

 THOMSON CONSUMER ELECTRONICS
Audio/Communication
Basic Service Data

RP1610B



P R O S C A N



Latin America After Sales

Indianapolis IN 46290 U.S.A.

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.

RP1610B VOLTAGE CHART

IC TA-2111F

Pin No.	1	2	3	4	5	6	7	8
FM	0.8	0	0.22	2.82	0.37	2.9	2.4	2.9
AM	0	0	1.16	2.89	0.48	2.92	2.25	2.92

Pin No.	9	10	11	12	13	14	15	16
FM	0	0	0	2.12	1.15	1.14	2.2	2.15
AM	0	0	0	2.36	1.15	1.14	2.22	2.91

Pin No.	17	18	19	20	21	22	23	24
FM	0.7	1.55	0.22	2.9	2.9	2.9	2.89	2.89
AM	0.7	0.95	1.15	2.92	2.92	2.92	2.92	2.92

IC TA-2073D

Pin No.	1	2	3	4	5	6	7	0.618
FM	1.21	2.95	1.2	0	0.61	0	0	0.61
AM	1.2	2.95	1.2	0	0.61	0	0	0.61

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:

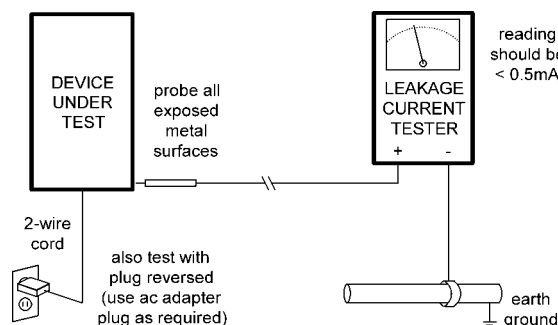
- a. Be sure that no built-in protective devices are defective and/or have been defeated during servicing. (1) Protective shields are provided on this instrument to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (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 (⚠) 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.

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

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.

@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>	<u>Drawing</u>	<u>Description</u>
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RP-1610B

CABINET ASY

CAB	98A32583	5003632010	CABINET FRONT
CAB	98A32584	5023632010	CABINET BACK
CLI	3A32590	5563632010	CLIP BELT
CON	2A31040	6613610010	CONTACT BATTERY +
CON	2A31042	6613610030	CONTACT BATTERY +/-
CON	2A31041	6613610020	CONTACT BATTERY -
DIA	90A32589	5393632010	DIAL POINTER
DOO	9A32585	5103632010	DOOR BATTERY
KNO	43A32587	5323632010	KNOB TUNING
KNO	43A32588	5433632010	KNOB SLIDE
LEN	6A32586	5213632010	LENS

ELECTRICAL COMPONENTS

CF1	36A32567	143D455B00	FILTER CER 455KHZ
CF2	36A32579	143E107MSE	FILTER CER
CF3	36A27384	143107G18A	FILTER CER 10.7MHZ
IC1	33A32532	1102111F00	IC TA2111F
IC2	33A32591	1102073D00	IC 2073D
JK1	41A27389	145H005000	JACK HEADPHONE
SW	39A32594	14923D7VG3	SWITCH
T1	61A32592	12711327A0	TRANSFORMER ITF
VR	42A32593	1461N20X14	RESISTOR VAR VOLUME

MISCELLANEOUS

LAB	4A30845	POPRP1610	LABEL, POP
USE	UCRP1610	UCRP1610B	USE & CARE GUIDE

<u>Symbol</u>	<u>Stock</u>	<u>Drawing</u>	<u>Description</u>
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