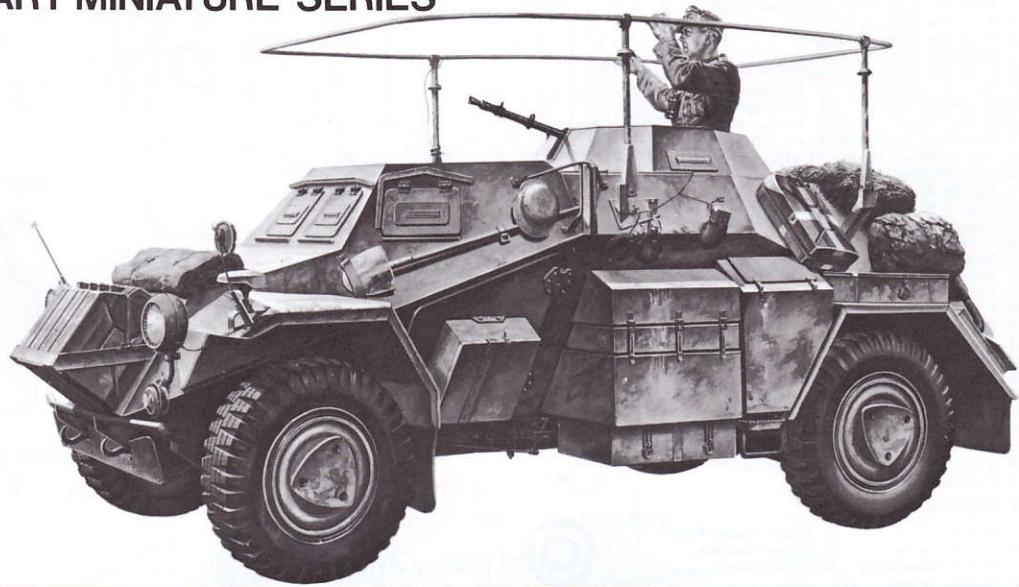


Sd.kfz 223 LEICHTER PANZERSPÄHWAGEN (Fu)

1/35 MILITARY MINIATURE SERIES



Those who are going to enjoy a sport or game will hope to know what sort of a man their opponent is, and take interest in his physique and condition. In actual war for the independence of the country or the freedom of people, apart from movie and television stories of spies and secret underground agents, it forms an important part of fighting to collect information about the enemy. It is the reconnaissance battalion that performed such a very risky and important mission on the ground. The reconnaissance mission had been entrusted to cavalry for a long time. Cavalry with superior mobility and cross-country ability was able to carry out long-distance reconnaissance missions as well as to make a dash in mass formation which was referred to as the flower of the battlefield. In World War I, by which time weapons of many countries much increased in fire power, the mobile attacks by cavalry became nothing but suicidal acts and cavalry came to be used only in secondary reconnaissance.

After the end of the long war, many countries refrained from attaching much importance to horses and started mechanizing their forces — supply troops, artillery and newly born tank troops in this order. On the other hand, cavalry which had been charged with mobile missions so far was trying to maintain its venerable traditions and smart appearance. In Germany after the war, there was no competition between arms of service because of the arms limitations placed by the Treaty of Versailles. The Germans, however, soon pushed forward the mechanization of their troops. In 1939, Germany declared rearmament and signs of another great war were daily increasing. German cavalry employed mechanical vehicles in place of horses as if it had been a matter of course and changed itself into the reconnaissance battalion.

The German Army planned to use the new reconnaissance battalion both in secret reconnaissance on the battlefield and in forced reconnaissance. The former mission was, as implied by the name, to steal into the enemy's territory and feel the enemy without being noticed. Owing to the progress of aircraft, however, its use in this mission became much limited. On the other hand, the latter was a special mission that could be performed only by ground troops. This mission was to wage a small fight for the purpose of grasping the

numerical strength, organization, disposition and counterattack system of the enemy. Thus, the forced reconnaissance was a limited attack to expose the enemy's defensive positions. The interception of the enemy's code telegrams was also a part of this very risky mission. For these reasons, the reconnaissance battalion was referred to as the "eye" and "ear" of the division.

At the beginning of World War II, the German Army employed armoured reconnaissance cars and armoured radio cars with regimental level wireless equipment as the main body of the reconnaissance battalion. In addition to these two types of cars, small vehicles and motorcycle infantry company were also included in the battalion.

The light armoured radio car SdKfz 223 had been developed as one of the important vehicles for the mechanized reconnaissance battalion. Like the light armoured reconnaissance car SdKfz 222, it used the chassis and engine, i.e. the most important parts of vehicle, that had been originally designed for use in Auto-Union's large passenger car and standardized as such.

The SdKfz 223 was a light-armed vehicle. It carried a machine gun on the low-silhouette open-top turret. In addition to this, an MP-38 machine pistol and signal pistol were used as the standard equipment.

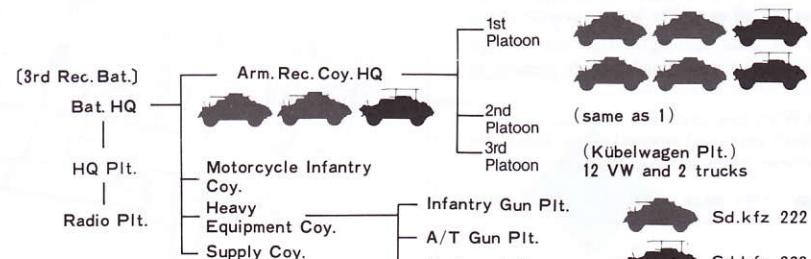
It carried a crew of three men. The driver sat in front of the compact vehicle and the radio operator was on his rear left. In the turret on the rear right of the radio operator was the commander who also served as machine gunner. Wireless equipment of great impor-

tance to the vehicle was mounted in front of the radio operator. As such equipment, standard vehicles carried a wireless telephone and 30 w medium-wave wireless apparatus FU-8. The FU-8 had a coverage of 50 kw and consisted of a transmitter, receiver and their power source. Its frequency range was 1,130 to 3,000 kc/s or 580 to 3,000 kc/s. Some vehicles used by the signal platoon of the regimental headquarters had an ultra-short wave wireless apparatus FU-7 which could be used even in communication with aircraft.

