

Dump Truck 10x4

(dump bed)

Building instructions, part 1



Information

5-axle dump truck 10x4 with a loading capacity of $\sim 25\text{m}^3$ / ~ 30 ton

Dimensions

# Parts	Length	Width	Height	Weight
2455	53 cm 66 studs	14,5 cm 18 studs	21 cm 26 studs	2,8 kg (incl batteries)

- Tipping angle: 45 degrees, 3rd axle lift: 1 cm

Technic functions

- 5 axle truck whereof 1st, 2nd and 3rd axle steered, including turning cycle correction for 2nd and 3rd axle,
- 3rd axle can be pneumatically lifted and has an 'auto-center' mechanism,
- Working V8 engine with fan, interconnected with differential units on 4th and 5th axle (both twin-wheels),
- Pneumatic tipping of dump-bed by 4 cylinders (2 in parallel),
- Headlights equipped with Power Functions LED's,
- Separated pneumatic circuits for 3rd axle lift and tipping.

Non-Technic functions

- Cabin doors open & close, Cabin can be opened for engine access, Raise-able wind deflector,
- Tow-bar.

Details applied

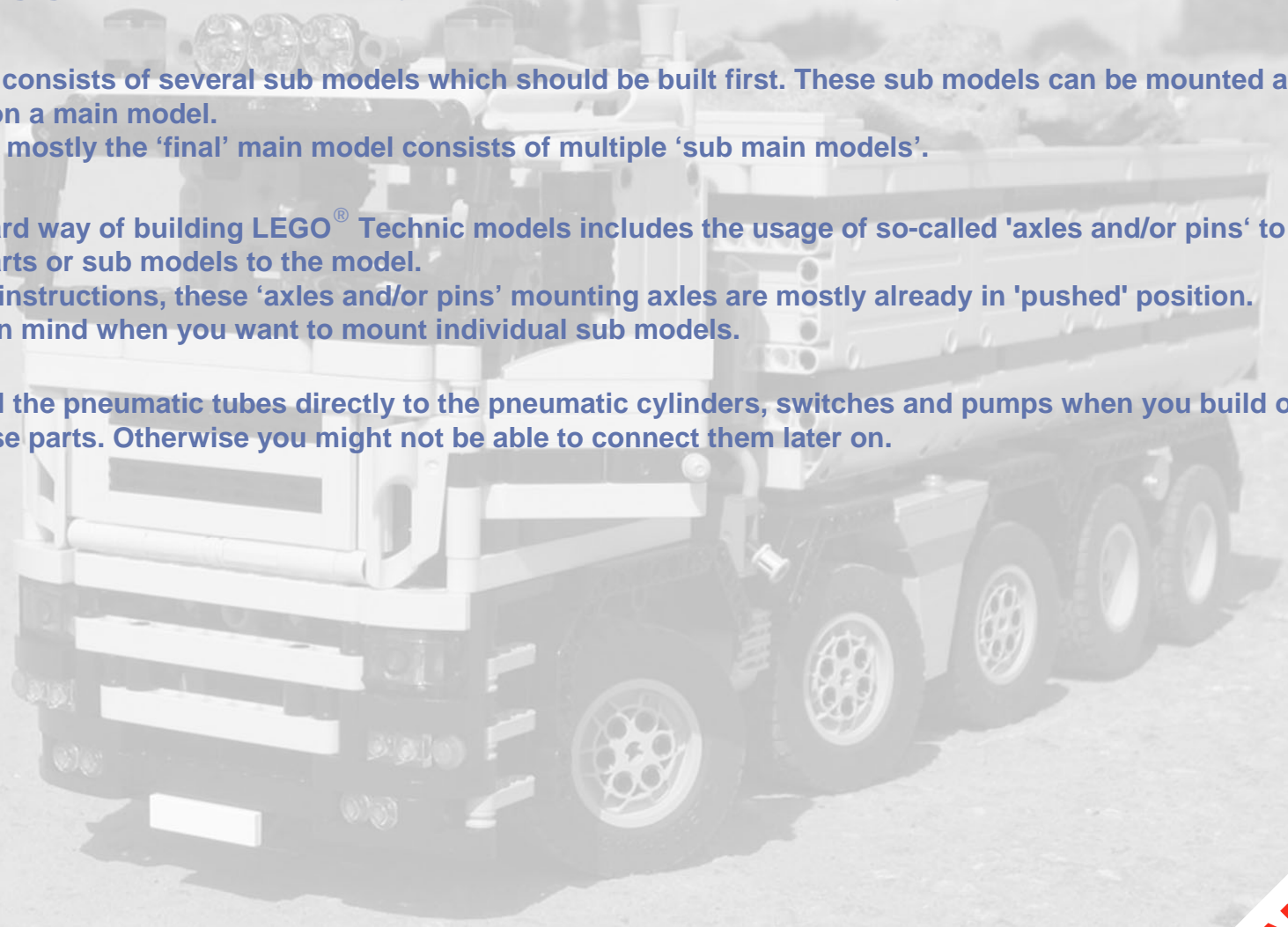
- Dashboard with coffee machine and coffee cups,
- Fuel tanks, air compressors and air filter units between the wheels,
- Fire extinguisher, exhaust pipe,
- Spotlights, flashlights, horns and airco-unit on cabin roof.



Building guidelines

The following guidelines will help you to build the model easily

- The model consists of several sub models which should be built first. These sub models can be mounted as 'one unit' on a main model.
Notice that mostly the 'final' main model consists of multiple 'sub main models'.
- The standard way of building LEGO® Technic models includes the usage of so-called 'axles and/or pins' to connect parts or sub models to the model.
Within the instructions, these 'axles and/or pins' mounting axles are mostly already in 'pushed' position.
Keep this in mind when you want to mount individual sub models.
- Connect all the pneumatic tubes directly to the pneumatic cylinders, switches and pumps when you build or mount these parts. Otherwise you might not be able to connect them later on.



