



# SERVICE BULLETIN

**Release Date:** February 28, 2020

**Communication #:** I-20-01-A/B

**Expiration Date:** February 28, 2021

# IND

**Model Year(s):** 2020

— Confidential and Proprietary —

**VERSION: R02 (April 7, 2020)**

**\*\*Add INTL models\*\***

## IMPORTANT

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

## SUBJECT: ECU CALIBRATION REFLASH / THROTTLE BODY INSPECTION

### PURPOSE

Indian Motorcycle Technical Service has received isolated reports of Challenger motorcycles exhibiting poor run quality and engine misfire shortly after setup and/or delivery to customer. Indian Motorcycle engineering has released an updated ECU calibration and throttle body inspection procedure to correct this issue on affected motorcycles.

### AFFECTED MODELS

MODEL YEAR	MODELS	VEHICLE IDENTIFICATION NUMBER RANGE
2020	Indian Challenger	Reference Unit Inquiry on the dealer website or the Service Communications list on the STOP site to lookup affected VINs.

### CUSTOMER NOTIFICATION

Dealers are required to review their sales records and make arrangements with customers for Bulletin completion. In addition to consumer units, dealers are required to correct any affected units in their inventory. Indian Motorcycle will NOT be mailing a notification letter to consumers affected by this Bulletin.

## WARRANTY CLAIM PARTS INFORMATION

Bulletin parts are excluded from the standard RMA policy and cannot be returned. An Initial Recommended Order Quantity has not been provided for this bulletin. If necessary, parts needed to complete Part B of this bulletin will be allocated once an ASK Polaris case has been submitted and approved. For more details, refer to University of Polaris training course "Polaris Item Availability and Daily Ordering" and click on "Bulletin Ordering Training".

ECU REFLASH & THROTTLE BODY INSPECTION	
<b>Bulletin #</b>	I-20-01-A
<b>Claim Type</b>	SB (Service Bulletin)
<b>Labor Allowance</b>	0.6 hours (36 minutes)
<b>Part Number / Description</b>	0000541 (QTY 1) Bulletin Misc Labor
<b>Parts Availability</b>	NA
<b>University of Polaris Video Training Required</b>	NO

THROTTLE BODY REPLACEMENT	
<b>Bulletin #</b>	I-20-01-B
<b>Claim Type</b>	SB (Service Bulletin)
<b>Labor Allowance</b>	1.3 hours (78 minutes)
<b>Part Number / Description</b>	<i>Requires authorization through an ASK Polaris case. Additional parts and labor required to complete I-20-01-B to be authorized through an ASK Polaris case.</i>
<b>Parts Availability</b>	Available to order when directed by ASK Polaris
<b>University of Polaris Video Training Required</b>	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 up to 30 minutes of labor:

Enter the actual labor time for the removal and installation into the Accessory R&R Min Field on the bulletin claim.

### For accessory removal and installation over 30 minutes of labor:

1. Start a new Ask Polaris Case, Service & Warranty Question > Authorization: In Warranty or 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 Indian Motorcycle® I-20-01, and I-20-01 in the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
4. Enter warranty fail codes 140/280/137.
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.

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## **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 February 28, 2020. Coverage will expire on February 28, 2021.

## **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](http://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).

## **FEEDBACK FORM**

A feedback form has been created for the technician to provide Polaris with an overall satisfaction rating for the instructions, provide comments on your experience or upload pictures/video. This feedback form is viewable on a mobile device by scanning the QR code or by clicking [HERE](#) if viewing this document electronically.



# I-20-01-A ECU REFLASH & THROTTLE BODY INSPECTION

## TOOLS REQUIRED

- Synchronizing Tool - RMI-TO-007
- Digital Wrench w/ MultiLink XP
- Box Cutter
- Long Needle Nose Pliers

## ECU REPROGRAMMING PROCEDURE

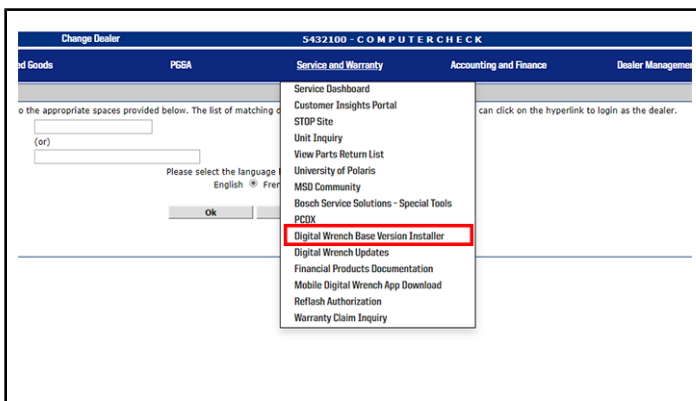
1. Verify that Digital Wrench version 4.1 Update 2/26/20 or later has been installed on your PC or laptop and proceed to step 6.
3. Once the Base Version is installed, go to your dealer homepage and select **Digital Wrench Updates** from the **Service and Warranty** dropdown menu.

