

- Magnum Force/Wilwood Front Disc Brakes For 1957-1964 “C” Body &
 - Wilwood Rear Disc Brake Installations for up to 1964 8 ¾ Mopar axles
- Note 1965 and later 8 ¾ axles can use the Wilwood rear brake kits as is
<http://www.magnumforce.com/magnumstore/shop/item.aspx?itemid=166>

Ask for drilled front rotors and cheaper black calipers unless you like Red.

-R is red caliper; -D is drilled rotor; -DR is drilled rotor with red calipers

Need Front Wilwood brake lines with banjo connectors.

Rear kit is also available through Magnum Force- They are a full Wilwood Dealer

Total cost for front and back was \$1861.00 shipped from CA to PA

Brake System Changes:

Installation of dual bowl master cylinder #M1323 with proportioning valve to balance front/rear brakes. Also see AAJ Brakes alternative.



AAJ Modified Master Cylinder



1968 Dart Master Cylinder #M1323 or 10-1323

Be sure to remove the residual valve from the drum/drum Master Cylinder if present

Remove residual valve from these dual bowl master cylinders originally intended for drum brakes.

Also see Dan Reitz's article on installing dual bowl master cylinder:

<http://www.chrysler300club.com/jhstuff/mod/mod.htm>

Convert brake light switch to a mechanical switch at brake pedal.

<http://www.chrysler300club.com/tech/fdiscaaj/fbc.html>



“The brake switch had to be re located to the inside of the car and attached so it could be activated by the brake pedal.

I attached mine to the steering column sleeve using short blunt head screws.”

Paul Martin

Or use the Stainless Steel Brakes' Proportioning Valve with Stop Light Switch:

<http://ssbrakes.com/search.html?q=proportioning%20valve>

DISTRIBUTION BLOCK - ALL IN ONE PROP BLOCK - POLISHED - A0730P - Available in Black A0730



Accepts 3/16 in. brake line.

Adjustable proportioning valve regulates rear brake pressure, helping to maintain correct brake bias between front and rear brakes. Easy to turn handle with directional arrows makes it simple to either increase or decrease rear brake pressure.

Designed for dual bowl master cylinders.

Distribution block connects to the master cylinder and distributes brake fluid to all four wheels.

Includes 2 inlets from master cylinder, 2 outlets to front brakes and 1 outlet to rear brakes.

Includes 5 stainless steel 3/16 in. fittings.

Includes wiring pigtail for rear brake light switch.

Mount to any convenient location.

*NOTE: This is not a direct factory replacement for original blocks and some line modifications may be necessary.

Simplify your brake plumbing with SSBC Performance Brake Systems. The adjustable, anodized proportioning valve regulates rear brake pressure, helping to maintain correct brake bias between front and rear brakes. The easy to turn handle with directional handles makes it simple to either increase or decrease rear brake pressure. The valve can be mounted to any convenient location and accepts a 3/16 brake line. Our Prop block (p/n A0730) offers you the same function but gives you a total of 5 ports for integration of your front and rear system plus a brake light switch! SSBC boasts over 34 years of manufacturing and engineering the finest disc brake products. Our highly trained technical staff set the highest quality control standards and possess up to the minute design, engineering and testing capabilities. Our commitment to our customers doesn't stop there. The SSBC staff works diligently each year, developing and perfecting new products to meet your braking needs.

**Magnum Force Instructional video for Magnum Force/Wilwood Front
Disc Installation For "C" Body Mopars
Pre-1965 Full Size Dodge, Plymouth, Chrysler & Imperials C-body front
disc brake kit for stock Drum Spindle 57-64.**

<https://youtu.be/g8tO-6BWEFg>

**Instructional video for Wilwood Front & Rear Disc Brake installation on
an Impala.**

This video shows an installation of a front adaptor bracket for Impala. With the exception of the vehicle specific adaptor bracket and bolt pattern, the front installation is the same. The rear installation is similar. Pre-1963 8 3/4" Mopar rears require the drilling of 2 new holes in the flanges of the rear axle. Pre 1965 Mopar 8 3/4" rears require the fabrication of a custom bearing retainer. Video features Emily Williams.

<https://youtu.be/WEoTKNNvkYI>

Please note that Emily does not wire the lugs together on the rotor assembly. It is highly recommended for this to be done. Please refer to John Hertog's early tech article when he was working on early Magnum Force prototypes for Wilwood brake installation. Magnum Force has since developed an installation bracket that does not require modifications to the original suspension and steering components.

See John Hertog's article that describes safety wire thru bolt heads:

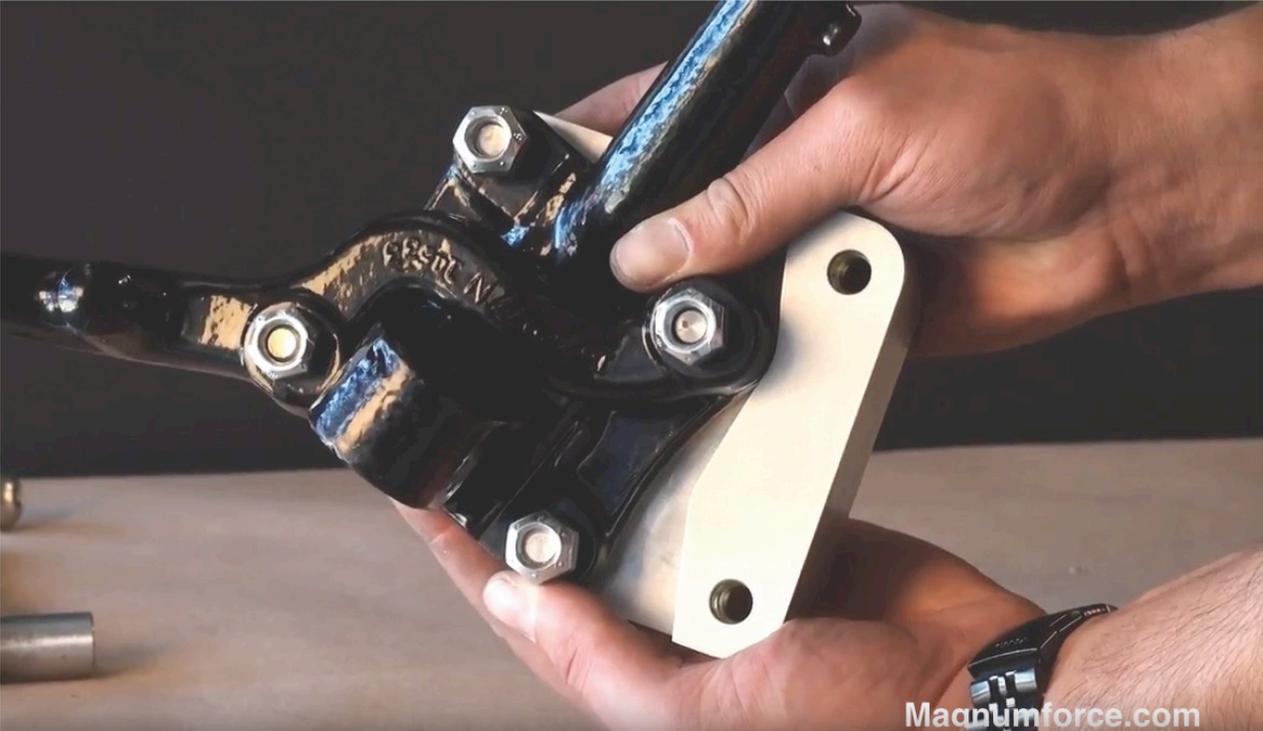
<http://www.chrysler300club.com/jhstuff/62disc/62.html>



