

VOLVO CONSTRUCTION EQUIPMENT  
**GENUINE VOLVO FILTERS**  
**-YOUR BEST CHOICE**



**MORE CARE. BUILT IN.**



# HARD FACTS ABOUT FILTERS

Filters are some of the most important parts in construction equipment. They have to clean fluids and air from dirt and impurities. Effective filters safeguard the machine's function and maintain operating safety.

With ever-increasing demands on equipment—higher availability, lower operating costs and longer service intervals — demands on filters also increase.

Some filter brands can't meet the standards, which will jeopardize the machine's performance and service life—and in the end, the machine's profitability. In a few comparison tests, we show how great the differences are between genuine Volvo filters and non-genuine.



Choosing non-genuine means taking a risk when great values are at stake. With genuine Volvo filters, you don't have to chance it; they're always your best choice.

## Explanations

**Pirate copy** = illegal copy of a genuine Volvo filter with very deficient quality.

**Non-genuine** = this description covers filters made by known OEM filter suppliers and offerings under genuine OEM brand, as will-fit OEM alternatives to genuine parts. However these will-fit alternatives often fail to match Volvo specifications.



# THAT'S HOW GREAT THE DIFFERENCES ARE

Non-genuine may be a little cheaper than genuine Volvo oil filters. But far from the lowest cost in the long run.

Comparisons show that the small saving has a considerably higher price: deficiencies and weaknesses that jeopardize your machine's profitability and service life.

This was the result when genuine Volvo oil filters were compared to six similar filters.

## Filter media area

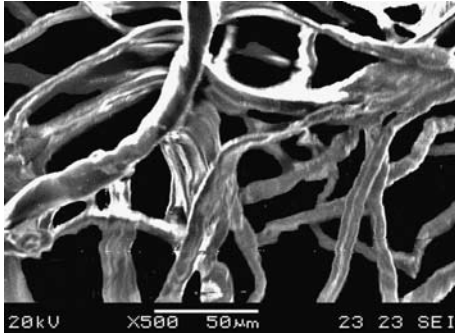
**Genuine Volvo:** have the largest media area, 0.64 m<sup>2</sup>.

**Non-genuine:** only two of the six could match Volvo's minimum requirement, 0.6 m<sup>2</sup>.

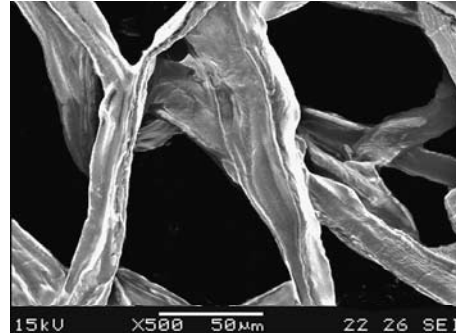
## Sealing (test at -30° Celsius for 72 hours)

**Genuine Volvo:** still soft and elastic, which means continued good sealing capacity.

**Non-genuine:** the seal has hardened on five of the six, which significantly increases the risk of leakage.



**Genuine Volvo**



**Non-genuine**

## Stability

**Genuine Volvo:** a spring with four support points gives the filter media excellent stability both sideways and vertically.

**Non-genuine:** coil springs, giving only vertical support.

## Media quality

The desired filtering efficiency and dirt holding capacity is obtained by mixing coarse and fine fibres. Poor

media quality with irregular permeability gives poorer cleaning and dirt capacity, and thus shorter service life. The differences are clearly visible in the scanning electron microscope.

## Service life

**Genuine Volvo:** unchanged high capacity during the entire service

interval.

