



JK Big Brake Kit Installation Instructions Part #: RT31046 & RT31047



NOTE: Ensure that all components in kit are accounted for.

| Parts List | | | |
|------------|--|------------------|----------|
| Item # | Description | Replaces Part # | Quantity |
| 1 | Brake Pad Set | 5143350AC | 1 |
| | Brake Pad Spring | Included w/ Pads | 8 |
| 2 | 13" Solid Brake Rotor (In RT31046) | 68040177AA | 2 |
| 2 | 13" Drilled & Slotted Brake Rotor Set (In RT31047) | RT31044 | 1 |
| 3 | Left Dual-Piston Brake Caliper | 68157611AA | 1 |
| 4 | Right Dual-Piston Brake Caliper | 68157610AA | 1 |
| 5 | Brake Caliper Bracket | 68034720AA | 2 |
| 6 | Caliper Bracket Bolt | 68048467AA | 4 |
| 7 | Caliper Bolt | 5143356AC | 4 |
| 8 | Brake Hose Bolt | 6508914AA | 2 |
| 9 | Brake Hose Washer | 6502114 | 4 |
| | Red Threadlocker | 27105 | 1 |

| Tools Required |
|----------------------|
| 13mm Wrench |
| 15mm Wrench |
| 21mm Wrench |
| 13mm Socket |
| 15mm Socket |
| 21mm Socket |
| Pry Bar |
| Flathead Screwdriver |
| Side Cutters |
| Hammer |
| Wire Brush |

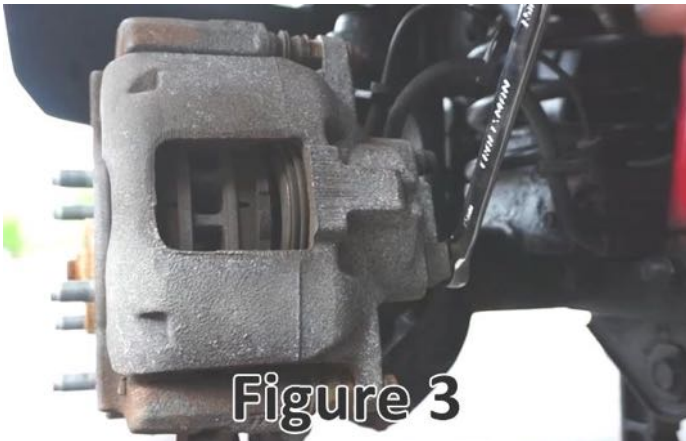
1. Set the parking brake or chock the rear wheels. Raise the front of the vehicle and set the front axle on jack stands.
2. Remove the front wheels.
3. Remove the brake rotor retainers if applicable. It's helpful unthreading them a bit and snipping them with a pair of side cutters. See **Figure 1**.



4. Compress the brake caliper pistons using a c-clamp, pry bar, or screwdriver. This will make removing the caliper easier. See **Figure 2**.



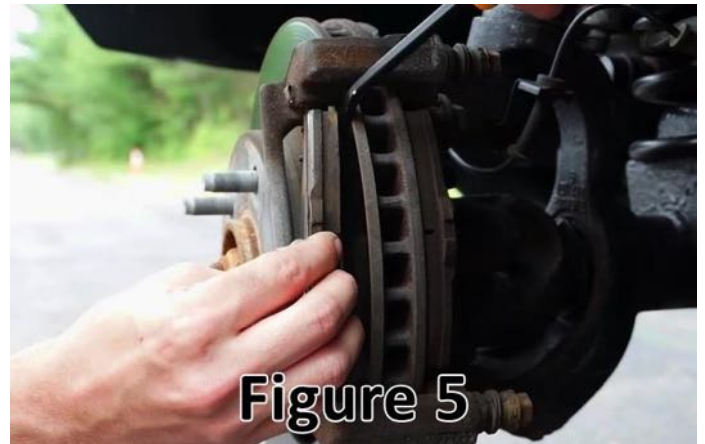
5. Using a 15mm wrench, loosen the brake hose bolt and lightly tighten it again. This will allow the brake hose bolt to be removed more easily when the caliper has been removed from its bracket. See **Figure 3**.



