



# INSTALLATION INSTRUCTIONS

REAR DISC BRAKE CONVERSION KIT A125

1968-81 CAMARO & FIREBIRD 10 & 12 BOLT W/"C" CLIPS

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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 716-759-8666.

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**  
**SOCKET SET**  
**BRAKE CLEANER**

**WRENCH SET**  
**MALLET**  
**TUBE WRENCHES**  
**BRAKE FLUID**  
**GEAR OIL**

**These kits use the following pads:**

**SSBC#: 1047**  
**FMSI#: D-347**

Revised to level 6 2/28/12

**TIP: BEFORE BEGINNING INSTALLATION, SPRAY ALL FITTINGS & FASTENERS WITH PENETRATING OIL.**

**1) Drum Brake Removal**

- a) Raise the car until the tires and wheels clear the floor and support the truck on jack stands. Remove the tires and wheel assemblies from the drum.
- b) Pull the brake drums off the axle shafts . If the brake drum will not come off easily, retract the shoes by inserting a narrow screwdriver through the adjusting slot in the backing plate and back off the adjusting screw.
- c) Remove the brake shoes and all the hardware.
- d) Disconnect parking brake cable from the actuator and pull through the backing plate after compressing the retaining clip.
- e) Disconnect the rigid brake line from the back of the wheel cylinder. Always use a tube wrench on brake lines so not to strip the tube nut.

**2) Removal of the Axles & Backing Plates**

- a) Remove differential cover and drain all fluid into a drain pan.
- b) Working through the open case, remove the pinion shaft lock bolt (7mm hex).
- c) Push pinion lock shaft out of the rearend housing.
- d) Push the axle shafts inward and remove the “C” locks from the ends of the axle shafts.
- e) Carefully pull the axle shafts out of the rearend being careful not to damage the axle bearings or seals.
- f) Remove the four nuts and bolts that secure the backing plates to the rearend housing and remove and discard the backing plates.

**3) Installation of Caliper Mounting Brackets**

- a) The caliper mounting brackets are identical. Install the brackets so the top edge of the bracket points towards the front of the vehicle on the passenger side and towards the rear of the vehicle on the driver side.
- b) Secure the brackets to the ends of the axle using the 3/8” bolts and elastic stop nuts supplied with the kit. Torque the bolts to 40 ft/lbs.
- c) Install the 7/16”-24 x 2” bolts from the outside into the four bolt holes in each mounting plate.
- d) On the backside of the plate, slide one of the 1/2” 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 bottom and the shorter one will go on the top. The straps will point towards the rear of the car on the passenger side and towards the front of the car on the driver side. The ends will point in towards each other.
- f) Install the 7/16”-24 elastic stop nuts on the bolts and torque them to 65-70 ft / lbs.

**4) Installation of Axles Shafts and Rotors**

- a) Reinstall the axle shafts, C-locks, lock pin and lock bolt in the reverse of removal.



**BE SURE TO INSTALL A NEW DIFFERENTIAL GASKET AND REFILL THE REAREND WITH THE PROPER GEAR OIL TO THE PROPER LEVEL.**

- b) Clean the rotors thoroughly with brake cleaner to remove the protective packing coating.
- c) Slide the rotors into position on the ends of the axle shafts and secure them with at least one lug nut.

## 5) Caliper Installation

- a) Install the hollow block end of the flex hoses to the caliper using the hollow banjo bolts and copper washers provided with the kit. Orient the hoses so they will point towards to rearend housing and torque the banjo bolts to 20-30 ft / lbs.
- b) Place caliper over the rotor and secure it to the mounting brake using the 12mm bolts supplied. Torque the bolts to 80-100 ft / lbs. The bleeder screws should be pointing down and the parking brake levers will point up. The calipers will be bled through the bleeder screws in the head of the banjo bolts.



**NOTE: THE PARKING BRAKE CABLE "L" BRACKETS SHOULD BE INSTALLED ON THE LOWER CALIPER MOUNTING BOLT.**

## 6) Brake Lines Installation

- a) Remove the original steel lines from the original rear flex hose.
- b) Install the steel lines supplied with the kit and bend them along the rearend housing so they can be connected to the flex hose at the calipers.
- c) Secure the new lines to the axles with the original line clips that are welded to the axle.