EXAMPLE





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EXAMPLE



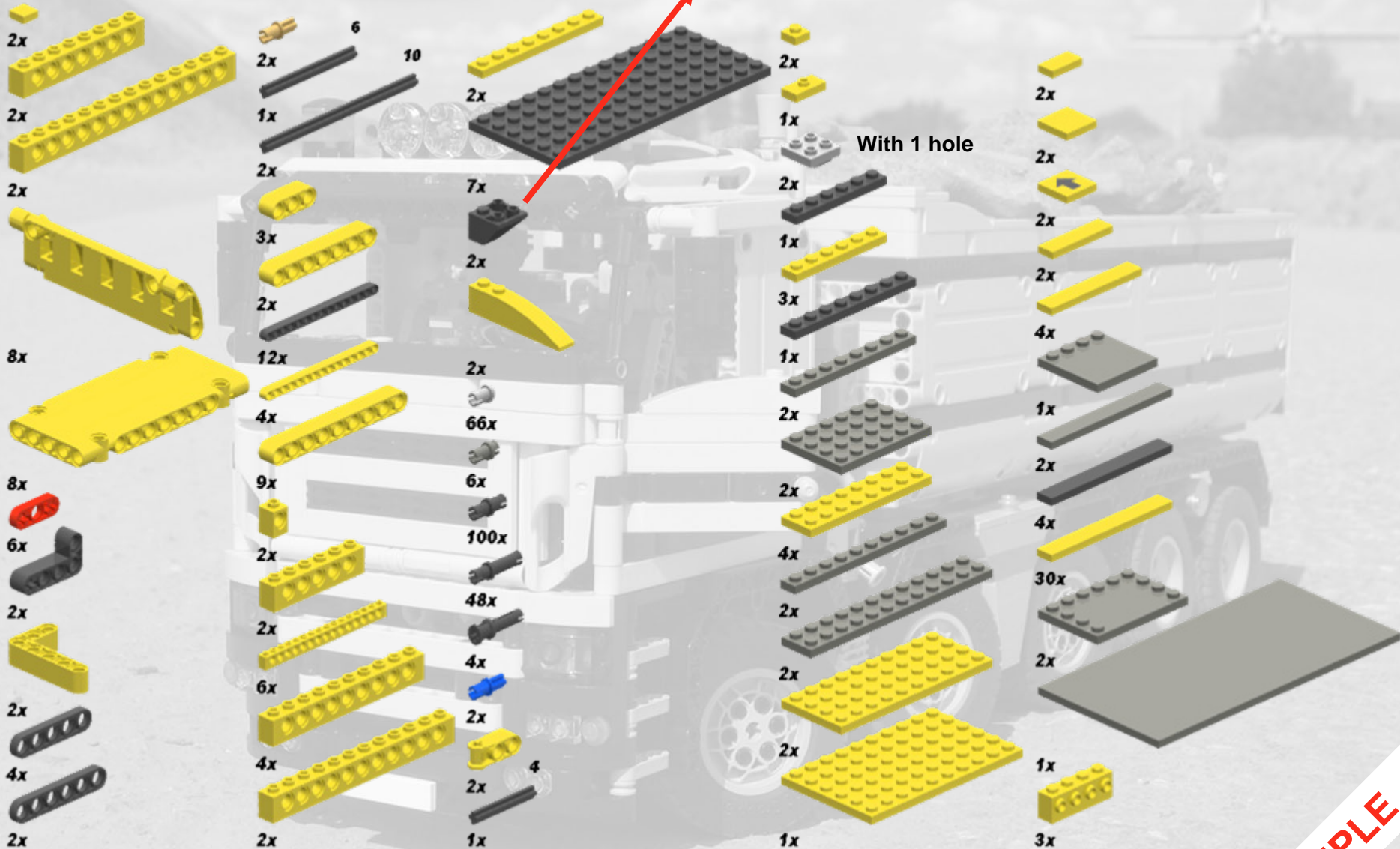
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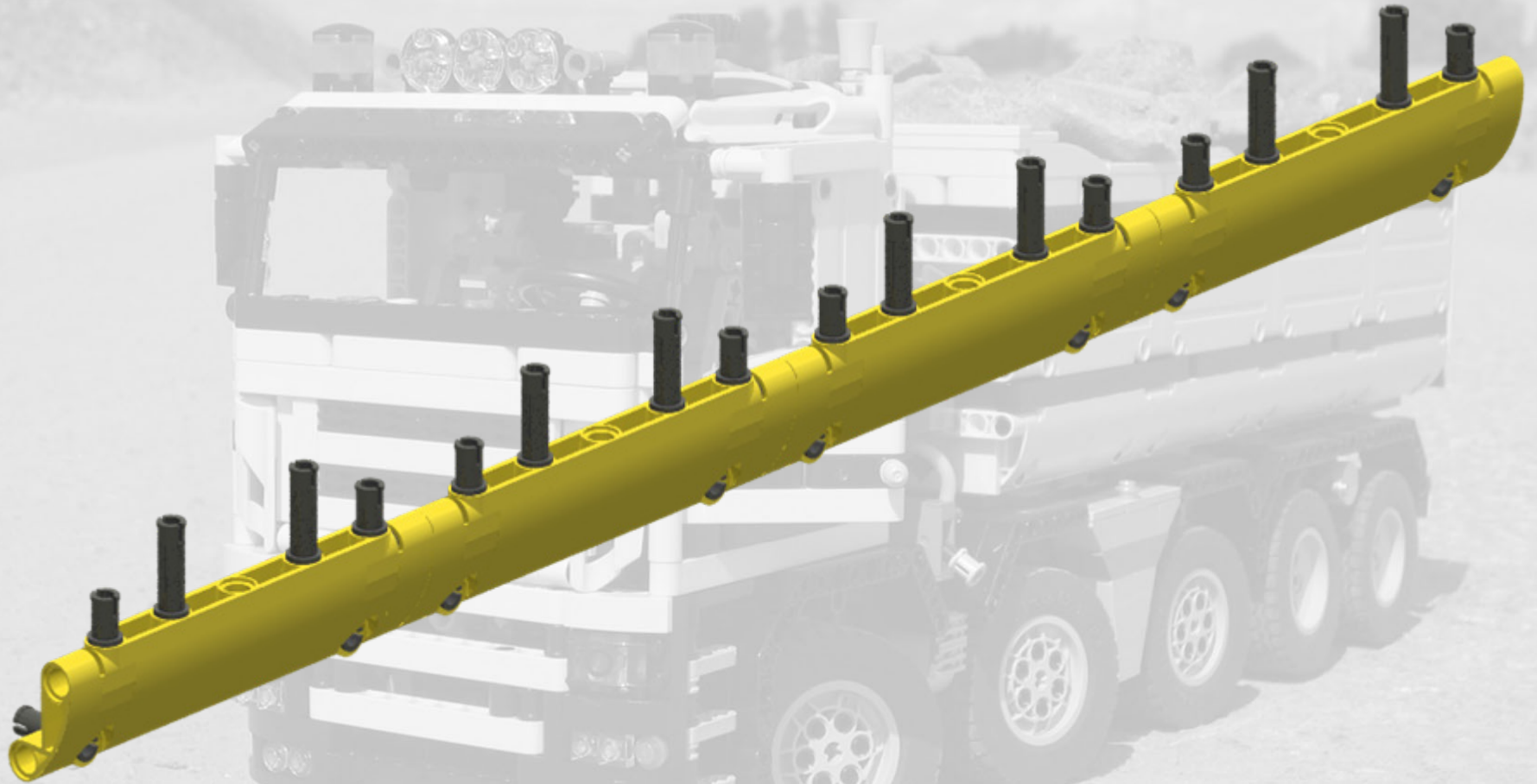
Part list

Part 3676 Slope, inverted 45 2x2 double convex



EXAMPLE

Sub model: Curved panels (rebuild 2x)

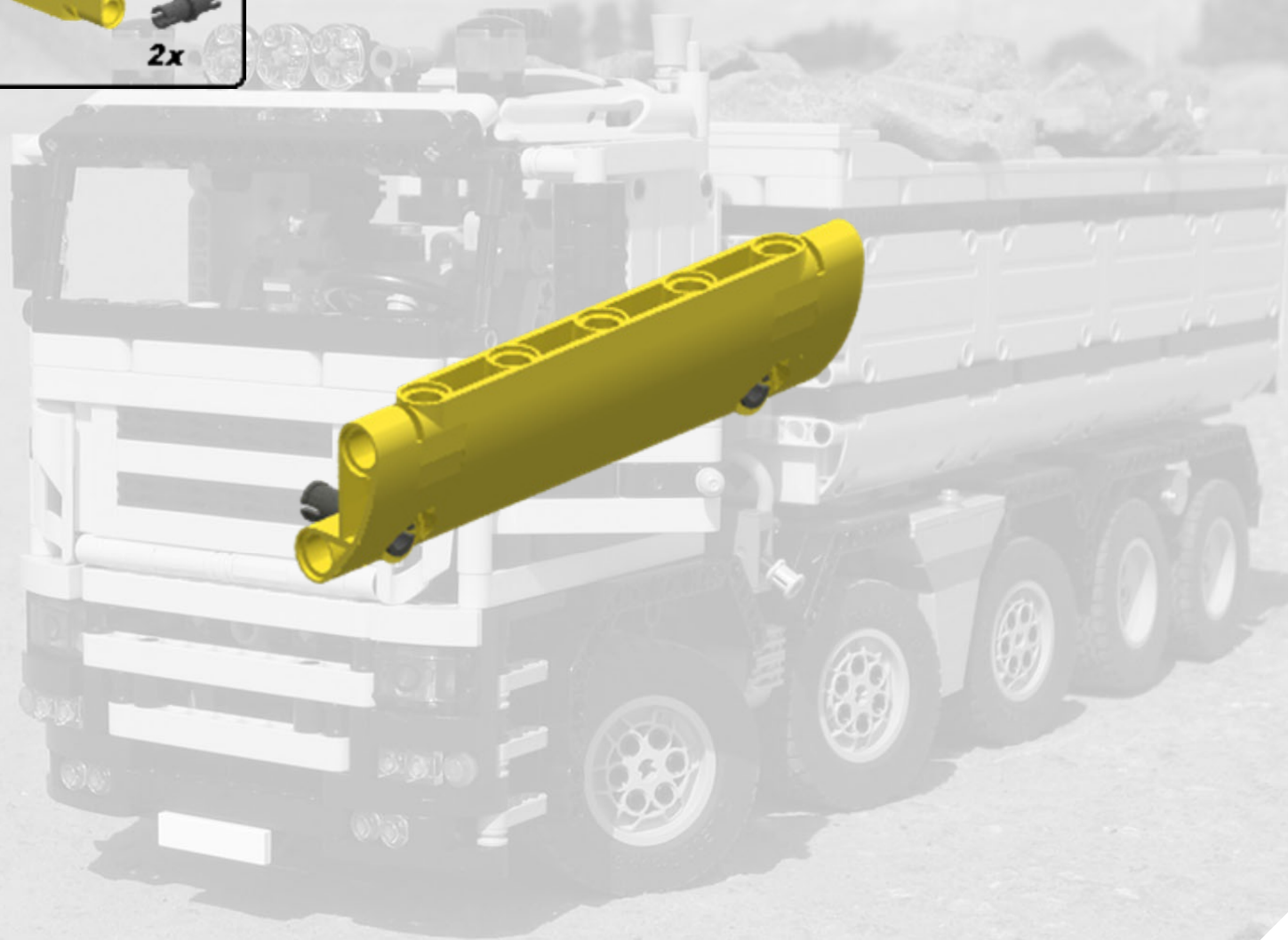
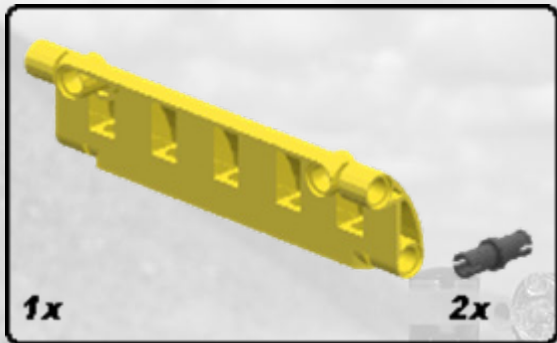


