

## fischertechnik <sup>Back</sup>

## **Building a Simple Model**

This exercise will help you understand how to build a simple model with the fischertechnik modeling system. The first step in building a model is to be sure you have the correct parts. This model will use the following parts.

35 129	35 063	35 088	32 879
Base plate 120x60	Clip axle 30	Crank shaft	Building block 30
1 x	2 x	1 x	2 x
32 064 Building block 15 with bore 2 x	36 264 Gear wheel T30 1 x	35 945 Cog wheel T10 1 x	35 031 Flat hub collet 1 x

31 058 Hub nut 1 x		

Once you have the twelve parts lay them out on the organizer above. There are three parts that you will need a quantity of two.

The first step is to take a building block 15 with bore and join this to a building block 30 by sliding the pin of the building block 15 with bore into the groove on the building block 30. A bore is a term we use for a really round hole.



Do that step a second time so you have two sets.

Set those aside and find the crank shaft and one of the clip axles. Set them next to each other on your table.



Line up the clip end of the axle with the opening in the crank shaft. Insert the shaft into the crank shaft. It will look like the picture below.



Take one of the sets of building blocks you created in the first step and a cog wheel. Place them on your table like the picture below.



Slide the clip axle through the bore in the block. Insert the cog wheel on the other end of the clip axle. It should look like the picture below.



Find the base plate and place that on your table. Slide the end of the block 30 into the first short groove on the plate. Below are two views of the assembly so far.



Now take the other clip axle, the gear wheel 30, the flat hub collet and the hub nut and place them on the table in front of you.



Place the gear wheel 30 on the flat hub collet. It should look like the picture below.



Now insert the clip axle in the center of the flat hub collet. The table will keep the axle from going all the way through the collet.



Place the hub nut over the axle and tighten the nut so it is tight and the axle will not move. Tighten it only with your fingers to prevent damage. Engineers call this finger tight.



Now take the other block 30 and block 15 with bore that you put together before and add that to the base plate. Place this assembly in the third short slot on the base plate, leaving one short groove between the two block towers. Be sure the bore is facing in the same direction as the first assembly.



Insert the clip axle into the empty bore and line up the gears.



Your assembly is now complete. Turn the crank and observe what happens.

Back