

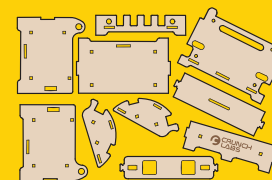
# NEW VIDEO UNLOCKED

BUILD ALONG & LEARN WITH MARK ROBER

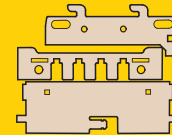


CRUNCHLABS.COM/LOCK

## PARTS



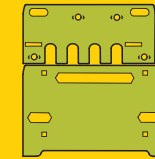
thin wood parts



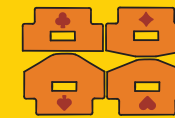
thick wood parts



color parts



plastic parts



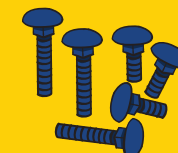
key parts



key pins



socket head bolts



carriage bolts



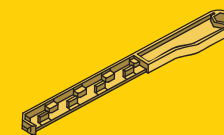
nuts



spacers



L brackets



key



driver pins



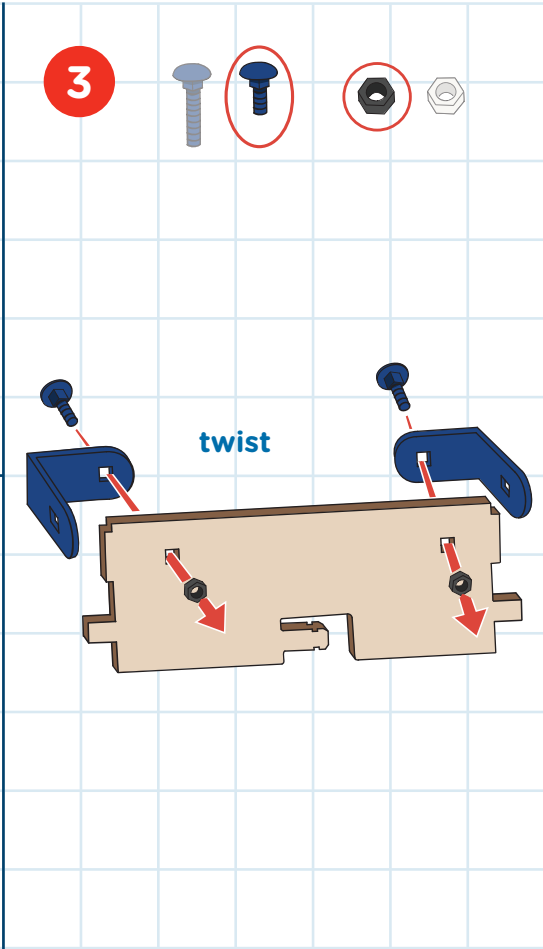
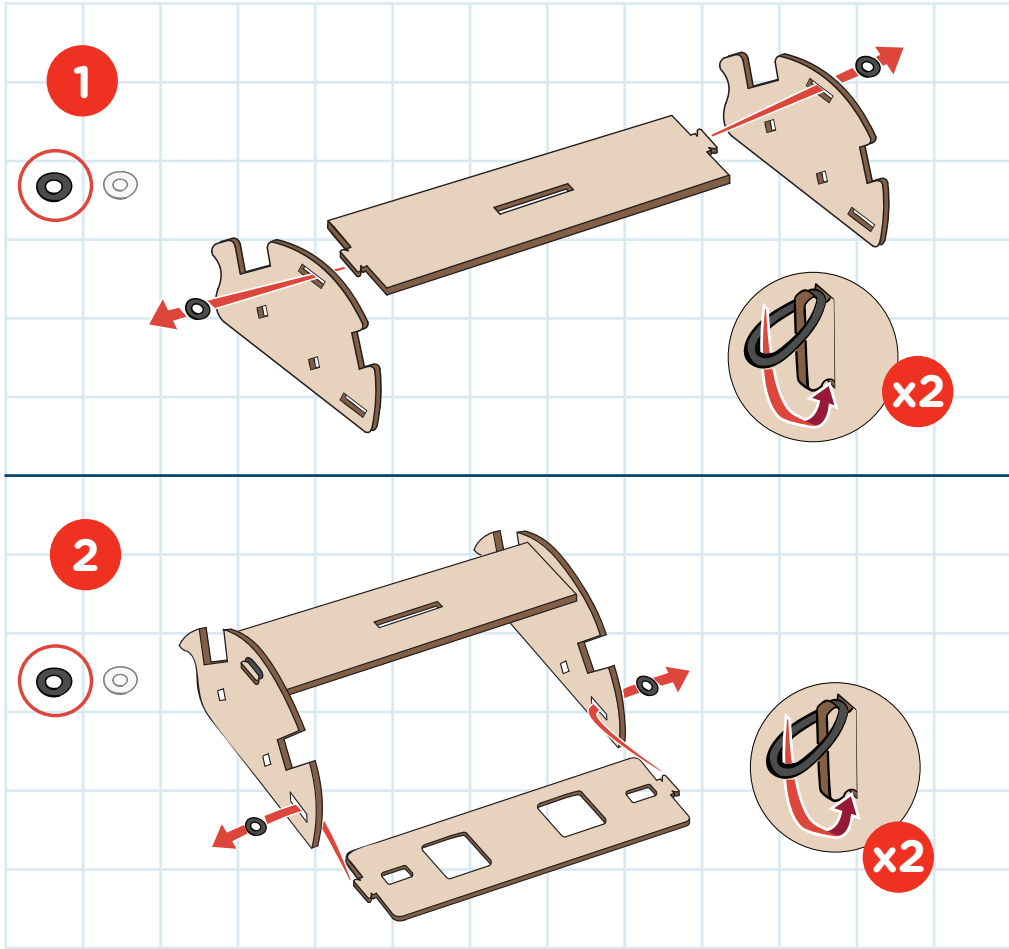
springs



