



Part Number: **TAD108**
Product **FRONTIER SERIES POLYMER FUEL TANK 185L**
Description:
Suited to **TOYOTA LANDCRUISER 200 SERIES 2007 ON, MODELS WITH**
vehicle/s: **AUXILLIARY TANK**

WARNING

NOTE THE FOLLOWING:

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any component, contact your nearest authorised ARB stockist. Repairs or modifications must not be attempted.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ This product is designed to carry diesel fuel only and is not suitable for use in petrol applications.
- ◆ Do not remove labels from this product.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The fuel gauge and distance to empty indicator may vary from factory condition.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel
- ◆ State regulations vary, please check with your local authorities regarding documentation of this installation.
- ◆ Biodiesel fuels do not conform to a mandatory code of practice regarding the chemical make-up of the fuel, therefore use of biodiesel is not recommended in this tank.
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ◆ Work safely at all times
- ◆ Unless otherwise instructed, tighten fasteners to specified torque

ARB 4x4 ACCESSORIES

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GENERAL CARE AND MAINTENANCE

By choosing a Frontier Series fuel tank, you have bought a product that is one of the most sought after 4WD products in the world. Your fuel tank is manufactured from a High Density Poly Ethylene (HDPE) product that has superior cross linking qualities. This cross linking polymer provides high impact resistance, high strength and rigidity and will not be effected by harsh chemicals and minerals. It is engineered to be a reliable high quality accessory that represents excellent value. To keep your fuel tank in original condition it is important to care and maintain it following these recommendations:



- It is recommended that following exposure to salt and or other contaminants, the fuel tank mounting straps, and fuel sender mounting area be thoroughly rinsed to prevent corrosion.
- As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of the vehicle is carried out, making sure that all bolts and other components are torqued to the correct specification. Also check that all wiring sheaths, fuel line connectors, and fittings are free of damage. Replace any components as necessary. This service can be performed by your local authorized ARB Stockist.

FITTING REQUIREMENTS

REQUIRED TOOLS FOR FITMENT OF PRODUCT:

| BASIC TOOLS KIT | HOSE CUTTERS |
|--|--|
| VEHICLE HOIST OR HYDRAULIC JACK AND STANDS | LIFTING EQUIPMENT SUITABLE FOR SUPPORTING FUEL TANKS |
| RUST PREVENTATIVE PAINT | FUEL TRANSFER EQUIPMENT |
| ANGLE GRINDER/HACKSAW | EMERY PAPER/FILE |

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

| | | | |
|--------------------|---|--------------------|---|
| Protective eyewear |  | Hearing protection |  |
|--------------------|---|--------------------|---|

NOTE: 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

FASTENER TORQUE SETTINGS:

| SIZE | Torque Nm | Torque lbft |
|------|-----------|-------------|
| M6 | 9Nm | 7lbft |
| M8 | 22Nm | 16lbft |
| M10 | 44Nm | 32lbft |
| M12 | 77Nm | 57lbft |

