

- ATTENTION:**
- GENERAL MANAGER
 - PARTS MANAGER
 - CLAIMS PERSONNEL
 - SERVICE MANAGER

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2008-2016MY Impreza
 2013-2017MY Crosstrek
 2014-2017MY Forester
 2015-2017MY WRX
 2013-2017MY BRZ

NUMBER: 07-128-18R

DATE: 01/19/18

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SUBJECT: Stop Lamp Switch / Pedal Stroke Adjustment
 Procedure Relating to DTCs C0054, C0075, C1249
 and C1531

INTRODUCTION:

This Service Information bulletin provides a measurement and adjustment procedure for the stop lamp switch. An improperly adjusted (or faulty) stop lamp switch can cause any of the DTCs listed above to set and result in the related system's warning lamp to illuminate.

SERVICE PROCEDURE / INFORMATION:

The table below provides DTC applicability by vehicle model:

| DTC | Impreza 2008-2011MY | Impreza 2012-2016MY Crosstrek 2013-2017MY | Forester | WRX | BRZ |
|-------|------------------------|--|--------------------|--------------------|--------------------|
| C0054 | BLS OFF MALFUNCTION | n/a | n/a | n/a | n/a |
| C0075 | Reverse Signal | n/a | n/a | n/a | n/a |
| C1249 | n/a | n/a | n/a | n/a | BLS MALFUNCTION |
| C1531 | n/a | BLS OFF / STUCK | BLS OFF / STUCK | BLS OFF / STUCK | n/a |

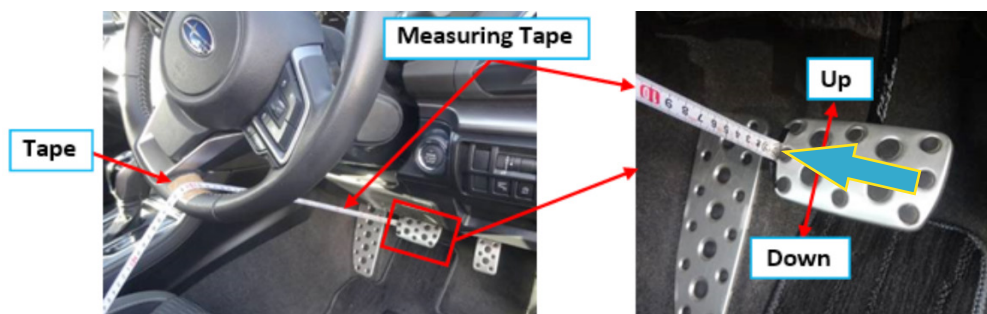
REQUIRED MATERIALS:

- Measuring tape (at least 36" long)
- Masking (or Painter's) tape
- Sharp-tipped marker.

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| <p>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</p> <p>Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.</p> | <p style="text-align: center;">Subaru of America, Inc. is ISO 14001 Compliant</p> <p>ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.</p> |
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1. Adjust the steering column to the lowest point and the telescopic position closest fully inward toward the instrument panel (IP).
2. After recording the customer's radio station presets (and Navigation Favorites where applicable), disconnect the ground (-) negative terminal from the battery and **wait 60 seconds** before proceeding.
3. Remove the lower dash trim and knee airbag module following the procedure in the applicable Service Manual. Reconnect the negative battery cable and proceed to step 4.
4. Apply tape as needed to protect any affected trim from scratching by the measuring tape.
5. Apply a piece of tape to the bottom of the steering wheel to use for making a measurement reference mark as shown below.
6. If needed and to maintain consistency, apply a piece of tape to the brake pedal as a reference for where the end of the tape measure needs to be positioned between "Up" and "Down". Make sure the measuring tape does not touch the IP lower trim.



