# **Troopy Tank Installation guide**

Thank you for your purchase of our Ark Earth Troopy water tank.

## **Before you start:**

We recommend watching our YouTube installation guide available online. Link

https://www.youtube.com/watch?v=qdP-rNhHmDA

We explain in a full walk through the installation step by step. We also provide tips and tricks on how to make the installation go as smooth sailing as possible.

#### Please note:

\*\*\*If you are going to run your plumbing up into the body of the troopy (for Vent box), it is easier to drill these holes into the body of the troopy before you install the tank, although you can do this with the tank in place, it's just another obstacle to navigate.

#### Tools you will need: (none of these items are supplied)

- -Loctite thread glue, blue or red grade (we recommend using Loctite on all connections, this is also a great product to have in your Troopy while you are travelling)
- -Basic Socket set
- -12mm socket required
- -13mm socket required
- -17mm socket required
- -Socket Knuckle joint
- -Long socket drive (helpful)
- -2x Spanner 13mm
- -Measuring tape
- -Trolley Jack (handy)

#### Safety info

Our tank weighs around 20kgs dry. Please use appropriate lifting techniques when installing. Use 2 people if available. \* recommended

**Step 1: Mounting the front brackets** 



- -The two L shaped brackets are the front brackets, they pair with 2x M10 Bolts each.
- -They mount inside the C channel section that your sub fuel tank bolts into.
- -You will see that there are 2 circular holes in the bottom of this channel, if you look up the face of the channel (sub tank side) there are two more circular holes directly above these bottom holes. These 4 holes are where you bolt the L shaped brackets. As shown in the pictures above.
- -The long side of the bracket is vertical facing,
- -Bolt both brackets in place inside the channel, insert the **bottom bolt only**. Verify that the top holes line up with the upper bracket holes.
- -Using a measuring tape check that the distance between the two bottom bolt centers, the distance needs to be 550mm Apart (This is critical for a smooth installation). Please see the YouTube video. (the distance measured is from center to center, not face to face or inside to inside.
- -You can adjust the brackets by loosening the bottom bolt and sliding the bracket side to side, there is only about 2mm of play in each bracket.
- -Check that the hole centers are 550mm apart. Then tighten the lower bolts (~58NM torque. Use Loctite on the bolt) When the tank is installed, you will not be able to access these bottom bolts again.

**Step 2: Rear mounting brackets** 





**Drivers side** 

Passengers side

- -The rear brackets install on the rear chassis, on the section that is diagonal to the rest of the chassis. You will find a hole roughly central on the bottom of these diagonal sections, this is where the rear brackets mount.
- -First check that the 2 rear chassis mounting points are clean. On some Troopies the rear passenger side bracket location has an M8 nut in place welded to the chassis. (Make sure this nut is clean). We recommend running the bolt through the nut before installing the tank to make sure that the thread on the chassis is in good condition (dirt usually builds here).
- -The Longer bracket is the (drivers side) and the shorter bracket (passenger side).
- -Install the 2 Angle brackets into these 2 chassis connection points. Using the M8 bolts provide. The two slotted holes face toward the front. These are the connection points for the tank.



-Have the brackets running parallel to the rear bar as shown in the pictures.

Tighten bracket finger tight. Or lightly tightened.

Step 3: Lifting in the tank (with a trolley jack)



- -Before lifting the tank in place. Check the clearance of the electrical cables within the cavity and any other obstructions, there is about 60mm from the top of the tank to the body of the Troopy, your cables will run within this space.
- -Place the tank onto the trolley jack centered. Wheel the tank into place. You may have to navigate around your towbar.

(In some instances you may have to put the tank onto the jack whilst under that car)

- -Tank orientation as per picture above.
- -Jack the tank up into the cavity. The tank should lift smoothly into the space, if it gets caught stop, lower the tank and clear the obstruction.

Jack the tank high enough so that the channel sits between the front tank bracket and the tank and are roughly in line with the L brackets which were placed inside the rail.



-Once inline thread the two M10 bolts through the tank brackets into the L brackets inside the chassis rail. (Make sure you apply a minimum blue grade Loctite to the threads). Tighten them finger tight.

\*\*\*While trying to insert these bolts it helps to wobble the tank to help locate the holes. There are a bunch of tips in the YouTube video.

#### Step 3: Lifting in the tank (without a trolley jack)

Place the tank under the cavity. Lift one end at a time and place a box or sturdy item under the tank, to try and achieve getting the tank into the right position. You can then install one bolt at a time into the front bracket on the tank.

## Step 4: Connecting the rear brackets to the tank

Depending upon what rear bar setup you have will determine how you tackle the rear brackets.

- -On the factory rear bar, you can remove the silver step via 4 bolts underneath (13mm socket). This gives you relatively good access to insert the 4x M8 10mm bolts into the rear of the tank. A long  $\frac{1}{4}$  shank socket set with 13mm socket is the perfect tool for this.
- -If you have an aftermarket bar you may need to find an alternative way to access the bolts. There is room from underneath to access with a 13mm spanner.
- -Apply Loctite to these 4 Bolts that go through the rear brackets into the tank.
- \*\*\*There is also access it your open the rear doors. (Picture below)



#### Finishing the tank:

Once you have installed all of the bolts. Now is the time to go back over everything and tighten all of the bolts making sure that all of them had Loctite applied. If you are unsure you can always remove a bolt and reapply Loctite.

We recommend starting at the rear and tightening the:

- 1- Angle brackets on the chassis. (13mm Socket, 13mm Spanner) or (2x 13mm Sockets)
- 2- Tighten the rear brackets on the tank (13mm Socket)
- 3- Tighten the front brackets on the tank (17mm Socket)

Once all the bolts are tightened, it is worth triple checking your work.

Once happy, enjoy a beer!

Thanks for choosing Ark Earth Landcruiser products for your water storage solution.

**Cheers Legends** 

Kyle