

Preview Solution CBR-2586-1

Exhaust Stack Rotation - VN (4) - PR (4) - AN (4)

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Valid For

Mack Chassis - PR (4) - AN (4)

Volvo Chassis - VN (4)

Model Year - 2025 to Current

The purpose of this CBR is to address issues of exhaust stack rotation on version 4 products

Anti-rotation feature for top stacks installation guide

Below we can see a picture that shows the final assembly of the anti-rotation feature, we would explain step by step how to get to this final assembly in this document

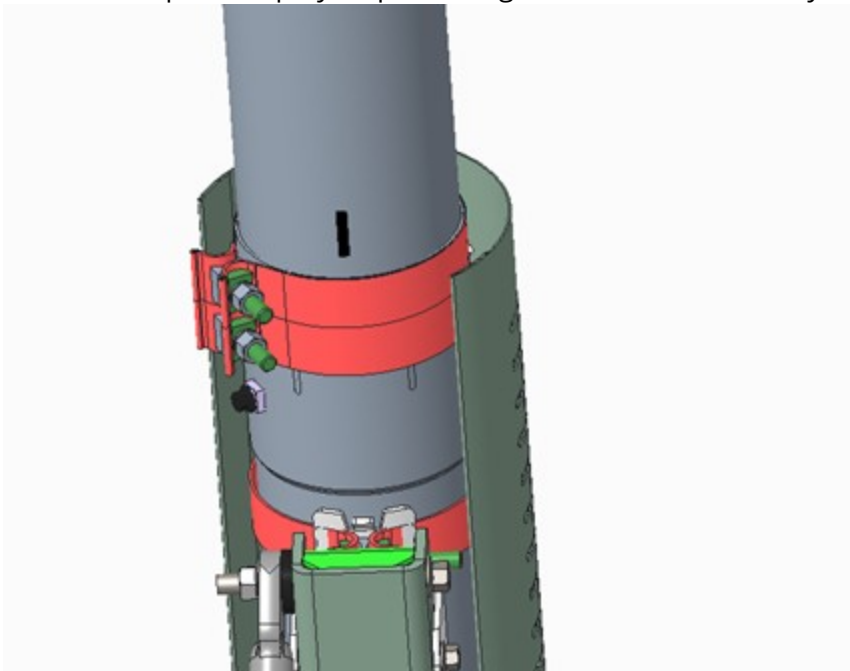


Figure 1 Anti-rotation feature, final assembly.

1. First step would consider the following assumption: top stack is not attached to the vertical stack when arrives at the dealership. Once this is considered, the first action would be to drill the hole that would allow the passing of the bolt through the vertical stack and top stack to lock it in position. The following picture shows the size of this hole (10.5 mm)

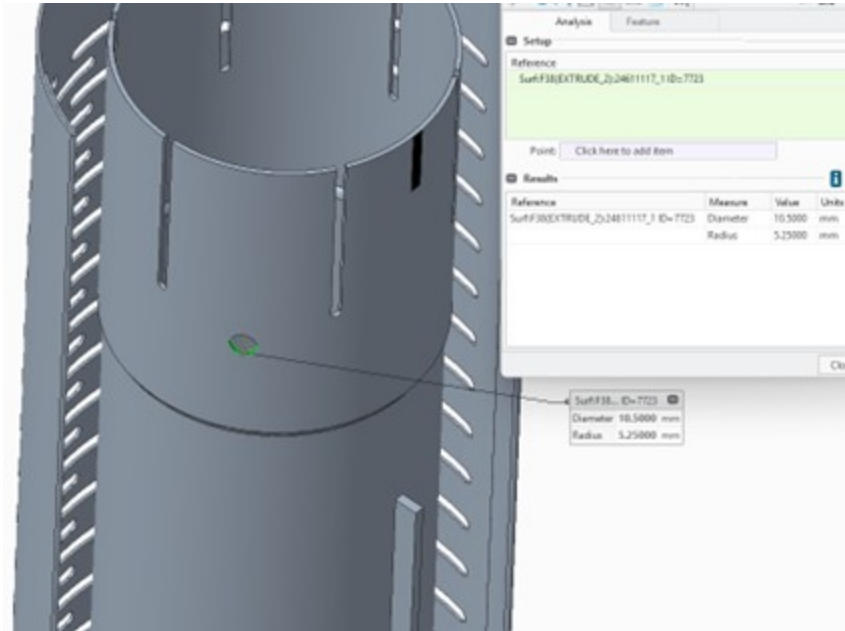


Figure 2 Vertical stack (2461117) hole size

2. The angle of this hole is 60 deg referenced to where the vertical stack key is located. The following picture better illustrates

