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Subject: EXCESSIVE OPERATING NOISE WHEN SLIDING POWER SEAT	Bulletin No: 09-021/13
	Last Issued: 07/19/2013

APPLICABLE MODEL(S)/VINS

2014 Mazda6 equipped with power seats with VINs lower than JM1GJ*****125980 (produced June 1, 2013)

DESCRIPTION

Some vehicles may exhibit excessive noise when operating either front power seat forward or backward.

The noise may be caused by cable vibration, which transmits power from the motor to the gears. The cable vibrates inside the case due to inadequate fabric wrapped around the cable. The fabric thickness has been increased to eliminate the noise.

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

REPAIR PROCEDURE

1. Verify if the noise is coming from the driver and/or passenger side seat when sliding the seat back and forth with the slide switch.

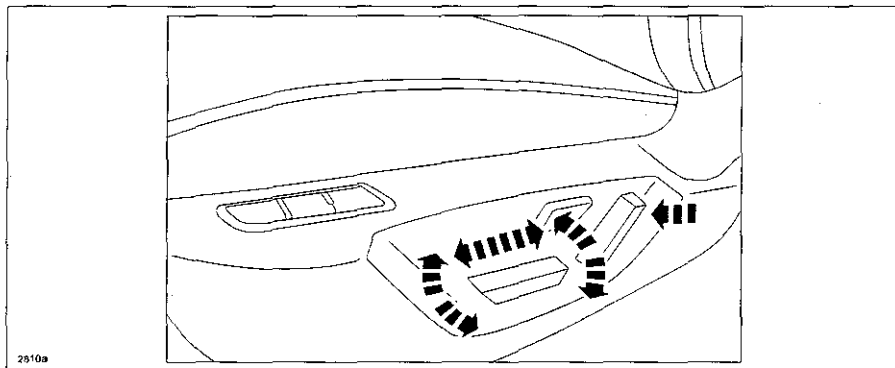
NOTE:

- To show the cable layout more clearly, the seat cushion was removed for the illustrations in this bulletin.
- Replace the power seat cable (with a modified part) only for the seat(s) generating noise.

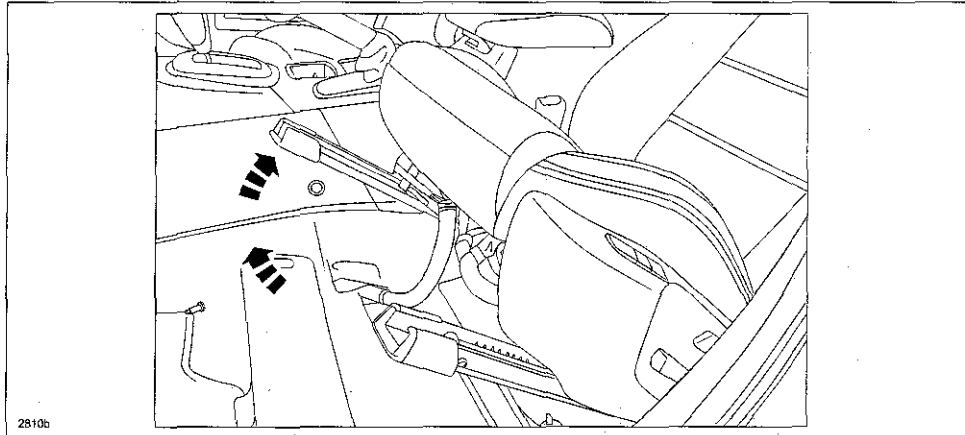
WARNING: Be sure to wear work gloves to avoid injuries by the seat frame.

2. Fold the seat back forward by operating the reclining switch.
3. Adjust the seat height and tilt positions upward by operating the switches in order to increase work space as necessary.

NOTE: There is no tilt or height adjustment function on the passenger side power seat.



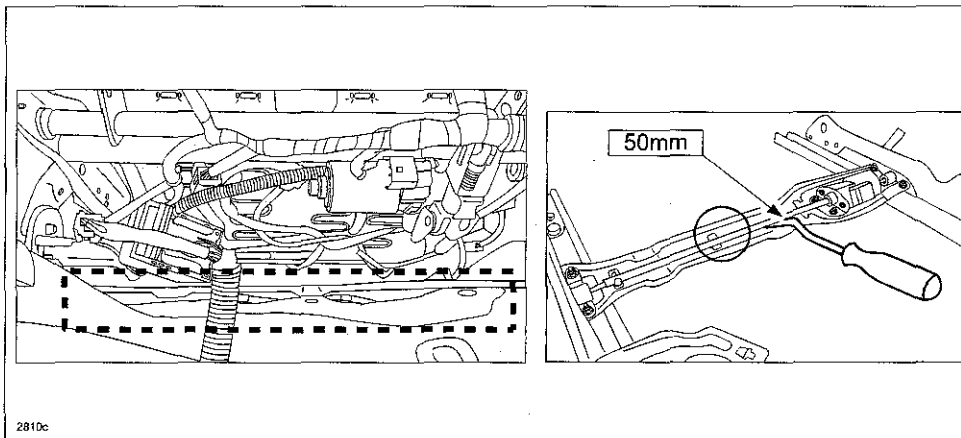
4. Slide the seat forward, then remove the rear installation bolts.
NOTE: Remove the rear installation bolts before removing the front installation bolts.
5. Slide the seat rearward, then remove the front installation bolts.
6. Lay the seat back down with care to avoid damaging the surrounding parts.