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Step 1

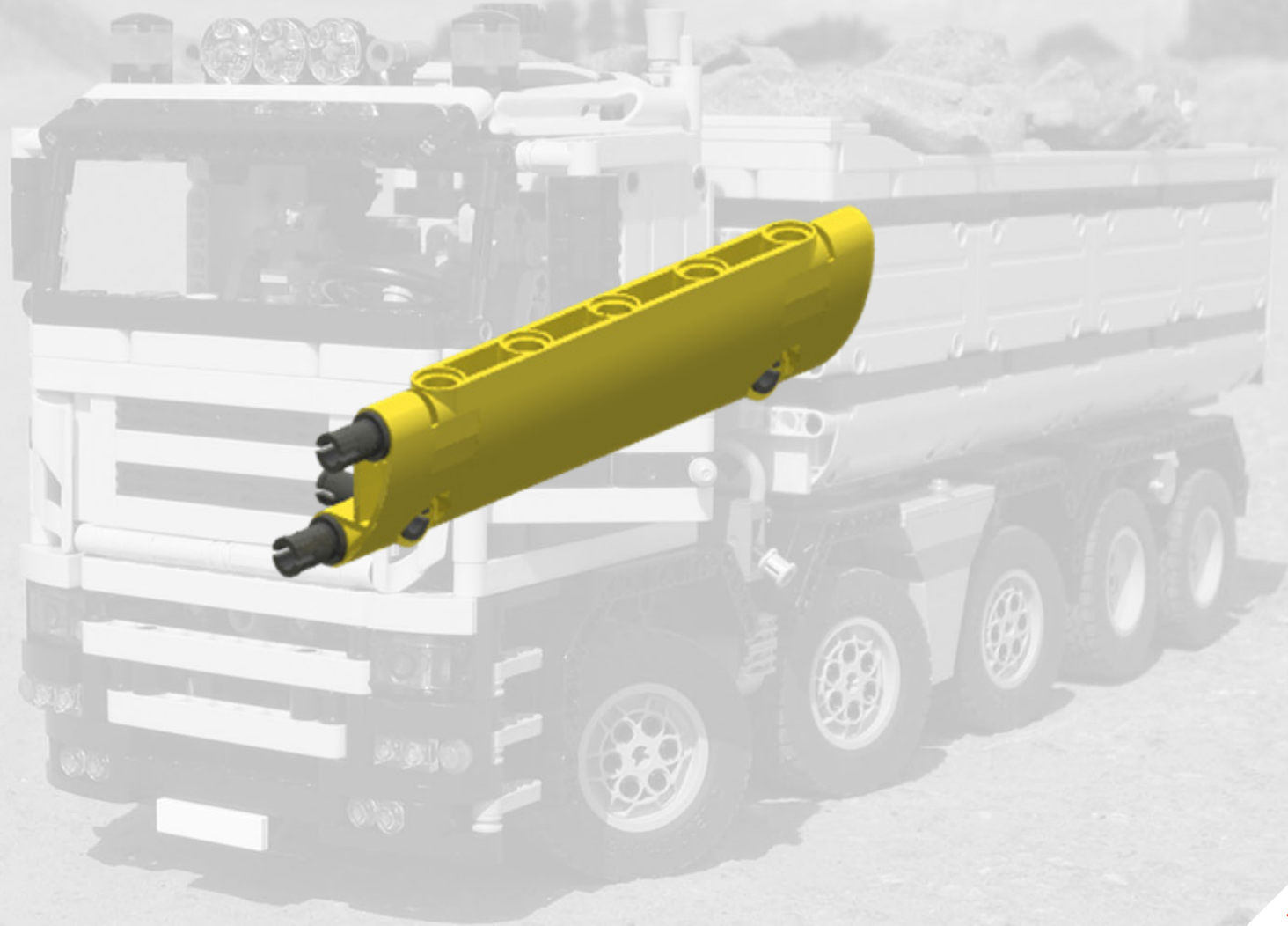


EXAMPLE





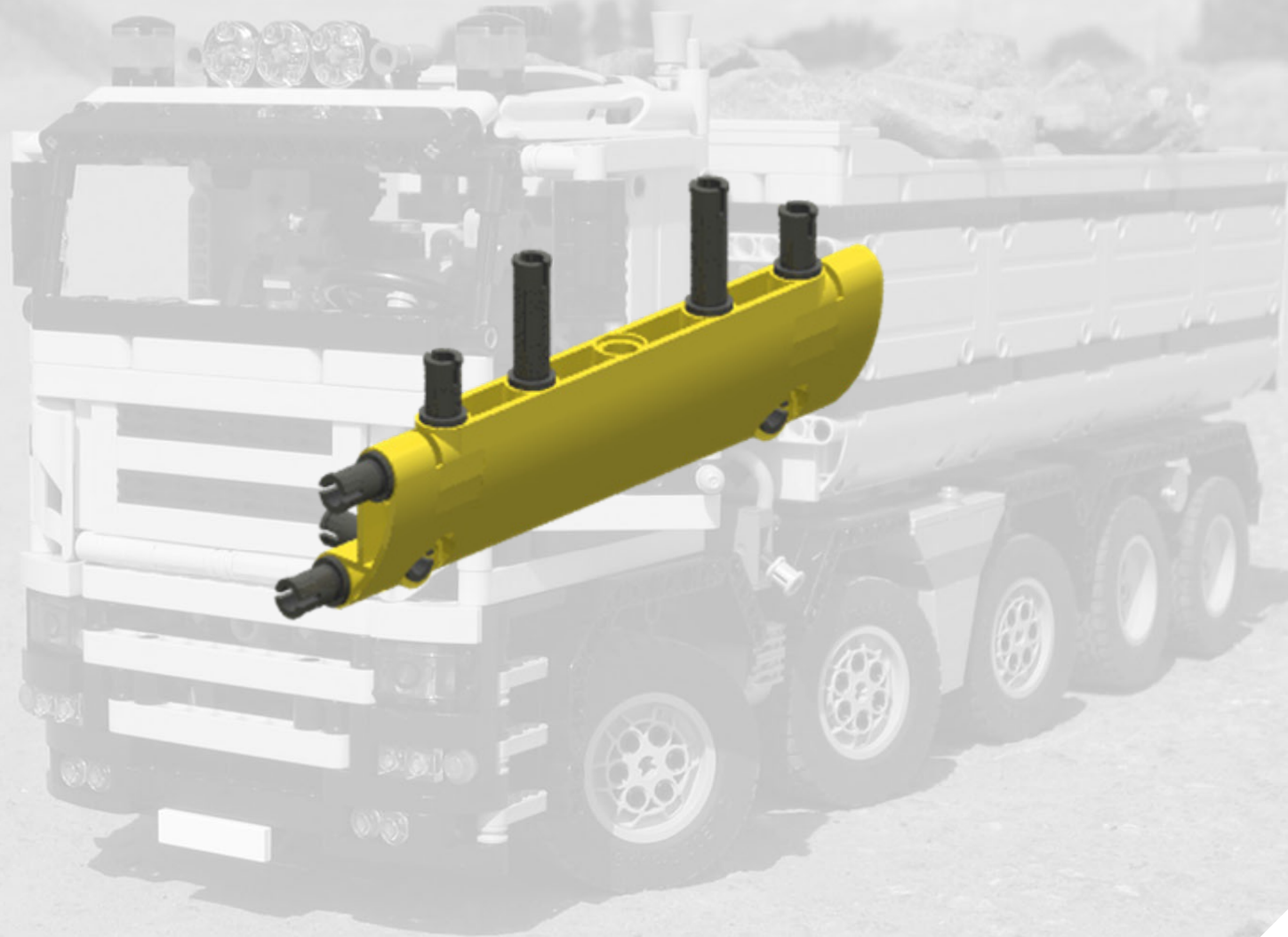
