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## FJ Cruiser Front Bumper

# INSTALLATION INSTRUCTIONS 3520/3530

NOTE: The Warrior Products 3520 & 3530 FJ Cruiser bumpers are designed to fit non-integrated, solenoid winches. In other words, the solenoid housing will most likely need to be removed from the winch and mounted either next to the battery in the engine compartment or relocated to a space behind the bumper. Additional power wires \*may\* need to be purchased separately. Although the bumper has a fairly roomy interior for winch fitment, Warrior Products makes no guarantees to the compatibility of every winch. If you are installing a winch at the same time as the bumper, you must install the winch prior to mounting the bumper to the vehicle. When fitting the bumper it is a good idea to have a helper available as the bumper can be a bit cumbersome and heavy for one individual to handle alone, particularly when pre-fitted with a winch.

<u>2010+ FJs:</u> While this bumper is compatible with 2007-2014 Toyota FJ Cruisers, the washer bottle in 2010+ FJs have been relocated and are visible when the bumper is installed. There are many aftermarket solutions to the washer bottle issue that can be found via a simple web search.

- 1. Begin the installation by removing the OEM grill, front bumper cover and all associated trim pieces outlined below.
  - a. Temporarily remove the headlight surround/grill by accessing the push-pins and screws along the top side and some clips along the bottom inside. Lift it out of the way and set it aside.
  - b. Remove the stock plastic bumper cover by accessing the push-pins along the topside and the lower bumper retaining screws and a couple screws located in the forward edge of each wheel well.
  - c. The ends of the plastic cover can now be flexed out and then the entire cover moved away and down off of the bumper reinforcement bracket.
  - d. Remove the inner bumper reinforcement bracket with extensions and retain the nuts for installation of the Warrior bumper.
- TOYOTA
- e. Remove the front bumper upper retainer.
- f. Remove the molded plastic front bumper side supports; one on either side.



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- g. The inner fender well liners will have a triangular 'bowled' section hanging freely once they have been unscrewed from the plastic bumper cover. At your discretion, trim/remove these sections off near the fender well ceiling.
- h. The front fenders will now need to be reattached to the body. Snap the square nylon nut into the square hole visible after removing the molded plastic front bumper side supports and use the ¼" bolt and flat washer to fasten the front fender mounting tab back onto the body.
- i. Reinstall headlight surround/grill.

### 2010+ FJ Cruisers, washer bottle removal:

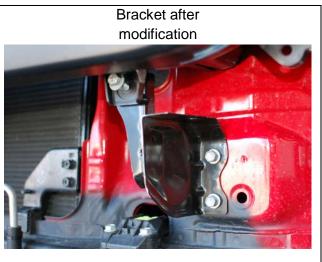
There is 1 bolt on the front of the bottle and 2 on the rear. The second rear bolt is high under the truck, so it may be difficult to reach. Make sure the wires are disconnected and hold the bottle as you take the last bolt out as it will fall if you don't.

#### **Modifying Headlight Brackets (Optional):**

To provide more support for your headlights after the bumper is installed, you can remove and modify the headlight support brackets and bolt them back into place. This should only be accomplished by a certified mechanic or fabricator. Reinstall headlight surround/grill.









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#### The vehicle should now be ready for installation of the Warrior bumper.

- 1. Using an assistant, lift the bumper up and onto the 8 frame-cap mounting studs. The oblong holes are slightly oversized to allow proper visual alignment as the frame and body will not always be exactly parallel to each other. Be aware of the notch in the winch plate for clearance of the condenser line. If the condenser line is in contact with the bumper or frame it will need to be reshaped slightly.
- 2. To minimize the strain on the lower fitting while reshaping the tubing, temporarily use a small spacer such as a piece of wood or plastic that fits between the condenser line and the radiator support just above the lower fitting. Gently flex the line until it is within a ¼" of the horizontal core support located approx 6" inches above the fitting and centered within the notch on the winch plate. It may also be a good idea to wrap the condenser line with a short length of rubber hose zip-tied in place to prevent damage in the unlikely event of rubbing.
- 3. Thread the nuts onto the studs, but only hand-tighten at this time.
- 4. Place the winch plate frame brackets on top of the frame just inboard of the body lift spacers. Insert the 3/8" bolts with a 3/8" flat washer through the brackets and into the corresponding oblong holes in the winch plate of the bumper. Place the 3/8" split washers on the bolts and **loosely thread** the nuts up from underneath the bumper. **Do not tighten at this time.**
- 5. Visually align the bumper by lining up the top edge of the bumper with the bottom edge of the grill. Once you have the horizontal and vertical spacing to your liking, tighten the (8) mounting nuts to 48 ft lbs.
- 6. Going back to the winch plate frame brackets; Utilizing a marker pen/scribe, mark the mounting holes on the side of the frame while pressing the winch plate frame brackets down to the top of the FJs frame (if necessary). Use a center punch then drill out the holes to 11/32". Use the 3/8" x 1" self-tapping bolts included with the bumper hardware and tighten the winch plate brackets to the frame. Now tighten the 3/8" bolts on the other end of the winch plate frame brackets that go through the winch plate of the bumper.







7. Reinstall the factory washer bottle to the factory position on the vehicle. If you are opting to relocate the washer bottle, do so at this time.



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- 8. You should now have the winch and fairlead bolted to the bumper, and the bumper securely installed on the vehicle. Double-check that all bolts are properly tightened.
- 9. Complete the installation by running your winch power and ground cables through the grille and into the engine bay and connect them to the positive and negative terminals on your battery. Install your d-ring shackles and winch hook. If your state requires a front license plate, our #2350 Fairlead License Plate mount or #2360 Hawse License Plate Mount are available separately.