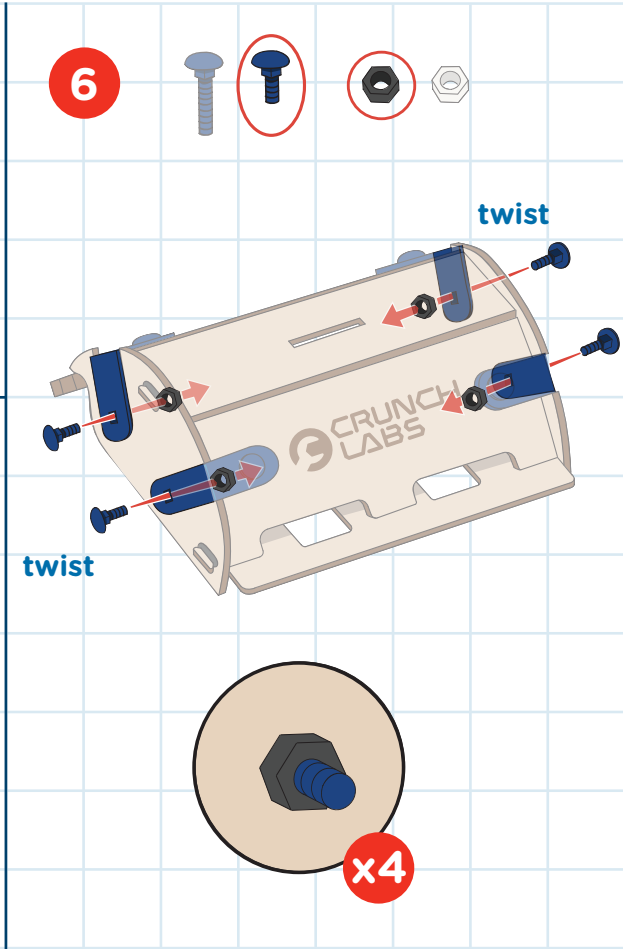
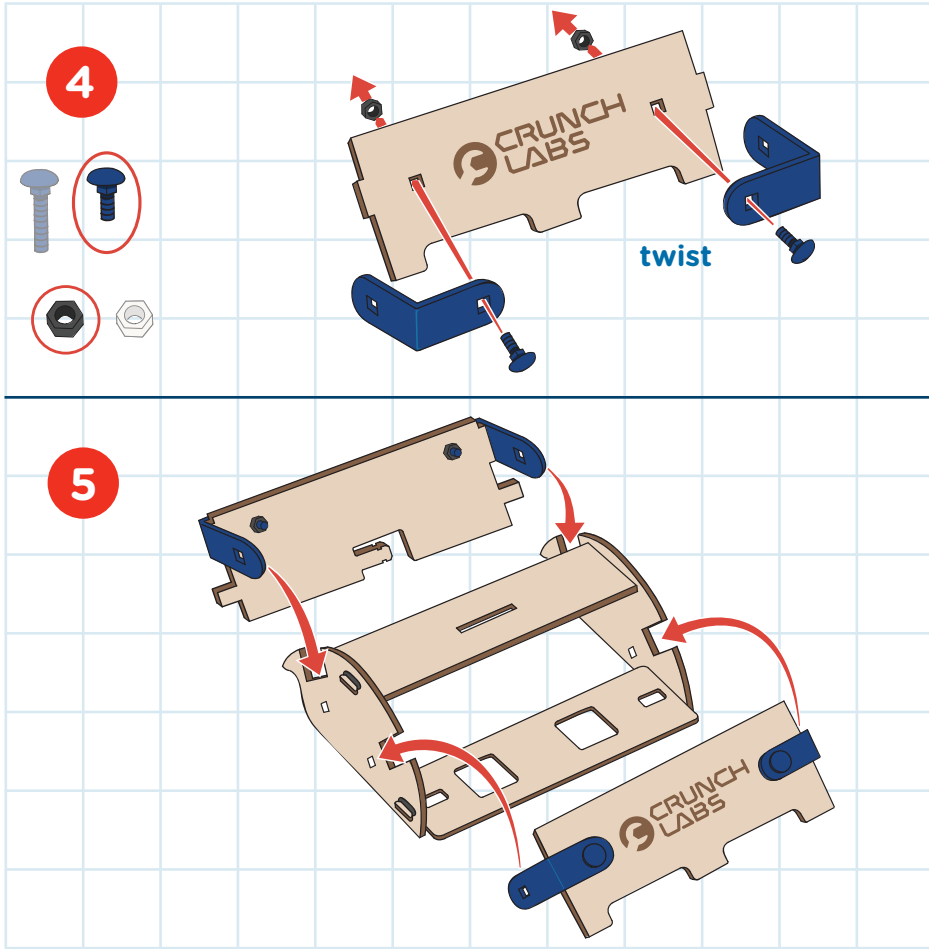
o-rings

For missing and replacement parts, visit "My Account" at [crunchlabs.com](https://crunchlabs.com) and we'll ship them to you for free.