PARTS LISTING-TAD108BK

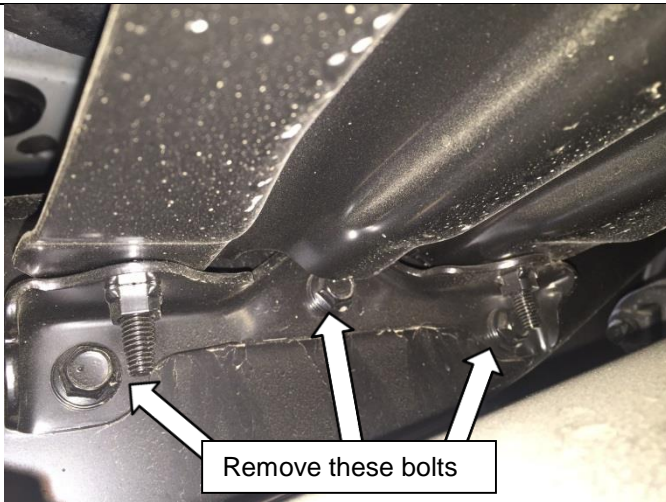
| APPLICATION. | PART NO. | QTY | DESCRIPTION |
|---|----------|-----|--------------------------------------|
| FRONTIER SERIES FUEL TANK INSTALLATION | TAD108 | 1 | POLYMER FUEL TANK |
| | BP80057 | 0.5 | 1/4 FUEL HOSE |
| | BP80275 | 1 | 1/4 Y PIECE |
| | BP80055 | 6 | #4 HOSE CLAMPS SUIT 1/4 " & 8MM HOSE |
| | BP80053 | 2 | #10 HOSE CLAMPS SUIT 10MM HOSE |
| | BP80059 | 0.5 | 8MM FUEL HOSE |
| | BP80210 | 1 | STRAP KIT LC200 |
| | BP80249 | 1 | RUBBER STAND OFF |
| | BP80160 | 1 | LABEL GAUGE CAUTION |
| | BP80154 | 0.9 | STRAP RUBBER 40MM |
| | BP80154 | 0.9 | STRAP RUBBER 40MM |
| | BP80154 | 0.9 | STRAP RUBBER 40MM |
| | BP80155 | 0.8 | STRAP RUBBER 63MM |
| | BP80155 | 0.8 | STRAP RUBBER 63MM |
| | BP80224 | 1 | STICKER BUMPER ARB FRONTIER |
| | BP80279 | 1 | FLOAT ARM 16 ON |
| | BP80280 | 1 | FLOAT ARM LC200 07 - 15 |
| | BP80282 | 2 | CIRCLIP PUSH ON 2.0MM |
| | BP80094 | 5 | M5 x 12 PAN HEAD SEMS |
| | 3789587 | 1 | INSTRUCTIONS |

REMOVAL OF ORIGINAL FUEL TANK

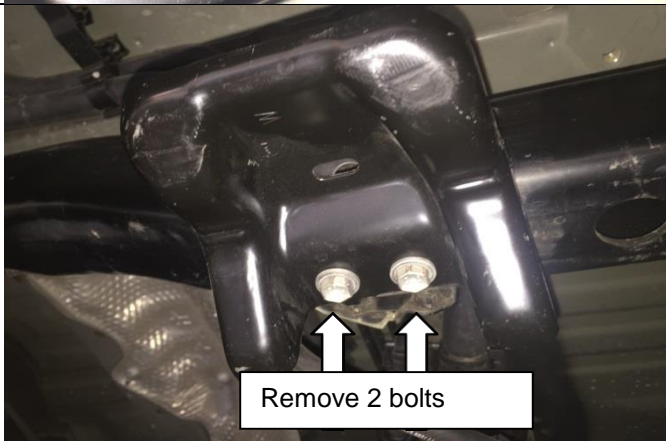
Installation of the 185L Frontier Fuel Tank requires removal and relocation of the vehicle's spare tyre. This will require the installation of an aftermarket rear bar / spare wheel carrier.

Once the style of rear bar is chosen read the installation instructions for the rear bar in conjunction with these instructions prior to installation. This will ensure both items are installed correctly and efficiently.

Remove the spare tyre from the vehicle. Tools for this are located in the RHS tailgate pocket.



Once the spare wheel has been removed, undo the 3 x M8 bolts at either end of the rear crossmember that forms the spare wheel mount and remove the crossmember.



Remove the 2 x M8 bolts from the tyre location bracket located above the differential and remove bracket.



