

TOSHIBA

STEREO PREAMPLIFIER

SY-C15



SPECIFICATIONS

Input Sensitivity/ Impedance:	PHONO 1, 2 2.5mV/47K ohm TUNER 150mV/47K ohm AUX/TAPE 150mV/47K ohm	Frequency Response:	AUX 10 Hz ~ 100 kHz $\begin{matrix} +0 \\ -2 \end{matrix}$ dB PHONO 20 Hz ~ 20 kHz ± 0.2 dB (RIAA equalization)
Output Level:	TAPE REC 150mV PRE OUT 1V	Phono Overload Level:	300mV
Total Harmonic Distortion:	0.01%	GENERAL	
S/N (IHF A Network):	PHONO 88 dB AUX 106 dB	Power Supply:	AC 220V 50 Hz or AC 240V 50 Hz
Tone Control:	BASS (at 100 Hz) ± 10 dB TREBLE (at 20 kHz) ± 10 dB	Power Consumption:	12W
Filter:	SUBSONIC (at 10 Hz) -6 dB/Oct	Weight:	2.7 kg
		Dimensions (mm):	257(W) x 54(H) x 208(D)

Specifications are subject to change without notice.

TE, TU, AY

1. OPERATING CONTROLS

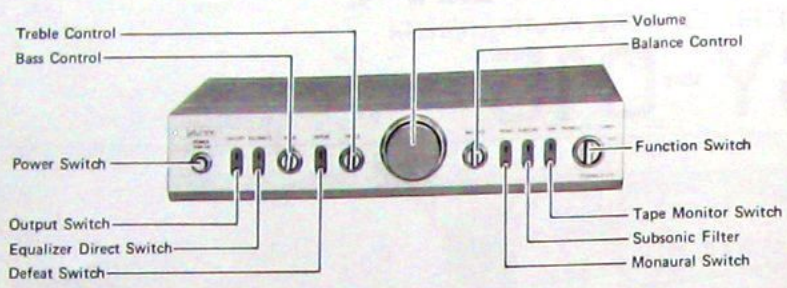


Figure 1.

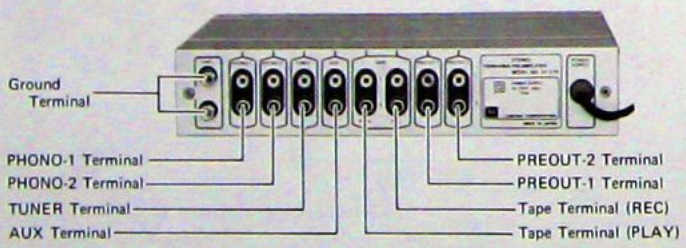


Figure 2.

2. DISASSEMBLY INSTRUCTIONS

PANEL REMOVAL

1. Remove 3 Knobs ①. See figure 3.
2. Remove 4 Screws ② and ③. See figure 4.
3. Remove the panel from the Set.

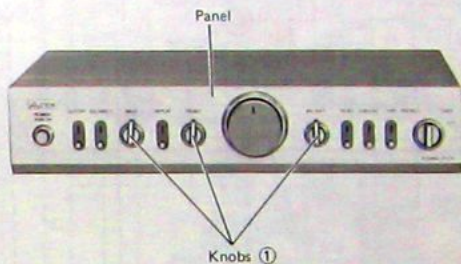


Figure 3.

BOTTOM PLATE REMOVAL

1. Remove the Panel. See figure 3 and 4.
2. Remove 6 Screws ④. See figure 4.
3. Remove the bottom plate from the set.

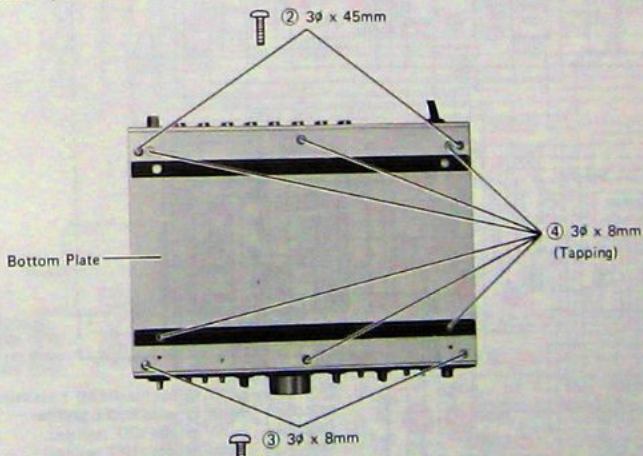


Figure 4.

