



2003-PRES Saturn ION QuickLIFT Installation Guide

Step 1 - Unpack QuickLIFT kit and verify contents.

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

- * (2) Gas Springs (RT-QL-200-A5A) - *Be sure to cycle them a few times before installing!*
- * (4) 3/16" steel multi-grip rivets
- * (2) 3/16" Aluminum rivets (longer than above) - for center hole of hood brackets.
- * (4) 5/16" head self-tapping sheet metal screws - fender brackets
- * (2) Fender steel brackets - 90 degree angle
- * (2) Hood steel brackets - 3 hole (angled)
- * Printed Instructions
- * Gas spring locking clips (installed on gas springs - remove before assembly - DO NOT LOSE!)



Step 2 - Gather the required tools.

Please gather the following tools before you begin the installation:

- * Power Drill
- * (3/16" or indexed #11) & 5/32" drill bits
- * 5/16" socket and socket wrench
- * Fine permanent marker or felt tip pen
- * Tape Measure
- * Masking Tape
- * Hammer & center punch
- * Rivet gun, capable of 3/16" rivets (most brands can handle this size)



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

Step 3 - Mark bracket centerline locations on hood and fender (Driver's Side).

A. Leave your hood closed.

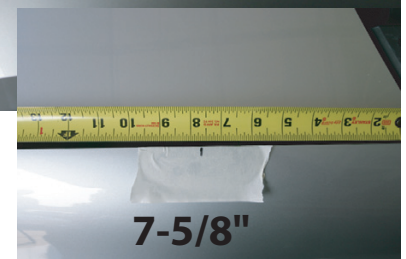
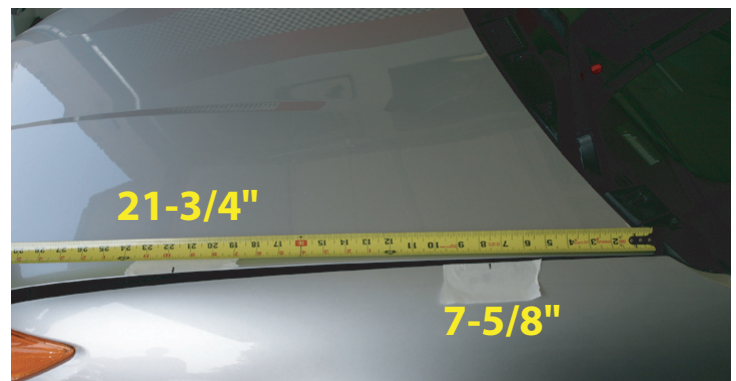
Using (2) pieces of masking tape and a permanent marker, carefully measure from the hood's corner (near hinge and windshield) along the fender line.

Place a mark on the fender masking tape at **7-5/8"**.

B. Place your second mark and on the hood's masking tape at **21-3/4"** as shown to the right.

Verify these measurements!

These marks are going to be used to align the brackets - the centerline of the bracket will align to these marks.



Step 4 - Align bracket and mark hole for drilling.

A. Place the angled bracket on the hood's inner frame pressed firmly against the lip as shown.

Standing along side the hood - align the bracket's ball-stud with the mark you made on the hood. The ball-stud should be pointing down and away from the vehicle while wrapping around the edge.

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 hood's under structure. 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).



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

A. Carefully drill the lower bracket 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. Do not use any other drill bit sizes!

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 lower end of bracket to hood.

A. Hold the bracket in position.

B. With the bracket lined up again, place the gold stem 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 force on rivet and bracket, firmly squeeze riveter handle multiple times until rivet gun pops and snaps off the rivet stem.

Riveting Tips:

1. Hold the riveter with two hands, this will help to stabilize it.
2. Be sure that the rivet is entirely through the hole and that you are putting pressure on the rivet through the riveter when squeezing.
3. Squeeze the rivet gun firmly while keeping the head perpendicular to the hood. In other words, you do not want to tip or angle the riveter during the squeezing of the rivet gun. Keeping the rivet gun head perpendicular to the mounting surface and bracket is desired and will help create a solid bracket mounting. We have found that having someone help hold the hood and bracket while riveting helps out a lot - otherwise, you are trying to rivet to a moving object and is difficult to apply adequate force.



