

All-Pro FJ Rear Bumper Installation Instructions

Important notices:

These instructions are intended only as a general guide for installing All-Pro products. For some items, specialized mechanical skills, metal fabrication and/or welding skills may be needed for proper installation. If you have any doubts or questions about installing these or other parts please call us at the shop 406-961-0126 or contact a competent mechanic, fabricator, welder or other appropriate professional.

Aftermarket accessories are intended to modify and/or prepare a vehicle for uses that exceed conditions anticipated by the vehicle manufacturer. These uses may include high performance demands and negotiation of rough terrain. These conditions have extreme variance and cannot be controlled by the vehicle manufacturer or aftermarket accessory manufacturer. Therefore, the safe control of your vehicle is entirely your responsibility. Do not purchase parts from All-Pro Off Road unless you are willing to accept this responsibility. Do not install any All-Pro part that you do not feel competent at installing without causing present or future injury to yourself or others; consult a professional installer .

All parts sold by All-Pro Off Road are for off road racing use only and are not intended for use on the street. Modification of your vehicle to enhance performance with the parts sold by All-Pro Off Road can result in dangerous situations that may result in bodily harm. The buyer hereby assumes all risks associated with any such modifications. All-Pro Off Road will not accept responsibility for personal injury or property damage arising from the failure of any parts manufactured or sold by All-Pro Off Road.

In an effort to provide both durability and safety, All Pro Off Road recommends you carefully read the entire installation procedure before beginning, then rigidly follow these instructions during installation. Also, it is extremely important that you abide by proper safety procedures including the use of jack stands, setting the parking brake, wearing eye protection, etc

You will need assorted hand tools; metric wrenches/sockets, a large C-Clamp or a Large Pair of Vise-Grips and a small hand saw to trim the stock FJ rear plastic. A hand saw like the one shown below works very well. They are affordable, and available at most hardware stores.



Installation:

1. Secure the vehicle with its parking brake and open the rear door giving you access to the bolts along the top of the plastic rear bumper cover. Remove all bolts.



2. Using the tip of a small standard screwdriver, remove the body clip shown below.



3. Remove the bolts holding the lower edge of the rear bumper cover as shown below.



4. Disconnect the Back-up Sensors Plugs on both sides of the vehicle from the main wiring harness.





5. With all bolts and body clips removed, carefully pull the forward upper corner plastic away from the body. It is secured with a series of “barbed fittings” that engage with the body and additional plastic on the rear of the vehicle. Pull gently to avoid breaking off these barbed fittings. You will be using them to re-install the plastic after trimming. After the bumper cover is loose, at all points from the vehicle, pull it rearward and off of the vehicle. Lay the bumper cover on something soft (carpet, sheet, blanket, etc?) if you want to protect its finish while trimming it.



6. Next you must remove the outside “corner pods”. To do so you must depress each of the clips holding the corner pod onto the main bumper cover. See Photos below for all clip locations. Remove both “corner pods”. It will look like the last photo (but your cover will be off of the vehicle).



7. Study the below “post trim” photo. Using a marker to create reference marks along the “edges” you will follow with your small hand saw, trim the “corner pod window” out as shown. Checks twice, mark, re-check and finally cut once!!



