

Service Bulletin

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Subject: SHOCK ABSORBER REPLACEMENT GUIDELINES	Bulletin No: 02-001/13
	Last Issued: 01/14/2013

BULLETIN NOTE

- This bulletin supersedes the previous bulletins 02-004/11 issued on 07/11/11, 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	1999-2002 Millenia	2004-2013 Mazda3	2007-2012 Mazda CX-7
1999-2003 Protege	2000-2006 MPV	2006-2013 Mazda5	2007-2013 Mazda CX-9
1999-2005 Miata	2001-2011 Tribute	2003-2014 Mazda6	2006-2013 Mazda MX-5
1999-2002 626	2011-2013 Mazda2	2013-2014 Mazda CX-5	2004-2011 Mazda RX-8

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.

CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical—including photocopying and recording and the use of any kind of information storage and retrieval system—without permission in writing.

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.

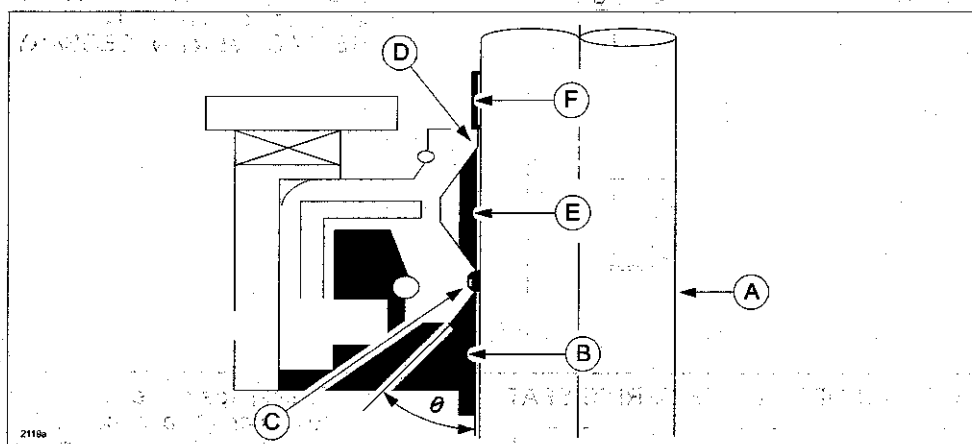
NOTE: Warranty claims submitted for oil seepage shock absorbers will be denied or subject to debit.

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.

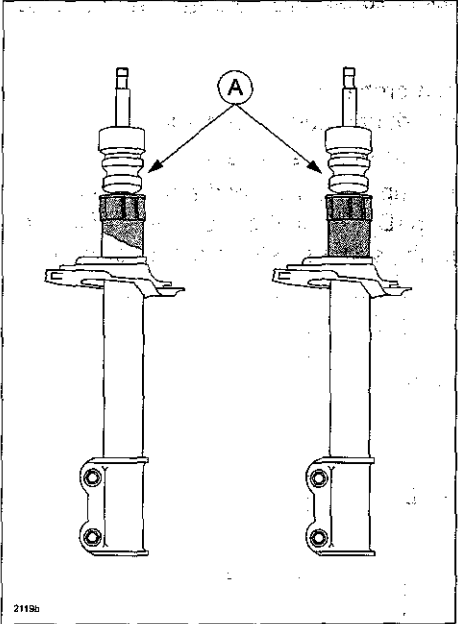
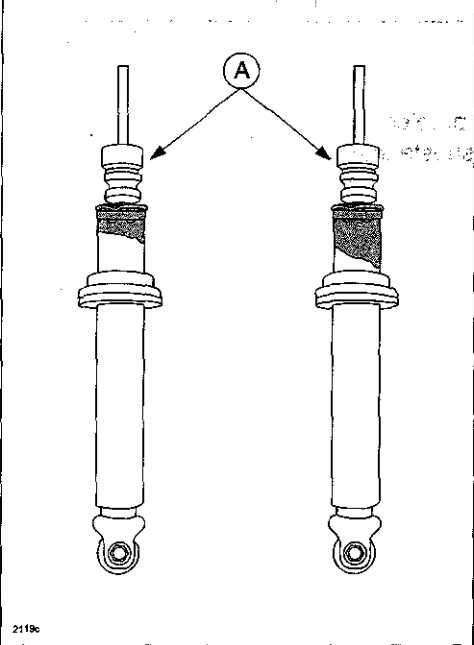
When the rod (A) receives input from the road and extends upward, most of the oil (B) on the rod is scraped off by the main lip (C) and some remains inside the dust lip (D). When the rod extends further, then most of the remaining oil (E) on the rod is scraped off by the dust lip, and a small amount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



