

REFERENCE:	Nova Bus Manuals
SECTION:	09: Engine and accessories
RS N°:	MQR 7621-2413
EFFECTIVE IN PROD.:	LE08 (2021AU)

APPLICATION DEADLINES: 2025JA01  
CLAIM REFERENCE NUMBER: WB5469

SUBJECT:	Belt guard
JUSTIFICATION:	The belt guard hinge may crack.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Replace the belt gaurd hinge post assembly.	Nova Bus	Nova Bus	1h
2	–	–	–	–

## DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED	RETAINED *	* To be reimbursed, the parts must be retained and returned in accordance with the usual warranty procedure.
	–	Yes	

## REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2023DE04	Initial release	André Pelletier

APPROVED BY:  
NQF772001 version 5

Irina  
Negoescu

Signature  
numérique de  
Irina Negoescu  
Date : 2023.12.04  
09:59:14 -05'00'

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## MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
<b>LEVEL 1</b>			
1	N87203-02	–	BELT GUARD HINGE POST ASSY YEL
4	N87398	–	HINGE BELT GUARD FEMALE BRKT
2	N86879	–	PIN QUICK-RELEASE STN STL 18-8
8	N22134	–	RIVET 3/16 MAGNA-LOK FASTENER
2	N81897	–	RIVET 3/16X.45 BUT SS .126-.25
1	N103962	–	PLATE BELT GUARD
2	N43774	C	SCREW M8X25 FL SSA2 C70 D6921
2	N43233	A	NUT HEX M8 FLANGED WITH INSERT
2	N0073009	–	SCREW HEX FL M8-1.25X25 ZF
2	N0113049	–	WASHER BLV M8X2 ZF
2	0711989	–	RIVET
1	N59662	A	TAG METAL ENGINE OIL FILL
1	N99501	–	BRACKET BELT GUARD
1	N104403	–	SUPPORT PLATE FOR HARNESS
1	N100386	–	SUPPORT PLATE FOR HARNESS
6	N87105	–	RIVET 1/4X.56BL PROT SS.08-.37
1	N84090-07	–	P-CLAMP ID 1.000"THK 0.030"M8
3	N44884-01	D	SCREW M6X20 FL SSA2 C70 D6921
3	N44890	B	NUT LOCKNYL M6 FL SSA2 C70
1	N8950892	–	PAINT (PS212Y13)
<b>LEVEL 2</b>			
–	–	–	–

Materials will be available within 148 days once your order has been placed.

To order, please contact [novabus.parts@volvo.com](mailto:novabus.parts@volvo.com)

Or by phone for CANADA 1-800-771-6682, for USA 1-877-999-8808

Specify document number, quantity of parts required and shipping address.

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Maryland Transit Administration - MTA - Maryland	LB82	20001	20001	L82J8K977	L82J8K977	1
Maryland Transit Administration - MTA - Maryland	LB83	20031	20031	S92J9K977	S92J9K977	1
Maryland Transit Administration - MTA - Maryland	LC27	20002	20030	L82JXL977	L82J4L977	29
Maryland Transit Administration - MTA - Maryland	LC28	20032	20070	S92J5L977	S92J3L977	39
Maryland Transit Administration - MTA - Maryland	LD82	21001	21070	L82J2M977	L82J9M977	70

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

## PROCEDURE

- 1.1. Park the vehicle on an even surface with the transmission on neutral.
- 1.2. Apply the parking brake and set the master control switch to the **stop** position.
- 1.3. Set the battery disconnect switch in the battery compartment to the **off** position. Follow the maintenance manual and your internal safety procedure to make sure the engine will not be started while working in the engine compartment.
- 1.4. Open the rear engine access door. Make a reference line on the belt guard hinge post for the height of the belt guard panel. See the next figure.

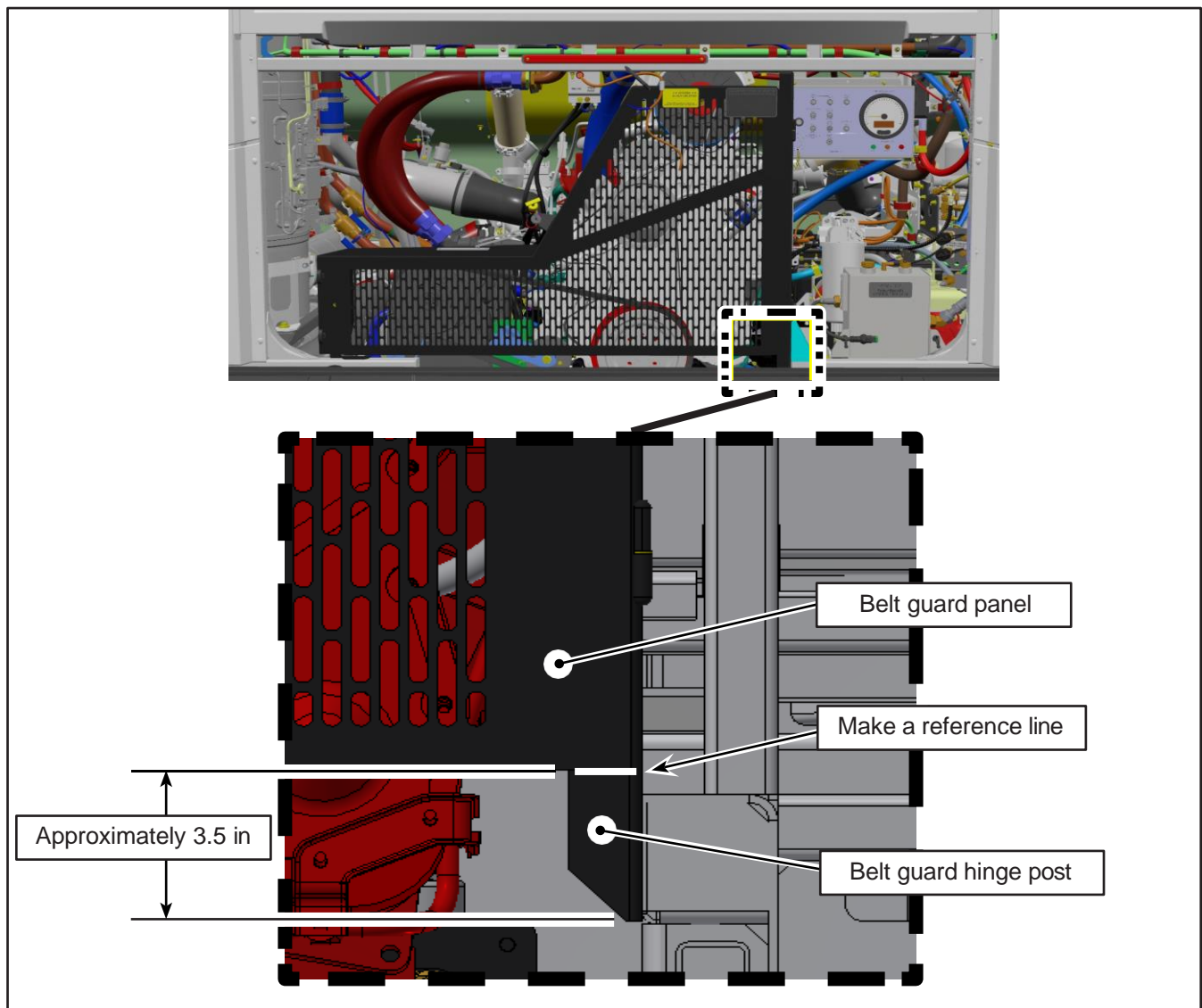
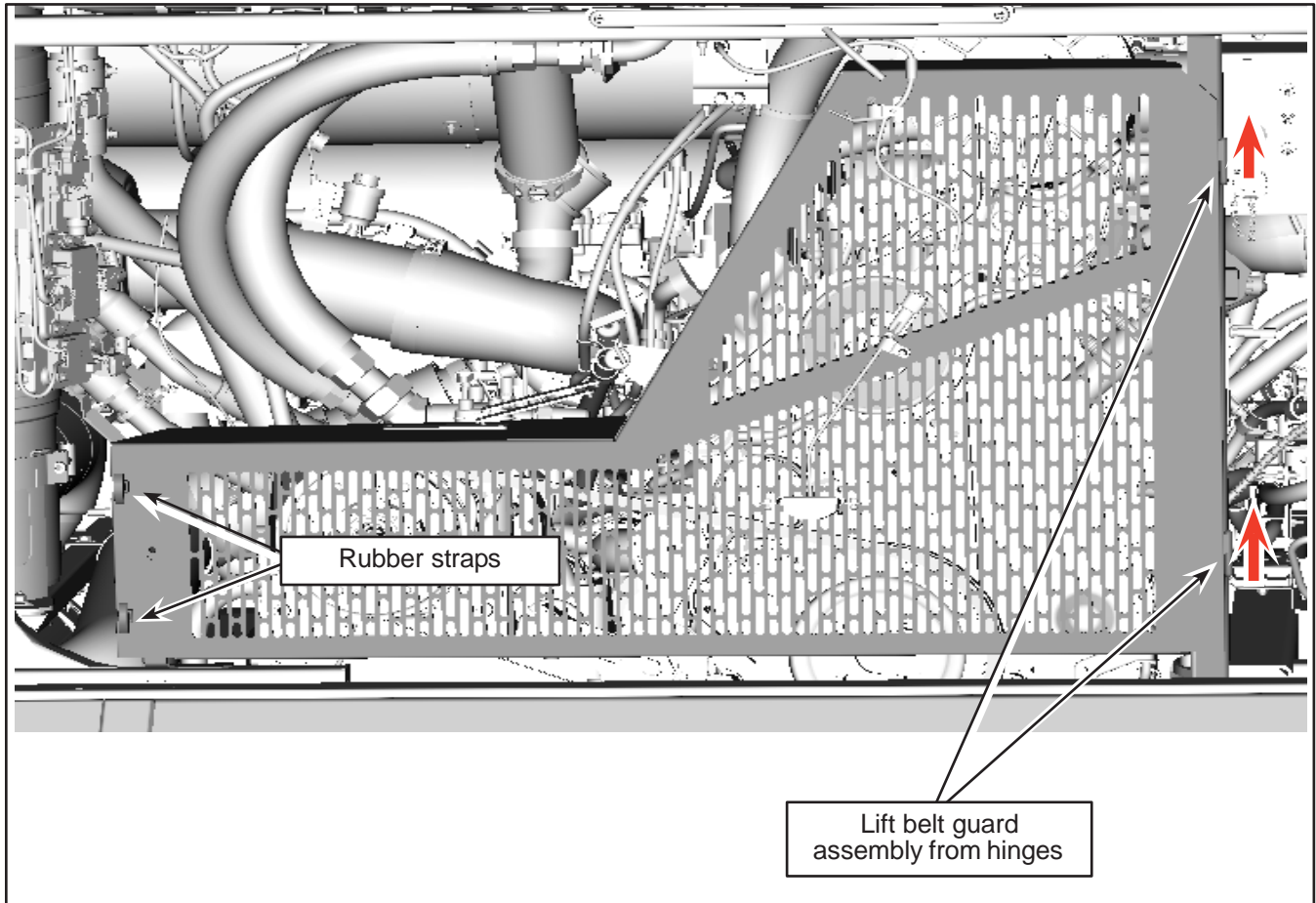


