

General

First read the instruction. If all is clear then cut out all pieces for the step, then fold them and hold them together. If this is correct and works out, then glue.

If you encounter a problem or some mistake in this model, so please feel free to send me a mail (chriess@vr-web.de), referencing to this model. I answer it as soon as possible.

Also if my misspelling is so big, as you get nightmares.

Tools

Knife

Glue

Scissor

Patience

Music & a good Drink ;-) I prefer uhm – are you mature ?

Some words to the model

Some sheets are to be printed out more than once. (e.g. Tires-sheet). Read the instruction before. Also read ? (Uhm good word for) the parts. Print out some spare-sheets if you think they are difficult to build or cut, or even if you thing the instruction is badly writing ;-). (And write a mail ...)

All parts for the step should be inside a outlined box on the sheets.

If you see a red X inside a part, then this is a area to be cut out.

If you see one or more parts outlinded with red lines, so this means this are parts which aren't seen from the outside. (e.g. internal structure of the model)

Grey lines are construction-lines, they could help to cut, bend and fold.

If you see a big colored area beside some parts, with a small red line in the middle, this means, fold and glue the parts to the area. Cut this parts after the glue is dry. (This are parts, that are seen from both sides, so they need a colored backside.)

Not used Parts

all parts in use

except : - grey outlined areas at the frame (for a larger frame, you can use it if you want)

Model-Pages

29 Pages, print page 5 2 times, page17 2 times, page 28 6 times

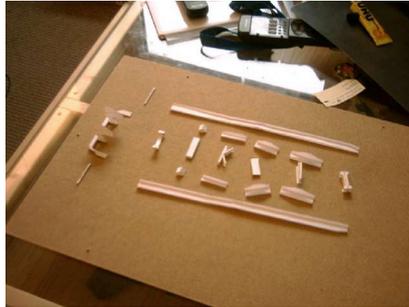
15 Pages of Instruction

Frame

Cut out Parts. [42 parts]

Fold and glue the parts as seen in the second picture. Start assembling from the outer sides. Be aware that the frame is in flush and straight. Add the inner crossmembers.

The two rolled parts, which are beside the frame (front) of the third picture are used later after assembling the engine, lock there were to place them, this will be better for fitting the engine in the frame



Cut out the parts for the suspension-support [15 parts]
Glue and assemble the parts and finally attach them to the frame.

The frame should be flush at the bottom.

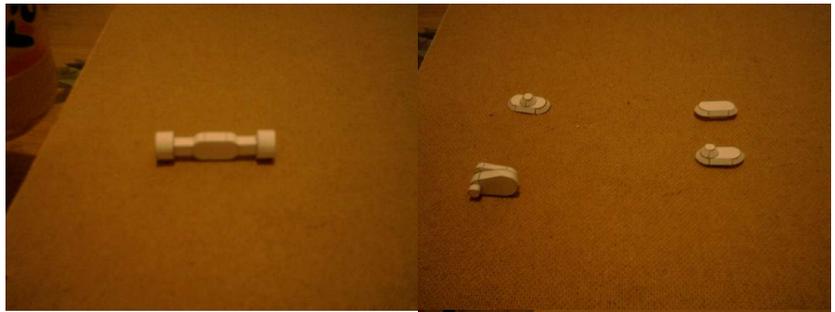


Rearaxles

Cut out the parts [2x6 (left pic), and 8 parts for the gearboxes]

Roll, fold, glue. Attach the quad-formed part into the brakes for stiffness.



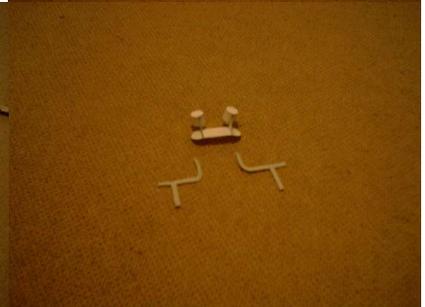
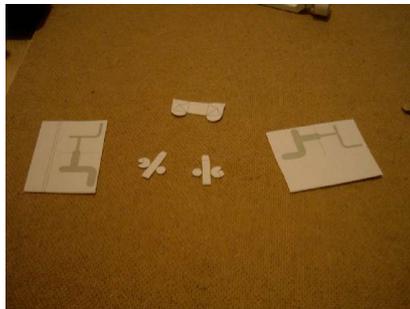


Glue the parts together and fit the gearboxes as shown here in the right picture

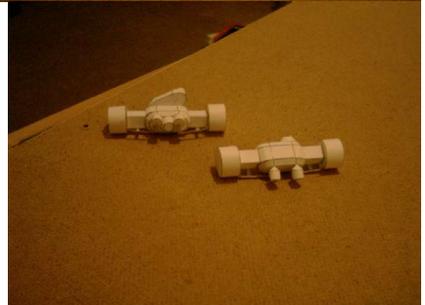


Cut out the parts of the brakes of the rearaxles [5 parts each]

Fold, roll, glue. Glue the lined parts backside.



