

MANUAL OF INSTALLATION

of



ALL IN ONE

Superheterodyne

**AUTO-RADIO
RECEIVER**

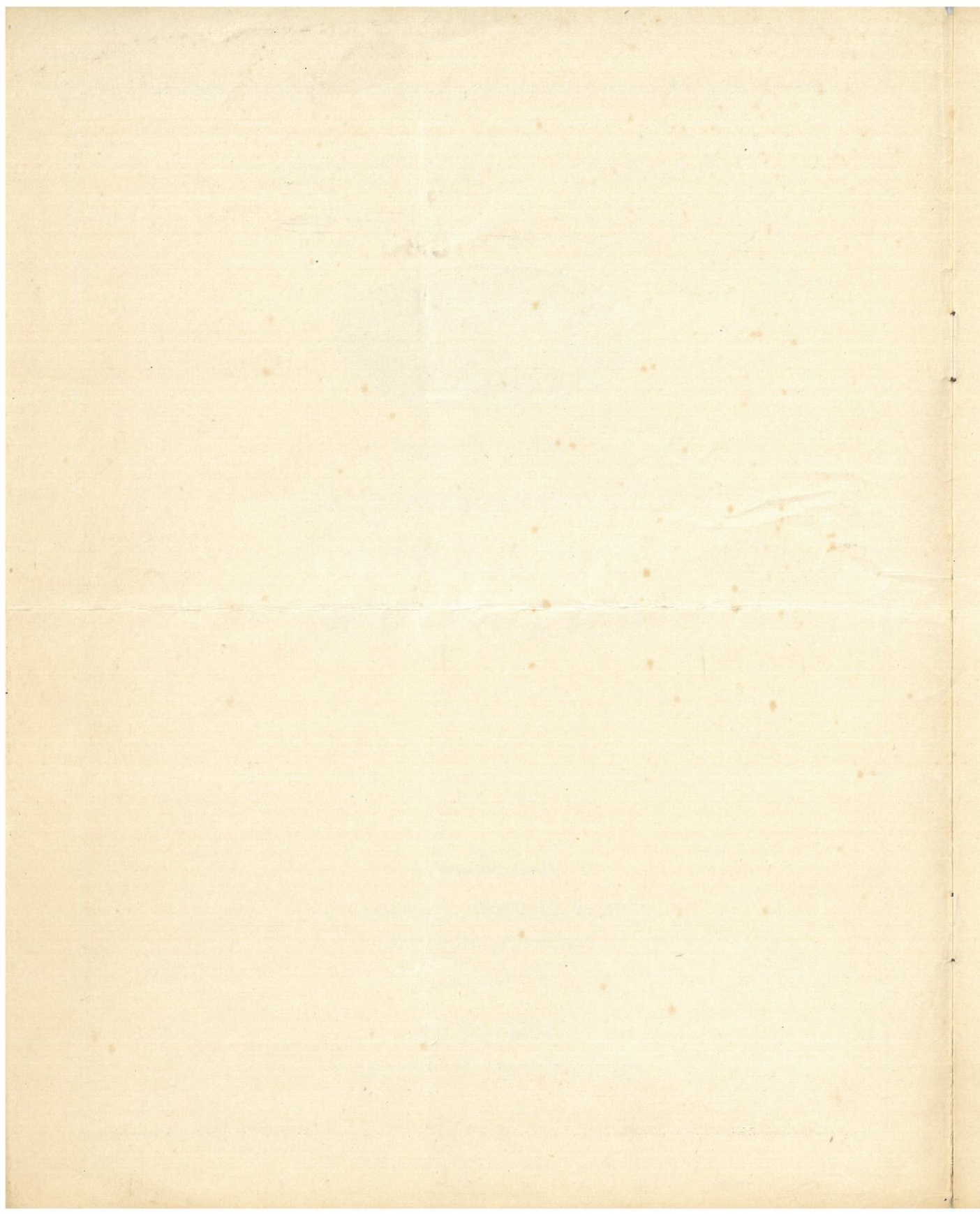
Manufactured for

**FORD MOTOR COMPANY
DETROIT, MICHIGAN**

By

PHILCO

PHILADELPHIA, PENNSYLVANIA



THE NEW FORD RADIO RECEIVER

SOLD EXCLUSIVELY BY FORD DEALERS

The New Ford Auto Radio Incorporates:

New, advanced principles of circuit and tube design. Six tube Superheterodyne with bass compensation. Rugged, compact, single unit Chassis. Built-in Electro-dynamic speaker. Highly developed automatic volume control.

Illuminated, custom-built instrument panel control, mounting in ash tray opening.

Marvelous tone. Maximum range. *Easily installed.*

The installation of this receiver is very simple, and does not interfere with leg room or the installation of hot water heater.

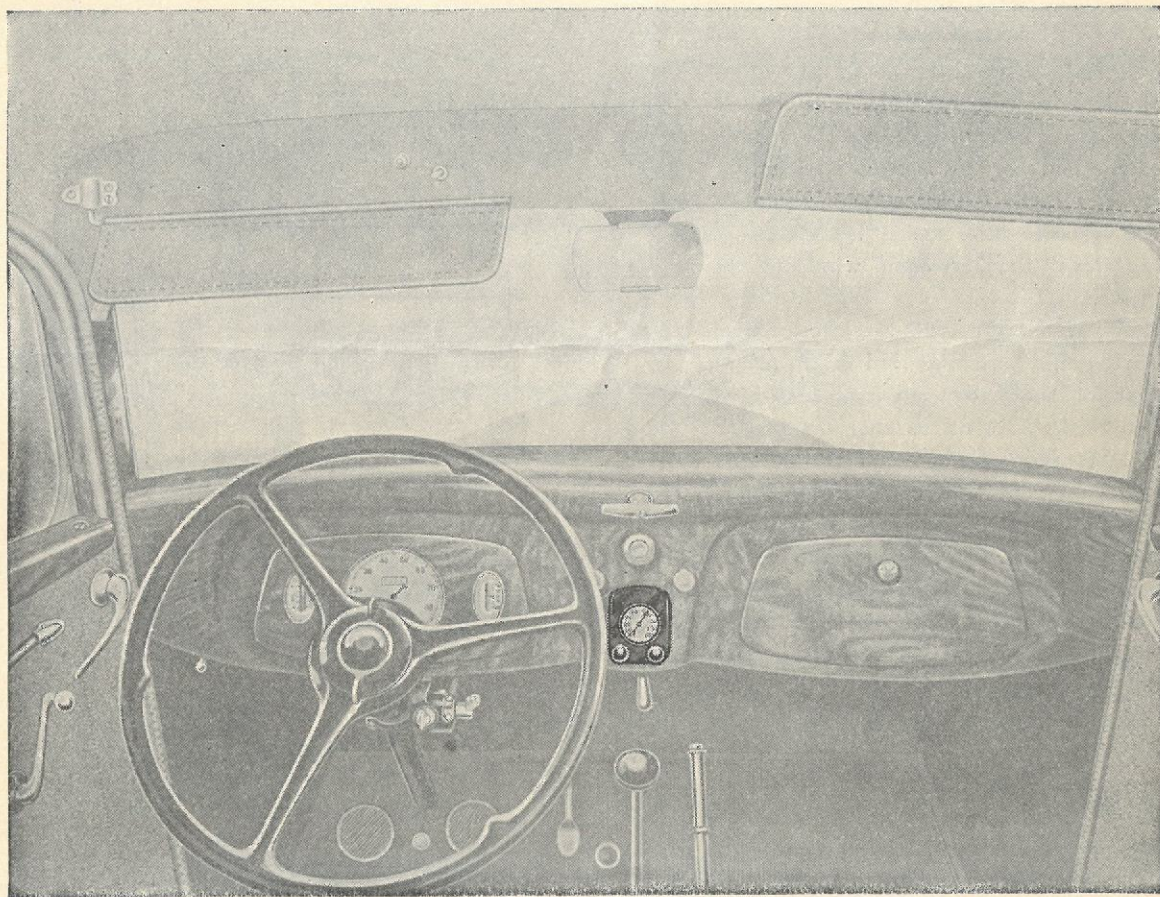


FIGURE 1

Receiver mounts directly above steering column, out of sight and out of the way.

Controls go into ash tray opening. Can be

mounted in cars without ash tray equipment by using a special drilling template furnished with each receiver.

Many Happy Miles With a Ford Auto Radio

Ford Radio Installation and Operating Instructions

Part No. 40-18805 E

SOLD EXCLUSIVELY BY FORD MOTOR COMPANY

These instructions have been carefully prepared for your use in installing the 40-18805E receiver in Ford 1933 and 1934 cars. Read these instructions carefully in every detail before attempting an installation.

AERIAL

Aerials have been built in all closed Ford cars for some time with aerial lead coming down at the rear of the body or the right-hand windshield pillar. Closed cars of recent manufacture have aerial leads coming down the left-hand windshield pillar.

When installing this radio in a car having the antenna lead-in at the rear of the body, cut this lead-in (40-18812-AR) off as short as possible (taping the end and fastening it securely to prevent shorting the antenna through contact with the metal of the body) and install the new lead-in (40-18812-D). Loosen the front left-hand corner of the headlining sufficiently to pass the single end of the lead-in through the center of the front L.H. pillar and solder that portion of the lead-in which is stripped to the wire roof netting (after two turns of the lead-in have been made around the netting). See Figure 8, connection "X". The roof netting must be scraped clean of any paint where the lead-in is to be soldered. A braided pigtail which is soldered to the male connector at the receiver end of the aerial lead must be grounded to a body brace just at the base of the pillar. This can be soldered or fastened with a sheet metal screw. Scrape the surface of the brace clean with a file to insure a good connection. See Figure 8, point "S".