The armoured radio car was characterized by its folding square frame antenna of all others. The folding mechanism of the frame antenna was easy to handle but was seldom used. It seems that the antenna was kept erect in many cases. As a result, the folding mechanism, which was originally considered to be an advantage of this antenna, ironically turned out to have the disadvantage of being too weak in construction. Because the antenna was not so large as that of the 8-wheeled armoured car SdKfz 232, this vehicle had the further disadvantage of being incapable of carrying long-distance wireless equipment.

In the first half of World War II when German tank troops took the leadership in battle and swept over the European Continent, German armoured radio cars not only fulfilled the important mission to feel the enemy but also contributed through their radio net toward bringing out a closer union of fighting power of all arms of service, which was indispensable to modern warfare.

Organization of 5th Light Division (later 21st Division), 3rd Rec. Battalion (Mechanized) 1940~41



PARTS

A PARTS

- 1. Fender Mirror 2. MG 34
- 3. Antenna
- 4. Radio Apparatus Rack
- 5. Base for Figure B 6. Black Light
- 7. Antenna Stay A (Left)
- 8. Antenna Stay A (Right)
- 9. Antenna Stay B (Left)
- 10. Antenna Stay B (Right)
- 11. Turret (Lower) 12. Turret (Upper)
- 13. Headlight (Left) 14. Headlight (Right)
- 15. Spare Tyre 16. Turret Visor
- 17. Direction Indicator 18. Air Filter
- 19. Turret Mesh Frame (Left)
- 20. Turret Mesh Frame (Right)
- 21. Figure A (Right Arm)
- 22. Figure A (Left Arm)
- 23. Figure A (Body)
- 24. Direction Indicator Guard (Left)
- 25. Direction Indicator Guard (Right)
- 26. Front Fender (Right)
- 27. Front Fender (Left)
- 28. Front Visor 29. Side Visor (Left)
- 30. Side Visor (Right)
- 31. Iron Bar 32. Radio Apparatus
- 33. Wash Basin 34. Helmets
- 35. Seat 36. Bag A
- 37. Camouflage Net 38. Bag B
- 39. Wood Case 40. Jerrycan Stay
- 41. Water Tank A 42. Water Tank B
- 43. Tool Box 44. Water Bottle
- 45. Jerrycan A 46. Jerrycan B
- 47. Figure B

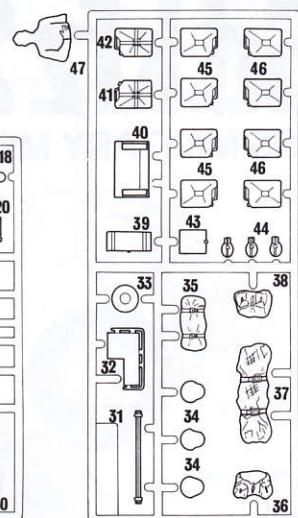
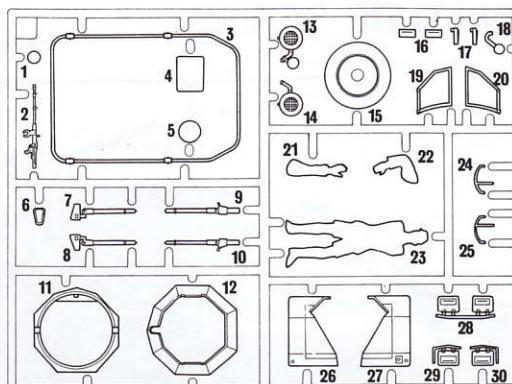
B PARTS

- 1. Shovel 2. Front Hook, Right
- 3. Tyres, Inside 4. Wheel Covers
- 5. Front Hook, Left 6. Drum A
- 7. Number Plate
- 8. Engine Room Hatch
- 9-a. Tool Box A Right 9-b. Tool Box A Left
- 10. Drum B 11. Jack Handle
- 12. Jack 13. Pole
- 14. Side Hatch, Right 15. Side Hatch, Left
- 16. Tool Box
- 17. Rear Fender, Right 18. Rear Fender, Left
- 19. Front Mudguard 20. Tyres, Outside
- 21. Tool Box B

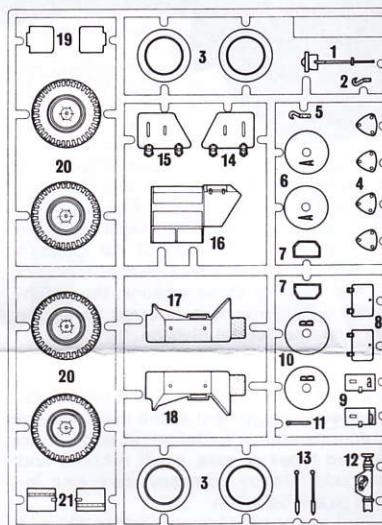
C PARTS

- 1. Front Bumper 2. Front Underguard
- 3. Wire Rope Parts
- 4. Exhaust Pipe, Left
- 5. Exhaust Pipe, Right
- 6. Rear Tie Rod 7. Front Tie Rod
- 8. Side Frame, Left 9. Rear Hook, Right
- 10. Rear Hook, Left 11. Side Frame, Right
- 12. Upright Arm 13. Fire Extinguisher
- 14. Differential & Shaft
- 15. Lead Arm B 16. Brake Rod
- 17. Lead Arm A 18. Tail Cover
- 19. Engine Rear Cover
- 20. Muffler, Left 21. Muffler, Right
- 22. Support 23. Rear Mudguard

