SAFETY RECALL 1217F

MECHANICAL REAR PARKING BRAKE STICKING CONCERN

A. VEHICLE INSPECTION PROCEDURE

1. Verify that the vehicle is within one of the following year ranges:

<table>
<thead>
<tr>
<th>Model</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mazda3</td>
<td>2014-2016</td>
</tr>
<tr>
<td>Mazda6</td>
<td>2014-2015</td>
</tr>
</tbody>
</table>

- If the vehicle is within one of the above year ranges, proceed to step 2.
- If the vehicle is not within one of the above year ranges, return the vehicle to the customer or inventory.

2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect vehicle for a Campaign Label 1217F attached to the vehicle’s hood or bulkhead. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

**NOTE:** Verify Recall number as the vehicle may have multiple Recalls.

**CAMPAIGN LABEL**

<table>
<thead>
<tr>
<th>Campaign No:</th>
<th>Dealer Code:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>P/N 9999-95-06A-06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**eMDCS System - Warranty Vehicle Inquiry Results**

<table>
<thead>
<tr>
<th>If eMDCS displays:</th>
<th>Campaign Label is:</th>
<th>Action to perform:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1217F OPEN</td>
<td>Present</td>
<td>Contact the Warranty Hotline at (877) 727-6626 to update vehicle history.</td>
</tr>
<tr>
<td></td>
<td>Not Present</td>
<td>Proceed to “B. REAR BRAKE CALIPER BOOT INSPECTION”.</td>
</tr>
<tr>
<td>1217F CLOSED</td>
<td>Present</td>
<td>Return vehicle to inventory or customer.</td>
</tr>
<tr>
<td></td>
<td>Not Present</td>
<td>Proceed to “I. CAMPAIGN LABEL INSTALLATION”.</td>
</tr>
<tr>
<td>1217F is not displayed</td>
<td>Does not apply</td>
<td>Recall does not apply to this vehicle. Return vehicle to inventory or customer.</td>
</tr>
</tbody>
</table>
PART OVERVIEW

* Boot Kit Components
Mazda6: G4YG-26-45Z (LH & RH set)
LH & RH set is available only for Mazda6

<table>
<thead>
<tr>
<th>No.</th>
<th>Part Name</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating Lever (RH &amp; LH)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Yellow mark (A) on front side</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R stamped on RH backside</td>
<td></td>
</tr>
<tr>
<td></td>
<td>L stamped on LH backside</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>L-shaped washer</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Boot</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Nut</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Grease (Orange)</td>
<td>1</td>
</tr>
</tbody>
</table>

How the boot kit is packed.

[Diagram of boot kit components and packaging]
Mazda6: G4YF-26-45Z (LH set)  
Mazda3: BJY9-26-45Z (LH set)

No. | Part Name                                                                 | Qty |
--- |----------------------------------------------------------------------------|-----|
1   | Operating Lever (LH) With or without yellow mark (A) on front side L, 3 or LH stamped on back-side | 1   |
2   | L-shaped washer                                                           | 1   |
3   | Boot                                                                      | 1   |
4   | Nut                                                                       | 1   |
5   | Grease (Orange)                                                           | 1   |

For reference table for Operating Lever (1):

<table>
<thead>
<tr>
<th>Model</th>
<th>Boot kit Part Number</th>
<th>Stamp on backside LH</th>
<th>Stamp on backside RH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mazda6</td>
<td>G4YF-26-45Z (LH set)</td>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>G4YG-26-45Z (LH &amp; RH set)</td>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>G4YE-26-45Z (RH set)</td>
<td>3</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LH</td>
<td></td>
</tr>
<tr>
<td>Mazda3</td>
<td>BJY9-2645Z (LH set)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td>BJY8-2645Z (RH set)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Except for operating lever, component parts are the same between Mazda6 and Mazda3.

