

STAGE 3 116 KIT MODEL YEAR 2020+



P/N 2884322, 2885158

IMPORTANT

Due to the technical nature of this kit, Indian Motorcycle® insists that this installation be performed by a certified Indian Motorcycle® technician.

NOTICE

Factory approved and certified accessories and calibrations are designed for maximum performance, while protecting the engine over a wide range of operating conditions. Use of aftermarket or unapproved accessories or calibrations will cause abnormal sensor or engine operation, error codes and risks damage to the engine. The Indian Motorcycle® Limited Warranty *excludes* damages or failures resulting from use of aftermarket or unapproved components, accessories, and calibrations.

APPLICATION

Model Year 2020 and newer Indian Motorcycles® with 111 Thunder Stroke®

Verify accessory fitment at www.indianmotorcycle.com.

BEFORE YOU BEGIN

Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

REQUIRED SOLD SEPARATELY

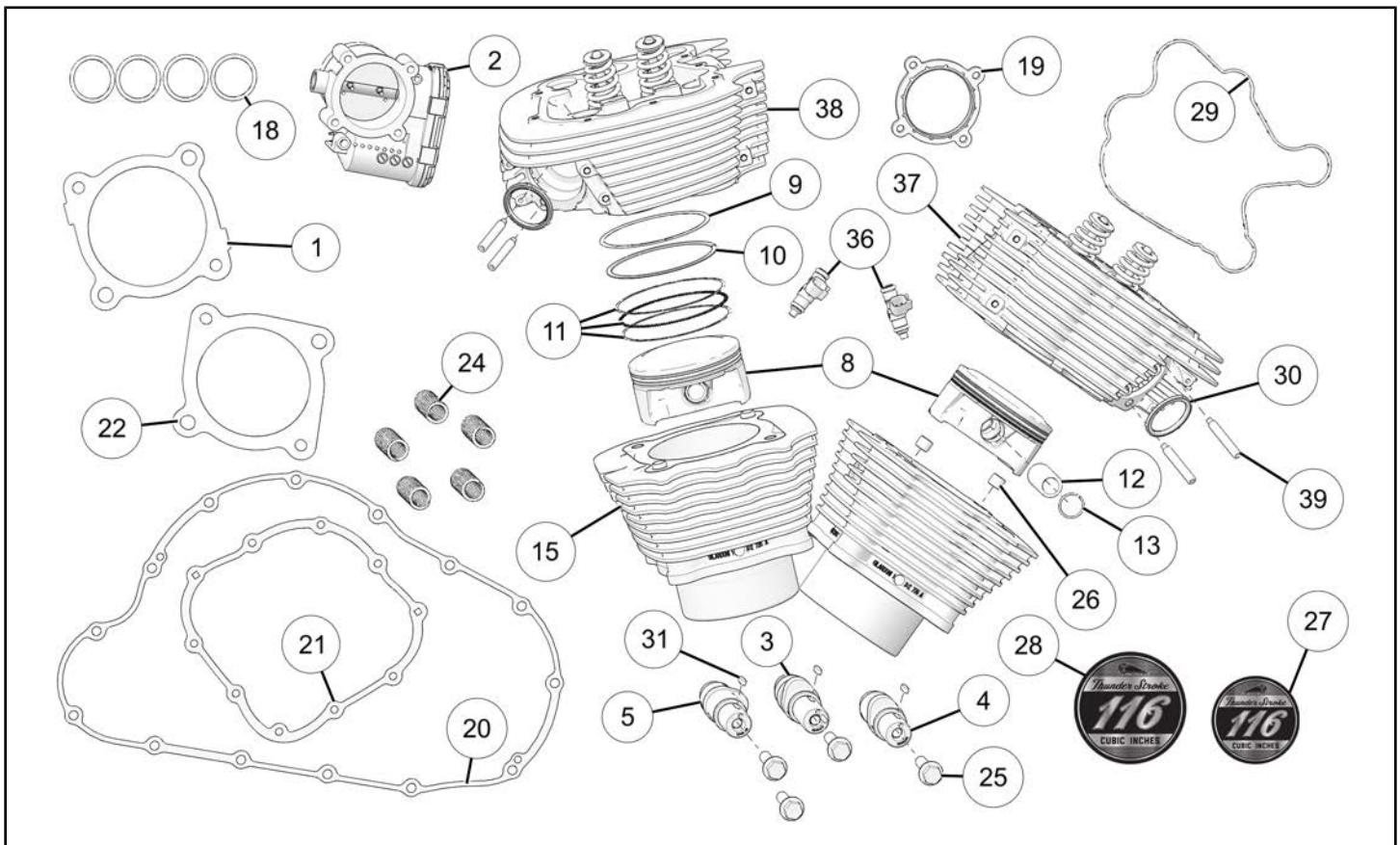
Only parts for installation of the Indian Motorcycle® Stage 3 116 Kit Model Year 2020+ are included. Prior installation of the following additional kits is also required (sold separately):

- *Stage 1 High Performance Air Cleaner Kit*, PN 2881779-XXX or *Thunder Stroke® High Flow Air Cleaner Kit*, PN 2880654-XXX
- *Stage 1 Muffler Kit*, PN 2879529-XXX, 2879724-XXX, 2879768-XXX, 2879769-XXX, or 2884187-XXX

NOTICE

XXX = Indian® color code (For example: 266 = Black)

KIT CONTENTS



REF	QTY	PART DESCRIPTION	P/N AVAILABLE SEPARATELY
1	2	Gasket, Base	5256328
2	1	Assembly, Throttle Body	1204975
3	1	Assembly, Camshaft, Stage 3, Intake	1205417
4	1	Assembly, Camshaft, Stage 3, Exhaust-Front	1205418
5	1	Assembly, Camshaft, Stage 3, Exhaust-Rear	1205419
8	2	Assembly, Piston, 103.2 MM	3023066
9	2	.Ring, Top, Piston, 103.2 MM	3023069
10	2	.Ring, Second, Piston, 103.2 MM	3023070
11	2	.Ring, Oil, Piston, 103.2 MM	3023068
12	2	.Pin, Piston, 22 MM	3023324
13	4	.Ring, Retaining, Round, 22 X 1.6 MM	7710479
15	2	Cylinder, 103.2 MM	5140989
18	8	O-Ring, 36.091 X 3.53	5416074
19	1	Gasket, Airbox	-
20	1	Gasket, Primary Cover	5813897
21	1	Gasket, Camshaft Outer Cover	5813898

REF	QTY	PART DESCRIPTION	P/N AVAILABLE SEPARATELY
22	2	Gasket, Cylinder Head, 103.2 MM	5814541
24	5	Clutch Spring, 395N (Kit P/N 2884322 only)	7044826
25	4	Screw, Hex Flange Head, M10 X 1.5 X 40	7519763
26	4	Dowel, Hollow, M13 X 10	7663008
27	1	Badge, Outer Cam Cover	5266138-01
28	1	Badge, Outer Primary Cover	5266139-01
29	2	Seal, Valve Cover	5414859
30	2	Gasket, Exhaust	5257156
31	3	Key, Round, End, 4 X 4 X 16	7710623
33	1	Calibration Card, 50 State, Indian (Not Shown)	-
36	2	Injector, Fuel, EV-14	2522178
37	1	Assembly, Cylinder Head, Front	-
38	1	Assembly, Cylinder Head, Rear	-
39	4	Stud, Socket, M8 X 1.25 X 45	7520858

TOOLS REQUIRED

- Safety Glasses
- Breaker Bar
- Digital Wrench®
- Drain Pan
- Hammer, Soft Face
- Piston Ring Compressor, Two-Piece Plier Style
- Platform Jack, Motorcycle
- Pliers, Side Cutting
- Pry Tool
- Screwdriver, Phillips
- Screwdriver, Slotted
- Socket Set, Hex Bit, Metric
- Socket Set, Metric
- Socket Set, Torx® Bit
- Torque Wrench
- Wrench Set, Metric
- Vehicle Lift/Support Equipment

CONSUMABLES REQUIRED

- Gloves, Chemical Resistant
- Grease, White Lithium
- Room Temperature Vulcanization Silicone (RTV), Loctite® SI 698 Black (or equivalent)
- Solvent Wipe (99% Isopropyl Alcohol)

IMPORTANT

Your Indian Motorcycle® Stage 3 116 Kit Model Year 2020+ is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

MAINTENANCE

Installation of the Indian Motorcycle® Stage 3 116 Kit Model Year 2020+ replaces several major engine components. Indian Motorcycle® recommends changing the engine oil and filter after the first **500 miles (805 km)** following installation and each subsequent 5,000 mil (8046 km) interval as outlines in the standard Maintenance Schedule. (Example: Odometer reading at 116ci kit install: 0 miles; 1st oil change at 500 miles; 2nd oil change at 5,000 miles; 3rd oil change at 10,000 miles; 4th oil change at 15,000 miles; etc.)

INSTALLATION INSTRUCTIONS

VEHICLE PREPARATION

GENERAL

IMPORTANT

Protect all finished surfaces during these operations.

NOTICE

Take careful notes of wire routing and cable tie locations during disassembly to ensure proper reinstallation.

Special care should be taken on higher mileage bikes during disassembly. Especially when removing fasteners threaded into engine block and cylinder heads (For example: Exhaust manifold bolts, Primary cover bolts, etc.) Thread repair kit may be necessary if threads become damaged.

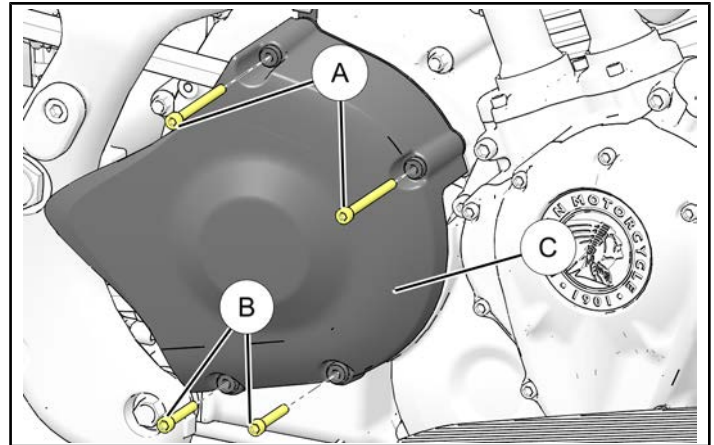
1. Turn key or ignition switch to **OFF** position and remove key. If equipped with keyless fob, remove fob from proximity of vehicle.
2. Park motorcycle on a flat surface, fully extend kickstand, and make sure vehicle is stable prior to installation.
3. Remove front fender. Refer to service manual for removal procedure.
4. Support motorcycle securely in an upright position. Clamp front tire securely in a wheel vise.

ACCESSORY INSTALLATION

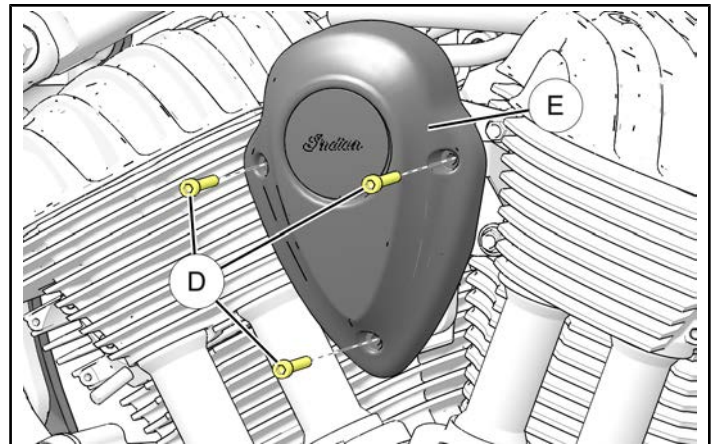
ENGINE REMOVAL PREPARATION

1. Drain engine oil.
2. Remove and keep upper and lower side covers, saddlebags, seat, battery, and fuel tank. Refer to service manual for removal procedures.
3. Disconnect Oxygen sensor wiring connectors and remove exhaust system. Refer to service manual for removal procedures.

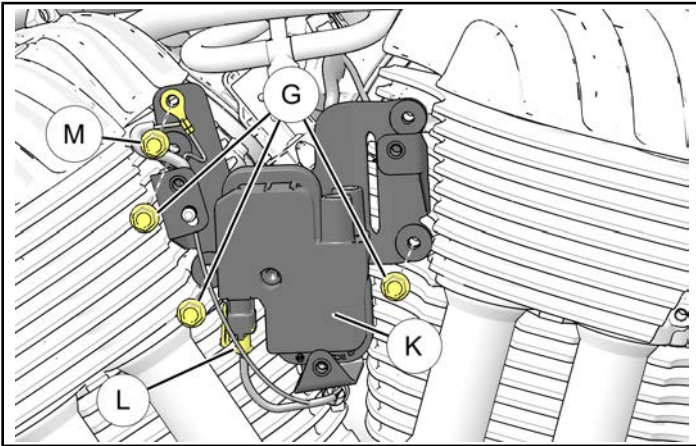
4. Remove and keep four screws **A** and **B** and remove drive sprocket cover **C**.



