



FRONT RUNNER

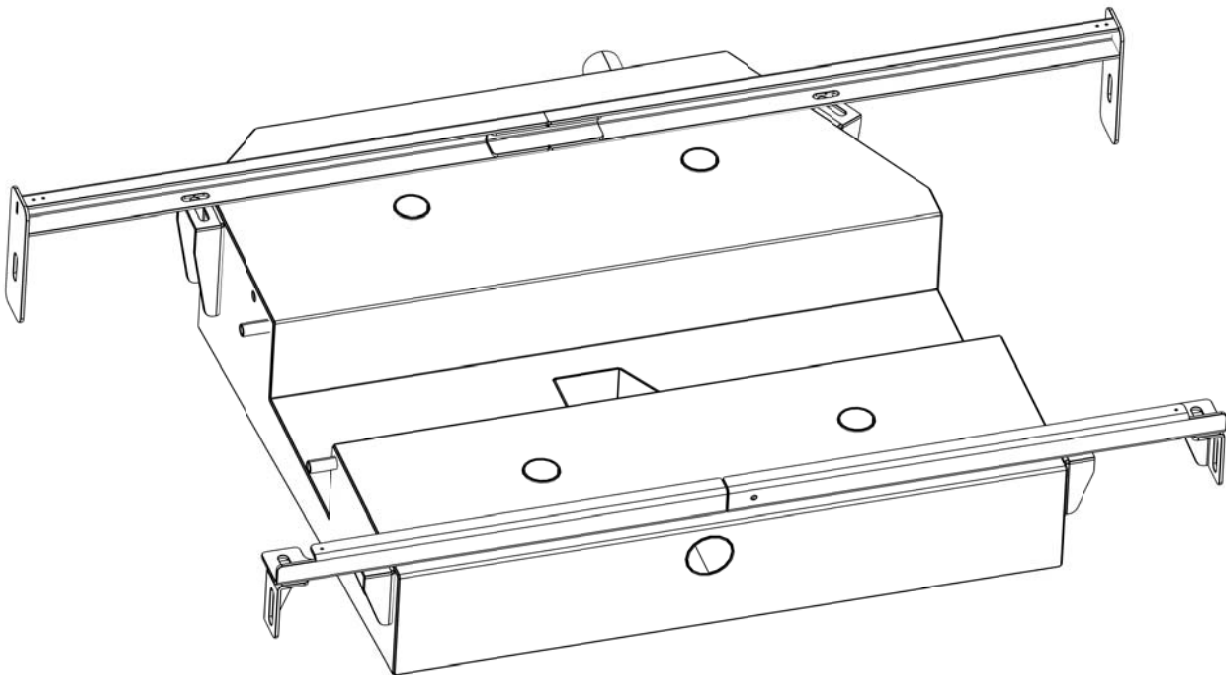
**FORD RANGER / MAZDA BT50
2012 ONWARD
63.5L ADDITIONAL FUEL TANK**

ENG

FTFM004



INSTALL TIME: 1 Hour 30 mins



IMPORTANT WARNING!

IT IS CRITICAL THAT ALL FRONT RUNNER PRODUCTS BE PROPERLY AND SECURELY ASSEMBLED AND ATTACHED TO YOUR VEHICLE. IMPROPER ATTACHMENT COULD RESULT IN AN AUTOMOBILE ACCIDENT, AND COULD CAUSE SERIOUS BODILY INJURY OR DEATH TO YOU OR TO OTHERS. YOU ARE RESPONSIBLE FOR ASSEMBLING AND SECURING ALL FRONT RUNNER PRODUCTS TO YOUR VEHICLE, CHECKING THE ATTACHMENTS PRIOR TO USE, AND PERIODICALLY INSPECTING THE PRODUCTS FOR ADJUSTMENT, WEAR, AND DAMAGE. THEREFORE, YOU MUST READ AND UNDERSTAND ALL OF THE INSTRUCTIONS AND CAUTIONS SUPPLIED WITH YOUR FRONT RUNNER PRODUCT PRIOR TO INSTALLATION OR USE. IF YOU DO NOT UNDERSTAND ALL OF THE INSTRUCTIONS AND CAUTIONS, OR IF YOU HAVE NO MECHANICAL EXPERIENCE AND ARE NOT THOROUGHLY FAMILIAR WITH THE INSTALLATION PROCEDURES, YOU SHOULD HAVE THE PRODUCT INSTALLED BY A PROFESSIONAL INSTALLER OR OTHER QUALIFIED PERSONNEL.