Figure 1 - Make a Reference Line

1.5. Unlatch the two rubber straps then lift and remove the belt guard. See figure the next figure.



*Figure 2 - Remove the Belt Guard*

- 1.6. Reproduce the reference line of the old belt guard hinge post on the new belt guard hinge post and add 3/16 in. See figure below.

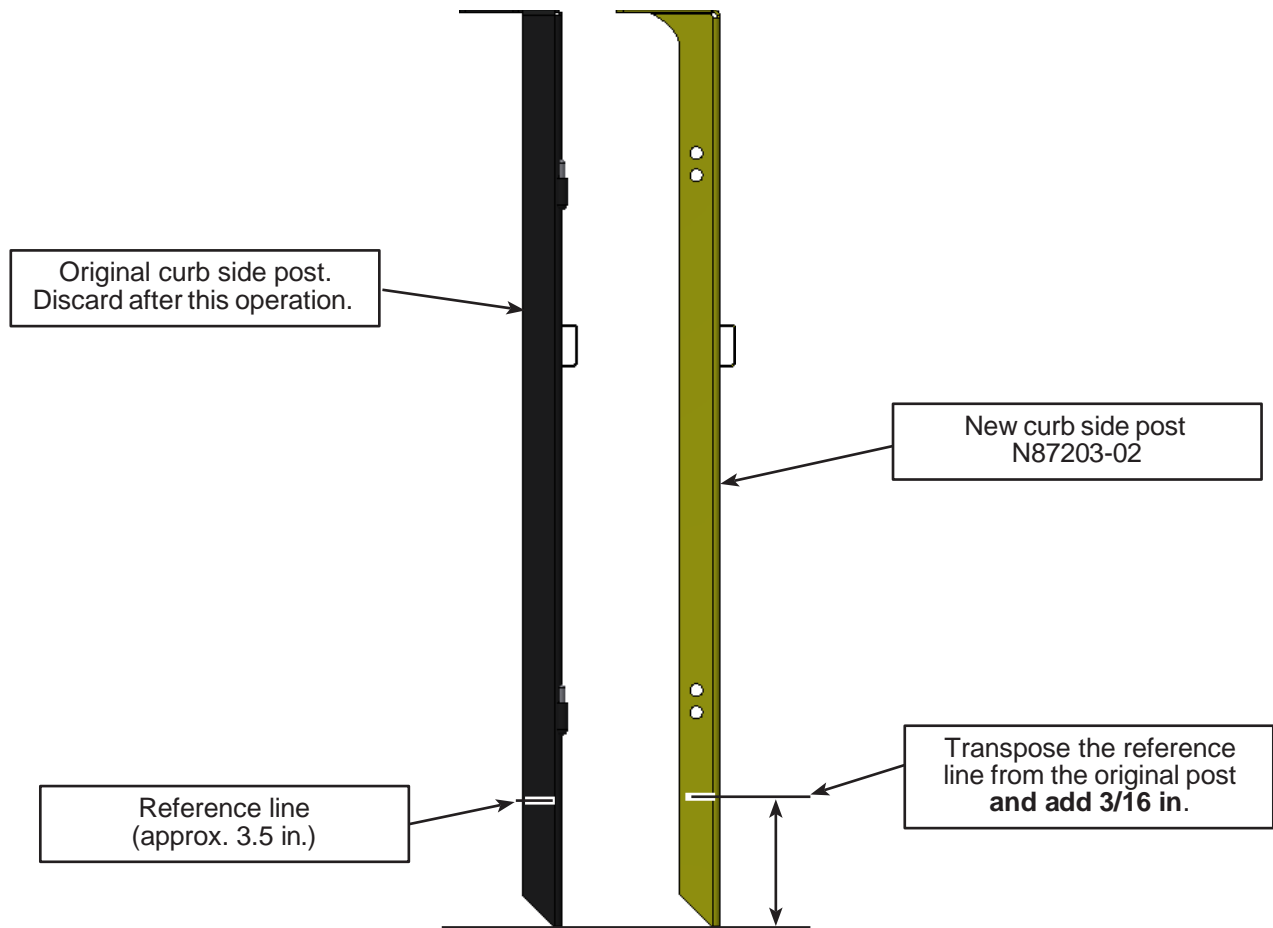


Figure 3 - Make the Mark on the New Post

- 1.7. Secure the female hinge bracket and quick release pin with rivets. Make sure you install the hinges in the correct orientation. Repeat for the two places. See figure below.

