# SERVICE MANUAL MODEL DVP-767

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

# DVD and CD PLAYER







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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

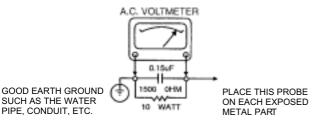
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

#### 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.
- SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
- CHECK FOR PHYSICAL EVIDENCE DE 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 A.15 MFD. 150V A.C. 1YPE 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.



#### SUBJECT GRAPHIC SYMBOLS

PIPE, CONDUIT, ETC.



THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN FOUILATERAL 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.

#### 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.
- 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
- 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 A/OID 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.
- REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS(WHERE

#### 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

- 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.
- 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.
- 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.
- 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.
- CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
- 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 RÉCEIVER 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**

- 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.
- 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.
- Do not defeat any plug/socket B+ voltage interlocks with witch instruments covered by this service manual might be equipped.
- 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.

# **Insulation Checking Procedure**

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.

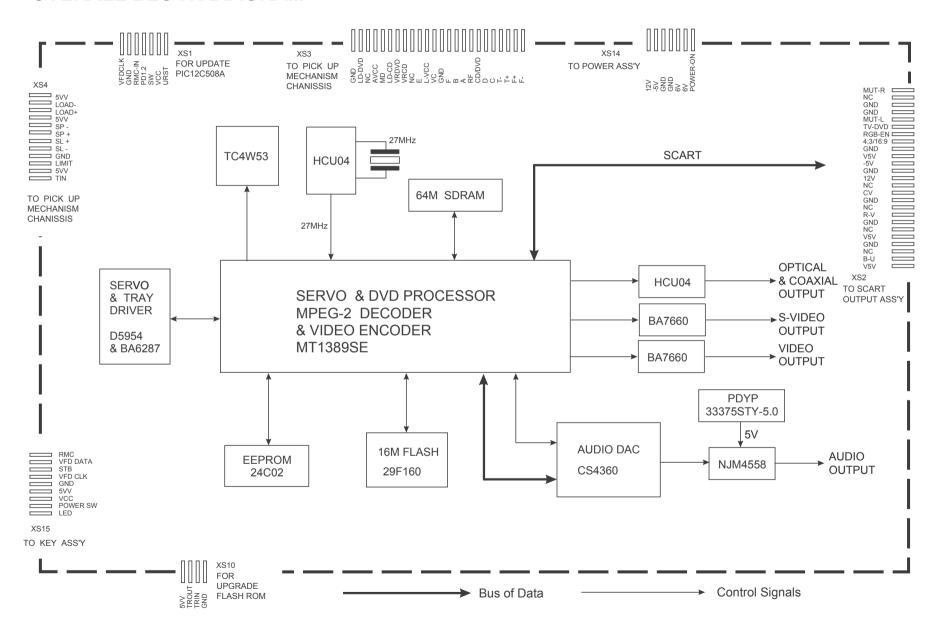
#### **Electrostatically Sensitive (ES) Devices**

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.

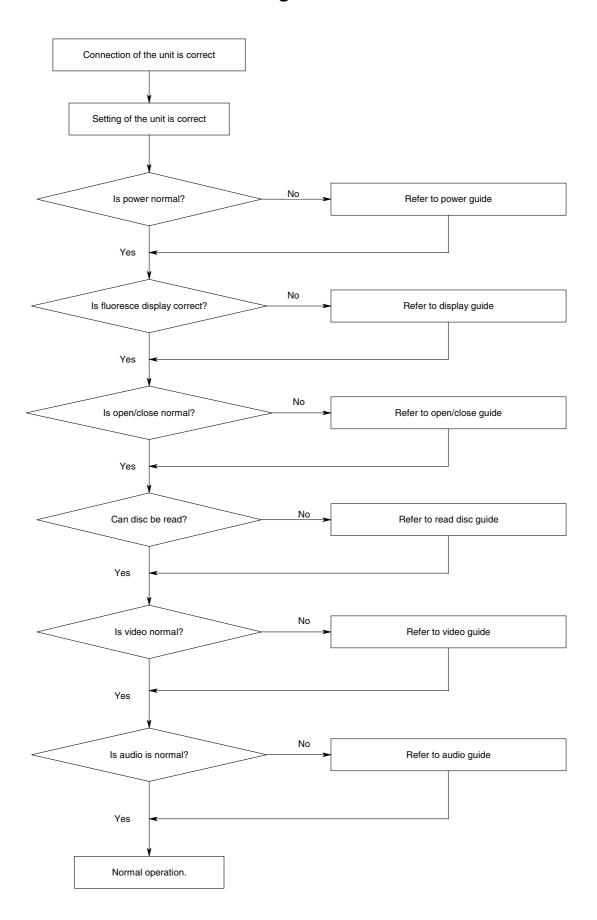
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

- 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.
- 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.
- Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.
- 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.)
- 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.
  - 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.)

