

HANOMAG Sdkfz 251 I

1/35 MILITARY MINIATURE SERIES NO.20



When the morning mist began to clear, they still hovering over the last 300 yards before the German Hindenburg Line near Cambrai in Central France which consisted of three lines of strong points. It was on 30th November, 1917, in the third year of World War I, The Hindenburg Line, whose impregnability the Germans were proud of, had successfully repelled fierce attacks from the combined forces of Britain and France that continued for about three months so far. The two Allied Powers had already lost their over 200,000 in killed and wounded. All battle lines had come to a deadlock and an increasing number of officers and men on both sides had been gassed. Trench warfare which characterized World War I had been going on ever since from and soldiers had fought little bit on the ground in order to break the gloomy deadlock, British tanks started appearing. At a surprising speed of only 3 km/h, they invaded German area about 5 km in depth and 10 km in width. It seemed as if the attack would succeed but the tanks could not advance any farther. The Allies had previously missed in detail a role in this operation to such an extent. Tanks were to play the leading role in a tank, with infantry and cavalry were to take charge of a pursuit battle to ensure victory and improve the fruits of battle. In practice, however, the infantry and cavalry which should have followed the tanks did not show themselves at all. Being divided into small groups, German machine gun crews ward off attacks from the British tanks and made fierce attacks against the infantry and cavalry which tried to follow the tanks. Thus, the tanks were isolated and also the infantry and cavalry were forced to fight independently.

The battle handed an important lesson on tank tactics as in the following: The tank is an effective weapon and must make speedy attacks

at the spearhead of an advance. After the main line breaks through the enemy line, infantry must give chase to the enemy and impose the fruits of battle. The most important point is that infantry should be mechanized so that they are mobile enough to keep pace with the tank.

Paying attention to this point, the British developed, on the basis of Colonel Fuller's idea, the Infantry Carrier Mk.IX, a chamber tank carrying 30 men. This was the first infantry vehicle for mechanization. In Germany, on the other hand, Adolf Hitler took power and organized the Reichswehr in 1933. He immediately began to mechanize his army. As early as the beginning of 1920's, the German Army had started to develop military transport vehicles and motorized tractors to take the place of horses on the basis of auxiliary vehicles. In Germany of those days, half tracks as well as tanks were widely used in agriculture and public works. The German military authorities paid attention to the good maneuverability and cross-country ability of the half tracks and in 1927 ordered immediate plans to develop military half tracks. They were classed into under 1 ton, 2 tons, 3 tons, 4 tons, 11 tons and 18 tons according to their tractor force. Each of the manufacturers was to develop one of these six classes.

Hans-Ludwig-Golth (AG) was in charge of the plan but he died and completed a prototype in 1934. It mounted a series-6 cylinder 15-hp engine of Maybach on the rear. The front was of such design that permitted subsequent fitting of various types. This vehicle was officially designated Sdkfz 11 but later called HL-RL-1. 200 units including the RL-2 and the RL-3 were produced by 1939 and supplied mainly to cavalry reconnoitering companies.

When German tank divisions were organized in 1932, the Germans actually started development



Sdkfz 11



Sdkfz 251 I Type A



Sdkfz 251 I Type D

gins for vehicles carrying infantrymen to support tank forces. In 1938, the German Army decided to develop an armored personnel carrier on the basis of the 3-ton half track (MG-34 type) mentioned above. Hansring Hansdorff Maschinenbau (AG) in Hannover was ordered to develop the running gear and Henschel-NAG in Berlin was to develop the superstructure to be mounted. Design work was hastened on the model of existing armoured cars and a prototype was completed at the end of 1938. The Germans tested the prototype in the Krummholtz Proving Ground and accepted it for mass production. This was born the Armoured Personnel Carrier Hansring SdKfz 251 which we may safely say, was a triumph for the German mechanized corps that showed mastery in all battlefields throughout the war. The Type A (the first production type) employed a Maybach HL 42 6-cylinder 4.11 cc engine of 90 hp. The transmission permitted four speeds forward and one backward. The armor thickness was 14.5 mm at the front from on the sides and 5 mm at the bottom. The maximum speed was 30 km/h. This vehicle could carry 12 fully armed soldiers in addition to two crew members. Production was immediately started by Henschel and Goliath. In 1941, Adler Werke AG, Auto Union and Hilda of Elben took in Czechoslovakian joined them.

In the Polish Campaign, a limited number of SdKfz 251s first saw battle on 9th September, 1939. General Heinz Guderian in command of the 1st Tank Division was in a SdKfz 251/1 which was equipped as a commander's vehicle. Noting full use of its mobility, he moved around the battlefield and became famous for his unqualified command. The Hansring Armoured Personnel Carriers of Type A and Type B were produced until the French Campaign of 1940. The two types were the same in performance and construction but slightly different only in appearance. They were distinguished from each other by soldiers, peep windows on the body sides. The Type A had a number of such windows, while the Type B had none except for the driver's view.

