



Part Number: **TAD103**
Product **FRONTIER SERIES POLYMER FUEL TANK 130L**
Description:
Suited to **VOLKSWAGEN AMAROK 4X4 AUTO AND MANUAL**
vehicle/s:

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.
 - ◆ When working with fuel, ensure correct work practices and suitable PPE is employed.
 - ◆ Contain any spills and dispose of correctly.
 - ◆ 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

Corporate Head Office

42-44 Garden St
Kilsyth, Victoria
AUSTRALIA 3137

Tel: +61 (3) 9761 6622
Fax: +61 (3) 9761 6807

Australian enquiries
North & South American enquiries
Other international enquiries

sales@arb.com.au
sales@arbusa.com
exports@arb.com.au

www.arb.com.au

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
FUEL SENDER REMOVAL TOOLS	FUEL TRANSFER EQUIPMENT

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-TAD103BK

APPLICATION.	PART NO.	QTY	DESCRIPTION
FRONTIER SERIES FUEL TANK INSTALLATION	TAD103	1	POLYMER FUEL TANK
	BP80062	0.22	16MM FUEL HOSE
	BP80062	0.48	16MM FUEL HOSE
	BP80057	0.75	1/4 FUEL HOSE
	BP80055	2	#4 HOSE CLAMPS SUIT 1/4 " HOSE & 8MM HOSE
	BP80056	4	#8 HOSE CLAMPS SUIT 16MM HOSE
	BP80362	1	FUEL LINE AMAROK SUPPLY
	BP80363	1	FUEL LINE AMAROK RETURN
	BP80228	2	RETAINER FUEL LINE
	BP80102	1	ROLLOVER VENT CAP
	BP80160	1	GAUGE CAUTION STICKER
	BP80175	2	INSULATOR RUBBER 80X400
	BP80154	0.62	STRAP RUBBER 40MM
	BP80154	0.67	STRAP RUBBER 40MM
	BP80373	1	STRAP KIT TAD103
	BP80385	1	BRKT MOUNT FRONT TAD103
	BP80224	1	ARB FRONTIER STICKER
	3789512	1	INSTRUCTIONS

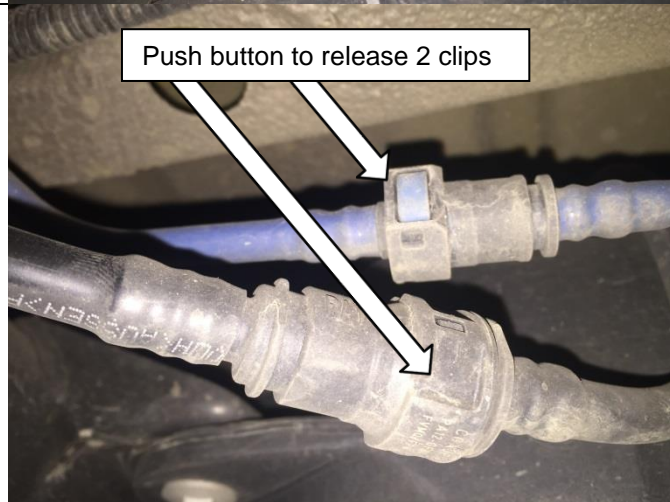
REMOVAL OF ORIGINAL FUEL TANK



Disconnect 38mm fuel filler hose, 16mm quick connect breather hose.

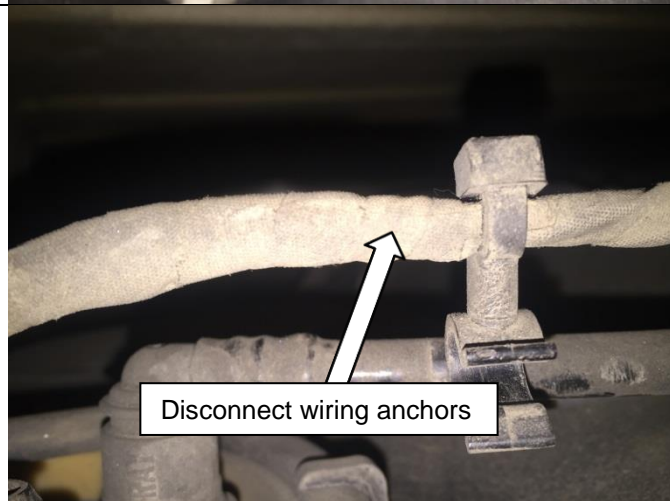
To disconnect breather hose squeeze 2 buttons on fitting to release hose.

