

SATISFIED CUSTOMERS

What is a satisfied customer?

A satisfied customer is one whose car performs well, rides comfortably, looks attractive, is safe to drive and economical to operate.

What can be done to get and hold satisfied customers?

There is no substitute for good work. Nothing will get and hold customers like doing each job properly. This means diagnosing correctly, doing the job right, testing and inspecting thoroughly and delivering on time.

That is Packard Service in a nut shell; however, there are some other things customers like, and they are just as much a part of service as good mechanical work. They are:

PROMPT attention—let the customer know you are aware of him. If you are busy, tell him you will be with him just as soon as possible.

COURTEOUS attention—discourtesy is a war time hangover and can be eliminated. Never run down a competitive product or service.

Learn and use customers names and always thank them for their business.

CLEAN service—next to courtesy, this is very important. It applies to the service sales area—the shop, the waiting room and the rest rooms.

ATTENTIVE service—listen to the customers' tale of woe. He will feel better for telling it, providing you listen carefully and it will help you with the diagnosis. Remember, to most customers, going to a service station is much like going to a dentist. He is not in too pleasant a frame of mind. Handle him accordingly. Not every customer has a chip on his shoulder. Assume that no one is going to ask for anything unreasonable; it saves lots of arguments.

COMPLETE service—sell customers not only what he came in to buy but what a careful examination shows he needs. Always explain why he needs the work and what improvement he can expect. Use instruments wherever possible for diagnosing. They will impress the customer with the accuracy and care of your inspection and help sell him on the need for the work.

FRONT SPRING SNAP

21st SERIES

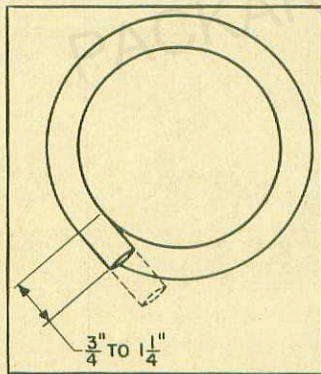
You may have an occasional complaint of a "grunt" or snap in the front end of a Clipper. If this noise seems to be in the springs, it probably is caused by improper seating of front springs in their recess in the lower wheel support arms.

Inspection can be easily made from under the car by checking the position of the end of the spring. If properly seated, the lower end of the spring will be as far down in the lower support arm spring recess as it will go and will cover the drain hole.

If the spring end does not cover the drain hole, it should be rotated into the proper position. The quickest way to do this is to disconnect the inner end of the wheel support arm to take the load off the spring. The load also could be removed by disconnecting the shock absorber arm from the vertical wheel support, but this method is not suggested as it necessitates resetting of caster and camber.

In some instances it may be impossible to seat the spring properly. It then becomes necessary to remove the spring and check its lower end.

The lower end of the spring should not follow the circle of the coil. The last inch of spring should be straight and approximately one half the diameter of the wire should project beyond the outside diameter of the coil as show in the illustration. If the straight portion of the spring is too long the end of the spring may protrude too far and rub against the recess in the support arm. This condition can be corrected by replacing the spring or by grinding off the straight section to a point where only half the diameter of the wire projects outside the outer diameter of the coil.



Defective springs may be returned to Zones for credit during warranty period. Use the regular Request for Parts Adjustment Form.

A credit for 0.6 hour labor at $\frac{1}{2}$ the Dealer's registered customer labor rate will be allowed when a spring is replaced during warranty period. Use Request for Labor Allowance Form.

HARD STARTING OF HOT ENGINE

21st SERIES

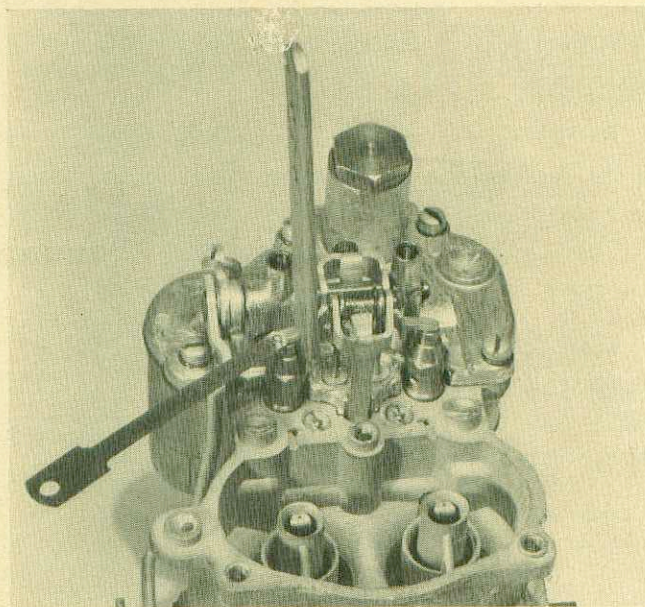
There have been a few reports from the field of hard starting when the engine is hot. This condition is likely to be caused by the "anti-percolator valves" not operating properly, or not properly adjusted. Before attempting to adjust the anti-percolator valves be sure the linkage is operating freely and the plugs are not loose in the carburetor body casting.

