INSTRUCTIONS

#210 Small Block Chevrolet Two-Piece Timing Cover

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.

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.