EVOLUTION SINGLE-PISTON FRONT BRAKE KIT INSTRUCTIONS

KIT #
B4147WCE - 4 on 4.25" B.C wheels

APPLICATIONS
- 1987-1993 Mustang with 8 cylinder spindles
- 1987-1988 Thunderbird with 4 cylinder spindles

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:

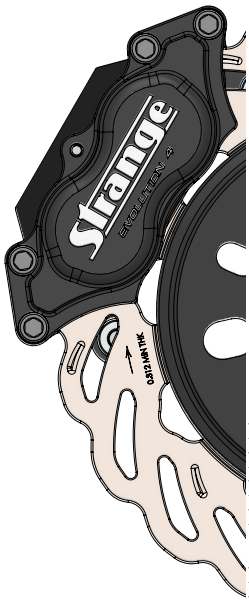
-Strange Engineering brake kits are designed for DRAG RACING ONLY!
-Read these instructions thoroughly and save for future reference.
-Brake fittings do not come pre-installed, it will need a layer of Teflon sealer applied to the thread (Figure# 2 for torque specs)
-If after reading these installation instructions, you have any questions or comments, please do not hesitate to call us.

Kit Contents

ITEM#	PART#	QTY	DESCRIPTION
1	B4154E	2	Aluminum hub cap
2	S3520F	2	#222 Buna O-ring (Installed on B4154E)
3	B2794NBC	2	2-Piece rotor adapter
4	B2798AS	2	Evolution S Rotor
5	B2794D	2	Spirolock
6	B1330C	2	Timken outer cup LM12710
7	B1330D	2	Timken outer cone LM12749
8	B4154SPM-4	2	Front hub Mustang 4 on 4-1/4" B.C.
9	B1330B	2	Timken inner cone L68149
10	B1330A	2	Timken inner cup L68110
11	B1328B	2	Wheel seal CR/SKF 19221
12	A1028B	8	1/2" I.D. Wheel stud washer
13	A1028A	8	1/2"-20 x 2.5" Wheel stud
14	B4144AR	1	Right Caliper mounting bracket
15	B4144AL	1	Left Caliper mounting bracket
16	B1301E	4	3/8"-24 Press nut (Installed in B4144AR/L)
17	B1381D	4	3/8"-16 x 1" caliper bracket bolt
18	S3402N	4	3/8" Washer
19	B1301H	16	3/8" I.D. x 0.025" Thick caliper shim
20	B1900	2	Billet Caliper
21	B5010	4	Semi-Metallic Strange 4-Piston Caliper pad
22	P2316	2	1/8" NPT x –3AN Fitting
23	B1301J	4	3/8" I.D. x 1/16" Thick flat washer
24	B5000Z	4	3/8"-24 x 1.187" Caliper bolt

Installation instructions

Figure # 1

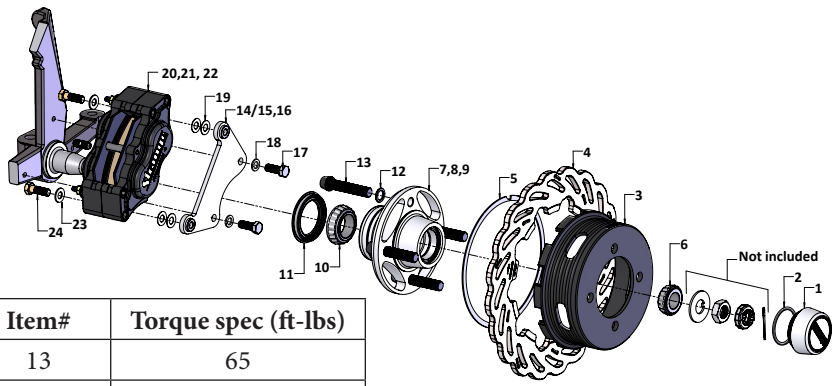


1. Raise and support front of vehicle on a level surface using suitable equipment.
2. Remove wheel, caliper, rotor, hub, and brake line. Inspect all ball joints for excessive play and replace as needed.
3. Cut off upper and lower caliper mounting ears at a distance approximately 1" from the center of the original caliper mounting hole on the top and approximately 2.5" from the original caliper mounting hole on the bottom as shown in figure #3
4. Drill holes to 5/16" and tap the caliper mounting bracket holes on the spindle to 3/8"-16 (see Figure #3).
5. Install the caliper mounting bracket (14/15) using the 3/8" caliper bracket bolts (17) and 3/8"AN washers (18) making sure that the press nuts (16) are facing towards the rotor assembly (3,4,5). Torque to 35 ft.-lbs.
6. Install 1/2" Dia. wheel studs (13) in front hub (8) using 1/2" I.D. wheel stud washer (12) 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.
7. Pack inner (10) and outer bearing cones (6) 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.
8. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (7,9) and place inner bearing cone (10) into the front hub (8).
9. Press the hub seal (11) into the inboard side of the hub (8) flush to the outer face of the hub.
10. Slide the hub assembly onto the spindle then slide the outer bearing cone (10) into the hub (8).
11. Install the key washer and the spindle 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. Then, loosen the spindle nut until the wheel spins freely and there is no end play.
14. Install the stamped spindle nut retainer, cotter pin, aluminum hub cap (1,2), and remove the wheel and tire.
15. Slide the Evo rotor assembly (3,4,5) over the wheel studs flush to the face of the hub (8). Note: Evo rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1).

- Please read B1950 instructions for complete caliper instructions.

16. Attach caliper using 3/8"-24 caliper bolts (24) with red loctite and 3/8" I.D. washers (23). Use 3/8" I.D. caliper shims (19) 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.
17. Connect the brake 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.
18. 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 B4147WCE Assembly View (Passenger side)



Item#	Torque spec (ft-lbs)
13	65
17	35
22	25
24*	35

*Must apply red loctite

Figure # 3: Adjustment guidelines