



**2 INCH SPACER
SUSPENSION**
FOR JEEP GLADIATOR

AEV30398AE
Last Updated: 05/03/24

INSTALLATION GUIDE



PLEASE READ BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

INCLUDED PARTS	QTY	REQUIRED TOOLS
Front Spring Spacers	2	Common Hand Tools
Rear Spring Spacers	2	Floor Jack
Front Sway Bar End Links	2	Jack Stands
Rear Sway Bar End Links	2	
Front Shock Brackets	2	
Rear Shock Brackets	2	
Front Bumpstop Spacers	2	
Rear Bumpstop Spacers	2	
Driveshaft Spacers	3	
Hardware Pack	1	
ProCal Snap	1	
ProCal Adapter Harness	1	



I. REAR SUSPENSION

1. Raise the Jeep, supporting the frame using jack stands or a hoist, so that the rear axle may be lowered enough to remove the springs. Support the axle using a floor jack under the center of the axle.
2. Remove the wheels.
3. Loosen but DO NOT REMOVE all 8 control arm bolts (fig. 1).
4. Loosen but DO NOT REMOVE the Track Bar hardware (fig. 2).

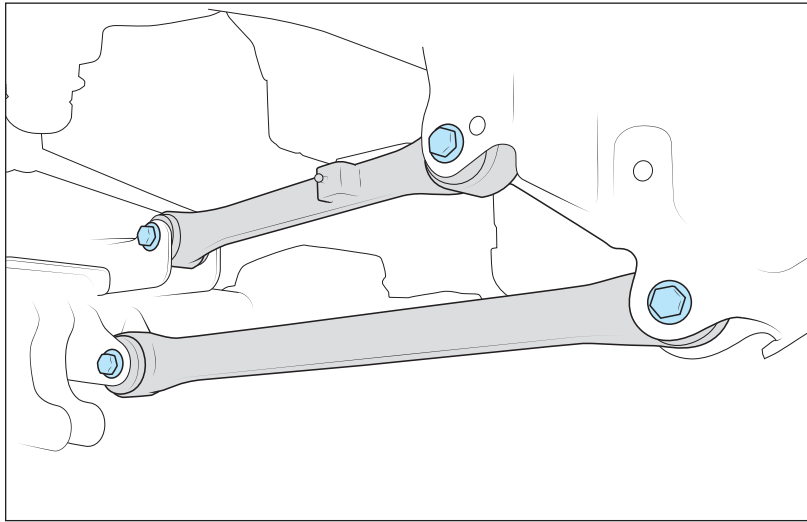


Figure 1: Left side shown.

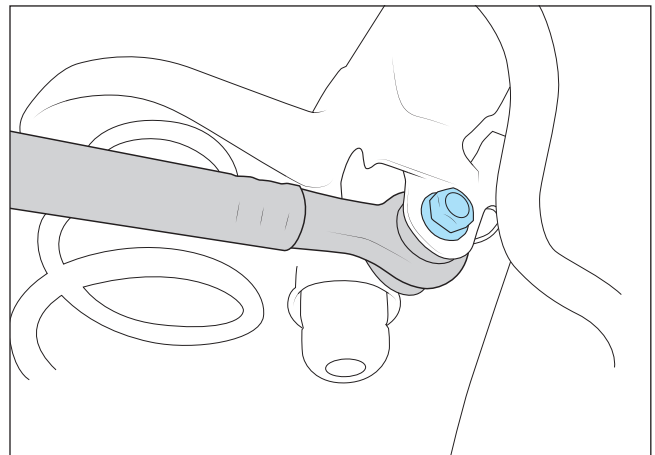
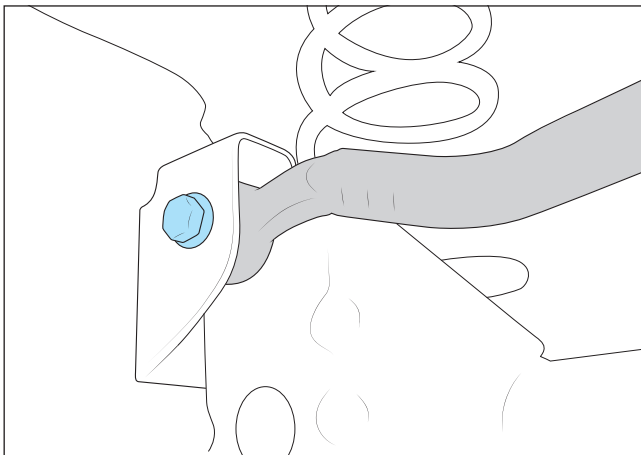