**MAKE SURE THE FLEX HOSES TAKE A SMOOTH BEND AND DO NOT BECOME KINKED OR TWISTED.**

## 7) Adjustable Proportioning Valve

- a) The (optional) adjustable proportioning valve can be installed anywhere in the front to rear brake line so long as it's before the rear flex hose and after the factory distribution block, if it is still being used (P/N A0707).
- b) By starting with the valve in the full increase position and making some test stops, you can gradually dial down the rear pressure until the front and rear brakes reach lockup at the same time.

## 8) Parking Brake Cables

### Driver Side

- a) Remove factory cable from equalizer.
- b) Install new cable into equalizer.
- c) Route the cable under the axle, then loop it around to the caliper.
- d) Install cable end into boss on the caliper.
- e) Hook the inner cable into the lever.

### Passenger Side

- a) Feed the parking brake cables through the cable L-brackets and lock the outer housing into the bracket.
- b) Feed the cable through the caliper casting. Compress the cable spring and lock the end of the cable into the parking brake lever of the caliper.

**NOTE: IT MAY BE NECESSARY TO LET ALL THE SLACK OUT OF THE CABLES AT THE FRONT CABLE ADJUSTER.**



***IF YOUR STOCK PARKING BRAKE CABLES ARE NOT COMPATIBLE, YOU WILL NEED TO PURCHASE OTHER CABLES OR HAVE CUSTOM CABLES MADE. THESE PARTS ARE NOT AVAILABLE FROM SSBC.***

## 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.
- 6) Pedal end play can be adjusted under the dash on non power cars and between the booster and master on power brake cars.

## 10) Parking Brake Adjustment

- a) Advance pistons of calipers so that clearance between pads and rotors is 1/32-1/16". Piston should be advanced using hydraulic system instead of parking brake levers. About 40 pumps of the pedal are required to extend the pistons to the correct clearance.



**IF PISTON HAS BEEN EXTENDED TOO FAR, TURN PISTON BACK INTO CALIPER. IF DESIRED, USE SPECIAL TOOL KD-2545 AVAILABLE AT MOST PARTS STORES. A PAIR OF NEEDLE NOSE PLIERS WILL ALSO WORK.**

- 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 when the parking brake handle is in the released position.
- 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 on the calipers returns all the way when the parking brake handle 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.
- 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.
- d) The rear brake pressure can be adjusted by turning the knob on the adjustable proportioning valve. It should be adjusted so the rear brakes do not lock up before the fronts.



**NOTE: 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!**

**NOTE: For frequently asked questions and technical reference information please visit the tech section of our website at [www.ssbrakes.com](http://www.ssbrakes.com).**

**TECH LINE --** If technical help is required, please call 716-759-8666.

**NOW ENJOY TRUE PERFORMANCE BRAKING!!**

## **REPLACEMENT PARTS & SPECIFICATIONS**

The calipers and brake pads used in this conversion kit are the same as those used from the factory on 1987-88 Ford Thunderbird Turbo Coupe. If you have a problem locating replacement pads, have your parts store reference the F.M.S.I. #D347. If you should need replacement rotors, they are only available from your distributor or **STAINLESS STEEL BRAKES CORPORATION** directly.

If you are using or ever plan on using aftermarket axle shafts, the following rotor dimensions will be important to keep in mind.

ROTOR HAT INNER DIAMETER	-	6.330"
ROTOR HAT THICKNESS	-	.240"
PILOT HOLE INNER DIAMETER	-	2.840"



