



Date: 6/28/2016

TECHNICAL SERVICE BULLETIN

Indian Motorcycle

Bulletin Number: I-16-02 A/B

Model Years: 2014-2016

Safety Bulletin

Service Bulletin

Service Alert Fax

Distribution: Owner/Principle Service Manager Sales Manager Parts Manager Technicians

This Service Bulletin is located at www.polarisdealers.com

-Confidential and Proprietary-

IMPORTANT SAFETY NOTICE! STOP SALE

SUBJECT: 2014-2016 Indian Motorcycles (111ci) – ECM Calibration Update

PURPOSE:

In the event of an ignition misfire on 2014-2016 Indian motorcycles (111ci), unburned fuel can be routed into the exhaust system, which can cause elevated exhaust temperatures that may pose a fire hazard. Indian Motorcycle has released a revised ECM calibration that includes engine misfire detection to address this condition.

Please follow the instructions outlined within this service bulletin and reflash the ECU to the revised calibration file for all affected vehicles.

AFFECTED MODELS:

ALL 2014-2016 Indian full size motorcycles manufactured on or before 06/10/2016.

Use 'Unit Inquiry' or the Service Bulletin VIN Lookup tool on the STOP Site to identify affected vehicles.

WHAT YOUR DEALERSHIP SHOULD DO:

1. Dealers are required to review their sales records and make arrangements with customers to complete the bulletin repair as needed.
2. Review your dealership's inventory to locate potentially affected models.
 - a. Use 'Unit Inquiry'

OR

 - b. Locate the 'Service and Warranty' dropdown, click on STOP Site
 - c. On the left hand side of the page, under 'STOP Site Links', click on 'Service Bulletins'.
 - d. Locate the service bulletin number (I-16-02 A/B) and click on the 'All VINs' link located on the right.
 - e. The 'All VINs' page will display all affected VINs within your dealership's inventory.
3. Follow the instructions outlined in this Service Bulletin to perform the Vehicle Controllers Update.
4. File a warranty claim using the bulletin number which corresponds to the reflash operation performed.
 - PART A – 2014 models
 - PART B – 2015-2016 models

CUSTOMER NOTIFICATION:

A customer notification letter has been sent to all registered owners of motorcycles affected by this Safety Bulletin. In addition to the notification letter sent by Indian Motorcycle, dealers are required to notify owners of motorcycles sold by their dealership, and to make arrangements to perform this bulletin immediately.

WARRANTY CLAIM / PARTS INFORMATION:

A single group claim may be submitted listing the complete (17-digit) Vehicle Identification Number for machines with the same model number. File claim type: **SB (Service Bulletin)**. DO NOT PUT MORE THAN ONE MODEL NUMBER ON A CLAIM.

2014 INDIAN MOTORCYCLES (FULL SIZE) - REFLASH	
SERVICE BULLETIN #	I-16-02A
CLAIM TYPE	SB (Service Bulletin)
LABOR ALLOWANCE	24 Minutes (0.4 Hours)
CLAIM PART NUMBERS	7170107 (QTY.1) – Bulletin Completion Decal
PARTS AVAILABILITY	Reflash Only

2015-2016 INDIAN MOTORCYCLES (FULL SIZE) - REFLASH	
SERVICE BULLETIN #	I-16-02B
CLAIM TYPE	SB (Service Bulletin)
LABOR ALLOWANCE	18 Minutes (0.3 Hours)
CLAIM PART NUMBERS	7170107 (QTY.1) – Bulletin Completion Decal
PARTS AVAILABILITY	Reflash Only

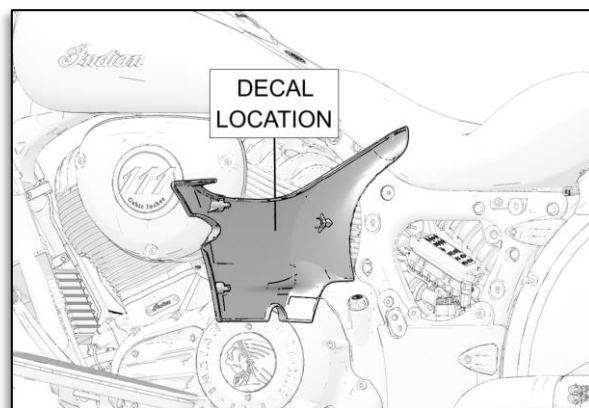
SERVICE BULLETIN COMPLETION DECAL:

A Service Bulletin Completion Decal must be completed for this bulletin repair. Place the decal on the unit as shown (inside left side cover). If you require more decals, order them through normal parts ordering channels.

