

AIRGEAR

How to Use the Tire Changing Kit

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HELP@AIRGEAR.STORE (520) 605-5000

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Tire Changing Kit Instructions

Everyone calls it “changing a tire” but what you are really doing is changing a tire and wheel assembly. The wheel is the metal part, the tire is the rubber part, and you are going to remove them as one piece. Later, a tire shop will remove the tire from the wheel to patch or replace it.

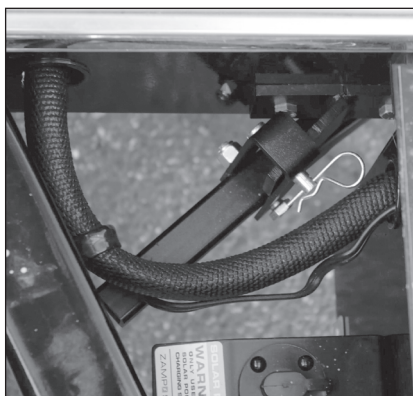
1. Safety first!

- Make sure the Airstream is pulled off the road to as safe a place as possible.
- If you are working by the side of the road, first put on the reflective safety vest included in this kit, and turn on the Hazard flashers on your tow vehicle—they’ll flash the Airstream’s tail lights too.
- Set the parking brake on the truck, and consider also chocking the tires on the side of the trailer that doesn’t have the flat.

2. Get the spare tire and wheel out of the carrier. The spare tire for most aluminum-bodied Airstream trailers is located under the front of the trailer.

- It’s a lot easier to access the spare tire if you use the hitch jack on the front of the Airstream to raise the front of the Airstream.

There’s a metal handle (a 1" square tube) below the A-frame on the curbside front of the Airstream (just behind the propane tanks, near the solar charge port). It is secured by a bracket and a bolt with a cotter pin.



- Pull out the cotter pin, then pull up on the metal handle to make it easier to remove the bolt.
- While still holding the handle, rotate the bracket off. The weight of the tire will be on the handle at that point.
- Lower the handle to the ground.



The easy way to get the tire out of the carrier, once it’s on the ground, is to sit on the ground on the curb side (passenger side) and push the tire with your feet.

3. Check the air pressure in the spare using the pressure gauge in this kit. The correct maximum pressure is printed on the sidewall of the tire. A tire that is low on air is likely to blow out, which could make things a lot worse. If the pressure in the spare is more than 15% below the maximum rated pressure and you can’t add air, you might consider three-wheel towing for a short time (see discussion below).

4. Loosen but do not remove the lug nuts of the wheel you need to remove. You’ll use three things in this kit to do that: the “breaker bar” (solid handle about 18" long), the 10" extension (another solid bar which snaps onto the breaker bar), and either a 13/16" socket or a 3/4" socket.

Most Airstreams made after mid-year 2017 have lug nuts that require a 13/16" socket. Insert the 10" extension bar into the socket that fits your trailer’s lug nuts.

The lug nuts may be tight. You can position the breaker bar so that you can carefully step or lean on the handle to get each nut loose. (Never use the torque wrench to remove nuts, because that can mess up its delicate calibration.)

Just get the nuts loose. You’ll remove them entirely after the trailer is jacked up.



5. Raise the Airstream tire.

If you have a two or three axle Airstream and you just want to get the Airstream up enough to change a tire, you don't need a jack. Make a stack of leveling blocks in front or behind of the wheel you aren't removing (on the same side of the trailer), then pull the Airstream up on the blocks.

This will allow the other tire to hang free in the air. If the tire isn't free to rotate, try again with a taller stack of blocks.

If you have a single-axle Airstream, you'll need a hydraulic jack to lift the trailer. (Your truck jack won't work for this job.)



On newer single-axle trailers Airstream places a label that says "JACK"

on the belly pan, just rear of the wheels. An arrow on the label points to a plate riveted to the main frame rail (underneath the trailer) where you can safely put the jack. If you can't find the label, you can put the jack under an exposed section of the trailer's frame near the axle. For more information on the correct jacking point, see your Owner's Manual.

Don't use the axle (long metal tube that goes side to side from one wheel to another) or the belly pan for jacking. Your jack can damage the axles internally, and it will just punch through the belly pan.

A safety tip: jacks are only for raising and lowering the trailer. You shouldn't go crawling around under the Airstream when it is supported by a jack.

6. Remove the lug nuts from the flat tire/wheel. Put them somewhere safe, not lying in the grass where they might get lost.

7. Pull the wheel off (it will weigh about 35-40 pounds) and replace it with the spare. It's easiest to do this when sitting on the ground. You can position your feet below the tire and use them to support the wheel, while you are wiggling the wheel off or on with your hands.