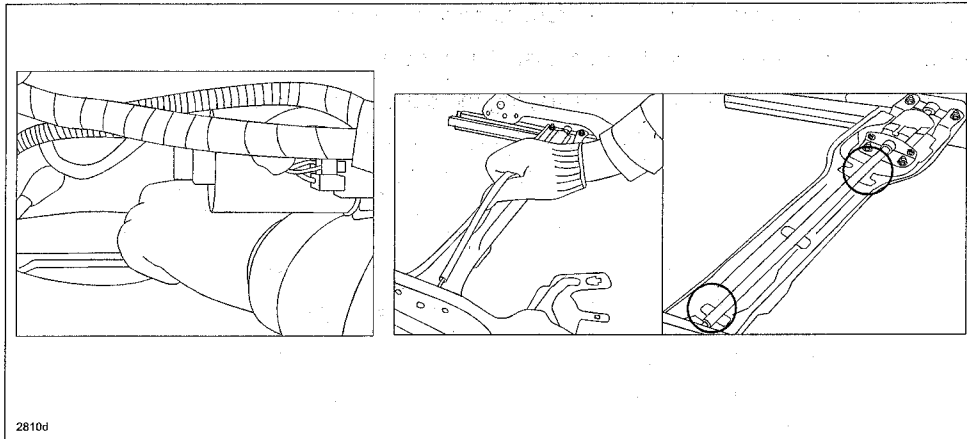
7. Insert an appropriate tool between the frame and the cable (the general area is shown below/left). Use the tool as a lever to release the cable from the center bracket (50mm from the motor as shown below/right).

CAUTION: To avoid adjuster unit damage, DO NOT operate the slide switch after removing the cable.

NOTE: To show the cable layout more clearly, the seat cushion is not shown.

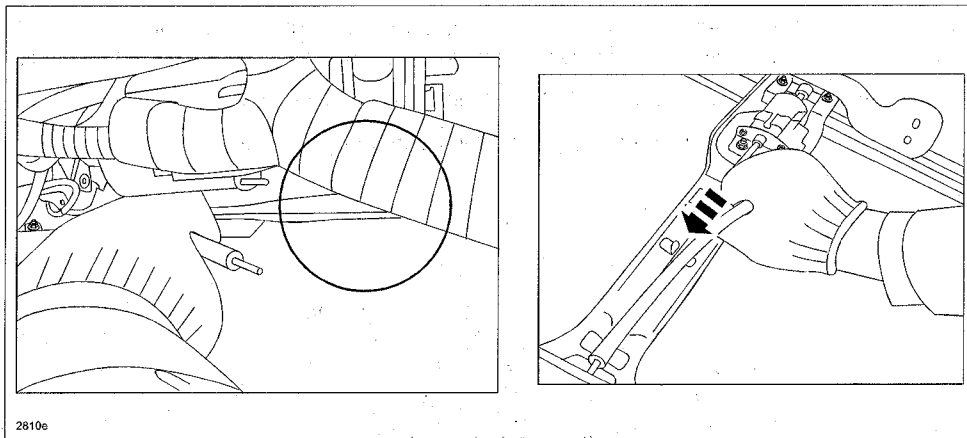


8. Hold the cable by hand and lift it up to release it from the (2) two outer cable brackets.

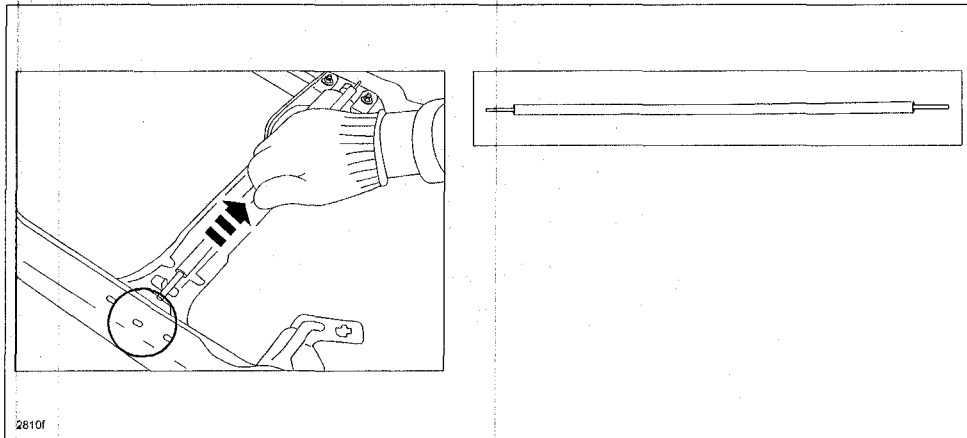


9. Pull the cable in the direction of the arrow (as shown below) to remove it from the motor.

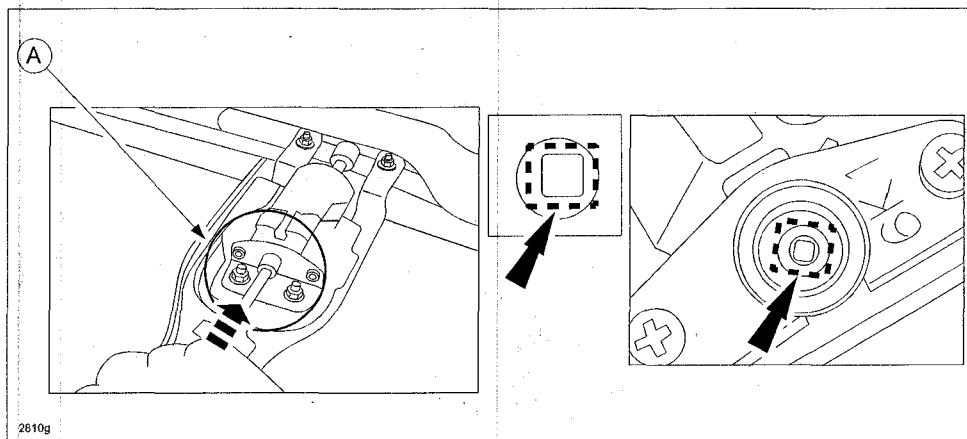
CAUTION: When removing the cable, remove it from the motor side first. If it is removed from the gear box side first, the engagement position could become misaligned.