Stainless Steel Brakes Corporation

11470 Main Road

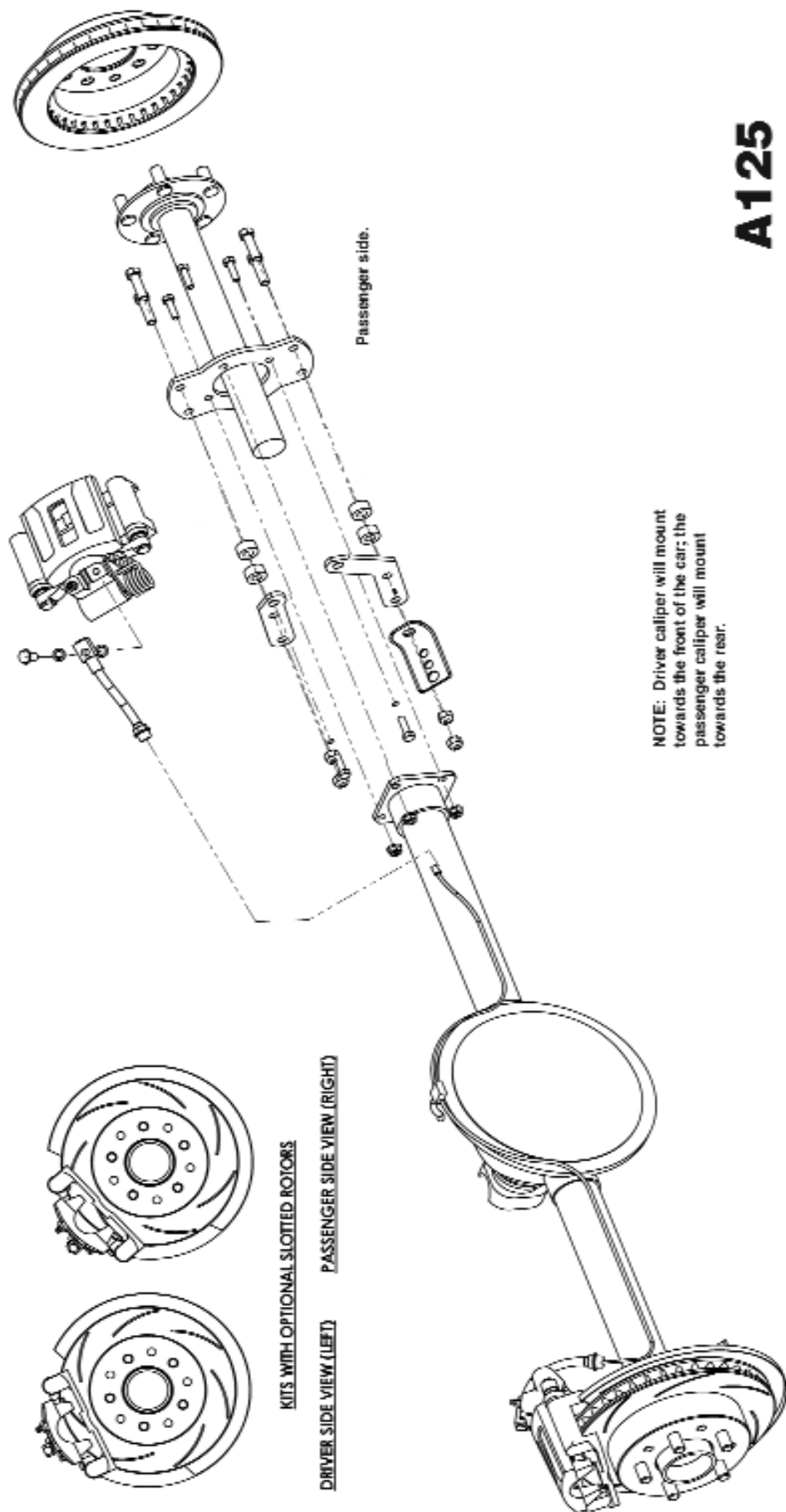
Clarence, NY 14031

(716) 759-8626

Fax: (716) 759-8686

[www.ssbbrakes.com](http://www.ssbbrakes.com)

[tech@ssbrakes.com](mailto:tech@ssbrakes.com)



# A125 A125-F

NOTE: Driver caliper will mount towards the front of the car; the passenger caliper will mount towards the rear.