Attach it to the rearaxles as shown.



Frontaxles

Cut out the parts [14 parts each]

Roll, fold and glue together, don't forget the stiffener.



You can make the axles steerable if you cut out the marked circles at the hinges and add a beam there. But be aware for the stability of the axle.



Front-Suspension

Cut out the parts [7 parts first axle each side, 9 parts second axle each side, 3 crossmembers]

Roll fold and glue as shown.
Glue the crossmembers backside.

Roll and glue the outer tubes of the damper. Roll and glue the inner tube, but don't glue together. This takes place at the assembly of the axles to the frame.

The V-shaped crossmember has a box-shaped part also attached.

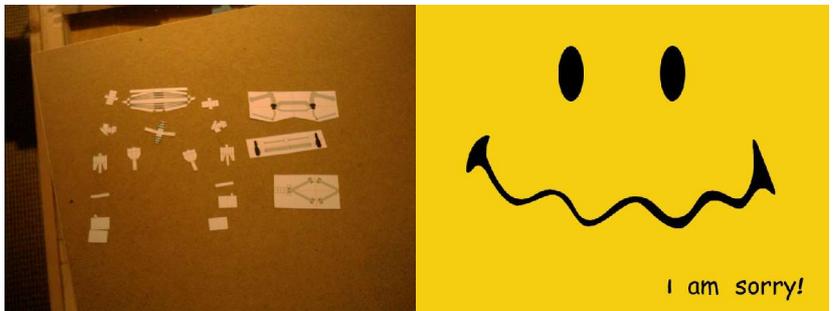


Rear-Suspension

Cut out the parts [16 parts each side, 3 crossmembers]

Glue roll and assemble. The V-shaped crossmember has a box too, as this for the second axle.

(Lost the picture of the assembled suspension :-), but nothing special, also look at the attaching of the axles to the frame)



Attaching the axles to the frame

Get all the parts. This picture shows the location of the parts.

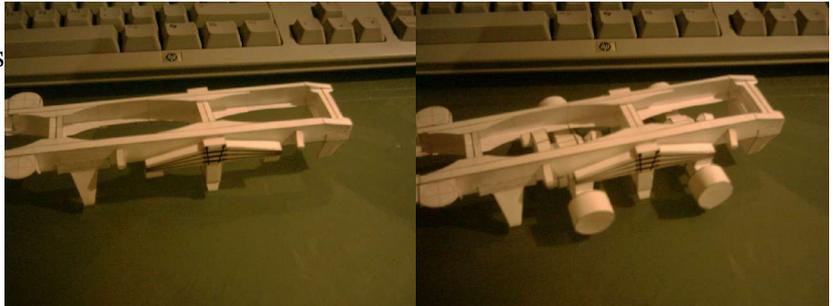
We start from the back.

Take your time, work step for step, let the glue dry.

First check the frame if it is straight and good, because with the added axles, it will be very stiff, so no more room for bending and correcting the frame.



Attach the spring to the suspension, then both rear axles. The brake-tubes both points to the back



Next are the supporters for the dampers at the bottom of the axles, then the damper themselves. Glue them together at the right length.

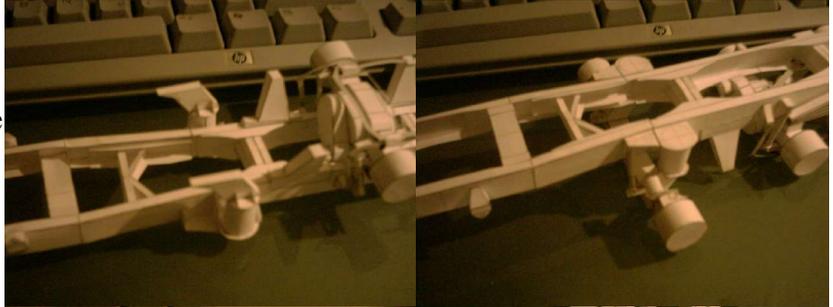


Add the crossmembers as shown, then the V-shaped crossmembers into the frame as shown

