



TJ Stretch Fuel Tank Installation Instructions

Thank you for purchasing this product!

Installation Notes:

- This tank is designed to fit a 1997-2006 Jeep TJ Wrangler and 05-06 Jeep LJ Wrangler Unlimited.
- This tank is designed to allow 9" of stretch with a factory axle and 8" of stretch with a 1-ton axle.
- Refer to the factory service manual for removal of any factory components.
- All threaded NPT fittings will need to have a gasoline compatible thread sealant applied.
- The fuel tank skid, hold down ring and straps will need to be painted or powder coated before installation.
- Supplied worm clamps will need to be installed on all vent line connections.
- This fuel tank is intended for off-road use only.
- Cleaning out the fuel tank is recommended before installation.

Tools required:

- Various hand tools
- Torque Wrench
- Razor Knife or tubing cutter
- Gasoline compatible pipe sealant
- Jack

Possible Kit Combinations

Qty	Kit Part Number	Kit Description
1	B4WK12846	TJ Stretch Fuel Tank Parts 97-02
1	B4WK12847	TJ Stretch Fuel Tank Parts 03-04
1	B4WK12848	TJ Stretch Fuel Tank Parts 05-06
1	B4WTJSTA	TJ Stretch Fuel Tank Assembly
1	B4WK12826	TJ Stretch Fuel Tank Skid Weldment

Contents of each box

Bill Of Materials for B4WK12846 97-02		
QTY	Part Number	Description
2	FTA-V-45	Roll over Fitting 1/2"NPT 5/16 Barb
1	5346K589	1.5" Barb to 1"NPT Brass Fitting
1	5346K65	5/8" Barb to 3/8" NPT Brass Fitting
1	B4WTG	TJ Stretch Tank Gasket
1	91355K52	5/16" Barbed Brass Tee
6	MHS-4Clamp/Stainless	#4 Mini Clamp Stainless Clamp Range .25-.625
2	MHS-10Clamp/Stainless	#10 Mini Clamp Stainless Range .625-1.00
1	B4W075033	TJ Stretched Tank Strap
1	B4W075034	TJ Stretch Tank Strap Mirror
4	25CNNE0Y/GC	1/4-20 Nylock Yellow
12	25C100HCS8Y	1/4-20 x 1 Hex Cap Screw Gr 8 Yellow
8	25NWSAFY	1/4" SAE Flat Washer Yellow
1	B4WTJSTFL	TJ Stretch Tank Fuel Line Assembly
1	27003-44in	5/16" Fuel Line 44in Long
1	B4W188A49	TJ Fuel Pump Hold Down Ring

Bill Of Materials for B4WK12847 03-04		
QTY	Part Number	Description
2	FTA-V-45	Roll over Fitting 1/2"NPT 5/16 Barb
1	5346K45	1-1/4" Barbed to 1"NPT Brass Fitting
1	5346K26	5/16" Barb to 3/8" NPT Brass Fitting
1	B4WTG	TJ Stretch Tank Gasket
1	91355K52	5/16" Barbed Brass Tee
10	MHS-4Clamp/Stainless	#4 Mini Clamp Stainless Clamp Range .25-.625
2	MHS-10Clamp/Stainless	#10 Mini Clamp Stainless Range .625-1.00
1	B4W075033	TJ Stretched Tank Strap
1	B4W075034	TJ Stretch Tank Strap Mirror
4	25CNNE0Y/GC	1/4-20 Nylock Yellow
12	25C100HCS8Y	1/4-20 x 1 Hex Cap Screw Gr 8 Yellow
8	25NWSAFY	1/4" SAE Flat Washer Yellow
1	B4WTJSTFL	TJ Stretch Tank Fuel Line Assembly
1	27003-53in	5/16" Fuel Line 53in Long
1	27008-6in	5/8" Fuel Line 6in long
1	B4W188A49	TJ Fuel Pump Hold Down Ring
1	5463K642	5/8" to 5/16" Barbed Fitting Plastic
1	qpd2b_10m_10	5/8" Barb to 5/8" Bundy Male Fuel Line Fitting
1	AL-102B	5/16" Barb to 5/16" Bundy Male Fuel Line Fitting