3. NEUTRAL VOLTAGE ADJUSTMENTS

1. Never apply signal.
2. Connect DC voltmeter to chassis ground.
3. Tone control BASS MAX
4. Connect DC voltmeter to test pin and adjust semi-fixed variable resistor to obtain $0 \pm 3\text{mV}$.

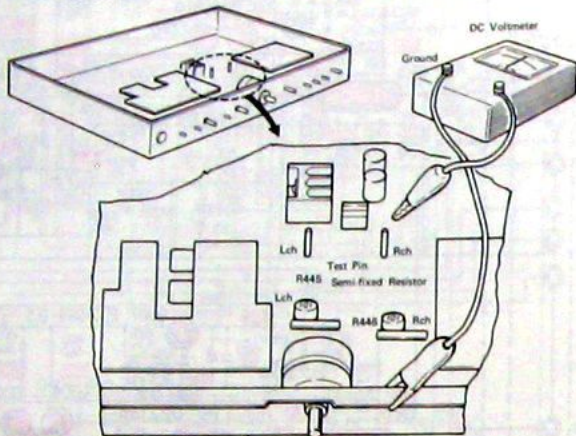


Figure 5.

4. BLOCK DIAGRAM

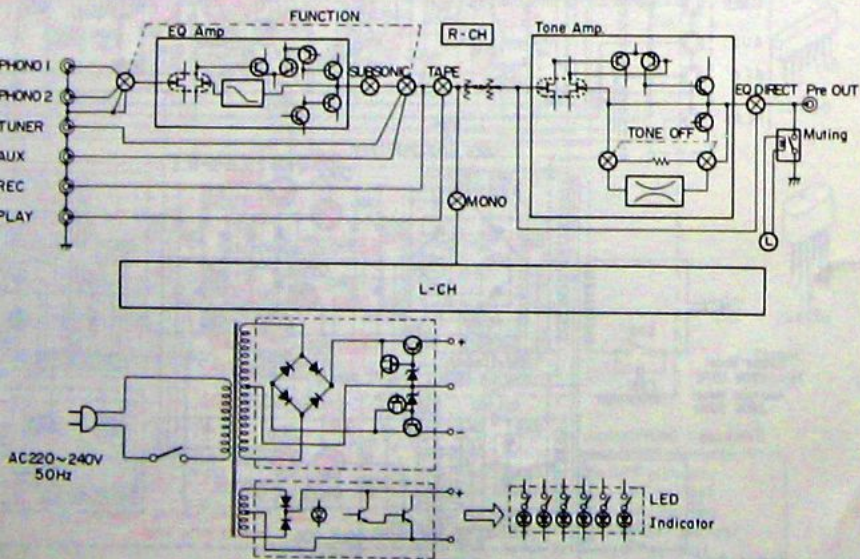
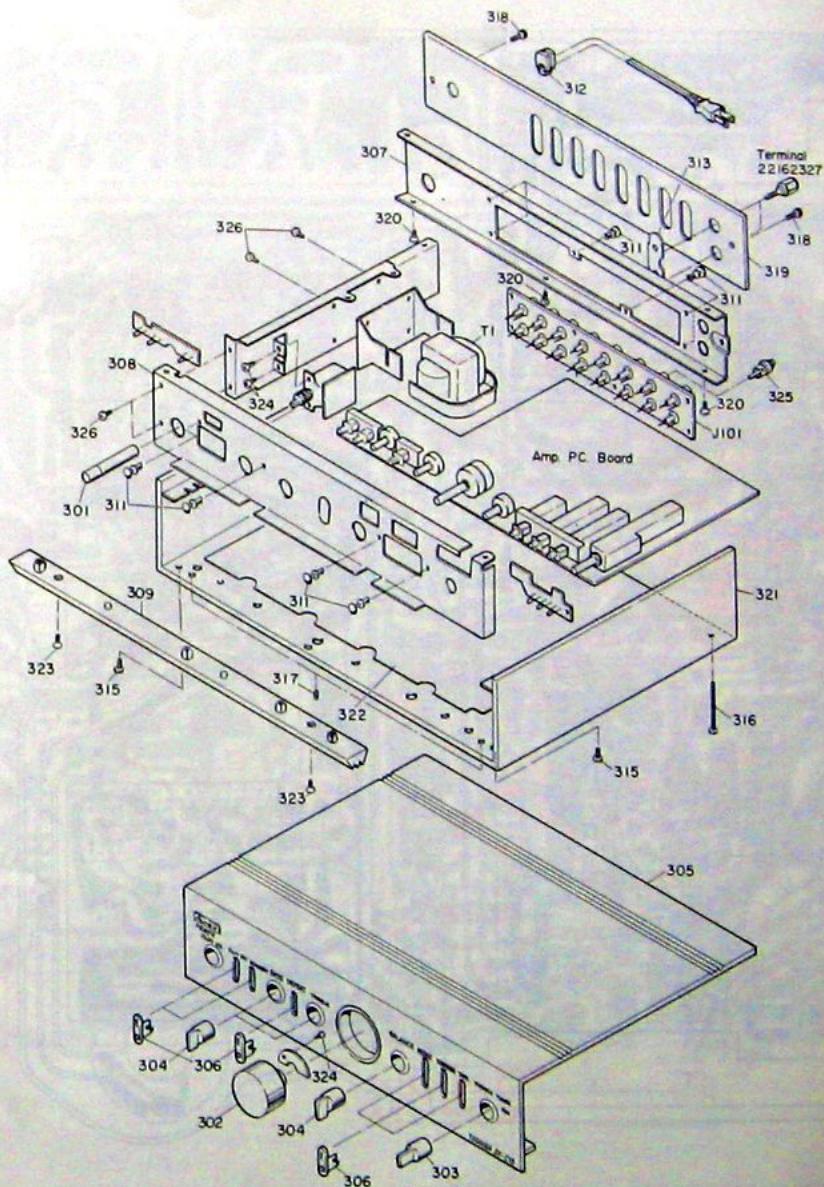


Figure 6.

7. CABINET PARTS LOCATIONS



NOTE: Excluded parts in the Parts List are not available as replacement parts.

Figure 9.