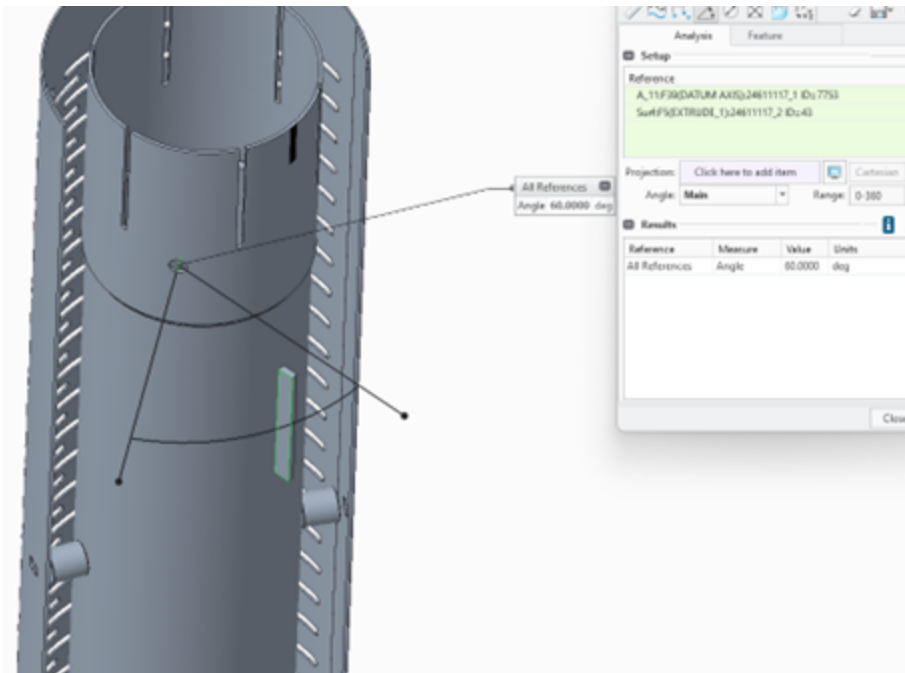


Figure 3 Drilling angle for the vertical stack hole

3. The distance of the hole is 95 mm referenced from the top surface of the vertical stack as shown in the following picture

