

REFERENCE:	Nova Bus Manuals
SECTION:	17: Radios and accessories
RS N°:	MQR 7621-2237
EFFECTIVE IN PROD.:	NA

APPLICATION DEADLINE: 2025FE20
CLAIM REFERENCE NUMBER: WB-5463

SUBJECT:	Front camera bracket breaking.
JUSTIFICATION:	Failure of camera bracket will cause the camera to swing while bus is in motion.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Install the new design bracket whole assembly.	Nova Bus	Nova Bus	1 h
2	—	—	—	—

MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
LEVEL 1			
1	N108657	—	Bracket, MVC-9100-FF-BRKT, Base, 4 Slots
4	N16729	X	Screw M6X35 R/C CR B633 Type VI
4	N44689	A	Washer Lockheli M6 SSA4
4	N17565	X	Washer flat OVS M6 SS DIN9021
4	N16914	X	Rivnut M6 CYL YP OP GR0.5-3.0
LEVEL 2			
—	—	—	—
SHOP SUPPLY			
2 ml	N97665	A	Threadlocker loctite 243 (50 ml Bottle)

Materials will be available within 49 days once your order has been placed.

To order, please contact 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.

DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED *	RETAINED	* Dispose of the unused parts and the defective parts in accordance with local environmental standards in effect.
	Yes	—	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2023DE13	Initial release (FT5463 superseded by BS5463)	Devanand
R1	2024AL10	Loctite added in step 1.17 & 1.21	Devanand

APPROVED BY:

PAGE 1 OF 10

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
New York City Transit - NYCT	L958	5439	5442	S92J9G9 [REDACTED]	S92J9G9 [REDACTED]	4
New York City Transit - NYCT	L959	5443	5443	S92J0H9 [REDACTED]	S92J0H9 [REDACTED]	1
New York City Transit - NYCT	LA23	5485	5530	S92J5J9 [REDACTED]	S92J6J9 [REDACTED]	46
New York City Transit - NYCT	LB59	5444	5484	S92J7H9 [REDACTED]	S92J6H9 [REDACTED]	41

Tools Required:

- 3/16" Allen wrench
- Flathead screwdriver
- Drill bit Ø9mm
- Rivnut tool
- Torque stripe marker

**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.
- 1.4. Locate the front camera under the front destination sign.

