PSB E265 EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection

Edit Clone

Number

E265

Section

Engine

Subject

EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection

Date

5/25/2021

Revision

05/28/2021: Chassis list updated.

Condition

Selected engines have been identified to receive a camshaft inspection and an update for improved camshaft lubrication.

Chassis Affected

690 chassis (674 U.S. and 16 Canada) T680, T800, T880, W900, and W990 chassis built from 02/28/17 through 04/25/19, equipped with PACCAR MX-13 EPA2017 engines. See the attached chassis list for specific chassis.

Action

Campaign

Service all chassis affected that enter your dealership, even if the customer has no issue with the chassis.

1. Review the attached chassis list for your dealer code and schedule your customer(s) for service if their chassis is on the list.
2. If you are not using Service Management to start repair orders, review SIR for “Complete” or "In Process" next to the “E265” campaign code prior to performing this repair.
3. If “E263” and/or “E264” campaigns are also “Open” in SIR, then those campaigns should be performed with campaign E265.
4. Follow the procedures below to install the High Oil Flow Kit.

CAUTION

Dealers that release trucks on the chassis list without completing the actions described below may face liability for progressive damage.

Warranty

For repairs completed by 06/01/2022, Kenworth will pay for parts at dealer net plus applicable mark-up and labor:

NOTE

Please be aware of claim filing instructions when E263 and/or E264 is also open.

Refer to the attached Claim Worksheet and E265 flowchart for details about the various claims.

E265 standalone repairs

- 4.8 hours labor to inspect the camshaft and install the HOFK (T800/W900). Use Quick Claim Code E265A.
- 4.3 hours labor to inspect the camshaft install the HOFK (Non-SFFA T680). Use Quick Claim Code E265B.
- 4.7 hours labor to inspect the camshaft and install the HOFK (SFFA T680). Use Quick Claim Code E265C.
- 4.2 hours labor to inspect the camshaft install the HOFK (Non-SFFA-T880/W990). Use Quick Claim Code E265D.
- 4.6 hours labor to inspect the camshaft install the HOFK (SFFA-T880/W990). Use Quick Claim Code E265E.

E265 repairs with E263 and/or E264 repairs

- 2.1 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open (T800/W900). Chassis also has E264 Open in SIR. Use Quick Claim Code E265F.
    - For E263, file claim E263A or E263C as appropriate.
    - For E264, file claim E264D.
- 2.2 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open (Non-SFFA T680). Chassis also has E264 Open in SIR. Use Quick Claim Code E265G.
    - For E263, file claim E263A or E263C as appropriate.
    - For E264, file claim E264D.

- 2.6 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open (SFFA T680). Chassis also has E264 Open in SIR. Use Quick Claim Code E265H.
    - For E263, file claim E263A or E263C as appropriate.
    - For E264, file claim E264D.
- 2.1 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open (Non-SFFA T880/W990). Chassis also has E264 Open in SIR. Use Quick Claim Code E265I.
    - For E263, file claim E263A or E263C as appropriate.
    - For E264, file claim E264D.
- 2.5 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open (SFFA T880/W990). Chassis also has E264 Open in SIR. Use Quick Claim Code E265J.
    - For E263, file claim E263A or E263C as appropriate.
    - For E264, file claim E264D.

E265 camshaft inspection resulting in camshaft or engine replacement

- File a long form claim. Refer to Long Form Claim Guidance for Camshaft or Engine Replacement for guidance.
    - Campaign E265 must be in the Campaign Code field.

Additional warranty related information:

File the claim within 14 days in accordance with Warranty Policy C-A-009.

Direct Fleets and Dealer Sponsored Fleets (DSF) may not use quick claims when submitting for repairs on chassis related to this bulletin but must submit a long form specifying part numbers, quantities, and pricing for parts used in the repair. Submittal of a Quick Claim for repairs made by the Fleet will be denied as pricing is incorrect on quick claims.

Kenworth dealers may perform E265 repairs on Peterbilt chassis, but Quick Claims do not apply. 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).

NOTE

Valve cover bolt SRT related information:
• Primary SRT **045-608** - Repair/Replace broken valve cover bolt and sleeve (One): This Includes set up and repair. – 0.1hrs
• Secondary SRT **045-609** - Time to Repair/Replace up to 3 additional valve cover bolts and sleeves. This is to be used in conjunction with the 045-608 only if there is more than one broken bolt. – 0.1hrs

Take-Off Parts Disposition: Destroy take-off parts 30 days after claim is paid

PRWS CLAIM CODING			
Campaign Code:	E265	Campaign Type	Field Repair
Claim Category:	Engine	Repair Type	Proactive
Customer Concern Code	173	Causal Code	A1
Corrective Action Code	12	Responsibility Code:	Camp
Failure Location	045-008-098	Causal Part	2112481
Supplier Code	N/A	SRT Code	See claim worksheet

CLAIM CODING			
Failure Location:	045-008-098	Work Accomplished:	35
Failure Type:	700	Responsibility Code:	01
SRT Code:	See claim worksheet	Claim Type:	F
Vendor Code:	N/A	Campaign Field:	E265

Parts

Parts are available from PACCAR Parts.