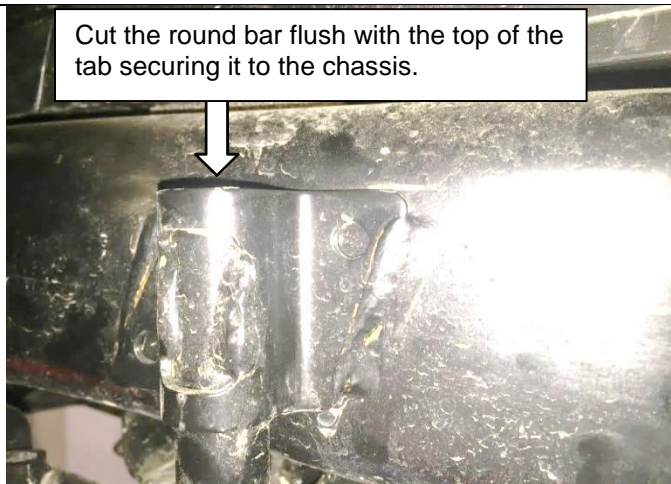
Using an angle grinder or hacksaw, remove the round bar that forms the tyre location bracket at the rear of the vehicle.

See the following image for location of cut.



REMOVAL OF ORIGINAL FUEL TANK

Cut the round bar flush with the top of the tab securing it to the chassis.



It is important to cut the bar in the correct location. Cut the bar flush with the top of the bracket that is welded to the chassis.

Do not cut the welded bracket.



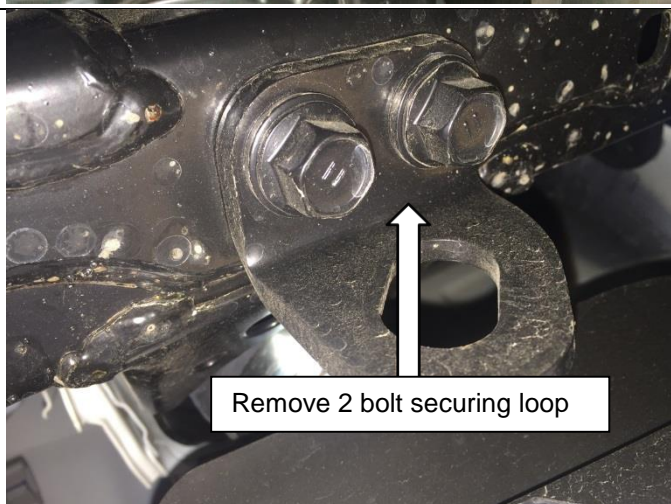
De-burr the tube and paint raw edge.

Remove 2 bolts securing loop



Remove the tie down loop from the RH side of the chassis.

Retain the bolts for the installation procedure.



Remove 2 bolt securing loop

Remove the tie down loop from the LH side of the chassis.

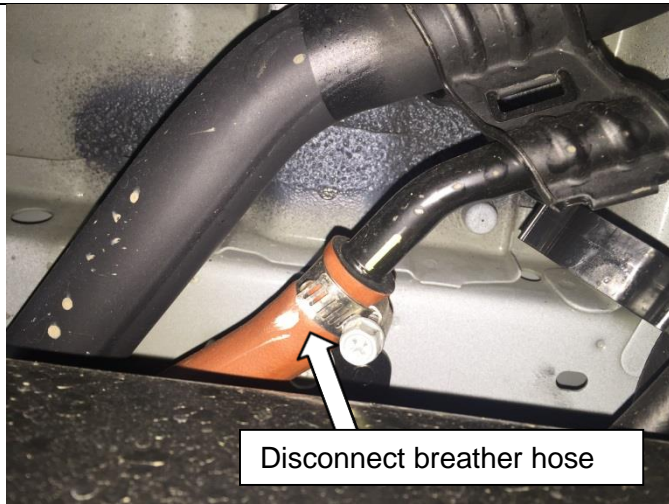
Retain the bolts for the installation procedure.



Disconnect the 16mm and 35mm fuel filler hoses from the steel fuel filler neck and the fuel tank.

Retain hoses and clamps for installation procedure.

