



Part Number: **TAD109**
Product **FRONTIER SERIES POLYMER FUEL TANK 145L**
Description:
Suited to **NISSAN PATROL GU ALL DIESEL 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

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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

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-TAD109BK

APPLICATION.	PART NO.	QTY	DESCRIPTION
FRONTIER SERIES FUEL TANK INSTALLATION	TAD109	1	POLYMER FUEL TANK
	BP80057	0.45	1/4 FUEL HOSE
	BP80308	0.45	10MM FUEL HOSE
	BP80295	1	FLOAT ARM
	BP80264	1	PICK UP TUBE
	BP80274	1	CLAMP
	BP80282	1	CIRCLIP PUSH ON 2.0MM
	BP80054	1	#24 HOSE CLAMP SIUT 35MM HOSE
	BP80055	6	#4 HOSE CLAMPS SUIT 8 & 10MM HOSE
	BP80244	1	STRAP KIT PATROL
	BP80224	1	STICKER BUMPER ARB FRONTIER
	BP80160	1	GAUGE CAUTION STICKER
	BP80155	1	STRAP RUBBER 63MM
	BP80155	1	STRAP RUBBER 63MM
	BP80155	0.8	STRAP RUBBER 63MM
	BP80155	0.8	STRAP RUBBER 63MM
	3789598	1	FITTING INSTRUCTIONS TAD109

VEHICLE PREPARATION

Fitment of this product may require temporary removal of non-genuine tow bars, wheel carriers and other aftermarket accessories.

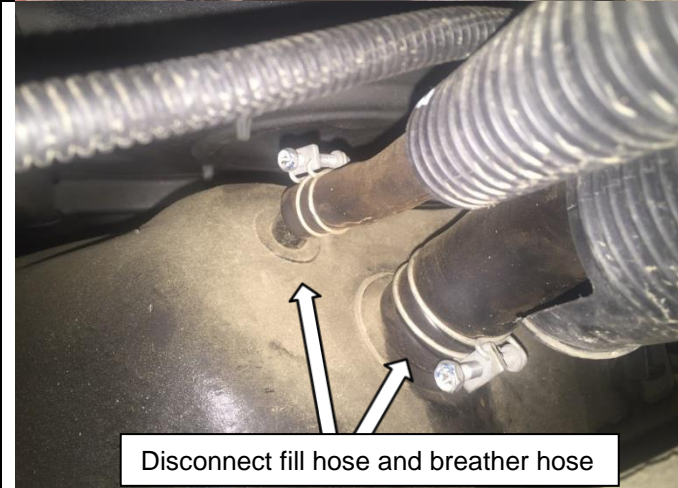
Refer to relevant manufacturer's instructions for removal and re-installation of such products.

REMOVAL OF ORIGINAL FUEL TANK

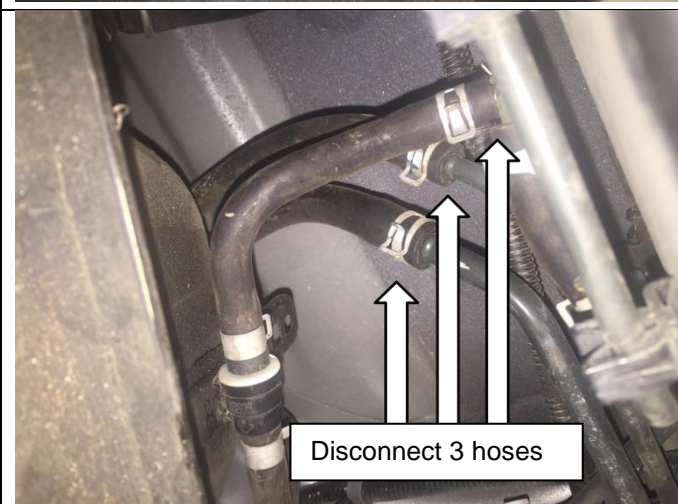


Remove the black plastic trim from the RHR wheel arch by removing the 2 plastic rivets and 1 screw.

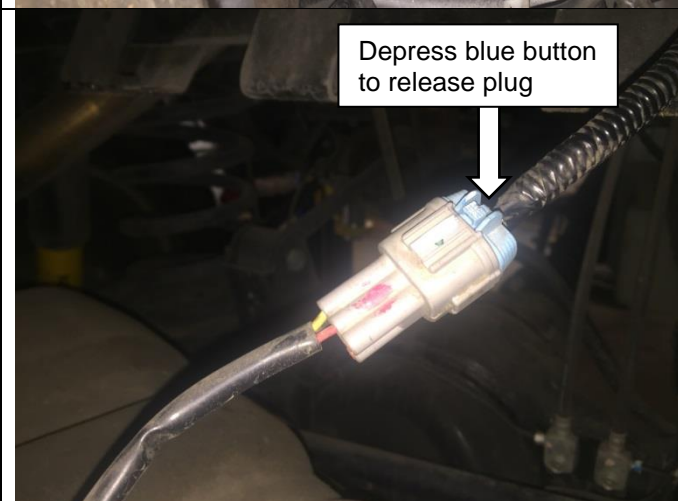
To release the plastic rivets pull the inner clip part of the way out then pull outer clip.



