



## **Parts Checklist:**

- ☐ Iron Rock Off Road Decal 10001 (Qty: 1)
- ☐ WJ D44A Truss Top 92287 (1)
- ☐ WJ D44A Spacer Plate 92288 (1)
- ☐ WJ D44A Rear Plate 92289 (1)
- ☐ WJ D44A Front Left Plate 92290 (1)
- ☐ WJ D44A Front Right Plate 92291 (1)
- ☐ WJ D44A Front Gusset 92292 (1)
- ☐ 3/16" steel brake line tubing (5 feet)

### **#193 WJ D44A Truss M14 Nuts**

- ☐ M14 x 2.0 plain nut, class 10.9 (3)

### **#184 T-Block Eliminator (1)**

- ☐ T-Block Eliminator 88263 (1)

### **#147 Rear Brake Line hardware (1)**

- ☐ 3/16" brake line flare nut (4)
- ☐ 7/16 x 1.25 grade 8 hex bolt (1)
- ☐ 7/16-14 grade 8 hex nut (1)

## **Before you begin:**

- ☐ Read all safety warnings and notes.
- ☐ Contact Iron Rock Off Road with any questions before, during, or after installation.
- ☐ Read and understand installation instructions.
- ☐ **Ensure that all parts are present and in good condition using the included parts checklist.**
- ☐ Be sure you have the following tools and supplies:
  - Paint (Spray paint, primer, etc.)
  - Metal cutting tools (grinder, etc.)
  - Welder
  - 3/16 double flaring tool for brake lines
  - Tubing cutter for brake lines
  - 3/8" flare nut wrench
  - Medium strength thread locker (Ex: Loctite Blue)
  - Hose pinching pliers, brake line plugs for 3/8 flare fittings or electrical tape
  - Basic hand tools (sockets, ratchet, wrenches)

## **Safety Warning:**

**\*\*\*Ensure vehicle is safely supported with jack stands prior to working underneath it.\*\*\***

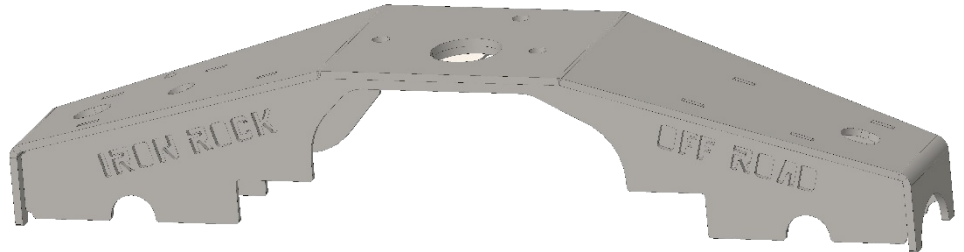
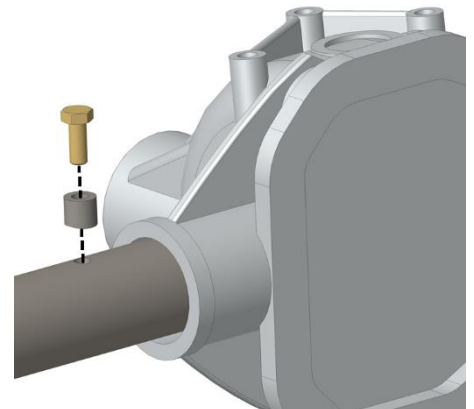
## **Notes:**

- ☐ We recommend that this truss be installed by a qualified professional and that all welds be performed by a certified welder. Be sure to re-torque all suspension components after the first 100 miles of use, and frequently inspect all safety critical suspension components.

## **Prepare the Axle:**

1. Lift the rear of vehicle and support with jack stands under the unibody frame.
2. Ensure that vehicle is safely supported.
3. Disconnect the axle breather hose from the body and axle tube.
 

**\*\*\*Tip: Plug the axle breather hole. This will prevent gear oil from leaking out while rotating the axle for welding.**
4. Disconnect ABS harness and position it out of the way.
5. Disconnect and remove hard brake line from T-Block to both rear brakes. Clamp brake hose with pinching pliers or plug T-Block with brake line plugs or electrical tape.
6. Unbolt T-block from axle and hang it out of the way.
7. Apply medium strength thread locker to original T-Block bolt and install T-Block Eliminator (#184) where the original T-block was located on the axle. See diagram.



