

Ball Joint Air Ride Install



Our goal is to make the install a breeze. Please read the entire guide before beginning.

Recommendations - It is recommended that you use drop spindles with the air ride kit to get the most drop out of the air ride kit. If you do not have drop spindles, please scan the code to the right with your smart phone.



If your wheels are close to the fender edge now, when installing the drop spindles and airing out the vehicle, the fender and fender edge will contact the tire. An Ultimate Beam would remedy this and make the installation a breeze. Scan the code on the left to view and purchase one.

1. Loosen the lug nuts 1/4 turn before jacking the vehicle up.
2. Jack up the front of the vehicle and place stands underneath the chassis.
3. Remove the wheels and place under the chassis as a fail safe.
4. Disconnect the battery
5. Remove the dust cap, remove the spindle nuts and slide off the drum. On the driver's side remove the (3) bolts holding the backing plate onto the spindle and set

to the side. Do not break loose any brake lines to avoid having to bleed the brakes afterwards.

6. To remove the spindle you will need to loosen the ball joint nuts on the back side of the spindle, but do not remove them. Then, use an air hammer to spring free the upper and lower control arms and avoiding damage to the boots. If you do not have an air hammer, use a heavier hammer to tap the spindle near the ball joint to spring free the joints. Now remove the nuts.
7. You can now make a choice. If you want to remove the spindle entirely, you will also need to remove the tie rod. Same as step 6 to accomplish this. If you do not, simply swing the spindle out of the way.
8. Now it is time to remove the upper and lower control arms. Remove the jam nuts and the grubs screws and slide the arms out. If you need some nice quality metric allen sockets, [click here](#) or scan the QR code.
9. At this point and time, check your ball joints. If there is up and down play, it is time to replace the joints. Airkewld offers two options to make this easy. One, you can purchase a set of [German ball joints](#) or purchasing a set of [#PRObuilt Arms](#) that have the German Ball Joints already pressed in on the right.



Allen Sockets

10. Remove the center grub screws and remove the factory torsion springs.
11. It is now time to install the Through rods. These inserts allow your front end to move freely and will ultimately rely on the Airkewld's air shocks. The through rods to come in two pieces, one male and one female. These can be screwed together and adding [Loctite](#) to create a bond or by adding a tack weld to them once you have spun them together. Slide the rods into the front end.



12. To install the upper and lower control arms you will need to pop out the dust caps out of the control arms. A [drift/punch](#) and a [dead blow hammer](#) make these easy. If you have an Ultimate Beam from Airkewld, slide the control arms in the beam. If they do not slide in easily, you will need to remove them and polish the bearing surfaces to make sure they move freely. You will need to [Emory cloth/sand paper](#) to smooth out these grooves. Scan the QR code to pick some up! If you see major grooving in them it's time to replace them. Always remember to use assembly [lube/grease](#) for all surfaces when you install. Once all items are moving freely pump grease through the grease zerks on the front end. 10-12 pumps will be sufficient. If you did not purchase the beam, slide the supplied delrin spacers onto the control arms and slide into the beam.



Emory Cloth

13. Install the supplied hardware as follows; washer-thrust bearing-washer-jam nut-jam nut. Tighten all the way down until the arm does not move and back it off 1/4 turn.



Check to make sure that the washer touching the control arm sits flat if it doesn't surface it until it does. Cut the remainder off with a die grinder or hack saw, smooth and paint. Make sure the arms rotate free and smooth. If they do, you are good to go to the next step.

14. It is time to install the spindles the reverse of removal. Make sure you lube all the holes where the ball joints go into to make adjustments easy. Tighten the ball joint nuts about 70%. If you have a level or degree finder, place it on the face of the spindle and rotate the eccentrics until you have 90 degree or perpendicular to the

Angle Finder



ground. If you don't have one, they're cheap, [here's a link](#) and a QR Code. Now snug the ball joint nuts. Reinstall the backing plates with the original hardware and tighten.

15. Reinstall the drum/rotor and tighten the nut until it can not turn at all. Then back it off 1/4 of a turn.
16. Install the thrust washer and spindle nut.
17. Reinstall the dust cap and push the speedometer cable through and attach the original circlip.
18. You will need to trim the lower shock boss so that it is smooth with the bushing. Now, install the air shocks with the supplied hardware.
19. With the supplied custom fittings you will need to use a thread compound or [Teflon tape](#) to the air shock. Do not over tighten the fittings that attach to the air shock because you can split them. Be careful. The way these fittings work is by inserting a straight cut piece of tubing into the fitting until it pops into place and then pull out to engage them. If you need to remove them again simply push the brass rings in and pull out the tubing.
20. Run your air lines to a tee and install the inflation stem.
21. Then do a leak test on the air lines. Please take your time so you will not have a problem in the future. Use a soapy solution on the fittings and fix if necessary.
22. Reinstall the wheels and remove the jack stands. Make sure the car is inflated so you do not damage your front apron with the floor jack.
23. Now deflate! BOOM! Rock bottom!
24. It is now time to do a poor mans alignment. Set the ride height to about have the up and down distance. Break loose your tie rod end jam nuts.



If you are still running the same beam you had in the vehicle before, center the steering wheel and adjust the tie rods evenly to keep the steering wheel centered. Measure from one side of the tire to the other remembering where you measured to on the front of the tires as well as the back of the tires. Just get it close. Tighten your tie rod jam nuts.