**If you do not have Version 4.1 – Update 2/26/20 or later installed, you must first download it before proceeding with the reflash.**

### NOTICE

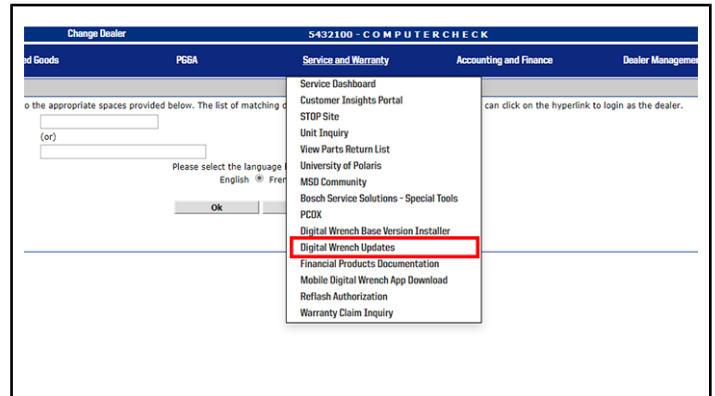
If you do not have Digital Wrench installed on your computer, you must first download the **Digital Wrench Base Version Installer** (STEP 2).

2. To download Digital Wrench Base Version, go to your dealer homepage and select **Digital Wrench Base Version Installer** from the **Service and Warranty** dropdown menu and download.

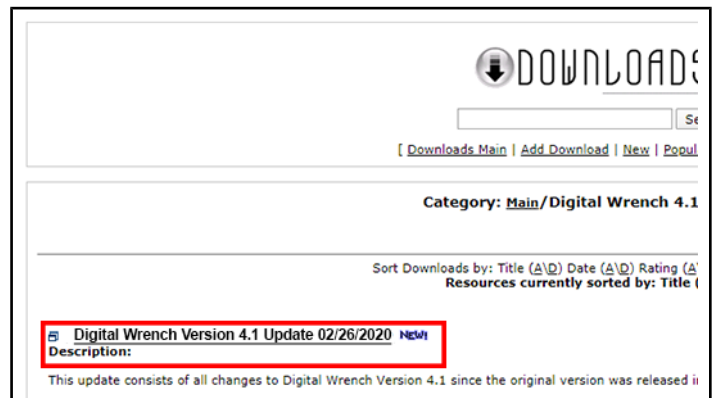


### NOTICE

International Subsidiaries and Distributors use the **Digital Wrench Subscriptions** link to purchase and update your digital wrench software.

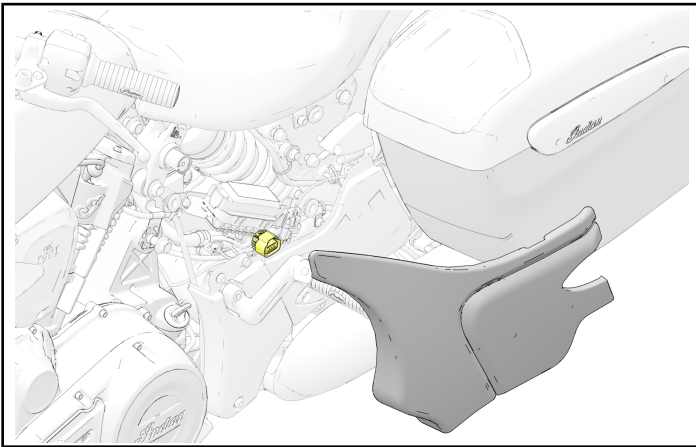


4. Click on **Digital Wrench Version 4.1 Updates**.
5. Download and install **Digital Wrench Version 4.1 update 2/26/20 or higher**.



