

# CHAMPION

# FILTER TROUBLE TRACER CHART

## CLEAN TO THE CORE



**Black exhaust smoke**

**Possible cause:**  
Dirty air filter  
**Solution:**  
Replace air filter



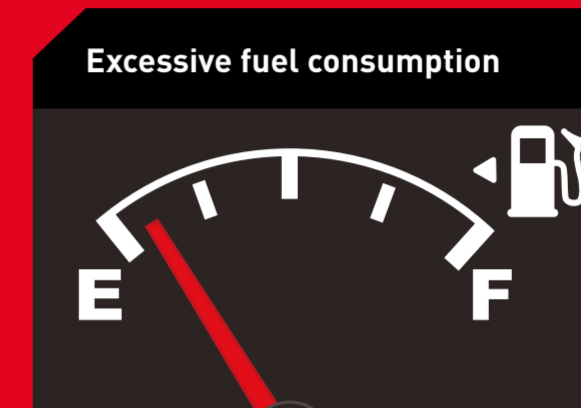
**Abrasive wear to engine components**

**Possible cause:**  
Ingress of dirt via a broken hose, blocked filter or residual debris within the lubrication system  
**Solution:**  
Flush engine to remove any remaining debris and replace oil, air and fuel filters



**Contamination of diesel**

**Possible cause:**  
Petrol in diesel from mis-fueling  
**Solution:**  
Replace/repair injectors, pump, clean fuel system, replace fuel filter



**Excessive fuel consumption**

**Possible cause:**  
Dirty air filter  
**Solution:**  
Replace air filter  
Flush oil galleries, replace oil filter



**Reduced performance of the air conditioning**

**Possible cause:**  
Cabin filter is clogged with dirt and dust and reduces the air flow  
**Solution:**  
Replace the cabin filter



**Hesitation**

**Possible cause:**  
• Dirty air filter  
• Water in petrol  
• Fuel filter clogged  
**Solution:**  
• Replace air filter  
• Drain fuel tank, replace fuel filter  
• Replace fuel filter



**Leaking fuel filter/housing**

**Possible cause:**  
Incorrect fitting  
**Solution:**  
Check fitment or replace fuel filter



**Leaking oil filter/housing**

**Possible cause:**  
• Incorrect fitting  
• Oil filter seal  
**Solution:**  
• Check fitment or replace oil filter  
• Tighten or replace oil filter



**Worn camshaft**

**Possible cause:**  
Residual debris in oil galleries  
**Solution:**  
Flush oil galleries and replace oil filter, air filter



**Fogged windows and reduced visibility**

**Possible cause:**  
A dirty cabin filter reduces the performance of the A/C system  
**Solution:**  
Replace the cabin filter



**Low oil pressure**

**Possible cause:**  
Dirty oil + filter  
**Solution:**  
Replace oil & filter, flush oil galleries



**Surging or misfiring**

**Possible cause:**  
Fuel filter clogged  
**Solution:**  
Replace fuel filter



**Scored bearing backs**

**Possible cause:**  
Foreign material entering via air intake  
**Solution:**  
Replace oil and air filters, flush oil galleries



**Loss of power**

**Possible cause:**  
• Fuel filter clogged  
• Dirty air filter  
**Solution:**  
• Replace fuel filter  
• Replace air filter  
• Flush oil galleries, replace oil filter



**Irritation (eyes, airways) and allergic reactions**

**Possible cause:**  
Dust, pollen and other pollutants seep into the cabin because the cabin filter is saturated  
**Solution:**  
Replace the cabin filter

All the listed problems above are linked to filter issues. Other causes may be at the origin of these problems too.