REMOVAL OF ORIGINAL FUEL TANK



Disconnect breather hose

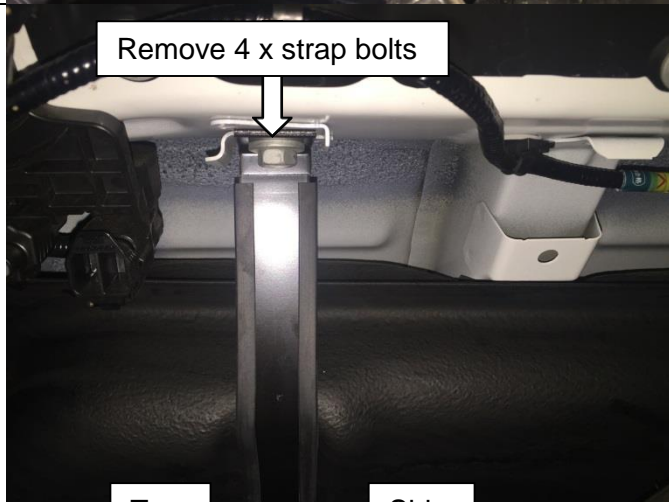
Disconnect the 16mm breather hose from the steel pipe at the front of the fuel tank.
Retain hose and clamp for installation procedure.



Disconnect 3 hoses

Disconnect 3 hoses at the front of the fuel tank.
2 x 6mm and 1 x 8mm.
Retain the hoses and clamps.

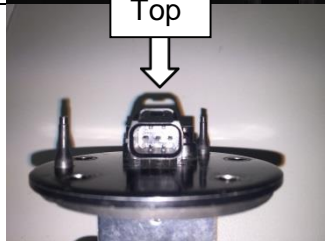
NOTE, Pre 2016 models have 5 hoses.
2 x 6mm and 3 x 8mm.



Remove 4 x strap bolts

Support the fuel tank with jack or stand.
Remove the 4 x M10 bolts retaining the fuel tank straps.
Lower the fuel tank and remove from the vehicle.
Whilst lowering the fuel tank, disconnect the fuel sender wiring.

Refer to next step to identify the position of the release button.



Top

2007 to 7/2015



Side

8/2015 on

Note the location of the release button on the plug according to the model.

INSTALLATION PROCEDURE

Place U bolt through bracket before placing onto rail



Pass 1 of the U bolts supplied in the kit through the front mounting bracket. Position the bracket over the chassis rail above the differential and secure using 2 M8 x 20 bolts and flat washers supplied in the kit.



22Nm

Mid 2016 models with updated chassis will need 10mm spacer installed between chassis and new mounting bracket.



Secure the front mounting bracket by installing the 2 U bolts and backing plates provided. Fasten the U bolts using the M10 Nyloc nuts and flat washers supplied in the kit.



44 Nm

Ensure that the 2 backing plates and u bolts have at least 20mm clearance from any heater and air conditioning pipes.



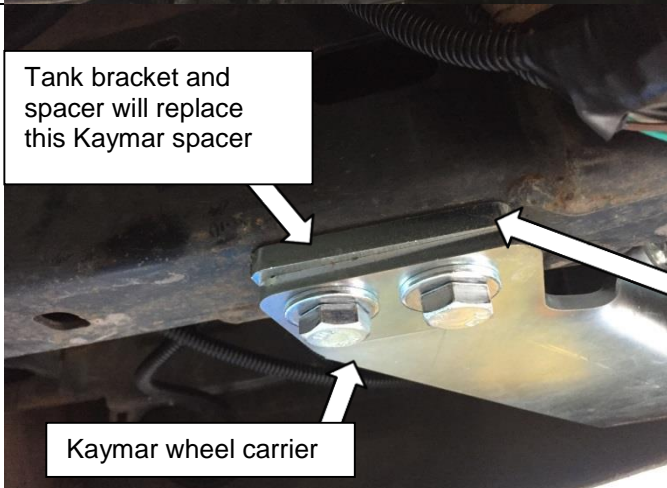
Position the rear mounting bracket into the vehicle and secure using the 4 x M12 bolts that were retained from the tie down loops.

