



## EVOLUTION

### EVOLUTION 4-PISTON FRONT BRAKE KIT INSTRUCTIONS

**KIT #**  
B4162WCE -"A" Mopar 10"  
Drum Spindles

**APPLICATIONS**  
1965-1972 Dart  
1965-1969 Barracuda

### 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# 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     | A1028A  | 10  | 1/2"-20 x 2.5" Wheel stud                                   |
| 2     | A1028B  | 10  | 1/2" I.D. Wheel stud washer                                 |
| 3     | B1301E  | 4   | 3/8"-24 Press nut (Installed in B4162AL & B4162AR)          |
| 4     | B1320H  | 2   | Inner hub bearing cup (Timken LM67010 installed in B4154SP) |
| 5     | B1320J  | 2   | Inner hub bearing cone (Timken LM67048)                     |
| 6     | B4154SP | 2   | Front Hub "HS" 4.5" B.C.                                    |
| 7     | B1324D  | 2   | Outer hub bearing cup (Timken LM11910 installed in B4154SP) |
| 8     | B1324E  | 2   | Outer hub bearing cone (Timken LM11949)                     |
| 9     | B2798AS | 2   | Evolution S Rotor   |
| 10    | B2794B  | 2   | 2-Piece rotor adapter                                       |
| 11    | B2794D  | 2   | Spirolock   |
| 12    | B1301H  | 16  | 3/8" I.D. x 0.025" Thick caliper shim                       |
| 13    | B1301J  | 4   | 3/8" I.D. x 1/16" Thick flat washer                         |
| 14    | B5000Y  | 4   | 3/8"-24 x 1.125" Caliper bolt                               |
| 15    | B5010   | 4   | DRM-35 metallic 4-piston brake pad                          |
| 16    | B1900   | 1   | Billet Caliper  |
| 17    | P2316   | 2   | 1/8" NPT x -3AN Fitting                                     |
| 18    | B4154E  | 2   | Aluminum hub cap  |
| 19    | B4162AR | 1   | R.H Caliper Bracket   |
| 20    | B4162AL | 1   | L.H. Caliper Bracket  |
| 21    | S3520F  | 2   | #222 Buna O-ring (Installed on B4154E)                      |
| 22    | A1026A  | 2   | 1/2"-20 x 3" HHCS GR8                                       |
| 23    | H1135C  | 2   | 1/2"-20 Flexlok Nut   |
| 24    | B1386C  | 2   | 7/16"-20 x 2" HHCS GR8                                      |
| 25    | B1346C  | 2   | 7/16"-20 Locknut  |
| 26    | B1320N  | 2   | Hub Seal (National #40494S)                                 |

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

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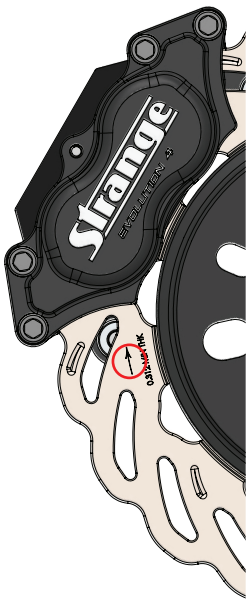
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**Installation instructions**

**Figure # 2**



1. Raise and support front of vehicle on a level surface using suitable equipment.
2. Remove wheel, and stock drum brake components. Inspect all ball joints for excessive play and replace as needed.
3. Install 1/2" Dia. wheel studs (1) in front hub (6) using 1/2" I.D. wheel stud washer (2) 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.
4. Install the caliper mounting bracket (19,20) using the 7/16"-20 hex bolt (24) in the top spindle hole along with the 7/6"-20 locknut (25), and the 1/2"-20 hex bolt (22) along with the 1/2"-20 flexlok nut (23) in the bottom spindle hole. Torque to 45 ft-lbs and 55 ft-lbs respectively.  
 Note: Ensure that the press nuts (3) installed in the caliper bracket face OUTBOARD.
5. Pack inner (5) and outer bearing cones (8) with NLGI 1 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.
6. Wipe a thin layer of wheel bearing grease on the bearing surface of the inner and outer cups (4, 7) and then place inner bearing cone (5) into the front hub (6).
7. Press the hub seal (26) into the inboard side of the hub (6) flush to the outer face of the hub (6).
8. Slide the hub assembly onto the spindle, then slide the outer bearing cone (8) into the hub (6).
9. Install the stock key washer and the spindle castle nut.
10. Mount the wheel and tire assembly on the hub and snug the lug nuts.
11. While rotating the wheel, torque the spindle nut to approximately 20 ft-lbs.
12. Loosen the spindle nut until the wheel spins freely and there is no end play.
13. Install the cotter pin, aluminum hub cap (18), and remove the wheel and tire. Note: cotter pin hole in spindle may need to be re-drilled.
14. Slide the rotor (9, 10,11) over the wheel studs flush to the face of the hub (6).  
 Note: Evolution rotors mount with the arrow pointing in the direction of normal rotation (See Figure #2).  
 - Please read B1950 instructions for complete caliper instructions.
15. Attach caliper (15, 16) with the arrow facing in the direction of normal rotor rotation using 3/8"-24 caliper bolts (13) with red loc-tite and 3/8" I.D. washers (12). Use 3/8" I.D. caliper shims (11) to center the caliper over the rotor, making sure pads contact the rotor evenly. The caliper bolt (13) 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 (13) 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.
16. Connect the brake lines to the calipers. Calipers are tapped to 1/8"-27 NPT and supplied with -3AN fittings (17). 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.
17. 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 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. 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 B4162WCE Assembly View