- Parts in Table 1 are required for all repairs.
- Parts in Table 2 are only required if campaigns E263 or E264 are not listed for the chassis in SIR.
- Parts in Table 3 are only required if a valve cover bolt breaks.

Table 1 Parts required for all E265 repairs

Quantity	Part Number	Description
1	2312680PE	High Oil Flow Kit (HOFK)
1	Locally Sourced	Brake Cleaner
*	079340-62040	Loctite 620
1	2111441PE	Oil Pan Gasket
47	Locally Sourced	Engine Oil
* One bottle of Loctite 620 is enough to service 20 engines. Credit is provided for 5 percent of bottle per repair.		

Table 2 Additional Parts required if E263 and E264 work is not ALSO being performed

Quantity	Part Number	Description
1	2302341PE	Valve cover gasket and Valve Train Gasket kit

Table 3 Parts to be used in cases of broken valve cover bolts

Quantity	Part Number	Description
As Required	1971745PE	Valve cover bolt assembly. Includes bolt and sleeve.
As Required	Source locally	M6x40mm flanged bolt, grade 8.8, yellow zinc coated. Matching 8mm bolt head recommended. Any bolt equivalent to this example https://www.fastenal.com/products/details/11115843

Procedure

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

NOTE

If a valve cover bolt is broken, follow this process to replace the bolt rather than replace the valve cover.

1. Attempt to push the bolt sleeve out of the valve cover. If it can be pushed out of the valve cover, replace the bolt assembly with part number 1971745PE. If the bolt cannot be pushed out, continue with this procedure.
2. Use any drill bit size between 17/64 and 9/32 to drill through the sleeve to remove enough material from the dimples used to retain the original bolt to allow a M6/40mm bolt to be installed. If the sleeve is removed from the valve cover during the drilling process, install bolt assembly 1971745PE.
3. If the broken bolt cannot be removed from the valve train casing, the valve train casing should be replaced.

You may find it helpful to look at the E265 Flowchart before beginning this repair.

Camshaft Inspection

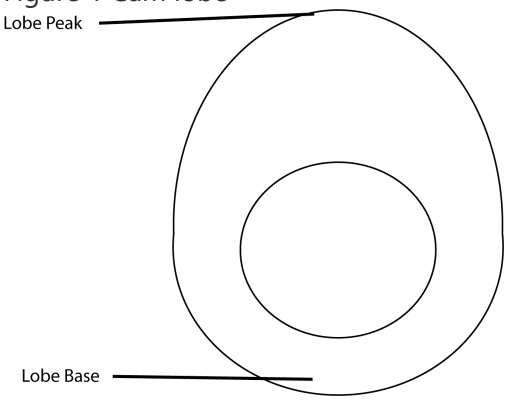
Camshaft lobe inspection

This inspection process will determine one of the following:

- No further repair required-the HOFK and other open campaigns can be performed.
- Camshaft replacement required.
- Long block or complete engine replacement required.

1. Remove the oil pan and inspect the camshaft exhaust lobes.
    a. Disconnect the batteries.
    b. Drain the oil.
    c. Remove the electrical harness bracket from the driver's side front of the engine block and oil pan.
    d. Use cable ties to hold the harness away from the pan.
    e. Remove the oil pan bolts and remove the oil pan.
    f. Refer to the Camshaft Inspection Photo Guide to take clean, clear, and in focus photos of the **PEAK** of the **EXHAUST** camshaft lobes. The exhaust cam lobe is the wider lobe.
2. Open the Camshaft Inspection Photo Guide document in the Attachments section of this bulletin and save it as a new file. Use the naming convention of "*last 8 digit of VIN* Cam Inspection".
3. After you take the photos, insert the photos into the appropriate open cells of the Camshaft Lobe Photos table.

Figure 1 Cam lobe



4. Start a TCS365 case. See the TCS365 Case Creation Guide section below for instructions to create the case. Attach the Camshaft Inspection Photo Guide to the case. The VSC will analyze the camshaft lobe photos and inform you of the next repair step.
5. If VSC directs you that the camshaft is ok, reassemble the engine per RMI, complete other open campaigns, and fill the engine with new oil.
6. If VSC directs you to inspect the lower main bearings, continue with this procedure.
7. Remove Main Bearing Cap numbers 3, 4, and 5.
    a. Remove the oil pickup tube from the fixing frame.
    b. Remove the fixing frame from the engine block.
    c. Remove the oil pump.
    d. Break loose the main cap bolts with hand tools.
    e. Remove the main cap bolts for main bearing journal locations 3, 4, and 5 (an air/electric impact tool can be used).
    f. Remove and inspect only the lower bearing shells of 3, 4, and 5. Leave the upper bearing shells in place.

