



Building instructions for classic wide spread tank trailer

Kit nr. 86095

Tekno kits are intended for advanced modelers.

Knowledge of Tekno miniatures and of the real truck or 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 sanding paper -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 the 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 cabs of the kits are not always drilled, so this has to be done by the builder himself.

Preparing

When unpacking you will notice that in the bags sometimes metal and plastic parts are added that do not directly belong together. Cause is the for Tekno most logical distribution over 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 truck, trailer or semitrailer and the Tekno miniature is desired.

Also look at the sample photos in these instructions.

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 make your own.

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 fit 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 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 at medium-high speed.

Use of drilling oil is recommended, e.g. WD40 drilling oil in a spray can. Spray a little bit 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 mounting 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. Also consider which parts you want to paint before or after 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 already now, especially also in connection with painting, what you can already finally mount and which parts you want to mount only after painting.

We recommend this order:

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.



Universal -with options.

This kit is thought of as in the photo on the left, with the ladders on either side in the middle.

You can also build the trailer as below if you wish, with the ladders at the rear. There were also trailers that had one ladder, either in the middle or rear.



On this photo you can see how to make the rear markings etc.

Furthermore, there were trailers that only had the side protection bar in the middle on the tank side, others had a pressure pipe higher on the side (as seen here).

This pressure line was used to discharge the sometimes tough liquid cargo (grease, etc.) under air pressure. There was usually a compressor on the tractor for this purpose.

Many tank trailers also had a heater system. Then a diesel heater unit was built into the pump box that heated a liquid in a pipe system under the tank (between the insulation).

In connection with these different possibilities, you have to drill the holes for the pressure line at the top and/or the ladders at the side or rear yourself, among other things. All possible drilling locations are marked with very small dots, in the tank and in the chassis. For the ladders on the side, a piece has to be grind out of the side protection bar.

Tank trailer - parts / modules / assembly

For an orderly assembly, the most logical order of construction and painting (partly) in colour before final assembly, you can divide the parts into the modules "chassis", "tandem axles" and "tank body".

For each module, see if additional holes need to be drilled out or new holes drilled. In the photos below, the parts are always next to or near their assembly positions as much as possible.



127 parts

Here you can see all the large and sometimes very tiny parts of this kit.

In the top half of the picture you see the tank and associated parts.

Below the catwalk platforms and manhole covers is the chassis with associated parts.

In the middle at right is the rear bumper with the taillights and hazard signs.

On the next page you see two pictures where the trailer is divided into chassis and tank body.



Chassis and axles

From bottom left:
 Bar for under the landing legs next to it, the pump box (2 parts), tandem axles with the springs, reaction rods and brake boosters to the right.
 Near and between the tandem gear are the brake parts, air tank and the two aluminium pins for the spring yoke.

Under the spare wheel are three screws used to mount the tank to the chassis.
 Above left the spouts, to the left of the side protection the tiny headlights.



Tank and rear bumper

Check (again) all parts for burrs or casting residue.
 Make trial fits with the tank halves and covers.

Lay aside for later assembly:
 the side bars with the mounting eyelets, the taillights and the danger signs.

← Direction of travel.
 Positions of the platforms, manhole covers and the small covers of the unloading valves.



Hose tubes

Check the fit and intended locations of the mudguards with the hose tubes.
 Pay close attention to the direction of travel and then glue the hose tubes to the mudguards.

Then the pins that go into the front of the tank will be at exactly the right angle of inclination.

Do not glue to the tank yet, this will be done at the final stage.



Glue first or glue later.

Glue the two tank halves together and then the covers on the front and back.

Depending on which (loose) parts you want to paint in colour first before gluing, or only paint after assembling:

glue the landings and manhole covers on top of the tank.

Now when you put the tank on the covers it will be level and stable to bolt the (partially or not) assembled chassis to the tank.

Tip: put a few drops of glue on a cardboard sheet and pick up glue each time with a cocktail stick. That way you can glue more precise than directly from the tube or bottle.

