

2014+ Lexus GX460 Tiger Shark Bumper Installation Guide

Included Parts:

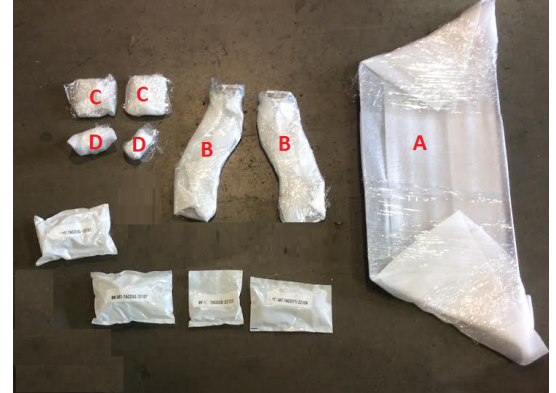
- Bumper Shell
- Winch Mount
- Accessory package
 - Lower Brush Guard
 - AC Line Guards Left & Right
 - Side Plates Left & Right
 - Rectangle Spacers (2)
 - LED Turn Signals (2)
 - LED Turn Signal Resistors (2)
 - Double Sided Adhesive
- Bumper Bolt Kit (BK-MT-33701)
- Tiger Shark Accessory Bolt Kit
- Winch Mount & Guard Bolt Kit (BK-MT-120-33202)

Tools/Supplies Needed:

- Metric sockets 10mm, 14mm, 17mm, 19mm
- SAE Socket 3/4"
- Drill w/ 1/2" drill bit
- Cold chisel
- Hammer
- Flat head screwdriver
- #2 Phillips screwdriver
- Optional blue thread locker for all threads
- 2" blue painters tape
- Zip ties
- Moving blanket/pad

Optional Add Ons:

- OPOR 20W Flange Mount LEDs (stage 2 & 3)
- OPOR 30" Single Row Combo LED Light Bar (stage 3)



Safety:

Please note that this work should be done by a competent mechanic. If you feel you are not competent to do this work please have a professional mechanic do this installation. Metal-tech Cage, LLC is not responsible for any modifications you make to your vehicle. These instructions are meant to be a guide to assist a competent mechanic.

#1 Always wear safety glasses

#2 Always chock the opposite end of wheels when working on a vehicle. (ie. Chock the rear when working on the front, and vice versa.)

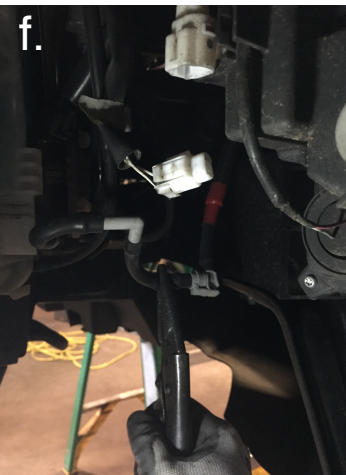
#3 Always use jack stands!!!! Never work on a vehicle solely suspended by a jack.

All Modifications are done at the owners' risk, check local laws for compatibility.

Prep:

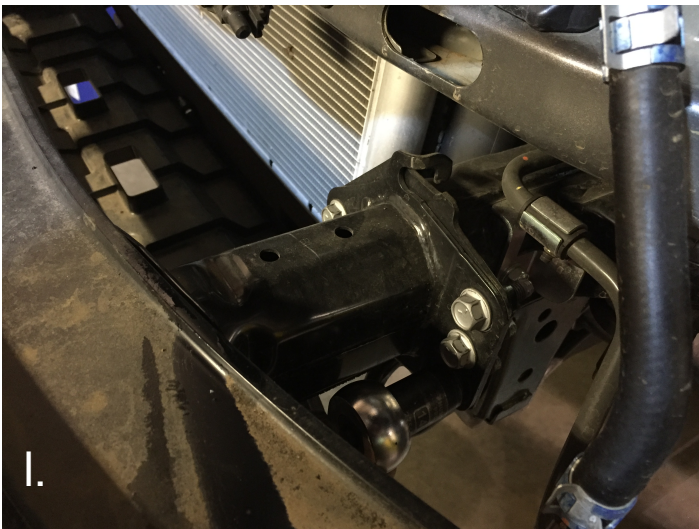
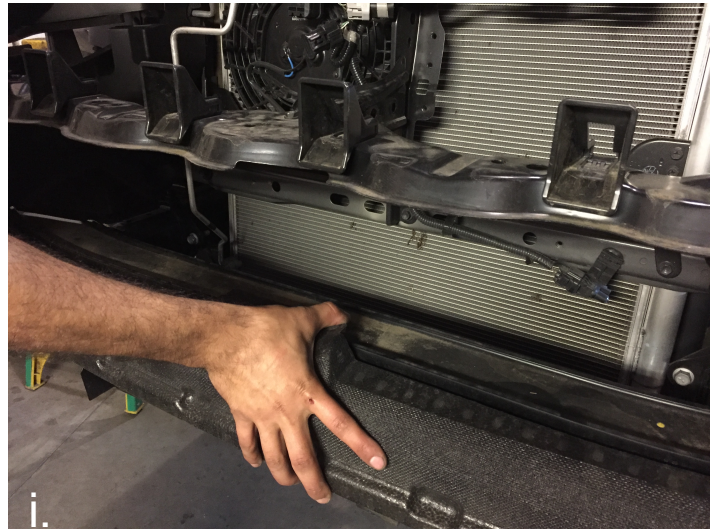
1. Stock Bumper Removal

