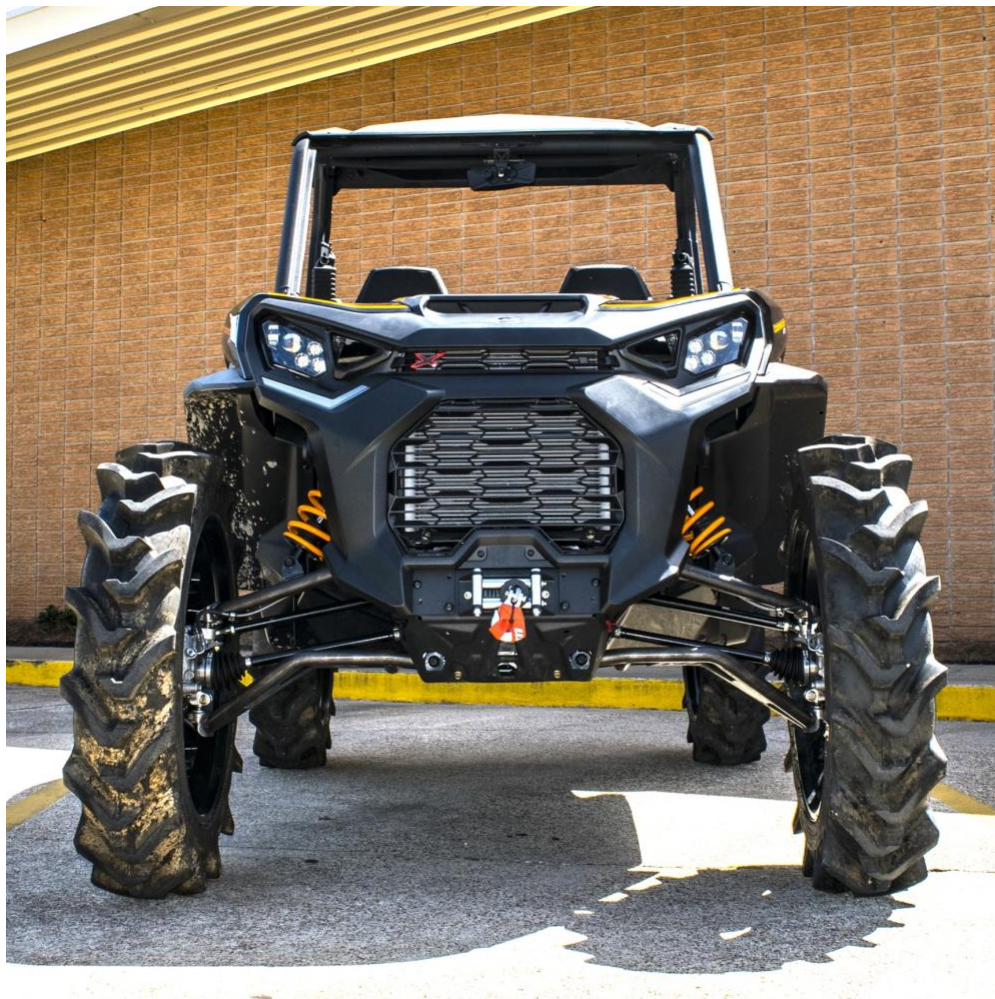




## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225



# INSTALLATION INSTRUCTIONS 2021+ Can-Am Commander 2" Forward A-Arm Kit



## 2021+ Can-Am Commander XT / XTP

### 2" Forward A-Arm Kit # S3225

## PARTS LIST

| PART #    | DESCRIPTION                | QTY |
|-----------|----------------------------|-----|
|           | Upper Driver Side A-Arm    | 1   |
|           | Upper Passenger Side A-Arm | 1   |
|           | Lower Driver Side A-Arm    | 1   |
|           | Lower Passenger Side A-Arm | 1   |
| 29678     | Steering Stop              | 2   |
|           | Zip Tie                    | 2   |
| S3120     | HD Bushing                 | 16  |
| 706202257 | Pivot Tube                 | 8   |