If using an ARB rear wheel carrier the wheel carrier will be mounted below the tank mounting bracket as shown.



77 Nm

Tank bracket and spacer will replace this Kaymar spacer



Kaymar wheel carrier

If using a Kaymar rear wheel carrier the 3mm spacer that was supplied in the kit will be placed between the carrier and the tank mounting bracket.

The 8mm spacer from the Kaymar kit will be discarded.



77 Nm



INSTALLATION PROCEDURE

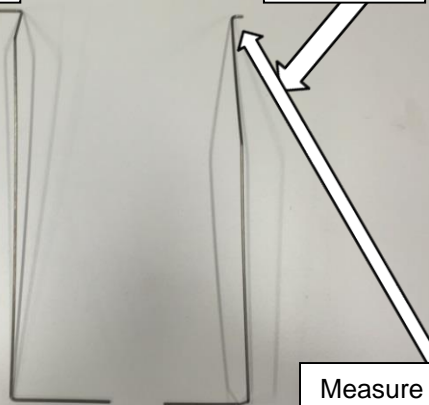


Secure the 2 rear tabs on the rear mounting bracket to the tubes left on the chassis from the spare wheel bracket using the 2 x M10 x 90 bolts, flat washers and flange nuts supplied in the kit. Please use one washer between the bolt head and chassis tube as shown.



2007 – 7/2015

8/2015 on



There are 2 float arms supplied in the kit. Firstly identify the correct arm for the vehicle model. To identify the arm measure the length of the return.

| Model | Return length |
|-------------|---------------|
| 2007-7/2015 | 25mm |
| 8/2015 on | 8-10mm |



Remove the push on circlip retaining the float. Remove the float and retain for the installation. Remove the float arm from the sender.



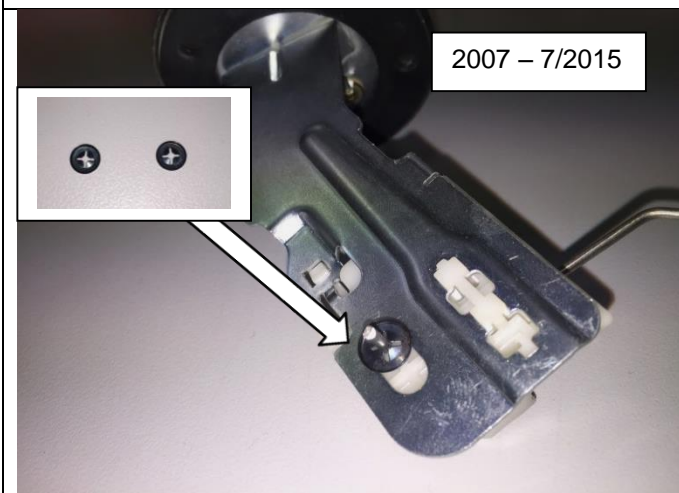
2007 – 7/2015

Install the float retained in the previous step onto the new float arm.

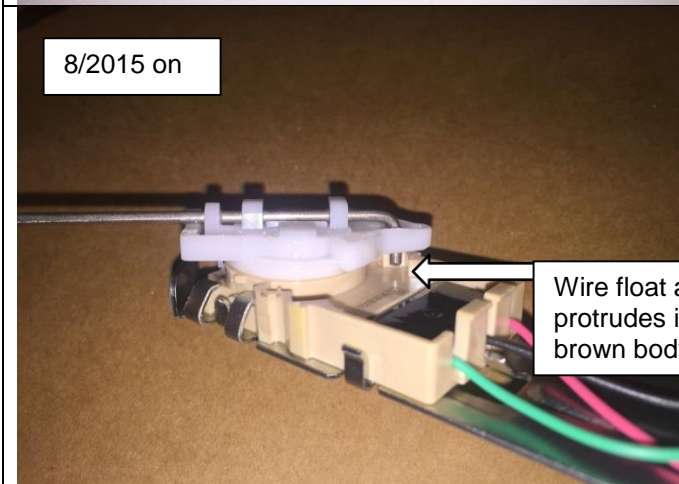
Note the orientation of the triangle float so that the bottom of the float is level when at the bottom of the sender stroke.

