



December 2017

Dealer Service Instructions for:

# **Safety Recall T65 / NHTSA 17V-670 Engine Oil Pump**

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## **Models**

**2018 (KL) Jeep® Cherokee**

**2018 (MP) Jeep® Compass**

*NOTE: This recall applies only to the above vehicles equipped with a 2.4L engine (Sales Code EDE, ED6, ED8) built from September 09, 2017 through September 28, 2017 (MDH 090912 through 092819).*

**IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery.** Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

## **Subject**

The engine oil pump on about 350 of the above vehicles may have been built with a cracked engine oil pump housing. A crack may propagate through the housing and cause the oil pump to fail. If the oil pump fails, it may cause the engine to stall. An engine stall could cause a crash without prior warning.

**Repair**

The engine oil pump on the involved vehicle must be inspected for the cavity number “KD.8” if this number is on the oil pump casting it must be replaced.

**Parts Information**

| <u>Part Number</u> | <u>Quantity</u> | <u>Description</u>           |
|--------------------|-----------------|------------------------------|
| 05047992AC         | 1               | Balance Shaft Module         |
| 06511057AA         | 3               | Bolt, Splash Shield          |
| 06509278AA         | 4               | Bolt, Ladder Frame           |
| 06508985AA         | 2               | Bolt, Oil Pan                |
| 06509285AA         | 3               | Bolt, A/C Compressor Bracket |
| 68218950AB         | 6 Quarts        | Oil, Engine 0-20W (MS-12145) |
| 04883971AB         | 1               | Sealant, RTV (MSGF44B)       |
| 05047566AC         | 1               | Pan Assy, Engine Oil         |
| 06509140AA         | 16              | Bolt, Oil Pan                |

**Parts Return**

No parts return required for this campaign.

**Special Tools**

No special tools are required to perform this service procedure.

**Service Procedure**

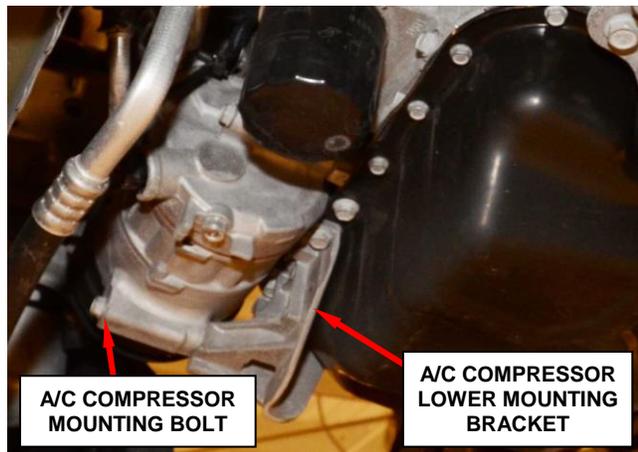
**A. Balance Shaft Module Inspection**

1. Open the hood.
2. Remove and save the engine oil dipstick.
3. Raise and support the vehicle.
4. Remove and save the right front tire/wheel assembly.
5. Remove and save the right side wheel well splash shield (Figure 1).



**Figure 1 – Right Splash Shield**

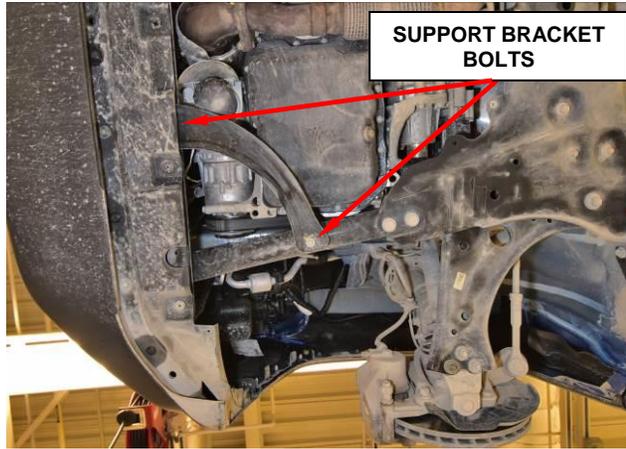
6. **If equipped** - remove the engine underbody belly pan or skid plates.
7. Remove the engine oil pan drain plug and drain the oil from the engine crankcase.
8. Install the engine oil pan drain plug.
9. **If equipped** - remove the lower A/C compressor mounting bolt (Figure 2).



