



Master Power Brakes
Disc Brake Conversion Kit
1965-1967 and 1968-1972 Ford F-100
P/N: DB2545B & DB2546B



Thanks for your purchase of our Rallye Series Disc Brake Conversion Kit for the 1965 to 1972 Ford F-100 applications. This system is a bolt-on application requiring basic hand tools to install. The system is designed to work with your existing drum brake spindle and therefore, won't require the removal of the spindle. It is strongly recommended that the kingpins be checked for wear at this time. If necessary, remove the spindle from the truck and replace the kingpins per the OE specifications.

Installation Notes:

- Please read all instructions before attempting the installation.
- Proper operation of your brakes is essential for your safety and the safety of others. Any brake service should be performed by a professional technician experienced in the installation of brake systems.
- Any installation requiring you to remove a wheel or gain access under the vehicle requires use of jack stands or a lift appropriate to the weight of the vehicle. In all cases, recommended ratings for jack stands should be at least 2-tons. If using a floor jack, be sure to use the appropriate wheel chocks.
- All installations require proper safety procedures and protective eyewear.
- A selection of hand tools sufficient to engage in the installation of these products is assumed and is the responsibility of the installer to have in his/her possession prior to beginning this installation. All installations, which require removal of hydraulic hoses and/or bleeding of the brakes, require appropriate fitting/line wrenches, as well as a safety catch can and protective eyewear. Other than these items, if unique or special tools are required they are listed in the section for that step.
- **ALWAYS CONFIRM WHEEL FITMENT PRIOR TO BEGINNING THE INSTALLATION OF ANY BRAKE SYSTEM!!** Returns will not be accepted for ANY installed part or assembly. Use great care to prevent cosmetic damage when performing wheel fit check!
- Before starting the installation, verify that all parts are included with the brake kit. If items are missing, notify Master Power Brakes immediately.
- Master Power Brakes recommends the use of a high quality DOT 3 or DOT 4 brake fluid. **ALL WARRANTY IS VOID IF DOT 5 FLUID IS USED**

Parts List	
Quantity	Description
2	Caliper Assembly (Includes brake pads)
1	Driver Side Brake Rotor (Assembled with hub)
1	Passenger Side Brake Rotor (Assembled with hub)
2	Primary Caliper Mounting Bracket (Labeled 6600593)
2	Intermediate Caliper Mounting Bracket (Labeled 6600591)
4	Spacer Bushings
2	A2 Outer Wheel Bearing (1965-1967 Applications)
2	A3 Outer Wheel Bearing (1968-1972 Applications)
2	A5 Inner Wheel Bearing
2	4148 Inner Grease Seal
2	Brake Hose Kit (Includes: stainless hoses, bolts, washers)
2	½"-20 x 2" Grade 8 Hex Head Bolt
4	½"-20 x 2 ¼" Grade 8 Hex Head Bolt
2	½"-20 x 2 ¾" Grade 8 Hex Head Bolt
2	½"-20 x 3" Grade 8 Hex Head Bolt
10	1/2"-20 Nyloc Nuts
20	1/2" Grade 8 SAE Flatwasher
4	M12 x 35mm Hex Head Bolt
4	M12 Flatwasher
1	Shim Kit
2	Spindle Nut
2	Spindle Washer
2	Rotor Grease Cap
2	Spindle Nut Retainer
2	Cotter Pin

Installation:

1. With the vehicle properly supported, remove the front wheels and tires.
2. Removing of the factory drum brake assembly is required next. Remove the drum and hub assembly along with the any hardware and backing plate along with the brake hoses. It is not necessary to remove the tie rod end from the steer arm. However, it is necessary to remove any hardware retaining the steer arm to the spindle.
3. Before installing the disc brake kit, inspect the spindles for any excessive war or damage. If any is present, replace the spindle(s) as necessary. If spindles are good, clean all attachment points along with the spindle pin to insure proper installation of the new components.
4. Install the Primary Caliper Mounting Bracket onto the spindle using the provided ½"-20 x 2" and a ½"-20 x 3" Grade 8 Hex Head Bolt. Each bolt will utilize two ½" SAE Flatwashers along with a ½"-20 Nyloc Nut as well. **NOTE:** Install the Caliper Mounting Bracket on the leading side of the spindle avoiding any possible interference with the steer arms. Once the bracket has been assembled onto the spindle, insert a ½"-20 x 2 ¾" Grade 8 Hex Head Bolt through the remaining hole in the spindle and the steer arm. This bolt will also utilize two ½" SAE Flatwashers and a ½"-20 Nyloc Nut as well. Once all bolts have been installed, they can be torqued to 100 lbs/ft. Figure 1 on the next page shows the Primary Caliper Mounting Bracket installation to the spindle.

