

Part# 18-1918

JL AIR IT UP® 4 Tire On Board Air Delivery System

(Requires External Air Source)



The most up-to-date instructions always visit www.UpDownAir.com

www.UpDownAir.com 833-226-4863

IMPORTANT INFORMATION- PLEASE READ FOR YOUR SAFTEY

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PLEASE TAKE A MINUITE TO READ THIS ENTIRE INSTRUCTION MANUAL BEFORE YOU START.

WE WANT YOU TO HAVE A FUN AND EASY INSTALLATION WITHOUT HURTING YOURSELF OR YOUR JEEP.

SAFTEY PRECAUTIONS

If you are working on the ground always use jack stands and chalk any tires touching the ground. Wear safety glasses and gloves as you will be using power tools for this installation. We recommend disconnecting the battery any time you are working on your Jeep.

FOR BEST RESULTS ALL 4 TIRES NEED TO BE CONNECTED

NEVER DRIVE WITH THE WHIPS CONNECTED TO YOUR JEEP MAJOR DAMAGE CAN OCCUR!

IF YOUR NEW UpDownAir PRODUCT HAS DAMAGED OR IS MISSING PARTS
PLEASE CONTACT UpDownAir CUSTOMER SERVICE DIRECTLY AT:

833-226-4863 option 4 or info@UpDownAir.com

TOOLS NEEDED

- Cordless Drill
- 5/16" Drill Bit
- Thread Sealer

(Loctite 577—or Teflon tape)

- Spray Bottle with Mild Soapy Water
- Phillips Head #2 Screw Driver
- Tube Cuter or Sharp Utility Knife

WRENCHES

- Crescent
- 22mm, 18mm
- 16mm, 14mm
- 13mm, 10mm
- 8mm, 1/4" Allen

3/8" Drive

- Ratchet
- 13mm Deep Socket
- 10mm Socket
- 8mm Socket
- 1/4" Allen Socket

Secure Jeep and Prep for Installation

This entire install can be done on the ground but jack stands or a lift will make it even easier.

- 1. Park your Jeep and set the parking brake.
- 2. Place a blanket on the edge of the roof and windshield of your Jeep and open hood the hood all the way.
- 3. Disconnect the negative (-) battery terminal.
- Begin installation step 1



Air It Up!

^{*}Special cut 9 /16 socket for 90 degree installation





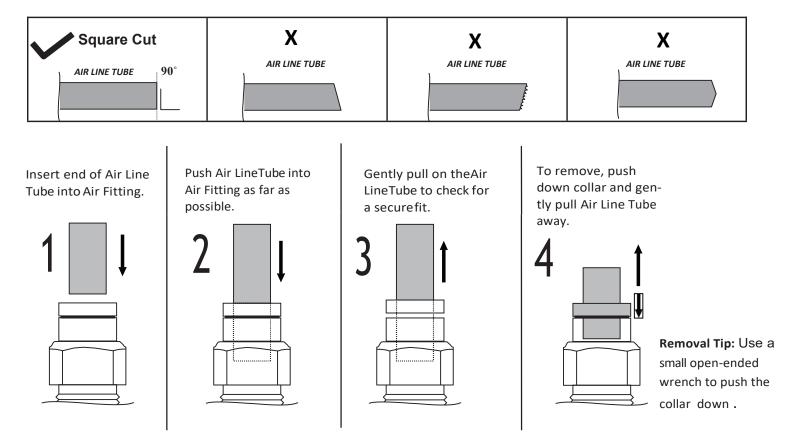
<u> Always:</u>

Use a tube cutter or sharp utility knife.

Do Not:

Fold or kink the Air Line Tube. Cut the Air Line Tube at an angle. Do not use pliers, scissors, snips, saws, or side cutters.

PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE



<u>Always:</u>

Select routes protected from heat, debris, and sharp edges. Use Nylon Ties to secure the Air Line Tube.

Do Not:

Bend or sharply curve Air Line Tubes. Leave Air Line Tube exposed to sharp edges. Use unnecessary lengths of Air Line Tube. Route Air Line Tube near moving parts. Let Air Line tube hang unsecured from vehicle. Scar Air Line Tube while routing.

