

# GERMAN Sd.kfz.250/3 GREIF



In April 1931 a French expedition was set up to see if half-tracks could survive a strenuous journey from Beirut to Indochina (now Vietnam). Seven Citroen-Kegresse half-tracks set out travelling through Gobi and China. The expedition was watched with interest by other Countries who were mechanising their troops and who were anxious to see if the half-tracks had the ability and endurance to complete this long journey. In March 1932 most of the seven vehicles reached their destination and thereby enhanced French prestige and proved that half-tracks were very reliable. Germany by that time had already formed plans for the development of various half-tracks varying from one ton to 18 tons. In 1934 the first experimental 1-ton half-track was completed by Demag and was called D11-1. Various experimental models were built and in 1939 model D-7 was made for the German army and was given the name Sd.Kfz 10. Its weight had been increased to 4.9 tons and it was supplied mainly to anti-aircraft and anti-tank units. It was powered by a Maybach HL42 417cc engine giving 100 hp. A light-armoured personnel carrier was developed by putting armour on the 1-ton half-track and the official name of this vehicle was Sd.Kfz 250. The front armour was 14.5mm thick and the side armour was 8mm thick. It had one pair of track rollers less than the original vehicle as the first torsion bar shaft had been removed to reduce the vehicle's weight. This half-track was also powered by the Maybach HL42. The production model called 250/1 had a weight of 5.38 tons and a maximum speed of 60 km/h with a fuel capacity of 140 litres and a radius of action of 175-300 km. The front

wheels were not driven and the track portion was nearly three-quarters the length of the body. This reduced the ground contact pressure, improved the mobility on soft ground and increased the tractive force. However, this feature made the vehicle difficult to turn and a complicated mechanism was installed in which the steering gear was interlocked with the differential and brake. When the steering angle was below 15° the differential worked, when it exceeded 15° either of the tracks was braked, as in a tank. The Sd.Kfz 250 was remodelled into various vehicles such as radio command cars and ammunition carriers. It was also adapted to carry AA guns and a 80 mm motor. Total production is said to have been 5900. The most famous half-track of them all was the Sd.Kfz 250/3 Greif which was used by General Rommel in North Africa and was used in the battle of Tobruk in June 1942. The word "Greif", in English "Griffin", was painted on its sides to represent the winged animal of Greek mythology. "Adler", meaning Eagle, was painted on another of Rommel's vehicles.

\* \* \*  
Im April 1931 startete eine französische Expedition mit sieben Citroen-Kegresse Halbkettenfahrzeugen, um von Beirut aus durch die Wüste Gobi und China bis Indochina zu fahren. Mit grossem Interesse wurde diese Reise von anderen Nationen beachtet, man sah eine Lösung der Mechanisierung der Truppen voraus, sollten diese Fahrzeuge die Strapazen und Hindernisse überstehen. Im März 1932 erreichten die meisten Fahrzeuge das Ziel und Frankreich sah darin die Bestätigung, dass Fahrzeugе solcher Bauart eben für militärische Zwecke bestens

geeignet wären.

Deutschland hatte zu dieser Zeit bereits feste Pläne für Halbkettenfahrzeuge von 1 to bis 18 to. Der erste Prototyp war 1934 ein 1 Tonne von Demag, weitere folgten und 1939 war der Type D-7 für die Armee fertig und erhielt den Namen Sd.Kfz.10. Gewicht 4.9 to und ausgerüstet als Flak und Pack Zugwagen mit dem Maybach Motor HL42 417cc und 100 PS.

Auf dem 1 to Fahrgestell wurde ein leichtgepanzelter Mannschaftstransporter entwickelt mit der Bezeichnung Sd.Kfz.250. Die Frontpanzerung betrug 14.5mm und an den Seiten 8mm. Um das Gewicht auf 5.38 to zu bringen, wurden die ersten Laufäder weggelassen. Mit dem Maybach HL42 wurde eine Geschwindigkeit von 60km/Std. erreicht, Aktionskreis 175-300km je nach Gelände mit Tankinhalt von 140 Litern. Die Fronträder wurden nicht angetrieben, der Kettenantrieb ging über 3/4 der Fahrzeuglänge.


Dies verringerte den Bodendruck, verbesserte die Fahreigenschaft auf weichem Grund und die Antriebskraft. Diese Ausführung machte aber das Fahrzeug sehr schwierig zum Drehen und ein komplizierter Mechanismus wurde eingebaut um die Steuerung mit Differential und Bremsen zu verbinden. War der Steuwinkel unter 15°, arbeitete das Differential, über 15°, wurde durch Bremsen der Ketten wie in einem Panzer gelenkt.

Das Sd.Kfz.250 wurde in vielen Abarten gebaut, als Funkwagen, Munitionswagen, Mörser, und Flakwagen und erreichte eine Produktion von ca. 5900 Fahrzeuge.

Das bekannteste Fahrzeug war das Sd.Kfz. 250/3 Greif von General Rommel in Nordafrika in der Schlacht von Tobruk im Juni 1942.

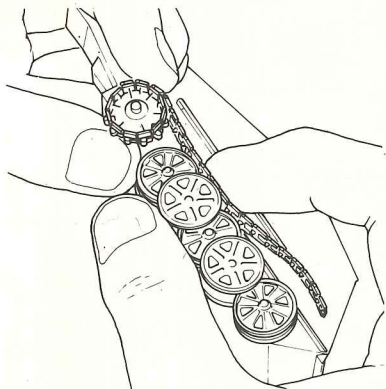


- ★ Study the instructions and photographs before commencing assembly.
- ★ You will need a sharp knife, a screwdriver, a file and a pair of pliers.
- ★ Do not break parts away from sprue, but cut off carefully with a pair of pliers.
- ★ Use cement sparingly. Use only enough to make a good bond. Apply cement to both parts to be joined.
- ★ Vor Beginn die Bauanleitung studieren und den Nummern nach die Elemente zusammenbauen.
- ★ Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abwickeln, Teile vor Kleben zusammenhalten, auf genauen Sitz achten. Nicht zuviel Klebstoff verwenden. Kleine Teile hält man mit Pinzette fest.
- ★ Abziehbilder vorsichtig von der Unterlage im Wasser abschieben, auf richtigen Sitz achten und gut trocknen lassen.