Secure the float onto the arm using 1 of the new push on circlips supplied in the kit.

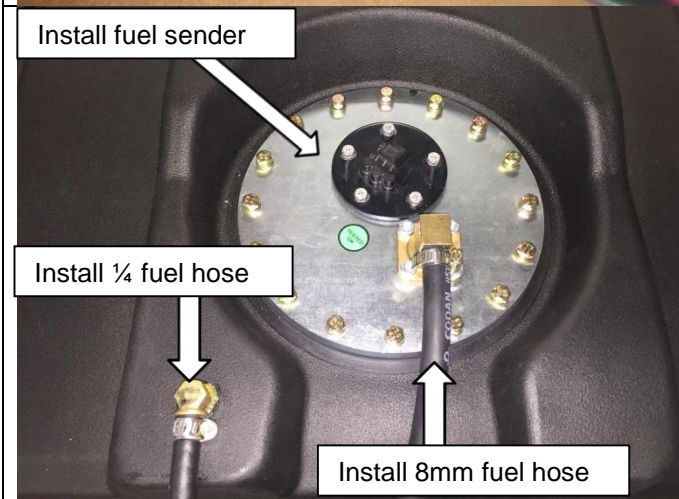
INSTALLATION PROCEDURE



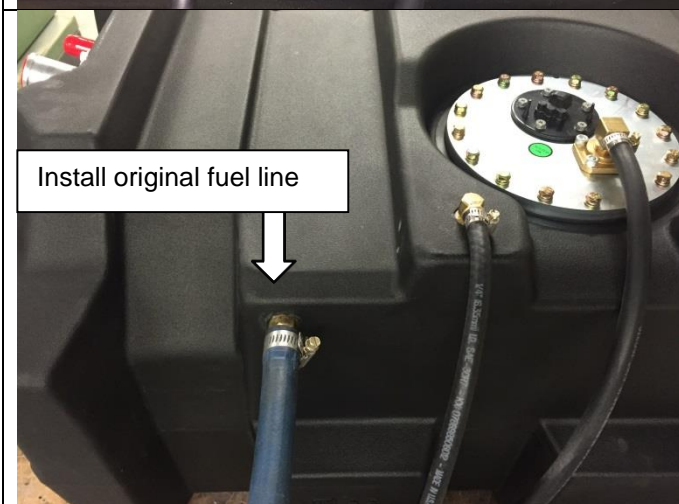
Install the new float arm into the original sender.
Secure the float arm into the sender using the other push on circlip supplied in the kit.



Note, the 8/2015 on model will not require this circlip fitted at the sender end of the arm.
On the 8/2015 on model, ensure that the sender arm protrudes past the white plastic so that it acts as a stopper at each end of the senders range of travel inside the brown plastic body of the sender.



Once the sender has had the new float arm and circlips installed, install the sender into the top of the Frontier Tank. Secure sender with the 5 x M5 x 12 screws supplied in the kit.
Install the 8mm fuel hose supplied in the kit to the brass fuel outlet in the Frontier tank, secure using clamp supplied in the kit.
Install the 1/4 fuel hose to the rollover valve in the Frontier Tank, secure using clamp supplied in the kit.

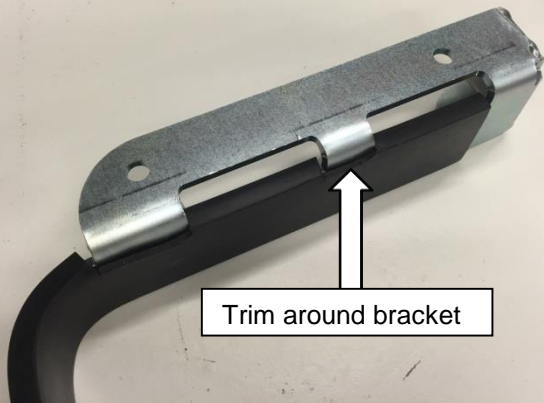


Install the original 16mm fuel breather hose removed and retained from the installation procedure to the breather on the front of the Frontier Tank.

