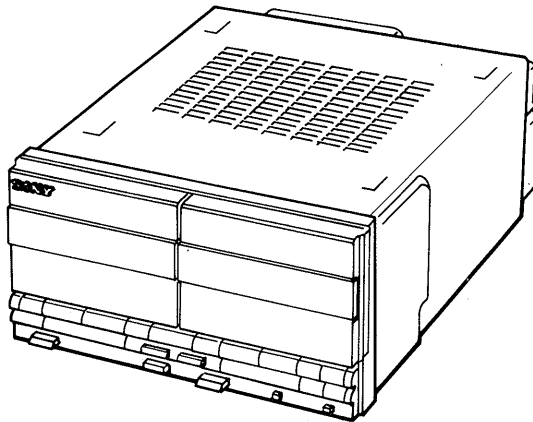


TC-WR808

SERVICE MANUAL

E Model



TC-WR808 is the STEREO CASSETTE DECK in FH-808R.

SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF (DIN) With TYPE IV cassette (Sony METAL-ES) 40 to 15,000 Hz (± 3 dB) With TYPE II cassette (Sony UX-S) 40 to 14,000 Hz (± 3 dB) With TYPE I cassette (Sony HF-X) 40 to 13,000 Hz (± 3 dB)
Wow and flutter	0,1% WRMS (NAB) $\pm 0.2\%$ (DIN)
Dimensions	Approx. 225 $\times$ 120 $\times$ 260 mm (w/h/d) (9 $\times$ 4 $\frac{3}{4}$ $\times$ 10 $\frac{1}{4}$ inches) incl. projecting parts and controls
Weight	Approx. 3.0 kg (6 lb 11 oz)

0dB = 0.775V

MODEL IDENTIFICATION

SONY® MODEL NO. TC-WR808
STEREO CASSETTE DECK

STEREO CASSETTE DECK
SONY®

[To apply B + voltage]

The power of this units is fed from other unit.
When the unit operates individually, connect the regulated power supply to the point as shown in the below figure.

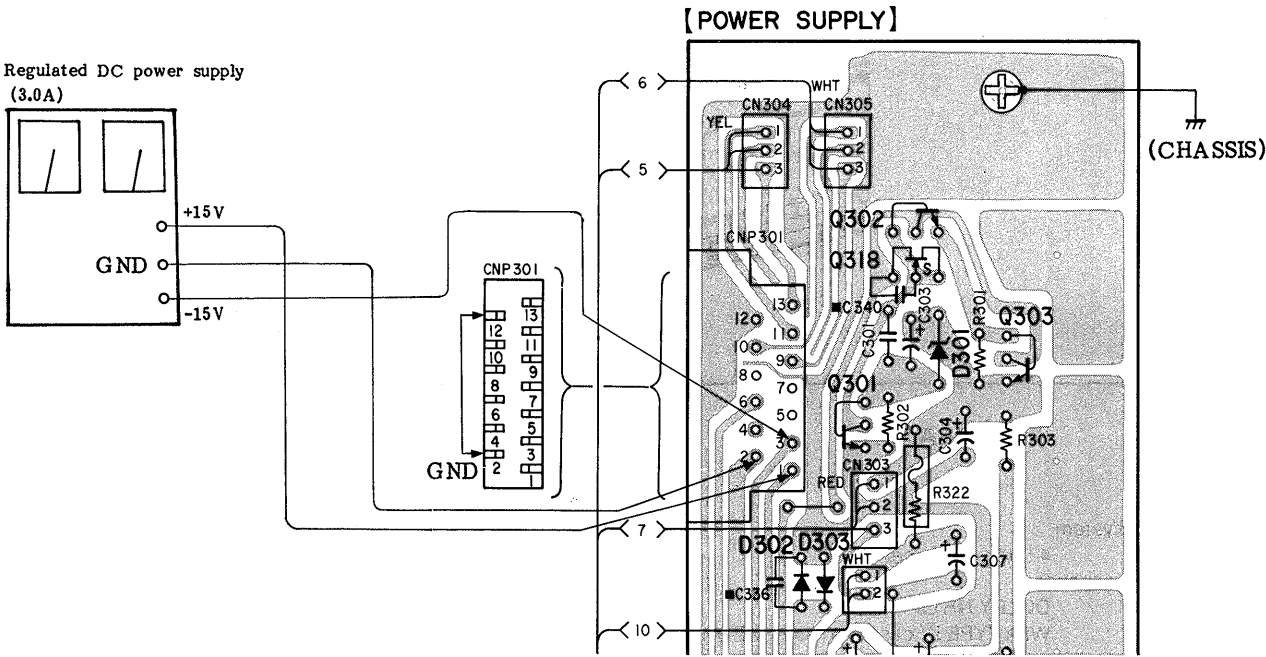
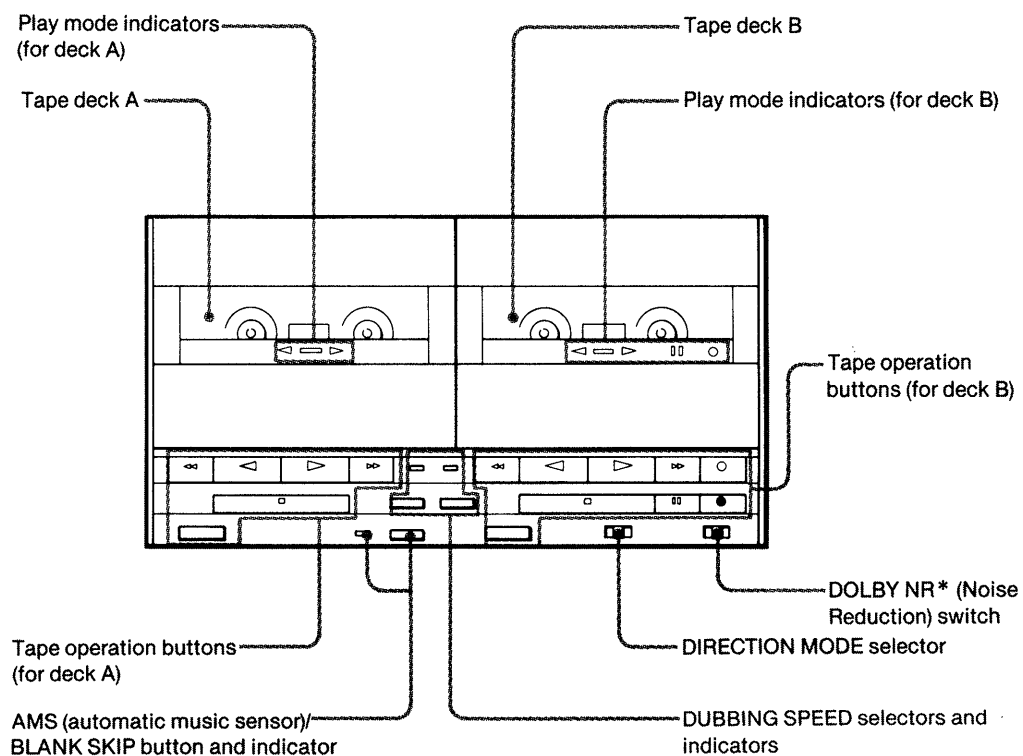


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PARTS IDENTIFICATION



SECTION 1

ELECTRICAL ADJUSTMENTS

1-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
 - record/playback/erase head
 - rubber belts
 - capstan
 - pinch roller
 - idlers
2. Demagnetize the head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30 - 60 g.cm (0.42 - 0.83oz.inch)
FWD back tension	CQ-102C	1 - 5 g.cm (0.01 - 0.07oz.inch)
FF, REW	CQ-201B	100 - 170 g.cm (1.39 - 2.36 oz.inch)

1-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual.

The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

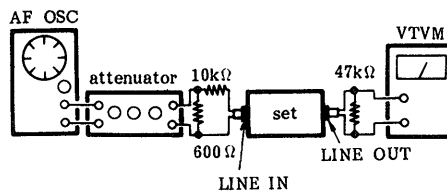
DOLBY NR switch: OFF

ISS switch: 1

- Standard Record:

Deliver the standard input signal level to the input jack and control the attenuator to obtain the standard output signal level.

- Record Mode -



Standard Input Level

	LINE IN
source impedance	10kohms
input level	0.44V (-5dB)

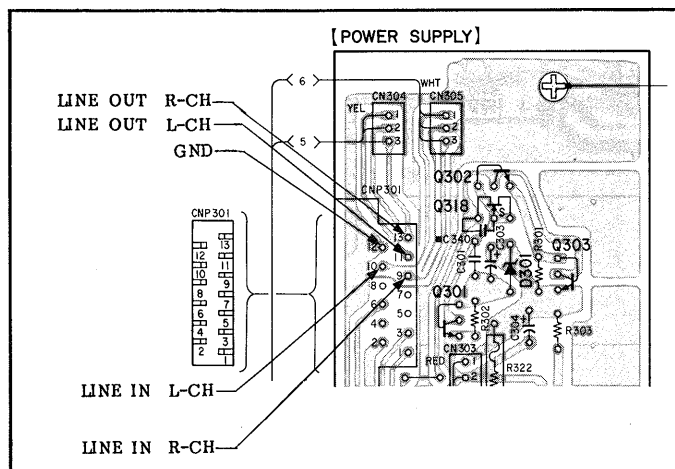
Standard Output Level

	LINE OUT
load impedance	NONE
output level	0.2V (-10dB)

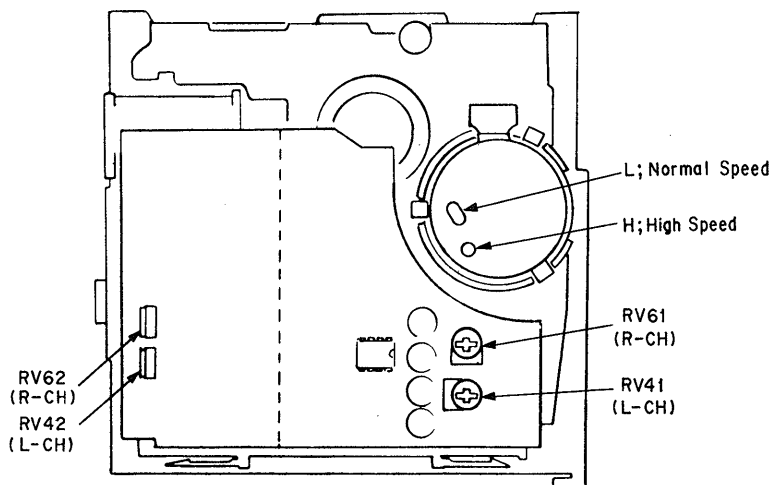
Test Tape

Type	Signal	Used for
WS-48B	3kHz, 0dB	Tape Speed Adjustment
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0 dB	Level Adjustment

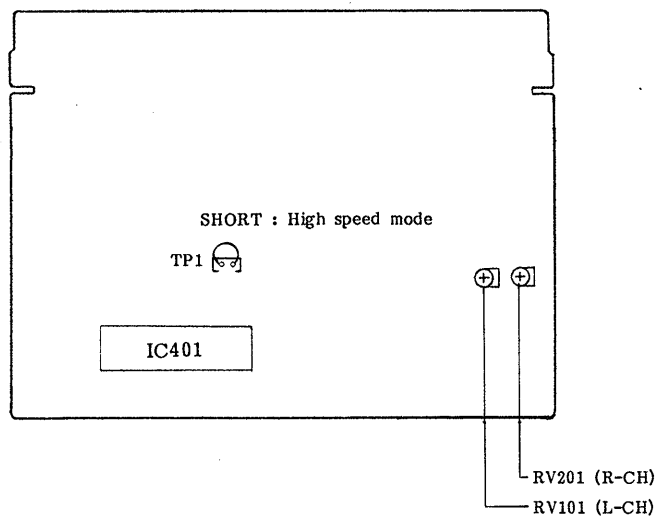
. Locations of LINE IN/OUT.