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



Disconnect the fuel supply and return and rollover vent hoses from the steel pipes on the chassis.

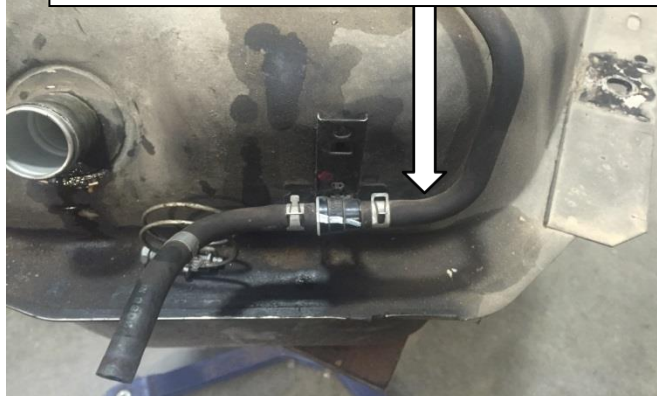


Place a jack under the tank. Remove the 6 bolts retaining the fuel tank and shield. Lower the fuel tank from the vehicle.

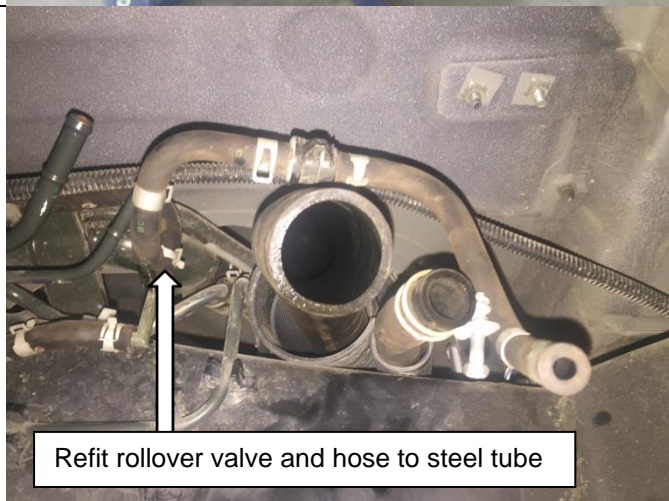
Whilst lowering the tank, disconnect the wiring harness from the top of the fuel tank.

REMOVAL OF ORIGINAL FUEL TANK

Remove rollover valve from fuel tank and retain



Remove rollover and hose from steel pipe on the fuel tank. Retain hose, rollover valve and clamps for the installation procedure.



Refit rollover valve and hose to steel tube

Refit rollover valve and hose to the steel tube on the chassis. Ensure correct orientation of valve.

Note the white end of the valve is to be positioned toward the chassis.



Remove the 2 fuel hoses from the fuel sender and discard.

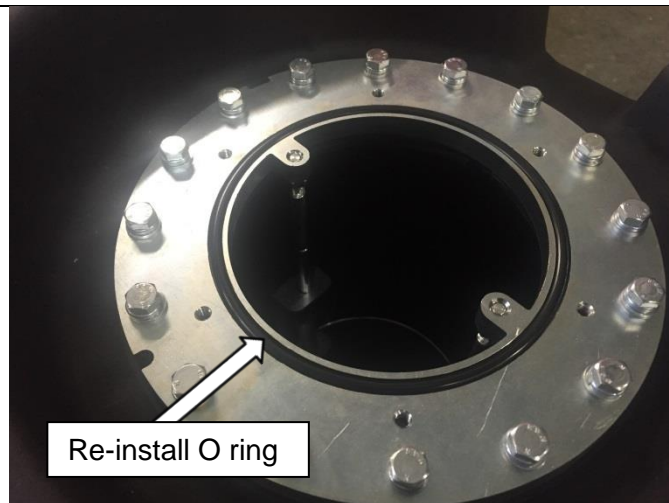


Remove and retain O ring

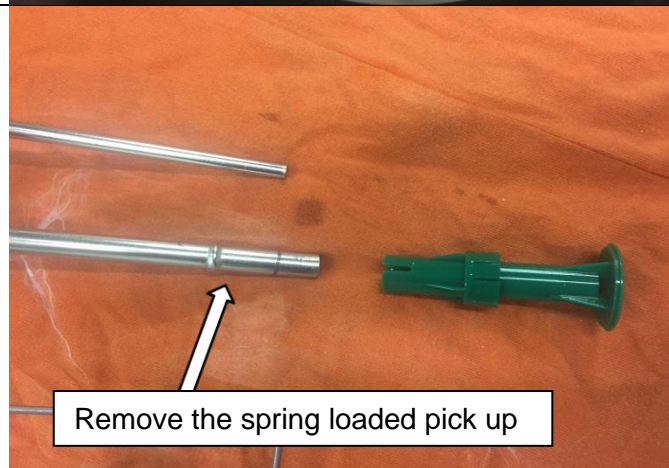
Remove the 6 screws retaining the sender and retain for the installation process.

