



Release Date: November 5, 2019

# IND

**Communication #:** I-19-03

Model Year(s): 2014-2019

- Confidential and Proprietary -

# VERSION: R02 (November 6, 2019)

\*\*updated shift drum pin length dimension\*\*

# **IMPORTANT STOP SALE SAFETY NOTICE!**

Stop selling affected vehicles immediately until the repair procedure has been completed on affected units at your dealership. Federal law prohibits the sale of products subject to a recall. Selling such products could subject the seller to substantial penalties.

## IMPORTANT

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

# SUBJECT: 2014–2019 INDIAN MOTORCYCLE (111 C.I.) GEAR POSITION SWITCH PURPOSE

Indian Motorcycle has determined the gear position switch used on 2014-2019 (111 c.i.) motorcycles may provide an inaccurate signal, which can lead to an incorrect gear being displayed. Oxidation on the contacts of the gear position switch may cause a change in resistance values resulting in the rider display indicating an incorrect gear. Incorrect gear indication during start-up can increase the risk of a crash.

Indian Motorcycle has released this Safety Bulletin, as an interim action, with instructions to inspect and clean the gear position switch on all 2014–2019 (111 c.i.) motorcycles in inventory. We are targeting a resolution by **Spring 2020**, at that time, a new communication will be released with additional information. In the interim, the gear position switch inspection and cleaning must be performed before any 2014–2019 Indian Motorcycle (111 c.i.) models can be retailed.

# AFFECTED MODELS

MODEL YEAR	MODELS	VEHICLE IDENTIFICATION NUMBER RANGE	
2014-2019	Chief, Chief Classic, Chief Dark Horse, Chief Vintage	Reference Unit Inquiry on the dealer website or the Service Bulletin list on the STOP site to lookup affected VINs.	
	Springfield, Springfield Dark Horse		
	Chieftain, Chieftain Classic, Chieftain Dark Horse, Chieftain Limited, Chieftain Elite		
	Roadmaster, Roadmaster Classic, Roadmaster Elite		

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# CUSTOMER NOTIFICATION

Indian Motorcycle will notify consumers by mail no later than 12/28/2019 to inform them of the concern and repair timeline. Consumers will also be reminded of the correct vehicle starting technique. If a gear position concern is identified, or the consumer does not feel comfortable riding their motorcycle, they will be asked to contact an authorized Indian Motorcycle Dealer for further instruction. Indian Motorcycle has also released an interim field communication ISA-19–03 to manage isolated cases mentioned above and consumer concerns regarding the gear position switch.

# WARRANTY CLAIM PARTS INFORMATION

In most cases, this Bulletin will not require parts to complete. If parts are required, they will be excluded from the standard RMA policy and cannot be returned.

2014–2019 INDIAN MOTORCYCLE (111 C.I.)				
Bulletin #	I-19-03			
Claim Type	SB (Service Bulletin)			
Labor Allowance	0.8 hours (48 minutes)			
Part Number / Description	0000541 (QTY 1) Bulletin Misc Labor			
Parts Availability	NA			
University of Polaris Training Required	Yes <sup>1</sup>			

<sup>1</sup>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 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:

- 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 in Indian Motorcycle® I-19-03 the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
- 4. Enter warranty fail codes 127/277/132.
- 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.

# **BULLETIN CONTACT LIST & SCHEDULING TOOL**

A scheduling tool is available for dealers to keep a record of customers contacted and scheduled for this bulletin. 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 http://www.universityofpolaris.com.

# COVERAGE PERIOD

Coverage will begin on 11/5/2019.

# UNIVERSITY OF POLARIS TRAINING REQUIREMENT

Each member of your service department team must complete the training on University of Polaris prior to completing **ANY** work, or submitting **ANY** warranty claim for this Bulletin. You must complete the entire course on University of Polaris in order to get credit. www.universityofpolaris.com

# **PARTS RETURN / DISPOSAL INFORMATION**

Under no circumstances shall the parts removed 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 communication) is taken out of circulation and disposed of properly or returned to Polaris (if required).

# **REPAIR AUDIT INFORMATION**

IMPORTANT

Several steps of this procedure require an audit by a service manager, owner, or lead technician that completed the bulletin training but did not complete the repair. Please note that there is NOT an associated Dealer Confirmation document that needs to be completed and retained by the dealer.

