

CONFIDENTIAL



WHY PAY MORE?

PRODUCT REPORT

Product Report Date: April 29, 2011

Part Name: Air Filter

Hyster Part Number: 1559418

Product Overview:

The air filters primary function is to protect the engine by preventing dust, dirt, and other airborne particles from entering the engine. A secondary function of the air filter is to resist a "thermal event" (fire) in the case of an engine backfire. There are many filter media materials, liners and external casing materials used to manufacture air filters. Poor filter performance and construction can result in excessive wear of engine components and can contribute to premature engine failure, or "dusting" of the engine.



Hyster P/N: 1599418



Will-Fit Part

Key Performance Indicators:

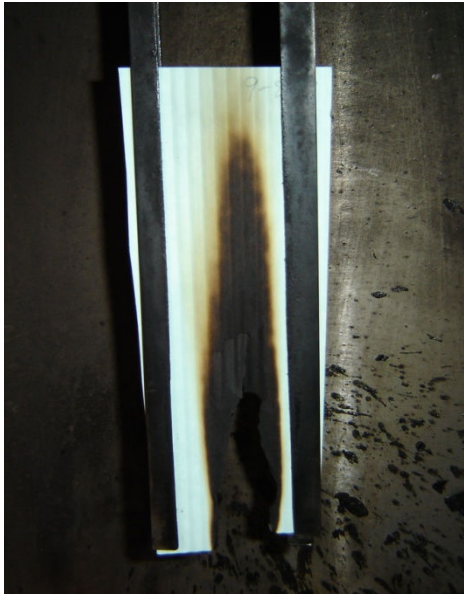
- Hyster air filters meet specific UL and industry requirements regarding flame retardant media materials. Side by side testing of the flame retardant media exposes the will-fit filter media as a catastrophic failure (See test results included with this report).
- The will fit air filter was tested along side the Hyster air filter. The test results indicate that throughout one Hyster air filter life cycle, the will-fit filter allowed more than 10 times more dust to pass through the filter and on to the engine (See test results included with this report).
- Based on test results, the Hyster air filter provides 680% more dust capacity while maintaining specified air flow and contaminate protection than the comparable will-fit air filter. (See test results included with this report).

Conclusion Statement:

Inadequate filtration can cause serious wear to the engine and it's components. This contributes to poor engine performance, low power, excessive fuel consumption, adverse emission levels, and ultimately, expensive repairs. Hyster filters have been specifically designed to minimize maintenance while increasing the life and performance of your engine.

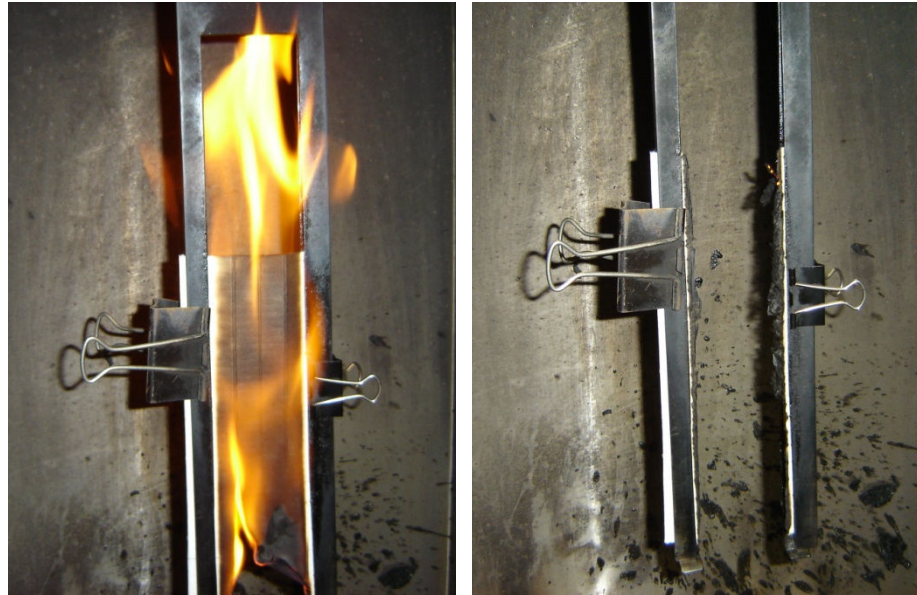
Note: The evaluation and testing were performed by the NMHG approved supplier of air filters. Testing and evaluation date: Jan 2011. Testing was done on three samples which is not statistically significant

Hyster Approved Flame Retardant Media



Hyster Flame Retardant media after testing.