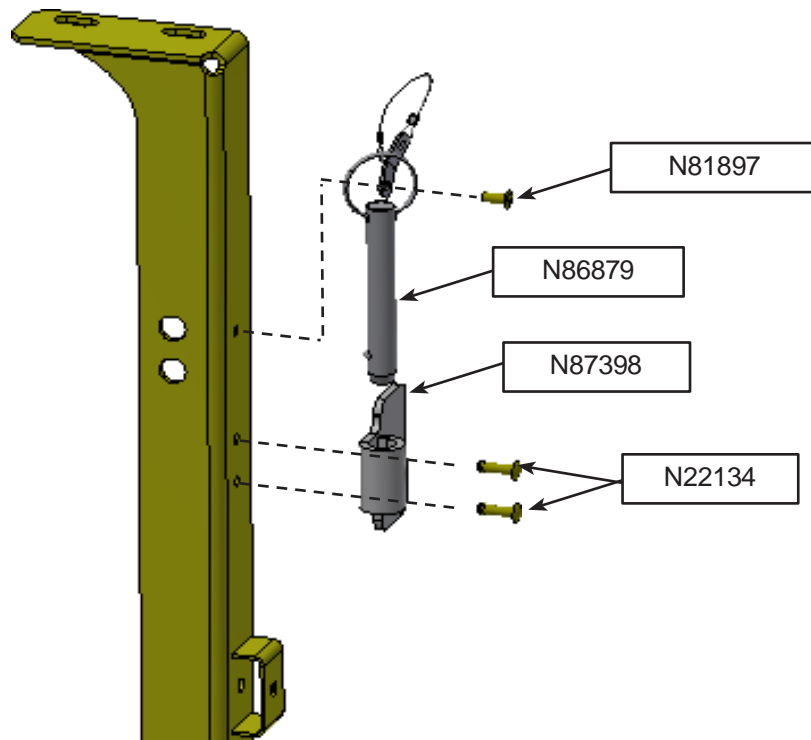


Figure 4 - Install the New Hinges on the Post

- 1.8. Cut off existing hinges and grind flush any welding or protuberance without carving into belt guard panel. A six inches cutting wheel is recommended.

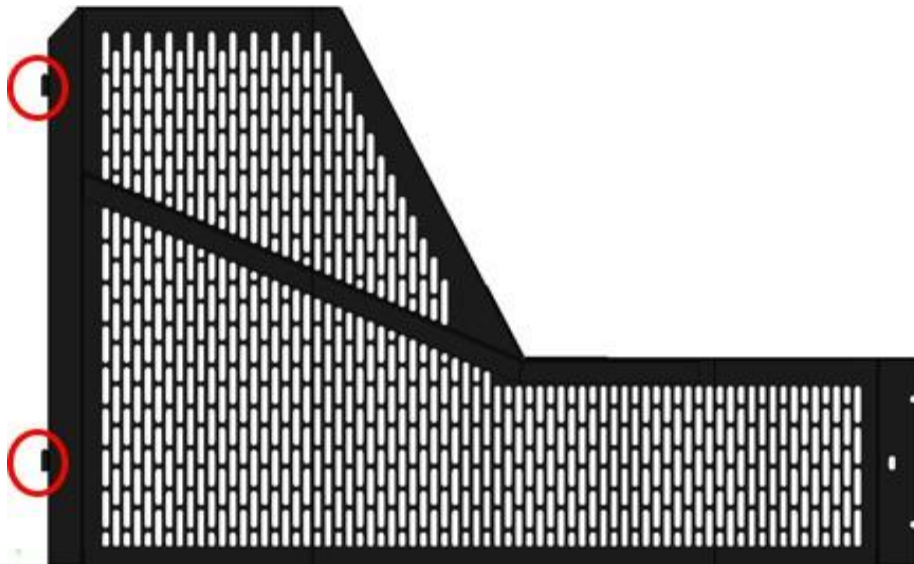


Figure 5 - Cut Existing Hinges on the Panel

- 1.9. Temporarily install the upper part of the hinges quick release pin N86879 on the belt guard hinges post.
- 1.10. Position belt guard hinges post on the belt guard panel and align the reference line with the bottom of the belt guard panel. Make sure the post is parallel with the panel.
- 1.11. Use hinges as a guide to drill four holes with a diameter of 0.191 in. to 0.201 in. in the belt guard panel. See the figure below.
- 1.12. Break off the sharp edges of the holes with a deburrer.

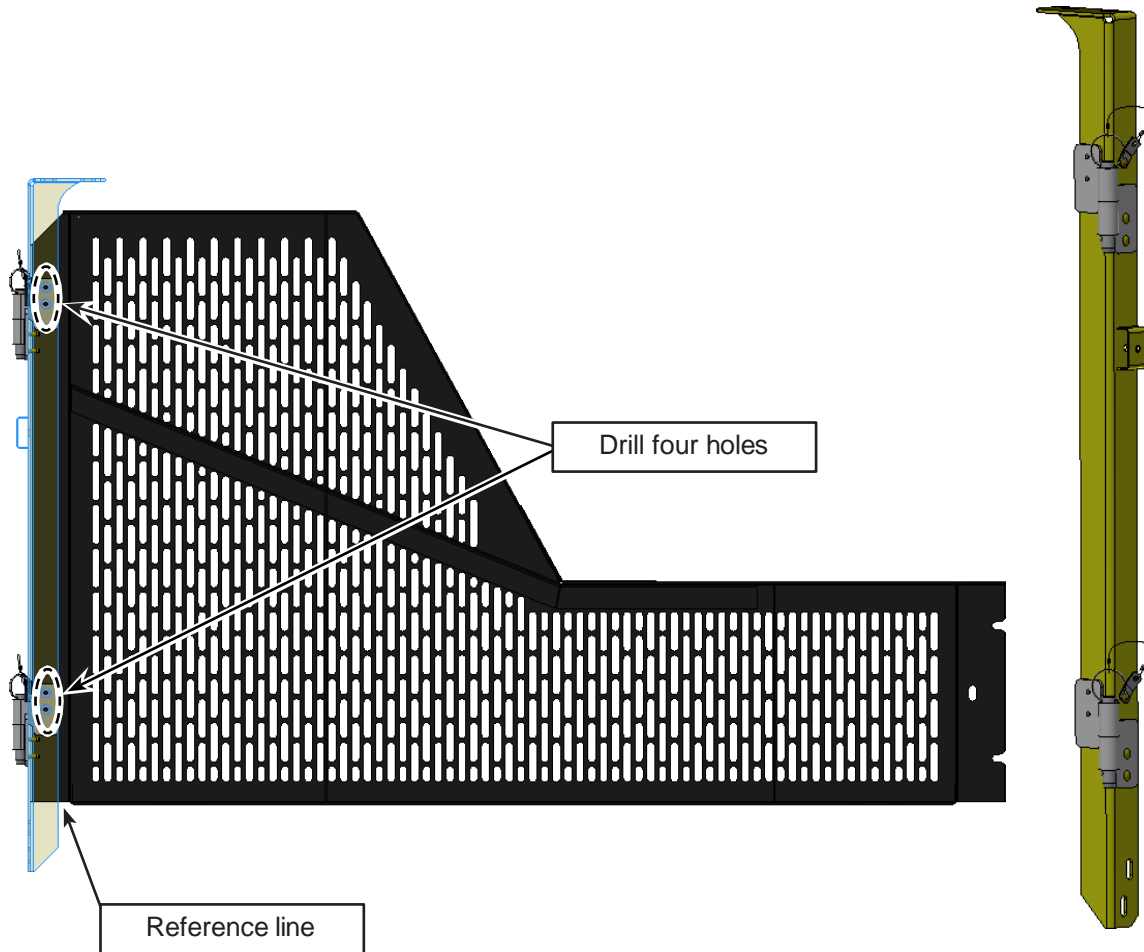
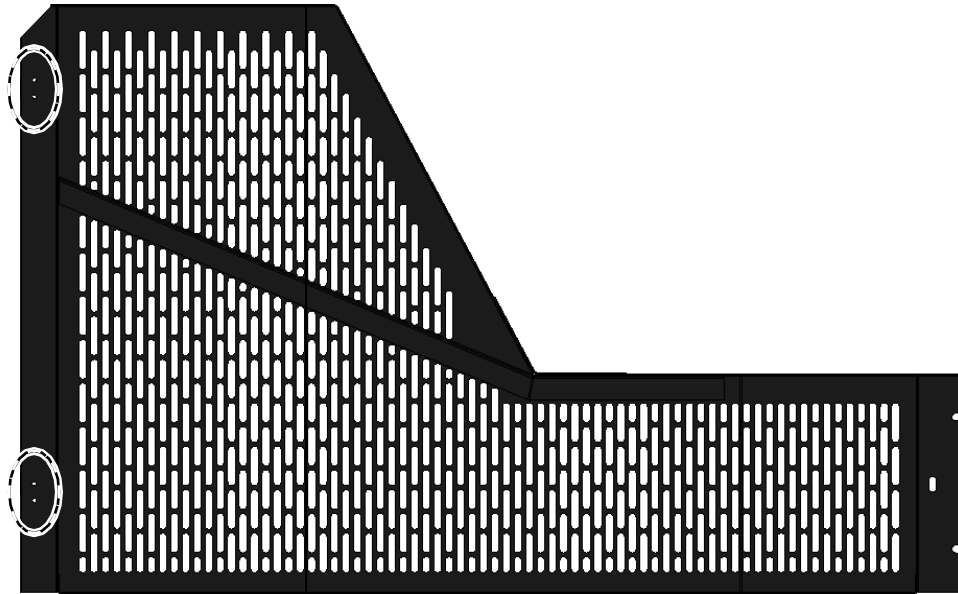