Step 7 - Drill and rivet lower hole - then drill and rivet hole in between the first two.

A. Reposition or rotate bracket into the proper position against hood lip. Carefully drill the second hole through bracket hole and hood's under structure.

Be careful not to drill up through top of the hood.



Carefully drill a third 3/16" hole between the first two. Then rivet the Aluminum rivet (longer rivet, 2 included) into this hole. This rivet helps stabilize the bracket and should be installed last.

Step 8 - Repeat steps 3-7 and install the passenger side hood bracket.

A. Your hood has a symmetrical under structure. Repeat Steps 3-7 to install the upper passenger hood bracket. Take your time.

Step 9 - Position and mark first hole for driver's side fender bracket.

A. Hold the bracket in position as shown to the right. The centerline of the bracket should be lined up with the mark made on the fender and also centered between the raised area as shown. You might need to loosen the fender bolt to allow the bracket to fit snugly between the bolt and the fender lip as shown to the right.

The bracket's ball-stud should face outward or away from the vehicle while the back lower corner of the bracket should sit nicely against the small raised fender lip.

B. Mark upper hole using a fine permanent marker.



Step 10 - Tap hole center before drilling.

A. Using a center punch and a hammer, tap the center of the marked hole. This will help guide the drill bit and keep it from wandering during the following step.



Step 11 - Drill upper or right hole using 5/32" drill bit.

A. Drill the upper or right hole at the marked position using a sharp 5/32" drill bit.



Step 12 - Attach the upper or right end of the bracket to fender.

- A. Using a color matching paint, touch up the area where you just drilled the hole.
- B. Using a 5/16" socket and wrench (or use a 5/16" nut driver and your drill), carefully attach the screw into the fender. Apply adequate pressure while screwing the sheet metal screw in - you will be creating threads through the layers of steel on the fender lip and it will require force.

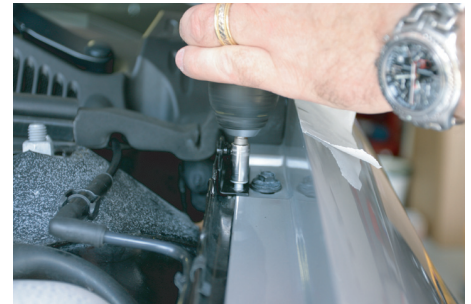


Step 13 - Mark center with marker and indent with center punch.

- A. Using a permanent marker, mark the left or lower hole of the fender bracket. **Be sure the bracket is parallel to the fender.**
- B. Using a center punch and a hammer, tap the center of the marked hole. This will help guide the drill bit and keep it from wandering. Bracket is not shown in photo, but should be installed from the right hole of bracket while marking and punching.

Step 14 - Drill second hole and attach bracket.

- A. Drill the second hole (hole closer to the front of the vehicle) at the marked position using a **5/32"** drill bit. Do not ream or over drill the hole - any larger and the threads will not hold securely.
- B. Attach the bracket using the same 5/16" socket and wrench. Secure both screws and bracket at this time.



Step 15 - Repeat steps 9-14 to attach the passenger fender bracket.

- A. Repeat Steps 9-14 to attach the passenger side fender bracket. The vehicle is symmetrical so the same locators can be used. Feel free to measure off of key areas to ensure a symmetrical installation.

Step 16 - Cycle Gas-springs!

- A. **Cycle your gas-springs.** Holding the thick end with two hands, carefully and firmly push the extending rod against the floor - compress the gas-springs a few times to lubricate shaft.
- B. Install the driver's side gas spring with the cylinder at the top (large end up and connected to the hood bracket ball stud). Be sure that the gas spring sockets snap securely onto the ball studs. Continue holding the hood until Step 17 is completed.
This procedure is most easily completed if the upper ends are snapped onto the ball-studs first and the lower ends are snapped on last.

Step 17 - Install the gas spring locking clips.

- A. Install the gas spring locking clips, just are you removed them before starting this installation.

Enjoy your QuickLIFT kit!