Reference table for Operating Lever (1):
SPECIAL SERVICE TOOL (SST) OVERVIEW

<table>
<thead>
<tr>
<th>Name</th>
<th>Image</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washer guide jig</td>
<td><img src="image1.png" alt="Washer guide jig" /></td>
<td>---</td>
</tr>
<tr>
<td>Washer press jig</td>
<td><img src="image2.png" alt="Washer press jig" /></td>
<td>---</td>
</tr>
<tr>
<td>Toothbrush</td>
<td><img src="image3.png" alt="Toothbrush" /></td>
<td>Dealer supplied (To clean ramp shaft)</td>
</tr>
</tbody>
</table>
REPAIR OVERVIEW

Note: Perform inspection and repair on both sides.

B. REAR BRAKE CALIPER BOOT INSPECTION
Judge if modified rear brake caliper has been already installed to the vehicle by checking the boot shape. (The modified one has been available since around June 2016 (for Mazda6) / Nov. 2016 (for Mazda3) as service parts.)

C. OPERATING LEVER REMOVAL
Remove the rear parking brake cable bracket and the operating lever from the rear brake caliper.

D. RAMP SHAFT INSPECTION
Check if there is rust at the ramp shaft where the operating lever is installed.

E. L-SHAPED WASHER INSTALLATION
Install the L-shaped washer to the ramp shaft by using SST (Washer guide and washer press jig)

F. L-SHAPED WASHER INSTALLATION INSPECTION
Check if the L-shaped washer is correctly installed by using SST (Washer press jig) groove.

G. OPERATING LEVER INSTALLATION
Install the boot kit

H. REINSTALLATION OF PARTS
Reinstall the removed parts

I. CAMPAIGN LABEL INSTALLATION
Install campaign label

End

Part name

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating lever</td>
</tr>
<tr>
<td>2</td>
<td>Fixing nut of operating lever</td>
</tr>
<tr>
<td>3</td>
<td>Ramp shaft</td>
</tr>
<tr>
<td>4</td>
<td>Boot</td>
</tr>
<tr>
<td>5a</td>
<td>Bracket</td>
</tr>
<tr>
<td>5b</td>
<td>Stopper at bracket</td>
</tr>
<tr>
<td>6</td>
<td>Spring</td>
</tr>
</tbody>
</table>

Modified caliper is installed
Modified caliper is not installed
Rusted
No rust
Correctly installed
Not correctly installed
Replace the rear brake caliper(s)

Note: Perform inspection and repair on both sides.
REPAIR PROCEDURE
B. REAR BRAKE CALIPER BOOT INSPECTION

NOTE:
• Mazda6 illustrations are shown. Mazda3 is similar.
• Since June 2016 (for Mazda6) / Nov. 2016 (for Mazda3), a modified rear brake caliper has been available as service parts. If it is already installed to the vehicle, it is not possible to install the L-shaped washer due to different shape of the ramp shaft.

Check the shape of rear brake caliper boot to judge if modified rear brake caliper has been installed or not.

1. Use a vehicle lift to raise the vehicle.
2. Remove the rear wheels and tires.
3. From the bottom side of the vehicle, check the shape of the boot located between the rear brake caliper and the operating lever.
INSTRUCTION RESULTS:

Result of rear brake caliper boot inspection

<table>
<thead>
<tr>
<th>Boot shape</th>
<th>Next step</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified caliper</td>
<td>No need to install boot kit. Go to I. CAMPAIGN LABEL INSTALLATION</td>
</tr>
<tr>
<td>Not modified caliper</td>
<td>Go to C. OPERATING LEVER REMOVAL</td>
</tr>
</tbody>
</table>

C. OPERATING LEVER REMOVAL

Remove the operating lever

1. Disconnect the upper panel from the rear console.
   a. Open the console lid.
   b. Remove the button (A), then remove the fastener (B).
   c. Pull the upper panel (Z) in the order of arrows (1), (2), and (3) as shown and remove it while detaching clips A, hooks B, and clips C.