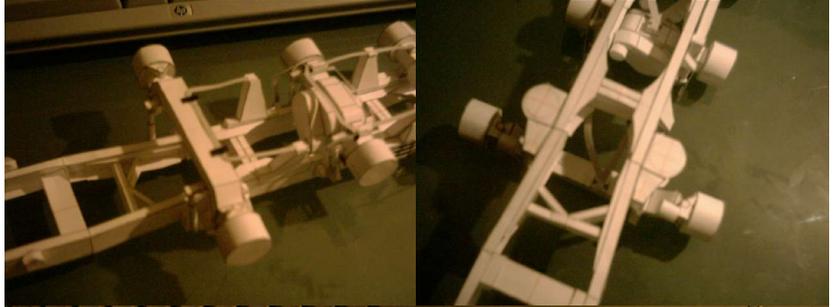


Ok this were the rear axles

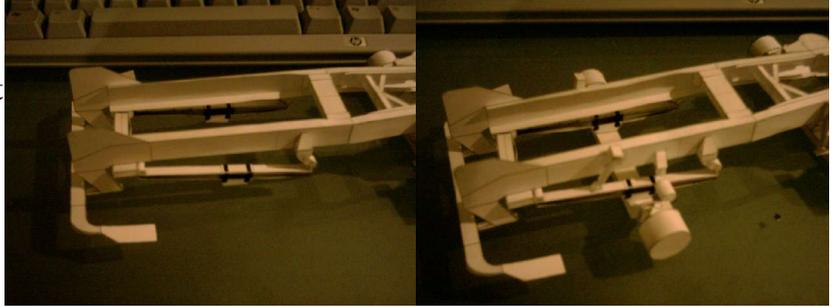
Add the air-springs of the second axle to the supporters. Add the damper and then the axle. This axle points the brake-drums to the front.



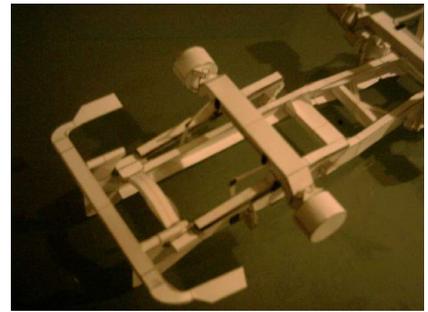
Add the crossmember and the V-shaped crossmember as before into the frame



Add the front-spring into its supporters Add the oval-shaped part to the longer flag of the spring. This side is the rearside of the spring. Carefully look at the picture. Add the axle in its place. It should be horizontally and the brakedrum points to the back. Place the little damper in the rear area to the frame, hovering above the brakedrum.



Add the last crossmember to the first axle. The axles should again be in flush. But its not so bad with a little distortion, because the wheels had some space for correcting.



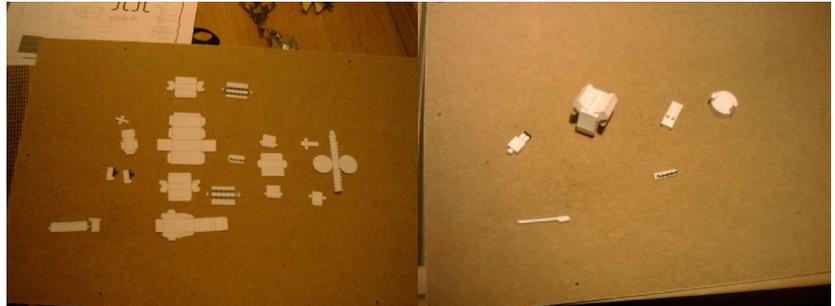
Engine

Cut out the parts [19 parts]

Roll, fold, glue.

Bottom-right shows the assembled enging.

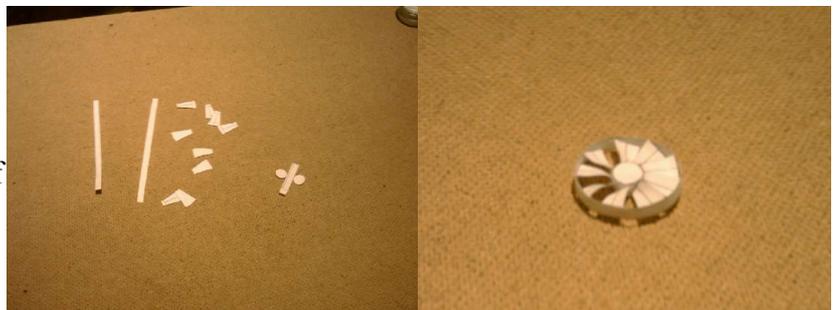
The part which is shown at the bottom left of the right picture is later used with the assembly of the cooler.



Fan

Cut out the parts [13 parts]

First glue the blades to the unassembled! inner-part. Then roll and glue the inner part. Bend the blades and then attach the shorter of the remaining strips. At last add the last strip. This works, believe me .-)



Cooler & Gearboxes

Cut out the parts [7 parts cooler, 3 parts gearbox]

Roll fold and glue. Nothing special.

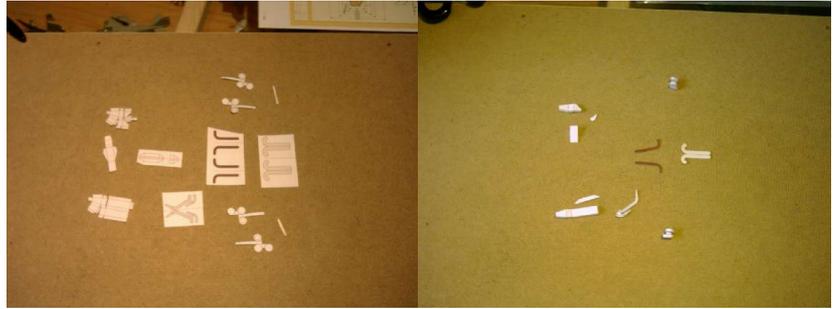
The tubes of the cooler are used when assembling to the engine. Don't attach yet.



