TRAIL FORTRESS

BUILT FOR THE TRAIL. CHECKED FOR YOUR TRUCK.

Rough Country 10565 Installation Instructions

Front Axle Truss and C-Gusset Kit for Jeep Wrangler JK (2007-2017)

Part number: 10565

trailfortress.com/front-axle-truss-and-c-gusset-kit-jeep-wrangler-jk-rough-country-10565

Scan for fitment, price and install help

ROUGH COUNTRY SUSPENSION SYSTEMS®

10563BAG

JEEP JK Dana 30 Axle Truss

Thank you for choosing Rough Country for your suspension needs.

Rough Country recommends a certified technician install this system. In addition to these instructions, professional knowledge of disassemble/reassembly procedures as well as post installation checks must be known. Attempts to install this system without this knowledge and expertise may jeopardize the integrity and/or operating safety of the vehicle.

Please read instructions before beginning installation. Check the kit hardware against the parts list. Be sure you have all needed parts and know where they go. Also please review tools needed list and make sure you have needed tools.

PRODUCT USE INFORMATION

⚠WARNING As a general rule, the taller a vehicle is, the easier it will roll. Seat belts and shoulder harnesses should be worn at all times. Avoid situations where a side rollover may occur.

Generally, braking performance and capability are decreased when larger/heavier tires and wheels are used. Take this into consideration while driving. Do not add, alter, or fabricate any factory or after-market parts to increase vehicle height over the intended height of the Rough Country product purchased. Mixing component brands is not recommended.

Rough Country makes no claims regarding lifting devices and excludes any and all implied claims. We will not be responsible for any product that is altered.

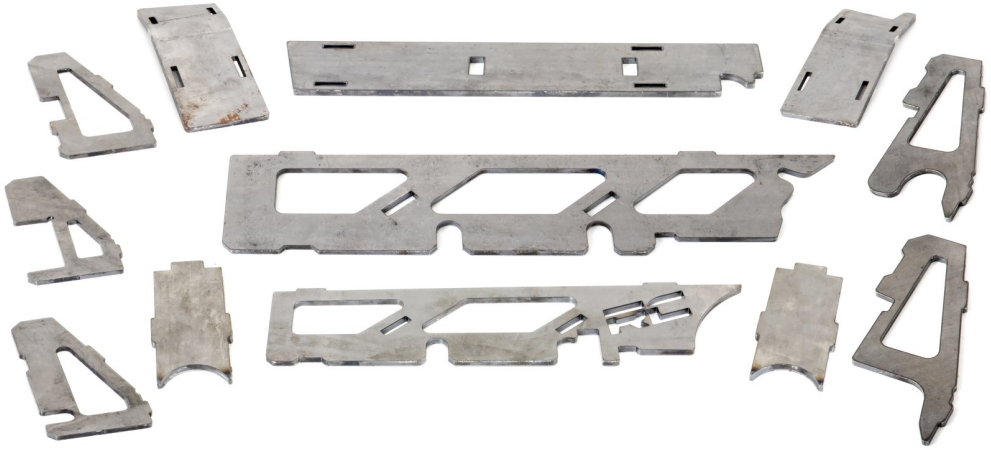
⚠NOTICE This truss was designed around a 3.5” or larger lift. If any interference is detected during the test fit, it may be necessary to utilize bump stop spacers to limit the up travel of the suspension.

