



Part Number: TAD123
Product FRONTIER SERIES POLYMER FUEL TANK 138L
Description:
Suited to NAVARA NP300 ALL MODELS
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.
- ◆ 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
FUEL SENDER REMOVAL TOOLS	FUEL TRANSFER EQUIPMENT
ANGLE GRINDER/HACKSAW	EMERY PAPER/FILE

HAVE AVAILABLE THESE SAFETY ITEMS WHEN FITTING PRODUCT:

Protective eyewear		Hearing protection	
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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.

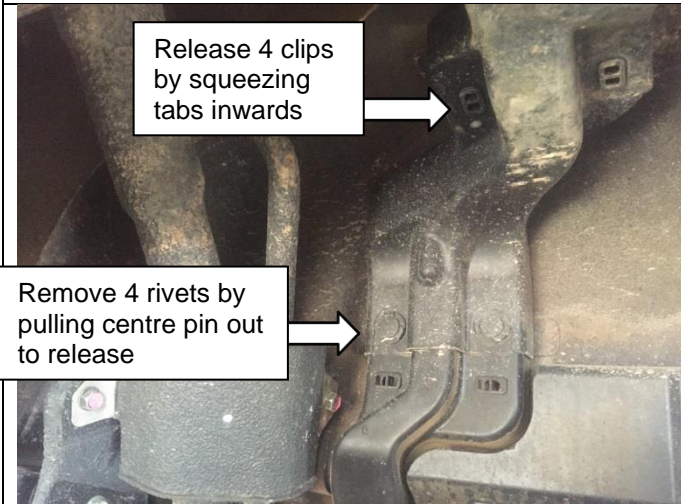
FASTENER TORQUE SETTINGS:

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

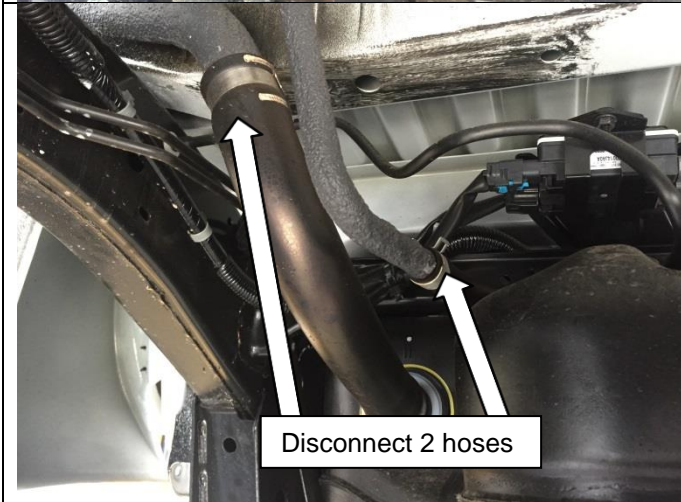
PARTS LISTING-TAD123K

APPLICATION.	PART NO.	QTY	DESCRIPTION
FRONTIER SERIES FUEL TANK INSTALLATION	TAD123	1	POLYMER FUEL TANK
	BP80057	0.75	1/4 FUEL HOSE
	BP80102	1	ROLLOVER VENT CAP
	BP80055	2	CLAMP HOSE #4 SUIT 1/4 " & 8MM HOSE
	BP80062	0.45	FUEL HOSE 16MM
	BP80056	2	CLAMP HOSE #8 SUIT 16MM HOSE
	BP80189	1	F/LINE BLANK 9.49
	BP80188	1	STRAP KIT NAVARA
	BP80174	1	INSULATOR RUBBER 80X320MM
	BP80175	1	INSULATOR RUBBER 80X400MM
	BP80160	1	LABEL GAUGE CAUTION
	BP80154	0.38	RUBBER EXTRUSION 40MM
	BP80154	0.75	RUBBER EXTRUSION 40MM
	BP1011	1	M8 X 20 SET SCREW
	BP1148	1	M8 NYLOCK NUT
	BP1092	1	M8 WASHER
	3789474	1	INSTRUCTIONS
	BP80224	1	STICKER BUMPER ARB FRONTIER