        IMPORTANT: Keep the bearings organized. Make note of the location of each bearing. If the bearings are determined to be OK, they will be reused. They MUST be installed in the same location that they were removed from.

    g. Place the bearing caps on a clean piece of paper or cardboard and label the bearing locations.

h. Take clear and in focus photos of the bearings.

8. Inspect the condition of the bearings and attach the bearing photos to the TCS365 case and update the Diagnostic Details of the case with “inspected and attached #3, 4, & 5 main bearing photos”. VSC will provide final direction of repair.
    - If you are directed to replace the camshaft, if the chassis has E263 Open in SIR, also replace the valve guide seals per PSB E263.
        - Use caution when opening the camshaft box. The box must be reused to return the camshaft.
    - If you are directed to install a short block, see the Flush the oil module procedure below.

NOTE
▪ Short block replacement is the preferred engine replacement. ▪ Refer to PACCAR MX-13 Long and Short Block Pre-Installation Service Procedures - SM045-001-002 for instructions in addition to those in RMI.

    - If the engine is not being replaced, and the chassis has E264 Open in SIR, also retorque the head bolts per PSB E264.

Figure 2 Example of main bearing photos

Flush the oil module (only when replacing the short block)

1. Remove the oil module and oil cooler.
2. Remove the oil cooler from the oil module.
3. Clean the oil module in a solvent tank.
4. Additionally, clean the oil module in a hot water parts cleaner.
5. Thoroughly dry the oil module.
6. Install the cleaned oil cooler back onto the module.

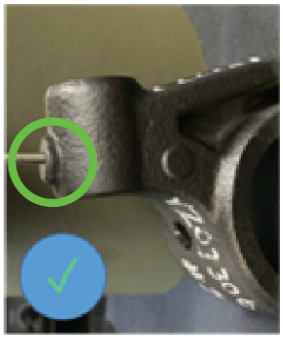
Unit Pump to High Pressure Fuel Rail Lines

- The high pressure fuel rail lines should only be disconnected during a camshaft or engine replacement.
- If the ends of the fuel lines are corroded as shown below, replace the fuel lines.
- Attach photos of the corroded fuel lines and the connections at the unit pumps to the TCS365 case.

Figure 3 Corroded Fuel Lines

HOFK Installation

1. Remove the valve cover and valve train casing per RMI procedures.
2. Confirm the exhaust rocker arm has extra material on the drilling boss.



2157845 (12V NA)
2157846 (24V EU)

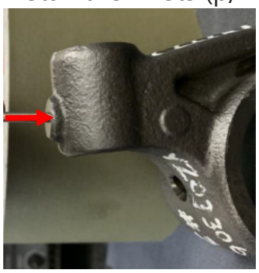
2199622 (12V NA)
2199623 (24V EU)

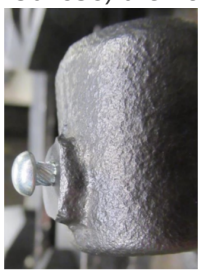
   - If the exhaust rocker has the extra material, continue with this procedure.
   - If the exhaust rocker does not have the extra material, take a photo of the rocker and start a TCS365 case using the TCS365 Case Creation Guide below.
3. Remove the existing lash screw from each DEB rocker arm.

NOTE

Peterbilt models 367, 567, 579 with short hoods may require the rear rocker arm assembly to be removed for access.

4. Cover the engine push tube openings with shop towels or similar to prevent the rivet from dropping into the engine.
5. Clean the small hole at the end of the DEB rocker arm by applying brake cleaner, see the red arrow in the figure below.
6. Apply Loctite® 620 onto the rivets before installation.
7. Install the rivets (p/n 2304858) the holes in the DEB rocker arms using a hammer and brass drift punch.

