

nect the jumper lead to the "H" and "B" terminals of the relay and note the voltmeter reading.

If no voltmeter reading is obtained, the wiring between the relay and horn is open or the horn is not grounded. If the voltmeter reading is less than 7.0 volts, the trouble is due to high resistance connections in the wiring or a faulty horn. If the reading is above 7.0 volts, the trouble is due to a faulty horn which should be adjusted or replaced.

Horn Operates But Has Poor Tone

This condition may result from:

1. Low available voltage at the horn.
2. Horn in need of adjustment (See Adjustment).
3. Defects within the horn (Horn must be replaced).

Although the horn should blow at any voltage above 7.0 volts, a weak or poor tone may occur at operating voltages below 11 volts. If the horn has a weak or poor tone at an operating voltage of 11 volts or higher (even after adjustment) replace the horn.

Horn Operates Intermittently

This condition may result from:

1. Loose or intermittent connections in the horn relay or horn circuit.
2. Defective horn switch.
3. Defective horn relay.
4. Horn in need of adjustment (See Adjustment).
5. Defects within the horn.

Horn Operates Continuously

This condition may result from:

1. Relay sticking.
2. Horn button sticking.

HORN ADJUSTMENT

To check the current adjustment, connect an ammeter into the horn circuit at the horn terminal and measure the current draw at the horn while the horn is operating. Both horns should show a current draw of 7.0–11.0 amperes at 12.0 volts. If the current reading is not up to specifications turn the current adjusting screw (fig. 123) to raise or lower the current draw as required. The adjustment of this screw is very sensitive and requires only a fraction of a turn at a time before operating the horn to recheck the current adjustment. The ammeter will indicate an excessive flow of current if the horn internal windings are shorted or grounded, in which case the horn must be replaced.

HORN REPLACEMENT

1. Raise hood and disconnect wire from horn.
2. Remove screw retaining horn and bracket assembly.
3. Install new horn and bracket assembly.
4. Replace wires to horn connections and test for operation.

DIRECTIONAL SIGNAL

The turn signal lever and cancelling mechanism are located in turn signal housing adjacent to the steering wheel. The switch mechanism, operated by means of a bowden cable from the housing, is attached to the lower portion of the mast jacket. The switch adjusts itself automatically, eliminating any need for further adjustment.

Special note should be taken of the fact that two different directional signal flashers are used in the 1961 Chevrolet.

- A "two-bulb" flasher for use in Biscayne and Bel Air Passenger Cars and in Brookwood and Parkwood Station Wagons. This indicates that the flasher must operate only two bulbs, the front parking lamp and the tail lamp.
- A "three-bulb" flasher for use in Impala Passenger Cars and Nomad Station Wagons. In this case, the flasher must operate the front parking lamp and two tail lamps for a total of three bulbs.

Adjustments

The direction signal switch requires no adjustments

due to its simplicity of design. However, if any malfunction of this mechanism should occur, the steering wheel may be removed and the mechanism checked for defective parts. Any defective parts should be replaced.

