

REPORT NUMBER 118-GTL-08-010

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 118
POWER-OPERATED WINDOW, PARTITION
AND ROOF PANEL SYSTEMS**

**FUJI HEAVY INDUSTRIES LTD.
2008 SUBARU IMPREZA PASSENGER CAR
NHTSA NO. C85502**

**GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443**



OCTOBER 3, 2008

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
WASHINGTON, D.C. 20590**

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Approval Date: 10/03/08

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: [Signature]
Acceptance Date: 10/3/08

1. Report No. 118-GTL-08-010	2. Government Accession No. N/A	3. Recipient's Catalog No. N/A
4. Title and Subtitle Final Report of FMVSS 118 Compliance Testing of a 2008 SUBARU IMPREZA PASSENGER CAR NHTSA No. C85502		5. Report Date October 3, 2008
		6. Performing Organ. Code GTL
7. Author(s) Grant Farrand, Project Engineer Debbie Messick, Project Manager		8. Performing Organ. Rep# GTL-DOT-08-118-010
9. Performing Organization Name and Address General Testing Laboratories, Inc. 1623 Leedstown Road Colonial Beach, Va 22443		10. Work Unit No. (TRAIS) N/A
		11. Contract or Grant No. DTNH22-06-C-00032
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Admin. Enforcement Office of Vehicle Safety Compliance (NVS-220) 1200 New Jersey Ave., S.E., Washington, DC 20590		13. Type of Report and Period Covered Final Test Report September 29, 2008
		14. Sponsoring Agency Code NVS-221
15. Supplementary Notes		
16. Abstract Compliance tests were conducted on the subject 2008 Subaru Impreza Passenger Car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-118-06 for the determination of FMVSS 118 compliance. Test failures identified were as follows: None		
17. Key Words Compliance Testing Safety Engineering FMVSS 118		18. Distribution Statement Copies of this report are available from NHTSA Technical Information Services (TIS) Room W45-212 (NPO-411) 1200 New Jersey Ave., S.E. Washington, DC 20590 Telephone No. (202) 366-4947
19. Security Classif. (of this report) UNCLASSIFIED	21. No. of Pages 32	22. Price
20. Security Classif. (of this page) UNCLASSIFIED		

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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF TEST

A model year 2008 Subaru Impreza Passenger Car was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 118 testing to determine if the vehicle was in compliance with the requirements of the standard. FMVSS 118 specifies requirements for power-operated window, partition, and roof panel systems to minimize the likelihood of death or injury from their accidental operation.

1.1 The test vehicle was a 2008 Subaru Impreza Passenger Car. The vehicle was identified as follows:

A. Vehicle Identification Number: JF1GH61608H813547

B. NHTSA No.: C85502

C. Manufacturer: FUJI HEAVY INDUSTRIES LTD.

D. Manufacture Date: 10/07

E. Color: Lighting Red

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 118 testing on September 29, 2008.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-118-06 dated 12 April 2006 and General Testing Laboratories, Inc. (GTL) Test Procedure, TP-118-03A, "Power Operated Window, Partition and Roof Panel Systems".

FMVSS 118 Compliance Testing was performed in the following sequence:

- A. Test Vehicle Identification/Documentation
- B. Power Window, partition and roof panel identification/documentation
- C. Interior, exterior and remote control switch identification/documentation
- D. Pre-test operation of all power windows, partitions and roof panels
- E. Photograph vehicle and interior, exterior and remote control devices
- F. Perform Interior Locking System Off Test
- G. Perform Interior Locking System with Key Removed Test
- H. Perform Exterior Locking System Test
- I. Perform Remote Actuation Device Test
- J. Perform Occupant Compartment Actuation Device Test(Sphere Test/Pull up or Pull Out Test)
- K. Perform Automatic Reversal System Test

Above tests H, I, and K were not required on this vehicle due to no exterior or remote actuation devices. Test J was performed for information purposes only.

2.1 SUMMARY OF RESULTS

The power window operational test resulted in no anomalies being noted. Test data indicate the FMVSS 118 requirements appear to have been satisfied. All test data resulting from the tests were recorded on test data sheets in Section 3.

SECTION 3

TEST DATA

3.0 TEST RESULTS

The following data sheets document the results of FMVSS 118 testing on the 2008 Subaru Impreza.