Adjustment Location : DECK-A/B



Adjustment Location : Audio Board



Tape Speed Adjustment DECK A DECK B

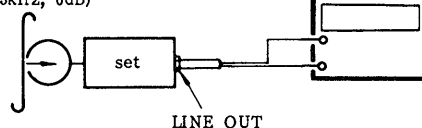
Procedure:

1. Mode: play back

Perform high speed adjustment before normal speed adjustment.

test tape
WS-48B
(3kHz, 0dB)

digital frequency
counter



2. When the DUBBING SPEED's HIGH button is continuously pressed after the FWD button is pressed, high speed is obtained.

Specifications:

	Digital frequency counter
Normal speed	2,910 to 2,970HZ
High speed	5,910 to 5,970Hz

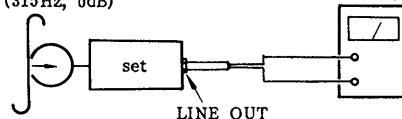
Playback Level Adjustment

DECK A DECK B

Procedure:

test tape
P-4-L300
(315Hz, 0dB)

VTVM



Adjust { DECK A: RV41A (L-CH), RV41B (R-CH) }
{ DECK B: RV61A (L-CH), RV61B (R-CH) } so

that the specifications are satisfied.

Specification:

LINE OUT level: 0.22V to 0.28V
(-11dB to -9dB)

Level difference between channels:

less than 1.0dB check that the check point level does not change in playback mode while changing the mode from playback to stop several times.

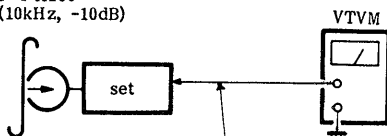
Record/Playback Head Azimuth Adjustment DECK A

Procedure:

DECK B

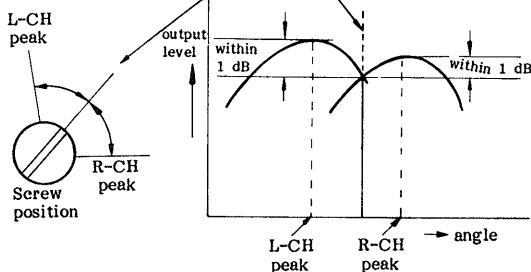
1. Mode: playback

test tape
P-4-A100
(10kHz, -10dB)



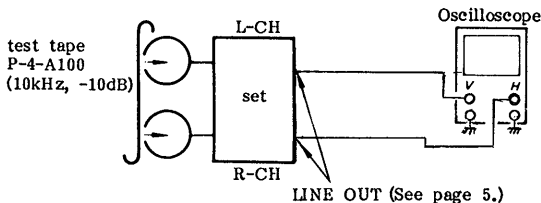
LINE OUT (See page 5.)

2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.

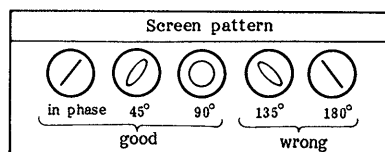


Phase Check

Mode: forward playback

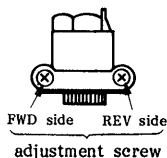


LINE OUT (See page 5.)



3. Set in the reverse mode and repeat steps 1-2.
4. After the adjustment, lock the screws with locking compound.

Adjustment Location:

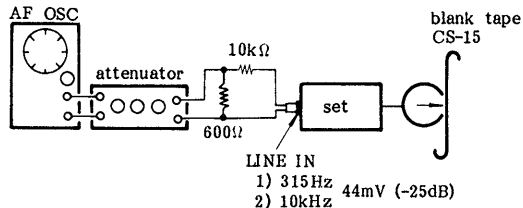


Record Bias Adjustment DECK B

Procedure:

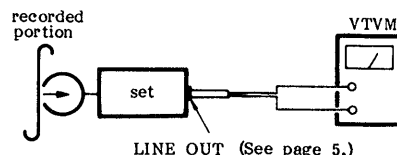
See page 5 for location of LINE IN.

1. Mode: record



LINE IN
1) 315Hz 44mV (-25dB)
2) 10kHz

2. Mode: playback



LINE OUT (See page 5.)

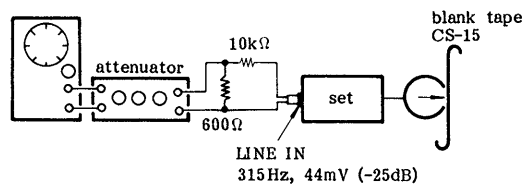
Confirm that the 10kHz playback output is -0.5dB to 0.5dB relative to the 315 Hz output. If necessary, adjust RV42 (L-CH), RV62 (R-CH) and repeat the steps given above.

Record Level Adjustment DECK B

Procedure:

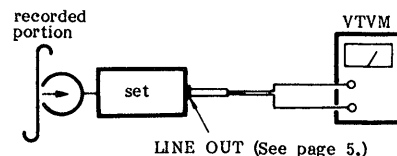
See page 5 for location of LINE IN.

1. Mode: record



LINE IN
315Hz, 44mV (-25dB)

2. Mode: playback



LINE OUT (See page 5.)

3. Playback the signal recorded in step 1. Confirm that the signal level is within the specification below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat steps 1 to 3.

Specification:

LINE OUT point (see page 5) level: 0.73V to 0.82V (-0.5dB to 0.5dB)

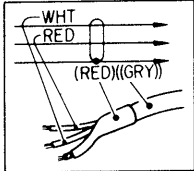
SECTION 2
DIAGRAMS

2-1. PRINTED WIRING BOARDS

• See page 15 for Semiconductor Lead Layouts.

Note:

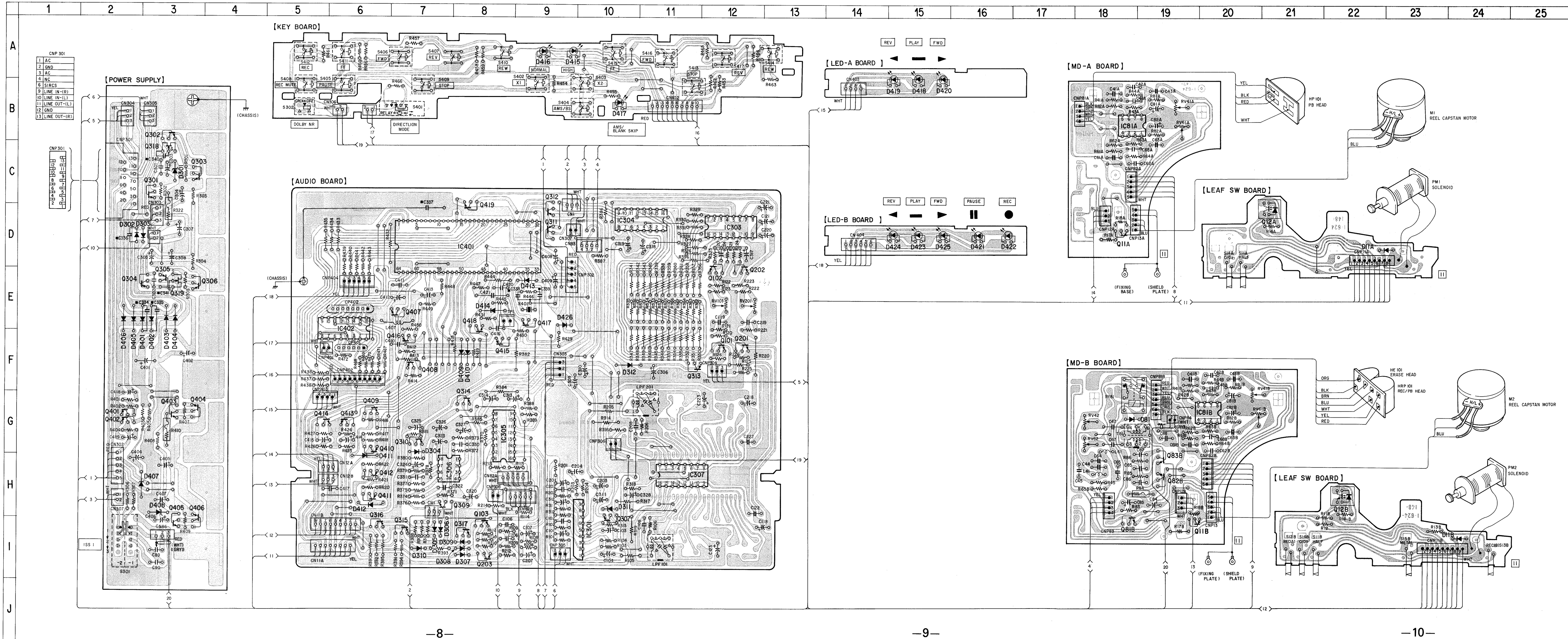
- Color code or sleeving over the end of the jacket.



