

AA-4408

2019-PRESENT

JEEP GLADIATOR (JT, GAS ENGINE)

2-4" LIFTED REAR AIR SUSPENSION SYSTEM





PRODUCT & INSTALLATION OVERVIEW



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CONGRATULATIONS!

Your AccuAir® Jeep JT Rear Air Suspension Conversion System reflects a unique solution to balancing enhanced off road terrain and obstacle clearance/leveling with everyday drivability and ride quality.

This Rear Air Conversion system is meant for vehicles that **currently** have a 2"-4" lifted suspension. The AccuAir® JT system features remote mounted seamless air tank, a quality compressor, mounts and all fittings necessary to replace your rear coil springs with ruggedly designed two corner air bags allowing you to select a rear ride height tailored to your off road adventures. Back on the road, the system will automatically level your rear suspension (with varying loads), helping to preserve familiar ride comfort. Enjoy your AccuAir® JT system by Treading Lightly® and following all instructions and product safety messaging below. If you have further questions contact us at: sales@ **AccuAir.com**. Our team is here to help.

A FEW WORDS ABOUT PRODUCT SAFETY

Before installation, please take a moment to review the following safety information and installation instructions. Important safety information is generally preceded by one of three signal words indicating the relative risk of injury.

The signal words mean:



A hazardous situation which, if not avoided, could result in death or serious injury. You CAN be killed or seriously hurt if you don't follow instructions.



CAUTION:

A hazardous situation which, if not avoided, could result in minor or moderate injury. You CAN be moderately hurt and may also suffer property damage if you do not follow instructions.



Tech: 888.234.6698

NOTICE:

Careful attention is required to this instruction or operation but does generally not relate to personal injury. Damage to your AccuAir® product or other property may result if you don't follow instructions.



PRODUCT & INSTALLATION OVERVIEW

The suspension of this vehicle has been optimized for off road utility through installation of an AccuAir® system allowing control/ adjustment of ride height to accommodate challenging terrain & obstacles. The suspension feel and handling maybe different than an unmodified leep.

To reduce risk of roll-over other accident & serious injury always:

- Inspect components including bags, lines, valves & compressor before use, followed by system self-test. Maintain & repair as indicated.
- **DO NOT** modify or substitute AccuAir® components of this system. Use of oversize tire/wheel combinations may increase stopping distances, ride height and/or compromise performance of vehicle stability control and other systems.
- Avoid excessive speeds, abrupt maneuvers, surfaces/obstacles which may induce a tipping moment. All occupants **BUCKLE UP & USE** supplemental restraints.
- Consult the AccuAir® installation manual (sales@AccuAir.com) & OEM off road supplement for additional safety information.



WARNING:

This advanced AccuAir® JT kit requires professional installation, with access to vehicle lift and experience with Jeep JT suspension, electrical wiring, Jeep maintenance recommendations, safety messaging, torque & other specifications, general repair safety including personal protection, vehicle rack safety, isolation and containment of OEM spring assemblies during removal.



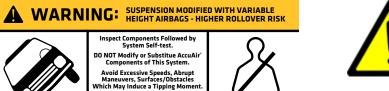
WARNING:

Included limit straps must be used for rear suspension to avoid premature air spring failure.

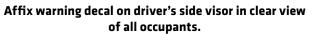


CAUTION:

Risk of Eye Injury. Safety glasses, gloves & other personnel protection should be worn when working with this product.







Always Buckle Up.

Manual & OEM Off Road upplement for Additiona



NOTICE:

Never lower vehicle from rack or following inspection/repair without air bags being fully inflated.



WARNING

CANCER AND REPRODUCTIVE HARM WWW.P65WARNING.CA.GOV

- If larger tires (10% more than the OEM diameter) are installed, speedometer recalibration will be necessary. Contact your local Jeep dealer.
- After installation, a qualified alignment facility is required to align the vehicle to the OEM specification.

If you have any questions or reservations about installing this product, contact AccuAir Customer Service.



WHAT IS COVERED?:

Subject to the terms, exclusions and limitations herein, Arnott, LLC. ("Warrantor" or "AccuAir") exclusively warrants to the initial retail purchaser of a AccuAir Jeep JT suspension kit that AccuAir will according to terms herein, repair defects in or replace AccuAir supplied components which, upon AccuAir inspection are determined to have defects in materials or workmanship existing as of the date of sale to the initial retail customer (hereafter "Customer"). This Limited Warranty is the sole and exclusive warranty made or authorized by Warrantor. This Limited Warranty is not a warranty or promise of any particular future performance.

The term of this Limited Warranty shall be three years as measured from the date of sale to initial Customer (the warranty "TERM"). Any claim under this limited warranty must be made within six months of the last day of the warranty TERM or will be forever waived. The duration of any implied warranty shall be limited to the three year term of express limited warranty above.

WHAT IS NOT COVERED?:

Your AccuAir Limited Warranty does not cover: (1) defect in a AccuAir air suspension kit or component causing or contributing to damage or defect, of any type whatsoever, to the vehicle it is installed upon or any electrical system or other vehicle system or component separately warranted or supplied by a manufacturer other than AccuAir, (2) damage to AccuAir components or your vehicle from altering or disabling any component of your vehicle or AccuAir product; additions, alterations, or other products or components not supplied by AccuAir, (3) installation or use contrary to professional installation recommendations, or other installation/use contrary to instructions and safety messaging included within your AccuAir product, (4) expected wear and tear on airbags and other components considering vehicle use, damage related to failure to adequately, install, inspect, maintain, adjust or service as recommended or required, damage resulting from improper suspension set-up, loading, accident, collision, vandalism, abuse, misuse, neglect, fire, flood, normal wear, defects in or degradation of finishes, reflecting corrosion, UV or other environmental influences (5), AccuAir, components used in competition, other off road use or events which may involve unforeseen vehicle components, suspension set ups, contact between vehicles, rocks or obstacles, other components of your vehicle and your AccuAir components, damage or degradation of performance, (6) labor, lost time, lost use or opportunities, reasonable delays in remedies hereunder, other consequential, incidental, punitive or other damages or costs, including those incurred in removing, reinstalling or delivering your AccuAir component to AccuAir for inspection, repair or replacement.