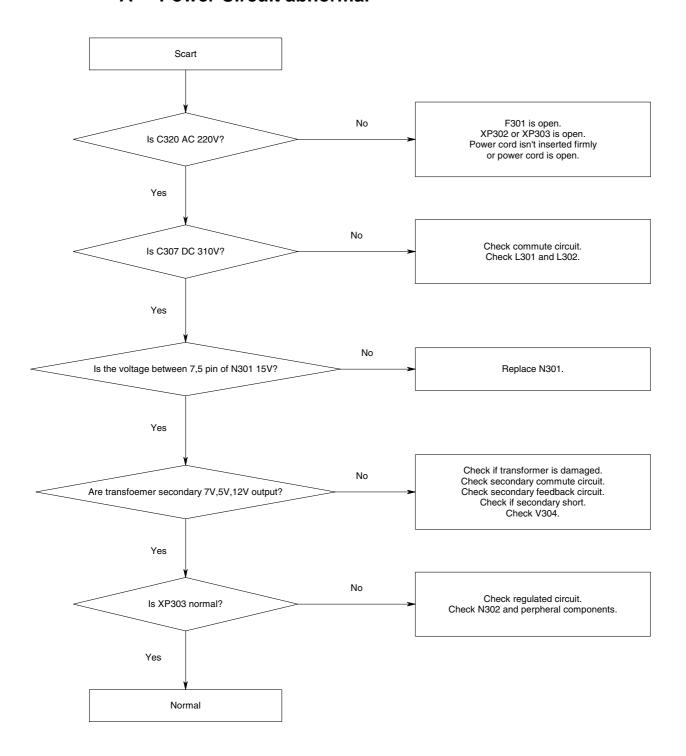
# **OVERALL BLOCK DIAGRAM**



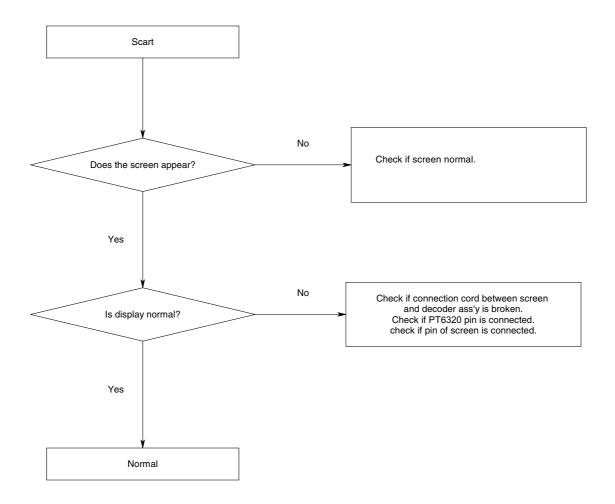
# **Electrical Trouble Shooting Guide**



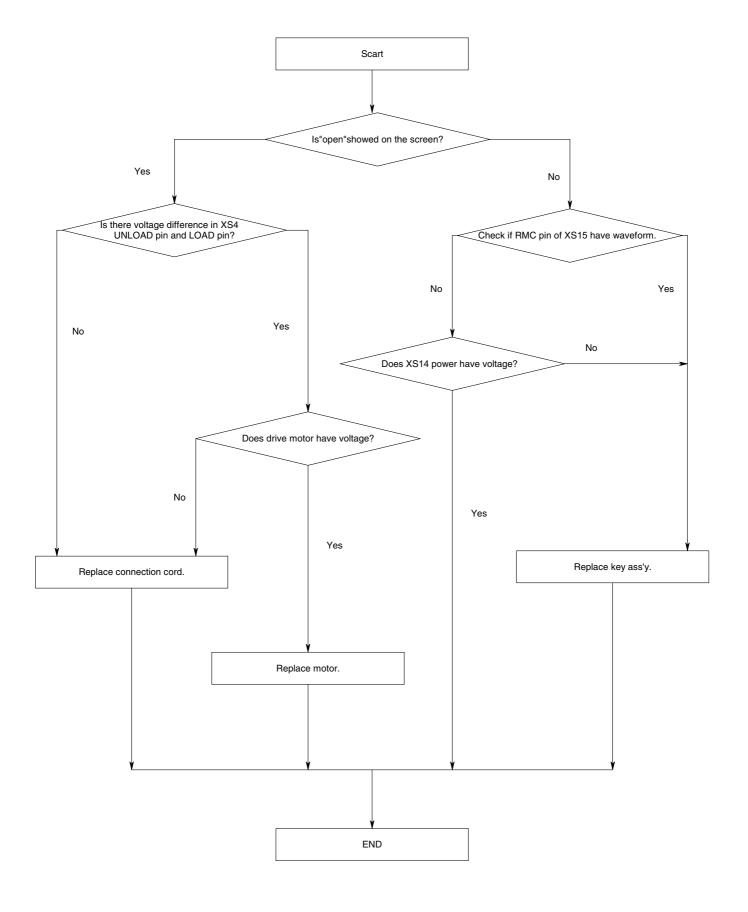
# A Power Circuit abnormal



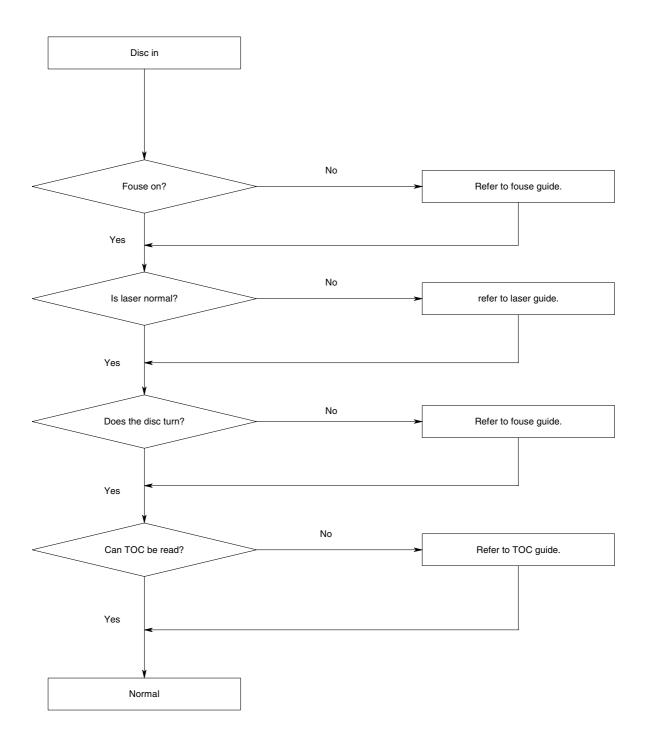
# B Display abnormal



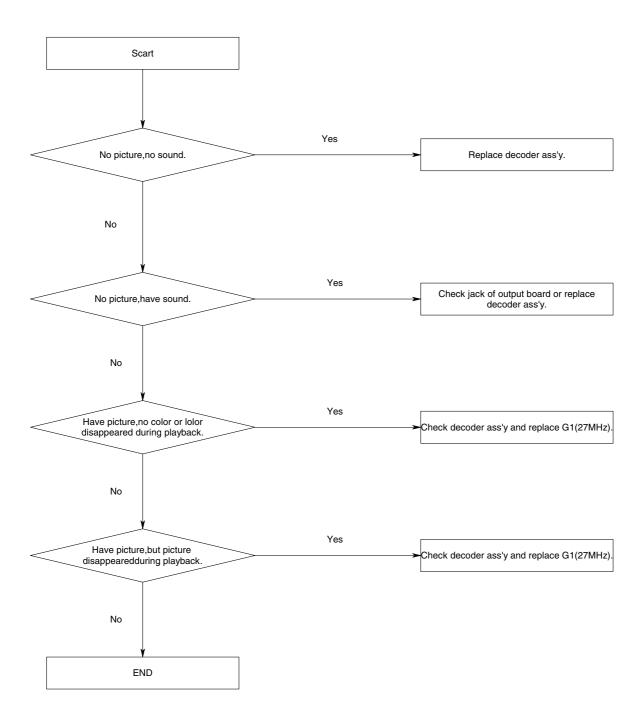
# C Open/close abnormal



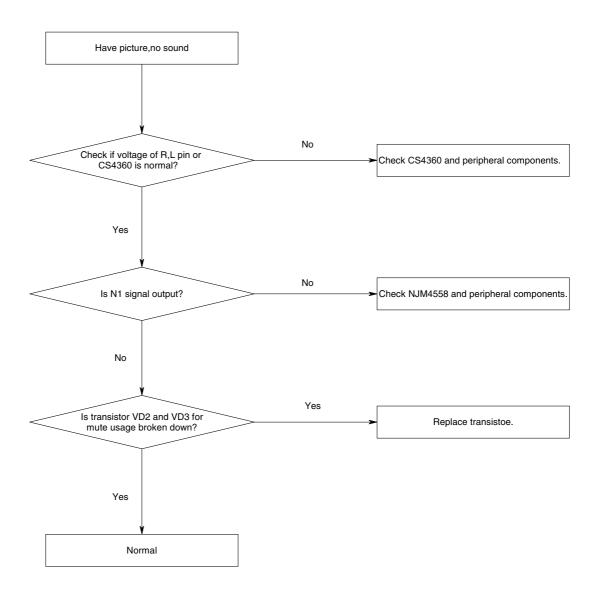
# D Read disc abnormal



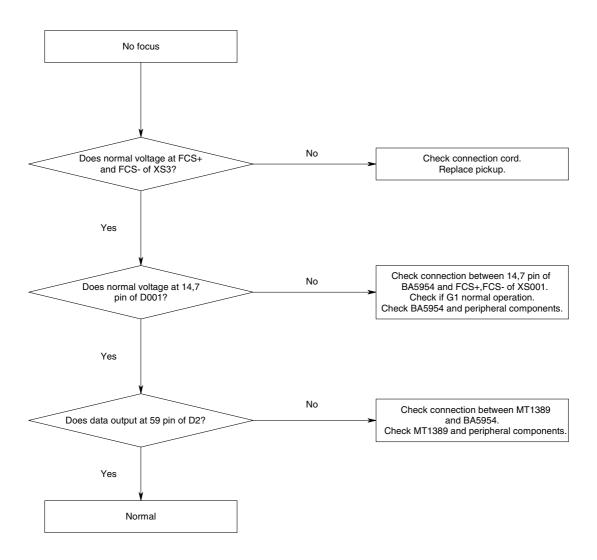
# E Video abnormal



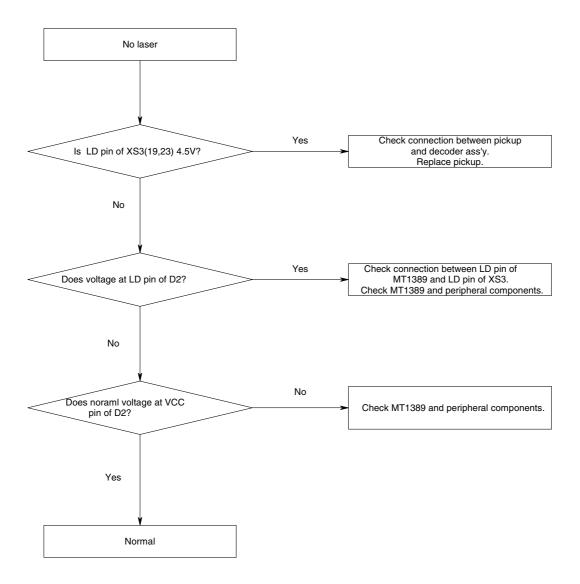
