



TECHNICAL SERVICE BULLETIN

Release Date: Nov 5, 2015
Expiration Date:

Indian Motorcycle

Bulletin Number: I-15-04
Model Year(s): 2015-2016

Safety Bulletin Service Bulletin Service Alert Fax Production Update Kit

Distribution: Owner / Principal 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: 2015-2016 Indian Full Size Motorcycles – Rear Master Cylinder Repair

PURPOSE:

Some 2015-2016 Indian Full-Size motorcycles have been manufactured with a rear brake master cylinder that does not meet Indian Motorcycle quality standards. In some vehicles, the rear brake master cylinder piston cup may develop a tear. Motorcycles assembled with an affected master cylinder may experience a loss of fluid pressure to the rear brake caliper resulting in reduced rear brake performance. This could cause the vehicle operator to lose control, increasing the risk of a crash.

AFFECTED MODELS:

2015-2016 Indian Chief Classic, Chief Vintage, Chieftain, Roadmaster, and Dark Horse Motorcycles manufactured on or between 1/2/2015 – 10/23/2015.

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

WHAT YOUR DEALERSHIP SHOULD DO:

Wholegood Units:

1. **STOP ALL SALES** of affected units until this Safety Bulletin has been completed. After the bulletin is completed and a warranty claim has been filed, it is acceptable to resume sales.
2. Review your dealership's inventory to locate potentially affected models.
 - a. Go to the STOP Site and click on the '**Click Here for a List of Your Dealership's Units with Open Bulletins / Recalls**' link located in the Search Options menu.
3. Follow the instructions outlined in this Safety Bulletin to replace the affected rear master cylinder piston assembly using the updated part detailed in this communication.
4. File a warranty claim immediately after completion of this bulletin.

Parts Stock Inventory:

1. Review your dealership's parts stock inventory to identify any potentially affected master cylinder assemblies:
 - 2205153 – KIT-ASM, REAR MC, IND
 - 2205751 – KIT-ASM, REAR MC, IND, BLK
 - 2205157 – KIT-PISTON, REAR MC, IND
2. File a Parts Stock claim for any master cylinder assemblies in dealer inventory and return to Indian Motorcycle.

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 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.**

REAR MASTER CYLINDER - REBUILD	
SERVICE BULLETIN #	I-15-04
CLAIM TYPE	SB (Service Bulletin)
LABOR ALLOWANCE	36 Minutes (0.6 Hours)
CLAIM PART NUMBERS	N/A – Auto Process Bulletin

PARTS INFORMATION:

REAR MASTER CYLINDER – REBUILD (I-15-04)	
PART NUMBER / DESCRIPTION	7170107 (QTY. 1) – Service Bulletin Completion Decal 2206308 (QTY. 1) – Piston Kit, Rear Master Cylinder* 7556372 (QTY. 2) – Copper Sealing Washer 7661010 (QTY. 1) – Cotter Pin, Push Rod
PARTS AVAILABILITY	Available to order *NOTE: 2206308 will be available 11/9 to order in <u>limited quantities</u> . Sufficient inventory to fulfill bulletin requirements will be in stock no later than 11/20/2015.
DIRECT-SHIP FROM POLARIS?	No
TO BE ORDERED BY DEALER?	Yes

PARTS RETURN INFORMATION:

ATTENTION: North American Dealers – All master cylinder pistons affected by this bulletin should to be returned via the normal warranty parts return system (DO NOT RMA).

Include the Vehicle Identification Number (VIN) and the date code located on bottom of the master cylinder housing (refer to image below). **NOTE:** Date code is also pin stamped on the master cylinder housing under the label.



Dealers & Distributors: Under no circumstances shall the part removed in this repair be re-used, sold, or re-purposed for another application. It is your dealership / distributorship's responsibility to make sure every part replaced is taken out of circulation and returned to Indian Motorcycle.

