

# SERVICE BULLETIN



**NOTE**  
 In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

|              |                 |               |               |                          |                 |                 |                 |                 |                |
|--------------|-----------------|---------------|---------------|--------------------------|-----------------|-----------------|-----------------|-----------------|----------------|
| ROUTING      | SERVICE MANAGER | SALES MANAGER | PARTS MANAGER | WARRANTY PROCESS MANAGER | LEAD TECHNICIAN | TECHNICIAN NO.1 | TECHNICIAN NO.2 | TECHNICIAN NO.3 | RETURN THIS TO |
| INITIAL HERE |                 |               |               |                          |                 |                 |                 |                 |                |

## M1450: Milwaukee-Eight Equipped Vehicles - Loss of Power or High Engine Braking

**M1450** 2017-11-15  
 Milwaukee-Eight: 107ciMilwaukee-Eight: 114ciMilwaukee-Eight: 117ci

### 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 Inventory Instructions and Extra information  |
| 2017-07-25 | Added Credit Procedure and Return Parts  |
| 2017-10-18 | Updated Required Dealer Action   |
| 2017-10-24 | Change Title   |
|            | Updated Purpose for Service Bulletin, Required Dealer Action and Extra Information   |
| 2017-11-15 | Added Required Dealer Action > Install   |
|            | Change Title   |
|            | Updated Purpose for Service Bulletin, Motorcycles Affected, Part numbers/Table 2, Dealer Inventory Instructions, Extra Information, Credit Procedure/Table 3, Credit Procedure/Table 4 |

| DATE | REVISION DESCRIPTION           |
|------|--------------------------------|
|      | Added Credit Procedure/Table 5 |

### Purpose for Service Bulletin

2017 and 2018 model motorcycles equipped with a Milwaukee-Eight™ engine can experience a condition known as sumping during extended periods 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.

### Markets Affected

All markets are affected.

### Part Numbers

Refer to Table 2.

Table 2. Part Numbers

| CURRENT PART NO.                            | ITEM DESCRIPTION     | NEW PART NO. |
|---|----------------------|--------------|
| 62400121, 62400143, 62400178 <sup>(1)</sup> | OIL PUMP ASSY, OIL   | 62400178     |
| 62400124, 62400146, 62400182 <sup>(1)</sup> | OIL PUMP ASSY, WATER | 62400182     |

*(1) Built or Packaged prior to 10/10/2017*

### 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.
2. 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.

- a. Operate the engine at idle for 2 min.
- b. Stop the engine.
- c. Check engine oil level immediately.
- d. Remove excess oil or add oil, if necessary.

### 3. NOTE

Sumping is more detectable at warmer oil temperatures.

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)

4. Place vehicle in an upright position.
  - a. With the vehicle at operating temperature, allow vehicle to idle in an upright position for 45–60 s.
5. Stop the engine. Remove the **CKP** (Crankshaft position) sensor within one minute.
6. Measure amount of oil drained from the sensor opening.
  - a. **Less than** 177.4 ml (6 fl oz): Go to Step 7.
  - b. **Greater than** 177.4 ml (6 fl oz): Go to Step 8.
7. The condition is not caused by sumping.
  - a. Explore other causes (fuel, timing, intake and so on).
8. The condition is likely caused by sumping.
  - a. Verify cylinder and piston integrity (scuffing, scoring, oil rings present).
  - b. 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

1. 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)

- a. Tighten screws 1–6.
- b. Rotate crankshaft 360°.
- c. Tighten screws 7–10.