Retain spring band clamp for installation procedure.



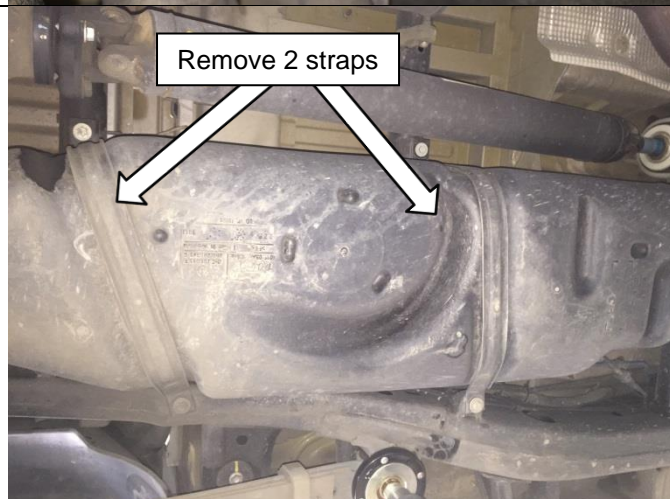
4CYL MODEL, Disconnect fuel supply and return hoses at LHF corner of fuel tank.

NOTE: These fuel lines can be discarded when the tank is removed.



Disconnect fuel sender wiring from the anchor point on the fuel lines and the round chassis rail above the fuel tank.

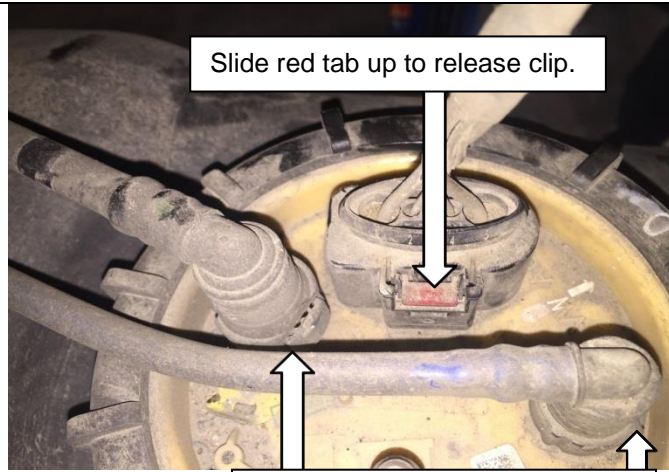
You will need this extra length to lower the tank and access the wiring connector.



Support the tank with a jack. Remove the bolts from the 2 mounting straps. Retain these bolts for the installation procedure.

Remove the bolt from the LHF corner of the tank.

REMOVAL OF ORIGINAL FUEL TANK



Slide red tab up to release clip.

Push tab inwards then pull pipe

When lowering the fuel tank disconnect the fuel sender wiring from the top of the sender.

Slide the red tab in the middle of the plug upwards to release it.

6CYL MODEL, Disconnect the fuel supply and return lines from the top of the sender. To release the lines squeeze each button on the end of the fitting.

Pull the pipe and the pipe will slide off the fitting.



Remove this ring

Remove and discard 4 cyl fuel lines.

Remove the fuel sender retaining ring from the tank by rotating anticlockwise.

This ring can be difficult to remove and may require mechanical assistance. Various tools can be used for this, options include:

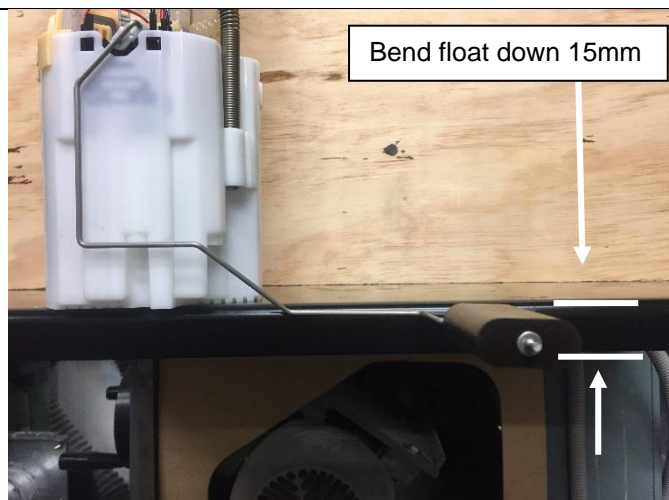
- Large pliers or filter wrench
- Sender tool
- Hammer and screwdriver



Remove the fuel sender from the tank.