For North American Dealers: 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 Indian Motorcycle has asked for the part(s) to be returned. If the part(s) were not identified as needing to be returned to Indian Motorcycle, please dispose of the part(s) properly.

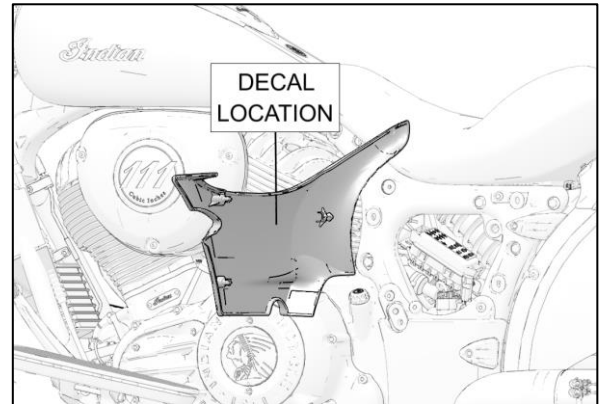
SERVICE BULLETIN COMPLETION DECAL:

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

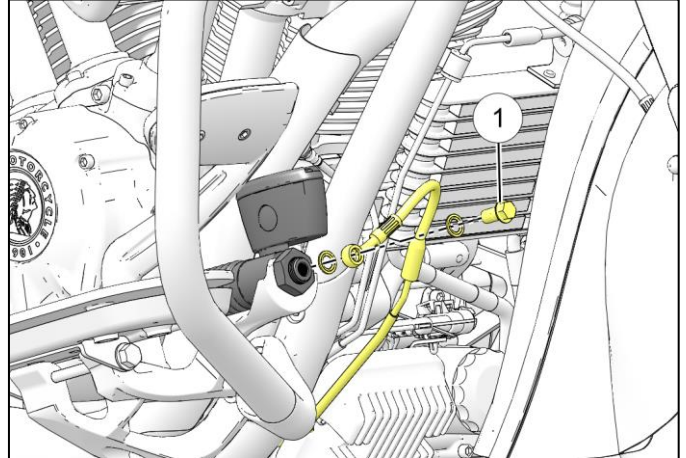


REAR MASTER CYLINDER PISTON REPLACEMENT:

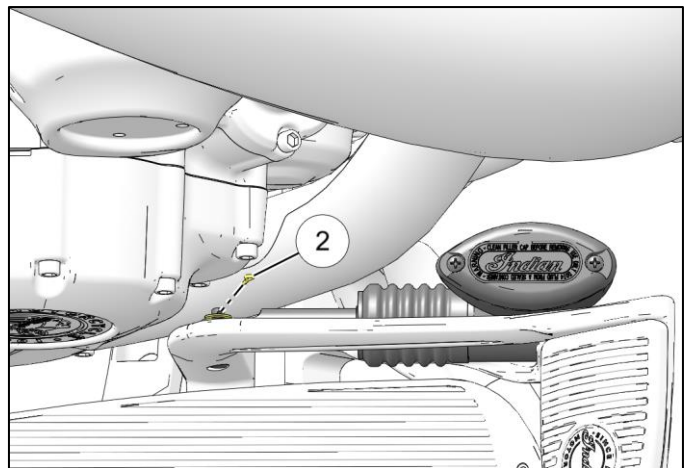
IMPORTANT: Brake fluid and brake cleaners will damage paint, plastics and some rubber compounds. Cover or remove plastic and painted parts before working on the brake system. If brake fluid is spilled on cosmetic surfaces, immediately rinse the area with a mild solution of soap and water until all traces of brake fluid are removed. Make sure the master cylinder reservoir being worked on is level before removing the cap.

