Audio/Communication Basic Service Data

SERVICE DATA INDEX

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CAUTION: Modification or repair of this unit by unauthorized persons is a direct violation of FCC Rules Part 68.216 and could result in risk of electric shock. You are urged to contact a qualified factory authorized service facility for repairs.

SAFETY NOTICE USE ISOLATION TRANSFORMER WHEN SERVICING

Components having special safety characteristics are identified by a (Δ) on schematics and on the parts list in this Service Data and its bulletins. Before servicing this instrument, it is important that the service technician read and follow the "Safety Precautions" in the Basic Service Data.

Page

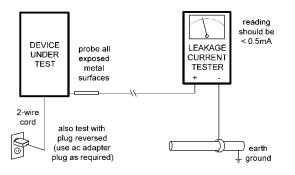


SAFETY PRECAUTIONS

- 1. **Before returning the instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:
 - a. Be sure that no built-in protective devices are defective and/or have been defeated during servicing. (1) Protective shields are provided on this instrument to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reassembling the instrument, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage, and may expose themselves and others to possible injury.
 - b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) excessively wide cabinet ventilation slots, and (2) improperly fitted and/or incorrectly secured cabinet covers.
 - c. Leakage Cold Check With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the *on* position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each push button/customer control, exposed metal screws, metallized overlays and to each cable connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the AC switch in the *off* position.

d. Leakage Current Hot Check

On completely assembled instrument, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI)



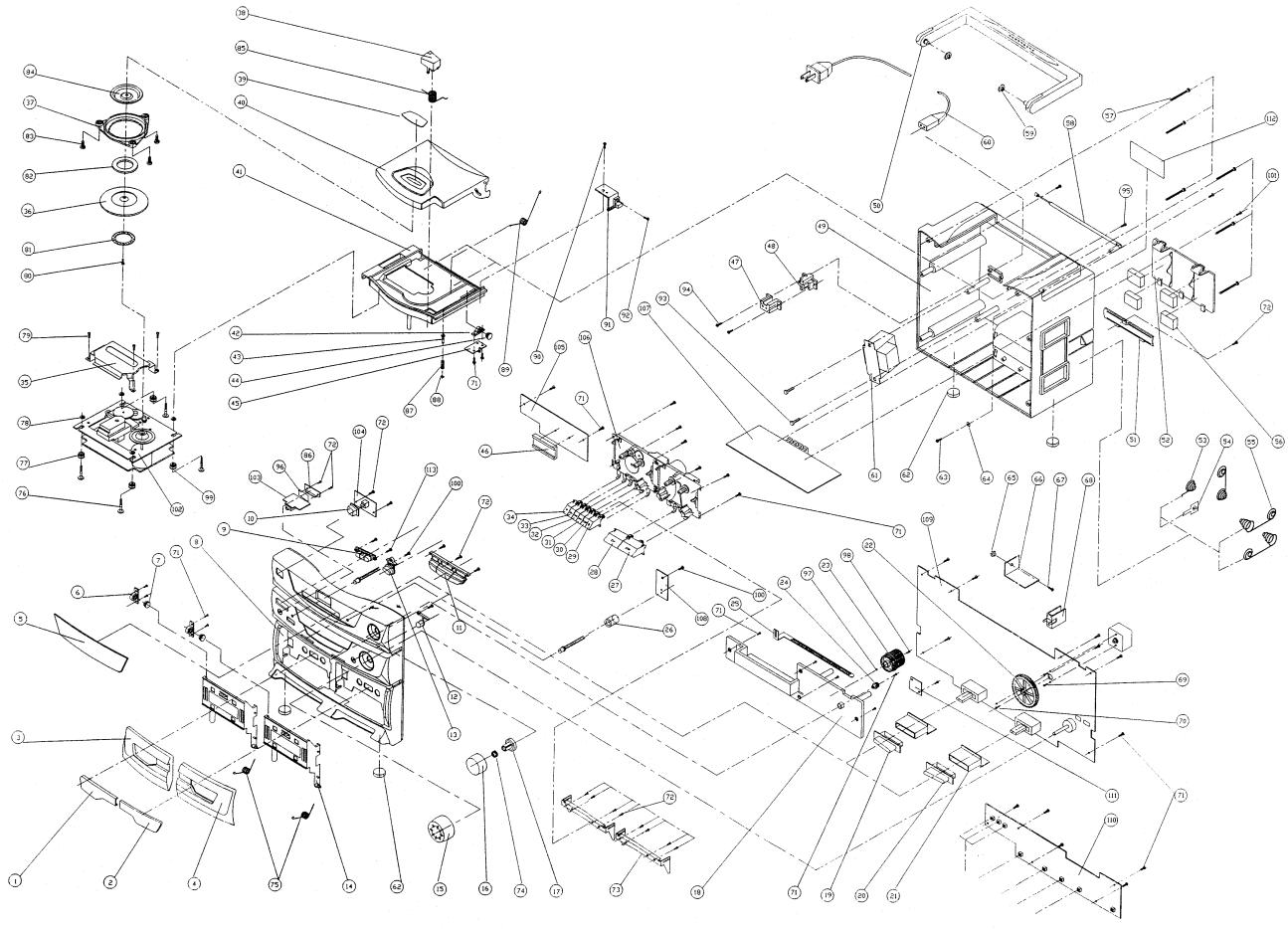
C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) *1492 (Section 67).* Measure for current from a known earth ground (metal waterpipe, conduit, etc.) to all exposed metal or conductive parts of the instrument (antenna connections, handle bracket, metal cabinet, screwheads, metallic overlays, push-buttons, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milliamp. Reverse the instrument power cord plug in the outlet and repeat the test.

ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING TO ANTENNA OR ACCESSORIES.

e. Interconnected Equipment AC Leakage Test

Avoid shock hazards. The instrument, accessory, or cable(s) to which this instrument is connected should have the applicable sections of the leakage resistance cold check and the leakage current hot check performed. Do not connect this instrument to an antenna, cable or accessory that exhibits excessive leakage currents.

- 2. Read and comply with all caution and safety-related notes on or inside the instrument cabinet, and on the chassis.
- 3. Design Alteration Warning Do not alter or add to the mechanical or electrical design of this instrument. Design alterations and additions, including, but not limited to, circuit modifications and the addition of items such as auxiliary audio output connections, cables and accessories, etc., might alter the safety characteristics of this instrument and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and will make you, the servicer responsible for personal injury or property damage resulting therefrom.
- 4. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: (a) near sharp edges, (b) near thermally hot parts - be sure that leads and components do not touch thermally hot parts, and (c) the AC supply. Always inspect in all areas for pinched, out-ofplace, or frayed wiring. Do not change spacing between components and the printed-circuit board. Check AC power cord for damage.
- 5. Components, parts and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
- 6. PRODUCT SAFETY NOTICE Many electrical and mechanical parts have special safety-related characteristics, some of which are often not evident from visual inspection, nor can the protection they give be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified in this service data by a (]) on schematics and in the parts list. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part in this service data parts list might create shock, fire and/or other hazards. Product Safety is under review continuously and new instructions are issued whenever appropriate. For the latest information, always consult the appropriate current service literature.



RP7954A EXPLODEDVIEW

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PartsList February 1999 **REPLACEMENT PARTS**

BEFORE REPLACING PARTS, READ THE FOLLOWING:

Approved Substitute Stock Numbers - Before ordering stock numbers in the part list, look for an approved substitute stock number in the current Price Schedule. This will minimize your service time and avoid ordering parts you already have in stock.

PRODUCT SAFETY NOTE: Components marked with a critical safety symbol have special characteristics important to safety. Before replacing any of these components, carefully read the PRODUCT SAFETY NOTICE in the basic service data. Do not degrade the safety of the set through improper servicing. Although assemblies as a whole may not be marked with a critical safety symbol, replacement of assemblies with other assemblies not approved may result in a safety hazard.