# TOOLS REQUIRED

- Small Flat-Blade Screwdriver
- 5mm, 6mm, 8mm allen socket
- 1/4" drive, 6" socket extension
- 7mm socket
- Short (stub-nosed) 5mm allen wrench (example shown below)

- Zip-Tie
- Scotch-Brite<sup>™</sup> green (600 grit or finer)
- Torque Wrench
- Magnet
- Digital Mulit-Meter

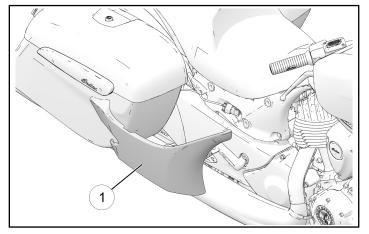
# **GEAR POSITION SWITCH INSPECTION / CLEANING**

## REMOVAL

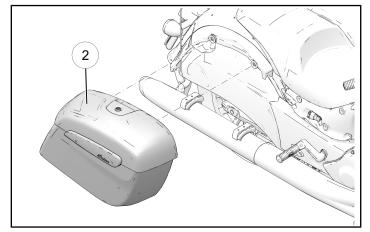
## NOTICE

When moving the transmission through the gears, it may be necessary to elevate the rear wheel and rotate back and forth by hand until the gear is fully engaged.

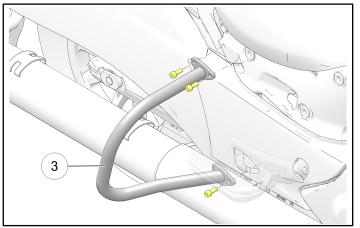
- 1. Park the motorcycle on a lift table with the wheel clamped in a wheel vise.
- 2. Turn the ignition off.
- 3. Remove the seat. Disconnect the Negative (-) battery terminal.
- 4. Remove upper right-hand sidecover ①.



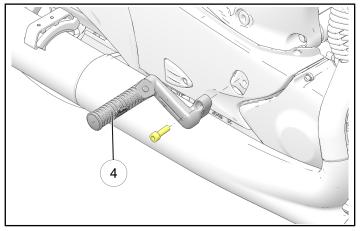
5. Remove right-hand saddlebag (2) (if equipped).



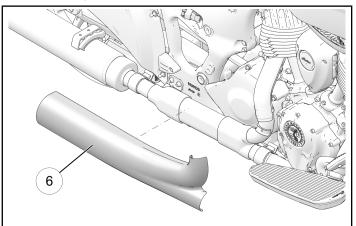
6. Using a 6mm allen socket, remove right-hand rear tip-over bar ③ (if equipped).



 Using a 8mm allen socket, remove right-hand passenger footpeg ④ (if equipped).

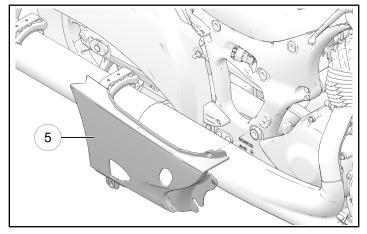


8. Using a flat-bladed screwdriver, loosen clamps and remove right-hand rear heatshield (6).

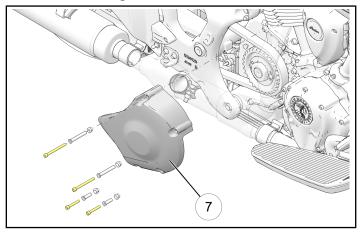


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9. Remove right-hand lower sidecover (5).



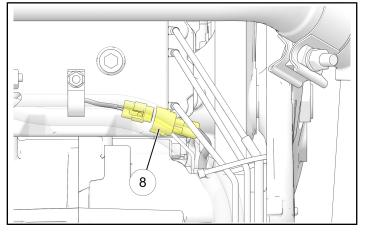
10. Remove drive sprocket cover I.



## IMPORTANT

Use of short (stub-nose) 5mm allen wrench is necessary for bottom two bolts and front bolt.

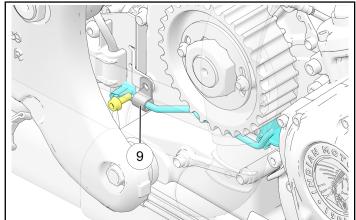
11. From under the motorcycle, unplug gear position connector (8).



## IMPORTANT

Use a small flat-blade screwdriver to depress the retention feature and release the connector.

12. Remove P-clip (9) securing the gear position switch wire.



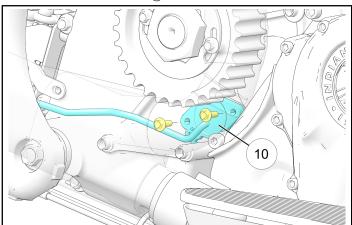
## NOTICE

It can be helpful to use a zip-tie to hold the belt out of the way during this step.

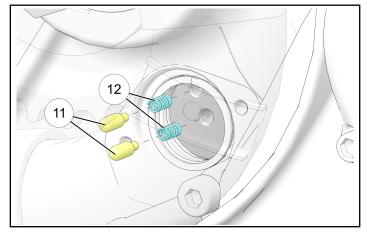
## IMPORTANT

Use of 1/4" drive 6" extension, 6mm allen socket is necessary for screw removal.

