

Landcruiser 78&Earlier Installation

Installation begins with the removal of the hardtop, side doors, and rear doors. If this is already done on your cruiser, you can skip this step. To remove the side doors, open the doors and remove the bolts holding the door limiter on while keeping all bushings in order. Then, using a drift, punch the pins out of the hinges. It is easiest to roll the front window down all the way so you can grip the top edge and get somebody to hold the door while removing the pins.

***Note:** Phillips looking heads on LandCruisers are typically JIS (Japanese Industry Standard) heads. Use a proper JIC screwdriver and lots of down-pressure on the screwdriver end for best results removing rusty screws.*

For the hardtop, remove all the 10 mm bolts along the edge of the tub. Remove the two 10 mm bolts on the front of the windshield frame. Remove the 14 mm nuts at the top front of the door jambs. Remove the two JIC screws that hold the angle bracket. To lift the hardtop off the body, it needs to be lifted straight up approximately 12 inches, since there is a tube that runs the length of the B-pillar section of the body (Figure 1).



Figure 1

Many of the components of the Landcruiser will need to be removed and kept for reinstallation. This includes seats, seat riser blocks, rear heater core, roll bar, seatbelts, fuel filler neck, door & cover, gas tank, front door jams, rear door strikers, tool holding clips and outer emblems.



Figure 2



Figure 3



Figure 4

Remove the fuel tank by first removing the 17 mm bolt at the base of the fuel tank cover plate. Remove the fuel tank cover and the filler neck cover by unbolting all the 10 mm hardware. The fuel sender unit wires will need to be disconnected at the same time (see figure 4). Be sure to keep as many of these components as possible. Unclamp and remove the filler hose and all vent hoses. Remove the upper steel section of the filler hose by removing the small JIS head screws. Pull the fuel tank out of the vehicle. Remove the filler door and lock catch. Be sure to keep and label these for reuse.

Remove the shifter boots by removing the 10 mm bolts on their metal surrounds. Pop the transmission shifter out by pushing down on its collet to compress the spring and turning it clockwise. Remove all 10 mm bolts and remove the transmission cover (see figure 5). This cover will not need to be used with the Aqualu tub since we provide an aluminum tunnel cover.



Figure 5

The next step is to remove the body mounts holding the tub onto the Landcruiser frame. There are two body mounts in the front, underneath the driver and passenger footwell. There are two body mounts in front of the rear wheel wells, as well as two in the middle of the rear wheel wells. There are four body mounts under the rear floor of the body, along with two bolts holding the rear sill to the rear bumper.



Figure 6

Removing the body mounts can be difficult. Some of these bolts will break or need to be cut for removal. Do not worry about keeping the old ones as a new set is supplied with each Aqualu aluminum body. Use a combination of torch heat, cutting wheels and an air hammer to get the best results. On this particular install, the rear mounts were cut off the frame after the body was removed due to the excess of rust.



Figure 7

Once all body mount bolts are removed, remove the spot welds along the front floor seam. This part can be a difficult, but can be made much easier with a spot weld cutter (Figure 7 above). Most spot weld cutters will require drilling a 3/32" or 1/8" pilot hole and cutting the metal surrounding the spot weld on only one sheet of metal. The remaining tab can be ground flat, leaving minimal material loss and saving time.

There is a factory seam along the floor underneath the driver and passenger floor pans, connecting to the raised footwell section and bottom floor pan. Look closely and clean the metal surface, spot weld indentations can be seen approximately every four inches along the floor. Remove the 12 mm bolts that attach the body to the cowl. Cut the side of the tub from the cowl about 1" rearward from the original seam that separates the cowl from the tub (see Figure 9). Remove the tub completely.



Figure 8



Figure 9

With the tub removed, drill or grind the welds that hold the 1" front rocker panel section still attached to the cowl. Be careful at this point to not damage of the cowl. Carefully remove this strip of metal, and remove other excess metal that may still be on the cowl. (see Figure 10, Figure 11, and Figure 12).



