

# **CDX** Replacing a fuel filter

## **Objective:**

Remove and replace a fuel filter.

## **This workshop procedure guide contains:**

- Step-by-step instructions for completing the workshop procedure.

## **Personal safety:**

Whenever you perform a task in the workshop you must use personal protective clothing and equipment that is appropriate for the task and which conforms to your local safety regulations and policies. Among other items, this may include:

- Work clothing - such as coveralls and steel-capped footwear.
- Eye protection - such as safety glasses and face masks.
- Ear protection - such as earmuffs and earplugs.
- Hand protection – such as rubber gloves and barrier cream.
- Respiratory equipment – such as face masks and valved respirators.

If you are not certain what is appropriate or required, ask your supervisor.

## **Safety check:**

- Gasoline fuel, in particular gasoline vapor, is explosive and highly flammable. Be careful not to spill any fuel onto a hot engine component where it could ignite and start a fire. Be careful not to cause any sparks while you are changing a fuel filter.
- Collect the gasoline waste in a metal container and dispose of it in an environmentally prescribed way.
- Always make sure that you wear the appropriate personal protection equipment before starting the job. It is very easy to hurt yourself even when the most exhaustive protection measures are taken.
- Always make sure that your work area/environment is as safe as you can make it. Do not use damaged, broken or worn out workshop equipment.
- Always follow any manufacturer's personal safety instructions to prevent damage to the vehicle you are servicing.
- Make sure that you understand and observe all legislative and personal safety procedures when carrying out the following tasks. If you are unsure of what these are, ask your supervisor.

## **Points to note:**

- There are a variety of fuel filters, so before you start always check the shop manual for the correct type of filter for the vehicle and the specific procedure for removing and replacing it.
- There are several ways to relieve the static pressure in the fuel system before removing the fuel lines. For instance, some fuel injection systems have a valve specifically to bleed off pressure. Other methods include bypassing the fuel pump relay with a jumper wire, or removing the fuel pump fuse and running the engine until it uses up the remaining fuel in the system and stops. Refer to the shop manual for the recommended method for your vehicle.
- If the fuel lines are flexible hoses rather than metal lines, check their condition to determine whether it is necessary to replace the hoses and clamps when you replace the filter. Some replacement filters come with these items, and when they are supplied you should always use them. If these are not supplied, but you need to replace them anyway, obtain a sufficient length of new fuel line and suitable clamps.
- There are different types of clamps for flexible fuel lines – spring type, or worm type or rolled edge. You will need to obtain and use the appropriate tool when installing new clamps on the hoses.

## 1. Locate fuel filter



Refer to the vehicle service manual to identify the location and type of fuel filter, and the correct procedure for removing and replacing it.

## 2. Remove static pressure from fuel system



If the engine is fitted with an electric fuel pump, locate the fuel pump fuse using the service manual,



and remove it.



Start the engine and wait for it to stop as it runs out of fuel.



Switch the ignition off.

### 3. Obtain correct replacement



Obtain the correct replacement filter and components.



If the vehicle has a carbureted fuel system, new intake and outlet hoses may have been supplied with the filter.



If so, then attach them to the new filter before you disconnect the old one.

### 4. Using correct equipment, remove fuel filter



Loosen the clamps on the fuel line on the engine side of the filter at the outer end of the hose and disconnect it.

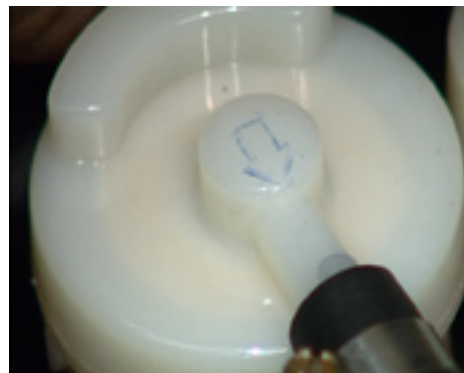


If necessary drain any excess fuel into the fuel proof container.

## 5. Install carbureted system filter



Connect the new filter hose and tighten the clamp.



Make sure that you have the filter facing in the right direction, with the flow indicator arrow pointing towards the engine.



Then remove the old filter and reconnect the new one to the fuel intake.



If you do this quickly, very little of the residual fuel in the line should leak from the system.

## 6. Remove old EFI system filter



In a fuel injected system, the fuel is under greater pressure, so the fuel lines are normally made of metal, which are not replaced at the same time as the filter.



Using the correct tool, loosen the metal line connectors and remove the filter, catching any leaking fuel in a fuel-proof container.

## 7. Install EFI system filter



Connect the new filter and tighten the line connectors.



Make sure that you have the filter facing in the right direction, with the flow indicator arrow pointing towards the engine.



Finally, remember to replace the fuel pump fuse.