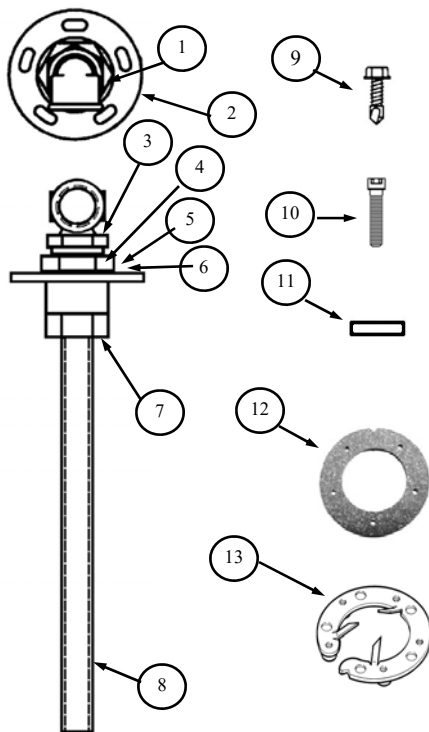


**INSTALLATION  
INSTRUCTIONS**

**Single Draw Standpipe Kit  
Part No. SP-1069**

**IMPORTANT: READ INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION**

The SP-1069 is a single, non-heated standpipe which can be used as a suction standpipe or as a return fuel provision. It may be cut to length by the installer to fit any size tank up to 29" (737mm) in depth. If available, this assembly may be bolted into an existing fuel gauge sending unit opening. If it is necessary to create an opening, the kit includes all necessary templates and hardware to simplify installation. If additional standpipes are needed for fuel supply to fuel fired heaters for coolant or air, or refrigeration units, contact Arctic Fox for information regarding your design requirements.



SP-1069 KIT COMPONENTS			
ITEM	QTY.	DESCRIPTION	PART #
1	1	5/8 Flare x 1/2 NPT Elbow	A-609
2	1	2.75" O.D. (70mm) Standpipe Plate with 5 x 72° Slots	A-1364
3	1	Bushing (Part # 1)	A-622
4	1	Hex Nut (Part # 2)	A-622
5	1	Copper Washer	A-816
6	1	Inverted Flare Gasket	A-635
7	1	Washer Head Nut (Part #3)	A-622
8	1	Standpipe 29" (737mm) - May be cut to required length	A-624-29
9	2	Self-Drill/Tap Screw	A-608
10	5	Allen Head Cap Screw (#10-32)	A-857
11	5	Stainless Steel Washer	A-861
12	1	Gasket	A-841
13	1	Template / Back-up Plate	A-834

**IMPORTANT PRECAUTIONS**

- Check all parts in the kit against the parts listing above
- Avoid mistakes—read these instructions completely BEFORE beginning installation
- Before cutting a hole in the fuel tank—
- Know where ALL baffles are located
- Verify the swing radius of the fuel gauge arm
- Determine precisely where the plumbing lines will run

**IMPORTANT CONSIDERATIONS**

- Mounting hole spacing of the SP-1069 flange is the same as most of the standard fuel gauge sending units.
- If an unused sending unit opening is available, follow installation instructions 1, 2, & 13-20, and disregard 3 through 12.
  - If an unused sending unit opening is NOT available, follow installation instructions 1 through 20.



**CAUTION:** To insure proper sealing of the SP-1069 standpipe flange when NOT using an existing sending unit opening and direct mounting to the tank, the A-834 back up plate **MUST** be used. Attempting to secure the unit to the tank with sheet metal screws or fasteners other than those supplied with the kit can result in gasket leakage.

**TOOLS REQUIRED**

- Needle-nose pliers
- 5/32" Allen wrench (3/8" drive style preferred)
- 3/8" drive air wrench and 5/16" socket
- High speed drill & 7/32" drill bit
- 400 RPM drill with 1/2" chuck
- 1-5/8" hole saw (Arctic Fox Part# T-519 saw T-510 Arbor)

