

Toothpick Miniatures

by Alexandre Karadimas

Make your own 1:64 miniatures with common household tools and materials

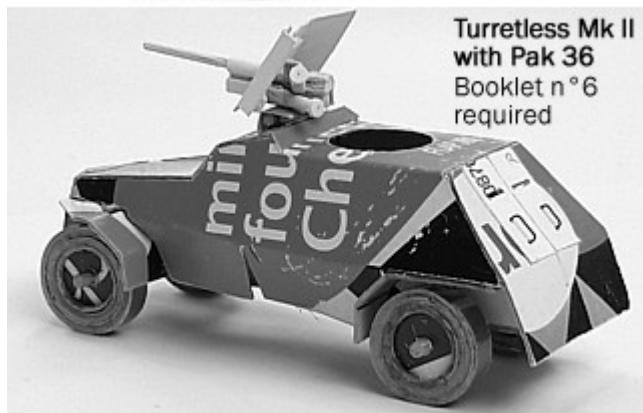
Marmon-Herrington Mk II

WORK IN PROGRESS



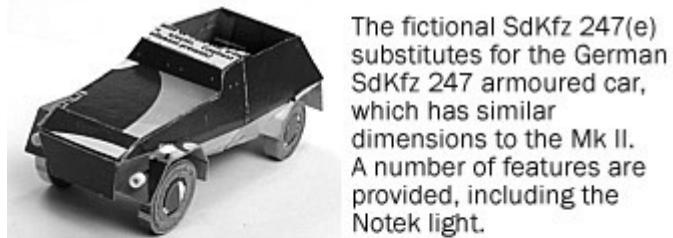
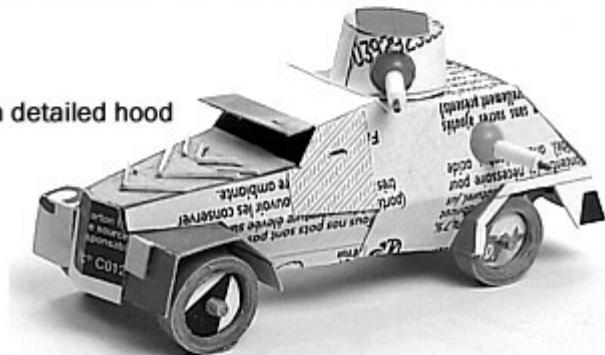
Mk II

This early release guide will enable you to build the variants shown here. Although these are developmental models and show some errors, the schematics are up to specification.



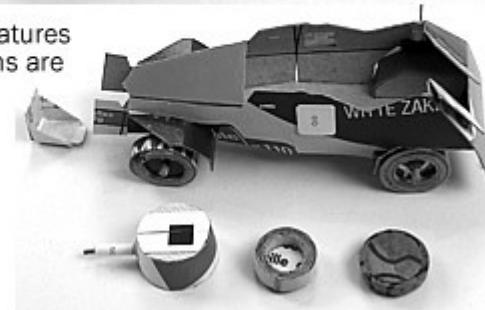
Turretless Mk II
with Pak 36
Booklet n°6
required

Mk I with detailed hood



The fictional SdKfz 247(e)
substitutes for the German
SdKfz 247 armoured car,
which has similar
dimensions to the Mk II.
A number of features are
provided, including the
Notek light.

Several features
and options are
available.



A specific BA-10 turret will
be provided in booklet n°10.
A BA-10 front MG feature is
provided in this guide.



(Developmental model for
boxes & simplified
canvas top)

The full version (16 pages) will be
available in late September 2025
along with Booklet n°9.

The Breda gun will
be detailed in
booklet N°9



Download this booklet and others for free from <http://www.toothpick-miniatures.com>
Visit the Youtube channel: <https://www.youtube.com/@ToothpickMiniatures-wl7gf>

Booklet 8 – Marmon-Herrington MkII Version 0.5 – July 2025

Tooling, Materials and Production aspects

T01 Tools required for all Toothpick Miniatures designs

Pin Ø 0,6 mm

Pin Ø 0,4 mm

Piercing board with a Ø 4 mm hole drilled through it, larger holes are useful

Pair of nail scissors

Small "snap-off blade" utility knife

Pair of thin pliers with a wire-cutting capability

(1) Mechanical pencil Ø 0,7 mm or less (2) Roller pen (even a depleted one) to draw folding lines.

(*) Use a toothpick to apply glue to parts

(3) Set square in metric (4) Stationery hinge clips

(5) Household glue, in liquid or gel form (*)

T02 Tools required for this design

Hole punch Ø 6 mm (preferred) or Ø 5,5 mm

(1) Metal file to deburr wire after cutting. (2) Permanent marker to mark metal wire.

(3) Recommended: a segment of a transparent ruler (3). (4) This ruler of the "aleph.pro" brand has matching measures on both sides, making it a small set square.

Always cut downwards on a cutting board and never towards any part of your body.

Please don't cut yourself.

Cutting board: a flat piece of wood, MDF, thick plastic or any other suitable material

M01

Cardboard used in packaging is technically called "thin cardboard". We will distinguish between "very thin" cardboard, as can be found for instance in packaging for biscuits (1), "regular" cardboard found for instance in breakfast cereal boxes or tissue boxes (2) and "thicker" cardboard (3).

Glue works better on the porous side of cardboard packaging. The smooth, printed side is better suited to be painted over.

Glueing two smooth sides together doesn't work well.

When accumulated in a front grille, the difference between regular and very thin cardboard becomes quite visible.

M02 Double Wire Clips can be found in bread packaging for instance, they have very malleable wire. DWC plastic can be transformed into parts that match the wire perfectly.

1 mm

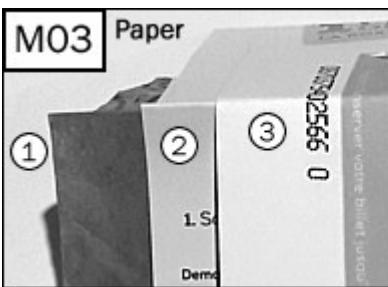
0,45 mm

Plastic tubes

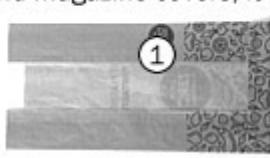
If you have double wire clips of slightly different thickness, sort them out and use only the thinner ones for this project.

The basic car miniature will require at least three double wire clips, some special versions even more.

M03 Paper



(1) Thin Kraft paper can be found in paper bags for fruits & vegetables. (2) Smooth paper can be found in leaflets and magazines. (3) Rigid Paper can be found for instance in train tickets and magazine covers, it can retain its shape when folded.



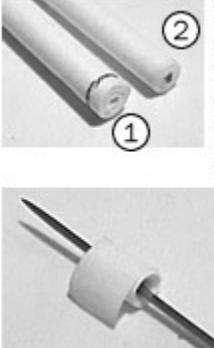
Rigid Paper is made of a single layer (4) whereas cardboard (5) is made of several layers that come apart when bent.

M04

(3) Ø 0,3 mm thin wire is typically sold as "florist wire" or "jewelry wire". (4) Ø 0,25 mm thin plastic-wrapped "freezer" wire can substitute for thin wire.



(1) (2) This design uses paper stems of ear cleaning swabs ("Q-tips"). It is necessary to use a variety that has a hole in its center (1). Note that different varieties have been marked differently (2) so that the workshop's materials supply remains manageable.



(5) Q-tips stems are a tight roll of paper. Conical shapes can be made by pushing in the center with a nail or a similar object.

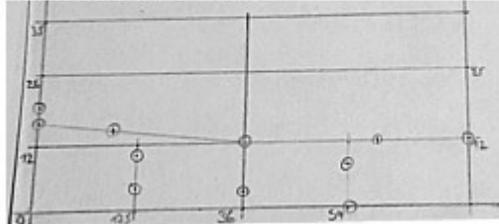
Some parts have a simple design and are best drawn in batches, using a ruler. Several examples are shown in the Steps illustrations.

Other parts have a complex design, which would be

too time-consuming to draw from scratch. In these cases we will first make a **template**, a piece of cardboard with all the markings needed to replicate these parts, as well as indications to modify and position them precisely afterwards.

P01 How to make templates

1. On a white piece of cardboard, draw a rectangular frame and write the measures on all sides.

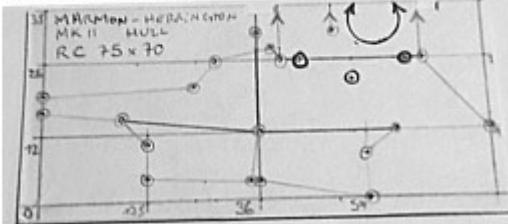


2. Use these marks as a grid to position points of the template. Draw the template.

3. Pierce the points as indicated then cut to shape.

4. Label the template. Draw the location of the folding lines with a distinct colour, also mark "special" dots.

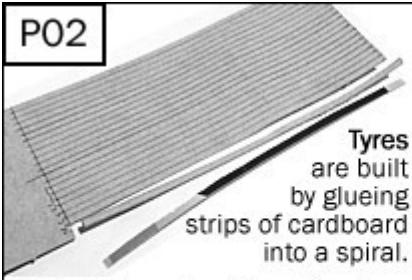
First pierce with the Ø 0,4 mm pin then use the Ø 0,6 mm pin and wiggle it so the Ø 0,7 mm graphite tip of the mechanical pencil can get through.



