

THOMSON CONSUMER ELECTRONICS
Audio/Communication
Basic Service Data

3-5027
Additional Models:
3-5027ATC



PROSCAN



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.

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:

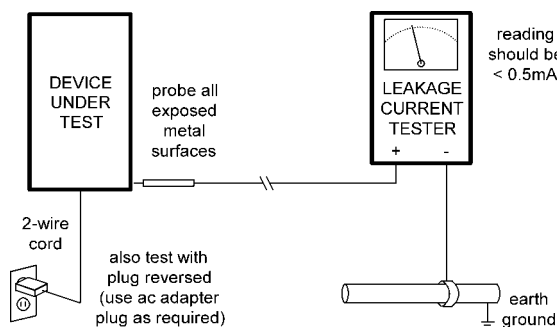
a. Be sure that no built-in protective devices are defective and/or have been defeated during servicing. (1) Protective shields are provided on this instrument to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (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 (Δ) 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>
3-5027			
CABINET ASY			
ADA	51075	14750250000	 ADAPTER AC 5-1075D
BEL	1A34849	22231033000	BELT RUBBER
CAB	98A34856	502100100GE01	CABINET BOTTOM
CAB	98A34855	501100100GE01	CABINET TOP
COU	73A34848	22101000000	COUNTER (MODEL NO. M3A 130-120)
DEC	73A34847	22010010100	DECK HY-9ZR-220-1
DOO	9A34857	521100100GE01	DOOR CASSETTE
DOO	9A34858	522100100GE01	DOOR BATTERY
FOO	45A34850	36012652000	FOOT RUBBER
HAN	78A34862	551100100GE01	HANDLE
KNO	43A34860	540003101GE01	KNOB CASSETTE
KNO	43A34861	540100100GE01	KNOB ADAPTERS CASS
LEN	6A34859	530100100GE01	LENS DOOR CASS
MIC	62A34846	16010620300	MICROPHONE
SPE	95A34845	15522530511	SPEAKER 2 1/4" 8 OHM
SPR	3A34853	73000110050	SPRING CONTACT +
SPR	3A34851	73000110030	SPRING CONTACT +/-
SPR	3A34852	73000110040	SPRING CONTACT -
SPR	3A34854	73000410010	SPRING DOOR CASS
ELECTRICAL COMPONENTS			
D1	16A20346	11702581700	DIODE 1N5817
D2	16A34871	117001N6000	DIODE 1N60
IC1	33A34869	10500665000	IC AN6650
IC1	33A34870	10500711201	IC UTC7112
JAC	8A34867	16503000400	JACK PHONE MONO REMOTE
JAC	8A34865	16501300300	JACK DC

<u>Symbol</u>	<u>Stock</u>	<u>Drawing</u>	<u>Description</u>
JAC	41A26186	16502500100	JACK STEREO PHONE
JAC	8A34866	16503000300	JACK PHONE MONO
Q1	186645	11001094557	TRANSISTOR 2SC945P
Q2	186645	11001094557	TRANSISTOR 2SC945P
SWI	39A34868	17003040205	SWITCH PUSH
VR1	42A34863	12523100200	RESISTOR VAR VOLUME
VR2	42A34864	12621500201	RESISTOR VAR
MISCELLANEOUS			
LAB	4A34827	POP35027	LABEL POP
USE	UC35027	UC35027	USE & CARE GUIDE
3-5027ATC			
CABINET ASY			
ADA	51075	14750250000	 ADAPTER AC 5-1075D
BEL	1A34849	22231033000	BELT RUBBER
CAB	98A34856	502100100GE01	CABINET BOTTOM
CAB	98A34855	501100100GE01	CABINET TOP
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DEC	73A34847	22010010100	DECK HY-9ZR-220-1
DOO	9A34858	522100100GE01	DOOR BATTERY
DOO	9A34857	521100100GE01	DOOR CASSETTE
FOO	45A34850	36012652000	FOOT RUBBER
HAN	78A34862	551100100GE01	HANDLE
KNO	43A34860	540003101GE01	KNOB CASSETTE
KNO	43A34861	540100100GE01	KNOB ADAPTERS CASS
LEN	6A34859	530100100GE01	LENS DOOR CASS
MIC	62A34846	16010620300	MICROPHONE
SPE	95A34845	15522530511	SPEAKER 2 1/4" 8 OHM
SPR	3A34851	73000110030	SPRING CONTACT +/-

REPLACEMENT PARTS (Continued)

