

# ***DYNATRAC PRODUCTS***

# ***V1.3***

## **2007-2017 Jeep JK Wrangler ProGrip Performance Brake Kit – Front & Rear**

### **Required tools:**

- 13mm wrench
- 15mm wrench
- 18mm socket
- 21mm socket
- Calibrated torque wrench.
- Anti-Seize compound.

### **Required Wheels:**

- 17" or larger
- 4.75" backspace or less
- or
- OEM Rubicon wheel with 1.50" spacer

### **Preparation and Inspection Checks:**

1. Read all instructions completely. Only perform this installation if you are comfortable working on brake components. **\*\*\*For wheel fitment see page 12\*\*\***
2. Inspect all boxes and packing material to expose all the parts in the kit. Using the bill of material attached, verify that the kit is complete. Do not start the installation until you are sure you have everything you need. Allow yourself plenty of time. You will need anywhere from 1 to 3 hours depending on your skill and experience level.



**WARNING: Always wear proper safety equipment including safety glasses and gloves while working with tools. Improper use of tools and equipment can cause injury or death.**



3. Place the vehicle on jack stands and remove the front wheels and tires. Make sure the vehicle is fully secured before working on your brake system. In these instructions we will start with the Front Brake system and finish with the rear, but it is okay to start in the rear.

**⚠ WARNING:** Anytime you work on a Brake System, always remember to pump the brakes to get a firm pedal before starting the engine. Failure to do so can cause injury or death to yourself and those around you.

### **FRONT BRAKE ASSEMBLY**

4. With the front wheel off, remove the Brake Caliper from the Caliper Bracket. Use a 13mm wrench on the outside and a 15mm wrench to hold the inside nut.

**ⓘ INFORMATION:** The caliper piston must be compressed to fit new brake pads and rotors; this is the best time to do that.



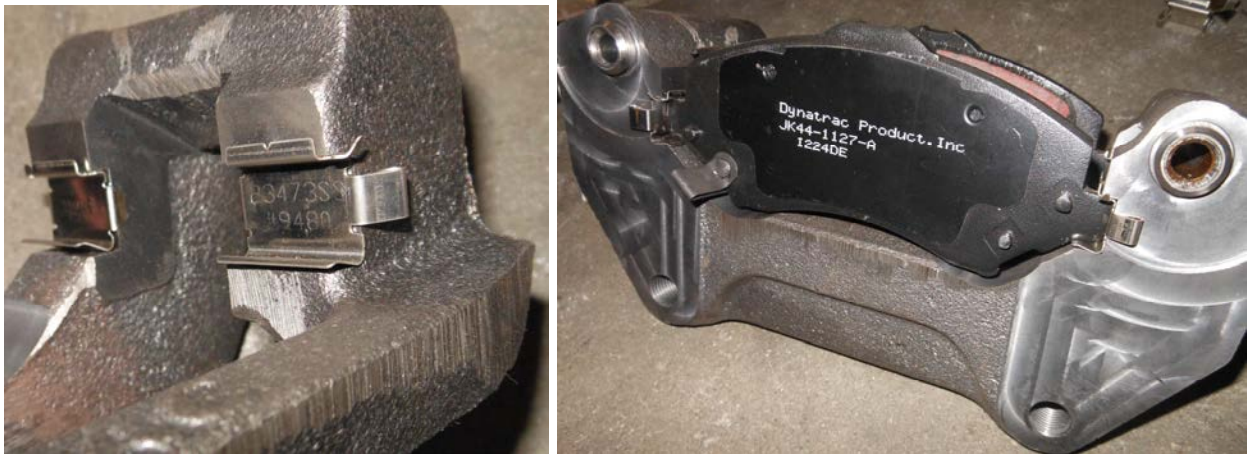
5. Carefully hang the calipers without stretching the brake lines. Do NOT disconnect the brake line.
6. Uninstall the factory caliper bracket from the steering knuckle using the 21mm socket. This is best done with a breaker bar or impact gun because the factory bolts have thread locker. Removing the ABS line will allow better access to the bolt head. Keep the factory bolts close as they will be reused on install.



7. Remove the factory Brake Rotor. It is a good idea to clean all the brake and axle components at this time.
8. Place the ProGrip Front Rotor onto the wheel hub.