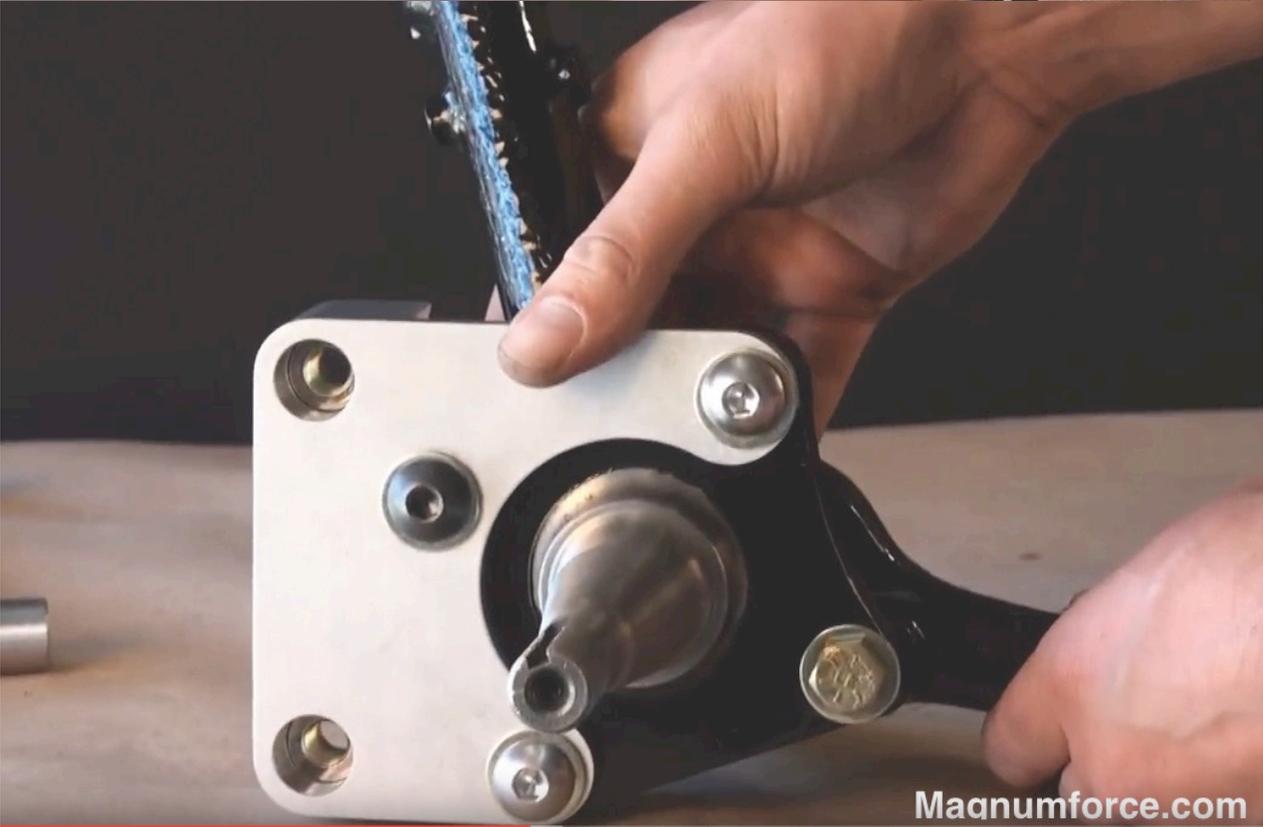
**“Safety wire gets threaded through all the bolt heads, as shown.
Don't want any of this stuff to come apart!
I used 18 Ga. steel wire 'cause it was there,
but you might want to go to lighter gauge stuff.”**

John Hertog

These photos show the Magnum Force "C" Body Front Disc Brake "Adaptor" For Wilwood Brakes:



