Thank you for choosing COMP Cams® products; we are proud to be your manufacturer of choice. Please read this instruction sheet carefully before beginning installation, and also take a moment to review the included limited warranty information.

**#210 Hardware Pack Includes:**

- (3) 1 1/4” Counter sunk head Allen screws
- (3) 1” Counter sunk head Allen screws
- (3) 3/4” Standard head Allen bolts
- (2) 1/4” Counter sunk head Allen screws
- (2) 1 1/4” Button head Allen bolts
- (6) 1/4” Button head Allen bolts
- (1) Pipe plug with Allen head
- (4) Shims (1) .005” thick
  - (2) .010” thick
  - (1) .020” thick
- (1) Roller cam button
- (1) Cam plate
- (2) Standard head Allen bolts
- (2) Timing Pointers
- (2) Button head bolts for timing pointer
- (2) Washers

1. Be sure that the block side of your cam gear is smooth and free of any burrs. Should the gear or the block need smoothing, use 600 grit sandpaper. Some engine builders machine the back side of the cam gear in order to use a wear plate. (If you choose to use a wear plate, the COMP Cams® part numbers are #201 for the small block and #203 for the big block.) This is not mandatory, but is a widely used practice by many professional engine builders. Another option is to use a timing chain with a roller thrust bearing that will reduce friction on the front of the block. (If you choose this option, use COMP Cams® Part #7100 Billet Timing Set or #3100KT Adjustable Gear Set.)

2. Install the timing cover base on the block using the (2) 1/2” standard Allen bolts and the gasket supplied. You should set the end play before installing the timing chain. This is done by placing the cam gear onto the cam with the wear plate (not included) in place, if using one. Then, install the cam thrust button, sandwiching (1) .010” shim between it and the cam. Place the cam button retaining plate over the cam button, and install with the three supplied 3/4” standard Allen head cam bolts. Install the front cover using all 8 bolts and tighten firmly. DO NOT use any sealer at this point! Measure cam end play with a dial indicator through the checking hole in front cover. Use a screw driver through a lifter bore to move the cam back and
forth. Recommended movement (end play) is .005”-.010”. Install the proper shims between the end of the cam and the cam thrust button to achieve the correct amount of end play. Be sure to TIGHTEN ALL 8 BOLTS each time you check the end play!

3. Before moving the cam gear, check your alignment between the cam and crank gears with a straight edge. The gear alignment should be within .005”. If corrective alignment measures need to be made, you should start by moving the CRANK GEAR. Once your gear alignment is correct, verify the cam end play. After the desired end play (.005”-.010”) is achieved, apply a small amount of LOCITITE on the supplied Allen bolts and secure the cam button retention plate and cam gear to the cam. You should clean both the timing cover base and the cover plate with BRAKE CLEAN or Lacquer Thinner prior to installing. Be sure to also lube the cam thrust button. Apply a thin layer of oil resistant silicone to the cover before installing as well.

4. If the use of a timing tab is desired, modification to your COMP Cams® timing cover and/or the tab used will be required. Please contact the CAM HELP line at 1-800-999-0853, and speak with one of our technicians for further assistance.

5. If using a STOCK type water pump, it will be necessary to replace the stock bolts securing the backing plate to the water pump with the (6) supplied ¼” button head Allen bolts supplied in the hardware kit. Some aluminum water pumps may require minor grinding to the back side to get the needed clearance. Make sure the water pumps backing plate bolts DO NOT contact the front of your COMP Cams® timing cover.

Limited Warranty

Competition Cams, Inc. warrants that all of its products are free from defects in material and workmanship, and against excessive wear for a period of (1) one year from the date of purchase. This limited warranty shall cover the original purchaser.

Competition Cams, Inc.’s obligation under this warranty is limited to the repair or replacement of its product. To make a warranty claim, the part must be returned within (1) one year of purchase to the address listed below, freight prepaid. Items covered under warranty will be returned to you freight collect.

It is the responsibility of the installer to ensure that all of the components are correct before installation. We assume no liability for any errors made in tolerances, component selection, or installation.

There is absolutely no warranty on the following:

A) Any parts used in racing applications;

B) Any product that has been physically altered, improperly installed or maintained;

C) Any product used in improper applications, abused, or not used in conjunction with the proper parts.

There are no implied warranties of merchantability or fitness for a particular purpose. There are no warranties, which extend beyond the description of the face hereof. Competition Cams, Inc. will not be responsible for incidental and consequential damages, property damage or personal injury damages to the extent permitted by law. Where required by law, implied warranties or merchantability and fitness are limited for a term of (1) one year from the date of original purchase.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state.

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