THE PREVENTATIVE MAINTENANCE SERIES

Mike Dawson

Oil leaks are always a topic of conversation and this month I'd like to address some causes that are not directly related to failed seals and gaskets, although marginal parts are the quickest to leak.

The first is a crankcase that is severely diluted with gasoline. You get tremendous blow-by and no seal can stop the combination of pressure and thin lubricant. The cause can be a leaking needle/seat and parking with the tank uphill, a failed choke pull-off that is ignored, a float with gas in it or a gently leaking fuel pump (with no raised internal boss). Also, don't overlook extra thin oil put in by others.

Second, check your crankcase vent system. ALL engines have them, whether a road draft tube or one of the different positive crankcase ventilators. If any of the plumbing is restricted, pressure quickly builds up and it can even blow oil out of the dipstick tube in extreme situations.

Third, an overfilled crankcase can cause pressure build up. Does it have gas in it? Also be sure to check your oil after you or others have changed it. I have found numerous cases over the years where dipstick tubes are not fully seated in the boss. If you have to add more than the 4 ½ quarts at a change, pull off the right side lower shroud and make sure the raised bead of the tube is seated on the boss. Chevrolet also published a TSB on the dipsticks in '64 because they sealed so well at the top of the tube that air pressure pushed the oil down in the tube and gave an erroneous reading. The solution was an air bleed hole in the side of the dipstick tube after W161610 in '64.

Under miscellaneous, worn out compression rings and exhaust valve guides can cause crankcase pressure that only a double road draft tube and double STP will help. Keeping filthy oil full of condensation in an engine in the winter is a good way to have a pressure regulator valve stick and blow the oil filter seal. Speaking of winter, short trips in below freezing temperature can cause condensation in dirty vents that freezes. Number two above is then dramatized in a very short period of time.

Getting back to the vents, short of removing the top cover, a method of cleaning the lower tube is as follows: fray the end of an old speedometer cable into a ball, gently pressurize the crankcase with metered shop air or a vacuum cleaner outlet and work the tube while the air flow blows out the junk. Be sure to clean the fixed orifice or PCV valve.