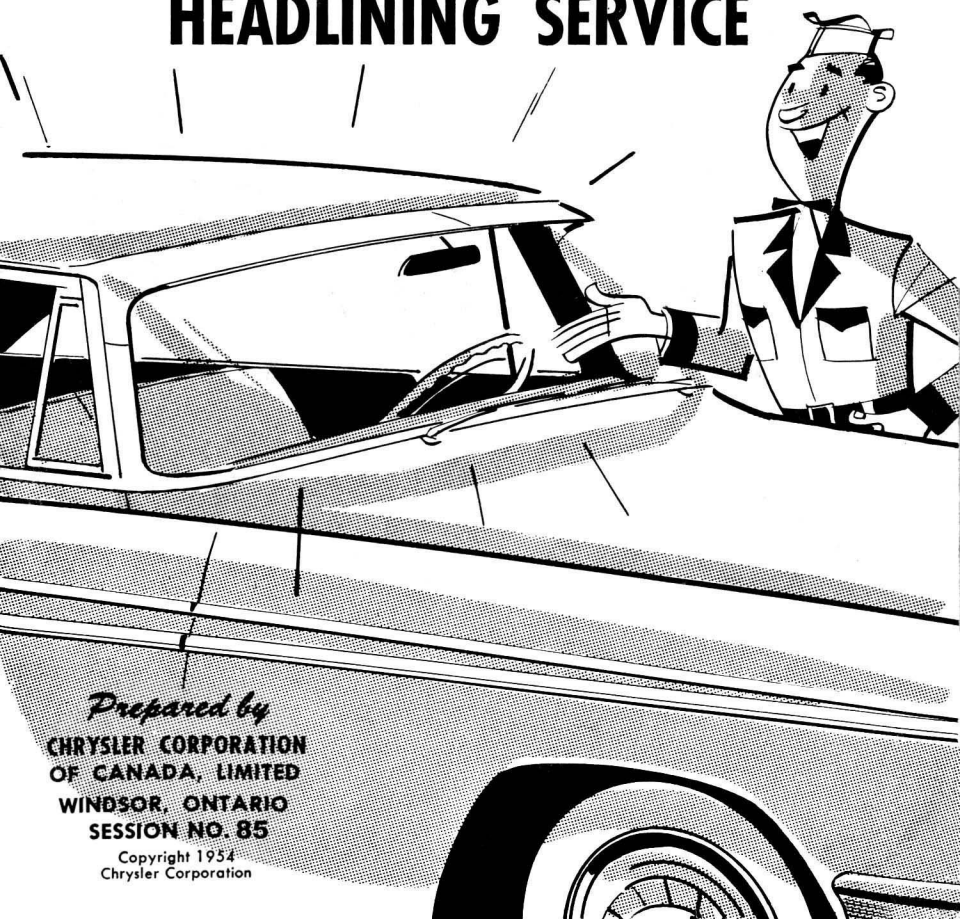
SERVICE REFERENCE BOOK

WINDSHIELD AND HEADLINING SERVICE



Prepared by
CHRYSLER CORPORATION
OF CANADA, LIMITED
WINDSOR, ONTARIO
SESSION NO. 85

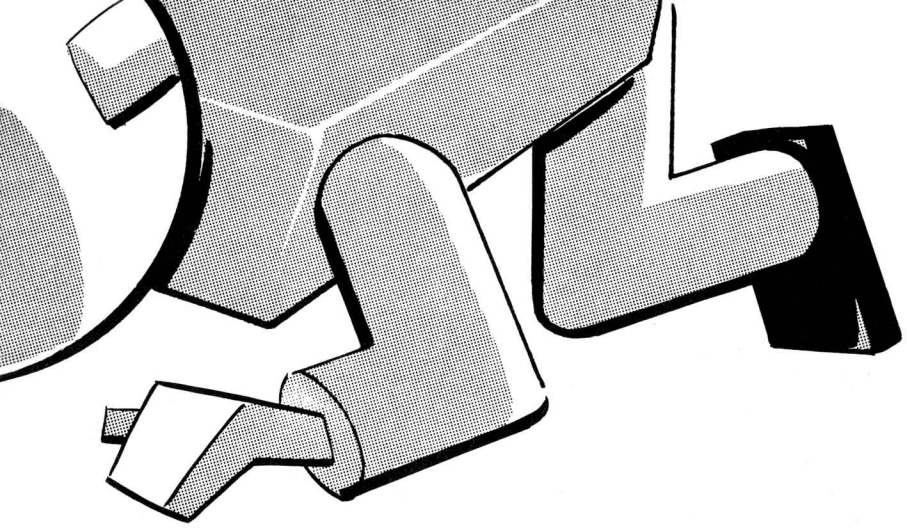
"WINDSHIELD WORK IS EASY!"

As a mechanic, you probably look at our completely new line of 1955 models with mixed feelings. You like the smart, new appearance as well as anyone. That's only natural. They are a sharp-looking series all right. But you may also be wondering about the servicing procedures that may be involved.

Well, when it comes to removing and installing the larger, new-design windshield and rear window, you can relax. Removing and installing the headlining is also easy. You won't need any special skill or body experience to do these jobs.

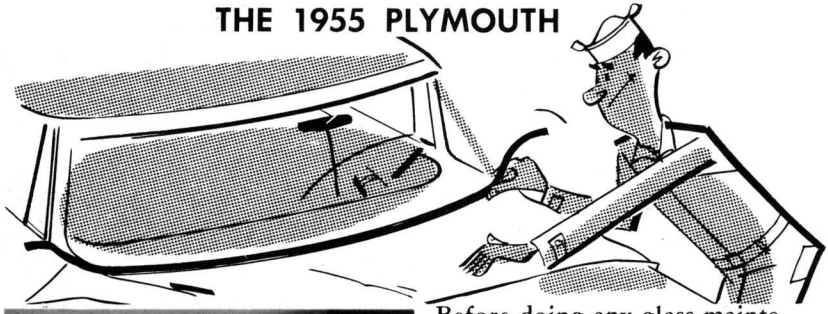
On most of our new models, for instance, you can do practically all of the windshield and rear glass work on the outside of the car. And, where there are no outside chrome moldings involved, like on the Plymouth Plaza, you'll find the new glass actually easier to service than previous designs. As a matter of fact, once you remove the outside moldings from any of the 1955 models, removing and installing the glass is done the same on all models.

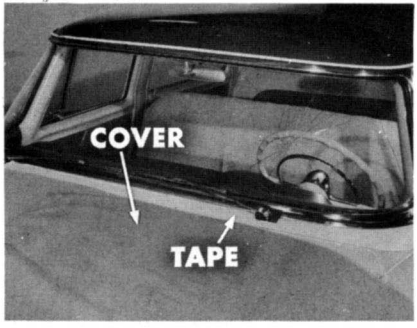
How this work is done on one model, and an explanation of the different molding assemblies you may run across, is all covered in this reference book. Here's where you'll find this and other information you need:



WINDSHIELD REMOVAL AND INSTALLATION

THE 1955 PLYMOUTH



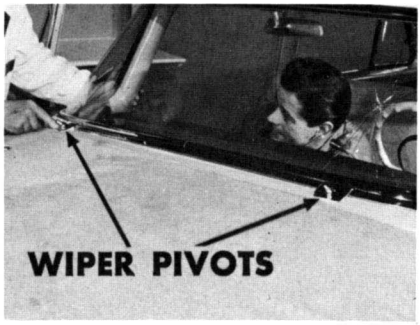


Before doing any glass maintenance, protect the finish of the car against scratches from the moldings or the glass. Cover the cowl, and use wide masking tape at the bottom molding and around the wiper pivot covers. In addition, use fender covers over the seats to keep them clean.

