

JVC

SERVICE MANUAL

MODEL
A-M1

STEREO INTEGRATED AMPLIFIER



No. 2465
FEB. 1979

Contents

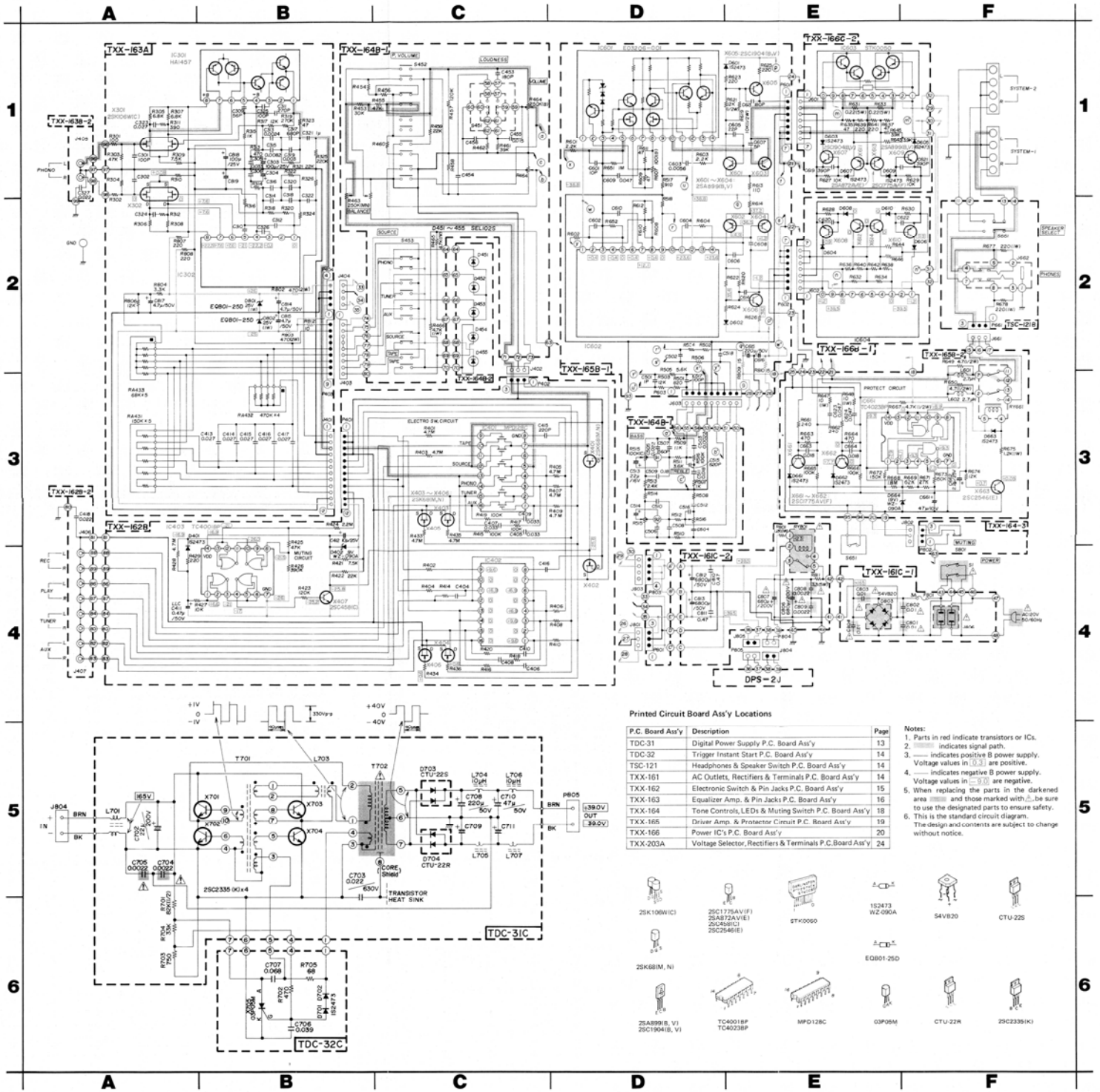
	Page
1. Specifications	1
2. Technology of Digital Power Supply (for USA)	
2-(1) Block Diagram	2
2-(2) Trigger Instant Start Circuit	2
2-(3) Inverter Circuit	3
3. Adjustment Procedures	
3-(1) Digital Power Supply (for USA)	4
3-(2) Power Amplifier	5
4. Removal Procedures	
4-(1) Cabinet	5
4-(2) Front Panel and Chassis	5
4-(3) Rear Panel	5
4-(4) Front Bracket	6
4-(5) Knobs	6
4-(6) Headphones & Speaker Switch (TSC-121B) P. C. Board Ass'y	6
4-(7) Loudness Switch P. C. Board Ass'y	6
4-(8) Volume Bracket	6
4-(9) Power Switch	6
4-(10) Heatsink and Driver Amp. (TXX-165-1) P.C. Board Ass'y	6
4-(11) Equalizer Amp. (TXX-163B) & Electronics Switch (TXX-162B) P.C. Board Ass'y	7
4-(12) Protector Circuit (TXX-165-2) P.C. Board Ass'y	7
4-(13) Digital Power Supply (TDC-31C) P.C. Board Ass'y (for USA)	7
4-(14) Fuse (F801) (for USA)	8
4-(15) Toroidal Transformer Power Supply (TXX-203A) P.C. Board Ass'y	8
4-(16) Fuse (F801, F802, F803)	8
5. Main Parts Location	
