

Construction Worker Trolley Overview

This is a set of instructions to build a trolley for construction workers. This device will be used for construction workers while working at a site. They will be able to park their cars in the assigned parking area and ride the trolley to the building site. The trolley will also take the construction workers back to the parking area when needed.

Materials List

The following materials are needed to build this device:

14 colored 2x4 pieces

2 black

4 red

4 yellow

4 white



2 wheel axles

1 blue 4x10 piece

2 yellow rails

1 white bar

3 ramps

1 green

1 blue

1 red with glass front

1 steering wheel

3 people

1 yellow semi circular piece

2 small white cylinder pieces

Tools and Equipment

To construct this device, a flat surface such as a table or an area on the floor is need. The construction worker trolley can be constructed using only your hands.

Summary of Steps

There are 4 main steps in constructing the construction worker trolley. They are as follows:

Step 1: The Base

The base includes the wheels and the support for seating and steering of the trolley.

Step 2: The Body

The body includes the part of the trolley used for seating

Step 3: The Front

Step 4: Putting it all together

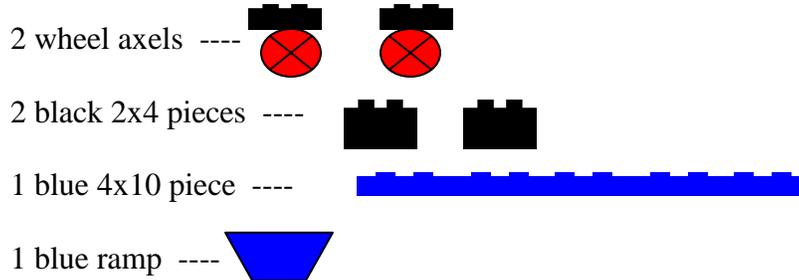
Each of the previous steps is listed below and provides a list of the materials that are needed to construct each part in a step-by-step process. Each section has pictures to use as guides. Please follow the steps in order

WARNING:

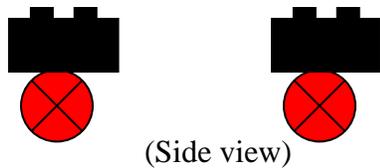
**Please keep all small pieces away from infant children and pets.
May be harmful if swallowed.**

ASSEMBLING THE BASE

1.1 To assemble the base you will need following *Lego* pieces



1.2 Now that you have gathered the pieces, take one of the wheel axels and place one black 2x4 piece directly on top of the wheel so that it makes 2 blocks of 4x2 pieces. Do the same to the second wheel. Place one black 2x4 piece directly on top of the wheel to make 2 blocks of 4x2 pieces. Your assembly should now look like



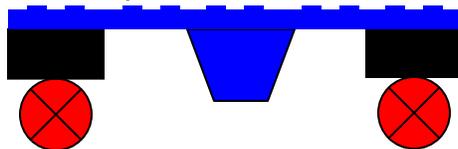
1.3 Now take the 1 blue 4x10 piece and attach the 1 block of 4x2 piece under the blue piece.



Repeat the same procedure on the other corner of the blue 4x10 piece. Your assembly should now look like



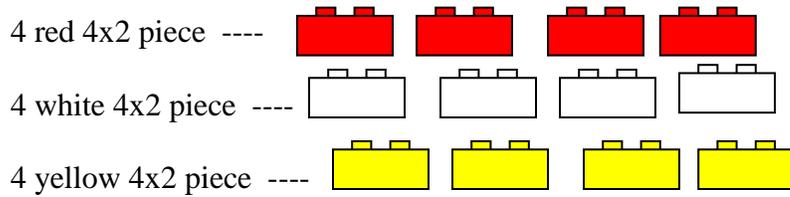
1.4 Lastly, take 1 blue ramp and place it underneath middle of blue 4x10. Therefore, it should cover 4-7 raised circles or connectors. Your assembly should now look like



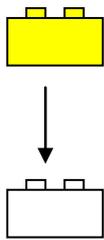
Note: If your assembly does not match the above figure repeat steps 1.1 through 1.4.