- a. Lift front of vehicle onto jack stands and remove front wheels.
- b. To gain access to the top of the bumper open hood and remove the plastic radiator cover. The clips can be pressed in the center and then removed.
- c. Using a 10mm socket remove the bolts retaining the top of the bumper.
- d. Remove screws underneath and in the fender well that all need to be removed.



- e. Unplug the main bumper harness.
- f. Disconnect headlight sprayer line and clamp off to prevent fluid leaking.
- g. Pull on Bumper skin corners at the fender to get it to unclip, (may take force).
- h. Remove the plastic bumper skin assembly and set aside.

- i. Remove the foam piece attached to the steel bumper beam.
- j. Remove plastic under guard.
- k. Remove the plastic radiator baffles located on each side of the radiator, they will be reused in step 5 e.
- l. Remove the bumper reinforcement bar, (6 bolts) and its mounts, (8 flange nuts). Do not discard flange bolts as they will be reused in step 3 h.



2. Stock Bumper Plastic Disassembly

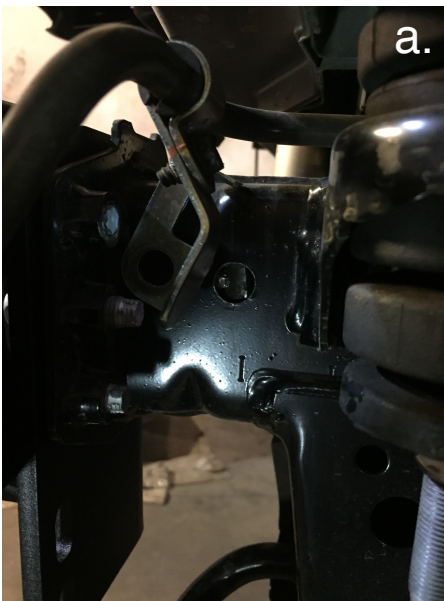
- Carefully set bumper skin face down on a blanket or pad to protect it.
- Remove wire harness and sprayer fluid lines from back side of bumper skin.
- Unplug and remove parking sensors.
- Remove fog light and turn signal housings.
- Remove center grill section from main bumper skin by popping out the white clips and removing the Phillips screws. Set aside as this will be reattached later. No need to cut this piece for the install.
- Set disassembled bumper skin aside for later use.