6. P.C. BOARD PARTS LOCATIONS

P.C. BOARD PARTS LOCATIONS

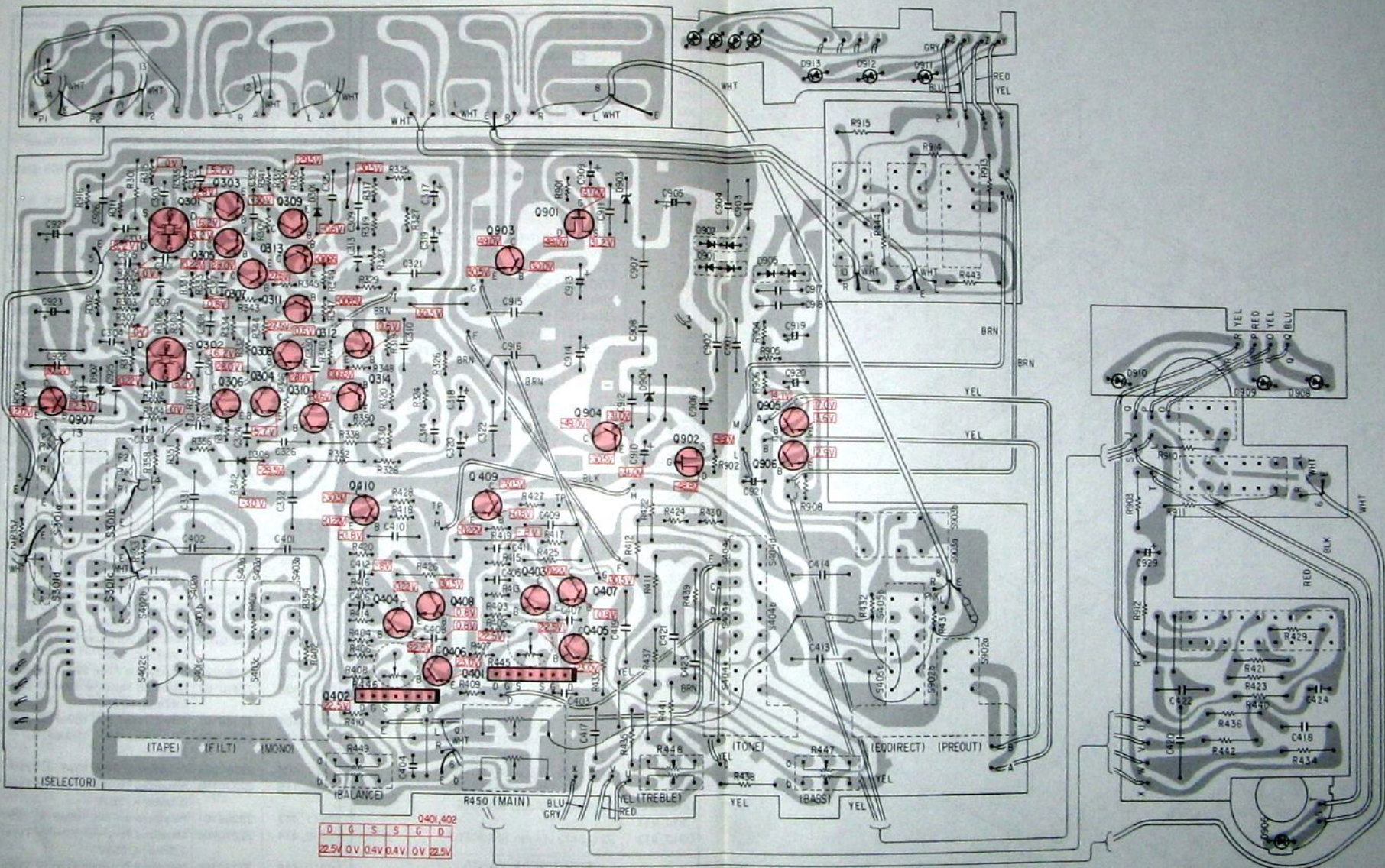


Figure 8.