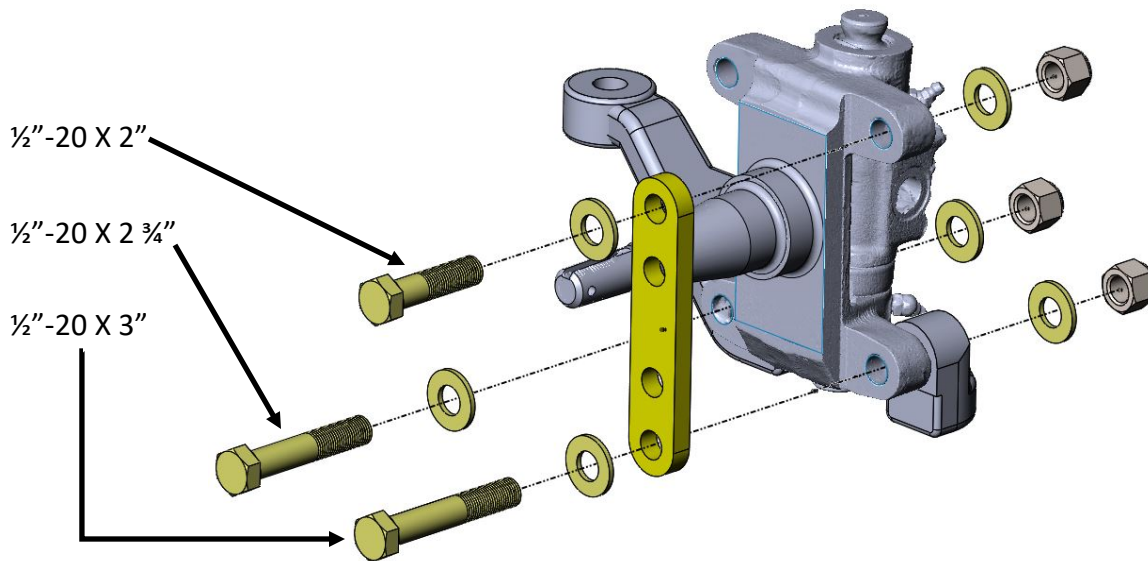


Figure 1 - Primary Caliper Mounting Bracket Installation (Passenger Side Shown)

- Next, install the Intermediate Caliper Mounting Bracket onto the Primary Caliper Mounting Bracket. The intermediate caliper bracket installs to the rear of the primary bracket with the provided bushing spacers installed between the primary and intermediate brackets. Use two $\frac{1}{2}$ "-20 x $2\frac{3}{4}$ " Grade 8 Hex Head Bolts along with flatwashers and nuts. **IMPORTANT:** The intermediate bracket has a top and a bottom. To assemble, install the bracket so the long side installs to the top. Refer to Figures 2 and 3 for additional information on how to install. Do not torque these bolts at this time as they will be removed later for shim installation.