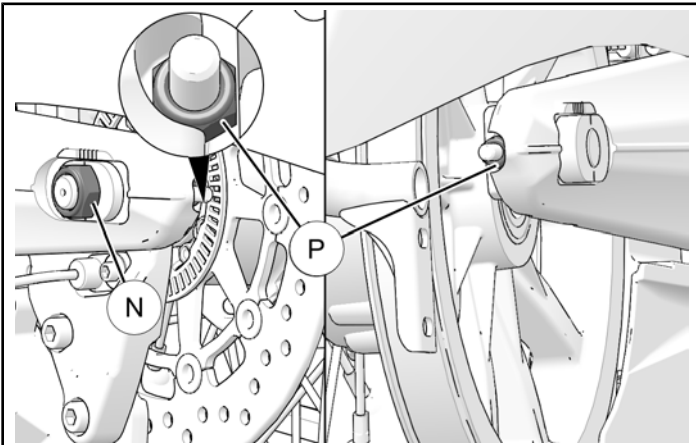
5. Remove and keep three screws **D** and cover **E**.



6. Mark ignition cables and remove from ignition coil (K). Disconnect connector (L). Remove and keep ground wire screw (M). Remove and keep three screws (G) and ignition coil (K) from engine.

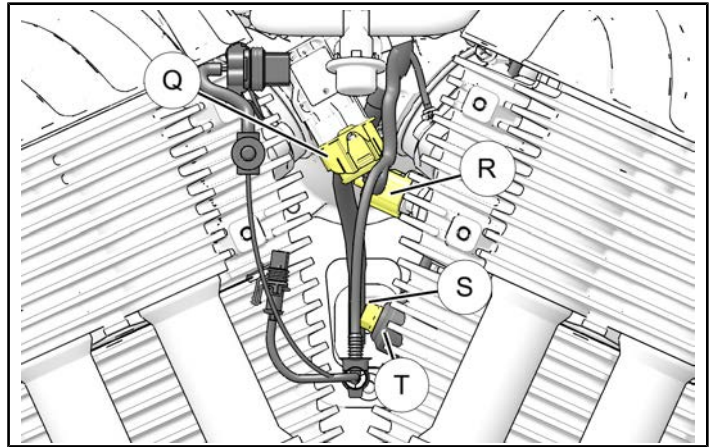


7. Remove floorboards. Refer to service manual for removal procedure.
8. Remove highway bars (if installed). Refer to service manual for removal procedure.
9. Loosen (**Do Not Remove**) rear axle nut (N). Loosen belt tension adjustment nuts (P) to release tension and remove belt from sprocket.

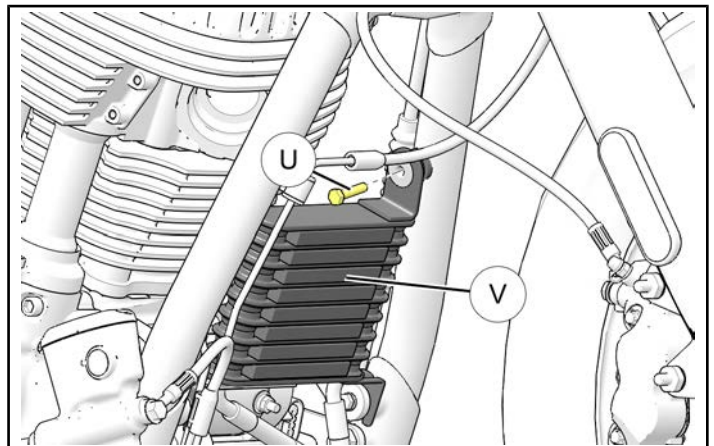


10. Remove airbox and throttle valve. Refer to service manual for removal procedure.

11. Unplug TMAP Sensor (Q) and CHT Sensor (R). Remove and keep screw (S) and knock sensor (T).

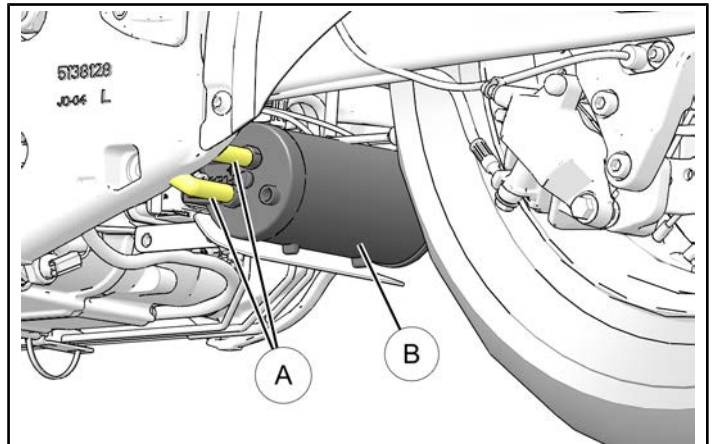


12. Remove top oil cooler fastener (U) and release oil cooler (V) from lower mounting. (Skip this step if oil cooler not equipped.)

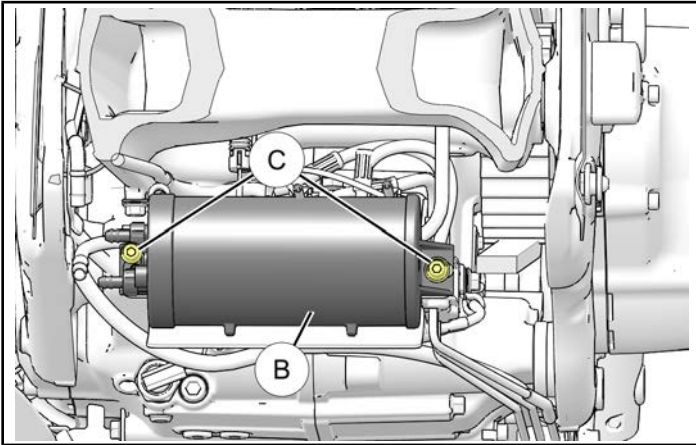


CALIFORNIA AND INTERNATIONAL MODELS ONLY
NORTH AMERICAN MODELS: SKIP TO NEXT SECTION
Model Year 2020

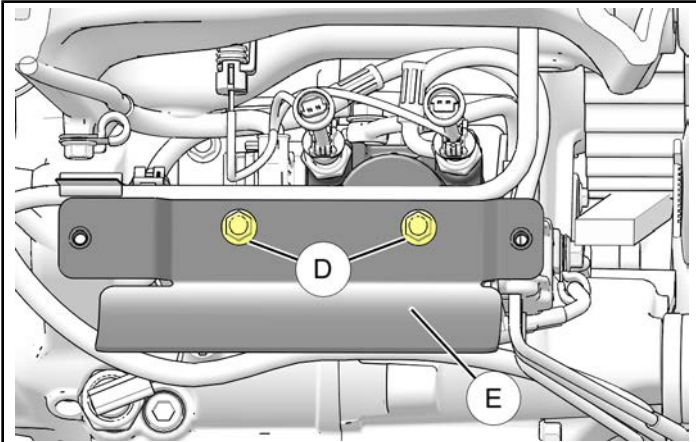
1. Disconnect three hoses (A) from canister (B).



- Remove and keep two fasteners ③ and charcoal canister ② from bracket.



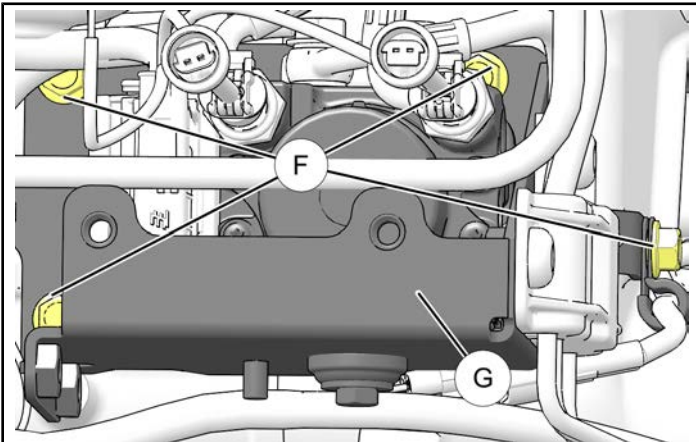
- Remove and keep two fasteners ④. Disconnect main ABS electrical connector and two brake switch connectors from ABS module.



NOTICE

It is not necessary to remove hydraulic lines from ABS module during engine removal.

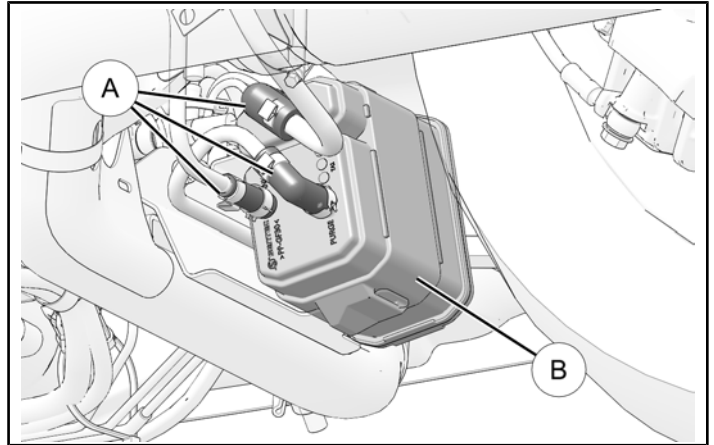
- Remove and keep four fasteners ⑥ from ABS bracket ⑦.



- Move ABS module/bracket and hydraulic brake lines far enough away from RH side of engine so engine can be lowered.

Model Year 2021+

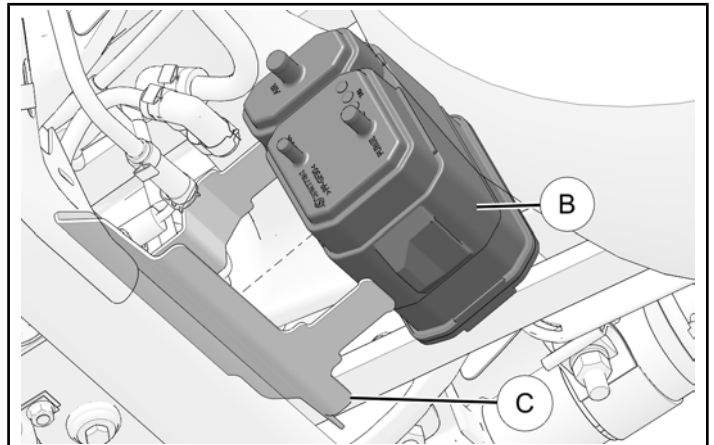
- Disconnect three hoses ① from canister ②.



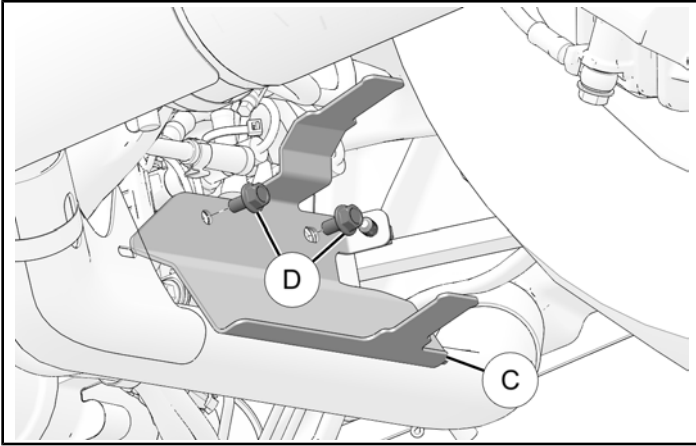
- Pull rearward to remove canister ② from bracket ③.

TIP

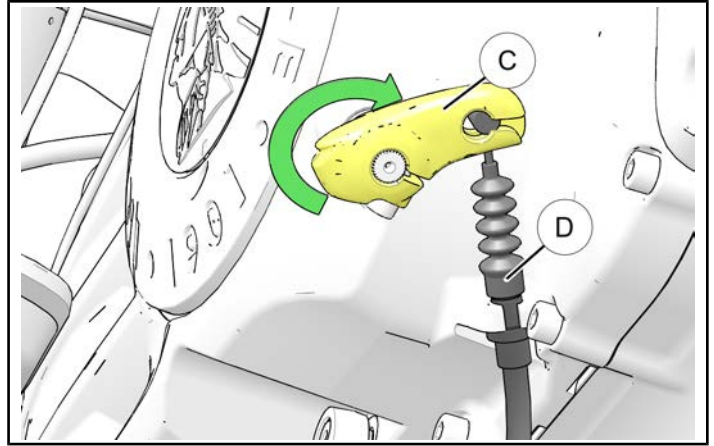
Spray rubber strap with soapy water to ease removal.