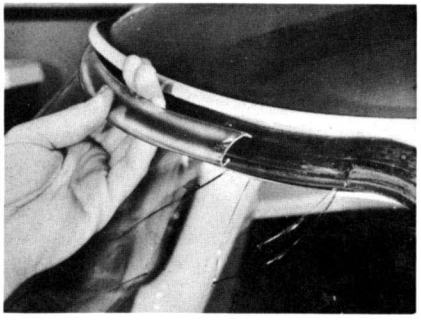
The first step is to remove the wiper arms. Next, remove the windshield belt molding. On Plymouth, this is a three-piece assembly. Remove the screw in each windshield post, and the six retaining nuts you can reach under the instrument panel.

While you're under the instrument panel, loosen the wiper pivots so you can slide the bottom molding out from under the pivot cover.

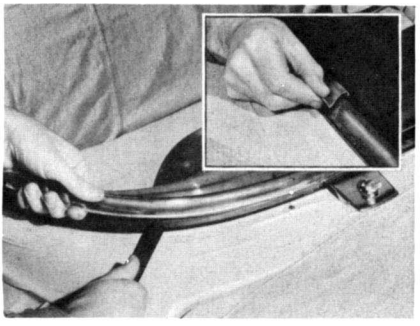
This is an operation you'll have to do on all models except the Dodge Royal line.



Now, once you have the Plymouth belt molding off, you can remove the two side moldings if they are used. This is done by removing the three attaching screws on each post. After removing the side pieces, lift the top molding off. It's just held by a groove in the rubber weatherstrip—and by the side moldings which snap over it.



All you have to do next is remove the clip at the center of the bottom molding. Then, raise the outer ends of the bottom moldings and lift them out of the weatherstrip.



NOTE: Where you have to remove sealer to loosen a retaining nut, or loosen wiper pivot nuts, remember to replace the sealer at that point when you are ready for reassembly, to guard against water leaks.

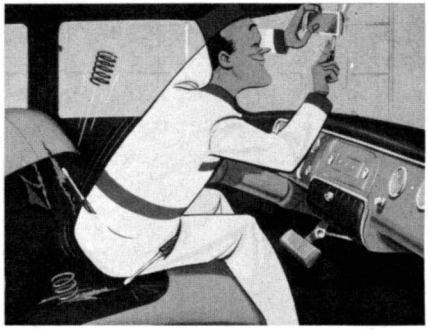
It Takes Two. Removing the glass, once the moldings are off, is more easily done by two men—one inside the car, the other outside. If you're the one outside, start the nib of the weatherstrip tool in the locking seam of the weatherstrip, at the corner. Then work it around to lift the locking lip from the seam.

CAUTION: Never use a screwdriver to unlock the weatherstrip. This not only will chew up the locking lip, but it can also chip the edges of the glass and may even crack the windshield.

Slip on your gloves and, while the inside man pushes out on a lower corner, the outside man can catch the glass. Work hand pressure across the bottom and up both sides until the glass is out.

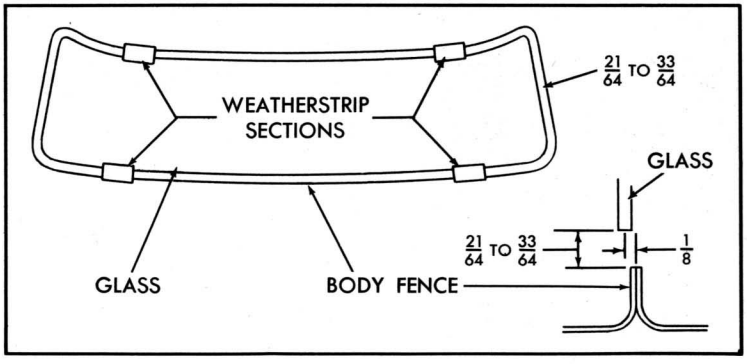
If you ever remove a good glass to perform some other service operation, be careful how you set it down. Use a cardboard box for center support and some carpeting to cover the bench. That way you'll avoid scratching the glass surface and chipping the edges.

Here's another safety tip. Be extra careful of metal buckles, buttons on uniforms, and sharp tools in slash pockets. It's so easy to gouge the paint when you lean over the fenders. It's also smart to keep sharp tools out of pockets when you sit inside an owner's car. Tools can scratch inside moldings and poke holes in the upholstery.



Checking The Windshield Opening—If you ever get a case where the glass was broken for no apparent reason, remove the weatherstrip and check the metal fence. A high or wavy spot can cause uneven pressure on the glass. You'll want to correct any unevenness before installing a new glass. Check for burrs or visible high spots and remove them with a file or grinder.

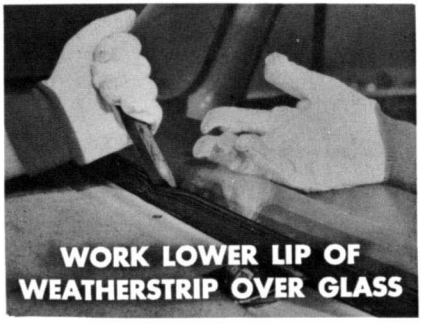
If you think the windshield opening is out of alignment, here's how to make sure. Put four short pieces of weatherstrip (about 3" long) on the fence, top and bottom, about one foot from each end. Install the glass in the four pieces of weatherstrip. Center the glass so it has equal clearance at both ends, then lock the weatherstrip sections on the glass.



You may have to shim the lower center section with wooden shims because the weight of the glass on the two small sections of weatherstrip will bring about more clearance at the top edge. When the glass is centered properly in the opening, there should be 21/64" to 33/64" clearance between the edge of the glass and outer edge of the fence. The inner surface of the glass should be within 1/8" of the fence. Any variation from these clearances should be corrected by grinding away the fence, or straightening the opening.

Installing The Glass—If you removed the weatherstrip from the fence, you'd naturally install it first. Be careful not to stretch it, and use only firm hand pressure to seat it in place. A little mild soap solution will facilitate this weatherstrip installation. Just brush the solution into the fence groove.

When the weatherstrip is in place, coat its outer surface and the glass groove with soap to ease in the glass. Then, install the top edge of the glass first. Use a fiber wedge to spoon the weatherstrip lip over the top edge, around the top corners, and partly down the sides.