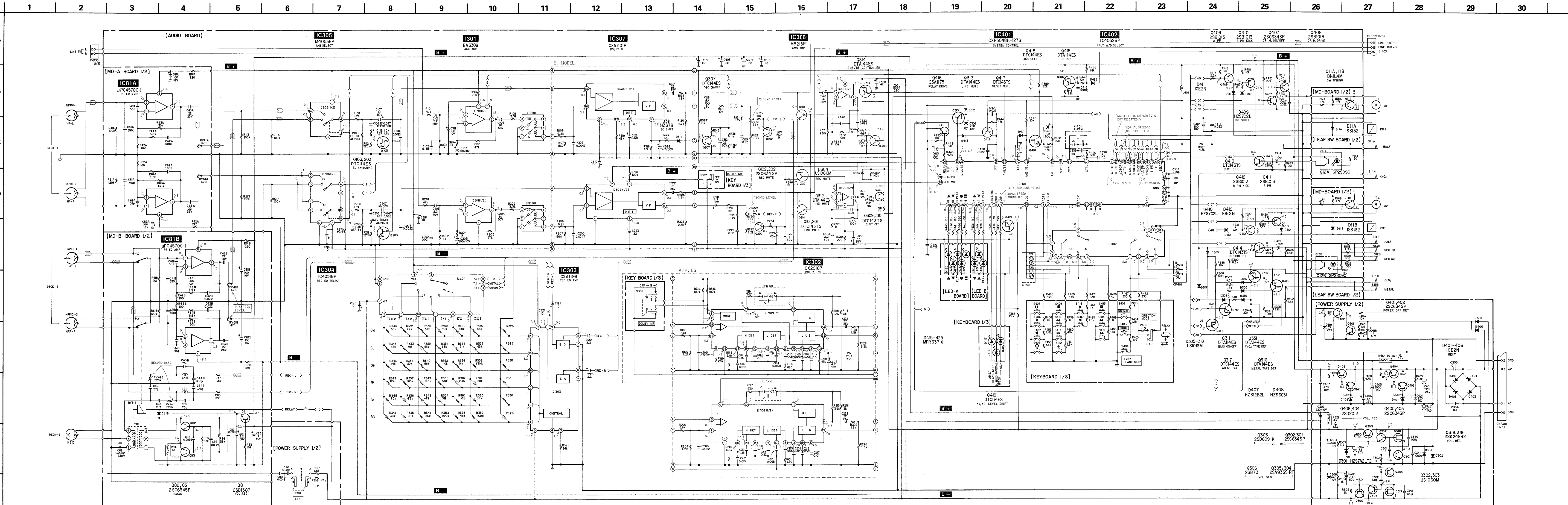
- : parts mounted on the conductor side.
- : indicates side identified with part number.

• SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
IC81-A	C-18	Q315	I-7	D311	I-10
IC81-B	G-19	Q316	I-6	D313	G-10
IC301	I-9	Q317	I-8	D401	F-2
		Q318	C-3	D402	F-2
IC303	D-12	Q319	E-3	D403	F-3
IC304	D-10	Q401	G-2	D404	F-3
IC305	H-8	Q402	H-2	D405	F-2
IC306	H-7	Q403	G-3	D406	F-2
IC307	H-11	Q404	G-3	D407	H-2
IC401	E-8	Q405	I-3	D408	I-3
IC402	F-6	Q406	I-3	D409	F-7
Q11-A	D-18	Q407	F-6	D410	F-8
Q11-B	I-19	Q408	G-7	D411	H-6
Q81-B	I-18	Q409	G-6	D412	I-6
Q82-B	H-19	Q410	H-6	D413	E-8
Q83-B	H-19	Q411	I-6	D414	F-8
Q101	F-12	Q412	H-6	D415	B-9
Q102	I-8	Q413	H-5	D416	B-10
Q103	F-12	Q414	F-8	D417	B-15
Q201	E-12	Q415	F-7	D418	B-14
Q202	J-8	Q416	F-9	D419	B-15
Q203	D-2	Q417	F-8	D420	E-15
Q301	C-3	Q418	D-8	D421	E-14
Q302	D-3	D12-A	D-20	D422	E-15
Q303	E-2	D81-B	G-18	D423	F-9
Q304	E-3	D301	D-3		
Q305	E-3	D302	E-2		
Q306	I-10	D303	E-2		
Q307	I-7	D304	H-7		
Q310	H-7	D305	I-7		
Q311	D-9	D306	I-7		
Q312	D-9	D307	J-7		
Q313	G-11	D308	J-7		
Q314	G-8	D310	J-7		



2-2. SCHEMATIC DIAGRAM . See page 15 for note.



Note:

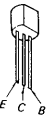
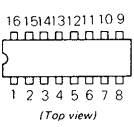
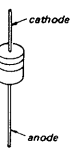
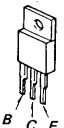
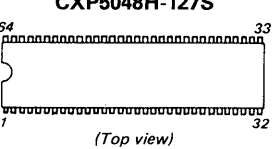
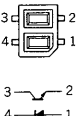
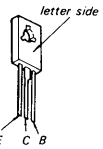
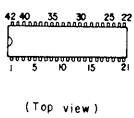
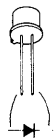
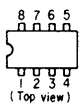
- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- $\triangle$: internal component.
-  : fusible resistor.
-  : B+ Line
-  : B- Line
-  : adjustment for repair.
- Total current is measured with no cassette installed.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark: STOP
-  : FWD  : REV  : REC
- Voltages are taken with a VOM (50 k Ω /V).
Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : PB (DECK A)
 : PB (DECK B)
 : REC (DECK B)
 : PB

. SWITCH

Ref. No.	Switch	Position
S11A	HALF	OFF
S11B	HALF	OFF
S12	REC (A)	OFF
S13	REC (B)	OFF
S14A	CrO ₂	OFF
S14B	CrO ₂	OFF
S15	METAL	OFF
S301	ISS	1
S302	DOLBY NR	OFF
S401	DIRECTION MODE	
S402 to 417	KEY MATRIX	

Note: The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

. Semiconductors Lead Layout

DTA114ES DTA144ES DTC114ES DTC143TS DTC144ES 2SC634SP 	2SB1013 2SC2001 2SD1387 	CXA1101P CXA1198P TC4051BP TC4052BP M4053BP 	HZS6C3L HZS7A1L HZS7B3L HZS7C2L HZS12B2L US1060M 10E2N ISS132 
2SA1175 	2SD2012 	CXP5048H-127S 	GP2S09-B 
2SB731 2SD809-K 	2SK246GR2 	CX20187 	MAY3877S MPG3371X MPG3877S MPR3371X MPR3877S 
	BA3308 	M5218P $\mu\text{PC4570C-1}$ 	

SECTION 3

EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

- Color Indication of Appearance Parts
Example:

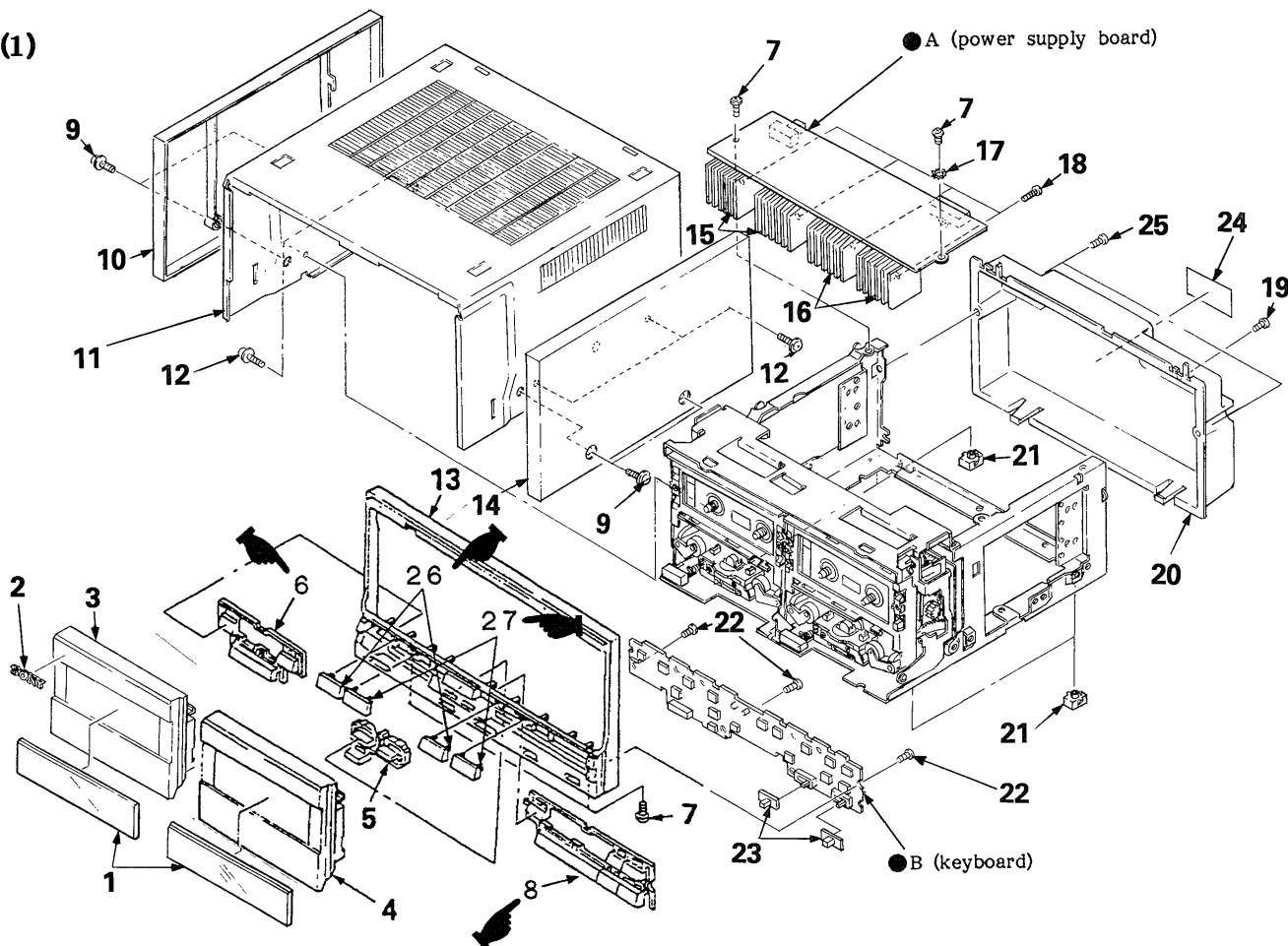
(RED) ... KNOB, BALANCE (WHITE)

↑
Cabinet's Color

↑
Parts' Color

The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

(1)