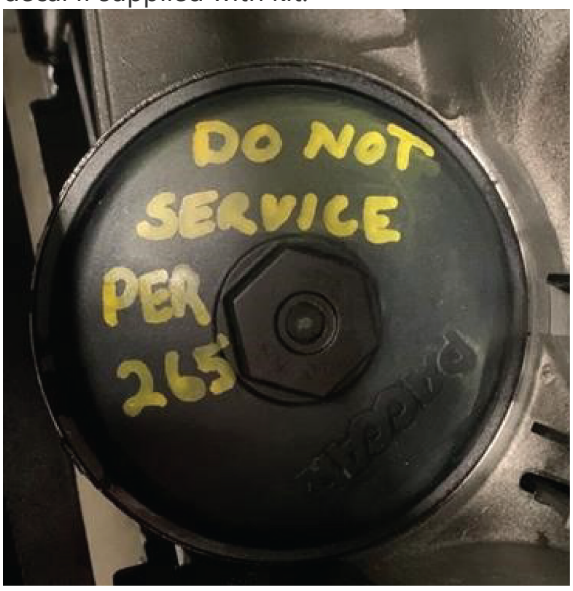

Hole to be closed with rivet


Rivet placed on hole


Rivet installed (side)


Rivet installed (front)

8. Install the grooved lash screws (p/n 2295926) and apply the regular lash adjustment per RMI.
9. Install the valve train casing and valve cover with new gaskets per RMI.
10. Remove and discard the centrifugal and its cover. The centrifugal filter will not be reinstalled.
11. Thoroughly lubricate the new O-rings and install them on the new cover.
12. Install the new centrifugal cover kit.
    a. Remove and discard the centrifugal filter and cover. The centrifugal filter will not be installed.
    b. Use a white or yellow paint pen to write “Do not service per E265” on the new cover. Or apply decal if supplied with kit.



    c. Thoroughly lubricate the O-rings with engine oil before installing them on the cover.
    d. Install the cover kit. Torque to specifications cast into the cover.

TCS365 Case Creation Guide

Follow this guide to create the TCS365 case for this bulletin to ensure the case is flowed to the appropriate personnel.
This guide should be used to submit a case for:

- Submitting cam lobe photos
- Requesting assistance if the rocker arm does not have the extra material.

- Open TCS365 in Google Chrome or Microsoft Edge.
- Select **Vehicle Support** | **Technical Assistance**.
- Select *Case* Type Powertrain
- On the Powertrain Support page, fill in the following fields as follows and fill in the other fields as appropriate:
- Subject: E265
- Description: E265
- Complaint/Verification Results:
  - Inspected Camshaft per E265
    OR
  - Rocker arm does not have extra material
- Did you perform the required steps: Yes
- Did you attach a PDF log file: No (if the camshaft shows damage, a log file may be required to determine the best repair)
- Warranty Dependent Case: No
- Repairs and Parts Replaced:
  - Photographed camshaft exhaust lobe peaks
    OR
  - Found rocker arm does not have extra material
- Diagnostic Details:
  - Photographed camshaft exhaust lobe peaks, oil filter cartridge pleats, and oil filter cap bypass valve retaining tabs.
  - Is there debris in the filter pleats?
  - Are there any broken bypass valve retaining tables?
    OR
  - N/A
- Upload File:
  - Upload the Camshaft Inspection Photo Guide that you inserted the camshaft lobe photos in.
    OR
  - Upload a photo showing the lack of material on the rocker arm.

Links

Dealer\Chassis List

U.S. Customer Letter

Canada Customer Letter

Camshaft Inspection Photo Guide

Claim worksheet

E265 flowchart

Authored by: OF

Kenworth Truck Company
Customer Service Department
PO Box 1000
Kirkland, Washington 98083-1000
(425) 828-5888

Date TBD

Scan this QR code to open the Kenworth Dealer Locator.

[First VIN]
Customer Name
Address
City, State Zip

Subject: ESB E265: EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection

Dear Kenworth Customer,

Your vehicle (listed within this letter) is eligible for a campaign to inspect the camshaft and install a High Oil Flow Kit into the rocker arms of your engine to increase oil flow to the camshaft. The added oil flow will increase engine life.

The problem is…	**Selected engines have been identified to receive a camshaft inspection and an update for improved camshaft lubrication.**
What your dealer will do…	**Dealers will install a High Oil Flow Kit.**
What you must do …	**Contact your Kenworth Dealer to schedule an appointment for repair.**

Please contact a Kenworth dealership to schedule an appointment for this work. If you have already had this work performed, please disregard this letter. You can find your nearest Kenworth dealer at Dealer Locator on the website www.Kenworth.com.

When contacting your selected Kenworth dealer, refer to campaign ESB **E265** and the VIN listed on this letter. The work will take approximately **5.0 hours**, depending on vehicle configuration and dealer scheduling. There will be no charge to you if completed by **06/01/2021**. We apologize for this inconvenience but ask for your cooperation to ensure your continued satisfaction with Kenworth products.

If you had this repair performed before you received this letter, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this campaign. Please contact your Kenworth dealer for more information.