### Tools Needed:

- Floor Jack
- Jack Stands
- Ratchet (3/8" or 1/2")
- Impact (3/8" or 1/2")
- Press (Strongly recommended if pressing out/in ball joints)
- Drill with 3/16" Drill Bit
- 6" Extension (3/8" or 1/2")
- Sockets (30mm or 1-3/16", 19mm, 18mm, 15mm, 10mm)
- Wrenches (19mm, 18mm, 15mm)
- Flathead Screwdriver
- Dead Blow Hammer
- Brass Hammer
- Needle Nose Pliers or Diagonal Cutters
- Snap Ring Pliers
- Red Threadlocker

### Installation Notes:

- In an effort to keep track of hardware, we recommend replacing where removed from.
- Disassemble/assemble one side at a time so a fully assembled side can always be referenced for bolt placement, orientation, brake line routing, etc.



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#### DISASSEMBLY:

- 1.) Place Commander in park (P) on a flat level surface. Elevate machine and support with suitable jack stands.
- 2.) Remove front tires.
- 3.) Remove 6mm (10mm head) bolt holding brake line on upper a-arm. (See Image 1)
- 4.) Drill out rivet securing brake line on upper a-arm. (See Image 1)
- 5.) Remove the two brake caliper bolts with a 15mm socket. Remove caliper from rotor and secure the caliper so that there is no tension on the brake line. (*Pro Tip : Use a zip tie to avoid putting tension on the brake line.*) (See Images 2-3)
- 6.) Remove outer tie rod bolt, using 15mm socket. (See Image 4)
- 7.) Remove cotter pins from front axles. These can be reused if undamaged during removal. If damaged, replace with new. (*Pro Tip : Needle nose pliers or diagonal cutters work well.*)
- 8.) With a 30mm socket (or 1 3/16"), remove front axle castle nut. (*Pro Tip : 1/2" impact works well. If you don't have one, a 1/2" breaker bar can be used. You will need an assistant to hold the brakes, taking care that the Commander is on jack stands.*) (See Image 5)
- 9.) Remove hub/rotor assembly and set aside. (See Image 6)
- 10.) Remove lower shock bolt, using 18mm socket and wrench. (*Pro Tip : Secure shock out of the way using a bungee or ratchet strap.*) (See Image 7)
- 11.) Using an 18mm socket and wrench, remove sway bar link from upper a-arm. Next, remove front sway bar by loosening two bolts securing sway bar to the frame, using an 18mm socket or wrench. (*Pro Tip : It may be easier to remove sway bar links completely from sway bar before removal.*) (See Images 8-9)
- 12.) Remove lower ball joint pinch bolt, using 18mm socket and wrench.
- 13.) Using dead blow hammer, tap lower a-arm to release ball joint from the steering knuckle.
- 14.) Remove two inner bolts securing lower a-arm to frame, using 18mm socket and wrench. Lower a-arm can now be removed.
- 15.) Remove two inner bolts securing upper a-arm to frame, using 18mm socket and wrench. Upper a-arm and steering knuckle can now be slid off outer axle splines. (See Image 10)
- 16.) Remove 19mm nut and washer from upper ball joint. (*Pro Tip : Use 6" extension and insert upward through bottom ball joint hole in knuckle to allow impact access. The upper ball joint stud is a tapered press fit into steering knuckle. Using brass hammer, tap on knuckle to release the ball joint and upper arm from the knuckle. See arrow on Image 11*) (*Note : Steering knuckles are side specific and are labeled "LH" and "RH"*)
- 17.) **IMPORTANT** – Note direction of removal/install of ball joints!!  
If reusing OEM ball joints, remove them from OEM a-arms using a bearing press or similar. Be sure to remove ball joint retaining rings first, taking care to not damage them as they will be reused. (*Pro Tip : Using a small flat blade screwdriver, remove the (4) ball joint rubber boots to not*



