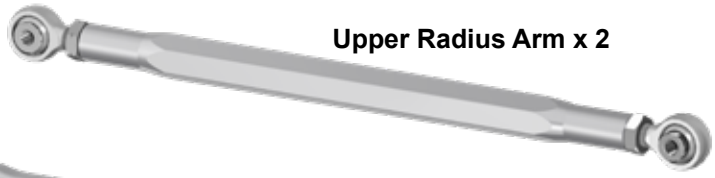
2753 Michigan Road • Madison, Indiana 47250 • 855-743-3427

INSTALLATION INSTRUCTIONS

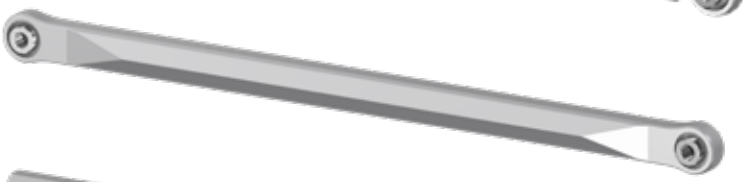
Rear Steer: for multiple Polaris RZR® models

- Do not discard packaging until product has been successfully installed.
- Avoid hot and/or rotating components when routing Wires.

Item	Description
A	Rear Arm - R
B	Rear Arm - L
C	Knuckle - L
D	Knuckle - R
V	Rotor - L



Upper Radius Arm x 2



Lower Radius Arm x 2

Tie Rod x 2

Ball and Socket x 2

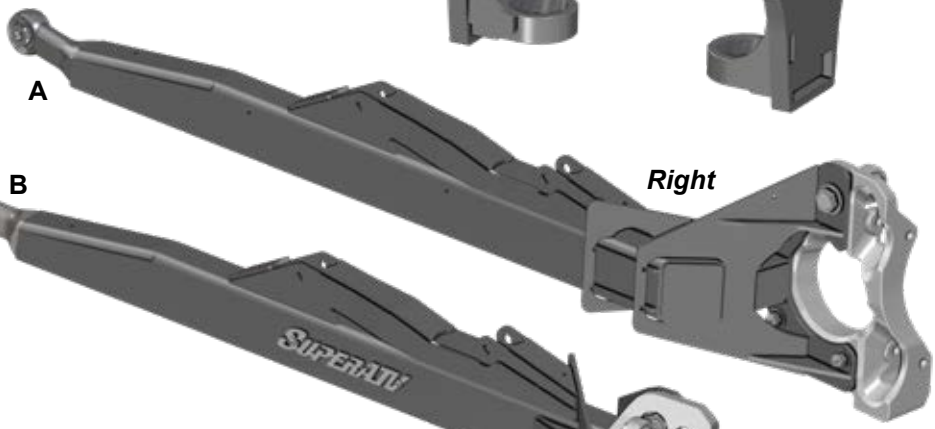
Jam Nut x 2

Tie Rod End x 2

C

D

Hardware Kit

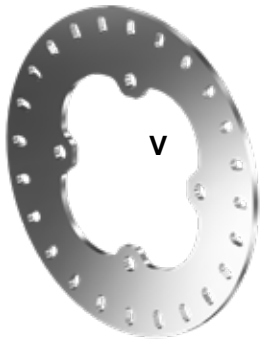


A

Right

B

Left



V

Hose x 2

(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

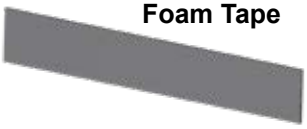
Read instructions and view illustrations before beginning.

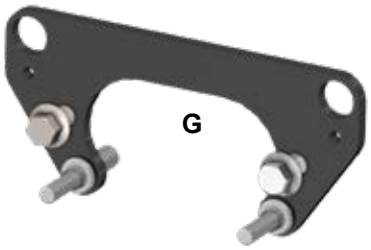
Thank You For Choosing

Rev IN-RSA-P-RZR1K-001A 4/24/2024

(kit contents continued)

Foam Tape

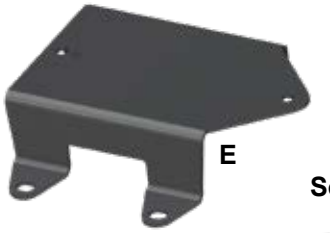




G

Blue Wire
Solenoid to Pump

H



E

Red Wire (+)
Solenoid to ACC Block

Black Wire (-)
Solenoid to ACC Block

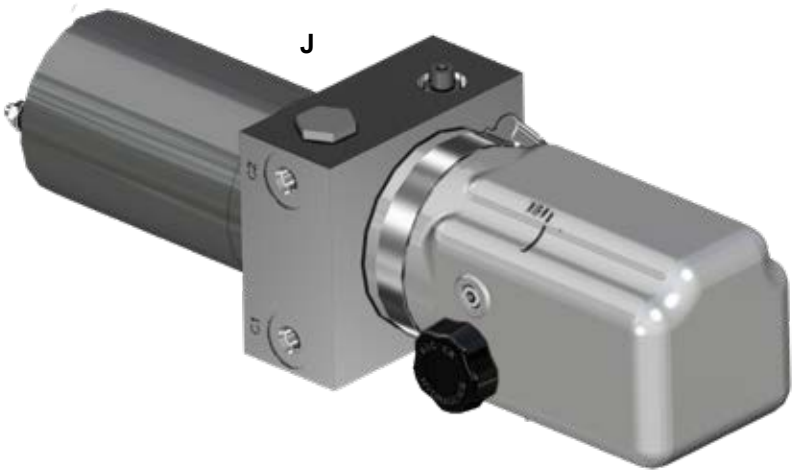
F

Lower Ball Joint x 2

W

Yellow Wire
Solenoid to Pump

Item	Description
E	Solenoid Mount
F	Solenoid Bracket
G	CMP Bracket
H	Spped Sensor Protector
J	Pump
K	Solenoid
L	Cylinder
W	CMP Adapter



J

(2 each)

90° Elbow

90° Adapter

K

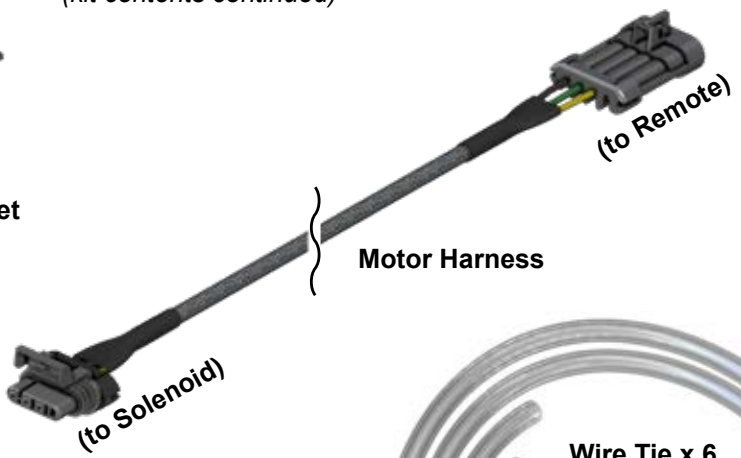
L

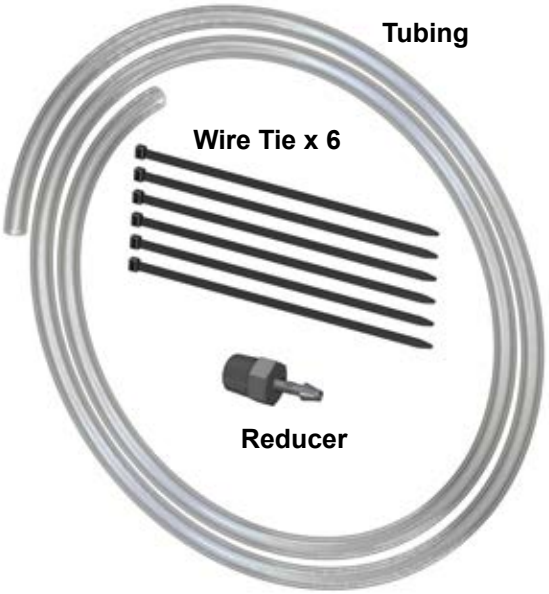
(remove and set aside all long hardware)

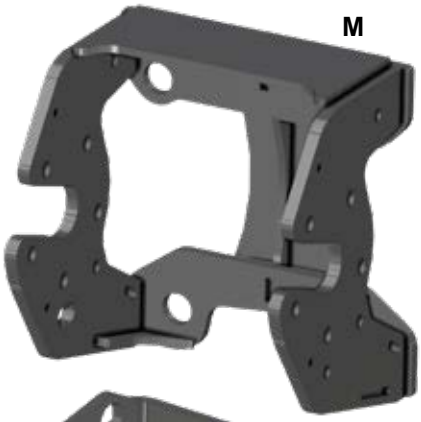
(kit contents continued)

Remote

Remote Bracket







M

N

P

M12 Insert x 4

Q

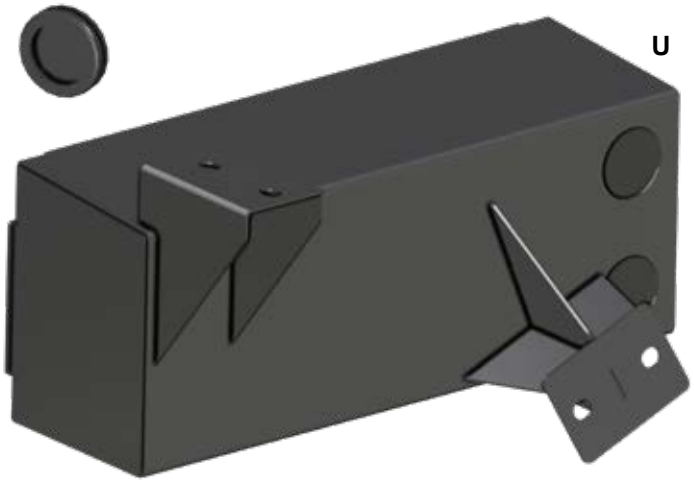
M10 Insert x 4

R

S

T

Grommet x 2

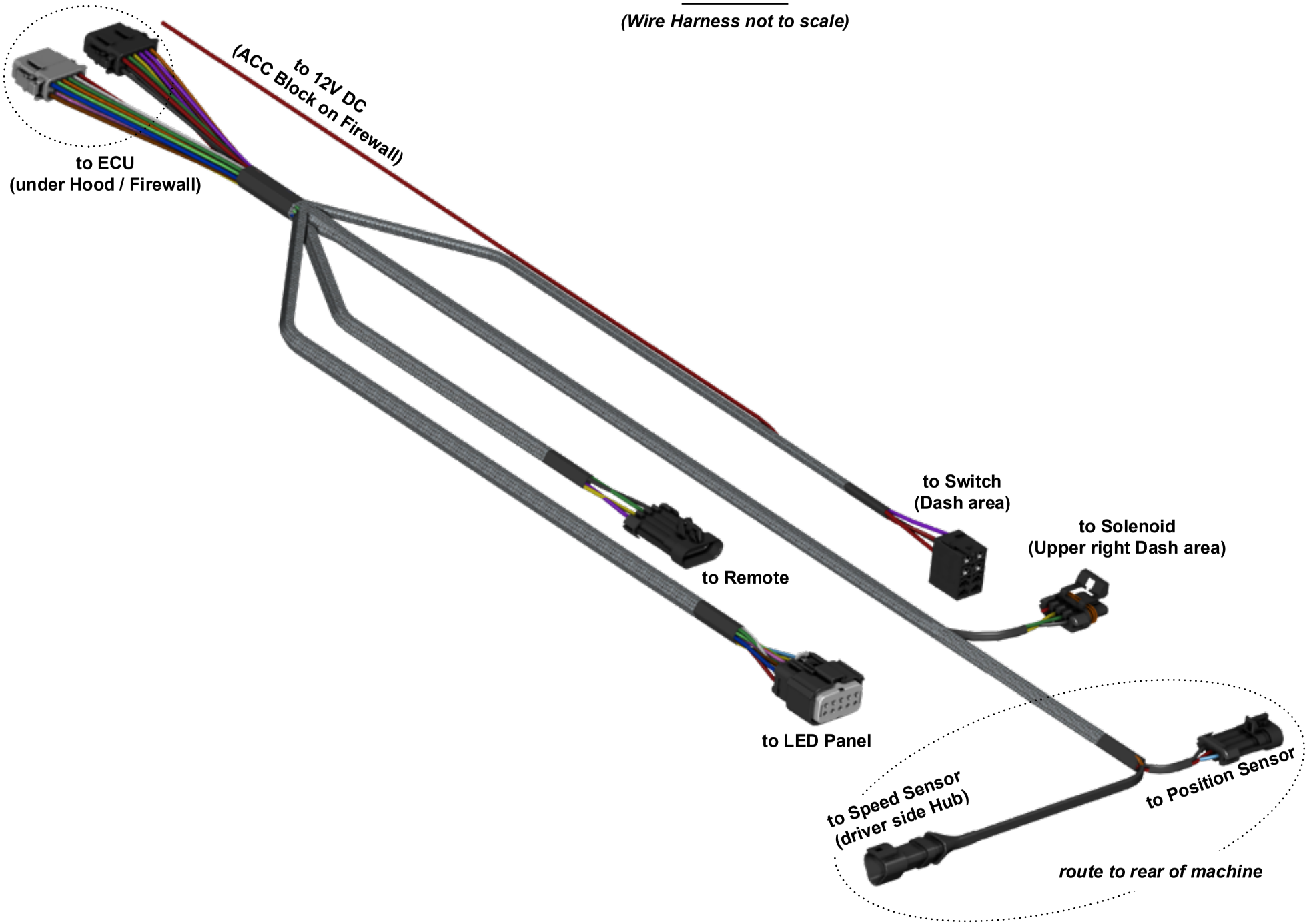


U

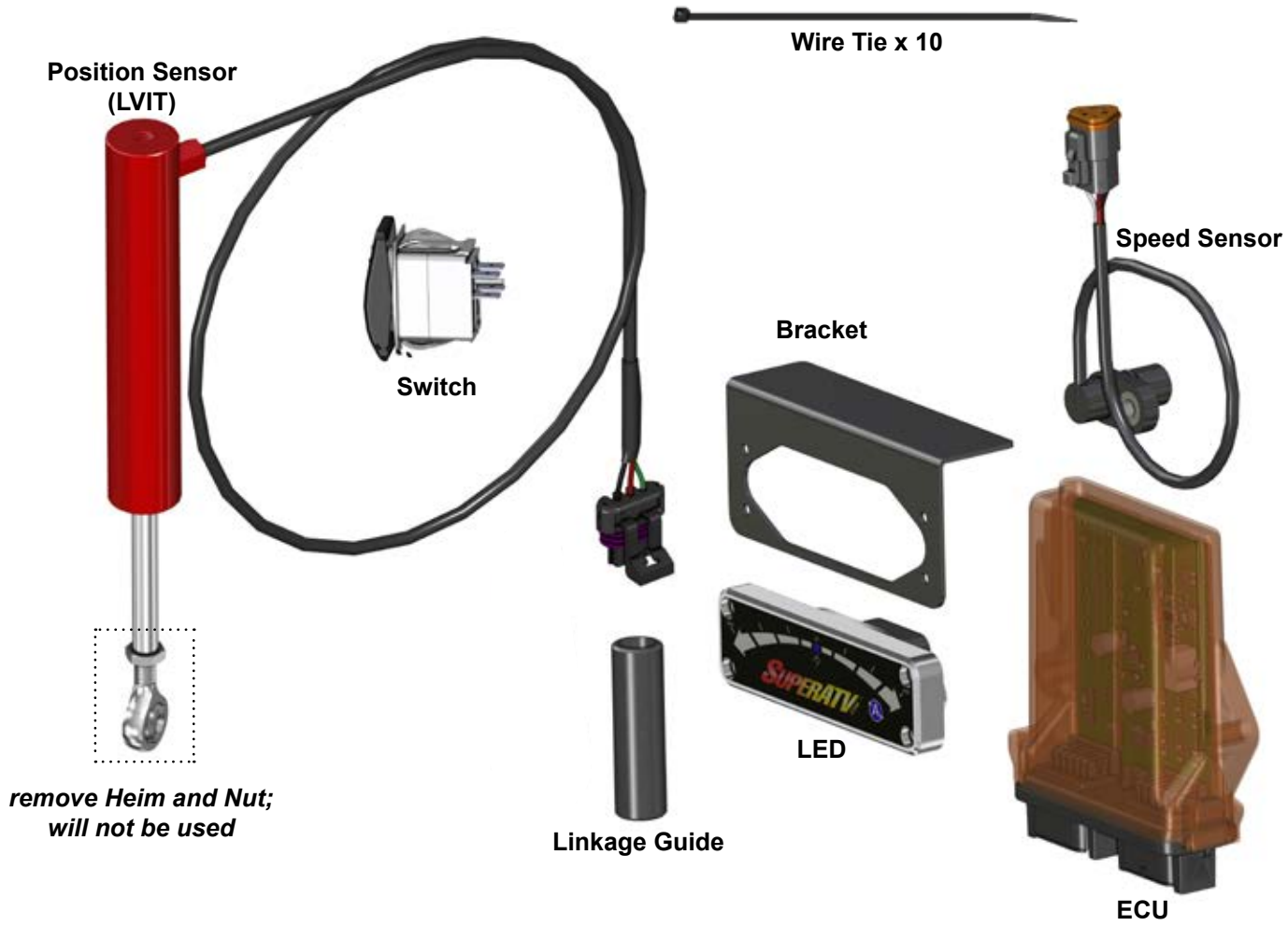
Item	Description
M	Cylinder Mount
N	Cylinder Cover
P	Cylinder Arm
Q	Cylinder Mount Rod x 2
R	Grease Tube
S	Thread Mount
T	Sensor Link
U	Pump Mount

Harness:

(Wire Harness not to scale)



(kit contents continued)



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.

