New Cummins Front Cover and Main Shaft Seal

Cummins has introduced fuel pump front covers with a new design along with a design change in the main shaft seal.

There are four new front cover housings covering automotive, VS, Pacer heavy automotive, and heavy VS applications. The difference between the old and new covers is the seal bore, on the fuel side of the cover, has been enlarged and modified to accommodate a larger main shaft seal. The chart on the left shows old and new front cover part numbers. Older style front covers can continue to be used. DIPACO has available both automotive AFC front covers, part numbers D3063054 and D3075524.

The drawing on the right shows a front cover with the enlarged seal area on the fuel side and the normal seal area on the oil side.

The change in the front cover design was driven by the design of the new main shaft seal, part number 3075523. The new seal has a teflon lip and a larger, rubber coated outside diameter. The teflon lip is used instead of the usual rubber lip to reduce leaks between the seal and the main shaft. It also reduces shaft wear caused by the low lubricity of diesel fuel, as compared to engine lubricating oil. The rubber coating on the outside diameter should reduce leakage between the housing and the seal. DIPACO also has this new seal available, part number D3075523.

The D3075523 seal replaces the D3062676 seal ONLY on the fuel side of the main shaft. The D3062676 seal WILL continue to be used on the oil side of the main shaft.

The new front cover and seal can be used on any AFC fuel pump, not just as a direct replacement. This design, with the larger fuel seal inside of the smaller oil seal, should eliminate the problem of seals walking out of the cover due to air compressor problems and other factors.

There are special tools to use and instructions to follow when installing and removing the seal. Failure to follow the instructions will result in seal failure and potential damage to the front cover. The procedure for installing the seal is on the reverse side of this bulletin and is also included with each seal. Cummins Service Topic 92T5-26 includes the complete procedure for rebuilding the front cover assembly.