Most templates are on the central pages (pages 6 & 7)

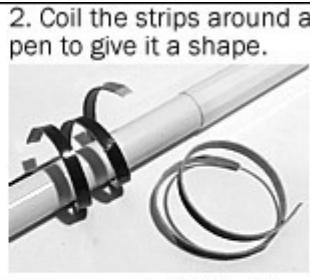
P02

1. For both ends of the strip, shave off about 1 mm from the smooth side, in order to avoid a visible "step" when the strips ends.

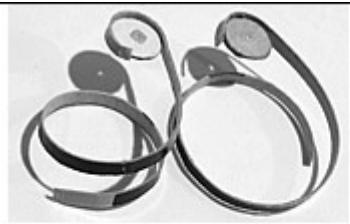


Tyres are built by glueing strips of cardboard into a spiral.

2. Coil the strips around a pen to give it a shape.



3. Start by glueing a portion of the strip to the wheel rim, so you can position it precisely at the depth you want. Let the glue harden.



4. Glue the rest of the strip in a spiral, all at once. While the glue is still fresh, apply pressure on the spiral or rub it against a flat surface, so that the outward side has an even aspect.



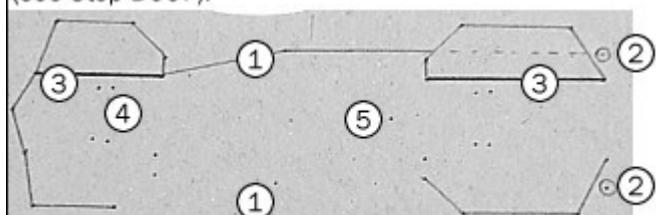
Note: in order to save time, many images in this guide have been made during development on miniatures that were not exactly to specification. You might

notice slight visual differences with the model you're building, but the technique that is being illustrated is still valid.

Part A - Hull subassembly

Simplified and detailed versions

A01 Connect the dots for the **chassis** from the outside in. The dots (1) are connected to the dots (2). Draw the folding lines (3) with a roller pen so they fold easily. Perforate dots (4). Dot (5) is the positioning dot for the Breda mount (see Step D007).



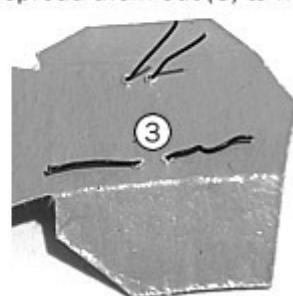
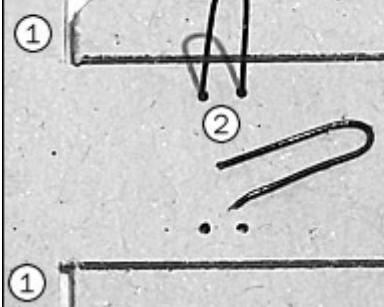
Take 7 mm of thin wire (the length of "freezer wire"), bend it in two and cut.



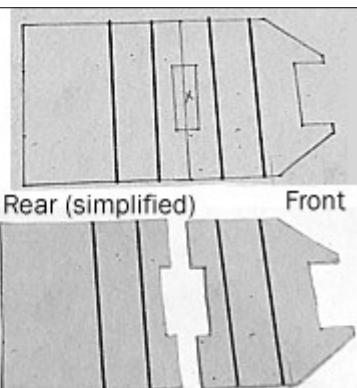
Repeat the process with the cuts to obtain four axle fasteners (6).

A02

(1) For the **rear** fender support, cut a gap about 1 mm wide as shown. (2) Insert the fasteners and spread them out (3) to keep them in place.



Use the same template to make three "detailed" 9 mm-wide rear fenders.

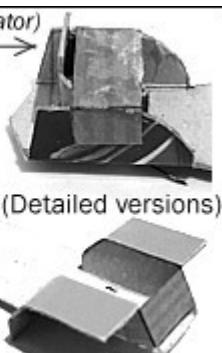


A03

Cut the corners that would interfere with the angles of the folded fenders. Leave the rear corners (1) intact.

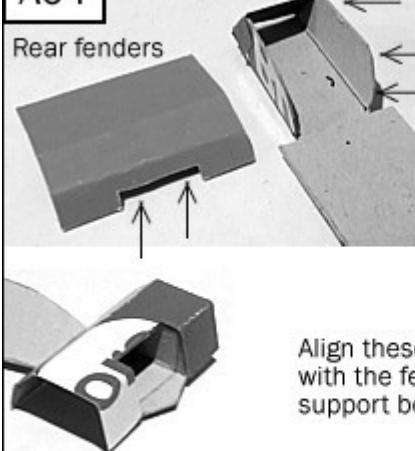
Leave the two front corners (2) intact except for the Mk I and the SdKfz versions.

Prepare a piece of paper as pictured above and cut 7 mm-wide strips from it. Use these strips to keep the fender support tabs in position.

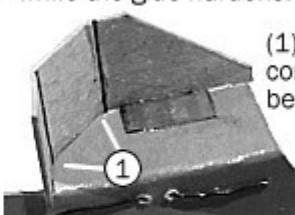


A04

Installing fenders



For both front and rear fenders, apply glue to the top of the fender support tabs and also inside the fender notch. Hold the fender down while the glue hardens.

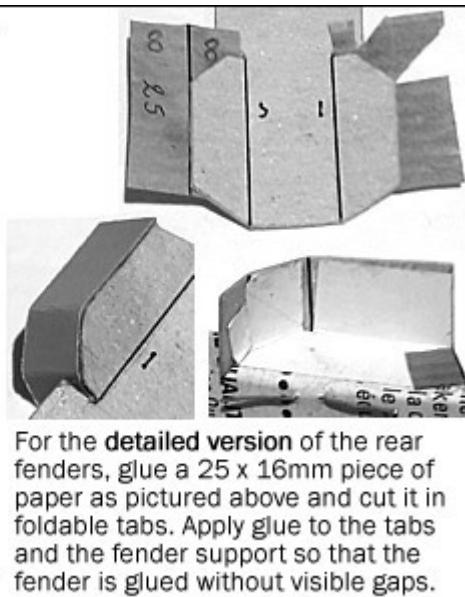


(1) These corners have been cut.

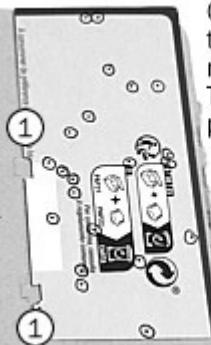


Align these sides with the fender support below.

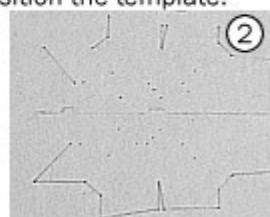
These **Mk I** front fenders wrap all around the fender support, therefore the third corner needs to be cut (see Step A03).



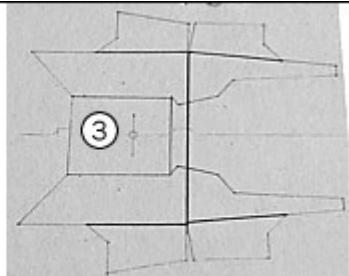
For the **detailed** version of the rear fenders, glue a 25 x 16mm piece of paper as pictured above and cut it in foldable tabs. Apply glue to the tabs and the fender support so that the fender is glued without visible gaps.

A05

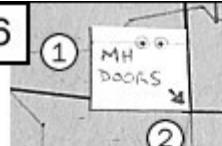
On the reverse side of the **hull** template, all dots have been marked for easy identification. The notches (1) are used to position the template.



(2) Connect dots from the outside in.
(3) The line between these dots and the central line intersect at the turret's axis. Perforate with a pin and enlarge with a toothpick, from the outside in.



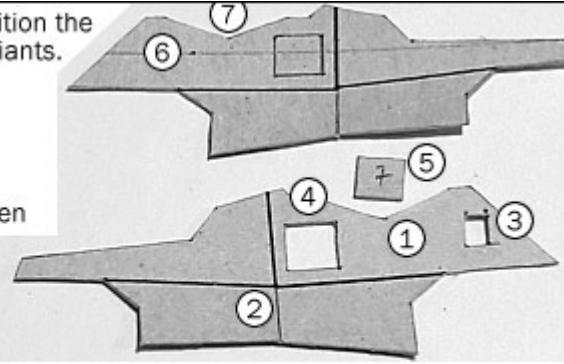
For the open top / Breda design, there is no top panel to connect both sides.