8. Next you will trim the lower section off as shown below.



9. Bend the back up sensor wire bracket, upward until it is flush with the bottom of the body. See photos below.



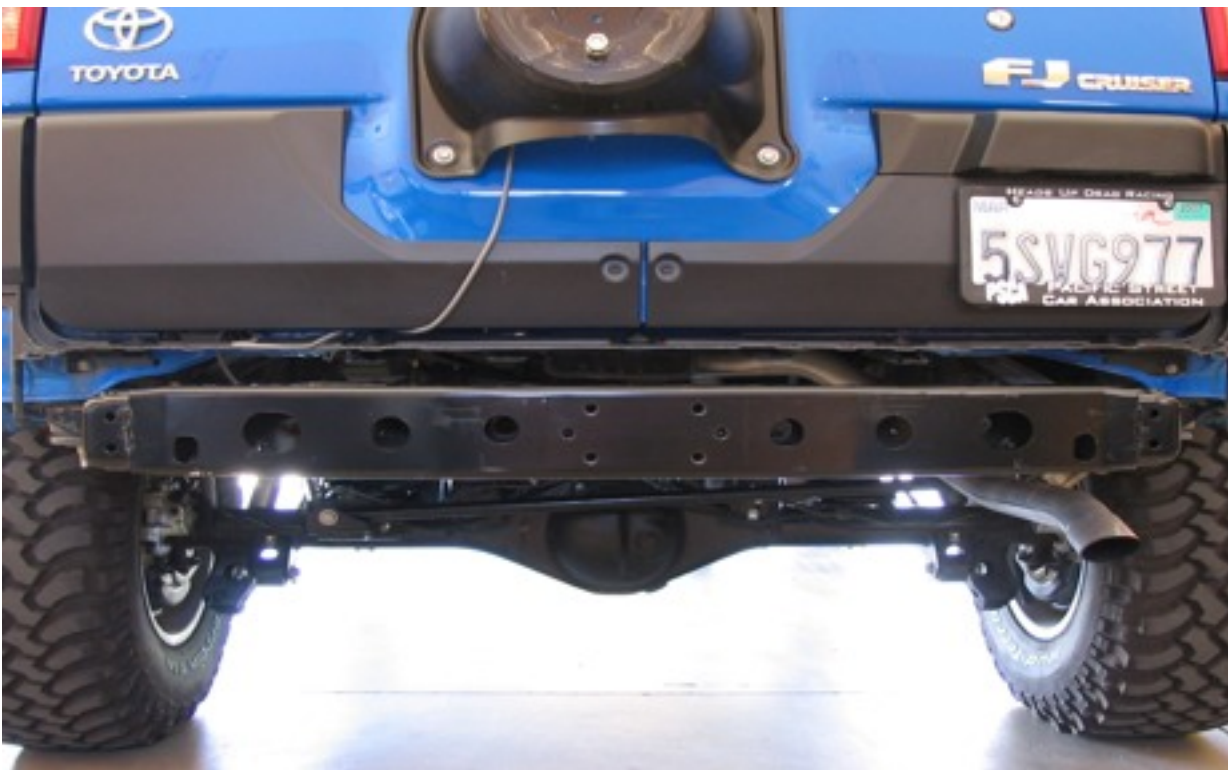
10. Remove your Factory Anchor points from the lower portion of your frame rail. See Photo.



11. Mark a cut line (yellow line seen below) on the top of the bumper cover's center section from the corner seen below (red arrow) across to the same corner on the other side of the bumper. Trim along the "yellow line" to remove the lower section of plastic from the rear bumper. See photos.



12. Re-install your bumper plastic cover back onto your vehicle. Place all of the bolts and body clips back into their respective locations and tighten. Your bumper cover should look like the photos below.



13. Next you will have to slot the bumper cover to allow the frame plates on the bumper (see photo below with read arrow) to slide all the way forward. Slot with you hand saw just deep and wide enough to allow the bumper to slide all the way forward and end up against the rear cross member.



14. Next you will “dry fit” the rear bumper on to the vehicle. Carefully slide the bumper forward with the frame plates sliding outside the frame rails, and the top of the center section of the bumper overlapping the trimmed section of the bumper cover below the door. It is important that the plastic section below the door is placed below the top of the bumper center section. This overlap prevents a gap being created between the body and the bumper.



15. Install all of the supplied hardware. (4) M12x1.25x45 bolts with large fender washers go through the 4 holes that are on the rear face of the bumper and into the rear cross member. (2) 4 M12x1.25x45 bolts with large fender washers are to be inserted up through the bumper into the cross member. (4) M12x1.25x45 bolts with the smaller washers supplied go through the “pointed long tabs” that run under the frame rails, place the tube spacers provided between the “pointed long tabs” and the bottom of the frame rail.
16. Hand tighten the 2 bolts that are on the underside of the cross member to raise the bumper up till it is against the underside of the cross member. Now hand tighten the 4 bolts on the rear face of the bumper to draw it forward against the rear cross member. Finally hands tighten the 4 bolts under the frame rails.

17. Having a friend help you, lift or lower the end caps of the rear bumper as required to get good fit and equal gaps between the bumper and the plastic around the rear quarter panels. When you are happy with this fit clamp the frame bracket (3/16" thick flange with 4 holes) to the side of the frame rail with a large C-clamp or a large pair of vise-grips.

