

Audio/Communication Basic Service Data



PROSCAN



Latin America After Sales

Indianapolis, IN 46290 U.S.A.

SERVICE DATA INDEX

	Page Number
General Information/Safety Precautions	1-2
Disassembly	2-1
Alignments	3-1
Troubleshooting Guides	4-1
Trouble Aids (Waveforms, Voltage, Timing Charts)	5-1
Replacement Partslist	6-1
Exploded Views	7-1
Block Diagrams	8-1
Schematic Diagrams	9-1
Circuit Boards	10-1

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.

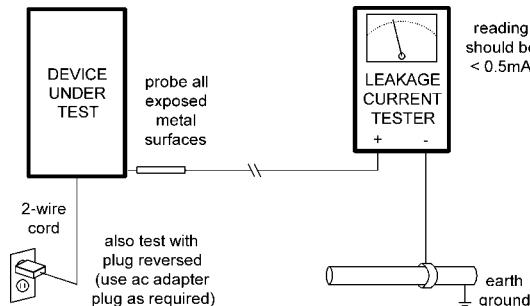
SAFETY PRECAUTIONS

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)



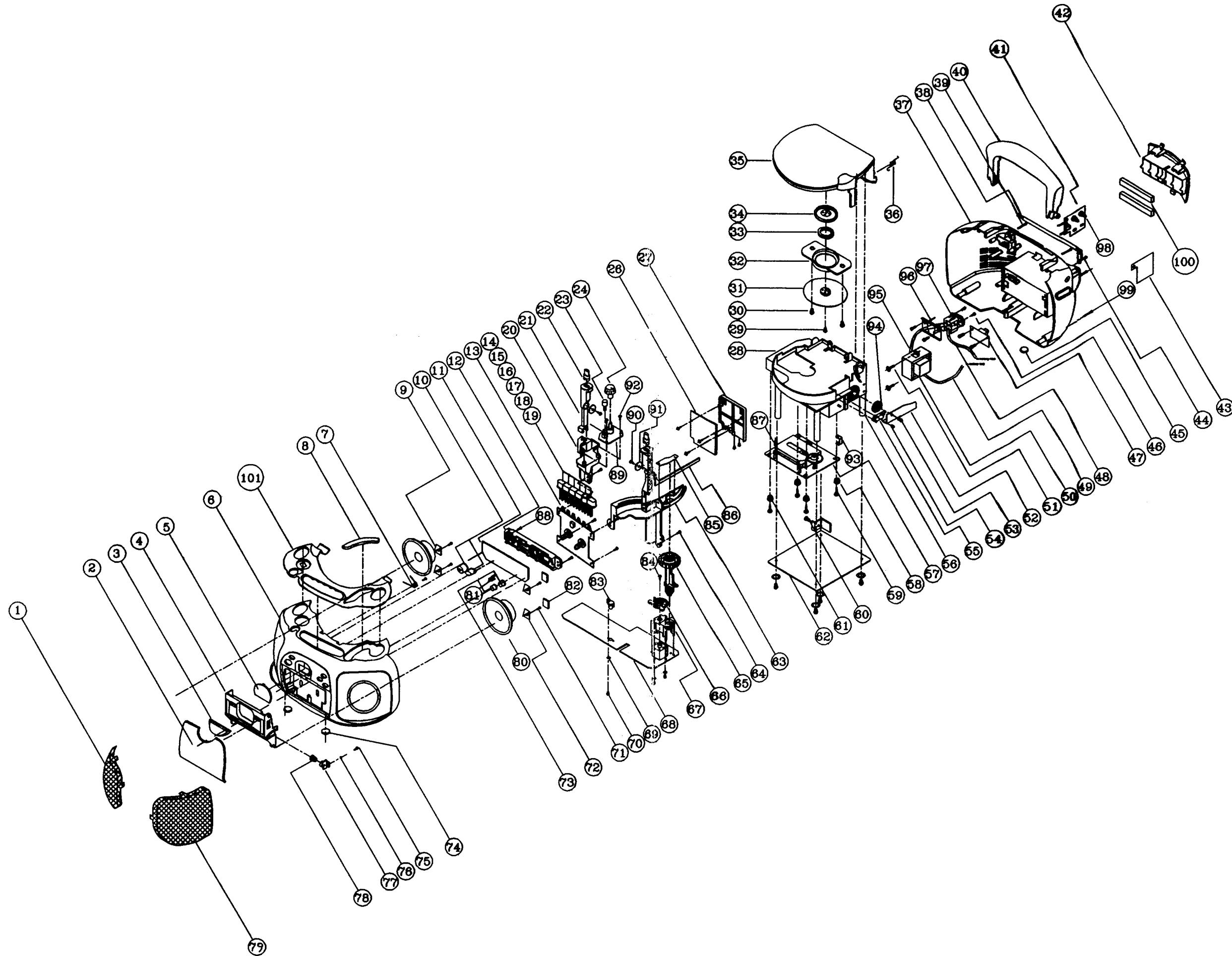
C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1492 (Section 67). Measure for current from a known earth ground (metal waterpipe, conduit, etc.) to all exposed metal or conductive parts of the instrument (antenna connections, handle bracket, metal cabinet, screwheads, metallic 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.