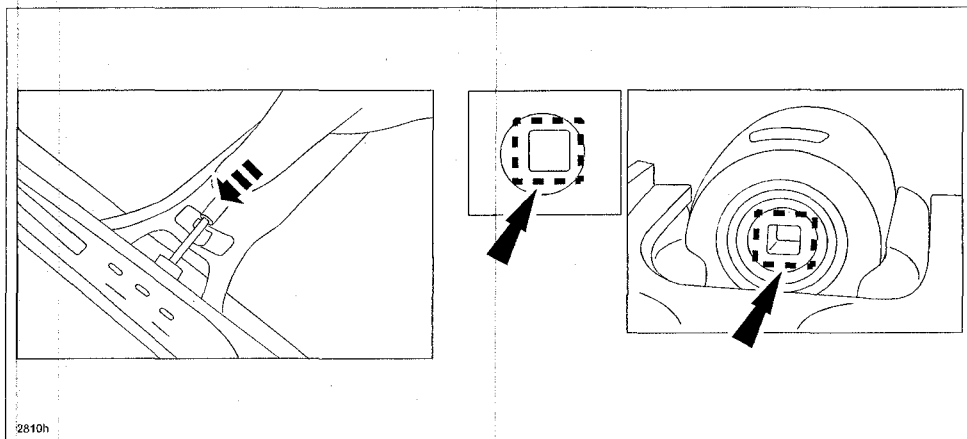
10. Pull the cable in the direction of the arrow (shown below) to remove it from the gear box.



11. Align the square tip of the new cable to the square shape in the motor. Push the cable all the way in (A) using care not to damage or deform it.

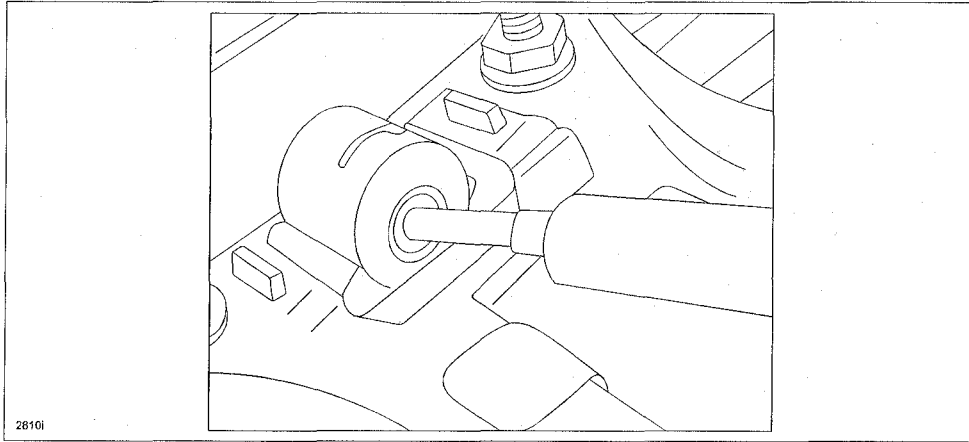


12. Align the square tip of the cable to the square shape in the gear box. Push the cable all the way in.



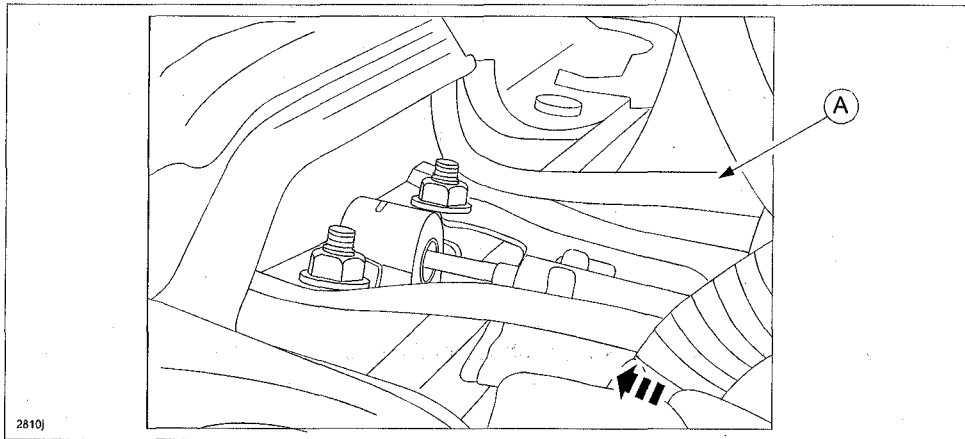
CAUTION:

- If the cable is bent too much during installation, operation noise may occur. DO NOT hold the cable around the tip.

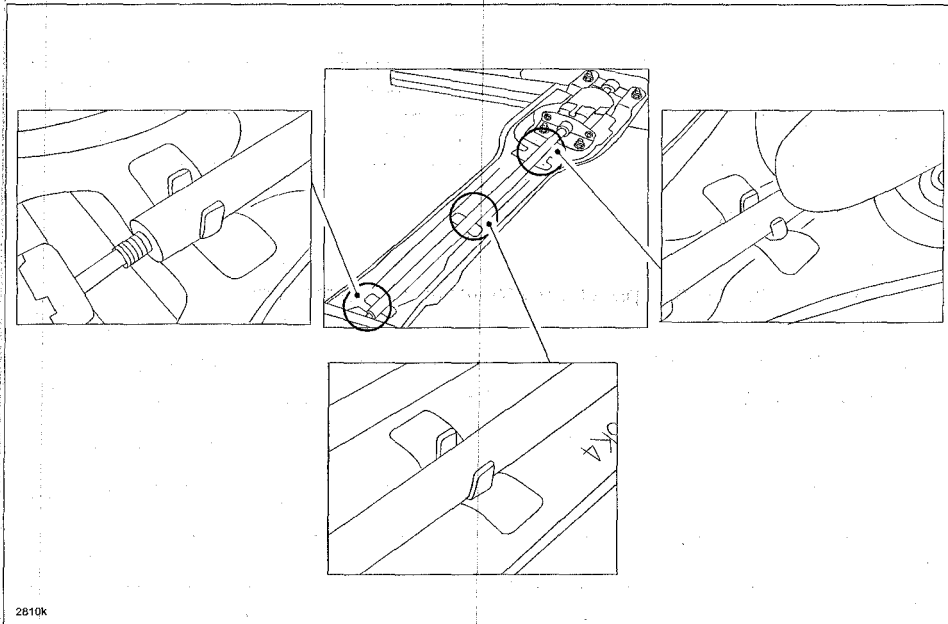


CAUTION:

- If work space is too dark to see properly, use a light to illuminate the spot where the cable should be installed.
- Take caution not to pinch the seat belt buckle harness (A).

