# **IJKP-8 / Installation Instructions**

Mounting Bracket Kit for ARB Twin Compressor (CKMTA12) Jeep JK 2-Door (2011 – 2018)

Made in USA

#### **Kit Contents:**

- 1 Flat Bracket
- 1 Formed Bracket
- 2 Plastic Push Pins
- 2 Bolts / Nuts
- 3 Wire Ties
- 2 5/16" Ring Terminals for ARB Harness to Battery (Red)
- 2 22-18 Gauge (Red) Quick Splices (1 Scotchlok / 1 T-Tap Set)

## **Tools Required:**

- Small Flat Blade Screwdriver or Metal Paper Clip
- Metal Rod and Tape (to help fish ARB wire harness through firewall)
- Drill
- <sup>1</sup>⁄<sub>4</sub>" Drill Bit
- 12" Extension with <sup>3</sup>/<sub>4</sub>" Step Drill (greatly eases ARB harness installation)
- Ratchet
- Extension
- 18mm Socket
- Breaker Bar
- Impact (optional)
- 10mm Socket
- 10mm Wrench

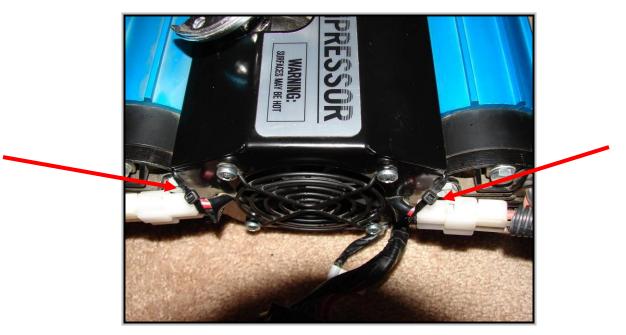


## **STEP 1 – Compressor / Wiring Preparation**

1-A) Follow the instructions provided with the ARB compressor to rotate the outlet as far to the left as possible. This ensures maximum clearance when installed under the seat. If using the ARB Tire Inflation Kit #171302, install the quick disconnect at this time and ensure it clears the compressor cover before re-assembling the compressor as per the ARB instructions. Or install your preferred connection at this time.



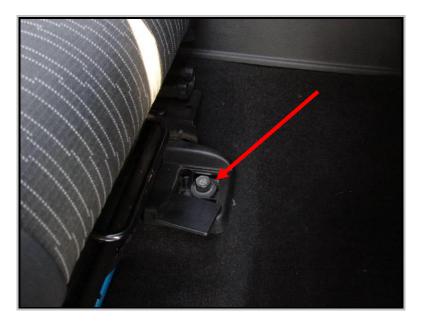
1-B) Use two of the provided wires ties to secure the main power plugs up against the compressor body and trim ends of wire ties. This is important for clearance as these wires will be close to the seat frame once the compressor is installed.



## **DISCONNECT YOUR BATTERY BEFORE PROCEEDING**

## **STEP 2 – Seat Removal and Preparation**

- 2-A) Slide <u>and</u> fold the passenger seat completely forward. Disconnect the yellow connector(s) under the seat. Also remove the one half of the yellow plug(s) attached to the metal plate under the seat. This is required to remove the seat from the vehicle.
- 2-B) Use a 18mm socket to remove the 4 bolts that secure the seat in the Jeep. You may need a breaker bar (or impact) to get these loose.



2-C) Find a work space to place the seat without damaging the fabric or leather and orient as shown below.



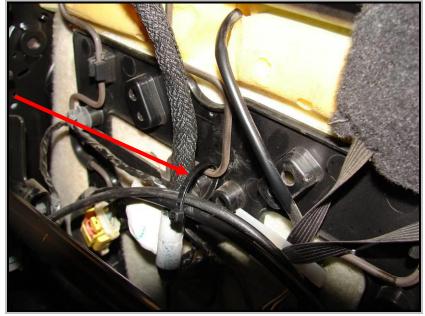
2-D) Use a drill to drill out the two rivets holding the metal plate on the bottom of the seat (on some models these may be screws, check first). You do not need to drill completely through. Just enough for the rivet heads to come off. Remove and discard, the plate is no longer needed.





2-E) Use one of the provided wire ties to secure the two black cables as shown below. Be sure to leave the wire tie loose as shown. The cables need to be free to move as the seat is adjusted. The wire harness to the yellow plug should be between the two cables and the bottom of the seat as shown in second picture.