Magnumforce.com

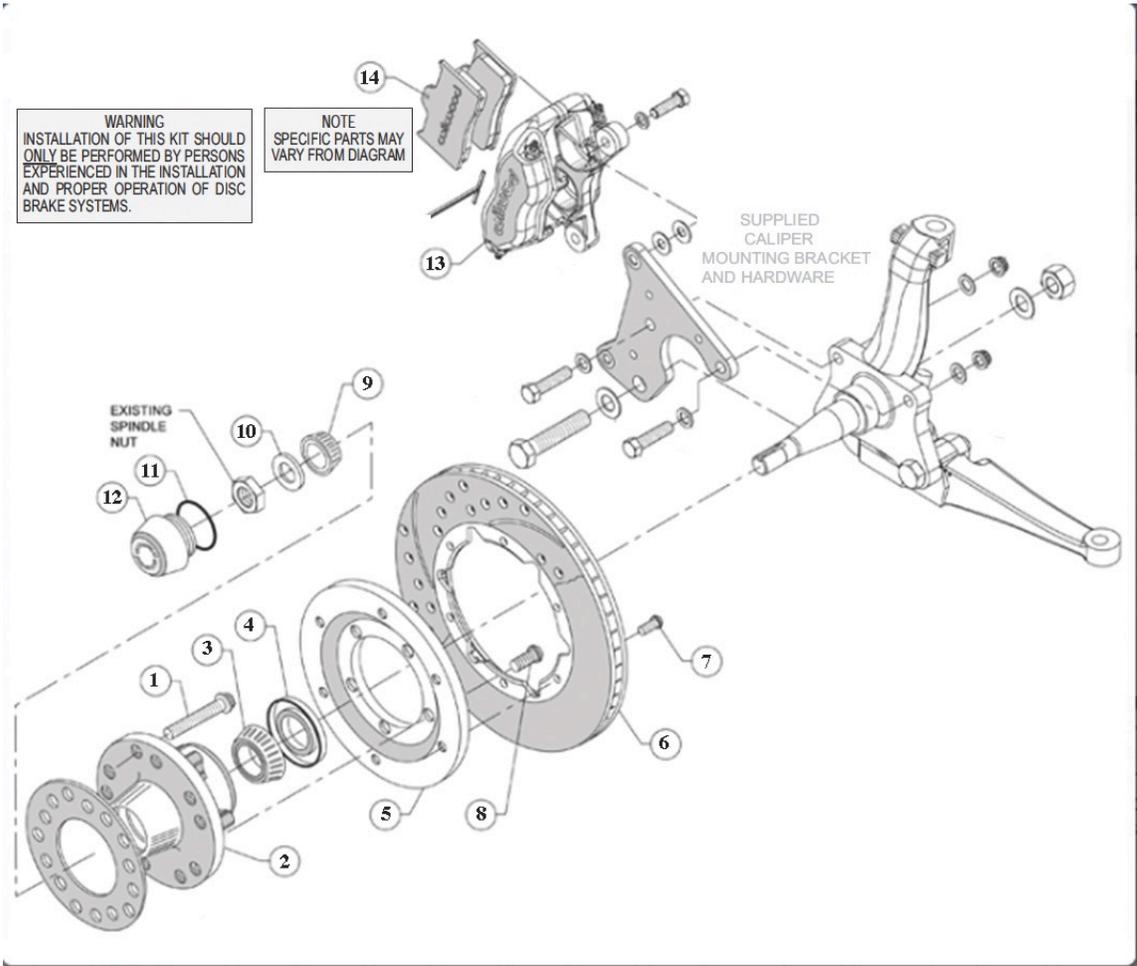


Magnumforce.com

Magnum Force/Wilwood Front End Kit Components and Installation For 14" or 15" Wheels • Magnum Force #MFR161100 (Wilwood #Z140-14227)



Shown Without Drilled Rotors

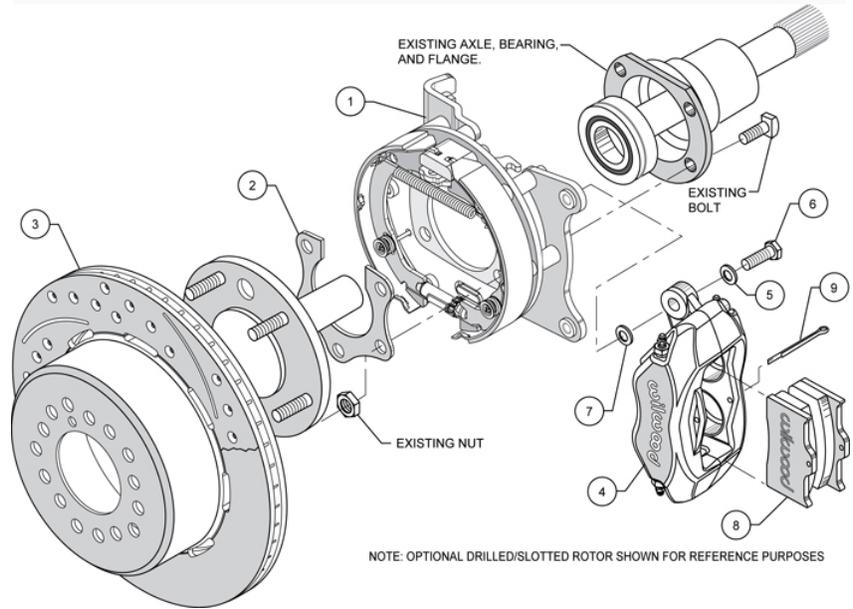


Link To Installation Manual:
<http://www.chrysler300club.com/tech/discb/140-14227.pdf>

Magnum Force/Wilwood Rear End Kit Components and Installation
Wilwood 15" Wheel Kit #140-10767-D (Use #140-11386-D For 14" Wheels) Red Calipers Optional. Note illustration shows instructions for a 1965 or later one piece axle. The provided horseshoe bearing retainers cannot be used. Custom bearing retainer must be fabricated for pre-1965.



140-10767-DR



Link To Installation Manual (15" Wheels 14010767.pdf):

<http://www.chrysler300club.com/tech/discb/140-10767.pdf>

Link To Installation Manual (14" Wheels 140-11386.pdf):

<http://www.chrysler300club.com/tech/discb/140-11386.pdf>

WILWOOD INSTRUCTIONS SAY TO INSTALL GREEN NON-ADJUSTABLE BEARINGS W/SNAP RINGS ON THE AXLES. THIS IS IMPOSSIBLE WITH PRE-1965 2 PIECE AXLES. USE THE EXISTING TAPERED BEARINGS OR REPLACE THEM WHILE YOU ARE DOING THE JOB. BE SURE TO PACK THEM WITH GREASE. On 1965 or later 8 ¾ rears, you can convert to Gen 2 green bearings with snap rings. DO NOT USE early Mopar Performance green bearings. Note “Green” refers to the original company that made them.

