



Building instructions potato trailer

Kit nbr. 85337

Tekno kits are intended for advanced modelers.

Knowledge of Tekno miniatures and of the real truck/ trailer is required.

Gather information from leaflets, dimensional drawings and/or google on the subject.

Tools (recommended).

Mini-drill with drills, grinding wheels, sanding rollers;
Cordless drill and/or pillar drill for metal drilling;
Machine clamp or vise with smooth (attachment) jaws;
Files: medium-fine and fine (instrument maker's files);
Fine sandpaper -grit 320 - 600;
Sanding board;
Pliers -also with smooth jaws;
Fine drawing pen;
Center point or fine dowel;
Tweezers.

Gluing

Use superglue, post-gluing with (quick-drying) two-component glue where necessary or desired.

Be very careful when working with clear windows and gluing small parts.

Remember that superglue can turn white and stain paint.

Tekno kits are derived from the production models. In production models, the holes for attachment of various parts are often drilled per product and to order specification.

Therefore, the chassis and components are not always (pre-)drilled, so this has to be done by the builder himself.

Preparing

When unpacking, you will notice that the bags sometimes contain metal and plastic parts that do not directly belong together. Cause is the for Tekno most logical distribution among the different moulds.

Empty all the bags and sort the parts that belong together, such as the superstructure and wheel sets.

When sorting, some knowledge of the real semitrailer or trailer and the Tekno miniature is desired.

Also look at the sample photos in this instructions leaflet.

Divide the kit parts into "chassis," "body," "wheels and tires" and "other" (side protection, bumper, landing gear and any accessories).

Sort the parts as in the pictures below and familiarise yourself with the subject.

The parts and method of assembly may vary from trailer to trailer.

But if you put them in front of you as shown in the pictures, things will sort themselves out.

Keep the sorted parts in different containers.

Perform trial fits, that way you will become familiar with the fitting of the parts and the construction of the kit.

Check all parts (zamac and plastic) for casting residue or burrs. File, grind, sand everything smooth.

See also the photos of the built model and the instructional photos below.

Drilling

In general, for drilling in zamac: use a center pin or make a center with a small drill bit (e.g. 0.6 or 0.8 mm) in the mini-drill. Then drill out the hole further with a (cordless) drill on medium speed.

Use of drilling oil is recommended, e.g. WD40 drilling oil in a spray can. Spray a little in a container and dip the drill bit into it regularly.

Because of the relatively low speed in combination with the drilling oil, the drill bit will cut better and wear less quickly. After drilling and before gluing, degrease all parts well (benzene or similar).

Location holes in the chassis: preferably drill with the chassis perpendicular to the side in a machine clamp and under a column drill. Or drill as accurately as possible out of hand and well perpendicular with a hand drill. Most chassis parts have pins of 1.6 - 1.8 mm.

Assembly sequence

The production method and order of assembly at the Tekno factory differs from what modelers are used to at several points. You notice this with the trucks, for example, in the assembly order of the engine block, wheels and tires and the assembly of the front axle with the assembly block, knuckle blocks and track rod.

At the Tekno factory, first all chassis parts, engine block and wheels are painted in colour separately, then the engine block is mounted with the central screw and all engine attachments are glued.

After the engine block, the tires are mounted, the axle stubs are pressed through the knuckles into the wheels.

Finally, the assembled front axle is mounted to the chassis by crimping up the fitting and location pins.

Even a semi-trailer or trailer sometimes requires a specific way and/or sequence of assembly.

Sort all the parts, look carefully to see which parts belong together and place them on the table in front of you as on the next page. Always think as far ahead as possible. This will familiarize you with the various parts and the method of assembly and give you an understanding of the correct order of assembly.

Temporarily on the wheels

Modelers like to put the model on wheels and tires at the very beginning of assembly. This requires a different assembly sequence than in the Tekno factory. Consider beforehand, especially also in connection with painting, what you can already finally assemble and which parts you want to mount only after painting.

Wheels and tires

First mount the tires (temporarily) on the wheels.

Or: primer and colour the wheels first and mount the tires permanently right away.

Assemble and disassemble the tires: put them in boiling hot water, hold them against an old-fashioned hot light bulb or place them on another heat source such as an electric (wall) heater for a while.

Because of the injection and release from the mould, the tires have a nice side and a slightly less nice side.

Pay attention to this and keep the nicest side on the outside when assembling.

Potato trailer - parts / modules / assembly

For an orderly assembly, the most logical sequence of construction and (partial) colour painting before final assembly, the potato trailer is divided into 'modules' here.

