

IJKP-9 / Installation Instructions

Mounting Bracket Kit for ARB Twin Compressor (CKMTA12) OR Single Air Compressor (CKMA12)

Jeep JK Unlimited (2007 - 2018) / Jeep JK (2007 - 2010)

Made in USA

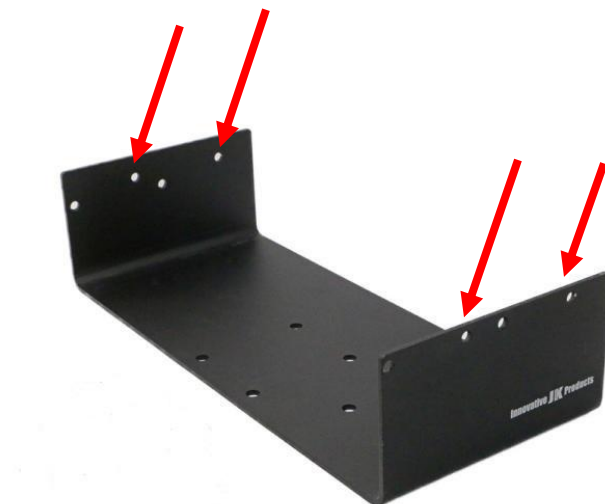
Kit Contents:

- 1 Bracket for ARB Compressor
- 4 M6x16mm Button Head Bolts / Nuts
- 3 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 Electrical Tape (to help fish ARB wire harness through firewall)
- Drill
- 1/4" Drill Bit
- 12" Extension with 3/4" Step Drill (greatly eases ARB harness installation)
- Ratchet
- Extension
- 18mm Socket
- Breaker Bar
- Impact (optional)
- 10mm Socket
- 10mm Wrench
- 4mm Allen Wrench
- Crimping Tool
- Heat Source (to shrink tubing on ring terminals)
- Pliers

NOTE: The 4 Red arrows indicate the holes you will be using to mount the bracket. **DO NOT** use hole pairs that are off centered, closer to edge (those are for RHD)



STEP 1 – Compressor Preparation

For a CKMA12 (Single Compressor) installation, please first proceed to the Supplement provided at the end of these instructions.

- 1-A) Skip this step for a CKMA12 (Single) installation. Follow the instructions provided with the ARB compressor to install a connection in the compressor outlet for your preferred method for distributing the air from the compressor. Please note that the connection port can be rotated depending on clearance (see ARB instructions). I recommend rotating the outlet as far downward as possible to maximize clearance under the seat. See example in Figure 1.



Figure 1

DISCONNECT THE BATTERY BEFORE PROCEEDING

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STEP 2 – Passenger Seat Removal, Preparation, and Brackets Installation

- 2-A) If equipped, disconnect the yellow connector(s) under the passenger seat. There may be one to two on newer model Jeeps and none on older models.
- 2-B) Using an 18mm socket 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) With the rear seat in the upright position (not folded), lay the front seat back as shown in Figure 2. **MAKE SURE YOU DO NOT ALLOW EITHER SEAT FRAME RAIL TO MOVE.** They can move independently once unbolted from floor and this will mess up the alignment and installation of the bracket later on. Wrap the rear seat belt across the top of the seat to hold it in place.



Figure 2

2-D) If equipped, remove the yellow plug(s) from the metal plate and remove the metal plate on the bottom of the seat (this may require rivets to be drilled out or screws to be removed, check first). Remove and discard, the plate is no longer needed.



Figure 3

2-E) For 2013+ Jeeps, simply use a 1/4" drill to drill out the two existing holes on the outer side seat frame rail as shown in Figure 4. Drill out the same two holes on the driver's seat. Skip to Step 2-G:



Figure 4

- 2-F) For 2007 – 2012 Jeeps, you will first need to mark the outer side seat frame rail holes for drilling (Jeep was not kind enough to provide these on older models). Continue to Step 2-G for details.
- 2-G) Bolt the provided bracket to the inner side seat frame rail (towards center of vehicle) using the two holes shown in Figure 5 (the lower, larger holes on the inner frame rail). Make sure the bracket is oriented as shown in Figure 6 with the red arrows indicating the mounting holes.