Retain sender and gasket.

INSTALLATION PROCEDURE



Bend float down 15mm

Place the fuel module on a bench with the float hanging over the edge. Note that the top of the float is level with the top of the bench.

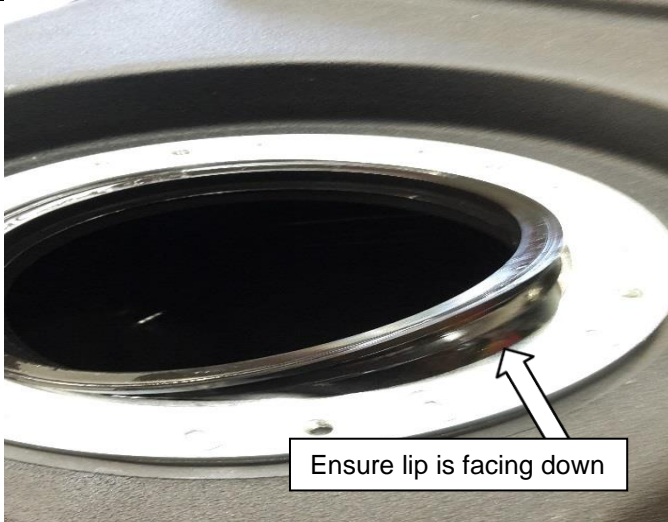
Bend the float down so that the top of the float sits 15mm below the top of the bench.

Note: Photo shows float in original position.

INSTALLATION PROCEDURE

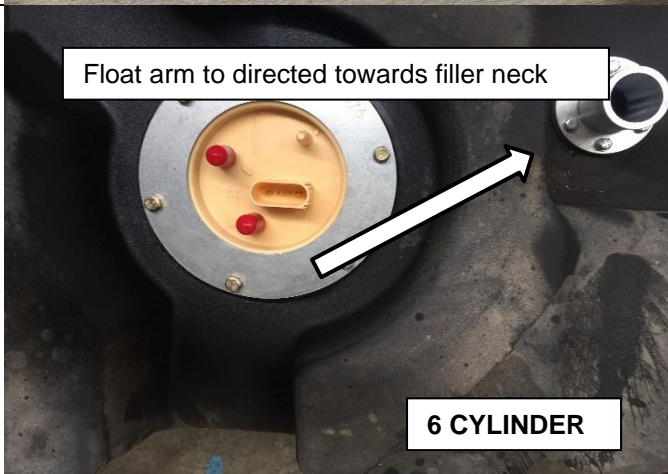


Install fuel sender gasket retained from original tank removal into the groove in the fuel sender mounting plate on the Frontier tank.



Note, the gasket has a lip on the outer diameter.

Ensure this lip is installed facing downward and is not folded or crimped.

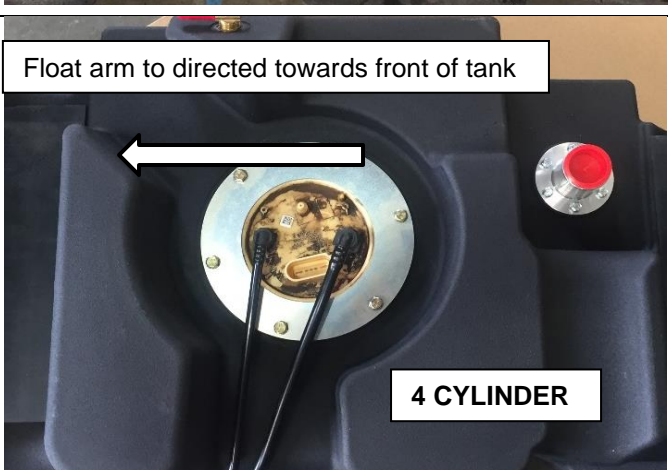


6CYL MODEL,

Install fuel sender into the Frontier tank. Push sender down firmly against sender seal.

Ensure that the float is directed towards the filler neck on the tank.

Install sender retaining plate and secure using the 6 x M6 bolts supplied.



