



INSTALLATION INSTRUCTIONS

INSTRUCTION FOR ASSEMBLY-DRUM TO REAR DISC CONVERSION KIT

A128-1 JEEP WRANGLER 1987-89

Thank you for choosing SSBC-USA 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

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	14352



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**

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info@ssbc-usa.com**

- 1) Raise the Jeep until the wheels and tires clear the floor. Support Jeep on jack stands. Remove the wheel cover or hub cap. Remove wheel and tire from the drum.
- 2) Remove drum brake assembly as follows:
 - a) Pull off brake drum from assembly.



IF THE BRAKE DRUM WILL NOT COME OFF EASILY, RETRACT SHOES BY INSERTING A NARROW SCREWDRIVER (OR SPECIAL TOOL) THROUGH THE BRAKE ADJUSTING SLOT IN THE BACKING PLATE, AND DISENGAGE THE ADJUSTING LEVER FROM THE ADJUSTING SCREW WHILE THUS HOLDING THE ADJUSTING SCREW, BACK OFF THE ADJUSTING TOOL.

- b) Remove all shoes and hardware.
- c) Disconnect parking brake cable from actuator and pull through backing plate after compressing retaining clip.
- d) Disconnect rigid brake line from back of 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!!

- 3) Remove axle and backing plate as follows:
 - a) Remove four nuts and bolts holding the backing plate to the axle flange.
 - b) Pull out axle shaft carefully, so as not to damage shaft seal, shaft bearing or splines.
 - c) Remove backing plate assembly and discard.
- 4) Axle & Lug Studs
 - a) The lug studs in the axles must be replaced with the longer ones supplied in the kit. The studs can either be pressed out or knocked out with a hammer if the axle is carefully supported in a vise.
 - b) The new lug studs will need to be pressed into the axle shafts. If you do not have a press available any local machine shop will be able to perform this operation.
- 5) Mounting Brackets
 - a) Carefully slide axle shaft approximately 7/8 of the way back into the rear end housing.
 - b) Place the two piece caliper mounting plate over the axle between the bearing and the bearing retainer plate. The circular depression on the back of the plate becomes the new bearing retainer. Make sure the bearings fit into this depression. Place one of the large split shims into the circular depression on the bracket. The shim should be between the face of the bracket and the axle bearing. This shim will correctly position the bearing in the axle housing to maintain proper axle end play.

- c) Carefully slide the axle shaft all the way back into the axle housing. This will sandwich the mounting plate between the end of the axle tube and the original bearing retainer plate. Secure the assembly with the 3/8-24 x 1-1/4" bolts and 3/8-24" elastic stop nuts. Torque to 40 ft/lbs.
 - d) Install the 7/16"-20 x 2" bolts from the kit through the four holes in the mounting plate. These bolts should be installed from the outside. Next, slide the four 3/4" tubular spacers over each of the bolts.
 - e) Install the caliper mounting straps on the four mounting bolts. Note that the straps are not the same length. The longer strap will go on the top and the shorter ones will go on bottom. The straps should point towards the rear of the car and the ends should point in towards each other. Retain the assembly with the elastic stop nuts supplied and torque to 35-40 ft/lbs.
- 6) Rotors
- a) Thoroughly clean rotors with brake cleaner to remove the protective coating.
 - b) If the axle center pilot is 2-7/16", use the bushing provided to properly center the rotor on the axle.
 - c) Slide the rotor onto the axle shaft and temporarily secure it into place using one lug nut.
- 7) Caliper Mounting
- a) Slide the calipers into position over the rotors. Be sure to install them on the correct sides. The bleeder screws must be pointing up. Secure the calipers to the strap brackets using the 12MM bolts supplied. Torque to 80 ft/lbs.
 - b) Install the block end of the hose onto the calipers using the hollow banjo bolts and copper washers provided with the kit. Orient the hoses so they are pointed toward the axle tube and torque the banjo bolts to 20-30 ft / lbs.
 - d) Rebend the original steel lines so they can be connected to the flex hoses. Make sure to use a tube wrench so not to strip the line fittings.



MAKE SURE THE HOSES TAKE A SMOOTH BEND AND DO NOT BECOME "KINKED" WHEN THE FINAL CONNECTION IS MADE

- e) Route the parking brake cables to the levers on the calipers. Locate the supplied L-brackets and determine which location and orientation of the brackets will work best with your cables. For most vehicles the rear bolt will work best, however varying cable length as well as factors such as lift kits will determine what works best on your vehicle
 - f) Remove the elastic stop nut, install the L-bracket and reinstall and torque the stop nut. Feed the parking brake cables through the L-bracket and lock the spring clip on the outer housing into the bracket.
 - g) Compress the spring and engage the cable end into the slot of the parking brake lever on the caliper. It may be necessary to let all the slack out in the cable to complete this step.
- 8) Proportioning Valve
- a) The factory installed fixed proportioning valve is part of the distribution block normally

found below the master cylinder. This block can be modified to allow full pressure to the rear brakes. While our road tests have shown that this modification is not necessary it will help in heavy use situations. See page 5 for step by step instructions.

