

REFERENCE:	Nova Bus Manuals
SECTION:	18 Articulation system
RS N°:	7621-398
EFFECTIVE IN PROD.:	—

APPLICATION DEADLINE: 2015AL15
CLAIM REFERENCE NUMBER: WB-3093

SUBJECT:	60 ft vehicle: 1200 series energy guidance system of the articulation system
JUSTIFICATION:	Hoses and harnesses can be damaged in the energy guidance system

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Replace and reroute the hoses passing on the energy guidance system	Nova Bus	Nova Bus	21 h
2	—	—	—	—

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
2	N31991		BOLT M6 X 50 SS GR.A2 DIN 931	
1	N72375		BRACKET MOUNTING EGS	
2	N71853		BRACKET MOUNTING EGS	
1	N71854		BRACKET MOUNTING EGS	
6	N44691		SCREW M6X30 HEX SSA4 C70 D931	
8	N37495		TWO WAY SADDLE MOUNT	
1	N68020		Carrier	
5	8860534		NYLON TUBING 1/2 BLACK (4 X 330mm)	
16	N76954		CABLE TIE HUBNER (PENDUIT)	
125	G5007996		TIE RAP BLACK	
2	N74177		HOSE 1.25" X 200" with loom	
1	N95808-02		Hydraulic extension 6.75 in	
1	N95808-04		HOSE HYD. PWR STEERING	
4	N70200-04		O-RING FOR ORS FITTING #08	
4	N70200-01		O-RING FOR ORS FITTING #20	
2	N58711		O-RING FOR ORS FITTING	
4	N70200-06		O-RING FOR ORS FITTING #20	
2	N31320-23		P-CLAMP 1.125" ID	
2	N31320-10		P-CLAMP 1.375" ID	
2	N31320-19		P-CLAMP 0.5" ID	
10	N43233		LOCKNUT NYLON M8 SS	

20	N75181		EDGE TRIM ES28-210-P80	
15	N34049		CORK TAPE	
20	N44890		NUT LOCKNYL M6 FL SSA2 C70	
4	N43104		INSULATION TUBE 1/2" I.D. (6 FEET)	
4	N20379		INSULATION TUBE 1 3/8" I.D. (6 FEET)	
4	N29982		INSULATION TUBE 1 1/8" I.D. (6 FEET)	
1	N76534		TUBE ASSY 1 3/8" CARR FRT BHD	
1	N76522		TUBE ASSY 1 1/8" CARR FRT BHD	
1	N76533		TUBE ASSY 1/2" CARR FRONT BHD	
1	N76519		TUBE ASSY 1 3/8" CARR RR BHD	
1	N76513		TUBE ASSY 1 1/8" CARR RR BHD	
1	N76518		TUBE ASSY 1/2" CARR REAR BHD	
1	N76423		BRACKET ASSY A/C PPG CARR FRT	
1	N76404		BRACKET ASSY A/C PPG CARR REAR	
2	N76405		BRACKET SUPPORT INTERFACE EGS	
4	N33563		SCREW M5X12 MACH PAN CR SS	
2	N38350		ANCHOR HEAVY DUTY MOUNTS	
4	N37749		Dual clamp Tie Tyton	
1	N95812-10		HOSE ASSY FC800 ORS-20 SUC	
1	N95795-03		HOSE ASSY GH134 ORS-08 LIQUID	
1	N95812-09		HOSE ASSY FC800 ORS-20 DISCH	
40	N14529		CABLE TIE	
2	N77181		HOSE PROTECTOR 6 INCHES LGTH	
4	N44884-01		SCREW M6X20 FL SSA2 C70 D6921	
LEVEL 2				
—	—	—	—	—

Materials will be available within 50 days. To order, please contact Prevost Parts by phone at 1-800-771-6682, by fax at 1-888-668-2555 or by email at prevostparts.commandes@volvo.com. 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	2014FE15	Initial release	Wilder Galiano

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
New York City Transit - New York	L545	1202	1289	S92U5A4000001	S92U0A4000098	88

**WARNING**

Follow your internal safety procedures.

(STEP X) refers to the steps of the quality assurance check sheets that can be found in the annex of this document.

PROCEDURE

Make sure the bus is completely straight before starting this procedure. (Step 1)

Turn off the main switch of the vehicle so that there is no current in the electrical wires before performing the following items. (Step 2)

- 1.1. Perform the A/C compressor oil procedure as per the manufacturer's specification.
- 1.2. Drain and recover the air conditioning coolant (Freon). Follow the manufacturer's specification. (Step 3)
- 1.3. Remove the articulation ceiling cover. (Step 4)
- 1.4. Remove the rear and front bulkhead. (Step 5)
- 1.5. Remove and tag baselights. Remove and retain the insulation and other protective material. (step 6).
- 1.6. Remove stanchions on the vehicle. (Step 7)
- 1.7. Unbolt the stabilizer arms from the bulkheads and attach them to the center guiding profile. (Step 8)

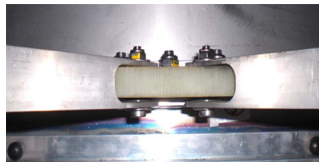


Figure 1 - Stabilizer Fixing Points

- 1.8. Cut all tie wraps that hold the hoses.
- 1.9. Retain black spacing tubes.

PRELIMINARY INSPECTION (STEP 9)

An inspection must be completed prior to performing the retrofit in order to determine what parts need to be changed. Inspect the following components for damage or wear and replace if needed:

- Hydraulic lines.
- Pneumatic lines.
- Main electrical harness.
- Power cables.
- Communication harness.

*A/C hoses, A/C copper pipes and coolant lines do not need to be inspected because they will be changed as part of this procedure.

Refer to your Maintenance manual for repair procedures and part numbers when damage is found on pneumatic, hydraulic lines or other components.

**All carriers must be changed on 1200 series.

***Refer to your campaign service representative when damage is found on electrical wires, harness or cables.

DRAIN

CLOSE WATER VALVES FOR HEATER LOOP (STEP 10)

Retain all fluids in appropriate clean containers to be reuse

1.10. Drain the coolant.

1.10.1. See section 09-302: Engine cooling and section 14: HVAC for the coolant draining procedure.

1.10.2. Drop down the coolant hoses.

1.10.3. Pinch hoses as shown with hose pinch-off pliers.

1.10.4. Cut the hoses and remove the pliers to drain.

1.10.5. Recuperate and reuse the coolant.

1.10.6. Remove and dispose of the coolant hoses.



Figure 2 - Suggested Coolant Drain

1.11. Drain the hydraulic liquid. (step 11)

1.11.1. See section 09-304: Hydraulic system for the hydraulic fluid draining procedure.

1.11.2. Underneath the hydraulic fluid reservoir, open the plug to drain five liters of the fluid shown.

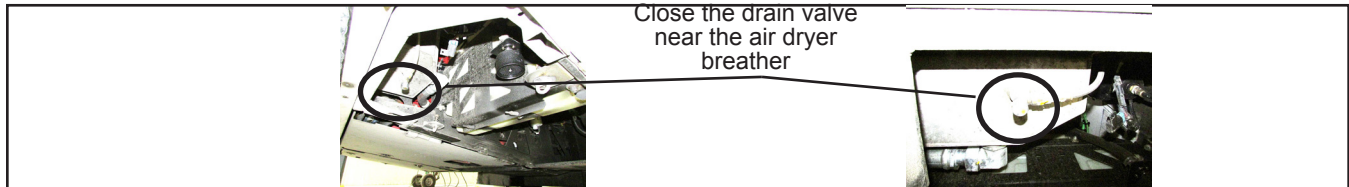


Figure 3 - Hydraulic System Drain

1.11.3. Unplug the hydraulic hoses in the front part of the vehicle.

1.11.4. Recuperate and reuse the hydraulic fluid in a clean container as shown.

DISSASSEMBLY

1.12. Disconnect the ground cable, accessories cables and 24 volt cables in the front section. Cables can be sorted in the articulation compartment. Labeling the 24 cables with labels is recommended. Street side and curb side. (step12)

1.13. The 12 volt cable must be disconnected in the front section.

- 1.14. Remove and dispose of the air conditioning hoses. (step 13)
1.15. Remove and dispose of the suspended rail (energy guidance system). (step 14)
1.16. Install and torque the new suspended rail.

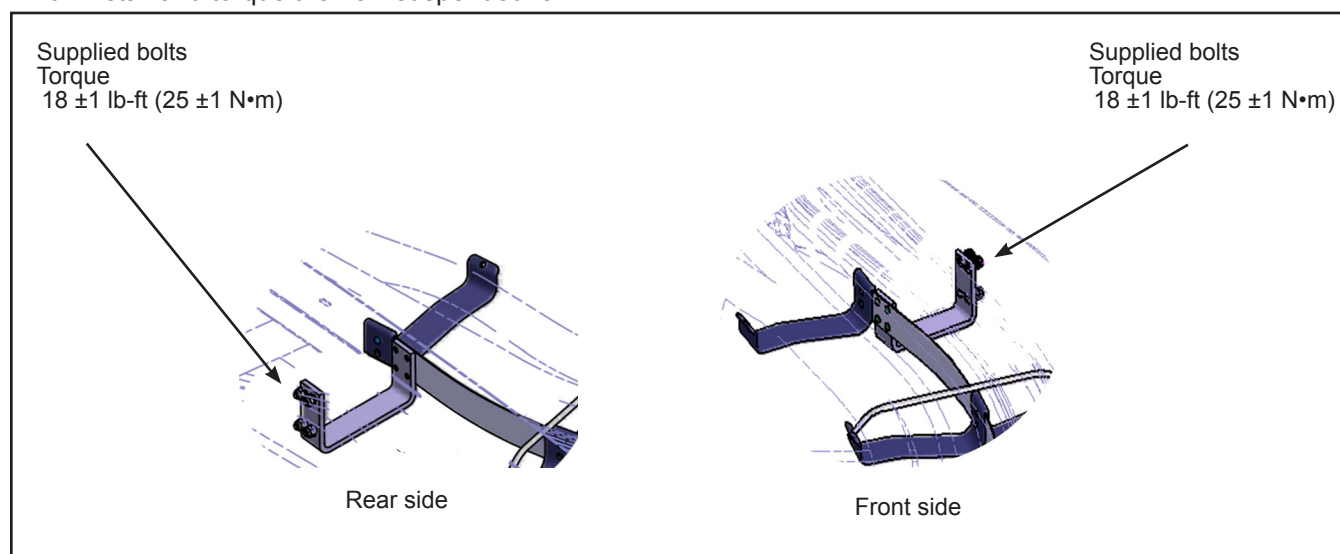


Figure 4 - Suspended Rail Installation

- 1.17. Remove the existing front and rear A/C copper pipes. (step 15)
1.18. Remove the plastic cylinder in the front and rear sections. (step 16)

