

TECHNICAL SERVICE BULLETIN

Slingshot

Bulletin Number: T-16-02 Model Years: 2016-2017

Safety Bulletin

Date: October 24, 2016

Service Bulletin

Service Alert Fax

Distribution: Owner/Principal Service Manager Sales Manager Parts Manager Technicians This Service Bulletin is located at www.polarisdealers.com

VERSION: R03 (February 23, 2017)

IMPORTANT STOP SALE SAFETY NOTICE! STOP SELLING ALL SLINGSHOT VEHICLES IMMEDIATELY UNTIL THE REPAIR PROCEDURE HAS BEEN COMPLETED ON ALL AFFECTED UNITS AT YOUR DEALERSHIP

IMPORTANT

If you are working with a printed copy, please verify you have the most current version of these instructions.

SUBJECT: 2016-2017 SLINGSHOT – Stat-O-Seal Replacement

PURPOSE:

Certain Slingshot vehicles may have been manufactured where the brake pressure switch was over torqued. This may result in a yielded brake seal posing a leak in the brake system. A leak in the brake system, after a period of non-use, may result in decreased brake performance increasing the risk of a crash.

Refer to "Unit Inquiry" on the dealer website to ensure each vehicle is within the specified VIN range for this Safety Bulletin. Refer to the repair procedure below for the proper steps to complete this bulletin.

Your service department **MUST** perform the following actions as directed by this Safety Bulletin:

- 1. Each member of your service department team must review this Safety Bulletin in its entirety.
- 2. Each member of your service department team must watch the training video prior to ordering ANY parts, completing ANY work, or submitting ANY warranty claim for this Safety Bulletin.

MODEL VEHICLE IDENTIFICATION NUMBER MODELS **MODEL NUMBERS** YEAR RANGE SLINGSHOT T16AASFAAA / AC / BA / CA / BC T16AAPFAAB / AJ / AH / BB / BH / BJ / CH / SLINGSHOT SL 2016 CJ/EH/EJ **Reference "Unit Inquiry" on the** T16AAPFAAG / AK / BG / BK / CG / CK / EG / SLINGSHOT LE dealer website or the Service Bulletin ΕK list on the STOP site to look up SLINGSHOT T17AASFAAA / BA / CA affected units. 2017 SLINGSHOT SL T17AAPFAAF / AL / BF / BL / CF / CL SLINGSHOT SLR T17AARFAAE / AM / BE / BM / CE / CM

AFFECTED MODELS:

CUSTOMER NOTIFICATION:

A customer notification letter will be sent to all registered owners of affected vehicles. In addition to the notification letter sent by Polaris, dealers are required to review sales records and contact consumers who have purchased a potentially affected vehicle. Make arrangements to perform the steps outlined in this Safety Bulletin immediately.

WARRANTY CLAIM / PARTS INFORMATION:

A single group claim may be submitted listing the complete (17 digit) VIN for machines with the same model number. File claim type **SB (Service Bulletin)**. Do **NOT** put more than one model number on a claim.

SERVICE BULLETIN #	T-16-02
CLAIM TYPE	SB (Service Bulletin)
LABOR ALLOWANCE	78 Minutes (1.3 Hours)
PART NUMBER / DESCRIPTION	2207061 (QTY.1) – KIT, SLG, BPS SEAL 7170107 (QTY.1) BULLETIN COMPLETION DECAL
PARTS AVAILABILITY	Limited quantities available by the end of November 2016. Supply meeting demand beginning January 2017.
UNIVERSITY OF POLARIS VIDEO TRAINING REQUIREMENT	YES*

*Polaris requires 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.

ACCESSORY REMOVE & REPLACE LABOR:

Polaris will cover labor for the removal and installation of accessories required to complete the bulletin work. Follow the steps below to obtain reimbursement.

For accessory removal and installation up to 1 hour of labor:

- 1. Start a new warranty claim under the Service and Warranty dropdown and enter the VIN.
- 2. Enter the Date Failed and Date Repaired information into the applicable fields.
- 3. Enter "T-16-02" in the Authorization field.
- 4. Enter the miles and hours.
- 5. Enter the labor time up to 1 hour.
- 6. Enter "T-16-02" in the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
- 7. Add part 0000511, quantity 1.
- 8. Enter warranty fail codes 124/412/151.
- 9. Validate the parts.
- 10. Save and submit the claim to Polaris.

For accessory removal and installation over 1 hour of labor:

- 1. Start a new Ask Polaris Case, Service & Warranty Question > Authorization: Non-Cosmetic & Polaris ESC or Authorization: Out of Warranty.
- 2. Enter your contact information and VIN, along with miles and hours into the applicable fields.
- 3. Enter "T-16-02" in the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
- 4. Enter warranty fail codes 124/412/151.
- 5. Add part 0000541, quantity 1.
- 6. Attach photos of the vehicle and accessories sufficient to support the labor time requested.
- 7. Submit the case to Polaris.

