



MOBILITY

Toyota Amerivan Ramp install, For Part # 0035311-200

Picture 1



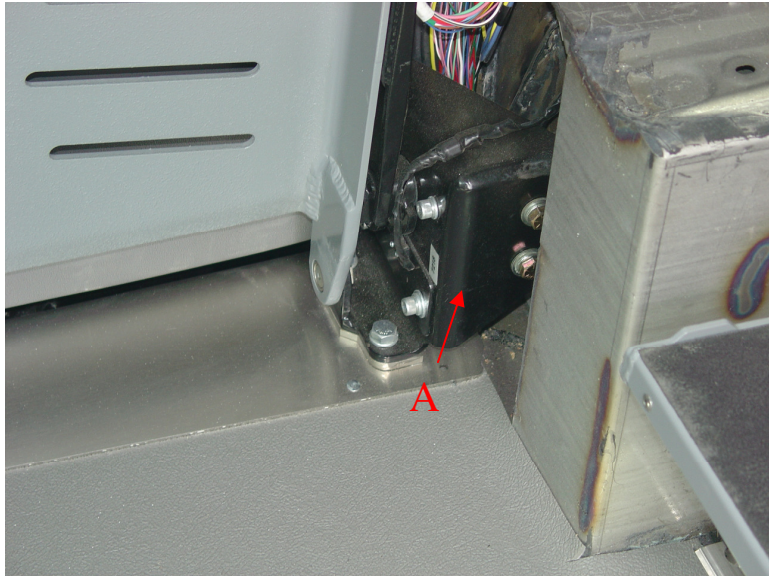
The ramp insulation requires adding a pocket for the ramp motor, the pocket is part # 0033877-030. Pictures 1 and 2 shows the 3.5 inch whole that needs cut in the c-pillar to start the ramp install. Page 3 of this document has drawing 0033877-021 it provides more information to locate the whole.

Picture 2



With the whole cut temporality install part # 0033877-030 shown on page 4 of this document into the new whole. To confirm that the pocket is in the correct location test fit ramp.

Picture 3



Picture 3 reference "A" shows bracket 0033877-029. The old bracket that's in its location needs we need to removed / cut from the van.

To located bracket 0033877-029 page 5 of this document, bolt the bracket to the ramp and installed ramp. Once the ramp is in its proper location tack weld the bracket and remove ramp to complete the welding. This bracket needs 4 one inch long welds, two down each side of and 2 spot welds one in the top and one on the bottom of the bracket.



With bracket 0033877-029 installed, complete the installation of 0033877-030 by adding 4 or 5 spot welds to the lip of the cup on the inside of the van and seam sealing around the wheel well side to prevent any water or dirt from coming into the van.

With both parts installed the final install the new ramp can now be completed, its bolted to the 0033877-029 and the threshold is riveted to the floor

Detailed instructions are below:

- Remove the front passenger seat and B pillar ABS
- Remove the ramp cover
- Remove the old ramp including the threshold. Just drill out the rivets, remove the 2 nuts that are on the C pillar and the ramp is out.
- If the floor covering is rubber, roll it back about 5 inches, if the floor covering is carpet, cover it to protect it from welding

- Unsecure the wires that are routed in the wire trough and move them away from the C pillar area
- Loosen the clamps that hold the HVAC lines inside the front of the rear wheel well area so the lines can be held out of the way while cutting the hole for the tube
- Picture #1 in the attached instructions shows the hole in the C pillar that will need to be drilled for the tube, to locate this hole, measure up from the top of steel floor 2.8" and measure in from the outboard edge of the part 1.75". This will be the center of the 3.5" hole that can be drilled with a hole saw
- Insert the tube into the hole and tack weld it in several places. You will want this tube as close to the outboard side of the van as possible. In the picture it shows a little material left on the outboard edge but I normally do not leave any material and the lip of the cup will overhang that edge.
- To install the (0033877-029) ramp body mount bracket, loosely install the bracket on to the ramp like shown in picture #3 of the attached instructions and then put the ramp into place. To locate the ramp bracket on the van, make sure the ramp threshold is sitting flat on the floor of the van and the outer lip of the threshold is tight up against the van floor. This should locate the bracket and it can be tack welded in place and then the ramp can be removed to better access welding the bracket in more solid.
- Once the bracket and cup are in place, seal around the cup seem to prevent moisture from the wheel well area getting into the van.
- Now the wires can be wrapped and placed back into the wire trough and the floor covering can be put back in place
- Install the new ramp and connect the wires:
 - 1: The YELLOW stow switch wire goes to pin 1.
 - 2: BLACK stow switch wire goes to pin 2, (The BLUE wire on the stow switch is not used)
 - 3: BLACK ramp motor wire goes to pin 3.
 - 4: RED ramp motor wire goes to pin 4.
- Make final adjustments to the ramp stow position making sure when the ramp stows that it is making the stow switch signal before it makes contact with the hard stop. **THE STOW SWITCH ON THE NEW RAMP IS ACTIVATED WHEN IT LOOSES CONTACT WITH THE RAMP SHAFT COLLAR!** This style of switch is operating on the normally closed side of the switch.
- Reattach the HVAC lines and make sure they are not between the ramp motor tube and the tire.
- Be sure to remove the lower door roller access plate from the threshold of the old ramp and install it on the new ramp threshold
- Reinstall the interior ABS and ramp cover