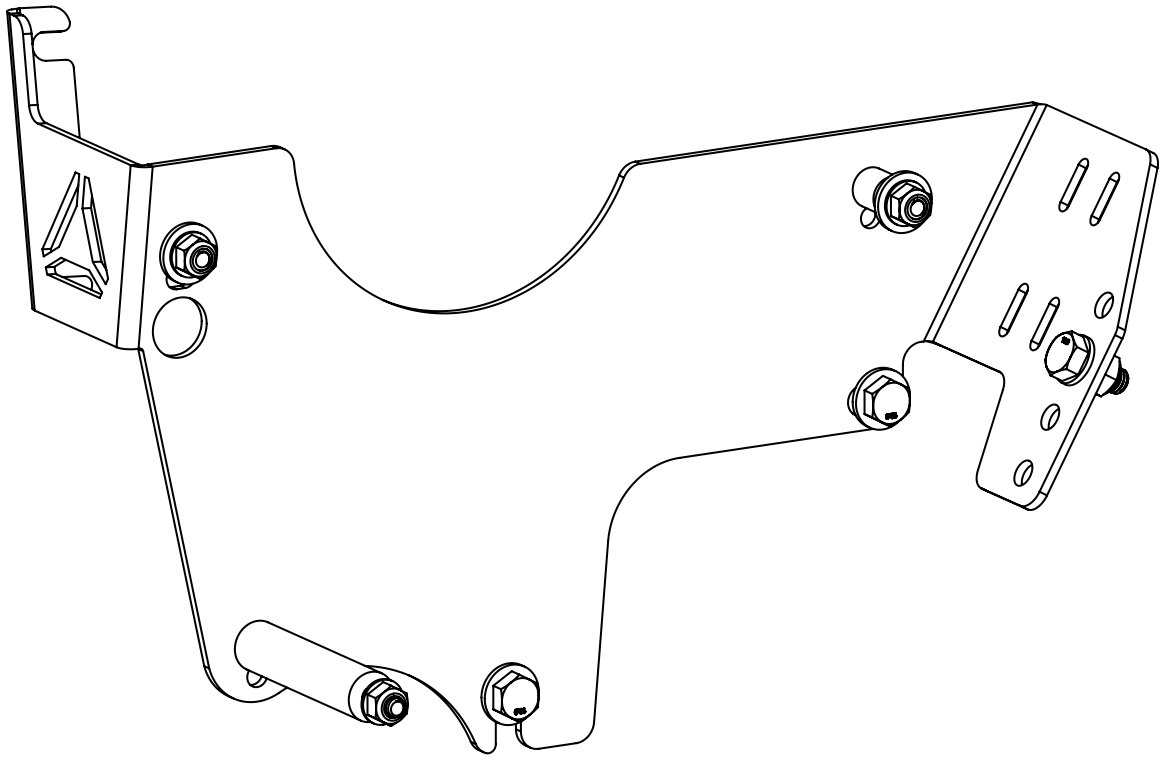
91-97 Land Cruiser/LX450 Washer Fluid Relocation Bracket



Overview
Congratulations on your purchase of the DELTA Vehicle Systems Washer Fluid Relocation Bracket. This bracket has been designed in CAD, CNC laser cut, formed, and powder coated 100% in the U.S.A.

Product Compatibility
This product is compatible with the 1991-1997 Toyota Land Cruiser and Lexus LX450.

Parts List

Part Number	Description	Quantity	
11297-1	Washer Fluid Relocation Bracket	1	☐
10863	6” Zip Tie	6	☐
11981	1/4” Braided Split Loom – 32”	1	☐
12049	16-14AWG Blue Heat Shrink Butt Splice	5	☐
12050	14AWG Red GXL Cross-Link Wire – 24”	1	☐
12051	14AWG Black GXL Cross-Link Wire – 24”	1	☐

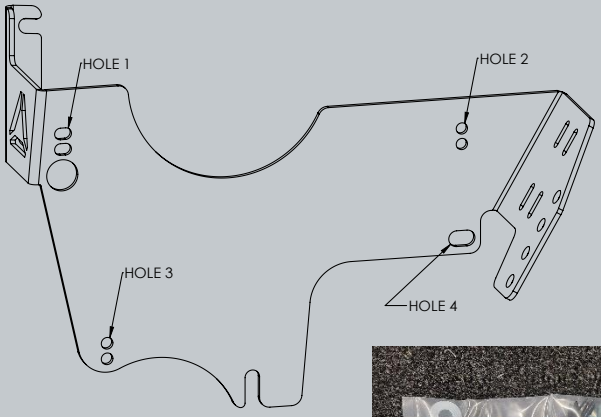
Hardware List

Part Number	Description	Quantity	
10189	1/4”-20 x 1 1/4” Hex Bolt	1	☐
10571	1/4”-20 x 3/4” Hex Bolt	1	☐
10923	1/4”-20 Nyloc Nut	3	☐
10929	1/4”-20 x 3 1/2” Hex Bolt	1	☐
10934	1/4” Washer	4	☐
10494	M8 x 20mm Hex Bolt	1	☐
10495	M8 Washer	2	☐
10821	M8 Nyloc Nut	1	☐
11411	M8 x 40mm Hex Bolt	2	☐
12040	2 3/4” Aluminum Spacer	1	☐
12041	5/8” Aluminum Spacer	2	☐
12042	1/2” Nylon Spacer	1	☐