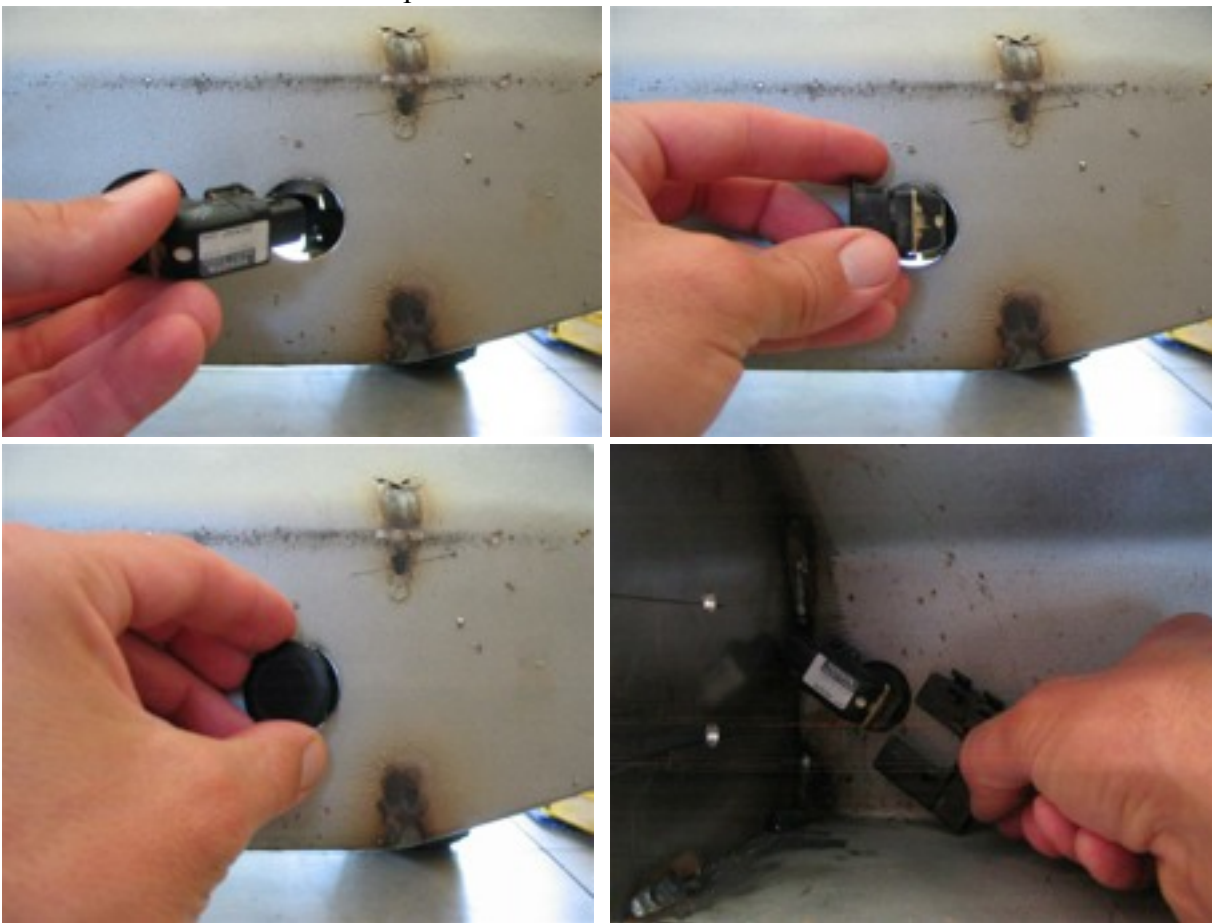


18. Using a something sharp, scribe the hole locations through the 4 holes in the bumper frame bracket onto the side of the frame rails. Be sure that you accurately mark each of these four holes.
19. Remove all of the hardware from the bumper and remove it from the vehicle. Center punch the center of each of the scribed holes on the frame rails and drill a 1/4" hole at each location. This will be the pilot hole for the 8 thread forming bolts (Black, tapered, hardened bolts).
20. Prep and paint your bumper.

21. Feed the back up sensor wires through the rear cross member outer large holes in preparation to attach them to the back up sensor.



22. Remove the backup sensor from your stock bumper cover by sliding the clip off the sensor on the backside of the cover. Install on your new bumper as per photos below. Re-attach the retention clip on the backside of the bumper.



23. Have a friend help you hold the rear bumper up close enough to the rear of the vehicle to attach the backup sensor wires to the back up sensors.

24. Slide the bumper over the top of the stock cover and around the frame rails.
25. Install all hardware as per step above. Hand tighten all hardware. Using a ratchet and socket insert the thread forming bolts through the bumper frame plates and into the pilot holes you drilled in the frame rails. Tighten the bolts up carefully. There will be a lot of initial resistance as the bolts form the threads in the frame rail. After the initial threads are formed they will advance easier. Another approach is to run each bolt into its hole and back out again with the bumper off. This may make starting the bolts easier while you are trying to hold the bumper in its final location.
26. Align each end cap with the plastic quarter panel trim; tighten all 8 frame rail bolts, then all other hardware. Re-check that each bolt is completely tight and re-check all bolts for tightness after 50 miles of driving as well as at each service interval.