

# Service Counselor

PARTS • ACCESSORIES • PRODUCT

PACKARD MOTOR CAR COMPANY



## Counselor

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### Heater Adjustments and Corrections

#### 24th Series

Proper operation of the heating and ventilating system, in many instances, is dependent upon correct adjustment of the control cables and freedom of the distributing valves.

To adjust the left side control lever and cables, move the left lever downward an inch or two and then move it upward until it is approximately  $\frac{1}{4}$ -inch from its stop at the top.

Loosen the cable housing clamp screw at the butterfly valve in the left air duct adaptor in the engine compartment.

Move the left lever upward against its stop to take up the  $\frac{1}{4}$ -inch travel and tighten the housing clamp screw at the valve while the lever is against its stop.

Move the lever downward until it is approximately  $\frac{1}{4}$ -inch from its downward limit of travel and then loosen the cable housing clamp screw at the thermal valve attached to the dash panel at the right side of the front compartment.

Move the lever downward to its limit of travel and tighten the housing clamp screw at the thermal valve.

To adjust the right side control lever and cables, move the lever downward and then upward until it is approximately  $\frac{1}{4}$ -inch from its stop.

Loosen the cable housing clamp screw at the butterfly valve in the heater assembly in the engine compartment.

Move the right lever upward against its stop and tighten the cable housing clamp screw while the lever is against its stop.

Move the lever downward to its limit of travel. Just as it reaches its limit of travel, a dull slap or thump should be heard which indicates that the air distributing valve has closed off the defroster outlet and the adjustment is correct. If no thump is heard, or if the

lever is short of its normal travel, loosen the cable housing clamp screw at the distributor valve in the front compartment and move the cable housing ahead or back as necessary.

As a recheck, move both levers to the top. The levers should be even or parallel and both butterfly valves should be closed. Move the levers downward to the "OFF" position. Both valves should be closed in the opposite direction.

#### NOTE

If all adjustments are correct and the heating system is operating properly, but an owner desires additional heat, it is recommended that a 160-degree thermostat be installed.

Other items which pertain to proper functioning of the heating and ventilating system follow:

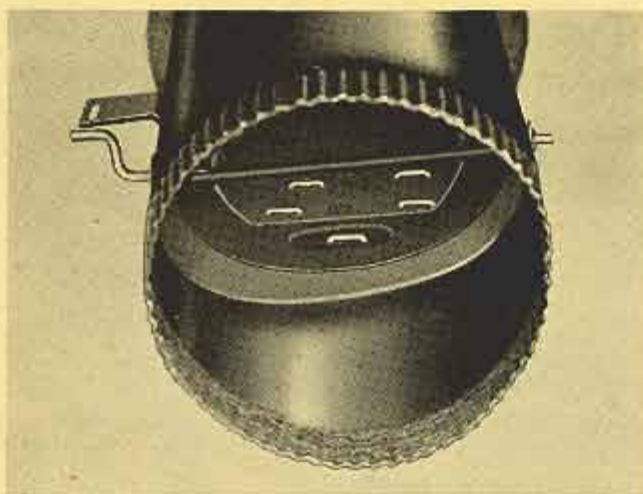
1. Air enters front compartment through left side duct when valve is closed.

The end of the left side air duct adaptor is fluted or crimped. On early 24th Series cars, this fluting is approximately  $\frac{3}{4}$ -inch in length whereas it is approximately  $\frac{1}{4}$ -inch in length on later cars. When the valve is closed in these early ducts, there is a possibility of air passing between the flutes and the valve rubber which contacts the crest of the flutes.

To check for this condition, close the valve and then slide the flexible tube off the end of the adaptor and place a light at the opening. From inside the front compartment, note whether the light glare can be seen between the valve rubber and the flutes.

If the valve rubber is not sealing and light glare can be seen through the flutes, the flutes or grooves





should be filled with undercoating material as shown in the illustration. This can be done without removing the duct adapter. Fill the grooves both at the top and at the bottom over approximately a four-inch length and smooth out the material by wiping a finger over the surface.

2. Blower motor runs at reduced speeds.

A poor ground connection will cause the blower motor to run slower than is normal. Tighten ground wire connection.

3. Right side control lever does not have full travel or sticks below the "HEAT" position.

This usually is caused by a sprung or distorted valve in the air distributor or a bent distributor box. Straighten or replace as necessary.

## Trunk Leak

24th Series

A condition which may be reported occasionally is that of water or gasoline finding its way into the trunk compartment.

Figure 1 shows a sheet metal section of the trunk floor, gasoline filler pipe access opening, and a curved housing commonly called the "dog-leg."