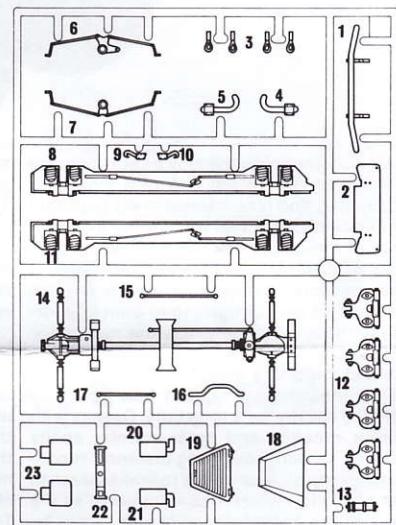
A PARTS



B PARTS

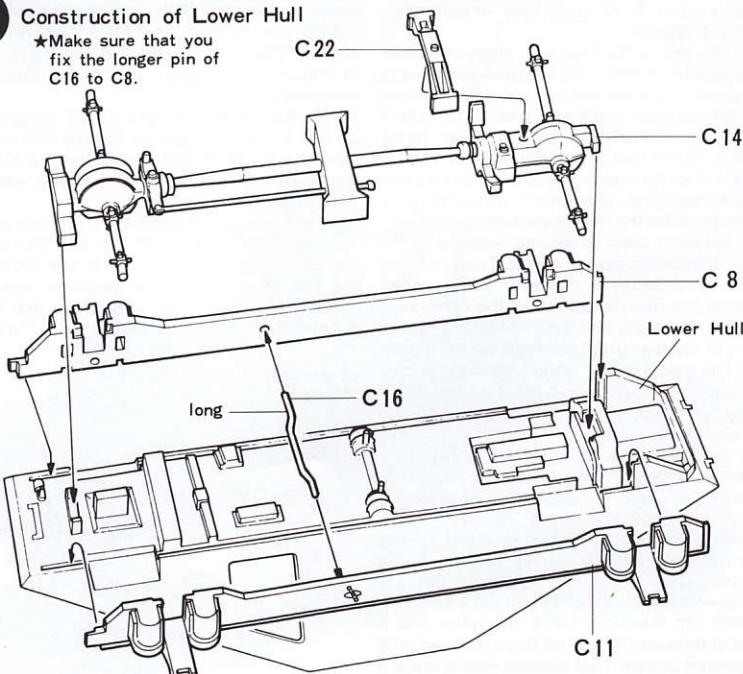


C PARTS



1 Construction of Lower Hull

★ Make sure that you fix the longer pin of C16 to C8.



★ Study the instructions and photographs before commencing assembly.

★ You will need a sharp knife, a pair of tweezers, a file, and a pair of pliers.

★ Do not break parts away from sprue, but cut off carefully with a pair of pliers.

★ Use glue sparingly. Use only enough to make a good bond. Apply cement to both parts to be joined.

★ When you paint the model.....

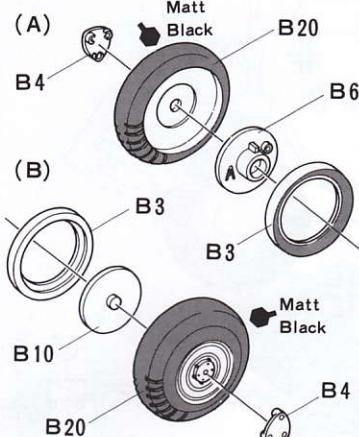
Small parts and internal parts should be painted while still on the sprue.

This mark shows the colour this part should be painted.

2 (Installation of Wheels)

Wheel Parts B6 are marked with letter "A" and Wheel Parts B10 with letter "B". Check these marks when installing Wheels.

Construction of Wheels

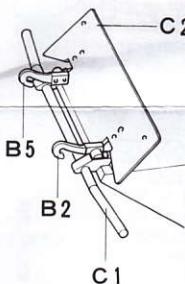


★ Make each 2 sets.

3 (Fixing of Tie Rods)

Front and Rear Tie Rods are alike in shape. Make sure of their number and fix.

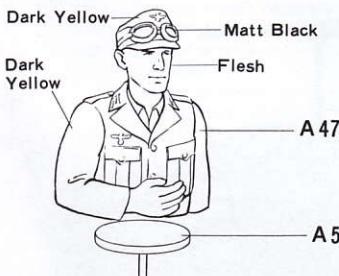
Front Hook Fixing Illustration



4 (Fixing of Upper Hull)

First, fix A4, A5, A32 and Model Figure B. Then, firmly cement the Upper Hull to the Lower Hull. Since the hull halves have large contact surface, it is recommended to hold them together for a while by means of adhesive tape or the like.