9) 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 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 3 or DOT 4 fluids are acceptable.
- 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 at a time starting at the wheel farthest from the master cylinder and working your way back around the wheel closest to the master. With bleeder screw open, observe bleeder. 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 for several seconds, close the bleeder valve and move on to the next wheel.



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.
- 4) With all bleeding complete, there should be approximately 3/4" to 1" of end play.
- 5) Power brake cars will experience a "drop off" of the pedal when the engine is started. This is a normal condition that signifies the booster is working.

10. Parking Brake Adjustment

- a) The caliper pistons adjust hydraulically by pumping the pedal. Do not attempt to fully adjust the pistons by using the parking brake lever.



NOTE: IF THE PISTONS BECOME EXTENDED TOO FAR, THE INNER BRAKE PAD CAN BE REMOVED AND THE PISTON CAN BE SCREWED BACK INTO THE CALIPER USING NEEDLE NOSE PLIERS OR A CALIPER ADJUSTING TOOL AVAILABLE AT MOST PARTS STORES.

- b) Make sure the parking brake lever is in the full released position.
- c) Take up the slack in the parking brake cables by adjusting the nut on the threaded rod under the car. Cables should be adjusted until they are taught but not enough to move

- the parking brake levers on the calipers.
- d) Move the parking brake handle through its full travel several times. The parking brake should hold the car from rolling but create no brake resistance when in the full released position. Make sure the brake lever is returned all the way when the parking brake is released.

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.
- c) When you are sure there are no interferences and the pedal is firm, torque the lug nuts and lower the car back onto the ground. Test drive the car and apply the brakes frequently to seat the pads.



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

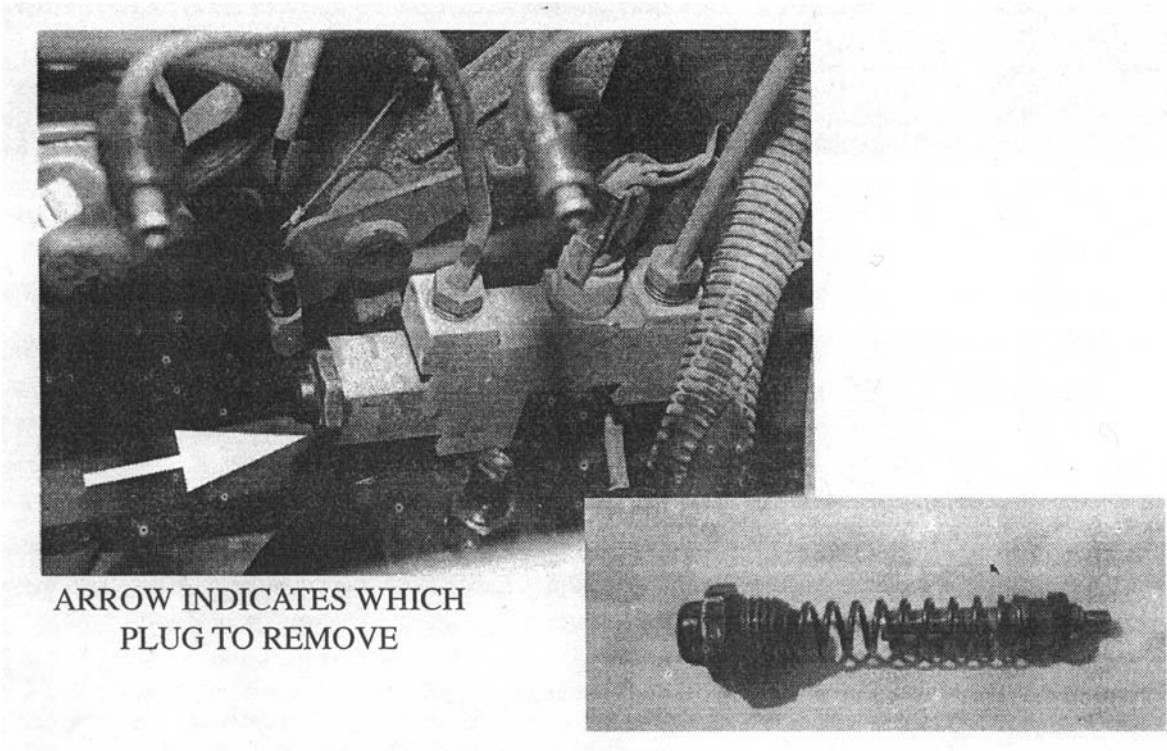
DO NOT DRIVE IN TRAFFIC UNTIL THE BRAKES SAFELY STOP THE CAR A SAFE DISTANCE WITHOUT A SPONGY PEDAL FEEL!