5-(1) Equipped with Digital Power Supply	9
5-(2) Equipped with Toroidal Transformer Power Supply	9
6. Exploded Views and Part Numbers	
6-(1) Front Panel	10
6-(2) Power IC's	10
6-(3) Power Supply Section	11
6-(4) Rear Panel Section	12
7. Printed Circuit Board Ass'y and Parts List	
7-(1) TDC-31 Digital Power Supply P.C. Board Ass'y	13
7-(2) TDC-32 Trigger Instant Start P.C. Board Ass'y	14
7-(3) TSC-121 Headphones & Speaker Switch P.C. Board Ass'y	14
7-(4) TXX-161 AC Outlets, Rectifiers & Terminals P.C. Board Ass'y	14
7-(5) TXX-162 Electronic Switch & Pin Jacks P.C. Board Ass'y	15
7-(6) TXX-163 Equalizer Amp. & Pin Jacks P.C. Board Ass'y	16
7-(7) TXX-164 Tone Controls, LEDs & Muting Switch P.C. Board Ass'y	18
7-(8) TXX-165 Driver Amp. & Protector Circuit P.C. Board Ass'y	19
7-(9) TXX-166 Power IC's P.C. Board Ass'y	20
7-(10) TXX-203A Voltage Selector, Rectifiers & Terminals P.C. Board Ass'y	24
8. Accessories List	24
9. A-M1 Schematic Diagram	22, 23
10. Packing Materials and Part Numbers	Back page
11. Parts List with Specified Numbers for Designated Areas	Back page