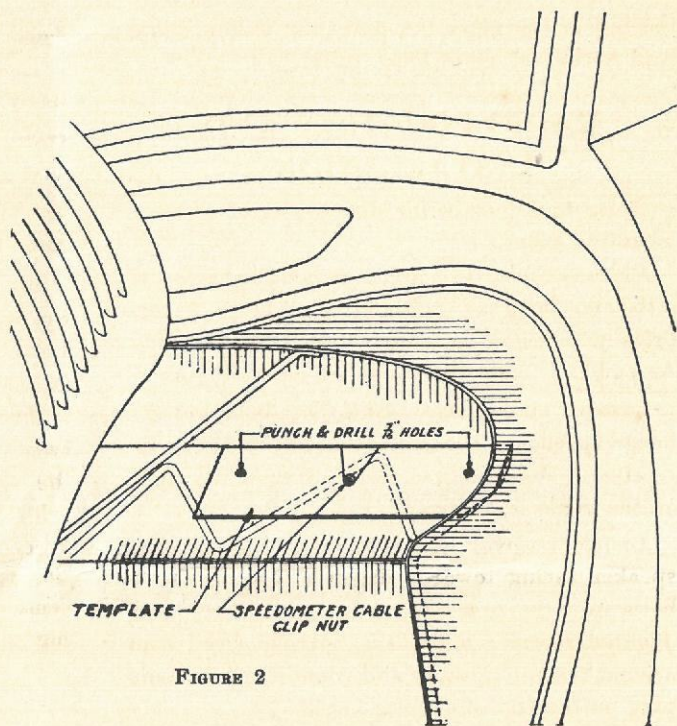


FIGURE 2

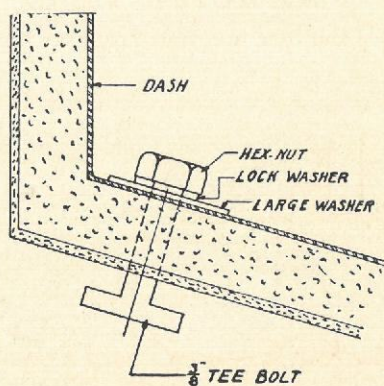


FIGURE 3

The spare tire mounting antenna, Part No. 40-18813-B should be used on all open cars.

Aerial extension lead, Part No. 40-18818, will have to be used on all cars having lead-in coming down right-hand windshield pillar. Plug the extension into receiver lead, place it over the top of the glove box and plug it into aerial lead socket at right-hand pillar.

RADIO LOCATION AND INSTALLATION

Refer to Figure 2 for dimensions of receiver mounting holes.

Place cardboard template on body ledge under left-hand hood as indicated in Figure 2 and prick punch hole locations. Drill 7/16" holes. Assemble T bolts loosely as shown in Figure 3.

Remove speedometer cable clip bolt and relocate speedometer cable to the left of the radio receiver. Relocate gas gauge line on the right of the radio receiver.

Install receiver above steering column with speaker facing towards driver and hook the T bolts into the brackets on top of the receiver. Tighten receiver into place. Bring aerial lead around rear of receiver and connect it into male plug on the end of the car aerial.

AMMETER LEAD

Place the fuse and fuse insulator in the metal

housing and assemble. Now connect the eyelet terminal to the hot (left) side of the fuse block.

INSTRUMENT PANEL CONTROL

Remove ash receptacle by dropping it forward and bending retaining clips toward the center. See Figure 4.

With a pair of pliers, bend backward and upward ash receptacle back-stop to allow clearance for control head. See Figure 5.

Assemble control head and cables in this hole by means of the U-clamp and two wing nuts. Draw up the wing nuts until the cover plate is against the instrument panel. See Figure 6.

The cowl ventilator handle should pass between the two flexible shafts. The shaft on the right with the male end is the station selector and is pushed into the bushing on the receiver closest to the dash. The left shaft is the switch and volume control. This has a female end and should be pushed into the bushing on the receiver nearest the instrument board

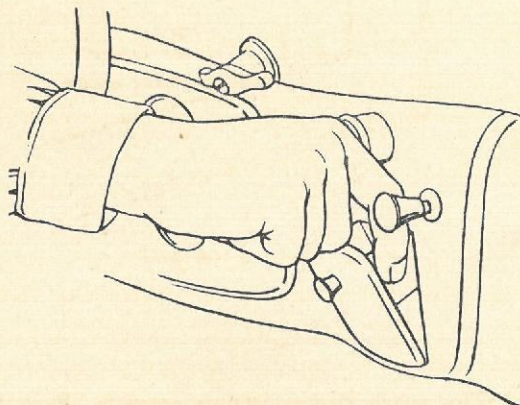


FIGURE 4

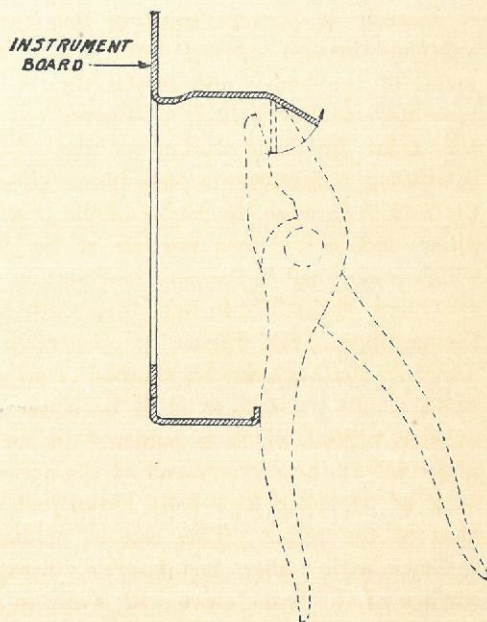


FIGURE 5

(See Figure 8). After the shafts are properly seated tighten the two shaft couplings. Plug the dial light wire into its receptacle close to the switch volume control bushing.

INSTALLING DASH CONTROLS IN CARS WITHOUT ASH RECEPTACLE

Place the template on the instrument panel, as indicated in Figure 7.

Be sure that the throttle and choke rods come to the bottom of the slots in the top of the template and that the bottom of the template is flush with the bottom of the instrument panel. With a sharp-pointed instrument score the panel around the opening in the template. Cut out dash to these lines by means of drilling around with a 1/8" drill and filing. Care should be taken not to mar the instrument board or file beyond line during this operation.

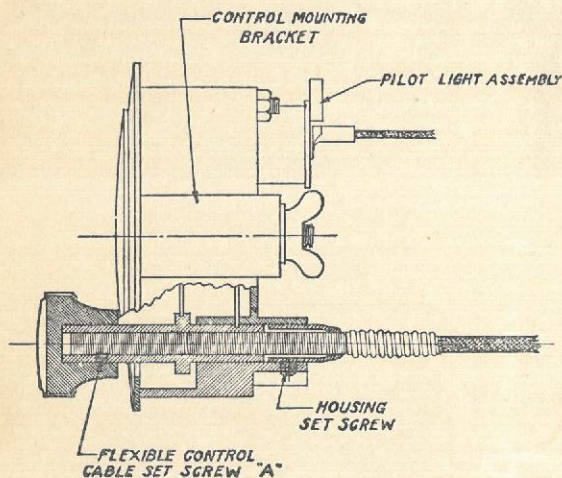


FIGURE 6

DIAL CALIBRATION

The receiver is calibrated in kilocycles with the last "0" omitted. Turn on receiver by rotating left-hand knob in clockwise direction.

It will take a few moments for the tubes to heat up. Tune in a station of known frequency. Remove the right-hand knob by pulling it towards you. This is held in position by a spring clamp. Loosen the set screw on shaft (See "A"—Figure 6) under knob until pointer moves freely. Now turn the pointer to the frequency of the station which is tuned in, tighten set screw and replace knob. Check accuracy of calibration on other stations at different points on the dial and adjust further if necessary.

SPARK NOISE ELIMINATION

Cut off the eyelet terminals on all spark plug wires at the spark plug and screw on the angle resistors. See Figure 9.

Remove the round knurled nut and in its place use snap-type nut furnished. Press resistors on snap nuts.

The by-pass condenser with special coil bracket should be mounted on the ignition coil with the condenser wire on the terminal, as shown in Figure 10.

GENERATOR INTERFERENCE

Remove generator relay mounting screws and slip condenser bracket under the generator cut-out mounting lug. Re-insert cutout mounting

