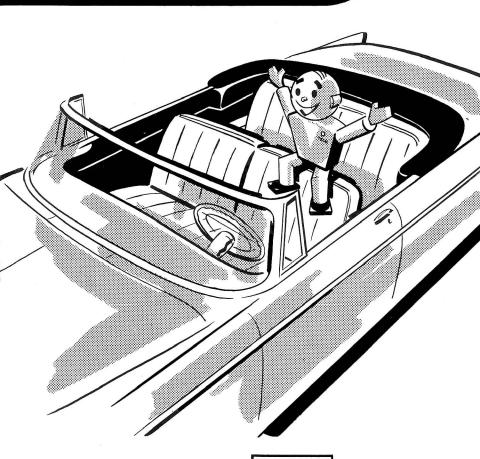
# 1955 BODY SERVICE SUGGESTIONS



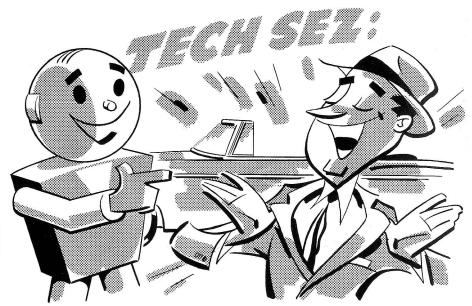
**SERVICE REFERENCE BOOK** 

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SESSION NO.

88

Prepared by
CHRYSLER CORPORATION
PLYMOUTH - DODGE - DE SOTO
AND CHRYSLER DIVISIONS



## "BODY SERVICE IS IMPORTANT!"

Ever notice how much pride a new-car owner takes in the appearance of his car? Sure you have. That's why you know how important body service is, and that's why this reference book is so important to you in your work.

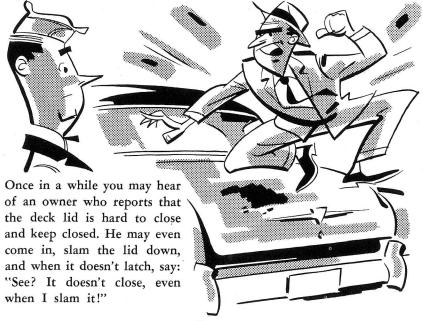
In fact, body service is even more important than before because everybody's got his eye on our 1955 "Forward Look." Yes, heads turn to follow each one of our 1955 models. Our new-car owners know it and want to keep admiring looks turned their way.

In special body models like the hard-top and convertible, of course, there's even greater interest. These body types have always been our glamor style leaders and it's up to us to keep them in perfect condition.

To help you do this, we've got some handy tips on adjusting the deck lid, rear quarter window, convertible top, and other helpful suggestions. You'll find it all spelled out on the following pages:

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### ADJUSTING THE DECK LID



This may never take place with one of your customers. But if it does, it will help if you explain that slamming the lid shut isn't the thing to do. Actually, that traps air in the trunk and is often why the lid is hard to close.



So, why not tell owners to bring the lid down about a foot from the latched position. Then they can push it down sharply and find that it generally will latch.

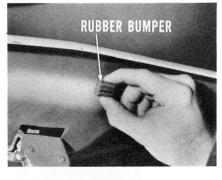
Now, if you should get a case where it won't latch, or stay closed, there are adjustments you can make. The place to start is with the

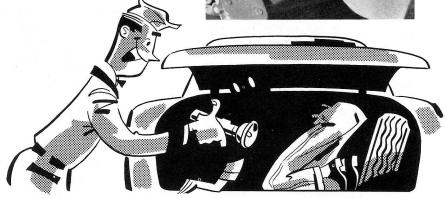


fit of the deck lid itself. Check the over-all fit visually and see if the lid needs to be centered in the opening. Also, check the weatherstrip. The deck lid may be compressing the weatherstrip too much, making it hard to close the lid.

If the deck lid needs realignment, adjust it so there's even spacing all around. And adjust the hinges so there's a good seal without too much compression.