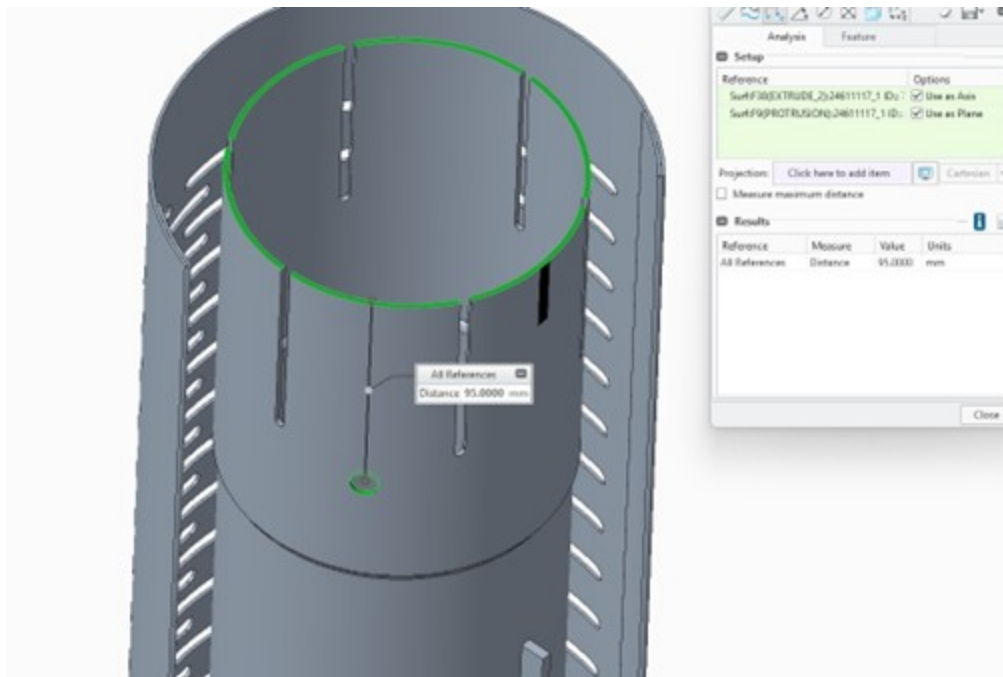


Figure 4 Drilling distance for the vertical stack hole

4. Once we have the hole drilled, we should ensure that the area where the hole was drilled is free from burrs

5. We should align weld nut (961614) with the hole drilled on the vertical stack (24611117)

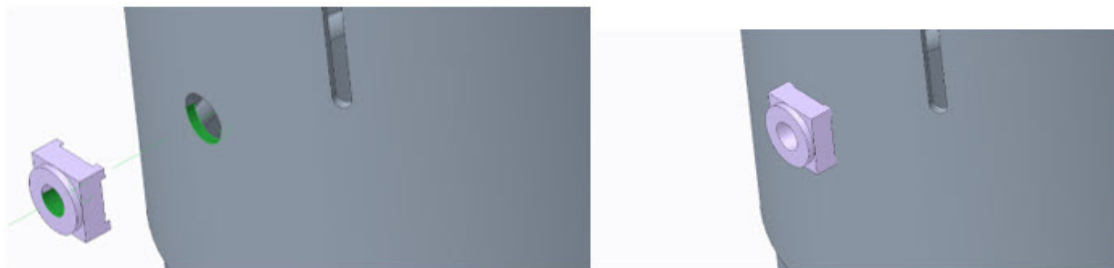


Figure 5 Bushing alignment

6. Once the weld nut and the drilled hole are aligned, we should hold it in place firmly since a welding procedure would be needed according to [STD 181-0007](#)

7. The next step will vary depending on if we have a straight top stack or a turned top stack, for the straight top stack follow instructions on steps 9 and 10. For the turned top stack follow steps 9 through 11

8. The diameter of the hole in the top stack should be 11 mm as shown in the following picture

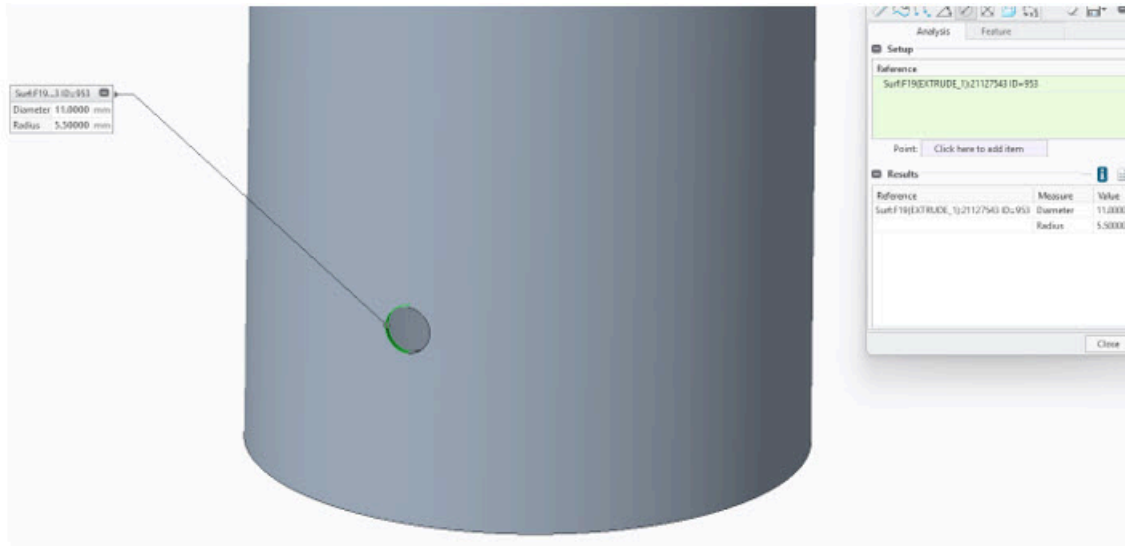


Figure 7 Top stack hole size

9. This hole is in the inferior part of the top stack; this means that it is in the area where the diamond knurling is present. Please remove all burrs from the drilled area

