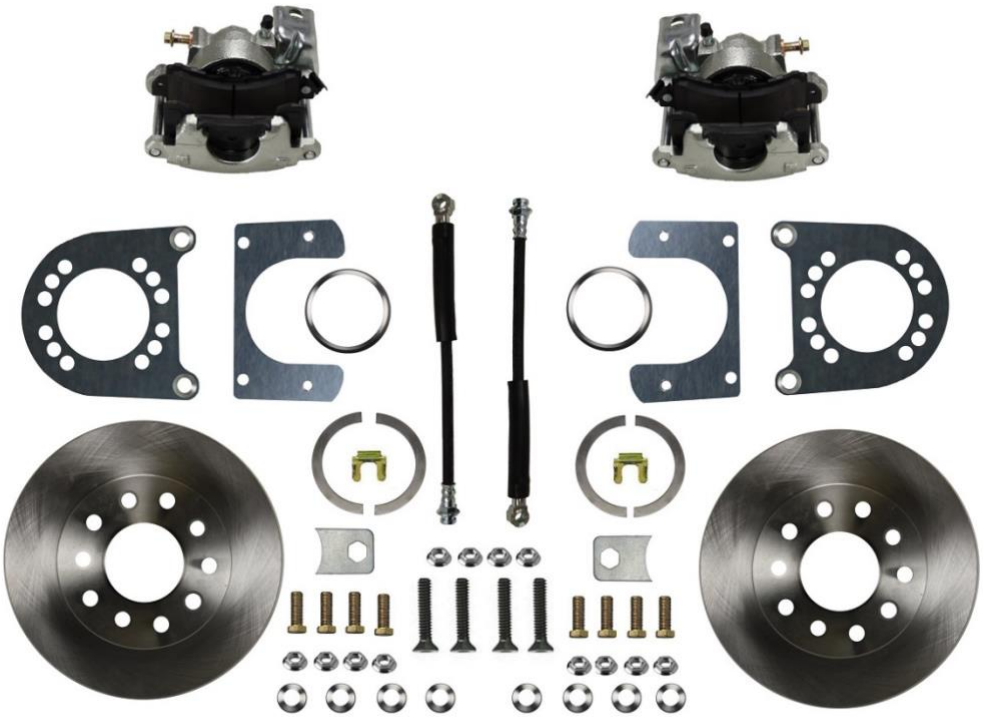
Installation Instructions

Rear Disc Brake Conversion Kit

Item # **RC0002, RC0002X**

Applications: Ford 9” Big Bearing Rear 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, Differential Gasket and Proper Gear Oil.

Wheel Size

This kit is designed for 15" or larger wheels. We do not recommend attempting to install this kit with 14" wheels and we do not authorize the modification of any of the components of the kit.

Axle Shafts

This kit is designed to work with a standard offset of 2.5". If you are having new axles made for any reason, please give this dimension to your axle manufacturer. In order for the rotors to slide over the axle shafts the outside diameter of the flange cannot exceed 6.125". Most factory axles will work without modification, but some factory and aftermarket axles may need to be machined down. Some factory axles may have burrs or high spots that can be filed down without requiring full machining.

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 rear wheels.
2. Begin by removing the brake drums from the ends of the axles. If the drums are stuck they can often be freed by tapping the drum face between the studs with a hammer. If the inside of the drums are badly grooved it may also be necessary to back of the self-adjuster to allow the drums to slide of over the brake shoes.

Axle Removal

1. Remove the 4 nuts from the end of the axle housing and slide out the axle shafts. It may be necessary to strike the axle flanges with a mallet until the axle bearing clears the end of the axle housing.
2. Disconnect the parking brake cable from the brake lever and the backing plate. Using a set of hose pinch off pliers or something similar pinch of the center rear flex hose. Using a flare wrench disconnect the brake line from the back of the wheel cylinder. Remove the drum brake backing plate.
3. Inspect the condition of your axle bearings and seals and clean the front side of the axle housing flanges for installation of the new brackets.

