2753 Michigan Road • Madison, Indiana 47250 • 855-743-3427

INSTALLATION INSTRUCTIONS

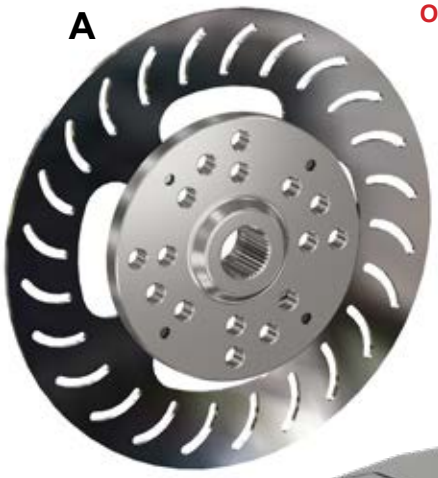
Gen 3 Portal Gear Hubs - 6”

Can-Am Commander

WHEN FILLING GEAR BOX USE ONLY SUPERATV PORTAL BLOOD. USING GREASE WILL CAUSE FAILURE OF GEARS AND BEARINGS. USING GREASE WILL VOID THE WARRANTY.

Item	Description
A	Rotor x 4
B	Left Gear Box x 2
C	Right Gear Box x 2
D	Gasket x 4
E	Cap x 4
S	Recessed Nut x 4

A



PGH607-GB451B



(Right)

PGH607-GB456B*



S

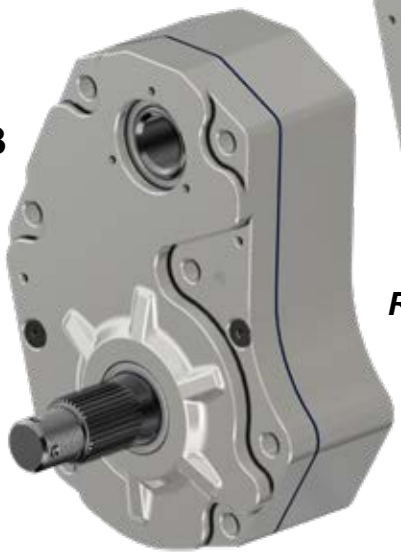


Front



C

B



PGH607-GB451A *(Left)*

Rear

D





E

PGH607-GB456A*

***PGH-6-7-14-453 kits will use:**

Item	Description
B	Left Rear Gear Box (PGH607-GB453A)
C	Right Rear Gear Box (PGH607-GB453B)
F	Rear Recessed Nut x 2
S	Front Recessed Nut x 2

F





S

(Kit Contents continue on following pages)

Need help with your installation?

sales@superatv.com

www.superatv.com

1-855-743-3427

8:00am - 8:00pm EST M-Th
8:00am - 7:00pm EST Friday
9:00am - 2:00pm EST Saturday

Read instructions and view illustrations before beginning.

Thank You For Choosing

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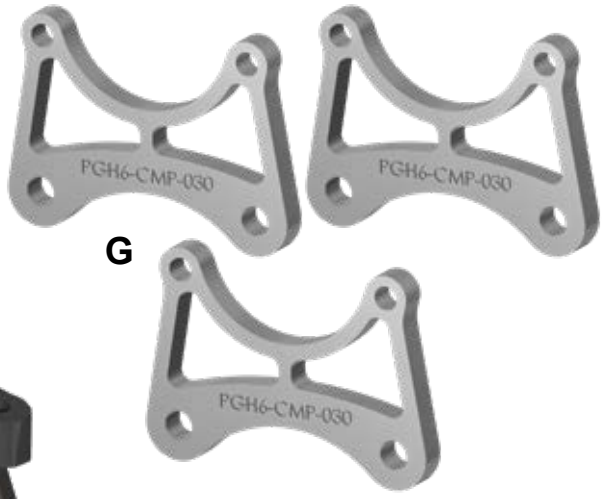
(Kit Contents continued)



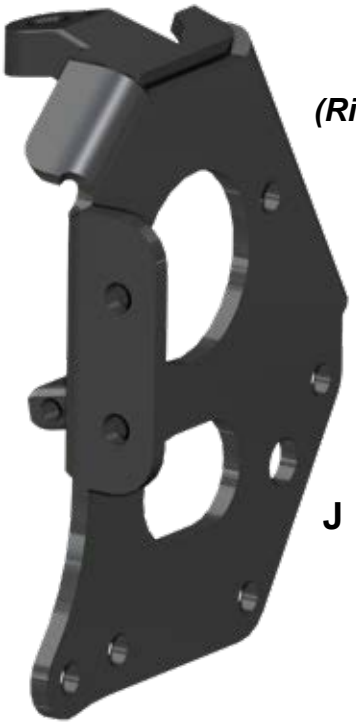




(Left)

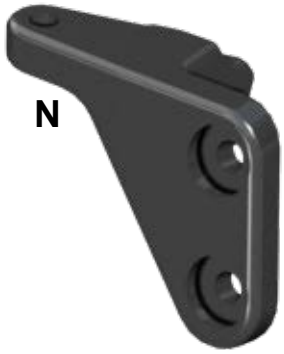


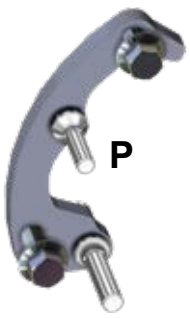
(Right)



Item	Description
G	Caliper Mounting Bracket x 3
H	Left Spindle
J	Right Spindle
K	Left Trailing Arm
L	Right Trailing Arm
M	Left Steering Arm
N	Right Steering Arm
P	Left Caliper Mounting Adapter
Q	Right Caliper Mounting Adapter



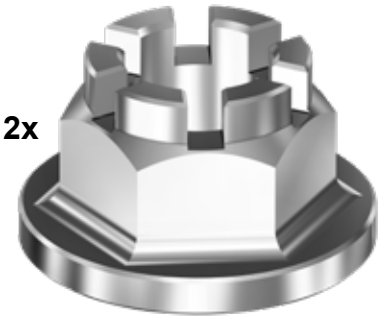




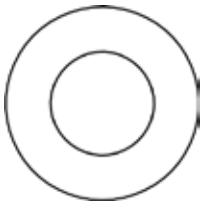


Front Hardware Kit

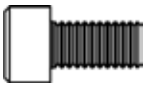
12x  M12 Nylock Nut

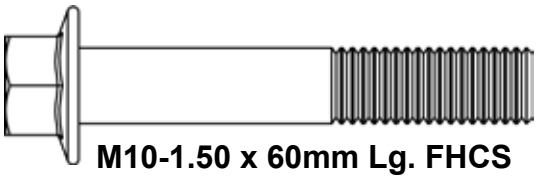
2x 
Castle Nut

Threadlock, 2mL

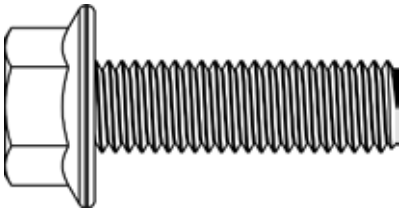
2x  M12 Narrow Washer

2x  Cotter Pin

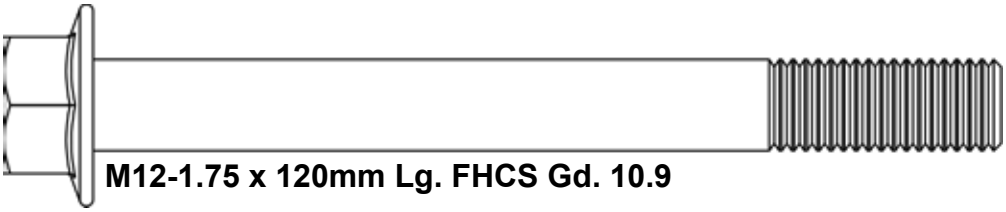
6x  M6-1.0 x 12mm Lg. SHCS

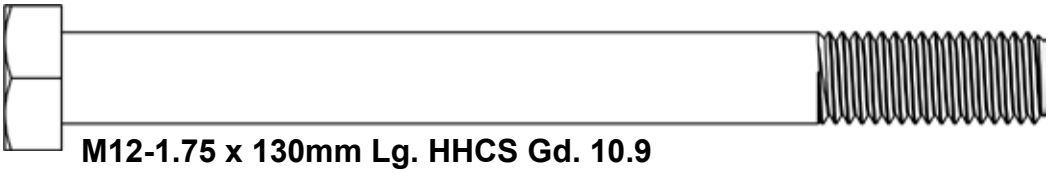
4x 
M10-1.50 x 60mm Lg. FHCS

4x  M10 Nylock Nut

4x  M12-1.50 x 40mm Lg. FHCS

8x  Drain Plug

6x 
M12-1.75 x 120mm Lg. FHCS Gd. 10.9

2x 
M12-1.75 x 130mm Lg. HHCS Gd. 10.9

Machines with SuperATV Heavy Duty Tie Rod Ends must use provided hardware shown when securing to Steering Arms.

 M12 Nylock Nut

 M10 Nylock Nut

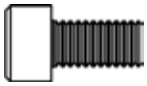
 M12 Nylock Nut

(Qty. 2 each)

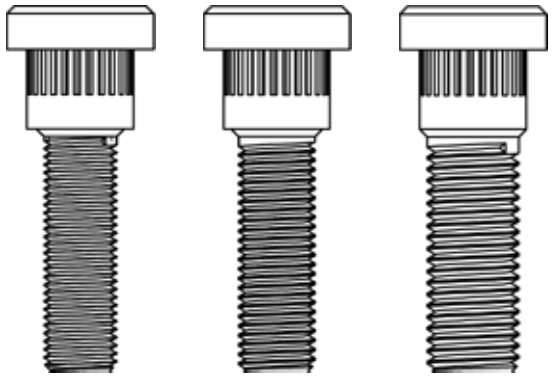
Rear Hardware Kit

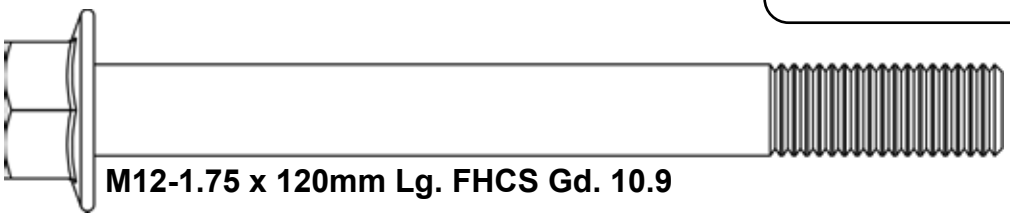
8x  M12 Nylock Nut

2x  Cotter Pin

6x  M6-1.0 x 12mm Lg. SHCS

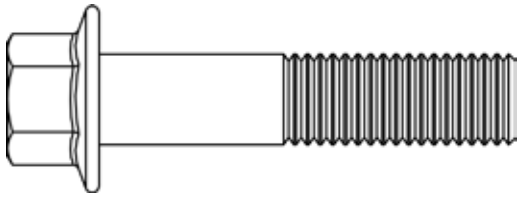
Wheel Stud Kit (16 each)



8x 
M12-1.75 x 120mm Lg. FHCS Gd. 10.9

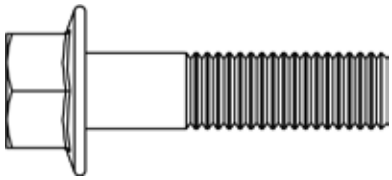
4x  Drain Plug

2x  Castle Nut

12x  M12-1.75 x 55mm Lg. FHCS

(Factory installed on billet models: disregard any remaining)

Accessory Hardware Kit

8x  M10-1.50 x 40mm Lg. FHCS

Liability Statement

SuperATV's® products are designed to best fit user's ATV/UTV under stock conditions. Adding, modifying, or fabricating any factory or aftermarket parts will void any warranty provided by SuperATV® and is not recommended. SuperATV's® products could interfere with other aftermarket accessories. If user has aftermarket products on machine, contact SuperATV® to verify that they will work together.