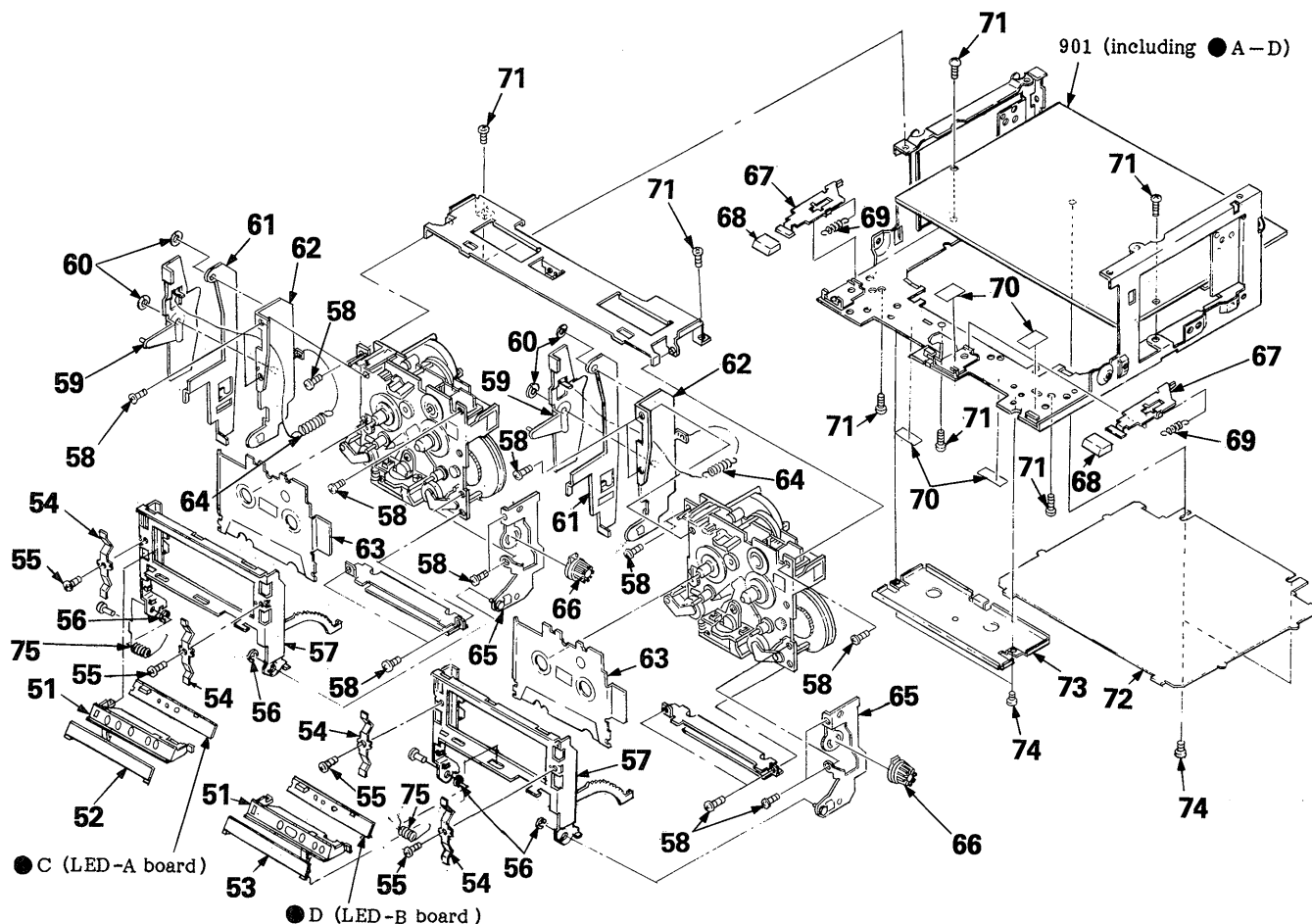
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-340-129-01	WINDOW		13	X-3332-467-1	(AEP)...PANEL ASSY, FRONT	
2	4-920-869-01	EMBLEM, SONY			X-3332-469-1	(E).....PANEL ASSY, FRONT	
3	3-340-148-01	(AEP)...LID (A), CASSETTE		14	3-346-340-01	(TC-WR808M)...PLATE (C-RIGHT), SIDE	
	3-340-148-11	(E)....LID (A), CASSETTE		15	*4-921-402-31	HEAT SINK	
4	3-340-149-01	(AEP)...LID (B), CASSETTE		16	*4-921-402-21	HEAT SINK	
	3-340-149-11	(E)....LID (B), CASSETTE		17	7-623-422-07	LW 3, TYPE B	
5	3-340-145-01	BUTTON (C)		18	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
6	3-340-146-01	(AEP)...BUTTON (A)		19	7-685-147-11	SCREW +P 3X10 TYPE2 NON-SLIT	
	3-340-146-11	(E).....BUTTON (A)		20	*3-340-112-01	PLATE, JACK	
7	7-682-147-01	SCREW +BVTT 3X6 (S)		21	X-4902-937-1	FOOT ASSY, RUBBER	
8	3-340-147-01	(AEP)...BUTTON (B)		22	7-685-133-11	SCREW +BTP 2.6X6 TYPE2 N-S	
	3-340-147-11	(E).....BUTTON (B)		23	3-323-415-41	(AEP)...KNOB, SWITCH TIMER	
9	4-886-821-51	SCREW, CASE, (M3X14)			3-323-415-51	(E)....KNOB, SWITCH TIMER	
10	3-346-341-01	(TC-WR808M)...PLATE (C-LEFT), SIDE		24	*3-346-326-01	(AEP)...LABEL MODEL NUMBER	
11	4-920-818-12	CASE			*3-346-328-01	(E)....LABEL MODEL NUMBER	
12	3-704-366-01	SCREW (CASE) (M3X8)		25	7-685-752-01	+PTT 3X8	
				26	3-346-397-11	BUTTON (LEFT)	
				27	3-346-398-11	BUTTON (RIGHT)	



REVISED

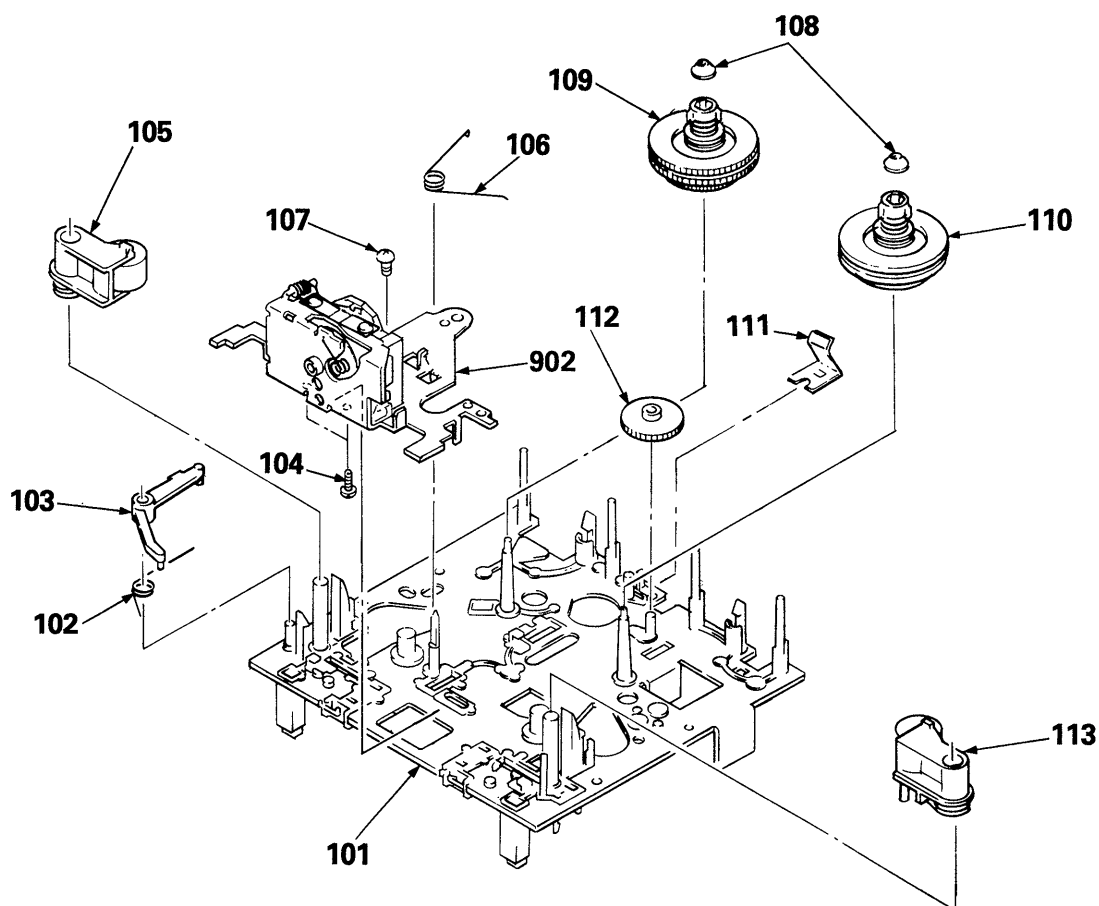
TC-WR808

(2)



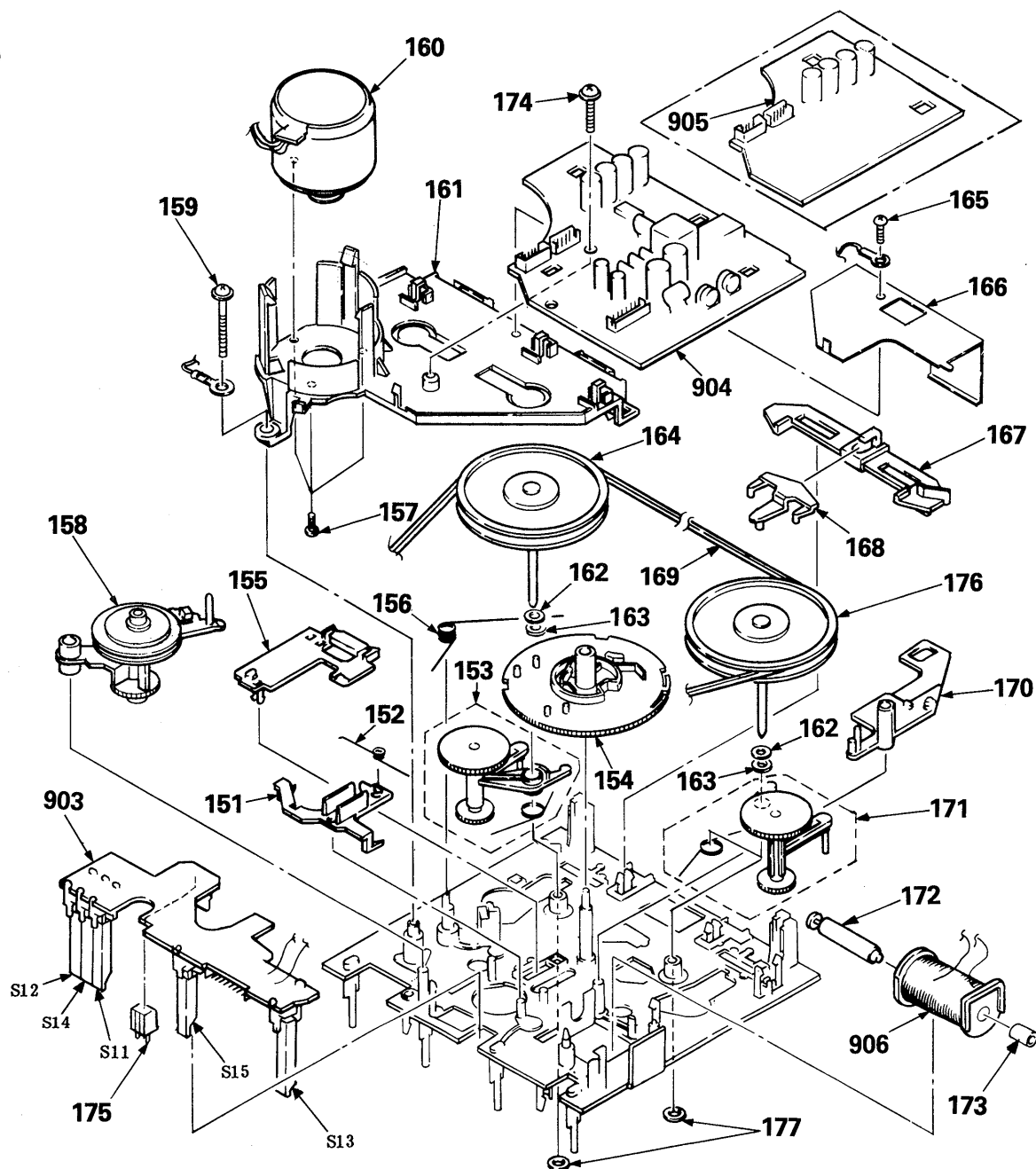
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	*3-340-144-01	HOLDER, LED		64	3-343-474-02	SPRING, TENSION	
52	3-340-127-01	PLATE (A), INDICATION		65	*X-3332-494-1	BRACKET (RIGHT) ASSY	
53	3-340-127-11	PLATE (B), INDICATION		66	X-3332-464-1	GEAR (DAMPER) ASSY	
54	3-340-137-01	SPRING		67	*3-340-125-01	SLIDER	
55	7-685-850-01	SCREW +BVTT 2X3 (S)		68	3-333-621-21	BUTTON, EJECT	
56	7-624-105-04	RETAINING, RING E-2.3		69	3-578-393-00	SPRING, TENSION	
57	*3-340-150-01	HOLDER, CASSETTE		70	3-831-441-XX	CUSHION (B), CABINET	
58	7-685-861-01	SCREW +BVTT 2.6X5 (S)		71	7-685-870-09	SCREW +BVTT 3X5 (S)	
59	*X-3332-465-1	LEVER (LOCK) ASSY		72	*3-325-594-01	PLATE, BOTTOM	
60	3-558-708-21	WASHER, STOPPER		73	*3-325-599-01	COVER, WIRING	
61	*3-340-142-01	LEVER (EJECT)		74	7-682-147-01	SCREW +BVTT 3X6 (S)	
62	*X-3332-466-1	BRACKET (LEFT) ASSY		75	3-346-342-01	SPRING (LOADING), TORSION	
63	3-340-123-21	RETAINER, CASSETTE		901	*A-2056-385-A	MOUNTED PCB, AUDIO	● A-D

