



## Solution

**Title (customer effect)** Service Only Regen Requested With No Warning. Diagnostic Trouble Codes ( DTC ) P24A4 / P10FE Active Or Inactive With Several Counts - **OBD15 And US14+OBD16 (Non-Common Rail Fuel System) Chassis**

**Cause** OBD15 and US14+OBD16 (Commonly Year Models 2016 and 2017) Conventional Chassis that spend most of the time in stop-and-go operation may log DTCs P24A4 and P10FE, together or separately.

## Solution

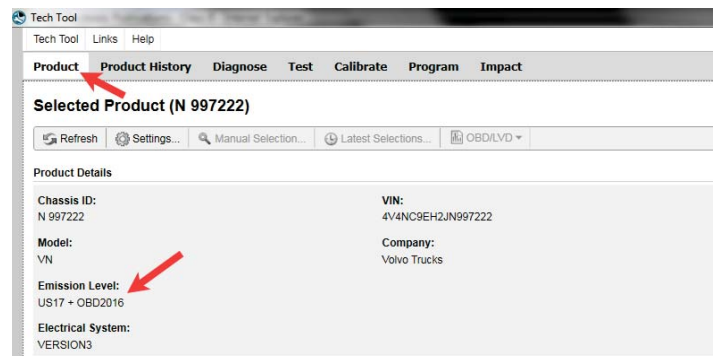
### Overview

During city driving (P&D and LTL) duty cycles, the Diesel Particulate Filter (DPF) can accumulate large amounts of soot inside. If the chassis is not driven on the highway enough for passive regeneration to reduce soot levels, a stationary regeneration will be required. The unit may also display “Service Only” regeneration on the Driver Information Display ( DID ) with no prior alert to the driver, which can result in an unplanned stop at a maintenance facility for a service regeneration can be performed.

### Repair

#### Verify the chassis emissions level

- Details can be found in the Product Details box on the Product tab in PTT as seen below:



#### For OBD15 And US14+OBD16 Chassis:

- Software improvements have been released to address these codes. If one or both codes are present and there are no other symptoms to indicate a physical issue, software should be checked and updated as necessary.

- Updated software for OBD15 chassis will have a Main Software

(MSW) 23167877 or newer

- Updated software for US14+OBD2016 chassis will have a Main Software (MSW) 23169815 or newer

- In some cases, containment software may have been loaded to the chassis with special instructions provided to the driver.

- **For chassis that have older MSW part numbers than listed above, including chassis with containment previously loaded:**

A. Reprogram the following modules in the order listed.

1. Engine Control Module ( EMS )
2. Aftertreatment Control Module ( ACM )

B. Reset the soot load, clear DTCs and run a regeneration if P24A4 or P10FE were present before programming the vehicle.

- If the chassis returns for frequent recurrence of the code following the software update, normal Guided Diagnostic procedures will need to be followed.

---

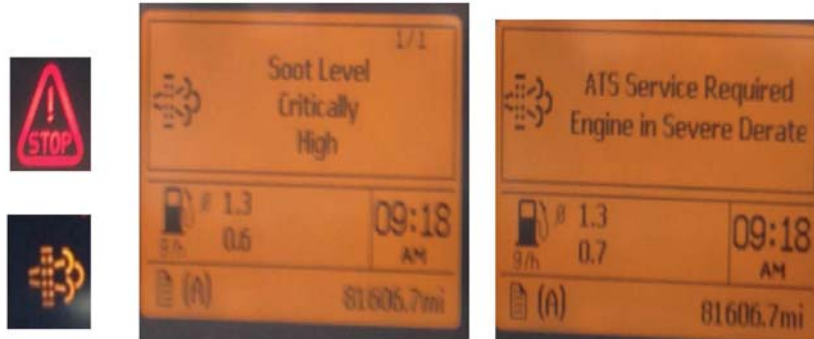
Intern  
l  
comm  
ents  
(BO)

**ALL INFORMATION BELOW is previous information for reference only:**

# Problem Description

Vehicle reached "Service only" regeneration with no warning

"Service only" regeneration forces customer to visit dealership (Unplanned stop).



- Truck MY 2016/2017 (may be Truck MY 2015).
- P24A4 or P10FE fault code (>150% Soot Load), RED STOP lamp is lit
- Dealer technicians are not finding any HW problem.
- Only seen in 13L Short Haul/ City Driving vehicles
- Customers -- Parr Lumber/ Lalonde Contractors/Lansdale Warehouse etc

# Instruction to Drivers/Customers

Do not watch and look for soot level through instrument cluster



- When regeneration is requested by the cluster, as shown below, start regeneration at the earliest convenience.
- Driver does not need to interrupt his/her mission, but has to complete regeneration within 8 hours of receiving first message.
- Typical regeneration takes ~40 minutes.



Regeneration Request Message



- Unique truck application (duty cycle) will dictate the regeneration request frequency. Expect regeneration request once or twice a week in light load, city driving applications.

# Containment until Permanent Solution Released

- Soot Warning Level moved from 130% (2) to 90% (< A=100%)



A = 100%
2 = 130%
3 = 140%
4 = 180%

- When soot level reaches 90% soot load, instrument cluster will request regeneration.
- High confidence in containment: “Warning” (90% soot load) message to “service only” (>150%) message will have 8 hour interval.
- Vehicles running short haul duty cycles with this containment may need to do regeneration once a week, depending on transiency of duty cycle.
- Only to be applied to trucks/fleets with P24A4 issue
- No fault found and short haul /city duty cycle
- Consequence of this containment “ frequent regeneration requests”.
- Requires support from Aftermarket Support Engineers.

If the conversion kit is performed, [THIS DOCUMENT](#) must be delivered to the servicing dealer and explained to the customer.

Solution visibility	<a href="#">Dealer distribution</a>
<b>Function(s)/component(s) affected</b>	
Function affected	exhaust , DPF
<b>Function Group</b>	
Function Group	254 catalytic converter; exhaust emission control equipment , 258 emissions after-treatment , 284 control system, fuel supply
<b>Customer effect</b>	
Main customer effect	soot , regeneration , fault code/display
<b>Administration</b>	

---

Author	ut0031h
Last modified by	RU4469V
Creation date	01-08-2016 20:08
Date of last update	12-02-2018 17:02
Status	Published
Average score	5
Number of scores	1
NA_Reviewer	a175606

---

### **NA\_MACK\_Vehicle\_Range**

---

**NA\_MACK\_Vehicle\_Range** Conventional , CHU , CXU , GU  
**ge**

---

### **NA\_VOLVO\_Vehicle\_Range**

---

**NA\_VOLVO\_Vehicle\_Range** Conventional , VNL , VNM , VHD , VAH  
**nge**

---

### **Engine family**

---

Engine family Volvo , 11L Engine , 13L Engine , Mack , MP7 , MP8

---

### **Emission Standard**

---

Emission Standard US16 , US15

---