

IJKP-34 / Installation Instructions

Bluetooth Conversion Kit for IJKP-24 (4-Tire Air System Jeep JL Unlimited / JL / JT (2018 - Present))

Made in USA

Kit Contents:

- 1 ARB Pressure Control Kit
- 2 Seat Brackets (for Air Line Bulkheads)
- 2 Air Line Bulkheads
- 4 M6x16mm Button Head Bolts / Nuts
- 1 90° Elbow Fitting
- 1 Male Straight Fitting (Pipe Thread to 3/8" Tube – Pressure Control Input)
- 1 90° Elbow Fitting (Pipe Thread to 3/8" Tube – Pressure Control Output)
- 1 Union Tee Fitting
- 1 4-inch section of Black Air Line Tubing (Pressure Control Output to Union Tee)
- 1 15-inch section of Black Air Line Tubing (Union Tee to Passenger Side Seat)
- 1 17-inch section of Black Air Line Tubing (Compressor to Pressure Control Input)
- 1 36-inch section of Black Air Line Tubing (Union Tee to Driver Side Seat)

Tools Required:

- Drill / 1/4" Drill Bit
- Ratchet
- Extension
- T-50 or E-12 Torx
- 4mm Ball Head Allen (long socket type ideal)
- 10mm Wrench
- 2.5mm Allen Wrench

Other items that may be required (not Supplied):

- 22-18 Gauge (Red) Butt Connectors and/or Materials for Soldering Connections
- Cable Ties

STEP 1 – Compressor and Pressure Control Manifold Preparation

- 1-A) Using a T-50 or E-12 Torx remove the 2 rear bolts that secure the passenger seat. Then disconnect the black air lines at the compressor / passenger seat by pushing on the ring on the fitting to release the tubing (same way you do to remove your air line sets from the seats). Unplug both electrical connectors from the compressor. Push up on the rear of the seat and slide out the compressor assembly and set aside. Slide the seat all the way back, and tilt back section all the way forward. Then remove the 2 front seat bolts and lean the seat backwards (**Figure 1**). There will be one or more harnesses attached to the bottom the seat. They do not need to be removed or disconnected.

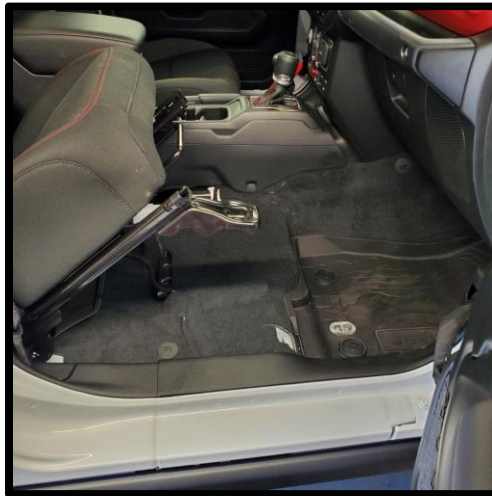


Figure 1

- 1-B) Insert an open end 10mm wrench into the slot on the top of the compressor and loosen the bolt on the end of the manifold (just enough to allow the end cap to rotate). Rotate the tee fitting to the top and remove it. Replace it with the provided 90° elbow fitting. Tighten the fitting to ensure a good seal. Rotate the fitting as far over as possible (**Figure 2**), then retighten the bolt on the manifold. **This step is really important since seat clearance is very tight. Get the fitting over as far as possible!**



Figure 2

- 1-C) Inspect the left compressor bracket for two (2) 1/4" holes as shown below. If not present, remove the bracket piece and you will have to drill two (2) 1/4" holes at the locations dimensioned in **Figure 3**. If holes are already present, proceed to **Step 1-D**.

Note: The shape of the bracket may vary slightly depending on your version.