OBTAINING WARRANTY & CUSTOMER SERVICE:

Register your AccuAir Purchase. For questions or claims contact AccuAir Customer Service: **100 Sea Ray Drive, Merritt Island, FL 32953**. You will be asked to advise AccuAir in writing of your understanding of all defects and provide AccuAir an opportunity to repair or replace the affected component(s) subject to the terms of this Limited Warranty. Please have proof of purchase available.

REMEDY LIMITED TO REPAIR/REPLACEMENT BY ACCUAIR. BINDING, SINGLE CLAIM ARBITRATION-VENUE:

Upon Customer's removal and delivery to AccuAir for inspection and AccuAir determination of a covered defect, the exclusive remedy provided hereunder shall at AccuAir's option be repair or replacement of the defective AccuAir component(s). Your sole and exclusive remedy for breach of this Limited Warranty or any implied warranty imposed by law, is the reasonable costs for replacement parts necessary to correct the defect(s) upon which the finding of breach is based. For separate, valuable consideration received; all claims arising from or related to purchase or use of AccuAir components shall exclusively be maintained as a separate action by each Customer applying Florida state law

(without reference to treaties or conflict of law provisions) through binding arbitration before a neutral selected by Customer from the JAMS® panel closest to Merritt Island, Florida. To the extent permitted by law, each party shall bear its own costs and fees. Any claim to enforce an arbitration award or for other breach or damages under this Limited Warranty can only be brought in a court of competent jurisdiction closest to Brevard County, Florida.

OTHER EXCLUSIONS -LIMITATION OF DAMAGES - YOUR RIGHTS UNDER STATE LAW.

No employee, other agent of AccuAir or authorized reseller may, amend or waive this written Limited Warranty or make additional representations or warranties regarding any AccuAir features, performance, workmanship or materials. AccuAir reserves the right to make changes in design and changes or improvements upon its products without imposing any obligation on itself to install or upgrade the same upon products previously manufactured.

By installation and use of your AccuAir product, and/or submitting a claim under this *Limited Warranty*, you acknowledge that you have received and understand all product instructions, warnings and this *Limited Warranty* and agree to be bound by all terms therein, reflecting the exclusive terms and remedies of the parties bargain.

This **Limited Warranty** gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you. All other warranties are hereby disclaimed, except to the extent prohibited by applicable law.

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DESCRIPTION

Air Suspension Conversion Kit
e+ Connect

TouchPad+

Height Sensor Brackets

VU4 4-Corner Manifold
3 Gallon Seamless Tank

VIAIR 485C Compressor

VIAIR Inflation System

Rear Upper Control Arms

Install Kit for ECU, Air Tank, Compressor

Air Compressor Bracket

SAE & SAE Hex Key Sockets/Wrenches

(5/32", 7/32" & 5/16" Hex Key Sockets, 7/16", 1/2", 9/16", 3/4", 13/16", 7/8" & 1-1/8")

Metric & Metric Hex Key Sockets/Wrenches

(6mm Hex Key Socket, 8mm, 10mm, 13mm, 15mm, 18mm, 19mm, 21mm, 22mm & 24mm)