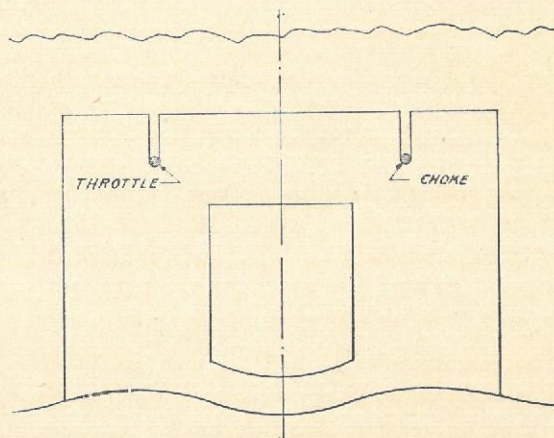


FIGURE 7

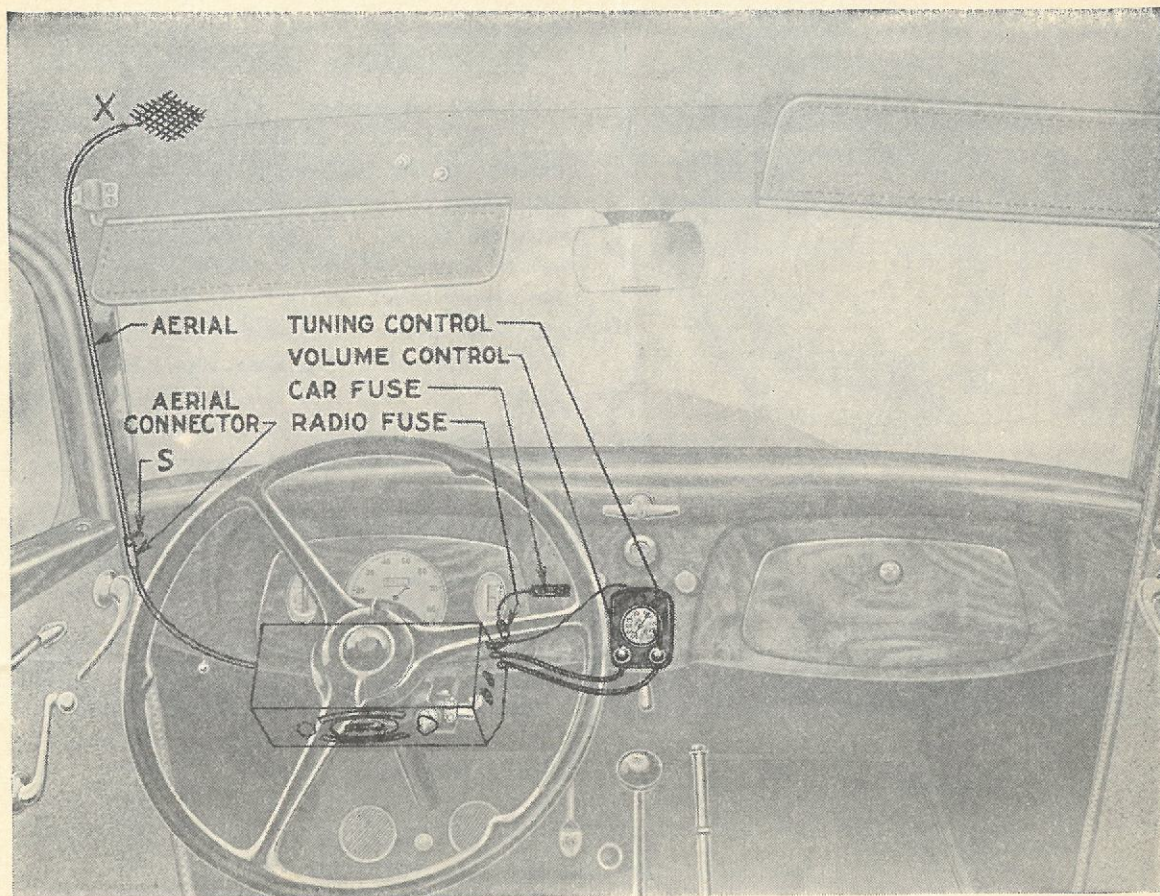


FIGURE 8

screw and tighten down securely. Connect the condenser wire to the battery terminal of the cutout. See Figure 11.

These operations should reduce the interference to a satisfactory level. However, there may be an occasional car which will require an additional B18827 condenser, either at the ignition switch or at the fuse block.

The condenser to be used at the fuse block can be mounted underneath the bolt which holds the loom adjacent to the fuse block. Connect the wire leading from the condenser to the terminal on either side of the fuse.

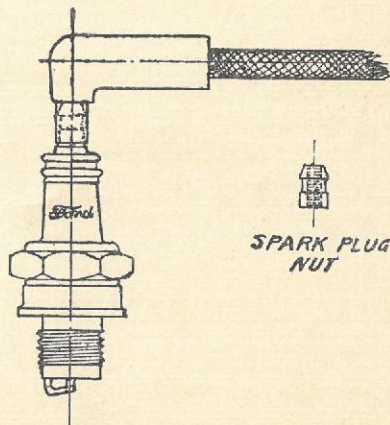


FIGURE 9

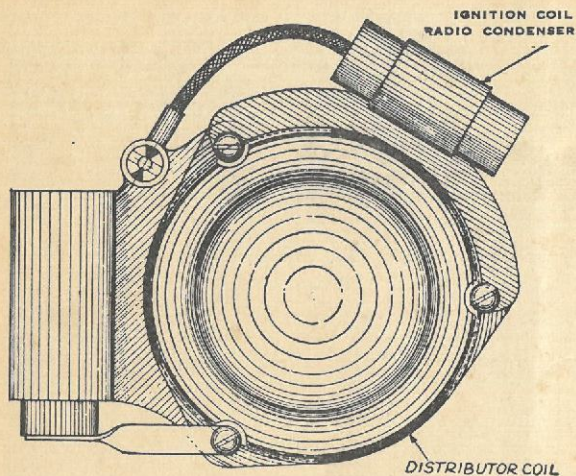


FIGURE 10

If this condenser is to be used at the ignition switch a small hole should be drilled in the instrument board flange just to the right of the steering column, using an 8-32 bolt, nut and lockwasher to mount the condenser. The wire from the condenser should be attached to either terminal at the ignition switch.

If the above operations do not reduce the electrical interference to a satisfactory point, it may be necessary to reduce the clearance between the distributor rotor and the terminal plate electrodes. Remove one distributor cap and terminal plate and clean electrodes with a small file or knife. Build up these contacts with *rosin core solder* about $1/32''$. Replace terminal plate and cap and revolve motor with crank, leaving ignition switch off. Remove terminal plate and inspect carefully, removing excess solder which may have sheared off.

Repeat this same operation on the other side of the distributor.

OPERATING INSTRUCTIONS

To turn on the receiver, turn the left-hand knob slightly in a clockwise direction. The balance of the rotation of this knob controls the volume of the radio receiver. 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, tunnels, bridges, etc., where the radio signal becomes so weak that it cannot be heard. When driving under trolley lines or in noisy locations, it is advisable to tune in on a strong local station.

Be sure the receiver is tuned in accurately, otherwise distorted reception will result and local electrical interference will be magnified.

When turning off the receiver be sure the left-hand knob is turned counter-clockwise until a snap is heard and the dial light goes off; otherwise the receiver will continue to operate and discharge the battery.

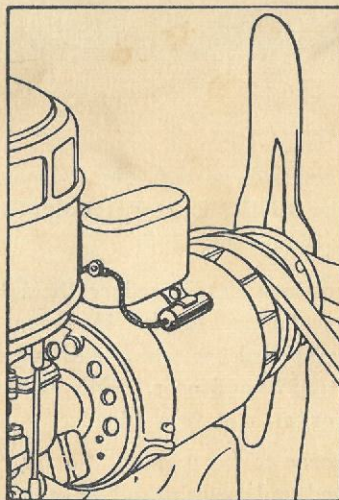


FIGURE 11

MATERIAL PACKING LIST

FORD PART NO. 68-18805-B
PHILCO PART NO. 43-2204

- 1 No. 37-9039 Model "T" -9 Receiver
- 1 No. 36-1175 Speaker Model "D"
- 1 No. 41-3167 Speaker Cable Assembly
- 1 No. 42-5426 Control Housing Assembly
- 1 No. 39-4446A Installation Instructions
- 1 No. 39-4447B Material Packing List

- 1 No. 40-9079 Kit
 - 2 No. 30-4181 Interference Condensers (Generator) - (Fuse Box
 - 1 No. 30-4387 Interference Condenser (Gas Gauge) Block)
 - 1 No. 30-4307 Interference Condenser (Oil Gauge)
 - 1 No. 30-4176 Interference Condenser (Distributor)
 - 1 No. 30-4388 Interference Condenser (Dome Light)

 - 1 No. W-1570 Screw
 - 1 No. W-410 Washer

- 1 No. 8080 Kit
 - 1 No. 7227 Fuse
 - 1 No. 27-7729 Insulator

- 1 No. 40-8135 Kit
 - 2 No. 27-4249 Knob Assemblies

- 1 No. 40-8138 Kit
 - 1 No. 29-2699 Clamp)
 - 2 No. W-1321 Wing Nuts) Control Mounting
 - 2 No. W-752 Lockwashers)

 - 2 No. 28-6161 "T" Bolts)
 - 2 No. 29-3439 Washers) Set Mounting
 - 2 No. W-518A Nuts)
 - 2 No. W-1406A Nuts)

 - 1 No. 03334 Knob

- 1 No. 40-8137 Kit
 - 2 No. W-1575A Screws)
 - 2 No. W-317A Nuts) Speaker Mounting
 - 2 No. W-752 Washers)
 - 2 No. 28-3155 Clamps)
 - 1 No. 36-3432 Tow Strap

The condenser, if used at the fuse block, can be mounted underneath the bolt which holds the loom adjacent to the fuse block. Connect the condenser lead to either one of the fuse terminals.

If the condenser is to be used at the ignition switch, a small hole must be drilled in the instrument board flange just to the right

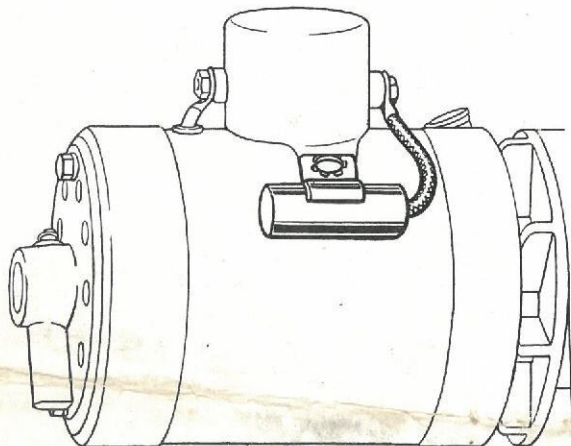


FIGURE 10

of the steering column. Use an 8-32 bolt, nut and lockwasher to mount the condenser. The condenser lead should be attached to either one of the ignition switch terminals.

If the above operations do not reduce the electrical interference to a satisfactory point, it may be necessary to reduce the clearance between the distributor rotor and the terminal plate electrodes. Remove one distributor cap and terminal plate and clean the electrodes with a small file or knife. Build up these contacts about 1/32" with ROSIN CORE SOLDER. Replace the terminal plate and cap and turn over the motor with the crank, leaving the ignition switch off. Remove the terminal plate and inspect carefully, removing any excess solder which may have sheared off.

Repeat this same operation on the other distributor cap.

OPERATING INSTRUCTIONS

The left hand 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 other 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 disturbances will be magnified.

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

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

The tone control knob is located on the right side of the sloping face of the Receiver (see Figure 9). 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.