Remove the fuel sender and O ring gasket. Retain for the installation procedure.

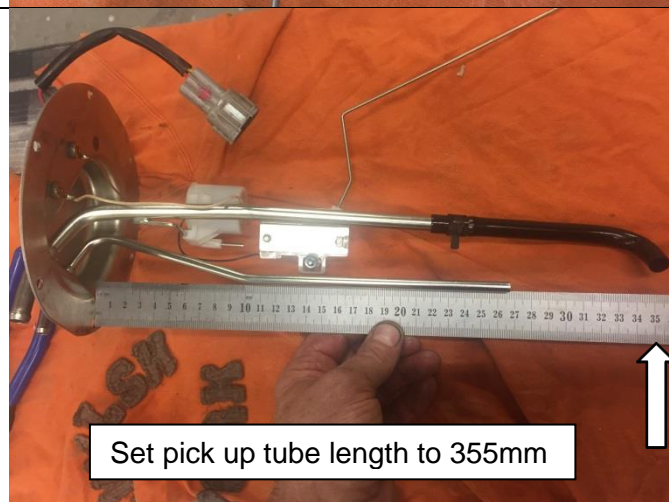
INSTALLATION PROCEDURE



Install the O ring gasket into the groove on top of the Frontier tank.



Remove the spring loaded pick up from the steel pick up tube on the sender assembly.

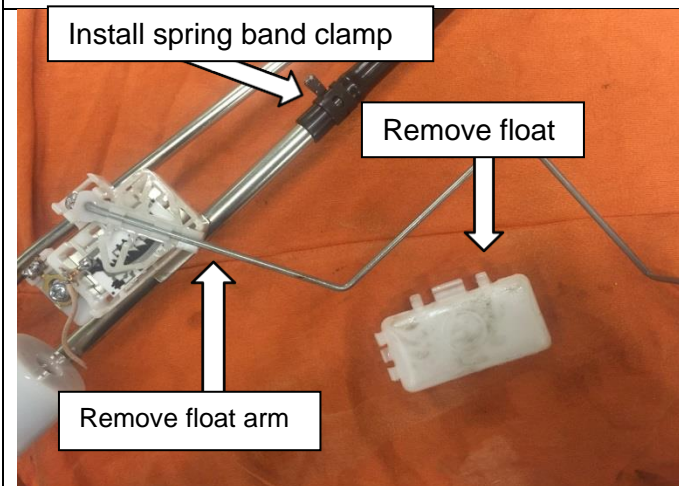


Heat long end of new plastic pick-up tube in hot water. Push the pick-up tube over the end of the steel pick up tube.
Set the length of the pick-up tube to 355mm when measuring from underside of fuel sender top plate.



Rotate the pick-up tube to achieve the correct orientation shown in the image

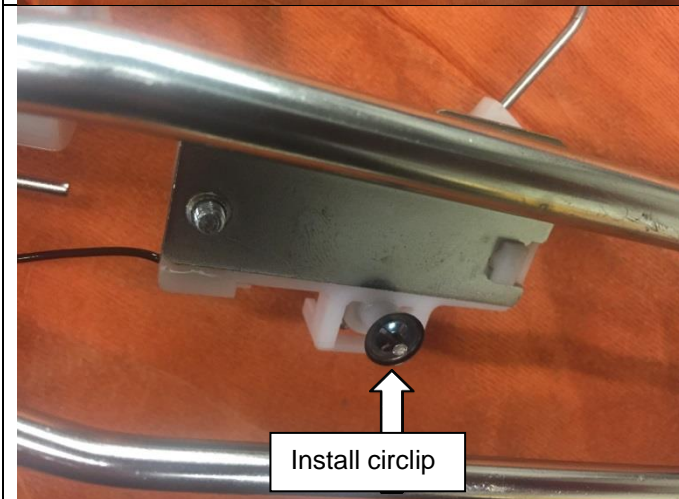
INSTALLATION PROCEDURE



Using the spring band clamp supplied in the kit, secure the pick-up tube in place.

Remove the plastic float from the original float arm and retain.

Remove the float arm from the sender and discard.



