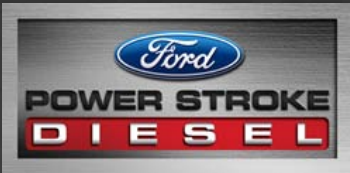




POWER STROKE

D I E S E L



Filter Comparison Kit

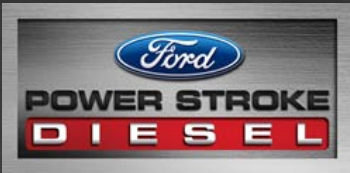


**Original Equipment Motorcraft
Maintenance Parts**



There's No Replacement for the Original

GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.

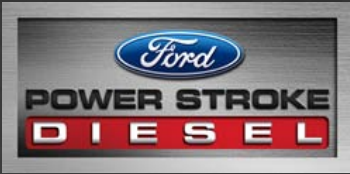


The OEM Motorcraft 6.0L Oil Filter



- Meets OE specifications
- Engineered to fit properly
- Backed by the Ford and Motorcraft names
- Filters all particles over 20 microns

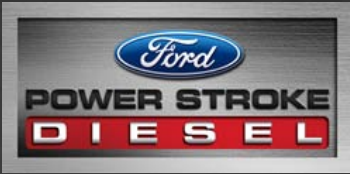
GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.



The Motorcraft 6.0L Oil Filter

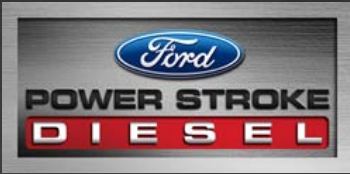
- In the 6.0L Power Stroke[®] engine, the oil filter performs additional duties besides filtration:
 - Engages and closes oil drain valve to ensure all oil enters into filtration path
 - Engages bypass valve on top of oil filter housing stand pipe

Note: *The patented Original Equipment Manufacturer (OEM) design allows for a precision fit that results in an optimal oil flow*



Alternative Oil Filters

- Some non-OEM/competitive oil filters on the market have inadequate designs such as:
 - Shorter element heights that do not meet OEM specifications
 - Removable locking lid on the top of the element that is both unnecessary and unsafe
 - Shorter locking end-caps that restrict flow from the bypass valve and may cause engine damage



Consequences

- Using a non-OEM oil filter may lead to:
 - Decreased oil life
 - Inaccurate injection actuation, possibly leading to injector failure
 - Excessive engine wear due to inadequate filtration of debris and particles
 - Trouble diagnosing a no-start/hard-start condition
 - Catastrophic engine failure

Note: *A removable lid from a competitive filter may be left in the housing, allowing the engine to run with no filter*



Special Service Message

MESSAGE TITLE: 2003-2007 MULTIPLE VEHICLES 6.0L DIESEL - NO START
CONDITION WITH LOW INJECTION CONTROL PRESSURE (ICP) - SERVICE TIP

APPLICABLE VEHICLES:

- 2003 - 2007 TRUCK:** 00028 F-SERIES
- 2004 - 2006 TRUCK:** 00016 E-SERIES
- 2003 - 2005 TRUCK:** 00126 EXCURSION

OASIS MESSAGE:

SOME AFTERMARKET OIL FILTERS ARE OF THE INCORRECT SIZE AND FIT FOR 6.0L DIESEL EQUIPPED VEHICLES. THIS MAY CAUSE OIL FLOW RESTRICTIONS OR DRAIN BACK, AND MAY RESULT IN A CRANK NO START/HARD START CONDITION WITH LOW OR SLOW TO BUILD INJECTION CONTROL PRESSURE(ICP). WHEN PERFORMING NORMAL DIAGNOSTICS, INSPECT THE OIL FILTER FOR CORRECT FIT AND APPLICATION. INSPECT FOR DAMAGE TO THE OIL FILTER STAND PIPE, CHECK VALVE, AND OIL FILTER HOUSING LID. INSTALL A FILTER THAT FITS PROPERLY, SUCH AS A MOTORCRAFT FL-2016.

GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.



6.0L Oil Filters



Motorcraft

Competitor "A" Competitor "B"

GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.