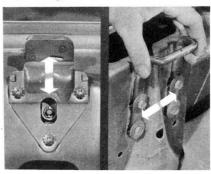
And if you find the deck lid's been hitting the lower opening and chipping the paint, install a rubber bumper on the lower inside panel of the deck lid.



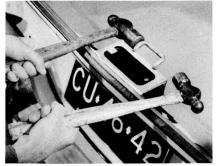


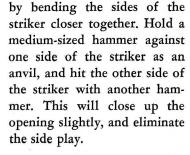
But before you try latch or striker adjustments, put a helper inside the trunk with a flashlight. Close the lid slowly and watch the latch to see what kind of interference there might be.

In addition, examine the wear pattern on the striker bar. This will give you a clue as to which kind of adjustment should be made. The latch has vertically slotted mounting holes so it can be moved up and down. The striker can be moved sideways for alignment with the latch.



You may find cases where the latch has too much side play inside the striker. You can cut down clearance between the striker and rotor







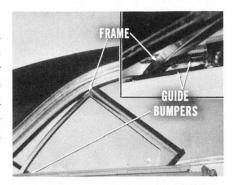
If you come across an occasional case where the deck lid closes but the rotor doesn't latch, here's all you have to do. First, see whether the latch is too far to the right. If this is true, the rotor won't trip into latching position soon enough. So, you'd have to shift the striker until the rotor just clears the side.

## ADJUSTING QUARTER WINDOWS— CHRYSLER AND DE SOTO CARS

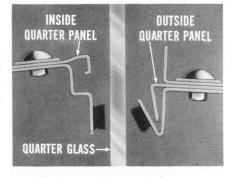


Every now and then you may hear an owner report a rattling noise at the rear quarter windows on some 1955 Chrysler and De Soto hard-top and convertible cars. This can occur if there's too much quarter window side play when the window's in its down position.

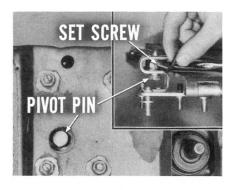
To eliminate this noise you can install two guide bumpers at each quarter window, near the rear of the window opening. These bumpers have a cat's-whisker strip which contacts the frame and glass when the window is operated.



Each bumper is attached by two screws to the top flange of each quarter panel. One goes on the inside panel, the other on the outside panel.



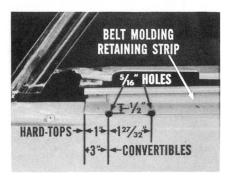
While these bumpers can be installed with the quarter window glass in place, some fellows prefer to remove the glass because it gives them a little more working space for installing the outer bumper. This, naturally, means taking out the rear seat and back first. Then, remove the upper and lower quarter trim panels, and the outside finish molding.



Lower the window next, so you can back out the Allen set screw enough to remove the pivot pin.



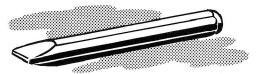
Then, partially raise the window so you can disengage the regulator arm from its track and lift out the window.



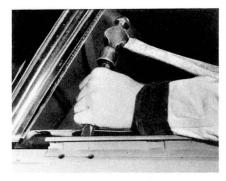
Installing the Outer Bumper. Drill two  $\frac{5}{16}$ " holes in the top of the outside quarter panel as shown here. These holes should be  $1^{27}/_{32}$ " apart on centers. The rear hole should be 3 inches from the rear edge of the quarter panel belt molding retaining strip on convertibles and 1" from the rear edge on hard-top models.

Both holes should be located  $\frac{1}{2}$ " out from the vertical section of the belt molding retaining strip.

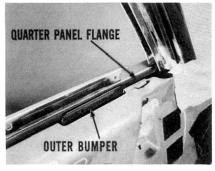
Use a caulking chisel or a suitable blunt instrument to drive the down-standing flange of the outer quarter panel toward the outside



to agree with the angle of the outer bumper. Just do this along the flange area where the bumper will be attached so there will be no interference with the glass frame due to an overlap at the panel flange. Interference at this point will keep the window from being fully closed.

