



AXLE & GEAR

G2 Axle and Gear
Rear Disc Brake Conversion
Installation Manual

Important Notices

Improper handling of a vehicle , especially while raised and supported by jack stands, ramps or other mechanical means, can cause serious bodily injury or even death. It is strongly recommended that a trained, experienced mechanic, with proper equipment, do the installation.

The seller nor the manufacturer assumes no liability, expressed or implied, for the improper installation or use of this product or its components. Before using, the user shall determine the suitability of the products for it's intended use. The user assume all responsibility and risk in connection there within.

It is the buyer's responsibility to have all suspension, drivetrain, steering, and other components checked for proper tightness and torque after the first 100 miles and every 3,000 miles by a qualified professional mechanic.

Extreme care should be taken while operating your vehicle to prevent vehicle rollover or loss of control. Both can result in serious injury or death. Do not add or modify parts to this kit or use outside it's intended purpose. Follow all safety regulations and warnings per state and federal laws.

Note: Final fitment of the wheel to caliper is the responsibility of the customer.

Note: It is important to read and understand this ENTIRE installation manual, before starting the installation.

Kit Contents

- 1 Pair of calipers w/pads
- 2 Rotors
- 2 Retaining plate
- 2 Preload spacers (C-clip applications)
- 4 Caliper bolts
- 8 T-bolts
- 8 Nuts
- 2 Disc brake mounting plate assembly (1 Left and 1 Right)
- 1 stainless steel brake line kit

Tools and Equipment That May Be Required

Different models and years of vehicle use different-sized fasteners, and every effort has been taken to correctly identify the proper sized tool for each step of the installation. Occasionally, however, manufacturers use alternate fasteners, so it's advisable to check that each tool correctly fits the fastener before loosening or tightening it. The following tools and equipment may be needed:

- 9/16" socket wrench
- 12mm socket
- 14mm wrench
- Torque wrenches capable of 10-148 lb-ft settings
- Several rags
- Small funnel or suitable means of filling master cylinder reservoir
- Brake bleed bottle
- 1 pair of jack stands or other means of supporting vehicle
- Hydraulic press
- Pair of Pliers

Step 1-Remove Wheels

WARNING - Brake fluid will damage most painted surfaces. Immediately clean spilled brake fluid from any painted surfaces. Be sure the cap is securely installed on the master cylinder. If the cap is loose or removed, it is likely more fluid will drip.

Note: All Photographs Show Left Side Installation, unless noted otherwise.

Break loose the lug nuts on both rear wheels before jacking up the car.

Refer to the Owners Manual for the correct location when jacking up the vehicle. Jack up the vehicle and secure on a pair of jack stands. Never leave any vehicle supported with only a jack - always use jack-stands.

After securing the vehicle at a convenient height, remove the rear wheels.

Note: If you remove the bottom lug nut last while holding the bottom of the tire, it will lessen the chances of the wheel tilting on it's own and make removal easier.

Step 2 -Removal of Drum Brakes and Axle

Remove brake drums from the brake assembly.

Remove the hard line from the wheel cylinder attached to the backing plate.

For c-clip applications- Remove the differential cover, unbolt the cross shaft and remove it from the vehicle. See factory service manual for additional information.

Using a 9/16" socket, remove the four nuts that hold each axle shaft into the axle and remove the axle shafts from the axle. Some leakage may occur.

Remove the backing plate from the axle housing.

Wipe clean grease and contaminants from all surfaces.

For semi-float applications- Press the old bearings and seals from the axle shafts. C-clip applications do not need the removal of the old bearings and seals unless parts are needed to be replaced.