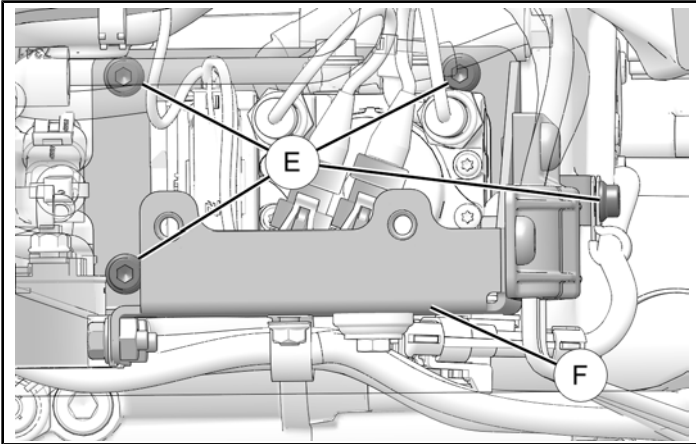
- Remove and keep two screws ① and bracket ③. Disconnect main ABS electrical connector and two brake switch connectors from ABS module.



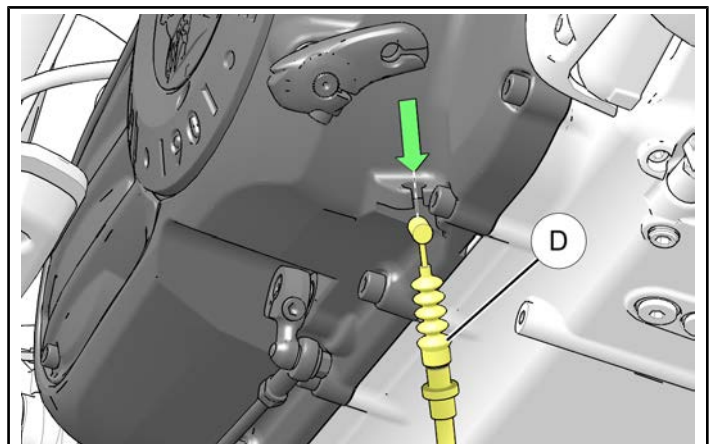
- Protect clutch release arm ③ with a shop towel. Rotate release arm inward. Disconnect clutch cable ④ from release arm.



- Remove and keep four fasteners ⑤ from ABS bracket ⑥.



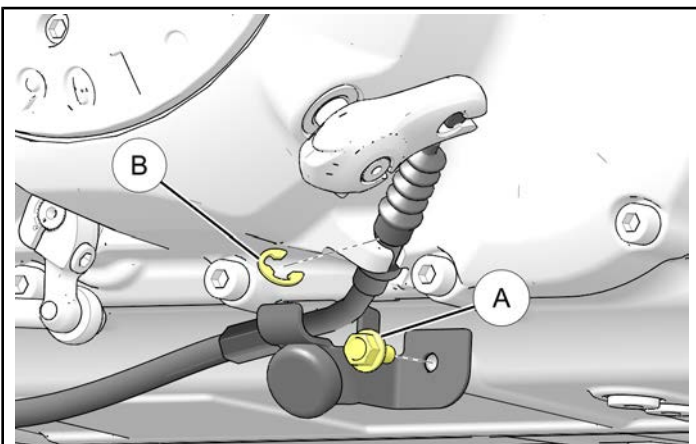
- Withdraw clutch cable ④ from mounting boss located on primary cover.



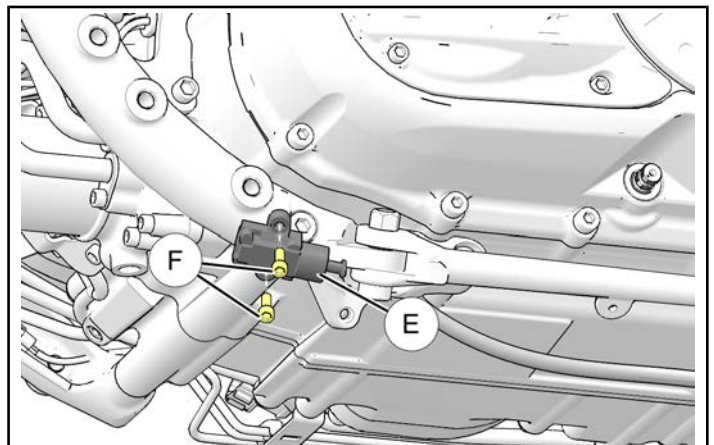
- Move ABS module/bracket and hydraulic brake lines far enough away from RH side of engine so engine can be lowered.

ENGINE REMOVAL

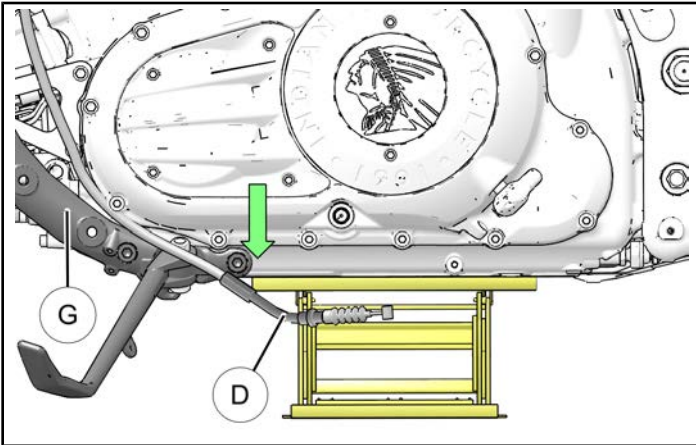
- Remove and keep side stand bumper bolt ① and clutch cable E-clip ②.



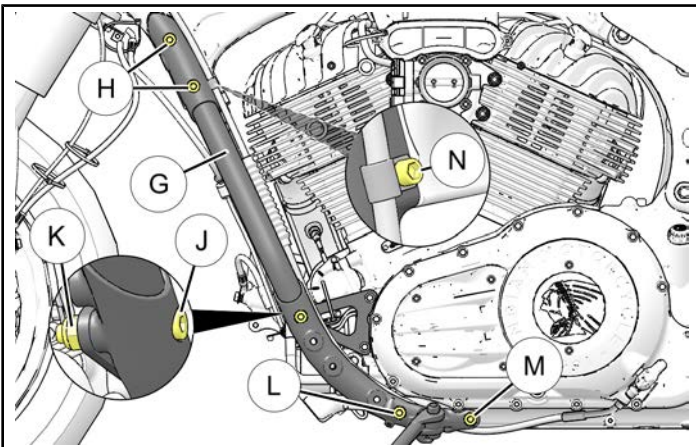
- Disconnect electrical connector for kickstand switch ⑤. Remove and keep two screws ⑥ and kickstand switch ⑤.



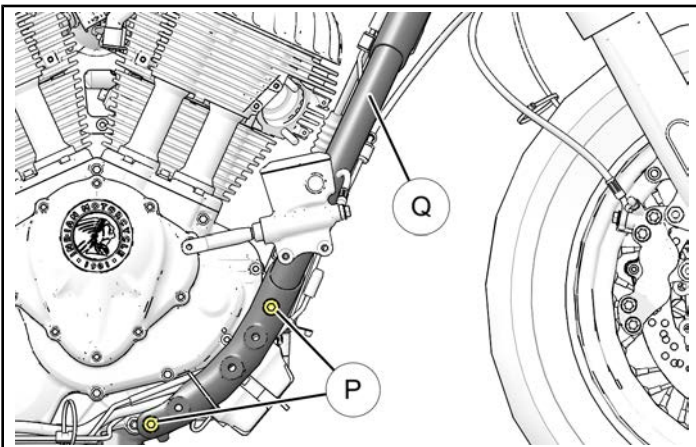
5. Flip kick stand down. Place small platform jack beneath engine just before front frame **G** (shown with arrow) and raise enough to support crankcase. Ensure clutch cable **D** is not pinched between jack and frame.



6. Remove and keep two screws **H**, one bolt **J** and nut **K**, screws **L**, **M**, and **N**, and remove LH frame downtube **G**.

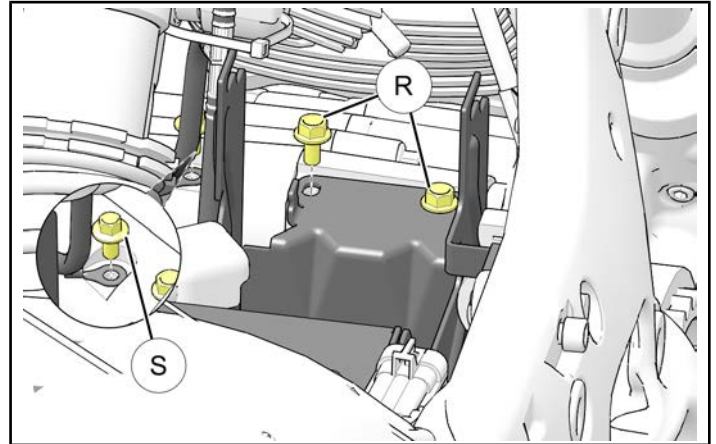


7. Remove and keep two screws **P** and remove RH frame downtube **Q**.

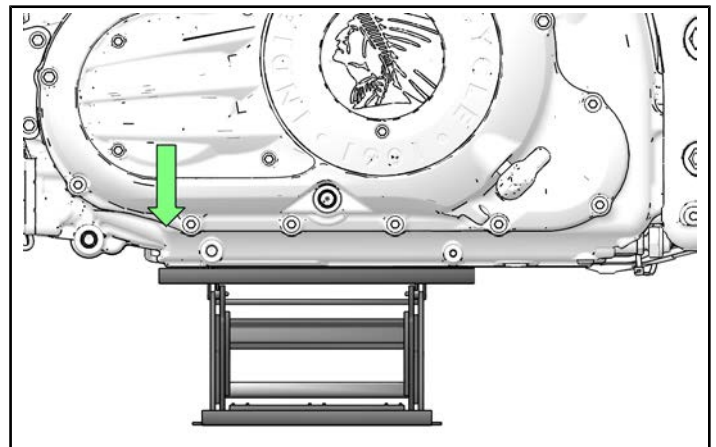


8. Position clutch cable so it is clear of engine area.

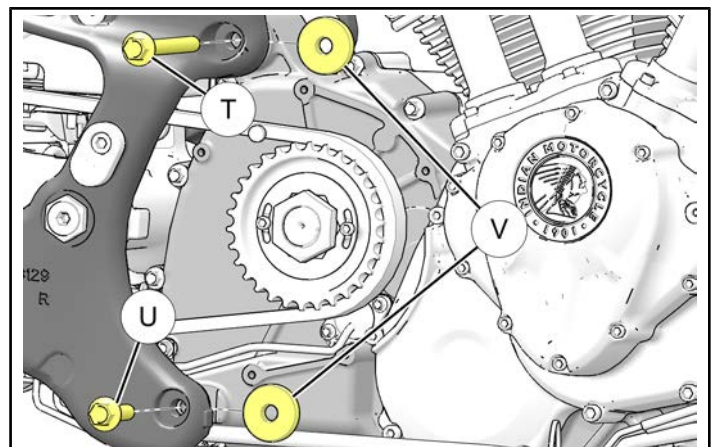
9. Remove and keep two fasteners **R** securing battery tray to engine and one screw **S** securing ground cable to engine case.



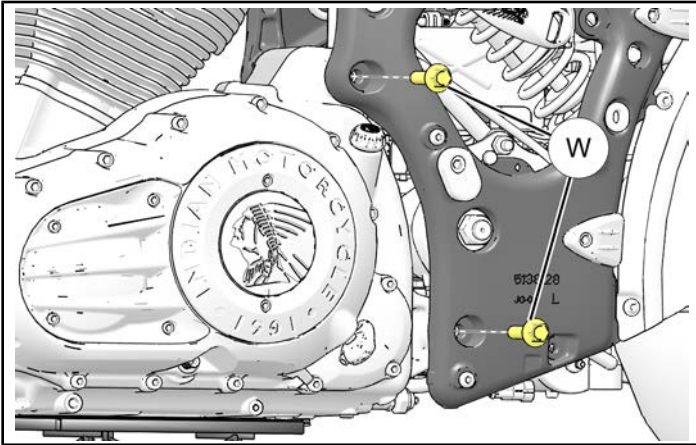
10. Slide the platform jack forward so its leading edge is under end of flat portion of engine as shown. Raise jack to support engine.



11. On RH side of engine, remove and keep upper **T** and lower **U** engine mount bolts. Remove and keep two spacers **V** from between engine and frame panel.



- On LH side of engine, remove and keep two engine mount bolts **W**.



13.