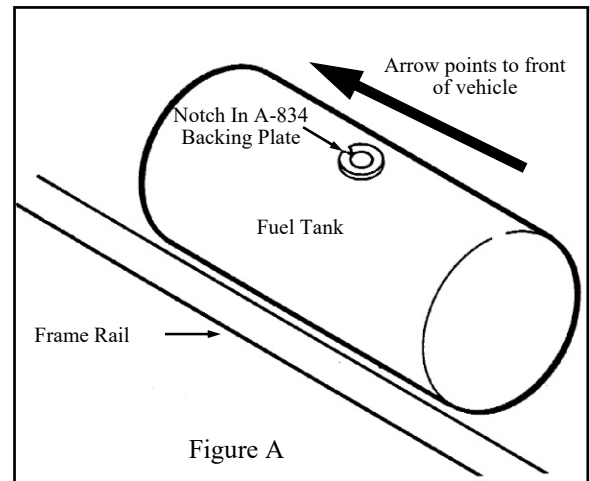
# INSTALLATION INSTRUCTIONS—ARCTIC FOX SINGLE DRAW STANDPIPE KIT—SP-1069

## PLAN THE INSTALLATION

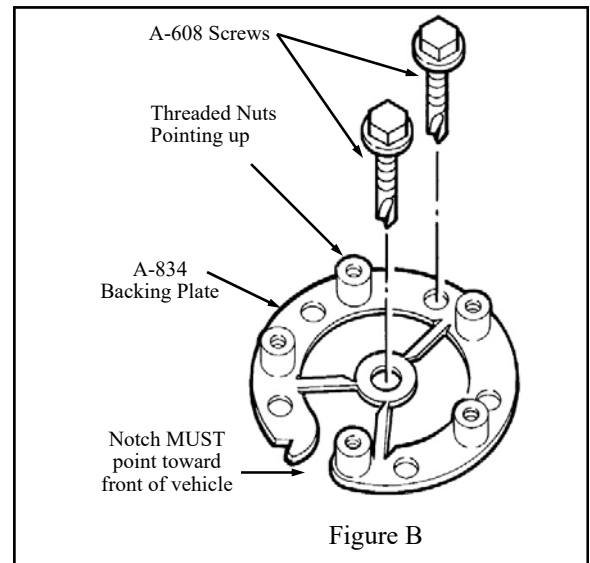
1. Locate the fuel gauge, baffles, and any other potential obstructions for the standpipe which may be present in the tank. Choose an installation location where there will be no contact with any of these items.
2. Clean the tank area where the SP-1069 stand pipe will be installed.

## DRILL HOLES FOR THE BACKING PLATE

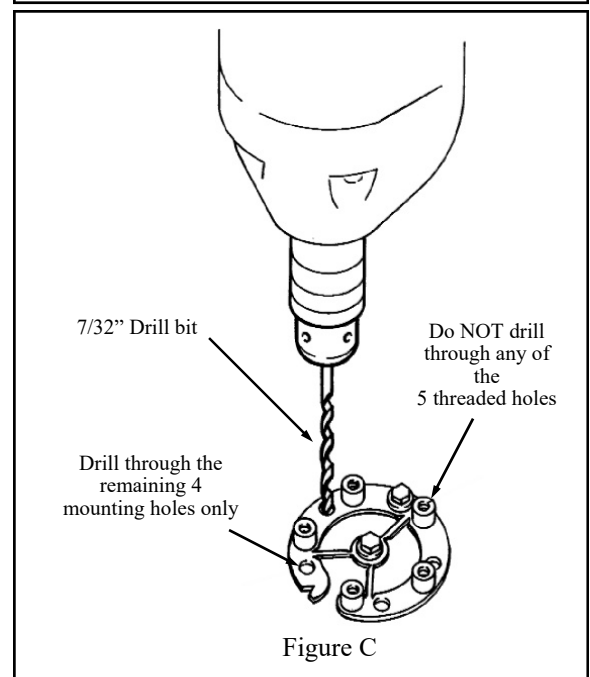
3. Refer to Figure A. Set the A-834 backing plate, with the longer side of the threaded nuts facing up, and the notch pointing toward the front of the vehicle, on the fuel tank in the location you chose to install the SP-1069 standpipe in step 1.



Refer to Figure B, and use the two A-608 self-drilling self-tapping screws to temporarily attach the backing plate to the tank.



4. Refer to Figure C, and drill  $7/32$ " holes through the tank at the four remaining un-threaded hole locations on the backing plate. Do NOT drill through the threaded nuts.
5. Remove the 2 self-tapping screws and lift the backing plate off the fuel tank. Re-drill both self tapping screw holes to  $7/32$ "



## INSTALLATION INSTRUCTIONS—ARCTIC FOX SINGLE DRAW STANDPIPE KIT—SP-1069

### CUT THE OPENING FOR THE SP-1069 STANDPIPE



**CAUTION:** If the fuel system does not have a fuel filter between the tank and the transfer pump, ALL chips MUST BE REMOVED from the inside of the fuel tank to avoid damaging the fuel pump! It is the installers responsibility to insure metal chips will not cause subsequent damage.