Stainless Steel Brakes Corporation

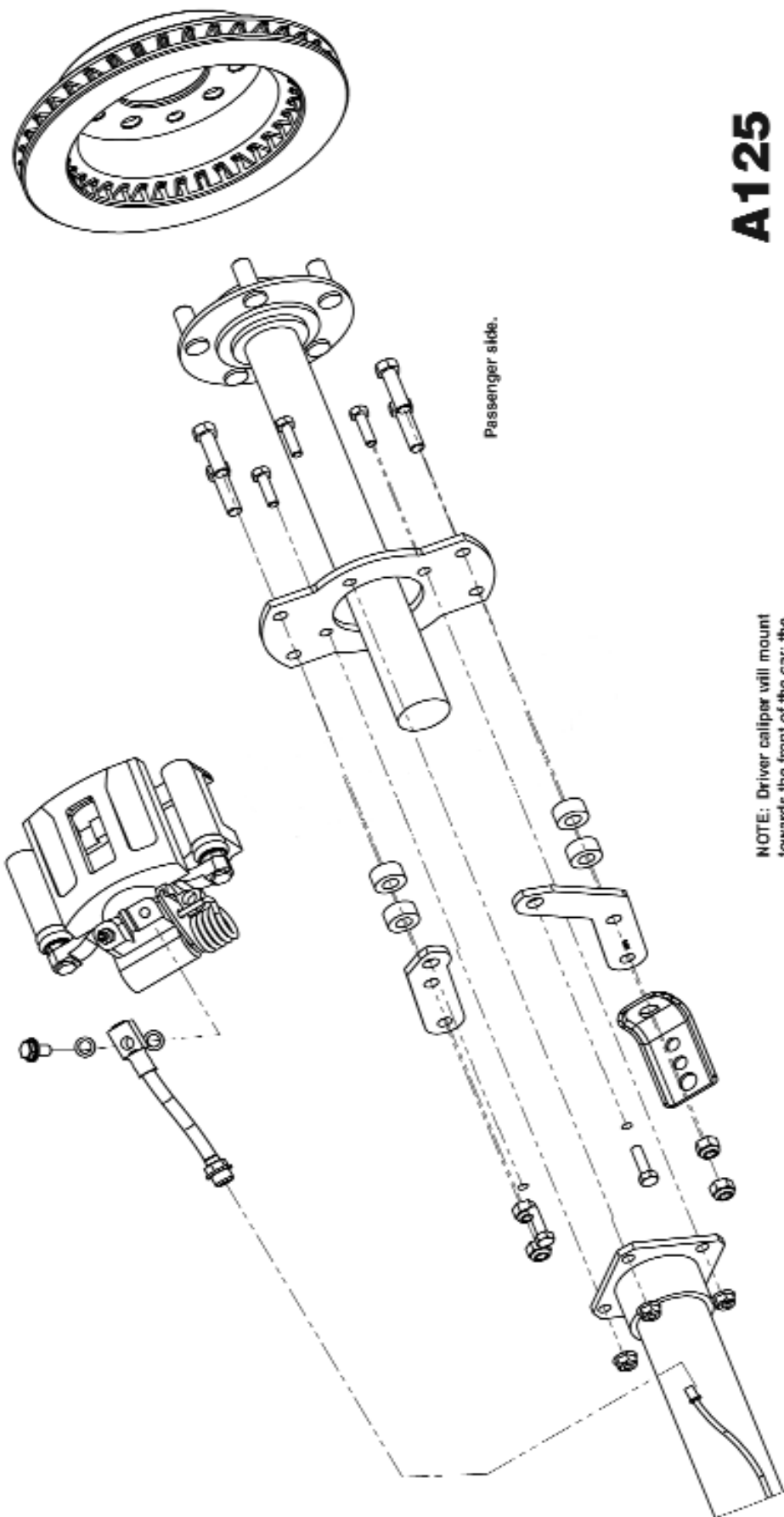
11470 Main Road  
Clarence, NY 14031

(716) 759-8556

Fax: (716) 753-8586

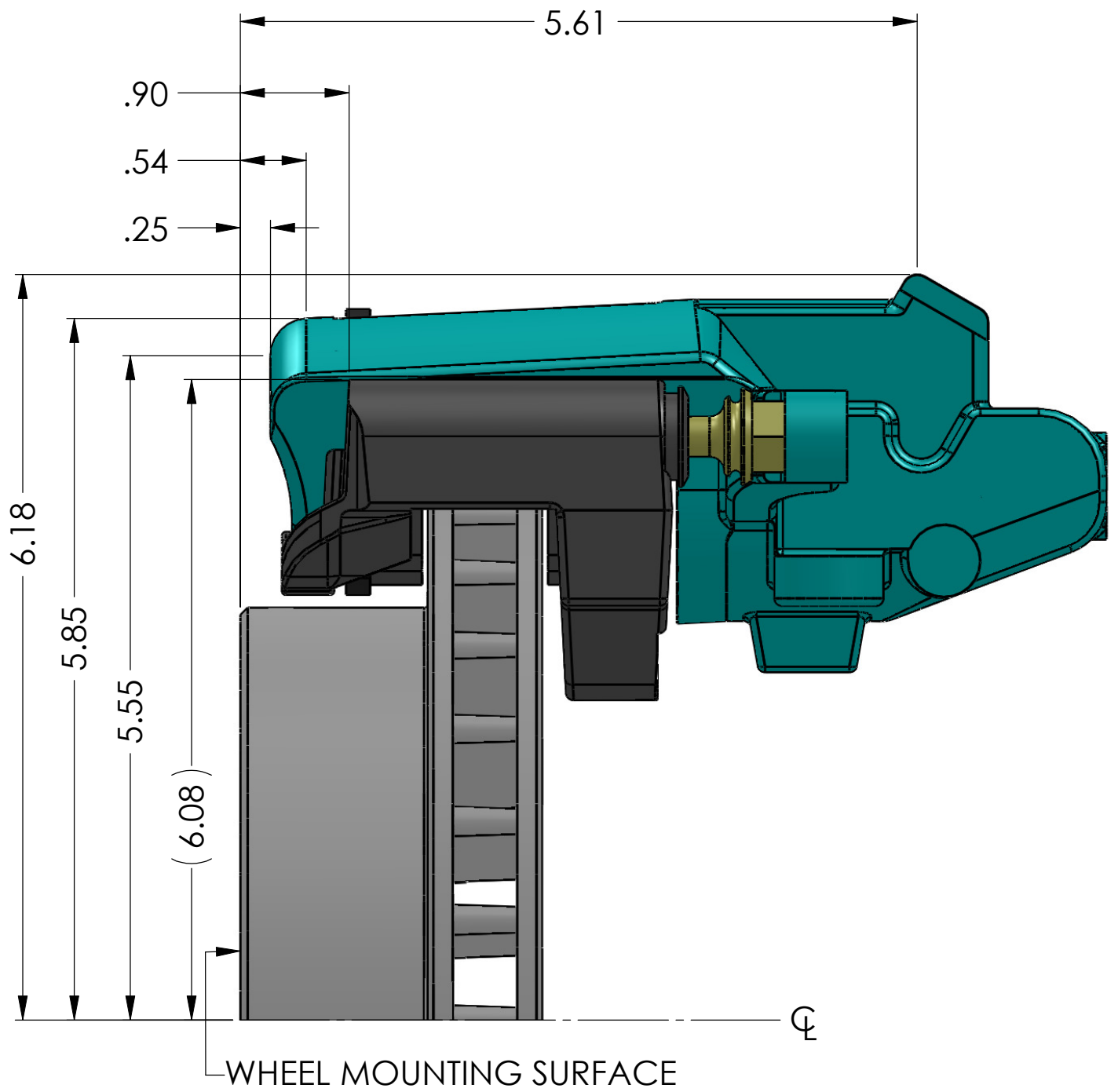
[www.ssbbrakes.com](http://www.ssbbrakes.com)

[tech@ssbrakes.com](mailto:tech@ssbrakes.com)



# A125 A125-F





DIMENSIONS ARE IN INCHES

TEMPLATE NO.  
T-038

DO NOT SCALE  
DRAWING

REV  
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**SSBC**

STAINLESS STEEL BRAKE CORP.

CLARENCE, NEW YORK 14031-1720  
Ph: 716-759-8666 / 800-448-7722 ~ Fx: 716-759-8688  
WWW.SSBRAKES.COM