Bracket Installation:

1. The base brackets will be installed on the **outboard** side of the axle housing flange. Be sure the surface is clean and free from any burrs or rust to insure the brackets will sit flat. **Photo 1**
2. The brackets are drilled with 3 separate bolt patterns. This allows you to position the calipers straight back, 20 degrees up or 20 degrees down. Depending on the specific vehicle you are installing the kit on and any aftermarket suspension it may be equipped with this will allow you to position the calipers where you need to clear the suspension or wheel wells. Be sure to install the base brackets with the countersunk holes facing out. **Photo 2, 3 & 4**
3. The upper caliper bracket can now be installed onto the base bracket. Install the 7/16" socket head bolts provided into the countersunk holes of the base bracket. Next slide (1) of the 1/4'' tube spacers provided over each bolt. **Photo 5**
4. Next slide the upper caliper bracket over the bolts and secure with the 7/16" nuts provided. The tube spacers should now be sandwiched between the upper and lower brackets. The nuts can be left finger tight until you verify the caliper is centered over the rotor. You may need to add spacer or replace the spacers with the 1/8" spacers provided. This will be covered in the next section. **Photo 6**
5. The axle shafts can now be slid back into the axle housing. It will be necessary to place the supplied bearing shims between the axle bearing and the original axle retainer plate. The shims will fit inside the center hole of the base bracket. Using (2) shims for each side of the vehicle to form a complete circle and fully cover the axle bearing. **Photo 7**
6. The original axle retainer plate can now be slid over the T-bolts trapping the shims against the axle bearing. Secure the assembly with the 1/2" flange nuts provided. Torque to 55-60 Ft/Lbs.

Rotor and Caliper Installation

1. Depending on the specific vehicle you are working on you may have the smaller 2-7/16" axle center pilots. For those axles you will need to install the rotor center bushings provided. The flanged end of the bushing should be installed against the axle shaft flange.
2. Inspect the axle shaft flanges to insure they are free from rust and burrs. For proper function it's important that the rotors sit flat on the axle flanges. Slide the rotors into place on the ends of the axle shafts and secure with 2 lug nuts. **Photo 8**
3. Since this kit is for non-staggered shock applications the calipers are different for the left and right sides. The calipers will be installed so that the parking brake levers are above the axle tube.
4. Slide the caliper into position over the rotor and align the caliper with the mounting holes in the bracket. Install the caliper slider bolts and check relationship of the caliper to the rotor. If the caliper is centered over the rotors no shimming is required. **Photo 9**

5. If the caliper is would not slip easily into place you will need to add or remove the supplied tube spacers between the upper and lower bracket. If the outer pad is binding against the rotor face you will need a thinner shim. If the inner pad is binding against the rotor face you will need to add a spacer. Repeat the process as necessary until the caliper is centered and the rotor can be turned freely by hand.
6. When the shimming is complete the 7/16" nuts can be torqued to 45-50 Ft/Lbs. The rotor and caliper can then be reinstalled and the slider bolts can be lubricated with silicone grease and torqued to 25-30 Ft/Lbs.
7. Attach the flexible brake lines to the caliper using the banjo bolt and copper washers provided in the kit. Place one copper washer on the banjo bolt and then slide the banjo bolt into the flex hose. Install a second copper washer onto the end of the bolt and then install the bolt into the caliper. Tighten the banjo bolts to 25 Ft/Lbs. Additional torque may be required if any leaks are noted after bleeding the brakes. **Photo 10**
8. Carefully bend the original hard lines so they can be connected to the flexible lines. Make sure both the hard lines and flex lines make smooth bends and do not contact any moving parts. If the hard lines cannot be secured to the axle housing using the original mounting tabs then the brackets supplied can be welded to the axle housing to support the lines. Now remove the pinch off pliers from the center rear flex line.

Parking Brake Cables and Adjustment

1. This kit has been designed to work with many stock parking brake cables. The cables will now run above the axle and connect to the levers on the calipers. In certain cases such as with some aftermarket suspension kits the stock cables may not work. In those situations the best solution is a universal cable kit such as those supplied by Lokar.
2. Work the parking brake levers on each caliper by hand until the rotor cannot be spun by hand with the lever engaged. **This step must be completed to achieve a firm brake pedal.** It will take many applications of the lever to completely adjust the calipers. If you are unable to properly adjust the calipers in this manner the pistons can also be adjusted by turning them out a ¼ turn at a time by removing the inner brake pad and turning the piston counter clockwise. The best tool for this job is a caliper adjusting tool, but a large flat head screwdriver can also be used. This process will also be used to turn the pistons back in when you replace worn out brake pads in the future. **In order for your new calipers to stay in adjustment and provide a solid pedal feel the parking brake must be used on a regular basis**.
3. Connect the cables to the calipers and make final adjustments as necessary to insure the parking brake applies and releases completely. If the car is supported under the frame rails and the rear suspension is fully extended it may be necessary to make your final adjustments when the car is back on the ground and the suspension is compressed.