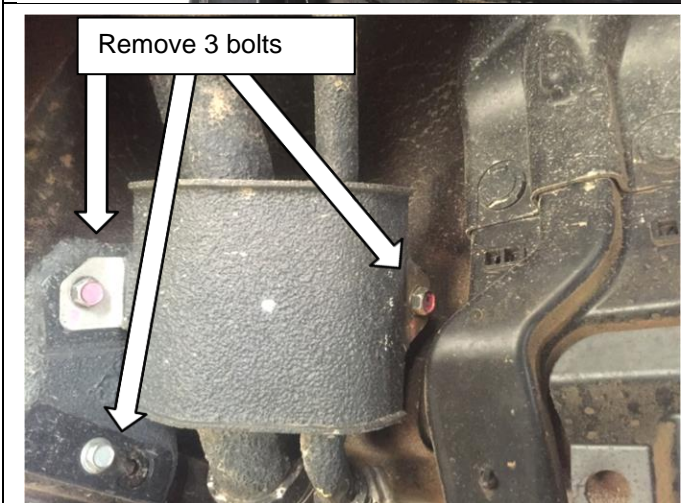
REMOVAL OF ORIGINAL FUEL TANK



Remove the 2 black plastic trims from the LHR wheel arch by first removing the 4 plastic rivets. To release the trim squeeze the 4 spring clips inwards and pull the trim gently.



Disconnect the fuel filler and breather hoses from the steel filler neck. Retain the hose clamp from the large filler hose.



Remove 2 bolts from the small metal shield around the filler neck in the LHR wheel arch. Remove the 1 bolt securing the filler neck to the vehicles body. Retain the bolts and shield for the installation process. Remove the filler neck assembly from the vehicle.



Measure 70mm from the edge of the filler mounting bracket and cut both of the 35mm and 16mm tubes, using an angle grinder or hacksaw. Using a file or emery paper remove any burrs from the cut pipe.



REMOVAL OF ORIGINAL FUEL TANK

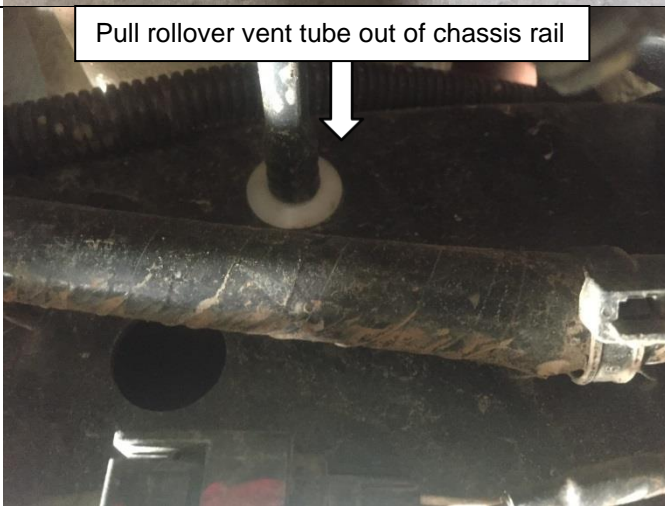
Clean rubber from filler neck and breather tube.



Clean the rubber coating from the outside of the tube so that they can accept hoses when reassembled.

A sharp knife or scraper will remove the bulk of the rubber coating and then clean remainder with a file or emery paper.

Pull rollover vent tube out of chassis rail



Remove rollover vent tube from the chassis rail by pulling outward. The tube is located on the inside of the chassis rail near the filler neck.

Remove 4 bolts securing the stone shield and remove stone shield.



Position a jack underneath the fuel tank.

Remove the 2 mounting bolts from the front strap and remove strap.

Remove the 1 mounting bolt from the rear strap, swing strap down and then remove other end of the strap from the keyway in the chassis.



