



**EVOLUTION 2-PISTON DDM  
FRONT BALL BEARING  
BRAKE KIT INSTRUCTIONS**

**KIT #**  
B4745WCE - 4.50" B.C wheels

**APPLICATIONS**  
- 1987-1993 Mustang with  
8 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

**Evolution 2 Piston Kit**

- Low friction Ball Bearings, Steel and Ceramic available
- Weight: 19.25 lbs
- Minimum Rotor thickness: 0.260"
- Minimum Pad Thickness: 0.200"
- Low friction seal and stainless steel seal rings

**Before you begin installation:**

-Strange Engineering brake kits are designed for DRAG RACING ONLY!

-Read these instructions thoroughly and save for future reference.

-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	B1500H	2	Aluminum hub cap
2	S3520F	2	#222 Buna O-ring (pre-installed on B1500H)
3	B1500D	2	Evolution 0.8665" ID outboard bearing sleeve
5	B1554SPM	2	Front hub "HS" 4.50" B.C.
6	A1028B	10	1/2" I.D. Wheel stud washer
7	A1028A	10	1/2"-20 x 2.5" Wheel stud
8	B2788AS	2	11" Evolution S Rotor
9	B2794D	2	Spirolok
11	B1500I	2	Hub seal
12	B1500C	2	Radius ring
13	B1381D	4	3/8-16 x 1 HHCS
14	S3402N	4	3/8 AN Washer
15a	B4744AL	1	L.H. Caliper Mounting Bracket
15b	B4744AR	1	R.H. Caliper Mounting Bracket
16	B1301E	4	3/8"-24 Press nut (pre-installed in B4744AL & B4744AR)
17	B1301H	16	3/8" I.D. x 0.025" Thick caliper shim
18	B1835	2	2-piston Evolution caliper
19	B2510	4	Soft Metallic 2-piston caliper pad
20	P2316	2	1/8" NPT x -3AN Fitting
21	B1301J	4	3/8" I.D. x 0.063 Thick caliper washer
22	S3440D	4	3/8"-24 x 1.000" Caliper bolt

**Ball Bearing Kits**

**B1500SKIT Steel Ball Bearing kit content**

**B1500CKIT Ceramic Ball Bearing kit content**

ITEM#	PART#	QTY	DESCRIPTION	ITEM#	PART#	QTY	DESCRIPTION
4a	B1500B	2	Outboard Steel Ball bearing	4b	B1500BC	2	Outboard Ceramic Ball bearing
10a	B1500A	2	Inboard Steel Ball bearing	10b	B1500AC	2	Inboard Ceramic Ball bearing

**Installation instructions**

**Figure # 1**



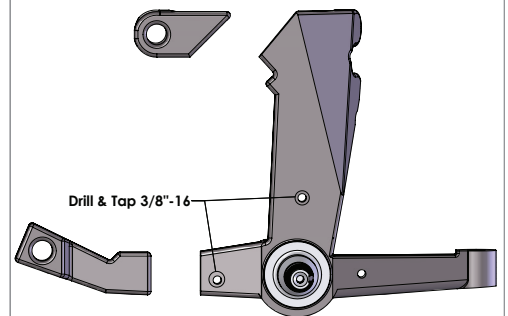
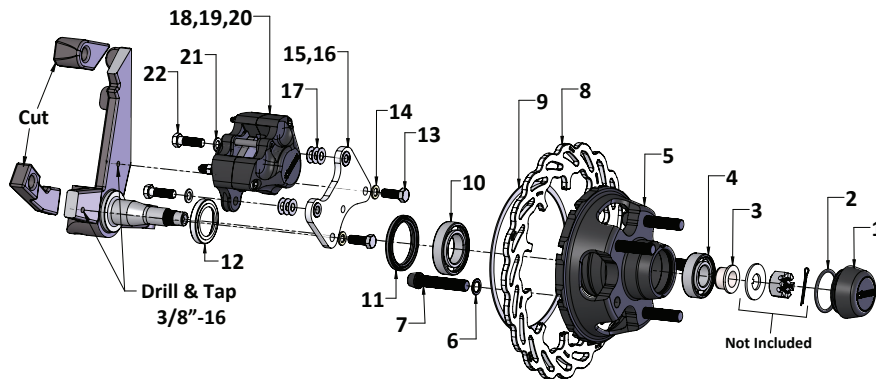
1. Raise and support front of vehicle on a level surface using suitable equipment.
2. Remove wheel, caliper, rotor, hub, and brake line. Inspect all ball joints for excessive play and replace as needed.
3. Cut off upper and lower caliper mounting ears at a distance approximately 1" from the center of 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 #2**
4. Drill holes to 5/16" and tap the caliper mounting bracket holes on the spindle to 3/8"-16 (see Figure #2/3).
5. Install the caliper mounting bracket (15) using the 3/8" caliper bracket bolts (13) and washers (14). Make sure that the press nuts (16) are facing towards the rotor. Torque to 35 ft.-lbs.
6. Install 1/2" Dia. wheel studs (7) in front hub (5) using 1/2" I.D. wheel stud washer (6) 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. Slide radius ring (12) onto spindle, refer to **Figure #2** for orientation
8. Slide the hub assembly onto the spindle, install the key washer and the spindle nut.  
**Note:** Evolution rotors mount with the arrow pointing in the direction of normal rotation (See Figure #1).  
- Please read B1835 instructions for complete caliper instructions.
9. Tighten the spindle nut until the hub has no end play and spins freely.
10. Install the spindle nut retainer, cotter pin, aluminum hub cap (1).
11. Attach caliper (18) using 3/8"-24 caliper bolts (22) with red loctite and 3/8" I.D. washers (20). Use 3/8" I.D. caliper shims (17) to center the caliper over the rotor, making sure pads contact the rotor evenly. The caliper bolt (22) should be fully engaged into the press nut.
12. Torque the caliper mounting bolts (22) 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.

13. 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.
14. 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 B4745WCE Assembly View

**FIGURE # 3:** Adjustment guidelines



Item#	Torque spec (ft.-lbs)
7	65
13	35
22*	35

• Radius Ring is oriented with lip facing the knuckle

\*Must apply red loctite

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

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