Measuring Tape

Jack Stands

Ball Peen Hammer

Floor Jack

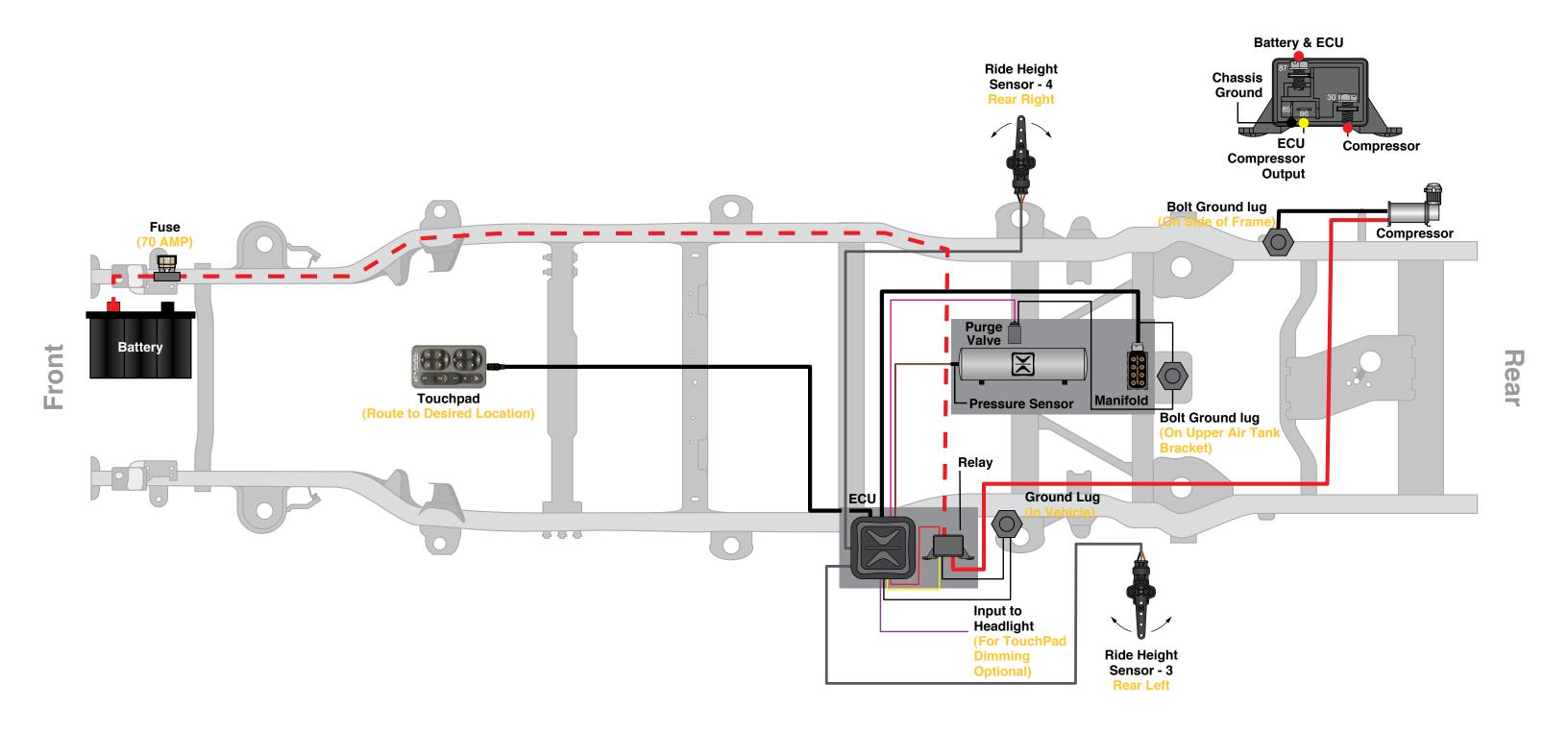
Safety Glasses

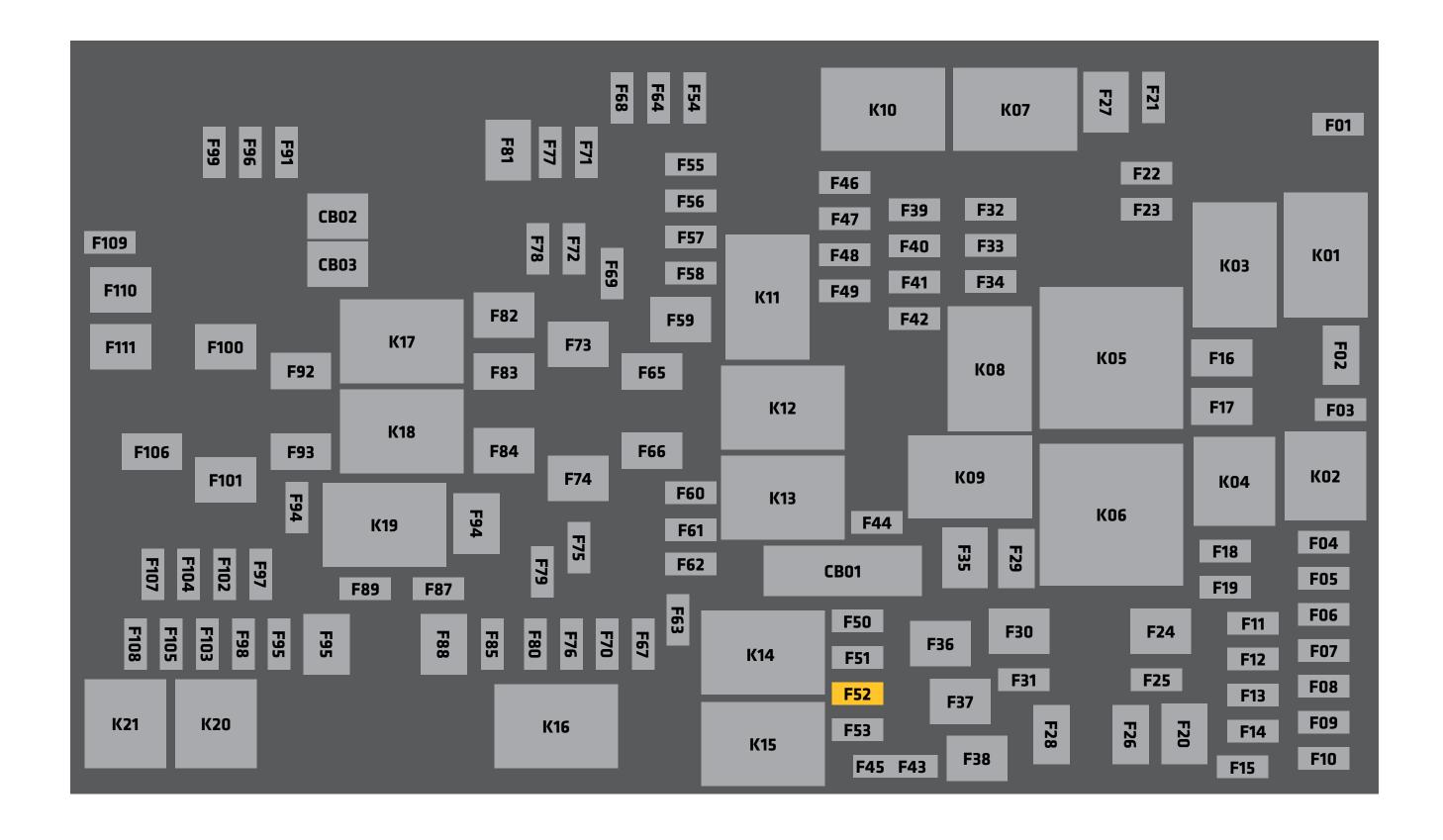
Pliers

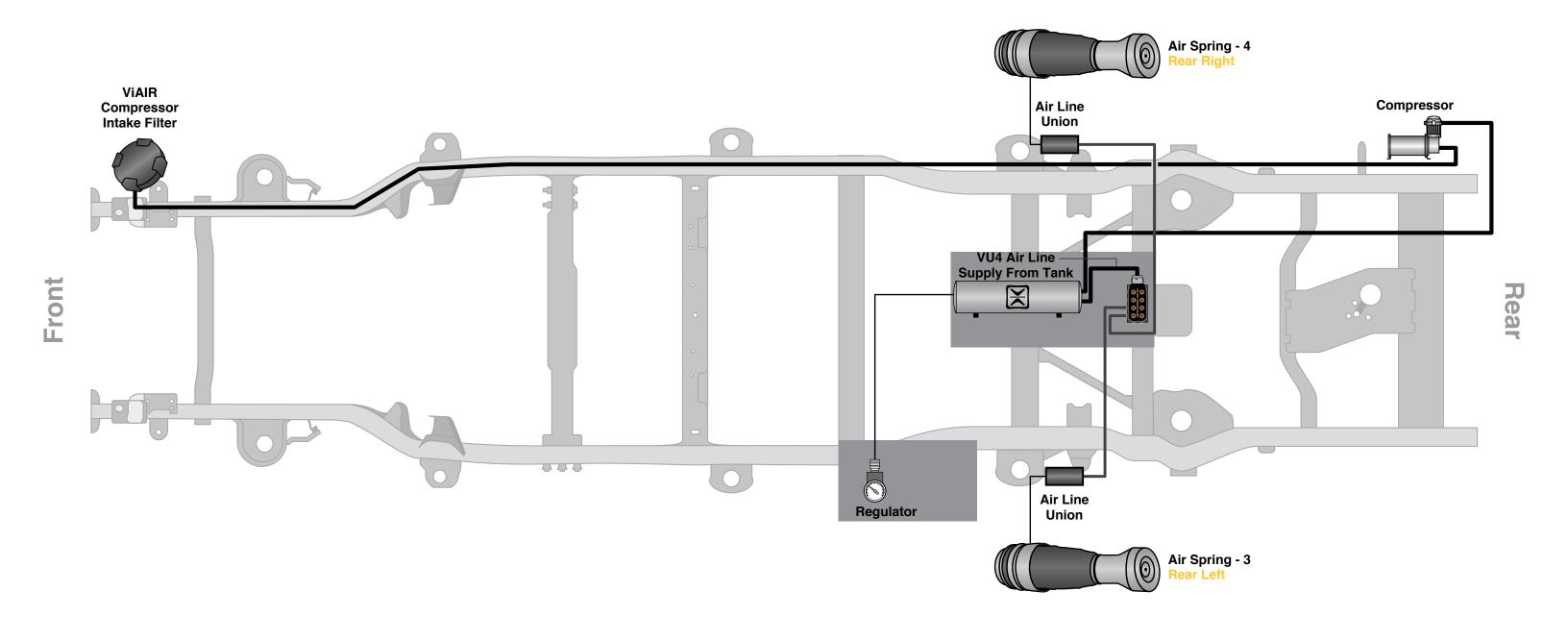
Wheel Chock

Torque Wrench

Blue Loctite









1. Remove plastic tray from under rear seat. Remove plastic bolt box under the driver rear seat. Fold carpet forward. (Figures 1, 2)





FIGURE 1

FIGURE 2

2. Locate the rubber plug in the floor located above the gas tank. Remove and install supplied grommet. (Figures 3, 4)





FIGURE 3

FIGURE 4

3. Take the 6 gauge power wire with the 70 AMP fuse installed. (Figure 5) Lay the fuse on top of the battery and route remaining wire along the passenger side frame rail to the floor drain plug underneath the center of the vehicle. Do not connect to battery at this time.

