

# Strange

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Oct 19, 2020

## PRO SERIES 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4118WC - Camaro Disc  
Spindles

**APPLICATIONS**  
1982-1992 Camaro, Firebird,  
Trans Am

### Before you begin installation:

-Strange Engineering brake kits are designed for DRAG RACING ONLY!

-Read these instructions thoroughly and save for future reference.

-If after reading these installation instructions, you have any questions or comments, please do not hesitate to call us.

**Note:** If using WELD "V" series wheels, a modification to either the hub or the wheel must be preformed for the wheel to fit.

KIT CONTENTS				
ITEM#	PART#	QTY	DESCRIPTION	
1	A1028A	10	1/2"-20 x 2.5" Wheel stud	
2	A1028B	10	1/2" I.D. Wheel stud washer	
3	B4148C	4	3/8"-16 x 1.00" FHSCS Caliper bracket bolt	
4	B1301E	4	3/8"-24 Press nut (Installed in B4110B)	
5	B1320H	2	Inner hub bearing cup (Timken LM67010 installed in B1759E)	
6	B1320J	2	Inner hub bearing cone (Timken LM67048)	
7	B1759E	2	Front hub "LF" 4.75" B.C.	
8	B1759C	2	Outer hub bearing cup (Timken M12610 installed in B1759E)	
9	B4170B	2	1/8" Front Wheel Spacer	
10	B1729A	2	Hub seal (C.R. 19748)	
11	B1759D	2	Outer hub bearing cone (Timken M12649)	
12	B1301H	16	3/8" I.D. x 0.025" Thick caliper shim	
13	B1301J	4	3/8" I.D. x 1/16" Thick caliper washer	
14	B5000Y	4	3/8"-24 x 1.125" Caliper bolt	
15	B5010	4	Soft Metallic 4-piston caliper pad	
16	B5002	1	Right hand 4-piston caliper	
17	B5004	1	Left hand 4-piston caliper	
18	P2316	2	1/8" NPT x -3AN Fitting (Installed in B5002 & B5004)	
19	B2795	1	Right hand HD/MD tapered rotor	
20	B2796	1	Left hand HD/MD tapered rotor	
21	B4118A	2	Caliper mount bracket	
22	B4154E	2	Aluminum hub cap	
23	S3520F	2	#222 Buna O-ring (Installed on B4154E)	

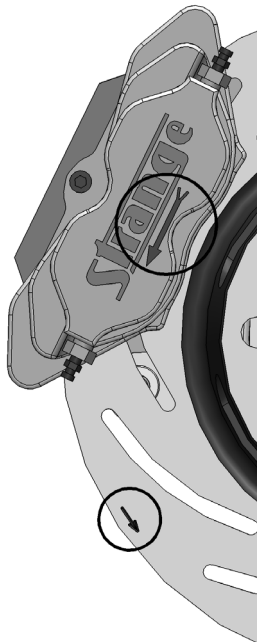
WARNING - RACING IS HAZARDOUS - STRANGE BRAKES ARE FOR LEGAL DRAG RACING ONLY

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### Installation instructions

Figure # 1



1. Raise and support front of vehicle on a level surface using suitable equipment.
2. Remove wheel, stock disc, hub, brake line, and backing plate/caliper assembly from spindle.
3. Clean and inspect spindle for damage (spun wheel bearings, stripped threads, etc.) and repair or replace as needed. Inspect upper and lower ball joints for excessive play and replace as needed.
4. Drill holes to 5/16" and tap top and bottom dust shield holes to 3/8"-16. The top mounting hole should be drilled and tapped at least one inch deep. Drill and tap the bottom hole through. See Figure #3.
5. Cut off the upper and lower caliper mounting ears at a distance of approximately 5/8" from the center of the caliper mounting bracket holes (the holes drilled in the previous step) as shown in Figure #3.
6. Mount caliper bracket (21) with the press nuts (4) facing outboard side of vehicle using the 3/8"-16x1" bolts (3). Torque to 35ft lbs.
7. Install 1/2" Dia. wheel studs (1) in front hub (7) using 1/2" I.D. wheel stud washer (2) and a small amount of BLUE Loc-tite®. Torque all studs to 65 ft-lbs. Note: Consult your wheel and/or lug nut manufacturer for proper lug nut torque.
8. Pack the inboard (6) and outboard bearing cone (11) with a suitable wheel bearing grease. Note: A bearing packer is recommended for this procedure. If one is not available work as much grease as possible into the cage and around the rollers.
9. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (5, 8) and slide the inboard bearing cone (6) into hub (7).
10. Press the hub seal (10) into the inboard side of the hub (7) flush to the outside.
11. Slide the hub assembly onto the spindle then slide the outer bearing cone (11) into the hub (7).
12. Install the stock spindle washer and nut.
13. Mount the wheel and tire assembly on the hub and snug the lug nuts.
14. While rotating the wheel, torque the spindle nut to approximately 20 ft-lbs.
15. Loosen the spindle nut until the wheel spins freely and there is no end play.
16. Install the cotter pin, aluminum hub cap (22), and remove the wheel and tire.
17. Slide the wheel spacer (9) and rotor (19, 20) over the wheel studs flush to the face of the hub (7).

