

| | |
|---------------------|----------------------|
| REFERENCE: | Nova Bus Manuals |
| SECTION: | 08: Pneumatic system |
| RS N°: | MQR N/A |
| EFFECTIVE IN PROD.: | NA |

APPLICATION DEADLINE: N/A

| | |
|----------------|---------------------------------------|
| SUBJECT: | Air regulator. |
| JUSTIFICATION: | Obsolete part replacement (G5009279). |

| LEVEL | DESCRIPTION | DIRECT CHARGES | | TIME |
|-------|--|----------------|----------|---------|
| | | LABOUR | MATERIAL | |
| 1 | Installation of new pressure regulator for interlock retarder. | Client | Client | 0.75 hr |
| 2 | - | - | - | - |

MATERIAL REQUIRED PER VEHICLE

| QTY | PART N° | REV. | DESCRIPTION |
|----------------|-----------|------|--------------------|
| LEVEL 1 | | | |
| 1 | N49129 | - | Pressure Regulator |
| 1 | 0444014 | - | Adapter |
| 4 ft | 8861149 | - | Tube 1/2" Green |
| 1 | 0696457 | - | Connector |
| 1 | 0144598 | - | Nipple |
| 0.5 ft | N34357-07 | - | Plastic Film Tape |
| 1 | 0696467 | - | Elbow 90° |
| LEVEL 2 | | | |
| - | - | - | - |

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 | 2021OC28 | Initial release | Devanand |

APPROVED BY:

Jean-Nicolas Fournier

Digitally signed by Jean-Nicolas Fournier
 DN: cn=Jean-Nicolas Fournier, o=Nova Bus, email=jean-nicolas.fournier@volvo.com, c=CA
 Date: 2021.10.28 14:24:55 -04'00'

PAGE 1 OF 9

| CLIENT | ORDER | ROAD NUMBER | | VIN (2NVY/4RKY...) | | QTY |
|--|-------|-------------|-------|--------------------|---------------|-----|
| | | FROM | TO | FROM | TO | |
| Academy Bus - New Jersey | L231 | — | — | L82U563000166 | L82U163000178 | 13 |
| Belleville Transit - Ontario | L179 | 179-1 | 179-1 | L82UX53000033 | L82UX53000033 | 1 |
| Belleville Transit - Ontario | L180 | 180-1 | 180-1 | L82U753000118 | L82U753000118 | 1 |
| Belleville Transit - Ontario | L176 | — | — | L82U563000233 | L82U563000233 | 1 |
| Belleville Transit - Ontario (L168) | L129 | — | — | L82S633000199 | L82S933000200 | 2 |
| Brantford - Ontario | L150 | — | — | L82U643000173 | L82U843000174 | 2 |
| Brantford - Ontario | L256 | — | — | L82U363000229 | L82U363000229 | 1 |
| Brantford - Ontario | L257 | — | — | L82UX63000230 | L82UX63000230 | 1 |
| Brantford - Ontario | L258 | — | — | L82U163000231 | L82U163000231 | 1 |
| Brantford - Ontario | L175 | — | — | L82U363000232 | L82U363000232 | 1 |
| Cape Breton Nova Scotia | L146 | 8031 | 8032 | L82U543000164 | L82U743000165 | 2 |
| Chicago Transit Authority - CTA - Illinois | L043 | 6400 | 6549 | L82S2Y3000157 | L82S1Y3000361 | 150 |
| Chicago Transit Authority - CTA - Illinois | L083 | 6550 | 6708 | L82S713000001 | L82S913000159 | 159 |
| Chicago Transit Authority - CTA - Illinois | L093 | 6709 | 6883 | L82S523000001 | L82S523000225 | 175 |
| Durham Region Transit - Ontario | L114 | 153 | 160 | L82P923000367 | L82P623000374 | 8 |
| Durham Region Transit - Ontario | L143 | — | — | L82S243000010 | L82S843000013 | 4 |
| Durham Region Transit - Ontario | L142 | 424 | 429 | L82U643000108 | L82UX43000113 | 6 |
| Durham Region Transit - Ontario | L149 | 161 | 168 | L82U443000155 | L82UX43000161 | 7 |
| Durham Region Transit - Ontario | L199 | 169 | 169 | L82U453000125 | L82U453000125 | 1 |
| Durham Region Transit - Ontario | L212 | — | — | L82UX53000128 | L82UX53000128 | 1 |
| Durham Region Transit - Ontario | L213 | — | — | L82U153000129 | L82U153000129 | 1 |
| Durham Region Transit - Ontario | L182 | 182-1 | 182-1 | L82U653000157 | L82U653000157 | 1 |
| Durham Region Transit - Ontario | L224 | 170 | 170 | L82U963000011 | L82U963000011 | 1 |
| Elliot Lake - Ontario | L148 | 04-01 | 04-02 | L82U143000162 | L82U343000163 | 2 |
| First Transit Inc. (ref. L173) | L144 | — | — | L82U543000049 | L82U543000049 | 1 |
| Fredericton - New Brunswick | L178 | 8053 | 8053 | L82U653000109 | L82U653000109 | 1 |
| Fredericton - New Brunswick | L225 | 8061 | 8061 | L82U663000032 | L82U663000032 | 1 |
| Gaylord Opryland - Nashville, Tennessee | L223 | — | — | L82VX53000221 | L82VX53000221 | 1 |
| GCRTA - Cleveland, Ohio | L111 | 2101 | 2150 | L82S713000287 | L82S513000336 | 50 |
| Grand River Transit - GRT - Ontario | L145 | 2400 | 2417 | L82U143000114 | L82U143000131 | 18 |
| Grand River Transit - GRT - Ontario | L161 | 2418 | 2433 | L82U643000254 | L82U843000269 | 16 |
| Guelph Ontario | L019 | 9701 | 9720 | L82K1V3000162 | L82K5V3000181 | 20 |
| Guelph - Ontario | L115 | 169 | 176 | L82P933000080 | L82P133000087 | 8 |
| Guelph - Ontario | L132 | 177 | 179 | L82P443000019 | L82P243000021 | 3 |
| Guelph - Ontario | L167 | 180 | 182 | L82U943000250 | L82U243000252 | 3 |
| Guelph - Ontario | L211 | 184 | 184 | L82U853000127 | L82U853000127 | 1 |
| Guelph - Ontario | L187 | 186 | 186 | L82U553000215 | L82U553000215 | 1 |
| Guelph - Ontario | L187 | 188 | 188 | L82U953000217 | L82U953000217 | 1 |
| H.R. Ross Industries - Massachussets | L107 | 7001 | 7002 | L82T713000234 | L82T913000235 | 2 |
| Leduc Bus Line - Ontario | L181 | — | — | L82V853000119 | L82V853000119 | 1 |
| Leduc Bus Line - Ontario | L228 | 228-1 | 228-1 | L82V663000041 | L82V663000041 | 1 |

