PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
RRV1032

COMPACT HI-FI SYSTEM
X-P30

STEREO RECEIVER
SX-P30

CASSETTE DECK MULTI CD
PDC-P30C

SPEAKER SYSTEM
S-P30

● Refer to the service manual ARP2821 for X−P30/KUXJ.

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.
	X−P30	SX−P30	PDC−P30C	S−P30		
KCXJ	○	○	—	—	AC120V	—
HEXJC	○	○	—	—	AC220−230V	—
HEXJC/DK	○	—	—	—	AC220−230V	—
HEXJC/FR	○	—	—	—	AC220−230V	—
HBXJ	○	○	—	—	AC240V	—
YPWXJ	○	○	—	—	AC240V	—
SDXJ	○	○	—	—	AC110V/120−127V/220V/240V	With the voltage selector
ACXJ	—	—	○	—	AC power supplied from power transformer's secondary of other system component	—
AEXJC	—	—	○	—		
ABXJ	—	—	○	—		
APWXJ	—	—	○	—		
ADXJ	—	—	○	—		

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

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4277

(FOR EUROPEAN MODEL ONLY)

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn varoitusmerkki

WARNING!
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

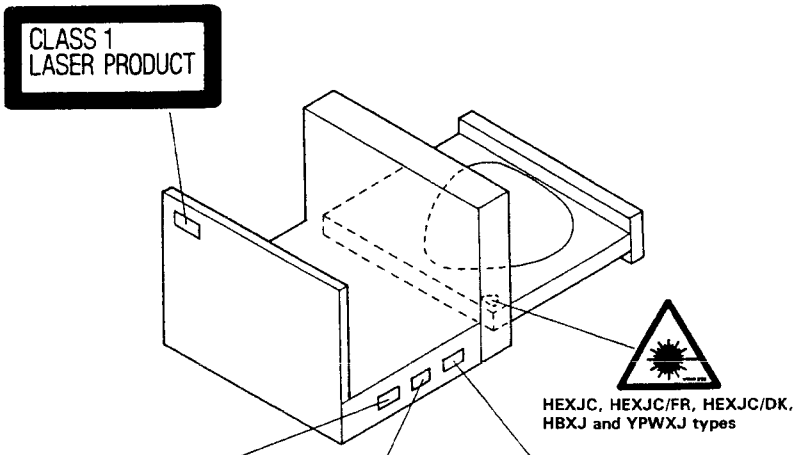
IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 790nm

LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK

HEXJC, HEXJC/FR, HEXJC/DK, HBXJ and YPWXJ types



HEXJC, HEXJC/FR, HEXJC/DK, HBXJ and YPWXJ types

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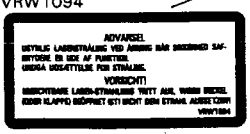
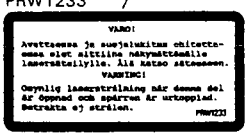


HEXJC, HEXJC/FR and HEXJC/DK types

PRW1233



HEXJC, HEXJC/FR and HEXJC/DK types

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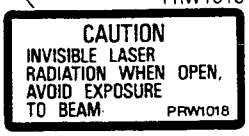


HBXJ and YPWXJ types

Additional Laser Caution

1. Laser Interlock Mechanism
   This mechanism is equipped with a photo-coupler (PH001) that confirms the presence of an installed disc by receiving the infrared light reflected by the disc through an infrared diode (D013). The photo-coupler status is detected by the system microcomputer, and when the photo-coupler corrector side is OFF (disc signal level is Low), the laser diode does not oscillate. If a reflecting object is purposely placed above the infrared diode and photo-coupler (disc signal level becomes High), the interlock will not function.
   When the 29 pin of CXA1081M (IC001) on CD DECODER PCB ASSY board is connected to a Low level (ON), or when the terminals of Q001 are shorted with each other (Fault Condition), the laser diode will oscillate continuously.

