



INSTRUCTION TO SERVICE

ITS: 61693		DATE 4/28/2026
SECTION:	219U – Propulsion Drive	
SUBJECT:	Replace Fuel cell Air intake assembly	
ISSUE:	Ballard obsoleted current Air filter assembly	
SUMMARY:	Air filter obsoleted by Ballard, to accommodate new Air filter, filter housing needs to be changed.	

ITS61693

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.

PROCEDURE:

Only trained personnel shall supervise and perform the High Voltage system testing, servicing and troubleshooting contained in this procedure.

1. Ensure to apply the parking brake.
2. Turn the master run switch to the off position and wait 5 minutes before proceeding.
3. Turn the 12/24V battery disconnect and HV Interlock switch to the “OFF” position.
4. Lock and tag the electrical system of the bus out and retain the key. See Figure 1.
5. Ensure to wear proper PPE.
6. Install a Lockout/Tagout Steering wheel cover as required.

☞ **NOTE:** Refer to the Lockout/Tagout Procedure in section 1 of your Preventive Maintenance Manual or section 9 of your Service Manual for additional information.

☞ **NOTE:** Use commercially available lock out equipment and tags being sure to follow any local laws or workplace procedures.

☞ **NOTE:** Refer to New Flyer High Voltage Safety Guidelines and Procedures Document 532295 (Appendix A) when completing installation or service work on high voltage power cables.

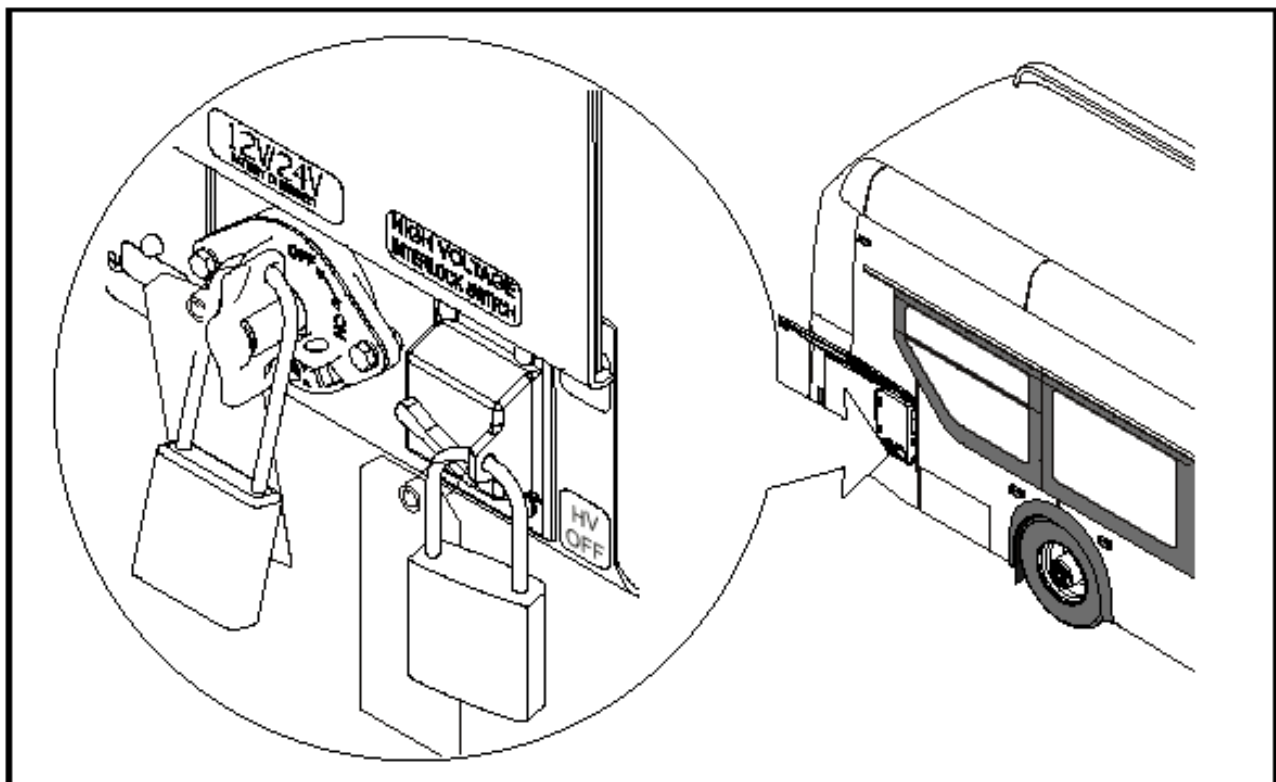


Figure 1: Lockout Tagout location reference.

