Oil Pump Differences on 1996-2011 Chrysler/Jeep 3.3 & 3.8L Engines

The AERA Technical Committee offers the following information regarding different oil pumps on 1996-2011 Chrysler/Jeep 3.3 & 3.8L engines. To achieve proper oil system function using the correct components and proper assembly of those components is essential for these engines.

Numerous front cover and associated oil pump components have been used in the fifteen year existence of this engine family so care should be exercised when ordering parts. The pressure relief valve is a main concern while working on these oil pumps. Refer to the illustrations and information below to help assemble the components properly.

Chrysler Front Cover 5137544AE (K117 kit) - 1996-2007 3.3 & 3.8L

Traditional assembly: valve, spring & cup plug
Chrysler Front Cover 68029219AC (K391 kit) - 2005-2008 3.8L

Install spring first then valve and then cup plug as shown with cup facing outward.
Install spring first then valve and then cup plug as shown with cup facing outward, same as K391.