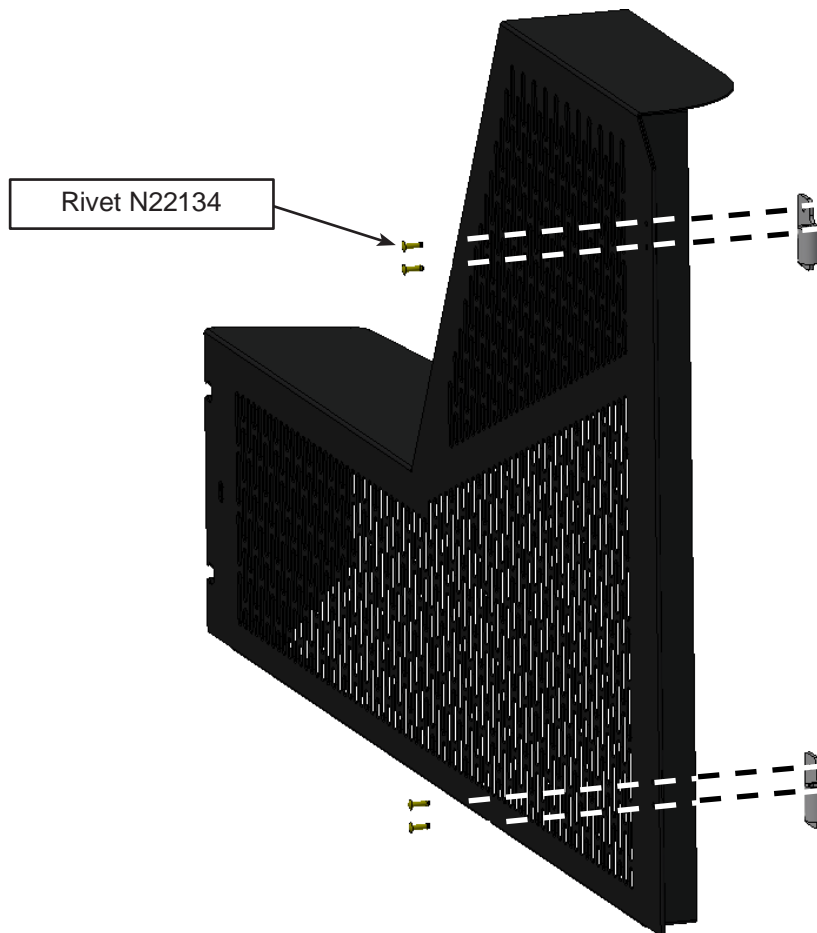
Figure 6 - Drill the Holes for the Hinges

- 1.13. Clean up grinded and drilled areas with isopropyl alcohol.
- 1.14. Apply paint N8950892 to grinded and drilled surfaces (follow application instructions).



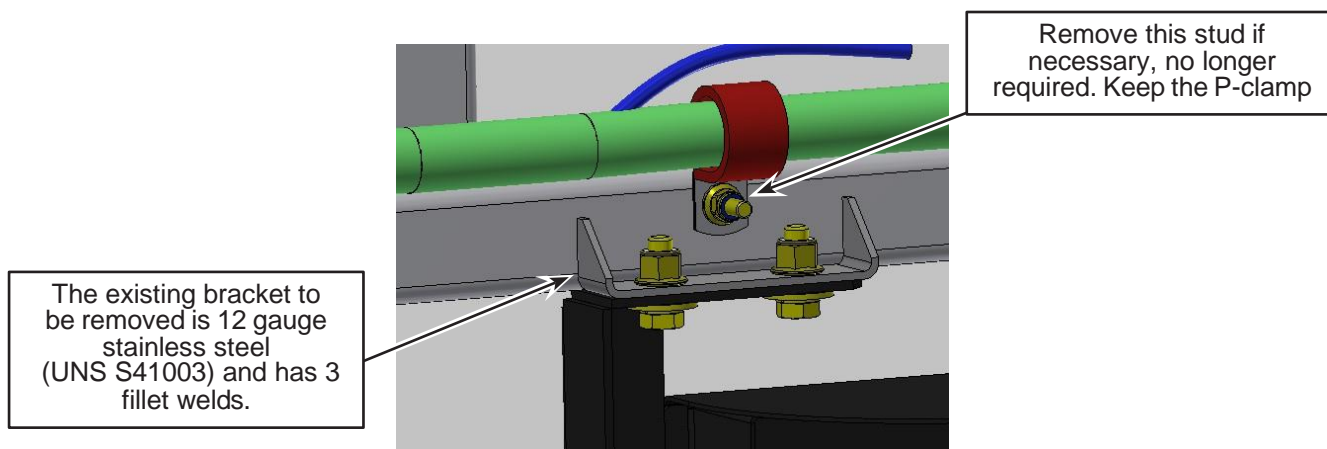
*Figure 7 - Prepare and Paint the Grinded Areas*

- 1.15. Fasten the female hinges brackets on the belt guard panel. Make sure to install the hinges in the correct orientation.