8. Disconnect the driveshaft from the axle.
9. Remove the upper and lower control arm mounting bolts at the axle.
10. Remove the axle assembly from the Jeep.
11. Prepare the axle for welding by removing paint or surface rust with a wire wheel, flap disk or grinder.

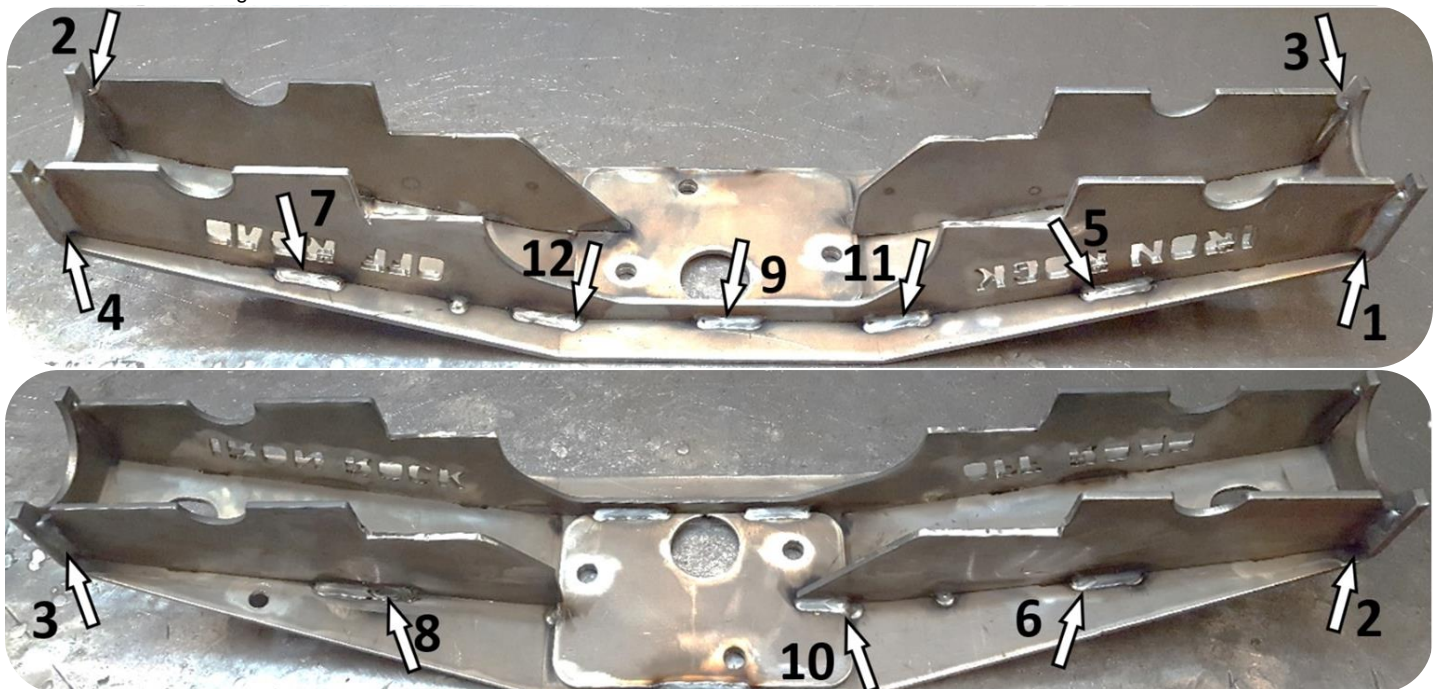
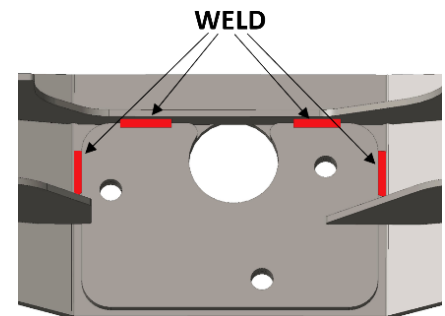
### **Prepare the Truss:**