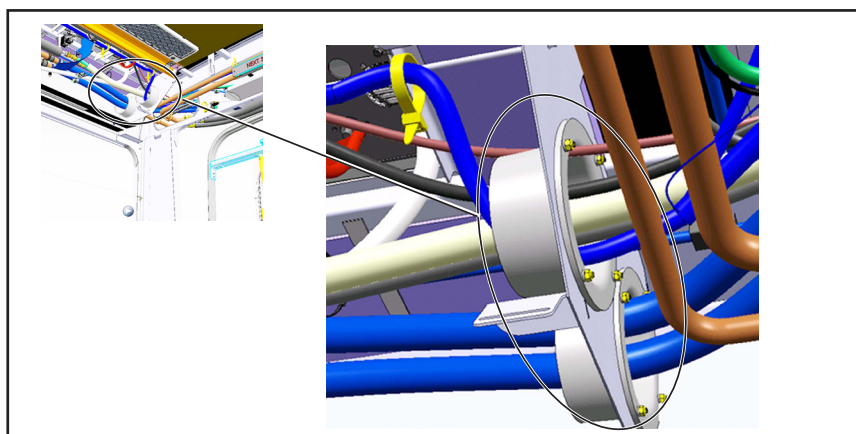
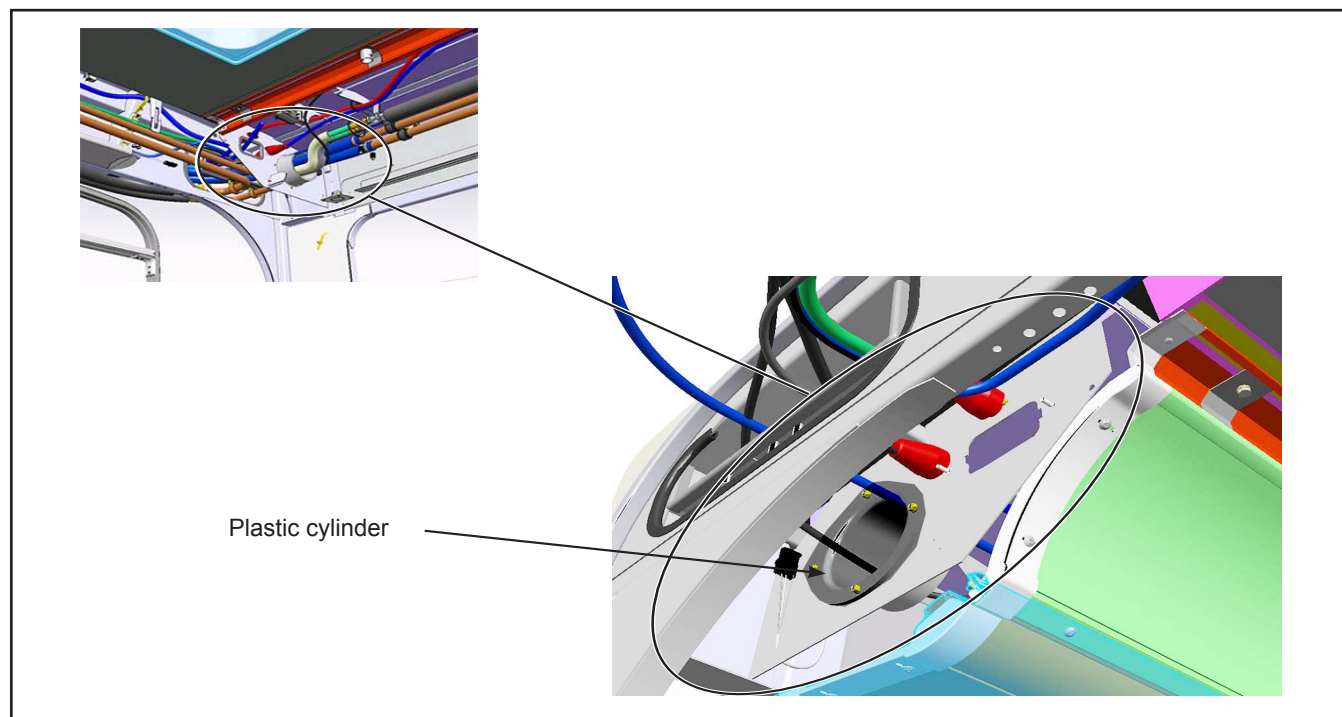


Figure 5 - Front and Rear Plastic Cylinder

- 1.19. Cut the existing A/C copper pipe support in the front section and rear section in the articulation area. The inner side must be cut and ground flush. On the outer side cut and leave 2 inches. Bend the two inch end towards the wall. (Step 17).

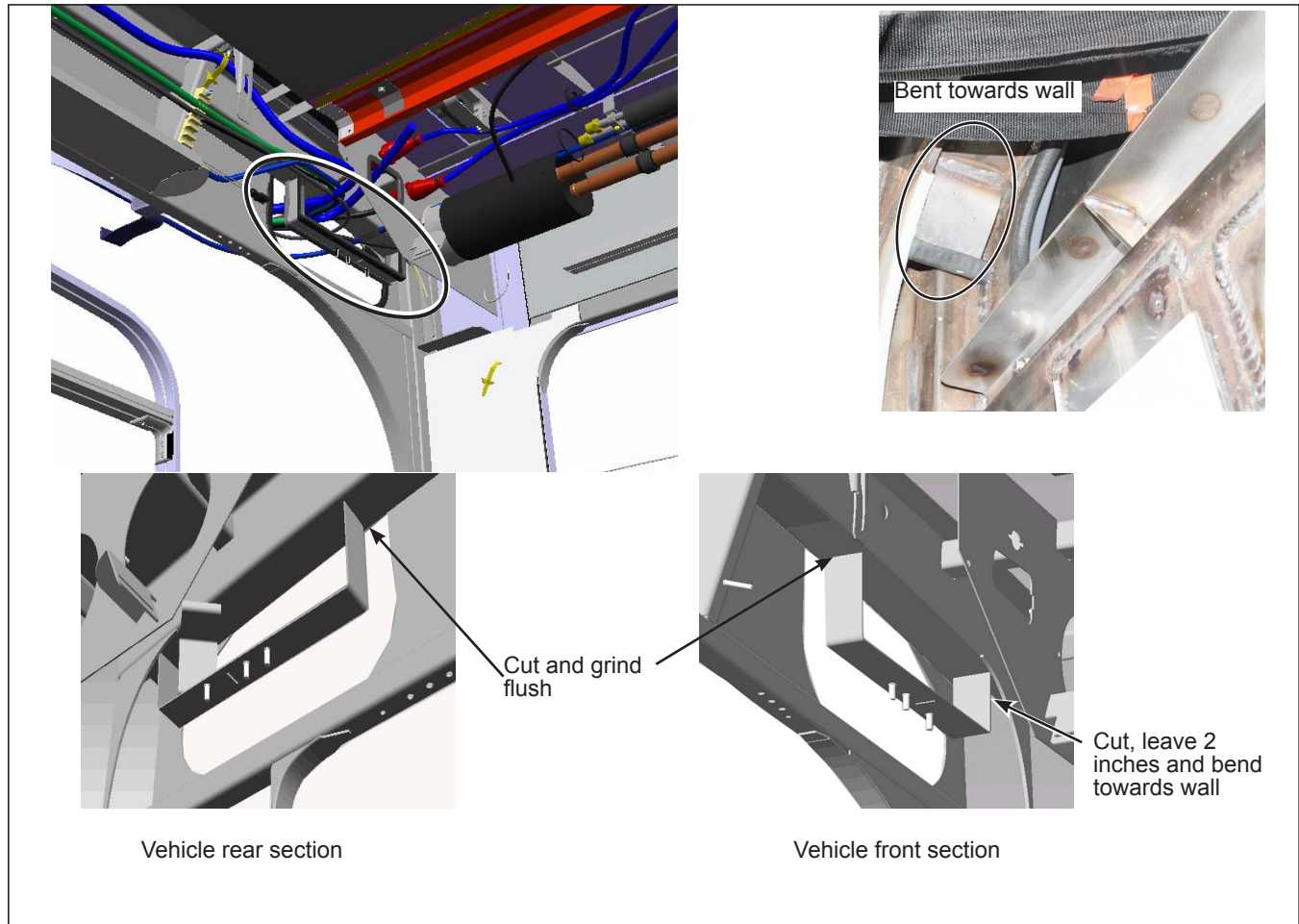


Figure 6 - Removing the A/C Copper Pipe Support

INSTALLATION

- 1.20. Temporarily position new bulkhead brackets using clamps. (Step 18).