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

MANUAL OF INSTALLATION

of



**NEW TWO UNIT RADIO
HEADER BAR SPEAKER
with
*EAR LEVEL RECEPTION***

Manufactured for

**FORD MOTOR COMPANY
DETROIT, MICHIGAN**

By

**PHILCO
PHILADELPHIA, PENNSYLVANIA**



THE NEW FORD RADIO RECEIVER

SOLD EXCLUSIVELY BY FORD DEALERS

The New Ford Auto Radio Incorporates:

New advanced principles of circuit and tube design. A totally new idea in sound distribution and musical fidelity is built into a dynamic speaker located above the occupants' heads in the headerbar of the car.

veloped Automatic Volume control, illuminated custom-built instrument panel control mounting in the ash receptacle opening.

The Receiver is mounted directly above the steering column out of sight and out of the way. This installation does not interfere with the installation of either a hot water

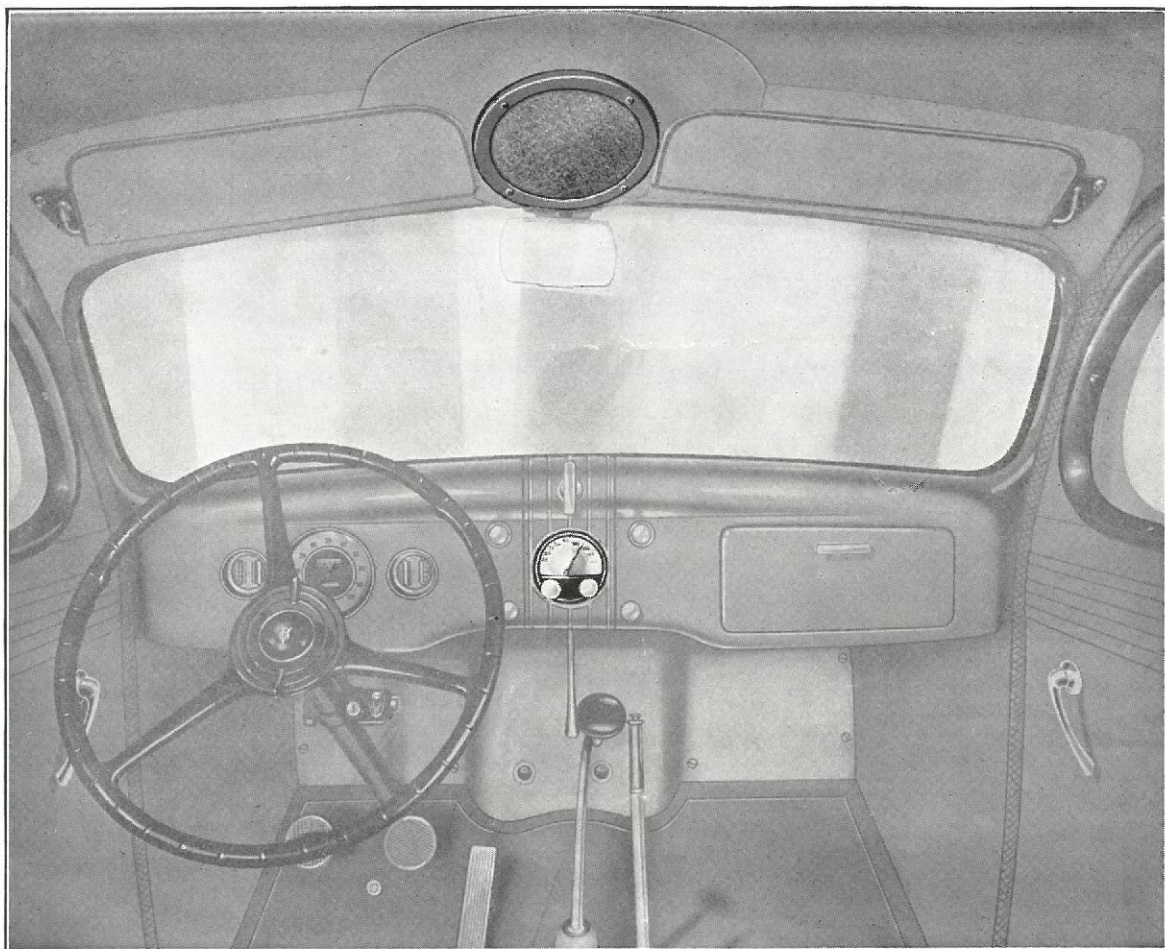


FIGURE 1

Other features of the set are two unit construction with separate speaker, highly de-

veloped Automatic Volume control, illuminated custom-built instrument panel control mounting in the ash receptacle opening. This installation does not interfere with the installation of either a hot water or hot air heater and does not cramp leg room.

Many Happy Miles With A Ford Auto Radio

Ford Radio Installation and Operating Instructions

Part No. 48-18805 - A and B

SOLD EXCLUSIVELY BY FORD MOTOR COMPANY

These instructions have been carefully prepared for your use in installing the 48-18805-A Radio in 1935 cars. Read these instructions carefully in every detail before attempting an installation. For open and convertible cars use No. 48-18805-B Radio and follow the instructions except for the header speaker.

AERIAL

All closed cars for 1935 have an aerial lead at the base of the left windshield pillar. Aerials suitable for open and convertible cars can be purchased from the Ford Motor Company.

RADIO LOCATION AND INSTALLATION

Refer to Figure 2 for the location of the Receiver mounting holes. The dash of the car is already marked with punch marks. Drill two $\frac{7}{16}$ " holes and assemble the T bolts loosely as shown in Figure 3. Install the Receiver above the steering column as shown in Figure 9 and hook the T bolts into the brackets on the top of the Receiver. Tighten the Receiver in place.

Bring the aerial lead around the rear of the Receiver and connect it into the male plug on the end of the car aerial lead.

SPEAKER LOCATION AND INSTALLATION

A partially sheared hole is provided directly above the rear vision mirror in the car header, as shown in Figure 4.

At a point above the mirror bracket cut the header cloth with a sharp knife. Skin

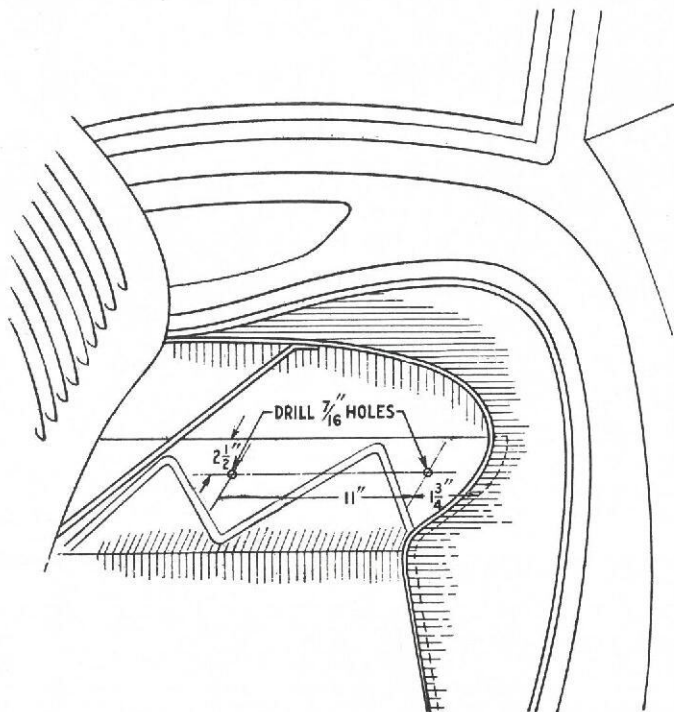


FIGURE 2

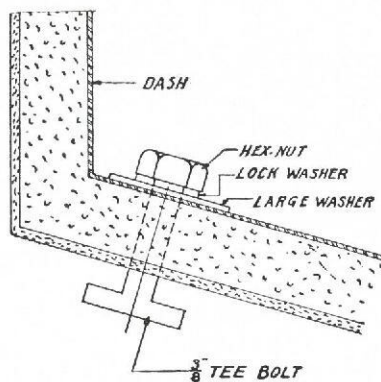


FIGURE 3

the cloth back and trim off at the shear line. Drill a hole in the shear near the mirror to

provide leverage to take out this cutout. Insert a screw driver and pry the metal outward. Then with a pair of diagonal side cutters, break the two lower bonds. Pull out the cutout and bend it back and forth a few times until the top bonds break loose.

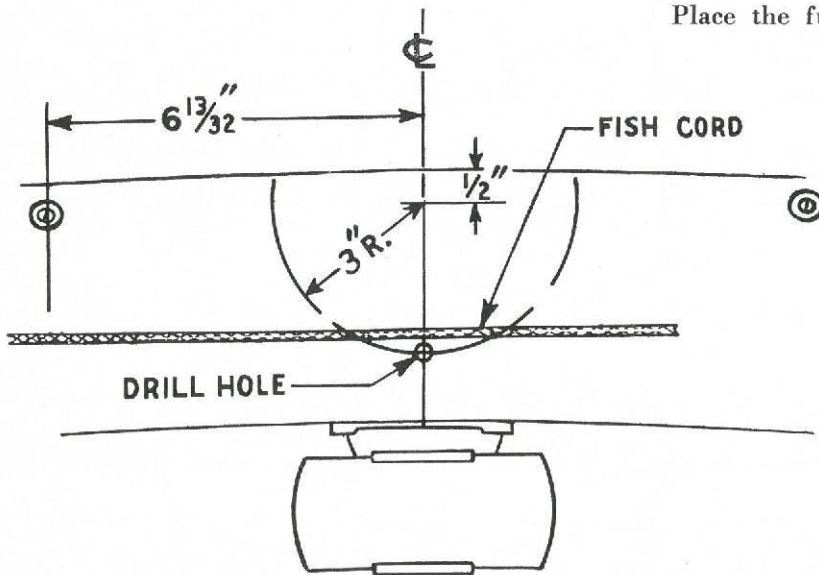


FIGURE 4

A fish cord for the speaker cable is tied to a roof brace. It can be found just below the speaker opening and runs down the right hand pillar. A tow strap made of loose cotton braid is provided in the accessory kit. Enlarge the open end of the braid and tuck in the terminal end of the speaker cable. Fasten the fish cord into the loop on the tow strap and pull the speaker cable up the right hand pillar into the speaker opening. The colors on the speaker wires correspond to the colors on the speaker terminals to which they are to be connected.