If you require further information about this campaign or experience any difficulty in making arrangements for this repair, please contact Kenworth Customer Service, provide your name, your dealer's city and state, your phone number, your email address (optional), the last 8 digits of your VIN, the bulletin number, and your question using one of the following:

Email: Kenworth.Campaigns@paccar.com with the bulletin number in the subject line
or
Mail: Kenworth Truck Company, P.O. Box 1000, Kirkland, WA 98083-1000, Attn: Customer Service Department
or
Phone: 425-828-5888

If you no longer own this vehicle, we would appreciate your advising us of the new owner if you know their name.

Thank you,

Annick Hollingsworth
Director of Service Platforms
Kenworth Truck Company

VIN: [VIN List]

E265 - EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection

Edit Clone

Number

E265

Section

Engine-MX - 45

Subject

EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection

Date

5/25/2021

Revision

05/28/2021 - Chassis List updated

Condition

Selected engines have been identified to receive a camshaft inspection and an update for improved camshaft lubrication.

Chassis Affected

Certain Model 567, 579, 365 and 389 vehicles built from 02/22/2017 through 04/23/2019.

Action

Campaign

Warranty

For repairs completed by 6/01/2022, Peterbilt will pay for parts at dealer net plus applicable mark-up and labor:

NOTE

Please be aware of claim filing instructions when E263 and/or E264 is also open.

Refer to the attached Claim Worksheet and E265 flowchart for details about the various claims.

E265 standalone repairs with Camshaft Inspection

Service all chassis affected that enter your dealership, even if the customer has no issue with the chassis.

1. Review the attached chassis list for your dealer code and schedule your customer(s) for service if their chassis is on the list.
2. If you are not using Service Management to start repair orders, review SIR for “Complete” or "In Process" next to the “E265” campaign code prior to performing this repair.
3. If “E263” and/or “E264” campaigns are also “Open” in SIR, then those campaigns should be performed with campaign E265.
4. Follow the procedures below to install the High Oil Flow Kit.

CAUTION

Dealers that release trucks on the chassis list without completing the actions described below may face liability for progressive damage.

- 3.9 hours labor to inspect the camshaft and install the HOFK (367/389). Use Quick Claim Code E265A.
- 4.3 hours labor to inspect the camshaft and install the HOFK (365). Use Quick Claim Code E265B.
- 4.6 hours labor to inspect the camshaft install the HOFK (Non-SFFA 567 Short Hood). Use Quick Claim Code E265C.
- 5.0 hours labor to inspect the camshaft and install the HOFK (SFFA 567 Short Hood). Use Quick Claim Code E265D.
- 4.2 hours labor to inspect the camshaft install the HOFK (Non-SFFA 567 Non-Short Hood). Use Quick Claim Code E265E.
- 4.6 hours labor to inspect the camshaft install the HOFK (SFFA-567 Non-Short Hood). Use Quick Claim Code E265F.
- 4.7 hours labor to inspect the camshaft install the HOFK (579 Short Hood). Use Quick Claim Code E265G.
- 4.3 hours labor to inspect the camshaft install the HOFK (579 Non-Short Hood). Use Quick Claim Code E265H.

E265 repairs with E263 and/or E264 repairs

- 2.1 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (367/389). Use Quick Claim Code E265I.
  - File E263 and/or E264 Quick Claims as appropriate.
- 2.5 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open In SIR (365 / Non-SFFA 567 Short Hood). Use Quick Claim Code E265J.
  - File E263 and/or E264 Quick Claims as appropriate
- 2.9 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (SFFA 567 Short Hood). Use Quick Claim Code E265K.
  - File E263 and/or E264 Quick Claims as appropriate.
- 2.1 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (Non-SFFA 567 Non-Short Hood). Use Quick Claim Code E265L.
  - File E263 and/or E264 Quick Claims as appropriate.

- 2.5 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (SFFA 567 Non-Short Hood). Use Quick Claim Code E265M.
- File E263 and/or E264 Quick Claims as appropriate.
- 2.6 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (579 Short Hood). Use Quick Claim Code E265N.
    - File E263 and/or E264 Quick Claims as appropriate.
- 2.2 hours labor to inspect the camshaft and install the HOFK with E263 and/or E264 open in SIR (SFFA 579 Non-Short Hood). Use Quick Claim Code E265O.
    - File E263 and/or E264 Quick Claims as appropriate.

E265 camshaft inspection resulting in camshaft or engine replacement

- File a long form claim. Refer to Long Form Claim Guidance for Camshaft or Engine Replacement for guidance.
    - Campaign E265 must be in the Campaign Code field.

Additional warranty related information:

File the claim within 14 days in accordance with Warranty Policy.

Peterbilt dealers may perform E264 repairs on Kenworth chassis, but Quick Claims do not apply. For Kenworth chassis repairs, file a long form claim and use the claim codes below.

