INSTALLATION GUIDE

Dual Swing Rear Bumper for FJ Cruiser

EXPEDITION ONE

OFF-ROAD RESEARCH & EQUIPMENT

PACKAGED CONTENTS

Remove the stock rear bumper.

The bumper is held in place by a series of small bolts and plastic retainers. Using a 12 MM socket or wrench, remove the bolts along the top inside edge of the bumper (this will require opening rear door) along with the plastic retainer clip on the passenger side of the bumper. Next remove the bolts along the bottom edge of the bumper, and un-clip the 2 wire connections for the back-up sensors, found on the underside of each side of the vehicle respectively. After the sensors have been un-clipped and all other hardware has been removed the bumper is ready to be removed.

Starting at the lower edge of the bumper (this step can be done on either side of the vehicle) near the lower edge of the rear fender flare, begin pulling the bumper away from the vehicle. After applying adequate pull force the bumper will separate from the vehicle (this can be loud and abrupt). Once released the other side will follow as you pull the bumper away from the vehicle. Remove the Styrofoam piece along with the bumper. Also remove the tow-loop on the bottom driver side of the bumper using a 16mm socket The rear frame should now be exposed.

Quick Tip: Check the frame for excess weld spatter and/ or large weld build up, particularly on the top side of the bumper, toward the outer edge. Excess weld may cause the bumper to pitch backwards undesirably. If weld is excessive, it can be hit with a hammer or lightly ground to ensure desired fit.

Cutting the stock rear bumper:

Before cutting begins, remove the silver end caps on the OEM bumper. WARNING: THIS IS THE POINT OF NO RETURN!
Once the plastic is cut a return to stock will require purchasing a new OEM bumper. Using the provided pictures follow the lines refer- enced on the OEM bumper for proper cutting.

Be careful when cutting!!! always avoid cutting toward yourself or anyone else. Cut both sides of the bumper to match. Once finished, the OEM bumper sides can be put back in place in there stock position. Passenger side plastic clip can be re-installed, as well as 1 top side bumper bolt on each side of the OEM bumper sides.

Quick Tip(s): Before putting the Expedition One bumper in place we recommend putting masking tape on the edges of the plastic where the bumper comes close. Contact with the plastic & metal bumper can cause small marring in the plastic.

Removing the Spare tire can make the install of the rear bumper easier.

Frame mount installation

1 Grab the driver's side lower frame mount (shown below), making sure the mountain logo faces toward the vehicle. Place this into position under the vehicle frame for the next step.

Attach the top frame mount bracket shown below over the vehicle frame and secure both with provided 1/2" bolts, washers and nylon locking nuts. (see step 3) 2

3 You'll want these snug but still able to move the frame brackets for adjustment later when placing the bumper into position.

In this step, take another 1/2" washer and bolt and place it through the frame bracket and vehicle frame from the top (see below) and secure with provided nut retainer. 4

5 Next, we'll insert 3 additional 1/2" bolts and washers from underneath to secure the frame brackets. See photo below on how to tighten these 3 bolts.

Take the included two-holed spacer provided in kit and place between the frame bracket and vehicle frame. (see photo below and step 7) 6

7 Secure spacer and frame mount bracket to the vehicle frame with provided hardware.

Now that we've secured the driver's side frame brackets, you'll repeat these steps for the passenger side. We recommend having an extra pair of hands to pull the exhaust pipe out of the way in order to get the additional bolts inserted from underneath. 8

You are now ready to place the bumper onto the rear frame brackets and into its final position.

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*Note - We had already pre-installed the swing arms(shown below) for internal testing but it's recommended to install arms after the main bumper is secured to vehicle.

Reach underneath and secure bumper to frame bracket with provided 1/2" bolts, nuts and washers. (3 sets on each side)

Swing Arm Install

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Next we'll need to grease each bearing (see photo below) and secured to the bottom of each arm. You will also need to secure the included ring seal that is pointed at with the green arrow.

51 Carefully lower the arm onto the spindle while holding the bearing and ring seal. You may need to wiggle and/or swing the arm back and forth until the bearing is seated correctly.

Grease the top bearings and place them onto the arm and onto the spindle. Again, you will likely need to wiggle the arm and swing back and forth so that the bearing is seated correctly and the arm looks level while opening and closing with ease. 52

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Place the large washer over the top bearing as shown in photo below.

Next we'll drop the included large spindle nut and hand tighten onto the top of the spindle.

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Tighten spindle nut with socket wrench until its nice and snug. You don't want it overly tight as you will need to remove nut and bearing assembly at least once a year (recommended) in order to regrease top and bottom bearings to keep them running smoothly.

Use the included anti-seize packet and smear a decent amount along the threads of the top spindle cap.

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Place the spindle cap onto the top assembly of spindle. You may need to rotate counter-clockwise while giving some mild downward pressure until you feel/hear a 'click' before rotating and tightening the spindle cap.

*You don't want this cap on super tight, just snug.

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Next, we'll need to take the drop pin plate and attach it to the corner of the bumper adjacent to the spindle as shown below. You'll need the appropriate allen head and wrench to tighten down these two bolts. *NOTE: you will want to keep these loose for now until we've installed the drop pin and tested that everything aligns correctly.

59 Next, place the drop pin system into place as shown below inside the arm closest to the where the arm is attached to the spindle. You will need to take the two included allen head bolts and thread them through from underneath. Secure with provided nuts.

Shown in photo below is how it looks from underneath the arm. The center pin will need to be aligned with the drop pin plate from step 30 before tightening down the plate.

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