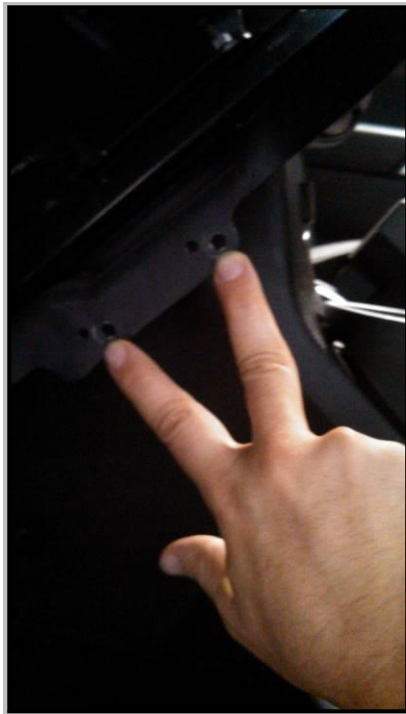


Figure 5

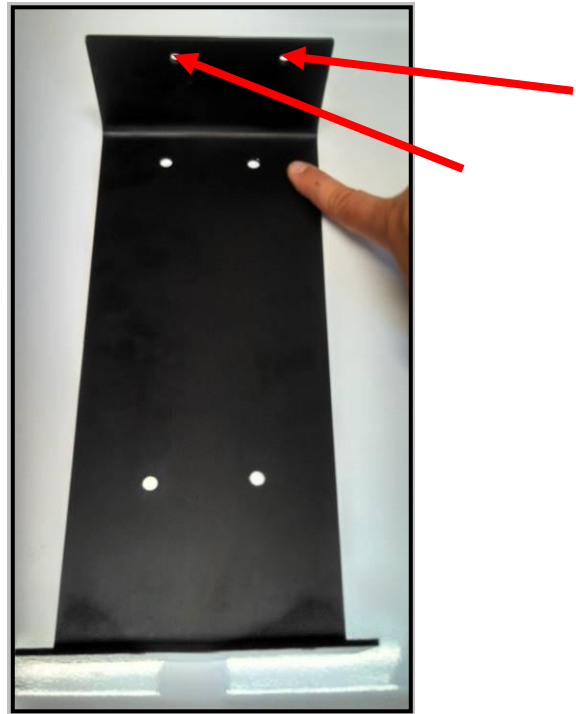


Figure 6

- 2-H) Bolt the bracket to the inside (towards center of vehicle) of the inner side seat frame rail as shown in Figure 7. It is important that the bolt and nut face in the direction shown (nut will be towards center of vehicle).

