

PARTS & SERVICE NEWS

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SUBJECT: CUMMINS (N14) ENGINE LUBRICATING OIL SYSTEM IMPROVEMENTS.

PURPOSE: To provide service information to the field

APPLICATION: WA500-1LE Wheel Loader Serial Number A61001 and up
WA500-3L Wheel Loader Serial Number A70001 and up

FAILURE CODE: A5H1Z9

DESCRIPTION: 1. INTRODUCTION:

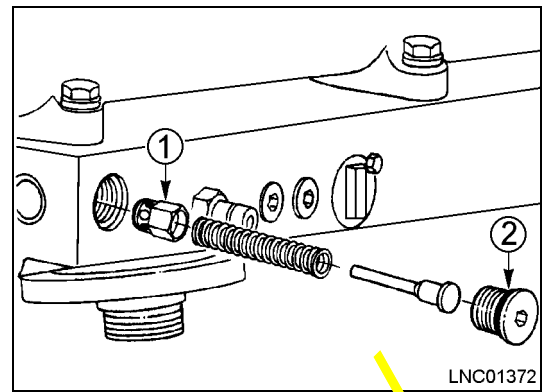
This news letter introduces three product improvements for the N14 lubricating oil system. Two improvements to the by-pass valve assembly and one to the lubricating oil pump high-pressure relief valve.

<https://hespareparts.com/>

2. OIL FILTER BY-PASS VALVE ASSEMBLY

One of the two improvements to the lubricating oil filter by-pass valve assembly is a new by-pass valve (1). The new valve contains a viton o-ring, which offers better deformation characteristics than the teflon o-ring used on the old by-pass valve, making it less susceptible to damage.

The second improvement was to change the filter by-pass valve assembly plug (2). The new plug has been designed to reduce the tolerance stackup in the assembly, resulting in a more consistent opening pressure for the filter by-pass valve. Plug (2) has a modified by-pass spring pocket. The pocket in the plug, where the spring is inserted, has been reduced by 3.65 mm (0.144 in.).



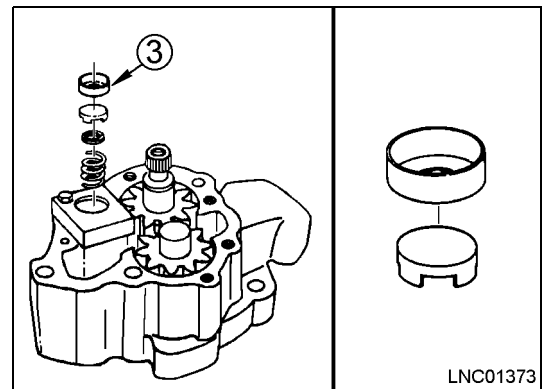
The net effect of these changes is increased spring pressure. The new filter by-pass valve assembly meets the valve opening specification of 689.47 kPa (100 psi) pressure differential between the filter inlet and outlet.

Item	Description	Old Part Number	New Part Number
1	By-pass Valve	1307 370 H1	1307 367 H2
2	Plug	1307 381 H1	1313 105 H91

3. OIL PUMP HIGH-PRESSURE RELIEF VALVE

The lubricating oil pump high pressure relief valve has been modified for improved durability. The valve retaining plug (3) has been heat treated to help minimize wear between the plug and valve disc.

Both the retaining plug and disc are heat-treated to 55Rc hardness.



Item	Description	Old Part Number	New Part Number
3	Valve Retaining Plug (Seat)	1307 393 H1	1307 393 H2