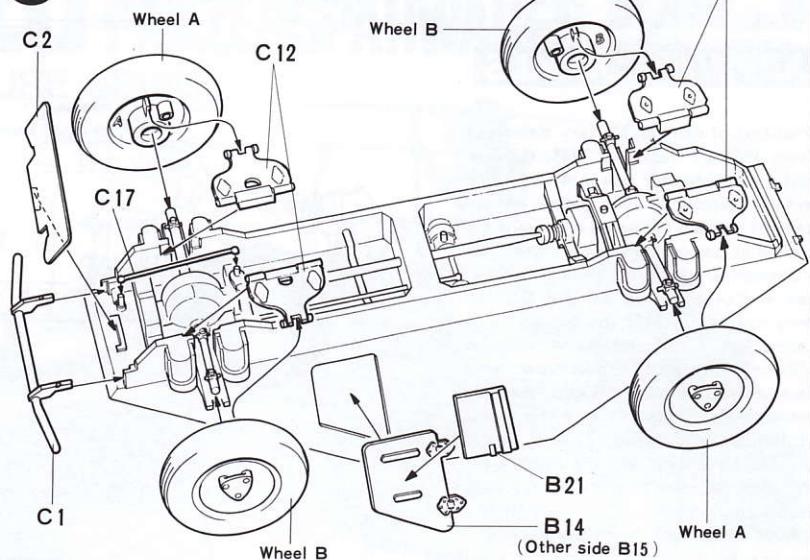
Construction and Painting of Figure B



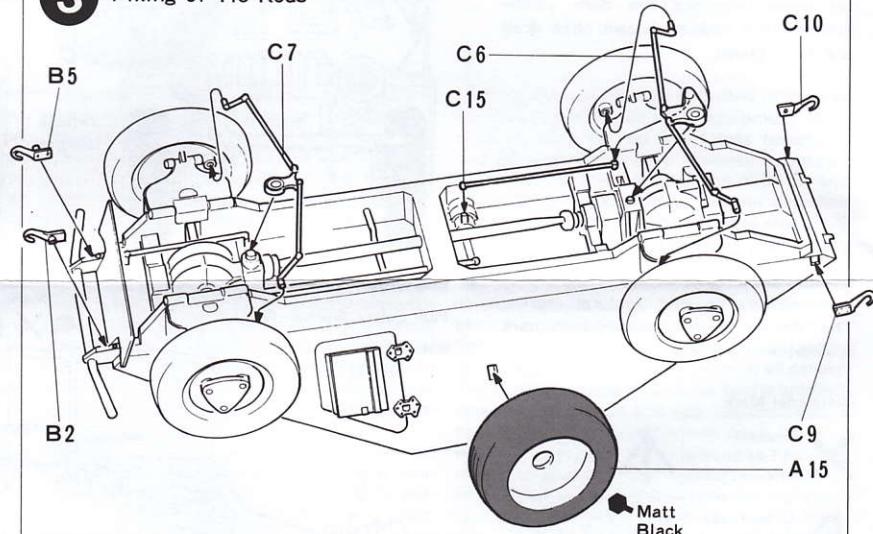
TAMIYA FARBKATALOG IN DEUTSCHER SPRACHE

Letzte Neuheiten von Autos, Booten, Tanks und Schiffen. Im Tamiya-Katalog in deutscher Sprache sind alle Modelle, ob Motorisierte, Ferngesteuerte oder Museum-Qualitäts-Modelle, farbig abgebildet.

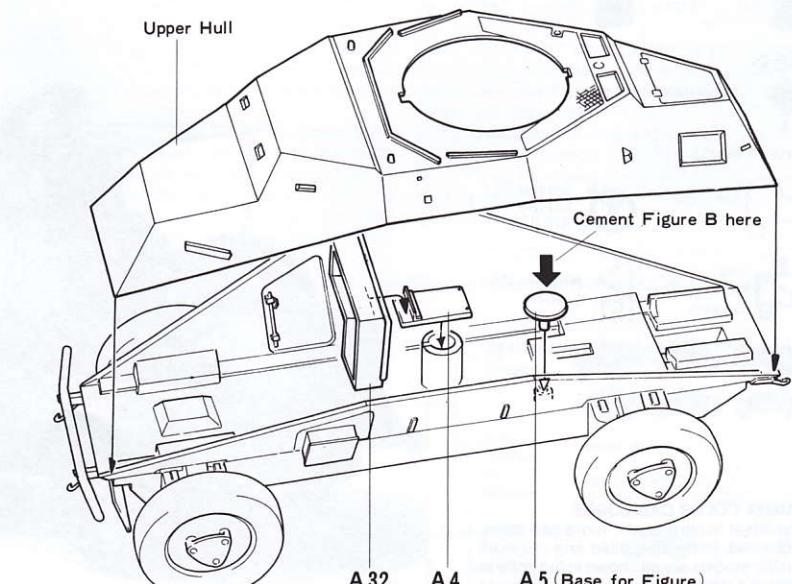
2 Installation of Wheels



3 Fixing of Tie Rods



4 Fixing of Upper Hull

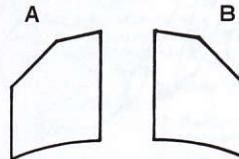


5 (Fixing of Fenders)

Before cementing, fit each fender in place by way of trial to make sure where to apply cement.

6 (Construction of Turret)

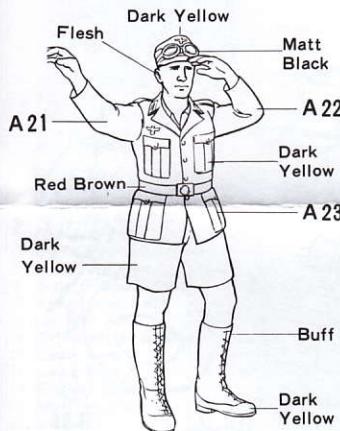
Cement meshes to Turret Mesh Frames. The Frames should be fixed to the Turret in an open or closed position. If you are to put Model Figure in the turret, it is better to keep them open. Mesh patterns drawn to scale are given below. Reproduce them on other paper to facilitate use.