 This mark shows colour.  
Zeichen für Bemalung.

### 3 <<Construction of Track A>> <<Kettenmontage A>>

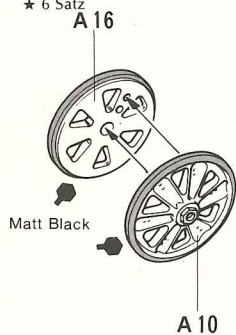
Fit track to drive sprocket first. Then push track little by little with your fingers to make the track sag realistically.  
Kette zuerst am Antriebszahnrad auflegen, dann Stück für Stück weiter auflegen und mit Finger eindrücken.



Remove flash with knife or similar instrument.  
Spritzrückstände mit Messer entfernen.

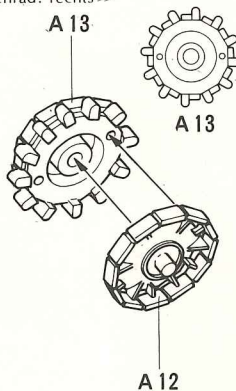
## 1 Construction of Wheels Räder

<<Road Wheel>>  
<<Laufrad>>  
★ Make 6 sets.  
★ 6 Satz

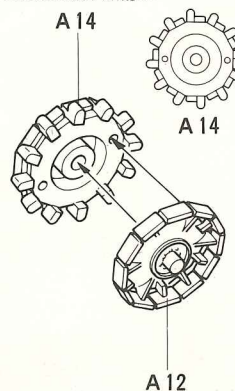


★ Be careful of the direction of the right and left cogs when assembling each sprocket.  
★ Bei jedem Zahnrad auf die Richtung, rechts und links achten.

<<Sprocket Wheel: right>>  
<<Kettenrad: rechts>>

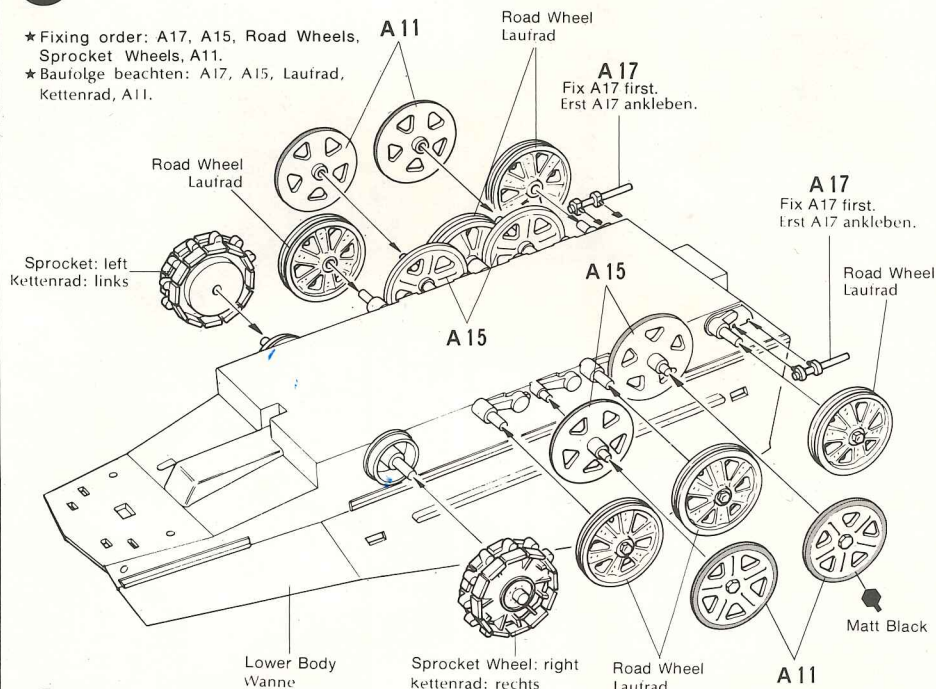


<<Sprocket Wheel: left>>  
<<Kettenrad: links>>



## 2 Fixing of Wheels Einbau der Räder

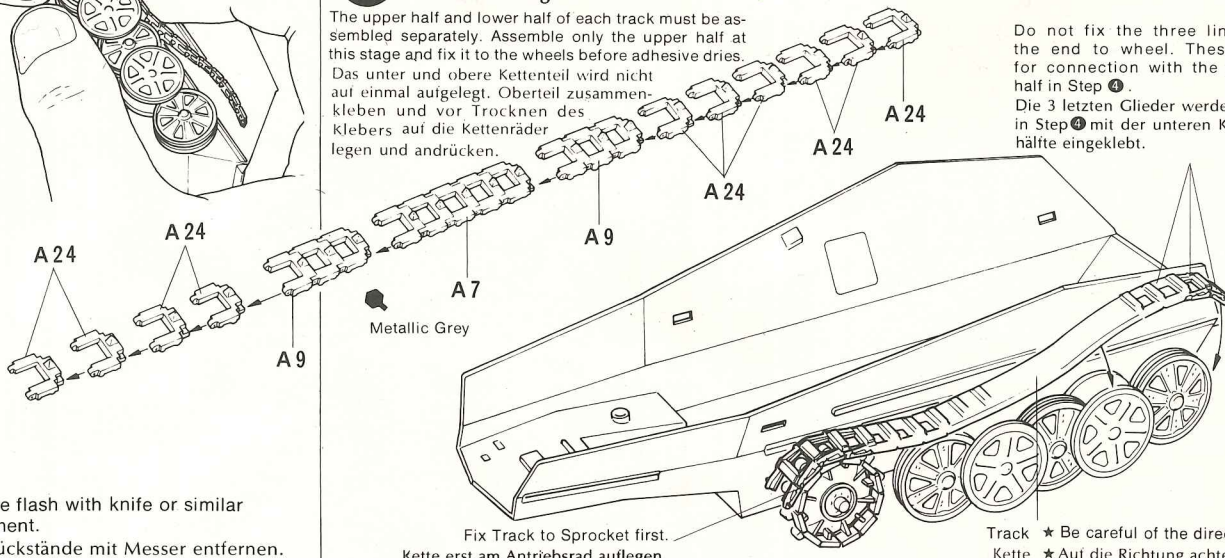
★ Fixing order: A17, A15, Road Wheels, Sprocket Wheels, A11.  
★ Baufolge beachten: A17, A15, Laufrad, Kettenrad, A11.