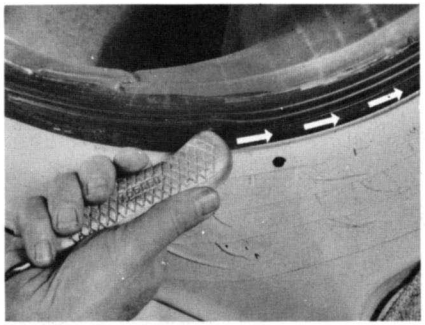


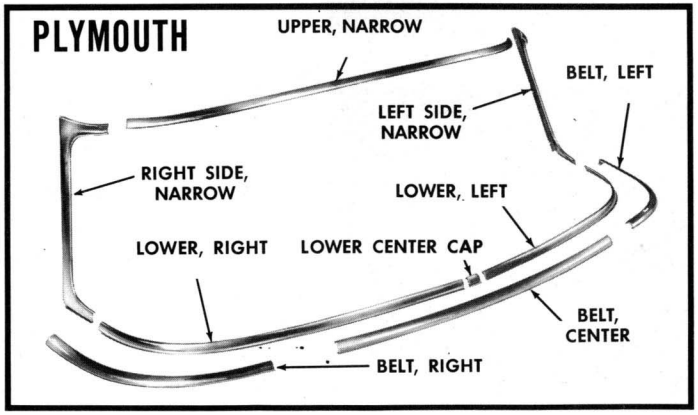
Once that's done, one mechanic should go inside and push out lightly on the bottom of the glass, because the weight of the glass tends to fold the lip of the weatherstrip in. By taking the weight of the glass off the weatherstrip it is easier to work the lip over the edge of the glass.

CAUTION: If there is quite a space between the glass and the weatherstrip, don't attempt to pry the glass in toward the weatherstrip. You'll chip the edge of the glass. Instead, the man inside the car can push the lip of the weatherstrip out to meet the glass.

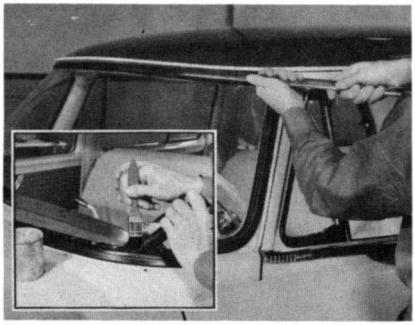
When you have the glass completely in the groove, tap around on it with the flats of your gloved hands to make sure it is properly seated. In any case, *don't use a rubber mallet.* You'll crack the glass if you do.

Use the weatherstrip tool to lock up the weatherstrip. Just hold the tool horizontally and work it all around the strip.

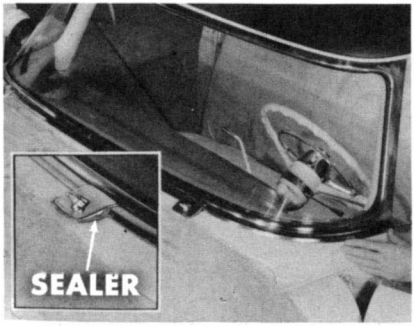




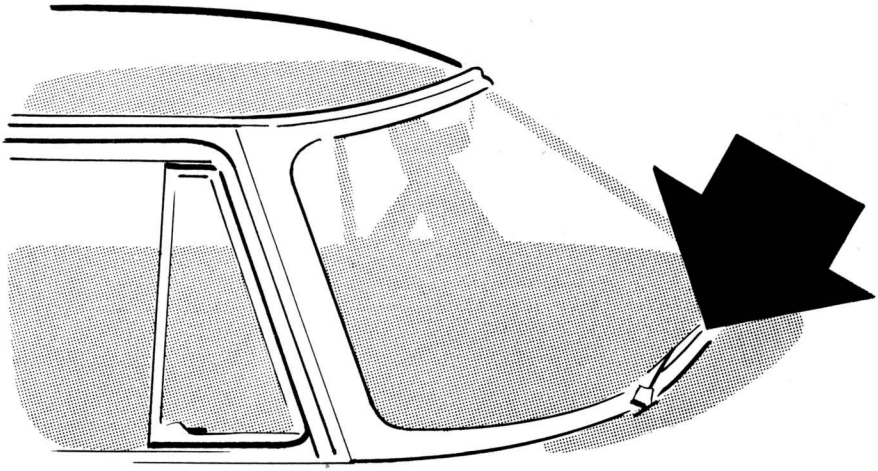
Installing The Molding—With the glass locked in place, coat the molding groove of the weatherstrip with the mild soap solution. Then, starting at the sides, slide in the top and bottom moldings. At this point, it's okay to use a fiber mallet, if you have to. Just tap the chrome moldings lightly into place.



Next, install the clip over the joint at the center of the bottom molding. Then, reinstall the two side moldings, making sure they snap over the top and bottom molding pieces.



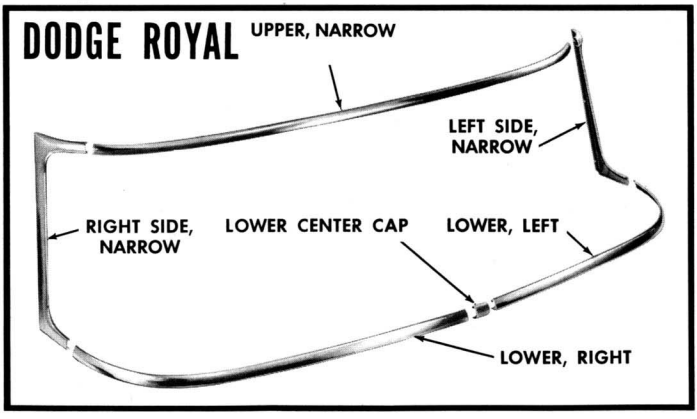
After that, reinstall the belt molding assembly, and tighten the wiper pivot bracket nuts, replacing any sealer you might have removed. Finally, install the wiper arms.



THE 1955 DODGE ROYAL

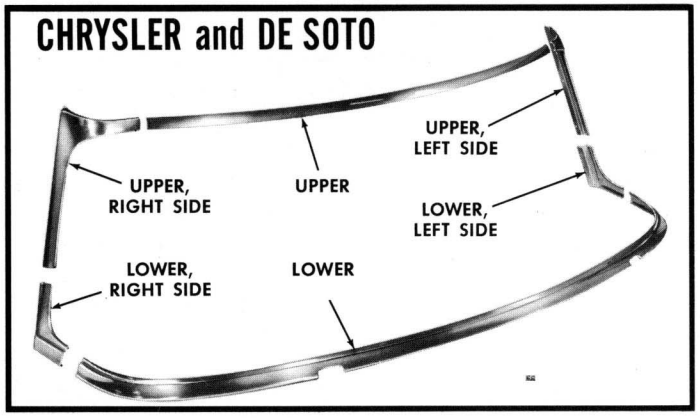
The Royal windshield outside molding assemblies are similar to those used on the Plymouth. They are a little different shape, but are removed and installed in about the same manner.

One big exception is that there is *no belt molding* which laps over the lower edge of the windshield molding, so you won't have that molding to contend with.



THE 1955 CHRYSLER AND DE SOTO

The standard outside molding assembly on Chrysler and De Soto models consists of two long horizontal sections, top and bottom, plus four corner pieces, two on each side of the windshield. These corner pieces cover the sides and also go around the corners far enough to lap over the top and bottom sections.