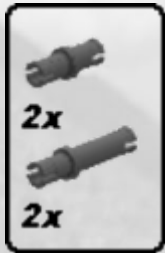
Step 2



EXAMPLE



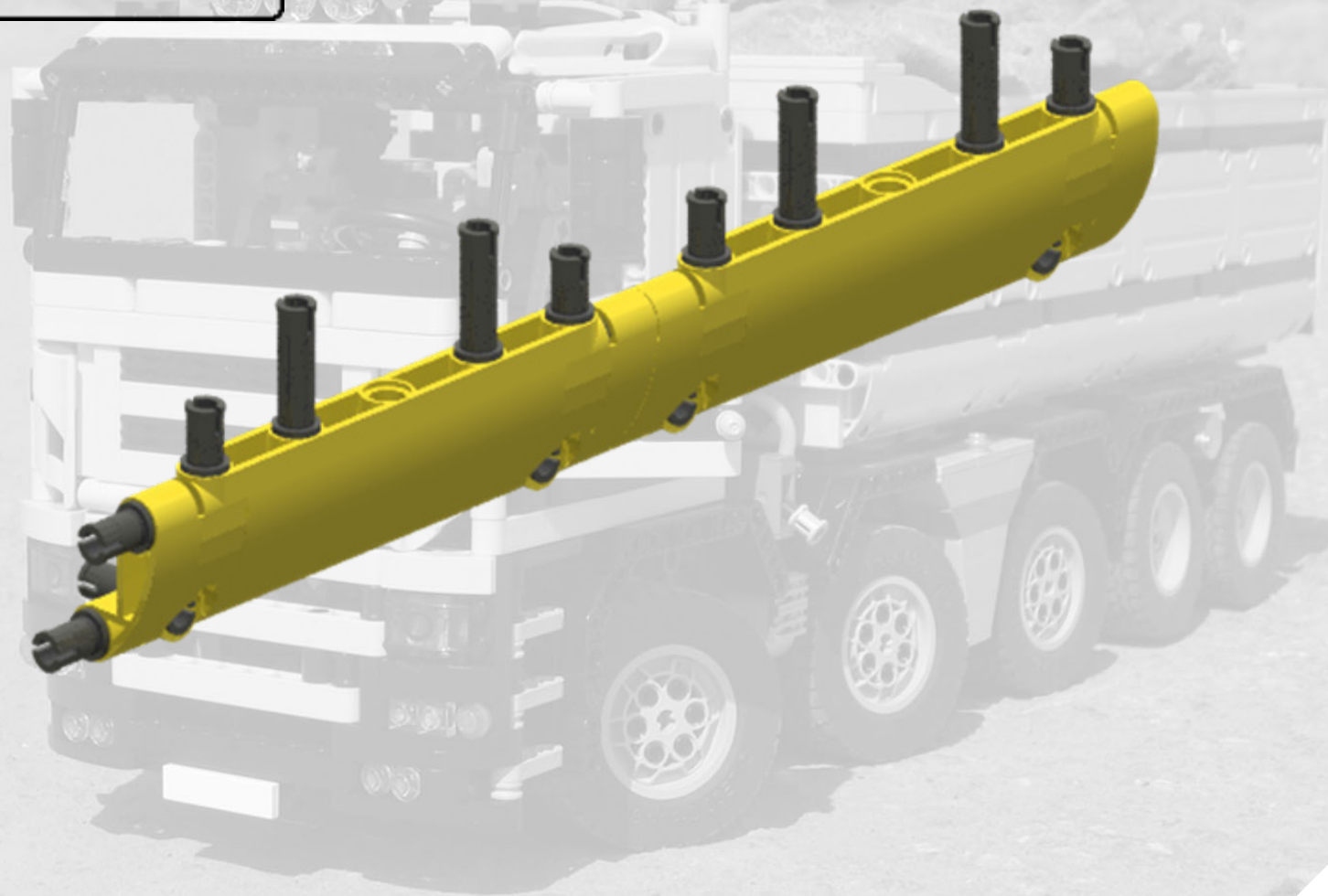
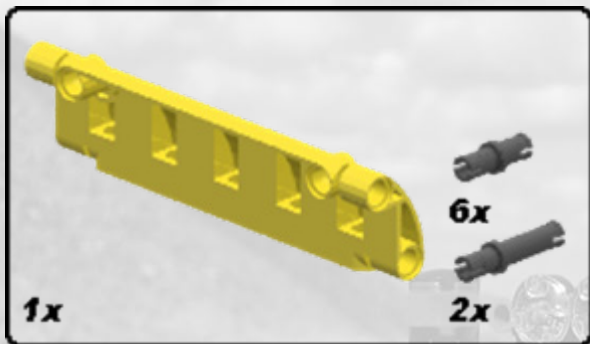
Step 3