Next loosen the rear vision mirror mounting screws and drop the windshield metal moulding sufficiently to allow the slotted end of the speaker baffle to fit

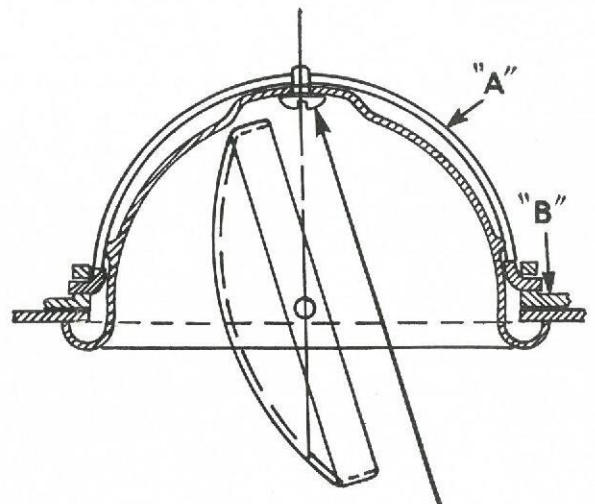
between the moulding and header. Remove the two sheet metal screws shown in Figure 4 and, in fastening the baffle in place, use larger screws which are furnished in the kit. Connect the speaker plug to the Receiver.

"A" BATTERY LEAD

Place the fuse and fuse insulator in the metal housing and assemble. Now connect the eyelet terminal to the hot side of the fuse block.

INSTRUMENT PANEL CONTROL

Pull out the ash receptacle and remove the round head screw in the center of the circular housing. Pull out the ash receptacle bezel. Then squeeze the ends of the semi-circular yoke together and snap it out of the bracket. See Figure 5.



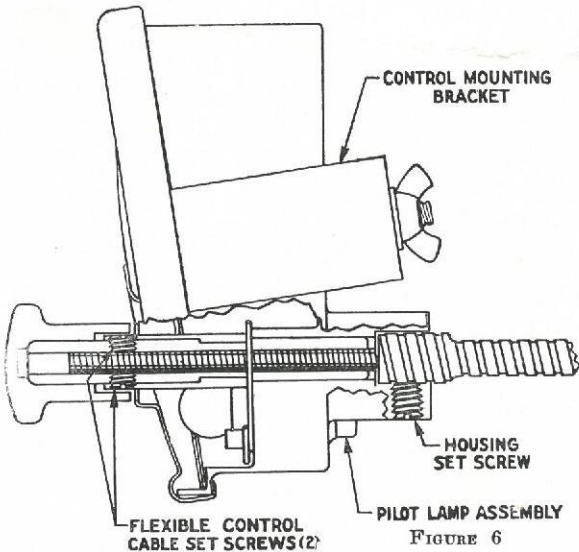
TURN COVER AND REMOVE SCREW - THEN ~ PRESS YOKE "A" TOGETHER AND SNAP OUT OF BRACKET "B"

FIGURE 5

Assemble the control head and shafts in this opening, using the U-clamp and wing nuts. Tighten the wing nuts until the flange on the control head is drawn up tightly against the front of the instrument board. See Figure 6.

Before coupling the flexible shafts to the Receiver, the tuning condenser coupling in the Receiver (the one nearest the dash) must be turned counter-clockwise as far as it will go. The control pointer should be set at the low end of the scale (55) and the tuning control flexible shaft then coupled in the control bushing on the Receiver. Next couple the volume control flexible shaft to the Receiver.

After the shafts have been properly seated, the knurled shaft nuts must be securely tightened.



DIAL CALIBRATION

The Receiver is calibrated in kilocycles with the last "0" omitted. Turn on the Receiver by rotating the left hand knob in clockwise direction. It will take a few moments for the tubes to heat up. Tune in a station of known frequency. Remove the right hand knob.

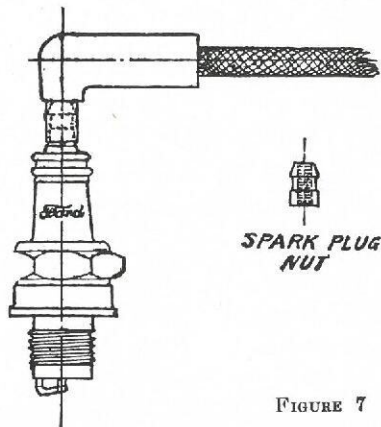


FIGURE 7

Loosen the set screws on the shaft under the knob until the pointer moves freely without affecting the tuning. (See Figure 6). Now turn the pointer to the frequency of the station which is tuned in. Tighten the set screws and replace the knob. Check the accuracy of the calibration on other stations at different points on the dial and adjust further if necessary.

SPARK NOISE ELIMINATION

Cut off the eyelet terminals on all spark plug wires at the spark plugs and screw on the angle resistors.

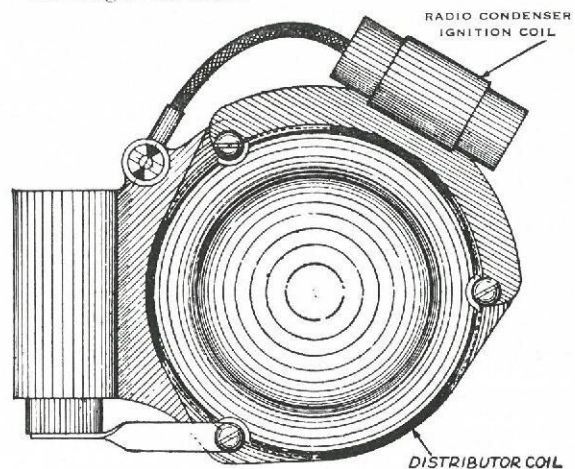


FIGURE 8

Remove the round knurled nuts from the plugs and replace with the round spark plug

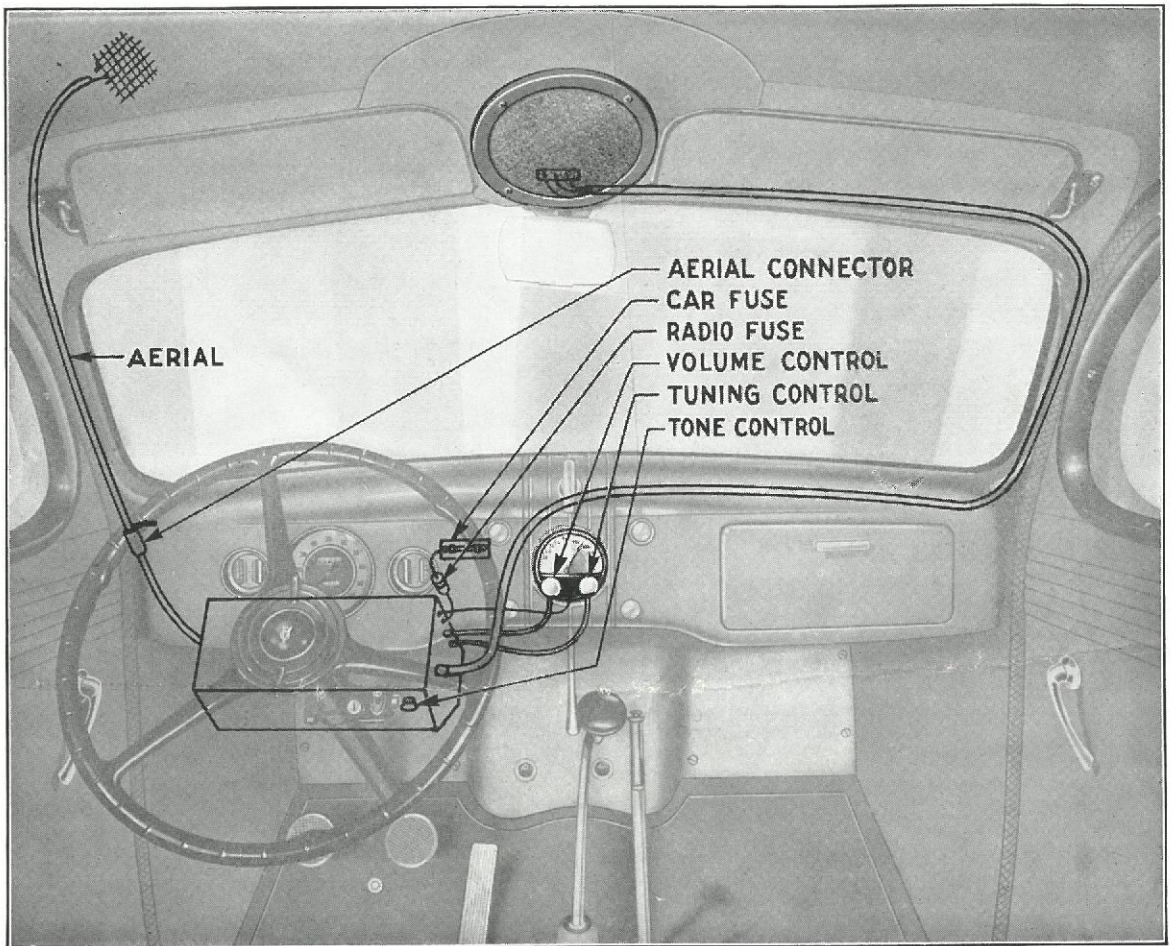


FIGURE 9

nut terminals. Snap the resistors on the terminals. See Figure 7.

The by-pass condenser with the special coil bracket should be mounted on the ignition coil with the condenser lead connected to the terminal as shown in Figure 8.

GENERATOR INTERFERENCE

Remove the generator cutout mounting screw and fasten the condenser bracket on the generator cutout mounting lug. Replace the cutout mounting screw and tighten down securely. Connect the condenser lead to the battery terminal of the cutout. (Figure 10).