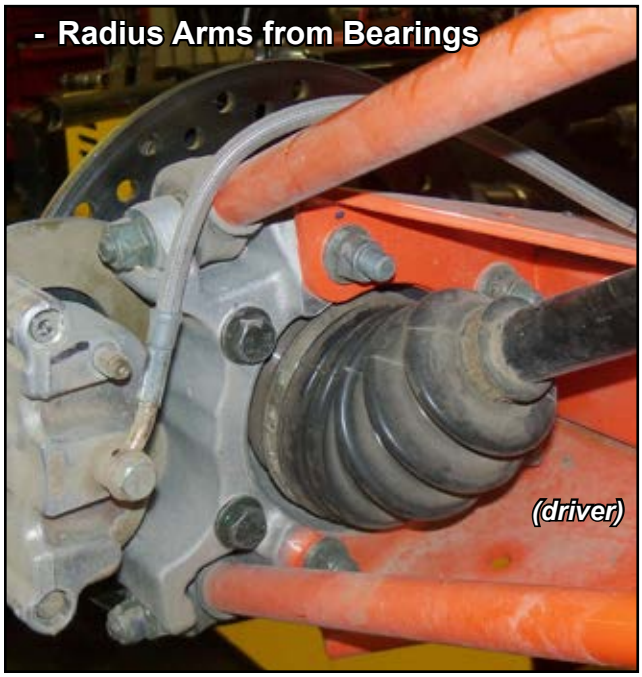
By purchasing and installing SuperATV® products, user agrees that should damages occur, SuperATV® will not be held responsible for loss of time, use, labor fees, replacement parts, or freight charges. SuperATV®, nor any 3rd party, will not be held responsible for any direct, indirect, incidental, special, or consequential damages that result from any product purchased from SuperATV®. The total liability of seller to user for all damages, losses, and causes of action, if any, shall not exceed the total purchase price paid for the product that gave rise to the claim.

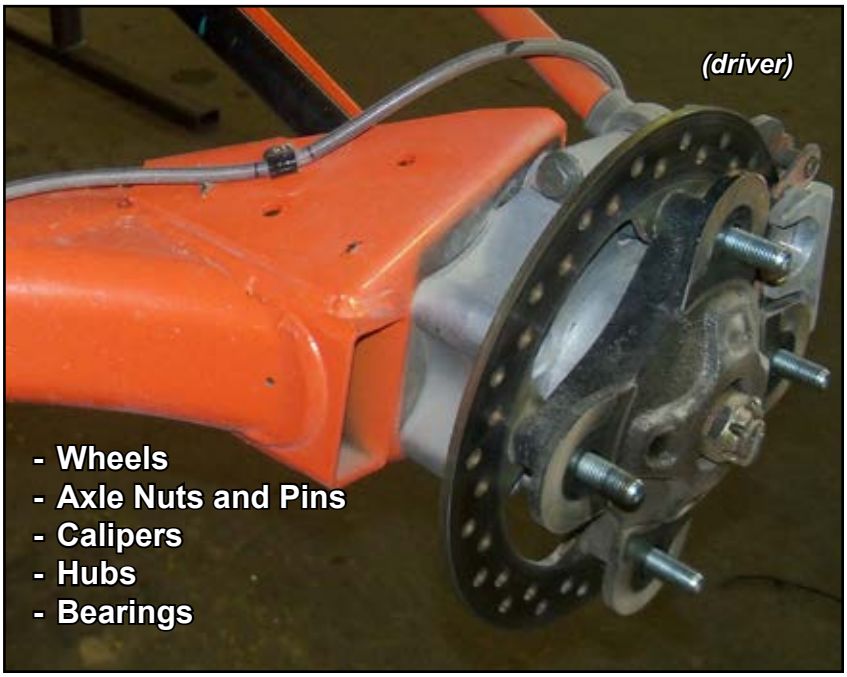
SuperATV® will warranty only parts provided by SuperATV®. Any damage or problems with OEM housings, bearings, seals, or other manufacturers' products will not be covered by SuperATV®. SuperATV® parts and products are not warrantied if item was not installed properly, misused, or modified.

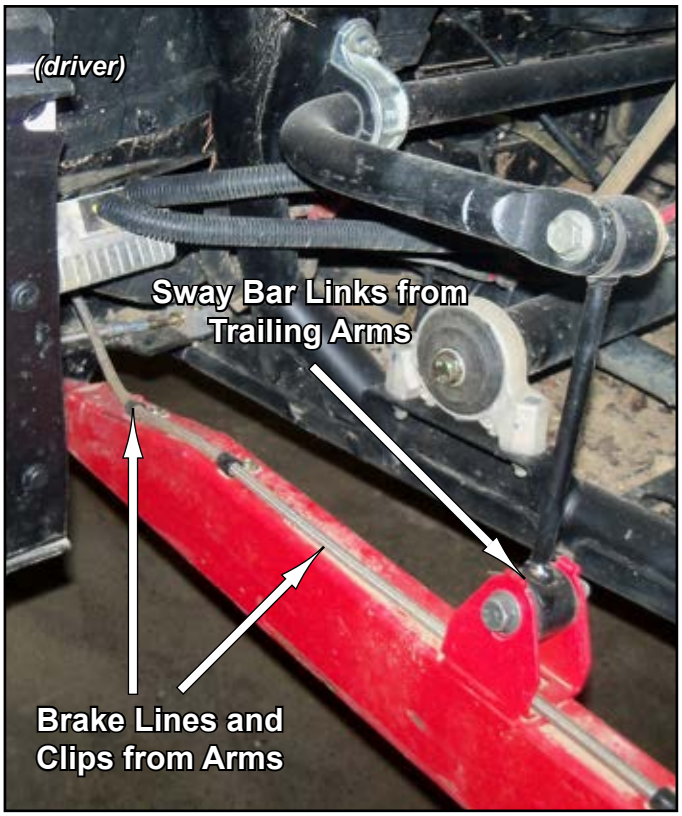
Installing, adding, modifying, or fabricating any factory or aftermarket product to your ATV/UTV may violate certain local, state, and federal laws. Be advised that laws vary depending on town, city, county, state, etc. Use of certain products on public streets, roads, or highways may be in violation 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.

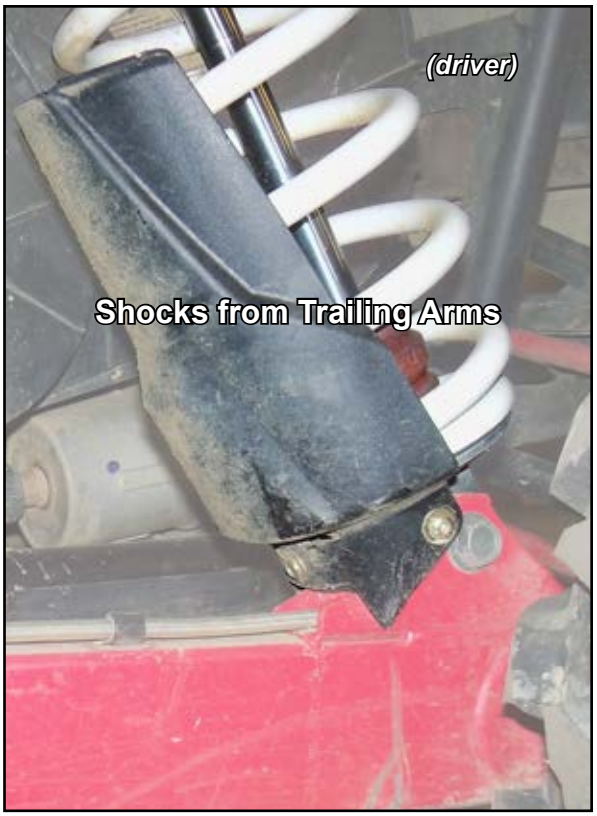
The Buyer is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications, warnings and instructions and agrees to hold SuperATV® harmless from any damage resulting from failure to adhere to such specifications, warnings and/ or instructions. 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.

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







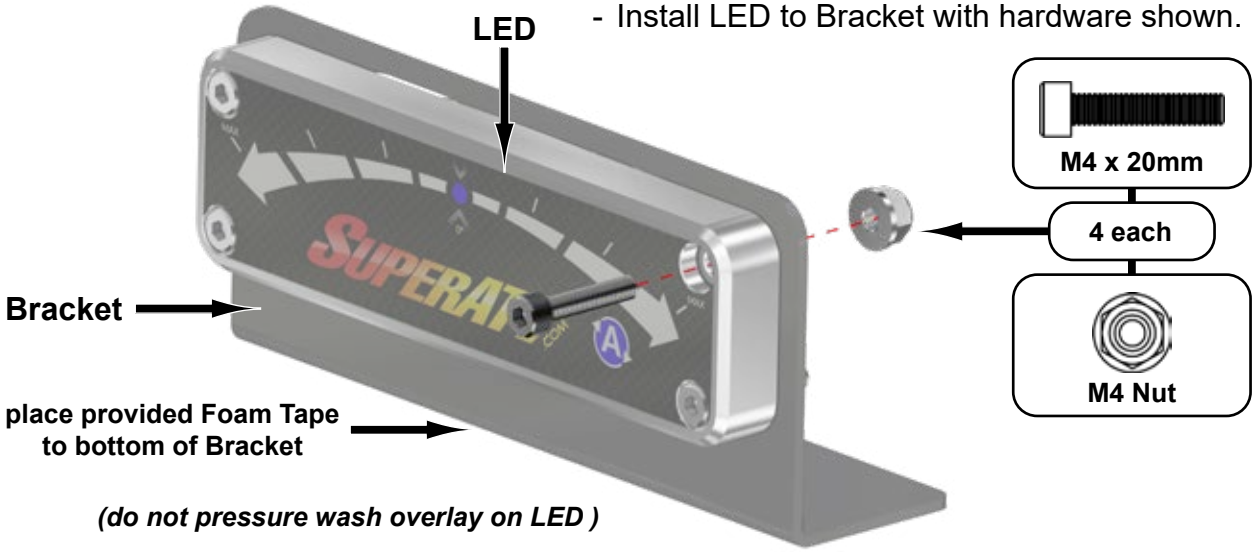


Components Removal continued: *Keep all components removed from machine.*

- Remove Seats.
- Remove Battery Cover and disconnect Battery. Reconnect after installation is complete.

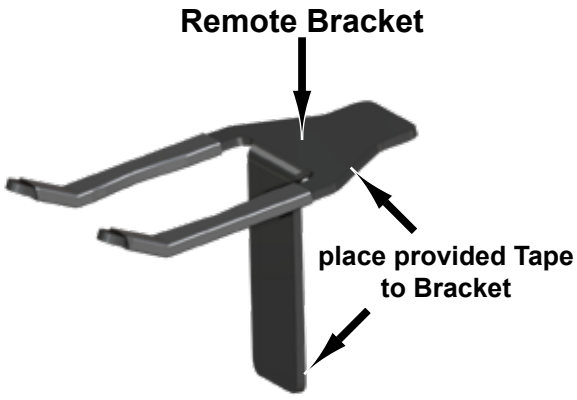
Reinstall applicable components after installation is complete.

- Install LED to Bracket with hardware shown.

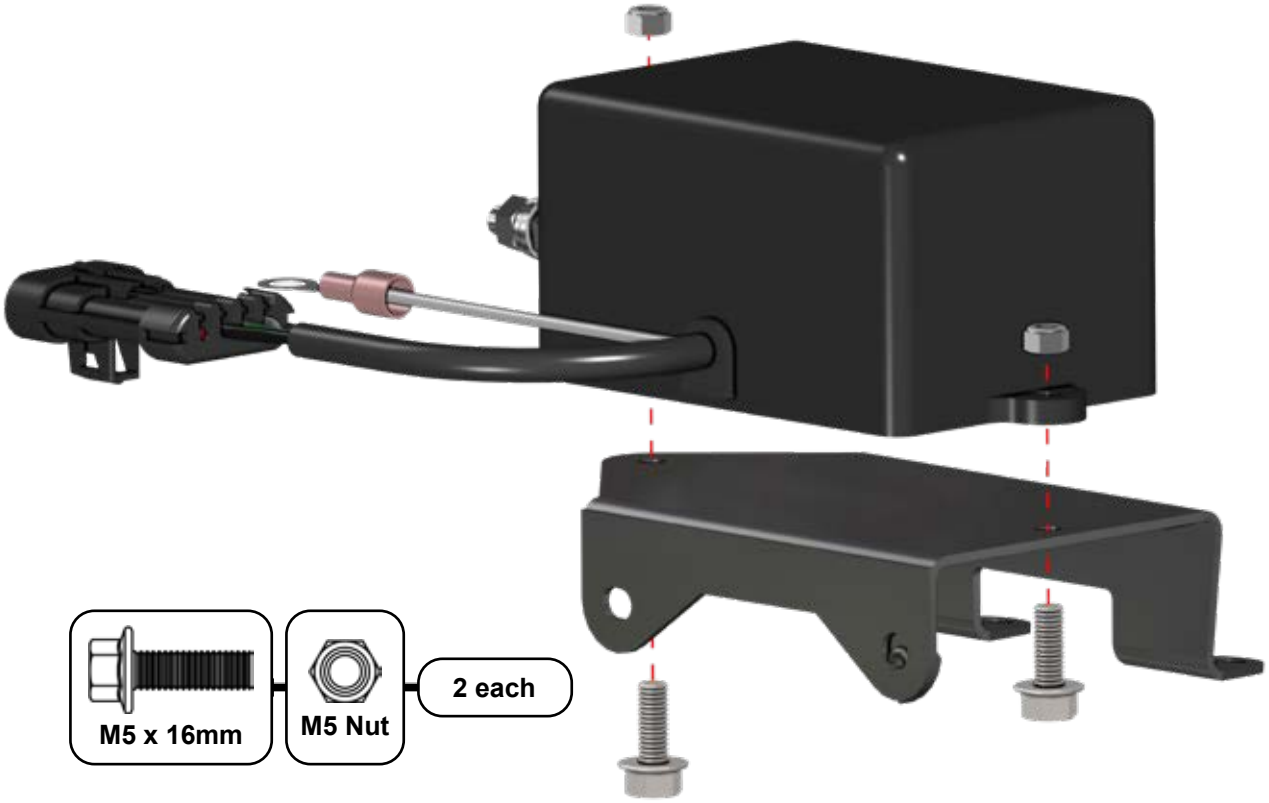


- User will determine where LED / Bracket assembly installs to on Dash.
- Verify that connection on Harness will reach; connect Harness.

- User will determine where Remote Bracket installs.
- Verify that Remote and Motor Harness will reach Solenoid.

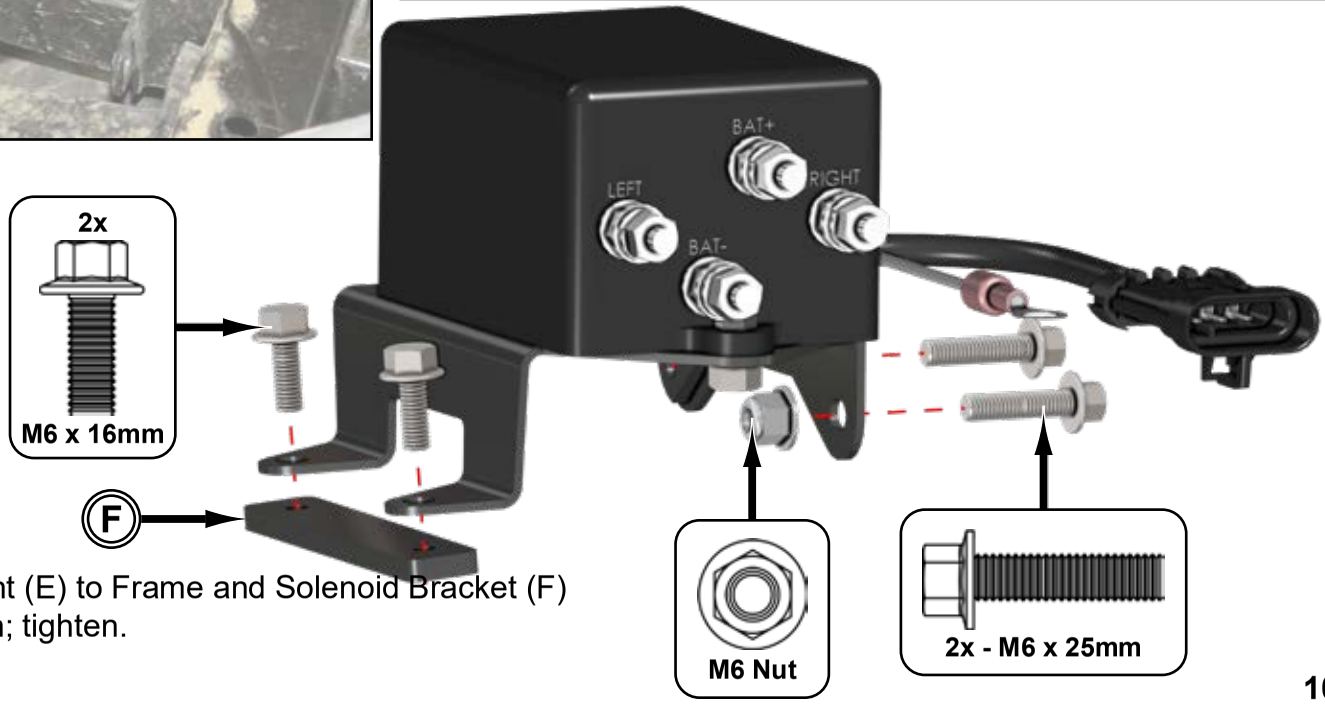


- Install Solenoid (K) to Solenoid Mount (E) with hardware shown; tighten.