A06

(1) The "doors" template enables to position the dots for the cabin vision ports for all variants. Note: only the Mk I has side doors, this template serves two purposes.

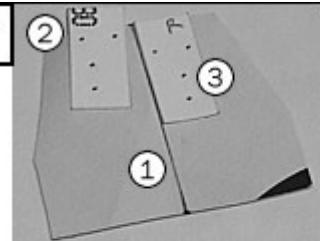
(3) The opening for the antenna, on the vehicle's right hand side. (4) These side hatches are a Mk III feature that has been retrofitted to some Mk II vehicles.

(5) If you cut out these side hatches, keep the two 7x7 mm parts for the **spare wheel**, as spacers.



(6) Positioning for the Mk I machine gun ball mount, see Step C07 page 11 for instructions at this stage.

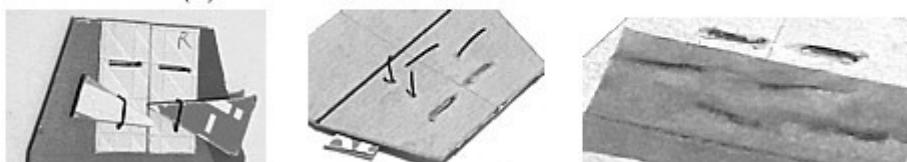
(7) Notice the notches for the "Breda" version.

A07

For the **closed rear doors** design, use the template to make the rear doors from rigid paper. Notice the "R" in the corner, identifying the door on the right. Use the rear panel template to draw the vertical line (1), along which the doors will be aligned.

Once the rear doors are glued, pierce them with a thin pin. Use the utility knife to cut a slit between the two upper holes on each door (2), then use the pin to make the borders of the vision port smooth.

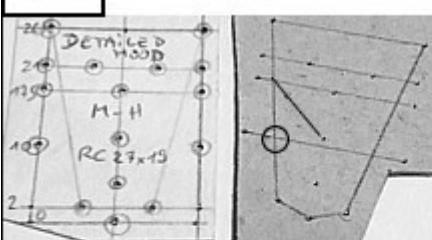
Use two 17 mm pieces of thin wire (see step A01) and bend them into handles (4), so they can be inserted into the handle holes (3).



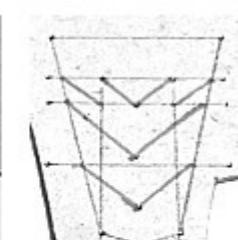
Cut two angular pieces of double-layered cardboard as shown, use them as spacers for the door handles. Turn the piece over and bend the wire, then glue thin kraft paper over them to keep them in place.

A08

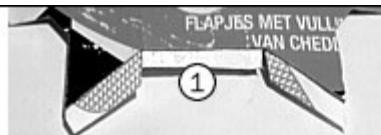
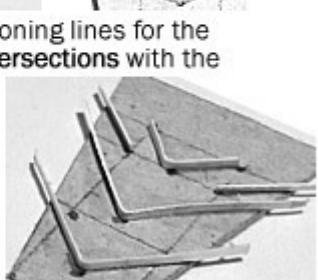
Hull assembly with hood and rear panel



Detailed hood: to draw the positioning lines for the bullet deflectors, connect the intersections with the central dots, as depicted.



Cut long strips (so the segments have the same height) of rigid paper, 1 mm wide or less. Apply glue to the hood part and position the segments along the lines, trim the excess.



Glue regular paper to the inside of the hull and shape them into **tabs**. Fold them inwards to create a straight fold line. For the rear panel (1), make sure the central tab doesn't interfere with the vision ports.



When assembling the rear panel, apply glue on the tab and the cardboard, the rear panel makes the rear hull rigid.



To assemble the front hood, apply glue only on the tabs, so the sides can pivot along the folding lines.



Marmon-
Herrington
MkII
Scale 1:64
Page 1/3

- + Pierce for 0,7mm
- * Calculated /

⊕ Special purpose

—| Folding line

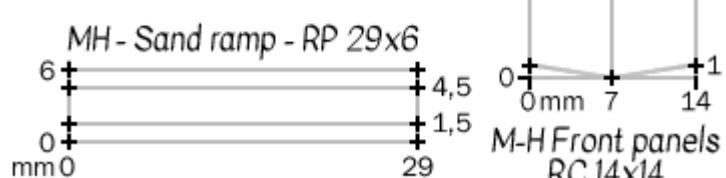
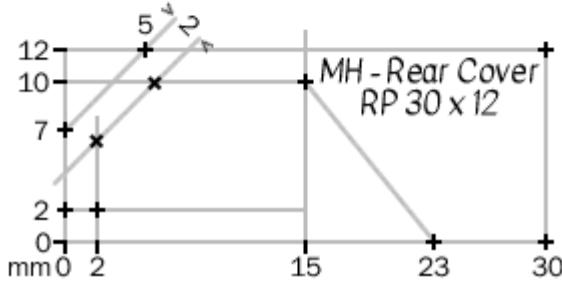
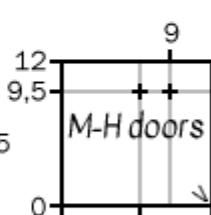
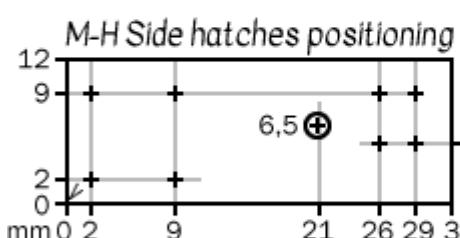
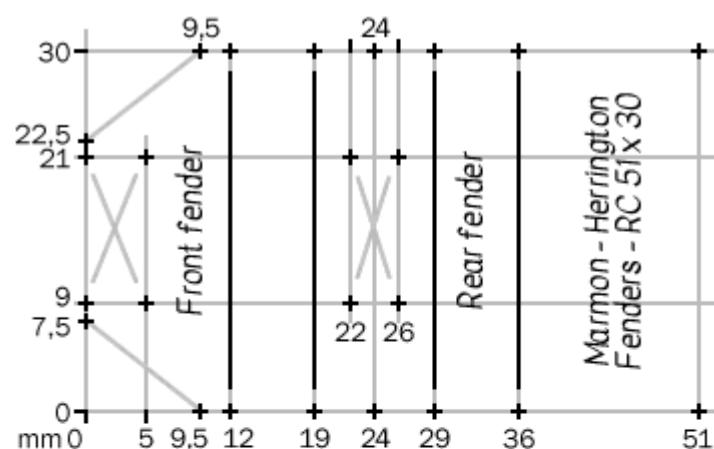
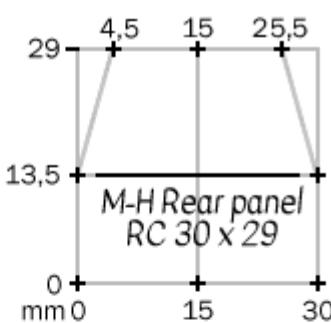
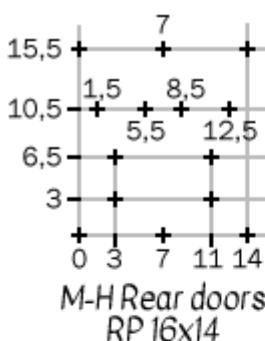
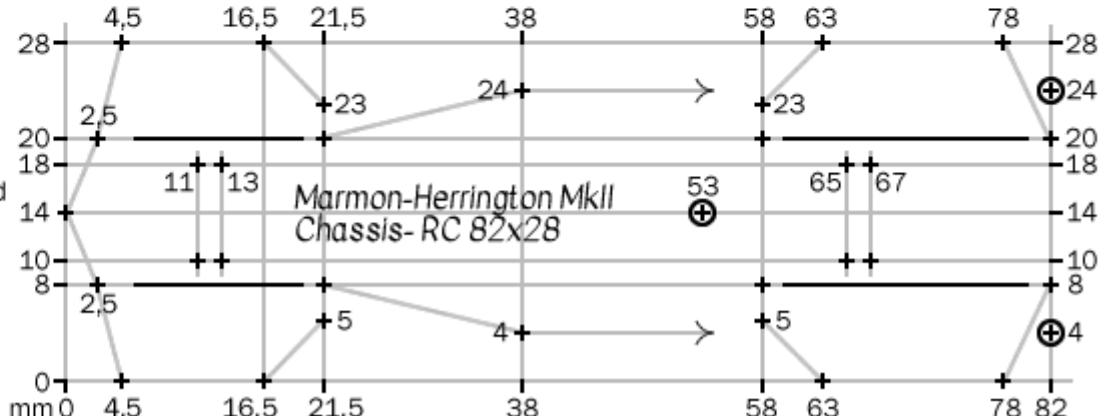
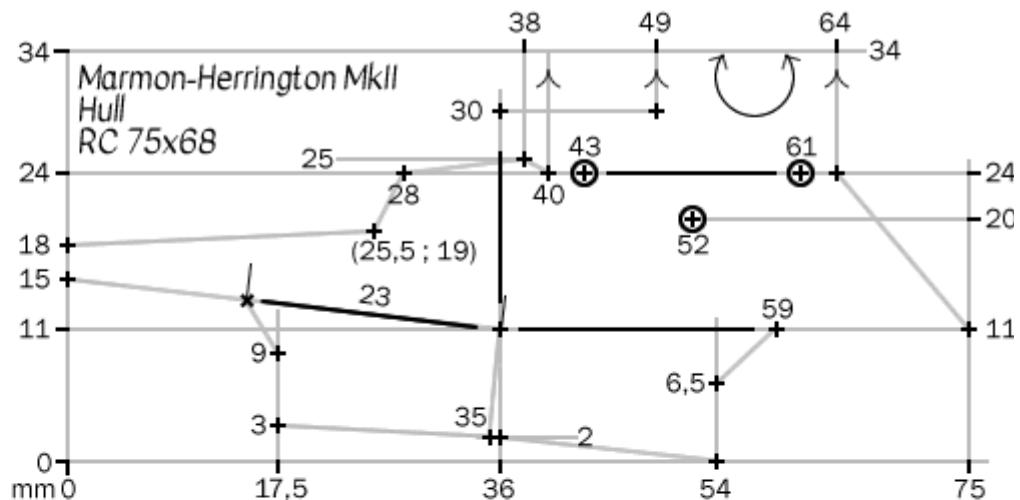
↓ Connect to
symmetrical
symmetric