EXAMPLE



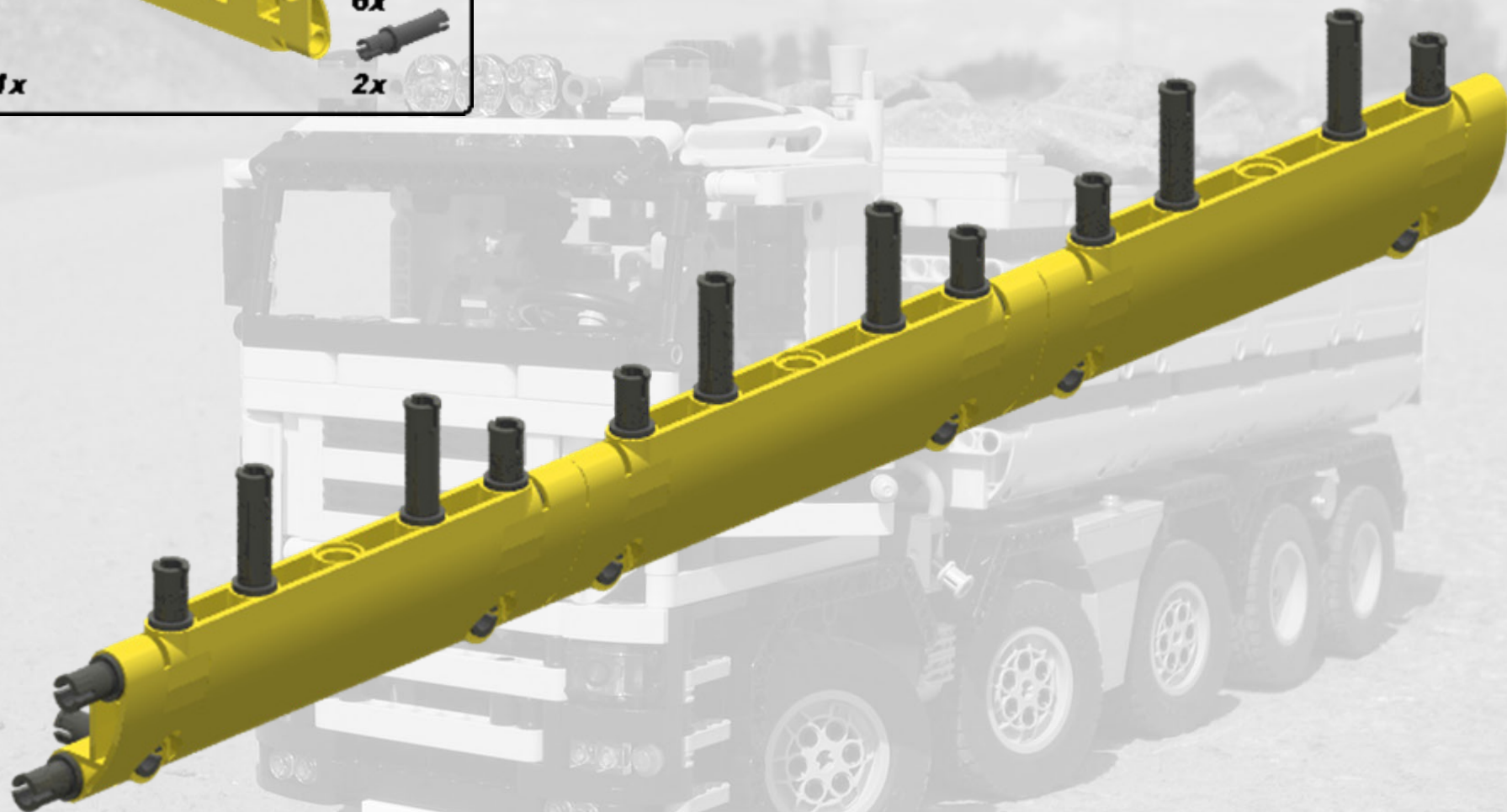
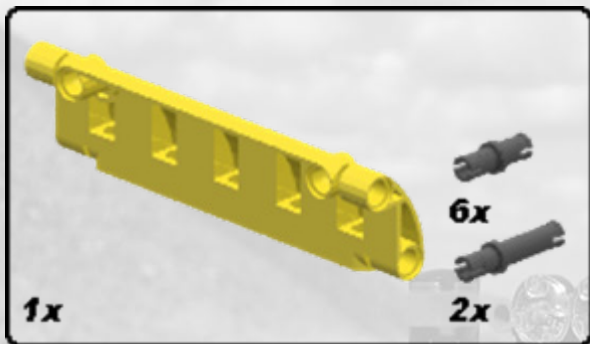
Step 4



EXAMPLE



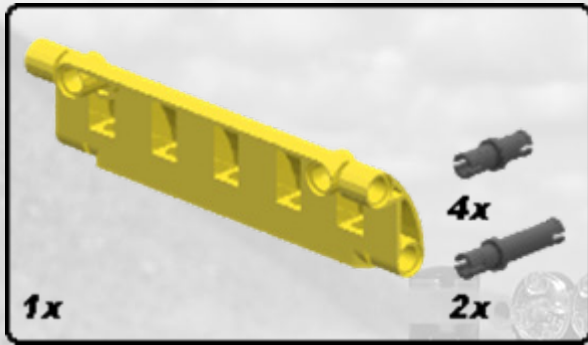
Step 5



EXAMPLE



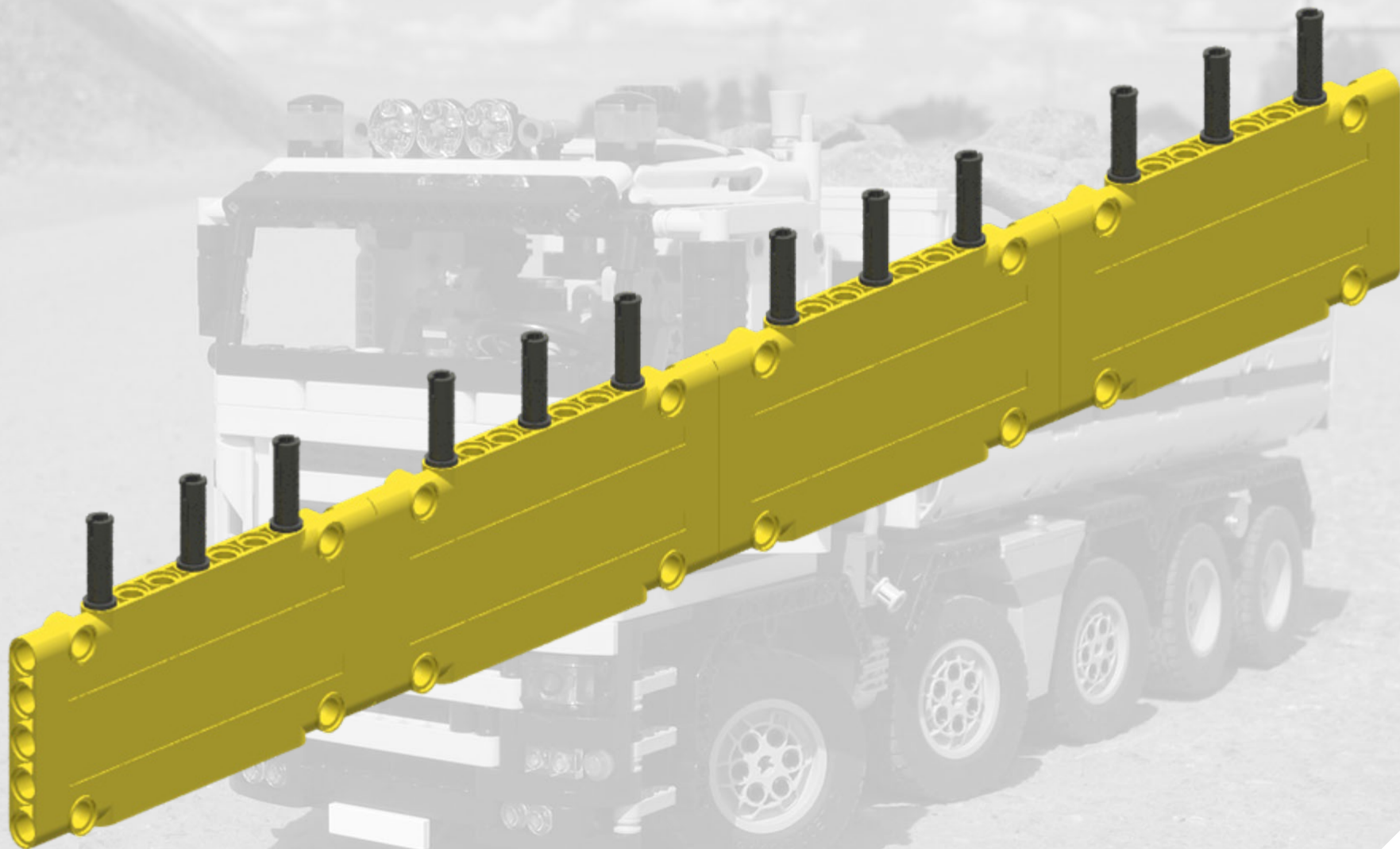
Last step 6



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EXAMPLE

Sub model: Straight panels (rebuild 2x)



