



Building instructions Scania LB76 4x2 tractor

Kit nr. 77469

Tekno kits are intended for advanced modellers.

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

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

Tools (recommended)

Minitol with drills, grinding wheels, sanding rollers;

Cordless drill and/or pillar drill for metal drilling;

Machine clamp or vice 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;

Centre point or fine dowel;

Tweezers.

Gluing

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

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

Bear in mind that superglue can turn white and stain paintwork.

Tekno kits are derived from production models. In production models, the holes for fixing all kinds of 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.

In connection with factory production and assembly, some chassis are fitted with ribs.

These are intended as extra support when mounting boxes, fuel tanks, etc.

If desired, you can grind away the ribs with a grinder, then file smooth.

Preparing

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

Empty all the bags and sort the parts that belong together, such as the metal tank with the plastic clamping brackets and filler cap. When sorting, some knowledge of the real truck and the Tekno miniature is desirable.

Also look at the sample photos in these instructions.

Divide the kit parts into 'chassis', 'cab', 'wheels and tyres' and 'other' (body, lights, mirrors and other accessories). Sort the parts as shown in the photos below and make your own. The parts for a Scania LB or LBS truck (4x2 or 6x2) will differ (also in number). But if you put them in front of you as in the photos, things will sort themselves out.

Keep the sorted parts in different trays.

Perform test-fits, so 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 instruction photos below.

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



Chassis parts

Bottom left is the front axle with four aluminium mounting pins, stub axle blocks, the track rod and the two axles for the front wheels.

On the right-hand side of the chassis are the spare wheel carrier and an air tank. On the left-hand side of the chassis is the fuel tank (note the small filler cap!) and an air tank. Note the plates used to attach the air tanks.

At the top next to the spiral hoses, you see the cab support.

Cab parts

At the front left, you see the grille, lights, mirrors and chrome film as mirror glass.

In the front centre, the dashboard, steering wheel and seats with the lower bed.

On the bottom right are the mud flaps.

Above left two M 2.5 screws, the long screw is used to attach the floor to the chassis.

The short screw is for mounting the cab to the floor.



Assembly sequence

The production method and order of assembly at the Tekno factory differs from what modellers are used to in several respects. You will notice this in the assembly order of the engine block, wheels and tyres and the assembly of the front axle with the stub axle blocks, track rod and aluminium mounting pins.

At the Tekno factory, all chassis parts, engine block and wheels are first painted in colour separately, then the engine block is assembled with the central screw. The crankcase with gearbox is glued at the bottom of the chassis plate.

After the engine/gearbox is assembled, the tyres are mounted, the axle stubs are pressed through the knuckles into the wheels and finally the front axle is mounted with the aluminium pins.

Chassis

First check all parts required for the chassis, i.e. both metal and plastic parts. Remove any casting residue (burrs) and, if necessary, drill all holes again.

For example, try fitting the fuel tank first. If the fitting of the mounting pins is too tight, drill the holes in the chassis again with a slightly larger drill bit. This will make assembly easier at a later stage, especially if the components are painted in colour.

Moreover, glue also needs a very small amount of space to make a strong connection.

Preferably clamp the chassis in a machine clamp during machining and drilling.

The photos below show how to remove the factory mounting ribs from the chassis with a grinding wheel if required. Then sand with a roller in the minitol and finally file or sand down to a smooth finish.



Drilling

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

The relatively low rpm in combination with the drilling oil will make the bit cut better and wear out 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.

Check the holes for the stub axle pins on the chassis, drill them out to 2 mm if necessary.

Temporarily on the wheels

Modellers like to put the model on its wheels and tyres right at the start of assembly.

This also helps you become familiar with the various parts and the method of assembly and gives insight which parts you want to paint separately or assemble right away.

We recommend this sequence:

Mount the tyres (temporarily) on the wheels first.

Or: primer and colour the wheels first and permanently mount the tyres immediately.

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

By injecting and releasing from the mould, the tyres have a good side and a slightly less nice side.

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

Rear axle

File the press ribs of the 2 mm rear axle smooth on one side, press one rear wheel onto the ribs on the other side, you can slide the other rear wheel loose on the smooth part of the axle during construction.

Front axle stub blocks

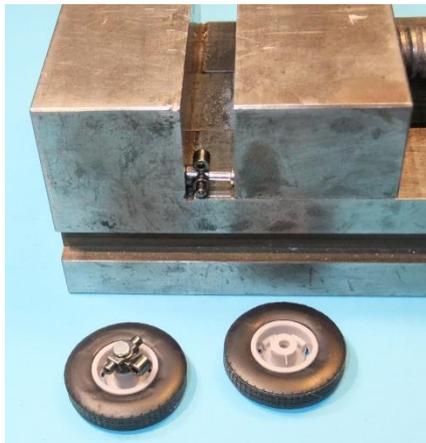
See the pictures below.

