



Part Number: **TAD117**

Product
Description: **FRONTIER SERIES POLYMER FUEL TANK 100L**

Suited to
vehicle/s: **MITSUBISHI PAJERO SPORT 2017 ON ALL DIESEL MODELS
2022 VEHICLES ON, NOTE EXTRA FITMENT DETAILS ON PP. 5 & 7**

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

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 affected 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
M5	2.1Nm	1.6lbft
M6	9Nm	7lbft
M8	22Nm	16lbft
M10	44Nm	32lbft
M12	77Nm	57lbft

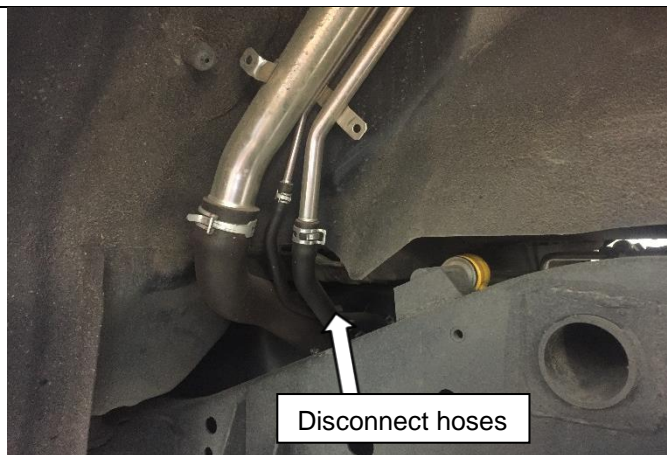
PARTS LISTING TAD117		
PART NO.	QTY	DESCRIPTION
TAD117	1	POLYMER FUEL TANK
BP80378	1	STRAP KIT TAD117
BP80381	4	INSULATOR 250X150X3
BP80240	1	INSULATOR 80X250X3
BP80241	1	INSULATOR 80X300X3
BP80173	1	INSULATOR 80X300X6
BP80380	1	FLOAT ARM SUIT TAD117
BP80441	1	O RING BS427
BP80094	6	M5 X 12 SEMS PAN HEAD
BP80224	1	STICKER BUMPER ARB FRONTIER
BP80324	1	CIRCLIP
BP80160	1	GAUGE CAUTION STICKER
3789836	1	INSTRUCTIONS

REMOVAL OF ORIGINAL FUEL TANK



Remove the black plastic trim from the LHR wheel arch by removing the plastic trim clips.

To release the trim clips, pull the inner clip part of the way out, then pull outer clip.



Disconnect the 35mm fuel filler hose, the 16mm breather hose and the 6mm rollover vent hose from the steel filler neck. Retain the hoses and clamps for the installation process.



Remove the two bolt covers for the seat mounts and scuff plate.



Remove the four bolts/nuts retaining the LHR seat and disconnect the wiring harness to the seat.

Remove the seat from the vehicle.

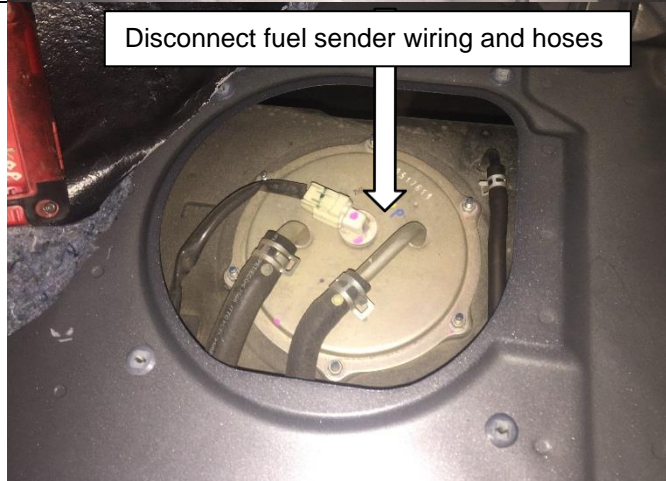
REMOVAL OF ORIGINAL FUEL TANK



Lift up the carpet to gain access to the fuel sender cover.

