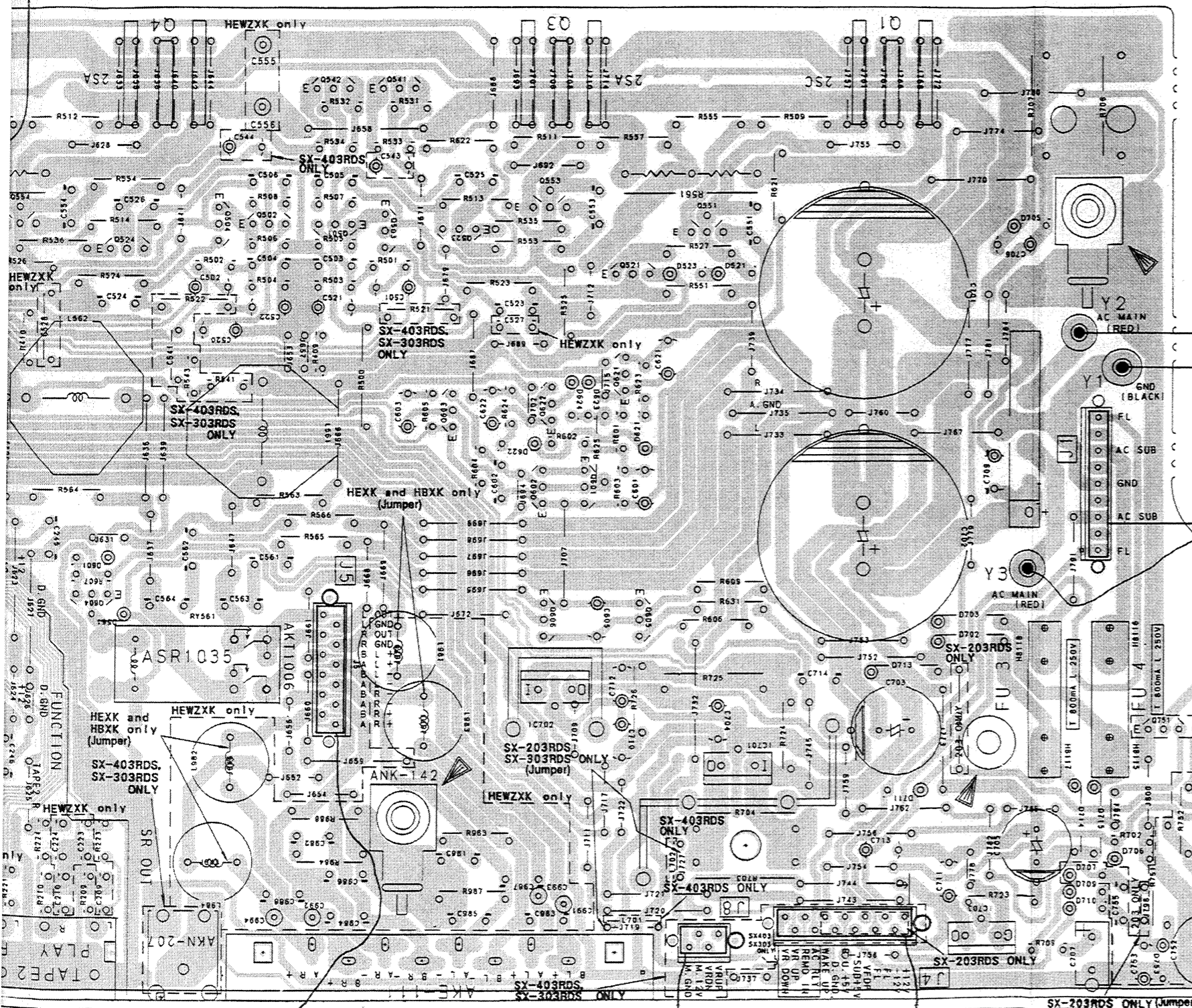
ONLY)

To RDS assy CN901

To AF assy J5

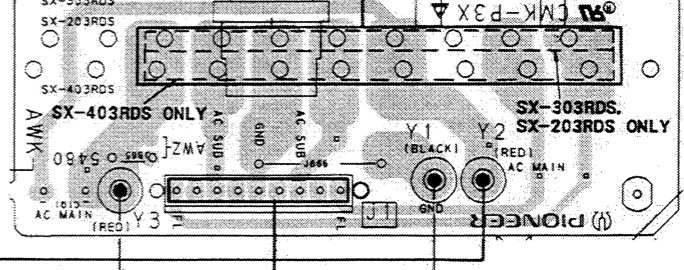
SP SW ASSY

SX-203RDS ONLY
POWER SW ASSY



To POWER TRANSFORMER T1

TRANS ASSY



CMK-P3X
SX-403RDS ONLY
SX-303RDS ONLY
SX-203RDS ONLY

HEWZXK only

SX-403RDS ONLY
SX-303RDS ONLY

HEXK and HBXK only (Jumper)

(NEUTRAL) (LIVE)

Q544 Q524 Q504 Q502 Q542 Q501 Q541 Q503 Q523 Q553 Q521 Q551
 Q604 Q603 Q602 Q522 Q501 Q621 IC702 Q506 Q505

To SP SW assy J5

To VR assy J8

To FRONT assy J4

To POWER TRANSFORMER T1

SX-403RDS and SX-303RDS : To VR ASSY J11(→SCH-4)
SX-203RDS : To FRONT ASSY J11(→SCH-4)

NOTE:

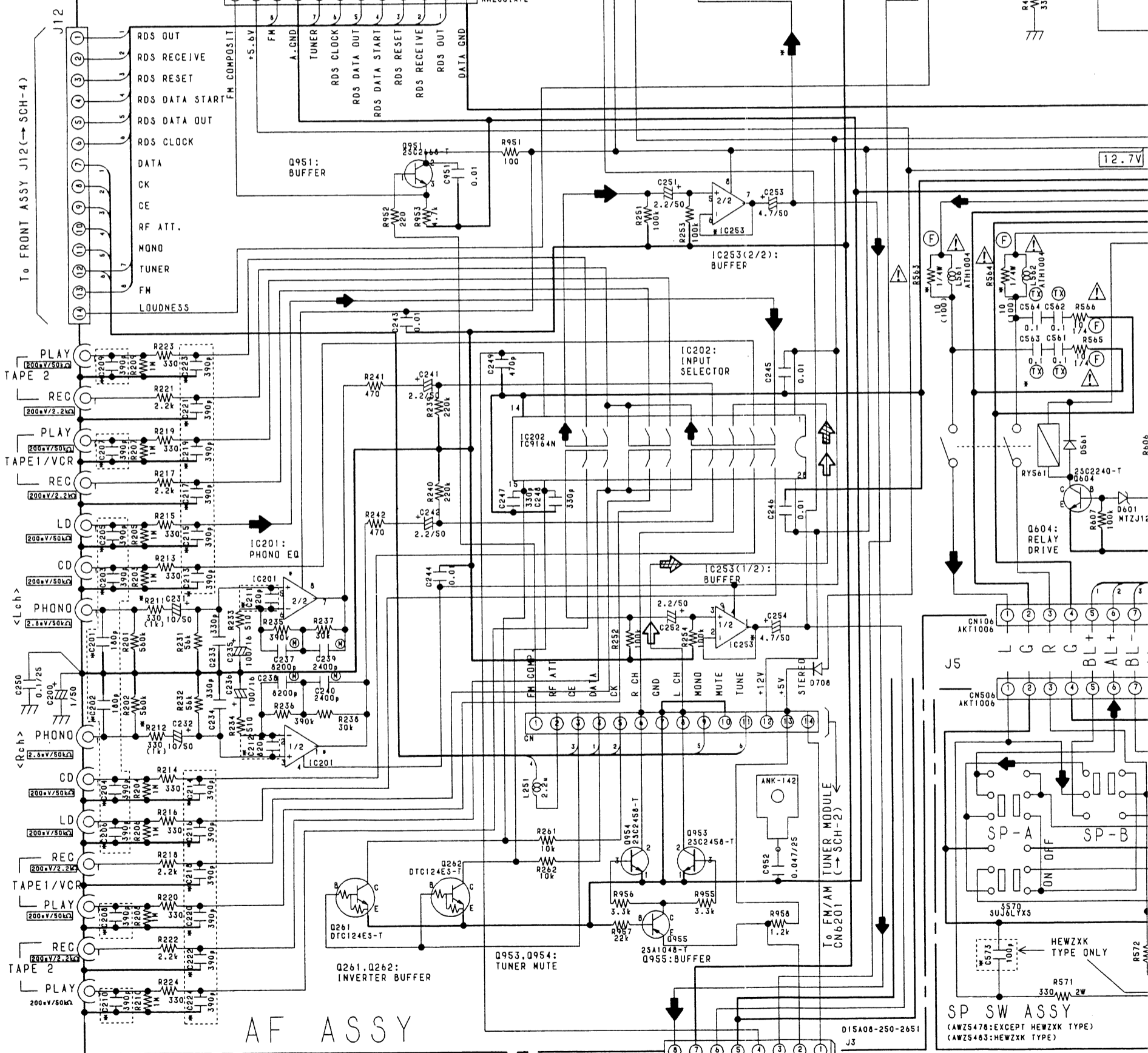
- Value in () is HEWZK
- The parts specified in the SX-403RDS/HEWZK, SX-303RDS/HEWZK and SX-203RDS/HEWZK are the parts specified in the SX-403RDS/HEWZK

TYPES	SX-203RDS			SX-303RDS			SX-403RDS	
Assy NO	HEXK	HBXK	HEWZK	HEXK	HBXK	HEWZK	HEXK	HEWZK
AF Assy	AWZ5476	AWZ5622	AWZ5482	AWZ5484	AWZ5623	AWZ5487	AWZ5488	AWZ5491

* MARKs indicate differences between models

MODELS	SX-203RDS		SX-303RDS		SX-403RDS	
TYPES	HEXK, HBXK	HEWZK	HEXK, HBXK	HEWZK	HEXK	HEWZK
R	521,522	1.2k	1.2k	1k	1k	910
	543,544			1k	1k	910
	706	2.2k 2W	2.2k 2W	2.7k 2W	2.7k 2W	2.7k 2W
	707	2.2k 2W	2.2k 2W	2.7k 2W	2.7k 2W	2.7k 2W
C	701,702	ACH1266 (5600/50)	ACH1266 (5600/50)	ACH1105 (6800/50)	ACH1105 (6800/50)	ACH1265 (8200/50)
	985,986		0.01		0.01	0.01
	520	100/16	100/16	100/16	100/16	100/25
	521,522	47/16	47/16	100/16	100/16	100/16
D	701	D3SBA20	D3SBA20	D3SBA20	D3SBA20	D5SB20F
RY	561	ASR1035	ASR1035	ASR1035	ASR1035	ASR112
IC	201,253	NJM4558DXP	NJM4558DXP	NJM4558DXP	NJM4558DXP	UPC4570C
FU	1	AEK-509 (T1.25A /250V)	AEK-509 (T1.25A /250V)	AEK-510 (T1.6A/250V)	AEK-510 (T1.6A/250V)	AEK-511 (T2A/250V)

To RDS ASSY CN901(→SCH-4)