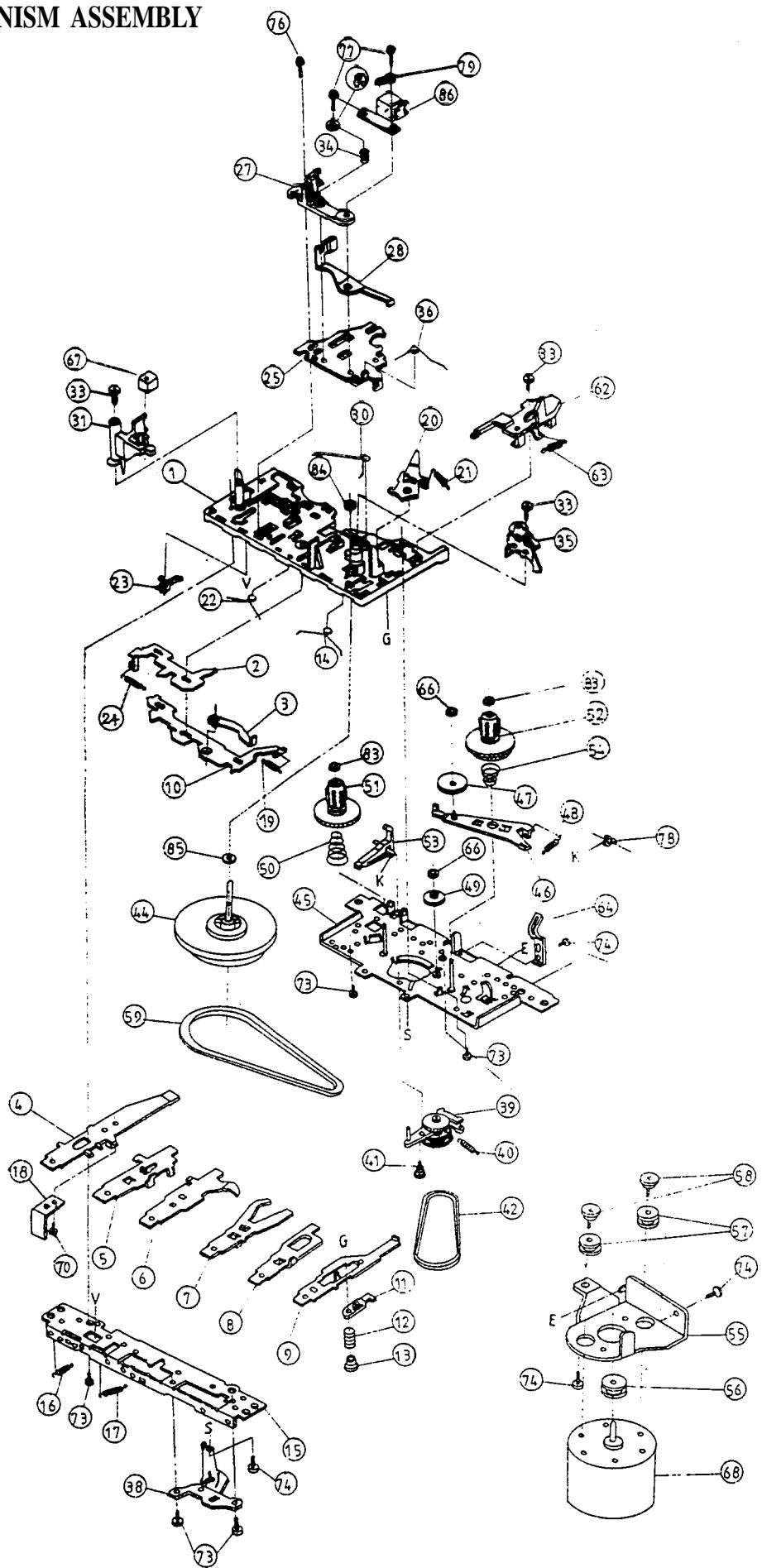
e. **Interconnected Equipment AC Leakage Test**

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-of-place, 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 (I) 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.