FMVSS 118
COMPLIANCE DATA SUMMARY SHEET

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA

VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547

VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07

LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

REQUIREMENT	PASS	FAIL	N/A
S4 Interior Locking system in Off Position(s)	X		
S4 Interior Locking System with Key Removed	X		
S4 Exterior Locking System			X
S4 Remote Actuation Device			X
S6 Occupant Compartment Actuation Devices (Sphere Test/Pull Up or Pull Out Test)	X*		
S5 Automatic Reversal System			X

REMARKS: * Compliance not required

RECORDED BY: G. Farrand

DATE: 09/29/08

APPROVED BY: D. Messick

WPRP PRE-OPERATIONAL CHECK

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZAVEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

Identify power-operated WPRP and WPRP actuation devices

	LEFT FRONT	LEFT REAR	RIGHT FRONT	RIGHT REAR	TAIL GATE	LEFT VENT	RIGHT VENT	ROOF PANEL
Power WPRP Installed	X	X	X	X				
Individual Interior Actuation Devices	X	X	X	X				
Master Control Panel Actuation Devices	X							
WPRP Operated by Exterior Locking System								
WPRP Operated by Remote Control								
WPRP with Auto-Reverse Capability								
WPRP with Express-Up Capability								

Master Control Panel Location: DRIVER'S DOOR PANELExterior Locking System Location: N/A

Remote Control Type: () Line of Sight () Non-line of Sight

WPRP Actuation Device Design (Toggle, Rocker, Push/Pull (Lever) or describe other):

Master Control Panel Push/Pull
 Individual Window Push/Pull
 Roof Panel _____
 Vents _____

Interior Locking System Key Positions (clockwise): LOCK, ACC, ON, START

All WPRP open/close cycles are satisfactory with key in "ON" position:

(X) YES () NO

All WPRP open/close cycles are satisfactory with key in "ACCESSORY" position:

() YES (X) Not Applicable –No power to WPRP's

REMARKS: Windows will only operate with key in the "ON" position.

RECORDED BY: G. FarrandDATE: 09/29/08APPROVED BY: D. Messick

DATA SHEET 1
INTERIOR LOCKING SYSTEM TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA

VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547

VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07

LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

Key lock position at start of test execution: (X) ON () ACCESSORY, Then to:
Key lock off position during test execution: (X) LOCK (X) OFF () ACCESSORY

ACTUATION DEVICES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER CONTROL PANEL ACTUATION DEVICES							
Left Front (LF)	X		X		X		P
Right Front (RF)	X		X		X		P
Left Rear (LR)	X		X		X		P
Right Rear (RR)	X		X		X		P
Tail Gate (TG)							
Vents							
Roof Panel (RP)							
INDIVIDUAL ACTUATION DEVICES							
Left Front (LF)	X		X		X		P
Right Front (RF)	X		X		X		P
Left Rear (LR)	X		X		X		P
Right Rear (RR)	X		X		X		P
Tail Gate (TG)							
Vents							
Roof Panel (RP)							

REMARKS:

RECORDED BY: G. Farrand

DATE: 09/29/08

APPROVED BY: D. Messick

DATA SHEET 2
INTERIOR LOCKING SYSTEM WITH KEY REMOVED TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA

VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547

VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07

LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

Key lock position at start of test execution: (X) ON () ACCESSORY, Then to:
Key lock off position during test execution: (X) LOCK () OFF () ACCESSORY

ACTUATION DEVICES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER CONTROL PANEL ACTUATION DEVICES							
Left Front (LF)	X		X		X		P
Right Front (RF)	X		X		X		P
Left Rear (LR)	X		X		X		P
Right Rear (RR)	X		X		X		P
Tail Gate (TG)							
Vents							
Roof Panel (RP)							
INDIVIDUAL ACTUATION DEVICES							
Left Front (LF)	X		X		X		P
Right Front (RF)	X		X		X		P
Left Rear (LR)	X		X		X		P
Right Rear (RR)	X		X		X		P
Tail Gate (TG)							
Vents							
Roof Panel (RP)							

REMARKS:

RECORDED BY: G. Farrand

DATE: 09/29/08

APPROVED BY: D. Messick

DATA SHEET 3
OCCUPANT COMPARTMENT ACTUATION DEVICE TEST
SPHERE TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA
 VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547
 VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07
 LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