See for each module whether additional holes need to be drilled out or new holes drilled.

In the pictures below, the parts are always next to or near their assembly positions as much as possible.



← Driving direction

← Basic superstructure and chassis frame.

The sloping floor with end walls attached, the inner head panels and the conveyor belt made of plastic.

The right side wall is completely smooth, in the left side panel is at the rear the hatch for connection and operation of the electric motor.

The conveyor belt must be mounted before the chassis frame is attached to the bottom of the superstructure.

Below is the chassis frame to which the subframe, landing legs, etc. are attached.

The chassis is attached to the superstructure with six M 2.5 screws -see below.

Subframe, suspension, wheels →

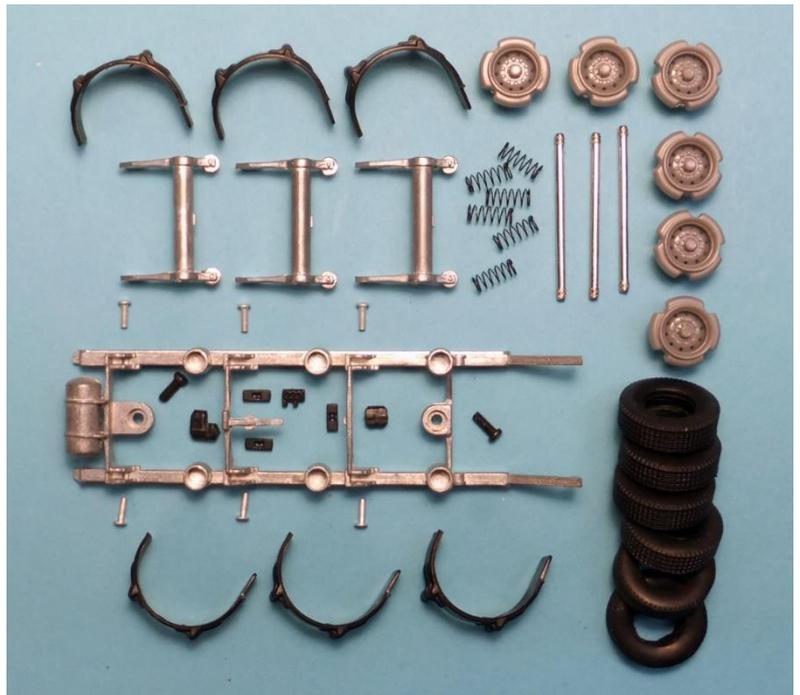
The subframe with suspension and brackets, axles, wheels and tires and the mudguards.

Special attention to the plastic connection- and valve- blocks that have to be glued in a certain way.

Details on this in the assembly instructions later on.

The subframe is attached to the chassis with two M2.5 screws.

