

# INSTALLATION GUIDE

## Front Bumper





Included Hardware: (Skid Plate)

- (4) 1/2 -13 x 1 1/4" hex cap bolts
- (8) 1/2 flat washers
- (4) 1/2-13 Nylocs
- (3) 3/8 -16 x 1 1/4" hex cap bolts
- (3) 3/8" flat washers
- (3) 3/8 -16 clip nuts

Included Hardware: (Internal bumper frame)

- (6) 1/2" x 1 1/2" bolts
- (12) 1/2" washers
- (6) 1/2" locking nuts

Rest of front bumper hardware uses existing bolts from vehicle frame during stock bumper removal

RECOMMENDED AFTERMARKET BATTERY: OPTIMA REDTOP 35

Disclaimer

Expedition One is not responsible for any damages to vehicle.  
We always recommend professional assistance when  
installing our vehicle products.





\*\*Recommended to lift front end and take the front tires off for easier access to inner fender well during bumper installation.

Fig 1A



First, remove the 8 plastic clips and 3 small bolts that hold each fender liner in place using an 8mm socket.

Go ahead and remove these from the vehicle for now

Fig 1B



Next, move to the front grill and with a trim tool, remove the plastic clips that hold it in place and remove it from vehicle. (14 Total)

Fig 1C



Remove plastic shroud





Fig 2A



Next, you'll need to remove the following bolts shown in the next few photos to get the bumper ready for removal.

3 on each side using a 10mm socket

Fig 2B



Fig 2C



Bracket to quarter panel fascia bolts

Fig 3A



Fig 3B



You will also need to remove 4 bolts from the underside of fascia shown to right.

Once these bolts are removed (4 total), you should then be able to tug on each side of bumper and pull away (carefully) from the vehicle. Start at wheel well and working forward.

Fig 3C



Make sure to remove bolt connecting quarter panel to quarter panel fascia



Fig 4A



Next, unplug the fog light wire on vehicle by accessing from driver fender well.

Fig 4B



After both sides are free, remove bumper/corner panel fascia as a single unit.

Fig 4C



Remove the remaining bolts or plastic clips holding the top trim piece onto the main stock bumper.

- A. Wheel well trim
- B. Quarter panel fascia



Fig 5A



Next, using a trim tool, wedge along the qtr panel fascia piece to pry it away from the fascia bumper as shown.

You'll also want to remove the wiring harness running along the stock bumper if you need to reuse these later.

Fig 5B



Once the bumper is off, unplug the wiring harness from stock bumper as shown to left.

Fig 5C



Next, we'll be removing the stock washer reservoir from its location on the drivers side. Start by removing the pump and fluid hoses and then the two nuts and 1 bolt holding it onto the frame.

There are various options to relocating this. We do offer a relocation kit but will require the car battery be moved to a different location. (may require buying a smaller battery for fitment purposes) The next few steps will guide you through our method of relocating the battery and washer kit.

Fig 6A



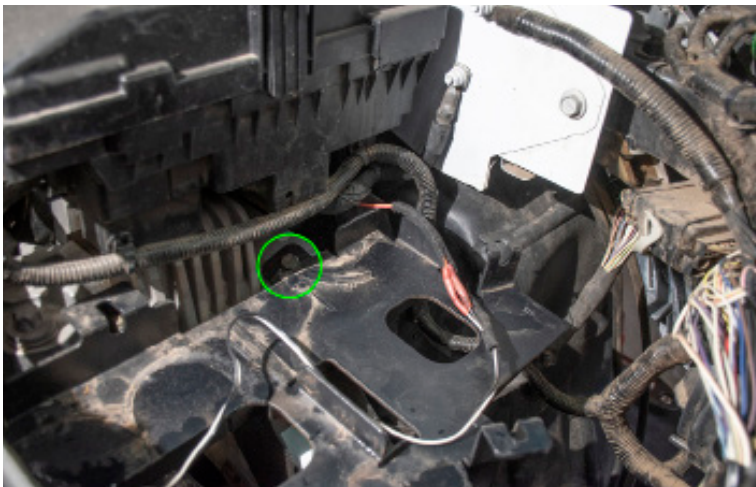
First, disconnect your battery with a 10mm socket and place off to the side. Next, you'll need to unbolt the 4 bolts that hold the stock plastic battery mount into place. This will be the most time-consuming part as there are also quite a few plastic clips to undo around the plastic mount.