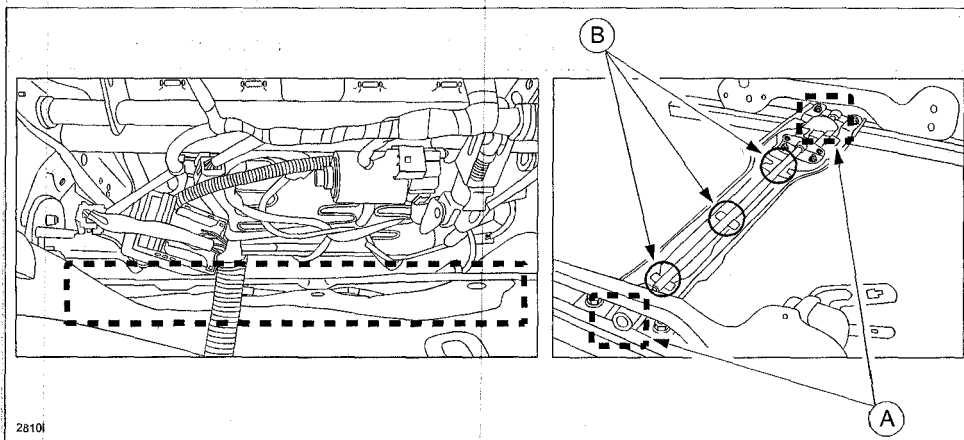


13. Press the cable from above with your fingers to secure it in the (3) three brackets shown below.



14. Look under the seat and verify the following points:

- The cable is not curved or floating.
- The cable is properly installed into the motor side and gear box side (A).
- The cable is properly secured to the seat frame at each cable bracket (B).



15. Reinstall the seat in reverse order of removal.

16. Verify the seat slides back and forth without any problem and that the noise is gone.

NOTE: If the cable is not installed correctly, the following abnormal conditions could occur:

- The seat slides only on one side rail (left or right side only).
- A rasping type noise is heard.

17. SEAT WITH SEAT WEIGHT SENSOR ONLY: Perform the seat weight sensor inspection according to the instructions on MS3 online or the Workshop Manual (section 09-13 [SEATWEIGHT SENSOR REMOVAL/INSTALLATION [TWO-STEP DEPLOYMENT CONTROL SYSTEM]]).

18. Verify the repair.

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PART(S) INFORMATION

Part Number	Description	Qty.	Notes
GHL2-88-0D1	Power seat cable	1 or 2	1 cable per side

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	80
Damage Code	97
Part Number Main Cause	GHL2-88-0D1
Quantity	1 or 2
Operation Number / Labor Hours:	XXJ8TXRX / 0.3 Hrs: One side (with or w/o seat weight sensor) XXJ8UXRX / 0.4 Hrs: Both sides (w/o seat weight sensor) XXJ8VXRX / 0.5 Hrs: Both sides (with seat weight sensor)

M-TIPS

UNIQUE REPAIR INFORMATION FOR
MAZDA TECHNICIANS



Multi-model...

Electrical concern due to aftermarket device

Multi-model...

Cloudy/yellowed headlights

Multi-model...

MIL on with DTC P0171

Multi-model...

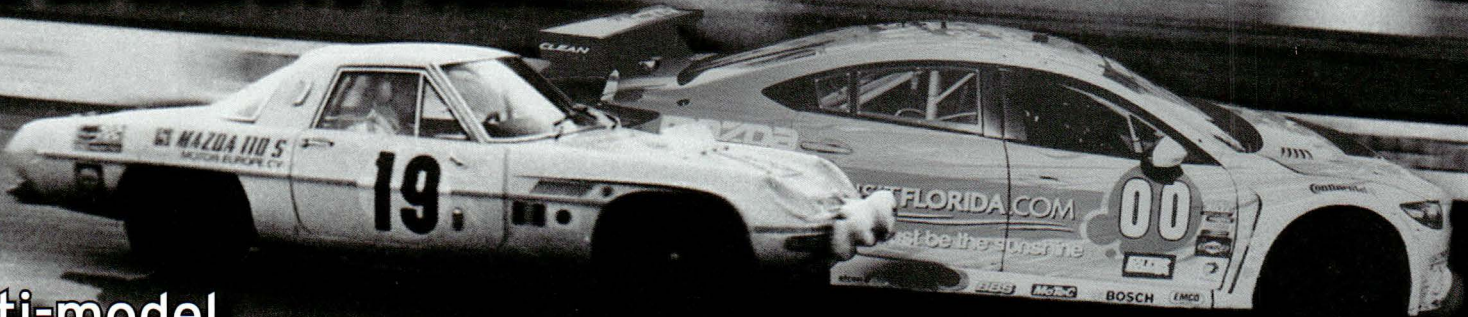
Vehicle pull/drift

Multi-model...

7 Tips to Lemon Law Prevention

Multi-model...

