

SERVICE ADVISORY

Published for Polaris Dealerships, Distributors, and Service Technicians

Division: On-Road Article TSA-18-02 Date: April 26, 2018

EXPIRATION DATE: December 31, 2020

VERSION: R01 (April 26, 2018)

SUBJECT:

2015-17 Slingshot – Brake Pressure Switch Replacement

PURPOSE:

Polaris has identified a quality issue affecting some Slingshot brake pressure switches. An intermittent failure of the switch triggers a "Brake Failure" malfunction indicator lamp, which is visible on the gauge cluster. There is no change in brake function as a result of this failure.

This Service Advisory has been released to communicate a process which enables dealers to assist customers and replace affected brake pressure switches without requiring pre-authorization from Polaris. Parts should only be replaced on vehicles exhibiting the issue as defined in this Service Advisory. DO NOT replace brake pressure switches proactively on units that are not exhibiting these symptoms. *Polaris reserves the right to expire this Service Advisory prior to the published expiration date for any reason.*

AFFECTED MODELS:

Model Years	Models	Affected Model range	
2015 - 2017	Slingshot	All models manufactured before 11/1/2016. Manufacture date can be found using "Unit Inquiry" on the deale	
	Slingshot SL		
	Slingshot SLR	website.	

CUSTOMER NOTIFICATION:

Dealers should not contact customers regarding this Service Advisory unless the customer has previously had this concern. Parts should only be replaced on vehicles exhibiting the issue as defined in this Service Advisory. Polaris will not send a letter to consumers notifying them of this Service Advisory.

WHAT YOUR DEALERSHIP SHOULD DO:

If your dealership encounters a vehicle exhibiting the issue outlined in this Service Advisory, proceed to the following steps. This Service Advisory is not a required update. This Service Advisory provides goodwill parts and labor coverage until December 31, 2020 on vehicles exhibiting the issue as defined in this Service Advisory. If a customer alerts the dealership about symptoms relating to a defective brake pressure switch, follow the repair procedure in this Service Advisory.

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WARRANTY CLAIM:

2015-17 Slingshot / Slingshot SL / Slingshot SLR		
Service Advisory #	TSA-18-02	
Claim Type	SA (Service Advisory)	
Labor Allowance	1.1 hours (66 minutes)	
Part Number / Description	2207836 (QTY.1) – KIT, BPS REPLACE	
Parts Availability	Available to order	
University Of Polaris Video Training Requirement	NO ¹	

¹ Polaris does not require one person from a dealership to be certified before parts ordering may occur and two people from a dealership to be certified before warranty claims may be processed.

INVENTORY / STOCK PART WARRANTY CLAIMS:

Located on the side of the brake pressure switch (4013596) is a 4 digit manufacture date code. In reference to the picture below, the first two digits (03) represent the week of manufacture and the last two digits (16) represent the year of manufacture. Dealers should review their service parts inventory and ensure switches dated **prior to 4316** (the 43rd week

of 2016) are NOT used for any repairs. The example below is a potentially defective switch since the date code indicates it was manufactured on the 3rd week of 2016.

Switches dated <u>4316 or later</u> (0317, 0118, etc.) can be used if the procedure outlined below is followed and the components specified in this procedure are used. For your convenience, a new Brake Pressure Switch service kit (PN 2207836) has been created for this advisory. The kit includes all parts and materials needed to successfully perform this repair and will represent the standard service part available on the dealer website.



IMPORTANT

Make sure the Brake Pressure Switch has a build date of 4316 or later.

NOTE

To remove these service parts from circulation, file a parts stock claim as directed below.

Please use the following process for filing PART STOCK warranty claim for any of the parts listed above.

- 1. Start a new Parts Stock warranty claim.
- 2. Select Product Line: SLI
- 3. Enter the Date Failed and Date Repaired information into the applicable fields.
- 4. Enter "TSA-18-02" in the CONCERN field.
- 5. Enter "TSA-18-02" in the CAUSE field.
- 6. Enter "TSA-18-02" in the CORRECTION field.
- 7. Enter the part number and quantity.
- 8. Enter warranty fail codes: 124/412/152.
- 9. Validate the parts.
- 10. Save and submit the claim to Polaris.