Although SuperATV® has thousands of satisfied customers, user should be aware that installing lift kits, long travel, or suspension kits, tires, etc. will change the ride of machine and may increase maintenance and part wear. Operating any off-road machine while, or after, consuming alcohol and/or drugs increases risk of bodily harm or death. No warranty or representation is made as to this product's ability to protect user from severe injury or death. SuperATV® urges operators and occupants to wear a helmet and appropriate riding gear at all times.

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SuperATV® will warranty only parts provided by SuperATV®. Any damage or problems with OEM housings, bearings, seals, or other manufacturers' products will not be covered by SuperATV®. SuperATV® parts and products are not warrantied if item was not installed properly, misused, or modified.

Installing, adding, modifying, or fabricating any factory or aftermarket product to your ATV/UTV may violate certain local, state, and federal laws. Be advised that laws vary depending on town, city, county, state, etc. Use of certain products on public streets, roads, or highways may be in violation law. The Buyer is solely and exclusively legally and personally responsible for any violation of the law by the installation or use of the product. You must abide by all local, state, and federal laws, including but not limited to vehicle safety, traffic laws, and ordinances. It is your responsibility to know the laws and how they apply to you.

The Buyer is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications, warnings and instructions and agrees to hold SuperATV® harmless from any damage resulting from failure to adhere to such specifications, warnings and/ or instructions. The Buyer is also responsible to obey all applicable federal, state, and local laws and ordinances when operating his/her vehicle while using this product, and the Buyer agrees to hold SuperATV® harmless from any violation thereof.

Read ALL instructions prior to operating Portal Gear Hubs. Injury to personnel, portal gear hub, and/or machine failure may be caused by improper installation, maintenance or operation.

• It is dangerous to get under a jacked-up vehicle. The vehicle could slip off the jack and fall on you. You could be crushed. Never place any part of your body under a vehicle that is on a jack. Never start or run the engine while the vehicle is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.

• Hot oil can cause severe burns. Use extreme care when removing lubrication plugs and when working close to a unit that has been in operation.

• Check lube level between scheduled lube changes to insure that proper lube level is maintained. Inspect the tightness of mounting bolts, excessive heating, or any unusual noise or vibration.

• Serious personal injury may occur as a result of improperly performed maintenance, adjustments or repairs.

• Always be extremely careful when working on the portal gear hub. Always follow commonly accepted safety practices and general common sense. Never risk personal injury.

• Do not operate the portal gear hub without proper lube and correct amount.

For safe operation and to maintain the unit warranty, when changing a provided fastener for any reason, it becomes the responsibility of the person making the change to properly account for fastener grade, thread engagement, load, tightening torque and the means of torque retention.

• Mounting bolts should be periodically checked to ensure that the unit is firmly anchored for proper operation.

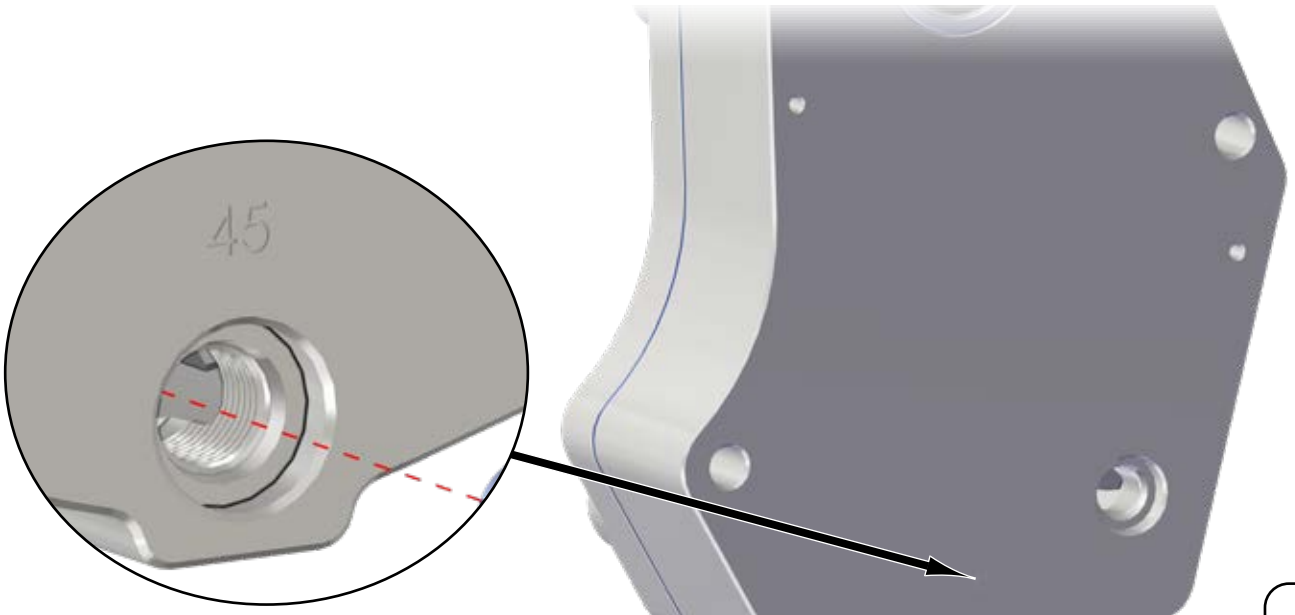
• These instructions are not intended to cover all details or variations in equipment, nor provide for every possible contingency to be met in connection with selection, installation, operation, and maintenance.

Should further information be desired or should particular problems arise which are not covered sufficiently for the Buyer's purpose, the matter should be referred to SuperATV®.

In the event of the resale of any of the goods, in whatever form, Resellers/Buyers will include the following language in a conspicuous place and in a conspicuous manner in a written agreement covering such sale:

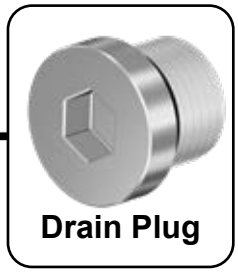
The manufacturer makes no warranties or representations, express or implied, by operation of law or otherwise, as to the merchantability or fitness for a particular purpose of the goods sold hereunder. Buyer acknowledges that it alone has determined that the goods purchased hereunder will suitably meet the requirements of their intended use. In no event will the manufacturer be liable for consequential, incidental or other damages. Even if the repair or replacement remedy shall be deemed to have failed of its essential purpose under Section 2-719 of the Uniform Commercial Code, the manufacturer shall have no liability to Buyer for consequential damages.

Resellers/Buyers agree to also include this entire document including the danger, warnings and cautions above in a conspicuous place and in a conspicuous manner in writing to instruct users on the safe usage of the product.



Numbers on Lid and Housing MUST match.
Stop and contact SuperATV if different.

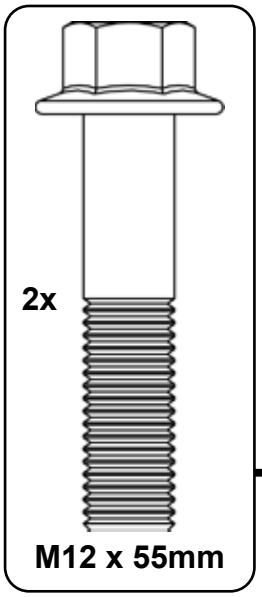
install into each Gear Box
Torque to 10 ft/lbs