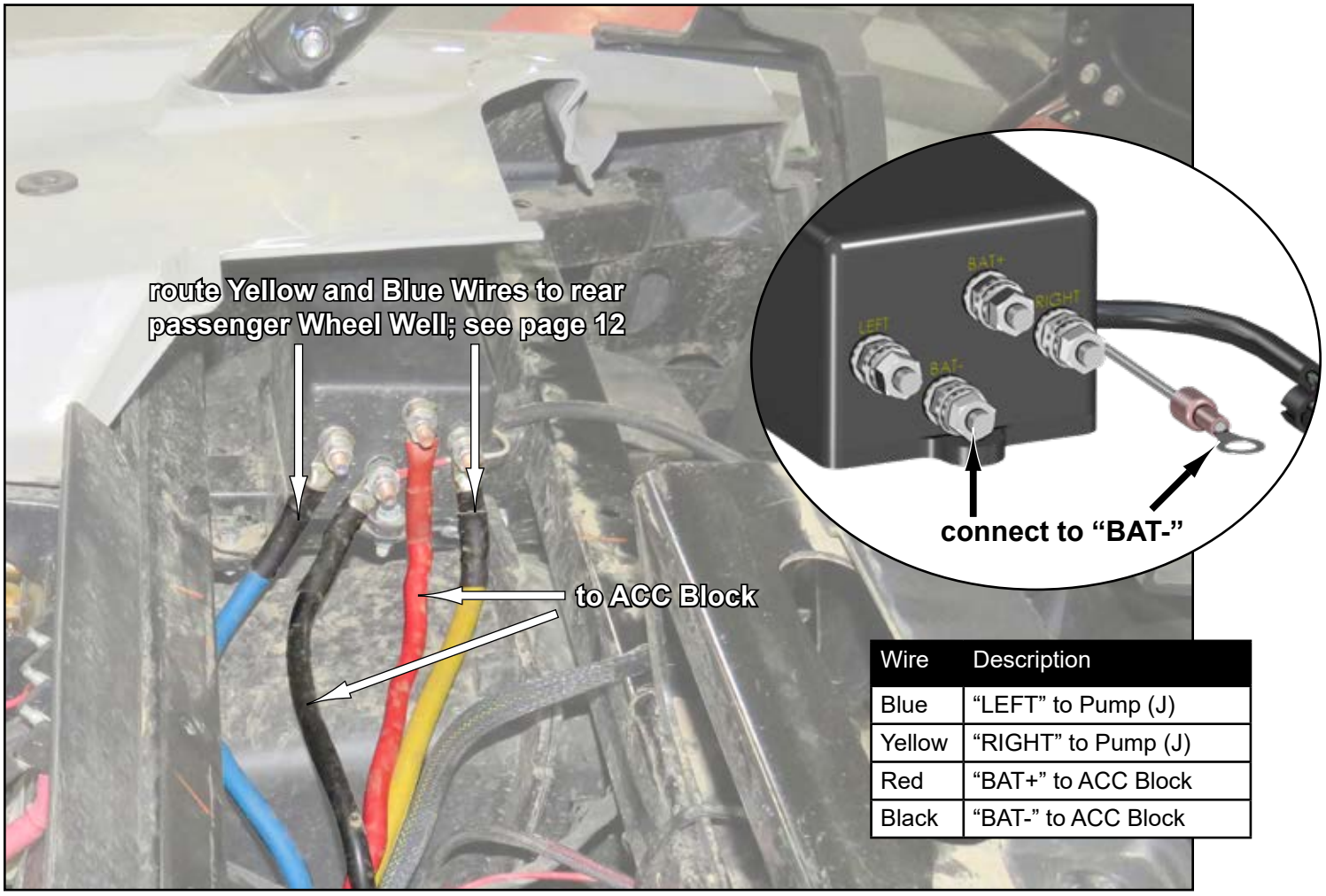
- Install Switch and connect appropriate end of Harness; see page 4.

- Insert Solenoid Bracket (F) through slot in Frame.



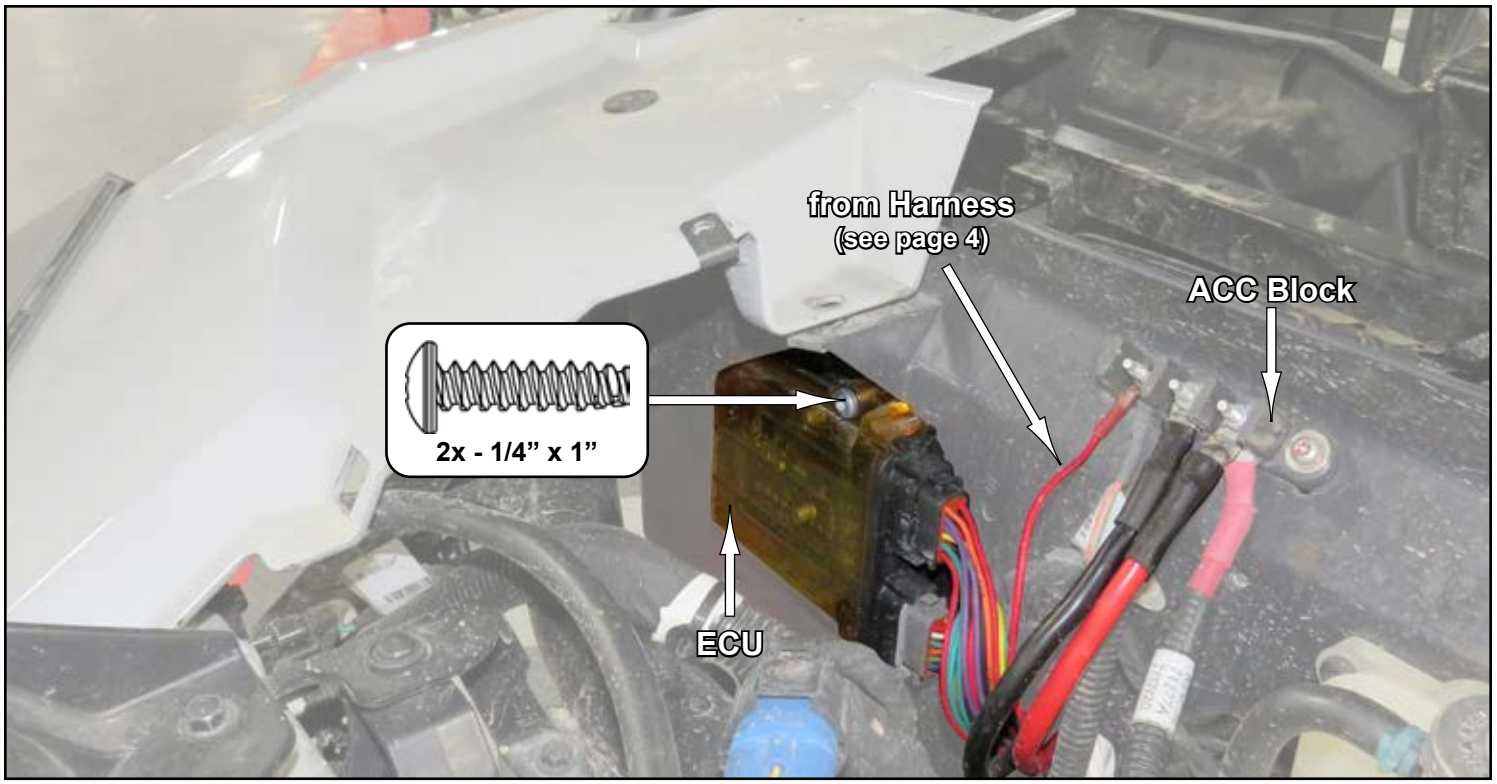
- Insert Solenoid Mount (E) to Frame and Solenoid Bracket (F) with hardware shown; tighten.

- Connect Wires to Solenoid; see table. Tighten connections.

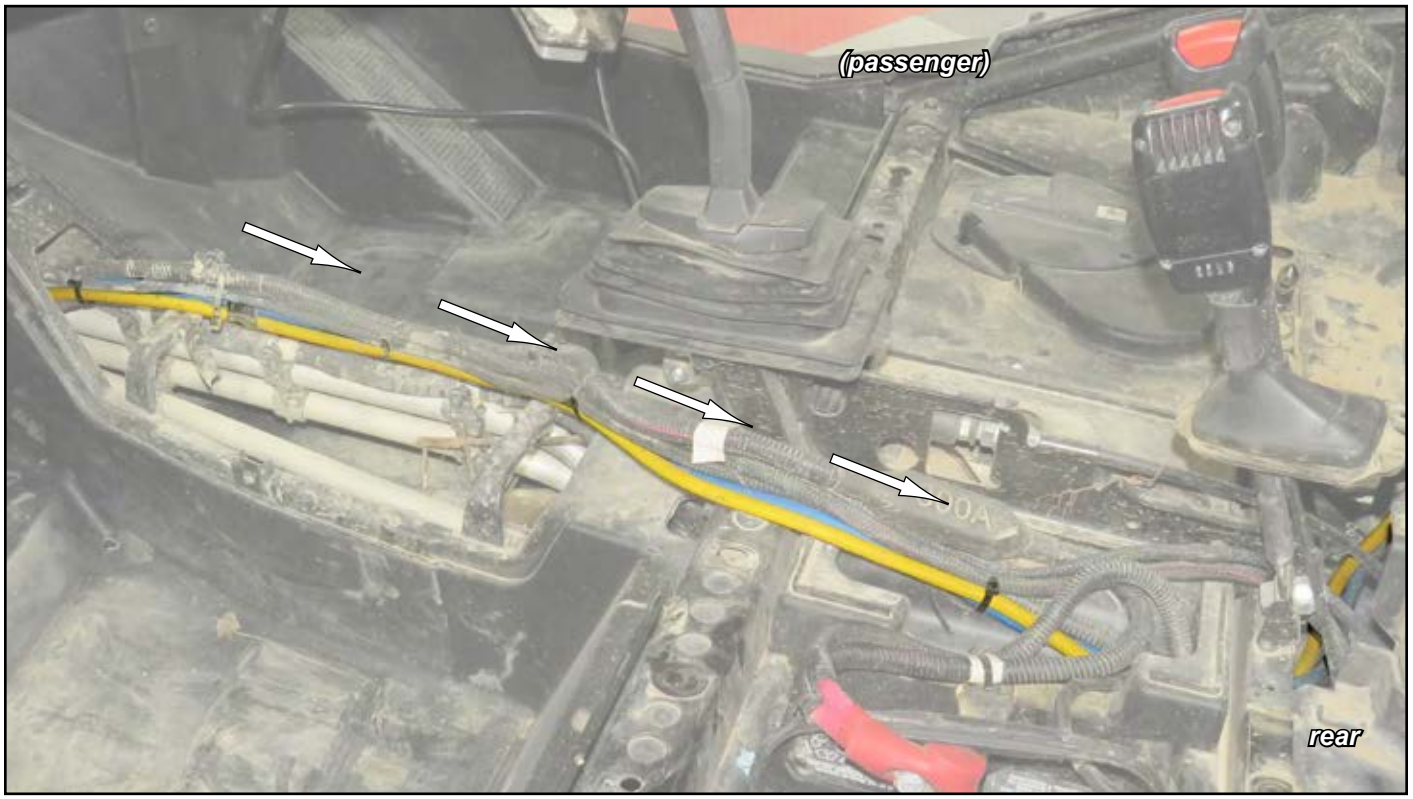


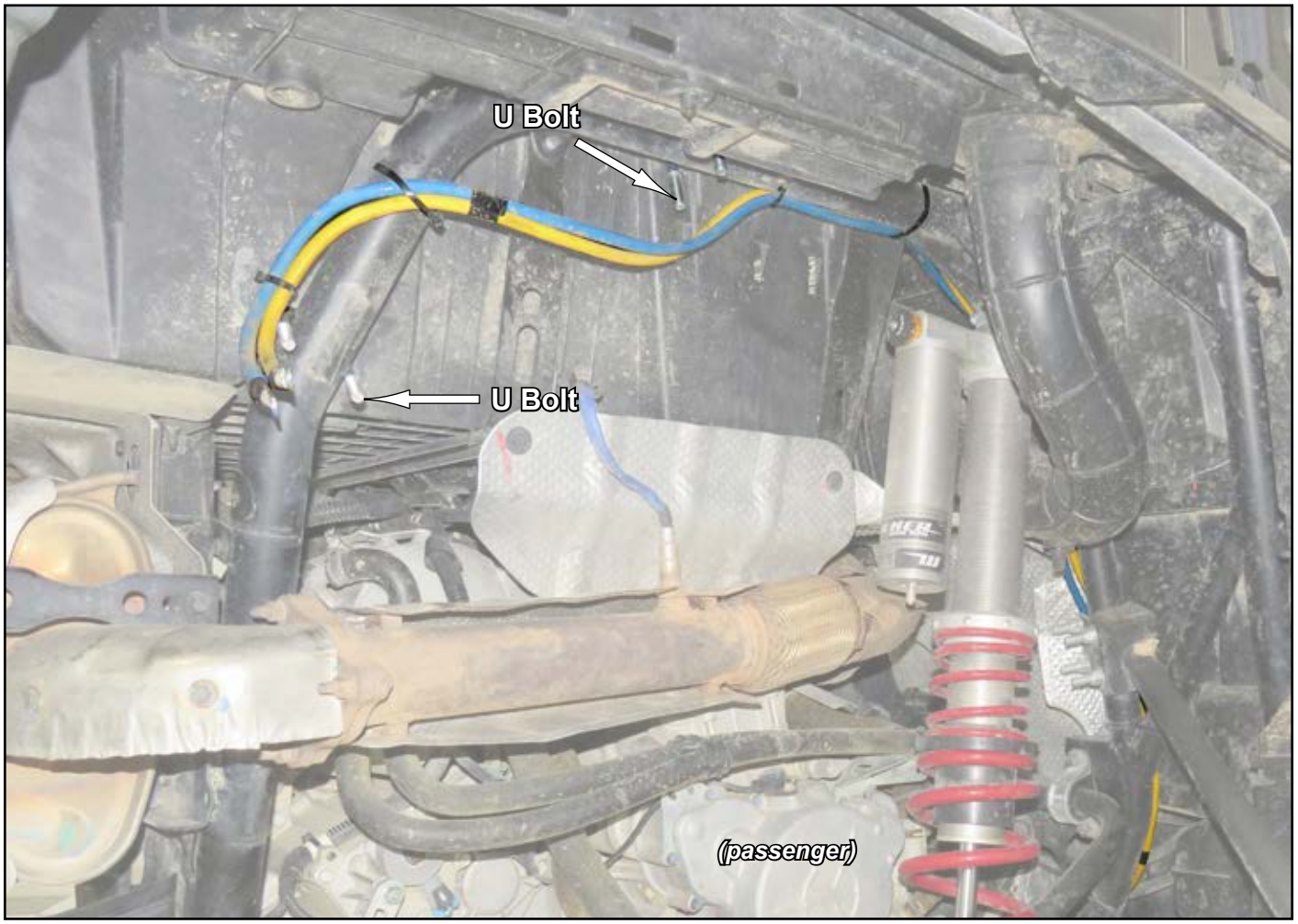
Wire	Description
Blue	"LEFT" to Pump (J)
Yellow	"RIGHT" to Pump (J)
Red	"BAT+" to ACC Block
Black	"BAT-" to ACC Block

- Install ECU to Fire Wall with provided hardware; tighten.
- Connect Wires to Solenoid; see table. Tighten connections.
- Connect Harness to ECU.

