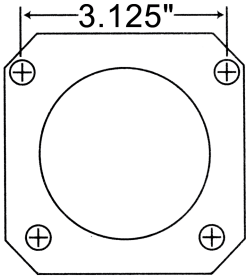
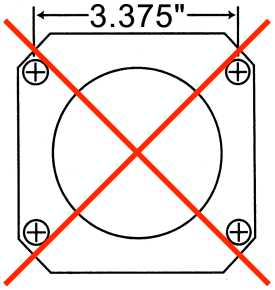
# A /F/X Body

## W/ Large Ford 3.15” Bearing Rear Disc Conversion Instruction Packet

64-72 A Body / 67-81 F Body / 62-74 X Body




**This kit is for axles with a 3 1/8” spread center to center on the top two bolt holes (pictured left), with a large Ford 3.15” bearing. If your axle flange does not measure 3 3/8” or you do not have a large Ford bearing, call 800.405.2000 for further assistance.**



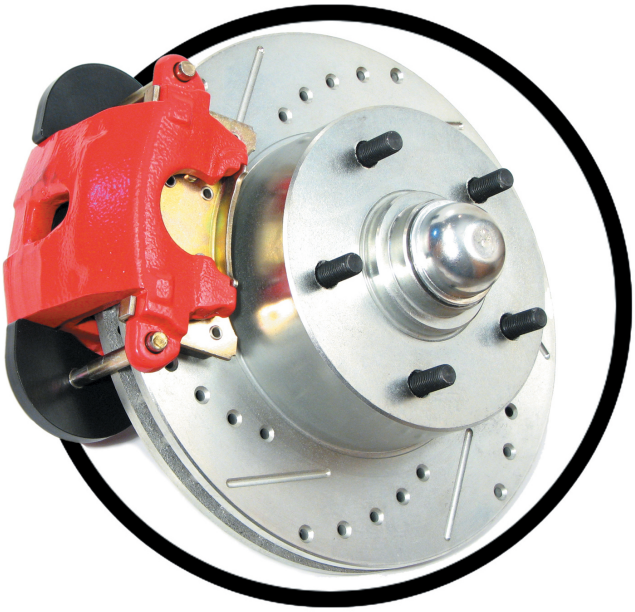

***<u>NOTE: This kit will push your wheels out an additional .125” per side, longer wheel studs may be required after installation of this kit</u>***

**<u>Rotor Measurements:</u>**

**Rotor Center = 2.78" - Rotor Hat Section Inside Diameter = 6.3125"**

**You will need to modify your axles if they will not fit inside the rotor hat and you will need to modify the rotor if the center hole is too small for your axles. Rotors with a new 2.90” center hole are available from us for an additional $30.00. This kit is designed to work with axles with either GM 5 x 4.75 Bolt Pattern and 7/16” wheel studs or Ford 5 x 4.5 Bolt Pattern and ½” wheel studs.**

**Note: If you are interested in Power Coated Calipers or Drilled and Slotted Rotors we have these upgrades available for exchange of non-installed components and an upgrade fee. If you are interested in Emergency Brake Cables for the front of your car please give us a call. We cannot exchange components that have been previously installed. Shipping charges will apply. Upgrades pictured.**



**Attention: <u>Before</u> modifying, painting, or powder coating any part of this kit, please trial fit all components and check rim clearance. We recommend you run 15" or larger wheels with this kit. We do not support the use of 14" wheels on this kit.**

**Modified, Painted, and Powder Coated parts are not returnable!**

***Note:** The emergency brake cables provided in the kit are generic length cables. They are of a generic length. We have other cables available. If you would like a different length of cable please give us a call and we can try to match up the length you need to the various lengths of cables that we have in stock. Due to the wide variety of vehicles this conversion fits we cannot guarantee cable availability. If you ordered a non-ebrake kit your kit will not contain emergency brake cables.