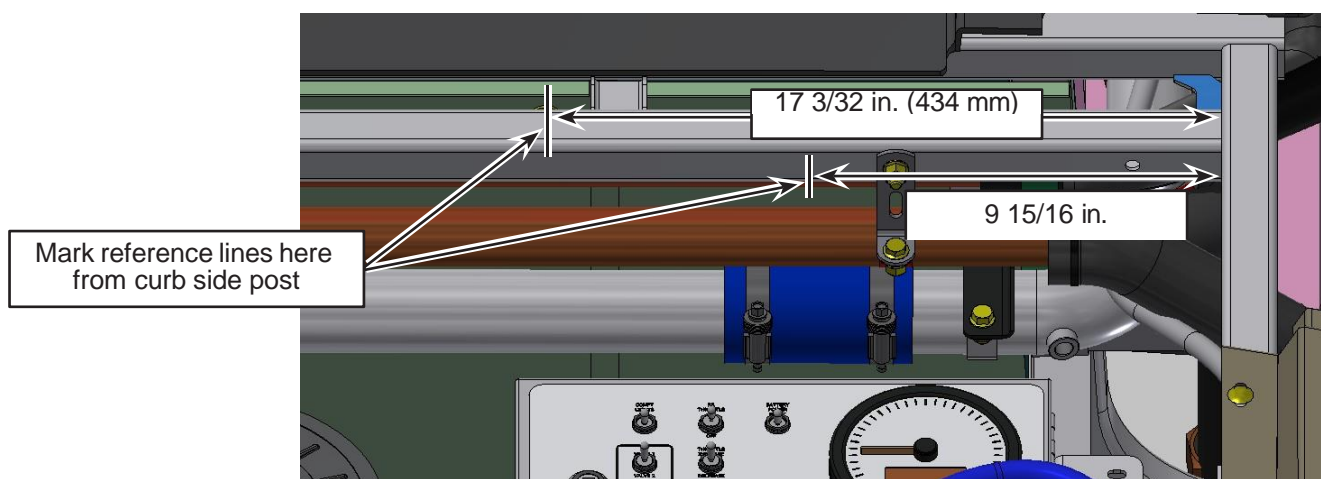
*Figure 8 - Install the Hinges on the Belt Guard Panel*

- 1.16. Cut off existing brackets and grind flush any welding or protuberance without carving into the structure square tubing. A 6 in. cutting wheel is recommended.



*Figure 9 - Remove Existing Bracket*

- 1.17. Mark reference lines as shown below to position the new bracket.



*Figure 10 - Mark the Position for the New Bracket*

- 1.18. Place brackets N100386 and N99501 with reference lines and clamp to hold in place.
- 1.19. Mark holes using bracket as a jig and drill holes (6x 0.261-0.272") for rivets N87105.
- 1.20. Install rivets as shown.

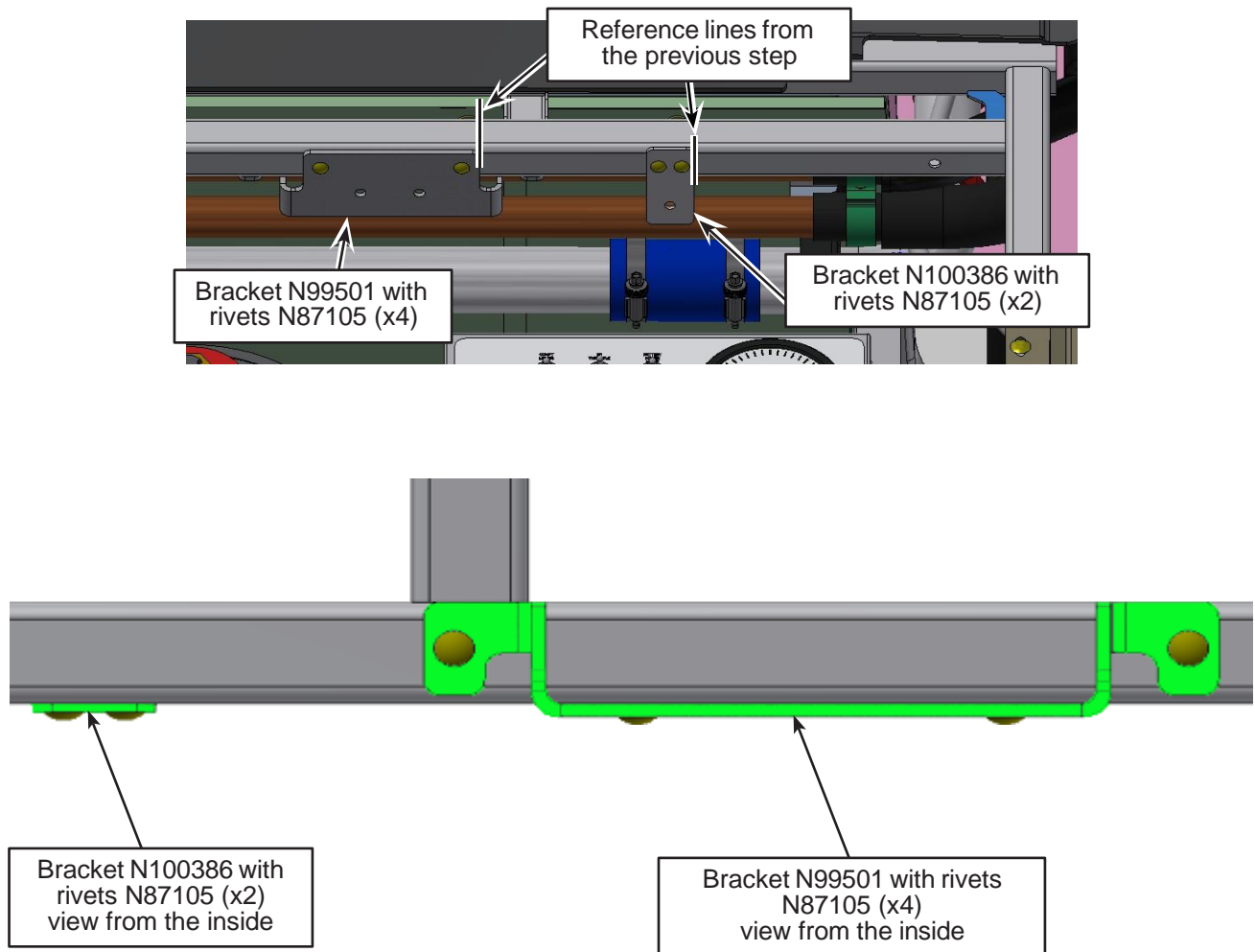
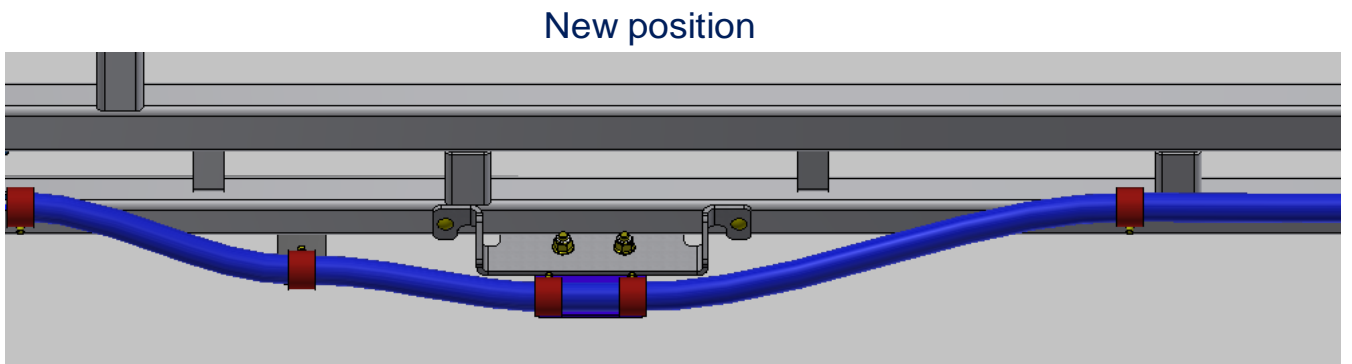
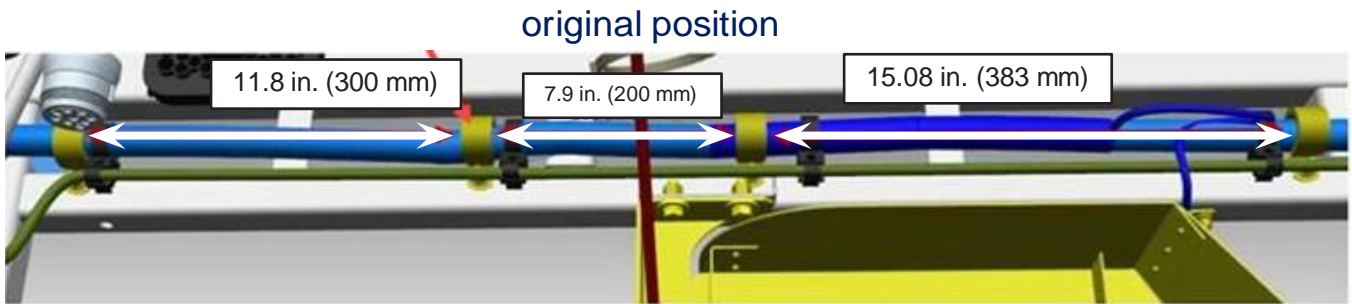


