

MANUAL of INSTALLATIO:

of



RADIO

Manufactured for

LINCOLN MOTOR COMPANY

DETROIT, MICHIGAN

By

PHILCO

PHILADELPHIA, PENNSYLVANIA

The New Lincoln-Zephyr Radio incorporates advanced principles of circuit and tube design:

A large electro dynamic speaker of exceptional efficiency is mounted on the instrument board extension and gives exceptional fidelity.

The Receiver is equipped with a highly developed automatic volume control, a specially designed input circuit to match the tire compartment door antenna, and the new cowl extension antenna, and an elaborate filter network to reduce ignition noise disturbance. The Receiver is also equipped with a variable tone control which permits the operator to select the tone most pleasing.

The Receiver is located under the front seat, on the right side. Accessibility to all parts for service is an outstanding advantage of this location.

A custom-built control which matches the styling of the instruments is located in the ash receptacle opening.

The New Lincoln-Zephyr Radio

SOLD EXCLUSIVELY BY LINCOLN - ZEPHYR DEALERS

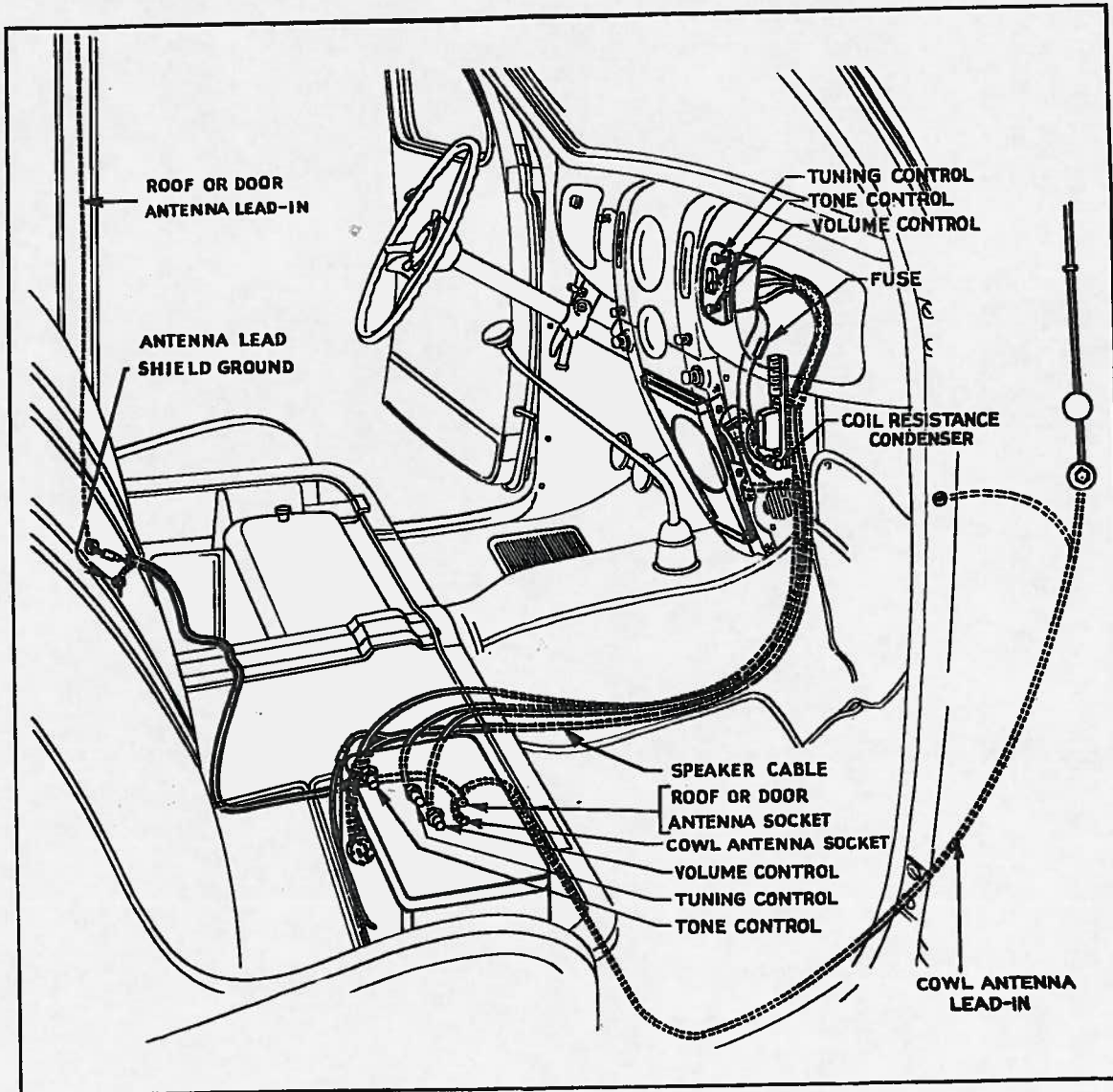


FIGURE 1

Lincoln-Zephyr Radio Installation and Operating Instructions

THESE INSTRUCTIONS have been prepared for your assistance in installing the HB-18805 Radio in the 1937 Lincoln-Zephyr. Read these instructions carefully and then proceed with the installation.

To prepare the car for the installation take out the screws holding the right and left instrument board extension panels in place and remove the panels.

Receiver Location and Installation

Refer to Fig. 5 which gives the location for the mounting screw holes in the floor under the front seat. Using the Receiver as a template, drill two $\frac{3}{16}$ " holes in the floor. Fasten the Receiver to the floor with the two sheet metal screws and clips provided in the Receiver package. (See Fig. 6).

