Switches

Mechanical switches, with the exception of the direction-signal switch, do not lend themselves to maintenance and repair. Any motorist, however, can insure more trouble-free operation by occasionally checking mechanical switches on his car for loose or corroded contacts and freedom of moving parts. Mechanical stop-light switches which are exposed to road splash, for instance, are especially likely to stick or freeze in the closed position.

Direction-signal switches vary considerably in design and construction. In case of failure or improper operation, such switches should be checked exactly according to the manufacturer's instructions or turned over to an experienced automotive electrician.

The most important adjustment concerning the solenoid switch is correct cranking-motor pinion clearance. To be done right, it must be made with the starter taken off the engine and clamped in a vise. Adjustment of pinion clearance is required whenever the starter has been dismantled and reassembled, or whenever the solenoid has been removed or replaced.

Testing headlight switch: If headlights on a car are dim, even when the battery is fully charged, and it is suspected that there is a voltage drop somewhere in the lighting circuit, here's one way to locate the possible source of trouble. Make a testing instrument by attaching a battery clip to one end of a length of No. 14 insulated wire and a test prod to the other end. When it is dark — or in a darkened space — turn the lights on a screen or white wall. Fasten the clip to the positive terminal and force the prod through the insulation at a point near the light. If the light becomes noticeably brighter, the voltage loss is probably in a switch, which may need replacing. If the lights remain dim, the ground circuit of the headlight connections may be the cause of the trouble and should be checked.

Fuses: If fuses blow mysteriously in your car, the trouble may be due to loose and corroded fuse clips. To correct this, wrap a piece of fine sandpaper around a fuse and rotate it gently in the clips. Then bend the clips inward in order to increase their tension.

Increasing headlight power: If you want more light than usual from the high beams of the sealed-beam headlights, this can be done easily. Connect a jumper from the battery terminal of the foot switch to the low-beam terminal of the dashboard switch. With the jumper in place, the low beam turns on with the dash switch and remains on until the switch is turned off. Thus, when the high beams are turned on with the hi-lo switch, the low beams remain on, adding their strength to the light thrown by the high beams.

Lighting circuit: The lighting circuit almost always starts at the positive side of the ignition and lighting switch and therefore circuits are traced from that point.

Common troubles found in lighting circuits, include open circuits, grounds, short circuits, poor connections, burned-out bulbs and blown fuses.

A few of the specialized mechanical switches built for cars having automatic transmissions. Three switches control accessories and safety devices such as stop lights, neutral safety feature and turn signals