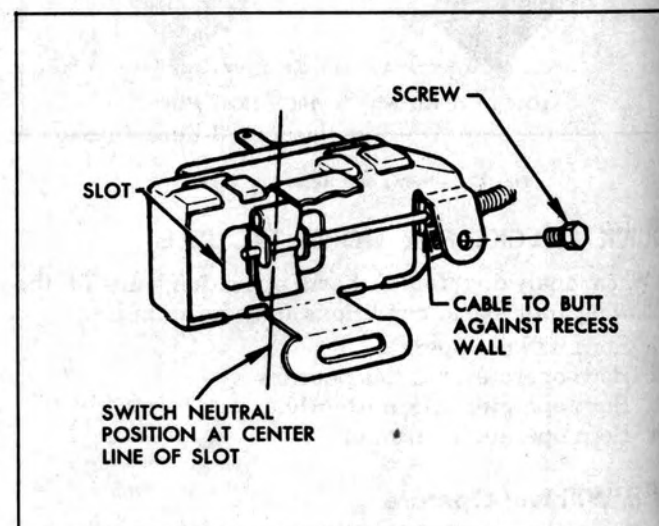


Fig. 125—Direction Signal Switch

DIRECTION SIGNAL DIAGNOSIS

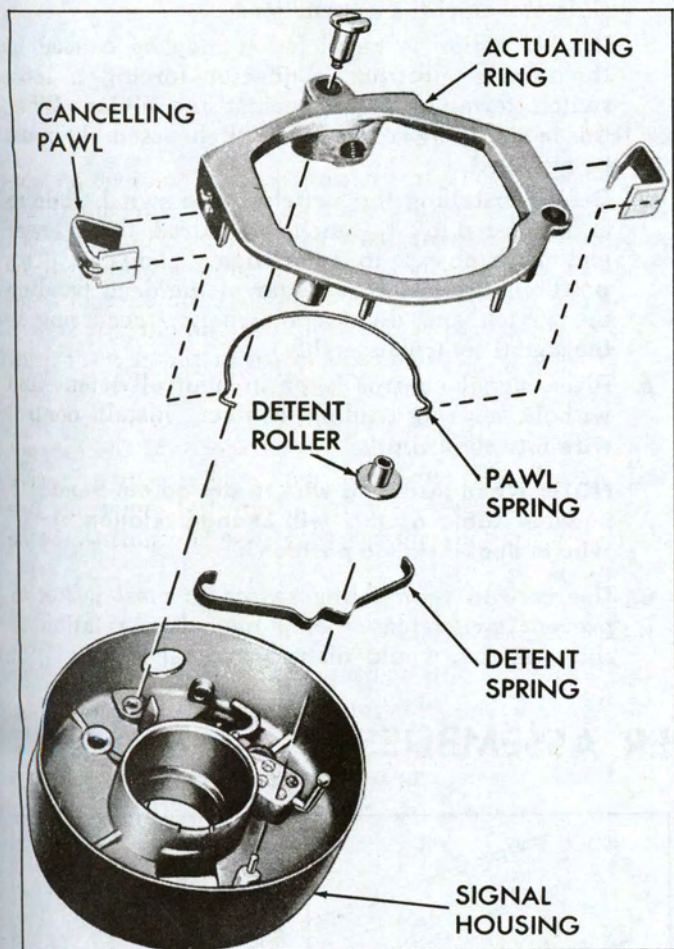


Fig. 126—Direction Signal Cancelling Mechanism Exploded

● **Trouble:**

When signalling a turn, the indicator light comes on but does not flash.

Correction:

1. Check for burned out parking or tail lamp on that side.
2. Check for the wrong flasher (3-bulb instead of 2-bulb flasher).

● **Trouble:**

When signalling a turn, the indicator light operation is very rapid.

Correction:

Check for the wrong flasher (2-bulb instead of a 3-bulb flasher).

● **Trouble:**

When signalling a turn either

1. Both turn indicators come on and stay on.

2. Neither turn indicator comes on.

3. In either case no "clicking" is heard.

Correction:

Replace the flasher. Be sure to replace with the same type flasher removed (2-bulb or 3-bulb flasher). Always replace with a series type flasher. Magnetic type flashers are not recommended.

● **Trouble:**

When signalling a turn, a "clicking" is heard but the indicator light does not flash.

Correction:

Replace the indicator bulb.

● **Trouble:**

Cancelling prong on steering wheel will not cancel the control lever.

Correction:

Remove steering wheel and bend cancelling prong on wheel assembly so that it stands perpendicular to the hub of the wheel. Do not "over bend" the prong as this will lead to an objectionable clicking sound when the turn signal lever is in the neutral position. Use care in replacing the wheel so that the prongs do not strike the steering shaft on assembly. Have T.S. control in neutral for assembly.

● **Trouble:**

Turn signal will not cancel, usually only in one direction.

Correction:

Replacement of the cancelling pawl is the best fix.

● **Trouble:**

Turn signal cancelling is erratic and may or may not cancel on turns in either direction.

Correction:

This condition is usually due to the actuating ring pivot pin becoming loose in the housing. The pin is screwed into the housing and if it loosens, the actuating ring is free to move out of the path of the cancelling cam prongs. If the pin is loose in the housing, check for lockwasher under actuating ring.

● **Trouble:**

Horn blows on turns while direction signals are operating.

