Latest Revision: 1/25/2024



SDHQ Motorsports 190 S McQueen Rd Ste 109 Gilbert, AZ 85233 www.SDHQoffroad.com

Product Packing List

Product: <u>SDHQ-30-1103-65</u>

<u>Description:</u> 2013-current Ram 2500/3500 & 2013-

2018 Ram 1500 ARB Air Compressor Mount

(1) N	Aain Compressor Mount	SDHQ-30-1103-65-A
(1) F	Iir Chuck Mount	SDHQ-30-1103-G5-B
(1) H	lardware Package	SDHQ-30-1103-G5-HP
	$_{-}$ (3) 1/4"-20 $_{ m X}$ 3/4" S.S. Button Head Bolts	;
	_ (2) 1/4"-20 No-Slip Clip-On Barrel Nuts	
	_(6) ¼" S.S. Washers	
	_(1) 1/4"-20 S.S. Nylock Nut	
	_ (1) Quick Disconnect Hose Coupler	
	_(1) Brass Through Wall Coupler	
	_(2) ¼" OD Push to Connect Tube Fitting	
	_(1) 15" of ¼" Air Hose	
	_(2) ¼" Push to Connect Security Clips	
	_(2) 8 Gauge ¼" Eyelet	
	(1) Tube of Blue Loctite	

Inspected and Packaged By:	Date:	
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INSTALLATION INSTRUCTIONS

Product: SDHQ-30-1103-65

Description: 2013-current Ram 2500/3500 & 2013-2018 Ram

1500 ARB Air Compressor Mount



(1) Main Compressor Mount	<u>Required Tools</u>
(1) Hardware Package SDHQ-30-1103-G5-HP (1) Brass Through Wall Coupler (2) 1/4" OD Push to Connect Tube Fitting (1) 15" of 1/4" Air Hose (2) 1/4" Push to Connect Security Clips (2) 8 Gauge 1/4" Eyelet (1) Tube of Blue Loctite	T30 Torx Bit 13mm socket Ratchet 11/16", 7/8" & 15mm wrenches Panel Removal tool

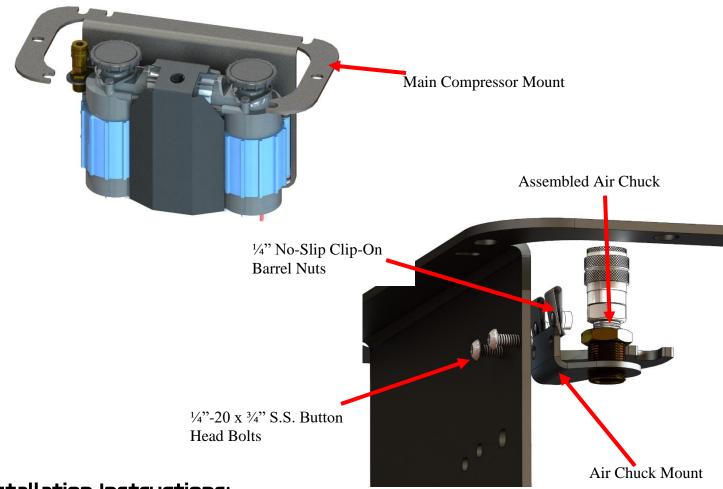
Tech Notes

Fits Crew Cab Trucks equipped with floor storage bins. Mount will work with 2019+ Ram 1500 Classic as well. Fits single or twin ARB air compressors.