Fig 6B



Once the 4 mounting bolts are removed and all the plastic clips are pushed out of the way, you will need to angle the plastic battery mount as shown to right and pull up.

Fig 6C



Next, place the new battery/washer kit mounting bracket into the vehicle bay as shown. You will be reusing the 4 stock bolts you took off the stock mount bracket in order to secure the new bracket into place. Highlighted in the photo is one of the locations where you'll insert and tighten one of the bolts.



Fig 7A



Shown to left are the two other bolt mount locations that will be used to secure the mount bracket. There is also one additional bolt location on the opposite side of these two bolt locations as your 4th and final bolt mounting point.

Fig 7B



Next, we'll be taking the washer reservoir that is provided in kit and drilling two holes for the fluid pump and the low level sensor. Shown right you can see the exact drill hole dimensions you'll need to do to properly fit both devices onto the reservoir bottle.

Fig 7C



After the holes are drilled, make sure to wipe away any debris. The low level sensor shown left will need to be inserted with the tab facing towards the top of the reservoir bottle. See photo on following page.



Fig 8A



If the sensor doesn't quite fit into place, we sometimes recommend taking off the sealant ring from the sensor and placing that into the hole first. Then push the sensor into the opening for good fitment.

Fig 8B



Once both sensors are in place on the bottle, you'll then place the bottle into position on top of the new relocation bracket. We recommend reaching under the driver's side wheel well to reconnect your wiring before tightening down your bottle in the next step.

Fig 8C



Once your washer bottle is plugged in, go ahead and place the top metal cover over the bottle and secure with provided hardware. (12mm socket)

Fig 9A



Shown left is the long screw piece that will secure the front end of the bottle to the mounting plate below.

Fig 9B



Next, you'll need to reuse the bolts that clamped to the back of the PCM (computer) to the stock battery piece and re-mount to the new side-wall of the mounting bracket. See Fig 9B

You will also need to adjust the ground wire from where its stock location is on the right, to the new bolt location 4" to the left as pointed at in Fig 9C

Finally, place your car battery into place with the negative end closest to you. Fig 9D

Fig 9C

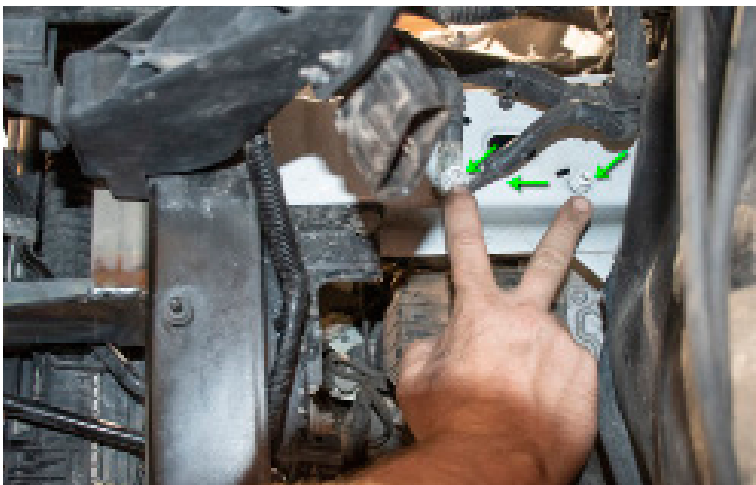


Fig 9D





Fig 10A



Included in kit is a battery cover bracket that secures the battery to the mount tray below. Place this cover over the battery and secure with provided bolts.

Reattach your positive/negative ends to the battery and your good to go!

Next you'll need to remove the air intake on the passenger side. Shown in photos below indicate what to remove in order to take it off the vehicle.

Fig 10B



Fig 10C



Fig 10D



You'll then need to unbolt and remove the stock recovery mounts. First, loosen the bolts underneath the hooks using a 16mm socket. When these are loose enough, you'll be able to rotate the length of the tow hook bar in order to remove the large nut on the back side of the frame. (see photo to left)





Next, remove the two small nuts (10mm, 1 on each side) shown in photo, then remove the 4 larger bolts (4 on each side) 16mm

Remove steel frame bumper piece from vehicle.



