Off-Road Safety Academy Newsletter – 14 Nov 05:53 PM 1

Off-Road Safety Academy [bob.wohlers@discoveroffroading.com]

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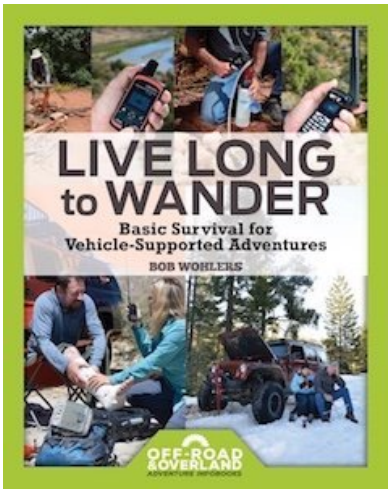
To: bob.wohlers@discoveroffroading.com

Wohlers Writings... Off-Road & Overland Adventure Newsletter

Welcome to the Inaugural Newsletter!

Live Long to Wander - Basic Survival



for Vehicle Supported Adventures

Could you survive a backcountry vehicle problem? If you are a vehicle-supported adventurer, this Infobook was written for you. You need this book if you drive a 4WD, ATV, UTV, Dual Sport Motorcycle, or Snowmobile into the remote backcountry. You can order in on my website by clicking HERE.

Compressors for Airing Up Your Tires...

An Overview

Portable? Mounted? Twelve volt? Belt-driven? Which compressor is right for you? What are my opinions? Why does any of this matter?

I want to open the door to some content on the subject from my new upcoming book, *The Total Approach to Getting Unstuck - Self-Recovery and Vehicle-Assisted Recovery*. Read on...

You should always air down your tires when traveling off-road. Once you return to the pavement, you must air them back up to proper highway operating pressures (with few exceptions these pressures are found on the driver's

side door sticker).

Compressors can be divided into two categories: 1) 12-volt electric, and 2) belt-driven by the engine. Both have advantages and disadvantages. Electric compressors can be permanently attached and wired to a vehicle (in the engine compartment, or in other open-air cool locations like in-cab roll bars), or portable with quick-clip battery connectors (in a box or a bag). Compressor units attached to the vehicle can't be forgotten, and the portable units can be moved between vehicles for convenience.

Portable Compressors

There are all makes, models, and sizes of portable 12-volt compressors used by off-roaders. Many portable units come in hard containers or in soft bags, ready for speedy deployment. When you purchase any 12-volt compressor, choose wisely. Make sure the compressor can supply the needed pressure to re-inflate your specific tires, and that it has the adequate capacity (duty cycle) to fill all four of your tires without a rest. Operation exceeding maximum pressure ratings and/or duty cycle will result in damage to the air compressor. If you decide to purchase a portable compressor for re-inflating your tires, don't forget to take it with you when leaving for an off-road trip. Also, be careful packing away vulnerable plastic hoses next to super-hot compressor heads once finished filling tires.

Extreme Outback Products Compressor. The compressor shown here is, in my opinion, the best portable compressor made. It has heavy-duty EVERYTHING - box, battery clamps, heat dissipating hose, coiled air hose, super chuck, Plano water proof and dust proof box.

ARB Compressor. Shown here is the ARB portable compressor. I've had this compressor for over seven years. This compressor in a box works_ great each time it is called on for tire inflation. I have had the hose at the head of the compressor melt a couple of times when used hard. Note that the ExtremeAire compressor above has a heat dissipating hose where mounted to the head of the actual compressor

Permanently Mounted 12-Volt Compressors

The majority of active off-roaders and overlanders opt for a permanently mounted 12-volt compressor option. Permanent mounting can be in the engine compartment, inside the cab, or in other

protected areas. Some compressors come with specific vehicle mounting plates and hardware, while other options can be purchased through aftermarket companies. Permanent mounting solutions can also incorporate a small tank, permitting the use of air tools and faster tire fill times. Those that have air-activated lockers often have permanently mounted 12-volt compressors, serving double duty – engaging the lockers and re-inflating tires.

Shown here is the Extreme Outback Products **ExtremeAire Magnum** mounted in my 2013 Jeep JK Rubicon. In my opinion this is the finest off-road/overlanding compressor available anywhere. I mounted this compressor to my rear roll bar. Using Power Tank's aluminum clamps, I fashioned a mounting plate. The mounting is VERY solid.