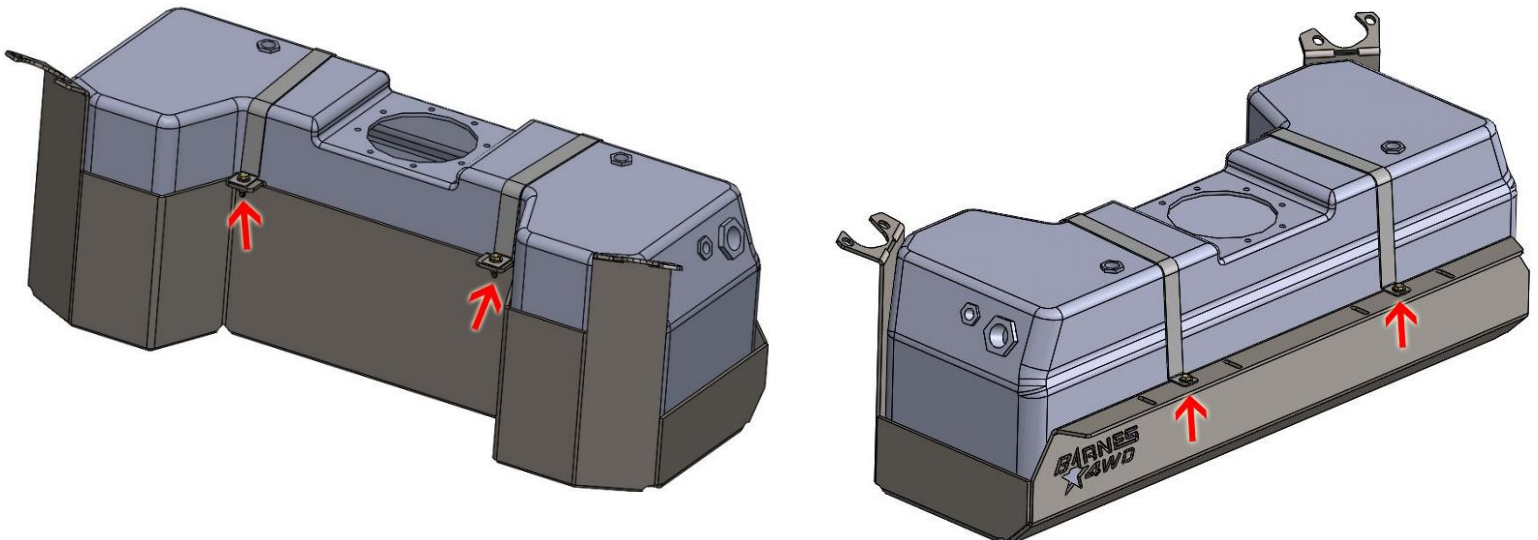
Bill Of Materials for B4WK12848 05-06		
QTY	Part Number	Description
2	FTA-V-45	Roll over Fitting 1/2"NPT 5/16 Barb
1	5346K45	1-1/4" Barbed to 1"NPT Brass Fitting
1	5346K26	5/16" Barb to 3/8" NPT Brass Fitting
1	B4WTG	TJ Stretch Tank Gasket
1	91355K52	5/16" Barbed Brass Tee
8	MHS-4Clamp/Stainless	#4 Mini Clamp Stainless Clamp Range .25-.625
2	MHS-10Clamp/Stainless	#10 Mini Clamp Stainless Range .625-1.00
1	B4W075033	TJ Stretched Tank Strap
1	B4W075034	TJ Stretch Tank Strap Mirror
4	25CNNE0Y/GC	1/4-20 Nylock Yellow
12	25C100HCS8Y	1/4-20 x 1 Hex Cap Screw Gr 8 Yellow
8	25NWSAFY	1/4" SAE Flat Washer Yellow
1	B4WTJSTFL	TJ Stretch Tank Fuel Line Assembly
1	27003-44in	5/16" Fuel Line 44in Long
1	27008-6in	5/8" Fuel Line 6in long
1	B4W188A49	TJ Fuel Pump Hold Down Ring
1	5463K642	5/8" to 5/16" Barbed Fitting Plastic
1	qpd2b_10m_10	5/8" Barb to 5/8" Bundy Male Fuel Line Fitting

Step 1:

Remove the factory tank and rear shocks from the jeep retain all hardware and lines, some will be used during installation.

