

SHORT CUTS *for* Auto Jobs

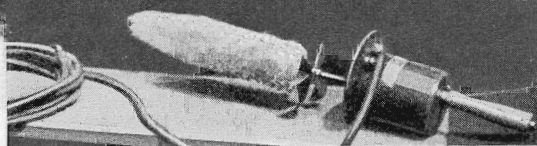
*Homemade Brush and Blower Clean Motor Quickly . . .
Sliding Windows Can Be Put in Open Car Curtains*



ODD CLEANING TOOL IS EASILY MADE

Blower and brush, below, made of scrap parts, are driven by a horn motor and used, as shown at left, to clean around spark plugs and wiring on the engine

MADE from scrap parts, the motor-driven brush, with blower, shown above is an inexpensive timesaver for cleaning an automobile engine. The blades from a discarded electric fan of the midget type are mounted on the wire shank of a spoke brush from which the wooden handle has been removed. By means of a loop, a right-angle bend, and some solder, the end of the wire shank is then attached to the threaded end of the armature of a motor from an old horn. The handle taken from the spoke brush forms a convenient grip when attached to the rear of the horn motor housing. It is connected to the car battery by means of a suitable length of lamp cord.



the rear axle and under the shaft tube in the manner indicated in Fig. 2, the long overhanging portion of the plank will counterbalance the shaft and leave the hands free to do the guiding.

Measure the Toe-in

BY CLAMPING a small, slide caliper rule to one end of a U-shaped wooden frame similar to that illustrated in Fig. 3, you can make a useful gage for testing the toe-in or "gather" of the front wheels on your car.

The short horizontal members of the wooden frame should be located so that they are in the horizontal plane of the front axle when the gage is in place. To use the gage, place the frame between the rims at the front of the wheels and clamp the caliper in place in such a way that the head touches the rim when the slide is closed. Next, move the assembled gage to a corresponding position at the back of the wheels and open the caliper until the head touches the rim. The reading will be an

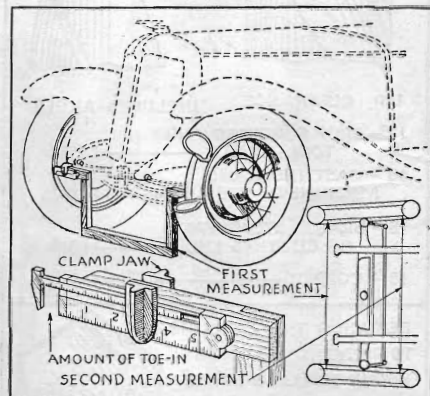


Fig. 3. By clamping a slide caliper to end of a U-shaped wooden frame, you have a gage that can be used to test the toe-in of front wheels

accurate measure of the toe-in. The proper value for your particular car can be obtained from the general instruction booklet issued by the manufacturer.

Twin Guide Mirrors

TWIN mirrors fastened to the rear wall of a one-car garage will aid the driver when he backs the car through the narrow doorway. The mirrors, placed about ten inches from the side walls as

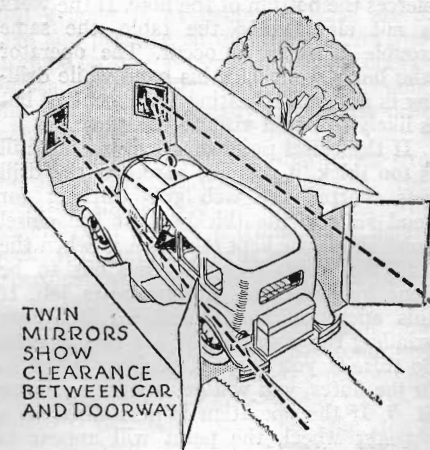


Fig. 4. Two mirrors, placed near the side walls of a small garage, guide driver in backing out

in Fig. 4, should be adjusted so the driver can see the back fenders on each side. By looking first at one mirror and then at the other, it is a simple matter to keep the car centered in the doorway. The mirrors should be large enough to give a good view of the fenders and each side of the car. Suitable mirrors can be purchased in most five-and-ten-cent stores. Adjust each mirror by having someone hold it at various angles while you check the view from the driver's seat.

Windows for Open Car

RIGID sliding glass windows can be easily installed in the side curtains of an open car. The wood frame, shown in Fig. 1 consists of four pieces, each having two 3/16-in. grooves to receive the two glass panels. The top and bottom pieces and one end of the frame should be fastened in place first, the stationary and movable windows slid in, and then the remaining side attached. The front glass can be held in place with cement.

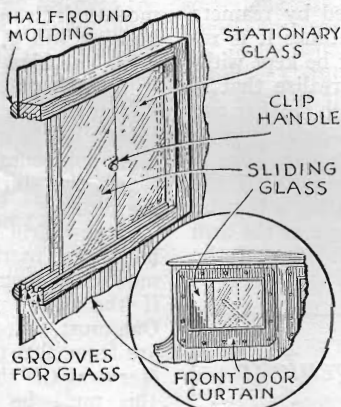


Fig. 1. Wooden frame set in curtains of open car can be fitted with glass windows that will open by sliding

Drive Shaft Tube

WHEN assembling the rear end of a car after repairs have been made, it is usually quite difficult to lift the drive shaft tube and at the same time guide the end of the shaft into place. However, if a long plank is placed over

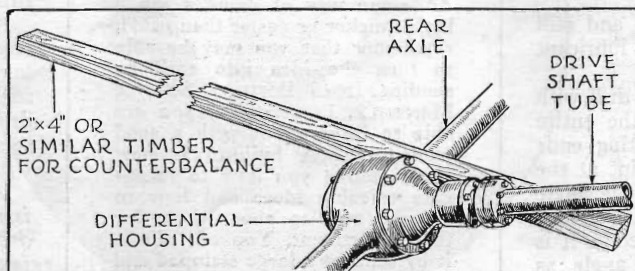


Fig. 2. A long plank is placed over the rear axle and beneath the drive shaft tube, to raise tube so the drive shaft can be guided home