# F Audio abnormal



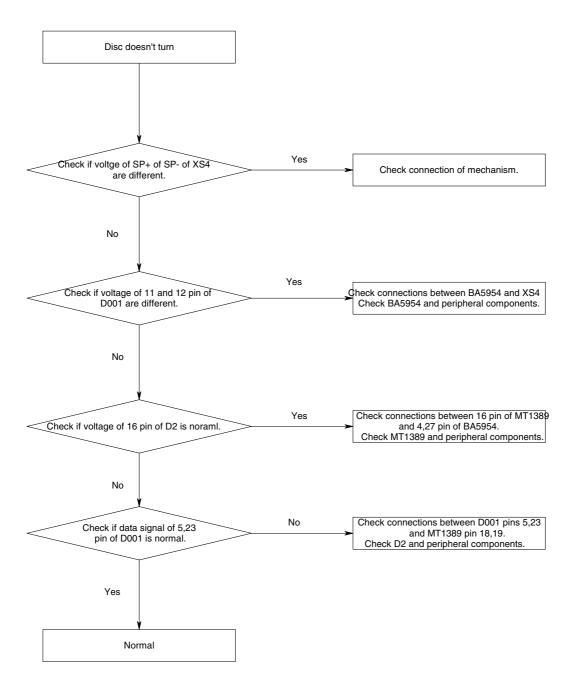
# **G** Focus abnormal



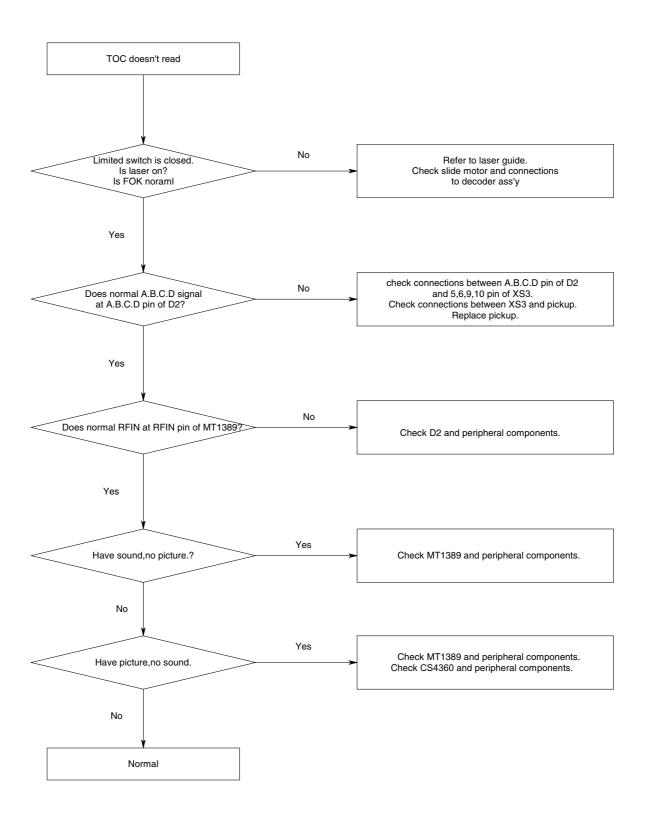
# H Laser abnormal

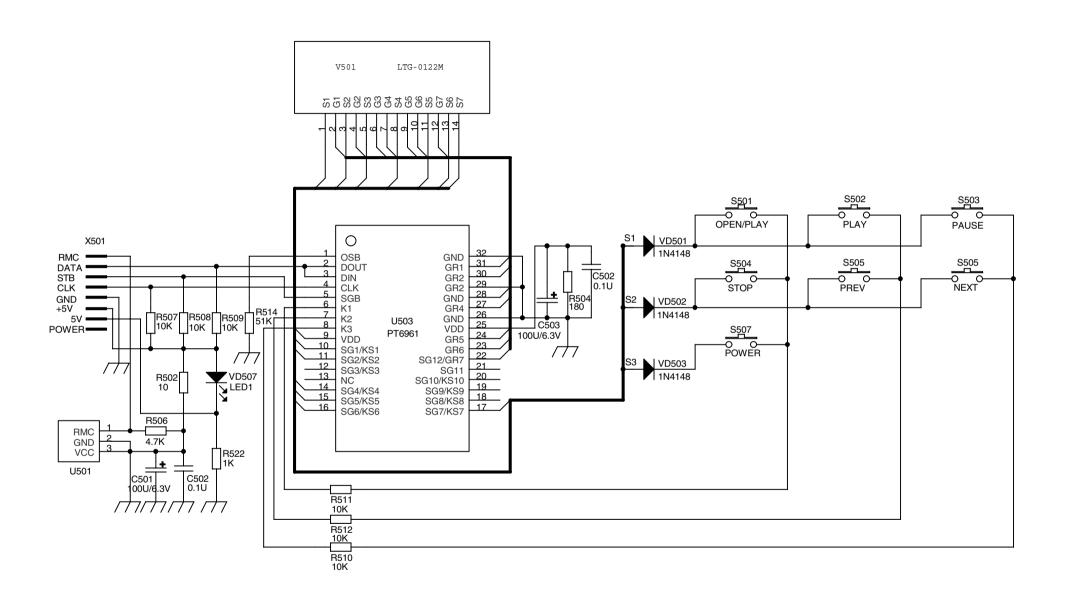


# I Turn abnormal

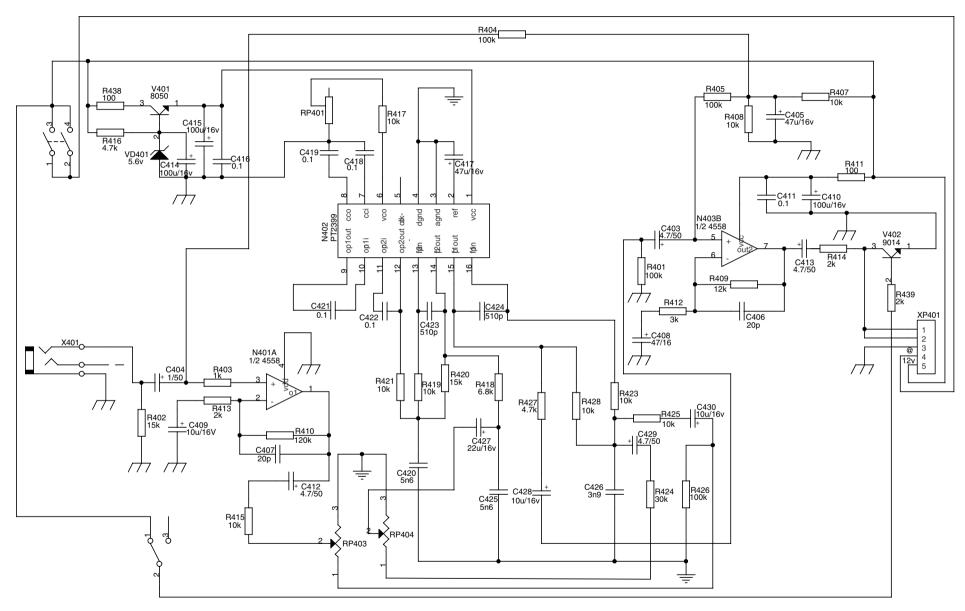


# J TOC abnormal

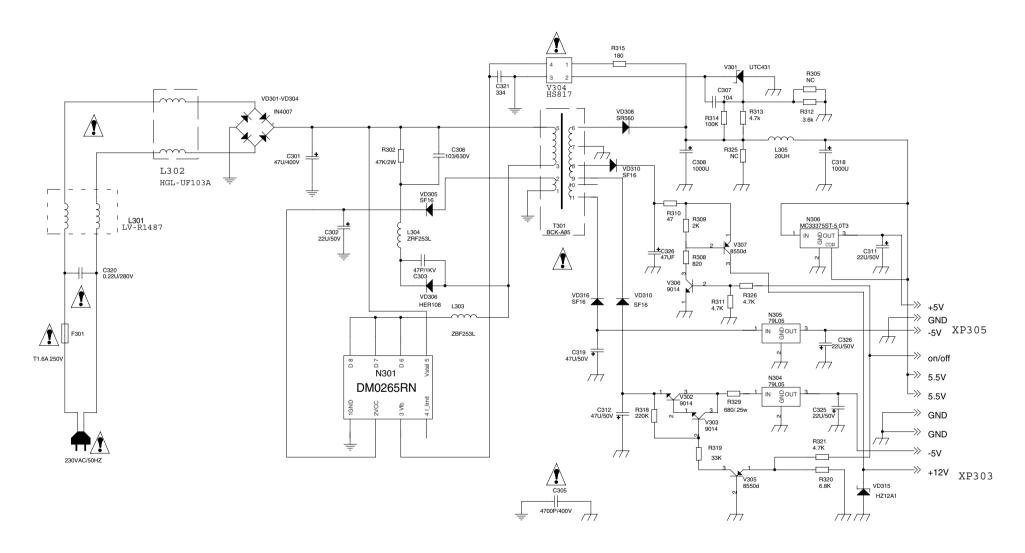




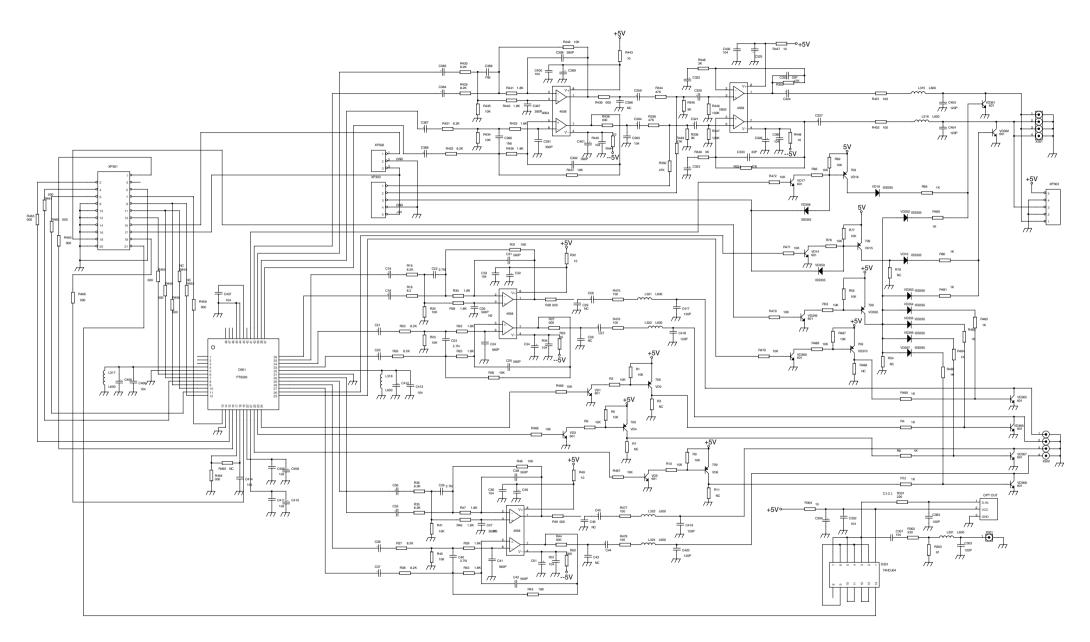
**DVP767 KEY CIRCUIT DIAGRAM** 



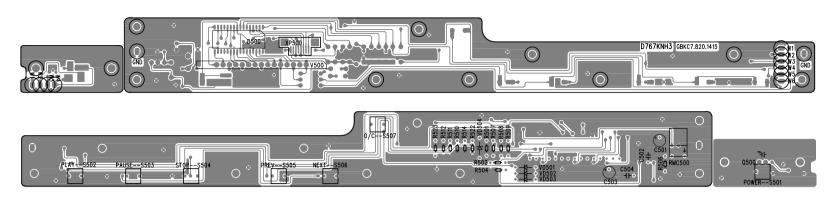
