

Please note: *This translation is provided as a courtesy, only. We cannot guarantee 100% accuracy so please read carefully and study the drawings before proceeding. We cannot accept liability for errors.*

Sd Kfz 2 NSU Kettenrad

GENERAL NOTES

This model of the NSU Kettenrad HK-101 tracked motorcycle has a medium difficulty level. It's construction is not complicated, however it is small enough as to require a greater precision when cutting and shaping each of the parts. Special care and attention is needed during the assembly of the tracks and chassis elements.

The main version of the model includes an open hatch over the engine and revolving wheels.

It is possible to build the motorcycle trailer with the cover in place or rolled up in front of the storage bay.

The order of the model's construction follows closely the numerical order of the parts and the indicated numbers on the frames.

The edges of the parts (particularly the thicker card as well as some of the inner surfaces) will need to be retouched. For this are used paints of a suitable colour. The retouching of these parts and groups should be done during the construction and before gluing the skins in place, allowing for better access to the areas before assembly.

ADDITIONAL INDICATORS

* – Laminate to 0.2mm thick card.

** – Laminate to 0.5mm thick card.

*** – Laminate to 1mm thick card.

L – Left-hand part.

P – right-hand part.

W – cut out.

\$ – cut.

OTHER DETAILS

1. The templates of elements made from wire and toothpicks are shown at a scale of 1:1;
2. The lines indicating bends (score with a blunt knife – do not cut deeply);
3. Oval-shaped or rolled up parts should be drawn across the edge of a table or blunt side of scissor blades several times;
4. Parts with a spherical shape should be pressed over a smooth round object until the required shape is achieved;

5. Use waterproof, quick-drying glues (for example PVA (white) or UHU);
6. It's construction will benefit from detailed attention to the assembly drawings and instructions;
7. The finished model should be retouched with paints and, if needs be, also lacquer.

ASSEMBLY INSTRUCTIONS

Construction of the model is begun with the assembly of the hull by following drawings 1 and 2. To that end, parts 1, 1aL, 1aP, 1c and 1d are glued together. To assemble the "bath", glue together pairs parts 2L and 2aL as well as 2P and 2aP, but prior to completing these elements, create the gaps under the hinges of the engine cover. On the indicated areas on part 2L and 2P, glue parts 3L and 3P, to the bottom of which are glued strips part 3aL and 3aP, hiding them from the bottom edges of these parts. Mudguards (part 4L, 4aL, 4P, 4aP) are first shaped, curving the high edge of parts 3L and 3P longways and glueing together the pairs for the left and right mudguards, then glue together the high edges parts 3L and 3P. To the indicated positions on part 4L and 4P are glued parts 5L and 5P and on the other side, parts 5aL and 5aP. Retouch the bottom edges of parts 6L and 6P as well as the high edges of parts 6aL and 6aP and glue them to their correct positions on parts 5L and 5P. Glue the skin panels to the hull (curving the arched side edges at the front of part 7 according to the outline of parts 4L and 4P. These edges are glued at the joints of part 4L, 4P, 5L and 5P (drawing 2). The high surfaces of the fuel tanks (part 8L, 8aL, 8P, 8aP) are shaped to the high edges of parts 2L, 2P, 5L and 5P, glued together in pairs and glued to these elements in accordance with the drawing 2. The filler caps (parts 8b, 8c) are glued onto parts 8L and 8P.

The engine (parts 9, 10, 11) are assembled by following drawing 3. Join together the engine (part 9), the gearbox (part 10) and the main transmission (part 11) pay attention to make sure the bottom surfaces of these groups all sit at the same level. The assembled engine group is inserted into the hull in the indicated location on part 1.

The air filter (part 12) is assembled from the same drawing but is only attached after the engine has been inserted into the hull. The filter inner part 12f is glued to part 2aL and the joining pipe (part 12g) is glued to the top of part 9r (drawing 3).

The driver's foot rests (part 13L, 13P) are shaped by following the shape presented by these parts and are inserted both sides of the engine, but with only the horizontal section to part 1 (drawing 20).

The front inner wall of the hull (part 14) is made from part 14a shaped by following the outline presented by part 14 and glued to it. Elements 14b are coiled according to the description and glued to their indicated positions, gluing on their tops part 14c.