← Driving direction



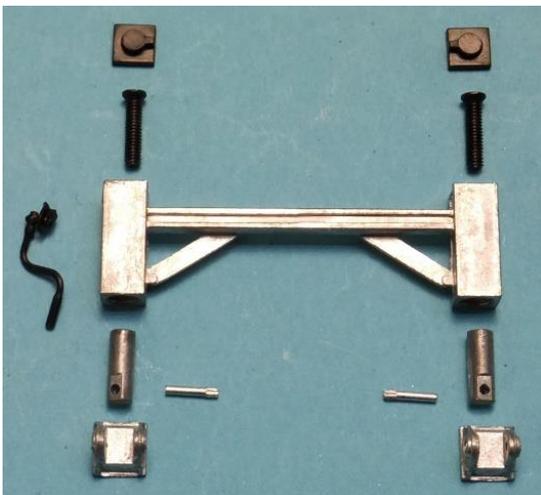
← Landing legs

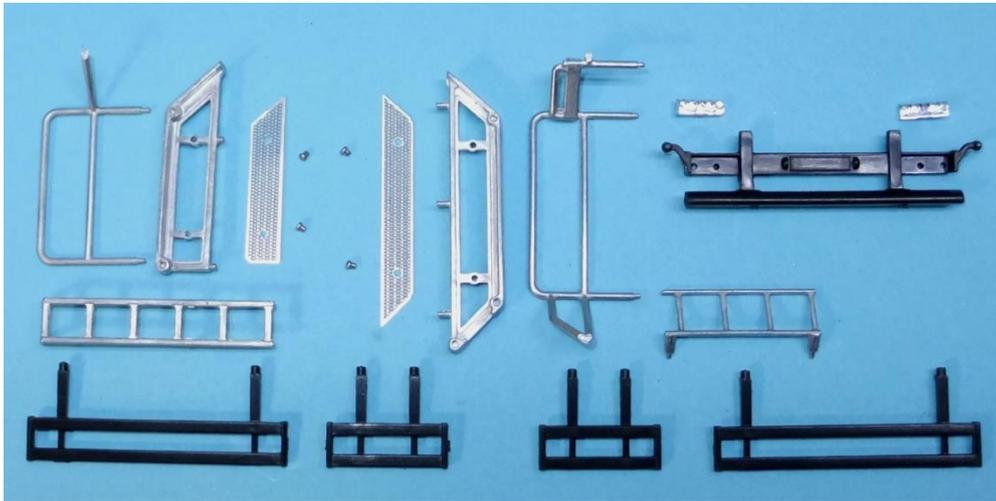
Locate these parts together and keep them separate until further machining and assembly.

See the instructions below.

Parts front →

Above the connections for air and electricity, center the filler panel above the coupling plate, below the kingpin.



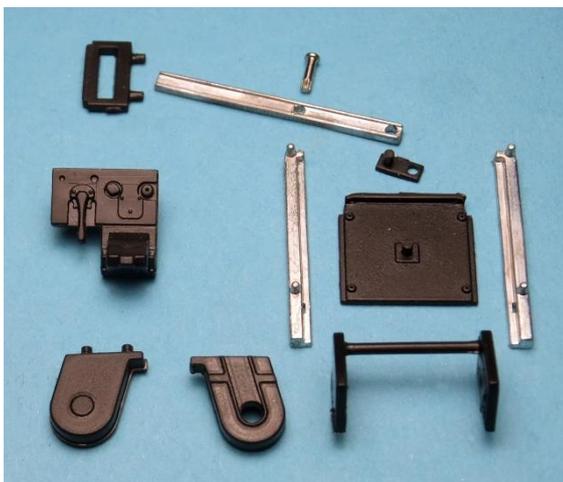


Miscellaneous parts.

Left is the front platform (with long ladder), in the middle is the rear platform, right next to it the rear bumper with lights. At the bottom you can see the side guards.

After painting, glue the photo-etched step grilles with the small, short pins.

Depending on the colour scheme, you can paint the landings, ladders and side guards separately.



← Unloading hatch, drive and control panel.

The control panel for the air suspension including the axle load weighing unit (left, center) comes on the left rear side of the subframe, next to the rear mudguard.

The lever can be used to open and close the sliding hatch.

On the lower left are the two halves of the drive chain case. See the assembly instructions below.

The load

In front the roof-shaped panel that comes above the conveyor belt. This canopy keeps the belt from being overloaded by the weight of the load.

At the top, the rolled-up sheet with the three supports that prevent the sheet to fall down the side.

Please note that the sheet can only be mounted after the load has been assembled.



Mounting the parts / assembling the modules

Consider carefully and in advance which parts need to be primed and painted first. And consider which modules can be assembled (partially or completely) before painting.

The following instructions are for assembling separate parts, assembling modules (partly or completely pre-assembled) and the parts that are mounted in the end.

The directions are in the recommended order as much as possible.

Screws

For mounting the chassis frame and subframe (with the suspension and axles) there are eight M2.5 screws. The two M2 flat-head screws belong to the landing gear.

First make all the screw threads gangly. Ideal is to use a tapping set, but you can also tap the threads with the screws themselves. Or find a stainless steel bolt with the same thread, which is stronger than the included screws.

Provide a good fitting Phillips head screwdriver, make sure the bolt is inserted straight at right angles into the hole and turn in and out bit by bit. Use drilling oil, this makes tapping the thread easier.

When assembling, always be careful when turning the screws in and out, do not over-tighten them, this will spare the threads.



Cargo box / superstructure

Sometimes a side wall, for example, may be slightly warped / skewed during injection the material in the mould. This is due to the long and relatively thin surface. Check the side walls and, if necessary, carefully straighten them, clamping them in the smooth jaws of the machine clamp while doing so.

Check all sides and edges of the panels, note casting residue along the sharp edge of the angled panels above the conveyor belt. Use a file a/or a sanding board for this and smooth and flatten all edges and posts.

Check all glue surfaces for unevenness or burrs.

Check the fit and file bottlenecks slightly wider if necessary, also to give the glue some space.

Perform trial adjustments before final gluing.

