

GEN2 INSTALLATION INSTRUCTIONS

Part# 210-0717

Jeep® JK AIR IT UP® 4 Tire Inflation System with Front Mounted Controller (Requires External Air Source)





IMPORTANT INFORMATION- PLEASE READ FOR YOUR SAFTEY

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.

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

TOOLS NEEDED

- Cordless Drill
- 5/16" Drill Bit
- Thread Sealer (Loctite 577—We do not recommend using 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

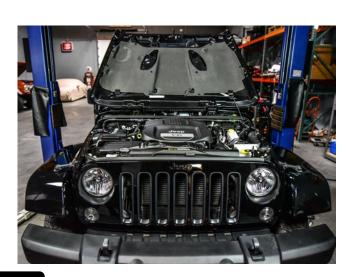
1/4" Drive

- 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.
- 4. Begin installation step 1





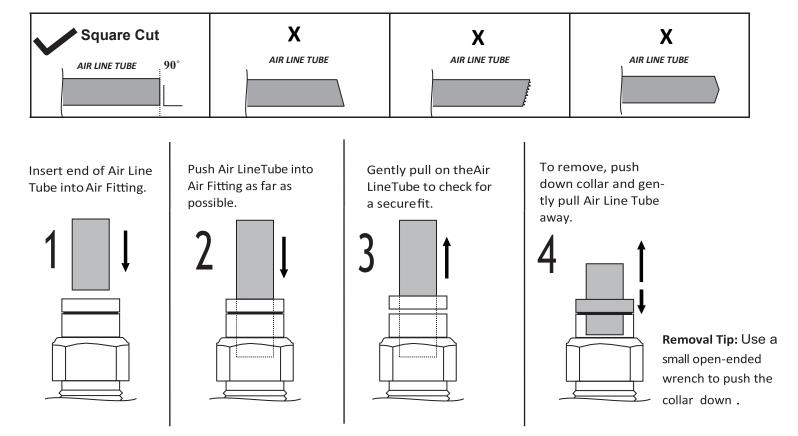
<u>Always:</u>

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

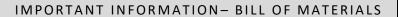


Always:

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.





		210 0717 Installation ROM
DADT#	OTV	210-0717 - Installation BOM
PART# 01-200	QTY 8	DESCRIPTION Quick Release Chucks with Betty Bar
02-208-153	4	3/8" Green Air Line 48"- For Tire Whips
02-208-133	4	3/8 Green Air Line 48 - For Tire Whips
210-0717-01	1	Jeep Front Mount ADS Controller - 80psi
01-201	4	Body Mount Schrader Valve - Push to Connect
05-133	4	1/4" Flat Washer
01-210	2	3/8" X 3/8"" Push to Connect "Y"
01-105	1	3/8" Push to Connect "T"
05-115	10	8" Cable Tie
05-117	4	Vinyl Cap
'-		
02-208-231	2	3/8 Black Air Line 91" - 3/8" "Y" to Rear Body Mount Schrader Valve
02-203-229	2	3/8 Split Loom 90" - Cover for 02-208-231
'		
02-200-41	2	3/8 Black Air Line 16" - 3/8" "Y" to Front Body Mount Schrader Valve
02-203-39	2	3/8 Split Loom 15" - Cover for 02-200-41
	•	
02-02-73	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
		<u> </u>
02-102-157	1	3/8" Black Air Line 62"- Firewall Crossover to "tee" 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
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Overview

The following illustration (Figure 1) will give you an overview of how the Up Down Air® air delivery system works. The illustration will not only help understand how the system works, but also help you identify the parts for installation. Please note that the illustration is not to scale.

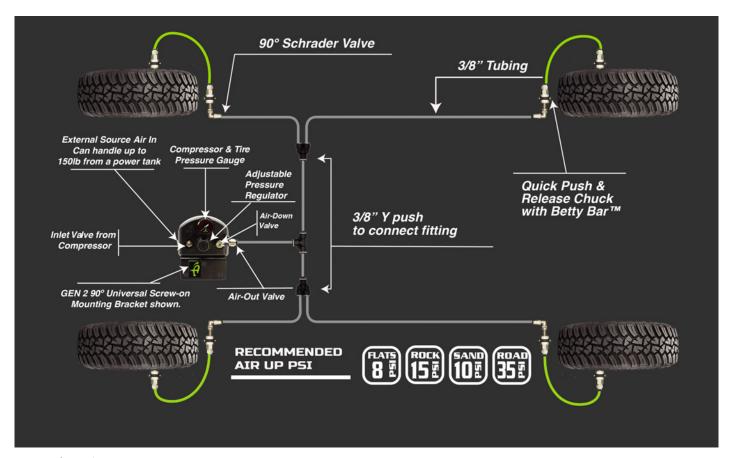


Figure 1



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 insert the whips hose into the Quick Disconnect Chucks.

