EVOLUTION 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

KIT #
B4139WCE

APPLICATIONS
1998 - 2000 2WD Ford Ranger

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

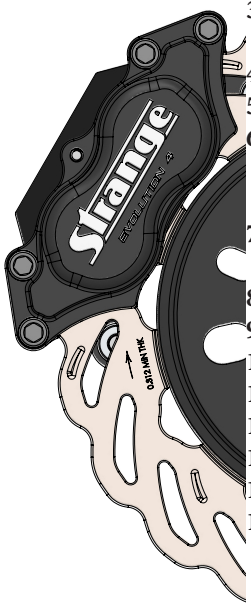
Before you begin installation:
-Strange Engineering brake kits are designed for DRAG RACING ONLY!
-This kit moves wheel mounting surface outboard by 0.640". Verify fitment before installation.
-Read these instructions thoroughly and save for future reference.
-Brake fittings do not come pre-installed, 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	ITEM#	PART#	QTY	DESCRIPTION
1	B4154E	2	Hub cap	13	A1028A	10	1/2-20 x 2-1/2" Taper head SHCS
2	S3520F	2	O-ring				
3	B2794B	2	2-Piece rotor adapter	14	B4152F	4	M12 x 1.75 Nylock nut
4	B2798AS	2	Evolution S Rotor	15	B4139B	4	Caliper bracket spacer
5	B2794D	2	Spirolock	16	B4139C	4	M12 x 1.75 x 80mm FHSCS
6	B1324E	2	Outer bearing cone (LM11949)	17a	B4139AL	1	LH Caliper bracket
				17b	B4139AR	1	RH Caliper bracket
7	B1324D	2	Outer bearing cup (LM11910)	18	B1301E	4	Press nut
				19	B1301H	16	Shim
8	B4154SPM	2	"HS" Front hub 4-½" B.C	20	B1900	1	Billet Caliper
9	B1330A	2	Inner bearing cup (L68110)	21	B5010	4	Semi-Metallic Strange 4-Piston caliper pad
10	B1330B	2	Inner bearing cone (L68149)	22	P2316	2	-1/8NPT x #3AN fitting
				23	B1301J	4	Washer
11	B1328B	2	Wheel Seal (SKF19221)	24	B5000Z	4	3/8-24 x 1.187 HHCS
12	A1028B	10	1/2" Stripper washer	25	P2316C	2	Plastic cap for #3AN fitting

Installation instructions

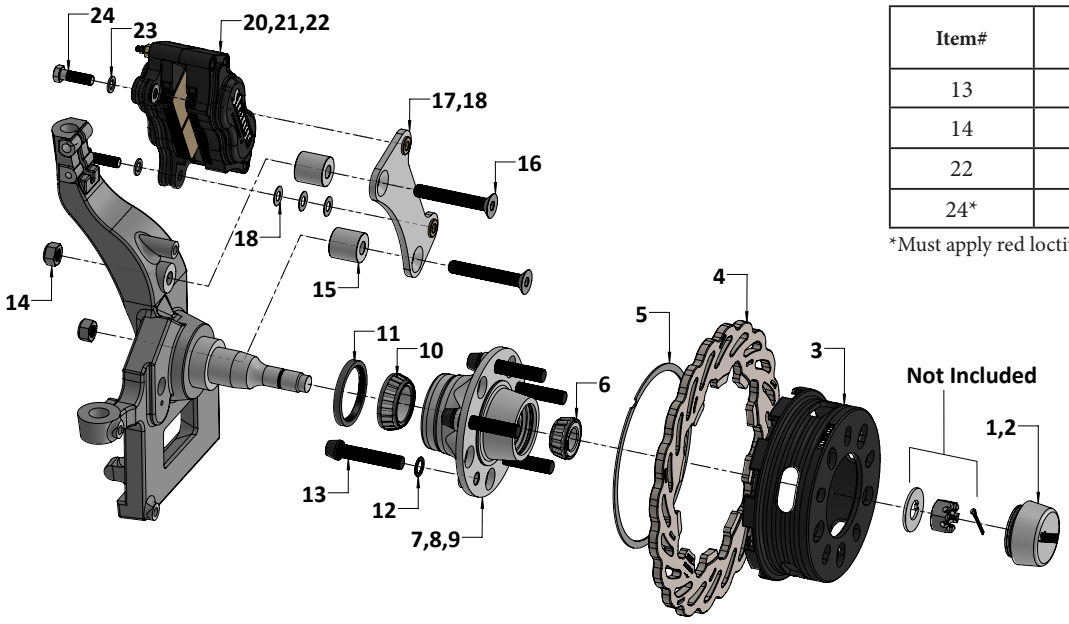
Figure # 1



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 (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.
4. Place the spacers (15) onto the spindle and install the caliper mounting bracket (17).
5. Mount the caliper bracket using the M12 Bolt (16) and nut (14).
6. Pack the inboard (10) and outboard bearing cone (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.
7. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (7,9) and then place inner bearing cone (10) into the front hub (8).
8. Press the hub seal (11) into the inboard side of the hub (8) flush to the outer face of the hub.
9. Slide the hub assembly onto the spindle, then slide the outer bearing cone (6) 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 (1), 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 B1900 instructions for complete caliper instructions.
16. Attach caliper (20) 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 (18) to center the caliper over the rotor, making sure pads contact the rotor evenly. Torque the caliper mounting bolts (24) 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 B4139WCE Assembly View (Driver's side)



Item#	Torque spec (ft-lbs)
13	65
14	50
22	25
24*	35

*Must apply red loctite