PRWS CLAIM CODING			
Campaign Code:	E265	Campaign Type	Field Repair
Claim Category:	Engine	Repair Type	Proactive
Customer Concern Code	173	Causal Code	A1
Corrective Action Code	12	Responsibility Code:	Camp
Failure Location	045-008-098	Causal Part	2112481
Supplier Code	N/A	SRT Code	See claim worksheet

CLAIM CODING			
Failure Location:	045-008-098	Work Accomplished:	69
Failure Type:	700	Responsibility Code:	09
SRT Code:	See claim worksheet	Claim Type:	A

Parts

Parts are available from PACCAR Parts.

- Parts in Table 1 are required for all repairs.
- Parts in Table 2 are only required if campaigns E263 or E264 are not listed for the chassis in SIR.
- Parts in Table 3 are only required if a valve cover bolt breaks.

Table 1 Parts required for all E265 repairs

Quantity	Part Number	Description
1	2312680PE	High Oil Flow Kit (HOFK)
1	Locally Sourced	Brake Cleaner
*	079340-62040	Loctite 620
1	2111441PE	Oil Pan Gasket
47	Locally Sourced	Engine Oil
* One bottle of Loctite 620 is enough to service 20 engines. Credit is provided for 5 percent of a bottle per repair.		

Table 2 Additional Parts required if E263 and E264 work is not ALSO being performed

Quantity	Part Number	Description
1	2302341PE	Valve cover gasket and valve train gasket kit

Table 3 Parts to be used in cases of broken valve cover bolts

Quantity	Part Number	Description
As Required	1971745PE	Valve cover bolt assembly. Includes bolt and sleeve.
As Required	Source Locally	M6x40mm flanged bolt, grade 8.8, yellow zinc coated. Matching 8mm bolt head recommended. Any bolt equivalent to this example https://www.fastenal.com/products/details/11115843

Procedure

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

NOTE

If a valve cover bolt is broken, follow this process to replace the bolt rather than replace the valve cover.

1. Attempt to push the bolt sleeve out of the valve cover. If it can be pushed out of the valve cover, replace the bolt assembly with part number 1971745PE. If the bolt cannot be pushed out, continue with this procedure.
2. Use any drill bit size between 17/64 and 9/32 to drill through the sleeve to remove enough material from the dimples used to retain the original bolt to allow a M6/40mm bolt to be installed. If the sleeve is removed from the valve cover during the drilling process, install bolt assembly 1971745PE.
3. If the broken bolt cannot be removed from the valve train casing, the valve train casing should be replaced.

You may find it helpful to look at the E265 Flowchart before beginning this repair.

Camshaft Inspection

Camshaft lobe inspection

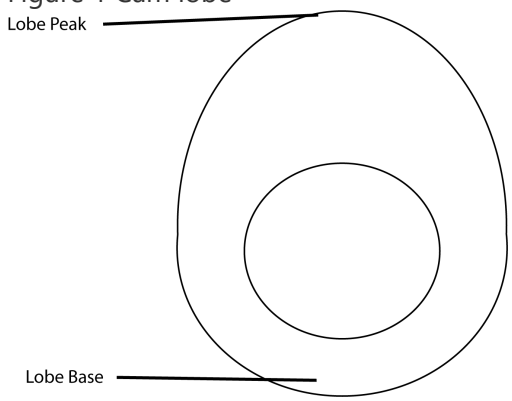
This inspection process will determine one of the following:

- No further repair required-the HOFK and other open campaigns can be performed.
- Camshaft replacement required.
- Long block or complete engine replacement required.

1. Remove the oil pan and inspect the camshaft exhaust lobes.
    a. Disconnect the batteries.
    b. Drain the oil.
    c. Remove the electrical harness bracket from the driver's side front of the engine block and oil pan.
    d. Use cable ties to hold the harness away from the pan.
    e. Remove the oil pan bolts and remove the oil pan.
    f. Refer to the Camshaft Inspection Photo Guide to take clean, clear, and in focus photos of the **PEAK** of the **EXHAUST** camshaft lobes. The exhaust cam lobe is the wider lobe.
2. Open the Camshaft Inspection Photo Guide document in the Attachments section of this bulletin and save it as a new file. Use the naming convention of "*last 8 digit of VIN* Cam Inspection".

3. After you take the photos, insert the photos into the appropriate open cells of the Camshaft Lobe Photos table.

Figure 1 Cam lobe



4. Start a TCS365 case. See the TCS365 Case Creation Guide section below for instructions to create the case. Attach the Camshaft Inspection Photo Guide to the case. The VSC will analyze the camshaft lobe photos and inform you of the next repair step.
5. If VSC directs you that the camshaft is ok, reassemble the engine per RMI, complete other open campaigns, and fill the engine with new oil.
6. If VSC directs you to inspect the lower main bearings, continue with this procedure.
7. Remove Main Bearing Cap numbers 3, 4, and 5.
    a. Remove the oil pickup tube from the fixing frame.
    b. Remove the fixing frame from the engine block.
    c. Remove the oil pump.
    d. Break loose the main cap bolts with hand tools.
    e. Remove the main cap bolts for main bearing journal locations 3, 4, and 5 (an air/electric impact tool can be used).
    f. Remove and inspect only the lower bearing shells of 3, 4, and 5. Leave the upper bearing shells in place.