Motorcraft vs. Competitor "A"

Figure 1

Motorcraft end cap engineered to fit properly in oil filter cap to allow oil flow to bypass valve for engine protection

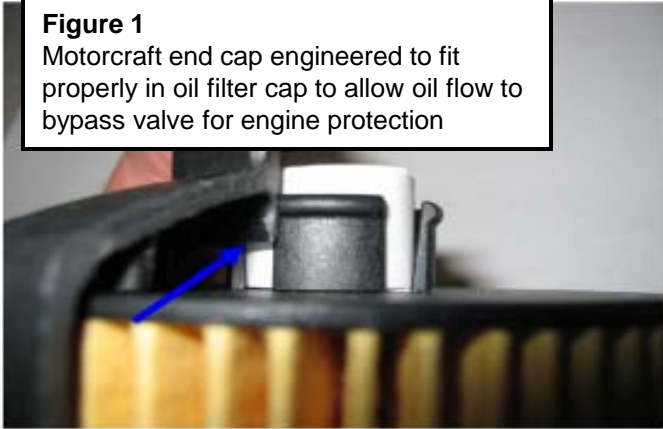


Figure 2

Competitor "A" design restricts oil flow to the bypass valve potentially resulting in engine damage



Figure 3

Motorcraft precision fit cap lock and proper spacing between oil filter cap and element end cap

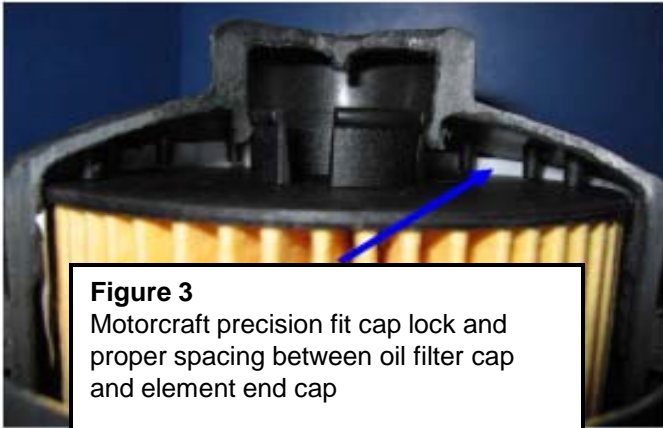
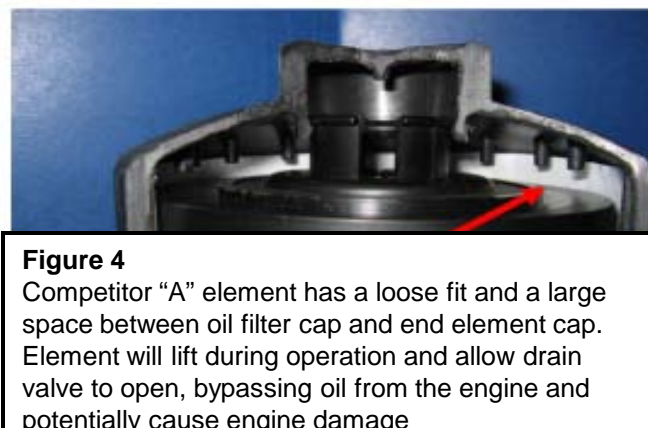


Figure 4

Competitor "A" element has a loose fit and a large space between oil filter cap and end element cap. Element will lift during operation and allow drain valve to open, bypassing oil from the engine and potentially cause engine damage



GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.



Motorcraft vs. Competitor "A"

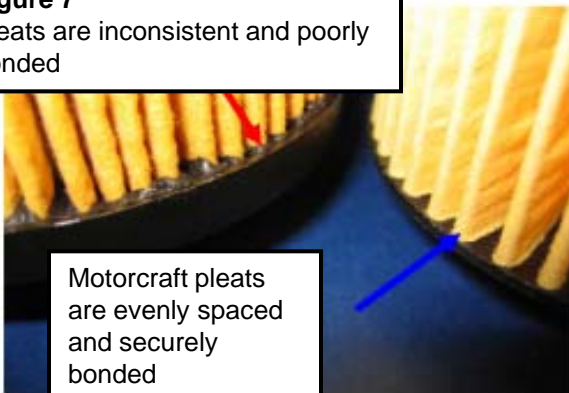


Figure 5
Competitor "A" element body is .250" shorter than the Motorcraft element allowing element to float in housing



Figure 6
Chemical stability of the adhesive bonding between gasket and end disk is doubtful