Correction:

This could be the result of interference between a turn signal cancelling pawl and the horn connector assembly (spring loaded horn contact), which would ground the horn circuit. Pawl interference is probably caused by the actuating ring pivot pin either being loose, or pressed too shallow in the signal housing—correction explained earlier. If pressing the pivot pin to specified depth does not stop horn blowing, it will be necessary to lightly grind the top of the offending pawl to obtain clearance.

● **Trouble:**

Flashing and cancelling of lights is erratic.

● **Correction:**

This condition usually results from the turn signal switch either being damaged or out of adjustment and can be eliminated by performing the checks and adjustments outlined below:

1. Remove screws holding switch case to mast jacket.
2. Remove control wire from spring clip on switch sliding contact.

3. With the electrical lead still connected to the switch, check travel of switch slide to assure that slide movement is unrestricted.

If slide action is restricted it may be caused by the female electrical connector forcing a loose switch terminal blade against the slider. When this condition occurs, the switch assembly must be replaced.

4. Before installing the switch, move switch slide to a dimension of $\frac{1}{16}$ inch, measured from lower end of switch case to lower edge of slide clip. (This positions the slider at center of the dead band on the switch and divides lost motion occurring in the signal control assembly).
5. Place signal control lever in neutral detent and without moving sliding contact, install control wire into slide clip.

NOTE: When installing wire to clip do not bend Bowden cable as this will change relation of wire in final installed position.

6. Use care in remounting switch to mast jacket to prevent switch case being moved in relation to slide, as this would disturb neutral setting.

WINDSHIELD WIPER ASSEMBLIES

Two different types of windshield wipers may be encountered in the 1961 Chevrolet. They are:

1. The regular production single-speed electric wiper.
2. An optional 2-speed wiper.

Both wipers are powered by a 12 volt electric motor and have auxiliary drive assembly with link driven wiper transmissions. Both wiper motor driving mechanisms rotate through 360° during normal operation. The single speed wiper employs a set of electrical contacts (parking switch contacts) to stop the wiper blades at the bottom of their downward stroke, while the 2-speed wiper makes use of a "reverse action" to park the blades against the windshield lower molding when the wiper motor is turned off.

The single-speed wiper installation shown in Figure 127 is typical of both wipers.

Windshield Wiper Motor Assembly

Removal and Installation

1. Make certain motor is in parked position.
2. Remove screw attaching each windshield washer nozzle, pull hose free from nozzle and remove nozzle.
3. Remove shroud ventilator grille.
4. Remove screw securing ground strap to body metal and disengage electrical connectors from motor. If present remove washer hoses from motor assembly. Mark hoses to insure correct installation.

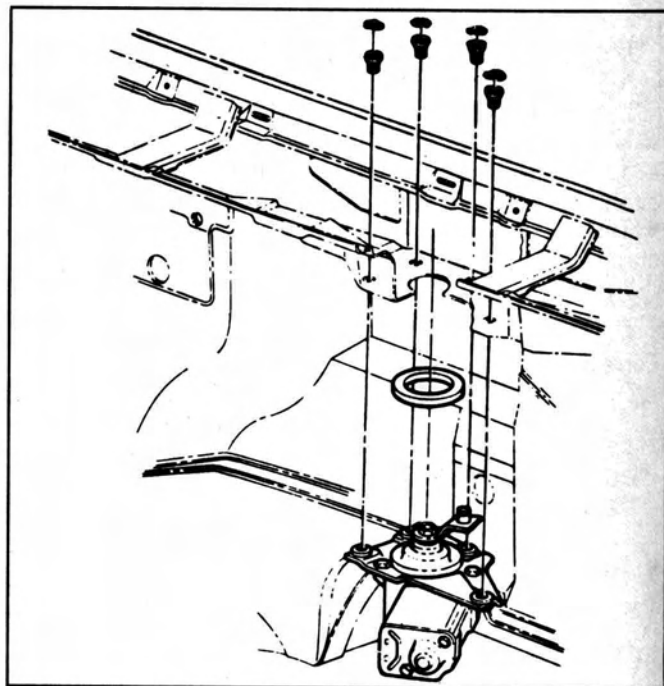


Fig. 127—Windshield Wiper Mounting

5. Inside plenum chamber, remove retainer securing drive linkages to motor assembly and disengage drive linkages from motor.
6. Remove four (4) screws and lock washer assemblies, Figure 127, securing motor assembly