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		<u>18-1819 - Installation BOM</u>
PART#	QTY	DESCRIPTION
01-100	8	Quick Release Chucks with Betty Bar
01-109	8	1/4" X 1/4 NPT Male Push to Connect Fitting
02-108-122	4	1/4" Green Air Line 48"- For Tire Whips
		T
18-1819	1	Jeep JL ADS Controller - 80 max psi
01-101	4	Body Mount Schrader Valve - Push to Connect
05-133	4	1/4" Flat Washer
01-110	2	3/8" X 1/4" Push to Connect "Y"
01-105	1	3/8" Push to Connect "T"
05-115	10	8" Cable Tie
05-117	4	Vinyl Cap
02-100-231	2	1/4 Black Air Line 144" - 1/4" "Y" to Rear Body Mount Schrader Valve
02-103-229	2	1/4 Split Loom 140" - Cover for 02-100-231
02-100-41	2	1/4 Black Air Line 30" - 1/4" "Y" to Front Body Mount Schrader Valve
02-103-39	2	1/4 Split Loom 15" - Cover for 02-100-41
02-102-73	1	3/8" Black Air Line 28"- From Crossover "T" to Driver Side "Y"
02-104-71	1	3/8" Split Loom 27"- Cover for 02-102-73
02-102-43	1	3/8" Black Air Line 17"- From Crossover "T" to ADS Controller "Y"
02-104-41	1	3/8" Split Loom 16"- Cover for 02-102-43
00 400 457		2/01/21 1.1.
02-102-157	1	3/8" Black Air Line 62"- Firewall Crossover to "T" and Passenger Side "Y"
02-104-155	1	3/8" Split Loom 61"- Cover for 02-102-157
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09-102	1	Whip Bag

Air It Up!

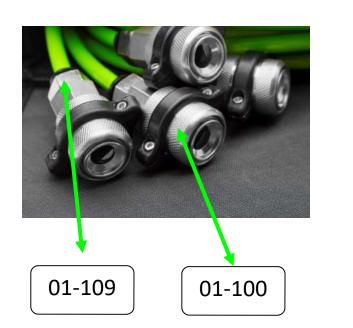


If quick connect chucks come pre-assembled skip to next page

Using the Bill of Materials identify and lay out all your kit components confirming that you have all the correct parts and quantity.

For our first step we will assemble the Quick Disconnect Chucks for the tire whips. You will need 14mm wrench, 16mm wrench and thread sealer.

- 1. Apply thread sealer to the 01-109 and screw into 01-100 and stop when hand tight.
- 2. Once the hand tight continue to tighten for 2-3 full rotations using the wrenches. Repeat for all.
- 3. Insert the green air line into the each end of Quick Disconnect Chuck . Repeat for all.





^{*} if chucks begin to leak upon connection, remove and switch ends to allow the internal plunger to reset itself.





Our next step is to assemble all the air lines that install in your Jeep. We will start with the 1/4" air line assemblies. Gather all the 1/4" black air line, split loom, Body Mount Schrader Valves and "Y" connectors.

- 1. Put one 01-101 (Body Mount Schrader Valve) on one end of each air line.
- 2. Next pull each air line through each split loom.
- 3. Next insert one long and one short air line assembly into the "Y" connector and repeat. You should now have two "Y" assemblies.



Gather all the 3/8" black air line, split loom, and the "T" connector.

- 1. Pull each air line through each split loom.
- 2. Install the $62^{\prime\prime}$ and $28^{\prime\prime}$ air line into the "T" connector making one long piece
- 3. Install the 17" air line in the perpendicular port of the "T" connector.



Air It Up!



This is where we will be drilling the holes to place the Body Mount Schrader valves on the body of your Jeep. The places we have selected are recommended but are not the only place to mount the Body Mount Schrader valves. *We have included a little extra length of air line to allow for alternate mounting spots.

Starting on the passenger's side **REAR** wheel well, locate the black push rivet and remove it. Place the Schrader in the hole where the push rivet was located. You may need to drill for more clearance.







Air It Up!



<u>Front Schrader location</u>— For the Front Schrader you will need to look for a safe location in the wheel well, away from contact with the tire. Drill a 5/16 hole and place the Schrader valve in that spot.



