

ENGINEERING BULLETIN

Ref Document No.	EB15005	Issue No.	2
Subject	Re-Orientation/modification of MONEx Exhaust back pressure sensor		
Release Date	16 th April 2015		
Client	COALTRAM® Owners / Operators		
Facilitator	PPK		

CONTEXT

Currently COALTRAM® exhaust back pressure sensor and 90° elbow become obstructed with exhaust particulate matter. This contaminate build-up can cause false measurement of the exhaust back pressure.

PURPOSE

To notify COALTRAM® owners / operators of PPK's modification of the MONEx exhaust back pressure sensor and adaptor to reduce sensor head contamination.

APPLICABILITY

COALTRAM® vehicles – CT08, CT10, CT10LP, CT13

BACKGROUND

PPK Service personnel and COALTRAM® operators have experienced and reported the MONEx exhaust back pressure sensor providing incorrect and over pressure measurements. The result of which is the particulate filter element being replaced prematurely. The incorrect readings have been caused by diesel particulate matter building up within the 90° elbow and blocking the sensor head.

INVESTIGATION/FINDINGS

Component inspection revealed excessive carbon build-up on the sensor & within the elbow pathway. The current orientation does not allow for the adaptor pathway to self-drain after vehicle is shutdown. As a result diesel particulate matter is pooling and contaminating the sensor, fouling the elbow pathway.

The following images show the current Exhaust back pressure sensor position (Image 1) and 90° elbow orientation (Image 2).

Image 1.



Image 2.



The pooling of contaminants against the sensor is due to the 90° elbow orientation.

RECOMMENDATIONS

PPK recommend replacement of the 90° elbow (part No.5520000693) to reduce contamination of the back pressure sensor head.

A back pressure sensor extension was designed (part No. 5520009545). This relocates the back pressure sensor higher in a downward orientation, eliminating the trapping of Diesel particulate debris.

The following images show; Image 1. Back pressure sensor extension component. Image 2. Cross section of the back pressure sensor reorientation and fitment. Image 3. Expanded view of the Exhaust back pressure sensor, Sensor extension and scrubber weldment. Image 4. Installed sensor extension and sensor.

Image 1.

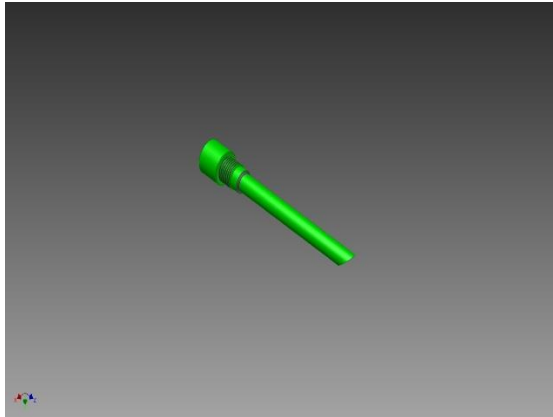


Image 2.

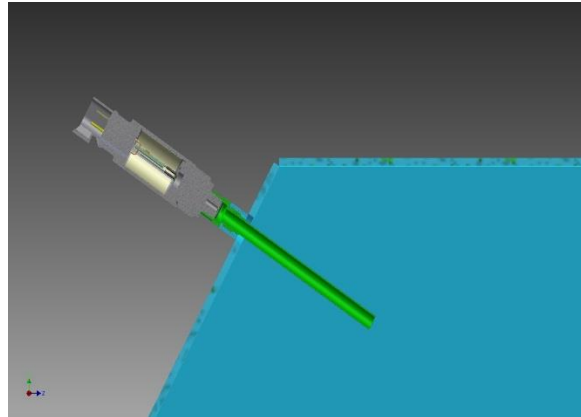


Image 3.

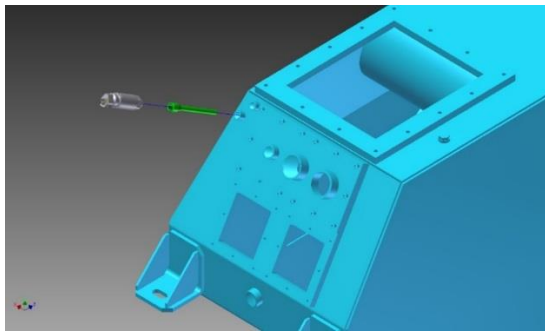


Image 4.



If fitted the exhaust back pressure sensor should be removed and the extension cleaned out as part of the vehicle weekly / 50 hour service.

PARTS LIST

	Part Number	Description
1	5520009545	Back pressure sensor extension

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