Drain Plug

DO NOT USE IMPACT WRENCH WHEN INSTALLING ANY HARDWARE INTO HOUSING

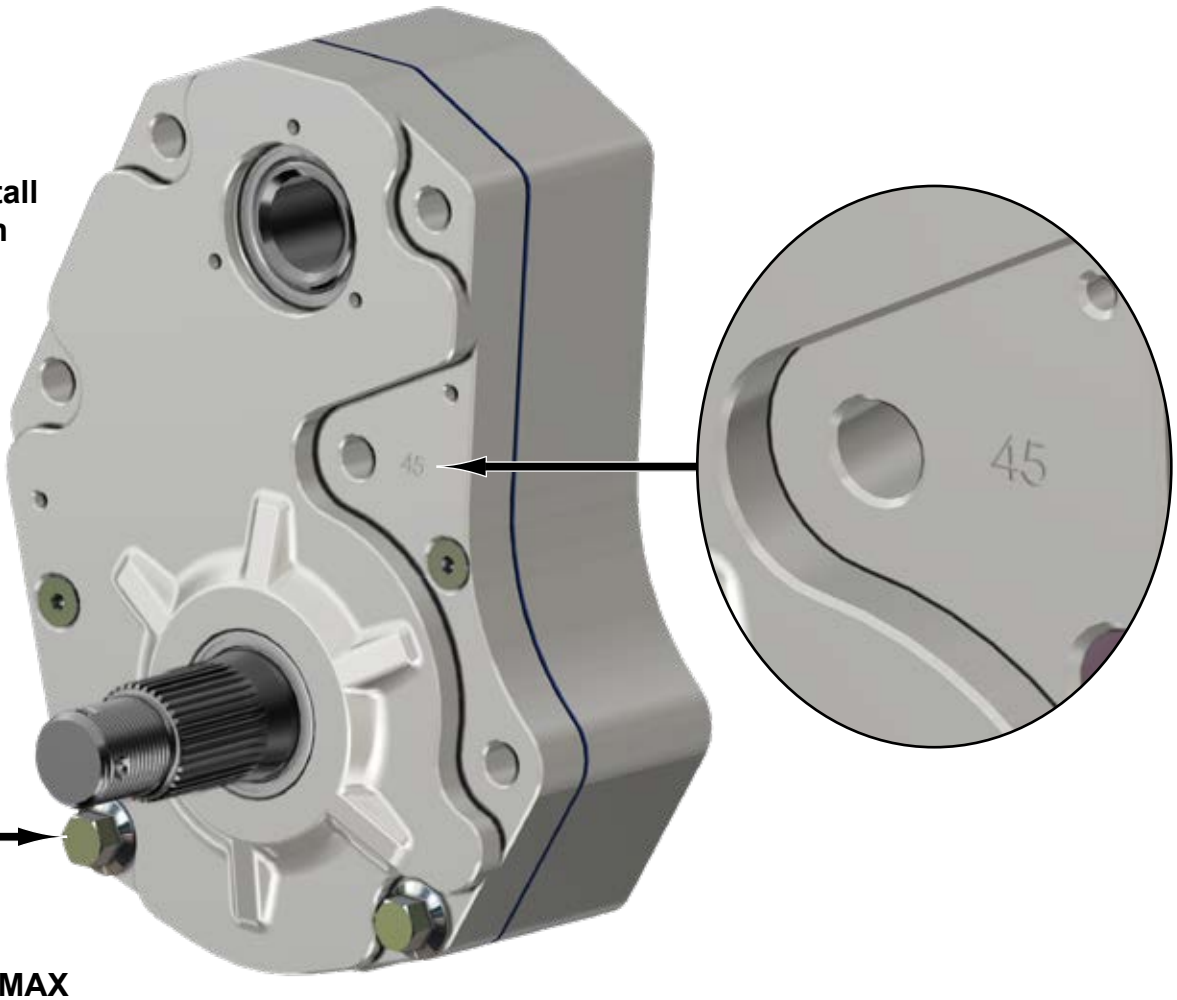
if not present, install hardware shown



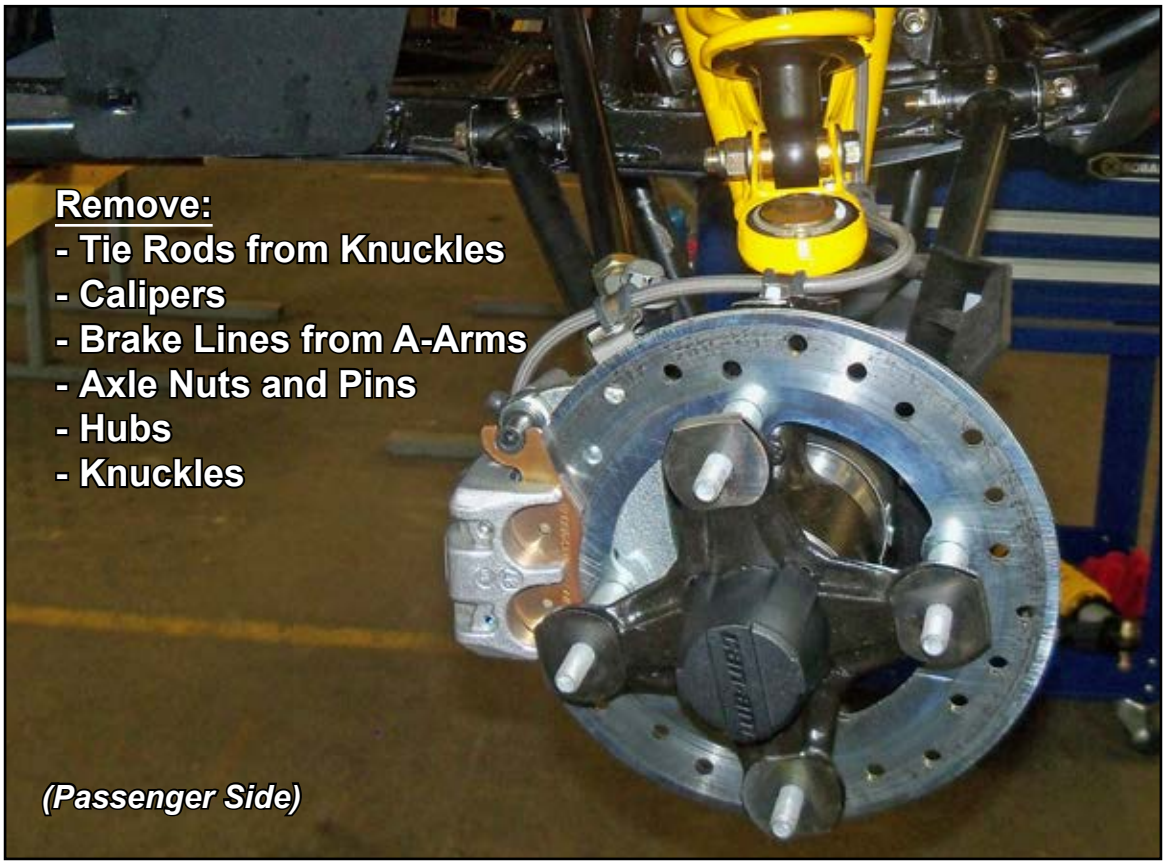
2x