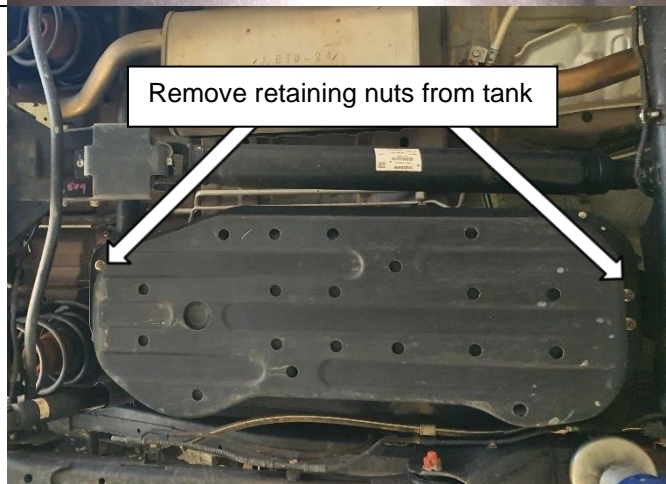
WARNING: THE EDGES ON THE COVER ARE VERY SHARP!!

Remove the four screws from the cover and remove cover.



Disconnect the sender wiring and two fuel hoses from the fuel sender.

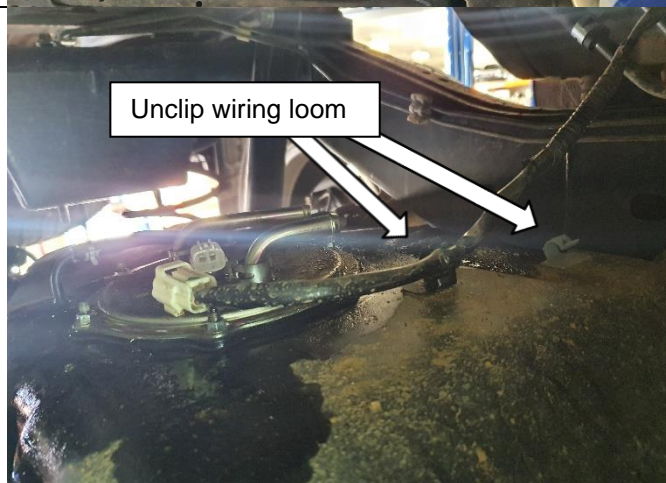
Retain clamps for the installation procedure.



PRE-MY22 VEHICLES

Place a jack or support under the tank, remove the two nuts at the rear of the tank and the two at the front of the tank. Retain the nuts for the installation process.

Lower tank out of vehicle.



MY22 VEHICLES ON

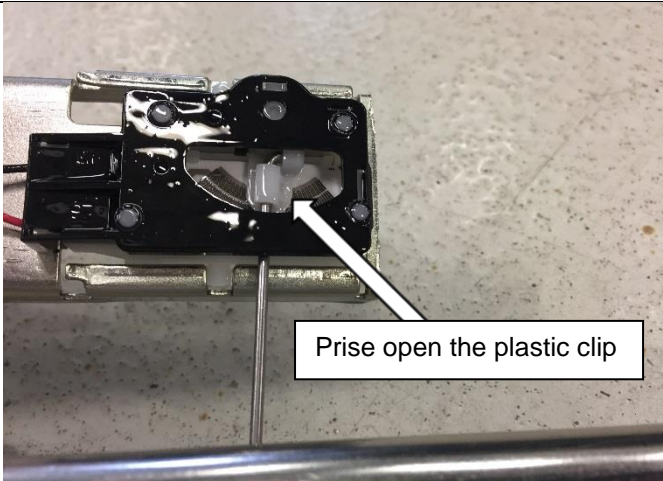
After removing the four retaining nuts, lower the tank approx. 100mm to gain access to the fuel sender wiring to unclip from fuel tank at two locations.