RP-7992A MECHANISM ASSEMBLY



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.

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.

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.

Symbol	Stock	Drawing	Description
RP-7992A			
CABINET & CHASSIS			
1	4A30975	0102-41621-00	GRILLE SPEAKER R
2	9A28860	0101-43364-00	DOOR CASS
3	6A28861	0101-43358-00	LENS CASS DOOR
4	2A28862	0101-43359-00	HOLDER CASS
5	6A28863	0101-43357-00	LENS DISPLAY
6	98A28864	0101-43342-00	CABINET FRONT
7	3A28865	0102-41624-00	SPRING CASS DOOR
8	6A28866	0101-43356-00	LENS DIAL
10	43A28867	0101-43890-00	BUTTONS CD CONTROL L
101	4A28903	0101-43346-00	PANEL CASS KEY INSERT
13	62A28868	0115-11100-1H	MECHANISM CASSETTE ASY
14	43A28869	0101-43691-00	KNOB CASS PAUSE
15	43A28870	0101-43692-00	KNOB CASS STOP/EJECT
16	43A28871	0101-43693-00	KNOB CASS FF
17	43A28872	0101-43694-00	KNOB CASS REW
18	43A28873	0101-43695-00	KNOB CASS PLAY
19	43A28874	0101-43696-00	KNOB CASS OTR
21	2A28875	0101-43759-00	LEVER BAND/FUNCTION
22	43A28876	0101-43349-00	KNOB SWITCH
23	43A28877	0101-43351-00	KNOB D.BB
24	43A28878	0101-43350-00	KNOB VOLUME
31	2A28879	0101-32546-01	PLATE CHUCKING
32	2A28880	0101-43360-00	PLATE CD CONTROL KNOB
33	2A28881	0110-30577-00	MAGNET RING
34	2A28882	0102-31274-00	PLATE CHUCKING
35	9A28883	0101-43344-00	DOOR CD
36	3A28884	0102-41623-00	SPRING CD DOOR

Symbol	Stock	Drawing	Description
37	98A28885	0101-43343-00	CABINET BACK
38	82A28886	0114-06141-00	ANTENNA WHIP
40	78A28887	0101-43345-00	HANDLE
42	9A28888	0101-43355-00	DOOR BATTERY
45	45A28889	0109-40346-00	FOOT RUBBER CABINET BACK
50	88A28890	0326-74832-16A	TRANSFORMER
56	2A28891	0101-43490-00	GEAR CD DOOR
57	73A28892	0115-60105-0E	MECHANISM CD ASY
58	60A28893	0109-30270-00	INSULATOR RUBBER BLUE
61	60A28894	0109-30270-01	INSULATOR RUBBER BLK
65	43A28895	0101-43352-00	KNOB TUNING
66	2A28896	0101-43491-01	GEAR PVC
73	43A28869	0101-43691-00	KNOB CASS PAUSE
74	45A28897	0109-40364-00	FOOT RUBBER CAB FRT
77	2A28898	0101-43489-00	HOLDER GEAR CASS DOOR
78	2A28899	0101-43488-00	GEAR CASS DOOR
79	89A28900	0102-41622-00	GRILLE SPEAKER L
80	95A28901	0118-08077-18	SPEAKER
94	2A28891	0101-43490-00	GEAR CD DOOR
98	2A28902	0119-30284-00	CONTACT SPRING BATT
CASSETTE MECHANISM			
23	39A28935	21-01-023A	SWITCH LEAF
35	2A28936	A--04	ARM PINCH ROLLER
39	2A28937	A--09	ARM RF ASSY
42	29A28938	A--4001--0A	BELT RF
44	62A28939	A--10	FLYWHEEL ASY
51	2A28940	A--06	GEAR REEL ASY
52	5A28941	A--07	GEAR TAKE-UP
53	2A28942	A--3017--0	LEVER REC SAFETY