## 3 <<Construction of Track A>> <<Kettenmontage A>>

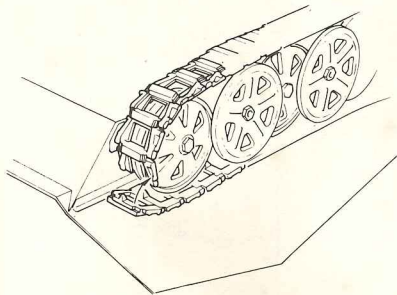
The upper half and lower half of each track must be assembled separately. Assemble only the upper half at this stage and fix it to the wheels before adhesive dries.  
Das unter und obere Kettenteil wird nicht auf einmal aufgelegt. Oberteil zusammenkleben und vor Trocknen des Klebers auf die Kettenräder legen und andrücken.

Do not fix the three links at the end to wheel. These are for connection with the lower half in Step 4.  
Die 3 letzten Glieder werden erst in Step 4 mit der unteren Kettenhälfte eingeklebt.



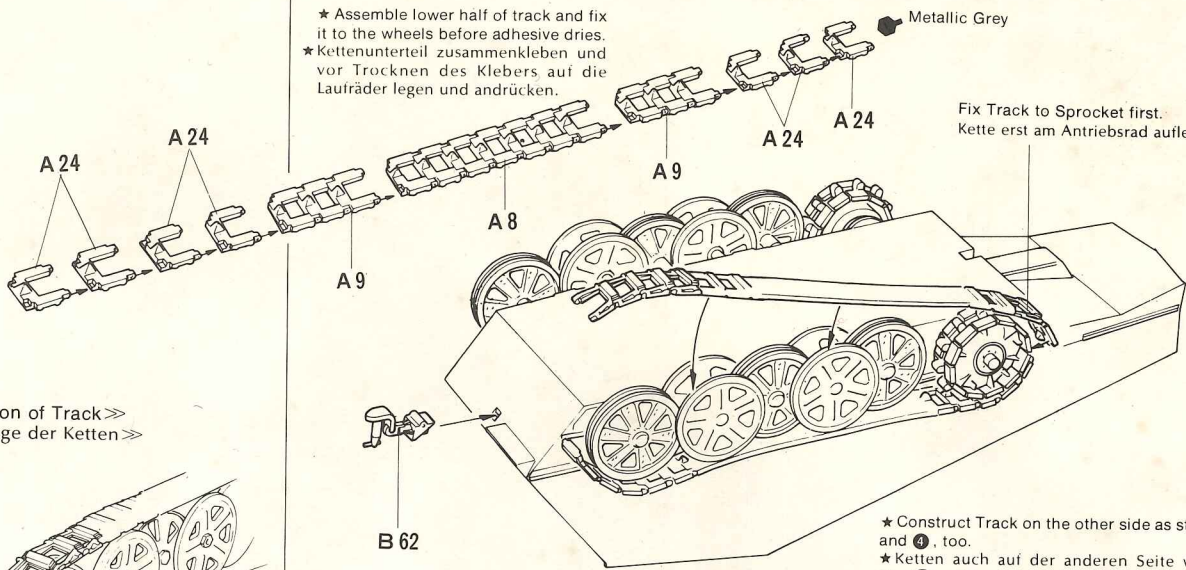
**4** <<Construction of Track B>>  
<<Kettenmontage B>>

<<Completion of Track>>  
<<Endmontage der Ketten>>



**4** Construction of Track B  
Kettenmontage B

★ Assemble lower half of track and fix it to the wheels before adhesive dries.  
★ Kettenunterteil zusammenkleben und vor Trocknen des Klebers auf die Laufräder legen und andrücken.

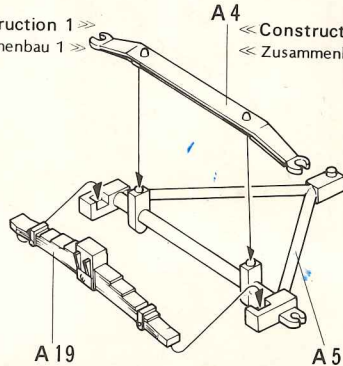


Fix Track to Sprocket first.  
Kette erst am Antriebsrad auflegen.

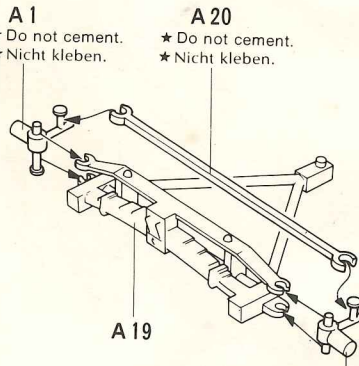
★ Construct Track on the other side as step 3 and 4, too.  
★ Ketten auch auf der anderen Seite wie in Step 3 und 4 gezeigt, anbringen.

**5** Construction of Front Suspension  
Konstruktion des vorderen Achsaufhängung

<<Construction 1>>  
<<Zusammenbau 1>>



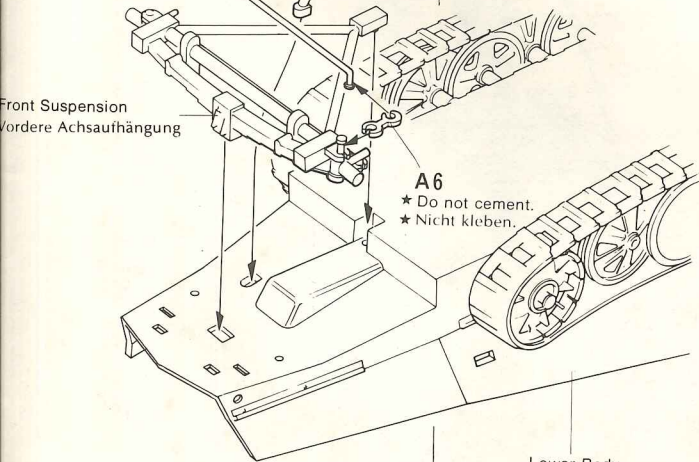
<<Construction 2>> ★ Do not cement.  
<<Zusammenbau 2>> ★ Nicht kleben.



