SERVICE BULLETIN



M1450 2017-07-25

M1450: MILWAUKEE-EIGHT WITH STAGE KITS - LOSS OF POWER OR HIGH ENGINE **BRAKING**

Reason for Revision

Refer to Table 1.

Table 1. Document History

Date	Revision Description
2017-07-05	Initial release
2017-07-07	Updated Purpose for Service Bulletin
2017-07-21	Updated Required Dealer Action, Dealer In-
	ventory Instructions and Extra information
2017-07-25	Added Credit Procedure and Return Parts
2017-10-18	Updated Required Dealer Action
	Change Title
2017-10-24	Updated Purpose for Service Bulletin, Re-
2017-10-24	quired Dealer Action and Extra Information
	Added Required Dealer Action > Install

Purpose for Service Bulletin

2017 and 2018 model motorcycles equipped with a Milwaukee-Eight $^{\text{TM}}$ engine and a Stage III or Stage IV kit can experience a condition known as sumping during extended periods in low gear, at high rpm or under heavy engine load.

Sumping is when an excessive amount of oil is suspended in the engine crankcase and the flywheel must travel through the oil, resulting in loss of power or a high degree of engine braking and potential engine component damage with extended use under these conditions.

This bulletin provides the diagnostic procedure for determining if sumping is occurring.

Motorcycles Affected

This information applies to all 2017 and 2018 Touring, CVO, Trike, Touring Police and 2018 Softail model motorcycles with a Milwaukee-Eight engine and a Stage III or Stage IV kit

Markets Affected

All markets are affected.

Part Numbers

Refer to Table 2.

Table 2. Part Numbers

Current Part No.	Item Description	New Part No.
62400143	OIL PUMP ASSY, OIL	62400178
62400124, 62400146	OIL PUMP ASSY, WATER	62400182

Required Dealer Action

Verify that sumping symptoms are present:

- 1. Confirm that the customer is experiencing loss of power or high intensity engine braking during extended high rpm (Revolutions per minute) use.
- Perform an oil level hot check to verify that the engine oil has not been over-filled or that oil level is low with no apparent signs of leakage. See the service manual.
 - Operate the engine at idle for 2 min. а
 - Stop the engine.
 - Check engine oil level immediately. C.
 - d. Remove excess oil or add oil, if necessary.

NOTE

Sumping is more detectable at warmer oil temperatures.

3. Take the vehicle for a test ride and operate the engine to normal operating temperature (Bulk Oil Tank Temperature).

Temperature: 82-121 °C (180-250 °F)

- Place vehicle in an upright position.
 - With the vehicle at operating temperature, allow vehicle to idle in an upright position for 45-60 s.
- Stop the engine. Remove the CKP (Crankshaft position) sensor within one minute.
- 6. Measure amount of oil drained from the sensor opening.
 - Less than 177.4 ml (6 fl oz): Go to Step 7.

ROUTING	SERVICE	SALES MANAGER	WARRANTY	<u> </u>	TECHNICIAN NO. 1		
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- b. Greater than 177.4 ml (6 fl oz): Go to Step 8.
- The condition is not caused by sumping.
 - Explore other causes (fuel, timing, intake and so on).
- 8. The condition is likely caused by sumping.
 - Verify cylinder and piston integrity (scuffing, scoring, oil rings present).
 - Verify that connecting rod bearings roll free and smooth. Connecting rod bearings that require more than light force to separate may require additional service.
 - c. A reduction in piston jet assembly screw torque is expected after operation due to gasket compression. Unless piston jet assembly is visibly loose, the piston jet assembly gasket is mis-installed or the gasket or a screw is missing, the piston jet assembly joint will not cause sumping. Tighten piston jet assembly.

Torque: 3.1–3.7 N·m (27–33 in-lbs)

If engine damage is observed: Contact regional Technical Service.

If engine damage is not observed: Install new oil pump (Refer to Table 2.) and existing gerotor using the torque sequence below, then assemble engine and file the appropriate warranty claim. Refer to Table 3.

Install

- Install cam support plate. See the service manual.
- 2. Refer to Figure 1. Follow modified tightening sequence. Torque: 10.4–12.7 N⋅m (92–112 in-lbs)
 - Tighten screws 1-6.
 - b. Rotate crankshaft 360°.
 - c. Tighten screws 7-10.

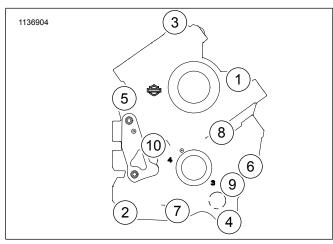


Figure 1. Cam Support Plate Tightening Sequence

Dealer Inventory Instructions

The current oil pump (Part No. 62400121, 62400124, 62400143 and 62400146) can be used for all OE (Original equipment) vehicle configurations that require oil pump maintenance or repair not associated with sumping.

Use oil pump (Part No. 62400182 or 62400178) for Stage III and IV kit that are exhibiting sumping.

Dealers should not return inventory of (Part No. 62400121, 62400124, 62400143 and 62400146) as defective stock.

Extra information

- 1. When installing a Screamin' Eagle Stage III or Stage IV kit on a 2017 and 2018 Milwaukee-Eight equipped motorcycle, a new pump assembly is required, which can be ordered through the regular part ordering process.
- New oil pumps installed for new Stage III and Stage IV kit installations are reimbursed at cost. Refer to Table 4.
- Current inventory of oil pumps (both oil cooled and Twin-Cooled™) can be used as replacement for any concern (not sumping related), as needed.

For example: Debris in oil, wrong oil pump for engine (oil vs water), gerotor cracks and so on.

Credit Procedure: Reimbursement of Oil Pump for Screamin' Eagle Stage III or IV Kits Registered to SWR

Reference this bulletin in the Event Notes/Comments of claim.

Table 3. Kits Registered to SWR

ITEM	DATA
Claim Type	PNA / Standard claim
	Screamin' Eagle Stage III or IV
Problem Part Number	Kit registered to
	VIN (Vehicle identification number)
Quantity	Leave Blank
Primary Labor Code ⁽¹⁾	8865
Time	7.6
Customer Concern Code	3102
Condition Code	9106
	New oil pump and necessary
Replacement part number	miscellaneous parts. Refer to
	Table 2.

(1) Download may be required.

Submit a warranty claim for the new oil pump required for the installation of Stage III and Stage IV kits. Refer to Table 4.

Table 4. Oil Pumps Required for Installation of Kits

ITEM	DATA
Claim Type	DFS (Defective stock) / PAM
Ciaiii 19po	Sold
Problem Part No.	62400121, 62400124,
Flobletti Fatt No.	62400143 or 62400146
Quantity	Leave blank
Customer Concern Code	9901
Condition Code	9110
Replacement part number	62400178 or 62400182
Quantity	1

Bulletin number M1450 must be entered into the comments section of the claim.

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Return Parts

Hold all claimed parts for 60 days from date of credit issued for possible field inspection and/or request to return to factory. After 60 days, destroy and discard the parts.

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