9. Load the new Dynatrac Caliper Bracket with the ProGrip pads and clips. NOTE: The clips are directional and should be installed as seen in the picture below.



10. Fasten the Dynatrac Caliper Bracket to the Steering Knuckle with the factory bolts. Apply thread locker to the bolts and torque to 120 lb ft.



11. Now, remove and clean the caliper sliding pins from the factory caliper bracket. Fully clean and grease the pin and the inside of the boot before installing into the Dynatrac caliper bracket.



12. Once the pins are prepped and slid into the caliper bracket, the caliper can be installed onto the bracket. Take care when sliding the caliper over the new pads. Press in the caliper piston further if it will not fit over the new brake pad assembly.



13. Apply thread locker and Torque the small caliper mounting bolts to 26 ft. lbs with a 13mm socket.

**⚠ WARNING:** Make sure you have routed all ABS and brake lines clear of suspension compression and both directions of steer. Failure to do so could result in the loss of brakes.

**⚠ WARNING:** Use a calibrated torque wrench on all bolts. Always torque bolts in the order listed.

14. Now fit the wheel and tire onto the wheel hub to make sure you have no interference between the wheel and the caliper. Spin the wheel to confirm that there is no dragging. You can now reinstall the front wheels and begin the rear brakes.

### **Begin Rear Brake Assembly:**

15. Lift the rear of the vehicle and place jack stands under the axle or the frame. Make sure it is safe to work under the vehicle.

16. Remove the rear wheels and prepare to work on the brakes.

**ⓘ INFORMATION:** The caliper piston must be compressed to fit new brake pads and rotors; this is the best time to do that.

17. The first step is to remove the rear caliper body from rear caliper bracket using a 13mm and 15mm wrench. Hang the caliper carefully and make sure the brake line is not stretched. Do NOT disconnect the brake line.



18. Next, the lower swaybar link bolt will have to be removed in order to reach the rear caliper bracket bolt.



19. Now, uninstall the Stock Rear Caliper Bracket using an 18mm socket and set the hardware to the side for reuse.



20. This is the best time to clean all the mating surfaces of the rotor and caliper, along any other dusty components.

21. Next, Install the new Dynatrac Rotor onto the shaft flange.



22. It is easiest to load the caliper bracket before installing it on the backing plate. Push the new clips into the bracket and slide in the new brake pads. NOTE: Clips are directional, make sure you install them correctly.



23. Once the caliper bracket is loaded, install it onto the backing plate using the factory fasteners. NOTE: Use thread locker on these bolts and torque to 77 ft lbs.



24. The lower sway bar link bolt can be reinstalled using the factory hardware.
25. Clean the caliper pins and apply a quality grease before sliding them into the Dynatrac Caliper bracket.



26. Finally, Install the caliper onto the new caliper bracket using the stock hardware. Use thread locker on these small bolts and Torque to 26 ft lbs.
27. The last step is to install the wheels and make sure they spin freely without any rubbing on the perimeter of the caliper body.



28. Once your wheels are back on the vehicle and torqued to the recommended 110 ft lbs., you should confirm that your brake fluid level is at the proper level. Test the brake pedal for pressure and make sure there are no leaks or loose bolts.

**⚠ WARNING: PUMP THE BRAKES TO GET A FIRM PEDAL BEFORE STARTING THE ENGINE. Failure to do so can cause injury or death to yourself and those around you.**

## **BRAKE BED IN PROCEDURE**

29. The first time you drive the vehicle be aware there will be limited stopping power as the rotors and pads break in.
30. To properly bed in this brake system you should take precaution in the first 200 miles of urban use. During this time try not to make any panic stops. Only slam the brakes in an emergency.
31. Start with 5 instances of 25-5 mph deceleration with light pedal force. Try not to hold the brakes at a complete stop as this can diminish the effectiveness of the bed in procedure.
32. Next, move to 40-5 mph deceleration with moderate pedal force. Repeat 5 times. Again, try not to hold the brakes at a complete stop.
33. At this point you should have a good feel for how your new ProGrip Brake Upgrade is working. It should become more effective as you bed in the brake pad friction surface into the brake rotor.
34. After about 200 miles of urban driving, the final procedure is to complete 5 attempts of 60 mph – 20 mph at strong pedal force but without ABS intervention. This will also help you understand the effectiveness of your brakes for any emergency situations.