Figure 11 - Install the New Brackets

1.21. Attach harness using new P-clamps and position them as shown. See layout and positioning on the following figures. Position harness in order to avoid any contact or chafing point.



Item 16

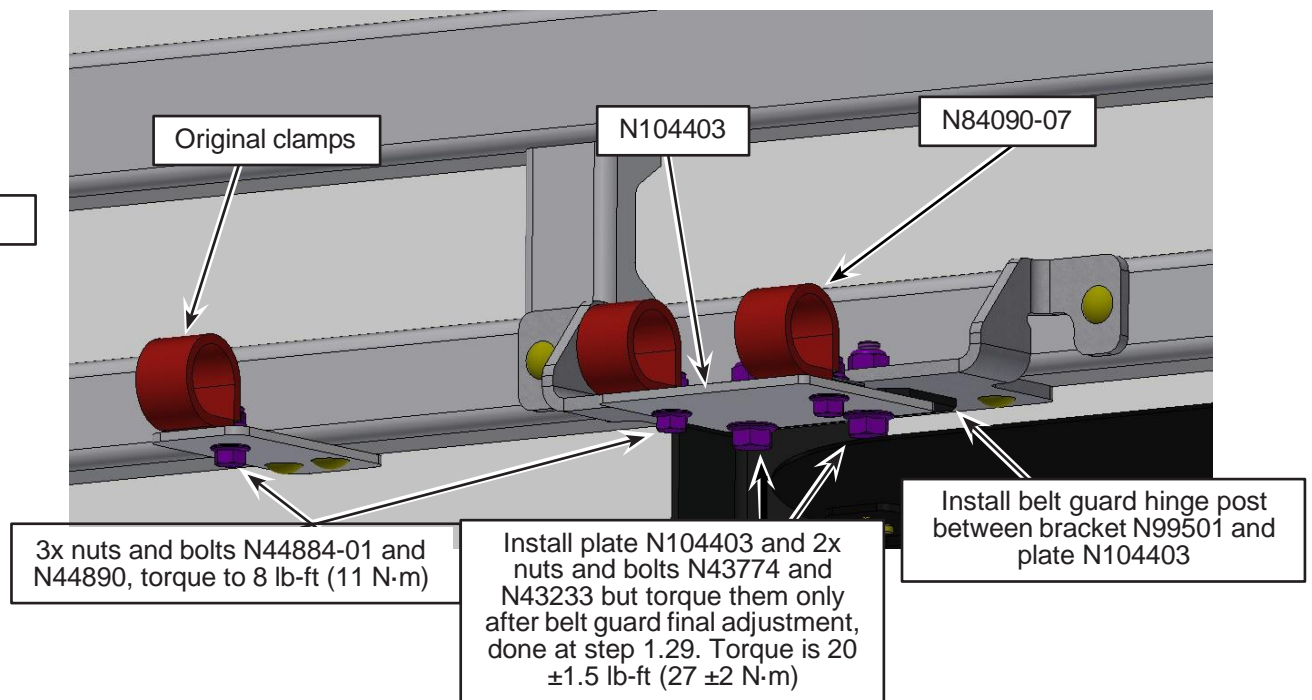
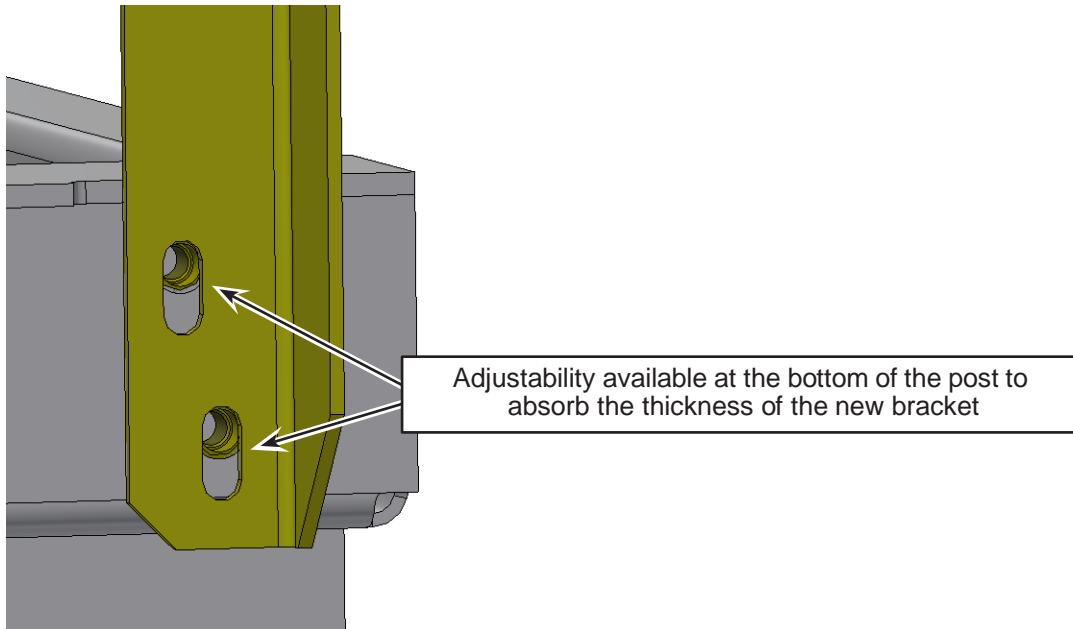


Figure 12 - Install Hardware for the Harness

1.22. Adjustability available in bottom of post to absorb thickness of new bracket



1.23. Install washers N0113049 and bolts N0073009 but do not torque them yet, this will be done after belt guard final adjustments.

