



Installation Instructions

Disc Brake Conversion Kit

Item # FC1008SMX & FC1009SMX

Applications: 1964-72 GM A Body, 67-69 F-Body, 68-74 X-Body



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, Separator or "pickle fork", 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. Starting at the front wheel hub, remove the grease cap, cotter pin, lock nut and flat washer from the spindle as well as the outer bearing.
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 hard brake line from your flexible hose at the frame rail. 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. Remove the horseshoe clip from the brake hose at the frame mount.

Spindle Assembly Removal:

1. Remove outer tie rod end retaining pin and nut. Carefully remove tie rods with the use of a splitter or "pickle fork" tool.
2. In order to remove the spindles the coil springs must be compressed. Place a floor jack directly under the coil spring pocket of the lower control arm and jack up the control arm to compress the spring. Make sure the frame rail of the vehicle is still supported by the jack stand. To insure the jack stays in place and the spring remains compressed a heavy duty safety chain should be run over the frame rail and secured to the frame of the floor jack.
3. With the spring compressed and the safety chain secured remove the cotter pins and locknuts from both the upper and lower ball joints. Carefully separate the ball joints from the spindles using the splitter or "pickle fork" tool.
4. Remove spindles from the vehicle. Separate the steering arms from the spindle assembly and save for re-installation.

Inspection:

Check all ball joints and tie rods for wear or damage prior to reassembly. Any worn or damaged parts should be replaced before you proceed.

Steering Arms:

Some GM vehicles used 7/16" holes in the steering arms from the factory. If your steering arms have 7/16" holes you will need to drill them out to fit the 1/2" bolts supplied in the kit.

Brake Kit Installation:

1. Install new spindles onto the upper and lower ball joints with the original castle nuts. After you torque the upper ball joint to 50 ft lbs and the lower ball joint to 65 ft lbs install new cotter pins.

Photo 1

2. With the spindles installed and the nuts torqued the safety chain and floor jack can be removed.
3. Install **Caliper mounting brackets** so that the threaded caliper mounting holes are facing towards the rear of the vehicle.
4. Install the supplied **5/8" bolt** at the top of the spindle through the bracket. The beveled side of the hole should face out. Place one of the supplied spacers between the spindle and bracket.

Photo 2 & 3

5. Using the **1/2" bolts and nuts** supplied install the steering arms on the inboard side of the spindle. Install the bolts so the heads are on the outboard side of the spindle. Make sure the steering arms are oriented correctly to attach to the tie rod ends. The **longer 1/2" bolt** will be used on the hole closest to the rear of the vehicle and it will also pass through the mounting bracket. The **shorter 1/2" bolt** will be used on the hold towards the front of the vehicle. **Photo 4**
6. **If you ordered the kit with 2" drop spindles the steering arm will bolt to the lower two holes on the spindle and the calipers brackets will bolt to the upper holes.**
7. Torque the **5/8" bolt** to 100 ft lbs and torque the **1/2 bolts** to 75 ft lbs.
8. Reinstall tie rods and locking nuts, torque to 35 ft lbs and install new cotter pin.
9. Next you will need to properly pack the **inner and outer bearings** with grease prior to installation.
10. Grease the inner bearing race and install the greased **inner bearing** into the **rotor**. **Photo 5**
11. Lightly pack grease into the inner lip of the **grease seal**. Next install the **grease seal** into the inner portion of the **rotor** using a soft mallet or piece of wood. This will prevent any damage from occurring during installation. * **The lip of the seal should face the bearing when installed.**

Photo 6

12. Slide the **rotor** onto the **spindle** grease the outer bearing race and install the greased **outer bearing, slotted washer and adjusting nut**. **Photo 7**
 - a. **Adjustment nut installation VERY IMPORTANT.** Rotate the rotor while tightening the spindle nut to 18-24 ft lbs. Next back off the adjustment nut about 1/2 turn and retighten to 10-15 ft lbs while aligning the retaining slots with the cotter pin hole in the spindle.
 - b. Install **cotter pin**, bend cotter pin so that each side is bent in the opposite direction of the other.
 - c. Install the **grease cap**. **Photo 8**

- d. Spin the rotor to insure there is no interference with the grease cap and retaining assembly.
13. **Calipers** will arrive preloaded and ready for installation. If you need to replace the pads in the future the retaining pins are held in by spring clips. The pins can be removed by driving them out with a punch from the outside face of the caliper. The pads are standard **D11** brake pads. **Photo 9**
14. Install the **calipers** using the **7/16-20 x 1-1/2" bolts, lock washers and spacers** provided. Torque to 45-60 ft. lbs. The tube spacers should be placed between the caliper and the mounting bracket at each mounting hole. **Photo 10 and 11**
15. Once the calipers are installed spin the rotors to insure there is no interference between the caliper and the rotor. **Photo 12**
16. Before installing the **flex hose** adapter into the caliper wrap the threads on the flat end of the adapter with Teflon pipe thread tape. **Note the pointed end of the fitting will connect to the flex hose and the flat end will go into the caliper. Do not use Teflon tape on the pointed end.** This is a pipe thread fitting that will become tighter as it is threaded into the caliper. It will be necessary to angle the adapter correctly to allow for the best flex hose routing. **Photo 13 & 14**
17. Install the female flex hose adapter to the frame bracket and retain it using the **horseshoe clip** provided. Reconnect the original hard line and tighten using a tube wrench.
18. Turn the wheels through a complete left and right turn to ensure there is no interference with the new brake system and any suspension or body components. Also check the flex hoses during this operation to ensure the hoses are not binding or twisting. If your hoses bind during a turn, you could experience loss of braking while driving. If it looks like they are binding adjust the adapters and reposition the brake hose until it no longer binds.
19. Please remember you will need to have a professional front end alignment performed to ensure your car drives correctly. Failure to do so will result in poor handling and tire wear. The alignment should be set to the factory specs for your particular year make and model.