TPMS warning light on



MAY / JUNE 2013

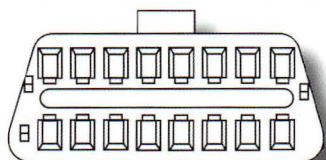
MULTI-MODEL

ELECTRICAL CONCERN DUE TO AFTERMARKET DEVICE

If you encounter any type of electrical concern (e.g. dead battery), interview the customer before proceeding with normal Workshop Manual diagnosis. Aftermarket devices may be the cause of the electrical concern. Ask the customer if any aftermarket devices have been installed. Below are a couple of examples of unusual electrical concerns caused by aftermarket devices.

Example 1

Some electrical devices connected to the DLC-2 connector by insurance companies may discharge the battery. The device may disrupt the CAN system battery saver mode.



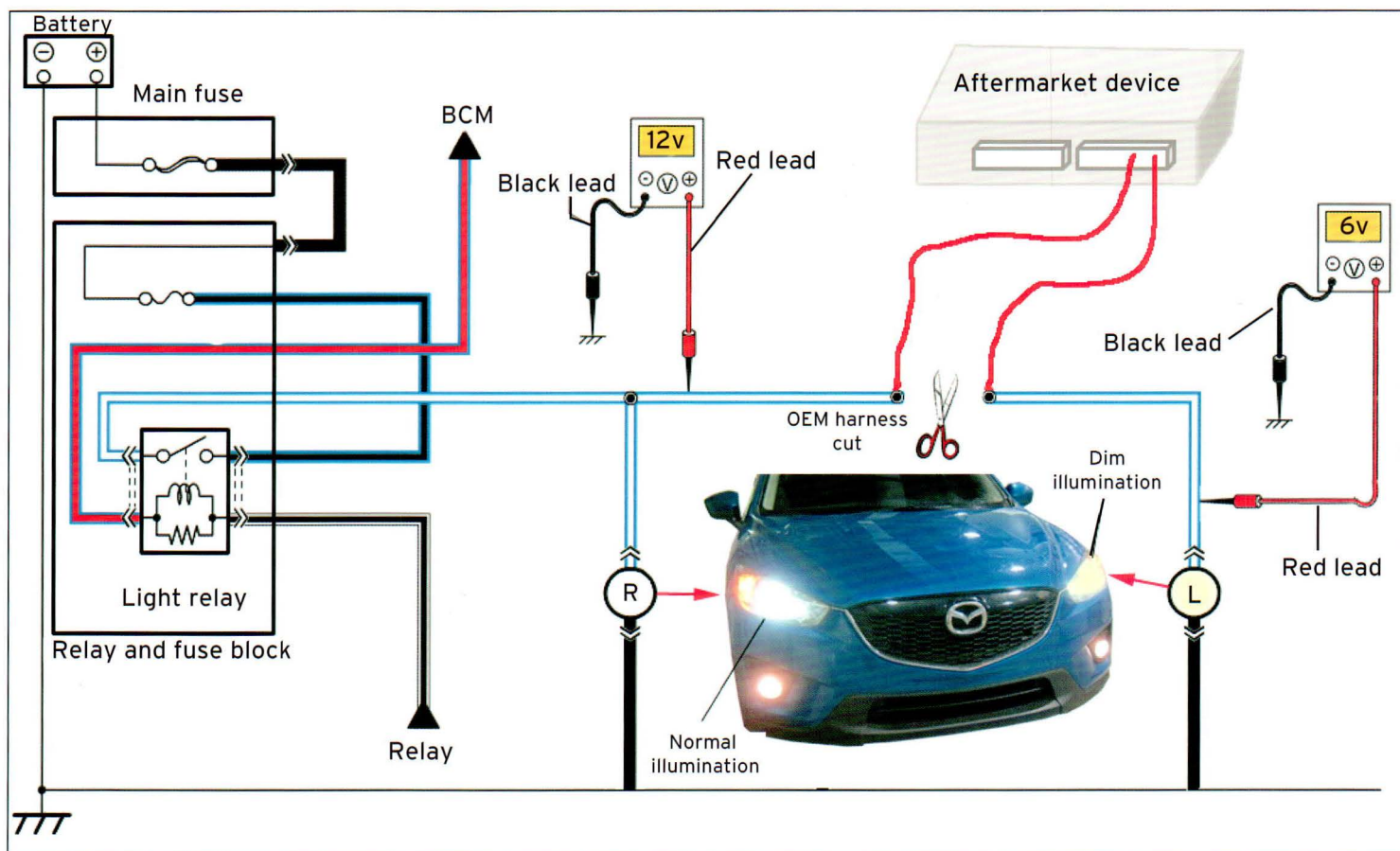
DLC-2



Aftermarket device

Example 2

Some aftermarket devices that are wired to the vehicles's wiring harness may create unusual electrical symptoms and/or store DTCs. Below is an example of a dim headlight. The aftermarket device changed the headlight circuit resistance, causing a dim headlight.



If you determine that no aftermarket devices have been installed, continue with normal Workshop Manual diagnosis.

Note: If you determine the concern was caused by an aftermarket device, inform the customer that vehicle repairs will not be covered by Mazda's New Vehicle Limited Warranty.

