Subject: KNOCKING / SQUEAKING NOISE FROM FRONT STRUT BEARING

BULLETIN NOTE

- This bulletin supersedes the previous bulletin 02-005/13, issued on 08/24/13 and 11/11/13. The APPLICABLE MODEL(S)/VINS, DESCRIPTION, REPAIR PROCEDURE, PART(S) and WARRANTY INFORMATION have been revised.
- Changes are noted below in Red beside the change bar.

APPLICABLE MODEL(S)/VINS

2013-2016 CX-5 vehicles with VINs lower than JM3KE******615844 (produced before Jan. 1, 2015)
2014-2016 Mazda6 vehicles with VINs lower than JM1GJ******404929 (produced before Jan. 6, 2015)

DESCRIPTION

Some vehicles may exhibit a knocking / squeaking noise from the front strut bearing (A) when driving on rough roads and/or when turning the steering wheel while the vehicle is stopped.

The noise may be due to upper front strut bearing damage or it may be due to stick/slip between the front strut bearing and coil spring.

To eliminate the noise, the following mass-production changes have been made:

1. The material and production method of the front strut bearing has been changed.
2. A protector has been installed onto the coil spring.

NOTE: The piston rod nut (B) requires replacement when the front strut bearing is replaced.

Customers having this concern should have their vehicle repaired using the following repair procedure.
REPAIR PROCEDURE

1. Verify the customer concern of knocking or squeaking noise coming from the front suspension.

2. Is the noise coming from the upper part of front shock absorber when turning the steering wheel?
   • Yes - Proceed to Step 3.
   • No - This bulletin does not apply.

3. Is the strut bearing broken as shown below?
   • Yes - Proceed to Step 4.
   • No - Proceed to Step 5.

4. Replace the front strut bearing with a new one according to MS3 online instructions or the Workshop Manual (section 02-13 FRONT SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY).

5. Use Special Service Tool (SST) ChassisEAR / EngineEAR II Combo JSP06608 or Wireless ChassisEAR JSP97202 to confirm noise is coming from the upper part of front shock absorber:

   NOTE: SST JSP06608 and JSP97202 are available for purchase on Mazda E-Store.
6. Using ChassisEAR SST, is the noise coming from the upper part of the front shock absorber?
   • Yes - Use the table below to determine if the subject vehicle is a Type A or Type B vehicle, then follow the appropriate repair.
   • No - This bulletin does not apply.

<table>
<thead>
<tr>
<th>Model</th>
<th>VIN Range</th>
<th>Mass-Production Date Range</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX-5</td>
<td>JM3KE******100001 - 343674</td>
<td>~ April 16, 2013</td>
<td>A</td>
</tr>
<tr>
<td>CX-5</td>
<td>JM3KE******343675 - 615844</td>
<td>April 16, 2013 ~ Jan. 1, 2015</td>
<td>B</td>
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<tr>
<td>Mazda6</td>
<td>JM1GJ******100001 - 121430</td>
<td>~ April 16, 2013</td>
<td>A</td>
</tr>
<tr>
<td>Mazda6</td>
<td>JM1GJ******121431 - 404929</td>
<td>April 16, 2013 ~ Jan. 6, 2015</td>
<td>B</td>
</tr>
</tbody>
</table>

**NOTE:**
- Before removing the mounting rubber (A), mark its original position so it can be re-installed later to the same position.
- It is not necessary to adjust the front wheel alignment because the front shock absorber and mounting rubber are not being replaced.
Repair For Type A Vehicles - (Modified strut bearing* and coil spring protector installation):
1. Remove the front strut bearing and coil spring according to the MS3 online instructions or the Workshop Manual (section 02-13 FRONT SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY).
   NOTE:  *If the front strut bearing is found to be damaged, replace it with a modified part.
2. Install a protector on the front coil spring according to “Coil Spring Protector (A) Installation” below.
3. Reinstall the front strut bearing and coil spring according to MS3 online instructions or the Workshop Manual (section 02-13 FRONT SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY).
4. Repeat Steps 1 - 3 on the opposite side front suspension.
5. Verify repair.

Repair For Type B Vehicles - (Coil spring protector installation only):
1. Remove the front strut bearing and coil spring according to MS3 online instructions or the Workshop Manual (section 02-13 FRONT SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY).
2. Install a protector on the front coil spring according to “Coil Spring Protector (A) Installation” below.
3. Reinstall the front strut bearing and coil spring according to MS3 online instructions or the Workshop Manual (section 02-13 FRONT SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY).
4. Repeat Steps 1 - 3 on the opposite side front suspension.
5. Verify repair.

Coil Spring Protector (A) Installation:

a. Starting from the top of the coil spring, degrease the spring 1.5 coils downward.
b. Cut a thin strip of paper to 138 mm in length (or use a cloth type measuring tape).
c. Place the strip of paper (or cloth measuring tape) along the inner side of the coil spring starting at point (A).

d. Mark the spot on the spring where (B) is. (B) is the starting point for the protector installation.

![Diagram of a coil spring with marks A and B]

**NOTE:** Install the protector so the gap (C) is evenly aligned around the outer edge of the coil spring.

![Diagram showing the protector aligned to gap C]

f. The inner side of the protector contains adhesive glue. After installing the protector onto the spring, press the inner side to firmly adhere it to the spring.

![Diagram illustrating the application of adhesive glue on the protector]
PART(S) INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD35-34-38XA</td>
<td>Front Strut Bearing</td>
<td>1 or 2</td>
<td></td>
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<tr>
<td>9YB0-41-237</td>
<td>Piston Rod Nut</td>
<td>2</td>
<td>Replace nut when front strut bearing is replaced.</td>
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<tr>
<td>KDY5-34-081</td>
<td>Protector</td>
<td>2</td>
<td>Coil spring protector</td>
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</tbody>
</table>

WARRANTY INFORMATION

NOTE:
- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda’s New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

<table>
<thead>
<tr>
<th>Warranty Type</th>
<th>A</th>
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<tbody>
<tr>
<td>Symptom Code</td>
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<tr>
<td>Damage Code</td>
<td>9A</td>
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<td>Part Number Main Cause</td>
<td>KD35-34-38XA</td>
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<tr>
<td>Quantity</td>
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<tr>
<td>Operation Number / Labor Hours</td>
<td>XXXKBXXRX / 0.9 Hrs.</td>
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