

# Strange

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Aug 2, 2021

## PRO SERIES 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4146WC

**APPLICATIONS**  
Mustang '94 -'04

### Before you begin installation:

- Strange Engineering brake kits are designed for DRAG RACING ONLY!
- Read these instructions thoroughly and save for future reference.
- Brake fittings do not come pre-installed, it will need a layer of Teflon sealer applied to the thread (Figure# 2 for torque specs)
- 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
1a	B2796	1	HD/MD tapered rotor -LH
1b	B2795	1	HD/MD tapered rotor -RH
2	B4154EB	2	Hub cap- aluminum front
3	S3520F	2	#222 Buna O-ring
4	B4152G	2	Mustang/challenger spindle nut
5	B4146I	2	Bearing sleeve (outer)-94-04 Must
6	B4152B	2	Hub-late model 4.5" B.C.
7	A1028B	10	1/2" Stripper washer
8	A1028A	10	1/2-20 X 2.5" Taper head SHCS
9	B4152C	2	Hub bearing 513058
10	B4152D	2	Retaining ring for 3" bore
11	B4146H	2	Bearing sleeve (inner) 1.437- 94-04 Must.
12a	B4146AR	1	Caliper mount 94-04 must. RH
12b	B4146AL	1	Caliper mount 94-04 must. LH
13	B1301E	4	3/8-24 Press nut
14	B4146K	2	Short Stand- 94-04 mustang Caliper MT.
15	B4146L	2	Long Stand- 94-04 mustang Caliper MT.
16	B4182E	2	M12 x 1.75 X 50mm Long FHS
17	B4146J	2	1/4-28 X 1 1/2 FHS
18	B1301H	16	3/8 ID x .025 Thick shim
19a	B5004	1	1 5/8 X 1 3/4 4 pist.Calpr.-LH
19b	B5002	1	1 5/8 X 1 3/4 4 pist.Calpr.-RH
20	B5010	4	Soft pad- Strange 4 Piston Caliper
21	P2316C	2	Plastic cap for #3AN fitting
22	P2316	2	Fitting -1/8NPT x #3AN
23	B1301J	4	Washer -3/8 ID 1/16 TK. Flat
24	B5000Y	4	3/8-24 X 1.125" HHCS Gr.8
25	B4152F	2	M12 x 1.75 Nylock nut
26	B5080D	2	1/4" Flat washer
27	S3430G	2	1/4-28 Locknut

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

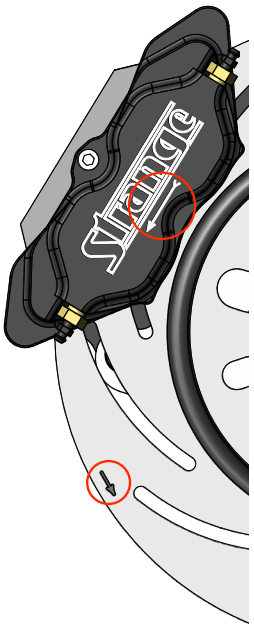
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**Installation instructions**

**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 strut and lower ball joints for excessive play and replace as needed.
4. Adjustments will have to be made to allow the caliper to clear the spindle. Trim the existing caliper ear as shown in Figure #3.
5. Place the tall spacer (15) on the  $\text{\O}1/4$ " hole and the small spacer (14) on the  $\text{\O}12\text{mm}$  hole.
6. Put the caliper mount (12) on the spindle and line up the holes, fixing the bracket in place using the M12 FHS (16) and nut (25) on the 12mm hole torquing it to 50ft-lbs. Then the 1/4-28 FHS (17), washer (26) and nut (27) on the 1/4" hole torquing it to 15ft-lbs.
7. Install 1/2" Dia. wheel studs (8) in front hub (6) using 1/2" I.D. wheel stud washer (7) and a small amount of BLUE Loc-tite<sup>®</sup> torquing them to 50 ft-lbs.
8. Slide the front hub (6) with the pre-installed hub bearing (9), retainer ring (10) and sleeves (5,11) onto the spindle.
9. Install the spindle nut (4) and torque it to 200ft-lbs.
10. Install the hub cap (2) with the O-ring (3).
11. Slide the rotor (1) over the wheel studs flush to the face of the hub.

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

12. Attach caliper (19) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (24) with red loctite and 3/8" I.D. flat washers (23). Use 3/8" I.D. caliper shims (18) 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.

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.

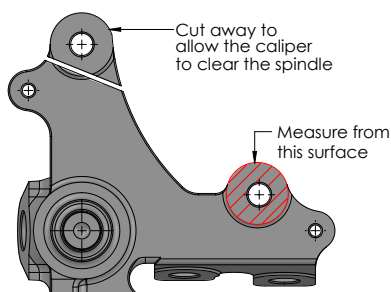
14. A proper break in procedure is required to avoid brake fade and uneven rotor deposits from the pads. It consists of 8-10 brake applications increasing in harshness while allowing the brakes to cool slightly in between; do not keep the brakes applied between stops. After the last stop the brakes should be allowed to cool completely.

**FIGURE # 2: Exploded B4146WC Assembly View (Passenger side shown)**

Item#	Torque spec (ft-lbs)
4	200
16	50
17	15
22	25
24*	35

\*Must apply red loctite

**Figure # 3**



**Note:** Distance to from specified area to wheel mounting surface 2.940"

