

# INSTALLATION GUIDE

2007-2013 RangeMax Front Bumper



### Needed Tools

Standard and Metric Socket Set  
Standard and Metric Wrenches  
Hex Keys/Allen Keys (wrenches)  
1/2" drill bit

### Included Hardware

(8) 1/2"x 1.5-13 Grade 8 Zinc Plated Bolt  
(24) 1/2" USS Grade 8 Zinc Plated Flat Washers (use as spacers/shims)  
(12) 1/2"x 13 Grade 8 Zinc Plated Nylon Lock Nuts  
(4) 1/2"x 4.5-13 USS Grade 8 Zinc Plated Flat Washers  
(2) Frame Reinforcement Brackets (left and right)  
(1) Main Internal Mounting Bracket

3/5 Stars (recommended professional installation)

## Remove Stock Bumper

Begin by removing the plastic piece underneath each headlight. Use a screwdriver to pop the plastic clips. Take off the plastic on the inner fenders by removing the clips using a 10 mm socket or wrench. You do not have to completely remove the plastic that is part of the bumper, as it will come off with the bumper.



The best we have found to remove the panel is to use a flat head screw driver covered with a piece of tape (to protect the paint). Slide in the screwdriver and carefully rotate it to release the plastic clips. \*\*If these panels are removed at the wrong angle there is a molded piece that will break off so use caution.

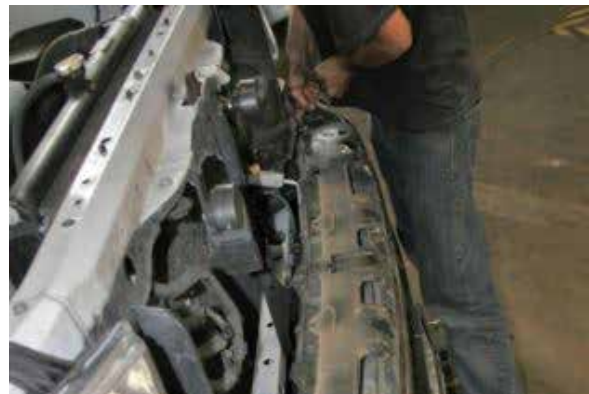


Once the panels are removed there are a series of 10mm bolts that need to be removed in order to remove the plastic of the stock bumper. They run along the front edge of the bumper just behind the plastic bumper edge and underneath the light.



Remove inner fender well bolts on each side (pictured right).

Once all the bolts are undone the top plastic piece of the bumper should come off.



Remove the large metal bracket extending across the bumper with a 10mm socket and/or wrench.



## Remove Stock Bumper

Remove the brackets underneath the headlights.



Now unbolt the chrome outer shell of the bumper to expose the aluminum bumper underneath.



Remove the bumper attached to the frame rails. Next remove the outer aluminum curved piece (shown at right) and then remove the bracket behind it. Both pieces need to come off.



Bracket removal at right



Exposed frame end





Center support bracket with has an extending mount coming off of it; this must be cut off in order for the bumper and/or winch to fit.



Picture of cut center support bracket cut.



The brackets that attach the sheet metal piece underneath the headlight need to be bent out of the way in order to clear the bumper (pictured at right).



Locate the internal mounting brackets (pictured to the right). Install utilizing the oem flange nuts, it is recommended you install just the nuts on the inside of the frame initially.

**\*\*Keep all the bolts relatively loose so you can fit everything in place before tightening.**

Mounting the frame reinforcement brackets require drilling a hole on the inner side of the frame. There is a pre-existing hole on the outside of the frame you can use as a pilot hole to drill through (as pictured to the right). Make sure to drill straight through using a 1/2" drill. Be careful when you break through the frame not to damage any hoses or components of the engine bay.

Install the frame reinforcement brackets, utilizing the factory bolts for the front 3 bolts on the frame, and the 1/2" long bolts. Install the 1/2" long bolts with a washer on both sides (nut side and bolt side). Repeat this step on the other vehicle side. Once you have the frame reinforcement brackets located and the frame reinforcement mount centered as best as possible, we recommend tightening all the bolts.

If you plan on mounting a winch in your bumper and you haven't already done so, this is the time to mount it. This particular winch mount is foot forward and shares mounting location with the fairlead bracket on the back side mounting holes of the winch.



Install your E1 bumper by sliding it into place, we recommend a friend to help you get everything lined up properly (especially if you are mounting a winch at the same time).

Use 4, ½" bolts on each side of the bumper in the internal mounting locations.

Helpful hint\* Do not install the lights in the ports yet, you will utilize this space for install (pictured right).

To properly level your bumper, we recommend installing a nut bolt on one side towards the top, then move to the other side. You will likely need to adjust it several times before getting the location and fit you want.

We recommend maintaining a gap of at least ½" between the bumper and the grill to accommodate for frame body flex.

Adjust the bumper as desired then tighten all bolts to standard torque specs.

Lights can then be installed per manufacturer instructions. Because all lights vary in size some will fit better than others. You may want to use washers as spacer shims to get the height you desire.

Re-tighten and check all bolts approx. 500 miles after initial install.

If you have questions please email us at [info@expeditionone.biz](mailto:info@expeditionone.biz)