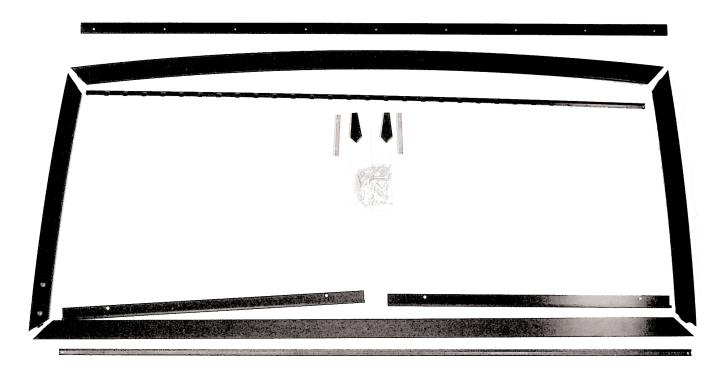


Aluminum Upper Tailgate Assembly Instructions For Range Rover



PLH514

You Will Need:

T H E

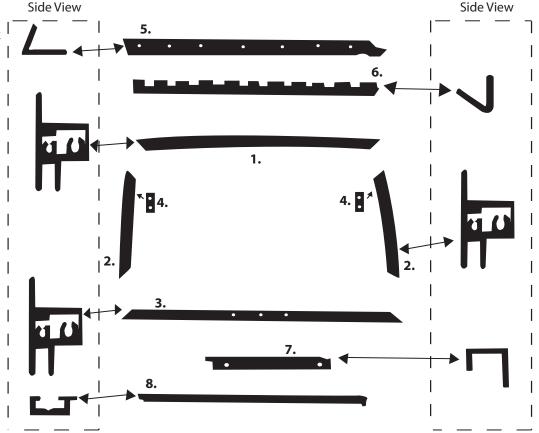
ECIALISTS

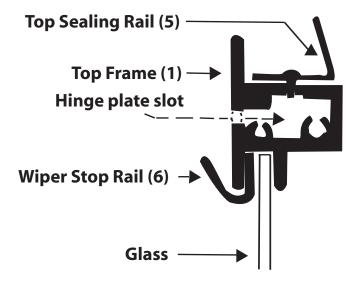
- Automotive window glazing putty
- Black silicone sealer

Rovers North, Inc. • 1319 VT Rt. 128 • Westford, Vermont • 05494-9601 USA

Contents INSTRUCTIONS: PLH514I

- 1. Top frame (curved)
- 2. Side frame (left hand and right hand)
- 3. Bottom frame
- 4. Hinge plates
- 5. Top sealing rail
- 6. Wiper stop rail
- 7. Lock Covers (2)
- 8. Lower seal fixing strip
- 9. Instructions and contents list
- 10. Accessory fixing kit





10. Accessory Fixing Kit Contents

- a. $4 \times M6 \times 40 \text{mm}$ countersunk pozi zinc machine screw (to fix locks to item 2)
- b. 2 x M6 nvloc nut (to fix locks to item 2)
- c. 11 x No \pm x 1/2" pan pozi self tapping screw (to fix item 7 to 3 and item 5 to 1)
- d. $2 \times No \times 11/2$ " countersunk pozi self tapping screw (to fix item 3 to 2)
- e. 8 x No 4 x 10mm flanged pozi self tapping screw (to fix item 8)
- f. 4 x M6 x 25mm raised countersunk machine screws (hinge bolts)
- g. 4×4.8 mm x 10mm long pop rivets (to fix strut retaining plates)
- h. $2 \times M6 \times 25 \text{mm}$ countersunk pozi machine screw (to fit item 2 to 1)
- i. 2 x No 8 x 25mm countersunk pozi self tapping screw (to fit item 1 to 2)
- j. 2 x MRC7257

1 800 403-7591

or (802) 879-0032 • Fax: (802) 879-9152

email@roversnorth.com • www.roversnorth.com

Directions INSTRUCTIONS: PLH514I

Prepare a clean workbench area large enough to accommodate your assembled tailgate lid. Cover this area with a soft cloth to avoid scratching the finish on your new aluminum upper tailgate.