RC: Regular Cardboard
RP: Rigid Paper

» Position marker

M-H compass

$\pm 4.5 \pm 7 \pm 8.5$



Diagrams on this page are not all at the same scale

Marmon-
Herrington
MkII
Scale 1:64
Page 2/3



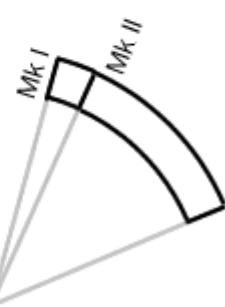
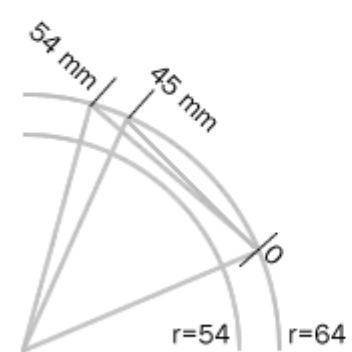
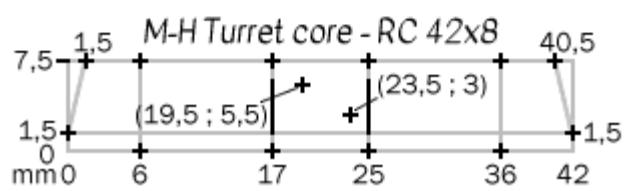
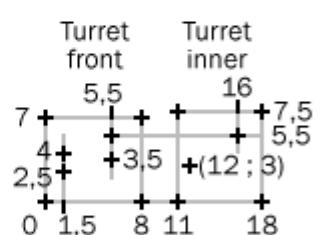
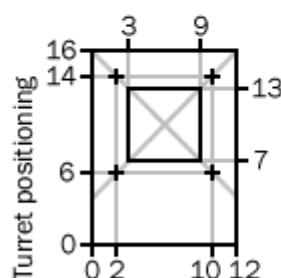
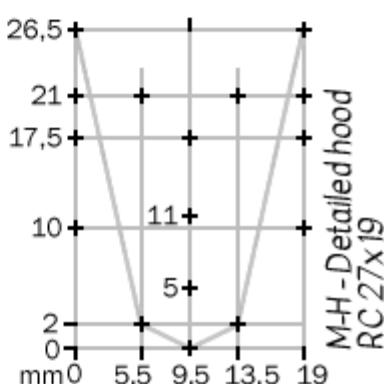
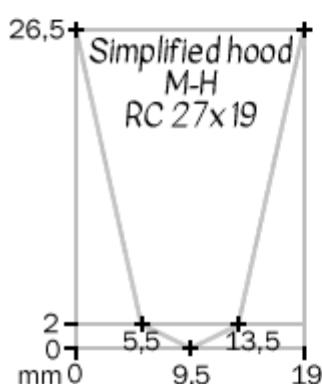
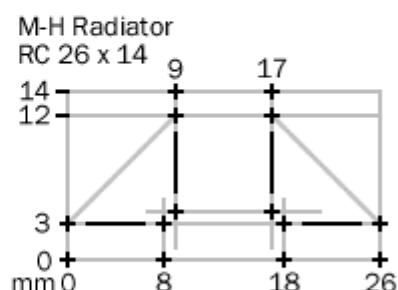
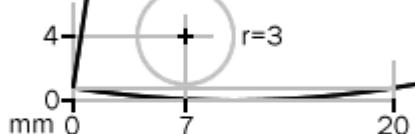
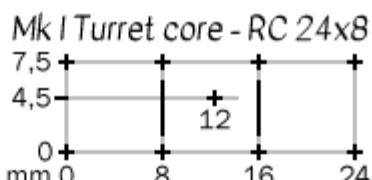
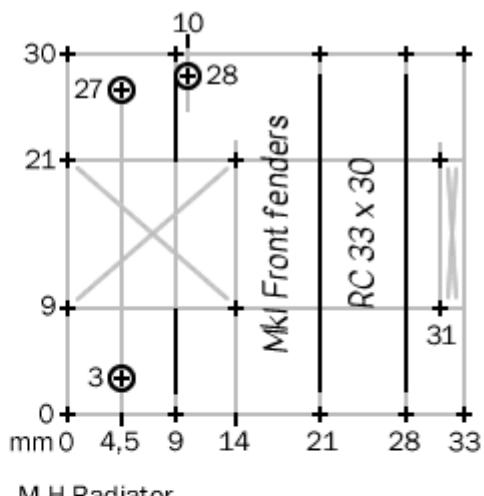
Flip it along this side

- + Pierce for 0,7mm

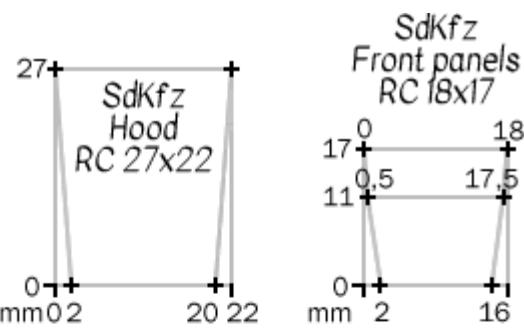
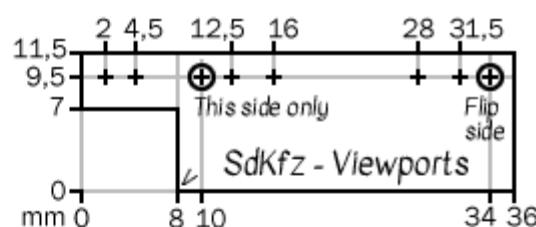
⊕ Special purpose