To keep most of the saw cuttings out of the tank, grease the inside and outside of the hole saw blade. Blow away chips as they accumulate. On steel tanks, chips that fall into the tank can usually be cleaned up with a magnet. Chips from aluminum tanks will need to be flushed out.

If there is a filter between the transfer pump and fuel tank, small amounts of chips tend to pass through the fuel line and lodge harmlessly in the primary fuel filter.

6. Refer to figure D, Using the center, self-tapping screw's hole as a pilot, cut a 1-5/8" diameter hole in the tank with a hole saw.
7. Refer to figure E, using a needle nose pliers, grip the center washer of the backing plate. Using a twisting motion, break the washer out of the plate.
8. Refer to figure F, while holding the backing plate with the threaded nuts facing downward, bend the 3 tabs up at about a 45° angle.
9. Refer to figure G. While holding one of the tabs with a needle nose pliers, insert the backing plate into the 1-5/8" hole in the tank. NOTE: when installing, insert the end WITHOUT a notch into the opening first.
10. Refer to figure H, and position the backing plate so the notch is pointing toward the front of the vehicle. Using either the pliers or your fingers, align the holes in the tank with the holes in the plate. Install all 5 of the mounting bolts finger tight to temporarily secure the plate in place.
11. Refer to figure I. Using the needle nose pliers, bend all 3 tabs up and over the tank edge. NOTE: The tabs do not have to be bent tightly, only enough to hold the plate in position until the standpipe assembly is installed.
12. Once the tabs are sufficiently bent, remove the 5 bolts and keep them for the final assembly.