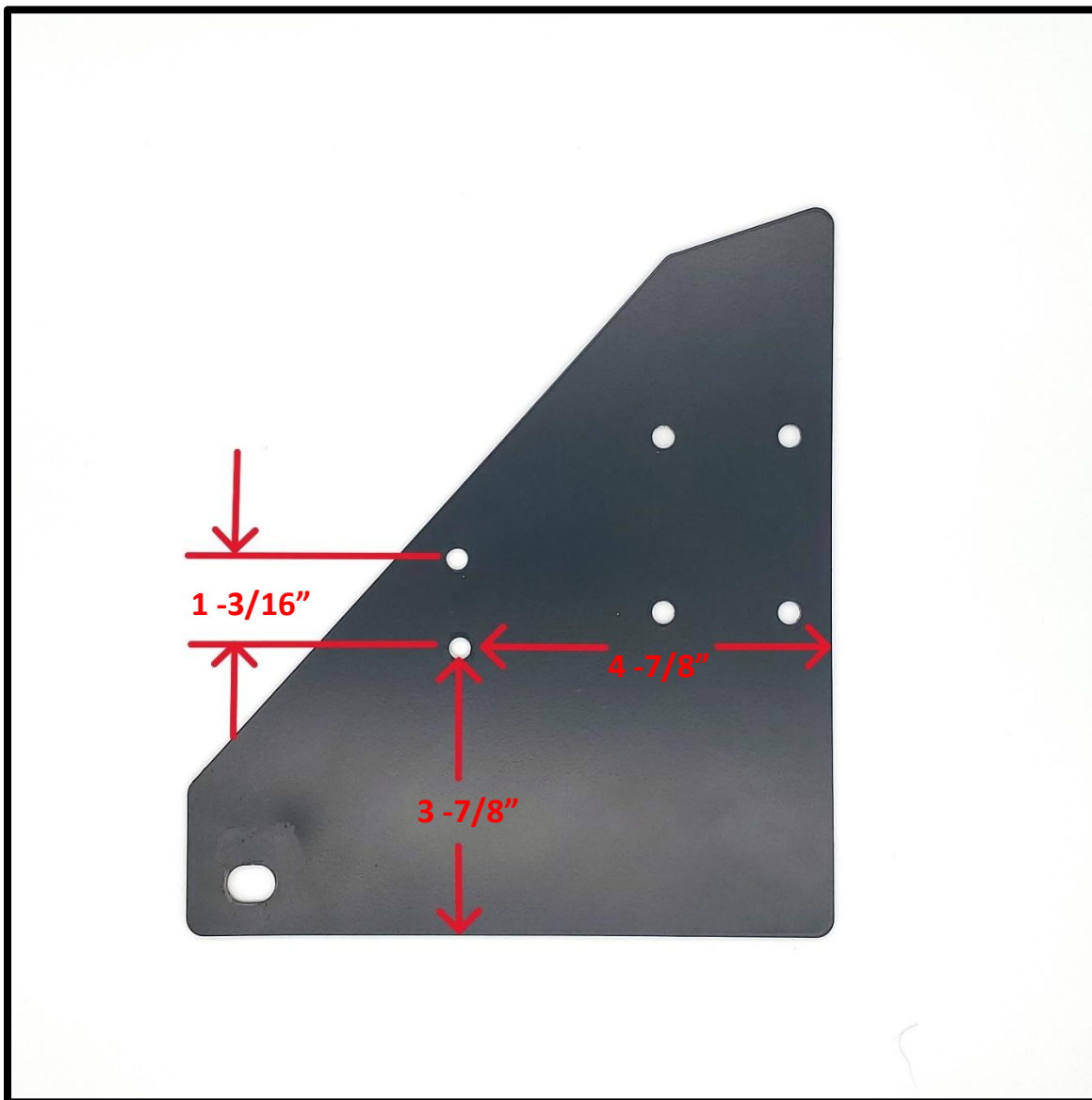


Figure 3

- 1-D) Open the ARB Pressure Control Kit and remove the valve assembly. Disassemble as shown in **Figure 4**. Loosen the cap on top of each solenoid and take note of the O-ring under each cap. Be careful not to damage them as you slide the solenoids off the posts. Each solenoid can be interchanged between the posts (they are identical), but maintain orientation (i.e., the single blade connection is the cap / O-ring end). Remove the fitting from the input

port and the small “muffler” from the exhaust port. The fitting and “muffler” will not be reused.