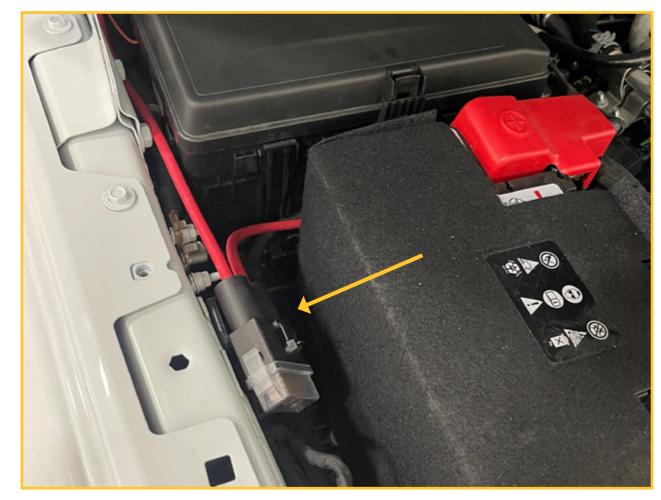


FIGURE 5



4. Install the upper part of the air tank bracket with VU4 manifold attached. This spacer must be used when installing the bracket to prevent crushing the crossmember when it is fully tightened. (Figure 6)



FIGURE 6

Snug bolt. Do not completely tighten at this time. You will come back and tighten this bolt after the lower bracket is installed. (Figures 7, 8)





FIGURE 7 FIGURE 8

5. Plug in the VU4 harness and run through the grommet in the floor to the inside of the cab. (Figures 9, 10)



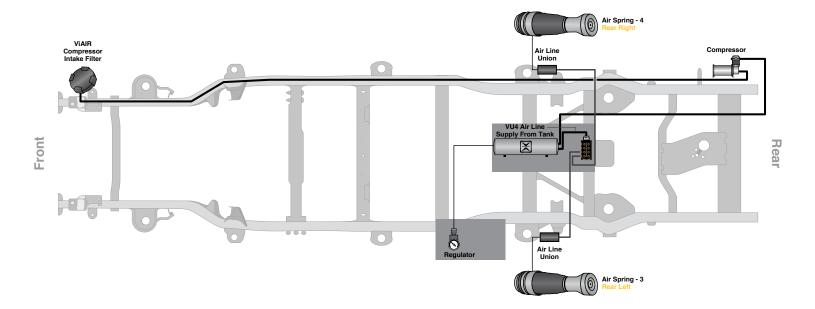
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FIGURE 9 FIGURE 10

WIRING

6. Run 3/8" tubing from the VU4 to both rear spring locations. Run in a safe location away from heat and objects that will pinch or chafe the lines.