2. Loosen the adjusting nut (C) so that the rear parking brake cable could be disconnected from the operating lever.
3. Release the parking brake, then raise the vehicle.

**NOTE:** The right side procedure is shown. Repair the left side as well.

4. Remove the rear wheel and tire.
5. Disconnect the rear parking brake cable (D) from the operating lever (F).
   a. Move the operating lever (F) upward to remove the cable end (G).

**NOTE:** If there is 5mm or more gap between the operating lever and the stopper at bracket, the caliper is seized. Replace the brake caliper.

6. Remove the spring (I) between the operating lever (F) and the bracket (E).

7. Loosen the nut (shown with red circle in below) from the caliper body.

**Caution:**  
- Do not remove the loosened nut at this moment.  
- Fix the operating lever and the stopper by adjustable wrench / plier, so that the operating lever would not rotate with the nut when loosening (tightening) (See upper right picture). Otherwise, the ramp shaft may come out.
8. Prepare 2 flat head screw drivers and protect them with tape. Insert them between the operating lever and the bracket, move up and down one after the other so that the engagement between the operating lever and the ramp shaft separates.
9. Remove the nut.

**Caution:** Do not throw away this nut at this moment as it will be used when pressing the L-shaped washer and the new operating lever.

10. Remove the bracket from the caliper body.
11. Remove the boot (J).
12. Clean the dirt of ramp shaft (K) by spraying brake parts cleaner to waste cloth and wiping it.

**Caution:** Do not spray brake parts cleaner to the ramp shaft (K) directly.

13. Go to D. RAMP SHAFT INSPECTION.

**D. RAMP SHAFT INSPECTION**

Check rust condition of ramp shaft

1. Check if there is rust at the ramp shaft root end by using groove of washer press jig (L).
   a. Set the washer press jig (L) with facing its groove (M) to the brake caliper side.
   b. Check if there is any of rust at the rust check “1.6mm-area” (0.06 in) (N) by **rotating the jig (L) to circumferential direction for 360 degrees (O).**
OK [No rust at 1.6 mm area (N)]

Note:
- Rust at location (P) is OK.
- Rotate the jig and watch the rusted area (Q).

NG [There is rust at 1.6 mm area (N)]
INSPECTION RESULTS:

Result of ramp shaft rust inspection

<table>
<thead>
<tr>
<th>Rust / No rust</th>
<th>Next Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>No rust</td>
<td>Go to E. L-SHAPED WASHER INSTALLATION</td>
</tr>
</tbody>
</table>

E. L-SHAPED WASHER INSTALLATION

Install the L-shaped washer

Set the order of washer press/guide jig and L-shaped washer

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Washer press jig (SST)</td>
</tr>
<tr>
<td>2</td>
<td>Washer guide jig (SST)</td>
</tr>
<tr>
<td>3</td>
<td>L-shaped washer</td>
</tr>
<tr>
<td>4</td>
<td>Ramp shaft</td>
</tr>
</tbody>
</table>

Part name

There is a gap

No gap

Temporary set

After install
1. Temporarily set the L-shaped washer to the ramp shaft.

   ![Image of L-shaped washer set to ramp shaft]

   **Caution:** Set the flange side of L-shaped washer to the caliper side.

<table>
<thead>
<tr>
<th>Correct</th>
<th>Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Correct image]</td>
<td>![Incorrect image]</td>
</tr>
</tbody>
</table>

2. Apply the grease (orange) to all over the washer guide jig and the washer press jig where contacts to the nut, then set them temporarily to the ramp shaft.

3. Temporarily set the nut. (Use the nut which was originally installed to the vehicle.)

   ![Image of grease applied to washer guide jig and washer press jig]

4. Use a flathead stubby screw driver to hold the groove of the ramp shaft head. Then, press the L-shaped washer into the ramp shaft by tightening the nut (Hold the ramp shaft with a flathead stubby screwdriver while tightening the nut.)

