SERVICE MANUAL MODEL DVD-300

CAUTION : Before servicing this chassis, read the "PRODUCT SAFETY SERVICE FOR VIDEO PRODUCTS" section on page 2 of this manual.

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PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION: DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY AND NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED, A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT: FIRE & SHOCK HAZARD

- 1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WITCH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
- 2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
- 3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
- 4. CHECK FOR PHYSICAL EVIDENCE DF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS, FOR FRAYED LEADS AND DAMAGED INSULATION (INCLUDING A.C. CORD), AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
- 5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
- 6. ALL CRITICAL COMPONENTS SUCH AS FUSES. FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
- 7. AFTER RE-ASSEMBLY OF THE SET, ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST, MAKE SURE TO USE AN A.C. VOLTMETER. HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHMS 10 WATT RESISTOR, PARALLELED BY A.15 MFD. 150V A.C. TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND 15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. ANY VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C. ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.

A.C. VOLTMETER



SUBJECT: X-RADIATION

- 1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
- 2. ONLY FACTORY SPECIFIED C.R.T ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS AN X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
- 3. IT IS ESSENTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRATION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
- 4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY, THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED, THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY. WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE AND THAT THE HIGH VOLTAGE READING BE RECORDED ON EACH CUSTOMER'S INVOICE.
- 5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY DO NOT OPERATE THE PRODUCT LONGER THAN IT IS NECESSARY TO LOCATE THE CAUSE OF EXCESSIVE VOLTAGE.
- 6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS(WHERE USED).

SUBJECT: IMPLOSION

- 1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTEGRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
- 2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT: TIPS ON PROPER INSTALLATION

- 1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS. CUBBYHOLE OR CLOSELY FITTING SHELF SPACE, OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
- 2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
- 3. AVOID PLACEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
- 4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT, MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS. A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM. BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
- 5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON



SUBJECT GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.

- 6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
- 7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH TV'S OF THE SAME OR LARGER SCREEN SIZE.
- 8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS. EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the DVD covered by this service data and its supplements and ADDENDUMS, read and follow the SAFETY PRECAUTIONS NOTE : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.

Remember Safety First:

General Servicing Precautions

- 1. Always unplug the DVD AC power cord from the AC power source before:
 - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
 - (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
 - (3) Connecting a test substitute in parallel with an electrolytic capacitor

Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

- 2. Do not spray chemicals on or near this DVD or any of its assemblies.
- 3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.

Unless specified otherwise in this service data, lubrication of contacts is not required.

- 4. Do not defeat any plug/socket B+ voltage interlocks with witch instruments covered by this service manual might be equipped.
- 5. Do not apply AC power to this DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
- 6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

- 1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
- 2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum toil, to prevent electrostatic charge buildup or exposure of the assembly.
- 3. Use only a GROUNDED-tip soldering iron to solder or unsolder ES devices.
- 4. Use only an anti-static solder removal device. Some solder removal devices not classified a "anti-static" can generate electrical charges sufficient to damage ES devices.
- 5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.
- 6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material.)
- 7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Insulation Checking Procedure

3

Disconnect the attachment plug trom the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M ohm.

Note 1 : Accessible Conductive Parts including Metal panels, input terminals, Earphone jacks, etc.

Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

OVERALL BLOCK DIAGRAM



4

Electrical Trouble Shooting Guide



A Power Circuit abnormal



B Display abnormal



C Open/close abnormal



D Read disc abnormal



E Video abnormal



F Audio abnormal



G Focus abnormal



H Laser abnormal



I Turn abnormal



J TOC abnormal



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OUTPUT BOARD



KEY BOARD









168 KEY BOARD

168 OUTPUT BOARD



168 POWER BOARD







DSM7012B DECODER

REPLACEMENT PARTS LIST

PART No.	PARTS NAME	Q'TY	
DVD300			
S8027	KHL232C(UL) LOADING	1	
01003	D168K KEY ASS'Y	1	
0856	DC168 POWER ASS'Y	1	
00948	DSM7012B DECODER ASS'Y	1	
0857	D168OUT OUTPUT ASS'Y	1	
S3230	RCA CORD AUDIO	1	
S3231	RCA CORD VIDEO	1	
S3118	WIRE	1	
S3119	LASER SERVO WIRE	1	
S2701a	7# BATTERY	2	
S3251e	CC-0.5×24×210-6	1	
S3126	CC-1.0×12×150	1	
S3190	CC-1.0×12×40	1	
S0588	6.2mH INDUCTOR ASS'Y	1	
04003	REMOTE CONTROL ASS'Y	1	
S3219a	DC168 POWER CORD ASS'Y	1	
02005	PHONE JACK ASS'Y	1	
S0676n	RC168 REMOTE	1	
S1024a	OWNER MANUAL	1	

REF No.	PART No.	PART NAME	REF No.	PART No.	PART NAME
CONTROL ASSY		R409	P11019	RC-03K104JT	
RESISTOR		R410	P11019	RC-03K104JT	
R501	G0735	RT13-0.167W-10K±5%	R411	P11013	RC-03K103JT
R502	G0735	RT13-0.167W-10K±5%	R412	P11013	RC-03K103JT
R503	G0735	RT13-0.167W-10K±5%	R413	P11003	RC-03K100JT
R504	G0735	RT13-0.167W-10K±5%	R430	P11003	RC-03K100JT
R505	G0735	RT13-0.167W-10K±5%	R431	P11009	RC-03K102JT
R506	G0735	RT13-0.167W-10K±5%	R432	P11009	RC-03K102JT
R507	G0735	RT13-0.167W-10K±5%	CAPACITOR		
R508	G0728	RT13-0.167W-4.7K±5%	C401	a3636	CD11CX-10uF-M-16V
R509	G0719	RT13-0.167W-1K±5%	C402	a3636	CD11CX-10uF-M-16V
R510	G0714	RT13-0.167W-180±5%	C403	P20064	GRM39CH510J50PT
R511	G0784	RT13-0.167W-56K±5%	C404	P20064	GRM39CH510J50PT
R512	G0705	RT13-0.167W-10±5%	C405	a3574	CD11CX-220uF-M-10V
R513	G0705	RT13-0.167W-10±5%	C406	P20015	GRM39F104Z25PT
	C	APACITOR	C407	a3574	CD11CX-220uF-M-10V
C403	a3540	CD110X-100u+50%-6.3V	C408	a3574	CD11CX-220uF-M-10V
C404	a3304	CT4-0.1u+50%-63V	C409	a3574	CD11CX-220uF-M-10V
C405	a3540	CD110X-100u+50%-6.3V	C410	a3574	CD11CX-220uF-M-10V
C406	a3304	CT4-0.1u+50%-63V	C411	P20015	GRM39F104Z25PT
		OTHER	C412	a3639	CD11CX-100uF-M-10V
S501	G6434	EVQ21504M(4.5mm) TOUCH			OTHER
S502	G6434	EVQ21504M(4.5mm) TOUCH	X401	a6662	HSJ1715-01110
S503	G6434	EVQ21504M(4.5mm) TOUCH	X402	a6985	AV -8.4-01
S504	G6434	EVQ21504M(4.5mm) TOUCH	X403	a6976	53259-02 POWER SOCKET
S507	G6434	EVQ21504M(4.5mm) TOUCH	XS401	a6515	B-10B-PH SOCKET
VD501	a5004	IN4148 DIODE	XS402	a6531	B-4B-XH SOCKET
VD502	a5004	IN4148 DIODE	XP401	a6519	S-3B-PH SOCKET
VD503	a5004	IN4148 DIODE	L401	a6878	FILTER
V501	a6918	VFD20-0605 DISPLAY	L402	P6817	BSZ-2012-600T3
B501	a6733	HS0038B RECEIVE	L403	P6817	BSZ-2012-600T3
D501	a4399	UPD16311 IC	V401	P5073a	2SB601AR
LED	a1500	ø3 RED LED	V402	P5073a	2SB601AR
XP501	a6569	12FPZ-SM-TF SOCKET	D401	P4513	NJM4580
XP2	a8820	DVD168 PHONE WIRE	VD401	a1226	18-1 MANOSTAT
	OU	TPUT ASSY	POWER ASSY		
RESISTOR		R001	P11033	RC-03K682JT	
R401	P11012	RC-03K472JT	R002	P11013	RC-03K103JT
R402	P11012	RC-03K472JT	R003	P11019	RC-03K104JT
R403	P11009	RC-03K102JT	R004	P11031	RC-03K392JT
R404	P11009	RC-03K102JT	R005	P11013	RC-03K103JT
R405	P11036	RC-02K223JI	R006	P11033	RC-03K682JT
R406	P11036	RC-02K223JI	R007	P11019	RC-03K104JT
R407	P11026	RC-03K122JT	R008	P11013	RC-03K103JT
R408	P11026	RC-03K122JT	R009	P11031	RC-03K392JT

