



## Polaris Pro R 2 Seat Auxiliary Fuel Tank

**Notes:** Mounting brackets will vary between model years, make sure that you select the correct kit for your specific vehicle when ordering. Double check for loose bolts and/or leaks after the first use. If you ever smell gasoline, immediately stop use of the machine and fuel system, locate and resolve the issue. Do not use loctite on any AN fittings. Read these instructions entirely to ensure that you are comfortable performing this installation or contact a qualified service center for help. When fueling, stop filling at the last bar on the gauge to avoid overfilling the factory tank.

-6AN Female cap will only be used if you remove the system from the vehicle to cap the bulk head fitting on the fill neck.

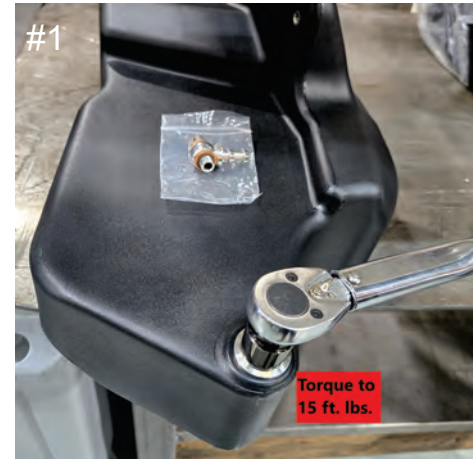


### Tools Needed:

- Torque Wrench (<20 ft. lbs.)
- Ratchet
- 10mm Socket
- 14mm Socket
- 18mm Socket
- 19mm Socket
- 10mm Wrench
- 14mm Wrench
- 16mm Wrench
- 17mm Wrench
- 19mm Wrench
- T40 Torx Bit
- 5mm Allen Wrench
- Drill with 1/4", 5/16" and 3/8" drill bits
- Hose Cutters / Wire Cutters
- Razor Blade

## Tank Installation:

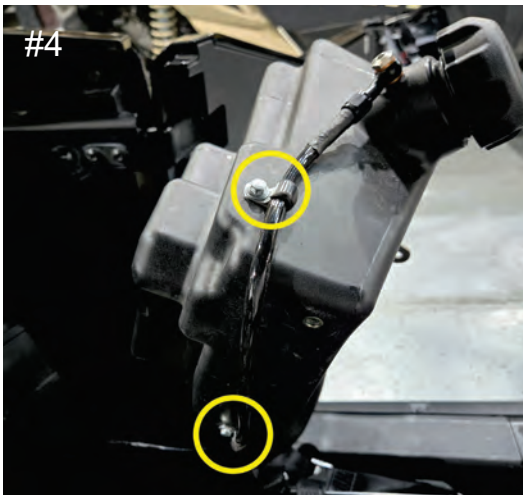
1. Start by blowing out the inside of the tank and removing both seats and the rear access panels. Remove the speaker behind the driver seat as well as the speaker bracket (if equipped). Apply loctite to both of the threaded sections of the fuel pickup fittings and install the fitting with the 2 rubber o-rings into the tank, tighten to 15 ft. lbs.



2. Install the barb fitting and banjo bolt with the supplied copper washers. Tighten to 15 ft. lbs while aiming the barb towards the front (rounded face) of the fuel tank.



3. Apply loctite to the threads of the banjo bolt for the -4AN vent hose and install it into the tank's fill neck so that it is angled towards the back of the tank. Tighten to 12 ft lbs. while aiming the fitting towards the threaded hole on the top of the tank.

