

ATTENTION:
 GENERAL MANAGER
 PARTS MANAGER
 CLAIMS PERSONNEL
 SERVICE MANAGER

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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2010-2018MY Legacy and Outback
 2017MY Impreza
 2018MY Crosstrek
 2008-2013MY Forester

NUMBER: 07-131-18R

DATE: 01/26/18

REVISED: 06/11/18

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

INTRODUCTION:

This 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 (e. g. VDC and/or EyeSight) warning lamp to illuminate.

SERVICE PROCEDURE / INFORMATION:

The table below provides DTC applicability by vehicle model:

DTC	Legacy / Outback 2010 - 2014MY	Legacy / Outback 2015MY - Current	2017MY Impreza 2018MY Crosstrek	Forester
C0054	BLS OFF MALFUNCTION	n/a	n/a	BLS OFF MALFUNCTION
C0075	WHEEL CYLINDER PRESSURE SENSOR OUTPUT	n/a	n/a	REVERSE SIGNAL
C1531	n/a	BLS OFF / STUCK	BLS OFF / STUCK	BLS OFF / STUCK

REQUIRED MATERIALS:

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

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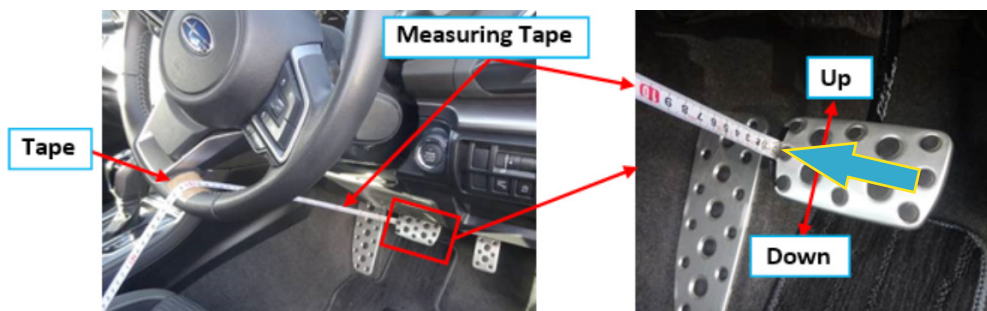
CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

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.

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1. Adjust the steering column to the lowest point and the telescopic position 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. **CAREFULLY** remove the lower dash trim and lower the knee airbag module following the procedure in the applicable Service Manual. It is **not** necessary to disconnect the airbag module harness connector. 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" (blue/yellow arrow). Make sure the measuring tape does not touch or scratch the IP lower trim.



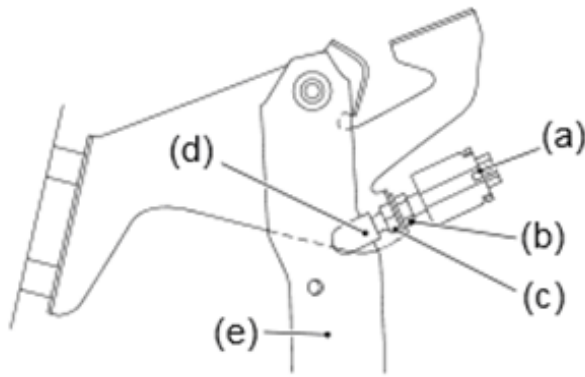
7. Put a reference mark on the steering wheel tape, make a measurement to the brake pedal as shown and record it.



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.

Legacy / Outback 2010MY - Current	2017 Impreza 2018 Crosstrek	Forester
3 to 8mm	3 to 5mm	3 to 8mm

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- (a) Stop Light Switch
- (b) Lock Nut A
- (c) Lock Nut B
- (d) Stopper
- (e) Brake Pedal

10. Loosen Lock Nut B (closest to switch body) and adjust pedal stroke by turning Lock Nut A.

TIP: Each quarter-turn (90 degrees) on Lock Nut A will change the pedal stroke by 1mm.

11. When the pedal stroke measurement is within the specified range, tighten Lock Nut B to retain the adjustment and torque to 6 ft. lbs. (8 Nm).

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.

12. 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 **10 & 11** 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.

NOTE: For DTC C1531, proceed to step **18**.