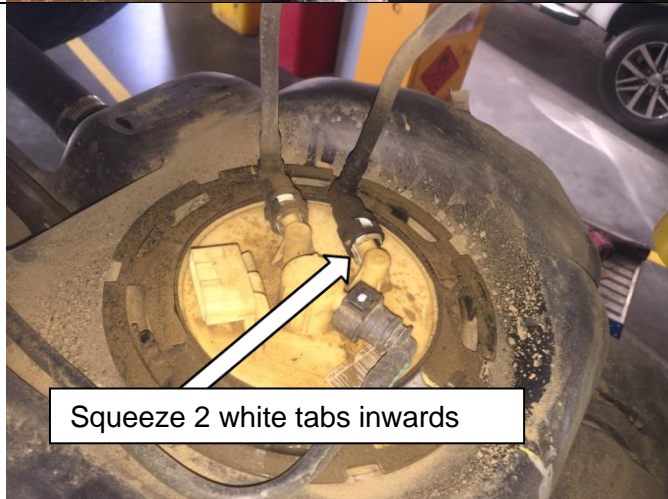
REMOVAL OF ORIGINAL FUEL TANK



Whilst lowering tank disconnect the sender wiring from the top of the tank.

NOTE; The fuel sender loom is very short, disconnect the sender wiring before lowering the tank too far.

To disconnect the plug press the button in the middle of the plug.



Continue to lower the fuel tank.

Disconnect fuel lines by squeezing the white clips inwards then pulling fuel line away from the sender.



Remove the 2 white fuel line retaining clips from the fuel lines by gently expanding the tabs with a small screwdriver and sliding them down the barb.



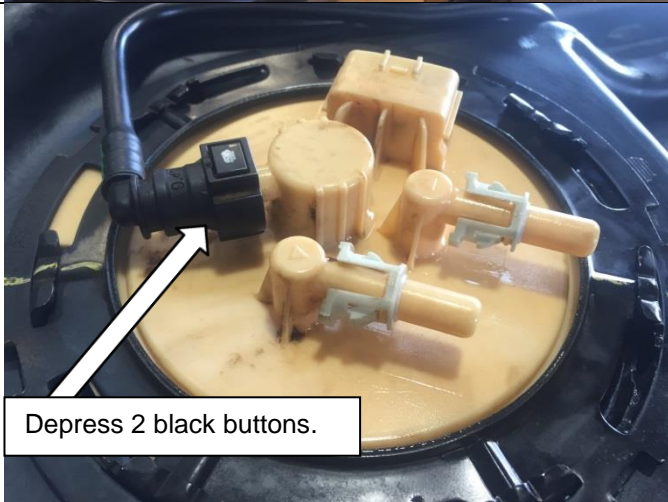
Re insert the white retaining clips into the fuel lines on the vehicle.

Ensure that the tabs are positioned in the cut outs as shown.

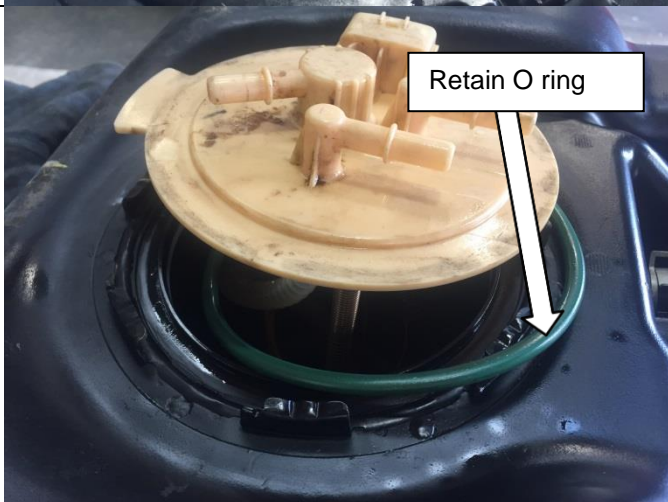
REMOVAL OF ORIGINAL FUEL TANK



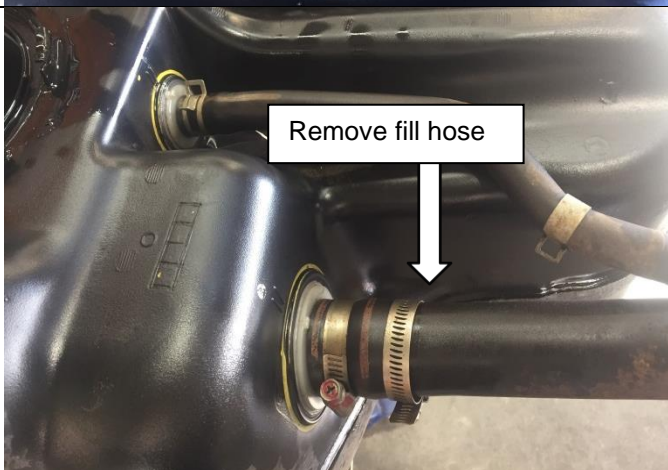
Remove shield from top of cross-member at the front of the fuel tank.
Remove the shield by removing the 4 x M8 bolts.



