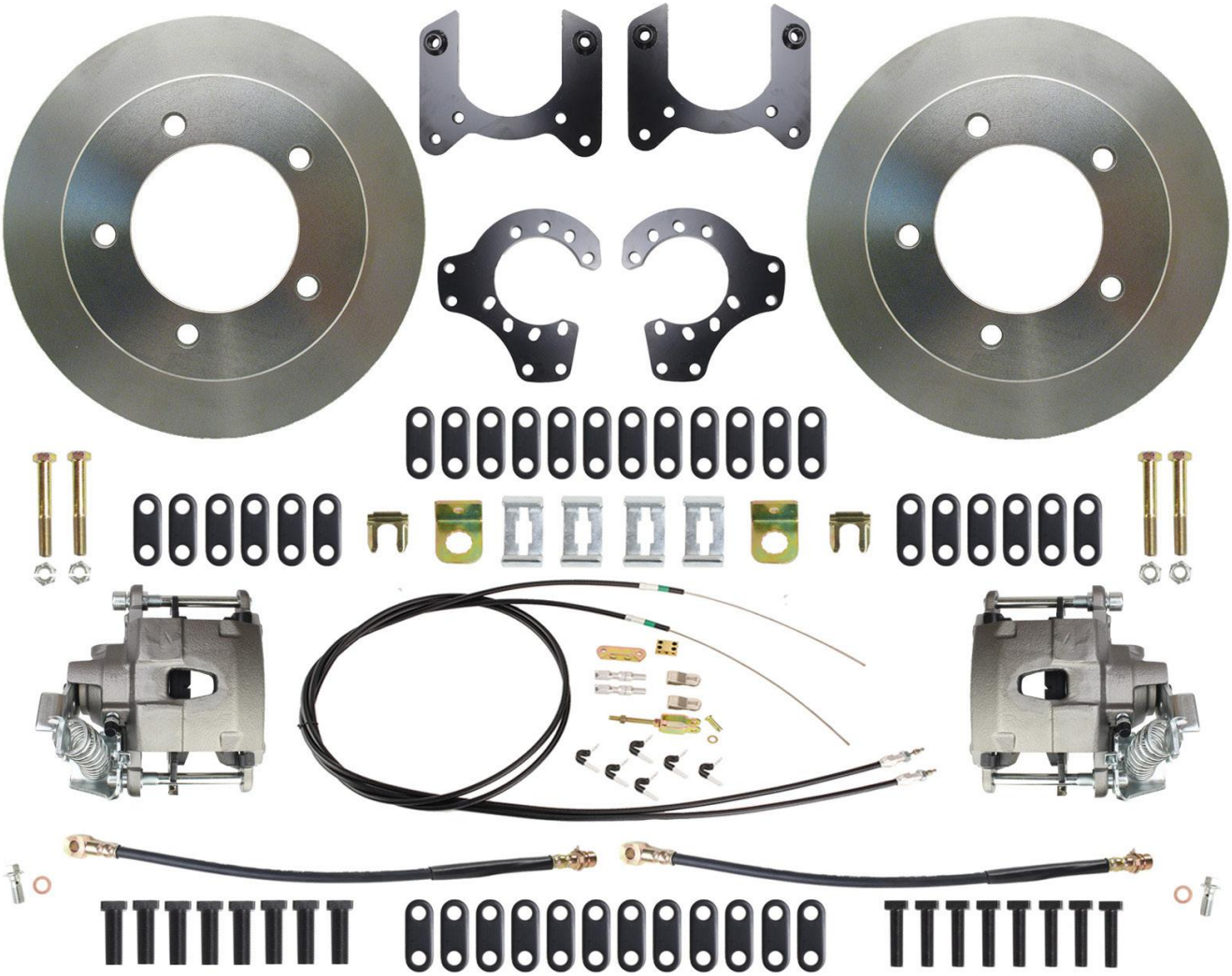
JEGS 631974, 631975,631976 REAR END DISC BRAKE CONVERSION KIT 1980-1996 FORD BRONCO

NOTE: ALSO AVAILABLE IN HIGH PERFORMANCE KIT WITH STAINLESS STEEL BRAIDED HOSES & CROSS-DRILLED & SLOTTED ROTORS NOTE: ALWAYS REFER TO THE VEHICLE OWNER'S MANUAL FOR CORRECT TORQUE SPECIFICATIONS WHEN INSTALLING KIT.