ACTUATION DEVICES	APPLICABLE (YES/NO*)	SPHERE ACTIVATED ACTUATION DEVICE CLOSES WPRP (YES/NO)	TEST RESULT PASS/FAIL	COMPLIANCE REQUIRED (Y/N**)
MASTER CONTROL PANEL ACTUATION DEVICES				
Left Front (LF)	Yes	No	Pass	No
Right Front (RF)	Yes	No	Pass	No
Left Rear (LR)	Yes	No	Pass	No
Right Rear (RR)	Yes	No	Pass	No
Tail Gate (TG)				
Vent Window(s)				
Partition (P)				
Roof Panel (RP)				
INDIVIDUAL ACTUATION DEVICES				
Left Front (LF)	Yes	No	Pass	No
Right Front (RF)	Yes	No	Pass	No
Left Rear (LR)	Yes	No	Pass	No
Right Rear (RR)	Yes	No	Pass	No
Tail Gate (TG)				
Vent Window (s)				
Partition(P)				
Roof Panel (RP)				

*This requirement does not apply to actuation devices that are mounted in a vehicle's roof, headliner, or overhead console and that can close a window, partition, or roof panel only by continuous rather than momentary switch actuation or actuation devices that comply with the reversing requirement of FMVSS 118, S5.

** Requirement is effective 1 October 2008. Early compliance is voluntary and test results are used for information only.

RECORDED BY: G. Farrand
 APPROVED BY: D. Messick

DATE: 09/29/08

DATA SHEET 4
 OCCUPANT COMPARTMENT ACTUATION DEVICE TEST
 FOR POWER-OPERATED WINDOWS ONLY
PULL UP OR PULL OUT TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA
 VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547
 VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07
 LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

ACTUATION DEVICES	SWITCH ORIENTATION A – horizontal B – vertical C - angled	CLOSES POWER-OPERATED WINDOW ONLY IF: PULL UP OR PULL OUT	TEST RESULT PASS/FAIL	COMPLIANCE REQUIRED (Y/N**)
MASTER CONTROL PANEL ACTUATION DEVICES				
Left Front (LF)	A	Pull Up	Pass	No
Right Front (RF)	A	Pull Up	Pass	No
Left Rear (LR)	A	Pull Up	Pass	No
Right Rear (RR)	A	Pull Up	Pass	No
Vent Window(s)				
INDIVIDUAL ACTUATION DEVICES				
Left Front (LF)	A	Pull Up	Pass	No
Right Front (RF)	A	Pull Up	Pass	No
Left Rear (LR)	A	Pull Up	Pass	No
Right Rear (RR)	A	Pull Up	Pass	No
Vent Window(s)				

** Requirement is effective 1 October 2008. Early compliance is voluntary and test results are used for information only.

RECORDED BY: G. Farrand
 APPROVED BY: D. Messick

DATE: 09/29/08

SECTION 4
TEST EQUIPMENT LIST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 SUBARU IMPREZA
 VEHICLE NHTSA NO: C85502 VIN: JF1GH61608H813547
 VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 10/07
 LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 09/29/08

ITEM	MFR	MODEL	S/N	CAL. PERIOD	DATE OF LAST CALIB.	REMARKS
SLR DIGITAL CAMERA	NIKON	D50	N/A	N/A	N/A	
PINCH FORCE SENSOR	SENSOR DEVELOPMENTS, INC.	10293	179104	12 MO.	06/08	

REMARKS:

RECORDED BY: G. FARRAND

DATE: 09/29/08

APPROVED BY: D. MESSICK

SECTION 5
PHOTOGRAPHS



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.1
 $\frac{3}{4}$ FRONTAL VIEW FROM RIGHT SIDE OF VEHICLE