NOTE: I HAVE ASKED MAGNUM FORCE TO MANUFACTURE THE CUSTOM BEARING RETAINER FOR WILWOOD REAR DISC BRAKE CONVERSION KITS SO THEY CAN BE USED FOR “C BODY” CARS WITH PRE 1965 8 ¾” MOPAR REAR ENDS

1957-62 8 ¾” Rear End Flanges are completely round and require drilling 2 new holes in each rear axle flange. The bottom 3 holes are the same and match.

The backing plate has emergency brakes in them. If you still use the e-brake on the rear of the automatic transmission, you do not have to use the rear e-brakes. If you do use the new e-brakes, then you need the Wilwood e-brake rear cable kit and Lokar universal front cable kit with custom longer length cable. See cable attachment photo. The clevis connector is actually for a Ford Bronco and available from Loker if you have existing rear e-brake cables. For retrofit, you can cut a slot, wedge it open, put cable thru and wedge it together or weld it closed.

Cable Attachment Photo:



This page contains links to a series of videos done on an early Imperial. They demonstrate everything from removing original rear brake drums to replacing axle bearings and oil seals.

Polejcky

1960 Chrysler Imperial/Le Baron #1 pulling the rear drum

<https://youtu.be/wlALkSsLXGM>

1960 Chrysler Imperial/Le Baron #2 pulling the rear axle

<https://youtu.be/3481eyGY134>

1960 Chrysler Imperial/Le Baron #3 Rear Axle bearings

<https://youtu.be/OHf6uQ4JpOc>

1960 Chrysler Imperial/Le Baron #4 Rear Bearing

<https://youtu.be/Y4Y6hbCCbSs>

1960 Chrysler Imperial/Le Baron #5 Rear Axle bearings Installation

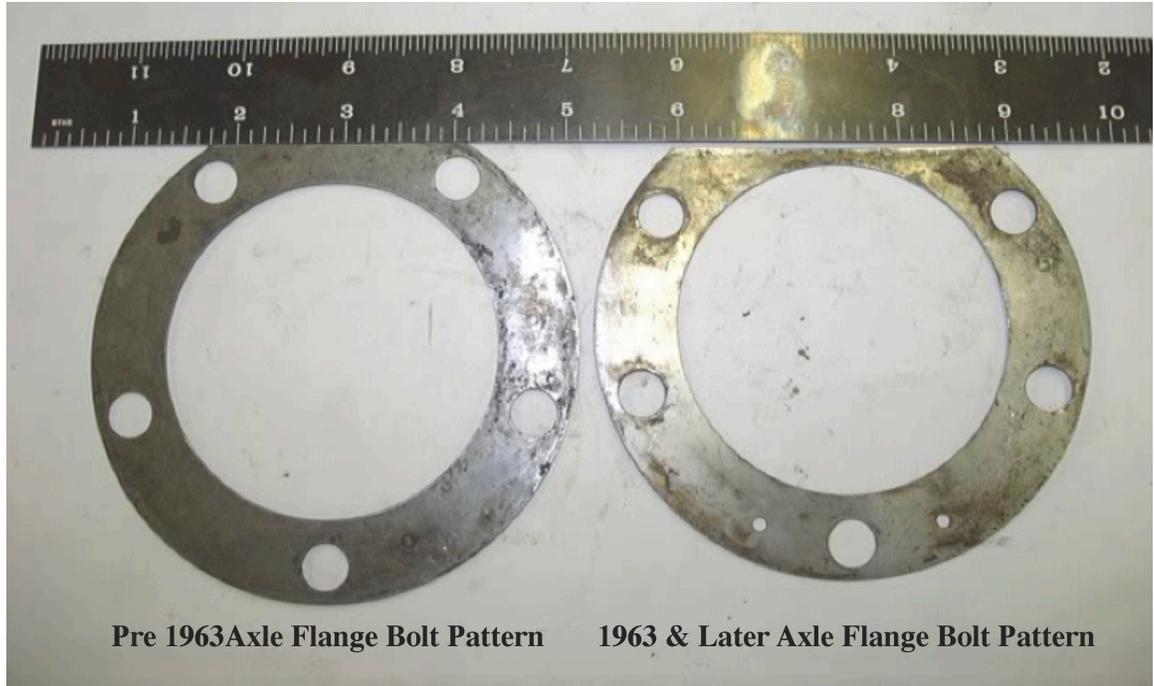
<https://youtu.be/M4-4XDvdRVs>

1960 Chrysler Imperial/Le Baron #6 Rear Axle oil seal and axle Installation

<https://youtu.be/xISPx1IoCVc>

Tapered Bearing photo from Polejcky

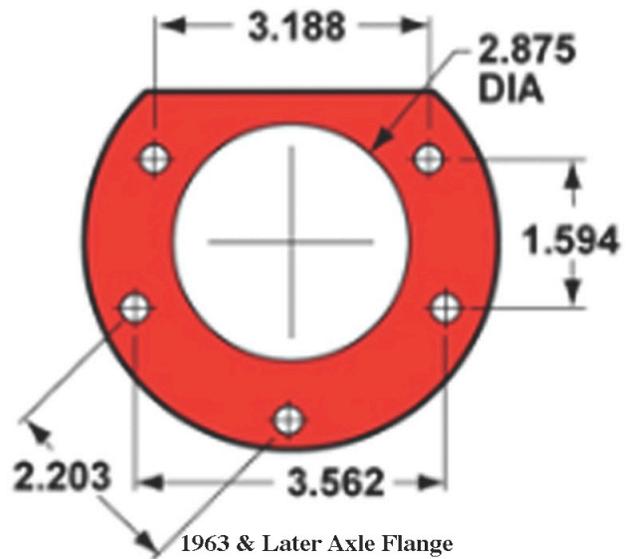




There are five studs on the end of the axle tube flange. Early flanges are round and later flanges have a flat on top to accommodate the larger single Bendix brakes' wheel cylinder. The Wilwood Brake backing plate is designed for the later bolt pattern. If your vehicle has the earlier round flange, the top 2 studs must be driven out, new holes drilled into the flange and new studs installed to match the 1963 and later bolt pattern.

