Perkins Fuel Lift Pumps
Ensure Correct Fuel Pressure

Introduction

ULPK0041 and ULPK0040

Lift pumps ULPK0041 and ULPK0040 offer superior performance. Brushed lift pumps can suffer performance reduction due to brush wear and gumming, caused by usage of bio fuel mixes. These pumps have no brushes to wear and they create three times the previous torque levels, eradicating any risk of gumming issues.

ULPK0041

ULPK0040

Perkins genuine filter pumps **protect your engine by** regulating the supply of fuel pressure

Incorrect fuel pressure can negatively impact your engine

- The role of the lift pump is critical to engine performance as it pressurises the fuel system to the correct levels to ensure the fuel injection pump operates effectively
- Fuel pressure is used to control the power and performance of the engine by ensuring the fuel is provided at the right time in the combustion cycle
- Fuel pressure impacts on fuel delivery techniques that regulate fuel demand
- Perkins specify a pressure range and maximum pressure limit to protect the fuel injection pump, head gasket and other parts of the engine. Only Perkins genuine parts guarantee operation within these limits.

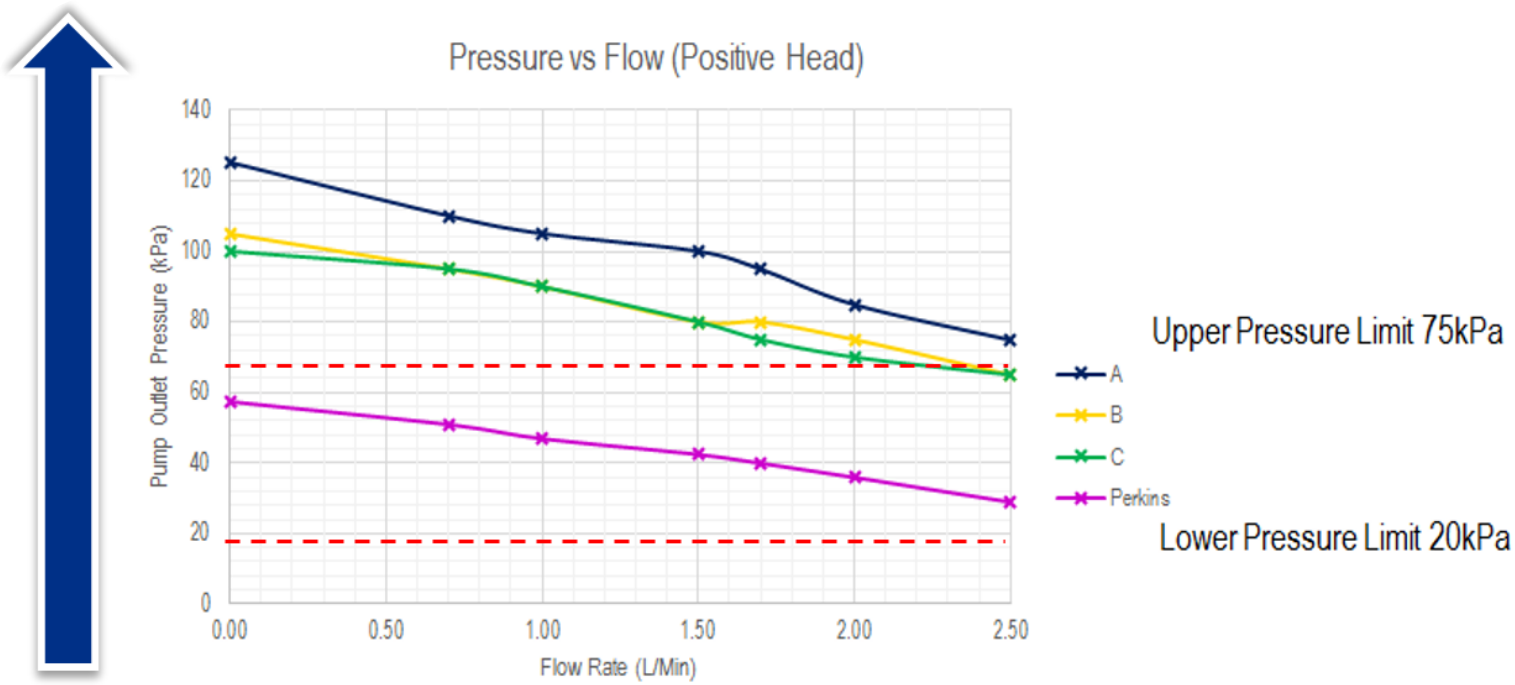
Potential effects of increased pressure

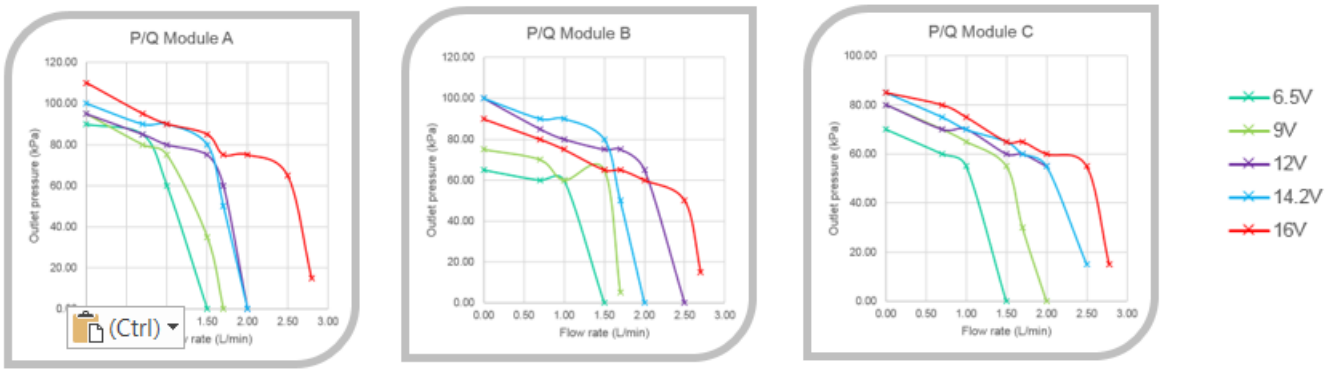
- Increase in NOx gases under normal operating conditions will increase emissions and potentially lead to exceeding declared emissions
- Damage of the fuel injection pump's internal mechanisms and hydraulic locking of the pump
- Increased torque and cylinder pressure resulting in shortened cylinder head gasket life