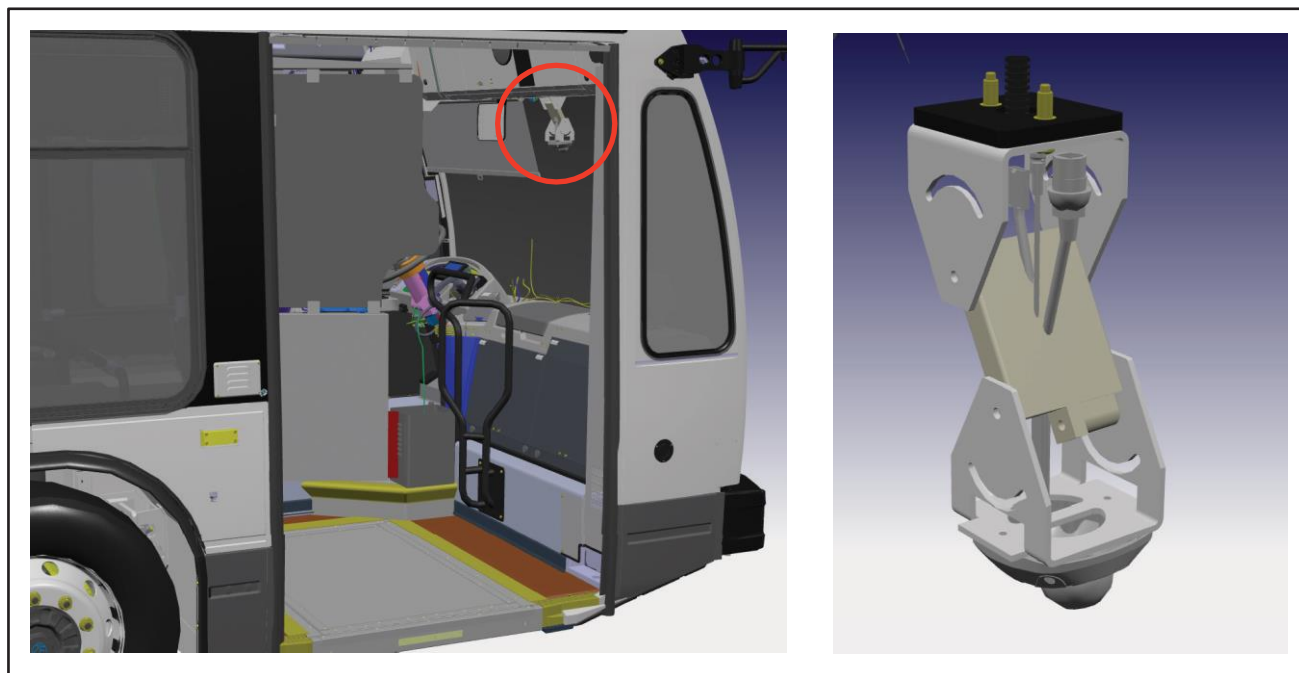


Figure 1 - Location of Front Camera

- 1.5. Ensure that the NVR is powered down.



Figure 2 - NVR Front Panel

- 1.6. Remove the two Philips screws that secure the N108657 bracket assembly to the mounting surface.

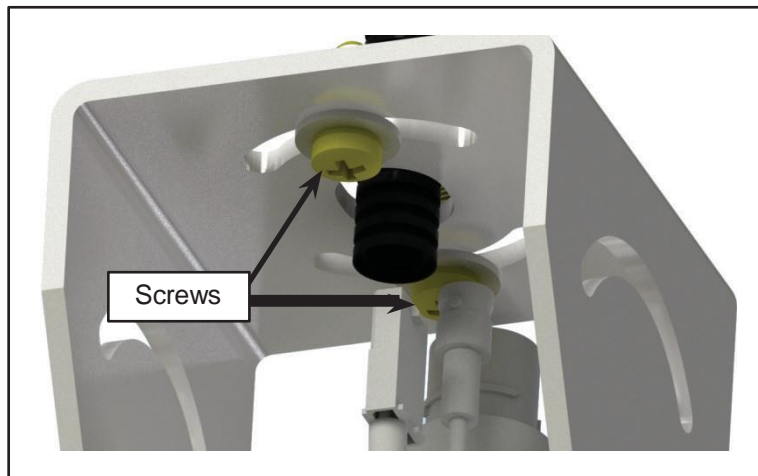


Figure 3 - Removal of Screws from Bracket Assembly

- 1.7. Check the condition of the rivnuts that are already installed. If the existing rivnuts need to be replaced use the new rivnuts.
- 1.8. To remove, either drill out the old rivnut or if loose it may pull out under slight pressure.

- 1.9. Gently pull the assembly downwards to expose the connections on the end of the camera pigtail.
- 1.10. Fully disconnect the camera from the camera harness (Ethernet cable). If the Standard Definition Analog Out feature on the camera is being used, disconnect the corresponding BNC connector.