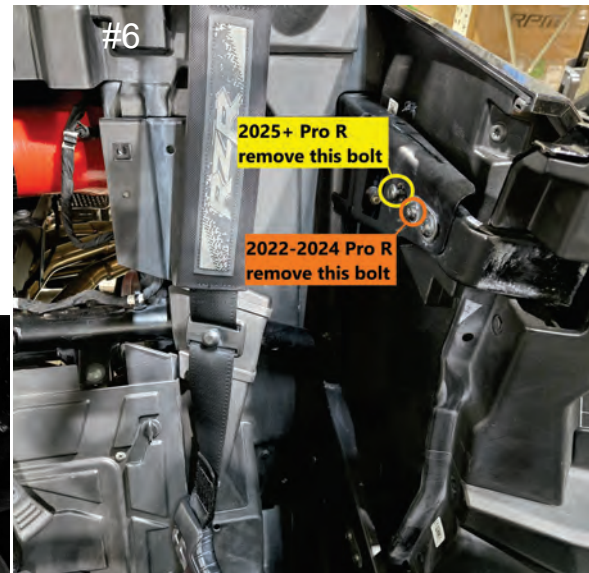


4. Thread one end of the -4AN vent hose onto the fitting installed in the last step. Install the (2) small rubber coated clamps onto the vent line and attach them to the tank using the (2) M6x14mm hex head bolts and loctite. Tighten to 12 ft. lbs.



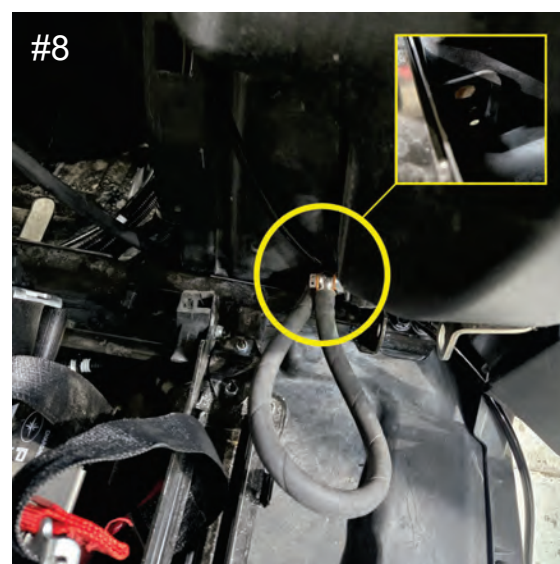
5. **Before installing the tank into the car**, push one end of the -6AN fuel hose onto the barb fitting until the end of the hose reaches the flat part of the fitting. **Make sure all of the fittings are tight as you will not be able to get to them easily after the tank is installed.**

6. Remove and save one of the bolts from the driver side top door support depending on what model year Pro R you are installing the tank into. 2022-2024 models will use one of the door adjustment bolts. 2025+ models will use the bolt further back going into the side plastics.



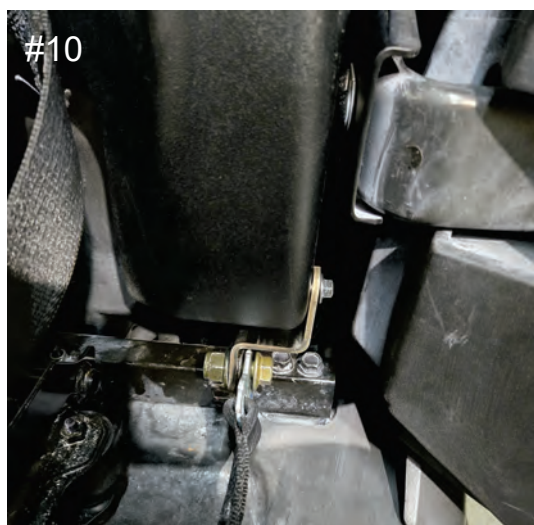
7. Use a drill with a 5/16" bit to slightly enlarge the hole on the raised edge of the back wall to make installing the 8mm bolt into the back of the tank easier. Then flip the circled clip around so it is installed from the inside of the vehicle

8. Start feeding the fuel hose through the larger hole of the rubber grommet behind the driver seat base. Pull the fuel line through the grommet leaving a small loop at the end near the tank. Tuck the loop under the bar and slide the tank down into position making sure the fuel line doesn't get kinked or pinched.



9. Install one of the M8x20mm hex head bolts through the back wall into the back of the tank using loctite. Leave the bolt loose for now until all of the brackets are installed.

10. Remove the nut from the driver's side seat belt harness closest to the door. Install the "Z" shaped bracket so the harness bolt goes through the larger hole and reinstall the nut. Attach the bracket to the tank using another M8x20mm hex head bolt and loctite. Leave these bolts loose for now.



11. Install the "L" shaped bracket so that the slotted hole is against the door frame. Attach the bracket to the tank using another M8x20mm bolt and loctite. Use the T40 head bolt removed in step 6 to mount the bracket to the door frame.