Release valves

Under the small lids in real life there is a hand wheel with a rod attached to it that runs down through the tank. This allows the so-called bottom valve or release valve to be opened to release one of the three compartments each time. See also the three spouts that later come under the tank.

Drilling

A list of drill bits to be used, for new holes to be drilled or extra drilling out some existing holes:

First check the axle holes in the axle housings, if necessary drill them out with a 2.1 or 2.2 drill bit;

Side bars and pressure line along the tank: 1.2 mm (see the small location points for the pressure line in the clamping straps);

Left and right two holes in the tank for the hose tubes: 1.8 mm;

In the chassis for the aluminium pins for the central spring swing yoke: 1.6 mm;

For rear side protection rods: 1 mm;

For ladders: 1 mm (see small location dots in chassis beam);

For danger signs on rear bumper and the rear lights: 1 mm.

Mounting the axles

We recommend this order: first glue the small brake valve to the front centre beam, then the air tank.

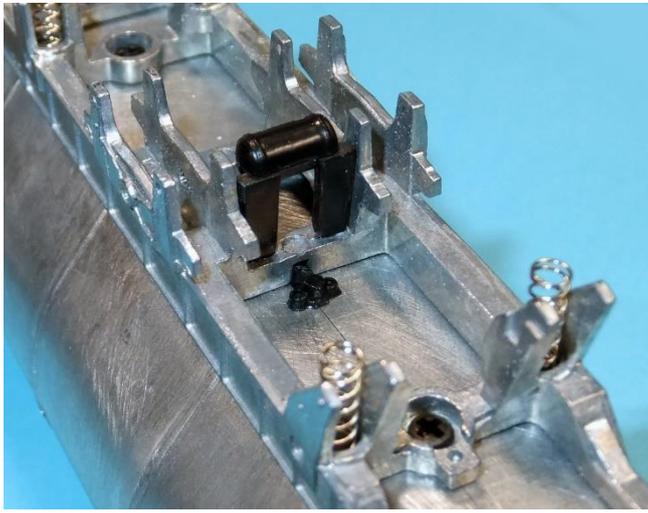
Glue the brake boosters to the axle housings, the flat part to the outside.

Put the coil springs in the cavities. Now bring the spring swing arm into position, press it against the spring pressure and insert the aluminium pins.

The hand brake lever (far right ↘) do not glue until the chassis is finally attached to the tank.

Tip: use a sticky dot to pick up small parts and to position them accurately. ↓





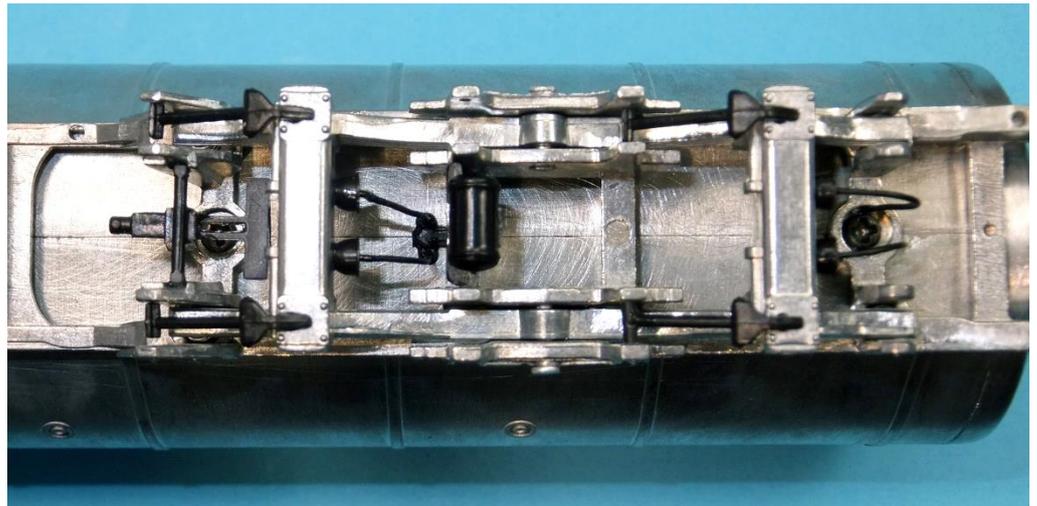
← Brake valve block glued into square fit hole in front of the centre beam. Air tank at bracket is glued in the position slots, the tank points backwards.