Figure 2: Axle side (left) Frame side (right)



5. Unclip the ABS sensor from bracket at the axle to allow movement (fig. 3).

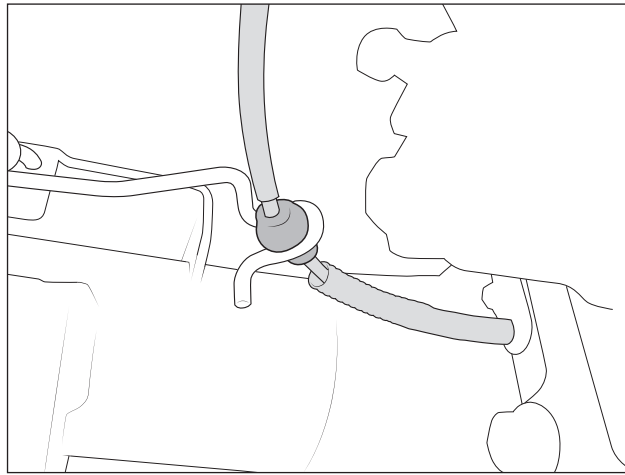


Figure 3

6. Remove the lower bolts from the shocks and SAVE HARDWARE (fig. 4).

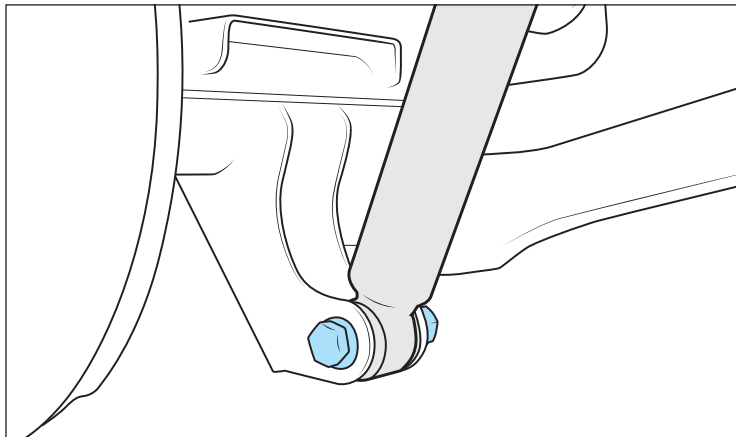


Figure 4

7. Remove sway bar endlinks (fig. 5).

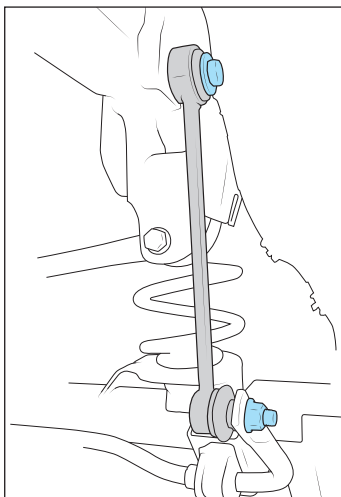


Figure 5



8. Carefully lower the axle until you can remove the springs. Use CAUTION not to overextend the e-brake or other wiring. Remove the factory isolator from the top of each spring.
9. Reinstall the spring with the AEV Spring Spacer (inserting molded pin on top of the spacer into the hole in the frame). Be sure the spring is properly seated into the notch on the AEV spacer (fig. 6). Raise the axle to keep in place.

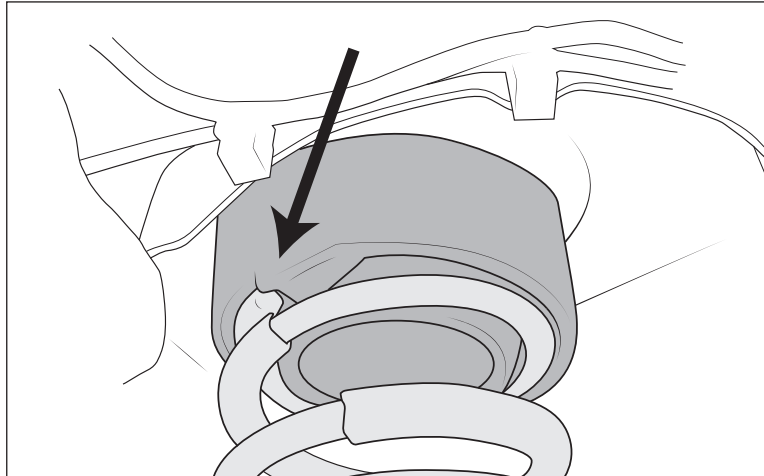


Figure 6

10. Drill the factory holes in the bump stop pads to $13/32$ ". Treat with rust preventative. Install AEV bump stop spacers on the axle using the supplied M10 flat head, countersunk bolts and flange nuts (fig. 7). NOTE: The longer side of the spacer should be at the rear of the vehicle.