Step 3 -Install Disc Mounting Plate

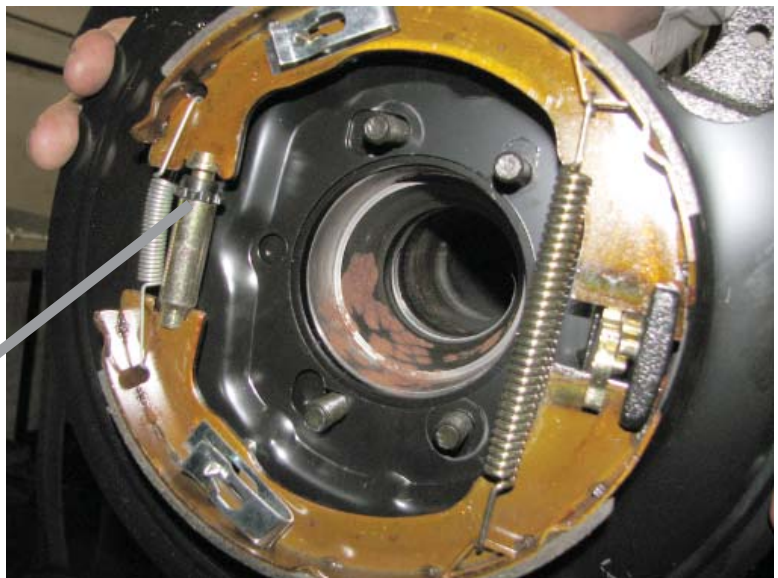
In order to install this kit, remove the factory bolts from the axle flange. If installing on a C-clip application do not remove the factory bolts.



Install the supplied bolts (longer than factory bolts) in the axle flange.



Install the disc brake mounting plate onto the axle flange with new supplied retaining bolts. The mounting plate is directional, insure that the plate is installed on the correct side.



Adjust the internal parking brake shoes with the adjuster until there is just enough room to slide the rotor over the shoes. Refer to the factory service manual for additional information.

STEP 4 -Install Axle Shafts

Install the retaining plate and new preload spacer on axle shaft. Notice the direction the preload spacer is facing in the photo to the right. The chamfer side faces inboard.

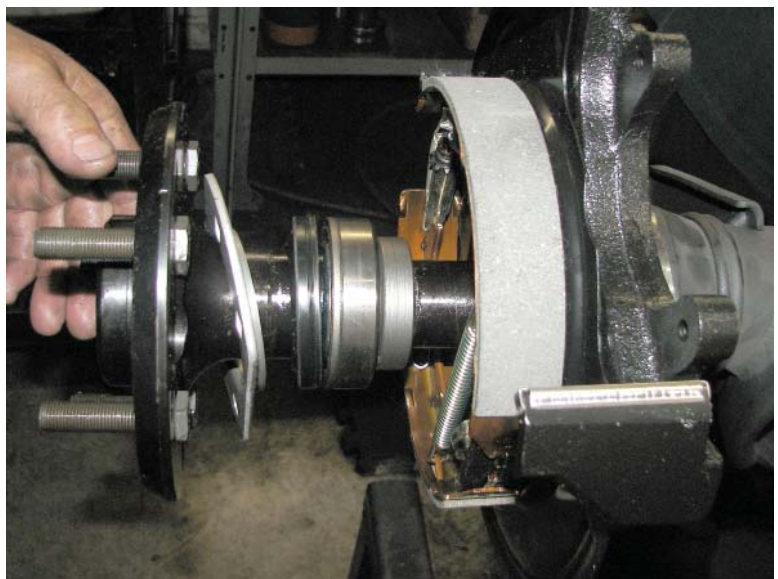
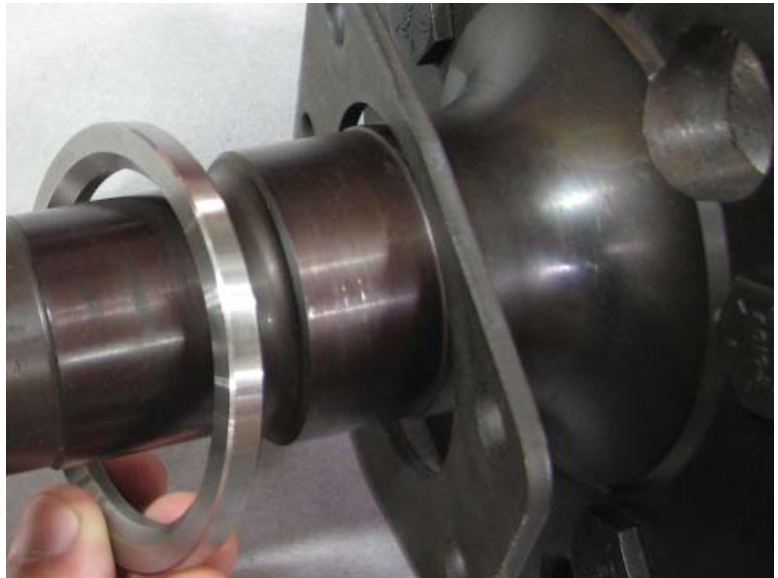
Grease the shaft where the axle shaft seal will be installed, then install the seal.