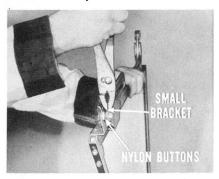


Next . . . assemble the "J" nuts to the outer bumper. Position the bumper under the flange of the outer quarter panel. Secure the bumper with screws and washers.

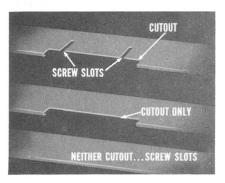


Now, if you removed the quarter window glass and frame assembly, now is the time to reinstall it—before you attach the bumper to the inner quarter panel. If you don't install it now, you'll have difficulty attaching the regulator arm.

Check the nylon buttons at the rear of the frame. First see that they

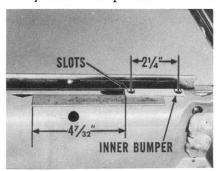


are installed and have enough tension to keep the lower glass frame from rattling on the guide slide. You can increase tension on these nylon buttons by bending inward the small bracket which holds the inner button to decrease the space between the two buttons.



Installing the Inner Bumper. Right where you install the bumper on the rear quarter inner panel flange you may find a cutout and screw slots. Some will have only a cutout. Others will have neither a cutout nor screw slots.

If you have to provide two slots in the panel flange, study the



sketch shown here. These slots are spaced  $2\frac{1}{4}$ " apart on centers. They are  $\frac{1}{32}$ " wide and  $\frac{3}{8}$ " long. You can locate these holes by measuring  $\frac{4}{32}$ " to the rear from the screw hole as shown in the adjacent drawing. This dimension will give you a guide line for the forward edge of the inner bumper.

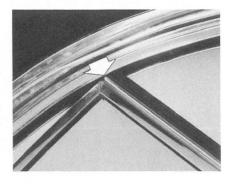
Hold the bumper in position and scribe marks for the slots opposite the bumper screw hole locations. Cut the slots out as marked. If there is no cutout in the panel, locate the bumper as described and drill two  $\frac{1}{16}$  holes, one-half inch in from the edge of the inner quarter panel flange.

Finally, assemble "J" nuts to the inner bumper and position it under the flange of the inner quarter panel. Use washers and screw to attach the bumper.

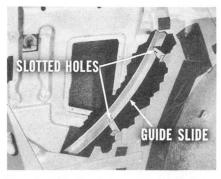
After installing the bumpers, you'll have to adjust them with the window down so there's about ½" of sidewise movement between the glass frame and bumpers. That's so the lower frame won't catch under the bumpers when the window is raised to its closed position.



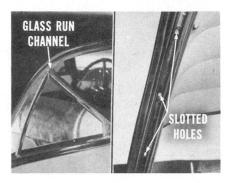
After adjusting the bumpers, raise the glass slowly and watch how it enters the upper glass run channel. If the window frame doesn't enter the channel, you may have to adjust the guide slide.



Adjusting the "Guide Slide." The guide slide is the curved track on which the rear corner of the window rides as the glass is raised



or lowered. The slide is provided with slotted attaching screw holes to provide sidewise adjustment. The slotted hole at the mid-point of the slide controls alignment of the glass with the upper glass run channel. The slotted hole at the upper end of the slide will control alignment with respect to the anti-rattle bumpers.



Occasionally, you might have to shift the glass run channel itself for proper alignment. Slotted holes in the channel provide an in and out adjustment of the channel.



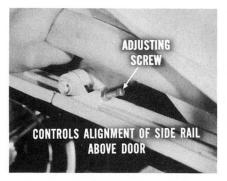
Another important thing to remember is that the entire glass and frame assembly can be moved fore and aft, up and down, or in-and-out by means of an adjustable hinge plate. Before buttoning up this job, also wipe off any excess lubricant from the window control mechanism. If this lubricant should get onto the cat's-whisker portion of the anti-rattle bumpers, it will leave streaks on the window and displease the owner.