**DVP767 MIC CIRCUIT DIAGRAM** 



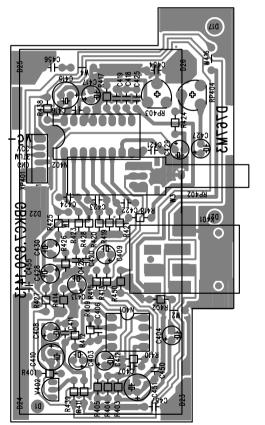
AD85UAH POWER CIRCUIT DIAGRAM

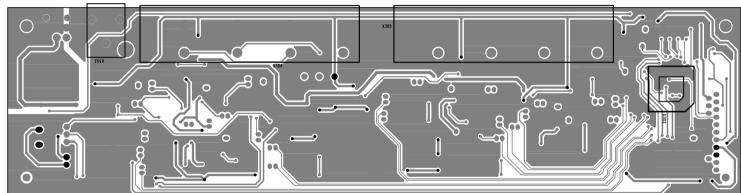


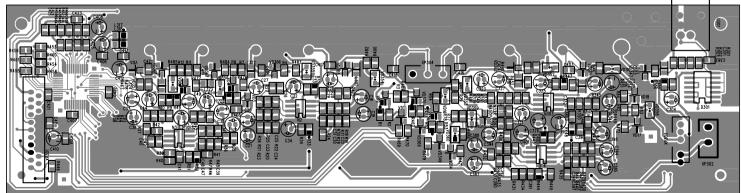
**DVP767 OUTPUT CIRCUIT DIAGRAM** 

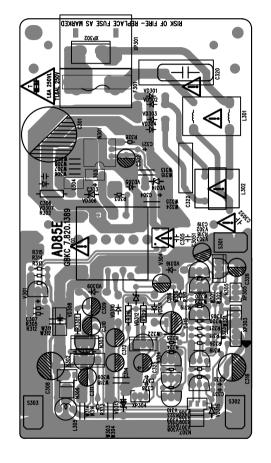


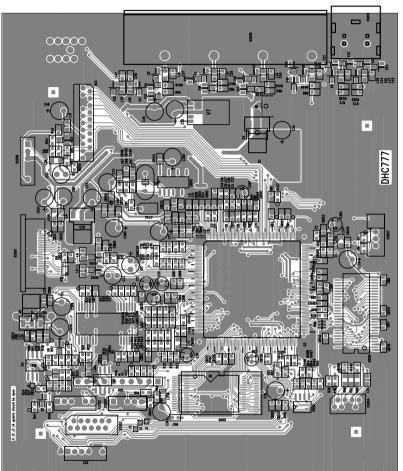
# **DVP767KUH KEY BOARD DIAGRAM**

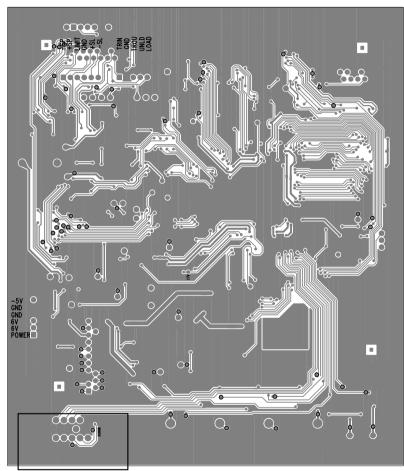












AD85UAH POWER BOARD DIAGRAM

DHC777 DECODER BOARD DIAGRAM

# **ELECTRICAL PARTS LIST**

PART No.	PART NAME	Q'TY			
	DVP767				
21490	DHC777 DECODER ASS'Y	1			
S7494	D767KNH3 KEY ASS'Y	1			
21492	OUT767 OUTPUT ASS'Y	1			
S7527	D767M3(AU) MIC ASS'Y	1			
S7468-3	AD85NAH-B-L-AU POWER ASS'Y	1			
S2701	7# BATTERY	2			
S2684	VDE POWER CORD	1			
S8101	SL260 LOADING ASS'Y	1			
S1658e	DVP767 OWNER MANUAL	1			
S8501	SCART COMMUTATOR	1			
S3022	RCA CORD VIDEO	1			
S3035	RCA CORD AUDIO	1			
S3134	CC-1.0×12×270	1			
S3451	CC-1.0×21×70	1			
S3251h	CC-0.5×24×210-MT(8+/-0.5)	1			
S3709	CC-1.0×8×140	1			
S0692e	DC-380H REMOTE CONTROLLER (WHITE)	1			

