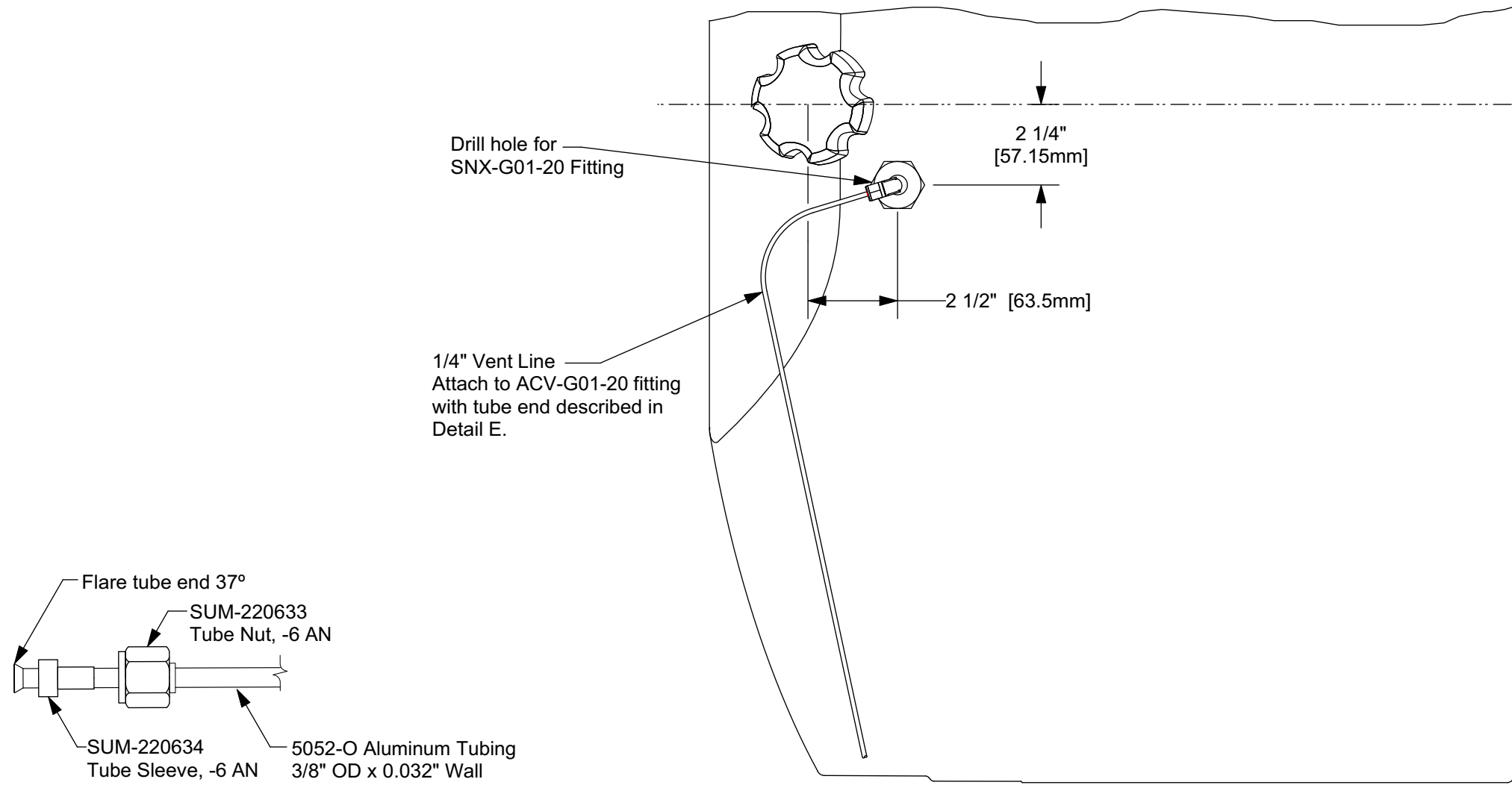
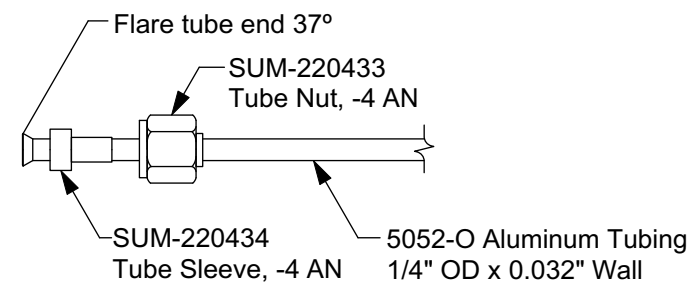


