

Constellation
Heritage
> 4700 Models

> 4800 Models
> 4900 Models
> 5700 Models

5900 Models
> 6900 Models

Western Star
Service Bulletin

General Information

This procedure improves the side window defrost function and overall A/C performance on Western Star 4700, 4800, 4900, 5700, 6900 models. In extreme cold conditions, the side windows may ice up and limit visibility. A retrofit kit (WWS RD-3-19025-0P) is available to remedy the side window issue. See [Fig. 1](#) for installation parts. Installation of the new louvers directs air flow to the side windows. Installing the fresh-air door-stop bracket, and sealing leaks in the A/C ducting, significantly improves air flow in heater/defrost and cooling modes, providing noticeable improvement in overall system performance.

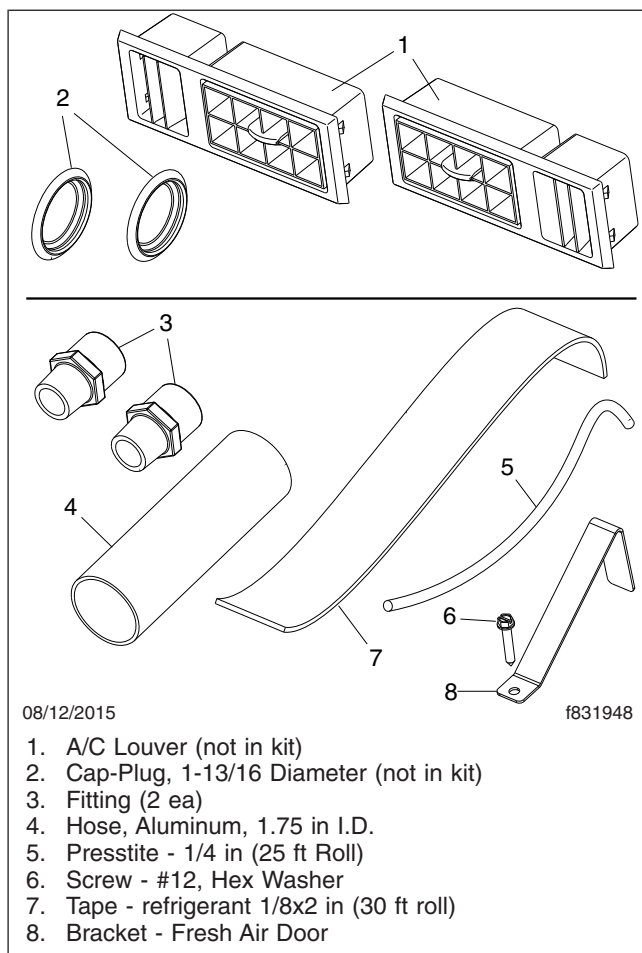


Fig. 1, Side Window Defrost Retrofit Parts

Procedure

1. Park the vehicle on a level surface, shut down the engine, and set the parking brakes. Chock the tires.
2. Install the left-side window defroster louver.
 - 2.1 Lower the steering column.
 - 2.2 Loosen the fasteners, and tilt the instrument panel out.

- 2.3 Remove the existing louver from the instrument panel. See [Fig. 2](#).



Fig. 2, Original Left-Side Louver

- 2.4 Install the new louver with the non-movable louvers pointing toward the side window.
2.5 Close the instrument panel, and secure the fasteners.
3. Install the right-side window defroster louver. See [Fig. 3](#).
3.1 Remove the louver.
3.2 Install the new louver into the dash as shown in [Fig. 4](#).



Fig. 3, Original Right-Side Louver



Fig. 4, New Right-Side Louver

4. Install the fresh-air door-stop bracket.
4.1 Remove the trim panel.
4.2 Set the HVAC system to recirculation mode; this moves the door out of the way and allows access to the location for the bracket installation.
4.3 Position the bracket and secure it with a self tapping screw as shown in [Fig. 5](#).