| CLIENT | ORDER | ROAD NUMBER | | VIN (2NVY/4RKY...) | | QTY |
|-------------------------------------|-------|-------------|-------|--------------------|---------------|-----|
| | | FROM | TO | FROM | TO | |
| MATA - Memphis, Tennessee | L108 | 889 | 903 | L82S713000337 | L82S113000351 | 15 |
| MATA - Memphis, Tennessee | L112 | 904 | 908 | L82S313000352 | L82S013000356 | 5 |
| MATA - Memphis, Tennessee | L116 | 909 | 923 | L82S723000226 | L82S123000240 | 15 |
| MATA - Memphis, Tennessee | L117 | 924 | 928 | L82S323000241 | L82S023000245 | 5 |
| Moncton (Codiac) - New Brunswick | L082 | — | — | L82S313000237 | L82S213000245 | 4 |
| Moncton (Codiac) - New Brunswick | L147 | 504 | 505 | L82U943000166 | L82U043000167 | 2 |
| Moncton (Codiac) - New Brunswick | L226 | 506 | 507 | L82U863000033 | L82UX63000034 | 2 |
| Ottawa - OC transpo | L020 | 9721 | 9740 | L82K7V3000182 | L82K7V3000201 | 20 |
| Ottawa - OC transpo | L162 | 162-1 | 162-1 | L82V343000270 | L82V343000270 | 1 |
| Peterborough - Ontario | L130 | 60017 | 60021 | L82S143000001 | L82S943000005 | 5 |
| Peterborough - Ontario | L159 | 60022 | 60024 | L82S443000168 | L82S243000170 | 3 |
| Peterborough - Ontario | L202 | — | — | L82U253000110 | L82U653000112 | 3 |
| Regina - Saskatchewan | L166 | 598 | 603 | L82U453000027 | L82U853000032 | 6 |
| Regina - Saskatchewan | L183 | 604 | 608 | L82U853000046 | L82UX53000050 | 5 |
| Regina - Saskatchewan | L239 | 609 | 610 | L82U363000179 | L82UX63000180 | 2 |
| St. John's - Newfoundland | L082 | 0147 | 0152 | L82S113000236 | L82S013000244 | 6 |
| Strathcona County Transit - Alberta | L177 | 921 | 923 | L82U953000024 | L82U253000026 | 3 |
| Thunder Bay - Ontario | L105 | 135 | 136 | L82S213000357 | L82S413000358 | 2 |
| Thunder Bay - Ontario | L131 | 137 | 141 | L82SX43000014 | L82S743000018 | 5 |
| Thunder Bay - Ontario | L221 | 142 | 144 | L82U863000033 | L82UX63000034 | 3 |
| Timmins - Ontario | L184 | 184-1 | 184-1 | L82UX53000081 | L82UX53000081 | 1 |
| Timmins - Ontario (ref. L189) | L144 | — | — | L82U343000048 | L82U343000048 | 1 |
| Walt Disney World - Florida | L074 | 4815 | 4829 | L82P0Y3000282 | L82P0Y3000296 | 15 |
| Walt Disney World - Florida | L084 | 4830 | 4832 | L82P2Y3000297 | L82P6Y3000299 | 3 |
| Walt Disney World - Florida | L104 | 4833 | 4861 | L82PX13000246 | L82P413000274 | 29 |
| Walt Disney World - Florida | L113 | 4862 | 4884 | L82P623000343 | L82P523000365 | 23 |
| Walt Disney World - Florida | L118 | 4885 | 4885 | L82P723000366 | L82P723000366 | 1 |
| Walt Disney World - Florida | L174 | 174-1 | 174-1 | L82U553000005 | L82U553000005 | 1 |
| Woodstock - Ontario | L255 | — | — | L82U163000228 | L82U163000228 | 1 |