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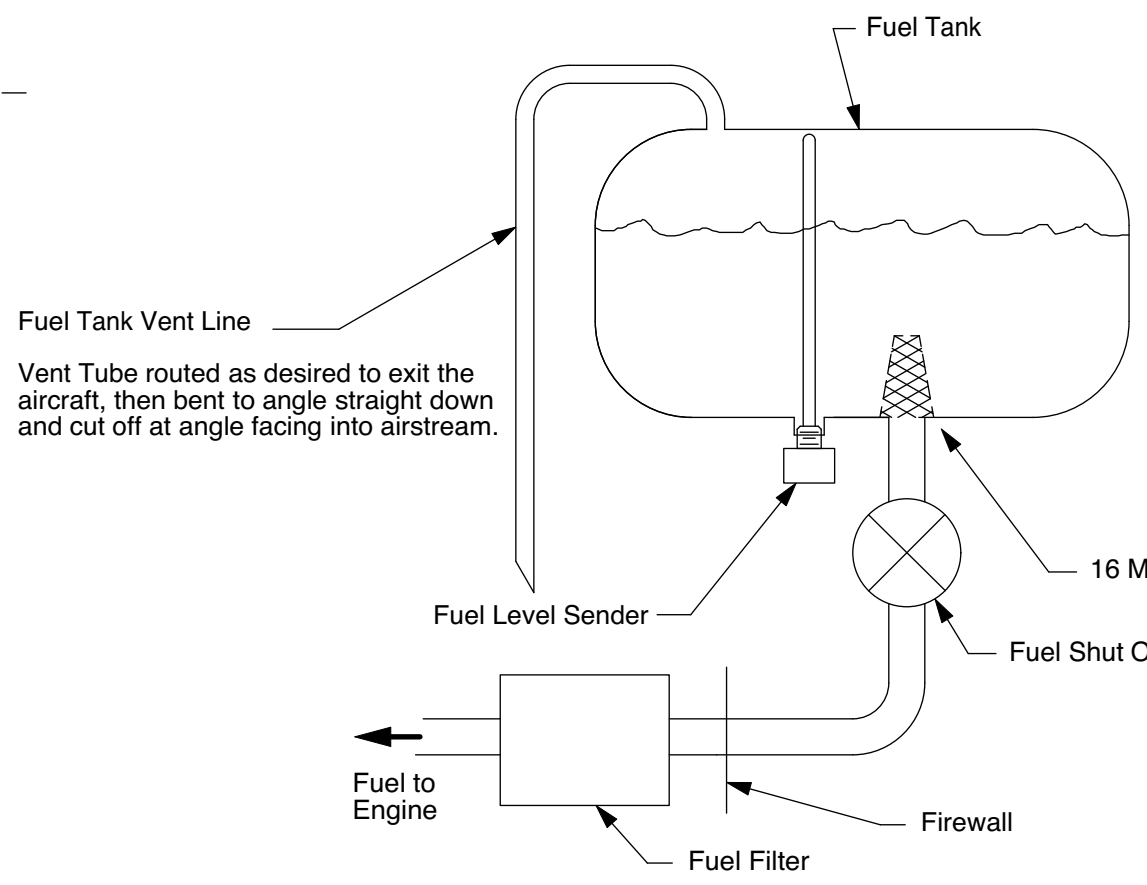
Revision Letter	Change Description	12/07/16
A	Detail B: AN3-15A Bolts, 4 Required was AN3-20A Bolts.	
B	Detail B: AN3-14A Bolts, 4 Required was AN3-15A Bolts. Part Change: SNB-G01-11 Fuel Tank Straps replaced SNB-G01-10 Straps. Installation Instructions Added: Added "Preparing and Installing the Fuel Tank" Instructions. -02 Tank Installation. Added Hardware call-outs for new Fuel Tank Strap halves.	6/22/21



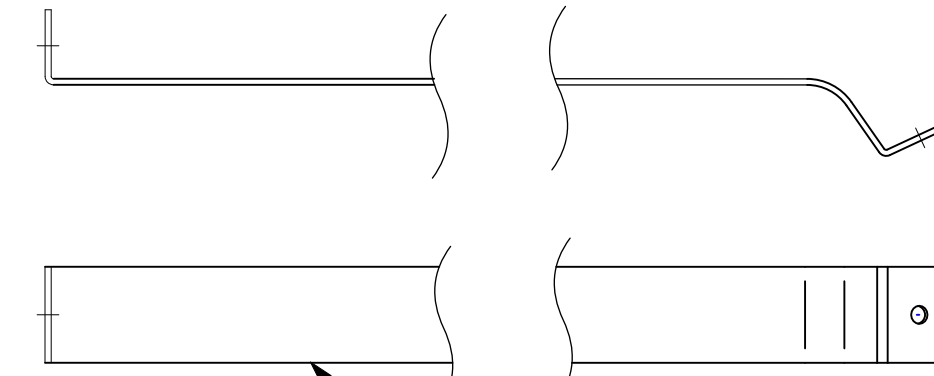
Detail D
-6 AN Tube End Detail
Scale: None