Anti-Percolator Adjustment: Carter WA-1 Carburetor used on Packard Clipper Six:

Open throttle valve .030", measured by placing gauge T109-29 (or .030" feeler) between valve and bore of carburetor on the side opposite idle ports.

Bend anti-percolator rocker arm using tool T109-105 until there is a clearance of .005" to .015" between rocker arm and accelerating pump arm.

Anti-Percolator Adjustment: Carter WDO Carburetor used on the Packard Clipper Eight and Super Clipper:



Turn out the idle speed screw so the throttle valves seat tightly in the bores of the carburetor. With the throttle valves tightly closed, insert a .015" feeler (gauge T109-72) between the anti-percolator valve stem and the lip on anti-percolator arm. Bend the lip so the center of scribed indicator line on valve stem is just flush with top of anti-percolator plug. Re-

peat the procedure on the other anti-percolator valve. Be sure an even adjustment is made on both anti-percolator arm lips.

To be sure hard starting of a hot engine is corrected, check the choke unloader for proper operation and the float for correct level.

A hot engine will start more readily with the throttle wide open.

CORRECTION

REMOVING WHEEL SUPPORT BUSHING BOLT

Vol. 20, No. 6, June 1946

In the Service Counselor, Vol. 20, No. 6 dated June 1946, it was stated that the "Vulcan" clamps used for making the wheel support bushing bolt extractor were obtainable from J. H. Williams & Co. of Buffalo, New York. This statement is in error since we have been informed that J. H. Williams & Co. will not ship direct. Clamps are obtainable only through local jobbers and dealers handling the J. H. Williams & Co. products.

STICKING HEAT CONTROL VALVES

2100 and 2101 SERIES

Stainless steel bushings are now used in the exhaust manifold of 2100 and 2101 Series cars to carry the heat control valve shaft. These new bushings reduce corrosion of the heat control valve and shaft and consequent danger of sticking valves.

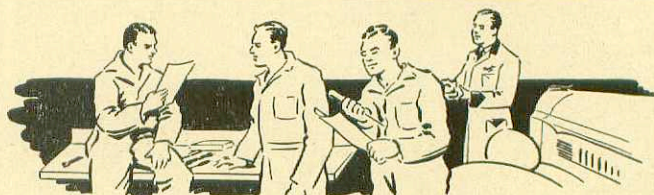
These bushings, manufactured from a special stainless steel are identical with those in the Super Eight which have proved very satisfactory.

Some early 2100 and 2101 Series cars did not have adequate minimum clearance between the bushings and the valve shaft and instances of sticking have been reported.

Current specifications call for a minimum clearance of .007 inch between the bushings and the shaft. If you are called upon to correct a sticking heat control valve in an early 2100 or 2101 Series car, the clearance may be brought up to current specifications by disassembling the exhaust manifold and increasing the inside diameter of the bushings from .376 to .382 inch with a $\frac{3}{8}$ -inch expansion reamer.

"QUIZ TEST"

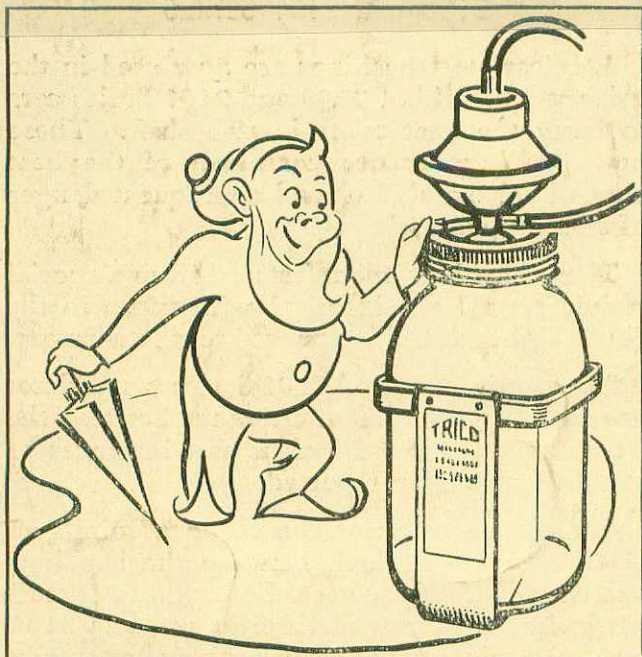
**HOW MANY DO YOU KNOW—
without looking at the answers?**



