



E-GUARD

E-Guard for ProMaster Installation Instructions



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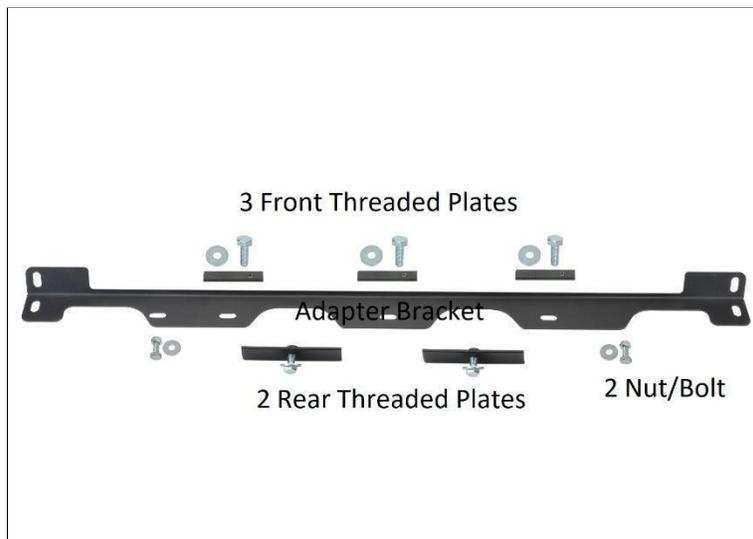
E-Guard for ProMaster Installation Instructions

First time installation of the E-Guard begins with installing the E-Guard adapter bracket. Once the bracket is installed, it does not need to be removed for future removal and reinstallation of the E-Guard.

Section I of this instruction guide refers to the adapter bracket installation and factory undertray modification for initial installation only.

Sections II and III refer to the E-Guard installation and subsequent removal/reinstallation for service work.

Included Parts:





Required/Recommended Tools

Wrenches	Sockets	Drivers	Other	Hymer Only
13 mm	13 mm	#2 Screwdriver	Side cutting pliers	#2 Square Drive
15 mm	15 mm		Tube of RTV (Silicone)	Tie Wraps
17 mm	17 mm		Jig Saw	
			Tin Snips	

Section I. E-Guard adapter bracket installation

NOTE: The E-Guard bracket installation requires access to the front bumper mounting brackets and trimming of the factory plastic undertray.

Remove the passenger side splash shield and set aside (Hymer/Roadtrek, also remove the driver’s side splash shield)



Place the 2 rear threaded plates at the rear of the subframe (use the FORWARD set of large holes). Thread the included bolts in 4-5 full turns at this time.



Place the 3 front threaded plates above the bumper trim cross member

(We recommend applying some RTV to the front threaded plates before putting in place, to ensure that the plates don't move when the E-Guard is removed for future service)



Insert the front threaded plates between bumper trim mount and radiator shroud (RTV not shown)



Remove the two 13 mm bolts at the bottom of the lower trim mounting plate. Place the E-Guard adapter bracket in place below the mounting plate and loosely install the 13 mm bolts back in along with the two included nut-and-bolt fasteners on either end of the adapter bracket to the lower extension of the bumper mounting brackets



Section II. E-Guard installation with adapter bracket installed

Support the E-Guard and slide the rear mounting tabs onto the large bolts at the rear of the subframe. Without tightening the rear bolts, carefully align the mounting slots at the front of the E-Guard with the holes in the lower trim mounting plate. Start all three front bolts into the threaded front mounting plates, but do not fully tighten. Ensure that the E-Guard has clearance from the alternator case on the passenger side.