4CYL MODEL,

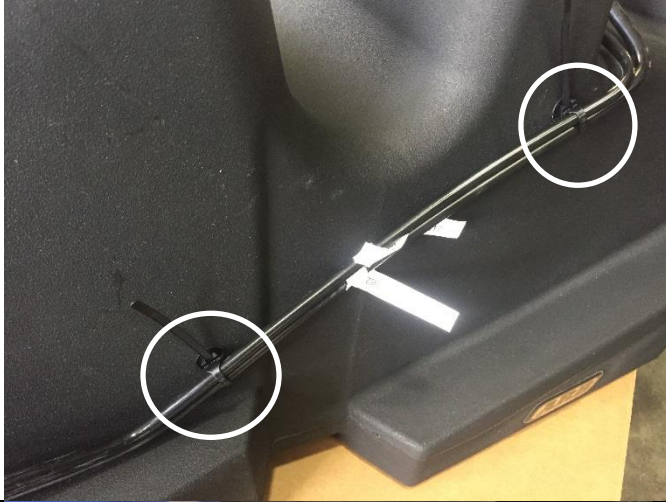
Install fuel sender into the Frontier tank. Push sender down firmly against sender seal.

Ensure that the float is directed towards the front of the tank.

Install sender retaining plate and secure using the 6 x M6 bolts supplied.



INSTALLATION PROCEDURE



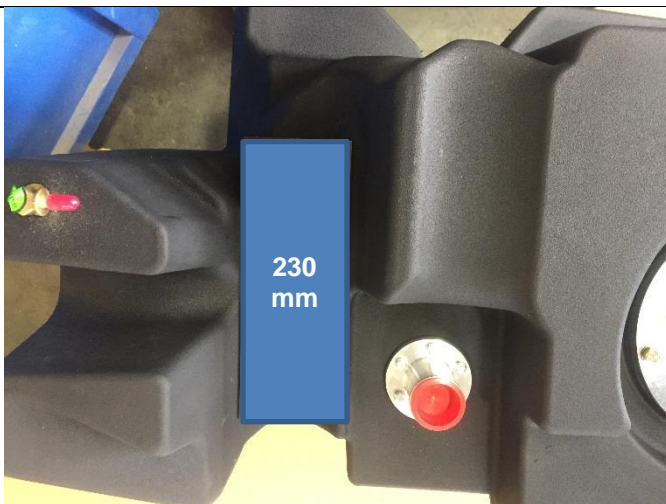
4CYL MODEL, Insert the 2 xmas tree cables ties supplied in the kit into the 2 brass threads on the side of the tank.

Secure the 2 fuel lines to the cable ties.



Install the 1/4 fuel hose supplied in the kit onto the rollover valve mounted in the rear of the tank.

Secure the hose with the hose clamp supplied in the kit.



Cut one of the rubber pads to 120 & 280mm length.

Cut the other rubber pad to 170 & 230mm length.

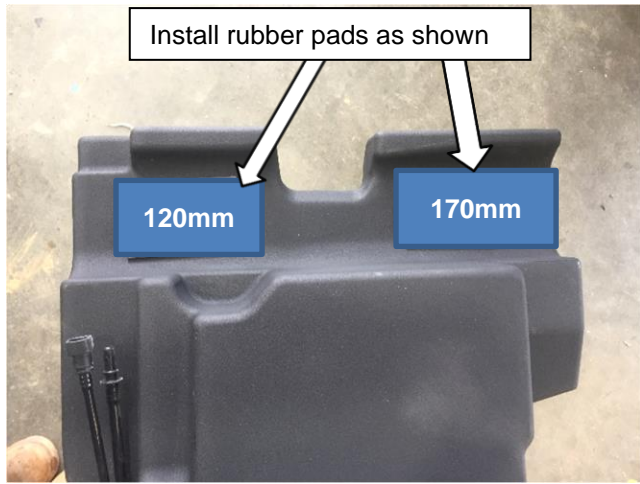
Remove the white backing from the 6mm thick rubber pads supplied in the kit and install the rubber pads onto the top of the tank in the location shown.

The 230mm long pad will be placed on the flat section at the rear of the tank as shown.



The 280mm long pad will be placed on the round section in the centre of the tank as shown.