AF ASSY

C201-C224:HEWZK TYPE ONLY

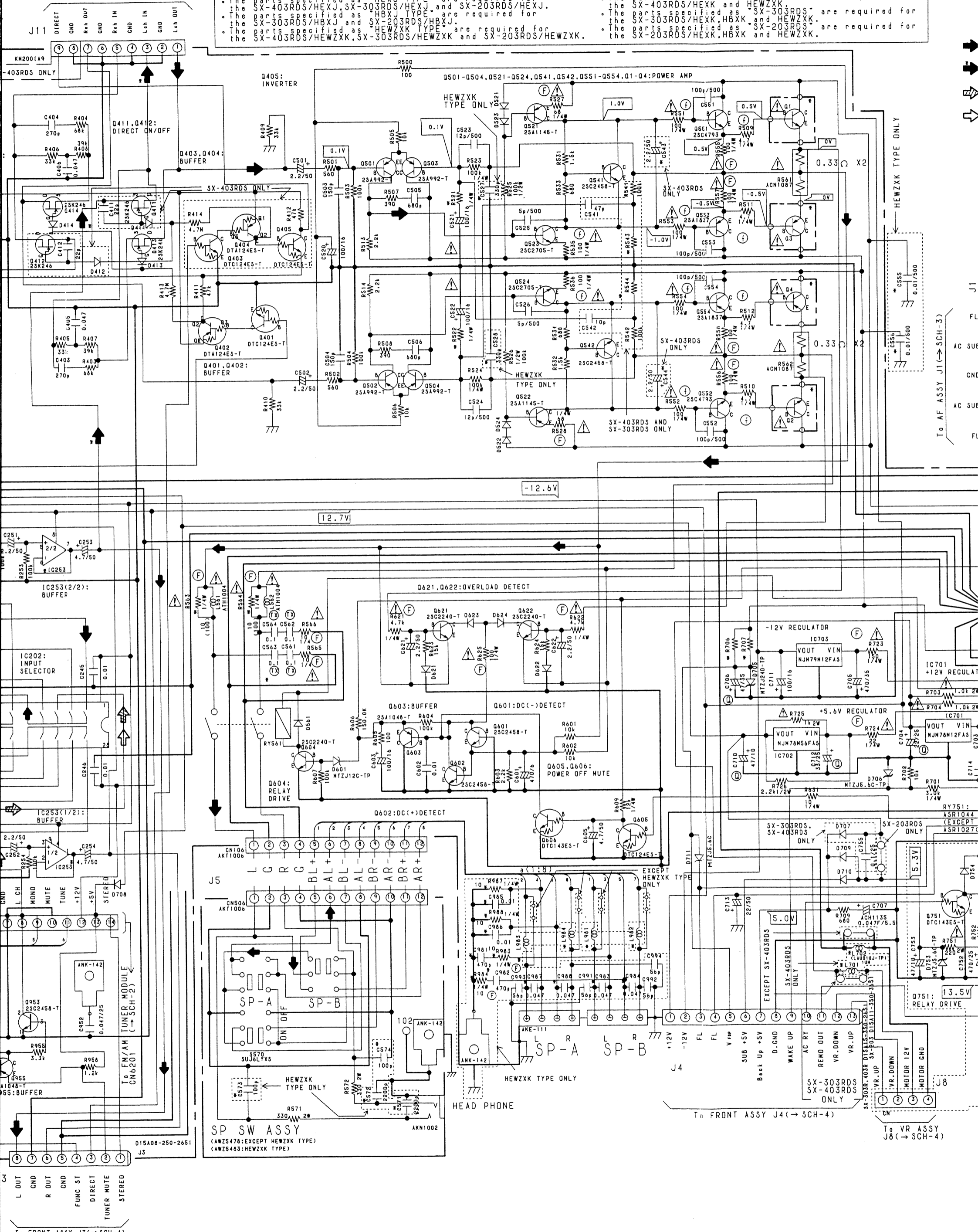
SCH-3

AF ASSY, SP SW ASSY, POWER SW ASSY, TRANS ASSY

and SX-303RDS : To VR ASSY J11(→SCH-4)
 SX-203RDS : To FRONT ASSY J11(→SCH-4)

NOTE:

- Value in () is HEWZKX TYPE.
- The parts specified as "SX-403RDS" are required for the SX-403RDS/HEXJ, SX-303RDS/HEXJ and SX-203RDS/HEXJ.
- The parts specified as "HEWZKX" are required for the SX-303RDS/HEXJ and SX-203RDS/HEXJ.
- The parts specified as "HEWZKX" are required for the SX-403RDS/HEWZKX, SX-303RDS/HEWZKX and SX-203RDS/HEWZKX.
- The parts specified as "SX-403RDS" are required for the SX-403RDS/HEXK and HEWZKX.
- The parts specified as "SX-303RDS" are required for the SX-303RDS/HEXK, HBXK and HEWZKX.
- The parts specified as "SX-203RDS" are required for the SX-203RDS/HEXK, HBXK and HEWZKX.



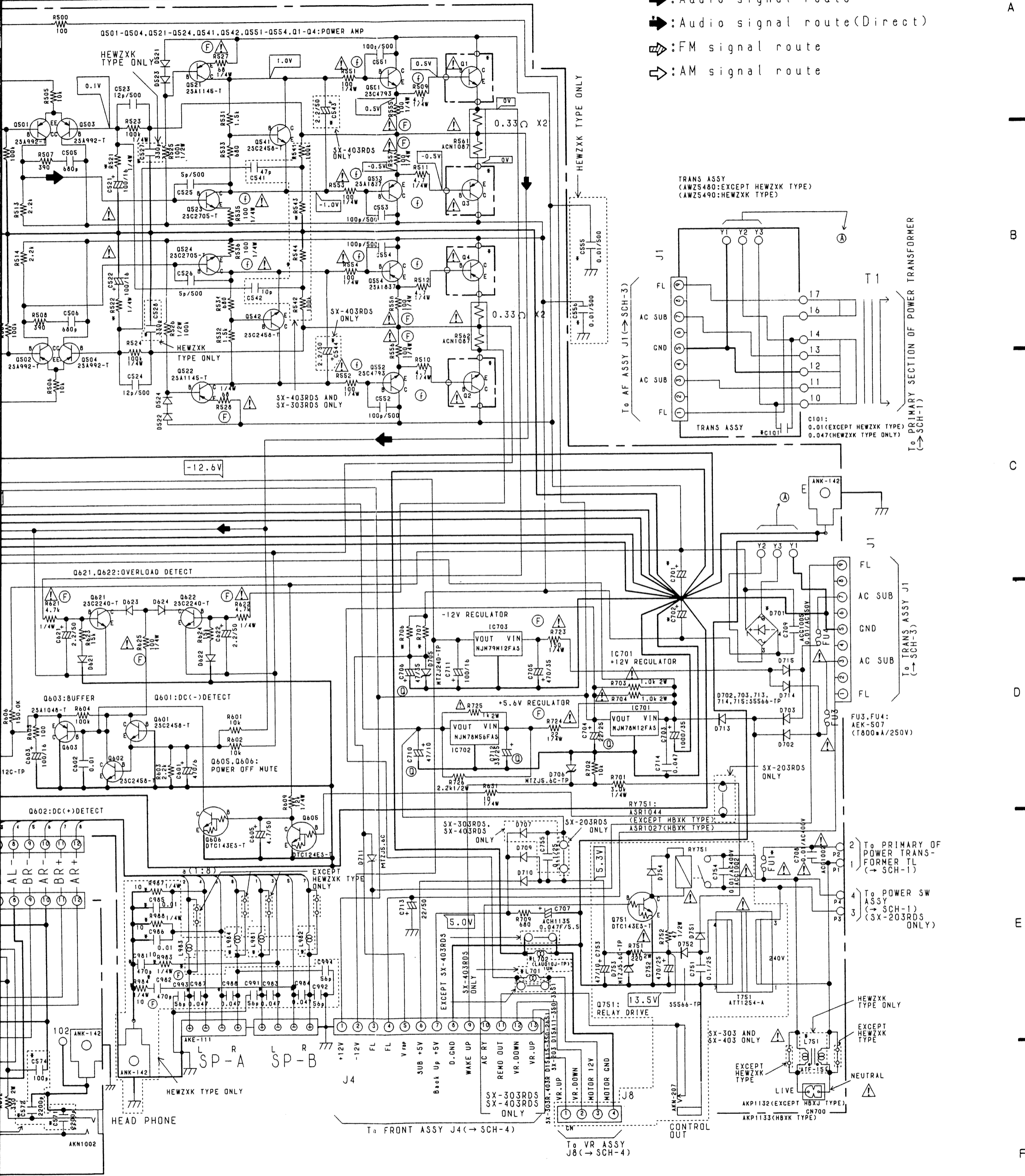
To FRONT ASSY J3(→SCH-4) | To FRONT ASSY J4(→SCH-4) | To VR ASSY J8(→SCH-4)

HEWZK TYPE, SX-303RDS/HEWZK and SX-203RDS/HEWZK are required for the SX-403RDS/HEWZK and HEWZK.
 The parts specified as "SX-403RDS" are required for the SX-403RDS/HEWZK and HEWZK.
 The parts specified as "SX-303RDS" are required for the SX-303RDS/HEWZK and HEWZK.
 The parts specified as "SX-203RDS" are required for the SX-203RDS/HEWZK and HEWZK.

The parts specified as "SX-403RDS" are required for the SX-403RDS/HEWZK and HEWZK.
 The parts specified as "SX-303RDS" are required for the SX-303RDS/HEWZK and HEWZK.
 The parts specified as "SX-203RDS" are required for the SX-203RDS/HEWZK and HEWZK.

SCH-3

- ➔: Audio signal route
- ➔: Audio signal route (Direct)
- ➔: FM signal route
- ➔: AM signal route



SCH-3

AF ASSY, SP SW ASSY, POWER SW ASSY, TRANS ASSY

3.4 FRONT ASSY, VR ASSY AND RDS ASSY

NOTE:

- The parts specified as "SX-403RDS" are required for the SX-403RDS/HEXK and HEWZXX.
- The parts specified as "SX-303RDS" are required for the SX-303RDS/HEXK, HBXK and HEWZXX.
- The parts specified as "SX-203RDS" are required for the SX-203RDS/HEXK, HBXK and HEWZXX.

FRONT ASSY (AWZ5489: SX-403RDS)
 (AWZ5485: SX-303RDS)
 (AWZ5477: SX-203RDS)