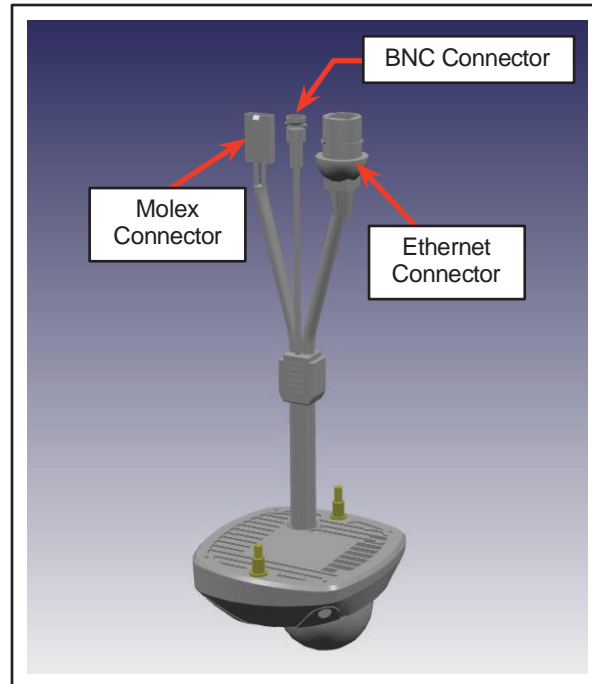


Figure 4 - Removal of Camera

- 1.11. Remove the old Top Bracket "C" from the upper panel.
- 1.12. Temporarily place the New Top Bracket "C" at the same place where old bracket removed.

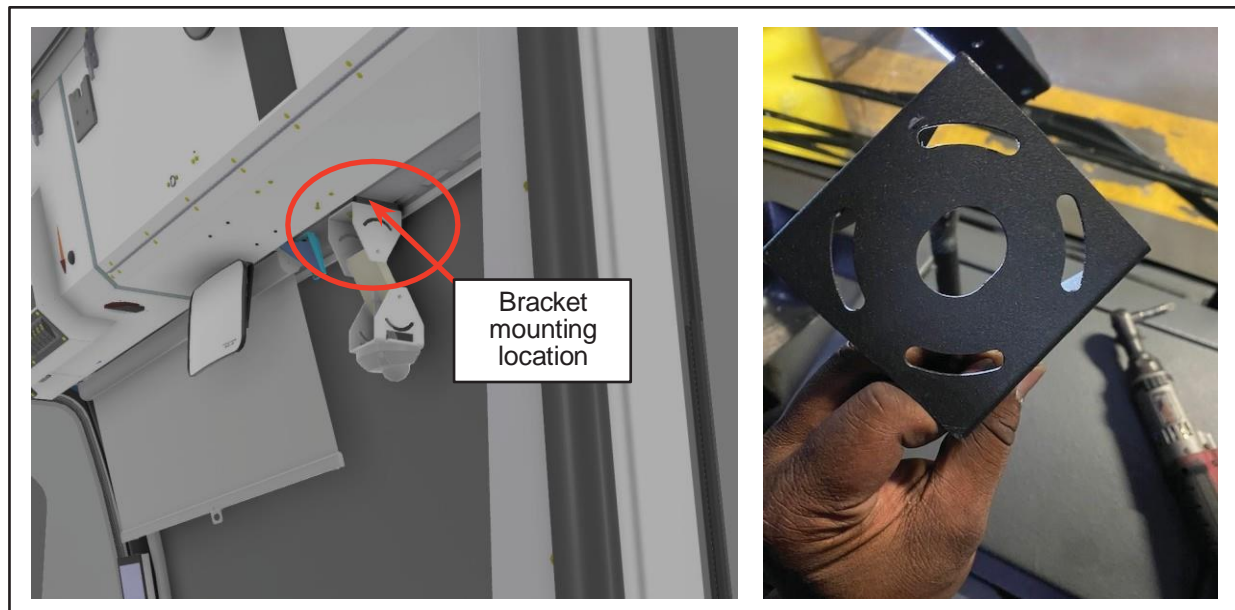


Figure 5 - Bracket Mounting Location and New Top Bracket

- 1.13. Use the center of the slots on the bracket's base to mark the four holes required to accommodate the screws or rivnuts. Drill the holes at $\varnothing 9\text{mm}$ and install the rivnuts.