**WARNING**

Follow your internal safety procedures.

PROCEDURE

- 1.1. Park the vehicle on an even surface with transmission on neutral (N).
- 1.2. Apply the parking brake.
- 1.3. Set the master control switch to the STOP position (see figure 1).

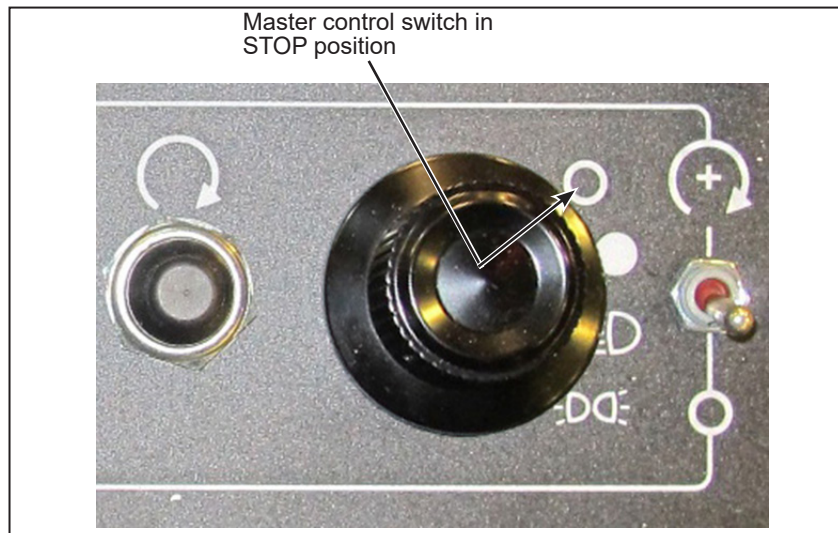


Figure 1 - Master Control Switch in STOP Position

- 1.4. Set the battery disconnect switch in the battery compartment to the OFF position (see figure 2).