(3)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	*X-3343-418-1	CHASSIS ASSY, MECHANICAL		109	X-3343-415-1	TABEL (REV) ASSY, REEL	
102	3-343-477-01	SPRING, TORSION (EJECT SAFETY)		110	X-3343-401-1	TABEL ASSY, REEL	
103	*3-343-476-01	LEVER (EJECT SAFETY LEVER)		111	3-343-420-01	SPRING, LEAF	
104	7-685-102-19	SCREW +P 2X4 NOW-SLIT TYPE 2		112	3-343-411-01	GEAR (FF GEAR)	
105	X-3343-403-1	LEVER (PINCH LEVER REV) ASSY		113	X-3343-402-1	LEVER (PINCH LEVER FWD) ASSY	
106	3-343-401-01	SPRING, TORSION		902	A-2108-122-A	(DECK-A)...PC BOARD ASSY, HEAD (HP101)	
107	7-621-773-86	SCREW +BVT 2.6X4 (S)			A-2108-123-A	(DECK-B)...PC BOARD ASSY, HEAD (HRP101/HE101)	
108	3-343-439-01	CAP (REEL TABLE)					

(4)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	3-343-453-01	SLIDER (BRAKE PLATE)		167	*3-343-457-01	SLIDER (REVERSE SLIDER)	
152	3-343-429-01	SPRING, TORSION		168	3-343-462-01	LEVER	
153	X-3343-406-1	LEVER (TU ARM REV) ASSY		169	3-343-426-01	BELT (CAPSTAN BELT SQUARE)	
154	3-343-470-01	GEAR (CAM GEAR)		170	*3-343-456-01	LEVER (PM LEVER)	
155	*3-343-461-01	SLIDER		171	X-3343-405-1	LEVER (TU ARM FWD) ASSY	
156	3-343-430-01	SPRING, TORSION		172	*3-343-425-01	ARBOR(MOVABLE IRON ARBOR),IRON	
157	7-627-556-28	SCREW +P 2.6X3.5		173	*3-343-424-01	ARBOR (FIXED IRON ARBOR), IRON	
158	X-3343-414-1	LAVER (FR ARM) ASSY		174	3-343-404-01	SCREW (PTPHW 2X10)	
159	3-343-403-01	SCREW (PTTWH 2X18)		175	*3-343-419-01	HOLDER (S SENSER A)	
160	X-3343-408-1	MOTOR ASSY		176	X-3343-416-1	FLYWHEEL (REV) COMPLETE ASSY	
161	*X-3343-407-1	BASE (THRUST RETAINER) ASSY		177	3-343-473-01	WASHER, NYLON	
162	4-605-835-11	WASHER (2.6), POLYSLIDER		903	*1-624-148-13	(DECK-B)...PC BOARD, LEAF SW	
163	3-307-482-00	WASHER, LUMILER		904	*1-624-146-11	PC BOARD, MD-B	
164	X-3343-411-1	FLYWHEEL COMPLETE ASSY		905	*1-624-147-13	(DECK-A)...PC BOARD, MD-A	
165	7-685-102-19	SCREW +P 2X4 NON-SLIT TYPE 2		906	1-454-456-11	SOLENOID, PLUNGER (PM1,2)	
166	*3-343-480-01	PLATE, SHIELD					

REVISED

SECTION 4

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μ F, PF: μ F.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:
UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
901	*A-2056-385-A	MOUNTED PCB, AUDIO
902	A-2108-122-A A-2108-123-A	(DECK-A)...PC BOARD ASSY, HEAD (HP101) (DECK-B)...PC BOARD ASSY, HEAD (HRP101/HE101)
903	*1-624-148-13	(DECK-B)...PC BOARD, LEAF SW
904	*1-624-146-11	PC BOARD, MD-B
905	*1-624-147-13	(DECK-A)...PC BOARD, MD-A
906	1-454-456-11	SOLENOID, PLUNGER (PM1,2)
C41A	1-162-289-31	CERAMIC 390PF 10% 50V
C41B	1-162-289-31	CERAMIC 390PF 10% 50V
C42A	1-136-157-00	FILM 0.022MF 5% 50V
C42B	1-136-157-00	FILM 0.022MF 5% 50V
C43A	1-124-282-00	ELECT 22MF 20% 25V
C43B	1-124-282-00	ELECT 22MF 20% 25V
C44	1-162-288-31	CERAMIC 330PF 10% 50V
C45	1-136-273-91	FILM 75PF 5% 630V
C47	1-162-209-31	CERAMIC 27PF 5% 50V
C48A	1-162-217-31	CERAMIC 56PF 5% 50V
C48B	1-162-217-31	CERAMIC 56PF 5% 50V
C61A	1-162-289-31	CERAMIC 390PF 10% 50V
C61B	1-162-289-31	CERAMIC 390PF 10% 50V
C62A	1-136-157-00	FILM 0.022MF 5% 50V
C62B	1-136-157-00	FILM 0.022MF 5% 50V
C63A	1-124-282-00	ELECT 22MF 20% 25V
C63B	1-124-282-00	ELECT 22MF 20% 25V
C64	1-162-288-31	CERAMIC 330PF 10% 50V
C65	1-136-273-91	FILM 75PF 5% 630V
C67	1-162-209-31	CERAMIC 27PF 5% 50V
C68A	1-162-217-31	CERAMIC 56PF 5% 50V
C68B	1-162-217-31	CERAMIC 56PF 5% 50V
C81A	1-124-445-00	ELECT 100MF 20% 16V
C81B	1-126-101-11	ELECT 100MF 20% 16V
C82A	1-124-445-00	ELECT 100MF 20% 16V
C82B	1-126-101-11	ELECT 100MF 20% 16V
C83	1-124-499-11	ELECT 1MF 20% 50V
C84	1-124-925-11	ELECT 2.2MF 20% 50V
C85	1-130-480-00	MYLAR 0.0056MF 5% 50V
C86	1-130-476-00	MYLAR 0.0027MF 5% 50V
C87	1-130-476-00	MYLAR 0.0027MF 5% 50V
C88	1-136-562-11	FILM 0.0082MF 5% 630V
C89	1-136-554-91	FILM 0.0018MF 5% 630V
C90	1-136-553-91	FILM 0.0015MF 5% 630V
C101	1-124-925-11	ELECT 2.2MF 20% 50V

Ref.No.	Part No.	Description
C102	1-162-294-31	CERAMIC 0.001MF 10% 50V
C103	1-124-443-00	ELECT 100MF 20% 10V
C104	1-123-875-11	ELECT 10MF 20% 50V
C105	1-161-375-00	(AEP)...CERAMIC 0.0022MF 20% 16V
C105	1-162-377-00	(E).....CERAMIC 0.0047MF 20% 16V
C106	1-136-161-00	(E).....FILM 0.047MF 5% 50V
C106	1-136-163-00	(AEP)...FILM 0.068MF 5% 50V
C107	1-123-875-11	ELECT 10MF 20% 50V
C108	1-161-375-00	CERAMIC 0.0022MF 20% 16V
C109	1-130-479-00	(AEP)...MYLAR 0.0047MF 5% 50V
C110	1-136-173-00	(AEP)...FILM 0.47MF 5% 50V
C111	1-136-167-00	(AEP)...FILM 0.15MF 5% 50V
C112	1-136-155-00	(AEP)...FILM 0.015MF 5% 50V
C113	1-136-169-00	(AEP)...FILM 0.22MF 5% 50V
C114	1-136-163-00	(AEP)...FILM 0.068MF 5% 50V
C115	1-136-161-00	(AEP)...FILM 0.047MF 5% 50V
C116	1-130-481-00	(AEP)...MYLAR 0.0068MF 5% 50V
C117	1-136-153-00	(AEP)...FILM 0.01MF 5% 50V
C118	1-124-927-11	ELECT 4.7MF 20% 50V
C119	1-136-169-00	FILM 0.22MF 5% 50V
C120	1-123-382-00	ELECT 3.3MF 20% 50V
C121	1-123-875-11	ELECT 10MF 20% 50V
C122	1-124-282-00	ELECT 22MF 20% 25V
C123	1-131-346-00	(E).....ELECT 22MF 20% 50V
C201	1-124-925-11	ELECT 2.2MF 20% 50V
C202	1-162-294-31	CERAMIC 0.001MF 10% 50V
C203	1-124-443-00	ELECT 100MF 20% 10V
C204	1-123-875-11	ELECT 10MF 20% 50V
C205	1-161-375-00	(AEP)...CERAMIC 0.0022MF 20% 16V
C205	1-161-377-00	(E).....CERAMIC 0.0047MF 20% 16V
C206	1-136-161-00	(E).....FILM 0.047MF 20% 50V
C206	1-136-163-00	(AEP)...FILM 0.068MF 5% 50V
C207	1-123-875-11	ELECT 10MF 20% 50V
C208	1-161-375-00	CERAMIC 0.0022MF 20% 16V
C209	1-130-479-00	(AEP)...MYLAR 0.0047MF 5% 50V
C210	1-136-173-00	(AEP)...FILM 0.47MF 5% 50V
C211	1-136-167-00	(AEP)...FILM 0.15MF 5% 50V
C212	1-136-155-00	(AEP)...FILM 0.015MF 5% 50V
C213	1-136-169-00	(AEP)...FILM 0.22MF 5% 50V
C214	1-136-163-00	(AEP)...FILM 0.068MF 5% 50V
C215	1-136-161-00	(AEP)...FILM 0.047MF 5% 50V
C216	1-130-481-00	(AEP)...MYLAR 0.0068MF 5% 50V
C217	1-136-153-00	(AEP)...FILM 0.01MF 5% 50V
C218	1-124-927-11	ELECT 4.7MF 20% 50V