REAR MASTER CYLINDER DISASSEMBLY/INSPECTION

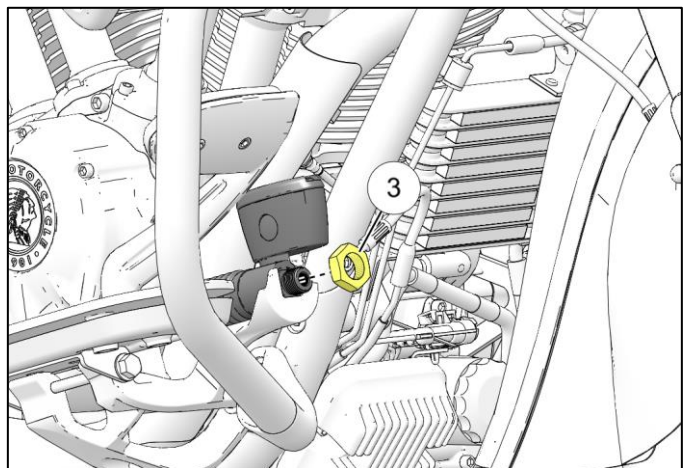
1. Place the motorcycle in an upright position with the front wheel clamped in a wheel vise.
2. Remove the brake line banjo bolt (1). Remove sealing washers and discard. To prevent loss of brake fluid suspend the open end of the brake line upright or place in a container of clean brake fluid while servicing the master cylinder. **NOTE:** Prevent brake fluid from contacting cosmetic surfaces.



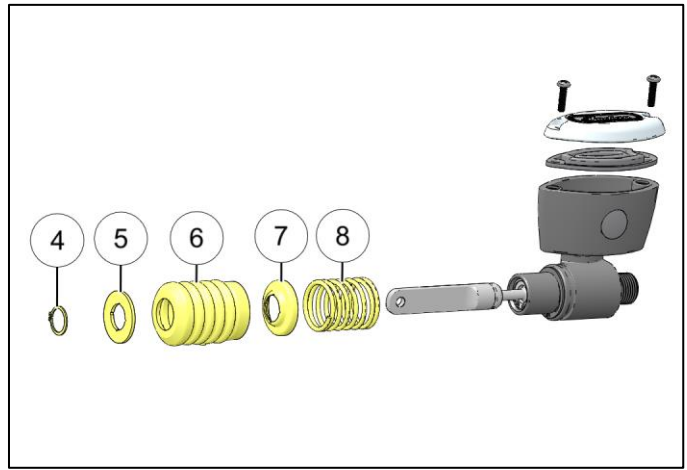
3. Remove cotter pin (2) from push rod pin and remove washer.



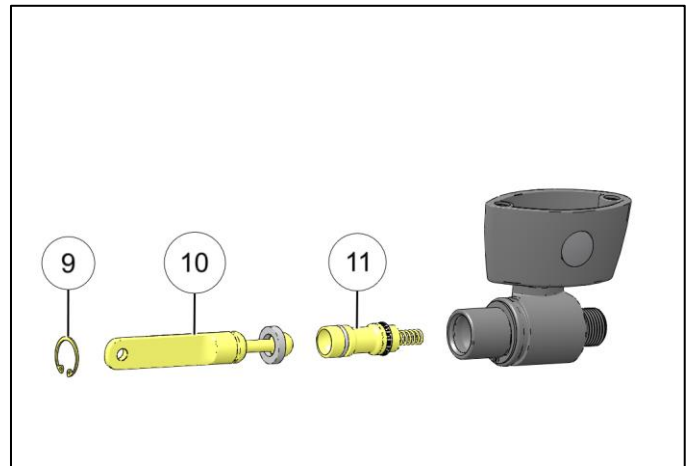
4. Remove jam nut (3) and remove the master cylinder from the floorboard support. **NOTE:** Use caution to ensure wrench does not contact the master cylinder reservoir.