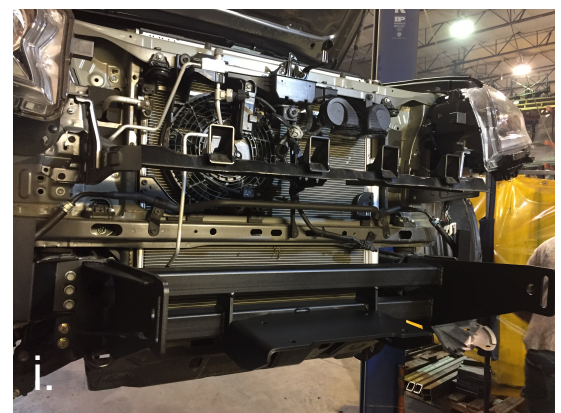
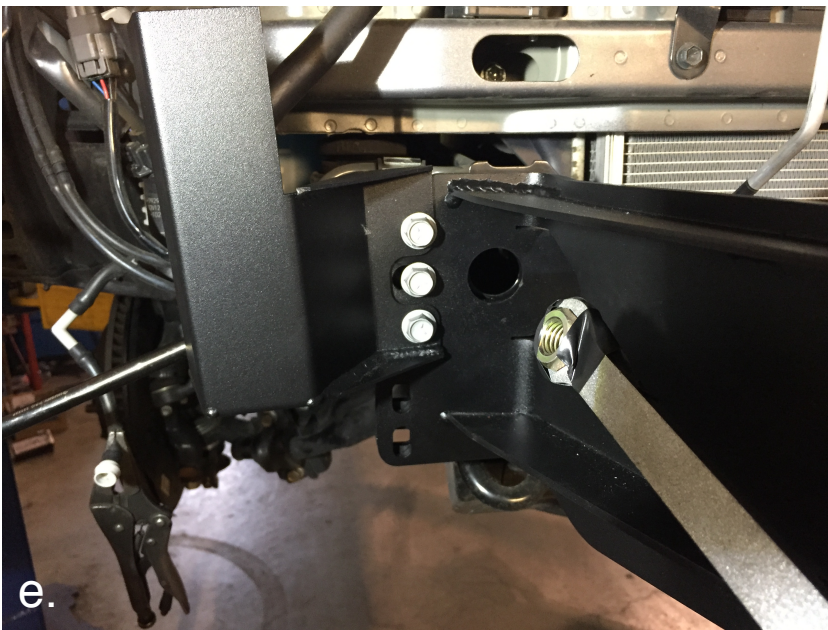
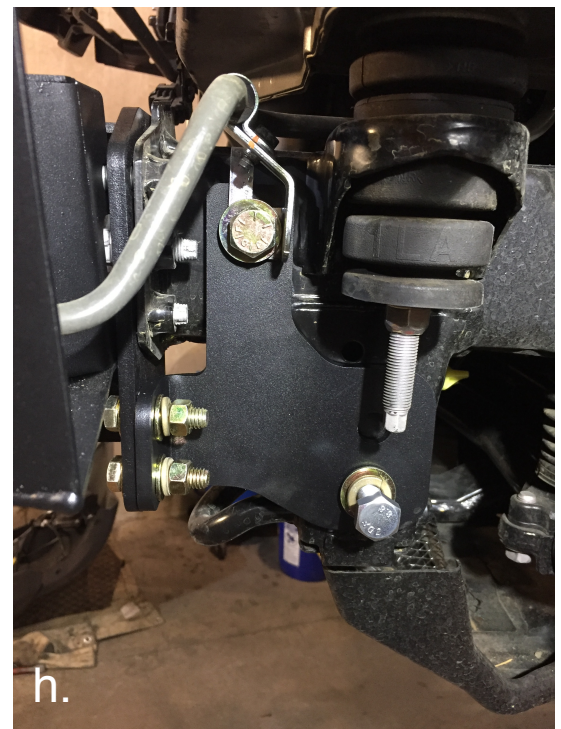
3. Winch Mount Installation

After removing the stock bumper and supports you are now able to start installation of the winch mount.

- Drill out the small threaded hole on the outside of the frame directly behind each front bumper flange. Make sure NOT to drill entirely through both sides of the frame. Drill AC Condenser line bracket also.
- Use a chisel and knock off any remaining inner metal fragments from inside the frame on both sides.
- Repeat drilling and chisel action for other side of vehicle.



