EVOLUTION 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

KIT #
B4155WCE

APPLICATIONS
1987-1996 Dakota

Evolution Rotors

- Dynamic Drive Mount (DDM) system secures the rotor and allows for rotor thermal expansion
- DDM system design is secured by an internal Spirolox, eliminating heavy bolts and hardware
- Unique Aero Slot design reduces rotating weight and promotes even heat dissipation

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.

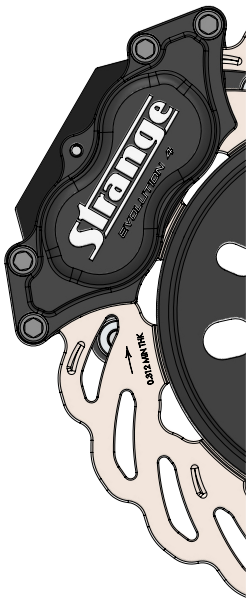
Kit Contents

ITEM#	PART#	QTY	DESCRIPTION
1	B4154E	2	Hub Cap
2	S3520F	2	Hub cap O-ring
3	B4155H	2	Spindle Washer
4	B1330D	2	Timken Cone LM12749
5	B1330C	2	Timken Cup LM12710
6	B4155B	2	Hub Front Dakota 4.50” B.C
7	B4155F	2	Timken Cup JL69310
8	B4155E	2	Timken Cone JL69349
9	B4155G	2	Seal C/R 20425
10	A1028B	10	Washer
11	A1028A	10	1/2-20 x 2-1/2” Taper Head SHCS
12	B2794B	2	2-Piece rotor adapter
13	B2798AS	2	Evolution S Rotor
14	B2794D	2	Spirolock
15	B4155D	4	1/2-20 X 1-1/2” FHSCS
16	B4155A	2	Caliper mount
17	B1301E	4	3/8-24 Plug nut
18	B4155C	4	Bracket spacer 1/2” ID x 3/8”
19	B1900	2	Billet 4-piston caliper
20	P2316	2	⅛" NPT x –3AN Fitting
21	B5010	4	Semi Metallic 4-piston caliper pad
22	B1301H	16	3/8 I.D. x 0.025 Thick Caliper Shim
23	B1301J	4	Caliper Bolt Washer
24	B5000Z	4	Caliper mounting bolt

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. Place the provided spacers (18) onto the knuckle. Then install the caliper bracket (16) using the 1/2-20 FHSCS (15), threading them into the knuckle.
4. 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.
5. Pack inner (8) and outer bearing cones (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, 7) and place the inner bearing cone (8) into the front hub (6).
7. Press the hub seal (9) into the inboard side of the hub (6) until it is fully seated.
8. Slide the hub assembly onto the spindle then slide the outer bearing cone (4) into the hub (6).
9. Install the spindle washer (3), spindle key washer and the spindle 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. Then, loosen the spindle nut until the wheel spins freely and there is no end play.
12. Install cotter pin, aluminum hub cap (1), and remove the wheel and tire.
13. Slide the rotor assembly (12,13,14) over the wheel studs flush to the face of the hub (6). Note: Evolution rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1).
    - Please read B1950 instructions for complete caliper instructions.
14. 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. washers (23). Use 3/8" I.D. caliper shims (22) to center the caliper over the rotor, making sure pads contact the rotor evenly. The caliper bolt (24) should be fully engaged into the press nut. If the bolt is over engaged, use any remaining shims under the head of the bolt to prevent it from running into the rotor. Torque the caliper mounting bolts (24) to 35 ft-lbs.
    Note: Because all spindles vary slightly you may not need the same amount of shim on both sides of the vehicle.
15. Connect the brake lines to the calipers. Calipers are tapped to ⅛"-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.
16. 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 B4155WCE Assembly View (Passenger side)

Item#	Torque spec (ft-lbs)
11	65
15	45
20	25
24*	35

*Must apply red loctite