# Kit Contents:

____ Pair of Rotors (BR09C for plain rotors, BR09ZDC rotors for drilled and slotted rotors)

____Pair of calipers (BC3839N for a non-staggered kit, BC3939N calipers for a staggered kit, if powder coated calipers were selected there will be a letter pertaining to the color of the caliper within the part number as well)

____Set of caliper brackets (CMB181)

____Pair of Flex Hoses (FHK09 for regular, FHK09S for braided stainless)

____Pair of Emergency brake cables (EBCRD1/EBCRD1 for non-staggered AFX181 or EBCRD1/EBCRD2 for staggered AFX185)

____Instruction Packet

* See the back page of the instruction booklet to review the "Pick Ticket" used to pull your order.

# Disclaimer:

The Right Stuff values your safety above all things. For this reason, we recommend all brake systems and components be installed by professionals. The installer of the brake parts is responsible for ensuring fitment and suitability of the parts for the vehicle it is being installed on. Brakes should be tested in a controlled open area with success before driving on the road. If you are unsure or uncomfortable with any part of your kit, please call for further instructions from our tech staff before driving.

# Installation Instructions:

**Before installing this kit on your car please watch the instructional video at www.getdiscbrakes.com under tech stuff.**

## 1. Prepare the car

Begin by securely supporting the car on jack stands. Chock the front wheels to be sure vehicle does not roll. Always work on a flat, even surface. Remove the wheels to gain access to the factory drum brakes.

## 2. Remove the old drum brakes

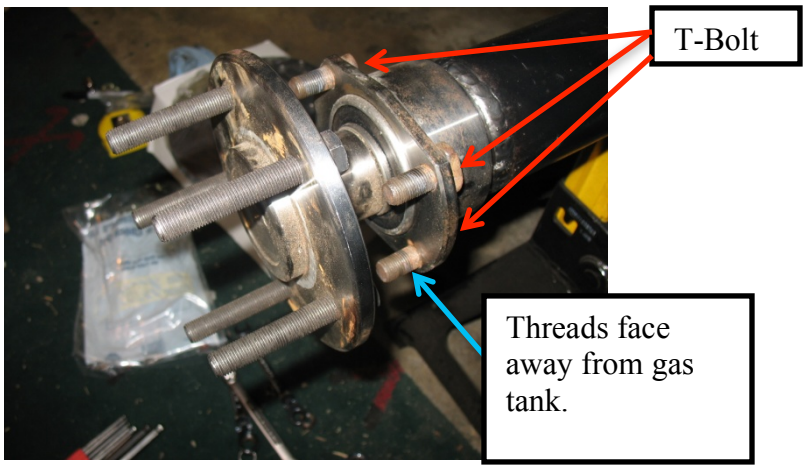
Remove the original axles from the vehicle. ***Keep your original T-bolts as you will need them to install the new brackets.*** After the axles are out, you can unbolt the drum brakes and remove them as a complete assembly. There is no need to remove the drum shoes and hardware before removing the backing plate. Dress the front and back of the axle flange with some steel wool or a wire brush to prepare it for the new caliper brackets. You may need to remove the factory bearing retaining plate that is between the wheel stud flange and the pressed on bearing. The axle flange plate that is included in this kit (bracket #1) replaces the plate that is on your axle. If you do need to remove the plate it will need to be cut off of the axle because it is between the pressed on axle bearing and the wheel stud flange. If you do not want to cut it off you will need to remove your pressed on bearing, remove the plate, then repress your bearing onto the axle.

## 3. Re-install the axles

Reinstall the axles into the rear end housing. When you are finished removing all of the drum hardware and reinstalling the axles you should be ready to install the new caliper mounting brackets.