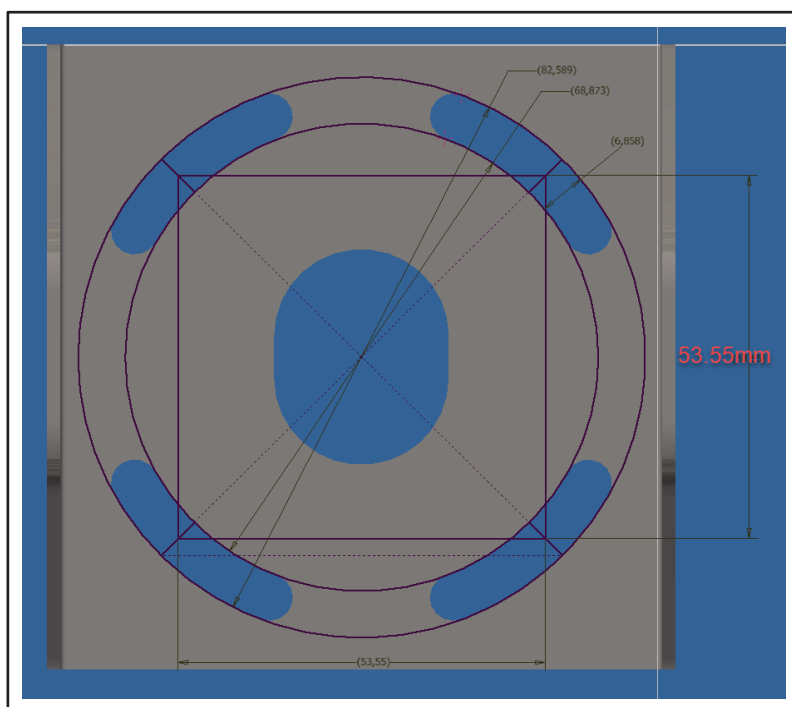


Figure 6 - Marking Four Holes on the Bracket's Base

- 1.14. Install the new rivnut using a rivnut installation tool.



NOTE

Make sure that the rivnut does not spin when a torque is applied.



Figure 7 - Rivnut Tool

- 1.15. Use a 3/16" Allen wrench to remove the four 1/4" -20 Thread Size, 1/2" Long Alloy Steel Socket Head Screws that secure the Top Bracket "C" to the "B" FF Bracket Body.

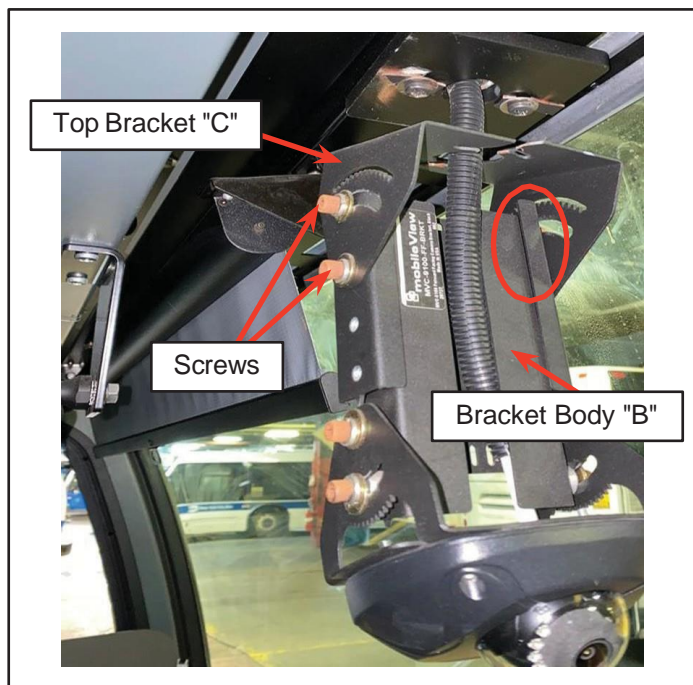


Figure 8 - Removal of Headscrews

- 1.16. Install the new Top Bracket "C" under the front destination sign.