Master Cylinder

1. If your car was previously equipped with drum brakes, you must convert it to a disc brake master cylinder.
2. For power brake applications we recommend a 1" bore master cylinder and for manual brakes we recommend a 15/16"-1" bore depending on the rear brakes the car is equipped with.

Bleeding the vehicles braking system:

We recommend that the brake system is bled using a gravity bleed method. While there are many ways to bleed a system this way is less likely to introduce air in the system causing a spongy pedal. Whenever bleeding your system, you must keep an eye on your fluid level. If your master runs dry you will have to bench bleed the master again.

1. Remove the cap from the master cylinder.
2. Starting at the right rear wheel cylinder or caliper attach a clear hose to the bleeder with the other end in a clear container.

3. Open the bleeder and observe the fluid flow. It may take a couple of minutes for the fluid to flow with a new system. Once the fluid begins to flow let it drip until you do not see any air.
4. Move to the left rear wheel, repeat step 3.
5. **The calipers are equipped with bleeder screws on both ends to allow for universal left and right mounting. Always bleed from the top bleeder screw once the calipers are bolted in place**
6. Move to the right front wheel, repeat step 3.
7. Move to the left front wheel, repeat step 3.
8. Repeat steps 2 through 6 once more.
9. Install the lid on the master cylinder.
10. Pump the brake pedal until you achieve a firm pedal.
11. Remove lid on master cylinder & check fluid level
12. Repeat steps 2 through 6 to ensure all air has been removed.

Install your wheels and spin them to insure they still spin freely making sure the caliper doesn't interfere with the wheel and your brake components are not dragging or locked up.

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

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Photo 1



Photo 2

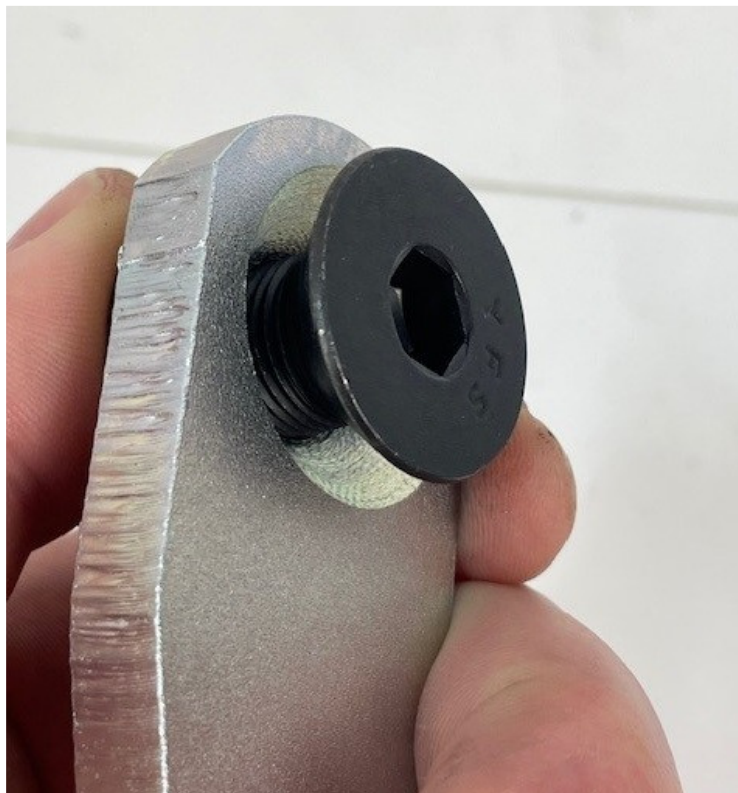


Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11

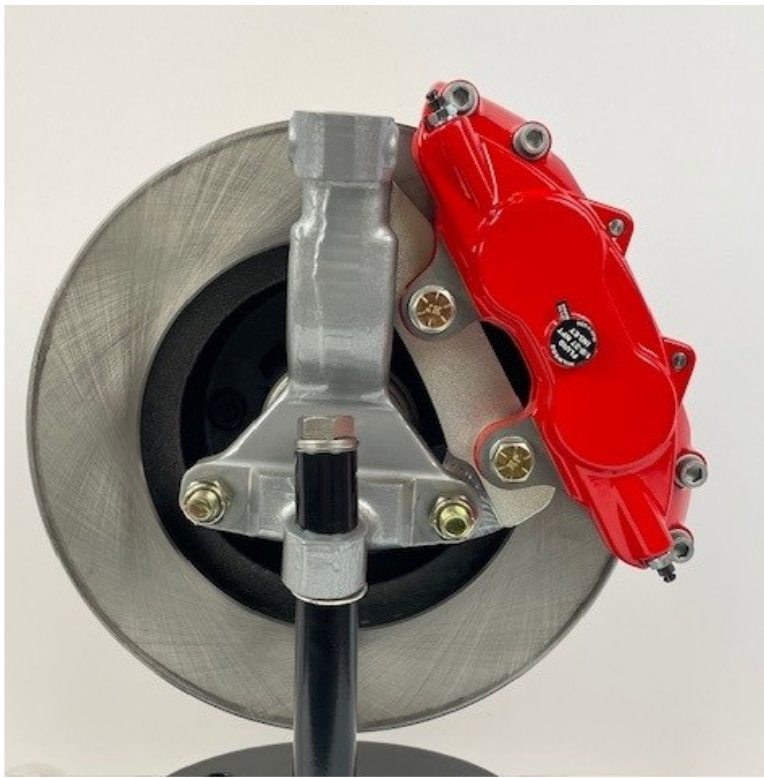


Photo 12



Photo 13



Photo 14