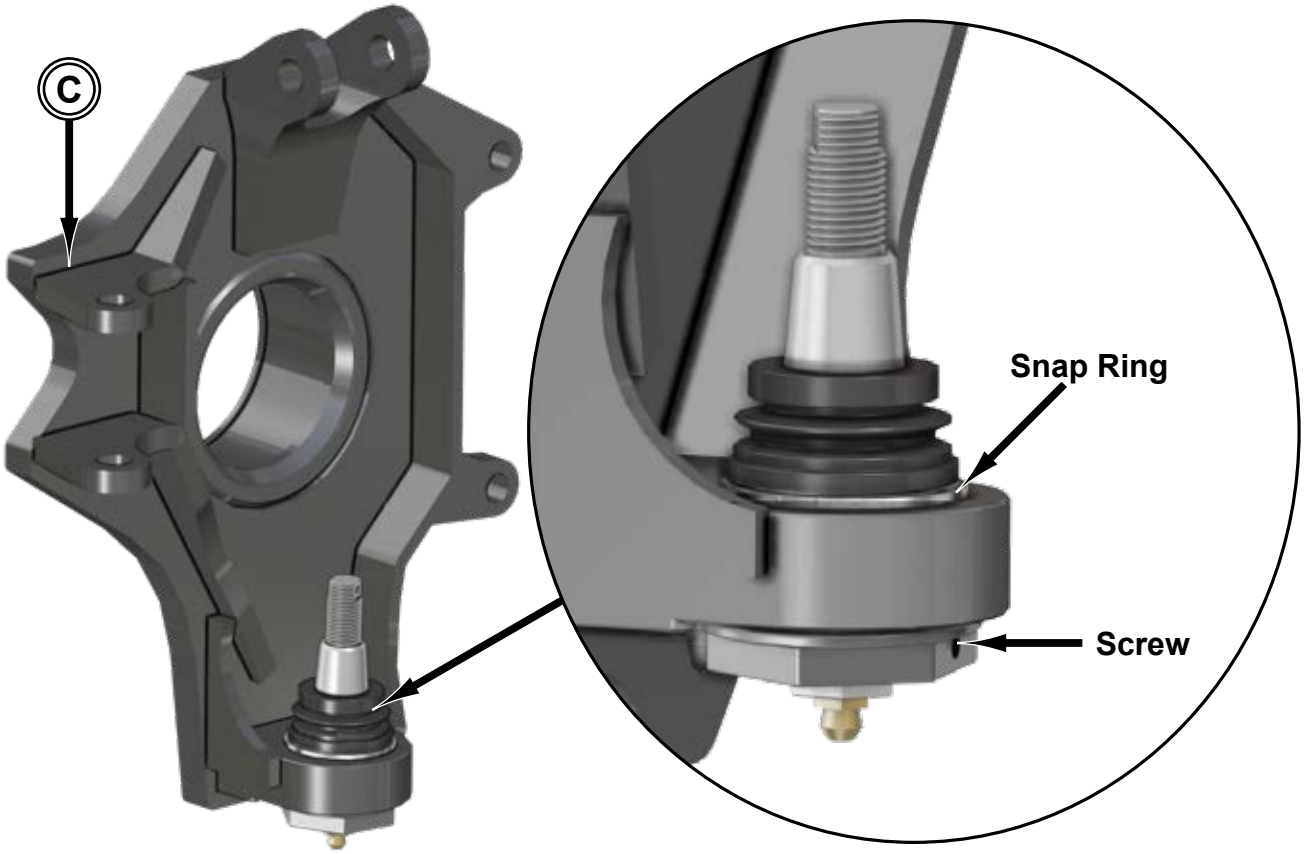


- Loosely secure Yellow and Blue Wires with Wire Ties.
- Place U Bolts around Frame in areas shown.





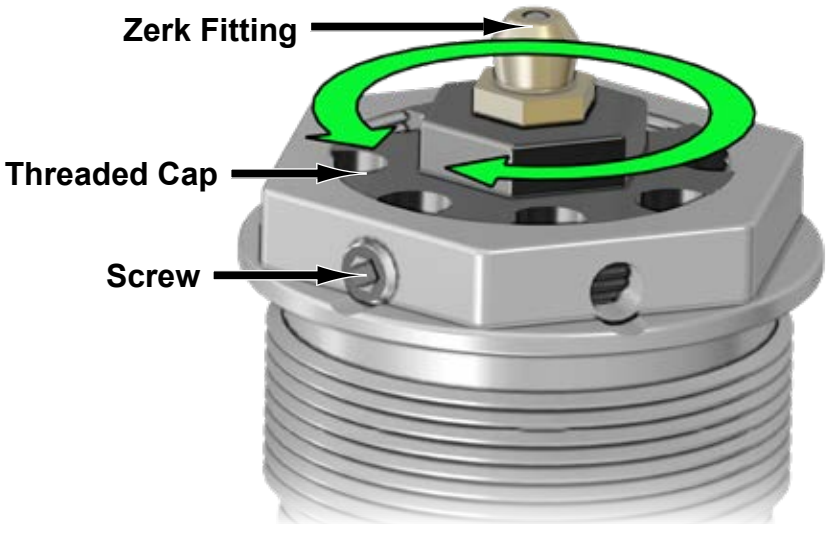
- Install Lower Ball Joint into Knuckle - L (C). Torque to 100 lbs/ft.
- Secure Ball Joint with provided Snap Ring.
- Ball Joint must be installed so that Screw can be removed.
- SuperATV recommends checking torque on a regular basis.



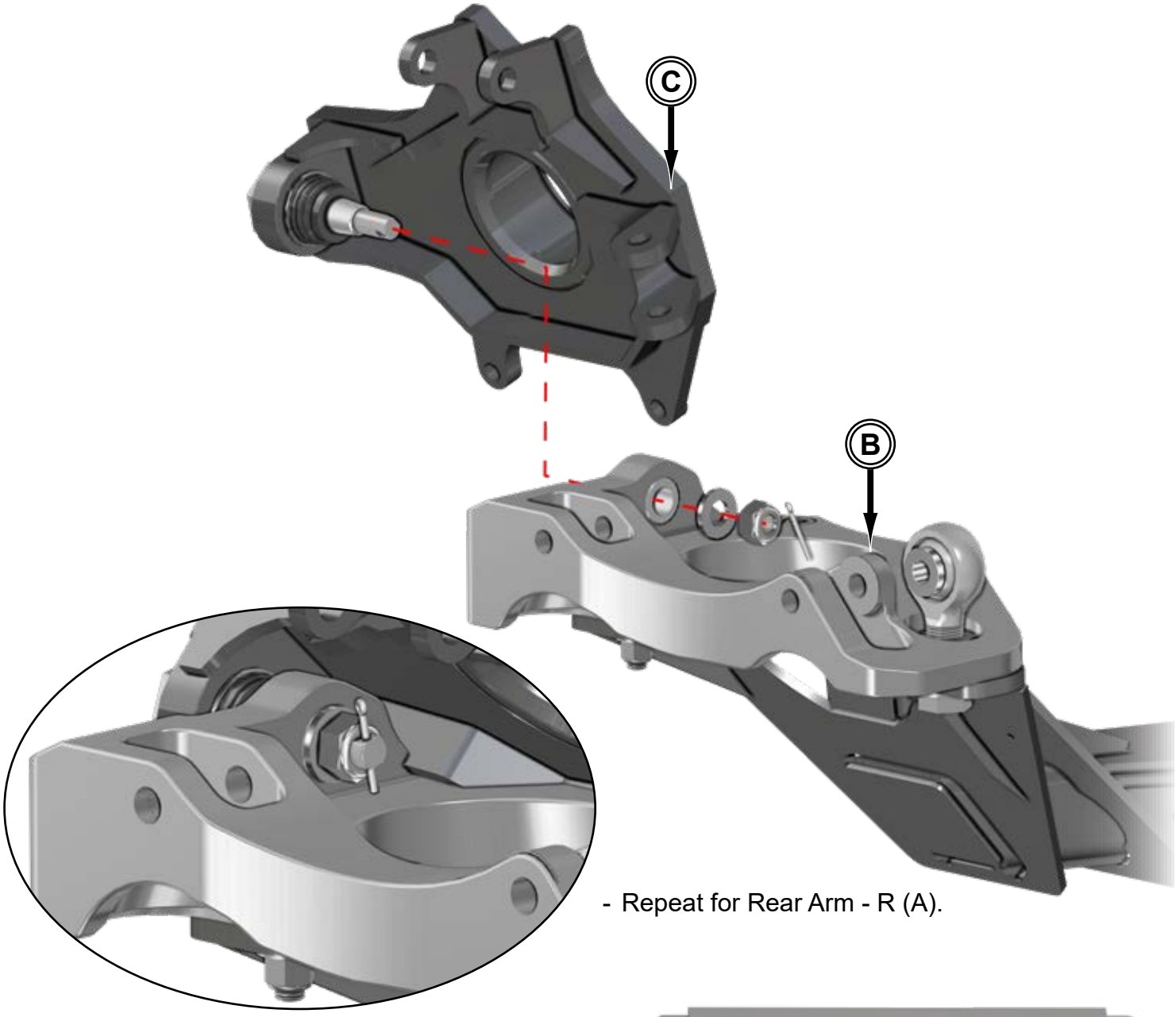
- Repeat steps for Knuckle - R (D) Ball Joint installation.

- Adjustments can be made with Ball Joint installed on Knuckle.
- Loosen Screw and rotate Threaded Cap; left loosen - right tighten.
- Tighten Screw.

DO NOT USE ZERK FITTING TO TIGHTEN OR LOOSEN.

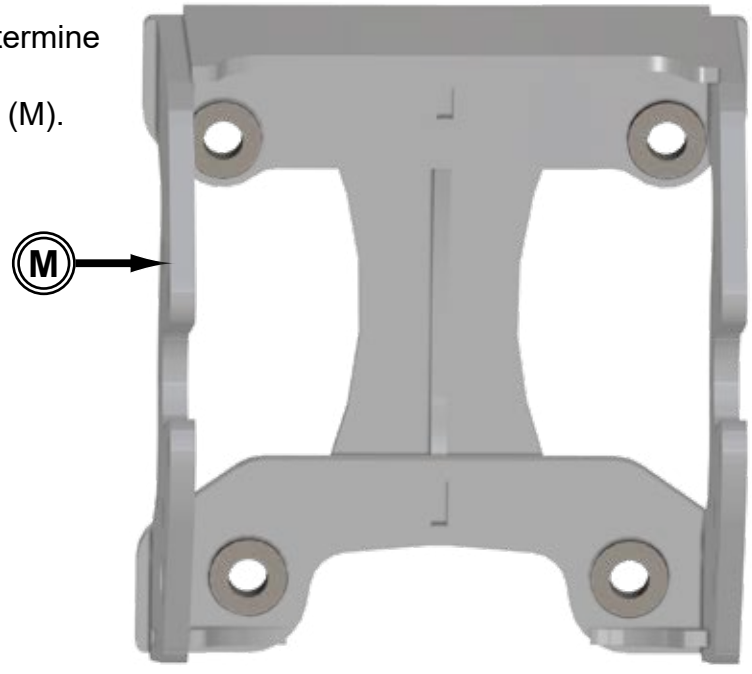


- Secure Lower Ball Joint into Knuckle - L (C) with hardware shown; tighten.



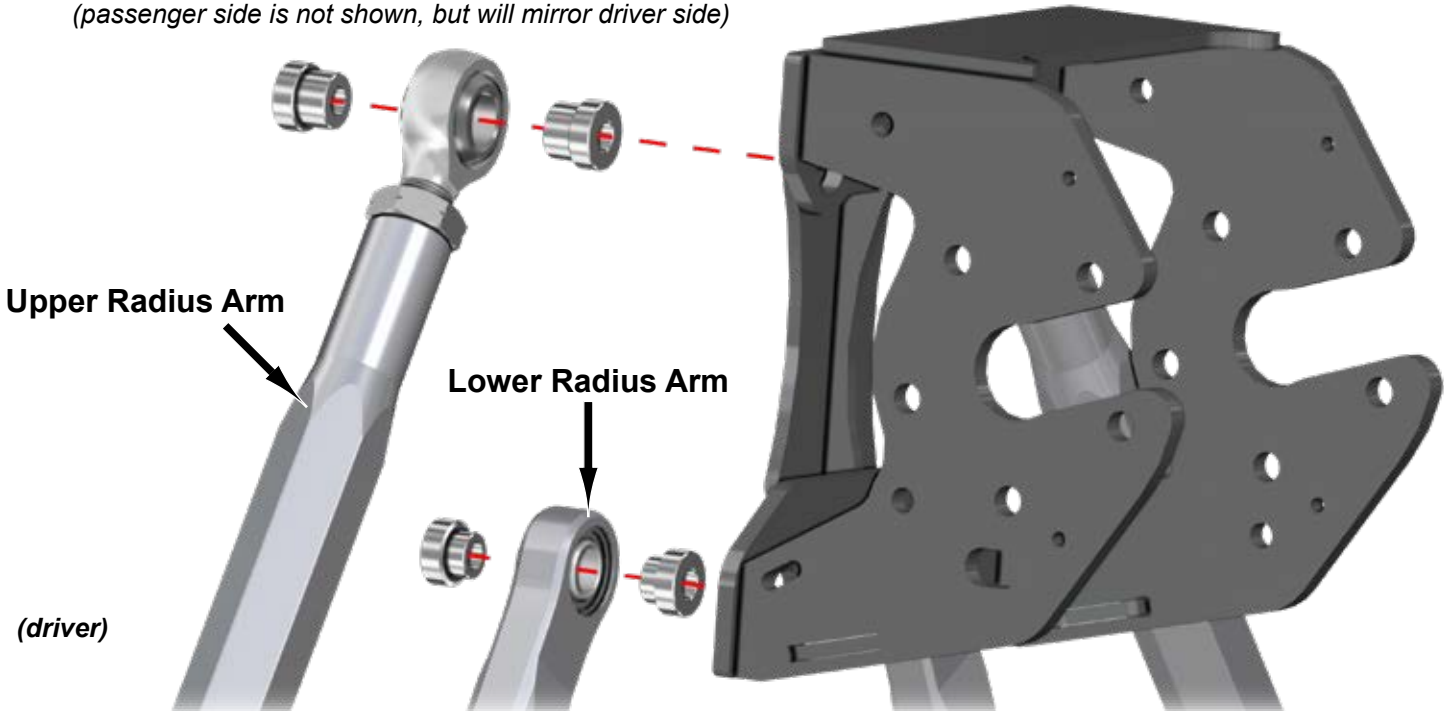
- Repeat for Rear Arm - R (A).

- Use previously removed Radius Arm Bolt to determine which size Insert to install.
- Insert M10, or M12, Inserts into Cylinder Mount (M).

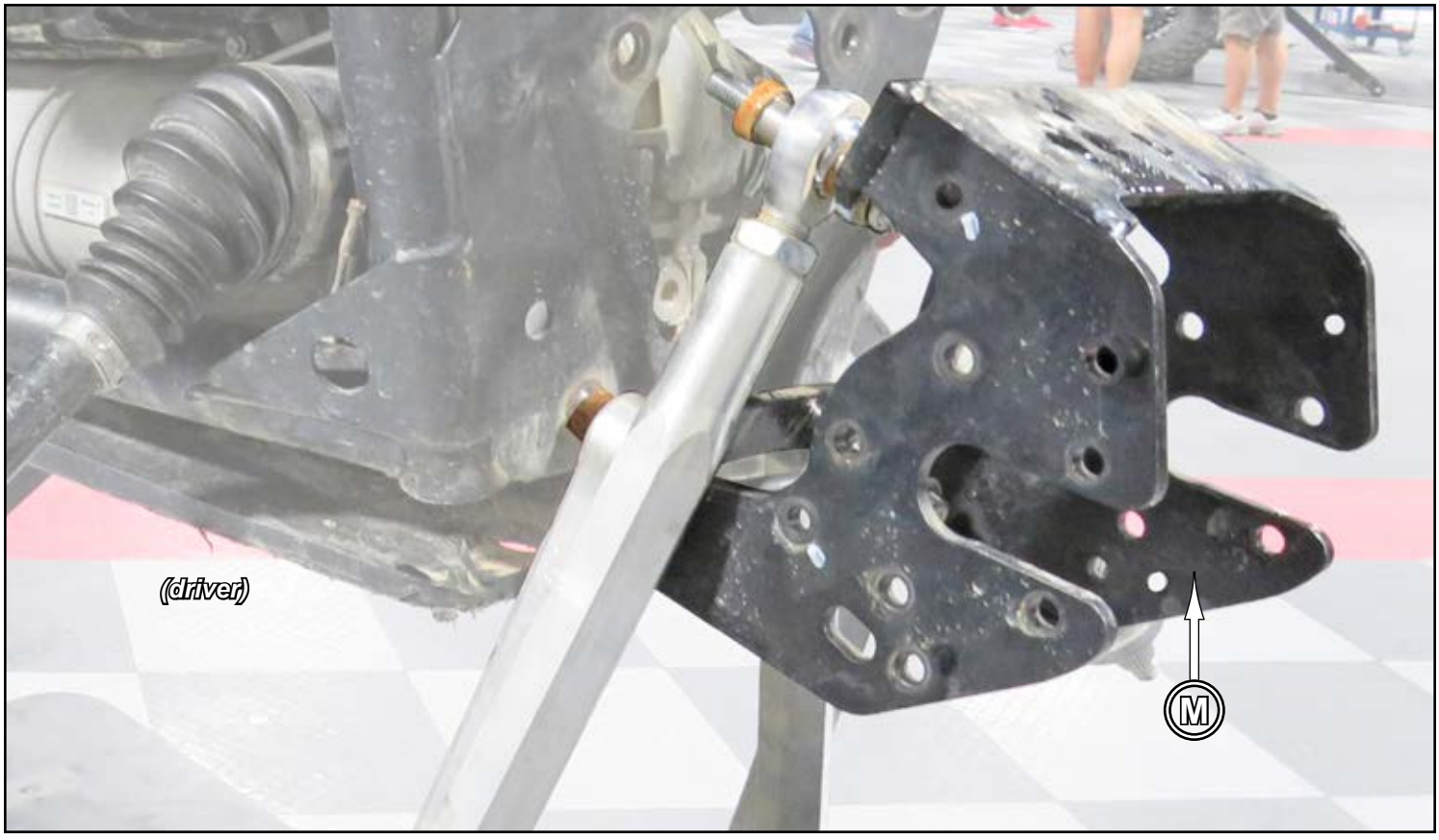


- Radius Arms are shipped with M12 Bushings installed.
- If M10 Radius Arm hardware was removed from machine, user must swap out M12 Bushings with M10 Bushings as shown below.