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*damage them during removal/install and set aside. Use caution to not puncture the ball joint boots. Extra grease may be added to ball joints before reinstalling them.) (See Image 12)*

#### **ASSEMBLY:**

- 18.) Carefully press ball joints into S3 a-arms the same direction as OEM arms. *(See Image 13) (Pro Tip : An arbor press or bearing press works well for this step.)*
- 19.) Reinstall snap rings, taking care that they are seated properly.
- 20.) Reinstall ball joint boots, taking care they are seated properly.
- 21.) Install provided HD a-arm bushings and pivot tubes into S3 a-arms. *(See Image 14) (Pro Tip : A 13mm deep socket, 6" extension and dead blow hammer works well to tap bushings and pivot tubes in.)*
- 22.) Before installing S3 a-arms, install steering stops. First, cut the inner zip ties on the rack boots and slide the rack boot back toward the outside of the machine. This will expose the worm gear of the rack. Snap the steering stop onto the worm gear shaft. Slide the rack boot back into place and use supplied zip ties to securely fasten rack boot. Remove excess zip tie.
- 23.) Assemble S3 upper a-arm and steering knuckle, using OEM flat washer, nut (19mm) and red thread locker. Final tighten to OEM specification. *(See Image 11.) (Pro Tip : Reference step 16 to enable impact access.)*
- 24.) Slide steering knuckle back through axle and install inner upper a-arm bolts to hang S3 upper a-arm. *(See Image 15) (Pro Tip : An assistant may be helpful for this step.)*
- 25.) Install S3 lower a-arm in frame using stock hardware. Hand tighten only. *(See Image 16)*
- 26.) Insert lower ball joint stud into steering knuckle. Reinsert stock pinch bolt and nut. Hand tighten only. *(See Image 17) (Pro Tip : Cycle the suspension manually until pinch bolt installs freely, without binding. Slight taps from a dead blow hammer on bottom of ball joint fixture may be necessary.)*
- 27.) Reinstall hub/brake rotor assembly, ensuring splines of the hub line up with splines on axle. Reinstall axle spring washer and thread on axle nut. Hand tighten only. (Note : Note orientation of spring washer. Curved side of washer should face outwards) *(See Image 18)*
- 28.) Reattach tie rod to steering knuckle, using stock hardware (10mm bolt w/15mm head). Hand tighten only. *(See Image 19)*
- 29.) Attach shock to S3 upper a-arm shock mount using stock hardware (12mm bolt w/18mm head and nut). Hand tighten only.
- 30.) Reattach brake caliper, using stock hardware. Final tighten (15mm) to OEM specifications using red thread locker. (Note : Reference Image 17 for brake line routing.)
- 31.) Final tighten all remaining bolts, using red thread locker, to OEM specifications. *(Pro Tip : Refer to service manual for OEM torque specifications.)*
- 32.) Remove OEM brake line tabs. Zip tie brake line to bottom of S3 upper a-arm, using brake line guides welded on S3 a-arm.
- 33.) Reinstall cotter pin into axles. Use new cotter pins if OEM were damaged during removal.
- 34.) Repeat on opposite side.