6. Park the motorcycle on a lift table with the wheel clamped in a wheel vise.
7. Turn the ignition off.

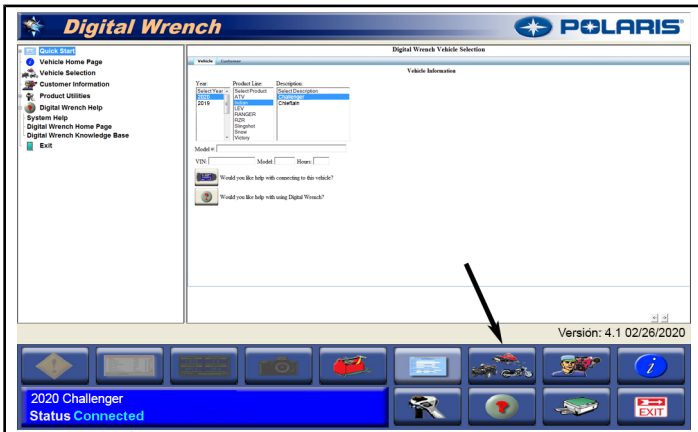
8. Remove the left-hand side upper cover.



9. Connect MultiLink XP cables to PC and vehicle.

10. Open the Digital Wrench program.

11. Select the model year, product line, and vehicle description by selecting the “Change Vehicle Type” icon .



12. Select the **Special Tests** tab.

13. Select **Engine Controller Reprogramming**.



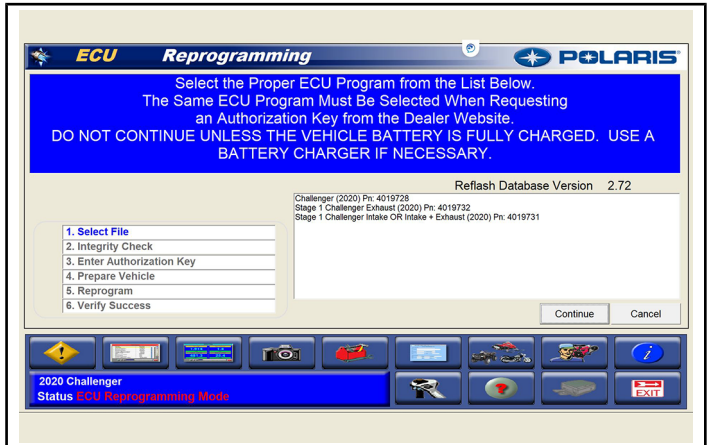
**NOTICE**

Digital Wrench will automatically identify current software levels and determine which modules require software updates.

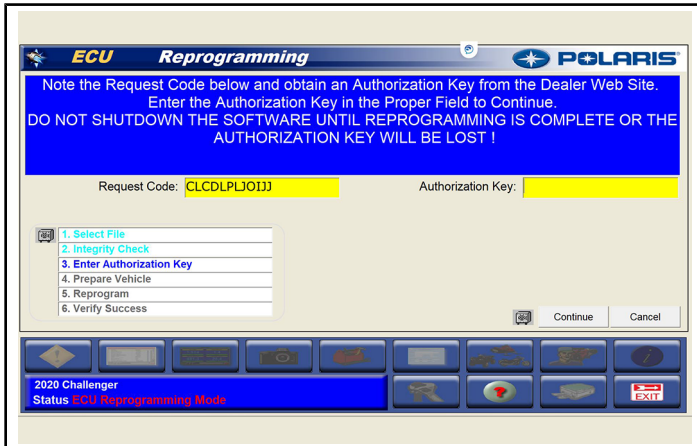
**IMPORTANT**

Make sure the vehicle battery is fully charged or connected to a battery charger before proceeding.

14. Select the applicable reflash from the list.



- For motorcycle with **STAGE CAL** updates, contact Indian Motorcycle Technical Service to obtain a reflash authorization key.



15. Follow the on-screen prompts until all control modules have been updated.
16. Once the flash is complete, hit the continue button and leave Digital Wrench connected and ignition powered ON. Do **NOT** touch the unit for 35 seconds.
17. Power ignition off and wait 130 Seconds.
18. Check / clear any stored fault codes, disconnect Digital Wrench and test ride the motorcycle.

## THROTTLE BODY INSPECTION

Indian Motorcycle shipped synchronization gauges to North America dealers the week of 2/24/2020. Although the gauge kit is designed for 4 cylinder engines, only two gauges are to be used for the following procedure. Indian Motorcycle recommends using two gauges that are located next to each other.