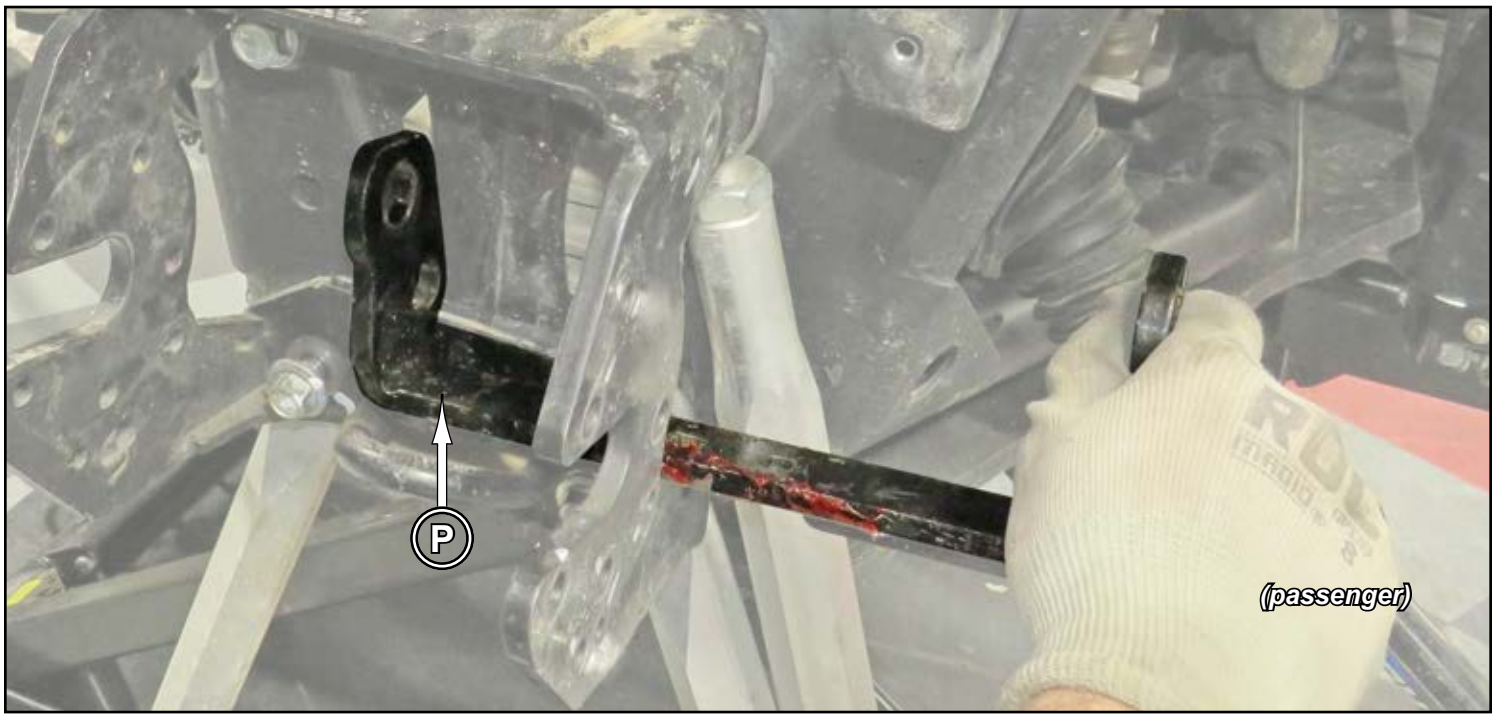
(passenger side is not shown, but will mirror driver side)



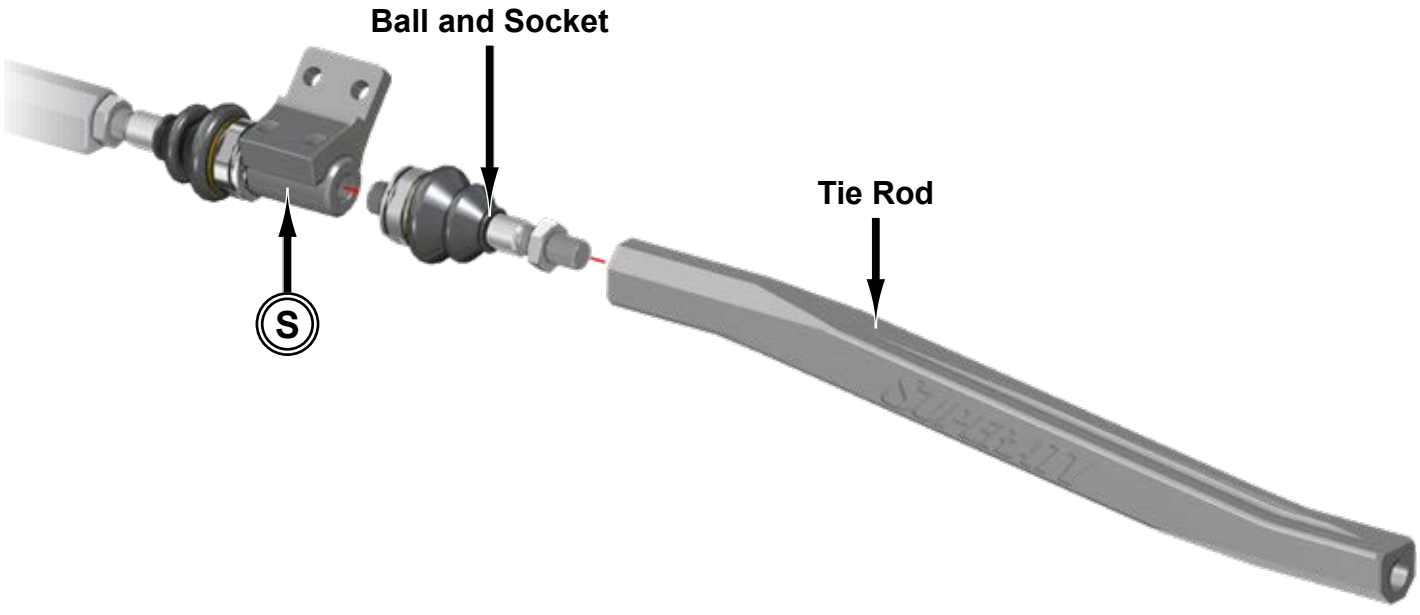
- Secure Radius Arms and Cylinder Mount (M) to Frame with previously removed Radius Arms hardware; tighten.



- Slide Cylinder Arm (P) through Cylinder Mount (M) as shown.

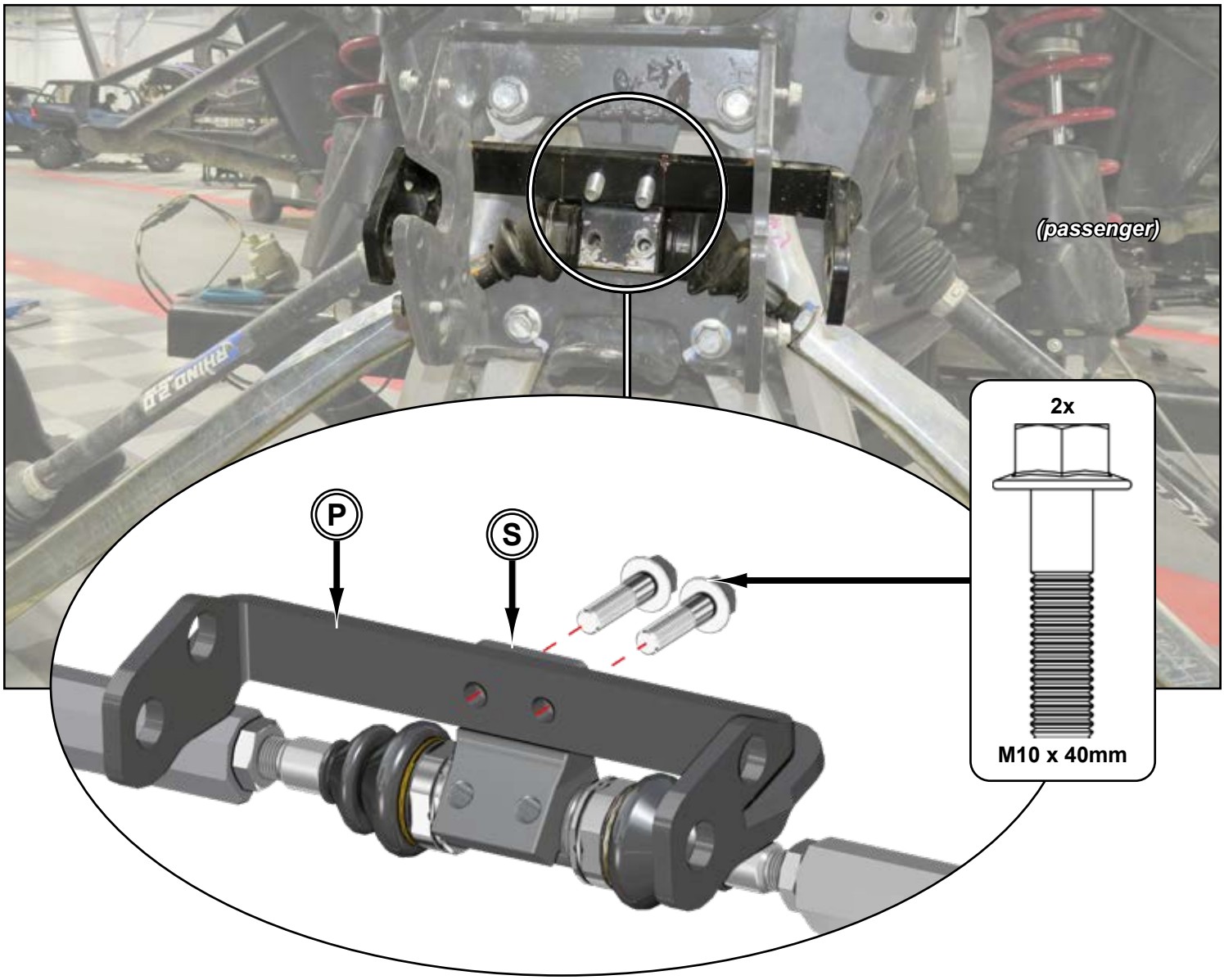


- Install Ball and Sockets and Tie Rods to Thread Mount (S); do not tighten.

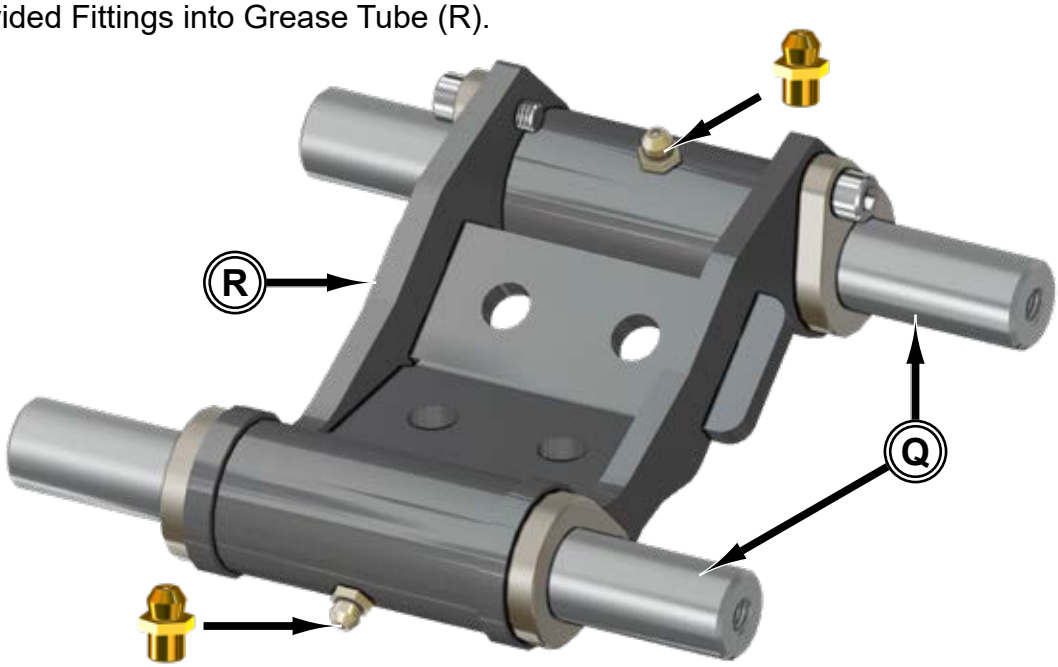


- Slide Tie Rods / Thread Mount assembly through Cylinder Mount (M) as shown.

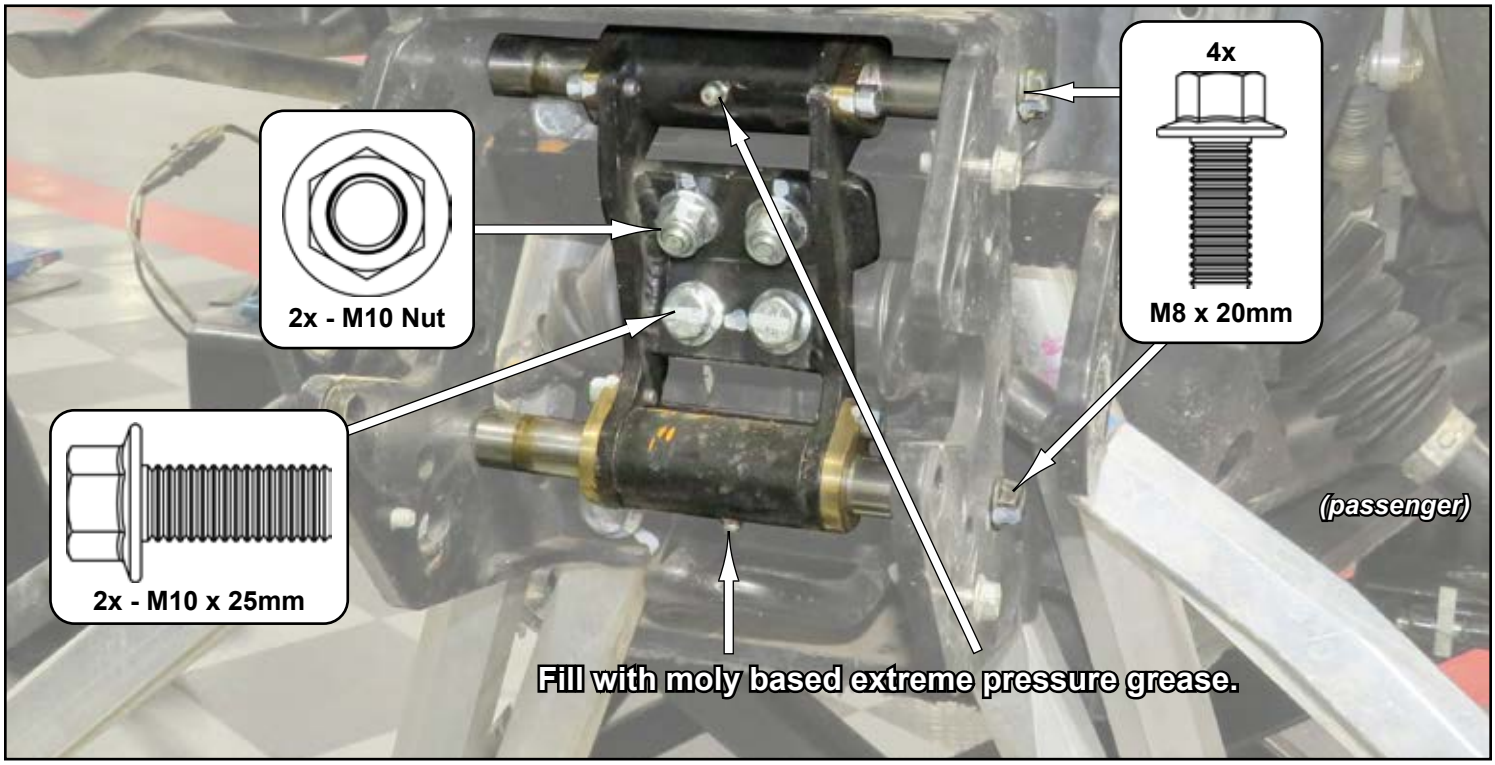
- Secure Thread Mount (S) to Cylinder Arm (P) with hardware shown.



- Insert Cylinder Mount Rods (Q) into Grease Tube (R).
- Install provided Fittings into Grease Tube (R).