|—| Folding line

RC: Regular Cardboard
RP: Rigid Paper



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Flip it along this side

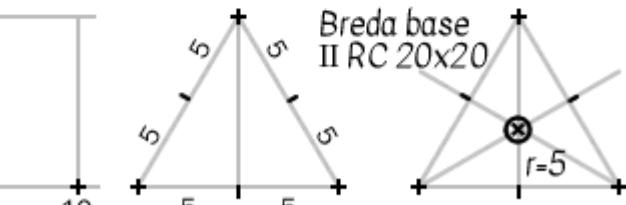
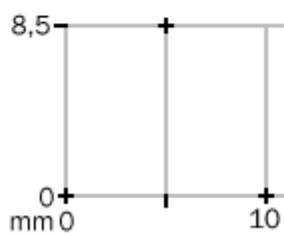
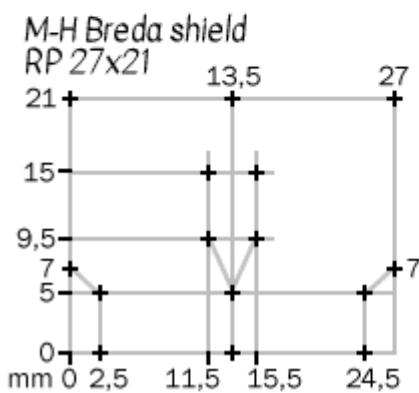
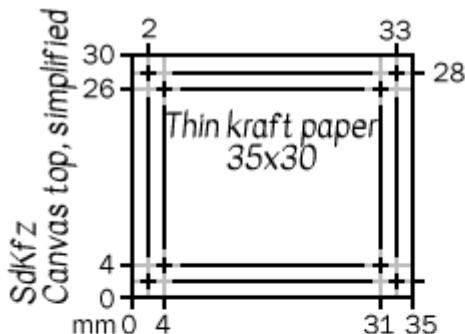
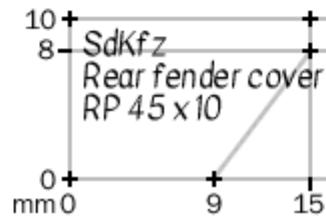
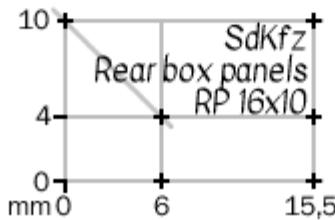
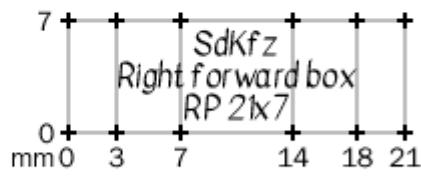
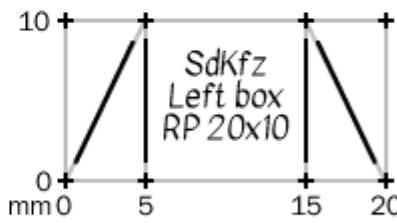
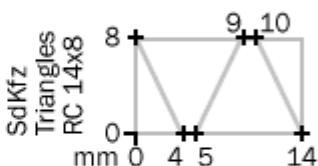
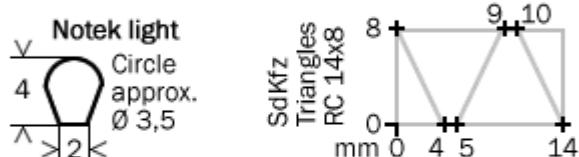
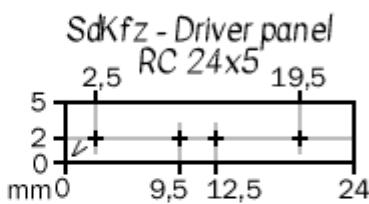
+ Pierce for 0,7mm
x Calculated / intersection

⊕ Special purpose

—|— Folding line

RC: Regular Cardboard
II: double layer
RP: Rigid Paper

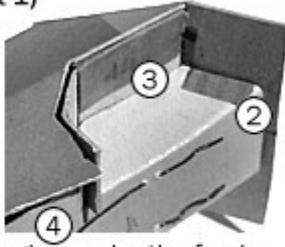
△ Position marker



Diagrams on this page are not all at the same scale

A09**Hull and chassis assembly (part 1)**

(1) For each side, glue a 14mm x 14mm piece of thin kraft paper on the inside halfway over the fender hole, as depicted.

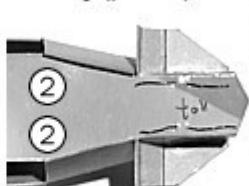
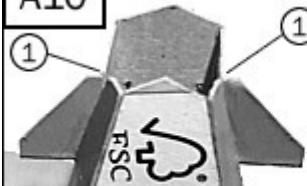


Apply glue under the fender tabs and also to the rear of the chassis (2).

(3) Glue the fender tabs to the underside of the chassis's rear fender, so that the hull's rear is flush with the rear fender.

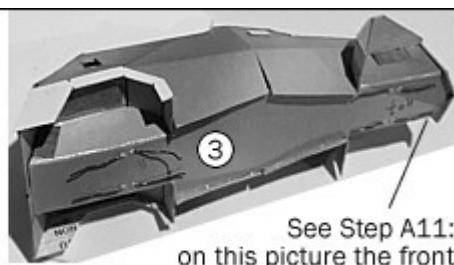
Notice none of the lower panels have been glued to the chassis (4).

Before the next step, accentuate the forward side folds (5), it will make easier to position the front part.

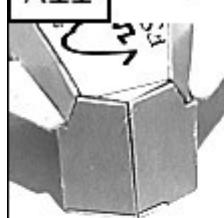
**5****A10****Hull and chassis assembly (part 2)**

Hold the pieces together with your fingers until glue has hardened.

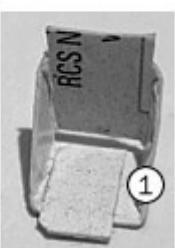
Finally glue the back lower panels to the chassis (3).

**See Step A11:**

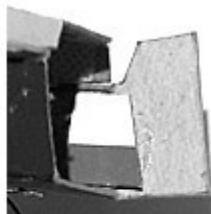
on this picture the front panels haven't been trimmed yet.

A11**Front panels, radiator, headlights**

For the closed design, glue the two front panels so that they align with the hood.



The radiator and the headlights are only visible when the panels are open. They have to be assembled **after the painting phase**.

**5****7****7**

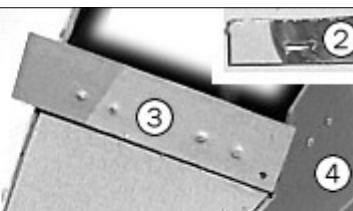
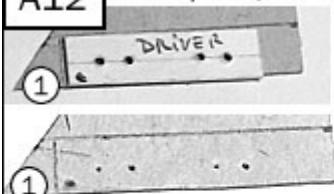
For the open design, prepare two pieces of cardboard to these dimensions.



Glue their porous side to the porous side of each panel. Glue these assemblies with a slight gap between the hull and the panel.

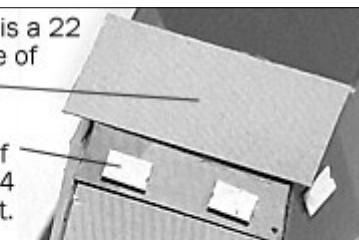
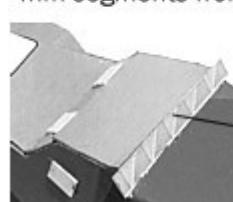


(1) Assemble the **radiator** so its porous side is outwards. Paint its main panel with the same dark grey colour as the tyres.
 (2) The **headlights** are two 2 mm pieces of Q-tip stem that have been pushed with the tip of a nail to create a conical hole.

A12**Driver panel, roofs**

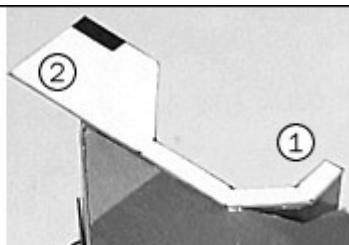
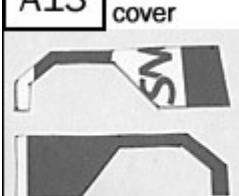
The **front roof** is a 22 x 10 mm piece of cardboard.

For the vision ports make a 2 mm strip of rigid paper, then cut 4 mm segments from it.

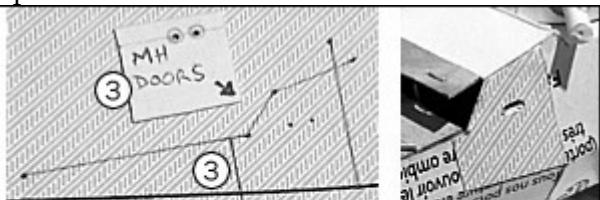


The **rear roof** is a 22 x 3 mm strip of rigid paper.

The positioning dot on the bottom left (1) reminds to align the part on the vehicle's left hand side. Either perforate through to create a slit (2) or make **positioning holes**: put the part on the cutting board and press the needle to create small holes on the other side (3). Notice the positioning holes on the side (4). Trim the excess after glueing.

A13 will be updated**A13****Rear fender cover**

Cut two parts of rigid paper. Glue a rear fender cover to the rear fender, aligning it on its front (1). The excess length at the part's rear (2) allows for better handling, trim it once the glue has dried.



Mk I paper doors: Replicate the forward section of the hull on a piece of paper, use the limit of the "Doors" template (3) to draw the end of the door part. Glue the paper doors over the hull.

A14 Side hatches, open rear doors, Mk I headlights

(3) Glue a 7 mm strip of "paper hinge" on the hatch, then glue the assembly on the body. Glue two 1 mm cardboard squares and a 2x1 part to hold it at a right angle.

Closed side hatches are made from rigid paper, open side hatches are made from cardboard. Both are 8x8 mm squares with their corners cut. For the closed design, just glue the square over the position of the opening (1). For the open design, cut "paper hinges" from a 4 mm strip of thin kraft paper folded in the middle (2).

(5) Proceed similarly for the open rear doors, glue a 0.5 mm strip (5) as a spacer. For the Mk I headlights, glue the hinge at the bottom of 4.5 mm cardboard squares. Glue a 0.5 mm strip on top as part of the headlight cover, glue to the front fender.

A15 Final details

For the antenna, fold a 7.5 x 3 mm strip of rigid paper in three 2.5 mm sides. Cut 4 mm of Q-tip and use a nail to push one end outwards. Cut 16 mm of DWC wire, insert it into the Q-tip without glueing it. Glue the three sides to the Q-tip, aligning on the bottom. (1) Apply glue inside the radio hole and insert the assembly. Push the wire down until it reaches the fender.

Glue the brackets to the rear fender cover, aligning the most forward to its bottom. Align the rearmost bracket to the first one.