7. Make VU4 connections as shown. Note the port to corner association with Figure 11 and plumbing diagram.



FIGURE 11

8. Start supplied bolts into existing threaded holes on passenger rear of frame. The bracket will slide over these bolts. Install the compressor bracket. Ensure the leader hose from the compressor is routed above the frame. (Figures 12, 13, 14)

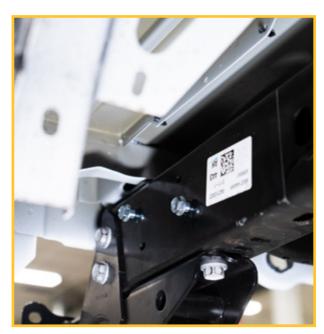




FIGURE 12 FIGURE 13



FIGURE 14



9. Ground the compressor to the frame using the factory bolt located in front of the compressor mounting location. (Figures 15, 16)





FIGURE 15

FIGURE 16

10. Run power from compressor to the inside of the cab through the rubber grommet in the floor. (Figure 17)

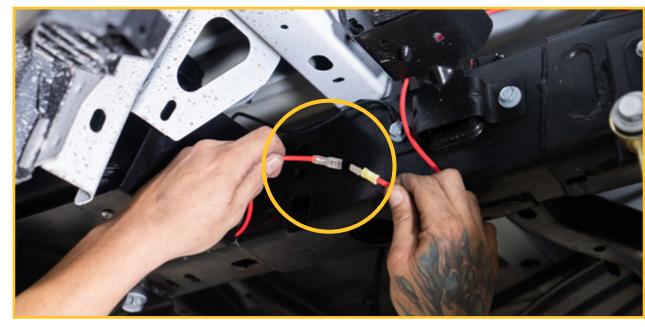


FIGURE 17

11. From inside the cab, run the tank pressure and dump plugs and wires through the grommet in the floor to the exterior of the Jeep. (Figure 18)

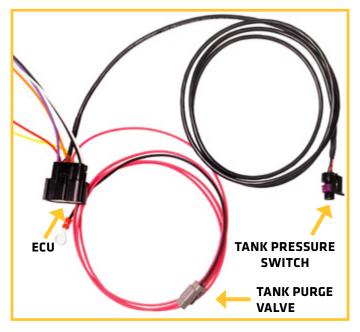


FIGURE 18



12. Install the lower tank bracket to the upper tank bracket using the supplied hardware. Two bolts in the front of the brackets utilize factory threaded holes in the transmission cross-member. (Figure 19, 20, 21)





FIGURE 19

FIGURE 20

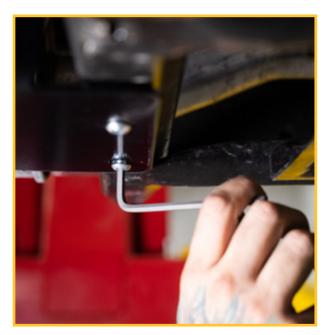


FIGURE 21
(USE BLUE LOCTITE WHEN INSTALLING THE M8 FASTENERS TO THE FACTORY CROSSMEMBER)

NOTE: Finish tightening the upper tank bracket mounting bolt at this time.

13. Plug in tank pressure sensor located on the front of the air tank. (Figure 22)



FIGURE 22

14. Plug in the tank purge valve. (Figure 23)

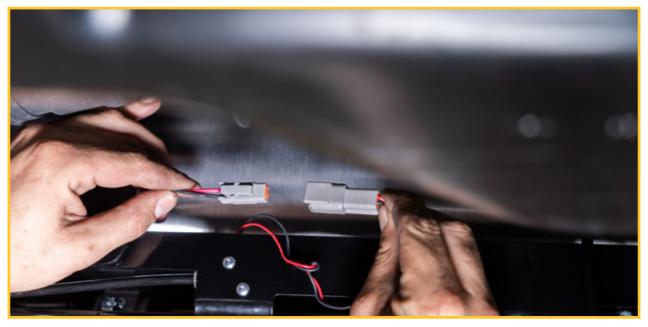


FIGURE 23

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15. Ground the VU4 harness and purge valve to the stud located on the top bracket using supplied washer and Nyloc nut. (Figures 24, 25)

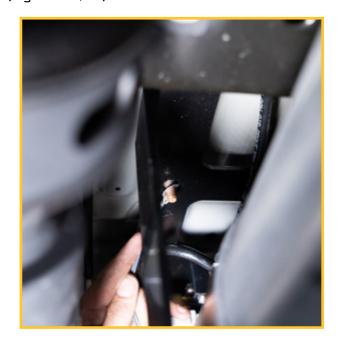




FIGURE 24

FIGURE 25

16. Run 3/8" tubing from VU4 supply to tank. (Figure 26)

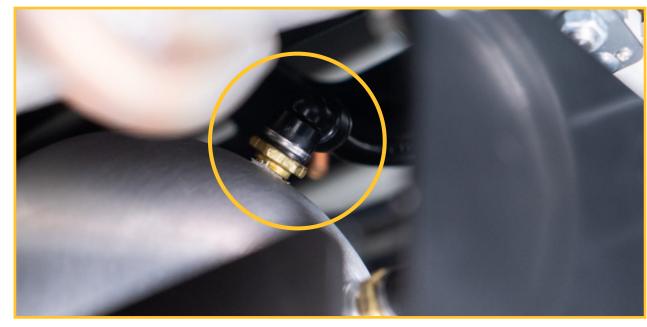


FIGURE 26

17. Run 3/8" tubing from PTC on the compressor leader hose to the air tank. (Figure 27)



FIGURE 27

18. Run the 3/8" tubing from the intake of the compressor to the air box area under the hood and install ViAIR compressor filter. (Figure 28)