Removal

7. Open rear fuel cell access door and gain access to fuel cell air intake system shown below. See figure 2.

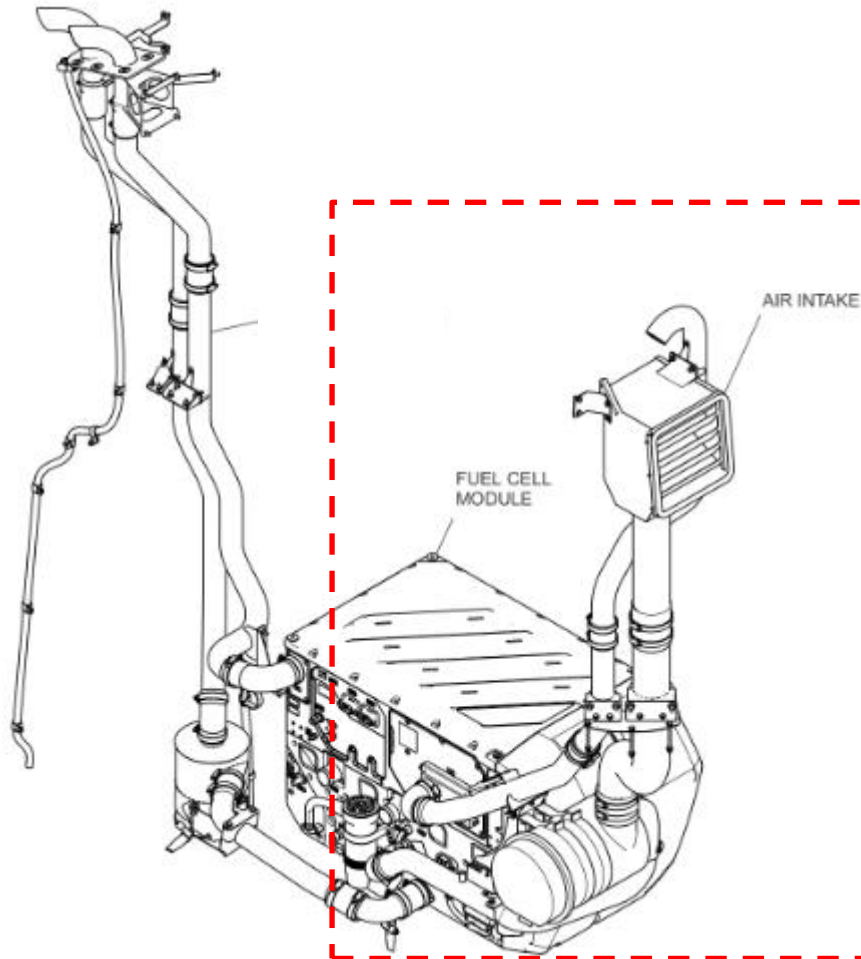


Figure 2: FC Air intake system location reference



8. Loosen the two clamps from each sleeve located at the base of the vertical air intake tube and FC vent intake tube. See figure 3.
9. Remove hardware from saddle clamps and set aside for reinstallation. See figure 3.

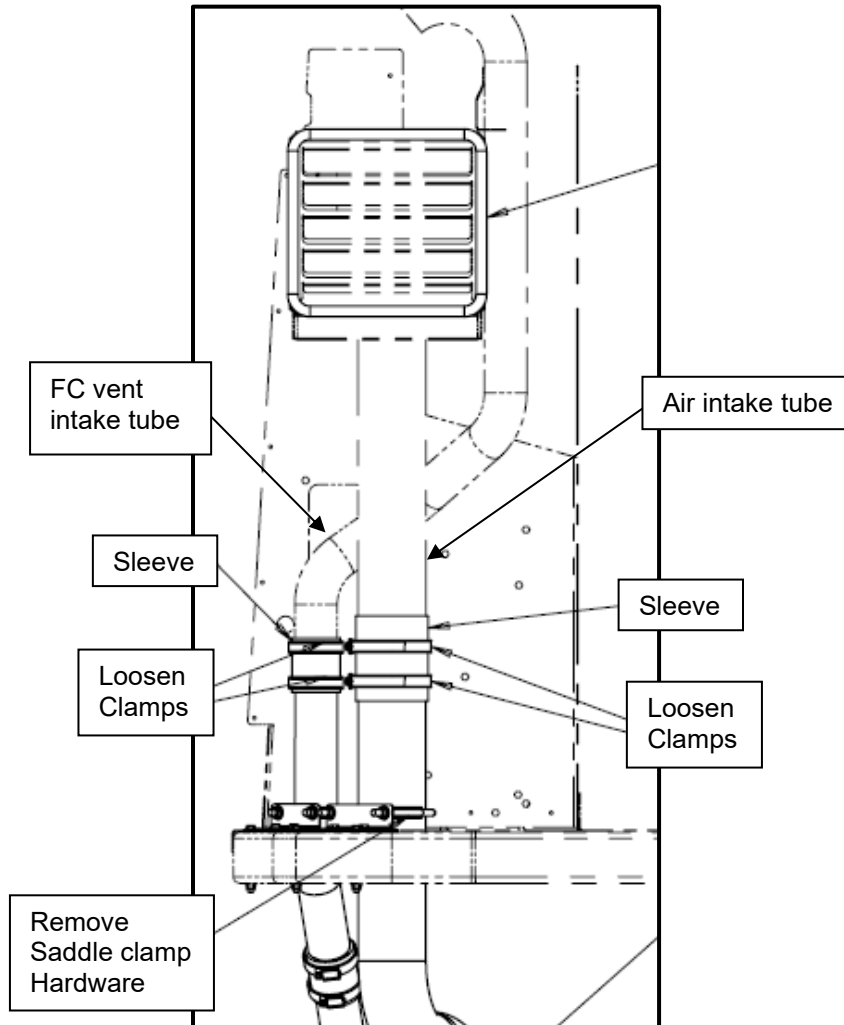


Figure 3: Sleeve and saddle clamp location reference

10. Loosen the clamp on the elbow on the outlet of the FC air intake tube and FC vent tube. See figure 4.
11. Turn off H2 fuel valve and remove hardware from H2 fuel hose support bracket as shown below and set aside for reinstallation. See figure 5.

