

Parts List:

- Instructions Invoice
- □ Iron Rock Off Road logo decal (1)
- C-Gusset front left 88147 (2)
- C-Gusset front right 88148 (2)

Safety Warning: ***Important! Read Before Installation.***

We recommend that these gussets be welded by a certified professional. Before driving vehicle ensure that gussets are clear of brake calipers, axle shafts, and anything else that may come into contact in all positions including full lock of the steering wheel.

Before you begin:

- Read all safety warnings.
- Read and understand installation instructions.
- Contact Iron Rock Off Road with any questions before, during, or after installation.
- Ensure that all parts are present and in good condition using the included shipping checklist.
- Be sure you have the following tools and supplies:
 - U Wire brush
 - □ 4 1/2" Electric angle grinder
 - □ 4 1/2" Wire wheel for angle grinder
 - 4 1/2" Flap wheel
 - Basic hand tools
 - Floor jack
 - Jack stands
 - **D** Torque wrench
 - Ball joint tool
 - □ MIG welder capable of welding 1/4" plate, or qualified professional welder.

Installation:

- 1. Lift front of vehicle and support with jack stands under the front axle.
- Ensure vehicle is safely secured. 2.
- 3. Remove front tires.
- ***Tip: Break lug nuts loose before lifting.***
- Thoroughly clean axle C's where they meet the gussets. 4.
- Remove any laser cutting scale from the edges of the c-gussets. 5.
- 6. Position left and right gussets into a wishbone shape.
- 7. Tack weld as shown in figure 1.
- Grind a 45° bevel on the inside of the area shown (figure 2). (If using RCV axle shafts, a little more 8. grinding may be required).
- 9 Remove brake calipers, brake rotors, and wheel bearing hub assemblies. No need to separate the axle shafts from the hub assemblies.
- 10. Remove knuckles and upper ball joints. (Good opportunity to replace ball joints.)
- Slide c-gussets inside the axle c. 11.
- 12. Center c-gussets in axle and tack in place.
- 13. Fully weld c-gussets by alternating 2" welds on opposite ends. Allow a short cooling period between welds. Ensure good penetration, but try to minimize the amount of heat and heat affected zone.
- 14. Cover with a welding blanket to ensure a slow even cooling process.
- 15. Once cool, clean and paint as desired.
- 16. Reinstall upper ball joints and knuckles.
- Reinstall wheel bearing hub assemblies, brake rotors, and brake calipers. 17.
- 18. Torque wheel bearing hub bolts to 75 ft-lbs.
- If axle nut was removed, reinstall and torque to 175 ft-lbs. 19. ***Important Safety Check*** Ensure brake calipers and other components do not contact cgussets at full lock steering or any other position.
- 20. Reinstall tires.
- 21. Torque lug nuts to factory specifications.
- 22. Lower vehicle.

*Re-torque all fasteners, including lug nuts, after 100 miles, and frequently inspect all safety critical suspension components.



Figure 1



Figure 2



Figure 3