WARNING Proper operation of your brakes is essential for your safety and the safety of others. Any brake service should be performed ONLY by persons experienced in the installation and proper operation of brake systems. It is the responsibility of the person installing any brake component or kit to determine the suitability of the component or kit for the particular application. After installation, and before operating your vehicle, be sure to test the function of the brakes under controlled conditions. DO NOT DRIVE WITH UNTESTED BRAKES!

IMPORTANT Take time to read all the literature that came with this kit. Before beginning installation check the provided list of parts against what you received to ensure that all parts are present. While this kit was designed to make the process of changing brake parts as simple as possible, NOTE: WITH SOME KITS IT MAY BE NECESSARY TO MAKE MINOR CHANGES TO YOUR CAR! READ ALL WARRANTY DISCLAIMERS AND RETURN POLICIES INCLUDED IN THIS KIT PRIOR TO INSTALLATION!

NOTE Always utilize safely restraints when operating the vehicle. The installation of disc brakes will require the use of 15" wheels. Any attempt to install disc brake with a 14" wheel will be the customer's responsibility.

NOTE This kit is an aftermarket solution. It is not intended to be a direct installation or OEM replacement. Due to changes in production in certain years, your car may require modifications beyond these instructions for this kit to install properly.

PARTS INCLUDED IN THIS KIT

PARTS INCLUDED WITH THIS KIT:

PART #	DESCRIPTION	QUANTITY
HWK88FD	Brackets/Hardware/Spacers/T Bolts	1 bag
HSDBK-10MM	Brake hose	1 bag
ECRE ADJ	Optional Emergency brake kit (if purchased e-brake cable kit)	1 bag
NR172/NR173	Left & Right brake caliper	2
5568 Rotors	Rotors	1 set

PREPARING YOUR VEHICLE TO INSTALL YOUR BRAKE SYSTEM UPGRADE

1. Rack the vehicle.
2. If you don't have a rack, then you must take extra safety precautions.
3. Choose a firmly packed and level ground to jack up the vehicle.
4. Page 4 Chock the front wheels.
5. Jack the vehicle up and support it with jack stands and secure the pins.
6. Put the transmission in park if automatic, reverse if manual transmission.
7. The wheels should be allowed to free hang to relieve tension on the springs.

IMPORTANT

NEVER rely on jacks to support a vehicle! Always test the steadiness of your stands that are supporting the vehicle before attempting to work on a raised vehicle!

COMPONENTS TO INSPECT, REPLACE OR UPGRADE DURING INSTALLATION OF DISC CONVERSION KITS

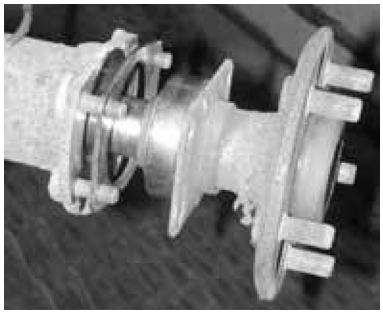
Shocks and hardware	Proportioning Valve	Proportioning valves
Brake lines	Stainless steel brake lines	Stainless steel hardware

SUGGESTIONS:

» Take the time to identify any suspect parts that are not included in this kit.
» Make upgrades such as converting to polyurethane bushings, performance shocks, Coil Over Springs, etc.
» Plan any Installation (s) of replacement parts during the various stages of the drum to disc conversion process.
» Check for interference with the exhaust system before installation.
» Check for proper master cylinder bore size

Slide Hammer Tool	Drum brake tool	Flare wrench set	Wheel chocks
3/8" ratchet drive set	3/8" Allen wrench or socket	Jack stands	Caliper slide grease
Box end wrench set	Disc brake quiet	Tire iron	Brake bleeder wrench
Pliers	Screwdriver	Brake Fluid	

