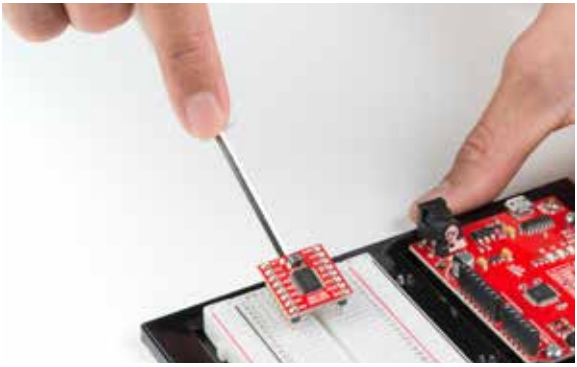
Once you're finished with this project, removing the motor driver from the breadboard can be difficult due to its numerous legs. To make this easier, use the included screwdriver as a lever to gently pry it out. Be careful not to bend the legs as you remove it.



The motors are polarized. However, motors are unique in that they will still work when the two connections are reversed. They will just spin in the opposite direction when hooked up backward. To keep things simple, always think of the red wire as positive (+) and the black wire as negative (-).

MEET YOUR MOTOR CONTROLLER.

The TB6612FNG Motor Driver may look complicated, but it's easy to use. Three pins on the right (PWMA, A12 and A11) control the two pins on the left (A01 and A02). The same is true for channel B. Motors require more current, which is why the VIN voltage is needed.

Most ICs have polarity and usually have a polarity marking in one of the corners. The motor driver is no exception. Be sure to insert the motor driver as indicated in the circuit diagrams. The motor driver pins are explained in the table on the next page.