Strange EVOLUTION

EVOLUTION 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

KIT #
B4161WCE

APPLICATIONS
1997 - 2002 Dodge 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:

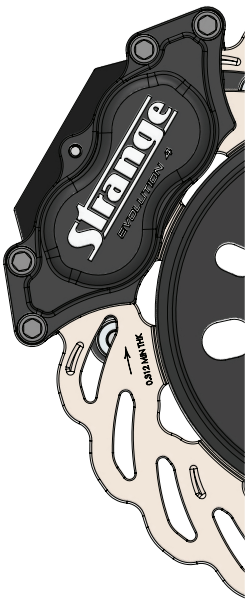
-Strange Engineering brake kits are designed for DRAG RACING ONLY!
-Read these instructions thoroughly and save for future reference.
-Modifications to the knuckle are necessary. See page 2 for more information,
-Brake fittings do not come pre-installed, it will need a layer of Teflon sealer applied 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	B4154EB	2	Aluminum hub cap
2	S3520F	2	#222 Buna O-ring (Installed on B4154EB)
3	B4152G	2	Axle nut
4	B2794BB	2	Rotor hat
5	B2798AS	2	Evolution S Rotor
6	B2794D	2	Spirolok
7	B4152B	2	Front Hub
8	A1028A	10	1/2"-20 x 2.5" Wheel stud
9	A1028B	10	1/2" I.D. Wheel stud washer
10	B4161C	2	Axle nut Washer
11	B4152C	2	Hub Bearing (Installed in B4152B)
12	B4152D	2	Retaining ring
13	B4122D	4	7/16-14 x 1-3/4” FHSCS
14a	B4161AR	1	RH Caliper mount bracket
14b	B4161AL	1	LH Caliper mount bracket
15	B1301E	4	3/8"-24 Press nut (Installed in B4161AL/R)
16	B4161B	4	Caliper mount spacer
17	B1301H	16	3/8 ID x 0.025 thick shim
18	B1900	1	Billet Caliper
19	B5010	4	Soft Metallic 4-piston caliper pad
20	P2316	2	Fitting 1/8 NPT x #3AN
21	B1301J	4	Washer -3/8 ID 1/16 Thick flat
22	B5000Y	4	3/8-24 x 1-1/8 HHCS

Installation instructions

Figure # 1



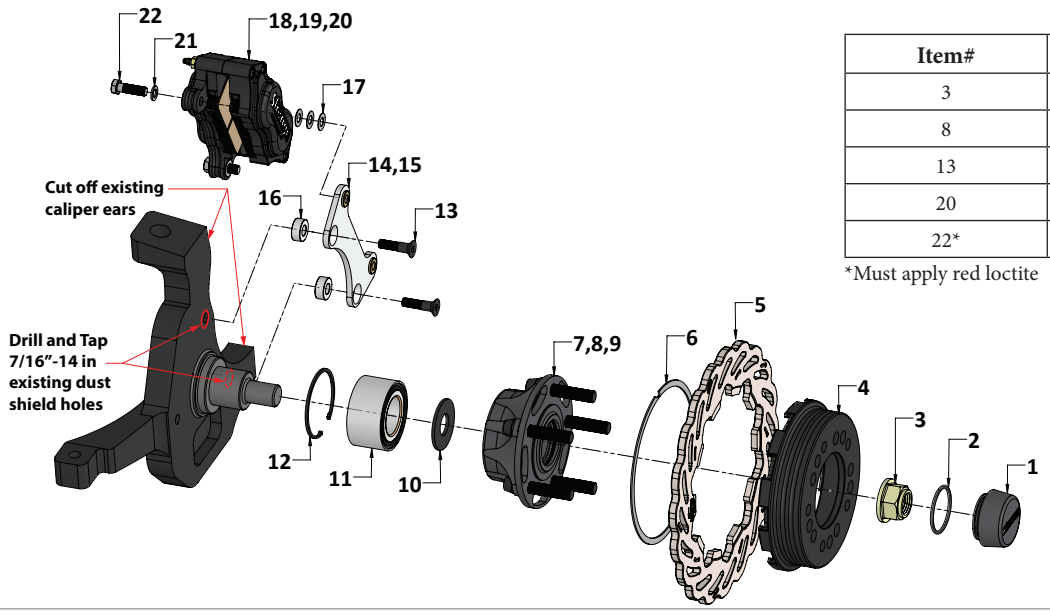
1. Raise and support front of vehicle on a level surface using suitable equipment.
2. Remove the stock wheel, brake lines, caliper, rotor, spindle nut, hub, and dust shield.
3. Clean the spindle and inspect suspension components for damage. Repair as needed.

   Modifications:

   - Cut off the caliper ears, allowing clearance for the brake caliper bracket mounting ears.
   - Drill and tap 7/16-14 the existing dust shield holes as shown in Figure #2
4. Put the spacers (16) onto the knuckle, then attach the caliper bracket (14) with 7/16" bolts (13).
5. Install wheel studs (7) in the front hub (5) with 1/2" washers (6). Use BLUE Loc-tite® on the studs (7).
6. Torque all studs (7) to 65 ft-lbs.
7. Slide the front hub (7) with the pre-installed hub bearing (11), washer (10) retainer ring (12) onto the spindle.
8. Install the spindle nut (3) and torque to approximately 200 ft-lbs.
9. Install the hub cap (1) with the O-ring (2).
10. Slide the rotor (4,5,6) over the wheel studs flush to the face of the hub (7).
    Note: Slotted rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1)
11. Attach the caliper (18) to the caliper mounting bracket (14) using the caliper bolts (22) with red loctite, flat washers (21), and shims (17). The arrow on the caliper must face the normal rotation of the rotor and wheel. (See Figure #2) Torque caliper bolts to 35 ft-lbs.
    Notes: The number of shims (17) installed will vary because not all spindles are exactly identical. Therefore, determine the proper amount of shims by positioning the caliper as closely as possible to the center of the rotor. Also, note that the passenger and driver side do not necessarily use the same amount of shims.
    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: After the initial installation of this kit, ensure that there is adequate clearance between all braking and chassis components by turning the wheels all the way left to right and moving them all the way up and down throughout the length of the wheel (suspension) travel. Additionally, make sure that the brake lines are not interfering with the wheel travel, or subject to binding or kinking. 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 B4161WCE Assembly View



Item#	Torque spec (ft-lbs)
3	200
8	65
13	40
20	25
22*	35

*Must apply red loctite