# INSTALLATION INSTRUCTIONS 

## QUICK CHANGE KIT A193-10

1999-2004 Ford F-250/350, Excursion

Thank you for choosing STAINLESS STEEL BRAKES CORPORATION for your braking needs. Please take the time to read and carefully follow these instructions to insure the ease of your installation as well as the proper performance of the complete system.

Before beginning your installation, please verify you have received all the parts indicated on the packing slip. If you believe anything to be missing or incorrect, please call our Customer Service Department at (716) 775-6700.

To assure your installation will go safely and smoothly, have the following items on hand to assist you:

JACK \& JACK STANDS
LUG WRENCH
TORQUE WRENCH
METRIC SOCKET SET

BRAKE FLUID - DOT 4
BRAKE CLEANER
TUBE WRENCHES
SAFETY GLASSES

These kits use the following pads:

SSBC\#: 10126
FMSI\#: D834

## Removal of Old Brakes

1) Raise rear of truck until the wheels and tires clear the floor and support the vehicle on jack stands. Remove lug nuts and take tire and wheel assemblies off vehicle.
2) Using a socket, remove the hollow banjo bolt that holds the end of the flexible brake hose to the caliper.


## BRAKE FLUID WILL CAUSE SEVERE DAMAGE TO YOUR PAINT. ALWAYS USE EXTREME CAUTION WHEN HANDLING BRAKE FLUID.

TIP: With the flex lines off the caliper, brake fluid will be free to drain from the hoses. The use of a hose pinch clamp (not vise grips!) or a plug in the end of the hose will prevent this. This will also be important since you do not wantthe master cylinder to go dry.
3) With the hose removed, the caliper can be taken off by removing the two hex head bolts that hold the caliper bracket to the spindle. This will allow removal of caliper and bracket as one unit.

## Installation of Kit

4) Calipers are sent as complete assemblies with pads already installed. Slide caliper over rotor and line up holes in caliper bracket with those in the spindle. Using the M14 bolts and lock washers, bolt bracket to spindle and torque to $140 \mathrm{ft} / \mathrm{lbs}$.
5) Install the brass adapter block to the back of the caliper using the metric banjo bolt and copper washers supplied. Secure the original flex hose to the adapter block using the $3 / 8$ " banjo bolt and copper washers supplied. Torque the banjo bolts to $20 \mathrm{ft} / \mathrm{lbs}$. See figure 1.
6) With all hardware bolted on make sure there is no interference or twisting of the flex hoses against suspension or frame members.
7) Turn the rotors by hand to insure they turn freely and there is no interference.

## Filling and Bleeding System

8) It is advisable to replace the brake fluid if the color is brown or muddy. This is due to water that has been absorbed by the fluid which will eventually corrode the brake lines and master cylinder. This absorbed moisture can also cause a vapor lock situation under extreme braking conditions. Flush system with clean brake fluid and replace with a good grade of disc brake fluid DOT 4.
9) The simplest and most effective way to bleed your brakes is to use the gravity bleeding approach as follows:
a) With calipers installed, make sure all fittings are tight and master cylinder is topped off.
b) Open one bleeder screw and observe for several minutes. At first the fluid will begin to escape with intermittent air bubbles. When the air bubbles stop and a steady flow of fluid is observed, close the bleeder and repeat process on other side of vehicle.
c) After bleeding both wheels and topping of the master cylinder, make several applications of the brake pedal. If a hard pedal is experienced, no further bleeding is required. If pedal is spongy, repeat bleeding process until a hard pedal is achieved.

## FINAL INSPECTION

10) Once a hard pedal is achieved, all fittings and connections must be inspected to make sure there are no leaks. Also check the level in both reservoirs of the master cylinder and top off if needed.
11) Put wheels back on the car and turn wheel by hand to insure that the wheel spins freely and does not interfere with any brake components.

DO NOT DRIVE IN TRAFFIC UNTIL THE BRAKES SAFELY STOP THE CAR A SAFE DISTANCE WITHOUT A SPONGY PEDAL FEEL!

BRAKING TESTS SHOULD ALWAYS BE DONE IN A SAFE OPEN AREA!

## PROPER BRAKE PAD BED IN PROCEDURE:

## Street Oriented Pads

For a street driven vehicle running non-race application brake pads, a proper bed in sequence should be performed to properly bed in the brake pads, achieve maximum performance, and reduce the amount of brake noise emanating from the system.

A typical brake pad bed in procedure can be accomplished by a minimum of ten stops, but recommended twenty stops. Follow the procedure listed below to maximize your braking system:

1. Perform a series of ten stops from 60 to 15 mph . Don't let the vehicle come to a $100 \%$ stop, this can cause uneven pad material transfer to the rotor causing excessive vibration!
2. When performing the stops, the brakes should be applied between 50-60\%. Pedal effort should be $50-60 \%$ of full brake lockup.
3. These series of stops should be performed in succession allowing slight cooling time for brakes between stops. This is to ensure that the brakes will reach sufficient temperature to drive out the bonding resins in the pads. Make sure the rotors and pads do not cool excessively between stops.
4. Let the brakes cool to ambient temperature.
5. Perform another ten 60 to 15 mph stops to complete the pad bed in following steps 1 thru 4 listed above.
6. Even after completing the bed in procedure, it is necessary to complete 200-250 miles of easy driving before full break in is complete.

NOTE: For frequently asked questions and technical reference information please visit the tech section of our website at www.ssbrakes.com.

TECH LINE -- If technical help is required, please call (716) 775-6700.


Figure 1
NOTE: You will reuse your stock brake hoses.