A

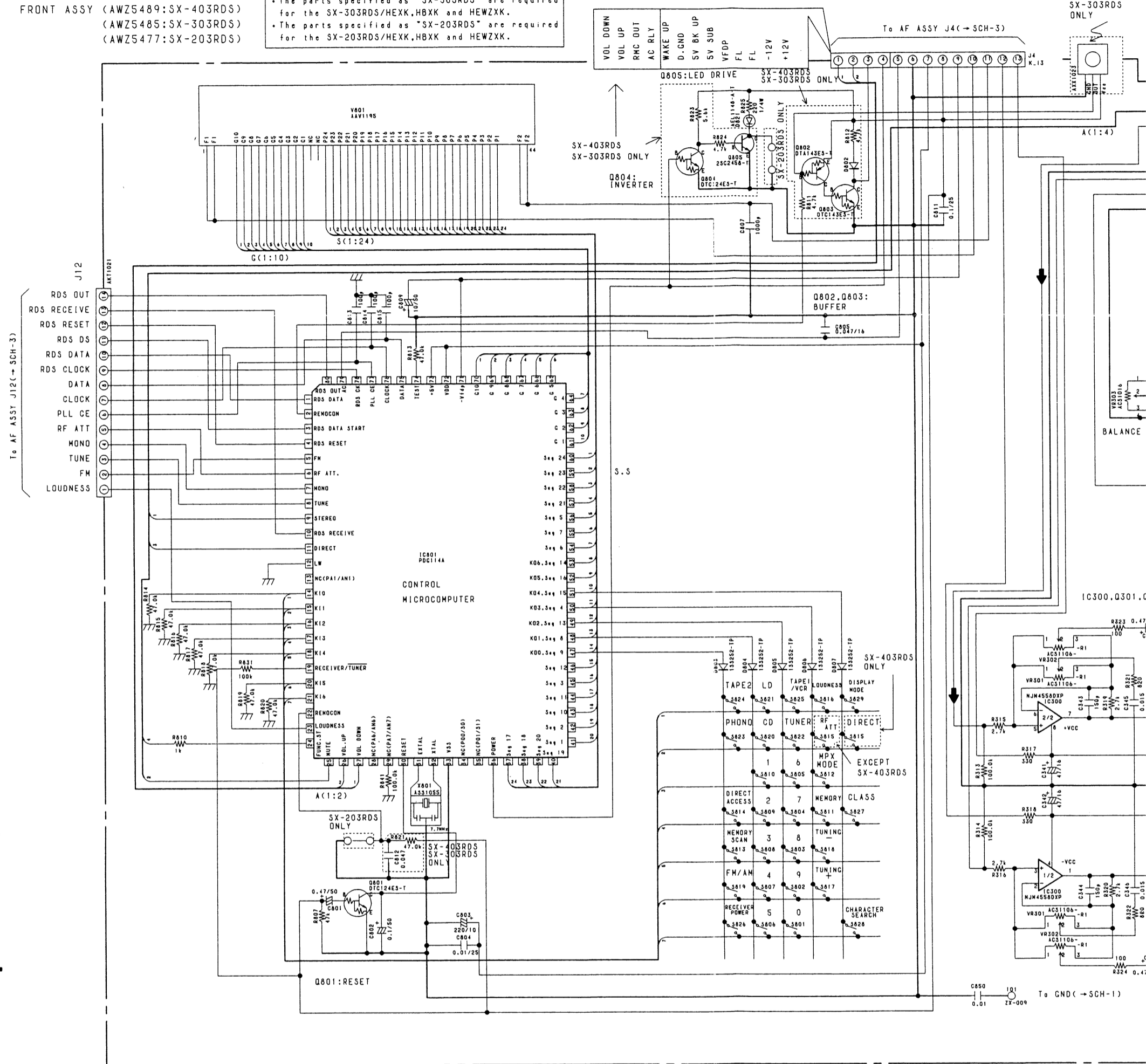
B

C

D

E

F

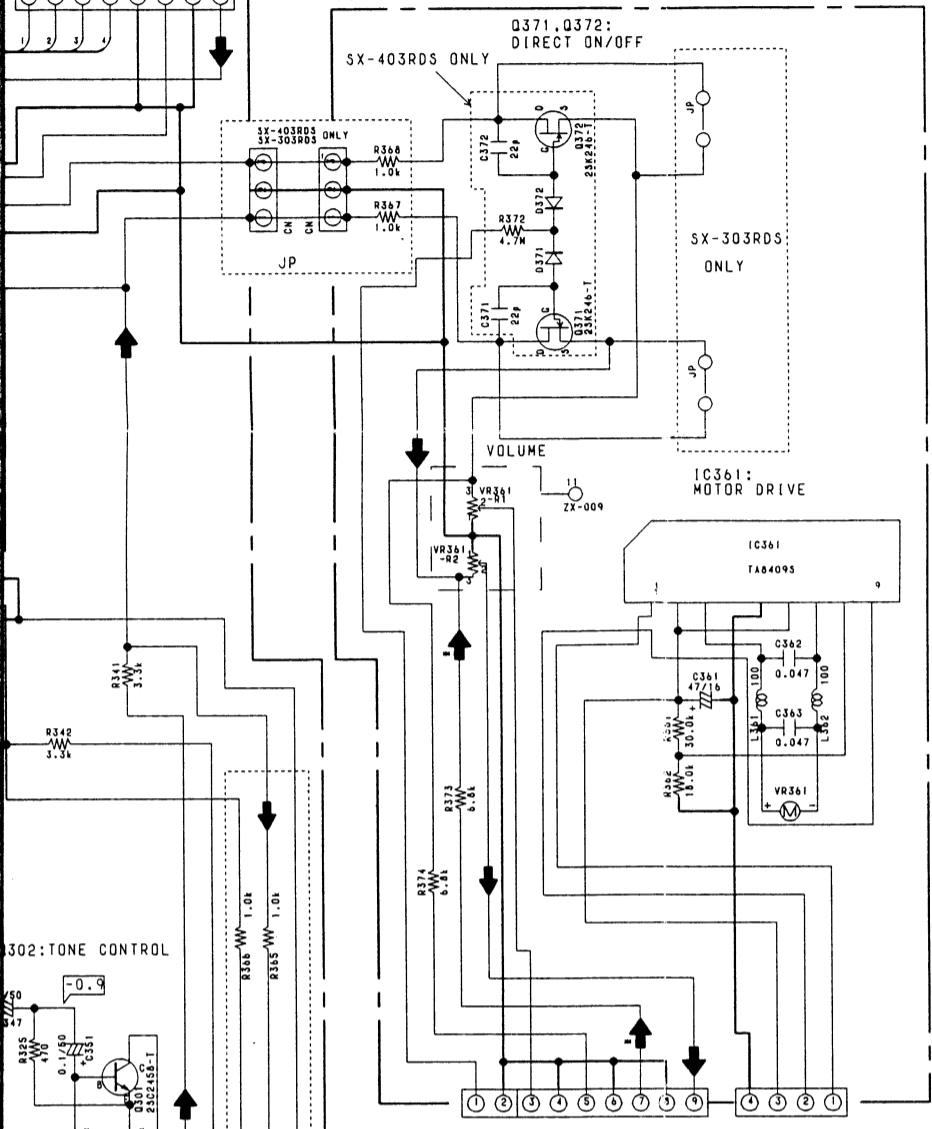


To AF ASSY J3 (→ SCH-3)

➔ : Audio signal route
➔ : Audio signal route (Direct)

SCH-4

VR ASSY (AWZ5489: SX-403RDS)
(AWZ5485: SX-303RDS)
(SX-403RDS AND SX-303RDS ONLY)



302: TONE CONTROL

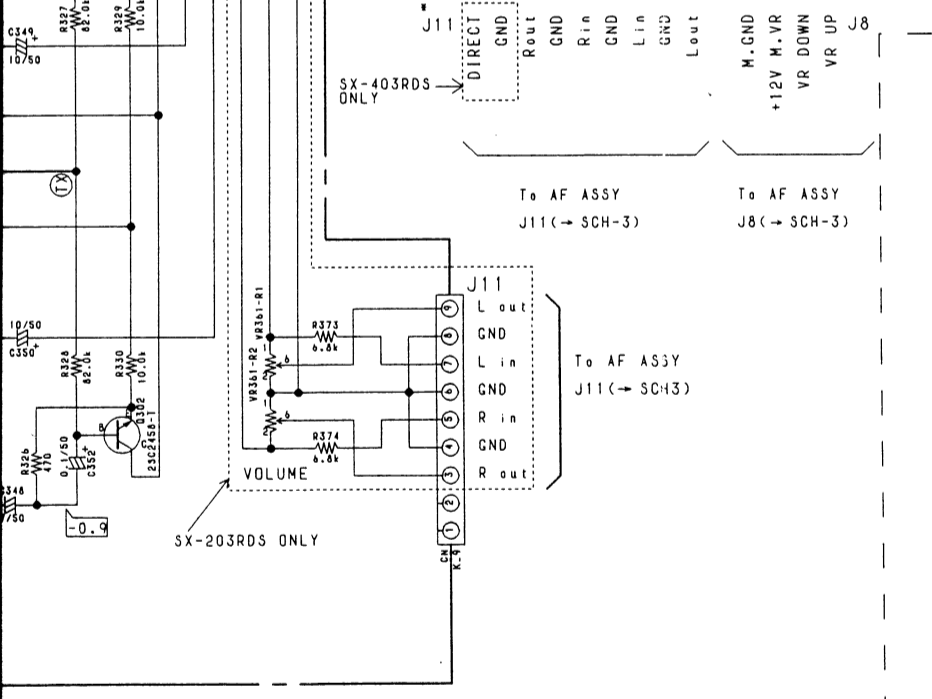
SX-403RDS ONLY

To AF ASSY J11 (→ SCH-3)

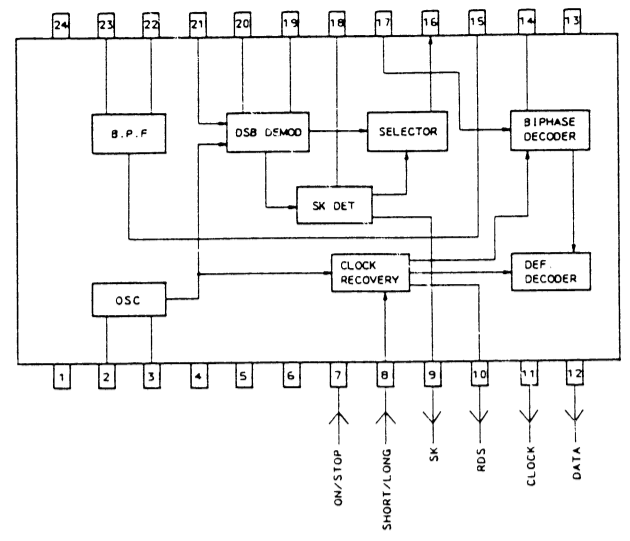
To AF ASSY J8 (→ SCH-3)

To AF ASSY J11 (→ SCH-3)

SX-203RDS ONLY

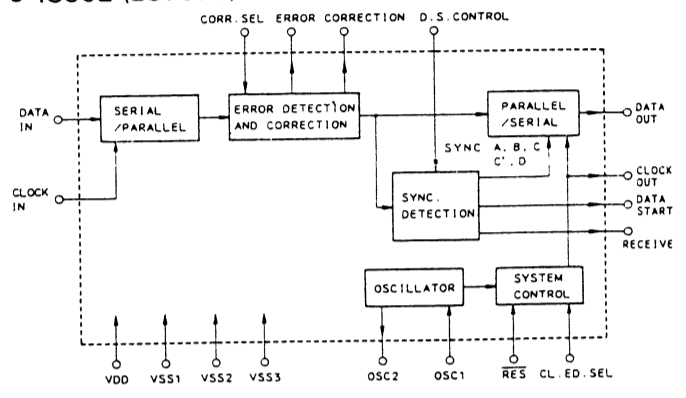


● IC901 (PM4002B)



A

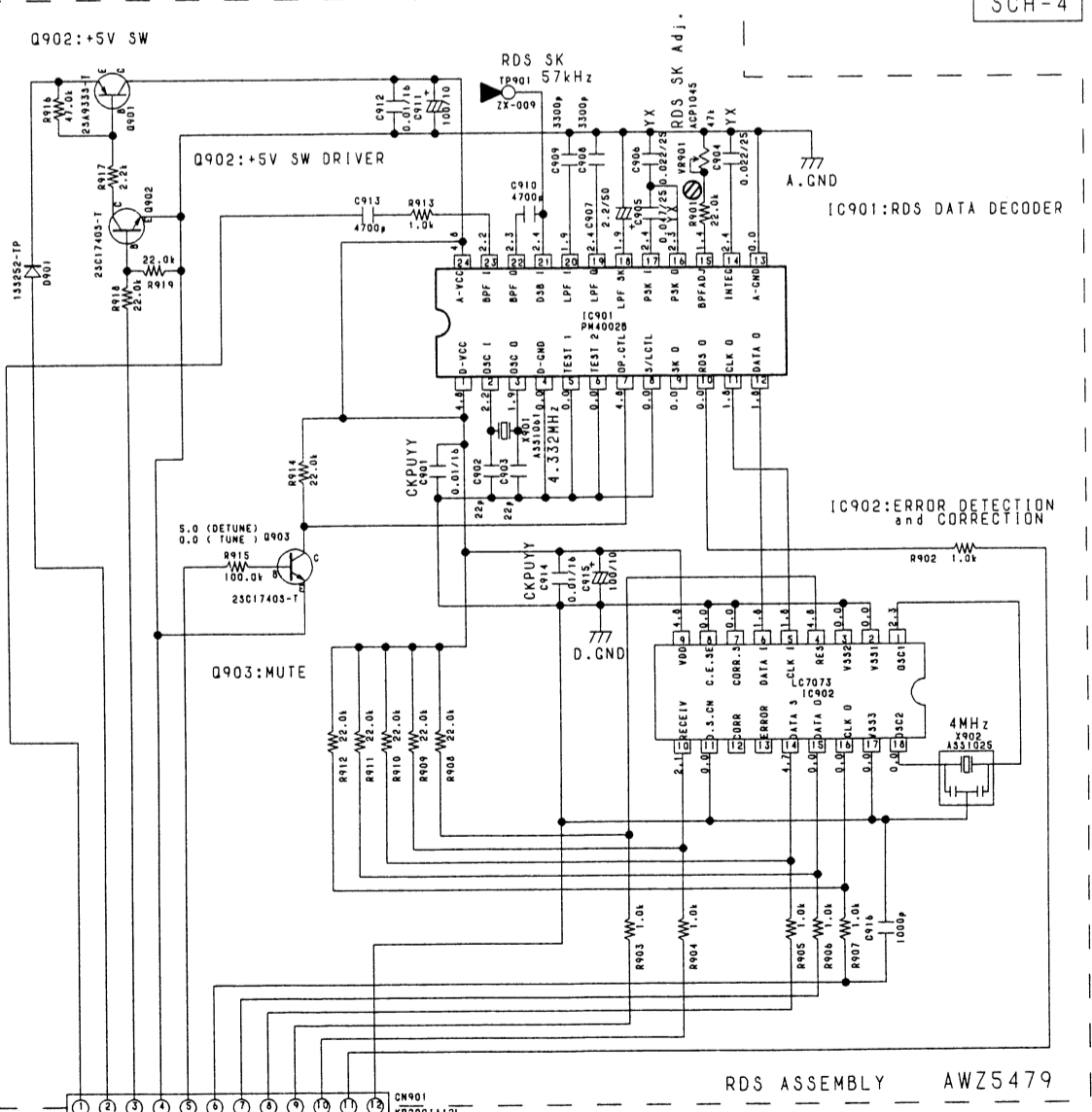
● IC902 (LC7073)



