

# Strange

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## PRO SERIES 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4184WC - for Mopar  
applications

**APPLICATIONS**  
2009-2012 Challenger

### 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.

### Notes:

- Instructions are for "lighter weight" spindles only. An indication of a "heavy weight" spindle is a 12mm caliper bracket bolt.
- B2795/B2796 (11-1/4" steel rotors) have a 0.355" start out thickness and minimal thickness of 0.312".

## KIT CONTENTS

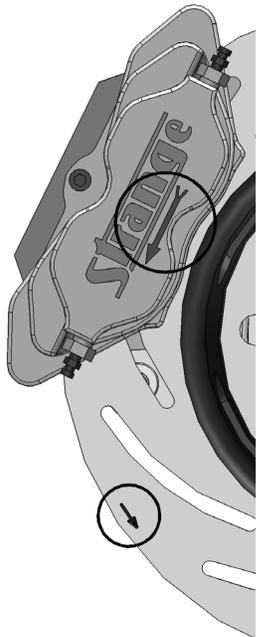
ITEM#	PART#	QTY	DESCRIPTION
1	B4154E	2	Hub Cap
2	S3520F	2	Buna O-Ring
3	B4152G	2	Spindle Nut
4	B2795/B2796	1 each	Tapered Rotor
5	B4152B	2	Front Hub
6	A1028B	10	1/2" Washer
7	A1028A	10	1/2"-20 x 2-1/2" Wheel Stud
8	B4152I	2	Outer Bearing Sleeve
9	B4152C	2	Hub Bearing
10	B4152H	2	Inner Bearing Sleeve
11	B4152D	2	Retainer Ring
12	B4184C	2	M14 x 2.0 x 40mm Caliper Bracket Bolt
13	B4184AL/B4184AR	1 each	Caliper Mount Bracket
14	B1301E	4	3/8"-24 Press Nut
15	B1301H	16	3/8" I.D. x .025" Thick Caliper Shim
16	B5004	1	Four Piston Caliper Driver Side
17	B1301J	4	3/8" I.D. x 1/16" Flat Washer
18	B5000Y	4	3/8"-24 x 1-1/8" Caliper Bolt
19	B4184B	2	Caliper Bracket Spacer
20	B4184D	2	M14 x 2.0 Nylon lock Nut
21	B5002	1	Four Piston Caliper Passenger Side
22	B5010	4	Organic Brake Pads
23	P2316	2	-1/8 NPT x #3AN Brake Line Fitting (installed in 5002/5004)

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 the stock wheel, brake lines, caliper, rotor, spindle nut, hub, and dust shield.
3. Clean the spindle and inspect suspension components for damage. Repair as needed.
4. Slide the caliper mounting bracket (13) over the spindle with the heads of the press nuts (14) facing out board. Only the top caliper bracket hole is utilized.
5. Slide the caliper bracket bolt (12) through the caliper bracket (13) while inserting the caliper bracket spacer (19) between the caliper bracket (13) and the top caliper bracket hole.
6. Install the nylon lock nut (20) and tighten the caliper bracket bolt (12) to 50 ft-lbs.
7. Install wheel studs (7) in the front hub (5) with 1/2" washers (6). Use BLUE Loc-tite® on the studs (7). Torque all studs (7) to 65 ft-lbs.
8. Slide the front hub (5) with the pre-installed hub bearing (9) and sleeves (8,10) onto the spindle.
9. Install the spindle nut (3) and torque to approximately 200 ft-lbs.
10. Install the hub cap (1) with the o-ring (2).
11. Slide the rotor (4) over the wheel studs flush to the face of the hub (5).  
**Note:** Slotted rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1)
12. Attach the caliper (16) to the caliper mounting bracket (13) using the caliper bolt (18), flat washer (17), and shims (15). The arrow on the caliper must face the normal rotation of the rotor/wheel. Torque caliper bolts to 35 ft-lbs.  
**Notes:** The number of shims (15) installed will vary because not all spindles are exactly identical. Therefore, determine the proper amount of shims by positioning the caliper as closely as possible to the center of the rotor. Also, the passenger and driver side do not necessarily use the same amount of shims.
13. 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 .

14. 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:** After the initial installation of this kit, ensure that there is adequate clearance between all braking and chassis components by turning the wheels all the way left to right and moving them all the way up and down throughout the length of the wheel (suspension) travel. Additionally, make sure that the brake lines are not interfering with the wheel travel, or subject to binding or kinking. 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 B4162WC Assembly View

Item#	Torque spec (ft-lbs)
3	200
7	65
12	50
18	35