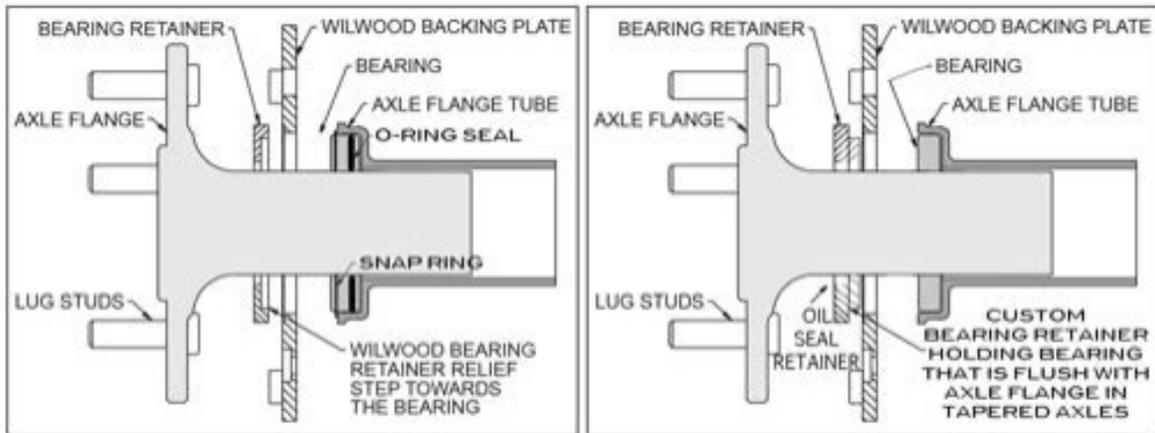


Pre 1963 Axle Flange



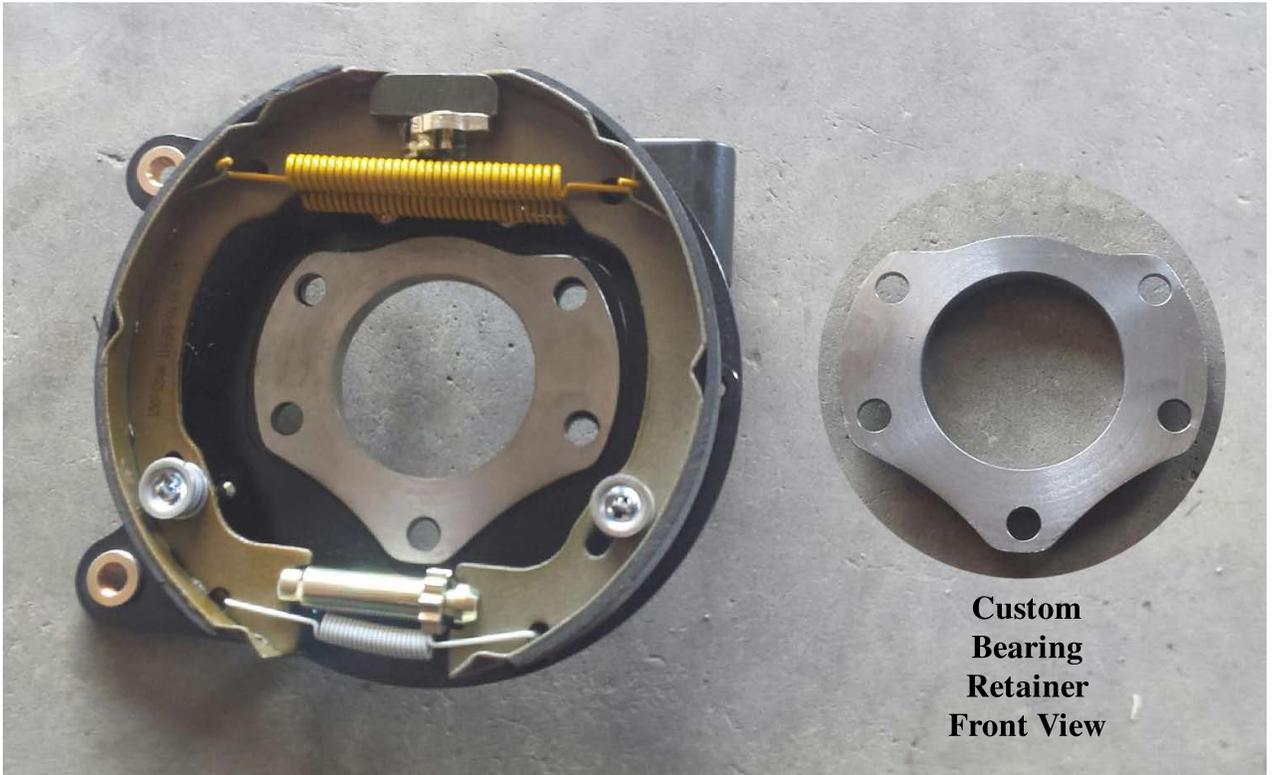


Two new holes drilled into axle flange to allow Wilwood rear kits to work on pre-1963 8 3/4" rears. The holes in the flanges of 1963 and 1964 2 piece axles match the Wilwood conversion pattern but you still need to have a custom bearing retainer made to adapt to tapered axle bearings that finish even with outside surface the axle flange.



