

E290 EPA21 PACCAR MX Fuel Injector Cleaning Procedure

Number

E290

Subject

EPA21 PACCAR MX Fuel Injector Cleaning Procedure

Date

3/31/2022

Revision

8/11/2022 - Added in-tank cleaner information in the Procedure section.

4/28/2022 - Removed Stanadyne as an alternative cleaning solution.

4/13/2022 - Updated the Parts section to include an alternative fuel system cleaning tool kit.

Condition

Chassis affected may experience one or more of the following DTCs or symptoms;

- Engine Knock
- P3300
- P0300
- P0301, P0302, P0303, P0304, P0305, P0306
- P1263, P1266, P1269, P1272, P1275, P1278
- P0263, P0266, P0269, P0272, P0275, P0278

Chassis Affected

All chassis models equipped with an EPA21 MX-13 or MX-11 engine.

Action

Fix as Fail

If a customer comes into your dealership and demonstrates the condition above, use the attached procedure to clean the fuel injectors. This procedure will be in addition to other diagnostic and troubleshooting steps as specified in RMI or other service documentation.

Warranty

Through Standard Warranty or any applicable active Extended Warranty, Peterbilt will pay for labor;

- If other diagnostic steps lead you to this procedure, Peterbilt will pay the listed labor to perform the attached injector cleaning process.
- **B44-FSC:** 3.6 hours labor to perform the attached injector cleaning process if the cleaning process was completed before **05/10/2022**. Reference E290 in the claim story.
- **B44-FSD:** 3.1 hours labor to perform the attached injector cleaning process if the cleaning process was

- completed after **05/10/2022**. Reference E290 in the claim story.
File the claim within 14 days in accordance with [Warranty Policy](#).

Parts

The fuel system cleaning tool listed in the procedure ([PN2281101PE](#)) is not currently available from PACCAR Parts. An alternative fuel system cleaning tool kit is available from PACCAR Parts and is listed in the table below. Updates to this bulletin and Tool Bulletin [98-020](#) will be made as parts are identified and become available.

Quantity	Part Number	Description
1	1961366-1CH	Fuel System Cleaning Tool Kit
1*	DK32P	DSG 4+ Super Clean (Fluid)

*5 quarts total in kit



CAUTION

Use caution when selecting alternative fuel module fittings and hoses. Some hose materials could be incompatible with concentrated cleaning solution, causing the material to contaminate the fuel system. Hose material is currently under investigation to prevent deterioration from the cleaning solution.

Background

The diagnostic codes and injector problems may be caused by carboxylate clogging of injector internal ports. This cleaning procedure should clean the deposits, but it is not a permanent fix. If the problem returns, switching fuel sources may reduce the formation of deposits.

The specified tool may not be available from PACCAR Parts at this time. Hoses can be constructed using the parts and instructions listed in the TCS365 KB Article in order to run the engine from a bucket as specified in the procedures.

Procedure

Please follow your dealership's safety procedures and precautions to ensure the vehicle can be safely repaired and maintained.

Use the attached document to clean the fuel injectors. Make sure to read all steps before proceeding.

**NOTE**

Injector Deposits or clogging may be reduced through the use of an in-tank fuel additive. PACCAR recommends using one of the following in-tank fuel additives.

In-Tank Fuel Additives

Product Title	Part Number	Treatment Concentration	Additive used per 50 gallons of Diesel
DSG 4+ Super Clean	DK32P (1 quart)	1:1,200	5.3 oz
Power Service Diesel Kleen + Cetane Boost	03025 (1 quart)	1:500	12.8 oz
John Deere Keep Clean	TY26827 (1 quart)	1:1,280	5 oz

This is a recommendation only. The use of additives is at the discretion of the customer.

See Links Section Below for Injector Cleaning Procedure

Make sure to follow the listed concentration instructions for the cleaning fluid used.

Links

[EPA21 MX13 MX11 Fuel Injector Cleaning Procedure](#)