

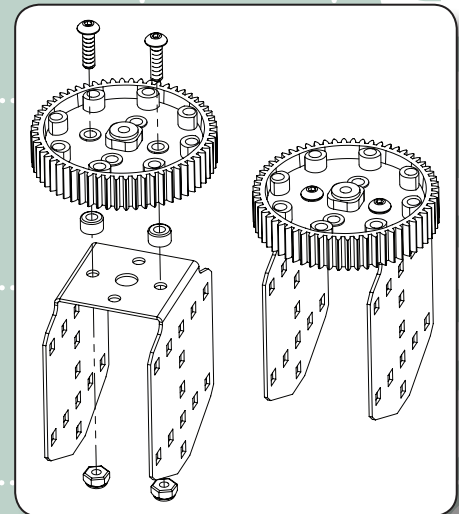
Swerve Drive Kit

Drive in any direction

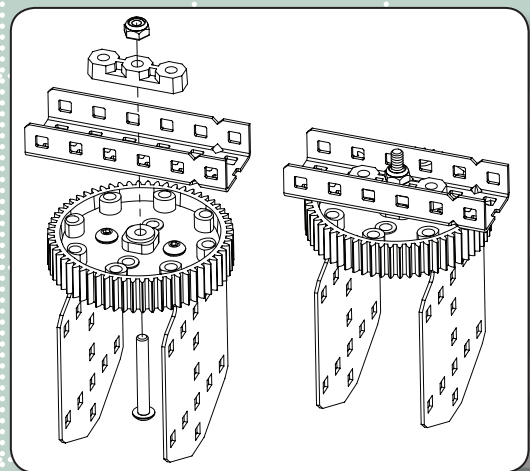
The swerve drive kit lets you build a unique drive and steering configuration for your VEX robot. Get unmatched maneuverability and increased versatility through drive pods which can be configured with up to 360 degrees of rotation. This kit will allow you to build independent drive modules with an integrated wheel and motor that can be separately "spun" to allow for multi-directional motion.

Assembly Instructions:

1. Install two (2) Round Hole Inserts into the center hubs of each of the 60-tooth High Strength Gears.
2. Using (2) 5/8" Long 8-32 Screws and two (2) 8-32 Nylock Nuts per assembly, attach a High Strength Gear to a Swerve Module Bracket. Use two (2) 4.6mm Plastic Spacers to space the gear off from Swerve Module Bracket, as shown.



3. Attach a module to your robot structure using one (1) 1-1/8" Long 8-32 Screw and one (1) 8-32 Nylock Nut. For added rigidity, thread the bolt through a VEX Delrin Bearing Flat (not included).



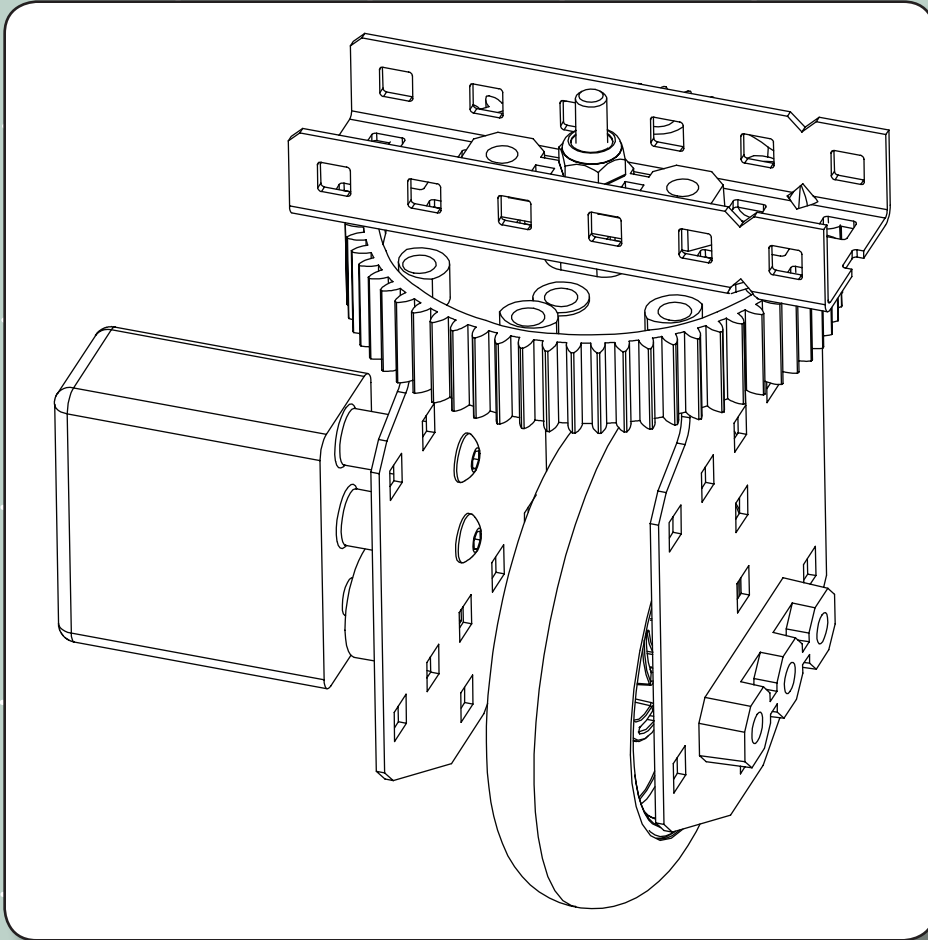
Limited 90-day Warranty
This product is warranted by VEX Robotics, Inc. against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from authorized Innovation First dealers. For complete warranty details and exclusions, check with your dealer.

VEX Robotics, Inc.
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Greenville, TX 75402

For More Information, and additional Parts & Pieces refer to:
www.VEXRobotics.com

Swerve Drive Kit, continued

4. Adjust how much the 1-1/8" Long Screw is tightened to change the amount of force required to "spin" the module.
 - a. A tighter screw results in a more rigid module, but it also requires more force to spin. Try to find a balance where the module spins freely, but does not wobble.
5. Attach the drive motor and wheel inside the Swerve Module Bracket. This may vary depending on your robot design. There are (2) VEX 2.75" diameter wheels included.



6. Add a mechanism to "spin" the swerve module (not included). This mechanism could be a motor with a gear that meshes with the 60-tooth gear at the top of the swerve module.
 - a. If you want multiple swerve modules to spin together, gear them such that they are mechanically linked together.