2. When the cover is opened and the objective lens is viewed at close range with the naked eye, exposure to a Class 1 laser beam may occur.

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ 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.*

X−P30/KCXJ, HEXJC, HEXJC/DK, HEXJC/FR, HBXJ, YPWXJ, SDXJ and X−P30/KUXJ have the sa

Mark	Symbol & Description	Part No.				
		X−P30/ KUXJ	X−P30/ KCXJ	X−P30/ HEXJC	X−P30/ HEXJC/DK	X−P30/ HEXJC/FR
NSP	STEREO RECEIVER section	SX−P30/ KUXJ	SX−P30/ KCXJ	SX−P30/ HEXJC	SX−P30/ HEXJC	SX−P30/ HEXJC
NSP	CASSETTE DECK MULTI CD section	PDC−P30C/ AUXJ	PDC−P30C/ ACXJ	PDC−P30C/ AEXJC	PDC−P30C/ AEXJC	PDC−P30C AEXJC
	Carton	AZH7006	AZH7019	AZH7008	AZH7008	AZH7008
	Speaker (S−P30−R)	AZP7001	AZP7001	AZP7001	AZP7003	AZP7001
	Speaker (S−P30−L)	AZP7002	AZP7002	AZP7002	AZP7004	AZP7002
	Operating instructions (English)	AZR7003	.....	.....	.....	.....
	Operating instructions (English, French)	.....	AZR7006	.....	.....	AZR7006
	Operating instructions (English, French, Dutch, Portuguese, Finnish, Danish)	.....	.....	AZR7004	AZR7004	.....
	Operating instructions (Spanish)	.....	.....	.....	.....	.....

STEREO RECEIVER SECTION

SX−P30/KCXJ, HEXJC, HEXJC/DK, HEXJC/FR, HBXJ, YPWXJ, SDXJ and SX−P30/KUXJ have the same construction

Mark	Symbol & Description	Part No.				
		SX−P30/ KUXJ	SX−P30/ KCXJ	SX−P30/ HEXJC	SX−P30/ HBXJ	SX−P30/ YPWXJ
	MAIN PCB assy kits	AZW7001	AZW7037	AZW7039	AZW7043	AZW7044
	MAIN PCB assy	AZW7004	AZW7038	AZW7040	AZW7040	AZW7040
	FRONT PCB assy	AZW7005	AZW7005	AZW7041	AZW7041	AZW7045
	AC SUPPLY (A) PCB assy	AZW7006	AZW7006	AZW7057	AZW7042	AZW7042
	AC SUPPLY (B) PCB assy	.....	.....	.....	.....	.....
	VOL. SEL. PCB assy	.....	.....	.....	.....	.....
⚠	AC power cord	ADG1058	AZD7011	AZD7012	AZD7013	AZD7014
⚠	Power transformer (AC120V)	AZT7001	AZT7010	.....	.....	.....
⚠	Power transformer (AC220−230V)	.....	.....	AZT7009	.....	.....
⚠	Power transformer (AC240V)	.....	.....	.....	AZT7008	AZT7008
⚠	Power transformer (AC110V/120−127V/220V/240V)	.....	.....	.....	.....	.....
⚠	F401 Fuse (3A/125V)	AZE7004	.....	.....	.....	.....
⚠	F401 Fuse (T3A/125V)	.....	AZE7013	.....	.....	.....
⚠	F401 Fuse (T3.15A/250V)	.....	.....	AZE7014	.....	.....
⚠	F401 Fuse (T3.15A/250V)	.....	.....	.....	AZE7011	AZE7011
⚠	F402 Fuse (T800mA/250V)	.....	.....	.....	AZE7012	AZE7012
	Rear panel	AZN7002	AZN7075	AZN7076	AZN7077	AZN7077

Note :