Figure 7
Pleats are inconsistent and poorly bonded



Motorcraft pleats are evenly spaced and securely bonded



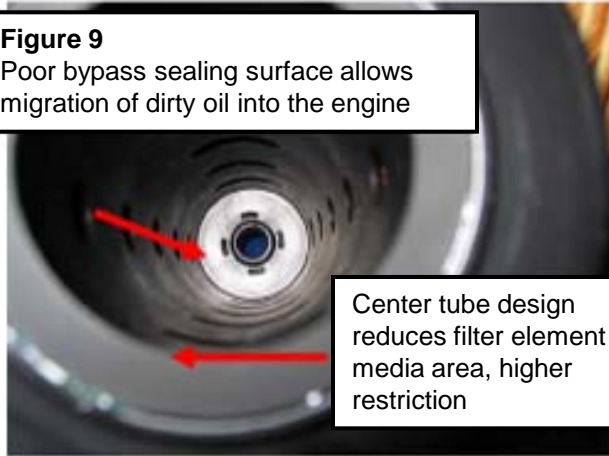
Figure 8
Glued element boom seal may come unglued when removing the filter for service, leaving the seal in the housing



Motorcraft vs. Competitor "A"

Figure 9

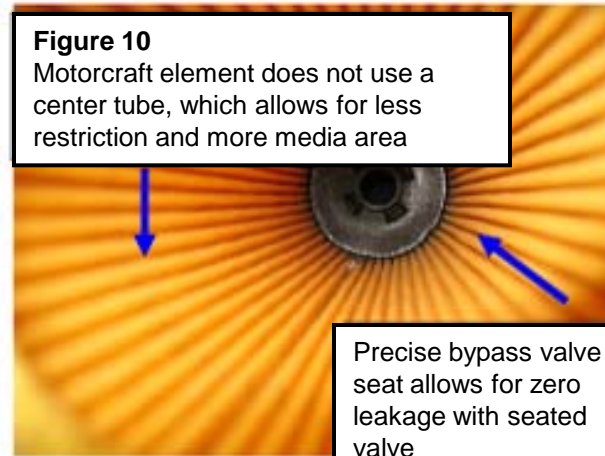
Poor bypass sealing surface allows migration of dirty oil into the engine



Center tube design reduces filter element media area, higher restriction

Figure 10

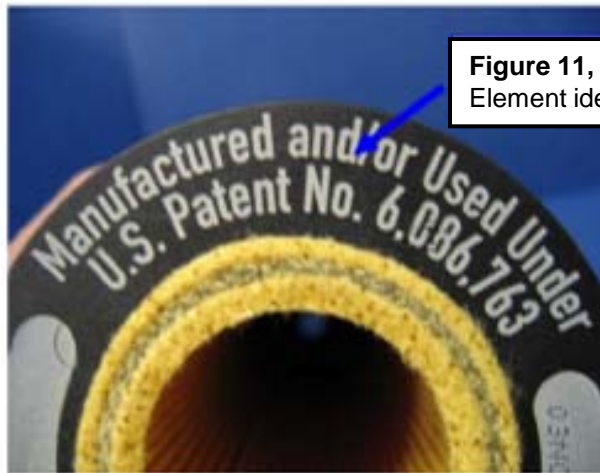
Motorcraft element does not use a center tube, which allows for less restriction and more media area



Precise bypass valve seat allows for zero leakage with seated valve

Figure 11, 12

Element identification



GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.




Motorcraft vs. Competitor "B"



Removable Lid



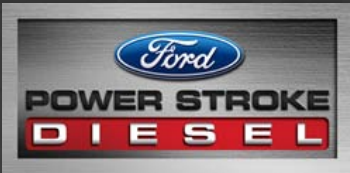
Competitor "B" 