Figure 7 - Fixing the Bracket

1.21. Install N75181 edge trim on the N71853 bracket. (STEP 19)

1.22. Install the N71853 support in the front section of the vehicle.

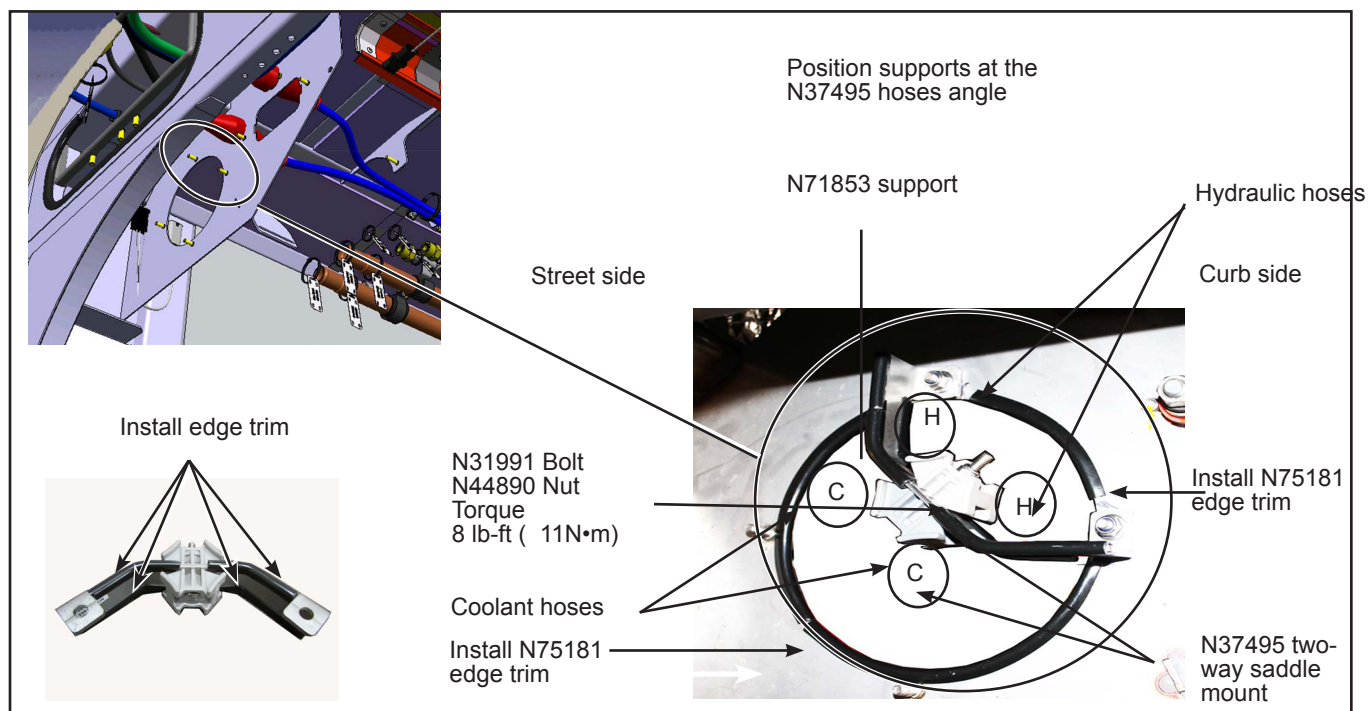


Figure 8 - Bracket Installation

1.23. Install the N72375 support in the front section of the vehicle.

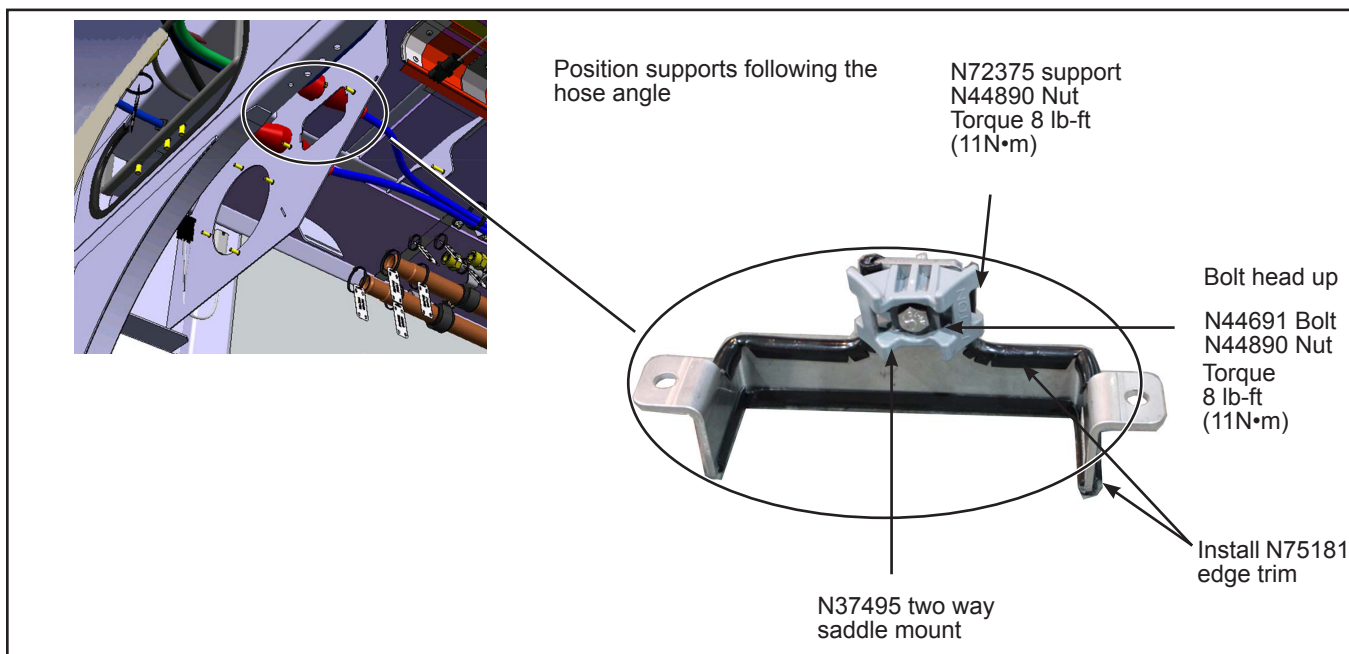


Figure 9 - Bracket Installation

1.24. Install the N71854 support in the rear section of the vehicle.

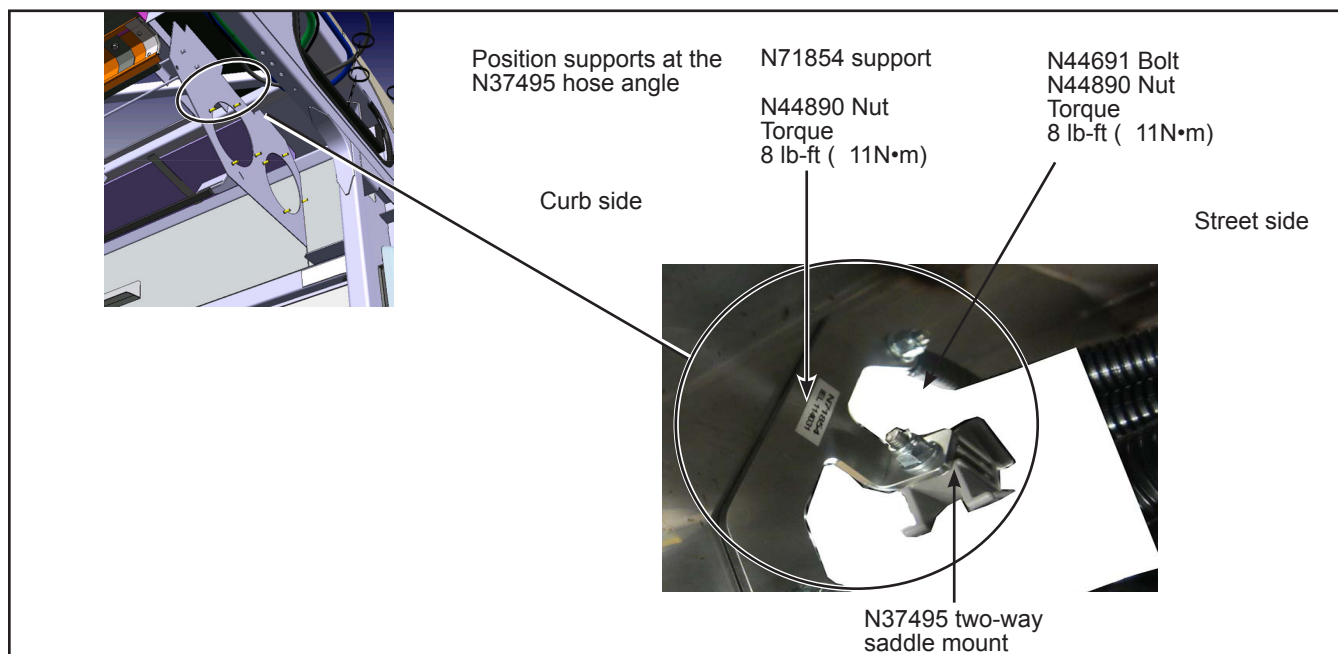


Figure 10 - Bracket Installation

1.25. Install N75181 edge trim on the N71853 bracket.

1.26. Install N71853 bracket.

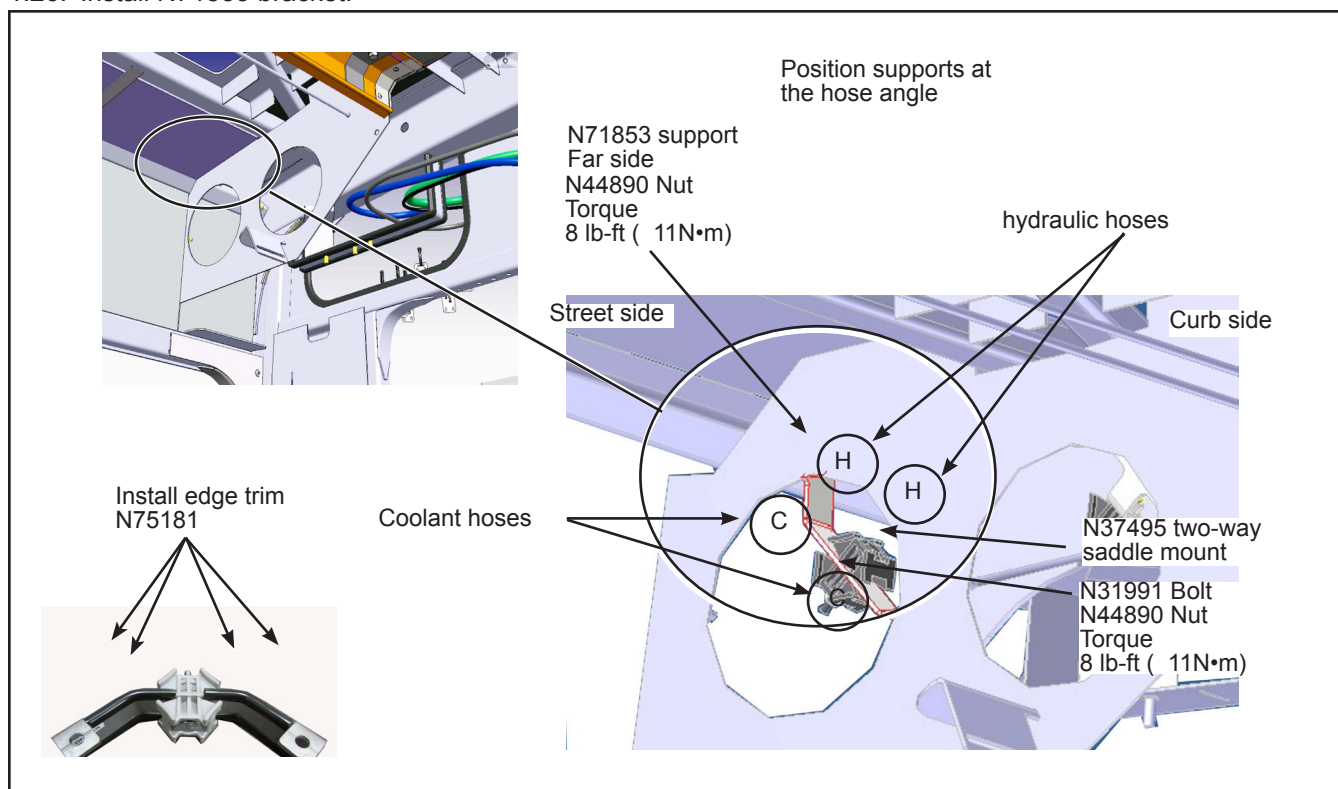


Figure 11 - Bracket Installation

1.27. Install N75181 edge trim around openings.

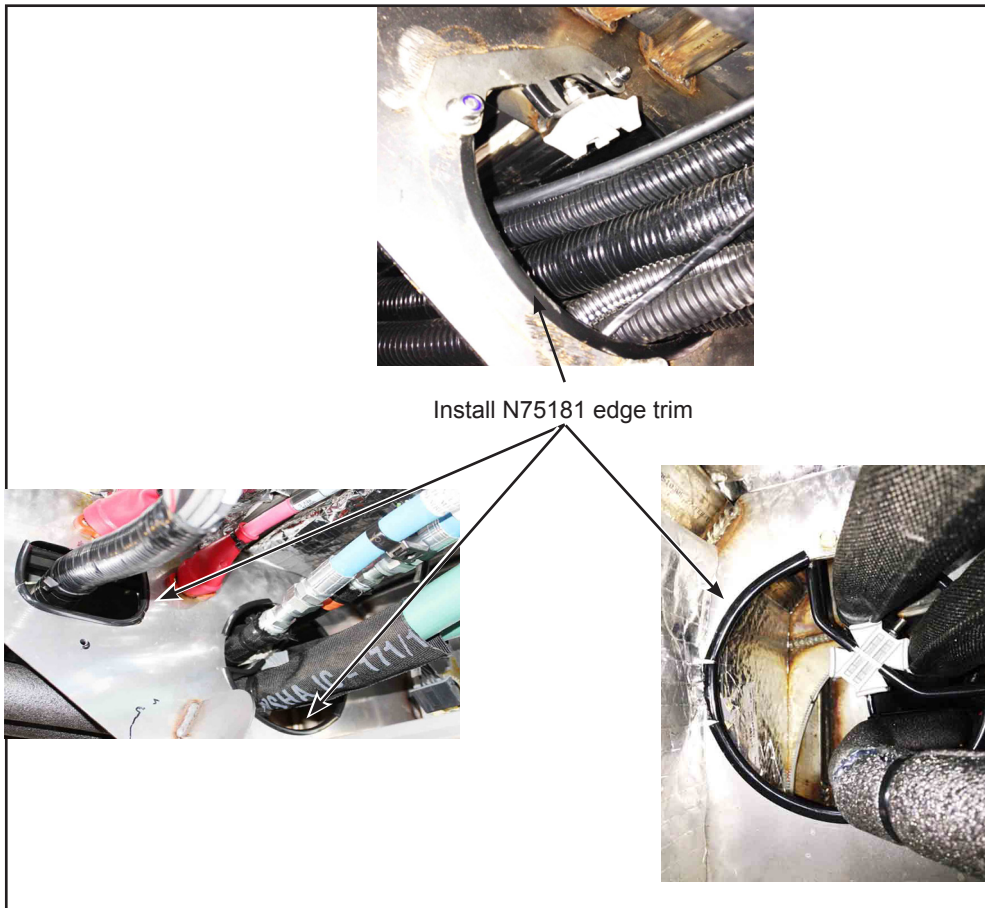


Figure 12 - Edge Trim

- 1.28. Install insulation on the A/C pipes. Use hot glue sticks and N14529 tie-wraps to secure them in place.
- 1.29. Install the new A/C pipes. Front: N76522, N76533 and N76534. Rear: N76519, N76513 and N76518. (Step 20).
- 1.30. Tighten to the torque specified.

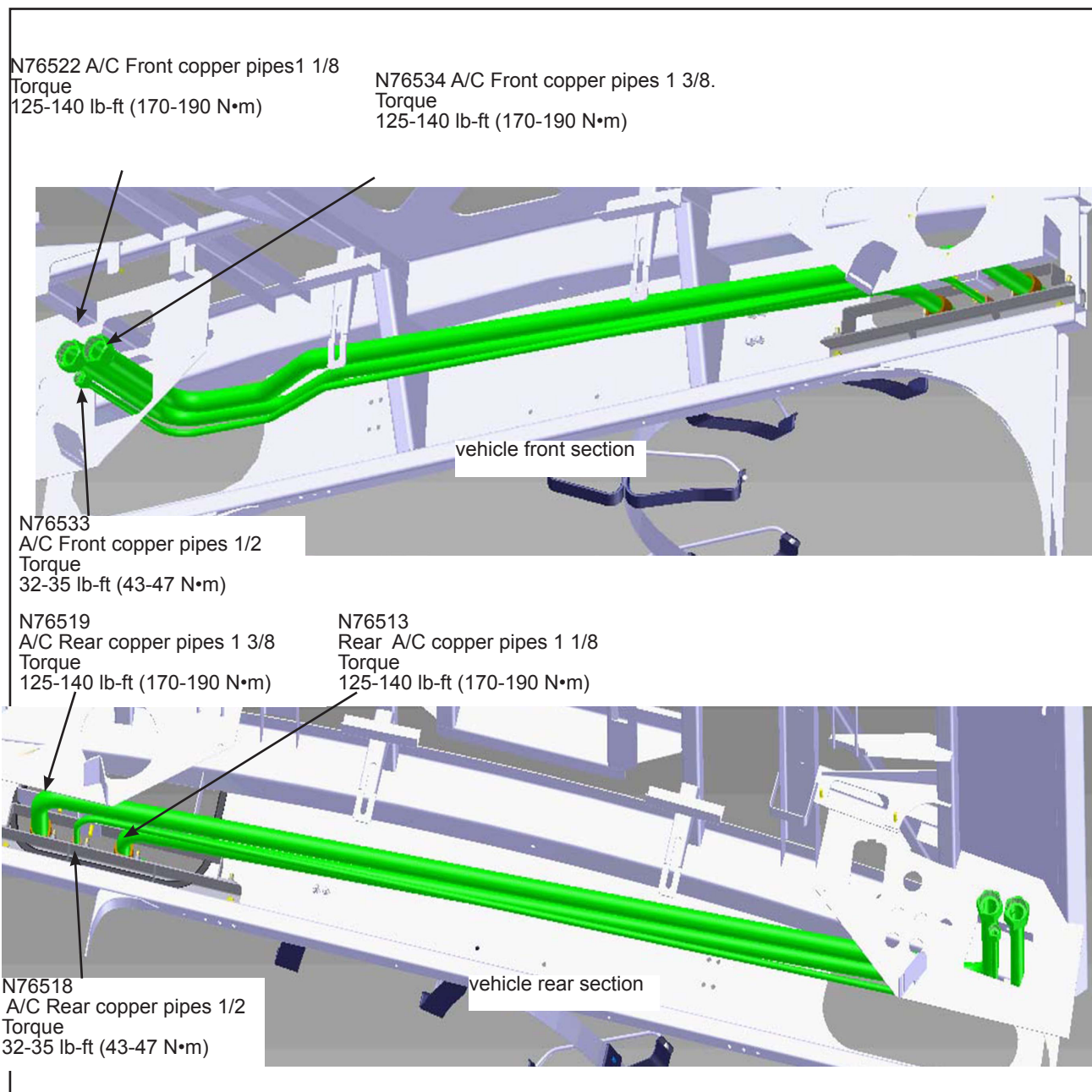


Figure 13 - A/C Copper Pipes Installation

- 1.31. Affix the copper pipes to the new N76423 front and N76404 rear interface bracket with the P-clamps and the hardware. Tighten to the torque specified. (Step 21)