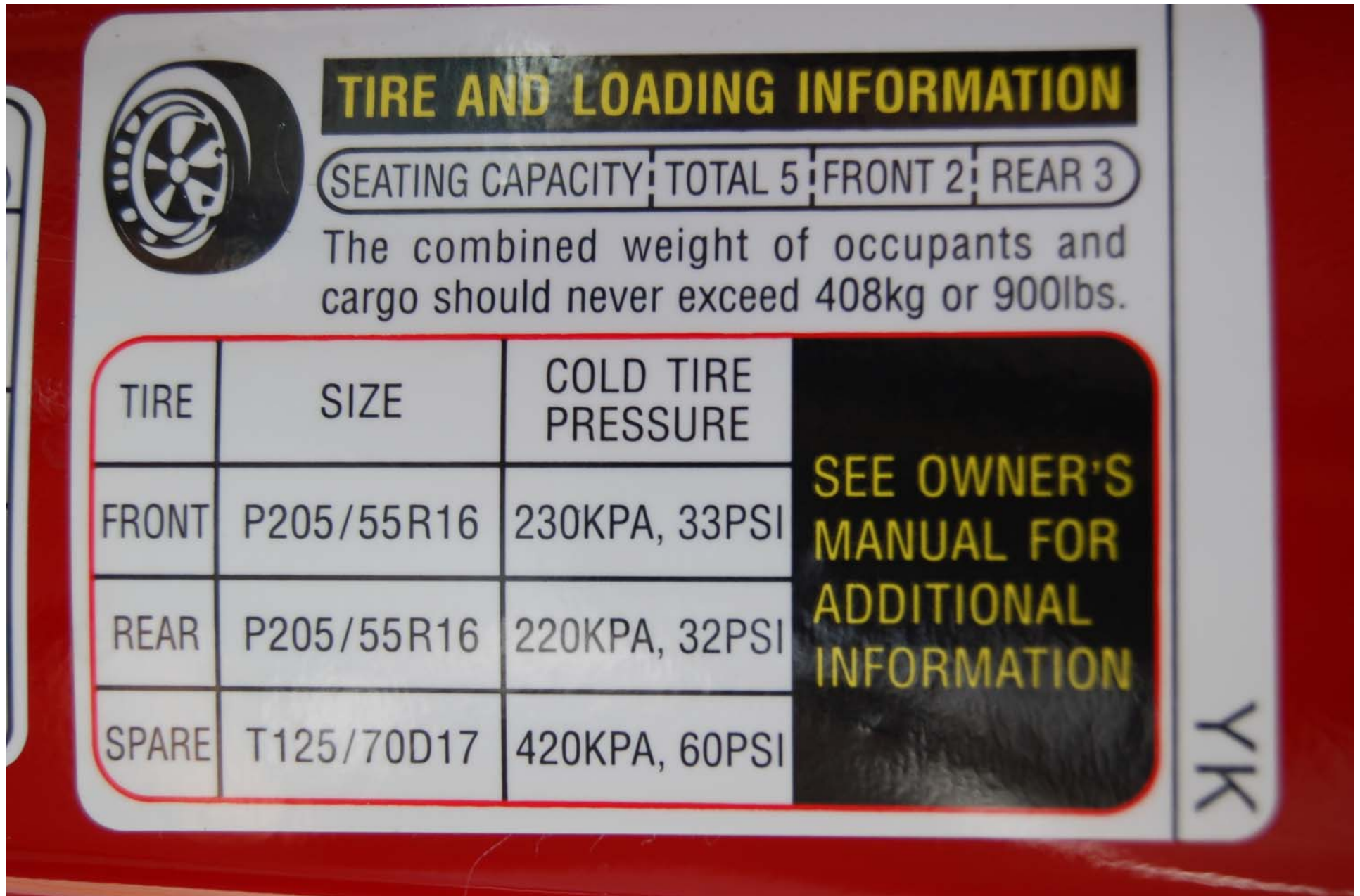
2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.2
¾ REAR VIEW FROM LEFT SIDE OF VEHICLE



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.3
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL



2008 SUBARU IMPREZA
 NHTSA NO. C85502
 FMVSS NO. 118

FIGURE 5.4
 CLOSE-UP VIEW OF TIRE INFORMATION LABEL



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.5
CLOSE-UP VIEW OF VEHICLE IGNITION SWITCH



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.6
CLOSE-UP VIEW OF LEFT FRONT POWER WINDOW
SWITCH



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.7
CLOSE-UP VIEW OF RIGHT FRONT POWER WINDOW
SWITCH



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.8
CLOSE-UP VIEW OF LEFT REAR POWER WINDOW
SWITCH



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.9
CLOSE-UP VIEW OF RIGHT REAR POWER WINDOW
SWITCH



2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.10
CLOSE-UP VIEW OF POWER WINDOW MASTER SWITCH



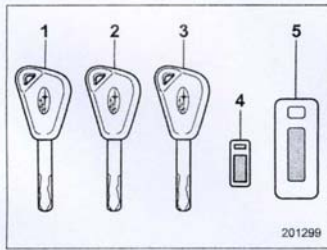
2008 SUBARU IMPREZA
NHTSA NO. C85502
FMVSS NO. 118