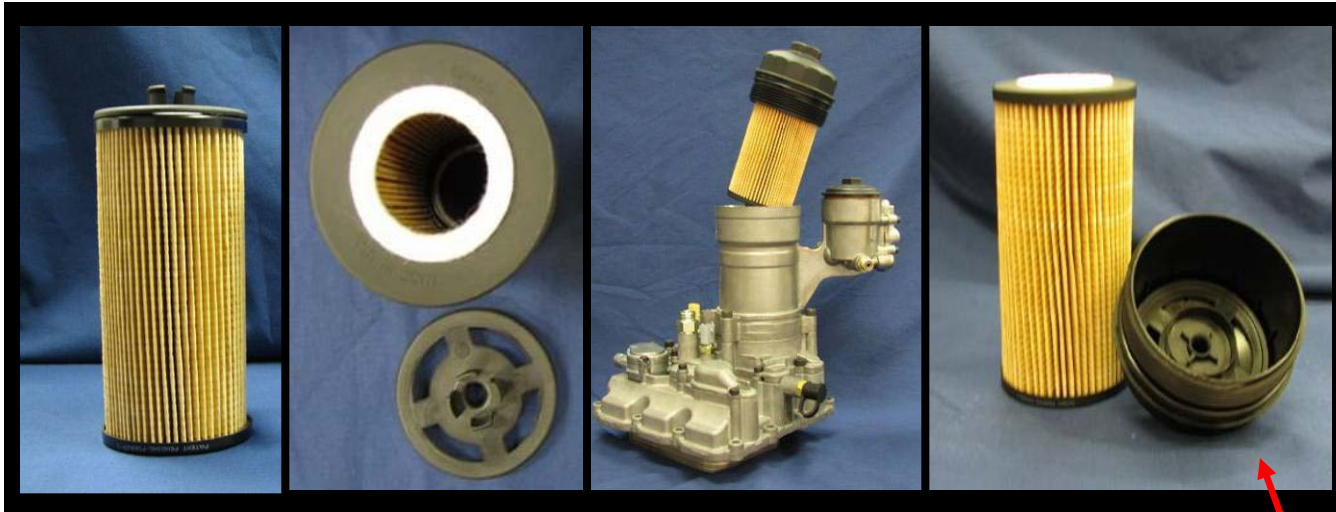
Element Height
6.46"

Element Height
6.5"

Significant Height Differences

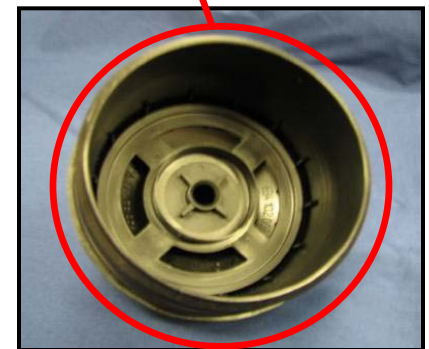


Motorcraft vs. Competitor "B"



Possible consequences with removable lid

Upon removal, the lid remains in the oil filter cap and may break off, possibly resulting in plastic pieces entering the engine crankcase



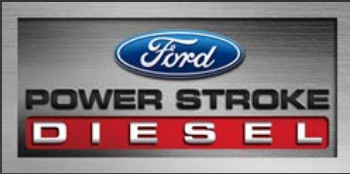
GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.



6.0L Fuel Filters

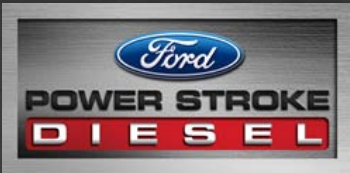


GENUINE **POWER.** GENUINE **PERFORMANCE.** GENUINE **PARTS.**



The OEM Motorcraft Fuel Filter

- The critical features on the OEM Motorcraft fuel filter that make it more effective than the competitors' filters:
 - Air bleed orifice is engineered to utilize the full potential of the filter pleats
 - Outer wrap found on the OEM filter keeps moisture from settling in the pleats and water from passing through to the fuel system



Motorcraft vs. Competitor "A"

Missing Critical Features

AIR BLEED ORIFICE

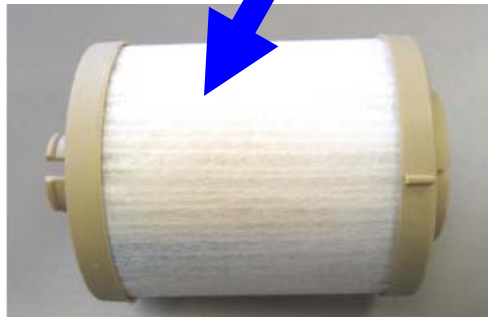


Air Bleed Orifice works in conjunction with the orientation tab to allow air to be purged from the top half of the module



Orientation Tab is present on Competitor "A" filter, but Air Bleed Orifice is missing. Filter housing will only fill halfway utilizing half of the filter media, reducing life and efficiency

WATER BARRIER OUTERWRAP



The outer wrap on the Motorcraft OEM filter pre-separates out water droplets before reaching the pleated media to prevent the water droplets from settling in the pleats on the upper half of the element. As droplets build up in the valleys of the pleats, the filter media will become saturated and begin passing through into the fuel system





Motorcraft Parts for Your Diesel!



Maintenance Parts

- Air Filters
- Fuel Filters
- Oil Filters
- Glow Plugs
- Glow Plug Relays
- Heater, Air Intake
- Thermostats
- Fuel Additives

GENUINE POWER. GENUINE PERFORMANCE. GENUINE PARTS.