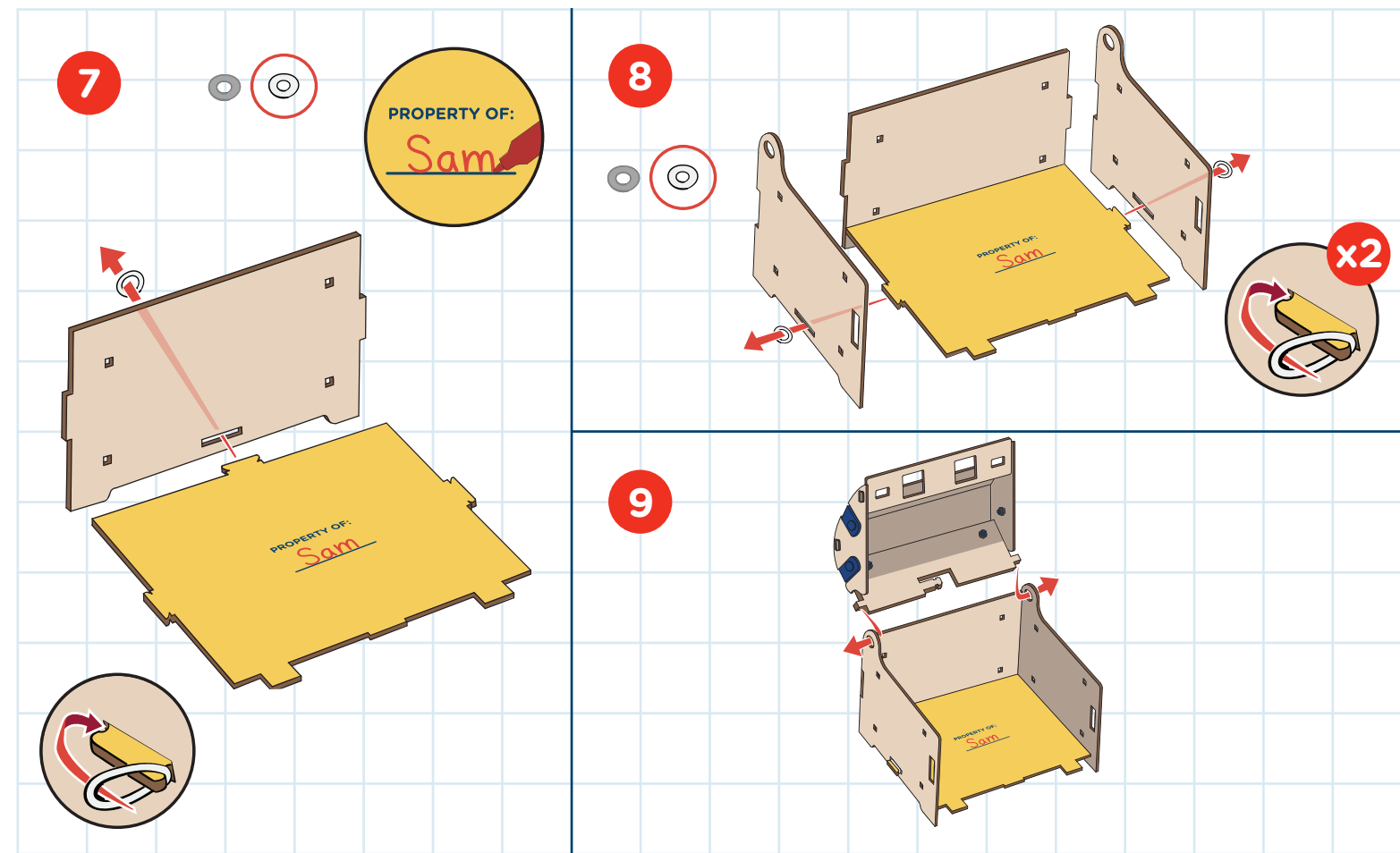
BUILD



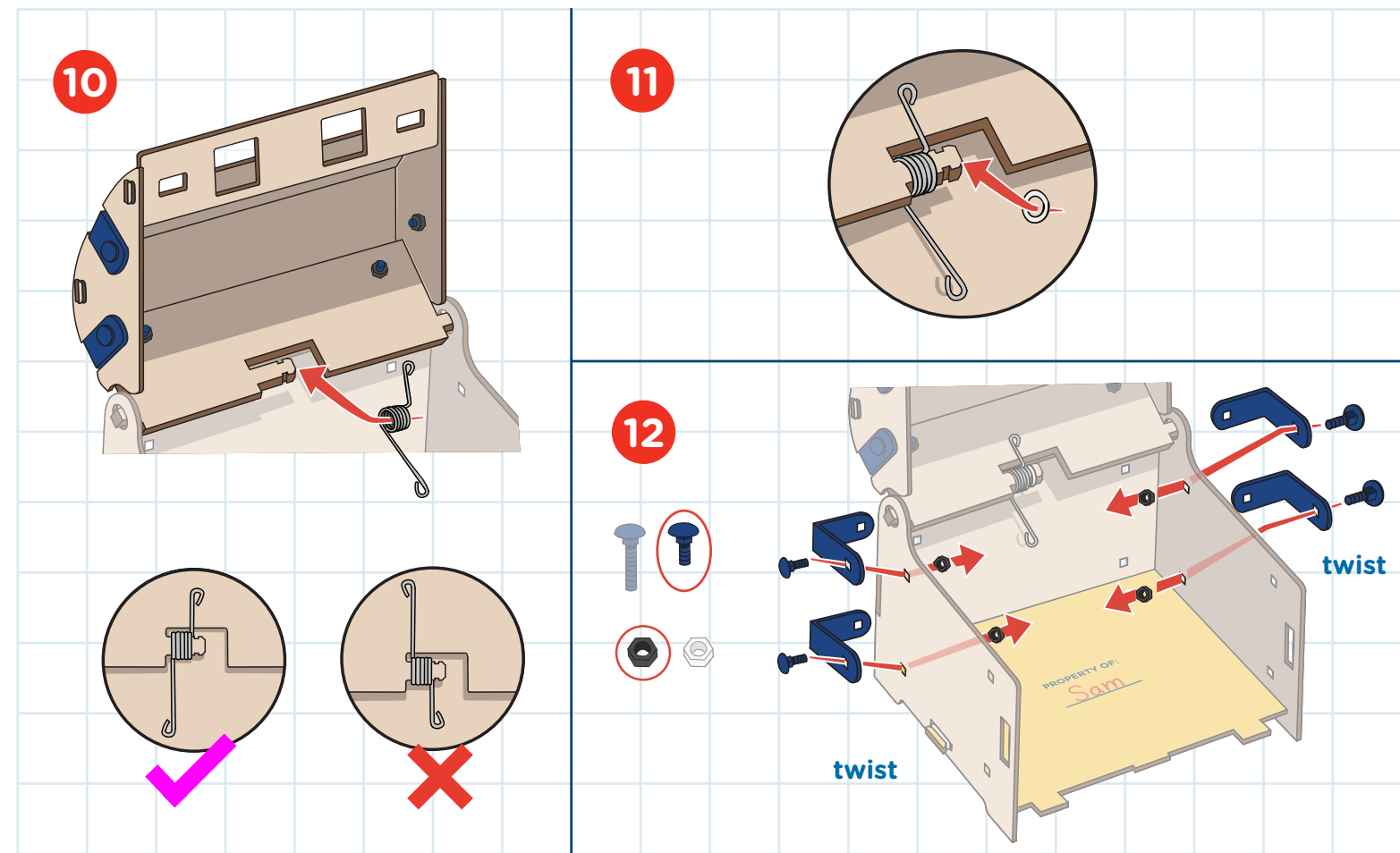
BUILD



# BUILD

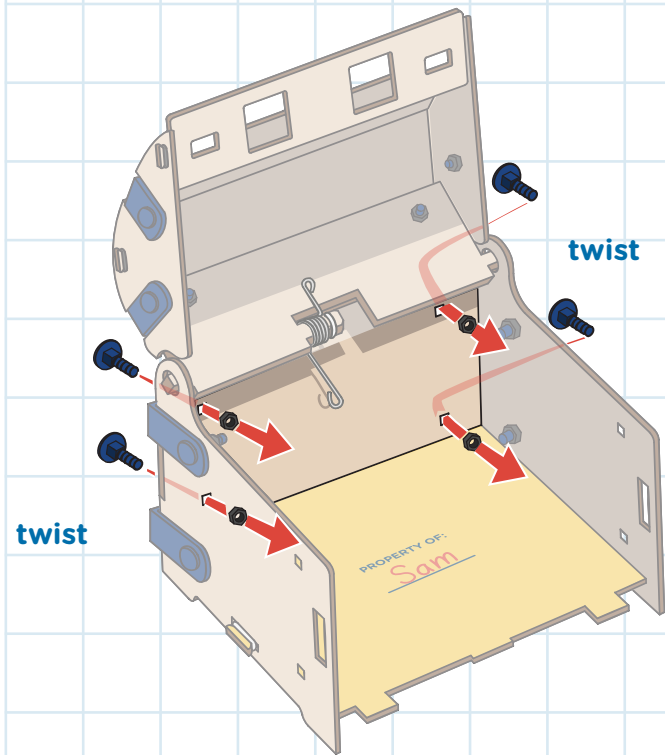
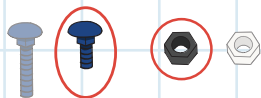


# BUILD

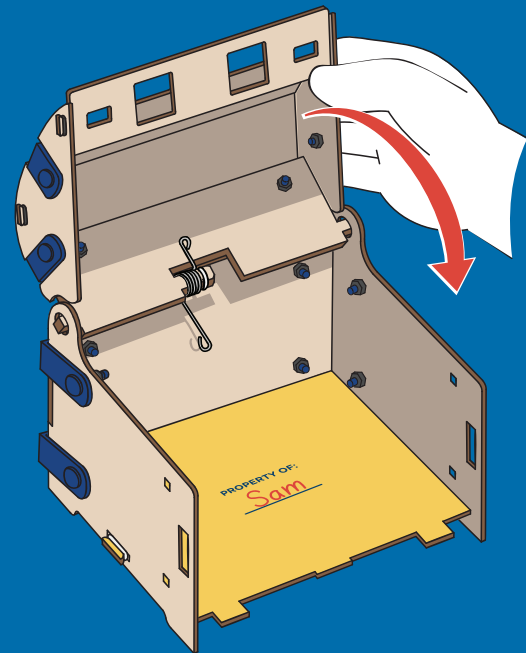


# BUILD

13



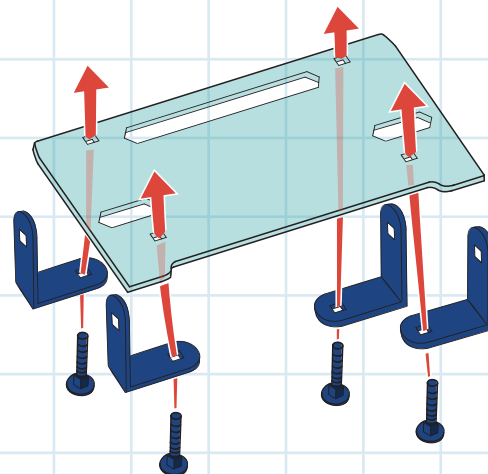
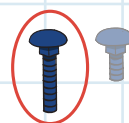
## TEST