B

C

SCH-4



D

E

FH COMPOSITE
+5.6V(DIGITAL)
FM(POWER CONTROL)
A-GND
TUNE
RDS CLOCK OUT
RDS DATA OUT
RDS DATA START
RDS RESET
RDS RECEIVE
RDS OUT
D-GND

RDS ASSEMBLY AWZ5479

TO MAIN ASSY (→ SCH-3)

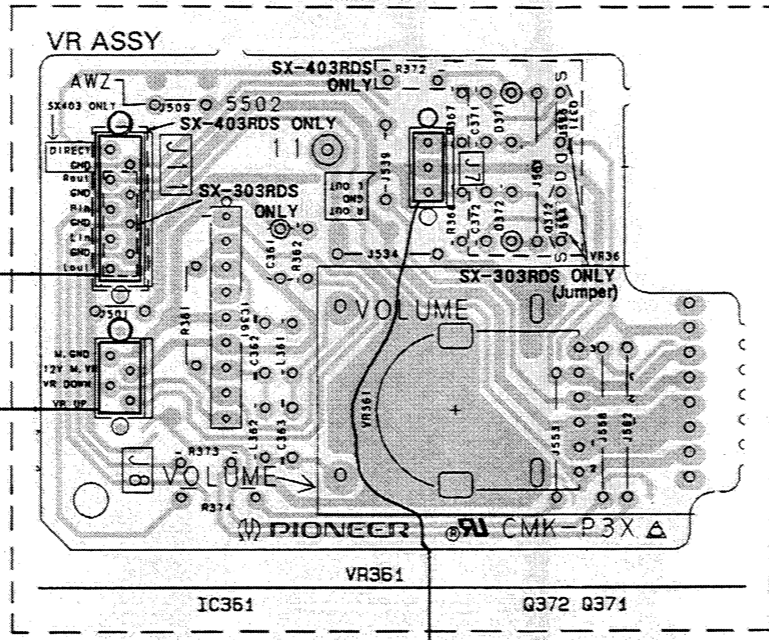
FRONT ASSY, VR ASSY, RDS ASSY

SCH-4

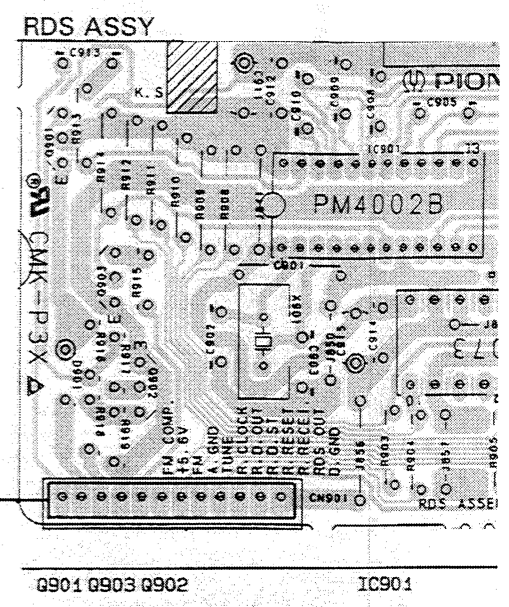
F

1 2 3 4 5 6

SX-403RDS AND SX-303RDS ONLY



To AF assy J11
To AF assy J8

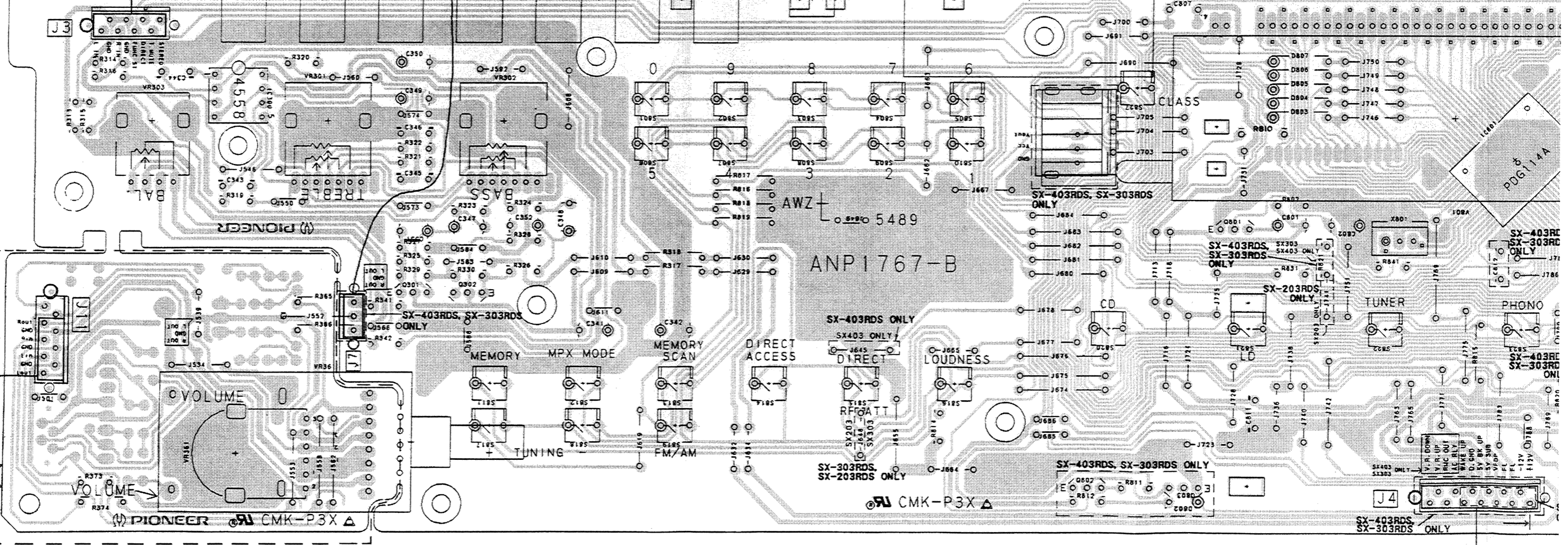


To AF assy
Q901 Q903 Q902 IC901

A

B

FRONT ASSY



SX-203RDS ONLY

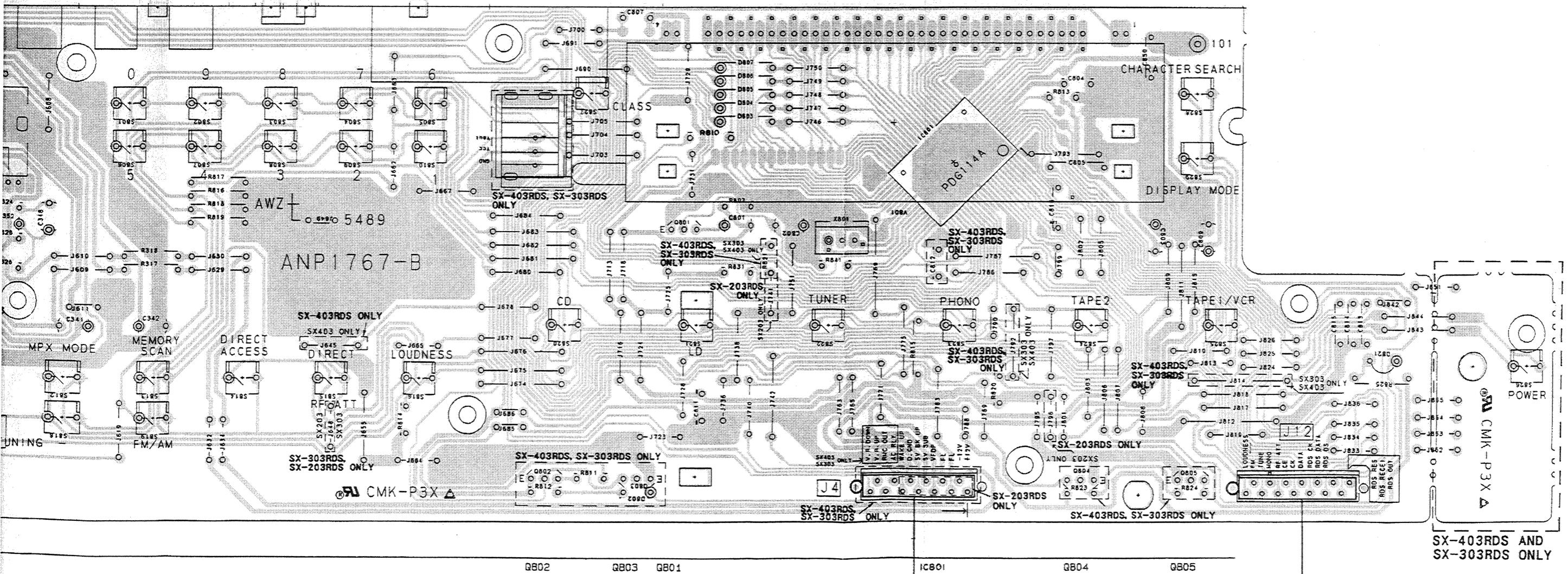
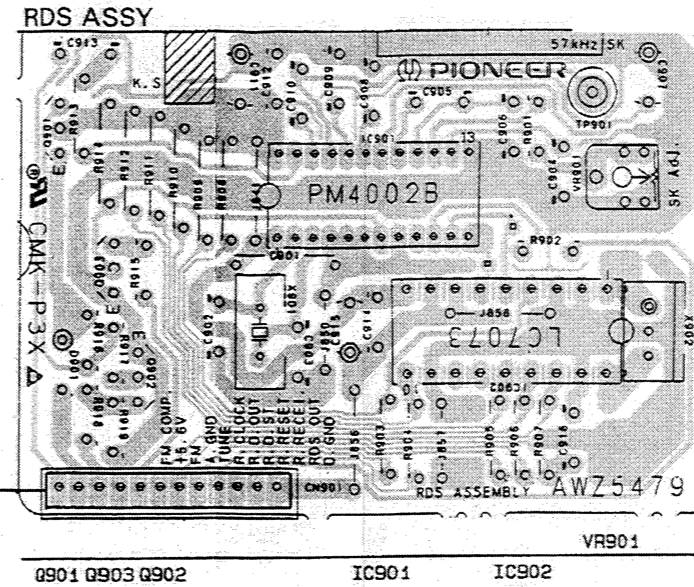
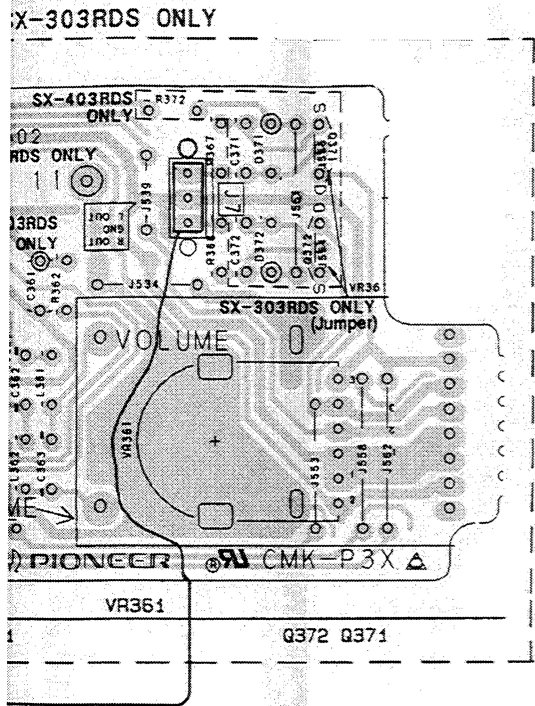
VR303 VR361 VR301 VR302 IC300 Q301 Q302 Q802 Q803 Q801 IC801

To AF assy J11

To AF

• This diagram is viewed from the mounted parts side.