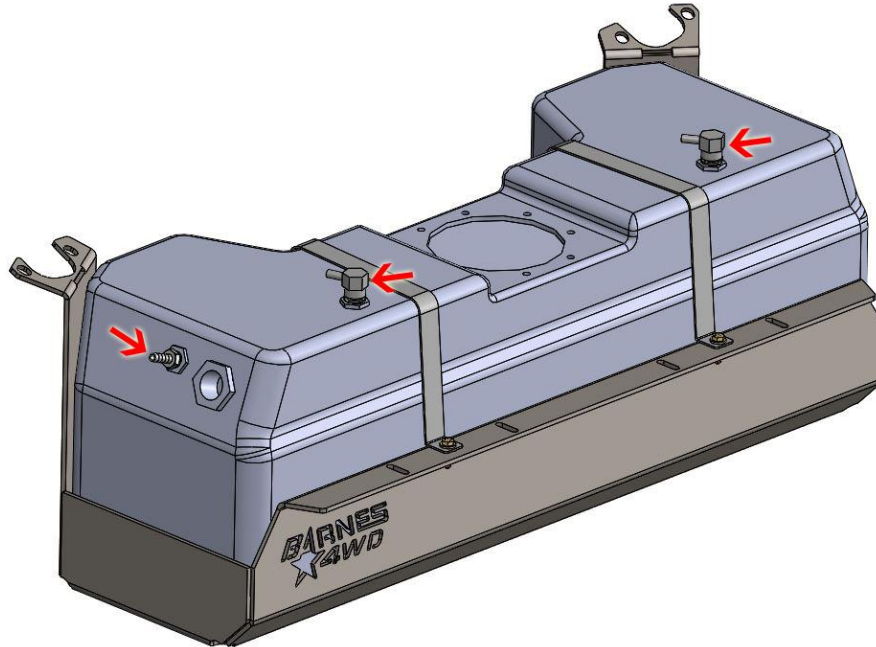
Step 2:

Place the Barnes 4wd tank into the supplied skid plate. Install the tank straps and tighten the supplied 1/4" bolts, nuts, and washers.



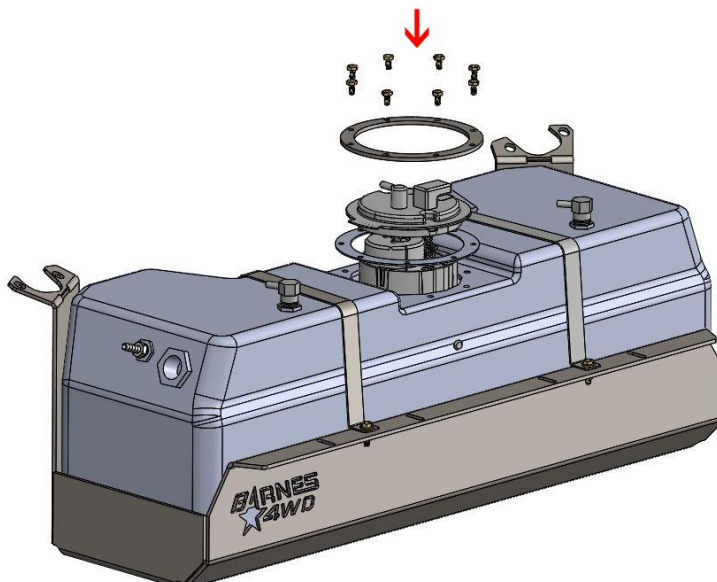
Step 3:

Install the rollover valves (FTA-v-45) and the vent (97-02 5346K65) (03-06 5346K26) into the tank as shown below. Make sure to add pipe sealant to the threads.