Below: tandem axle gear mounted, drummed up the aluminium pins with smoothing pliers on the inside. But gluing is also possible, just make sure the spring set can swing.
Handbrake lever mounted in the slots between the front spring brackets. Reaction rods glued into the mounting holes in the axle housings.

Tip:

Make your own brake hoses from thin electrical wire, 18 to 20 mm long. If possible, take out the core.
Drill 0.6 mm holes in the brake valve and next to the screw behind the rear axle. Glue the hoses into these holes and then into the brake boosters.

← Driving direction.

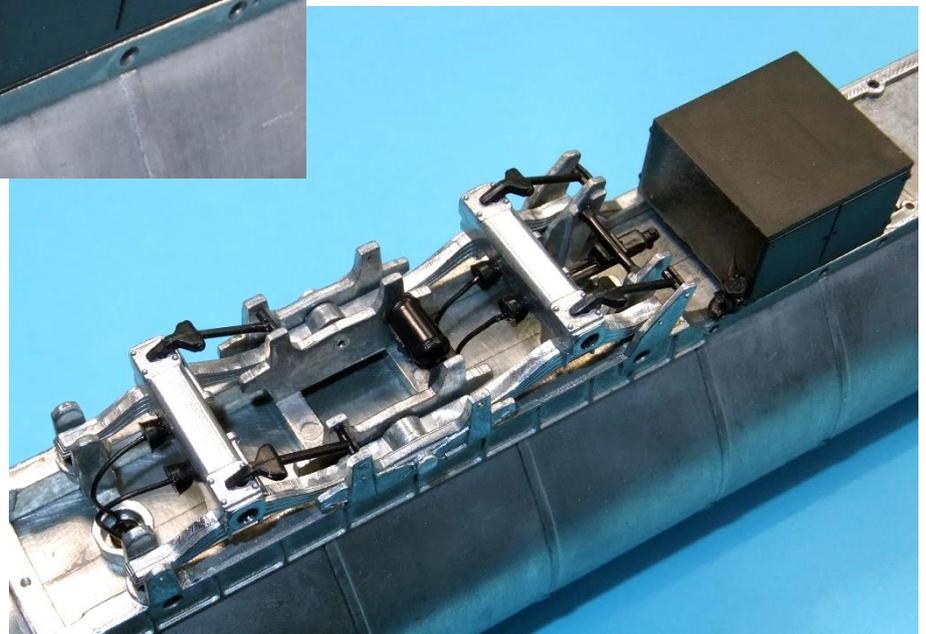


Pump box

Glue the top plate into the pump box and the assembly to the fitting blocks on the chassis beams.
Here the box is lightly sanded for good adhesion of the primer.

Brake control valve ↑

This was still used to manually set the brake pressure:
full/half-full/empty/loose.
If necessary drill out the mounting hole a little more.





Landing legs and mudguards

Assemble the landing gear in the locations indicated. First the legs, then the struts behind them against it. Glue the crank into the crescent-shaped hole.

Test fit the glued together mudguards and hose tubes.

Do not glue in place yet.



Axles

File the ridges on the metal axles on one side smooth enough for the wheel to fit smoothly around them.

The axle holes in the wheels are 7.5 mm deep. Mark this on the axle and press the side with the ridges in the wheel, straight and level in the vice exactly to that depth. These wheels remain permanently on the axle, the wheel on the other side is glued on during final assembly.

Tires

Put the tires for some time in boiling hot water or heat them on e.g. an old-fashioned hot light bulb or other heat source.

Mount the tires when they are flexible enough. Also when you want to disassemble them to paint the wheels: heat well first. Because of unloading from the mould, the tires sometimes have a slightly less nice side. Make sure the nicest side of the tire is on the outside.