13. Using a 7mm socket, remove gear position switch fasteners and switch <sup>(1)</sup>.



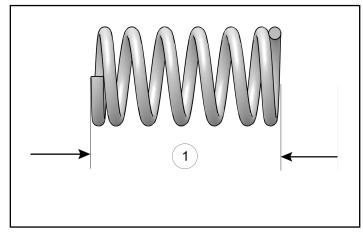
14. Remove shift drum pins 1 and springs 2.



#### NOTE

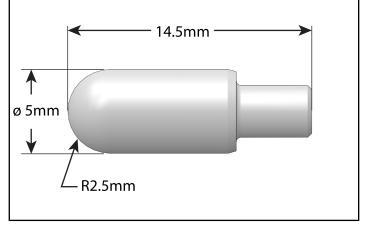
Use magnet to aid in removal and re-installation of pins and springs (assemble spring onto pin).

15. Measure the free length of the shift drum springs. If the measurement is out of specification, the spring must be replaced.



MEASUREMENT				
① 12.5 mm ± 0.5 mm				
12.5 mm ± 0.5 mm				

16. Examine pin for excessive wear at contact point. The pin should move freely in shift drum bore and be smooth and rounded at contact point.



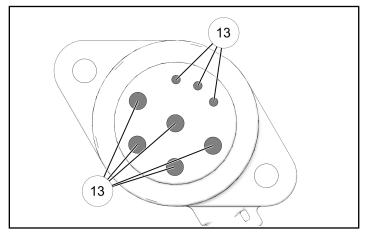
## IMPORTANT

If the nose of the pin is visibly worn or does not move freely in the drum bore, the pin must be replaced.

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# **GEAR POSITION SWITCH CLEANING**

Using a Very-Fine abrasive pad, such as Scotch-Brite<sup>™</sup> green **(600 grit or finer)**, apply light pressure by hand in a rotary motion to the contact points <sup>(3)</sup> on the switch face until they are clean and uniform in color. Use only enough movement to put a light shine on the brass contacts.



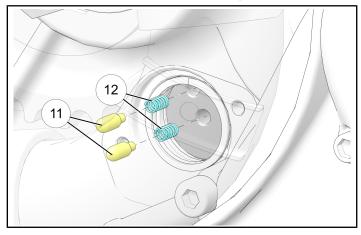


## CAUTION

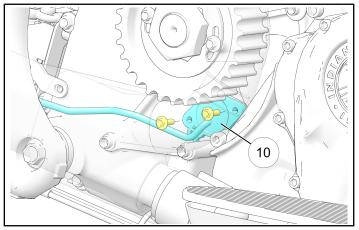
Scotch-Brite<sup>™</sup> Green (600 grit is the coarsest abrasive that should be used). DO NOT use a power tool or rotary tool to polish.

# INSTALLATION

1. Install shift drum pins 1 and springs 2.



2. Install gear position switch (1). Torque fasteners to specification.



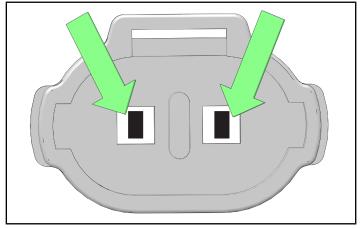
#### IMPORTANT

Make sure the gear position switch is properly seated before tightening fasteners.

#### TORQUE

Gear Position Switch Fasteners: 43 in-lbs (5 N·m)

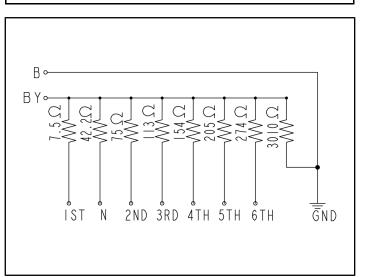
- 3. Set multi meter to measure resistance (" $\Omega$ " Ohms) to test the switch for proper resistance.
- 4. Connect one meter lead to each of the pins on the switch connector.



5. Watch the resistance readings as the transmission is shifted through each of the 6 gear positions including Neutral. The meter readings should match the resistance specifications given in the following diagram.

## IMPORTANT — AUDIT STEP

A secondary dealer representative must verity that the meter readings match the resistance specifications below.



	RESISTANCE (OHMS)		
GEAR	MIN	NOMINAL	MAX
lst	7.107291	7.481359	7.855427
Ν	39.53571	41.61654	43.69737
2nd	69.51783	73.17666	76.83549
3rd	103.4657	108.9113	114.3569
4th	139.1792	146.5044	153.8296
5th	186.4891	196.3043	206.1196
6th	248.1241	261.1833	274.2424

#### STOP!

If resistance values from any gear position **DOES NOT** show in the specified range, take pictures of the meter readings and start an ASK Polaris case.