Press the axle pins for the front wheels through the stub axle blocks and into the front wheels. The wheel axles fit very tightly through the stub axle blocks for as little play as possible. Therefore, be careful when pressing and use a machine clamp as shown here. Pay attention to the correct fitting of the axles through the stub axle blocks: push the axle through the stub axle block from the flat inside, the long axle stub has to be on the outside against the wheel.

Photo left: support the stub axle block in the clamp and gently tap the axle through the stub axle block, or (centre photo) press the axle through the stub axle block in the machine clamp.

Photo right: in this way you press the axles into the wheel purely straight and without transverse forces.

The forces are evenly distributed and this also prevents damage to the wheel nuts.



Track rod

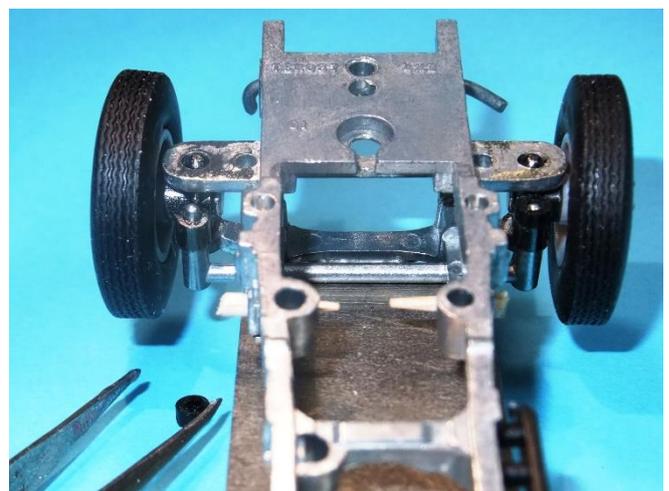
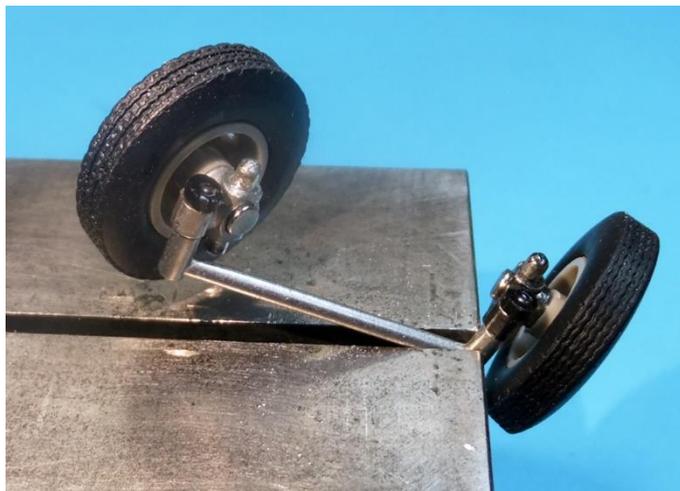
At the Tekno factory, the track rod is assembled by machine, whereby the (vertical) track ends are drummed up: pressing creates a collar at the top and then the track end cannot go back through the stub axle. Those with the right equipment for this will be able to fit the track rod without any problems.

Alternative (1):

Beforehand, mount the track rod to the stub axle blocks in the machine clamp. Slide a short piece of cut wire insulation on top of track end and fix it by applying a drop of super glue from above. This will run slightly between the wire insulation ring and provide a reasonably good glue joint.

You can also fit the track rod later as in the photo on the right. In that case, make sure there is a support block under the track rod (as in the right-hand photo).