INSTALLATION PROCEDURE



Install the 40mm rubber strap insulators to the inside of the 3 lower mounting straps as shown.

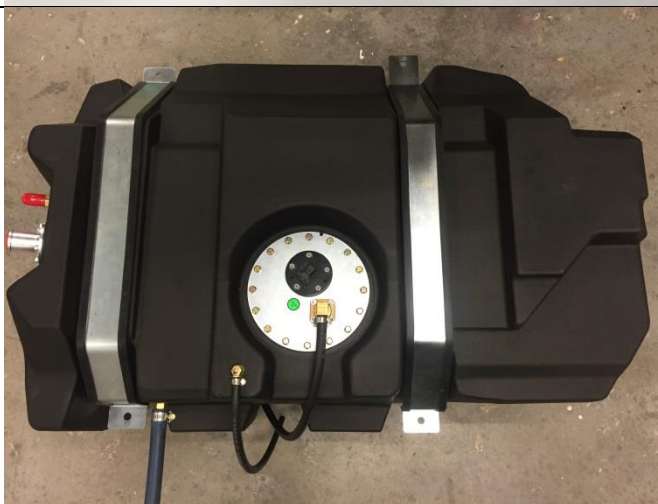


It is necessary to trim the rubber on one of the straps so that it neatly wraps around the bracket as shown.

Note, this strap is to be installed on the LH side of the tank.

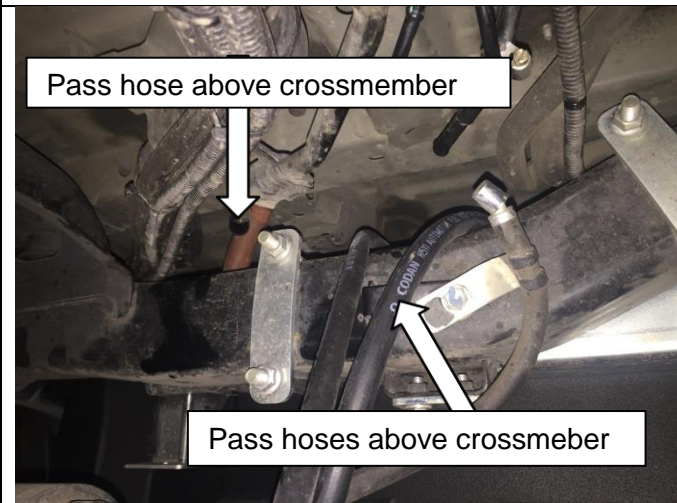


Install the 63mm rubber strap insulators to the inside of the 2 upper mounting straps as shown.



Place the 2 upper mounting straps on top of the Frontier Tank in readiness to raise the tank into the vehicle.

INSTALLATION PROCEDURE



Place the Frontier tank onto a jack, raise the tank into the vehicle.

Whilst raising the tank into the vehicle reconnect the fuel sender wiring.

Also whilst raising the tank into the vehicle, direct the hoses on the front of the tank over the top of the crossmember.



Position the tank so that the top mounting straps are aligned with the studs in the front and rear mounting brackets. Once aligned, continue to raise tank into position.



Once the tank is in position, install the 3 lower mounting straps.