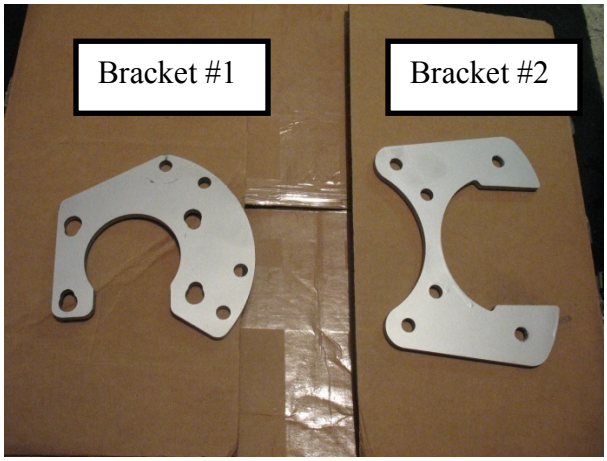
# 4. Install the axle flange bolts

The new caliper brackets mount to the front (outboard) side of the axle flange. Take four of the 1/2in T-bolts and place them in the holes of the bracket the axle tube is on the car (shown below). The threads of the T-bolts should be facing towards the outside of the car away from the gas tank (shown below).




# 5. Install the new axle flange brackets

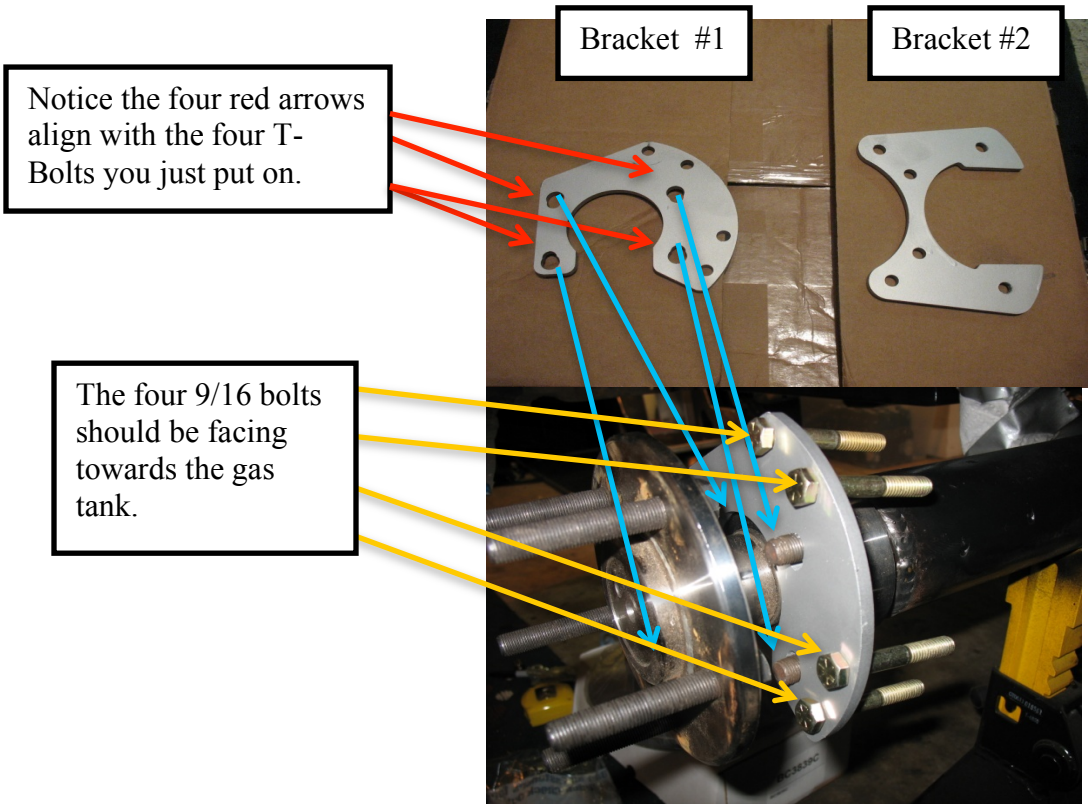
Separate out the 4 brackets that are in the kit (shown below).