Note: The “muffler” designed to reduce the noise of the air being released during an air down cycle. However, we have found it does restrict airflow and in turn increases the time to air down. We recommend removing it. The sound difference is minimal.



Figure 4

- 1-E) Remove the small silver bracket from the ARB Pressure Control kit and place on the valve assembly as shown in **Figure 5**. Then slide the solenoids back over the posts and re-install the O-rings and caps. Caps should be finger tight. The final assembly should look like **Figure 6**.



Figure 5

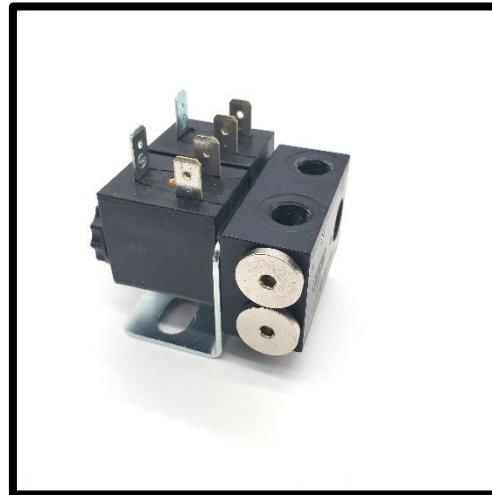


Figure 6

- 1-F) Remove the ARB pressure sensor from the ARB Pressure Control Kit and obtain the two fittings with the small pipe threads on one end (a 90° elbow fitting and a male straight fitting). Install all three (3) items as shown in **Figure 7**. Install the elbow first and tighten, then install the male straight and tighten,

and finally the ARB pressure sensor (note this has an O-ring for a seal so DO NOT apply any Teflon or thread sealant and only tighten finger tight). Both fittings have pre-applied Teflon thread sealant. For reference note the arrows on the valve assembly body. These indicate the direction of air flow. Both the ARB pressure sensor and the 90° elbow will be on outputs and the male straight is on an input. The silver caps on the opposite side seal the unused outputs and should come from ARB tightened (note these also use an O-ring to seal). Now bolt the assembly to the left half of the ARB mounting plate as shown in **Figure 8**. Be sure to insert the bolts from the bottom.



Figure 7

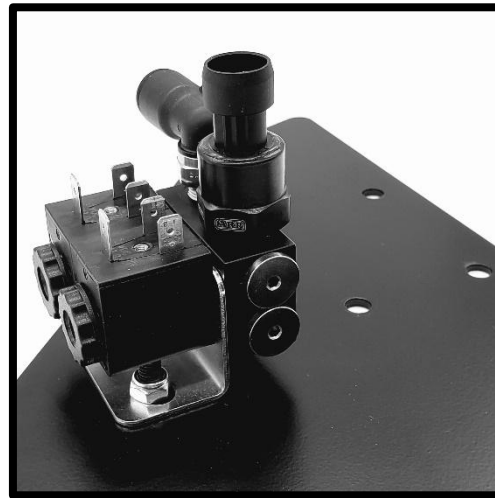


Figure 8

1-G) If removed, bolt the left bracket back to the compressor. Before tightening, ensure the two halves are parallel.

1-H) The final assembly should look like **Figure 9**. Set the assembly aside for now.

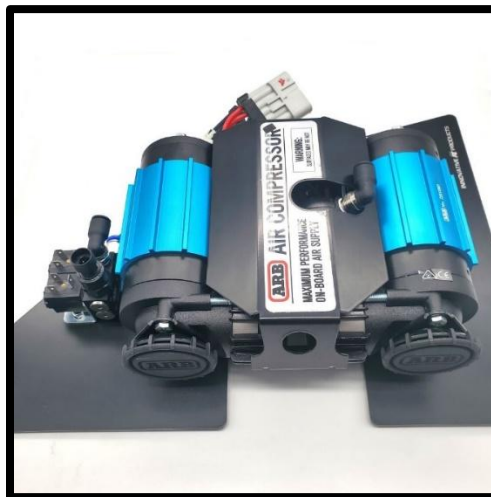


Figure 9

STEP 2 – ARB Assembly Placement and Connections

- 2-A) Carefully place the ARB assembly under the seat as shown in **Figure 10**. Plug in both the ARB main power harness and the ARB switch harness to the compressor.