8. PARTS LIST

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
CABINET PARTS					
301	22824291	Knob, Power		22223287	Transformer, Power (England/Australia)
302	22826222	Knob, Volume	S301	22195185	Switch, Rotary, Function
303	22826223	Knob, Function	S401, 402, 403	22195229	Switch, Push, Subsonic/Tape/Mono
304	22826224	Knob, Bass/Treble/Balance	S404	22195184	Switch, Push, Defeat
305	22821458	Panel Ass'y	S405, 902	22195183	Switch, Push, Out Off/EQ Direct
306	22824264	Knob, Out Off/EQ Direct/Defeat/Mono/Subsonic/Tape	S901	22146295	Switch, Push, Power
309	22874045	Leg	S903	22148650	Relay
311	22705020	Rivet, 3/8 x 4.5mm	J101	22163702	Jack, US 16P
312	25844035	Bushing, Power Cord		22162327	Terminal, Ground
315	22707327	Screw (BID), 3/8 x 8mm		22176286	Cord, Power (Europe)
313	22707328	Screw (BID), 3/8 x 45mm		22176536	Cord, Power (England)
317	22701492	Screw, Special		22176588	Cord, Power (Australia)
318	22707028	Screw, Special	CAPACITORS		
319	22843676	Panel, Jack (Europe)	J = ±5%, K = ±10%, G = ±2%, Z = -20+80%, P = -0+100%		
	22844155	Panel, Jack (England/Australia)	C301, 302	22380079	Polystyrene Film, 33pF, J, 125V
321	22843621	Chassis	C303, 304	22388101	Polystyrene Film, 100pF, K, 125V
323	20794138	Screw, 3/8 x 8mm, Tapping	C305, 306	22388681	Polystyrene Film, 680pF, K, 125V
324	22701321	Screw (BID), 3/8 x 6mm	C307, 308	22388101	Polystyrene Film, 100pF, K, 125V
325	22164311	Plug, US 1P	C309, 310	22370242	Metalized Polyester Film (V Type) 0.122mfd, G, 250V
TRANSISTORS AND DIODES			C313, 314	22370241	Metalized Polyester Film (V Type) 0.0345mfd, G, 400V
Q301, 302		Transistor, 2SK146-BL	C317, 318	22442471	Electrolytic, 470mfd, 6.3V
Q303, 304		Transistor, 2SC2240-BL	C319, 320	22442471	Electrolytic, 470mfd, 6.3V
Q305, 306		Transistor, 2SC2240-BL	C321, 322	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V
Q307, 308		Transistor, 2SA970-BL	C323, 324	22380084	Polystyrene Film, 1500pF, J, 125V
Q309, 310		Transistor, 2SC2240-BL	C325, 326	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V
Q311, 312		Transistor, 2SC1626-Y-O/Y	C327, 328	22380080	Polystyrene Film, 47pF, J, 125V
Q313, 314		Transistor, 2SA816-Y-O/Y	C329, 330	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V
Q401, 402		Transistor, 2SK150-GR-Y/BL	C331, 332	22370209	Metalized Polyester Film (V Type) 2.2mfd, K, 250V
Q403, 404		Transistor, 2SA970-BL	C333, 334	22380097	Polystyrene Film, 220pF, J, 500V
Q405, 406		Transistor, 2SA970-BL	C401, 402	22370187	Metalized Polyester Film (V Type) 0.47mfd, K, 250V
Q407, 408		Transistor, 2SC1626-Y-O/Y	C403, 404	22388101	Polystyrene Film, 100pF, K, 125V
Q409, 410		Transistor, 2SA816-Y-O/Y	C405, 406	22380084	Polystyrene Film, 1500pF, J, 125V
Q901, 902		Transistor, 2SK117-Y	C407, 408	22380065	Polystyrene Film, 15pF, J, 125V
Q903		Transistor, 2SC1669-O.S	C409, 410	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V
Q904		Transistor, 2SA839-O.S	C411, 412	22388101	Polystyrene Film, 100pF, K, 125V
Q905, 906		Transistor, 2SC2240-BL	C413, 414	22370209	Metalized Polyester Film (V Type) 2.2mfd, J, 250V
Q907		Transistor, 2SC1669-O.S	C417, 418	22370190	Metalized Polyester Film (V Type) 0.022mfd, K, 400V
Q301, 302		Diode, 1S1555V			
D901		Diode, 1G221			
D902, 903		Diode, 1G2C1			
D903, 904	22115347	Diode, RD33E			
D906	22115473	Diode, SEL301E			
D907		Diode, 02Z13A			
D908, 909, 910, 911	22115473	Diode, SEL301E			
D912, 913	22115473	Diode, SEL301E			
ELECTRICAL PARTS					
T1	22223274	Transformer, Power (Europe)			