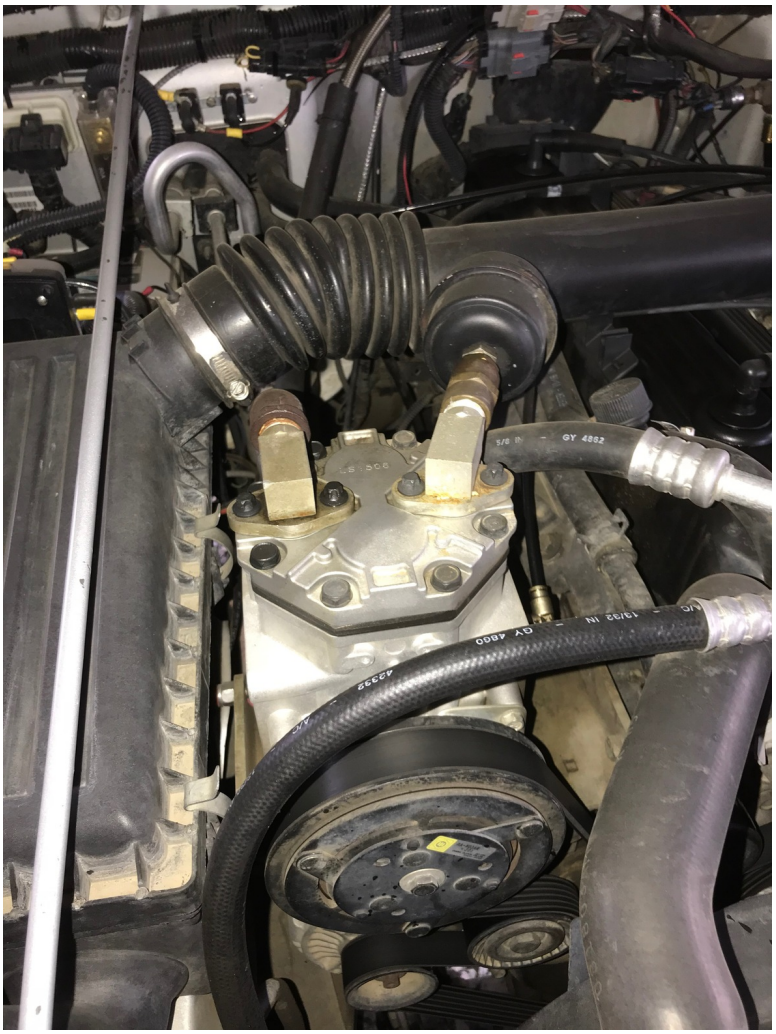
Réservoir Tanks. Regardless of the compressor you choose to use off-road, a connected reservoir tank accomplishes several objectives within an air delivery system. First, it keeps

the compressor from working so hard. When used in conjunction with an air pressure shut off valve, once the reservoir tank reaches the set pressure, the compressor turns off - letting it rest (even as you move from one tire to the next). Second, the reservoir allows for more efficient and constant use of air tools. It minimizes the pulsation in the system caused by a reciprocating compressor. Third, the tank allows the air to cool prior to delivery.

Belt-Driven Compressors

Belt-driven units use powerful, repurposed air conditioning compressors (York and Sanden types). York compressors are more popular due to their high air output and internal oil reservoir. Obviously, these

compressors are engine compartment-mounted and remain permanently attached to the vehicle. Most are powerful enough to allow you to use air tools, especially if the compressor feeds a reasonably sized reservoir tank mounted somewhere on, under, or in the vehicle. Permanent vehicle plumbing allows for air outlets to be located anywhere convenient. Besides simply inflating tires, some of these air compressors also run vehicle suspension air bags, and air-activated sway BAR disconnects.



York Mounted Compressor. Shown here is the compressor I use in my 2004 Jeep TJ Rubicon. The York is a modified air conditioning compressor. It's the preferred air conditioning compressor (even though it's an old unit) for use as an air compressor because it has its own oil sump. Sanden (round) style air compressors used in today's vehicles are lubricated with oil in the freon refrigerant; so they are not often used as air compressors. My TJ uses this air compressor to run my AiRock air springs, airing up tires, and running air tools like impact wrenches and grinders.

Cheers!
(Have Questions? Call Bob: 909844.2583)
Bob Wohlers