FIGURE 5.11
TYPICAL SWITCH/SPHERE TEST SET-UP

SECTION 6
OWNER'S MANUAL INFORMATION

2-2 Keys and doors

Keys



- 1) Master key (Black)
- 2) Submaster key (Black)
- 3) Valet key (Gray)
- 4) Key number plate
- 5) Security ID plate

Three types of keys are provided for your vehicle:

Master key, submaster key and valet key.

The master key and submaster key fit all locks on your vehicle.

- Ignition switch
- Driver's door
- Trunk lid release lever (4-door)
- Glove box

The valet key fits only the ignition switch

and driver's door lock. You can keep the trunk and glove box locked when you leave your vehicle and valet key at a parking facility.

CAUTION

Do not attach a large key holder or key case to either key. If it bangs against your knees while you are driving, it could turn the ignition switch from the ON position to the Acc or OFF position, thereby stopping the engine.

■ Key number plate

The key number is stamped on the key number plate attached to the key set. Write down the key number and keep it in another safe place, not in the vehicle. This number is needed to make a replacement key if you lose your key or lock it inside the vehicle.

Immobilizer

The immobilizer system is designed to prevent an unauthorized person from starting the engine. Only keys registered with your vehicle's immobilizer system can be used to operate your vehicle. Even if an unregistered key fits into the ignition switch and can be turned to the "START" position, the engine will automatically stop after several seconds.

Each immobilizer key contains a transponder in which the key's ID code is stored. When a key is inserted into the ignition switch and turned to the "ON" position, the transponder transmits the key's ID code to the immobilizer system's receiver. If the transmitted ID code matches the ID code registered in the immobilizer system, the system allows the engine to be started. Since the ID code is transmitted and acted upon almost instantly, the immobilizer system does not impede normal starting of the engine.

If the engine fails to start, pull out the key once before trying again. Refer to the "Ignition switch" section in chapter 3.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This

Keys and doors 2-3

device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE

To protect your vehicle from theft, please pay close attention to the following security precautions:

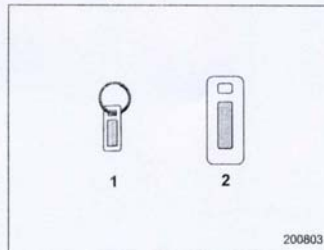
- Never leave your vehicle unattended with its keys inside.
- Before leaving your vehicle, close all windows and lock the doors and rear gate.
- Do not leave spare keys or any record of your key number in the vehicle.

CAUTION

- Do not place the key under direct sunlight or anywhere it may become hot.

- Do not get the key wet. If the key gets wet, wipe it dry with a cloth immediately.

■ Security ID plate

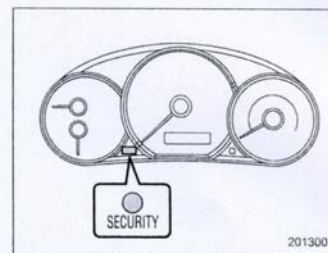


- 1) Key number plate
- 2) Security ID plate

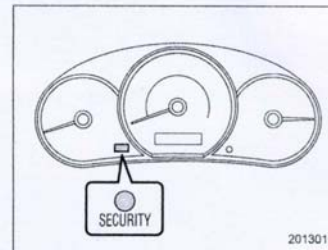
The security ID is stamped on the security ID plate attached to the key set. Write down the security ID and keep it in another safe place, not in the vehicle. This number is needed to make a replacement key if you lose your key or lock it inside the vehicle.

This number is also needed for replacement or repair of the engine control unit, integrated unit, and combination meter.

■ Security indicator light SECURITY



Turbo models



Non-turbo models

The security indicator light deters potential

- CONTINUED -

2-4 Keys and doors

thieves by indicating that the vehicle is equipped with an immobilizer system. It begins flashing (approximately once every 3 seconds) approximately 60 seconds after the ignition switch is turned from the "ON" position to the "Acc" or "LOCK" position or immediately after the key is pulled out.

If the security indicator light does not flash, the immobilizer system may be faulty. If this occurs, contact your SUBARU dealer as soon as possible.