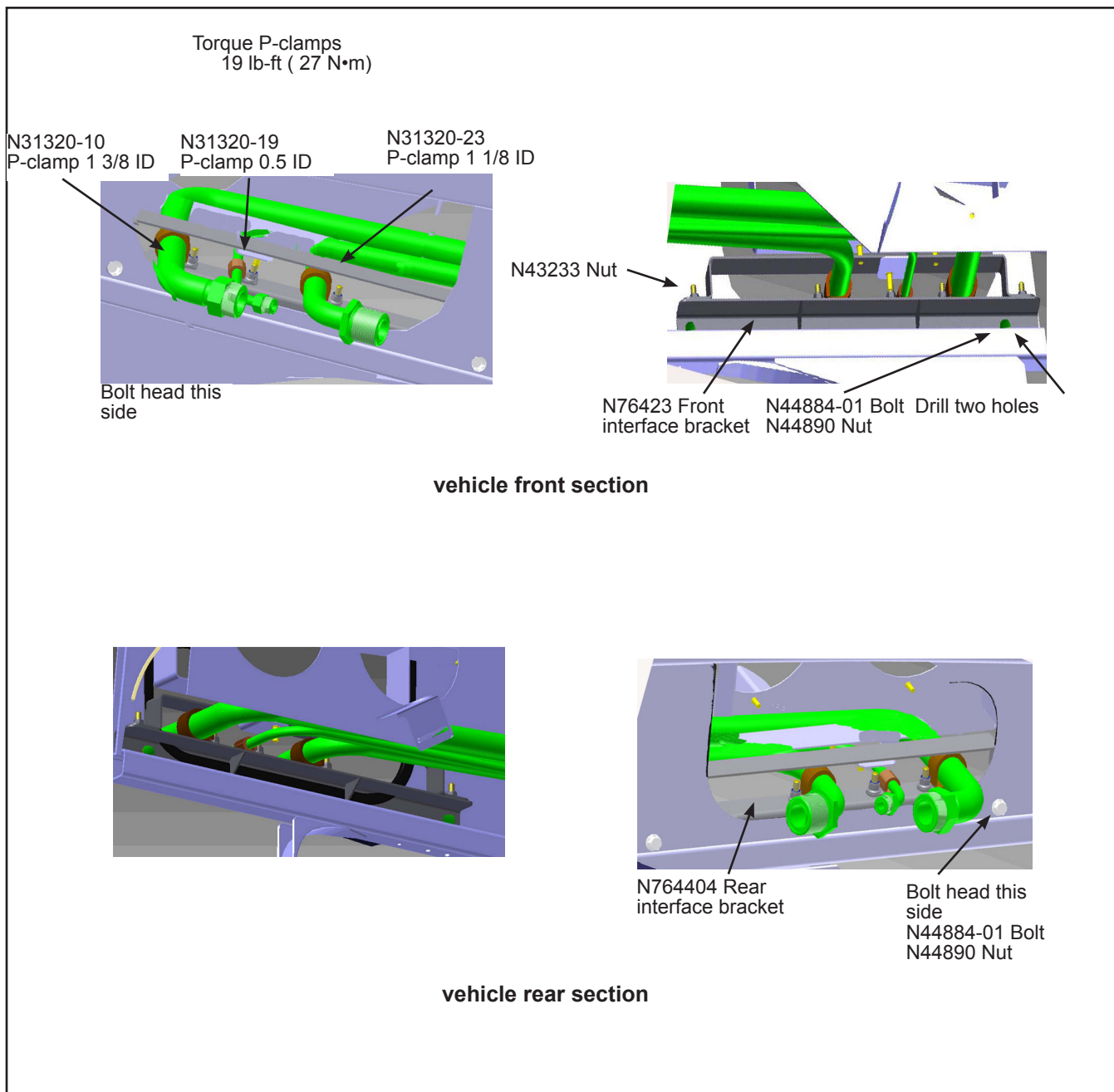


Figure 14 - A/C Copper Pipes Installation

- 1.32. Drill two 5/16 holes in the structure. Use the interface bracket as a template.
- 1.33. Affix the interface bracket support with two N44884-01 M6 bolts and N44890 nuts.
- 1.34. Install edge trim on two sides of the N76405 upper interface support.
- 1.35. Install three tie wraps as shown. Tie wraps lock the mechanism underneath the interface support.
- 1.36. Affix the top interface bracket on top of the interface bracket with two N43233 nut.
- 1.37. Install safe edge on front and rear cut outs.

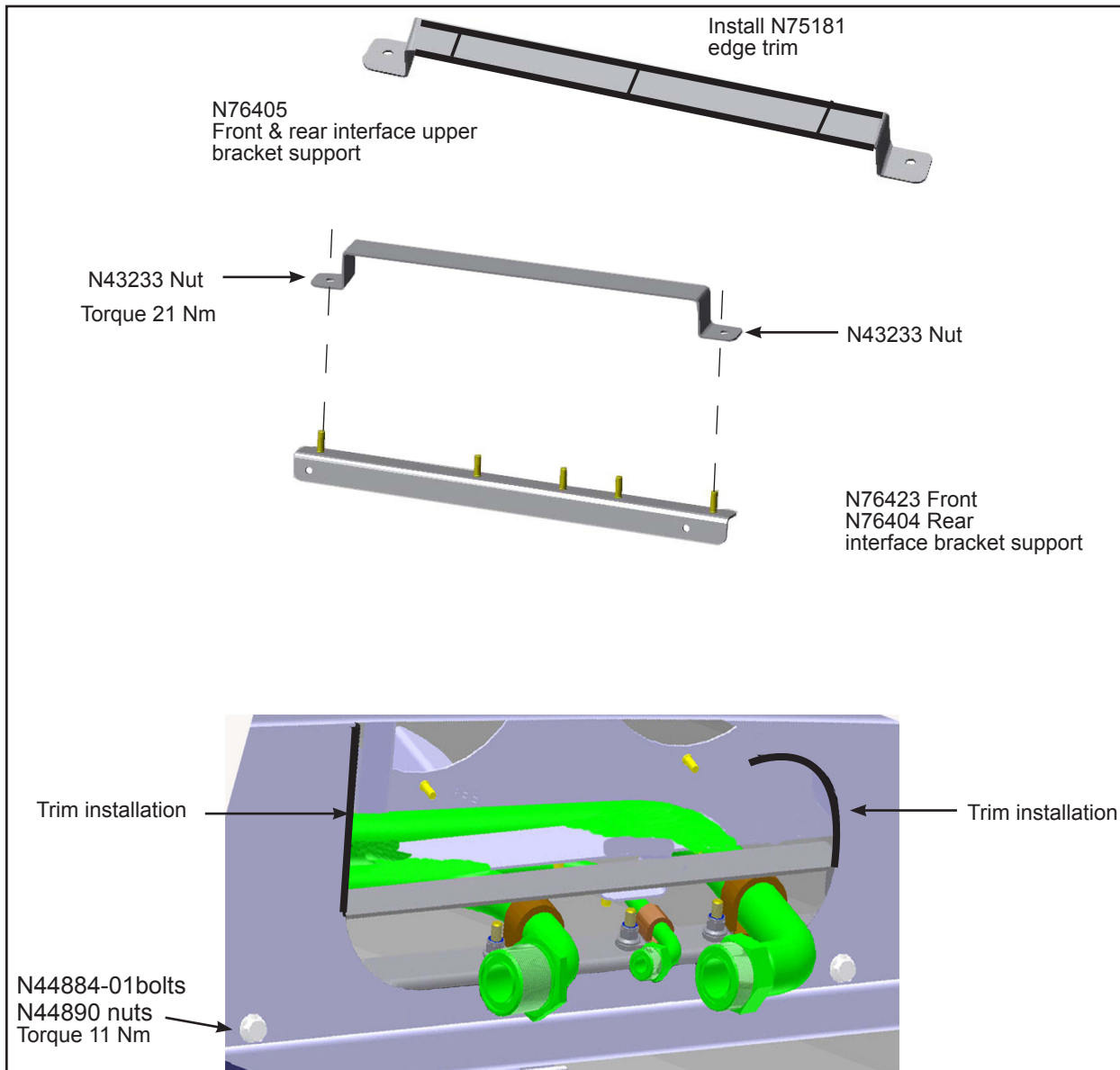
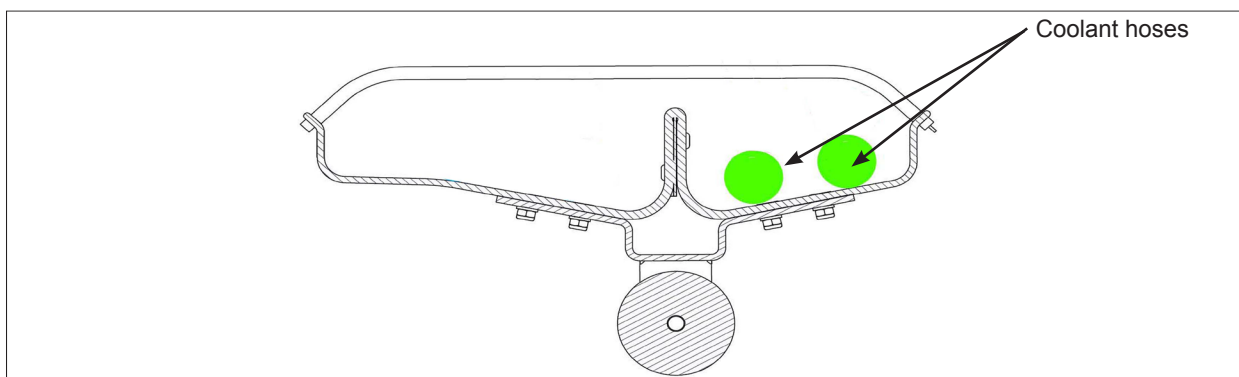


Figure 15 - New Interface Bracket

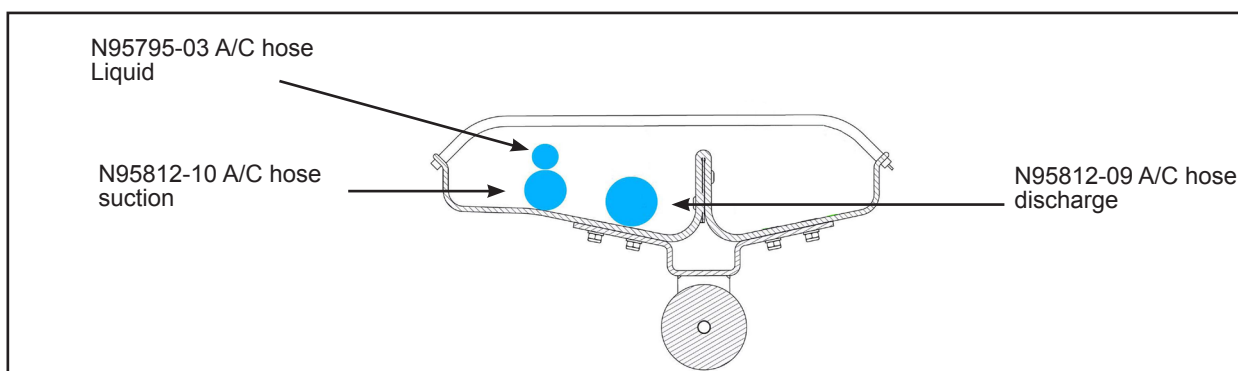
Ensure that when installing any bracket or support, there is no protective trim between the bracket and the fixing surface.

ROUTING SEQUENCE**Coolants (STEP 22)**

- 1.38. Lay the two N74177 flexible coolant hoses along the suspended rail.
- 1.39. Affix the two front ends with a hose clamp.
- 1.40. Apply 6 to 6.5 Nm (53 to 58 lb-in) torque to the breeze hose clamps.
- 1.41. Refer to section 99: General practices in the Nova bus Maintenance manual for the installation of the breeze clamps.