Figure 10

- 2-B) Obtain the ARB pressure control module / wiring harness, plug the harness into the module, and use two-sided tape or equivalent to attach the module under the center console as shown in **Figure 11**. It sits between a stud to the rear and the heating / cooling duct. Once in place we recommend placing a piece of tape over the top that extends over the open area where the harness connects as shown in **Figure 12**. This will reduce any risk of damage to the electronics if your passenger spills something between the seat and console! The ground for the module (**black wire**) will have a brass ring connector. Attach to the stud circled in **Figure 12**.



Figure 11



Figure 12

- 2-C) Attach the three (3) plugs from the ARB pressure control module wiring harness to the valve assembly as shown in **Figure 13**. The plug with the purple wire must be attached to the solenoid directly above the exhaust port (this will be the solenoid towards the front of the vehicle). Bundle the wires over and use a cable tie to attach them to the upper fitting as shown in **Figure 13**. This will eliminate any risk of the wires catching on the bottom of the seat. Use a 2.5mm allen wrench to tighten the two small screws in the center of each solenoid plug.

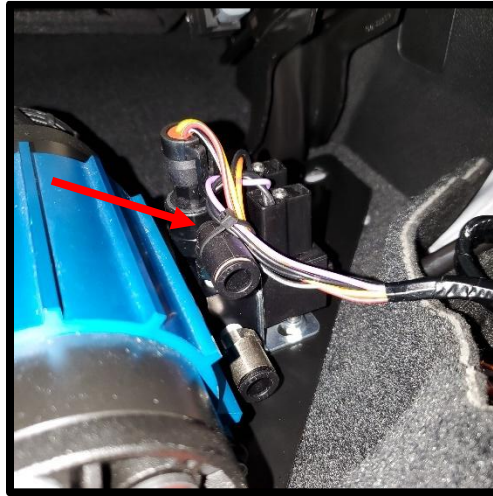


Figure 13

- 2-D) Connect the **red** wire from the ARB pressure control module harness to the same switch control that you currently use to turn on/off the compressor. Based on your setup, you will have to determine the best method / path.

2-E) Run the provided 36-inch section of black tubing under the center console through the area shown in **Figure 14** (this will replace the black tubing that is currently there). If you open the driver door to allow light in and come back to the passenger side, you will be able to see an opening to target. Connect the rest of the black tubing as shown in **Figure 15** per below (press the tubing in firmly until it bottoms out at each connection):

- 4-inch section – from valve assembly output (the 90° elbow fitting on top) to the center of the provided union tee fitting.
- 36-inch section – from under the console to the union tee.
- 17-inch section – from the compressor fitting to the valve assembly input (the male straight fitting on the bottom)
- 15-inch section – connect to the union tee and leave the other end loose for now

Note: The **red** tubing shown is for demonstration purposes only.



Figure 14

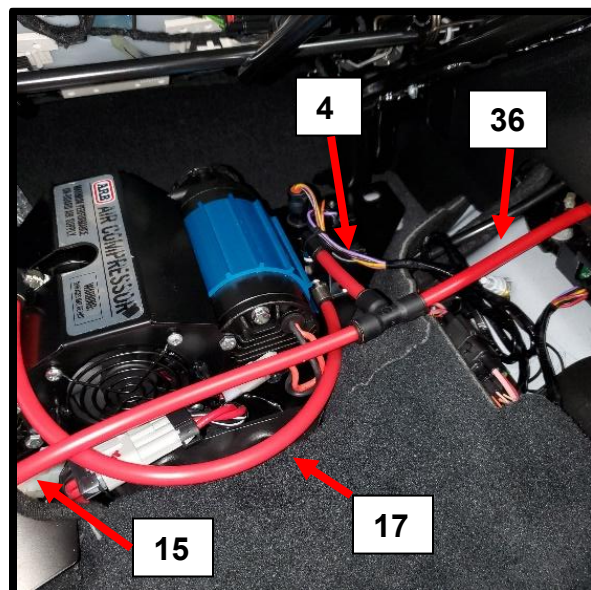


Figure 15

2-F) Now tilt the passenger seat back into position, reinstall the front seat bolts finger tight only. Move to the back of the seat and align the holes of the mounting bracket assembly with the holes for the rear seat legs (**Figure 16**). Reinstall the rear seat bolts finger tight only. Check under the seat for clearance and ensure there is no inference, or anything is pinched. Tighten all four (4) seat bolts starting with the front first. While looking under the seat slide the seat forward and back to confirm clearance once again.

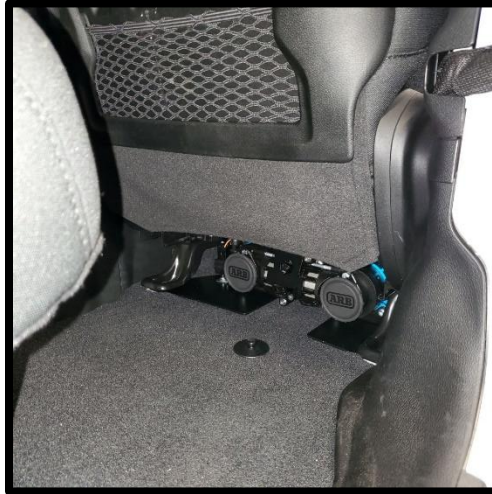


Figure 16

STEP 3 – Seat Brackets Installation

- 3-A) Skip to **Step 3-C** if you already have this style seat bracket. There is a driver and passenger side seat bracket. Install the provided bulkheads in each seat bracket as shown in **Figure 17**. Leave most of the bulkhead to the inside (for clearance and appearance).



Figure 17

- 3-B) Attach each seat bracket with the provided bolt and nut using a 4mm allen and a 10mm wrench or socket. There is a factory hole in the top of the seat frame rail. **Figures 18** and **19** show the passenger side. Repeat on the driver side.



Figure 18



Figure 19

- 3-C) Attach the black tubing left under each seat to each bulkhead on the passenger and driver side. Press the tubing in firmly until it bottoms out at each connection.

STEP 4 – System Check

- 4-A) Turn on the system. The compressor should run for a few seconds then shut off when it reaches the pressure safety switch built into the compressor, 150 psi. The system should be able to sit for a few minutes without the compressor cycling. If after a few seconds to a minute the compressor cycles, you will need to check for leaks. The first thing to check is the fitting in the compressor to ensure it is not leaking, then check the fitting on the input side of the valve assembly, and finally the tubing connection between each. Make sure they are tight and not leaking and tubing is pressed in firmly. Once everything is ok, TURN OFF the system.

STEP 5 – System Set-up and Use

- 5-A) Download the “**ARB Compressor Connect**” App available for iOS or Android. Sample screen shots shown below in **Figures 20 and 21**. The settings shown are just examples and not recommendations. If you select the gear icon, bottom right, it will bring you to the settings screen. From here if you select the “i”, upper right, it will bring to an information screen that provides all the details of the app.

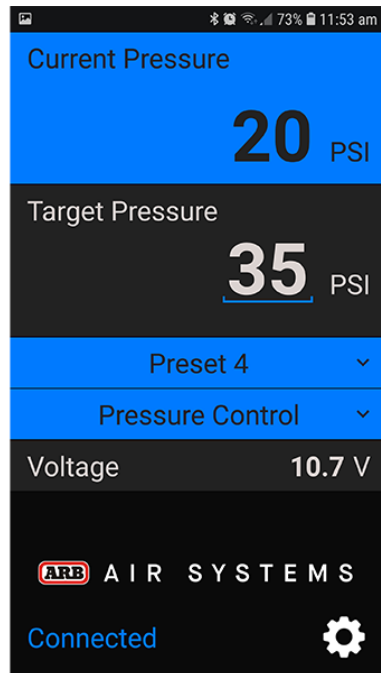


Figure 20

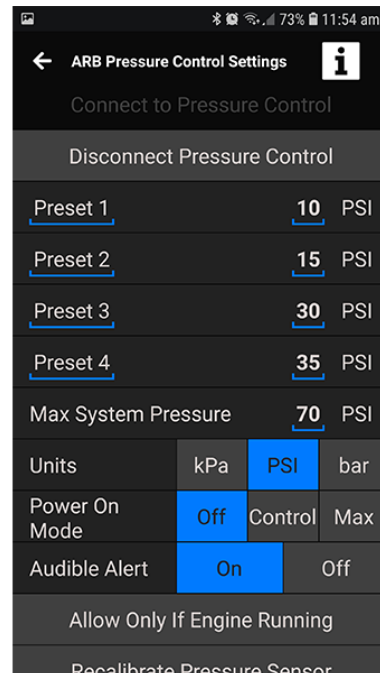


Figure 21

5-B) The following are some recommendations for the initial set-up. Bear in mind the recommended settings may need to be adjusted based on your vehicle weight, wheel / tire combination and conditions of the terrain. And the names for each preset can be adjusted to your preference.

- **DO NOT** use the “Recalibrate Pressure Sensor” function after installing the system. The pressure sensor is set properly from ARB.
 - This is only required in rare cases and if not done properly it will cause an incorrect pressure reading on the app resulting in the system not functioning correctly.
- **Read** the Quick Start Guide provided by ARB with the Pressure Control. It does have some helpful info and tips.
- Set the “Max System Pressure” to 90 psi.
 - There is no need to continually run the system at full pressure (150 psi). It can be adjusted later if needed.
- Change “Preset 1” to “Off Road” and set to your desired off road tire pressure.
 - This will be your air down to pressure for off-road conditions.
- Change “Preset 2” to “Road” and set to your desired on road tire pressure.
 - This will be your normal daily use tire pressure.

5-C) **System Use** – Airing down and up all 4-tires is simple with your new 4-Tire Air System.

Airing Down: Connect your two (2) airline sets to the passenger and driver side seat connections. Then hook the air chucks to each tire. The order does not matter. The Haltec air chucks clip on by pressing on the valve stem and then sliding the silver sleeve towards the wheel to lock it (note: the Haltec air chucks are shipped with the sleeve in the locked position, so you will have to slide the sleeve back for the first use). Once all tires are connected, turn **on** your system switch, open the app, select the “Air Down” preset or enter your desired pressure. Then select “Pressure Control” and the system will start airing down. Once complete, select “Pressure Off”. Turn **off** your system switch. Disconnect air chucks first then remove airlines from seat connections.

Airing Up: Repeat what was done above to connect everything and turn **on** the system. Select the “Road” preset or enter your desired pressure. Then select “Pressure Control” and the system will start airing up. Once complete, select “Pressure Off”. Turn **off** your system switch. Disconnect air chucks first then remove airlines from seat connections.

STEP 6 – System Tips

- 6-A) The last part in your parts bag should be a black plastic plug. Keep this somewhere safe in your Jeep. It is used to close off one seat connection if you happen to only be using one side (i.e., to fix a flat or air up another vehicle). **DO NOT store it in one of the seat connections.** It will get broken off!
- 6-B) If you have dual valves on your wheels, use the valve without the TPMS sensor. Deflation / inflation will be quicker.
- 6-C) The system is designed to be flexible in that you can air 1, 2, 3, or 4 tires at once since all the air chucks are self-sealing. Also, any of the four (4) airlines can also be used on their own. The same way you connect / disconnect the airlines from the seat connections, each airline can be removed from the splitter and plugged directly into either seat connection. This way you can use a single airline to fix a flat, air up a mattress, fill a bike tire, etc. (Check out [IJKP-32: Air Inflation Accessory Kit](#)). No need to carry a fifth single line since you have four to choose from.

Please contact info@innovativeATproducts.com if you have any questions or feedback.

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