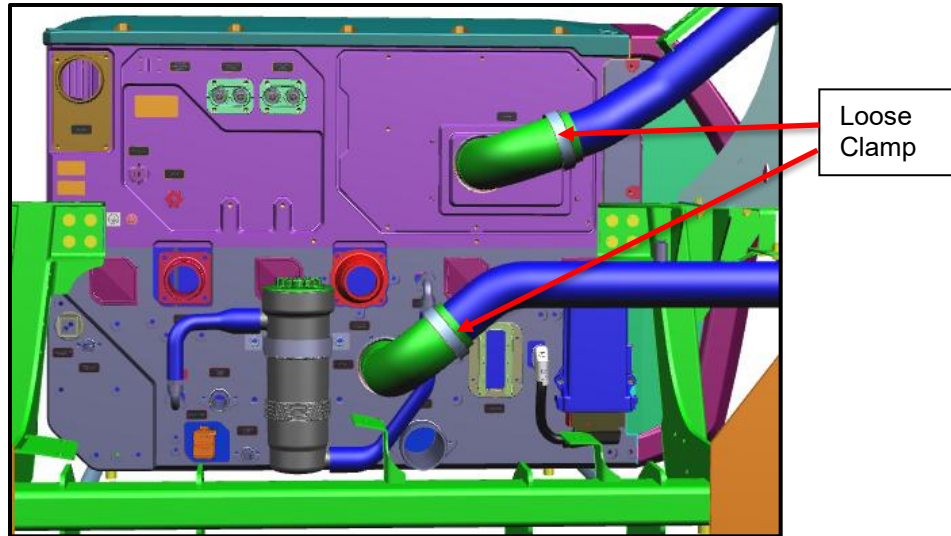


Figure 4: FC outlet location reference

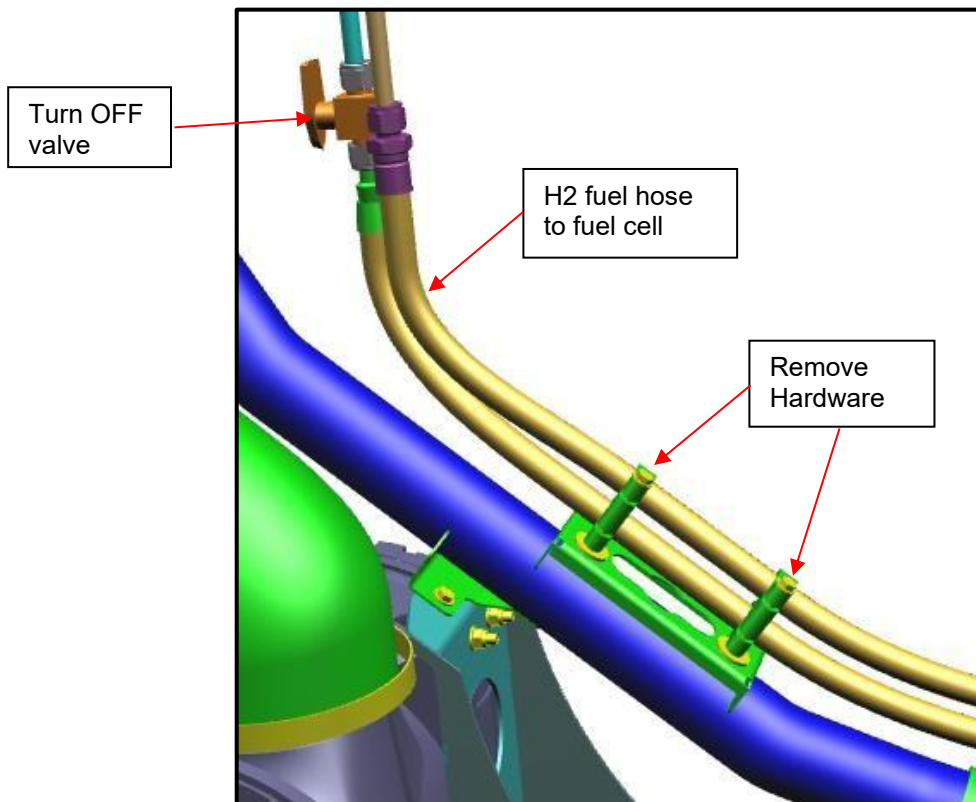


Figure 5: H2 fuel hose location reference

12. Remove the sleeves, clamps, reducer elbow, and tubes from the air intake tube, vent tube and immediately tape both elbow at end of vent tube and intake tube to prevent entry of contaminants. set clamps aside for reinstallation. See figure 6.