Lower tank out of vehicle.

FRONTIER TANK PREPARATION



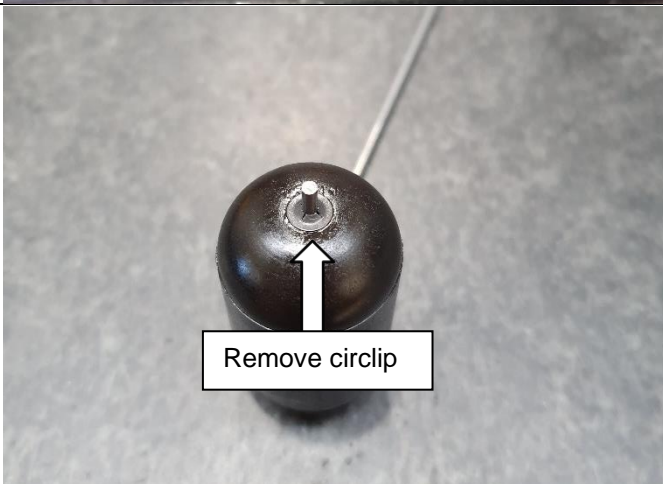
Remove and discard the six nuts retaining the fuel sender, remove the sender from the original tank.



After removing the fuel sender from the original tank, it is necessary to carry out a modification prior to installing it into the new tank.

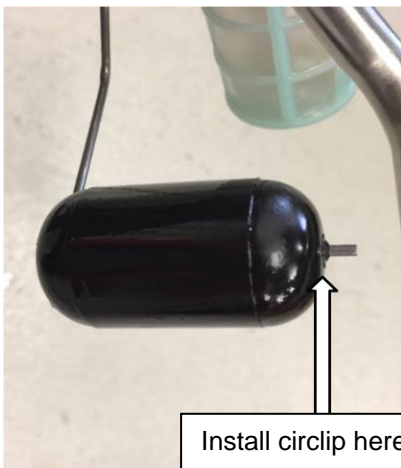
Begin by first removing the wire float arm from the sender by gently prising open the white plastic clip and pulling the wire out of the retainer.

Discard the float arm.



Remove the float from the float arm by removing the circlip on the end.

Retain the float for the installation process



Install the float onto the new float arm, secure it in place with the push on circlip supplied.

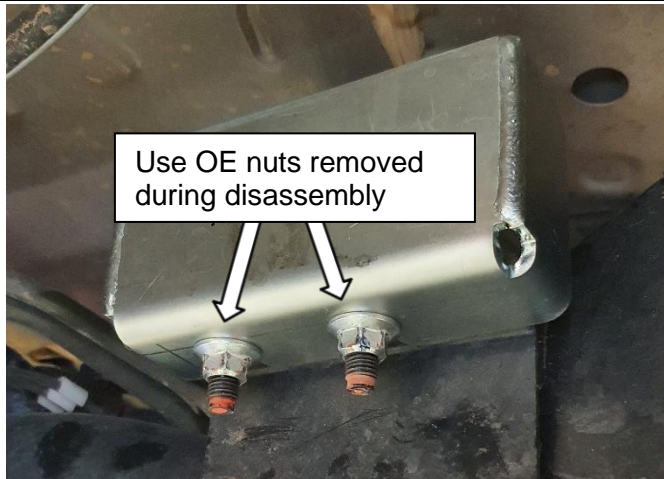
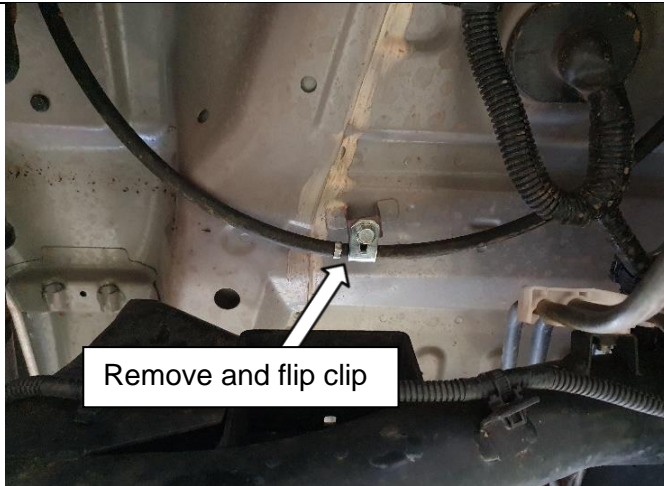
Install the new float arm into the fuel sender.