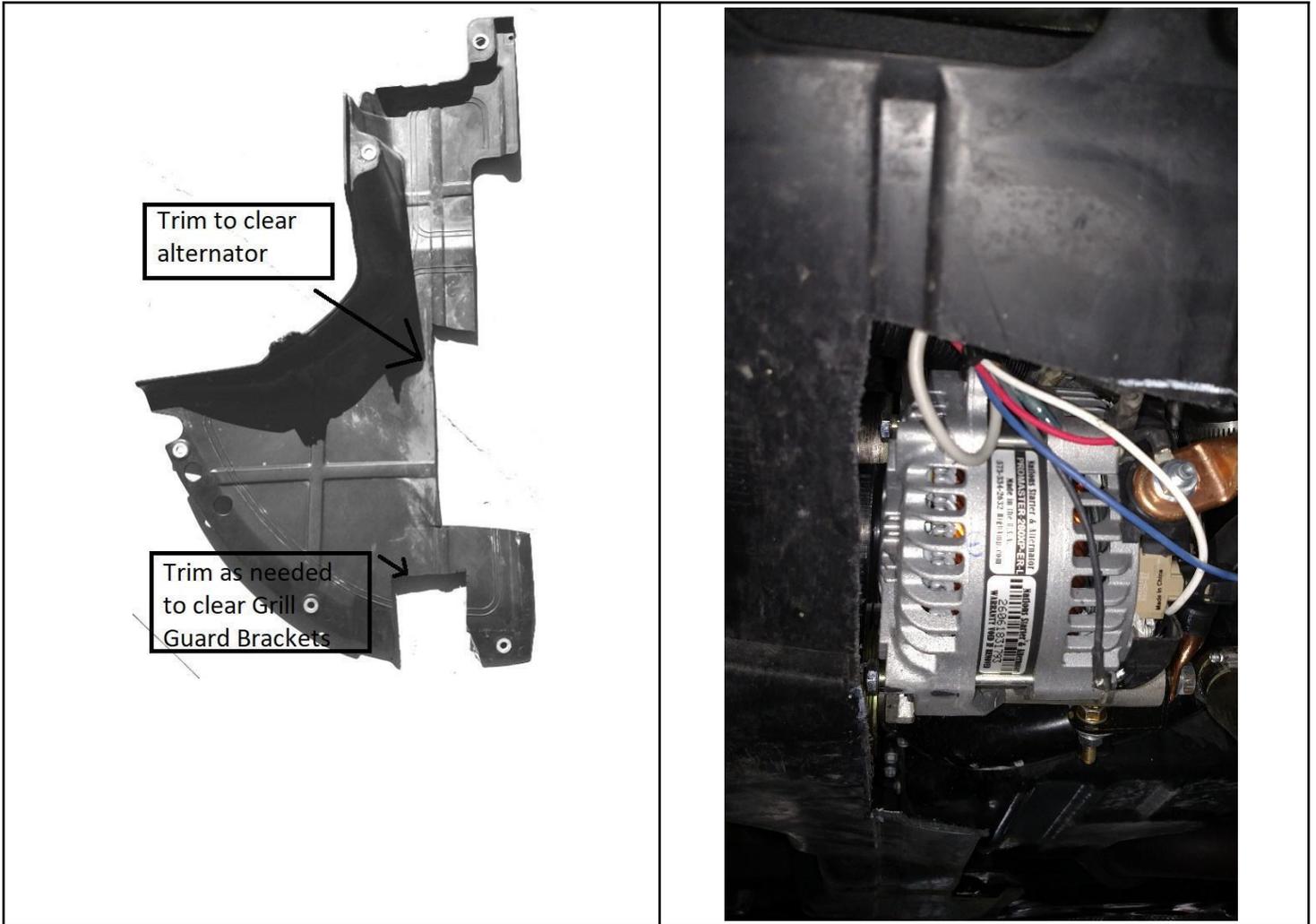


Once you have determined that the E-Guard has sufficient clearance, tighten down the front three bolts. Check the E-Guard clearance again, as it may have shifted during the tightening sequence.

Next, tighten the four fasteners holding the mounting bracket in place.

Finally, tighten the two rear bolts and inspect the lower exhaust flange for clearance with the E-Guard.

Trim the factory undertray using a jigsaw or similar tool along the molded line as shown, then reinstall the plastic panel.





Section III. Service removal and reinstallation

Loosen the two rear mounting bolts, but do not remove them. Remove the three mounting bolts in front of the E-Guard and carefully lower the E-Guard while pulling forward to disengage from the rear mounting slots. If the vehicle is to be moved or the E-Guard will be off for an extended period of time, we recommend tightening the two rear bolts and reinstalling and tightening the three front bolts to ensure that the backing plates do not shift.

To reinstall the E-Guard, loosely start the rear mounting bolts, leaving room to slot the E-Guard in. Slot the rear of the E-Guard into the bolts, line up the three front mounting holes, then loosely start the three front mounting bolts. With the E-Guard loosely held on by all five bolts, check clearance to the under-hood generator on the passenger side (if applicable).