- 1. Remove the cover strips along the inside lower edge and up the right hand side of the old tailgate. This gives access to the cables for the central locking, which can be disconnected at the actuator end. Releasing the clamping saddles on the grey plastic tubes that guide the cables up into the rear headlining, disconnect the heated rear window connections. Take great care here: these connections are very vulnerable and if you knock one off the glass, you'll have to sub for a complete new window! Throughout the whole operation, keep those connections in mind.
- 2. Disconnect the lower end of the glass struts. Remove the 4 top hinge screws. You may have to drill out the four screws in the hinges which can seize, but there are replacements in the kit. Then the tailgate is lifted off and placed, outside down, on a large table, with the handle hanging over the edge. All the other fittings- latches, actuator rods and so on, should be removed, apart from the lock (which we will come back to in a minute). The outer handle is held by two large screws from the inside, and as this is steel-into-alloy, you may need an overnight soaking with penetrating oil before they will budge.
- 3. The steel frame is made in two parts- the top and sides as one, and the bottom as the other, held together with long screws. To dismantle, use a hacksaw on it or even a metal cutting disc in an angle-grinder, always taking great care not to go too deep and nick the glass.
- 4. Follow the line of the old join, and cut through the fixings between the bottom and sides. Once you're through the metal, two people should be able to pull the frame bottom off the glass. You'll probably need to repeat the cutting exercise on the upper two corners. Once the glass is free, carefully remove the old sealant from it and put the glass safely to one side. You can now be more ruthless with the old frame.
- 5. Drill out the big pop rivets holding the glass strut lower fixings to the sides. Draw a sketch of how they locate first, because they will have to go back in the exact same way. Rivet on to the new frame before the glass goes in. Now remove the central lock unit from the lower frame. There are two countersunk screws, their heads are hidden under the sealing rubber channel rust. They'll need a good overnight soaking in some releasing oil.
- 6. You'll also need to remove the little plastic "saddles" that support the lock actuator rods. They're in two parts, with a collar pressed into a hole in the metal, and the saddle (looking like a miniature rowing boat rowlock) pushed down into it. This plastic has probably become very brittle, and it is easiest to angle-grid a hole in the outer face of the frame so a screwdriver can be used on the parts from behind to gently push them up. Do as much work as possible on the new frames before you start building the glass in- it's not so heavy for a start, and there is less likelihood of damaging those vulnerable heating element connectors.
- 7. Because of the internal structure of the extruded lower frame rail, you'll need to check inside before you decide where to drill the holes for the plastic inserts that support the "saddles". Their fore-and-aft position isn't critical for operation, but it's best to position them in a clear part of the interior. Likewise, the bottom sealing strip holder is best fitted before the frame is assembled, but you may have to remove it again temporarily to allow the lock to be fitted into the frame. You'll need to drill the (2mm) fixing holes yourself. Note that the holder isn't symmetrical and the longer lip needs to face towards the outside (rear) of the vehicle, in the angle of the lower frame. Similarly, drill and fit the top rain gutter to the top frame, but remove it again before assembly. Start from the center and work outward, as you are forcing it into a curve. Now you can start to build the top and sides together. Lay a blanket on the table (worktop) to protect the powder coating and offer up the pieces, having first cleaned up any rough edges on the mitre with a file.
- 8. Insert the hinge plates (4) into the slots (see diagram) in the top open ends of the side frames (2). Push inside the frame until the holes line up with those drilled in the face of the frame. Some swarf may have to be cleared initially to ensure a smooth entry into the frame. Temporarily secure with hinge bolts (f). Fix side frames to the top frame using items h and j. The self tap screw goes through the side frame and the machine screw through the top frame, the edge of the top screw fits offset to the frame. Take great care not to cross-thread the machine screws; you're going into an angled end, and the aluminum is soft. Before final tightening, lay the frame on a flat surface to make sure its not warped.