You remove the two upper corner pieces first. Each one is attached to the windshield post by four screws. Next, remove the two lower corner pieces which are attached to the post by one screw and by the overlap from the upper corner moldings. You can then raise the ends of the top section and lift it out of the groove in the weatherstrip.

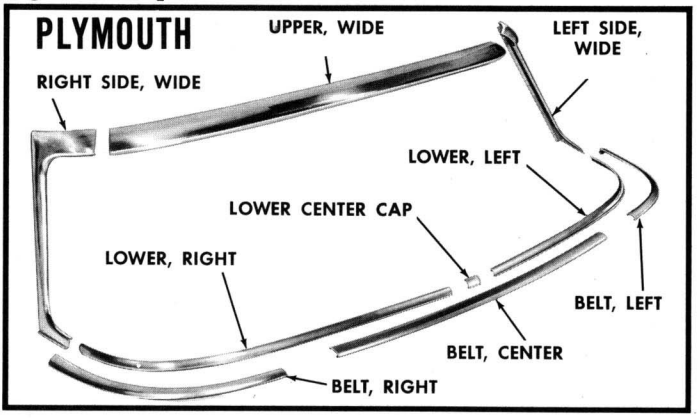
Before you remove the large bottom windshield molding take off the wiper arms, and then loosen the wiper pivot bracket retaining nuts which you can reach from underneath the instrument panel. It isn't necessary to loosen the molding clip stud nuts under the instrument panel. You can pry the bottom molding away from the seven retaining clips that hold it to the cowl and lift it out from under the wiper pivot covers.

Loosen the seven molding retaining clips, if necessary, and turn the clips 90° to provide clearance for removing the windshield. The rest of the glass removal procedure—unlocking the strip and taking out the glass—is the same as for Plymouth.

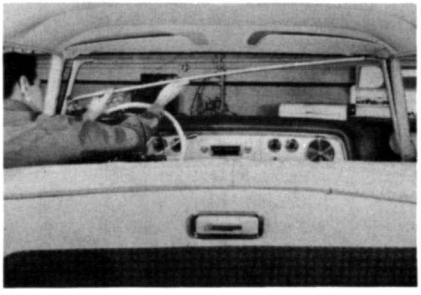
MODELS EQUIPPED WITH EXTERIOR VISOR OR SUN CAP

PLYMOUTH

You'll find some Plymouth models equipped with an exterior visor trim molding at the top of the windshield. This adds a little to the molding removal procedure.

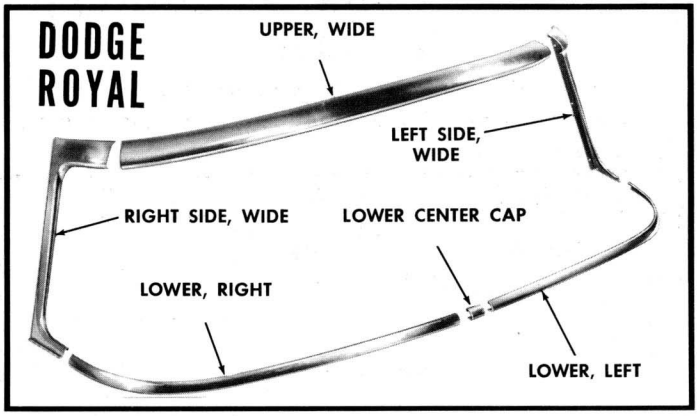


On these cars, you remove the rear-view mirror and inside top garnish molding first. Just loosen the side garnish moldings and let them tilt inward. This enables you to get at the retaining nuts which hold the visor molding to the header.



DODGE ROYAL

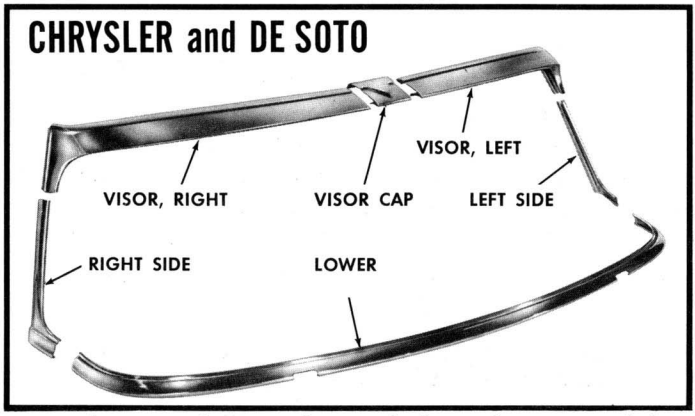
The Royal Sun Cap is similar to the Plymouth exterior visor trim piece. You also have to remove the rear-view mirror and inside garnish molding before you can remove the top horizontal section of the visor molding. Four long bolts for attaching the Sun Cap extend through the windshield header, the same as you'll find on the Plymouth.



Royal guards against water leaks through these bolt holes in the windshield header this way. A long rubber compression insulator, cut to match the roof panel contour, a flat rubber washer, and Permagum sealer at each bolt are used. When the nut is tightened inside the header, compression of the rubber washers and Permagum provides a leakproof seal.

CHRYSLER AND DE SOTO

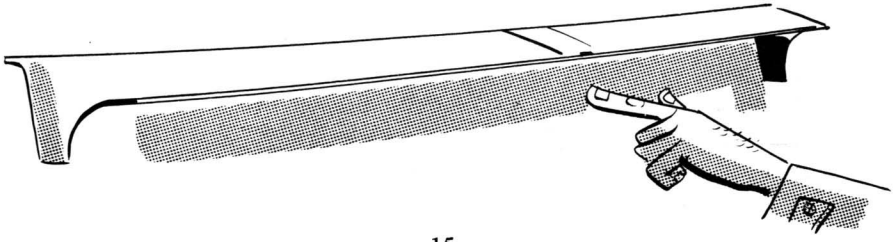
Where you find Chrysler and De Soto cars equipped with the Sun Cap visor molding, removal differs only in how you take off this extra trim. On both models, the Sun Cap consists of three pieces. Two long visor sections extend from about an inch from the center of the windshield, across the top to the windshield post, make a 90° bend and extend several inches down the windshield posts.



Between these two long sections and above the center of the windshield is fitted a short, flat chromed plate. Over this plate a short visor piece is installed, connecting the two long visor sections.

Four brackets, fastened directly to the roof panel and extending down and over the top section of the windshield weatherstrip, are used to retain the two long visor sections. A fifth bracket, much wider than the other four, is held by three screws to the center of the roof panel over the windshield. This middle bracket supports the joints of the three visor sections.

Besides snapping into place over these retaining brackets, each of the long visor sections is secured by two screws. The center visor section and backing plate are held by one screw. Floating retaining nuts in the brackets permit shifting of the moldings back and forth to obtain exact positioning before you tighten them firmly into place. At the windshield posts, each of the vertical portions of the long visor sections is secured by two screws.



Another difference in the Sun Cap molding is the longer vertical section in the lower corner molding at the side of the windshield. This lower molding is L-shaped. Three screws fasten each of these lower corner moldings to the windshield post. The vertical section of the Sun Cap laps over the lower corner molding on the windshield. The horizontal section of the lower corner molding laps over the bottom windshield molding which extends across the cowl.