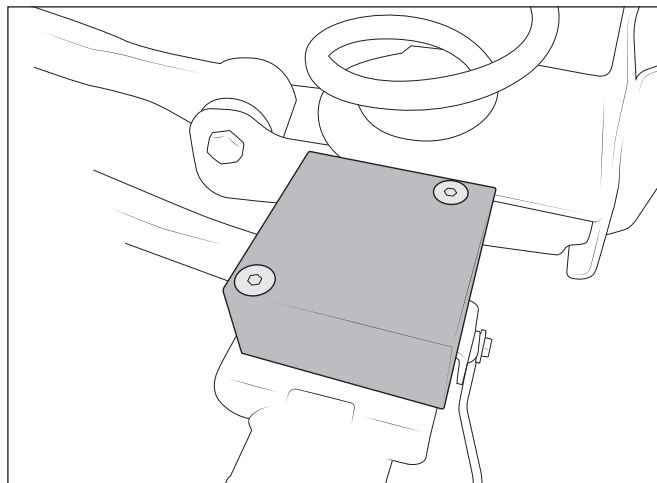


Figure 7



11. Install the AEV Shock Extension brackets as shown. Hold bracket in place using factory shock bolt for alignment. Mark hole location shown, remove bracket and drill to 13/32". Treat bare metal with rust preventative. Use AEV Supplied and Factory Hardware to install bracket and Shock (fig. 8).

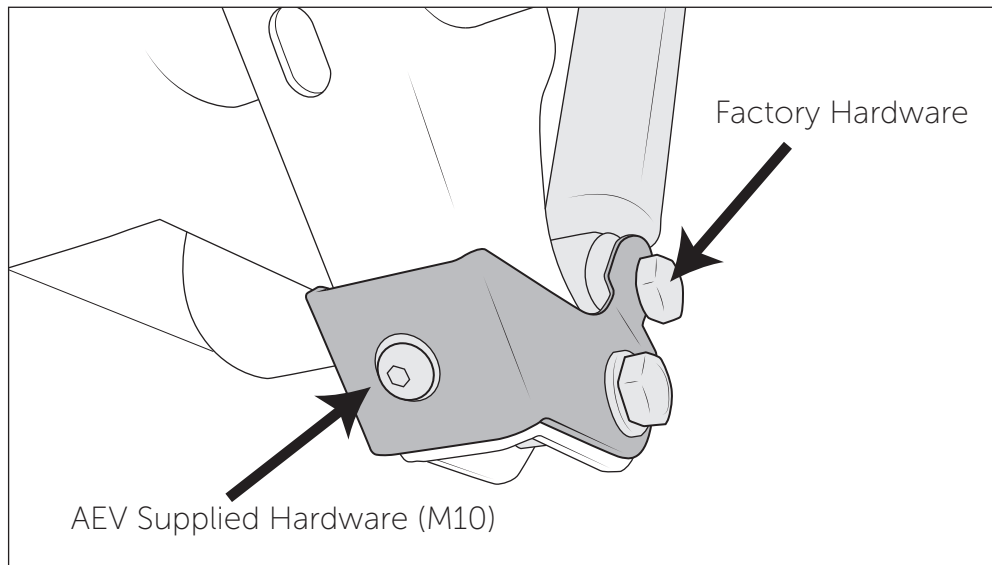
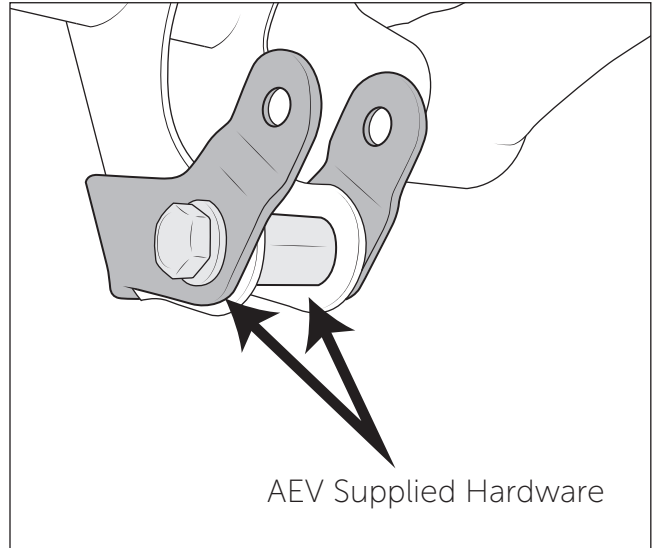
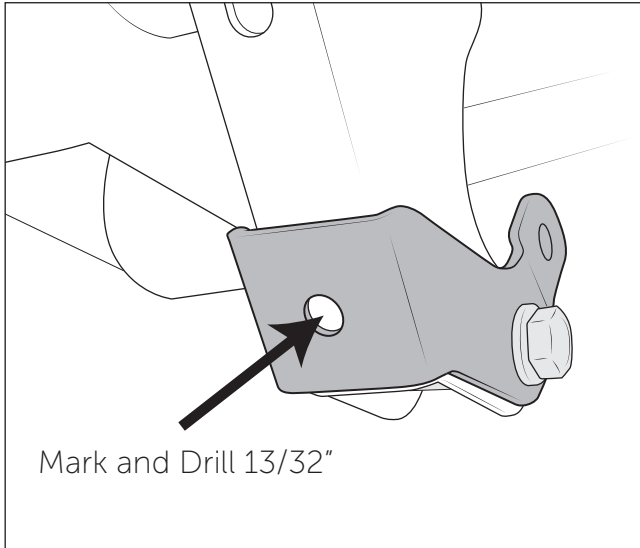