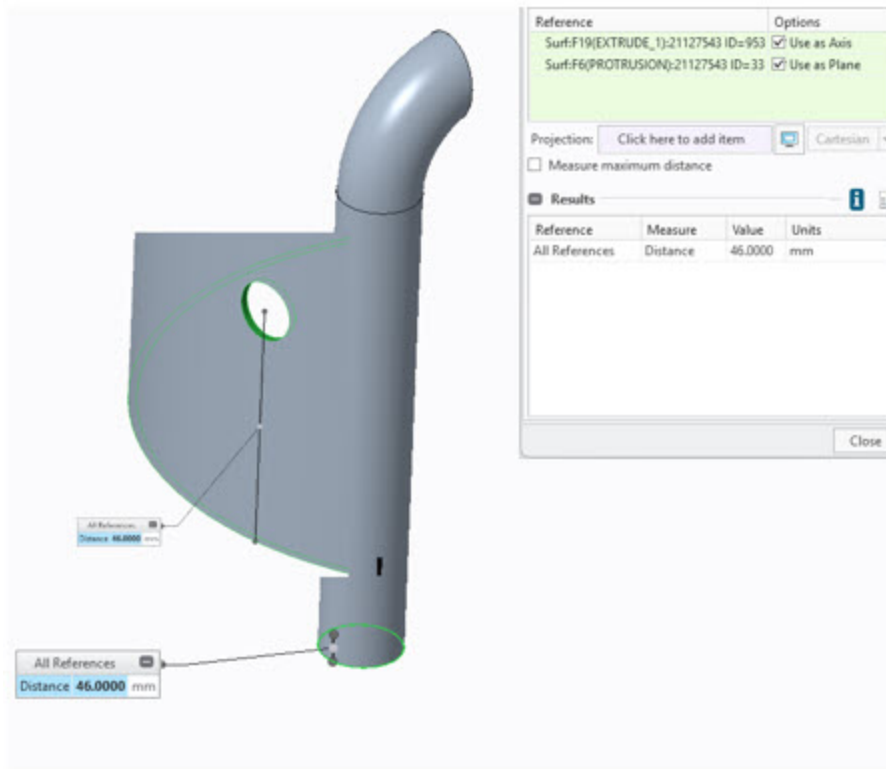


Figure 8 Top stack hole height dimension

10. This step is to determine the angle of the hole for the turned top stacks; the angle is 15 deg referenced to the axis of the exit of the gases

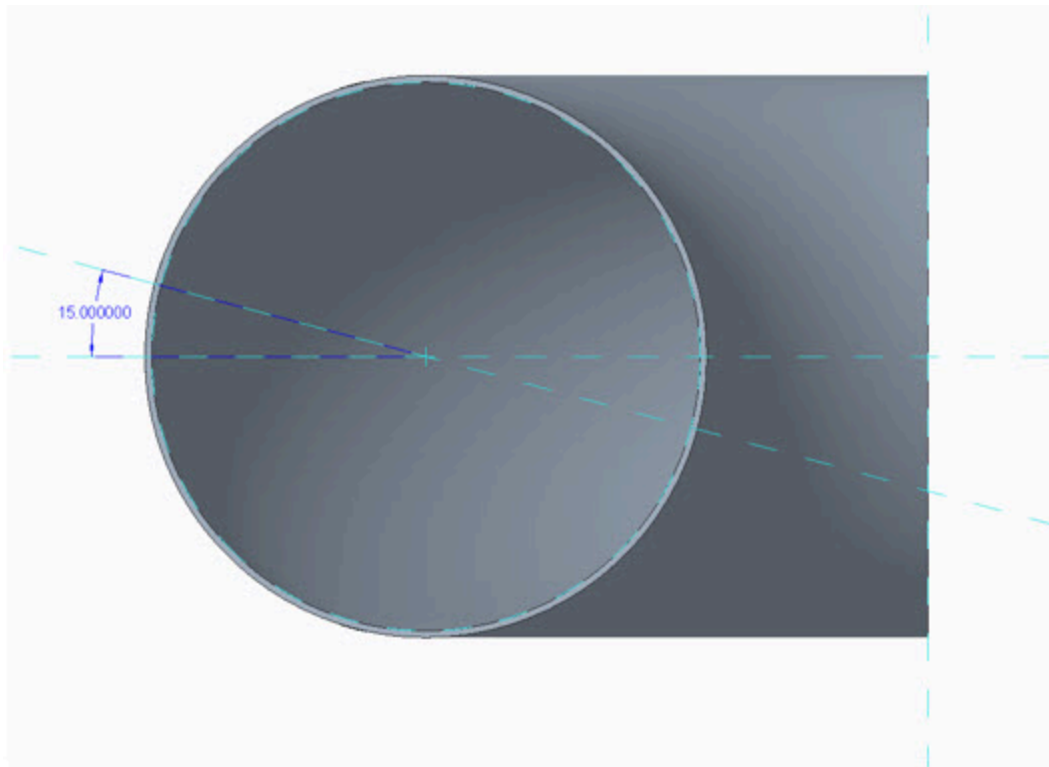


Figure 9 Turned top stack hole angle (bottom view)