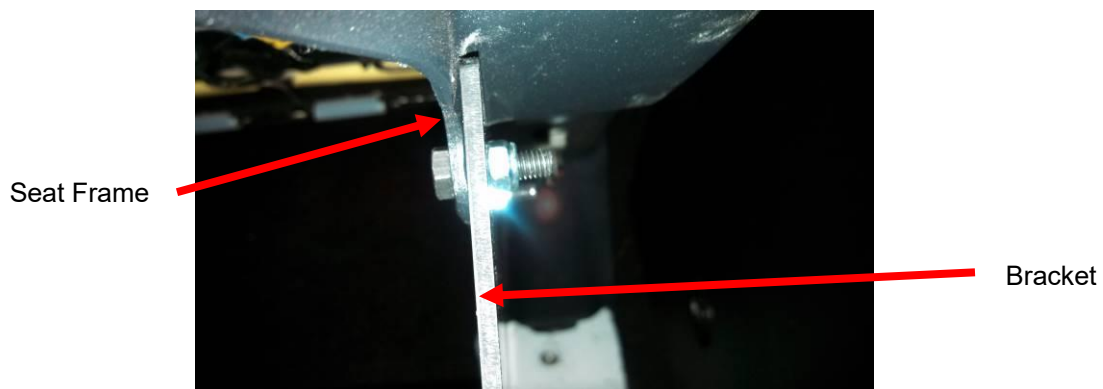


Figure 7

- 2-I) Skip this step for 2013+ Jeeps. Using the holes in the bracket, mark the holes on the outer side seat frame rail. Make sure the bracket is pushed up before marking holes. Before drilling, I would **HIGHLY RECOMMEND** you lay the seat back down onto the floor mounting holes to make sure none of the frame rails have moved as noted in Step 2-C. If the rails have moved and you drill the holes everything will be out of alignment! Once you are sure everything is aligned, mark the holes and drill the two ¼" holes in the outer side seat frame rail.
- 2-J) Bolt the bracket to the inside (towards center of vehicle) of the outer side seat frame rail as shown in Figure 7. It is important that the bolt and nut face in the direction shown (nut will be towards center of vehicle).

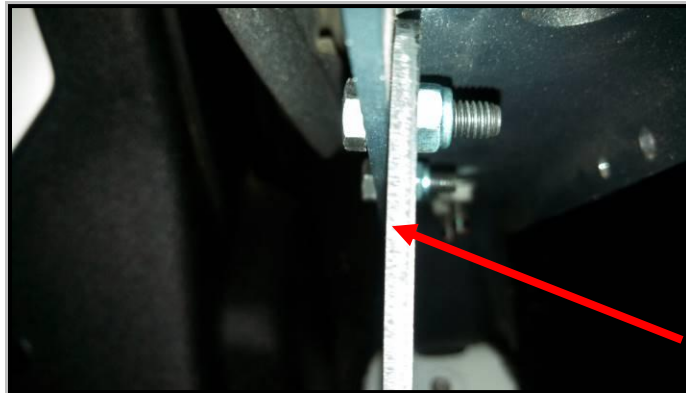


Figure 7

- 2-K) Once complete, the installation of the brackets should look like Figure 8.



Figure 8

- 2-L) If equipped, zip tie the cables for the yellow plug(s) to the bottom of the seat as shown in Figure 9. Do not completely tighten the zip tie (leave some slack for cables to move).

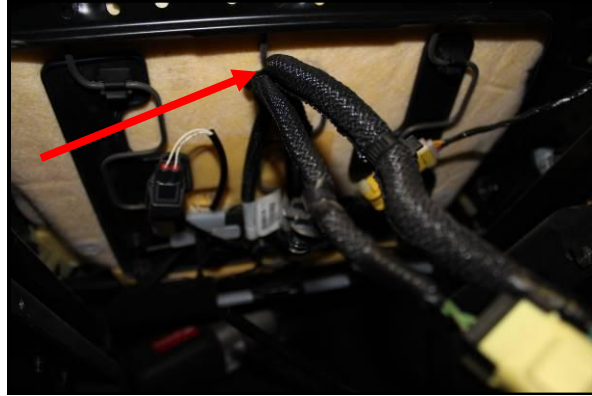


Figure 9

STEP 3 – Compressor Installation

- 3-A) Place the compressor on the bracket with the fan facing forward. Use the four bolts provided by ARB to mount the compressor to the bracket. Start all four bolts before tightening each one. See Figure 10.



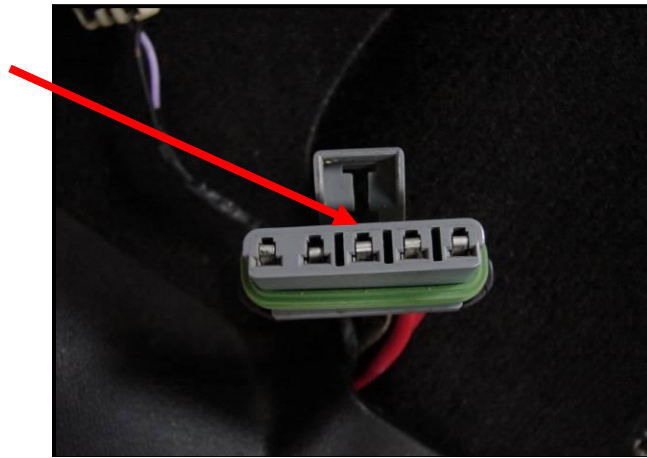
Figure 10

TIP: You can leave the seat in this tilted position until you complete the wiring harness install. It will make running the harness easier. You can bolt the seat in place and connect everything once the wiring harness has been installed.