**Non-genuine:** four of six don't have the required cleaning capacity for the entire service interval.

## Filter joint

**Genuine Volvo:** bonded and reinforced with a vertical metal rail.

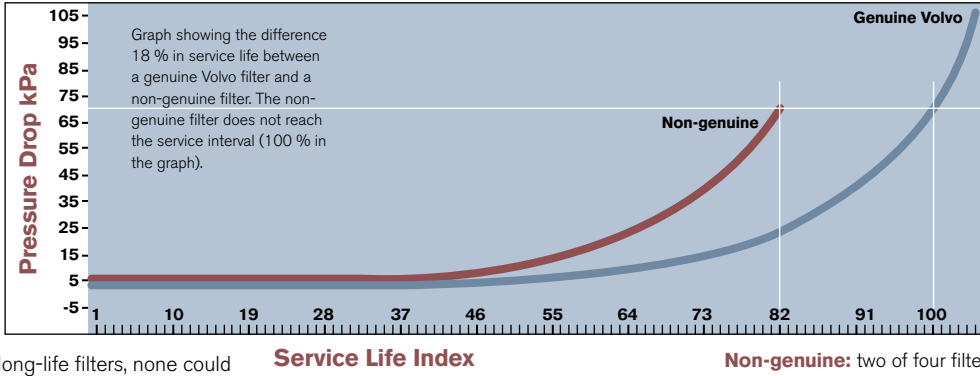
**Non-genuine:** three of six only have a bonded filter joint.

# DON'T COMPROMISE ON QUALITY

Genuine Volvo Long-life oil filters are designed for even longer service intervals, which means reduced maintenance costs. The filter has

thicker media and larger filter area, reinforced filter housing as well as a sturdier gasket to give longer service life with maintained safety and cleaning capacity.

When comparing to four non-genuine long-life filters, none could match Volvo's standards.



Service Life Index

## Seal test

**Genuine Volvo:** seals during the entire service interval.

**Non-genuine:** three of four filters do not pass the test, for example, they can't handle cold temperatures, which increases the risk of leakage.

## Low-frequency pulsation test

(simulated cold-start 100 000 times and a pressure of 10 bar)

**Genuine Volvo:** no leakage.

**Non-genuine:** one of the filters ruptured.

## Durability

(Volvo's minimum requirement is that the filter must tolerate a maximum working pressure of 15 bar)

**Genuine Volvo:** can handle up to 17 bar.

**Non-genuine:** two of four filters ruptured at 13 and 14 bar, respectively.

## Cleaning and dirt capacity

**Genuine Volvo:** maintained capacity during the entire service interval.

**Non-genuine:** one of the filters doesn't meet the standards, which gives engine wear and requires shorter change interval.



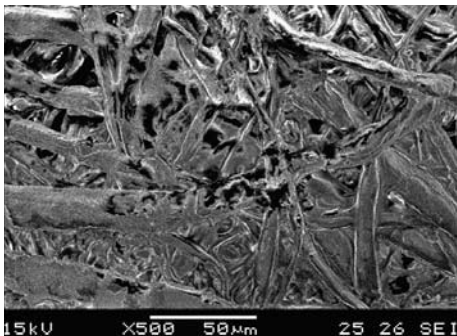
## ONLY GENUINE VOLVO STANDS UP TO THE TEST

Fuel in tank is never 100 percent clean.

Grain, dust and water may also contaminate the fuel when refuelling.

The fuel filter has to remove particles and

substances that damage the fuel system's components, and cause corrosion. Volvo's high standards for fuel filter design and capacity help machine owners avoid unnecessary costs.



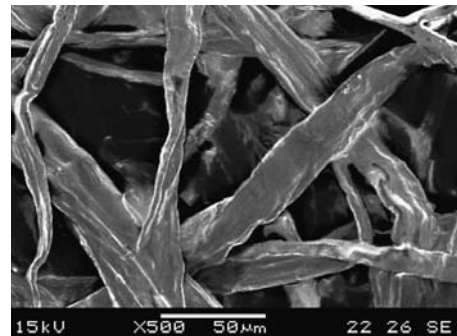
**Genuine Volvo**

The differences are obvious when comparing the genuine Volvo fuel filter and six non-genuine filters.