Next, you'll need to remove the aluminum collision frame piece shown left. There is one small nut(10mm) and 3 bolts (16mm) that hold this onto the vehicle.



Remove engine skid plate ( x7 13mm bolts)

Then remove the bottom radiator bracket.

(8 bolts total to remove)





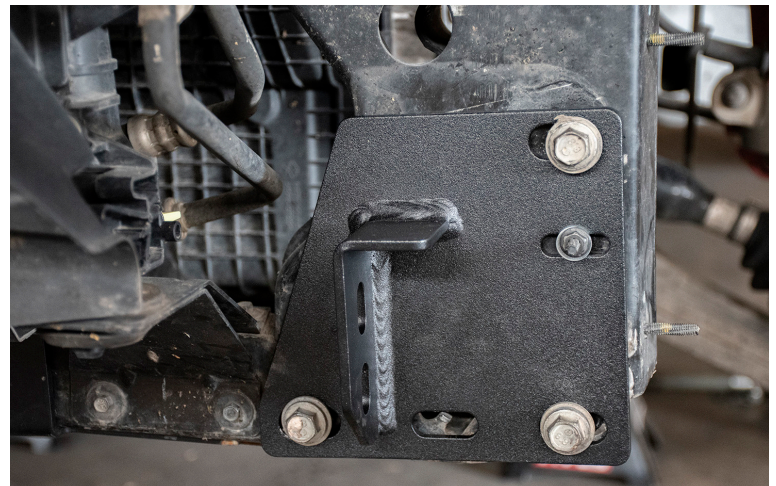


- A. Using the (8) oem bolts, install the new steel radiator bracket piece provided in kit, hand tighten into place but keep somewhat loose to allow some room to reinstall the engine skid plate.
- B. Install engine skid plate
- C. Torque 13mm bolts to 33 ft-lbs
- D. Verify radiator bracket bolts are tightened. (17 ft/lb)

Install transition skid plate brackets as shown to right using existing hardware that was taken off initially. You will need to add one small washer from your kit for each side for the 10mm hanger nut.

Torque 16mm bolts to 35 ft-lbs

Shown to right is Driver's side



#### Install Transition Skid Plate

Using a 3/4" (19mm) bolts/locking nuts and washers, begin placing and tightening the skid piece shown to left to 50 ft-lbs torque. (Start with the bottom bolts first so you have room to get your fingers inside for the top).





Transition Skid Plate Mounting Bracket



Install (2) bolts on bottom side to connect transition skid plate to bottom radiator bracket.

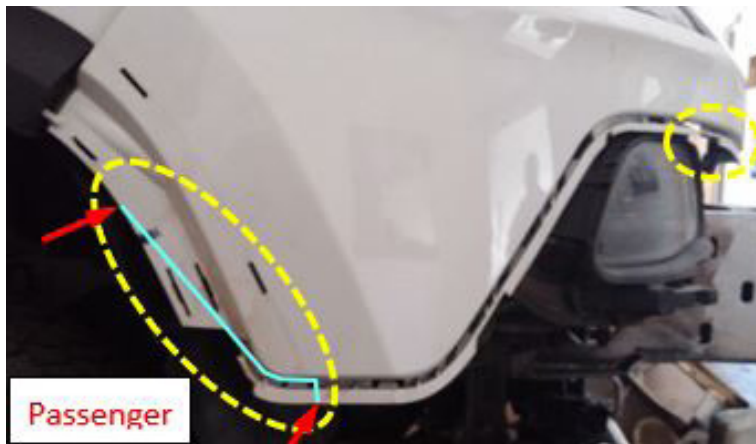


**\*\*IMPORTANT\*\***

Verify skid plate is not rotated forward, otherwise bumper skin will not fit properly. Skid plate should fit close to radiator isolator.