REF No.	PART No.	PART NAME	
	D767KNH3 KEY ASS'Y		
S501	a6434	TOUCH EVQ11L04W	
S502	a6434	TOUCH EVQ11L04W	
S503	a6434	TOUCH EVQ11L04W	
S504	a6434	TOUCH EVQ11L04W	
S505	a6434	TOUCH EVQ11L04W	
S506	a6434	TOUCH EVQ11L04W	
S507	a6434	TOUCH EVQ11L04W	
	C	APACITOR	
C501	a3540	CD110-6.3V-100uF±20%	
C502	a3304	CT4D-2F4-63V-0.1uF-S	
C503	a3540	CD110-6.3V-100uF±20%	
C504	a3304	CT4D-2F4-63V-0.1uF-S	
	F	RESISTOR	
R502	G0705	RT13-0.167W-10±5%	
R504	G0714	RT13-0.167W-180±5%	
R506	G0728	RT13-0.167W-4.7K±5%	
R507	G0735	RT13-0.167W-10K±5%	
R508	G0735	RT13-0.167W-10K±5%	
R509	G0735	RT13-0.167W-10K±5%	
R510	G0735	RT13-0.167W-10K±5%	
R511	G0735	RT13-0.167W-10K±5%	
R512	G0735	RT13-0.167W-10K±5%	
R514	G0749	RT13-0.167W-51K±5%	
R522	G0719	RT13-0.167W-1K±5%	
R523	G0785	RT13-0.167W-510±5%	
		LED	
Q500	a1576	RED LED	
V500	a7371	LTG-0122M	
		DIODE	
VD501	a5004	1N4148	
VD502	a5004	1N4148	
VD503	a5004	1N4148	
VD504	a5004	1N4148	
		IC	
D500	P90294	PT6961	
		SOCKET	
XP500	P7075	8 PINS SOCKET	
		OTHER	
RMC500	a6733	HS0038B RECEIVER	

REF No.	PART No.	. PART NAME		
a9198 KE		KEY CONNECTOR WIRE		
	D767M3(AU) MIC ASS'Y			
	F	RESISTOR		
R401	G0753	RT13-0.167W-100K±5%		
R402	G0738	RT13-0.167W-15K±5%		
R403	G0719	RT13-0.167W-1K±5%		
R404	G0753	RT13-0.167W-100K±5%		
R405	G0753	RT13-0.167W-100K±5%		
R409	G0737	RT13-0.167W-12K±5%		
R410	G0754	RT13-0.167W-120K±5%		
R411	G0705	RT13-0.167W-10±5%		
R412	G0724	RT13-0.167W-3K±5%		
R413	G0721	RT13-0.167W-2K±5%		
R414	G0721	RT13-0.167W-2K±5%		
R415	G0735	RT13-0.167W-10K±5%		
R417	G0735	RT13-0.167W-10K±5%		
R418	G0731	RT13-0.167W-6.8K±5%		
R419	G0735	RT13-0.167W-10K±5%		
R420	G0738	RT13-0.167W-15K±5%		
R421	G0735	RT13-0.167W-10K±5%		
R423	G0735	RT13-0.167W-10K±5%		
R424	G0743	RT13-0.167W-30K±5%		
R425	G0735	RT13-0.167W-10K±5%		
R427	G0728	RT13-0.167W-4.7K±5%		
R428	G0735	RT13-0.167W-10K±5%		
R438	G0705	RT13-0.167W-10±5%		
R439	G0721	RT13-0.167W-2K±5%		
	R	HEOSTAT		
RP401	a0648a	WH09JT11-B503-F30		
RP403	a0511	WH0615-22K		
RP404	a0640	WH0615-47K		
	C	APACITOR		
C403	a3508	CD110-16V-4.7uF-M		
C404	a3505	CD110-1u-M-16V		
C406	a2015	CC1-63V-05B-20K-CH		
C407	a2015	CC1-63V-05B-20K-CH		
C408	a3512	CD110-47u-M-16V		
C409	a3509	CD110-16V-10u-M		
C410	a3513	CD110X-16V-100u-M		
C411	a3304	CT4D-2F4-63V-0.1uF-S		

REF No.	PART No.	PART NAME
C412	a3508	CD110-16V-4.7uF-M
C413	a3508	CD110-16V-4.7uF-M
C415	a3513	CD110X-16V-100u-M
C416	a3304	CT4D-2F4-63V-0.1uF-S
C417	a3512	CD110-16V-47uF-M
C418	a3304	CT4D-2F4-63V-0.1uF-S
C419	a3304	CT4D-2F4-63V-0.1uF-S
C420	a3044	CL11-100V-5600P-K
C421	a3304	CT4D-2F4-63V-0.1uF-S
C422	a3304	CT4D-2F4-63V-0.1uF-S
C423	a2038	CC1-63V-10B-511K-SL
C424	a2038	CC1-63V-10B-511K-SL
C425	a3044	CL11-100V-5600P-K
C426	a3041	CL11-100V-3900P-K
C427	a3510	CD110-16V-22uF-M
C428	a3509	CD110-16V-10u-M
C429	a3508	CD110-16V-4.7uF-M
C430	a3509	CD110-16V-10u-M
C450	a3304	CT4D-2F4-63V-0.1uF-S
C451	a3513	CD110X-16V-100u-M
		OTHER
V402	a5009a	C9014C
N401	a4042b	UTC4558
N402	a4503	PT2399
X401	a6871b	CKX-6.35-7 JACK
XP401	a9246	MIC WIRE
AD85NAH-B-L-AU POWER ASS'Y		-L-AU POWER ASS'Y
	F	RESISTOR
R302	a0472	RY27-2W-47K±5%
R312	G0909	RT13-0.167W-3.6K±5%
R313	G0728	RT13-0.167W-4.7K±5%
R314	G0753	RT13-0.167W-100K±5%
R315	G0714	RT13-0.167W-180±5%
R318	G0759	RT13-0.167W-220K±5%
R319	G0744	RT13-0.167W-33K±5%
R320	G0728	RT13-0.167W-4.7K±5%
R321	G0731	RT13-0.167W-6.8K±5%
R329	G0036	RT14-0.25W-470±5%
CAPACITOR		
C301	a2548	CD288-47uF-M-400V(18X20)