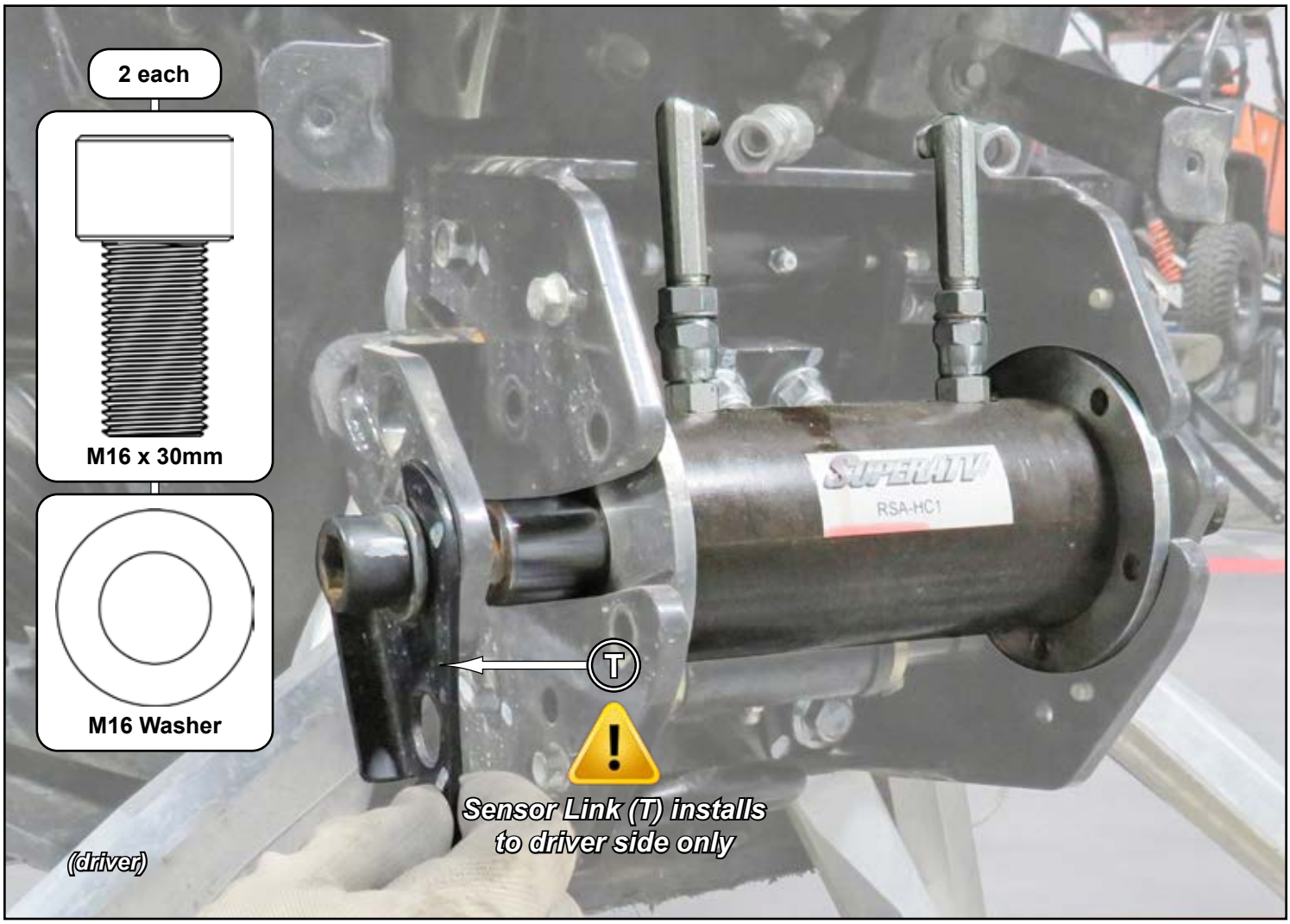


- Secure Cylinder Mount Rods (Q) to Cylinder Mount (M) with hardware shown; tighten.
- Secure Grease Tube (R) to Thread Mount (S) with hardware shown; tighten.



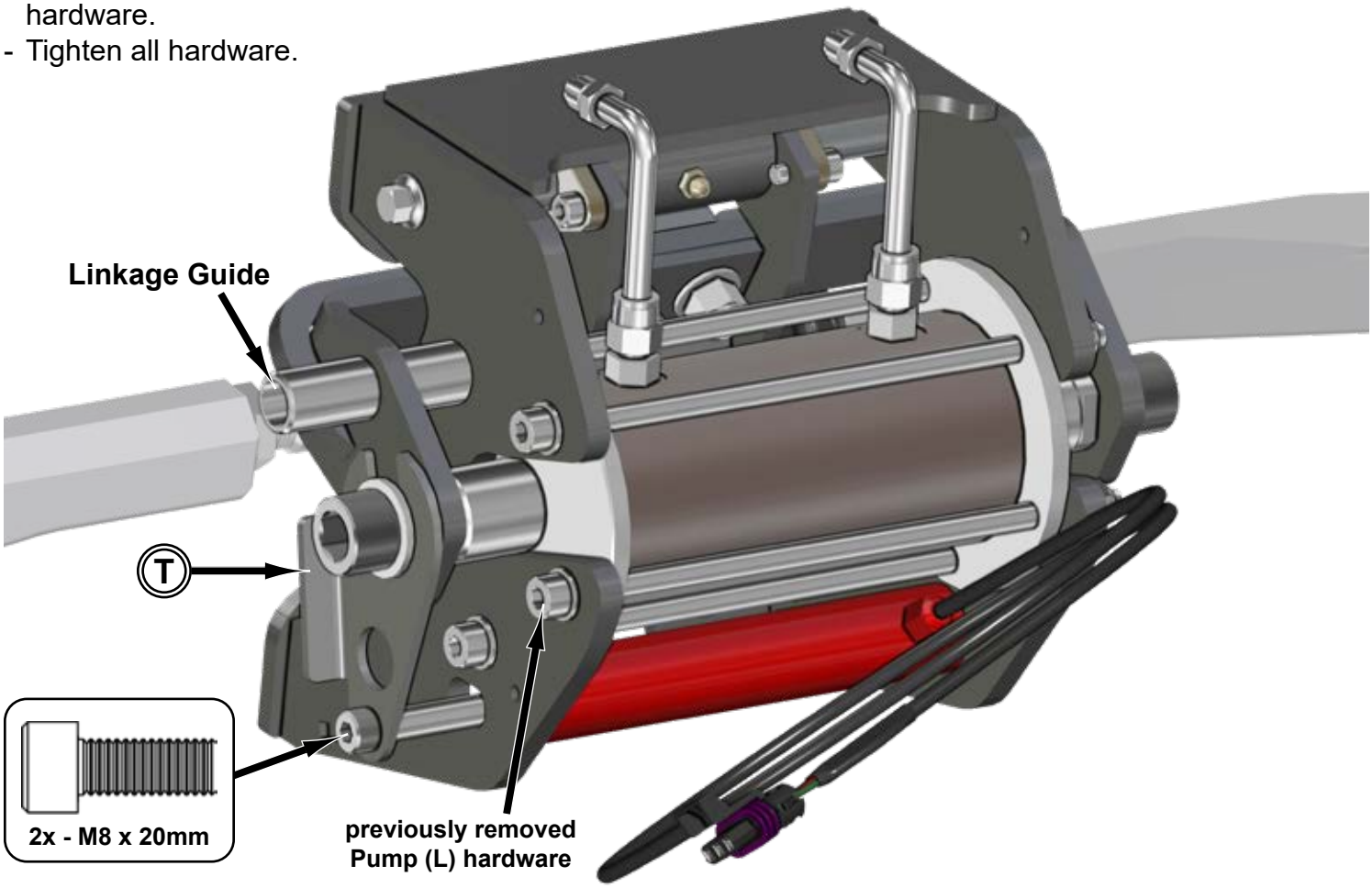
- Install 90° Adapters to Cylinder (L); tighten.

- Secure Cylinder (L) and Sensor Link (T) to Cylinder Mount (M) with hardware shown; do not tighten.

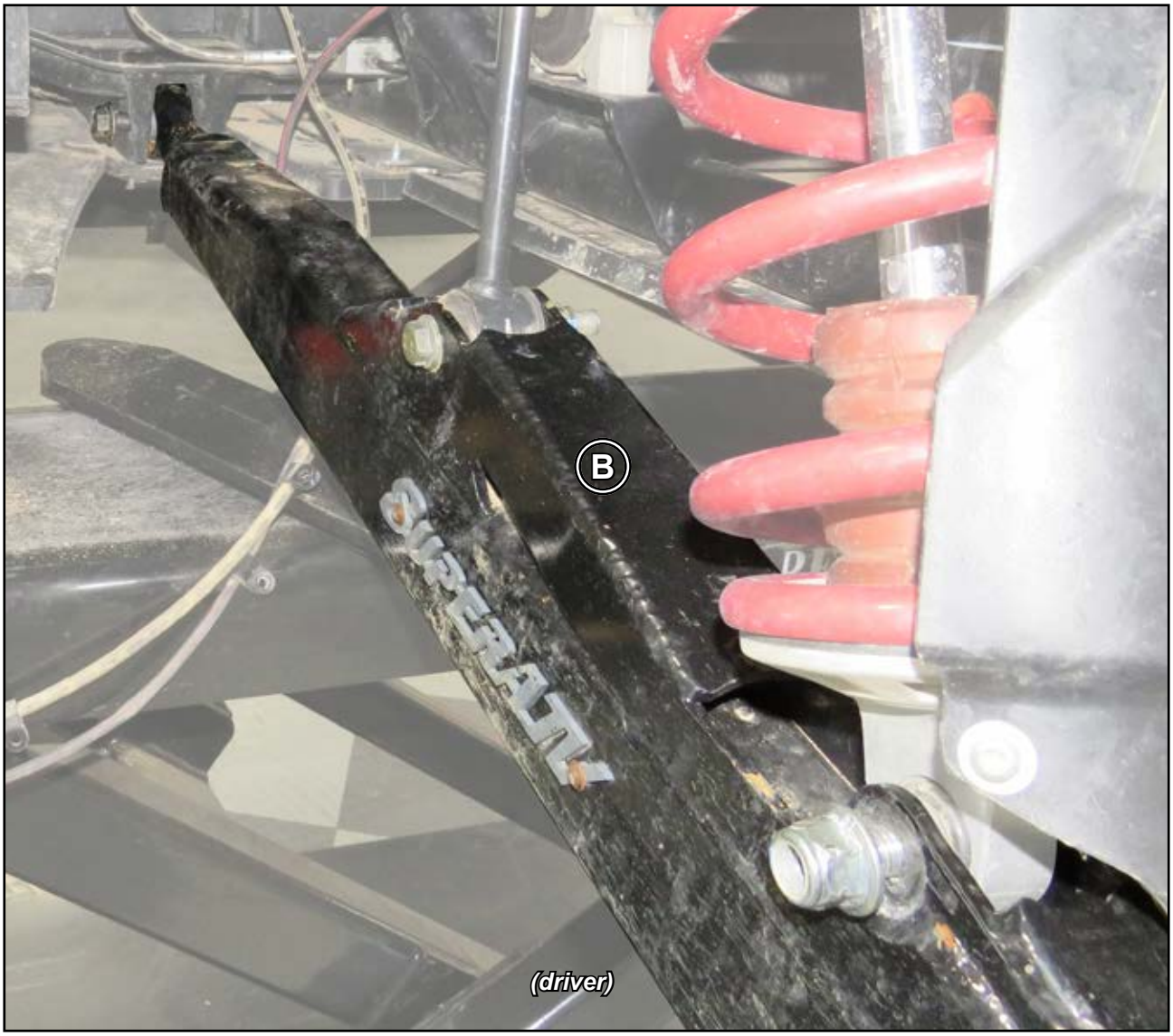


- Place Position Sensor into place as shown.

- Secure Position Sensor to Cylinder Mount (M) and Sensor Link (T) with hardware shown.
- Rotate Sensor Link (T) up and insert Linkage Guide.
- Secure Cylinder (L) and Linkage Guide to Cylinder Mount (M) with previously removed Cylinder (L) hardware.
- Tighten all hardware.

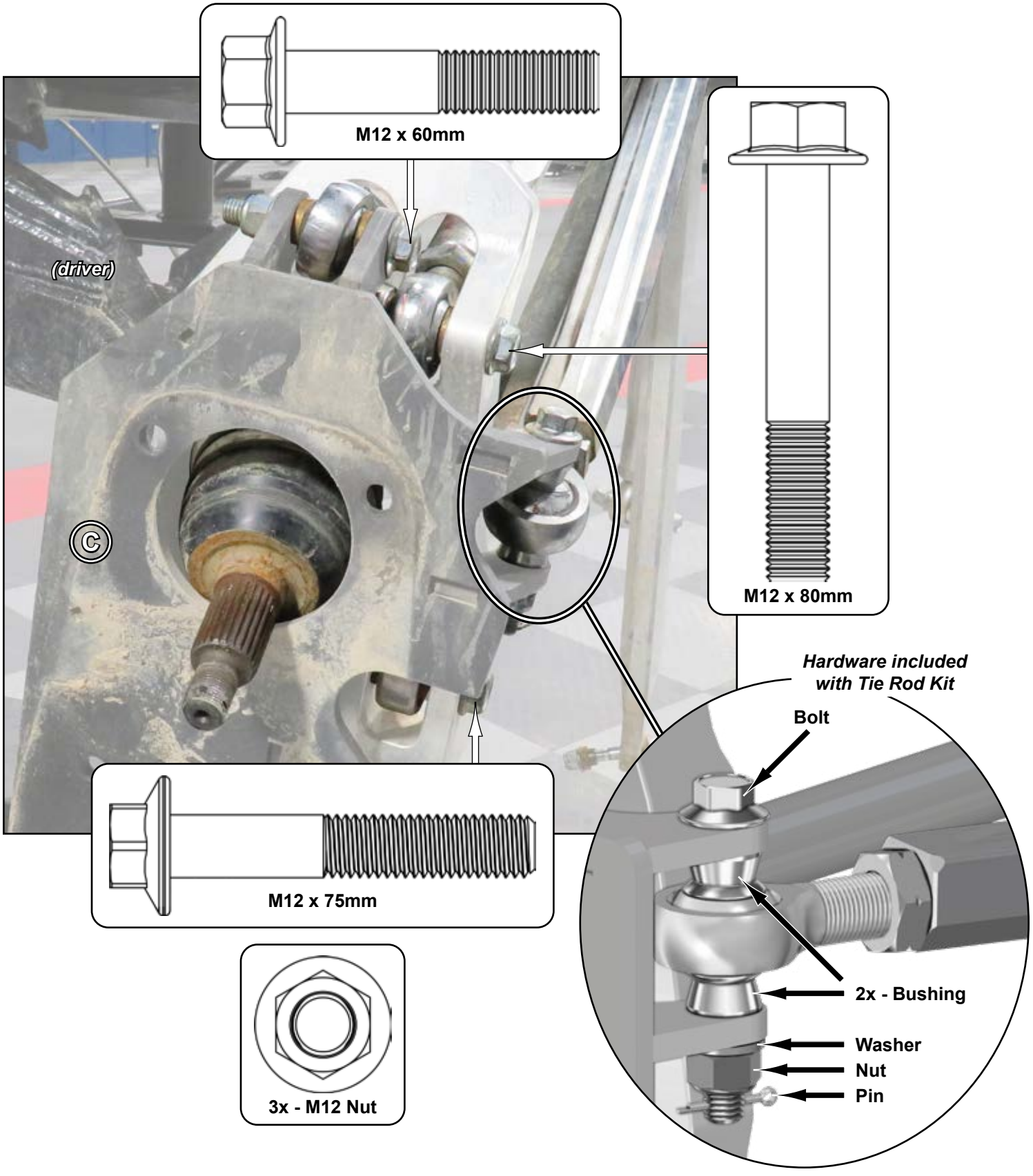


- Install Rear Arm - L to machine with stock hardware; tighten.
- Secure Sway Bar Link and Shock with stock hardware; tighen.



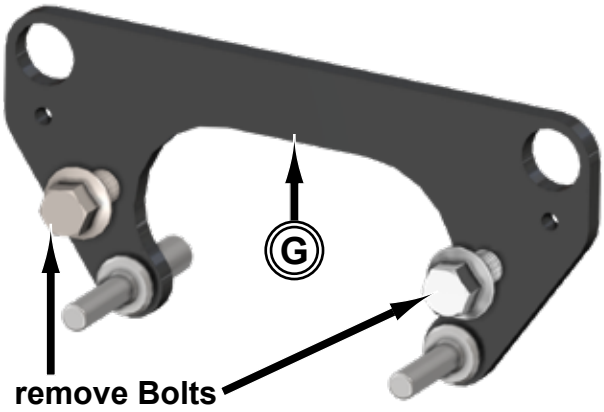
- Repeat for passenger side installation.

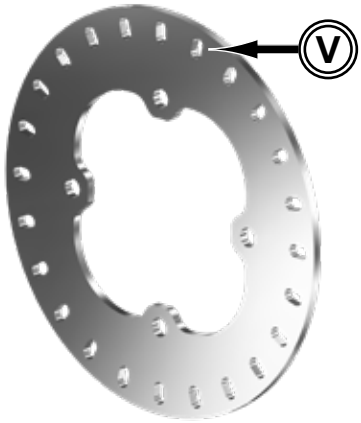
- Rotate Knuckle - L (C) up and secure to Rear Arm - L (B) with hardware shown; tighten.
- Secure Radius Arms to Rear Arm - L (B) with hardware shown; tighten.
- Secure Tie Rod End to Knuckle - L (C) with hardware shown; tighten.

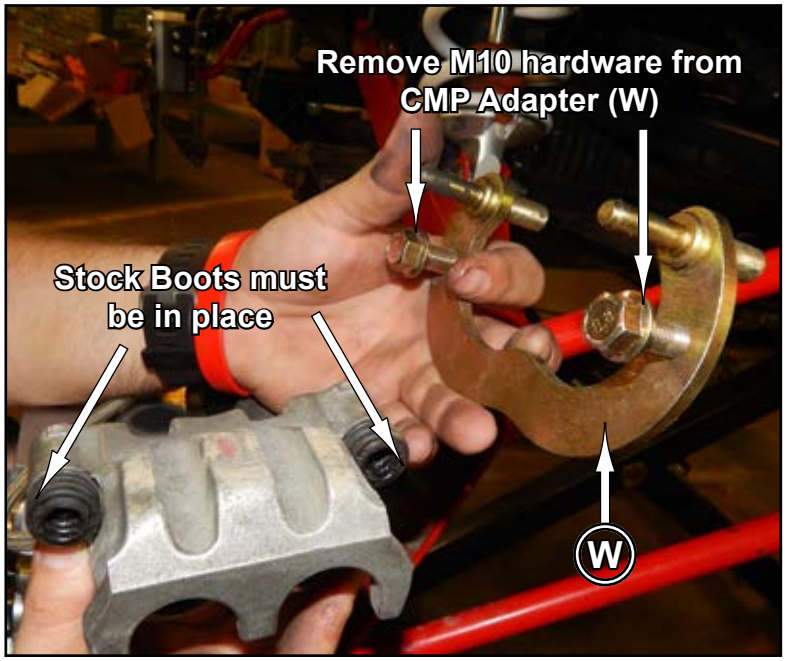


- Repeat steps for passenger side installation.
- Reinstall Portal Gear Hubs. Do not install driver side Caliper.