WARRANTY COVERAGE PERIOD:

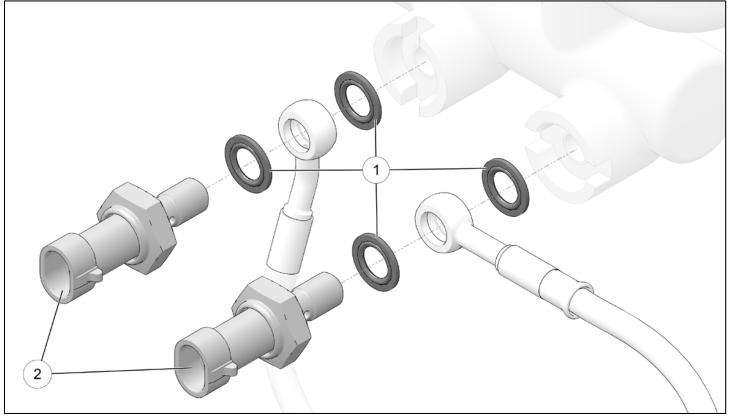
This Service Advisory for goodwill coverage is separate from, and does not alter or otherwise affect the terms of any existing warranty.

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PARTS RETURN OR DISPOSAL INFORMATION:

Once the warranty claim for each unit has processed, please review the "Check Returned Parts List" on your dealer website to determine whether or not Polaris has asked for the part(s) to be returned. If the part(s) were not identified as needing to be returned to Polaris, please dispose of the part(s) properly.

KIT CONTENTS (2207836)



REF	QTY	PART DESCRIPTION	PART NUMBER
1	4	STAT-O-SEAL	5413212
2	2	BRAKE PRESSURE SWITCH	4016380
	1	LUBRICANT (not shown)	8560254
	2	Shop Towel (not shown)	2830403
	1	Instructions, Kit (not shown)	9929251

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PART 1: STAT-O-SEAL REPLACEMENT

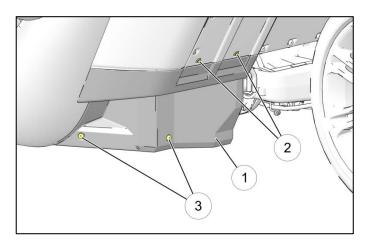
Tools Required:

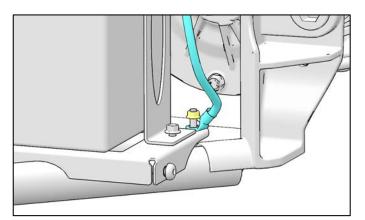
- Standard Screw Driver
- T40 Torx Bit & Driver
- 3/8" drive ratchet
- 3/8" drive wobble extension
- 8 mm, 13 mm, and 22 mm or 7/8" deep well sockets (3/8" drive)
- 10 mm socket (3/8" drive)
- Ratcheting torque wrench that can measure down to 35 in-lbs (3/8" drive)

REMOVAL

- 1. Park vehicle on a flat and level surface. Keep transmission in gear. Release parking brake. Turn key to "OFF" position and remove from vehicle.
- Remove the driver's side lower close out panel 1 by removing the push rivets 2 and T40 fasteners 3.
 Loosen and disconnect negative battery cable.

- 10 mm box end wrench
- 13 mm open end wrench
- Clear rubber hose ¼" inside diameter
- Clean container
- Multi-function Pliers
- Flashlight



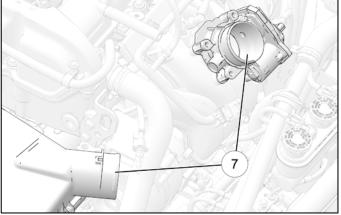


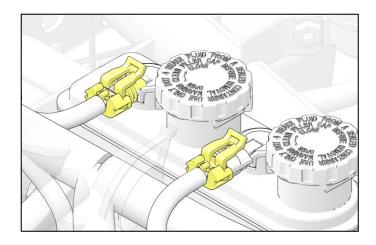
3. Open Vehicle Hood.

4. Loosen two hose clamps ④, Disconnect Air Temp Sensor ⑤ and Breather Hose ⑥. Remove Intake Hose to allow access to Brake Pressure Switches.

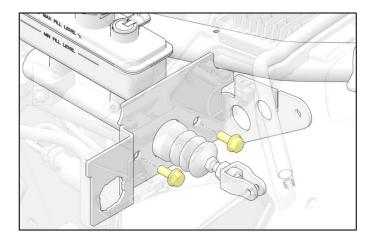
5. Cover Intake and airbox $(\overline{7})$ to prevent debris from entering the engine.