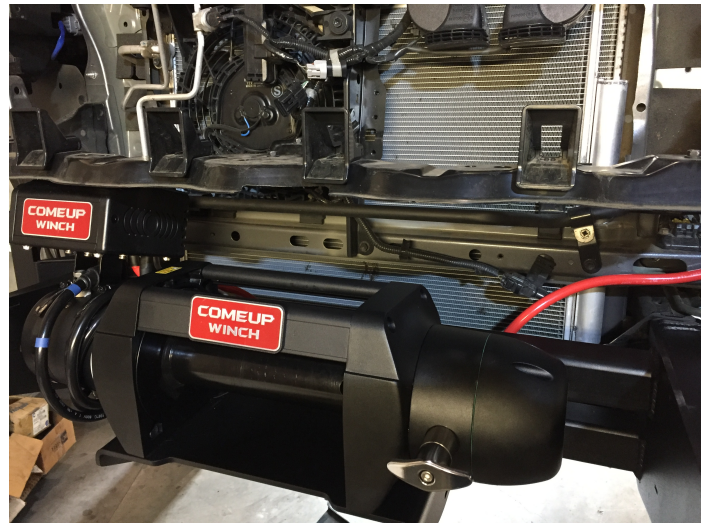
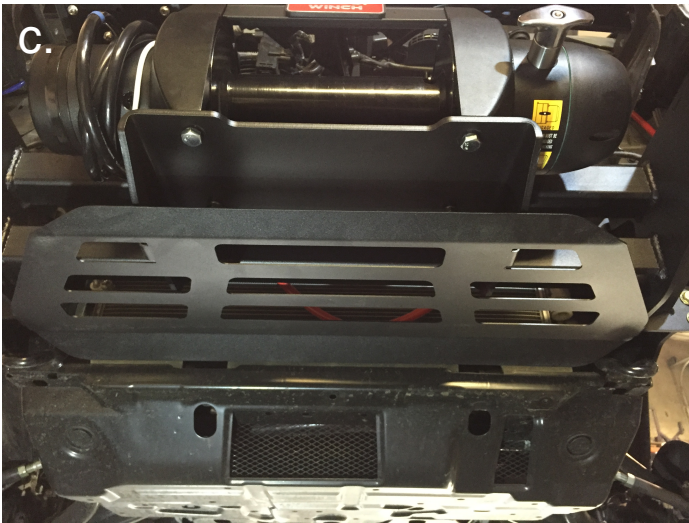
- d. Install side mounting plates onto frame using the black rectangular spacer between the frame and the mounting plate.
- e. Using a 3/4" box wrench enclosed with tape, to retain the 1/2-13 nut, install and loosely tighten the 1/2-13x1 1/2" bolt with a washer and lock washer on the outside of the mounting plate in the top of the plate.
- f. Install the provided 12m bolt in the lower location on the plate again with a washer and lock washer on the outside of the mounting plate, finger tight.
- g. REPEAT steps a thru f on the other side of the vehicle.
- h. Hang the winch mount onto the vehicle frame horns and install AC line guards securing them using the stock flange bolts from bumper removal step 1 I.
- i. Use the provided 3/8 bolts to attach winch mount to frame ties, finger tight.
- j. Repeat other side and secure all bolts. (You may need to loosen and shift winch mount side to side for perfect bumper fitment).



4. Winch Installation & Brush Guard

NOTE: Metal Tech 4x4's Bumper Fits most planetary style winches.

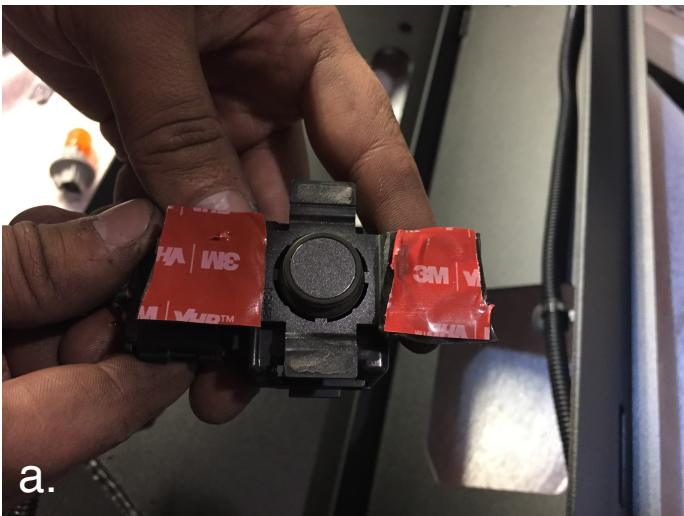
- a. With the winch mount secured it is the ideal time to install your winch following manufacturer's instructions.
- b. For your specific winch installation please refer to the manufacturer's installation instructions. Ensure proper winch placement and ease of use by making sure the clutch is clocked to be accessed via the front of the truck. To clock your winch forward also refer to the manufacturer's instructions.
- c. Once the winch is installed use the Lower Guard Bolt Kit hardware to install the Brush Guard.



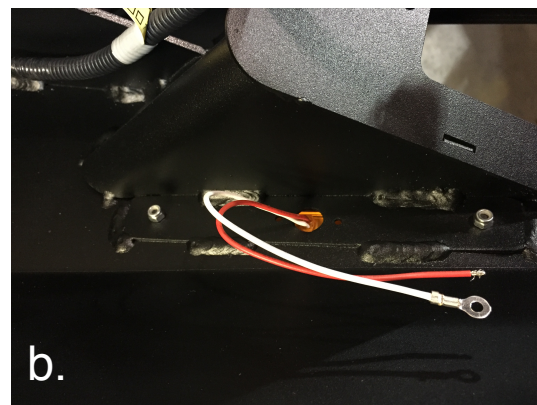
5. Bumper Shell Installation (2 person job recommended)

You are now ready to hang the bumper shell.

- a. Install the parking sensors using the provided doubled sided tape and the bumper wire harness previously removed from the stock bumper.



