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96-02 4Runner Plate Bumper Install Guide

Congratulations on purchasing your new 4x Innovations 4Runner Plate Bumper. Included in this manual are package contents, surface coating recommendations, and installation guide. This document consists of a guide and is not an absolute instruction manual. Professional installation and attention to details is required for best finished results. If you have any questions please call us at 1-608-348-4880.

Package Contents:

1x Plate Bumper
2x Amber Turn signals
2x 1/4 x 3/4 License Plate Bolts
2x 1/4 Washer

Caution:

1. This installation should be performed by a qualified professional.
2. Always wear proper Personal Protective Equipment, including but not limited to Closed Toed or Safety Shoes, Safety Glasses, Hearing Protection, Face Shield, and Gloves.
3. Always have a fire extinguisher in reach while working in and around your vehicle. Interior panels are made from vinyl and other plastics which burn VERY easily; under carriages can be covered in oil and road grime which also burns easily.
4. Working around vehicles is inherently dangerous. You and the installer are responsible for your actions. Take general care while working on a vehicle.

Coatings: Note: Note: ALWAYS check fitment BEFORE painting parts, painted parts are NOT returnable for any reason! For optimum coating performance follow coating manufacturer's instructions.

- A. On the cheap, quick and easy: Simple spray paint.
This method is an economical method to coat your new Front Bumper. Any top quality spray paint rated for metals can be used. In our shop we use Rustoleum Professional Metal paint.
- B. POR-15, KBS Coatings or similar moisture cured polymers:
These professional coatings are highly durable and can be touched up if scratched. Most are formed as multi part primer, color, and top coats that are abrasion, and heat resistant. They are available online, usually directly from the manufacturer.
- C. Powder Coating:
Powder coating consists of spraying a powdered paint onto the parts and baking the powder to the part. This process must be performed by a qualified business to have proper adhesion. This process is typically costly. Powder Coat is stronger than typical paint but WILL get scratched on a front bumper and offers little possibility for quality touch up once scratched. 4x Innovations prefers moisture cured polymer paints over powder coat because of this fact.

List of Required Tools:

Ratchet
Sockets; 10mm, 19mm, 17mm, 7/16" and 1/2"
Deep-well Socket; 10mm
1/2" Box Wrench
Anti-Seize
A forklift or a friend and jack stands to help lift heavy stuff

Wire strippers
shrink wrap/shrink butt connectors
soldering iron
solder
lighter

Remove Factory Bumper

1. Unplug the turn signals by pulling the bulb holder and fog lights (if equipped) from the wiring harness
2. Using the 10mm socket remove the bolt near the tire on the bumper wing. Figure 1.
3. Remove the three frame horn bolts using the 17mm socket. Figure 2.
4. There are 2 bolts on a plate sticking off the bumper that run parallel to the frame. Remove these bolts, and be aware the bumper will slide down, but should not fall off because of the stock hangers.
5. Check to ensure all wiring is free and clear of the bumper.
6. At this point we are ready to remove the bumper. To do so have a friend help you lift up gently on both sides of the bumper and pull out slowly.
7. After the bumper is removed your vehicle should look similar to figure 3.
Please note it is not required to remove the grille.

Install Front Bumper

1. Using the 14mm socket remove the 3 bolts in the front section of the skid plate.
2. To make it easier to line up the bumper thread the top bolt on the front of the frame horn in from the back side of the mount. This gives the bumper something to rest on while installing the other bolts.



Figure 1. Outer wing bolt backside

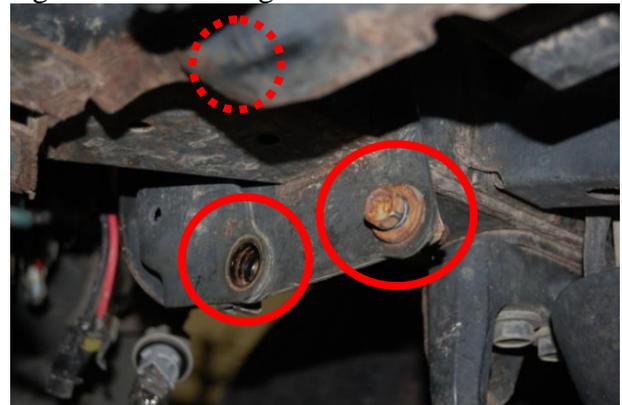


Figure 2. Lower frame horn bolts



Figure 3. Front bumper removed

3. Have the remaining 6 large bolts ready with a small amount of anti-seize applied. Lift the bumper and slide the lower flange between the skid plate mounts and the frame. Rest it on the bolts that were threaded in backwards while someone else starts the remaining bolts.
4. Before tightening the wing or frame horn bolts, thread in the skid plate bolts and tighten them to no more than 15 ft-lbs. Figure 4
5. Finish installing the bumper by tightening all the remaining bolts starting with the front frame horn mounting bolts. Remember to flip and tighten the bolts we hung the bumper on.

Turn signals

1. When wiring in the signals it is recommended to use either waterproof butt connectors or solder and shrink wrap.
2. Cut the stock pigtail off and use one of the aforementioned techniques to connect the provided light harnesses.
3. To insert the light in the bumper remove it from its rubber housing and insert the rubber housing into the turn signal hole making sure it is fully seated.
4. Push the light into the hole. This may take quite a bit of pressure. Figure 5.



Figure 4. Proper skid plate/bumper alignment



Figure 5. Fully seated turn signal