



HOW TO DEGREE A CAMSHAFT

By Eric Bolander

The "Checking Figures @ .050" Cam Rise" data is the only figures to be used when checking the camshaft.

It is nearly impossible to check a cam at running clearance where the opening and closing points occur on the clearance ramp. It is also difficult to check lift at the valve, as flexibility in the valve train, minor errors in rocker arm geometry, etc. can add or subtract from the total lift. For this reason we use a checking clearance of .050" lift off base circle measured at the tappet for all of our camshafts. The amount of rise is well past the end of the clearance ramp and will give consistent and predictable reading when degreing the camshaft.

When checking the cam, with these figures, proceed in your normal matter to find T.D.C. and set your degree plate and pointer. Place dial indicator to read directly off of the tappet or an extension attached to the tappet. Find the base circle (where the tappet is on the heel of the cam and the indicator is not moving) set the indicator at "0". Rotate engine in the normal direction of rotation until indicator reads .050" lift, read degree plate. This will be the opening point of this valve for checking purposes. Proceed to rotate the engine in normal direction, watch indicator for gross lift reading. Continue turning the engine until you reach .050" above base circle. This is the closing point of this valve for checking purposes.

Check the other valve for this cylinder in the same matter. When you have all four figures you will be able to compare them to the "Checking Figures @ .050" Cam rise" figures on the other side of this cam card. Duration (opening number + 180 + closing number) should be within + or - 2 degrees. You will also be able to see if the cam is split, advanced or retarded.

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