

Fitting a tricky fuel filter

As fuel filter development progresses in parallel with vehicle engine requirements, WIX tells us more about this technology and shares one example of how to overcome a tricky installation procedure on a variety of models.

Fuel filters play a key part in the protection of the vehicle's fuel system. As car manufacturers tend to apply more and more precise solutions (engine components made with extreme care and accuracy, and fuel injectors working under extremely high pressure) the risk of failure dramatically increases, should any impurities enter the system.

All fuel, even high quality fuel, contains impurities such as: mineral dust, fuel container rust, water particles, organic particles and crystallized paraffin. Modern diesel engines have proven to be particularly prone to impurities. Additionally, manufacturers are increasingly locating filters in hard-to-reach places as car designs – especially smaller vehicle models – make the most of space around the engine.

Different filter types

There are many fuel filter types that take various shapes and forms. The majority of these are simple cartridges which fit inside a housing and are quite easy to fit. Others, such as the WF8302, are supplied in cast housings which, when fitted, become part of the fuel system of the vehicle. These filters may also include fixing points for water sensors and fuel heaters.

WIX has designed filters to efficiently deal with dirt, the effects of container corrosion, metal dust and other impurities – all of which pose obstacles to the clean and efficient work of the engine. The range is manufactured in accordance with the recommendations of the engine and vehicle manufacturer and the applied filtration media (depending on the filter type, the media can be based on natural materials and synthetic ones) provides effective fuel filtration and excellent separation of water.

The WF8302 fuel filter is common to a number of popular applications including:

- Citroën** C1, C2, C3, C3 II, Nemo, Xsara
- Ford** Fiesta V (02-) & VI (08-), Fusion/Fusion Plus
- Mazda** 2
- Peugeot** 1007, 107, 206/206 SW, 206+, 207, 307/307 SW, Bipper
- Toyota** Aygo.

The WF8302 can prove to be a tricky filter to fit, but simply follow the instructions to ensure the safe, quick and easy installation of a new fuel

filter. The positioning of the fuel filter on the applications listed is hidden away under the engine masking frame and the air filter cover. Some models are fitted with an electronic water indicator in the filter, as well as a fuel heater connection. It is recommended that these are removed from the old filter and fitted to the new one first. The filter only has one 'in' and one 'out' fuel hose to be fitted and these locations are clearly marked on the top, while the fitting nozzles are supplied with blank caps to prevent dirt entering the filter chamber before fitting.

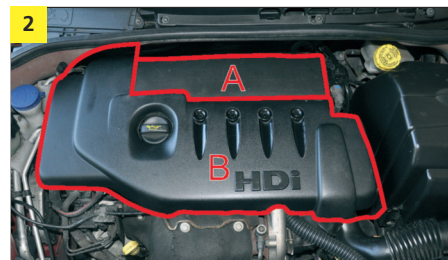
Replacing a (WF8302) fuel filter in 7 steps

Step 1

Fuel injection system elements in diesel engines are made with very strict tolerances and very little slackness. For this reason cleanliness is absolutely necessary when operating these elements.

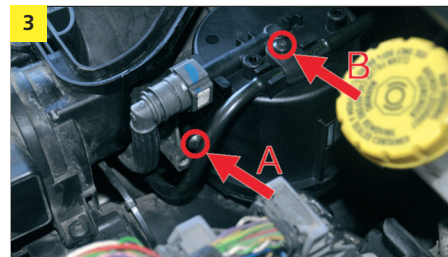
Step 2

Remove the air filter cover (A) and the engine masking frame (B). Take the battery casing off.



Step 3

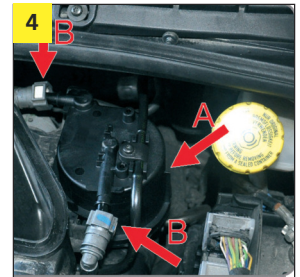
Untighten the screw that fastens the fuel filter (A) and then do the same with the screw that fastens the brake vacuum pipeline (B).



Step 4

Disconnect the fuel heater connector that is placed in the bottom part of filter (A) before opening the quick connections of the fuel hoses (B). You can then remove the filter (please note

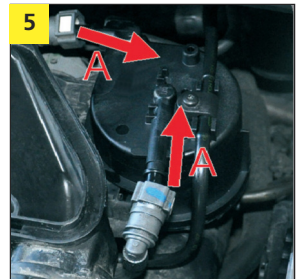
that some car models are equipped with an electronic indicator of water in the filter. In this case it is recommended to remove the water sensor from the filter).



Step 5

Connect the fuel heater connector and fix the new filter in the casing.

Remove the plugs and connect the fuel hoses (A) (please note that some car models are equipped with an electronic indicator of



water in the filter. In this case it is recommended to install the water sensor in the filter. During installation, the sensor seat plug in the filter is pushed in, which has no negative result on the fuel filtration process).

Step 6

Tighten the screw that fastens the fuel filter (A) and screw the fastening for the brake vacuum pipeline (B).



Step 7

Fix the battery cover (A) and air filter cover (B). Start the engine, checking the fuel system for leakage, and install the engine masking frame.