### **CONVERTIBLE TOP ADJUSTMENTS**



Adjustments to the convertible top (when required) haven't changed much, but reviewing them might be helpful. Knowing the basic points of adjustment, and what they are designed to control, will help you in your work. Before you make any top adjustments, however, always check the over-all fit of the doors. This will tell you if the body bolts are shimmed properly. Then see if the body bolts are up to torque specifications.

Improperly shimmed or tightened body bolts, you'll recall, can cause body misalignment. If this is the case, the top won't fit properly over the doors and quarter windows, or at the windshield header. So check door fits and body bolt shimming and torque first.



There are adjusting screws at the folding binges in the side rails. The forward binge adjusting screw controls alignment of the side rail above the door, which affects the fit of the glass in the weatherstrip.



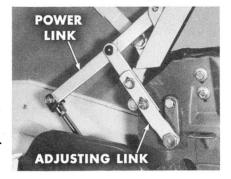
If the rail is too far above the door at the hinge joint, so the door glass doesn't go up far enough into the weatherstrip, you'd turn the adjusting screw in to lower the side rail at this point.



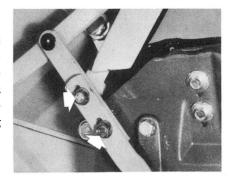
The rear hinge adjusting screw controls side rail alignment above the rear quarter window. If there is too much space between the top of the window and side rail weatherstrip at the hinge joint, turn the adjusting screw in to lower the side rail.

Moving Top Forward. Now, suppose you get a case where the entire top needs to be moved forward—let's say the top is short at

the windshield, or there's space at the back of the rear quarter window. This, of course, would call for adjusting the power link. The method for doing this on Chrysler and De Soto cars differs from that used on Plymouth and Dodge. Let's consider the former models.



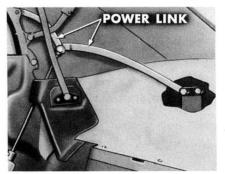
Chrysler and De Soto. On these models, power link adjustments are made by loosening two cap screws that fasten the two sections of the twopiece link, and then extending or shortening the link.



Shortening the adjusting link causes the top to move forward farther when the power cylinder moves out to the extreme of its travel. Lengthening the link decreases this travel.



Plymouth and Dodge. On Plymouth and Dodge convertibles, this



adjustment is controlled by a long, curved connecting link that is attached to the clevis at the top of the power cylinder piston rod and to a mounting plate fastened to the inside quarter panel above the wheelhousing. Slotted holes in the panel permit moving the mounting plate for adjustment.

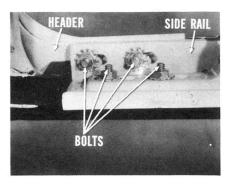
You'd make this power link adjustment to shift the entire convertible top forward or backward. You'd want to do this if there was improper clearance at the quarter window and roof side rail. To decrease clearance, move the adjusting plate forward. To increase clearance, move the plate rearward.

Moving the entire top forward or rearward may also be necessary, in some cases, to improve latching ease or alignment of the top at the windshield header.



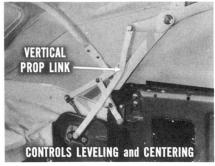
Header Adjustment. Suppose you made all the power link adjustments possible and improved the fit at the quarter window, but the top was still short at the windshield, what then? Well, there's an adjustment designed to stretch the top material for a better fit and to provide easier latching of the top to the windshield header.

On each side of the top, loosen the four bolts that connect the header to the side rail. Then, push the header forward.

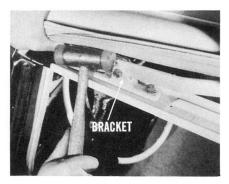


Leveling and Centering. There is another point at which an adjustment can be made to control leveling and centering of the top at the roof side rail seals above the door glass, and also leveling of the top with the windshield header. This is the vertical prop link adjustment.

Just loosen two bolts that hold the mounting plate on the lower end of the prop link. Then, move the plate up and down to level the top—fore and aft, or side to side. Usually, both prop links will have to be adjusted to properly level or center the top.