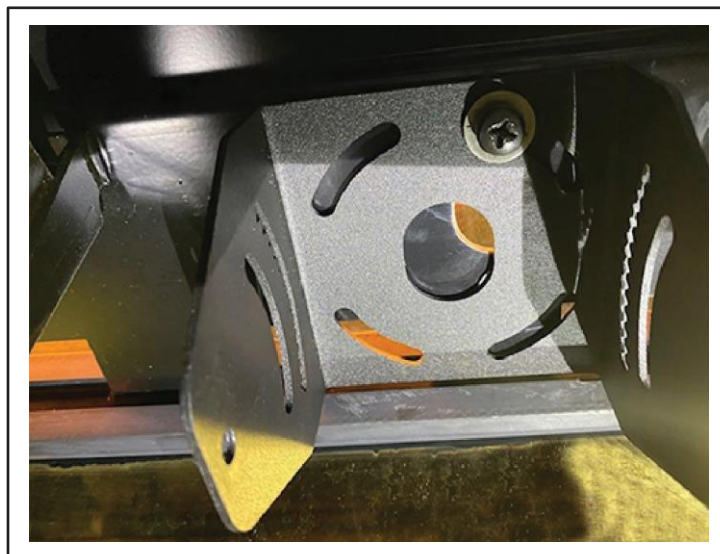


Figure 9 - Installation of New Top Bracket

- 1.17. Apply Threadlocker loctite 243 N97665, reinsert the 1/4" -20 Thread Size, 1/2" Long Alloy Steel Socket Head Screws. Apply a torque value of 85 in-lbs.

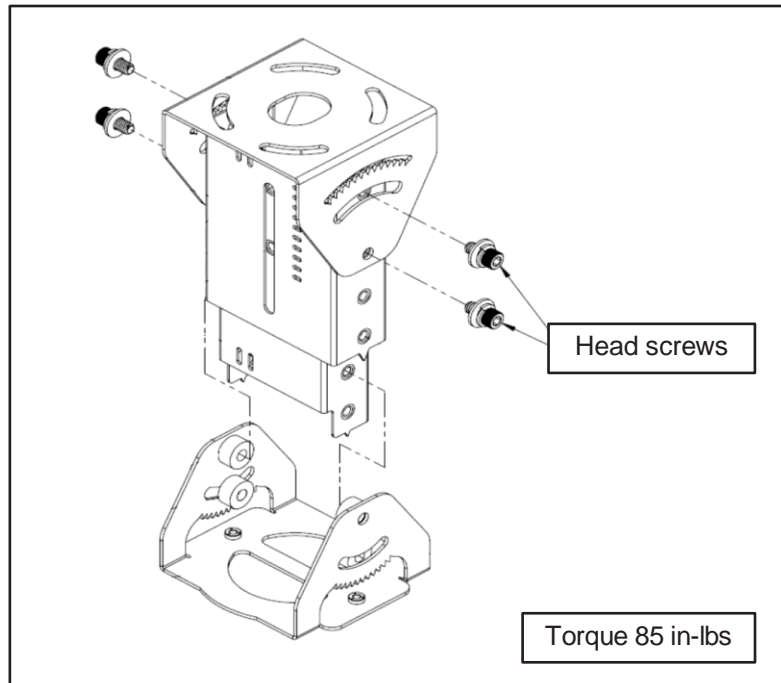


Figure 10 - Reinstallation of Headscrews

- 1.18. Route the camera pigtail through the hole of the New Top Bracket "C".
- 1.19. Connect the camera to the camera harness (Ethernet cable). If the Standard Definition Analog Out on the camera is being used connect the corresponding BNC connector.
- 1.20. Secure the updated N108657 bracket assembly to the mounting surface using four screws. Apply a torque value of 85 in-lbs.