★ Do not cement.  
★ Nicht kleben.

**6** <<Fixing of Front Suspension>>  
<<Einbau der Vordere Achsaufhängung>>

A 18 A 6 A 3  
★ Do not cement. ★ Do not cement.  
★ Nicht kleben. ★ Nicht kleben.

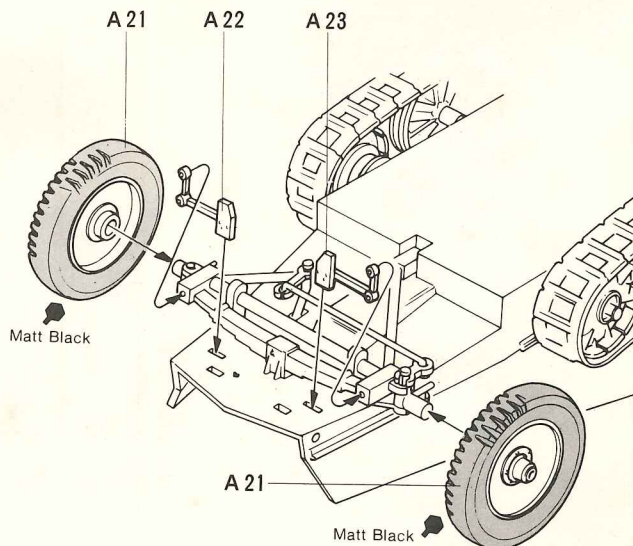


**6** Fixing of Front Suspension  
Einbau der Vordere Achsaufhängung

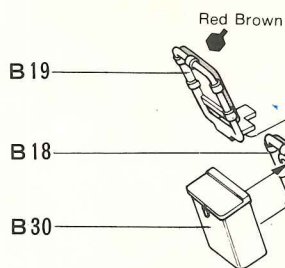
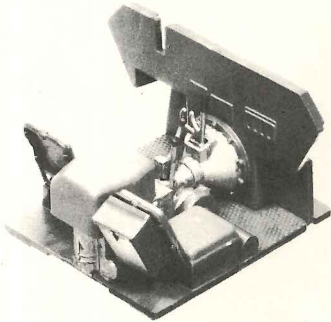
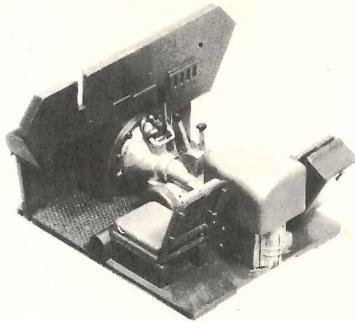
A 6  
★ Do not cement.  
★ Nicht kleben.

Lower Body  
Wanne

A 2  
★ Do not cement.  
★ Nicht kleben.



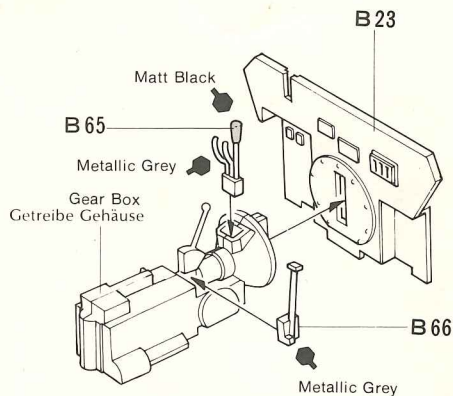
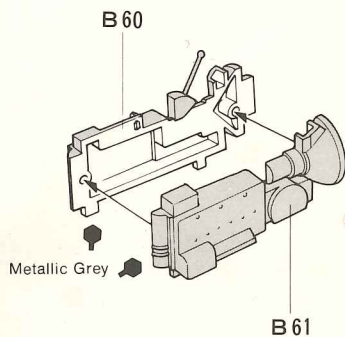
**8** <<Construction of Seats>>  
<<Konstruktion der Sitze>>



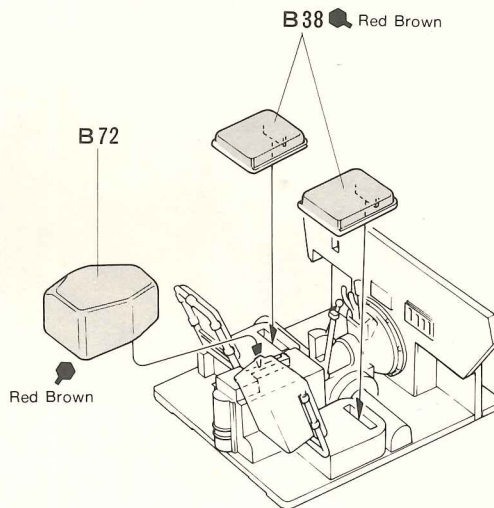
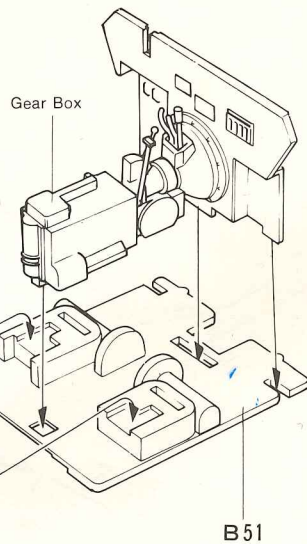
<<Painting>>  
Only use paint suitable for polystyrene plastic.  
Overall painting shown on pages 9 and 10.

<<Bemalung>>  
Da die Farben unter der englischen Bezeichnung zu erhalten sind, geben wir nur die englischen Namen an.  
**Keine Farben auf Nitrobasis verwenden!!**  
Wir übernehmen keine Haftung für Schäden die durch falsche Farbenwahl entstehen. Nur **Farben verwenden**, die für Polystyrol Plastik geeignet sind.  
Bemalung siehe Seite 9 und 10.

