# Check out our product videos here >>>

**Description:** The two products together remove even stubborn deposits in the fuel system

Instructions for use: Apply a thin coat of LIQUI MOLY Throttle Valve Cleaner to the intake valves.

Keep the engine running and after 2-3 minutes the cleaner removes the loosened deposits in

the residual fluid. LIQUI MOLY Fuel Injection Cleaner additive can be added at any time through

Problem

PRO-LINE

Engine leaks oil from

Leaks from valve stem

seals (Exhaust emits

Loss of compression

due to piston rings

Stubborn contaminants

various seals

blue smoke)

seizing up

in oil circuit

### Recommended product

**Pro-Line** 

**Pro-Line** 

**Engine Flush** 

Oil Loss Stop

### Functional characteristics/Application

**Description:** To regenerate seals which have lost their sealing ability over the years, add LIQUI MOLY Oil Loss Stop to the motor oil when a leak occurs.

This regenerates the seals and improves the viscosity index of the oil.

Description: This highly concentrated cleaning additive removes even stubborn deposits on the piston rings and in the oil system, allowing the engine to run smoothly again.

> Handy hint: This will allow fresh motor oil to be fully effective.

The engine is noisy and/or runs unevenly

Increase in fuel consumption



**Pro-Line Engine Wear Protection** 

**Description:** This additive reduces the friction between the bearing points, allowing for significantly quieter running.

Loss of compression due to excessive wear



**Pro-Line** Visco-Plus

**Pro-Line Engine Wear Protection**  **Description:** Add Visco-Plus + Engine Wear Protection to compensate for wear and/or minimize future wear between the piston rings and cylinder walls. These additives improve the sealant and wear protection properties of the motor oil.

High wear at the shaft of the turbocharger due to insufficient lubrication during the initial commissioning



**Pro-Line Turbocharger Additive** 

**Description:** Used for the initial filling of new turbochargers in order to protect them against dry running and damage caused by lack of oil after a change in the running-in phase. **Instructions for use:** The oil intake passage of the turbocharger is filled to the brim with Pro-Line Turbocharger Additive before the oil supply line is connected.

Difficult to shift gear Noisy transmission/

bearings



**Gear Oil Additive** 

**Description:** LIQUI MOLY Gear Oil Additive smoothes the surfaces of synchronizers, which in turn significantly improves the gear shift action. To minimize noise and further wear, we recommend LIQUI MOLY Gear Oil Additive.

Transmission leaks oil from various seals



**Pro-Line** Gear Oil Leak Stop

**Description:** To regenerate seals which have lost their sealing ability over the years, add LIQUI MOLY Gear Oil Leak Stop, which regenerates the seals and improves the viscosity index of the oil.

Engine overheats

- Deposits in cooling circuit
- Heating does not work



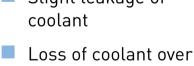
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**Pro-Line Radiator Cleaner** 

**Description:** The deposits which reduce the cooling performance are loosened by the radiator cleaner, holding suspension, and then flushed out.

> Handy hint: To avoid long-term damage from deposits in the cooling circuit, use in the cooling system before replacing components.

Slight leakage of

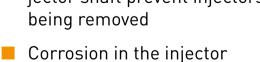


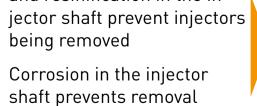
a prolonged period



**Description:** The polysparkles contained in LIQUI MOLY Radiator Stop Leak K are deposited between the outside air and the cooling system where leaks are located - due to the difference in pressure - and plug them safely without the need for epoxy.

Oil and exhaust gas residues and resinification in the in-



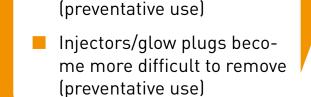


**Pro-Line** Injector and Glow Plug Dismantling Aid

**Description:** Heavy-duty solvent for seized injectors, glow and spark plugs. Undermines accumulated dirt and corrosion and enables easy removal. Outstanding cleaning properties allow stubborn oil residues, resinification and encrusted dirt to be removed easily.

Injectors/glow plugs

begin to corrode



Pro-Line Injector and Glow **Plug Grease** 

Description: Artly synthetic, metal-free special grease for lubricating injectors and glow plugs before installation in the engine. Blocks the ingress of moisture and so prevents corrosion of the injector and glow plug. The special grease also makes disassembly much easier.

## Problem

PROBLEM-SOLVING IN THE WORKSHOP

# Recommended product

#### Functional characteristics/Application

Engine runs irregularly

Loss of compression due to intake valves not closing properly



**Pro-Line** Throttle Valve

**Pro-Line Fuel Injection Cleaner** 

**Description:** This highly concentrated cleaning additive removes even stubborn **Fuel Injection** deposits in the fuel system, allowing the injection nozzles to function properly.

the fuel tank (minimum content of 30 liters of fuel).

and intake system, allowing the engine to run smoothly again.