Figure 8



12. Install new AEV endlinks in factory orientation using supplied hardware (fig. 9). Reattach ABS lines (step 5), and install wheels using factory hardware.

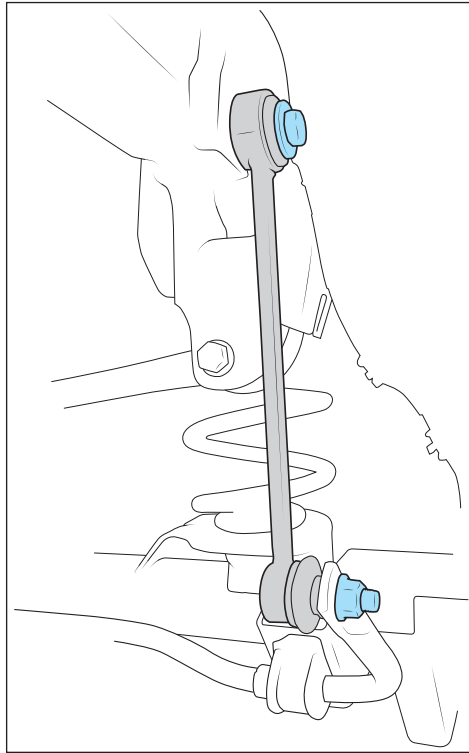


Figure 9

13. Remove driveshaft pillow block from frame. Install three (3) provided spacers with supplied bolts. This will help improve driveline angle and prevent vibration (fig. 10).

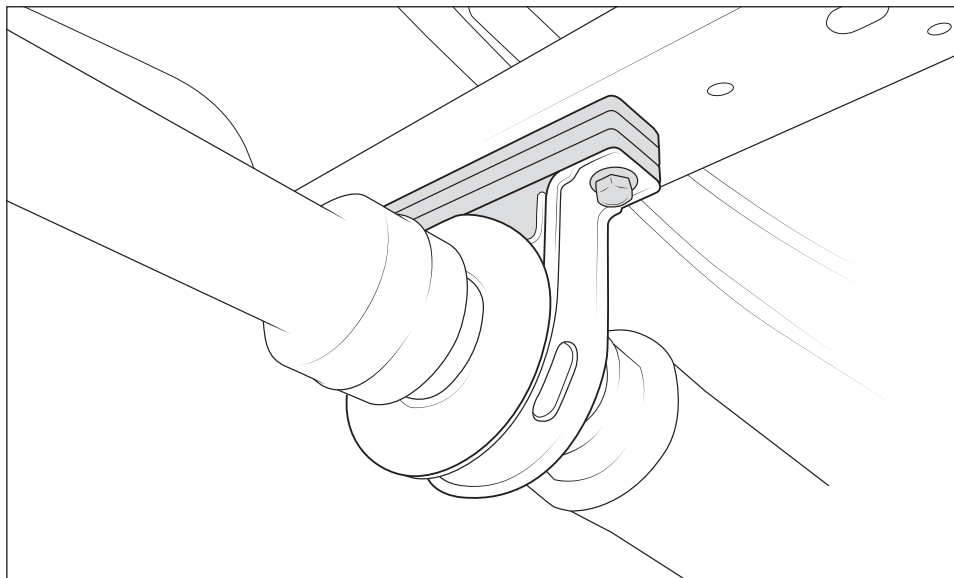


Figure 10



II. FRONT SUSPENSION

1. Raise the Jeep, supporting the frame using jack stands or a hoist, so that the rear axle may be lowered enough to remove the springs. Support the axle using a floor jack under the tube next to the differential casting.
2. Remove the wheels.
3. Loosen but DO NOT REMOVE all 8 control arm bolts (fig. 11).
4. Loosen but DO NOT REMOVE track bar bolts (fig. 12).