**WARNING: Deceleration should only be done in a safe environment. Be aware of vehicles around you and do not slam the brakes with vehicles behind you.**

35. Check the torque on your lug nuts every 500 miles.



**WARNING: Failure to check bolt and lugnut torque can cause serious accident, component failure, serious injury or death.**

## **Bill of Material**

<b>Jeep JK ProGrip Brake Kit</b>		
<b>JK44-2X1125-A</b>		
<b><u>Description</u></b>	<b><u>Quantity</u></b>	<b><u>Dynatrac P/N</u></b>
Caliper Bracket, Front	2	JK44-2B292-C
Rotor, Front	2	JK44-1125-A
Brake Pads, Front	1	JK44-1127-A
Hardware Kit, Clips	1	JK44-2B164-A
Caliper Bracket, Rear	2	JK44-2B292-D
Rotor, Rear	2	JK44-1125-B
Brake Pads, Rear	1	JK44-1127-B

Torque all Bolts to the following Specs

<b>Fastener</b>	<b>Ft. Lbs.</b>	<b>Nm</b>	<b>Threadlocker</b>
Front Caliper Mounting Bolts	26	35	Loctite 271
Rear Caliper Mounting Bolts	26	35	Loctite 271
Front Caliper Bracket Bolts	120	163	Loctite 271
Rear Caliper Bracket Bolts	77	105	Loctite 271
Stabilizer Bar Nut/Bolt	75	102	None
Lug Nuts	110	149	None