**Smooth Operation.** If the top doesn't raise or lower smoothly, the front side rail pivot may be out of alignment. That would cause a bind in the side rail and might damage the rail or the linkage.



So, loosen the front pivot bracket attaching screws and tap the bracket lightly toward the rear. But remember! A slight movement of this bracket will make a big difference in operation of the top. Just move the bracket about ½6"—that's often all that's needed.

NOTE: Do not move the side rail pivot to the rear any farther than necessary. Movement toward the rear tends to cause the side rail hinge to sag above the door glass.

None of these adjustments are too difficult to make, but all of them are mighty important. When they're made correctly, the top will raise and lower smoothly, and will fit right . . . all the way around.

Locking the Top to the Header. Locking the top firmly to the header is important, and is something all your customers should be taught to do. Briefly, this is the proper procedure. Starting with the top in the well, turn the instrument panel switch to "raise" position. Hold it there until the top comes fully forward.



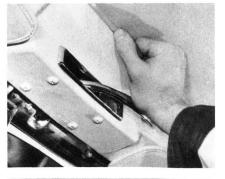
Reach up between the header and the top covering next, so you can pull down on the header. At the same time you do that, use your other hand to turn the switch to "raise" position again for an instant.

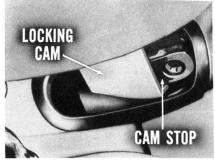


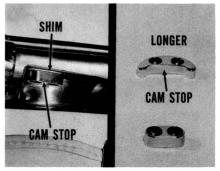
You may be wondering, "Why turn the motor on again? Why not try to latch the top?" Here's the answer. When the "raise" switch is turned off, the pistons in the power cylinders tend to settle back slightly. This puts tension on the top and makes it difficult to lock. So, by turning the switch to "raise" position as you pull down on the header, the pistons again extend fully. This gives a final boost to the top, and makes it easier to latch.

Now, while holding the header down with one hand, use the heel of your other hand to push the handle forward to lock the top. A button on the handle mechanism should "click" into a notch on the lever cam. This "click" tells you the handle has moved far enough to rotate the locking cams into securely closed position.

But remember ... make sure that the locking cams have rotated under and behind the cam stops in the windshield header. This is mighty important!







If you find that the cam doesn't go up behind the cam stop, you can put a shim between the header and stop to lower the stop slightly. Or, you may want to install a new stop that is a little longer to provide a greater locking area.

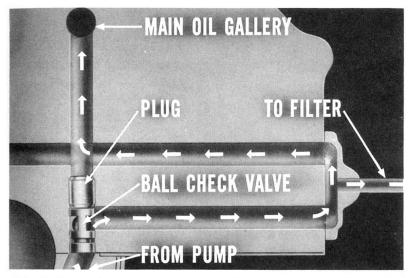


On Chrysler and De Soto convertibles, you may find a handle lever cam with two notches. In this case, make sure you hear *two clicks* when you close the handle.

#### OIL PRESSURE DROP—TRUCK ENGINES

Premium V-8 Engine (241 Cubic Inches). There have been occasional reports of a sudden drop in engine oil pressure during high-speed acceleration on the premium V-8 engine used by Dodge truck-2½-ton and up.

This is a condition where engine oil pressure is normal during idle speed. It continues normal up to about 40 to 45 psi during low-speed acceleration. Further acceleration at higher speeds, however, results in a noticeable pressure drop of about 10 to 15 psi. This drop can happen during any engine speed operation above 3000 rpm. Main reason for that pressure drop is resistance to the flow of oil in the passage between the pump and main oil gallery, as the pump output increases.

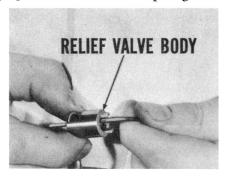


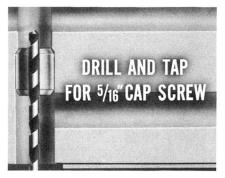
As indicated in the drawing above, there is a plug in the vertical oil passage leading from the pump to the main gallery. The plug routes oil from the pump to the oil filter check valve plate on the right side of the block.