*Figure 16 - Coolant Hoses Installation***A/C HOSES (STEP 23)**

- 1.42. Install N77181 coolant hose protector above A/C connectors using N14529 tie wraps
- 1.43. Replace all A c pipe gasket O-rings. Lubricate O-rings with A/C compressor oil.
- 1.44. Install the three A/C hoses N95812-10 (suction), N95795-03 (liquid) and N95812-09 (discharge) A C on the trays as shown.

*Figure 17 - A/C Coolant Hose Installation*

1.45. Torque all A/C connectors as shown.

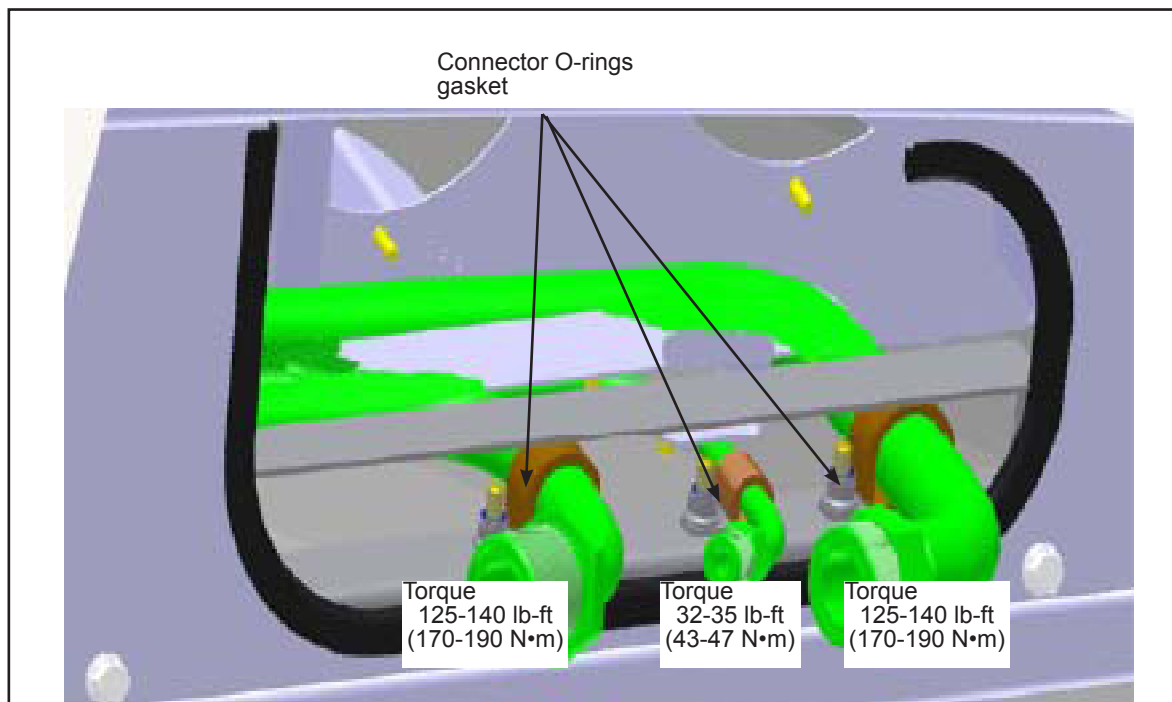


Figure 18 - A/C Coolant Hose Torque

HYDRAULIC LINES (STEP 24)

1.46. Install N95808-02 and N95808-04 hydraulic hoses into the hydraulic circuit in the front. N95808-04 is installed on the vehicle curb side.

1.47. Lay the two flexible hydraulic hoses on the A/C suction hose as shown.

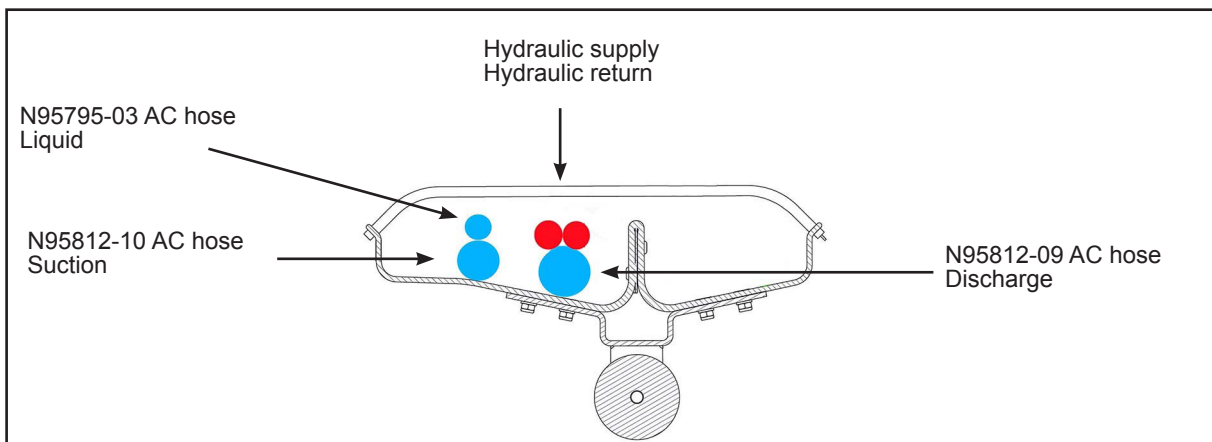


Figure 19 - Hydraulic Line Installation

1.48. Torque all hydraulic connectors on the hoses and pipes as shown.

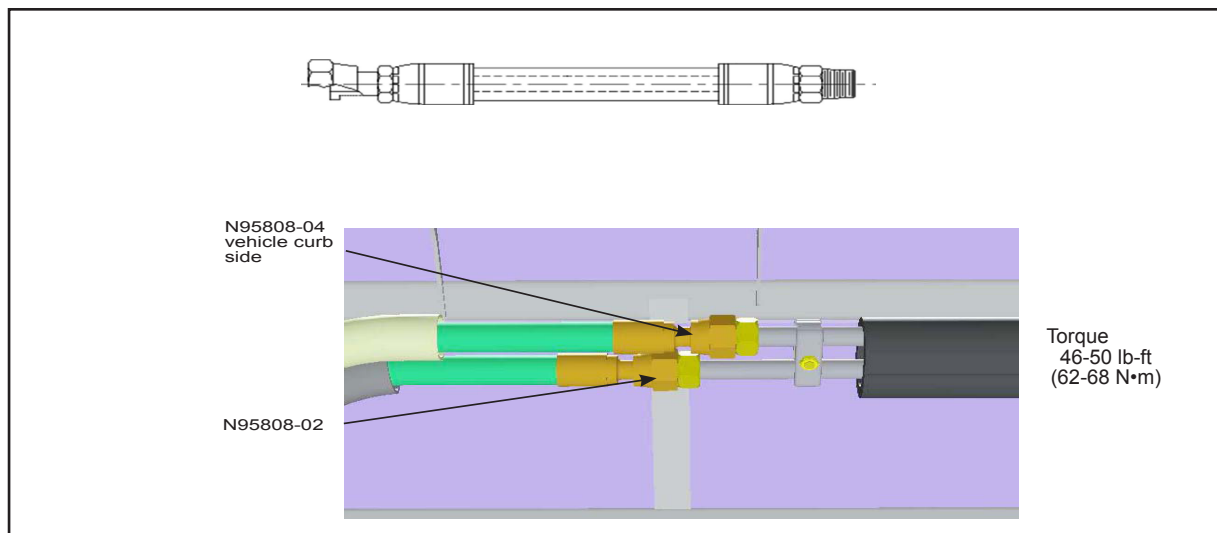


Figure 20 - Hydraulic Lines Torque

1.49. Pressure test A/C system to 250 lbs.

1.50. Vacuum the A/C system to 500 microns.

- 1.51. Install 2 N77181 coolant hose protector above A/C connectors using N14529 tie wraps. In the front and rear sections of the vehicle. Installation on the identified A/C connector only.



Figure 21 - A/C Hose Protection

MAIN ELECTRICAL (STEP 25)

- 1.52. Install the main electrical harness on top of the coolant as shown. Install two tie wraps per section.
- 1.53. Tighten the excess slack from the main harness in the rear vehicle section.

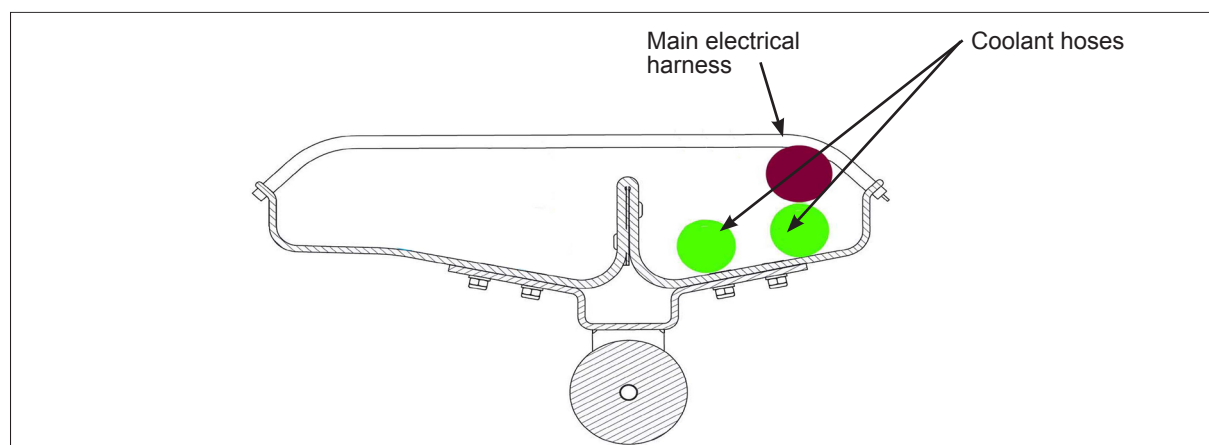
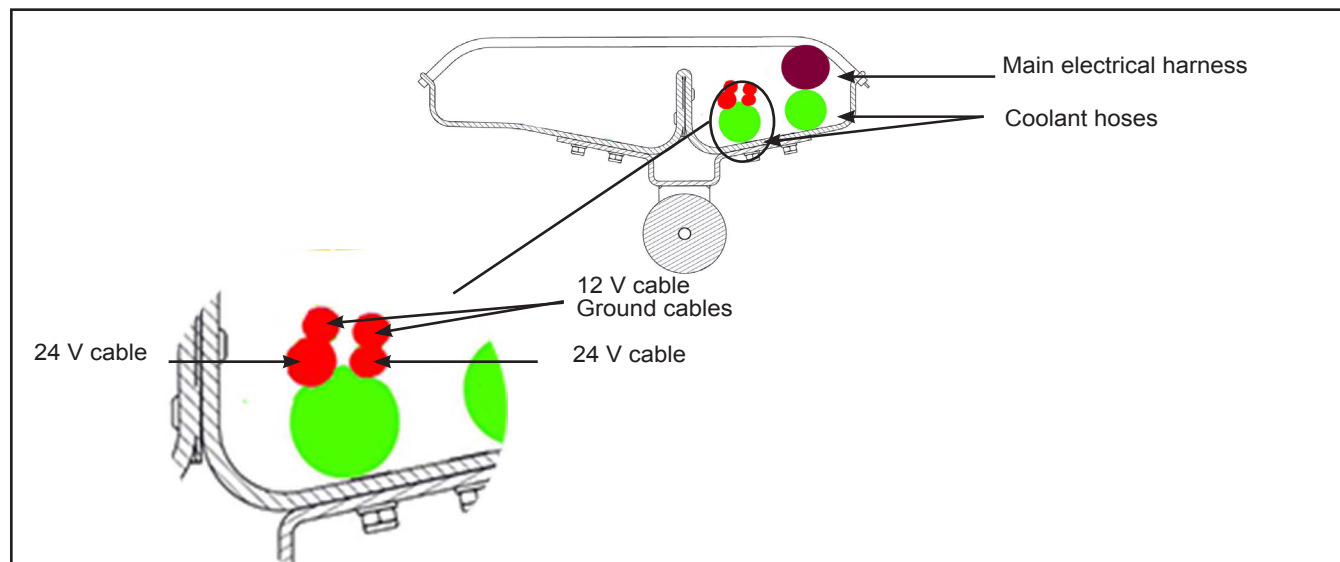


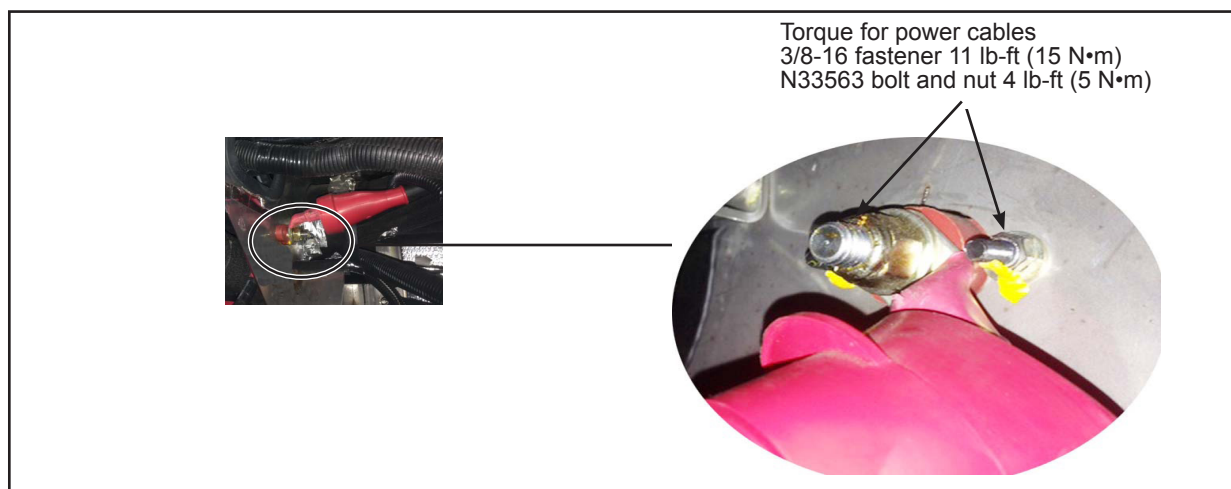
Figure 22 - Main Electrical Installation

POWER CABLES

- 1.54. Connect 24 V cable at front of the vehicle (STEP 26)
- 1.55. 24 V cables must run from the front of the bus towards the rear, with two (2) tie wraps between each tray. All slack must be brought to the back.