FRONTIER TANK PREPARATION

*** IMPORTANT ***

MY22 VEHICLES ON

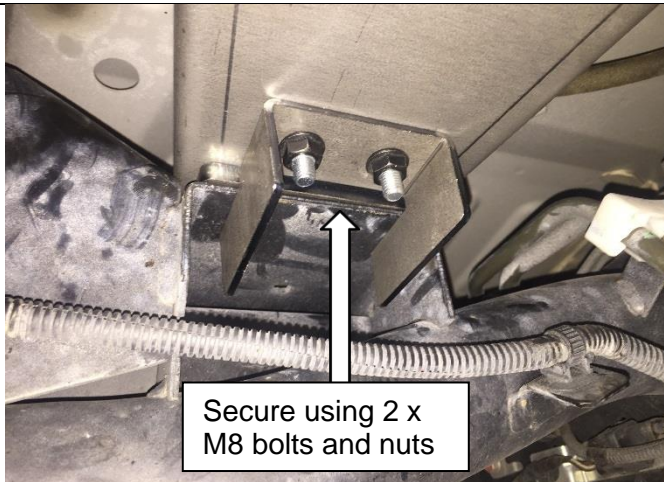
Before fitting the front mounting bracket, it may be necessary to remove and flip the P-clip retaining the transmission shifter cable to prevent it rubbing on the edge of the front mounting bracket.



Pass the front mounting bracket supplied in the kit over the top of the front tank mount.

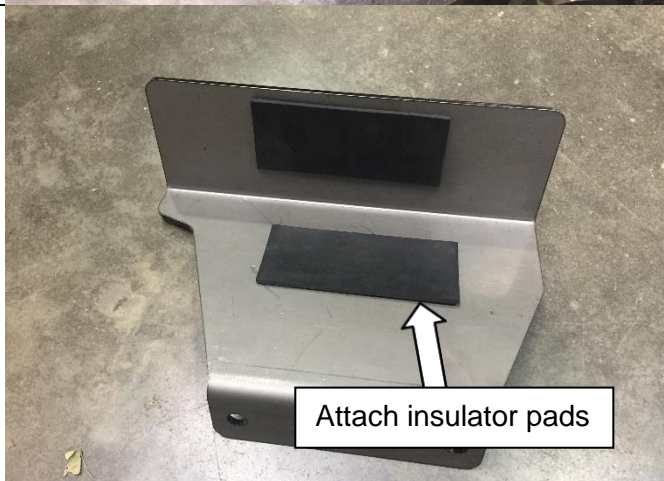
The end of the bracket with the studs should face the front of the car.

Push the bracket all the way forward on the slots and secure using two nuts removed in the disassembly procedure.



Clamp the front tank mount bracket to the chassis using the U-shaped bracket supplied in the kit.