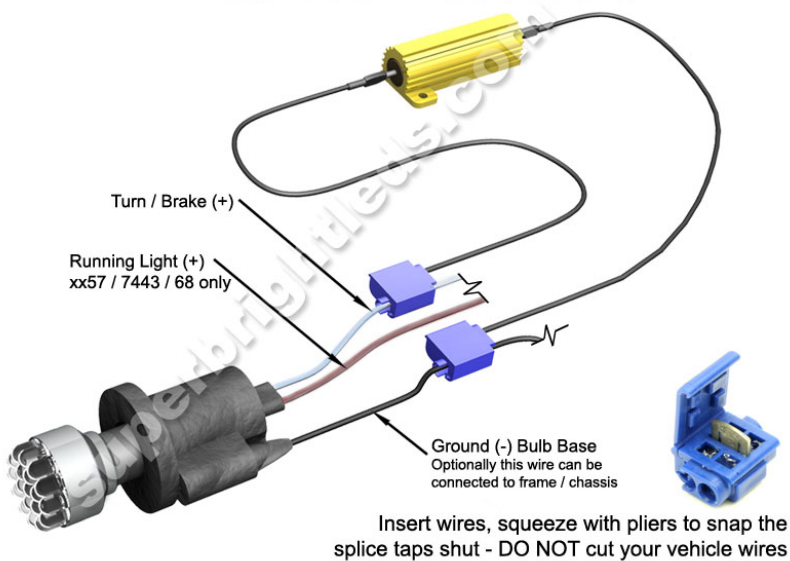
- b. Install the LED turn signals in the recessed mounts on the bumper shell.



- c. Install optional LED fog lights and LED light bar.
d. Finish all wiring including LED turn signal load resistors.

d.

Load Resistor Installation Instructions



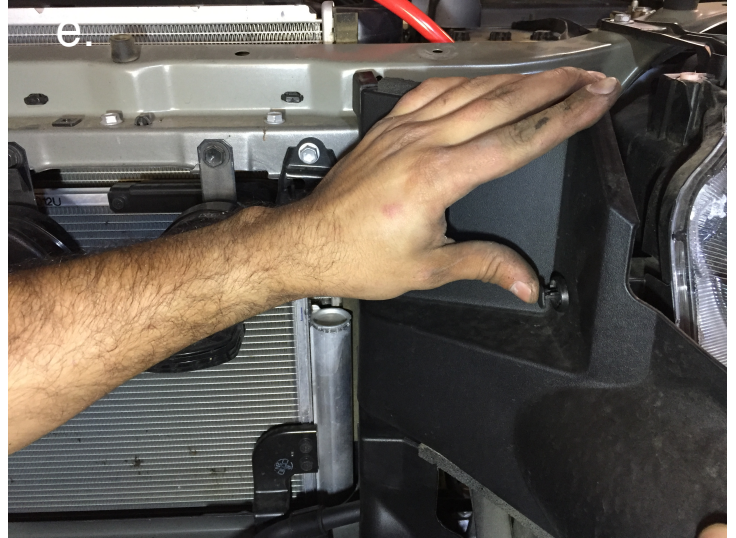
- Use 2 Load Resistors if installing LED bulbs in turn signals in front **only** OR rear **only** (one per LED turn signal bulb)
- Use 4 Load Resistors if installing LED bulb in turn signals in front AND rear (one per LED turn signal bulb)

WARNING: Load Resistors heat up like a lightbulb.
Must be installed to make no contact with paint or plastic.

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- e. Grab the plastic radiator baffles and cut away material to clear the fog light housing, reinstall.
- f. Grab the factory bumper skin and cut out bottom center section.
- g. Cut out the left and right corner sections. You may have to hang the bumper skin on the vehicle a couple of times to double check the cut lines.
- h. Reattach top center grill piece to bumper skin using the Phillips screws and white plastic clips.
- i. Hang the cut plastic bumper back on the vehicle. Use 2" blue painters tape to mask and protect the plastic bumper as needed.



- j. Reinstall washer fluid lines.
- k. Install bumper shell checking for proper clearances. Trim excess plastic off the remaining factory bumper as needed to get the proper fit. Use supplied Trimlock to dress the edge of the cut plastic bumper.
- l. Once the desired fit is achieved, tighten and check all bolts including winch mount bolts. We recommend a gap all around the bumper shell to allow room for body flex.
- m. Plug all of your lights in. Secure any excess slack in the harness using zip ties. Pull your winch line through the fairlead and connect your desired winch attachment.
- n. Trim the inner fender well back and secure as necessary to avoid rubbing on the tire and to keep it from flapping in the wind.



Please contact our technical support if you have any install questions or need any help. Call 503-822-1111 or email info@metaltech4x4.com.

Thank you for your business and enjoy your new bumper! After a short time on the road or trail be sure to check all hardware and tighten if needed.

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