Lay the superstructure with the head sides on its side and glue one side panel. Note left and right and front and back of the superstructure. Use super glue and/or quick-drying two-component glue. Place a weight on the side wall so that it is snug all around in the glue slot. When the glue is sufficiently fixed, turn the superstructure over and glue the other side panel.

Wait to assemble the conveyor belt after spraying. Then mount it before assembling the (finished and sprayed) chassis frame.

Chassis frame

Check for casting residue, especially along the side edges. These should fit tightly against the superstructure.

Perform a trial fit, tighten the screws gently but not too tight in this first attempt.

Subframe

Choice: 1) fix the aluminium pins used to attach the suspension brackets by crimping: insert the pins through the brackets and crimp them up by firmly squeezing with smooth flatbed pliers.

Or 2) drill the holes also through the rear supports and glue the pins. Use a 1.5 or 1.6 drill bit for this.

In the side beams are center holes for the mudguard supports. Drill these out in increments (e.g. first with 1 and 1.5 mm) to 2.2 mm. (The two semicircular holes are provided for two straight mudguards per side.)

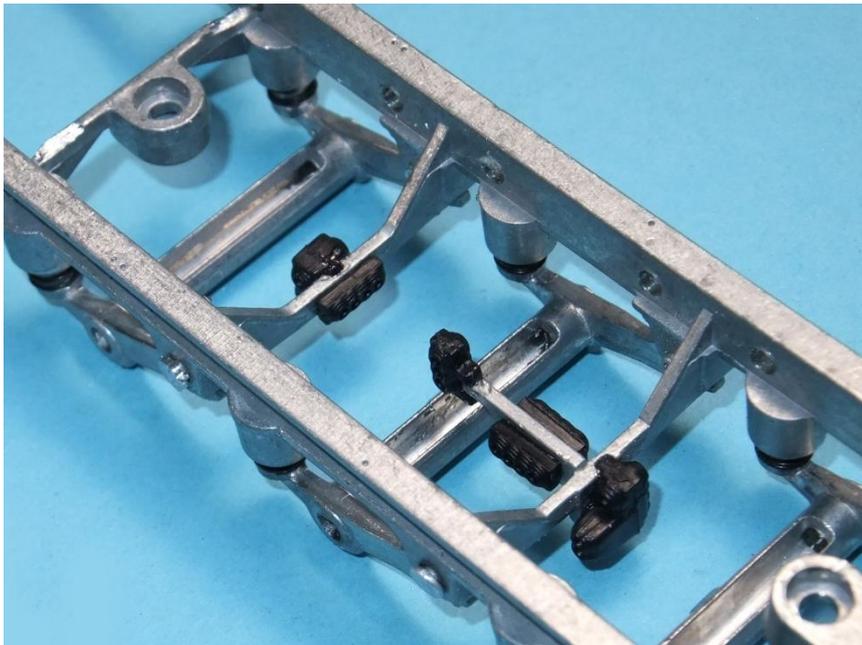
Use drilling oil. Later remove the burr with a larger drill bit (slightly countersink). Then rinse all the holes well with benzene so that the glue picks up well.



On the left, a 1.6 drill bit for the aluminium pins used to attach (glue) the suspension brackets.

On the right, the 2.2 mm drill bit for the mudguard supports (6 per side). Use drilling oil, don't run the machine too fast, so the drill bit will cut better.

After drilling, rinse the parts clean and degrease with e.g. benzene.



Valve Blocks

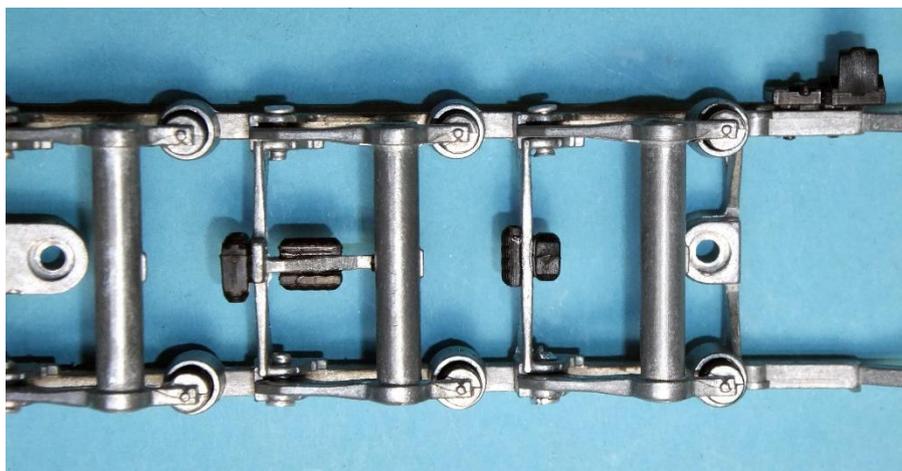
There are six valve blocks:

3 x quadruple - of these, one comes on the crossbar for the third axle and two left and right to the long center beam. The block with U-shaped opening comes at the end of the beam.

