

BIKE FLOOR PUMP OWNER'S MANUAL

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Introduction

The Bike Floor Pump inflates bike tires quickly, safely, and is flexible enough for all your inflation needs. The pump is designed with a durable steel barrel, sturdy base, ergonomic handle, and a dual head that is compatible with Schrader and Presta valves (Bell Sports Inc., 2022). The top-mounted pressure gauge is easy to read and ensures that tires are inflated to the correct specifications of your tire manufacturer to ensure the best performance and safety of your bike tires. Follow the minimum or maximum tire pressure, indicated in pounds per square inch (PSI), displayed on the outside of the tire sidewall.



Fig. 1 Example of a road bike tire with a maximum 120 PSI.

Beginner and advanced cyclists alike will find the Bike Floor Pump provides consistent inflation performance each use. The pump comes fully assembled and is ready to go when you are. The task of inflating your bike tires has never been easier.

Warnings and/or hazards

Underinflation of tires:

An underinflated tire is when the tire pressure is below the recommended PSI. Without sufficient air pressure a tire will struggle to support the weight of the rider. This can lead to flat tires, damage to the tire rims, or even a difficulty in pedaling.

Overinflation of tires:

An overinflated tire is when the tire pressure is above the recommended maximum PSI. A common problem with overinflation is that the tire can burst because of too much pressure building up in the inner tube.

Definition of key terms

Pounds per square inch (PSI):

The air pressure measurement is in pounds per square inch.

Tube valve types:

- **Schrader valve:**

This is the most common valve found on bicycles and automobiles.



Fig. 2 Example of a Schrader valve (Bernstein, 2015).

- **Presta valve:**

This valve is generally found on high-pressure tires.



Fig. 3 Example of a Presta valve (Bernstein, 2015).

Technical description

The Bike Floor Pump is designed with versatility in mind. It is an ideal pump for inflation of all types of bike tires, sports gear, and inflatable toys. The tall, thin-barrel design offers less resistance making it easy to inflate tires big and small, including the thin, high-pressure tires found on road and commuter bikes (Bell Sports Inc., 2022). The top mounted pressure gauge is easy to read PSI levels and provides accurate inflation. The dual head is compatible with both Schrader and Presta valves. The extra-large base and soft touch handle ensure a comfortable and easy pumping experience.

Technical specifications:

Pump type	Floor pump
Valve types	Schrader Presta
Air volume	470 cm ³ (Walmart, 2022)
Maximum pressure (PSI)	120 pounds per square inch (Walmart, 2022)
Weight	2.55 lbs. (Walmart, 2022)
Dimensions (L x W x H)	5.30 x 10.70 x 25.10 inches (Walmart, 2022)
Barrel material	Steel (Bell Sports Inc., 2022)

Pump diagram:



1. **Handle:** Grip the handle firmly and use an upward lifting and downward pushing motion.
2. **Pressure gauge:** Top-mounted to easily read pressure fluctuations and readout of PSI levels.
3. **Dual head:** Compatible with Schrader and Presta valves.
4. **Barrel:** The barrel sends high pressure air through the hose and into the tube valve of your tire.
5. **Base:** The wide and sturdy base gives you plenty of room for your feet to provide stability to the pumping action of the handle.

Walmart (2022). [Picture of Bell Sports Air Glide 750 pump] [Photograph].

<https://www.walmart.com/ip/Bell-Sports-Air-Glide-750-High-Pressure-Bicycle-Floor-Pump-with-Top-Gauge-Orange/49706785>

Tire inflation procedure

Helpful tip:

Place your bike against a solid surface or use a kickstand to provide stability while inflating your tires.

Steps to inflate a bike tire:

1. Check the PSI level for each tire. The recommended PSI level is on the outside of the tire. Do not inflate tires beyond the maximum PSI.



2. Check if you have a Schrader or Presta valve. The pump is compatible for both.



Example of a Schrader valve.

Example of a Presta valve.

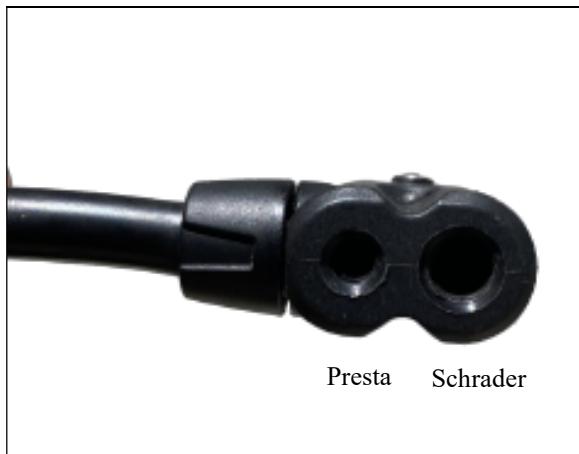
3. Unscrew valve cap. Loosen the top part of the valve to allow air flow (in the case of a Presta valve only).