CAUTION

It is recommended that two people lower engine. Engine is heavy and may be difficult for one person to easily handle. Failure to have two people lower engine could result in damage to vehicle and/or engine and possible personal injury.

Push engine slightly to RH side to release from alignment dowels. With an assistant, carefully lower engine from frame.

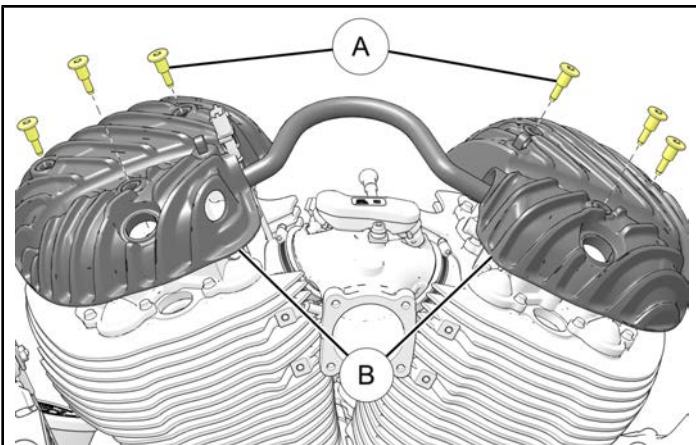
- Disconnect any remaining electrical, vacuum, or breather lines from top of engine.

NOTICE

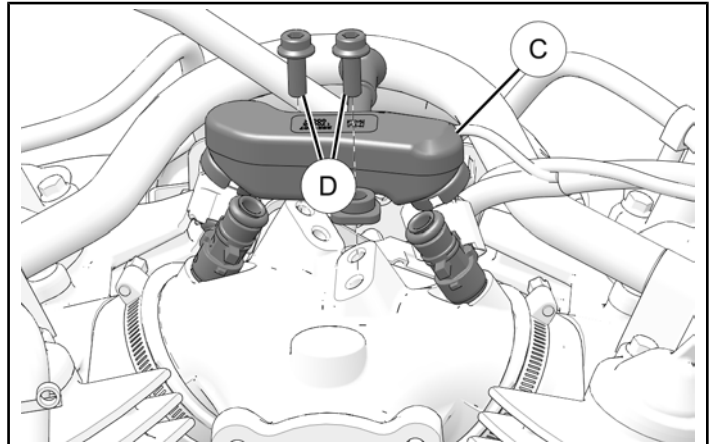
Take careful notes of wire routing and cable tie locations during disassembly to make sure of proper reinstallation.

REMOVE CYLINDER HEADS AND CYLINDERS.

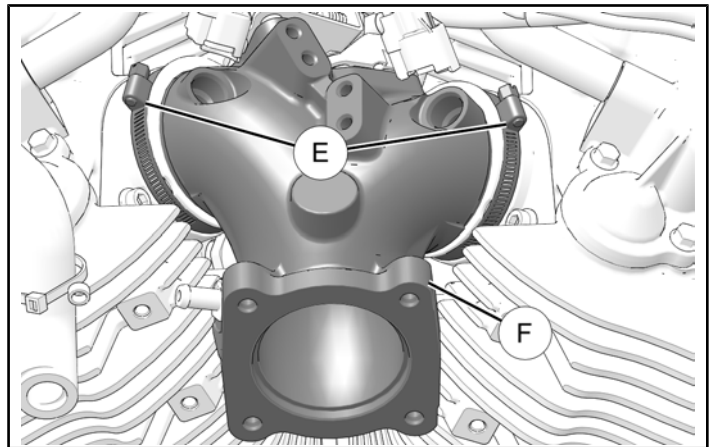
- Remove and keep six upper valve cover screws **A**. Remove both valve covers **B** and set aside.



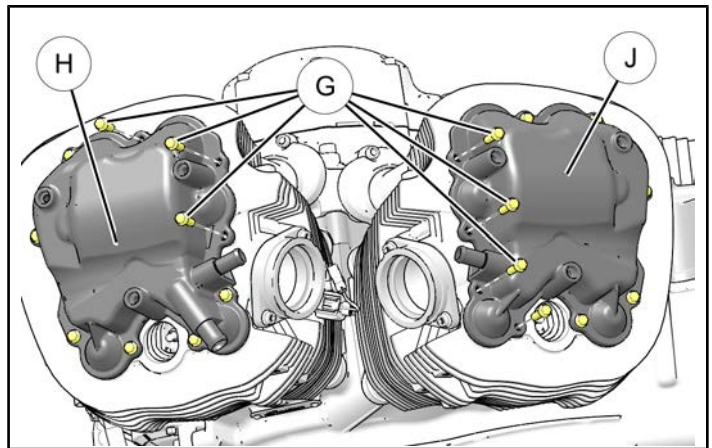
- Remove fuel rail and fuel injectors. Refer to service manual for removal procedure.
- Remove and keep two screws **D** and fuel rail assembly **C**. Remove and discard fuel injectors.



- Remove and keep two hose clamps **E** and intake manifold **F**.



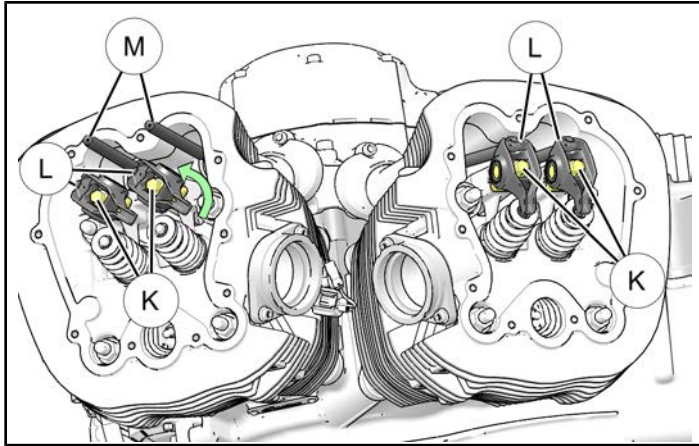
- Remove and keep eighteen screws **G** and front **H** and rear **J** lower valve covers.



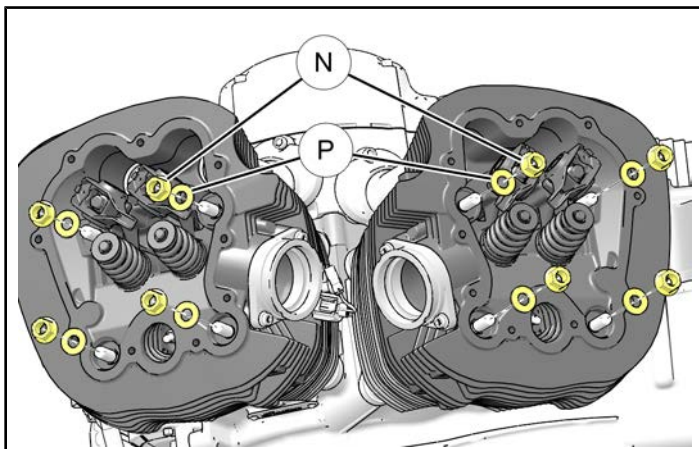
- Loosen rocker arm bolts (K) and turn rocker arms (L) enough to remove pushrods (M). Label pushrods upon removal for reinstallation.

CAUTION

If engine will be disassembled for extended period of time (overnight), the hydraulic lifters may bleed down. To prevent this, place hydraulic lifters in oil bath until ready for reassembly. Failure to do this may cause engine to NOT turn over with starter motor upon initial reassembly of engine.



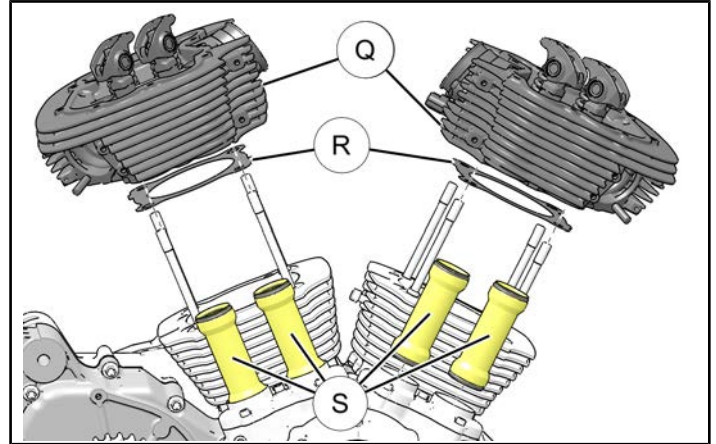
- Alternately loosen eight cylinder head nuts (N). Remove and keep eight nuts (N) and eight washers (P).



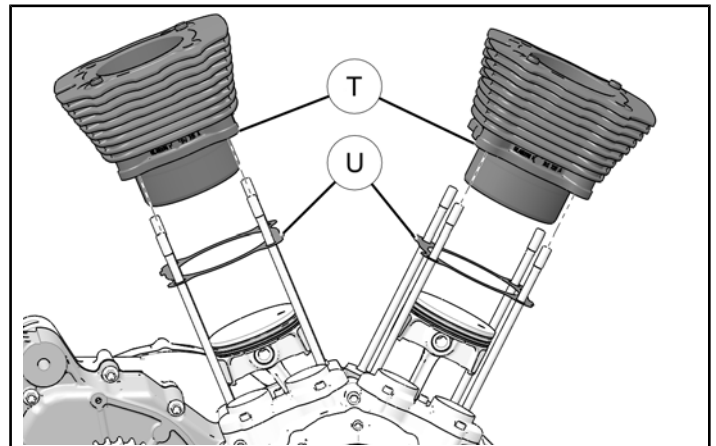
- Remove cylinder heads (Q), head gaskets (R), and four pushrod tubes (S). Label and set parts aside.

NOTICE

Separation of cylinder heads from push rod tubes may be difficult, particularly on high mileage engines. Special care or modified process may be required.



- Lift and remove both cylinders (T) and gaskets (U) from engine block.

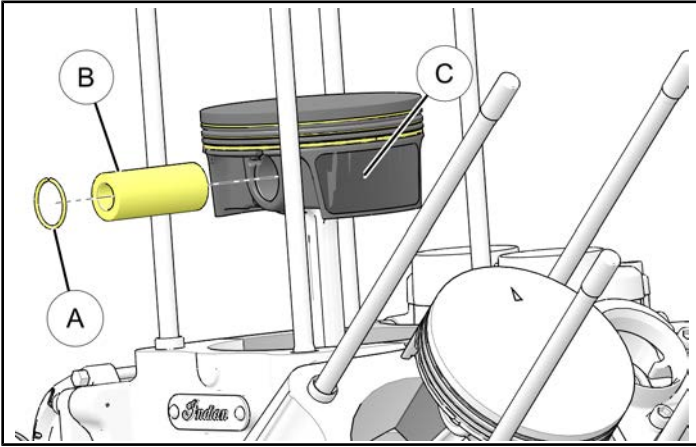


- Clean cylinder gasket mounting surface on top of engine block.
- Slide rubber hoses over lower studs to protect piston rings from damage.

PISTON REPLACEMENT

PISTON REMOVAL

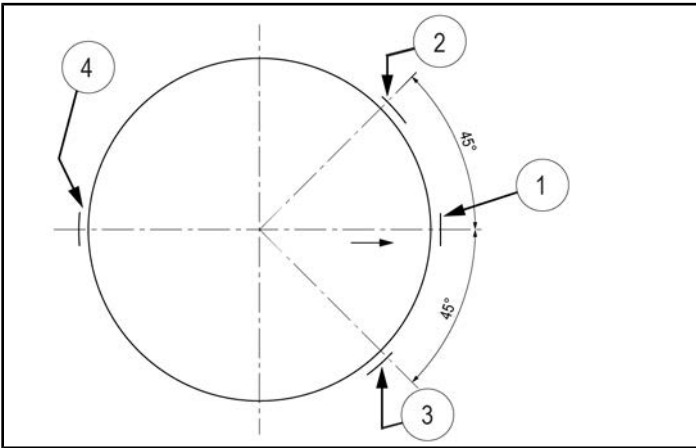
1. Remove left piston pin retaining ring (A). Push piston pin (B) out to left side of engine and remove stock piston (C).



2. Repeat step for other piston.

PISTON RING ALIGNMENT

1. Ensure piston ring gaps are aligned as shown:
Compression Ring 1 and 2 (1)
Upper Oil Control Ring (2)
Lower Oil Control Ring (3)
Expander Ring (4)



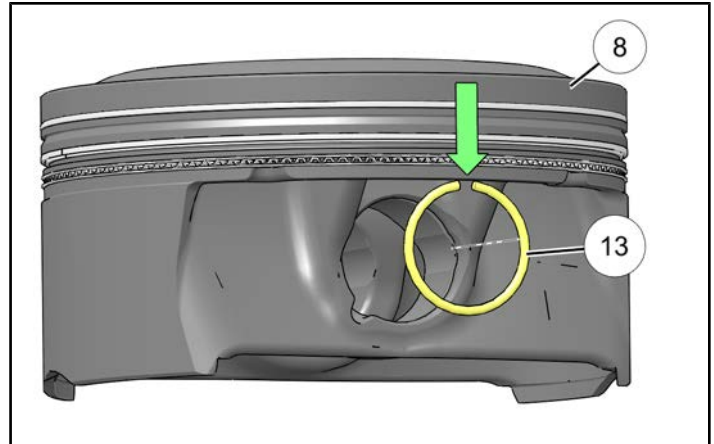
2. Lubricate all rings and sides of pistons with engine oil.