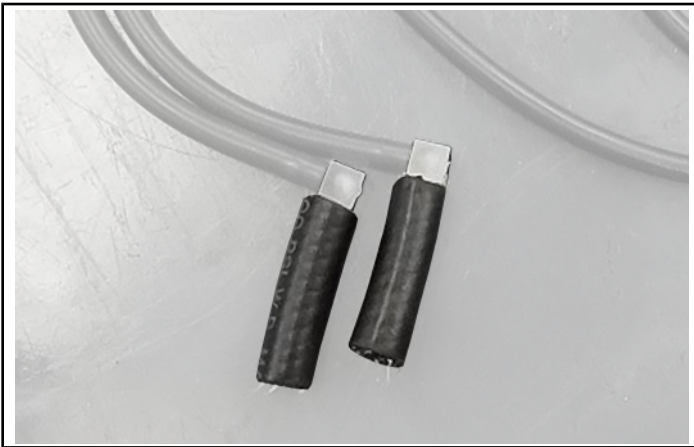
1. If gauges do not read zero at atmospheric pressure, as shown in the picture below, remove the plastic cover and carefully adjust the adjustment screw until needles are in the center of the white strip.



### IMPORTANT

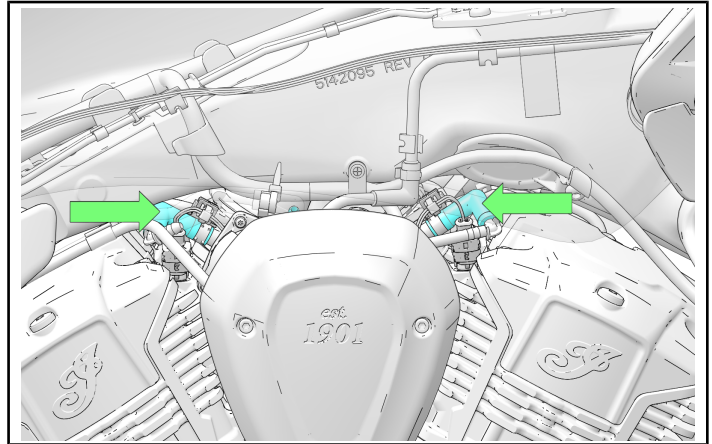
Both gauges must read the same value before use.

2. Un-wrap the flexible lines and cut them about 4 inches from the ends. Assemble each part of the lines to the plastic needle valve included in the kit. Both valves should be installed the same distance from each of the two gauges to ensure pressure pulses are read the same.
3. Attach short rubber hose/adaptor section and 90 degree fitting to the end of the vacuum line that will be attached to the purge port on the throttle body.

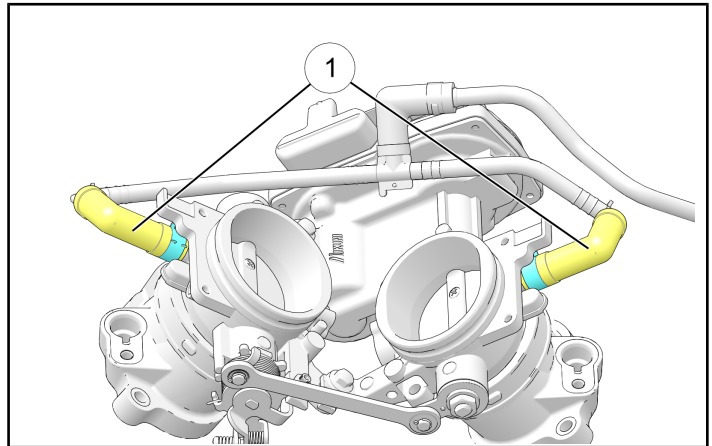


4. Start the motorcycle and allow the engine to run until it reaches operating temperature (the cooling fan turns on).

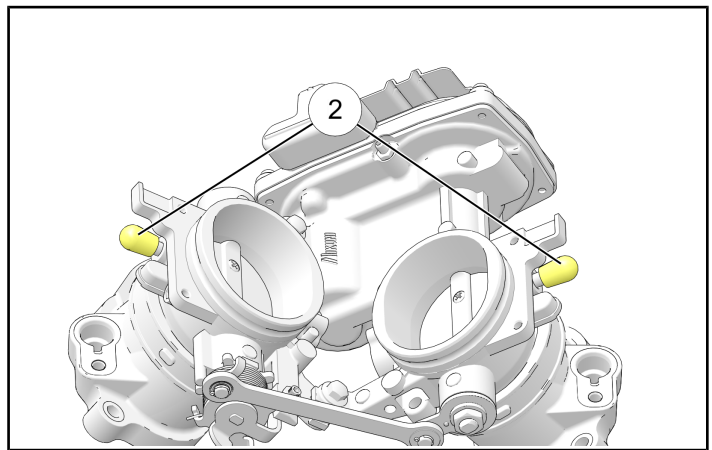
5. Turn off the motorcycle.
6. Working from the right-hand side of the motorcycle, use long needle-nose pliers to remove both purge lines OR purge line plugs from the throttle body.



