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EVOLUTION

Nov-3, 2023-

PRO SERIES 4-PISTON REAR BRAKE KIT INSTRUCTIONS **KIT #**B1716WCE
B1716WCEM

APPLICATIONSOEM 1967-1980 Small GM housing ends

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#1 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	B2798AS	2	Evolution S Rotor	
2	B2794B	2	2-Piece rotor adapter	
3	B2794D	2	Spirolock	
4	B1309B	2	Inboard Safety Hub half	
5	B1301E	4	3/8"-24 Press nut (Installed in B1716A/B)	
6a	B1716A	1	Caliper mounting bracket (Left)	
6b	B1716B	1	Caliper mounting bracket (Right)	
7	A1030C	2	Seal (National #41013S)	
8	B1301H	16	0.025" Thick caliper shim	
9	B1301J	4	1/16" Thick caliper washer	
10	B5000Y	4	3/8"-24 x 1-1/8" Caliper bolt	
11a	B5010	4	DTC-30 Semi metalic 4-piston brake pad (B1716WCE)	
11b	B5020	4	DRM-35 metallic 4-piston brake pad (B1716WCEM)	
11c	B5022	4	DRM-40 metallic 4-piston brake pad (B1716WCEM)	
12	B1900	2	Billet Caliper	
13	P2316	2	1/8" NPT x –3AN Fitting	

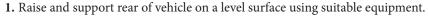
FIGURE # 1: Exploded B1716WCE Assembly View

Item#	Torque spec (ft-lbs)	_1 ₂
Housing end bolts	35	3-
10*	35	
13	25	Not included —
	Supplied in Safety Hub Kit	Supplied in Saftey Hub Kit

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Installation instructions

Figure # 2



- 2. Remove wheel, axle, drum, and backing plates from housing.
- 3. Consult A1030 safety hub kit instructions to prepare axle if necessary
- **4.** Check the axle for any signs of twisting or runout and repair or replace as needed. The maximum allowable runout checked between centers at the face of the flange, bearing surface, and near the splines is 0.005" total indicated runout (T.I.R.).
- **5.** Inspect the rotor (1,2,3) for fit on the axle flange. The rotor should slide freely over the axle flange and seat flush against the face of the axle flange. The rotor must center on the axle flange or axle studs. If the axle flange is too large, it must be machined to 6.240" diameter.
- **6.** Inspect the housing end for straightness and repair as necessary.
- 7. Push bolts (A1030D, from Safety Hub Kit) thru housing end flange holes from inboard side of the flange.
- **8.** Place one gasket (included in S.H.K.) against the housing end and slide the caliper mounting bracket (6) over the housing bolts with the heads of the press nuts (5) facing towards the axle flange. Modify a second gasket to fit around B1309B, or use a pliable "gasket in a tube," such as Permatex Blue.
- **9.** Install new seals (7) in B1309B (4) hub halves. The seals should be inserted with the lettering on the face facing out.
- **10.** Slide B1309B (4) hub half over the housing end bolts so that the round portion of the hub half fits inside the caliper mounting bracket (6).
- 11. Slide axle into the housing and rotate outer hub half to align with housing end bolts. Torque housing end bolts to 35 ft/lbs.
- 12. Install rotor over wheel studs and flange, ensuring that the rotor is flush and parallel to the face of the axle flange. Note: Slotted rotors mount with the arrow at the top pointing towards the front of the car,

indicating direction of rotation (Figure #2).

- Please read B1850 instructions for complete caliper instructions.
- 13. Attach caliper (12) using 3/8"-24 caliper bolts (10) with <u>red loctite</u> and 1/16" thick flat washers (9). Use 0.025" thick caliper shims (8) to center the caliper over the rotor, making sure pads contact the rotor evenly. The caliper bolt (10) 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 (10) to 35 ft-lbs.
- 14. 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.
- **15.** 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.

Note: After the initial installation of this kit, ensure that there is adequate clearance between all braking and chassis components by moving the suspension all the way up and down throughout its travel. Additionally, make sure that the brake lines are not interfering with the wheel travel, or subject to binding or kinking. Operate the vehicle in a cautious manner until you determine that the brakes are functioning properly. Routinely check and re-torque all bolts.

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

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