**Figure 2 – Air Conditioning Compressor Lower Mounting Bracket**

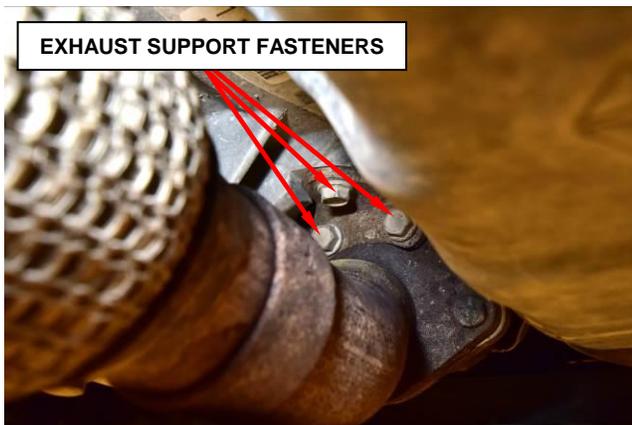
**Service Procedure (Continued)**

10. Remove the three A/C mounting bracket bolts; save the bracket discard the bolts (Figure 2).
11. **(MP Model)** remove the right side support bracket bolt and loosen the front bolt, move the bracket away enough to clear the oil pan obstruction (Figure 3).



**Figure 3 – Support Bracket**

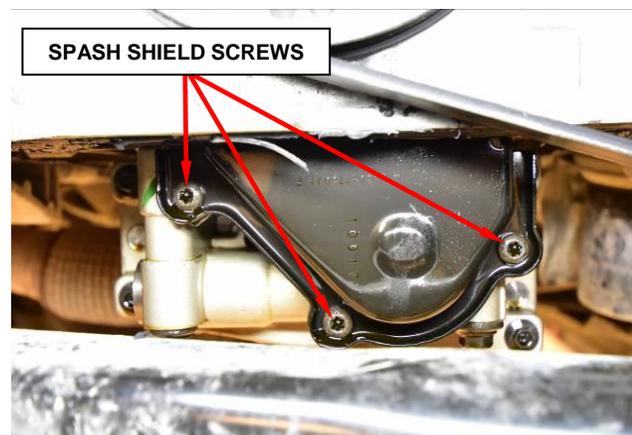
12. Remove the three exhaust manifold support bolts and save (Figure 4).
13. Remove the oil pan bolts.
14. Using a putty knife, loosen the seal around the oil pan.



**Figure 4 – Exhaust Support Bracket**

**NOTE: Do not use pry points on block to remove the oil pan**

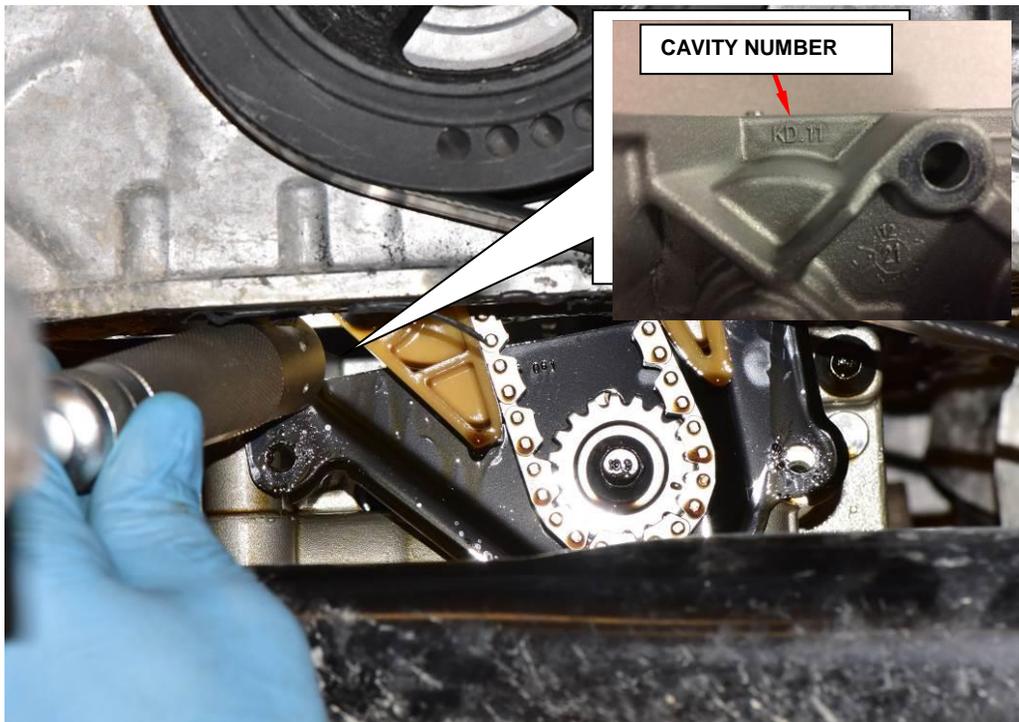
15. Remove and discard the oil pan.
16. Remove the three oil splash shield screws and discard the screws (Figure 5).