**Note:** Minimum clearance between the top caliper mounting bracket bolt and the inboard face of the rotor should be 1/16"

**Note:** Slotted rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1).

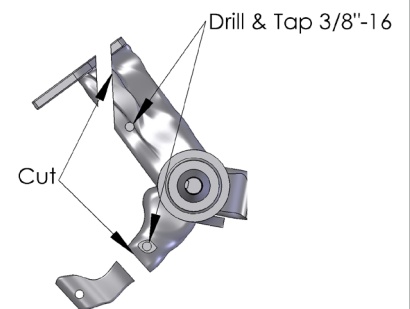
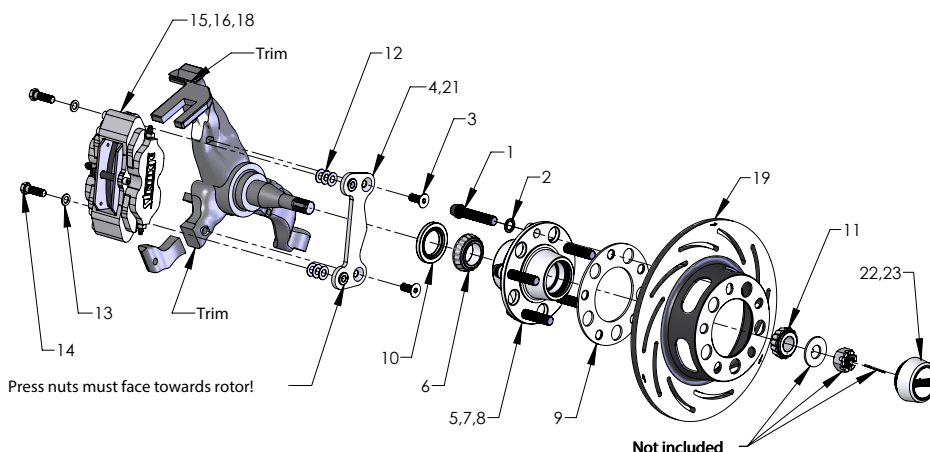
- Please read B1850 instructions for complete caliper instructions.

18. Attach caliper (16, 17) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (14) with red loctite and 3/8" I.D. flat washers (13). Use 3/8" I.D. caliper shims (12) to center the caliper over the rotor, making sure pads contact the rotor evenly. Use any remaining shims under the head of the 3/8" Dia. Caliper bolt to prevent the bolt from contacting the rotor. Torque the caliper mounting bolts (14) to 35 ft-lbs.
19. Connect the hydraulic lines to the calipers. Calipers are tapped to 1/8"-27 NPT and supplied with -3AN fittings. Use proper adapters to connect them to existing lines or use new -3AN braided steel line (teflon lined). Bleed the calipers with DOT 4 or DOT 5.1 brake fluid ONLY .
20. A proper break in procedure is required to avoid brake fade and uneven rotor deposits from the pads. It consists of 8-10 brake applications increasing in harshness while allowing the brakes to cool slightly in between; do not keep the brakes applied between stops. After the last stop the brakes should be allowed to cool completely.

**Notes:** A proper break in procedure is required to avoid brake fade and uneven rotor deposits from the pads. It consists of 8-10 brake applications increasing in harshness while allowing the brakes to cool slightly in between; do not keep the brakes applied between stops. After the last stop the brakes should be allowed to cool completely. Operate the vehicle in a cautious manner until you determine that the brakes are functioning properly. Routinely check and re-torque all bolts.

FIGURE # 2: Exploded B4116WC Assembly View

FIGURE # 3: Spindle Cuts



Item#	Torque spec (ft-lbs)
1	65
3,9	35
14*	35

\*Must apply red loctite