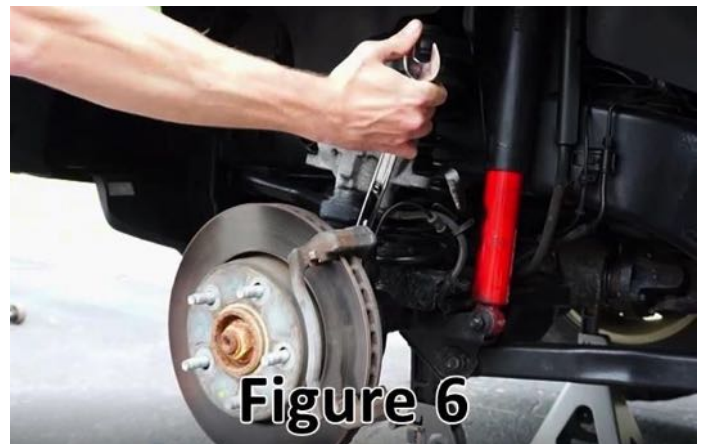
6. Unclip the ABS line from the brake hose.
7. Remove the caliper from the caliper bracket using a 13mm and 15mm socket or wrench. See **Figure 4**. Place the caliper in a way that the brake hose will not become damaged (hang using a bungee cord or coat hanger or lay on a sturdy surface).



8. Remove the pads from the caliper bracket using a screwdriver or pry bar. See **Figure 5**.



9. Remove the caliper bracket from the knuckle using a 21mm socket or wrench. See **Figure 6**.



10. Remove the brake rotor. Hammering the rotor may be necessary to free it from the hub. Use caution not to damage the wheel studs.
11. Clean any dirt, rust, corrosion, etc. from the hub surface using a wire brush and/or scuff pad. This will ensure the brake rotor and caliper bracket sit flush. See **Figure 7**.



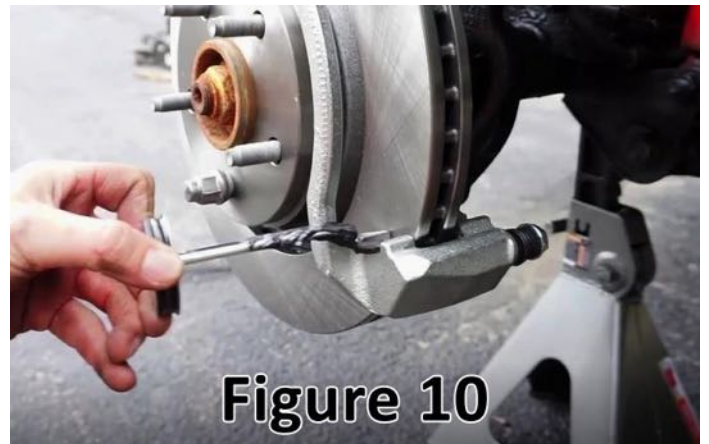
12. Clean the oils from the new brake rotor using brake parts cleaner and a shop towel. See **Figure 8**. Install the rotor using a lug nut to keep the rotor snug against the hub.



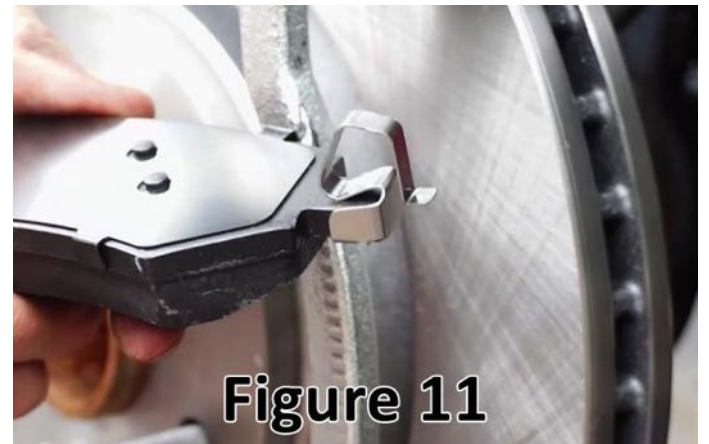
13. Place some red threadlocker on each of the caliper bracket bolts. Only a small amount is necessary. See **Figure 9**. Install the caliper bracket onto the knuckle and torque the bolts to 120 ft. lbs.