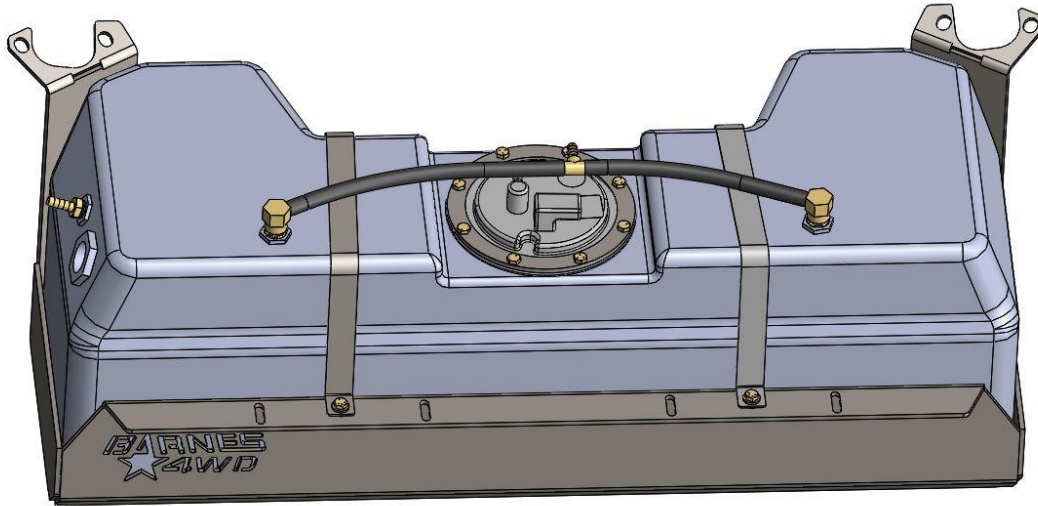
Step 4:

Install the fuel pump gasket, fuel pump, and hold down ring into the tank with the supplied $\frac{1}{4}$ " hardware. When installing the pump make sure it is clocked in such a way that the float can fully swing, and the outlet is facing the front of the jeep. Tighten the fuel pump hardware in a star pattern to 60 inlbs



Step 5:

With the supplied 5/16" fuel line cut 2 pieces 11" long and plumb the 2 roll over valves together with the tee in the middle.

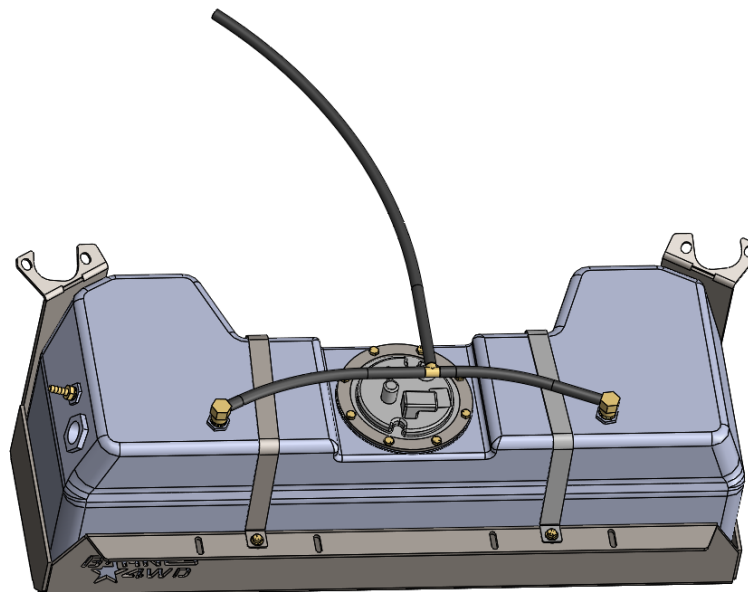


Step 6:

Refer to your year model Jeep.

97-02

Install the remaining 5/16" fuel line coming out of the tee.