Under-hood generator





E-Guard Installation – Hymer Aktiv/Roadtrek Zion Addendum

Hymer/Roadtrek coaches require 4 unique steps for this installation:

Trim the Hymer/Roadtrek proprietary left side splash shield

Trim the Hymer/Roadtrek right side modified splash shield

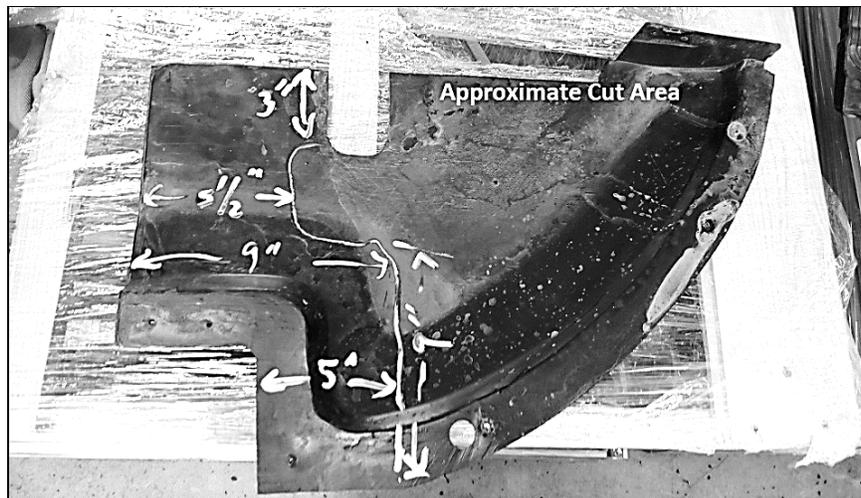
Reposition the generator output cable

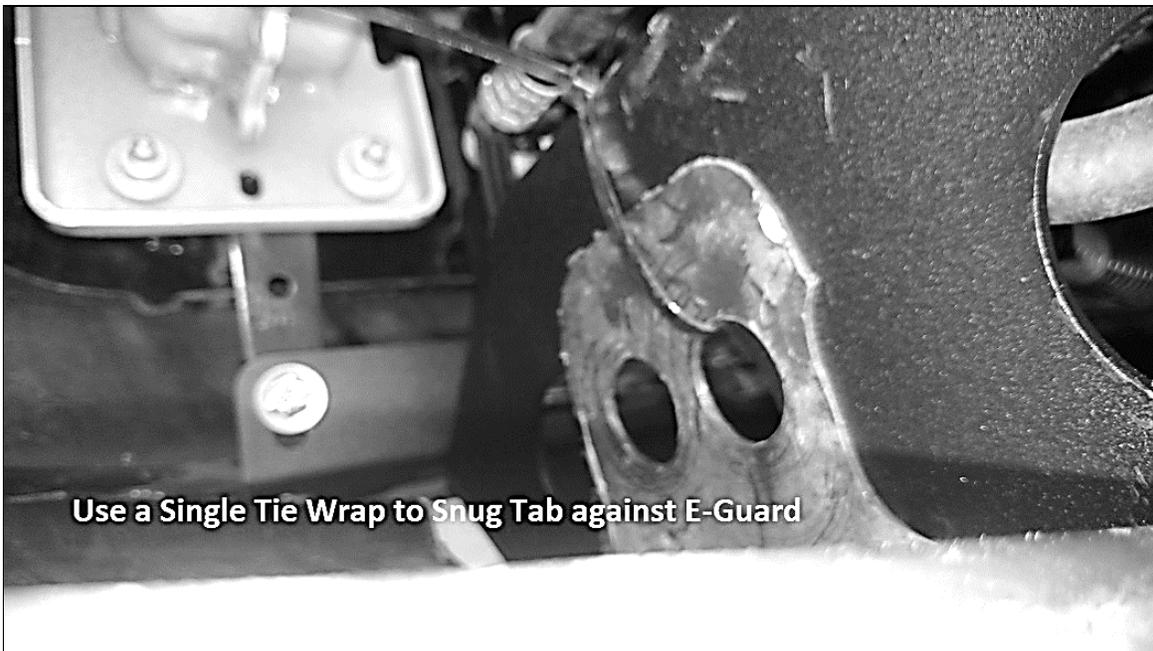
Reposition Balmar cable (if Balmar is installed on the frame rail)

Hymer/Roadtrek uses a proprietary molded cover on the left side of the vehicle, under and behind the bumper. This cover primarily protects the Balmar regulator (on lithium battery equipped units).