In the Polish Campaign where Hansring personnel carriers first saw action and the French Campaign which was started soon after that, the advantages of (German) mechanized or the armored carriers were not such the form of from a tactical point of view. This is not merely

because the personnel carriers used were limited in number but because they were often used by machine-gun platoons and engineer companies and for saving infantry guns rather than for carrying infantrymen. It was not until the Russian Campaign which started in 1941 that fully mechanized infantry exercised its terrible power in rapid action with tanks.

The Type C was put to production at the end of 1940. The Type C was improved in body construction and employed 100% welding process in place of the former combination process of bolting and welding. Three standard light machine guns of model 34 were mounted as the standard armament. The armor was equal in thickness to that of the previous types. In 1941, the Type was officially designated "Armoured Personnel Carrier (APV)" (but the Type B appeared in 1941, the Type C played an important part in support of German tank forces in the initial stage of fighting against Russia from the Operation Barbarossa to the Battle of Stalingrad. Especially in the German Summer Offensive of 1942 which the Russian leaders referred to as "Blazing Steppes of 1942," German tank divisions led a great number of Type Cs and drove the Russian tank to the Volga.

The Armoured Personnel Carrier developed into the further improved Type D and came to have a wide variety of equipment and armament. In all, 22 variations ranging from the SdKfz 251/1 equipped only with shielded machine guns to the SdKfz 251/22 armed with a Daimler AT gun of 88mm calibre were manufactured. It is reported that the total production reached about 10,000 by the end of 1944.

World War II was a war of mechanized power, that is to say, a war of mechanized power. It must not be overlooked that the part — although not the leading part — which the German armoured personnel carriers played in and the influence they exerted on the total war were very great and also that most of personnel carriers used during the war were of half track type.



SdKfz 251/1



SdKfz 251/2



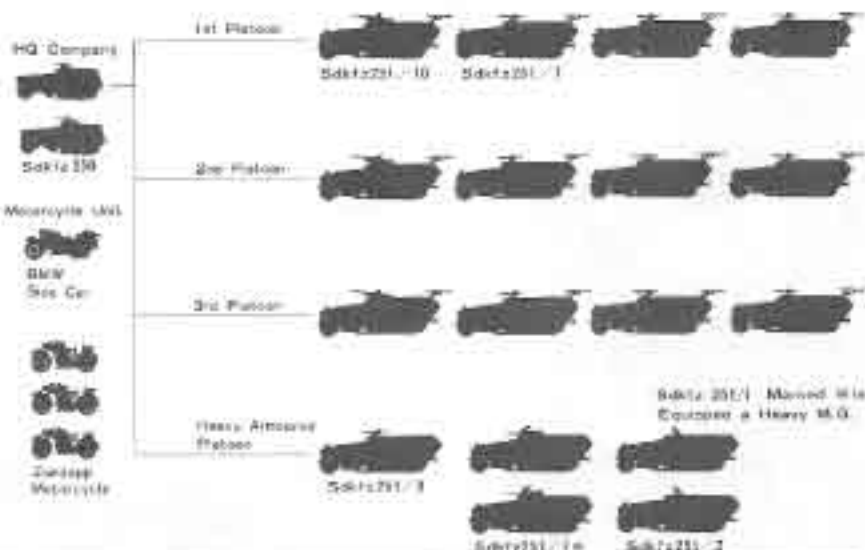
SdKfz 251/12 on Projector



SdKfz 251 variants

Sd-kfz 251/1	APC
Sd-kfz 251/2	3rd Motor Carrier
Sd-kfz 251/3	Radio Vehicle
Sd-kfz 251/4	Machine Carrier
Sd-kfz 251/5	Engineer Vehicle
Sd-kfz 251/6	Command Vehicle
Sd-kfz 251/7	Engineer Support Vehicle
Sd-kfz 251/8	Artillery
Sd-kfz 251/9	1.7 cm SP
Sd-kfz 251/10	3.7 cm SP
Sd-kfz 251/11	Fire-hose Vehicle
Sd-kfz 251/12	Search Vehicle
Sd-kfz 251/13	Sound Recording
Sd-kfz 251/14	Sound Ranging
Sd-kfz 251/15	Flash Recording
Sd-kfz 251/16	Flare-thrower
Sd-kfz 251/17	Iron Pin
Sd-kfz 251/18	APC
Sd-kfz 251/19	Telephone Base
Sd-kfz 251/20	Infantry B.L. Carrier
Sd-kfz 251/21	1.5 cm Flak
Sd-kfz 251/22	7.5 cm Flak 40

Organization of Tank Grenadier Company (As of 1942)



PAINTING



APPLYING DECALS

Painting

Around 1942, most of German military vehicles on the European front were painted German grey overall and most of those on the African front were dark yellow. Some had camouflage painting of either dark yellow and red brown or dark green and German grey.