You will note that the access opening consists of a nearly square frame-like section spot-welded in the opening of the "dog-leg." If gasoline is spilled over the bottom of the opening, which sometimes happens when a gasoline hose nozzle is taken out of the filler pipe, it may run between the spot-welds and under the bottom of the frame-like section and into the trunk.

Spilled gasoline which runs downward behind the face of the "dog-leg" runs onto a ledge and through

pockets at each end of the ledge and into the trunk. A window has been cut in the top of the "dog-leg" to show this ledge. See figure 2.

Water, as well as gasoline may enter the trunk at these points if they are not properly sealed.

Sealing material, which is not soluble in water nor in gasoline, is available in one-pound cans under part number 436209 to close up the openings mentioned.

The access opening should be sealed along the sides and top as well as along the bottom. Although gasoline may not be spilled on the sides and top, the gasoline fumes may enter the trunk and then travel to the rear compartment of the car.

The sealer should be applied along the seam of the spot-welded flanges in the opening. See figure 3.

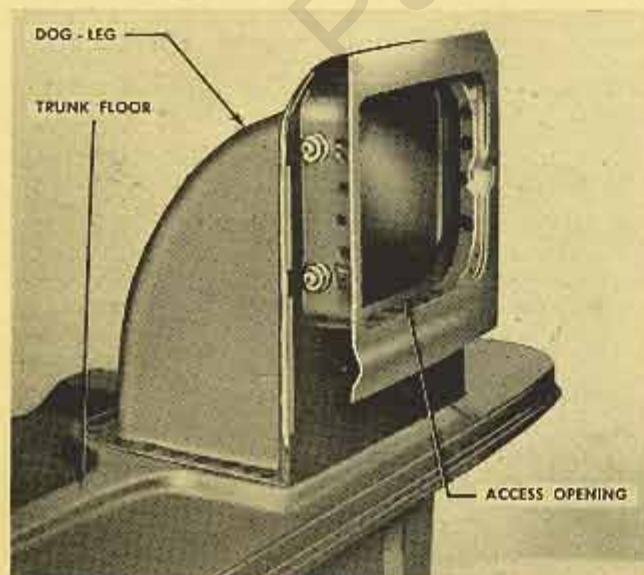


Fig. 1

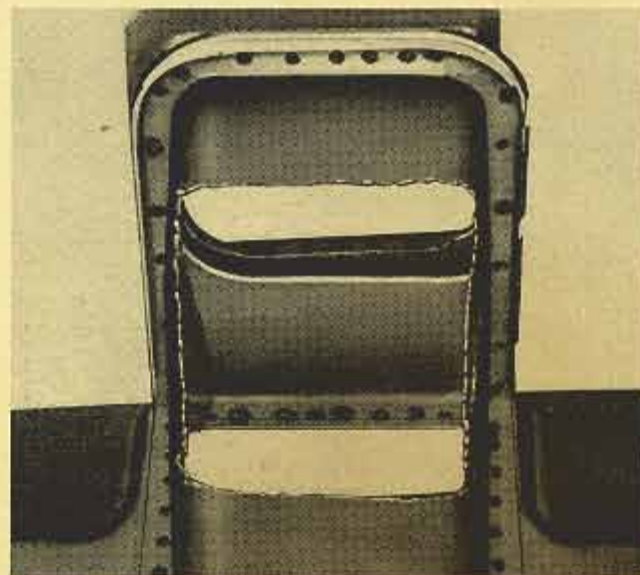


Fig. 2



The ledge inside the "dog-leg" can be reached through the access opening. Removing the gasoline filler cap makes the ledge more accessible. The pockets at each end of the ledge should be completely filled with sealer and the seam in the center of the ledge also should be covered. Figure 4 shows the ledge through the window in the "dog-leg" after the sealer has been applied.

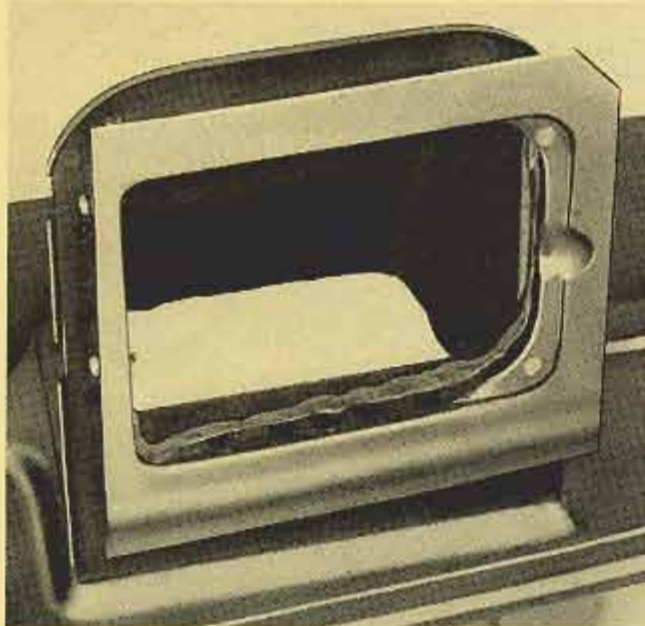


Fig. 3

A few instances have been reported of gasoline finding its way past the filler cap gasket because of insufficient spring tension in the cap when locked. The tension may be increased by using a pair of pliers and bending the locking ears slightly.