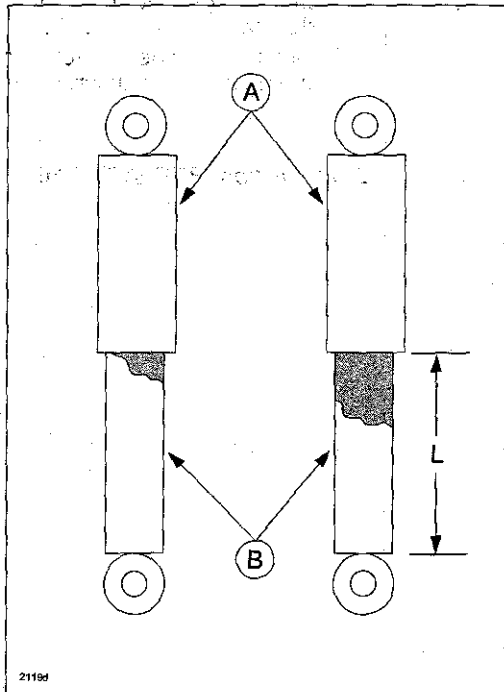
CAUSE OF OIL LEAKAGE

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.

SYMPTOM	DESCRIPTION / REPLACEMENT CRITERIA
STRUT  The diagram shows two struts side-by-side. A circle labeled 'A' with two arrows points to the top of each strut, specifically to the bump cap area. Shaded regions indicate oil seepage coming out from below the bump cap and running down the sides of the struts. The struts are shown in a vertical orientation with their mounting brackets at the bottom. 2119b	• 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  The diagram shows two shock absorbers side-by-side. A circle labeled 'A' with two arrows points to the top of each shock absorber, specifically to the bump cap area. Shaded regions indicate oil seepage coming out from below the bump cap and running down the sides of the shock absorbers. The shock absorbers are shown in a vertical orientation with their mounting brackets at the bottom. 2119c	• 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.

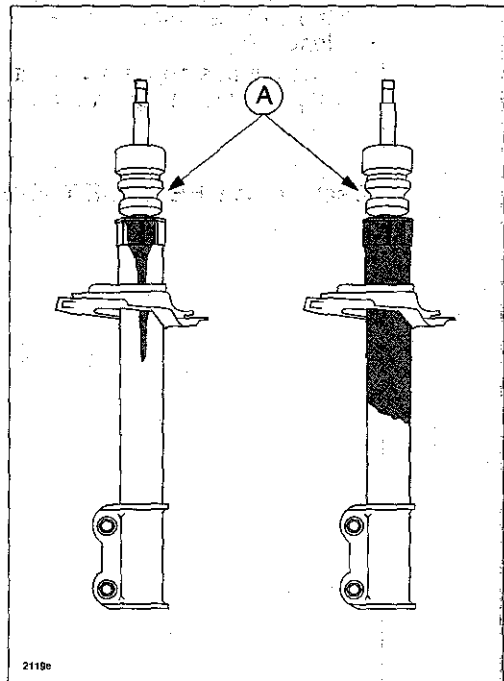
SHOCK



- 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.

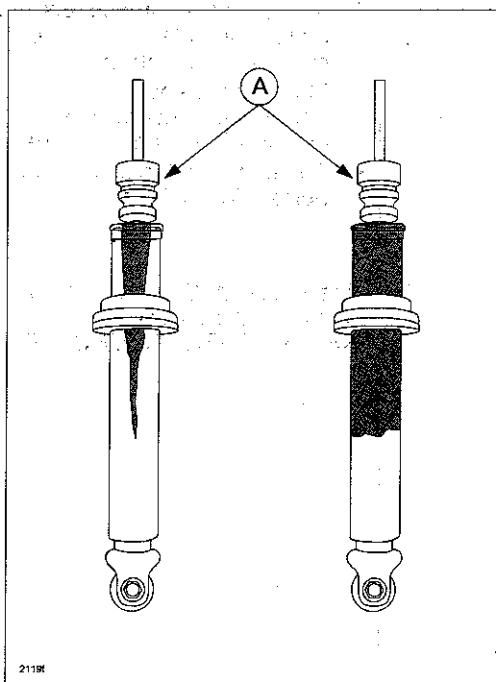
STRUT



- 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.

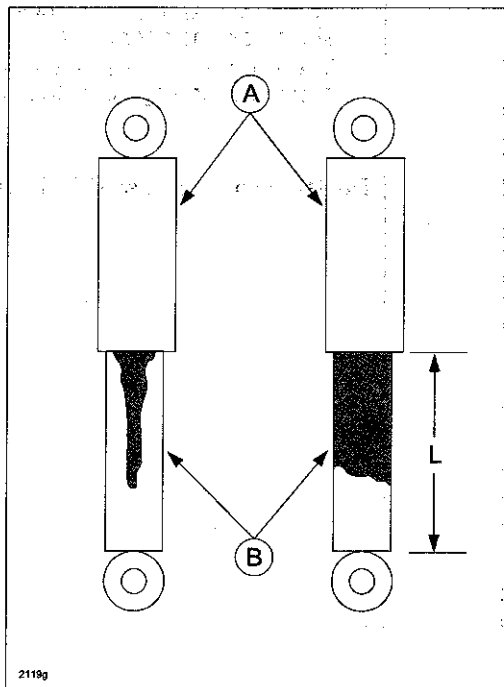
SHOCK ABSORBER WITH SPRING SEAT



- 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.