



Model Year 2017 to Current - Fuel Filter Change (Primary And Secondary) For The EM - USA17 Emission Engines



Internal Content

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The new EM - USA17 Emission Engines Secondary Fuel Filters have a " DEEP " groove end cap with a seal to fit on the new Fuel Filter Housings. Previous filters had a " SHALLOW " groove end cap and will not fit nor seal properly on EM - USA17 Emission Engines Fuel Filter Housings. It is also possible that metal debris may be created when trying to install the incorrect filter as seen in the attached pictures [here](#). The Secondary Filter is mounted in the forward position on the Fuel Filter Housing. The Primary Filter is mounted behind the Secondary , or on the frame rail.

EM - USA17 Emission Engines require a 4 micron Secondary Filter.

Volvo

- 21764964 - Primary Filter, Long Life
- 21764966 – Primary Filter, standard
- 22474709 - Secondary Filter, Long Life
- 22253547 – Secondary Filter, standard



- 22094967 - Secondary Filter, Long Life
- 22094987 - Primary Filter, Long Life

Fuel Filter Installation Instructions

- Clean contact surface
- Apply engine oil to the seal
- Install filter
- Hand tighten the filter until the seal makes contact with the filter base. Once the seal has made contact tighten the filter an additional 1/2 turn
- Operate the pump by hand until resistance is felt



The image below is an example of a fuel filter housing that shows evidence of the fuel filter being over torqued.



Tags

[k35020211](#) [volvo](#) [mack](#) [fuel filter installation](#) [fuel filter torque](#)

Categories *

[Live UI](#) and Model > Mack > CXU/CHU/PI - Pinnacle

Make and Model > Mack > LEU - TerraPro Low Entry

Make and Model > Mack > LR

Make and Model > Volvo > VNL

Make and Model > Volvo > VNX

Make and Model > Volvo > VAH

Make and Model > Volvo > VHD

Vehicle System > Fuel System

Emission Standard > US17 > US17+OBD16

Emission Standard > US17 > US17+OBD18

Make and Model > Mack > MRU/TE - TerraPro

Make and Model > Mack > GU/GR - Granite

Related links and attachments

No links or attachments available



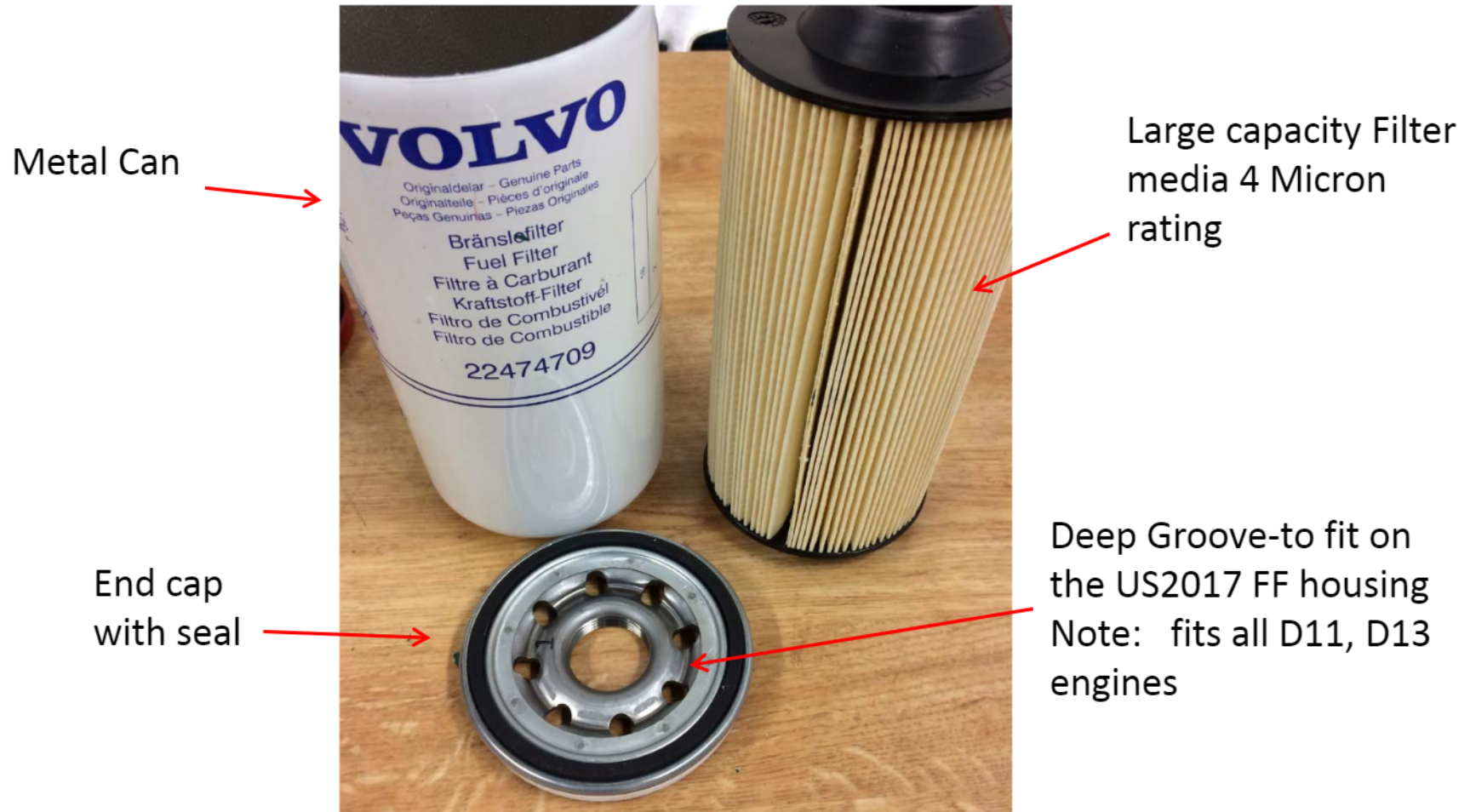
Feedback

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US2017 engines use New Primary and secondary engine fuel filters