∗2 : AZW7033, AZW7034, AZW7035, AZW7036 and AZW7031 are the same as those of SX−P30/SDXJC/NC which is shown in the se

have the same construction except for the following :

t No.	X−P30/ HEXJC/FR	X−P30/ HBXJ	X−P30/ YPWXJ	X−P30/ SDXJ	Remarks
	SX−P30/ HEXJC PDC−P30C/ AEXJC	SX−P30/ HBXJ PDC−P30C/ ABXJ	SX−P30/ YPWXJ PDC−P30C/ APWXJ	SX−P30/ SDXJ PDC−P30C/ ADXJ	
	AZH7008 AZP7001 AZP7002	AZH7009 AZP7001 AZP7002	AZH7009 AZP7001 AZP7002	AZH7010 AZP7001 AZP7002	
	..... AZR7006	AZR7003	AZR7003	AZR7003	
	.....	.....	.....	AZR7005	

construction except for the following :

	SX−P30/ YPWXJ	SX−P30/ SDXJ	Remarks
	AZW7044 AZW7040 AZW7045 AZW7042	AZW7033 *2 AZW7034 *2 AZW7035 *2 ..... AZW7036 *2 AZW7031 *2	
	AZD7014 .... AZT7008 .... AZE7011 AZE7012 AZN7077	AZD7051 .... AZT7006 .... AEK−513 ..... AZN7079	

shown in the service manual ARP2821 for X−P30.

AIN PCB ASSY

ZW7038, AZW7040 and AZW7004 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AZW7004	AZW7038	AZW7040	
	C156L, C156R	CKDYX103M25	CKDYX103M25	CKDYX682M25	

RONT PCB ASSY

lthough AZW7041, AZW7045 and AZW7005 are different in part number, they have the same service parts.

C SUPPLY (A) PCB ASSY

ZW7042, AZW7057 and AZW7006 have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		AZW7006	AZW7042	AZW7057	
	R421(33M)	AZC7023	.....	.....	
	C421A (470p/250V)	ACG-508	.....	.....	
	C421A, C421B (1000p/400V)	.....	AZC7014	.....	
	C421A, C421B, C421C (1500p/400V)	.....	.....	AZC1047	

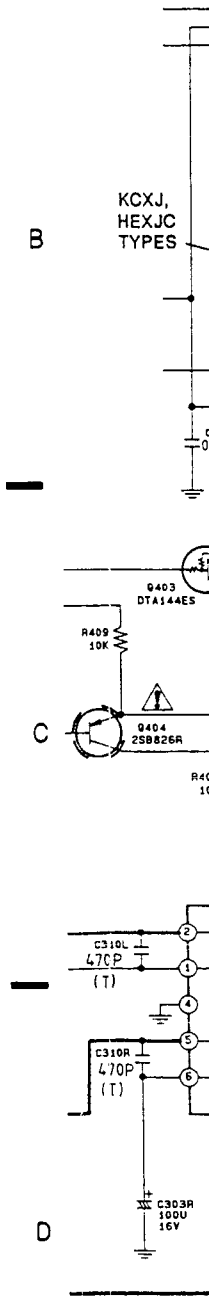
CASSETE DECK MULTI CD SECTION

DC-P30C/ACXJ, AEXJC, ABXJ, APWXJ, ADXJ and PDC-P30C/AUXJ have the same construction except or the following :

Mark	Symbol & Description	Part No.						Remarks
		PDC-P30C/ AUXJ	PDC-P30C/ ACXJ	PDC-P30C/ AEXJC	PDC-P30C/ ABXJ	PDC-P30C/ APWXJ	PDC-P30C/ ADXJ	
	Bottom chassis assy	AZW7020	AZW7051	AZW7052	AZW7053	AZW7054	AZW7032	
	Rear panel	AZN7025	AZN7070	AZN7071	AZN7073	AZN7073	AZN7072	