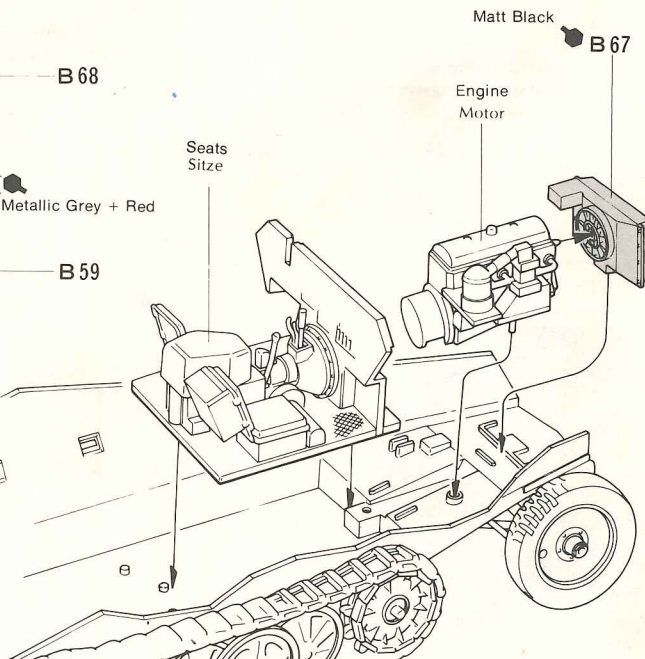
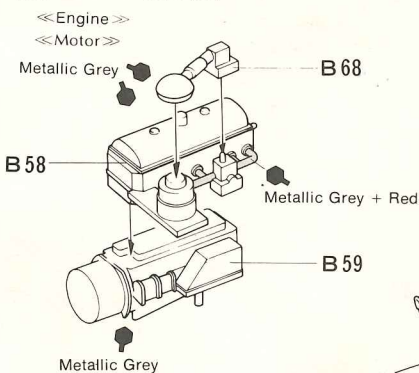
**7** Construction of Gear Box  
Konstruktion der Getriebe Gehäuse



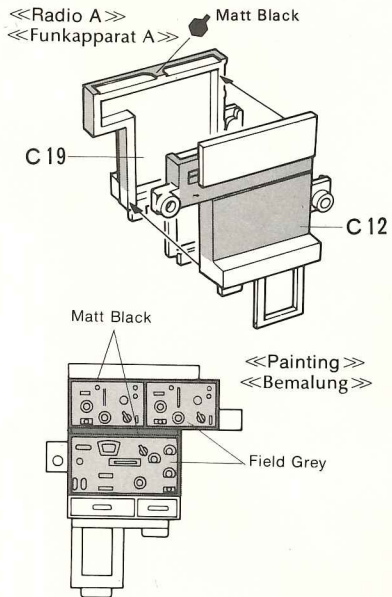
**8** Construction of Seats  
Konstruktion der Sitze



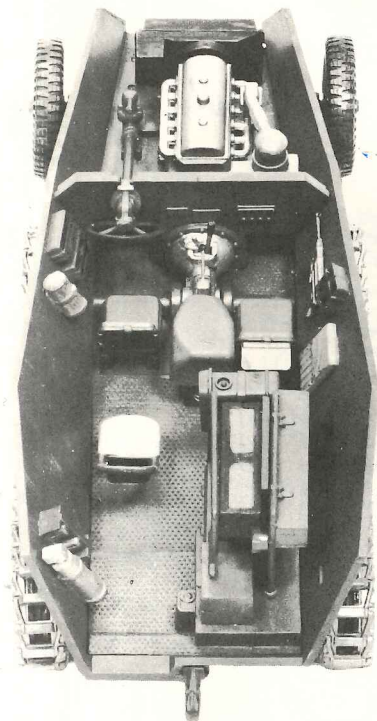
**9** Fixing of Seats  
Einbau der Sitze



**10** <<Construction of Radio Stand>>  
<<Funkgeräte>>



**11** <<Fixing of Inner Parts>>  
<<Fahrzeug-Innenteile>>



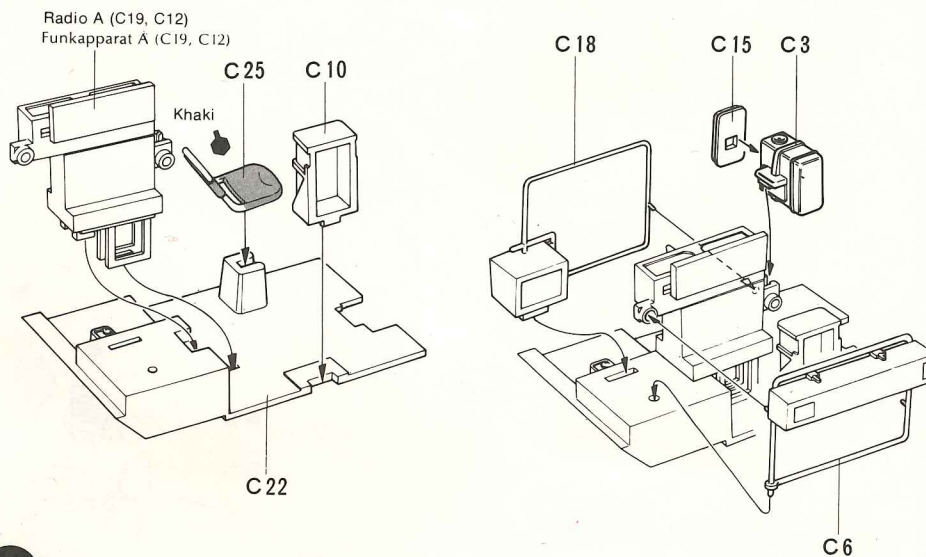
<<How to make Antenna>>  
<<Antennenbau>>



