

ON 40-60 cycle receivers, omit R12 and connect A-B and X-Z.
 ON 25 cycle receivers, add R12 and connect X-Y.
 Omit R16 when No. 51 dial lamp is used.

General Electric Models J-602, J-603

Tuning Frequency Range.....540-1720 KC

Intermediate Frequency.....455 KC

Electrical Power Output (117 line volts)

Undistorted.....1.0 watts
 Maximum.....1.5 watts

Loudspeaker—PM Dynamic

Outside Cone Diameter.....5 inches
 Voice Coil Impedance (400 cycles) 3.5 ohms

Tubes

RF Amplifier.....GE-12B7
 Converter—Oscillator.....GE-12SA7
 IF Amplifier.....GE-12B7
 Detector, Audio, and AVC.....GE-12SQ7
 Power Output.....GE-35L6GT
 Rectifier.....GE-35Z5GT
 Dial Lamp (see paragraph below) MAZDA #47 or #51

GENERAL INFORMATION

Models J602 and J603 are six-tube AC-DC superheterodyne receivers with Underwriters' Approval listing. The Model J602 is housed in a mahogany plastic cabinet, while the Model J603 has an ivory plastic cabinet.

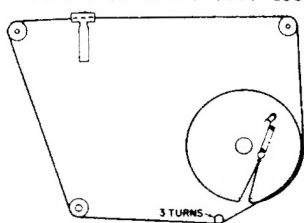
Both the MAZDA No. 47 and No. 51 dial lamps were used during production. When lamp No. 51 is used, the resistor R16 should be omitted.

Either the metal or glass type 12B7 tube may be used in the RF or IF stage. However when the glass tube is used in the IF stage, a tube shield must be used to prevent oscillation at the low frequency end of the broadcast band.

ALIGNMENT PROCEDURE

Alignment Frequencies

RF.....1500 KC
 IF.....455 KC



Dial Stringing Diagram

IF Alignment

Connect an output meter across the voice coil. Turn the volume control to maximum. Set test oscillator to 155 KC and keep the oscillator output as low as a readable meter reading will permit.

Apply signal to the 12SA7 converter grid through a .05 mfd. capacitor and align progressively the trimmers in the 2nd and 1st IF transformers.

RF Alignment

When making the following alignment the loop antenna must be bolted to the chassis by the screw and spacer mounting. The RF signal should be capacity coupled to the receiver loop by placing a two-foot piece of wire for an antenna on the test oscillator output post (high side). Keeping this antenna two feet or more from the receiver loop will generally insure freedom from too much coupling. Metal objects such as meters, tools, etc., should not be placed in close proximity to the loop when making this alignment.

With the gang condenser plates completely closed, the pointer should line up with the first mark on the left of the scale. Set the signal generator to 1500 KC. Align (C-1b) to the signal while the pointer is on the 1500 KC mark. Peak (C-1a) for maximum output.

Stock No.	Symbol	Description
RC-7049	C-1a, 1b, 2a, 2b	CONDENSER—Tuning condenser.....
*RC-235	C-3	CAPACITOR—100 Mmf., mica.....
*RC-242	C-8	CAPACITOR—150 Mmf., mica.....
*RC-274	C-9	CAPACITOR—330 Mmf., mica.....
*RC-039	C-10	CAPACITOR—.01 Mfd., 600 V. paper.....
*RC-072	C-11	CAPACITOR—.05 Mfd., 200 V. paper.....
*RC-104	C-12	CAPACITOR—.01 Mfd., 600 V. paper.....
*RC-216	C-13	CAPACITOR—47 Mmf., mica.....
*RC-023	C-14	CAPACITOR—.005 Mfd., 600 V. paper.....
*RC-039	C-15	CAPACITOR—.01 Mfd., 600 V. paper.....
*RC-092	C-16	CAPACITOR—.05 Mfd., 600 V. paper.....
RC-5183	C-17a, 17b	CAPACITOR—50 Mfd., 60 Mfd., electrolytic.....
*RC-235	C-18	CAPACITOR—100 Mmf., mica.....
*RQ-1227	R-1	RESISTOR—47 ohm, 1/2 W. carbon.....
*RQ-1275	R-2	RESISTOR—4700 ohm, 1/2 W. carbon.....
*RQ-1299	R-3	RESISTOR—47,000 ohm, 1/2 W. carbon.....
*RQ-1295	R-4	RESISTOR—33,000 ohm, 1/2 W. carbon.....
*RQ-1235	R-5	RESISTOR—100 ohm, 1/2 W. carbon.....
*RQ-1339	R-6	RESISTOR—2.2 megohm, 1/2 W. carbon.....
RV-120	R-7, S-1	VOLUME CONTROL—.5 megohm, combined with power switch.....
*RQ-1349	R-8	RESISTOR—5.6 megohm, 1/2 W. carbon.....
*RQ-1323	R-9, 10, 11	RESISTOR—470,000 ohm, 1/2 W. carbon.....
*RQ-1213	R-12	RESISTOR—12 ohm, 1/2 W. carbon.....
*RQ-1239	R-13	RESISTOR—150 ohm, 1/2 W. carbon.....
RQ-651	R-14	RESISTOR—1000 ohm, 2 W. carbon.....
*RQ-1299	R-15	RESISTOR—47,000 ohm, 1/2 W. carbon.....
*RQ-1255	R-16	RESISTOR—680 ohm, 1/2 W. carbon.....

*Used in previous receivers.