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<b>Subject:</b>  OXYGEN / AIR FUEL RATIO SENSOR REMOVAL CAUTION	<b>Bulletin No:</b> 01-032/10
	<b>Last Issued:</b> 05/27/2010

## BULLETIN NOTE

- This bulletin supersedes the previous bulletins 01-019/07 issued 05/10/07, 01-006/08 issued 02/11/08 and 10/10/08, 01-051/09 issued 11/19/09. The REPAIR PROCEDURE has been revised.
- Changes are noted below in Red beside the change bar.

## APPLICABLE MODEL(S)/VINS

1997-2003 Protege  
1997-2005 Miata  
1997-2002 626  
1997-2002 Millenia  
1997-2006 MPV  
2001-2006 Tribute  
2008-2010 Tribute  
2008-2010 Tribute Hybrid  
2003-2010 Mazda6  
2004-2010 Mazda3  
2004-2010 RX-8  
2006-2010 Mazda5  
2006-2010 MX-5  
2007-2010 CX-7  
2007-2010 CX-9

## DESCRIPTION

Use the following repair procedure to minimize the need to replace the catalyst converter/exhaust pipe when removing oxygen sensors and/or air fuel ratio sensors.

**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.

## REPAIR PROCEDURE

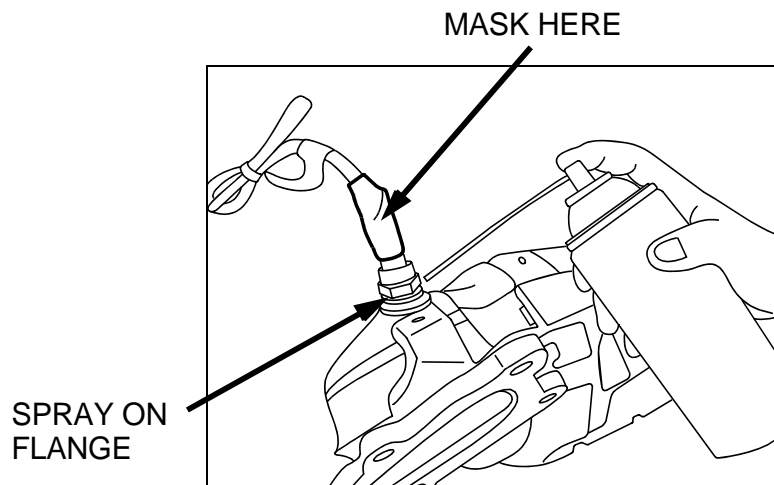
### Oxygen Sensor Removal Procedure

**WARNING:** To avoid personal injury, allow exhaust system to cool down before removing oxygen sensor.

**NOTE:** In some cases oxygen sensor and/or air fuel ratio sensor seizure will occur during this removal procedure. If seizure occurs, remove the converter or exhaust pipe from the vehicle and re-attempt removal with the assembly placed in a vise. This will maximize your positioning and ability to apply adequate torque to remove the sensor.

1. If reusing oxygen sensor, mask it with masking tape to prevent lubrication soaking.
2. Spray CRC Freeze-Off (or equivalent) around flange area of oxygen sensor.

**CAUTION:** Avoid excess spraying. Remaining flammable substance could catch fire.



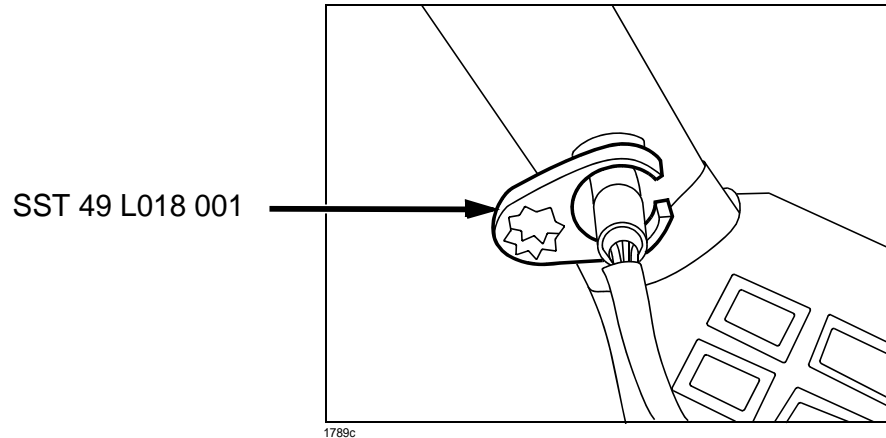
3. Allow lubricant to reach sensor threads for a minimum of 1 - 2 minutes.

**NOTE:** FOLLOW ALL PENETRANT MANUFACTURER INSTRUCTIONS LISTED ON THE PRODUCT LABEL.

4. Turn 30 degrees counter-clockwise with **SST (49 L018 001)**.
5. Remove SST and spray lubricant again in the same place.
6. Allow lubricant to reach sensor threads for a minimum of 1 - 2 minutes.

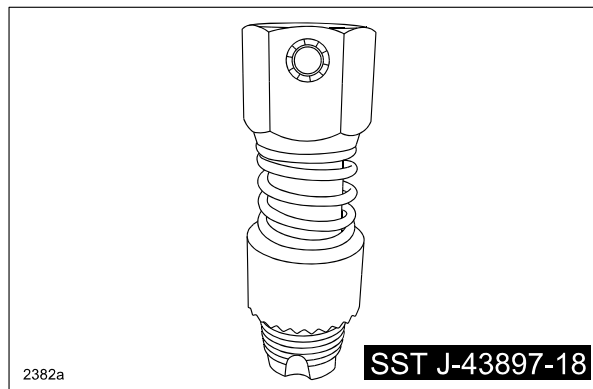
7. Use SST to loosen sensor.

**NOTE:** If sensor begins to bind, it may be necessary to work the sensor in a tightening and loosening motion to slowly work the sensor out.



8. Wipe off all excess lubricant.

9. Clean O2 sensor threads in converter or pipe with **SST J-43897-18** (which can be ordered through MStore).



**NOTE:** If the converter or exhaust pipe threads cannot be correctly cleaned on the vehicle, remove the converter or exhaust pipe from the vehicle to perform thread cleaning procedure. If the threads cannot be adequately cleaned to correctly install the sensor, then converter or exhaust pipe can be replaced. However, these parts are subject to collection to confirm the replacement was necessary.

10. Coat O2 sensor threads with "NEVER-SEEZ" (or equivalent) high temperature nickel based anti-seize grease.

**WARNING:** If reusing the oxygen sensor, completely remove the masking tape to prevent vehicle fire.

11. Install O2 sensor and tighten to:

**Tightening Torque: 29 - 49 Nm (22 - 36 ft. lbs.)**