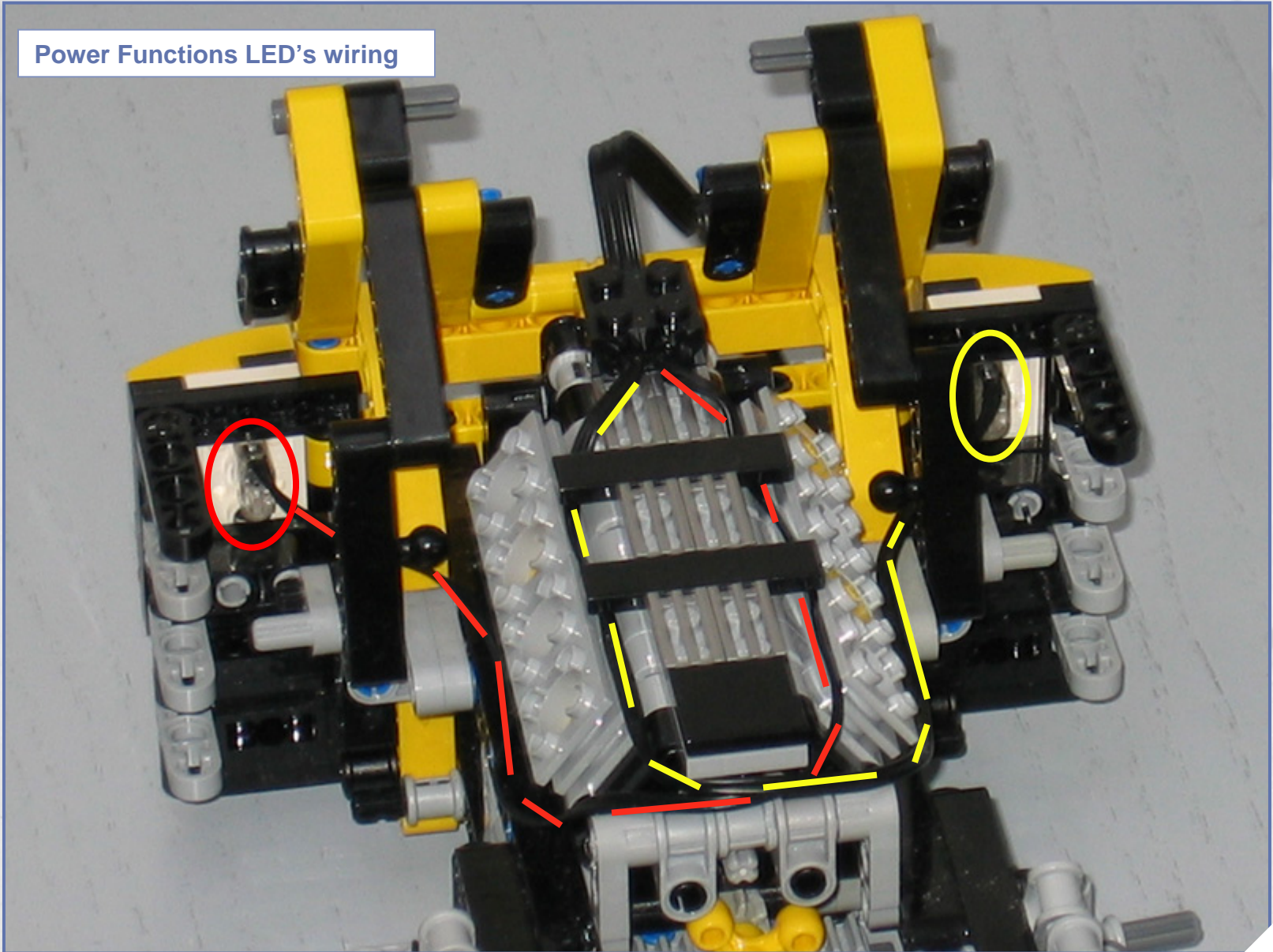
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Step 65b

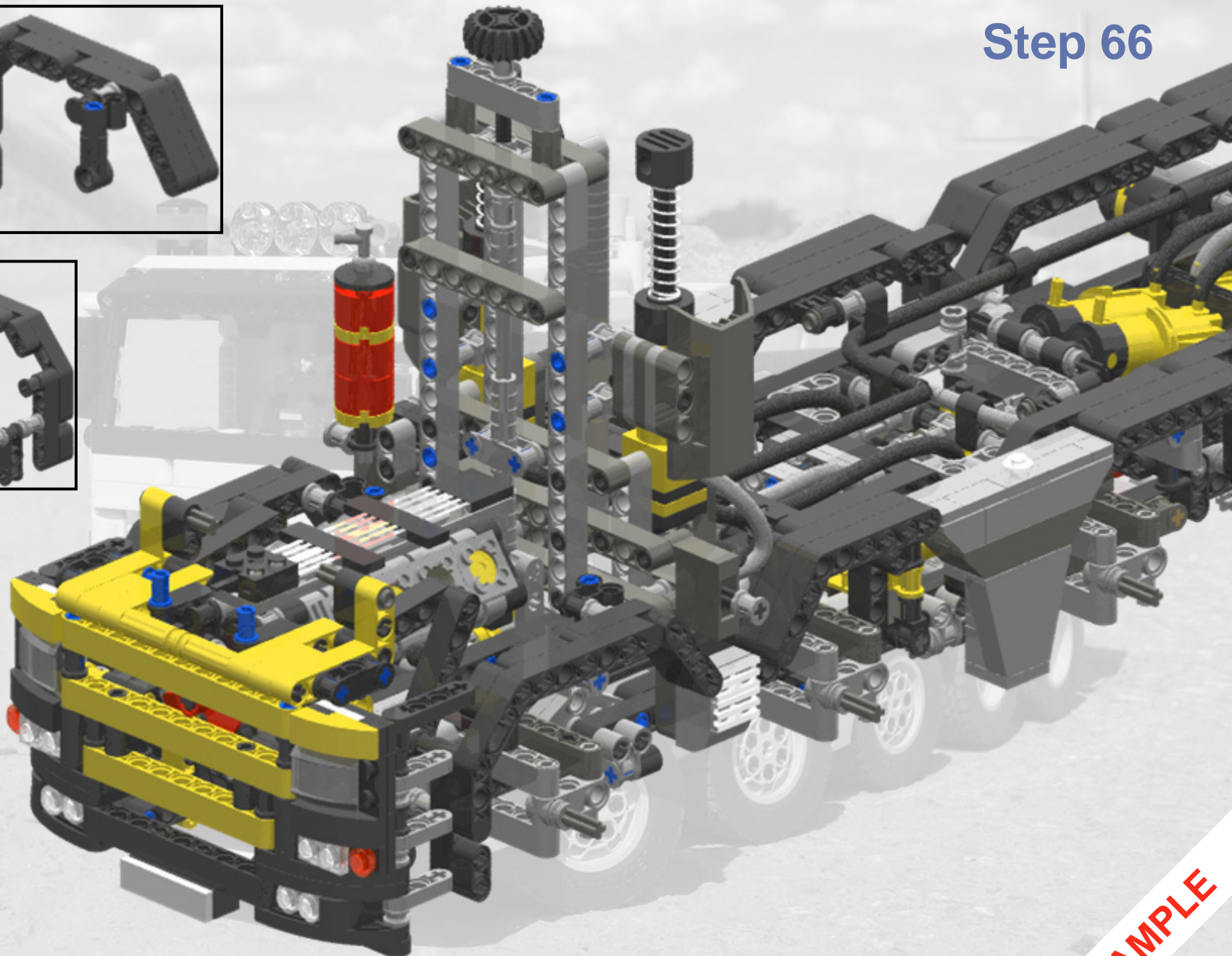
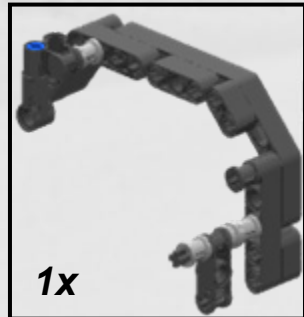
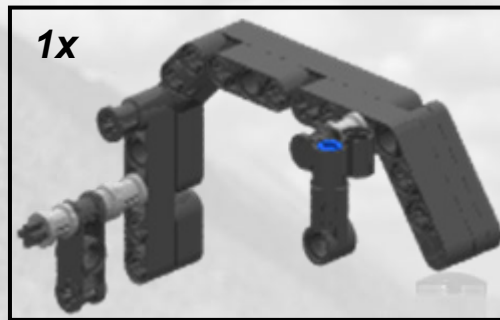
Power Functions LED's wiring