- **50 STATE:** Remove both purge lines ① from the throttle body.



- **49 STATE:** Remove the purge line plugs ② from the throttle body.



### IMPORTANT

Be careful not to lose the purge line plugs.

7. Connect both rubber hoses to the throttle body purge ports using a set of long needle-nose pliers.

**IMPORTANT**

Be careful not to damage the fuel injector electrical wires when attaching or removing the rubber hoses.

8. Start the motorcycle and allow the engine to run until the cooling fan turns on.

**STOP!**

The engine operating temperature is critical to achieve accurate readings. Make sure the engine fan has cycled before testing the throttle body synchronization.

9. Adjust needle valves on both lines to achieve less than 1 inch Hg fluctuation on the gauge (outer graduations). Maintain some gauge flutter to ensure the valve is not closed entirely.

**IMPORTANT**

Take a picture of the gauge reading



10. Read both gauges in relation to each other.  
Determine the difference in the readings.

**EXAMPLE OF A GOOD READING**



**EXAMPLE OF A BAD READING**



**STOP!**

- If the difference in readings between each side is **BELOW** 1.5 inches Hg, the throttle body is synchronized. Install both purge lines / plugs and proceed to STEP 11 to complete I-20-01-A.
- If the difference in readings between each side is **AT OR ABOVE** 1.5 inches Hg, the throttle body is not synchronized and must be replaced. Proceed to I-20-01-B

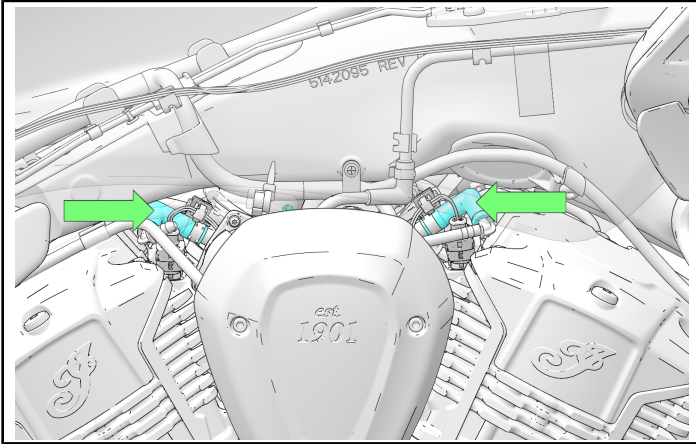
US/CAN: Submit an Ask Polaris Service & Warranty Question> All Vehicle Diagnostic case.

INT'L: Contact your Country Service Department.

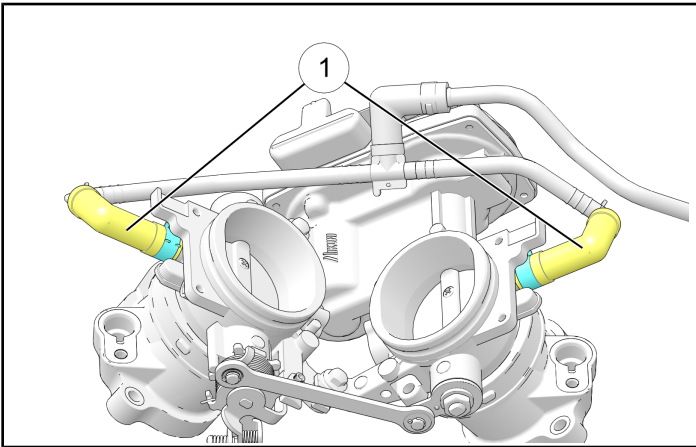
11. Working from the right-hand side of the motorcycle, use long needle-nose pliers to install both purge lines OR purge line plugs to the throttle body.