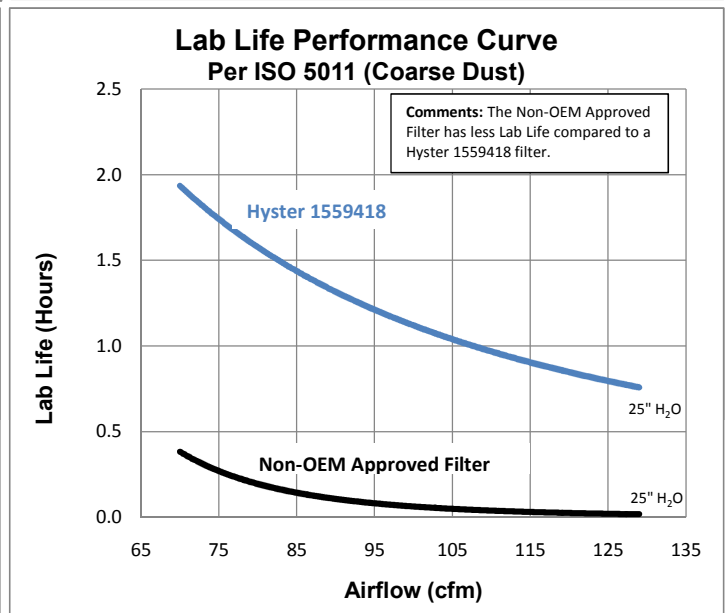
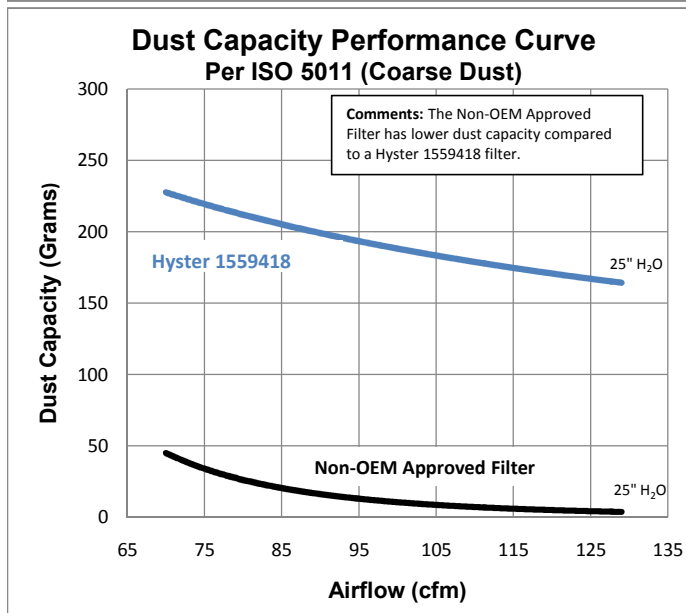
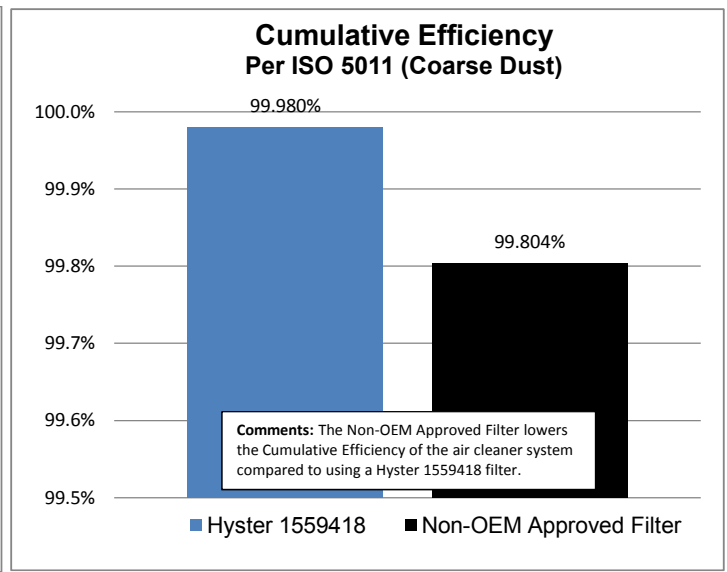
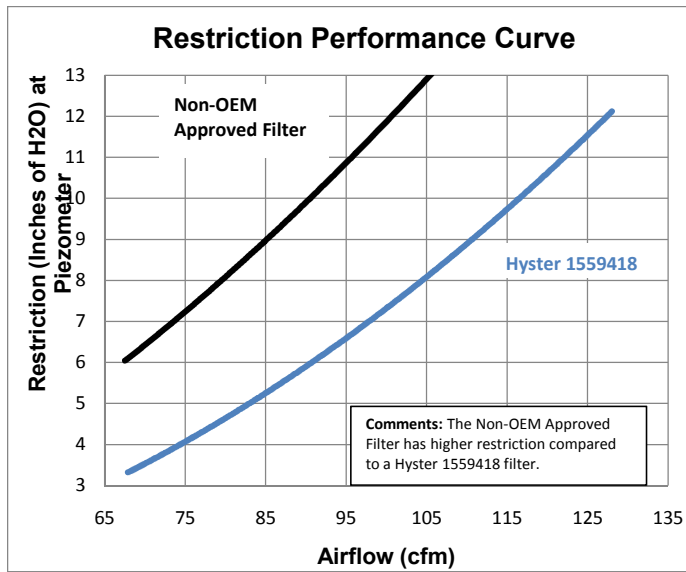
Non-OEM Approved Flame Retardant Media



The Flame Retardant test was completed on a Non-Approved Hyster filter media. The media was cut from the filter element & tested on a flame retardant fixture. The test failed, the media burned completely, no indication of any flame retardance in the material.

Pictures of burning media (above left) and also picture 15 seconds after (above right), there's nothing left!

Element: Hyster 1559418 vs. Non-OEM Approved Filter



From this data...

13%

The "Dust Capacity" or "Lab Life Hours" the Non-OEM Approved Filters provides compared to one Hyster 1559418 filter.

7.8

The number of Non-OEM Approved Filters to equal one Hyster 1559418 filter (in terms of Dust Capacity or Lab Life Hours).

10.5

The number of times more dust the Non-OEM Approved Filters passes compared to the life of one Hyster 1559418 filter.

Comments:

Difficult to insert the Non-OEM Approved Filter - may cause leaks.
Non-OEM Approved Filter media fails industry Flame Retardant testing.
Hyster 1559418 filter has higher Dust Capacity and Longer Life.
Hyster 1559418 has higher Dust Capacity and Longer Life.
More Down time and servicing required with Non-OEM Approved Filters.
Engine dusting may be a concern with Non-OEM Approved Filter

2010-008095

Jan-11