Potential effects of reduced pressure

- Reduced supply pressure can lead to other issues, such as piston failure and loss of engine power and poor performance

Test results on three non-genuine pumps





Tested over a range of voltages, high pressures on the three non-genuine pumps were still seen at low voltages. The sharp drops in pressure are symbolic of struggling pumps and increased internal slip.

Summary results on non-genuine pumps

✗ Patented Technology

Tests on non-genuine pumps showed they all violated Perkins patented technology for the filter/head

✗ Fuel Pressure

Non-genuine pump performance showed incorrect fuel pressure which can lead to:

- Piston failure
- Head gasket failure
- Emissions non-compliance
- Fuel injection pump failure

✗ Fuel Filter Performance

Non-genuine fuel filters can allow debris and water through, leading to damage to the fuel pump and injectors and causing poor performance, reduced power and increased emissions

✗ Unknown air bleed system

Use of non-genuine parts can stop important air bleeding from occurring. If air remains in the fuel pump it can lead to engine misfiring and delayed start up. The engine can also run inefficiently, increasing fuel consumption and reducing performance.

Please note:

Alternative aftermarket parts ULPK0038A/ULPK0039A are available as an alternate Original Equipment Manufacturer (OEM) specification pump which is offered for heritage engines that were originally fitted with the previously superseded design pump to give our customers more choice.

For more information on Perkins fuel pumps please visit www.perkins.com.