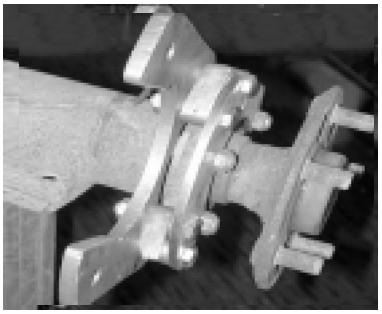
5. Now you can remove the drum backing plate and disconnect the emergency brake.
6. Clean the rotors using brake cleaner first, then with soap and water. Dry with a clean towel.
7. Check to make sure that the axle flange is 6 1/8" in diameter or smaller. (Trial fit the rotor to the axle flange.) This will ensure that the rotor will mount flush to the axle flange. (If the axle flange is larger than 6 1/8", you will need to machine it down to the proper size.) If you have aftermarket axles consult the manufacturer before machining them.
8. Clean the axle housing flanges and where the axle bearing seats.
9. Now you will need to determine which set of spacers and brackets you will need for your car. Each set has been individually bagged for ease of identification. The easiest way to identify which set you will use is to check the holes in the spacer plate (in bags labeled A,B, and C) to see if they align with the holes in **<u>your</u>** axle housing.



Installation of Spacer Plate.



Installation of small bracket.



Installation of caliper bracket.

11. Once you have determined the proper bracket set, install the axle spacer plate followed by the axle. (The spacer plate will take the place of the backing plate.)
12. Install the primary bracket so that the calipers will be mounted up and toward the rear of the car.
13. Now reinstall and tighten the bearing retainer nuts.
14. Take the supplied bolts, and install those on the primary bracket. Use the set of flat retangular spacers, provided and install those onto the bolts (See Figure 1), to set the back spacing of the bracket to center the caliper over the rotor.
15. Bolt the secondary bracket to the primary bracket and tighten the nylock nuts.

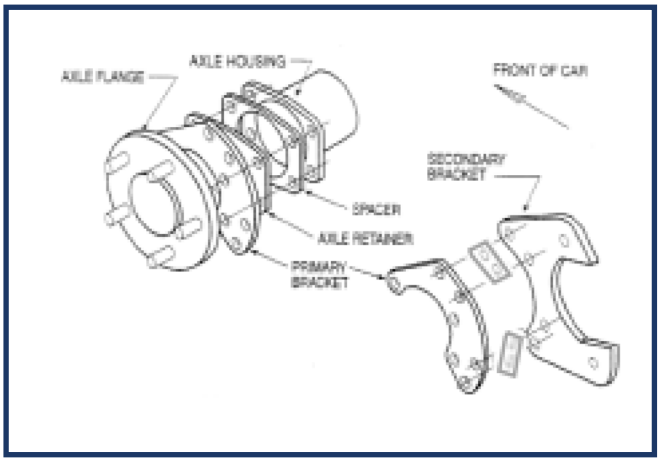


Figure 1

16. **IMPORTANT: Check to be sure the axle retaining "T" bolt heads clear the edge of the secondary bracket! If the "T" bolts interfers with the secondary bracket, it will be necessary to trim the bolt head to allow it to seat properly.**
17. Install the new rotor onto the axle flange. (Note: Use two or three wheel nuts to hold the rotor in place so you can complete the installation. Only hand tighten the wheel nuts so that you will not damage or warp the rotor.) Now rotate the rotor and check that the rotor runs true. You also want to be sure that nothing is interfering with the rotation. To be sure that the rotor is flush to the axle flange and is all the way over the axle center pilot, insert some strips of paper between the back of the rotor and the axle flange. If you cannot pull the paper out easily, then the rotor is all the way on.
18. The installation of the rear caliper has three steps:
    A. Physically installing the caliper.
    B. Physically setting up the emergency brake.

C. Emergency brake adjustment.

19. With the rotor and caliper bracket installed, locate the two metal slider sleeves that the mounting bolts go


Fig. 2


Fig. 3

though (Fig. 2).

20. With your thumbs, press the slider sleeves flush against their tabs to allow the caliper to be installed into the caliper bracket smoothly (Fig. 3). Prior to inserting the caliper into the bracket, you need to make sure that the pads are installed correctly.
21. The inboard pad has a special clip (Fig. 4) that snaps over the caliper piston and rests in a groove on the