FIGURE 28





19. Run 1/4" tubing from the front of the air tank through the rubber grommet inside the cab. This will be run to the regulator. (Figure 29)



FIGURE 29

1. Disconnect both rear sway bar links from chassis and sway bar. (Figures 30, 31)





FIGURE 30

FIGURE 31

2. To gain access to the upper shock bolts, the fender liner can be pulled back to allow a wrench to loosen the shock. (Figure 32)



FIGURE 32



3. Remove shocks. This will allow the rear axle to droop enough to remove the factory coil springs. (Figures 33, 34)



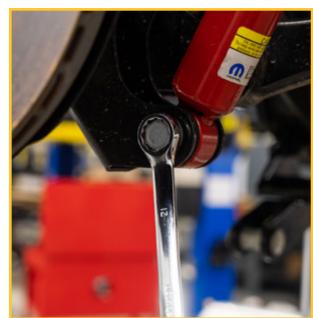


FIGURE 33 FIGURE 34

4. Lower the rear axle and remove the rear coil springs and rubber spring isolators. (Figures 35, 36)



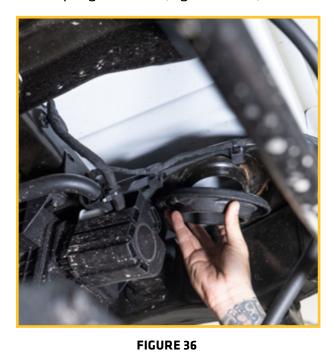
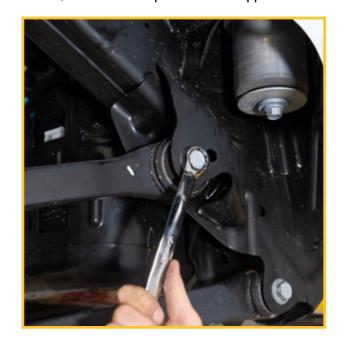


FIGURE 35

5. Reinstall shocks.

6. One at a time, remove and replace the rear upper arms with the supplied arms. (Figures 37, 38, 39, 40, 41)



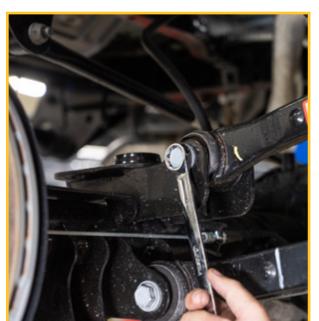


FIGURE 37

FIGURE 38

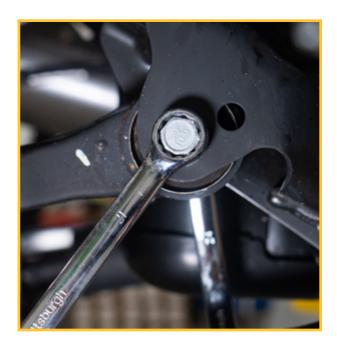




FIGURE 39

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FIGURE 40





FIGURE 41

7. When installing the upper arms, you will need to install the height sensor bracket while installing the upper link bar bolt on the frame. Ensure the locating tabs on the height sensor bracket are sitting against the mount. When installing the upper link bar, the welded tab for height sensor linkage should be on top and towards the frame. (Figure 42)

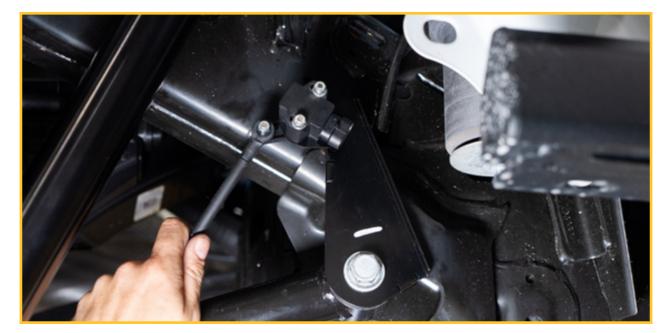


FIGURE 42

8. After you finish installing upper rear arms, connect the rear height sensor linkage to the upper arm using the supplied hardware and spacer. (Figures 43, 44)



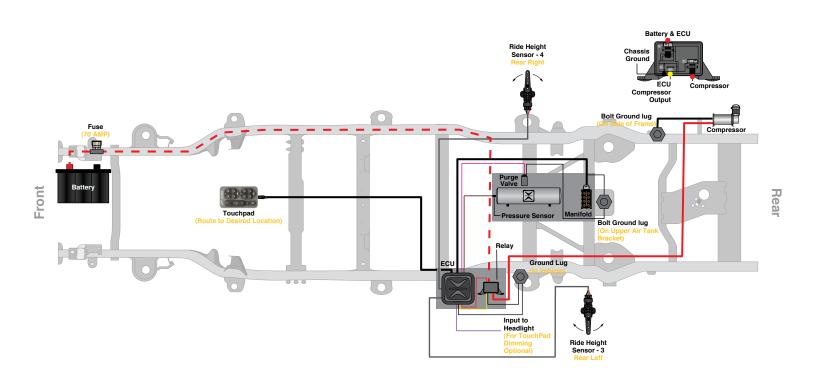


FIGURE 43 FIGURE 44

9. From the inside of the cab, feed all four height sensor plugs through the grommet and route to corresponding height sensors. (Figure 45)



FIGURE 45



10. Install new rear air springs by inserting the locating tab inside the hole on the lower perch and rotating the bag to the rear of the vehicle. Ensure locating tabs are on the outside of this bracket (towards center of the axle). (Figures 46, 47, 48, 49)