7. Put a reference mark on the steering wheel tape, make a measurement to the brake pedal as shown and record it.



8. Press the brake pedal until the stop lights come on (using a helper or the SSM4 with the stop lamp switch PID selected) then measure again to determine the brake pedal stroke.
9. If the pedal stroke measurement is less than 3mm, the stop lamp switch must be adjusted because the stop lights may come on erroneously from vibration. Refer to the table below for the target pedal stroke measurement values.

| Impreza 2008-2011MY | Impreza 2012-2017MY Crosstrek 2013-2017MY | Crosstrek HEV | Forester | WRX | BRZ |
|---------------------|--|---------------|----------|----------|-----------|
| 3 to 8mm | 3 to 7mm | 1 to 2mm | 3 to 7mm | 3 to 7mm | 5 to 10mm |

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10. Use a sharp-tip marker to mark the current position of the stop lamp switch for reference. Turn the switch to the left (counter-clockwise) to release and remove it from the mounting bracket.



11. The table below provides how much each notch (thread) on the switch will change the pedal stroke measurement.

| Impreza 2008-2011MY | Impreza 2012-2017MY Crosstrek 2013-2017MY | Forester | WRX | BRZ |
|---------------------|--|----------|-----|-----|
| 5mm | 4mm | 4mm | 4mm | 5mm |

IMPORTANT NOTE: Never shorten the pedal stroke to less than 3mm. Doing so may cause the stop lamps to illuminate without pressing the brake pedal.

Example: A 2015 WRX has a measured pedal stroke of 13mm. Specification is 3 to 7mm. Each notch on the switch will change the stroke by 4mm. The switch position must be moved by 2 threads to bring it into specification. Moving it 3 notches would make the stroke 1mm, under the 3mm minimum.

12. Pull up on the brake pedal while reinstalling the switch. Turn the switch to the right (clockwise) to lock it back into position. You will need to develop a “feel” for the adjustment notches along with how the switch releases and locks back into position. The switch in the photo below has been adjusted 2 notches.



13. Press the brake pedal until the stop lights come on then measure again to determine if the brake pedal stroke is now within the specified values. If not, repeat steps 9-12 and measure again. If the stroke measurement is now within the specified values, the measurement and adjustment procedure is complete. Remove any tape applied to the steering wheel and / or brake pedal.

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IMPORTANT NOTE: For DTC C1531, proceed to step **19**.

- 14.** Disconnect the ground (-) negative terminal from the battery and **wait 60 seconds** before proceeding.
- 15.** Reinstall the knee airbag module and lower IP trim in reverse order of removal. Reconnect the negative battery cable.
- 16.** Connect SSM4 and clear the memory.
- 17.** Reset all the customers radio presets (and Navigation Favorites where applicable).
- 18.** Confirm all affected systems operate normally to complete the repair. **STOP** here unless diagnosing a DTC P1531.
- 19.** Use one of the following procedures (WITH or WITHOUT EPB) when DTC **C1531** is in memory and the VDC Warning Light is **ON**. For the other DTCs listed in this TSB, follow the diagnostics in the applicable Service Manual. Connect SSM4 and from the Brake Control System list, select the following data:
 - Master Cylinder Pressure Sensor
 - Stop Light Switch
 - EPB Switch Indicator