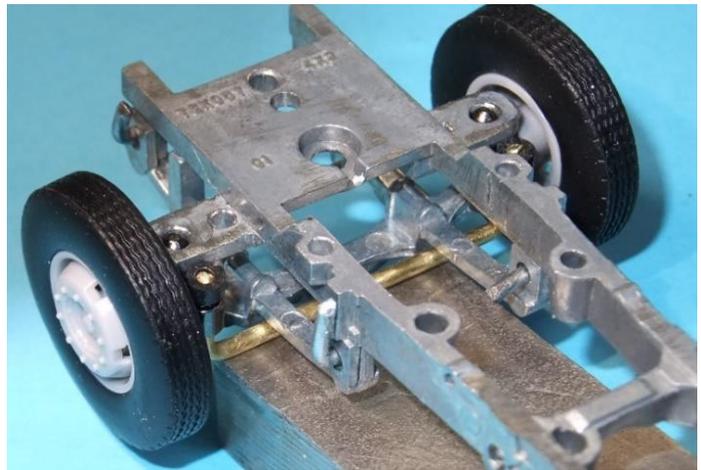
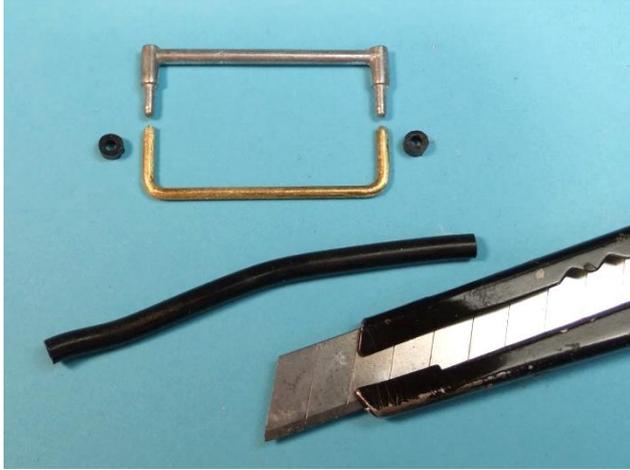
On the right, the clamping ring is already glued, on the left it is ready. ↓



Alternative (2):

A simple and excellent alternative is a home-made track rod of 1.5 mm brass wire.

The track rod is fixed with two short pieces of wire insulation or another suitable piece of plastic tube. Make sure that these rings clamp slightly around the brass wire, this way the homemade track rod is also good for temporary assembly to put the chassis on the wheels for a while as a test. Only on final assembly do you fix the clamping rings with a drop of superglue.



Brass wire 1.5 mm bent to the right size.
Pieces of cut wire insulation as mounting wire.
Glue in place during final assembly.

Front axle temporarily mounted with pieces of 1.5 mm iron wire. The wire insulation holds the track rod.
Provide a support block under the track rod.

In the photos in these instructions, almost all parts are temporarily mounted, such as the front axle mounted with loose pins of 1.5 mm iron wire. The pieces of wire insulation slightly clamp around the track ends so that the track rod can also be easily removed again.

You can see, that with the front axle in place, you can no longer reach the central screw for fixing the cab. But with the model now temporarily on its wheels, you do get an impression of the further construction and the order of the main and smaller components.

Notes on the LB76

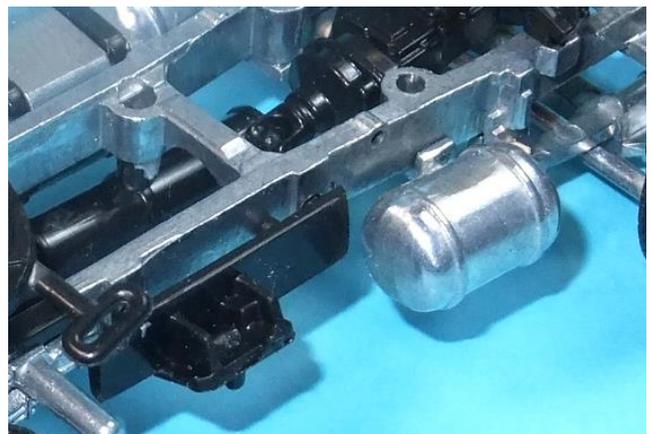
If necessary, drill additional holes for the tank (left) in the chassis and the spare wheel carrier (right) with a 1.8 mm drill bit. Remove the burrs around the drilled hole with a slightly larger (countersink) drill bit, so that the pins disappear completely into the hole and the tank can be fitted tightly against the chassis.

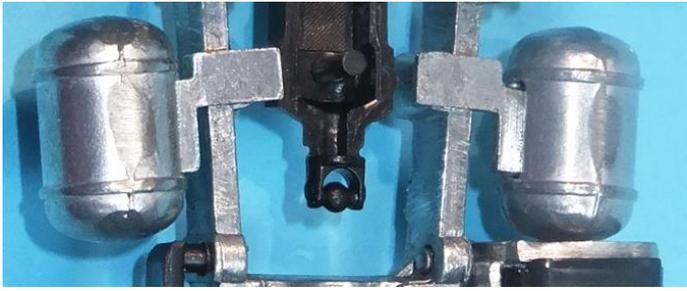
This generally applies to all drill holes.

Remove the small burrs in the slots for the mounting straps in the tank, this will improve the fit of the tank clamp straps and the bracket under the tank.