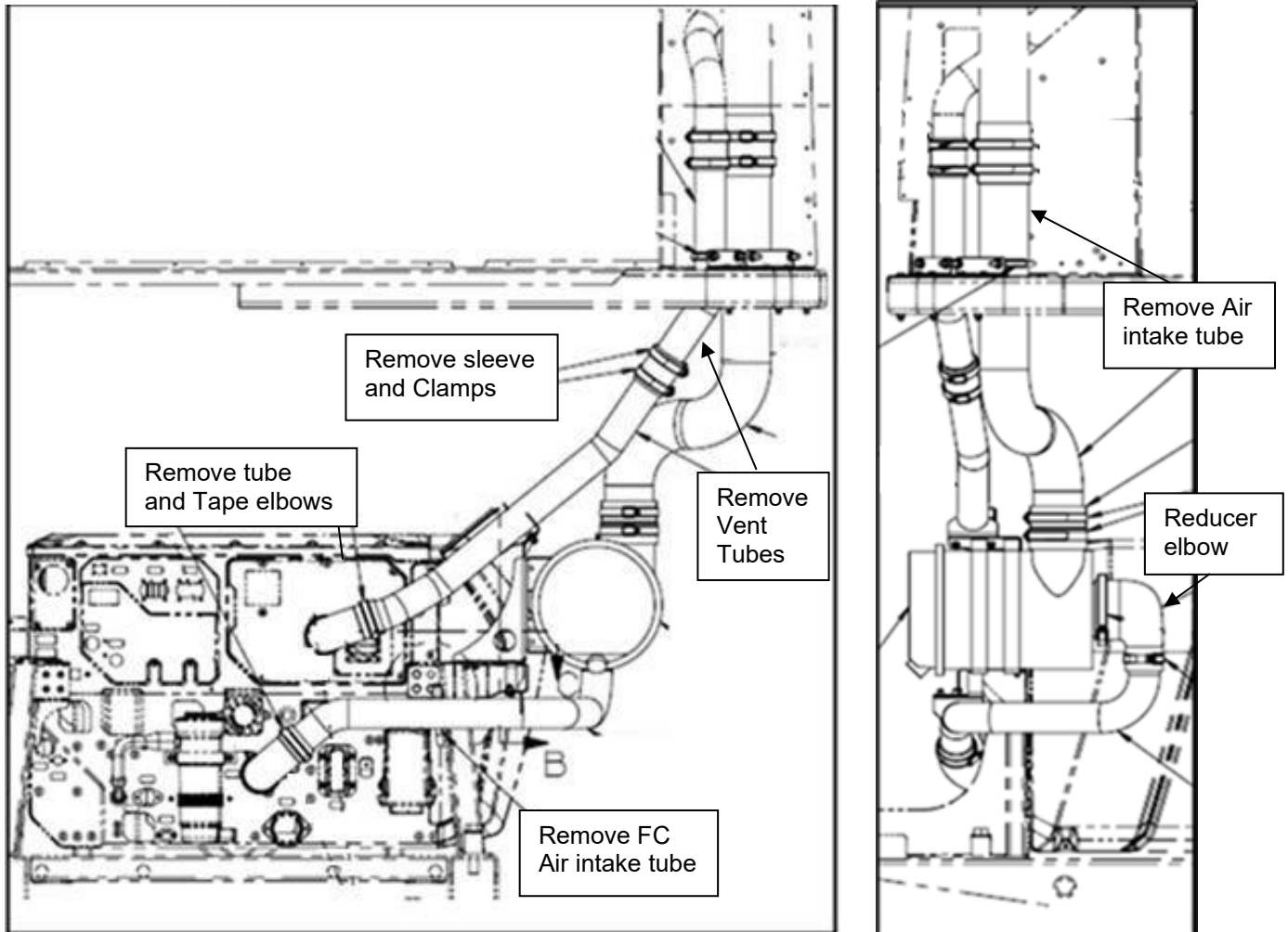


Figure 6: Air intake and vent tube location reference



13. Remove the bolts and washers from the air filter mounting brackets on the side of the air cleaner assembly. See figure 7.
14. Carefully support the air cleaner assembly and remove from the vehicle.
15. Remove rest of hardware from air intake mounting bracket including air intake and vent tube support bracket, set aside for reinstallation. Remove air intake bracket from the vehicle.

