



Installation Instructions

Spindle Mount Disc Brake Conversion Kit

Item # **FC3001SM**

Applications: 1946-75 Jeep CJ Series

Dana 25, 27, 30 Front Axles



Thank you for choosing Leed Brakes for your automotive product needs. Before you begin your installation please inspect all parts and review the installation instructions. If you have any missing or damaged parts or if you have any questions regarding the fitment of this kit on your specific vehicle please contact our customer service team at (716) 852-2139 before beginning your installation

Tools required for a safe and smooth installation:

Proper Jack & Jack Stands, Tube Wrenches, Standard Socket Set, Standard Wrench Set, Torque Wrench, Lug Wrench, Pliers, Mallet, Brake Fluid, Brake Cleaner, Wheel Bearing Grease.

Drum Brake Removal:

1. Safely raise the vehicle off the ground until the wheels are clear and spin freely. Support the vehicle using the appropriate Jack Stands and remove the front wheels.
2. Begin by removing the lockout hub assemblies. Please note that the factory or factory replacement lock out hubs will be reused with this kit. Next remove the outer and inner spindle nut assemblies.
3. You should now be able to slide the hub/drum assembly off the spindle. If you have trouble removing this assembly, you may need to retract the brake shoes by inserting a flathead screwdriver into the adjustment slot in the drum brake backing plate. Use the screwdriver to disengage the adjusting lever from the adjusting screw. You should now be able to turn the adjusting screw to retract the brake shoes.
4. Before you remove the drum brake backing plate you will want to remove all brake fluid from your brake system. ***Be very careful not spill any brake fluid on any painted surfaces as it will damage your paint.*** To remove the brake fluid from your system first remove the lid from your master cylinder. Next place one end of a clear hose on the bleeder of your wheel cylinder and the other into a suitable container. Finally open the bleeder screw until all fluid has been removed from your system.
5. Disconnect the short hard brake line from the back of the wheel cylinder and from the flex hose at the top of the knuckle. It is recommended you use a tube wrench as to not damage the brake line fittings. If your fittings look rusty spray them with penetrating oil and let them soak for easy removal.
6. Disconnect the front axle hard line from the factory flex hose.
7. Remove the horseshoe clips from both ends of the factory flex hose and remove the hose.
8. Remove the drum brake backing plate assembly by removing the 6 spindle retaining bolts and removing the spindle and backing plate from the knuckle. Use caution not to damage the bearing surfaces on the spindles.
9. Clean and inspect the spindles and the face of the knuckle. Install the spindles back onto the knuckle and align the 6 mounting holes. **Photo 1 & 2**

Bracket Installation:

1. The brackets must be pre-assembled prior to installing them on the truck. As shown in **Photo 3** you will need to assemble the base bracket, spacers, and upper bracket and secure with the 7/16" bolts and nylon lock nuts supplied. The brackets are machined the same for left and right sides, but the upper bracket will need to be installed on the inboard side of each base bracket. Also, be sure the nylon lock nuts are installed on the outboard side of the bracket assemblies. **Photo 3 & 4**
2. The calipers will be installed on the rear side of the spindle pointing back towards the firewall. The brackets are double drilled allowing you to install them in either the 3 and 9 o'clock position or the 2 and 10 o'clock position. For most **open knuckle** installations, the 2 and 10 o'clock position will work best. For **closed knuckle** installations the 3 and 9 o'clock positions are usually the best option. The bracket assemblies will bolt to the outside face of the spindles using the (6) 3/8" mounting holes.
3. On **open knuckle** applications the brackets will be installed on the 6 studs that previously held the drum brake backing plates. Secure using the 3/8" lock nuts supplied and torque to 40-45 ft/lbs. **Photo 5**

4. **Note on closed knuckle applications it may be necessary to grind down or replace the knuckle fill plug. A flush style ½" NPT pipe plug will usually work best. Photo 6**
5. On **closed knuckle** installations secure the brackets using the 3/8" bolts supplied. Use blue Loc-Tite on these bolts and torque to 40-45 ft/lbs. **Photo 7**

