

# INSTRUCTION LEAFLET & SERVICE INFORMATION

—FOR THE—

5 Tube, 1 Band, A.M. Custom Tuner

Model CH51-515 by *Electrohome*

— FEATURING —

- Tuned R. F. Stage
- Magnified Tuning with Gear Driven Gang
- Shock Mounted Gang to Prevent Acoustic Feedback
- Slide Rule Dial
- 10 Kc. (Whistle) Filter
- Cathode Follower Output
- Shielded Connector Cable
- Self-contained Volume Control and Switch
- Triple Filtered, Self-contained, Power Supply
- Operation on 110-120 Volts AC, 25-60 Cycle
- Dressup (Wrap Around) Panel Adjustable or Removable to permit installation of unit with varying panel thicknesses

— SPECIFICATIONS —

Tuning Range ..... 540 - 1650 Kc.  
Intermediate Frequency ..... 455 Kc.  
Sensitivity ..... 3 uv for .3V at Output Jack  
Selectivity ..... 12 Kc. wide at 10X down  
Cathode Follower Output 2V. at less than 1% distortion  
Response .....  $\pm$  3 db from 30 to 20,000 cycles  
Power Consumption ..... 22 Watts

## **Dominion Electrohome Industries Ltd.**

**KITCHENER - ONTARIO - CANADA**

### **Other Products**

Radios, Hi-Fi Phonographs and Radio Phonograph Combinations, Car Radios.  
Custom-Built Radio Receivers, Tuners, Hi-Fi Amplifiers, Cabinets.  
Fans, Heat Circulators, Small Electric Motors, Humilifiers, Dehumidifiers.  
Home Freezers and Clothes Dryers.  
Deilcraft Fine Furniture.

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#-10-24 MACHINE SCREWS (2 REQ'D.)

# **INSTALLATION**

## **CHASSIS INSTALLATION**

This tuner has been designed with a removable dial escutcheon and dressup panel to permit its installation in custom cabinets, bookcases, wall panels, etc., and retain the usefulness of the dial escutcheon. The drawing showing the mounting of the tuner will assist in the proper location of the chassis in relationship to the panel being used to provide adequate shaft protrusion for the knobs. It is important that the tuner be located to insure proper ventilation as the tubes and power transformer give off considerable heat which should be dissipated to insure normal life of the tubes and components. The chassis must be mounted on the base plate supplied, and if it is to be installed in a totally enclosed compartment, the compartment **MUST BE AT LEAST 1.5 CU. FT.**, to meet CSA requirements.

## **ANTENNA**

A short antenna mounted inside a cabinet will provide satisfactory reception in most cases on local stations or in other areas of high signal strength. For better results, the use of an outdoor antenna is recommended. This antenna should comprise 50 to 100 feet, including lead-in, of copper wire mounted as high as possible and clear of buildings to minimize interference from electrical equipment. Connect antenna terminal marked "A".

## **GROUND**

A ground connection is strongly recommended for use with this tuner, particularly if the antenna used is higher than the surrounding buildings. This ground may be obtained by making connection to a water pipe or to a metal rod driven into the ground. Connect the ground lead to Ground Terminal marked "G".