Remove the rollover breather tube from the fuel sender. To remove the tube depress the 2 black buttons and pull.

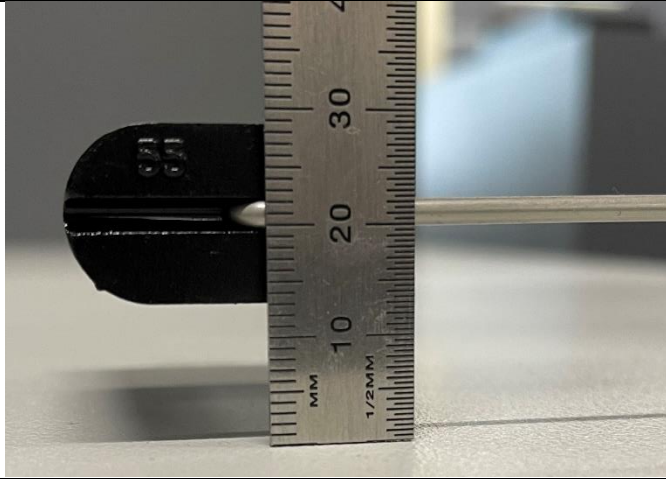


Remove metal retaining ring from sender by rotating anti clockwise.
Remove fuel sender and O ring seal from the fuel tank. Retain sender and seal for the installation process.



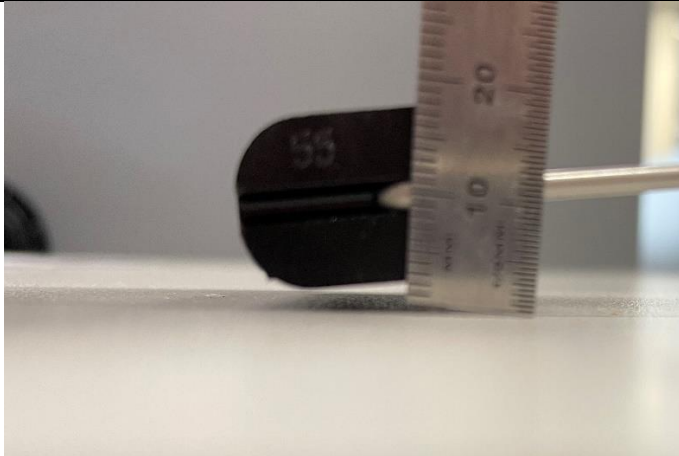
Remove the 35mm fuel filler hose from the fuel tank. Retain hose and clamps.

INSTALLATION PROCEDURE

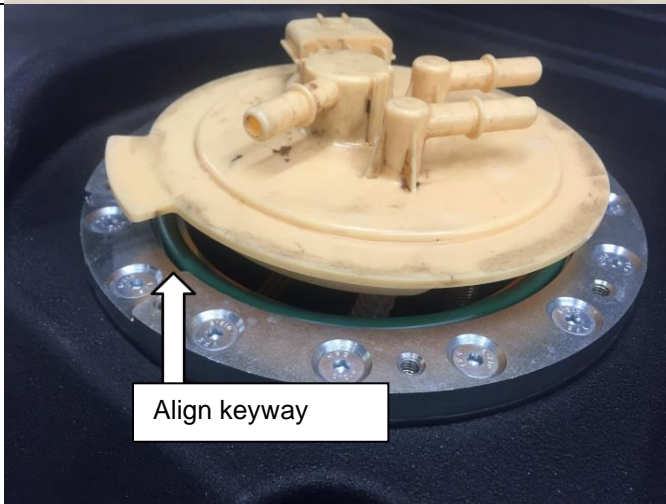


For NP300 it is necessary to modify the fuel sender to allow the gauge to read the lower portion of the tank.