7 (Fixing of Upper Hull Parts)

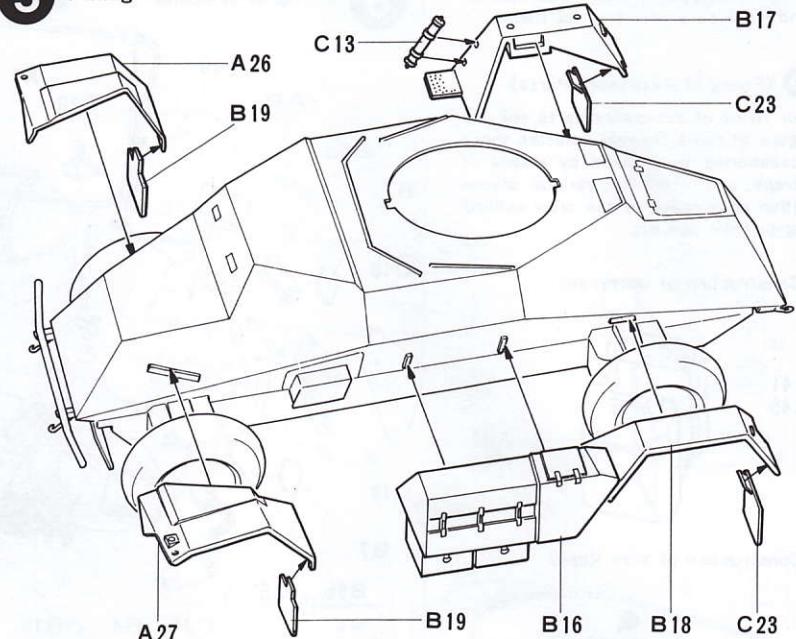
Before fixing parts, check their number and make sure where to fix them. Put the Turret in the direction shown in the figure and then turn it.

(Construction and Painting of Figure A)

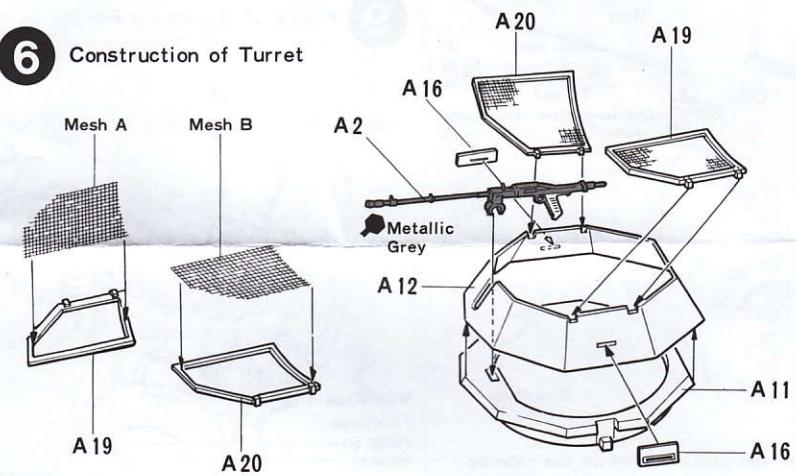


★Let the right arm of Figure A touch Antenna. See the box top.

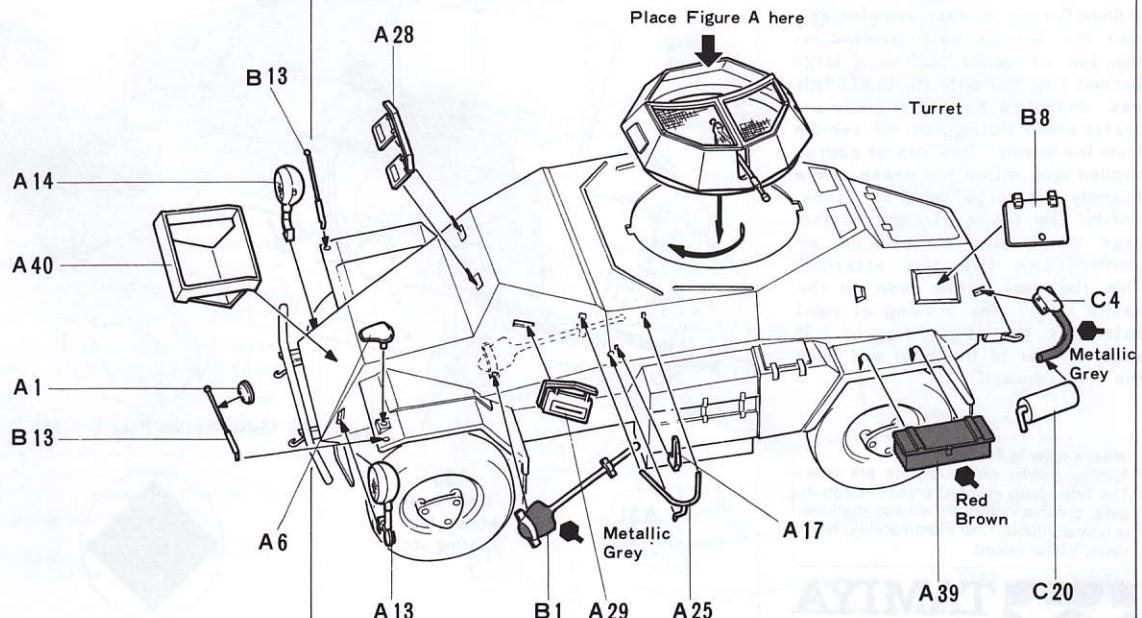
5 Fixing of Fenders



6 Construction of Turret



7 Fixing of Upper Hull Parts



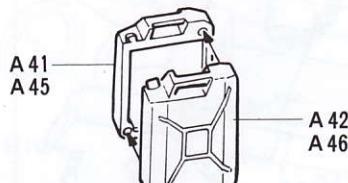
⑧ <Fixing of Antenna>

Before fixing parts, check their number and make sure where to fix them.