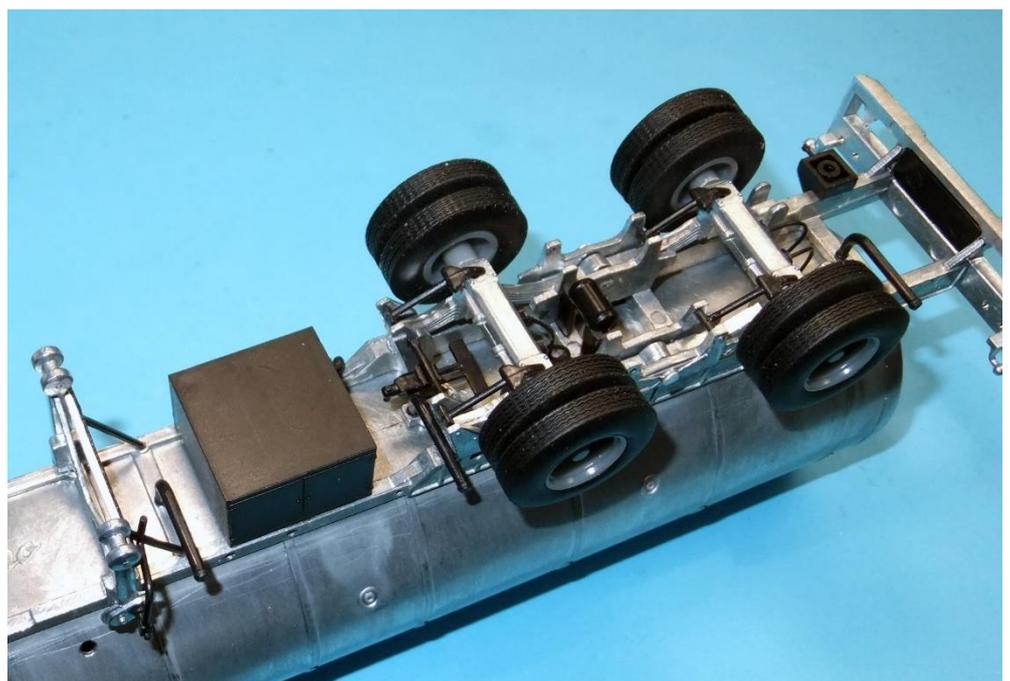
Discharge pipes

Glue the three discharge pipes straight and in line in the location holes. See the photo to the right.

Glue the license plate holder into the rear bumper and the assembly to the rear of the chassis.

Paint the taillights first and do not glue them until final assembly.

Glue the spare wheel carrier into the two holes indicated. Glue the spare wheel during final assembly.



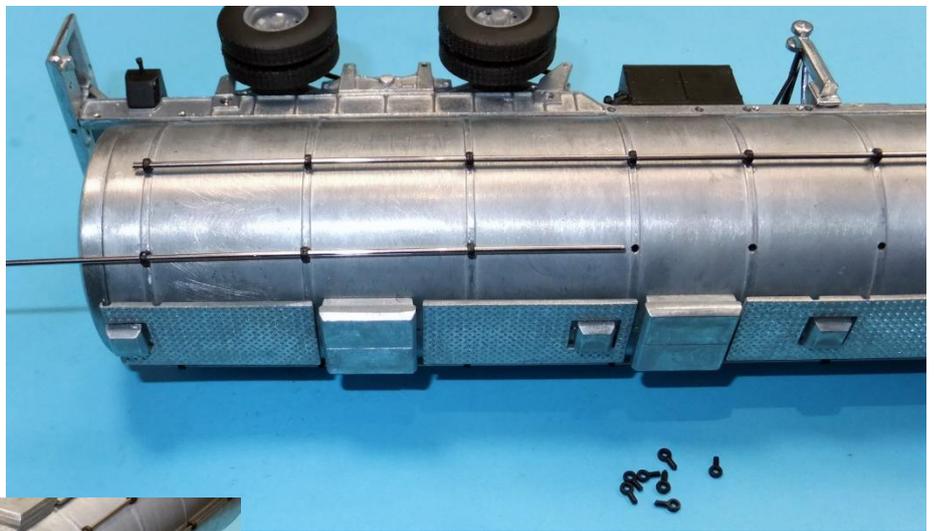
Side bars / pressure line

Glue three eyelets into the holes and insert the rod through them. Now glue two eyelets each time and insert the rod through them immediately.