In case an unauthorized key is used (e.g. an imitation key), the security indicator light comes on.

NOTE

Even if the security indicator light flashes irregularly or its fuse blows (the light does not flash if its fuse is blown), the immobilizer system will function normally.

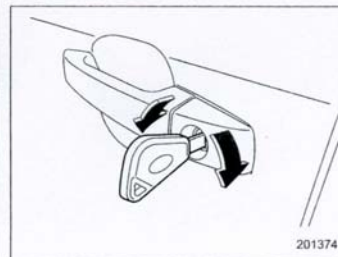
■ Key replacement

Your key number plate and security ID plate will be required if you ever need a replacement key made. Any new key must be registered for use with your vehicle's immobilizer system before it can be used. Up to four keys can be registered for use with one vehicle.

For security, all the keys registered with your vehicle's immobilizer system will have their ID codes erased and re-registered when a new key is made. Therefore, all of your vehicle's keys must be presented when a new key is registered. Any key that is not re-registered when a new key is made cannot be used after the other keys are re-registered. For information on replacement keys and on the registration of keys with your immobilizer system, contact your SUBARU dealer.

NOTE

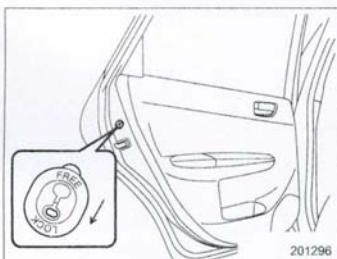
A vehicle that is equipped with the remote engine start system as a dealer option can register up to three keys for use with one vehicle.

Door locks**■ Locking and unlocking from the outside**

To lock the driver's door from the outside with the key, turn the key toward the rear. To unlock the door, turn the key toward the front.

Pull the outside door handle to open an unlocked door.

Keys and doors 2-19

Child safety locks

Each rear door has a child safety lock that prevents the doors from being opened even if the inside door handle is pulled.

When the child safety lock lever is in the lock position, the door cannot be opened from inside regardless of the position of the inner door handle lock lever. The door can only be opened from the outside.

WARNING

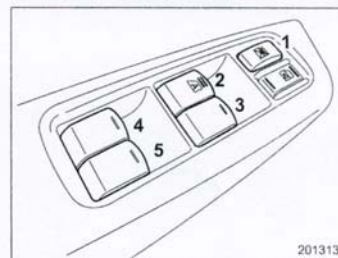
Always turn the child safety locks to the "LOCK" position when children sit on the rear seat. Serious injury could result if a child accidentally opens the door and falls out.

Windows**■ Power windows****WARNING**

To avoid serious personal injury caused by entrapment, you must do the following.

- When operating the power windows, be extremely careful to prevent anyone's fingers, arms, neck or head from being caught in the window.
- Always lock the passengers' windows using the lock switch when children are riding in the vehicle.
- Before leaving the vehicle, always remove the key from the ignition switch for safety and never allow an unattended child to remain in the vehicle. Failure to follow this procedure could result in injury to a child operating the power window.

The power windows operate only when the ignition switch is in the "ON" position.

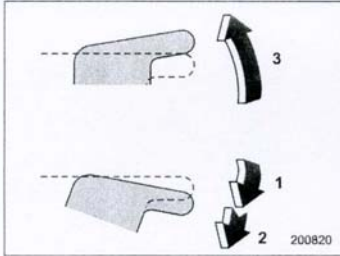
▼ Driver's side switches

- 1) Lock switch
- 2) For driver's window (with one-touch auto down feature)
- 3) For front passenger's window
- 4) For rear left window
- 5) For rear right window

All door windows can be controlled by the power window switch cluster at the driver side door.

— CONTINUED —

▽ Operating the driver's window



- 1) Open
- 2) Automatically open
- 3) Close

To open:

Push the switch down lightly and hold it. The window will open as long as the switch is held.

This switch also has a one-touch auto down feature that allows the window to be opened fully without holding the switch.

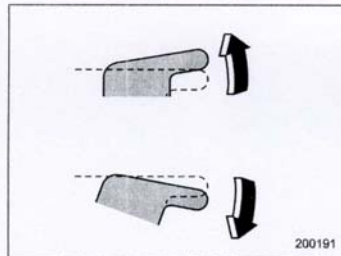
Push the switch down until it clicks and release it, and the window will fully open. To stop the window halfway, pull the switch up lightly.