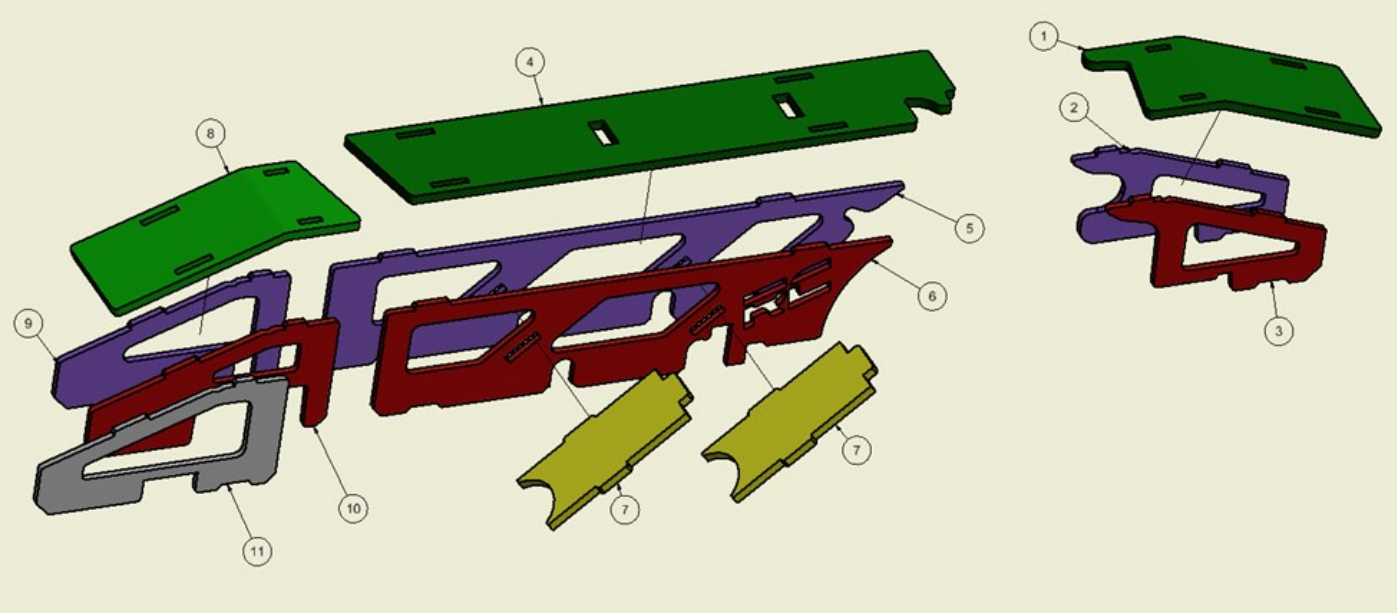
If question exist we will be happy to answer any questions concerning the design, function, and correct use of our products by calling 1-800-222-7023.

⚠NOTICE NOTICE TO DEALER AND VEHICLE OWNER

Any vehicle equipped with any Rough Country product should have a “Warning to Driver” decal installed on the inside of the windshield or on the vehicle’s dash. The decal should act as a constant reminder for whoever is operating the vehicle of its unique handling characteristics.

INSTALLING DEALER - it is your responsibility to install the warning decal and forward these installation instructions on to the vehicle owner for review. These instructions should be kept in the vehicle for its service life.



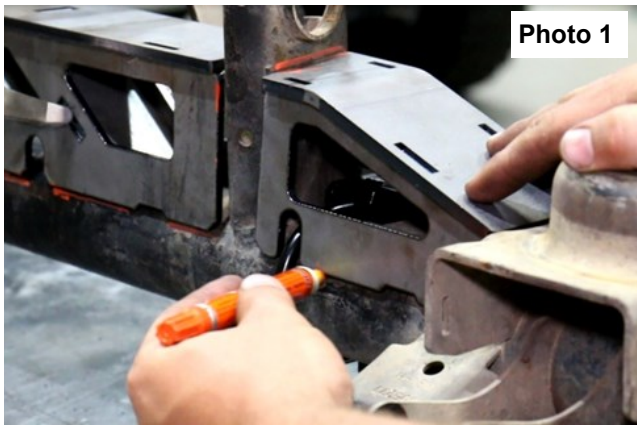


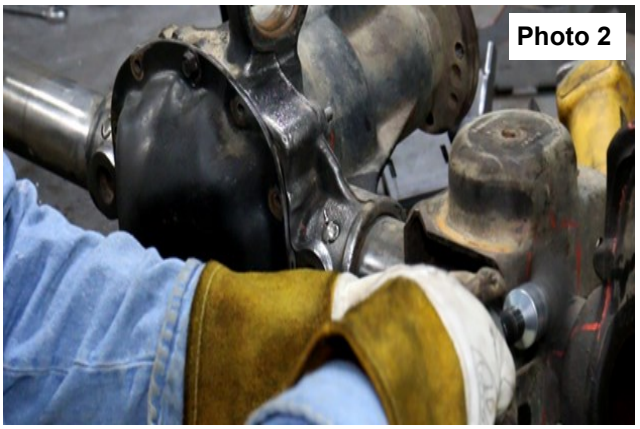
1. Driver side top truss plate.
2. Driver side rear truss plate.
3. Driver side front truss plate.
4. Middle top truss plate.
5. Middle rear truss plate.
6. Middle front truss plate.
7. Middle truss gusset. x 2
8. Passenger top truss plate.
9. Passenger rear truss plate.
10. Passenger front truss plate. **(To be used with Rough Country track bar relocation bracket.)**
11. Passenger front truss plate. **(To be used with the factory track bar mount.)**

Install Instructions

⚠ NOTICE It is recommended to remove your axle from the vehicle to achieve best results. Remove any components on the axle that may be damaged during welding including but not limited to: ball joints, bushings, differential cover and assembly, tie rods, axle seals, axle bearing races, and axle breather tube.

