

# Toms Offroad

## Big Brake Kit Instructions

*Please read entire set of instructions before beginning installation.*

### Tools needed for installation:

- Spindle nut socket (Part #3220)
- Spindle removal tool (Part #3488)
- Hex socket set or hex tool set
- Torx-T15 driver
- Torque Wrench up to 80 ft lbs

### Disassembly:

1. Jack up the Bronco from the front axle and place it on jack stands.
2. Remove the tires and wheels.
3. With a hex socket or hex tool, remove the lockout hubs and snap rings.
4. Using a spindle nut socket (Part #3220, sold separately) unscrew and remove the spindle nuts and washer inside the hub assembly. **Retain these nuts and washer for re-assembly.**
5. Remove the factory drum brake hubs and drums.
6. Disconnect the flexible brake lines from the backing plates and drain the fluid into a can or jar for proper disposal.
7. Remove the flexible brake lines from the hard lines.
8. Remove the 6 bolts that hold the spindle and backing plate to the knuckle.
9. Remove the spindle and backing plate. If the spindle is difficult to remove, hit it with a rubber mallet or brass hammer to knock it loose.

Now is a great time to inspect axle shafts, u-joints, and to clean up any debris out of the axle tubes. Your axle shafts should be smooth, without any grooves in them. Your u-joints should easily move freely. If these are difficult to move, they need to be replaced. Below are replacement axle shafts and u-joints you can find at [TomsOffroad.com](http://TomsOffroad.com).

- Drivers Side Dana 44 Axle Shafts - Part #3455
- Passenger Side Dana 44 Axle Shaft - Part #3460
- U-Joints - Part #3205



### Installation:

1. If removed in the disassembly, reinstall axle shafts being careful not to damage internal seals.

### Spindles

2. Slide the Spindle Bellow Seal onto the axle shaft and around the lip of the axle shaft.
3. Slide the Spindle Thrust Washer onto the axle shaft with the tapered edge facing the Spindle Bellow Seal.
4. Insert the Spindle Bearing Seal into the back of the Spindle (see image below).



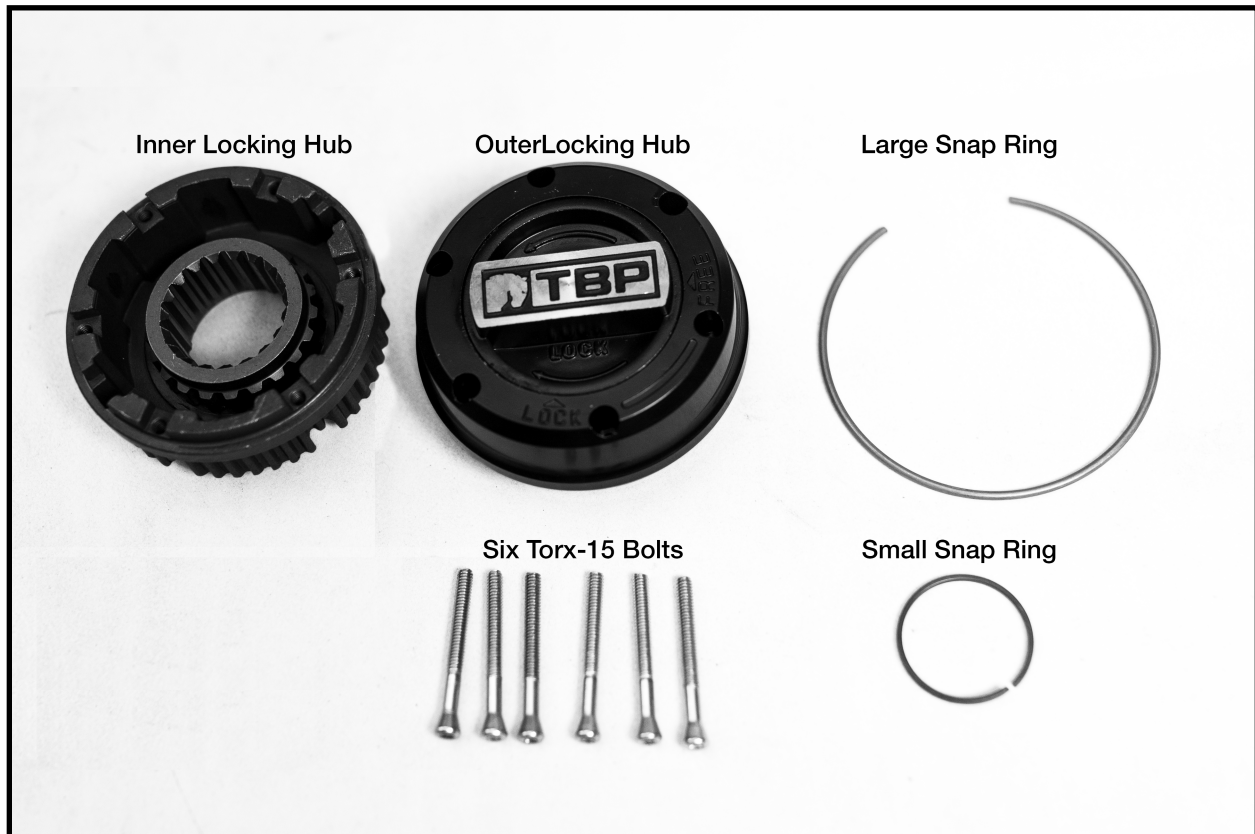
5. Slide the Spindle onto the axle shaft and line the holes up with the holes in the knuckle.
6. Slide the Black Caliper Bracket on the spindle. The bracket should be in the 10:00 position on the spindle and line the holes up with the spindle and knuckle.
7. Slide the Caliper Support Plate onto the spindle and line the holes up with the bracket, spindle and knuckle.
8. Using the six Grade 8 bolts and lock washers provided, secure the spindle, caliper bracket, and support plate to the knuckle. Torque the bolts to 35-45 ft-lbs.