Turbo

Cut out the parts [14 parts]

Roll fold glue, blue backside.... the whole range :-)) but all as usual. The two turbo-housings should be twisted at 90°



Assembling of the engine

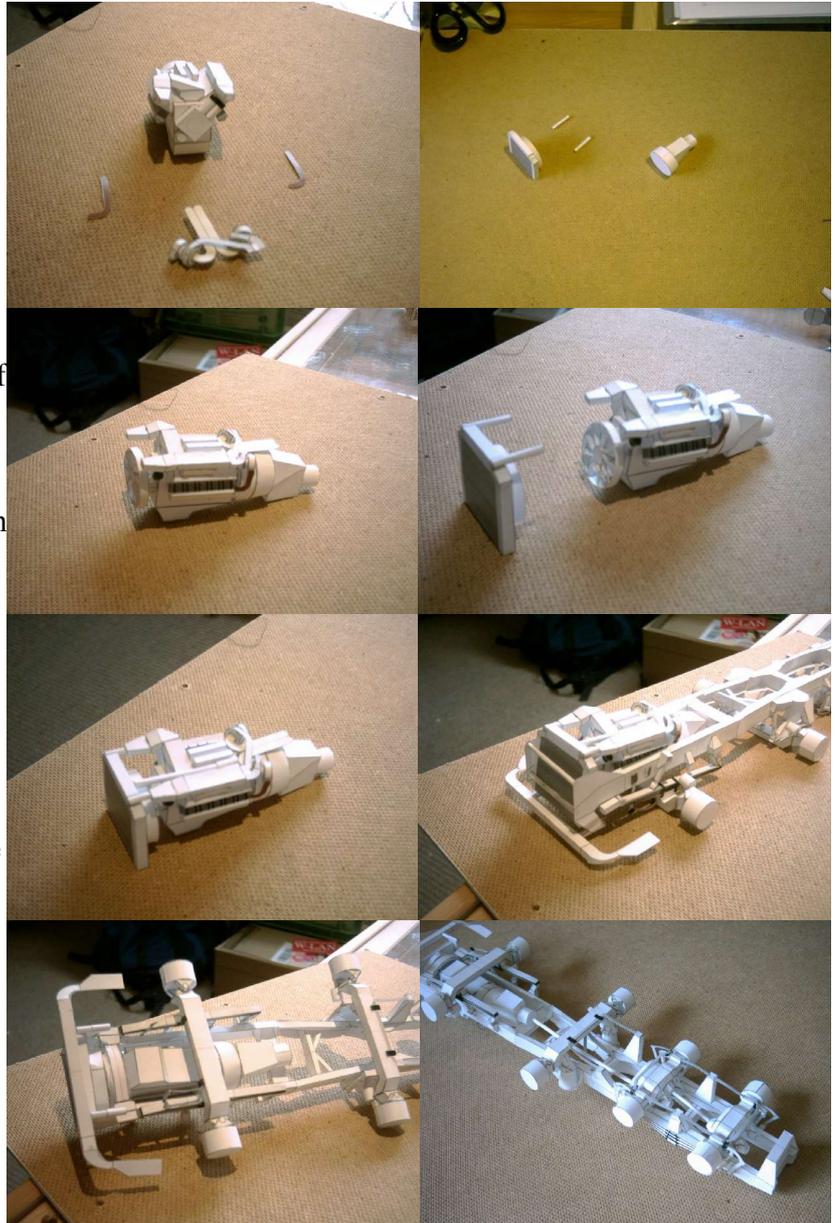
First attach the gearbox and the fan at back and front of the engine. Then add the turbos. They don't have to be supported, because through 4 tubes they will be very stiff connected to the model.

Get the cooler, cut the tubes to the correct length, then glueing. The fan should be inside the round part of the cooler.

At last add the last tube at the left top side of the engine to the cooler.

At last add the engine into the frame. Add the two beams just in front of the cooler to the frame. The engine lies a little beveled in the frame !

Roll 2 length tubes and attach between the rear axles and the gearbox. (no parts there:-), but i think you will make it)

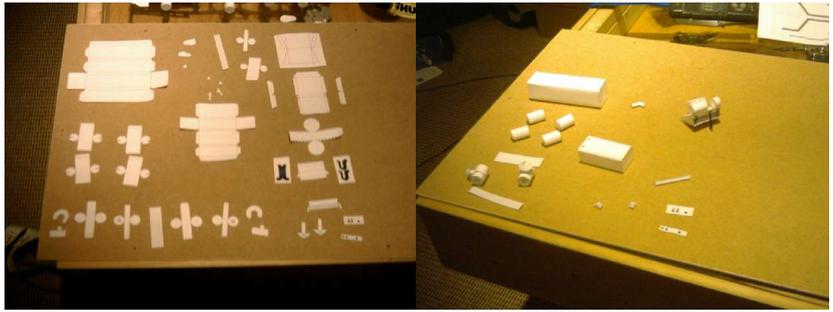


Energy-Rack

Cut out the parts [37 parts]

Roll fold and glue together. The strips are used to attach the airfilter and tanks to the frame.