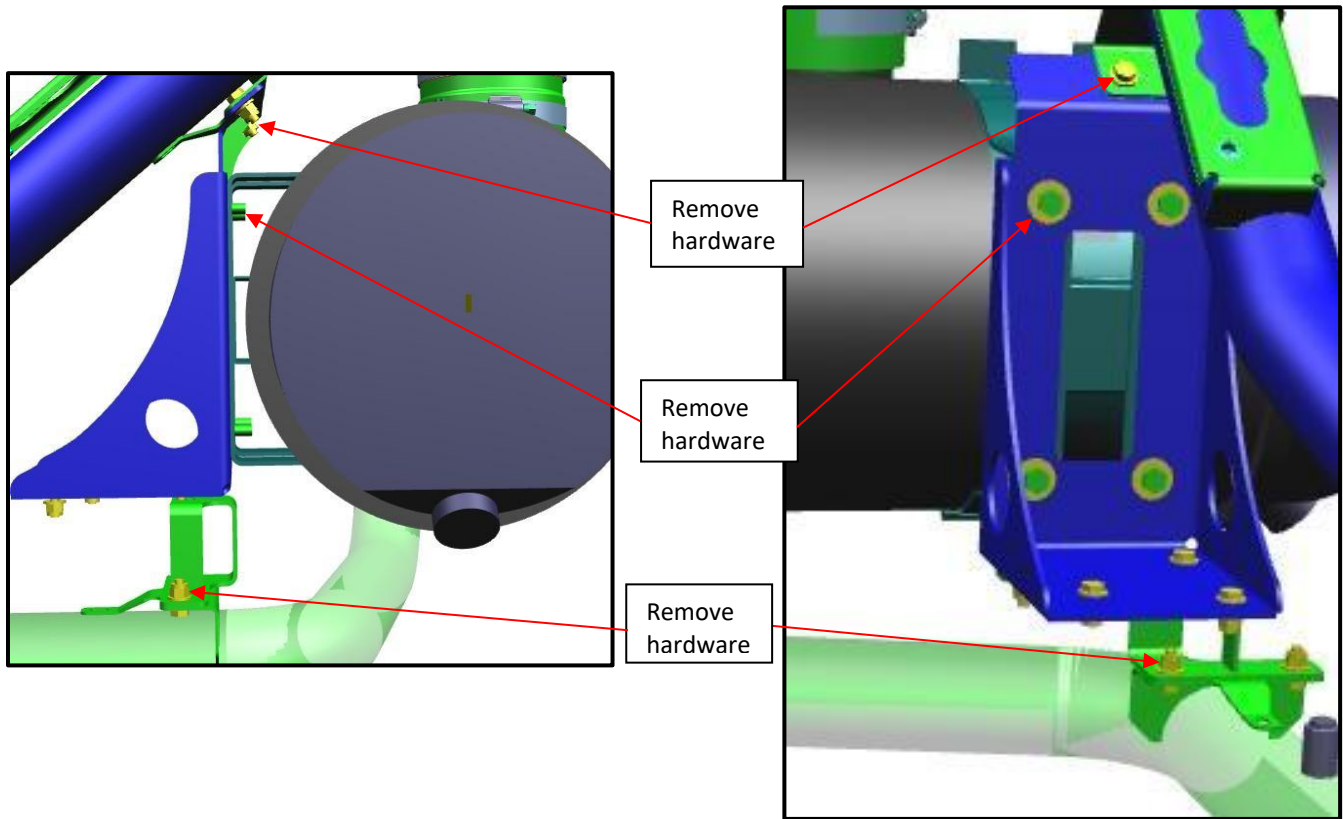


Figure 7: Air filter mounting and tube support bracket location reference

Installation:

- 16. Inspect and clean the vertical intake pipe and vent pipe.
- 17. Install new mounting bracket on to rear FC mounting structure and secure as shown below. See figure 8.