*Figure 23 - Power Cable Installation*

- 1.56. Create a bundle with the ground wire, 12 Volts, communication harness and accessories. The bundle slack must be secured in the front baselight. (STEP 27)
- 1.57. Lay bundle on top of 24V cables.
- 1.58. Cut the excess of two rear end coolant hoses and affix to the cooper hose connector with breeze clamps.
- 1.59. Apply 6 to 6.5 Nm (53 to 58 lb-in) torque to the breeze hose clamps.
- 1.60. Replace the bolts that hold the bulkhead connector if it shows more than three threads. Dispose of the bolts and flat washers and retain the nuts.
- 1.61. Affix the two connectors with the new shorter N33563 bolts and the retained nuts.
- 1.62. Attach the ground cable surplus in the front baselight.

*Figure 24 - Cable Connector Installation*

1.63. Install ground cable. Apply the torque specified.

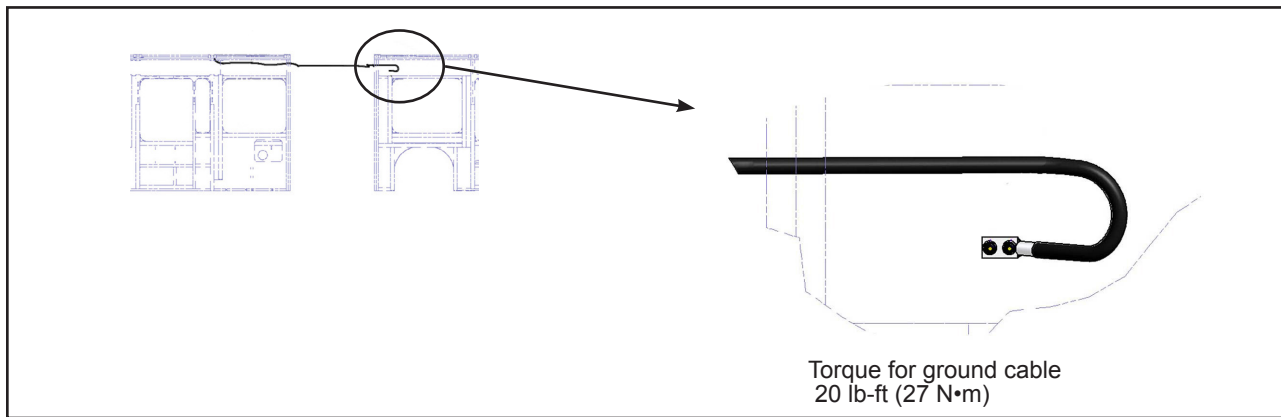


Figure 25 - Ground Cable Installation

PNEUMATIC HOSES (STEP 28)

- 1.64. Install the pneumatic hoses on top of the accessories cables as shown.
- 1.65. Attach the pneumatic hose surplus in the rear bulkhead.

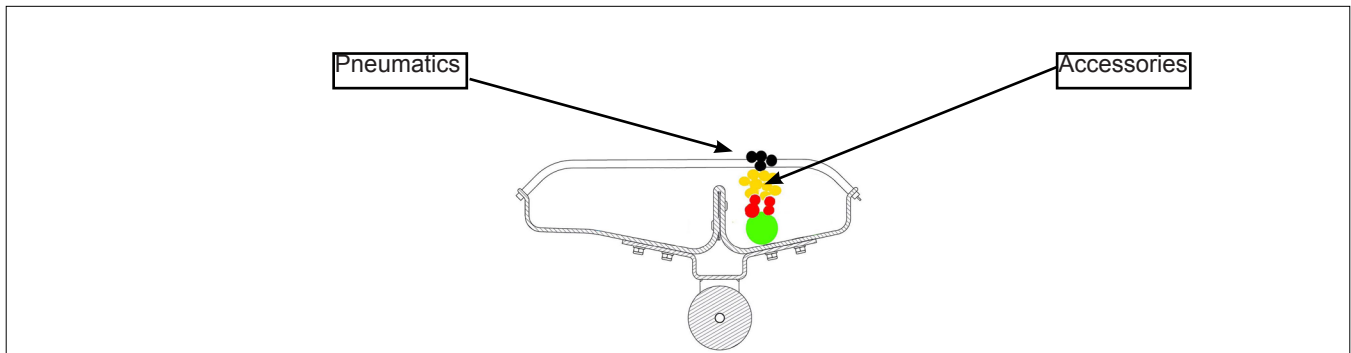


Figure 26 - Pneumatic Hoses Installation

1.66. Retain bundles with two tie wraps centered between each tray.

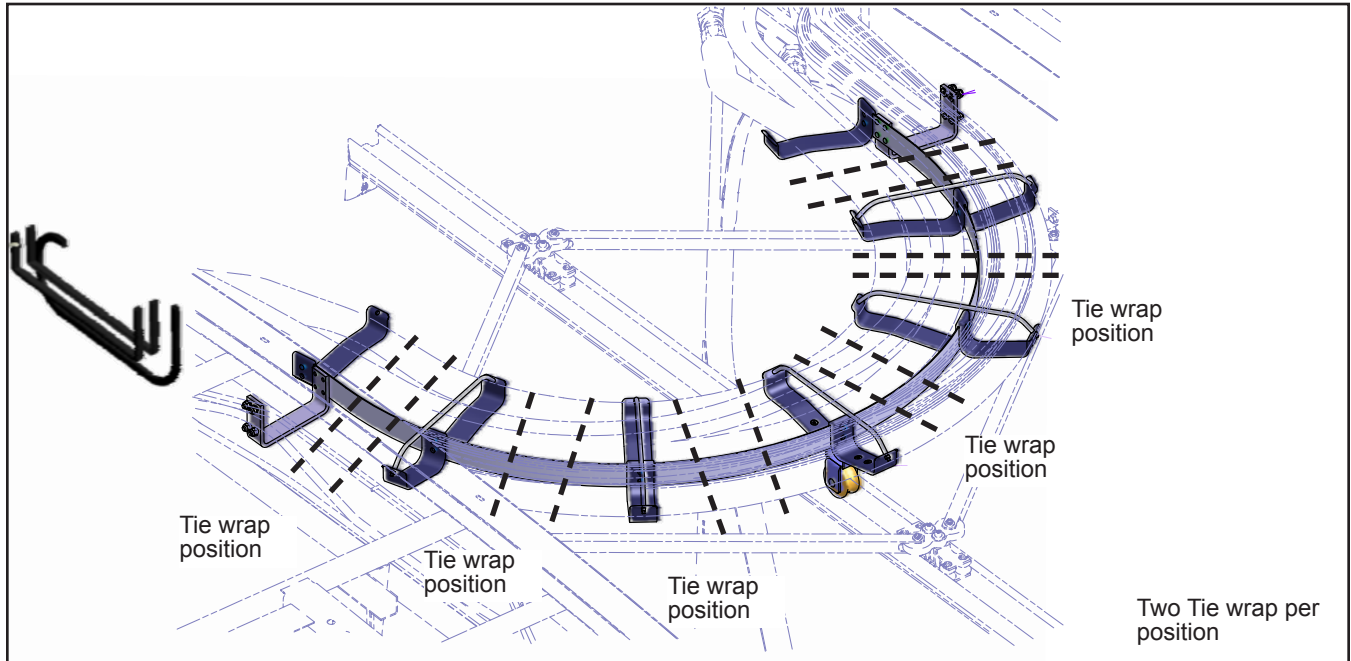


Figure 27 - Tie Wraps Installation

1.67. The lock mechanism should be positioned toward the outside. Do not install between bundles. (STEP 29)

PREPARATION FOR THE INSTALLATION OF PROTECTION OF THE COOLANT HOSES.