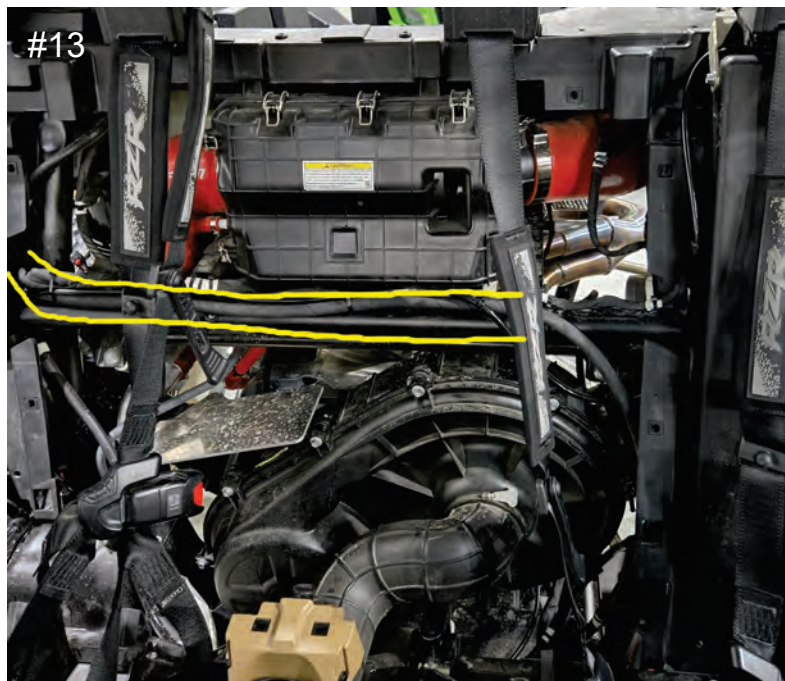
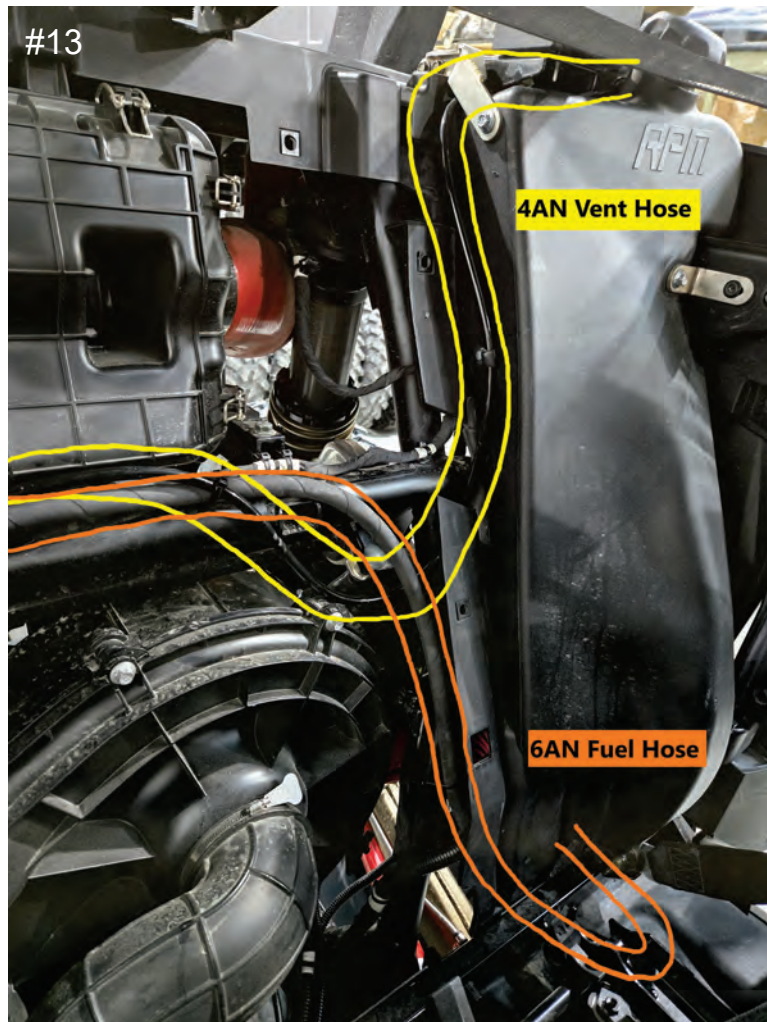


**Note:** 2022-2024 Model Year owners will receive a longer "L" shaped bracket to utilize the door adjustment bolt removed in step 6.



