

Horns

Should either or both horns become inoperative, or operate only intermittently, a thorough check should be made. First make sure the battery is charged sufficiently to crank the engine. If it is not, it must be recharged before the horn checks and adjustments can be made satisfactorily.

Clean and tighten all connections in the horn wiring circuit, including grounds. Look for frayed insulation or breaks in the wiring. If necessary, check for defective wiring by connecting separate test leads from the horn to the battery.

A loose connection or poor contact at the horn button may cause the horn to operate intermittently. Shunt around the horn button to determine whether there is poor contact at the horn-button switch.

If the above procedures do not locate the source of trouble, check and adjust the horn relay. This entails checking the point opening, the air gap and closing voltage, or low amperage circuit. Checks and adjustments of the air-gap and contact-points openings are made with the battery disconnected.

Adjusting a typical, seashell-type electric horn is not difficult. Remove the horn back shell and check for loose or broken

wiring or defective soldering. Make sure there is no dirt, metal shavings, or other foreign material in the air gap. Clean the air gap if necessary. Then insert a .007-in. gauge, not more than $\frac{1}{4}$ in. wide, between the adjustment nut and the contact blade. Loosen the locknut and turn the adjusting nut down until the horn will not blow. Back off the adjusting nut (slightly less than $\frac{1}{10}$ turn) and tighten the locknut. See if horn will blow. Repeat this procedure until the horn just barely blows. Then remove the gauge and replace the cover.

If it is found that a low place has been worn on the adjusting nut where the contact blade vibrates against it, either replace the nut or turn it over so that the worn place is on the top side. Otherwise, the worn portion of the nut may prevent obtaining perfect adjustment.

Occasionally a passenger-car horn gets "stuck" and blows continuously—frequently when the car is unoccupied. In most cases this is caused by a short circuit in the horn button, or the horn-button wiring.

It can be caused, however, by stuck contact points in the horn relay or other maladjustments. In such an emergency, the battery, or "hot," wire should be removed quickly from the center horn-relay terminal to disconnect horn from the battery.

Cutaway view of a horn. The electric horn is similar to an auto starter in that it is designed to operate under a terrific overload for short periods of time. Most horns are tuned to the musical notes E flat and G