Antenna Lead-in

(SEE FIGURE 1)

There is an antenna lead-in, fitted with a male connector, at the base of the left, center, door pillar in all closed cars. A shielded adaptor lead (which has a male and female connector, one at each end) is supplied with the Receiver.

When using the tire compartment door antenna, connect the female end to the antenna lead-in. The lead should be dressed across the floor under the seat to the Receiver. Connect the male end to the upper antenna socket (marked Roof or Door Antenna) on the Receiver housing and ground the pigtail on the antenna lead shield to the floor of the car at the base of the pillar.

When using the cowl antenna, connect the antenna lead-in which is furnished with the antenna to the lower antenna insulator stud. (Complete cowl antenna installation instructions are packed with each Antenna). Dress the lead down the side of the cowl, behind the kick pad, and then under the carpet, along the door sill to the front seat. From there, dress the lead-in along the Receiver housing and connect it to the lower antenna socket (marked Cowl Antenna). Ground the shield pigtail on the antenna lead to the door pillar. For details, see the special antenna instructions.

Speaker

The speaker is furnished complete with a special baffle for mounting on the rear of the instrument board extension. (See Fig. 2). With the right and left instrument board extension side panels removed, TAKE OUT THE CARDBOARD behind the front panel and slip the speaker and baffle into place. Fasten it securely with four bolts. Dress the speaker cable along the right side of the transmission housing under the floor

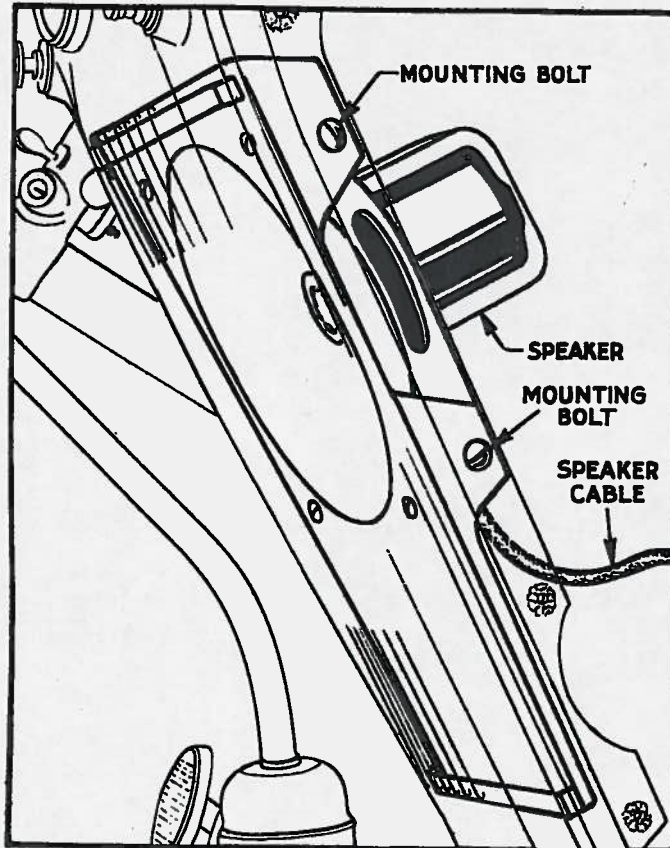


FIGURE 2

carpet to the Receiver and plug it into the speaker socket. Secure the cable in place with special clips.