From 1943 onward, only dark yellow was accepted as the basic colour and camouflage painting of olive drab, red brown and/or German grey was applied according to the theater of war. This was brushed or sprayed on vehicles accordingly.

MARKING

(Divisional Markings)

-  14th Panzer-Division
-  16th Panzer-Division
-  24th Panzer-Division




All of these divisions showed activity but were annihilated in the Battle of Stalingrad.

-  Panzer-Division (Einkreiselpanzer)
-  Waffen-Panzer-Division
-  21st Panzer-Division

The 15th and 21st Panzer Divisions belonged to the Africa Corps and showed activity on the African front.

-  Symbol of Africa Corps

(Tactical Marks)

-  Mark of Infantry Battalion. This was applied to Tank Grenadier Units. Company numbers used were 1-16.
-  Mark of Engineer Battalion. Company numbers used were 1-4.
-  Mark of AA Gun Battalion. This was applied to personnel carriers and ammunition cars.

(Vehicle Numbers)

Numbers painted on both sides of vehicles represent Company, Platoon and Vehicle. For instance:

324 324 means 4th Vehicle in 2nd Platoon of 3rd Company.

401 401 means 1st Vehicle in HQ Squad of 4th Company.

Generally speaking, one regiment consisted of two battalions, each battalion of four companies, and each company of four platoons. Each platoon had four or five vehicles.

Russian Front (As of 1942)



Divisional Mark: Apply one of those:

-  14th Panzer-Division
-  16th Panzer-Division
-  24th Panzer-Division
-  Panzer-Division (Einkreiselpanzer)

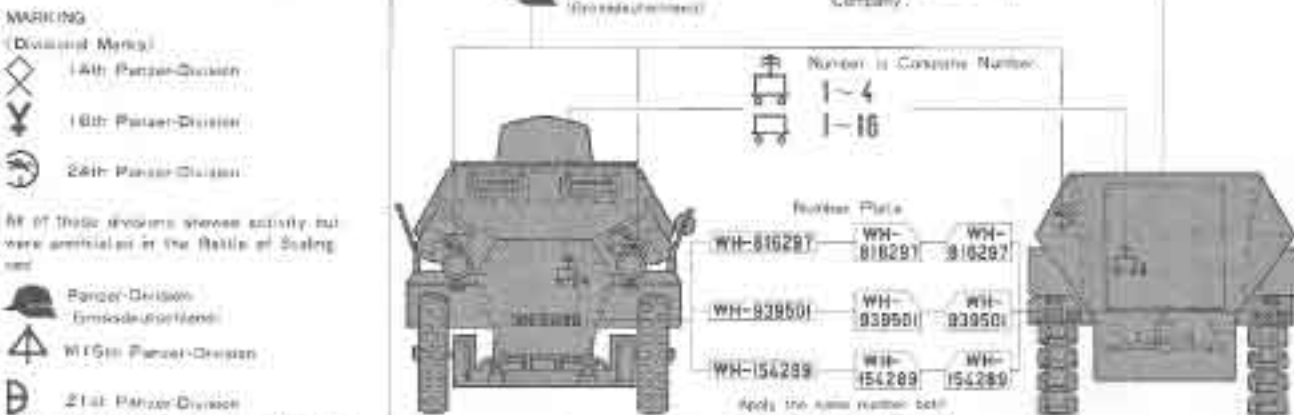
125

This means 5th Vehicle in 2nd Platoon of 1st Company.

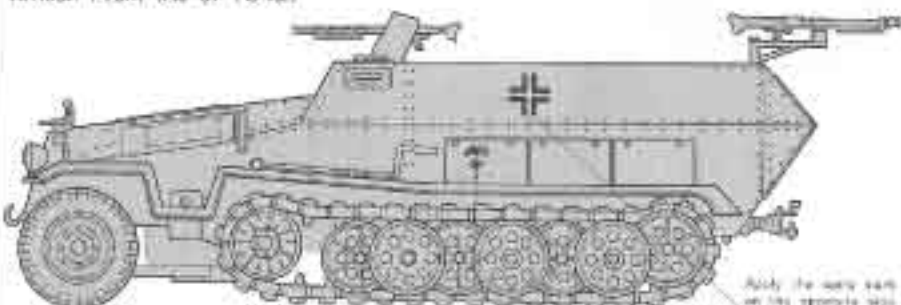
435

This means 5th Vehicle in 3rd Platoon of 4th Company.