Ref.No.	Part No.	Description			
C219	1-136-169-00	FILM	0.22MF	5%	50V
C220	1-123-382-00	ELECT	3.3MF	20%	50V
C221	1-123-875-11	ELECT	10MF	20%	50V
C222	1-124-282-00	ELECT	22MF	20%	25V
C223	1-131-346-00	(E)....ELECT	22MF	20%	50V
C301	1-162-219-31	CERAMIC	68PF	5%	50V
C302	1-162-219-31	CERAMIC	68PF	5%	50V
C303	1-124-482-11	ELECT	33MF	20%	25V
C304	1-124-472-11	ELECT	470MF	20%	10V
C305	1-124-902-00	ELECT	0.47MF	20%	50V
C306	1-124-444-00	ELECT	220MF	20%	10V
C307	1-124-120-11	ELECT	220MF	20%	16V
C308	1-124-472-11	ELECT	470MF	20%	10V
C309	1-124-443-00	ELECT	100MF	20%	10V
C310	1-124-443-00	ELECT	100MF	20%	10V
C311	1-124-443-00	ELECT	100MF	20%	10V
C312	1-124-908-11	ELECT	22MF	20%	50V
C313	1-123-875-11	ELECT	10MF	20%	50V
C314	1-123-875-11	ELECT	10MF	20%	50V
C317	1-124-499-11	ELECT	1MF	20%	50V
C318	1-123-875-11	ELECT	10MF	20%	50V
C319	1-123-875-11	ELECT	10MF	20%	50V
C320	1-124-902-00	ELECT	0.47MF	20%	50V
C322	1-136-157-00	FILM	0.022MF	5%	50V
C323	1-124-925-11	ELECT	2.2MF	20%	50V
C324	1-124-925-11	ELECT	2.2MF	20%	50V
C325	1-124-925-11	ELECT	2.2MF	20%	50V
C326	1-124-477-11	ELECT	47MF	20%	25V
C327	1-124-477-11	ELECT	47MF	20%	25V
C328	1-124-927-11	ELECT	4.7MF	20%	50V
C334	1-136-165-91	FILM	0.1MF		
C335	1-136-165-91	FILM	0.1MF		
C336	1-162-294-11	CERAMIC	1000PF		
C337	1-162-286-11	CERAMIC	220PF		
C338	1-162-232-11	CERAMIC	10PF		
C339	1-162-232-11	CERAMIC	10PF		
C340	1-162-282-11	CERAMIC	100PF		
C341	1-162-282-11	CERAMIC	100PF		
C401	1-124-563-11	ELECT	2200MF	20%	25V
C402	1-124-480-11	ELECT	470MF	20%	25V
C404	1-124-120-11	ELECT	220MF	20%	16V
C405	1-124-360-00	ELECT	1000MF	20%	16V
C406	1-124-477-11	ELECT	47MF	20%	25V
C407	1-124-472-11	ELECT	470MF	20%	10V
C408	1-124-478-11	ELECT	100MF	20%	25V
C409	1-124-443-00	ELECT	100MF	20%	10V
C410	1-161-494-00	CERAMIC	0.022MF		25V
C411	1-161-494-00	CERAMIC	0.022MF		25V
C412	1-124-443-00	ELECT	100MF	20%	10V
C413	1-124-925-11	ELECT	2.2MF	20%	50V
C414	1-124-499-11	ELECT	1MF	20%	50V
C415	1-124-499-11	ELECT	1MF	20%	50V
C416	1-162-294-31	CERAMIC	0.001MF	10%	50V
C417	1-161-494-00	CERAMIC	0.022MF		25V
C418	1-124-499-11	ELECT	1MF	20%	50V
C419	1-124-482-11	ELECT	33MF	20%	25V
C420	1-161-494-00	CERAMIC	0.022MF		25V
C421	1-161-494-00	CERAMIC	0.022MF		25V

Ref.No.	Part No.	Description
CNP11A*1-506-501-11		PIN, CONNECTOR 8P
CNP11B*1-506-615-11		PIN, CONNECTOR 9P
CNP12A*1-564-337-51		PIN, CONNECTOR 3P
CNP12B*1-564-337-51		PIN, CONNECTOR 3P
CNP13A*1-564-707-11		PIN, CONNECTOR (SMALL TYPE) 5P
CNP13B*1-564-707-11		PIN, CONNECTOR (SMALL TYPE) 5P
CNP81A*1-564-338-51		PIN, CONNECTOR 4P
CNP81B*1-564-709-11		PIN, CONNECTOR (SMALL TYPE) 7P
CNP82A*1-564-339-51		PIN, CONNECTOR 5P
CNP82B*1-564-339-51		PIN, CONNECTOR 5P
CNP83 *1-564-338-51		PIN, CONNECTOR 4P
CNP84 *1-564-704-11		PIN, CONNECTOR (SMALL TYPE) 2P
CNP301*1-565-291-11		SOCKET, CONNECTOR 13P
CNP306*1-564-336-61		(E)....PIN, CONNECTOR 2P
CNP306*1-564-337-61		(AEP)...PIN, CONNECTOR 3P
CNP401*1-564-336-51		PIN, CONNECTOR 2P
CNP402*1-564-666-11		PIN, CONNECTOR 10P
CNP403*1-564-338-51		PIN, CONNECTOR 4P
CNP404*1-564-340-51		PIN, CONNECTOR 6P
CP401 1-233-119-11		COMPOSITION CIRCUIT BLOCK
CP402 1-233-120-11		COMPOSITION CIRCUIT BLOCK
D11A 8-719-940-76		DIODE 1SS132
D11B 8-719-940-76		DIODE 1SS132
D81 8-719-940-76		DIODE 1SS132
D301 8-719-933-43		DIODE HZS7A2LT2
D302 8-719-000-26		DIODE US1060M
D303 8-719-000-26		DIODE US1060M
D304 8-719-000-26		DIODE US1060M
D305 8-719-000-26		DIODE US1060M
D306 8-719-000-26		DIODE US1060M
D307 8-719-000-26		DIODE US1060M
D308 8-719-000-26		DIODE US1060M
D309 8-719-000-26		DIODE US1060M
D310 8-719-000-26		DIODE US1060M
D311 8-719-933-48		(E)...DIODE HZS7B3L
D312 8-719-200-77		DIODE 10E2N
D401 8-719-200-77		DIODE 10E2N
D402 8-719-200-77		DIODE 10E2N
D403 8-719-200-77		DIODE 10E2N
D404 8-719-200-77		DIODE 10E2N
D405 8-719-200-77		DIODE 10E2N
D406 8-719-200-77		DIODE 10E2N
D407 8-719-933-77		DIODE HZS12B2L
D408 8-719-933-41		DIODE HZS6C3L
D409 8-719-933-50		DIODE HZS7C2L
D410 8-719-933-50		DIODE HZS7C2L
D411 8-719-200-77		DIODE 10E2N
D412 8-719-200-77		DIODE 10E2N
D413 8-719-000-26		DIODE US1060M
D414 8-719-000-26		DIODE US1060M
D415 8-719-970-06		DIODE MPR3371X
D416 8-719-970-06		DIODE MPR3371X
D417 8-719-970-07		DIODE MPG3371X

Ref.No.	Part No.	Description
D418	8-719-942-15	DIODE MPG3877S
D419	8-719-942-15	DIODE MPG3877S
D420	8-719-942-15	DIODE MPG3877S
D421	8-719-942-14	DIODE MAY3877S
D422	8-719-942-17	DIODE MPG3877S
D423	8-719-942-15	DIODE MPG3877S
D424	8-719-942-15	DIODE MPG3877S
D425	8-719-942-15	DIODE MPG3877S
D426	8-719-000-26	DIODE US1060M
IC81A	8-759-111-44	IC UPC4570C-1
IC81B	8-759-111-44	IC UPC4570C-1
IC301	8-759-939-73	IC BA3308
IC302	8-752-018-70	(AEP)...IC CX20187
IC303	8-752-032-60	IC CXA1198P
IC304	8-759-240-51	IC TC4051BP
IC305	8-759-601-41	IC M4053BP
IC306	8-759-601-02	IC M5218P
IC307	8-752-031-83	(E)...IC CXA1101P
IC401	8-752-804-34	IC CXP5048H-127S
IC402	8-759-240-52	IC TC4052BP
L41	1-410-780-11	INDUCTOR 27MMH
L61	1-410-780-11	INDUCTOR 27MMH
L401	1-408-080-00	INDUCTOR 100UH
LPF101	1-236-087-00	FILTER, LOW PASS
LPF201	1-236-087-00	FILTER, LOW PASS
Q11A	8-729-117-54	TRANSISTOR 2SA1175
Q11B	8-729-117-54	TRANSISTOR 2SA1175
Q12A	8-719-939-11	TRANSISTOR GP2S09-B
Q12B	8-719-939-11	TRANSISTOR GP2S09-B
Q81	8-729-801-93	TRANSISTOR 2SD1387
Q82	8-729-100-13	TRANSISTOR 2SC2001
Q83	8-729-100-13	TRANSISTOR 2SC2001
Q101	8-729-900-74	TRANSISTOR DTC143TS
Q102	8-729-600-27	TRANSISTOR 2SC634SP
Q103	8-729-900-80	TRANSISTOR DTC114ES
Q201	8-729-900-74	TRANSISTOR DTC143TS
Q202	8-729-600-27	TRANSISTOR 2SC634SP
Q203	8-729-900-80	TRANSISTOR DTC114ES
Q301	8-729-600-27	TRANSISTOR 2SC634SP
Q302	8-729-600-27	TRANSISTOR 2SC634SP
Q303	8-729-180-92	TRANSISTOR 2SD809K
Q304	8-729-117-54	TRANSISTOR 2SA1175
Q305	8-729-117-54	TRANSISTOR 2SA1175
Q306	8-729-173-13	TRANSISTOR 2SB731
Q307	8-729-900-89	TRANSISTOR DTC144ES
Q309	8-729-900-74	TRANSISTOR DTC143TS
Q310	8-729-117-54	TRANSISTOR 2SA1175
Q311	8-729-900-61	TRANSISTOR DTA114ES
Q312	8-729-900-65	TRANSISTOR DTA144ES
Q313	8-729-900-65	TRANSISTOR DTA144ES
Q314	8-729-900-65	TRANSISTOR DTA144ES
Q315	8-729-900-65	TRANSISTOR DTA144ES
Q316	8-729-900-65	TRANSISTOR DTA144ES
Q317	8-729-900-89	TRANSISTOR DTC144ES
Q318	8-729-201-56	TRANSISTOR 2SK246GR2
Q319	8-729-201-56	TRANSISTOR 2SK246GR2