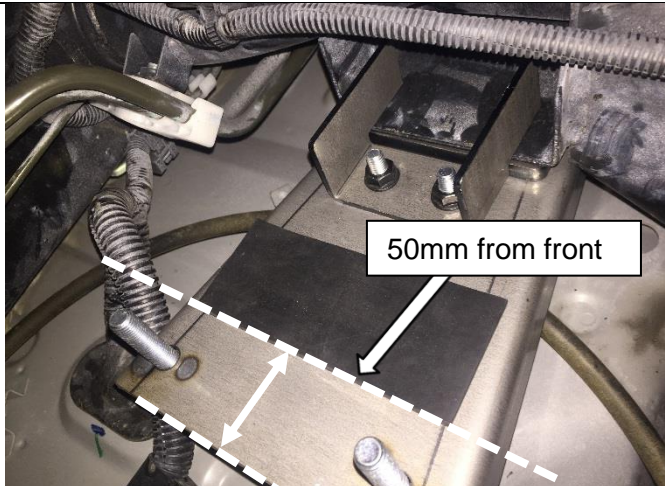
Secure the bracket using two M8 x 20 bolts, washers and M8 Nyloc nuts supplied in the kit.



Cut the **300 x 80 x 3mm** insulator pad supplied in the kit in half.

Remove the white paper backing from the rubber and attach the two pieces onto the rear tank bracket as shown.

FRONTIER TANK PREPARATION



Cut the **250 x 80 x 3mm** insulator pad supplied in the kit in half.

Remove the white paper backing from one half of the pad and attach onto the front tank bracket as shown.

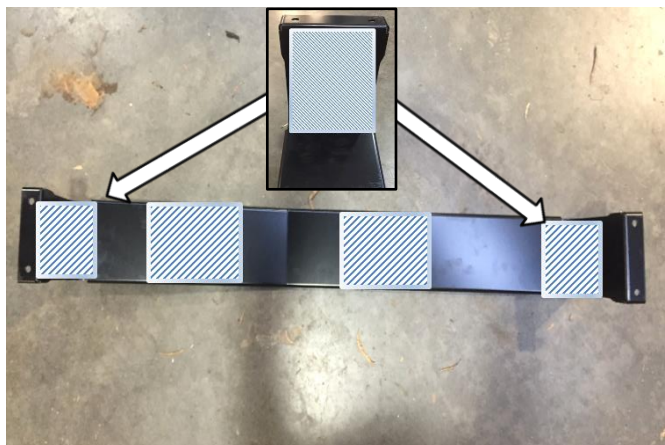
Ensure the edge of the rubber is positioned 50mm from the front edge of the bracket.



Attach the other half of the **250 x 80 x 3mm** insulator pad to the front area of the tank as shown.



Remove the paper backing from the **300 x 80 x 6mm** insulator pad and attach to the tank in the location shown.

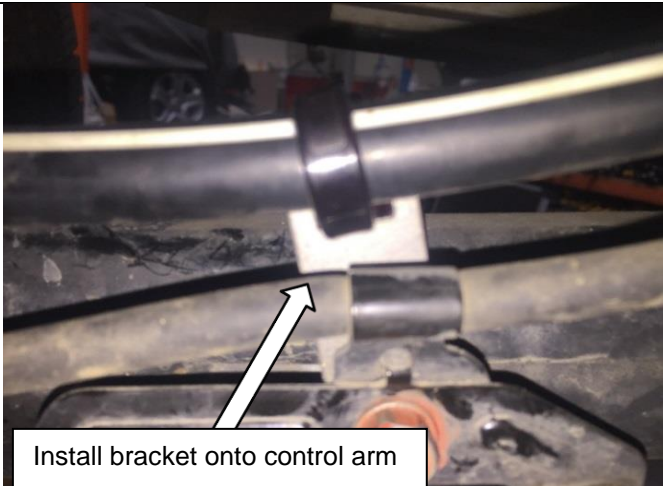


Remove the white protective backing from the four pieces of **250 x 150 x 3mm** insulator pad.

Install the insulator pads into the large support bracket as shown.

