

# **TT2402** BLUE OX® E350 & E450 C-Chassis thru 2004 Rear Bar Installation Instructions

Each installation may vary due to chassis manufacturing options and variations in design. The rod assembly may be installed in several different combinations, such as either front or rear of the supplied brackets as well as using different bracket holes. The important thing is to maintain clearance between your TigerTrak and any chassis component (moving and stationary) such as exhaust, vehicle frame, differential, or any other item which might interfere with the operation of this product. Pictures and diagrams may not represent the best installation for every application.

## **Bolt Torque Specifications** Torque in Foot-Pounds for Inch Bolts

| Bolt Size | Grade 5 | Grade 8 |
|-----------|---------|---------|
| 1/4"      | 10      | 14      |
| 5/16"     | 19      | 29      |
| 3/8"      | 33      | 47      |
| 7/16"     | 54      | 78      |
| 1/2"      | 78      | 119     |
| 5/8"      | 154     | 230     |
| 3/4"      | 257     | 380     |

| 1 FOOL-FOUNDS 101 INCH BOILS |         |         |  |  |
|------------------------------|---------|---------|--|--|
| :e                           | Grade 5 | Grade 8 |  |  |
|                              | 10      | 14      |  |  |
|                              | 19      | 29      |  |  |
|                              | 33      | 47      |  |  |
|                              | 54      | 78      |  |  |
|                              | 78      | 119     |  |  |
|                              | 154     | 230     |  |  |
|                              | 257     | 380     |  |  |

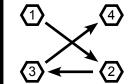
## **Bolt Torque Specifications** Torque in Foot-Pounds for Metric Bolts

| <b>Bolt Size</b> | Grade 8.8 | Grade 10.9 |
|------------------|-----------|------------|
| 6MM              | 6         | 8          |
| 8MM              | 16        | 22         |
| 10MM             | 31        | 40         |
| 12MM             | 54        | 70         |
| 14MM             | 89        | 117        |
| 16MM             | 161       | 230        |
| 18MM             | 222       | 318        |



## **Bolt Torque Specifications** Torque in Foot-Pounds for Grade 5 U-Bolts

| Bolt Size | Fine | Course |
|-----------|------|--------|
| 3/8"      | 21   | 18     |
| 7/16"     | 33   | 29     |
| 1/2"      | 52   | 45     |
| 5/8"      | 107  | 91     |
| 3/4"      | 190  | 165    |
| 7/8"      | 304  | 270    |



\*Always tighten and torque u-bolts in a cross pattern sequence.

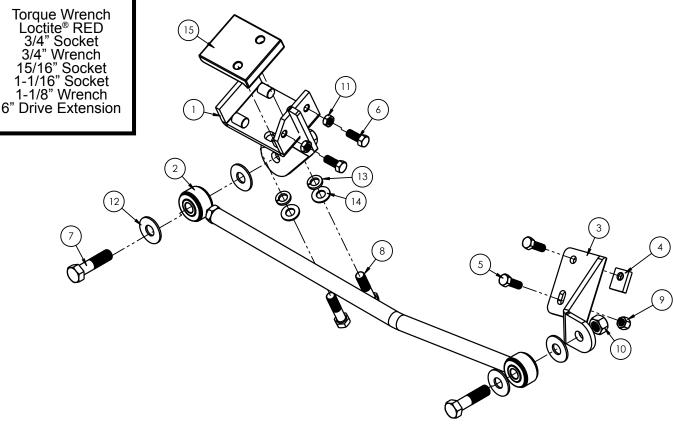
# NOTICE

- Only a qualified mechanic using normal automotive tools and following all safety standards should perform the installation of this product.
- If the vehicle is equipped with air bags be sure that nothing interferes with the deployment of them.
- Be sure to use Loctite® Red on all bolts before tightening. Tighten all bolts according to the torque charts provided or to the manufacturer's torque specifications on OEM parts. If no manufacturer specifications can be found then use the torque charts provided.
- Dealer or installer be certain the user receives these instruction sheets.