Warning: When replacing the parts marked with \triangle , be sure to use the designated parts to ensure safety.

1. Specification

Output power	: 50 Watts per channel, min. RMS, both channels driven, into 8 ohms, from 20 Hz to 20 kHz with no more than 0.03 % total harmonic distortion	RIAA PH equalization	: ± 0.3 dB (20 Hz – 20 kHz)
Load impedance	: SYSTEM 1 or 2 4 – 16 ohms	Input sensitivity	: PHONO 2.5 mV (47 k ohms)
Frequency response	: TUNER, AUX, TAPE DC – 70 kHz ± 0 dB	(Impedance)	: TUNER, AUX, TAPE PLAY 150 mV (47 k ohms)
		Dimensions	: 93 x 230 x 269 (mm)
		(H x W x D)	: 3-11/16 x 9-1/16 x 10-9/16 (inches)

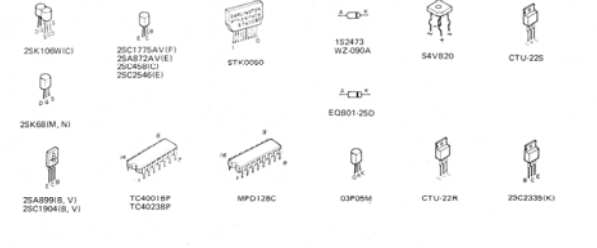
9. A-M1 Schematic Diagram

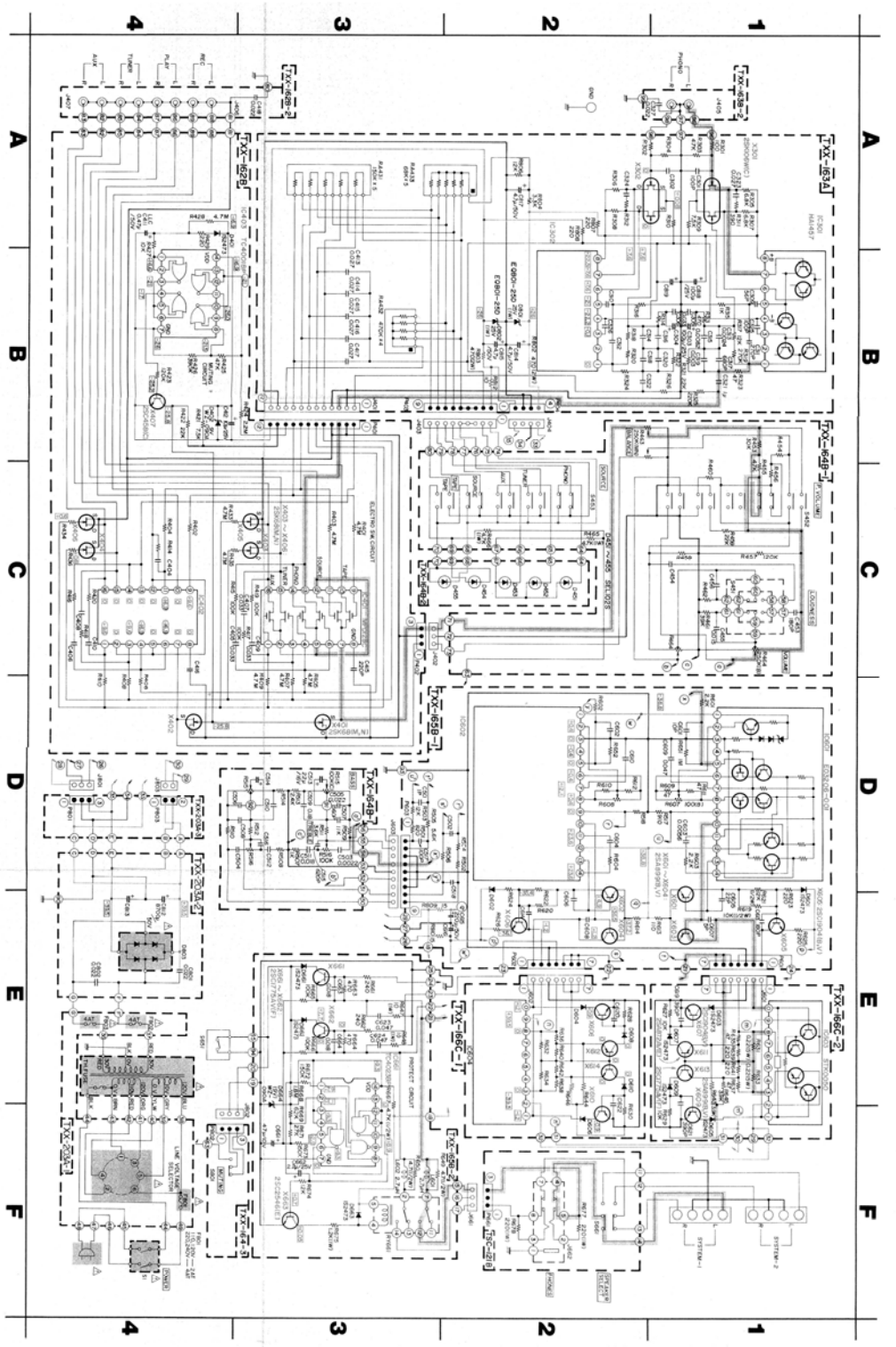


Printed Circuit Board Ass'y Locations

P.C. Board Ass'y	Description	Page
TDC-31	Digital Power Supply P.C. Board Ass'y	13
TDC-32	Trigger Instant Start P.C. Board Ass'y	14
TDC-121	Headphones & Speaker Switch P.C. Board Ass'y	14
TXX-161	AC Outlet, Rectifiers & Terminals P.C. Board Ass'y	14
TXX-162	Electronic Switch & Pin Jacks P.C. Board Ass'y	15
TXX-163	Equalizer Amp. & Pin Jacks P.C. Board Ass'y	16
TXX-164	Tone Controls, LEDs & Muting Switch P.C. Board Ass'y	18
TXX-165	Driver Amp. & Protector Circuit P.C. Board Ass'y	19