1

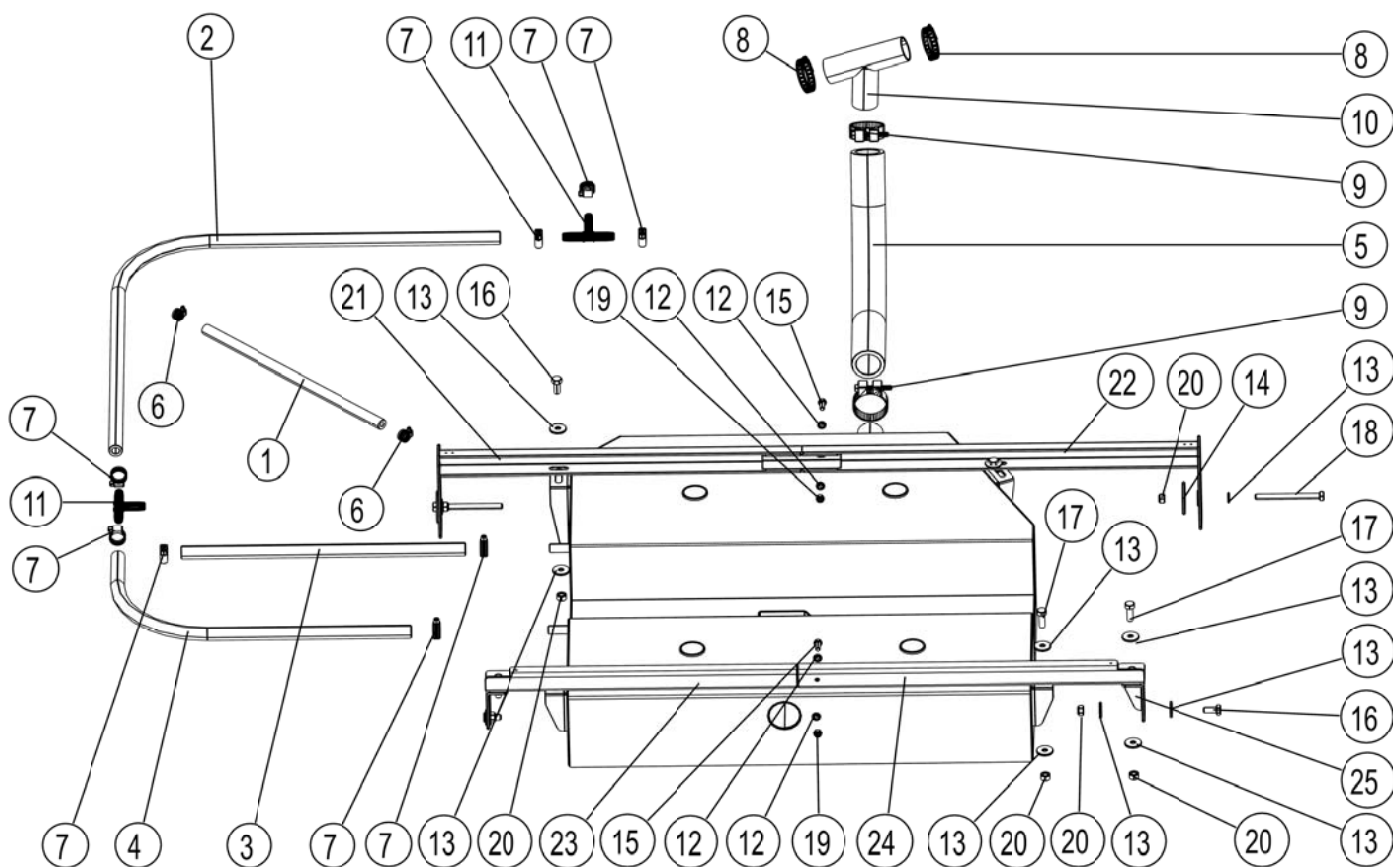
GET ORGANIZED

Here is what you are looking at:

Item #	Quantity	Description
1	1	8mm FUEL HOSE - 390mm LONG
2	1	12mm FUEL HOSE - 1580 LONG
3	1	12mm FUEL HOSE - 440mm LONG
4	1	12mm FUEL HOSE - 560mm LONG
5	1	38mm FILLER HOSE
6	2	8-16mm HOSE CLAMP
7	8	16-25mm HOSE CLAMP
8	2	32-50mm HOSE CLAMP
9	2	45-50mm UNI-CLAMP
10	2	STEEL Y-PIECE
11	2	NYLON T-PIECE 12x12x12
12	4	M6 FLAT WASHER
13	18	M8 FLAT WASHER
14	2	M10x50 FLAT WASHER
15	4	M6x16 HEX BOLT
16	4	M8x20mm HEX BOLT
17	4	M8x25mm HEX BOLT
18	2	M8x100mm HEX BOLT
19	2	M6 NYLOC NUT
20	10	M8 NYLOC NUT
21	1	LEFT FRONT BRACKET
22	1	RIGHT FRONT BRACKET
23	0	LEFT REAR BRACKET
24	0	RIGHT REAR BRACKET
25	0	REAR SUPPORT BRACKET
26	1	BALANCE FITTING (not pictured)

You will need:

- ☐ Ford Ranger / Mazda BT50
- ☐ Measuring Tape
- ☐ medium size Star Point Screw Driver
- ☐ 7 mm Flat and Socket Wrench
- ☐ 10 mm Flat and Socket Wrench
- ☐ 13 mm Flat and Socket Wrench
- ☐ 8 mm Drill Bit and Drill Machine
- ☐ Pair of Pliers
- ☐ Utility knife
- ☐ White Marker
- ☐ clean dry work area near your Ford / Mazda
- ☐ Wire "Hooking" Tool (Refer to Step 3B)
- ☐ Thread Tape
- ☐ Pop Rivet Gun
- ☐ Cable Ties (for securing fuel hoses)



(A) Familiarize yourself with the parts and then step away from the work area and read through these instructions from beginning to end. Take a moment as a little prep now may save you a lot of time later.

2

PREPARATION FOR FILLER PIPE FITMENT



NOTE:

- This installation is applicable to Ford Ranger / Mazda BT50 models made from 2012 onwards.
- Please ensure the fuel tank is below half full before starting with the installation.
- Try to position all hose clamps in such a manner that they are easily accessible in the event of a possible fuel leak.

- (A) Lower the filler cap side wheel arch liner enough to gain access to the filler neck and pipes by removing the plastic retaining clips with a star point screw driver.

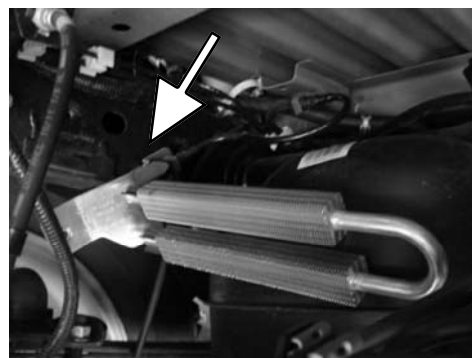
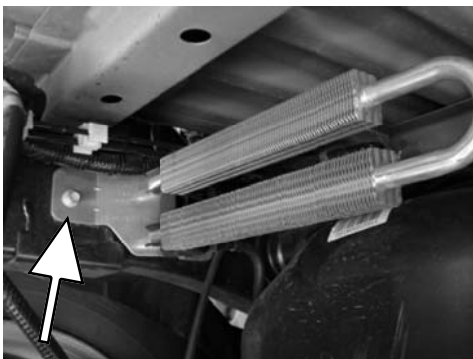
You will need to drill out the rivet as indicated by the arrow.



