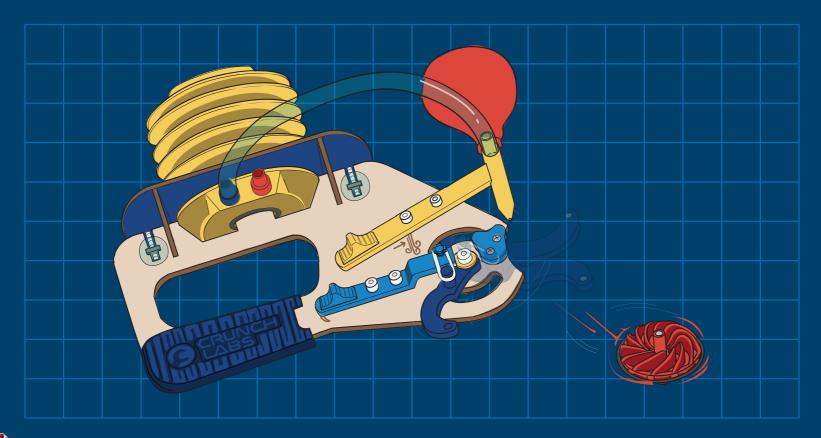


BUILD TURBINE TOP





NEW VIDEO UNLOCKED

BUILD ALONG & LEARN WITH MARK ROBER





CRUNCHLABS.COM/SPIN

PARTS







nozzle



release toggles



magnetic arms





shoulder washers



plastic nuts and bolts



metal nuts and bolts



stopper



bellows and tube







clear sticker sheet



balloons



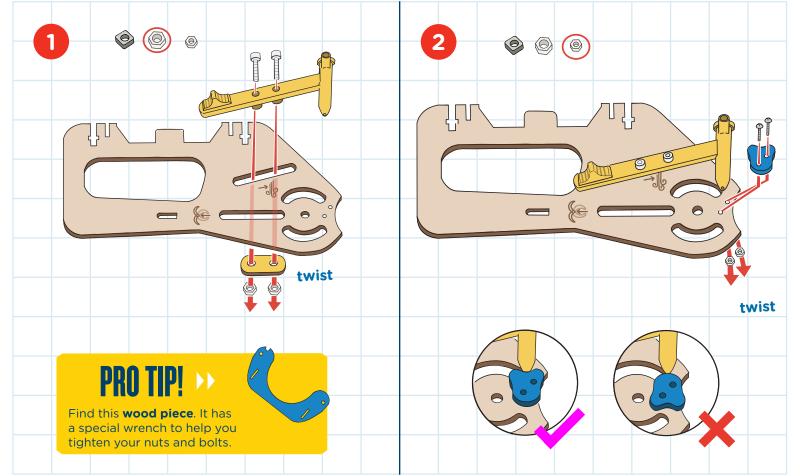
paper straws

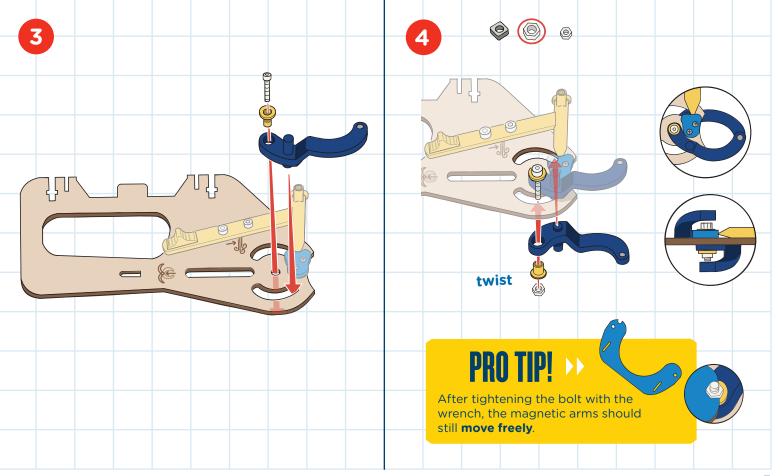


handle

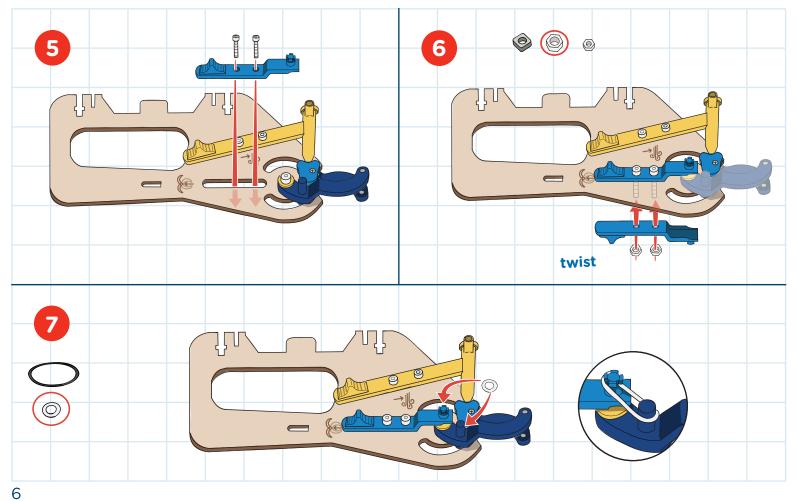
For missing and replacement parts, visit "My Account" at crunchlabs.com and we'll ship them to you for free.

