

# SERVICE BULLETIN



M-1409A

December 1, 2015

## TOURING AND TRIKE AIR SUSPENSION DIAGNOSIS

### Reason for Revision

This revision provides diagnostic information to determine the source of an air leak.

### Purpose

This bulletin is to inform dealers of the steps to perform after performing the Touring and Trike Rear Shock absorber call-back return.

The shipping plug must be transferred from the new shock to the return shock. When oil is allowed to leak during the return process, the call-back issue cannot be properly diagnosed. Installing the plug in the return shock contains the oil in the shock during the shipment to the supplier.

### Motorcycles Affected

This information applies to 2014-2016 Touring and Trike models with rear air shock absorbers.

### Markets Affected

U.S. markets are affected.

### Required Dealer Action

#### Diagnose Air Leak

1. See Figure 2. Make copy of attached Leak Record Sheet.
2. Mix solution of dish soap and water.
3. Inflate air suspension to operating pressure with AIR SUSPENSION PUMP AND GAUGE (Part No. HD-34633).

#### NOTE

*Allow several minutes for bubbles to form. Slow leaks may appear as a foamy area.*

4. Inspect for leaks.
  - a. Apply soapy solution with a paintbrush at all connections and fittings.
  - b. Look for bubbles.
  - c. Remove rubber boot from each shock body to expose shock shaft seal area.
  - d. Inspect for oil leak.
  - e. Install rubber boots.
  - f. Circle leak locations on Leak Record Sheet.

#### NOTES

*When trimming hose:*

- *Use a very sharp cutter.*
  - *Keep the hose from becoming oval shaped.*
  - *Remove any burrs.*
5. See Figure 2. If source of leak is other than the shock, repair as necessary and retest.
    - a. Leak at fitting threads (1, 8): Remove, reseal, install.
    - b. Leak at any union (2, 3, 5, 7, 9): Cut 1/8 in (3 mm) from end of line using a razor blade.
    - c. Leak at union (2, 3, 5, 7, 9) after trimming: Replace fitting.
    - d. **Gently tug on the hose or elbow to verify that it is secure in the union.**
  6. If leak is from a damaged shock, replace shock and prepare damaged shock for return.

#### 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									

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## Return Shock Absorber

1. See Figure 1. Remove plug (1) from the fitting (2) on the **new** shock absorber.
2. Insert plug into fitting in the damaged shock until it bottoms.
3. **Gently tug on the plug to verify that it is secure in the union.**

### NOTES

- *Be sure that the part will not leak oil inside the package.*
  - *See Figure 2. Failure to include the Leak Record Sheet with the part could cause the claim to be rejected.*
4. Write warranty claim number on the Leak Record Sheet.
  5. Return part and Leak Record Sheet to Harley-Davidson using your normal warranty return process.

