STAR ONLINE PUBLICATION

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Symptom/Vehicle Issue: Drone Noise From Bed Or Rear Of Truck While Driving At Speeds Between 20 And 45 MPH

Customer Complaint/Technician Observation: Customer may complain of a low frequency booming noise from the back of the vehicle driving at speeds of 20-45 mph. The noise could also be compared to a drumming sound. Vehicle will have the MWK multifunction tailgate option.

Discussion: A noise vibration harshness (NVH) plate will need to be fabricated to reduce drone or noise from the vehicle. Obtain a piece of steel plate 6mm thick, 170mm x 150mm. Refer to Fig 1. Locate and drill the required holes based on the measurements in Fig 1. All 3 holes are centered on the 150mm side of the plate. It may be helpful to use a sharp scribe and a T-square to mark the center of the plate for the hole centers.

Parts Required:

Locally sourced steel plate 6mm thick 150mm x 170mm.
Drill press or power drill.
Qty 2- 06511413aa M6x1x18.35 screws
3mm drill
5mm drill
6.6mm drill
M6x1 Tap
Tap handle

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Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.

Scribe or sharp pick
Center punch
Hammer
Zinc rich primer (such as RustOleum or equivalent)
Black enamel spray paint
3m single step primer 08682 black color or equivalent
Pliogrip 7779 Adhesive

1. Using measurements from figure 1 mark, center punch, and drill the 3 hole centers. 3mm hole will be used to fish the plate into place. The 5mm holes once drilled will need to be tapped to M6x1. **Do not use the 6.6mm drill for these 2 holes in the plate.**
2. With all 3 holes drilled and tapped, prep the plate for corrosion coating. Remove any oils or grease with a grease and wax remover. Then apply zinc rich primer to the plate following application instructions. Once cured apply black spray enamel following the material's application instructions.

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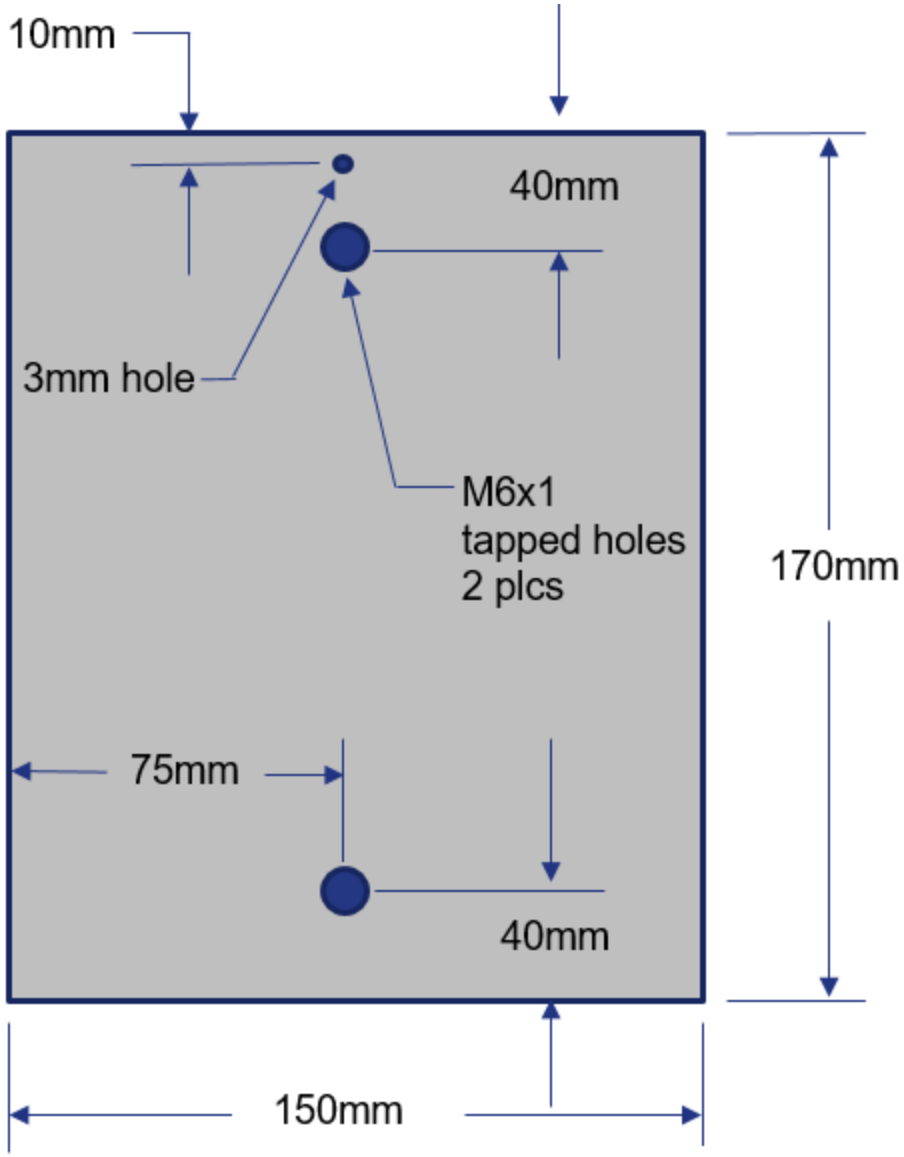


Fig 1
Fabricated Plate And Hole Locations.