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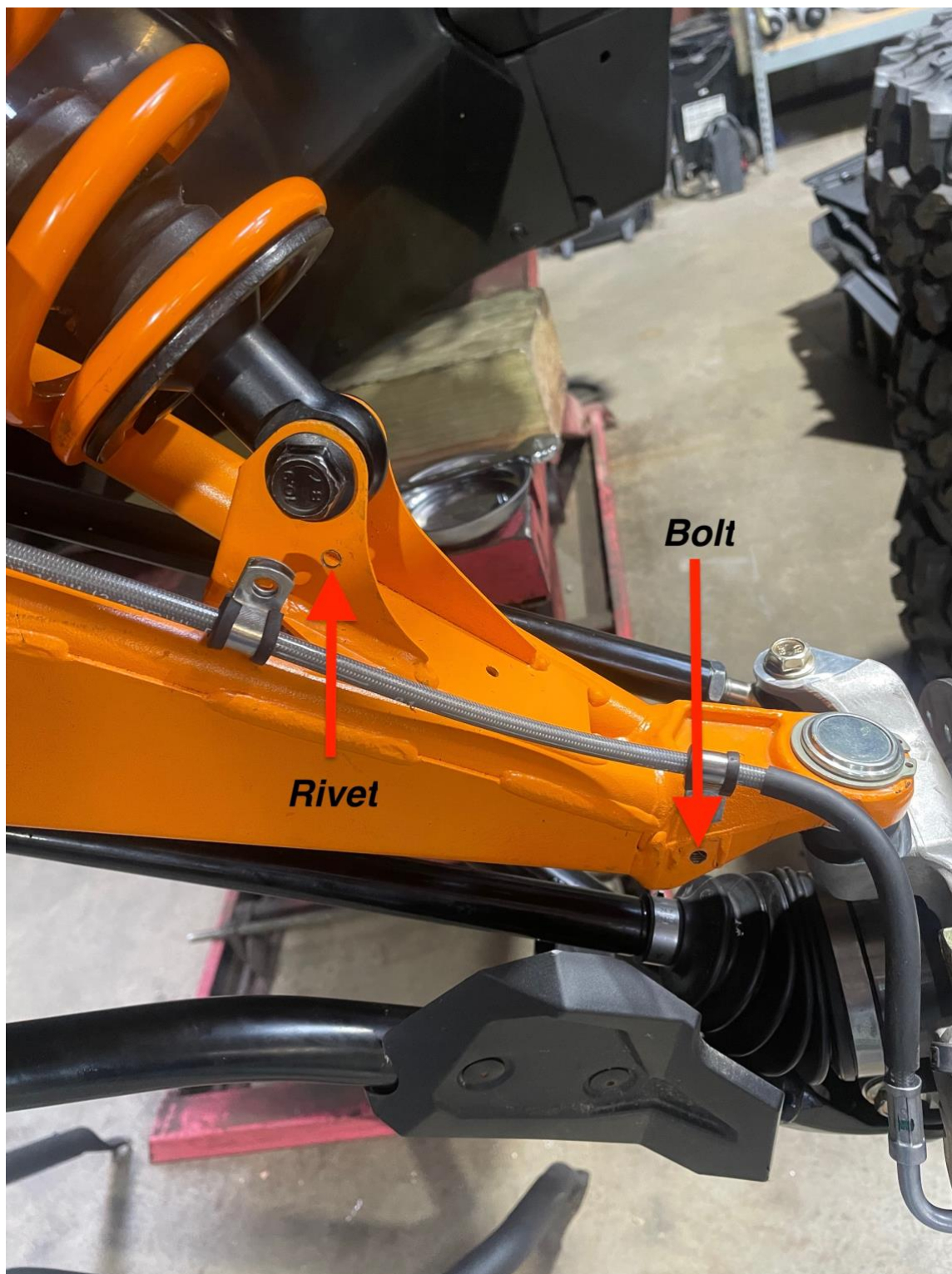
- 35.) See Images 19-20 for final assembly.
- 36.) Install desired wheels/tires and place Commander back onto flat ground.
- 37.) Test drive and recheck all hardware/fasteners. (Note : Front end alignment may be necessary when installation is complete.)





