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HEAVY DUTY 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT** # B4130WC

APPLICATIONS
'83-'94 Ford Ranger

## Before you begin installation:

- -Strange Engineering brake kits are designed for DRAG RACING ONLY!
- -This kit moves wheel mounting surface outboard by 0.625". Verify wheel fitment before installing.
- -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            | B1320J   | 2   | Outer bearing cone (LM67048)      |
| 5            | B1320H   | 2   | Outer bearing cup (LM67010)       |
| 6            | B4154SPM | 2   | "HS" Front hub                    |
| 7            | B1324D   | 2   | Inner bearing cup (LM11910)       |
| 8            | B1324E   | 2   | Inner bearing cone (LM11949)      |
| 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           | B1381D   | 4   | 3/8-16 x 1" HHCS                  |
| 13           | S3402N   | 4   | 3/8 AN washer                     |
| 14a          | B4130AL  | 1   | LH Caliper bracket                |
| 14b          | B4130AR  | 1   | RH Caliper bracket                |
| 15           | B1301E   | 4   | Press nut                         |
| 16           | B1301H   | 16  | Shim                              |
| 17a          | B5002    | 1   | Right hand Caliper                |
| 17b          | B5004    | 1   | Left hand Caliper                 |
| 18           | B5010    | 4   | Soft Strange 4-Piston caliper pad |
| 19           | P2316    | 2   | -1/8NPT x #3AN fitting            |
| 20           | B1301J   | 4   | Washer                            |
| 21           | B5000Y   | 4   | 3/8-24 x 1.125 HHCS               |
| 22           | P2316C   | 2   | Plastic cap for #3AN fitting      |

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

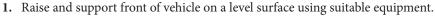
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## **Installation instructions**

## Figure # 1



- 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 (10) in front hub (6) using 1/2" I.D. wheel stud washer (11) and a small amount of BLUE Loc-tite\*. Torque all studs to 65 ft-lbs.
- **4.** Modify knuckle using Figure #3 as reference. Install the caliper mounting bracket (14). Mount using the 3/8"-16 bolts (12) and washers (13)
- 5. 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
- 6. into the cage and around the rollers.

  Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (4,7) and then place
- 7. 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. 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).

15. - Please read B1850 instructions for complete caliper instructions.

Attach caliper (17) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (21) with <u>red loctite</u> and 3/8" I.D. washers (20). Use 3/8" I.D. caliper shims (16) to center the caliper over the rotor, contact the rotor evenly. Torque the caliper mounting bolts (21) to 35 ft-lbs.

16. 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 B4130WC Assembly View

FIGURE # 3: Knuckle modification

stock ears

for caliper

clearance