Warranty Status of Assemblies and Parts - All assemblies and components shown in this part list are eligible for warranty exchange or replacement except those with a dot shown to the left of the Description. Assemblies and components with a dot to the left of the Description are NOT eligible for warranty exchange or replacement.

Warranty replacement of cabinet parts requires the approval of a Thomson Consumer Electronics Field Service Manager.

Warranty Status and Specifications of assemblies and components are subject to change without notice. Consult the TCE Parts Pricing Microfiche for the latest warranty status information.

Critical Safety Symbol

Not Eligible For Warranty

@NOTE: When ordering components that are listed more than once in this part list, always adhere to the serial number application guidelines given in the description column. If a serial number application guideline is not given, always select the component with a value, rating, other specification or identification marking(s) that match those of the corresponding component in the instrument you are servicing.

<u>Symbol</u>	<u>Stock</u>	Drawing	Description	<u>Symbol</u>	<u>Stock</u>	Drawing	Description
DD 705	4.4			33	43A29116	53-07954-11	BUTTON PLAY A
<u>RP-7954A</u>			34	43A29117	53-07954-12	BUTTON REC A	
CABINET & CHASSIS			36	2A26916	55-07953-01	DISC	
1	6A29092	43-07954-01	LENS CASS DOOR A	37	2A26914	48-00920-00	HOLDER DISC
2	6A29093	43-07954-02	LENS CASS DOOR B	38	43A29118	53-07954-15	KNOB CD DOOR OPEN
3	9A29094	66-07954-00	COVER CASS DOOR A	39	6A29119	43-07953-09	LENS CD DOOR
4	9A29095	66-07954-01	COVER CASS DOOR B	40	9A29120	66-07953-06	DOOR CD
5	6A29096	43-07954-00A	LENS DISPLAY	42	2A26795	63-00206-00	HOLDER DAMPER GEAR
6	2A29097	63-10001-01	HOLDER GEAR CASS DOOR	43	1A26921	55-07953-00	PIN CD DOOR EJECT
7	2A29098	63-10001-02	GEAR DAMPER CASS DOOR	44	2A26794	63-00206-01	GEAR DAMPER
8	98A29099	60-07954-00A	CABINET FRONT	48	8A25151	12-00004-09	SOCKET AC POWER
9	43A29100	53-07954-03	KNOB REPEAT	49	78A29121	57-07953-06	HANDLE
10	43A29101	53-07954-00	KNOB POWER	50	98A29122	61-07953-20	CABINET REAR
102	73A29131	98-07936-01	MECHANISM CD TCM122.5	51	9A29123	58-07953-07	DOOR BATTERY SMALL
106	62A29132	94-21628-00	MECHANISM CASS CS-21SW-	52	9A29124	58-07953-06	DOOR BATTERY
			628	53	3A26958	74-01000-01A	SPRING -
11	43A29102	53-07954-06	KNOB CD FUN	54	2A26959	74-00910-00	CONTACT PLATE +
112	2A29133	40-13008-01	PLATE LOGO	55	3A26960	74-01000-00A	SPRING +/-
12	43A29103	53-07954-04	KNOB STOP	58	82A26956	23-00910-00	ANTENNA WHIP
13	43A29104	53-07954-05	KNOB SUPER BASS	60	66A31143	30-00029-02L	CORD POWER
15	43A29105	51-07954-00	KNOB VOL	61	88A29125	15-06610-00	TRANSFORMER POWER
16	43A29106	51-07954-01	KNOB TUNING	62	45A29126	81-07953-02	FOOT RUBBER
19	43A29107	53-07954-02	KNOB BAND 2	75	3A29127	36-07954-00	SPRING CASS DOOR
20	43A29108	53-07954-01	KNOB BAND 1	77	1A26807	81-07635-08	GROMMET RUBBER BLK
23	2A29109	47-00937-03	GEAR A	82	2A29128	97-00255-02L	MAGNET
27	43A29110	53-07954-14	BUTTON STOP/EJECT B	84	2A26918	39-07953-03	PLATE CLAMPER
28	43A29111	53-07954-13	BUTTON PLAY B	85	3A29129	36-07953-01A	SPRING CD KNOB EJECT
29	43A29112	53-07954-07	BUTTON PAUSE A	87	3A29130	36-03310-02	SPRING CD BUTTON EJECT
30	43A29113	53-07954-08	BUTTON STOP/EJECT A	89	3A26814	36-07930-01	SPRING CD DOOR
31	43A29114	53-07954-09	BUTTON FFWD A	99	1A26806	81-07635-07	RUBBER CD
32	43A29115	53-07954-10	BUTTON REW A				