REPLACEMENT PARTS (Continued)

Symbol	Stock	Drawing	Description
56	6A28943	A-3018-0	PULLEY
59	29A28944	A--4003-3A	BELT MAIN
62	2A28945	A--3019-0HV	LEVER EJECT SLIDE
68	72A28946	M9T12U24--1	MOTOR
86	62A28947	BS-09	HEAD R/P
ELECTRICAL COMPONENTS			
C617	4A28934	0336-30002-50	CAP CER 0.02UF +80-20% 50V
C805	4A28933	0335-42200-25	CAP LYTC 2200MFD 20% 25V
CF303	36A28930	0342-2455Y-00	FILTER CER
COR	66A28931	0349-30005-10	CORD AC POWER
D101	EA16X0878	0344-14148-01	DIODE 1N4148
D102	EA16X0878	0344-14148-01	DIODE 1N4148
D103	EA16X0878	0344-14148-01	DIODE 1N4148
D301	EA16X0878	0344-14148-01	DIODE 1N4148
D302	EA16X0878	0344-14148-01	DIODE 1N4148
D303	16A26092	0344-12638-01	DIODE AFC
D601	16A28912	0344-14004-08	DIODE 1N4004
D602	EA16X0878	0344-14148-01	DIODE 1N4148
D603	EA16X0878	0344-14148-01	DIODE 1N4148
D604	EA16X0878	0344-14148-01	DIODE 1N4148
D801	16A28912	0344-14004-08	DIODE 1N4004
D802	16A28912	0344-14004-08	DIODE 1N4004
D803	16A28912	0344-14004-08	DIODE 1N4004
D804	16A28912	0344-14004-08	DIODE 1N4004
DIO	17A28914	0346-20002-00	DIODE LED GREEN
DIS	63A28915	0347-40059-18	DISPLAY LCD
FIL	36A26090	0342-1107M-24	FILTER CER 10.7MHZ
FIL	36A28911	0342-107MS-2M0	FILTER CER
IC101	33A28924	0330-10406-15	IC KS57C0104-06
IC102	33A26828	0330-92828-15	IC KS9282B
IC103	33A28926	0330-92700-15	IC KA9270D
IC104	33A28925	0330-9220C-15	IC KA9220C
IC105	33A28923	0330-09258-015	IC KA9258D
IC301	33A28908	0330-08164-01	IC TA8164P
IC302	EA33X9010	0330-7343A-01	IC TA7343AP
IC501	33A28920	0330-3313L-17	IC BA3313L
IC501	33A28919	0330-3312N-17	IC BA3312N
IC601	33A28909	0330-6269P-40	IC KIA6269P
IC602	33A28910	0330-7808F-44	IC NJM7808FA
MEC	73A28932	0115-60115-00A	MECHANISM CD ASY
PJ601	41A28904	0322-63511-01	JACK HEADPHONE
Q101	15A28833	0329-01003-17	TRANSISTOR KSR1003
Q102	15A28922	0329-9012G-17	TRANSISTOR SS9012G
Q103	15A28922	0329-9012G-17	TRANSISTOR SS9012G
Q601	15A28907	0329-3198G-22	TRANSISTOR
Q602	15A28907	0329-3198G-22	TRANSISTOR
SOC	8A08928	0322-30021-11A	SOCKET AC
SOC	8A08928	0322-30021-11A	SOCKET AC
SW301	39A28906	0323-20375-00	SWITCH SLIDE
SW601	39A28905	0323-20294-00	SWITCH SLIDE
SWI	39A28918	0324-90088-04	SWITCH REC
SWI	39A28918	0324-90088-04	SWITCH REC

Symbol	Stock	Drawing	Description
SWI	39A28921	0323-60208-03	SWITCH QUIT ACTION
SWI	39A28916	0324-20085-13	SWITCH PUSH
SWI	39A28913	0324-10054-04	SWITCH TACT
TRA	88A28929	0326-14141-241	TRANSFORMER POWER
VR401	49A28917	0325-10207-25	RES CONTROL
X101	41A28927	0363-1693M-01	RESONATOR CER 16.93MHZ
MISCELLANEOUS			
LAB	77A28948	POPRP7992	LABEL POP
USE	UCRP7992	UCRP7992	USE & CARE GUIDE