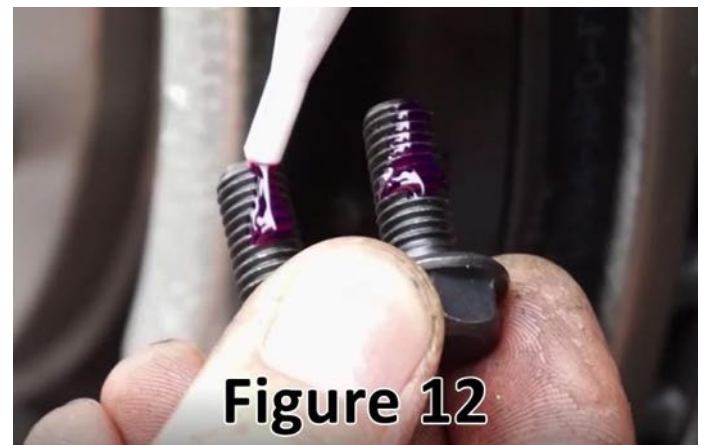
14. Grease the pad contact points on the supplied caliper bracket. See **Figure 10**. Be careful not to get any grease on the rotor.



15. Install 2 of the included brake pad springs onto each of the supplied brake pads. See **Figure 11** for spring orientation. Install the brake pads into the caliper bracket. The pads are all the same so there is no inner or outer specific pad.



16. Place some red threadlocker on each of the caliper bolts. See **Figure 12**.



17. Install the supplied caliper onto the caliper bracket, ensuring the bleeder screw is above the brake hose bolt hole. The brake pads will need to be compressed toward the rotor in order for the caliper to slide over the pads. See **Figure 13**. Torque to 26 ft. lbs. using a 13mm socket.



18. Remove the brake hose from the original caliper. Ensure the old brake hose washers are removed. Clean any debris from the brake hose using a shop towel. Install onto the new caliper using the supplied brake hose bolt and washers. Ensure there is a washer on either end of the brake hose. See **Figure 14**. Test to ensure the brake hose does not get pinched, crushed, or stretched during articulation or turning. The orientation will vary depending on which hose you have and what the ends are shaped like. Torque to 23 ft. lbs. using a 15mm socket.



19. Repeat Steps 4-12 on the other side of the vehicle.

NOTE: For optimal brake pedal feel and braking performance we suggest the installation of our large-bore brake master cylinder (Replaces **P/N: 68091278AB**; Not Included In Kit).

20. Perform the brake bleeding procedure to remove all air from the brake system. We suggest a full brake fluid exchange for optimal life and performance of the entire braking system.

Brake Bed-In Procedure

Bedding in the new brake pads and rotors is imperative to ensure the braking system lasts as long as possible and performs to the extent of its ability. Failure to adhere to the bed-in procedure will result in decreased performance and a drastically shorter life.

1. Perform five medium stops from 45-10mph. Brake pedal pressure should be slightly higher than in normal braking. Do not come to a complete stop during this process.
2. Perform ten aggressive stops from 60-10mph. Brake pedal pressure should be significantly higher than in normal braking but without triggering the ABS system. Do not come to a complete stop during this process.
3. Drive for 10 minutes trying not to use your brakes. This will cool the pads and rotors down.
4. For the next 100 miles use lighter than normal brake pressure. After 100 miles the braking system can be used normally.