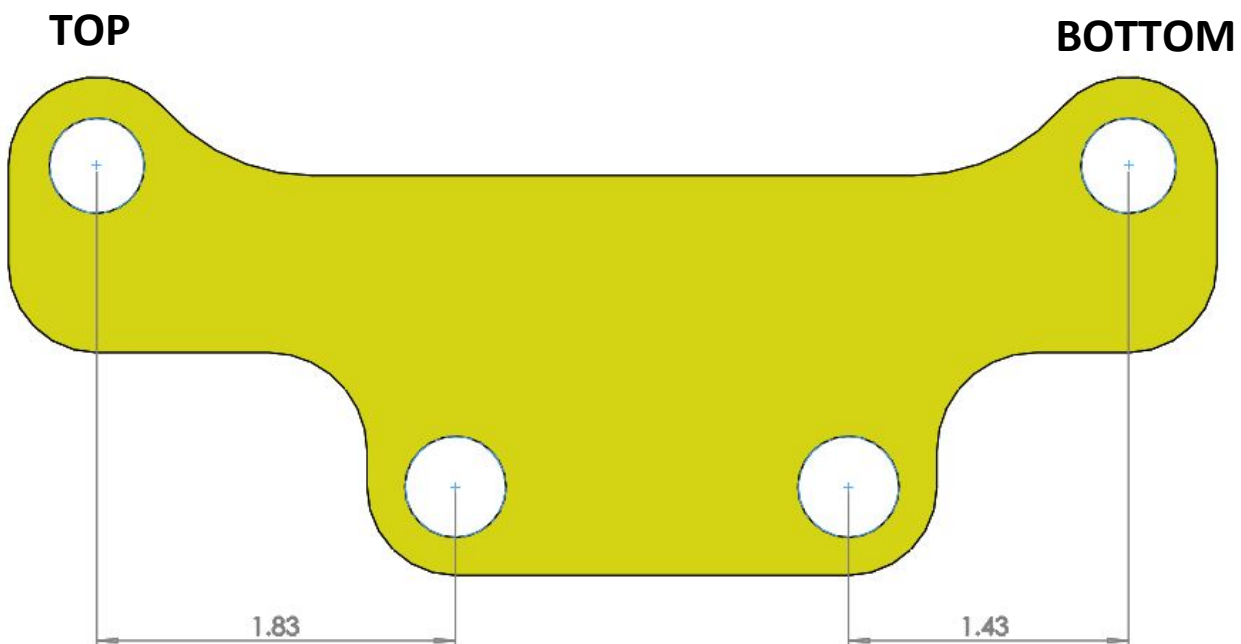


Figure 2 – Determining Top and Bottom for Intermediate Caliper Mounting Bracket

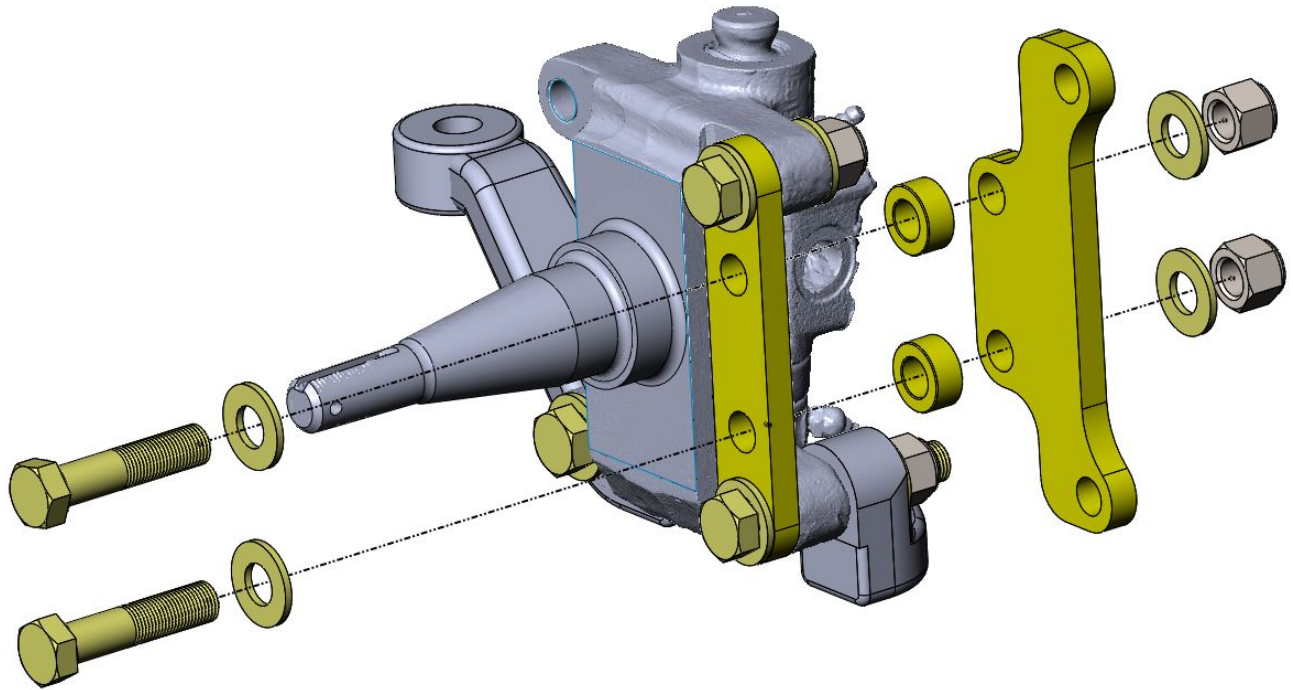


Figure 3 - Intermediate Caliper Mounting Bracket Installation (Passenger Side Shown)