The whole group is inserted between parts 1aL, 2aL and 1aP, 2aP. The arched segments parts 13L and 13P are glued to the front of part 14a at the level of the horizontal line. The instrument panel (part 14d) is glued to the high edges of part 1c and 14. Glue on parts 14e and 14f (drawing 20). To the outside of the front hull wall (on part 7), glue on strengthening parts (part 14g, 14h).

The plate under the back seat (part 15) is folded along the lone and inserted from the rear of the vehicle between parts 5aL and 5aP (drawing 4). Element 15a is glued to the bottom of part 15 between parts 2aL and 2aP. The bottom seat cover is assembled by gluing together parts 16 and 16a and next gluing on part 16b. Shape the marked edges of part 16a should be shaped into a semi-circle before gluing on the skin (part 16b). The support for the seat (part 16c, 16d) is assembled in a similar way, gluing it to part 15 only after gluing the base of the bottom cushion.

The engine cover (part 17) is assembled according to drawing 5 with the aid of template 1, from which

the shape of the storage cover is formed. After cutting parts 17 and 17a to the desired outline, they are glued together after placing in between them some gauze material matching template wz.2, and then shaping the completed section to match the template. The hinges of the cover (part 17b) should overlap the axes (wz.1) and the axes is seated and glued into the gaps in part 2L, 2aL, 2P, 2aP. Funnel parts 17b must be able to free turn on wz.1. After the connections of the axles to the hull have dried, the funnels are pushed to the side walls and to the top are glued the engine cover, being careful not to glue the funnels to the walls of the hull or the axes (wz.1).

The assembly of the motorcycle chassis is begun with the drive wheels (part 18) in accordance with drawing 6. To the centre of the exterior wheels (part 18aL, 19aP) are stuck the cone-shaped elements (part 18d, 18e, 18f) to their indicated positions and next, glue on the rims where the tracks contact the wheels (part 18c). Between part 18c and 18d are inserted ribs (part 18g) and following this, glue on rings (part 18i). To the rims of the inner driving wheels (part 18bL, 18bP) are glued the contact area of the tracks (part 18c), ribs (part 18h) as well as rings (part 18i). The inner rims are linked with the outer rims through discs (part 18j). Pay attention during this operation. Don't mix up the left and right elements of the wheels or the setup of the linked elements. Use the wheel axle (part 18i) to centre the elements. Between the edges of the exterior rims (part 18aL, 18aP) and inner rims (part 18bL, 18bP) are inserted rollers (part 18k). The assembled wheels are added to the hull, inserting the axles (part 18l) in the spaces in the tops of the side suspension arms (part 18).

Carrying wheels (part 19) are assembled according to drawing 7 in the following order: the wheel axles (part 19) are glued to part 2L and 2P (drawing 1 and 7), the wheel hub (part 19a) is glued to the connection point of the arms (part 18c) at a 45 degree angle. Once the joint between the wheel hub and arm has dried, get rings (part 19d) and glue to the arms. To the front of the hub is glued the hub cap (part 19b). In the hubs are inserted the wheel axles (template 3), but do not fit the wheels to the axles.

Carrying wheels (part 20) are assembled according to drawing 8. The exterior of the wheels (part 20a) are cut and shaped into a concave cone. The inner sides of the wheels (part 20b) are cut out and shaped into a convex cone. The shaped elements are glued to each other so the edges at the join on both cones (part 20a and 20b) are not covered. Once the joints are dry, cut out the spaces in the discs and glue the rubber rims (part 20a) to part 20a. The wheel hubs (part 20) are glued to part 2L and 2P and inserted onto the wheel axles (wz.4).

Carrying wheels (part 19 and 20) are assembled on the hull in the following order: The wheel axles (wz.4) are assembled one by one for parts 20a, 20b and 20d, followed by the other set of wheel axles (wz.3) and the completed wheels are attached. To the wheel axles are glued the hubs (part 20d), large discs (part 20a, 20b, 20c) and then the hub caps (part 20e).

The tracks (part 21) are assembled in accordance with drawing 9 and set up on the chassis so that the two ends of the track connect at a point on the ground under the wheels and glued.

After assembling the tracks, the bottom of the vehicle is glued according to drawing 10, silencer (part 30) as well as mud flaps (part 31L, 31P) according to drawing 11.