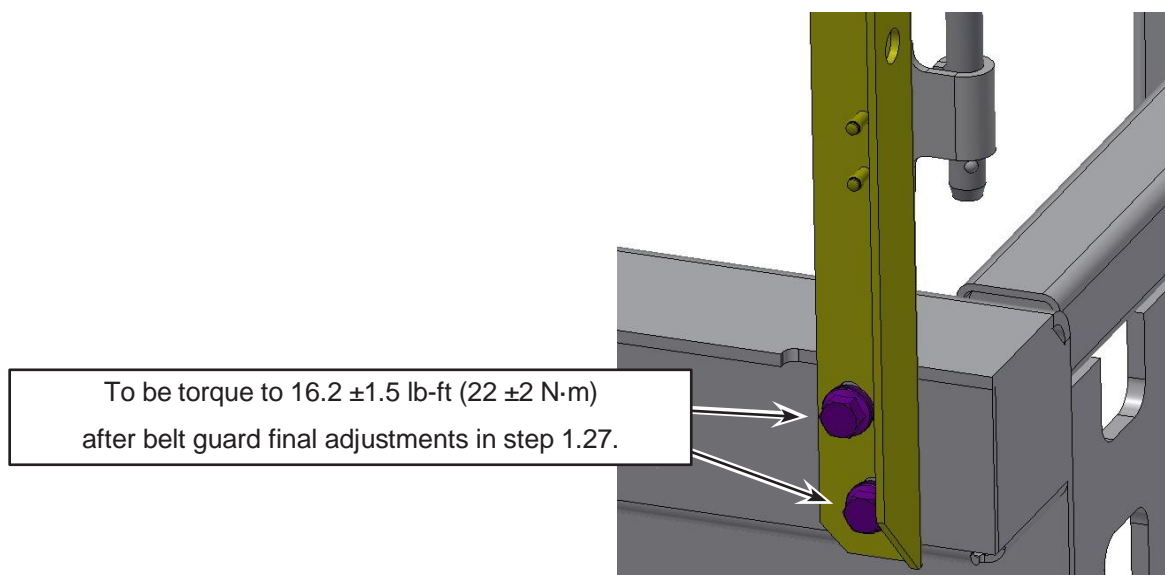
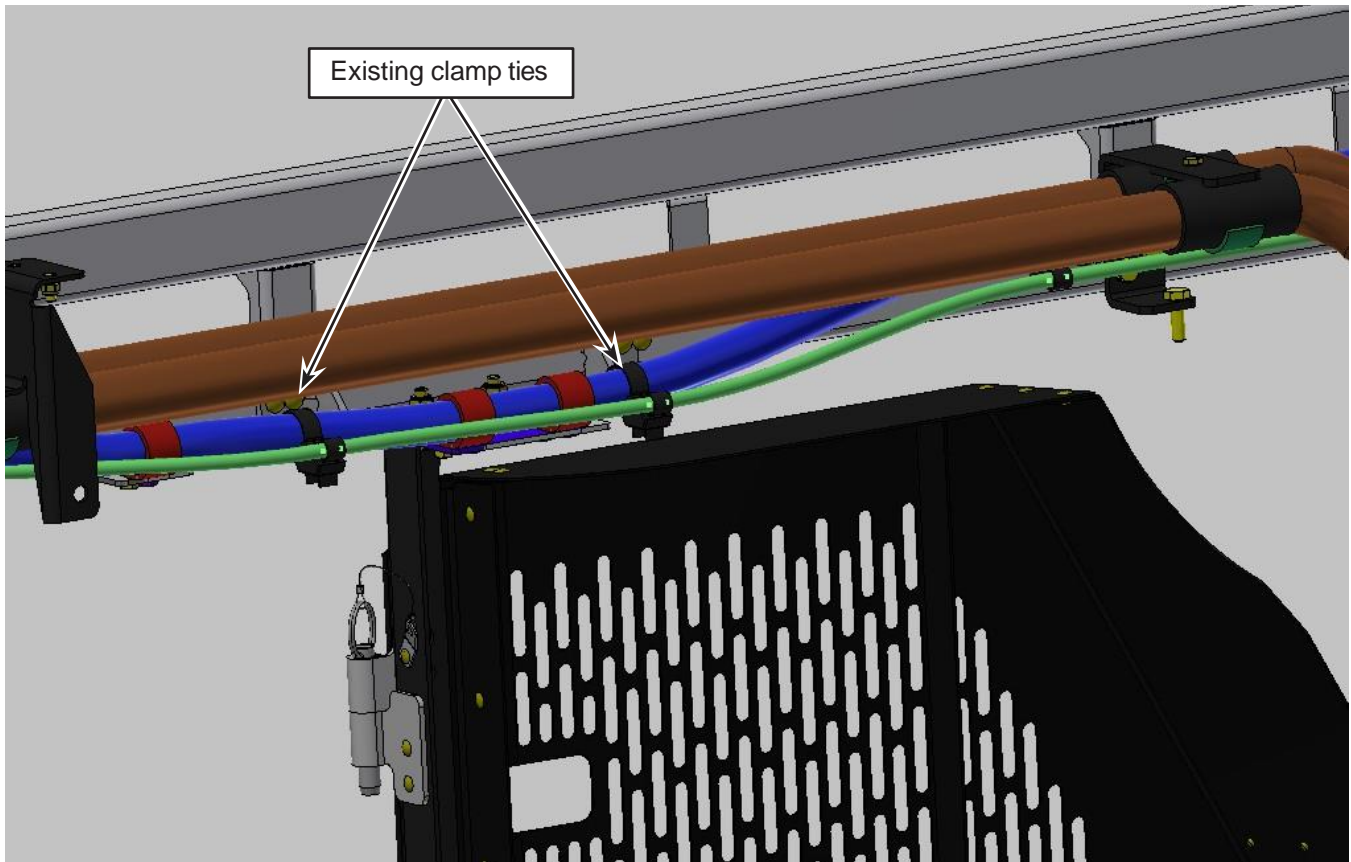


Figure 13 - Adjust and Secure Post in Place

1.24. Turn clamp ties until the harnesses are horizontally aligned. See the next figures.

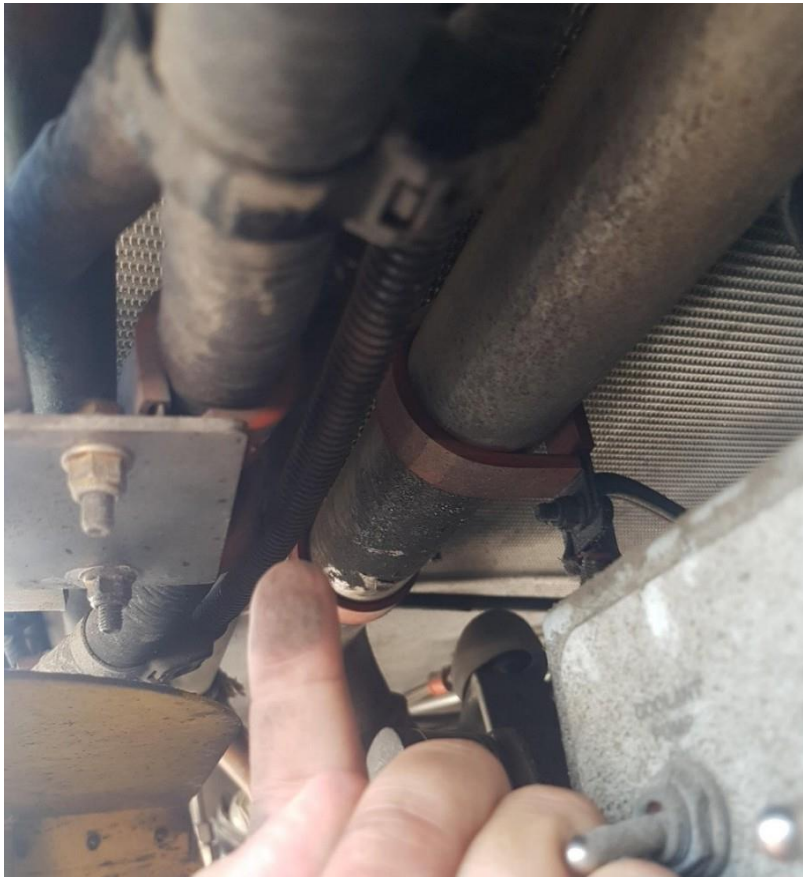


Before



After

Figure 14 - Secure Harness to the Horizontal



*Figure 15 - Secure Harness to the Horizontal*

- 1.25. Install the belt guard panel onto the belt guard hinge post.
- 1.26. Make sure you have installed the belt guard panel square and correctly to keep an even gap between the bumper and the belt guard. Use the slots on the belt guard hinge post assembly if required. See page 14.
- 1.27. Torque the belt guard hinge post assembly bolts shown on page 14.