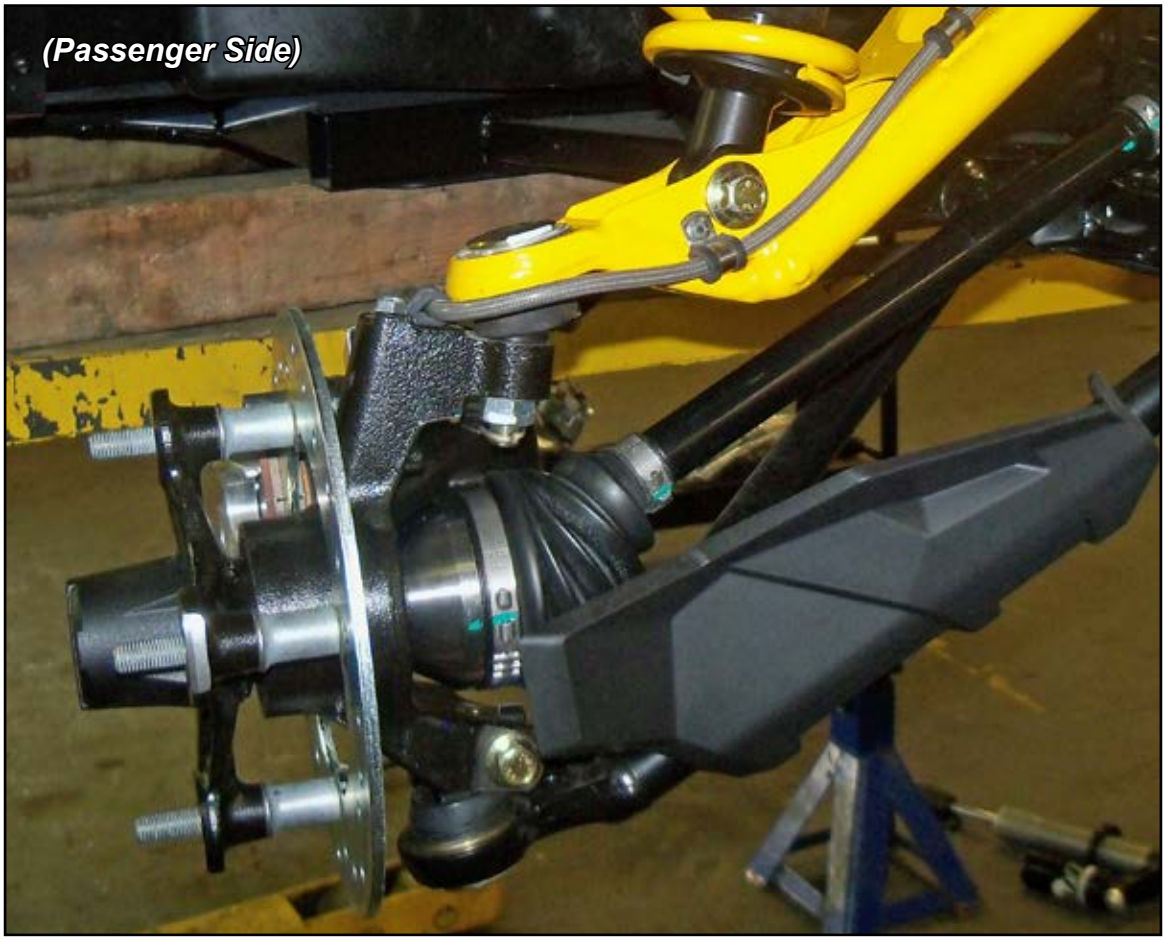
M12 x 55mm

Torque to 60 ft/lbs MAX

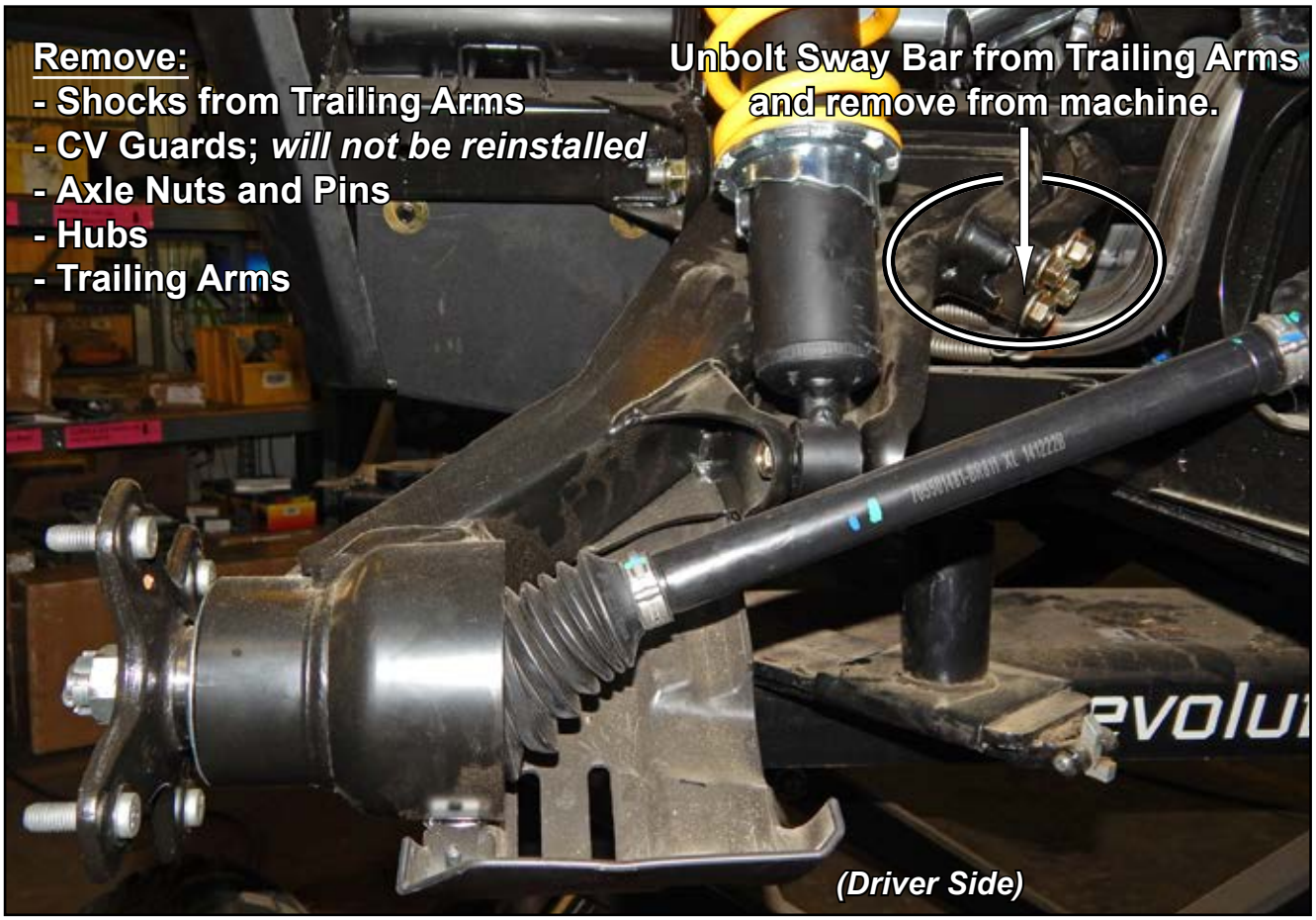


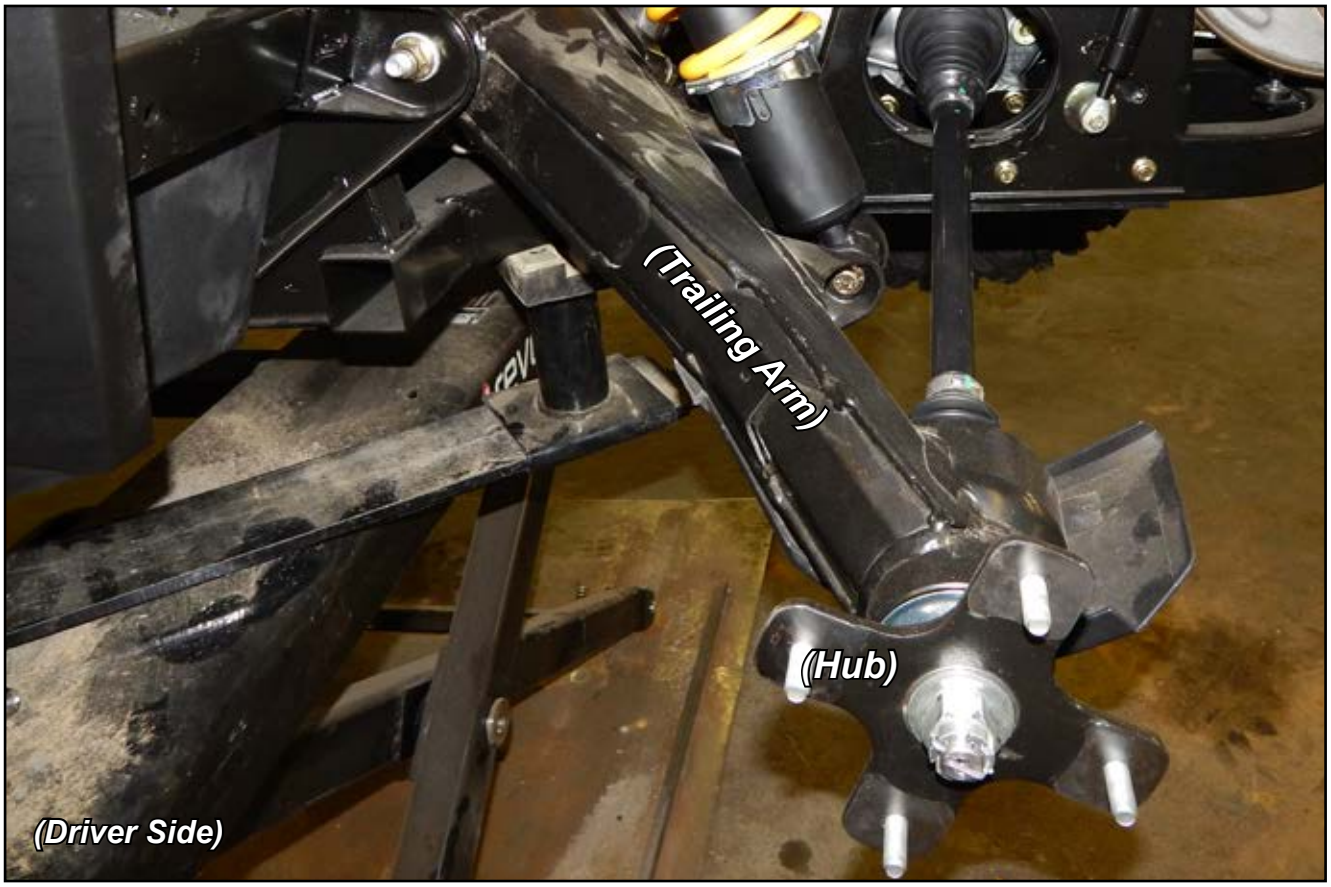
Front Components Removal: *Keep all components removed from machine.*