February 19991 - 4**REPLACEMENT PARTS**(Continued)

<u>Symbol</u>	<u>Stock</u>	Drawing	Description	<u>Symbol</u>	<u>Stock</u>	D
ELECI	RICALC	OMPONENTS		Q103	15A20006	0
CF1	36A15191	09-50107-20	FILTER	Q105	15A29137	0
D1	16A29139	02-30041-02G	DIODE LED LT0311G-41	Q106	15A29137	01
D10	10A29139 198589	02-04148-00R	DIODE 1N4148	Q107	15A29137	0
D10 D11	198589	02-04148-00R	DIODE 1N4148 DIODE 1N4148	Q108	15A29137	0
D112	198589	02-04148-00R	DIODE 1N4148 DIODE 1N4148	Q11	15A29137	01
				Q12	15A29137	01
D13	198589	02-04148-00R	DIODE 1N4148	Q13	15A15170	01
D14	198589	02-04148-00R	DIODE 1N4148	Q163	15A26973	01
D15	198589	02-04148-00R	DIODE 1N4148	Q17	15A20006	01
D16	198589	02-04148-00R	DIODE 1N4148	Q18	15A29134	01
D17	198589	02-04148-00R	DIODE 1N4148	Q19	15A20006	0
D18	198589	02-04148-00R	DIODE 1N4148	Q20	15A20006	01
D19	198589	02-04148-00R	DIODE 1N4148	Q201	15A26816	01
D2	198589	02-04148-00R	DIODE 1N4148	Q202	15A26816	01
D20	198589	02-04148-00R	DIODE 1N4148	Q203	15A20006	0
D21	198589	02-04148-00R	DIODE 1N4148	Q204	15A29137	0
D23	198589	02-04148-00R	DIODE 1N4148	Q205	15A29137	0
D24	198589	02-04148-00R	DIODE 1N4148	Q206	15A29137	0
D25	198589	02-04148-00R	DIODE 1N4148	Q207	15A29137	0
D26	198589	02-04148-00R	DIODE 1N4148	Q208	15A29137	0
D29	198589	02-04148-00R	DIODE 1N4148	Q21	15A29137	0
D3	198589	02-04148-00R	DIODE 1N4148	Q25	15A29137	0
D30	198589	02-04148-00R	DIODE 1N4148	Q26	15A29136	0
D308	16A29139	02-30041-02G	DIODE LED	Q7	15A29135	0
D31	198589	02-04148-00R	DIODE 1N4148	Q8	15A26815	0
D32	198589	02-04148-00R	DIODE 1N4148	Q9	15A29137	0
D34	198589	02-04148-00R	DIODE 1N4148	SOC	8A25151	12
D35	198589	02-04148-00R	DIODE 1N4148	SW1	39A29144	16
D36	198589	02-04148-00R	DIODE 1N4148	SW2	39A29143	16
D37	198589	02-04148-00R	DIODE 1N4148	SW301	39A26820	16
D38	198589	02-04148-00R	DIODE 1N4148	SW302	39A26820	16
D4	EA16X1078	02-50091-00	DIODE ZENER 9.1V 1/2W	SW303	39A26820	16
D5	EA16X1078	02-50091-00	DIODE ZENER 9.1V 1/2W	SW304	39A26820	16
D501	198597	02-04001-00	DIODE	SW305	39A26820	16
D502	198597	02-04001-00	DIODE	SW306	39A26820	16
D503	198597	02-04001-00	DIODE	SW307	39A26820	10
D504	198597	02-04001-00	DIODE	SW308	39A26820	10
D6	198589	02-04148-00R	DIODE 1N4148	SW309	39A26820	10
D7	198589	02-04148-00R	DIODE 1N4148	SW310	39A26820	16
D8	198589	02-04148-00R	DIODE 1N4148	SW310	39A26820	10
D9	16A11218	02-01043-00	DIODE	SW312	39A26820	16
FIL	36A25176	09-00455-01T	FILTER CERAMIC CCFA-455	SW312	39A26820	10
FIL	36A27314	09-80001-00T	FILTER FM	SW313	39A26820	16
IC1	33A23328	03-08227-00	IC TA8227P	SW314	39A26820	16
IC3	33A14317	03-08189-00	IC TA8189A	SW315	39A26820	16
IC4	33A29140	03-01828-00	IC LA1828	SW310	39A26820	10
JAC	41A26978	12-21235-15	JACK PHONES	SW317 SW318	39A26820 39A26820	10
LAB	4A31110	POPRP7954	LABEL POP	SW318 SW319	39A26820 39A26820	16
LCD301	63A29145	91-07954-00	DISPLAY LCD			
Q10	15A29137	01-09014-03A	TRANSISTOR 9014C	SW320	39A26820	16
Q101	15A26816	01-09013-07	TRANSISTOR 9013G	SW321	39A26820	10
Q102	15A26816	01-09013-07	TRANSISTOR 9013G	SW322	39A26820	10
				SW323	39A26820	1