13. Disconnect the ground (-) negative terminal from the battery and **wait 60 seconds** before proceeding.

14. Reinstall the knee airbag module and lower IP trim in reverse order of removal. Reconnect the negative battery cable and proceed to step **16**.

15. Connect SSM4 and clear the memory.

16. Reset all the customers radio presets (and Navigation Favorites where applicable).

17. Confirm all affected systems operate normally to complete the repair.

18. Use one of the following procedures (WITH or WITHOUT EPB) when DTC **C1531** is in memory and the VDC Warning Light is ON. Connect SSM4 and from the Brake Control System list, select the following data:

- Master Cylinder Pressure Sensor
- Stop Light Switch
- EPB Switch Indicator

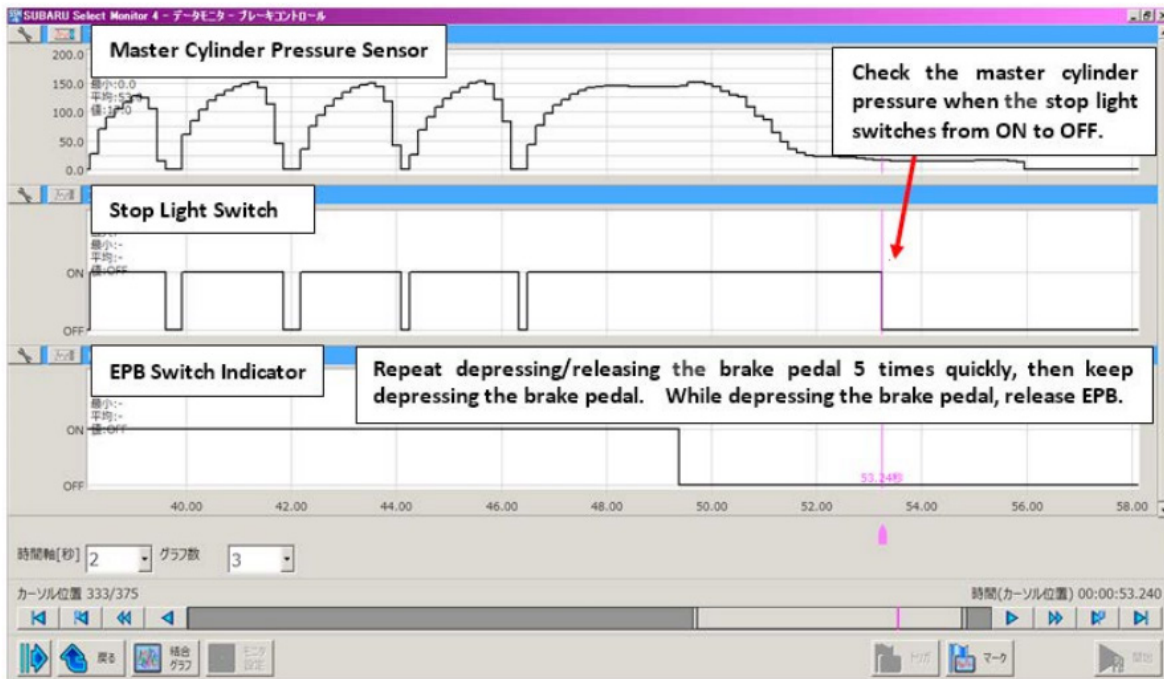
A: For vehicles **WITH** Electronic Parking Brake (EPB):

- 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).

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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 below for reference.
- h) If the master cylinder pressure is out of specification, continue DTC C1531 diagnosis following the procedure in the applicable Service Manual. If the value is within specification, the procedure is complete.



B: For vehicles WITHOUT 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 OFF. If the master cylinder pressure is out of the specifications, there must be another cause of the condition.
- f) Conduct troubleshooting for DTC C1531 by following the applicable Service Manual procedure.
- g) If the master cylinder pressure is within specifications, perform steps **13-17** above to complete the procedure.

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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
STOP LIGHT SWITCH- ADJUSTMENT ONLY	A455-318	Impreza Crosstrek	0.8	Legacy Outback Forester	0.5	UAE-43
MFI OBDII STOP LIGHT SWITCH- R&R	A455-311		0.9		0.7	

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.