Also, now is a really good time to vacuum up all those chips from drilling on both sides of the Jeep.

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 smaller side 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.

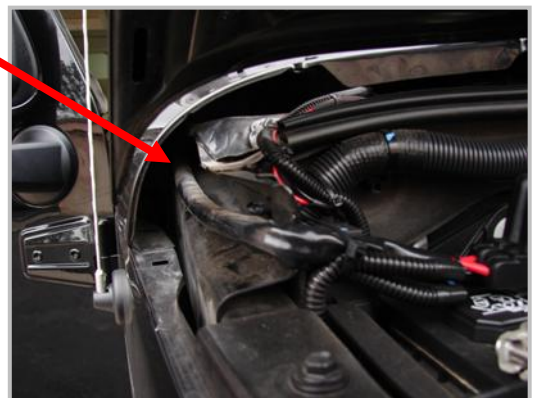


4-C) There are two ways to do this step.

Simplest - 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.



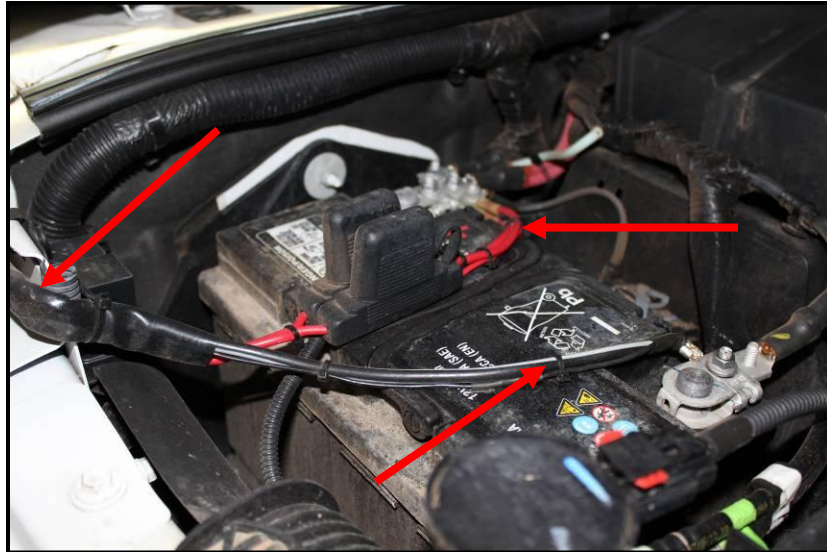
4-D) Run the ARB wiring harness down along the dash and along the rocker as shown below. Run the harness directly behind the door strap hook (i.e. between hook and body). Reinstall the metal connectors into the 5-pin plug in the correct order you noted in Step 4-A. If you forgot, you can always match 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. Leave a little extra length of the long ARB harness near the 5-pin plug. You will see 2 white connectors (for airlockers) which are not used. Just tuck these away.

NOTE: If you are running a sPOD proceed directly to Step 5. Leave the remaining long ARB wiring harness in the footwell for now.