The largest multiblock comes against the center crossmember (right in the photo), the smaller block comes against the rear intermediate crossmember (far left in the photo).

Note the glue-location holes in the blocks.

↘ = driving direction



← Control unit the air suspension etc. is outside left on the subframe.

← Location of the distribution blocks viewed from below.

(You can't see the block at the end of the central beam, which is behind the axle housing here).

← = driving direction

Axes and wheels

Check the bores in the axle housings. If necessary, drill out a little wider with a 2.1 or 2.2 drill bit.

Installing the suspension brackets: insert the coil springs in the bellows and fix the brackets in a slightly compressed position with the aluminium pins. When mounted, the axles can move slightly up and down without the springs falling out. (See also the lugs for this on the arms, which come up against the yokes at the front).

File the press ridges of the 2 mm rear axles smooth on one side, so you can slide the wheel on and off during assembling. At the end glue the wheel to the axle. On the other side, press the wheel onto the ribs.



Tapping M2 threads into the struts.



Press pins into the support legs and skids.

Trailer supports

Photo above -left:

First, tap M2 threads into the lower support legs. Turn slowly, turning in and then all the way back so that the burrs come out with. Use drilling oil. Tap the thread as deeply as possible.

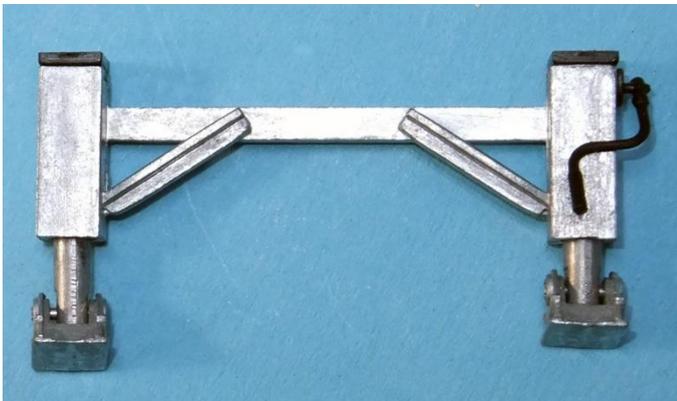
After tapping, rinse the inside well with benzene to degrease everything.

Then screw the M2 screw all the way into the top support leg and fix the screw by running a good drop of glue from above on the head of the bolt.

Photo above -right:

Press the pin into the lower support leg and fix it with a drop of glue.

Use the machine clamp to press the pins in without transverse tension.



Glue the two black cover plates on top of the support legs and in the right leg (seen from above in the driving direction) the crank handle in the fitting hole.

This "module" can be sprayed separately, provided both support legs are turned all the way up.

At the picture, the left leg is turned out (down) and the right one is up.

Rear panel and sliding hatch

Wait until after spraying to assemble the conveyor belt, drive unit and sliding hatch with the lever.

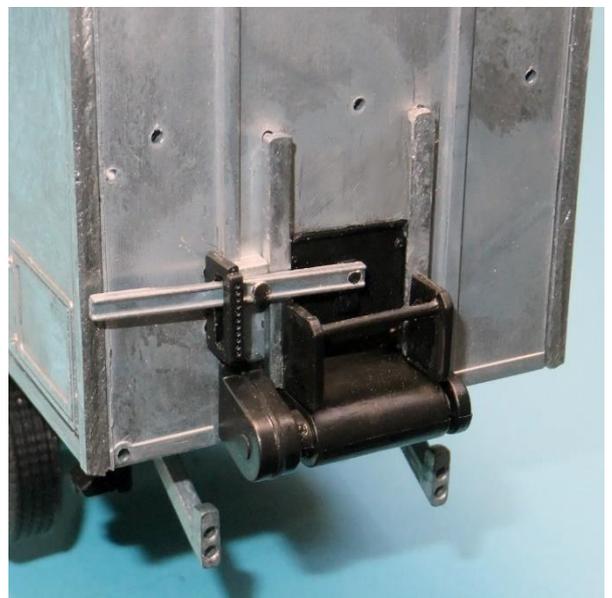
To assemble these parts, see next page.