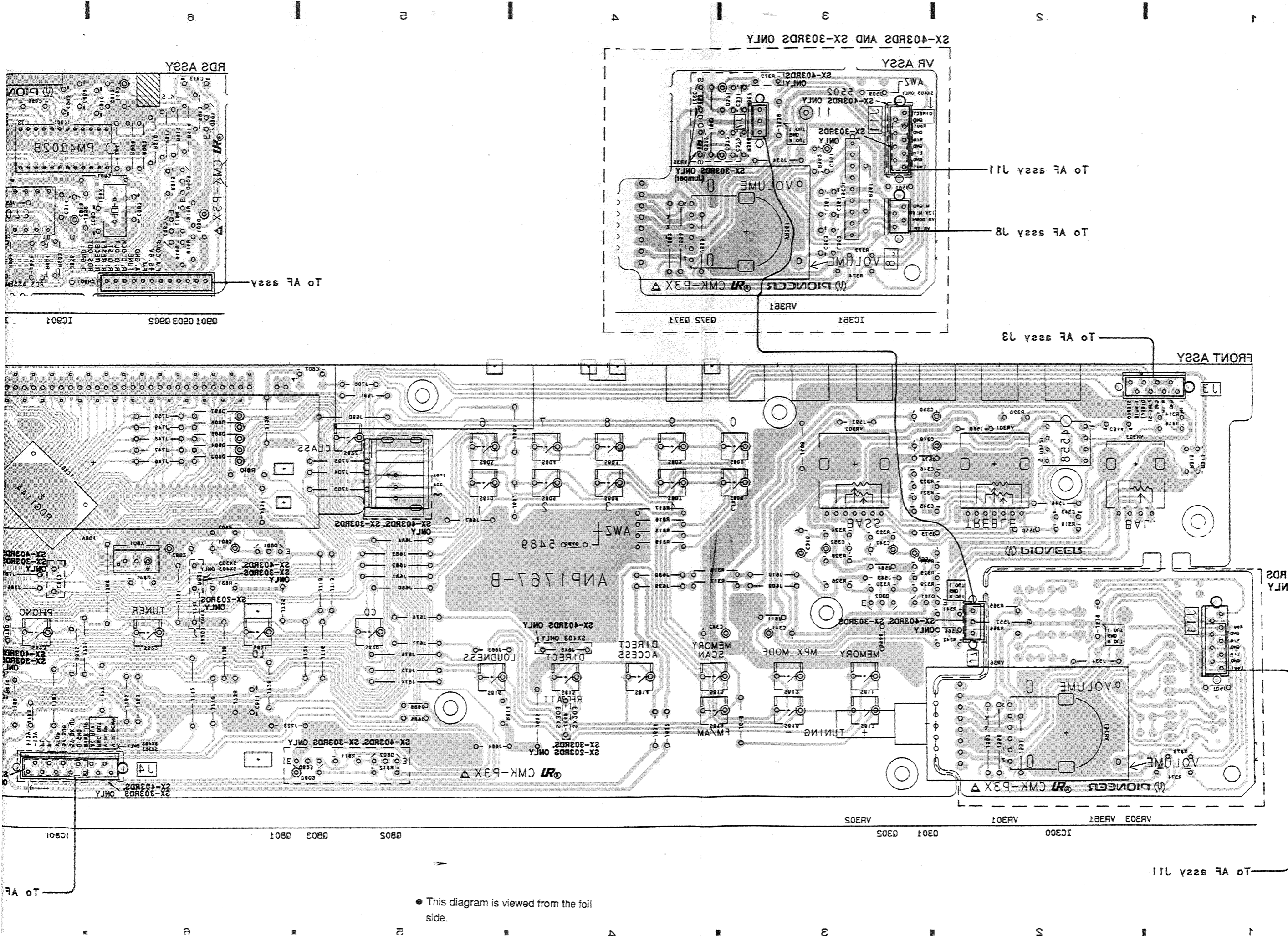
1 2 3 4 5 6



• This diagram is viewed from the mounted parts side.

To AF assy J4

To AF assy J2



● This diagram is viewed from the foil side.

A

B

C

D

SX-403RDS, SX-303RDS, SX-203RDS

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	Q523, Q524		2SC2705		C752 (SX-403RDS and SX-303RDS only)		CEAS471M25
	Q551, Q552		2SC4793		C705		CEAS471M35
	Q411, Q412 (SX-403RDS only)		2SK246		C601		CEAS471M6
	Q413, Q414		2SK246		C253, C254, C605		CEAS4R7M50
	Q402		DTA124ES		C521, C522 (For SX-403RDS)		CEEA101M16
	Q404 (SX-403RDS only)		DTA124ES		C521, C522 (For SX-303RDS)		CEAS101M16
	Q261, Q262, Q401		DTC124ES		C521, C522 (For SX-203RDS)		CEAS470M16
	Q403, Q405 (SX-403RDS only)		DTC124ES		C501, C502 (For SX-403RDS)		CEEA2R2M50
	Q605		DTC124ES		C501, C502 (For SX-303RDS and SX-203RDS)		CEAS2R2M50
	Q606		DTC143ES		C704		CEHAQ220M25
	Q751 (SX-403RDS and SX-303RDS only)		DTC143ES		C712		CEHAQ330M25
	D411, D412 (SX-403RDS only)		1SS252		C710		CEHAQ470M10
	D413, D414, D521-D524, D561		1SS252		C706		CEHAQ470M35
	D621-D624, D708-D710		1SS252		C520 (For SX-403RDS)		CEXA101M25
	D707, D751, D754		1SS252		C520 (For SX-303RDS and SX-203RDS)		CEAS101M16
	(SX-403RDS and SX-303RDS only)				C561-C564		CFTXA104J50
	D701 (For SX-403RDS)		D5SB20F		C405, C406		CFTXA473J50
	D701 (For SX-303RDS and SX-203RDS)		D3SBA20 (A)		C243-C246, C602		CKCYF103Z50
	D601		MTZJ12C		C714		CKCYF473Z50
	D705		MTZJ24D		C751, C755 (For SX-403RDS and SX-303RDS only)		CKCYX104M25
	D711		MTZJ5.6C		C505, C506		CKDYB681K50
	D706		MTZJ5.6C		C951		CKDYF103Z50
	D753 (SX-403RDS and SX-303RDS only)		MTZJ5.6C		C250		CKDYX104M25
	D702, D703, D713-D715		S5566		C952		CKDYX473M25
	D752 (SX-403RDS and SX-303RDS only)		S5566		C233, C234, C247, C248		CKPUYB331K50
					C249		CKPUYB471K50
					C239, C240		CQMA242J50
					C237, C238		CQMA822J50
COILS AND FILTERS				RESISTORS			
	L251		LAU2R2J	△	R561, R562 (0.33/5W)		ACN-139
	L561, L562 (0.7uH)		ATH1004		R525, R526		RD1/2PM104J
	L701, L702 (SX-403RDS only)		LAU010J		R726		RD1/2PM222J
					R752 (SX-403RDS and SX-303RDS only)		RD1/2PM470J
					R631		RD1/4PM100J
TRANSFORMERS					R523, R524		RD1/4PM104J
	T751 (SX-403RDS and SX-303RDS only)		ATT1254		R609		RD1/4PM123J
SWITCHES AND RELAYS					R701		RD1/4PM302J
	RY561 (For SX-403RDS)		ASR-112		R521, R522 (For SX-403RDS)		RD1/4PM911J
	RY561 (For SX-303RDS and SX-203RDS)		ASR1035		R521, R522 (For SX-303RDS)		RD1/4PM102J
	RY751 (SX-403RDS and SX-303RDS only)		ASR1044		R521, R522 (For SX-203RDS)		RD1/4PM122J
CAPACITORS					R563-R566		RD1/4PMF100J
△	C708 (0.01/AC400V)		ACG1002	△	R555-R558, R625		RD1/4PMF101J
△	C754 (0.01/AC400V)		ACG1002	△	R621, R622		RD1/4PMF472J
	(SX-403RDS and SX-303RDS only)			△	R527, R528		RD1/4PMF680J
	C709 (0.01/AC150V)		ACG1005	△	R535, R536, R551-R554		RFA1/4PS101J
	C707 (0.047F/5.5)		ACH1135	△	R723		RFA1/4PS151J
	C701, C702 (8200/50) (For SX-403RDS)		ACH1265	△	R724		RFA1/4PS220J
	C701, C702 (6800/50) (For SX-303RDS)		ACH1105	△	R509-R512		RFA1/4PS4R7J
	C701, C702 (5600/50) (For SX-203RDS)		ACH1266	△	R703, R704, R725		RS2LMF102J
	C542 (SX-403RDS and SX-303RDS only)		CCCSL100C50	△	R751 (SX-403RDS and SX-303RDS only)		RS2LMF221J
	C525, C526		CCCSL050C500	△	R706, R707		RS2LMF272J
	C551-C554		CCCSL101K500	△	(For SX-403RDS and SX-303RDS)		RS2LMF222J
	C523, C524		CCCSL120K500	△	R706, R707 (For SX-203RDS)		RD1/8PM473J
	C503, C504		CCCSL151J50	△	R412 (SX-403RDS only)		RD1/8PM475J
	C403, C404		CCCSL271J50	△	R414 (SX-403RDS only)		RD1/8PM104J
	C411, C412 (SX-403RDS only)		CCPUSL220J50		R541, R542		
	C541 (SX-403RDS and SX-303RDS only)		CCPUSL470J50		(SX-403RDS and SX-303RDS only)		
	C200		CEAS010M50		R543, R544 (For SX-403RDS)		RD1/8PM911J
	C231, C232		CEAS100M50		R543, R544 (For SX-303RDS)		RD1/8PM102J
	C235, C236, C603, C711		CEAS101M16		Other Resistors		RD1/8PM□□□□
	C703		CEAS102M35				
	C713		CEAS220M50				
	C241, C242, C251, C252		CEAS2R2M50				
	C543, C544 (SX-403RDS only)		CEAS2R2M50				
	C621, C622		CEAS2R2M50				
	C753 (SX-403RDS and SX-303RDS only)		CEAS470M10				

SX-403RDS, SX-303RDS, SX-203RDS

Mark	No.	Description	Parts No.
OTHERS			
		PIN JACK 6P (PHONO, CD, VCR)	AKB1121
		PIN JACK 8P (TAPE1 PLAY/REC, TAPE2 PLAY/REC)	AKB1127
		SPEAKER TERMINAL 8-P JACK (CONTROL OUT) (SX-403RDS and SX-303RDS only)	AKE-111 AKN-207
CN700		AC INLET (1P)	AKP1132
		CABLE HOLDER (9P) HEAT SINK SCREW	AKT1082 ANH-575 BBZ30P080FMC
CN302		12P PLUG	KM200IA12

FRONT ASSY SEMICONDUCTORS

IC300	NJM4558DXP
IC801	PDG114A
Q301, Q302	2SC2458
Q805 (SX-403RDS and SX-303RDS only)	2SC2458
Q802 (SX-403RDS and SX-303RDS only)	DTA143ES
Q801	DTC124ES
Q804 (SX-403RDS and SX-303RDS only)	DTC124ES
Q803 (SX-403RDS and SX-303RDS only)	DTC143ES
D802 (SX-403RDS and SX-303RDS only)	1SS252
D803-D807	1SS252
D821 (RED)	AEL1148

SWITCHES AND RELAYS

S801-S825, S827-S829	ASG1029
S826 (SX-403RDS and SX-303RDS only)	ASG1029

CAPACITORS

C343, C344	CCDSL151J50
C349, C350	CEAS100M50
C351, C352, C802	CEJA0R1M50
C809	CEJA100M50
C803	CEJA221M10
C341, C342	CEJA470M16
C347, C348, C801	CEJAR47M50
C345, C346	CFTXA153J50
C811	CKDYX104M25
C813-C815	CKPUYB101K50
C807	CKPUYB102K50
C804, C850	CKPUYF103Z25
C805, C816	CKPUYF473Z16
C812 (SX-403RDS and SX-303RDS only)	CKPUYF473Z16