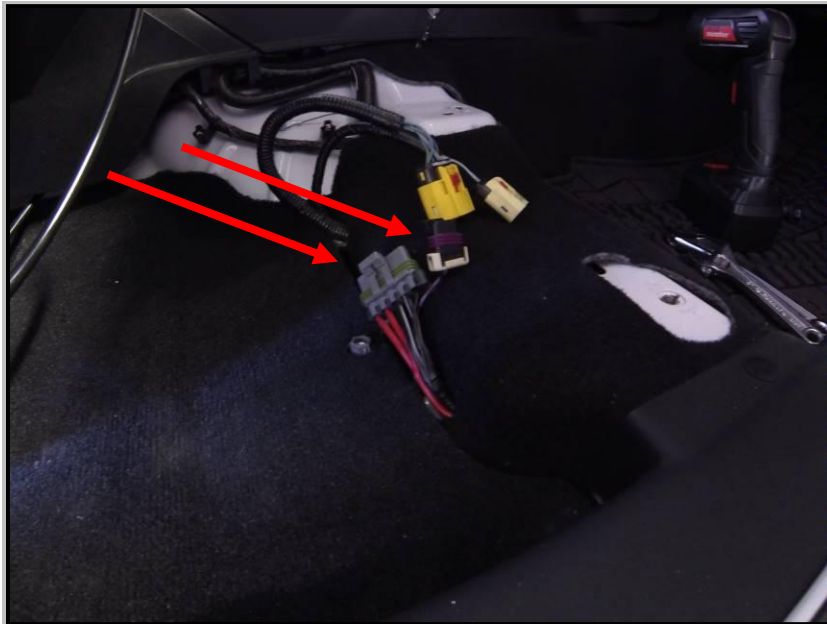
Run the remaining harness up behind the glove box (remove glove box for access) and leave there for now.



- 4-E) Go back to the engine compartment and attach the ARB harness to the battery. Crimp and use a heat source to attach and seal one of the provided ring connectors to each positive wire (**red**). Attach both to the positive (+) terminal of battery. Repeat with the remaining ring 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.



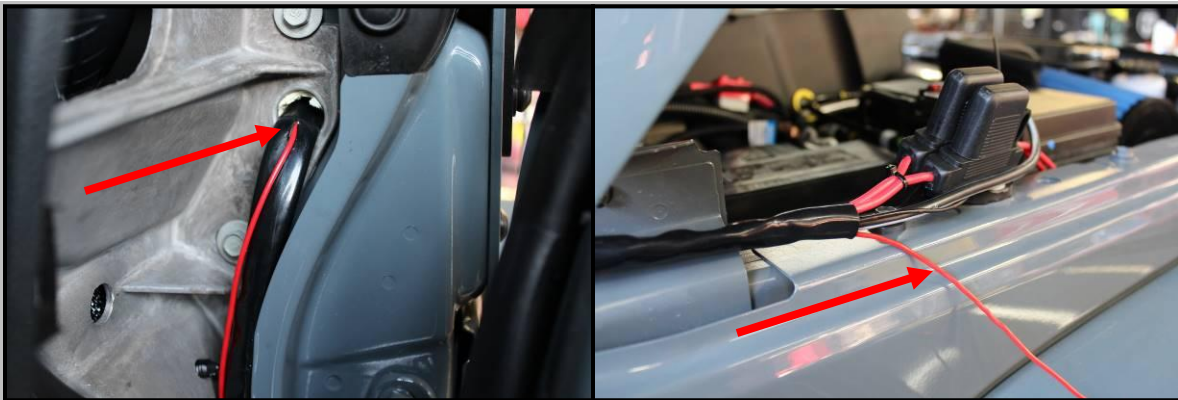
- 4-F) Reinstall the side panel and rocker panel. The two harnesses can be run under the carpet with the plugs positioned as shown below.



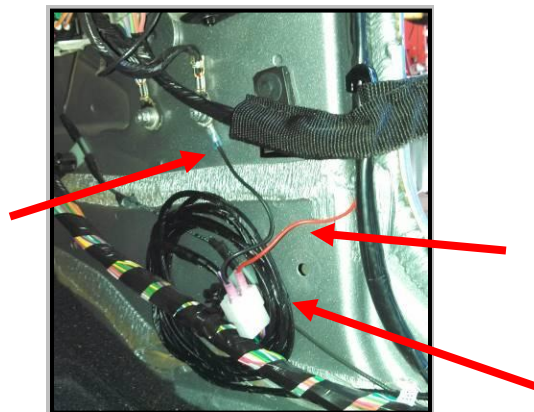
STEP 5 – for sPOD Connection Only (all others skip to Step 6)

Note: Two female spade connectors, one terminal spade connector, one ring terminal, ~20 feet of 22-18 gauge **red** wire, and 6" of 22-18 gauge **black** wire are suggested (not provided in kit). Note, the ARB switch harness is not used for this method.