Take bracket #1 (shown below) and align it with the T-bolts you just installed. The curved part of the bracket #1 can point towards the front or rear of the car. This will determine if you caliper is going to be front mounted or rear mounted. As a general rule of thumb, you mount the caliper on the opposite side of the axle than the shock is on. Caliper clearance is the issue here. If your caliper will clear the shock it is ok to mount the calipers on the same side of the axle. * The rear axle bearing sticks out of the axle housing 1/8". This is normal. When you install the axle flange bracket (Bracket #1) there will be a 1/8" gap between the flange bracket and axle flange. **Use the supplied 1/8" spacer to fill the gap between Bracket #1 and your axle flange.** This will provide enough support so that the bracket does not bend when you tighten the bracket to the axle flange. Attach the four T-bolt nuts to the T-bolts and tighten them in a star pattern using a 3/4 wrench or socket. Torque the axle flange brackets to 55 ft/lb. Take the four bolts supplied and put them through the other four holes in bracket #1 and have them facing towards the gas tank.

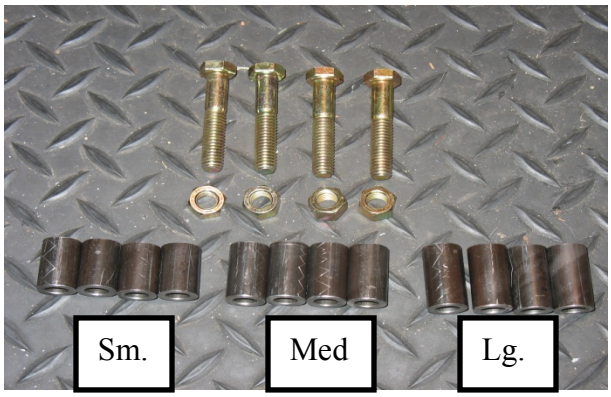
## ***Attention Staggered Shock Owners:***

Staggered shock rear ends require you to mount the driver's side caliper towards the front of the car. The passenger's side caliper still mounts towards the rear of the car. Make sure you have the correct kit for staggered shocks (ZDCRD05)

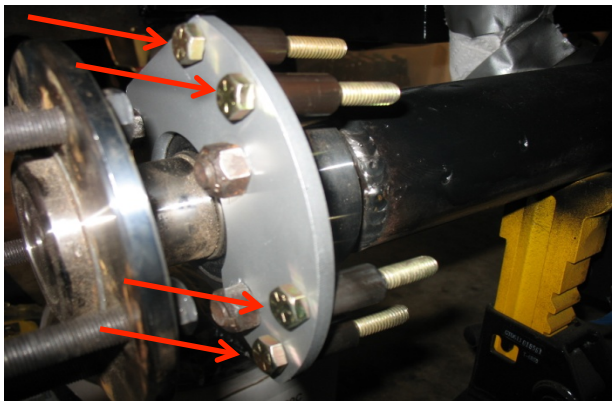


# 6. Install the caliper bracket spacers

We have supplied 3 sizes of spacers to be used on your application. The rotor spacing on rear ends can vary, so we have supplied 3 different sizes for trial and error fitment of the caliper and rotor alignment.

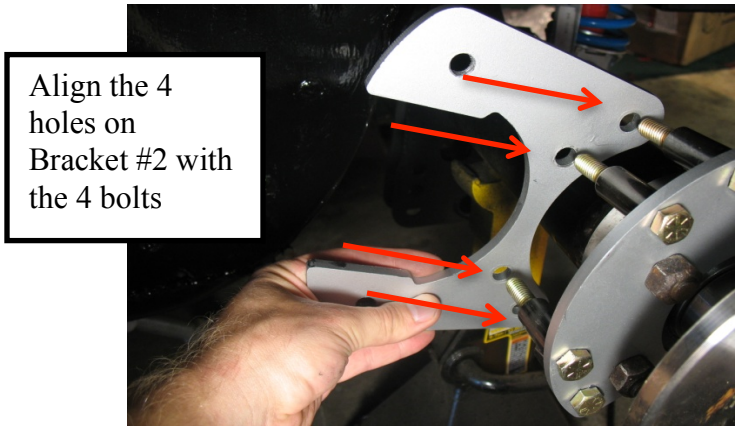



Start with the medium sized spacer and place them on the four bolts you just put on. (Shown below).