When installing the E-Guard, the Hymer/Roadtrek cover needs to be trimmed so that it fits against the E-Guard (see pictures). The cover can be cut with a jigsaw or metal shears.

The factory self-drilling screws and a plastic cable tie will be used for installation.







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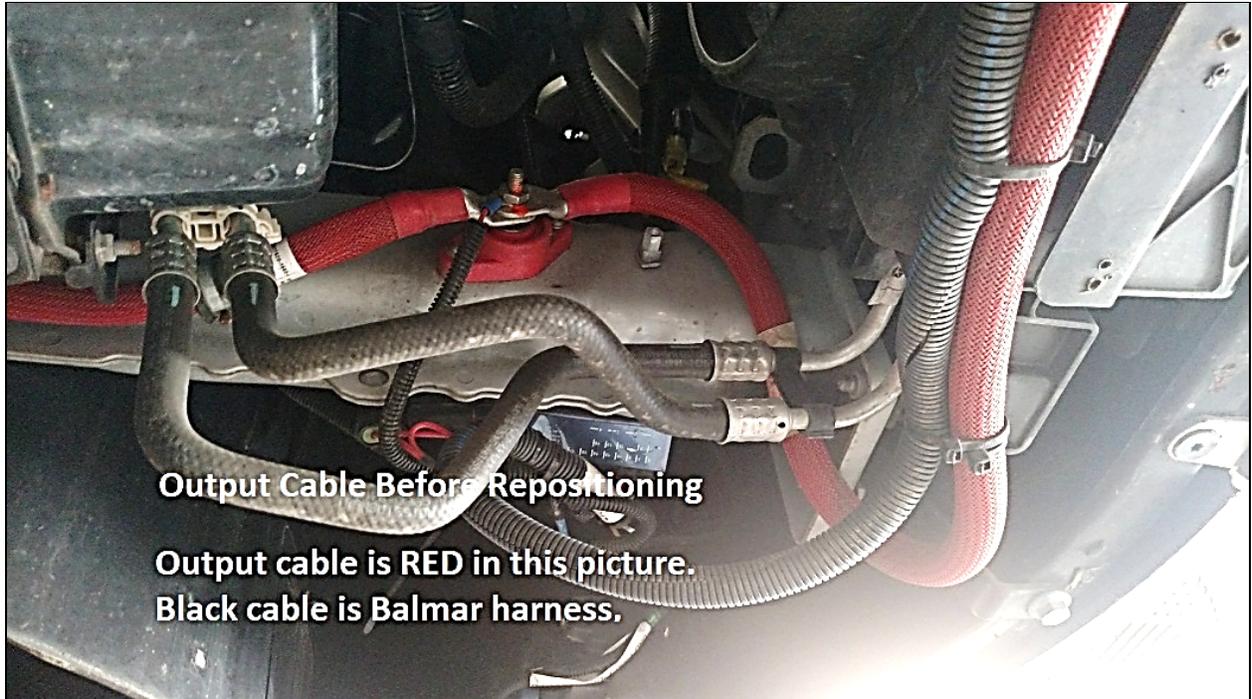
Hymer/Roadtrek modifies the right-side factory splash guard to fit over and conceal the under-hood generator. This cover needs to be trimmed to fit alongside the E-Guard (see pictures). The cover is best cut with a jigsaw, and metal shears can help to adjust the cuts for best fit.

The original square drive and Philips and/or 8mm screws can be re-used for installation. Use the factory spacers as needed in order to clear the Hymer/Roadtrek installed rivets.



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On many but not all units, Hymer/Roadtrek routed the high-current alternator output cable from the under-hood generator to the driver's side frame rail by passing on the outside of the transmission cooler lines and upward before turning 180 degrees and connecting at the junction point to the main cable at the frame rail. For the E-Guard installation, the cable needs to be routed on the inside of the transmission cooler lines and routed upwards along the radiator shroud before turning downward to the junction point.



To reroute the high current cable, first shut off the lithium batteries and disconnect the AGM battery at the main charging junction. (If it is not practical to disconnect the AGM battery, it is possible to perform this procedure, but it is recommended to wrap your 14 mm wrench with electrical tape and be VERY CAREFUL not to touch a grounded surface while loosening or tightening the junction nut.) (Note here that sometimes a 15 mm can help if the nut is covered with inspection paint, but be sure to use a 14 mm to properly secure.)