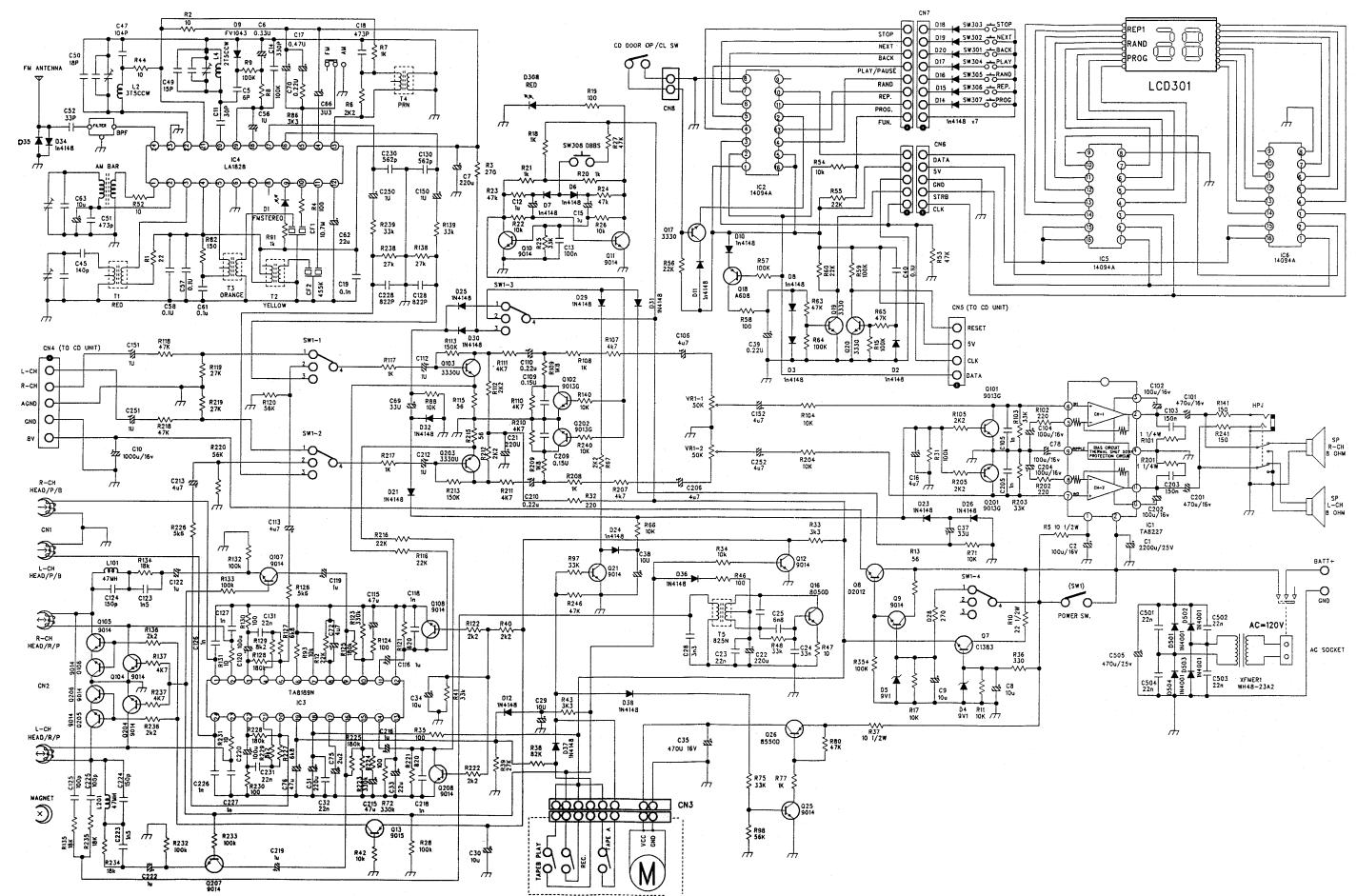
Drawing Description 01-03330-21 TRANSISTOR 2SC3330U 01-09014-03A TRANSISTOR 9014C 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C TRANSISTOR 9014C** 01-09014-03A 01-09015-03 TRANSISTOR 01-08050-04S **TRANSISTOR 8050D** TRANSISTOR 2SC3330U 01-03330-21 01-01317-01 TRANSISTOR 2SA1317S TRANSISTOR 2SC3330U 01-03330-21 01-03330-21 TRANSISTOR 2SC3330U 01-09013-07 TRANSISTOR 9013G 01-09013-07 **TRANSISTOR 9013G** 01-03330-21 TRANSISTOR 2SC3330U 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A TRANSISTOR 9014C 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C** 01-09014-03A **TRANSISTOR 9014C**)1-08550-04S **TRANSISTOR 8550D** 01-01383-18 TRANSISTOR 2SC1383R 01-02012-00 TRANSISTOR 2SD2012 **TRANSISTOR 9014C** 01-09014-03A 12-00004-09 SOCKET AC POWER 16-10403-42 SWITCH SLIDE 16-10402-31 SWITCH SLIDE 16-10102-03S SWITCH TACT SWITCH