OIL GAUGE INTERFERENCE

On all model cars equipped with Electric Oil Gauges, condenser No. 48-18823 should be connected to the oil gauge terminal. Fasten the condenser under the screw on the dash that holds the gas line bracket and connect the lead to the terminal of the gauge on the fly wheel housing.

These operations should reduce the interference to a satisfactory level. However, there may be an occasional car which will require an additional No. B-18827 condenser, either at the ignition switch or at the fuse block.

MATERIAL PACKING LIST

FORD PART NO. 48-18805A

PHILCO PART NO. 43-1864

- 1 No. 37-9006 Model T6 Receiver
- 1 No. 43-1882 Speaker Model P26 and Baffle Assembly
- 1 No. 41-3125 Speaker Cable Assembly
- 1 No. 42-5312 Control Housing Assembly
- 1 No. 38-5749 "A" Battery Lead
- 1 No. 39-4022A Installation Instructions
- 1 No. 39-4023C Material Packing List

- 1 No. 40-9065 Kit
 - 8 No. 33-1195 Spark Plug Resistors
 - 1 No. 30-4181 Interference Condenser
 - 1 No. 30-4176 Interference Condenser
 - 1 No. 30-4307 Interference Condenser

- 1 No. 40-8080 Kit
 - 1 No. 7227 Fuse
 - 1 No. 27-7729 Insulator

- 1 No. 40-8086 Kit
 - 1 No. 29-2699 Clamp)
 - 2 No. W-1321 Wing Nuts) Control Mounting
 - 2 No. W-752 Lockwashers)

 - 2 No. 28-6161 "T" Bolts)
 - 2 No. W-518A Nuts)
 - 2 No. 28-2051 Washers) Set Mounting
 - 2 No. W-1406A Nuts)
 - 2 No. W-1444B Screws)

 - 1 No. 03334 Knob
 - 1 No. 36-3432 Cable Tow Strap

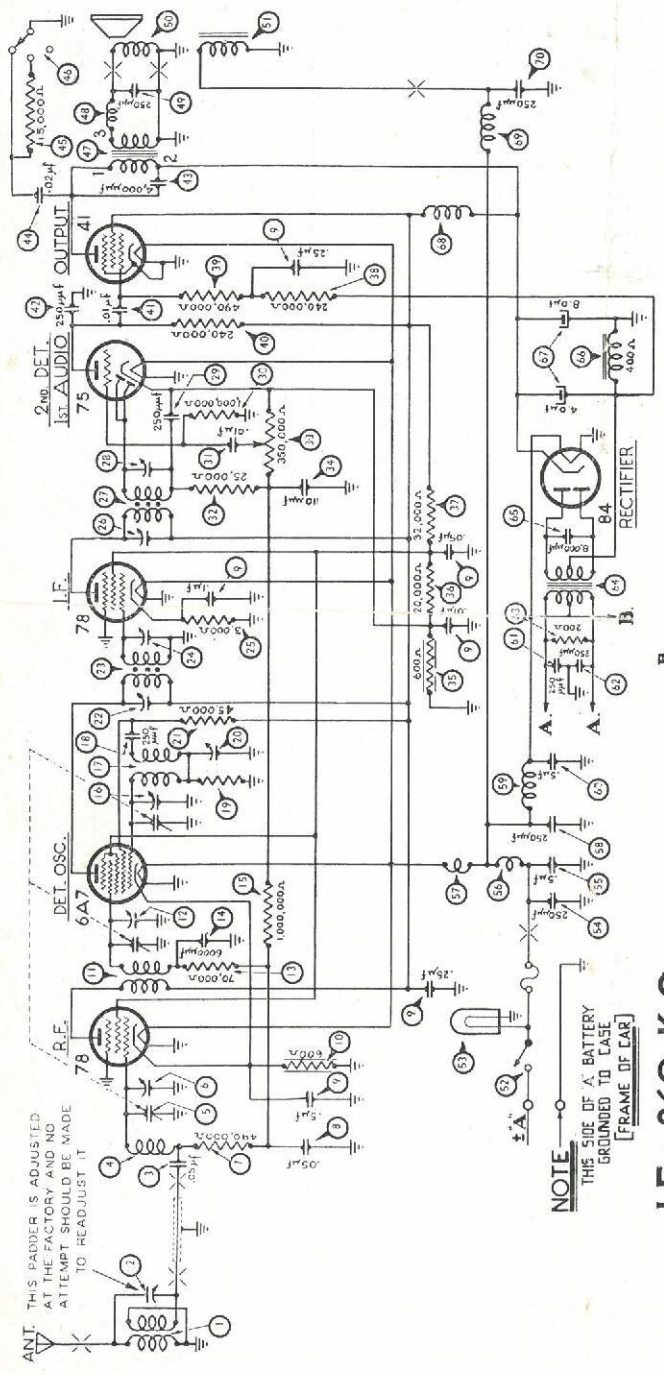


FIGURE 14

I.F. = 260 K.C.

NOTE
THIS SIDE OF 'A' BATTERY
GROUNDED TO CASE
[FRAME OF CAR]

MODEL F-1440—PARTS LIST

No.	Description	No.	Description
1	Roof antenna transformer	36	Resistor (20,000 ohms)
2	Padder	37	Resistor (32,000 ohms)
3	Condenser (.05 mfd.)	38	Resistor (210,000 ohms)
4	Receiver antenna transformer	39	Resistor (490,000 ohms)
5	Tuning condenser	40	Resistor (210,000 ohms)
6	First padder (on tun. cond.)	41	Condenser (.01 mfd.)
7	Resistor (480,000 ohms)	42	Condenser (250 mmfd.)
8	Condenser (.05 mfd.)	43	Condenser (4000 mmfd.)
9	Condenser (.01, .05, .1, .25, .25, .5 mfd.)	44	Resistor (15,000 ohms)
10	6 A. F. transformer	45	Output transformer
11	K. F. transformer	46	Choke
12	Second padder (on tun. cond.)	47	Condenser (250 mmfd.)
13	Resistor (70,000 ohms)	48	Cone & voice coil
14	Condenser (6000 mmfd.)	49	Field coil assembly
15	Resistor (1,000,000 ohms)	50	On & off switch
16	Third padder (on tun. cond.)	51	Resistor (600 ohms)
17	Oscillator transformer	52	Condenser (250 mmfd.)
18	Condenser (250 mmfd.)	53	Condenser (.5 mfd.)
19	Condenser (.5 mfd.)	54	Flame choke
20	"A" choke	55	Vibrator choke
21	Flame choke	56	Filter condenser
22	Condenser (250 mmfd.)	57	Filter choke
23	Vibrator choke	58	Choke
24	Condenser (.5 mfd.)	59	"P" choke
25	Condenser (250 mmfd.)	60	Choke
26	Resistor (2000 ohms)	61	Condenser (250 mmfd.)
27	Power transformer	62	Vibrator
28	Condenser (8000 mmfd.)		
29	Filter condenser		
30	Filter choke		
31	Choke		
32	"P" choke		
33	Choke		
34	Condenser (250 mmfd.)		
35	Vibrator		

MANUAL OF INSTALLATION



EAR LEVEL RECEPTION, TWO UNIT RADIO

with

CONCEALED HEADER BAR SPEAKER

For use only with

FORD ROTARY (*Reserve Power*) AERIAL

for

1937 FORD CARS

Manufactured for

FORD MOTOR COMPANY

DETROIT, MICHIGAN

By

PHILCO

PHILADELPHIA, PENNSYLVANIA

The New Ford Radio Receiver

SOLD EXCLUSIVELY BY FORD DEALERS

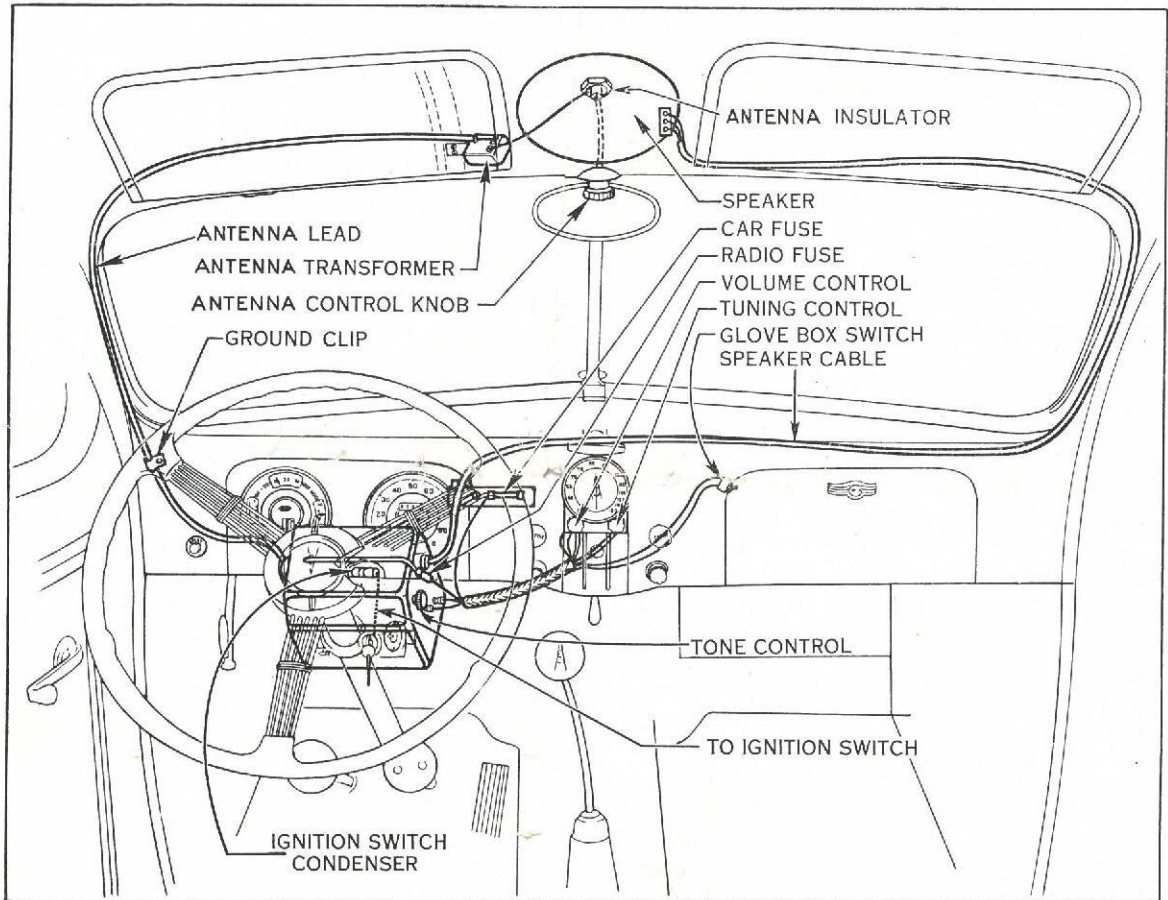


FIGURE 1

The New Ford Auto Radio Incorporates Advanced Principles of Tube and Circuit Design.