# Dynatrac ProGrip Kit

## *Wheel Fitment Instructions*

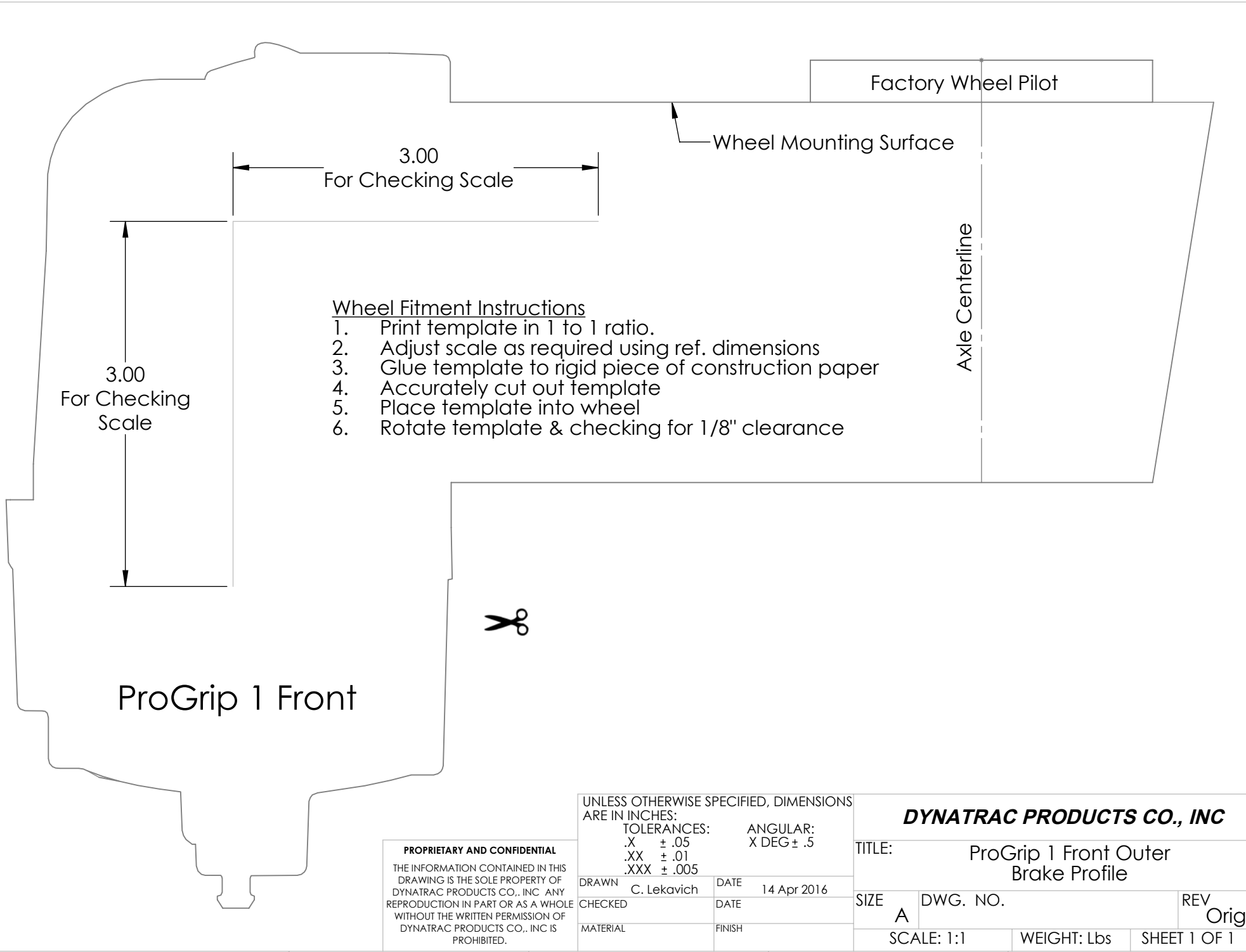
---

1. **Print out the brake template in a 1 to 1 ratio.** In printer preferences, start with selecting “actual size” and not “fit to page.”
2. After printing, check that the scaling is correct on both the horizontal and vertical axes with the reference dimensions. If the 3 inch measurement is not exactly three inches then proceed to adjust the scaling of the document.
3. To help make the template more rigid, glue the brake profile sheet to a piece of construction paper or a manila folder.
4. Carefully and accurately cut the template out along the outer profile line.



5. Take your completed profile and place it into the wheel. Make sure the wheel pilot is centering your cutout and that the cutout is resting on the wheel mounting surface.
6. Rotate the template about the axle centerline. **Dynatrac recommends that you have a minimum clearance of .125” between your template and the wheel.**

*Please check wheel fitment prior to purchasing the kit or before you buy new wheels. Dynatrac does not recommend the use of wheel spacers. If there is interference between the profile and the wheel you are checking then the wheel is not ideal for this kit.*



Wheel Fitment Instructions

1. Print template in 1 to 1 ratio.
2. Adjust scale as required using ref. dimensions
3. Glue template to rigid piece of construction paper
4. Accurately cut out template
5. Place template into wheel
6. Rotate template & checking for 1/8" clearance



