

# MACAIR HELMET AIR PUMPER

How to install a MAC AIR Pumper System. Available in 2-person or 4-person sizes.

# INSTALLATION INSTRUCTIONS

## Equipment

#### Parts List

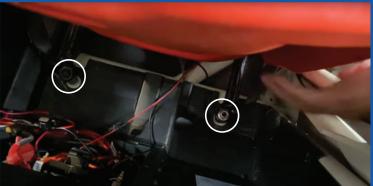
- Socket wrench set (including sizes for front seat bolts and rear nuts)
- Allen wrench set (for bar clamps)
- · Screwdrivers (Phillips and flathead)
- Pliers (for removing harness and securing eyelets)
- Wire cutters/strippers (for adjusting cable lengths)
- Small screws (for securing P-clips)
- Power drill (for screwing into plastic if necessary)
- Soapy water and a container for filter cleaning
- Rubbing alcohol
- Microfiber cloth
- R-Wrap Velcro strips

### Installation

#### Step 1: Remove the Passenger Seat

First, remove the passenger seat. Start by taking out the front two bolts that hold the seat in place. Then, go around behind the seat and remove the two big nuts to get the seat out. Pull the harness out of the seat and lift the seat straight up to bring it out of the vehicle.





#### **Step 2: Prep The Pumper Housing**

Next, prep the bumper housing. Clean the nozzles on the pumper system with rubbing alcohol and a microfiber cloth to remove any manufacturing residue, oils, or grease.



<sup>\*</sup>NOTE: this installation features a 2021 CAN-AM X3, the steps might vary depending on your vehicle model & brand.

#### Step 3: Attach Bar Mounts To The Pumper Housing

Attach the bar mounts to the pumper housing using a 2.5-inch bar clamp. Ensure the Allen screw that tightens it down is facing up for easy access. Position the clamp between the seats and tighten the screws.



#### **Step 4: Secure The Pumper Motor**

With the mount tightened to the pumper housing, remove the screws for the upper part of the C-clamp. Position the C-clamp on the center bar and reinsert the Allen screws. Tighten the screws to secure the C-clamp and hold the pumper motor in place.





#### Step 5: Prep & Clean The Filter

Avoid using your air compressor and avoid using K&N engine filter cleaner on a helmet pumper system. Remove any debris from the filter by gently tapping it. Wash the filter with soapy water and agitate in a circular motion. Rinse the filter from the inside out with mild pressure. Shake out the filter and let it dry.



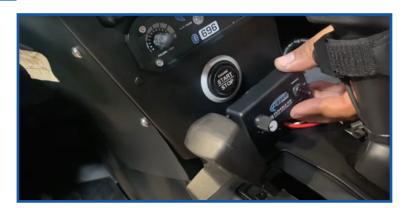
#### Step 6: Install Filter & Pre-Filter

Install the clean filter by sliding it back on and tightening the hose clamp. Then, slide the pre-filter over the top of the filter.

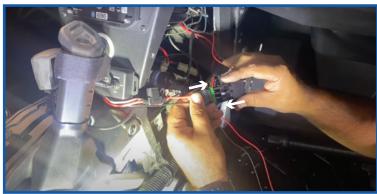


#### Step 7: Install The Variable Speed Controller (VSC)

To install the Variable Speed Controller (VSC), find a good place on the dash to mount it using Velcro or screws. Pull the passenger side of the console out to access the area behind it. Pull the front panel loose to gain access to run both the power cable and VSC controls.







#### Step 8: Run & Secure Cables

Run the VSC control and power cable through the grommet underneath the console. Use double-sided Velcro (R-wraps) to secure the cables, making them serviceable. Use P-clips to secure the cables to the firewall, avoiding the center piece that comes out for engine service.

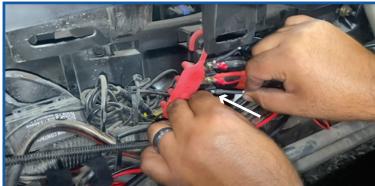




#### Step 9: Connect Power & Ground

Connect the power and ground cables. Cut the cables to the appropriate length and add eyelets. Connect the ground to the upper terminal and power to the lower auxiliary terminal on the bus bar. Replace the protective cover over the terminals.





#### Step 10: Reassemble The Console

Reassemble the console by starting with the front panel, ensuring the two front tabs slide in correctly. Reattach the side panel for the Rugged system if applicable. Reassemble the rear piece, ensuring it snaps into place.



#### Step 11: Reinstall The Passenger Seat

Reinstall the passenger seat by setting it in place and aligning it with the rear two studs. Insert the bolts in the front, wiggling as needed to fit them. Tighten the two big nuts at the rear.





#### Step 12: Prep & Install Pumper Hoses

Prep the pumper hoses by cleaning the inside with rubbing alcohol. Slide the hoses onto the pumper and twist them up as far as possible. Route the hoses behind the seats and secure them with R-wraps to avoid damage. Ensure the hoses are positioned for easy access on the left side of the driver and co-driver.





#### Performance Check

Now it's time to test. It's always best to check performance in an outdoor open area. Finally, ensure all hoses are secured and positioned correctly. Turn on the blower, plug it into a helmet, and enjoy your ride. Thank you for purchasing the Mac Air system from Rugged Radios. If you have any questions or comments, please give us a call at the office. We'd love to help you out. If you have any other questions, our team is ready to help give us a call.

RUGGEDRADIOS.COM • 1 (888) 541-7223 • Ask For Tech Support