Delay in throttle response Emissions values outside permitted range

Injection nozzles are

covered in deposits

Irregular running and/or engine stalling while idling



**Pro-Line Throttle Valve** Cleaner

Cleaner

Description: LIQUI MOLY Throttle Valve Cleaner removes even stubborn deposits in the intake system, allowing the engine to run smoothly again. **Instructions for use:** The cleaning fluid is applied by spraying it onto the throttle valve at frequent intervals while the engine is running. This loosens the deposits, which are then burned off.

**Handy hint:** For stubborn deposits, spray the cleaner sparingly into the throttle valve while the engine is at a standstill and allow the deposits to soak in the fluid for 2-3 minutes.

Injection nozzles, piston and combustion chamber are covered in deposits

LSPI through combustion chamber and injector deposits



**Pro-Line Direct Injection** Cleaner

**Pro-Line** 

Cleaner

**Diesel System** 

**Beschreibung:** Modern fuel additive with polyetheramine technology. Thanks to the use of active PEA, achieves the greatest cleaning effect in the fuel system as well as excellent piston and combustion chamber cleanliness. Considerably reduces the risk for damage to the engine due to low-speed pre-ignition (LSPI). For the ideal effect, add to the fuel every 5,000 km at the earliest.

Handy hint: Is recommended by LIQUI MOLY as an alternative to Opel OEM part number 95 599 923.

Injection nozzles are covered in deposits

Engine runs irregularly

Emissions values outside permitted range

Engine is difficult to start

Increase in fuel consumption



Super Diesel **Additive** 

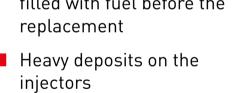
**Description:** This cleaning additive removes deposits in the fuel system and boosts the cetane number of the fuel. To keep the system clean over a prolonged period, add Super Diesel Additive every 2000 km. This in turn optimizes the combustion performance.

**Description:** This highly concentrated cleaning additive removes even stubborn

deposits in the fuel system, allowing the injection nozzles to function properly.

A new diesel filter must be filled with fuel before the

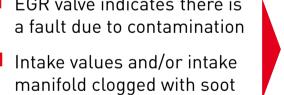
replacement



**Pro-Line Dieselfilter Additive** 

**Description:** To prevent air bubbles in the fuel system after replacing the filter, it is necessary to fill the fuel filter with fuel or with the Dieselfilter Additive before assembly. Increased wear on the high-pressure components during the initial starting is hereby prevented. In addition, the components carrying fuel are also intensively cleaned by the concentrated additive. Instructions for use: Add to the new diesel filter or the cartridge before assembly.

EGR valve indicates there is a fault due to contamination



**Pro-Line Intake System Cleaner Diesel**  **Description:** LIQUI MOLY Intake System Cleaner Diesel removes even stubborn deposits in the intake system, allowing the engine to run smoothly again. **Instructions for use:** Before cleaning, make sure you have direct access to the relevant components. The entire quantity is then applied to the EGR valve, intake manifold and intake valve by squirting the product onto the components with the engine running at approx. 2500 rpm.

Particulate filter is frequently choked (preventive action)



**Pro-Line Diesel Particulate** Filter Protection

**Description:** This additive reduces the burn-off temperature of the soot particles generated by the combustion process and therefore prevents the particulate filter from becoming clogged up. To prevent the diesel particulate filter from becoming repeatedly clogged up, add LIQUI MOLY Diesel Particulate Filter Protection every 2000 km before refueling.

Particulate filter is clogged with soot

Automatic regeneration

function not active



**Pro-Line Diesel Particulate** Filter Cleaner

**Pro-Line Diesel Particulate** Filter Purge

**Description:** Used in succession, these two highly effective additives clean typical contaminants from the particulate filter.

Instructions for use: LIQUI MOLY Diesel Particulate Filter Cleaner is applied to the surface using the pressurised spray gun and the probe through an opening in front of the particulate filter (e.g. pressure sensor or temperature sensor). After approx. 15 minutes, flush the loosened soot out to the exhaust using LIQUI MOLY Diesel Particulate Filter Purge. After cleaning the filter, go through the regeneration process as specified by the manufacturer.

#### High oil consumption? A solution in just a few steps:



Fuel System Cleaner Cleaner

Gasoline: Pro-Line Fuel Injection Cleaner, 500 ml-Cont., Add entire contents to tank

Diesel: Pro-Line Diesel System Cleaner,

500 ml-Cont., Add entire contents to tank



Step 2 **Intakte System** Cleaner

Gasoline: Pro-Line Throttle Valve Cleaner, 400 ml-Cont., Apply completely

Diesel: Pro-Line Intake System Cleaner Diesel 400 ml-Cont., **Apply completely** 



Step 3

Cleaning of the motor oil circuit/the piston rings

Pro-Line Engine Flush, 500 ml-Cont., Add entire contents or 15 % of the oil filling quantity

Let engine idle for 15 minutes



Change oil and add additives Drain off the old oil, take a sample of the old

oil if necessary. Change the oil filter. Use motor oil with the highest possible viscosity. Follow the manufacturer's instructions!

Pro-Line Engine Wear Protection, 1 l-Cont., Add 5 % of the oil filling quantity