Rotor Installation

1. Remove the brake drums from the hubs if they did not come off when the hubs were removed.
2. The lug studs in the hubs will now need to be removed. If they are the original studs the shoulder above the face of the hub may be crimped. If they are pressed or hammered out of the hubs this will damage the holes and create problems when installing the new studs. The best approach is to cut the studs of flush with the face of the hub and then press out the remaining end of the stud.
3. Clean and inspect the backside of the hubs. They must be clean of any rust or debris and free of any burrs or damage. This is the mounting face for the new brake rotors and any imperfections can cause run out in the brake rotor.
4. Place the new rotors face down on the back side of the hubs and align the lug stud holes. Make sure the rotor is sitting flat against the hub face. If it's not be sure the back of the hub is machined flat as shown in **Photo 8**. Due to manufacturing variations some original hubs may not be machined. In those cases, the hubs will need to be taken to a machine shop or replaced with fully machined hubs.
5. From the backside place one of the supplied lug studs in each hole. Be sure the rotor is sitting flat against the back face of the hub and that the lug studs can easily be started into the holes. The studs must now be pressed fully into place to secure the rotor to the hub. A hydraulic press works best for this procedure, but it can be accomplished with a hammer and drift if the hub face is properly supported, and great care is taken not to damage any of the components. **Photo 9 & 10**
6. This is a great time to install new wheel bearings and seals. If you choose to reuse your originals or purchase new ones, they must be packed with hi temperature wheel bearing grease for disc brakes. **Do not** reuse your old bearings without repacking them.
7. The hub and rotor assemblies can now be slid onto the spindle and the wheel bearings and spindle nuts can be reinstalled. The spindle nut hardware and lock out hubs can be reinstalled in the reverse of removal. If you are unsure of the assembly procedure, please consult a manual for your particular hubs.
8. Spin the rotor by hand to insure it clears all the brackets and hardware and that the rotor runs true without any wobble or runout. **Photo 11**

Caliper Installation

1. Calipers should arrive preloaded with the brake pads and hardware. Install the calipers so the bleeder screws are pointing up and secure with the 14MM bolts and lock washers supplied. The bolts will pass through the upper bracket and thread into the caliper assembly. Torque the bolts to 100 ft/lbs. **Photo 12 & 13**
2. Once the calipers are installed spin the rotors to insure there is no interference between the caliper and the rotor. **Photo 14**
3. Install the flex hose to the caliper using the banjo bolt and copper washers supplied. **Photo 15**
4. Install the other end of the flex hose to the bracket on the axle housing and retain it using the horseshoe clip provided. Reconnect the original hard line and tighten using a tube wrench.

5. Turn the wheels thru a complete left and right turn to insure there is no interference with the new brake system and any suspension or body components. Also check the rubber hoses during this operation to ensure the hoses are not binding or twisting. If your rubber hoses bind during a turn, you could experience loss of braking while driving. If it looks like they are binding remove the horseshoe clip and reposition the brake hose until it no longer binds.
6. With the truck still on jack stands install the wheel and check for caliper clearance. If the wheel goes on fully and sits flat against the face of the hub install all 5 lug nuts and tighten. Spin the wheel by hand and again check for any interference with either the brake caliper or flex hose. If everything clears you can repeat the process for the other side. If any interference is found optional wheel spacers are available for purchase from Leed Brakes. The spacers will normally only be needed with early factory style wheels. The spacers we offer are .375" thick, but other thickness options may be available through your local performance parts distributor.

Master Cylinder

1. For proper function of your new disc brakes, it will be necessary to upgrade to a disc brake master cylinder. Depending on the year of your Jeep and the brake pedal ratio a 1" bore will normally be correct for manual brake applications and a 1-1/8" bore will usually work best for power brake applications. For more information on your specific application please contact Leed Brakes.

That completes the installation of your brake kit at the spindles. If you purchased a kit containing power or manual actuation, please refer to the separate instructions provided with those components.

If you have any questions, please call our tech line at (716) 852-2139

Thank you for purchasing from Leed Brakes we hope you have had an enjoyable experience.