**Figure 5 – Oil Pump Splash Shield**

**Service Procedure (Continued)**

17. Using a light, source look for the cavity number that's on the left rear balance shaft casting (Figure 6).



**Figure 6 – Cavity Number Location**

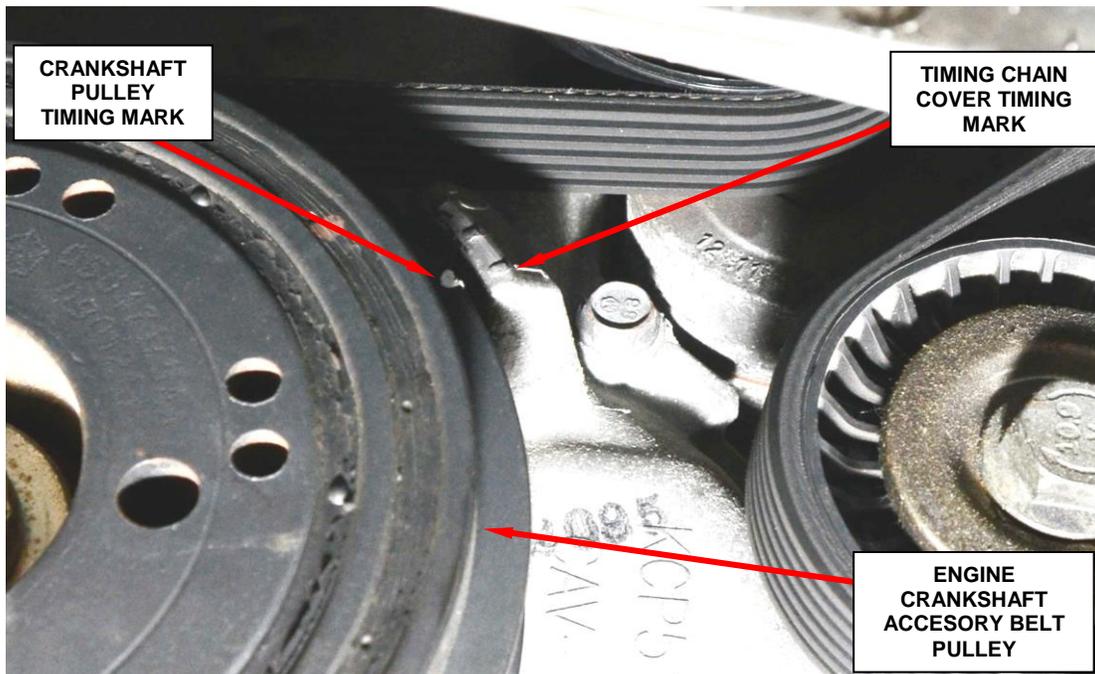
- a. If the casting cavity number is, “KD.8” proceed with section **B** Step 1.
- b. If the casting cavity number is NOT “KD.8”, proceed with section **C** Step 10.