To close:

Pull the switch up lightly and hold it. The window will close as long as the switch is

held.

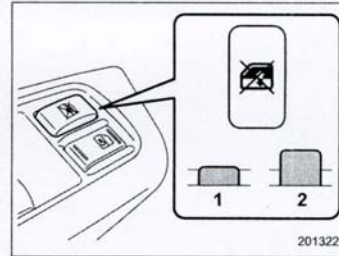
▽ Operating the passengers' windows



To open the passengers' windows, push the appropriate switch down and hold it until the window reaches the desired position.

To close the window, pull the switch up and hold it until it reaches the desired position.

▽ Locking the passengers' windows



- 1) Lock
- 2) Unlock

To lock the passengers' windows, push the lock switch. When the lock switch is in the "LOCK" position, the passengers' windows cannot be opened or closed.

Press the switch again to cancel the passengers' window locking.

▼ Passengers' side switches

To open the window, push the switch down and hold it until the window reaches the desired position.

To close the window, pull the switch up and hold it until the window reaches the desired position.

When the lock switch on the power window switch cluster, located on the driver's side door, is in the "LOCK" position, the passengers' windows cannot be operated with the passengers' switches.

Trunk lid (4-door)

WARNING

- To prevent dangerous exhaust gas from entering the vehicle, always keep the trunk lid closed while driving.
- Help prevent young children from locking themselves in the trunk. When leaving the vehicle, either close all windows and lock all doors or cancel the inside trunk lid release. Also make certain that the trunk is closed.

On hot or sunny days, the temperature in the trunk could quickly become high enough to cause death or serious heat-related injuries including brain damage to anyone locked inside, particularly for small children.

■ To open and close the trunk lid from outside

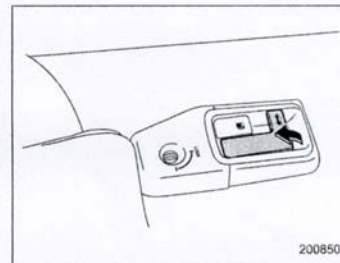
The trunk lid can be opened using the remote keyless entry system. Refer to the "Remote keyless entry system" section in this chapter.

To close the trunk lid, lightly press the trunk lid down until the latch engages.

NOTE

Do not leave your valuables in the trunk when you leave your vehicle.

■ To open the trunk lid from inside



Pull the trunk lid release lever upward.

Ignition switch

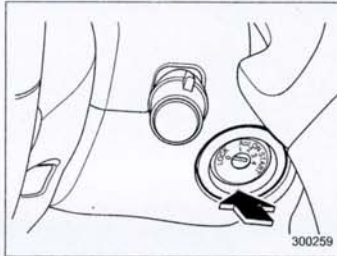
WARNING

- Never turn the ignition switch to "LOCK" while the vehicle is being driven or towed because that will lock the steering wheel, preventing steering control. And when the engine is turned off, it takes a much greater effort than usual to steer.
- Before leaving the vehicle, always remove the key from the ignition switch for safety and never allow an unattended child to remain in the vehicle. Failure to follow this procedure could result in injury to a child or others. Children could operate the power windows, the moonroof or other controls or even make the vehicle move.

CAUTION

Do not attach a large key holder or key case to either key. If it banged against your knees or hands while you are driving, it could turn the ignition switch from the "ON" posi-

tion to the "Acc" or "LOCK" position, thereby stopping the engine. Also, if the key is attached to a keyholder or to a large bunch of other keys, centrifugal force may act on it as the vehicle moves, resulting in unwanted turning of the ignition switch.



The ignition switch has four positions: LOCK, Acc, ON and START.

NOTE

- Keep the ignition switch in the "LOCK" position when the engine is not running.
- Using electrical accessories for a long time with the ignition switch in the "ON" or "Acc" position can cause the

battery to go dead.

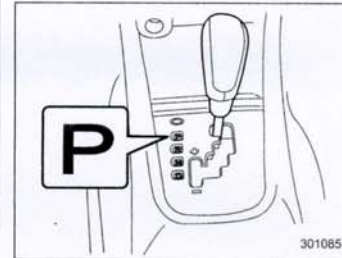
- If the ignition switch will not move from the "LOCK" position to the "Acc" position, turn the steering wheel slightly to the left and right as you turn the ignition switch.