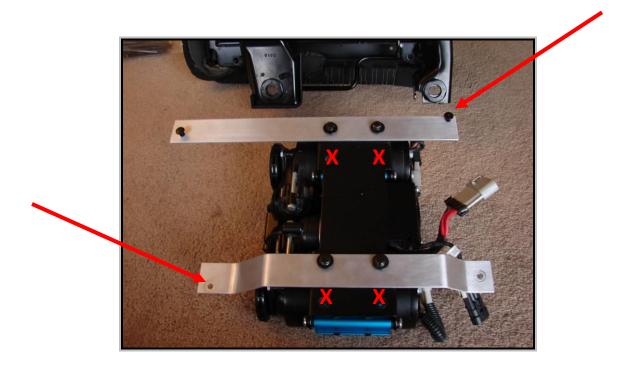


## **STEP 3 – Compressor Installation**

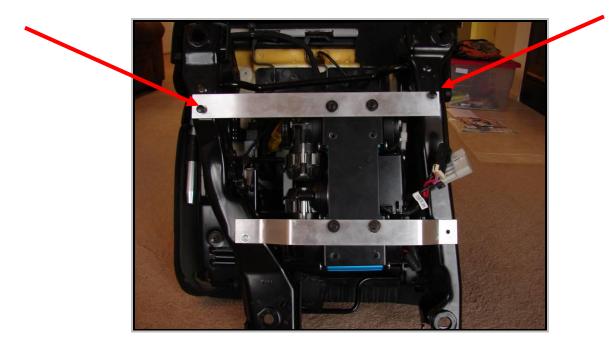
3-A) Orient the compressor upside down with the electrical plugs to the right as shown below. Place the two supplied plastic push pins partially into the flat bracket and then place the flat bracket on the compressor (using the two upper most holes) and finger tighten in place with the bolts supplied with the ARB compressor. Ensure the flat bracket is oriented correctly (plastic push pin on the right should be in the upper right corner and the longer side of the flat bracket should be on the left).

Place the bent bracket on the compressor and finger tighten in place with the bolts supplied with the ARB compressor. Ensure the bent bracket is oriented correctly (bends go down towards work surface and hole on left should be in lower left corner).

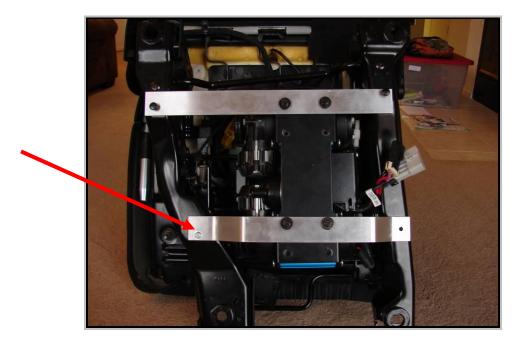
Note: Holes on compressor marked with an X are not used.



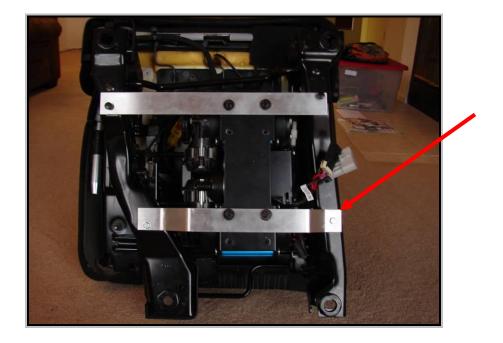
3-B) Use the flat bracket as a guide to locate the plastic push pins into the factory holes in the seat frame. Use a hammer to tap the plastic push pins firmly into the flat bracket and into the seat frame.



3-C) Use one of the supplied bolts and nuts to secure the left side of the bent bracket to the seat frame using the factory hole. The nut should be on the top side of the seat frame.



3-D) Use the hole in the right side of the bent bracket as a guide to drill a 1/4" hole into the seat frame. Use the remaining bolt and nut to secure the right side of the bent bracket to the seat frame. And finally, tighten the 4 bolts to secure the compressor.

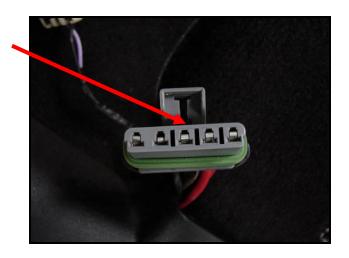


3-E) Once installed it should look like this as viewed from the top:



## **STEP 4 – Wiring Harness Installation**

4-A) Locate the 5-pin plug on the large ARB wiring harness (NOT the 5-pin plug on the compressor). Remove the plastic retainer from the back of the plug. This will allow the wires to be removed from the plug. Using a small flat blade screwdriver, or a paperclip, insert it into the <u>smaller side</u> of each metal connector and pull out the wire from the back of the plug at the same time (there is a metal tab that locks each connector in place and the screwdriver will temporarily unlock the connector so it can be removed). Make sure you note the order! Removing the wires from the plug allows the wires to be passed through the firewall later.



4-B) Remove the rocker panel on the passenger side. Pulling up on the panel near the push pins (2) will help release the pins (2) and then the panel. Up in the footwell, the panel must be pulled towards center of vehicle to release it. Then remove the side panel from the dash on the passenger side. A small flat head screwdriver will help get it started. It can then be pulled off.



4-C) There are two ways to do this step.

<u>Simplest</u> - Using a 12" extension and  $\frac{3}{4}$ " step drill to open the hole in the firewall that runs into the engine compartment that is filled with expanding foam (see first picture at bottom of page). The  $\frac{3}{4}$ " drill will go through the foam quickly and then ease into the firewall portion since the hole is not round. Once the hole is opened up to  $\frac{3}{4}$ " you can pass the entire ARB harness through in one shot by attaching a metal rod and pulling through.



