

## Technical Information

## FRAM

## Loss of Oil Pump Prime

Immediately after an oil change one of the most confusing issues to face the typical do-it-yourselfer or professional mechanic is failure to get oil pressure back into the operating range.

Although not a common occurrence, it is very possible that the oil pump may lose it's prime during the oil change.

When the used motor oil is drained from the engine the oil may also drain from the oil pump pickup tube and possibly from the oil pump itself. When new motor oil is installed the pump's pickup tube inlet again becomes submerged trapping air in the tube on the suction side of the oil pump. The trapped air will cause cavitation of the pump and prevent it from producing oil flow and subsequent oil pressure.

Many installers tend to blame this on the oil filter and assume that the filter is blocking the flow of oil. Since the filter is now suspect the installer will install a second filter. Sometimes this solves the problem because the trapped air was released when the first filter was removed. Of course, the installer's suspicion that the oil filter was at fault has increased.

The point being made is the oil filter was not the problem and in most cases there is a simple solution.

If after the oil and filter change, the red light or low oil pressure remains for ten seconds, shut the engine off, remove the oil filter and, using an oil squirt can with 30 weight motor oil, squirt oil several times into the oil filter base outlet on the engine. (This will be the opening beside the threaded stud; it will not do any good to squirt oil into the threaded stud.) Next, fill the filter with new motor oil and reinstall. Start the engine and check for oil pressure. In most cases the problem will be solved. DO NOT allow the engine to run for more than ten seconds without oil pressure. Use a watch to time the ten seconds and be sure of the elapsed time. In some instances the full ten seconds is needed for the pump to recover oil flow. If this fails, again remove the filter and crank the engine until oil spills from the engine base. DO NOT crank over ten seconds at a time. When oil spills, reinstall the oil filter, correct the oil level and restart the engine. Oil pressure should now be back to

Note: Sometimes this problem can be avoided by limiting the time the oil is drained.