Apply the same mark on the opposite side.



African Front (As of 1942)



Apply the same mark on the opposite side.



Symbol of Africa Corps (Choose one)



(Painting of Figures)



Flak Brown

Gun Stock, Red Brown
Gun Barrel, Metallic Grey

Gas Mask Case
Field Grey

Canteen
Field Grey

Bayonet
Flak Black



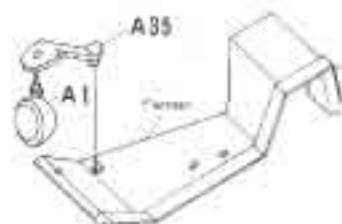
15 Construction of Figures



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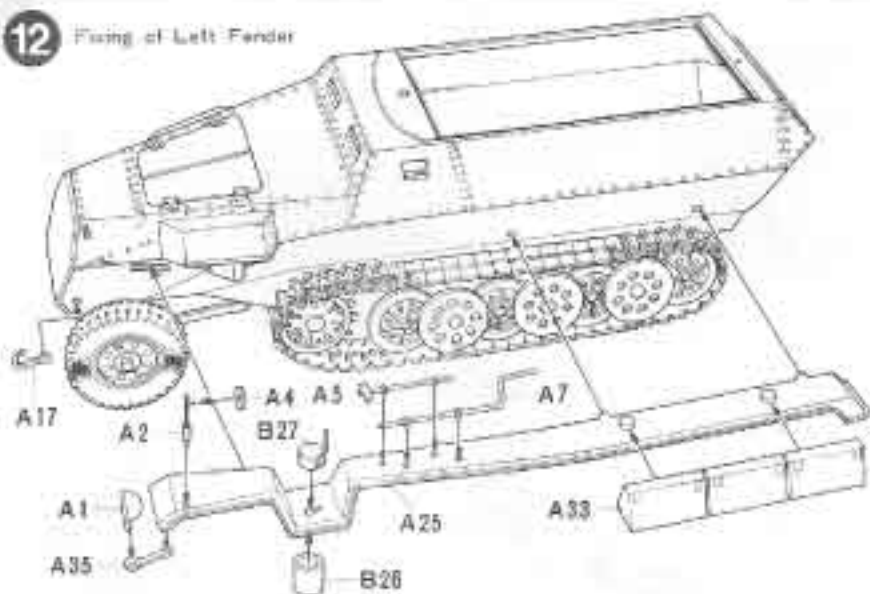
⑩ Fixing of Left Fender!
 Fix the Fender securely.
 See the figure below when fixing Head Light.



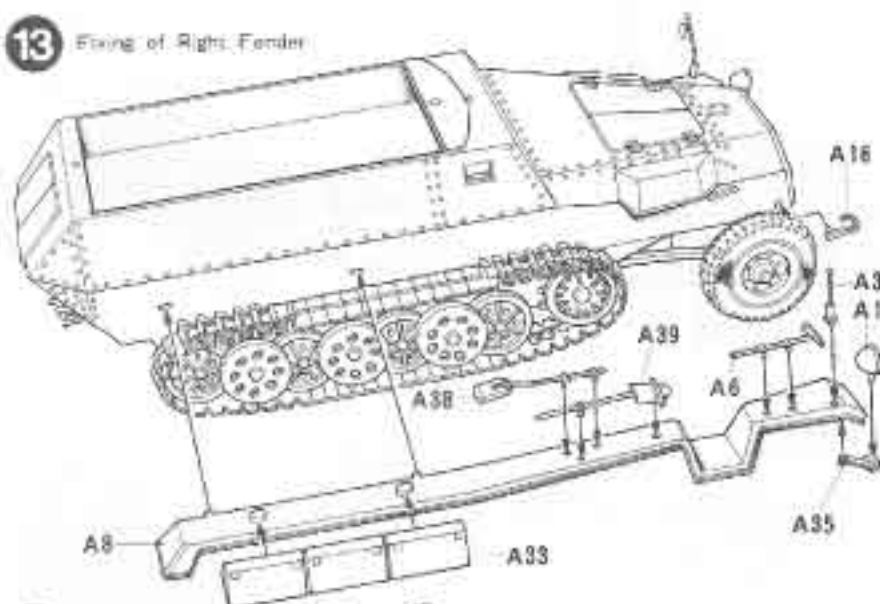
⑪ Fixing of Right Fender!
 Fix Fender securely. For fixing of Head Light, see the figure above.



