

IJKP-30 / Installation Instructions

Air Locker Conversion Kit for IJKP-24 (4-Tire Air System Jeep JL Unlimited / JL / JT (2018 - Present)) Made in USA

Kit Contents:

- 2 Seat Brackets
- 2 Female Quick Couplings and Tube Bulkheads
- 2 M6x16mm Button Head Bolts and Nuts
- 1 14 inch section of Black Nylon Tubing (for Driver Seat Connection to Union Tee)
- 1 9 foot section of Black Nylon Tubing (for Manifold to Union Tee)
- 2 Y-Connectors and Male Quick Couplings
 - These will replace your current connectors on your airlines
- 1 Union Tee Fitting
- 1 Air Locker Manifold
- 1 90° Elbow Fitting
- 2 M5x40mm Socket Head Bolts and 1 Nut (for securing Air Locker Manifold to firewall)

Tools Required:

- Teflon Tape
- Drill
- 3/16" Drill Bit
- 13/64" Drill Bit
- Metal Plate
- Ratchet
- 8mm Wrench
- 10mm Wrench
- 11/16" Wrench
- 4mm Ball Head Allen
- Tubing Cutter or Knife

STEP 1 – Air Locker Manifold Preparation

- 1-A) Align manifold on top of firewall under hood on passenger side as shown in **Figure 1** (centerline of mounting holes aligned with edge of foam piece and towards front edge of body seam). Mark (use manifold as a guide) and drill the forward hole with a $\frac{13}{64}$ " drill bit and the rear hole with a $\frac{3}{16}$ " drill bit as shown in **Figure 2**. **IMPORTANT:** Place a metal plate or equivalent under the body seam you are drilling through to avoid accidentally drilling into the wiring harness located directly underneath! Take your time!

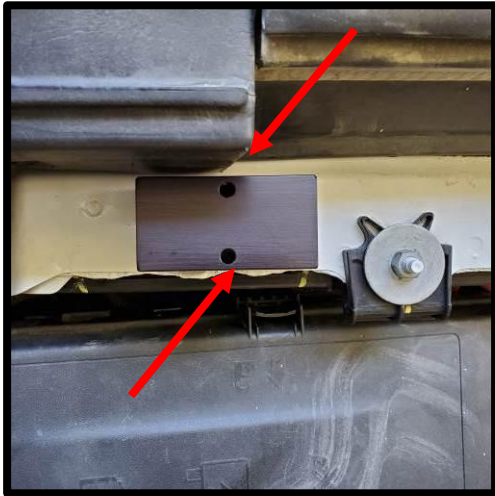


Figure 1

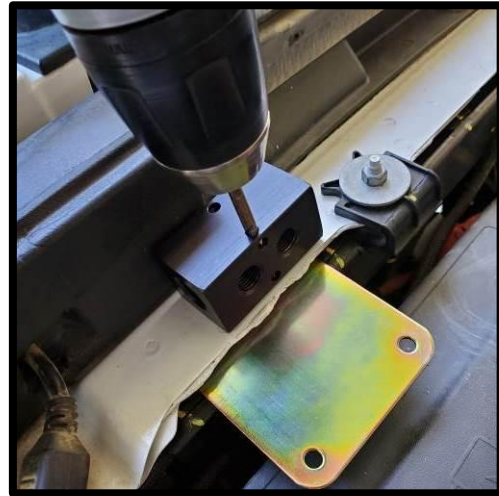


Figure 2

- 1-B) Install the air locker solenoids and elbow fitting onto the air locker manifold as shown in **Figure 3**. Use Teflon tape to seal all the threads (except the ARB supplied fittings with washers or o-rings). DO NOT use pipe paste or equivalent (the heat will cause it to break down and leak). Once tightened, both solenoids must be facing forward with the ARB banjo fittings on top.



Figure 3

- 1-C) Install manifold assembly onto the firewall as shown in **Figure 4** using one(1) M5x40mm socket head bolt in the rear hole and tighten carefully. No nut will be installed, it will just be threaded into the body seam. Install one(1) M5x40mm socket head bolt and nut in the forward hole and tighten.



Figure 4

- 1-D) Run your airlines from the locker solenoids to each axle. There are many paths they can be run to each axle. Use your best judgment to avoid kinks, pinch points, and high heat sources that could damage airlines.

STEP 2 – Seat Brackets Installation

- 2-A) Remove your existing seat brackets. Install the provided female couplers into the bulkheads (use Teflon tape on threads). Then install each bulkhead in each seat bracket as shown in **Figure 5** (it is important the seat brackets are oriented as shown).



Figure 5

- 2-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. **Figure 6** and **Figure 7** show the passenger side. Repeat on the driver side.



Figure 6



Figure 7

STEP 3 – Re-Plumbing System

- 3-A) Remove the plastic trim along the rocker panel on the driver side. To do so, you will need to first remove the access panel to the door wiring harness plug (see **Figure 8**). Once removed, pull the plug assembly off (you do not need to separate the plugs, just disconnect from inner footwell). Use a 10 mm socket to remove the retaining nut (see **Figure 9**). You will then be able to remove the trim piece. Start at front, up in footwell. There are three clips holding in place on backside that will come loose by pulling trim piece in towards center of Jeep. The rear section can be unclipped by pushing the rear part (near seam) towards center of Jeep.