The front wheel of the motorcycle (part 22) is assembled according to drawing 13. First rings (part 22, 22a) are glued together and in the gap is inserted part 22b, then from parts 22c and 22d the sides and the top of the tyre is assembled, gluing it to part 22. The inner part of the wheel is assembled from parts 22e and 22f, which after sticking together is inserted into part 22b. After gluing part 22f to 22e, turn to the valves on part 22f. Into the space in part 22e, 22f is inserted the wheel hub (parts 22g, 22h).

The forks of the front wheel (part 23) are assembled by sticking together parts 23L and 23aL as well as parts 23P and 23aP in pairs. The connection of the forks will be strengthened by the mudguard (part 26) as well as the headlamp (part 24). The mudguard is assembled from parts 26 and 26a which are shaped separately according to the outline (template 2 is helpful at this point), to which parts 23aL and 23aP are glued to the dashed line. The headlamp is assembled according to drawing 14, giving part 24a a convex shape. The completed headlamp is inserted between parts 23aL and 23aP, slightly straightening its supports. Mudguard supports (wz.6) are glued to the bottom of the mudguard (part 26a) and part 2h. Above the mudguard is glued the registration plate (part 26b) and its illumination lamp (part 25). Following drawing 14, glue part 23b to parts 23L and 23P. Drawing 14 shows elements in the correct scale (1:25), so part 23b can be glued onto part 23L and 23P, laying the linked parts on the drawing and using it as a template. The steering column is assembled according to drawing wz.5 using parts 23d, 23e, 23f, 23I, 23j. The steering column is inserted into parts 23d and 23e and must be allowed to rotate freely. To the free ends of part 23b at the centre, glue the tubes (part 23c) in accordance with drawing 14 and then join the steering column by linking part 23d and part 23c, keeping the assembly parallel to the forks (part 23L, 23P). Glue the supports for the steering column assembly (part 23g) is glued to part 7. To the supports and edge of part 14d is glued part 23e. The steering column and joint are strengthened with element 23h and inserted between parts 7, 23e and 23g. The wheel is assembled according to drawing 14 and template 7, which is glued to the joint between part 23d and the bottom part of element 23i.

The rear column (part 32) is assembled according to drawings 12 and 20. Part 32b is inserted into the center, gluing it to the inner side of part 32a.

Towing hook (part 33) is assembled according to drawing 12 and glued to part 5d and 7b.

Handrails (part 34L and 34P) are glued to the junction of part 5b and the front part of element 15. Rear lamp (part 35) and rear registration plate (part 36) are assembled according to drawing 12 and glued to part 32a. Rear-view mirror (part 37) is assembled according to drawing 20 and template 10 and is glued to part 8L. Tarpaulin (part 38) is curved according to the drawing of this part, very carefully crumpled in the hand and then rolled up, glued together and the securing straps (part 38a) glued onto their indicated positions. The coiled tarpaulin is glued to the edge of part 15, in this way it will not prevent the opening of the engine cover (part 17).

The framework of the trailer box (part 39L, 39P, 39a, 39b, 39c, 39d) is assembled according to drawing 15. Next the exterior skin (part 39e, 39h) is glued in place and the inner skin (part 39f, 39gL, 39gP) is inserted.

The trailer axle (part 40) is assembled according to drawing 17 as well as template 10 and then glued to the trailer. Wheels (part 42) are assembled according to drawing 16 and fixed with glue to the end of part 40, template 11. The trailer mudguards are modelled from parts 41 and 41a which are glued to each other in pairs using template 3. Glue the mudguards to the trailer (drawing 17) and then glue the edges to the mudguards (part 41b).

The trailer arm (part 43) is assembled using template 4 and is glued to the front of the trailer (part 39e) in its indicated position.

The rear illumination light (part 44), reflector (part 45), board (part 46) as well as the rear lamp (part 47) are assembled according to drawing 17 and glued to the rear wall.

If the trailer is assembled with the cover in place, cover (part 48) is glued to part 39e and 39h. If the trailer is to be uncovered, omit this element.

Jerry cans (part 49) are assembled according to drawing 18 and ammunition boxes (part 50) are glued together according to drawing 19 and situated according to the general plan drawing in the trailer as cargo.

Carry out any final retouching. The finished model can be coated with a matt, colourless varnish, but bear in mind that paints used for retouching the edges of parts may change in shade, unlike the printed areas and glued joints may come unstuck. The designer does not recommend varnishing card models.

We wish you pleasant entertainment, and a satisfying and relaxing time from the finished result.