TXX-166	Power IC's P.C. Board Ass'y	20
TXX-203A	Voltage Selector, Rectifiers & Terminals P.C. Board Ass'y	24

- Notes:
- Parts in red indicate transistors or ICs.
 - indicates signal path.
 - indicates positive B power supply. Voltage values in () are positive.
 - indicates negative B power supply. Voltage values in () are negative.
 - When replacing the parts in the darkened area and those marked with a triangle, be sure to use the designated parts to ensure safety.
 - This is the standard circuit diagram. The design and contents are subject to change without notice.



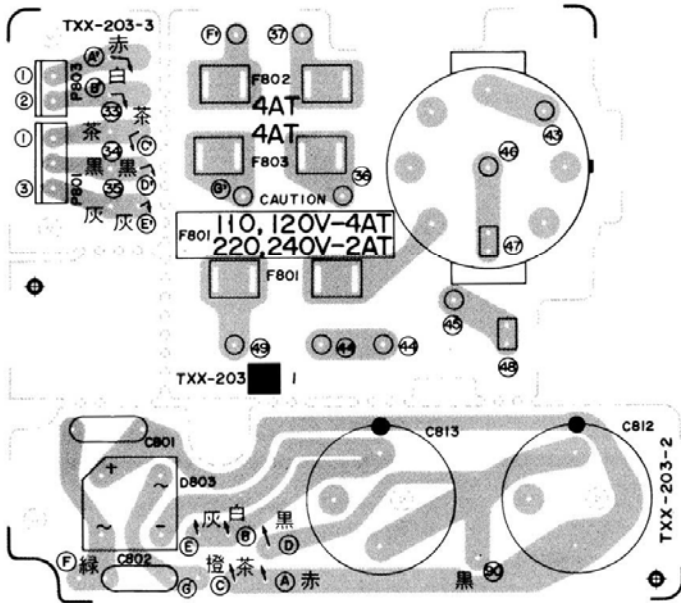


Printed Circuit Board Assy Locations

P.C. Board Assy	Description	Page
TDC-31	Digital Power Supply P.C. Board Assy	13
TDC-32	Trigger Inhibit Serrt P.C. Board Assy	14
TSC-171	Headphones & Speaker Switch P.C. Board Assy	14
TXX-161	AC Outlets, Rectifiers & Terminals P.C. Board Assy	14
TXX-162	Electronic Switch & Trim Jacks P.C. Board Assy	15
TXX-163	Equalizer Amp, LED & Muting Switch P.C. Board Assy	16
TXX-164	Tone Control, LED & Muting Switch P.C. Board Assy	18
TXX-165	Driver Amps, & Protector Circuit P.C. Board Assy	19
TXX-166	Power IC's P.C. Board Assy	20
TXX-200A	Voltage Selector, Rectifiers & Terminals P.C. Board Assy	24