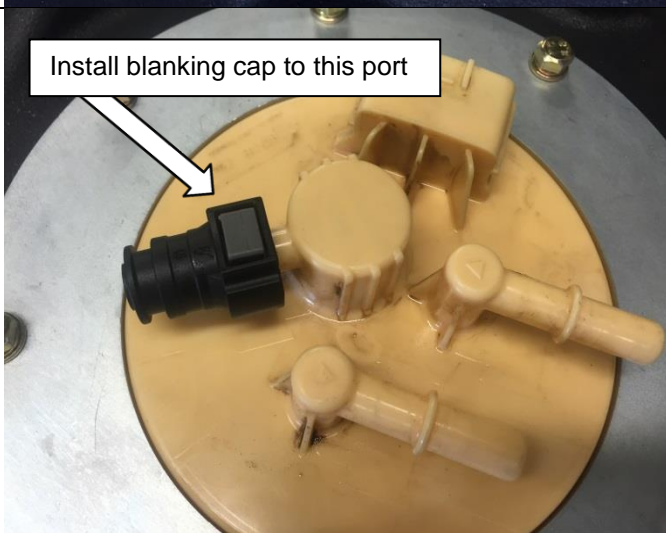
This image shows the fuel sender float at standard height – approximately 13mm from the bottom.



Bend the float arm down so that the float is approximately 1 – 2mm from the bottom.



Install the o ring retained in the removal procedure into the groove in the fuel sender sealing flange. Install the fuel sender into the Frontier tank. Align the tab on the outer diameter of the fuel sender with the cut out in the fuel sender flange on the top of the tank.



Once the fuel sender is correctly positioned. Install the fuel sender retaining plate over the top of the sender and secure using the 8 M6 x 12 bolts supplied.



9Nm.

Ensure correct alignment of sender in keyway whilst tightening to prevent damage.

Install the quick connect blanking cap supplied in the kit to the rollover valve in the fuel sender module.

INSTALLATION PROCEDURE



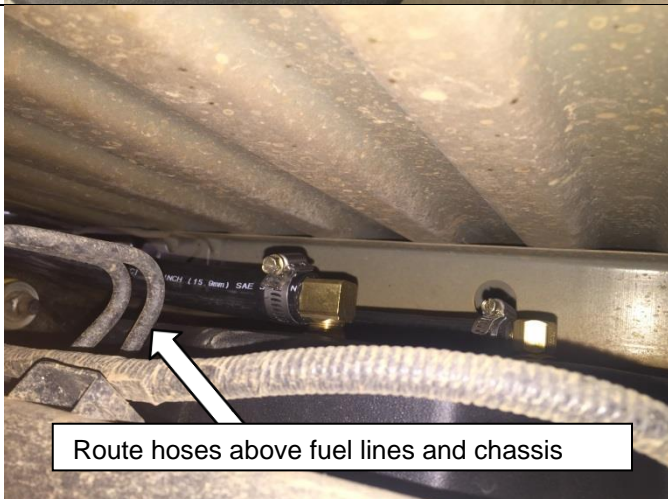
Remove the white paper backing from the 400mm long rubber insulator and install on the front of the tank as shown.



Remove the white paper backing from the 320mm long rubber insulator and install on the rear of the tank as shown.



Install the 16mm and $\frac{1}{4}$ fuel hoses to the filler breather and the rollover valve on top of the new tank. Secure these hoses using the clamps supplied in the kit.



Raise the fuel tank into the vehicle.
Whilst raising the fuel tank route the $\frac{1}{4}$ and 16mm fuel hoses over the top of the brake lines near the rear crossmember.
Connect the 2 fuel supply and return fuel lines still attached to the vehicle to the fuel sender and ensure that the retaining clips have engaged correctly.
Reconnect fuel sender wiring.