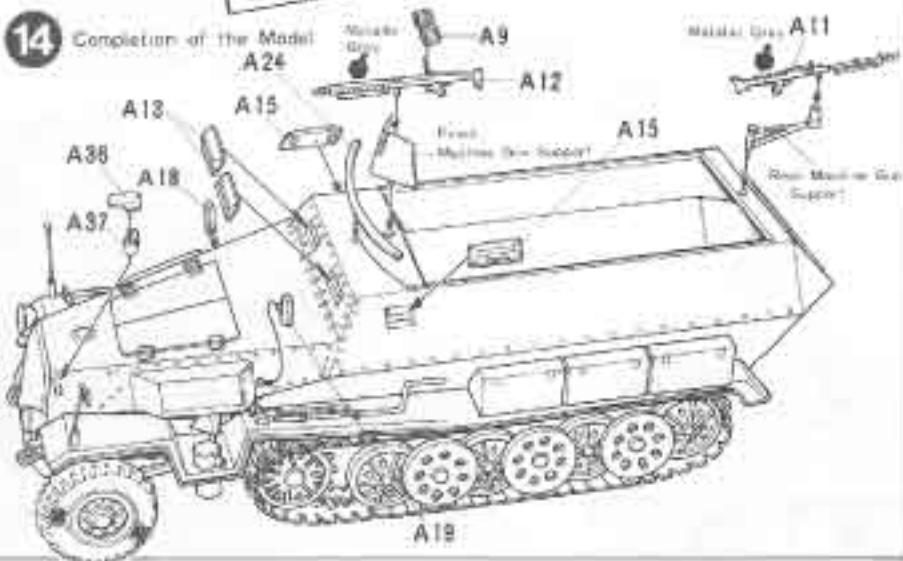
12 Fixing of Left Fender



13 Fixing of Right Fender



14 Completion of the Model



6 Construction of Wheels

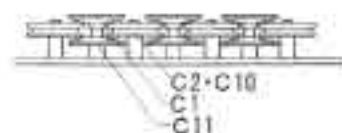
C6 is movable. Do not use glue. When fixing C9 and C8 with adhesive be sure not to restrict C6. When gluing C8 to C3 and C10 to C2, be sure to insert pins into respective holes.

7 Construction of Front Axle

C15, B21 and B22 are movable. Do not use glue.

8 Fixing of Wheels

When fixing Road Wheel, first fix C11 and then the covered wheel (C10 and C3) and then fix C1 with adhesive. Front Axle and Track (B15) must be held in place by means of B10. Do not glue them.

**9 Construction of Rear Hatch**

A31 and A32 are movable parts and must not be glued. Just insert them into A31 and A32.

