

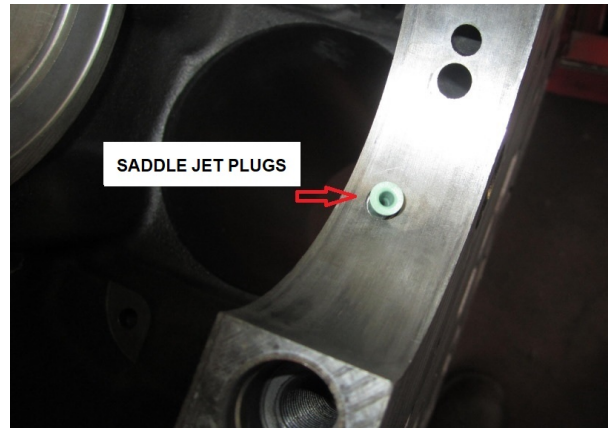
## **Piston Cooling Nozzle Plugs on Cummins/Dodge 5.9 & 6.7L Diesel Engines**

The AERA Technical Committee offers the following information regarding the use of piston cooling nozzle plugs on Cummins/Dodge 5.9 & 6.7L diesel engines. This information pertains to the common-rail engines used during this time frame and should be referenced anytime the cylinder block is being worked on.

Most of the cylinder blocks used for these engines incorporated two drillings for the piston oil cooling jets used to reduce piston crown temperatures. Only one of those passages were used at a time while the other was blocked off. When the bolt-on "J" Jet plugs a solid block-off plug must be used or oil pressure will be sacrificed. The location of those block-off plugs is indicated in Figure 2, while the solid plug Part # 3959574 is shown in Figure 1.



**Figure 1. 3959574 Block-Off Plug**



**Figure 2. Block-Off Plug Locations**

There have been instances of these plastic block-off plugs melting when extreme operating conditions are endured. There is an aftermarket solid Billet Aluminum plug available for these situations. Many performance application engines use those plugs for added assurance.