● The di
betwee

MAIN PCB a

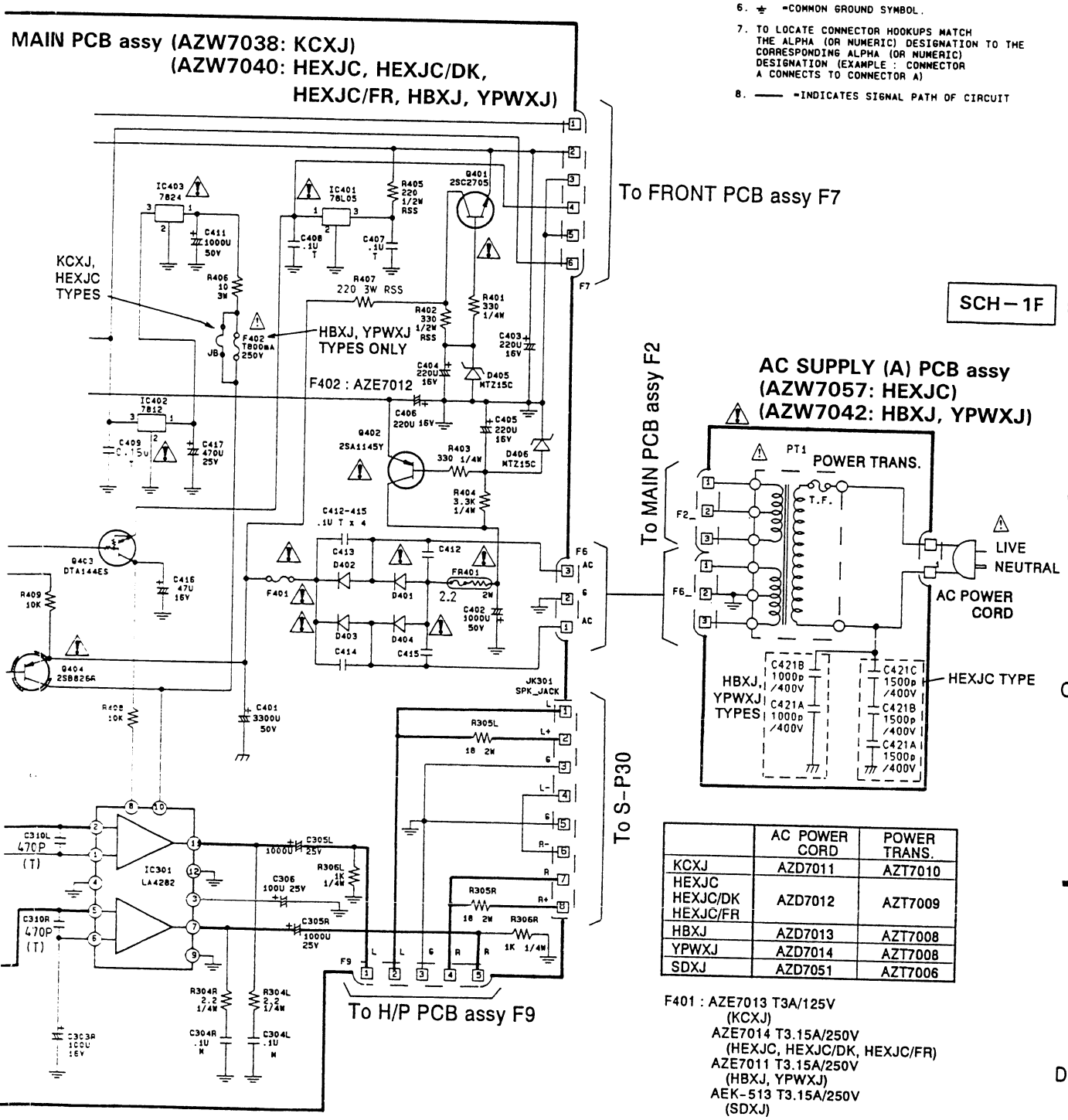


2. SCHEMTIC AND PCB DIAGRAMS

● The differences in the schematic diagram between AZW7038 and AZW7040 are as follows.

SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
3. RESISTANCE VALUES ARE IN OHMS (K=1000, M=MEGOHM).
4. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/6 WATT CARBON FILM, ±5% TOLERANCE
5. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
6. ⏚ =COMMON GROUND SYMBOL.
7. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE : CONNECTOR A CONNECTS TO CONNECTOR A)
8. —— =INDICATES SIGNAL PATH OF CIRCUIT

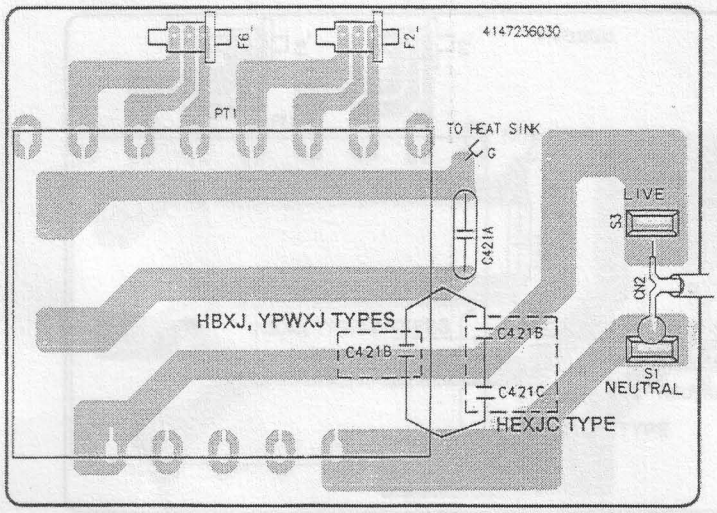


	AC POWER CORD	POWER TRANS.
KCXJ	AZD7011	AZT7010
HEXJC HEXJC/DK HEXJC/FR	AZD7012	AZT7009
HBXJ	AZD7013	AZT7008
YPWXJ	AZD7014	AZT7008
SDXJ	AZD7051	AZT7006

F401 : AZE7013 T3A/125V (KCXJ)
AZE7014 T3.15A/250V (HEXJC, HEXJC/DK, HEXJC/FR)
AZE7011 T3.15A/250V (HBXJ, YPWXJ)
AEK-513 T3.15A/250V (SDXJ)

SCH—1F MAIN PCB ASSY
AC SUPPLY (A) PCB ASSY

AC SUPPLY (A) PCB assy



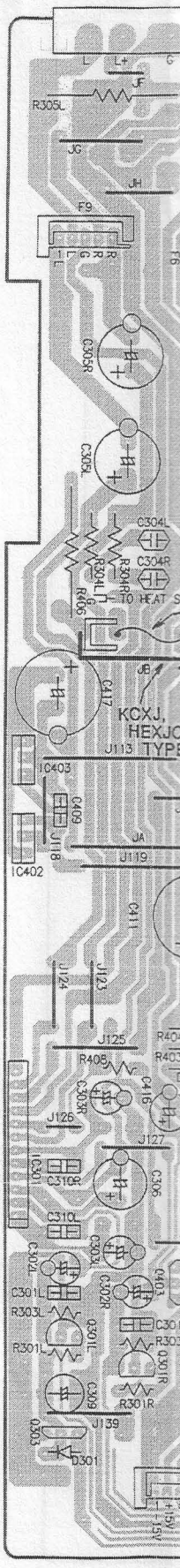
Note: The parts which have been mounted on the PCB can be replaced with those shown with the corresponding wiring symbols listed in the following table.