LOCK

The key can only be inserted or removed in this position. The ignition switch will lock the steering wheel when you remove the key.

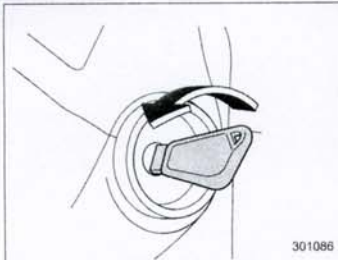
If turning the key is difficult, turn the steering wheel slightly to the right and left as you turn the key.

▼ **Automatic transmission vehicles**



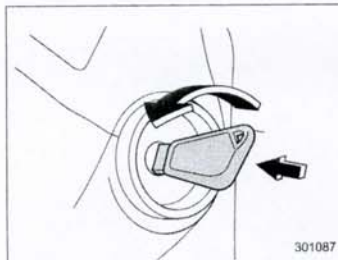
- CONTINUED -

3-4 Instruments and controls



The key can be turned from "Acc" to "LOCK" only when the selector lever is in the "P" position.

▼ **Manual transmission vehicles**



The key can be turned from "Acc" to "LOCK" only when the key is pushed in

while turning it.

Acc

In this position the electrical accessories (radio, accessory power outlet, etc.) can be used.

ON

This is the normal operating position after the engine is started.

START

The engine is started in this position. The starter cranks the engine to start it. When the key is released (after the engine has started), the key automatically returns to the "ON" position.

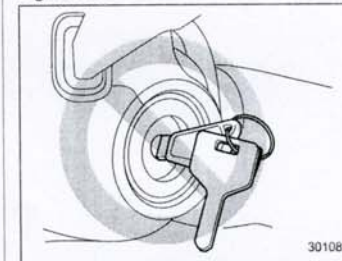
CAUTION

Do not turn the ignition switch to the "START" position while the engine is running.

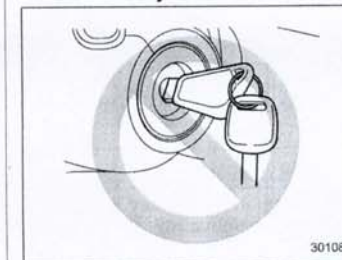
If your registered key fails to start the engine, pull out the key once (the security indicator light will blink), and then insert the key in the ignition switch and turn it to the "START" position and again try to start the engine.

NOTE

The engine may not start in the following cases:



- The key grip is touching another key or a metallic key holder.



- The key is near another key that

contains an immobilizer transponder.

- The key is near or touching another transmitter.

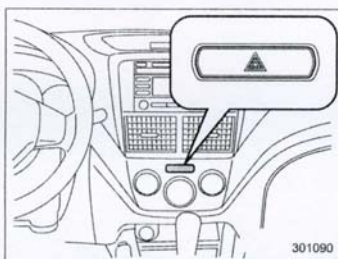
■ Key reminder chime

The reminder chime sounds when the driver's door opens and the key is in the "LOCK" or "Acc" position. The chime stops when the ignition switch is turned to the "ON" position or the key is removed from the ignition switch.

■ Ignition switch light

For easy access to the ignition switch in the dark, the ignition switch light comes on when driver's door is opened. The light remains on for 5 seconds and goes out after driver's door is closed or if the key is turned to the "ON" position.

Hazard warning flasher



The hazard warning flasher is used to warn other drivers when you have to park your vehicle under emergency conditions. The hazard warning flasher works regardless of the position of the ignition switch.

To turn on the hazard warning flasher, push the hazard warning button on the instrument panel. To turn off the flasher, push the button again.

NOTE

When the hazard warning flasher is on, the turn signals do not work.

Meters and gauges (Turbo models)

NOTE

Liquid-crystal displays are used in some of the meters and gauges in the combination meter. You will find their indications hard to see if you wear polarized glasses.

■ Combination meter illumination

When the ignition switch is turned to the "ON" position, the various parts of the combination meter are illuminated in the following sequence:

1. Warning lights, indicator lights, meter needles and gauge needles light up.
2. Meter needles and gauge needles each show MAX position.
3. Meter needles and gauge needles each show MIN position.
4. Meter and gauge dials, odometer and trip meter back light illuminate.
5. Regular illumination (for driving) begins.

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