REF No.	PART No.	PART NAME
C302	a3607	CD110X-22uF-M-50V
C303	a2063	CC81-06B-47K-1KV-SL
C306	a2544	CBB21-103J-630V
C307	a2056	CS1-06B-104Z-63V-Y5V
C308	a3676	CD288-1000uF-M-10V
C312	a3210	CD110X-47uF-M-50V
C318	a3676	CD288-1000uF-M-10V
C320	a3447	CIS-0.22uF-280VACX2-K
C321	a3307	CT4D-2F4-0.33uF-63V-S
C325	a3607	CD110X-22uF-M-50V
C3051	a2081	CT81-18B-2E4-472M-400VAC-YA
		DIODE
VD301	a5005b	1N4007-YH
VD302	a5005b	1N4007-YH
VD303	a5005b	1N4007-YH
VD304	a5005b	1N4007-YH
VD305	a1202a	SF16-YG
VD306	a1205c	HER108-YH
VD308	a5136	SR560(BL)
VD310	a1202a	SF16-YG
TRIODE.IC		
N301	a4764	DM0265R
N304	a4766	79L05
V301	a4557a	UTC431
V302	a5009a	C9014C
V303	a5009a	C9014C
V304	a5094	HS817
V305	a5104a	C8550D
	11	NDUCTOR
L301	a6686	LV-R1487 FILTER
L302	a7279	HGL-UF103A
L303	a7020	Reluctance jumper ZBF253L-4
L304	a7020	Reluctance jumper ZBF253L-4
L305	a6621	COIL-0.02mH
		OTHER
T301	a7443	BCK-A85 Transformer
XP302	a7278	2 pins connector
XP303	a9175	DC power cord
F301	a6763	FUSE 61801.6M
	a6443	FC502H FUSE HOLDER

REF No.	PART No.	PART NAME	REF No.	PART No.	PART NAME
	OUT767	OUTPUT ASS'Y	R48	P11013	RC-03K103JT
	F	RESISTOR	R49	P11003	RC-03K100JT
R1	P11013	RC-03K103JT	R50	P11003	RC-03K100JT
R2	P11013	RC-03K103JT	R52	P11013	RC-03K103JT
R4	P11009	RC-03K102JT	R53	P11013	RC-03K103JT
R5	P11013	RC-03K103JT	R77	P11013	RC-03K103JT
R6	P11013	RC-03K103JT	R78	P11013	RC-03K103JT
R8	P11009	RC-03K102JT	R80	P11009	RC-03K102JT
R9	P11013	RC-03K103JT	R82	P11013	RC-03K103JT
R10	P11013	RC-03K103JT	R83	P11013	RC-03K103JT
R12	P11009	RC-03K102JT	R85	P11009	RC-03K102JT
R18	P11055	RC-03K822JT	R301	P11071	RC-03K221JT
R19	P11055	RC-03K822JT	R302	P11024	RC-03K331JT
R20	P11055	RC-03K822JT	R303	P11167	RC-03K910JT
R21	P11055	RC-03K822JT	R304	P11003	RC-03K100JT
R22	P11028	RC-03K182JT	R338	P11209	RC-03K443JT
R23	P11013	RC-03K103JT	R339	P11052	RC-03K302JT
R24	P11013	RC-03K103JT	R344	P11209	RC-03K443JT
R25	P11028	RC-03K182JT	R345	P11052	RC-03K302JT
R26	P11013	RC-03K103JT	R346	P11019	RC-03K104JT
R27	P11006	RC-03K101JT	R347	P11019	RC-03K104JT
R28	P11006	RC-03K101JT	R348	P11052	RC-03K302JT
R29	P11028	RC-03K182JT	R349	P11052	RC-03K302JT
R30	P11028	RC-03K182JT	R350	P11018	RC-03K473JT
R31	P11013	RC-03K103JT	R351	P11018	RC-03K473JT
R32	P11003	RC-03K100JT	R429	P11055	RC-03K822JT
R33	P11003	RC-03K100JT	R430	P11055	RC-03K822JT
R35	P11055	RC-03K822JT	R431	P11055	RC-03K822JT
R36	P11055	RC-03K822JT	R432	P11055	RC-03K822JT
R37	P11055	RC-03K822JT	R433	P11028	RC-03K182JT
R38	P11055	RC-03K822JT	R434	P11013	RC-03K103JT
R39	P11028	RC-03K182JT	R435	P11013	RC-03K103JT
R40	P11013	RC-03K103JT	R436	P11028	RC-03K182JT
R41	P11013	RC-03K103JT	R437	P11013	RC-03K103JT
R42	P11028	RC-03K182JT	R438	P11000	RC-03K000JT
R43	P11013	RC-03K103JT	R439	P11000	RC-03K000JT
R44	P11006	RC-03K101JT	R440	P11028	RC-03K182JT
R45	P11006	RC-03K101JT	R441	P11028	RC-03K182JT
R46	P11028	RC-03K182JT	R442	P11013	RC-03K103JT
R47	P11028	RC-03K182JT	R443	P11003	RC-03K100JT

REF No.	PART No.	PART NAME	REF No.	PART No.	PART NAME
R444	P11003	RC-03K100JT	C18	a3594	CD11CX-47uF-M-16V
R446	P11024	RC-03K331JT	C19	a3594	CD11CX-47uF-M-16V
R447	P11003	RC-03K100JT	C20	a3594	CD11CX-47uF-M-16V
R448	P11003	RC-03K100JT	C21	a3594	CD11CX-47uF-M-16V
R449	P11018	RC-03K473JT	C22	P20042	GRM39B222K50PT
R450	P11018	RC-03K473JT	C23	P20042	GRM39B222K50PT
R451	P11006	RC-03K101JT	C24	P20046	GRM39B561K50PT
R452	P11006	RC-03K101JT	C25	P20046	GRM39B561K50PT
R455	P11000	RC-03K000JT	C27	a3594	CD11CX-47uF-M-16V
R456	P11000	RC-03K000JT	C28	a3594	CD11CX-47uF-M-16V
R458	P11000	RC-03K000JT	C30	P20046	GRM39B561K50PT
R459	P11000	RC-03K000JT	C31	P20046	GRM39B561K50PT
R460	P11000	RC-03K000JT	C32	a3594	CD11CX-47uF-M-16V
R461	P11000	RC-03K000JT	C33	P20015	GRM39F104Z25PT
R462	P11000	RC-03K000JT	C34	a3594	CD11CX-47uF-M-16V
R463	P11000	RC-03K000JT	C35	a3594	CD11CX-47uF-M-16V
R464	P11000	RC-03K000JT	C36	a3594	CD11CX-47uF-M-16V
R466	P11000	RC-03K000JT	C37	a3594	CD11CX-47uF-M-16V
R467	P11013	RC-03K103JT	C38	a3594	CD11CX-47uF-M-16V
R468	P11013	RC-03K103JT	C39	P20042	GRM39B222K50PT
R469	P11013	RC-03K103JT	C40	P20042	GRM39B222K50PT
R470	P11013	RC-03K103JT	C41	P20046	GRM39B561K50PT
R471	P11013	RC-03K103JT	C42	P20046	GRM39B561K50PT
R472	P11013	RC-03K103JT	C44	a3594	CD11CX-47uF-M-16V
R475	P11006	RC-03K101JT	C45	a3594	CD11CX-47uF-M-16V
R476	P11006	RC-03K101JT	C47	P20046	GRM39B561K50PT
R477	P11006	RC-03K101JT	C48	P20046	GRM39B561K50PT
R478	P11006	RC-03K101JT	C49	a3594	CD11CX-47uF-M-16V
R479	P11013	RC-03K103JT	C50	P20015	GRM39F104Z25PT
R480	P11009	RC-03K102JT	C51	a3594	CD11CX-47uF-M-16V
R481	P11009	RC-03K102JT	C301	P20015	GRM39F104Z25PT
R482	P11009	RC-03K102JT	C302	P20015	GRM39F104Z25PT
R483	P11009	RC-03K102JT	C303	P20020	GRM39CH121J50PT
R484	P11009	RC-03K102JT	C304	a3594	CD11CX-47uF-M-16V
R485	P11009	RC-03K102JT	C320	a3594	CD11CX-47uF-M-16V
R486	P11019	RC-03K104JT	C321	a3594	CD11CX-47uF-M-16V
R487	P11013	RC-03K103JT	C322	a3594	CD11CX-47uF-M-16V
R488	P11013	RC-03K103JT	C323	a3594	CD11CX-47uF-M-16V
R490	P11009	RC-03K102JT	C324	a3594	CD11CX-47uF-M-16V
	C	APACITOR	C325	a3594	CD11CX-47uF-M-16V