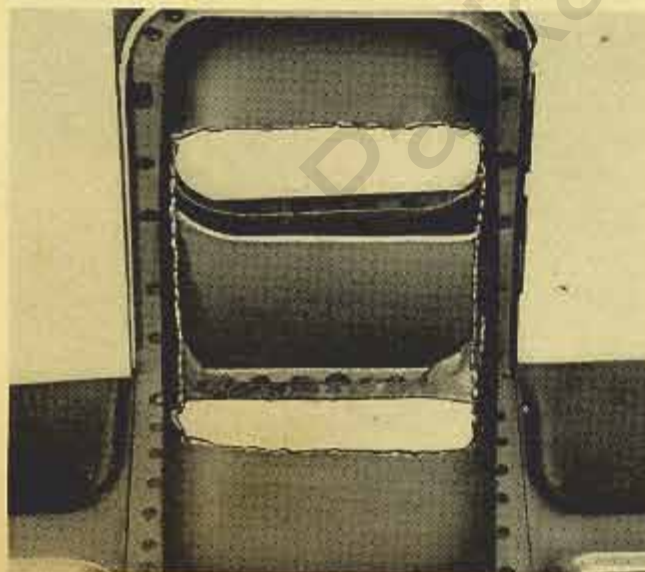


Fig. 4

There also is a possibility that gasoline may leak past the locking collar in the filler tube when making a right-hand turn with a full or nearly full tank. This condition may be corrected by working through the access opening and packing sealer around the tube and under the locking collar as shown in figure 5.



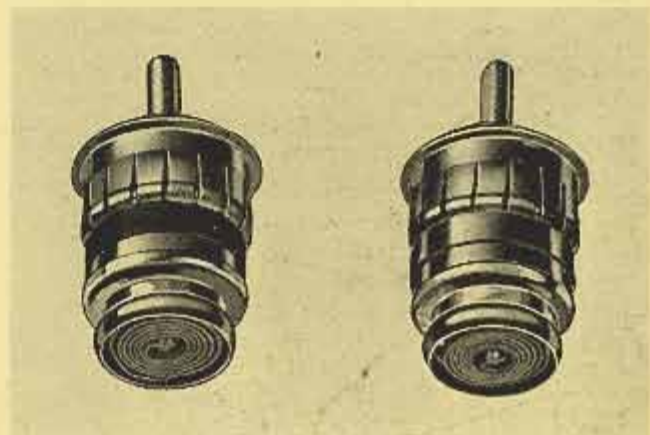
Fig. 5

The gasoline tank vent hose was recently increased in length to reduce the possibility of the hose working off the vent pipes. The position of the hose should be checked when gasoline fumes and leakage is reported.

### Replacement Cigar Lighter Elements

The service replacement cigar lighter elements in Factor Warehouse stock were recently reworked to prevent their sticking and, in some instances, burning out when installed in 22nd, 23rd and 24th Series cars.

The illustration shows an element before reworking and one after reworking. Before reworking, the bakelite is shiny and has a small shoulder near the center. After reworking and cutting down the bakelite above the shoulder, the upper portion of the bakelite has a dull black finish and only a slight shoulder remains.



Elements in Dealer stock which have not been reworked should be used only in cars produced prior to 22nd Series models.

The Factory Parts Warehouse now is shipping only reworked elements and these should be used in cars produced after 21st Series and they also may be used in cars prior to 22nd Series models.



### Front Seat Cushion Pad

Model "200"

When disassembling a front seat cushion, you will note that the zigzag springs are covered with a cotton spring pad having a compressed cotton base.

It is important that the spring pad be properly hog-ringed when the cushion is built up; otherwise, the base of the pad might be pushed down between the springs in a short time.

The cushion spring assembly has a double rail along the sides and the front at the top. The front of

the spring pad should be folded around the outer rail and a hog-ring should be used between each spring.

The pad then should be pulled rearward and folded around the heavy wire welded to the channel at the rear of the spring assembly. The pad should be ringed to the heavy wire with hog-rings spaced approximately five inches apart.

The sides of the pad should be folded around the spring assembly outer rail and hog-ringed with four rings at each side.

In the event a new spring pad is required, it may be ordered under part number 429153.