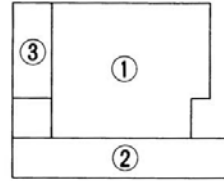
- Notes:
1. Parts in red indicate transients or I.C.
 2. — indicates positive B power supply.
 3. — indicates positive B power supply.
 4. Voltage values in () are positive.
 5. Voltage values in () are positive.
 6. — indicates negative B power supply.
 7. Voltage values in () are positive.
 8. — indicates negative B power supply.
 9. When replacing the part in the delineated area and those marked with **A**, be sure to use the designated parts to ensure safety.
 10. The design and contents are subject to change without notice.

7-(10)TXX-203A AC Outlet, Rectifiers & Terminals P.C. Board Ass'y



1. TXX-203A-1 Voltage Selector P.C. Board Ass'y
2. TXX-203A-2 Rectifiers P.C. Board Ass'y
3. TXX-203A-3 Terminals P.C. Board Ass'y

Note: The specific symbols (黒, 赤, 茶 . . . etc.) on a surface of P.C. Board are actually unrelated to the repair service and are significant denotement in order to process the process the proper assembly of P.C. Board at the factory.



Diode

Item No.	Part Number	Rating	Description	
			Material	Maker
D803	S4VB20	200 V, 4 A	Silicon	Shin-dengen

Capacitors

Item No.	Part Number	Rating	Description
C801	QFZ0072-223	0.022 μ F 250 V	Film
C802	QFZ0072-223	" "	"
C812	QEW81HA-878H	8700 μ F 50 V	Electrolytic
C813	QEW81HA-878H	" "	"

Others

Item No.	Part Number	Rating	Description
J404	QSR0085-001		Voltage Selector
	E48965-002		Fuse Clip
P801	E03733-0403		Socket Ass'y
P803	E03782-003A		Plug
	E03782-002A		"