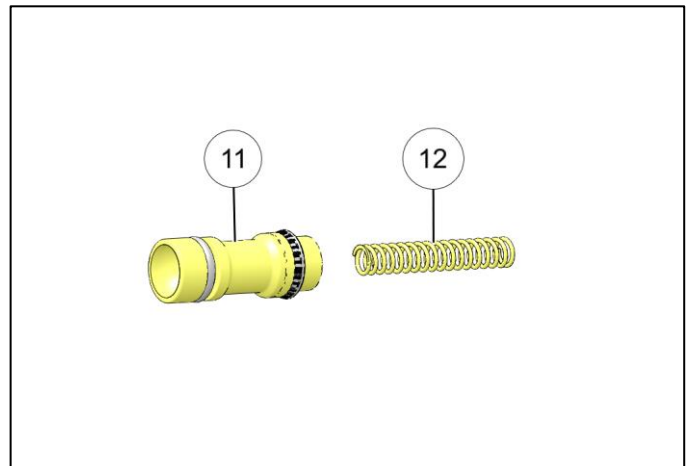
5. Place rear brake master cylinder on a clean work surface. **IMPORTANT:** Maintain cleanliness of work surface and master cylinder components. Any debris or fluid could damage master cylinder components.
6. Clean rear brake master cylinder external surfaces and remove cover screws, cover and cover seal
7. Using a suitable fluid recovery container, pour out the brake fluid in the master cylinder reservoir and dispose of brake fluid properly.
8. Remove external snap ring (4), washer (5), dust boot (6), spring retainer (7) and return spring (8). **NOTE:** Spring retainer and return spring are typically retained in the dust boot.



9. Remove and discard internal snap ring (9). Remove pushrod/retainer bushing assembly (10) and piston assembly (11).

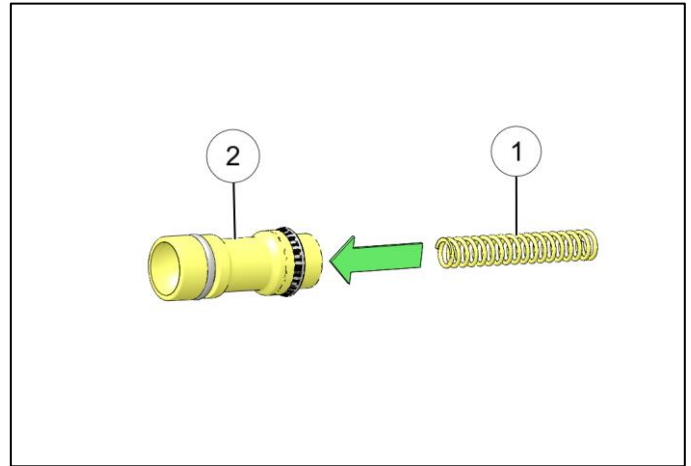


10. Remove piston return spring (12) from piston assembly (11). **NOTE:** Retain and tag piston for warranty parts return.
11. Clean all internal parts with Indian Motorcycle DOT 4 brake fluid or isopropyl alcohol from a sealed container.
12. Inspect cylinder bore and chamfer on front of the bore for corrosion, scratches, scoring or pitting. Replace master cylinder if any of these conditions are evident.
13. Use compressed air to clear fluid holes and passages to verify they are clean and unobstructed.

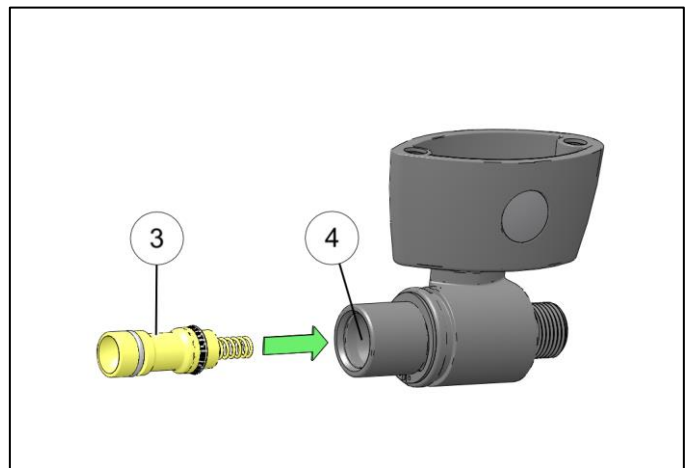


REAR MASTER CYLINDER ASSEMBLY:

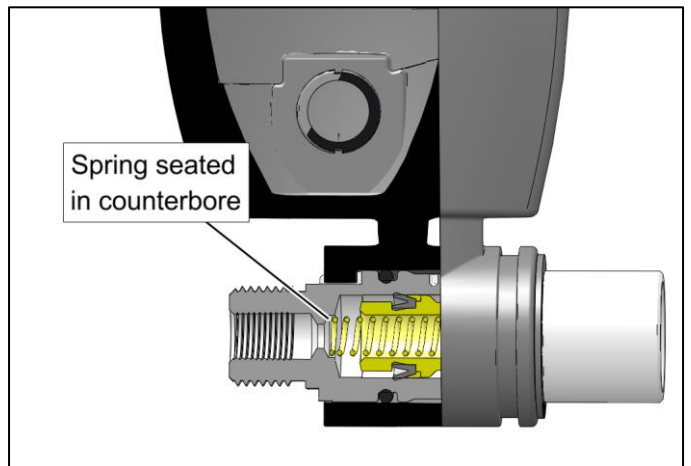
1. Insert original piston return spring ① in the NEW piston assembly ②.
2. Lubricate piston assembly and master cylinder bore with clean Indian Motorcycle DOT 4 brake fluid.



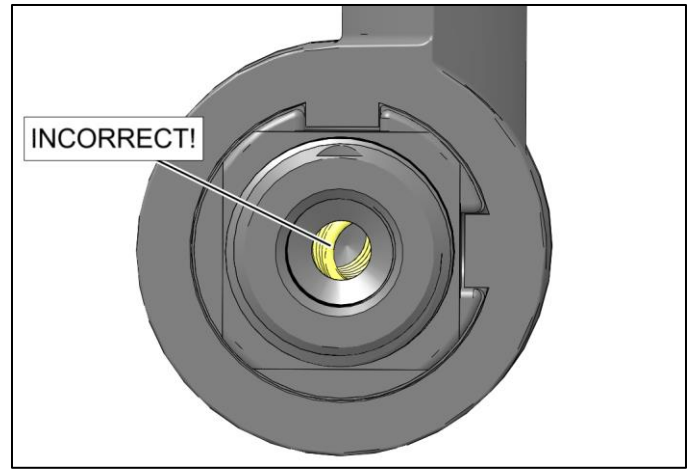
3. Align the piston assembly ③ with the master cylinder bore ④.



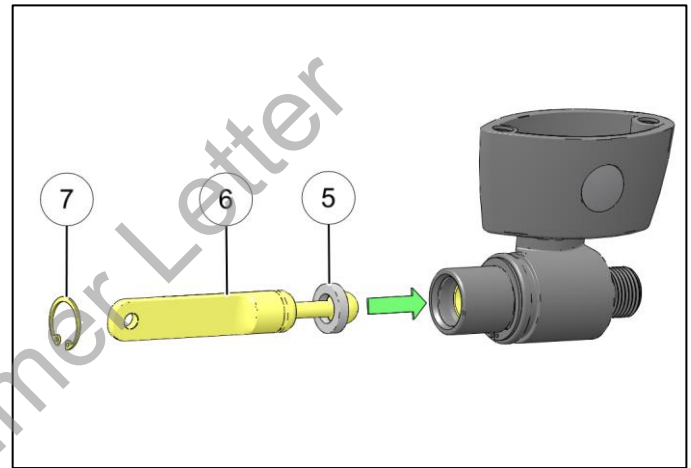
4. Partially insert the piston assembly into the master cylinder bore taking care so the spring does not scratch or damage the bore. **NOTE:** Do not fold or damage the piston seals and cup when inserting piston.
5. Use a flashlight to view the spring end through the fluid outlet port to guide the spring end into the master cylinder counter bore (refer to image at right).