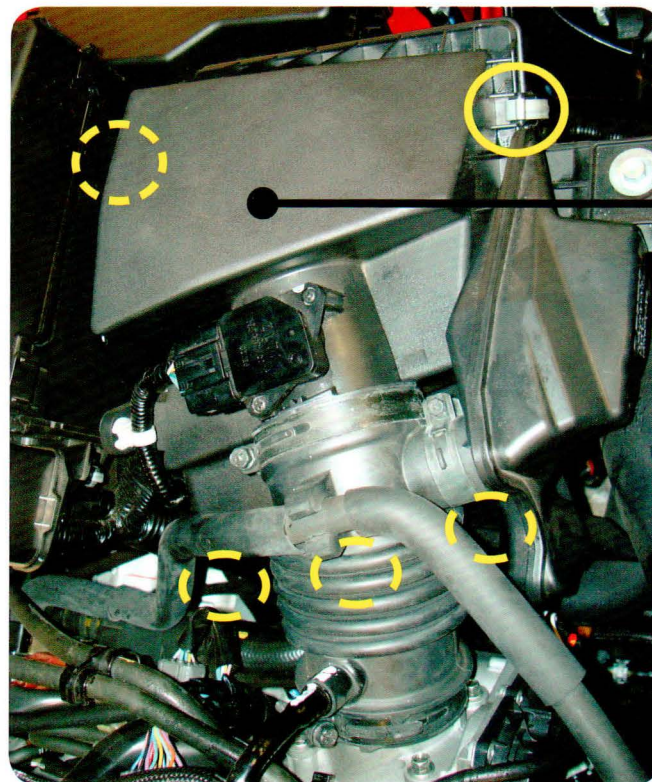
MULTI-MODEL

MIL ON WITH DTC P0171 AND/OR ROUGH IDLE

Some vehicles may exhibit a MIL on with DTC P0171 (Fuel trim system too lean) and/or a rough idle. The rough idle is most pronounced at idle when the A/C compressor engages. Prior to performing normal diagnostics, confirm that the air cleaner cover is properly secured.

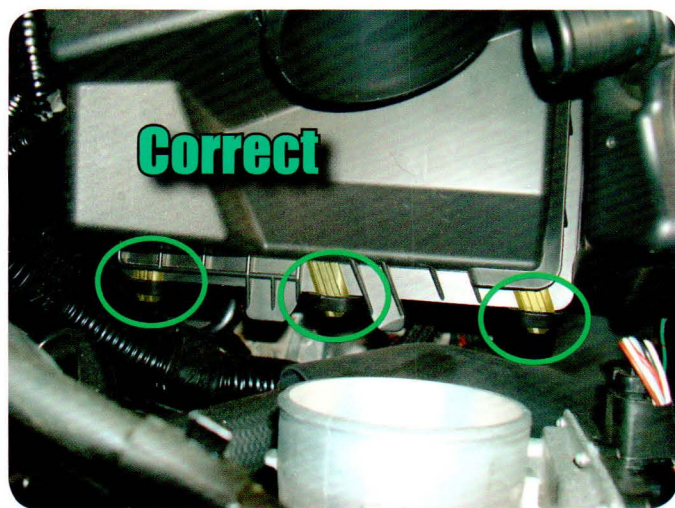
Note: A 2011 Mazda3 air cleaner cover is shown. Other model air cleaners are similar.

When replacing or inspecting the air cleaner element, make sure the air cleaner cover is properly secured to the lower air box. Some air cleaner covers have 3 inserts on one side and 2 anchors on the other side. A MIL may be stored and/or a rough idle may occur if the air cleaner cover is not installed correctly.



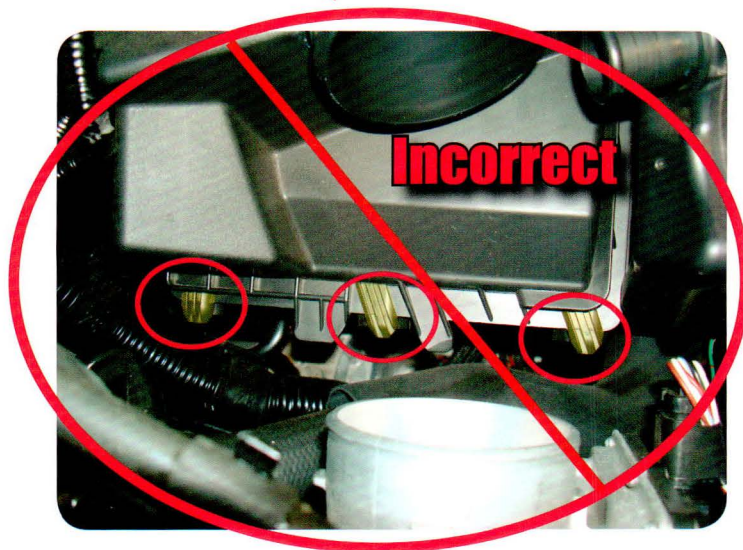
Air cleaner cover

Front of vehicle



Correct

Left side of the air cleaner cover is inserted into the lower air cleaner housing correctly.



Incorrect

Left side of the air cleaner cover is not inserted into the lower air cleaner housing correctly.

MULTI-MODEL CLOUDY/YELLOWED HEADLIGHTS

Some customers may complain about cloudy or yellowed headlights. A Mazda approved headlight restoration kit is available to correct this concern.

The headlight lens discoloration or cloudiness is a problem plaguing the automotive industry. Varying degrees of this condition can be found on vehicles 4 years or older, regardless of vehicle make or model. The problem is caused by ultraviolet (UV). This degradation of the original hardcoat on the lens. This exposes the unprotected polycarbonate surface, which quickly yellows and turns cloudy.

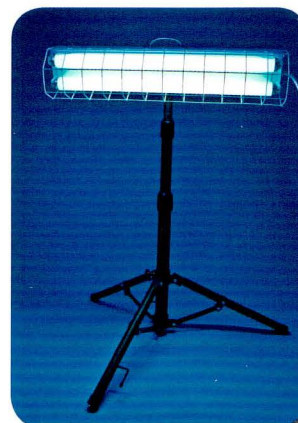


To correct this concern and provide a long term solution, Mazda has approved the Presta ReNuLite® Headlight Restoration Kit. This Kit has three distinct advantages over similar repair products found on the market today.

- Most of the products and procedures on the market include only sanding and buffing the lens. While initial results look good, the lens will return to its former condition within a few months. ReNuLite's Headlight Sealant, a patent-pending formula that contains UV absorbers and neutralizers. The sealant treats the lens surface to prevent future lens discoloration and deterioration.
- When the repair is performed per the instructions, the headlight will retain its restored appearance and performance for about 3 years.
- This is the only sealant Mazda recommends. The sealant passes extensive weathering testing using industry standard specifications, such as SAE J2527 and J1545.