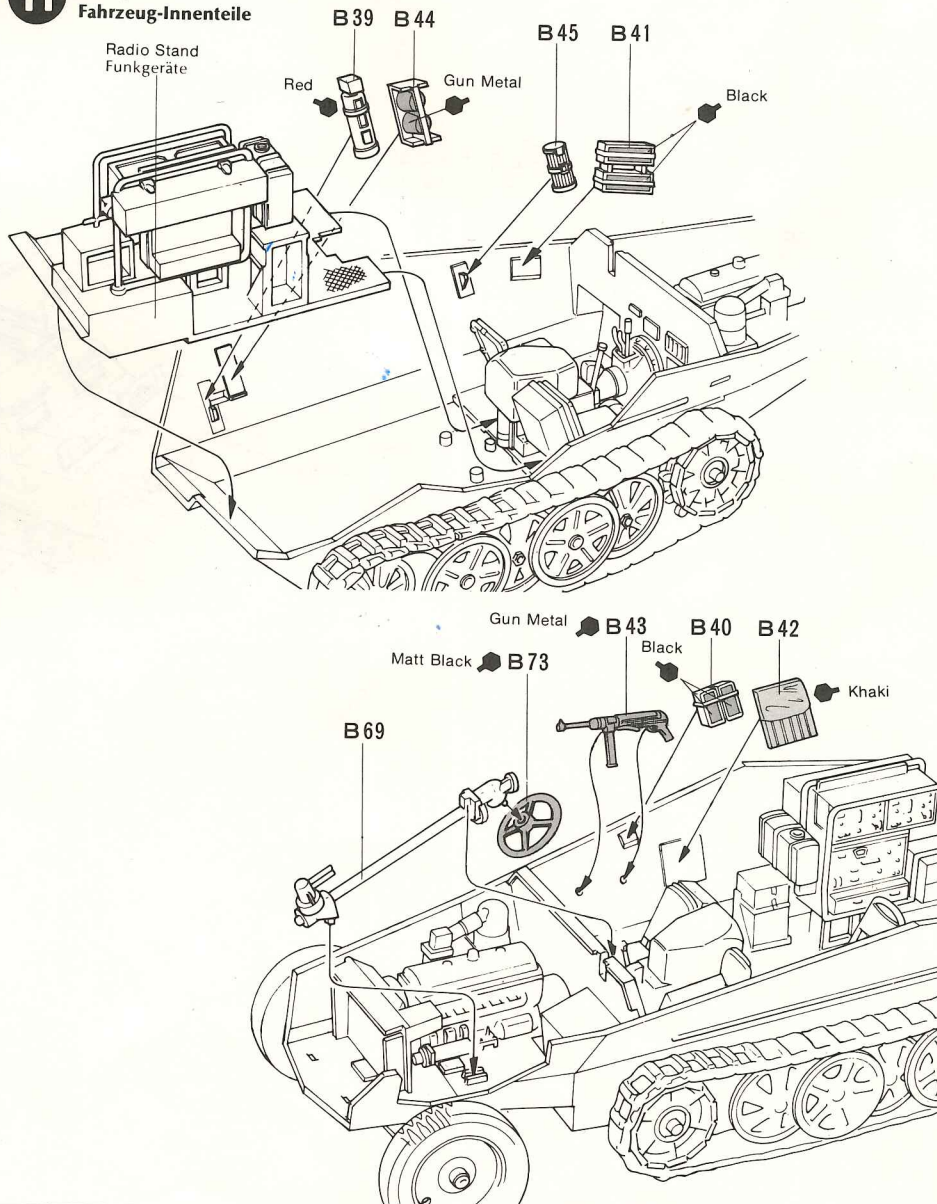
★ Heat a length of sprue and when melted a little, stop heating to stretch it. Hold for about 15 seconds to cool.

★ Ein Stück vom Spritzling über Kerze gerade biegen. Dann in der Mitte im Drehen erhitzen. Wenn Plastik schmilzt, nicht weiter erhitzen und langsam aus einanderziehen und ca. 15 Sek. abkühlen.

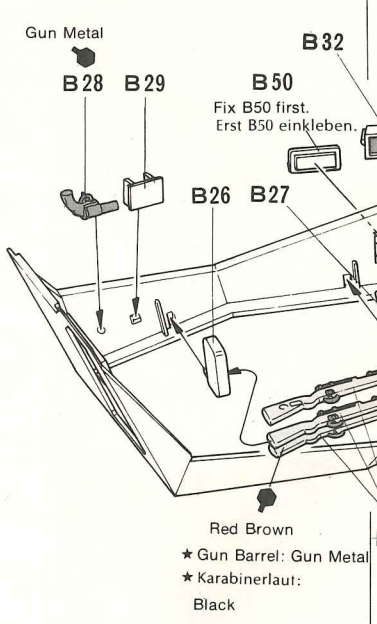
**10** Construction of Radio Stand  
Funkgeräte



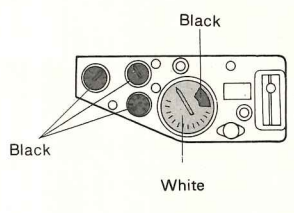
**11** Fixing of Inner Parts  
Fahrzeug-Innenteile



