

# WIX 33963



The demand for better fuel economy, cleaner burning fuels, and more power continues to drive engine development forward. Today's fuel systems require a level of cleanliness that is far more stringent than those of the past. The filter industry must also keep pace with these changes.

The WIX 33963 has recently been redesigned to make it suitable for use on future systems. The filters continue to provide a superior level of protection for the diesel fuel systems for which they are currently cataloged.

**Primary Filter:**  
WIX has phenolic fuel/  
water separation media,  
no outer scrim required.



**Secondary Filter:**  
Dual element design to  
filter fuel twice.



**Secondary Filter:**  
Larger bleed hole in top  
cap helps to prevent  
airlocks.



**Secondary Filter:**  
Air bleed hole in air bleed  
chamber prevents fuel  
by-pass.



When the WIX fuel/water separator filter (Primary) is compared to the OE style fuel water separator, both the height and the white membrane material of the OE style filter stand out as notable differences.

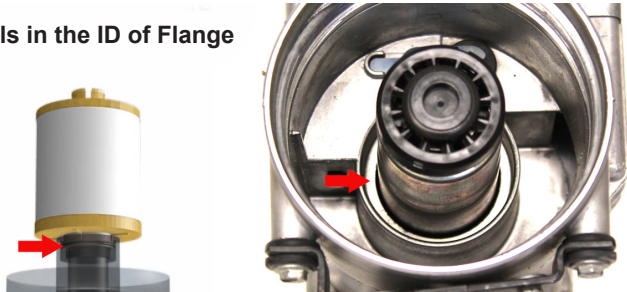


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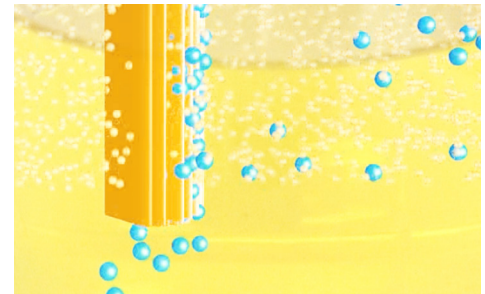
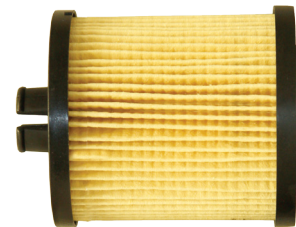


When installed both filters seal radially, however the sealing point is different for each. The OE style filter seats and seals in the ID of the flange in the filter housing. This design requires an extended sealing collar at the bottom of the filter which fits into the flange area. The radial seal is formed as the filter is seated.

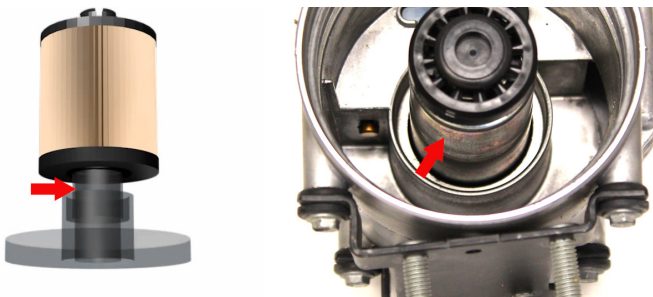
Seals in the ID of Flange



The white membrane material is not required for the WIX filter as its media is a proprietary blend that has been engineered with increased hydrophobic properties. This means the media itself is chemically resistant to the flow of water. As the fuel water mixture attempts to pass through the media, the water content is stripped out.



The WIX 33963 fuel/water separator creates a radial seal around the center post of the housing.



Seals Around Center Post

Because the WIX fuel water separator seals at the post and not in the housing flange, the sealing collar is not required. The absence of the collar reduces the overall height of the WIX filter.

As the fuel water mixture attempts to pass through the media, the water content is stripped out. The water molecules are more dense than those of the fuel and collect in the bottom of the housing to be drained out based on the manufacturer's suggested guidelines.

Because the WIX filter does not use the membrane construction, bleed holes are not required to vent the air that can become trapped under such coverings.

