

© 2007 Mazda Motor of America, Inc.

Subject: MIL COMES ON WITH DTC P2006 (VARIABLE SWIRL CONTROL SYSTEM SHUTTER VALVE STUCK CLOSED)	Bulletin No: 01-010/07
	Last Issued: 03/01/2007

APPLICABLE MODEL(S)/VINS

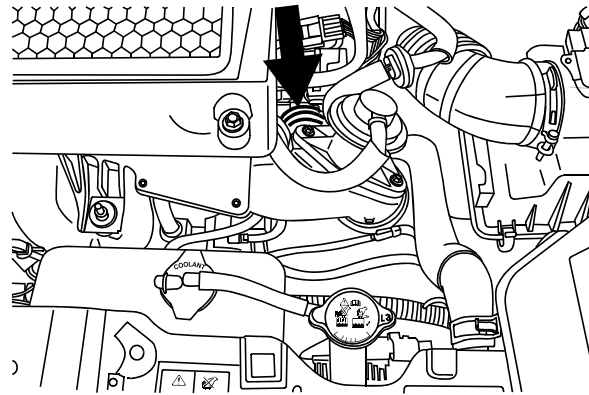
2006-2007 Mazdaspeed6

2007 Mazda CX-7

2007 Mazdaspeed3

DESCRIPTION

On some vehicles, the MIL comes on with DTC P2006 stored in memory due to the variable swirl shutter valve actuator sticking intermittently in cold weather. This is caused by inadequate spring force in the actuator. To ensure the valve opens, the spring force of the actuator has been increased.



1757a

Customers having this concern should have their vehicle repaired using the following repair procedure.

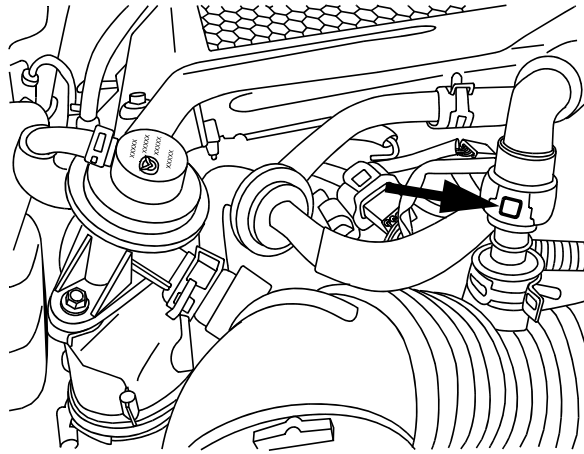
IMPORTANT: DO NOT alter or modify any portion of the throttle sensor switch.

REPAIR PROCEDURE

1. Verify customer concern.
2. Record the customer's radio presets.
3. Disconnect the negative terminal from the battery.
4. Remove the engine cover.
5. Disconnect the mass air flow (MAF) connector and remove the MAF harness from the clip on the air cleaner cover.
6. Remove the air cleaner cover.

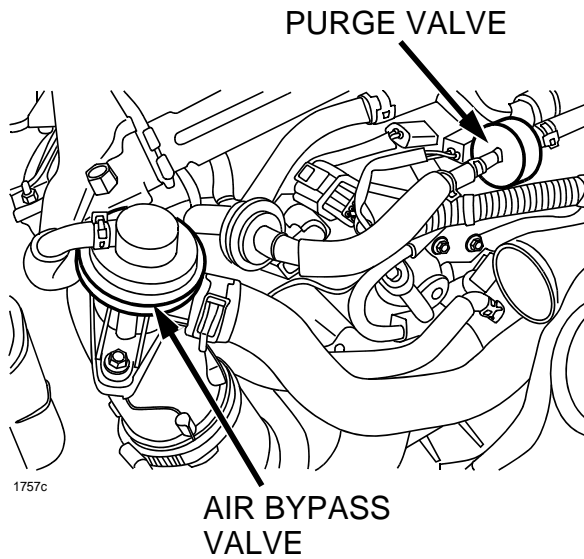
CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers 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.

7. Disconnect the vent hose from the air intake hose using the quick disconnect, then remove the air intake hose.



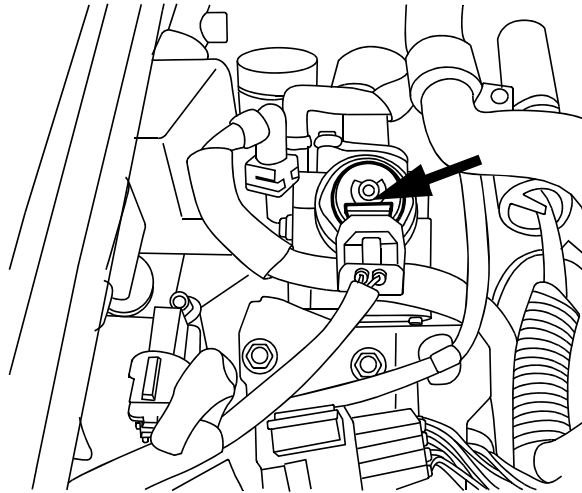
1757b

8. Disconnect the air bypass hose from the air bypass valve and the purge valve hose from the purge valve, then move the hoses up out of the way.