1 800 403-7591

or (802) 879-0032 • Fax: (802) 879-9152 email@roversnorth.com • www.roversnorth.com

- 9. Before you fit the glass, test-fit and remove the bottom rail with its long self-tapping screws to make sure that the threads are cut, and everything's going into place. It won't be so easy when you're forcing the glass against its glazing putty. Using "Dum-Dum" glazing putty or another equivalent, place 3 or 4 small lengths in each channel of the frame where the glass is to fit. Slide the glass into the frame from the bottom, then secure the bottom frame onto the main frame. The glazing putty is there purely to stop the glass from moving in the frame. Using Dunlop DP2205 High Modulus Black Silicone Sealer or a similar glass sealing compound/silicone sealant, carefully seal the glass to the frame on both sides. Support the glass first with a small bead of glazing putty in the channels, and apply the sealer afterwards. Slide the glass up into the channels of the upper frame and make sure that you get the heating element on the inside. The machine screws that help fix the lower corners also hold the latch boxes in place. Lightly fit them to make sure that the frame is aligned, then fully tighten the self-tapping screws. The machine screws can then come out again to fit the latches.
- 10. Read the instructions on your silicone sealer if it says "remove excess immediately with white spirit" then do so, otherwise you may find it's much harder to remove after it has dried. Place wiper stop rail (6) in top channel, so that the serrated edge is wedged between the outside of the glass and the main frame (see diagram). It is recommended that this rail is held in position with 3-4 pieces of tape stretching from he glass then contacting the wiper stop rail and going over the top of the tailgate frame before sticking to the other side of the glass until the sealant has dried.
- 11. Centralize the top sealing rail (5), then drill and screw to the top frame (1), from the center to the outside, using screws (c) (see diagram) thus forming a channel.
- 12. Attach the lower seal fixing strip (8) to the bottom of the bottom frame (3) using self tapping screws (e). Next, fit the bottom sealing rubber into its channel. There really is no quick and easy alternative to working slowly along, levering it under the channel lip with a blunt screwdriver. When re-fitting the lock to the lower rail, note that the screws may be two different lengths. The shorter one should go towards the LH side of the vehicle to avoid fowling the mechanism inside the lock. Fit the exterior handle and push-button before you attempt to adjust the side latch operating rods. Don't forget to feed the plastic central-locking actuator arm through the slot in the frame before you introduce the locking mechanism, aligning it with the rotating collar on the back of the push button.
- 13. Now fit the latches on the side frames, screwing the actuator rods from the central unit, and clipping them into the plastic "rowlocks". Test them by pushing the latch forks down into the locked position. If the latch won't stay down, then the rod is too short; lengthen it until the latches will stay down, then (using the threaded adjuster) shorten it until it pops up again. Back it off half a turn. If both latches "pop" at the same time when you press the exterior button, then the rods are evenly adjusted. Finally, fit the corner trims (k) with some sealant to keep them in place, to the joint between the side frames (2) and bottom frame (3). Carefully bend over the corners. DO NOT use pliers as this will damage the trims. Remove excess sealant.
- 14. Fit locking mechanism covers (7), using screws (c) and existing handle screws. On cars with central locking transfer fittings as per the original tailgate. Cover lengths vary according to the year of the original tailgate. Transfer wiring loom/central locking covers and actuators if fitted.
- 15. On some vehicles it may be necessary to adjust the top hinge where it passes through the rear bodyframe (behind the headling), the striker plates on the body sideframe, and possibly the lower tailgate. This varies from vehicle to vehicle.

JOB DONE

Instructions Questionnaire

We rely on our customers to help us continually improve our instruction sheets. Please FAX or mail any comments, questions, or ideas for improvements you may have.

or Fax: 8	02-879-9				1319 Vermont Route 128 Westford, VT 05494								
	802-879-9152												
Your Name:Address:				Phone #:Email Adrs:									
Overall, how	-	ou rate the q	uality of this	description of set of instruct	ions? (please	circle one):							
<u>Poor</u> 1 2		Fair3 4		<u>Good</u> 5 6		Very Good 7 8		Excellent 9 10					
Ideas, Comr	nents, or	Corrections	(please inclu	de specifics, s	uch as page 1	number, or st	ep number):						

THANK YOU!

Send To: Rovers North