

TECHNICAL BULLETIN APTB 03/09 ■ Oct 2009

SUBJECT: Racor® Fuel and Oil Filters for 6.0 L Engines

When 6.0 L engines were first introduced in 2003, the oil filter center post on F Series truck engines was a non-spring design (Figure 1). In 2004, the design changed to a slightly longer post surrounded by a spring (Figure 2). The center post on E Series engines has always been a longer post with spring design. The overall height of the original equipment filter element (PFL2016) is unchanged (7.1") for all applications.



Figure 1 (2003 F Series)



Figure 2(2004-2007 F Series)

Service Dealers should be aware some aftermarket filter vendors (i.e., Napa and Wix) offer oil filter elements with three different dimensions for various 6.0 L applications (i.e., 2003 F Series, 2004-2007 F Series and E Series). They compensate for the difference by using different cap dimensions for the 2004-2007 F Series and E Series filters. Dimension details are listed below:

Application	Product	NAPA part	WIX part	Element hight	Racor OEM part number	Element hight	Racor OEM replacement cap
2003 F series	Element Only	PFL2016	FIL 7311	7.1"	PFL2016	7.1"	RK31821
2004-2007 F series	Element & Cap Assembly	PFL2016	FIL 7312	8.203"	PFL2016	7.1"	RK31821

Warning: A misapplication of aftermarket filters resulting in poor lube oil filtration could damage the 6.0 L high-pressure oil circuit, including injector failure, in addition to the potential for other engine damage. We know of at least one possible misapplication using aftermarket filters that resulted in virtually no oil filtration, and there were likely more. It is possible to install the aftermarket element/cap assembly that should be applied to 2004-2007 trucks (long post with spring) on a 2003 truck (short post without spring); the >1" element height difference leads to the bypass valve never sealing. We can also speculate about similar negative consequences if a Racor element is installed with an aftermarket cap (the old element is hard to get out of an aftermarket cap).

In addition to the benefits of using original equipment filtration to eliminate the possibility of an application error, we once again suggest installing Racor element PFL2016 in all 6.0 L applications. If the existing cap is not original equipment, install the appropriate Racor replacement cap (refer to the table above).

For more information visit