NOTE

Clamp load not to exceed 1000 lbs

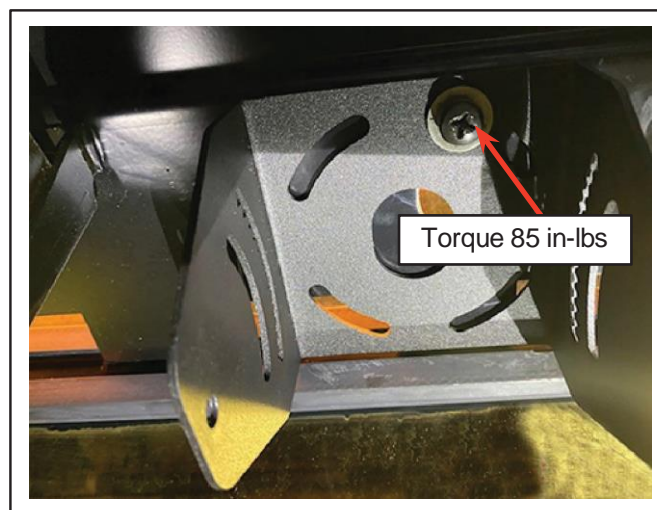


Figure 11 - Installation Torque

- 1.21. Place a washer N17565 on each bracket set screw N16729, apply threadlocker loctite 243 N97665 and thread the screws into the inner slide bracket "B", Tighten the screws. Apply a torque value of 85 in-lbs.

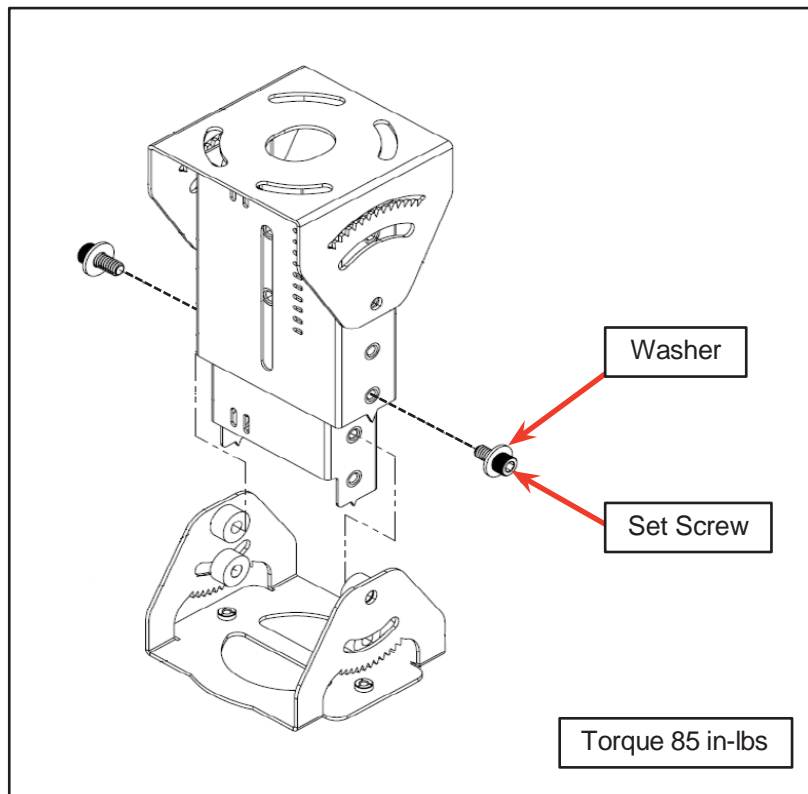


Figure 12 - Installation of Set Screw and Washer

- 1.22. Apply power to the NVR and verify that a video stream can be seen. Make final adjustments to the N108657 bracket assembly as necessary.

FRONT CAMERA BRACKET TORQUE STRIPE:

- 1.23. Make sure the part is properly secure.
1.24. Clean the area the product will be applied to.
1.25. Apply the ink to the area so that the two or more adjoining parts are all connected by the applied ink.
1.26. Allow the ink to dry. Ambient temperature is fine, the drying process can be speed up by applying warm air.
1.27. Upon future inspection, if the torque stripe is broken, the parts have loosened or have been tampered with.

