

# **INSTALLATION INSTRUCTIONS**

Part# 22-7810

Add On Kit for Your ADS System Contents: Complete Install Kit for Your ARB CKMTA12V Compressor







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, DAMAGE CAN OCCUR.

# This bracket kit will not work with upgraded brake booster!

### **TOOLS NEEDED**

- Cordless Drill
- 3/8" and 7/32" Drill Bit
- Thread Sealer (Loctite 577—We do not recommend using Teflon tape)
- Spray Bottle with Mild Soapy Water
- Phillips Head #2 Screw Driver

### WRENCHES

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

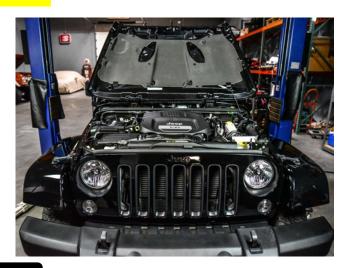
#### 1/4" Drive

- Ratchet
- 10mm Socket
- 8mm Socket
- 1/4" Allen Socket
  - \* 9/16" special 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.

- 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.
- Read and refer to your ARB instructions for all issues directly related to your ARB compressors. UpDownAir warranty does not cover any ARB Compressors or parts.







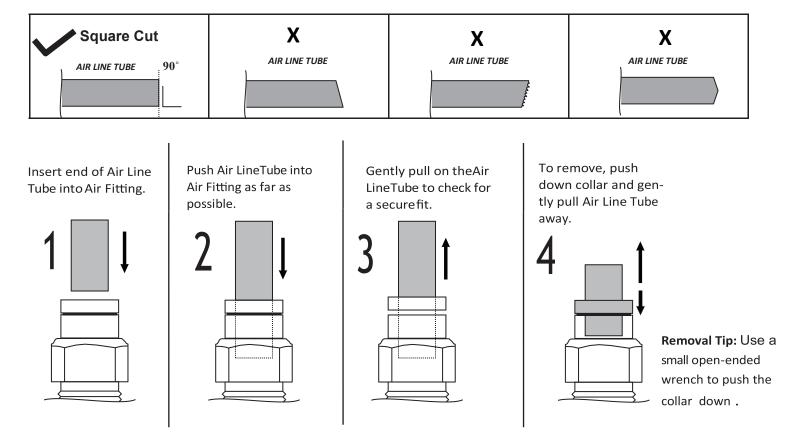
## <u>Always:</u>

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

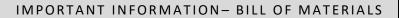


### Always:

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.







22-7810 - Install Kit System for ARB®CKMTA12			
NEW PART#	QTY	DESCRIPTION	Notes
01-112	2	3/80D X 1/4NPT (MALE) Swivel 90 All Metal	
02-113-60	1	3/8 OD High Temp Tubing Manifold to Contoller	Cut Piece
03-522	1	ARB Jeep Under Hood Mounting Brkt	
03-528	1	Rectangle SS Flat Washer	
05-115	2	8" Cable Tie	
05-121	2	1/2" X 5-3/8 Tube	
05-122	1	5/16" Cone Spacer	
05-123	1	3/8" X 3/4 Cap Screw	
05-124	3	3/8" X 3/4 Bolt	
05-125	3	3/8" Lock Washer	
05-126	3	3/8" Flat Washer	
05-127	2	1/4" 3/4" Bolt	
05-128	2	1/4" Stover Nut	
05-129	4	1/4" Flat Washer	
05-130	4	6mm X 16mm Bolt	
05-131	4	6mm Lock Washer	
For Kit Part Number 12-6717 - Use 22-7810 and add CKMTA12V			
CKMTA12V	1	ARB 12V Dual Compressor	



## 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, and may contain part numbers that are not applicable to your installation.

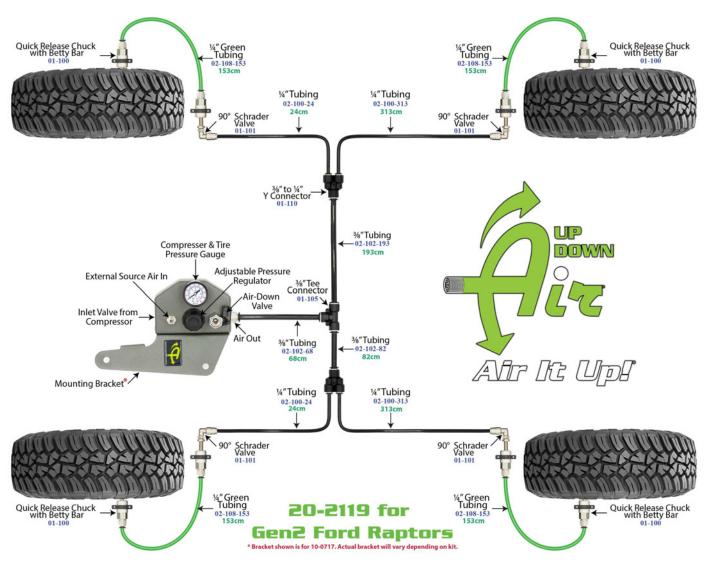


Figure 1



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Using the Bill of Materials identify and lay out all your kit components confirming that you have all the correct parts and quantity. The 22-7810 Bracket is designed to fit 2007-2018 Jeep JK/JKU Wranglers, and will accommodate the sPOD box.