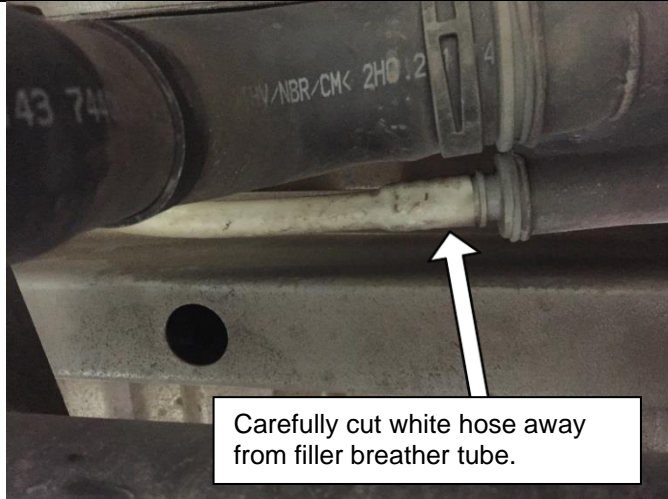
INSTALLATION PROCEDURE



The 120mm and 170mm pads will be placed on the flat section at the front of the tank as shown.



Install the rubber extrusion supplied in the kit onto the inside face of the new mounting straps.



Carefully cut and remove the white plastic filler breather hose away from the barb on the end of the breather tube.



Install the 480mm long piece of 16mm fuel hose to the barb on the breather tube. Secure using the hose clamp supplied in the kit.

INSTALLATION PROCEDURE

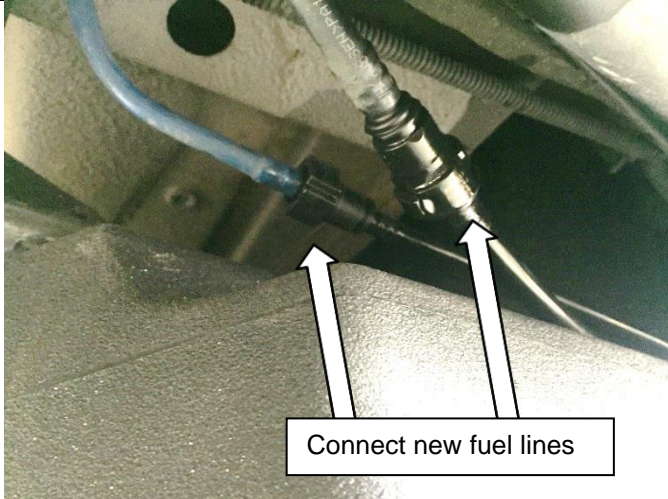


Place the Frontier fuel tank onto the jack and raise into position.

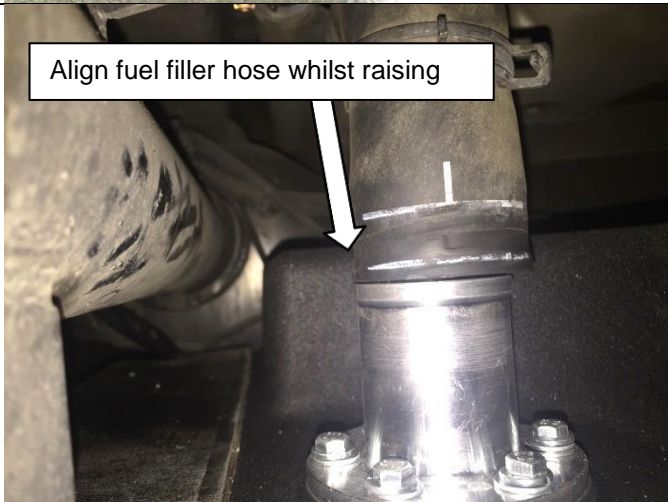
Whilst raising the tank reconnect the fuel sender wiring.

6CYL MODEL, whilst raising the tank into position reconnect the fuel lines to the fuel sender.

Also whilst raising the tank into position route the rollover breather hose over the top of the chassis rail and directed towards the fuel filler neck.



4CYL MODEL, Also whilst raising the tank into position, connect the new fuel lines at the LHF corner of the tank.