REAR WINDOW REMOVAL AND INSTALLATION

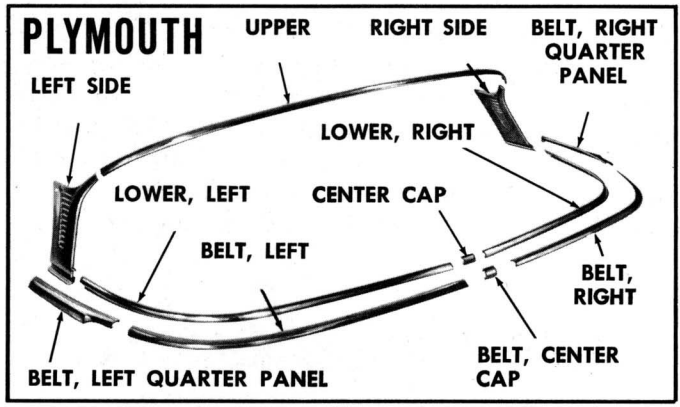
You'll have an easy time removing and installing the rear window glass whenever it's necessary. The procedure's just about the same as that used on the windshield as both glasses are held in place by a weatherstrip of the same basic design.

However, the outside molding assemblies differ on the various models. It will therefore be helpful to know these differences and the removal and installation procedures involved.

PLYMOUTH

On all Plymouth models where there is an outside chrome molding assembly at the rear window, you'll find that the rear belt molding sits very close to the bottom section. Therefore, the rear belt molding should be removed first.

The belt molding assembly consists of four sections. Two short pieces extend back along the quarter panels from the rear door lock pillars. Two longer pieces curve around the base of the rear window weatherstrip molding and meet in the center of the deck opening upper panel. A center cap covers the joint.



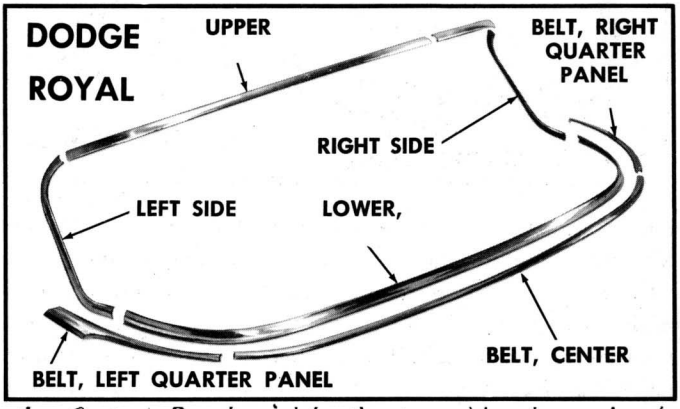
These longer belt molding pieces are secured to the body by several clips with bolts and nuts. You reach the retaining nuts from inside the luggage compartment. Each of the shorter side pieces has one retaining clip with a bolt that extends through the quarter panel and a retaining nut accessible from inside the luggage compartment above the wheelhousing. There's also a screw in the rear door lock pillar that attaches the forward ends of the rear belt molding. If some of these retaining nuts are sealed, be sure to replace the sealer during reassembly.

Four L-shaped molding sections and four clips make up the Plymouth standard rear window outside molding assembly. The larger sections are held by a molding groove in the weatherstrip, the clips, and the overlapping belt molding at the bottom. The rear quarter trim moldings on Belvedere models snap over the upper and lower sections of molding.

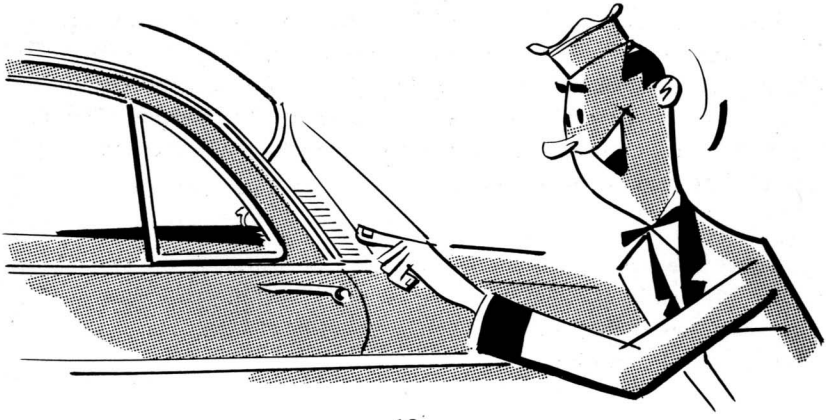
There are no garnish moldings for rear windows on any of the 1955 Plymouth models. The rear window weatherstrip has a large lip that frames the interior window opening and eliminates the need for a garnish molding.

DODGE ROYAL

There's a four-piece molding assembly used at the rear window on 1955 Royal models. One long section extends across the top, one across the bottom, and two U-shaped pieces are at the sides, lapping over the ends of the top and bottom pieces. All moldings snap into retaining grooves in the weatherstrip.



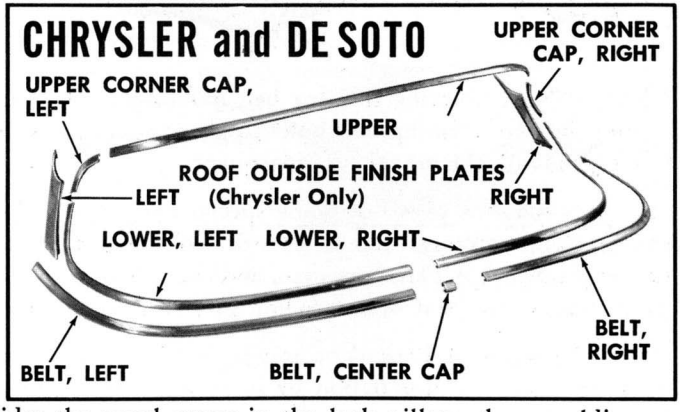
On the *Custom Royal models,* the two side pieces also form a quarter roof ornament plate. A clip, fastened to the roof by a screw, holds the top of this plate. You'll see this clip in the drip rail. At the bottom, the ornament is fastened by a single screw.



Again, the belt molding on all the Royals will have to be removed before the rear window moldings can be removed. The Royal belt molding is a three-piece deal fastened at the door lock pillars by a screw, and to the body panel by means of clips, bolts and retaining nuts reached inside the luggage compartment.