- Replace stock Left Rear Rotor with Rotor - L (V).



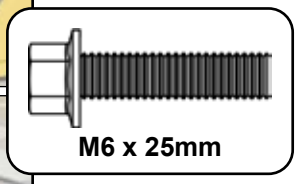




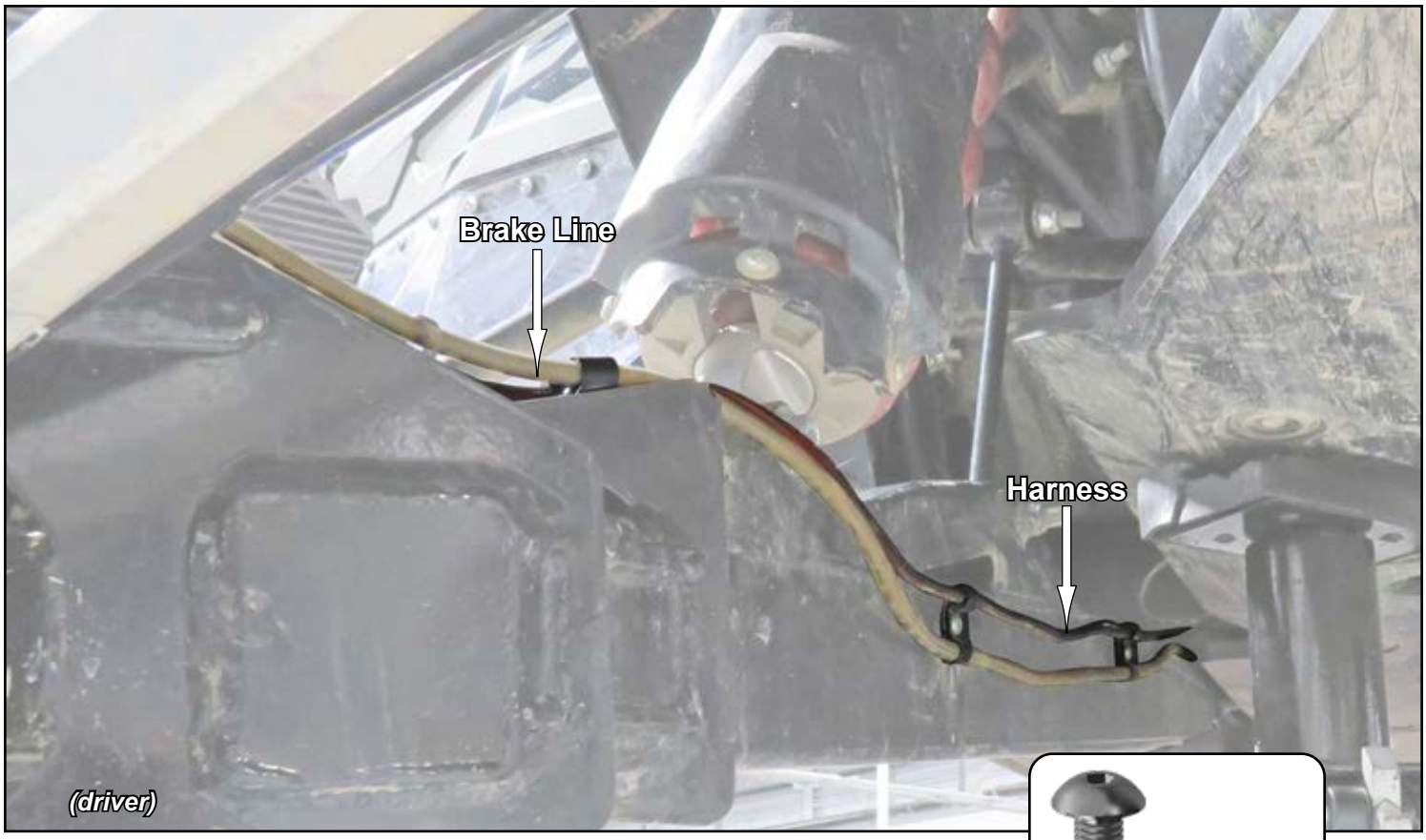
- Install CMP Bracket (G) / CMP Adapter (W) assembly with previously removed Bolts from CMP Adapter (W).

- Install Protector onto Speed Sensor.

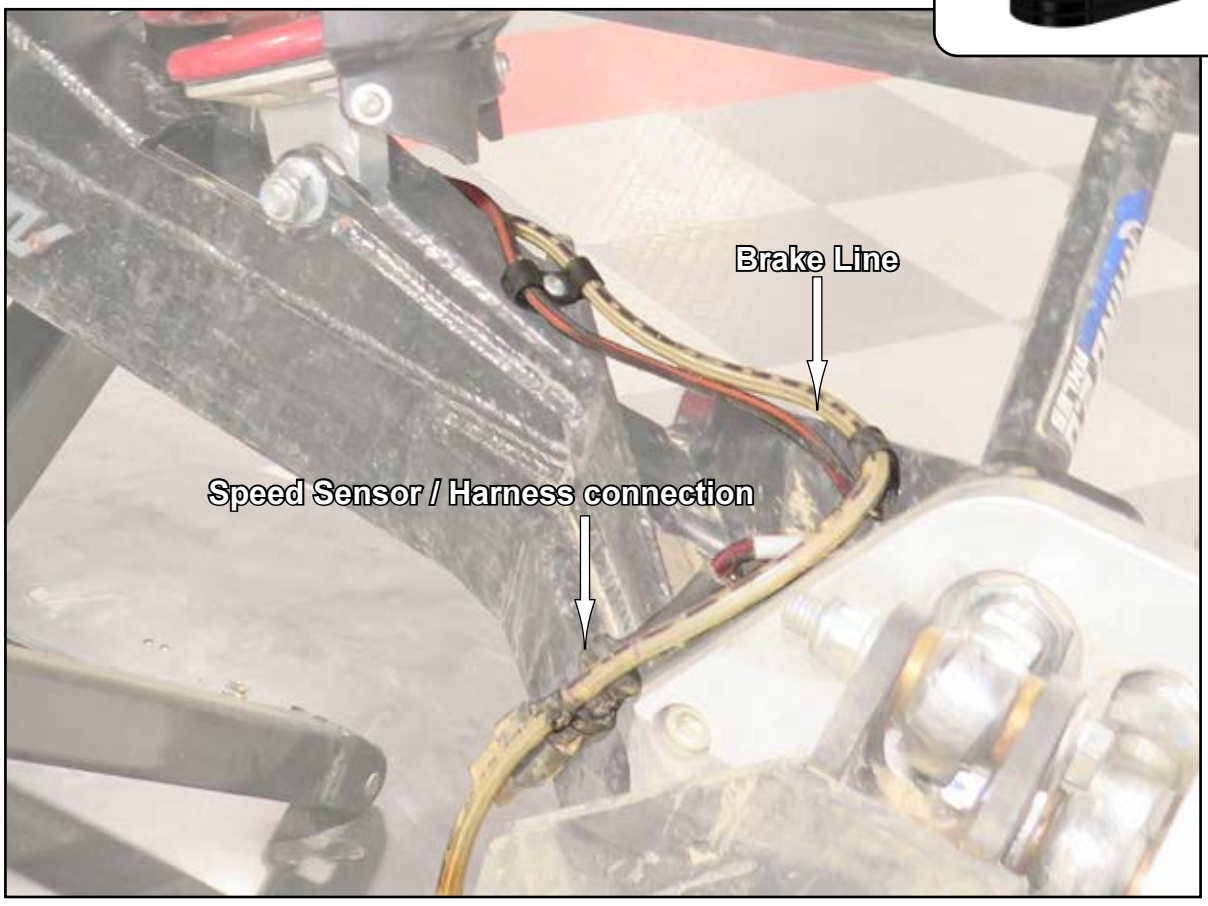
- Secure Speed Sensor to CMP Bracket (G) with hardware shown.



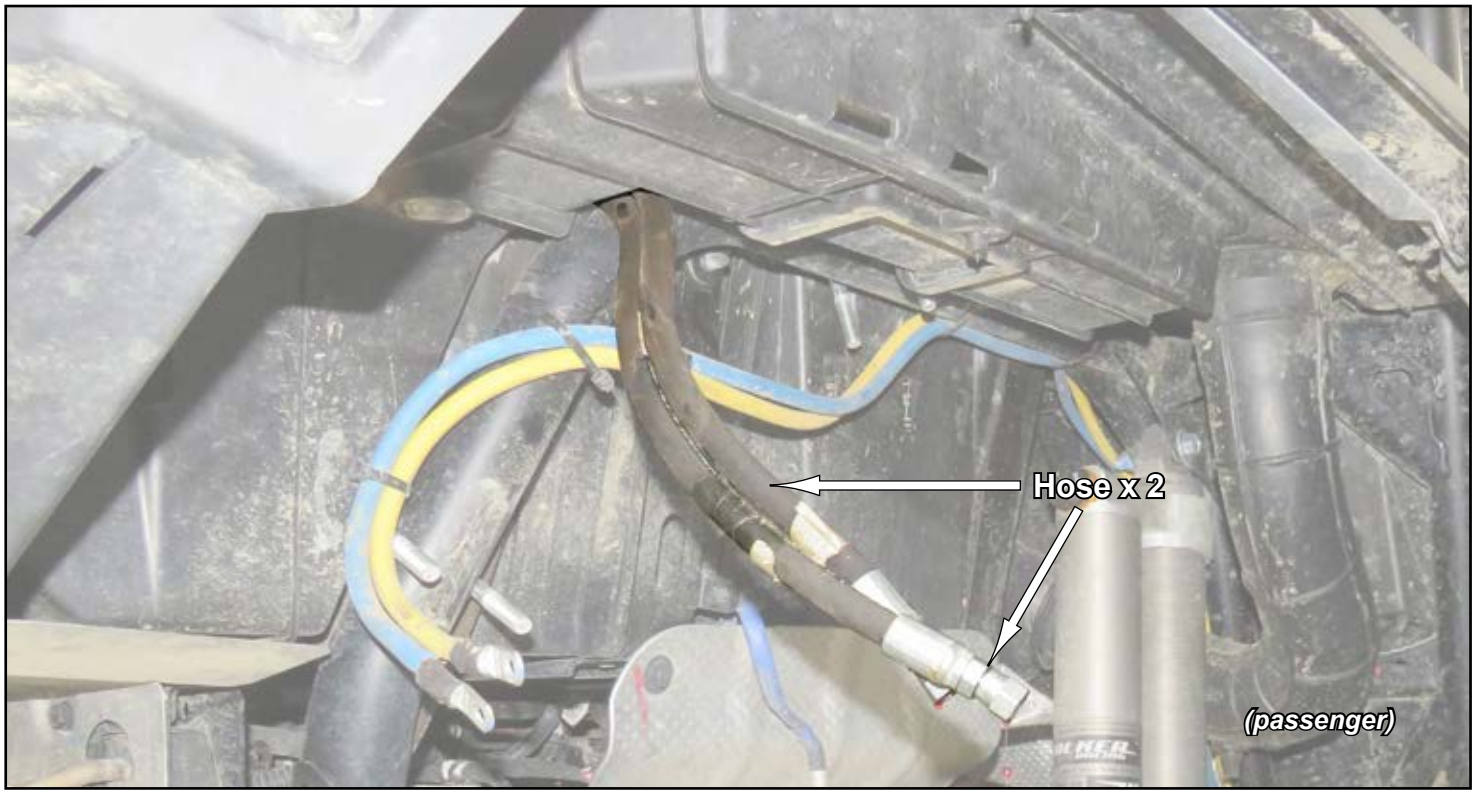
Tighten all hardware completely.



- Route Speed Sensor to Harness and connect.
- Secure components with Brake Line Clips and hardware shown.



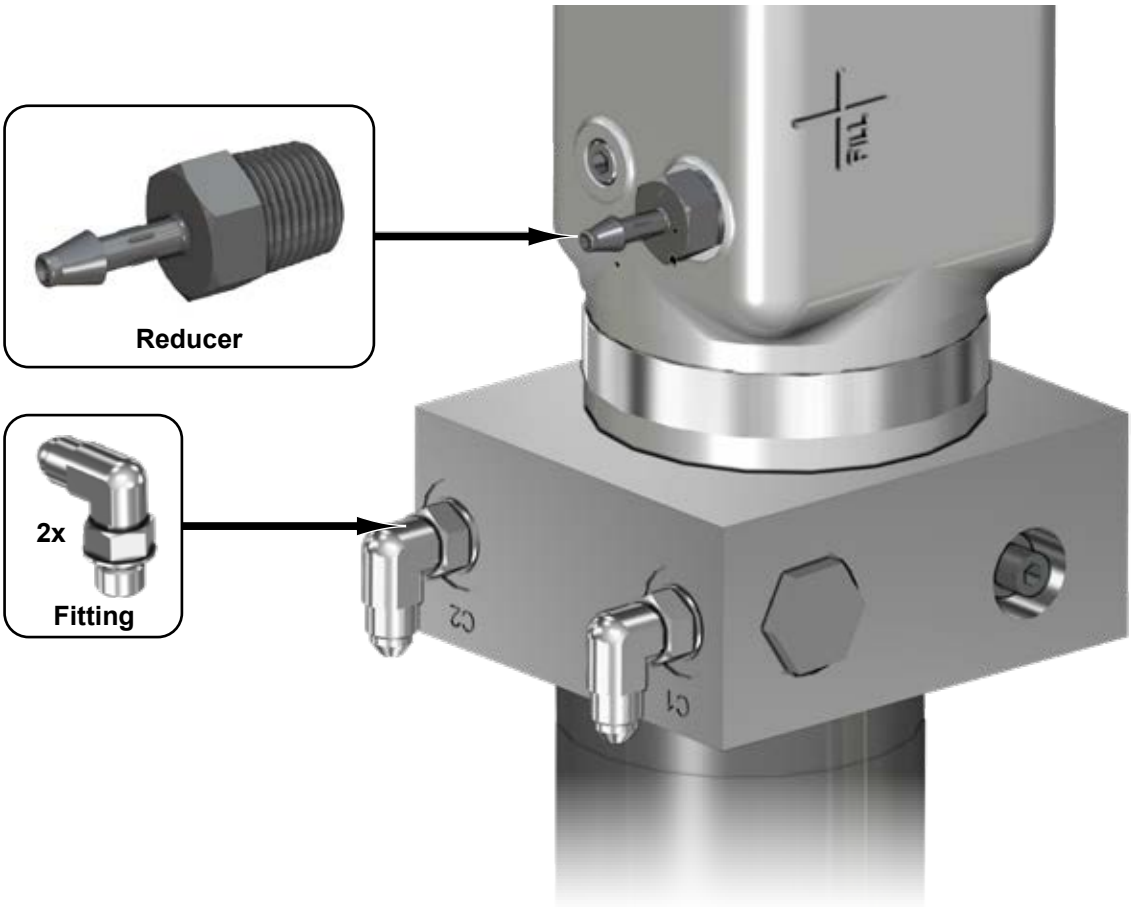
- Insert Hoses and route to Cylinder (L).



HOSE CONNECTIONS BETWEEN PUMP AND CYLINDER ARE INDEPENDENT OF EACH OTHER. CONNECT HOSES TO EITHER FITTINGS.

- Connect Hoses to previously installed Adapters on Cylinder (L); tighten.