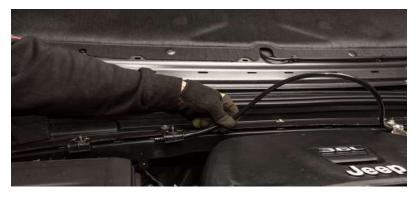


Air line assembly

The air lines that you pre-assembled are in four sections:

- (2) 1/4" Front to Rear "Y" sections with Schrader valves attached (144")
- (1) 3/8" Firewall Cross-over with 3/8" "Tee" attached (85" + 28")
- (1) Cross-over "T" to ADS Control Unit (18")

First, lay in the **3/8" firewall cross-over section**. You will run the tubing under the factory clips along the firewall of the jeep, also use supplied cable clips. Place the "T" connector on the passenger side behind the fuse box. Continue to run your other 3/8" tubing from the other open port behind the fuse box to the inside of the fender where it will be connected to the "Y" connector for the 1/4" tube. You can run the driver side 3/8 tube to the driver side inner fender as well.





Air It Up!



First select one of the **1/4"** Front to Rear "Y" sections with Schrader valves and go to the front passenger side and lay the "Y" fitting towards the front of your Jeep. Pull the 3/8" firewall cross-over tube down from the inner fender until it is visible and accessible to the "Y" and connect.







You can repeat this process on the driver side. Once all fittings connected you can now pull up the slack and secure with cable ties. We will now run the 1/4 line down the passenger and driver side of the jeep.





We suggest running tubing through the body on the underside of the jeep like seen in pictures, but as long as they are placed in a safe route away from damage, installer may choose any location. Now attach the 1/4 line into the Schrader's placed in the wheel well.





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Once all air lines are ran though the jeep you can go back and secure any loose lines with zip ties, be sure to keep the air lines away from exhaust or any moving parts of the vehicle.



You will now go back to your engine compartment and connect your final piece of 3/8" tubing into the remaining port on the "T" connector and then let sit until we mount the ADS controller.



Air It Up!



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Now we will install the ADS Controller into the engine bay. This is a simple bolt in operation. You will need a 10mm wrench or socket.

Remove the rear most fender bolts on the passenger side near the battery using a 10mm





You can now place the ADS controller in that spot and fasten using the factory fender bolts. attach the remaining 3/8 tubing into the push connect on the right hand side of the controller.

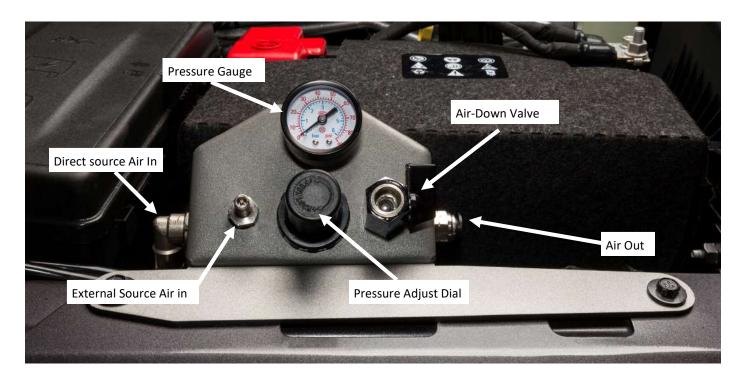


90 swivel for direct air source is either pre installed or requires special 9/16 socket for installation



Air It Up!





Congratulations you have now completed the install of your new Air It Up® 4 Tire on Board ADS System.

Please perform the following pressure tests.

- 1. Pressurize your system with no whips connected to ensure all Schrader's are sealed and everything is working properly (release pressure on each valve to make sure all flowing equal)
- 2. Connect all your tire whips to the Body Mounted Schrader valves and the tires. Note the tire pressure on the ADS Controller gauge.
- 3. Listen and Inspect all connections for leaks.
- 4. If you think you have a leak spray mild soapy water at the fitting and look for bubbles.
- 5. If you find a leak. Please refer to our trouble shooting section.

(Take a few minutes to try different settings and get familiar with the system)

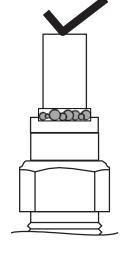




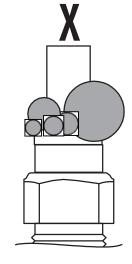
LEAK INSPECTION

To inspect for leaks pressurize your system, take a spray bottle with a solution of mild soap and water and spray suspected area. If you are not sure where the leak is coming from take a systematic approach spraying one area at a

time.