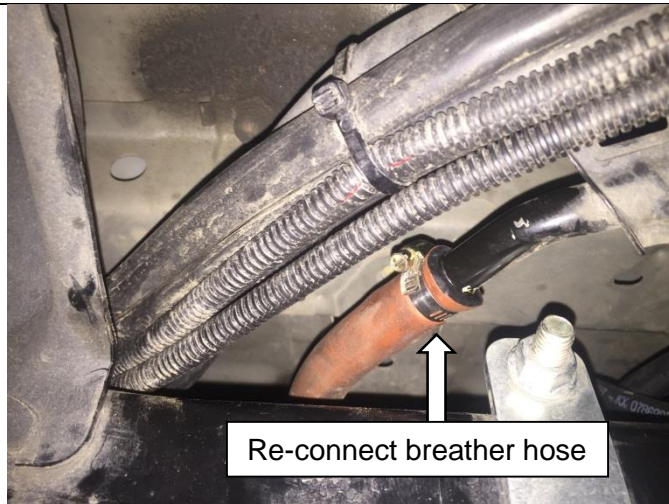
Ensure tank is correctly positioned and that no hoses or wiring are in any pinch points, and secure with the 6 x M10 x 1.0mm flange nuts supplied.



Reinstall the 35mm and 16mm fuel hoses from the tank to the steel fuel filler neck.

Secure with clamps retained in the installation process.

INSTALLATION PROCEDURE



Shorten the 16mm breather hose at the front of the tank by 35mm. Reinstall the hose onto the steel tube on the vehicle.

Secure with the clamps retained in the installation process.



Install the white plastic "Y" piece into the 2 x 6mm hoses located at the front of the tank. Shorten the ¼ fuel hose already connected to the rollover valve on the tank and connect it to the "Y" piece.

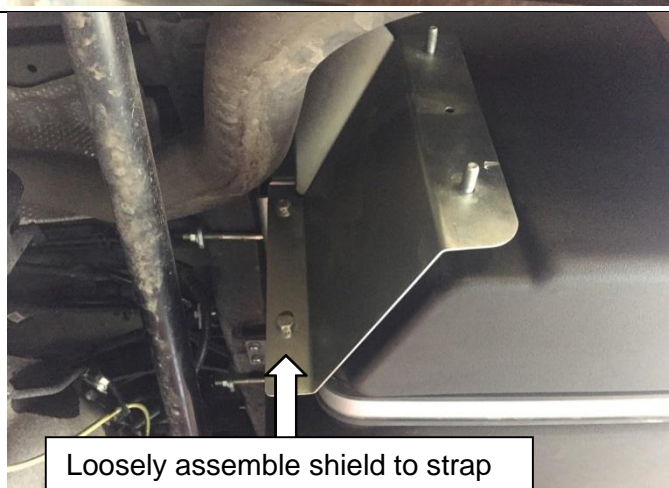
Secure all hoses with original clamps and new clamps supplied in the kit.

Shorten the 8mm fuel hose connected to the tank and connect it to the 8mm steel pipe on the vehicle. Secure with the clamps supplied in the kit.

NOTE; Models with 5 hoses, use section of original hose and loop between the 2 x 8mm steel pipes on the RH side of the vehicle.



Install the double side M8 vibration dampener to the M8 insert located on the LH side of the tank near the exhaust.



Install the small part of the heat shield with the 4 studs attached to the 2 holes in the LH lower mounting strap. Secure using 2 x M8 flange nuts supplied in the kit.

Start the 2 x M8 flange nuts but do not tighten at this stage.

INSTALLATION PROCEDURE



Pass the large section of heat shield up over the exhaust.

Position the shield over the studs on the rear mounting bracket, front section of heat shield and vibration dampener.

Secure using the M8 flange nuts supplied in the kit.

Tighten all heat shield securing nuts.



22 Nm



Add fuel to vehicle and run engine to check for leaks. Check fuel sender for correct operation.

Note, it may take several minutes or several cycles of the ignition for the gauge to show a true reading if the new fuel level is less than the previous level. It is possible it will still show the fuel level that was present before removing the original tank. This is normal operation as the fuel gauge is controlled by the vehicle's body control module.

Install Gauge Caution Sticker to RH upper side on the inside of the vehicles windscreen.

FITTED PRODUCT