12. Test ride the motorcycle to ensure proper operation.

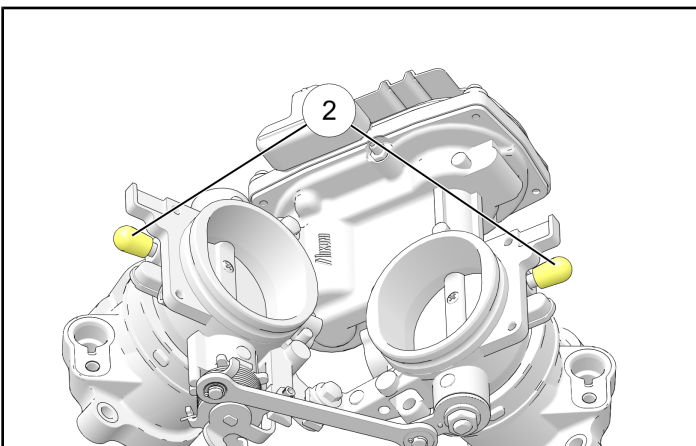
13. File a claim for I-20-01-A



- **50 STATE:** Install both purge lines ① to the throttle body.



- **49 STATE:** Install the purge line plugs ② to the throttle body.



**IMPORTANT**

Be careful not to lose the purge line plugs.

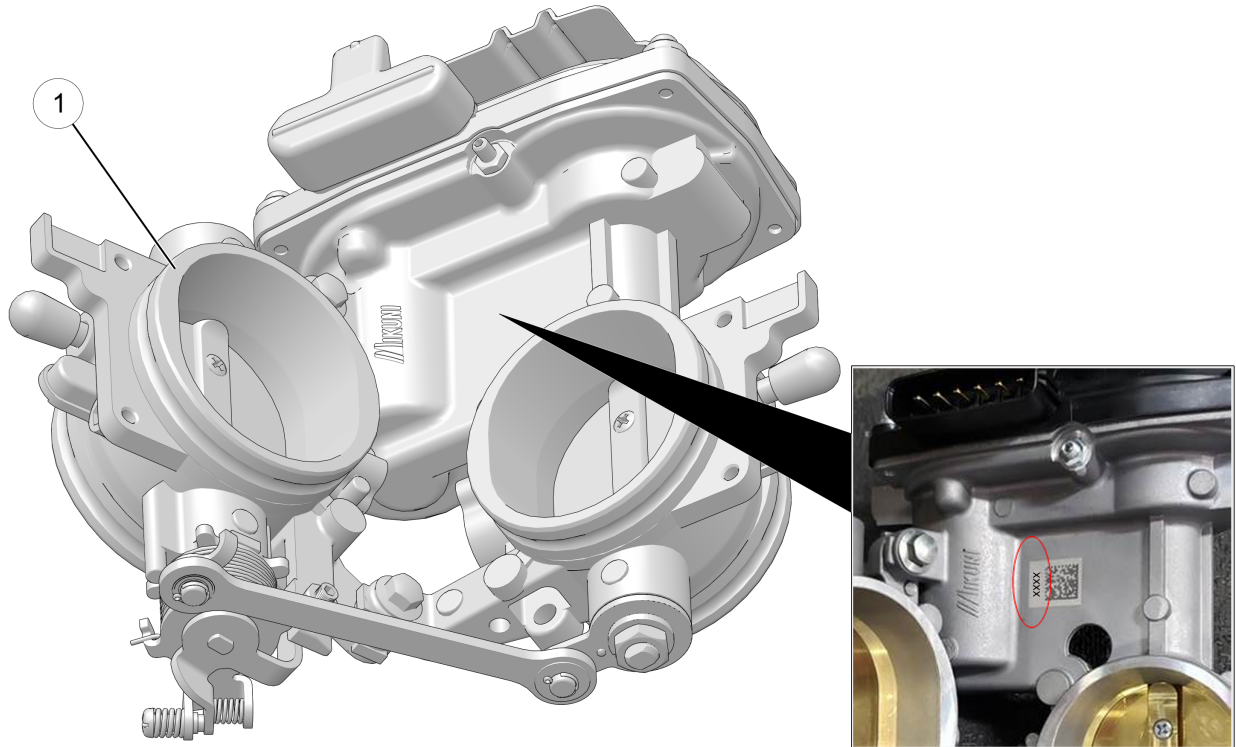
IMPORTANT

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

**INT'L Dealers:** Contact your Country Service Department.

**Submit photos of the sync gauge reading and wait for further instructions from Indian Motorcycle Technical Service.**

**Take a photo of the CV scan code located on the top of the throttle body.**



**If the sync gauge difference between the two cylinders is reading at or above 1.5 inches Hg, do not file a warranty claim for either I-20-01-A OR I-20-01-B until directed by Indian Motorcycle Technical Service.**