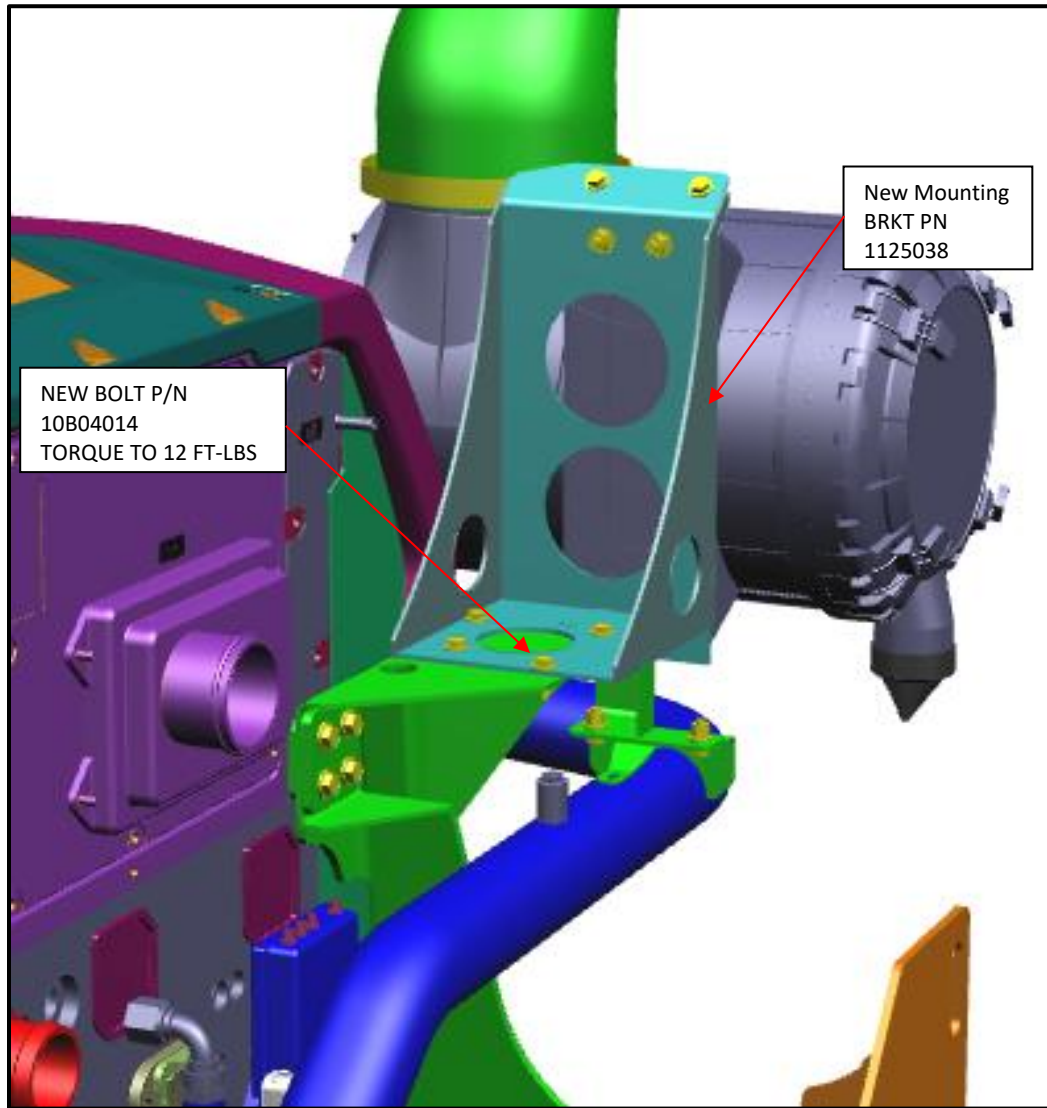


Figure 8: Air filter mounting bracket location reference



- 18. Install new air filter assembly along with new air intake tubes and secure it using existing clamps as shown below. See figure 9.
- 19. Remove tape from elbow and secure FC air intake tube using same clamp, support bracket and hardware. See figure 9.