GREEN BEARING GEN 2 USED IN 1965 AND LATER
 RUBBER SEAL IN AND SNAP RING OUT
 BEARING EXTENDS OUT OF AXLE FLANGE

PRE 1965 TAPERED 2 PIECE AXLES
 BEARING FINISHES EVEN WITH END OF
 AXLE FLANGE



**Custom
Bearing
Retainer
Front View**



**Custom
Bearing
Retainer
Rear View**

Removing the drum/hub assembly & separating the hub from the original brake drum (Information Derived From Hotrods and hemis.com website referencing a Dodge Polara)

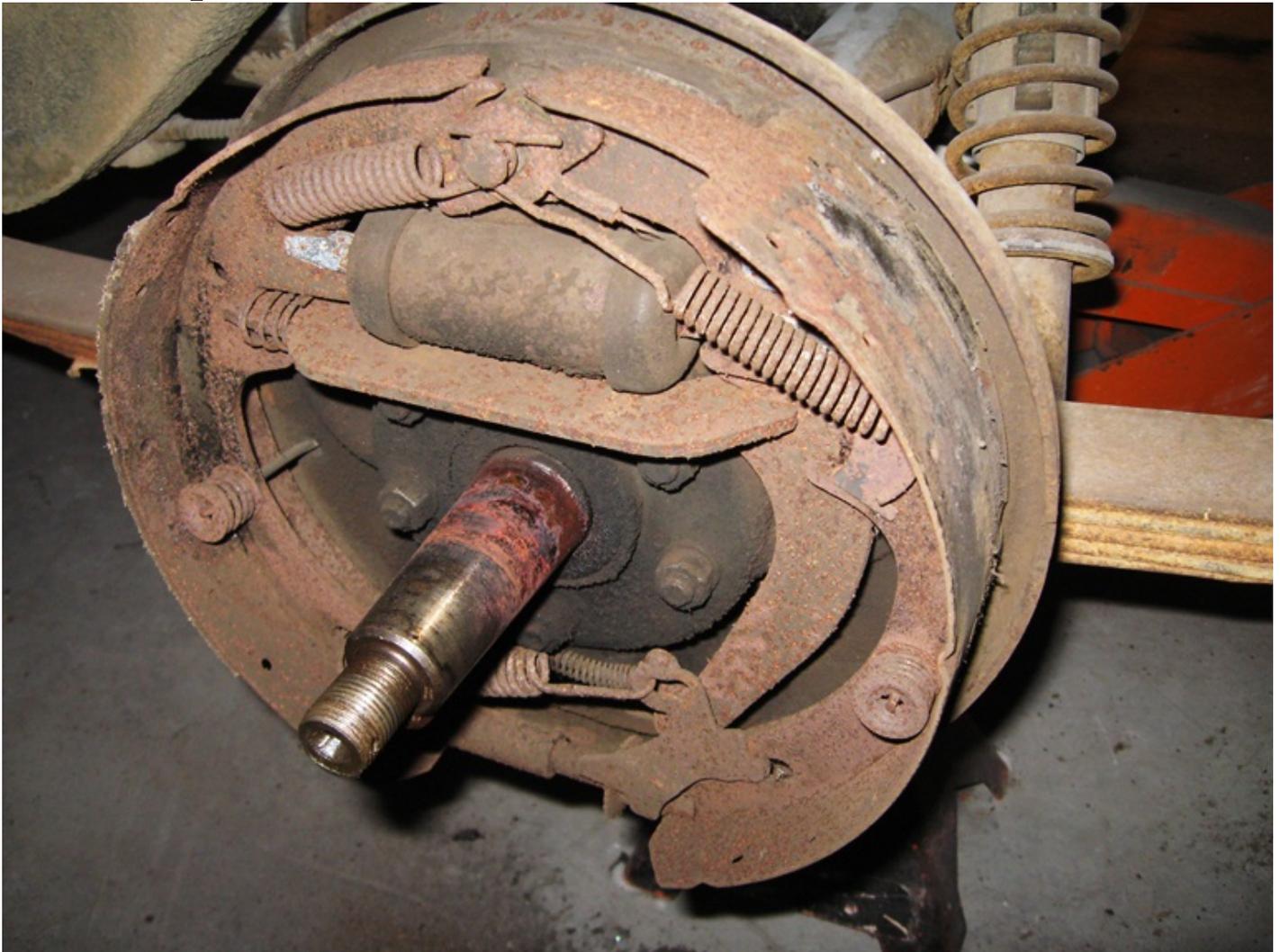
<http://hotrodsandhemis.com/TaperedAxleBrakes.html>

So the first question is, "How do I get the drum off this thing?" This is where that "tool" comes in. Below is a picture of the special puller required to remove the drum/hub assembly from the axle. These pullers are still available through Miller Special Tools (Universal Wheel Puller # C-844), but many times they can be found on eBay as well.