Using a hydraulic press, press the new bearing and retaining collar onto the axle shaft. Refer to the factory service manual for more details.

On C-clip retained axles, slide the axles all the way into the axle housing using care to avoid damage to the splines or the bearing surface. Reinstall the C-clip and the cross shaft. Ensure that all old silicone is cleaned from the differential housing and the differential cover, and reinstall the differential cover using a new gasket or silicone. Fill the housing with new oil.

Apply grease to the outside of the bearing seal assembly and slide the preload spacer onto the seal. The grease will help hold the spacer in place.

Slide the axle shaft into the axle housing by hand, lining it up with the differential. The axle shaft should not be forced, damage may occur.



STEP 4 -(Continued)Install Axle Shafts



Line up the access holes located on the axle shafts with the retainer bolts. Using a 9/16" socket wrench tighten the four nuts to 25 - 30 ft-lbs.

STEP 5 -Install the Rotor and Caliper



Install the rotor on the axle.

Install the brake pads in the caliper.



Using a 12mm socket wrench install the caliper onto the mounting plate. Torque the bolts to 15-18 ft-lbs.

STEP 6 -Install Stainless Steel Brake Lines



Install the caliper end of the stainless steel brake line by first placing a copper crush washer on either side of the banjo fitting.

Insert the banjo bolt into the caliper using a 14mm wrench or socket to tighten it.

Insert the stainless steel brake line fitting through the chassis bracket, and screw it onto the hard line fitting by hand a few turns, to ensure that it is properly engaged. Tighten the hard line fitting.

Check to ensure that the brake line is not binding in any way, nor interfering with any suspension component.

Note that you will need to purchase shorter metal brake lines from an automotive parts supplier.

If realignment is necessary, loosen the banjo bolt, and realign the brake line, or loosen the inboard end of the line, and slightly re-clock the fitting.

If the brake line is not properly routed, a catastrophic failure could occur. If you are unsure that the line is routed properly and safely, do not drive the car. Please call our Tech Support Dept. for assistance if you have any doubt as to the brake line routing.

Weld the brake line mounting tab onto the axle tube. Install the brake line through the tab and install the c-clip to secure the line.

Install the emergency brake cable at the mounting plate and adjust, refer to the factory service manual.

STEP 7-Bleed Brakes

Complete installation on both sides of the vehicle before bleeding the system.

Note: The calipers and lines will need to fill with fluid, quickly draining the master cylinder reservoir. Keep a close watch on the fluid level when initially bleeding the system. Do not allow the master cylinder reservoir to run dry and draw in air. Doing so may require the brake system to be serviced by a certified brake technician.

Refer to owners manual for torque used on bleed screws.

After initially bleeding the system, gently tap the caliper body with a non-marring mallet or hammer to dislodge any small air bubbles and re-bleed.

After bleeding, apply a constant pressure to the brake pedal and check all connections, including bleed screws, and both ends of the line for leaks.

Brake fluid will damage most painted surfaces. Immediately clean spilled brake fluid from any painted surface, including the caliper. Though caliper paint is designed to resist harsh chemicals, prolonged exposure will damage the finish.

STEP 8-Reinstall wheels

Check wheel to caliper clearance before installing wheels!

Reinstall the wheels and torque the lug nuts to your wheel manufacturer's specifications. It may be necessary to snug the bolts before lowering the vehicle and then torque the wheels when the car is on the ground. Alternatively, an assistant may depress the brake pedal while you tighten the wheel nuts to the proper torque setting.

Carefully test-drive the vehicle in a safe area at low speed to insure all components are working correctly.