- Install Fittings to Pump (J).
- ***If Pump is going to be submerged during riding, remove Cap and install Reducer.***

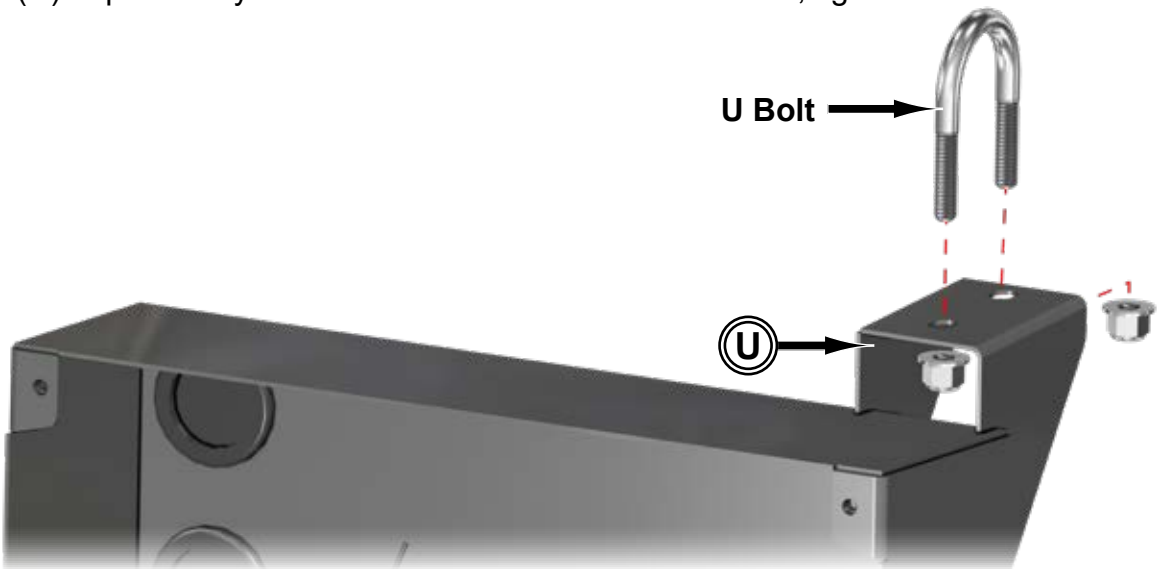


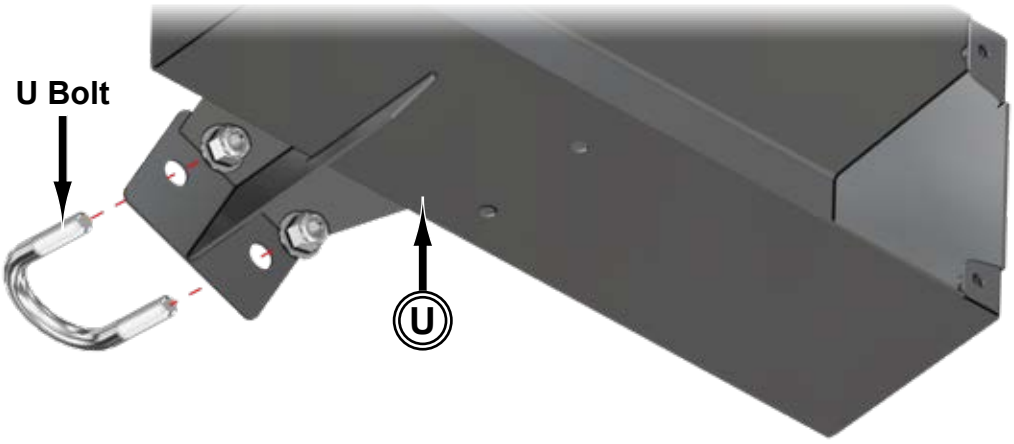
- Remove Lid and install Grommets into Pump Mount (U).

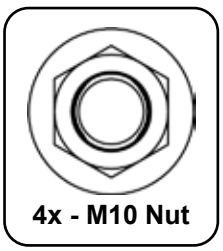
- Cut a slit into Grommets.

- Route Hoses and Wires through Grommets.

- Secure Pump Mount (U) to previously installed U Bolts with hardware shown; tighten.



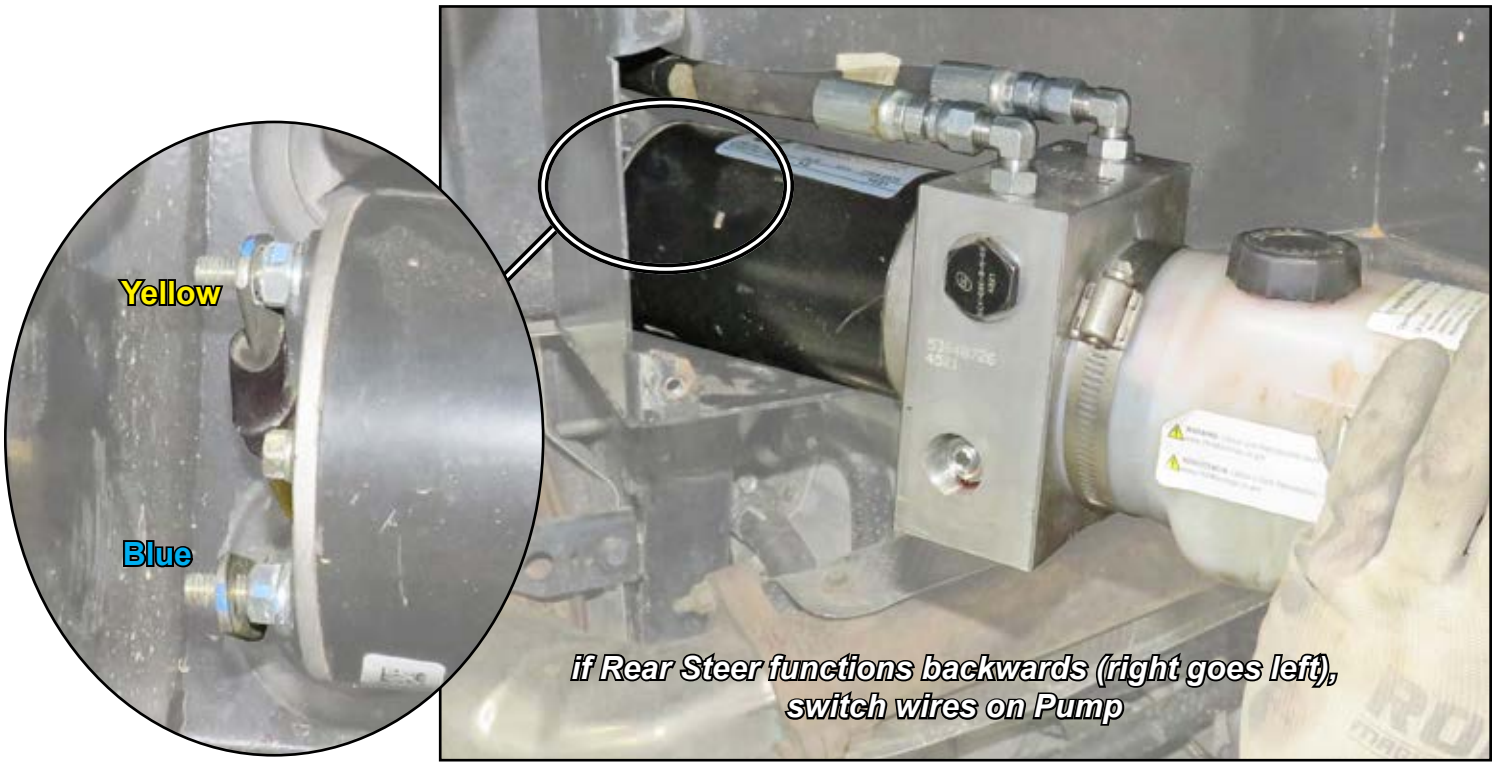




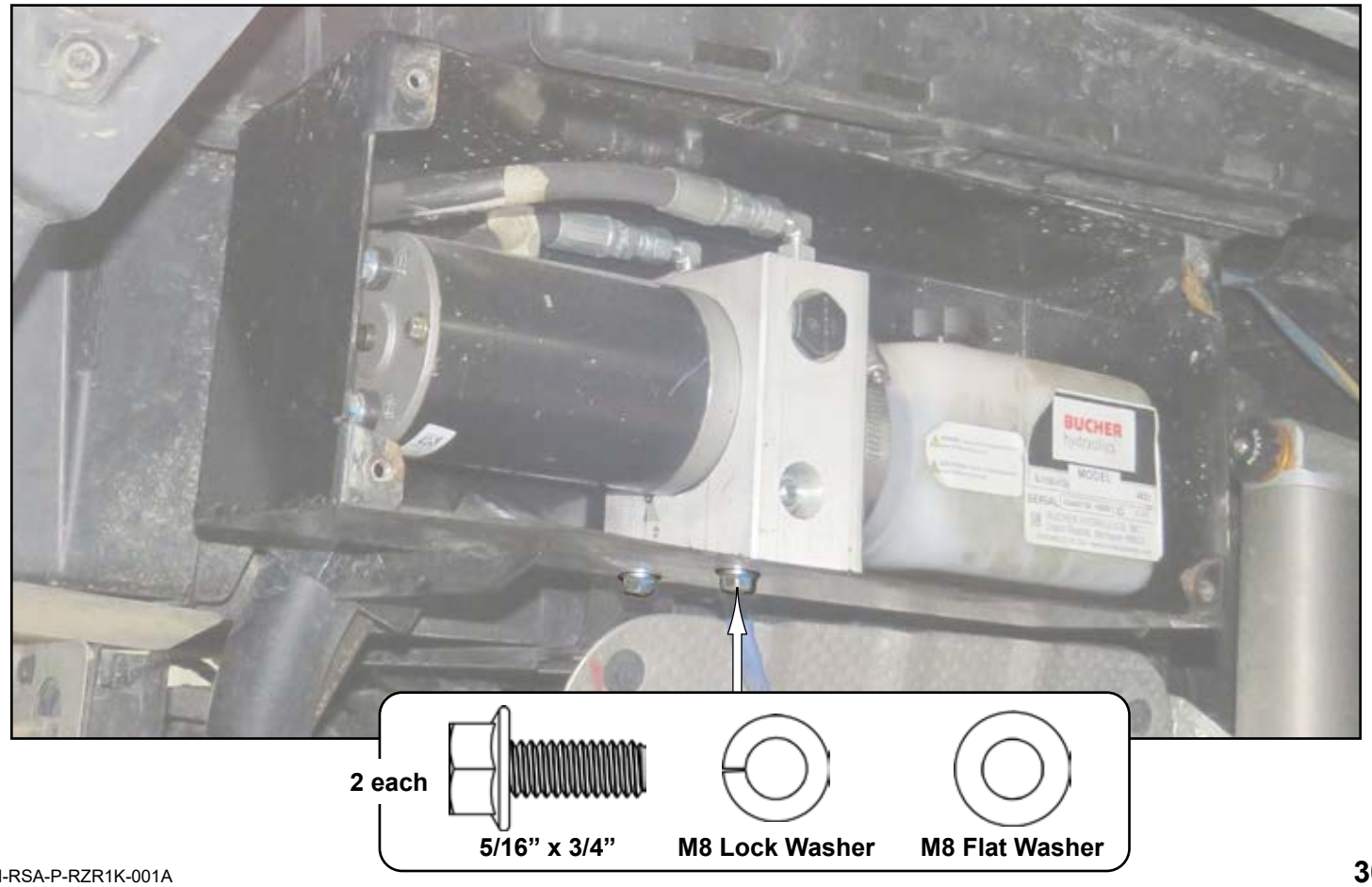
HOSE CONNECTIONS BETWEEN PUMP AND CYLINDER ARE INDEPENDENT OF EACH OTHER. CONNECT HOSES TO EITHER FITTINGS.

- Secure Hoses and Wires to Pump (J); tighten.

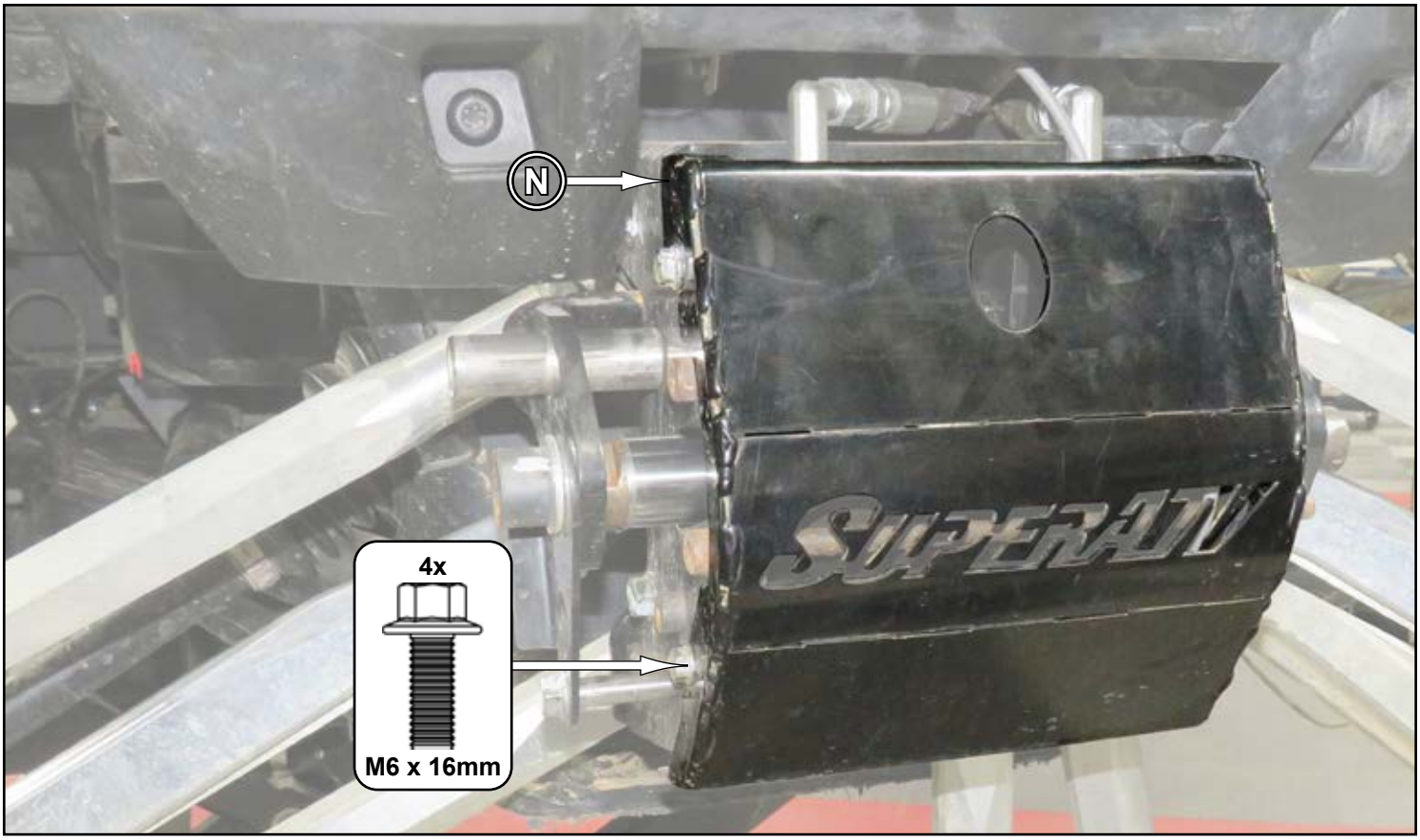
Fill Pump with Dexron Automatic Transmission Fluid only.



- Secure Pump (J) to Pump Mount (U) with hardware shown; tighten.



- Install Cylinder Cover (N) to Cylinder Mount (M) with hardware shown; tighten.



Install Tubing only if Reducer was installed to Pump (page 28)

- Connect Tubing to Reducer and secure with Wire Tie.
- Route up and to Cage area shown.

- Use previously removed hardware and reinstall Lid to Pump Mount (U).

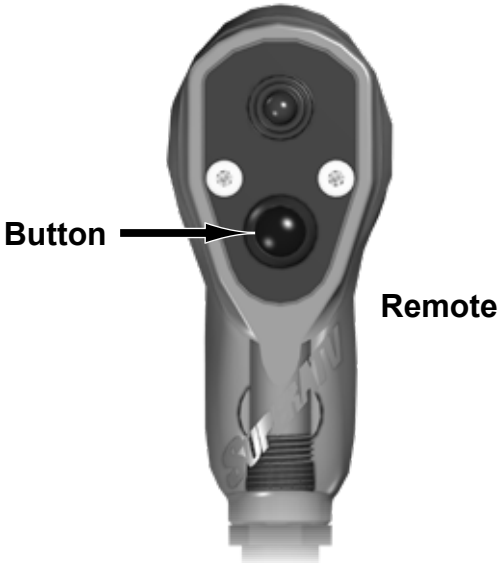
Cylinder Centering Procedure:

1. Engage Switch to power ECU on.
2. Use remote and verify that Cylinder moves correctly according to toggle direction.
   - If Cylinder direction is correct, move Cylinder close to center.
   - If Cylinder moves in opposite direction as intended, switch power leads on Pump Motor.
3. Press Button on Remote and Switch simultaneously until all LEDs stay lit.
4. Release buttons.
5. Toggle left until correct LED is lit matching vehicles tire size.

LED Tire Size Chart:

6. Once correct LED is lit, confirm selection by pressing Button on Remote.
7. The ECU will cycle Cylinder to locate center.
8. LEDs will flash once complete.
9. Power cycle ECU.
10. Programming is now complete.
11. Make sure machine is on ground and suspension is relaxed.
12. Toe can now be set with Cylinder set at center.

Switch



ERROR CODE	DESCRIPTION	CORRECTIVE ACTION
Double Blink (R3 / L3) within 2s after calibration starts	switch Pump Motor leads or left Motor signal not reaching Motor	switch Pump Motor Leads •if error repeats, check signal from Auto-Center Wire Harness to Contactor •if signal, check signal from Contactor to Motor
Double Blink (R3 / L3) after left limit calibration ends	right Motor signal not reaching Motor	check signal from Auto-Center Wire Harness to Contactor •if signal, check signal from Contactor to Motor
Double Blink (R3 / L3) after both limit calibration ends	stroke range to narrow (<42%)	mechanical obstruction keeping Cylinder from completing stroke
Triple Blink (R3 / L3) during calibration	memory write failure	Power Cycle
L2 / L1 Blink	overcurrent on Left Driver	
R2 / R1 Blink	overcurrent on Right Driver	
Slow L3 / R3	low Battery	Allow Battery to charge
LED's scanning back and forth	Speed Sensor disconnect	Check Sensor Plug
LED scan to left during calibration	LVIT out of range - left	LVIT out of calibration or BAD**
LED scan to right during calibration	LVIT out of range - right	
System loses power, center, then loses all function	RSA-CON1 micro-processor failed	replace RSA-CON1

** This is likely due to a bent LVIT Shaft or supplier calibrated incorrectly. Bent Shafts happen due to a misalignment leading to a bind or collision.

To factory reset, enter calibration mode and repeat calibration. For best calibration results, use Remote to manually locate Cylinder close to center position before entering calibration.