

RCA MODELS SHC-460, SHC-461

(SHC-461 AM TUNER ONLY VERSION)

TUNING RANGE

Standard Broadcast 540 - 1600 Kcs.
Intermediate Frequency 455 Kcs.

RECORD PLAYER INFORMATION MODEL SHC - 461 COLLARO STEREO CONQUEST

MODEL SHC - 460 RP - 205 SERIES

POWER SUPPLY RATING

Power Supply Rating 115 volts, 60 cycles Watts
Tuning drive ratio

Record Changer

Turntable speed 16 2/3, 33 1/3, 45 or 78 r.p.m.
Record capacity up to fifteen 7 inch or twelve
10 inch or ten 10 inch inter-
mixed

Pickup Stock #106770 Stereophonic Ceramic.

Audio Power Output 12 Watts

Frequency Responses 50 cycles to 20,000 cycles

Loud Speakers

One 10" PM "Woofer" (SHC 460) 3.2 ohm at 400 cycles

One 12" PM "Woofer" (SHC 461) 3.2 ohm at 400 cycles

Two 3 1/2" PM "Tweeter (both) 8 ohm at 3,000 cycles

Alignment Procedure

Line Voltage 117 volts — 60 cycles
Standard Output 1.3 volts across 3.2 ohms voice coil
or 0.9 volts across each speaker when
external speaker is used.
Dummy Antenna 10 mmf and dummy loop

1. With range switch in radio position, gang capacitor fully opened, and oscilloscope connected at junction of R-51 and R-52, apply 455 Kc sweep signal to V-7-1 (6BA6) through a 01 mfd. capacitor.
Adjust T-105 (second IF Transformer) for symmetrical curve.
2. Apply 455 Kcs sweep signal to V-6-7 (6BE6), through 0.1 mfd capacitor, and adjust T-104 (1st IF transformer) for maximum output.
3. Disconnect Scope and sweep Generator.
4. Connect AC output meter across voice coil, turn tone and

volume controls to maximum clockwise position, and correct dummy loop to the black and green antenna leads and apply RF signals through a 10 mmf capacitor to the green lead. Connect low side of signal to chassis.

5. With gang fully closed, adjust pointer to start point (54 Kcs).
6. Turn gang condenser, until pointer is over the 600 Kc. point. Feed in 600 Kcs. signal, and adjust oscillator and antenna coils for maximum output.
7. Turn gang condenser, until pointer is over the 1,500 Kcs. point, and adjust oscillator and antenna trimmers for maximum output.
8. Repeat steps 6 and 7 until no further improvements in sensitivity can be made.

CHANNEL GAIN EQUALIZATION

A gain equalization control is provided to enable the gain of the RIGHT CHANNEL (internal speakers) to be balanced with the gain of the LEFT CHANNEL (external speakers).

This equalization control R-32 is located on the top of the chassis. When adjusting this control, five conditions must exist:

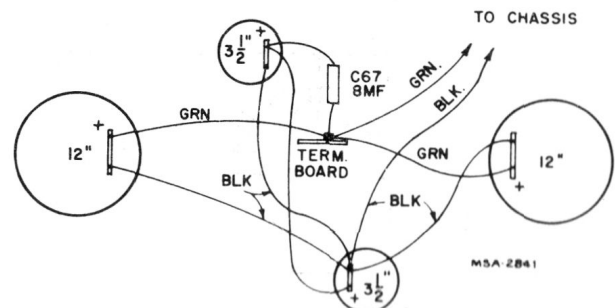
1. A **monaural signal input** must be used. This should be a monaural test record; use a frequency test record when measuring with an output meter or use a music record for listening test.
2. The **function switch** must be in #3 position (PHONO).
3. The **Function Switch** must be **STEREO** position. This enables the two channels to have independent outputs.
4. The **speaker selection switch** must be in the "INT. & EXT. SPKRS." position. This is necessary for the two channels to have independent outputs.
5. Both internal and external speaker systems must be connected or the output loaded equally with resistors. If output is measured with an output meter, a channel having no speakers connected will have an abnormally high output voltage reading.

Adjust the equalization control (R-32) to obtain right channel output equal to left channel output. The left channel gain is not adjustable.