PCB Pattern Diagram Indication	Corresponding Part Symbol	Part Name
Q504	or	Transistor
Q215	or	FET
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarized)
C518	C518	Capacitor (Non-Polarized)

Others

PCB Pattern Diagram Indication	Part Name
IC	IC
S	Switch
L	Coil
CF	Filter
VR or SFR	Variable Resistor or Semi-Fixed Resistor

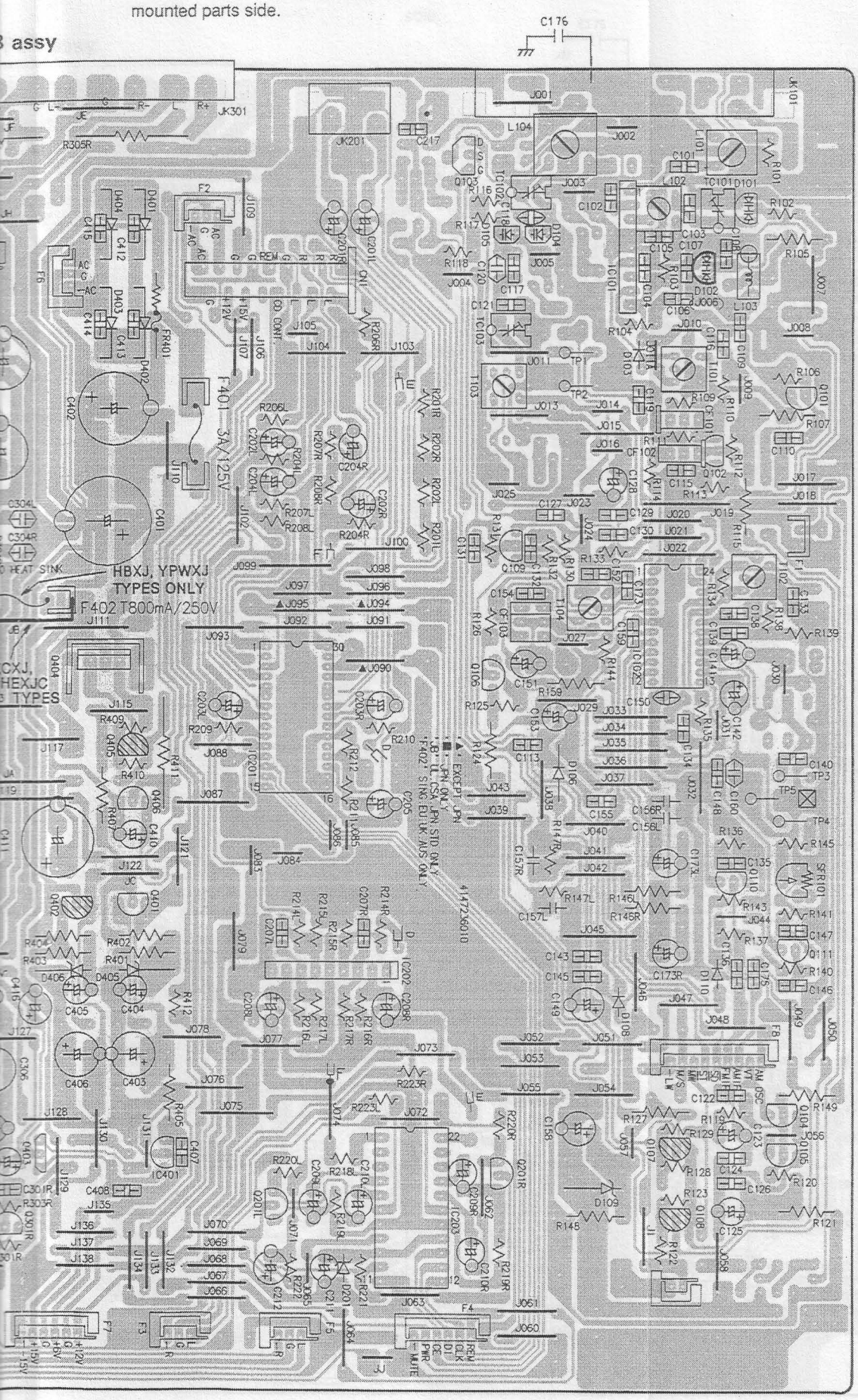
MAIN PCB ass



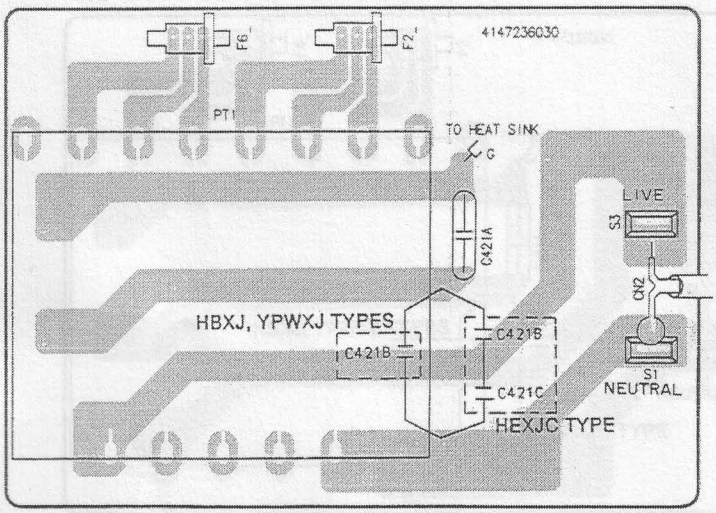
PCB－1F

• This diagram is viewed from the mounted parts side.