Figure 8



Figure 9

- 3-B) Attach the 9ft section of black tubing to the elbow in the air locker manifold. Run it along the firewall as shown in **Figure 10**, through the lower plug hole next to brake booster as shown in **Figure 11** (it can be removed by pushing from the backside inside Jeep so you can drill a hole through it and then push back in place from under the hood), and along the rocker panel inside the Jeep as shown in **Figure 12**. As you run the tubing be careful not to kink it as you route it through the Jeep.



Figure 10



Figure 11

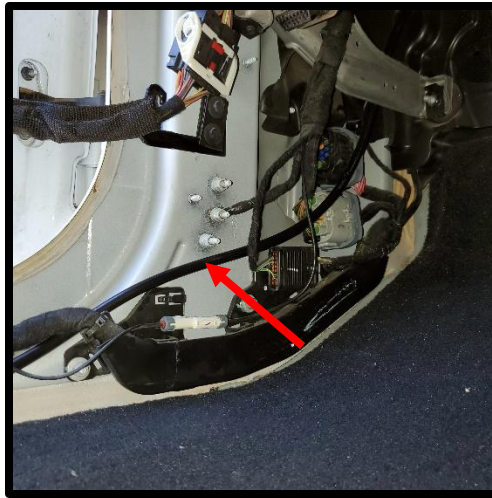


Figure 12

- 3-C) Starting at the air locker manifold assembly secure the 9-foot section of black tubing along the firewall. Where it passes through the plug in the firewall, it is recommended to seal the opening around the tubing. Leave the excess tubing under the driver seat and then replace the rocker panel plastic trim.
- 3-D) Attach the 14-inch section of black tubing to the driver side seat connection. Using **Figure 13** as a guide, attach the other end of the 14-inch section of black tubing to the center of the provided union tee fitting. You will then trim the 9-foot section (coming in from air locker manifold) and the black tubing from the passenger side to connect to the union tee fitting such that it is positioned as shown in **Figure 13**. **Note: Double check everything before making any cuts! Use a sharp knife or tubing cutter to make clean, square cuts of the tubing.**



Figure 13

STEP 4 – Wiring the Solenoids

There are a few methods described here depending on the method you plan to use to activate the solenoids. Please review each one to determine which one will work best for your application.

Method 1 – Switch Controller (i.e. sPod, SwitchPros, etc.)

Note: The ARB switch harness (the one with all the connectors) is not used for this method.

4-A) Follow the manufacturer instructions to connect each solenoid to your switch control system.

Method 2 – Z-Locker Controller

Note: The ARB switch harness (the one with all the connectors) is not used for this method.

4-B) Follow the manufacturer instructions for connections to your lockers. You will also need to connect the ARB **Black** and ARB **Purple** wires to your switch control system.

STEP 5 – System Check and Final Set-up

- 5-A) Turn on compressor. It should run for a few seconds then shut off (when it reaches the pressure safety switch built into the compressor). The system should be able to sit for a few minutes without the compressor cycling. If after a few seconds or even a minute the compressor cycles you will need to check for leaks. The first thing to check are the manifold and air locker solenoids to ensure there are no leaks where they connect to the manifold or any of the manifold fittings. Also check the fitting installed on top of compressor. Once everything is ok, TURN OFF the compressor. If you do find a leak, make sure you bleed pressure from the system first! This can be done by cycling one of your air locker solenoids a few times with the compressor off.
- 5-B) Install the male couplers onto the y-connectors (no Teflon tape required) as shown in **Figure 14**. Then swap these with your existing y-connectors on your airlines. If you have the Air Down / Air Up Tool (see [IJKP-18 Instructions](#)), it will need to be moved in line with either airline set as shown in **Figure 15**. Now that your system is “closed” to maintain pressure for the air lockers, it will exceed the range of the gauge (which is sized for tire pressures). The compressor will operate as high as 150 psi.



Figure 14

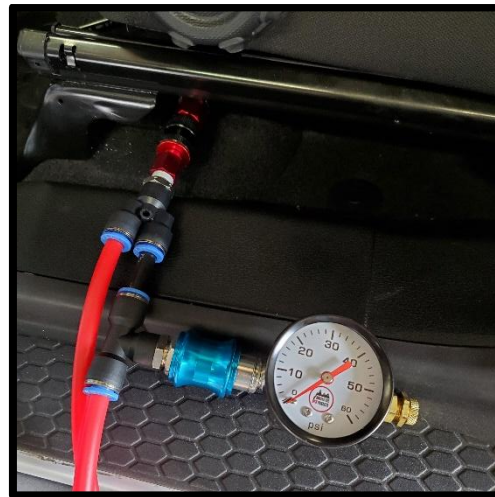


Figure 15

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

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