**Service Procedure (Continued)**

**B. Balance shaft module removal procedure**

1. Bar the engine over and align the timing mark on the crankshaft accessory belt pulley with the mark on the timing chain cover (Figure 7).

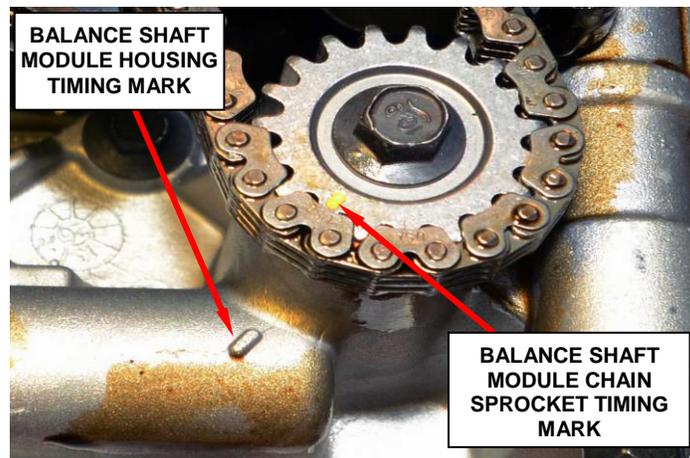
**NOTE: It is very important that the crankshaft stays stationary during the following steps. Do not move the crankshaft until the installation procedure is completed.**



**Figure 7 – Timing Chain Cover Timing Marks**

2. Verify that the mark on the balance shaft module chain sprocket aligns with the mark on the balance shaft module housing (Figure 8).