Bleeding and Final Adjustments

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 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 bubbles.
4. Move to the left rear wheel, repeat step 3.
5. Repeat steps 2 thru 4 once more.
6. Install the lid on the master cylinder.
7. Pump the brake pedal until you achieve a firm pedal.
8. Remove lid on master cylinder & check fluid level
9. Repeat steps 2 thru 6 to insure all air has been removed.

Once you feel you have successfully removed all air from your brake system check all fittings and lines for leaks and verify all fasteners are tight. Install your wheels, and spin them to insure they still spin freely making sure the caliper doesn't interfere with the wheel and your brakes are not dragging or locked up.

You may now take your vehicle for a test drive in a safe area. We recommend that you drive the vehicle with light to medium application of the brakes for the first 150-200 miles. This will allow your brake pads to properly seat to your rotors to insure optimal braking performance.

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

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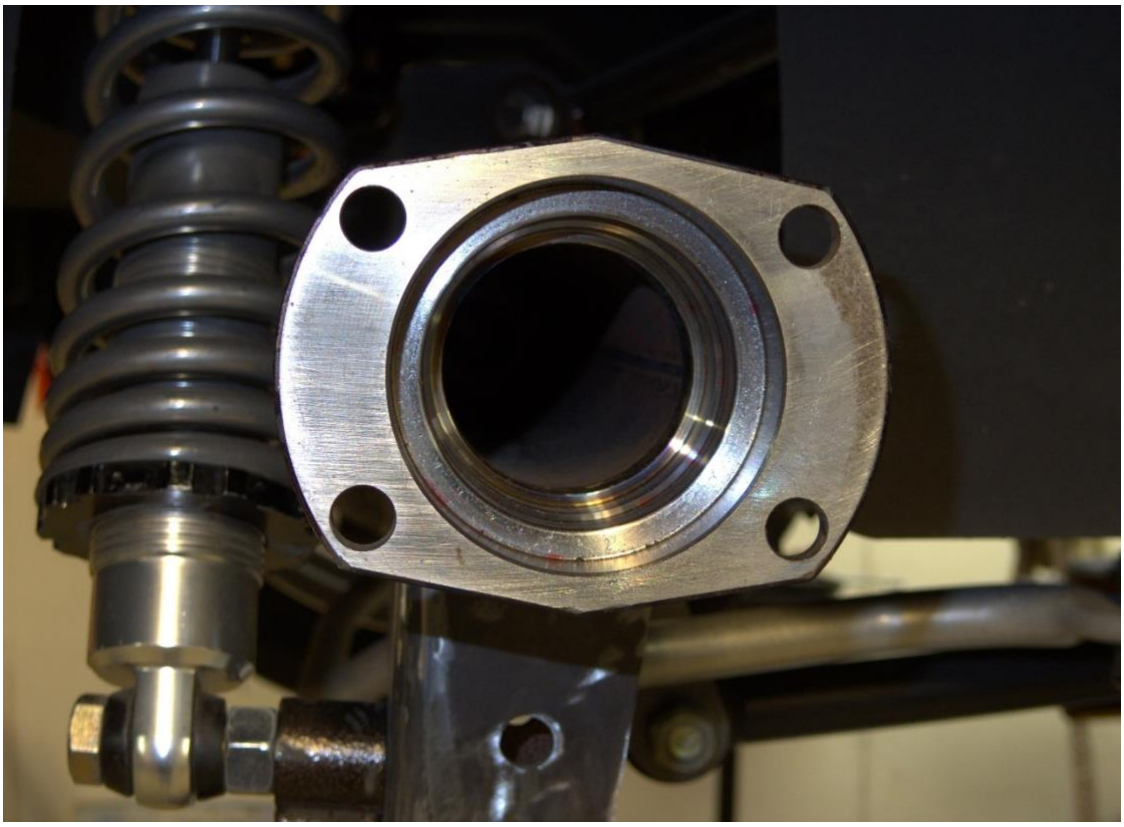