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### Throttle Control Rod Splasher

## 24th Series Ultramatic

The accompanying illustrations show a metal splash pan which can be made up for 24th Series Ultramatic-equipped vehicles to protect the throttle control linkage against the build-up of wet snow and slush.

After cutting the splasher and drilling the holes in it, following the dimensions shown in figure 1, bend the attaching flanges to a 90-degree angle. Refer to figure 2. The wide portion of the metal sheet, which becomes the front face of the splasher when bent upward, should be bent at an approximate 105-degree angle in relation to the bottom of the splasher. In other words, the front face of the splasher should tilt forward at an angle of approximately 15 degrees from vertical.

After forming the splasher, hold it in position against the frame sub-channel and use it as a template to mark the location of the attaching screw holes in the channel. The edge of the lower flange should be even with the bottom of the sub-channel and the front of the pan should be approximately one-half inch from the control damper. See figure 2.

The holes in the sub-channel should be drilled with a 7/32-inch drill and three self-tapping screws, part number 426310, should be used to attach the splashers. A 7/32-inch drill welded to a rod will facilitate the drilling operation and reduce the angle of the holes in the sub-channel.

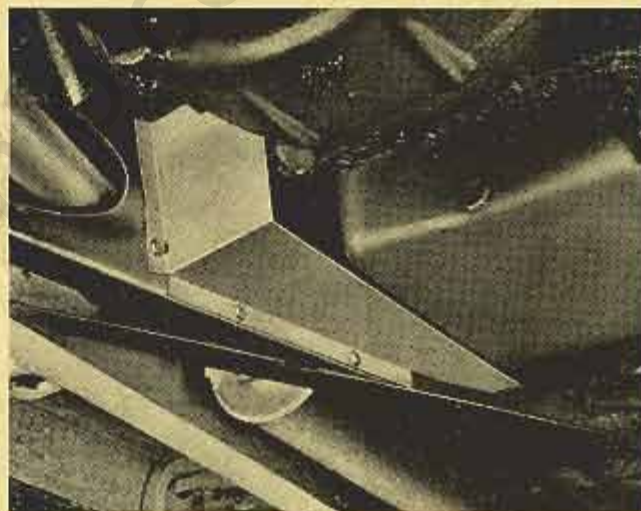
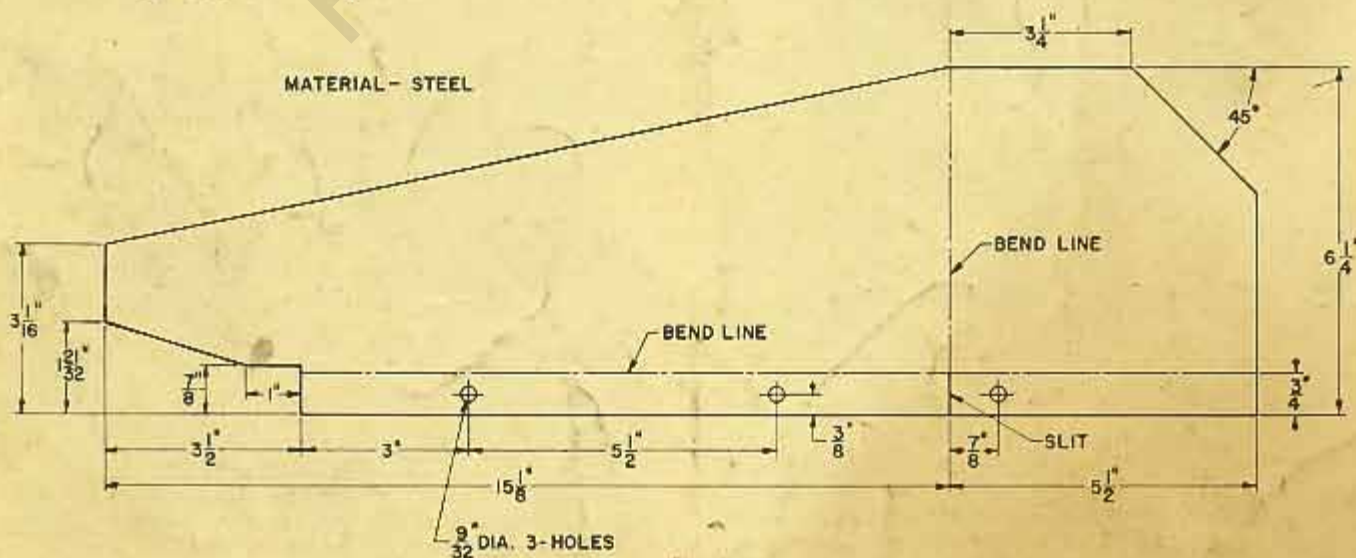


Fig. 3



Feng, 2011