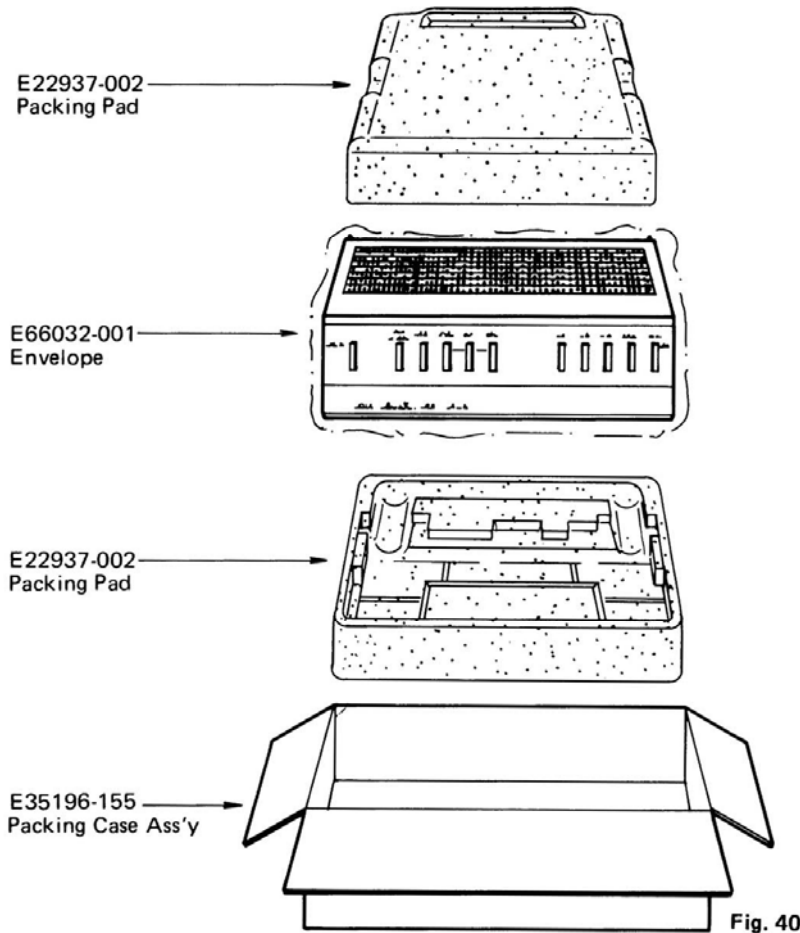
8. Accessories List

Item No.	Part Number	Description	Qty
1	E30580-739A	Instruction Book	1
2	see table below	Warranty Card	1
3	E41202-9	Envelope (Instruction Book & Warranty Card)	1
4	BT20023	Service Procedures for U.S.A. only	1
5	BT20024	"Do It Better" for U.S.A. only	1
6	E04056	Siemens Plug for U.S. Military Market & Other Countries only	1
7	QMF51A2-4ROS (or -2ROL)	4A Fuse (or 2A Fuse) for U.S. Military Market & Other Countries only	1
8	E66188-023 (or -024)	2A Fuse Label (or 4A Fuse Label) for U.S. Military Market & Other Countries only	1
9	E64204-073	Envelope (Fuse) for U.S. Military Market & Other Countries only	1

Warranty Card

U.S.A.	U.S. Military Market	U.K.	Australia	Europe & Other Countries
BT20032	BT20032	BT20013B	BT20029B	

10. Packing Materials and Part Numbers



11. Parts List with Specified Numbers for Designated Areas

Description	U.S.A.	Australia	U.K.	Europe	U.S. Military & Other Countries
Power Cord with Plug Δ	QMP1200-200	QMP2560-244	QMP9017-008	QMP3900-200	QMP7600-250
Rear Panel	E3582-003	E35872-004	E35872-004	E35872-004	E35872-004
Sub Rear Panel		E300238-001	E300238-001	E300238-001	E300238-001
Chassis Base	E22888-005	E22888-003	E22888-003	E22888-003	E22888-003
Chassis Base	E22888-006	E22888-004	E22888-004	E22888-004	E22888-004
Circuit Board Holder	E22890-001	E23134-001	E23134-001	E23134-001	E23134-001
AC Outlet Δ	QMC0437-001				
Voltage Selector Δ		QSR0085-001	QSR0085-001	QSR0085-001	QSR0085-001
Fuse (Primary) Δ	QMF61U1-3RO	QMF51A2-2ROL	QMF51A2-2ROL or QMF51A2-4ROS	QMF51A2-2ROL	QMF51A2-2ROL or QMF51A2-4ROL
Fuse (Secondary) Δ		QMF51A2-4ROS	QMF51A2-4ROS	QMF51A2-4ROS	QMF51A2-4ROS
Power Transformer Δ		E03671-15C	E03671-15C	E03671-15C	E03671-15C
Digital Power Supply Δ	DPS-2J (TDC-31C)				
Power Supply P.C. Board	TXX-161C	TXX-203A	TXX-203A	TXX-203A	TXX-203A
Rating Plate	E66420-001	E66294-001	E66294-001	E66294-001	E66468-001
Fuse Holder	E65795-002				
Rating Label		E47330-441	E47330-441	E47330-442	

JVC

VICTOR COMPANY OF JAPAN, LIMITED, TOKYO, JAPAN