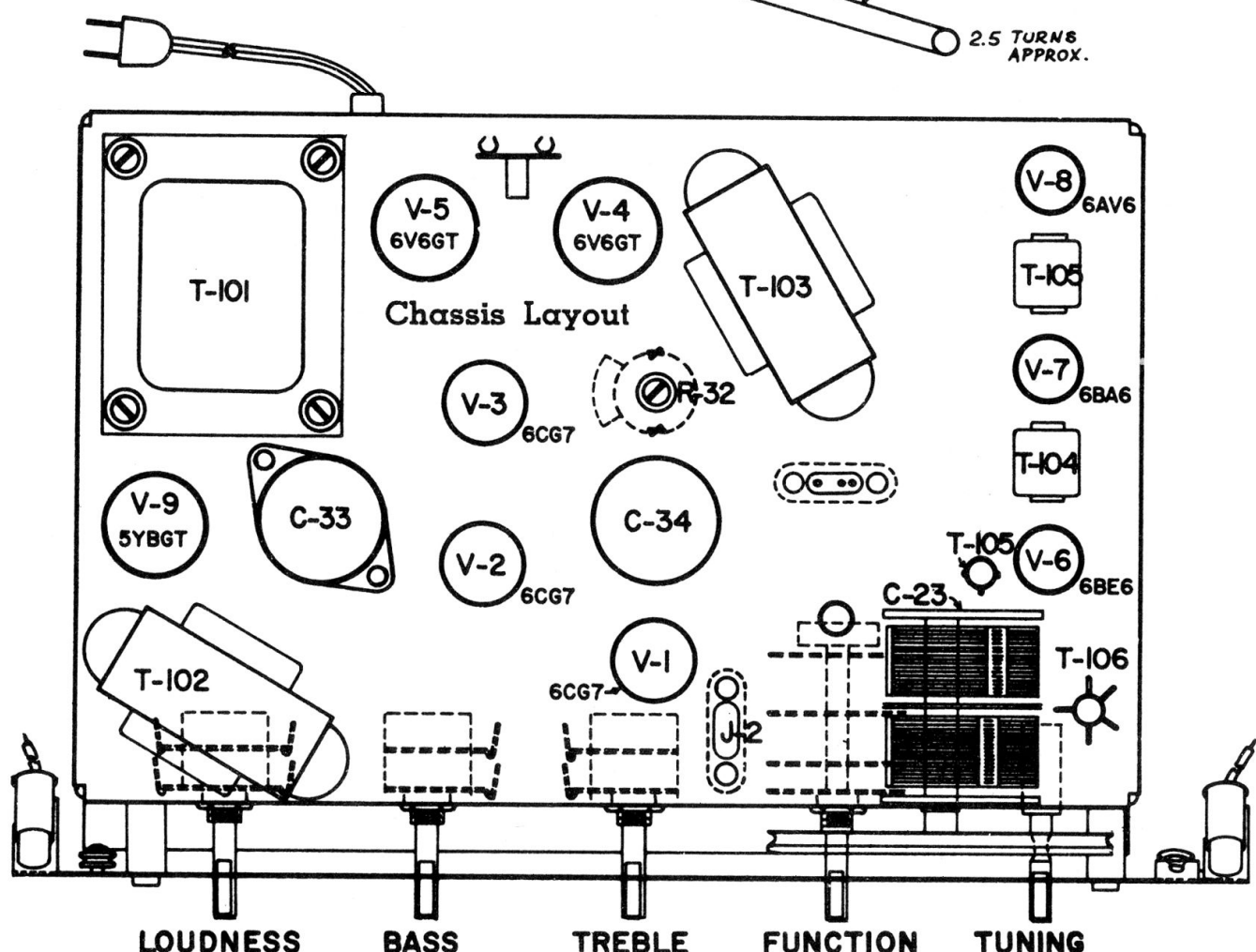
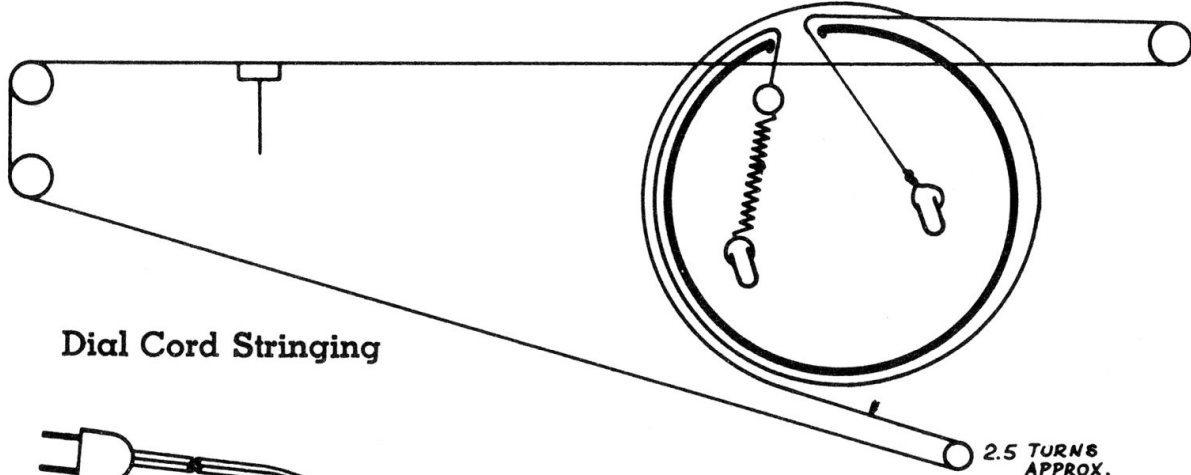
NOTES