1. Insert the green air line into the each end of Quick Disconnect Chuck . Repeat for all.







Our next step is to assemble all the air lines that install in your Jeep. We will start with the 3/8" air line assemblies. Gather all the 3/8" black air line, split loom, Body Mount Schrader Valves and "Y" connectors.

- 1. Put one 01-201 (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" and 28" air line into the "T" connector making one long piece
- 3. Install the 17" air line in the perpendicular port of the "T" connector.



SCHRADER VALVE PLACEMENT-FRONT



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 front wheel well locate a spot on the inner fender well closest to the firewall.

- On 13-up locate in the rectangle recess.
- 07-12 anywhere that the tire will clear under full lock.

Drill a 5/16" hole. Repeat on the driver's side.









<u>Mounting option with factory side steps -</u> Your hole must be located as low as possible on the pinch weld just above the bend.

Starting with the rear of the Jeep locate the spot weld on the passenger 's side rear body seam. Drill one 5/16 hole as low a possible.

Repeat on driver's side.



<u>Mounting option without factory side steps -</u> Starting with the rear of the Jeep locate the spot weld on the passenger's side rear body seam. Drill one 5/16 hole making sure the leave enough material to hold the Schrader valve.

Repeat on driver's side.





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

- (2) 3/8" Front to Rear "Y" sections with Schrader valves attached (91")
- (1) 3/8" Firewall Cross-over with 3/8" "Tee" attached (85" + 28")
- (1) Cross-over "T" to ADS Control Unit (18")

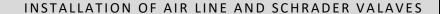
First, lay in the 3/8" firewall cross-over section. You will want it to follow the factory wiring harness along the top of the rear fire wall. Insert the end without the "T" in the corner gap between the battery and the intersection of the firewall and fender on the passenger side. Next run it all the way over to the driver side placing the end with the "T" in the corner gap between the brake booster and the intersection of the firewall and fender on the driver side. The "T" will end up over the brake booster. Do not fasten it in place yet.













Next we will install the passenger side air line with the body Schrader's attached.

First select one of the *3/8" Front to Rear "Y" sections with Schrader valves attached* 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 until it is visible and accessible to the "Y" and connect.







Next install the passenger front Schrader into the 5/16 hole you drilled in the inner fender liner. Install washers and nut and tighten with 13mm socket.







Now take the long air line going to the rear of the passenger side and run it along the top of the frame rail behind the body mounts.







Next install the passenger rear Schrader into the 5/16 hole you drilled in the pinch rail. Install nut and tighten with 13mm socket.



Now you can pull the slack from the firewall cross-over tube back up into the engine compartment. Repeat on the driver side.

Tie Wrap the rear air lines to the harness that runs the length of the frame rail on the top side

in three spots.



Install the short 3/8 tube from the center of the "T" and run it under the horn and set it by the abs unit.





INSTALLATION OF FRONT MOUNT ADS CONTROLLER

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

Remove two fender 6mm bolts and the 6mm ground wire nut using a 10mm wrench.







Connect the 3/8 air line from the firewall cross-over to the ADS Controller.





Install the tire setter to your Jeep body and reinstall all 6mm fasteners. Be sure the reconnect the ground wires on the lower stud before tightening the lower nut. Be sure to pull the tire setter up and back to gain as much clearance from the ECU wire and the ABS brake lines.





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

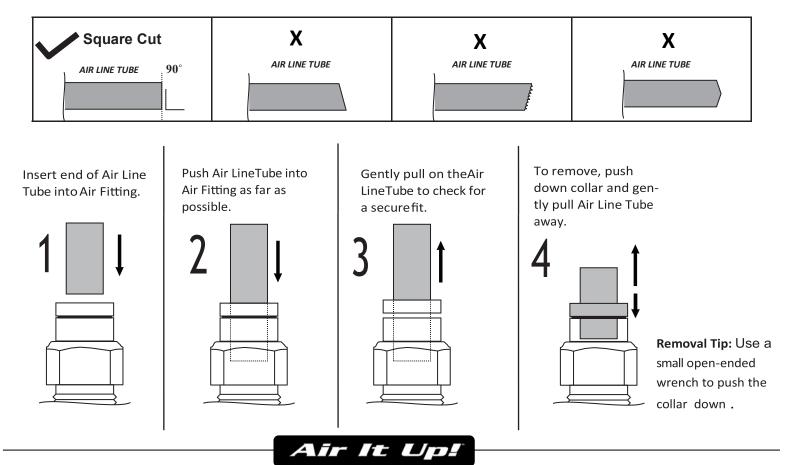
Please preform the following tests.