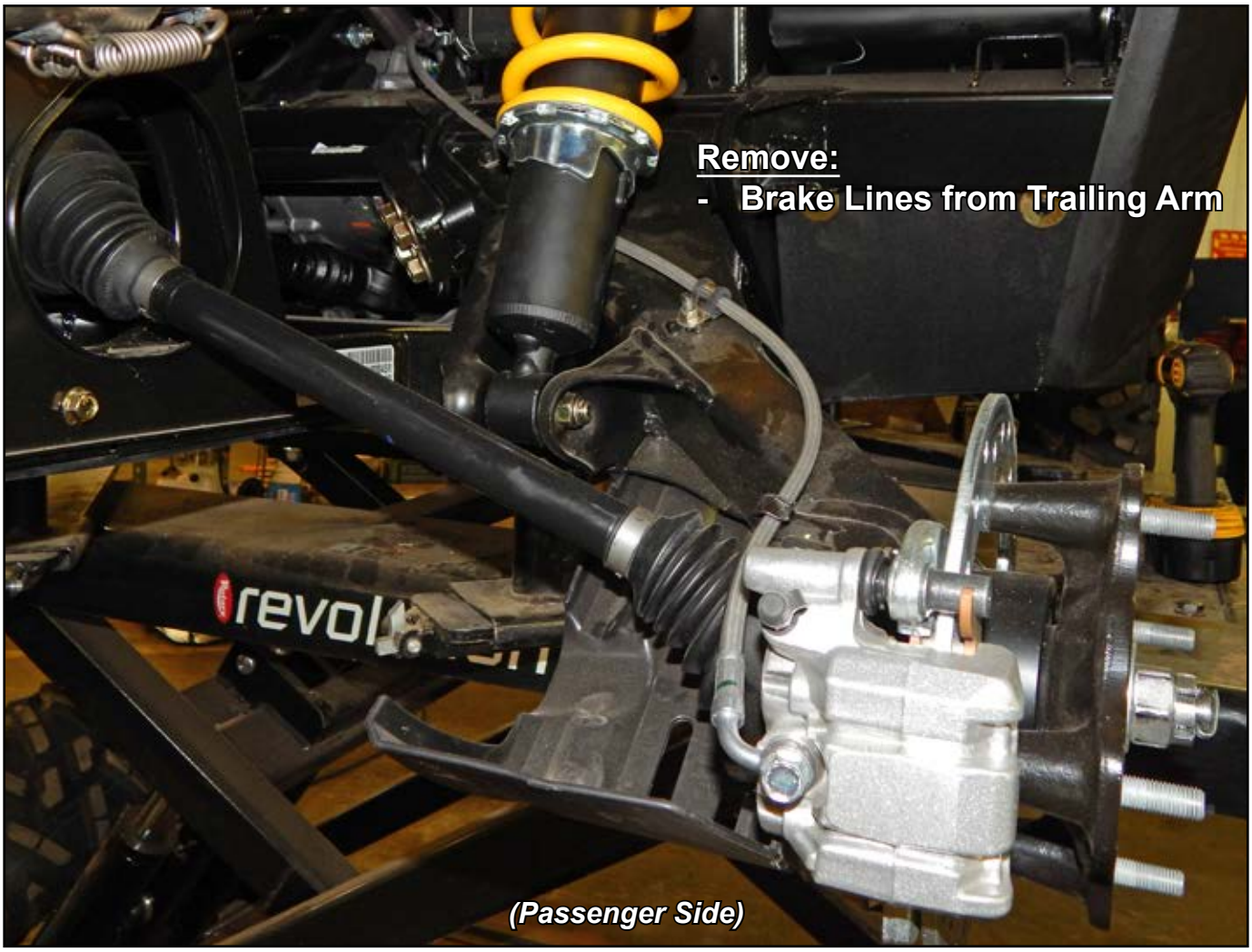


Rear Components Removal: *Keep all components removed from machine.*



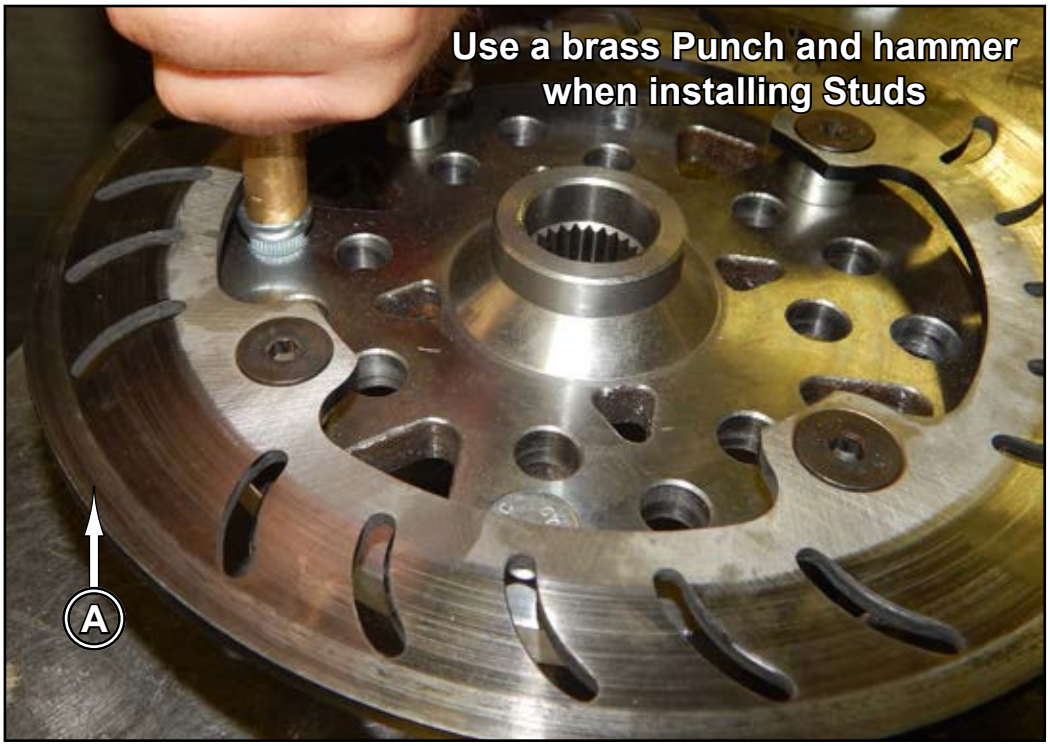


Rear Components Removal continued: *Keep all components removed from machine.*



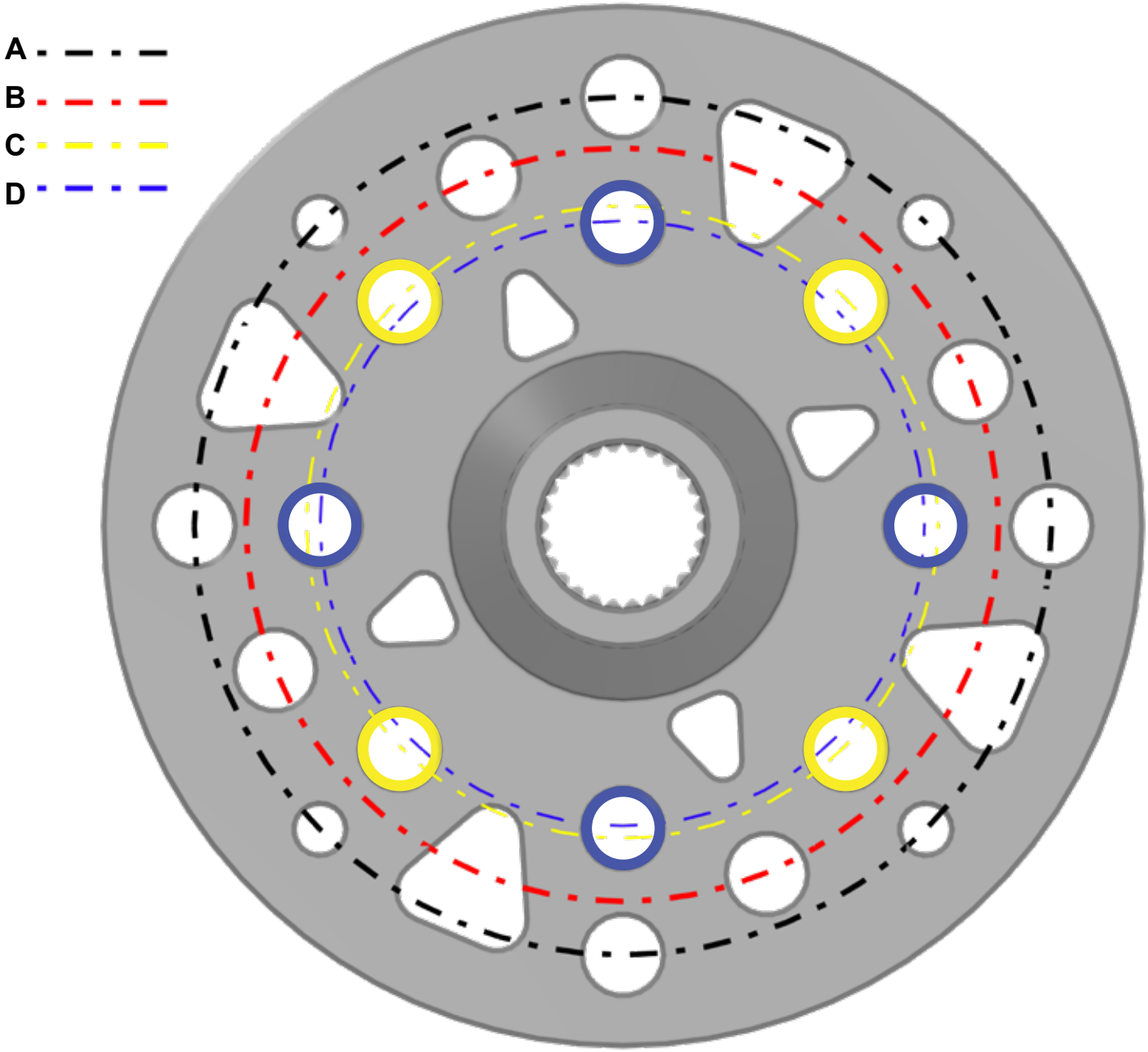
Install provided Studs into Rotors (A):
- See “Wheel Hub Bolt Patterns”.
- Note machines bolt pattern and lug size.
- Set Rotors (A) aside when complete.







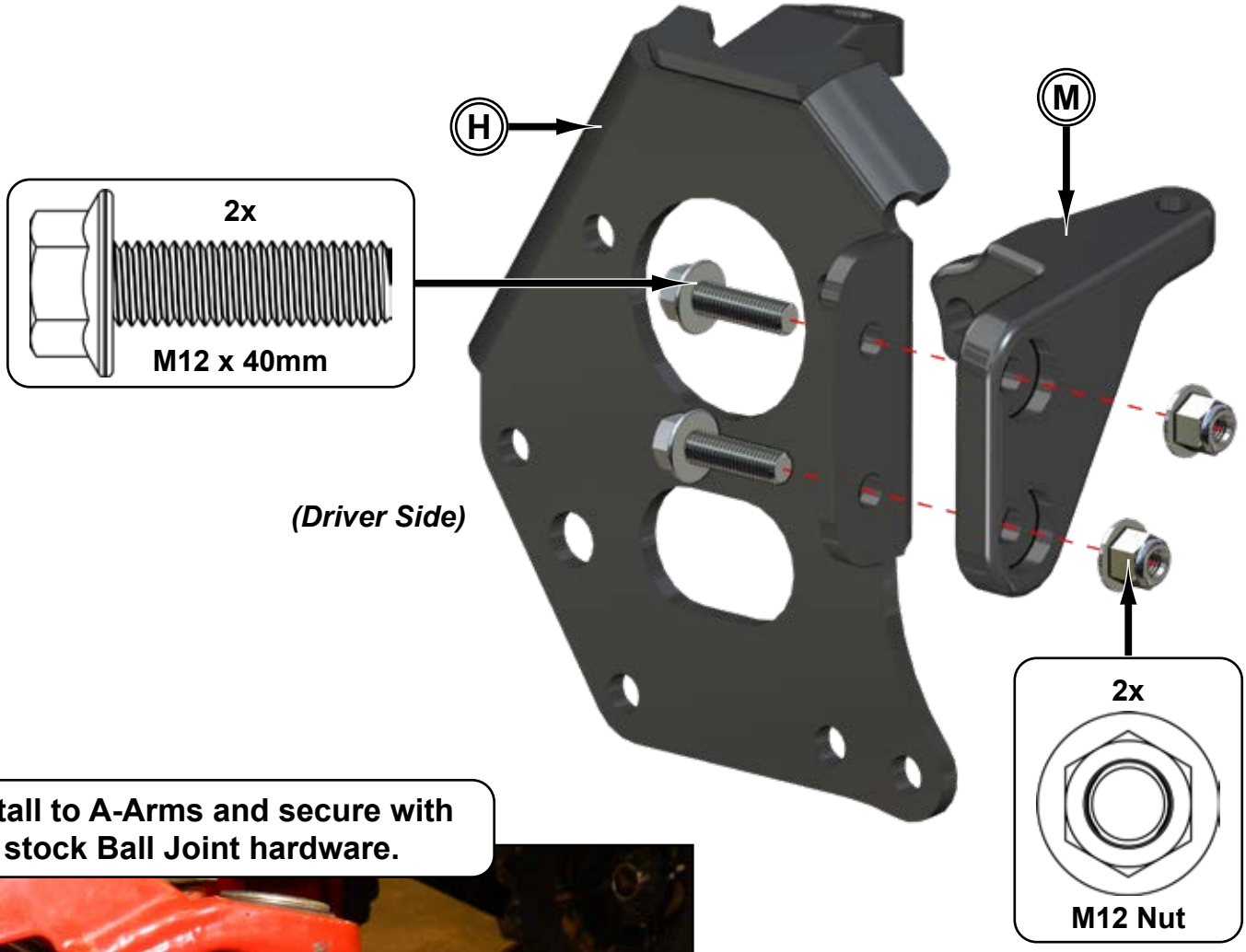
Wheel Hub Bolt Patterns



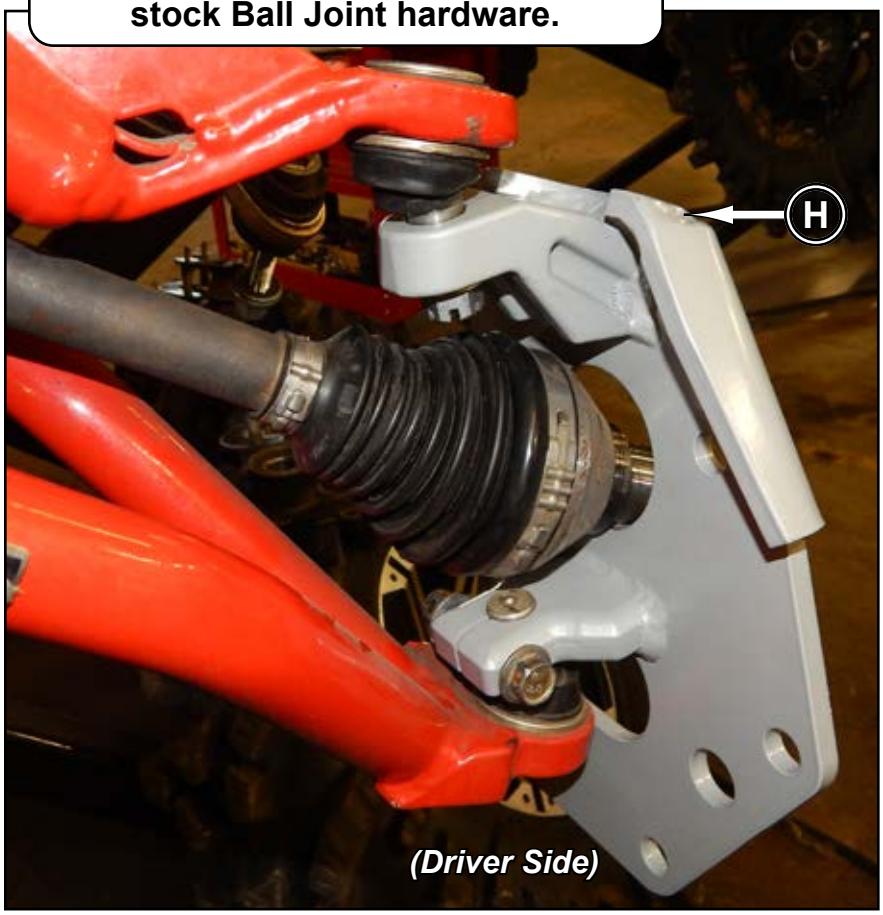
Pattern	Machine	Diameter
A	Polaris	156mm
B	Can-Am/Teryx4	137mm
C	Arctic Cat	115mm
D	Honda/Yamaha	110mm

Front: *do not tighten hardware completely unless noted.*

- Secure Left Steering Arm (M) to Left Spindle (H) with hardware shown.