Presta ReNuLite® Headlight Restoration Kit



UV curing light

The Presta kit will repair up to 10 vehicles. Also shown is the optional UV curing light. This light will be required only if adequate sunlight is not available to cure the applied sealant.

A video of the easy-to-use repair process can be viewed in English or Spanish at the following link:
<http://www.prestaproducts.com/renulite.aspx>

Order the kit(s) directly from the supplier:

The ReNuLite Headlight Restoration Kit and replacement products can be ordered from Presta at (800) 860-4488 Monday through Friday, 8:00 am to 5:00 pm Eastern Standard Time or by emailing renulite@prestaproducts.com. Technical support questions can also be directed here.

2013-2014 CX-5, 2014 Mazda6, 2014 Mazda3 TPMS WARNING LIGHT ON AFTER TIRE REPLACEMENT

If a tire replacement is necessary (e.g. road hazard/car accident), the replacement tire size, brand, and tread pattern must match the three remaining tires on the vehicle. Mazda recommends using an Original Manufacture (OEM) replacement tire. Also, damaged tires/wheels must be replaced. If the replacement tire does not match the other three tires on the vehicle, the Tire Pressure Monitoring System (TPMS) warning light  may come on.

Basic Operation

The TPMS monitors the tire pressure of all four tires. If the tire pressure of one or more tires become excessively low, the driver is notified.

Detection

The TPMS analyzes various wave frequencies to determine low tire pressure. The TPMS may misjudge a low tire pressure if the replacement tire does not match or the wheel/tire is damaged.

If a customer comes to your dealership with the TPMS warning light on and all four tire pressures are within specification, check the following:

- Tire size mismatch
- Tire brand mismatch
- Tire tread pattern mismatch
- Tire worn
- Tire damage
- Wheel damage

Note:

An ABS/DSC DTC may also be stored if the replacement tire does not match the other three tires on the vehicle.



Tire tread pattern mismatch



Tire worn



Wheel damage

An editorial board comprised of MNAO service staff members generates, collects, and verifies information for this publication. To contribute a newsletter idea, send an e-mail to mtips@mazdausa.com or fax to (949) 442-6599

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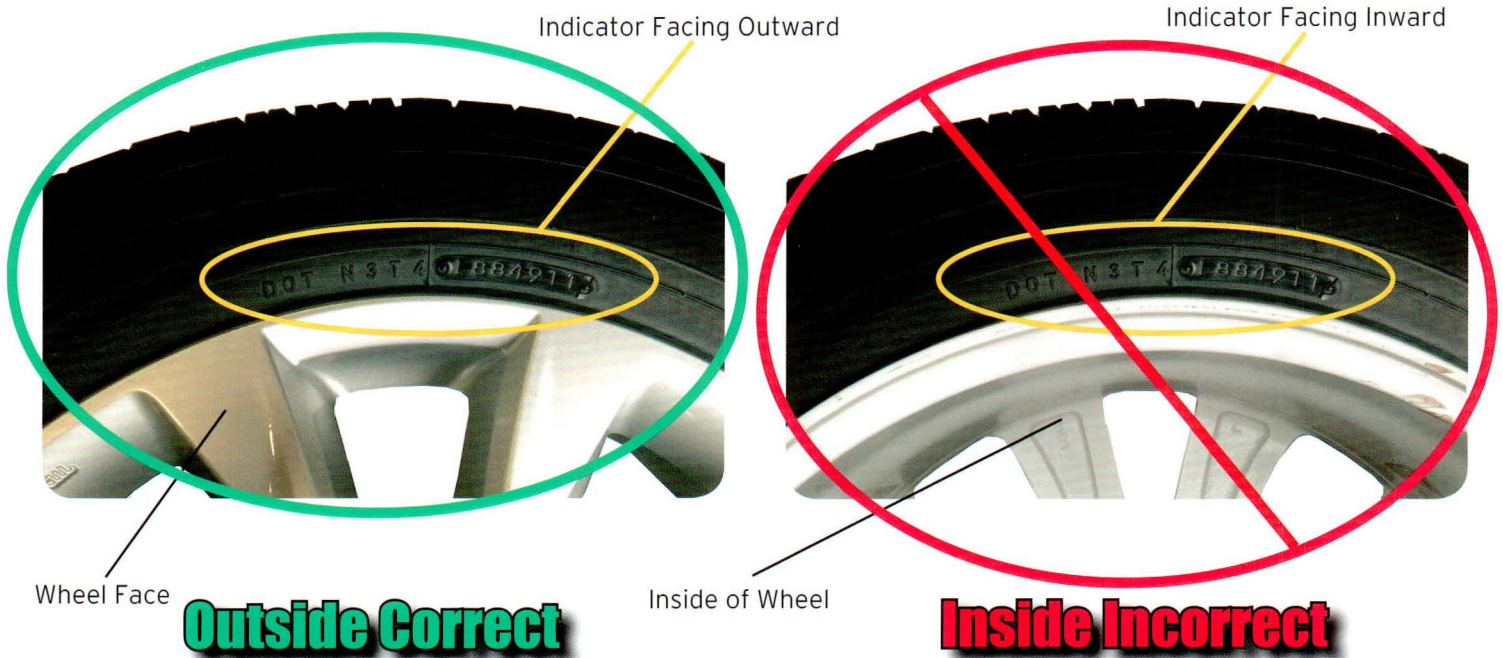
MULTI-MODEL VEHICLE PULL / DRIFT AFTER TIRE REPLACEMENT

When installing a replacement tire on a customer's vehicle, make note that the tire sidewall indicators below face outward.

- Colored painted dots
- OUTSIDE
- DOT XXXX XXXX XXXX (see example below)

Note: DOT XXXX facing inward is normal

Incorrect tire installation may cause the vehicle to drift or pull while driving.



During the tire manufacturing process, there is some amount of conicity (lateral force). Tire conicity results when the tire belts are not perfectly aligned when the tire is built. Tire conicity should not be confused with a separated, worn, or damaged tire.