REF No.	PART No.	PART NAME	REF No.	PART No.	PART NAME
R010	P11013	RC-03K103JT	R313	P11029	RC-03K222JT
R011	P11006	RC-03K101JT	R314	P11039	RC-03K563JT
R012	P11018	RC-03K473JT	R315	P11039	RC-03K563JT
R013	P11018	RC-03K473JT	R316	P11140	RC-03K220JT
R014	P11018	RC-03K473JT	R317	P11140	RC-03K220JT
R015	P11018	RC-03K473JT	R318	P11205	RC-05K0000T
R016	P11009	RC-03K102JT	R319	P11205	RC-05K0000T
R017	P11018	RC-03K473JT	R320	P11026	RC-03K122JT
R018	P11019	RC-03K104JT	R321	P11030	RC-03K272JT
R019	P11013	RC-03K103JT	R322	P11027	RC-03K132JT
R020	P11009	RC-03K102JT	R323	P11004	RC-03K330JT
R021	P11018	RC-03K473JT	R327	P11205	RC-05K0000T
R022	P11013	RC-03K103JT	R328	P11095	RC-05K100JT
R023	P11019	RC-03K104JT	R329	P11098	RC-05K681JT
R024	P11006	RC-03K101JT	R330	a0028	RT14-0.25W-220±5%
R025	P11018	RC-03K473JT	R331	P11012	RC-03K472JT
R026	P11018	RC-03K473JT	R332	P11009	RC-03K102JT
R027	P11006	RC-03K101JT	R333	P11010	RC-03K202JT
R028	P11006	RC-03K101JT	R335	P11013	RC-03K103JT
R029	P11009	RC-03K102JT	R335	P11013	RC-03K103JT
R030	P11013	RC-03K103JT	R339	P11051	RC-03K-152JT
R031	P11009	RC-03K102JT	R340	P11080	470
R032	P11012	RC-03K472JT	CAPACITOR		
R033	P11018	RC-03K473JT	C001	a3561	CD110X-16V-10u±20%
R034	P11008	RC-03K471JT	C002	a3561	CD110X-16V-10u±20%
R035	P11013	RC-03K103JT	C003	P20030	GRM39B272K50PT
R036	P11009	RC-03K102JT	C004	P20029	GRM39CH331J50PT
R037	P11009	RC-03K102JT	C005	P20029	GRM39CH331J50PT
R038	P11013	RC-03K103JT	C006	a3561	CD110X-16V-10u±20%
R039	P11008	RC-03K471JT	C007	a3561	CD110X-16V-10u±20%
R040	P11067	RC-03K201JT	C008	a3609	CD110X-16V-100u±20%
R041	P11067	RC-03K201JT	C009	a3594	CD110X-10V-47u±20%
R042	P20054	GRM39CH271J50PT	C010	P20030	GRM39B272K50PT
R301	P11035	RC-03K203JT	C011	a3561	CD110X-16V-10u±20%
R302	P11038	RC-03K393JT	C012	a3561	CD110X-16V-10u±20%
R303	P11038	RC-03K393JT	C013	P20064	GRM39CH510J50PT
R304	P11040	RC-03K683JT	C014	P20064	GRM39CH510J50PT
R305	P11038	RC-03K393JT	C015	a3561	CD110X-16V-10u±20%
R306	P11038	RC-03K393JT	C016	a3561	CD110X-16V-10u±20%
R307	P11038	RC-03K393JT	C017	a3609	CD110X-16V-100u±20%
R308	P11013	RC-03K103JT	C018	a3594	CD110X-10V-47u±20%
R309	P11013	RC-03K103JT	C023	P20029	GRM39CH331J50PT
R310	P11006	RC-03K101JT	C024	P20029	GRM39CH331J50PT
R311	P11006	RC-03K101JT	C026	a3514	CD110X-220uF-M-16V
R312	P11029	RC-03K222JT	C027	a3594	CD110X-10V-47u±20%