Photo 1

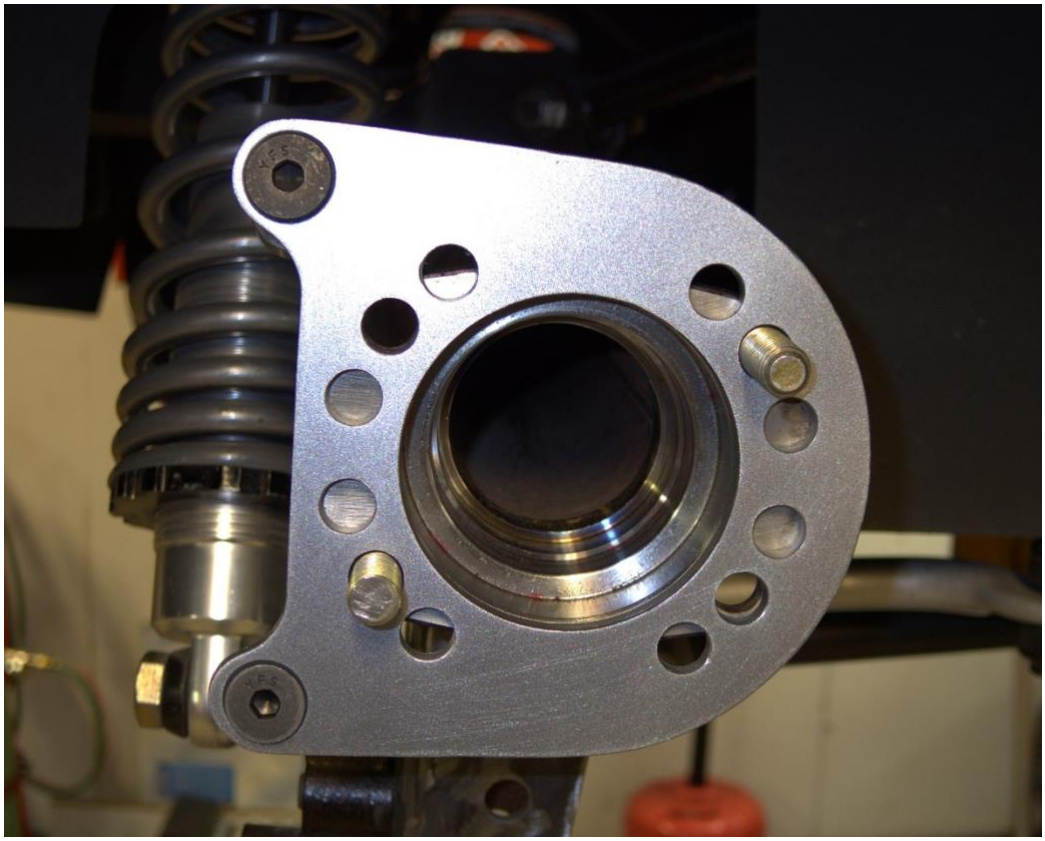
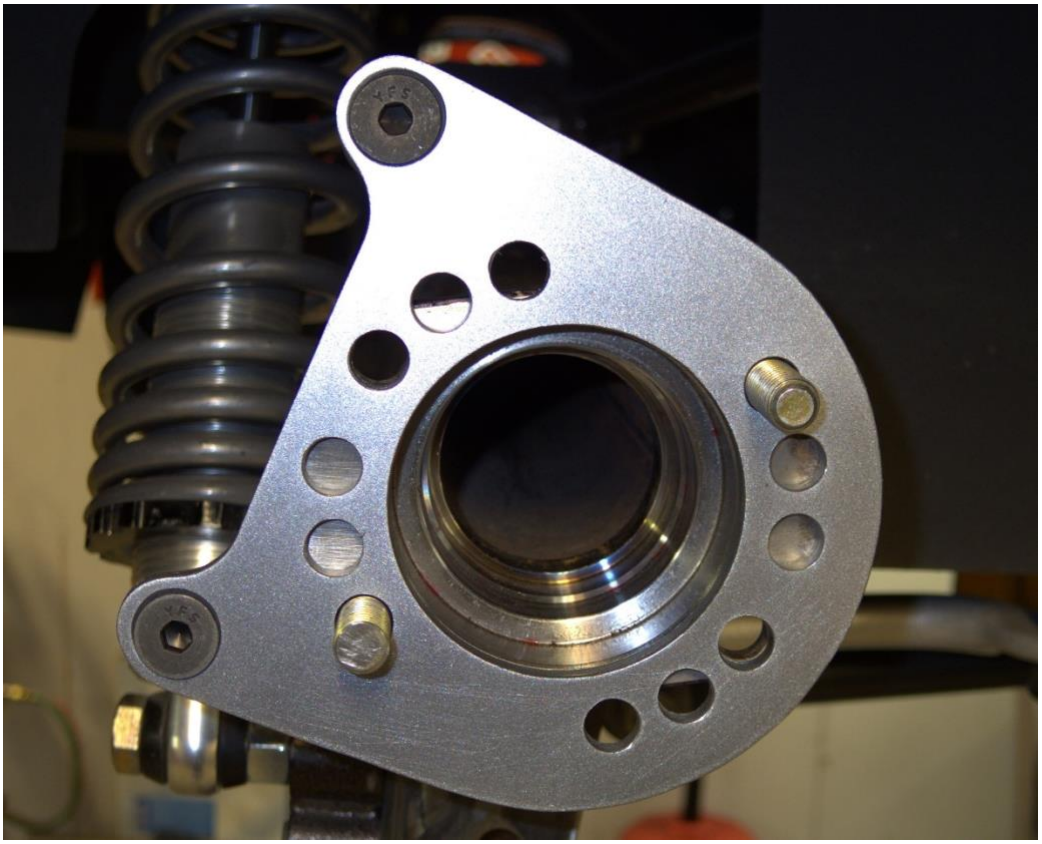