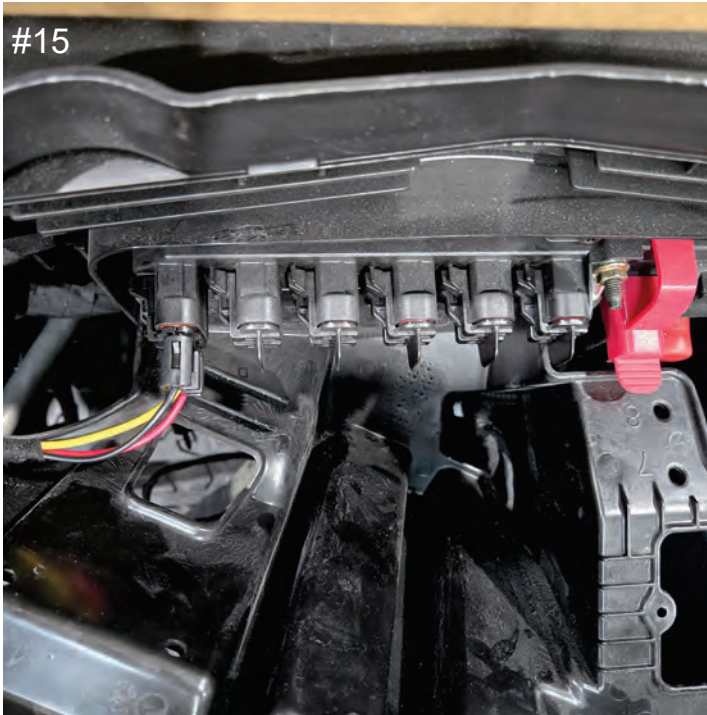
12. Mount the top bracket to the frame tab used for the seat belt harness using the (2) supplied self-tapping hex head bolts. Attach the bracket to the tank using another M8x20mm hex head bolt and loctite. You can now fully tighten all of the tank mounting hardware evenly to 12 ft. lbs.

13. Route the fuel and vent lines along the frame bar under the airbox over to the other side making sure that they don't get pinched or rub on anything sharp. Wait to zip tie the lines until the fuel pump is mounted and all of the fittings are tight.



## Wiring:

14. Find a good location to install the fuel pump switch, remove the plastic cover and push the switch in until it clicks into place.



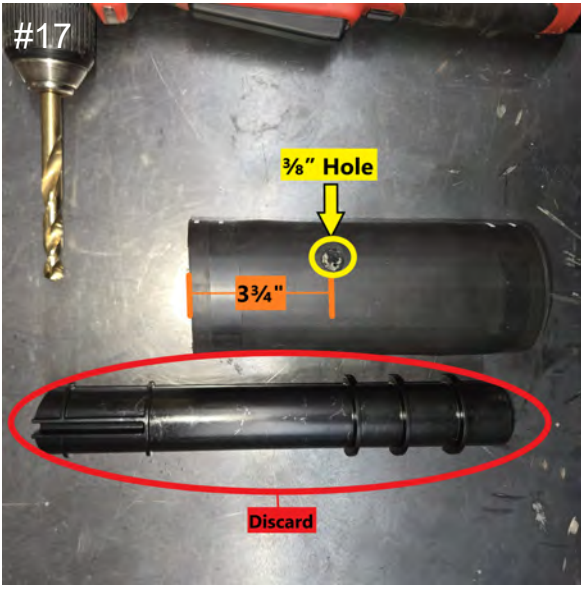
15. Plug in the wire harness to the back of the switch and run the bus bar connector up to the factory bus bar. Remove one of the plastic clips and plug in the connector, the relay can be mounted to one of the numbered holes near the bus bar.

16. Route the fuel pump wiring (2 small eyelets) through the rubber grommet into the center tunnel and towards the back of the car.