Figure 10



Figure 11



Figure 12

There is a small tab of metal that folds around from the kick vent panel (seen in Figure 13). Keep this tab of metal intact, since it will keep the kick vent plate flat and free from warping.



Figure 13

At this point of the installation, consider frame restoration options. On virtually all LandCruisers, the rear section of the frame that is prone to rusting. Sandblasting and painting the frame is an excellent way of preventing further rot. There are options from complete removal and powder coating to a light wire brushing and POR15 or paint system. On this particular install, the frame was sandblasted and painted. This makes a big difference and keeps rust away for years to come. (See figure 14, figure 15 and figure 16).



Figure 14



Figure 15



Figure 16

The aluminum tub can now be dry fitted (no SikaFlex®) on the frame. You will likely need to notch the corner edges of the cowl floor away in order to push the tub completely against the cowl. Be sure not to cut too much away, to avoid creating holes in your floor.

Test fitting this tub is a crucial step to ensure it will fit properly when installed permanently. Small adjustments will need to be made and should be done at this step to fit these pieces properly

Once test fitting and adjustment has been done, the body can be painted and installed using four bolts on each side along the front seam and rocker panels as shown in figures 17, 18 and 19 below:



Figure 17



Figure 18



Figure 19

Add generous amount of SikaFlex® sealant between contacting surfaces to avoid moisture buildup and corrosion. At this point, the door hinges and catches can be hung and marked so the front door weather-strip is compressed to the right pressure for sealing. The Nut plate can be installed on the inside of the tubing (Figure 21). Slightly oversized holes in the aluminum are suggested to allow some adjustment after installation. Ensure the door catch screws are tightened enough to avoid shifting and loosening.

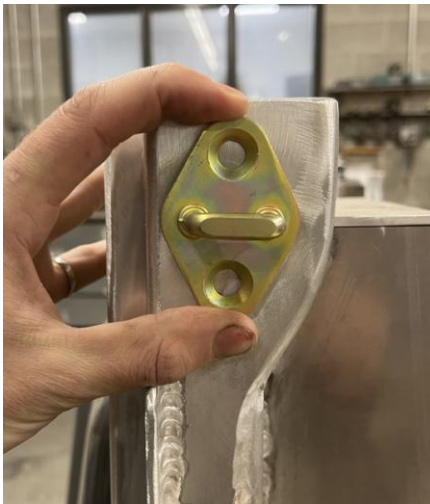


Figure 20

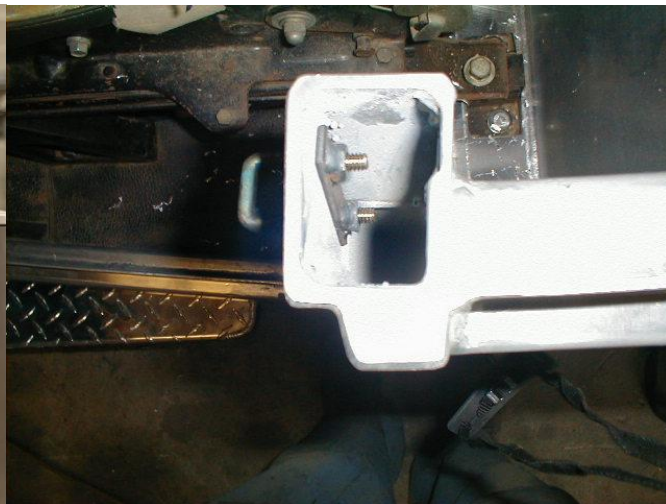


Figure 21

Finally, install the doors and hard top. We cannot stress enough how important it is to test fit everything before painting the Aqualu body. Hang all doors and drill the positions of all features needed such as hinges and mounting holes. With any problems or questions, please reach out to info@aqualu.com.



Figure 22