Spraying and painting

Preferably use an etching primer, do not spray too thickly.

Consider in advance, what colours the modules and parts to be sprayed (and painted) should get.

After spraying, leave the model alone for several days to a week. This allows the paint to harden somewhat. Especially model paint needs time to harden.



Final assembly and sequence

The following is the recommended assembly sequence of all modules and remaining parts.

1)

Glue the conveyor belt at the bottom of the superstructure, note the location slots.

2)

Mount the chassis frame to the superstructure with the six M2.5 screws.

3)

Mount the subframe to the chassis frame with the two M2.5 screws.

Mount the six mudguards (see L and R on the inside) and then the wheels and tires.

4)

Glue the landing gear -make sure the crank is on the right.

Glue the coupling pin -file the pin a little shorter if necessary (the pin is riveted at the factory).

Glue the block with the air and light connections to the front panel.

5)

Assemble the drive (chain) case and the sliding hatch with lever to the rear wall:

Check the plastic parts for casting residue, file and/or sand everything flat and smooth.

Check the fit before final gluing. If necessary, drill out the holes slightly.

Glue the two halves of the drive case together and then into the two fitting holes in the panel and against the roller axle of the conveyor belt.

Assembling the hatch: first glue one of the two guide rails in the fitting holes, place the hatch in the rail and glue the other guide.

Be careful not to glue the hatch, so only apply a drop of glue into each location hole.



Then glue the plastic support and latch bracket (left), that in real life allows the lever -and opening of the hatch- to be locked in multiple positions.

The small plastic compensating lever comes loose around the pin on the hatch. Bring the lever into position and secure it with the little pin.

Also glue the little pin carefully with just a drop of glue into the hole.

In the factory, the pin is pressed-in, for gluing you can make the hole slightly wider with a 1.2 drill bit.

Glue the guide side plates (with the crossbar, above the conveyor belt) into the fitting holes in the guide rails.

6)

Install the rear bumper and the pre-painted taillights.

7)

Install the side underride guards at the bottom of the chassis frame.

8)

First glue the photo-etch step grilles into the platforms, then the platforms to the front and rear walls followed by the ladders.

9)

Assemble the load, first the filler frame and then the potatoes. Do this carefully, the fit is tight, if necessary you can make these parts slightly narrower before inserting them.

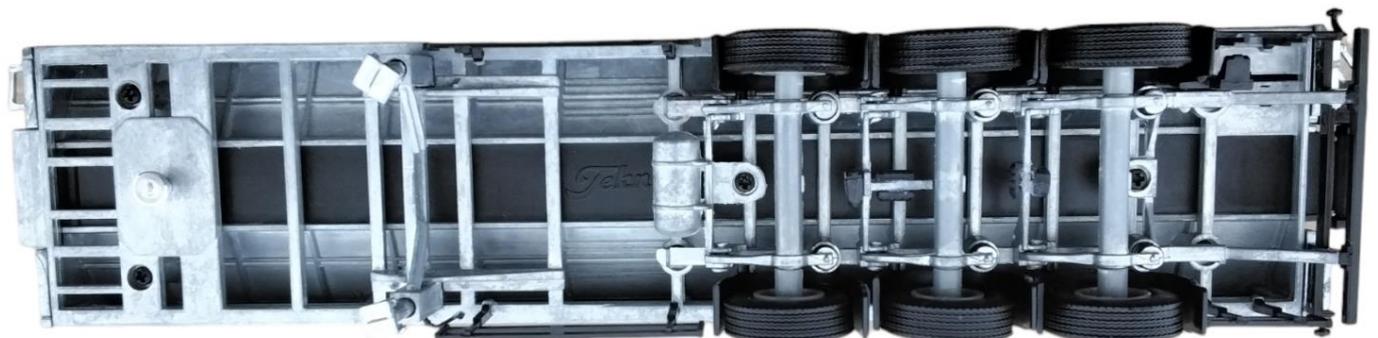
10)

Finally, glue the rolled up sheet in the location holes.
For the three supports, there are fitting holes in the side wall.



*N.B. Due to licensing rights, Tekno does not provide numbers of factory and customer colours.
So please consult your documentation, brochures, photos or the internet for this.*

Following are a number of pictures which give a good impression of the trailer built.





Tekno
Parts