Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



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Subject:

SHOCK ABSORBER REPLACEMENT GUIDELINES

Last Issued: 07/11/2011

BULLETIN NOTE

- This bulletin supersedes the previous bulletins 02-005/09 issued 06/05/09, 02-004/08 issued 05/18/08 and 02-001/04 issued 01/15/04. The APPLICABLE MODEL(S)/VINS has been revised.
- Changes are noted below in Red beside the change bar.

APPLICABLE MODEL(S)/VINS

1999-2009 B-Series

1999-2003 Protege

1999-2005 Miata

1999-2002 626

1999-2002 Millenia

2000-2006 MPV

2001-2011 Tribute

2003-2012 Mazda6

2004-2012 Mazda3

2004-2011 RX-8

2006-2012 Mazda5

2006-2012 MX-5

2007-2012 CX-7

2007-2012 CX-9

2011-2012 Mazda2

DESCRIPTION

Some customers may complain of signs of oil on the struts or shock absorbers. In most cases the oil that is present is normal, and a result of the oil that remains on the shaft during the normal sweeping process of the shaft seal.

Follow the inspection guidelines to determine if the condition is a result of the normal sweeping process or a failure of the shaft seal.

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SERVICE INFORMATION

- 1. Inspect the shock absorber by using the following guidelines to determine if shock absorber replacement is necessary or not.
 - If it is oil seepage, the shock absorber does NOT need to be replaced.
 - If it is oil leakage, the shock absorber needs to be replaced.

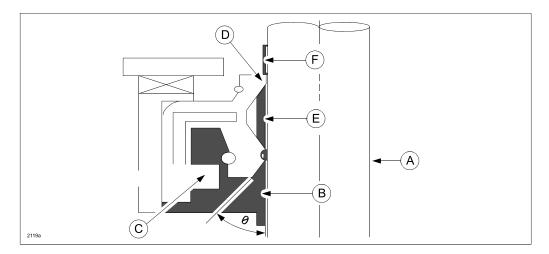
NOTE: Warranty claims submitted for oil seepage shock absorbers will be denied or subject to debit.

CAUSE OF OIL SEEPAGE

Oil seepage is caused by the following factors and is not a problem:

- A small amount of oil seeps outside through the dust lip during normal operation.
- The oil film thickness is uneven due to production variation of rod and seal.

When the rod (A) receives input from the road and extends upward, most of the oil (B) on the rod is scraped off by the main lip (C) and some remains inside the dust lip (D). When the rod extends further, then most of the remaining oil (E) on the rod is scraped off by the dust lip, and a small amount of oil seeps out (F).



CAUSE OF OIL LEAKAGE

Oil leakage is caused by the following factors and is a problem:

- The rod is damaged (dent, etching, rust, or foreign substance).
- The lips are damaged.

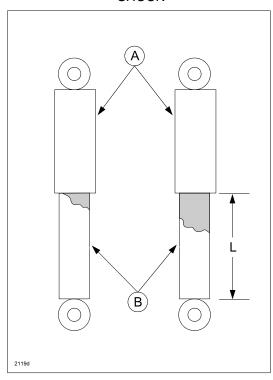
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SYMPTOM **DESCRIPTION / REPLACEMENT CRITERIA STRUT** Oil seepage comes out below the bump cap (A) and may run down the sides, but does not run past the spring seat. The surface appears dirty due to oil and dust, but it is not wet with oil dripping / running down the sides. The damping function is still performing correctly. Dealer action: Clean and dry the unit as much as possible. NO REPLACEMENT NECESSARY. SHOCK ABSORBER WITH SPRING SEAT Oil seepage comes out below the bump cap (A) and may run down the sides, but does not run past the spring seat. The surface appears dirty due to oil and dust, but it is not wet with oil dripping / running down the sides. The damping function is still performing correctly. Dealer action: Clean and dry the unit as much as possible. NO REPLACEMENT NECESSARY. 2119c

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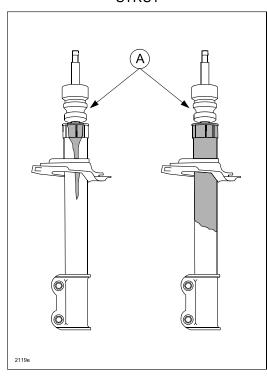
SHOCK



- Oil seepage comes out under the dust cover (A) and covers not more than 50% of the outer cylinder (B) length (L).
- The surface appears dirty due to oil and dust, but it is not wet with oil dripping / running down the sides.
- The damping function is still performing correctly.

Dealer action: Clean and dry the unit as much as possible. NO REPLACEMENT NECESSARY.

STRUT



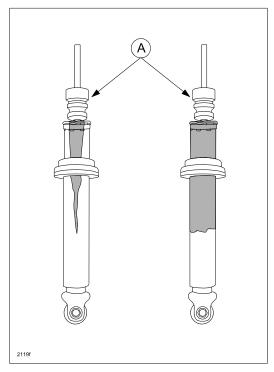
- Oil leakage comes out below the bump cap (A) and runs down the sides past the spring seat.
- The surface appears wet with oil dripping / running down the sides.

Dealer action: REPLACE THE UNIT.

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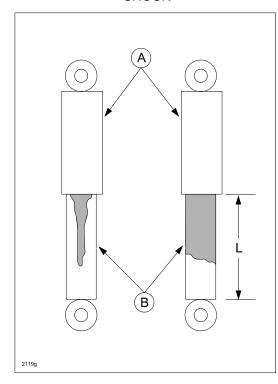
SHOCK ABSORBER WITH SPRING SEAT



- Oil leakage comes out below the bump cap (A) and runs down the sides past the spring seat.
- The surface appears wet with oil dripping / running down the sides.

Dealer action: REPLACE THE UNIT.

SHOCK



- Oil leakage comes out under the dust cover (A) and covers 50% or more of the outer cylinder (B) length (L).
- The surface appears wet with oil dripping / running down the sides.

Dealer action: REPLACE THE UNIT.