9. Using the two 3/4" hex bolts, secure the Aluminum Caliper Bracket to the Black Caliper Bracket. Torque the bolts to 35-45 ft

## Hub and Rotor

The Wheel Bearing Hub comes from Toms Offroad as bare steel for your convenience. To avoid your Hub becoming rusty, we recommend putting a coat of paint on the outside of the hub, making sure not to get any paint inside or on the races.

10. Take the Hub and place it face down on a piece of wood or cardboard. Set the Rotor on top of the Hub and drive the five Wheel Studs through the Rotor and Hub. These wheel studs should sit flush on the rotor and will keep the rotor face from moving away from the back of the hub.
11. Verify that the races are fully seated into the Wheel Bearing Hub.
12. Pack both wheel bearings with grease.
13. Place the (larger) inner wheel bearing into the back side of the hub assembly.
14. Place the hub seal in the hub on top of the bearing. Using a soft rubber mallet, tap the hub seal flush with the hub, being careful not to bend the metal lip of hub seal.
15. Grease the hub seal.
16. Slide the Hub and Rotor assembly over the spindle.
17. Slide the (smaller) outer wheel bearing (packed with grease) onto the spindle.
18. Install the Spindle lock nut with the dowel pin onto the spindle and tighten it down using a Dana 44 Spindle nut socket (part #3220 sold separately).
19. To properly seat the bearings, torque the nut to 50 ft-lbs while rotating the hub and rotor assembly back and forth. Then, back off the nut and re-torque to 30-35 ft-lbs. Then, back off the adjusting nut approximately 90 degrees.
20. Install the Spindle lock nut washer onto the spindle and line the holes in the washer up with the lock nut dowel pin. The washer must line up with the dowel pin in order for the washer to sit flush against the lock nut.
21. Install the outer spindle lock nut on the spindle and tighten to 50-80 ft-lbs. The final end play of the hub and rotor assembly should be 0.001 to 0.010 inch. The hub and rotor should spin by hand, but not too loose. It should have a bit of drag to it.



### Locking Hub

22. With the dial knob set to "FREE" remove the cap screws and separate the inner and outer locking hub.
23. Slide the inner locking hub into the wheel hub.
24. Insert the large snap ring into the hub and push it into place. Discard the small snap ring.
25. Slide the outer locking hub into the hub.
26. Using the six Torx-T15 bolts, tighten the outer locking hub.





### **Caliper**

27. Place the Brake Pad Clip into the caliper.
28. Place the brake pads into the caliper and push them between the brake pad clip and the two tabs on the caliper.
29. Install the caliper onto the aluminum caliper bracket around the rotor, using the two \_\_\_\_ bolts
30. Torque the bolts down to 45 ft-lbs.
31. Attach the flexible stainless brake hose to the hard line at the axle.
32. Attach the brake hose to the caliper using the provided banjo bolt and washers. And tighten all fittings.
33. Bleed the brakes to remove all air from the brake lines.
34. Mount your wheels and tires.
35. Carefully road test brake system.