

Replacing the One-Piece Aluminum Crossmember with a Steel Five-Piece Crossmember

TSB-31-019-WST

Creation Date: 2025-11-25

Engine or Vehicle Affected:

► 47X

This is an informational bulletin only. The described condition is a product improvement and is not warrantable.

Described Condition

Some 47X vehicles equipped with either a mixer or refuse body application have developed cracks in the one-piece aluminum back-of-transmission crossmember. Follow the instructions below to replace the one-piece crossmember with a five-piece crossmember.

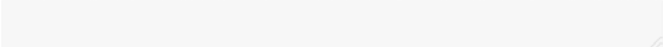
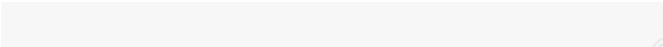
Parts

Table 1, Parts Table

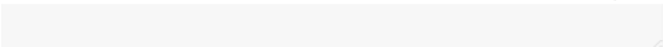
Part Number	Part Description	Quantity
A15-30243-000	XM-BOLTED 5-PC,834,561,ESC	1
23-14283-050	BOLT-HEX,PC10.9,PO,M16X1.5X50	16
23-14451-116	NUT-HEX,LKG,VLH BLU,M16X1.5	16
23-09114-000	WASHER-HRDN,0.69X1.31X.177,ZN	32

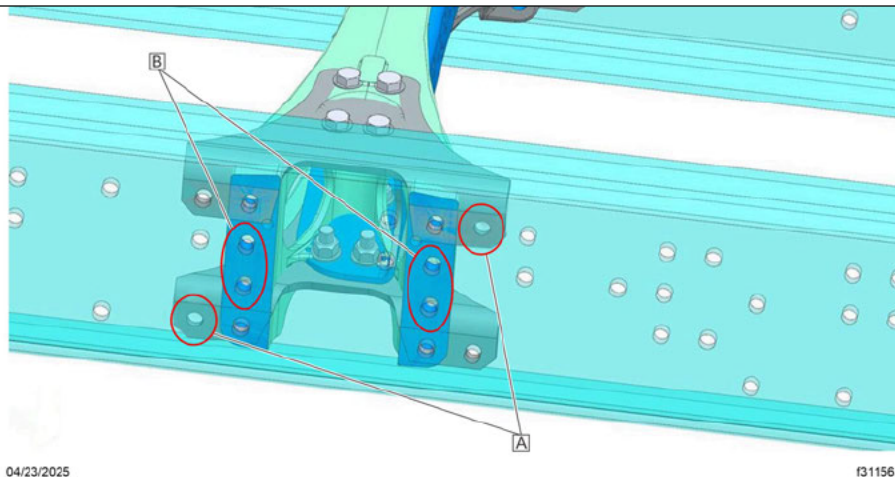
Table 1, Parts Table

Replacement of the Crossmember

- ☐ Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.

- ☐ Remove the back-of-transmission crossmember. For instructions, see **Group 31: 2.9.2** in the *47X, 48X and 49X Workshop Manual*.


🔧 **Note:** Depending on frame rail drillings, additional holes may need to be drilled for the new crossmember. Step 3 is an example.

- ☐ Drill two new holes in each frame rail to accommodate the five-piece crossmember assembly. See Fig. 1 for the exact hole locations.




A. Drill two new holes in the locations shown.

B. Fill the four unused holes with Grade 8 fasteners.

Fig. 1, Frame Rail Drill Locations and Unused Holes (example)

4. ☐ Identify the four unused holes on each frame rail, as shown in Fig. 1.
5. ☐ Fill the unused holes using Grade 8 bolts, nuts, and hardened washers. Position the bolt heads on inside of the frame rail. For the bottom two holes, grind a small amount of material from the bolt heads to ensure the new crossmember lower gusset does not interfere.
6. ☐ Tighten the fasteners 173 lbf-ft (235 N·m).
7. ☐ Position and install the five-piece bolted crossmember using the newly drilled holes. Align with the frame rails and ensure the lower gussets do not interfere with the neighboring bolt heads.

Note: The five-piece bolted crossmember has a different hole pattern on the center channel web compared to the aluminum crossmember casting.

8. ☐ Based on the routing of the electrical and pneumatic lines and any body builder accessories, move the routing and clipping brackets as needed to secure them to the new crossmember.

Warranty

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Note:

W12
W14
W16
W17
REMOVE
INSTALL
REPLACE
014-001-007

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