

# Strange

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## HEAVY DUTY 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4139WC

**APPLICATIONS**  
1998 - 2000 2WD Ford  
Ranger

### Before you begin installation:

- Strange Engineering brake kits are designed for DRAG RACING ONLY!
- This kit moves wheel mounting surface outboard by 0.640". Verify fitment before installation.
- 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.

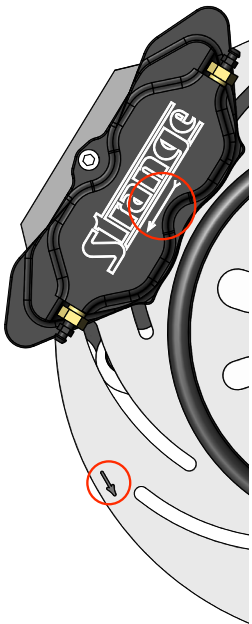
KIT CONTENTS			
ITEM#	PART#	QTY	DESCRIPTION
1a	B2795	1	Right hand rotor
1b	B2796	1	Left hand rotor
2	B4154E	2	Hub cap
3	S3520F	2	O-ring
4	B1324D	2	Outer bearing cup (LM11910)
5	B1324E	2	Outer bearing cone (LM11949)
6	B4154SPM	2	"HS" Front hub 4-1/2" B.C
7	B1330A	2	Inner bearing cup (L68110)
8	B1330B	2	Inner bearing cone (L68149)
9	B1328B	2	Wheel Seal (SKF19221)
10	A1028B	10	1/2" Stripper washer
11	A1028A	10	1/2-20 x 2-1/2" Taper head SHCS
12	B4152F	4	M12 x 1.75 Nylock nut
13	B4139B	4	Caliper bracket spacer
14	B4139C	4	M12 x 1.75 x 80mm FHSCS
15a	B4139AL	1	LH Caliper bracket
15b	B4139AR	1	RH Caliper bracket
16	B1301E	4	Press nut
17	B1301H	16	Shim
18a	B5002	1	Right hand Caliper
18b	B5004	1	Left hand Caliper
19	B5010	4	Semi-Metallic Strange 4-Piston caliper pad
20	P2316	2	-1/8NPT x #3AN fitting
21	B1301J	4	Washer
22	B5000Y	4	3/8-24 x 1.125 HHCS
23	P2316C	2	Plastic cap for #3AN fitting

### 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, and stock disk brake components. Inspect all ball joints for excessive play and replace as needed.
3. Install 1/2" Dia. wheel studs (11) in front hub (6) using 1/2" I.D. wheel stud washer (10) and a small amount of BLUE Loc-tite®. Torque all studs to 65 ft-lbs.
4. Place the spacers (13) onto the spindle and install the caliper mounting bracket (15).
5. Mount the caliper bracket using the M12 Bolt (14) and nut (12).
6. Pack the inboard (8) and outboard bearing cone (5) 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.
7. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (4,7) and then place inner bearing cone (8) into the front hub (6).
8. Press the hub seal (9) into the inboard side of the hub (6) flush to the outer face of the hub.
9. Slide the hub assembly onto the spindle, then slide the outer bearing cone (5) into the hub.
10. Install the stock key washer and the spindle castle nut.
11. Mount the wheel and tire assembly on the hub and snug the lug nuts.
12. While rotating the wheel, torque the spindle nut to approximately 20 ft-lbs.
13. Loosen the spindle nut until the wheel spins freely and there is no end play.
14. 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).  
**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.

16. Attach caliper (18) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (22) with red loctite and 3/8" I.D. washers (21). Use 3/8" I.D. caliper shims (17) to center the caliper over the rotor, making sure pads contact the rotor evenly. Torque the caliper mounting bolts (22) to 35 ft-lbs.

17. 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. Mount the tire and wheel.

**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 B4139WC Assembly View (Driver's Side)