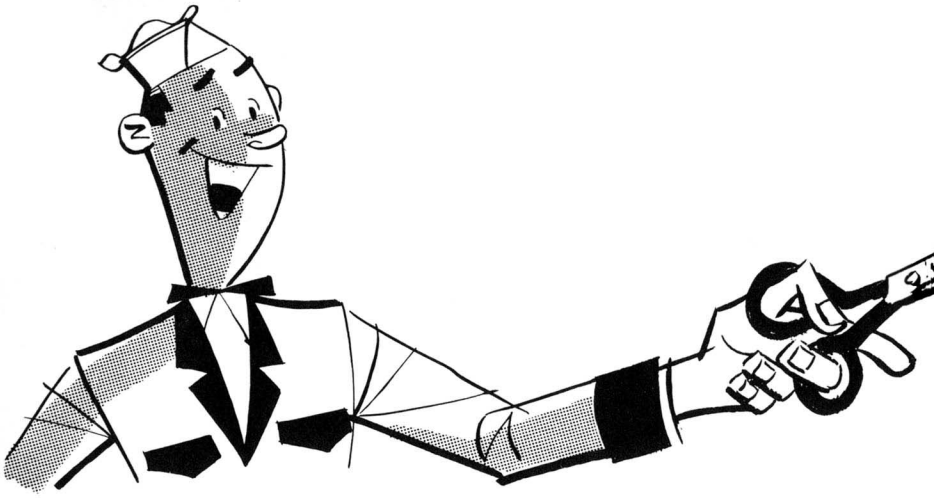
CHRYSLER AND DE SOTO

As on the other models, the rear belt molding has to be removed before the rear window outside moldings can be taken off prior to removing and installing the glass. In general, this belt molding assembly is a two-piece deal plus a clip at the center joint near the bottom of the rear window.



Besides the usual screw in the lock pillars, these molding sections are held by clips, bolts and nuts reached inside the luggage compartment. However, there's one big difference on these models in the end clip bolts which are accessible only from the passenger compartment.

In this case, you'll have to remove the rear seat and back first. Then, carefully remove the headlining from the quarter panel inside support and from behind the headlining retainer strip along the upper rear edge of the rear door lock pillar. Be extremely careful not to soil the headlining, and remove just enough to gain access to the belt molding retaining nut on each side of the car.

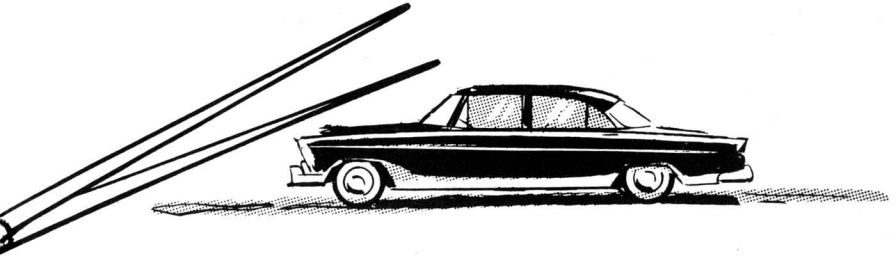


NOTE: When replacing the rear belt molding, apply sealer around the clip retaining bolt holes to guard against possible water leaks into the luggage compartment.

Except for ornament plates on some special body models, the rear window outside moldings should present no unusual removal or installation problems. All sections, caps, and clips snap easily together. The long sections are held by a molding groove in the weatherstrip.

Installation Tip—Use of Cord—You might find it easier to open this groove during molding installation by inserting a stout cord (like a venetian blind cord) into the groove first. This will hold the molding groove open so you can insert the edge of the molding. Use a rubber or fiber mallet to tap the molding into place, pull the cord out slowly as you insert the molding in place.

GARNISH MOLDING NOTE: On some Chrysler and De Soto models you'll have to loosen the inside garnish moldings at the rear window before you can remove and install a new glass. Cross-recess-head screws hold these moldings into place. Be careful not to scratch the finish of these garnish pieces when you work around them.

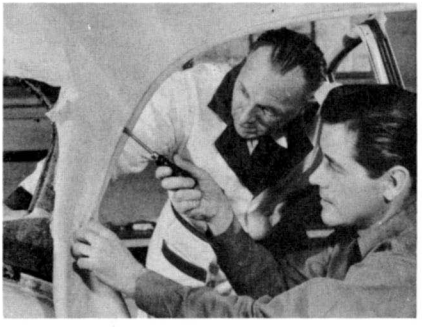


HEADLINING REMOVAL AND INSTALLATION

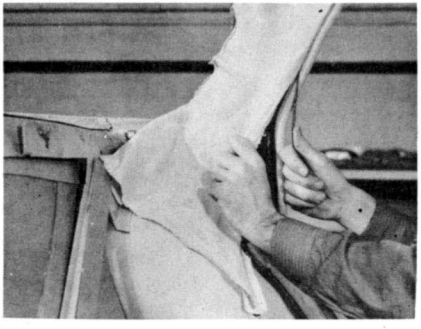
There may be times when you'll have to remove the rear window even though it isn't damaged. That's necessary in the event that you are going to remove and install a new headlining. The rear window has to come out in this case because the lining is tucked around the opening, under the weatherstrip. And, of course, the windshield garnish molding also has to be removed.

So, after the rear window is out, here's the way to go about removing the headlining. First of all, remove the rear seat and back. Next, start removing the headlining at the rear. Drop the rear weatherstrip loose from the top and sides, and carefully pull the headlining loose at the opening.

Then, pull the headlining loose from under the package shelf and away from the quarter panel and wheel-housing.



Now, if you're going to reinstall the *same* headlining, carefully insert a screwdriver behind the retainer strip. Pry the strip away from the roof side rail above the doors.

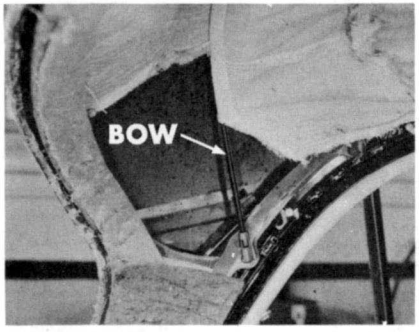


Use a length of stiff wire about 8″ long, and insert it between the retainer strip and headlining to lift the fabric off the retaining barbs. While you're working that wire with one hand, use your other hand to pull the headlining out from behind the retainer strip.

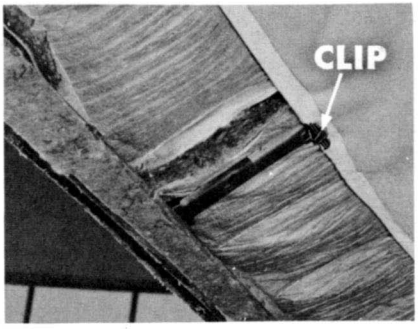
You wouldn't have to go to this trouble if the headlining were torn and you were going to replace it with a new headlining. Instead, you'd just cut the old headlining at the doors about 2″ above the lower edge of the roof line. Then, with a screwdriver you'd pry the headlining retainer away from the roof rail and pull the material from the barbs.

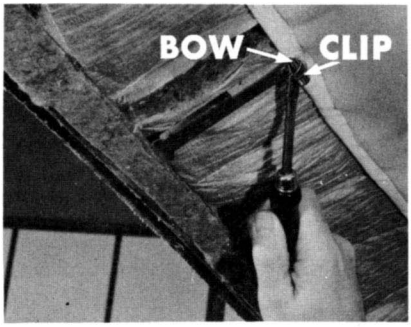
Tugging away at the old headlining strip in this way, however, might bend some of the barbs. So it would pay you to check them and straighten any barbs accidentally bent.

Once you've got the headlining loose at the edges around the entire car, you're ready to remove the headlining bows. These bows are thin steel ribs, like stays in an umbrella. They keep the material taut and in place. They are in listing seams which are sewed into the headlining.