A totally new idea in sound distribution and music fidelity is built into the dynamic speaker concealed behind the header bar of the car, above the occupants' heads. Other features of the Receiver are — two unit construction with separate Flush-Type Speaker, highly developed

automatic volume control, and illuminated, custom-built, instrument board control, mounting in the opening in the instrument board above the ash receptacle.

The Receiver is mounted on the dash directly above the steering column, out of sight and out of the way. It does not interfere with the installation of a hot-air heater and does not restrict leg room.

Many Happy Miles With a Ford Auto Radio

Ford Radio Installation and Operating Instructions

Part No. 78-18805A and B

SOLD EXCLUSIVELY BY THE FORD MOTOR COMPANY

These instructions have been carefully prepared for your assistance in installing the 78-18805A Radio in the 1937 Ford cars. Read these instructions carefully in every detail before attempting an installation. For open and convertible cars, use the Open Car Radio, 78-18805B, as supplied by the Ford Motor Company and follow the instructions printed below, except those pertaining to the speaker location and installation.

AERIAL

A special aerial is provided for installation on the front of the roof on closed cars and on the top windshield bar on open cars. See the detailed and illustrated installation instructions packed with the aerial.

INSTRUMENT BOARD CONTROL

Remove the cover plate above the ash receptacle. This is held in place with flanges which can easily be bent back, thereby permitting the removal of the plate (See Fig. 2). Assemble the control head and shafts in this opening and fasten in place with the "U" clamp and wing nuts. Tighten the wing nuts until the flange on the control head is drawn up tightly against the front of the instrument board (See Fig. 3).

"A" LEAD

Install the glove box switch in the hole provided in the upper left corner of the glove box. Secure it in place with the nuts on the switch. Connect the "A" lead with the eyelet terminal to the hot side of the fuse block. After the Receiver is installed, insert the fuse and fuse insulator in the fuse housing and connect it to the Receiver "A" lead.

RADIO LOCATION AND INSTALLATION

The Receiver mounting hole locations are punch marked on the motor side of the dash. (Refer to Figure 4) for the exact location. Drill or punch two 7/16" holes in the dash and loosely assemble the "Tee" bolts as shown in (Figure 5). Install the Receiver above the steering column as shown in Figure 1. Hook the "Tee" bolts into the brackets on top of the Receiver. Tighten the Receiver securely in place.

After the aerial has been installed, connect the aerial lead to the aerial receptacle on the left side of the Receiver.

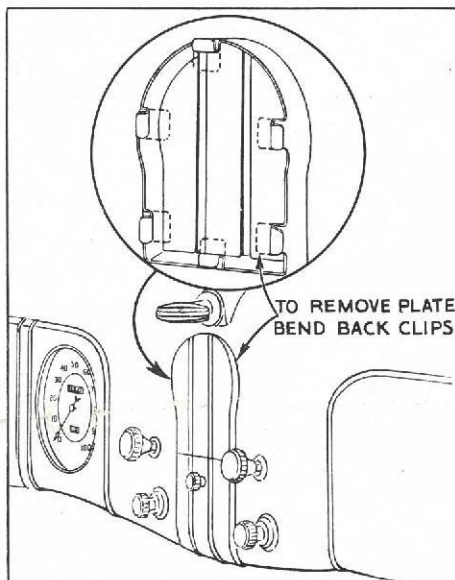


FIGURE 2

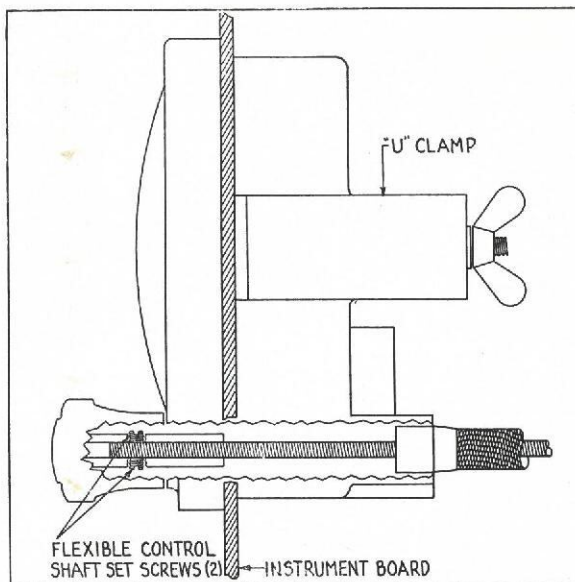


FIGURE 3

FLEXIBLE SHAFTS

With a small screw driver, turn the tuning condenser coupling in the Receiver (the one farthest from the dash) COUNTER CLOCKWISE as far as it will go. Set the control pointer at the low end of the scale (55). Then couple the flexible tuning control shaft in the tuning control bushing on the Receiver. Next couple the flexible volume control shaft to the Receiver.

Turn the volume control clockwise as far as it will go, then turn it counter-clockwise until the switch clicks "off" in the control head. This synchronizes the low point of the volume control with the "off" point in the switch.

After the shafts have been properly seated, the knurled shaft casing nuts must be securely tightened with the fingers.

SPEAKER LOCATION AND INSTALLATION

(See Fig. 6 and 7).

Mount the speaker on the back of the header where it is concealed by the header cloth. The header must be removed entirely to install the speaker. To do this:

- 1.—Loosen the rear vision mirror bracket.
- 2.—Remove the windshield wiper regulating knob.
- 3.—Loosen the windshield opening finish strip.
- 4.—Remove the four sheet metal screws which hold the header in place, one at each end and near the end.
- 5.—REMOVE THE PAPER INSERT FROM THE BACK OF THE CIRCULAR SPEAKER OPENING.

Hold the speaker in place with the four mounting holes lined up with the four holes provided in the supporting brackets. The terminal panel on the speaker must be to the right. Then fasten the speaker assembly with the self-threading screws. Figure 7 shows the details of the speaker installation assembly.

A fish cord for the speaker cable is tied to a roof brace. It can be seen behind the header bar and runs down the RIGHT pillar. A tow strap made of loose cotton braid is provided in the accessory kit. Enlarge the open end of the braid and tuck in the terminal end of the speaker cable. Fasten the fish cord to the loop on the tow strap and pull the speaker cable up the right-hand pillar and over to the speaker. Before replacing the header, install the aerial.

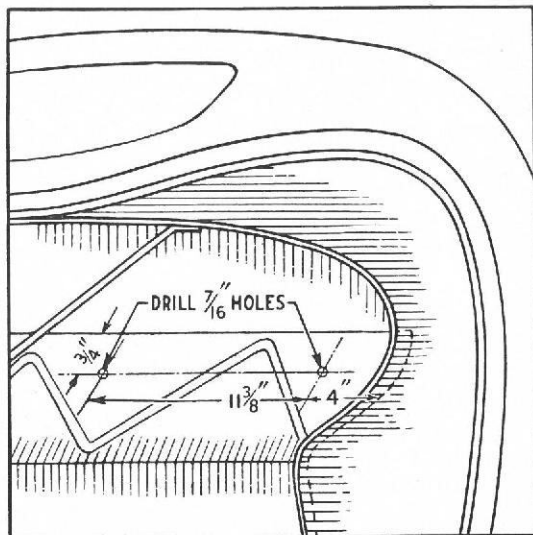


FIGURE 4

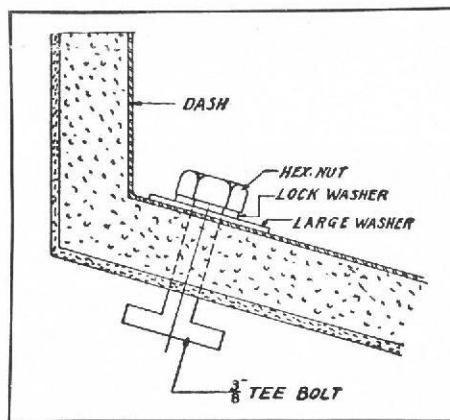


FIGURE 5

(See instructions in aerial package.) The colors of the speaker cable wires correspond to the colors on the speaker terminals to which they must be connected.

Replace the header and the wiper knob. Tighten all screws on the rear vision mirror and the windshield finish strip.

Connect the speaker plug in its receptacle on the right side of the Receiver housing.

DIAL ADJUSTMENT

The Receiver is calibrated in kilocycles with the last "0" omitted. Turn on the Receiver by rotating the left-hand knob in a clockwise direction. It will take a few moments for the tubes

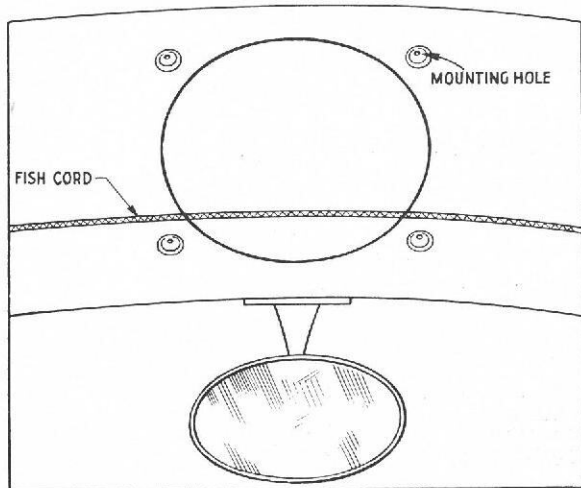


FIGURE 6

to heat up. Tune in a station of known frequency and remove the right-hand knob.