1. Place the truss assembly on the axle and confirm all fitments. Use a marker or paint pen to mark everywhere that the truss contacts the axle. **See Photo 1.**
2. Remove the truss assembly and use a sander, wire wheel, or flapper disk to thoroughly clean the axle around ALL marked locations. It is crucial that bare metal is exposed along the entire weld surface to ensure good weld penetration. **See Photo 2.**





3. Identify pieces 1,2, and 3 that will be installed on the driver side of the axle. Place the driver top plate (1) over the tabs on the driver side plates (2 and 3). Slide this assembly onto the axle from the top ensuring that the side plates are vertical. The outside edge of the top plate should be aligned with the spring perch and the top edge should contact the driver upper control arm mount. Tack weld the top plate to the spring perch and upper control arm mount. Confirm that the side plates are vertical and tack weld the tabs in order to secure the top plate. **See Photo 3.**
4. Identify pieces 4, 5, 6, and 7 that make up the center section of the truss. Insert both internal gussets (7) into the side plates (5 and 6). Insert this new assembly into the top plate (4). It is recommended to clamp this assembly together while locating it on the axle. Drop the assembly down from the top onto the center of the axle and rotate forward until the notch in the top plate contacts the differential housing. Ensure the side plates are vertical and the assembly is oriented correctly, then tack weld the corners of the side plates to the axle. Tack weld the internal gussets to the side plates using the tabbed holes. **DO NOT tack weld the top plate**. **See Photo 4.**

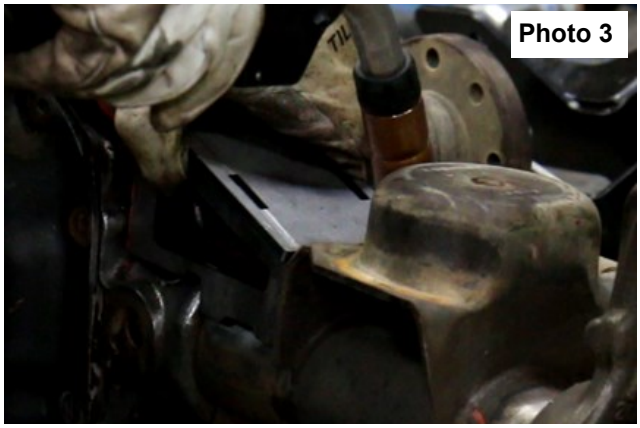
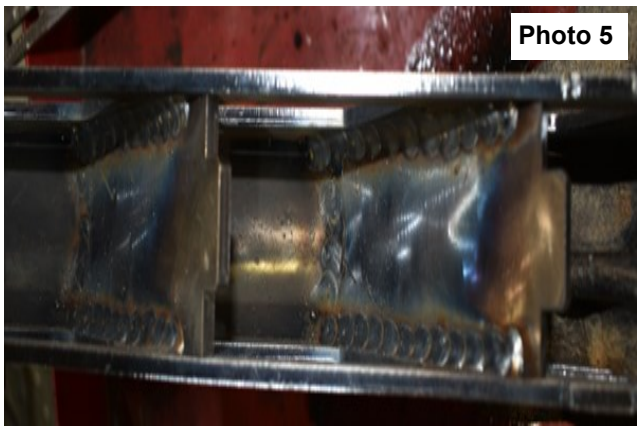
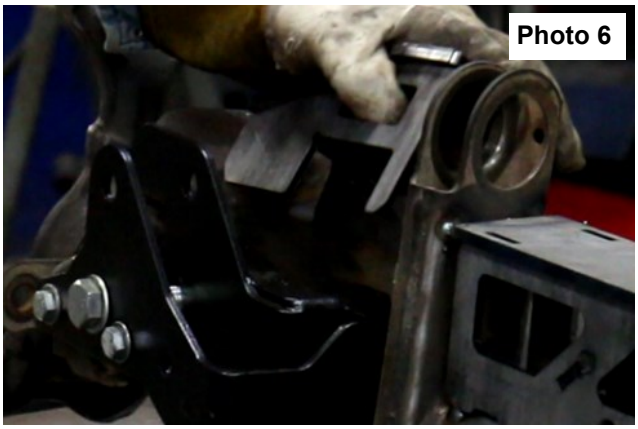