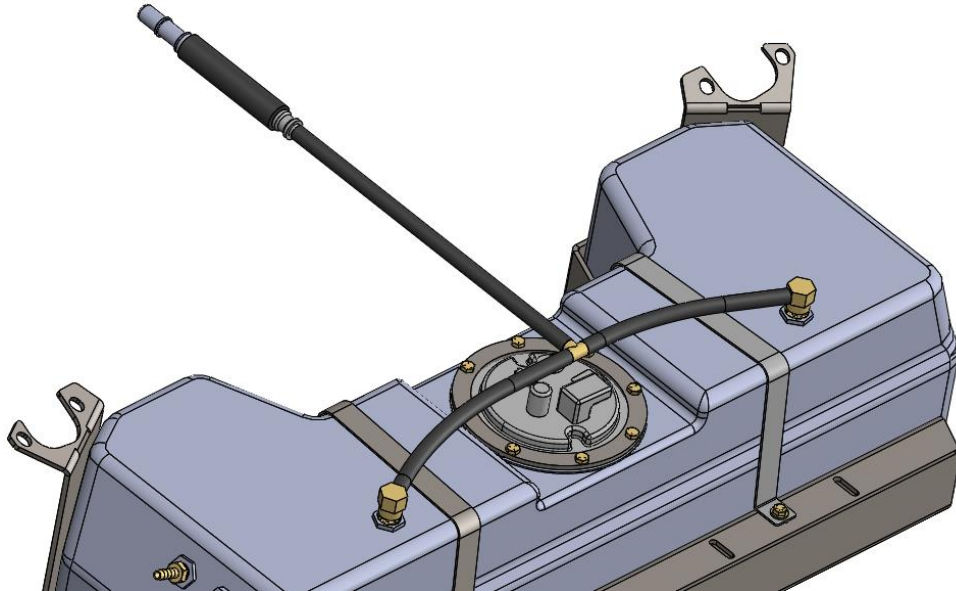
03-06

Cut 12" off the 5/16" fuel line and connect it to the tee.

Connect the 5/16" to 5/8" adapter to the 5/16" fuel line.

Connect the supplied 5/8" fuel line to the adapter.

Connect the 5/8" bundy fitting to the 5/8" fuel line.



Step 7:

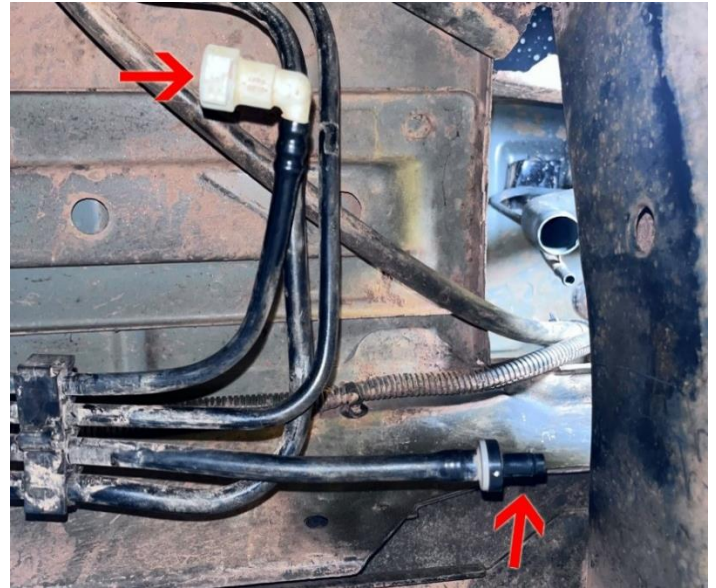
Install the supplied fuel line to the fuel pump, the smaller end will be at the pump. In some cases, the factory plastic retainer will need to be removed from the factory pump outlet.



Step 8:

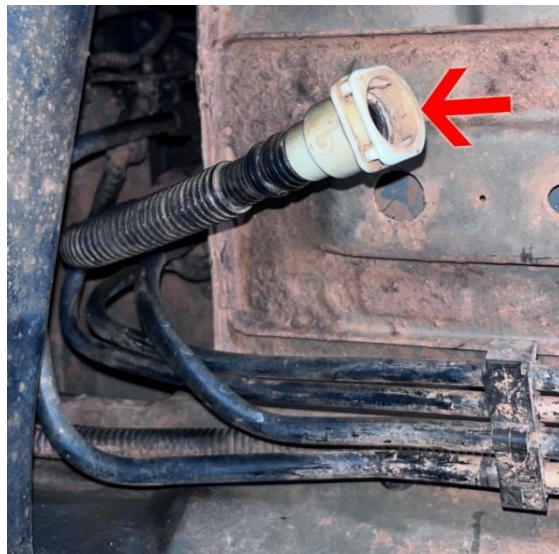
If you have a 97-02 or a 05-06 move to the next step.

Cut 9" from the supplied the 5/16" fuel line and connect the supplied 5/16" bundy fitting. Under the jeep connect the bundy into the factory evap line quick release and the other end into the factory evap vent line.



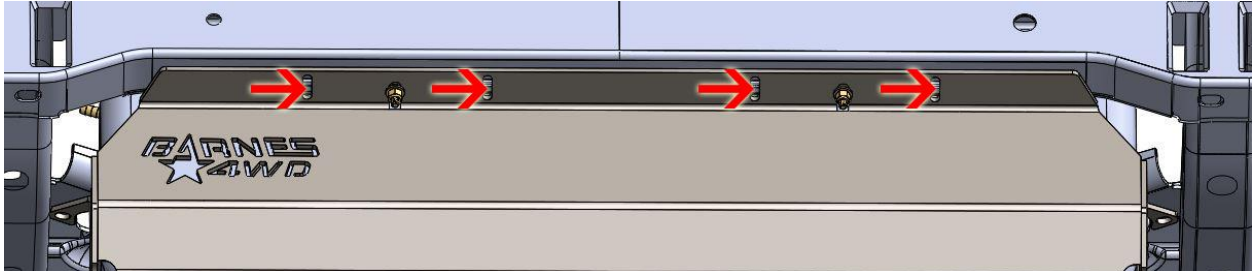
Step 9:

Place the fuel tank assembly on a jack and slowly lift the assembly into place. If you have an 03-06 while the assembly is being raised, you will need to install the 5/8" bundy fitting to the factory 5/8" evap fitting. If you have an 05-06 you will also need to connect the fuel pump wiring.



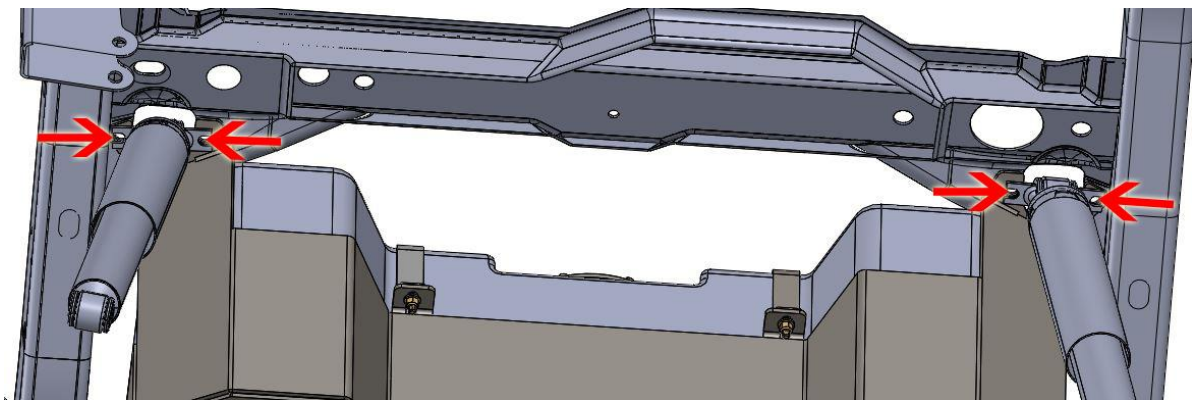
Step 10:

Raise the fuel tank assembly all the way and install the factory nuts holding the rear of the skid to the rear crossmember.



Step 11:

Install the top of the rear shock and the tank assembly to the shock mounting locations with the factory shock hardware.



Step 12:

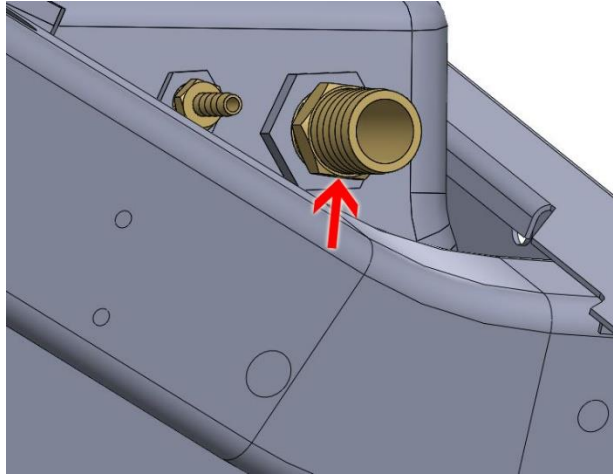
Connect the provided fuel supply line to the factory fuel line. In some cases, the factory plastic retainer will need to be removed from the factory line.

Step 13:

If you have a 05-06 move to the next step. If you have a 97-02 install the 5/16" line installed in step 7 to the factory evap line. If you have a 97-04 connect the fuel pump wiring to the fuel pump.

Step 14:

Install the filler neck barb fitting into the tank adding pipe sealant to seal the threads.



Step 15:

Connect the factory filler neck to the tank. Trimming of the line may be required so the line does not kink. If you have a 97-02 connect the factory filler neck vent to the tank. If you have a 03-06 you will need to use the last piece of the 5/16" fuel line to connect the filler vent.

Congratulations! You Have finished the installation of the Barnes4wd TJ Stretch Fuel Tank

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