Ref.No.	Part No.	Description
Q401	8-729-600-27	TRANSISTOR 2SC634SP
Q402	8-729-600-27	TRANSISTOR 2SC634SP
Q403	8-729-600-27	TRANSISTOR 2SC634SP
Q404	8-729-209-15	TRANSISTOR 2SD2012
Q405	8-729-600-27	TRANSISTOR 2SC634SP
Q406	8-729-209-15	TRANSISTOR 2SD2012
Q407	8-729-600-27	TRANSISTOR 2SC634SP
Q408	8-729-801-83	TRANSISTOR 2SB1013
Q409	8-729-801-83	TRANSISTOR 2SB1013
Q410	8-729-801-83	TRANSISTOR 2SB1013
Q411	8-729-801-83	TRANSISTOR 2SB1013
Q412	8-729-801-83	TRANSISTOR 2SB1013
Q413	8-729-900-74	TRANSISTOR DTC143TS
Q414	8-729-900-74	TRANSISTOR DTC143TS
Q415	8-729-900-61	TRANSISTOR DTA114ES
Q416	8-729-117-54	TRANSISTOR 2SA1175
Q417	8-729-900-74	TRANSISTOR DTC143TS
Q418	8-729-900-89	TRANSISTOR DTC144ES
Q419	8-729-900-89	TRANSISTOR DTC144ES
R11	1-215-424-00	CARBON 1.3K 5% 1/4W
R12	1-249-414-11	CARBON 560 5% 1/4W
R13	1-215-408-00	CARBON 300 5% 1/4W
R14A	1-249-408-11	CARBON 180 5% 1/4W
R14B	1-249-408-11	CARBON 180 5% 1/4W
R17A	1-249-437-11	CARBON 47K 5% 1/4W
R17B	1-249-437-11	CARBON 47K 5% 1/4W
R18A	1-249-437-11	CARBON 47K 5% 1/4W
R18B	1-249-437-11	CARBON 47K 5% 1/4W
R41A	1-247-881-00	CARBON 120K 5% 1/4W
R41B	1-247-881-00	CARBON 120K 5% 1/4W
R42A	1-249-405-11	CARBON 100 5% 1/4W
R42B	1-249-405-11	CARBON 100 5% 1/4W
R43A	1-215-472-00	CARBON 130K 5% 1/4W
R43B	1-215-472-00	CARBON 130K 5% 1/4W
R44A	1-249-426-11	CARBON 5.6K 5% 1/4W
R44B	1-249-426-11	CARBON 5.6K 5% 1/4W
R45	1-249-430-11	CARBON 12K 5% 1/4W
R61A	1-247-881-00	CARBON 120K 5% 1/4W
R61B	1-247-881-00	CARBON 120K 5% 1/4W
R62A	1-249-405-11	CARBON 100 5% 1/4W
R62B	1-249-405-11	CARBON 100 5% 1/4W
R63A	1-215-472-00	CARBON 130K 5% 1/4W
R63B	1-215-472-00	CARBON 130K 5% 1/4W
R64A	1-249-426-11	CARBON 5.6K 5% 1/4W
R64B	1-249-426-11	CARBON 5.6K 5% 1/4W
R65B	1-249-430-11	CARBON 12K 5% 1/4W
R81A	1-249-409-11	CARBON 220 5% 1/4W
R81B	1-249-409-11	CARBON 220 5% 1/4W
R82A	1-249-409-11	CARBON 220 5% 1/4W
R82B	1-249-409-11	CARBON 220 5% 1/4W
R83	1-249-429-11	CARBON 10K 5% 1/4W
R84	△ 1-212-849-00	FUSIBLE 4.7 5% 1/4W F
R85	1-249-435-11	CARBON 33K 5% 1/4W

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				
R86	1-249-435-11	CARBON	33K	5%	1/4W	
R101	1-249-437-11	CARBON	47K	5%	1/4W	
R102	1-249-417-11	CARBON	1K	5%	1/4W	
R103	1-249-437-11	CARBON	47K	5%	1/4W	
R104	1-249-417-11	CARBON	1K	5%	1/4W	
R105	1-249-423-11	CARBON	3.3K	5%	1/4W	
R106	1-215-440-00	(E).....CARBON	6.2K	5%	1/4W	
R106	1-249-426-11	(AEP)....CARBON	5.6K	5%	1/4W	
R107	1-249-414-11	(E).....CARBON	560	5%	1/4W	
R107	1-249-418-11	(AEP)....CARBON	1.2K	5%	1/4W	
R108	1-249-418-11	CARBON	1.2K	5%	1/4W	
R109	1-215-432-00	(AEP)....CARBON	3K	5%	1/4W	
R109	1-219-441-11	(E).....CARBON	100K	5%	1/4W	
R110	1-215-422-00	(AEP)....CARBON	1.1K	5%	1/4W	
R110	1-249-419-11	(E).....CARBON	1.5K	5%	1/4W	
R112	1-247-887-00	CARBON	220K	5%	1/4W	
R113	1-249-441-11	CARBON	100K	5%	1/4W	
R114	1-249-441-11	CARBON	100K	5%	1/4W	
R115	1-249-424-11	(AEP)....CARBON	3.9K	5%	1/4W	
R116	1-215-432-00	(AEP)....CARBON	3K	5%	1/4W	
R117	1-215-412-00	(AEP)....CARBON	430	5%	1/4W	
R118	1-249-427-11	(AEP)....CARBON	6.8K	5%	1/4W	
R119	1-249-415-11	(AEP)....CARBON	680	5%	1/4W	
R120	1-249-429-11	CARBON	10K	5%	1/4W	
R121	1-249-428-11	CARBON	8.2K	5%	1/4W	
R122	1-249-421-11	CARBON	2.2K	5%	1/4W	
R123	1-249-429-11	CARBON	10K	5%	1/4W	
R124	1-249-417-11	CARBON	1K	5%	1/4W	
R125	1-249-420-11	CARBON	1.8K	5%	1/4W	
R126	1-249-422-11	(E).....CARBON	2.7K	5%	1/4W	
R126	1-249-423-11	(AEP)....CARBON	3.3K	5%	1/4W	
R201	1-249-437-11	CARBON	47K	5%	1/4W	
R202	1-249-417-11	CARBON	1K	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W	
R204	1-249-417-11	CARBON	1K	5%	1/4W	
R205	1-249-423-11	CARBON	3.3K	5%	1/4W	
R206	1-215-440-00	(E).....CARBON	6.2K	5%	1/4W	
R206	1-249-426-11	(AEP)....CARBON	5.6K	5%	1/4W	
R207	1-249-414-11	(E).....CARBON	560	5%	1/4W	
R207	1-249-418-11	(AEP)....CARBON	1.2K	5%	1/4W	
R208	1-249-418-11	CARBON	1.2K	5%	1/4W	
R209	1-215-432-00	(AEP)....CARBON	3K	5%	1/4W	
R209	1-249-441-11	(E).....CARBON	100K	5%	1/4W	
R210	1-215-422-00	(AEP)....CARBON	1.1K	5%	1/4W	
R210	1-249-414-11	(E).....CARBON	1.5K	5%	1/4W	
R212	1-247-887-00	CARBON	220K	5%	1/4W	
R213	1-249-441-11	CARBON	100K	5%	1/4W	
R214	1-249-441-11	CARBON	100K	5%	1/4W	
R215	1-249-424-11	(AEP)....CARBON	3.9K	5%	1/4W	
R216	1-215-432-00	(AEP)....CARBON	3K	5%	1/4W	
R217	1-215-412-00	(AEP)....CARBON	430	5%	1/4W	
R218	1-249-427-11	(AEP)....CARBON	6.8K	5%	1/4W	
R219	1-249-415-11	(AEP)....CARBON	680	5%	1/4W	
R220	1-249-429-11	CARBON	10K	5%	1/4W	
R221	1-249-428-11	CARBON	8.2K	5%	1/4W	

Ref.No.	Part No.	Description				
R222	1-249-421-11	CARBON	2.2K	5%	1/4W	
R223	1-249-429-11	CARBON	10K	5%	1/4W	
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-420-11	CARBON	1.8K	5%	1/4W	
R226	1-249-422-11	(E).....CARBON	2.7K	5%	1/4W	
R226	1-249-423-11	(AEP)....CARBON	3.3K	5%	1/4W	
R301	1-249-417-11	CARBON	1K	5%	1/4W	
R302	1-249-417-11	CARBON	1K	5%	1/4W	
R303	1-249-430-11	CARBON	12K	5%	1/4W	
R304	1-249-429-11	CARBON	10K	5%	1/4W	
R305	1-249-417-11	CARBON	1K	5%	1/4W	
R306	1-249-437-11	CARBON	47K	5%	1/4W	
R307	1-249-439-11	CARBON	68K	5%	1/4W	
R308	1-249-427-11	CARBON	6.8K	5%	1/4W	
R309	1-249-423-11	CARBON	3.3K	5%	1/4W	
R310	1-249-418-11	CARBON	1.2K	5%	1/4W	
R311	1-215-493-00	CARBON	1M	5%	1/4W	
R312	1-215-493-00	CARBON	1M	5%	1/4W	
R313	1-249-405-11	CARBON	100	5%	1/4W	
R314	1-249-409-11	CARBON	220	5%	1/4W	
R315	1-249-441-11	(AEP)....CARBON	100K	5%	1/4W	
R316	1-249-441-11	CARBON	100K	5%	1/4W	
R317	1-249-411-11	CARBON	330	5%	1/4W	
R318	1-249-437-11	CARBON	47K	5%	1/4W	
R319	1-215-460-00	(E).....METAL	43K	5%	1/4W	
R319	1-215-469-00	(AEP)....METAL	100K	1%	1/6W	
R321	1-249-441-11	CARBON	100K	5%	1/4W	
R322	△1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R325	1-215-454-00	CARBON	24K	5%	1/4W	
R332	1-249-433-11	CARBON	22K	5%	1/4W	
R333	1-249-436-11	CARBON	39K	5%	1/4W	
R334	1-215-456-00	CARBON	30K	5%	1/4W	
R335	1-215-464-00	CARBON	62K	5%	1/4W	
R336	1-215-460-00	CARBON	43K	5%	1/4W	
R337	1-249-441-11	CARBON	100K	5%	1/4W	
R338	1-215-462-00	CARBON	51K	5%	1/4W	
R339	1-215-462-00	CARBON	51K	5%	1/4W	
R340	1-249-438-11	CARBON	56K	5%	1/4W	
R341	1-249-438-11	CARBON	56K	5%	1/4W	
R342	1-249-437-11	CARBON	47K	5%	1/4W	
R343	1-247-881-00	CARBON	120K	5%	1/4W	
R344	1-249-438-11	CARBON	56K	5%	1/4W	
R345	1-249-439-11	CARBON	68K	5%	1/4W	
R346	1-215-454-00	CARBON	24K	5%	1/4W	
R347	1-249-436-11	CARBON	39K	5%	1/4W	
R348	1-215-466-00	CARBON	75K	5%	1/4W	
R349	1-215-470-00	CARBON	110K	5%	1/4W	
R350	1-249-436-11	CARBON	39K	5%	1/4W	
R351	1-249-435-11	CARBON	33K	5%	1/4W	
R352	1-215-470-00	CARBON	110K	5%	1/4W	
R353	1-247-887-00	CARBON	220K	5%	1/4W	
R354	1-215-462-00	CARBON	51K	5%	1/4W	
R355	1-249-438-11	CARBON	56K	5%	1/4W	
R356	1-249-439-11	CARBON	68K	5%	1/4W	
R357	1-215-460-00	CARBON	43K	5%	1/4W	
R358	1-215-472-00	CARBON	130K	5%	1/4W	

