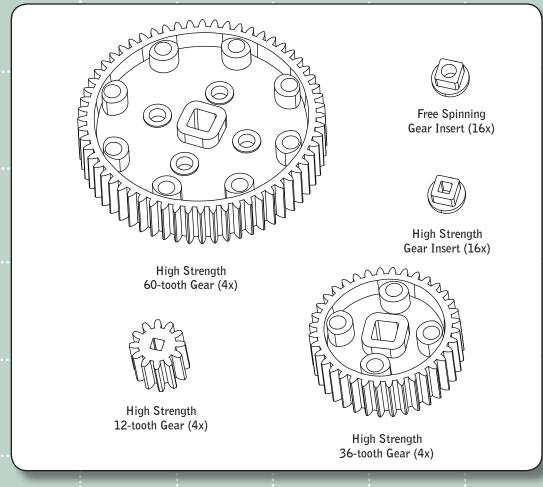
# High Strength Gear Kit

This kit provides several new gears with features to handle higher loads. Each of these gears has a wider face width; this means each tooth is wider so applied loads will be spread over a larger area. The 12-tooth High Strength Gear is molded out of powdered metal. The 36-tooth and 60-tooth Gears have powdered metal inserts. These metallic components will protect the gear from high loads applied by a VEX axle.

INSERT THIS PAGE at the back of the Motion Chapter in your VEX Inventor's Guide.



## **Compatibility**

These gears should be used together for the highest strength, but are also compatible with all VEX Spur Gears (VEX Spur Gears are 24 diametral pitch).

Limited 90-day Warranty

This product is warranted by Innovation First 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.

Innovation First, Inc. 1519 IH 30 W Greenville, TX 75402

For More Information, and additional Parts & Pieces refer to:

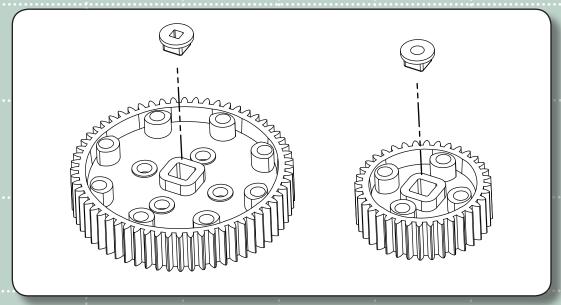
www.VEXrobotics.com



## High Strength Gear Kit, continued

### **Swapping Hub Inserts**

The 36-tooth and 60-tooth High Strength Gears come with two types of removable hub inserts. The insert with a square hole is designed to fit snugly on VEX shafts; this insert allows for torque to be transferred between a shaft and the gear. The insert with a round hole is designed to rotate smoothly on a VEX shaft. This allows the gear to be used in any application where the gear must turn independently from the shaft it rides on, such as an idler gear.



## **Direct Mounting**

The 36-tooth and 60-tooth High Strength Gears are designed with mounting holes such that components can be bolted directly onto them. This is a useful way to power a mechanism (for example attaching a robot arm).