> Use Teflon tape or thread sealant on all threaded air fittings. Use blue Loctite on supplied Stainless Steel (S.S.) Hardware. Will work on either driver or passenger side storage bin

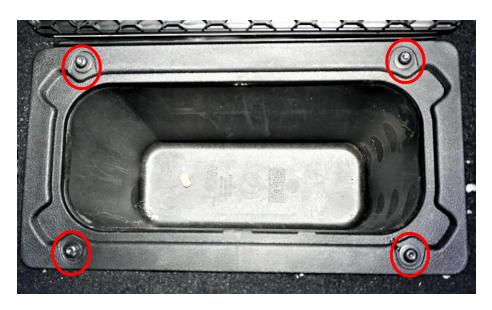
Approx. Install Time: 1 1/2 Hours (not including wiring or plumbing)

***READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! ***



Installation Instructions:

- 1. Gather all required tools for the installation of your new SDHQ ARB Compressor Mount. Unbox your ARB Compressor Mount and verify all parts are present. Familiarize yourself with the diagrams on page 4.
- 2. Preparing your vehicle. Remove the Driver or Passenger floor mat to expose the lid for your floor storage bin. Open the lid, remove and discard the inner plastic storage bin and remove the (4) T30 bolts. Remove the lid and set aside.



3. Remove the (2) remaining 13mm bolts holding the storage bin to the truck. Leave bin in place

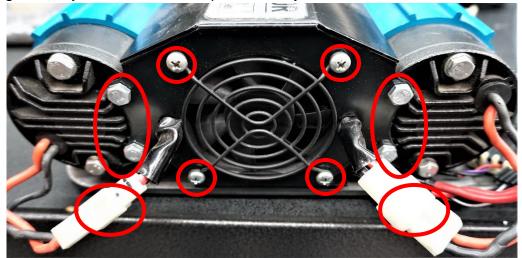


4. Preparing the ARB twin compressor. See step 2.2 in your ARB compressor install instructions. Remove the (4) 10mm bolts holding on the ARB compressor cover and take it off. Then loosen the (1) 10mm bolt on the compressor outlet port. This will allow you to rotate the outlet port to the side position. Tighten outlet port bolt and reinstall the cover plate with the (4) 10mm bolts. Attach (1) of the ½" OD Push to Connect fittings to the exhaust port using a 19/32" wrench. If you are using the SDHQ ARB Extension Harness, proceed to Step 5 for compressor wiring modifications BEFORE reinstalling the cover plate. *Failure to change compressor outlet port angle will cause contact with the storage bin. *



- 5. Preparing the ARB twin compressor for use with SDHQ ARB Extension Harness. Follow the steps below to modify the compressor wiring for use with the extension harness
 - **A.** Unbolt the center cover by removing the (4) 10mm bolts on the bottom of the compressor and lift the cover off of the compressor.

B. Disconnect the (2) motor connections, along with the purple and yellow connections on the switch (**Note the orientation of the connections**). Remove the (2) 10mm nuts holding the relays to the cover and pull the relays off of the cover.



- **C.** Unscrew the (4) Philips head screws holding the fan and grill to the cover, let the fan fall away so that you can remove the (2) connectors for the motors. Once free, replace the fan and grill.
- **D.** Clip the zip tie holding the other end of the harness to the cover. Carefully contort the wire harness so the two connectors that were formerly on the bottom of the compressor run through the opening for the air fitting and towards the top of the compressor.
- E. Reassemble the modified cover, make sure nothing gets pinched or twisted unnaturally. When replacing the cover onto the compressor be sure to tuck the motor connections under the cover against the body of the compressor.

Note: We recommend that when you drill a hole for the wire harness in the storage bin, that you de-pin the connector to minimize the size of the hole.





- **6.** Flip the ARB compressor over with the mounting holes facing up and place the Main Compressor Mount on top of it. Use the ARB supplied hardware to mount the compressor.
- 7. Attach the Air Chuck Mount using the Clip-On Barrel nuts and S.S. Button Head bolts as shown on page 4. Tighten down the compressor mounting bolts and double check the supplied S.S. hardware is fully tightened. Thread the air quick disconnect on top of the coupler tightening with an 11/16" wrench. Thread on the push to connect fitting to the bottom of the brass through wall coupler tightening with a 15mm wrench. Then install the brass through wall coupler to the mount using 7/8" wrenches to tighten. Push the 15" air hose into both push fittings, running the hose under the air compressor so it does not get caught during install. Install the ½" security clips to both push lock fittings



- 8. Pause install now to wire your compressor, refer to the ARB wiring instructions to properly wire your air compressor (If using SDHQ-02-1103-ARB6 refer to the wiring section).
- **9.** Now that the wiring is ran for your compressor, lower the assembled mount into the storage bin and connect the wire harness, the compressor sits in the pocket as shown.
- **10.** Take the lid that was removed earlier and trim the tabs off of the 2 sides so that the lid will sit flat on the mount.