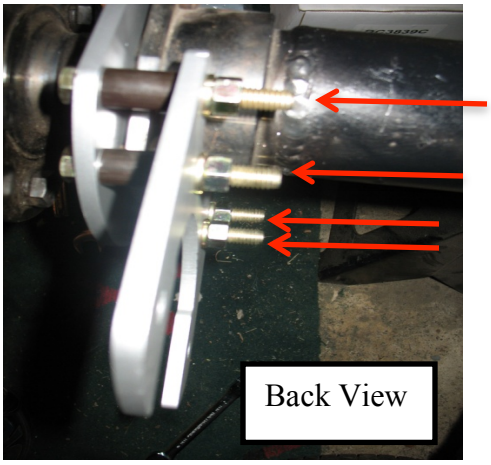


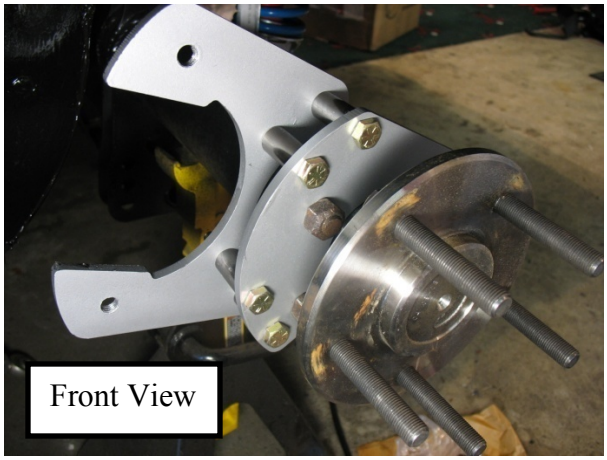
# 7. Install the caliper mounting brackets

Take bracket #2 and align it so the four holes on bracket #2 match the bolts that are in bracket #1. (Shown Below)

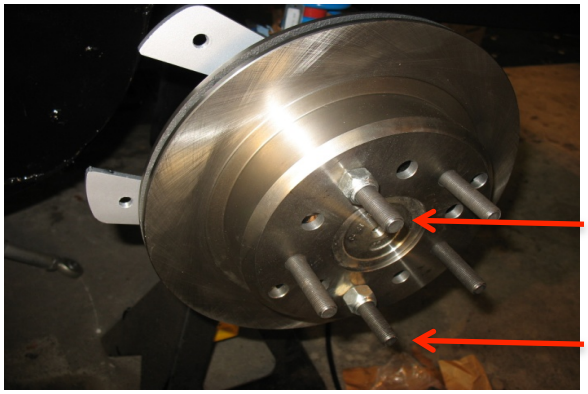



Take four of the eight nuts and lock washers and tighten down bracket #2 to bracket #1.