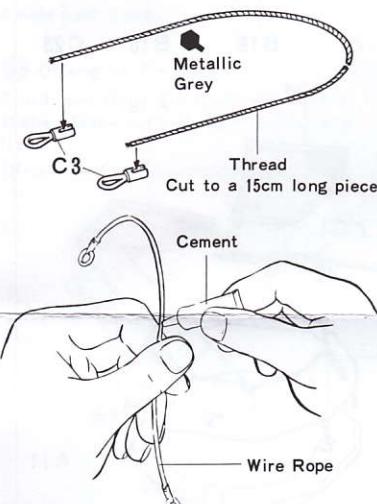
⑨ <Fixing of Accessory Parts>

For fixing of accessory parts, see the figure at right. On real vehicles, these accessories were fixed by means of straps and wires to various places within easy reach of the crew according to their use, etc.

《Construction of Jerrycan》



《Construction of Wire Rope》

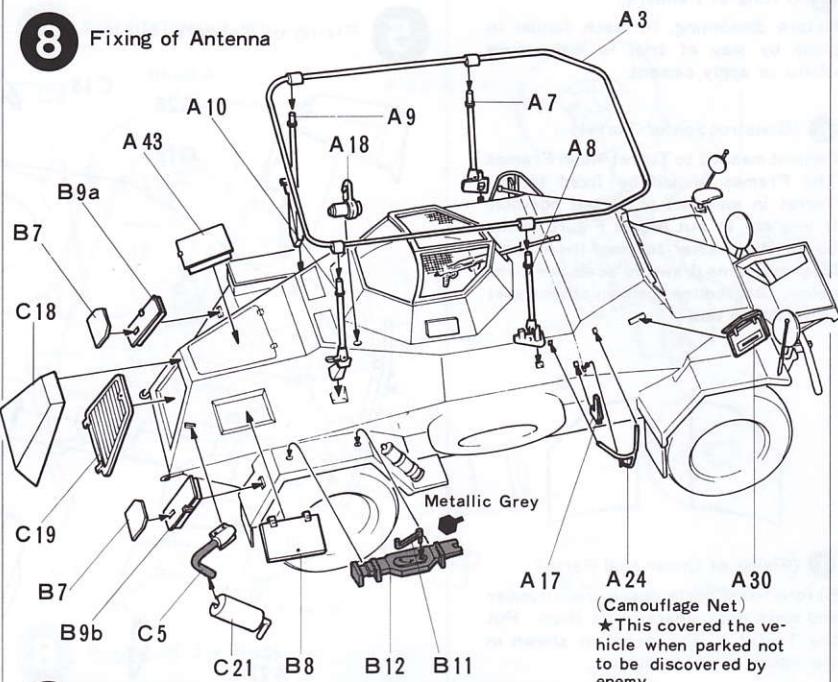


★If you apply cement to the rope before stretching it around Bumper, the rope will be added the natural curve when dried.

when dried.
〈Air Identification Flag〉

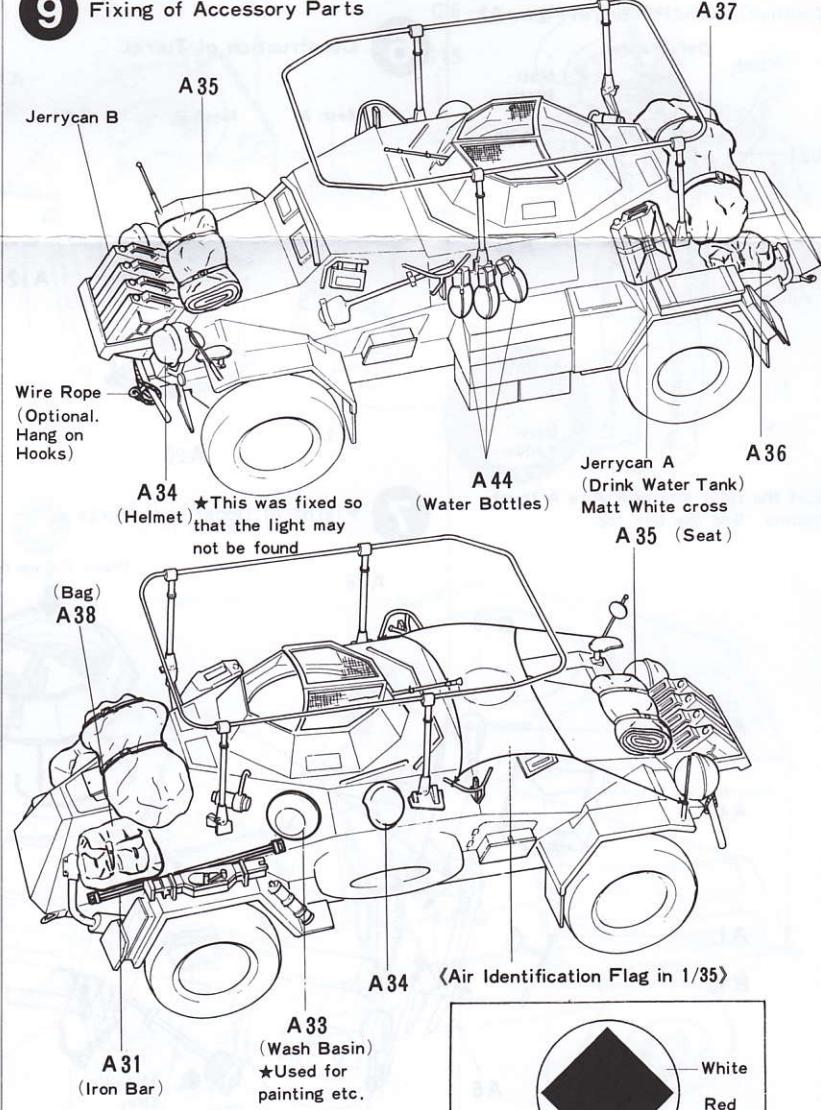
★ Some German military vehicles carried the German mark painted on the top of upper hull or a large German flag tied onto the hull. This was attached so that friendly aircrafts could distinguish the vehicle from the enemy. This was of course applied only within the areas where friendly air force took air superiority. The figure at right on this page shows one to which an air identification flag was attached. This flag was often seen on the battle field. The drawing at right bottom is the actual flag in 1/35 scale. Refer to this plan and make the flag yourself.

