



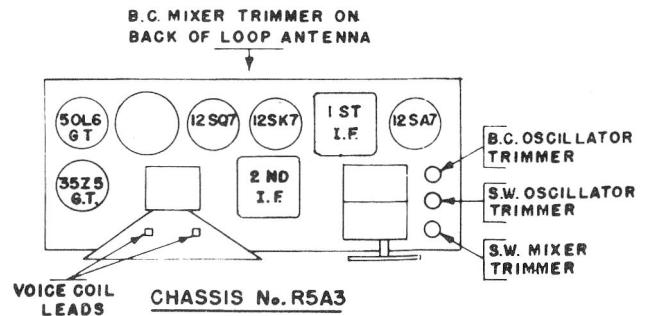
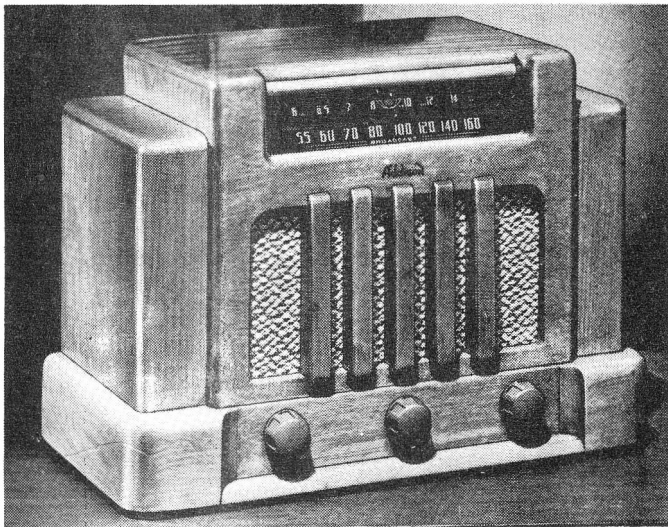
# SERVICE INFORMATION

## A. CROSS & COMPANY LTD.

WINNIPEG • TORONTO • MONTREAL



Form No. 143-72



### ADDISON R5A3 CHASSIS AS USED IN MODELS 5A, 5B, 5C, 5D, 5E, 5F

#### DESCRIPTION

The Models 5A, 5B, 5C, 5D, 5E and 5F, are a five tube AC, DC Superhetrodyne receiver covering the Standard Broadcast and Foreign Short Wave bands.

#### FEATURES INCLUDE:

5" Dynamic Speaker

Built in Loop Antenna with high impedance primary winding for external antenna.

Automatic Volume Control.

Beam Power Output Tube.

Slide Rule Dial.

Cabinets of Walnut, Mahogany & Bleached Wood and Catalin Plastic.

#### TUNING RANGE

550 to 1600 K.C. (Broadcast Band)

6 to 16 Megacycles (Short Wave)

#### TUBES AND THEIR FUNCTION

ONE	12SA7	Oscillator Modulator
ONE	12SK7	Intermediate Frequency Modulator
ONE	12SQ7	Detector, A.V.C. 1st Audio
ONE	50L6GT	Beam Power Output Tube
ONE	35Z5GT	Rectifier

## ALIGNMENT PROCEDURE

The Intermediate Frequency Broadcast and Short Wave circuits in this receiver have been accurately adjusted at the factory and any further adjustments should not be necessary. If any adjustment is necessary the following procedure is to be carried out utilizing a modulated Signal Generator and Output Meter.

### 1. TUNING I.F. AMPLIFIER TO 456 KILOCYCLES

- (a) Connect the Output from the Signal Generator through a 60 mmf. mica condenser to the lead provided for use of an external antenna.
- (b) Connect the Output Meter across the voice coil.
- (c) Turn the control situated at the left on front of chassis (On-Off switch and Volume Control) to its maximum clockwise position and the Tuning Control so that the plates are completely in mesh.
- (d) Set Generator to 456 Kilocycles.
- (e) Adjust both trimmers located on top of the 2nd I.F. Transformer (T2) until maximum deflection is obtained on the Output Meter.
- (f) Adjust both trimmers located on top of the 1st I.F. Transformer (T1) until maximum deflection is obtained.