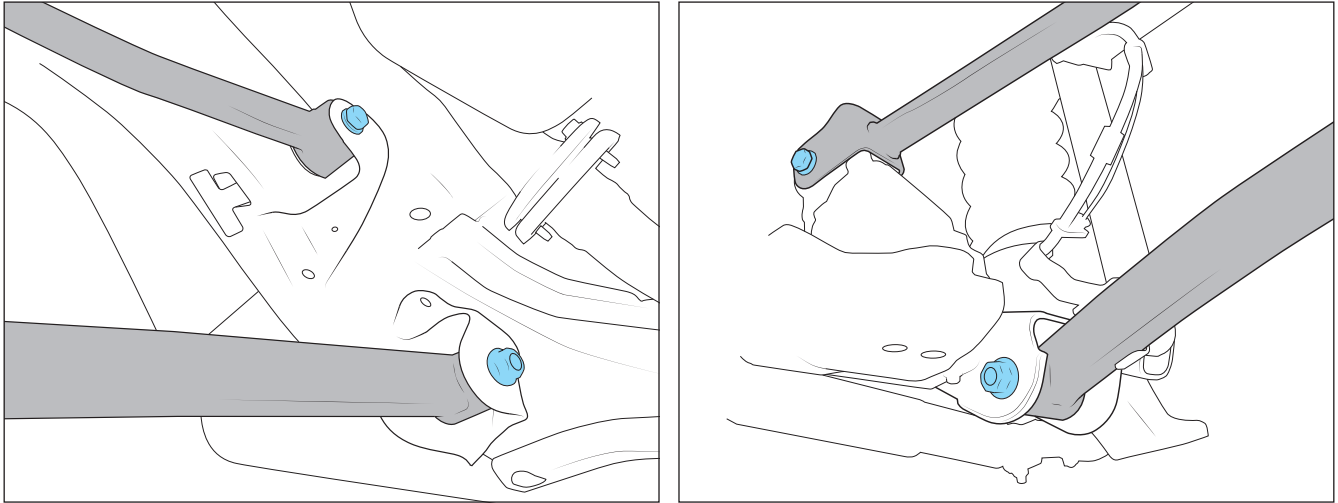


Figure 11

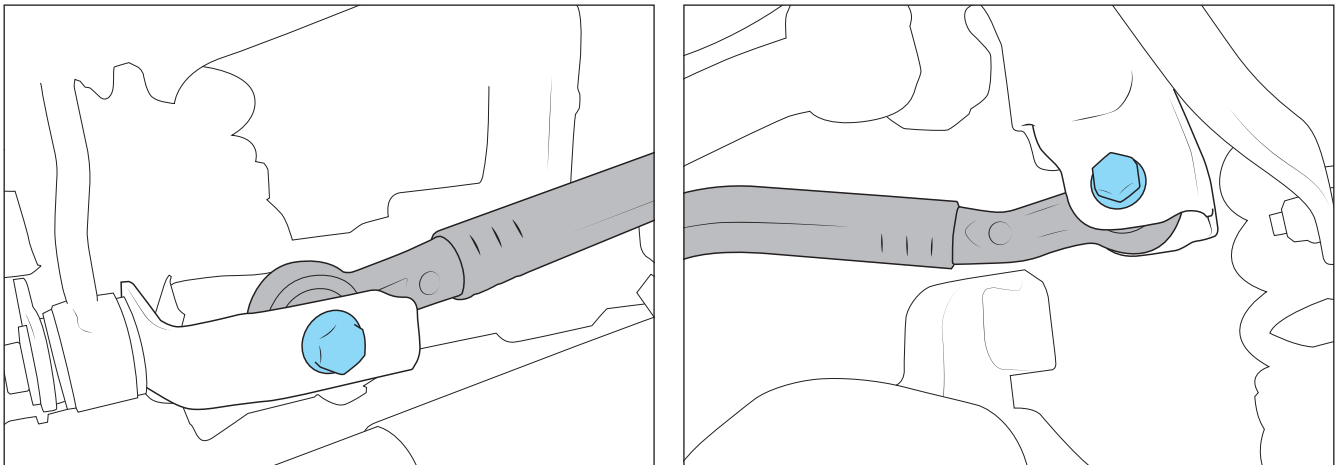


Figure 12



5. Remove sway bar end links. SAVE lower mounting hardware (fig. 13).

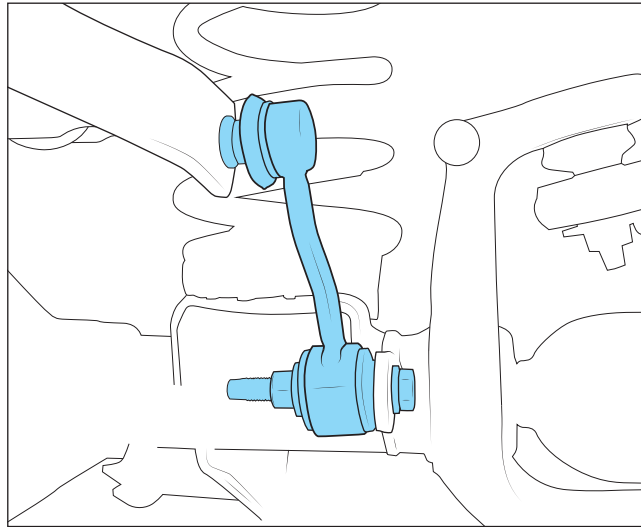


Figure 13

6. Remove lower shock mount hardware and SAVE (fig. 14).