6. Disconnect Fluid Level Sensor connectors from Master Cylinder.





- 7. Disconnect Brake Pressure Switch connectors (8).



8. Remove two Master Cylinder Bolts to allow clearance to the Brake Pressure Switches.

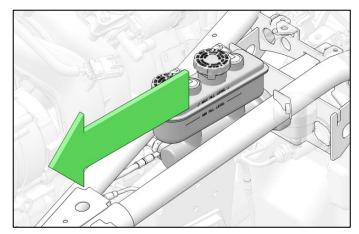
NOTE

Access master cylinder retaining bolts through driver footwell using a ratchet and extension or under hood area using a 13mm open end wrench.

9. Gently slide the Master Cylinder forward to allow access to remove the Brake Pressure Switches.

IMPORTANT

Be careful when moving the Master Cylinder not to damage any brake lines, wiring, or the master cylinder boot.



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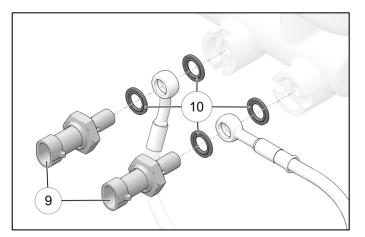
10. Remove and discard the Brake Pressure Switches 9 and Stat-O-Seals 10.

NOTE

Use a rag to contain the small amount of brake fluid that may drain from the Master Cylinder and brake lines.

CAUTION

Brake fluid will damage finished surfaces. Do not allow brake fluid to come in contact with finished surfaces.



INSTALLATION

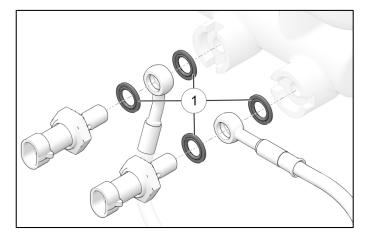
 Inspect NEW Brake Pressure Switches to make sure the date code is 4316 or later. Refer to Inventory / Stock Part Warranty Claims section at the beginning of this bulletin for more details.

IMPORTANT

Make sure the Brake Pressure Switch has a build date of **4316** or later.

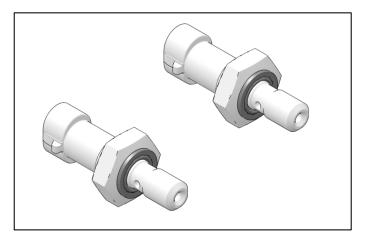


2. Apply a thin layer of lubricant (PN 8560254 provided in kit) to new Stat-O-Seals ①.



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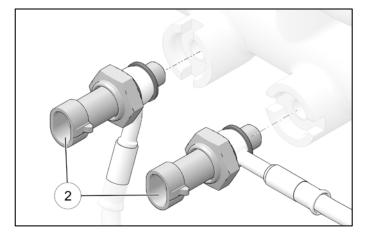
3. Install one Stat-O-Seal onto each Brake Pressure Switch until fully seated against switch base surface.



 Install the brake line ends and the remaining two Stat-O-Seals onto the Brake Pressure Switches. Thread the Brake Pressure Switches (2) into the Master Cylinder.

NOTE

Before tightening, make sure brake lines are properly aligned in notches of master cylinder as shown.



5. Stabilize master cylinder and torque Brake Pressure Switches to specification.

CRITICAL The Brake Pressure Switch torque is critical.

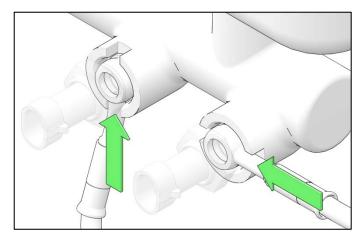
DO NOT OVERTORQUE

TORQUE

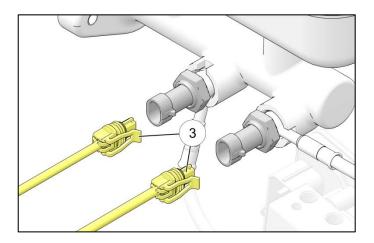
Brake Pressure Switch: 12 ft-lb (16 Nm)

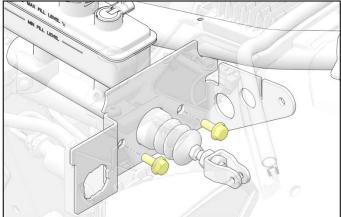
IMPORTANT

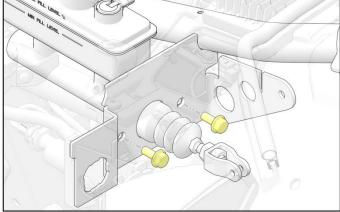
Visually inspect that all Stat-O-Seals are present and properly installed.