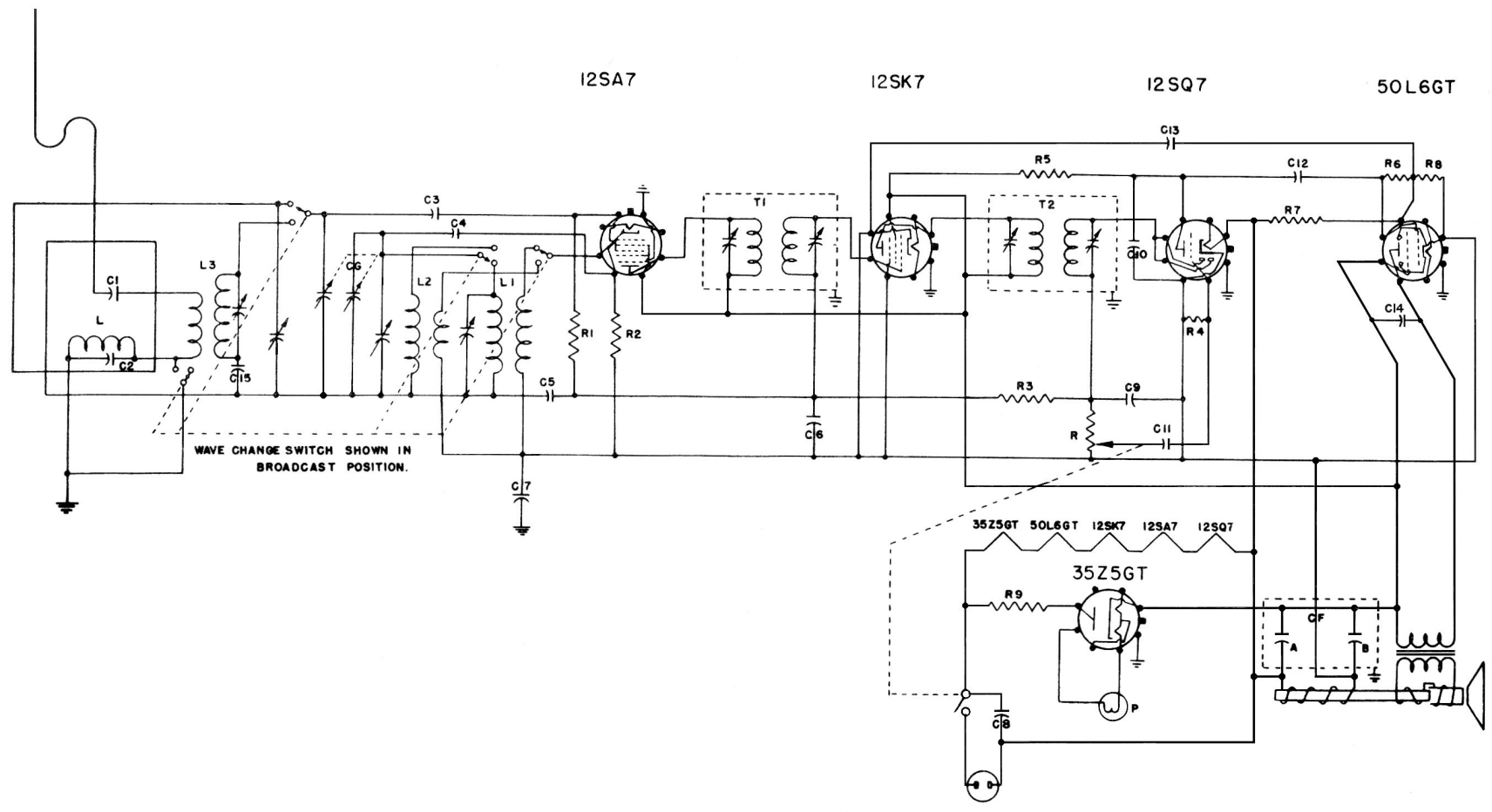
N.B.: After each adjustment has been made it may be necessary to re-adjust the Generator Attenuator to a reasonable output.