ASSEMBLING THE BODY

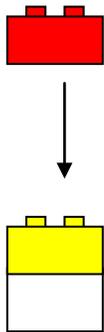
2.1 To assemble the body you will need following *Lego* pieces



2.2 Take one yellow piece and place it directly on top of one white piece.



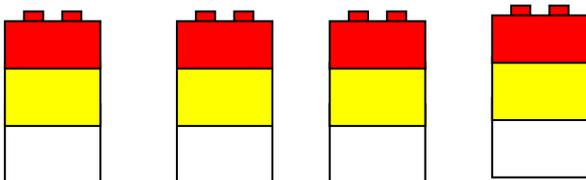
2.3 Next take one red piece and place it directly on top of the yellow and white pieces



Your assembled piece should look like this:



2.4 Repeat steps 2.1-2.3 until you have 4 red - yellow - white structures



ASSEMBLING THE FRONT

3.1 To assemble the front you will need following *Lego* pieces

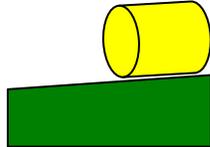
1 steering wheel --- 

1 yellow semicircle ---- 

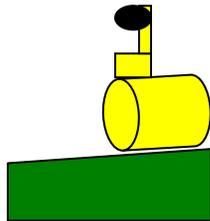
1 green ramp ---- 

1 red windshield ---- 

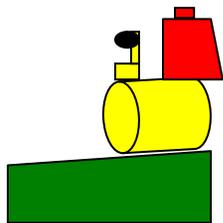
3.2 Attach the yellow semicircle to the green ramp.



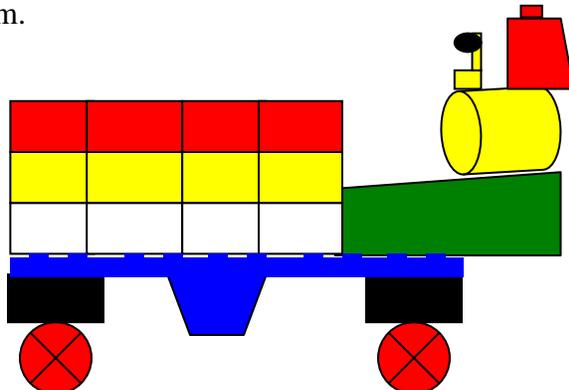
3.3 On the yellow semicircle, attach the steering wheel on the row of connectors that are closest to the vehicle body (to the left)



3.4 Attach the windshield to the front row of the yellow semicircle. The flat part of the windshield should be against the back of the steering wheel.



3.5 Attach the green ramp to the front of the blue platform of the base. Insert the completed front onto the front two rows of connectors on the blue platform.



Note: If your assembly does not match the above figure repeat steps 3.1 to 3.5.

PUTTING IT ALL TOGETHER

4.1 In order to put together the vehicle you will need following *Lego* pieces

2 white “coffee cups” ---- 

2 yellow handrails ---- 

1 white guardrail ---- 

1 red-hat driver, 2 passengers (1 black-hat passenger, 1 white-hat passenger)

4.2 Place the red-hat driver on the first row of connectors on the red, yellow, and white column.

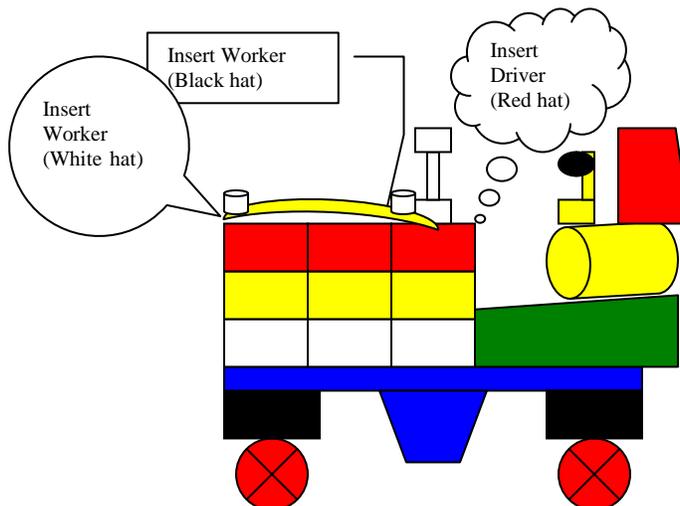
4.3 Place the guardrail on the 2nd row of connectors directly behind the driver.

4.4 On each side of the red, yellow, and white column, starting on the 3rd row, place the yellow handrails.

4.5 On the 4th and 5th row connectors, place the second passenger in the vehicle.

4.6 On the 7th and 8th row connectors, place the third passenger in the vehicle.

4.7 Lastly, place the white “coffee cups” on the yellow handrails.



Note: If your assembly does not match the above figure repeat steps 4.1 to 4.7.