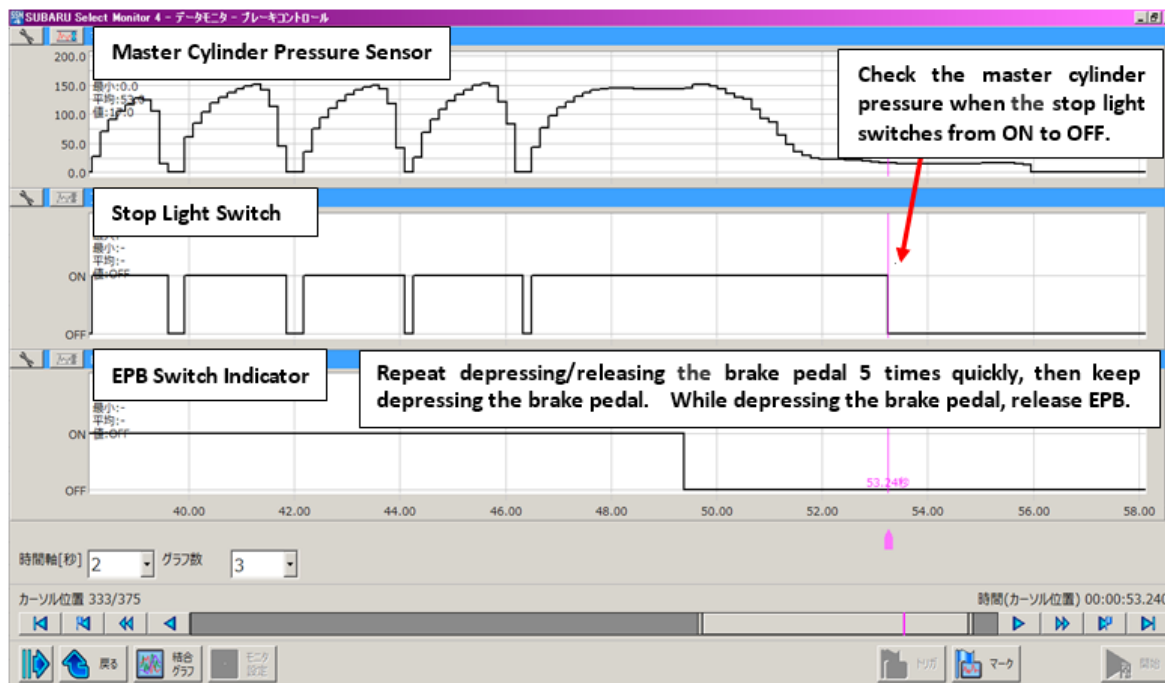
A: For vehicles **WITH** Electronic Parking Brake (EPB):

- a) Put the select lever to the P position and start the engine.
- b) Start the data monitoring on SSM-4.
- c) Apply Electric Parking Brake (EPB).

NOTE: Although the indicator lamp in the EPB switch is ON, pull the EPB switch to confirm proper EPB system operation.

- d) Without depressing brake pedal, make sure the stop light switch shows **OFF** on the SSM-4 data monitor.
- e) Depress and release the brake pedal 5 times quickly, then hold pressure on the brake pedal.
- f) While depressing the brake pedal, release EPB.
- g) After releasing EPB, gradually release the brake pedal and note the value for master cylinder pressure when the stop light switch turns from **ON** to **OFF**. The specification is Less than 15 bar (1.5 MPa). See the screen shot provided below for reference.
- h) If master cylinder pressure is out of specification, continue DTC C1531 diagnosis following the diagnostic procedures found in the applicable Service Manual.
- i) If master cylinder pressure is within specification, perform steps **16**, **17** and **18** above to complete the procedure.

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B: For vehicles WITHOUT Electronic Parking Brake (EPB):

- a) Put the select lever to the P position and start the engine.
- b) Start the data monitoring on SSM-4.
- c) Without depressing brake pedal, make sure the stop light switch shows **OFF** on the SSM-4 data monitor.
- d) Depress and release the brake pedal 5 times quickly, then hold pressure on the brake pedal.
- e) Gradually release the brake pedal and check the master cylinder pressure when the stop light switch turns from **ON** to **OFF**.
- f) If master cylinder pressure is out of specification, continue DTC C1531 diagnosis following the diagnostic procedures in the applicable Service Manual.
- g) If master cylinder pressure is within specification, perform steps **16**, **17** and **18** above to complete the procedure.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by an active Subaru Added Security Classic or Gold plan, this repair may be submitted using the following claim information:

| Labor Description | Labor Operation # | Labor Time | | | Fail Code |
|------------------------------------|-------------------|------------------------------------|----------|-----|-----------|
| | | Impreza Crosstrek WRX BRZ | Forester | | |
| STOP LIGHT SWITCH- ADJUSTMENT ONLY | A455-318 | 0.8 | | 0.5 | UAE-43 |
| MFI OBDII STOP LIGHT SWITCH- R&R | A455-311 | 0.9 | Forester | 0.7 | |

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IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.