RESISTORS

VR303 (500k-B)	ACS1016
VR301, VR302 (30k-B5 x 2)	ACS1106
VR361 (SX-203RDS only)	ACT1071
R825	RD1/4PM221J
R365, R366 (SX-203RDS only)	RD1/8PM102J
R373, R374 (SX-203RDS only)	RD1/8PM682J
R811, R812, R824 (SX-403RDS and SX-303RDS only)	RD1/8PM472J
R821 (SX-403RDS and SX-303RDS only)	RD1/8PM473J
R823 (SX-403RDS and SX-303RDS only)	RD1/8PM562J
Other Resistors	RD1/8PM□□□J

Mark	No.	Description	Parts No.
OTHERS			
V801		FL TUBE CABLE HOLDER (3P) (For SX-403RDS and SX-303RDS)	AAV1195 AKT1076
X801		(7.70MHZ) REMOTE RECEIVER UNIT (SX-403RDS and SX-303RDS only)	ASS1055 AXX1023

VR ASSY (SX-403RDS and SX-303RDS only) SEMICONDUCTORS

IC361	TA8409S
Q371, Q372 (SX-403RDS only)	2SK246
D371, D372 (SX-403RDS only)	1SS252

COILS AND FILTERS

L361, L362	LAU101K
------------	---------

CAPACITORS

C371, C372 (SX-403RDS only)	CCPUSL220J50
C361	CEAS470M16
C362, C363	CKPUYF473Z16

RESISTORS

VR361 (100k-A5 x 2)	ACX1069
R372 (SX-403RDS only)	RD1/8PM475J
Other Resistors	RD1/8PM□□□J

OTHERS

CABLE HOLDER (3P)	AKT1076
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POWER SW ASSY (SX-203RDS only)

CAPACITORS

C651 (0.01/AC400V)	ACG1003
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SWITCHES AND RELAYS

S651	ASG1035
------	---------

FM/AM TUNER MODULE

SEMICONDUCTORS

IC6201	LA1836M
IC6202	LM7001J
Q6102	2SC2223
Q6203	2SC2235
Q6202	2SC2712
Q6103, Q6214	2SC2714
Q6201	2SK208
Q6104, Q6105	2SK302
Q6101	3SK194
Q6204	XDA124EK
Q6215, Q6217	XDC124EK
D6101, D6102, D6104	1SV228
D6201	HVU187

COILS AND FILTERS

L6106	ATC1003
L6101	ATC1016
L6102	ATC1017
L6103	ATC1018
L6104	ATC1019

SX-403RDS, SX-303RDS, SX-203RDS

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	T6101		ATE-063		R6237		RS1/8S182J
	L6207 (F = 10.7MHZ)		ATE1013		R6209		RS1/8S221J
	F6204		ATF-107		R6239		RS1/8S332J
	F6203		ATF-119		R6112		RS1/8S473J
	F6202 (F = 450KHZ)		ATF1155		Other Resistors		RS1/10S□□□J
	L6107		ATH1043	OTHERS			
	L6209		LCTA221J3225		2P TERMINAL WITH PAL		AKA1017
	L6201, L6202, L6203, L6208		LCTA2R2J3225		X6203 (7.200MHZ)		ASS1042
					X6201 (456kHZ)		ASS1066
					X6202 (450kHZ)		ATF1027
					AM RF TUNING BLOCK		AXX1041
CAPACITORS							
	C6234, C6236, C6254, C6269		ACG1051				
	C6235		ACG1052				
	C6120		CCSCH060D50				
	C6229		CCSCH821J50				
	C6111		CCSQCH010C50				
	C6112, C6122		CCSQCH020C50				
	C6118		CCSQCH080D50				
	C6113, C6203		CCSQCH101J50				
	C6116, C6208, C6221, C6222		CCSQCH150J50				
	C6117		CCSQCH330J50				
	C6105		CCSQL471J50				
	C6101		CCSQTH110J50				
	C6119		CCSQTH150J50				
	C6106, C6107		CCSQTH270J50				
	C6262		CEAS100M50				
	C6231, C6233		CEAS3R3M50				
	C6216, C6217		CEAS330M16				
	C6219		CEAS470M10				
	C6243, C6244, C6245		CEAS470M16				
	C6227		CEAS470M25				
	C6246		CEEA100M50				
	C6224		CEEA101M25				
	C6261		CEJA010M50				
	C6238		CEJA100M16				
	C6249, C6250		CEJA4R7M35				
	C6215		CFTXA103J50				
	C6214		CFTXA224J50				
	C6125, C6204, C6207		CKSQYB102K50				
	C6102, C6114, C6115, C6121, C6124		CKSQYB103K50				
	C6210, C6253, C6264		CKSQYB103K50				
	C6213		CKSQYB223K50				
	C6230		CKSQYB273K50				
	C6228		CKSQYB472K50				
	C6209, C6237		CKSQYB473K50				
	C6251, C6252		CKSQYB682K50				
	C6212, C6218		CKSQYF103Z50				
	C6220, C6226, C6239, C6242, C6255		CKSQYF223Z50				
	C6241		CKSQYF473Z50				
	C6123		CKSYB103K50				
	C6232		CKSYB273K50				
	C6223		CKSYF103Z50				
	C6263		CKSYF473Z50				
RESISTORS							
	VR6201 (10k)		ACP1056				
	VR6202		VRTB6VS223				
	R6299, R6300		RD1/8PM102J				
	R6115, R6119, R6123, R6127, R6268		RS1/8S000J				
	R6269-R6273, R6275, R6276, R6278		RS1/8S000J				
	R6283, R6284, R6289, R6290, R6293		RS1/8S000J				
	R6294, R6297, R6303		RS1/8S000J				
	R6243, R6244		RS1/8S101J				
	R6211		RS1/8S103J				
	R6247		RS1/8S152J				

5. ADJUSTMENTS

FM TUNER SECTION

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	FM SG (1kHz, ± 75 kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dB μ V)			
1	Center Adjustment	98 Non modulation	80 or more	98MHz	L6207	Adjust so that the DC voltage between Pin 4 and Pin 28 (or \oplus leads of C6224 and C6261) of IC6201 becomes $0V \pm 50mV$.
2	Front End Sensitivity	98	10-30	98MHz	L6104 L6105*1 L6102 T6101	Adjust so that the DC voltage between Pin12 (or \oplus leads of C6238) of IC6201 (S-meter) and GND becomes at maximum level.
3	TUNED IND. Lighting Level	98	15 ± 2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.
4	SK Level Adjustment	88 EXTERNAL *2 (RDS SG)	60	88MHz NORMAL (RF ATT ON)	VR901	Adjust so that the output level 57kHz between TP901 and GND becomes maximum.

*1 : HEWZXX type only

*2 : RDS SG (AUDIO, PILOT, RDS, BK and DK: OFF, SK: ON)

Notes:

- Before adjusting, make sure there is no gap between L6101 and L6102. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
- Make indicator adjustments in order of AM \rightarrow FM.

AM TUNER SECTION

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dB μ V/m)			
1	TUNED IND. Lighting Level	999	47 ± 2	999kHz	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

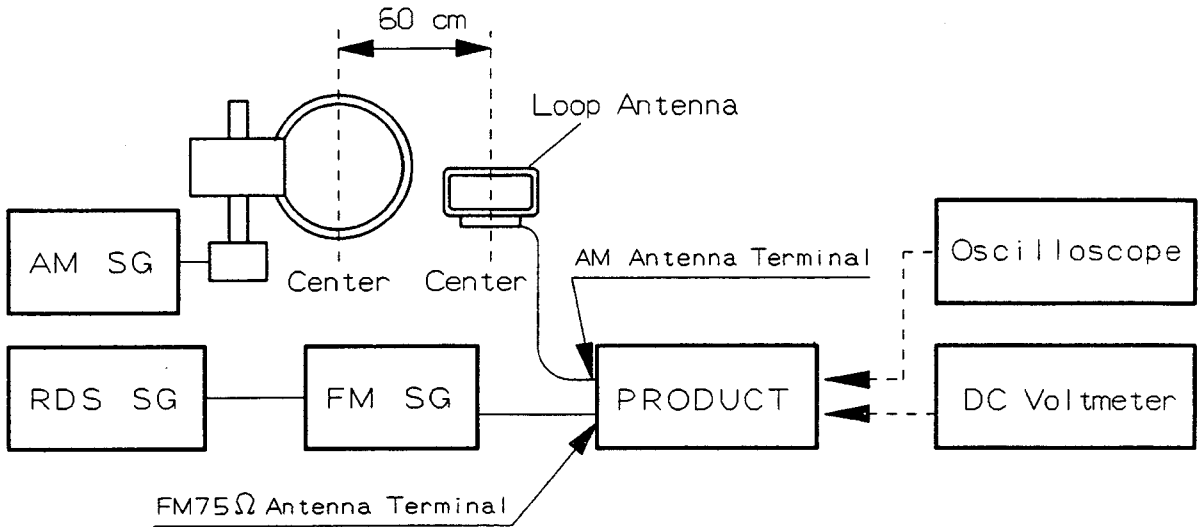
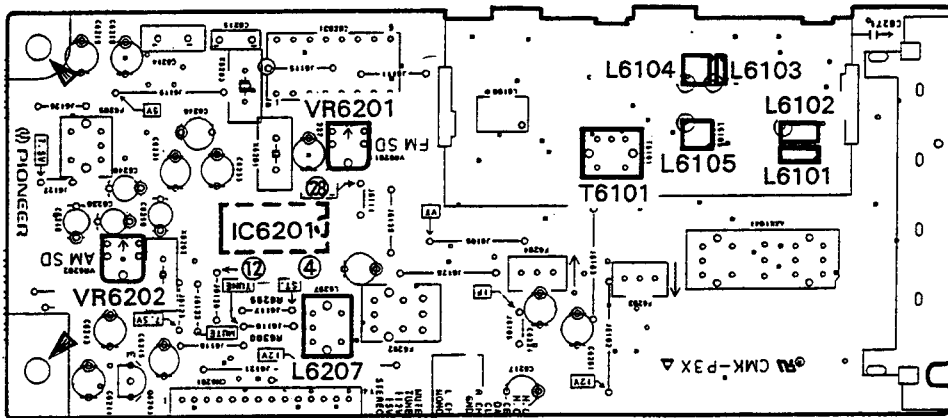


Fig. 1 FM and AM Adjustment Wiring Diagram

FM/AM TUNER MODULE



RDS Assy

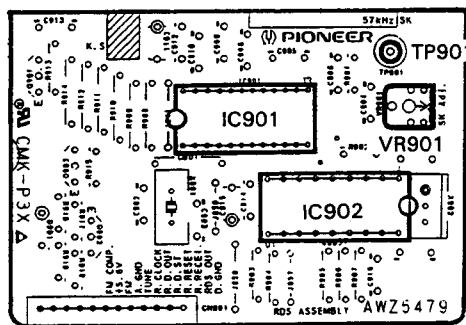



Fig. 2 Adjustment Points



7. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG114A (IC801) CONTROL MICROCOMPUTER

● Pin Function

No.	NAME	I/O	FUNCTION	ACT
1	RDS DATA	I	Data from LC7073 input	—
2	REMOCON	I	Remote control signal input	—
3	RDS DATA START	I	Synchronizing signal of each block from LC7073 input	—
4	RDS RESET	O	Reset signal output to LC7073 when receiving frequency converted	
5	FM	O	FM BAND select output	H
6	RF ATT	O	RF ATT ON/OFF output	H
7	MONO	O	FM MONO output	H
8	TUNE	I	TUNE indicator signal input	L
9	STEREO	I	STEREO indicator signal input	L
10	RDS RECEIVE	I	Signal showing RDS station or not input	L
11	DIRECT	O	DIRECT ON/OFF (Receiver only) *1	H
12	LW be or not	I	L: LW not being H: LW being (Tuner only) *1	—
13	LOUDNESS	O	LOUDNESS ON/OFF (Receiver only) *1	H
14	K10	I	KEYSCAN input 0	H
15	K11	I	KEYSCAN input 1	H
16	K12	I	KEYSCAN input 2	H
17	K13	I	KEYSCAN input 3	H
18	K14	I	KEYSCAN input 4	H
19	RECEIVER/TUNER	I	Change-over of RECEIVER/TUNER (L: Tuner H: Receiver)	—
20	K15	I	KEYSCAN input 5 (Receiver only) *1	H
21	K16	I	KEYSCAN input 6 (Receiver only) *1	H
22	REMOCON be or not	I	Change-over of destination (Receiver only) *1	H

