

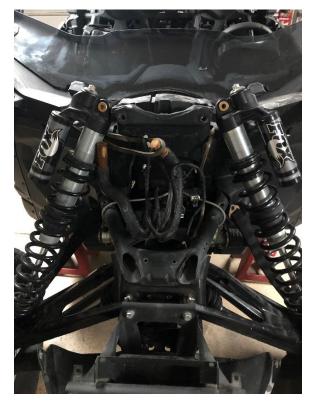
EXO NAV 2017-2021 CAN-AM MAVERICK X3 FRONT SHOCK TOWER INSTALLATION INSTRUCTIONS

NOTE: The front shocks on the vehicle must be flipped (reservoirs outward) for this shock tower to fit. This is a common modification for these vehicles. Instructions can be found online with a quick Google search. Contact EXO NAV if you need more assistance.

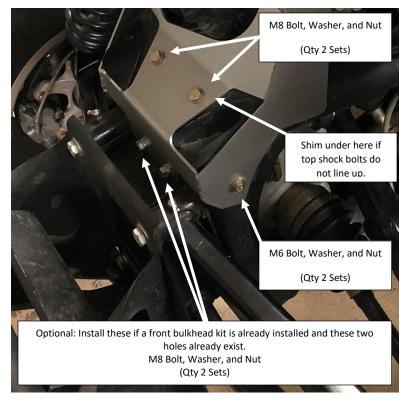
- 1. Remove front clip from the vehicle. Instructions can be found online with a quick Google search. Contact EXO NAV if you need more assistance.
- 2. With the engine temperature cool, disconnect the three rubber hoses at the radiator, plugging each one as soon as it is disconnected. This will prevent the engine coolant from draining out completely. Some leaks will occur during the hose removal. Remove the radiator completely.



3. Securely raise the front of the vehicle until the two front tires are about ¼" off the ground. Use jack stands on the vehicle frame for safety. Remove the top shock bolts and rest the top of the shocks beside the top shock mount (frame).



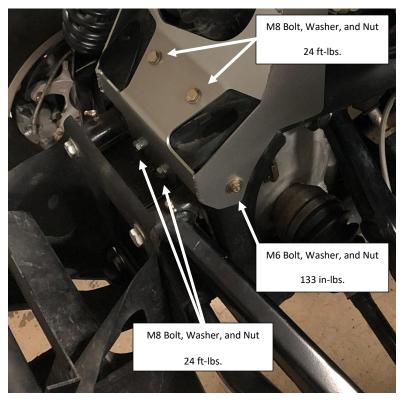
4. Place the new front shock tower onto the frame. Install the set of four or six bolts to the frame (see picture). Hand tighten these fasteners for now. Note: In some cases it might be necessary to install a shim between the new shock tower and the frame due to slight differences in the vehicles' manufacturing measurements. A shim is provided.



5. Place driver's side shock in position and re-install top shock bolt and nut. Repeat this for the passenger's side shock. Torque top shock bolts and nuts to 77 ft-lbs.

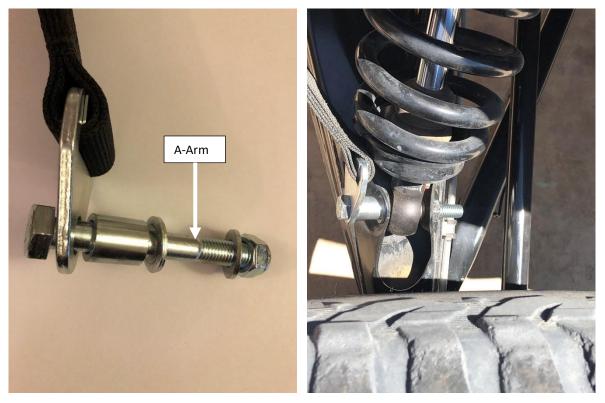


6. Torque frame bolts and nuts to 24 ft-lbs. for M8 size and 133 in-lbs. for M6 size.



- 7. Pass the three radiator hoses through the center of the new shock tower.
- 8. Re-install the radiator and re-attach the three radiator hoses.