Packaged by: _____

Tools
- 7/16” (11mm) & 13mm (1/2”) sockets
- Socket wrench(es)
- Socket extension (optional but makes things easier)
- Drill with 5/16” bit (depending on installation option; see step 1)

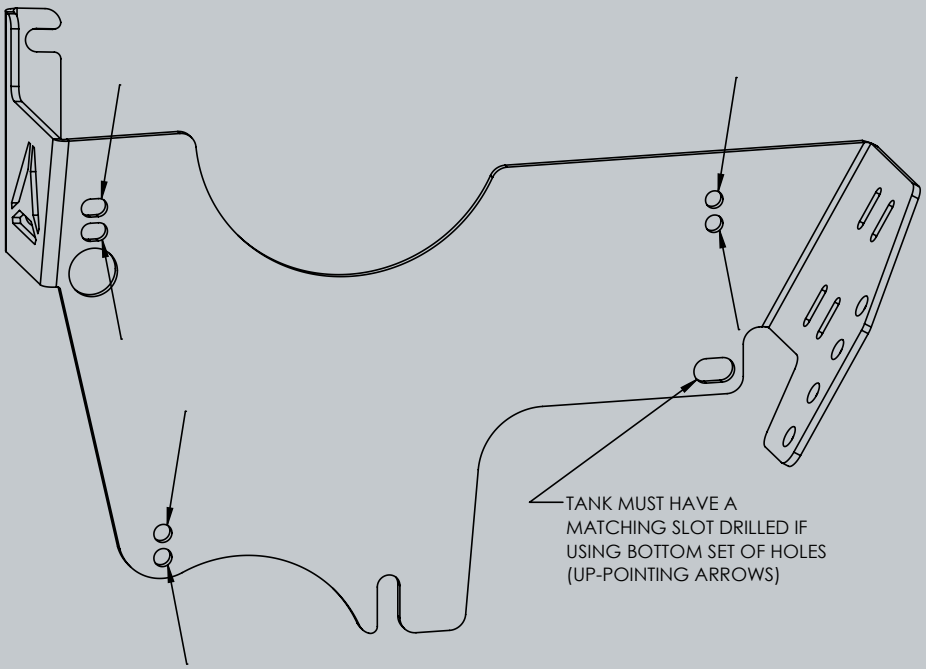
Reference Information



Throughout this document, we will refer to “holes 1-4” as notated here.

We will also refer to the cells of the hardware pack as the 1st, 2nd, and 3rd cells, from left to right as pictured.

1 Choose an Installation Option



The bracket has 2 sets of holes to accommodate the stock mounting holes of the fluid tank. Using the top set of holes **(down-pointing arrows)** requires no modification, but the cap of the tank will slightly contact the hood insulation when closed, which may cause issues over time.

Using the bottom set of holes **(up-pointing arrows)** requires drilling a small slot in a mounting tab on the tank, but mounting this way eliminates the hood contact. This is a minor modification and has a better result, so this is the method we use and recommend.

2 Remove Washer Fluid Tank

Disconnect and unbolt the washer fluid tank so you can remove it from the vehicle. Be prepared either to drain the tank or to quickly plug the hole (we used a piece of hose with a bolt in the end).

3 Bolt Tank to Bracket (3 Stock Holes)

Open the 1st cell of the hardware pack, containing the 1/4” hardware.

For each of the 3 stock mounting holes in the tank, the bolt inserts from the back of the bracket. Hardware stacks are as follows, in order from back to front:

Hole 1 (top left pic): 3/4” bolt, tank, washer, nut

Hole 2 (right pic): 1 1/4” bolt, nylon spacer, tank, washer, nut

Hole 3 (bottom left pic): 3 1/2” bolt, 2 3/4” aluminum spacer, tank, nut

Don’t overtighten these bolts, as this could damage the plastic tabs on the tank.

