



Technical Information Bulletin

E124



Section

Inlet/Exhaust and Aftertreatment

Subject

Repetitive SCR Efficiency Diagnostic Trouble Codes (DTC) troubleshooting procedure.

Release Date

3/13/2017

Condition

Vehicle is experiencing repetitive SCR (Selective Catalyst Reduction) Efficiency DTCs; P3818, P3830, P3997, P3928, and/or P3914.

Chassis Affected

All PACCAR MX-13 EPA 2013 engines.

Action

FIX-AS-FAIL

Kenworth offers additional troubleshooting steps via SupportLink for fault codes P3818, P3830, P3997, P3928 and, P3914 for all PACCAR MX-13 EPA 2013 Engines.

The procedures below should ONLY be followed for repeat SCR fault codes. See the Procedure section below.

Warranty

Through Standard Warranty (includes Extended Warranty) Kenworth will pay for parts at dealer net plus applicable mark-up and labor:

- File a long claim for performing the SupportLink "Answers" troubleshooting steps. No quick claim is available due to the multiple troubleshooting guide exit points.



NOTE

Kenworth dealers may perform E124 repairs on Peterbilt chassis. For Peterbilt chassis repairs, use the long claim input form in DWWC selecting "Draft/Offline Claims," the "General" tab, and in the "Type of Claim" drop down box, select "PACCAR Engine Claim," then manually enter claim codes (Campaign #, Failure type, and SRT).

CLAIM CODING	
Failure Location: 043-007-148	Work Accomplished: 19
Failure Type: 363	Responsibility Code: 01/06
SRT Code: See SRT Table Below	Claim Type: A/D

Take-Off Parts Disposition: N/A

Parts

If the investigation indicates a part issue, please follow the steps outlined in the procedure section **before** replacing any parts.

Procedure

[Follow](#) the procedure below to help troubleshoot the engine and after-treatment systems before replacing any parts. The procedures below should ONLY be followed for repeat SCR fault codes.

1. Log in to SupportLink through DealerNet.
2. Click on the Answers tab.
3. Type SCR efficiency in the search bar and then click Search.
4. In the search results, click on the link for Procedure for repeat SCR efficiency faults; P3818, P3830, P3997, P3928, P3914
5. Use the procedure to help troubleshoot the engine and after-treatment system.

File SRT base on the procedures completed:

		Procedure for repeat SCR Faults(ESC)	
SCR-010		SupportLink Knowledge Base Article “Procedure for repeat SCR efficiency faults: P3818, P3830, P3997, P3928, P3914”	0.0 HRS
	SCR-01A	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 1 exit)	3.6 Hrs.
	SCR-01B	SCR - - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, DEF tank flush, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 2 exit)	4.8 Hrs.
	SCR-01C	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 3 exit)	4.1 Hrs.
	SCR-01D	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 4 exit)	4.3 Hrs.
	SCR-01E	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check Doser Clocking, Adjust alignment/Clocking (R&I) Decomposition tube, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 5 exit)	5.2 Hrs.
	SCR-01F	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check Doser Clocking, R&R Decomposition tube and Check for Crystallization, Clean Decomposition tube, Verify Updated Decomposition tube installed, check Decomposition tube for corrosion, Update SupportLink and forward issue to Engine Support Center (ESC) (Step 6c exit)	2.6 Hrs.
	SCR-01G	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check Doser Clocking, R&R Decomposition tube and Check for Crystallization, Clean Decomposition tube, Verify Updated Decomposition tube installed, check Decomposition tube for corrosion, DEF Dosed Override Tests 3 times, Record 2 Regenerations with overviews, DAVIE Quick Check, ESC requested Road test (Step 7 exit)	6.8 Hrs.
	SCR-01H	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check Doser Clocking, R&R Decomposition tube and Check for Crystallization, Clean Decomposition tube, Verify Updated Decomposition tube installed, check Decomposition tube for corrosion, DEF Dosed Override Tests 3 times, Inspect SCR with Borescope, Update SupportLink and forward issue to Engine Support Center (ESC) (Step 8 exit)	3.6 Hrs.
		SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check	

	SCR-01J	Doser Clocking, R&R Decomposition tube and Check for Crystallization, Clean Decomposition tube, Verify Updated Decomposition tube installed, check Decomposition tube for corrosion, DEF Dosed Override Tests 3 times, Inspect SCR with Borescope, Check SCR for White Powder, Update SupportLink and forward issue to Engine Support Center (ESC) (Step 9 exit)	3.7 Hrs.
	SCR-01K	SCR - Includes: Connect Davie, Check DEF concentration with refractometer, DEF Tank Visual Inspection, Check DEF with Test strip, Intake Exhaust Pressure Test, Check for Exhaust Leaks, Check Decomposition tube Alignment, Check Doser Clocking, R&R Decomposition tube and Check for Crystallization, Clean Decomposition tube, Verify Updated Decomposition tube installed, check Decomposition tube for corrosion, DEF Dosed Override Tests 3 times, Inspect SCR with Borescope, Check SCR for White Powder, 2 regens with overviews, DAVIE Quick Check, ESC requested Road test (Step 10 exit)	7.0 Hrs.

Attachments

[E124 Procedure for repeat SCR faults](#)

[E124 Fault flow diagram with Exit Points](#)

[E124 Supplemental Diagnostic Procedures](#)

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