PISTON AND CYLINDER INSTALLATION

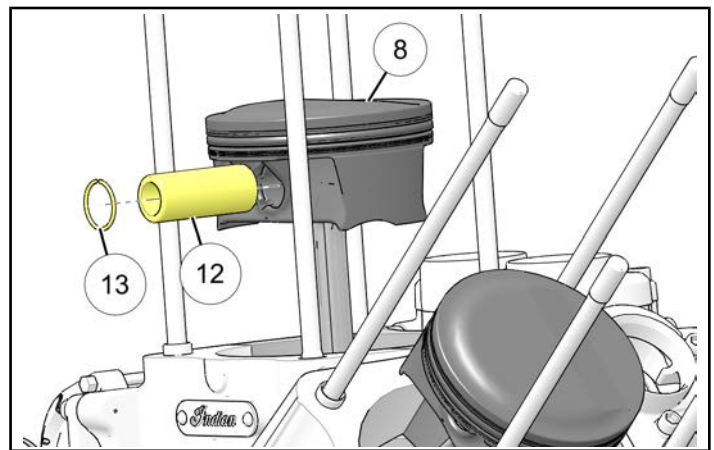
NOTICE

Pistons are marked with an arrow on crown. Install with arrow facing **FRONT** of engine.

1. Apply a light coat of engine oil to piston and rings.
2. Place a clean shop towel over crankcase to prevent foreign material from entering crankcase.
3. Make sure retaining ring (13) is installed on one side of piston (8) with end gap facing **UP** (12:00 position).



4. Slide piston pin (12) out of piston (8).
5. Install piston (8) over connecting rod with arrow on piston crown facing **FRONT** of engine.
6. Slide piston pin (12) back into piston (8).
7. Install new retaining ring (13) on piston (8) with end gap facing **UP** (12:00 position).



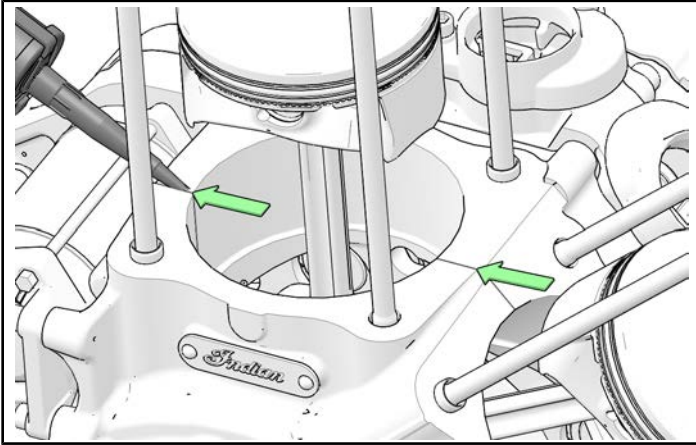
8. Repeat **steps 1-6** for second piston.

9. Transfer any sensors or brackets over from the stock cylinders to the new cylinders.

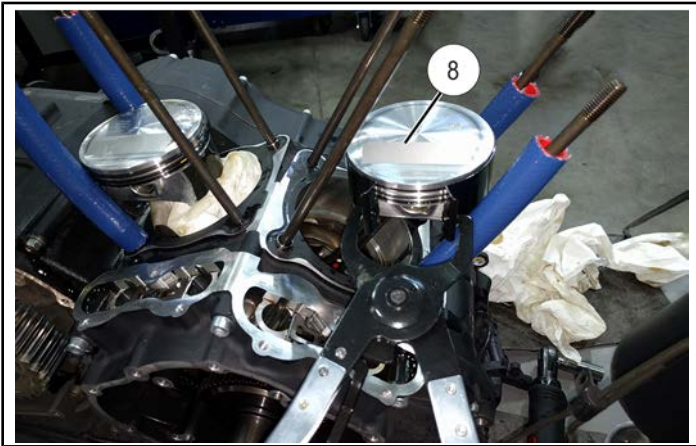
TORQUE

Knock Sensor Fastener:
15 ft-lbs (20 N·m)

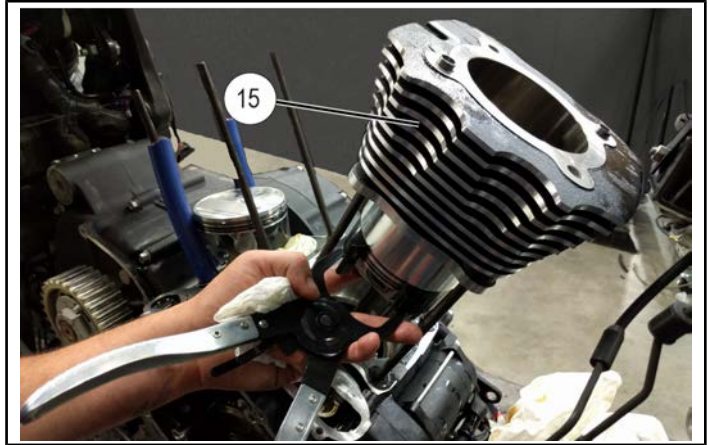
10. Apply RTV Silicone (Loctite® SI 698 Black or similar) to split line of engine block on both sides of cylinder (shown with arrows).



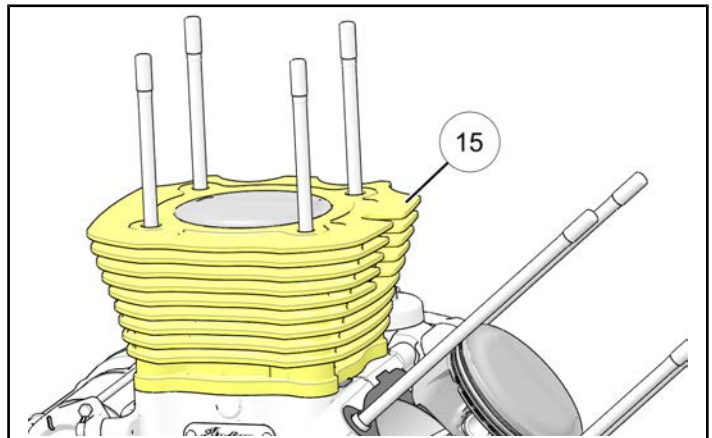
11. Install new base gasket ① on engine block.
12. Double check piston ring gap placement and install piston ring compressor around piston ⑧. Remove protective hoses from cylinder studs.



13. Hold piston in place and carefully slide cylinder ⑮ over piston ring assembly. **Do not force cylinder over piston.** Monitor rings carefully. If a piston ring becomes dislodged from ring compressor, remove cylinder and inspect ring carefully for damage.

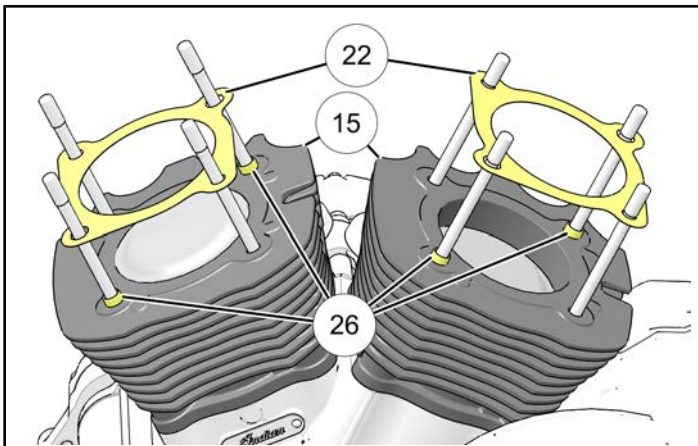


14. Remove piston ring compressor once rings are fully captive in cylinder.
15. Slide cylinder ⑮ down over piston until seated to base gasket and crankcase surface.

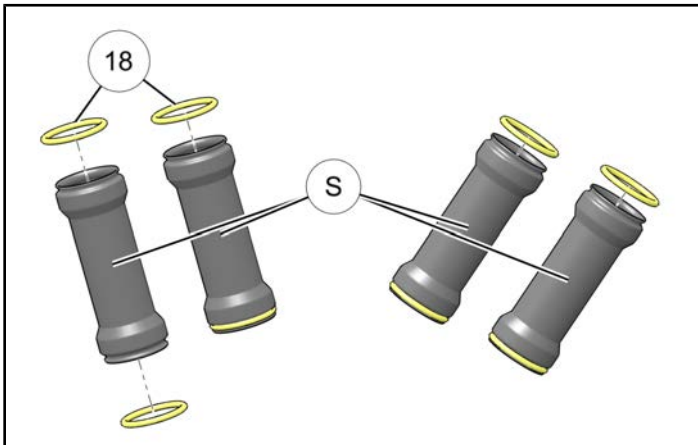


16. Repeat steps 9-14 for other cylinder.

17. Install two new hollow dowels ②⑥ on each cylinder ①⑤ as shown. Install two new head gaskets ②② onto cylinders ①⑤ as shown. Ensure larger holes in gasket are installed on dowels ②⑥.



18. Remove and replace push-rod tube O-rings ①⑧ on push-rod tubes ⑤.

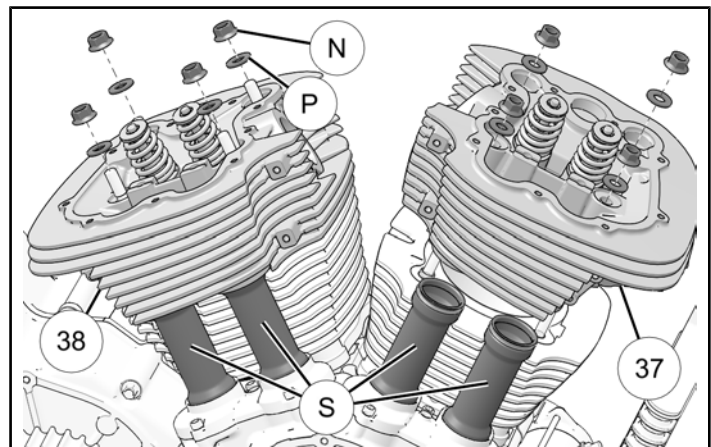


19. Lubricate push-rod tube o-rings ①⑧ with engine oil and press push-rod tubes ⑤ into lifter blocks until fully seated.

20. Lubricate cylinder studs with engine oil and set new cylinder heads ③⑦ and ③⑧ in place on cylinders and press down over push-rod tubes ⑤ until fully seated. Install retained washers ① and nuts ① on cylinder studs. Tighten finger tight.

IMPORTANT

If not seated correctly, O-rings will leak oil. Take special care to make sure O-rings are seated correctly.



21. Fully torque cylinder heads using a three step process. Follow torque pattern as shown for each step:

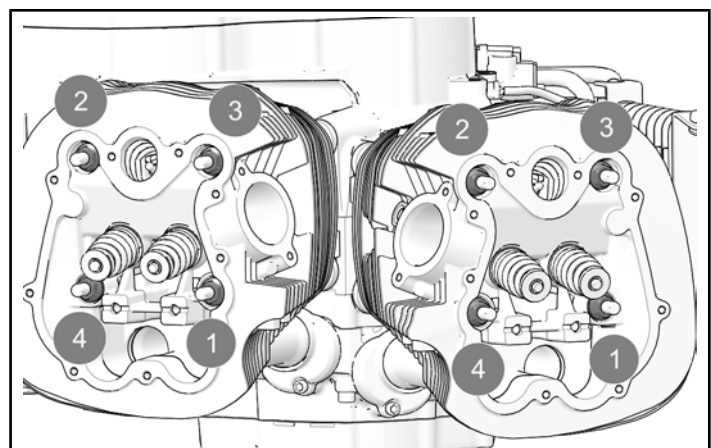
TORQUE

Cylinder Head Nuts: ①:

Step 1: **26 ft-lbs (35 N·m)**

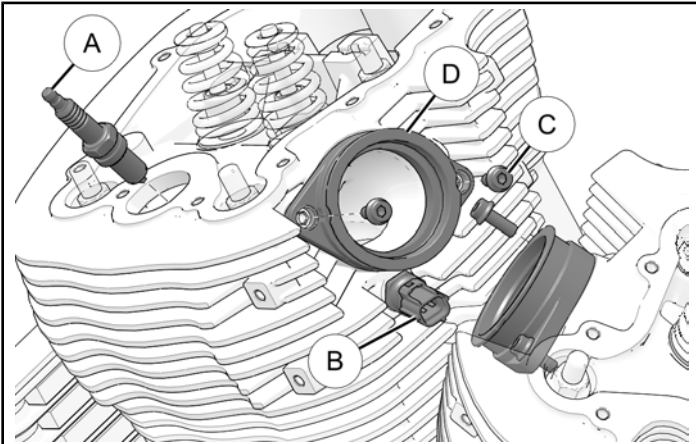
Step 2: **Turn additional 50°**

Step 3: **Turn additional 90°**



INSTALL CYLINDER HEAD COMPONENTS

1. Remove and keep both spark plugs (A), cylinder head temperature sensor (B), four screws (C) and two intake manifold adapters (D).