1. A firmer ride and reduced rear wheel bounce can be accomplished by:
(a) decreasing the number of Silenite inserts in the rear springs. ☐
(b) installing a new set of Silenite inserts. ☐ (c) lubricating the spring leaves. ☐
(d) replacing the innermost pair of rubber inserts of each spring with Silenite inserts. ☐
(e) installing more antimony lead inserts. ☐
2. Irregular tire wear, such as; flat spots, cups, gouges, and wavy wear can be caused by:
(a) static unbalance of wheels. ☐ (b) out of round brake drums. ☐
(c) worn pivot pins and bushings of the upper and lower support arms. ☐
(d) worn steering knuckle pins and bushings. ☐ (e) worn steering rod ball sockets. ☐
3. Any area on the chassis underneath an engine that is washed clean with oil indicates that:
(a) the engine has been operated too fast. ☐ (b) the oil in the crankcase is too thin. ☐
(c) there is an external oil leak in front of the washed area. ☐
(d) the piston rings are not the correct type. ☐
(e) the wrong type of lubricant is used in the steering rods. ☐
4. Water vapor coming from the tail pipe during the engine warm-up period is caused by:
(a) water in the gasoline. ☐ (b) sweating of the cylinder. ☐
(c) using a poor grade of gasoline. ☐ (d) water produced in the burning of gasoline and air. ☐

For Answers, See Back Page.

AUTOMATIC WINDSHIELD WASHER



Automatic Windshield Washers are now available for installation on 1946 Clippers. They are packed one to a carton complete with attaching parts and instructions for installing.

This device provides clear vision for all weather since it permits cleaning the windshield while the car is being driven. It is particularly appreciated for night driving and is a real driving aid. A touch of the button and a few swings of the wiper blades removes road spray, bugs, dust, and grime from the windshield.

For Prices see P & A Bulletin 46P-40 Dealer 26.

See Parts & Accessory Bulletin 46-P65 Dealer 45 for announcement of Windshield Washer Solvent Winter Mixture to take care of this equipment during the winter months.

FACTORY WAREHOUSE CLOSED FOR INVENTORY

The Factory Parts Warehouse will be closed for inventory from November 18 to November 30, 1946. Stock orders received as of November 11 will be filled as far as possible and shipments will be resumed on December 2.

QUIZ QUESTION ANSWERS

1. ANSWER: (b) and (d) Many complaints of soft rear springs or rear wheel bounce can be very easily corrected. If the rear spring leaves have been lubricated, it is most likely that the rubber and Silenite inserts are damaged. Damaged or worn inserts should be replaced. When a firmer ride is desired, the innermost pair of rubber inserts in each spring may be replaced with Silenite. Silenite provides enough friction between the leaves to provide a firm ride, and reduces the rebound which causes rear wheel bounce. See Service Letter 6-1-43.

2. ANSWER: (a), (b), (c), (d), and (e) Any of these conditions can contribute to spotty tire wear. There are a great number of combinations of factors that can cause the types of tire wear in question. It cannot be definitely stated that any one condition is the cause. It is a known fact that unbalanced wheels, particularly static unbalance, or out of round brake drums, will cause spotty tire wear.

Looseness of parts in the suspension system, such as, worn pivot pins and bushings of the upper and lower support arms, worn steering knuckle pins and bushings, or worn steering rod ball sockets, will permit the front wheels to fight or kick around, causing spotty tire wear. If the wheel alignment is incorrect, it can contribute to spotty tire wear of one type or another.

3. ANSWER: (c) is obviously correct.

4. ANSWER: (d) Gasoline is a hydrocarbon compound. Burning of the hydrogen of the gasoline and oxygen of the air produces water which is passed out through the exhaust system. When the engine and exhaust system are hot, the water vapor passes out the tail pipe as an invisible gas. During warm-up the exhaust system is cool, condensing the exhaust vapors, making them visible.

ORDER BLUE CORAL NOW!

Blue Coral freezes in winter shipments Order now so your supply will be in a warm warehouse ready for use.