

January 14, 2022

Subject: Exhaust Pipe and Cab Support Bracket Interference

Models Affected: Specific Freightliner New Cascadia vehicles built from April 20, 2021 through August 11, 2021.

General Information

Eleven New Cascadia vehicles are reporting interference between the exhaust pipe and the lower cab mounting bracket. This CAL contains work instructions for fixing this issue.

Parts

Part Number	Description	Quantity
04-32365-000	PIPE-EXH,VERT,INTRM,NGC	1 (A/R)
23-14067-060	BOLT-HEX,ZNAL,BK,M16X1.5X60	2
23-14091-007	WSHR-STL,HDND,ZHAL,BK.625	6

Table 1, Parts

Work Instructions: Exhaust Pipe and Cab Bracket Interference

1. Park the vehicle, shut down the engine, and apply the parking brakes. Chock the tires.



WARNING:

PERSONAL INJURY

To avoid injury from hot surfaces, wear protective gloves, or allow engine to cool before removing any component.

- Referencing **Fig. 1** (from installation diagram D04-31766-007), remove the lower clamps numbered 14 and 12.

- 007-INSTL-EXH,1F3,SLPR,NGC,AFT OUT,1 BRKT (E)

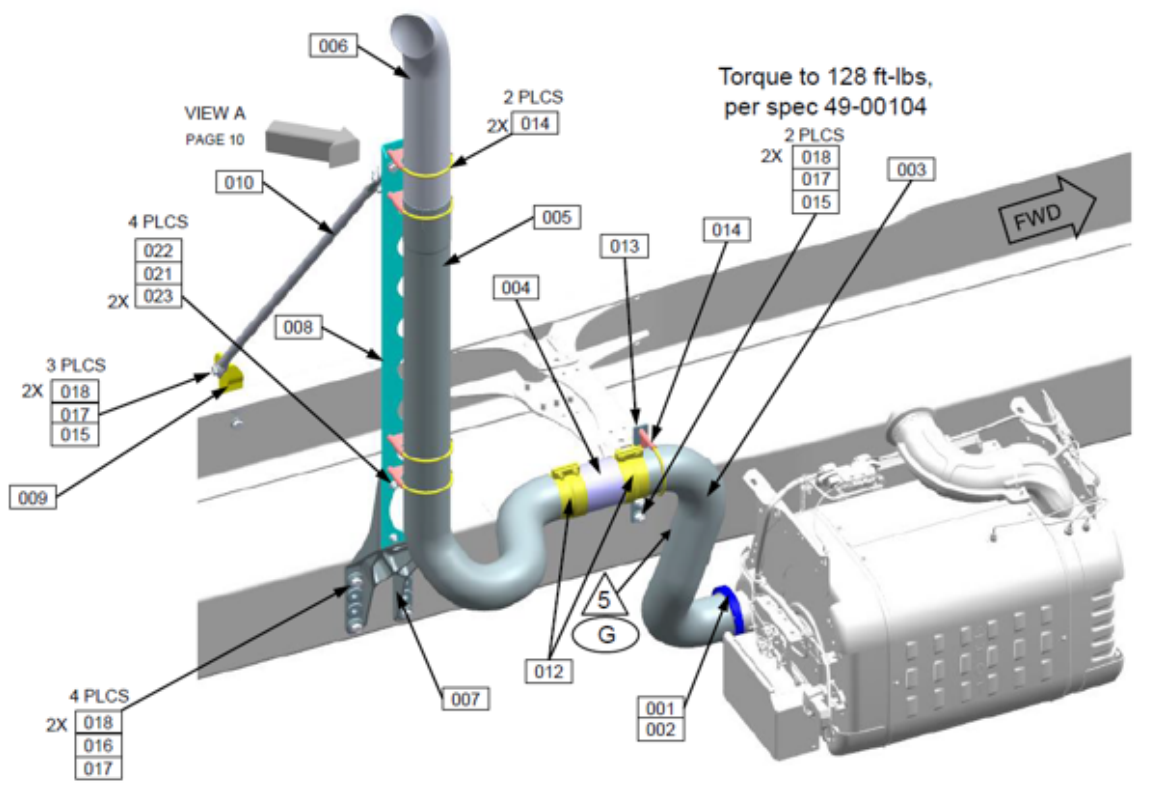


Figure 1: Installation Diagram Vertical Exhaust

- Remove the exhaust pipe bracket, labeled as item 13 in **Fig. 1** (from installation diagram D04-31766-007).