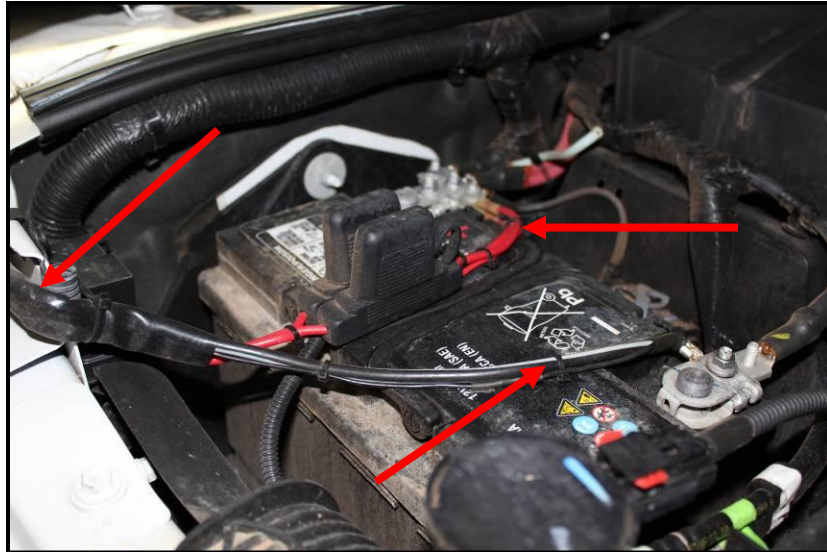
- 5-A) Install the white connector onto the long ARB harness. The connector is usually attached to the harness in a little plastic bag (refer to the ARB instruction manual). Once complete, use a female spade connector to connect a **red** wire to the male spade connector of the **purple** wire in the ARB white 4-pin connector. Now run the **red** wire to the switch connection of your choice on the sPOD under the hood. This is best accomplished by making a small slit in the main ARB harness sheathing that you just ran through the firewall and then fish the **red** wire through the sheathing until it comes out the other end in the engine compartment (see pictures below). You can then run the **red** wire to the switch connection of your choice on the sPOD and connect using a terminal spade connector. You will not need to connect the corresponding ground at the sPOD. Finally, use a female spade connector to connect a **black** wire to the male spade connector of the **black** wire in the ARB white 4-pin connector and run the other end to the ground stud in the footwell with a ring terminal.



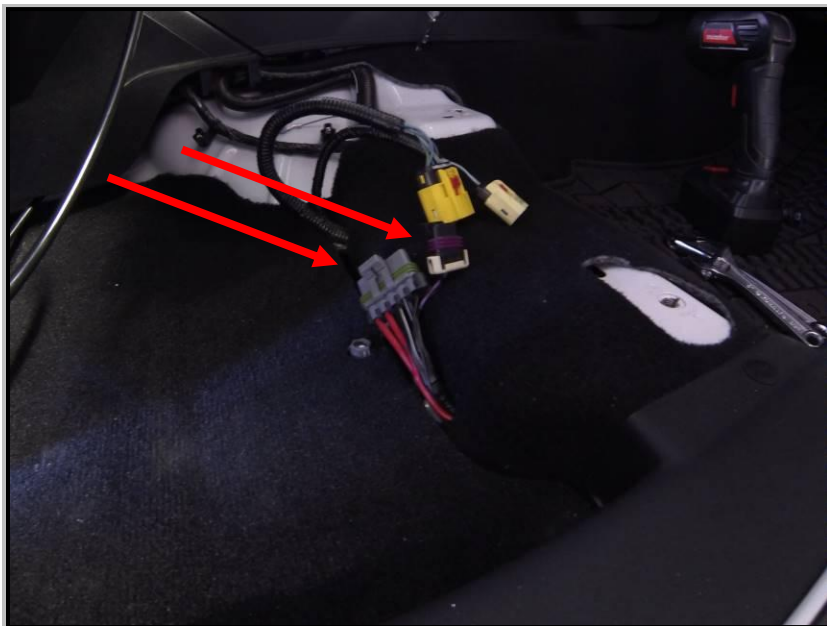
- 5-B) Coil up the remaining long ARB wiring harness you just connected the **red** and **black** wires to and position behind rocker panel in footwell.