Photo 2



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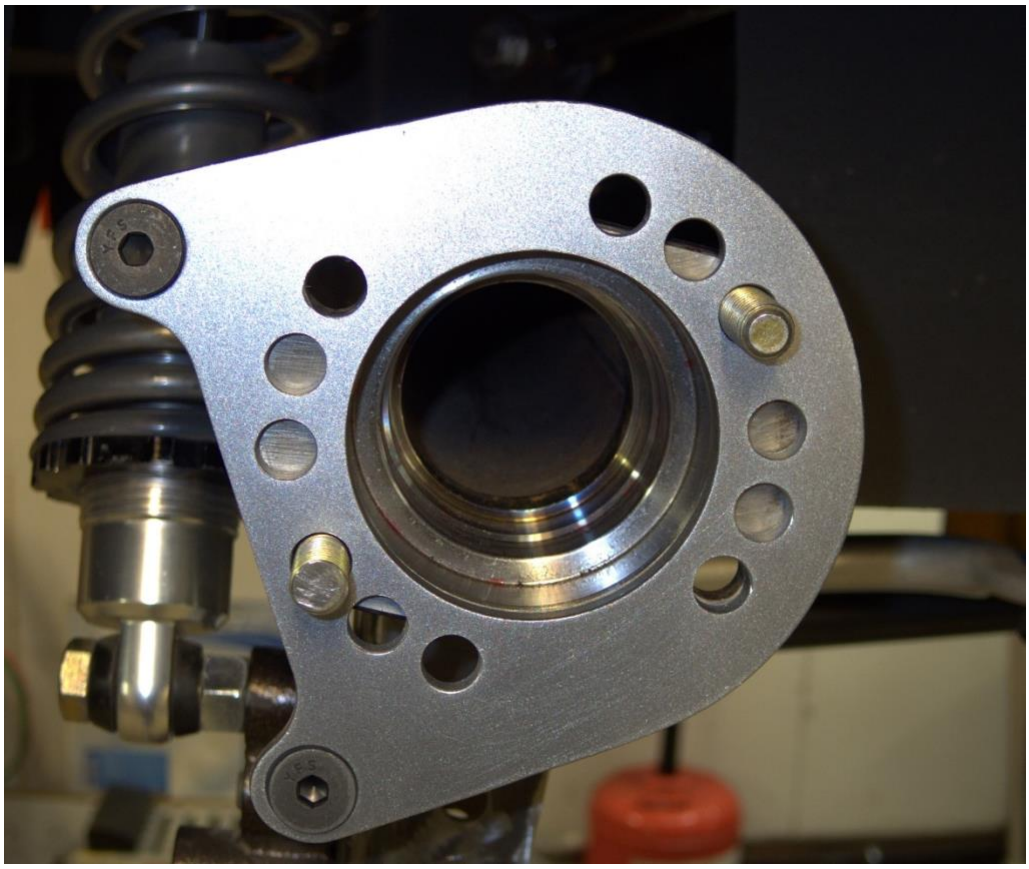