NOTE: At each end of the large support, ensure the insulator covers the upright face and radius as shown in breakout image.

FRONTIER TANK PREPARATION



Install bracket onto control arm

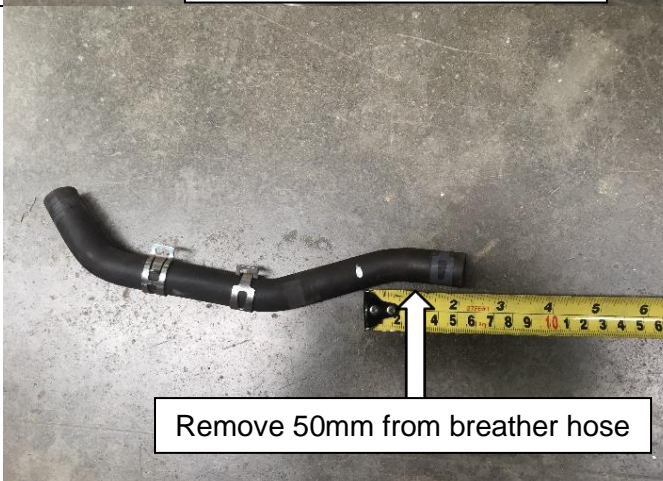
Install the small bracket with one round hole and one slot onto the LHR suspension control arm under the bolt that secures the ABS loom.

Secure the handbrake to the newly installed bracket.



Remove 50mm from fill hose

Cut 50mm from the 35mm filler hose as shown.



Remove 50mm from breather hose

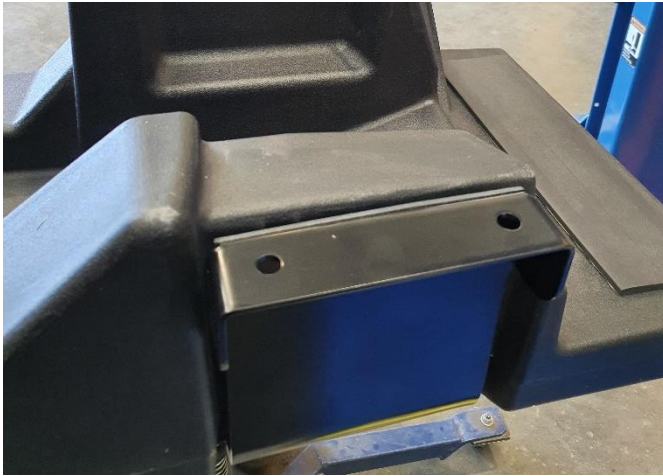
Cut 50mm from the 16mm breather hose as shown.



Remove 300mm from rollover hose

Cut 300mm from the 6mm rollover hose as shown.

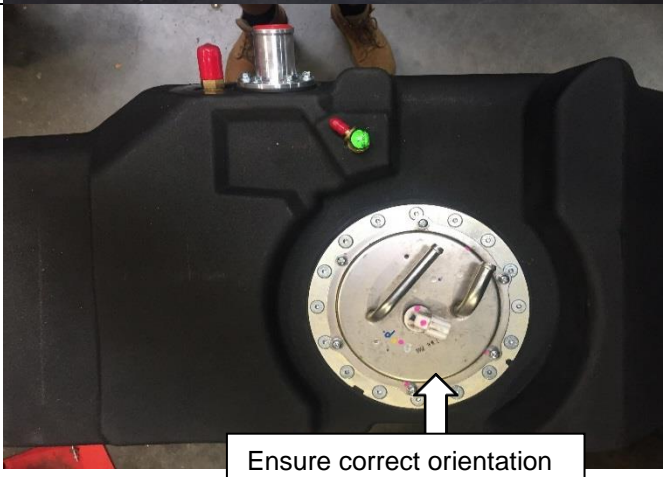
FRONTIER TANK PREPARATION



Place the Frontier Tank into the large support bracket with the front of the bracket lining up with the top surface of the front of the tank.