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

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

. NOW ENJOY TRUE PERFORMANCE BRAKING!!

Proportioning Valve Removal For Full Rear Brake Line Pressure

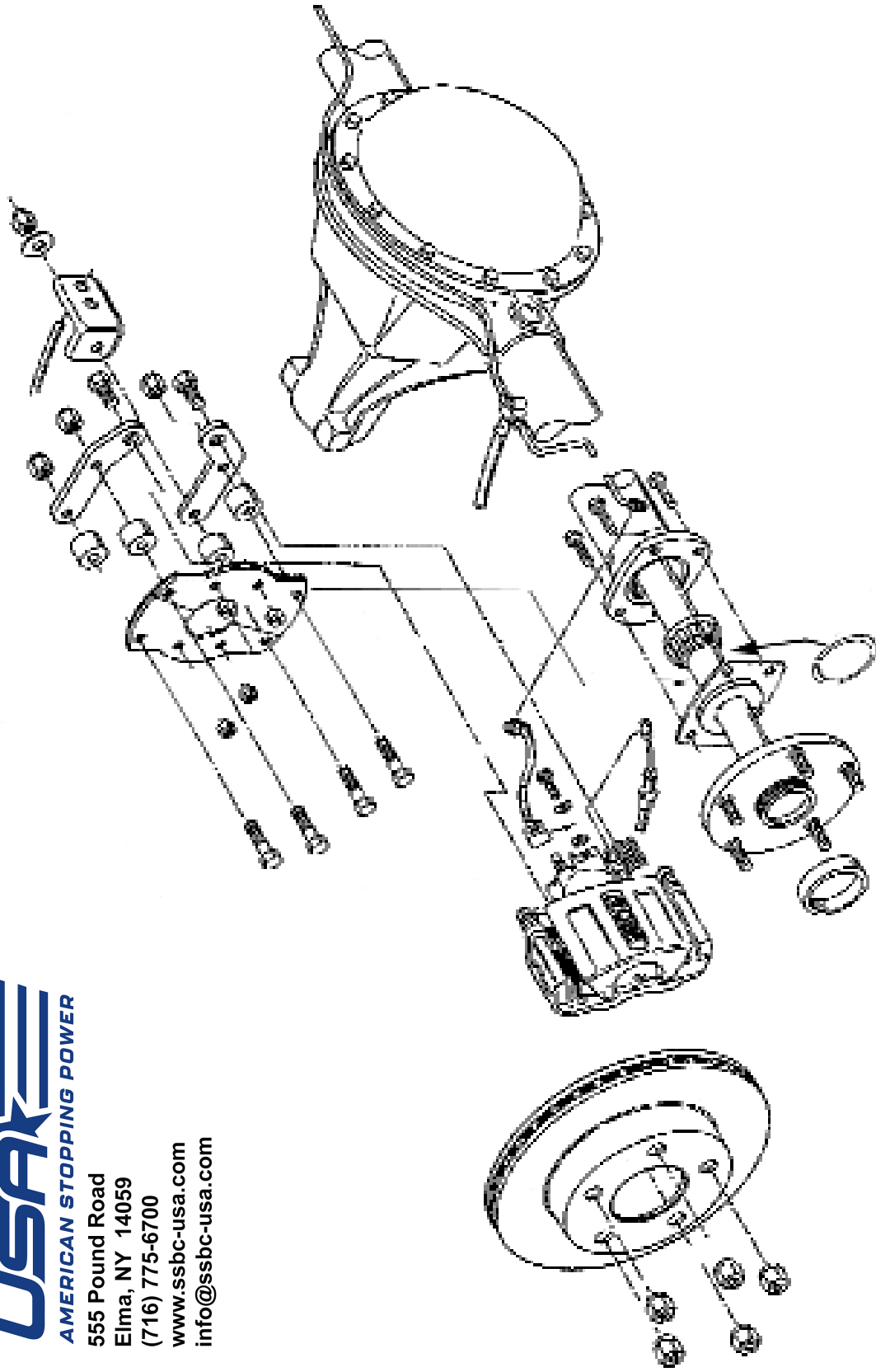


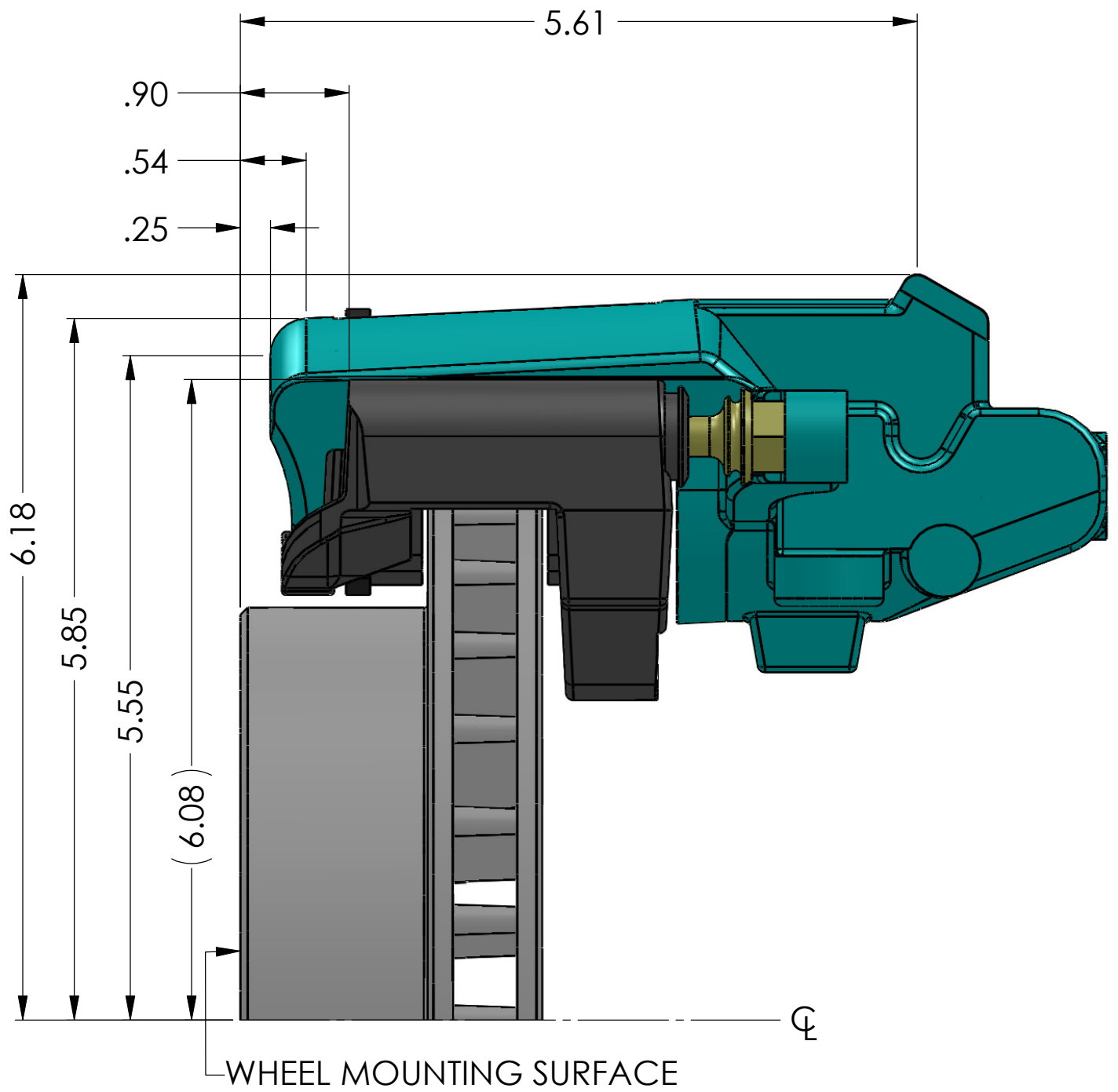
- 1) Remove Nut / Plug (with a rubber dome). **Note: It is spring loaded!**
- 2) Remove piston and all loose parts from the housing, take the seal off the piston and install the tapered side of piston into the plug. It should push in. There is an O-ring in the nut which will seal off the brake fluid.
- 3) Reinstall piston and nut assembly into block without the spring and seal.
- 4) Tighten plug snugly.
- 5) Rebleed the system and check for leaks. There will be a fair amount of air in the rear system. Refer to instructions for bleeding procedures. You should now get 1000-1200 PSI brake line pressure.

A128-1



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DIMENSIONS ARE IN INCHES

TEMPLATE NO.
T-038

DO NOT SCALE
DRAWING

REV
-

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