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
C419, 420	22370227	Metalized Polyester Film (V Type) 0.22mfd, K, 250V	R335, 336	22555153	15K ohm
C421, 422	22370195	Metalized Polyester Film (V Type) 0.033mfd, J, 400V	R337, 338	22555183	18K ohm
C423, 424	22388392	Polystyrene Film, 3900pF, K, 125V	R339, 340	22555821	820 ohm
C901, 902	22370181	Metalized Polyester Film (V Type) 0.01mfd, K, 630V	R341, 342	22555391	390 ohm
C903, 904	22370181	Metalized Polyester Film (V Type) 0.01mfd, K, 630V	R343, 344	22555472	4.7K ohm
C905, 906	22448471	Electrolytic, 470mfd, 50V	R345, 346	22545124	120K ohm
C907, 908	22370208	Metalized Polyester Film (V Type) 1mfd, K, 250V	R347, 348	22555390	39 ohm
C909, 910	22447100	Electrolytic, 10mfd, 35V	R349, 350	22555390	39 ohm
C911, 912	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V	R351, 352	22555101	100 ohm
C913, 914	22448471	Electrolytic, 470mfd, 50V	R353, 354	22555104	100K ohm
C915, 916	22370208	Metalized Polyester Film (V Type) 1mfd, K, 250V	R355, 356	22555391	390 ohm
C917, 918	22340030	Ceramic, 0.01mfd, P, 500V	R357, 358	22555330	33 ohm
C919	22447101	Electrolytic, 100mfd, 35V	R401, 402	22555472	4.7K ohm
C920	22442471	Electrolytic, 470mfd, 10V	R403, 404	22555123	12K ohm
C921	22445221	Electrolytic, 220mfd, 16V	R405, 406	22555123	12K ohm
C922	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V	R407, 408	22555223	22K ohm
C923	22447471	Electrolytic, 470mfd, 35V	R409, 410	22555123	12K ohm
C924	22447100	Electrolytic, 10mfd, 35V	R411, 412	22555391	390 ohm
C925	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V	R413, 414	22555222	2.2K ohm
C926	22370186	Metalized Polyester Film (V Type) 0.1mfd, K, 250V	R415, 416	22555153	15K ohm
C927	22447471	Electrolytic, 470mfd, 35V	R417, 418	22555821	820 ohm
C929	22445100	Electrolytic, 10mfd, 16V	R419, 420	22555153	15K ohm
C931	22340090	Ceramic, 4700pF, Z, 250V	R421, 422	22545683	68K ohm
RESISTORS			R423, 424	22555222	2.2K ohm
All resistors are $\frac{1}{4}W$, $\pm 5\%$, carbon film unless otherwise noted.			R425, 426	22555330	33 ohm
R301, 302	22555473	47K ohm	R427, 428	22555330	33 ohm
R303, 304	22555122	1.2K ohm	R429, 430	22545271	270 ohm
R305, 306	22555122	1.2K ohm	R431, 432	22555270	27 ohm
R307, 308	22555100	10 ohm	R433, 434	22545122	1.2K ohm
R309, 310	22555151	150 ohm	R435, 436	22545471	470 ohm
R311, 312	22555392	3.9K ohm	R437, 438	22545681	680 ohm
R315, 316	22540153	47 ohm, $\pm 1\%$	R439, 440	22545822	8.2K ohm
R317, 318	22555152	15K ohm	R441, 442	22545222	2.2K ohm
R319, 320	22550233	24K ohm, $\pm 1\%$	R443, 444	22545102	1K ohm
R323, 324	22540155	2.2K ohm, $\pm 1\%$	R445, 446	22658292	100 ohm, Semi-fixed
R325, 326	22555222	2.2K ohm	R447, 448	22651484	100K ohm, Variable, Bass/Treble
R327, 328	22555222	2.2K ohm	R449	22651483	100K ohm, Variable, Balance
R329, 330	22555270	27 ohm	R450	22651485	50K ohm, Variable, Volume
R331, 332	22555561	560 ohm	R451, 452	22555104	100K ohm
R333, 334	22555561	560 ohm	R901, 902	22555101	100 ohm
			R903	22545821	820 ohm
			R904	22555123	12K ohm
			R905	22555392	3.9K ohm
			R906	22555101	100 ohm
			R908	22555560	56 ohm
			R909	22555472	4.7K ohm
			R910, 911	22555821	820 ohm
			R912, 913	22555821	820 ohm
			R914, 915	22555821	820 ohm
			R916	22555102	1K ohm
ACCESSORIES					
			22902226	Owner's Manual	
			22170388	Cord, Connection	

TOSHIBA CORPORATION

2-1, GINZA 5-CHOME, CHUO-KU, TOKYO 104, JAPAN