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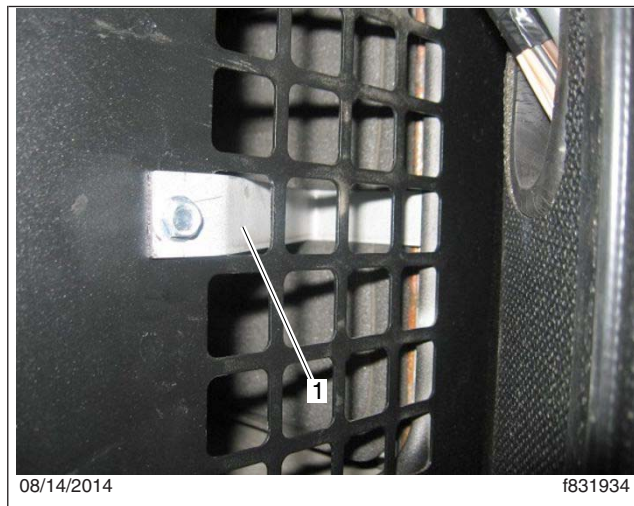


Fig. 5, Fresh-Air Door-Stop Bracket Installation

NOTE: Some vehicles may have a round defrost louver outlet on the end of the dash facing the door panel. These outlets must be blocked.

5. If installed, remove the round defrost louvers at each end of the dash and install plugs in the holes. See [Fig. 6](#).

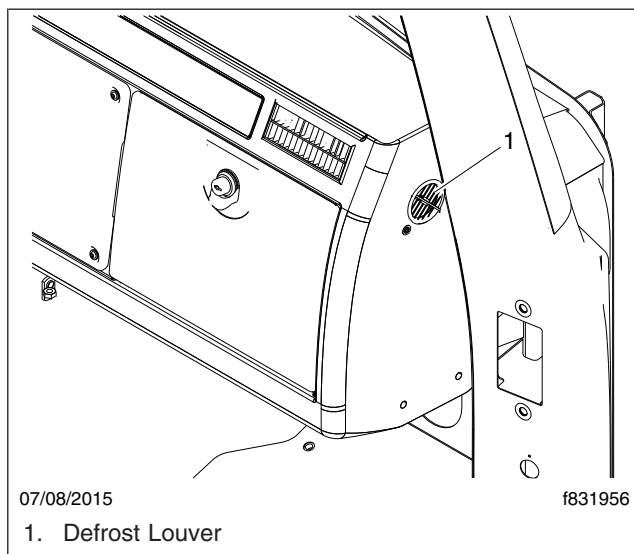


Fig. 6, Defrost Louver

NOTE: Refer to the examples in [Fig. 7](#), [Fig. 8](#), [Fig. 9](#), and [Fig. 10](#) for the following procedure.

6. Seal any accessible duct-to-plenum interface leaks.
 - 6.1 If not already done, open the instrument panel, the auxiliary instrument panel, and remove the fuse panel cover.

- 6.2 Temporarily tape closed all of the in-dash louvers.
- 6.3 Set the mode switch to blow from the dash panel, and turn on the fan switch.
- 6.4 Check for air leaks at all accessible interfaces between the ducting and plenums.

Depending on the size of the gap, seal the connections with either RD-5-4092 Presstite Bead, or RD-5-4058 Refrigeration Tape or other suitable material.

- 6.5 Set the mode control switch to window defrost
- 6.6 Check for air leaks at all accessible interfaces between the ducting and plenums.

Depending on the size of the gap, seal the connections with either RD-5-4092 Presstite Bead, or RD-5-4058 Refrigeration Tape or other suitable material.

