

INTRODUCTION:

This bulletin announces a design change to the brake light switch (BLS) to reduce the possibility of improper illumination of the ABS and/or VDC warning lamp. In the event a product containing silicone is used to lubricate the BLS or for other purposes in the area around the switch, a non-conductive coating may develop over time on the internal electrical contacts and affect operation of the switch. On / Off signal output from the BLS is critical for proper operation of various systems on the vehicle. When the switch does not operate properly, warning lamps illuminate and DTCs are stored. A table with BLS-related DTCs and additional information is provided in the Service Procedure information. A photo of the switch changes is shown below. This bulletin also provides a diagnostic and adjustment procedure to be used when diagnosing brake light switch-related DTCs.

PART INFORMATION:

Description	Part Number	
SWITCH STOP LP BUL	83311FJ001*	

*Supersedes part numbers: 83311FG010 and 83311FG011



- The previous switch body was Gray in color while the new version is Blue and also has a greenish paint mark / dot applied to help identify it as the latest version.
- Fluorine grease is now used to lubricate the plunger and prevent silicone from potentially contaminating the switch contacts.

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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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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.

PRODUCTION CHANGE INFORMATION:

Vehicle / Model	Starting VIN	
Forester	G*539705	
Impreza	G*013102	
XV Crosstrek	G*267360	

The new brake light switch was incorporated into production per the table below.

SERVICE PROCEDURE / INFORMATION:

If any warning lamps are illuminated (or there is a customer concern of a warning lamp being illuminated previously), always check each system for stored DTC(s) and if found, diagnose as per the applicable Service Manual before proceeding with any BLS replacement. Use the table below for reference:

DTC	Select Monitor Display Items	Condition	Warning Lamp(s) Illuminated
C1531, C0054	BRAKE SWITCH OFF STUCK	ABS does not function.	ABS Warning Light
		VDC does not function.	VDC Warning Light
		Hill Start Assist does not function.	HSA Warning Light
B2813	BRAKE SWITCH	EyeSight system does not function.	EyeSight Warning Lights Check Engine Light
B2817 BRAKE LAMP	BRAKE LAMP	EyeSight system does not function.	EyeSight Warning Lights
		Stop Lights stay ON.	Pre-Collision Brake Warning
	Stop Lights inoperative.	Lane Departure Warning	
P0719	BRAKE SWITCH "B" CIRCUIT LOW	A/T control does not downshift when going up an incline. ATF Temperature Warning Light	
P1521	BRAKE SWITCH CIRCUIT RANGE (08-11MY Impreza WRX / STI sedan models only)	Ignition timing is retarded to control the engine torque.	Check Engine Light

If diagnosis leads to a faulty BLS, replace it with the latest version listed above following the procedure in the applicable Service Manual.

IMPORTANT: The BLS installation and adjustment procedure varies from model to model. Accurate BLS adjustment is critical for proper operation of all the systems listed in the table above.

• The following procedure applies to all models listed in this bulletin **EXCEPT** 2012-16 Impreza and XV Crosstrek (for those models, see below).

The minimum brake pedal travel specification (amount of pedal travel before the brake lamps come on) also varies between models. Using the illustrations below, measure the brake pedal stroke by first measuring the distance "A" between the floor mat and the pedal. Depress the brake pedal slowly until the brake lights come on "B" then record the second measurement. Subtract "B" from "A" to obtain the pedal stroke measurement.



The pedal stroke specification to activate the stop light switch is 5.5mm +/- 2.5mm (>3mm but <8mm).

If the measurement (switch activation) is out of specification, the stop light switch will need to be adjusted. When the brake lights come on too soon (not enough pedal stroke), the switch needs to be adjusted "inward" toward the bulkhead. If the pedal stroke is excessive before the brake lights come on, the switch will need to be adjusted outward toward the steering wheel. The switch adjustment is sensitive and in most cases, moving it just one should bring the operation into specification since one notch is equivalent to approximately 4mm of movement. Using a sharp-tipped permanent marker, put a reference mark on the switch (a) as shown below.



If the BLS needs adjustment, rotate the switch approximately 45 degrees to the left (counter-clockwise) to release it from the pedal bracket as shown in the illustration below. You will need to develop a "feel" for the adjustment notches along with how the BLS releases and locks back into position. Move the BLS inward or outward as required using your reference mark as a guide then rotate the BLS back to the right to "lock" it into position. Re-measure the pedal stroke. If the switch operation is within the specified limits, the adjustment procedure is complete.



• 2012-16 Impreza and XV Crosstrek Procedure:

The specification for 2012-14 Impreza and XV Crosstrek is 1.5 - 2.5 mm and is measured differently. A .020" thick spacer (a feeler blade is preferred) shown as (a) in the illustration below is used for setting the gap between the switch plunger and the pedal stopper. While pulling up the brake pedal toward the steering wheel, and with the stop light switch installed, insert the spacer (a) between the pedal stopper (b) and the switch (c) as shown in the illustration below. Turn the switch to the left to release it and back to the right (clockwise) by 45° to "lock" it into position. Remove the spacer and measure the gap (specification is 1.5 - 2.5mm) between the pedal stopper and switch plunger while pulling the pedal toward the steering wheel. Move the switch in or out until the proper gap is achieved.



Clear all applicable system memories and road test the vehicle to confirm no DTCs reset. Should any reset, continue with further diagnosis for each DTC as outlined in the applicable Service Manual.

Warranty / Claim Information

For vehicles within the Basic New Car Limited or California Emission Warranty period or covered by a 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
BRAKE LIGHT SWITCH R&R and ADJUST	A455-311	0.5	UAE-43

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.