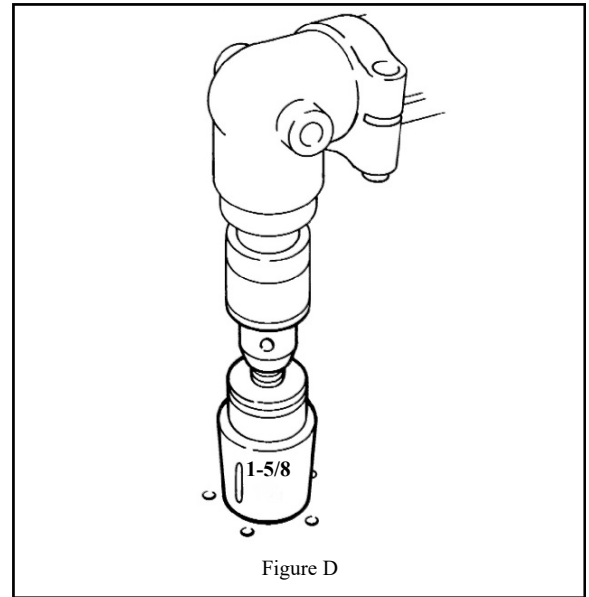


Figure D

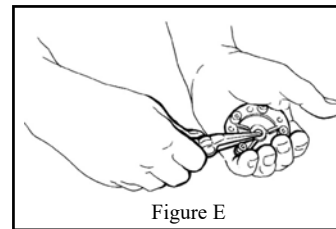


Figure E

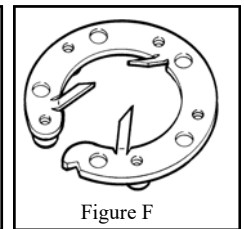


Figure F

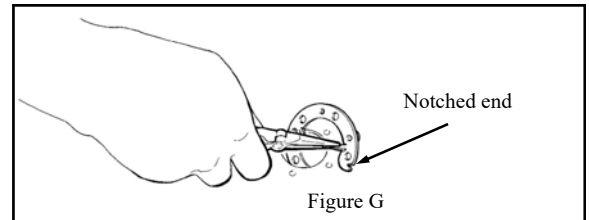


Figure G

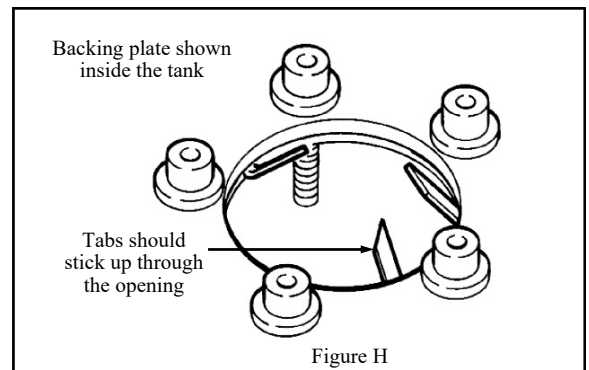


Figure H

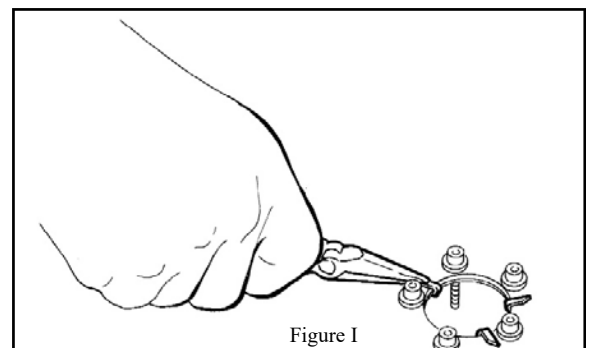
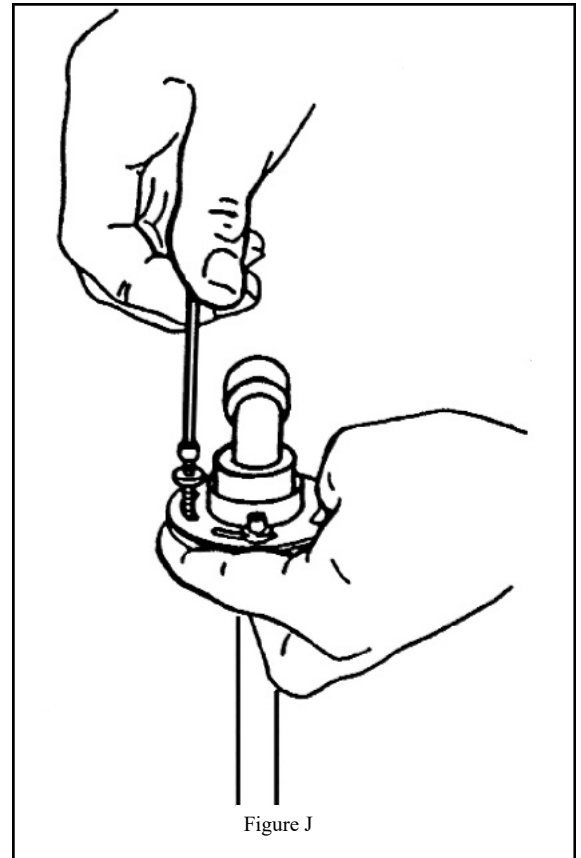


Figure I

## INSTALLATION INSTRUCTIONS—ARCTIC FOX SINGLE DRAW STANDPIPE KIT—SP-1069

### INSTALL THE SP-1069 STANDPIPE ASSEMBLY

13. Place the A-841 gasket over the tank opening with the notch in the gasket pointing toward the front of the vehicle. Make sure all 5 holes in the gasket line up with the holes in the tank and backing plate.
14. Hold the standpipe over the tank opening and verify the direction that the plumbing connection is pointed. Verify what type of fuel fitting will be required and install the proper fitting into the 1/2" NPT connection of the standpipe.
15. Insert the SP-1069 standpipe part way into the fuel tank opening, in the same orientation as determined in step 14. Without turning the gasket, slide it up the standpipe.
16. Refer to figure J. While firmly holding the gasket against the standpipe mounting flange, insert all 5 of the mounting bolts with washers through the stand pipe flange. Use the Allen wrench to push them through the gasket.
17. Insert the stand pipe with gasket all the way into the tank opening. Line up the bolts with the threaded holes in the tank. Verify that the stand pipe is properly oriented in the direction from step 14 and partially screw the five bolts into the backing plate. Finger tighten the all of the bolts with the Allen wrench.
18. Gradually tighten alternate bolts until all are securely tightened and the gasket is partially "squeezed out" all around the mounting flange. Maximum torque on the bolts is 90 inch pounds ( 10.16nm).
19. Attach fuel line to stand pipe
20. Purge air from fuel system as directed by the engine or vehicle manufacturer.



### WARRANTY

The Phillips & Temro Industries and Arctic Fox warranty statements are located on the website at [phillipsandtemro.com/terms](http://phillipsandtemro.com/terms)