ProGrip 1 Front

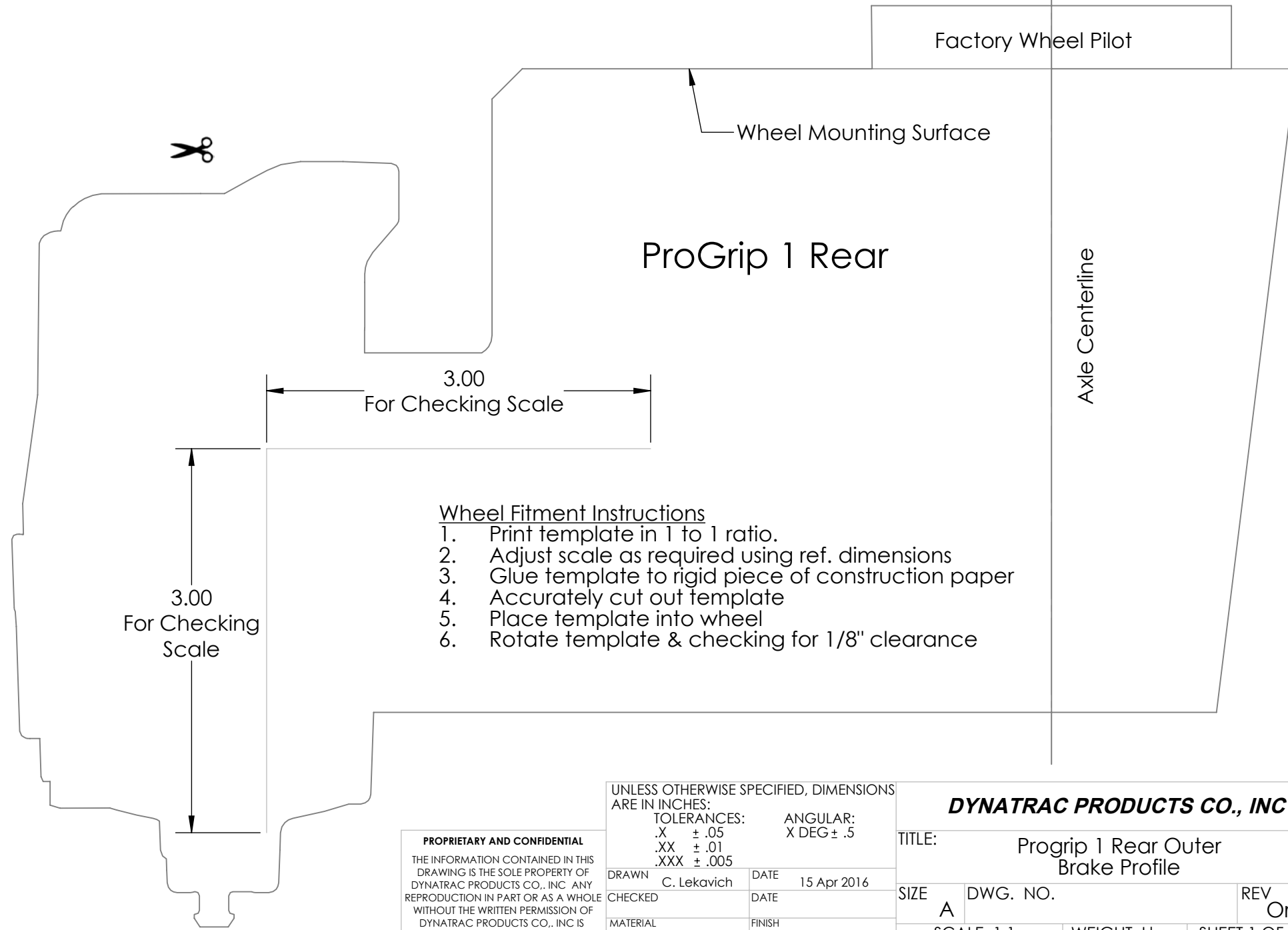
**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYNATRAC PRODUCTS CO., INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYNATRAC PRODUCTS CO., INC IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES:

TOLERANCES:		ANGULAR:	
.X	± .05	X DEG	± .5
.XX	± .01		
.XXX	± .005		
DRAWN	C. Lekavich	DATE	14 Apr 2016
CHECKED		DATE	
MATERIAL		FINISH	

<b>DYNATRAC PRODUCTS CO., INC</b>			
TITLE: ProGrip 1 Front Outer Brake Profile			
SIZE	DWG. NO.	REV	
A		Orig	
SCALE: 1:1		WEIGHT: Lbs	SHEET 1 OF 1

Learn more about brakes, pads, rotors on our website.



# ProGrip 1 Rear

Axle Centerline

Factory Wheel Pilot

Wheel Mounting Surface

3.00  
For Checking Scale

3.00  
For Checking Scale

### Wheel Fitment Instructions

1. Print template in 1 to 1 ratio.
2. Adjust scale as required using ref. dimensions
3. Glue template to rigid piece of construction paper
4. Accurately cut out template
5. Place template into wheel
6. Rotate template & checking for 1/8" clearance

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYNATRAC PRODUCTS CO., INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYNATRAC PRODUCTS CO., INC IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES:	
TOLERANCES:	ANGULAR:
.X ± .05	X DEG ± .5
.XX ± .01	
.XXX ± .005	
DRAWN C. Lekavich	DATE 15 Apr 2016
CHECKED	DATE
MATERIAL	FINISH

<b>DYNATRAC PRODUCTS CO., INC</b>		
TITLE: ProGrip 1 Rear Outer Brake Profile		
SIZE A	DWG. NO.	REV Orig
SCALE: 1:1	WEIGHT: Lbs	SHEET 1 OF 1