

# Strange

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Jul 28, 2021

## PRO SERIES 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4100WC - Santhuff 4-piston front  
brake kit

**APPLICATIONS**  
Santhuff Struts  
Afco Struts

### Before you begin installation:

- Strange Engineering brake kits are designed for DRAG RACING ONLY!
- Brake fittings do not come pre-installed, it will need a layer of Teflon sealer applied to the thread (Figure#2 for torque specs)
- 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.

### B4100WC KIT CONTENTS

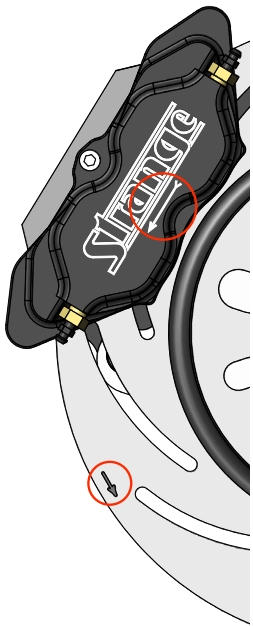
ITEM#	PART#	QTY	DESCRIPTION
1a	B2795	1	Tapered Rotor
1b	B2796	1	Tapered Rotor
2	B4154E	2	Hub Cap - Aluminum Front
3	S3520F	2	Buna O-ring
4	B1324E	2	Timken LM11949 - Cone
5	B1324D	2	Timken LM11910 - Cup
6	B1324A	2	Hub Front "F" -4.75" B.C
7	A1028A	10	1/2-20 X 2.5" Taper head SHCS
8	A1028B	10	1/2" stripper washer
9	B1320H	2	Timken LM67010 - Cup
10	B1320J	2	Timken LM67048 - Cone
11	B1336A	2	C/R Seal #15141
12	F1237D	2	3/8-24 x 3/4" FHSCS
13	R5211E	2	3/8-24 x 7/8" HHCS
14	F1282	2	3/8-24 Jet Nut
15a	B4100AR	1	Caliper mount RH
15b	B4100AL	1	Caliper mount LH
16	B1301E	4	3/8-24 Press nut
17	B5010	4	Soft pad
18	B5002	1	1-5/8 x 1-3/4 Piston Caliper RH
19	B5004	1	1-5/8 x 1-3/4 Piston Caliper LH
20	P2316	2	Fitting -1/8NPT x #3AN
21	P2316C	2	Plastic cap
22	B1301H	16	3/8 ID x 0.25 Thick shim
23	B1301J	4	Washer -3/8 ID 1/16 Thick flat
24	B5000Y	4	3/8-24 X 1.125 FHSCS
25	S3402N	4	3/8 AN Washer

### 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 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 (7) in front hub (6) using the 1/2" I.D. wheel stud washer (8) 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 (10) and outboard bearing cone (4) 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.
6. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (5, 9) and slide inboard bearing cone (10) into hub (6).
7. Press the hub seal (11) into the inboard side of the hub (6) flush to the outer face of the hub.
8. Install the caliper mounting bracket (15) with the heads of the press nuts (16) facing towards the outboard side of the vehicle.
9. Use one 3/8" flat head bolt (12), finger tight and to hold the caliper bracket in place.
10. Slide the hub assembly onto the spindle then slide the outer bearing cone (4) into the hub (6).
11. Install the stock spindle washer and nut.
12. Mount the wheel and tire assembly on the hub and snug the lug nuts.
13. While rotating the wheel, torque the spindle nut to approximately 20 ft-lbs.
14. Loosen the spindle nut until the wheel spins freely and there is no end play. Install the cotter pin, aluminum hub cap (2), and remove the wheel and tire.
15. Slide the rotor (1) over the wheel studs flush to the face of the hub (6).
16. **Note:** Slotted rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1). 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 3/8" flat head bolt (12) to 30 ft/lbs. Torque the lower bolt to 35 ft/lbs.  
- Please read B1850 instructions for complete caliper instructions.
19. Attach caliper (18, 19) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (24) and 3/8" I.D. flat washers (23). Use 3/8" I.D. caliper shims (22) 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 (24) 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.

**FIGURE # 1: Exploded B4100WC Assembly View**

Item#	Torque spec (ft-lbs)
7	65
12	30
13	35
20	25
24*	35

\*Must apply red loctite