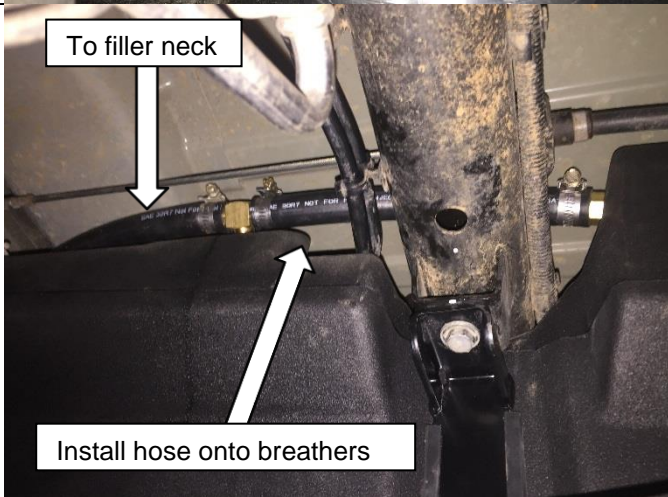


Also whilst raising the tank into position align the fuel filler hose onto the filler neck on the tank.

Install new mounting straps and secure using bolts retained during removal procedure.

 22 Nm.

Secure the filler hose to the filler neck on the Frontier tank using the springband clamp retained in the removal procedure.



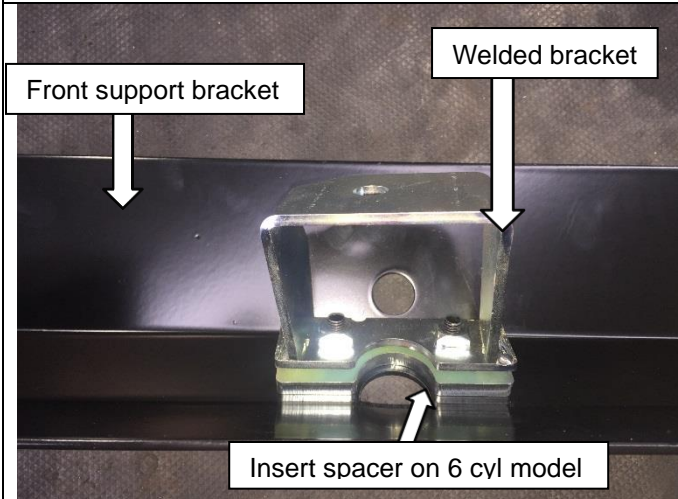
Connect the hose from the filler breather tube to the "T" piece barb facing the rear of the vehicle on the RH side of the tank.

Connect the 220mm piece of 16mm fuel hose from the other side of the barb to the brass elbow at the front of the tank.

Secure using the clamps supplied in the kit.

Route the rollover breather hose towards the top of the filler neck and secure.

INSTALLATION PROCEDURE



Pre assemble welded bracket with captive nuts into large front support bracket.

4CYL MODEL, Align half-moon cut out in welded bracket with large hole in black support bracket. Secure using 2 M8 x 30 setscrews and flat washers.

6 CYL MODEL, Insert 8mm spacer between welded bracket and large black bracket.

Leave these M8 bolts loose until further in the installation procedure.



Insert nut plate with M8 nut into bracket below centre bearing.

Align the nut with the hole on the LH side of the centre bearing bracket.



Install front mounting bracket around the front of fuel tank.

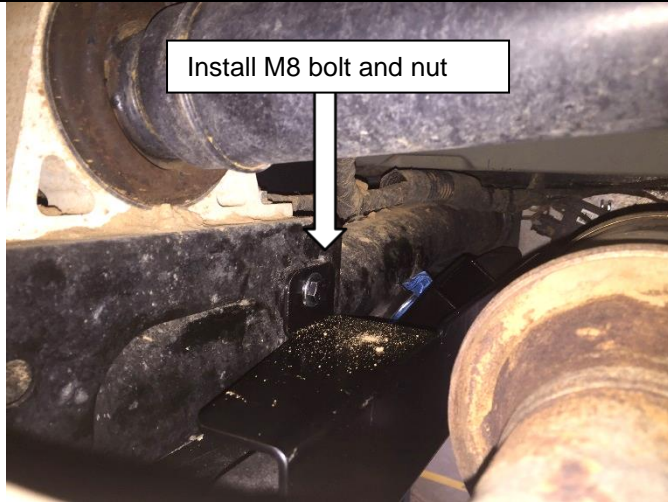


Secure front mounting bracket to chassis using the M10 x 1.5 flange nut supplied in the kit to the M10 stud connected to the chassis.

Position bracket so that gaps on underside of bracket to tank are even.

Tighten 1 x M10 and 2 x M8 bolts.

INSTALLATION PROCEDURE



Install M8 bolt and nut

Also secure front mounting bracket to centre bearing support bracket using the M8 x 20 setscrew and M8 x 25 flat washer inserted into the M8 nut plate installed previously.



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