Figure 16 - Install Belt Guard and Adjust It

1.28. Close belt guard panel with straps (street side).

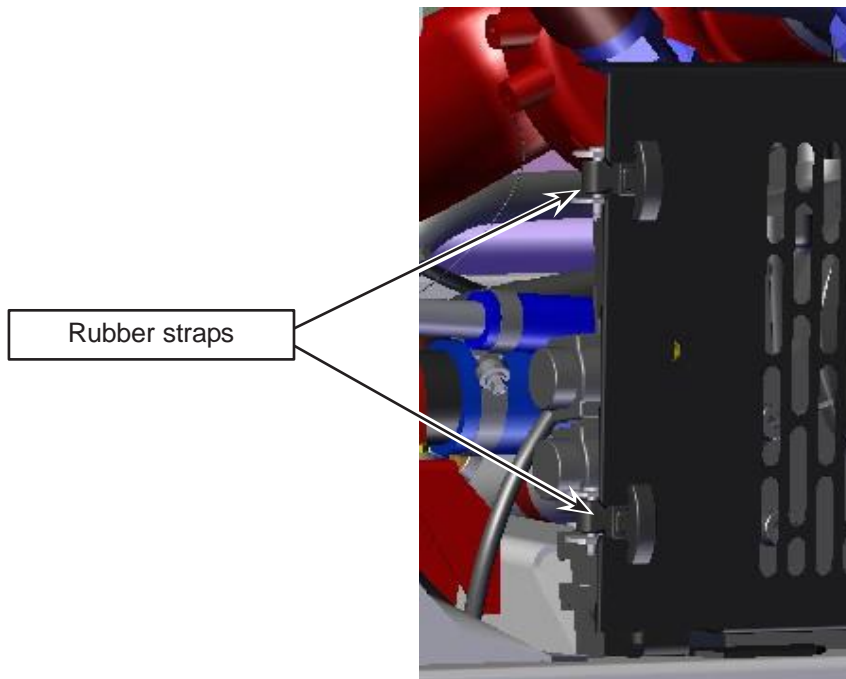


Figure 17 - Close Belt Guard

1.29. Adjustability available at the bottom of the post to absorb the position of belt guard. Torque to  $16.2 \pm 1.5$  lb-ft ( $22 \pm 2$  N·m). Also torque the upper bolts shown on figure 12 on page 13.

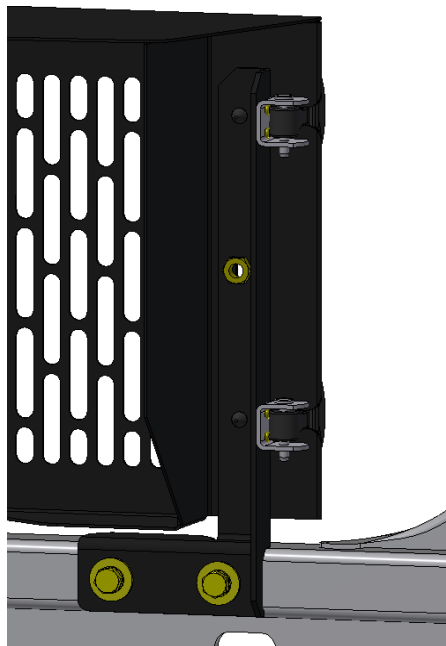


Figure 18 - Final Torque and Adjustments

1.30. Install metal tag N59662 as shown with rivets 0711989.

1.31. The vehicle can return to service.

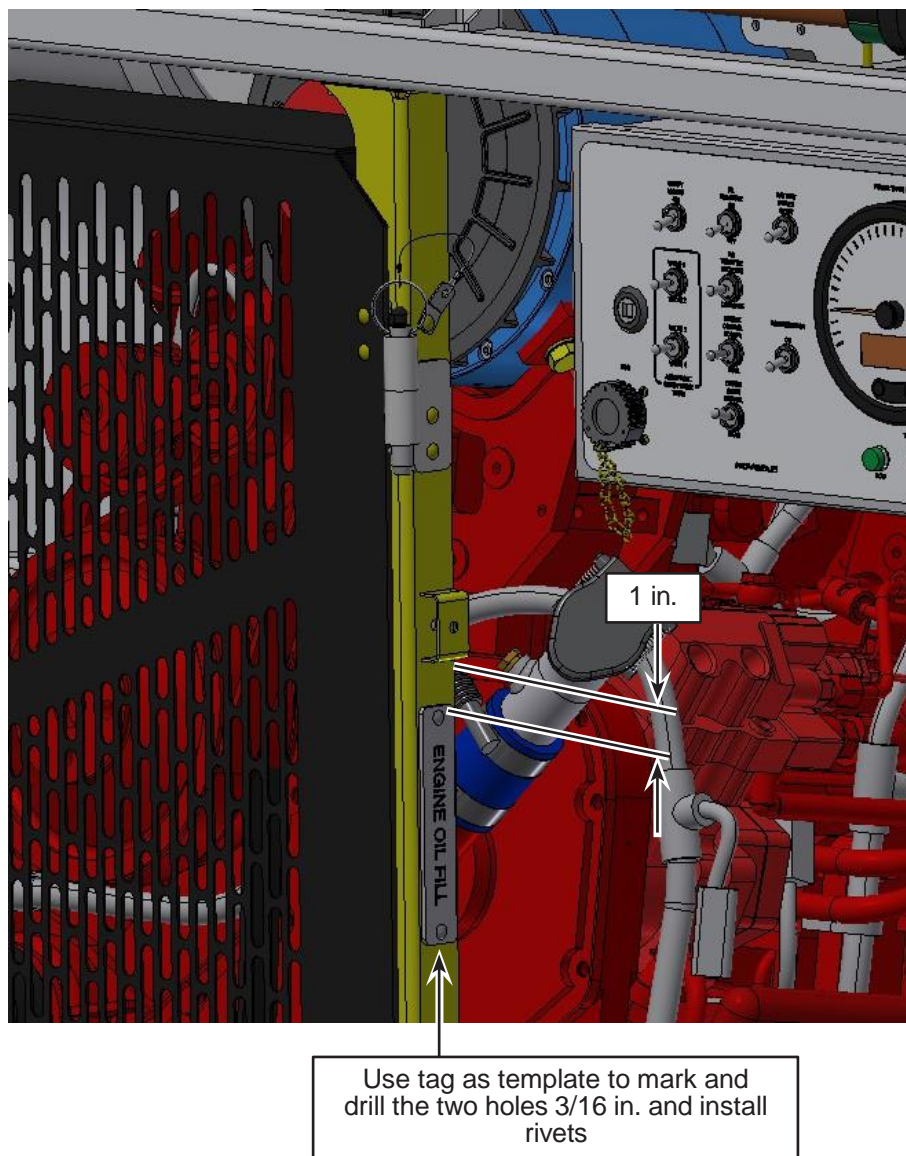


Figure 19 - Install Metal Tag