   ![Image of flathead stubby screw driver holding groove]

   **Note:**
   - Use a flathead stubby screw driver whose head width is smaller than the inner diameter of the nut, so that they would not make contact.
   - Do not fully tighten the nut during this step.
5. Tighten the nut until the washer press jig contacts to the caliper.  
   (Tightening torque: About 10 Nm, 88.5 in-lbf)

6. Loosen the nut. Then, confirm that there is no gap between the washer press jig and the caliper.
   **Note:** If there is a gap, retighten the nut.

7. Remove the nut, washer press jig, and washer guide jig. Then, wipe the grease which remains on both jigs.

8. Wait for 5 minutes until the adhesive dries. (After the L-shaped washer is installed, the adhesive (yellow color) appears which is pasted at inner side the L-shaped washer.)
   **Note:** While you wait for 5 minutes, start inspection/repair for the opposite side. (Check rust condition of ramp shaft and install the L-shaped washer.)

9. Wipe and remove the adhesive by using the toothbrush. If there is any foreign material remains on the ramp shaft, remove it with a toothbrush.

10. Go to F, L-SHAPED WASHER INSTALLATION INSPECTION
F. L-SHAPED WASHER INSTALLATION INSPECTION

Check the condition of the L-shaped washer

1. Check the install condition of L-shaped washer by using the washer press jig.
   a. Face the groove side of the washer press jig to the caliper (R).
   b. Set the washer press jig from the side direction (S) so that the groove of the jig would fit to the flange of L-shaped washer.

   ![Image](image1)

   c. Confirm that:
      - The groove of the washer press jig fits to the flange of the L-shaped washer (T).
      - There is no gap between the washer press jig and the caliper (U).

   ![Image](image2)

<table>
<thead>
<tr>
<th>OK</th>
<th>Not OK</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
</tr>
<tr>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
</tr>
</tbody>
</table>

   There is a gap between the washer press jig and the caliper.
   The groove of the jig and the flange of L-shaped washer contacts.
### INSPECTION RESULTS:

Result of L-shaped washer installation condition

<table>
<thead>
<tr>
<th>Install condition</th>
<th>Next Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>Go to G. OPERATING LEVER INSTALLATION</td>
</tr>
</tbody>
</table>

### G. OPERATING LEVER INSTALLATION

Install the operating lever

1. Apply the grease (orange) to the following areas.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Caliper body (where the boot is hooked)</td>
</tr>
<tr>
<td>2</td>
<td>L-shaped washer (outer part)</td>
</tr>
<tr>
<td>3</td>
<td>Inside the new boot</td>
</tr>
</tbody>
</table>
2. Install the new boot to the caliper body.

**Note**
- Do not use pliers or do not pinch it by your nail. Otherwise, the boot may be damaged.
- After installing the boot, rotate it 360 degrees and confirm that it is does not come off.

3. Apply the grease (orange) to the boot and the thread of the ramp shaft as shown.

4. Tighten the nut which is originally installed to the vehicle by hand, loose the nut, and remove it. This will apply grease to the thread of the ramp shaft (V).
5. Install the bracket (E) to the caliper body.
   Tightening torque: 7.9 - 11.7 Nm (70 - 104 in-lbf)

6. Apply the grease (orange) (W) to the backside of the nut which is originally installed to the vehicle.

7. Set the new operating lever (F) to the ramp shaft. Then, tighten the nut by hand (X) while keeping the operating lever contacted to the bracket stopper (Y).
8. Fix the operating lever and the bracket stopper with an adjustable wrench / plier, so that they do not move.

9. Tighten the nut to the specified torque.

**Note:**
- Since the operating lever is pressed with grooves by the ramp shaft, it will require a large force to tighten.
- The operating lever has a stamp on the backside which requires the proper tightening torque listed in the table below.