- (B) Loosen the original filler hose clamp (with a 10 mm wrench) holding the rubber filler hose to the steel filler neck and remove the rubber filler hose from the steel filler neck.



- (C) Using a 10mm wrench, loosen the two bolts holding the fuel cooler in position. Move the fuel cooler out of the way of the original fuel tank. (Refit fuel cooler after Step 4D)



- (D) Loosen the hose clamp securing the original filler hose to the fuel tank and remove the filler hose.

3 FIT THE BALANCE FITTING

- (A) If you look closely at the back of the plastic fuel tank fitted to your vehicle, you will see two round circles moulded into the plastic. One below and one above the split line.

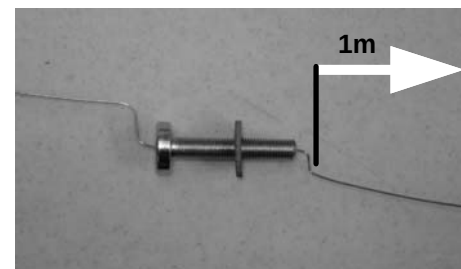
Grab your drill and 8mm drill bit and drill a hole using the top circle as your marking point of where to drill.



- (B) A tool is required to be made for this process. Make the tool from wire approximately 1.5mm in diameter.



- (C) The copper wire supplied needs to be modified. Measure a 1m length of wire from either end. Make a kink in the wire and slide the balance fitting onto the wire. Ensure that the balance fitting has only one fibre/cork washer on its length. Make another kink in the wire after the balance fitting. Make sure that there is some play for the balance fitting along the length of the wire.



- (D) The wire with the balance fitting from Step 3C must be inserted into the tank (right side from image first). Keep the left end of the wire sticking out the tank. Insert the wire retrieval tool made in process "4B" into the hole you have already drilled in the existing tank. Locate the wire within the tank and pull the balance fitting through. Add the nut and remaining fibre/cork washer onto the balance fitting and flatten the kink on the wire. You can now pull the wire out from the top of the tank.

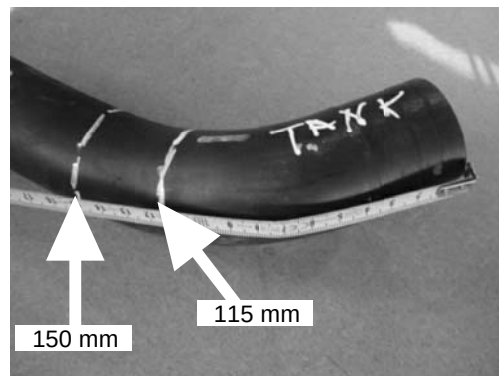
Grip the balance fitting with a pair of pliers to prevent it from rotating and fasten with a 13mm wrench. Wrap balance fitting threads with thread tape.



4 FIT THE FILLER PIPE

- (A) Using a measuring tape and white marker, measure and mark the original filler hose you removed. Starting from the fuel tank side of the hose, the first marking should be at 115 mm and the second at 150 mm.

If you are happy with your measurements and markings, cut the hose in both places using a utility knife.



- (B) Insert the steel Y-piece (item 10) as indicated and loosely tighten the two 32-50 mm hose clamps (item 8) with a 7mm wrench.



- (C) Refit the original filler hose, with Y-piece now attached, back into position from underneath the vehicle. Don't forget the original hose clamp that fastens the filler hose to the fuel tank. Tighten all clamps.



- (D) Fit the wire reinforced filler hose (item 5) supplied to the remaining open end of the Y-piece and fasten using one of the 45-50mm uni-clamps (item 9) supplied.