For the sand ramp brackets make a 1.5 mm-wide strip of rigid paper. Divide it in segments of 6+1+6 mm as depicted.

Apply glue all inside the bracket, glue the external bracket end to the sand ramp.

The turret axle is a 25 mm long piece of toothpick.

Part B - Wheels and axles subassemblies

For Marmon-Herrington Mk I, Mk II and variants

B01 Wheel rims

(1) Use the 4.5 mm compass to draw circles on a single layer of cardboard. (2) Mark the center with a dot. (3) Use nail scissors to cut out the disks. Cut at least eight disks.

(4) Cut a cross with the utility knife across the center.

(5) Pierce the disk with a toothpick.

(6) Shave off the "petals".

(7) Thin wheel rim: Make strips of double-layer cardboard (7) 1.5 mm to 2 mm wide. Cut 5 mm bits from it, glue them to a disk (8).

(8) Slide the disk with the spacers on a toothpick, then slide a simple disk. Glue them together, making sure the disks are not offset, then remove the assembly from the toothpick.

B02

Mk II wheels	Wheel diameter is 15,5 mm Wheel thickness is 4 mm
---------------------	--

For each wheel, cut two 140 x 4 mm cardboard strips (length may vary depending on the type of cardboard), glue them one after the other (1) around the wheel rim. Use the spiral method depicted in step P02 (page 3).

The rim is central and not offset to one side.

Mk I wheels	Wheel diameter is 13,5 mm Wheel thickness is 4 mm
--------------------	--

For the spare wheel, the wheel rim is a double-layer disk of 9 mm of diameter (no perforation), glued to the limit of the strip. See Step A06 for the spacer.

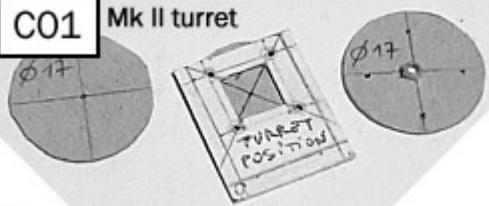
(2) The distance between wheel sides is 29 mm. Make a distance jig to assemble wheels with the axles. (3) The axle is 31 mm long, the axle protrudes from both sides.

For the wheels of the Mk I, depicted on image (3), use five 175 x 4 mm cardboard strips.

Part C - Turrets

Marmon-Herrington Mk II, Marmon-Herrington Mk I, BA-10

C01 Mk II turret



Cut two cardboard disks, the turret bottom (\varnothing 17 mm) and the turret top (\varnothing 14 mm). Draw a diameter line and another line at a right angle. Use the tool as depicted to draw the positioning dots.

Cut two pieces of DWC wire, one 34 mm long and the other 25 mm. For both, bend 4 mm at a right angle.

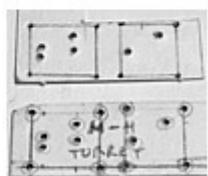
30 mm

21 mm

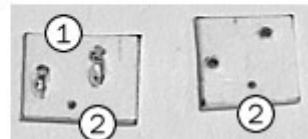
Draw the **turret core** piece, draw folding lines (there are only two, the two others are positioning lines), perforate the center dots for 0,7 mm.

Draw, perforate and cut the **front** and the **inner** turret panels.

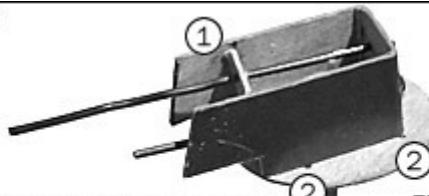
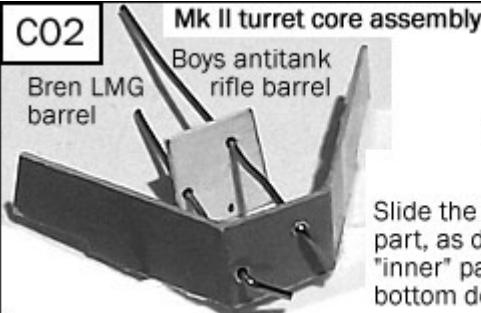
(1) Cut slits between the holes of the front panel, like in Step A07 use the pin to make their borders smooth.



(2) Notice a dot has been added to identify the bottom side of each part



C02 Mk II turret core assembly



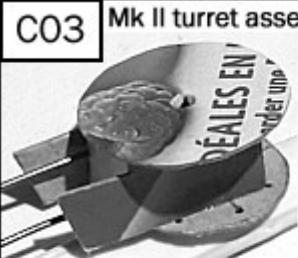
Slide the wire parts into the "core" part, as depicted, then slide the "inner" panel onto them. Notice the bottom dot is on the inside.

Simultaneously: glue the inner panel to the turret core using the positioning line (1), and glue both parts to the turret bottom, using the positioning dots (2).

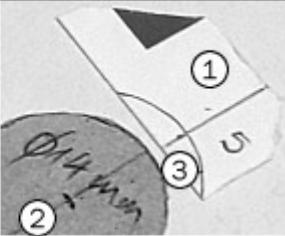
Finally glue a piece of thin kraft paper on the bent wire parts to hold them in place.



C03 Mk II turret assembly



Glue the turret top using the positioning dots, check its alignment visually.



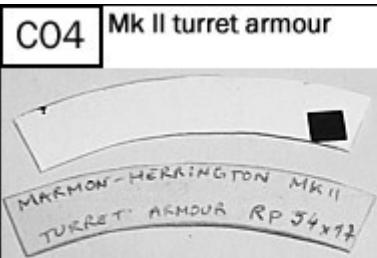
On a piece of rigid paper, draw a line 5 mm from its border (1) and align it to the diameter line of a 14 mm disk (2). Use the disk as a template to draw an arc (3).

Cut away the arc and glue the rest of the rigid paper piece onto the top of the turret core, against the turret top. Trim the excess on the side and the front.



Glue the front panel, smooth side outwards. In doubt, look where the bottom dot is. Do not trim the excess.

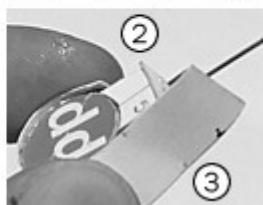
C04 Mk II turret armour



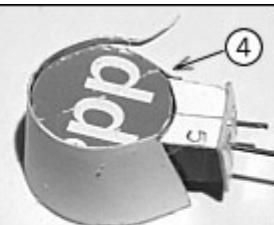
Use the template to make a rigid paper piece. Use a pen to give it a rounder shape (1).



(2) Apply glue to the sides of both the turret top and bottom parts. Glue the armour skirt to them, starting at one of the front edges. Make sure there is no slack on top and on the bottom.



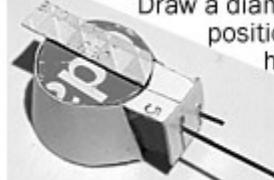
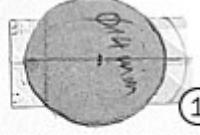
Immediately, while the glue is still fresh, mark the positions where the skirt meets the other front edge. Remove the skirt and cut away the excess part.



Glue the skirt on the turret again, you may have to pinch at the front to fit (4). Trim the excess above and below.

C05 Mk II turret hatch

16 x 10 mm piece of rigid paper, draw a line dividing it in two 5 mm sections. Align the diameter template on this dividing line then draw an arc as depicted. Cut away the arc end (1) then cut along the dividing line.



Draw a diameter line on the turret top, use it to position and glue one of the two rigid paper halves.

Glue the other half. When the glue has hardened, trim the excess.

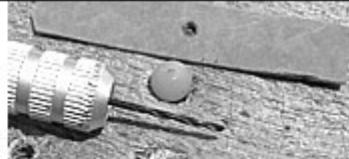


C06 MG ball mount for the Mk I turret & hull

Pellets for BB toy guns (\varnothing 5,5 mm to 6 mm) are the most realistic solution to make a machinegun ball mount. While it is possible to simply glue a Q-Tip stem directly to such a pellet, it is preferable to use wire as support.



Place the pellet on the hole and hold it in place by pressing down the strip of cardboard above it, holding it with two fingers as depicted. Proceed with caution as you drill through the pellet.



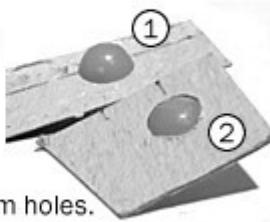
For this you would need a manual drill with a \varnothing 1 mm drill bit, a piece of wood with a hole (here a \varnothing 8 mm drill bit was used to create a conical crater) and a perforated strip of cardboard.

Here are \varnothing 6 mm pallets showing through:

- (1) a \varnothing 6 mm hole,
- (2) a \varnothing 5,5 mm hole.

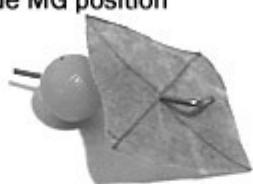
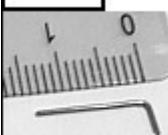
In this design, you will

have to use a 3 mm compass to make \varnothing 6 mm holes.