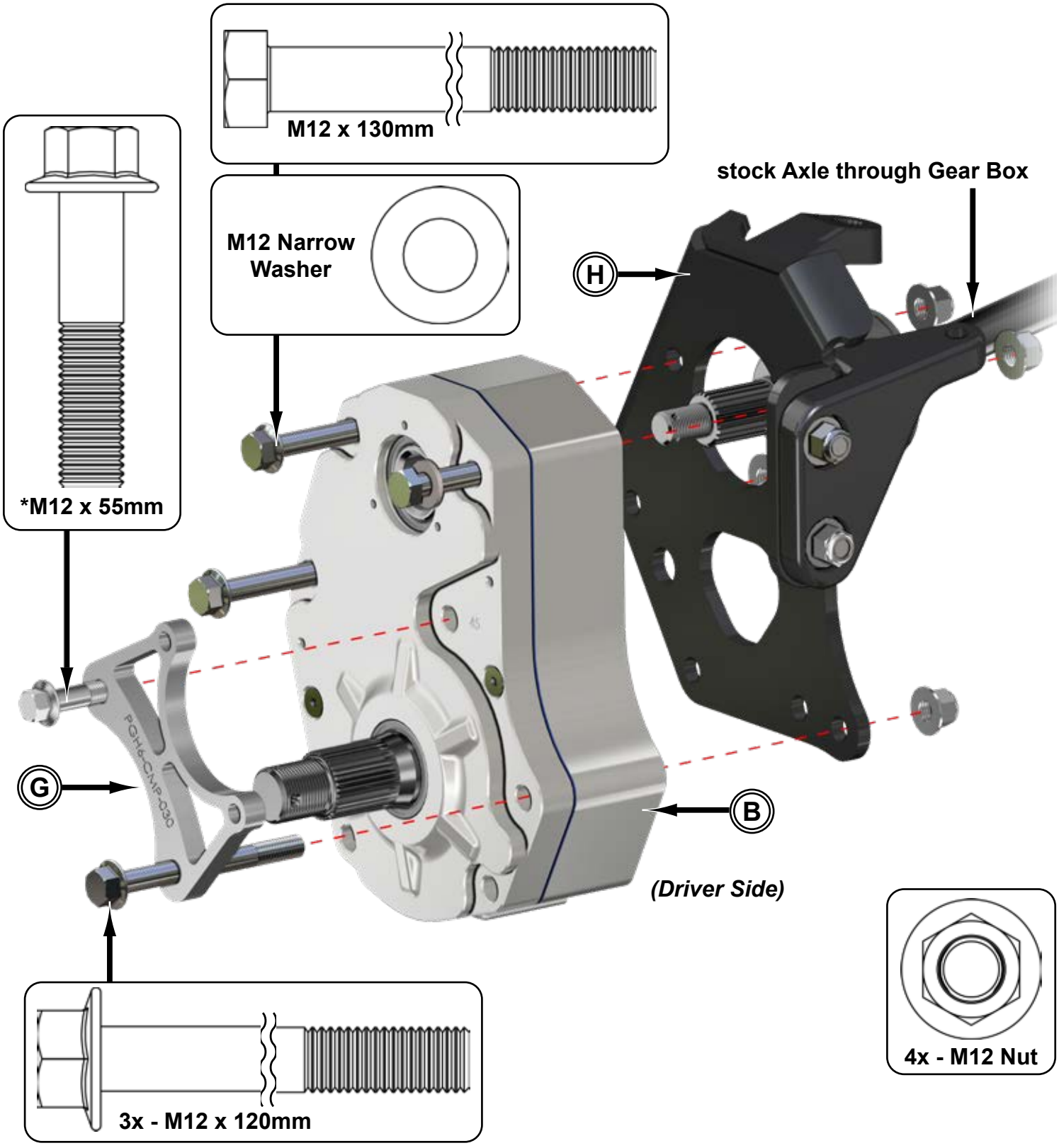


Install to A-Arms and secure with stock Ball Joint hardware.



Front continued:

- Secure Left Gear Box (B) and Caliper Mounting Bracket (G) to Left Spindle (H) with hardware shown.

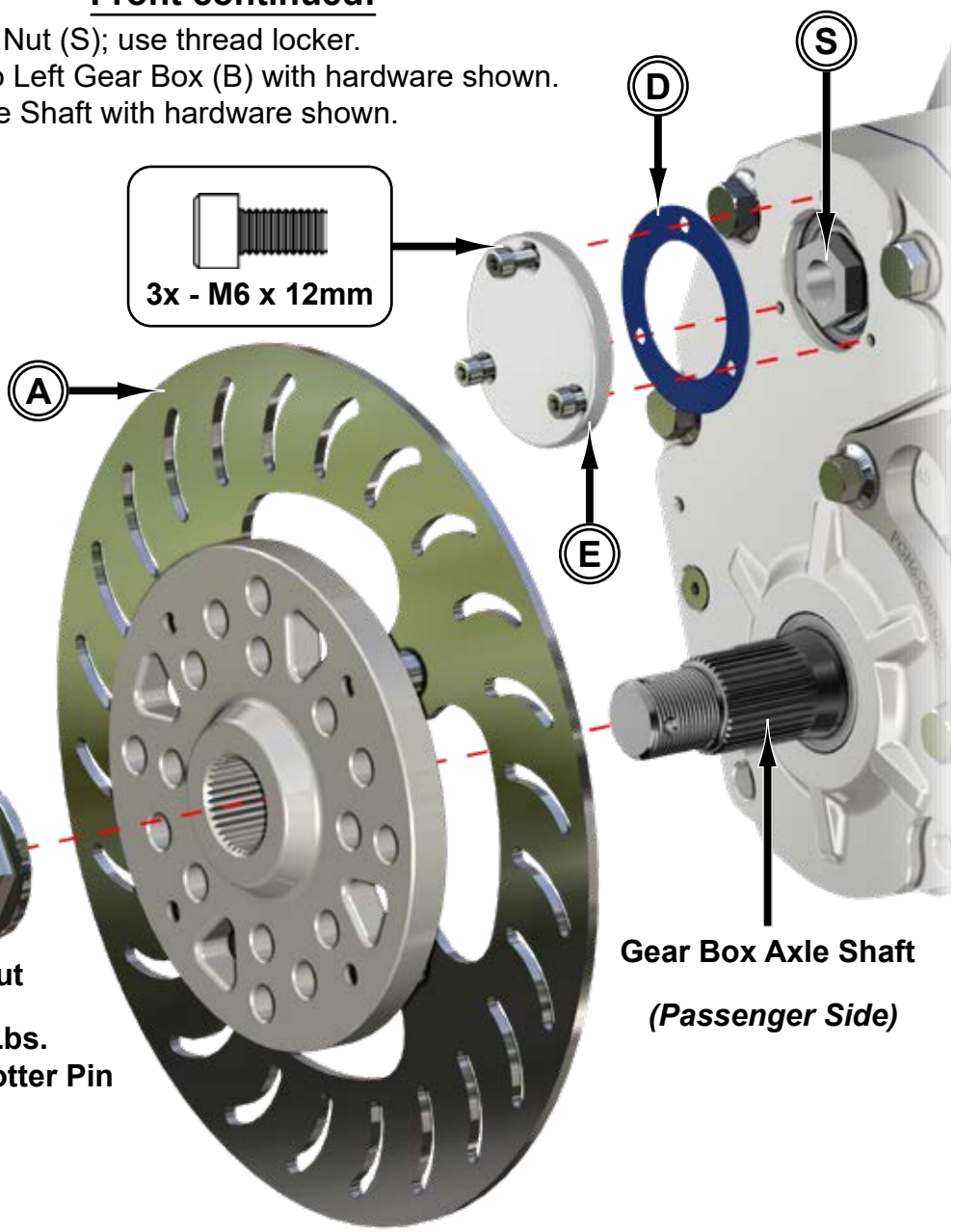


*Torque to 60 ft/lbs MAX

Tighten hardware completely and repeat steps for opposite side.

Front continued:

- Secure stock Axle with Recessed Nut (S); use thread locker.
- Secure Gasket (D) and Cap (E) to Left Gear Box (B) with hardware shown.
- Secure Rotor (A) to Gear Box Axle Shaft with hardware shown.



Castle Nut

- **Torque to minimum 300 Ft/Lbs.**
- **Continue tightening until Cotter Pin can be installed.**

Tighten all hardware completely and repeat steps for opposite side.

