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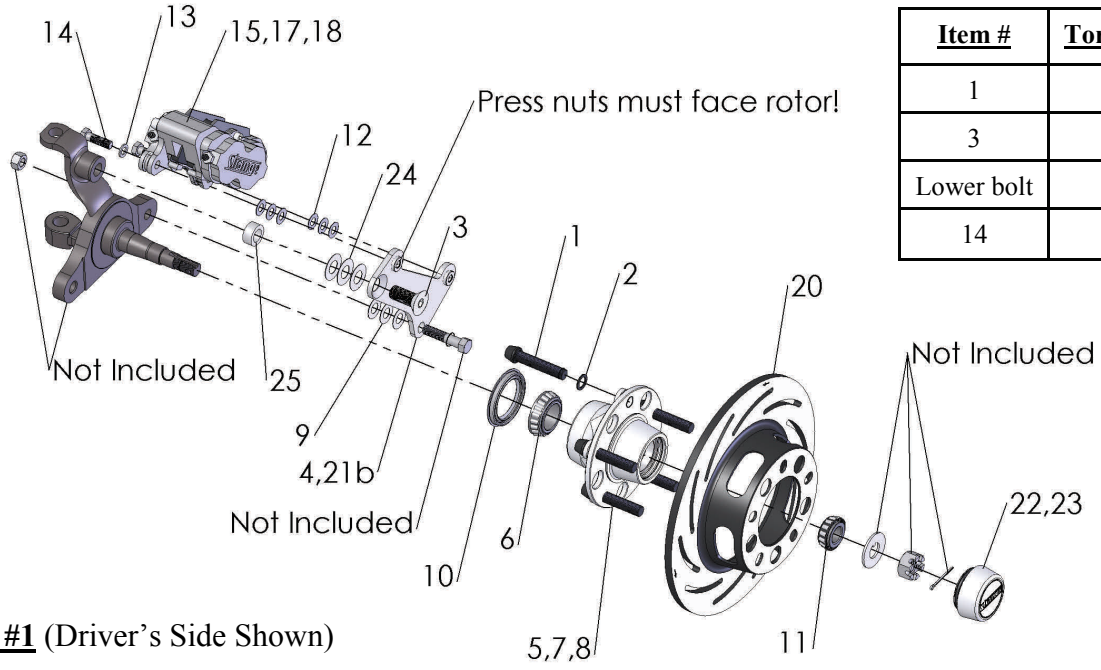
Installation instructions for B4112WC heavy duty (4-piston) front brake kit for 67-69 Camaro disc brake spindles.

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.

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	B4112A	2	5/8"-18 x 1.50" Flat head 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 B1324A)
6	B1320J	2	Inner hub bearing cone (Timken LM67048)
7	B1324A	2	Front hub "F" 4.75" B.C.
8	B1324D	2	Outer hub bearing cup (Timken LM11910 installed in B1324A)
9	B1380C	10	1/2" ID x .025 Shim
10	B1320N	2	Hub seal (National # 40494S)
11	B1324E	2	Outer hub bearing cone (Timken LM11949)
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
21a	B4110BR	1	Passenger side caliper mount bracket
21b	B4110BL	1	Driver's side caliper mount bracket
22	B4154E	2	Aluminum hub cap
23	S3520F	2	#222 Buna O-ring (Installed on B4154E)
24	B1380B	10	5/8" ID x 0.025" thick shim
25	B4112B	2	5/8" I.D. x 0.450" tall caliper mount spacer

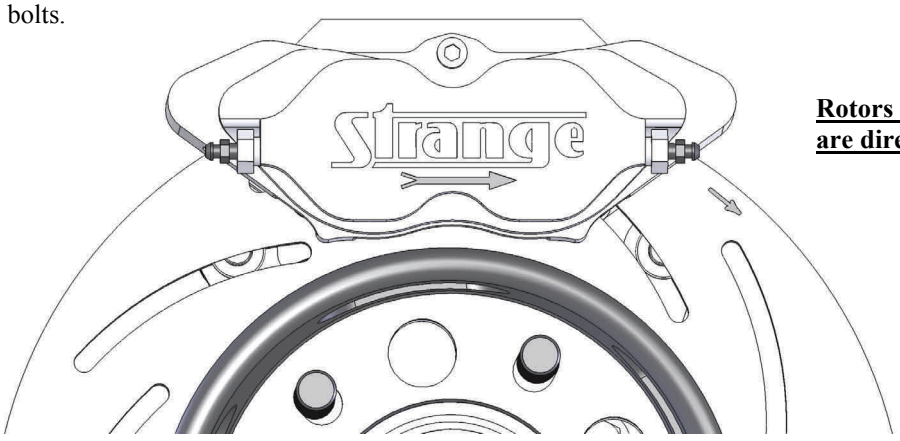


Item #	Torque Spec (ft-lbs)
1	65
3	50
Lower bolt	40
14	35

Figure #1 (Driver's Side Shown)

1.) Raise and support front of vehicle on a level surface using suitable equipment.
2.) Remove wheel, stock drum, hub, brake line, and backing plate 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.) 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.
5.) Pack the inboard (6) and outboard bearing cone (11) with NLGI 1 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.
6.) Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (5, 8) and slide inboard bearing cone (6) into hub (7).
7.) Press the hub seal (10) into the inboard side of the hub (7) flush to the outer face of the hub.
8.) Slide the hub assembly onto the spindle then slide the outer bearing cone (11) into the hub (7).
9.) Install the stock spindle washer and nut.
10.) Mount the wheel and tire assembly on the hub and snug the lug nuts.
11.) While rotating the wheel, torque the spindle nut to approximately 20 ft-lbs.
12.) Loosen the spindle nut until the wheel spins freely and there is no end play.
13.) Install the cotter pin, aluminum hub cap (22), and remove the wheel and tire.
14.) Install the caliper mounting bracket (21a, 21b) with the heads of the press nuts (4) facing towards the outboard side of the vehicle. Use one 5/8" flat head bolt (3) and caliper mount spacer (25), finger tight, to hold the caliper bracket in place.
15.) Use the 1/2" shims (9) on the bottom bolt to equalize the mounting surfaces.
16.) Slide the rotor (19, 20) over the wheel studs flush to the face of the hub (7).
Note: Slotted rotors mount with the arrow pointing in the direction or normal rotation (See Figure #2).
17.) Measure the distance between the inboard face of the rotor and the outboard face of the caliper mounting bracket. Add or remove 1/2" and 5/8" shims as needed to obtain a distance of approximately 5/16" (+/- 1/32"). Note: Because all spindles vary slightly, you may have shims left over. Also, you may not need the same amount of shims on both sides of the vehicle.
18.) Torque the 5/8" flat head bolt (3) to 50 ft/lbs. Torque the lower bolt to 40 ft/lbs.
- Please read B1850 instructions for complete caliper instructions.
19.) Attach caliper (16, 17) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (14) 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.
20.) 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** .
21.) 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.

Note: 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.



Rotors and calipers are directional

Figure #2