Refit the fuel cooler.

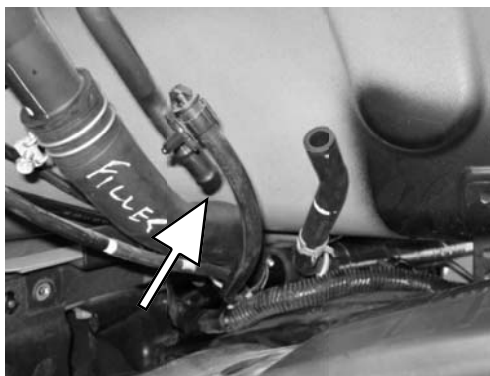


- (E) Refit the filler cap side of the original filler hose and fasten using original hose clamp.



5 FIT THE BREATHER PIPES

- (A) Loosen the breather pipe from the filler neck using a pair of pliers to open the hose clamp.



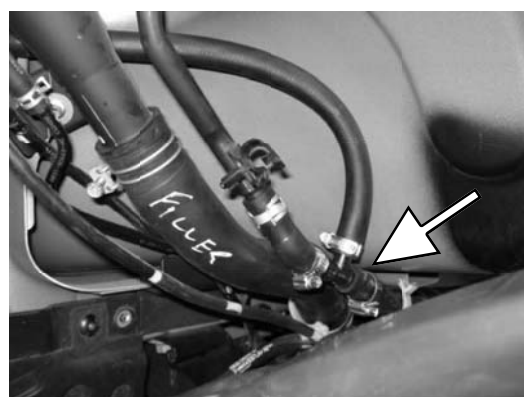
- (B) Measure 70 mm from the end of the breather hose, mark and cut off the measured section of hose using a suitable knife.



- (C) Connect the plastic T-piece (item 11) supplied between the 70mm section of hose you have just cut and the remaining breather hose.

Connect the 1580mm long - 12mm fuel hose (item 2) supplied to the remaining open end of the T-piece.

Fasten all three sections of hose to the T-piece using three of the 16 - 25mm hose clamps (item 7) supplied and reconnect to filler neck.

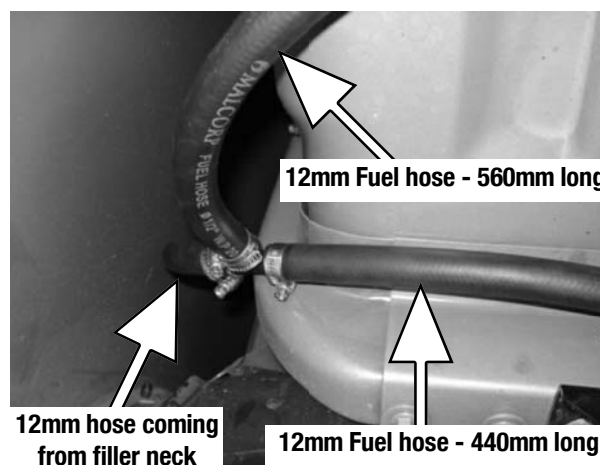


- (D) Route the 1580mm long - 12mm fuel hose up and over the wheel arch liner supports towards the rear of the vehicle. Secure hose along the way using cable/zip ties (not supplied).

Fit the remaining plastic T-piece supplied to the end of the 1580mm hose you have just run.

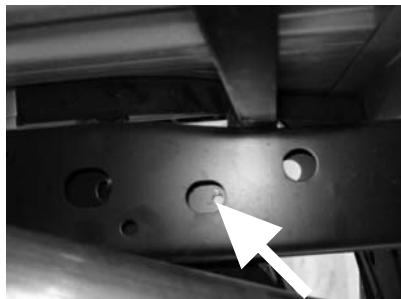
Connect the 440mm (item 3) and 560mm (item 4) long, 12mm fuel hose supplied to the T-piece as indicated.

Once again use three of the 16-25mm hose clamps supplied to secure the hoses.



6 PREP FOR TANK FITMENT

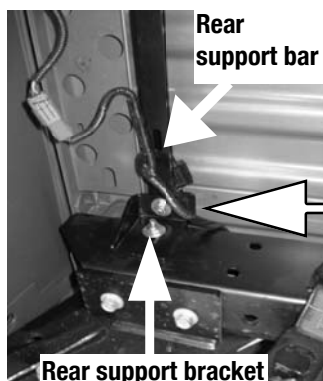
- (A) Grab your drill and 8mm drill bit, and from underneath the vehicle drill a 8mm hole in the centre of the slot in the chassis rail as indicated by the arrow for both the left and right hand side chassis rails.



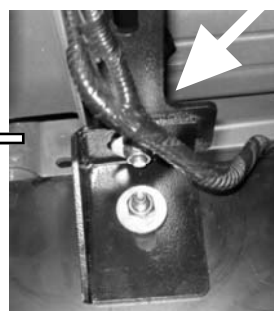
- (B) Assemble rear support bar (item 23,24) using a M6x16 Hex Bolt, M6 Flat washer and M6 Nyloc Nut (items 12,15,19.)



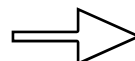
- (C) Fit the rear support brackets (item 25) onto chassis rail and rear support bar using M8 x20 Hex Bolts, M8 Flat Washers and M8 Nyloc Nuts (items 13, 16, 20).



Note that the "L" of the support bar must face the front of the vehicle.



FRONT OF VEHICLE



- (D) From underneath the vehicle, grab the left and right front support brackets (items 22,23) and loosely mount them so the "leg" sits on the outside of the chassis rail using the M8 x100 Hex Bolts, M8 Flat Washers, M10 x50 Flat Washers and M8 Nyloc Nuts (items 13,14,18, 20). The "L" must face toward the rear of the vehicle .

Loosely join the left and right support brackets in the centre as before with the rear support bar.

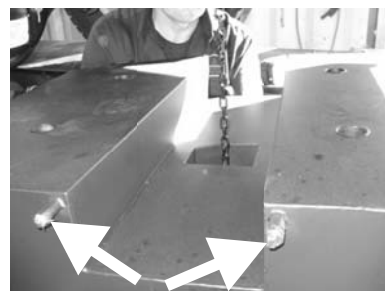
Now you can securely fasten the two outer bolts and finally the centre joint.



7 FIT THE ADDITIONAL TANK

- (A)** Remove all the masking tape from the pipes on the additional tank. Stick the wheel lift chain through the the hole in the centre of the additional tan. Ensure the two breather pipes indicated are on the same side of the vehicle as the breather pipes you ran earlier.

Begin to wind the additional tank up and into position. The tank will knock up against the steel winding mechanism before reaching its final home position. You will need to remove the winder and feed it through the hole specially made in the additional tank before continuing to wind it to its home position.



- (B)** Align the four mounting points on the tank with the brackets previously mounted and fasten into place using M8 x25 Hex Bolts, M8 Flat Washers and M8 Nyloc Nuts (item 13,17, 20).

Check that winder mechanism has enough clearance to work.



- (C)** Connect the two breather hoses feeding off the plastic T-piece to the front and rear breather pipes on the additional tank using the remaining 16-25 mm hose clamps.



- (D)** Connect the wire reinforced filler hose to the additional tank using the remaining 45 - 50mm uni-hose clamp (item 9).



7 FIT THE ADDITIONAL TANK CONT...

- (**E**) Join the 8mm fuel hose (item 1) supplied between the additional fuel tank and the balance fitting fitted earlier using the two 8 - 16mm hose clamp (item 6) supplied.



- (**F**) Refit the wheel arch liner using the Pop Rivets and M6 x19 Flat Washers provided.

Congratulations, you have completed your installation. Take a step back and admire your work. Good Job!

8 INSTALL OTHER VEHICLE AND RACK ACCESSORIES

- (**A**) Now's the time to visit your favorite Front Runner dealer in person or online.