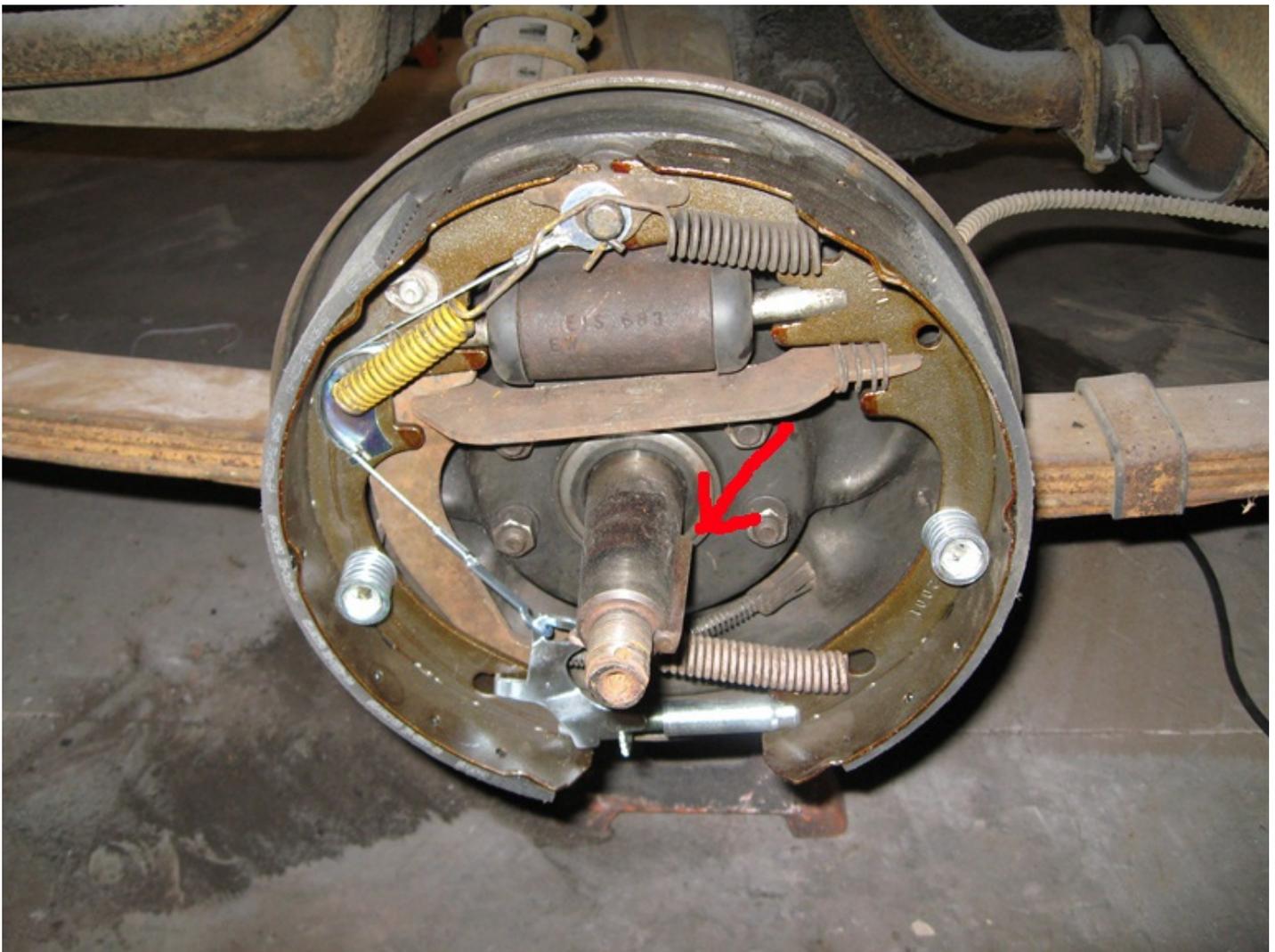


Also View Video: <https://youtu.be/RLRD0xv9Nu0>

You'll need a good sized sledge hammer as well (the first time you remove them anyway). When the hub is reinstalled, a little anti-seize will make this process much easier if it ever has to be repeated. Sometimes it takes patience, fortitude, a big hammer, some penetrating oil and a little heat to get one of these things off, especially if it hasn't been removed in 20 or 30 years. However, if you keep at it, you will eventually be successful. The trick sometimes is not only to smack the wings of the tool with the hammer (which tightens the puller) but also to smack the end of the puller to "jolt" the hub loose. One side may come off quicker than the other.



As you can see above there is literally no brake material left on these shoes. The difficulty of removing these units is why people tended NOT to service them as often as they should... and never in some cases. As you can see in the picture below, the hub is "keyed" in position on the axle. Although this is kind of an "old" way of doing things it still works very well. Don't lose this key...they are very hard to replace. The brakes are pretty much typical for any Mopar 8.75" rear end so there will be no surprises there.



The Hubs

On to the hubs. When the hub/drum unit is removed it will look like the photo below. This unit is all one piece because the lug bolts are swedged onto the brake drum. This is a procedure where the hub and drum are assembled, then the lug bolts are expanded where they contact the drum. This, for all intents and purposes, rivets them together.



Below is a picture showing what a swedged lug bolt looks like when compared to one that has not been swedged. The lug bolt on the left has been swedged and the one on the right has not. You can see how pressure has been applied and the lug bolt has been "riveted" to the drum. Certainly not the way to do things if you want to make servicing easy.



Separating The Hub

The next job is to separate the hub from the drum. On the surface it would seem you could just press the studs out and be done with it. This is NOT the case. If swedged studs are simply pressed out they will enlarge the holes in the hub and ruin it. No one is reproducing these, so care must be taken to do the job right. The right way is to use a swedge cutter on a drill press and remove the swedges. Then, the drum will simply slide off. An easy job if you have a swedge cutter, but most people don't. You can still find them occasionally for about a hundred bucks, but you don't really need one.

If you are not going to keep your old drums, here's an easy way to not only separate the drum from the hub but also remove the stud from the hub at the same time.

First, you need to cut the stud off flush with the outside of the drum. You can use a cut-off wheel for this or a hack saw; just make sure you have them flush with the drum surface. Then, center punch each one and drill a 3/16" - 1/4" hole in the center of each stud about a quarter inch deep. This will relieve the stress and allow the swedged area to curl in on itself when the stud is pressed out of the hub. You need to do this for all five studs. Then from this point, it is a simple procedure to press out the studs. With this done you now have the hubs and drums separated. Remember this procedure will basically ruin your drums so don't use it unless you plan to replace them.

Here's where the fun begins. You now need to press in new studs. The stock lug bolts on these old Mopars are 1/2-20 UNF

thread with a 0.622" knurl. The knurl is the ridged part of the stud that fits into the hub. In order to have a good tight press fit you need to make sure whatever stud you use has a knurl size of at least 0.622", but it can't be too large either. If it's too large, it will be difficult to press in and you stand a chance of damaging the hub. NAPA has studs that have a 0.623" knurl (part number BK 641-1128) and these work very well. Below is a picture of the hubs with these non-swedged studs installed.



When you reinstall the hubs on the axles, it will save you some work if you clean the axle and inside surface of the hub with a

good solvent. This will get rid of any rust or other contaminants that might make it more difficult to remove the hub again if you ever need to remove it or the axle. You may also choose to coat the axle with a little anti-seize compound. The nut is torqued to 120 ft/lb and is held in position with a good sized cotter pin; this is not all that different than how front hubs are held on- and they're full of grease. So a little anti-seize can make disassembly a lot easier if the axle ever has to be removed to service the pumpkin.