Installation Photos

Disc Brake Conversion Kit

Applications: 1946-75 Jeep CJ Series



Open Knuckle

←Front of Truck

Photo 1



Closed Knuckle

→Front of Truck

Photo 2

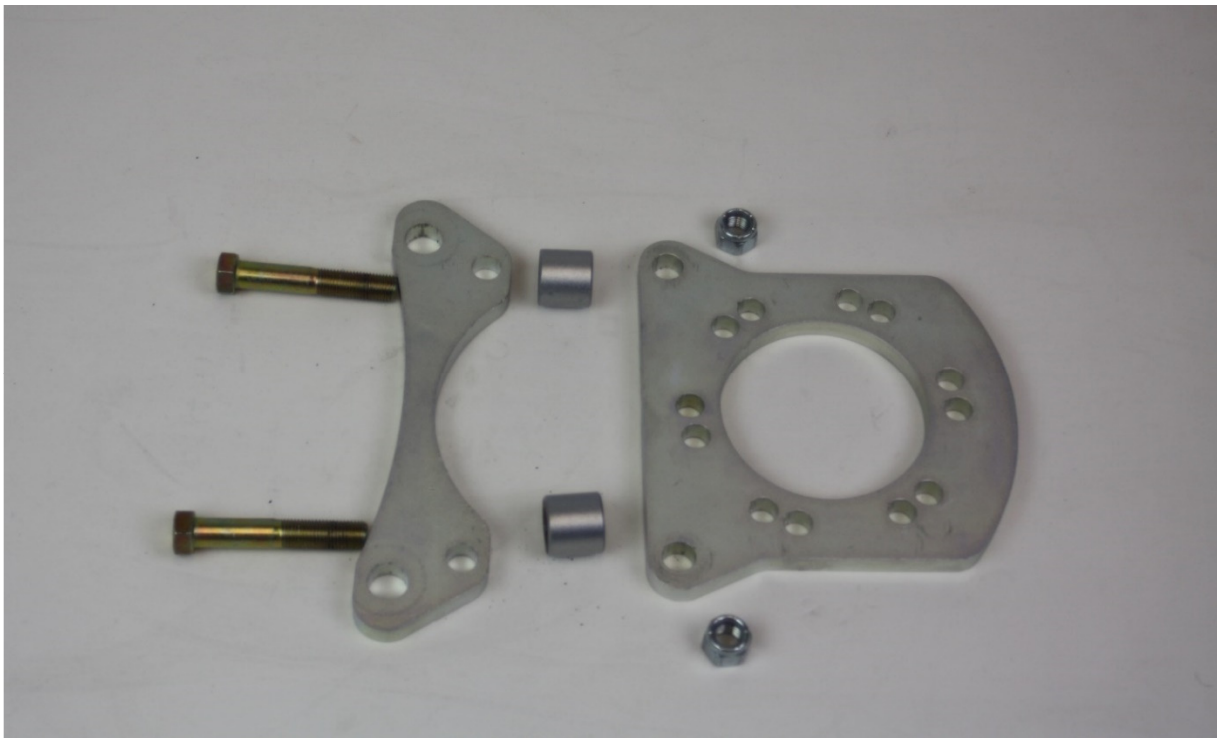


Photo 3



Photo 4



Photo 5 Open Knuckle

←Front of Truck



Photo 6



Photo 7 Closed Knuckle

→Front of Truck

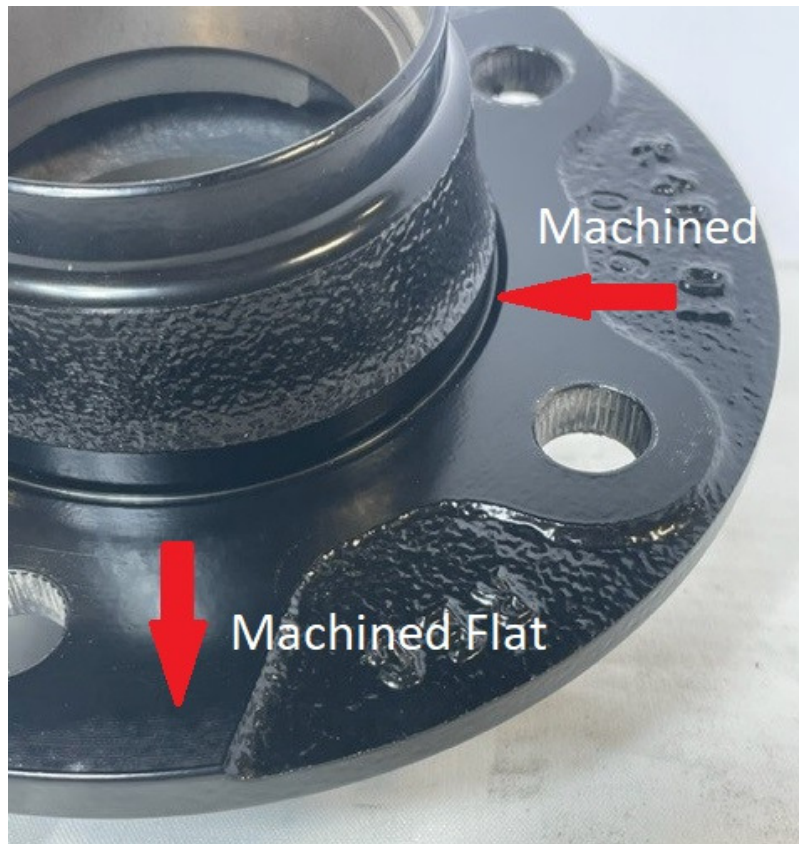


Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13

→Front of Truck



Photo 14



Photo 15