Conicity

When a cone rolls, it rolls in a circle towards the point of the cone. This phenomena is known as conicity. The amount of lateral force varies from tire to tire.



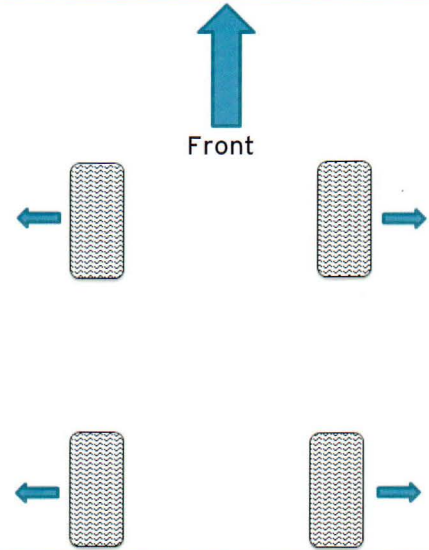
Note: Vehicle pull/drift can be caused by other factors:

- Improper tire inflation
- Out of wheel alignment
- Improper ride height
- Tire or wheel defect

This article only covers proper tire installation. Refer to MS3 online or Workshop Manual section 02-11 for additional service information.

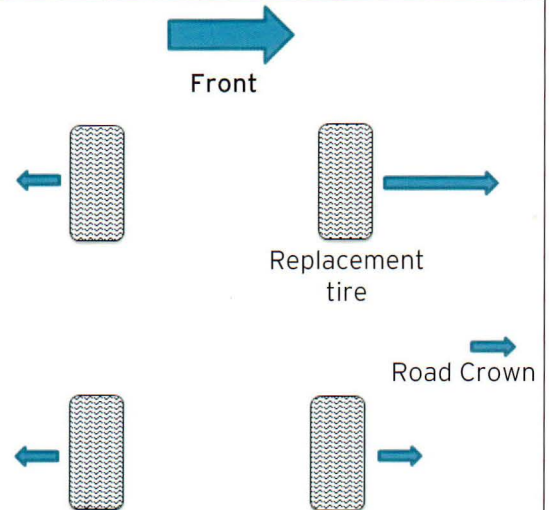
Correct Tire Installation

All tires are installed correctly with the indicators facing outward. Lateral forces offset each other. When the vehicle is driven, it drives straight.



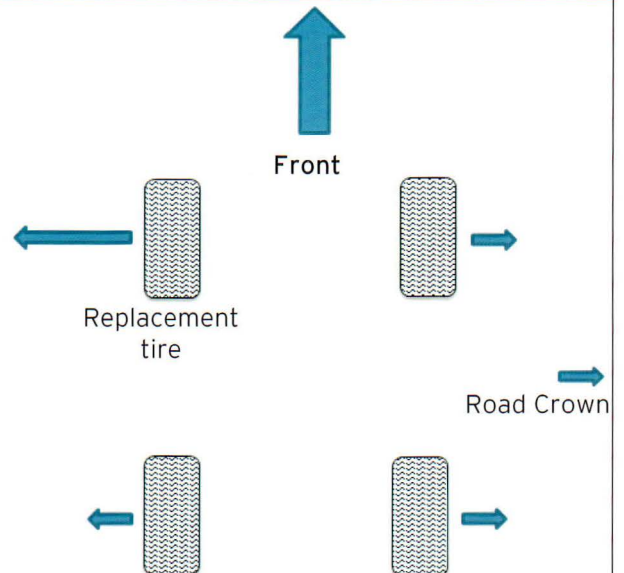
Correct Tire Installation with Pull/Drift

All tires are installed correctly with the indicators facing outward. The replacement tire conicity lateral force is sometimes more than the three other tires on the vehicle. This additional lateral force, plus road crown, may cause the vehicle to pull/drift to the right when driven.



Correct Tire Installation with Tire Rotation Adjustment

This situation can be corrected by simply rotating the front wheels. The additional force to the left may be offset by the road crown force to the right. When the vehicle is driven, it drives straight.



7 TIPS TO LEMON LAW PREVENTION

Technicians are the first line of defense against Lemon Law claims. Keep these 7 Tips to Lemon Law Prevention in mind when working on every vehicle:

1. Make sure the repair order is properly worded and has adequate information before getting started.
2. Verify the customer concern before attempting any repair (unless you are advised differently by the Tech Hotline or a Mazda North American Operations representative). Once a concern is identified, promptly repair the vehicle.
3. Document what you did on the repair order, whether to explain a no defect found condition or outline the steps taken to repair the defect.
4. Verify any repair made.
5. **Do not hold a customer's vehicle longer than necessary for any reason; promptly close any nonactive repair order.**
6. **For any repeat repair attempt, contact the Tech Hotline for assistance and follow the guidelines provided in the Service Consultant and Technician Reminder Sheet.**
7. Always participate in "good faith" when investigating or repairing customer concerns.



Review Mazda State Course 1427 for a refresher. As always, contact your DSM for any questions regarding a repair.

Course 1427 can be found on Mazda State

A screenshot of the Mazda State Online Training website. The header features the Mazda State logo and navigation tabs for Home, Certification, Training Activity, Training History, Reports, and Admin. A search bar on the left is circled in red, with a red arrow pointing from the text above to it. The search bar contains the text '1427' and a 'Go' button. Below the search bar is a 'What's New' section listing various training courses with their respective IDs, such as 'Selling Mazda CPO #1496' and '2014 Mazda CX-5 (Sales) #1476'. The background of the website shows a close-up of a car's headlight and grille.

Submit Your Own M-Tip Article!

If you have a valuable repair tip that you would like to submit for consideration in the next M-Tips Newsletter, please send by e-mail to mtips@mazdausa.com or by FAX to (949) 442-6599.

If we select your repair tip, you will receive a \$50 American Express Gift Cheque for your efforts.

Daniel Gonzalez - Editor (949) 442-6526