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3. Using a tape measure, locate the front bed bulkhead center inset rib. See Fig 2.
4. Measure up from the floor of the bed 175mm and place a paint mark or a scribe mark. Next, measure from the first hole upwards 90mm and mark a second hole. Center punch both hole locations and drill holes using a 6.6mm drill. NOTE- be very careful to not drill the truck cab when the drill passes completely through the bed bulkhead steel.
5. Use single step primer such as 3M 08682 (or equivalent) to corrosion protect the holes drilled in the bed. Follow product applications and cure times.

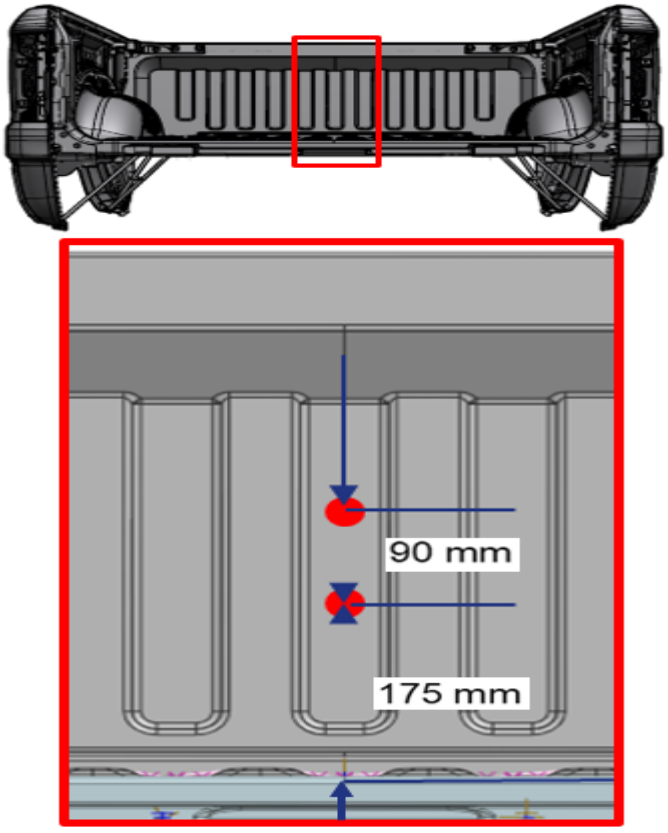


Fig 2.
Front Bed Bulkhead Hole Locations To Be Drilled With 6.6mm Drill.

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6. Apply Pilogrip 7779 to the fabricated plate. Follow the pattern in Fig 3. The bead applied should be between 3-5mm diameter on the plate. Total width of both beads on the plate should not exceed 43mm wide (to cover the bulkhead rib width).

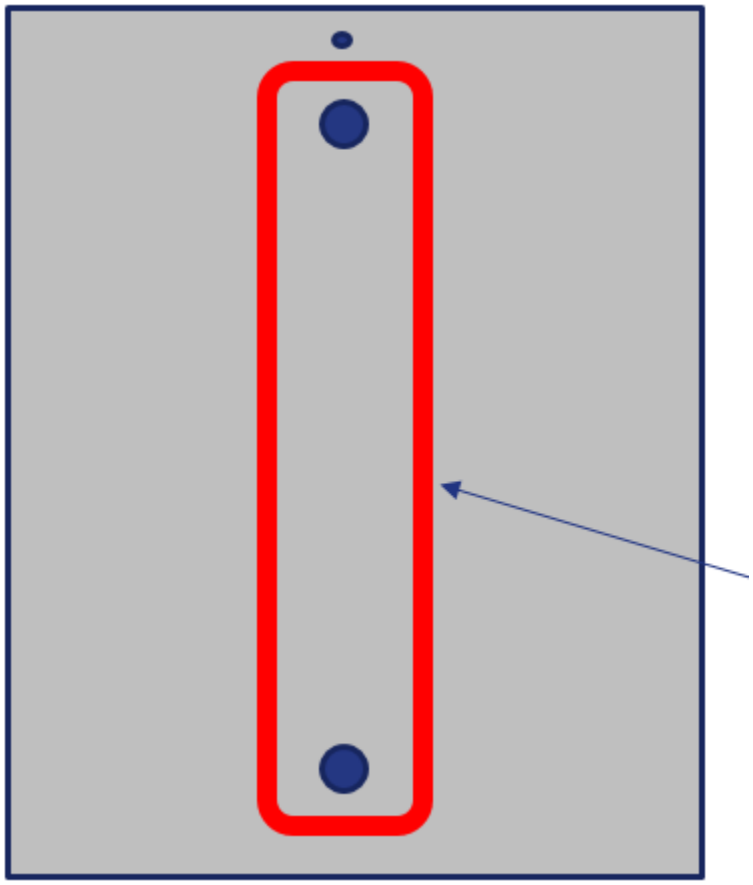


Fig 3.
Pilogrip 7779 adhesive applied to the plate in the 3-5mm bead pattern shown.

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7. Using a wire inserted into the 3mm hole and looped around the fabricated painted plate, carefully fish the plate into position between the bed front bulkhead and the cab. Start the threads of the 2 M6x1x18.35 screws (MOPAR 06511413AA) from the inside of the bed to hold the plate in place. Try to not disturb the adhesive bead until it is in position. Torque the bolts to 10Nm. Remove the fish wire from the plate.
8. Once the adhesive is cured, test drive to confirm the NVH noise is corrected.

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