6. With the brackets assembled on the spindle, slide the rotor onto the spindle. The new rotors come with the Timken bearings pre-installed and packed with Red Line Synthetic wheel bearing grease. **NOTE:** It is not necessary to add more grease. Apply a small amount of grease to the hub sealing surface and install the rotor assembly. Using the new castle nut along with the nut retainer, tighten the nut to 5-10 ft/lbs. Loosen the nut and tighten the nut again using the same 5-10 ft/lbs. Do this a couple of times spinning the rotor to fully seat the wheel bearings onto the spindle. Loosen the nut a final time and re-tighten to remove all play. Tighten approximately an additional 1/16th of a turn to give the appropriate pre-load and line up the cotter pin hole. Install the cotter pin and dust cap. See Figure 4 below for correct placement of left and right rotors and Figure 5 on the next page for additional information on the rotor installation.

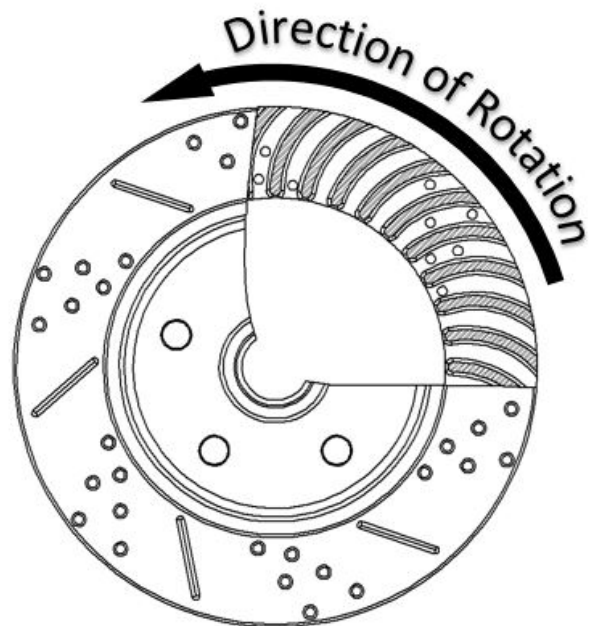


Figure 4 – Direction of Rotor Rotation

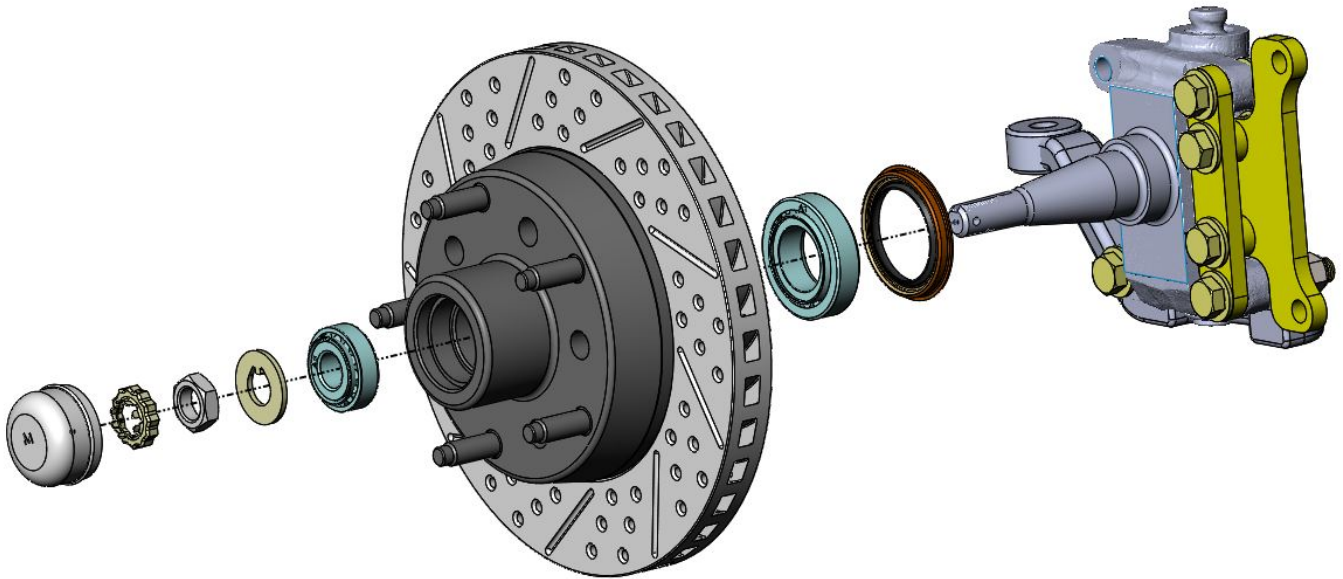


Figure 5 – Rotor Installation (Passenger Side Shown)

7. With the pads removed from the caliper, position the caliper over the brake rotor and secure using the supplied M12 x 35mm Hex Head Bolts. Snug the bolts only at this time as they may need to be removed at a later step. Refer to Figure 6 below for reference.

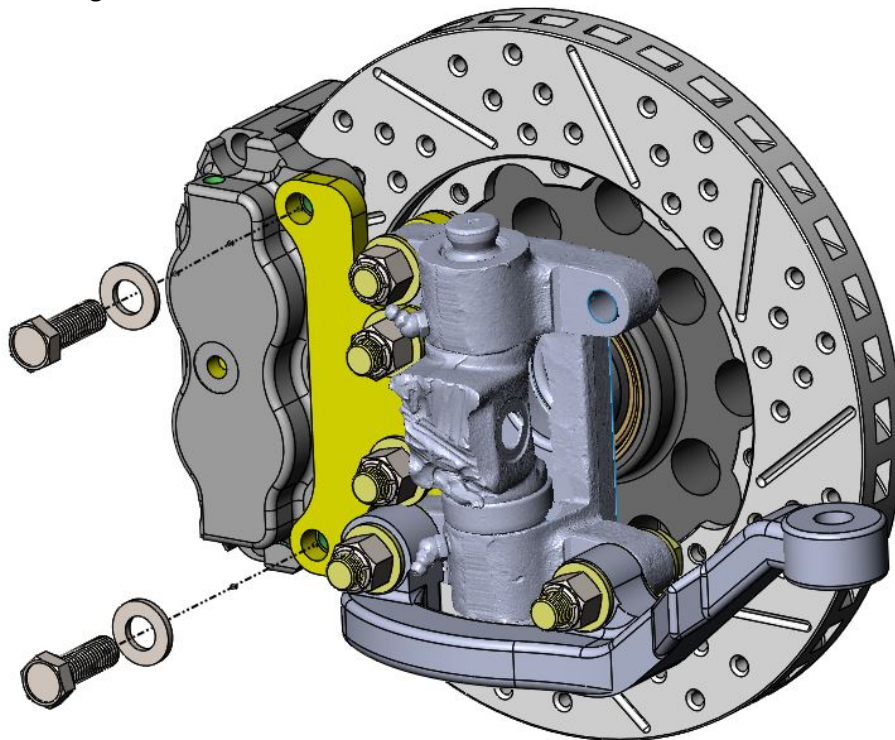


Figure 6 – Caliper Bolt Installation (Passenger Side Shown)

8. After installing the caliper, it is necessary to center the caliper over the rotor. A shim kit is supplied with the disc brake kit to accomplish this. Measure the gap from the rotor to caliper body at 4 points (top inside and outside and the bottom inside and outside). With all measurements taken, subtract the top inside measurement from the top outside measurement. Take that difference and divide by two to determine the shim required. For example, the inside measurement is .865" and the outside measurement is .905" leaving a difference of .040". Divide the difference by two leaving the necessary shim at .020". Do this procedure at both

the top and bottom to determine appropriate shimming. It is possible for the top and bottom to require different thickness shims. Set the gaps to within .005" of each other. This will keep the possibility of noise to a minimum. Follow the steps below for proper shimming of the calipers once the measurements have been taken:

- a. Select the required shims from the shim kit provided.
- b. Remove the caliper.
- c. Loosen the bolts from between the primary and intermediate brackets.
- d. Install the appropriate shims removing one bolt at a time. Snug bolts at this time.
- e. Reinstall the caliper and recheck the gap as described above. If necessary, add or remove shims.
- f. Once proper caliper location has been achieved through shimming, torque the bolts to 80 ft/lbs. Reinstall the caliper and torque the caliper mounting bolts to 80 ft/lbs.