When finished you have a fuel tank, oil tank, 4 airtanks, 2 airfilters, an additional cooler, lights, a step and two connecting-tables.



Additional aggregates

Cut out the parts [6 parts]

Roll fold and glue.

This will form the air pump, oil pump and the step.



Exhaust

Cut out the parts [5 parts each side]

Nothing special, just fold and glue.



Add the exhaust pipe into the heating housing, flushing at the top as shown right.

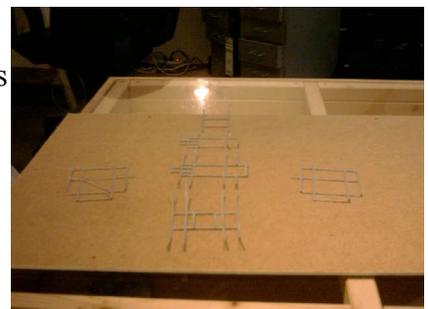


Assembling the Energy-rack

Cut out the main parts. [6 parts] You can use the other grey strips as stiffener or hide some cuts and so on. Otherwise you can use the frame as a template for your (better .-) frame.

Just make it step for step, let glue and dry....

The picture shows the rack from back of the truck.



Take the front and back part and assemble it with the first floor.

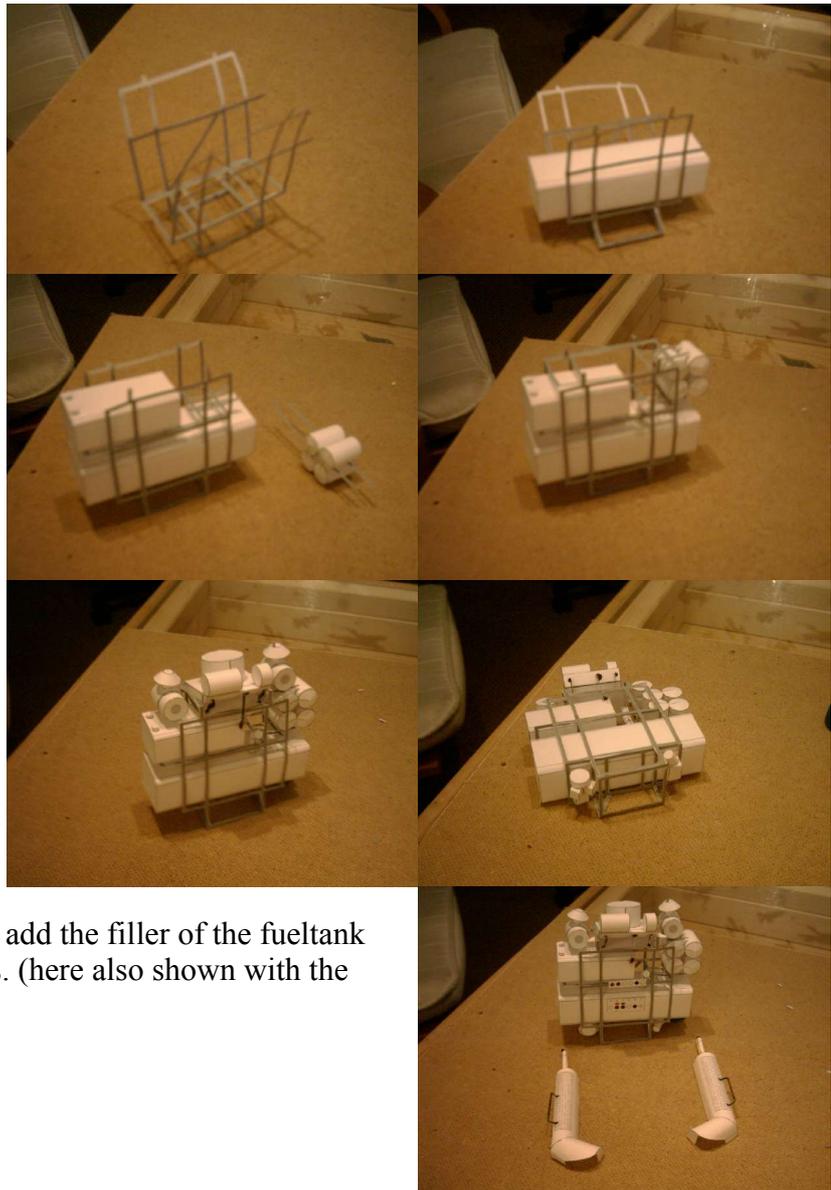
Take the fuel tank and glue it into the frame. If your frame bend under the load, so you had to strenghten it using some of the grey strips.