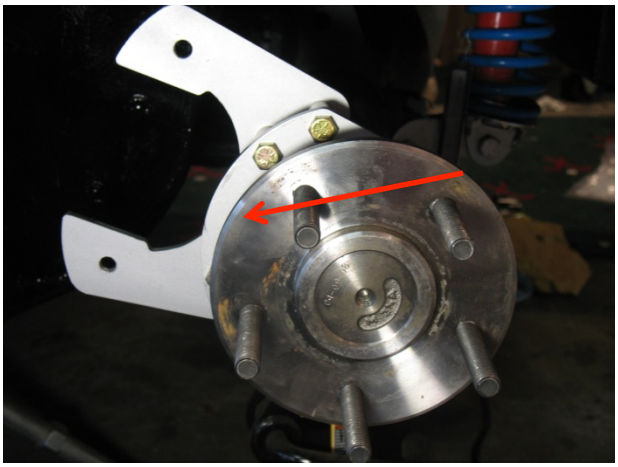


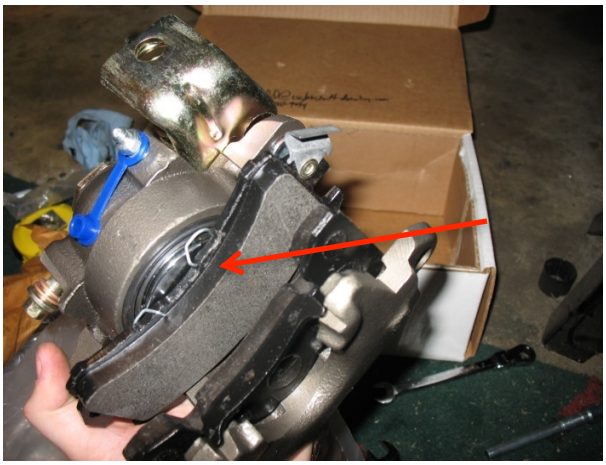




Slide the rotor onto the studs. The rotors are drilled for both Ford and Chevy bolt pattern. Hand thread two lug nuts to seat the rotor in place for test fitting.



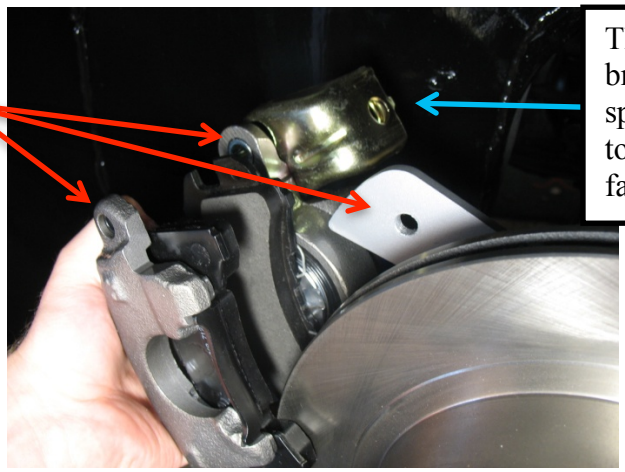
Take out the caliper and notice how Bracket #2 and the contour of this caliper shown below fit.





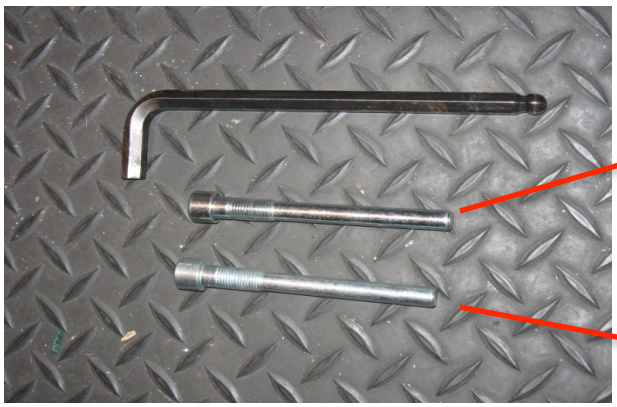
Slide the caliper into position, have the brake pads go on each side of the rotor and the two mounting holes on the caliper will match up with the two holes in Bracket #2.

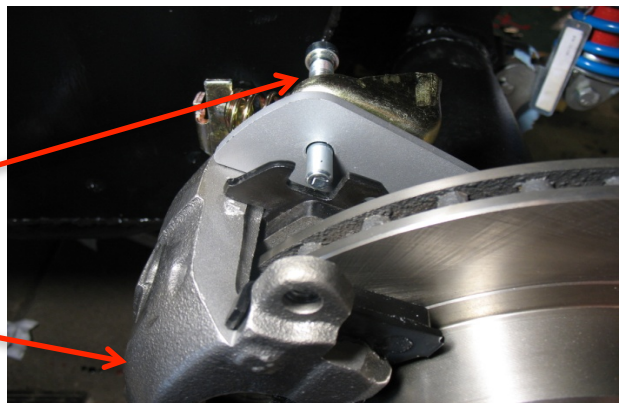
You can see the two mounting holes on the caliper and the mounting holes Bracket #2.



