



<b>Subject:</b>  <b>SHOCK ABSORBER REPLACEMENT GUIDELINES</b>	<b>Bulletin No.:</b> 02-001/19
	<b>Last Issued:</b> 01/02/2019

## BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted below in Red.

Previously Issued TSBs:	Date(s) issued	Previously Issued TSBs:	Date(s) issued
02-006/18	03/26/18	02-005/09	06/05/09
02-004/16	02/15/16	02-004/08	05/18/08
02-001/13	01/14/13	02-001/04	01/15/04
02-004/11	07/11/11		

## APPLICABLE MODEL(S)/VINS

1999-2009 B-Series	1999-2002 626	2004-2019 Mazda3	2007-2012 CX-7	2016-2019 CX-3
1999-2003 Protege	2000-2006 MPV	2006-2015 Mazda5	2007-2019 CX-9	
1999-2005 Miata	2001-2011 Tribute	2003-2019 Mazda6	2006-2019 MX-5	
1999-2002 Millenia	2011-2014 Mazda2	2013-2019 CX-5	2004-2011 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.

## 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.**

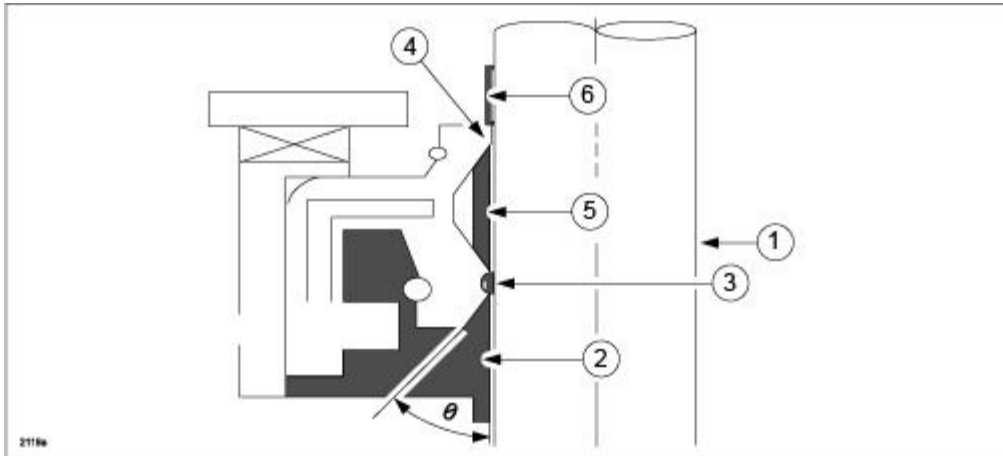
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## CAUSE OF OIL SEEPAGE

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.

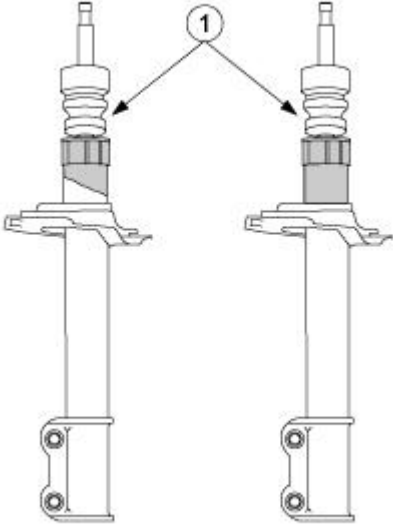
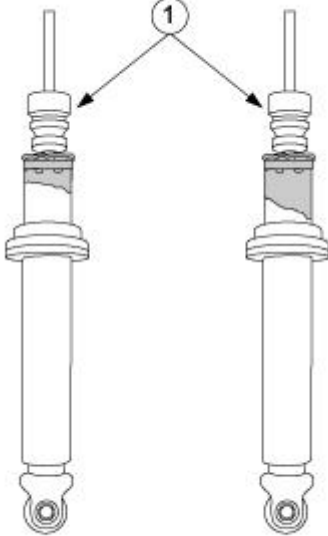
When the rod (1) receives input from the road and extends upward, most of the oil (2) on the rod is scraped off by the main lip (3) and some remains inside the dust lip (4). When the rod extends further, then most of the remaining oil (5) on the rod is scraped off by the dust lip, and a small amount of oil seeps out (6).