No.	NAME	I/O	FUNCTION	ACT
23	NC		Not used	H
24	FUNCTION ST	O	Change-over of FUNCTION IC (TC9164N) Strobe (Receiver only) *1	
25	MUTE	O	TUNER, MUTE control output	H
26	VOL UP	O	VOLUME UP output	H
27	VOL DOWN	O	VOLUME DOWN output	H
28	Rotary input	O	Rotary encoder input A (Tuner only) *1	H
29	Rotary input	O	Rotary encoder input B (Tuner only) *1	H
30	$\overline{\text{RST}}$	I	Reset input	
31	EX' TAL		Connecting 7.7 MHz oscillation crystal between pins	—
32	X' TAL			—
33	Vss		GND standard electric potential	—
34	NC		Not used	—
35	FL AC	O	FL AC ON/OFF	L
36	POWER	O	POWER ON/OFF	H
37	Seg 17	O	Segment indication output	H
38	Seg 18	O		
39	Seg 20	O		
40	Seg 19	O		
41	Seg 1	O		
42	Seg 2	O		
43	Seg 10	O		
44	Seg 11	O		
45	Seg 3	O		
46	Seg 12	O		
47	K00/S9	O	Segment indication output / KEYSKAN output	H

6. FL INFORMATION

● AAV1195(V801)

PIN LOCATION

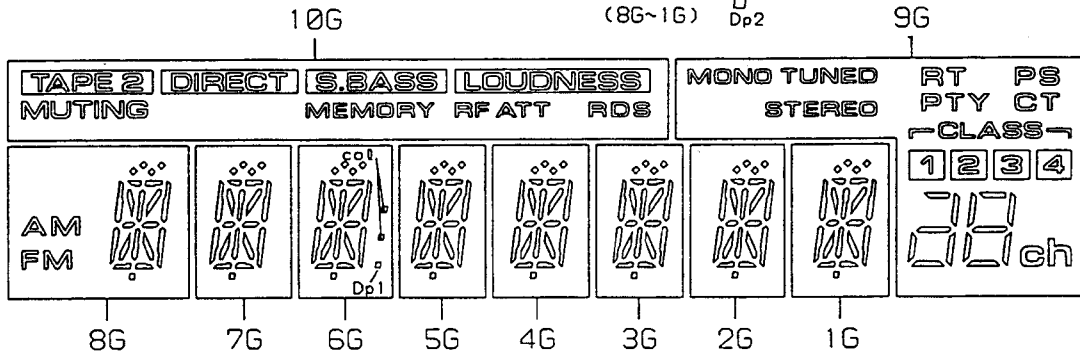


PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44								
CONNECTION	F	F	N	N	0	9	8	7	6	5	4	3	2	1	N	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

- NOTE
- 1) F1, F2 --- Filament
 - 2) NP ----- No pin
 - 3) NC ----- No connection
 - 4) DL ----- Datum Line
 - 5) 1G~10G --- Grid

GRID ASSIGNMENT



ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	-	TUNED	S1	S1	S1	S1	S1	S1	S1	S1
P2	-	STEREO	S2	S2	S2	S2	S2	S2	S2	S2
P3	-	2	S4	S4	S4	S4	S4	S4	S4	S4
P4	-	3	S3	S3	S3	S3	S3	S3	S3	S3
P5	MEMORY	MONO	a1	a1	a1	a1	a1	a1	a1	a1
P6	RFATT	4	a2	a2	a2	a2	a2	a2	a2	a2
P7	-	CLASS	h	h	h	h	h	h	h	h
P8	-	1	j	j	j	j	j	j	j	j
P9	TAPE 2	2b	b	b	b	b	b	b	b	b
P10	-	RT	k	k	k	k	k	k	k	k
P11	MUTING	1a	g	g	g	g	g	g	g	g
P12	LOUDNESS	1b	f	f	f	f	f	f	f	f
P13	-	2c	m	m	m	m	m	m	m	m
P14	-	CT	c	c	c	c	c	c	c	c
P15	-	PTY	p	p	p	p	p	p	p	p
P16	-	PS	r	r	r	r	r	r	r	r
P17	-	1g	n	n	n	n	n	n	n	n
P18	S.BASS	1e	d1	d1	d1	d1	d1	d1	d1	d1
P19	DIRECT	1c	e	e	e	e	e	e	e	e
P20	RDS	1d	d2	d2	d2	d2	d2	d2	d2	d2
P21	-	1f	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2	Dp2
P22	-	ch	AM	-	col	-	-	-	-	-
P23	-	2a, 2d, 2g	FM	-	-	-	-	-	-	-
P24	-	2e	-	-	-	-	-	-	-	-

SX-403RDS, SX-303RDS, SX-203RDS

No.	NAME	I/O	FUNCTION	ACT
48	K01/S8	O	Segment indication output / KEYSCAN output	H
49	K02/S13	O		
50	K03/S4	O		
51	K04/S15	O		
52	Seg 16	O	Segment indication output	H
53	Seg 14	O		
54	Seg 6	O		
55	Seg 7	O		
56	Seg 5	O		
57	Seg 21	O		
58	Seg 22	O		
59	Seg 23	O	Segment indication output (Receiver only) *1	H
60	Seg 24	O		
61	R: G 1 T: G 10	O	Grid FL indication output	H
62	R: G 2 T: G 9	O		
63	R: G 3 T: G 8	O		
64	R: G 4 T: G 7	O		
65	R: G 5 T: G 6	O		
66	R: G 6 T: G 1	O		
67	R: G 7 T: G 2	O		
68	R: G 8 T: G 3	O		
69	R: G 9 T: G 4	O		
70	R: G 10 T: G 5	O		

No.	NAME	I/O	FUNCTION	ACT
71	-VFDP	/	Electric potential for FL display (-30 V)	—
72	VDD	/	+5 V Power source input	—
73	NC	/	+5 V Power source input	—
74	TEST	I	TEST MODE judgement input	H
75	PLL_DT	O	PLL communication data output (LM7001) and change-over function (TC9164N)	—
76	PLL_CK	O	PLL communication clock output (LM7001) and change-over function (TC9164N)	—
77	PLL_CE	O	PLL communication chip enable output (LM7001)	H
78	RDS_CK	I	Each bit from LC7073 synchronizing clock input	—
79	AC	I	WAKE • UP AC pulse input	—
80	RDS_OUT	I	Judging RDS signals output or not	L

*1 : Functions will be changed according to setting (L or H) of Pin 19.

8. FOR SX – 403RDS/HEWZ XK, SX – 303RDS/HB XK, HEWZ XK, SX – 203RDS/HB XK AND HEWZ XK TYPES

NOTES :

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- Parts marked by "☉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

CONTRAST OF MISCELLANEOUS PARTS FOR SX – 403RDS

SX – 403RDS/HEWZ XK and HEXK have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks	
		HEXK Type	HEWZ XK Type		
NSP	AF COMPLEX assy	AWK1819	AWK1820		
	AF assy	AWZ5488	AWZ5491		
	TRANS assy	AWZ5480	AWZ5490		
	SP SW assy	AWZ5478	AWZ5483		
	FM/AM TUNER MODULE	AXQ3227	AXQ3228		
	Ceramic capacitor (C2)	CCDSL820J50		*
	Serial sheet	AAX1523		
Operating instructions (English, French, German, Italian, Dutch, Swedish, Spanish, Portuguese)	ARE1312	.....		
	.....	ARC1480		

* : Refer to page 4.

CONTRAST OF MISCELLANEOUS PARTS FOR SX – 303RDS

SX – 303RDS/HB XK, HEWZ XK and HEXK have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		HEXK Type	HB XK Type	HEWZ XK Type	
NSP	AF COMPLEX assy	AWK1817	AWK1841	AWK1818	
	AF assy	AWZ5484	AWZ5623	AWZ5487	
	TRANS assy	AWZ5480	AWZ5480	AWZ5490	
	SP SW assy	AWZ5478	AWZ5478	AWZ5483	
	FM/AM TUNER MODULE	AXQ3227	AXQ3227	AXQ3228	
	Δ	Ceramic capacitor (C2)	.....	.....		CCDSL820J50	*
AC power cord		ADG1135	ADG1143	ADG1135	
Serial sheet		.....	.....	AAX1523
Operating instructions (English, French, German, Italian, Dutch, Swedish, Spanish, Portuguese)		ARE1312	
		ARB1480	
Operating instructions (German)		ARC1480	

* : Refer to page 4.

SX-403RDS, SX-303RDS, SX-203RDS

AF ASSY (For SX-303RDS)

AWZ5623, AWZ5487 and AWZ5484 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ5484	AWZ5623	AWZ5487	
△	RY751	ASR1044	ASR1027	ASR1044	
△	L751	.....	.....	ATF-151	
	L981-L984	.....	.....	ATH-133	
	C201, C202	.....	.....	CKPUYB181K50	
	C203-C210, C213-C224	.....	.....	CKPUYB391K50	
	C211, C212	.....	.....	CKPUYB821K50	
	C527, C528	.....	.....	CKPUYB331K50	
	C555, C556	.....	.....	CKDYB103K500	
	C981, C982	.....	.....	CKDYB471K50	
	C983, C984, C987, C988	.....	.....	CFTXA473J50	
	C985, C986	.....	.....	CKDYF103Z50	
	C991-C994	.....	.....	CCDSL560J50	
△	R211, R212	RD1/8PM331J	RD1/8PM331J	RD1/8PM102J	
	R563, R564	RD1/4PMF100J	RD1/4PMF100J	RD1/4PMF101J	
	R983, R984, R987, R988	.....	.....	RD1/4PMF100J	
	CN700 AC inlet (1P)	AKP1132	AKP1133	AKP1132	

AF ASSY (For SX-203RDS)

AWZ5622, AWZ5482 and AWZ5476 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AWZ5476	AWZ5622	AWZ5482	
△	L751	.....	.....	ATF-151	
	L981-L984	.....	.....	ATH-133	
	C201, C202	.....	.....	CKPUYB181K50	
	C203-C210, C213-C224	.....	.....	CKPUYB391K50	
	C211, C212	.....	.....	CKPUYB821K50	
	C527, C528	.....	.....	CKPUYB331K50	
	C555, C556	.....	.....	CKDYB103K500	
	C981, C982	.....	.....	CKDYB471K50	
	C983, C984, C987, C988	.....	.....	CFTXA473J50	
	C985, C986	.....	.....	CKDYF103Z50	
	C991-C994	.....	.....	CCDSL560J50	
△	R211, R212	RD1/8PM331J	RD1/8PM331J	RD1/8PM102J	
	R563, R564	RD1/4PMF100J	RD1/4PMF100J	RD1/4PMF101J	
	R983, R984, R987, R988	.....	.....	RD1/4PMF100J	
	CN700 AC inlet (1P)	AKP1132	AKP1133	AKP1132	

CONTRAST OF MISCELLANEOUS PARTS FOR SX – 203RDS

SX – 203RDS/HBXK, HEWZXX and HEXK have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		HEXK Type	HBXK Type	HEWZXX Type	
NSP	AF COMPLEX assy	AWK1815	AWK1840	AWK1816	*
	AF assy	AWZ5476	AWZ5622	AWZ5482	
	TRANS assy	AWZ5480	AWZ5480	AWZ5490	
	SP SW assy	AWZ5478	AWZ5478	AWZ5483	
	FM/AM TUNER MODULE	AXQ3227	AXQ3227	AXQ3228	
△	Ceramic capacitor (C2)	.....	.....	CCDSL820J50
	AC power cord	ADG1135	ADG1143	ADG1135	
	Serial sheet	.....	.....	AAAX1523
	Operating instructions (English, French, German, Italian, Dutch, Swedish, Spanish, Portuguese)	ARE1312	.....	.....
	Operating instructions (English)	.....	ARB1480	.....
	Operating instructions (German)	.....	.....	ARC1480

* : Refer to page 4.