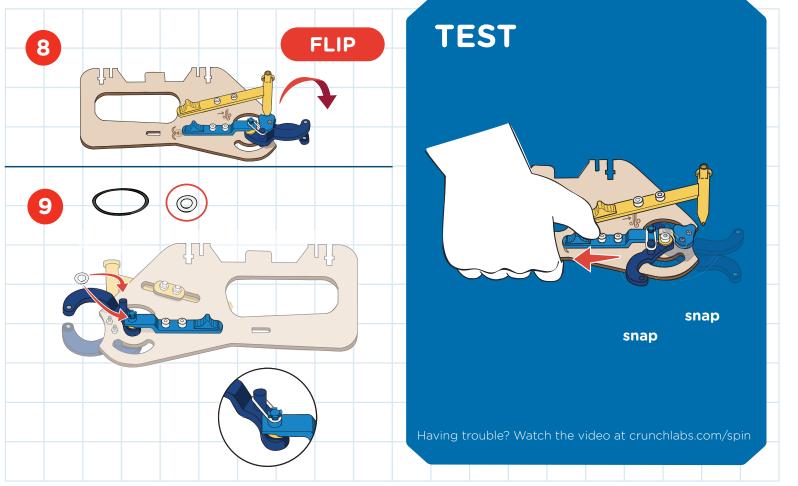




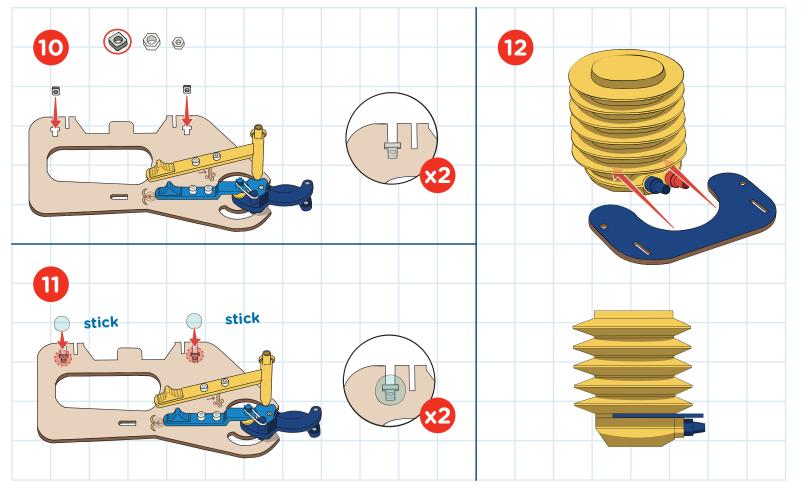


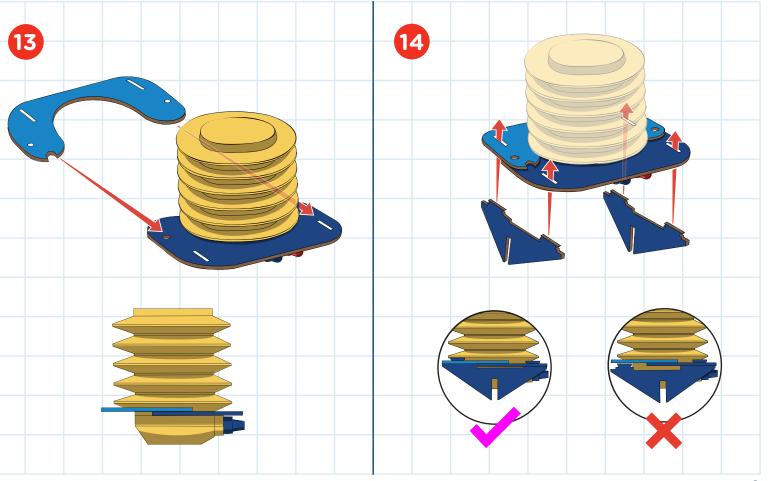
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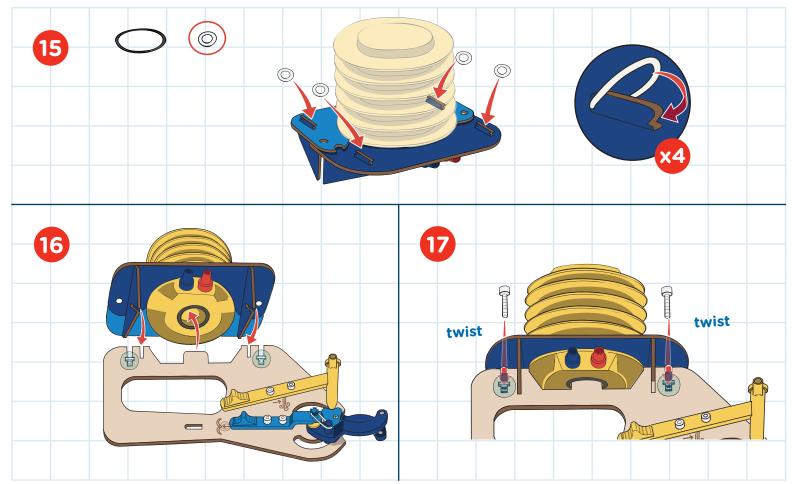
BUILD