5-C) Go back to the engine compartment and attach the ARB harness to the battery. Crimp and use a heat source to attach and seal one of the provided ring connectors to each positive wire (**red**). Attach both to the positive (+) terminal of battery. Repeat with the remaining ring 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.



5-D) Reinstall the side panel and rocker panel. The two harnesses can be run under the carpet with the plugs positioned as shown below.



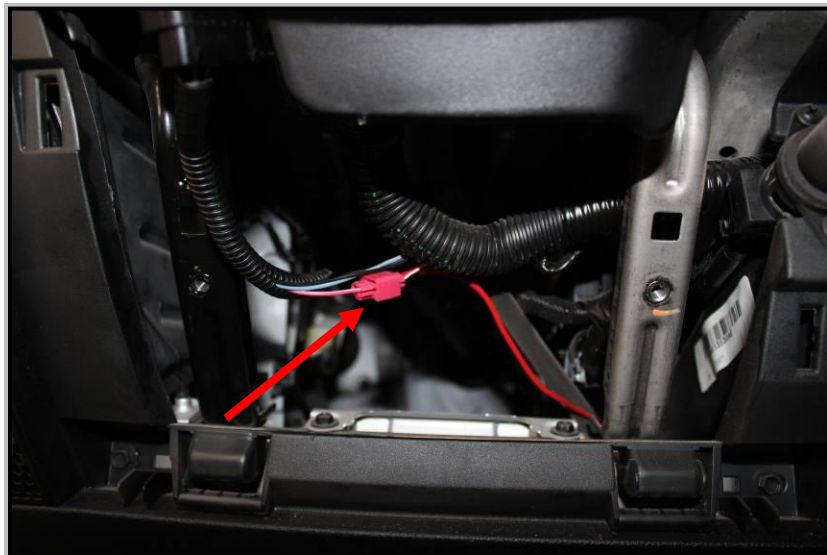
STEP 6 – Seat Installation

- 6-A) Bolt the seat back in place and torque bolts to manufacturer specifications. Connect the two plugs to the compressor. Reconnect the yellow plug(s), if applicable. While looking under seat, check for clearance on wires, cables, plugs, and compressor as the seat is moved forward and back. Use wires ties to secure cables from yellow plugs if necessary leaving slack where necessary to allow the seat to move without getting caught on anything.



STEP 7 – Final Wiring (does not apply if using an sPOD)

- 7-A) Follow the ARB instructions to complete the wiring. Also provided below are some tips to help with Jeep specific connections.
- 7-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.
- 7-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
- 7-D) Connect the **red** wire w/ **yellow stripe** to the **pink** wire w/ **white stripe** 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.



