



# **INSTALLATION GUIDE**

14+ Tundra Rear Winch Mounted Bumper









#### **Included Hardware:**

- (2) 1/2"x13x1.5" Stainless Steel Button Head Bolts
  - (6) 1/2" SAE Grade 8 Zinc Plated Flat Washers
- (2) 1/2"x13 Grade 8 Zinc Plated Nylon Lock Nuts
- (16) 1/2" USS Grade 8 Zinc Plated Flat Washers (use as spacers/shims)
  - (2) 3/8"x 16 x 1.5" Grade 8 Zinc Plated Hex Cap Bolts
    - (2) 3/8"x 16 Grade 8 Zinc Plated Nylon Lock Nuts
      - (4) 3/8" USS Grade 8 Zinc Plated Flat Washers
        - (2) M6 Zinc Plated Socket Cap Bolts
          - (2) M6 Flat Washers
          - (2) License Plate lights
          - (4) male wire connectors
          - (4) female wire connectors

# Tools:

Standard and Metric Socket set Standard and Metric Wrenches Hex Keys/Allen Keys (wrenches)

# Skill Level:

4/5 stars (Professional install recommended)





#### Remove Stock Bumper

First, unplug all wires and any sensor plugs attached to the bumper including license plate lights. Now remove the tailgate (this step is not required but it will make your install easier).

• Next, pull the plastic corners on the bumper off.



### Remove Stock Bumper (Cont)

Remove plastic center section and remove stock steel bumper ends using a 13mm wrench or socket.



## Remove Stock Bumper (Cont)

Now the stock bumper should be removed and you can begin to install your Expedition One bumper.







#### **Drill Out Holes**

### \*Skip this step if running dual tire carrier setup\*

Drill out the pre-existing holes in the bottom of the receiver hitch assembly where the bumper was mounted. The hole needs to be big enough to accommodate a 3/8" bolt...we recommend you open the hole up to approx. 7/16"



#### **Mount Brackets**

Locate the internal mounting brackets on the oem receiver hitch assembly (pictured to the right). It shares two oem mounting locations; this requires removal of 2 oem mounting bolts (pictured at right) in order to mount the bracket.

- Replace the stock bolts once you have your bracket properly positioned, being sure to leave them loose for adjustment later.
- In the lower mounting hole of the bracket, utilize 1, 1/2" bolt, 1 nylock nut, and 2 USS flat washers (one washer on the bolt side and one on nut side). Repeat this step on the other side of your vehicle.





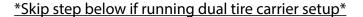




#### **Mounting Expedition One Bumper**

Next, position your Expedition One bumper. Your bumper should slide in place and rest on the oem receiver hitch assembly.

In the 2 rectangular holes on the top of the bumper, install 2 M6 socket cap bolts with corresponding washers. Keep loose.



Install the 3/8" hex cap bolt with corresponding washers and nylocks (again using washers on both the nut and bolt sides), in the holes previously drilled out.

Again, keep all nuts and bolts loose.





#### Mounting Expedition One Bumper (Cont)

\*Skip this step if you're running a dual tire carrier setup\*

In the center step of the bumper there are 2 holes for 1/2" button head bolts. These bolt locations are mainly used for the optional winch mount and are not required for regular use, however if you desire to install the bolts we recommend using the additional USS flat washers as shims between the bumper and the factory receiver hitch assembly.







#### Finish Mounting & Tighten Down

Join the mounting brackets and bumper using 4 (2 per side) 1/2" bolts and corresponding nylock nuts with USS flat washers on nut and bolt sides.



Adjust the bumper as desired then tighten all your bolts. We recommend tightening the top 2 socket cap bolts utilizing a hex key first...this will help the bumper from shifting as you tighten the rest of the bolts. It is also recommended you tighten the oem bolts on the mounting brackets last.



### **License Plate Lights**

Clip ends from OEM wiring. Expose some wire on the clipped ends and insert into round end of electrical connectors. Use either both male or both female on OEM wires and the other set on the wires of the provided license plate lights. Crimp to secure wires in the connectors and insure electrical contact.

- Connect the OEM wire to the pigtail wire with the slide in connectors.
- Press pigtail into back of light and test. If the light doesn't turn on when set to on, switch the wires.
- Locate the lights in the license plate area in the center of your E1 bumper in provided holes. Pay attention to the markings on your light for proper orientation. In some cases you may require some lubricant (liquid soap is a good option).
- Reinstall your trailer plug
- Lights for the rear ports can then be installed per manufacturer instructions
- Re-tighten and check all bolts approx. 500 miles after initial install. Follow standard torque specs for all bolts.



Lay your spare tire on the ground and set the tire mount into place. Now set the arm on top of it, marking the height when the arm is flat across it.



Flip arm over and position your tire mount into position. Tighten into place where you marked your lines.

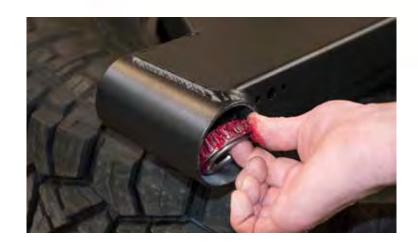


Using marine-based lithium grease, grease your bearings.

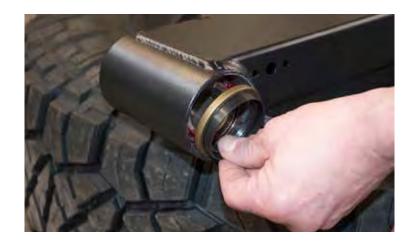




Place your greased bearing ito the bottom of the arm as shown.



Now place grease seal as shown inside the bottom of the arm.



Place arm into position, holding the bearing/grease seal with hands, onto the spindle.

You will need to wiggle until it drops into place. You may also swing it back and few times times to get it to set properly into place.





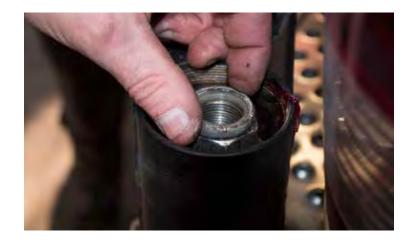
Add your top bearing and drop it into the arm as shown.



Drop provided washer into place



Drop your large bolt into place and tighten down into place till its nice and tight. Then nudge it back a hair so it won't bind.





Repeat these steps for the other arm.



Open arm till the pin drops into place. If it doesn't as shown to right, you'll need to go to the next step below.



Adjust the button head bolts as shown until the pin drops into place. Then secure down again.





If handle needs to be adjusted, then these three bolts shown to right are the bolts you will need to adjust to do that.



Shown to right are the additional bolts for the bump stop that can be adjusted for proper latching.



Using anti-seize provided, paste it around the threaded area of cap.





# **REAR WINCH MOUNT**

Attach cap onto spindle and hand tighten down.



#### Rear Winch Mount Install Information:

This is a "foot forward" mount system.

If the bumper is already installed, remove the 1/2" stainless steel button head bolts. If you are just installing the bumper, leave those bolts out for now.

Mount the winch to the winch mount bracket first. Mount only the lower bolts of winch. Then slide the bracket in place and put in the stainless steel button head bolts.

There are 2 round holes one on each side of the fairlead opening for the upper bolts to attach the fairlead and the winch.

The 2 lower holes on the winch mount bracket intersect with 2 flat areas on the OEM receiver hitch. Drill through the flat area using a 3/8" or 7/16" drill bit, and put in 3/8" bolts.