

How to build a VEX DRIVE-TRAIN

The chassis used in this video was the standard 12 inch model. Exothermic Robotic teams tend to use aluminum to save weight, but is often out of the budget of smaller teams. The design requires two three-inch wheels and four small omni-directional wheels. All of these parts are available from the VEX store: vexrobotics.com/products



High-res: http://i.imgur.com/CbZ9f.jpg

The sequence of parts for the rear wheel coming from the inside out is as follows: two washers, a lock collar, a sprocket, the wheel, a small black spacer and a nylon washer. Two bearing blocks go on either side.

The front two omni-wheels, which are not covered in the video, have two lock collars on the outsides of the chassis rails with washers. Two small black spacers and two washers center the omni-wheels. It should be noted that this only works on smaller chassis.



High-res: http://i.imgur.com/yGL9u.jpg



High-res: http://i.imgur.com/M4ED9.jpg

The sequence of parts for the motor sprocket coming from the inside out is as follows: one lock collar, a nylon washer, the chassis rail, a bearing block, a washer, another lock collar, a sprocket, three nylon washers, one medium white nylon spacer and a large nylon spacer

PROTEP The wheels used in the video are 2.75 inch wheels. They tend to not be very popular, but have several key advantages over the larger wheels. They accelerate faster and stop faster, but don't have as high a top speed. As is stated in the video, larger wheels help with uneven or sloped terrain, but aside from that, offer no clear advantage over the smaller wheels.

Intended for use with the video available at http://www.youtube.com/watch?v=6emQmZya6ec