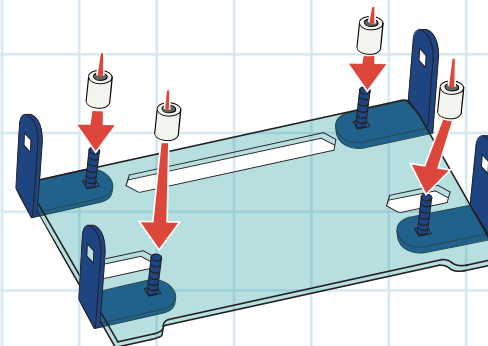
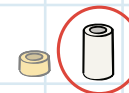
Having trouble? Watch the video at [crunchlabs.com/lock](https://crunchlabs.com/lock)

# BUILD

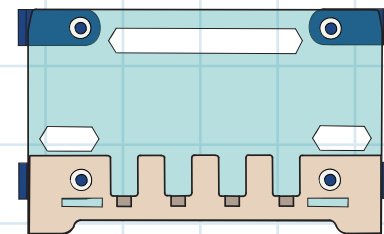
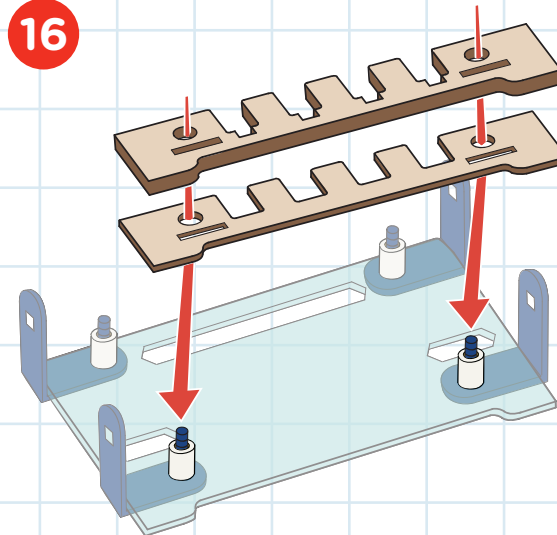
14



15

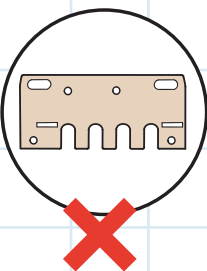
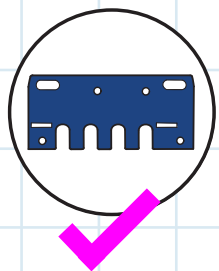
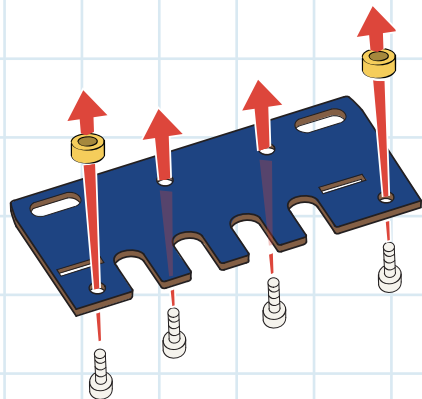


16

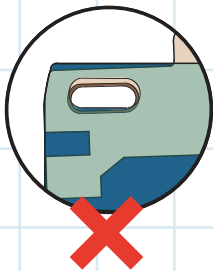
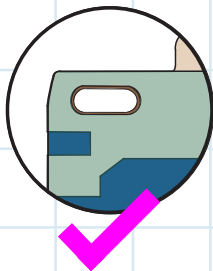
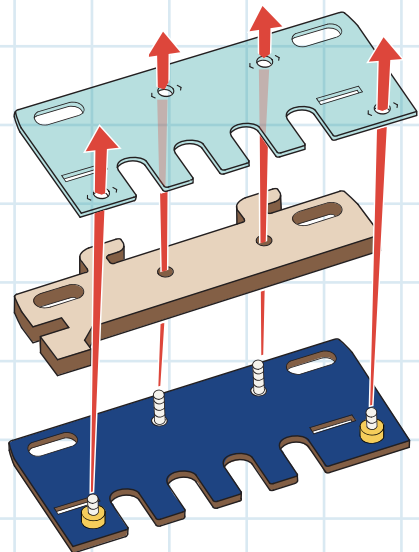


# BUILD

17

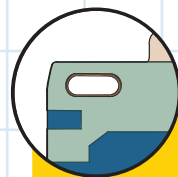
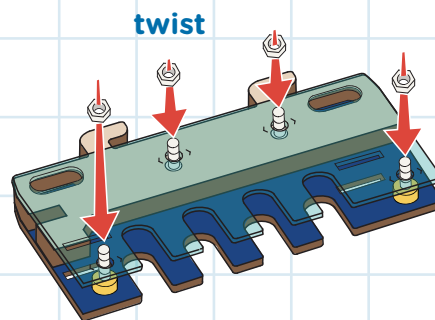
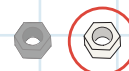


18

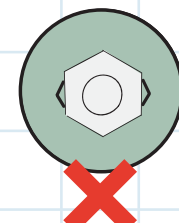
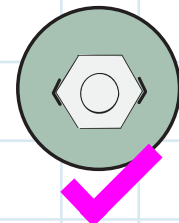


# BUILD

19

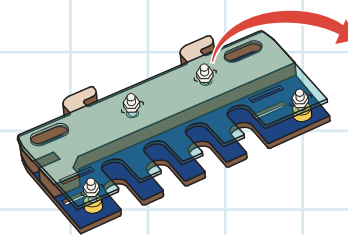


**PRO TIP!**  
Make sure the pieces are aligned before tightening the nut.

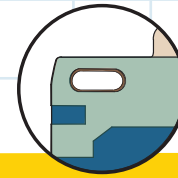
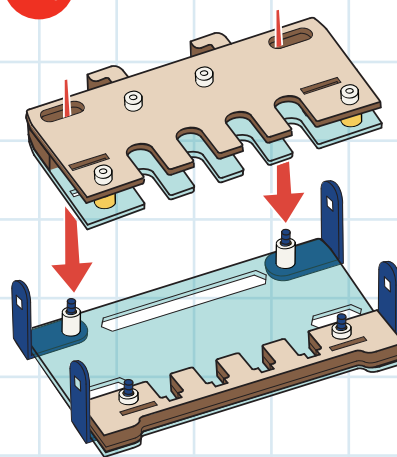