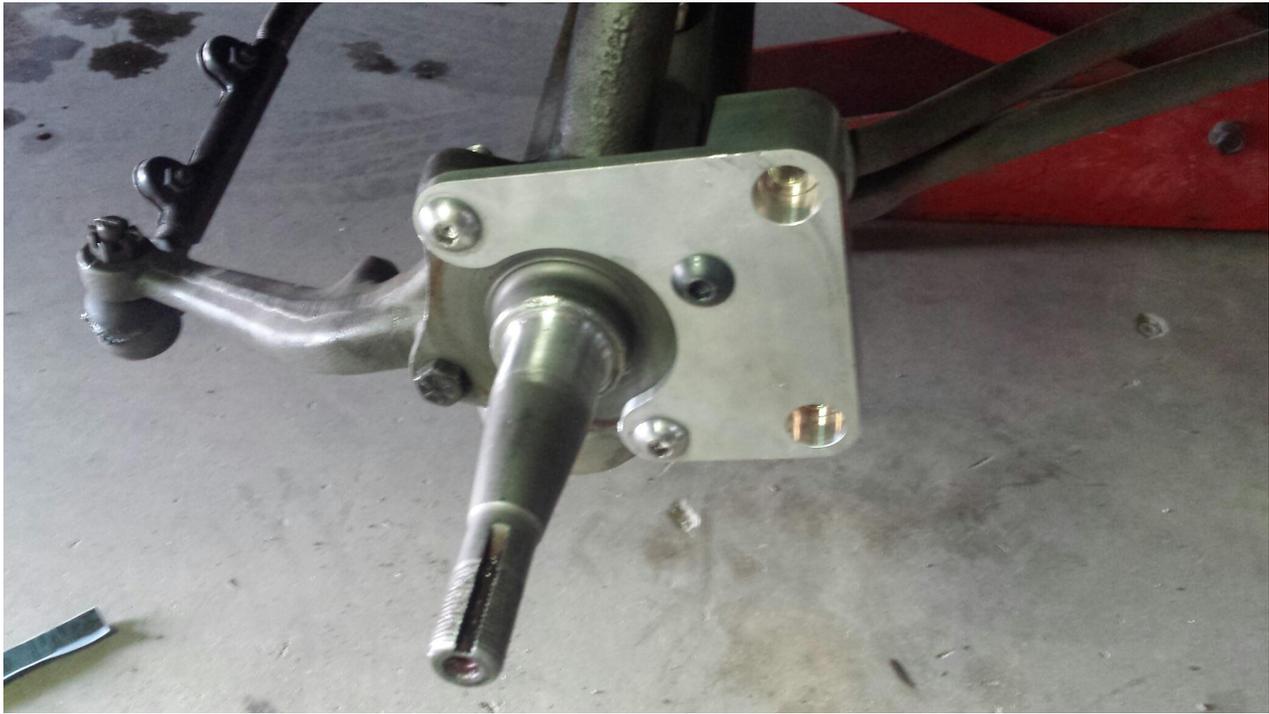
Hub reinstalled (Shown Below) on to tapered axle ready for disc brake installation.



Photos From My Front & Rear Wilwood Disc Brake Conversions



Above: new master cylinder. Below: Proportioning Valve



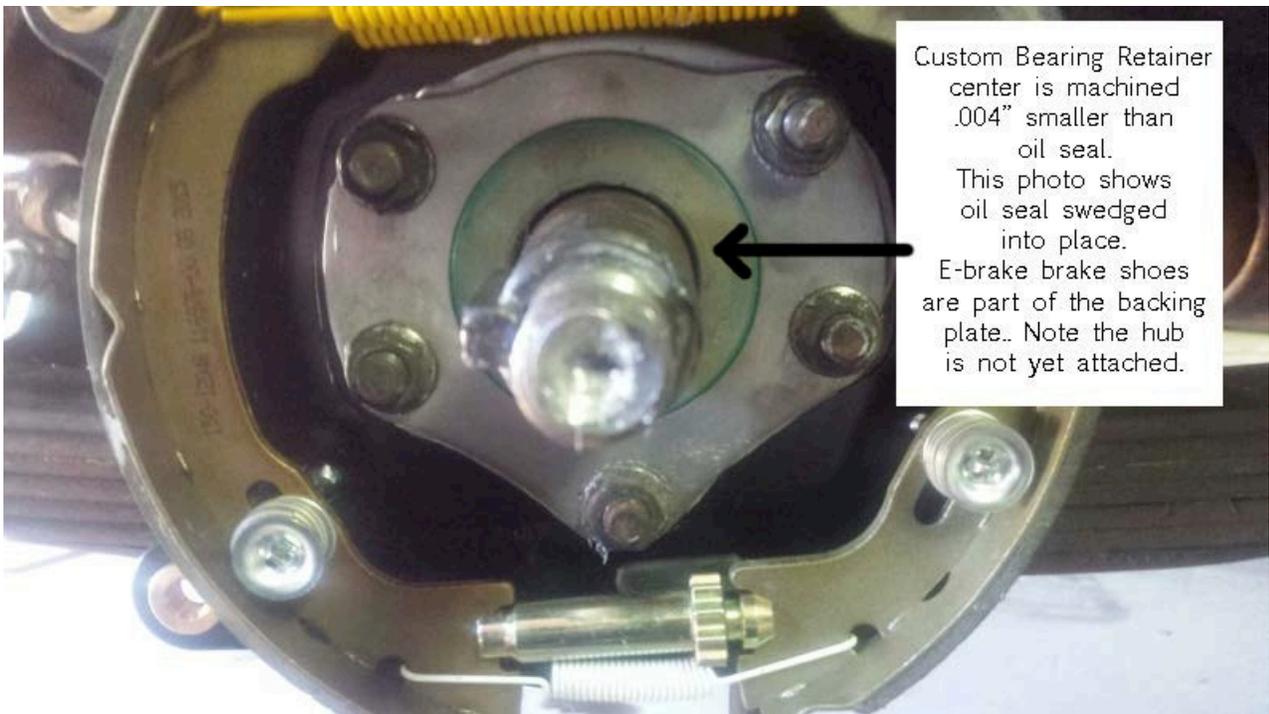
Installation of front adapter bracket. Left side shown.



Completed installation of Magnum Force/Wilwood disc brake conversion. Right side shown.



Wilwood flexible brake line installed. Note, the rear does not require a flexible line. Your brake lines are hard piped into the rear calipers. You do not have to drop the calipers to change Wilwood brake pads.





Completed installation of Wilwood rear disc brake conversion. Note the hub has been attached to the axle using cotter pin & nut with keyway.