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



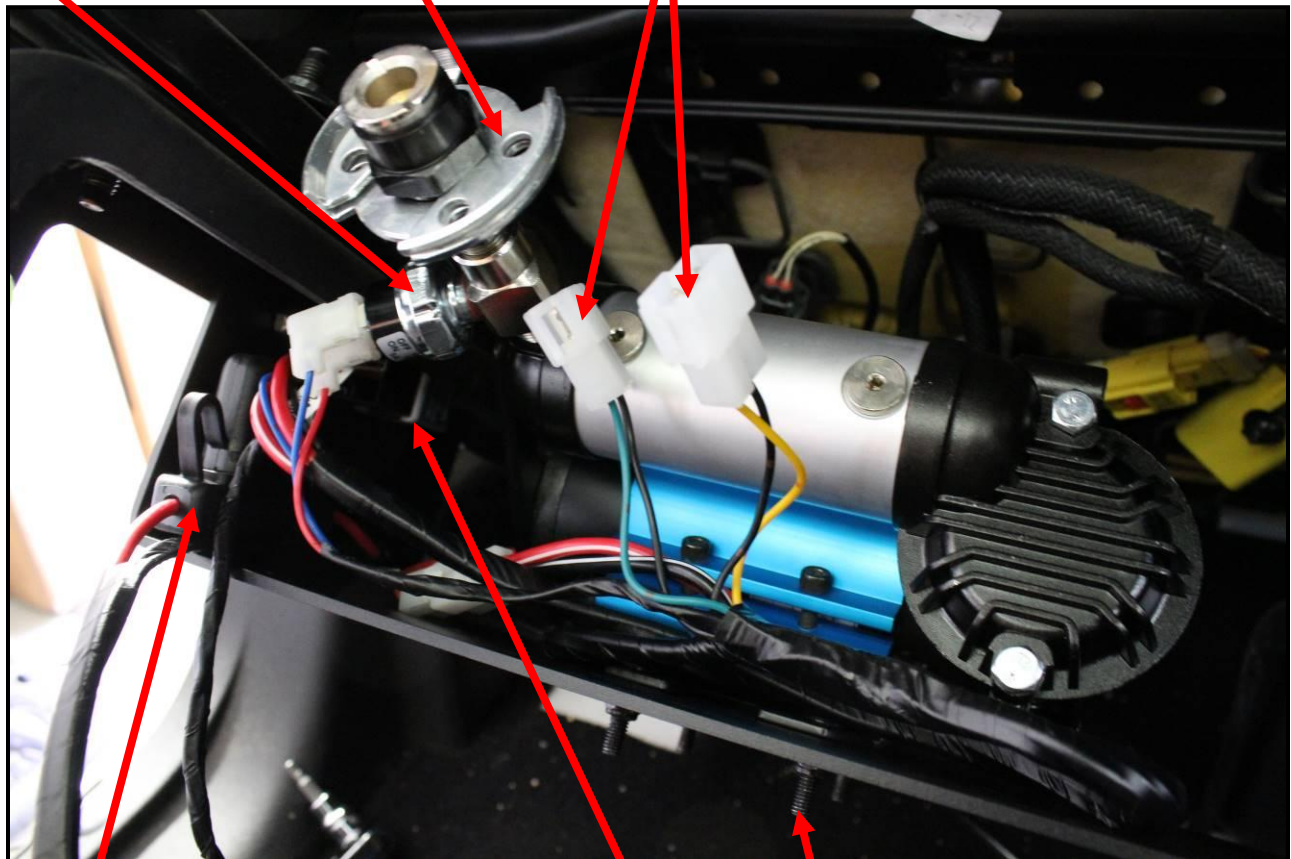
SUPPLEMENT – CKMA12 (Single)

The four holes in a smaller square on the bracket are for the single air compressor. What is shown below is just a suggestion as far as a configuration that provides easy access to the air hook-up, fuse, and connections (both for the compressor and air locker plugs (if being used)) and can be modified for your application as necessary. The compressor itself has the flexibility to be mounted and rotated in different configurations. Once you configure the compressor, you can then return to Step 2 which will bring you through all the steps of the bracket installation and wiring BEFORE actually mounting the compressor to the bracket as shown below. To achieve the configuration below you will have to unbolt, rotate, and adjust various parts of the compressor as provided by ARB. The main wire harness leads may need to be extended to reach the battery.

Optional ARB Connection

Pressure Switch

Air Locker Plugs (if used)



Main Fuse Holder

Bolts provided by ARB are long but will clear floor. ARB provided backing plate is not required.

Wire Harness Relay (secure in place using rear mounting bolt of bracket). This will secure it in place.

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

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