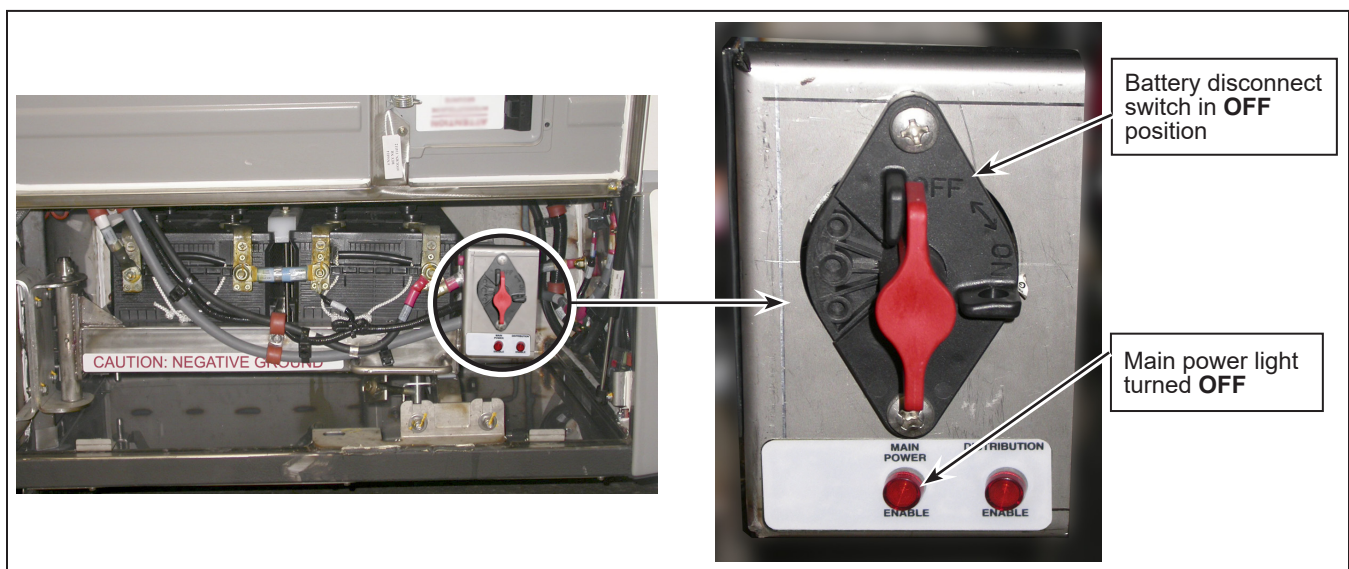


Figure 2 - View of Battery Disconnect Switch

**WARNING**

Remove air pressure from the system completely before disconnecting any component. Air under pressure can cause serious bodily injuries. For more information about the air supply system, see your maintenance manual section 08: Air Supply System.

- 1.5. Drain the pneumatic system by opening the drain valves near the entrance door operator (close the valves after).
- 1.6. Open the access panel under the dash.
- 1.7. Disconnect the pneumatic hose and nipple connected to the air regulator.
- 1.8. Disconnect and remove the air hose connected to the dual brake valve.
- 1.9. Disconnect the nipple from the magnetic valve.