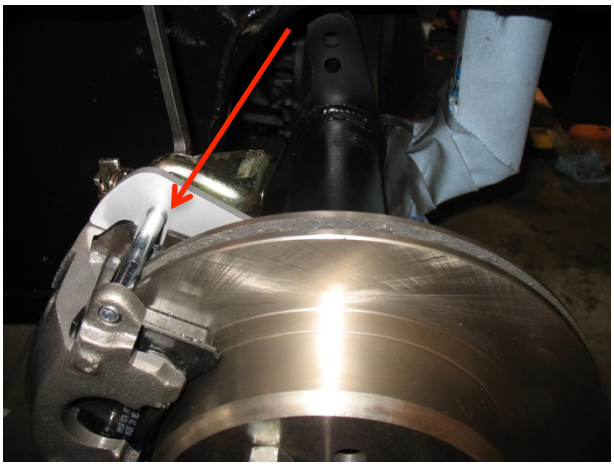
The zinc plated bracket with spring attached to it needs to face upwards.

With the caliper on the rotor and in Bracket #2 we can use the two caliper bolts to secure the caliper in place using a 3/8" allen wrench and torque to factory specs.





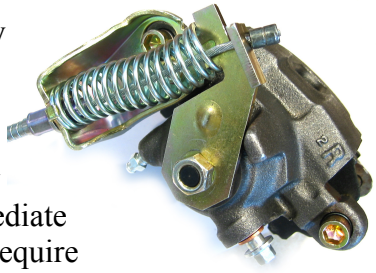
You now have the caliper in its final location. We need to check how tight the brake pad is against the rotor. If you can't move the brake pad with your fingers go down a spacer size. If the brake pad is really loose go up a spacer size. You are looking for just a little bit of movement between the pad and the rotor on both sides of the rotor. If there is too much or too little movement please go back to step 6 and try either the smaller or larger spacers to correct your caliper/rotor spacing issue.



# 8. Attach the flex hoses

Remove the banjo bolt and copper washers from the caliper. Place a copper washer on top of the flex hose and insert the banjo bolt. Place the second copper washer over the banjo bolt on the bottom of the flex hose and bolt the hose onto the caliper with the specifications provided in the assembly manual.

# 9. Install the emergency brake cables and adjust the calipers



You rear disc conversion comes with new rear emergency brake cables. You'll use the existing intermediate and front cables on your car. Run the cable up thru the center of the spring and insert the metal bung on the end of the cable securely into the notch on the emergency brake lever. Attach the other end to your existing intermediate cable using the included hardware. Some rare instances require shortening of the intermediate cable.

After the cables are installed, you need to adjust the system. Engage and release the emergency brake lever several times to activate the self-adjustment mechanism built into the calipers. You'll know you've got it when emergency brake is fully engaged and the rear wheels will no longer turn by hand. If your rear caliper pistons do not ratchet out by use of the e-brake arm on the caliper follow this procedure to get the piston to extend the brake pads to the rotor surface. Remove the spring and the e-brake arm from the caliper. Turn the threaded bolt extending from the body of the caliper by hand or with the aid of a wrench. Continue to turn the bolt until the brake pads come in contact with the rotor. After the desired adjustment is achieved reattach the e-brake arm and the spring onto the caliper. Continue with the bleeding procedure. A support video is available on our web site under tech support to guide you through the process.

**Note:** It is important that you regularly use the emergency brake to keep them properly adjusted.

## **Attention Staggered Shock Owners:*

Staggered shock rear ends require two different length brake cables. The short cable is used on the passenger's side. The longer cable comes out of the driver's side caliper towards the back of the car and loops back around to the front. Make sure you have the correct kit for staggered shocks (ZDCRD05).