EXAMPLE



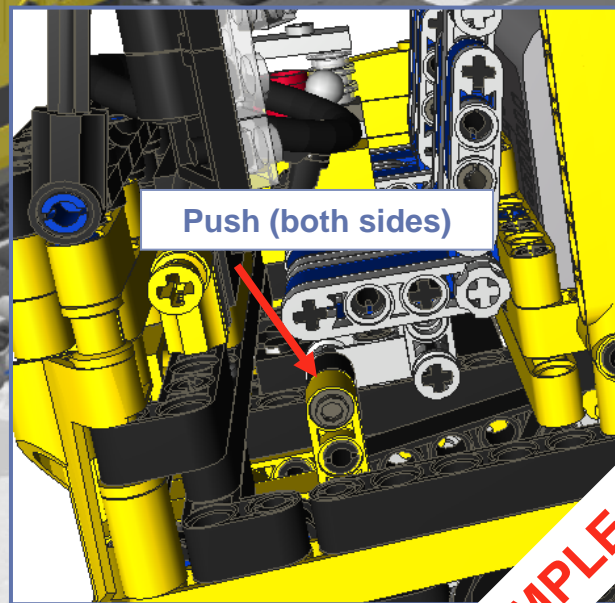
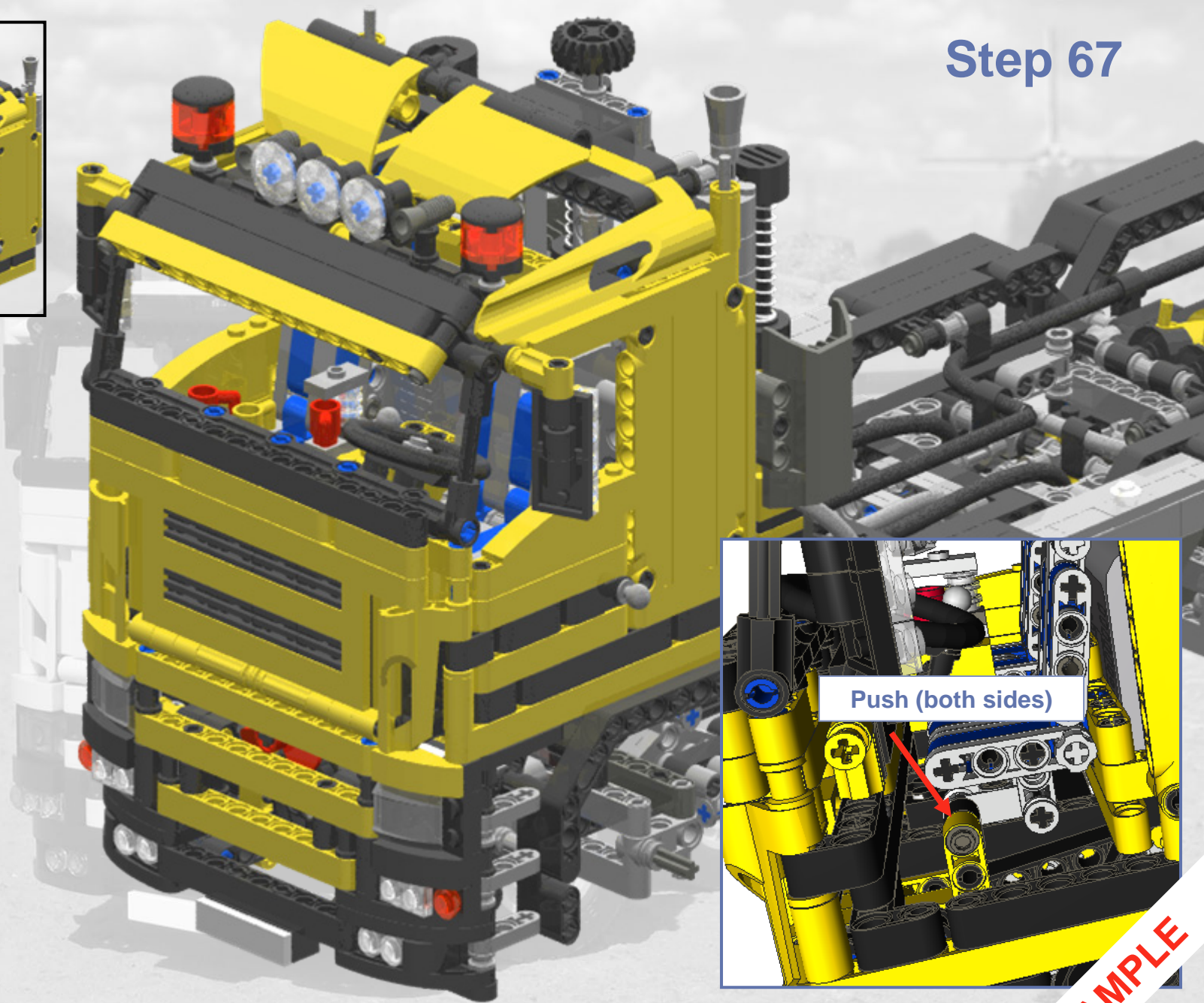
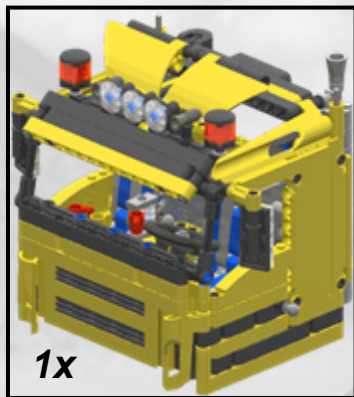
Step 66