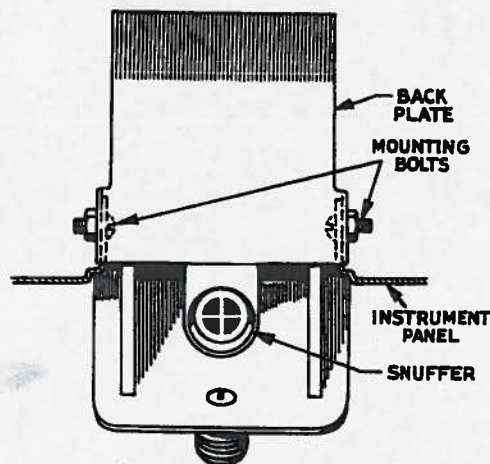


FIGURE 3

Control Unit

The Lincoln Zephyr bezel plate is furnished with only the prime coat. Before installing, it must be painted to match the color of the instrument board of the car in which it is to be installed. Spray the bezel plate, using the proper color.

The control unit can be installed in the location of either the right-hand or the left-hand ash receptacle in the instrument board. Pull out the ash receptacle, press down the ash snuffer and remove the ash receptacle from the instrument board. Next remove the two bolts on the sides of the opening and take out the back plate. (See Fig. 3).

Assemble the bezel back plate to the control unit with the large offset at the top. Install the control head and shafts in the opening from the rear of the panel. Apply the front bezel and secure the assembly with the special nuts on the control shaft sleeves. (See Fig. 4). Tighten the nuts with the special wrench provided.

Dress the flexible control shafts under the carpet along the right side of the transmission housing cover to the Receiver. Connect the shafts to their respective couplings on the Receiver (see Fig. 1) and tighten the knurled casing nuts on the shafts.

"A" Lead Connections

(SEE FIGURE 1)

Place the 15 amp. fuse and fuse insulator in the fuse housing. Connect the separate "A" lead to the fuse housing and then connect the terminal end of the battery terminal of the circuit breaker on the dash. Connect the other lead from the control head to the "A" lead in the speaker cable and the "A" lead, coming from the speaker cable at the Receiver end, must be connected to the Receiver "A" lead.

Adjustments

Turn the volume control knob (lower) clockwise to a stop, then turn it counter clockwise

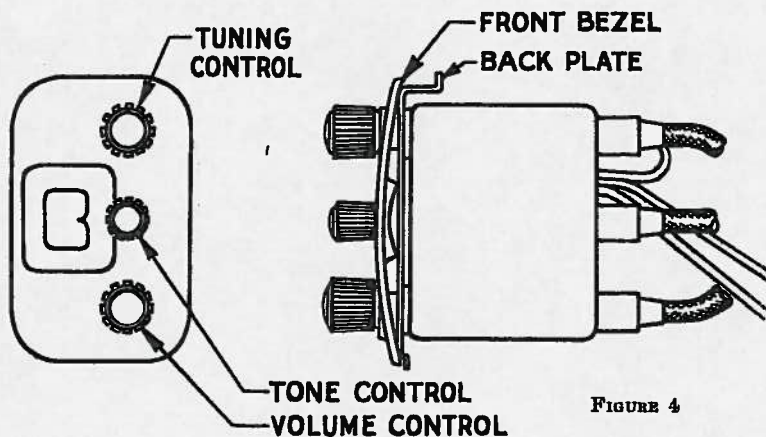
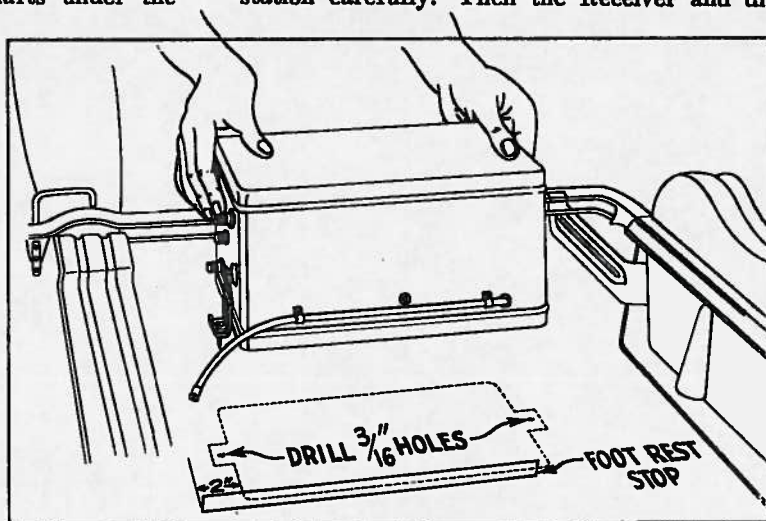