20

FLIP



21

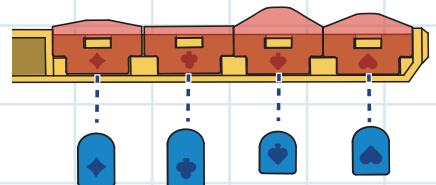
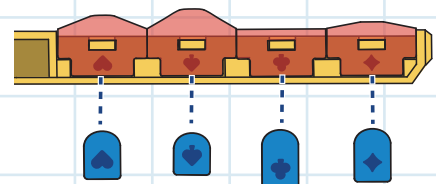
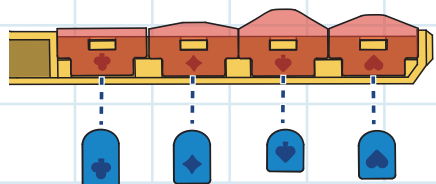


**PRO TIP!**  
If the piece doesn't fit, check for alignment and revisit step 19.

# BUILD

22

shuffle

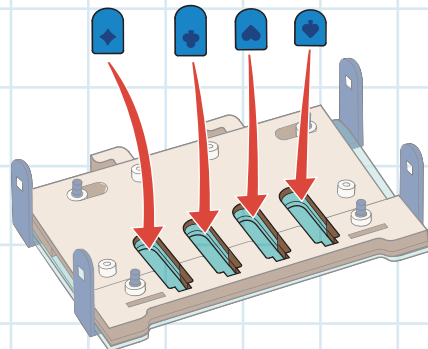
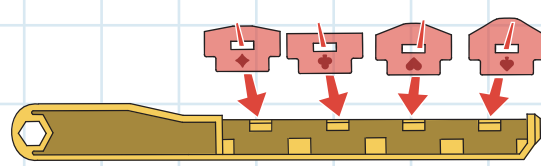


**PRO TIP!** ▲

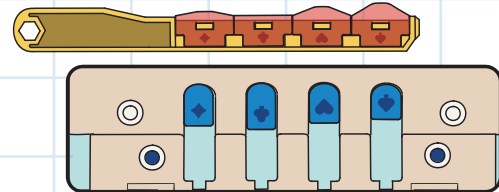
Match the shapes on the keys to the pins.  
Any combination will work.

23

shuffle

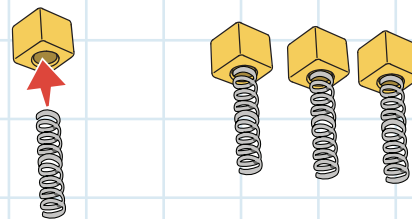


CHECK

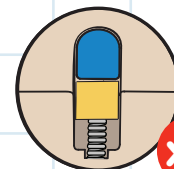
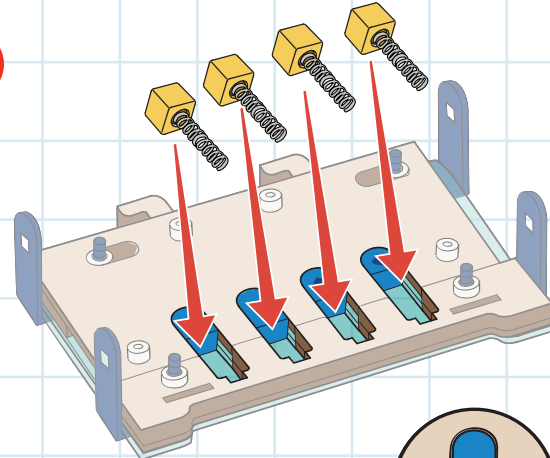