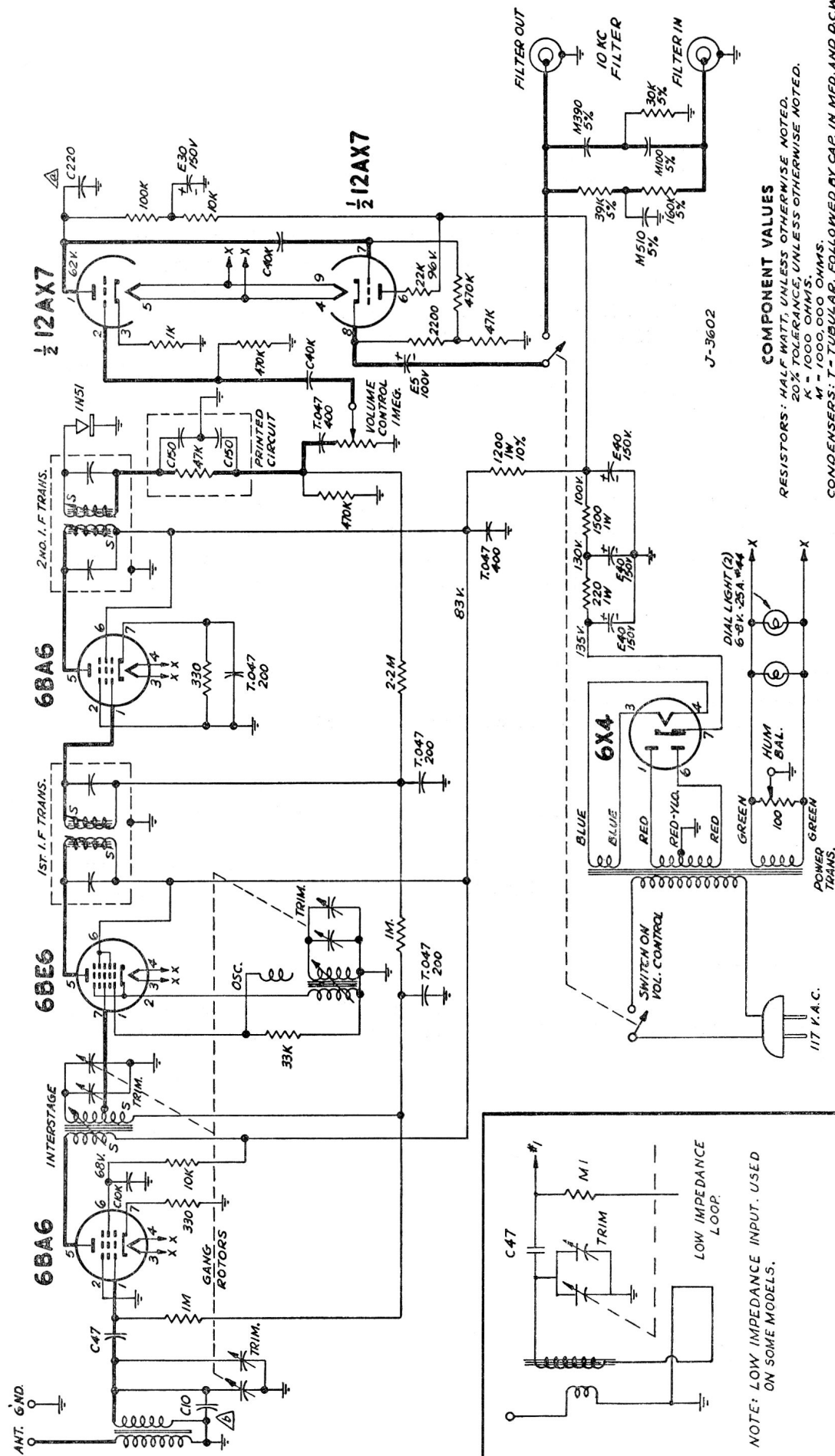
## **10 KC FILTER**

This tuner has been designed to provide alternative output connections to an amplifier either with or without a 10 KC Filter. The connection through the 10 KC. Filter is strongly recommended in areas where strong signals from stations on adjacent channels interfere and cause the annoying Heterodyne whistles. It will also help to eliminate some of the interference caused by adjacent TV receivers. Plug into output jack which suits your local conditions best.

## **VOLUME CONTROL AND OFF-ON AC SWITCH**

The volume control and off-on switch on this tuner permits the tuner to be turned on and off and the volume to be adjusted independent of the controls on the associated amplifier to which it may be connected. The control and switch operate in the usual manner.

NOTE—C10 Condenser Added Across Secondary of Ant. Coil.  
C220 Condenser Added 12AX7 Pin No. 1 to Ground.



NOTE: LOW IMPEDANCE INPUT. USED ON SOME MODELS.

### COMPONENT VALUES

RESISTORS: HALF WATT, UNLESS OTHERWISE NOTED.  
20% TOLERANCE, UNLESS OTHERWISE NOTED.

$K = 1000 \text{ OHMS.}$   
 $M = 1000,000 \text{ OHMS.}$

CONDENSERS: T = TUBULAR, FOLLOWED BY CAP. IN MFD. AND D.C.W.V.  
E = ELECTROLYTIC, FOLLOWED BY CAP. IN MFD. & D.C.W.V.  
C = CERAMIC, FOLLOWED BY CAP. IN MMFD. & TOL. IF CRITICAL.  
M = mica, FOLLOWED BY CAP. IN MMFD. & TOLERANCE IF CRITICAL.