Detail E
-4 AN Tube End Detail
Scale: None



Fuel System Schematic
Scale: None



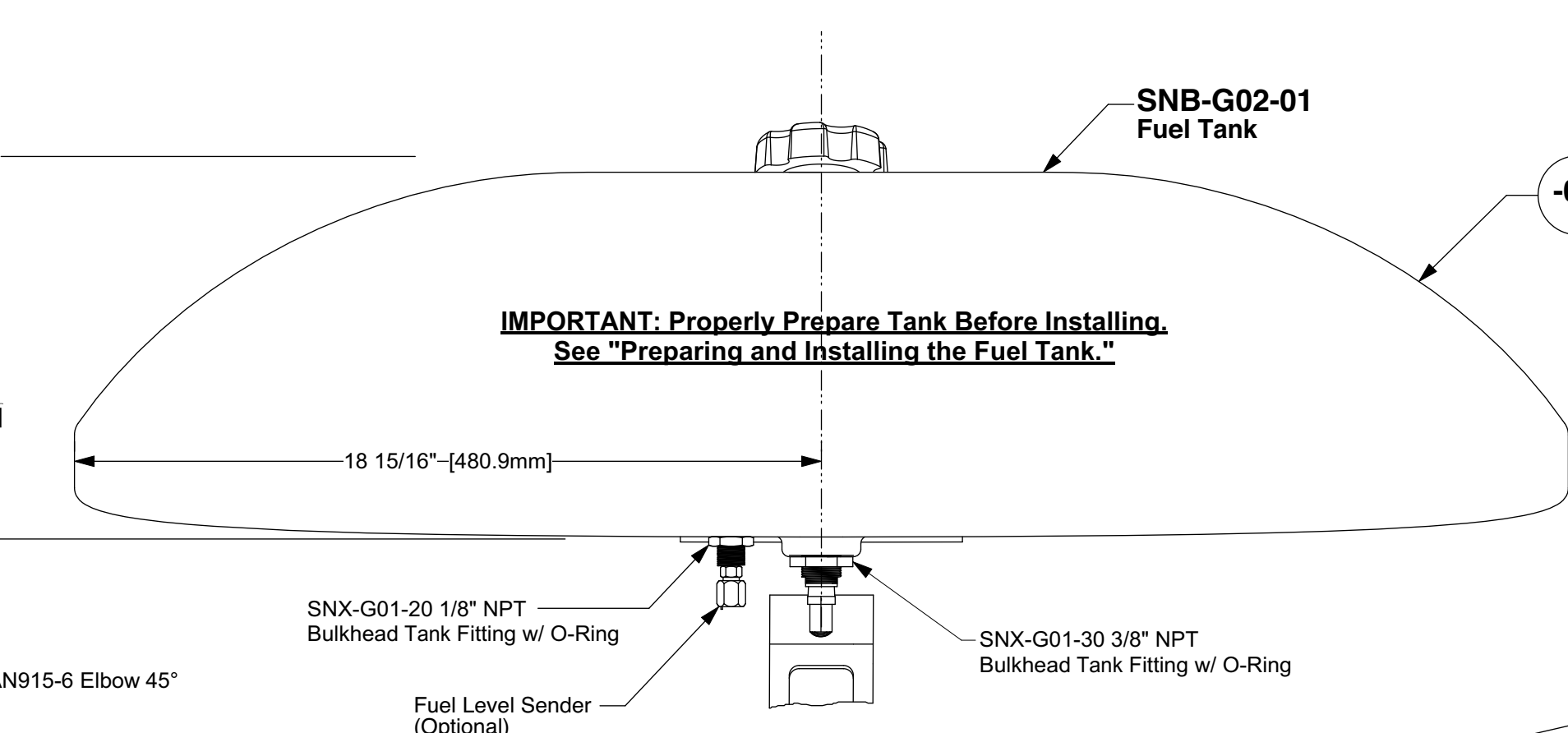
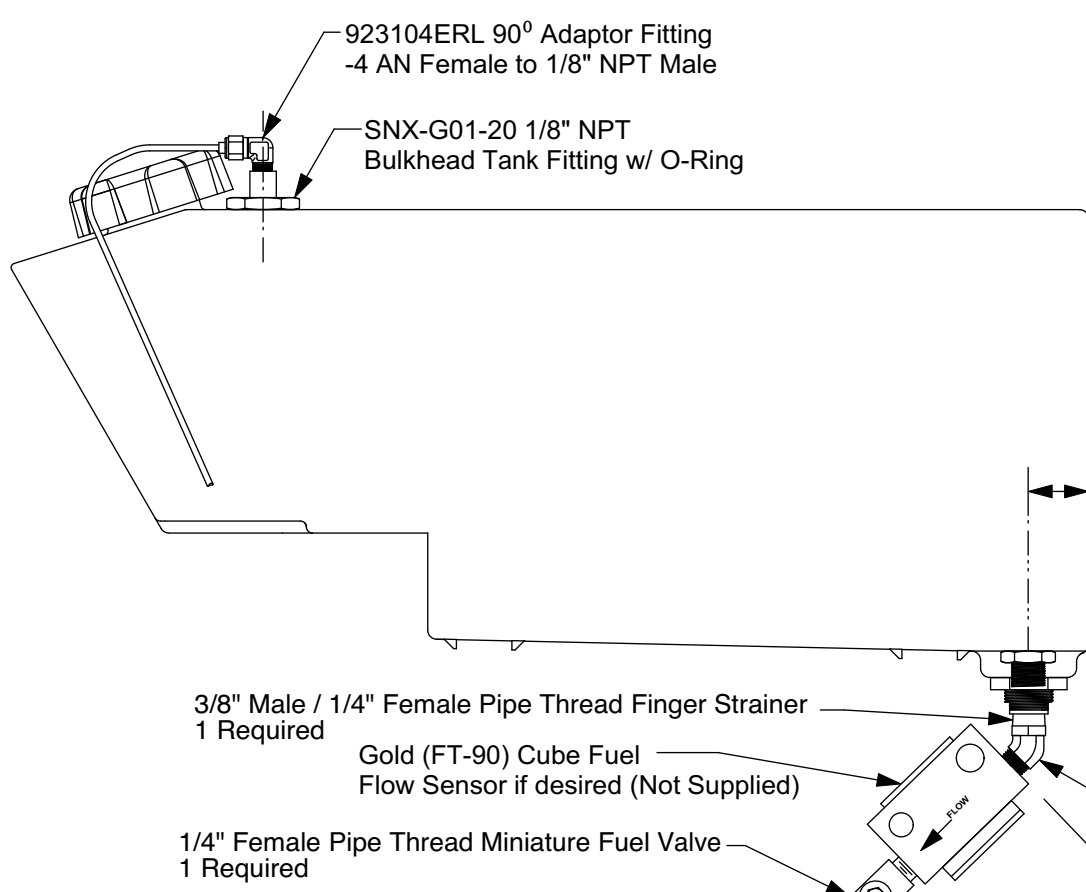
SNB-G01-11
Tank Strap, 4 Required