Cut a small corner out of the spare wheel carrier plate at the top left (rear), so that it fits better along the spring bracket (here somewhat hidden behind the fifth wheel handle).

Shorten the plate at the front until against the dowel pin to make room for the air tank.





For a better fit of the air tanks to the supports: file away some material from the lips to which the air tanks are mounted.

Pay attention to the correct mounting of the supports: the mounting lips of the brackets point backwards. The fitting next to the fuel tank is tight.

Assembly sequence

For the assembly of the Scania-Vabis LB76 chassis you could follow the sequence below.

Consider which parts you want to glue now or only after painting.

This depends on your example.

Machining, drilling and mounting the cab will follow later.

Mount the fifth wheel plate with the self-tapping screw, as far forward as possible.

Glue the fuel tank and spare wheel holder.

Glue the air tanks with the supports at the bottom left and right to the chassis.

Glue the brake cylinders to the rear axle and click the axle housing to the chassis. Additional gluing as required.

Glue the rear mudguards now, or leave them black and mount them after painting.

Glue the engine block to the top of the chassis plate. Later, the central cab support will come through the hole in the engine block.

Temporary:

Mount the front axle with wheels and track rod.

Mount the rear wheels.

Your model is now temporarily standing on its wheels, with some of its parts either permanently mounted or not.

Check that the chassis is straight and level on the surface.

Take the front axle off again and remove the wheels etc. to allow everything to be painted.



↑ Cabin support temporarily mounted, to check the clearance of the exhaust pipe.

Top left bottom view: the front axle is temporarily mounted with a piece of iron wire and two stubs of a cocktail stick.



← Top view with trial fit of the exhaust -the cab support comes over the pipe.

Cabin

The floor and the cab are mounted with two M 2.5 screws, the long one for the floor, the short one is used to mount the cab to the floor.

The builder must tap the threads into the holes himself.

Drill the holes in the mounting "columns" for the M 2.5 screws slightly deeper with a 2 mm iron drill.

Tap the thread, for example with a stainless steel M 2.5 screw. This material is harder than zamac and will therefore tap reasonably well.

A tapping set is of course ideal, but not every modeller will have one.

Check the drill holes and the fit in the floor and cabin.

Drill all holes a little further if necessary.



Marking out holes

Here you can see the best way to mark off the holes for the sun visor.

During assembly in the Tekno factory, a drilling jig is used for this, but you can also mark the holes to be drilled by hand as shown in the photo.

First accurately determine the centre and put a dot here. The holes left and right are 13.5 mm from the centre, these holes are 1 mm backwards.

Check this also with the pins on the sun visor.

Mark the holes accurately with a fine drawing pen (e.g. Staedtler, Micron or Artline 0.1 or 0.2 mm).

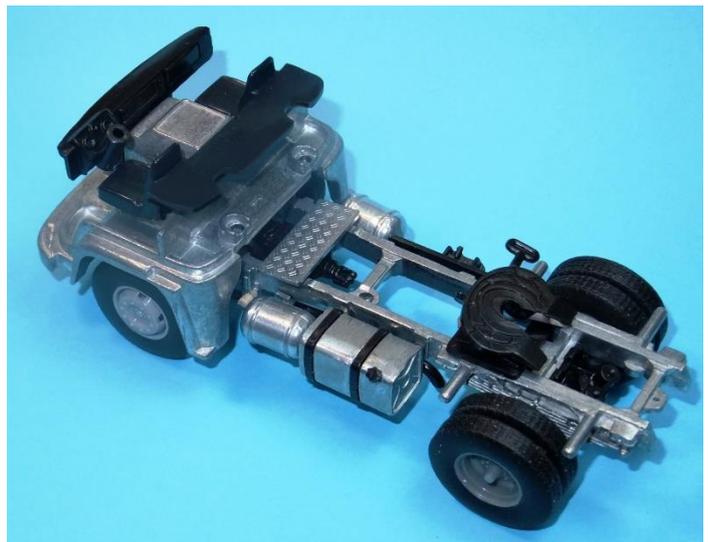
Mark the holes with a fine center point, or make center points with a 0.5 or 0.6 mm drill bit.

Then drill further in increments, e.g. 0.8, then 1.0 mm and finally 1.5 mm. Use drilling oil.

Test fit the floor to the chassis. →

The catwalk plate has two different thicknesses of dowel pins.

The plate is still skewed here, so the holes have to be drilled a little deeper. Or shorten the dowel pins slightly.



Spraying and painting

Take the tyres off the wheels again, so you can spray them separately. (Or you have already painted the wheels.)

Make sure all parts and assemblies are grease-free.