File off one end of the hole (for instance, with a nail file) until the stem of a Q-tip can be placed squarely against it.

C07 Mk I side MG position



Take a 18 mm bit of DWC wire and bend 4 mm of it at a right angle. Perforate a 14 x 14 mm piece of thin kraft paper in its center, insert the DWC wire and then the perforated pellet, as depicted.

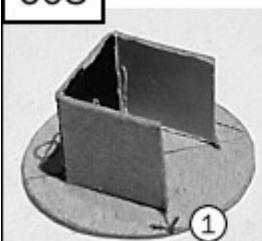
Before folding the hull, use the positioning dot (see Step A06) as the axis for a 3 mm compass; draw and cut a \varnothing 6 mm hole.

Glue the thin kraft paper to the hull, making sure it envelops the pellet so it can't escape to the other side. The wire helps you to visualise the direction of the machinegun.

When the glue has hardened, wrap a small piece of thin kraft paper over the bent end of the DWC wire (1) to hold it in place as well.



C08 Mk I turret

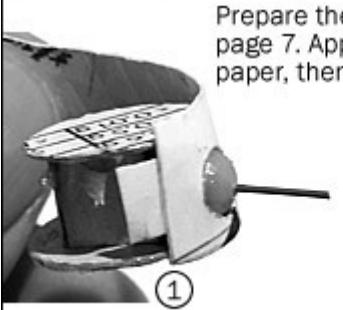
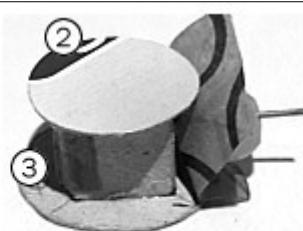


Position the Mk I turret core like a standard turret core.

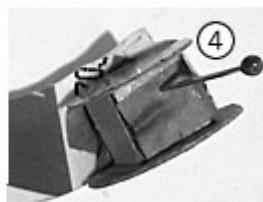
(1) Make a marking at this end of the diameter line.

(2) Glue the turret top. Cut a 24 mm bit of DWC wire and bend 4 mm of it at a right angle. Perforate a 14 x 14 mm piece of thin kraft paper in its center.

(3) Insert the DWC wire in the hole at the rear of the turret core then glue a piece of paper over it to hold it in place. Slide the piece of thin kraft paper and finally the perforated pellet on the wire.

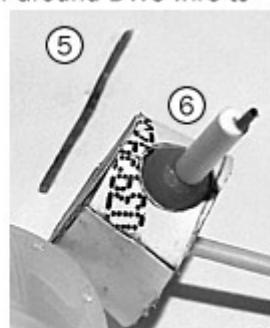


Prepare the turret side armour as explained on page 7. Apply glue to it and also to the thin kraft paper, then glue it on the marked position (1).



(4) Perforate the rear of the turret core so the pin can push the pellet against the hole. Follow the procedure from Step C04 to finish.

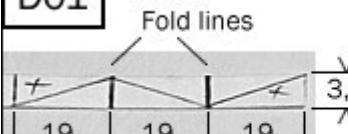
(5) Roll thin kraft paper around DWC wire to create a 1 mm tube.



Part D - Marmon-Herrington Mk II with add-on artillery

Breda 20/65 - Pak 36 - Hotchkiss 1934 25mm - BA-10**

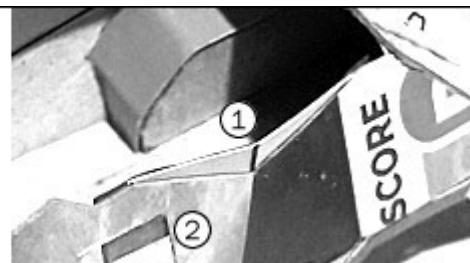
D01 Breda side armour

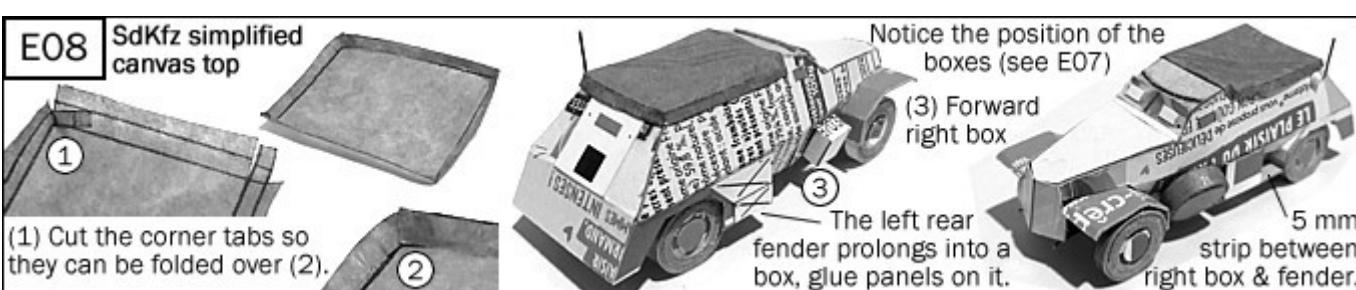
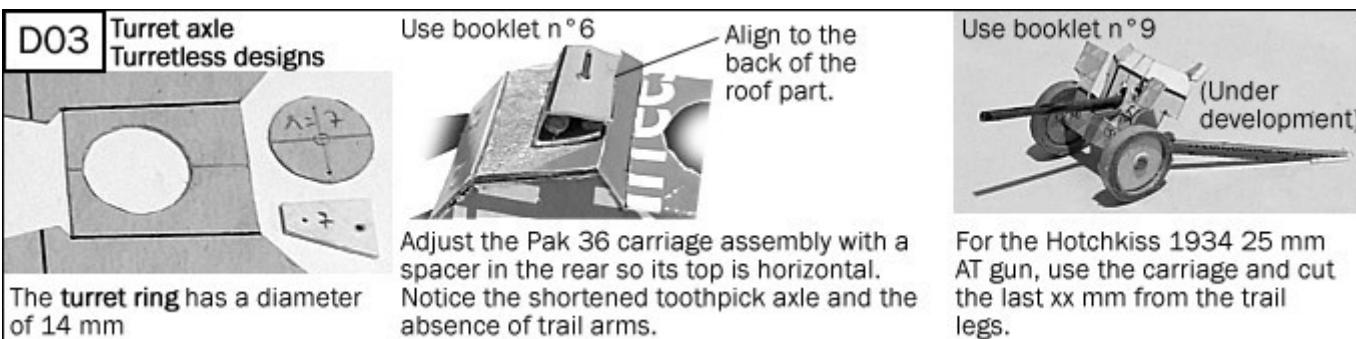
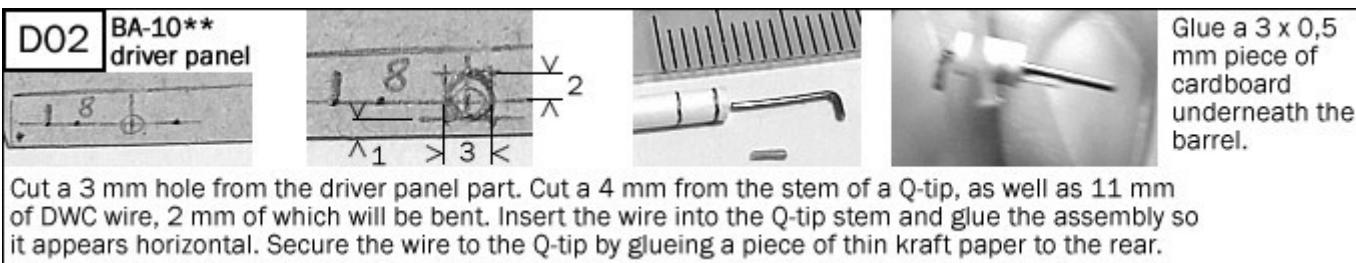


Make two parts from rigid paper as depicted above.