STEP	APPLY SIGNAL AT KC.		SIGNAL GENERATOR THRU SERIES DUMMY		THRU SERIES SET DUMMY	ADJUST MAX. OUTPUT AT OUTPUT JACK	ALIGNMENT AND SENSITIVITY MODULATED 30% AT 400 CY. NOMINAL SENSITIVITY FOR 3 VOLTS AT OUTPUT JACK
	1	2	12BA6 I-F No. 1 PIN	12BE6 I-F No. 1 PIN			
1	455				.05	2ND. I.F.	3000 $\mu$ K
2	455				.05	MINIMUM CAPACITY 1ST I.F. 2ND. I.F.	80 $\mu$ K
3	1460				.05	O.S.C. AND INTERSTAGE TRIMMERS	ADJUST OSCILLATOR PAID. AT 600
4	1460	ANT.			200 $\mu$ pf/d	1460 KC. ANTENNA F. TRIMMERS	2 $\mu$ K
5	600	ANT.			200 $\mu$ pf/d	600 KC. INTERSTAGE TRIMMERS	5 $\mu$ K

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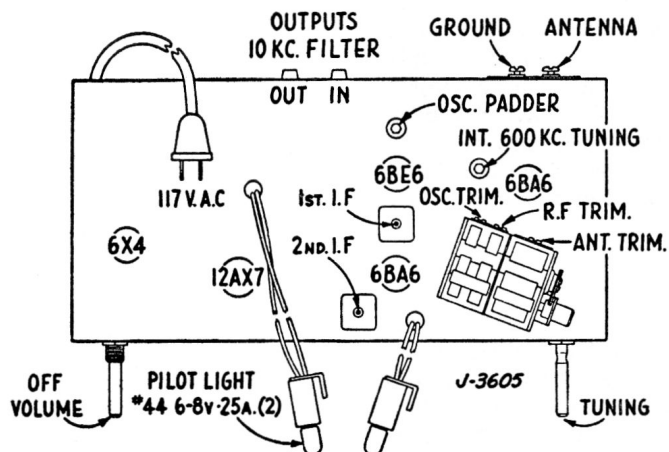
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## SERVICE INFORMATION

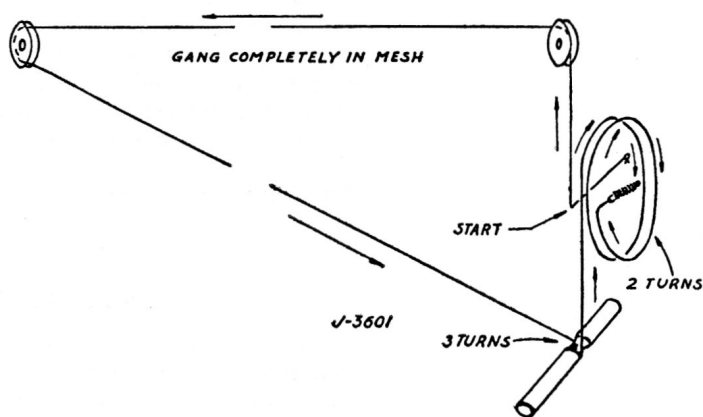
When writing for service information and/or parts, please quote model and serial number.

### Servicemen Please Note:

**Hum Balance** — It may be found necessary to adjust this control for minimum hum output — particularly when the 12AX7 tube is replaced. Turn volume full on, set tone controls on the associated amplifier to positions of maximum boost and adjust control for minimum hum level.



CHASSIS LAYOUT



NOTE—2 Springs are used on this model

STRINGING DETAIL

## SERVICE REPLACEMENT PARTS LIST

- A-2918.....Glass Dial Scale
- C-977-1.....Escutcheon
- G-605-1.....Electrolytic 5 ufd. 50V DC.
- G-628.....Four Section Electrolytic
- K-1394.....Filpec (Printed Circuit)
- K-771A.....Pilot Lamp 6-8V. .25A #44
- K-1641.....Germanium Diode Detector
- LK-572-1.....Power Transformer 25-60 cycle
- N-428-1.....Knob
- P-2780-1.....BC Ant. Coil
- P-2715-1.....BC Osc. Coil
- P-2485R.....I.F. Transformer (1st & 2nd)
- P-2781.....Connecting Cable Assem.
- R-336-3.....Volume Control & Switch
- R-391-1.....Hum Balance Control
- V-387-1.....Gang Condenser