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description			
R359	1-215-474-00	CARBON	160K	5%	1/4W
R360	1-249-439-11	CARBON	68K	5%	1/4W
R361	1-247-883-00	CARBON	150K	5%	1/4W
R362	1-249-439-11	CARBON	68K	5%	1/4W
R363	1-215-462-00	CARBON	51K	5%	1/4W
R364	1-215-462-00	CARBON	51K	5%	1/4W
R365	1-215-466-00	CARBON	75K	5%	1/4W
R366	1-215-470-00	CARBON	110K	5%	1/4W
R367	1-247-887-00	CARBON	220K	5%	1/4W
R370	1-247-887-00	CARBON	220K	5%	1/4W
R371	1-247-887-00	CARBON	220K	5%	1/4W
R372	1-249-441-11	CARBON	100K	5%	1/4W
R373	1-249-429-11	CARBON	10K	5%	1/4W
R374	1-249-428-11	CARBON	8.2K	5%	1/4W
R375	1-249-423-11	CARBON	3.3K	5%	1/4W
R376	1-249-441-11	CARBON	100K	5%	1/4W
R377	1-249-441-11	CARBON	100K	5%	1/4W
R378	1-249-417-11	CARBON	1K	5%	1/4W
R379	1-249-429-11	CARBON	10K	5%	1/4W
R380	1-249-441-11	CARBON	100K	5%	1/4W
R381	1-249-417-11	CARBON	1K	5%	1/4W
R382	1-215-452-00	CARBON	20K	5%	1/4W
R384	1-249-409-11	CARBON	220	5%	1/4W
R385	1-249-409-11	CARBON	220	5%	1/4W
R386	1-249-433-11	CARBON	22K	5%	1/4W
R387	1-249-429-11	CARBON	10K	5%	1/4W
R388	1-249-429-11	CARBON	10K	5%	1/4W
R389	1-249-433-11	CARBON	22K	5%	1/4W
R390	1-249-427-11	CARBON	6.8K	5%	1/4W
R391	1-249-427-11	CARBON	6.8K	5%	1/4W
R392	1-249-427-11	CARBON	6.8K	5%	1/4W
R393	1-249-427-11	CARBON	6.8K	5%	1/4W
R394	1-249-433-11	CARBON	22K	5%	1/4W
R395	1-249-433-11	CARBON	22K	5%	1/4W
R396	1-249-417-11	CARBON	1K	5%	1/4W
R401	1-249-429-11	CARBON	10K	5%	1/4W
R402	1-249-417-11	CARBON	1K	5%	1/4W
R403	1-249-431-11	CARBON	15K	5%	1/4W
R404	1-249-399-11	CARBON	33	5%	1/4W
R405	1-249-423-11	CARBON	3.3K	5%	1/4W
R407	1-249-417-11	CARBON	1K	5%	1/4W
R408	1-249-425-11	CARBON	4.7K	5%	1/4W
R409	1-249-417-11	CARBON	1K	5%	1/4W
R410	△1-217-490-00	FUSIBLE	56	5%	1W F
R412	1-249-433-11	CARBON	22K	5%	1/4W

Ref.No.	Part No.	Description			
R413	1-249-417-11	CARBON	1K	5%	1/4W
R414	1-249-429-11	CARBON	10K	5%	1/4W
R415	1-249-421-11	CARBON	2.2K	5%	1/4W
R416	1-249-429-11	CARBON	10K	5%	1/4W
R417	1-249-417-11	CARBON	1K	5%	1/4W
R418	1-249-429-11	CARBON	10K	5%	1/4W
R419	1-249-421-11	CARBON	2.2K	5%	1/4W
R420	1-249-429-11	CARBON	10K	5%	1/4W
R421	1-249-417-11	CARBON	1K	5%	1/4W
R422	1-249-429-11	CARBON	10K	5%	1/4W
R423	1-249-441-11	CARBON	100K	5%	1/4W
R424	1-247-887-00	CARBON	220K	5%	1/4W
R426	1-249-441-11	CARBON	100K	5%	1/4W
R427	1-247-887-00	CARBON	220K	5%	1/4W
R429	1-249-432-11	CARBON	18K	5%	1/4W
R430	1-249-430-11	CARBON	12K	5%	1/4W
R431	1-249-433-11	CARBON	22K	5%	1/4W
R432	1-249-425-11	CARBON	4.7K	5%	1/4W
R433	1-249-411-11	CARBON	330	5%	1/4W
R434	1-249-411-11	CARBON	330	5%	1/4W
R435	1-249-409-11	CARBON	220	5%	1/4W
R436	1-249-408-11	CARBON	180	5%	1/4W
R437	1-249-408-11	CARBON	180	5%	1/4W
R438	1-249-408-11	CARBON	180	5%	1/4W
R439	1-249-409-11	CARBON	220	5%	1/4W
R440	1-249-411-11	CARBON	330	5%	1/4W
R441	1-249-408-11	CARBON	180	5%	1/4W
R442	1-249-408-11	CARBON	180	5%	1/4W
R443	1-249-408-11	CARBON	180	5%	1/4W
R444	1-249-437-11	CARBON	47K	5%	1/4W
R445	1-249-437-11	CARBON	47K	5%	1/4W
R446	1-249-423-11	CARBON	3.3K	5%	1/4W
R447	1-249-429-11	CARBON	10K	5%	1/4W
R448	1-249-425-11	CARBON	4.7K	5%	1/4W
R449	1-249-429-11	CARBON	10K	5%	1/4W
R450	1-249-429-11	CARBON	10K	5%	1/4W
R453	1-249-417-11	CARBON	1K	5%	1/4W
R454	1-249-420-11	CARBON	1.8K	5%	1/4W
R455	1-249-430-11	CARBON	12K	5%	1/4W
R456	1-249-417-11	CARBON	1K	5%	1/4W
R457	1-249-420-11	CARBON	1.8K	5%	1/4W
R458	1-249-423-11	CARBON	3.3K	5%	1/4W
R459	1-249-417-11	CARBON	1K	5%	1/4W
R460	1-249-420-11	CARBON	1.8K	5%	1/4W
R461	1-249-423-11	CARBON	3.3K	5%	1/4W

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
R462	1-249-417-11	CARBON 1K 5% 1/4W
R463	1-249-420-11	CARBON 1.8K 5% 1/4W
R464	1-249-417-11	CARBON 1K 5% 1/4W
R465	1-249-420-11	CARBON 1.8K 5% 1/4W
R466	1-249-422-11	CARBON 2.7K 5% 1/4W
R467	1-249-411-11	CARBON 330 5% 1/4W
R468	1-249-411-11	CARBON 330 5% 1/4W
R469	1-249-411-11	CARBON 330 5% 1/4W
R470	1-249-411-11	CARBON 330 5% 1/4W
R471	1-249-411-11	CARBON 330 5% 1/4W
R472	1-249-411-11	CARBON 330 5% 1/4W
RV41A	1-228-989-00	RES, ADJ, CARBON 470
RV41B	1-228-989-00	RES, ADJ, CARBON 470
RV42	1-230-725-11	RES, ADJ, CARBON 220K
RV61A	1-228-989-00	RES, ADJ, CARBON 470
RV61B	1-228-989-00	RES, ADJ, CARBON 470
RV62	1-230-725-11	RES, ADJ, CARBON 220K
RV101	1-228-995-00	RES, ADJ, CARBON 22K
RV201	1-228-995-00	RES, ADJ, CARBON 22K
RY81	1-515-614-11	RELAY
S11A	1-571-281-21	SWITCH, LEAF
S11B	1-571-281-21	SWITCH, LEAF
S12	1-571-281-21	SWITCH, LEAF
S13	1-571-281-21	SWITCH, LEAF
S14A	1-571-281-21	SWITCH, LEAF
S14B	1-571-281-21	SWITCH, LEAF
S15	1-571-281-21	SWITCH, LEAF
S301	1-554-277-00	SWITCH, SLIDE
S302	1-570-835-11	(AEP)...SWITCH, SLIDE
S302	1-570-845-11	(E)....SWITCH, SLIDE
S401	1-570-835-11	SWITCH, SLIDE
S402	1-553-856-00	SWITCH, KEY BOARD
S403	1-553-856-00	SWITCH, KEY BOARD
S404	1-553-856-00	SWITCH, KEY BOARD
S405	1-553-856-00	SWITCH, KEY BOARD
S406	1-553-856-00	SWITCH, KEY BOARD

Ref.No.	Part No.	Description
S407	1-553-856-00	SWITCH, KEY BOARD
S408	1-553-856-00	SWITCH, KEY BOARD
S409	1-553-856-00	SWITCH, KEY BOARD
S410	1-553-856-00	SWITCH, KEY BOARD
S411	1-553-856-00	SWITCH, KEY BOARD
S412	1-553-856-00	SWITCH, KEY BOARD
S413	1-553-856-00	SWITCH, KEY BOARD
S414	1-553-856-00	SWITCH, KEY BOARD
S415	1-553-856-00	SWITCH, KEY BOARD
S416	1-553-856-00	SWITCH, KEY BOARD
S417	1-553-856-00	SWITCH, KEY BOARD
SPK101	1-235-186-00	(AEP)...ENCAPSULATED COMPONENT
SPK201	1-235-186-00	(AEP)...ENCAPSULATED COMPONENT
T81B	1-433-337-11	TRANSFORMER, BIAS OSCILLATION
TP1	*1-564-505-11	PLUG, CONNECTOR 2P
X401	1-567-772-11	VIBRATOR, CERAMIC