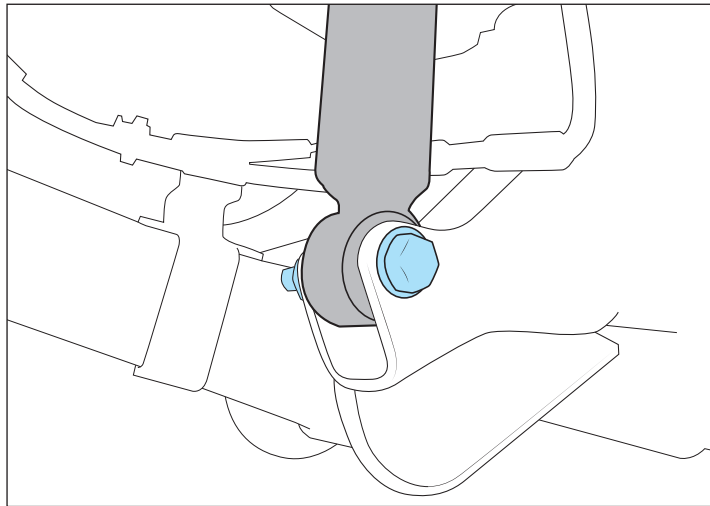


Figure 14

7. Unbolt the brake line brackets from the frame (fig. 15).

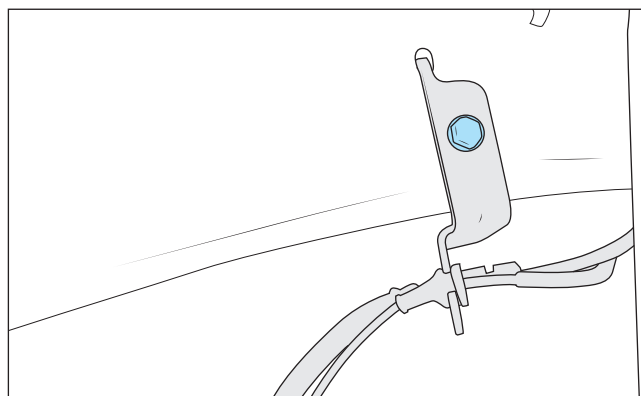


Figure 15



- Unhook the connector and harness running to the central axle disconnect (fig. 16).