8 Fixing of Antenna

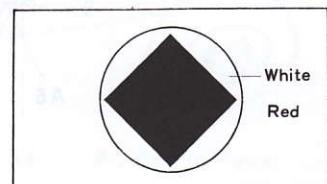


(Camouflage Net)
★ This covered the vehicle when parked not to be discovered by

9 Fixing of Accessory Parts



A-34 <Air Identification Flag in 1/35>



What's New in Finishes?

What's New in Finishes?
Tamiya acrylic model paints are new. The final, long awaited breakthrough in safe, durable paints for all applications is now available. Low Flammability, Non-toxic, Water based.

PAINTING



APPLYING DECALS

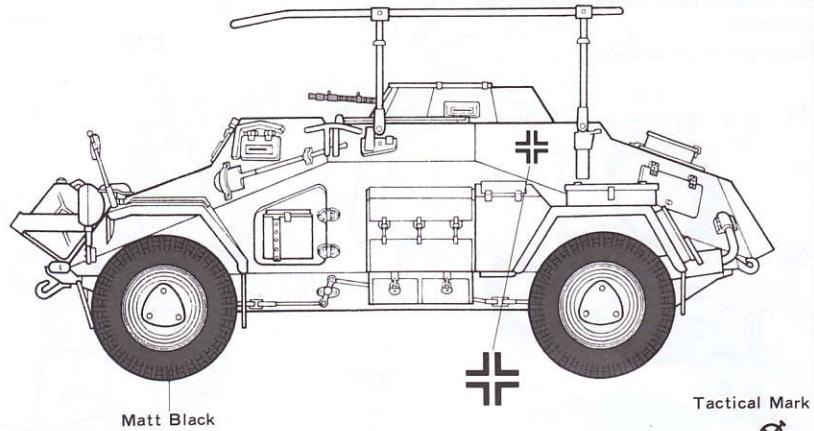
Painting of German Military Vehicles

From 1935 to February 1943, German military vehicles for use in Africa wore uniform painting of dark yellow, camouflage of reddish brown on a dark yellow ground or camouflage of dark green on a German Grey ground, while those for use in Europe were painted German Grey overall. In 1942, the two kinds of camouflage for Africa were replaced with camouflage of reddish brown on a dark yellow ground. In Russia, German vehicles were painted in water paint of flat white in winter.

On 18th February 1943, the military authorities decided to accept only dark yellow as the basic colour. Field forces applied other colours on the basic colour according to the terrains and gave various camouflage patterns. Applied for camouflage on the dark yellow ground were reddish brown, olive drab and dark green.

African Theatre

Hull colour: Dark Yellow



Marking of Sdkfz 223

German marking generally consisted of divisional marks and tactical marks. The "Afrika Korps" used its own mark in addition to them.

Divisional Mark

	Wehrmacht 5th Tank Division European Theatre		Africa Corps 15th Tank Division
	Africa Corps 21st Tank Division		Wehrmacht Tank Grenadier Division "Gross-deutschland"
	1st Tank Division		2nd Tank Division



Africa Corps

Tactical Marks

	Armoured Vehicles Unit		Motorcycle Infantry Battalion
	Tank Reconnaissance Battalion		Battalion H.Q. Vehicle

Combination of divisional and tactical marks are free.

TAMIYA COLOR CATALOGUE

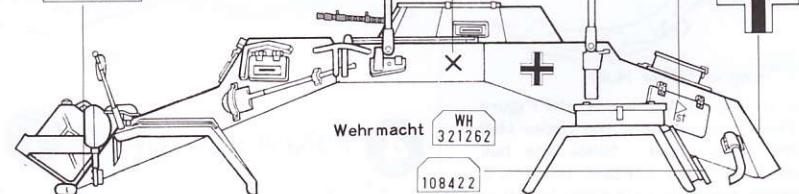
The latest in cars, boats, tanks and ships. Motorized, radio controlled and museum quality models are all shown in full color in Tamiya's latest catalogue. At your nearest hobby supply house.

European Theatre

Hull colour: German Grey

Wehrmacht

WH-321262
-108422



■エッチング製砲塔上部ネットの取り付け / ■Attaching photo etched mesh-door
 ■Anbringen der fotoätzten Gittertür / ■Fixation des portes en grille photo-découpée



注 意

- 工具の使用には十分注意してください。特にナイフ、ニッパーなどの刃物によるケガや事故に注意してください。
- 接着剤や塗料は使用する前にそれぞれの注意書きをよく読み、指示に従って正しく使い、使用する時は換気に十分注意してください。
- 小さなお子様のいるお家の工作はやめてください。小さな部品の飲み込みや、ビニール袋をかぶっての窒息などの危険な状況が考えられます。



CAUTION

- When assembling this kit, tools including knives are used. Extra care should be taken to avoid personal injury.
- Read and follow the instructions supplied with paint and/or cement, if used (not included in kit). Use plastic cement and paints only.
- Keep out of reach of small children. Children must not be allowed to put any parts in their mouths, or pull vinyl bag over their heads.