FIGURE 46

FIGURE 47

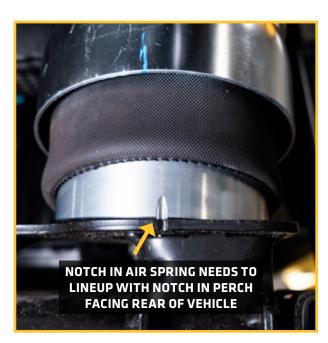




FIGURE 48

FIGURE 49

11. Connect the 1/4" air line supplied to the top of the air spring. Then push the top of the air spring into the factory spring pocket and install the retaining clip as pictured. (Figures 50, 51, 52)





FIGURE 50 FIGURE 51



FIGURE 52

12. Remove shock bolt and replace it with the provided bolt. Add the thinner spacer to the side of the shock with the bolt head and add the thicker spacer between the limit strap and shock. (Figure 53)



FIGURE 53

13. Tighten the bolt using a 22mm socket on the bolt head and 21mm wrench on the nut. (Figure 54)



FIGURE 54

14. Unfasten the bottom shock bolt with a 21mm socket and mount the limit strap to the inside of the vehicle on the lower shock mount (Figures 55, 56)





FIGURE 55

FIGURE 56

15. Route the 1/4" line to meet the 3/8" line from the VU4 and connect using supplied fitting. (Figure 57)

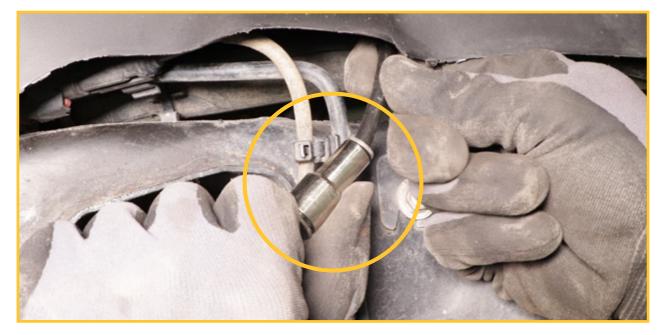


FIGURE 57

- 16. Reinstall sway bar end links.
- 17. Install the rear bump stop extensions using supplied hardware. (Figures 58, 59)





FIGURE 58

FIGURE 59

18. Inside the cab, route the VU4 harness, 12V power supply, height sensor, compressor power, and ECU main plug to the drivers side and through the factory carpet cutout as pictured. (Figure 60)

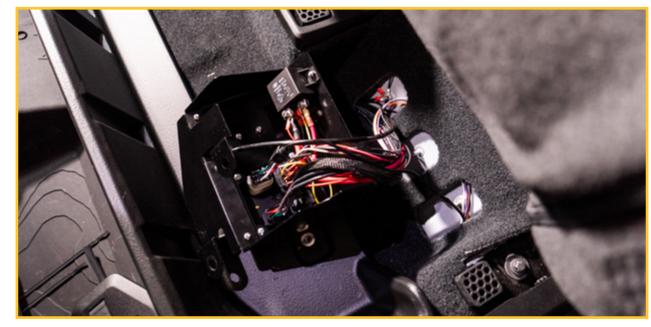


FIGURE 60

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19. Make all connections to the ECU and compressor relay. Route the orange, purple speed module wire and TouchPad harness to the drivers side lower kick panel. (Figure 61)

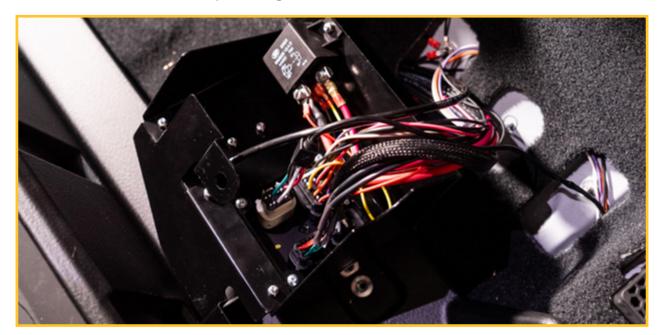
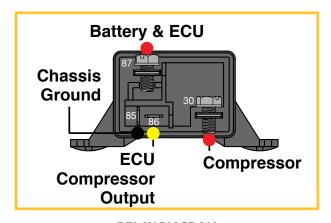


FIGURE 61



RELAY DIAGRAM

20. There will be three grounds, one from the ECU, one from the speed control module and one from the compressor relay. They will go on the stud as pictured. (Figure 62)

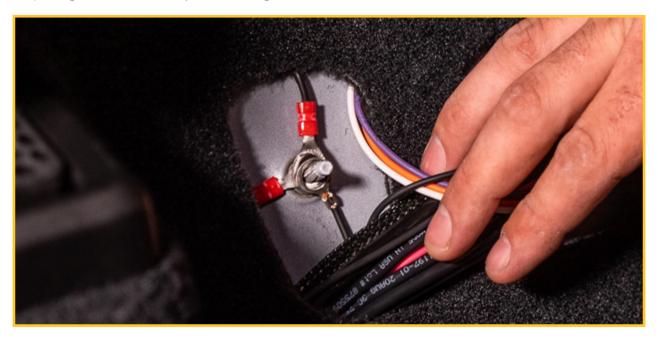


FIGURE 62

21. Connect 1/4" tubing from the air tank to the PTC fitting on the regulator for the inflation system. (Figure 63)



FIGURE 63

22. Replace the plastic tray. The ECU bracket utilizes two of the factory mounting points on the drivers side. (Figures 64, 65)





FIGURE 64

FIGURE 65

23. Replace the bolt storage bin behind the ECU bracket. Make sure both grounds are still in position before tightening. (Figures 66, 67)





FIGURE 66

FIGURE 67

24. Route the orange ignition-on wire to the fuse box located under the hood and connect to fuse 52 using the supplied fuse splice. Crimp and make battery connection for the main power wire and install the 70 AMP fuse. (Figures 68, 69)





FIGURE 68

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FIGURE 69

- 25. Install rear tires/wheels using a 22mm socket. Torque to 130 ft/lbs.
- 26. Inflate rear air springs using TouchPad Controller. Ignition must be on. Inflate by tapping the double up arrow. (Figure 70)



FIGURE 70

YOU MUST INFLATE **AIR SPRINGS BEFORE** LOWERING **TO THE GROUND**

Scan the QR code for more details.