Brake Caliper: *drivers side shown*

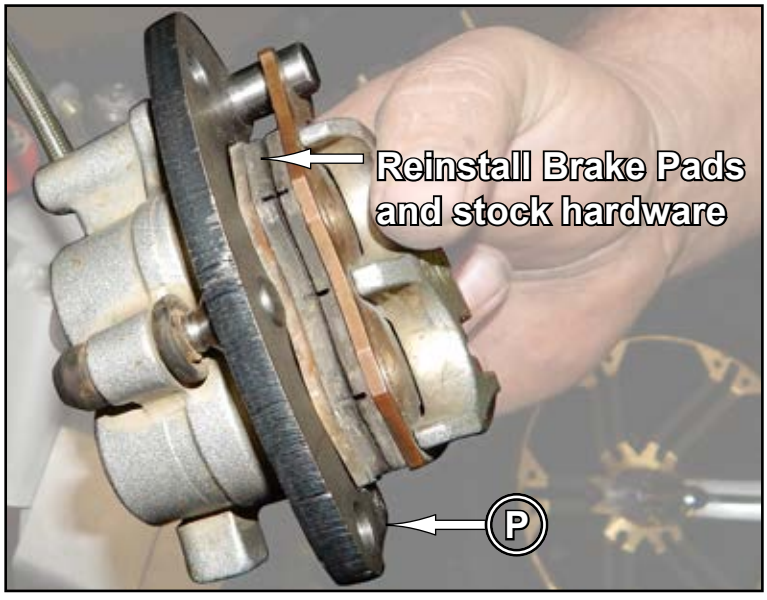


Remove Brake Pads and stock Mounting Bracket





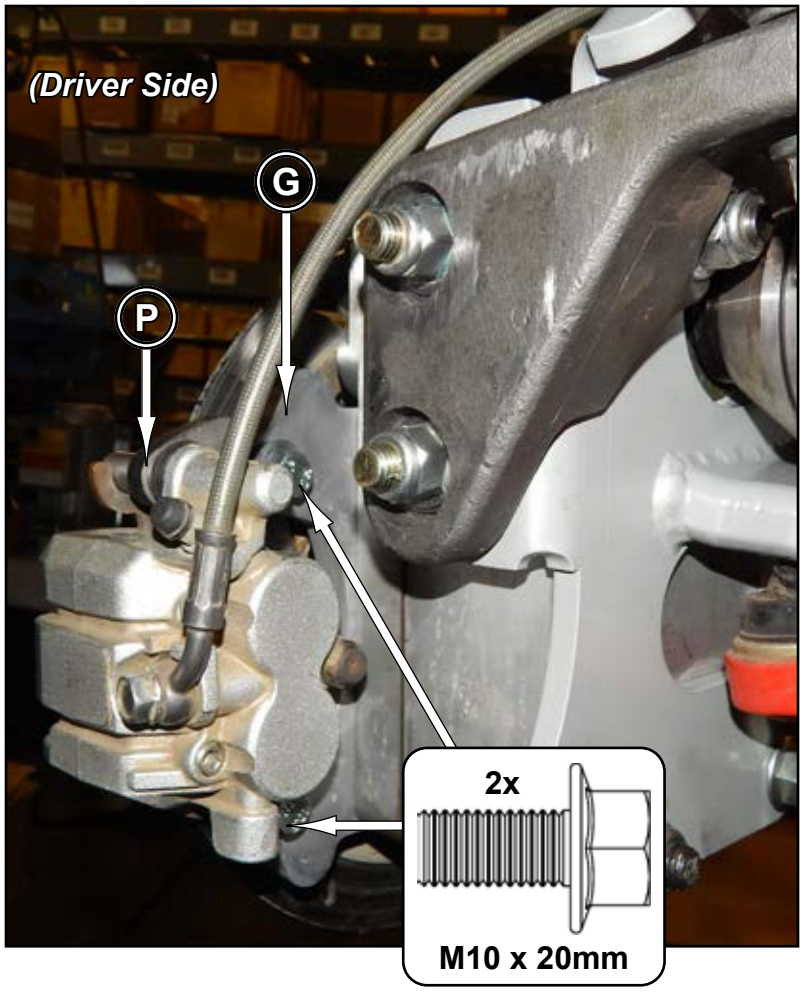


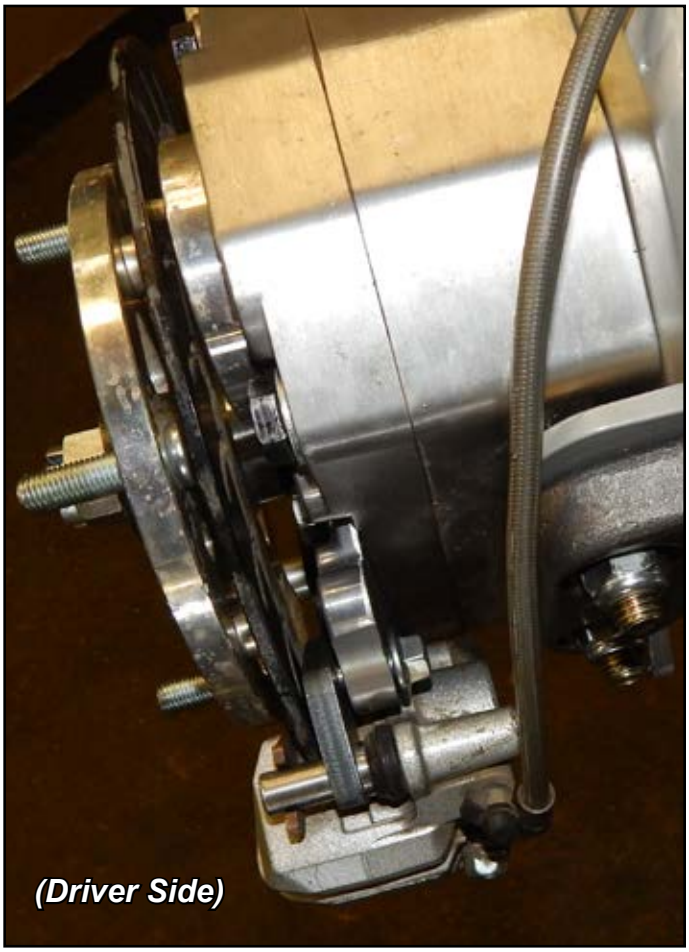


Repeat steps for opposite Brake Caliper.

Brake Caliper continued:

- Using previously removed hardware, secure Left Caliper Mounting Adapter (P) to Caliper Mounting Bracket (G).





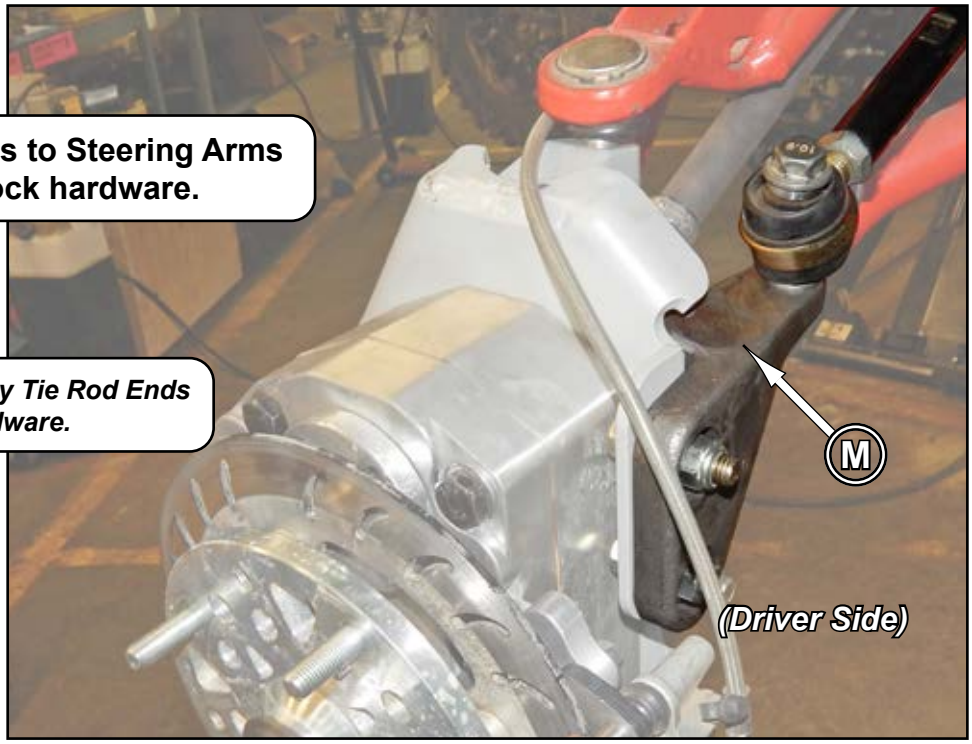
Tighten hardware completely and repeat steps for opposite Brake Caliper.

Front continued:

Secure Tie Rod Ends to Steering Arms (M)(N) with stock hardware.

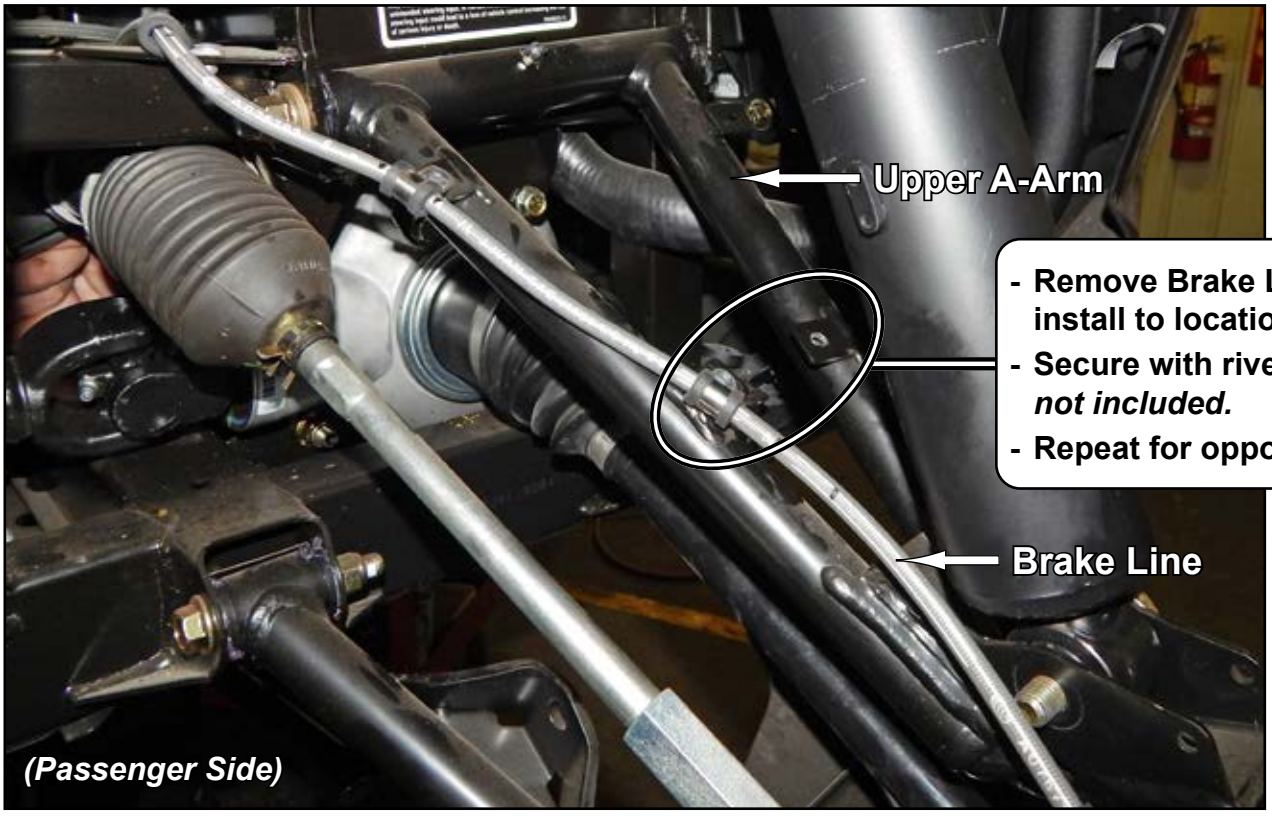
STOP

If machine has SuperATV Heavy Duty Tie Rod Ends see page 3 for correct hardware.



Tighten all hardware completely.