2. Install spark plugs (A) into new cylinder heads (37) and (38) and torque to specification.

TORQUE

Spark Plug (A):
13 ft-lbs (17 N·m)

3. Install cylinder head temperature sensor (B) and torque to specification.

TORQUE

Cylinder Head Temperature Sensor (B):
71 in-lbs (8 N·m)

4. Install intake manifold adapters (D) and secure with two screws (C). Torque screws to specification.

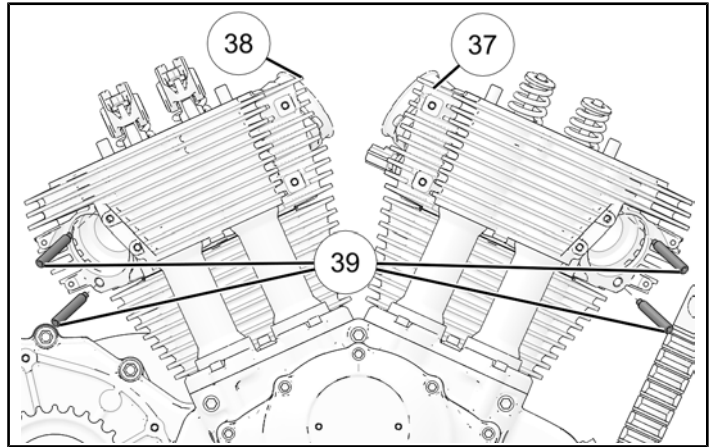
TORQUE

Intake manifold adapter screws (C):
88 in-lbs (10 N·m)

5. Install four new studs (39) onto new cylinder heads (37) and (38). Torque to specification.

TORQUE

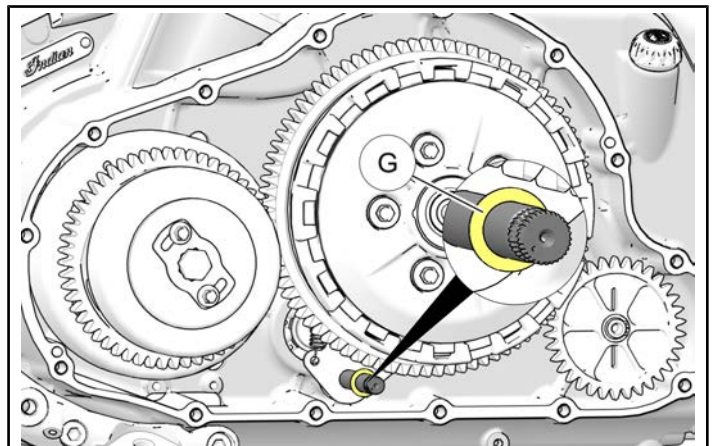
Exhaust Manifold Studs (39):
15 ft-lbs (20 N·m)



REMOVE PRIMARY COVER AND LOCK CRANKSHAFT

REMOVE PRIMARY COVER

1. Remove and keep primary cover. Refer to service manual for removal procedure.
2. Make sure washer (G) remains in place on shaft after removing primary cover.



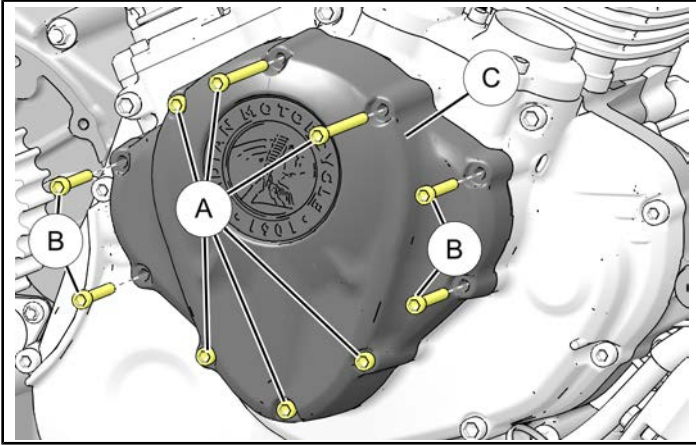
LOCK CRANKSHAFT

1. Perform Crankshaft locking procedure. Refer to service manual for locking procedure.

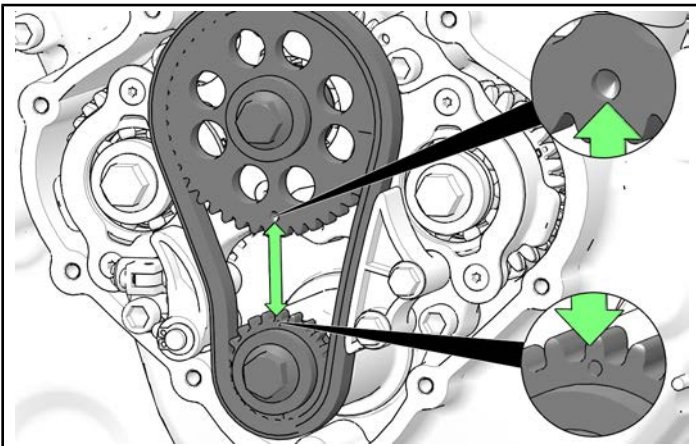
REMOVE AND INSTALL CAMSHAFTS

CAM CHAIN, GUIDE AND TENSIONER REMOVAL

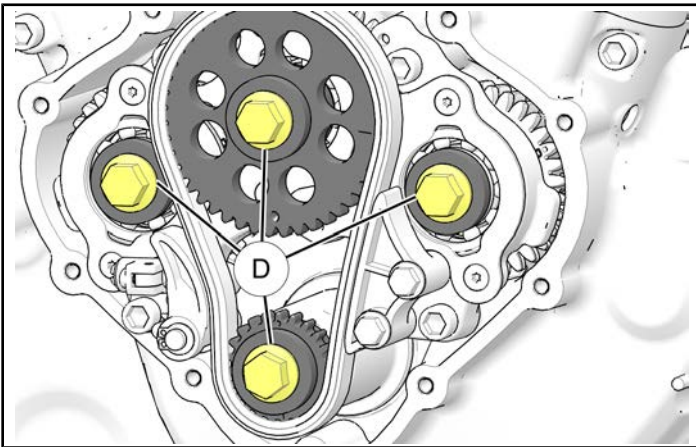
1. Remove and keep ten fasteners (A) and (B), make note of different sizes and locations. Remove cam chain cover (C) and gasket.



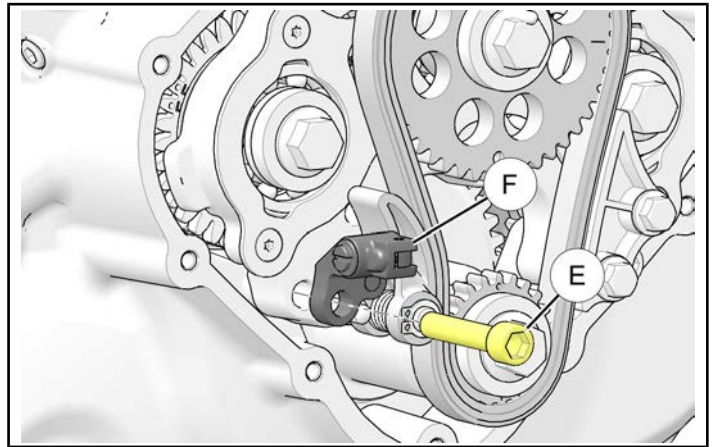
2. Make sure indents on gear faces align with each other as shown. If they do not, repeat crankshaft locking procedure and align them.



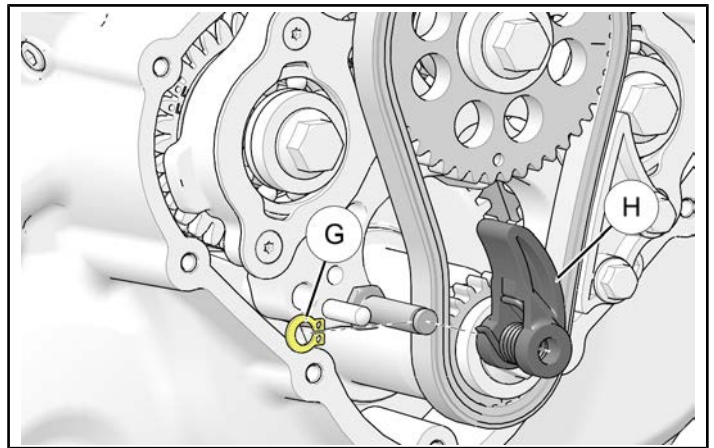
3. Loosen, but **DO NOT REMOVE** four screws (D).



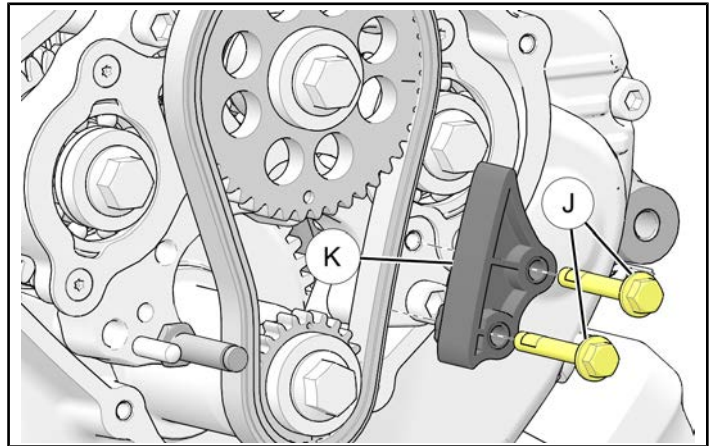
4. Remove and keep chain tensioner fastener (E) and chain tensioner (F).



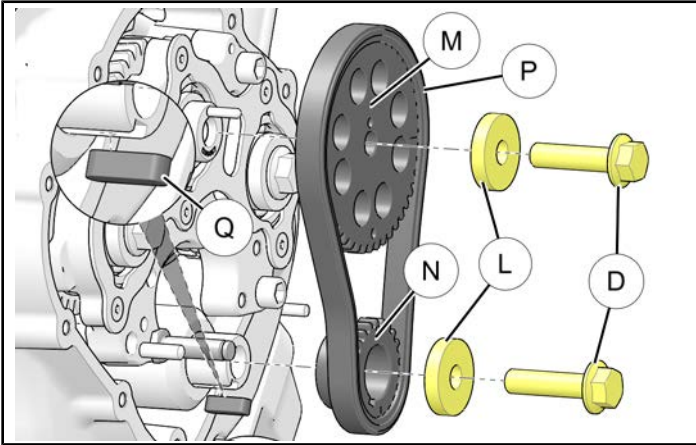
5. Remove and keep external snap ring (G) and chain tensioner arm and spring assembly (H).



6. Remove and keep two fasteners (J) and Camshaft Chain Guide (K).



- Remove screws ① and washers ② from crankshaft and camshaft. Pull camshaft sprocket ③, crankshaft sprocket ④ and cam chain ⑤ off as an assembly and set aside. Collect woodruff key ⑥ from crankshaft and set aside.



REMOVE AND INSTALL CAMSHAFTS

IMPORTANT

Camshaft removal with cylinder heads torqued in place requires Special Tool: **PF-51455**

- Remove and install camshafts. Refer to service manual procedure “**CAMSHAFT SERVICE - IN BIKE**” for step by step procedure.
- Install new camshafts ③, ④, and ⑤ with new woodruff keys ⑥ and screws ⑦. Refer to service manual for procedure.