<u>Symbol</u>	<u>Stock</u>	<u>Drawing</u>	<u>Description</u>
SPR	3A34854	73000410010	SPRING DOOR CASS
SPR	3A34852	73000110040	SPRING CONTACT -
SPR	3A34853	73000110050	SPRING CONTACT +

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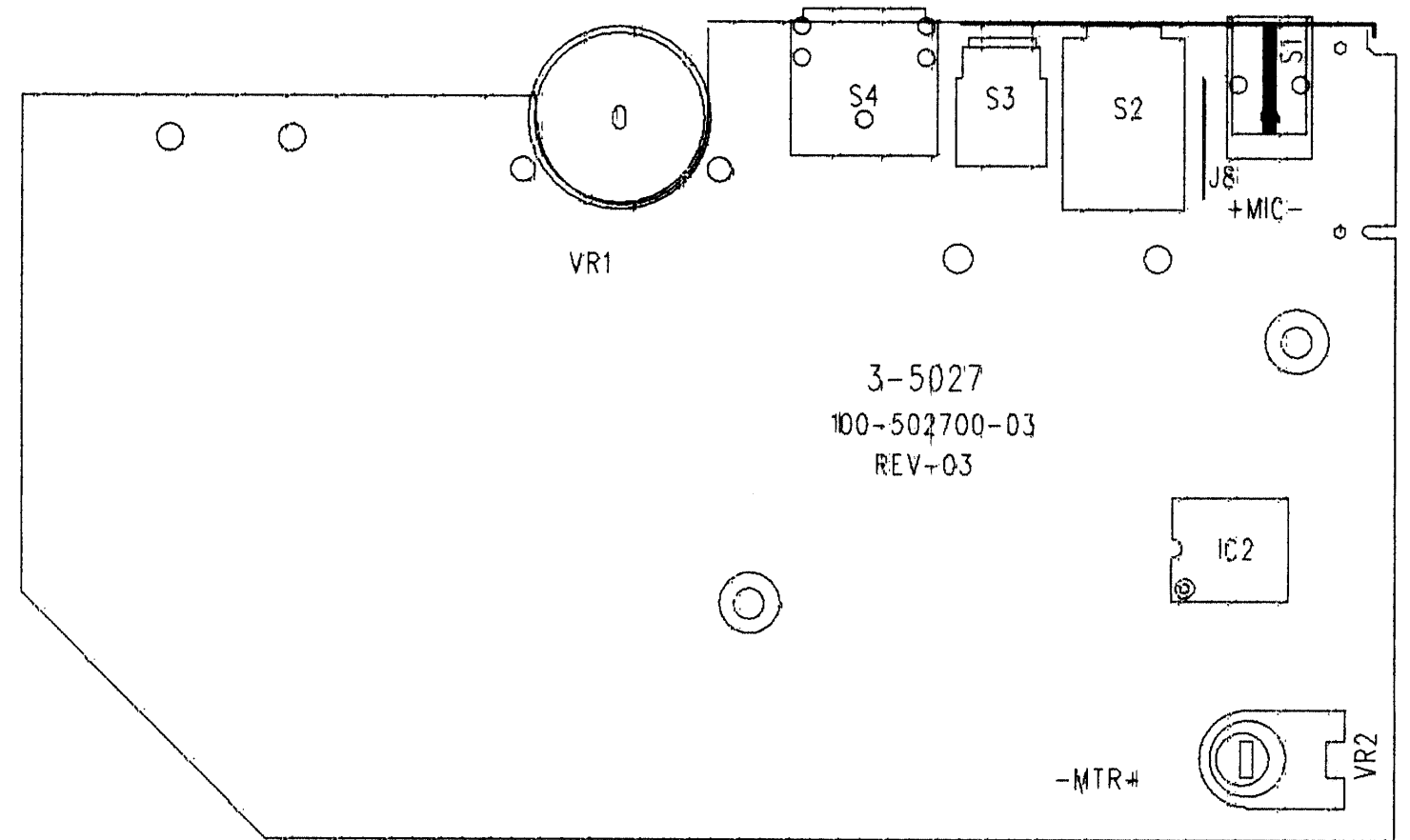
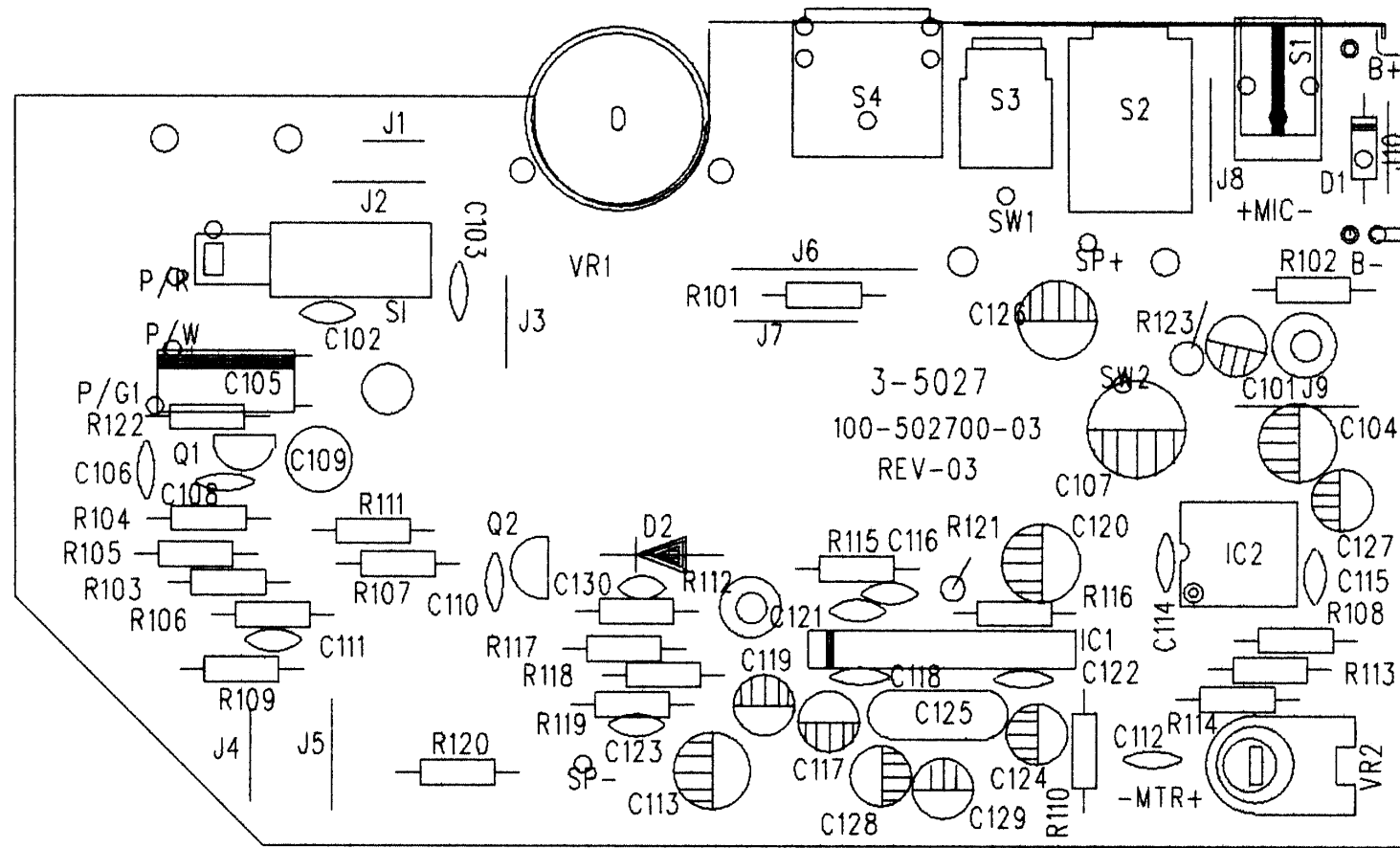
ELECTRICAL COMPONENTS