12. Prepare the truss for welding by cleaning the edges with a wire wheel, flap disk or grinder.
13. Position the top plate upside down and align the spacer plate with the A-arm mounting holes on the inside of the truss.  
**\*\*\*Tip: Use the three bolts removed from axle to align the mounting holes.**
14. Insert the front and rear vertical plates into the slots provided.
15. Tack weld the spacer plate and the vertical plates to the truss top plate.
16. Test fit the truss assembly to the axle. The truss should rest on the axle tubes and the top of the differential housing. The 3 mounting holes should align with the mounting bosses on the differential.

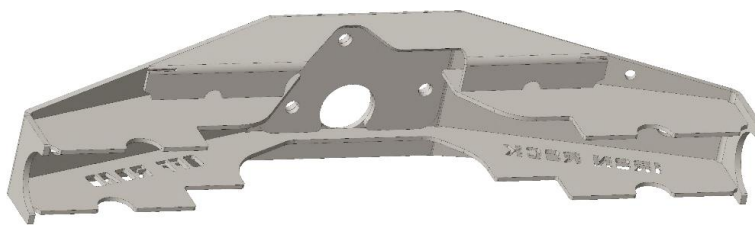
**\*\*\*Ensure good fitment of truss on axle before welding truss assembly\*\*\***

**\*\*\*The extreme heat from welding will warp the truss and greatly affect fitment. Weld only the minimum amount and in short sections while the truss is off of the axle.**

17. Remove truss from axle and weld spacer plate to top plate inside the truss.
18. **\*ONLY if repairing broken mounting bosses:** Weld three M14 x 2.0 plain nuts to the bottom of spacer plate. Use M14 bolts to hold the nuts firmly against truss spacer plate while welding.
19. **\*ONLY if repairing broken mounting bosses:** Using a grinder with a cut off wheel, remove broken mounting bosses from differential to make room for welded nuts.



20. Stitch weld the truss with 1 to 2 inch welds in the order shown. Allow time for welds to cool to avoid warping.
21. Bolt the truss securely to the axle using M14 bolts in the top mounting holes. Ensure the spacer plate is flat against the 3 mounting bosses. **\*\*Tip: Attach the axle breather hose to the axle and secure it with a clamp before welding the truss to the axle.**
22. Fully weld the spacer plate to the truss top plate.
23. Fully weld the truss to the axle tubes by alternating 1 to 2 inch welds on opposite sides of the axle assembly. Allow a short cooling off period between welds. Ensure good weld penetration but try to minimize the amount of heat and the heat affected zone.
24. Fully weld the vertical plates of the truss to the top plate using the same alternating technique.
25. Align the front gusset to the edges of the top plate and vertical plates then fully weld it onto the truss. Some grinding of your weld on the front



edge may be required to get a tight fitment of the gusset plate.

26. Remove any weld spatter and prepare the axle assembly for paint.
27. With the axle assembly cool to the touch, fully paint the truss and all welded areas.
28. Reinstall axle into Jeep. Ensure the top mounting bolts are long enough for your specific application.
29. Attach the T-block to the mounting hole on the front of the truss using the 7/16 nut and bolt from hardware kit #147.
30. Orient the T-block with the brake lines in the most convenient angle for assembly.
31. Insert flare nuts before flaring and double flare per the instructions provided with your flaring tool.
32. Route brake lines from T-block to left and right caliper hoses.
33. Check that all hoses, brake lines, and wiring are routed to avoid the driveshaft and any moving suspension components and are tied securely.
34. Bleed the brake system.
35. Tighten any loose bolts to factory spec.
36. Lower vehicle.

Recommended Upper Mounting Bolt Lengths	
OEM Ball Joint	M14 x 2.0 x 50
IRO 4-Link Mount	M14 x 2.0 x 60
IRO A-Arm Mount	M14 x 2.0 x 60
IRO A-Arm Spacer	M14 x 2.0 x 100
RC A-Arm Spacer	M14 x 2.0 x 100
RC A-Arm Mount	M14 x 2.0 x 60