3 assy



AC SUPPLY (A) PCB assy



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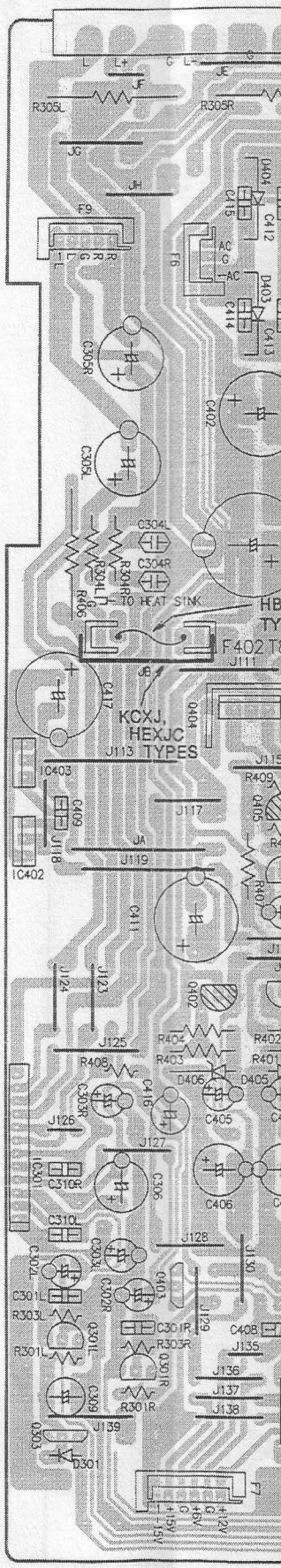
PCB Pattern Diagram Indication	Corresponding Part Symbol	Part Name
Q504	or	Transistor
D S G Q215	D S G or D S G	FET
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarized)
C518	C518	Capacitor (Non-Polarized)

Others

PCB Pattern Diagram Indication	Part Name
IC	IC
S	Switch
L	Coil
CF	Filter
VR or SFR	Variable Resistor or Semi-Fixed Resistor