NOTE

Polaris requires dealers to maintain warranty records, including repair orders and supporting documentation for five years. All claims for additional labor, dealer transport/travel or part stock claims for T-16-02 are subject to audit and inspection. Infractions will result in chargebacks and fines in accordance with the Polaris Audit Policy

SAFETY BULLETIN CONTACT LIST & SCHEDULING TOOL

A new scheduling tool is available for dealers to keep a record of customers contacted and scheduled for bulletin repairs. This optional tool provides visibility for your dealership and will be helpful to track the status of scheduled service. For more information log in to <u>www.universityofpolaris.com</u>

WARRANTY COVERAGE PERIOD:

Warranty coverage for Safety Bulletin T-16-02 will begin on October 24, 2016. This bulletin has no expiration date.

DISPOSAL INFORMATION:

Dealers/Distributors:

Under no circumstances shall the parts removed in this repair be re-used, sold, or re-purposed for another application. It is your dealership / distributor's responsibility to make sure every part replaced (related to this bulletin) is taken out of circulation and disposed of properly.

SERVICE BULLETIN COMPLETION DECAL:

A Service Bulletin Completion Decal must be completed for this bulletin repair. Remove the hood and place the decal on an easily visible portion of vehicle. If you require more decals, order them through normal Polaris parts ordering channels.

T-16-02 REPAIR PROCEDURE:

	IMPORTANT
Seve tec	eral steps of this procedure require an audit by another dealership representative other than the chnician who is completing the repair. Completing these check backs is a critical component to ensuring the repair has been properly completed
An au	udit checklist will be provided with each kit. It must be completed and retained with the instruction sign-off and repair order.
וחווא	
	'erify that both Stat-O-Seals have been fully seated against the switch base surface.
□ V	'erify that the Brake Pressure Switches have been torqued using a torque wrench set to the correct specification and mark
w	vith a paint pen. Torque value: 12 ft-Ibs (16 Nm)
🗌 V	erify that the Master Cylinder Bolts have been torqued using a torque wrench set to the correct specification and mark
W	vith a paint pen. Torque value: 18 ft-Ibs (24 Nm)
🗌 V	erify a solid connection of the Intake Hose, Breather Hose and Air Temp Sensor. Verify the air temp sensor line is routed
р	roperly and the Intake Hose Clamps were torqued using a torque wrench set to the correct specification. Mark hose
С	lamps and breather hose clamp with a paint pen. Torque value: 35 in-lbs (4 Nm)
🗌 V	erify that the Negative Cable Eyelet Nut has been torqued using a torque wrench set to the correct specification and mark
W	vith a paint pen. Torque value: 60 in-Ibs (7 Nm)
🗌 V	erify that the ABS Brake Bleed Procedure has been completed TWICE at each wheel.
□ V s	'erify that the three Brake Caliper Bleeder Screws have been torqued using a torque wrench set to the correct pecification and mark with a paint pen. Torque value: 72 in-Ibs (8 Nm)
□ V	erify the master cylinder has been refilled to a fluid level between the MIN and MAX lines.
🗌 V	erify that the brake system leak check was performed and no signs of leaks were detected.

UNIVERSITY OF POLARIS VIDEO TRAINING REQUIREMENT

Each member of your service department team must watch the training video on University of Polaris prior to completing ANY work, or submitting ANY warranty claim for this Safety Bulletin. You must watch the video through the University of Polaris in order to get credit for watching the video. www.universityofpolaris.com

FEEDBACK FORM

A feedback form has been created for the installer to provide any comments, questions or concerns about the instruction video. The form is viewable on mobile devices by scanning the QR code or by clicking <u>HERE</u> if viewing on a PC.



KIT CONTENTS (2207061)



REF	QTY	PART DESCRIPTION	PART NUMBER
1	4	STAT-O-SEAL	5413212
	1	BRAKE FLUID, DOT 4 (not shown)	2872189
	1	LUBRICANT (not shown)	8560254
	1	T-16-02 Bulletin Completion Instructions & Dealer Confirmation	9927895
	2	Shop Towel	2830403

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 (7) to prevent debris from entering the engine.

6. Disconnect Fluid Level Sensor connectors from Master Cylinder.

7. Disconnect Brake Pressure Switch connectors (8).

- 6 5 4 7







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.

10. Remove the Brake Pressure Switches (9) and discard 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

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



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

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that both Stat-O-Seals have been fully seated against the switch base surface. Improperly seating Stat-O-Seals can cause damage to the seal and cause a brake system leak.