Place the O-ring supplied in the kit on the machined surface of the fuel sender mounting plate.



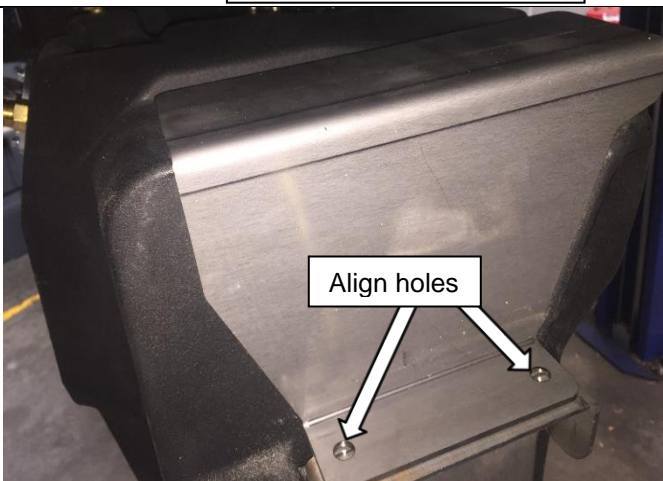
Install the fuel sender into the Frontier tank. Ensure that the O-ring is nested inside the groove on the underside of the fuel sender.

Align the fuel inlet and outlet tubes as shown.

Secure the sender using the 6 M5 x 12mm pan head screws supplied in the kit.



M5 - 2.1Nm



Place the upper rear support bracket onto the tank as shown, aligning the mounting holes.

FRONTIER TANK INSTALLATION



Raise the tank into the vehicle. Align the two rear tank mounting brackets with the two studs in the vehicle's chassis.

Start the OE nuts loosely.



Align the front of the tank support bracket with the two studs on the front mounting brackets installed earlier.

Loosely start the M10 x 1.5 Nyloc nuts supplied in the kit.

Check positioning of the tank inside the support bracket and tighten mounting nuts.



M10 - 44 Nm



Ensure loom has clearance

Unclip the gearbox wiring loom from the clip point on the floor. Move the loom away from the front mount bracket to create clearance.



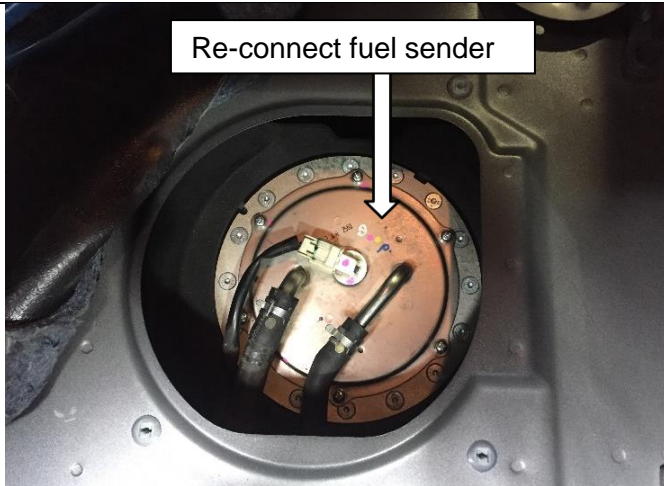
Re-connect hoses

Re-connect filler and breather hoses to the filler pipes inside the LHR wheel arch and to the tank.

- 35mm fill hose
- 16mm breather hose
- 6mm rollover hose

Secure using clamps removed in the removal procedure.

FRONTIER TANK INSTALLATION



Re-connect and secure fuel supply and return hoses and fuel sender wiring.

Re-assemble sender cover, carpet, seat, wiring and trim panels.



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 drivers' side upper corner on the inside of the vehicle's windscreen.

FITTED PRODUCT