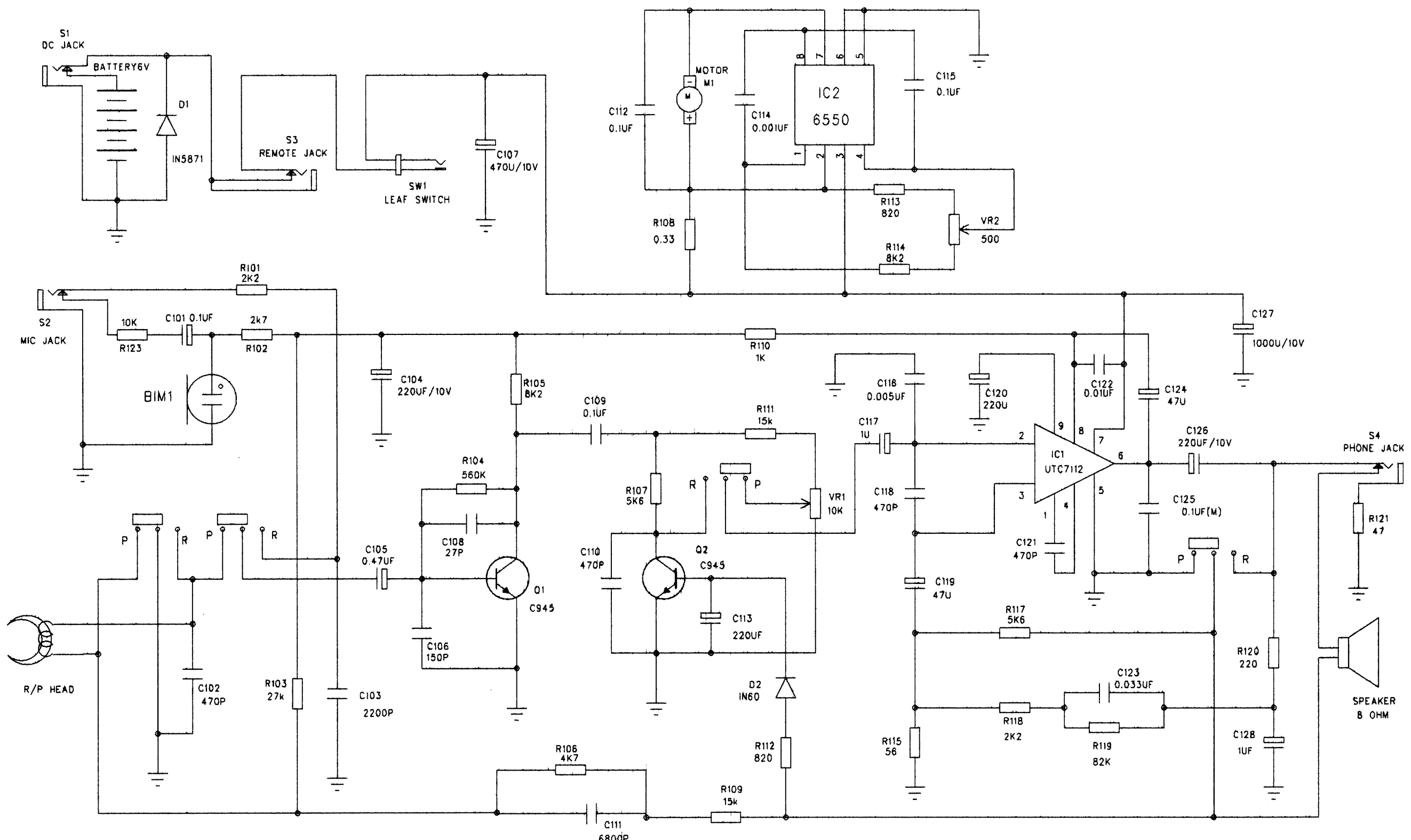
D1	16A20346	11702581700	DIODE 1N5817
D2	16A34871	117001N6000	DIODE 1N60
IC1	33A34870	10500711201	IC UTC7112
IC1	33A34869	10500665000	IC AN6650
JAC	8A34867	16503000400	JACK PHONE MONO REMOTE
JAC	8A34865	16501300300	JACK DC
JAC	41A26186	16502500100	JACK STEREO PHONE
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SWI	39A34868	17003040205	SWITCH PUSH
VR1	42A34863	12523100200	RESISTOR VAR VOLUME
VR2	42A34864	12621500201	RESISTOR VAR

MISCELLANEOUS

LAB	4A34827	POP35027	LABEL POP
USE	UC35027	UC35027	USE & CARE GUIDE

ALIGNMENT LOCATION GUIDE





IC 1	PIN	1	2	3	4	5	6	7	8	9
	UTC7112	0.7/V	2.2/V	2.3/V	2.3/V	0	2.3/V	6.0/V	5.7/V	2.3/V
IC 2	PIN	1	2	3	4	5	6	7	8	
	AN6650	4.7/V	6.0/V	6.0/V	6.0/V	0	0	4.3/V	0.7/V	
2SC945P	PIN	B	C	E						
	Q1	0.8/V	1.3/V	0						
	Q2	0	0	0						