January 14, 2022

- Trim the bracket along the green lines as shown in **Fig. 2**.

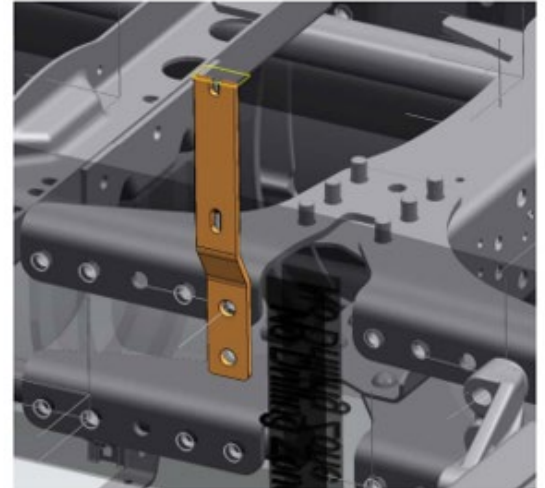
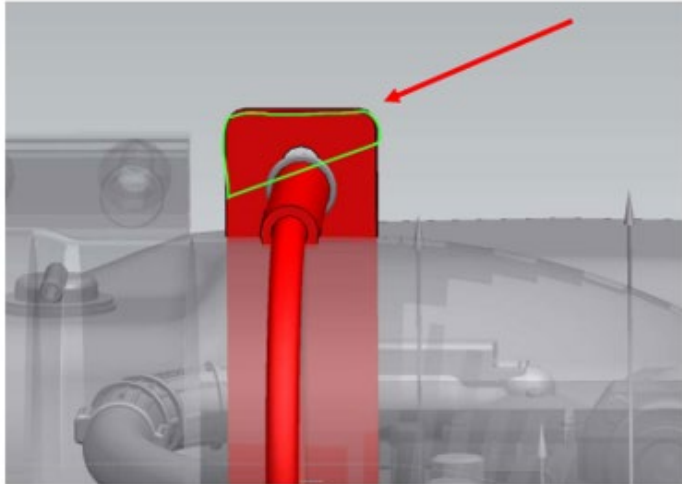


Figure 2: Exhaust Pipe Mounting Bracket Trimming

- Install the trimmed bracket using the hex bolts (23-14067-060), adding 3 additional washers (23-14091-007) at each bracket mounting point to separate it from the frame rail. This will result in moving the pipe to a new position. Torque to 128 lbf•ft (174 N•m).
- Install the clamp, item 14 in **Fig. 1**, removed in step 2. Tighten only hand tight as shown in **Fig. 3**.

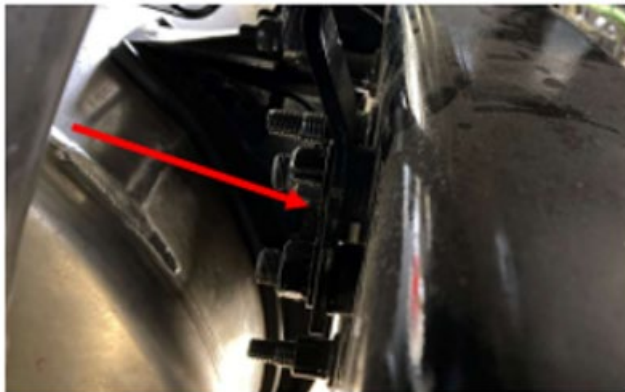


Figure 3. Exhaust Bracket reinstalled and Exhaust Clamp loose.