AF ASSY (For SX – 403RDS)

AWZ5491 and AWZ5488 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ5488	AWZ5491	
△	L751	ATF – 151	
	L981 – L984	.....	ATH – 133
	C201, C202	.....	CKPUYB181K50
	C203 – C210, C213 – C224	.....	CKPUYB391K50
	C211, C212	.....	CKPUYB821K50
	C527, C528	.....	CKPUYB331K50
	C555, C556	.....	CKDYB103K500
	C981, C982	.....	CKDYB471K50
	C983, C984, C987, C988	.....	CFTXA473J50
	C985, C986	.....	CKDYF103Z50
C991 – C994	.....	CCDSL560J50	
△	R211, R212	RD1/8PM331J	RD1/8PM102J	
	R563, R564	RD1/4PMF100J	RD1/4PMF101J	
	R983, R984, R987, R988	.....	RD1/4PMF100J

SX-403RDS, SX-303RDS, SX-203RDS

TRANS ASSY

AWZ5490 and AWZ5480 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ5480	AWZ5490	
C101		CQMXA103J100	CQMXA473J100	

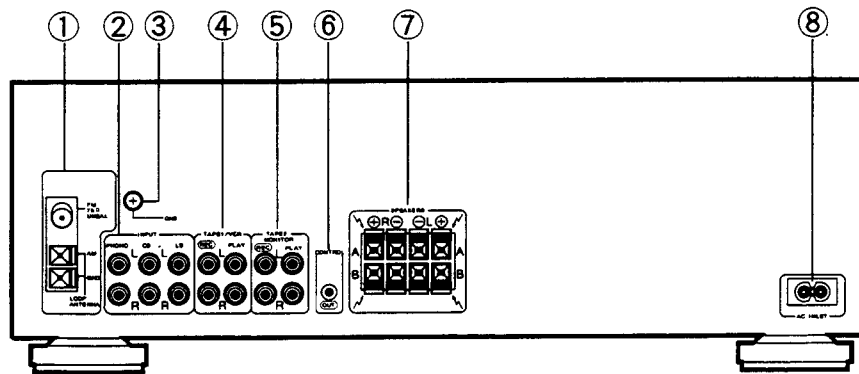
SP SW ASSY

AWZ5483 and AWZ5478 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ5478	AWZ5483	
C571, C572 C573, C574		CKDYB222K50 CCDSL101J50	

9. PANEL FACILITIES

9.1 REAR PANEL FACILITIES



• The illustration shows SX-403RDS.

① FM/AM ANTENNA terminals

Use these antenna terminals for receiving FM and AM broadcasts.

② INPUT jacks

PHONO Connect to the output cables from a turntable.

CD Connect to the output jacks of a compact disc player.

LD Connect to the output jacks of a LD player.

③ GND terminal

Connect to the ground lead of a turntable.

Use a screwdriver to connect with the ground terminal.

④ TAPE 1/VCR jacks

Connect these jacks to the cassette deck or video cassette recorder.

⑤ TAPE 2 MONITOR jacks

Connect these jacks to the cassette deck.

⑥ CONTROL OUT jacks

(SX-403RDS and SX-303RDS)

Connect this jack to other Pioneer components bearing the **SR** mark when using the remote control of this unit to control the other components.

① To the CONTROL IN jack of other component.

② Receiver

③ Pioneer component bearing the **SR** mark.

④ Remote control unit.

⑦ SPEAKERS terminals

A: Connect to a first set speakers.

B: Connect to a second set of speakers.

NOTE:

No sound will be heard through the speakers when both **A** and **B** buttons are depressed if only one set of speakers has been connected to either **A** or **B** SPEAKERS terminals.

⑧ AC INLET

Connect the power cord first to the unit, then plug it into the **AC** wall outlet.

FM/AM TUNER MODULE

AXQ3228 and AXQ3227 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AXQ3227	AXQ3228	
	Q6218	.....	2SC2712	
	D6103	.....	1SV228	
	F6205	.....	ATF1152	
	L6105	.....	ATC1015	
	L6205	.....	LCTA680J3225	
	C6106	CCSQTH270J50	CCSQTH330J50	
	C6107	CCSQTH270J50	CCSQTH300J50	
	C6109	.....	CCSQTH270J50	
	C6110	.....	CCSQTH300J50	
	C6115	CKSQYB103K50	CKSQYB102K50	
	C6122	CCSQCH020C50	CCSQCH010C50	
	C6126	.....	CKSQYB102K50	
	C6203	CCSQCH101J50	.....
	C6204	CKSQYB102K50	ACG1051	
	C6229	CCSCH821J50	CCSCH102J50	
	C6247	.....	CKSQYB122K50	
	C6248	.....	CEEA100M50	
	C6251, C6252	CKSQYB682K50	CKSQYB562K50	
	C6256	.....	CKSQYF223Z50	
	C6267	.....	CKSQYB473K50	
	C6272	.....	CCSQL330J50	
	R6114	.....	RS1/10S473J	
	R6122	RS1/10S472J	RS1/10S332J	
	R6129, R6302	.....	RS1/8S000J	
	R6131, R6308	RS1/10S000J	.....
	R6232	.....	RS1/10S134J	
	R6233	.....	RS1/10S513J	
	R6234	.....	RS1/10S222J	
	R6235	.....	RS1/10S132J	
	R6236	.....	RS1/10S472J	
	R6237	RS1/8S182J	RS1/8S122J	
	R6238	RS1/10S182J	RS1/10S122J	
	R6239	RS1/8S332J	RS1/8S103J	
	R6240	RS1/10S332J	RS1/10S103J	
	R6251	RS1/10S620J	RS1/10S680J	
	R6290	RS1/8S000J	.....

SX-403RDS, SX-303RDS, SX-203RDS

⑩ TUNING buttons (-, +)

Use for tuning. Press the buttons to change the frequency display (3-speed Accel Tuning)
In the Manual Name input mode and PTY search mode, use to select characters and program types.

⑪ MEMORY button

When the unit is in the frequency display mode, pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.

NOTE:

The MEMORY button does not function during SLEEP timer operation.

⑫ VOLUME control

Use to adjust volume level.

⑬ PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

⑭ SPEAKERS (OFF, ON) buttons

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to A terminals are in use.

B: When the speakers connected to B terminals are in use.

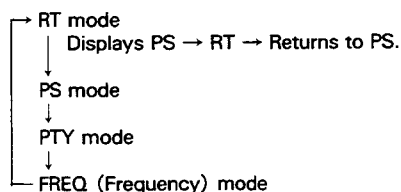
- Turn both A and B speakers to OFF position when only the headphones are in use.

NOTE:

No sound will be heard through the speakers when both A and B buttons are pressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑮ DISPLAY MODE button

Use only during FM reception. Use this to switch between display modes. Each time you press it, the display changes as follows.



- This button does not function when the SLEEP button of the remote control unit is ON.

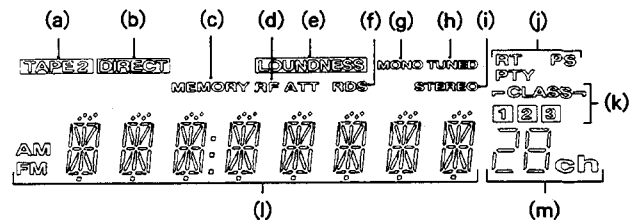
⑯ CHARACTER/SEARCH button

When receiving an AM broadcast, or when in the FM RT, PS modes:
Press the button, "INPUT" is displayed, and the mode switches to manual station name input.

When in the FM PTY mode:

Press the button, "SEARCH" is displayed, and the mode switches to program type search.

- This button does not function when the SLEEP button of the remote control unit is ON. This button does not function at the time of frequency mode.



⑰ OPERATION DISPLAY panel

- (a) TAPE 2 monitor indicator
- (b) DIRECT indicator (SX-403RDS)
- (c) MEMORY indicator
- (d) RF ATT indicator
- (e) LOUDNESS indicator
- (f) RDS indicator
- (g) MONO indicator
- (h) TUNED indicator
- (i) STEREO indicator
- (j) RT, PS, PTY indicator
- (k) CLASS indicator
- (l) Frequency, function, character display
- (m) Channel display

⑱ CLASS button

Use to switch between preset memory classes 1 to 3. In each class, one station can be memorized in each of the 1 to 10 STATION CALL buttons, enabling a total of 30 stations to be memorized.

⑲ Remote sensor

⑳ STATION CALL buttons

These buttons are used to preset and recall desired broadcasting stations and direct access tuning.

㉑ BASS tone control

Use to adjust the low-frequency tone. The center position is the flat (normal) position. When tuned to the right, low-frequency tones are emphasized.

NOTE:

This control does not operate when the DIRECT button is in the ON position. (SX-403RDS)

㉒ TREBLE tone control

Use to adjust high-frequency tone. The center position is the flat (normal) position. When tuned to the right, high-frequency tones are emphasized.

NOTE:

This control does not operate when the DIRECT button is in the ON position. (SX-403RDS)

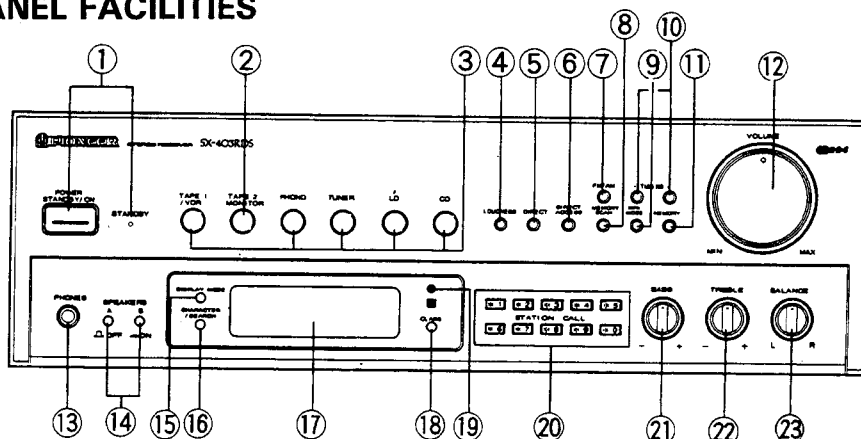
㉓ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L position and if the left side is louder, turn toward the R position.

NOTE:

This control does not operate when the DIRECT button is in the ON position. (SX-403RDS)

9.2 FRONT PANEL FACILITIES



• The illustration shows SX-403RDS.

① POWER (STANDBY/ON) switch/STANDBY indicator (SX-403RDS, SX-303RDS)

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

• The accessory remote control unit can also be used to operate STANDBY/ON.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for approx. 5 seconds.

① POWER switch/indicator (SX-203RDS)

When this switch is pressed, the indicator showing power is being supplied lights up.

Press the switch again to turn power OFF.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for approx 5 seconds.

② TAPE 2 MONITOR button

Press when listening to tape playback with the cassette deck 2.

③ Function buttons

Use to select playback source.

[TAPE 1/VCR] – Press when listening to tape playback with the cassette deck 1 or video cassette recorder.

[PHONO] – Press when listening to record playback on a turntable.

[TUNER] – Press when listening to AM or FM broadcasts with a tuner.

[LD] – Press when listening to laser disc with a laser disc player.

[CD] – Press when listening to compact disc playback with a CD player.

④ LOUDNESS button

Use when listening at low volume levels.

ON: Boosts low and high frequencies to produce a fuller sense of sound, particularly at low volume levels.

OFF: Normal position.

NOTE:

This button does not operate when the DIRECT button is in the ON position (SX-403RDS).

⑤ DIRECT button (SX-403RDS)

Use this button when you do not wish to pass the output from input terminal through the various frequency adjusting circuits (TREBLE, BASS and LOUDNESS). When this button is on, the BALANCE control does not operate.

⑤ RF ATT button (SX-303RDS/SX-203RDS)

Set this button to ON when receiving strong FM signals (near-by stations) to reduce sound distortion.

Normally, this button should be set to OFF.

This button has no effect on reception of AM broadcasts.

NOTE:

This button's status is preset for each station in station memory.

⑥ DIRECT ACCESS tuning button

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.

⑦ FM/AM selector button

This button is used to select either AM or FM reception.

⑧ MEMORY SCAN button

This button is used for station memory scan.

MEMORY SCAN is not executed at the time of SLEEP timer operation.

⑨ MPX MODE selector button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lighted.

Auto stereo mode:

Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This button has no effect on reception of AM broadcasts.