11. Bolt the mount in using the (2) 13mm bolts removed earlier. Then finally replace the storage bin lid and T30 hardware, check operation of the lid. Enjoy your SDHQ Air Compressor Mount for your Ram 1500/TRX!!





Wiring:

If you purchased the SDHQ Built ARB Twin Extension 6' Harness (**SDHQ-02-1103-ARB6**) the installation instructions are given below. **(Can only be used with the ARB Twin Air Compressor)** This harness is used in combination with the harness supplied by ARB. Approximate Install Time (1) hour.

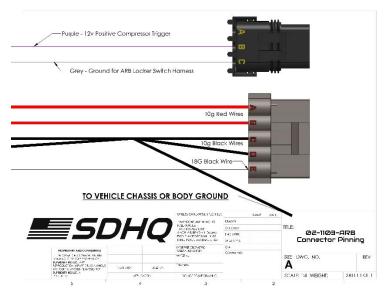
- 1. Drill a 1-1/8" hole into the bottom front face of the storage box, this will allow for the fitment of the PG-21 16mm Cable Gland.
- 2. Insert the de-pinned side of the extension harness into the Cable Gland leaving the single ground wire out. Install the Cable Gland to the Storage Box. Ensure that the larger nut is outside of the Storage Box as shown. Secure the cable gland by threading on the retaining nut from inside the storage box.



3. Attach a 1/4" Eyelet to the ground wire previously separated from the extension harness and heat shrink over the loom and eyelet. Using a supplied 1/4"-20 3/4" bolt, nut and washers secure the ground wire to the chassis on the body mount as shown.



4. Attach the supplied 5 and 3 Way Metri-Pack plugs and clip locks to the wires as shown below. Once this is complete the air compressor can be installed into the vehicle as explained in the compressor mount install instructions.



- **5.** Remove the front driver side fender liner.
- **6.** For routing under the vehicle tuck the harness above the body mount and along the factory e-brake cable until the front wheel, where the frame raises. Approximately where the front wheel is located the ARB harness is attached to the extension harness circled in blue.



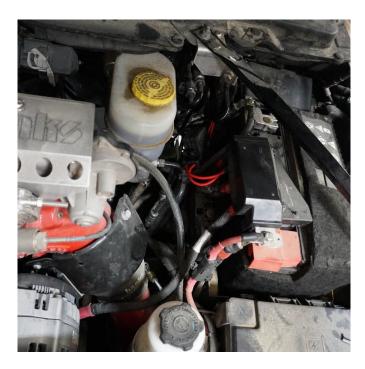






For questions or help with the installation, please email $\underline{\text{help@sdhqoffroad.com}}$ Store front hours: Mon. – Fri. 8:00am – 5:30pm and Sat. 9:00am – 2:00pm Arizona Time. Page 9 of 11

7. Crimp the two red ARB positive wires into an 8 Gauge Eyelet to attach to the positive terminal of the battery. Crimp the large and smaller black ARB negative wires into an 8 Gauge Eyelet to attach to the negative terminal of the battery. The finished install should be similar to as shown below. Note: 1/4" eyelets attached to the back of the positive SDHQ Terminal and Top of the SDHQ Negative Distribution Block.



8. It's suggested to zip tie any slack in the fender well above the fender liner as shown. Replace front driver side fender liner when complete.



9. The install of the wiring is complete, test the system and troubleshoot if necessary.

Double check all hardware is installed correctly and tight

Re-torque ALL bolts after 100 miles



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