### Stability

**Genuine Volvo:** has an exactly adapted steel spring plate that holds the filter media exactly in place.

**Non-genuine:** all six filters that were tested have springs with length and thickness that don't give reliable stability.



**Non-genuine**

### Filter media area

**Genuine Volvo:** has 0.2 m<sup>2</sup> filter area, which guarantees full capacity during the entire service interval. Further, the filter media is finer, which makes it possible to trap dirt particles.

**Non-genuine:** only one of the six filters could match

Volvo's minimum requirements. Two filters only have half the filter area of a genuine Volvo filter.

### Filter joint

**Genuine Volvo:** elastic bonded joint, reinforced with a metal rail.

**Non-genuine:** one of the filters is only glued, which increases the risk of failure.

## Genuine Volvo oil filter

### Filter housing

#### Genuine Volvo oil filter

- + a heavy-duty metal casing
- + galvanized sheet metal to prevent corrosion
- + pressure-proof and safe operation
- + no leaking joints
- + knurled top for fast, easy changes

#### Pirate copy and non-genuine

- thin metal, higher risk of the oil filter rupturing
- not corrosion protected
- weak design, higher risk of failure
- inadequate joints increase risk of leakage
  - smooth top makes change difficult

### Spring

#### Genuine Volvo oil filter

- + sturdy design with four support points
- + exact fit in the metal plate's recess
- + gives stability both sideways and vertically

#### Pirate copy and non-genuine

- single coil spring
- poor fit
- gives poor stability, and only vertically

### Filter media

#### Genuine Volvo oil filter

- + fibres specifically adapted to the Volvo engine's features and service intervals
- + accurate folding and maximum filter area
- + hardened adhesive joints prevent leakage due to vibrations and pressure
- + metal rail connects media and improves durability
- + high dirt capacity
- + high cleaning capacity during the entire service interval

#### Pirate copy and non-genuine

- thinner filter media of poor quality
- inadequate folding and small filter area
- carelessly glued joints cause serious leakage
- stapled filter media causes holes in the media and thus leakage, only small clamps hold together the paper
  - low dirt capacity causes pressure-drop and increased engine wear
  - poor cleaning capacity, resulting in subsequent engine wear

If all oil filters were the same, the choice would be easy.

Now, in reality they're not. Non-genuine may be a little less expensive than genuine Volvo—and there is an explanation for that. Quite simply, they don't stand up to Volvo's quality standards.

There are also pirate copies—they pretend to be genuine, but at a closer look they just don't make the grade.

Compare for yourself! Fact, not fiction, makes your choice easier and safer!

### Inner and outer gasket

#### Genuine Volvo oil filter

- + elastic special rubber seals tight, even at extreme temperatures
- + adapted to genuine Volvo oils

#### Pirate copy and non-genuine

- poor quality rubber means higher risk of leakage
- cold and heat reduce sealing capacity

### Bottom plate

#### Genuine Volvo oil filter

- + filter thread with exact fit
- + fixates the outer gasket permanently in the right position
- + easy to install and remove the filter

#### Pirate copy and non-genuine

- risk of poor fit and leakage
- inadequate design increases risk of leakage

## Pirate copy and non-genuine

**THOSE WHO  
PICKED THE CHEAPER  
ALTERNATIVE PROBABLY DON'T WANT TO  
KNOW THIS...**

# NO COMPROMISES—JUST PURE QUALITY

We have all the filters you need. And with genuine Volvo you always know what you get: filters that are developed and adapted for optimum function with your Volvo machine, and to give the operator a safer and pleasant work environment. In other words, quality down to the smallest detail.

That gives you long-term advantages such as high reliability, maintained high performance and a high resale value.





**More care. Built in.**

Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. Contact your dealer for further information.

# **VOLVO**

**Volvo Construction Equipment**  
**[www.volvo.com](http://www.volvo.com)**

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