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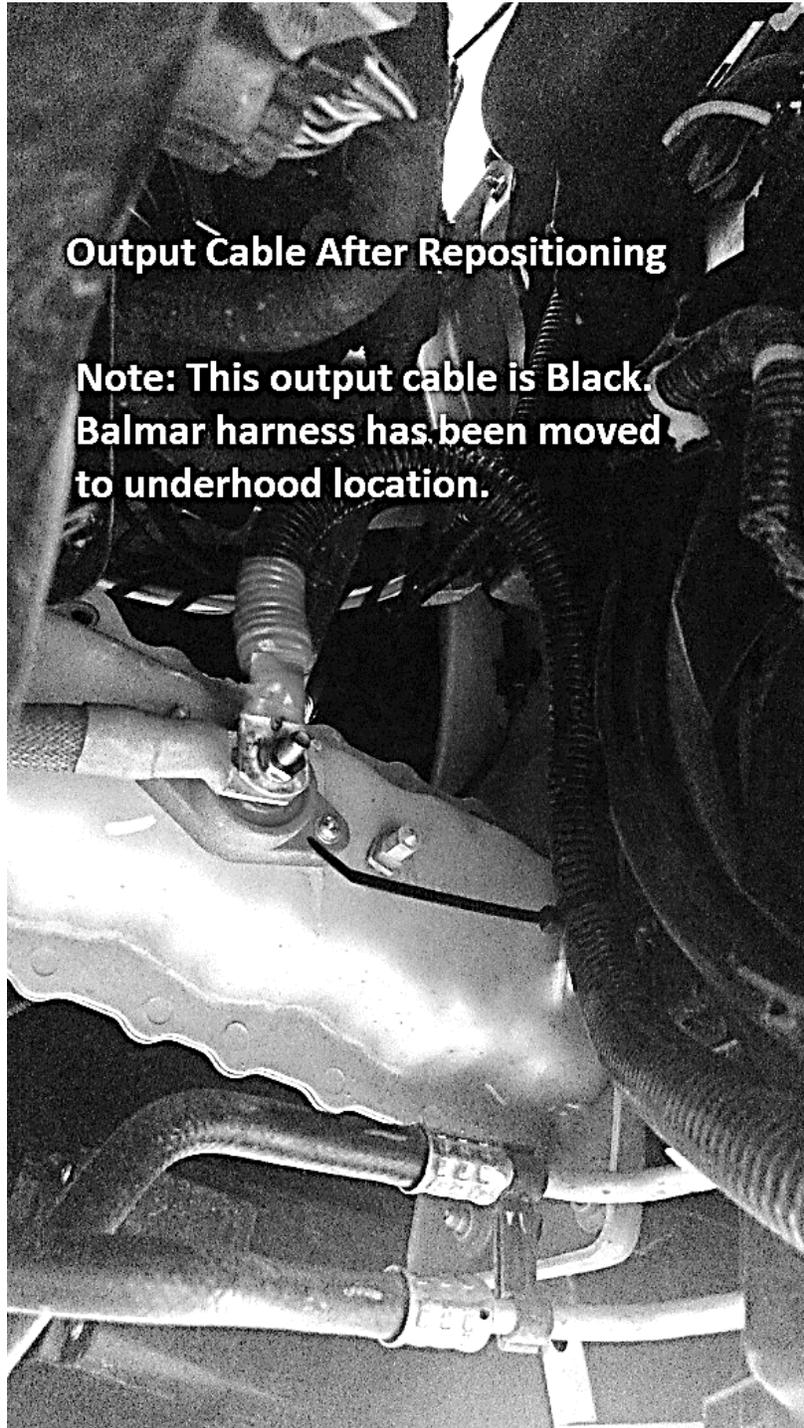
Carefully remove the junction point nut. Move the output cable to the inside of the transmission lines and back into position before reconnecting it to the junction.

Drill a ¼" hole in the flange of the radiator housing and use a plastic cable tie to secure the cable.





Close Up of Output Cable Tie Wrap and Hole in Radiator Shroud



Lastly, in the factory position, the Balmar harness may or may not interfere with the E-Guard side plate. Reposition the harness as necessary to avoid interference with the E-Guard or transmission cooler lines.