P/N 22474709 = Volvo Secondary extended Life


P/N = 21764964 = Volvo Primary (engine mounted) extended life



US2017 engines use New Primary and secondary engine fuel filters
P/N 22094967 = Mack Secondary extended Life
P/N = 22094987 Mack Primary (engine mounted) extended life



Large capacity Filter
media 4 Micron
rating



Pre-US2017 Secondary engine fuel filter
P/N 21879886
DOES NOT FIT US2017 emission engines



Shallow Groove- **Does Not** fit on the
2017 fuel filter housing



Filter end cap comparison

OLD

New



Volvo 21879886
Shallow Groove-
will not fit on the
US2017 fuel filter
housing

**This filter fits US2017 and earlier
engines**

Volvo P/N 22474709

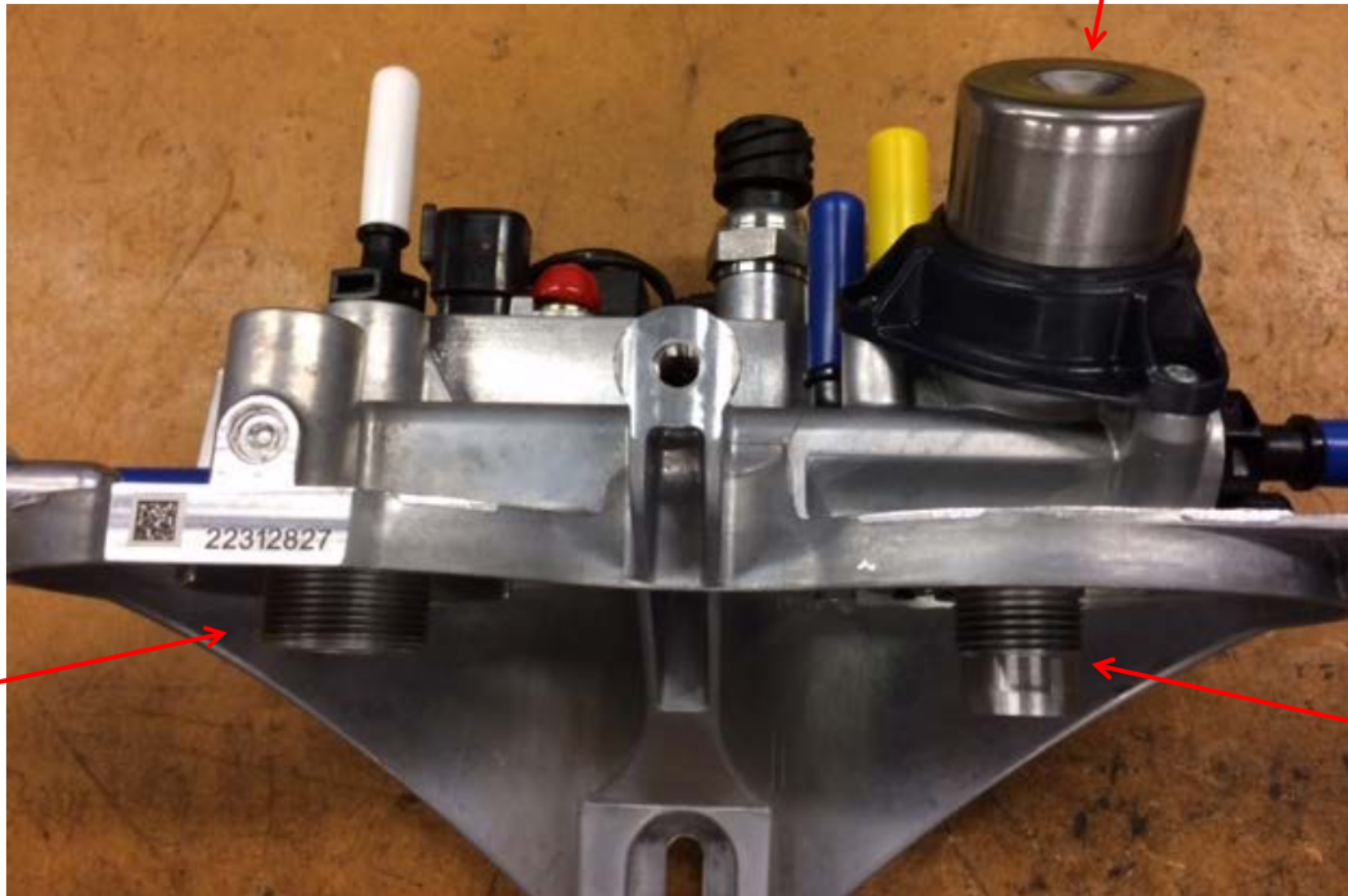
Mack P/N 22094967

Deep Groove-to fit on the 2017 engine fuel filter
housing

US2017 Fuel filter housing

Fuel Filters should be installed dry. Then use the Hand Primer to pull fuel through the filter(s). Ensuring filtered fuel is sent to the engine.

New Hand Primer



Secondary
Filter
Location

Primary
Filter
Location

After attempting to install a filter that hits the filter restrictor, we removed the filter and noticed aluminum on the filter and the housing