**NOTE: Oil Splash Shield removed for illustration of timing mark on module.**



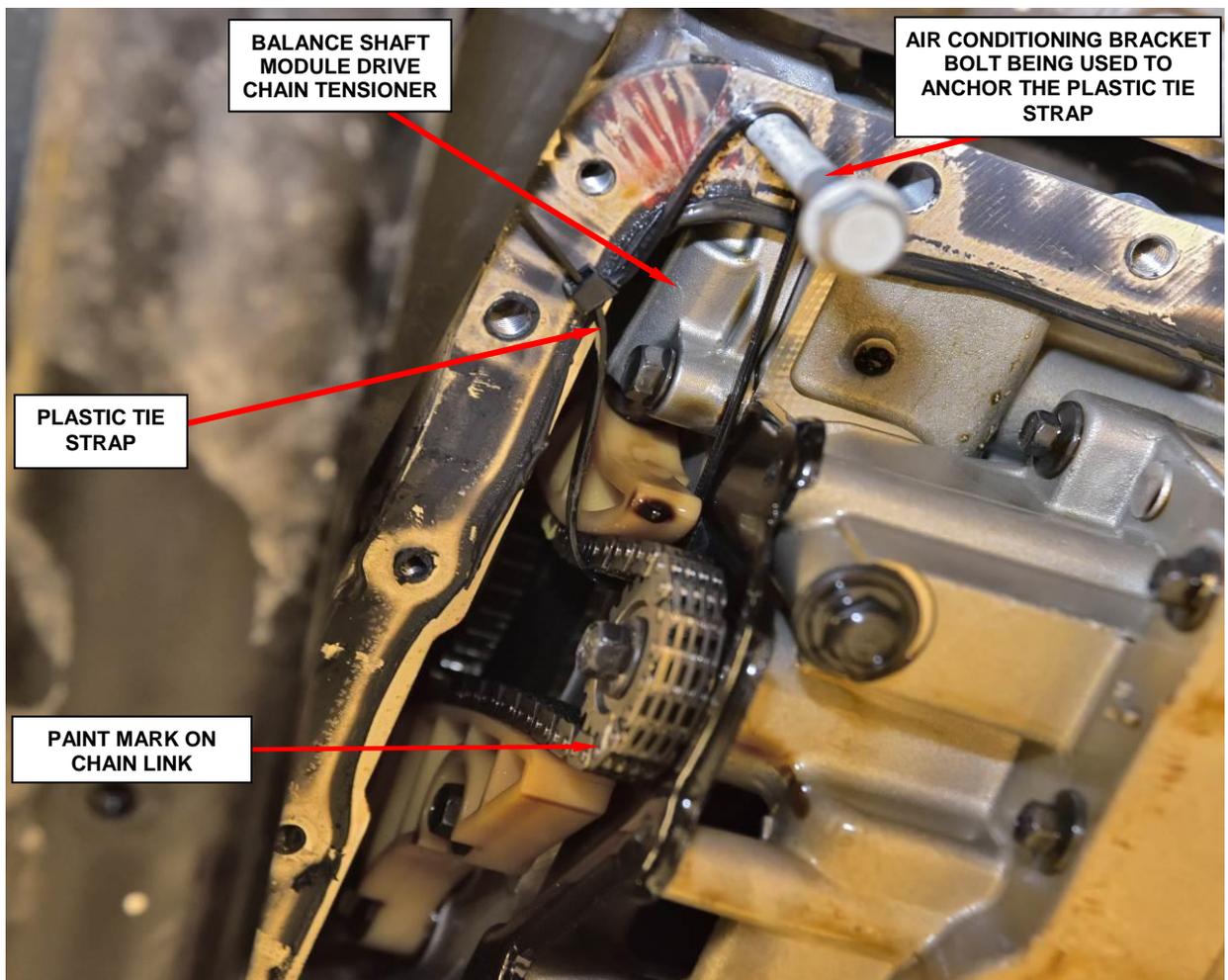
**Figure 8 – Timing Marks**

**Service Procedure (Continued)**

3. Install one air-conditioning compressor bracket bolt into the right forward corner thread boss (Figure 9).

**NOTE: The bolt will provide a sturdy point to secure a tie strap to hold the tensioner in the compressed position.**

4. Apply a paint mark on the chain link that is aligned with the drive sprocket mark (Figure 9).



**Figure 9 – Relive Balance Shaft Drive Chain Tension**

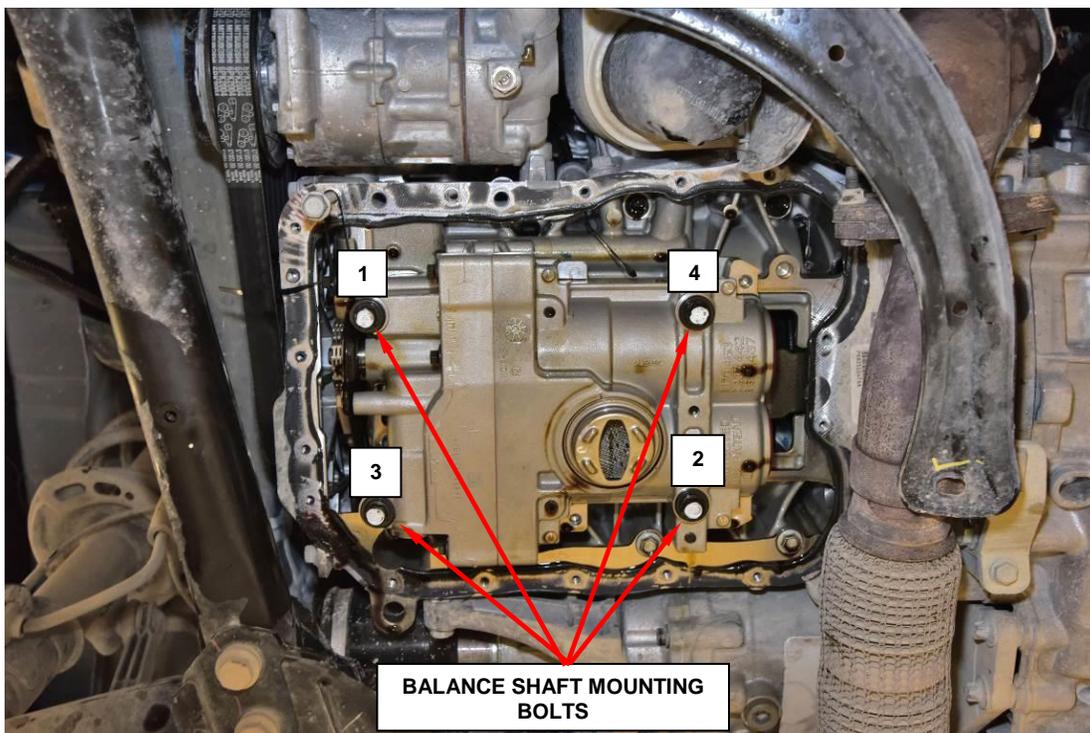
5. Position a plastic tie strap around the chain, tensioner and bolt that was previously installed (Figure 9).