January 14, 2022

7. Loosen the lower exhaust clamp shown in red in **Fig. 4**.

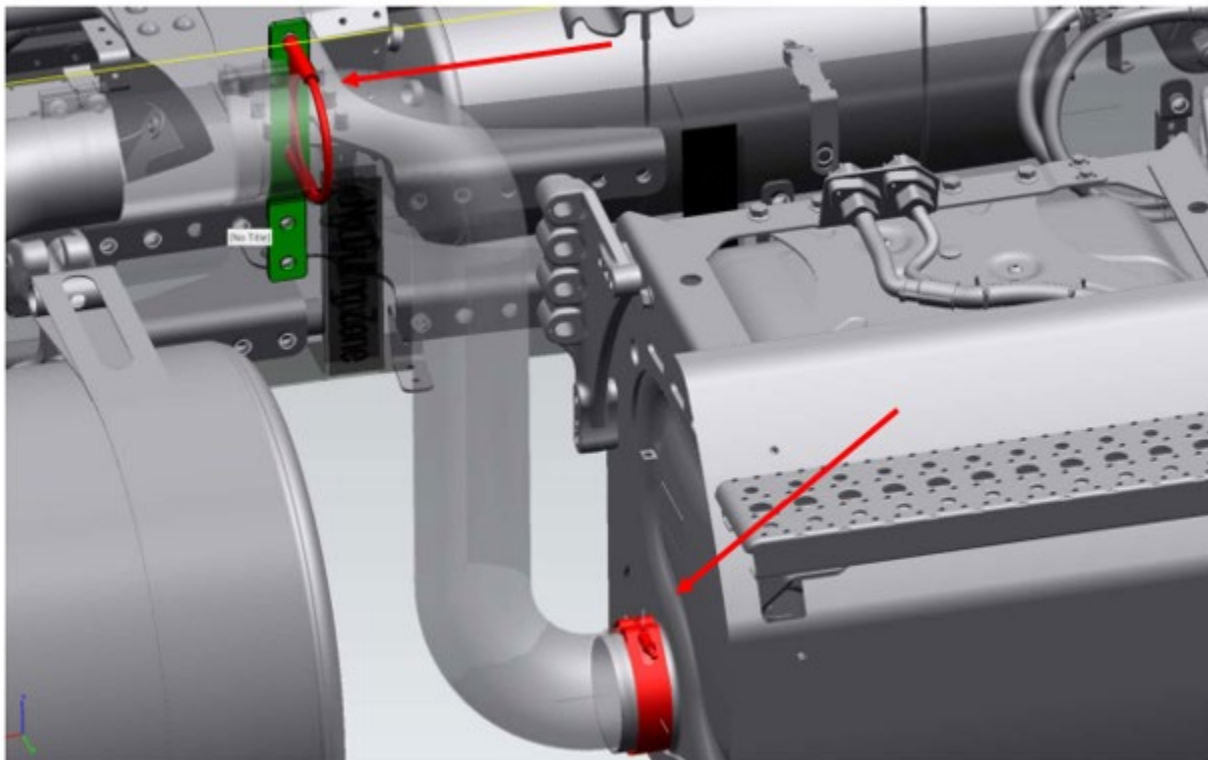
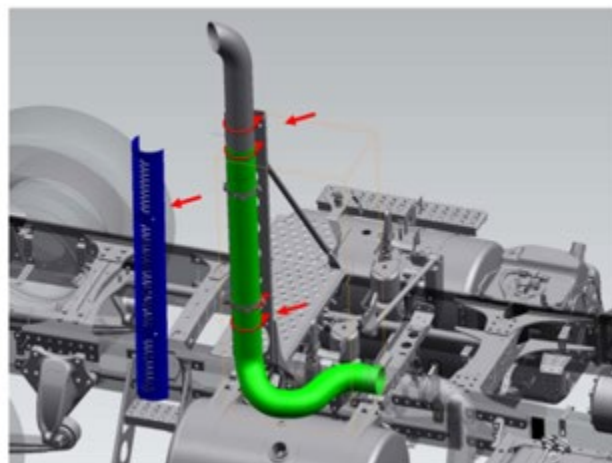
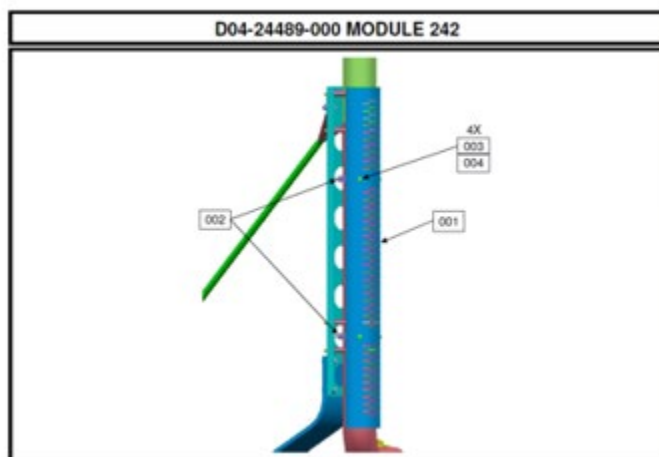


Figure 4. Upper (Item 14) and lower (Item 1) Exhaust Clamps shown.