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## **Tools Required**

Torque Wrench Loctite® RED 3/4" Socket 3/4" Wrench 15/16" Socket 1-1/16" Socket 1-1/8" Wrench



| Item No. | Part No.             | Description                                 | Qty. |
|----------|----------------------|---|------|
| 1        | 61-6439              | TigerTrak Frame Bracket                     | 1    |
| 2        | 62-3634              | TT2402 Rod Assembly                         | 1    |
| 3        | 101-7145             | TT2402 Axle Bracket                         | 1    |
| 4        | 102-7113             | TigerTrak Nut Plate                         | 1    |
| 5        | 201-0051             | 1/2"-13 x 1-1/2" Hex Head Bolt, Grade 5, ZP | 2    |
| 6        | 201-0308             | 1/2"-20 x 1-1/4" Hex Head Bolt, Grade 5, ZP | 2    |
| 7        | 201-0632             | 3/4"-16 x 3" Hex Head Bolt, Grade 5, ZP     | 2    |
| 8        | 201-0913             | 5/8"-18 x 2-3/4" Hex Head Bolt, Grade 5, ZP | 2    |
| 9        | 202-0094             | 1/2"-13 Hex Nylon Insert Lock Nut, ZP       | 1    |
| 10       | 202-0168             | 3/4"-16 Stover Lock Nut, ZP                 | 2    |
| 11       | 202-0184             | 1/2"-20 Jam Hex Nut, ZP                     | 2    |
| 12       | 203-0007             | 3/4" Flat Washer, ZP                        | 4    |
| 13       | 203-0013             | 5/8" Lock Washer, ZP                        | 2    |
| 14       | 203-0106             | 5/8" SAE flat Washer, ZP                    | 2    |
| 15       | 229-0734             | Frame Bracket Nut Plate                     | 1    |
| 16       | 190-0155 (not shown) | 10-1/2" Loom                                | 1    |
| 17       | 290-0275 (not shown) | 8" Cable Tie                                | 2    |

#### Important:

Use only genuine factory replacement parts on your TigerTrak. Do NOT substitute homemade or non-typical parts. If a bolt is lost or in need of replacement, for your safety and the preservation of your TigerTrak, be sure to use a replacement bolt of the same grade (In most cases it will be Grade 5, please reference the parts list above). Replacement parts may be ordered through your nearest Blue Ox® Dealer or Distributor.

#### TT2402

# E350 & E450 C-Chassis thru 2004 Rear Bar Installation Instructions

#### Installation Instructions

- Position the vehicle on a level surface with the front wheels straight ahead and sitting at normal ride height. Set the brake and chock all the wheels.
- 2. Remove the right rear (passenger) shock absorber and set aside. Install the axle bracket to the shock mount with two (2) 1/2"-13 x 1-1/2" bolts with a 1/2" lock nut on the bottom hole and the 1/2" nut plate on the top hole. On the top hole the nut plate will need to be slid in then the bolt started. Tighten both bolts and reinstall the shock absorber.

Note: The upper bolt/nut plate may need to be reversed for shock absorber clearance.

- 3. Position the frame bracket onto the left (driver) side frame rail and loosely secure it with the nut plate frame bracket and the 5/8"-18 x 2" bolts with 5/8" lock and flat washers. Loosely install the two (2) 1/2"-20 x 1-1/4" bolts with the 1/2"-20 jam nuts into the frame bracket. The bracket needs to be loose enough on the frame rail to move back & fourth to line up with the axle bracket.
- 4. Install the rod assembly onto the axle bracket with one (1) 3/4"-16 x 3" bolt, two (2) 3/4" flat washers and a 3/4" lock nut. Be sure the flat washers are on either side of the urethane bushing. Position the frame bracket so it is straight with the axle bracket and rod assembly. Adjust the length of the rod assembly until you are able to pass a bolt thru both the rod assembly and frame bracket. Install a 3/4" bolt, two (2) flat washers and a 3/4" lock nut into the rod assembly and frame bracket. Leave all bolts finger tight for now.
- 5. Once the frame bracket is straight with the rod assembly and axle bracket, alternately tighten

- down the 5/8" bolts on the frame bracket and torque to specifications. Then torque the 1/2"- $20 \times 1-1/4$ " bolts to the frame and tighten the jam nuts.
- Torque the 3/4" bolts in the rod assembly to specifications. Inspect for any wiring or hoses that may rub against the brackets and secure in a safe position with the loom and/or cable ties provided.

#### **CUSTOMER SERVICE COMMITMENT**

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Additionally, please visit our website to see which rallies our Destination America team will be attending. For a nominal fee, our service technician will service your towing system to ensure it's in proper working condition. Also, as a commitment to our customers, should you visit our factory, you can stay at our full service Blue Ox® campground at no charge along with enjoying a factory tour.

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