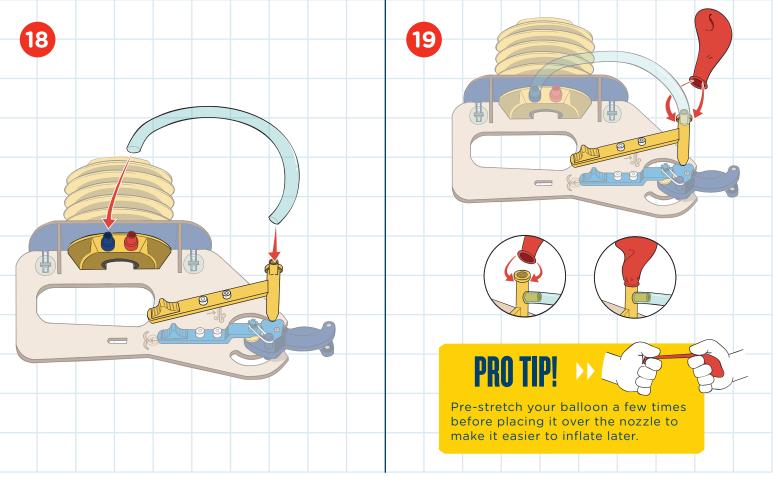




Q

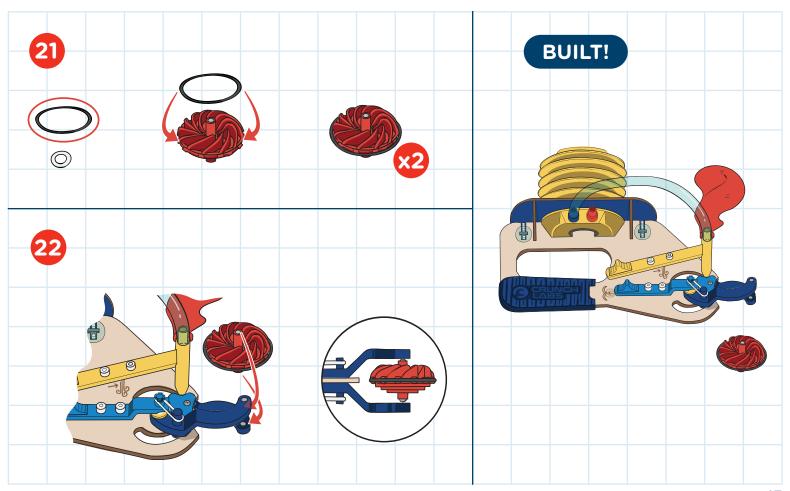
BUILD





10







THINK

A turbine is a wheel or rotor that uses blades to extract energy from the flow of fluids.

Basically, turbines use the flow of water or air to make stuff happen.

Deep inside hydroelectric dams, high behind a windmill's blades, and held lightly in the hand as a colorful pinwheel, you'll find **turbines**. Unlike a fan, which uses energy to move air, a turbine captures energy from air. Windmills and dams use turbines to **convert breezes and flowing water into electricity** that can charge your phone or light your home.

steam, and air. In Turbine Top, the balloon blows air into the top's blades, causing it to speed up!

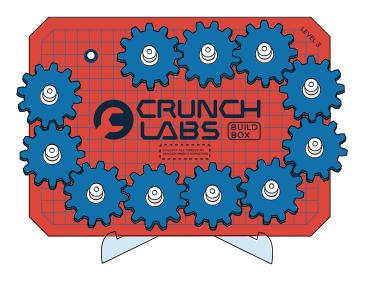
Turbines use curved blades to catch fluids like water,

CONGRATULATIONS! You earned a gear badge for turbine



Turbines are super common wherever electricity is generated. Hydroelectric plants use water flowing downstream to spin turbines and generate power.





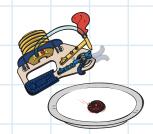
Don't forget to add your gear badge to your gear train!

Even coal, natural gas, and nuclear plants use turbines. Energy-dense fuels are used to heat water into steam, which pushes past the blades of massive rotors, causing them to spin. Unless your electricity comes from a biomass plant or solar farm, it's likely you have a turbine to thank!



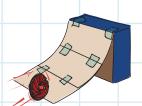
CRUNCH

It's crunch time! Use your engineering superpowers to keep building.



TOP TIME TRIAL