Fig. 4


Fig. 5

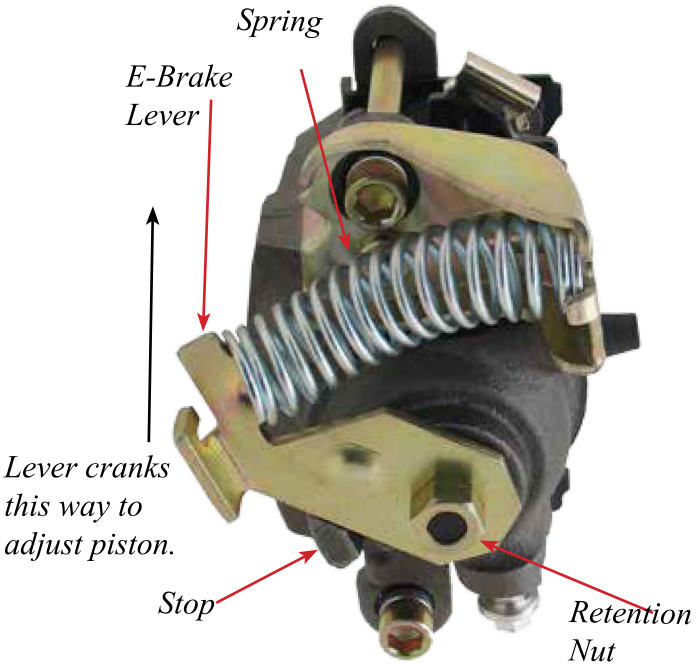
piston. The pad has notches into which the tabs of the clips fit (Fig. 5).

22. Now insert the caliper, with the pads installed, into the caliper bracket. The bleeder screws and springs should be at the top with the caliper on the rear of the axle.
23. It may be necessary to retract the caliper piston to allow the brake pads to clear the rotor.
24. To retract the piston, remove the spring on the emergency brake. Be sure to note the position of the spring. Next remove the nut and its' lever. Be sure to note the position of the lever.
25. Move the piston in or out as needed by turning the shaft with the wrench positioned on the integrated hex nut. You may also use the lever to adjust piston depth.
26. Reinstall the bracket, spring, and pads. Install the caliper into the caliper bracket, and press the slider sleeves up against the caliper bracket and tighten down the 2 mounting bolts using an Allen wrench. If needed, install the bracket shims between the axle and the caliper bracket in order to center the caliper over the rotor.
27. Test spin the rotor, and once it is centered, tighten down the bracket.
28. Proceed to setting the emergency brake.
29. If you have not already done so, remove the original drum brake cables from the vehicle.
30. You will be using the front and middle sections of the original drum cable setup.
31. Next feed the end of the new cable though the spring and locate, but do not install the cable into the notch on the lever yet.
32. Now take the clip provided with the kit and stake it over the emergency brake cable to steady the cable against the caliper. Save the old emergency brake clip so you can check the new brake clips for the proper
33. size. With the system physically assembled, proceed to the adjustment of the e brake setup.
34. Attaching the flexible brake hose to the caliper and then to the hard line. Now attach the E-brake cable to the caliper. The parking brake cables are supplied to bring you to a central point, It is the customers responsibilty to tie the cables into the system!

35. Bleed the brakes and test for a full pedal. If the back wheels skid before the front you should install a proportional valve to reduce the pressure to the rear brakes.

REAR CALIPER ADJUSTMENT

When installing rear disc brakes with calipers that have an internal parking brake you must adjust or set the calipers when installing. Failure to do so will prevent you from getting a firm pedal and you will have no rear brake function. Only do this adjustment with the caliper and rotor installed on the vehicle. You must set the parking brake every time you park to keep the calipers adjusted.



INITIAL ADJUSTMENT

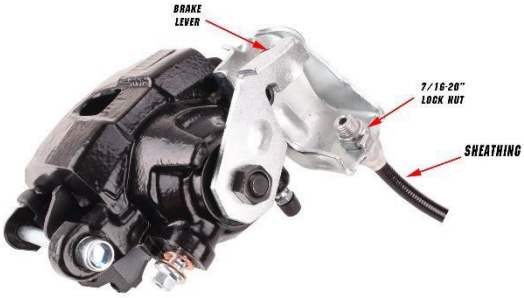
1. Remove the spring.
2. Crank the lever or turn the retention nut to actuate the lever forward.
3. After cranking the lever forward as far as it will go, rotate it back the other way until you hit the stop. You may need to use a long screwdriver to lever the lever back into place.
4. The rear caliper should now be correctly adjusted.
5. Re-install spring

Important: You must use the parking brake mechanism on a regular basis to set the self adjusting calipers. Failure to use the rear parking brake will result in rear brake loss!

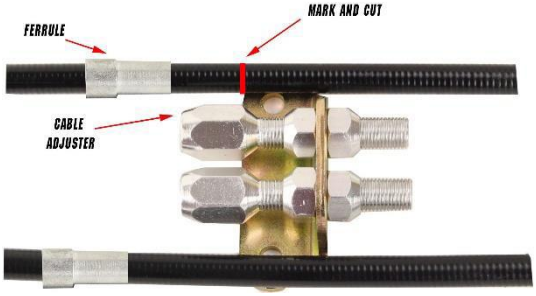
This kit is intended to be installed <u>ONLY</u> after the emergency brake adjustment has been performed on the calipers.

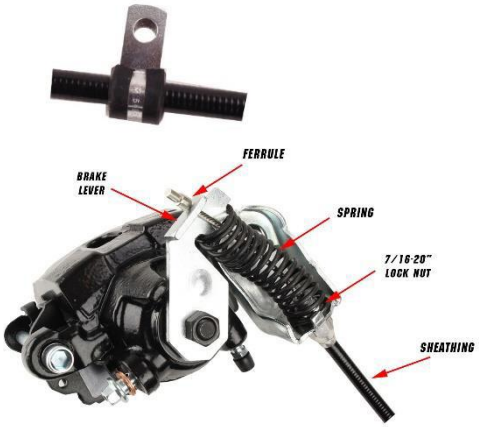
Before proceeding, verify that the pads cinch down on to the rotor and hold it still when you engage the brake cable lever(s) on the caliper(s). If further caliper adjustment is still needed, complete that before proceeding.

1. Remove the **brake lever springs** from both calipers.
2. Remove the **cable cores** from the black **cable housing** or sheathing.
3. Remove the lock nuts from the black **cable housings.**
4. Install the cables though the **cable mounting bracket** on each caliper and secure the lock nuts.
5. Replace the **brake lever springs** for both calipers from step 1.



6. Choose the cable routing paths most suitable for your suspension and exhaust components. Keep in mind that the factory routing is the most preferable. Avoid bending or binding in the cables. Do not keep a cable path that uses bends less than 7" diameter.
7. Feed both cables to the location of the original **cable stay bracket**. The location of your original bracket may be ideal and the bracket re-usable, but if not, use the **cable stay bracket** provided.
8. If your old bracket is missing or damaged, mount the **new bracket** in this location.
9. Mount the silver colored **cable adjusters** into the bracket as shown. The end that accepts the cable support sleeves must face towards the rear cables. Tighten the nuts on both sides of the guides to secure it into the bracket.
10. Once the **cable stay bracket** is secure, pull the cables into the preferred length. Be sure to allow the wheels to hang so you can see the full range of travel before modifying the overall cable length.





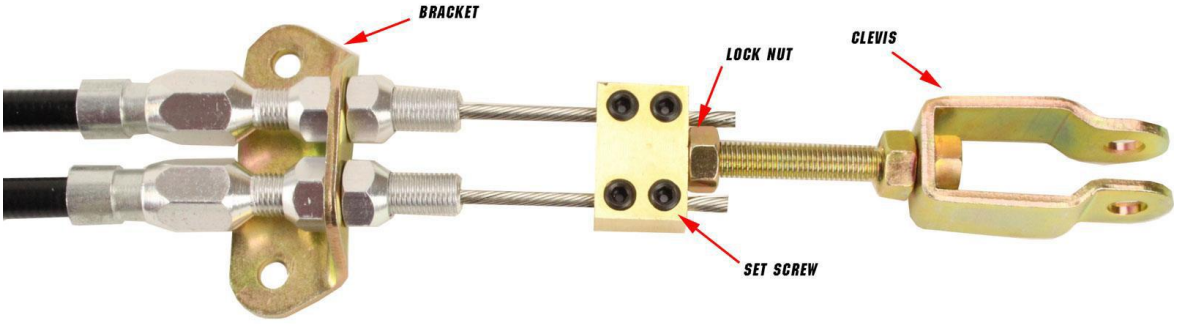
11.Using the **cable mounting tabs** provided, secure the cable to the chassis. Mark the **black cable sheathing** on the location you intend to cut them at.

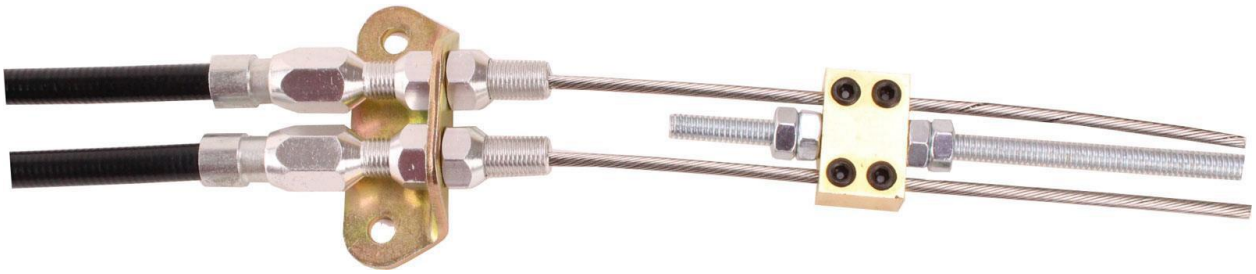
Using an appropriate saw, cut the **black cable sheathing**.

12.Place the **silver cable housing ends** on to the newly cut ends and feed into the cable adjusters.

13. Feed the **cable cores** through the openings in the levers, though the brake lever springs, and back into the black cable housings. **Do not cut** the cable cores at this time.

14. Locate the **brass block** used to secure the cables.
15. Determine how you will connect the brass block to **your pre-existing system or intermediate cable.** You may or may not use the clevis or rod provided, which is used when connecting directly to the handle pull system. Some applications will not use these parts, but will drill through the threaded block instead. If this is the case, secure the original threaded cable end through the block and secure lock nuts to either side of the block.
16. Feed the cable cores through the brass block.
17. In the brass block, tighten the socket nuts on to the cables. Mark the cables on either side of the block with paint. **Do not cut** the cable cores.





At this point the emergency cable system should be completely connected.

18. Test the emergency brake system by depressing the foot pedal or using the pull handle.
19. Make sure the cables are not slipping in the set nuts in the block. Tighten as necessary.
20. Now cut off the excess cable cores that are in the brass block.
21. At this point, you can make any final tension adjustment in the system.
22. In a safe location, test engaging and dis-engaging the emergency brake system.

UNIVERSAL FRONT DISC BRAKE CHECKLIST

	Spindle properly secured to ball joints and tie rods with castle nut and cotter pin.
	All mounting bolts properly tightened.
	Wheel bearings properly packed with grease.
	Inner bearing must be installed before grease seal.
	Rotor I bearings slide onto spindle with ease.
	Washer, castle nut properly torqued and cotter pin installed.
	Calipers installed and properly torqued.
	Spin rotor and check for any interference. (If any interference is found, resolve problem before driving vehicle.)
	Flex lines are properly installed with no interference.
	Power booster (if applicable) installed properly.
	Master cylinder bench bled according to the instructions.
	All brake lines are properly tightened and free of leaks.
	Turn wheels lock to lock and check for any interference.
	Place wheel onto vehicle and spin the wheel to make sure there is no interference between the brakes and wheel.

UNIVERSAL REAR DISC BRAKE CHECKLIST

All bolts on base bracket properly tightened.
All caliper mounting bolts properly tightened.
Rotor slides onto axle with ease.
No interference with rotor and any other parts (splash shield, brackets, etc.).
Caliper is centered over the rotor (because of difference in axle lengths, you may have to shim caliper in or out).
No interference with caliper and rotor.
All brake lines are tight with no leaks.
Parking brake is properly adjusted and not dragging, with vehicle on ground.
Adjustable proportioning valve installed (if applicable).
Distribution block modification made (if applicable).
Brake system properly bled.

IMPORTANT

WITH EVERY NEW SET OF ROTORS AND PADS, YOU SHOULD GIVE YOUR VEHICLE 200 - 250 MILES OF EASY DRIVING TO PROPERLY SEAT THE PADS TO THE ROTORS. DO NOT TAKE THE VEHICLE UP TO 60 MPH AND JAM ON THE BRAKES BEFORE THE FIRST 200 - 250 MILE BREAK IN PERIOD IS OVER, OR YOU WILL GLAZE THE PADS AND ROTORS.