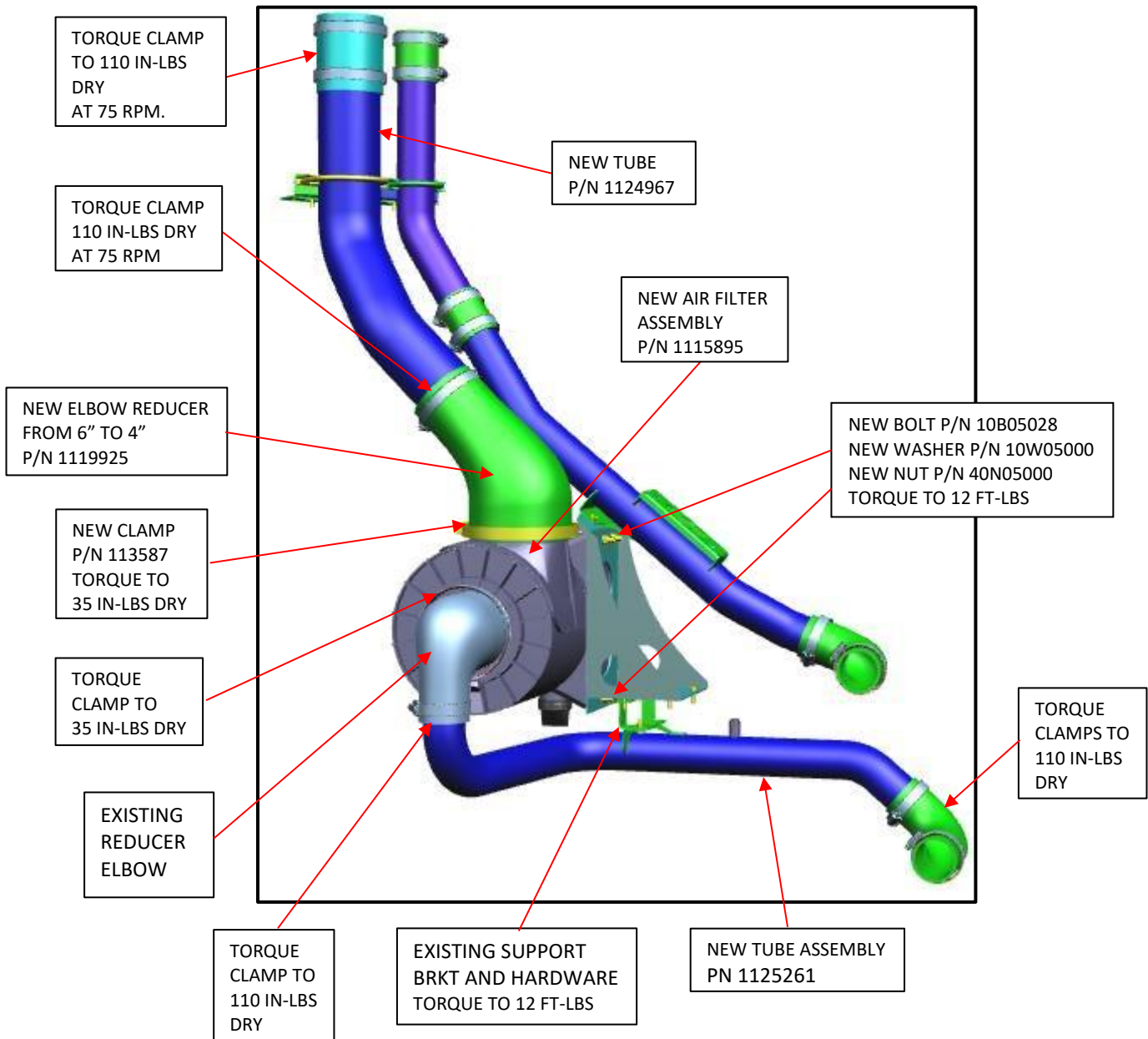


Figure 9: Air filter and intake tube location reference



- 20. Remove tape from the elbow and Install new FC vent tube, secure using existing clamps and torque as shown below. See figure 10.
- 21. Reinstall saddle clamp on Air intake and vent tube using existing hardware. See figure 10.

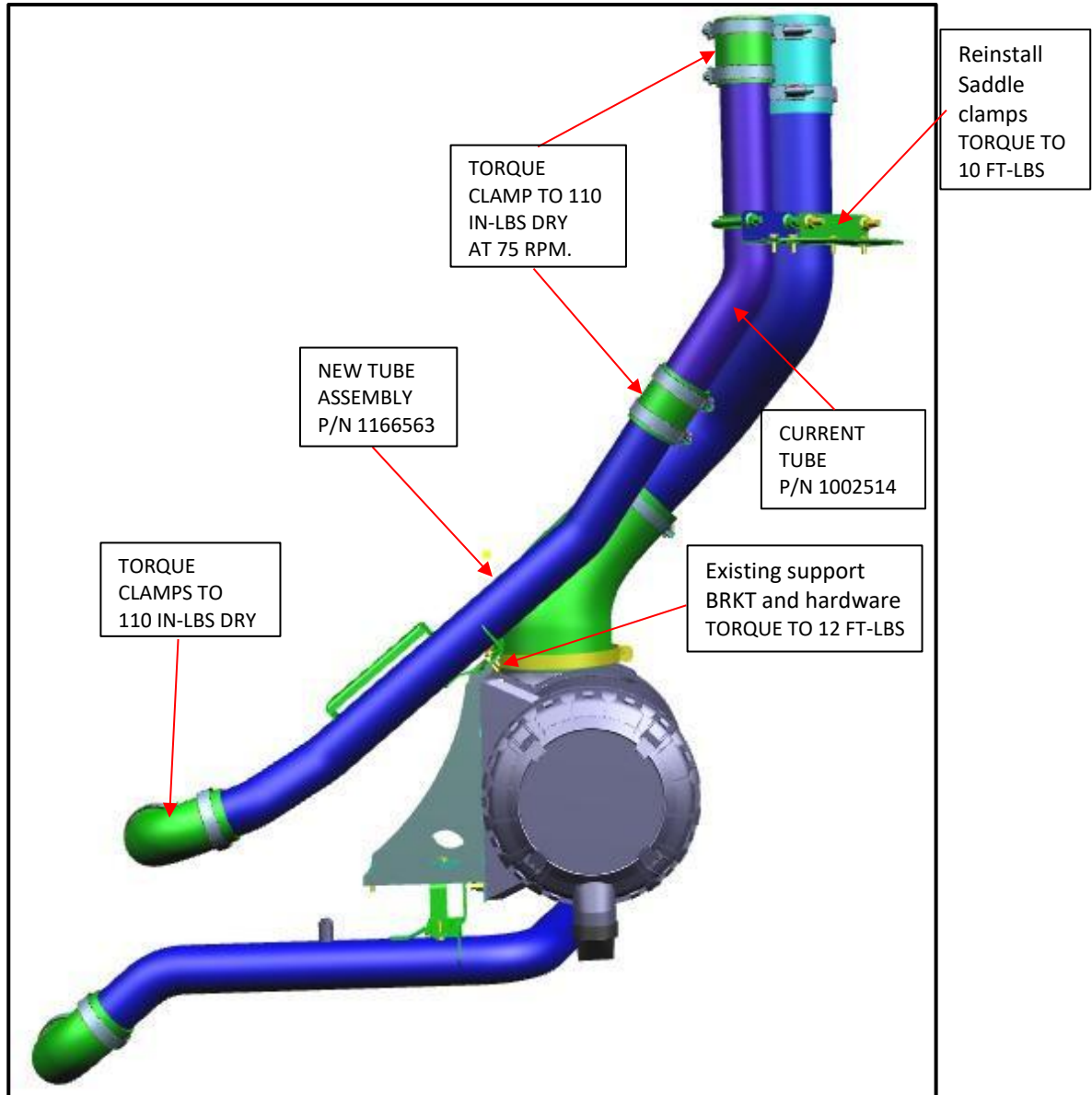


Figure 10: FC vent tube location reference

22. Reinstall H2 fuel hose on vent tube bracket using existing hardware and apply 1-2 drops of Loctite-243 PN 081034 to the threads. Turn valve to ON position. See figure 11.
23. Clean up all tools and debris. close access door and return bus to service condition.