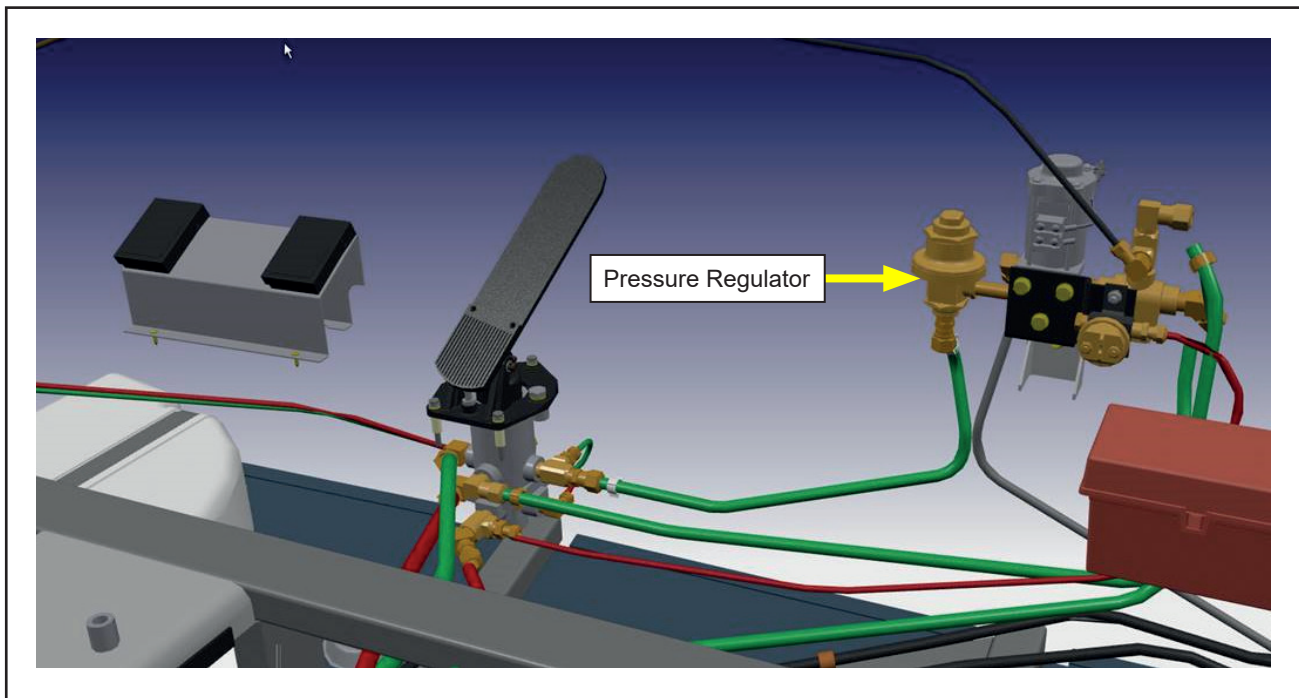


Figure 3 - Location of Pressure Regulator

**NOTE**

There must be no liquid sealant inside the coupling.

- 1.10. Remove the old pressure regulator P/N G5009279, nipple P/N 0144598 and connector P/N 0696457 (see figure 4).

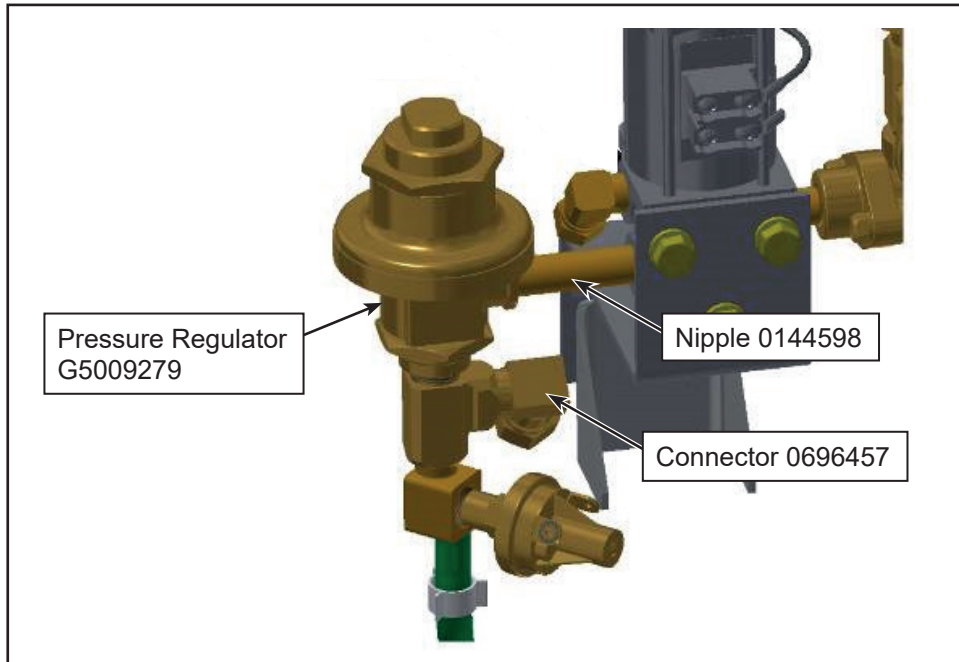


Figure 4 - Removal of Old Pressure Regulator

- 1.11. Retain tee P/N 0444150, elbow 90° P/N 0444042 and pressure switch hobb P/N G5011332 (see figure 5).