       IMPORTANT: Keep the bearings organized. Make note of the location of each bearing. If the bearings are determined to be OK, they will be reused. They MUST be installed in the same location that they were removed from.

    g. Place the bearing caps on a clean piece of paper or cardboard and label the bearing locations.
    h. Take clear and in focus photos of the bearings.
8. Inspect the condition of the bearings and attach the bearing photos to the TCS365 case and update the Diagnostic Details of the case with “inspected and attached #3, 4, & 5 main bearing photos”. VSC will provide final direction of repair.
    - If you are directed to replace the camshaft, if the chassis has E263 Open in SIR, also replace the valve guide seals per PSB E263.
        - Use caution when opening the camshaft box. The box must be reused to return the camshaft.
    - If you are directed to install a short block, see the Flush the oil module procedure below.

NOTE

- Short block replacement is the preferred engine replacement.
- Refer to PACCAR MX-13 Long and Short Block Pre-Installation Service Procedures - SM045-001-002 for instructions in addition to those in RMI.

- If the engine is not being replaced, and the chassis has E264 Open in SIR, also retorque the head bolts per PSB E264.

Figure 2 Example of main bearing photos

Flush the oil module (only when replacing the short block)

1. Remove the oil module and oil cooler.
2. Remove the oil cooler from the oil module.
3. Clean the oil module in a solvent tank.
4. Additionally, clean the oil module in a hot water parts cleaner.
5. Thoroughly dry the oil module.
6. Install the cleaned oil cooler back onto the module.

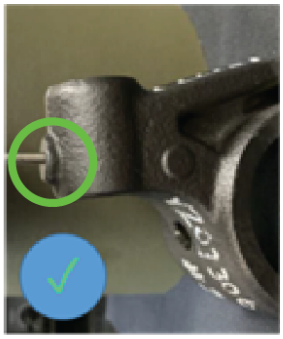
Unit Pump to High Pressure Fuel Rail Lines

- The high pressure fuel rail lines should only be disconnected during a camshaft or engine replacement.
- If the ends of the fuel lines are corroded as shown below, replace the fuel lines.
- Attach photos of the corroded fuel lines and the connections at the unit pumps to the TCS365 case.

Figure 3 Corroded Fuel Lines

HOFK Installation

1. Remove the valve cover and valve train casing per RMI procedures.
2. Confirm the exhaust rocker arm has extra material on the drilling boss.



2157845 (12V NA)
2157846 (24V EU)

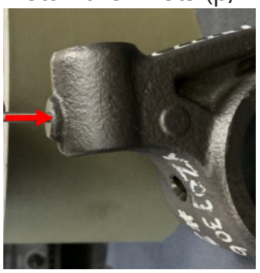
2199622 (12V NA)
2199623 (24V EU)

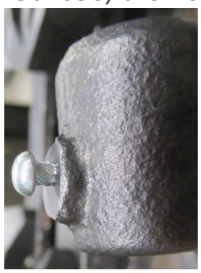
   - If the exhaust rocker has the extra material, continue with this procedure.
   - If the exhaust rocker does not have the extra material, take a photo of the rocker and start a TCS365 case using the TCS365 Case Creation Guide below.
3. Remove the existing lash screw from each DEB rocker arm.

NOTE
Peterbilt models 367, 567, 579 with short hoods may require the rear rocker arm assembly to be removed for access.

4. Cover the engine push tube openings with shop towels or similar to prevent the rivet from dropping into the engine.
5. Clean the small hole at the end of the DEB rocker arm by applying brake cleaner, see the red arrow in the figure below.
6. Apply Loctite® 620 onto the rivets before installation.

7. Install the rivets (p/n 2304858) the holes in the DEB rocker arms using a hammer and brass drift punch.

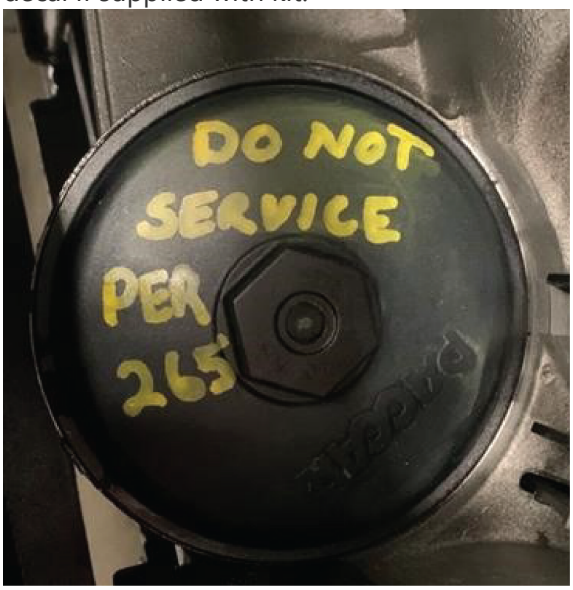

Hole to be closed with rivet


Rivet placed on hole


Rivet installed (side)