Attach the second floor and take the oil tank into the left side, its fueler at the left. Glue the four airtanks to two strips. Using the same width as in the second floor at the right side. (you can use the strips of the tank for attaching if you want.) Attach them to the right side of the frame.

Add the third floor, and then the airfilters and the cooler-assembly with the fourth floor. Attach the air and oil pumps to the bottom of the rack.

At least add the lights, step and the connecting tables and don't forget to add the filler of the fuel tank between the oil tank and the airtanks. (here also shown with the assembled exhausts).

Let dry, add stiffeners if needed.



Wheelarches

Cut out the parts [5 parts each]

Roll glue and assemble. Roll the rectangles to tubes, which are fitting in the holes, but don't glue into, this take place at the connecting to the frame. Right picture shows all three arches of one side. You need a second set for the other side. Be aware of the holes. You need all holds at the innersides ! You can also add the flaps here or glue them later.



Bumper

Cut out the parts [11 parts]

Also nothing special, maybe the strengthener as you see at bottom.

The cut of the biggest part is for the bumper part at the frame

You can glue the housing of the hinge to the bumper or not.



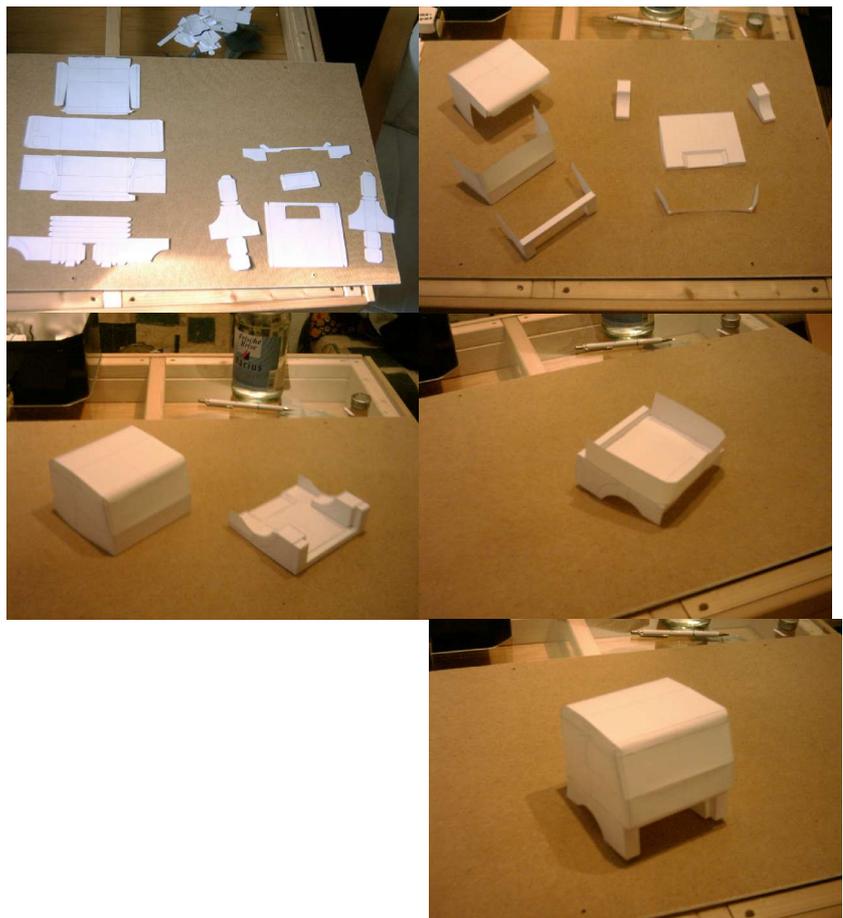
Cabine

Cut out the parts [9 parts]

Fold and glue them. As shown here.

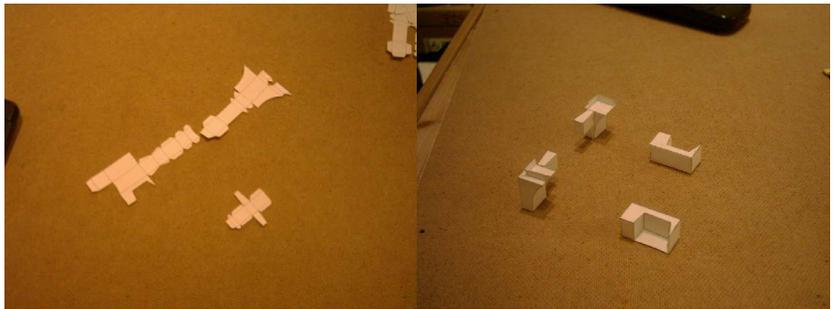
The floor part is shown upsidedown.

Add a large glueing-flap to the floor part, then connect it to the upper part.