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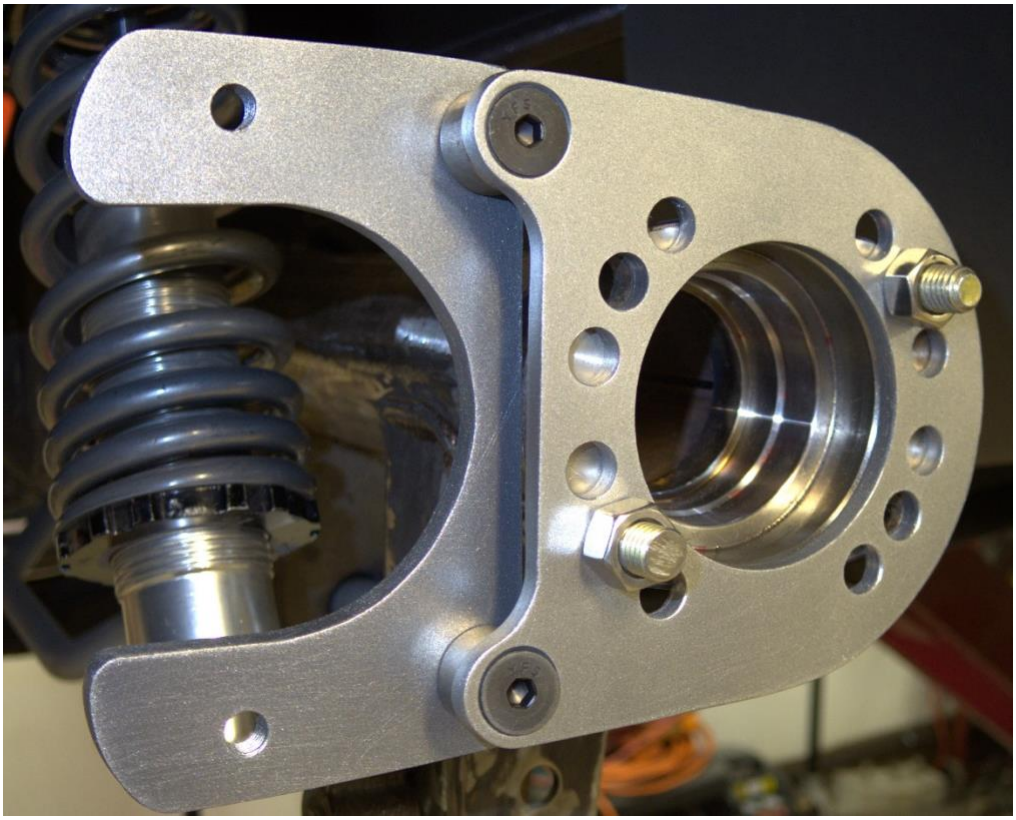

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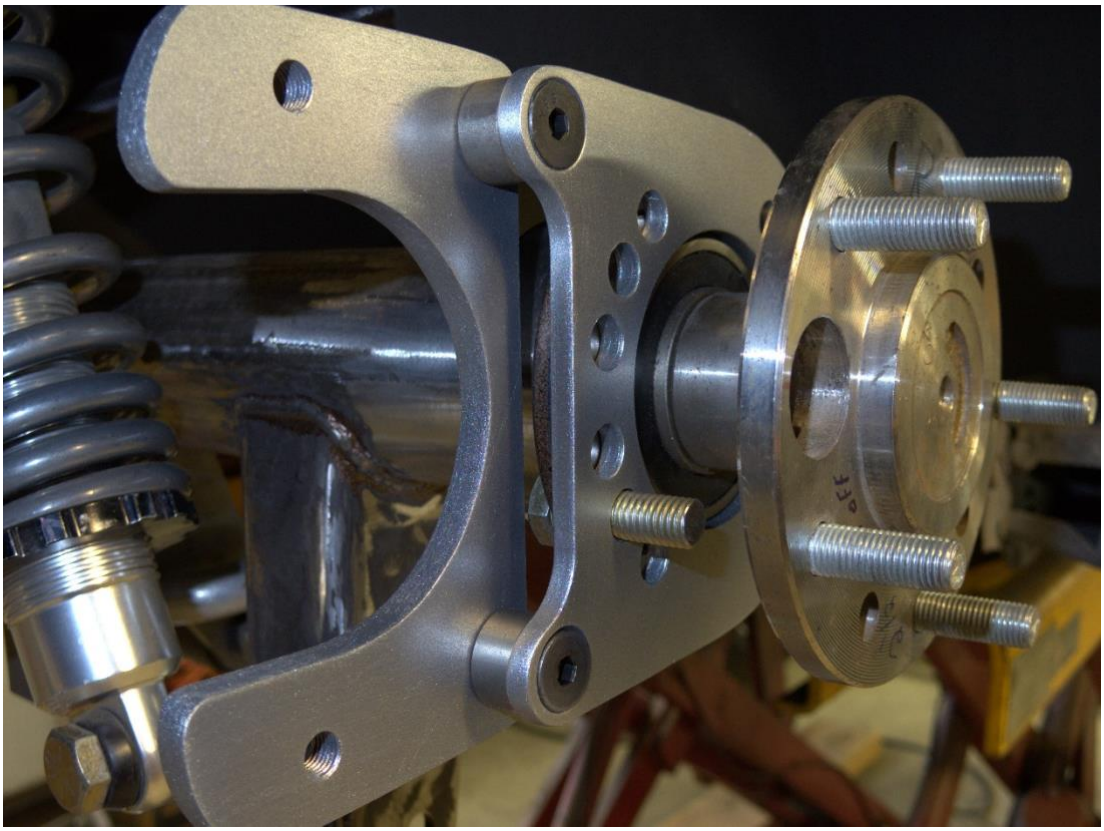