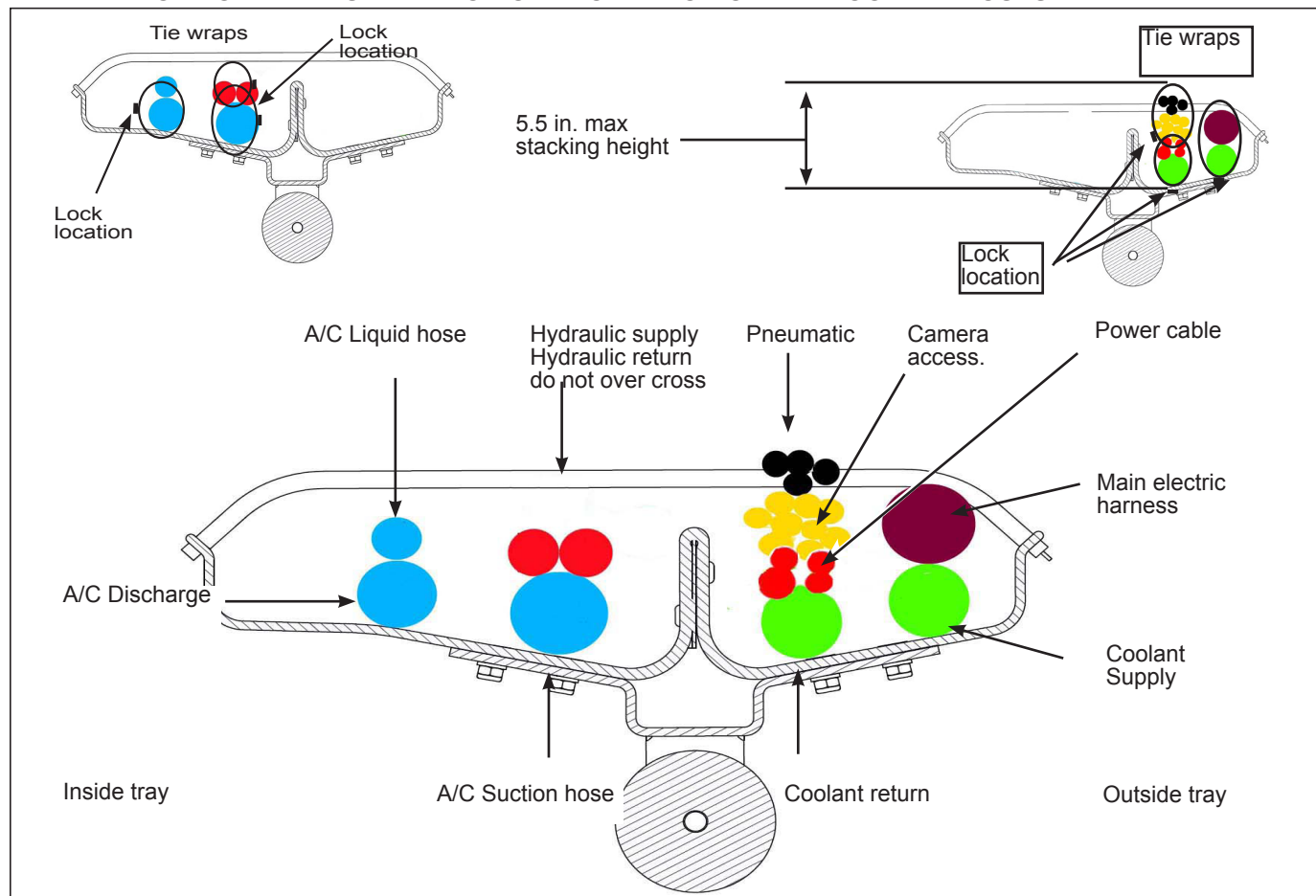
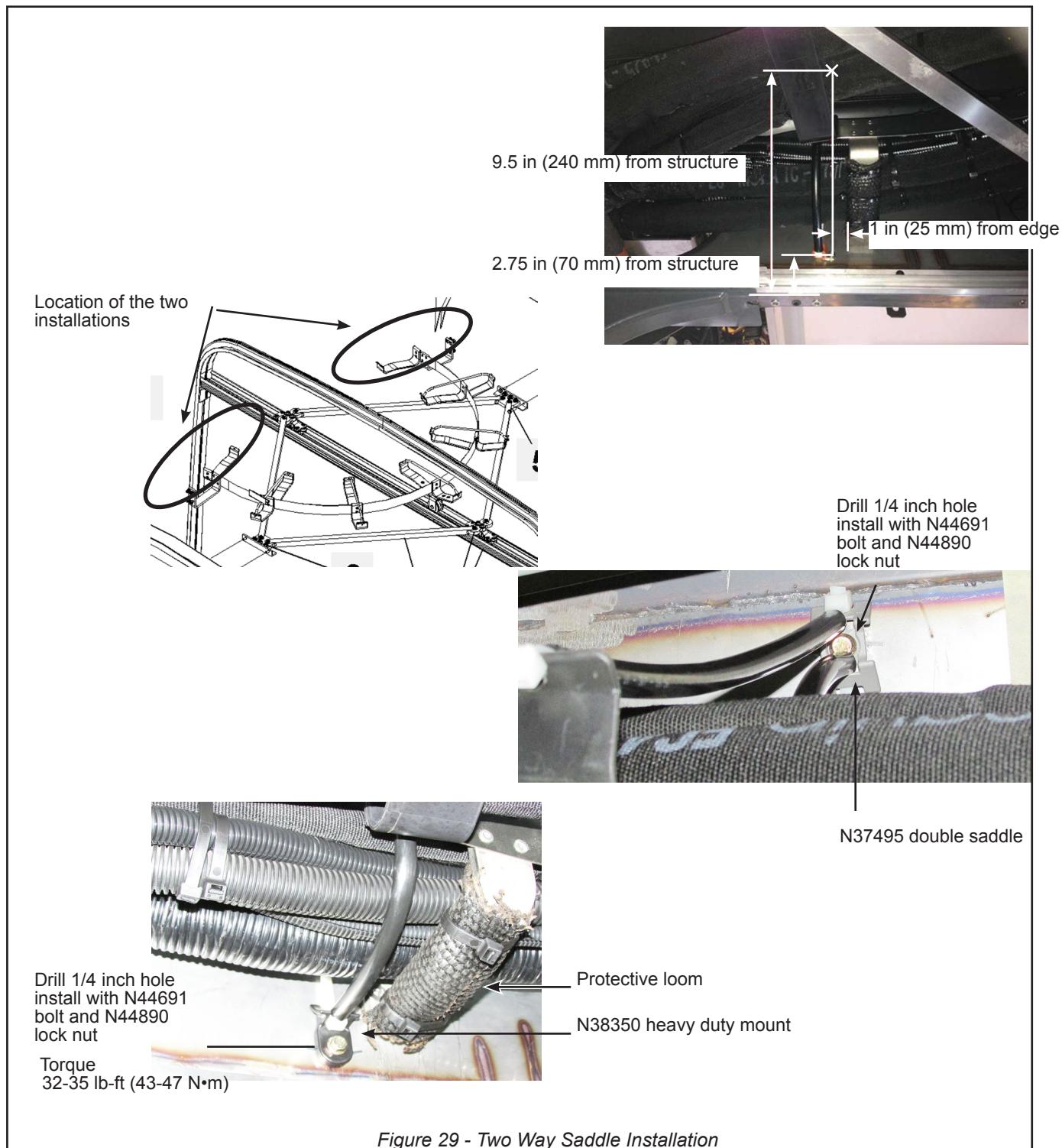


Figure 28 - Hoses and Harnesses, Final Result

Drill four holes in the approximate location shown.

1.68. Install two N37495 two way saddles and two N38350 heavy duty mounts with N44691 bolts and N44890 lock nuts.

1.69. Install in the front and rear, two 13 in. 8860534 flexible tubes with two N68034 tie wraps as shown.



1.70. Reposition the electrical cable so that it does not push against the tubular frame.



Figure 30 - Power Cable Routing

- 1.71. Route and tie harness neatly in the baselights, making sure they will not contact the access panels in the front and the rear baselights.

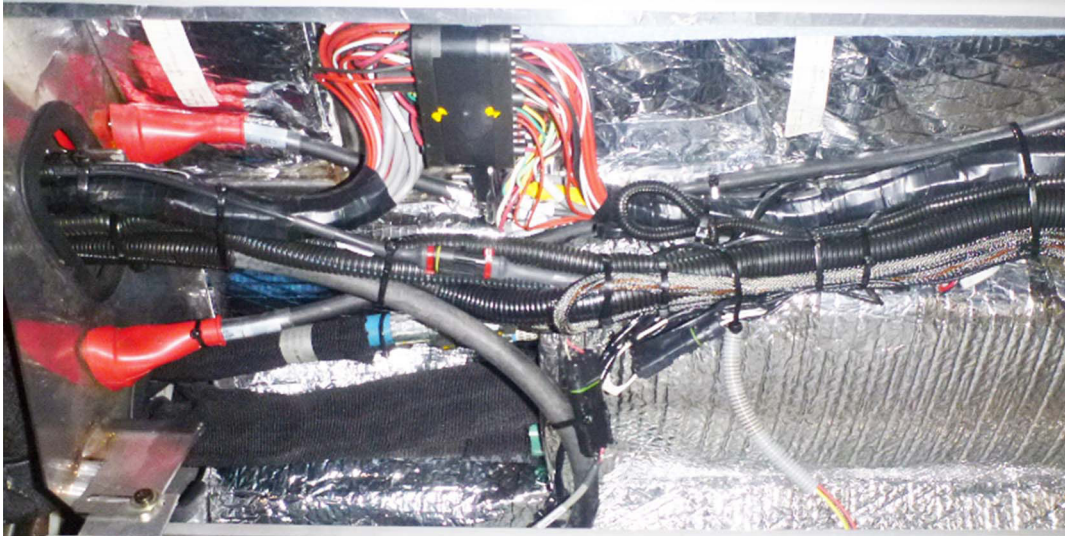


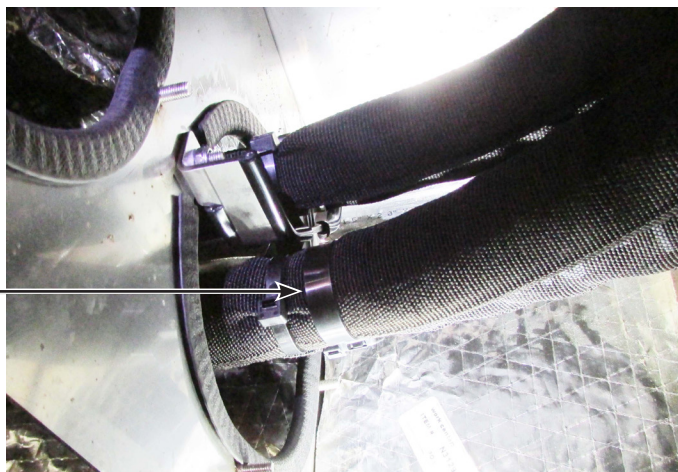
Figure 31 - Baselight Routing

- 1.72. Attach the coolant hoses with a double tie wrap in the front and rear bulkhead.
- 1.73. All routings should be evenly spaced (5/8") in the suspended rail. Use the 'W' shaped jigs to validate the spacing.

If coolant hoses with a banana shape are too long. Cut the excess length.



Affix with one double tie wrap



'W' shaped jigs

Figure 32 - Securing Harnesses and Hoses

FILLING

Ensure that all coolants, hydraulic and A/C fluids, are at specified levels. (step 30).

- 1.74. Add oil to the A/C compressor.
- 1.75. Fill the coolant fluid. Use the retained fluid.
- 1.76. Fill the hydraulic fluid. Use the retained fluid.

- 1.77. Reinstall at its original condition the baselight insulation and other protective material.
- 1.78. Remove bolts and nuts and install bolts head up, on top of the stabilizer bars. Apply to the front and rear of the stabilizer mechanism. (step 31).
- 1.79. Affix the stabilizer bar at its original position with the retained hardware.

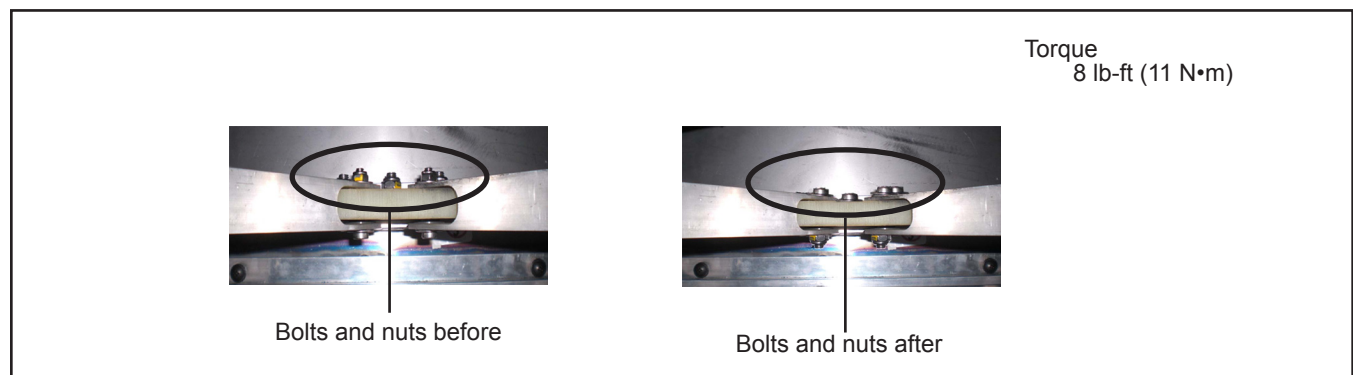


Figure 33 - Install Stabiliser Bolts Head Up

PRE-INSPECTION

With the vehicle in a straight position. (step 32).

- 1.80. Perform the pre inspection process.
- 1.81. Install tie wrap bridges between the trays, in seven places.
- 1.82. Ensure that the tie wrap bridge assemblies clear the bottom of trays from the stabilizer bar.
- 1.83. Tie wraps should not be too tight at bending angles. (step 33).
- 1.84. Route and tie hoses and harness to ensure that there is no contact with the bellows. They should not be tied to any part of the EGS to allow freedom of movement.

- 1.84.1. Make sure all hoses and cables are spread evenly in the suspended rail.
- 1.84.2. Ensure all the hoses and harnesses are properly secured in the baselight.



Figure 34 - Tie Wrap Installation

- 1.84.3. Make sure to leave a distance of $\frac{5}{8}$ between hose stacks. **(step 34).**
- 1.84.4. Ensure that there is no contact between the hoses/cables and the cut-outs on the bulkhead panels (approximately $\frac{1}{2}$ " distance). **(step 35).**



Figure 35 - No Contact Between Hoses and Surrounding Components

1.84.5. Contact with bellow is not acceptable. (step 36).



Figure 36 - Avoid Contact With Surrounding Components

1.84.6. Contact with stabilizer bars is not acceptable.

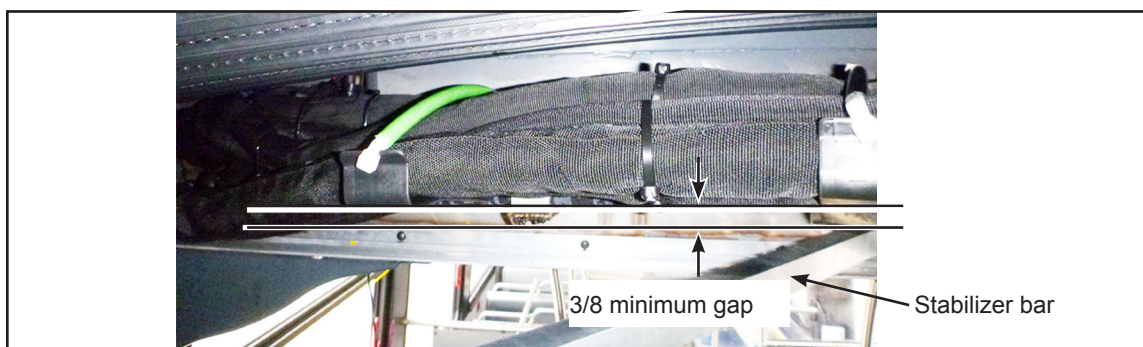


Figure 37 - Avoid Contact With Stabilizer Bar

1.84.7. Ensure there is no contact between electrical cables and the frame.

1.84.8. Ensure there is no pressure on the trays from the EGS suspended rail.

INSPECTION (Step 37)

Refer to inspection sheet in annex. This sheet must be filled out for each bus by the person performing the retrofit. Below are the major items to look for.