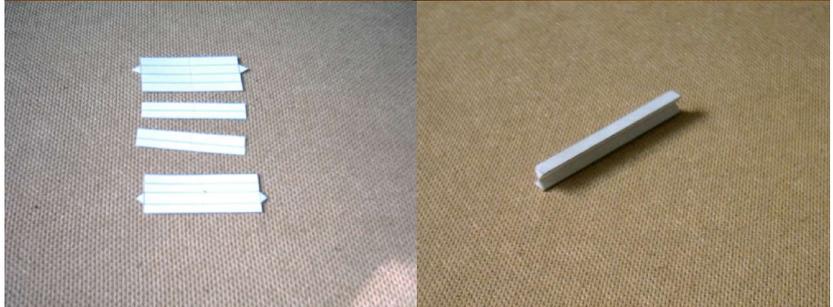
Cut out the parts of the lower cabine [3 parts each side]

Fold and glue.



Cut out the parts for the hinge [4 parts]

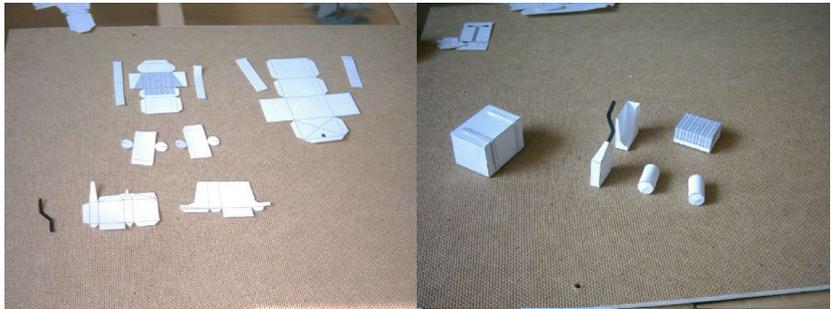
Fold and glue the triangular-shaped beams and then glue them together with the two rectangles. So the hinge can bend.



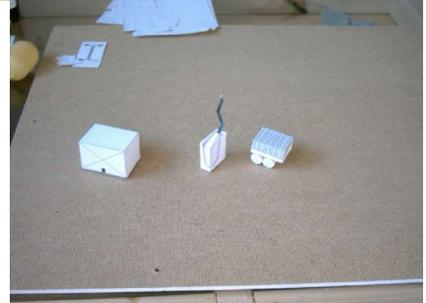
Aggregates

Cut out the parts [9 parts]

Fold, roll glue together.



The strips are used to attach them to the frame. Maybe you will then need some additional strips.



Saddle

Cut out the parts [8 parts]

The saddle itself is shown here upsidedown.

You can glue the two parts together, but then they can't tiling . Your choice :-)



Additional parts

This parts you don't really need, but it will make the model richer .-)

Cut out the parts [9 parts]

Fold glue and assemble .-)



Mirror

Cut out the parts [4 parts each side]

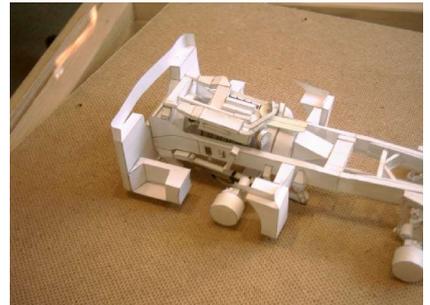
Fold and glue together.



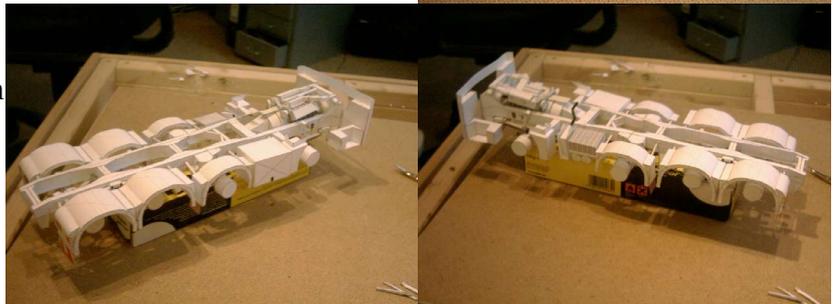
Add the cabine and the rack

First add the bumper with respect of the hole in the bumper and the crossbeam located there at the frame.

Then add the lower cabine parts.

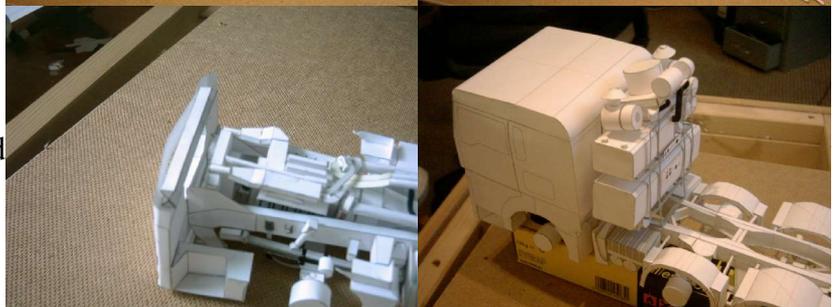


Then add the aggregates and the wheelarches. The sides should be in flush. Using the strips at the aggregates and the tubes from the arches to level things out and glue all together. Let dry.