# BUILD

24

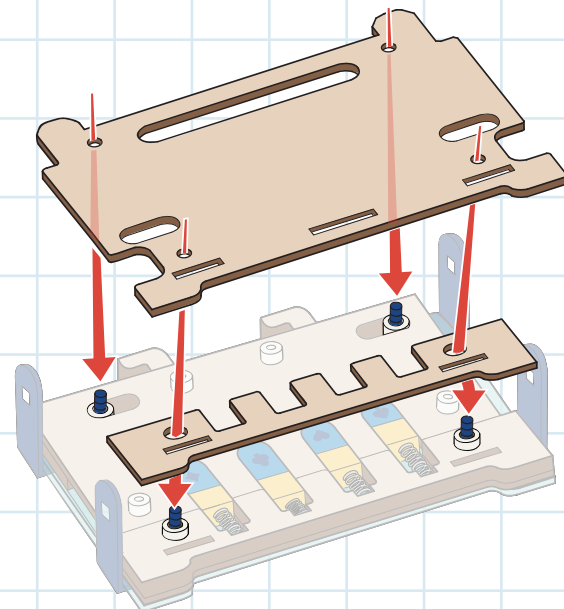


25



x4

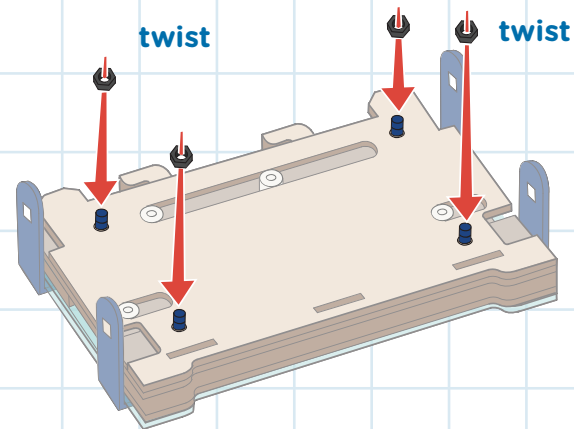
26





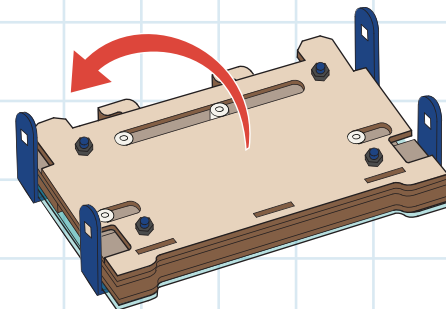
# BUILD

27

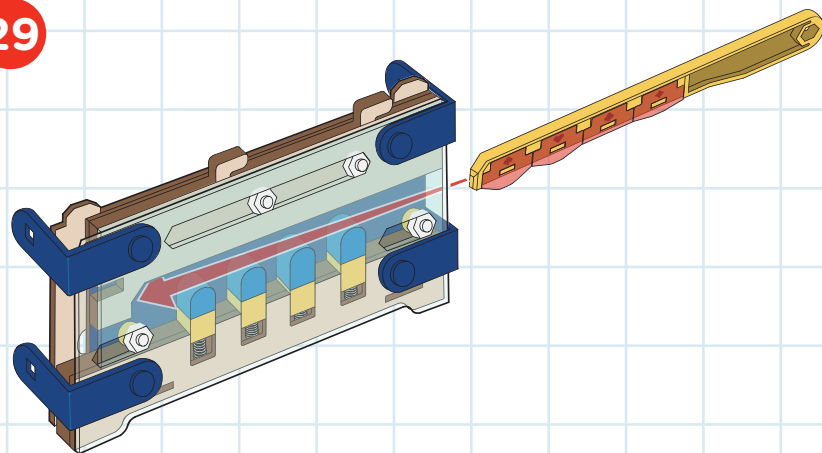


28

FLIP

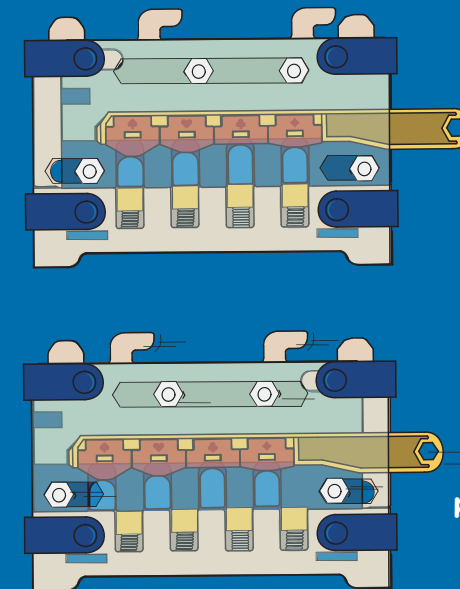


29



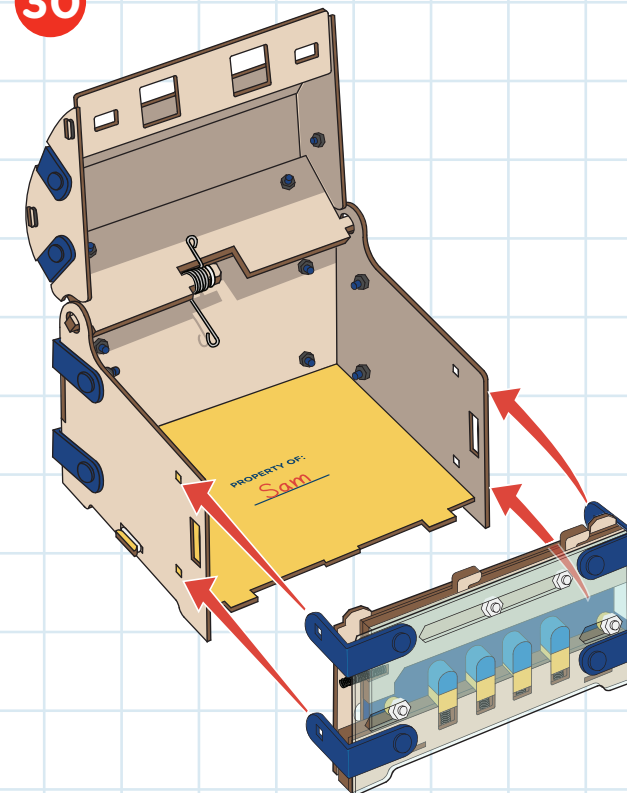
# BUILD

## TEST



Having trouble? Watch the video at [crunchlabs.com/lock](https://crunchlabs.com/lock)