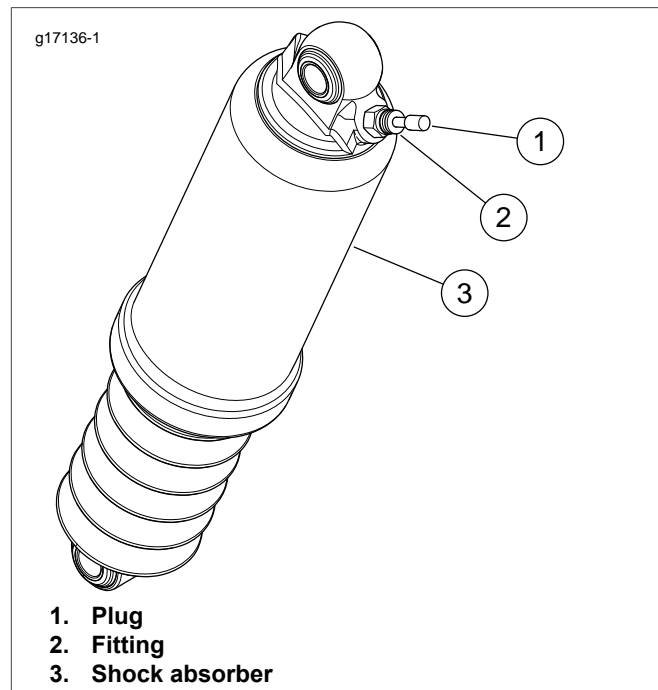
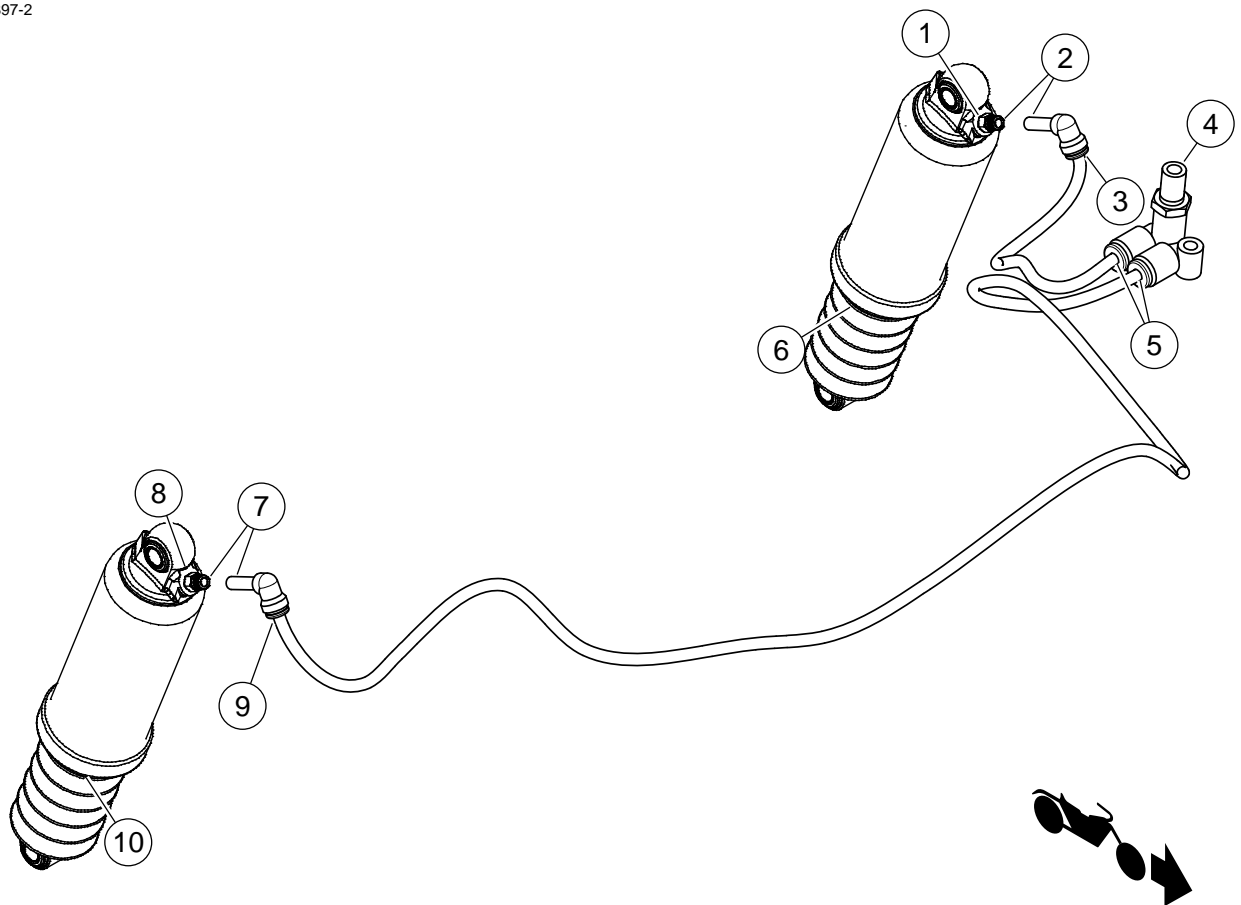


Figure 1. Shock Absorber Plug

# LEAK RECORD SHEET

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- |                                       |                                        |
|---------------------------------------|----------------------------------------|
| 1. Fitting threads, left              | 6. Shock shaft seal, left              |
| 2. Elbow to fitting union, left shock | 7. Elbow to fitting union, right shock |
| 3. Hose to elbow union, left          | 8. Fitting threads, right              |
| 4. Schraeder valve                    | 9. Hose to elbow union, right          |
| 5. Hose to filler fitting union (2)   | 10. Shock shaft seal, right            |

Figure 2. Leak Locations

Warranty claim number