

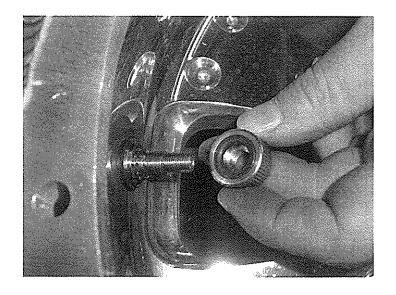
Select the correct grommet for the hole. Insert the stem through the grommet and then through your rim.



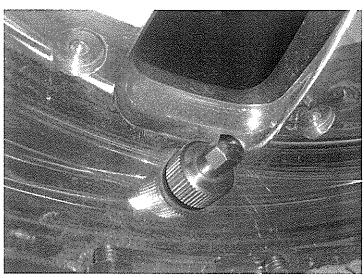
Place the washer on the backside of your rim. Install the Nylock Nut onto the stern. Use the supplied standard jam nut on the external threads-temporally- to allow you to tighten the Nylock securely, but not so much that the grommet squeezes out

TRAILREADY RAD

RAPID AIR-DOWN VALVE STEMS Patent # 6,929,020



Install the External Nut, and place cap. Reseat the bead and inflate the tire.



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TRAILREADY PRODUCTS RAPID AIR-DOWN VALVE STEM:

Notes, installation, and use

Notes:

The Rapid Air-down Valve (RAD) weighs 1 $\frac{3}{4}$ ounces. It installs into either of the two standard valve stem hole sizes: 0.453" (29/64") or 0.625" (5/8") diameter. The hole must be perpendicular to both the inside and outside surfaces. It needs a flat seating area (ignoring the rim diameter curvature) of $\frac{3}{4}$ " (.0750") diameter. It will work on rims from $\frac{1}{8}$ " (.125") to $\frac{9}{16}$ " .562") thick at the valve stem hole location.

Installation:

1. If you already have a tire on the rim, deflate it and unseat the outer bead. Hold the tire down near the valve stem hold so that you have access to both sides of the rim there.

Option- For 2 valve stem applications

For best performance and ease of use, we recommend installing the RAD in a hole directly across from your stock valve stem (to minimize imbalance). This is great if the existing valve stem hole is in an impact-vulnerable location near the outer edge of the rim, or the hole is not perpendicular to both surfaces, or is where the rim doesn't have a large enough seating area. The farther inboard you locate this second hole, the greater the protection. You will need a drill with a /2"chuck, a pilot drill bit around 1/8", and a 29/64" drill bit. You will need the tire deflated and the outer bead unseated, but you do not need to remove it from the rim. Drill the pilot hole from the center of the rim outward, then drill the final hole size from whichever side you find easier. Deburr, and remove all chips.

- 2. Select the correct grommet for the hold. Insert the stem through the grommet and then through your rim.
- 3. Place the washer and jam Nylock onto the stem (for extra security you can use non-permanent thread-locking material too.) Use the supplied standard jam nut on the external threads-temporally-to allow you to tighten the jam Nylock securely, but not so much that the grommet squeezes out.
- 4. Lubricate the 0-ring and the treads of the external nut with powdered graphite, and install the external nut.
- 5. If your rim is thin, you may want to shorten the stem. This can prevent tire puncture if the tire contacts the stem at extremely low air pressure.
- 6. Reseat the bead and inflate the tire. Check for leaks using soapy water.
- 7. Rebalance the wheel.

Operation:

Installed, the valve cap prevents the external nut from inadvertently loosening and rapidly deflating the tire when you don't want to. Use only a RAD Valve Cap, and always reinstall it before driving the vehicle.

Air up normally. If you have the two-stem set-up, you can read the pressure at one stem while adding air at the other. Note: There are some poor quality air chucks widely distributed. Check by airing up without the Schrader Valve in place: if the chuck won't admit air, find a better one.

Air down by loosening the cap from the RAD and loosening the external nut just a few turns. You don't need to remove it. Check the air pressure while you are letting the air out. This is easier with the two-stem set-up, because to get an accurate reading from a one stem system, you must close the external nut before you'll get an accurate reading. When you get to the pressure you want, simply tighten the external nut until it bottoms out, then reinstall and tighten the cap to lock it in place.

The RAD valve stern is made from stainless steel and is much stronger than the typical rubber or plated brass stems. All it should need is an occasional looking over. The RAD is designed to self-clean as the air blows out. After extensive use on dusty trails, or submerged, we suggest you remove, wipe, and re-lubricate the 0-ring (to reduce abrasion wear) and the external threads (to prevent galling between the two stainless steel parts). The 0-ring is a standard "205": normally 7/16" ID x 11/16" OD x 1/8" diameter. It may wear out over time, depending of course on frequency of use.