



2001-05 Toyota RAV4 QuickLIFT Installation Guide

Step 1 - Unpack QuickLIFT system and verify contents.

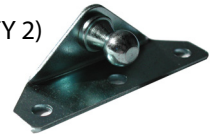
Remove all items from the packing tube. You should have the following before beginning:

- * (2) Gas springs (RT-QL-170-4A) - Be sure to cycle them a few times before installing.
- * (4) 3/16" multi-grip #2 rivets (used on hood brackets)
- * (2) ball-studs and (4) washers
- * (2) ball-stud mounting brackets

(4 MG#2 rivets)



(QTY 2)



Step 2 - Gather the required tools.

Please gather the following tools before you begin the installation:

- * Power Drill
- * 3/16" or #11 indexed drill bits
- * 10mm socket and 13mm deep-well socket with wrench
- * Fine permanent marker or felt tip pen
- * Tape measure or ruler
- * Masking tape
- * Hammer & center punch
- * Rivet gun, capable of 3/16" rivets



Recommended: Craftsman standard or Swivel Riveter (shown - 974749) - \$9.99 to \$17.99

Note: Only use the rivets supplied in the QuickLIFT system.

Step 3 - Mark lower edge of hood bracket.

A. Prop open hood - for last time!

B. Roll a piece of masking tape and place on back of bracket. Place the bracket on inner hood frame just above the hinge (ball-stud aiming inward) as shown to the right - upper edge touching round on hood, outer edge 1" from the edge of the hood's skin.



Step 4 - Align bracket and mark lower hole for drilling.

A. Align the bracket as shown in Step 4. You will need to view the hood directly from the front as shown in **Figure 4A**. The bracket should sit on the inner hood frame with the top edge near round as shown. Ball-stud aiming inward toward car.

B. Holding bracket in place, mark the center of the lower hole using a permanent felt tip marker. Be sure the bracket is straight and sitting flat against the hood's frame.

C. Set bracket aside. Using a center punch and a hammer, tap the center of the mark you just made (this indentation will help guide the drill bit and keep it from wandering).



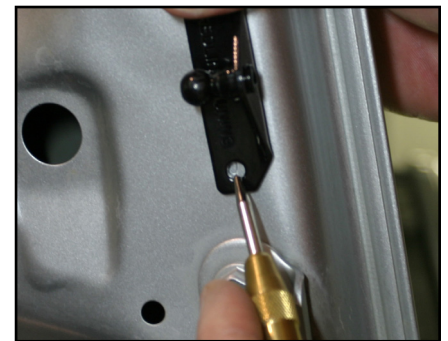
Figure 4A

Step 5 - Drill #11 indexed bit hole, or 3/16" hole.

A. Carefully drill the hole as shown to the right using a **(#11 indexed bit)** or **(use 3/16" bit if #11 bit is not available)**.

If you do not have a #11 indexed bit, you can use the 3/16" bit, however you may have to test fit the rivet and slightly ream hole until rivet fits tightly through bracket and hole - 3/16" is slightly smaller than the #11 bit.

Wrap a piece of electrical tape around the drill bit about 1/4" from the tip to prevent the bit from denting the hood skin. Use new and sharp bits!



Step 6 - Rivet end of bracket to hood.

A. Hold the bracket in position.

B. With the bracket lined up again, place the rivet through the bracket and hole with the long stem sticking outward - The rivet may require a few twists while pushing it in.

C. Check to be sure your rivet gun has the **3/16"** rivet head installed, then slide rivet gun onto rivet. While applying downward force on rivet and bracket, firmly squeeze riveter handle multiple times until rivet gun pops and snaps off the rivet stem.



Step 7 - Drill and rivet upper hole

A. Reposition or rotate bracket into the proper position aligned to round on inner hood frame. Carefully drill the second hole through bracket hole and hood frame. Rivet into place.

Wrap end of drill bit 1/4" down from tip with electrical tape to keep drill bit from pulling through and hitting hood skin.



Step 8 - Install passenger side hood bracket

A. Repeat steps 3-7 and install the passenger side hood bracket. Verify both brackets are installed correctly before proceeding to fender.

Step 9 - Remove fender bolts.

A. Remove fender bolt as shown using a 10mm socket or wrench.

B. Using a 1/2" or 13mm socket drive for the ball-stud, install the ball-stud & washer(s) securely to the fender.

C. Repeat for passenger side.



Step 10 - Cycle both gas springs a few times.

A. **CYCLE EACH GAS SPRING BEFORE INSTALLING - firmly hold a gas spring with both hands by the thick cylindrical end - firmly press down on the floor or carpet and compress the spring. Compress both springs.** Have a friend hold the hood up.

Compress each gas spring a few times - Note: If you unable to compress the gas springs, do not worry. Normal function after installation will also serve the same purpose.

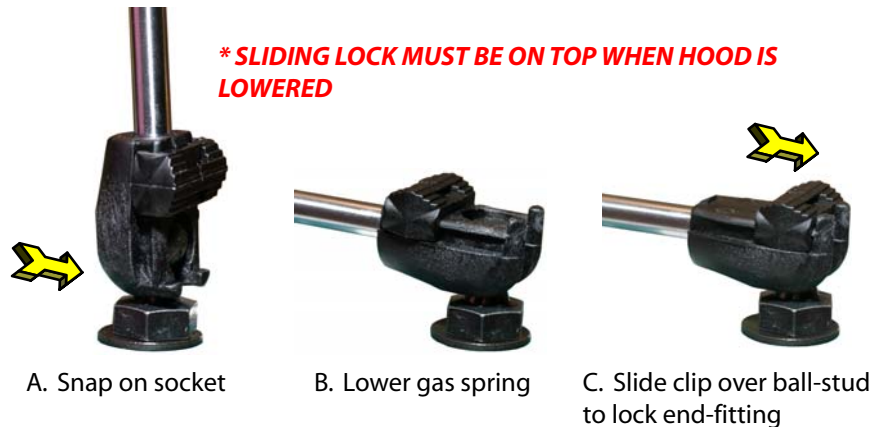


Step 11 - Install gas springs onto fender ball-studs.

A. Firmly press the open end of the socket onto the ball-stud.

B. Lower gas spring down such that the LOCKING MECHANISM IS ON TOP - aiming toward windshield.

C. Slide the locking mechanism over the ball-stud to secure the gas spring. Be sure that the locking clip slides all the way over the ball-stud - this will ensure that this end of the gas spring will not free itself.



Step 12 - Snap gas springs onto hood brackets securely