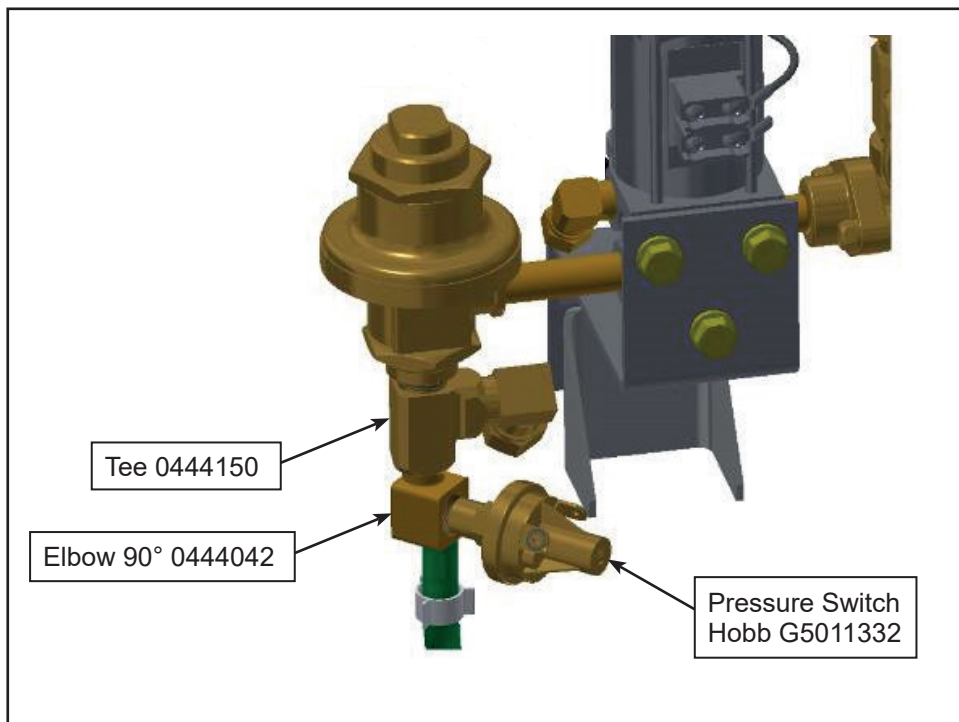


Figure 5 - Retain the Connectors

- 1.12. Connect the nipple P/N 0144598 to the new pressure regulator P/N N49129 and to the magnetic valve (see figure 6).
- 1.13. Install adapter P/N 0444014 on the pressure regulator.
- 1.14. Reinstall tee P/N 0444150 and elbow 90° P/N 0444042 on pressure regulator (see figure 6).