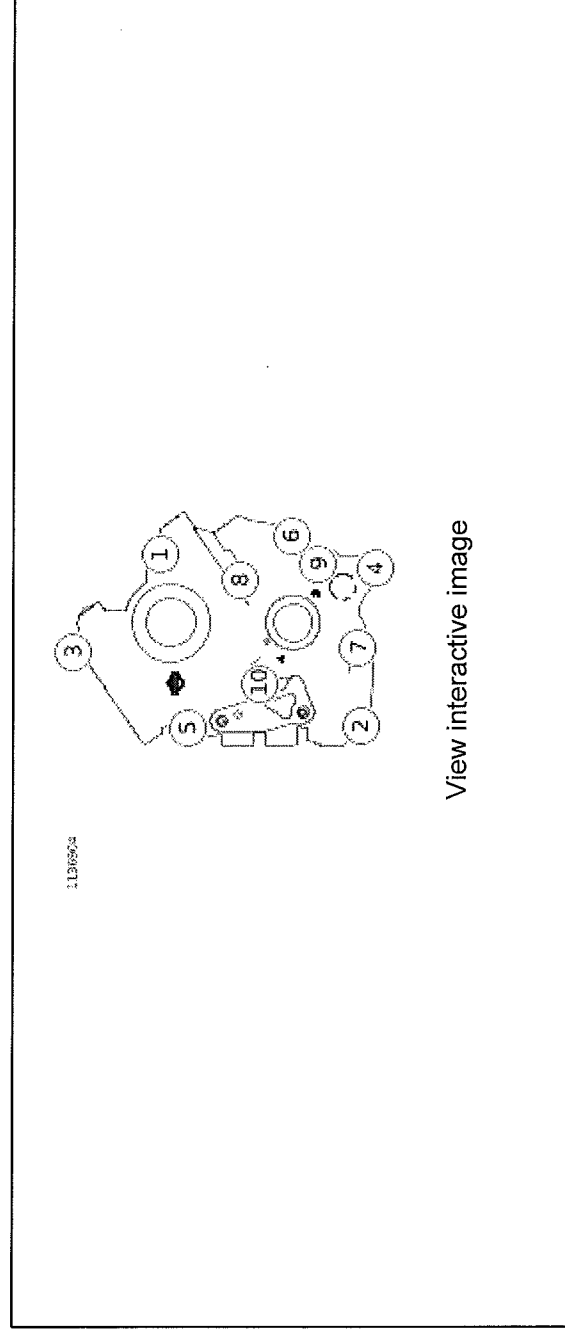


Figure 1. Cam Support Plate Tightening Sequence

### Dealer Inventory Instructions

Use oil pump (Part No. 62400182 or 62400178) with a package date of 10/10/2017 or later for engines that are exhibiting sumping.

### Extra information

1. When installing a Screamin' Eagle Stage III or Stage IV kit on a 2017 and 2018 Milwaukee-Eight equipped motorcycle built prior to 10/10/2017, a new pump assembly is required, which can be ordered through the regular part ordering process.
2. New oil pumps installed for new Stage III and Stage IV kit installations are reimbursed at cost. **Refer to Table 4.**
3. When performing an oil pump repair on an **OE** (Original equipment) 2017 or a 2018 Milwaukee-Eight equipped motorcycle built prior to 10/10/17, a new pump assembly is recommended. Order the new pump through the regular part ordering process.
4. For **OE** applications exhibiting this condition where an oil pump has been installed. **Refer to Table 5.**

- 5. New oil pumps installed for OE installations are reimbursed at cost. Refer to Table 5.

**Credit Procedure: Reimbursement of Oil Pump Replacement**

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

Table 3. Kits Registered to SWR

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

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 / PAM Sold   |
| Problem Part No. <sup>(1)</sup> | 62400121, 62400124, 62400143, 62400146, 62400178, 62400182 |
| Quantity                        | Leave blank  |
| Customer Concern Code           | 9901   |
| Condition Code                  | 9110   |
| Replacement part number         | 62400178, 62400182   |
| Quantity                        | 1  |

<sup>(1)</sup> Built or packaged prior to 10/10/17

Table 5. OEM Credit Table

| ITEM | DATA |
|------|------|
|      |      |

| ITEM                               | DATA   |
|------------------------------------|--|
| Claim Type                         | MC / Standard Claim  |
| Problem Part Number <sup>(1)</sup> | OEM oil pumps (62400121, 62400124, 62400143, 62400146, 62400178, 62400182) |
| Quantity                           | Leave Blank  |
| Labor Code                         | 3341   |
| Time                               | 5.5 h  |
| Customer Concern Code              | 3102   |
| Condition Code                     | 9106   |
| Replacement part number            | 62400178, 62400182   |

*(1) Built or packaged prior to 10/10/17*

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

### 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.