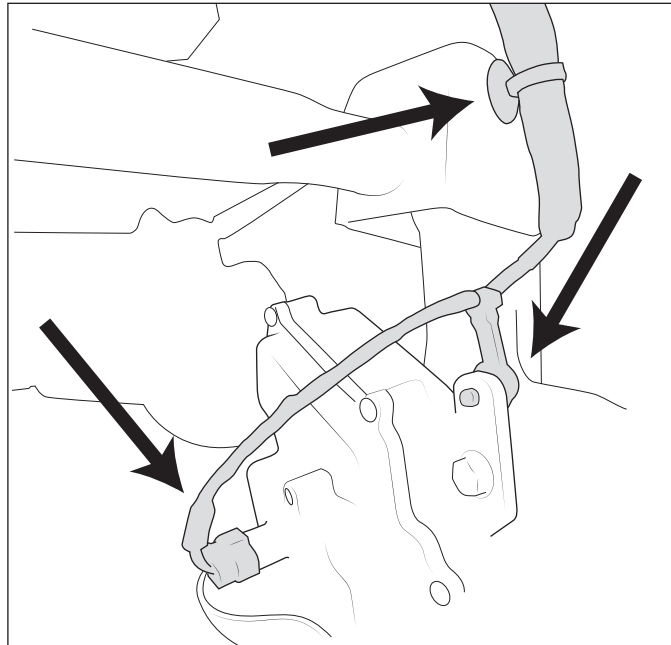


Figure 16

- Lower the axle enough to remove the front springs and isolators.
- Install front spring spacers with molded posts pointing upward. Place bumpstop spacer inside spring and install both together (be sure counter-bored hole is on top). With AEV logo facing outward, make sure bot posts on the spring spacer engage the holes in the frame. Make sure spring is properly clocked into the lower spring mount and raise axle slightly to hold the assembly in place (fig. 17).
- Install M10 socket head bolt and washer through the top of the bump stop spacer. Install and tighten nut on the bottom through the opening between the spring pad and axle tube.

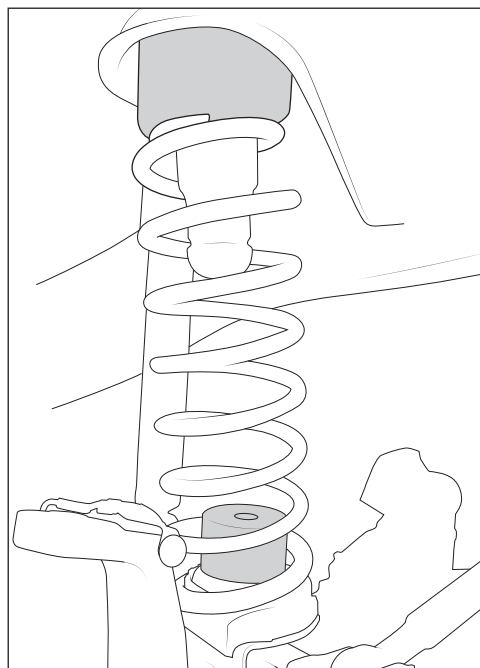


Figure 17



12. Install AEV shock extension brackets as shown, then re-install factory lower shock mount hardware (fig. 18). You may need to pull the shock body downward to reach the shock bracket. This is normal due to internal shock bumpers. NOTE: Due to variation in factory brackets, you may be required to enlarge the bottom hole slightly using a drill bit or round file.

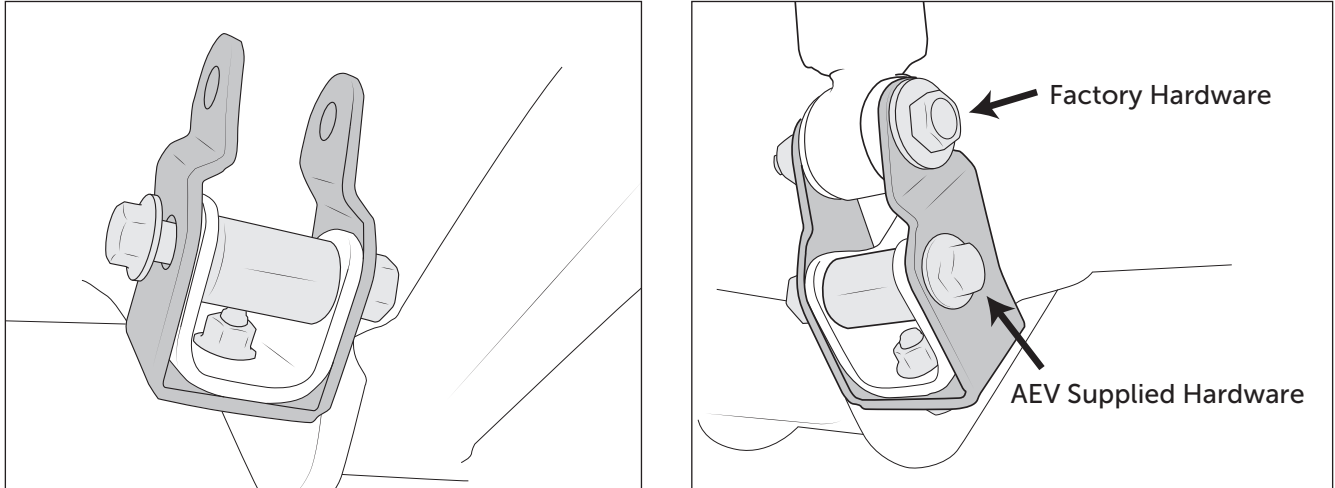


Figure 18

13. Install sway bar end links

- A. For each side attach the upper end stud to the sway bar in the same manner as the original front links had been (nut on frame side of bar). NOTE: The upper stud has a different thread than the rest of the M12 fasteners in the suspension—it is a “standard” pitch versus a “fine pitch.” Tighten to 40 ft-lbs. (Fig. 19).