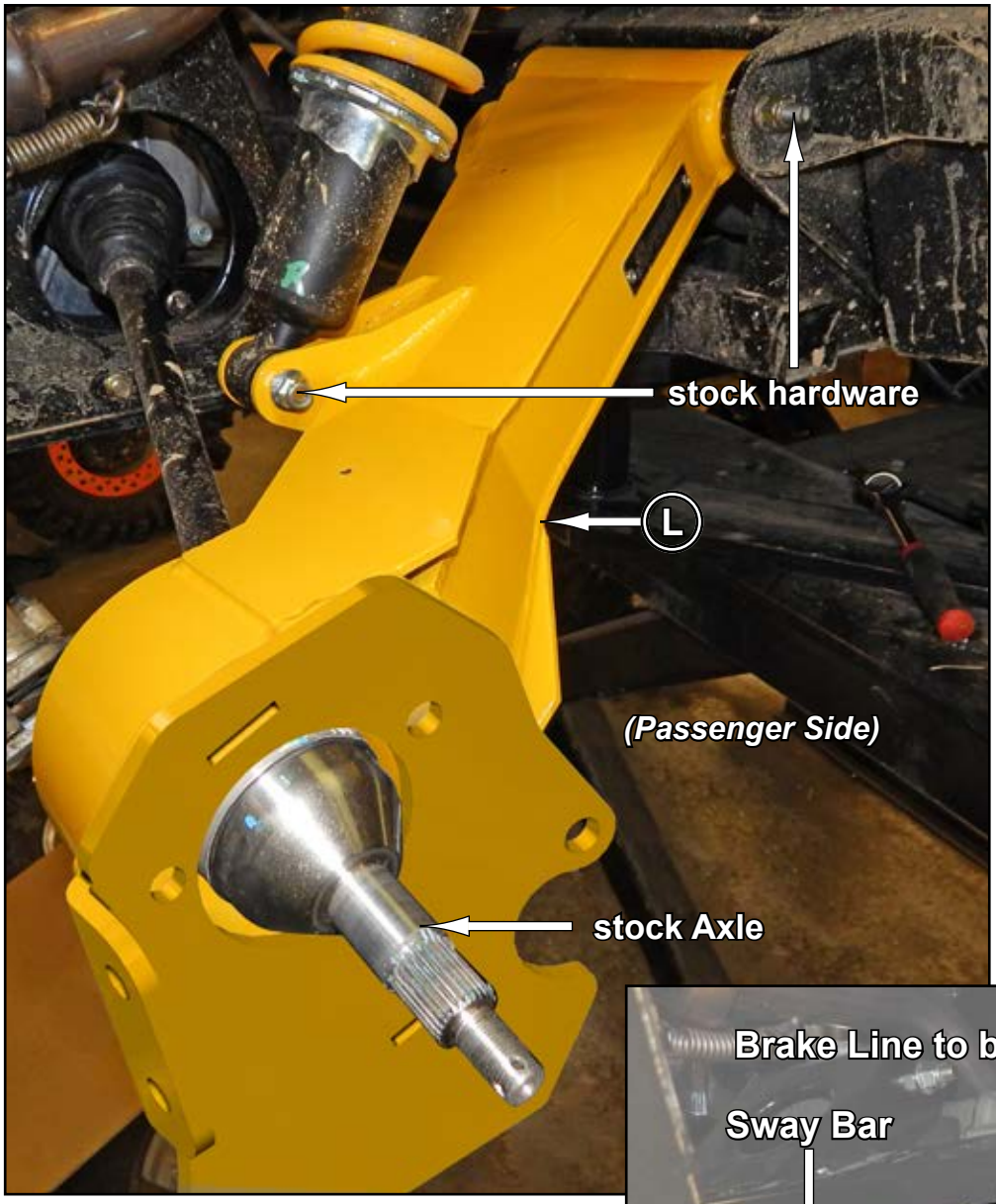
Front Brake Lines rerouting:

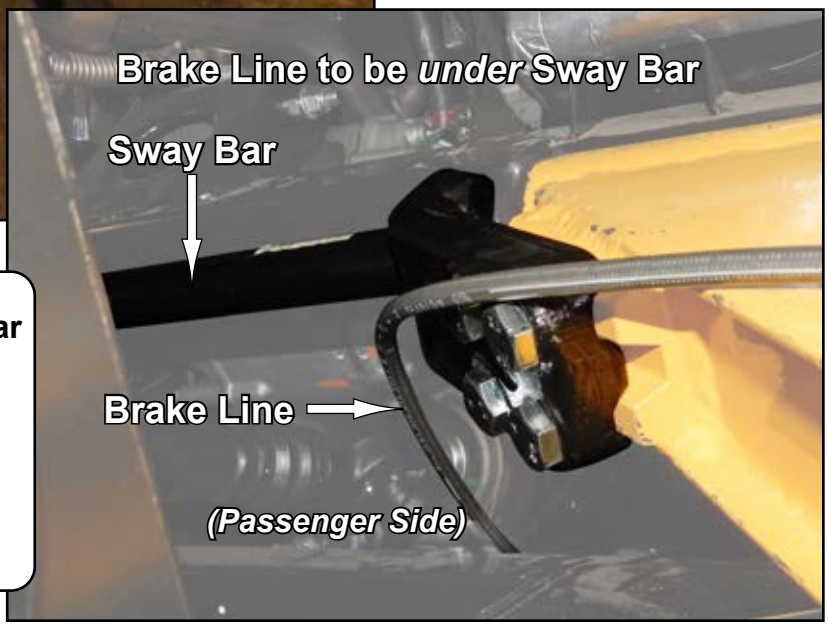


- **Remove Brake Line Clip and install to location shown.**
- **Secure with rivet or wire tie; *not included.***
- **Repeat for opposite side.**

Rear: *do not tighten hardware completely unless noted.*

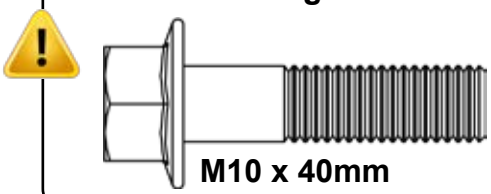
- Install Right Trailing Arm (L) to machine with stock hardware.
- Repeat for opposite side.
- Reinstall Sway Bar to new Trailing Arms (K)(L) with stock hardware; ***2015+ years see illustration below.*** Ensure that passenger Brake Line is under Sway Bar.
- Secure Shocks with stock hardware.
- Tighten hardware completely.





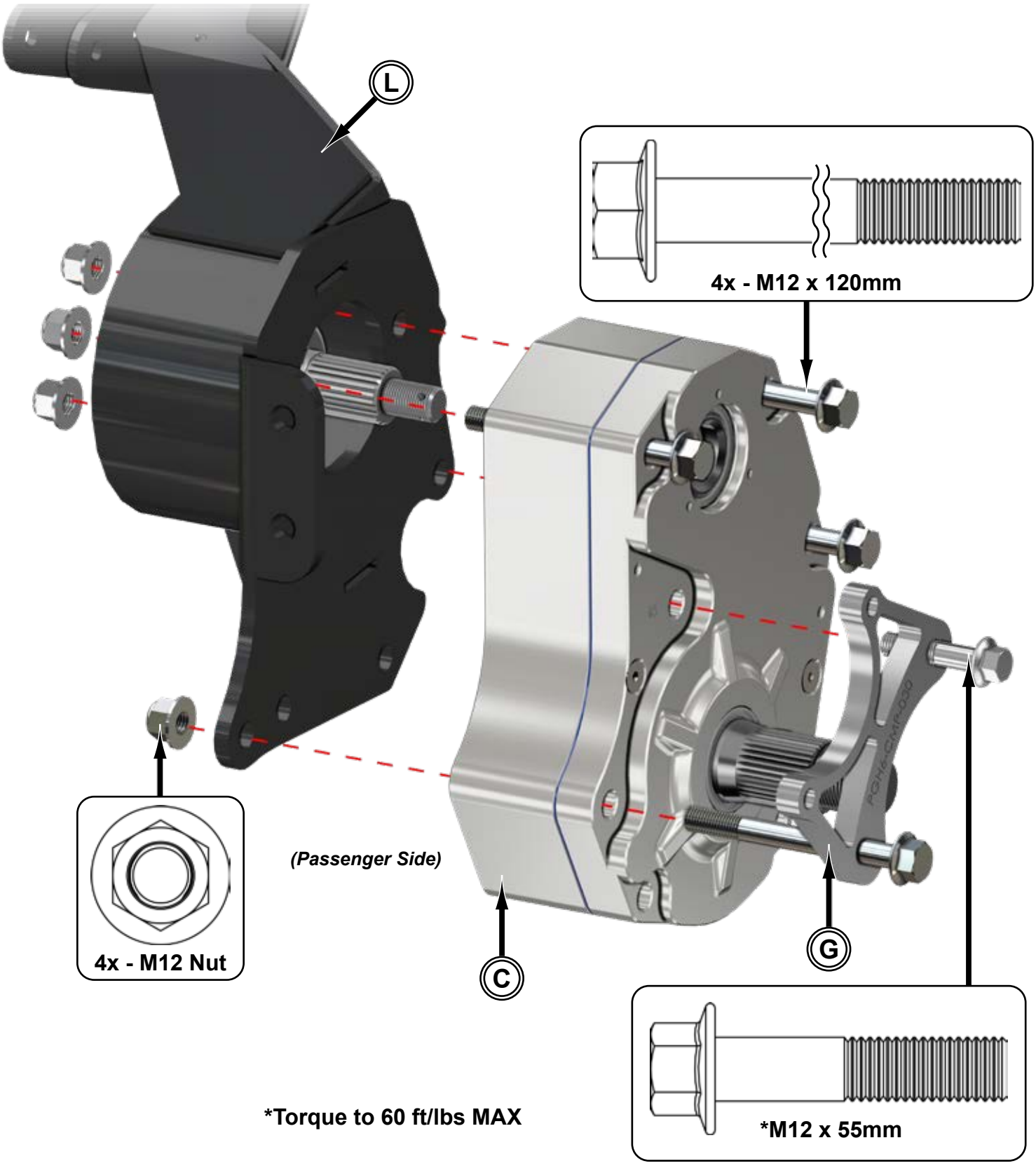
2015+

Use when installing Sway Bar to Trailing Arms.



Rear continued:

- Install Right Gear Box (C) onto stock Axle.
- Secure Right Gear Box (C) to Right Trailing Arm (L) with hardware shown.
- Install Caliper Mounting Bracket (G) to Right Gear Box (C) with hardware shown. *Caliper Mounting Bracket (G) will not be installed to driver side.*



***Torque to 60 ft/lbs MAX**

Tighten all hardware completely and repeat steps for opposite side.

Rear continued:

- Secure stock Axle with Rear Recessed Nut (S)*; use thread locker.
- Secure Gasket (D) and Cap (E) to Left Gear Box (B) with hardware shown.
- Secure Rotor (A) to Gear Box Axle Shaft with hardware shown.

***PGH-6-7-14-453 kits will use (F)**



- **Torque to minimum 300 Ft/Lbs.**
- **Continue tightening until Cotter Pin can be installed.**

Tighten all hardware completely and repeat steps for opposite side.

Rear continued:

- Reinstall stock Caliper to Caliper Mounting Bracket (G).



- Attach a hose to a funnel and fill each Gear Box with SuperATV Portal Blood.
- Fill up to fill holes.
- Install Drain Plugs to Gear Box.