- 1. Connect all your tire whips to the Body Mounted Schrader valves and the tires. Note the tire pressure on the ADS Controller gauge.
- 2. Listen and Inspect all connections for leaks.
- 3. If you think you have a leak spray mild soapy water at the fitting and look for bubbles.
- 4. If you find a leak. Please refer to our trouble shooting section.

Let your system sit with all tire whips connected for two minutes and note the tire pressure and compare it to your starting pressure.

If you have had no pressure drop you are good to go.

PROPER AND IMPROPER CUTS IN THE AIR LINE TUBE

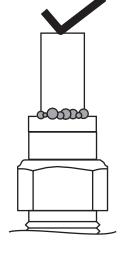




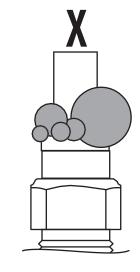
LEAK INSPECTION

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.



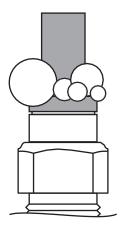
SMALL SOAP BUBBLES THAT DO NOT EXPAND



SOAP BUBBLES THAT EXPAND

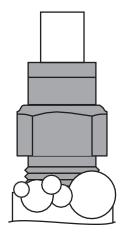
LEAK CORRECTION

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.

Air It Up!

LEAK OUT OF THE VALVE CORE
ON INFLATION VALVE



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



Congratulations!

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

WARNING: YOUR REGULATOR HAS NOT BEEN PRESET FROM THE FACORY, AND MUST BE SET AFTER INSTALLATION.

How To Use Your **UP Down Air®** Air Delivery System.

Airing down your tire pressure.

While the vehicle is parked and in a safe place, connect all 4 quick connect hoses to your tire valve stems and to the installed 90° Schrader valves.

In the engine bay, go to the controller box. On the right-side controller box is the release valve lever. Open the release valve and now you're airing down all 4 your tires at the same time. Close the valve and it will now read your current tire's air pressure. *It's That Simple!*

*The first time you air down your tires, keep track how long it takes so you are able to set a timer next time you air down your tires.

Checking and Setting your Tire & regulator pressures or airing up your tires.

This is how the system works for airing up:

Our ADS System uses a simple dial type pressure regulator that can be adjusted to allow more or less air in the system by turning the black regulator knob *clockwise* to release the air or *counter-clockwise* to reduce the air pressure.

With your green Quick Connect hoses completely removed, turn the compressor on, and within 10 seconds the compressor should come to a stop or turn on & off. The pressure gauge needle will show the pressure from the compressor. This is how you dial the regulator in to set your desired Tire Pressure. You should now push the knob down to set it.

In order to fill all 4 of your tires you will need to tightly connect all 4 quick connect hoses to your tires valve stems and to our special 90 °Schrader valves stems. To insure there are no leaks, please rotate the chucks a quarter turn clockwise to create a tight seal to the valve stems.

FINAL INSTALLATION INSPECTION



Now after connecting all 4 of the quick connect hoses to the valve stems and the Schrader valves, the gauge dial needle will now reading the pressure from all 4 of the tires. At this time, you may start your engine and turn the compressor on.

While your compressor is connected and turned on, along with your vehicle being started, start turning the dial *clockwise* to allow *higher* PSI. Turn the dial *counter clockwise* to *lower the* PSI.

When the compressor pulsates or turns on and off, and you are not at your set tire pressure, then immediately turn black knob clock-wise to allow air to escape into the regulator lower chamber. This will re-activate the ARB compressor, and as you turn the dial, you will notice the compressor speeding up.

If your tires are at the desired pressure, you may now turn your compressor off and safely store your hoses with the convenient storage bag provided.

Do Not your let the compressor cycle on and off, as this means your ARB compressor is not supplying any more airflow, so the compressor is not producing any further air at this time and should be turned off immediately to avoid blowing fuses. If you're ARB compressor blows a fuse or suggestion is go to an auto parts store and buy name-brand 50 AMP fuse as the ARB seems to be equipped with a lesser quality fuse.

We sure hope you enjoy your system our goal is to offer a trouble-free easy to use products.