TORQUE

Camshaft Screws ⑦:
52 ft-lbs (70 N·m)

TORQUE

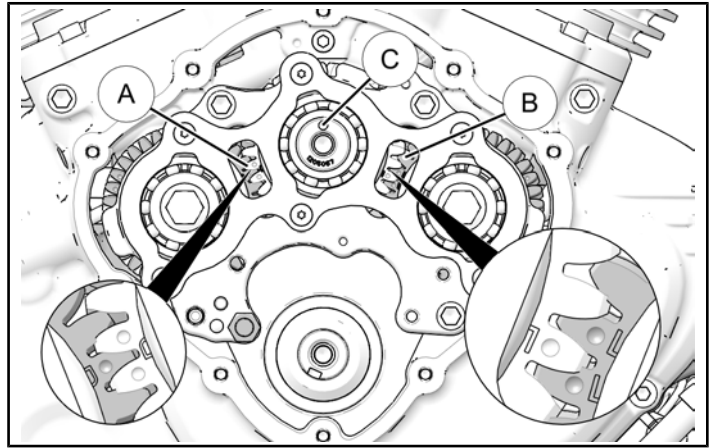
Camshaft Carrier Fasteners: :
15 ft-lbs (20 N·m)

CAM CHAIN INSTALLATION

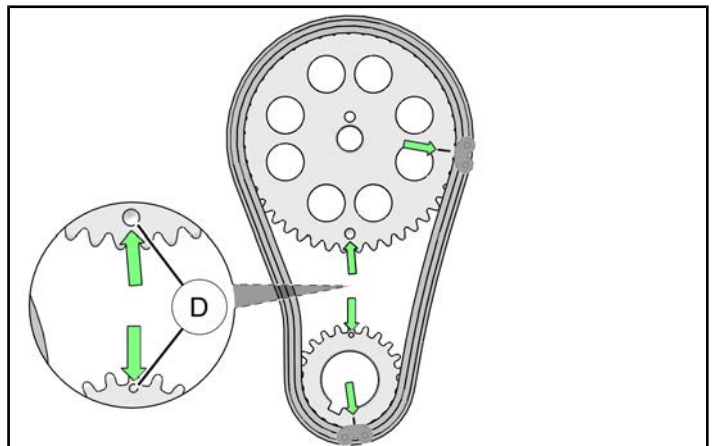
⚠ CAUTION

Thunder Stroke is an INTERFERENCE ENGINE. If camshafts and crankshaft must be turned independently of each other to set valve timing, camshafts must be set to TDC prior to rotating crankshaft. Failure to do this may cause pistons to contact valve resulting in engine damage.

- Verify camshafts are set to TDC.
 - Camshaft timing marks ① and ② should be aligned as shown. Camshaft sprocket alignment dowel ③ should be at 12 o'clock as shown.

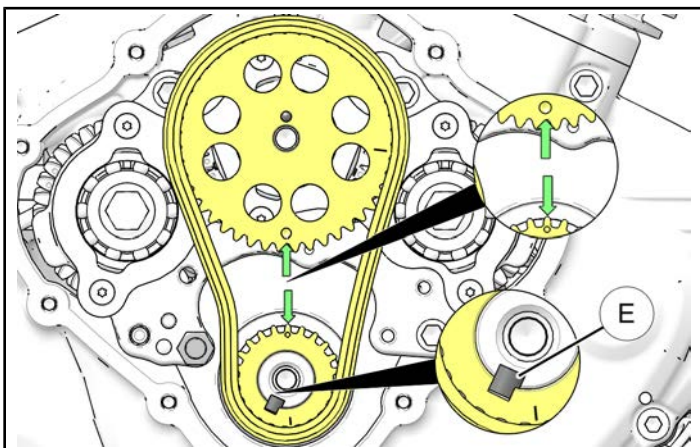


- Assemble timing chain onto camshaft and crankshaft sprockets.
 - Align timing marks ④ as shown.
 - Position chain so dark chain links line up with sprocket hashmarks as shown.



- Move chain and sprocket assembly onto crankshaft and center camshaft.

4. Make sure crankshaft woodruff key **(E)** is in place and timing marks are aligned.



5. Install new crankshaft and camshaft sprocket fasteners and retained washer and torque to specification.

TORQUE

Sprocket Screws **(25)**:
52 ft-lbs (70 N·m)

6. Install retained cam chain guide and torque fasteners to specification.

TORQUE

Cam Chain Guide Screws **(1)**:
71 in-lbs (8 N·m)

7. Install retained cam chain tensioner and tensioner arm assemblies. Torque to specification.

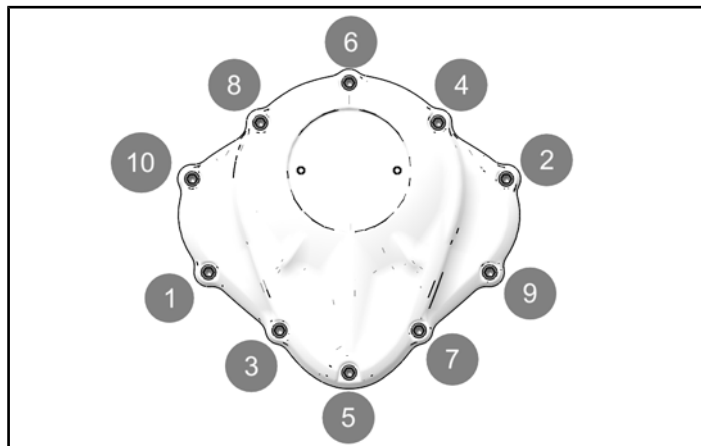
TORQUE

Cam Chain Tensioner Arm Screw **(E)**:
15 ft-lbs (20 N·m)

8. Clean gasket mating surfaces and install retained cam chain cover with new gasket **(21)**. Torque screws to specification using the following torque sequence.

TORQUE

Cam Chain Cover Screw **(A)**:
10 ft-lbs (13 N·m)



REPLACE CLUTCH SPRINGS (KIT PN 2884322 ONLY)

IF INSTALLING KIT PN 2885158 SKIP TO NEXT SECTION

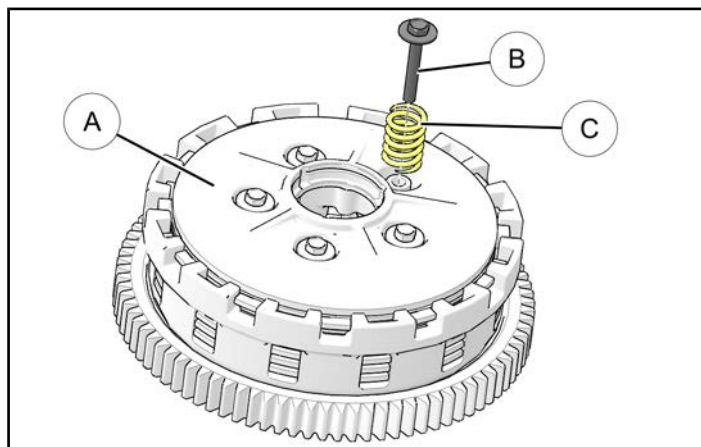
NOTICE

Replace clutch springs one at a time so clutch pack removal is not needed.

1. With clutch assembly **(A)** still installed, remove and keep one pressure plate fastener **(B)**, remove one clutch spring **(C)**, and replace with a new clutch spring **(24)**. Reinstall screw **(B)** and torque to specification.

TORQUE

Clutch Spring Screw **(B)**:
89 in-lbs (10 N·m)



2. Repeat procedure for other four clutch springs, replacing them one at a time.

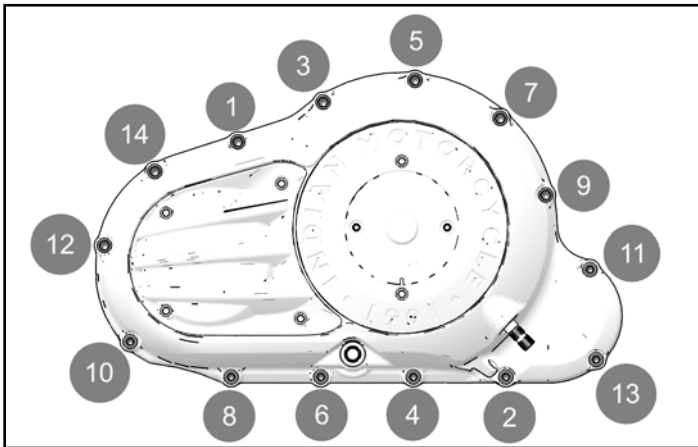
VEHICLE REASSEMBLY

LOWER ENGINE REASSEMBLY

1. Remove crankshaft locking pin installed during locking procedure.
2. Install stator. Refer to service manual for procedure.
3. Install flywheel. Refer to service manual for procedure.
4. Install torque compensator. Refer to service manual for procedure.
5. Clean gasket surfaces of crankcase and primary cover.
6. Make sure thrust washer is installed on shift shaft (as shown in **step 5 of Remove Primary Cover** section).
7. Install new primary cover gasket (20).
8. Apply a thin layer of grease to shift shaft seal.
9. Install primary cover. Refer to service manual for procedure.
10. Torque primary cover fasteners to specification following torque sequence.

TORQUE

Primary Cover Screws (C):
15 ft-lbs (20 N·m)



UPPER ENGINE REASSEMBLY

NOTICE

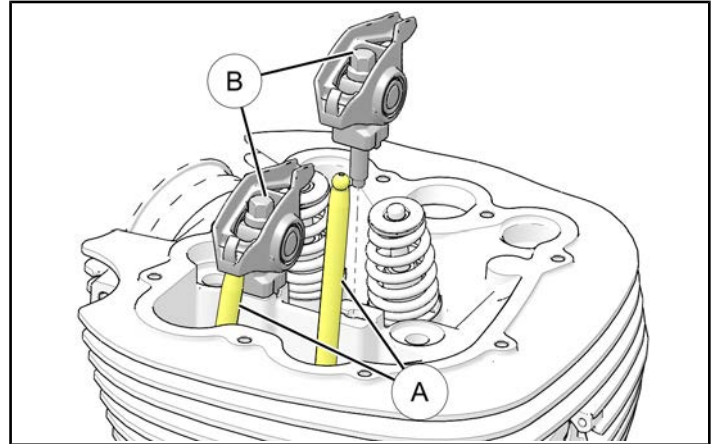
Make sure wire routings are clear of sharp edges and heat sources when installing. Refer to notes taken during disassembly and reinstall **ALL** cable ties and clips to original locations.

Assemble Valvetrain

1. Reinstall retained push-rods (A) into tubes. Reinstall rockers (B) into original locations and torque rockers to specification.

TORQUE

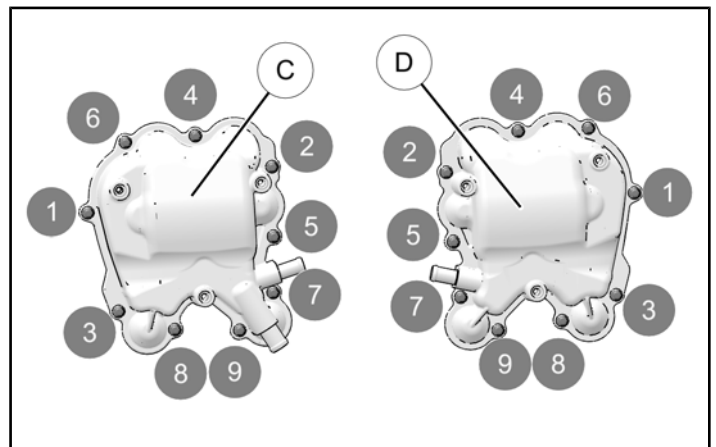
Rocker Arms (B):
22 ft-lbs (30 N·m)



2. Replace valve cover gaskets with new gaskets (29).
3. Install front (C) and rear (D) valve covers with retained bolts (G). Tighten bolts finger tight, then torque to specification following torque sequence.

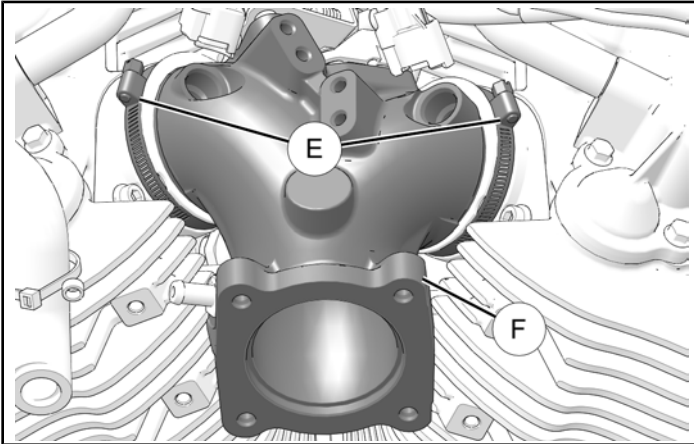
TORQUE

Lower Valve Cover Screws (G):
89 in-lbs (10 N·m)



Install Intake Manifold

1. Install retained intake manifold (F) with retained hose clamps (E).

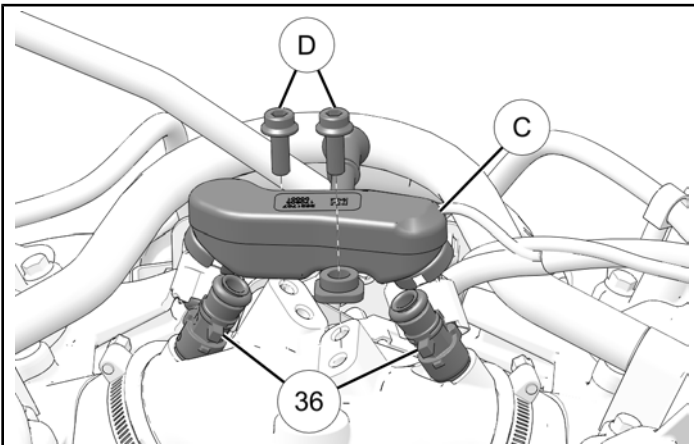


Install Fuel Injectors

1. Install two new fuel injectors (36). Secure with retained fuel rail (C) and screws (D). Torque screws to specification.