8. With the lower exhaust clamp loosened, tighten the upper exhaust clamp (item 14 in **Fig. 4**) to 23 ± 3 lbf•ft (31 ± 3.5 N•m).
9. Tighten the lower exhaust clamp (item 1 in **Fig. 4**) to 15 ± 0.5 lbf•ft (20 ± 1 N•m).
10. Remove the mounting bolts that fasten the exhaust shield and remove the exhaust shield as shown in **Fig. 5**.



January 14, 2022

Fig. 5, Exhaust Shield Removal

11. Inspect the area of the exhaust pipe called out in **Fig. 6** for any damage.

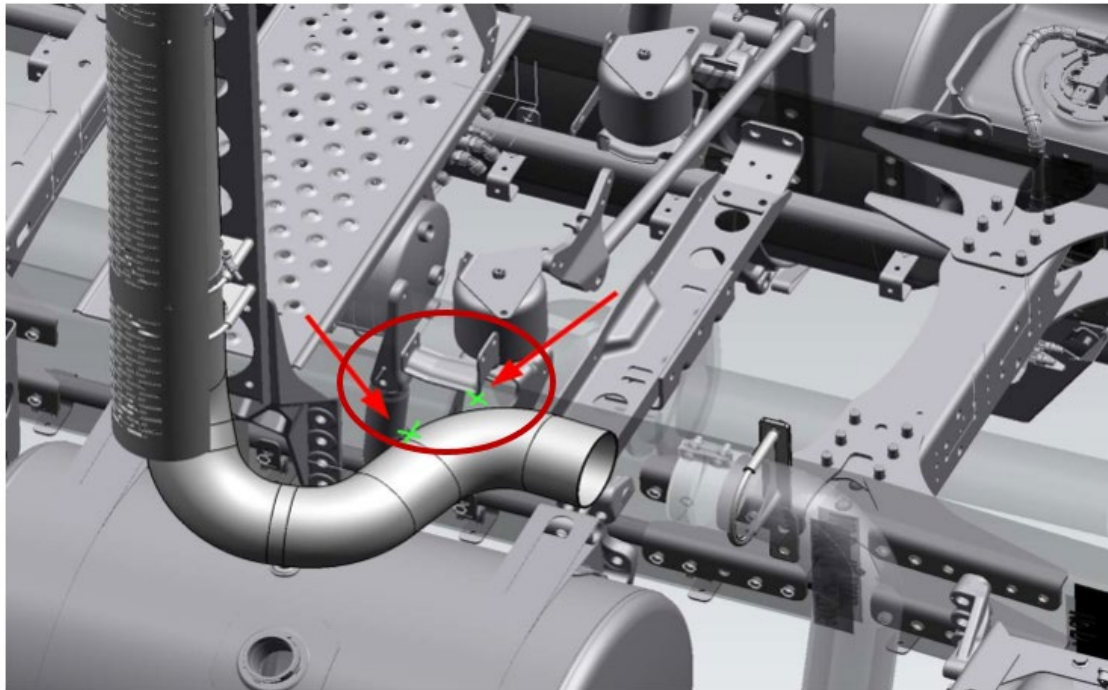


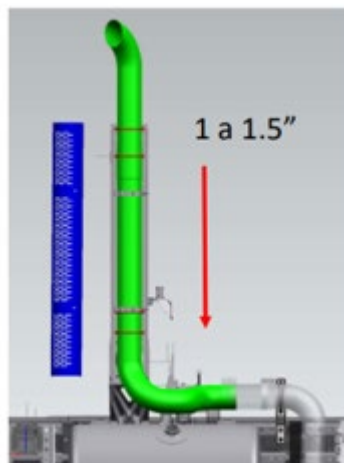
Figure 6. Hard Interference points.

12. Loosen the four vertical exhaust pipe saddle clamps called out in red in **Fig. 5**.

13. Inspect the section of the exhaust stack called out in **Fig. 6**.

13a. If the pipe is indented, replace this portion of exhaust pipe with the same part number, leaving the saddle clamps loose.

