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EVOLUTION

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# HEAVY DUTY FRONT BRAKE KIT INSTALLATION INSTRUCTIONS

**KIT #** B4177WCE

#### **APPLICATIONS**

'93 - '97 Camaro & Firebird using stock hubs

## **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 <u>DRAG RACING ONLY</u>

Brake fittings do not come pre-installed, it will need a layer of Teflon sealer applied to the thread (Figure# 1 for torque specs)

#### Modifications to the OEM knuckle are required for this kit.

Semi-metallic brake pads (B5010) have 0.200" minimal thickness Evolution Rotors (B2798AS) have 0.312" minimal thickness

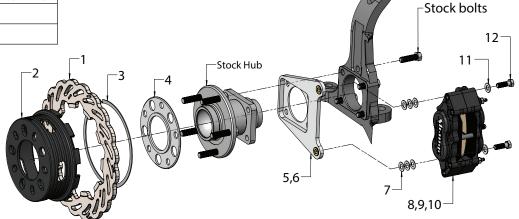
KIT CONTENTS			
ITEM#	PART#	QTY	DESCRIPTION
1	B2798AS	2	Evolution S Rotor
2	B2794B	2	2-Piece rotor adapter
3	B2794D	2	Spirolock
4	B4178C	2	Register Ring
5	B4177A	2	Caliper Mount
6	B1301E	4	3/8-24 press nut
7	B1301H	16	3/8" I.D. x 0.025" Thick Caliper Shim
8	B5010	4	DTC-30 Semi metalic 4-piston brake pad (B4177WCE)
9	B1900	2	Billet Caliper
10	P2316	2	1/8" NPT x –3AN Fitting
11	B1301J	4	3/8" I.D. x 1/16" Thick Flat Washer
12	B5000Y	4	3/8"-24 x 1.125" Caliper Bolt

### FIGURE 1:

Item#Torque spec (ft-lbs)Stock bolt5012\*35

**B4177WCE Driver Side Camaro** 

<sup>\*</sup>Must apply red loctite



#### FIGURE 2:



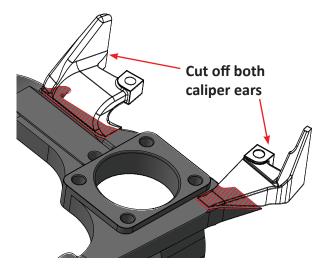
- 1. Raise and support front of vehicle on a level surface using suitable equipment.
- 2. Remove wheel, caliper, rotor and brake line. Inspect all ball joints for excessive play and replace as needed.
- 3. Modify knuckle as shown in Figure #3.
- 4. Place the caliper bracket (5) onto the knuckle, making sure the press nuts (6) are facing towards the rotor.
- **5.** Insert the stock hub into the outline in the bracket, securing it with the stock bolts. Torque to 50 ft.-lbs.
- 6. Put the register ring (4) on the hub then slide the rotor (1,2,3) over the wheel studs flush to the face.

  Note: Slotted rotors mount with the arrow pointing in the direction of normal rotation (See Figure #2).
  - Please read B1900 instructions for complete caliper instructions.
- 7. Attach caliper (9) using 3/8"-24 caliper bolts (12) with <u>red loctite</u> and 3/8" I.D. washers (11). Use 3/8" I.D. caliper shims (7) to center the caliper over the rotor, making sure pads contact the rotor evenly. The caliper bolt (12) 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 (12) to 35 ft-lbs.

**Note:** Because all knuckles vary slightly you may not need the same amount of shim on both sides of the vehicle.

- **8.** 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.
- 9. Mount the wheel and tire assembly on the hub and torque the lug nuts.
- 10. 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 3:**Knuckle Modification



- Cut away the caliper ears along the face of the knuckle
- Grind away any sharp edges
- Mount the caliper to check clearance and grind further if needed.

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

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