



Advanced Innovational Machinery

# AIM Corp. PERFORMANCE PRODUCTS

## CF2 Performance Clutch kit (Complete Kit)

### Installation Instruction 1/2

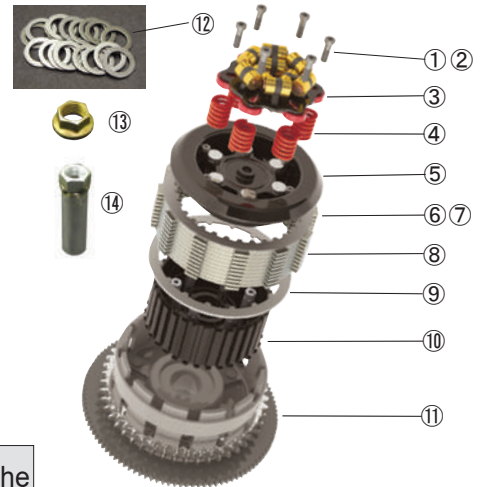
Parts#:TA008-002

Parts#:TA008-003 For '06 Dyna and '07 and later Big Twin, Cable Clutch Control

Read and become familiar with these installation instructions before start.

#### Contents:

|                                       | Qty |                            | Qty |
|---------------------------------------|-----|----------------------------|-----|
| ① 5mm allen head bolt                 | 6   | ⑨ Base steel plate, .125"  | 1   |
| ② Small washer                        | 6   | (3mm)                      |     |
| ③ Lock up head                        | 1   | ⑩ Clutch hub               | 1   |
| ④ Static coil spring                  | 6   | ⑪ Billet clutch basket     | 1   |
| ⑤ CF2 Pressure plate                  | 1   | ⑫ Spring shims             | 18  |
| ⑥ Top steel plate                     | 1   | ⑬ Clutch adjuster lock nut | 1   |
| ⑦ Adjust Steel Plate<br>(if provided) | 1   | ⑭ Lock nut socket          | 1   |
| ⑧ Clutch Pack                         |     |                            |     |



**WARNING:** Clutch Plates Stack Height is very important in order to make the lock up operate properly. Pay extra attention to set up the clutch pack set height.

**WARNING:** To prevent accidental vehicle start-up, which could cause serious injury, disconnect negative(-) battery cable before proceeding.

1. Remove clutch assembly (See Harley Davidson service manual.)
2. Install the CF2 clutch basket and hub assembly (⑪ and ⑩) including primary chain and compensating sprocket, see Picture 1.
3. Clean the threads on the compensator bolt, clutch nut, and mainshaft, then apply red locktight to them.
4. Tighten the compensator bolt and clutch hub nut. (see Harley Davidson service manual for torque spec.)
5. Install the primary cover with gasket then temporary tighten the primary screws.
6. Rotate the clutch basket by hand to check the clearance between the clutch basket and primary cover. If the clutch basket makes contact with the primary cover, you need to modify the primary cover.
7. Remove the primary cover screws and cover and install the thick .188"(3mm)base steel plate ⑨ in the clutch hub, see Picture 3.

If you are using new clutch pack which comes with CF2 Kit, skip to section 10. The clutch pack stack height has been measured by AIM Corp.

8. When checking the stack height do it with 9 friction plates and 8 steel plates (If you are using AIM Kevlar Plates, Carbonite Plates or any other kind of extra plate kit, there are 10 friction plates and 9 steel plates) without damper spring and damper spring seat. The measurement should be **1.85" to 1.89" (47.0mm to 48.0mm)**, see Picture 4.
9. Changing the stack height can be done with .043" (1.1mm) or .059" (1.5mm) adjust steel plate which would be on the top of the stack (yes you can have two steel plates on top of each other) or you can swap original steel plates of clutch pack to adjust steel plates. This creates the proper stack height. The different adjust steel plates are available through AIM Corp.

Picture.1



Picture.2



Picture.3



Picture.4





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## • Gen. 2 - CF2 Performance Clutch kit (Complete Kit)

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### Installation Instruction 2/2

10. Soak the new clutch plates ⑧ for 10 minutes in the recommended primary fluid, from the manufacture.
11. Once the correct stack height is completed start installing the clutch pack ⑧ into the clutch hub ⑩ by installing the narrow friction plate then damper seat. It must sit inboard of the narrow friction plate. Then install the damper spring with the concave side facing out. Install the remaining 9 friction and 8 steel plates (If you are using AIM Kevlar Plates, Carbonite Plates or any other kind of extra plate kit, there are 10 friction plates and 9 steel plates) in the correct manner alternating between the friction plates and steel plates, ending with the friction plate on the top.
- 12 Then install the adjust steel plate ⑦ (if needed) and top steel plate ⑥ on the clutch pack. You can have two steel plates on top of each other.
- 13 Install the pressure plate ⑤ and the 6 coil springs ④, and then the lock up head ③ on the pressure plate using the provided bolts ① and washers ② tighten in a star pattern little at a time, so the plate can evenly sink in, then tighten to 9-10 Ft.-lbs., seen in Picture 7.
14. Check the clearance between Lock up head black retainer plate and brass weight by pushing down the weight until the weight lever touch the top surface of the round piston. At this time, the weight should not touch the black retainer plate. See Picture 8.  
If there is no clearance between the lock up head black retaining plate and brass weight, check clutch plates stack height, Section 8.
- 15 When adjusting the clutch (cable only) use the stock clutch adjuster screw and special lock nut ⑬ to adjust the clutch cable free play. Tighten the screw in until it gently bottoms out then back it out 1/2 to 1 full turn. Use the special lock tool ⑭ seen in Picture 9.
- 16 Then adjust the cable with 1/8 inch free play.
- 17 Check all the weights for free movement when the clutch pulled in. If the weights is binding at this time, check the clutch plates stack height, section 8.
- 18 Install the primary cover and gasket and then fill with fluid (see Harley-Davidson service manual.).
- 19 Use derby cover gasket part number AM003-001 or if your derby cover is solid cut out the middle to make a ring seen in Picture 10.
- 20 Check the clearance between lock up head and derby cover with clay before installing the derby cover.

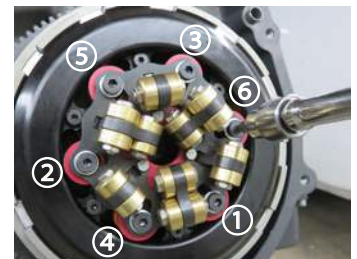
Picture.5



Picture.6



Picture.7



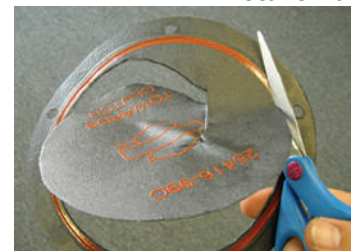
Picture.8



Picture.9



Picture.10



**Caution:** H-D stock derby cover, 103" and 110" CVO Covers (except any special) are not required a derby cover spacer. Non-stock derby cover (including any special) may require a derby cover spacer. These numbers will be changed depending on motorcycle specifications.