! IMPORTANT !
Preparing and Installing the Fuel Tank:

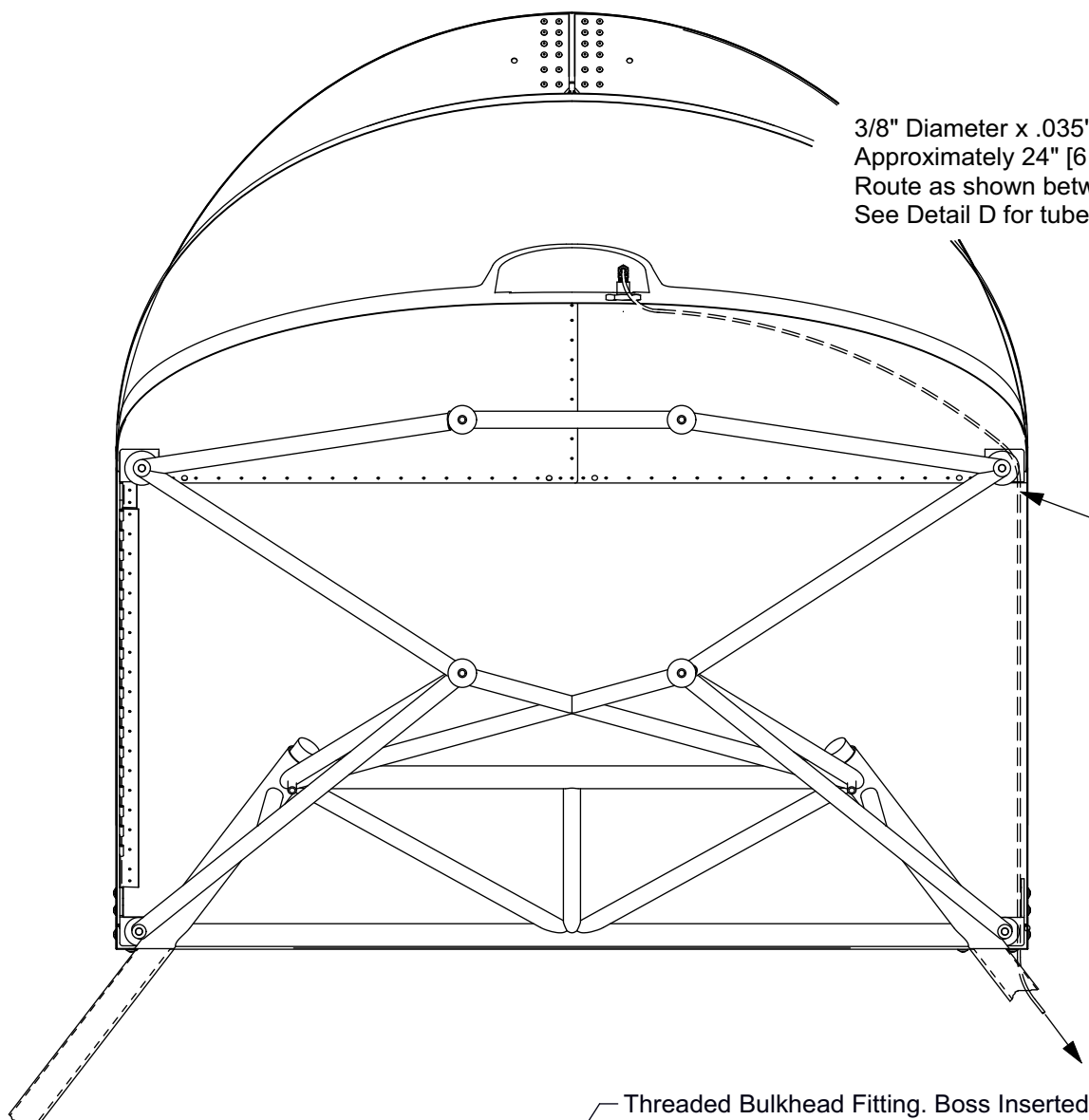
The fuel tank can expand up to 3% when exposed to fuel. To prevent distortion of the tank this procedure must be followed. Failure to follow this procedure may result in a distorted, unworthy fuel tank installation.