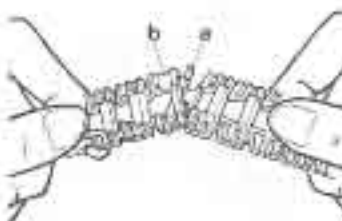
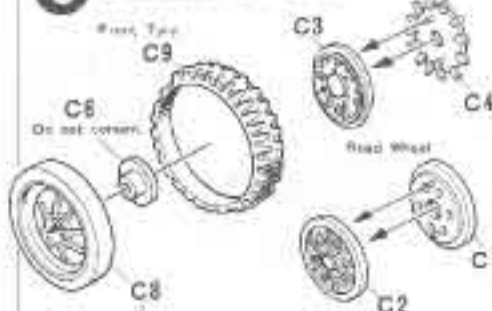
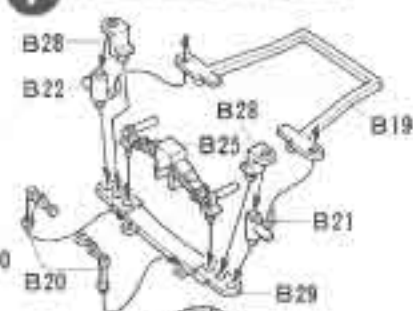
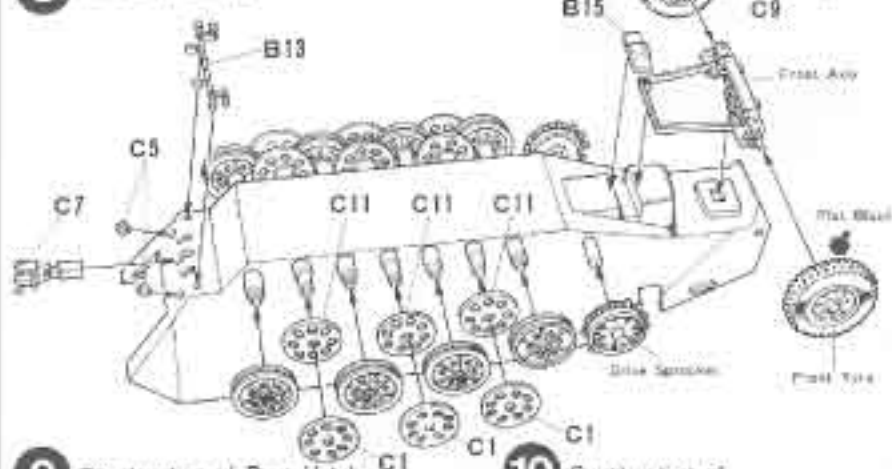
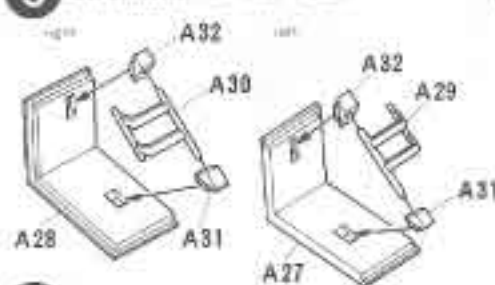
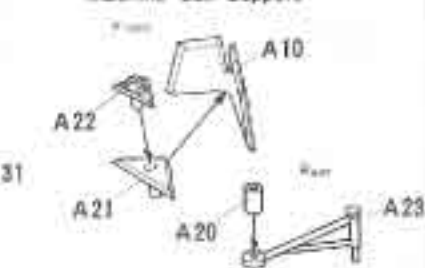
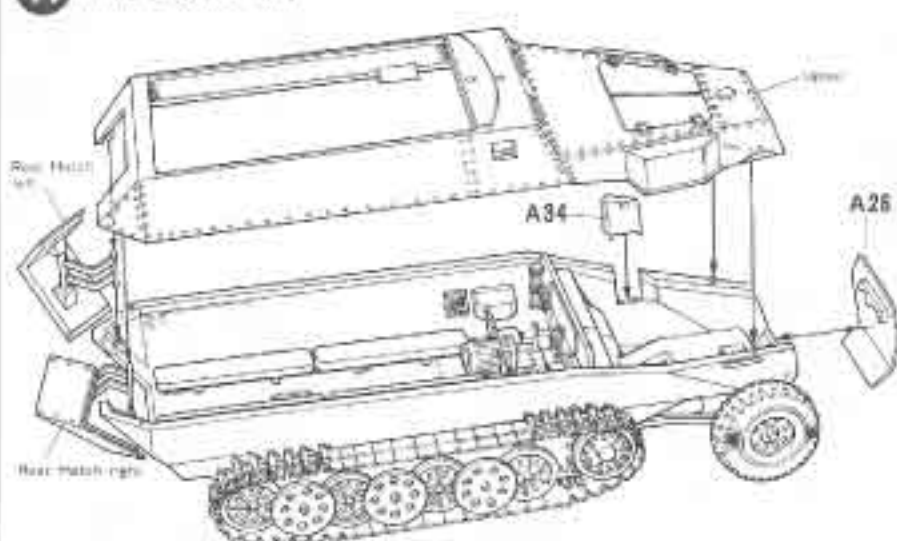
10 Fixing of Upper Body

Rear Hatch is movable. Do not use glue. After gluing Upper Body to Lower Body, fix them together with rubber bands or tapes.

11 Construction and Fixing of Caterpillar

Push a part into a part as shown in the figure below.

Be careful of the direction of Caterpillar.

**6 Construction of Wheels****7 Construction of Front Axle****8 Fixing of Wheels****9 Construction of Rear Hatch****10 Construction of Machine Gun Support****11 Fixing of Upper Body**

Construction of Floor

After doing the work earlier, glue B1, B3 and B5 before taking Dash Board.

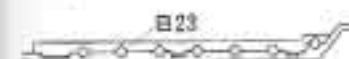


Be sure to fit A14 in proper position. The one with pins fixed below must face toward the center line.



Fixing of Shafts

- Shafts (B16, B18) is movable.
- Do not use glue.
- B23 is Shaft Support and must be glued securely.



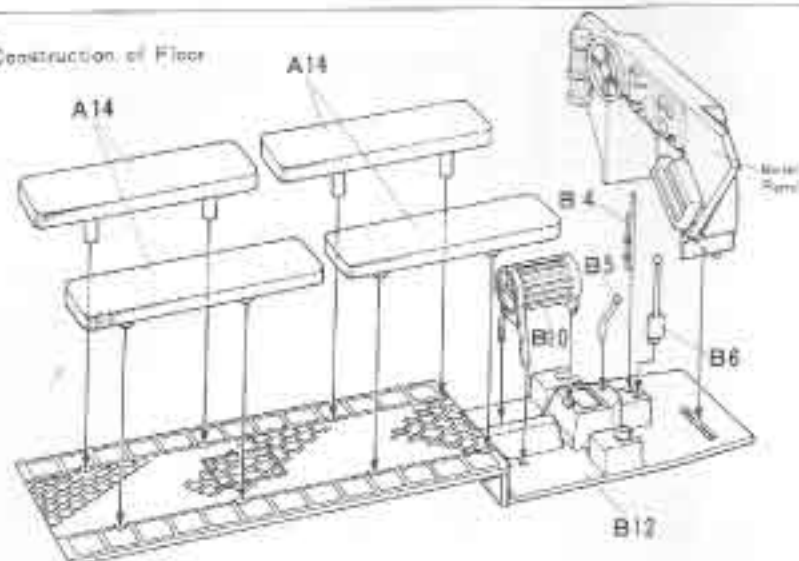
Apply adhesive in the shadowed portion shown in the figure above.