EXAMPLE



Step 67



EXAMPLE





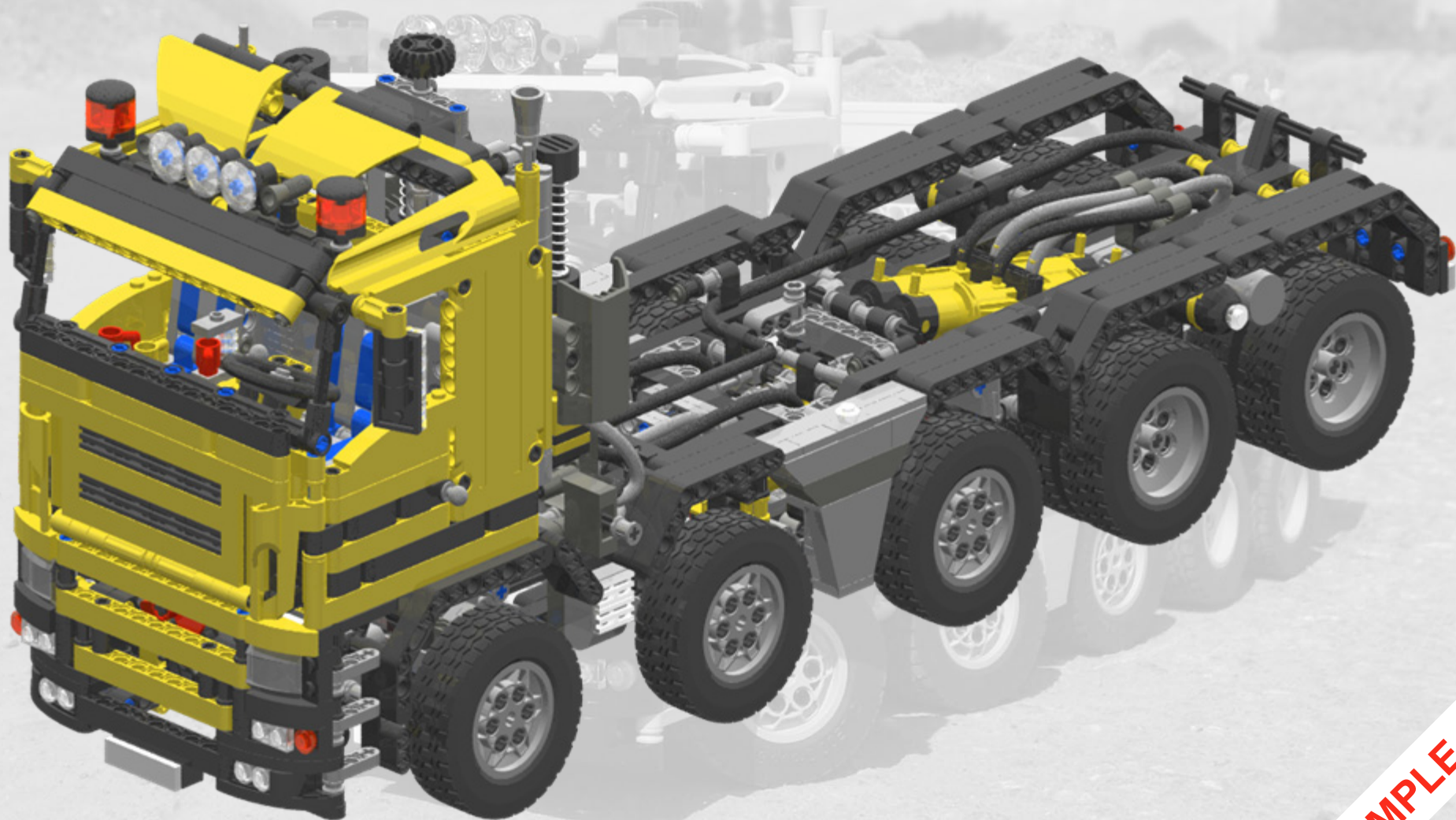
6x



4x

When 'twin wheels' are mounted: be careful not to push to hard without taking care of the differential.

Step 68

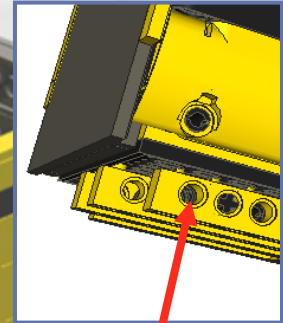
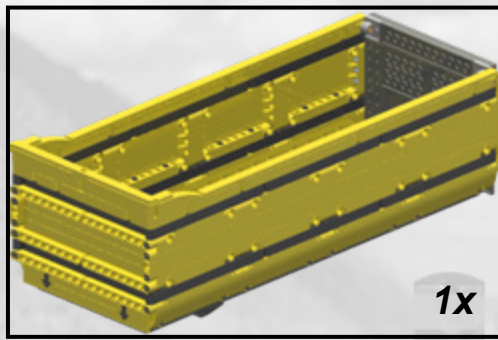


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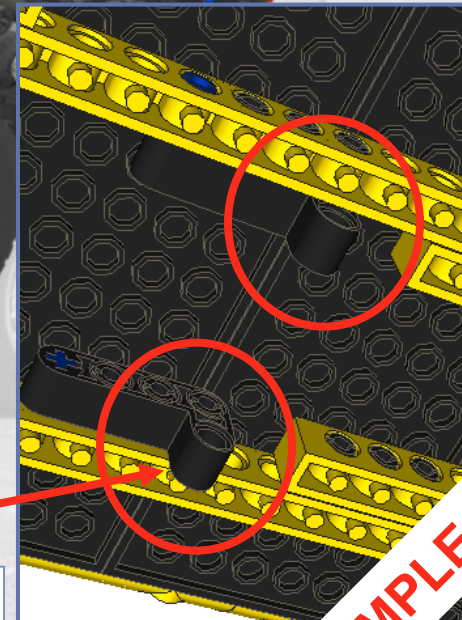
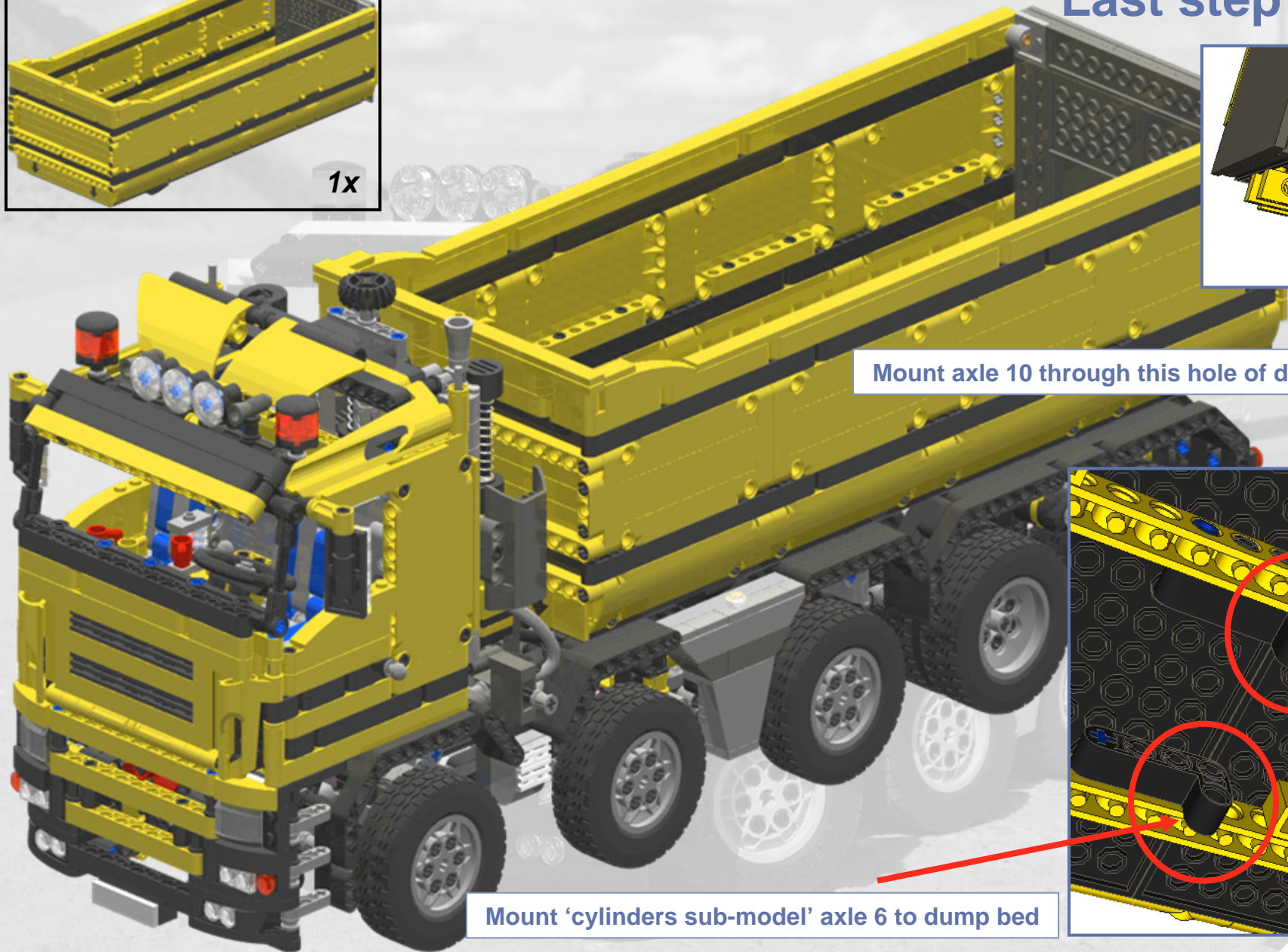
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Last step 69



Mount axle 10 through this hole of dump bed



Mount 'cylinders sub-model' axle 6 to dump bed

EXAMPLE