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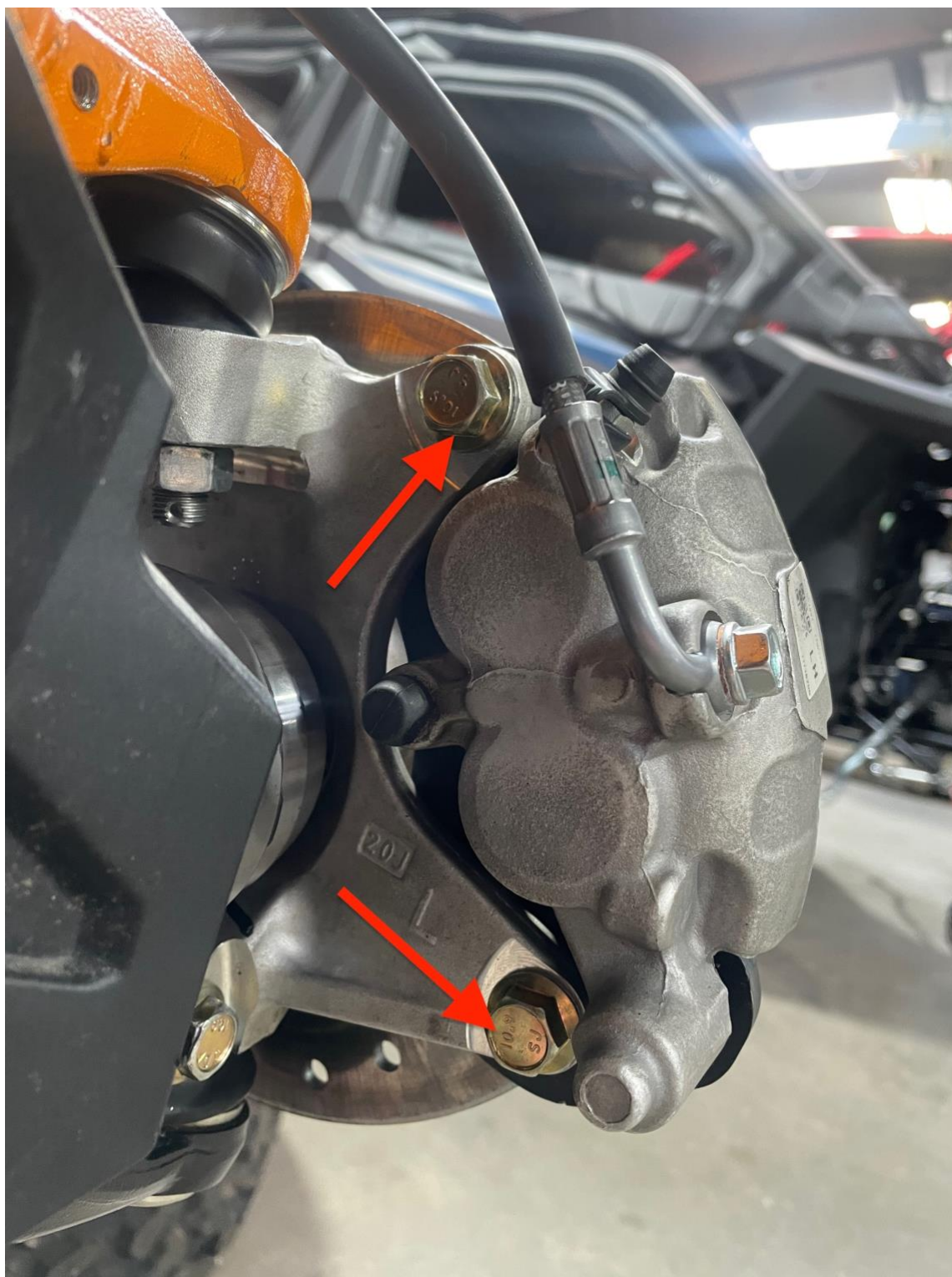
Image 1





## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 2







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 3







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 4





## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 5







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 6







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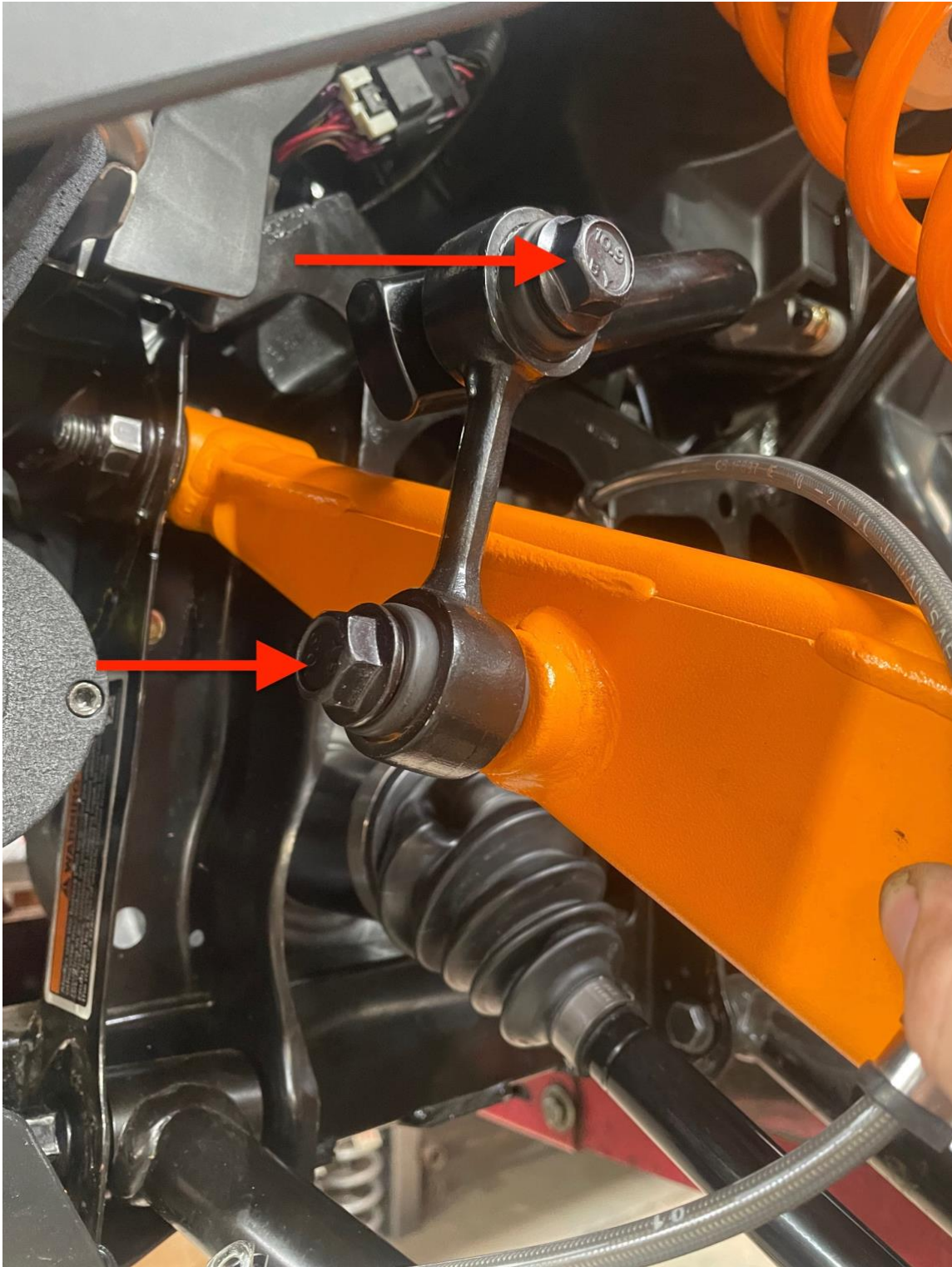
Image 7