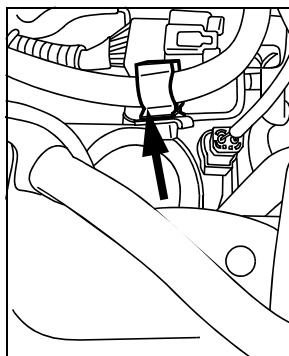
1757c

9. Disconnect the high pressure fuel spill valve connector.



1757d

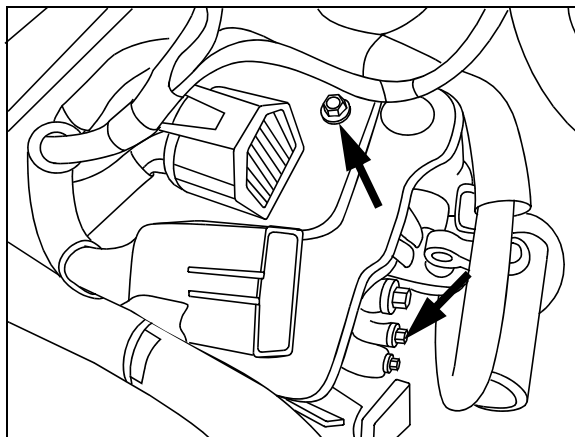
10. Disconnect the hose from the clip on the wire harness bracket.



1757e

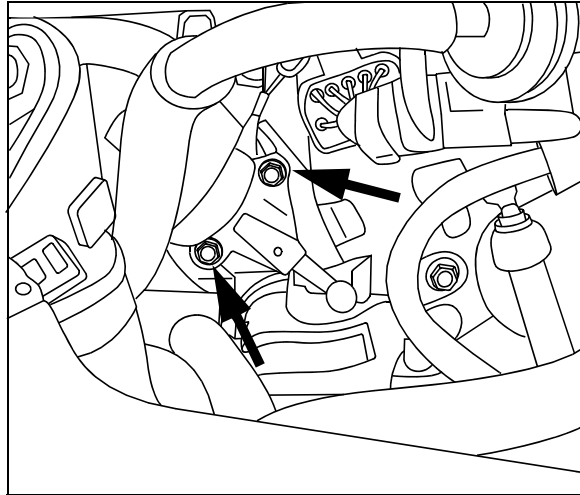
11. Remove the two bolts holding the wire harness bracket and move the bracket up and out of the way.

NOTE: It is not necessary to remove the ground wire bolt or disconnect the connectors as shown.



1757f

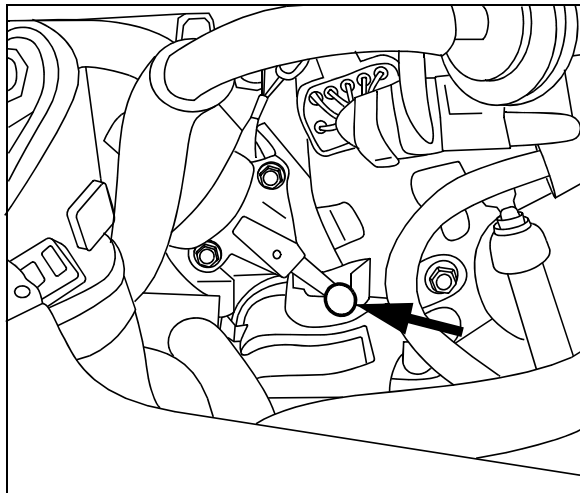
12. Remove the two bolts from the variable swirl shutter valve actuator.



1757g

13. Using a hair dryer (NOT a heat gun), apply approximately 176 °F (80 °C) heat onto the variable swirl shutter valve actuator ball joint for 3 minutes.

CAUTION: Do not apply heat higher than 212 °F (100 °C) because it may cause damage to sensors.



1757h

14. Make sure the ball joint gets warm, then disconnect the joint.

CAUTION: Do not use a tool to disconnect the joint, otherwise the plate could get deformed.

15. Disconnect the variable swirl shutter valve actuator hose, then remove the actuator from the vehicle.

16. Apply approximately 176 °F (80 °C) heat to the modified variable swirl shutter valve actuator ball joint for 3 minutes, then install the modified actuator.

CAUTION: In order to prevent the plate from getting deformed, make sure to warm up the joint before the installation.

17. Re-assemble the parts in the reverse order of removal.

NOTE: For proper alignment, connect the vent hose to the air intake hose before tightening the clamps for the air intake hose.

18. Reprogram the PCM with IDS 47.5 or later software.

19. Verify repair.

20. Enter the customer's radio presets.

PART(S) INFORMATION

Part Number	Description	Qty.
L3Y2-20-170	Variable Swirl Shutter Valve Actuator	1

CALIBRATION INFORMATION

Vehicle	Spec	Trans	New PCM Calibration Part Number	File Name
CX-7	CA	A/T, FWD	L33L-18-881R	SW-L33LER000.HEX
CX-7	CA	A/T, AWD	L33M-18-881R	SW-L33MER000.HEX
CX-7	Fed/Can	A/T, FWD	L33N-18-881R	SW-L33NER000.HEX
CX-7	Fed/Can	A/T, AWD	L33P-18-881R	SW-L33PER000.HEX
CX-7	Mexico	A/T, FWD	L39J-18-881D	SW-L39JED000.HEX
CX-7	Mexico	A/T, AWD	L39K-18-881D	SW-L39KED000.HEX
Mazdaspeed6	CA	6M/T	L38J-18-881E	SW-L38JEE000.HEX
Mazdaspeed6	Fed/Can	6M/T	L38K-18-881E	SW-L38KEE000.HEX
Mazdaspeed3	CA	6M/T	L34B-18-881G	SW-L34BEG000.HEX
Mazdaspeed3	Fed/Can	6M/T	L34C-18-881G	SW-L34CEG000.HEX

NOTE: The PCM Calibration Part Numbers listed above are provided for PCM reprogramming purposes only. These are not necessarily the same Mazda part numbers used to order an actual PCM through the Mazda Parts System. It is not necessary to order a PCM as part of this repair procedure.

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	92
Part Number Main Cause	L3Y2-20-170
Quantity	1
Operation Number / Labor Hours:	XXC026RX / 0.8 Hrs.