## Step 1A: IF you have a 2015 JK and up, PLEASE READ THE FOLLOWING!

In mid 2015, Jeep made a design and routing change to their air conditioning line. In earlier models, one of the two lines drops down and goes below the brake booster. In newer models (2015 and up) both A/C lines stay on top, and without the following relocation of the A/C line, they will interfere with the ARB compressor.





Move the smaller A/C line to the inside by removing push in keeper (re-use). Bend small tab on bracket down. Insert bent tab into original hole and push in new keeper.





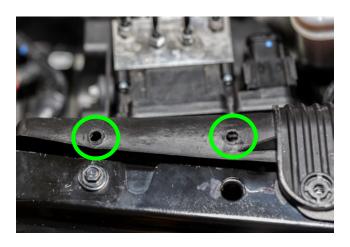
Use the angle bracket to move the A/C line to the inside toward the motor.

KIT LAYOUT AND PRE-ASSEMBLY

For our next step we will mark the holes in the ABS manifold tray that will need to be drilled.

- 1. Install the 2 long tubes to the compressor mounting plate
- 2. Set the plate in place and mark 4 holes with a sharpie.
- 3. Drill the holes in the **bottom** of the tray with a 3/8" bit and the **top** of the tray with a 7/32" bit.







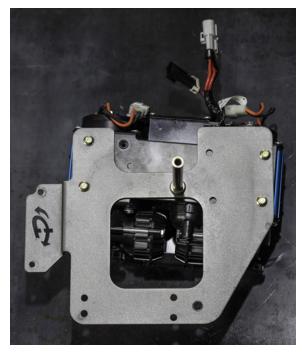
Remove the forward tube from the mounting plate and install it in the front hole in the ABS tray using the 17mm bolt, washer and rectangle plate.



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Set the compressor on the mounting plate and install the 6mm hardware.



Now set the compressor with the mount attached into the appropriate location Now you will attach the remaining stilt to the plate using the supplied hardware. Underneath the wheel well behind the inner fender fasten the remaining stilt to the jeep. Next attach the upper side bolts to the ABS tray.





To make things easier you can insert the handle of the screw driver between the fender and ABS tray to allow for easier access to the upper nuts and bolts. Install and tighten the 6mm nuts and bolts.





Next tighten the forward stilt to the compressor plate.

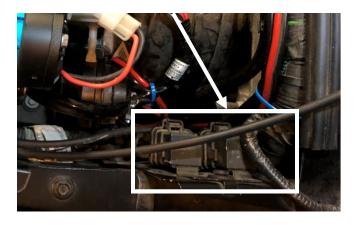


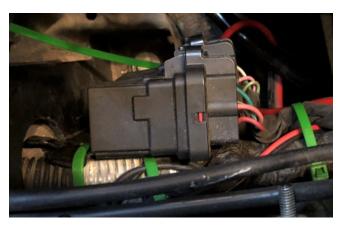
Use directions from pages (9-10) and Add the the 90 degree swivel in the controller housing Install high temperature hose

Wire compressor using ARB instructions.



For installation of rear mounted controller (69-0717) you will need to re-locate your factory <a href="High note horn">High note horn</a> and <a href="OEM relays">OEM relays</a>. Your first step will be removing the relays mounted on the driver side fender near the firewall





Start by removing the plastic push rivet that holds the 2 relays in place. Once rivet is removed you will move the relays further down and secure to the factory jeep wiring harness with a zip tie so that it is out of the way.

<u>Horn re-locating-</u> We can now start relocating the high note horn. Begin by unplugging the horn and removing the bracket that holds the horn (10mm) remove the horn from bracket and attach bracket to the stud next to the brake booster shown in pictures below.

(your jeep comes with 2 separate horns. Removal of one can be done to avoid the next steps and you will still have functioning horn)

Before attaching, drill hole in bracket to mount horn.

Use an M8 1.25 nut and lock washer to attach the bracket to the firewall stud.



Once bracket is in place you can now attach your horn in the new location. You will need to extend the factory wires or just make a jumper cable to make up for the length change in the new location



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 you are 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 You can now hook your high temperature hose from the compressor to the new 90 degree swivel



In this kit we supply a bracket to mount your ARB compressor rocker switch in the engine compartment for easy use with our system. The location to mount is universal but here is a suggested mounting location.



You will need to put the switch bracket in a bench vice and bend a 90 degree angle for this option. Use the mounting hole where we removed the factory relays on page 8 section 3.



Your final setup should look like the picture above





# 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.

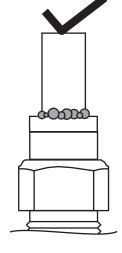




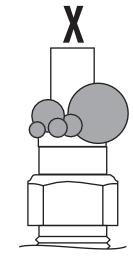
# **LEAK INSPECTION**

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.



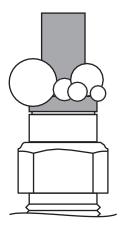
SMALL SOAP BUBBLES THAT DO NOT EXPAND



SOAP BUBBLES THAT EXPAND

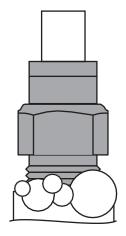
## **LEAK CORRECTION**

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.