FIGURE 4

until the switch clicks "off" in the control head. This synchronizes the low position of the volume control with the "off" position of the switch.

Turn the volume control knob clockwise and allow a few minutes for the tubes to heat up, then tune in a station. The dial is calibrated in kilocycles with the last "0" omitted. Check the dial setting of the station tuned in. If it is not received at the right point on the dial, turn the dial to the right point. Hold it with the rubber on the end of a lead pencil and then tune in the station carefully. Then the Receiver and dial



will be synchronized. A further check can be made on other stations if necessary.

Motor Interference Elimination

The following operations must be carefully performed as described for satisfactory results:

Coil Interference

Two by-pass condensers (Philco Part No. 30-4404) with special brackets must be installed on the distributor as shown in Figure 7.

Generator Interference

Remove the generator cut-out mounting screw and locate the condenser (Ford Part No. B18827) bracket on the generator cut-out mounting lug. Replace the cut-out mounting screw and tighten securely. Connect the condenser lead to the battery terminal of the cut-out. (See Fig. 8).



FIGURE 6

Oil Gauge Interference

Install an oil gauge condenser (Ford Part No. 48-18828), on the transmission housing underneath the starter wire clamp as shown in Figure 9. Connect the wire from the condenser to the terminal on the oil gauge.

Water Gauge

Fasten the water gauge condenser (Philco Part No. 30-4007) underneath the top radiator shell-to-body-brace bracket bolt at the top of the radiator. (See Figure 10). Connect the condenser lead to the water gauge terminal.

Coil Resistor Condenser

Fasten the coil resistor condenser (Ford Part No. 18827), under the left-hand cut-out mounting strip bolt and connect the lead to the battery terminal of relay. (See Figure 1).

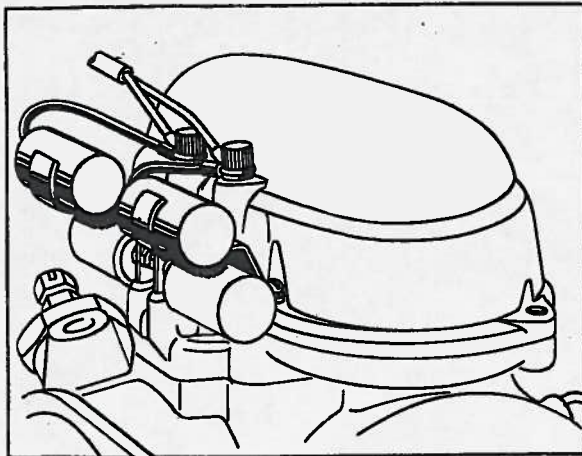


FIGURE 7

Gas Gauge Condenser

Install the gasoline gauge condenser (Ford Part No. 68-18871) on the gas gauge on top of the gas tank as shown in Figure 11.

Operating Instructions

The lower knob on the control is a combination switch and volume control. Turn the volume control knob clockwise. The first range of motion operates the Receiver switch; from there on it is the manual volume control.