Danger! Fuel and fuel vapors are explosive. Avoid serious injury or death. Keep fuel and filled fuel tank away from all ignition sources including heaters, electrical equipment, open flames, sparks, etc. **DO NOT drill into the tank after fuel has been introduced.**

1. Install the Bulkhead fittings in the fuel tank.
2. Thoroughly clean the inside of the fuel tank with water.
3. Let the tank dry.
4. Plug the bulkhead fittings with pipe plugs.
5. Add about 2 gallons of fuel to the tank.
6. Install the fuel cap.
7. Let the sealed fuel tank sit for 6 weeks. During this time the tank will expand slightly, aided by the fuel vapor. Do not removed the fuel cap.
8. After about 6 weeks, drain the fuel from the tank.
9. Attach the fuel tank straps to the upper longerons. See Detail B.
10. Install the fuel tank. It will be a tight fit and may require you to sit in the cockpit and push the tank into position by placing the balls of your feet on the outside corners of the tank.
11. Install the bolts that hold the fuel tank strap halves together. Do not over-tighten the bolts.
12. Complete plumbing the fuel tank, mindful of the remaining, potentially explosive fuel vapors.



-05 Tank Assembly
Scale: 1/4

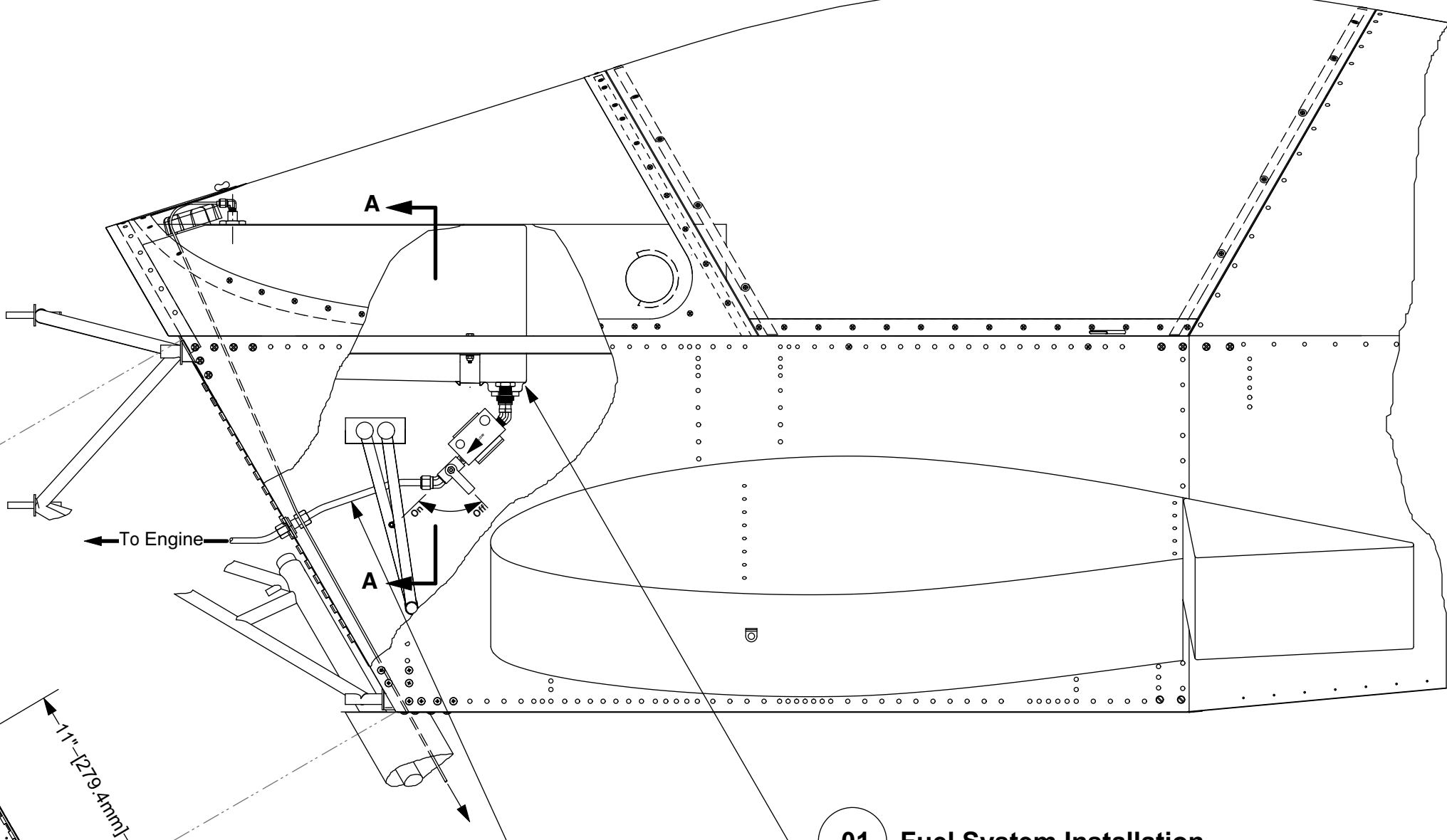


3/8" Male / 1/4" Female Pipe Thread Finger Strainer
1 Required
Gold (FT-90) Cube Fuel Flow Sensor if desired (Not Supplied)

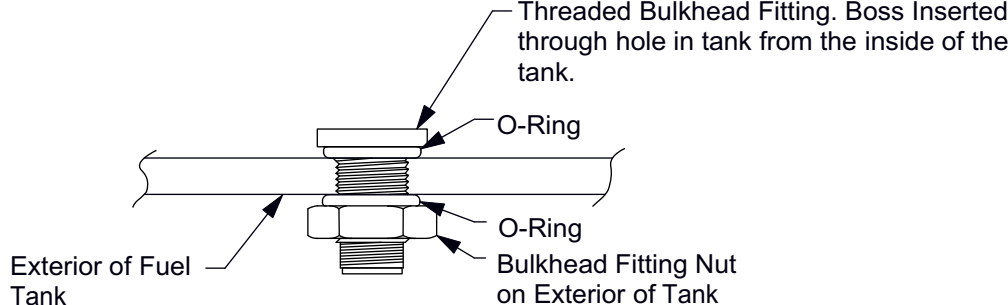
1/4" Female Pipe Thread Miniature Fuel Valve
1 Required
AN915-6 Elbow 45°, 1 Required
AN818-6 Nut Coupling, 1 Required
AN819-6 Sleeve Coupling, 1 Required

Note: For all NPT Fittings apply Teflon paste before tightening lines.

For Vent Line:
1/4" Diameter x .032" Wall 5052-O Aluminum Tubing
Approximately 70" [610mm]
Route as desired, secure with plain clamps:
AN742-D4 Plain Clamp
AN526-832R8 Machine Screw
AN960-8 Washer
AN965-832A Nut
*number required depends on routing and builder preference. Four (4) sets included in hardware kit.