REF No.	PART No.	PART NAME
C326	a3594	CD11CX-47uF-M-16V
C327	a3594	CD11CX-47uF-M-16V
C332	P20026	GRM39CH330J50PT
C333	P20026	GRM39CH330J50PT
C380	P20015	GRM39F104Z25PT
C383	P20015	GRM39F104Z25PT
C384	a3594	CD11CX-47uF-M-16V
C385	a3594	CD11CX-47uF-M-16V
C387	a3594	CD11CX-47uF-M-16V
C388	a3594	CD11CX-47uF-M-16V
C389	P20010	GRM39B152K50PT
C390	P20010	GRM39B152K50PT
C391	P20034	GRM39B391K50PT
C392	P20034	GRM39B391K50PT
C394	a3594	CD11CX-47uF-M-16V
C395	a3594	CD11CX-47uF-M-16V
C397	P20034	GRM39B391K50PT
C398	P20034	GRM39B391K50PT
C399	a3594	CD11CX-47uF-M-16V
C400	P20015	GRM39F104Z25PT
C401	a3594	CD11CX-47uF-M-16V
C402	P20015	GRM39F104Z25PT
C403	P20020	GRM39CH121J50PT
C404	P20020	GRM39CH121J50PT
C405	a3594	CD11CX-47uF-M-16V
C406	P20020	GRM39CH121J50PT
C407	P20020	GRM39CH121J50PT
C408	a3594	CD11CX-47uF-M-16V
C409	P20020	GRM39CH121J50PT
C410	P20035	GRM39F105Z10PT
C411	P20015	GRM39F104Z25PT
C412	a3594	CD11CX-47uF-M-16V
C413	P20015	GRM39F104Z25PT
C414	P20015	GRM39F104Z25PT
C415	P20020	GRM39CH121J50PT
C416	P20020	GRM39CH121J50PT
C417	P20020	GRM39CH121J50PT
C418	P20020	GRM39CH121J50PT
C419	P20020	GRM39CH121J50PT
C420	P20020	GRM39CH121J50PT

REF No.	PART No.	PART NAME
C421	P20015	GRM39F104Z25PT
C422	P20015	GRM39F104Z25PT
C423	P2000	GRM39CH150J50PT
C424	P2000	GRM39CH150J50PT
C425	P2000	GRM39CH150J50PT
R34	P20015	GRM39F104Z25PT
R51	P20015	GRM39F104Z25PT
R445	P20015	GRM39F104Z25PT
	MULTILAYE	ER CHIP INDUCTOR
L301	P6817	BSZ2012-600T
L315	P6817	BSZ2012-600T
L316	P6817	BSZ2012-600T
L317	P6817	BSZ2012-600T
L318	P6817	BSZ2012-600T
L321	P6817	BSZ2012-600T
L322	P6817	BSZ2012-600T
L323	P6817	BSZ2012-600T
L324	P6817	BSZ2012-600T
		DIODE
VD16	P1200	1SS355TE Switch Diode
VD19	P1200	1SS355TE Switch Diode
VD352	P1200	1SS355TE Switch Diode
VD353	P1200	1SS355TE Switch Diode
VD354	P1200	1SS355TE Switch Diode
VD355	P1200	1SS355TE Switch Diode
VD356	P1200	1SS355TE Switch Diode
VD357	P1200	1SS355TE Switch Diode
VD358	P1200	1SS355TE Switch Diode
VD359	P1200	1SS355TE Switch Diode
VD360	P1200	1SS355TE Switch Diode
		TRIODE
VD1	P5073a	2SD601AR
VD2	P5700	2SB709AR
VD3	P5073a	2SD601AR
VD4	P5700	2SB709AR
VD5	P5073a	2SD601AR
VD6	P5700	2SB709AR
VD14	P5073a	2SD601AR
VD15	P5700	2SB709AR
VD17	P5073a	2SD601AR

REF No.	PART No.	PART NAME
VD18	P5700	2SB709AR
VD349	P5073a	2SD601AR
VD350	P5700	2SB709AR
VD361	P5073a	2SD601AR
VD362	P5073a	2SD601AR
VD365	P5073a	2SD601AR
VD366	P5073a	2SD601AR
VD367	P5073a	2SD601AR
VD368	P5073a	2SD601AR
VD369	P5073a	2SD601AR
VD370	P5700	2SB709AR
		IC
D301	P4516	SN74HCU04DR
D302	P90252	CS4362-KQ
N2	P4577	LM833M
N3	P4577	LM833M
N303	P4577	LM833M
N304	P4577	LM833M
		SOCKET
U2	a7294	TX179AP
X303	a6936	AV-8.4-4A
X304	a7539	AV4-RWRW
X305	a7292	AV4-BBRW-757
XP301	a7244	FABSD2152
XP303	a6511	B-6B-PH