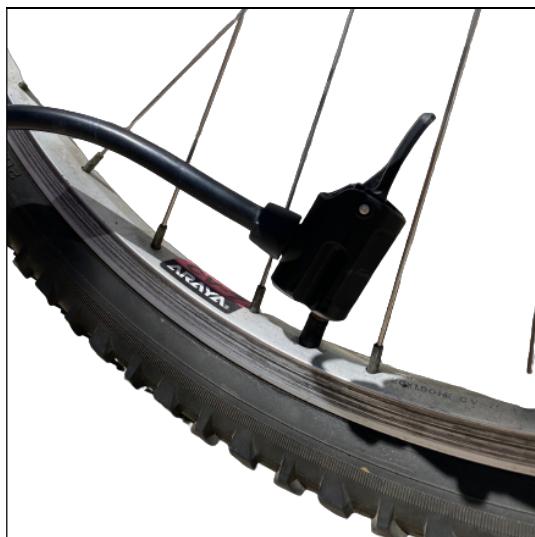
4. Unlock the dual head by pulling up on the lever.



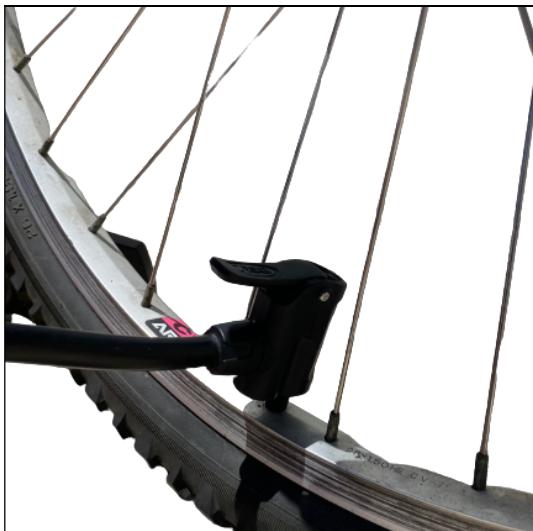
5. The dual head has two openings; one that is used for a Presta valve, and the other is used for a Schrader valve.



6. Attach the correct opening of the dual head to the valve securely. If the head feels loose on the valve, adjust the head so that it fits snuggly to the valve.



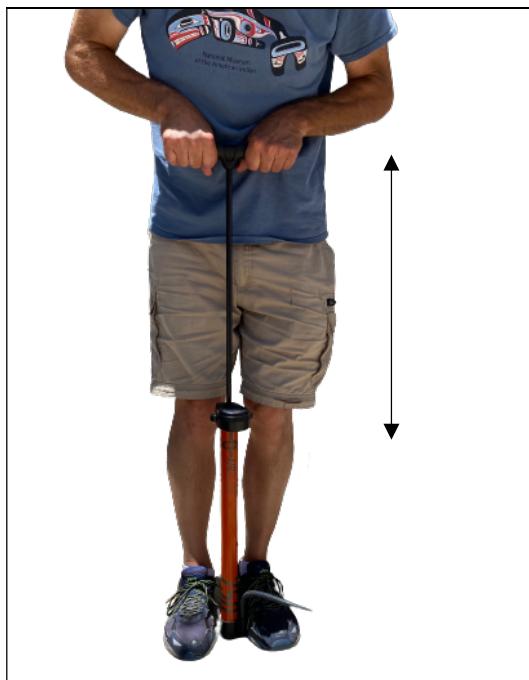
7. Lock the head to the valve by pushing the lever down.



8. Once the head is secure and locked to the valve, plant your feet on the base of the pump.



9. Grip handle with both hands and pump with a vertical upward and downward motion.



10. Watch the pressure gauge as you are pumping. Inflate the tire until you reach the recommended maximum PSI level. Do not over inflate your tires.



11. Stop pumping once the correct PSI level is reached.

12. Unlock the head from the valve by pulling up on the lever and then release the head from the valve.



13. Tighten the air valve (Presta only). Screw the valve cap back on for both valve types.

Your bike tire is now inflated.



Frequent issues and troubleshooting guide

Tire not inflating:

If the tire is not inflating, adjust the head tightly over the valve. Try pumping again and watch the pressure gauge for fluctuations in air pressure.

Slow leaks:

Tires can lose air pressure over time. It is good practice to check your tire air pressure and inflate tires to the recommended PSI level before each bike ride. If you notice that your tire is losing air pressure over a short period, then you may have a puncture in your tire or another issue that requires maintenance.

Works cited

Bell Sports Inc. (2022). Retrieved June 24, 2022,
from <https://www.thebellgarage.com/accessories/pumps/>

Bernstein, R., & Bernstein, B. (2015). *The ABC's of Bike Tires: How To Choose The Best Tires for Your Bike*. BLB Publishing.

Walmart (2022). Retrieved June 29, 2022, from <https://www.walmart.com/ip/Bell-Sports-Air-Glide-750-High-Pressure-Bicycle-Floor-Pump-with-Top-Gauge-Orange/49706785>