**12** <<Construction of Upper Body Inside>>  
<<Konstruktion der Innenteile>>

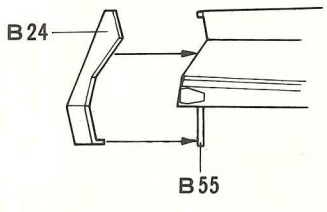


<<Painting of B36>>  
<<Bemalung der B36>>

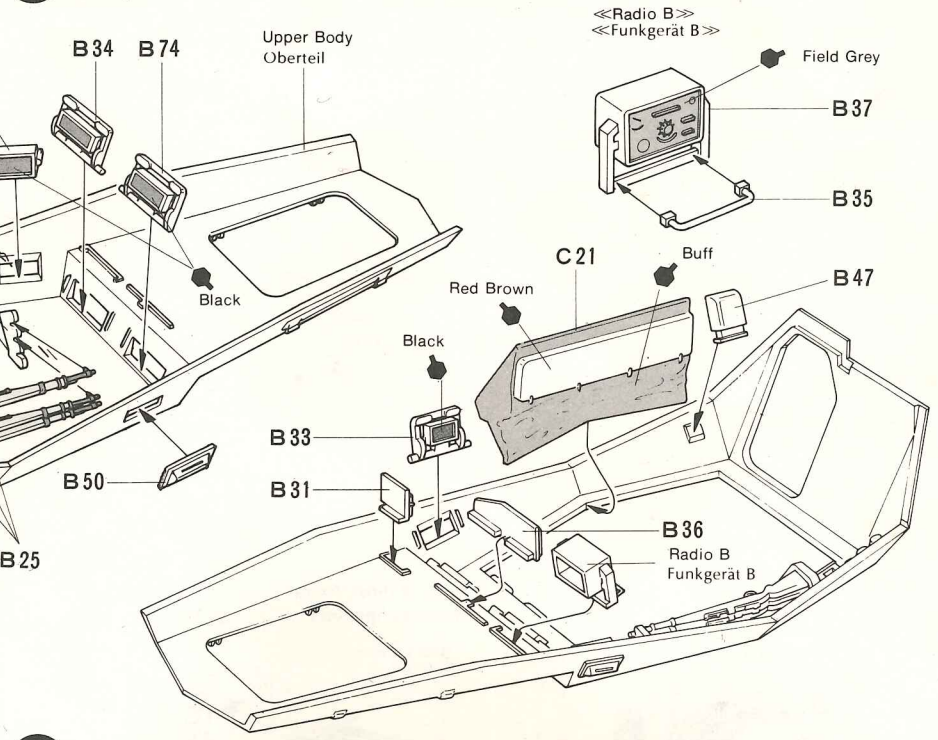


**13** <<Fixing of Upper Body>>  
<<Einbau Oberteil>>

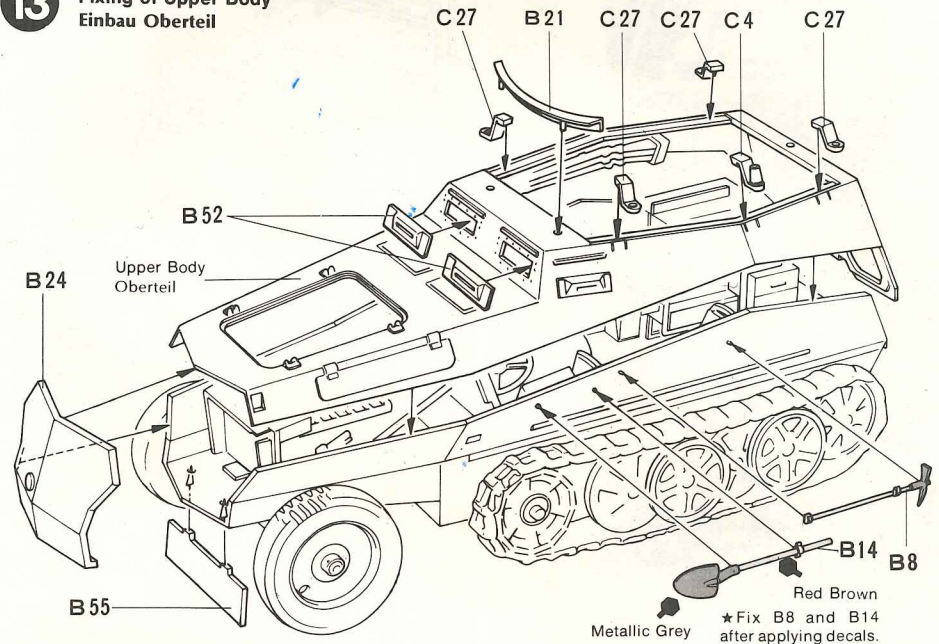
<<Fixing of B24>>  
<<Einbau der B24>>



**12** Construction of Upper Hull Inside  
Einbau der Innenteile

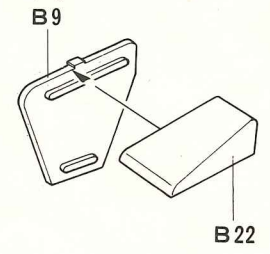


**13** Fixing of Upper Body  
Einbau Oberteil

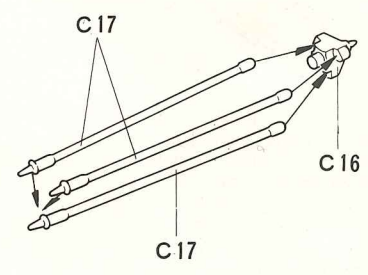


**14** Construction of Tools  
Werkzeug und Geräte

<<Tool Box>>  
<<Werkzeugkasten>>

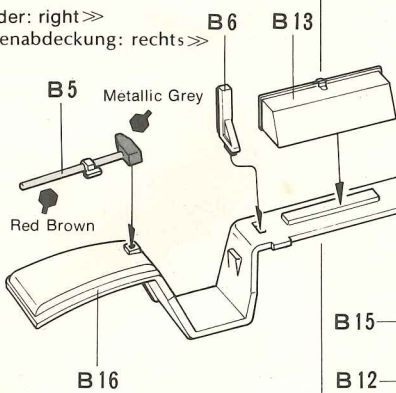


<<Tripod>>  
<<Dreibein>>



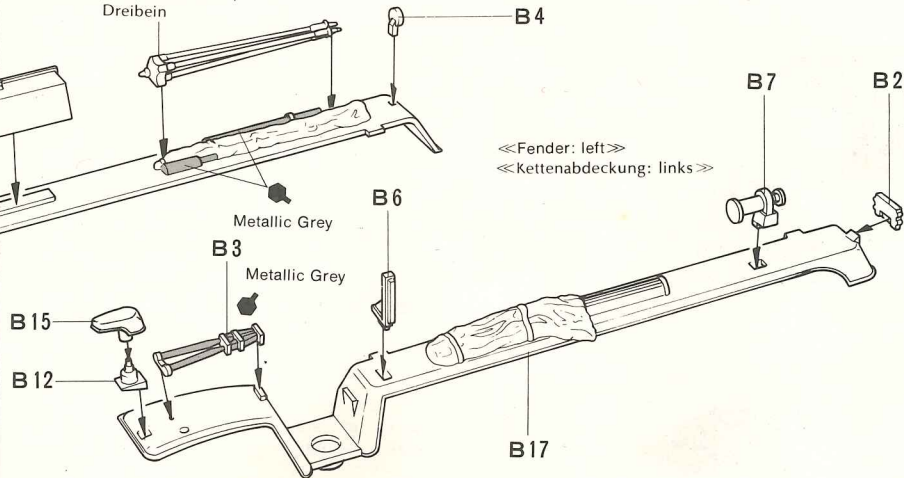
**15** <<Construction of Fender>>  
<<Kettenabdeckung>>