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Image 8

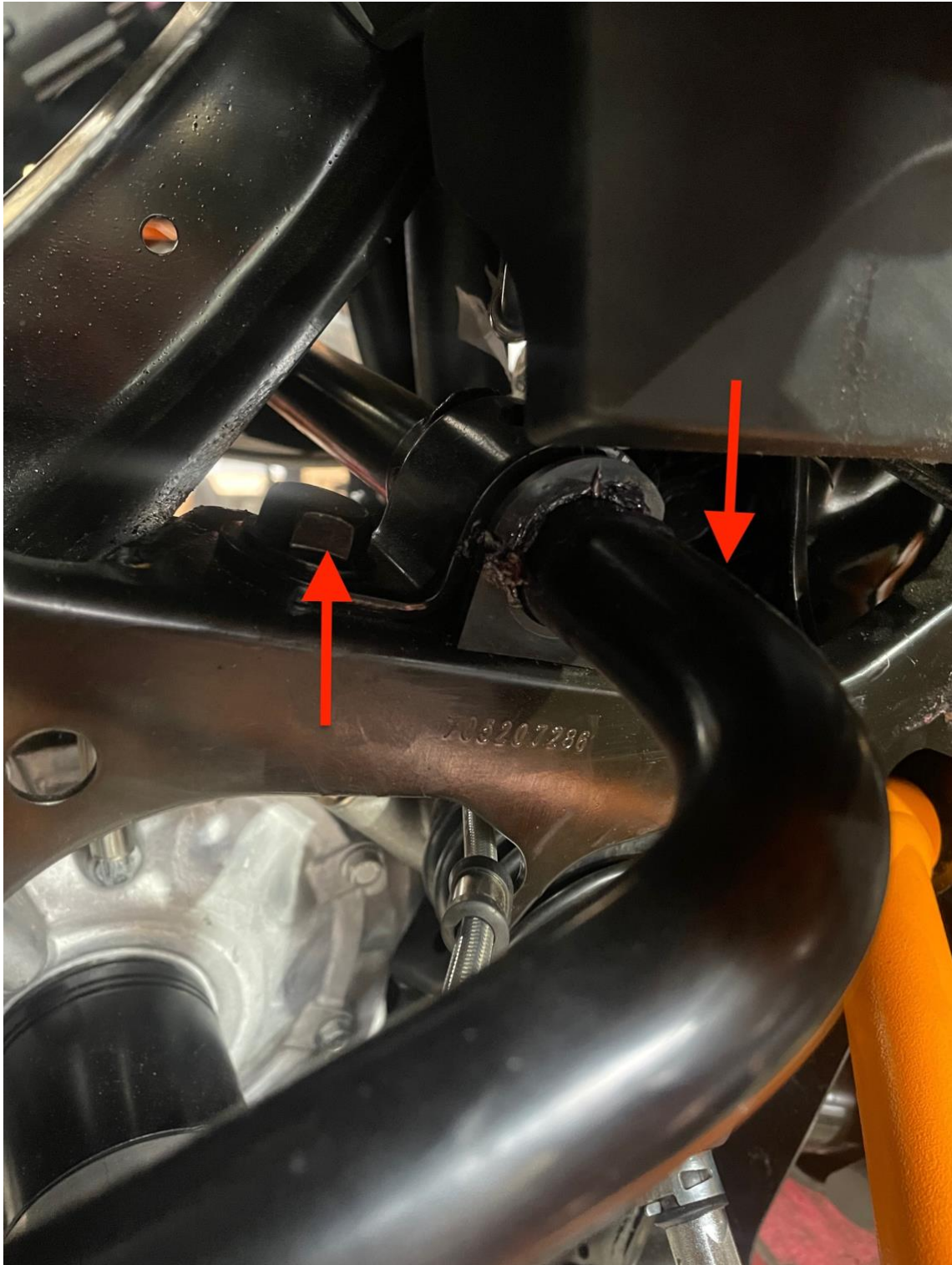






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Image 9







# 2021+ Can-Am Commander XT / XTP

## 2" Forward A-Arm Kit # S3225

**Image 10**







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 11







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 12







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 13

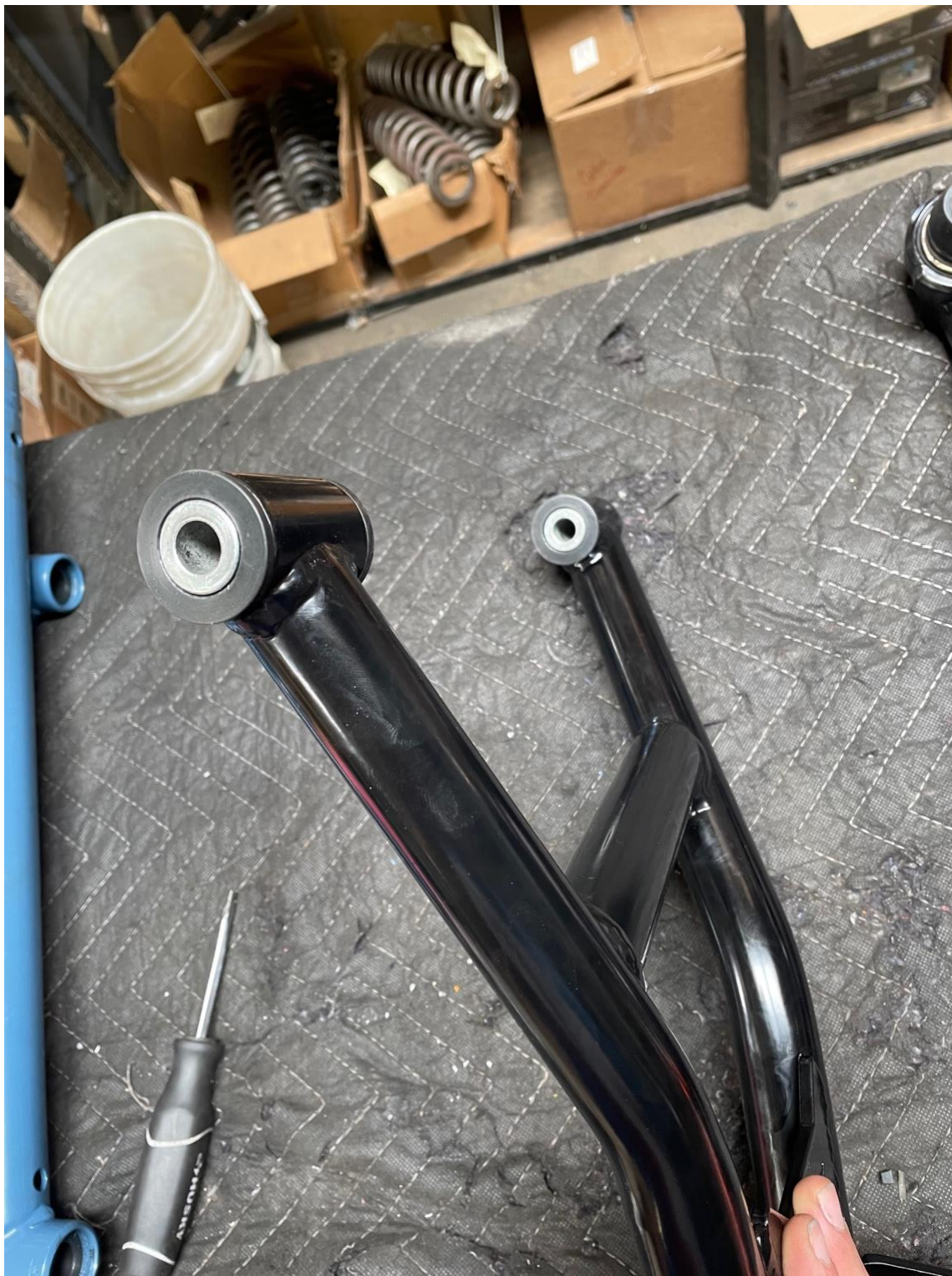






## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 14







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 15







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 16







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 17







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 18





## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 19







## 2021+ Can-Am Commander XT / XTP 2" Forward A-Arm Kit # S3225

Image 20