Fixing of Floor

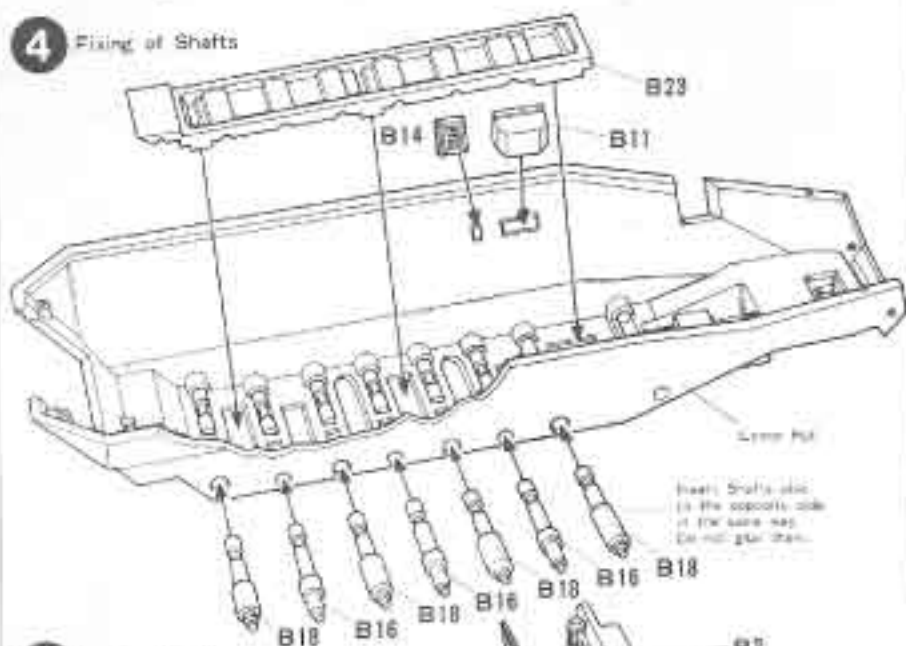
Floor (B12) also serves as a drive-shaft support and must be glued securely. B17 is movable. Do not use glue.