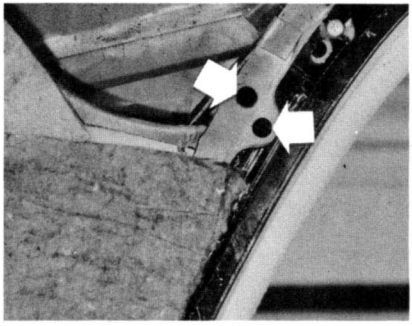


You'll notice that the center of the rear headlining bow is held by a retaining clip. This clip extends forward from the top of the rear window.

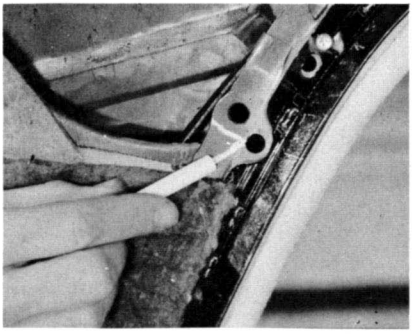




What you do next, then, is bend this retainer clip to free the bow. Now you can spring the bow and remove the bow ends from the clip holes in the roof side rails.



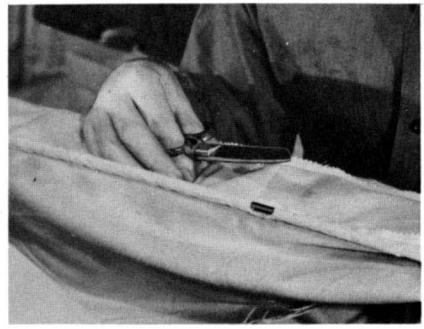
At most bow locations, incidentally, there are two clip holes. The bows are fitted into the hole that provides the smoothest fit for the lining.



So, when you remove the headlining bows, mark the holes that they were in. In this way you can be sure to get the same beautiful contour and fit you had originally.

Leave The Bows In The Listing Seams—Here's an important point to keep in mind. Don't remove the bows from the old headlining at this time. They're all different lengths and you might mix them

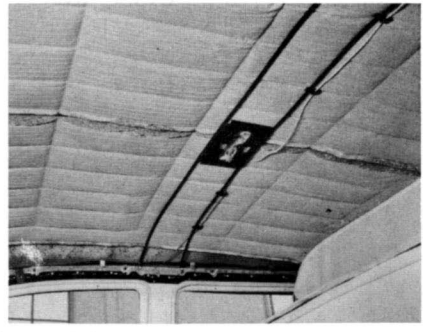
up. So, leave them in their listing seams for now. Just remember that you're going to have to thread the same bows into the new headlining when you install it. In that case, leaving the bows in place in the old headlining is the easiest way to get them installed in the right seams of the new headlining.



Generally, the bows are color-marked by a daub of paint near the end for position identification. From front to rear, these colors are white, yellow, green, orange, maroon, and silver. This color identification is also followed by the parts department.

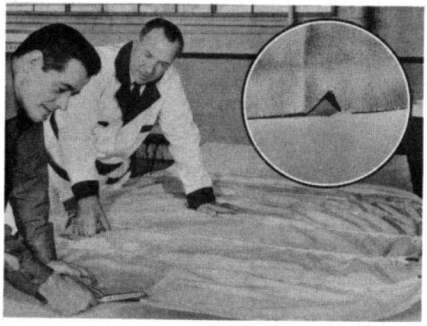
Squeeze the dome lamp plastic lens to remove it. Remove the bulb, disconnect the wires, remove the dome lamp assembly and place it on the bench.

Check The Roof Silencer Pad—Once you have the headlining and bows out of the car, it pays to check the roof silencer pad for any loose sections. If you spot any, be sure to re-cement them before going ahead with the new headlining installation.

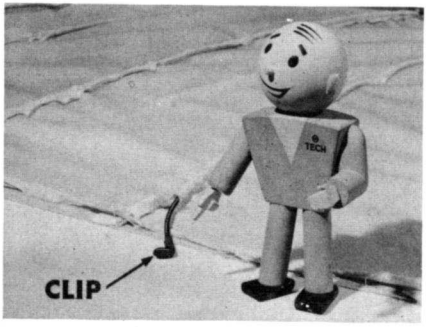


CAUTION: Be sure to use a cement that dries hard and solid for re-cementing any loose pad sections. You don't want a cement that's liable to melt and run all over the headlining on a hot day.

Check The Old Against The New—When you're ready to install a new headlining, it will pay to match the old lining with the new.



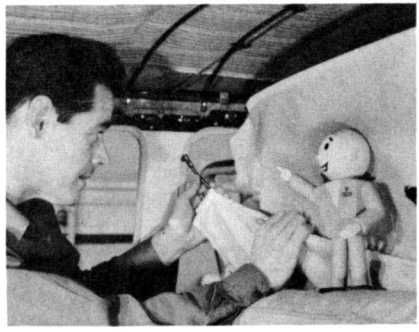
You'll get a good chance to trim off any excess material that will save you installation time later. Another thing to do while you have the headlining out of the car is to notch the lining in the center of the front and rear edges. These notches will serve as a guide and help you keep the lining centered when you install it.



After trimming the new headlining (if it needs it), slip off the retaining clip from one end of the bow. Pull the bow out of its listing and install it in the corresponding listing of the new headlining. Put the retaining clip back on the end from which you removed it.

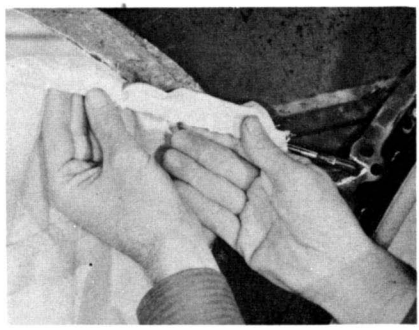
In other words, you put the rear bow from the old headlining into the rear listing of the new lining, and so on.

Take a pair of scissors, next, and cut a hole in the middle of the listing for the rear headlining bow support clip. If you tried to force a hole through the listing at this point, the material would pull and this would set up wrinkles that you'd never smooth out.



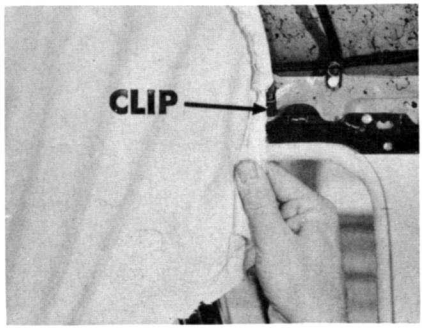
This will also help distribute the material evenly on each side of the roof.

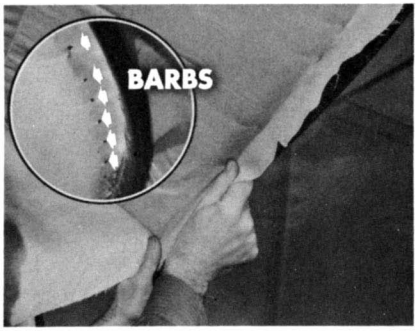
Install the rear bow ends in the marked clip holes next. Then, install the rest of the bow ends, making sure you stretch the headlining evenly so the same amount of material hangs down at both sides.



