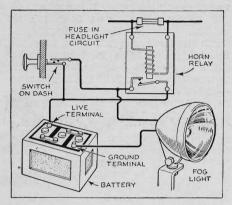
# Timely Tricks for Car Owners

## Novel Switch Controls Car's Driving Lights

DRIVERS frequenting unlighted roads at night can hook up a spotlight or an emergency fog light so that it will go on automatically in case anything happens to blow out the headlight fuse. As shown in the diagram, the circuit employs a horn relay in such a way that the wiring for emergency use does not interfere with the normal operation of the spotlight or fog light.—G. R. B.



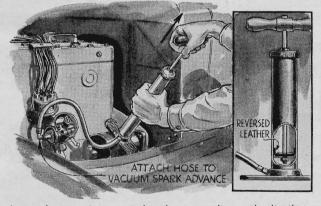
How relay is wired to operate the safety light



brush, drill a few small holes in a short length of pipe. Then cut a number of disks from an old inner tube and slip them over the pipe, as shown. A pipe cap and a nut will hold them in place. When the brush is attached

to a hose, water seeps through the pipe perforations of the attachment, washing away dirt loosened by the rubber disks.—A. H. W.

### Hand Pump Tests Automatic-Spark Adjustment

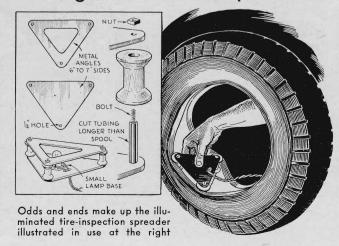


In use, the pump is connected to the vacuum line on the distributor

TO PROVIDE suction for checking the adjustment of an automatic, vacuum-operated spark advance on the distributor of a car, an ordinary tire pump can be used. Remove the ball check valve from the base of the pump and reverse the position of the leather washer. Then when the handle is drawn upward, air will be sucked into the pump hose, creating a vacuum.

#### Spreader With Light Aids Tire Inspection

EXAMINING the inside of a punctured tire is made easier by the illuminated spreader shown. Two metal triangles are joined at each corner by metal tubes covered with wooden spools that are free to revolve. miniature electric-bulb base is mounted in the center of one triangle, while the center of the opposite triangle is cut away. Wired to an electric outlet, the spreader is used as indicated.



# The gauge can be attached to the thermostat

#### Extra Gauge on Motor Shows Radiator Level

A GLASS gauge connected to the thermostat on my car makes it easy to determine the water level in the radiator. Tapping out the boss on the thermostat casing, I inserted the sight glass and fitted it with a quarter-inch petcock, which is kept closed, of course, while the motor is running. When the petcock is opened, the glass tube shows the water level in the radiator.—E. W. C.

#### Clutch Operates Horn

CONNECTED to a horn terminal, an insulated bolt placed in a car floorboard contacts the grounded clutch pedal when the latter is fully depressed in an emergency stop, completing the circuit.

