

# TECHNICAL BULLETIN

Ref Document No.	TB14001	Issue No.	1
Subject	HEP Solenoid		
Release Date	20 <sup>th</sup> May 2014		

## Purpose

To advise machine owners of a possible hazard due to oil ingress into the HEP (injector) pump solenoid coil.

## Applicability

Applies to all COALTRAM® CT08, CT10 and CT13 vehicles.

## Background

A COALTRAM® was experiencing abnormal throttle response with the source of the problem identified as oil ingress into the ECUEX termination area with enough depth (approx. 3cm) to bridge across the intrinsically safe sensor input connection terminals.

## Investigations/ Findings

It was revealed that the oil had ingress from the solenoid in the HEP (injector) pump. HEP coil part number – 5520002372 (CT08, CT10, CT10LP), 5520002379 (CT13). The oil was able to track along the internal sheathing of the HEP coil into the casing of the cable. Due to the pressure from the HEP pump the oil travelled up the cable through the casing and into the ECUEX. The oil built up enough over time to a depth that could bridge the circuit causing signals to act abnormally.

The supplier has recently redesigned the solenoid coil and the oil ingress can no longer occur in the updated design. Some of the new solenoids will be in circulation already. The updated coil is available to purchase under the same part number.

## Recommendations

1. At the next convenience check to see what version of HEP solenoid coil is installed on all COALTRAM's. Differentiation can be seen as per below images.

Old coil with circlip retention



New coil with nut retention



2. COALTRAM owners with the old pump solenoid coil may choose to continue using old pump solenoid coil and regularly monitor for any oil ingress as per Safety Bulletin SB14001 or replace with new pump solenoid coil. Vehicles fitted with the new style pump solenoid coil may continue running without modification.



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