### 2. BROADCAST ALIGNMENT

- (a) Leave Generator and Output Meter connected as described in the Tuning of the I.F. Amplifier.
- (b) Set Signal Generator to 1500 K.C. and Tuning Condenser for a corresponding dial reading.
- (c) Adjust the Oscillator Trimmer situated on the top right side of chassis through the 3rd opening from front until deflection is obtained on the Output Meter.
- (d) Now adjust the Mixer Trimmer situated on the back of the Loop Antenna until maximum deflection is obtained on the Output Meter.
- (e) If adjustment should be necessary at the low frequency end of the Broadcast Band, bend the slotted plates on Mixer section of the Tuning Condenser for maximum output.

### 3. SHORT WAVE BAND ALIGNMENT

- (a) Turn the Band Switch (Right hand knob) to Short Wave position and set the Signal Generator to 15 Megacycles and the Tuning Condenser for a corresponding dial reading.
- (b) Adjust the Short Wave Oscillator Trimmer situated on the top right side of chassis through the centre opening until maximum deflection is obtained determining also that set is peaked to the "Fundamental" signal and not the "Image". This may be checked by rotating the Tuning Condenser to approximately 14.1 Megacycles where the "Image" should be observed.
- (c) Set the Generator to 12 Megacycles and the Tuning Condenser for a corresponding dial reading and adjust the Short Wave Mixer Trimmer situated on the top right side of chassis through the opening nearest the front for maximum deflection on the Output Meter.
- (d) Set the Generator to 6 Megacycles and check that the signal is observed when the Tuning Condenser is at a corresponding dial reading; if not, bend the slotted plates on the Oscillator section of the Tuning Condenser, but bear in mind that any adjustments to this section will produce an alteration on the Broadcast band and re-adjustment of the slotted plates on mixer section of tuning condenser may be necessary.



## PARTS LIST FOR MODEL R5A3 CHASSIS

CODE	PART No.	DESCRIPTION	CODE	PART No.	DESCRIPTION
R1	88-711	1 Megohm 1/4 Watt	T2	95-02	2nd I.F. Transformer
R2	88-521	22,000 Ohm 1/4 Watt	T3	103-31	5" Dynamic Speaker and Output Transformer Assembly
R3	88-721	2.2 Megohm 1/4 Watt	L	119-01	Loop Antenna Assembly
R4	88-811	10 Megohm 1/4 Watt	L1	94-02	Broadcast Oscillator Coil
R5&6	88-651	.47 Megohm 1/4 Watt	L2	94-03	Short Wave Oscillator Coil
R7	88-631	.33 Megohm 1/4 Watt	L3	94-01	Short Wave Antenna Coil
R8	88-611	.1 Megohm 1/4 Watt		116-51	12SA7 Tube
R9	88-221	22 Ohm 1/2 Watt		116-52	12SK7 Tube
R	90-01	Volume Control .5 Megohm and S.P.S.T. On-Off Switch		116-53	12SQ7 Tube
C1	84-351	500 Mmf. Mica Condenser		116-61	35Z5GT Tube
C2, 3&4	84-251	50 Mmf. Mica Condenser		116-71	50L6GT Tube
C5&6	84-551	.05 Mfd. Paper Condenser		112-01	Dial Drive Assembly
C7&8	84-531	.025 Mfd. Paper Condenser		85-01	Trimmer 3 Sections
C9	84-331	250 Mmfd. Mica Condenser		91-01	Wave Change Switch
C10	84-351	500 Mmfd. Mica Condenser		25-11	Insulated Pilot Lamp Socket
C11	84-431	.003 Mfd. Paper Condenser		113-01	Dial Pointer
C12	84-451	.005 Mfd. Paper Condenser		110-01	Dial Back Plate Complete consisting of:
C13	84-631	.25 Mfd. Paper Condenser		36-03	Dial Back Stamping
C14	84-521	.02 Mfd. Paper Condenser		31-05	Bracket for Pilot
C15	84-371	700 Mmfd. Mica Condenser		4-221	Rivets Shoulder
CF A&B	83-01	Insulated Can Filter Condenser 60-30 Mfd. 150 V. Common Positive		16-21	Pulleys
CG	86-01	2 Gang Condenser with Tracking Section & Pulley		18-01	Spring Dial Drive
T1	95-01	1st I.F. Transformer		31-02	Dial Glass Bracket
				136-01D	Catalin Cabinet