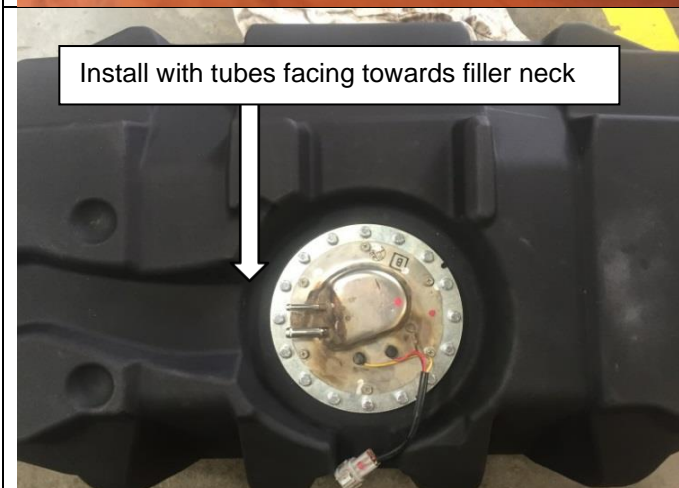
Install the new float arm supplied in the kit to the fuel sender.

Install the push on circlip onto the float arm as shown.

Check to ensure free movement of the float arm.



Install the float onto the new float arm as shown.

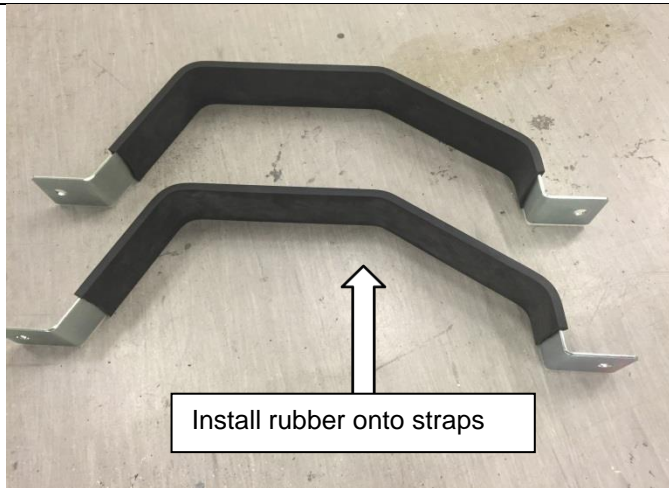


Install the sender assembly into the Frontier Tank.

- Whilst installing sender ensure that the float is positioned outside of the swirl pot.
- Also ensure that the pick-up tube and return tube are positioned inside the swirl pot.
- Also ensure that the pick-up tube does not foul on the orange coloured valve in the base of the swirl pot.

Secure the sender using the 6 screws retained during the removal procedure.

INSTALLATION PROCEDURE



Install the 2 x 800mm long pieces of insulator rubber onto the 2 x top mounting straps as shown.



Install the 2 x 450mm long (1/4" and 10mm dia.) pieces of fuel hose onto the fuel sender and secure using the clamps supplied in the kit.

Place the 2 x top mounting straps over the top of the tank and position into the grooves as shown.



Install the 2 x 1000mm long pieces of insulator rubber onto the 2 x lower mounting straps as shown.



Place the tank onto a jack and raise into position. Place the 2 x lower mounting straps under the tank.

Secure the tank using the 4 x M10 x 50 bolts, spring and flat washers supplied in the kit.

 44Nm.

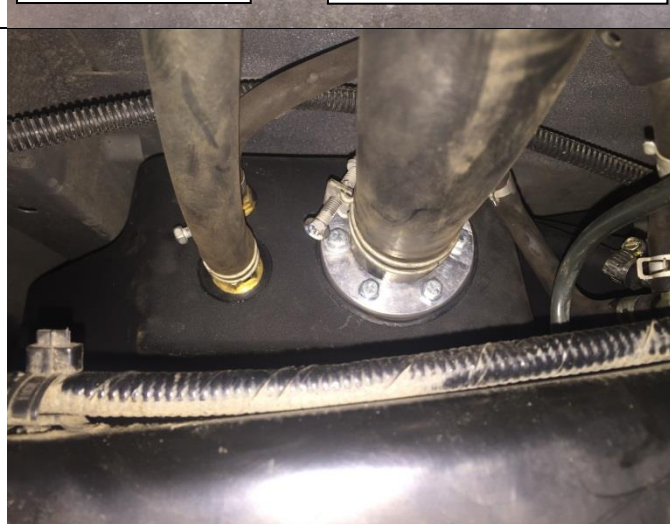
INSTALLATION PROCEDURE



Connect the ¼" and 10mm fuel hoses from the tank onto the steel pipes on the chassis.



Cut 50mm from the tank end of the 35mm diameter filler hose.



INSTALLATION PROCEDURE



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