How long can you keep your top going? What's the best surface to release tops onto for long-duration spins?



TOP TARGET

Turn the top sideways to create a rolling projectile! Set up other build box builds to create chain events, or mask off "goal" areas on a table and keep score.



THE LAST STRAW

Battle your friends to see who can use the included straws to keep their top spinning the longest. Up the ante by allowing opponents to blow on each other's spinning tops in reverse directions to slow them down!

SHOW OFF YOUR BUILD





Share your funniest moments & coolest mods! #crunchlabs @crunchlabs # f • J





WARNING: CHOKING HAZARD: Children under 8 yrs can choke or suffocate on uninflated or broken balloons. Adult supervision required. Keep uninflated balloons from children. Discard broken balloons at once. Made of natural rubber latex.

SWEEPSTAKES

Each CrunchLabs build box contains the chance to WIN a trip to visit CrunchLabs with Mark Rober! Sadly, you are not a prize winner this time. Check inside your next build box for another chance to win.

Trip includes roundtrip transportation and two (2) night's hotel accommodations for a family of four (4). Approximate value: \$4,500. NO PURCHASE NECESSARY. Open to legal U.S. residents, 18 years of age or older. Void where prohibited. For complete Official Rules, including promotion end date and information on how to obtain a free game ticket, visit www.crunchlabs.com/win.

This toy is intended for use by children over the age of eight years. These instructions contain important information, do not throw away.