## 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.

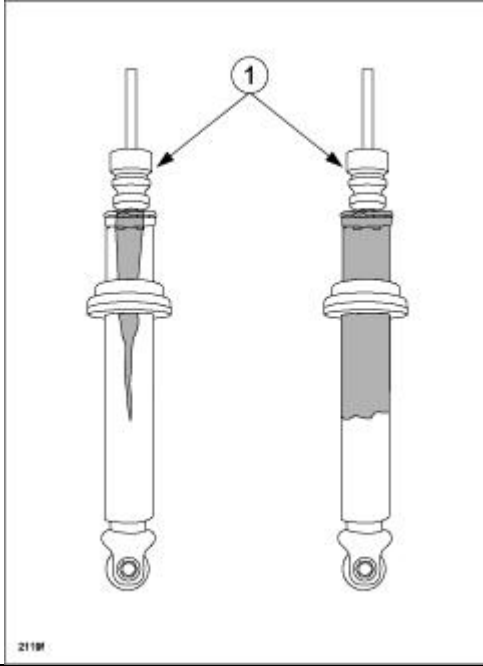
SYMPTOM	DESCRIPTION / REPLACEMENT CRITERIA
<p data-bbox="391 239 472 266">STRUT</p>  <p data-bbox="207 905 240 919">2119c</p>	<p data-bbox="678 239 1414 478">Oil seepage comes out below the bump cap (1) and may run down the sides, but does not run past the spring seat. The surface appears dirty due to 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.</p>
<p data-bbox="207 932 662 959">SHOCK ABSORBER WITH SPRING SEAT</p>  <p data-bbox="207 1598 240 1612">2119c</p>	<p data-bbox="678 932 1414 1171">Oil seepage comes out below the bump cap (1) 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.</p>

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<p style="text-align: center;"><b>SHOCK</b></p> <p style="text-align: left; font-size: small;">2119d</p>	<p>Oil seepage comes out under the dust cover (1) and covers not more than 50% of the outer cylinder (2) length (3).          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. <b>NO REPLACEMENT NECESSARY.</b></p>
<p style="text-align: center;"><b>STRUT</b></p> <p style="text-align: left; font-size: small;">2119e</p>	<p>Oil leakage comes out below the bump cap (1) and runs down the sides past the spring seat.          The surface appears wet with oil dripping / running down the sides.          Dealer action: <b>REPLACE THE UNIT.</b></p>

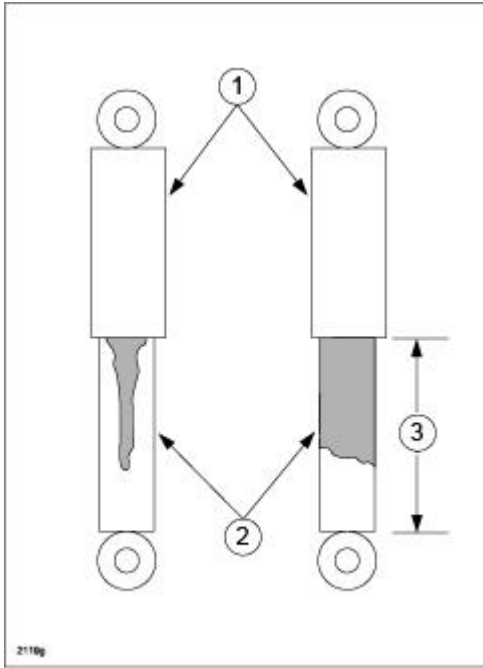
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SHOCK ABSORBER WITH SPRING SEAT



Oil leakage comes out below the bump cap (1) 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 (1) and covers 50% or more of the outer cylinder (2) length (3).  
 The surface appears wet with oil dripping / running down the sides.  
 Dealer action: REPLACE THE UNIT.

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