Sincerely,



Doug Koch,
Technical Service and Warranty Manager



REFLASH PROCEDURE:

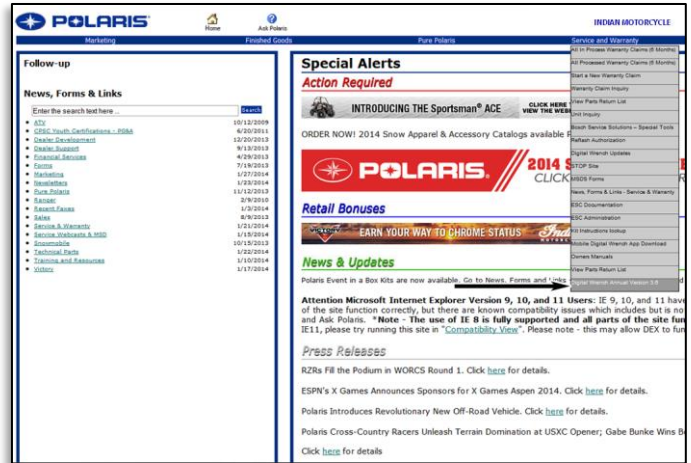
1. Verify that Digital Wrench version 3.7 Update 6/13/16 has been installed on your PC or laptop and proceed to STEP 6.

If you do not have Version 3.7 – Update 6/13/16 or higher installed, you must first download it before proceeding with the reflash.



2. Go to your dealer homepage and select **Digital Wrench Annual Version 3.7** from the **Service and Warranty** dropdown menu and download.

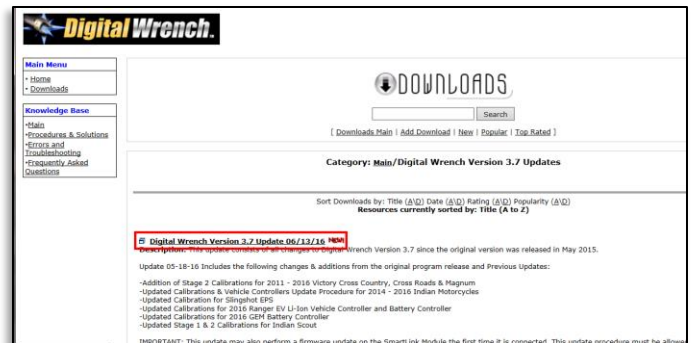
NOTE: International Subsidiaries and Distributors use the **Digital Wrench Subscriptions** link to purchase and update your digital wrench software.



3. Go to your dealer homepage and select **Digital Wrench Updates** from the **Service and Warranty** dropdown menu.
4. Click on **Digital Wrench Version 3.7 Updates**.



5. Download and install **Digital Wrench Version 3.7 Update 6/13/16 or higher**.



6. Connect SmartLink Module cables to PC and vehicle.
7. Open the Digital Wrench program.
8. Select the model year, product line and vehicle description by selecting the “Change Vehicle Type” icon ①.



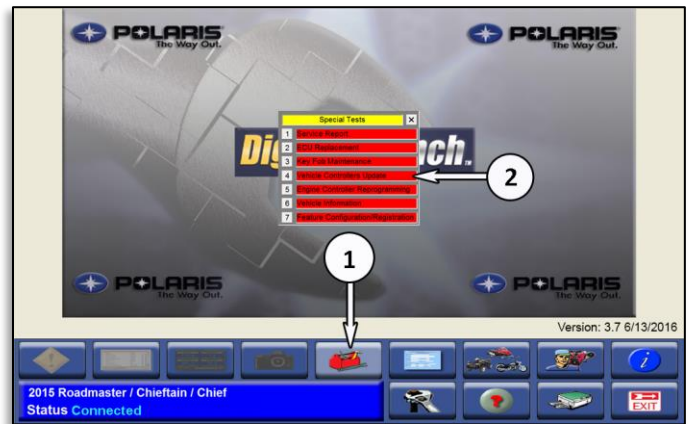
9. Select **Vehicle Controllers Update** ②.