SMALL SOAP BUBBLES THAT DO NOT EXPAND

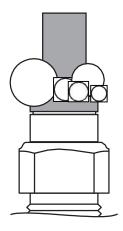


SOAP BUBBLES THAT EXPAND

LEAK CORRECTION

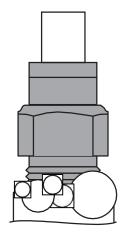
Most leaks will be in one of these three areas and the correction is listed below. If this does not correct you problem or you need further assistance please call **833-226-4863**, **option 4** and one of our technical staff will assist you.

LEAK AT AIR LINE
TUBE AND AIR FITTING



Release Air Line Tube. Review proper cuts and procedures.

LEAK AT BASE OF AIR FIT-TING ON AIR SPRING



Tighten Air Fitting one turn or until leak stops.

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LEAK OUT OF THE VALVE CORE
ON INFLATION VALVE



Tighten valve core with valve core wrench on Inflation Valve Cap.

DIRECT AIR SOURCE PLUMBING

When plumbing a direct air source to the ADS controller you have 2 options. The first option is to use the front external source Schrader port.







To remove the Air-Port Schrader use a 9/16 wrench or socket, spray penetrating oil, wait 5 min and remove slowly. After removed be sure the threads are clean and no adhesive residue is left over.







Add pipe sealer to the threads and Install the 90 degree 3/8 swivel using the 9/16 wrench until tight. Connect your high temp hose to the compressor and your done.



The second option is the 3/8 hex plug located on the left side of the ADS controller.





Apply penetrating oil to the 3/8 hex plug threads and insert 1/4 Allen key completely. Slowly remove the plug and make sure not to damage or strip. (you can also use a heat gun to make plug removal easier)





When plug is removed make sure to clean threads and remove all glue residue. You will now apply Teflon tape or thread sealer to your 90 degree swivel and install using our special socket

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FINAL INSTALLATION INSPECTION



Congratulations you have now completed the install of your new ARB Compressor and or ADS System.

Please perform the following tests.

Inflation -

- 1. Connect your Whips to all 4 corners of your Jeep.
- 2. Turn compressor on to pressurize the ADS Unit. The regulator can be adjusted by lifting the adjustment knob to un lock it, Then turning it Clockwise to Increase Pressure or Counter Clockwise to Decrease Pressure. Once you have set it to your factory recommended pressure. The Adjustment Knob needs to be pushed down to Lock the regulator in place. Once you Set it you can Forget it.
- 3. The compressor should stop when the ADS is fully pressurized. When the compressor stops listen and inspect all connections for leaks.
- 4. If you think you have a leak spray mild soapy water at the fitting and look for bubbles.

Let your system sit for two minutes and note the tire pressure and compare it to your starting pressure

Deflation—

- 1. Connect your whips to all 4 corners.
- 2. Check your tire pressure on the ADS Controller
- 3. Open the Air-Down Valve on the ADS Controller to Deflate your tires. Once you have reached the desired pressure Close the ball valve and verify tire pressures on the ADS Controller gauge.
- 4. Remove your tire Whips and you are Trail Ready.



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UP DOWN AIR'S NO FINE PRINT 12 MONTH WARRANTY

Our unique warranty proves our commitment to the quality and reliability of every UpDownAir® product.

No Fine Print Warranty: If you are the original purchaser of any UpDownAir® product and it breaks, we will replace it.

UpDownAir's obligation under all warranties is limited to the repair or replacement, at UpDownAir's option, of the defective material. Any cost of removal, installation or reinstallation, freight charges, incidental or consequential damages are expressly excluded from these warranties. Up Down Air Systems, LLC reserves the right to make future revisions to this product and Product Warranty without prior notice or obligation to upgrade your product.

Please read all instructions carefully prior to beginning installation of your Up Down Air Systems, LLC. product.

PLEASE CONTACT US DIRECTLY FOR ALL WARRANTY ISSUES AT:

Toll Free: 883-226-4863 Email: info@UpDownAir.com

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