11. Assemble now top stack on top of the vertical stack and align top stack hole with the vertical stack hole. The picture below shows this process better

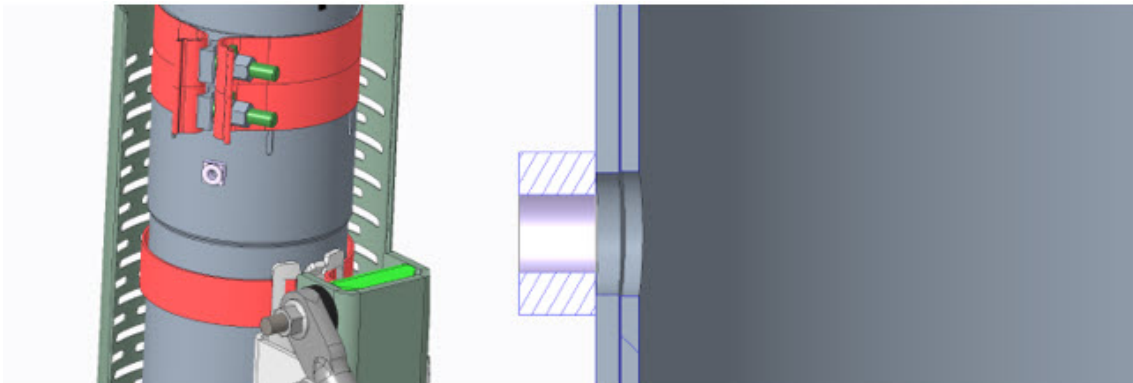


Figure 10 Top stack and vertical stack alignment

12. To complete the process, assemble the flange bolt (994383) and torque it with a standard torque for an M8 bolt (~22–29 Nm (16–21 ft-lbs.))

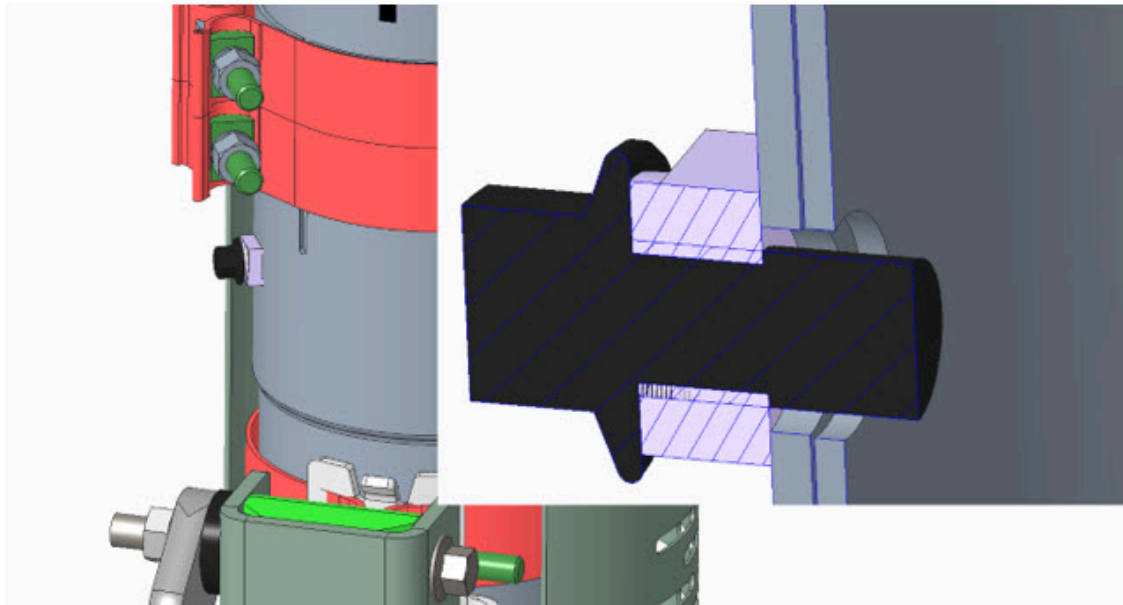


Figure 11 Bolt assembly

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