



INSTALLATION INSTRUCTIONS

QUICK CHANGE CALIPER UPGRADE KIT A186-1

1988-98 GM Trucks & SUVs

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 (716) 775-6700

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

JACK & JACK STANDS
TORQUE WRENCH
MALLET
BRAKE FLUID

WHEEL BEARING GREASE
SOCKET SET
WRENCH SET
BRAKE CLEANER

This kit uses the following pads:

SSBC#: A1094

FMSI#: D-369



BEFORE INSTALLING, PLEASE LAY OUT ALL OF THE CONTENTS OF THIS KIT AND THOROUGHLY READ THROUGH THIS INSTRUCTION MANUAL TO ENSURE THAT YOU HAVE ALL OF THE PARTS NEEDED TO COMPLETE THE INSTALL!

IF YOU FIND YOU ARE MISSING ITEMS, PLEASE CONTACT SSBC IMMEDIATELY, REGARDLESS OF WHAT DEALER YOU PURCHASED THIS KIT FROM.

IF YOU HAVE ANY QUESTIONS REGARDING MISSING ITEMS, WARRANTY CLAIMS, DEFECTIVE ITEMS, OR SIMPLY INSTALLATION ISSUES, PLEASE CONTACT SSBC DIRECTLY.

TIP: BEFORE BEGINNING INSTALLATION, SPRAY ALL FITTINGS AND FASTENERS WITH PENETRATING OIL

1) Removal of Old Brake Parts

- a) Raise the vehicle until the wheels and tires clear the floor and support the vehicle on jack stands. Remove the front wheel and tire assemblies from the vehicle.
- b) Begin disassembly by removing the bolts holding the flex hoses to the caliper. To prevent the master cylinder from going dry, the hoses should either be plugged or pinched off using hoses pinch off pliers.



NOTE: IF THE HOSES ARE ALLOWED TO DRAIN FREELY, THE MASTER CYLINDER MAY RUN DRY. IF THIS HAPPENS, THE MASTER CYLINDER MUST BE TAKEN OFF THE VEHICLE AND BENCH BLED!

- c) Remove the two caliper slider bolts and remove the caliper and pads from the spindle.

2) Caliper Installation

- a) Install the supplied clips onto the back of the inner pads. The portion of the clip marked “top” will go towards the top of the pads. Slide the outer pad into the caliper until the clips lock into the recesses on the outside of the caliper. The inboard pad is then slid into the caliper and held into place by pushing the tab on the spring clip into the caliper piston.
- b) Lubricate the new caliper mounting bolts with silicone based grease. Slide caliper into position over the rotor and line up the holes in the spindle with those in the ear of the caliper. Make sure the bleeder screws are pointing up.
- c) Install the caliper mounting bolts and thread the bolts into the spindle. Torque the bolts to 40 ft / lbs.



IF THE CALIPER WILL NOT SLIDE EASILY INTO PLACE OVER THE ROTOR, CHECK THE CLEARANCE OF THE INBOARD BRAKE PAD. IF THE CLEARANCE IS INSUFFICIENT, CHECK TO MAKE SURE THE CALIPER PISTON IS RETRACTED ALL THE WAY. IF THE PROBLEM STILL PERSISTS, PLEASE CALL OUR TECH SERVICE LINE

- d) With the calipers in place, the flex lines can be installed. Secure the end of the flex line to the caliper using the hollow banjo bolts and copper washers supplied in kit.
- e) Turn the steering wheel through a full left to right turn to assure they do not twist or take a double bend. If they do bend incorrectly, remove them from the 12-point bracket and reorient them until the problem is eliminated.

3) Filling and Bleeding system

- a) 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 vapor lock situation under extreme braking conditions. Flush system with clean brake fluid and replace with a good grade of disc brake fluid DOT 3 or DOT 4.
- b) The simplest and most effective way to bleed your brakes is to use the gravity bleeding approach as follows:
 - 1) With calipers installed, make sure all fittings are tight and master cylinder is topped off.
 - 2) 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.



MAKE SURE TO KEEP A CLOSE WATCH OVER THE FLUID LEVEL INSIDE THE MASTER CYLINDER DURING THE BLEEDING PROCESS. NEVER LET THE RESERVOIR RUN DRY. ALWAYS KEEP IT AT LEAST 1/3 FULL.

- 3) After bleeding both wheels and topping of the master cylinder make 20-30 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

- a) 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.
- b) 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. If any interferences are detected, DO NOT drive vehicle until problem can be identified and corrected.

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!

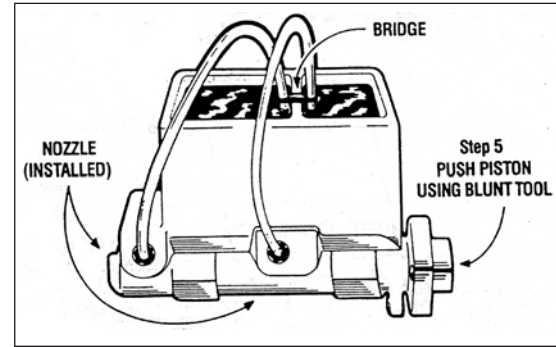
NOTE: For frequently asked questions and technical reference information please visit the tech section of our website at www.ssbrakes.com.

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

NOW ENJOY TRUE PERFORMANCE BRAKING!

How and why do I bench bleed a master cylinder?

When installing or replacing a master cylinder, it is critical that all air is removed from the master cylinder. This can easily be done by bench bleeding the master cylinder prior to installation. Using the SSBC master cylinder bleeder kit (#0460):



- 1) Place your master cylinder in a vise by the ears (not body). Make sure it is level.
- 2) Attach a piece of clear plastic hose to the short end of one of the plastic nozzles. Do the same to the other hose and nozzle.
- 3) Clip the plastic bridge to the wall and push the ends of the hose through the holes so they are SUBMERGED in the reservoir on either side of the wall.
- 4) Press the tapered end of the nozzle FIRMLY into the cylinder port hole with a twisting motion. Repeat this procedure on the other port hole.
- 5) Fill the reservoir with CLEAN brake fluid recommended by the manufacturer.
- 6) Using full strokes, push the piston in, then release. Do this until ALL the air bubbles have disappeared from the clear plastic hose. **(CAUTION-MASTER CYLINDER WILL NOT BLEED PROPERLY UNLESS HOSES ARE SUBMERGED IN BRAKE FLUID UNTIL THE BLEEDING PROCESS IS COMPLETED.)**

Now mount master cylinder and avoid brake fluid leaking out of front and rear ports during installation.

Bleeding steps for Dual Port Master Cylinder

If you have a master cylinder with dual port holes (4 port holes - 2 on each side), it is necessary to bleed both port sides of the master cylinder. If both sides of the master cylinder are not bled, there will be air trapped in the master cylinder and your brakes will not function properly.

To bleed dual port master cylinders:

- 1) Follow steps 1 - 6 above on the side you will be hooking the brake lines to. Plug the other side.
- 2) Once the air bubbles are no longer visible in the plastic hose, open the bleeder screws in the supplied plugs and allow the mater cylinder to gravity bleed. **DO NOT** push the master cylinder piston in while the plugs are gravity bleeding.
- 3) When clear, steady streams of fluid are coming out of both bleeders, close and tighten the bleeders. Give the master cylinder piston several strokes, making sure there are still no bubbles present in the clear plastic tubes.
- 4) Remove the tubes and plastic fittings and mount the master cylinder on the vehicle being careful not to spill brake fluid on any painted surfaces.