Quick-Start Guide

Built it, try it, change it. TeacherGeek™ components allow you to design and engineer your most imaginative mechanisms. Combine them with other materials and products. More resources are available at teachergeek.com.

Dowels

Dowels vary in diameter. Some may be too large or small to use.

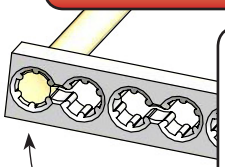
The ends of dowels may taper and need to be cut off to fit tightly into holes.

Cutting

Dowels and Connector Strips can be cut with a multi-cutter (best method), saw, side cutters or pruning shears. Wear safety glasses when cutting.

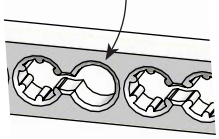
Multi-Cutters

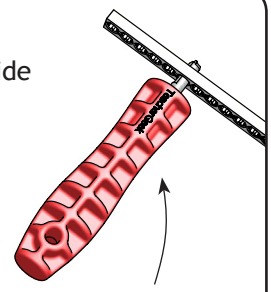
Holes & Reaming



Components come with holes that dowels press securely into.

Reaming holes to allow dowels to rotate and slide freely.



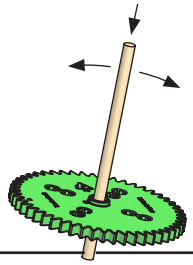


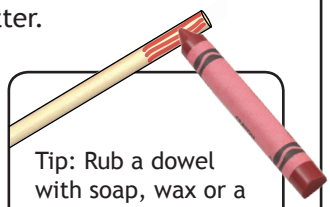
Turn a reamer back and forth through a hole.

Push, Wiggle, Tap

Push dowels into holes by:

- Wiggling and pressing with your hands
- Tapping dowels with a hammer or the side of your cutter.

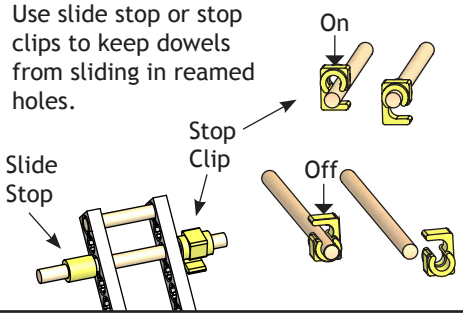




Tip: Rub a dowel with soap, wax or a crayon to allow it to slide easier into and out of holes.

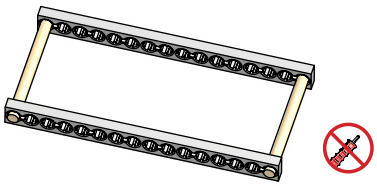
WARNING!!! Most holes should not be reamed. Do not ream holes which dowels should stay pressed into.

Use slide stop or stop clips to keep dowels from sliding in reamed holes.

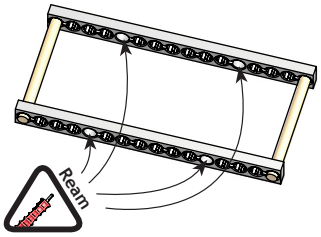


Example Assembly

An example mechanism with two gears that turn together in a frame.

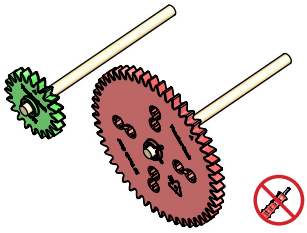


1 Connector strips and dowels are cut. Then they are assembled to make the frame.

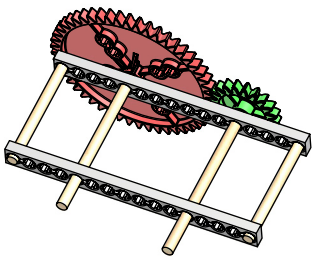


3 Holes in the frame are reamed for the gear axles to rotate in.

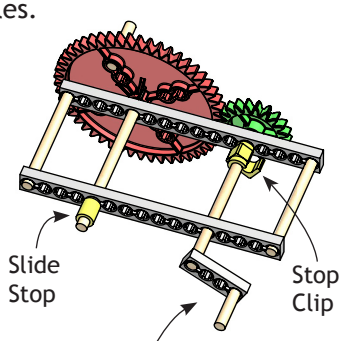
5 Slide stop and a stop clip are put on axles to keep them from sliding out of the reamed holes.



2 Dowels are cut to make axles and pushed into gears.



4 Gear axles are placed through the reamed holes.



6 Cranks are attached.