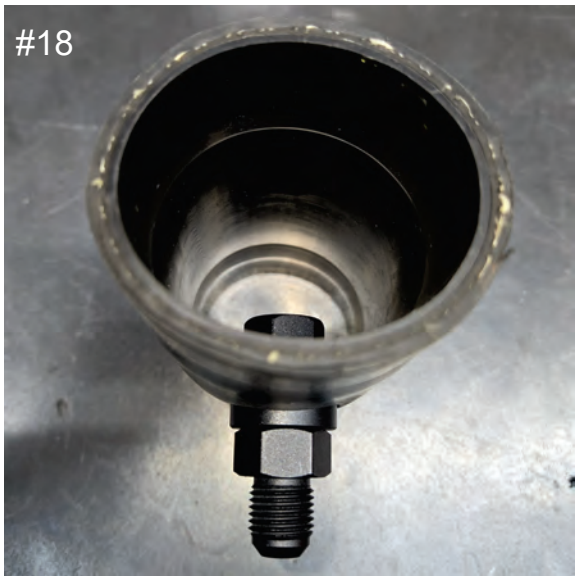
(Driver's side kick panel removed for clarity)

# Fuel Pump Installation:



17. Make a mark on the fill neck  $3\frac{3}{4}$ " from the end of the tube where the gas cap is installed. Remove the gas cap and fill tube, discard the plastic tube inside of the rubber tube and drill the marked location with a  $\frac{3}{8}$ " drill bit.

18. Push or thread the bulkhead fitting with one of the curved washers into the  $\frac{3}{8}$ " hole drilled in the last step (this should be a very snug fit). Install the other curved washer on the opposite side as well as its nut, use plenty of loctite and make sure that the curves match the shape of the fill tube hose as the fitting is tightened to create a good seal. Do not over tighten! Stop when the rubber begins to deform.



19. Reinstall the fill tube and gas cap with the factory hose clamps, leave them loose until all of the fittings are connected and tightened. Install the -6AN swivel adapter onto the bulkhead fitting installed in the last step and connect the -4AN vent line using the straight -4AN fitting. Only use loctite on the NPT (National Pipe Thread) side of the fitting.

20. Install the check valve onto the silver "out" side of the fuel pump with the supplied gasket and loctite so that the flow arrow is pointing away from the pump. Hold the silver part of the pump with a 14mm wrench while torquing down the check valve to 15 ft. lbs. Then, install one of the supplied 120\* -6AN fittings onto the check valve and push the 16" section of fuel hose onto the fitting until it is fully seated. Leave the -6AN Fitting loose enough enough that it can still swivel around until all of the fittings are connected.



#18



18. Put the foam cover over the fuel pump and connect the wire harness to the pump. The red wire connects to the (+) stud, the black wire connects to the (-) stud. The lock washers and nuts supplied with the pump will go over the eyelets.

#19



Back Side

19. Install the threaded barb fitting and copper washer onto the other end of the fuel pump using loctite. Put one of the rubber isolated clamps around the fuel pump foam and hold the pump up into position to mark the hole location. Drill the hole using a 1/4" drill bit and mount the pump using one of the M6x20mm hex head bolts with a 6mm nut on the back side. Cut the fuel line to the correct length and push into onto the top barb fitting of the fuel pump.

#20



20. Route the 16" section of fuel hose around the outside of the fill neck and install the other 120\* -6AN fitting onto the fill neck bulkhead fitting, rotate the fill next until it lines up in a good position without the fuel line getting kinked or rubbing on anything. Cut the fuel line down to the correct length if needed. Push the fuel hose firmly onto the 120\* fitting and then tighten all of the fuel fittings evenly. When tightening the fittings, you will need to hold the check valve and the bulkhead fitting with another wrench to keep them from spinning as each fitting is torqued between 12-15 ft. lbs. Tighten the 2 clamps on the fill neck once everything is in place.

#22



21. Double check that all of the fittings and connections are tightened to 12-15 ft. lbs. Fill the RPM Aux. Tank with about a gallon of fuel and test the system to make sure it is wire correctly and that there are no leaks.

22. Zip tie the lines and wires up so they don't rub on anything sharp and reinstall all of the removed parts. Finish filling the tank with fuel and always be sure to thread the gas cap on until it clicks.