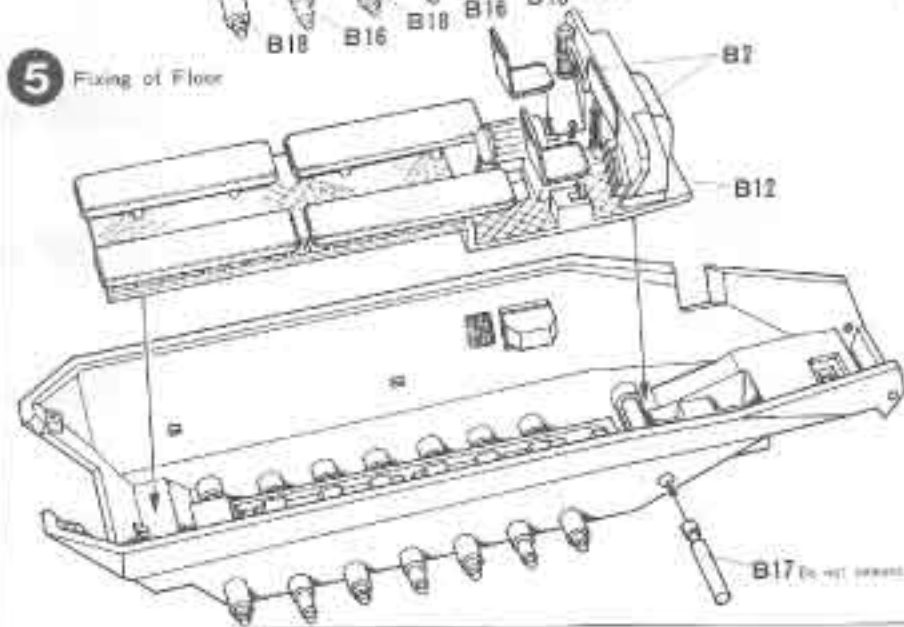
3 Construction of Floor



4 Fixing of Shafts



5 Fixing of Floor



PARTS

A PARTS

- | | |
|-----------------------------|-----------------------------|
| 1 Head Light | 2 Horn |
| 3 Rear View Mirror | 4 Horn |
| 5 LED | 6 Horn |
| 7 Rear View Mirror | 7 Clasp |
| 8 Pick-up | 8 Magazine |
| 9 Front Right | 9 MG 34 Machine Gun |
| 10 Gun Shield | 10 MG 34 Machine Gun |
| 11 MG 42 Machine Gun | 11 Seat |
| 12 Front Window | 12 Seat |
| 13 Side Window | 13 Window |
| 14 Front Head, Right | 14 Front Head, Left |
| 15 Window | 15 Window |
| 16 Machine Gun Mount Part A | 16 Machine Gun Mount Part B |
| 17 Machine Gun Mount Part C | 17 Machine Gun Mount Part C |
| 18 Rear Machine Gun Mount | 18 MG for Machine Gun |
| 19 MG for Machine Gun | 19 Hood, Left |
| 20 Hood, Left | 20 Foremost Part of Body |
| 21 Hood, Right | 21 Rear Glass, Left |
| 22 Rear Glass, Right | 22 Hinge, Left |
| 23 Hinge, Left | 23 Hinge, Right |
| 24 Hinge, Right | 24 Hinge Support, Lower |
| 25 Hinge Support, Upper | 25 Tail Bar |
| 26 Tail Bar | 26 Exhaust Port |
| 27 Head Light Stay | 27 Head Light |
| 28 Head Light Stay | 28 Head |
| 29 Head | 29 Head |

B PARTS

- | | |
|---------------------|-------------------|
| 1 Dash Board | 2 Seat |
| 3 Interior Part C | 3 Grains Laver |
| 4 Door Shift Lever | 4 Lever |
| 5 Panel | 5 Case |
| 6 Steering Wheel | 6 Interior Part D |
| 7 Interior Part A | 7 Floor |
| 8 Rear Part | 8 Interior Part B |
| 9 Tire Rear Support | 9 Shaft A |
| 10 Shaft C | 10 Shaft B |
| 11 Track Rod | 11 Spring |
| 12 Upright, Left | 12 Upright, Right |
| 13 Shell Support | 13 Tire Extruder |
| 14 Suspension | 14 Muffler Part A |
| 15 Muffler Part A | 15 Muffler Part B |
| 16 Tire Rod | 16 Front Axle |

C PARTS

- | | |
|--------------------|--------------------|
| 1 Road Wheel B | 2 Road Wheel C |
| 3 Drive Sprocket A | 4 Drive Sprocket B |
| 5 Tail Light | 6 Wheel Part |
| 7 Hub | 8 Front Wheel Part |
| 9 Front Wheel | 10 Road Wheel C |
| 11 Road Wheel B | |

FIGURE PARTS

- | | |
|-----------------------|-----------------------|
| 1 NP 40 | 2 NP 88A |
| 3 MG 34 | |
| 4 MG 42 Magazine Case | 5 MG 42 Magazine Case |
| 6 Water Bottle | 7 Gun Mask Case |
| 8 Haversack | 9 Wrench |
| 10 Wrench | 11 Holes |
| 12 Duffel Bag | 13 Gun |



Please read this before commencing assembly.

- You will require a pair of tweezers, a file and a sharp hobby knife to build your kit.
- As this kit is composed of many fine parts, take good care when removing parts from the plastic sprues.
- Always use glue very sparingly. Too much glue will spoil your finished model.

PAINTING

- You had better paint the body after the kit is completely assembled.
- See the painting instructions given on page 7.

This mark shows in which colour to be painted.

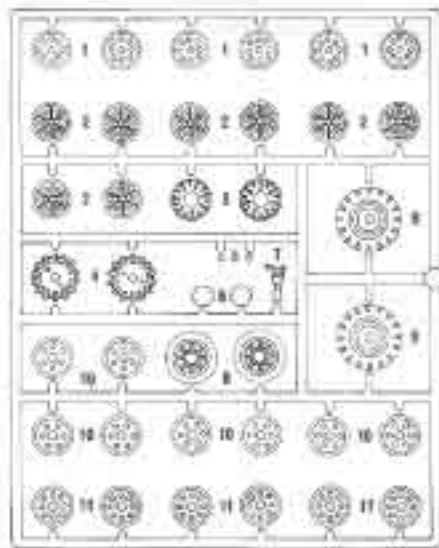
A



B



C



1

Construction of Water Tank

2

Assembly of Meter Panel