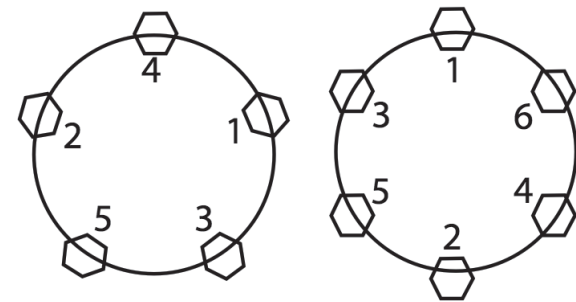
8. Put the spare tire on, using the same technique as you used to pull the wheel off.

9. Replace the lug nuts and tighten with your fingers only until they are all snug.

10. Lower the Airstream tires, by pulling it off the blocks or lowering the jack.

11. Torque the lug nuts. The correct torque is extremely important, so that's why this kit includes a torque wrench. Under the right amount of tension, the wheel is pressed to the brake hub face and the lug bolt will be well mated with the lug nut. Too much torque and the lug bolt will be stretched, and eventually break. Too little tension and the lug nut can work off.

- Remove the socket and extension bar from the breaker bar, and attach them to the torque wrench.
- Set the target torque in foot-pounds (see directions that come with the wrench). For most Airstream aluminum wheels the setting should be 110 ft-lbs, but check your Owner's Manual to be sure. Make sure you are using the foot-pounds scale on the wrench, not the metric Newton-meters scale.
- Tighten the lug nuts using the pattern shown. This will help ensure the wheel tightens evenly. The wrench will "click" when you've tightened the nut to that setting. Keep tightening each nut until the wrench clicks.



12. Once the nuts are torqued, you can put the spare away, and pack up.

Double-check:

- hitch jack has been raised fully
- spare tire carrier has been put back into place and bolted
- all tools and chocks have been collected

ONE MORE THING TO DO...

It's very important to re-check the lug nuts after the trailer has been towed for a while. This is because the lug nuts need a little time to "seat" properly. A common recommendation is to check the lug nuts with your torque wrench after 25 miles, then again at 50 miles, and one last time after 100 miles from when you changed the tire. If you don't check and re-tighten the lug nuts to proper torque, they may loosen over time, which can lead to losing a wheel.

Use the same tightening pattern that you used in Step 11.

THREE WHEEL TOWING

Perhaps you don't have a spare, or the spare is too low on air to be safely used, or you somehow managed to get two flats at the same time. If you have a two or three axle Airstream, you have another option. You can simply remove the flat tire and continue towing to the nearest service center.

You can drive a short distance on three wheels (Airstream says up to 100 miles). But keep in mind that this will stress the remaining tires. You must reduce your speed to 30 MPH or less. Check the air pressure in the remaining tires before proceeding, and don't go further than necessary.

PATCH, PLUG, OR REPLACE?

That flat tire needs to be addressed. Take it to a good tire shop and have them check it. If the problem is just a clean puncture, it can be repaired.

These days the gold standard repair is a mushroom-shaped patch-plug. This seals the outside of the tire against water that could cause the tire's internal belts to rust, and also seals the inner liner of the tire so that it will not leak. Ask the tire shop if they can do a patch-plug, and take your tire elsewhere if they can't.

If the tire damage is too severe or in the wrong place, you'll need to replace the tire. Don't hesitate. A tire blow-out can do major damage to your Airstream, and it's a false economy to try to "save" a tire that should be sent off for recycling.

OUR RECOMMENDATION FOR ADDITIONAL SAFETY

One of the best ways to avoid blowouts is to install a Tire Pressure Monitoring System. These systems typically use sensors screwed onto the valve stems, or placed inside the wheel. A remote monitor in the tow vehicle will alert you if the tire becomes dangerously under-inflated, or over-inflated (usually from overheating of brake or wheel bearing parts). Some will also monitor the tire temperature, which is useful to help you understand what's going on as you travel.

You want to know what's going on with your tires because often you won't feel or see a change in tire air pressure. In fact, on multi-axle Airstreams it's possible to lose a wheel entirely and not feel any change in towing characteristics. Knowing immediately what's going on can save you a lot of trouble.

If you get a TPMS, buy a quality one. Cheap ones are often marketed under different names by different re-sellers, and this is a case where you will get what you paid for. We offer a high-quality unit by Truck Systems Technologies (TST), at airgear.store.

One nice aspect of having a TPMS is that you will know the pressure of each tire moments after you get in your tow vehicle, every time you tow. No more bending down and checking each tire one at a time, no more getting your hands dirty, and less time spent getting ready to tow.

Don't forget to buy a spare sensor for the spare tire, so you don't have to slide under the Airstream to check it before every trip. If your tow vehicle doesn't have a built-in TPMS, consider getting tire sensors for it, too.

**If you have any questions about using this kit,
contact us at: help@airgear.store for assistance.**

HAPPY CAMPING!