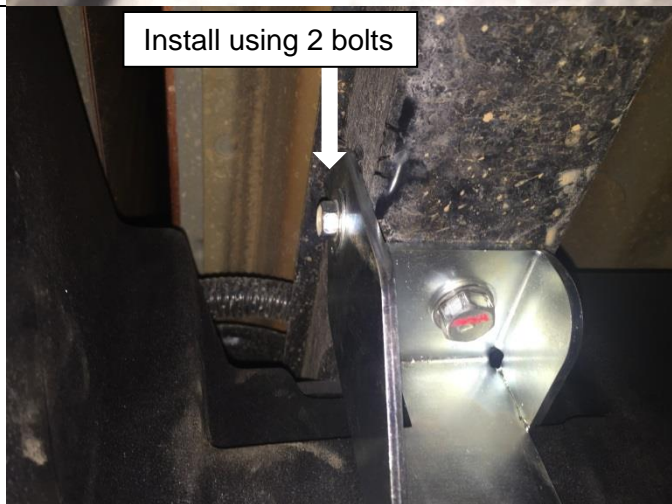
INSTALLATION PROCEDURE




Install the rubber insulation to the inside face of the tank mounting straps.



Once the tank is in place insert the new rear mounting strap into the keyway in the chassis.

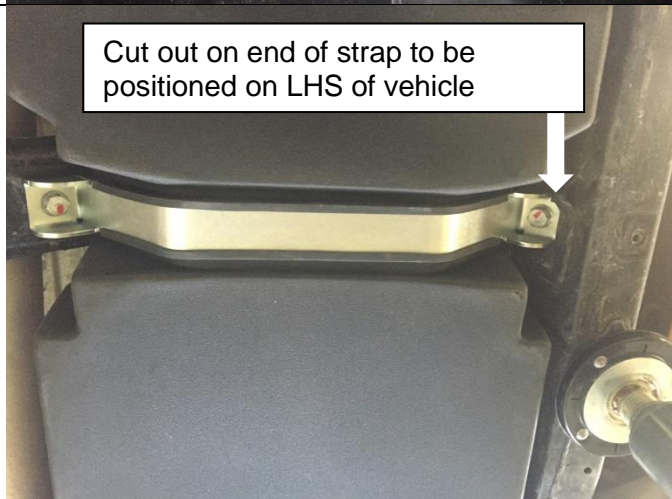


Secure other end of strap with the original bolts retained in the tank removal procedure.

 44Nm M10


Re-install M8 bolt into thread that was securing the shield.

 22Nm M8

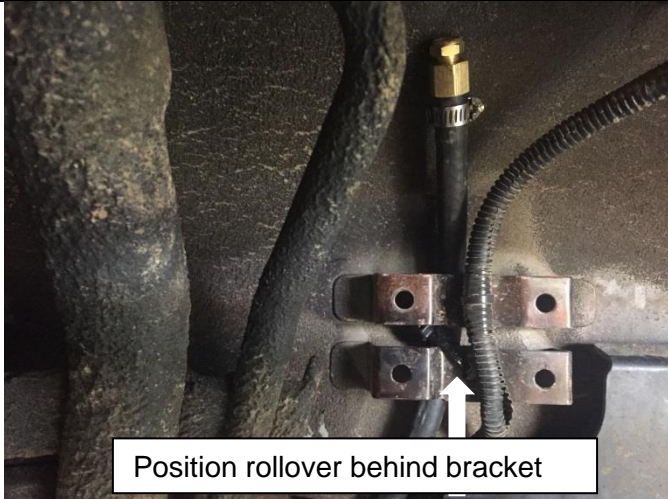


Position the front strap with the cut out towards the LH side of the vehicle.

Secure using the 2 bolts retained in the removal procedure.

 44Nm M10

INSTALLATION PROCEDURE



Position the rollover breather hose behind the bracket that mounts the plastic trims in the LHR wheel arch. Secure the hose and install the rollover vent into the hose. Secure the vent with the hose clamp supplied in the kit.



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



Re-install fuel filler neck into the vehicle. Connect the filler hose and fast fill breather hose to the steel filler neck. Secure the 35mm hose using the original hose clamp retained in the removal procedure. Secure the 16mm hose with the hose clamp supplied in the kit.

Secure the filler neck using the bolt retained in the removal procedure.



9Nm



Re-install the small metal shield over the filler neck. Re-install the 2 plastic trims over the top of the wiring harness and rollover vent.



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