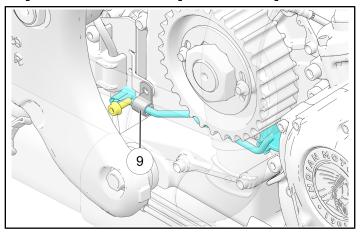
US/CAN: Submit an Ask Polaris Service & Warranty Question> All Vehicle Diagnostic case.

INT'L: Contact your Country Service Department.

If resistance values from all gear positions **<u>DOES</u>** show in the specified range, proceed to step 6 and complete Indian Motorcycle<sup>®</sup> I-19-03.

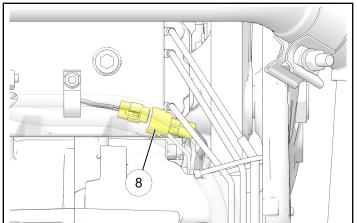
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6. Install P-clip (9) and fastener securing the gear position switch wire. Torque fastener to specification.



TORQUE P-clip Fastener: 84 in-lbs (9 N·m)

7. From under the motorcycle, plug in the gear position connector (8).



#### IMPORTANT

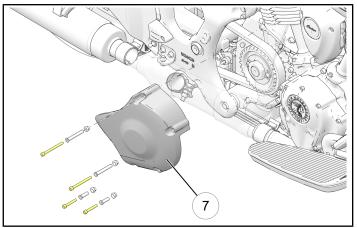
Listen for an audible click to indicate the connection is secure.

## IMPORTANT — AUDIT STEP

A secondary dealer representative must verify the connection is secure.

8. If removed, install the O2 sensor p-clip to the top drive sprocket cover fastener.

9. Install drive sprocket cover ①. Torque fasteners to specification.



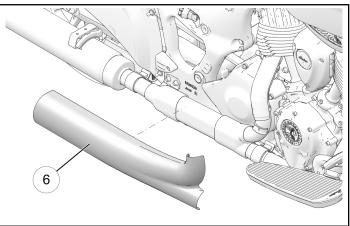
## NOTICE

When re-installing, bolts must be loosely assembled into the cover before assembling onto motorcycle.

## TORQUE

Drive Sprocket Cover Fasteners: 84 in-lbs (9 N·m)

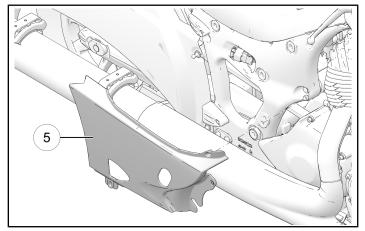
10. Install right-hand rear heatshield (6). Torque clamps to specification.



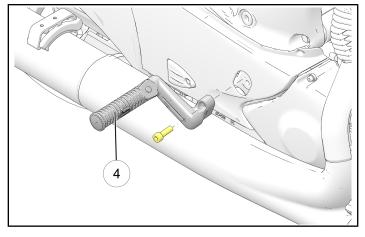
## TORQUE Heat Shield Clamps: 31 in-lbs (4 N·m)

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11. Install right-hand lower sidecover  $\mathfrak{S}$ .

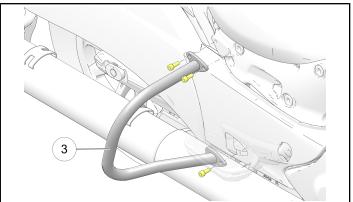


12. Install right-hand passenger footpeg ④ (if equipped). Torque fastener to specification.



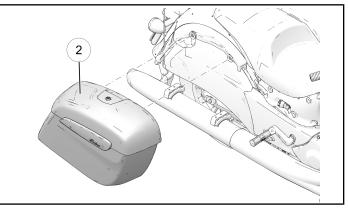
**TORQUE** Footpeg Fastener: **35 ft-lbs (48 N**·**m)** 

13. Install right-hand rear tip-over bar ③ (if equipped). Torque fasteners to specification.

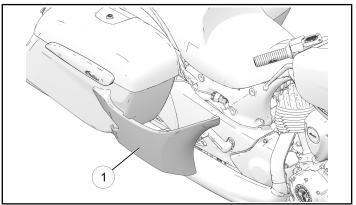




14. Install right-hand saddlebag O (if equipped).



15. Install upper right-hand sidecover ①.



16. Connect the negative (-) battery terminal. Install the seat. Torque fasteners to specification.

## TORQUE

Battery Terminal Fasteners: 40 in-lbs (5 N·m)

#### TORQUE

Seat Fasteners (All): 84 in-lbs (9 N·m)

- 17. Road test the motorcycle to ensure the correct gear position is indicated, in every gear, on the instrument cluster.
- 18. File a claim for Indian Motorcycle® I-19-03