NOTE: Shimming of the caliper is required due to variations in spindle manufacturing and wear at the bearing seat area of the inner bearing. Refer to Figure 7a for measuring reference and Figure 7b on the location of the shims.

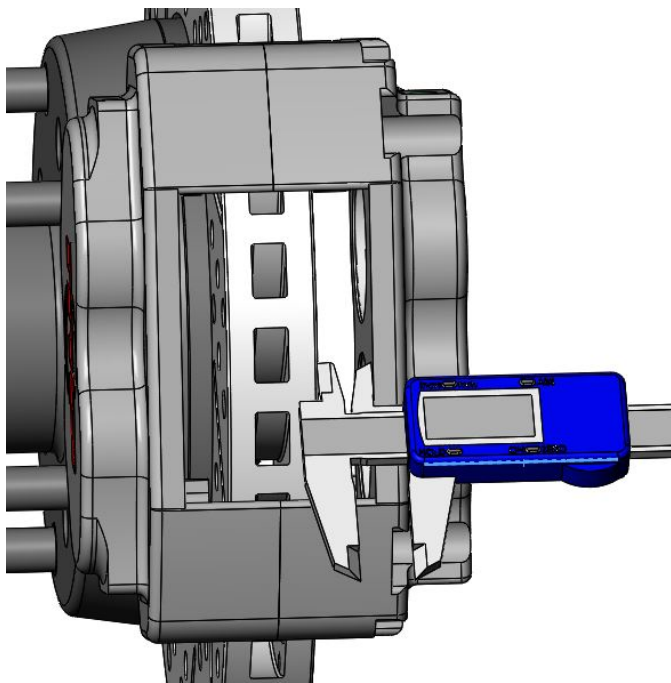


Figure 7a – Measuring the Pad to Rotor Clearance

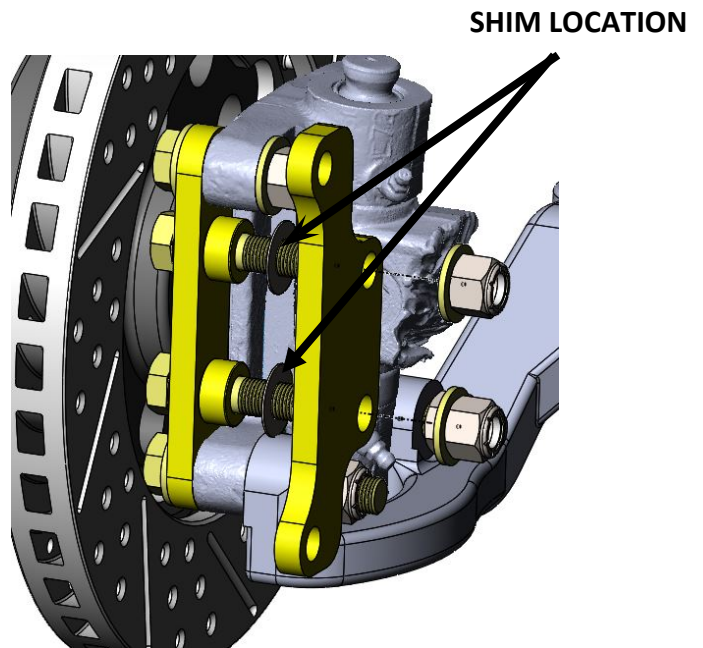


Figure 7b - Shim Location

9. Install the brake hose to the caliper and attach to the original plumbing on the vehicle. **NOTE:** Be sure the copper crush washer has been installed on the brake hose (one on both sides of the banjo) to prevent leaks before installing.
10. Once the master cylinder has been properly bench bled and then installed on the vehicle, the remaining brake system can be bled to remove all of the air from the system. **REMEMBER:** Master Power Brakes requires the use of either DOT 3 or DOT 4 brake fluid and recommends the use of Pentosin Super Dot 4 fluid as seen on next page in Figure 8. Any warranty is void if DOT 5 fluid is used.



Figure 8 – Pentosin Super DOT 4

11. The installation is complete.