Harder (if tool not available) - This method will take patience. Use a metal rod to punch through the foam and sealing tape on back side of the hole through firewall. Pull the black sheathing back on the ARB wiring harness to expose about 3 feet of the harness near the end with the metal connectors you removed in Step 4-A. Starting with the three (3) black wires, use tape to attach the ends to the metal rod and pull them through the firewall. Repeat the process for the two (2) red wires. DO NOT try and do all five (5) at once. Now pull the sheathing up the harness so you have about 1 foot that is smooth (not bunched up). Secure the sheathing to the wires with tape (electrical tape is preferred) wrapping tightly. Use a set of pliers to squeeze the bundle into a flatter shape (a large round bundle will not fit through the flat shaped hole under the cowl). With a little finesse you can get the wire harness / sheathing through the firewall by working it back and forth. Once through, pull the sheathing up the harness again to cover the wires and then the whole harness should move easily through the firewall to adjust as needed.



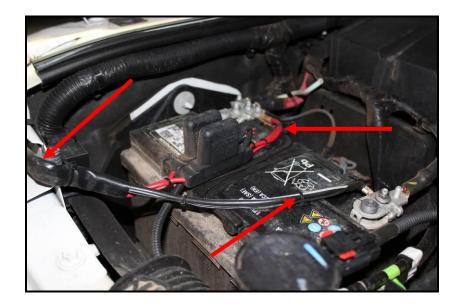


4-D) Run the ARB wiring harness down along the dash and along the rocker as shown below. You can run the harnesses directly behind the door strap hook (i.e. between hook and body). It will give you a little extra harness to work with at either end. Reinstall the metal connectors into the 5-pin plug in the correct order you noted in Step 4-A. If you forgot, you can always match up against the connector on the compressor. This must be done before attaching harness to the battery in the next step! Now run the long ARB wiring harness (the one with a plug on one end and 4 wires on the other end) in reverse along the large ARB harness before reinstalling the panels. There are extra connections for an airlocker. Just tuck these away. Run the remaining harness up behind the glove box (remove glove box for access) and leave there for now.





4-E) Go back to the engine compartment and attach the ARB harness to the battery. Both positive wires (red) should be placed in one of the provided connectors. Crimp and use a heat source to seal. Attach to positive terminal of battery. Use the second connector to connect both negative wires (black) to the negative terminal of battery. Make sure the wires are secure and run in a fashion not to interfere with anything.



4-F) Reinstall the side panel and rocker panel and position the two harness plugs as shown below.



5-A) Reinstall the seat and torque the 4 bolts to manufacturer specifications (45 ft-lbs). Attach harness to compressor. Side panels are removed from the seat frame in picture below just for demonstration purposes.

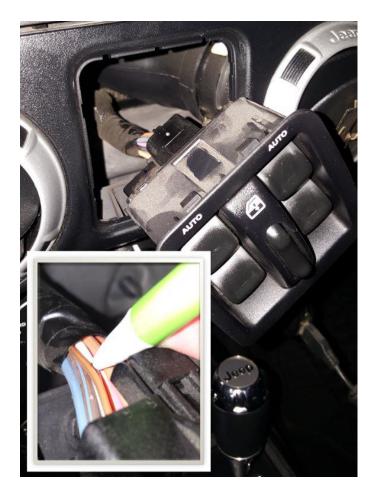


5-B) Reconnect yellow plug under seat. While looking under seat, check for clearance on wires, cables, plugs, and compressor as the seat is moved forward and back and folded and tumbled.

- 6-A) Follow the ARB instructions to complete the wiring. Also provided below are some tips to help with Jeep specific connections.
- 6-B) Now go back to the harness behind glove box. Follow the ARB instructions to connect the ARB switch harness (the one with all connectors) to the long ARB harness. ARB provides a 4-pin white connector to join the two sections. The other end of this harness will have a lot of terminal connectors (you will only be working with the connectors for the isolation switch (i.e the on/off switch), a *red wire w/ yellow stripe*, and a *blue wire w/ white stripe*. The other two sets of terminal connectors are for front and rear air locker solenoids which are not discussed in this installation.
- 6-C) Run the end of the harness with all the connections described above to your switch location. Install the provide ARB switch and connect the terminals as indicated in the ARB wiring diagram. Some Mounting location options for the supplied ARB Compressor Switch are provided below.
  - Daystar makes a Lower Dash Switch Panel or A-Pillar Mounted Pod
  - Cut an opening in dash or console for switch
- 6-D) Connect the <u>red wire w/ yellow stripe</u> to the <u>pink wire w/ white stripe</u> using the provided red Scotchlok as shown below. It is located under the steering wheel behind the dash panel. That panel is removed by grapping the top and pulling away. A metal plate will then need to be removed using a 10mm socket. This is an ignition on power source, so your compressor will only work if the ignition is on or the engine is running.



6-E) If you want your ARB switch to light up when your parking/headlights are on for visibility at night, connect the <u>blue wire w/ white stripe</u> to the <u>orange wire</u> <u>w/gray stripe</u> using the provided red T-Tap Set as shown below. The wire is located in the harness that goes to the window control module.



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

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