**Service Procedure (Continued)**

6. Push the chain, guide and tensioner to the compressed position.
7. Tighten the tie strap to hold the components together.

**NOTE: The tighter the strap, the more room for removal and installation of the balance shaft module.**

8. Remove the four balance shaft module mounting bolts (Figure 10).



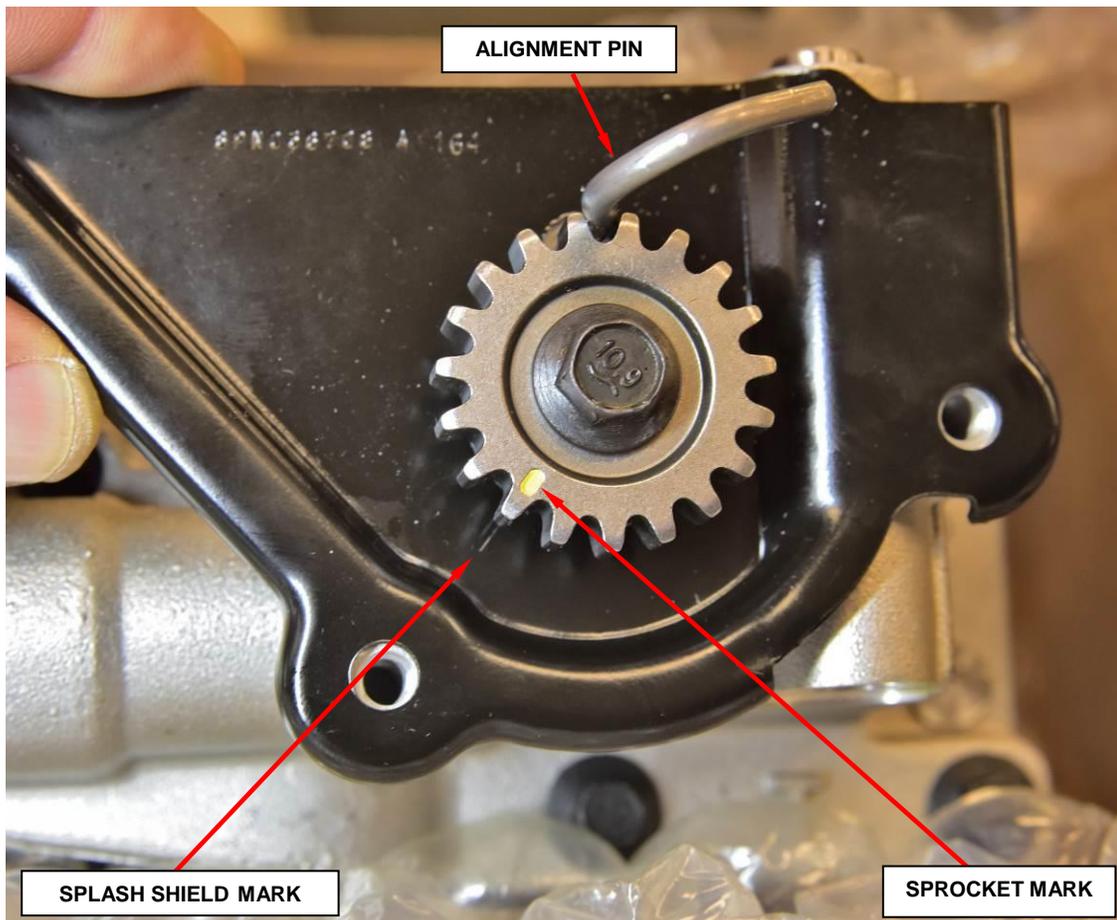
**Figure 10 – Mounting Bolts**

9. Remove the balance shaft module from the engine by tilting the rear of the balance shaft module downward while lifting the drive gear out of the chain links.
10. Clean the oil pan mounting surface and remove any residual sealant.