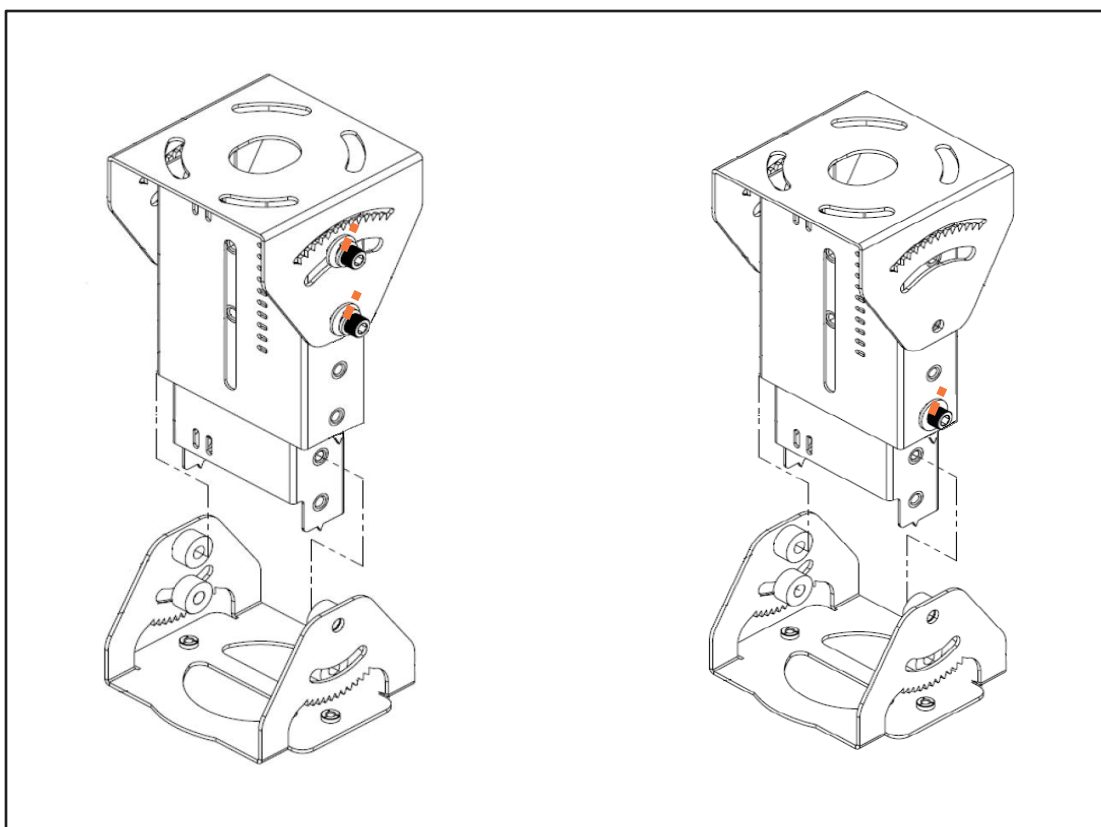
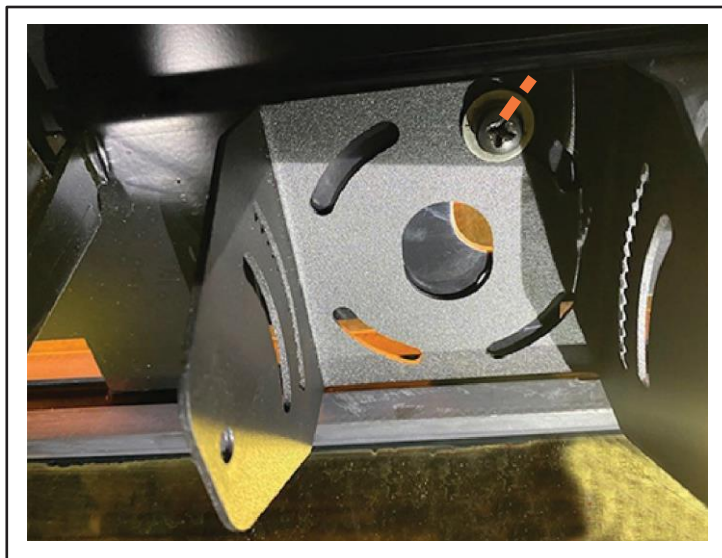


Figure 13 - Torque Stripe

1.28. The vehicle may return in service.❖