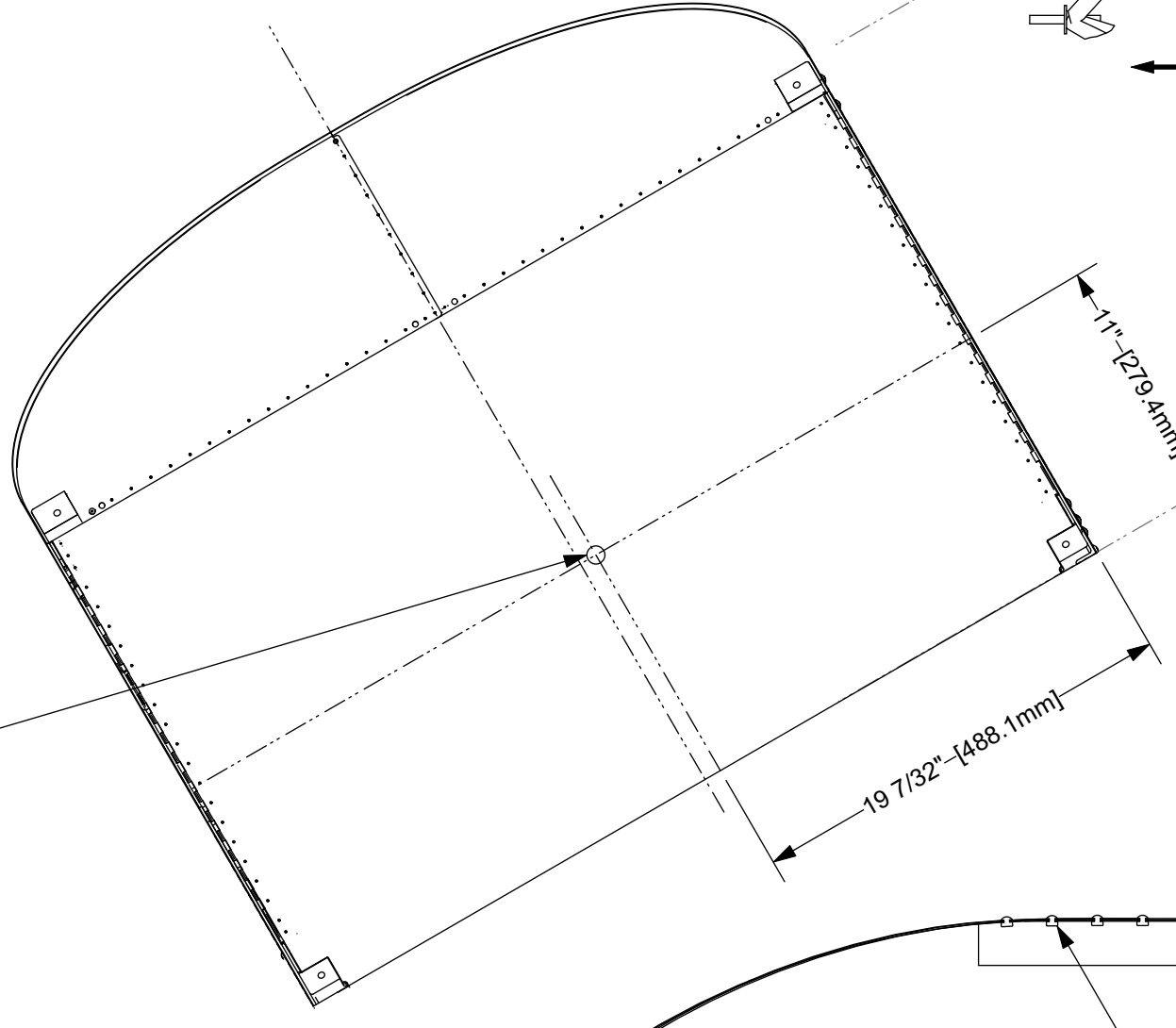
-01 Fuel System Installation



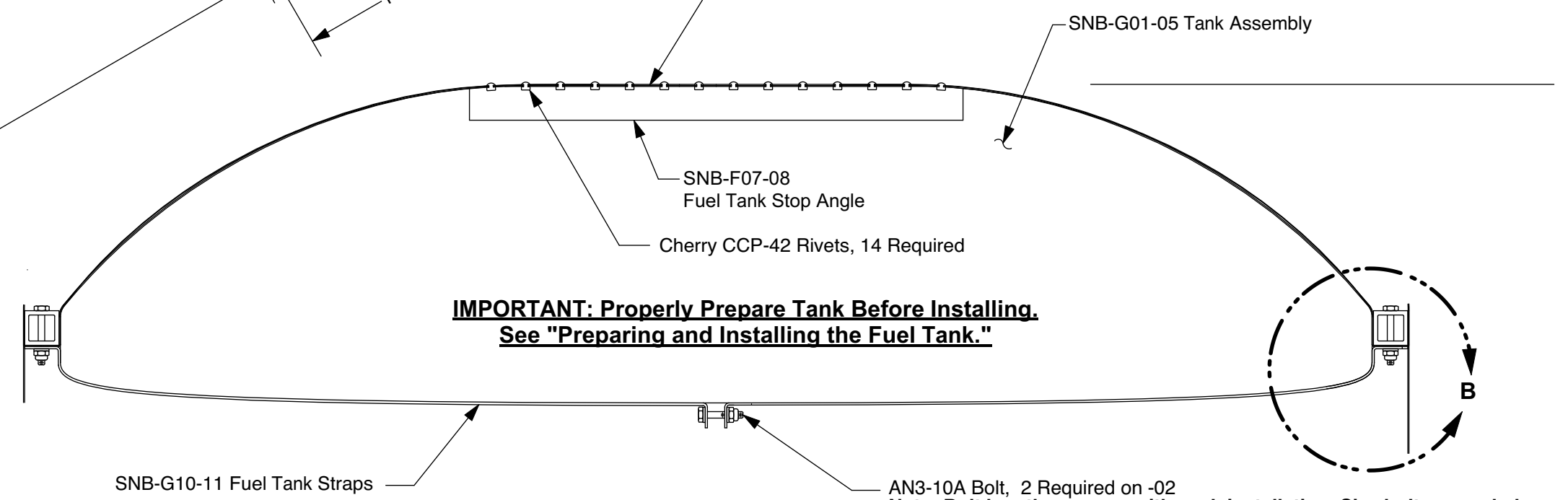
Detail C
Bulk Head Fitting Detail
Scale: 2:1
Typical for Both Sizes

- Installing Bulkhead Fitting:**
Note: This is just one method which can be used to position a Bulkhead Fitting in the tank. Any tools or methods that accomplish the task are acceptable.
1. Drill holes as required.
 2. Use a sharp knife, sandpaper, and other tools as required to smooth both sides of each hole to create a smooth sealing surface.
 3. Thoroughly clean the inside of the tank.
 4. Guide a flexible wire (electrical wire, coat hanger, safety wire, etc.) through the hole in which you are installing a fitting and out the filler neck.
 5. Place the bulkhead fitting (nut removed, and one o-ring installed) over the wire and let it slide through the tank to the hole.
 6. Attach a 3/4" diameter washer to the end of the wire which extends from the filler neck and pull the wire/washer into the tank until the washer contacts the bulkhead fitting and "pushes" it through the hole.
 7. Slide the bulkhead fitting's nut (with o-ring) over the wire and onto the fitting. Tighten the lock nut by turning it counter-clockwise. The wrench flats on the end of the internal fitting allow it to be held with a wrench while the nut is tightened.
 8. Remove the wire and washer from the tank.
 9. It is wise to test the fittings for leaks before installing the tank. If you use air pressure, do not apply more than 5 psi.