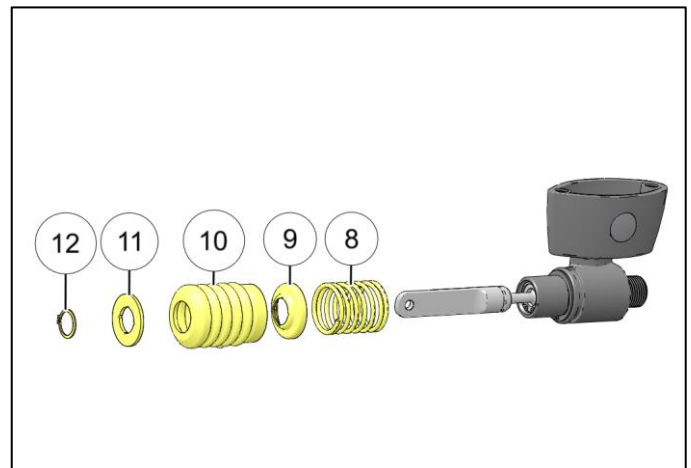
6. Verify the spring is seated correctly in the master cylinder counter bore before fully seating the piston in the master cylinder bore. **NOTE:** Spring is installed **incorrectly** if end is visible through the outlet port (refer to image at right).
7. If spring is seated correctly proceed to step 8. If spring is not seated correctly remove piston assembly and repeat steps 3-7.



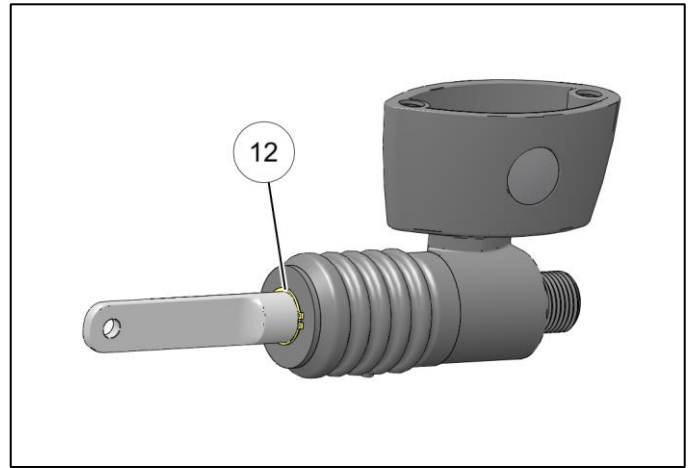
8. Insert the pushrod ⑥ retainer bushing assembly ⑤ and depress both into master cylinder bore deep enough until snap ring groove is visible above retainer bushing. Install NEW snap ring ⑦ with square edge facing out in snap ring groove. **NOTE:** Verify snap ring is fully seated in groove.



9. Assemble return spring ⑧, spring retainer ⑨, dust boot (with drain hole facing down) ⑩, and washer ⑪ on the pushrod. Depress return spring, cup, dust boot and washer down the pushrod to expose the snap ring groove...



10. Install the snap ring (12) in the pushrod groove with the square edge facing away from master cylinder. **NOTE:** Verify dust boot is seated in groove on back of master cylinder housing

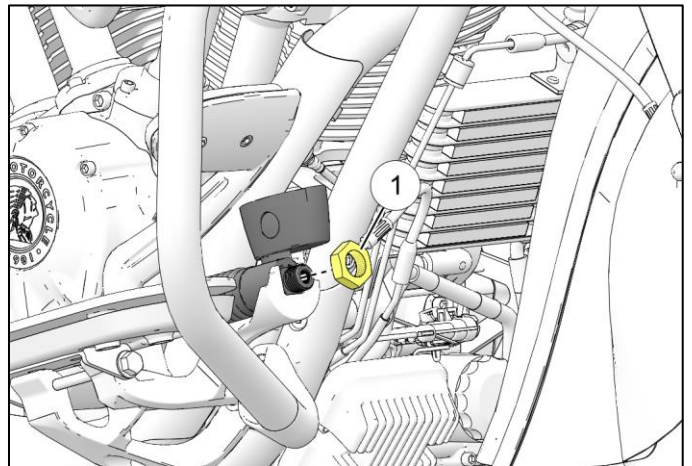


REAR MASTER CYLINDER INSTALLATION:

1. Install the master cylinder to floorboard support and torque the jam nut (1) to specification.

TORQUE:

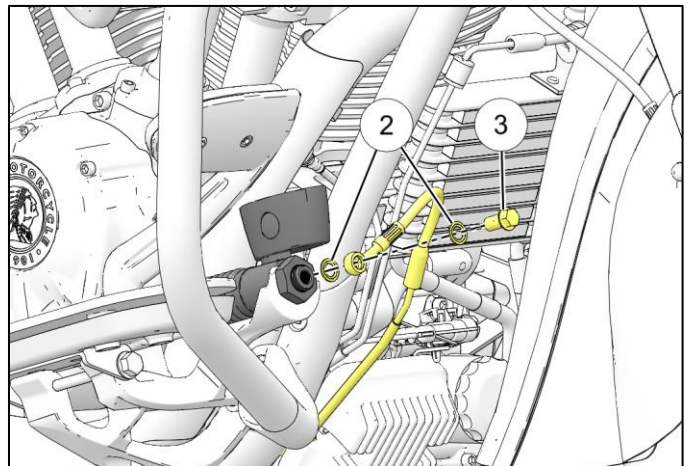
Master Cylinder Jam Nut: **35 ft-lbs (47.5 Nm)**



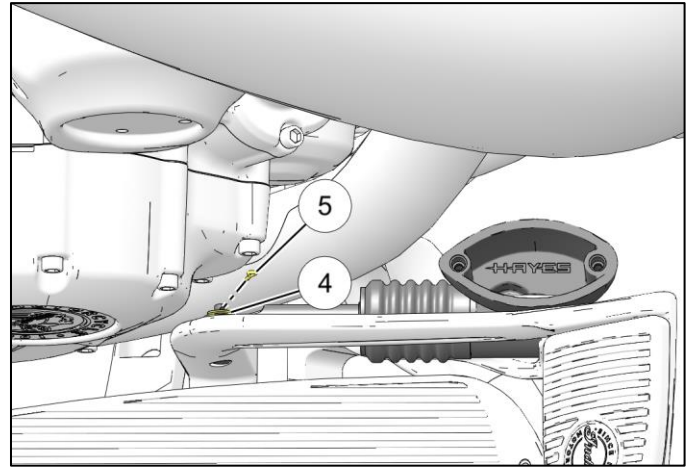
2. Install a NEW sealing washer (2) on each side of the banjo fitting and torque the banjo bolt (3) to specification. **NOTE:** Do not reuse brake sealing washers.

TORQUE:

Brake Line Banjo Bolt: **18 ft-lbs (24.4 Nm)**



3. Assemble the pushrod onto the brake pedal pin. Install washer ④ and a NEW cotter pin ⑤.



4. Bleed the rear brake system as outlined in Chapter 14 of the 2014-2016 Indian Motorcycle (Full-Size) Service Manual (PN 9925933).
5. Top up the brake fluid as necessary and install the reservoir cover. Torque screws ⑥ to specification.

TORQUE:

M/C Reservoir Cover Screws: **13 in-lbs (1.5 Nm)**

6. Test ride the motorcycle to verify proper brake operation and pedal feel.
7. Include the VIN and master cylinder date code on a tag attached to the original master cylinder piston for warranty return (refer to PARTS RETURN INFORMATION).
8. File a warranty claim for I-15-04.