VORSICHT

- Beim Zusammenbau dieses Bausatzes werden Werkzeuge einsch-

ließlich Messer verwendet. Zur Vermeidung von Verletzungen ist besondere Vorsicht angebracht.

●Wenn Sie Farben und/oder Kleber verwenden (nicht im Bausatz enthalten), beachten und befolgen Sie die dort beiliegenden Anweisungen. Nur Klebstoff und Farben für Plastik verwenden.

●Bausatz von kleinen Kindern fernhalten. Verhüten Sie, daß Kinder irgendwelche Bauteile in den Mund nehmen oder Plastiktüten über den Kopf ziehen.

PRECAUTIONS

●L'assemblage de ce kit requiert de l'outillage, en particulier des outils de modélisme. Manier les outils avec précaution pour éviter toute blessure.

●Lire et suivre les instructions d'utilisation des peintures et ou de la colle, si utilisées (non incluses dans le kit). Utiliser uniquement une colle et des peintures spéciales pour le polystyrène.

●Garder hors de portée des enfants en bas âge. Ne pas laisser les enfants mettre en bouche ou sucer les pièces, ou passer un sachet vinyl sur la tête.

《用意する工具》

Tools recommended
Benötigtes Werkzeug
Outilage nécessaire



メタルプライマー
Metal primer
Metall-Grundierung
Apprêt pour métal



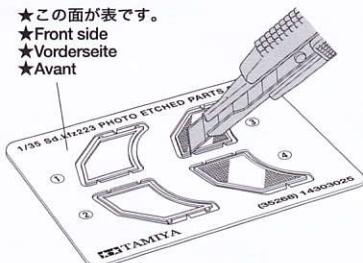
クラフトナイフ
Modeling knife
Modellbaumesser
Couteau de modéliste



瞬間接着剤
Instant cement
Sekundenkleber
Colle rapide

1

- ★この面が表です。
★Front side
★Vorderseite
★Avant



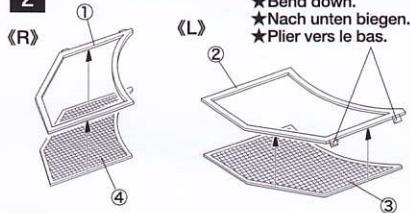
1 エッチングパーツをクラフトナイフ等で切り離します。①と④、②と③を接着するのでわからなくならないように注意します。

1 Cut off photo etched parts using modeling knife. ① is to be attached with ④, and ② with ③, be careful not to mix up parts.

1 Die fotoätzten Teile mit dem Modellbaumesser abschneiden. ① wird mit ④ angebracht und ② mit ③. Darauf achten, die Teile nicht zu vermischen.

1 Détailler les pièces photo-découpées avec un couteau de modèle. ① doit être collé sur ④ et ② sur ③. Attention de ne pas intervertir les pièces.

2



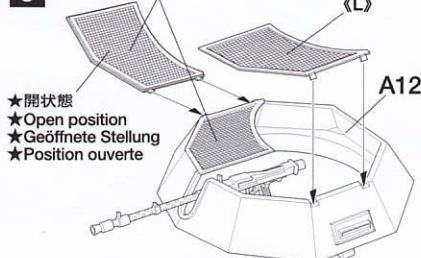
2 切り離したエッチングパーツ①と④、②と③の裏面同士を瞬間接着剤(タミヤ瞬間接着剤をご利用ください)で接着します。図の①と②の折り曲げ部分はA12の側面の角度に合わせて折り曲げます。また塗装は別売のタミヤメタルプライマーを吹き付けてからおこなってください。

2 Attach ① to ④ and ② to ③ by applying instant cement (use Tamiya instant cement) to the reverse side of each part. Bend down the tabs on ① and ② to align with A12. If painting, apply metal primer (available separately) before painting.

2 Tel ① an ④ und ② an ③ jeweils an der Rückseite der Teile mit Sekundenkleber verbinden (Tamiya Sekundenkleber verwenden). Die Laschen an ① und ② nach unten biegen, damit sie mit A12 fließen. Zum Lackieren vorher (getrennt erhältliche) Metallgrundierung auftragen.

2 Fixer ① sur ④ et ② sur ③ avec de la colle rapide (colle Tamiya CA Cement) appliquée sur les parties du verso de chaque pièce à mettre en contact. Plier les ergots sur ① et ② pour les aligner avec A12. Appliquer de l'apprêt pour métal (disponible séparément) avant peinture.

3



3 本文説明書の組み立て⑥のA19とA20のかわりに、A12に瞬間接着剤で取り付けます。またこの時、開閉を選択してください。実車の砲塔上部ネットは閉状態を基準にして170度付近まで開くようです。

3 Choose doors in open or closed position before cementing and adjust tab angle accordingly. Note real mesh-doors only opened up as far as 170°. Cement the doors to A12 in replace of A19 and A20 as shown in step ⑥.

3 Entscheiden Sie sich vor dem Verkleben für geöffnete oder geschlossene Türen und stellen Sie den Winkel an den Laschen entsprechend ein. Beachten, dass die echten Gittertüren nur bis 170° zu öffnen waren. Die Türen an A12 wie in Schritt ⑥ beschrieben anstelle von A19 und A20 festkleben.

3 Choisir entre position ouverte ou fermée avant de coller les portes et ajuster l'angle des ergots de fixation en fonction. Attention, l'angle d'ouverture des portes sur le véritable véhicule était de 170°. Coller les portes sur A12 à la place des pièces A19 et A20 montrées à l'étape ⑥.