In most cases, the listing will be longer than the bows. That means you'll have to cut them in from the sides to avoid wrinkles at the seams near the roof side rails.

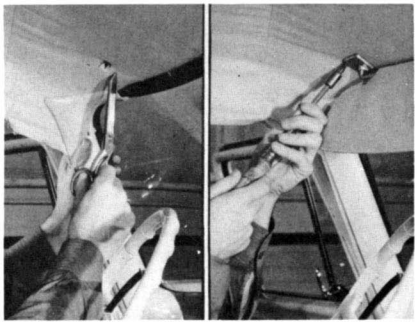
Just cut the listings right up to the headlining bow clip and no farther. If you cut past the clip, the material will leave the contour of the bow and angle straight across to the retainer at the roof side rail.



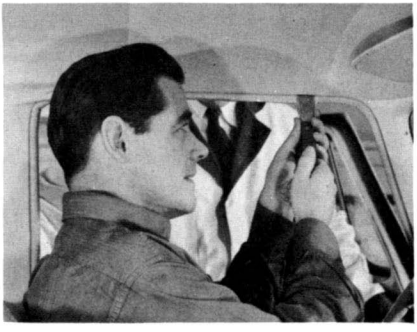


After that, apply cement to the windshield header bar. Wait until the cement becomes tacky. Stretch the new headlining material forward and over the cemented area. Snap it onto the barbs on the windshield header. Be sure the first seam at the front of the headlining is straight.

Try not to stretch the material too tightly. This can cause an uneven first seam and set up strains in the headlining.

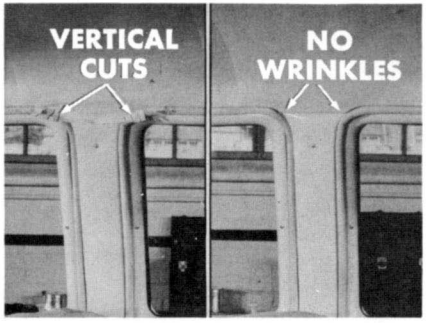


Cut holes in the headlining for the sun visor retaining screws next. Then, install the visors before you tuck in the corners of the headlining at the top of the windshield posts. This will keep you from tearing the lining when you tighten the visor retaining screws.



Now you can reinstall the windshield garnish moldings. And, if you find the material at the side a little longer than necessary, trim it so only ½" to 1" hangs down below the door windcord. Then, use a dull putty knife to tuck the first and second seam between the roof side rail and headlining retainer.

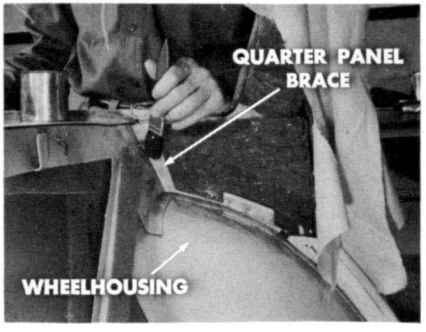
Incidentally, here's a headlining fitting tip. Small vertical cuts *in* from the edge at the tucked-in part will help keep the material from wrinkling, especially at the corners.

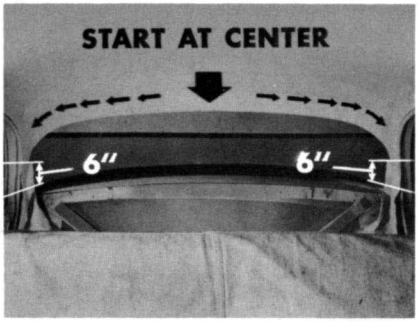


This headlining installation is done best by two men, but you can handle it satisfactorily alone. If you ever solo the job, however, alternate from one side of the car to the other, and do only one section at a time. That way you'll be sure to keep the seams straight.

When you get the headlining all in place between the roof rail and retainer strips at the sides, you're ready to button up the job at the rear of the car. So, put cement on the surface of the rear window opening where the headlining will fasten.

In addition, apply cement to the quarter panel braces, rear wheelhousings, and under the package shelf cover corners. Check the material you'll need. Trim off any excess. Some of those vertical slits in the edges will also help the fit.

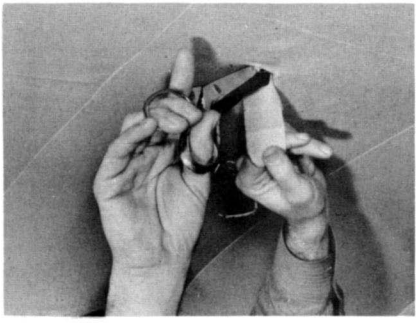




When the cement is tacky, press the headlining onto it, starting above the center of the rear window and working to the sides. Stop at about 6" from the lower window corners.

Then, press the material in place at the quarter panel braces, the wheelhousings and under the package shelf corners. Install the rest of the headlining at the rear window, making sure all wrinkles are worked out.

You can then go ahead and reinstall the rear window weatherstrip and the glass. Besides that, you can replace the outside chrome moldings, and the rear belt molding. Install the rear-view mirror.



About all that remains is locating the center of the dome lamp bracket. You cut a small hole in the headlining at this point. Pull the wires through and attach them to the dome lamp housing.

Apply cement to the inner edge of the dome lamp bracket. And, when it gets tacky, hold the dome lamp in place and reinstall the screws. Finally, reinstall the dome light lens and any other inside hardware, such as the coat hanger hooks.

LAST, BUT NOT LEAST...

After working on the windshield, rear window, or on the headlining, inspect your work carefully. Remember that these items are those that command a lot of attention because they affect the appearance of the car. Our customers count on us to help them keep up the good appearance of their cars. How good the car looks after you service it depends on how carefully and neatly you do the job.

USE THE TECH QUESTIONNAIRE FOR SESSION NO. 49 WHEN RECORDING YOUR ANSWERS TO THESE TEN QUESTIONS

It isn't necessary to remove the belt molding to take out the 1955 Plymouth windshield. RIGHT 1 WRONG

When removing the belt molding beneath the windshield it is necessary to loosen the windshield wiper pivots on all 1955 models except Dodge Royal. RIGHT 2 WRONG

If the windshield glass was broken for no apparent reason, remove the weatherstrip and check alignment of the metal fence. RIGHT 3 WRONG

Use the fiber or rubber mallet to help seat the windshield in the weatherstrip. RIGHT 4 WRONG

During windshield or rear window service, replace sealer at any points from which you remove it to prevent the possibility of water leaks. RIGHT 5 WRONG

You have to remove the rear window in order to install a new headlining. RIGHT 6 WRONG

Use a stiff wire, about 8" long, between the retainer strip and headlining to lift the fabric off the retaining barbs. RIGHT 7 WRONG

At most bow locations in the roof side rail there are two clip holes so you can use the one that provides the smoothest fit for the headlining. RIGHT 8 WRONG

All the bows in the headlining listing seams are the same length. RIGHT 9 WRONG

When re-cementing any loose sections of the roof silencer pad, be sure to use a cement that will dry hard and solid and won't melt and run all over the headlining on a hot day. RIGHT 10 WRONG

LITHO IN U.S.A.