27. Lower vehicle to ground.

CALIBRATION MUST BE PERFORMED

Once system installation is complete, the system will need to be calibrated. Calibration is a process that will learn the vehicle range of travel and automatically set ride heights.

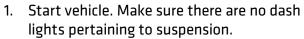
The vehicle needs to be on level ground with the wheels pointed straight ahead. Leave the vehicle running to power the compressor(s) during this procedure.

Before starting calibration, turn on the vehicle and let the compressors run to fill the tank. Once the compressor stops running (green "C" on TouchPad stops blinking) you may simultaneously hold the ">" and "2" button for 5 seconds. You may let go when the vehicle starts to move up.

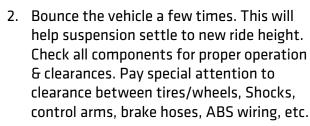
The vehicle will now open the valves to the air springs and run the compressor to fill all air springs. The system will continue doing this until the set pressure is achieved at which point the maximum suspension travel will be defined.

Next, the vehicle will exhaust all air from the air springs to define the minimum travel.

Calibration is complete when the system prompts a position 2 two adjustment ("2" will be flashing on the TouchPad). This may take some time as the system has to fill the tank and air springs from near empty.



CALIBRATION VIDEO





WARNING:

The system will automatically raise/lower the vehicle in the next procedure. Remove all obstructions and keep clear of vehicle before proceeding.

3. Rear Tighten & Torque Sequence.

Track bar bracket bolts. 1/2" Bolts Torque 90 ft-lbs. 9/16" Bolt Torque 130 ft-lbs.

Track bar at the bracket. Torque 130 ft-lbs.

Rear shock absorber upper mount using a 18mm socket/wrench. Torque 81 ft-lbs. Rear shock absorber lower mount using a 18mm socket/wrench. Torque 74 ft-lbs.

ADX Reservoir clamp. Double check position & clearance. Tighten with 5/32" Hex Key socket.

Sway bar end link mount using a 18mm socket/wrench. Torque 59 ft-lbs.

Before driving, it is necessary that the steering wheel and wheels are straight at position two. Adjust drag length accordingly. VEHICLE MUST BE PROFESSIONALLY ALIGNED.

CHECK FOR SYSTEM LEAKS

Place all 4 wheels on the ground and inflate air springs with the TouchPad. Check for system leaks using soapy water on all pneumatic connections to the air springs and the regulator.



FINAL NOTES

After installation is complete, double check that all nuts & bolts are tight. Refer to the following chart for proper torque specifications.

NOTE: Do not re-tighten nuts & bolts where thread lock compound was used.

With vehicle placed on ground, cycle steering lock to lock & inspect steering, suspension, brake lines, front & rear drive lines, fuel lines & wiring harnesses for proper operation, tightness & adequate clearance.

Have headlights readjusted to proper settings.

Have a qualified alignment center align vehicle to OEM specifications.

After first 100 miles, check all hardware for proper torque & periodically thereafter.

| TORQUE SPECIFICATIONS | | | | | | |
|-----------------------|------------|------------|---------------|------------|------------|--|
| INCH SYSTEM | | | METRIC SYSTEM | | | |
| Bolt Size | Grade 5 | Grade 8 | Bolt Size | Class 8.8 | Class 10.9 | |
| 5/16 | 180 in-lbs | 240 in-lbs | 6MM | 60 in-lbs | 108 in-lbs | |
| 3/8 | 30 ft-lbs | 35 ft-lbs | 8MM | 216 in-lbs | 23 ft-lbs | |
| 7/16 | 45 ft-lbs | 60 ft-lbs | 10MM | 32 ft-lbs | 45 ft-lbs | |
| 1/2 | 65 ft-lbs | 90 ft-lbs | 12MM | 55 ft-lbs | 75 ft-lbs | |
| 9/16 | 95 ft-lbs | 130 ft-lbs | 14MM | 85 ft-lbs | 120 ft-lbs | |
| 5/8 | 135 ft-lbs | 175 ft-lbs | 16MM | 130 ft-lbs | 165 ft-lbs | |
| 3/4 | 185 ft-lbs | 280 ft-lbs | 18MM | 170 ft-lbs | 240 ft-lbs | |

THE ABOVE SPECIFICATIONS ARE NOT TO BE USED WHEN THE BOLT IS BEING INSTALLED WITH A BUSHING.

COLDER CLIMATE TIPS

In the winter months, to keep your air system from freezing, we recommend adding CRC air brake antifreeze. This can be purchased at most automotive parts houses. We recommend that you add two caps (about 1 ounce) to the system through the compressor intake. To do this, you should adjust the suspension to deplete the air in the tank so the compressor will be running while you perform this process. You want to slowly add the antifreeze to the system so it has time to vaporize and coat everything. You will need to do this periodically depending on how much use the vehicle has. Generally, once every two weeks will be adequate but that can vary.

REGULATOR NOTICE

The supplied regulator will always have some small residual leak, due to how the regulator works, which means the tank pressure will decrease over time. If you are experiencing tank pressure dropping more than 5 psi overnight, the regulator may be leaking excessively. To rectify this, adjust the regulator pressure down to 20 psi, then up to 120 psi. If you desire no leakage, remove the regulator and cap the line from the tank.

AccuAir advises against adjusting the regulator over 150 psi.



TROUBLESHOOTING & TECHNICAL SUPPORT

MORE INFO?
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