# 10. Install the flex house mounting tabs

Install the flex hose mounting tabs pictured below that are included in your kit. Before installing these tabs you either need to shorten your existing rear axle lines or purchase a pre-shortened rear axle line set. The shortening of the rear axle line is necessary to compensate for the flex hose coming off of the caliper. As a general rule of thumb your lines will be about 6” – 8” shorter than the factory lines. Mount these tabs where your hard lines end. They will need to be tack welded to your rear axle housing. It is ok to tack weld the tabs after your rear end has been assembled. After they have been welded to your axle housing, insert your flex hose into the bracket and secure with the flex hose clip provided. After you have secured your hose into the bracket, screw your axle line into the end of the flex hose and tighten it with a wrench.

# 11. Bleed the system

**Before bleeding your brakes please watch the instructional video at www.getdiscbrakes.com under tech stuff.**

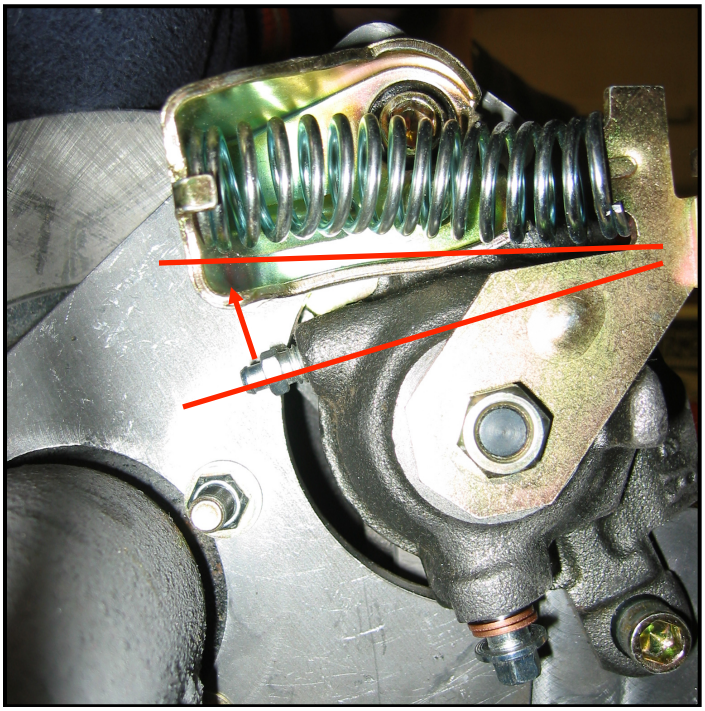
If you are concerned with the damaging effects of DOT 3 brake fluid, The Right Stuff suggests synthetic DOT 5. The Right Stuff is not liable for damage caused by system fluids.

**Make sure the emergency brakes have been adjusted properly as discussed in step eight before bleeding the brakes.** Working your way forward from the wheel farthest from the master cylinder will help insure a good bleed and a firm pedal. It is important to bleed the system in the following order:

**1. Right Rear 2. Left Rear 3. Right Front 4. Left Front**

## Attention:

The bleeder screws must be positioned horizontally. If the bleeders are pointed down, the calipers will trap air and the system will not bleed properly. You can remove the caliper mounting pins and rotate the caliper to re-position the bleeder. Remember to keep the pads over the rotor when rotating the caliper. This is to ensure the pads do not close too much to be able to get them back over the rotors once the bleeding process is finished. The picture below shows how you need to re-position the bleeder to get all the air out of the system.



# Technical Support

We want your conversion project to go smoothly. Double check that you have followed these instructions correctly and those included with any upgrade components you may have purchased. If you need additional help getting your new disc brakes to function properly, we're here for you. You can visit our website at www.GetDiscBrakes.com for Tech Tips, Tricks & Videos. If you are having trouble getting a good pedal please take a moment to watch the rear disc installation support video. If you cannot find the assistance you need from that source feel free to send us an email from the Tech support section of the website for priority service. If you are still unable to get the help you need, please feel free to give us a call at (800) 405-2000.

## Thank You for Your Business!

THE RIGHT Stuff DETAILING

**Brake & Fuel Line Systems**

**Disc Brake Conversions**

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# Pick Ticket: