INSTALLATION INSTRUCTIONS

INSTRUCTIONS FOR JEEP WITH DANA 35-C AXLE, 5x4-1/2 B.C
REAR DISC BRAKE CONVERSION KIT A-128-6

Thank you for choosing SSBC-USA for your braking needs. Pleases 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
METRIC WRENCH SET
BRAKE CLEANER
SAFETY GLASSES

REPLACEMENT PARTS

Part	SSBC-USA #
Pads	1047
Left Rotor	23007AB1A
Right Rotor	23007AB1A
Left Caliper	2424L
Right Caliper	2424R
Hoses	14335-1
Master Cylinder	A0456

Revision 3 4/3/12

SSBC-USA • 555 Pound Road • Elma, NY 14059
Phone: (716) 775-6700
www.ssbc-usa.com • info@ssbc-usa.com

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-USA 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-USA DIRECTLY.

PHONE: 716-775-6700
M-F: 8:00AM-5:00PM EST

tech@ssbc-usa.com
info@ssbc-usa.com

1) Raise the Jeep until the wheels and tires clear the floor. Support the Jeep on jack stands. Make sure parking brake is in the off position. Remove wheel and tire assembly.

2) Remove drum assembly as follows:
   a) Pull off brake drum from assembly.
   b) Disconnect parking brake cable from drum assembly.
   c) Disconnect rigid brake line from the back of the wheel cylinder making sure not to strip the ferrule nut. We strongly recommend the use of a tube wrench.

BE CAREFUL NOT TO GET BRAKE FLUID ON THE PAINT, IT CAN CAUSE SEVERE DAMAGE!!

   d) Remove shoes, hardware and cables from backing plates.

3) Removing axles and backing plates:
   a) Remove rear end cover, a drain pan will be necessary.
   b) Working through the opening in the differential case, remove the side gear pinion shaft lock bolt (8mm hex small bolt). Refer to exploded view.
   c) Push the side gear pinion shaft (pin) out.
   d) Push the axle shafts inward and remove "C" locks from inner end of the axle shafts.
   e) Remove axle shafts.
   f) Remove drum backing plate assembly from axle flange, and save bolts.

4) Caliper Mounting Brackets
   a) Brackets are one piece and are marked left and right. Left is considered the driver's side. Slide caliper mounting brackets onto axle flange, see exploded view. Reattach, old bolts and nuts supplied, (the bolt head should be from the inside to the outside). Tighten to 40 ft./lbs.

PLEASE CHECK TO SEE THAT ROTORS FIT CLEANLY ON AXLE BEFORE RE-INSTALLING AXLES. ROTOR MUST BE FLUSH ON AXLE FACE!

   b) Slide axle shafts back into housing in reverse of step 3.
   c) Fill differential with Hypoid gear lubricant.

DO NOT USE ANTI-SQUEAK ADHESIVE ON BACK OF PADS. THIS WILL DEGRADE THE PERFORMANCE OF THE CALIPER!!

5) Mounting Calipers to Bracket
   a) Mount rotors onto axle shafts (left and right are same), and hold in place with 2 lug nuts.
   b) Slide caliper marked "Left" or "Right" into position, over rotor. Refer to exploded view. **Note: Calipers are reversed with special banjo bolt above the bleeder**

c) Attach to mounting bracket using (2) 12mm locking bolts supplied, and tighten to 50 ft/lbs.

6) Inlet hose and Tubing

a) Attach "block" end of hose with special hollow bolt and two (2) copper washers. Be sure to install a copper washer on each side of the brass block. Tighten to 10-15 ft./lbs.

b) Attach caliper inlet line to hose fitting and secure to axle with original metal clip.

BE CAREFUL THAT ALL HYDRAULIC COMPONENTS ARE KEPT CLEAN AND FREE OF DEBRIS INSIDE AND OUT. REMEMBER: DIRT IS THE ENEMY OF HYDRAULIC SYSTEMS, AND WE WILL NOT BE RESPONSIBLE FOR SYSTEM FAILURES DUE TO UNCLEAN INSTALLATION!

7) Filling the System

a) It is advisable to replace brake fluid if color is brown and muddy. This condition is due to water that has been absorbed by the fluid which will eventually corrode the brake lines and master cylinder, plus possibly creating a vapor lock under extreme braking conditions. Flush system with clean brake fluid and replace with a good grade of disc brake fluid (DOT 3 or 4 Glycol base) available from your distributor or SSBC-USA.

8) Proportioning valve (this allows full pressure to rear calipers)

a) Remove master cylinder. The factory installed fixed proportioning valve is part of the distribution block, typically located below the master cylinder. Our road test show that it is not necessary but will help in situations that require heavy breaking (big tires, trailering, steep grades).

b) Unscrew hex plug (it has a rubber center).

BE CAREFUL, IT IS SPRING LOADED!

Remove spring, seat, and rubber seal from piston. Push tapered end of piston back into the hex nut. It should slide inside the nut.

c) Reassemble the block. It will be necessary to re-bleed the system after this is done (refer to bleeding instructions).

d) Bench bleed the new master cylinder. Run dummy line from the ports back into the reservoir. Pump the master cylinder slowly until you do not see any air returning into the reservoir. Bolt master cylinder to booster and reinstall the old lines. It will be necessary to re-bleed the entire system!

ADJUSTABLE PROPORTIONING IS AVAILABLE FOR FINE TUNING OF THE REAR BRAKE SYSTEM, ASK FOR SSBC-USA PT# A0707.

9) Adjust caliper as follows:

a) Advance caliper piston by pumping the brake pedal 40-50 times until piston advances 1/16" from rotor face. Do not use parking brake lever for this operation.

b) Use feeler gauge or 1/16" drill for measuring.

10) Bleeding the system
   a) When pressure bleeding is employed the correct pressure setting is 10-15 psi. (max.) for the bleeder tank.
   b) If power brakes are fitted, the engine should not be running and the vacuum reserve should be reduced to zero by pumping the brake pedal or pulling the booster vacuum hose.
   c) Tapping the caliper with a rawhide mallet, before fluid is flowing, may assist in obtaining a better bleed job.
   d) Brake bleeding can be simplified by assuring that there are no line restrictions, by using the gravity bleed approach as follows:
      1) Leave all bleeder screws open when installing calipers.
      2) Fill master cylinder reservoir, do not pressurize master cylinder or pump brake pedal; instead observe bleeder ports until brake fluid flows out; then shut bleeder valves.
      3) No further procedure is required if brake pedal is hard after shutting off all bleeder valves. Make sure that the master cylinder is "topped-off."
   e) With bleeders closed and system bled, a hard pedal should be experienced so that at full application and with the engine running, the toe of your left foot can still be placed between the bottom of the pedal and the floor.
      1) In addition there should be brake pedal end-play of ¾" to 1" inch (from full release until initial braking action takes place).
      2) Power brake Jeeps will experience a "drop-off" of the pedal when the engine is started. This is a normal condition, and signifies that the booster is working correctly.

DO NOT DRIVE THE JEEP UNTIL THE BRAKES STOP THE CAR SAFELY, INITIAL BRAKING TESTS SHOULD BE DONE IN A SAFE OPEN AREA!!

   f) If brake pedal "end-play" is excessive, adjust push-rod between master cylinder and booster (to lengthen) in ¼ turn increments until 1" of "end-play" is achieved.

11) Parking Brake Cables (SEE NOTES BELOW)
   a) Reuse old parking brake cables and slacken them.
   b) Take the cable housing with the end that has a slot cut into it, and insert into caliper. Push this end through the hole on the bottom of the caliper. Pull end of cable through slot into parking brake lever. In cases where cables are too short, new cables may need to be purchased, contact SSBC-USA or your distributor for more info.
   c) When both cables are attached, remove slack in the cables by turning the nut located under the floor pan.

TURN AXLES BY HAND TO BE SURE THAT THERE IS NO DRAGGING OR INTERFERENCES BY CALIPER, ROTOR OR WHEEL.

d) Adjust parking brake as follows:
   1) Push down parking brake pedal, 1 "click."
   2) Tighten parking brake cables at lever until lever on caliper just begins to leave the "stop" on the caliper (both sides). Rusty, frayed or frozen cables should be replaced.
   3) Release parking brake pedal, there should be no drag. Re-adjust if necessary.

TJ WRANGLERS MAY REQUIRE SSBC-USA P/N #1209-1 PARKING BRAKE BRACKET. CALL YOUR DISTRIBUTOR OR SSBC-USA FOR AVAILABILITY.

12) Final Inspection
   a) Before driving, screw at least two lug nuts on lug studs to hold rotor firmly to axle flange.
   b) Spin rotor to check operation.

TURN WHEELS BY HAND AND CHECK FOR ANY INTERFERENCES. DO NOT DRIVE CAR UNTIL BRAKES STOP THE CAR WITH OUT A SPONGY FEELING. INITIAL BRAKING TESTS SHOULD BE DONE IN A SAFE OPEN AREA. IF BRAKES DO NOT OPERATE CORRECTLY CONTACT ONE OF OUR TECHNICIANS FOR ASSISTANCE.

   c) Check for fluid leaks at every junction while and assistant is applying brake pressure.

13) Final Assembly
   a) Take lug nuts off studs.
   b) Mount wheel, torque lug nuts to proper specifications.
   c) Spin wheel to assure that there are no interferences.
   d) Test drive and apply brakes lightly to wear-in pads. By dragging brakes in 15-20 second intervals at speeds under 30 mph several times will wear in pads for long life. Pads are available thru SSBC-USA distributors ask for **SSBC-USA P/N #1047.**

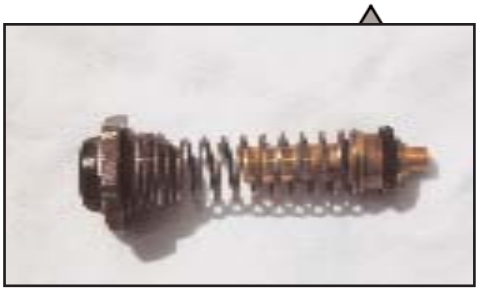
If technical help is required, please call 716-775-6700

. **NOW ENJOY TRUE PERFORMANCE BRAKING!!**

ELMA, NEW YORK 14059
(716) 775-6700
WWW.SSBC-USA.COM

INSTRUCTIONS FOR JEEP WITH DANA 35-C AXLE, 5x4-1/2 B.C
REAR DISC BRAKE CONVERSION KIT A-128-6
full rear brake pressure modification

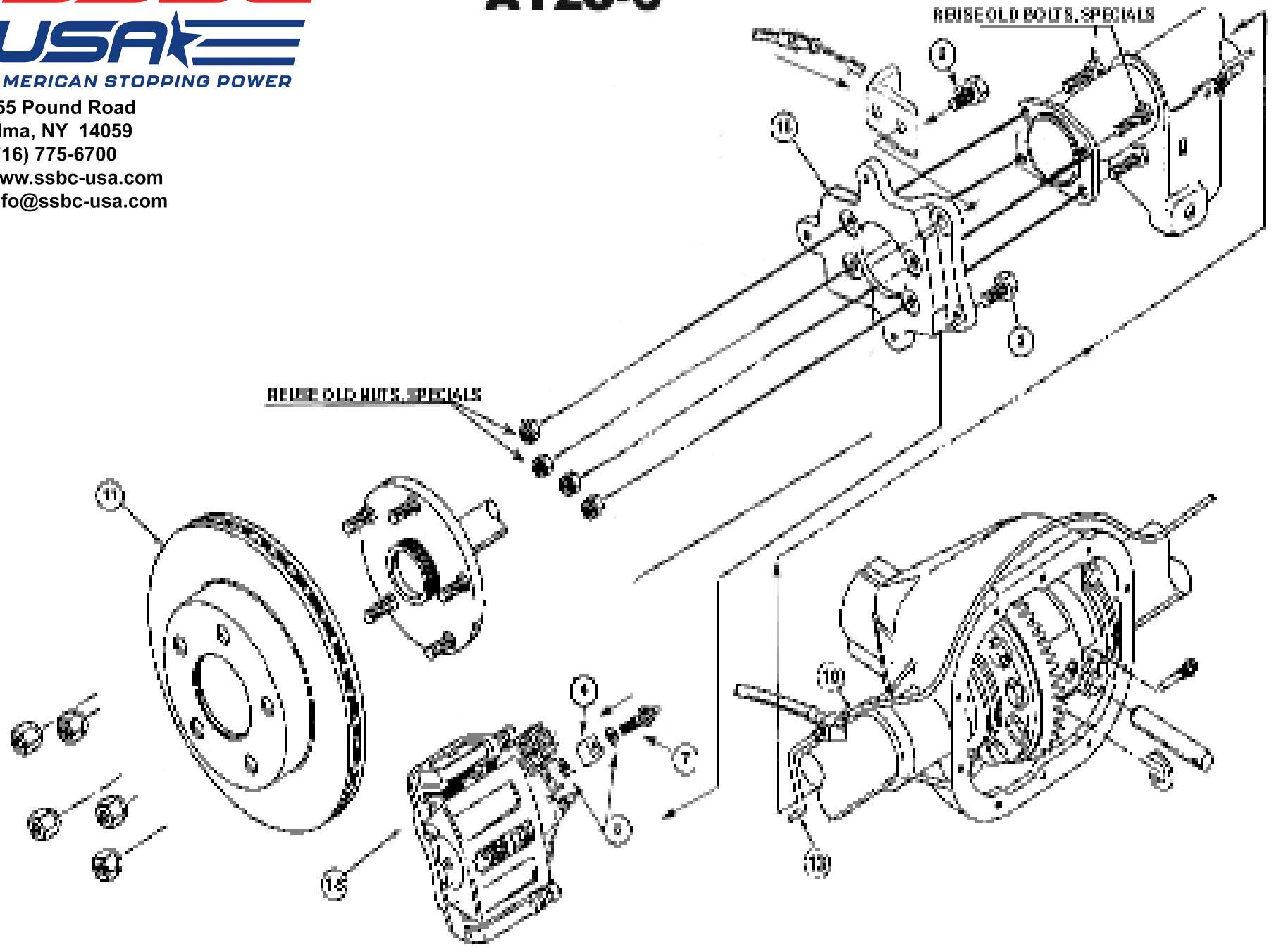
REMOVE SPRING AND SEAL FROM PISTON
RE-INSTALL TAPERED END INTO NUT;
SCREW NUT INTO DISTRIBUTION BLOCK



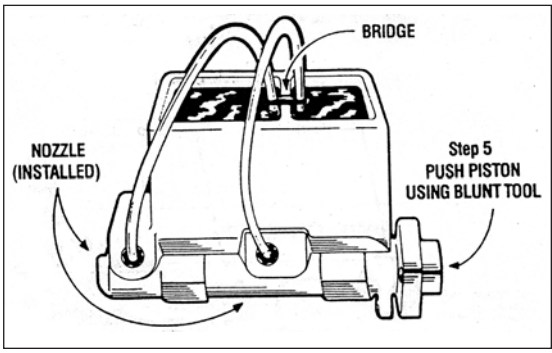
SPOOL REMOVED
FROM DISTRIBUTION/COMBO
BLOCK

SSBC USA
AMERICAN STOPPING POWER
555 Pound Road
Elma, NY 14059
(716) 775-6700
www.ssbc-usa.com
info@ssbc-usa.com

A128-6



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-USA 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.)**

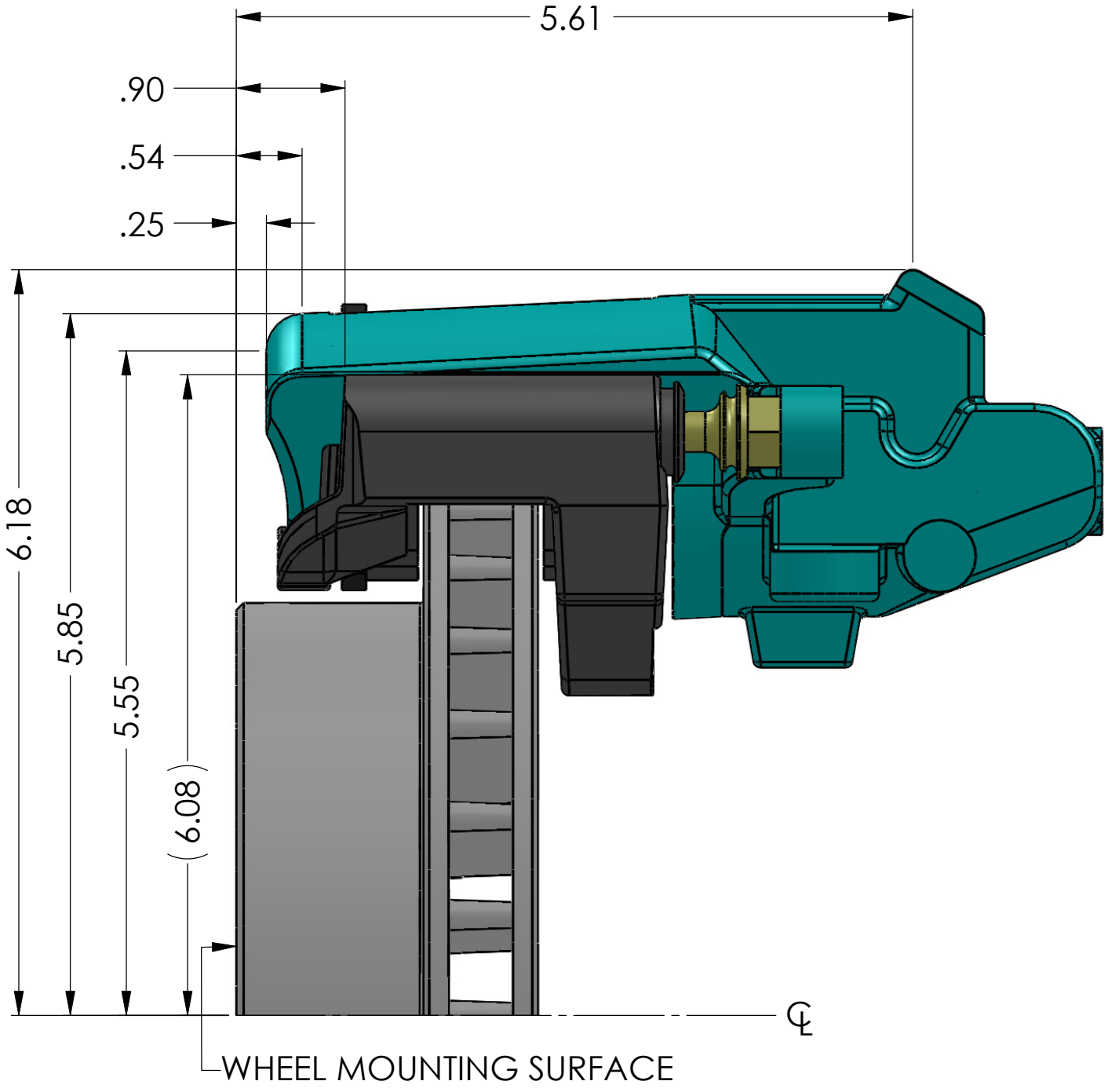
Now mount master cylinder and avoid brake fluid leaking out of front and rear ports during installation.

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.



DIMENSIONS ARE IN INCHES

TEMPLATE NO.	DO NOT SCALE DRAWING	REV
T-038		-

SSBC USA
AMERICAN STOPPING POWER
ELMA, NEW YORK 14059
(716) 775-6700
WWW.SSBC-USA.COM