4 Drill Slot in Tank (If Applicable)

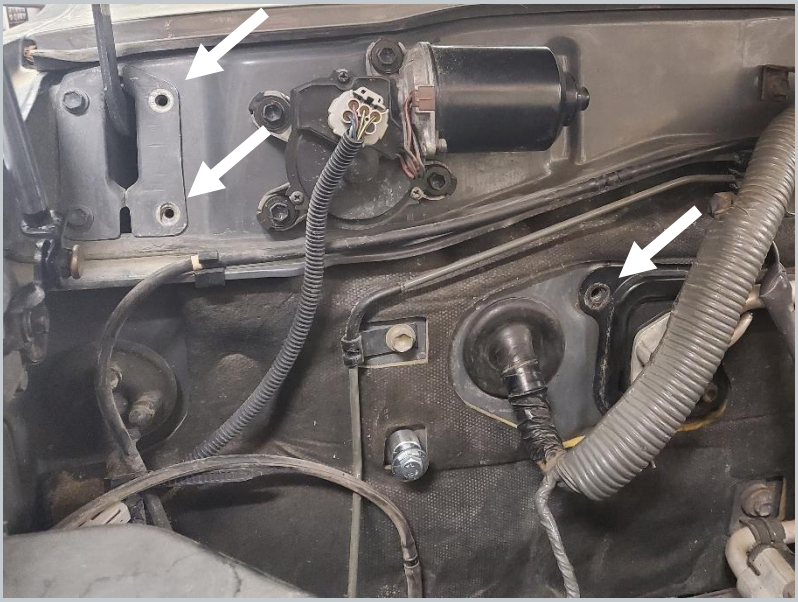
If you are using the top set of holes for your installation, the tank's 4th mounting hole will line up with hole 4 in the bracket, so you can skip this step. If you are using the bottom set, you will need to drill a slot in the tank matching the one in the bracket (hole 4).

With the tank held in place by the three bolts from the previous step, drill a hole in the plastic at each end of the slot in the bracket (hole 4). Then work the drill between these two holes to form a slot.

5 Remove Diagnostics Port & Bracket

The stock diagnostics port is mounted to a small bracket on the passenger side firewall. The port should unclip from the bracket, which you can then detach by undoing the M8 bolt. This bolt will be replaced by hardware from the kit, so you can set it aside.

6 Prepare Firewall for Bracket



There are three more bolts to remove, notated with arrows. The rightmost (from the camera's perspective) bolt will be replaced, but the two on the hinge panel will be reused, so don't lose them!

Open the 2nd cell of the hardware pack, take one of the included 40mm M8 bolts with one of the larger washers and a 5/8" aluminum spacer (in that order, from the bolt head) and partially thread it into the hole left by the diagnostics port.

The goal here is to set the bracket onto this bolt, so make sure there's enough space in between the spacer and the washer to make this easier.

7 Set Bracket in Place

Take the other 40mm M8 bolt, put the other larger washer on it, and stick it through hole 4 from the front. Then add the other 5/8" aluminum spacer and hold it all in place.

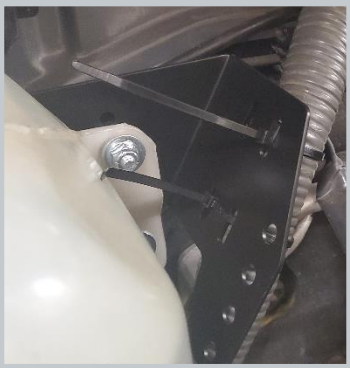
Continuing to hold this hardware, carefully set the bracket in place over the bolt you set in the previous step, lining it up with the slot on the bottom. Make sure the bracket sits in between the spacer and the washer.

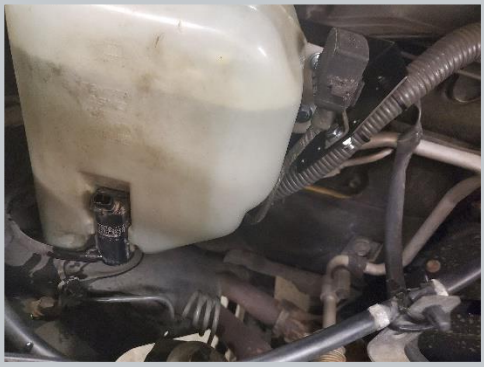
Once it's in place, thread in the loose M8 bolt (just enough to hold in the bracket).

8 Finish Bolting in Bracket

Replace the two hinge panel bolts and tighten them back down over the bracket. Then tighten the rightmost M8 bolt (which will be much easier with a socket extension, as shown), and then finally the bottommost M8 bolt. That bottom bolt is tricky to access; you may have more luck with a ratchet box wrench.

9 Zip Tie Engine Harness, Attach Diagnostics Port & Reconnect Fluid Tank





Open the 3rd and final hardware pack cell.

On the right side of the bracket is a set of slots for you to zip tie the engine harness to.

After you trim the zip ties, attach the diagnostics port bracket to one of the four nearby holes using the remaining M8 hardware (in order: 20mm bolt, washer, port bracket, Delta bracket, washer, nut). Bend the bracket slightly so that it sticks straight up, and clip the diagnostics port back on.

Now is also a good time to reconnect the fluid tank line.

10 Extend Stock Wiring Harness + Finished!

Trim off the stock wiring harness a few inches below the connector, as shown. Using the included wire, heat shrink butt splices, and braided loom, extend the harness so it can reach the fluid tank in its new location. **Be careful not to accidentally reverse the polarity.**

It may make things easier if you disconnect the 3-pin sensor connector under the air box, but this isn't strictly necessary.

Then plug the connector back into the tank and test fire the washer fluid a few times to make sure it's working. If not, double check your wiring.

After that, you're all done!