Loosen the set screws on the shaft under the knob until the pointer moves freely without affecting the tuning (See Fig. 3). Now turn the pointer to the frequency of the station which is tuned in. Tighten the set screws and replace the knob. Check the accuracy of the calibration on the other stations at different points on the dial and adjust further if necessary.

SPARK NOISE ELIMINATION

The following operations must be performed with the greatest care to insure freedom from ignition disturbance.

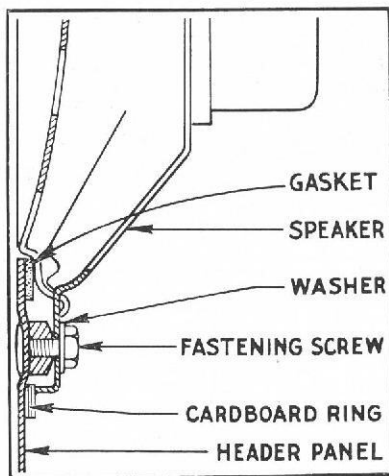


FIGURE 7

IGNITION SWITCH CONDENSER

Drill a hole in the flange of the instrument board just above the ignition switch and mount the interference condenser, Part No. 78-18827 (See Fig. 1). Connect the condenser lead to one of the terminals of the ignition switch.

GENERATOR INTERFERENCE

Remove the generator cut-out mounting screw and fasten the condenser (Part No. B-18827) 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).

OIL GAUGE INTERFERENCE

Connect an interference condenser, (Part No. 48-18823) to the oil gauge. Figure 9 shows the mounting and connection for the Model 60 car, while Figure 10 shows the details for the Model 85 car. On the latter, the condenser must be mounted on the dash under a screw holding the gas line to the dash.

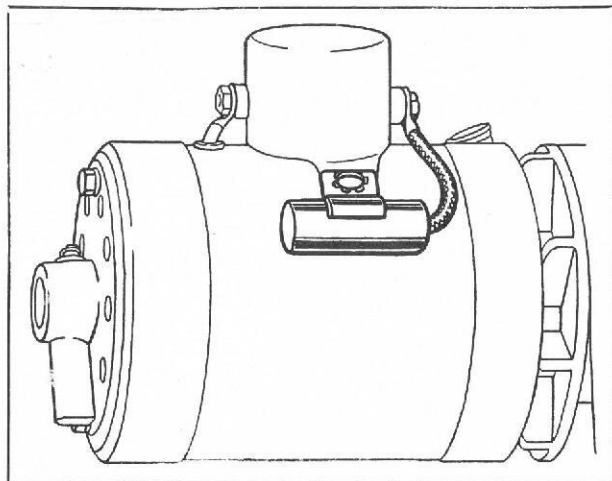


FIGURE 8

GAS GAUGE INTERFERENCE

Install the gasoline gauge condenser (Part No. 68-18871) with special bracket on the gas gauge as shown in Figure 11. It will be necessary to remove the spare wheel and the cover plate over the gauge before it is accessible.

OPERATING INSTRUCTIONS

The left hand knob on the control is a combination switch and volume control. After the radio switch has been turned on, turn the volume control knob clockwise. The first range

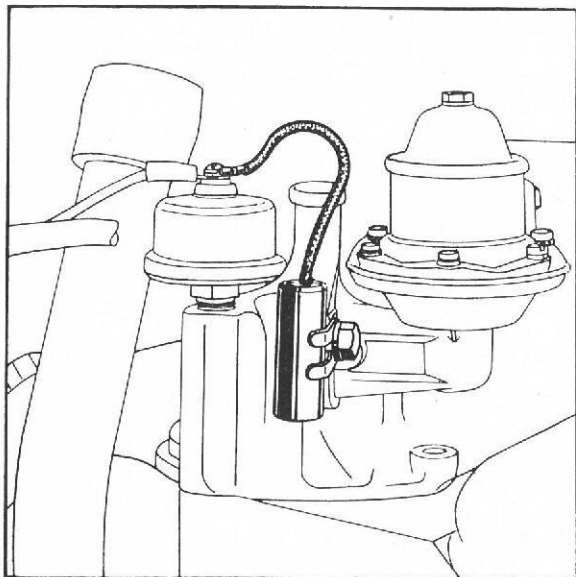


FIGURE 9

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 other 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 disturbances will be magnified.

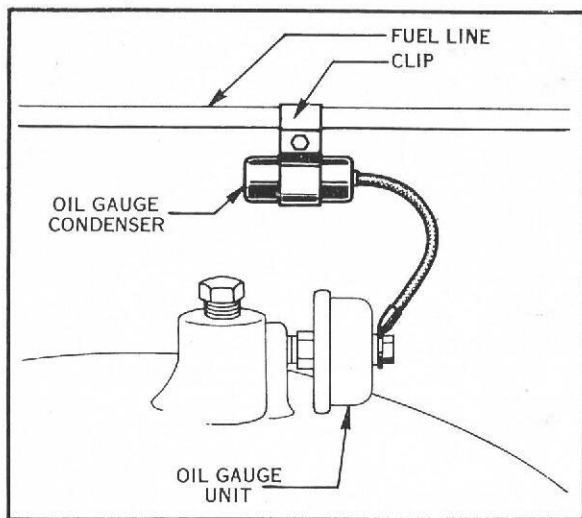


FIGURE 10

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.

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

The tone control knob is located on the right side of the Receiver. (See Figure 1). By adjusting this control, different degrees of high frequency response can be obtained. While listening through static or other interference noises, use the deepest tone setting.

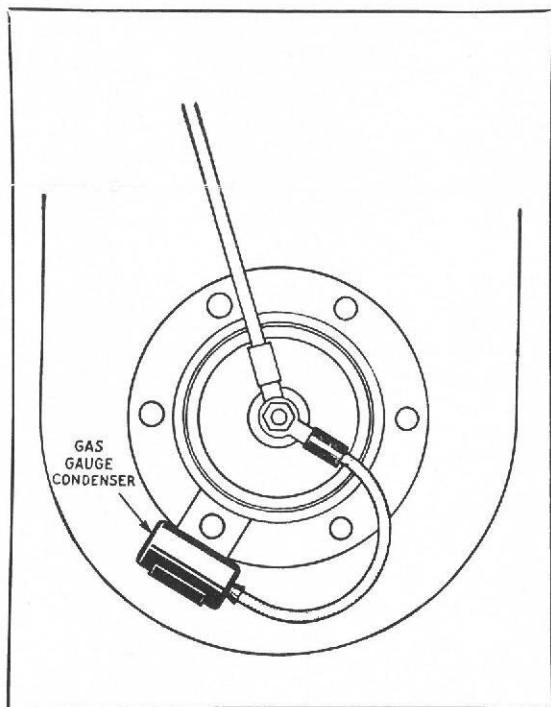
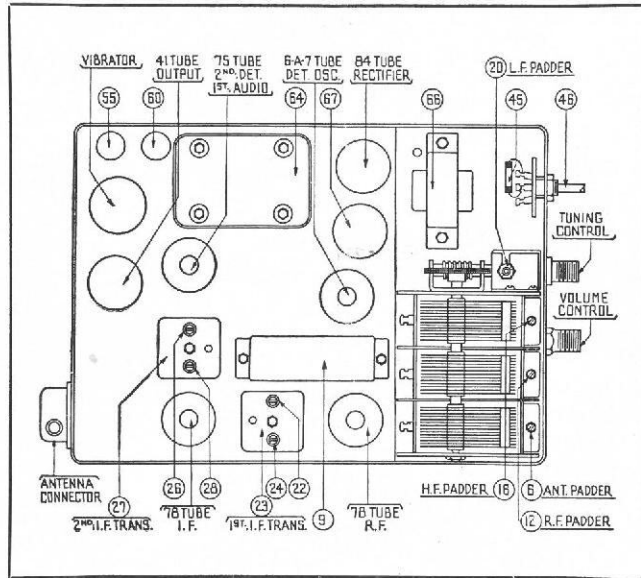


FIGURE 11

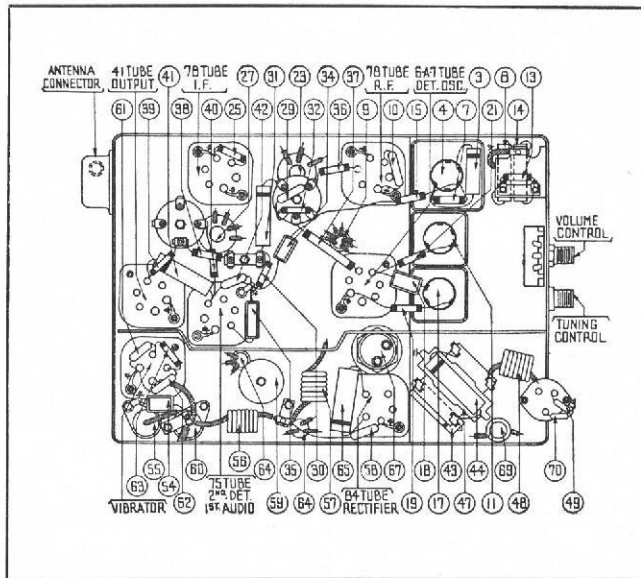
When turning off the Receiver, be sure the volume control (left hand) knob is turned counter-clockwise until a snap is heard and the dial light goes out. Otherwise the Receiver will continue to operate and discharge the battery.

The Receiver can be locked by turning off the radio operating switch in the right glove compartment and locking the compartment door.



View Showing Tube Locations

FIGURE 12



View Showing Base Arrangement

FIGURE 13

221.6
DVK0015441