During the inspection process, ensure that there is no tension between the bundle and the blades. Contact between the bundles and the blade is allowed.

1.85. Perform the inspection.

- 1.85.1. Position the vehicle in a left jack-knife by backing it into this position. (Do not bring artic joint to hard stop).
- 1.85.2. Ensure that the hoses and harnesses do not move in the baselight.
- 1.85.3. Slight contact between hose stacks is acceptable as long as there is no tension.
- 1.85.4. Slight contact with blade is acceptable as long as there is no tension on the blade.
- 1.85.5. Ensure that there is no contact between the hoses/cables and the cut-outs on the bulkhead panels (approximately 1/2" distance).
- 1.85.6. Contact with bellow is not acceptable.
- 1.85.7. Contact with stabilizer bars is not acceptable.
- 1.85.8. Ensure there is no contact between electrical cables and the frame.
- 1.85.9. Ensure there is no pressure on the trays from the EGS suspended rail.
- 1.85.10. Finalize the installation of all tie wraps.

Make sure that the hose protector is installed correctly in the front and rear section.

Minor adjustments may be necessary to allow unrestricted movement of the cables and hoses with the energy guidance system. Major adjustments may require more extensive work and re-validation.

1.86. Repeat inspection in right jack-knife position. (Step 38)

***Under normal operating conditions, the articulation joint never reaches a hard stop (54°). it is only when backing up the vehicle in very narrow areas that a driver will flip the emergency release switch and that the vehicle will reach this extreme condition. This procedure is intended to verify the position of the component under normal fatigue conditions only (51°).**

****Note: minimal contact/slight contact is defined by being able to slide your finger between the two components without feeling much discomfort.**

CLOSING

- 1.87. Ensure that N34049 cork tape is applied where needed, particularly on all A/C hose connectors from P-clamp to A/C hose and exposed sections of the copper pipes. (Step 39)



Figure 38 - N34049 Cork tape Installation

- 1.88. Fill the A/C system with freon. (Step 40)
1.89. Record A/C system pressures. (Step 41)
1.90. Install the baselight panels, bulkhead panels, stanchions and roof cover. (Step 42)
1.91. Clean bus. (Step 43). ❖

ANNEX

QUALITY ASSURANCE CHECKLIST FOR EGS RETROFIT					
UNIT # _____		MILEAGE _____	LOCATION _____	SERVICE BULLETIN # _____	
ITEM	TASK	DATE	COMPLETED BY	INSPECTED BY	
PREPARATION AND DISASSEMBLING					
STEP 1.	MAKE SURE THE BUS IS STRAIGHT BEFORE STARTING RETROFIT				
STEP 2.	TURN OFF BATTERY DISCONNECT SWITCH AND LOCKOUT, TO MAKE SURE THERE IS NO CURRENT IN THE ELECTRICAL WIRES BEFORE PERFORMING THE FOLLOWING STEPS				
STEP 3.	ATTACH FREON RECOVERY SYSTEM				
	3.1 FREON RECOVERED _____ LBS				
STEP 4.	REMOVE ARTIC JOINT CURTAIN (CEILING COVER)				
STEP 5.	REMOVE BULKHEAD PANELS				
STEP 6.	REMOVE AND IDENTIFY BASE LIGHT PANELS				
STEP 7.	REMOVE STANTIONS				
STEP 8.	UNBOLT STABILIZER BARS AND ATTACH TO CENTER GUIDING PROFILE				
STEP 9.	PRELIMINARY INSPECTION (Record all required repairs in the section provided below)				
	9.1 HYDRAULIC LINES				
	9.2 PNEUMATIC LINES				
	9.3 MAIN ELECTRICAL HARNESS				
	9.4 POWER CABLES				
	9.5 COMMUNICATION HARNESS				
	9.6 DAMAGE TO EGS CARRIER OR TRAYS (5000 SERIES ONLY)				
STEP 10.	CLOSE WATER VALVES FOR HEATER LOOP AND DRAIN COOLANT				
	10.1 RETAIN COOLANT IN APPROPRIATE CONTAINER SO IT CAN BE REUSED				
	10.2 DISPOSE OF THE COOLANT HOSES				
STEP 11.	DRAIN HYDRAULIC OIL				
	11.1 DRAIN 5L OF OIL FROM THE HYDRAULIC FLUID RESERVOIR				
	11.2 RETAIN OIL IN APPROPRIATE CONTAINERS SO IT CAN BE REUSED				
STEP 12.	DISCONNECT GROUND CABLE, 12 VOLT CABLE, 24 VOLT CABLES, ACCESSORIES AND COMMUNICATION HARNESSES FROM THE FRONT SECTION				
STEP 13.	REMOVE AND DISPOSE OF THE A/C HOSES				
STEP 14.	REPLACE EGS BLADE (1200 SERIES ONLY)				
	14.1 TORQUE EGS BRACKET BOLTS TO _____ LBS				
	14.2 REPLACE ANY DAMAGED EGS TRAYS (5000 SERIES ONLY)				
STEP 15.	REMOVE AND DISCARD A/C PIPES				
STEP 16.	REMOVE PLASTIC CYLINDERS IN THE BASELIGHTS				
STEP 17.	CUT EXISTING BULKHEAD BRACKET				
INSTALLATION					
STEP 18.	TEMPORARILY POSITION NEW BULKHEAD BRACKETS USING CLAMPS				
STEP 19.	INSTALL ANTI-CHAFFING SUPPORT BRACKETS IN BASELIGHTS				
	19.1 INSTALL SAFE EDGE ON BRACKETS BEFORE INSTALLATION				
	19.2 TORQUE M6 BOLTS TO _____ LBS				
STEP 20.	INSTALL NEW A/C PIPES				
	20.1 TORQUE -20 CONNECTORS TO _____ LBS				
	20.2 TORQUE -24 CONNECTORS TO _____ LBS				
	20.3 TORQUE -10 CONNECTORS TO _____ LBS				
	20.4 TORQUE -08 CONNECTORS TO _____ LBS				
	20.5 TORQUE P-CLAMPS TO _____ LBS				
STEP 21.	FINALIZE THE INSTALLATION OF THE BULKHEAD BRACKETS				
	21.1 TORQUE M6 BOLTS TO _____ LBS				
	21.2 INSTALL SAFE EDGE ON FRONT AND REAR CUT OUTS				
STEP 22.	INSTALL NEW COOLANT HOSES				
	22.1 TORQUE BREEZE CLAMPS TO _____ LBS				
	22.2 INSTALL COOLANT HOSE PROTECTORS ABOVE A/C CONNECTORS				
STEP 23.	INSTALL A/C HOSES				
	23.1 REPLACE O-RINGS				
	23.2 TORQUE -24 CONNECTORS TO _____ LBS				
	23.3 TORQUE -20 CONNECTORS TO _____ LBS				
	23.4 TORQUE -08 CONNECTORS TO _____ LBS				
	23.5 PRESSURE TEST AC SYSTEM TO 250 LBS				
	23.6 VACUUM SYSTEM TO 500 MICRONS				
	23.7 RECORD MICRON LVL _____				
STEP 24.	INSTALL HYDRAULIC LINE EXTENSIONS				
	24.1 TORQUE TO _____ LBS				
STEP 25.	INSTALL MAIN ELECTRICAL HARNESS ON TOP OF COOLANT HOSE				
	25.1 ATTACH SURPLUS IN REAR BASELIGHT				
STEP 26.	INSTALL 24V CABLES ON THE COOLANT HOSE (RUN CABLES FROM FRONT TO REAR)				
	26.1 REPLACE SCREWS FOR 24V JUNCTION BLOCK (1200 SERIES ONLY)				

ITEM	TASK	DATE	COMPLETED BY	INSPECTED BY
	BUNDLE GROUND CABLE, 12 V CABLE, COMMUNICATION HARNESS AND ACCESSORIES			
STEP 27.	27.1 LAY BUNDLE ON TOP OF 24V CABLES AND FIX WITH TIE WRAPS			
	27.2 ATTACH ALL THE EXCESS LENGTH IN THE FRONT BASE LIGHT			
	27.3 TORQUE GROUND CABLE TO _____ LBS			
STEP 28.	INSTALL PNEUMATIC HOSES ON TOP OF THE BUNDLE			
	28.1 ATTACH PNEUMATIC HOSES SURPLUS IN THE REAR BULKHEAD			
STEP 29.	INSTALL LARGE TIE WRAP TO PREVENT CHAFFING OF COOLANT HOSES ON THE BLADE			
STEP 30.	FILL COOLANT, HYDRAULIC OIL AND COMPRESSOR OIL TO CORRECT LEVELS			
STEP 31.	INSTALL STABILIZER BARS WITH THE BOLT HEADS FACING UP			
	34.1 TORQUE BOLTS TO _____ LBS			
INSPECTION				
STEP 32.	WITH THE VEHICLE IN A STRAIGHT POSITION ENSURE THE EGS TRAYS ARE NOT TOUCHING THE STABILIZER BARS			
STEP 33.	ENSURE ALL HOSES AND HARNESSES ARE PROPERLY SECURED IN THE BASE LIGHTS			
STEP 34.	THERE SHOULD BE 5/8" CLEARANCE BETWEEN EACH STACK OF HOSES			
STEP 35.	NO CONTACT BETWEEN ROUTINGS AND STRUCTURE			
STEP 36.	NO CONTACT BETWEEN ROUTINGS AND BELLOW			
	BACK THE VEHICLE INTO A FULL JACK-KNIFE POSITION TO THE LEFT (DO NOT FLIP THE EMERGENCY OVERRIDE SWITCH*)			
	37.1 ENSURE ALL HOSES AND HARNESSES ARE WELL SECURED IN BASELIGHTS AND HAVE NOT MOVED			
	37.2 SLIGHT CONTACT BETWEEN HOSE STACKS IS ACCEPTABLE AS LONG AS THERE IS NO TENSION**			
	37.3 SLIGHT CONTACT WITH BLADE IS ACCEPTABLE AS LONG AS THERE IS NO TENSION ON THE BLADE			
	37.4 ENSURE THERE IS NO CONTACT BETWEEN THE HOSES/CABLES AND THE CUT-OUT ON THE BULKHEAD PANELS			
	37.5 CONTACT WITH BELLOW IS NOT ACCEPTABLE			
	37.6 CONTACT WITH STABILIZER BARS IS NOT ACCEPTABLE			
	37.7 ENSURE THERE IS NO CONTACT BETWEEN ELECTRICAL CABLES AND THE FRAME			
	37.8 ENSURE THERE IS NO PRESSURE ON THE TRAYS OF THE EGS SUSPENDED RAIL			
	* UNDER NORMAL OPERATION CONDITIONS, THE ARTICULATION JOINT NEVER REACHES THE HARD STOP (54°). IT IS ONLY WHEN BACKING UP THE VEHICLE IN VERY NARROW AREAS THAT A DRIVER WILL FLIP THE EMERGENCY RELEASE SWITCH AND THAT THE VEHICLE WILL REACH THIS EXTREME CONDITION. THIS PROCEDURE IS INTENDED TO VERIFY THE POSITION OF THE COMPONENTS UNDER NORMAL FATIGUE CONDITIONS ONLY (±51°).			
	** NOTE : MINIMAL CONTACT/SLIGHT CONTACT IS DEFINED BY BEING ABLE TO SLIDE YOUR FINGER BETWEEN THE TWO COMPONENTS WITHOUT FEELING TOO MUCH DISCOMFORT.			
STEP 38.	REPEAT INSPECTION IN RIGHT JACK-KNIFE POSITION BY MEANS OF BACKING UP THE VEHICLE			
CLOSING				
STEP 39.	ENSURE CORK TAPE IS APPLIED ON ALL JOINTS AND EXPOSED SECTIONS OF PIPE			
STEP 40.	FILL FREON			
	40.1 QUANTITY OF FREON ADDED _____			
STEP 41.	RECORD A/C PRESSURES			
	45.1 LOW SIDE PRESSURE _____ PSI			
	45.2 HIGH SIDE PRESSURE _____ PSI			
STEP 42.	INSTALL BASE LIGHT PANELS, BULKHEAD PANELS AND CEILING COVER			
STEP 43.	CLEAN BUS			

A COPY OF THIS INSPECTION CHECK SHEET MUST BE KEPT ON RECORD

	Steps only applicable on the 5000 series vehicles
	Steps only applicable on the 1200 series vehicles

Additional repairs and campaigns	Description	DATE	COMPLETED BY	INSPECTED BY
1				
2				
3				
4				
5				

Retrofit final approval	
Prevost inspector must have completed an entire inspection and have signed this document prior to presenting the vehicle to NYCT inspector	
Prevost inspector	NYCT inspector
Date	Date