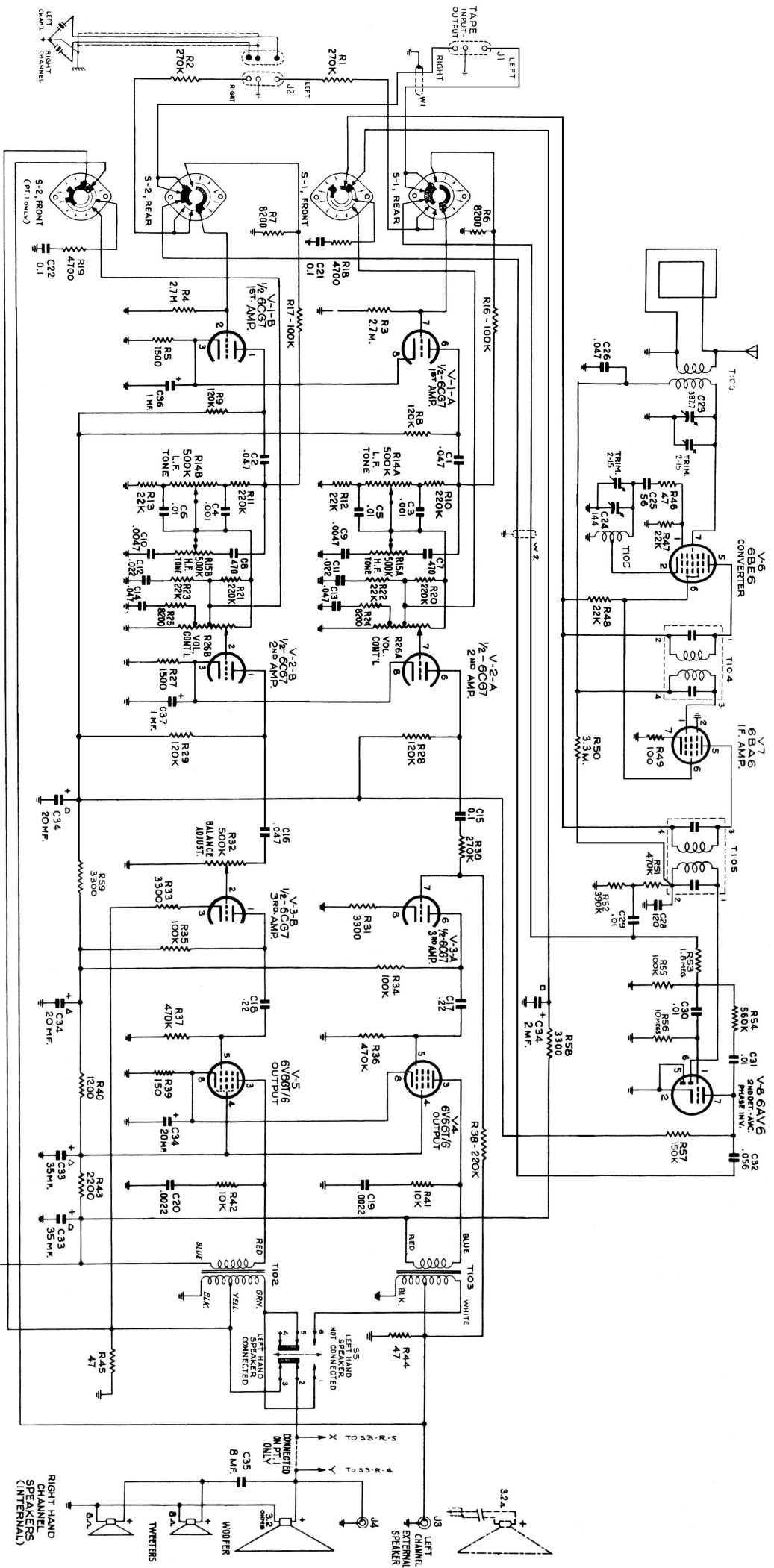
It is not necessary to measure the audio output while making the equalization adjustment; sufficient accuracy can usually be had by listening. This is best done by playing a monaural record with the left channel speaker placed for stereo listening. Adjust the balance control until the sound appears to be coming from a point midway between the two speakers.

If the external speaker system is other than 3.5 ohms impedance, the output voltages will not be equal for equal power output.



Speaker Wiring Assembly





RCA SHC-460, SHC-461
 (SHC-461 IS THE AM TUNER VERSION)