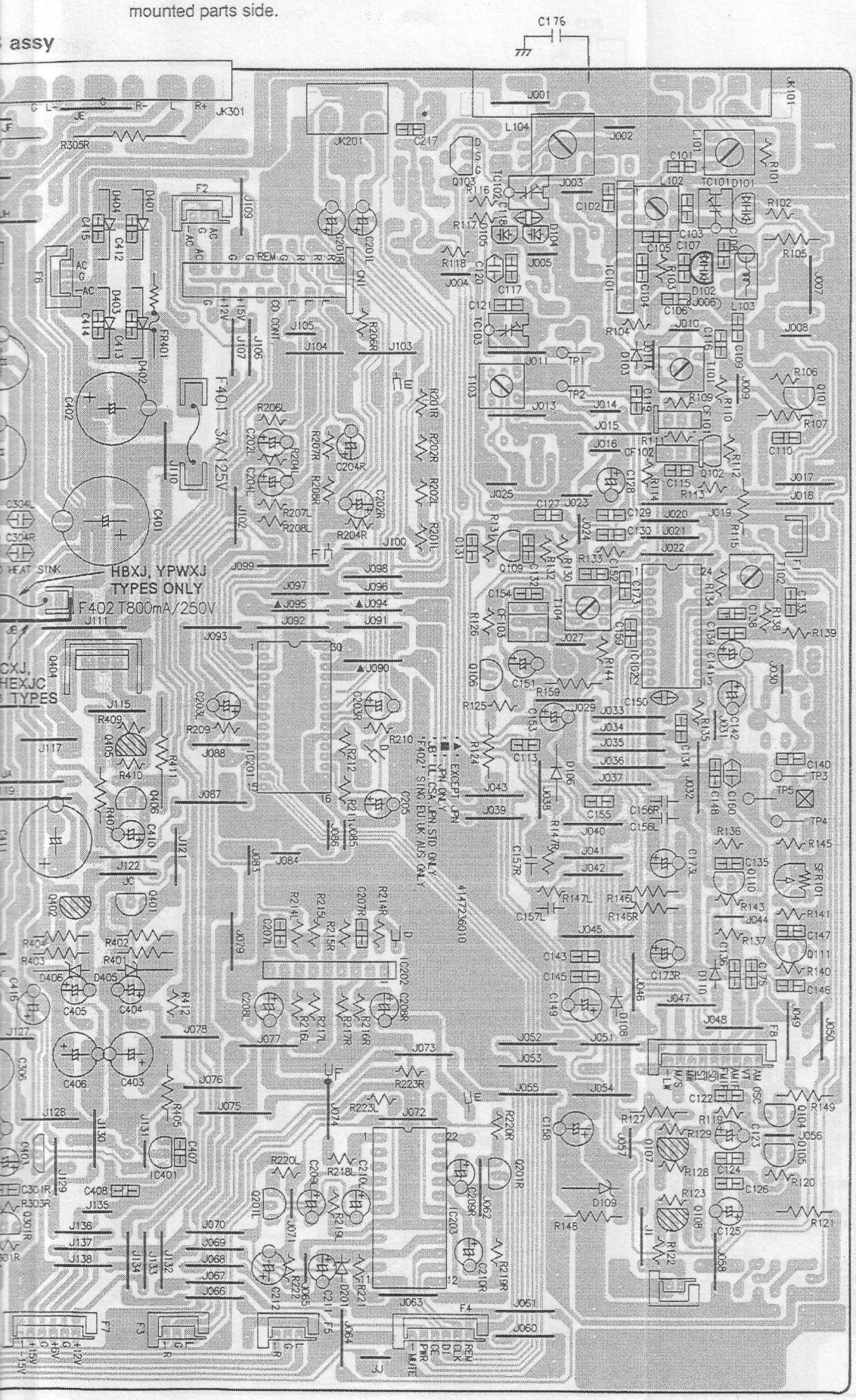
MAIN PCB assy



PCB－1F

• This diagram is viewed from the mounted parts side.

assy



A

Q103

IC101

Q101

Q102

B

Q109

IC102

Q404 Q106

IC403

Q405 IC201

IC402

Q406

C

SFR101 Q110

Q401 Q402

IC202 Q111

IC301

Q403 Q104

IC401 Q107

Q105

Q301L Q201R Q201L

Q301R IC203 D

Q108

Q303

8