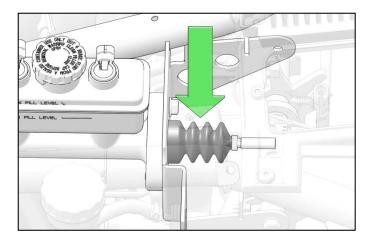


6. Connect both of the electrical connections (3) to the Brake Pressure Switches. Listen for an audible click.









7. Align Master Cylinder with mounting plate. Install two Master Cylinder fasteners. Torque fasteners to specification.

NOTE

Access master cylinder retaining bolts through driver footwell using an extension and torque wrench.

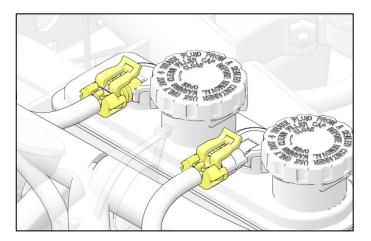
TORQUE

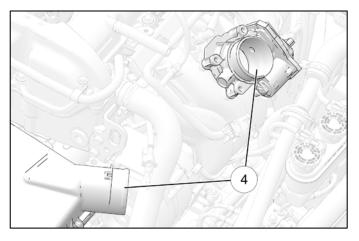
Master Cylinder Fasteners: 18 ft-lbs (24 Nm)

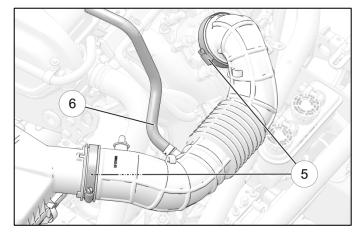
8. Use a flashlight to thoroughly inspect the master cylinder boot to confirm there are no cuts or tears.

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9. Reconnect the Fluid Level Sensors. Listen for an audible click.







10. Uncover the airbox and engine intake (4).

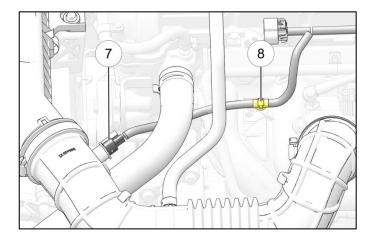
11. Reinstall Intake Hose. Connect two hose clamps (5), and breather hose (6). Torque hose clamps to specification.

TORQUE	
Intake Hose Clamps:	
35 in-Ibs (4 Nm)	

12. Connect air temp sensor 7.

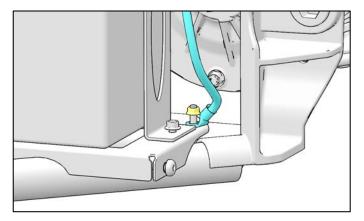
NOTE

Make sure the air temp sensor is properly routed underneath the breather hose and coolant line as shown and is properly secured (8).

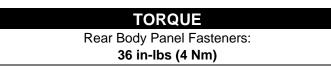


13. Connect ground (negative) cable eyelet to chassis stud. Torque to specification.

> TORQUE Negative Cable Eyelet Nut: 60 in-Ibs (7 Nm)



14. Install the driver's side lower close out panel. Torque fasteners to specification.



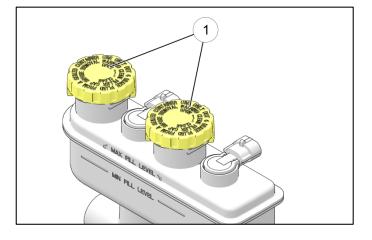
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PART 2: BRAKE BLEED PROCEDURE

CAUTION

Brake fluid will damage finished surfaces. Do not allow brake fluid to come in contact with finished surfaces.

 Clean Master Cylinder Caps ① thoroughly and remove. Fill both reservoir chambers to the MAX FILL line using Polaris DOT 4 Brake Fluid (PN 2872189). Reinstall Master Cylinder Caps.



2. Connect the Vehicle Interface Cable to the Digital Wrench diagnostic connector.

NOTE Make sure Digital Wrench is updated to version 3.8 9/14/2016 or later.