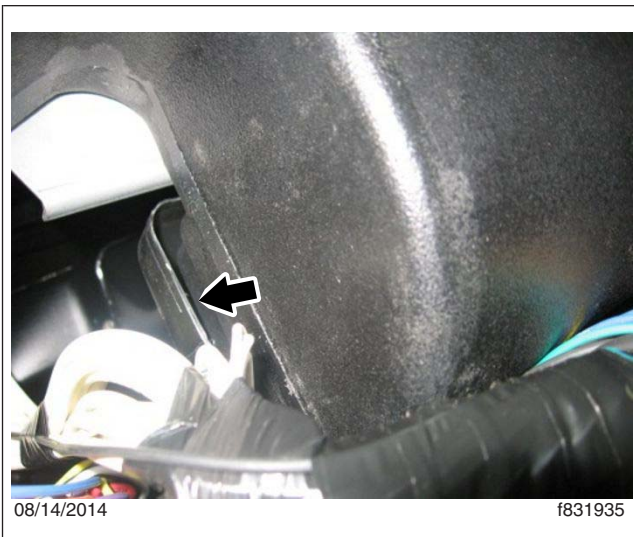


Fig. 7, Example of Gap



Fig. 8, Example of Gap

- 6.7 Remove the tape from all the in-dash louvers.
- 7. Install the fuse panel cover, then close and secure the auxiliary and main instrument panels.
- 8. Verify that the heater water valve is fully closed when the selector switch is in the full cold position.
 - 8.1 Cycle the temperature control switch several times, stopping at full cold, then move it two clicks back toward hot. See [Fig. 11](#) and [Fig. 12](#).
 - 8.2 Verify that the water-valve arm is resting on the stop. See [Fig. 13](#).
If the arm is not resting against the stop, Go to the next step.
If the arm is resting against the stop, no further adjustment is needed.
 - 8.3 With the temperature control still at the two-clicks-back position, loosen the cable housing clamp and move the cable assembly until the arm is against the stop.
 - 8.4 Tighten the clamp.
 - 8.5 Cycle the temperature control switch several times, stopping at full cold, then move it two clicks back toward hot. Verify that the water-valve arm is now resting on the stop. Adjust it again if needed.

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Fig. 9, Presstite Bead

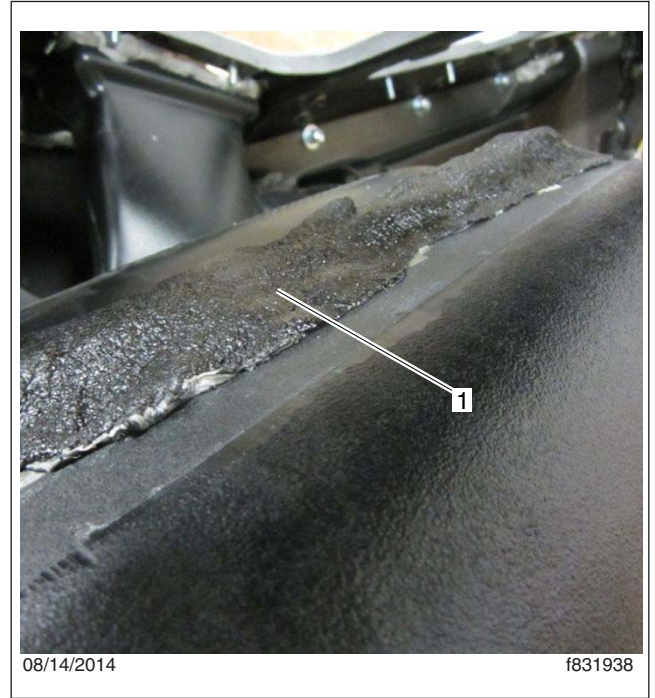


Fig. 10, Refrigerant Tape



Fig. 11, Control Knob, Full Cold



Fig. 12, Control Knob, Two Clicks Back



Fig. 13, Water-Valve Arm Resting on the Stop

Parts

See [Table 1](#) for required parts. Parts are available through the PDC separately, or order Red Dot retrofit kit WWS RD-3-19025-0P plus the louver and plug.

Side Window Defrost Retrofit Parts				
Part Number	Description	Quantity	Source	
WWS RD-3-19025-0P	Red Dot Side Window Defroster Retrofit Kit	1	Red Dot	
	Includes the following parts:			
	RD-5-4092	Presstite Bead	1	Red Dot
	RD-5-4058	Refrigeration Tape	1	Red Dot
	RD-5-15258-0	1.75 Inch Diameter Aluminum Ducting Hose, 24-Inch Long Extended (not used)	1	Red Dot
	436-010	Lasco PVC Fitting, 1-Inch Male Adapter, Schedule 40 (not used)	2	Red Dot
	N/A	Silicone Sealant, Tube	1	Red Dot
A22-71764-000	A/C Louver	2	PDC	
23-11688-019	Plug (used on vehicles with open louver on the end of the dash panel)	2	PDC	

Table 1, Side Window Defrost Retrofit Parts

Warranty

This procedure is informational only. Warranty does not apply.