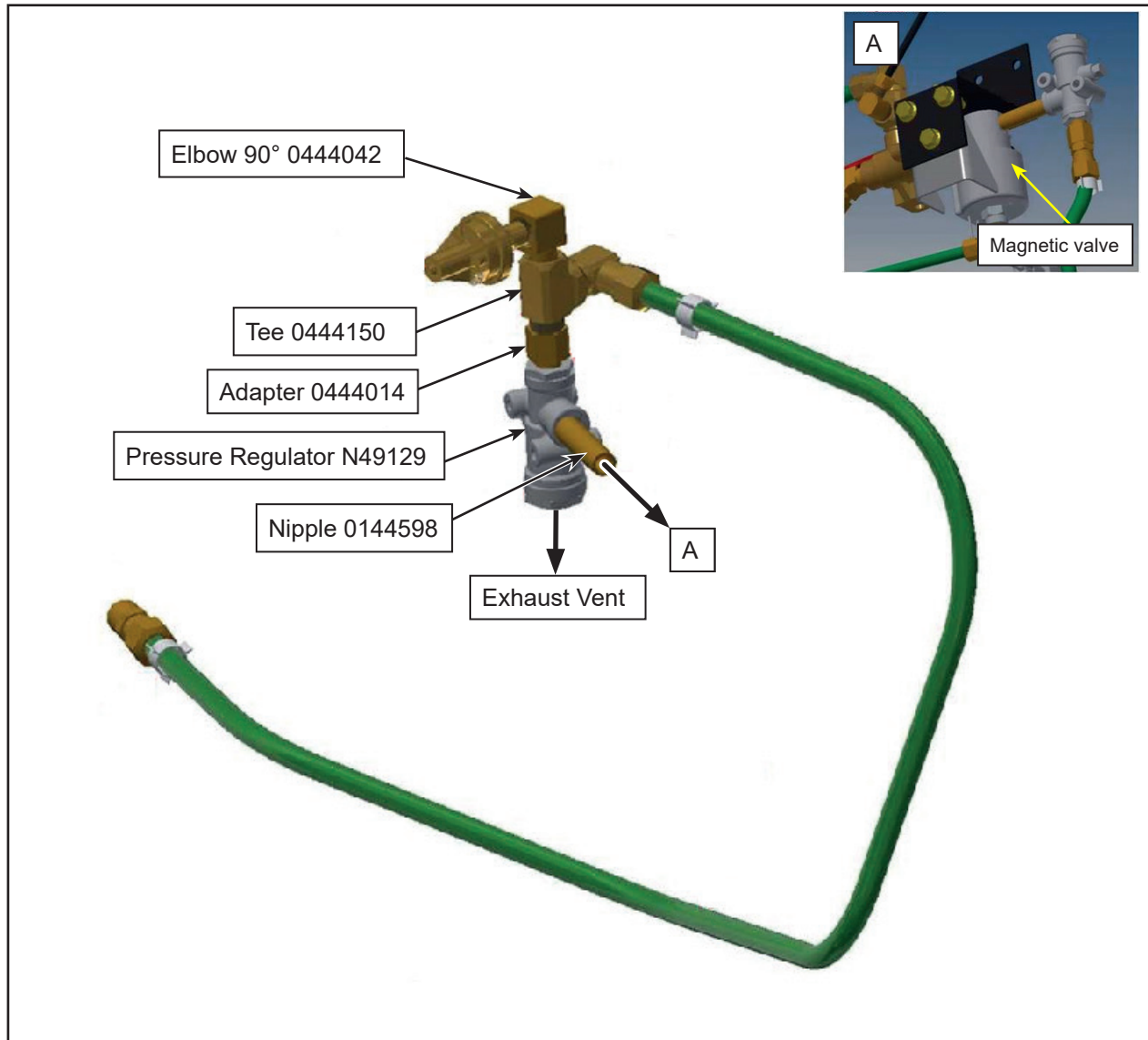


Figure 6 - Installation of New Pressure Regulator

- 1.15. Install elbow 90° P/N 0696467 along with tube P/N 8861149 on tee connector (see figure 7).
- 1.16. Connect the connector P/N 0696457 to other end of the tube on the dual brake valve and install the plastic film tape P/N N34357-07 (see figure 7).