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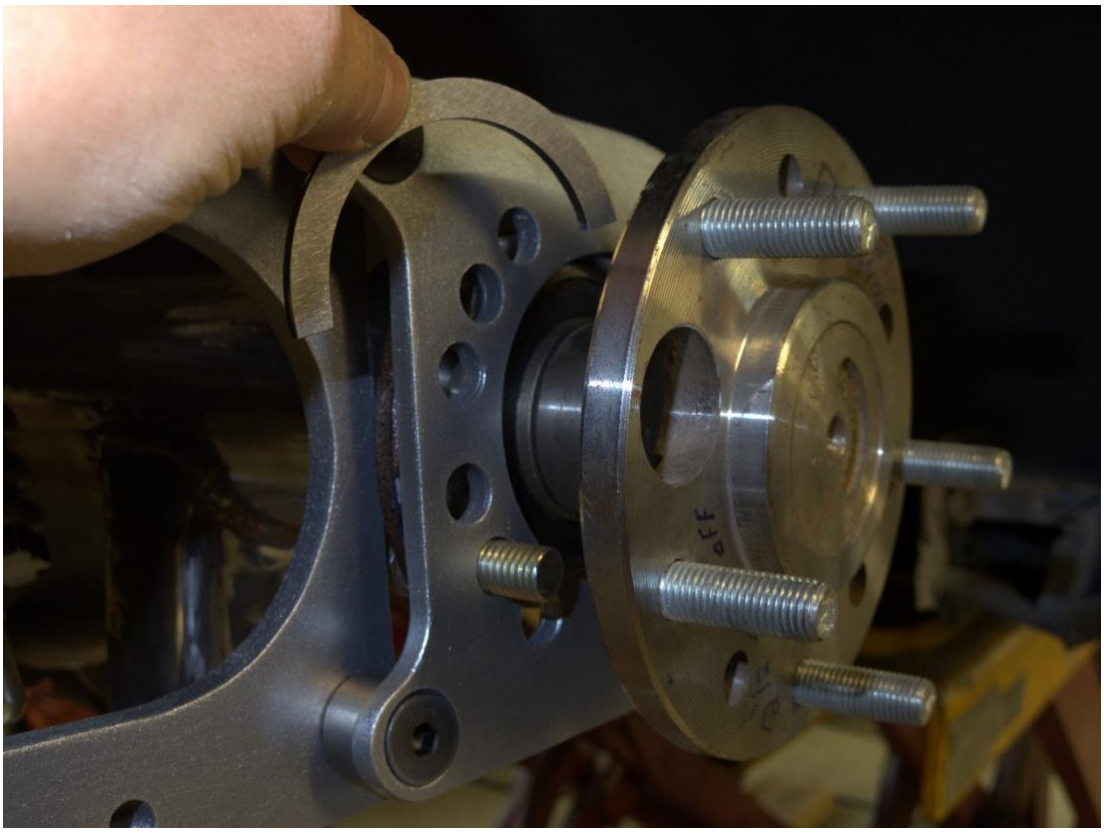