Some of the oil goes through the check valve plate to the filter. The rest is shunted through the check valve plate to the main oil gallery.

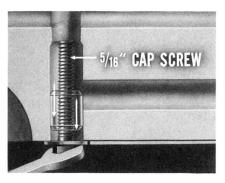
Now, you can remove this plug from the vertical oil passage and

install an oil pressure relief valve body in its place. The relief valve body has a passage through it which will permit some oil to go directly to the main gallery. That means it will provide normal pressure in the main gallery at all speeds and still not change operation of the oil filter.



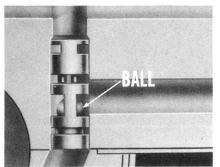


Installing this relief valve body is easy. All you do is remove the ball check valve from the passage. Then, drill the plug and tap for a 5/16" cap screw.



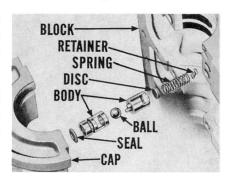
Next, put one or two washers on a  $\frac{5}{16}$ " cap screw. Turn the screw into the tapped hole and draw the plug out of the passage.

Once you have drawn the plug out, you're ready to install the valve body of the oil pressure relief valve into the vertical oil passage.



Insert this valve body with the prongs pointed down. The valve body keeps the ball of the check valve from going up into the oil passage. You can finish up the correction by reinstalling the ball check valve, rear main bearing cap and the oil pan. Premium V-8 Engine (331 Cubic Inches). If this same condition comes up on the 331 cubic inch premium truck engine, you make a similar correction. But in this case, instead of a plug in the vertical passage, the 331 cubic inch engine uses an oil pressure relief valve.

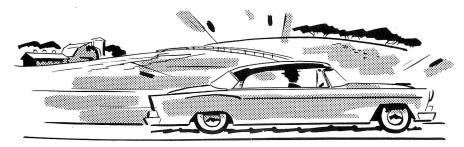
So, what you'd do is remove the check valve assembly and the relief valve assembly above it. Then remove the oil pressure relief valve spring, disc, and retainer from the relief valve body. Reinstall the relief valve body (prongs down) and the check valve assembly, in the block.



Finish up the job as you did on the 241 cubic inch engine by reinstalling the rear main bearing cap and the oil pan.

#### A FINAL WORD

Some of the service suggestions covered in this book are fairly easy to follow. Others may call for a little more effort on your part. But nobody needs to tell you that whether a job is easy, or tough, it's the final result that really counts. That is when everyone will appreciate the difference between an ordinary mechanic and a Master Technician!



# RECORD YOUR ANSWERS TO THESE QUESTIONS ON QUESTIONNAIRE NO. 88

Before making any deck lid latch adjustments, make sure the lid is aligned properly in the opening.	RIGHT	WRONG
Wear marks on the striker bar will often provide a clue as to which deck lid latch adjustment is required.	RIGHT	2 wrong
Guide bumpers installed at rear quarter windows of Chrysler and De Soto hard-top and convertible models will eliminate noise.	RIGHT	3 WRONG
An adjustable hinge plate permits moving the rear quarter window fore-and-aft, up-and-down, or in-and-out.	RIGHT	4 WRONG
Before making convertible top adjustments, check the fit of the doors to see that the body is properly shimmed on the frame.	RIGHT	5 WRONG
Adjusting screws at the folding hinges in the convertible top side rails control alignment of the rails above the doors and quarter windows.	RIGHT	6 WRONG
The power link adjustment controls the fore-and-aft movement of the convertible top.	RIGHT	7 WRONG
A vertical prop link adjustment controls leveling and centering of the convertible top.	RIGHT	8 WRONG
Proper location of the front pivot bracket controls the smooth operation of the convertible top.		9 WRONG
When locking the convertible top, make sure the locking cams have rotated under and behind the cam stops in the windshield header.	RIGHT	10 WRONG