**Caution:** To prevent the ramp shaft breakage,
- Tighten the nut gradually to prevent over torquing.
- Stop tightening as soon as it reaches the specified torque.
- Do not tighten with power tools.

---

### Tightening torque table

<table>
<thead>
<tr>
<th>Model</th>
<th>Boot kit part number</th>
<th>CHECK Stamp on backside LH</th>
<th>CHECK Stamp on backside RH</th>
<th>Tightening torque</th>
<th>Yellow Mark on the operating lever</th>
<th>Yellow mark location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mazda6</td>
<td>G4YG-2645Z (LH &amp; RH set)</td>
<td>L</td>
<td>R</td>
<td>30 ft lb (40 Nm)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G4YF-2645Z (LH set)</td>
<td>L</td>
<td></td>
<td>30 ft lb (40 Nm)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>22 ft lb (30 Nm)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G4YE-2645Z (RH set)</td>
<td>R</td>
<td></td>
<td>30 ft lb (40 Nm)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td>22 ft lb (30 Nm)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Mazda3</td>
<td>BJY9-2645Z (LH set)</td>
<td>TBD</td>
<td></td>
<td>22 ft lb (30 Nm)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BJY8-2645Z (RH set)</td>
<td>TBD</td>
<td></td>
<td>22 ft lb (30 Nm)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
Since the inner diameter of some operating levers are different, the required tightening torque is different. All levers with a Yellow Mark have a higher torque specification of 40 Nm (30 ft lb).

10. Loosen and remove the nut. Then, wipe the grease which remains at the ramp shaft. (Spray brake parts cleaner to a waste cloth, then wipe it using waste cloth.)
11. Install the new nut and tighten it.

   Tightening torque: 17.7 - 26.5 Nm (13.1 - 20 ft lbf)

12. Install the spring between the operating lever and the bracket.

   Note: Install the spring in the direction shown.

13. Go to H. REINSTALLATION OF PARTS.

**H. REINSTALLATION OF PARTS**

Reinstall parts

1. Parking brake cable installation.
   a. Install the rear parking brake cable end (G) to the operating lever (F).
   b. Verify that the outer end tabs (H) of the rear parking brake cable (D) is securely engaged with the bracket (E).

2. Reinstall the rear tire & wheel to the vehicle.
3. Lower the vehicle from the vehicle lift.
4. Tighten the adjusting nut (C).
5. Inspect the parking brake lever stroke.
   a. Pump the brake pedal a few times.
   b. Pull the parking brake lever two to three times.
   c. Inspect the parking brake stroke by slowly pulling at point A 50 mm {2.0 in} from the end of the parking brake lever with a force of 98 N {10 kgf, 22 lbf} and counting the number of notches (clicking sound)

   Parking brake lever stroke when pulled at 98 N {10 kgf, 22 lbf} : 2—3 notches

6. After adjustment, pull the parking brake lever one notch and verify that the parking brake warning light illuminates.
7. Verify that the rear brakes do not drag.
8. Upper panel installation.

   **Note:** When clips C are removed at the front of the upper panel, clips for the rear of the shift panel may be disengaged.

   a. Verify that the clips for the rear of the shift panel are installed to the front console.

   **Caution**
   If the upper panel is pressed in without hooks B inserted into the rear console groove, hooks B may be bent outward or inward and damaged. Verify that hooks B are inserted into the rear console groove, then press the upper panel in.

   b. Press the upper panel (Z) in in the order of arrows (1), (2), and (3) as shown in the figure, and install hooks B, clips C, and clips A.
c. Fasten the fastener (B) and button (A).
d. Close the console lid.

9. Go to I. CAMPAIGN LABEL INSTALLATION.

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I. CAMPAIGN LABEL INSTALLATION

1. Fill out a blue “Campaign Label” (9999-95-065A-06) with Campaign No: “1217F”, your dealer code, today’s date.

2. Affix the Campaign Label to the hood or bulkhead as shown:

3. Return the vehicle to the customer.