- 3. Switch the ignition key to the ON position.
- 4. Select the appropriate vehicle and wait for the status to display "Connected" in the lower left corner of the screen.

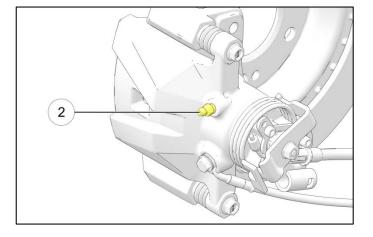


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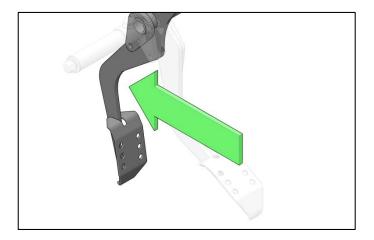
5. Select the Special Tests menu "Red Tool Box" icon.



- 6. Select the "ABS Brake Bleed Procedure".
- Starting at the rear wheel, install a box end wrench on the brake caliper bleeder screw (2). Attach a clean, clear 1/4" hose to fitting and place the other end in a clean container. Be sure the hose fits tightly on bleeder screw fitting.



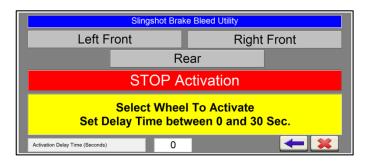
8. Have an assistant slowly pump the brake pedal until pressure builds and hold brake pedal down to maintain pedal pressure.



 Select the button in the Digital Wrench Brake Bleed Utility to activate the ABS module, applying pressure to the selected brake circuit.

NOTE

You can set an Activation Delay Time (seconds) in the white data field to allow time to prepare before activation begins.



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10. When you hear ABS activate, open rear brake caliper bleed screw ½ turn, pause and close. Time the opening of bleeder with ABS cycle start and close bleeder just before ABS cycle stops.

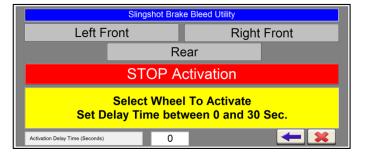
IMPORTANT

Do not release foot pedal before bleeder screw is tight or air may be drawn into the master cylinder.

11. Repeat steps 7-10 for a second time. Then continue to the front passenger side brake caliper, followed by the front driver side caliper. Select the appropriate brake in the Bleed Utility screen.

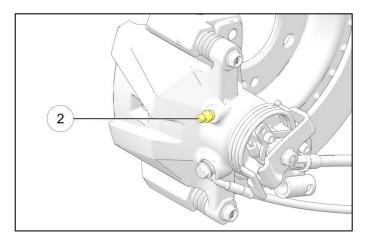
IMPORTANT

Check master cylinder fluid level after two ABS bleed cycles on any brake circuit. Do not allow the master cylinder to run dry during this process.



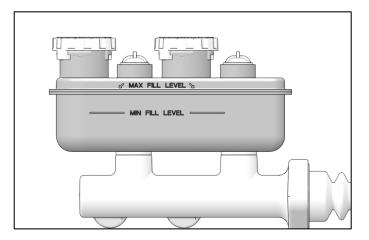
12. Torque all three brake caliper bleeder screws (2) to specification.

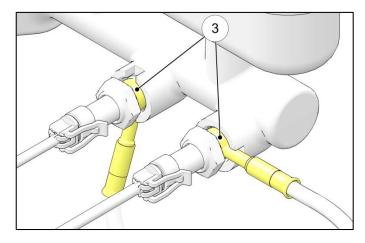
TORQUE
Bleeder Screw:
72 in-lbs (8 Nm)



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13. Refill both master cylinder reservoir chambers between MIN and MAX lines with Polaris DOT 4 brake fluid after process is complete. Do not overfill.





14. Check the brake system for any sign of leaks. Clean the brake line connections between the brake pressure switches and master cylinder (3) thoroughly using brake cleaner and compressed air. Apply pressure to brake pedal for three minutes. Thoroughly wipe brake line fittings and pressure switch connections with shop towel (PN 2830403) to inspect for any signs of fluid leak.

- 15. Field test the vehicle before putting into service. Check for proper brake system performance by completing three parking lot speed stops and three stops from normal vehicle operating speed.
- 16. Verify that no MIL indicator lights are present.