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

STAGE CALIBRATIONS: If a motorcycle is equipped with STAGE 1 or STAGE 2 performance upgrades, Digital Wrench will identify and maintain the upgraded software calibration.

IMPORTANT:

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



10. CAUTION:

The VCM update procedure will take you through TWO separate reprogramming procedures:

- Boot Mode
- Reflash Application

During the reflash process the gauge and all indicators will power down. Each procedure must be completed in sequence or the VCM will not function.

11. Follow the on-screen prompts until all control modules have been updated.

NOTE: Some 2014 Chieftain models must have the TPMS sensors relearned after the reflash is complete. Refer to 2014-2016 Indian Motorcycle service manual - TPMS Activation, page 13.5.

12. At this time you should check / clear any stored fault codes, disconnect Digital Wrench and test ride the motorcycle.

Add this information to your Service Manual. Cut out along dotted line and paste into appropriate manual under the EFI SERVICE section.



CYLINDER MISFIRE DETECTION

The ECU monitors crankshaft speed via the crankshaft position sensor. A misfire will cause a fluctuation in crankshaft speed. A code will set and flash the check engine light after an engine misfire threshold/rate is detected that is above a pre-determined limit. This threshold varies based on engine speed.

One or more of the following codes will be set if a misfire occurs:

- P0301 (SPN 65591/FMI 7) Misfire Detected, Cylinder 1 (Front)
- P0302 (SPN 65592/FMI 7) Misfire Detected, Cylinder 2 (Rear)
- P0314 (SPN 65590/FMI 7) Misfire Confirmed

If a misfire is detected, the following events will occur:

- The check engine indicator lamp will begin to flash and fuel will be cut to the affected cylinder(s). The check engine indicator lamp will continue to flash until the ignition switch has been moved to the off position. Restarting the engine will clear the flashing indicator and restore fuel to both cylinders.
- If a 2nd misfire occurs, the check engine indicator lamp will resume flashing and fuel will once again be cut to the affected cylinder(s).
- After the 3rd misfire, P0314 misfire fault is determined & set, the check engine light will remain on and fuel will be cut to the affected cylinder(s). If this occurs, follow the troubleshooting section below.

In cases where cylinder misfire is intermittent, or has been repaired in the field (e.g. loose spark plug wire has been reattached), Misfire Detection utilizes a self-healing feature to allow continued operation. Following the 1st or 2nd misfire event, when the ignition is cycled OFF and ON again, the misfire code becomes historic and the MIL turns off. When P0314 is set, after the 3rd misfire event, the MIL will stay on for 3 fault free drive cycles before turning off.

If the MIL turned on solid due to P0314, it will stay on until the misfire condition has been removed and 3 fault free drive cycles have occurred.

NOTE

DRIVE CYCLE:

A drive cycle consists of cycling the ignition from OFF to ON, then start the engine and run at idle for a period of approximately 4 minutes. Finally, turn off the ignition for approximately 2 1/2 minutes.

If it does not turn off, diagnose by verifying the following items:

TROUBLESHOOTING

- Ignition Coil and connections are good
- Spark plugs wires are secure
- The correct spark plugs are installed and the plugs are not fouled
- Crankshaft Position Sensor tests good
- Wiring to the Crankshaft Position Sensor, ECU and Ignition Coil are not damaged. Chassis ground is clean and tight
- Fuel pressure is within specification
- Fresh/good quality fuel is in the fuel tank
- Engine mechanical is good (leak down, timing)

IMPORTANT

Once the systems is repaired and functioning normally, connect to Digital Wrench to clear active and historic codes. Retest to verify the condition is no longer present.

Cut and paste section below into whole goods stock Owner Manual and provide customer a copy. Cut out along dotted line and paste into appropriate manual under the INSTRUMENTS, FEATURES AND CONTROLS section.



MISFIRE DETECTION

If a misfire is detected, the check engine indicator lamp will begin to flash and fuel will be cut to the affected cylinder(s). The check engine indicator lamp will continue to flash until the ignition switch has been moved to the off position. Restarting the engine will clear the flashing indicator and restore fuel to both cylinders. If another misfire occurs, the check engine indicator lamp will resume flashing and fuel will once again be cut to the affected cylinder(s). After the 3rd misfire, P0314 misfire fault is determined & set, the check engine light will remain on and fuel will be cut to the affected cylinder(s). If this occurs, your INDIAN dealer can assist.