14. Adjust the position of the exhaust stack down 1 to 1.5 inches (2.5 to 4 cm) as shown in **Fig. 7**.



January 14, 2022

Fig. 7, Adjust the Exhaust Stack Down

15. To increase clearance between the exhaust pipe and lower cab support bracket, rotate the exhaust pipe clockwise as shown in **Fig. 8**.

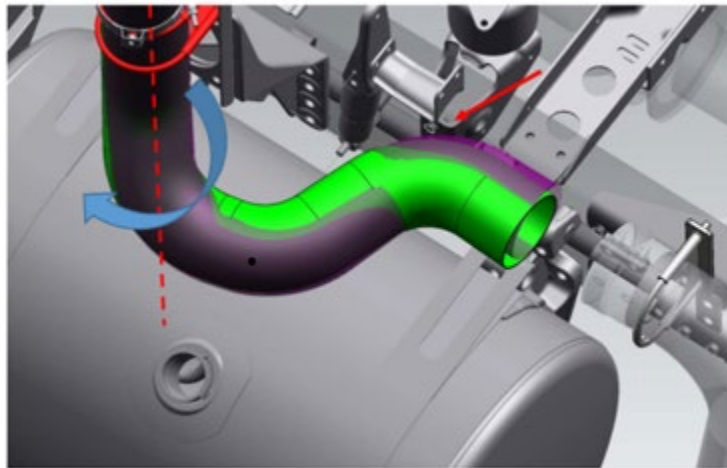


Fig. 8, Rotate the Exhaust Pipe Clockwise

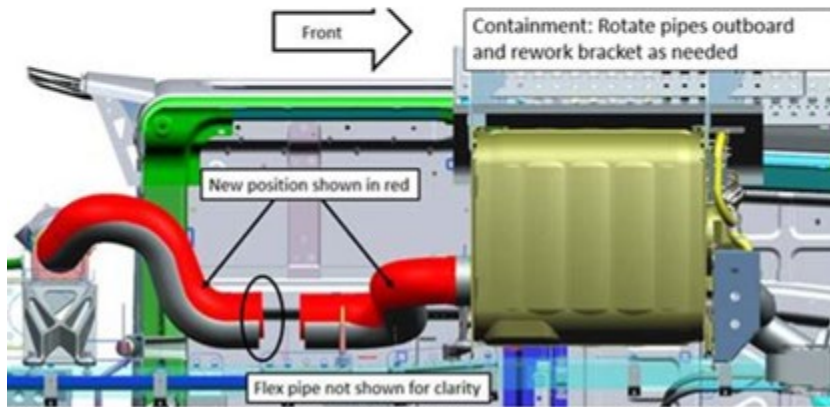
16. Confirm there is no interference between the exhaust pipe and the lower cab support bracket.
17. Install the flex pipe and clamps (item 12 in **Fig. 1**); tighten the clamps 38 to 45 lbf•ft (45 to 55 N•m).
18. Tighten the four vertical exhaust pipe saddle clamps to 23 ± 3 lbf•ft (31 ± 3.5 N•m).
19. Install the exhaust shield, tighten the mounting bolts 11 lbf•ft (15 N•m).
20. Inspect the final installation; it should look like **Fig. 9**.

January 14, 2022

CAL FTL 49-004

Containment

- Rotate pipes outboard
- Rework bracket



Containment shown on an effected vehicle

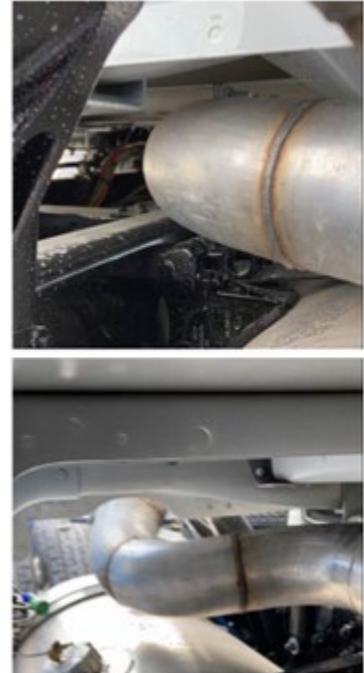


Fig. 9, Final Installation