This way you force the eyelets to set tightly in line.

Lay the tank upside down or on its side and run a drop of super glue against each eyelet.

This will ensure good fixation.



Grab each eyelet in tweezers time, take your time to do this work as accurately and tightly as possible. After the eyelets dry, you can take the rods out to spray the eyelets with the tank.

The last eyelet will be in the front of the lid. The eyelet should come just in front of the corner of the pipe. Mark the position, bend the pipe upward and drill a 1.2 mm hole.

You will have to paint this eyelet separately and you can glue it only after the rod has been assembled this far.

Repeat: think again about what you want to paint separately. Also look carefully at your example.

As long as you have not glued the handbrake lever and the central brake valve, you can still remove the chassis.

If both the chassis and the tank come in the same colour, you can assemble almost the whole trailer beforehand, except for the wheels, the spare wheel and the mudguards with the hose tube. Always spray the latter separately, so that the paint also gets well into the corners of the chassis and against the underside of the tank.

Depending on the above: install the side protection bars. Check the front part, if necessary bend the rods accurately and very carefully in a straight line with smoothing pliers. While doing so, also look very carefully at the angle of the bend in the side bar. Test fit repeatedly and carefully bend a little bit at a time until the mounting rods of the protection bars fit without tension in the location holes in the chassis.

Now glue the side bars side by side, making sure that they come cleanly perpendicular and straight to the chassis. Make sure, that the supports for the hose tube point straight up, also at the rear side bar.

Now determine how many ladders you want to mount and where. To do this, drill the holes in the chassis beam -see the location holes. If the ladders will be in the middle, wait to grind out the part of side bars until the mounting rods of the side bars are set and secure.

Glue the tiny headlamps into the holes of the side protection bar during final assembly.



Cutting out the side bar for the ladder. ↑



The photo on the right shows the ladder mounted in the holes in the chassis.
Test fit the ladders first, the supports may need to be bent slightly.
At the top, the legs of the ladder come into recesses at the bottom of the platform plate.

Final assembly

Glue the mudguards with the hose tubes straight and tight to the chassis and front of the tank.
Make sure that the hose tube comes on the supports on the side guard rods.
Assemble the wheels and tires. Put a drop of glue in the axle hole of the loose wheel and press the wheel onto the axle quickly and slightly rotating against the axle housing.
Glue the hazard signs to the bumper.
Glue the pre-painted tail lights into the holes in the light box.
Glue the small headlights (position lights) into the holes in the front corner of the side guard. Leave the lamp housing black and carefully tip the lamp glass white with a small brush.

Paint Tips

Where necessary, carefully sand or file the surfaces (of the tank, pump box, side protection, etc.) smooth and tight with a fine file and/or 600-grit sandpaper.

Above all, make sure that the entire trailer and all loose parts to be sprayed are thoroughly free of grease. Wash everything off in lukewarm washing-up liquid (drain the tank well afterwards) and let the parts dry for a day near the heater. Or wash the items with a soft brush in a bath of benzene.

Preferably use an etching primer, first a thin coat of adhesive and then another.
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 modelling paint needs time to harden, this can sometimes take several weeks. Until then, be patient and careful when handling. If necessary, wear surgeon's gloves.

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

On the next page you find some more pictures that give a good impression of the tank trailer.



The bar under the landing legs is included. This is in two parts, glue them together and paint it in wood colour.



On the right again the variant with the ladders at the rear.
Please notice that this is a completely built trailer, painted in silver.
You can see how nice and sleek the tanker shows then.



Tekno
Parts