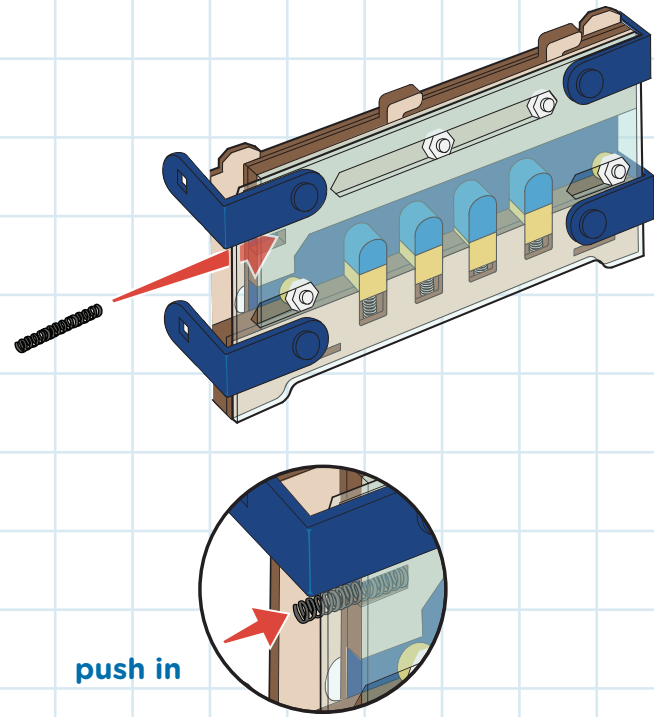
30



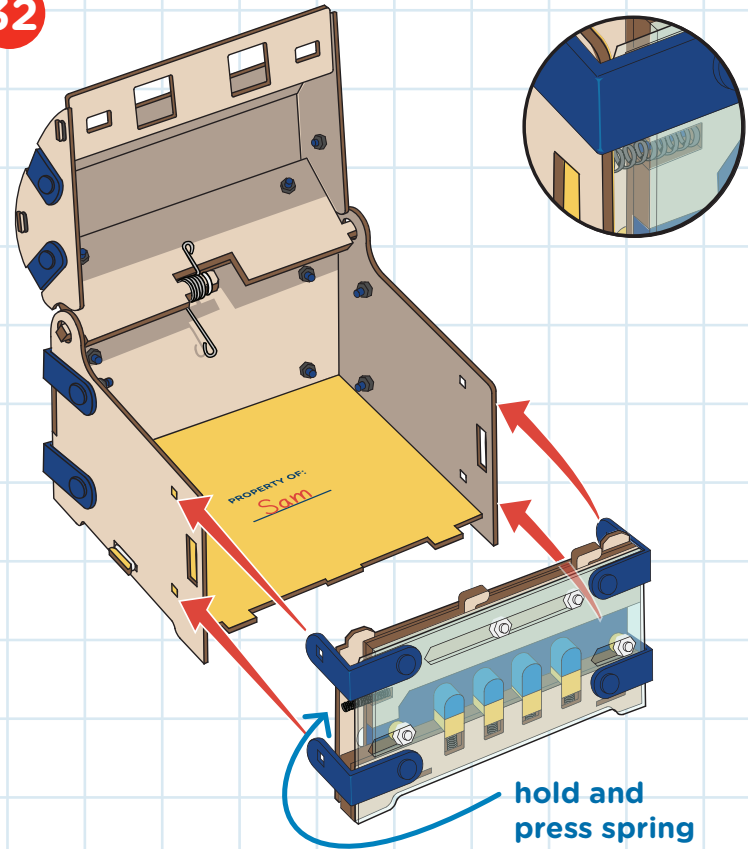


# BUILD

31

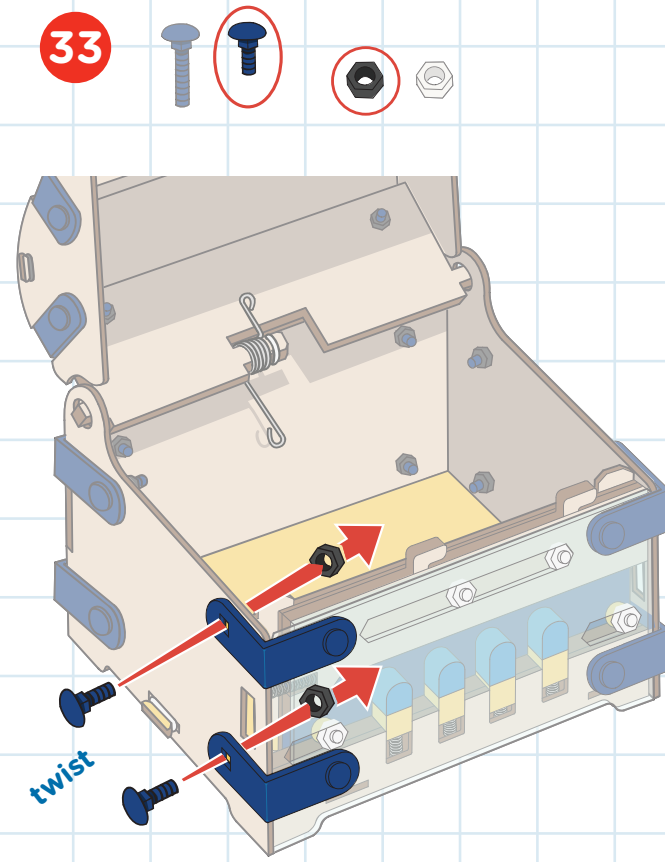


32

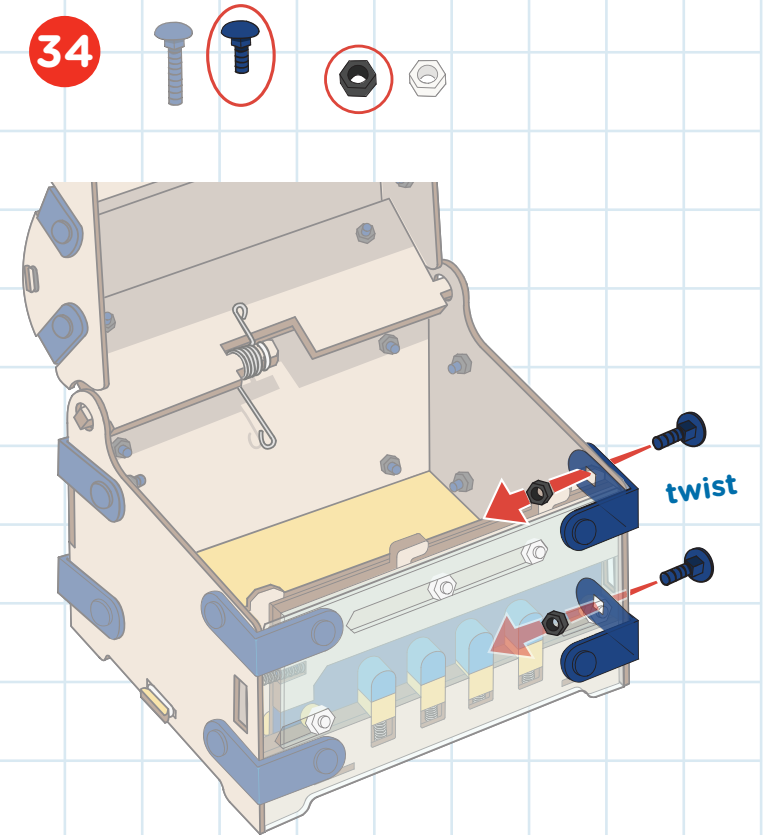


# BUILD

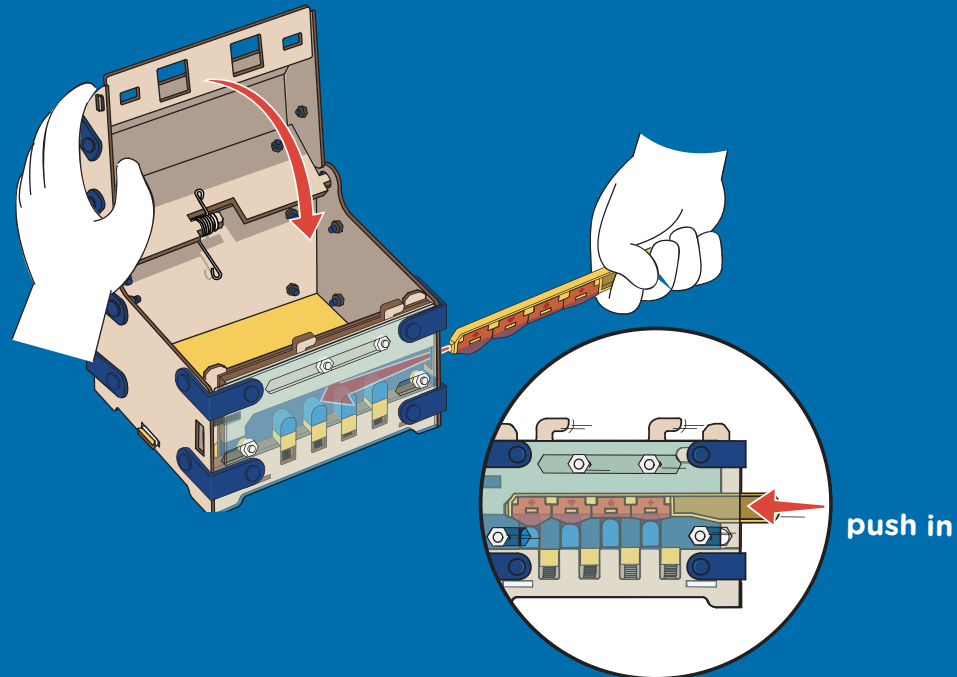
33



34

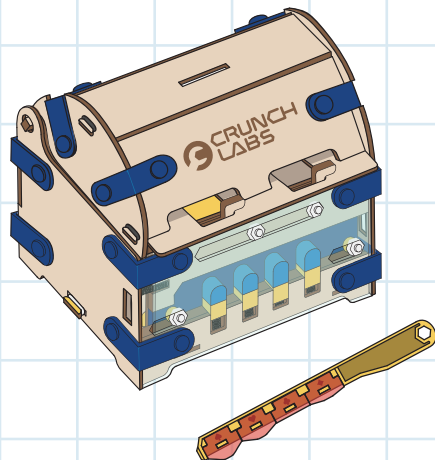


## TEST



Having trouble? Watch the video at [crunchlabs.com/lock](https://crunchlabs.com/lock)