NOTE: 2024 and newer vehicles come from the factory with M14 upper end link studs. AEV fastener packs include spacers to adapt to this larger hole in the sway bar. Rubicon models with the electronic sway bar disconnect will use the wider spacers, non-Rubicon with the fixed sway bar will use the narrower version. 1 spacer goes on each side of the vehicle, front sway bar only.

- B. The lower ends of the links will attach in the factory location using the original hardware, with AEV-provided washer added to the inboard side of driver side link only (Fig 19). Washer is not needed on passenger side because it has brackets on both sides of bushing. Torque to 40 ft-lbs.

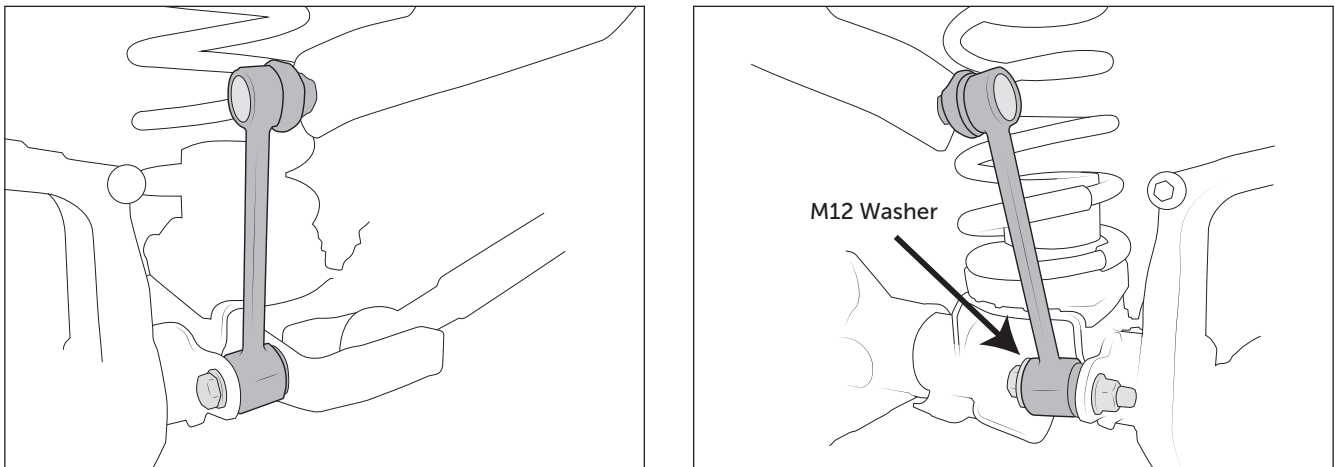


Figure 19



14. Re-install brake line brackets, axle disconnect wiring, and wheels.
15. Put Jeep on level ground and torque all hardware as listed on the last page
16. A professional alignment is recommended to re-center the steering wheel.
17. Follow instructions for ProCal Snap to recalibrate tire size if necessary.

TORQUE SPECS

Front Upper Control Arms: 80 ft-lbs

Front Lower Control Arms: 190 ft-lbs

Front Track Bar: 110 ft-lbs

Front Sway Bar End Links: 60 ft-lbs

Brake Line Brackets: 15 ft-lbs

Rear Upper Control Arms: Frame 111 ft-lbs plus 95° Axle 111 ft-lbs plus 90°

Rear Lower Control Arms: 111 ft-lbs plus 65° Axle 111 ft-lbs plus 60°

Rear Track Bar: Frame 85 ft-lbs Axle 100 ft-lbs

Rear Sway Bar End Links: Upper Bolt 81 ft-lbs Lower Nut 70 ft-lbs

Front Lower Shock Bolts (and relocation bolts): 75 ft-lbs

Rear Lower Shock Bolts (and relocation bolts): 89 ft-lbs

M10 Shock Bracket Bolts: 35 ft-lbs (47.5 N-m)

Bumpstop Spacer Hardware (front and rear): Tighten until slight deformation of plastic spacer.