TACT 16-10102-03S 16-10102-03S SWITCH TACT 16-10102-03S SWITCH TACT 16-10102-03S SWITCH TACT 16-10102-03S SWITCH TACT SW323 39A26820 16-10102-03S SWITCH TACT

February 1999 1 - 5 REPLACEMENT PARTS (Continued)

<u>Symbol</u>	<u>Stock</u>	Drawing	Description
SW324	39A26820	16-10102-03S	SWITCH TACT
SW325	39A26820	16-10102-03S	SWITCH TACT
SW326	39A26820	16-10102-03S	SWITCH TACT
SW327	39A26820	16-10102-03S	SWITCH TACT
SW328	39A26820	16-10102-03S	SWITCH TACT
SW329	39A26820	16-10102-03S	SWITCH TACT
SW330	39A26820	16-10102-03S	SWITCH TACT
SWI	39A29141	16-10101-26	SWITCH LEAF CD DOOR
SWI	39A29142	16-10202-47T	SWITCH PUSH POWER
TER	38A26977	12-00006-00	TERMINAL SPEAKER
TRA	88A29125	15-06610-00	TRANSFORMER POWER
USE	UCRP7954	UCRP7954	USE & CARE GUIDE

Symbol Stock Drawing Description

RP7954A MAIN SCHEMATIC



RP7954A MAIN SCHEMATIC

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