With the volume control turned on half way, allow the tubes to heat up. Then turn the upper knob (tuning control) to tune in the various programs. Adjust the volume to a suitable level and recheck the tuning. Be sure the Receiver is tuned accurately, otherwise distorted reception will result and local electrical

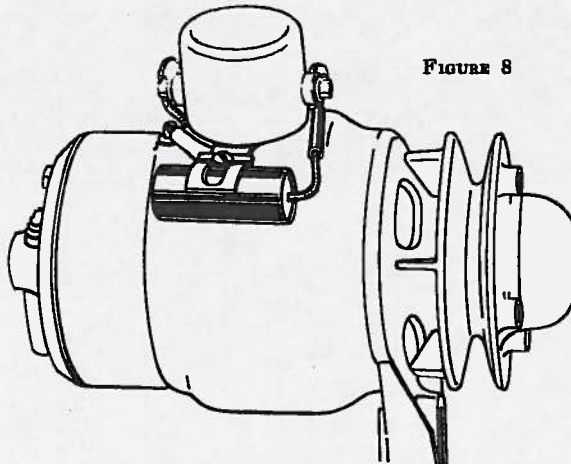


FIGURE 8

disturbances will be magnified.

This Receiver is equipped with a highly developed automatic volume control system which tends to maintain the volume at a constant level. However, there are some places, under viaducts, bridges, tunnels, etc., where the radio signal becomes so weak that it cannot be heard.

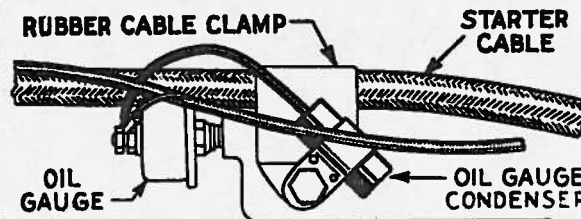


FIGURE 9

When driving under trolley lines or in noisy locations, it is advisable to tune in a strong local station.

The tone control knob is the center knob on the control unit (see Figs. 1 and 4). By turning this control clockwise, different degrees of high frequency response can be obtained. While listening through static or other interference noises, use the deepest tone setting.

If the Receiver is used in conjunction with the cowl extension antenna, the antenna can be adjusted to meet the local requirement. In its compact position, this antenna should provide

adequate pick-up for most local broadcasts and in locations where trolley line and other electrical interference is experienced, it will give quieter reception. For best results in areas at considerable distance from broadcasting centers, the antenna rod sections should be pulled up until the antenna rod is extended to its full height.

When turning off the Receiver, be sure the volume control (lower) knob is turned counter clockwise until a click is heard and the dial light goes out, otherwise the Receiver will continue to operate and discharge the battery.

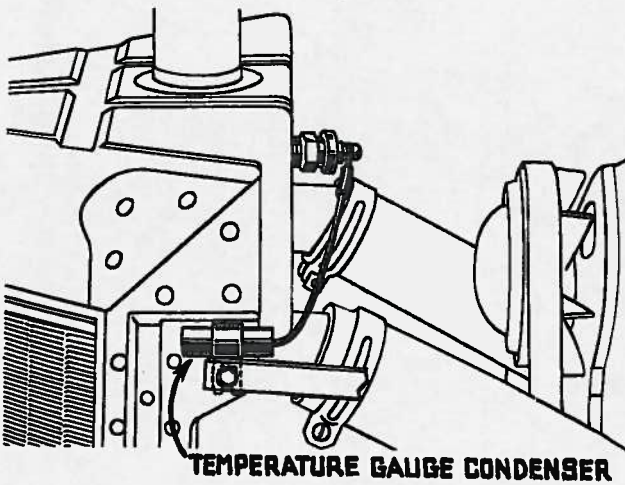


FIGURE 10

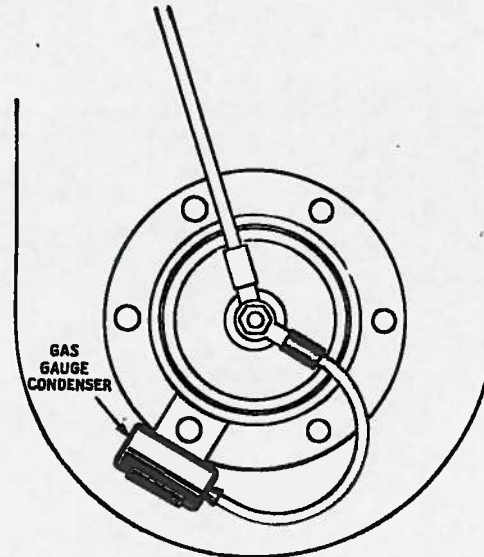


FIGURE 11