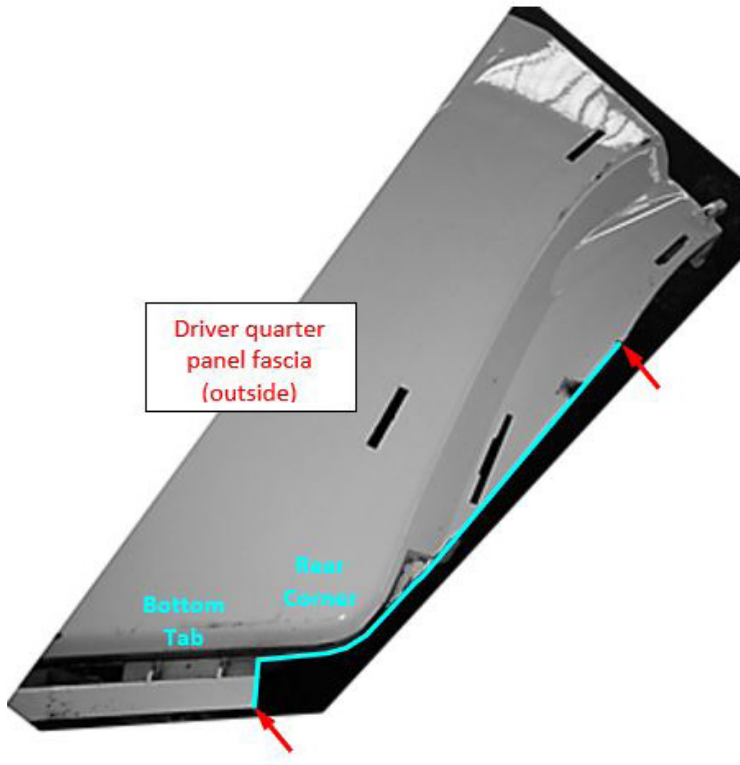
## Quarter Panel Modifications

The quarter panel fascia needs to be trimmed in two places: [1] near the upper, inboard corner of the headlight lens, and [2] near the forward wheel well. Trimming of these areas will allow the new bumper to properly sit around the light housing and wheel well with minimal trimming. See photos that highlight the areas to be trimmed and the blue cut lines.

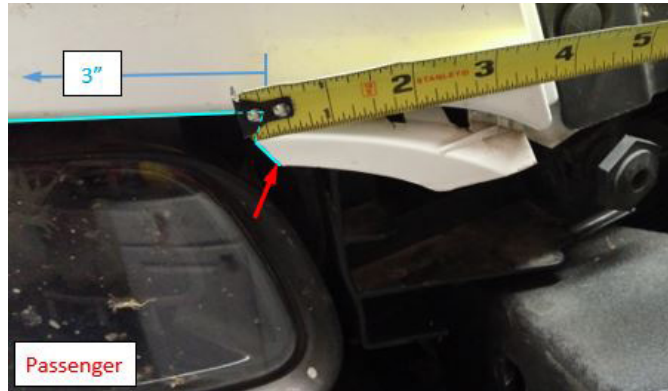




- Trim quarter panel fascia using a straight line from the wheel well liner bolt hole [1a] to the fascia bottom rear corner. Trim from the rear corner to the first bottom tab.
- Repeat for passenger side.



- Trim quarter panel fascia snap groove near light housing, approximately 3.5 inches from vehicle hood. Take care to trim flush with exterior surface for approximately 3 inches.
- Repeat for driver side.
- Touch-ups may be needed after bumper skin is positioned.



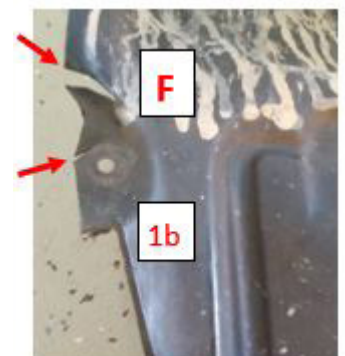


## Wheel Well Liner Modifications

- Cut a 9.5 inch vertical slit [A] approximately 8.25 inches [B] from the engine side of the front wheel well liner.
- Cut a second 9 inch vertical slit [C] approximately 5.5 inches [D] from slit [A].



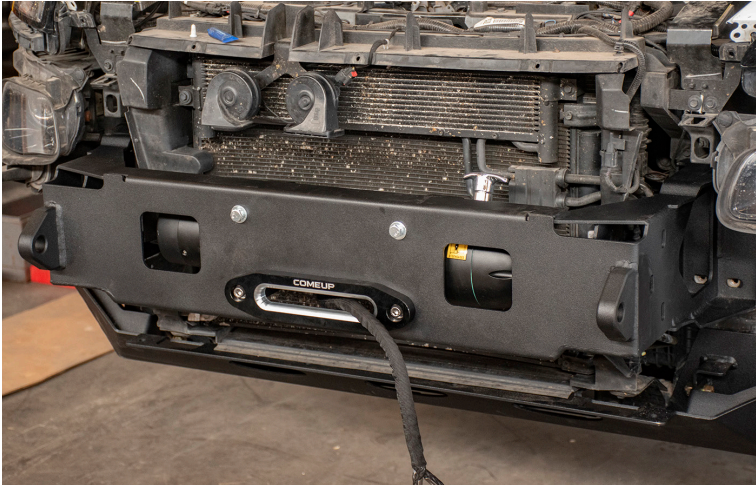
- Cut two relief slits [F] approximately 1.25 inches long above the second bolt hole [1b]. This will help section [E] bend properly when installed.
- Re-install wheel well liner.
- Attach section [B] with push pin [2] and 10mm bolt [4].



- Attach section [D] by straightening the bottom tab and pushing hole [3] onto the lower support beam bolt.
- Install 8mm screw [1a]. Screw holes [1b] and [1c] are not used.
- Tuck and fold section [E] up into bumper above transition skid plate.
- Repeat for passenger side.

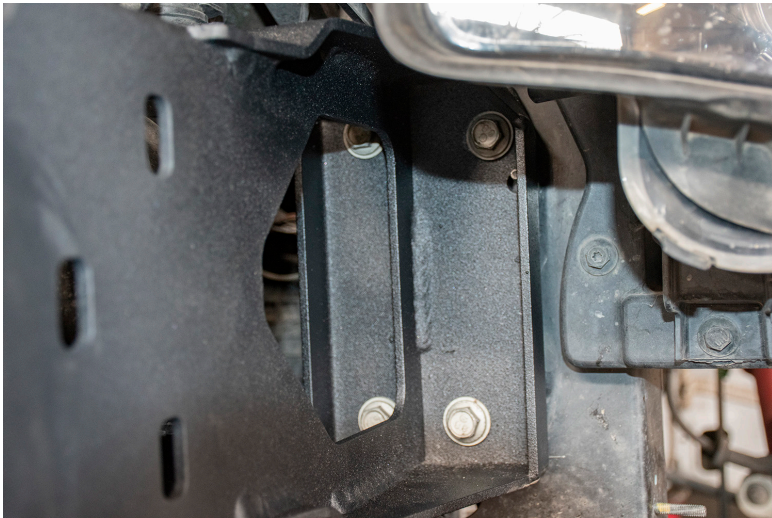






At this point you'll want to mount your non-integrated winch & fairlead to the winch box. Follow vendor install instructions.

Next, place the inner reinforcement bumper onto the frame mounts. Reuse the 16mm bolt hardware you took off initially from your vehicle to tighten down the new winch box.



**\*\*Important\*\***

Check hanger bolt alignment. Distance from bolt to bracket edge should be the same.

Torque 16mm mounting bolts to 35 ft/lbs

Next, you'll also need to trim the bottom section highlighted to the right for the plastic pieces that are adjacent to the light housing. We've marked the outline in white with the 'X' showing what is being removed.

Mirror the passenger side shown for the driver side piece as well.



At this final stage and with the help of a friend, place the outer shell bumper onto the frame. Once in place, check alignment around the entire body to make sure there is a decent gap from the body and no 'rub' areas.

Once your happy with placement, you'll need to reach inside the shell and underneath the vehicle to tighten down your bolts/nuts/washers to the inner bumper frame.

Tighten bolts to 75 ft-lbs torque





Final Fitment Examples

Your all done! If you have any questions or feedback, please email us at

[info@expeditionone.biz](mailto:info@expeditionone.biz)

