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GROUP: Body

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SUBJECT:

Optimum Roof Rack Cross Bar Positioning To Reduce Air Turbulence Concerns

OVERVIEW:

This bulletin involves a discussion regarding the correct installation and positioning of the roof rack cross bars.

MODELS:

2005 (WK/WH) Grand Cherokee

DISCUSSION:

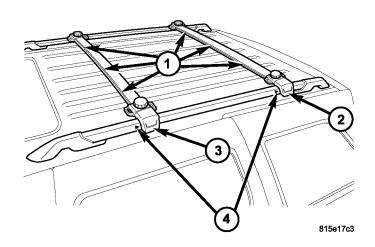


Fig. 1 ROOF RACK CROSS BOW POSITIONING

- 1 POSITION PROTRUDING BEAD TOWARDS FRONT OF VEHICLE
- 2 POSITION #7 STORE REAR CROSS BAR HERE
- 3 POSITION #2 STORE FRONT CROSS BAR HERE
- 4 ALIGNMENT MARKS FOR POSITIONING CROSS BARS WHEN NOT IN USE



A customer may experience an air turbulence or wind whistle-like sound when driving their vehicle. This sound may be caused by a roof rack cross bar that has been installed backwards or a cross bar that has not been positioned correctly to the roof rack side rails.

The optimum position for the roof rack cross bars when not in use is with the rear cross bar at the rearmost position (position #7) of the roof rack side rails, and the front cross bar in the second (#2) position from the front of the roof rack. This position will provide the least amount of air turbulence and wind whistle-like sound. Note that the roof rack side rails may have a unique (arrow, line, etc.) feature used as an alignment mark that is stamped into each rail to indicate the correct position for storing the front and rear cross bars (Fig. 1).

If a cross bar is installed backwards, then an air turbulence or a wind whistle-like sound may occur even if the cross bar is properly positioned to the side rails. **Cross bars are normally installed by the dealer during pre-delivery or later on by the customer**. The leading edge of a correctly installed cross bar has a protruding bead running along the top edge of the bar. Each cross bar has an arrow stamped on its bottom surface that should point toward the front of the vehicle when the cross bar is correctly assembled to the roof rack. **Be sure to review the instructions supplied with the roof rack cross bar kit when installing each cross bar (Fig. 2)**.

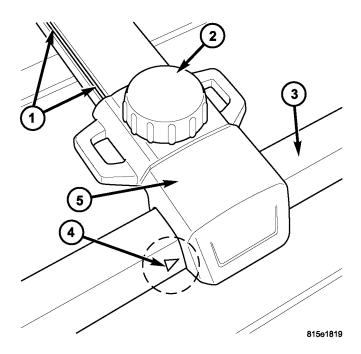


Fig. 2 ROOF RACK BOW ALIGNMENT MARK

- 1 PROTRUDING BEAD ON LEAD EDGE OF CROSS BAR
- 2 THUMB SCREW
- 3 ROOF RACK SIDE RAIL
- 4 ALIGNMENT MARK USED TO POSITION CROSS BAR WHEN NOT IN USE
- 5 PLASTIC CROSS BAR END CAP

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If a cross bar has been installed backwards then perform the following steps to correct:

- 1. Loosen thumb screws (four in total) on both cross bars.
- 2. Slide front and rear cross bars to the rear of the roof rack. This is the widest spacing between the roof rack side rails.
- 3. Place a protective cloth under each plastic end cap of the cross bar to protect the vehicle painted surface.
- 4. For the cross bar that is installed backwards, fully remove the thumb screw at each plastic end cap of the cross bar. The thumb screw may be a little tight near the end of its threads.
- 5. With the thumb screw removed, one end of the catch bracket (metal strap) on the bottom of each cross bar plastic end cap will pivot (drop) down onto the roof. The other end of the bracket will be held in place by the metal pin in the plastic end cap.
- 6. Working at one end cap, slide the metal cross bar all the way into the opposite end cap. Now lift up on both the metal cross bar and the end cap that you are working from. This will cause the end cap and metal cross bar to separate. Make sure that the metal cross bar was slid to one side before attempting to separate the plastic end cap from the cross bar.
- 7. Slide the cross bar out of the other end cap.
- 8. Switch plastic end caps from side to side. The end caps are indexed to the shape of the metal cross bar.
- 9. Insure that the catch bracket on each plastic cross bar end cap is properly positioned to each end cap and is correctly engaging its respective pivot pin before proceeding further.
- 10. Position the cross bar so that the top edge bead is toward the front of the vehicle. The arrow stamped on the bottom of the metal cross bar should also point toward the front of the vehicle.
- 11. Position yourself to one side of the vehicle and slide the appropriate end of the metal cross bar all the way into the opposite end cap furthest from your position. Now bring together and insert the metal cross bar in to the end cap closest to you.
- 12. Verify that the pin in each plastic end cap is in place and fully seated into the end cap body.

NOTE: The cross bar end cap metal pins must be used to properly attach the catch bracket to the end cap. If additional pins are needed the pin part number is 05174361AA.

- 13. Install each thumb screw.
- 14. Perform similar steps to the other cross bar if it was installed incorrectly.
- 15. Position both cross bars to their optimum storage positions (#2 and #7 positions) and tighten all thumb screws.
- 16. Verify proper roof rack and cross bar assembly.

POLICY:

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