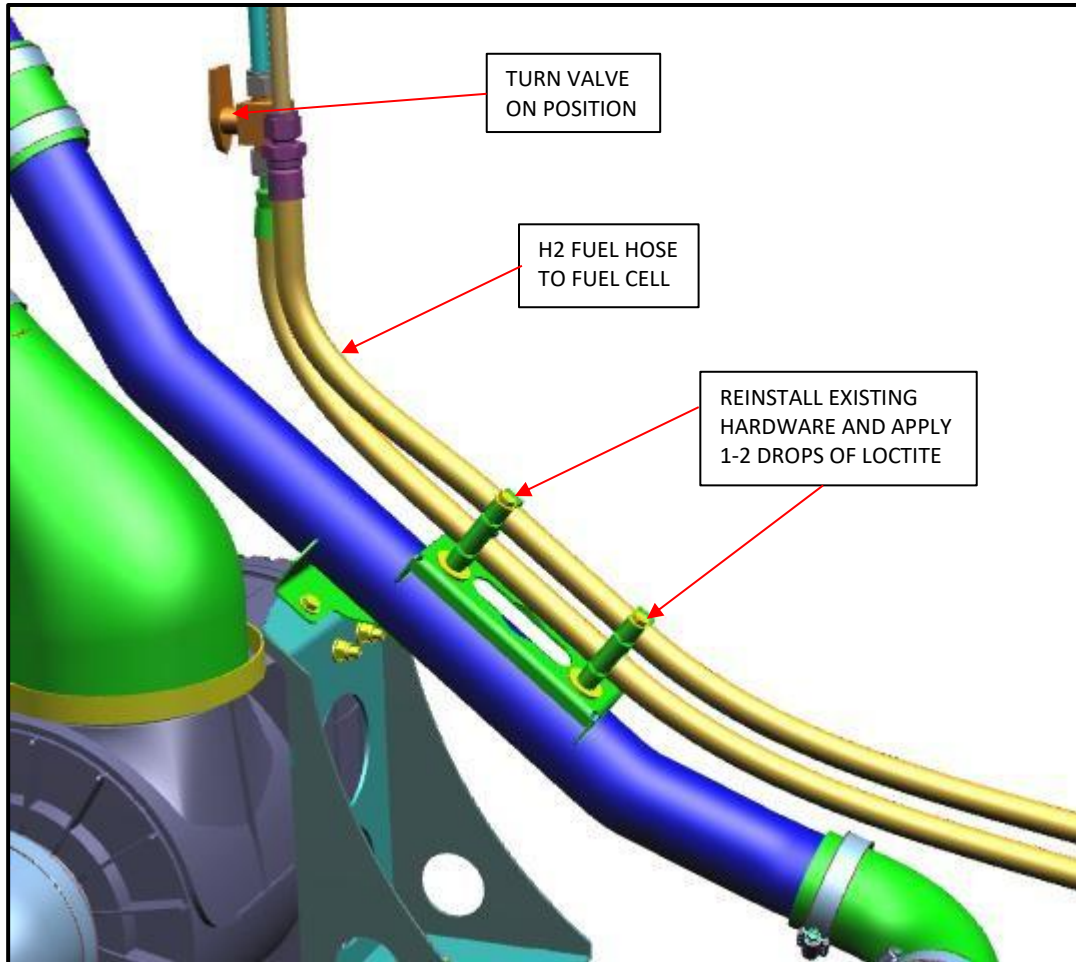


Figure 11: H2 fuel hose location reference



LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Replace FC Air intake assembly	1	2	2

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	1125261	ASSY-TUBE AIR INTAKE FC	1	EA	
2	1166563	ASSY-WELD FC VENT TUBE	1	EA	
3	1125038	WELD-AIR FILTER BRACKET	1	EA	
4	1124967	TUBE-AIR INTAKE	1	EA	
5	1119925	ELBOW-REDUCER FC AIR INTAKE	1	EA	
6	1115895	ASSY-AIR FILTER FUEL CELL	1	EA	
7	113587	CLAMP-BREEZE 6.25"-7.13"	1	EA	
8	40N05000	NUT LOCK NYLON 5/16"	4	EA	
9	10W05000	WASHER-FLAT 5/16	8	EA	
10	10B05028	BOLT-HEX 5/16 UNC x 1.75	4	EA	
11	10B04014	BOLT-HEX 1/4 UNC x 0.88	4	EA	
12	081034	LOCTITE-243 MEDIUM 10ML	0.010	EA	

SPECIAL TOOLS REQUIRED					
Item	Part Number	Description	Qty.	Units	Notes