Photo 3


Photo 4

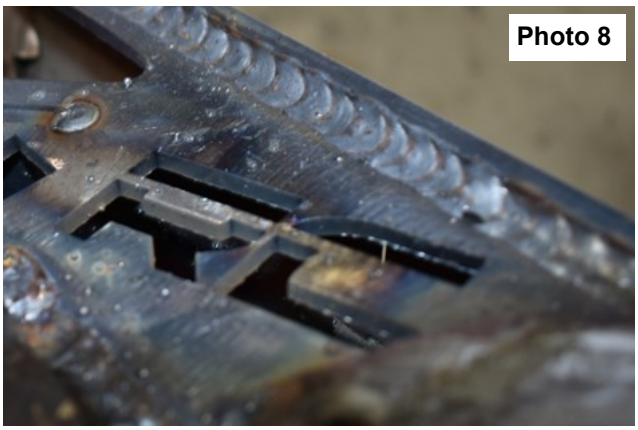
5. Verify that the assembly is still in the correct position, then remove the clamps and top plate. Weld the internal gussets to the axle tube and also to the inside of the side plates for maximum strength. Replace the top plate and plug weld all tabbed holes. **See Photo 5.**
6. The passenger side truss will contain two separate front plates depending on your setup. Piece 11 will be used if you are retaining the OE track bar mount. Piece 10 was designed specifically to work with the Rough Country HD Track Bar Bracket (SKU 1118). Identify which front piece is needed for your application (10 or 11) and then identify the passenger top plate (8) and the passenger rear plate (9). If using the HD track bar bracket, install the kit before welding on any part of the truss. Once the kit is installed, slide the passenger assembly over the bracket from the top and ensure fitment. Tack weld the top plate to the passenger upper control arm mount and the bottom corner of the front plate. Remove the track bar assembly and tack weld any corners that were restricted by the track bar mount. **See Photos 6 & 7.**


Photo 5


Photo 6

7. It is **HIGHLY** recommended that you perform a test fit to ensure the new truss has clearance for the suspension to fully cycle. You may need to install your control arm bushings to fully cycle the suspension. Make any necessary modifications while everything is tack welded in place.
8. ⚠NOTICE It is crucial that this kit is welded slowly to prevent the axle from warping. Start on one end of the axle and begin welding 1 inch long stitch welds along the axle tube. After each stitch, move to a completely new section of the axle. Allow the axle to cool in between welds.
9. After all of the welds on the axle tube are cool, weld the underside of the top plate to the side plates. Again, be sure to let the welds cool between passes. **See Photo 8.**


Photo 7


Photo 8

10. Welding to the differential casting will require some extra precautions. For best results, it is recommended to preheat the casting to about 400 degrees F. It is important to weld while the casting is still hot. This will allow proper penetration between the plate steel and the differential casting. After welding, post heat the cast back up to 400 degrees and wrap the axle in a welding blanket. Allowing this section to cool off as slowly as possible, this will help to prevent stress cracks from forming as the plate steel cools faster than the cast section. Allow the axle to cool for approximately 24 hours and inspect all welds for cracks. If any cracks are discovered, repeat the above steps after grinding away the insufficient welds.
11. Tape off any mating surfaces such as the press fit surfaces for the bushings and ball joints. Replace the differential cover and secure with a few bolts. While everything is sealed off, use several coats of paint to cover any exposed bare metal on the axle. This is crucial to prevent corrosion on your newly strengthened axle.
12. Reinstall all removed items such as ball joints, bushings, breather tubes, axle seals, and differential parts. Reinstall the axle onto the vehicle making sure to follow all factory torque specifications.

By purchasing any item sold by Rough Country, LLC, the buyer expressly warrants that he/she is in compliance with all applicable , State, and Local laws and regulations regarding the purchase, ownership, and use of the item. It shall be the buyers responsibility to comply with all Federal, State and Local laws governing the sales of any items listed, illustrated or sold. The buyer expressly agrees to indemnify and hold harmless Rough Country, LLC for all claims resulting directly or indirectly from the purchase, ownership, or use of the items.