**Caution: Do not use an aggressive abrasive to remove the sealant this may damage the mounting surface.**

**Service Procedure (Continued)****C. Balance Shaft Module Installation Procedure**

1. Remove the **NEW** balance shaft module from the shipping box and verify the alignment pin is aligned with the drive sprocket mark and splash shield cover (Figure 11).



**Figure 11 – Alignment Pin**

2. With the rear of the balance shaft module on a slight downward angle, position the gear into the chain links. Make sure the mark on the **NEW** balance shaft module and the paint mark on the chain link are aligned.
3. Pivot balance shaft module upwards and position on ladder frame.

**Service Procedure (Continued)**

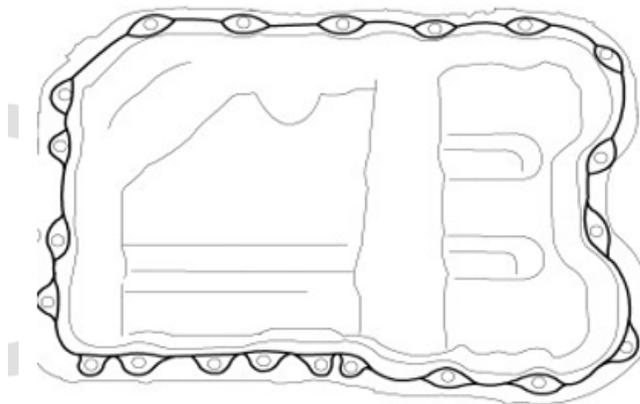
4. Install the four **NEW** balance shaft module bolts finger tight.

**NOTE: The balance shaft module bolts are tightened using a torque plus angle procedure. The bolts must be replaced.**

5. Tighten the **NEW** balance shaft module bolts in the sequence shown below, follow the three-step torque procedure, and crisscrossing tightening the opposite bolt 1-2-3-4 an ending with a torque angle method (Figure 10).
  - Step 1: All to 15 N·m (11 ft. lbs.).
  - Step 2: All to 29 N·m (22 ft. lbs.).
  - Step 3: All an additional 90°. **Do not use a torque wrench for this step**
6. Double check the alignment marks to ensure the gear indicator and balance shaft module assembly indicator are aligned (Figure 7 and 8).
7. Remove the alignment pin from the balance shaft module.
8. Remove the tie strap.
9. Remove the A/C compressor-mounting bolt.
10. Install the **NEW** splash shield bolts and tighten to 9 N·m (6 ft. lbs).
11. Clean the oil pan sealing surfaces with isopropyl alcohol or equivalent in preparation for sealant application.
12. Apply Mopar® Engine Sealant RTV Silicone Rubber Adhesive or equivalent at the front cover to the engine block parting lines.

**Service Procedure (Continued)**

13. Apply a 2 mm bead of Mopar® Engine Sealant RTV Silicone Rubber Adhesive or equivalent around the **NEW** oil pan as shown (Figure 12).



**Figure 12 – Oil Pan Sealant Application**

14. Install the **NEW** oil pan and **NEW** bolts tighten the bolts as indicated:
- M6x1.00x16.35 - 10N·m (7 ft. lbs.) Quantity of 16.
  - M8X1.25X104 – 26 N·m (19 ft. lbs.) Quantity of 2.
15. Install the AC compressor to engine block supporting bracket and tighten the **NEW** bolts as indicated:
- M8x1.25x30.00 – 30 N·m (22 ft. lbs.) Quantity of 3.
16. Verify the oil drain plug on the **NEW** oil pan is tightened to 20 N·m (15ft. lbs.).
17. Install the AC compressor mounting bolt and tighten to 28 N·m (21ft. lbs.).
18. Install the exhaust support bracket and tighten the three bolts to 20N·m (15 ft. lbs.).
19. Install the right side support bracket bolt and tighten to 10 N·m (7 ft. lbs.).
20. **If equipped** - install the underbody engine belly pan/skid plates and bolts and tighten to 20 N·m (15 ft. lbs.).
21. Install the right wheel well splash shield.
22. Install the right tire/wheel assembly tighten the lug nuts to 135 N·m (100 ft. lbs.).