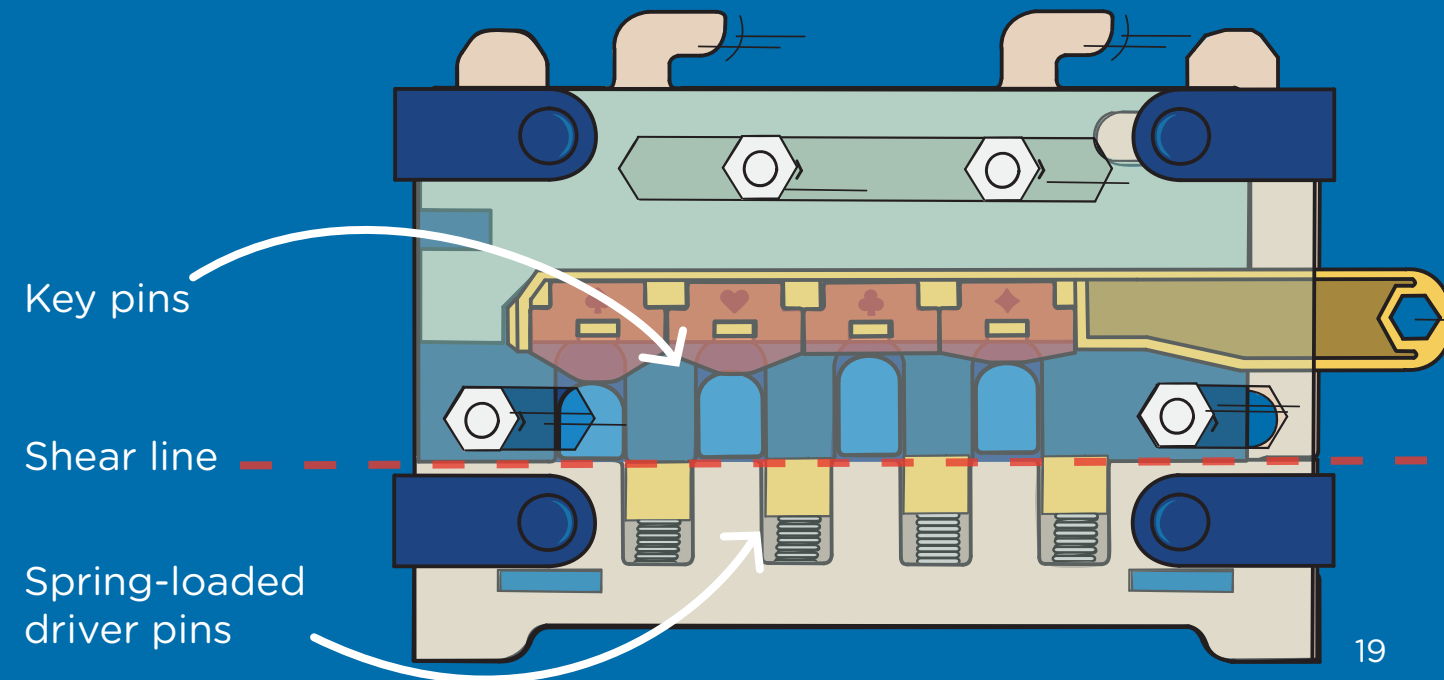
## BUILT!



## THINK

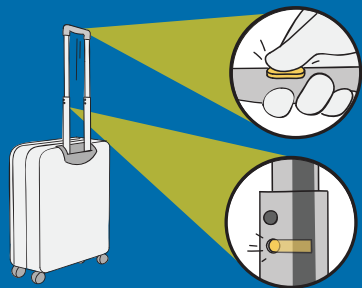
In engineering, a **pin** secures the position of two or more parts relative to each other.

When a key with the right combination is inserted on your Lock Box, the key pins and the spring-loaded driver pins align at the shear line to open the box.



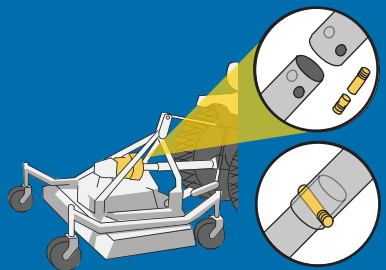
## THINK

There are many types of pins that come in various shapes and sizes, like dowel pins, cotter pins, taper pins, and shear pins. They can be found everywhere, from airplane doors to dining tables.



### TELESCOPING HANDLE

Spring loaded pins engage to lock the telescoping handle in position and disengage to allow you to adjust the handle height.

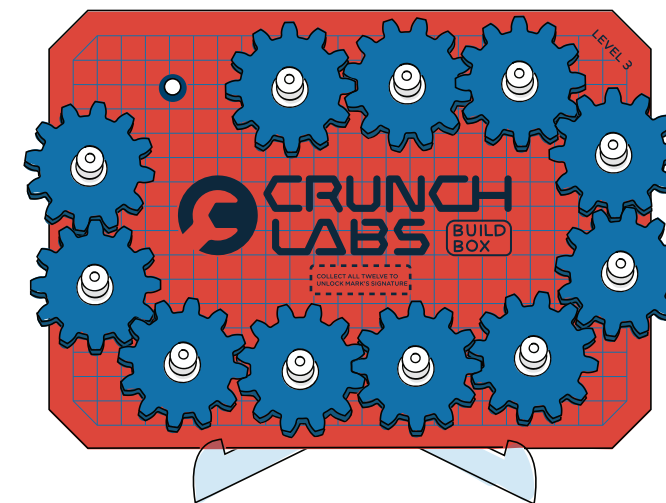
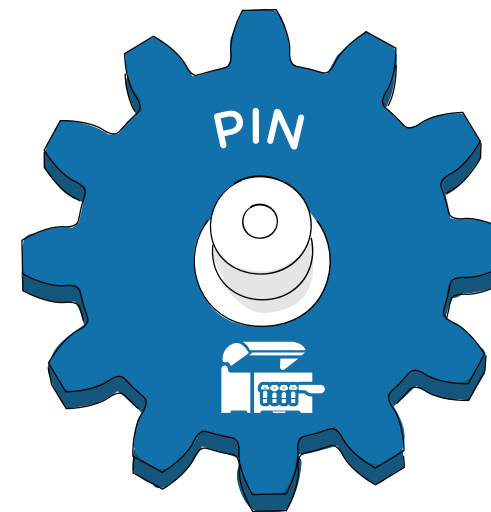


### LAWN MOWER

When the blade hits something too hard, the shear pin in a lawn mower is designed to shear off and break in a specific place. While you sacrifice the pin, this actually prevents damage to more important parts of the machine.

## THINK

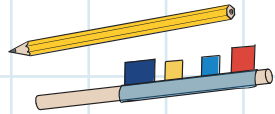
**CONGRATULATIONS!** You earned a gear badge for pin



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

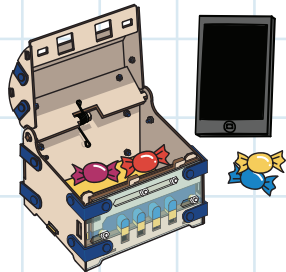
# CRUNCH

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



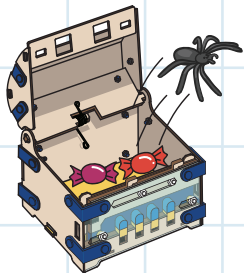
## LOCK PICK

Now that you know how the locking mechanism works, can you pick it – without the key?



## CONCENTRATE

Lock away distractions such as your phone or snacks so you can focus on your homework.



## PRANK YOUR BUDDY

Put something silly or unexpected inside the treasure chest and give it to a friend!

# SHOW OFF YOUR BUILD



Share your funniest moments & coolest mods!  
**#crunchlabs @crunchlabs**    



## **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](http://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.

© 2025 CrunchLabs LLC, All Rights Reserved