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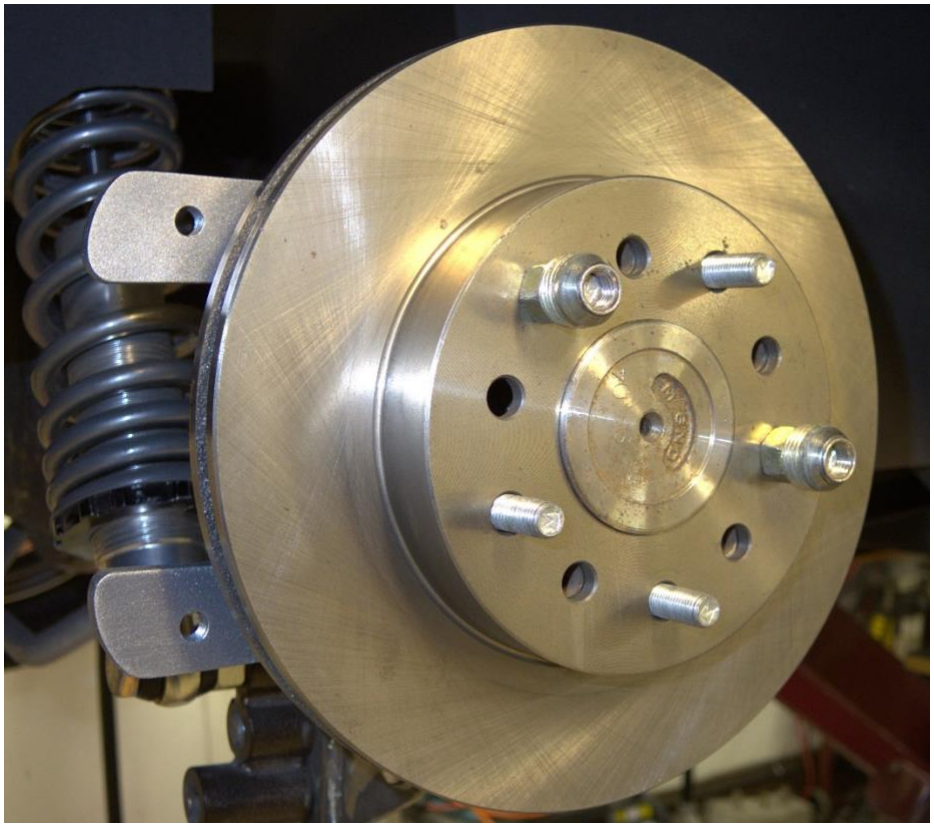

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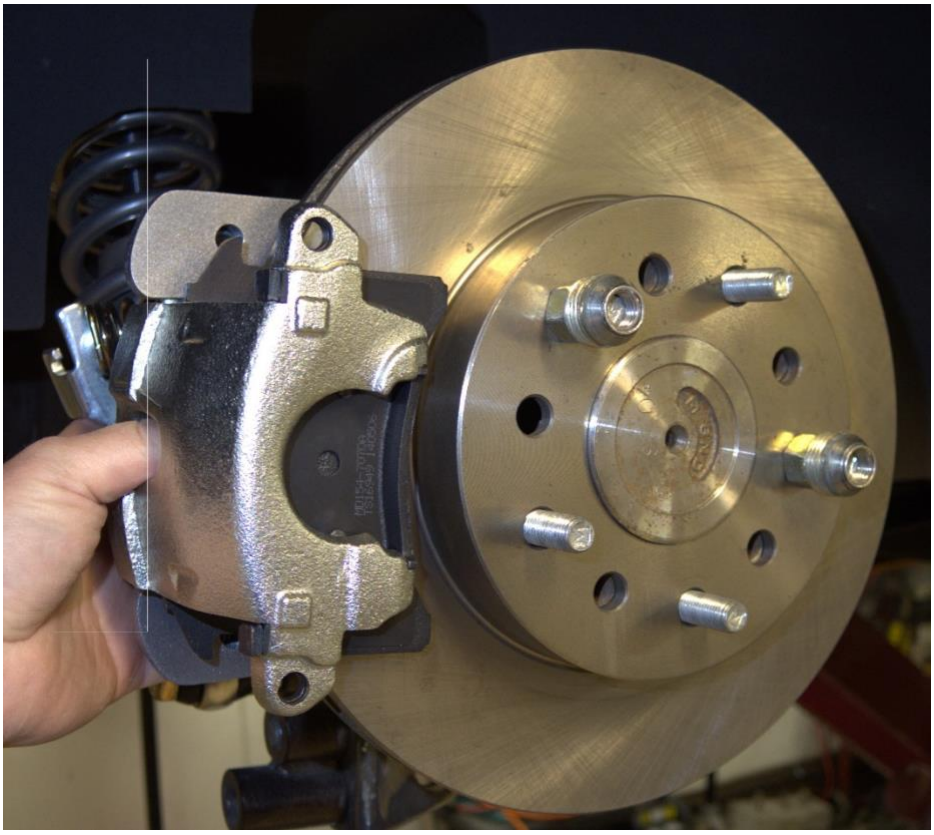

Photo 9

Photo 10