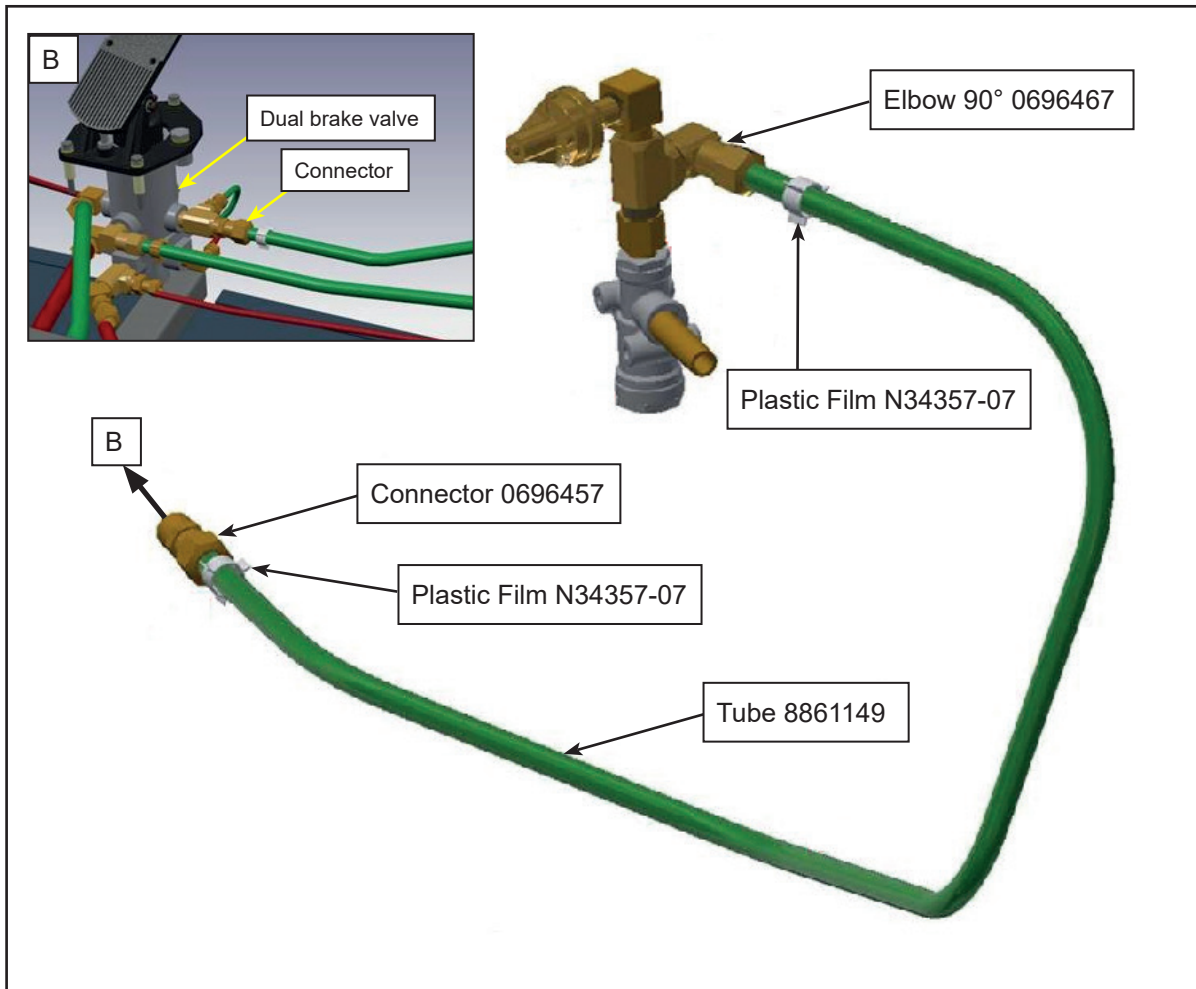


Figure 7 - Installation of Elbow and Connector

1.17. Reinstall the pressure switch hobb G5011332 to 90° elbow (see figure 8).

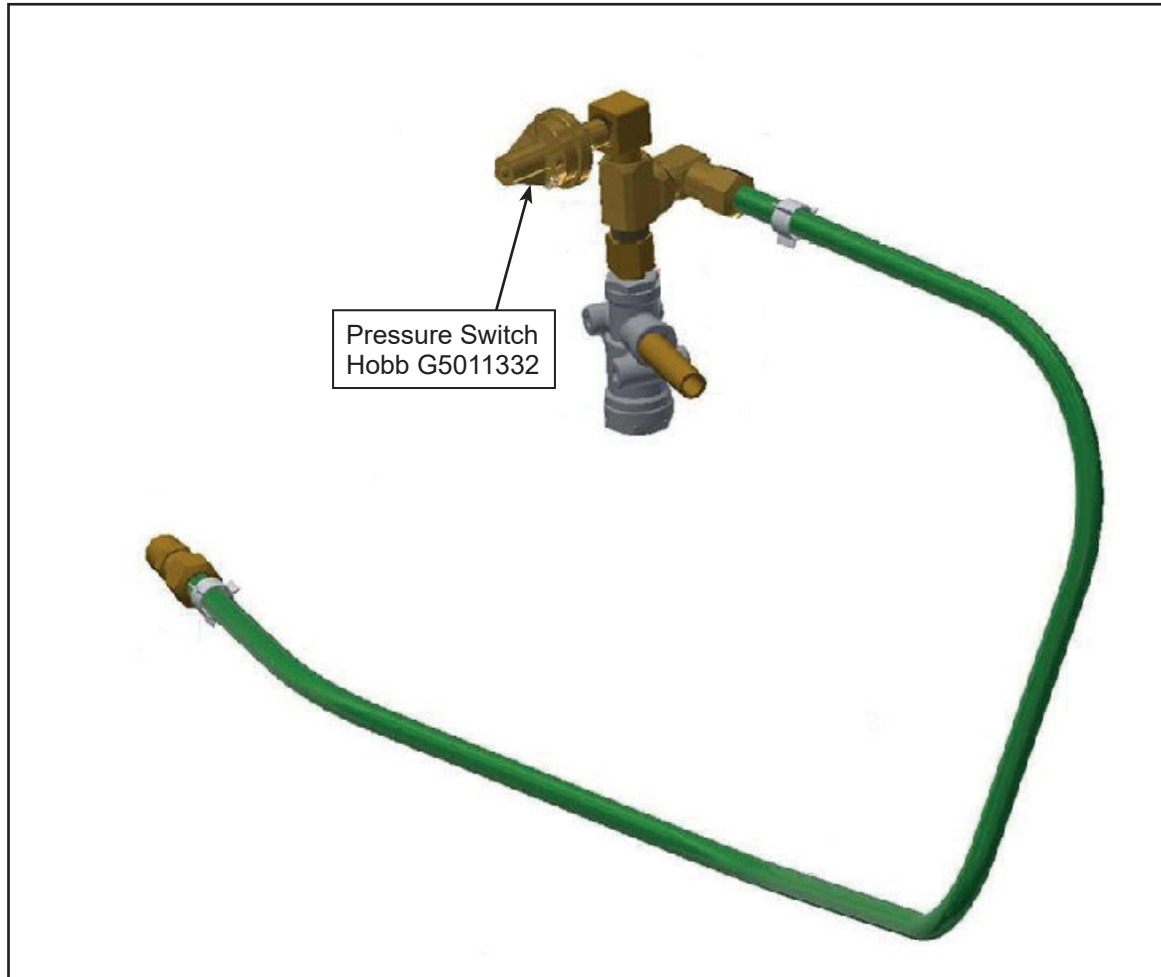


Figure 8 - Reinstallation of Pressure Switch Hobb

- 1.18. Pressurize the air system and make sure there is no leakage from the new installation.
- 1.19. Close the access panel.
- 1.20. Set the battery disconnect switch in the battery compartment to the **ON** position.
- 1.21. Return the bus to service.❖