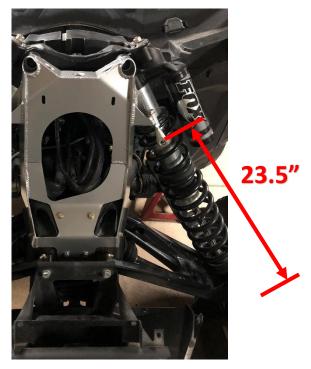
- 9. Refill the engine coolant reservoir tank at the back of the vehicle. Make sure to use the Can-Am recommended coolant type. Run the engine for 10-15 minutes to ensure that it warms ups to help get rid of air pockets in the coolant system. Let the engine cool down while you finish the rest of the installation. Check for leaks and fix as necessary. Caution: Never open the coolant reservoir cap or disconnect radiator hoses when coolant is hot!
- 10. Secure the radiator hoses to the vehicle such that they do not rub any sharp corners on the frame or the new shock tower. The radiator hoses can be secured nicely with zip ties.
- 11. With the front tires of the vehicle still in the air, measure the extended shock length from top bolt to bottom bolt for both shocks. Write down these values. They should be 32" each.
- 12. Loosen and remove the driver's side lower shock bolt and nut. Be careful not to let the suspension fall completely. Use a floor jack if needed.
- 13. Install the new longer M12 bolt through the limit strap bottom mounting bracket, then the large spacer, followed by a washer. Insert the M12 bolt through the vehicle's top a-arm. Install another washer followed by the new locknut on the back side of the control arm. Tighten this bolt only till the assembly is snug but still movable for now. This will be torqued later.



14. Install the driver's side clevis onto the new shock tower with one washer and one jam nut on either side of the mount tube. A good starting point is 1.5" of thread at the top (see picture). Hand tighten the nuts only as this may be adjusted later.



15. With the front tires of the vehicle still in the air, measure the distance between the center of the bottom shock bolt and the clevis limit strap mounting hole. Write down this value. The value should be around 23.5". If it is not, adjust the clevis position to make this dimension 23.5".



- 16. With the vehicle still on jack stands, lift (compress) the driver's side suspension with a floor jack until the limit strap top mounting bracket reaches the clevis mounting hole.
- 17. Pass the limit strap top mounting bracket through the slit in the clevis and install the spacers and fasteners as shown. It is important to keep the bolt head towards the shock's coil springs in order to get more clearance. The side with the nut and flanged spacer is longer and is at higher risk of hitting the coil spring. Tighten this 7/16" top limit strap bolt enough to engage the nylon locking feature but not so much that the clevis deforms.



18. Slowly lower the floor jack allowing the new limit strap to hold the suspension up. Wiggle the limit strap bottom mounting bracket so that it is pointing at the top shock bolt if not already.

- 19. Torque the bottom shock bolt to 77 ft-lbs. keeping the limit strap bottom mounting bracket pointed at the top shock bolt.
- 20. Adjust the clevis height so that the maximum shock extension (eye-to-eye) is limited to 30.5". This limits the total shock extension by 1.5".

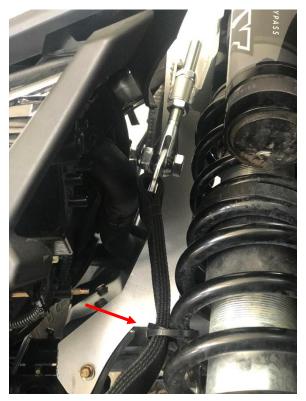
NOTE: All limit straps stretch. The rule of thumb is to allow 1" of stretch for every 12" of limit strap. The Can-Am front suspension is light in comparison to most other off-road vehicles so we figured allowing for 1.5" stretch is safe. In this case the 22" limit strap plus the 1.5" allowed stretch equals the 23.5" clevis installation length (bottom shock bolt to clevis limit strap mounting hole).

TIP: Jacking up the a-arm will make clevis height adjustments easier.



- 21. This is where user preference comes in. Adjust the limit strap up or down from the 1.5" limit setting if desired, or leave it as-is. Once satisfied with the measurements, tighten the two clevis jam nuts against each other to lock the clevis height.
- 22. Slowly lower the floor jack again allowing the driver's side suspension to droop completely again. This time the suspension will be limited by the new limit strap.
- 23. Repeat steps 12-22 for the passenger's side.
- 24. Ensure that all fasteners are tight.

25. Each limit strap should be attached to the coil spring at mid-length to keep the limit strap away from radiator hoses and wires when slacking under full suspension compression. Install one Velcro strap to each of the limit straps. Velcro straps are provided.



- 26. Re-install the front clip of the vehicle. Ensure that the fan and light harnesses get re-connected. Route all harness cables out of the way of moving parts as they came from the factory.
- 27. With the engine temperature cool, check the engine coolant reservoir tank at the back of the vehicle and refill if needed. Make sure to use the Can-Am recommended coolant type. Run the engine for 10-15 minutes to ensure that it warms up to help get rid of air pockets in the coolant system. Let the engine cool down, re-check the engine coolant level, and refill as necessary. **Caution: Never open the coolant reservoir cap when coolant is hot!**
- 28. Enjoy your now stronger Can-Am Maverick X3!
- 29. Check limit strap lengths for stretching (with age) every 200-300 off-road miles and adjust the clevis heights accordingly. Clevis adjustment can be done without disassembling any part of the vehicle.