Drill for Bulkhead Fitting

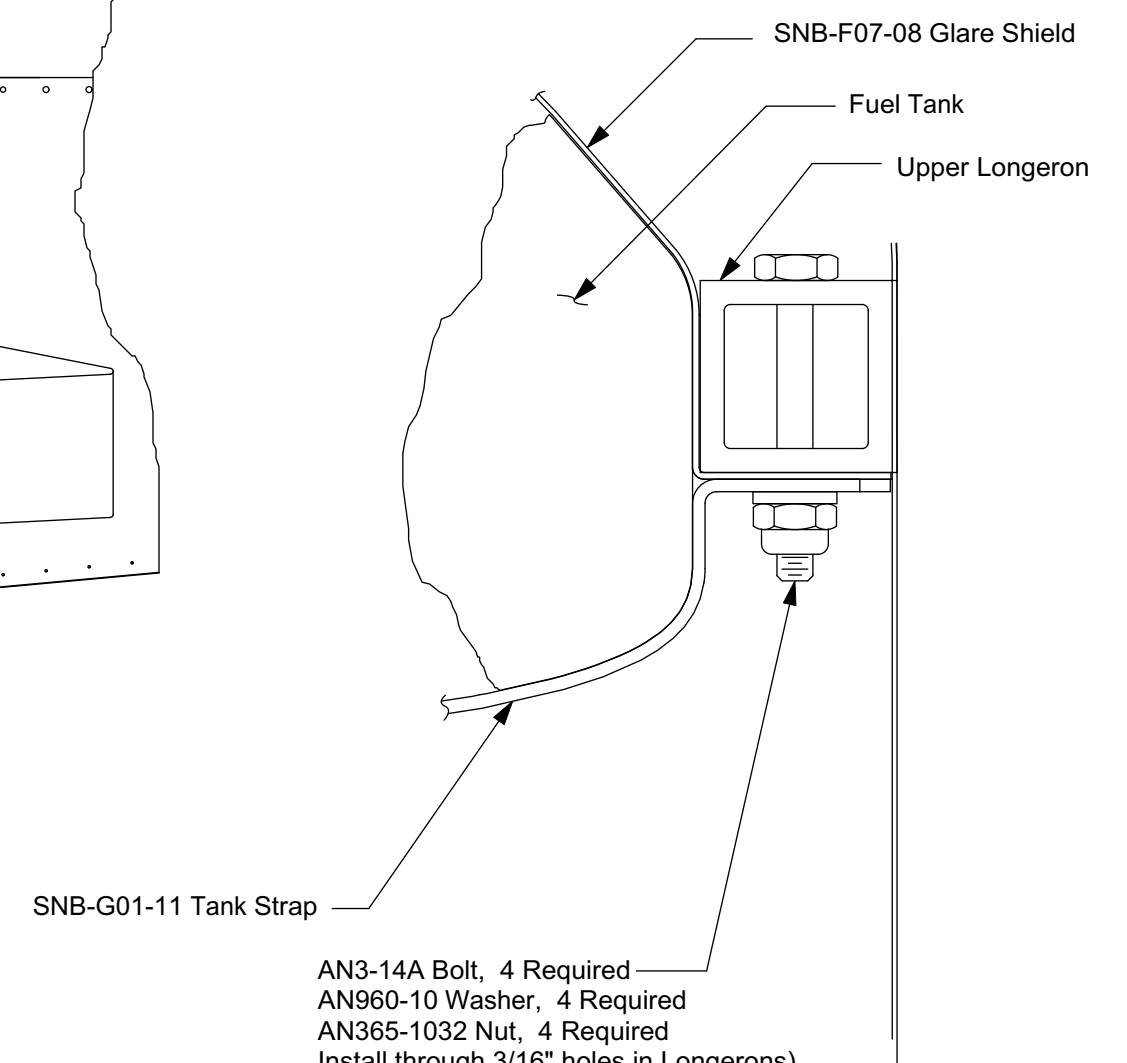


-02 Tank Installation
Scale: 1/4



Section A-A
Detail of Tank Strap Installation
Typical for Aft and Forward Straps
Scale: 1/4

AN3-10A Bolt, 2 Required on -02
Note: Bolt length can vary with each installation. Size bolt as needed.
AN960-10 Washer, 2 Required on -02
AN365-1032 Nut, 4 Required on -02
Note: Only snug bolts enough to secure fuel tank in place (overtightening can deform tank and longerons)



Detail B
Tank Strap Installation
Scale: Full

Part / Assy Number	Qty. Req'd	Part Title	SNB-B04
SNB-G01-01	1	Fuel System Installation	Next Assembly

sonex-B
Fuel System Installation

Drawing Scale	Drawing Number	Revision
1/8 & Noted	SNB-G01	B