REF No.	PART No.	PART NAME	REF No.	PART No.	PART NAME
C028	a3664	CD110X-10V-470u±20%	V005	P5073a	2SD601AR
C034	a3609	CD110X-16V-100u±20%	V006	P5700	2SB709
C301	P20054	GRM39CH271J50PT	V203	P5700	2SB709
C302	P20035	GRM39F105210PT	V205	P5073a	2SD601AR
C303	P20015	GRM39F104225PT	V206	P5073a	2SD601AR
C304	P20015	GRM39F104225PT	V301	P5723	2SJ357
C305	P20015	GRM39F104225PT	V302	P5723	2SJ357
C306	P20015	GRM39F104225PT	V303	a5063	3DA3852
C307	P20015	GRM39F104225PT	V304	P5700	2SB709
C308	P20035	GRM39F105210PT	VD201	P1200	ISS355
C309	P20012	GRM39B103K50PT	VD203	P1200	ISS355
C310	P20012	GRM39B103K50PT	VD301	a5001	IN4001
C311	P20009	GRM39B102K50PT	VD302	P1556	MA152
C312	P20009	GRM39B102K50PT	VD303	P5721	RB160L-40
C313	P20042	GRM39B222K50PT	VD304	P5721	RB160L-40
C314	P20042	GRM39B222K50PT	VD305	P5722	RB060L-40
C317	P20035	GRM39F105210PT	VD306	a1139	5A1
C318	a3542	CD110X-1000u-6.3V±20%	VD307	a1106	2CW-5.1V
C319	a3542	CD110X-1000u-6.3V±20%	VD308	a1136	2CW-4C2
C320	a3594	CD110X-10V-47u±20%	VD309	P11000	RC-03K0000T
C321	a3594	CD110X-10V-47u±20%	VD310	P1200	ISS355
C322	a3209	CD288-10V-1000u-10%+30%	VD312	P1200	ISS355
C323	a3209	CD288-10V-1000u-10%+30%			IC
C325	a3607	CD110-50V-22u±20%	N001	P4530	4558
C326	a3607	CD110-50V-22u±20%	N002	P4530	4558
C327	a3607	CD110-50V-22u±20%	D301	P4580	TL1451AC
C330	a3613	CD110X-25V-100u±20%	N302	P4590	BU4S71-JR
C331	P20015	GRM39F104225PT	N303	P4590	BU4S71-JR
C332	a3609	CD110X-16V-100u±20%	N304	P5714	FMC3AT148
C333	a3609	CD110X-16V-100u±20%	N305	P5702	XN4601
C334	a3648	CD110X-6.3V-100u±20%	N306	P5702	XN4601
	11	NDUCTOR	N307	a4714	CW7809
L001	P6817	BSZ2012-600T	N308	a4571	CW7805
L002	P6817	BSZ2012-600T	N309	P90090	PQ05DZ11
L003	P6817	BSZ2012-600T			OTHER
L004	P6817	BSZ2012-600T	W2	a6946	EPC-19 TRANSFORMER
L005	P6817	BSZ2012-600T	XP001	a8821	OUTPUT CONNECT WIRE 1
L006	P6817	BSZ2012-600T	XP002	a8822	OUTPUT CONNECT WIRE 2
L204	a6945	5uH	XP201	a6947	S-13B-PH SOCKET
L302	a6945	5uH	XS001	a6787	FABSE1252 SOCKET
L301	a6879	100uH		N	WIRE ASSY
L305	a6879	100uH		a6969	0.4mHINDUCTOR
	TR	ANSISTOR		a8844	DVD168 WIRE 1
V003	P5700	2SB709		a8845	DVD168 WIRE 2
V004	P5700	2SB709			