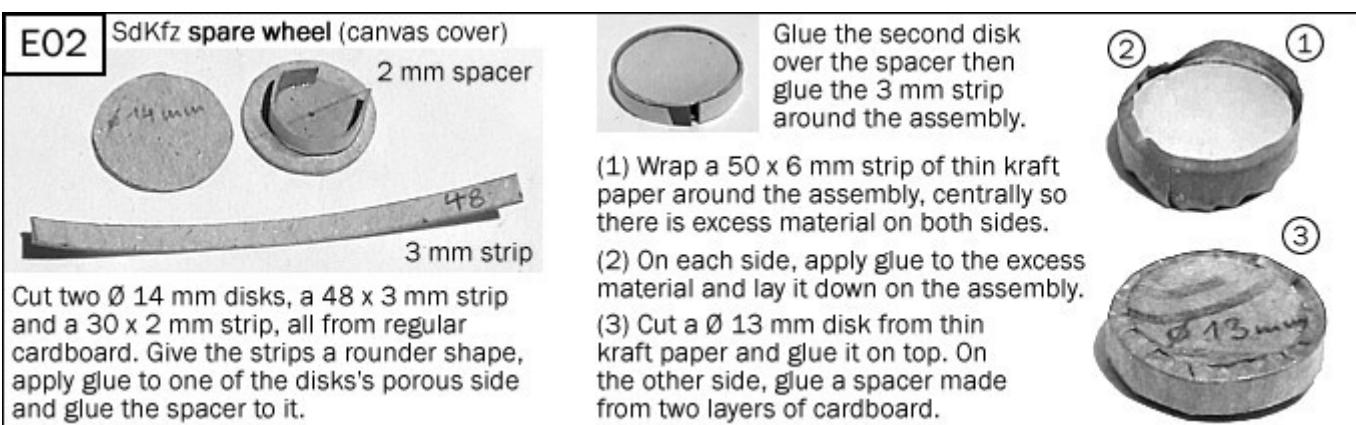
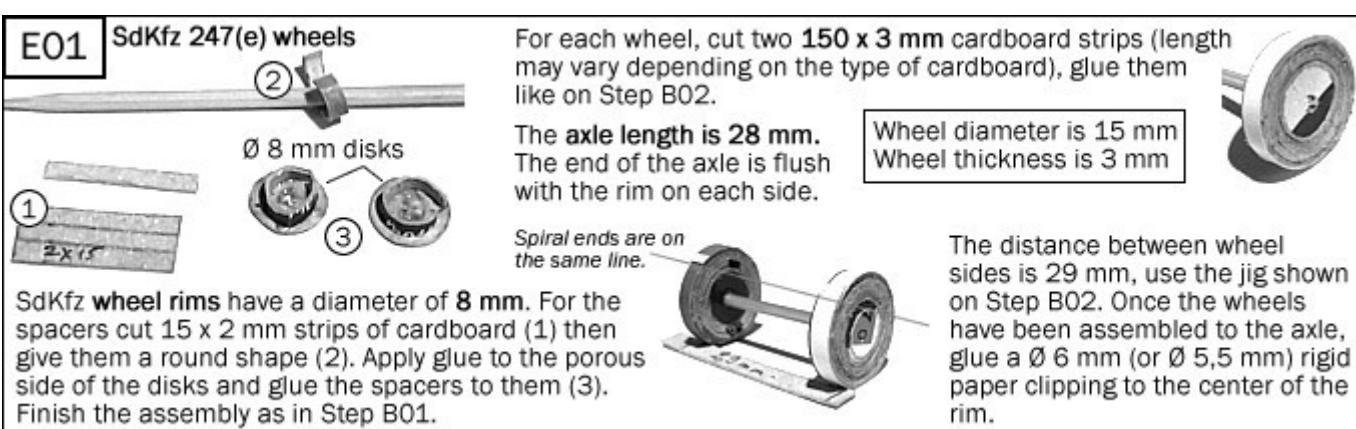
Make two 22 x 6 mm parts from thin kraft paper and glue the rigid paper parts as depicted. Accentuate the fold (1), apply glue to the kraft paper then glue flush with the hull. (2) Trim the side hatch opening.





Part E - SdKfz 247 (e)

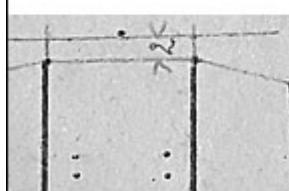
Open design (armoured radio/command car) - Closed design (with canvas top)



E03 SdKfz parts

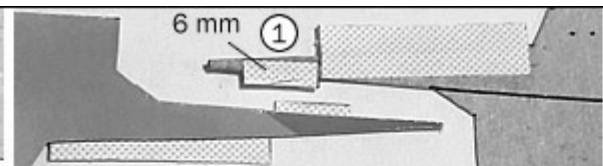


Use the Marmon-Herrington hull template to draw the **hull halves**, but prolong the front lines. The lower line measured from the center point must be at least 45 mm long.

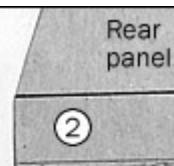


Keep **2 mm** ahead of the chassis front as depicted (not 2,5 mm, where the dot for the point is).

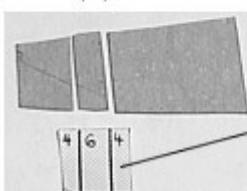
Use the **Mk I front fender** template, perforate the "special purpose" dots for the headlights & the Notek light.



Glue the paper hinges for the hood and also 6 x 2 mm paper strips underneath the front. (1)



(2) Make a **rear panel** part, cut 2 mm from the bottom.



Glue the two **front panels** parts to a piece of paper with fold lines as depicted.

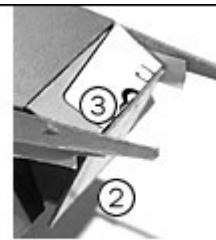
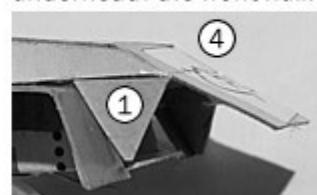
The last 4 mm tab will be glued to the hood once the latter has been assembled.

E04 SdKfz front assembly



Assemble the hull to the chassis. Glue the "front panels" assembly tab under the hood.

First glue the "triangles" parts (1) to the paper underneath the front hull.



Afterwards, glue the lower front panel (2) to the chassis, so that the bottom of the smaller front panel (3) is flush with the bottom of the hull part.

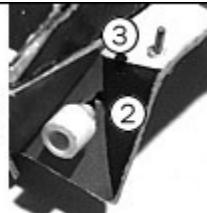
Trim the excess (4).

The images have not been taken in the correct sequence, it turned out that the triangles have to be glued first.

E05 SdKfz lights



(1) For each headlights prepare a 2 mm bit of Q-tip as in Step A11 then pass a pin through the hole. Also prepare a 7 mm piece of DWC wire bent at 3 mm.



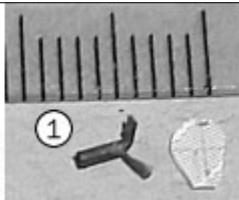
(2) Insert the wire so that the 3 mm bit protrudes from the fender, the 4 mm bit will be held in place, horizontally (so it can pivot), by a piece of thin kraft paper. Apply glue on protruding DWC wire & back of headlight, slide the headlight on.

(3) It is the same procedure for the Notek light (see E06) except the protruding bit is 2 mm long.

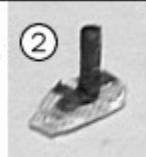
E06 The Notek light is a very small assembly.



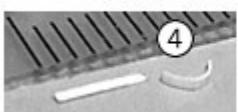
On a piece of rigid paper, draw a semi-circle around the stem of a Q-tip, connect the semi-circle to the 2 mm on the bottom of the piece.



(1) Wrap thin kraft paper around DWC wire to create a 1 mm tube, cut 4 mm off and split it in two on the upper half. (2) Open the split half as a flower and glue the petals to the piece of rigid paper.



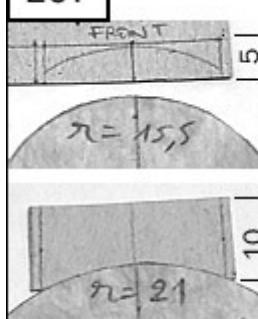
(3) Apply glue on the DWC wire protruding and slide the assembly on it. (4) Cut a 4x0,5 mm piece of rigid paper, give it a round shape.



(4) Apply glue inside the round strip of rigid paper and glue it around the back of the assembly.



E07 SdKfz roofs, side boxes



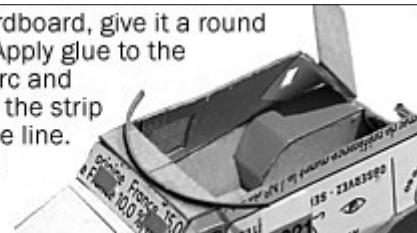
The "combat" roof is inspired from the SdKfz 250, more suitable to an armoured personnel carrier. It is 5 mm long.

The "command" roof is inspired from the SdKfz 247, more suitable to an armoured radio or command car.

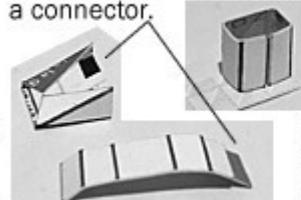
Make a jig with both radii (15,5 and 21 mm), notice that the former aligns at the front of the roof, the latter at the rear. In each case, measure the hull width for the roof and add 1 mm on both sides.

(1)

Cut a 0,5 mm strip of cardboard, give it a round shape. Apply glue to the drawn arc and position the strip along the line. Trim the excess.



The **side boxes** are meant to be closed on the back side with a connector.



Glue the right forward box on a piece of rigid paper to act as a top, trim the excess.

Separate the rear box panels & draw "X" shapes as depicted.