**Service Procedure (Continued)**

- 23. Lower the vehicle and fill the engine crankcase with the 0-20w engine oil to the correct level.
- 24. Start the engine and check for an oil leak.4
- 25. Return the vehicle to the customer.

**Complete Proof of Correction Form for California Residents**

This recall is subject to the State of California Registration Renewal/Emissions Recall Enforcement Program. Complete a Vehicle Emission Recall Proof of Correction Form (Form No. 81-016-1053) and supply it to vehicle owners residing in the state of California for proof that this recall has been performed when they renew the vehicle registration.

**Completion Reporting and Reimbursement**

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

|   | <b>Labor Operation<br/>Number</b> | <b>Time<br/>Allowance</b> |
|---|-----------------------------------|---------------------------|
| Inspect balance shaft cavity number (KL, MP)  | 09-T6-51-81                       | 1.5 hours                 |
| Inspect and replace balance shaft module (MP) | 09-T6-51-82                       | 1.7 hours                 |
| Inspect and replace balance shaft module (KL) | 09-T6-51-83                       | 1.8 hours                 |
| Skid Plate Equipped (KL)                      | 09-T6-51-60                       | 0.4 hours                 |
| Skid Plate Equipped (MP)                      | 09-T6-51-61                       | 0.2 hours                 |

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

**Dealer Notification**

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

**Owner Notification and Service Scheduling**

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

**Vehicle Lists, Global Recall System, VIP and Dealer Follow Up**

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner’s name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer’s VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

**Dealers must perform this repair on all unsold vehicles before retail delivery.** Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

*Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.*

**Additional Information**

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

This notice applies to your vehicle,

[Model Year and Model]

VIN XXXXXXXXXXXXXXXXXXXX

T65/NHTSA 17V-670

LOGO

VEHICLE PICTURE

#### YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION**  
Call your authorized Chrysler / Dodge / Jeep® / RAM / Jeep® Dealership.
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403.** An agent can confirm part availability and help schedule an appointment
- 3. Visit recalls.mopar.com, scan the QR code below, or download the Mopar Owner's Companion App.**

QR Code

Get access to recall notifications, locate your nearest dealer, and more through this website or Mopar Owner's Companion App. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

#### DEALERSHIP INSTRUCTIONS

Please reference Safety Recall T65.

# IMPORTANT SAFETY RECALL

## Engine Oil Pump

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain [2018 Jeep® Compass, Jeep® Cherokee] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

#### WHY DOES MY VEHICLE NEED REPAIRS?

The engine in your vehicle <sup>[1]</sup> may have been built with a cracked engine oil pump housing. The crack may propagate through the housing and cause the oil pump to fail. If the oil pump fails, it may cause the engine to stall. **An engine stall could cause a crash without prior warning.**

#### HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle <sup>[2]</sup> free of charge (parts and labor). To do this, your dealer will inspect and replace the engine oil pump if needed. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit. Your time is important to us; please be aware that these steps may require more time. The estimated repair time is 2 hours. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

**TO SCHEDULE YOUR FREE REPAIR CALL 1-800-853-1403  
OR YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY**

#### CALIFORNIA RESIDENTS

The State of California requires the completion of emission recall repairs prior to vehicle registration renewal. Your dealer will provide you with a Vehicle Emission Recall Proof of Correction Form after the recall service is performed. Be sure to save this form since the California Department of Motor Vehicles may require that you supply it as proof that the recall has been performed.

#### WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit [www.fcarecallreimbursement.com](http://www.fcarecallreimbursement.com) to submit your reimbursement request online. <sup>[3]</sup> Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations  
Fiat Chrysler Automobiles US LLC



**Mr. Mrs. Customer**  
**1234 Main Street**  
**Hometown, MI 48371**

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to [safercar.gov](http://safercar.gov).

[3] You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.

Note to lessors receiving this recall notice: Federal regulation requires that you forward this recall notice to the lessee within 10 days.