Preferably use an etching primer, but don't spray too thickly.

Spray the chassis, cab, wheels, etc. in colour using the airbrush or a spray can.

Make sure the pivot points of the steering knuckles and the track rod are not clogged with paint.
Paint the interior, floor, upholstery, etc. before assembling.
After painting, paint the exhaust pipe and silencer with a mixture of iron colour and brown.

Consult brochures and the internet for the right colours.

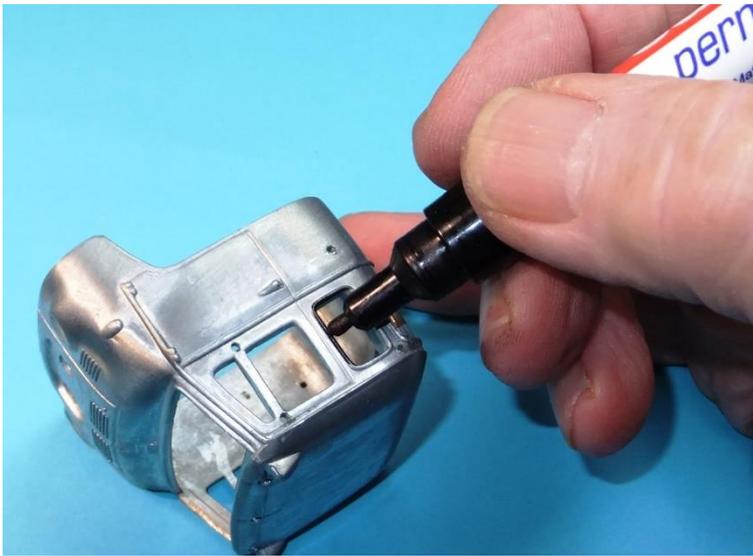
When all parts have been sprayed and/or painted, leave the model alone for several days to a week. This will allow the paint to harden somewhat. Modelling paint in particular needs time to harden.

Windows

Wear thin surgeon's gloves when working on the windows.

Gloves are also recommended for final assembly to avoid fingerprints in the paint.

Above all, never touch the windows, try to avoid that even with the gloves.



Paint the window rubbers (on the cab shell) matt coal black (e.g. Revell 9).
Or use a thin Edding 400 marker, as shown in the photo on the right.
After this, using the applied ink as a guide, you can still paint over the rubbers thinly for better coverage.

Place the brush or marker transversely and flatly on the rubber and move sideways, so you don't slide on the paint.
Always turn the cab so that you can move the brush or marker towards you as accurately as possible.

At the bottom, cut off a piece of the windows, roughly as shown. This improves the fit of the windows and makes insertion easier.

Drill the fitting holes at the top slightly larger; this also makes fitting the windows easier.

At most, try inserting the windows and the fit once or twice. Avoid scratches or other damage.

On final assembly, glue the window into the cabin with a drop of Bison Kit contact glue or the like.



Trial fit of the floor and cab to the chassis.



These pictures already give a good impression of the LB76 tractor.

Final assembly

Fit the tyres to the wheels and attach the rear wheels.

Be careful with the tyres for the front axle, making sure there is no stress on the track rod.

If you waited to assemble the engine block after painting, assemble it first now.

First glue the top part of the engine to the chassis plate.

Glue the rear cab support (with the coil brake hoses attached to it) into the fitting holes in the chassis.

Glue the silencer in the semi-circular fitting hole in the chassis, with the exhaust pipe coming under the cabin support.

Then screw down the cabin floor with the central screw (long M2.5 bolt). If desired, you can also apply glue for extra fixation.

Now glue the sump under the chassis plate and the dowel pins in the gearbox.

After this, the front axle can be mounted. Attach the four aluminium pins, trump them up on the inside by squeezing with smooth pliers or glue them in the holes.

Snap the cardan shaft to the balls of the universal joints, the short sliding piece comes to the gearbox.

Now place the cab on the floor -still without mirrors and other small parts.

Always wear surgeon's gloves when doing this and also when fitting the small parts to the cab.

Fit the remaining parts to the chassis and cabin - the parts may vary from model to model:

Catwalk plate (with air hoses);

Grille, steps, spare wheel, headlights, tail lights, top lights, indicators;

Decals or stickers (if applicable);

Licence plate holder;

Finally, glue on the wipers, handles, mirrors, sun visor, antennas, etc.

Bear in mind that superglue can turn white. Preferably use fast-setting transparent two-component glue, apply a drop in the drilled hole and insert the dowel pins. This prevents glue stains on the paint.



Composition: Hans Witte Truck Art – Truck Models 2023

Tekno
Parts
