

Novel Kinks to Use on a Car

Shellac as a cure for leaky gas tank —How to make arm rest for driver—Simple device to test valves

ALTHOUGH the driving position in modern motor cars is far more comfortable in many ways than it was in older type vehicles, few make provision for an arm rest for the driver. Figure 1 shows a simple arm rest designed to hook over the window regulator of the door at the driver's side. It consists of a sheet iron bracket to which is attached a padded wooden strip to form the arm rest. The length of the bracket and the dimensions of the arm rest must, of course, be arranged to suit the car.

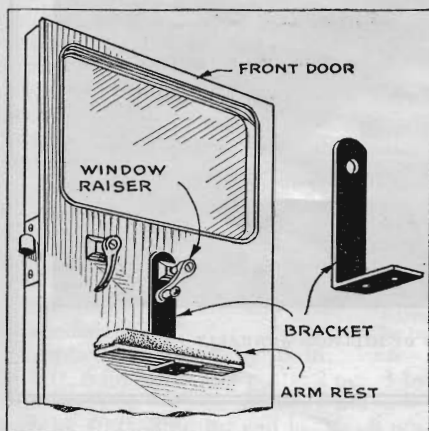


Fig. 1. A sheet iron bracket with padded wooden strip hooks on door to form driver's arm rest.

SIMPLE VALVE TESTER

WHILE there are excellent gages now being made for testing the tightness of a valve after grinding, the amateur auto mechanic can satisfactorily test valves after grinding by the arrangement shown in Figure 2. An ordinary thin rubber ball is cut in two very carefully so as to leave a clean edge. The valve is held off its seat while the inverted half of the ball is placed over it and squashed down. Then the valve is held tightly against the seat. If the valve is tight, the half ball cannot resume its shape.

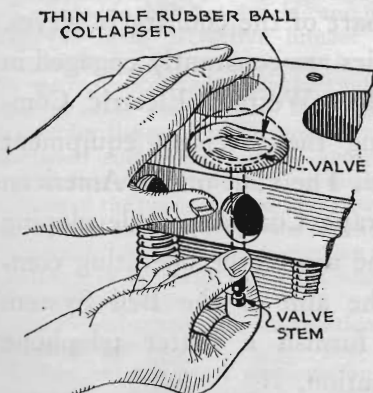


Fig. 2. Ordinary thin rubber ball can be used as satisfactory engine valve tester.



Draining the gas tank, letting it stand until dry, and then coating with shellac stops leaks.

LEAKING GAS TANKS

OCCASIONALLY a gasoline tank develops a leak caused by a tiny opening in the seam or around one of the pipe connections. It often is possible to avoid soldering by draining the tank and allowing it to stand several days until it is completely dry. Then openings are plugged and a quart of shellac is poured in. The tank should be shaken so that the shellac will reach every part of the inner surface. Then the shellac is poured out again and the tank allowed to stand in the garage for several days until the shellac dries.

Difficulty may be encountered if the tank contained low grade gasoline. Such gasoline often contains enough kerosene-like material that it will not completely evaporate. Instead an oily film is left which will prevent the shellac from sticking to the metal. In such cases wash out the empty tank with high test gasoline.

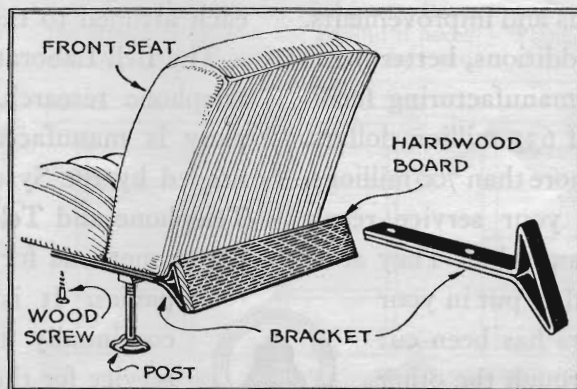


Fig. 3. Angle iron brackets, supporting hard wood board and attached to front seat, make foot rest.

FOOT REST FOR COACHES

IN MANY coaches the passengers on the rear seat are placed so far forward that there is a natural tendency to rest the feet against the backs of the front seats with decidedly bad effects on the upholstery. Figure 3 shows how to construct a simple foot rest that can be applied to each front seat to save the upholstery. Angle iron brackets are bent up as shown and attached by wooden screws to the bottom of the seat and the hardwood board attached to the brackets. This can be covered with rubber matting, if desired.

EXTENSION FOR JACK

FIGURE 4 shows a way to form a drop extension out of a heavy piece of strap iron. This drop extension will prove extremely useful in cases where it is necessary to get under the axle when the jack itself is too high. Do not attempt to make the drop extension out of light strap iron. The steel must be so thick that there will be no chance of the weight bending the lower angle and permitting the axle to slip.

The base area of many types of jacks is neither wide enough or long enough. They work well on hard surfaces, but are quite likely to tip over if an attempt is made to use them on sand or soft ground. This is particularly true when an extension is used. It is, therefore, desirable to fit an extra base to the jack as shown.

POPULAR SCIENCE MONTHLY awards each month a prize of \$10, in addition to regular space rates, for the best idea sent in for motorists. This month's prize goes to H. W. Swope, Danville, Pa., for his suggestion for repairing leaky auto gas tanks (shown and described in column two).

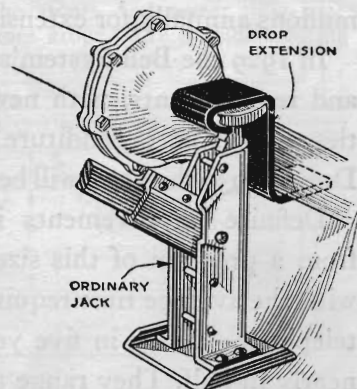


Fig. 4. Heavy strap iron is bent to make drop extension for jack.