3. Install the remaining two Stat-O-Seals in between the brake line ends and the Master Cylinder. Install the Brake Pressure Switches (2).

NOTE

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



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

CRITICAL

The Brake Pressure Switch is torque critical. DO NOT OVERTORQUE

TORQUE

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

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify the brake



pressure switches have been torqued using a torque wrench set to the correct specification. Mark brake pressure switches with a paint pen to indicate the audit has been completed.

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

6. 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-Ibs (24 Nm)

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify the fasteners have been torqued using a torque wrench set to the correct specification. Mark fasteners with a paint pen to indicate the audit has been completed.





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



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

9. Uncover the engine intake (4).





- 10. 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)	

NOTE

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

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify a solid connection of the Intake Hose, Breather Hose and Air Temp Sensor. Verify the air temp sensor line is routed properly and the Intake Hose Clamps have been torqued using a torque wrench set to the correct specification. Mark hose clamps and breather hose clamp with a paint pen to indicate the audit has been completed.

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

TORQUE

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

IMPORTANT – AUDIT STEP

A secondary dealer representative must confirm that the Negative Cable Eyelet Nut has been torqued using a torque wrench set to the correct specification. Mark the Nut with a paint pen to indicate the audit has been completed.

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

TORQUE

Rear Body Panel Fasteners: 36 in-Ibs (4 Nm)





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 (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.



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.

- 9. 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.



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.

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the ABS Brake Bleed Procedure has been completed **TWICE** at each wheel.

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

TORQUE

Bleeder Screw: 72 in-Ibs (8 Nm)

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the Bleeder Screws have been torqued using a torque wrench set to the correct specification. Mark bleed screws with a paint pen to indicate the audit has been completed.

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.

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify the master cylinder has been refilled to a fluid level between the MIN and MAX lines.







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 break line fittings and pressure switch connections with shop towel (2830403) to inspect for any signs of fluid leak.

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the brake system leak check was performed and no signs of leaks were detected.

- 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. Install a completed Service Bulletin Completion Decal (7170107). Close the vehicle's hood.







IMPORTANT SAFETY RECALL

This notice applies to your vehicle Recall Campaign: 16V752 – Brake Seal Subject: 2016-2017 Slingshot / Slingshot SL / Slingshot LE Stat-O-Seal Replacement PLEASE READ IMMEDIATELY

Dear Slingshot Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. The Slingshot Division of Polaris Industries Inc. has decided that a defect which relates to motor vehicle safety exists in some 2016-2017 Slingshot vehicles. Our records indicate that you have purchased a potentially affected vehicle.

The reason for this recall:

Polaris has determined that some Slingshot vehicles were manufactured with a brake system seal that does not meet Polaris quality standards. Some vehicles may have been manufactured where the brake pressure switch was over torqued. This may result in a yielded brake seal posing a leak in the brake system. A leak in the brake system, after a period of non-use, may result in decreased brake performance increasing the risk of a crash.

What Polaris and your dealer will do:

While parts availability may be limited, Polaris is working with suppliers to procure parts as soon as possible. Your Polaris Slingshot dealer has been authorized to complete the updates outlined below at no cost to you:

Affected Component	Repair Action
Recall T-16-02 Brake Seals	Install new brake pressure switch seals to decrease the risk of a leak

What you should do:

Polaris will be sending you a follow up communication no later than the end of November regarding the next steps for completing these bulletins. Once you receive this letter, please contact your local Slingshot dealer at your earliest convenience to schedule an appointment to have bulletin repairs performed. When making contact with your dealer, discuss parts availability, their schedule and how long they will need to keep your vehicle to complete the updates.

If you have questions or if you need more information:

While your Slingshot dealer is in the best position to answer your questions, if you have any questions that your dealer cannot address, if you are having difficulty obtaining the recall repairs outlined in this letter, or if you need assistance finding a Slingshot dealer, please visit the Slingshot web site at <u>http://www.polaris.com/en-us/slingshot</u> or contact our Slingshot Consumer Service Department by calling 1-855-863-2284.

This notice was mailed to you according to our most current registration information. If you no longer own your Slingshot vehicle, please contact your local Slingshot dealer to have the ownership information changed. The Slingshot Consumer Service Department cannot change ownership information without identification. Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

If you have had these repairs performed before you received this letter, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall. For more information regarding reimbursement please contact your Slingshot dealer or the Slingshot Consumer Service Department using the information above.

If you believe that the Slingshot Division of Polaris Industries Inc. has failed to remedy this defect without charge or is unable to do so within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, D.C. 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or on the web go to http://www.safercar.gov.

Please accept our apologies for any inconvenience this may cause you. Your safety and continued satisfaction with your Slingshot is our primary concern. Thank you for your prompt attention to this matter.

Sincerely,

The Polaris Slingshot Team