TORQUE

Fuel Rail Screws (D):
88 in-lbs (10 N·m)

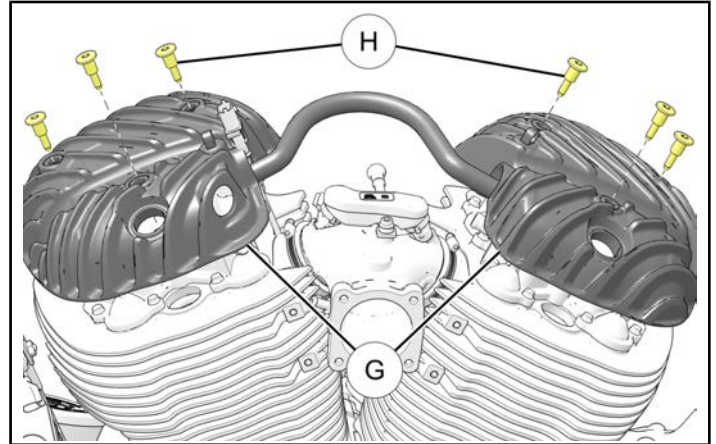


Install Upper Valve Covers

1. Install upper valve covers and breather hose (G) with six retained screws (H). Torque upper valve cover screws to specification.

TORQUE

Upper Valve Cover Screws (H):
89 in-lbs (10 N·m)

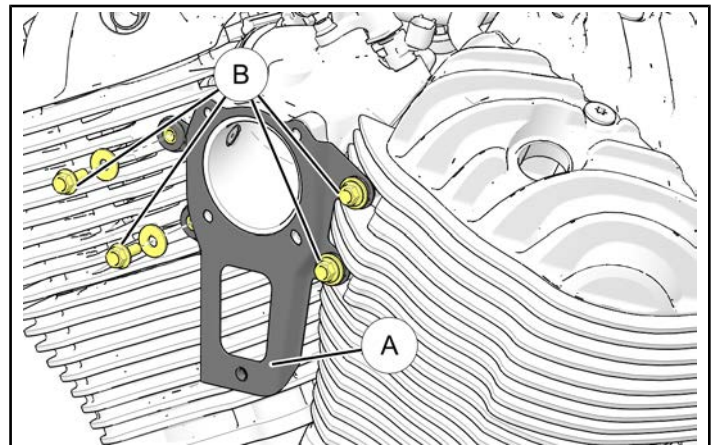


AIRBOX/THROTTLE BODY INSTALLATION

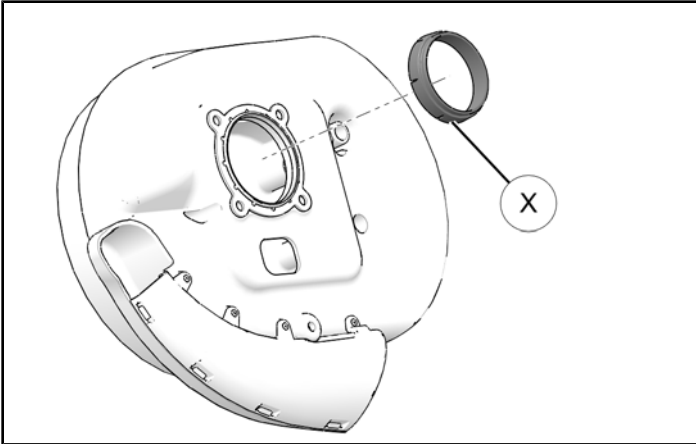
1. Install retained bracket (A) with four retain fasteners (B). Torque fasteners to specification.

TORQUE

Bracket Fasteners (B):
88 in-lbs (10 N·m)



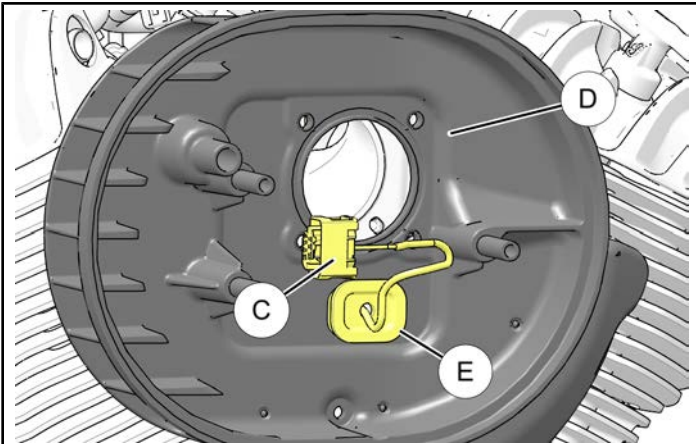
2. Before installing **Stage 1 High Performance Air Cleaner Kit** (PN 2881779-XXX). Remove and discard hard plastic spacer (X).



3. Feed throttle body electrical connector (C) through hole in airbox (D) and install rubber harness seal (E) in rectangular cutout.

NOTICE

Ensure harness seal is fully seated in airbox.



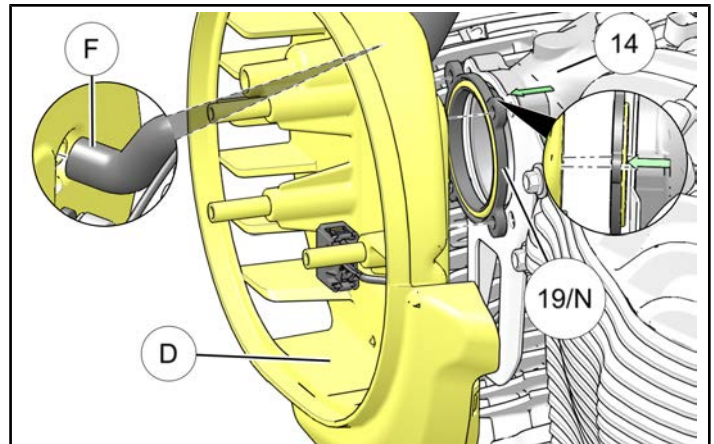
- 4.

IMPORTANT

Make sure proper airbox gasket is used with corresponding airbox.

- Stage 1 High Performance Air Cleaner Kit (PN 2881779-XXX) (Oval Airbox)
 - Airbox Gasket (N) PN 5633638 (Included in Airbox Kit)
- Performance Airbox Kit (PN 2880654-XXX) (Round Airbox)
 - Airbox Gasket (19) PN 5633754 (Included in Stage 3 116 Kit PN 2884322 and 2885158)

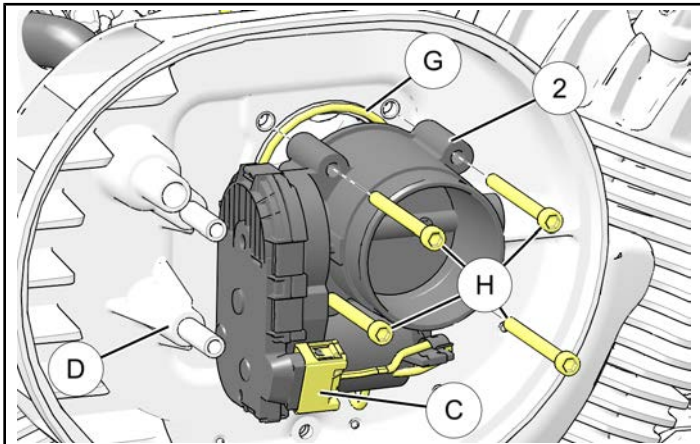
Install **new** airbox gasket (19) with round airbox and reuse airbox gasket (N) with oval airbox with inner gasket lip extending into intake (as shown with inset and arrow) between intake manifold (14) and airbox (D) (Airbox may vary from image based on which kit is equipped). Loosely install airbox (D) to intake manifold (14). Ensure breather hose (F) is connected to airbox (D).



5. Install retained throttle body gasket ⑥ and new throttle body ② using four retained screws ④. Connect throttle valve connector ③ into throttle valve. Torque screws to specification.

TORQUE

Throttle Valve Screws ④: **88 in. lbs. (10 Nm)**



6. Complete installation of airbox using kit instructions for equipped airbox.
7. Reconnect any ignition wires, hoses, or any other connections on top of engine.
8. Reinstall ignition coil. Refer to service manual for procedure.

INSTALL ENGINE

1. Perform engine installation completely. Refer to service manual for procedure with the following additions or changes.

IMPORTANT

Make sure wire routings are clear of sharp edges and heat sources when installing. Refer to notes taken during disassembly and reinstall **ALL** cable ties and clips to original locations.

NOTICE

- Install new exhaust gaskets ③⑩ before installing exhaust header.
- **Stage 1 Muffler Kit** (PN 2879529-XXX, 2879768-XXX, or 2879769-XXX) must be installed and not stock exhaust.

2. Replace engine oil with new, clean oil (either Indian® 20W-40 or Indian® 15W-60 Engine Oil) and replace oil filter with new Indian® oil filter.
3. Use dipstick to check engine oil level and add recommended oil, if necessary.

4. Remove spark plugs.
5. Turn engine over several times with starter motor to pump up oil into engine.
6. Reinstall and torque spark plugs.

TORQUE

Spark Plug ①:
13 ft-lbs (17 N·m)

REPLACE BADGES

IMPORTANT

- Installation temperature must be between 70-100° F (21-37° C)
- Clean surfaces are critical for adhesion performance.
- Backing liners should not be removed until part is going to be applied.

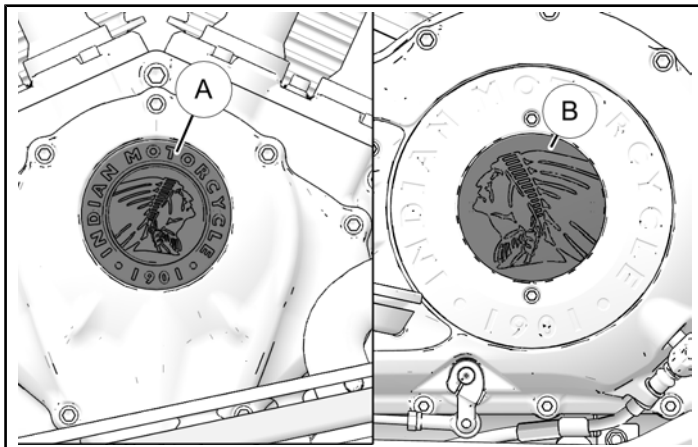
NOTICE

Clean surfaces no more than 20 minutes prior to installation.

⚠ WARNING

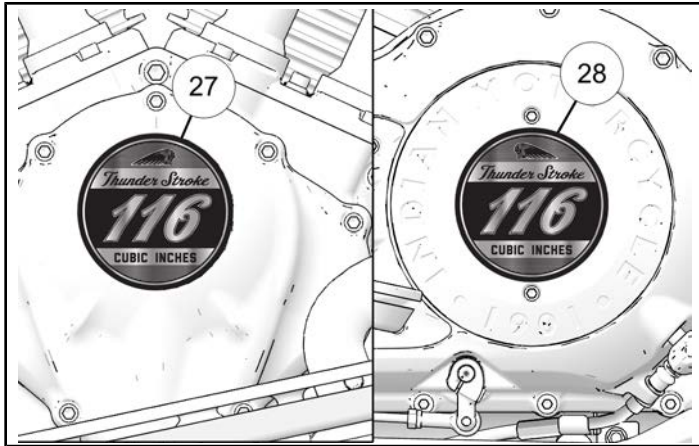
Isopropyl alcohol is hazardous to your health. See isopropyl packing for proper handling instructions, including recommended personal protective equipment such as goggles and chemical resistant gloves.

1. Carefully remove Cam Cover badge ① and Primary Cover badge ② with non-marring tool.



2. Clean adhesive from covers with solvent wipes.

3. Remove backing paper from badges and apply to corresponding locations. Apply firm pressure over entire badge surface for proper adhesion.



FEEDBACK FORM

A feedback form has been created for the installer to provide any comments, questions or concerns about the installation instructions. The form is viewable on mobile devices by scanning the QR code or by clicking [HERE](#) if viewing on a PC.



UPDATE ECM

UPDATE ECM

1. Update ECM with new calibration software using included Calibration Card ③.

IMPORTANT

This step must be completed by an Authorized Indian Dealer. Do not operate vehicle until recalibration of vehicle is complete.