Add the hinge atop the bumper.

Fit the cabine atop the engine, but don't glue yet. Place the rack behind the cabine, letting som 8-10mm space for the airtube. You can also check if you need some more high at the hinge. If yes cut out strips and attach them to the hinge for a correct high. Let dry.



Air & exhaust-tubes

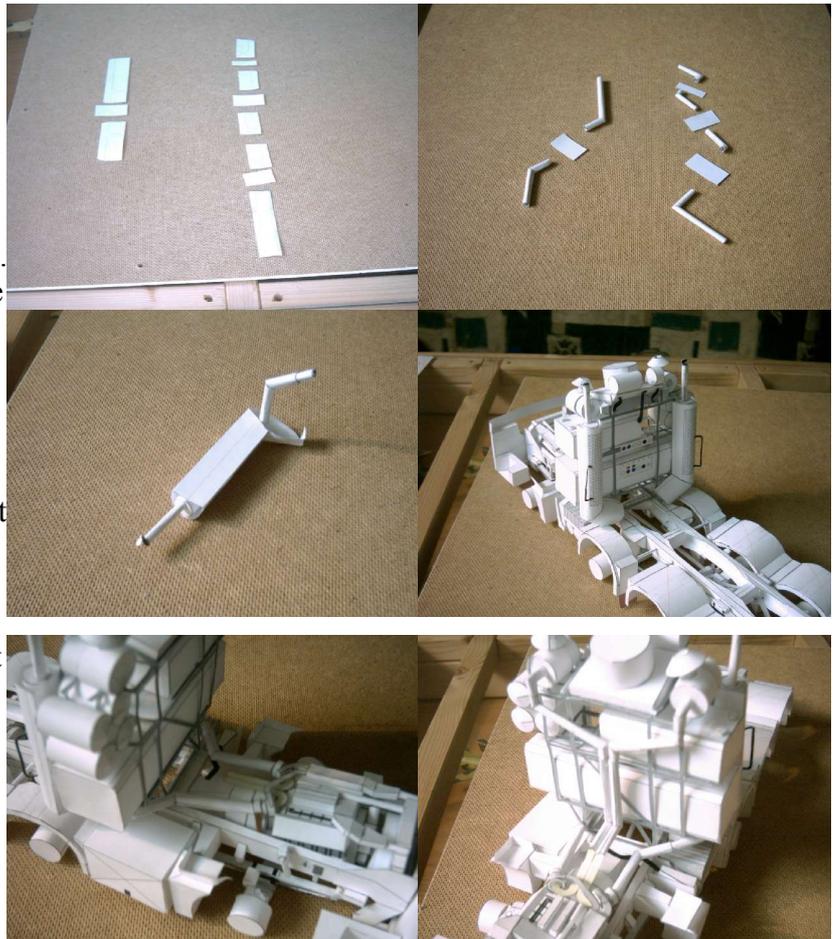
Cut out the parts [11 parts each side]

Roll as shown, the other rectangle parts in between have to be rolled and fitted into the tubes. Don't glue yet, this will be glued at the assembly. Left are the exhaustpipes, right is the airpipe.

Glue one of the exhaustpipes to the exhaust. Glue the exhausts to the rack. Add the remaining tube to the turbo while cutting them to the right length.

Make the same with the airpipes, paving the way from the airfilters at the rack to the middle feeder of the turbos.

Alternatively you can use the flat pipes. You have to glue them backside and fold them fitting into the model.



The rest

Add now the cabine. Add the left bumper parts, if you don't had them applied.

Add the saddle and the additional parts.

Add the bogeylights and the mirrors.

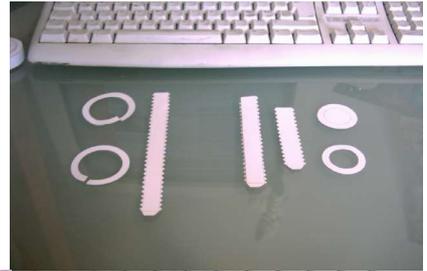


Wheels

Parts of the tire and the rim. [7 Parts each wheel]

You need two wheels for a frontaxle, also two wheels for a rearaxle. If you want doubletires, so you need 4 wheels for this axle. (I don't know if i'am saying you something new ?! ;-)

Glue and roll the together, then glue the tire to the rim



Parts of the front- and rearwheelcaps [2 Parts Front, 3 Parts rear]

Other formed caps in this model but same method .-)

Roll and glue. Glue the frontcap to the outside of the wheel, and the rearcap to the inside of the wheel.

If you want doubletires, so glue two wheels opposites and glue a rearcap to the outer side. Do not glue a cap to the innerside



Glue the wheels to the Axles. They should be in flush with the wheelarches.



So only missing now are the trailer and the loading, aren't that ????

The model is finished.

I hope you had enough fun building it, hope almost as much as i constructing :-) anyway have a lot of fun and waste of time.