Rivet installed (front)

8. Install the grooved lash screws (p/n 2295926) and apply the regular lash adjustment per RMI.
9. Install the valve train casing and valve cover with new gaskets per RMI.
10. Remove and discard the centrifugal and its cover. The centrifugal filter will not be reinstalled.
11. Thoroughly lubricate the new O-rings and install them on the new cover.
12. Install the new centrifugal cover kit.
    a. Remove and discard the centrifugal filter and cover. The centrifugal filter will not be installed.
    b. Use a white or yellow paint pen to write “Do not service per E265” on the new cover. Or apply decal if supplied with kit.



    c. Thoroughly lubricate the O-rings with engine oil before installing them on the cover.
    d. Install the cover kit. Torque to specifications cast into the cover.

TCS365 Case Creation Guide

Follow this guide to create the TCS365 case for this bulletin to ensure the case is flowed to the appropriate personnel.
This guide should be used to submit a case for:

- Submitting cam lobe photos
- Requesting assistance if the rocker arm does not have the extra material.

- Open TCS365 in Google Chrome or Microsoft Edge.
- Select **Vehicle Support** | **Technical Assistance**.
- Select *Case Type***Powertrain Support** and *Case Category***Engine Diagnostics**.
- On the Powertrain Support page, fill in the following fields as follows and fill in the other fields as appropriate:
- Subject: E265
- Description: E265

- Complaint/Verification Results:
  - Inspected Camshaft per E265
    OR
  - Rocker arm does not have extra material
- Did you perform the required steps: Yes
- Did you attach a PDF log file: No (if the camshaft shows damage, a log file may be required to determine the best repair)
- Warranty Dependent Case: No
- Repairs and Parts Replaced:
  - Photographed camshaft exhaust lobe peaks
    OR
  - Found rocker arm does not have extra material
- Diagnostic Details:
  - Photographed camshaft exhaust lobe peaks, oil filter cartridge pleats, and oil filter cap bypass valve retaining tabs.
  - Is there debris in the filter pleats?
  - Are there any broken bypass valve retaining tables?
    OR
  - N/A
- Upload File:
  - Upload the Camshaft Inspection Photo Guide that you inserted the camshaft lobe photos in.
    OR
  - Upload a photo showing the lack of material on the rocker arm.

Links

Chassis List

Customer Letter

Quick Claim Guide

Select the date.

CAMPAIGN LETTER

This notice applies to your vehicle. Your VIN(s) can be found on the bottom or back of this page.

Subject: E265 - EPA2017 PACCAR MX-13 Engines High Oil Flow Kit (HOFK) and Camshaft Inspection
EXPIRATION DATE: 6/1/2022

Dear Peterbilt Customer,

Peterbilt is pleased to inform you that your vehicle is eligible for a campaign to inspect the camshaft and install a High Oil Flow Kit into the rocker arms of your engine to increase oil flow to the camshaft. The added oil flow will increase engine life.

What is Peterbilt improving?	Selected engines have been identified to receive a camshaft inspection and an update for improved camshaft lubrication.
What will this improvement do?	Dealers will install a High Oil Flow Kit.
What should you do?	Contact your dealer immediately to schedule an appointment.

Please contact a Peterbilt dealership to schedule an appointment for this improvement. To find your Peterbilt dealer, please visit the Dealer Locator at www.Peterbilt.com or scan the QR code. When contacting your Peterbilt dealer, refer to campaign E265 and the VIN(s) listed in this letter. The work for this improvement will take approximately 5.0 hours of labor depending on vehicle configuration and dealer scheduling. There will be no charge to you if completed within standard warranty or by June 1, 2022, whichever is later.

We look forward to the opportunity to deliver this product improvement as part of our effort to provide the highest levels of customer satisfaction and service expertise. We value your business and appreciate your ongoing loyalty to Peterbilt and its dealer network. Industry-leading quality, performance and reliability are hallmarks of Peterbilt products, and we thank you for making Peterbilt your truck of choice.

Sincerely,

Michelle Ponsonby
Director of Customer Service
Peterbilt Motors Company

Scan this QR code to open the Peterbilt Dealer Locator.