<<Fender: right>>  
<<Kettenabdeckung: rechts>>



**15** Construction of Fender  
Kettenabdeckung

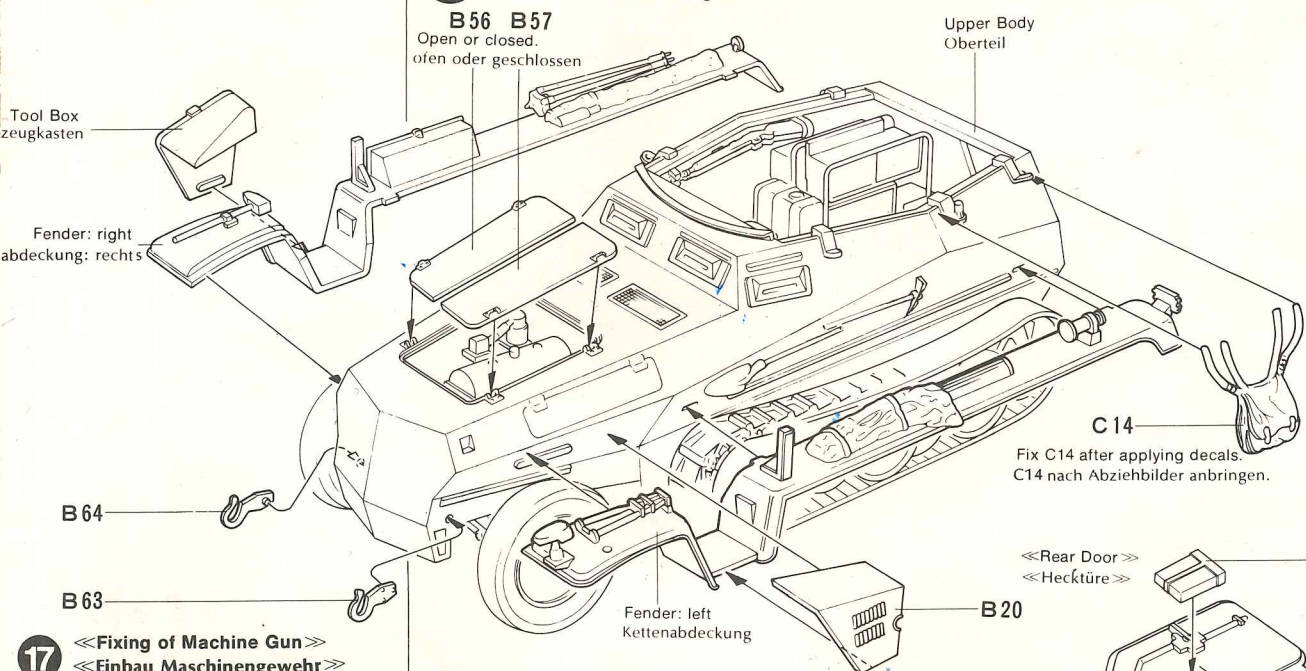
Tripod (C16, C17)  
Dreibein



<<Fender: left>>  
<<Kettenabdeckung: links>>

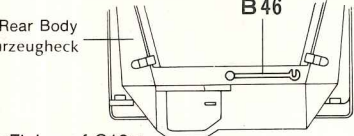
**16** Fixing of Fender  
Einbau Kettenabdeckung

B56 B57  
Open or closed.  
offen oder geschlossen



**17** <<Fixing of Machine Gun>>  
<<Einbau Maschinengewehr>>

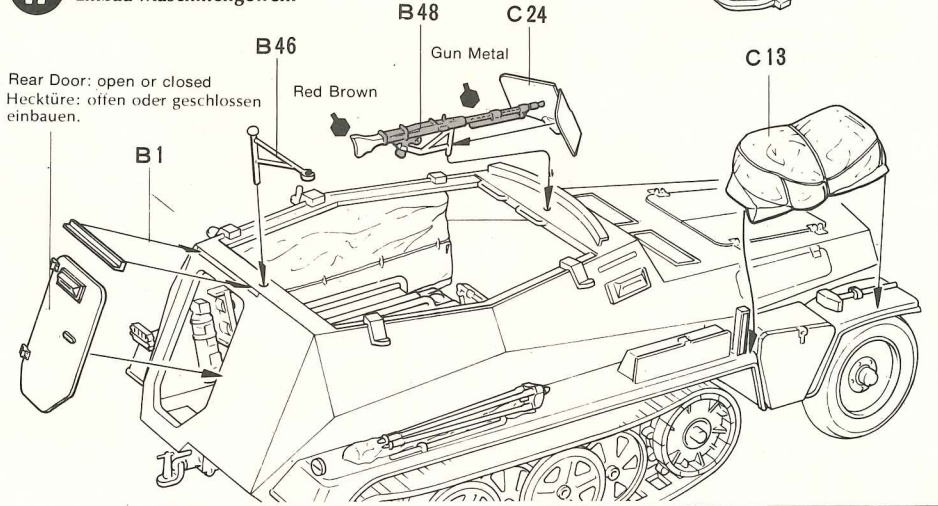
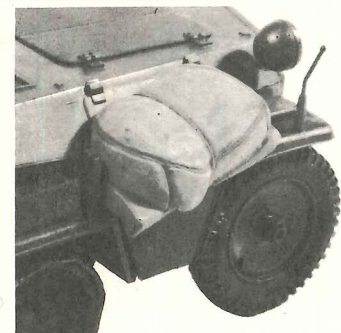
<<Top view for B46>>  
<<Draufsicht B46>>

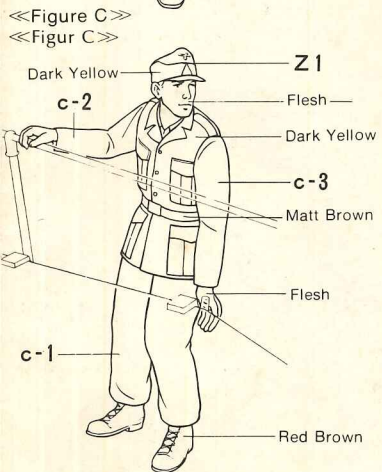
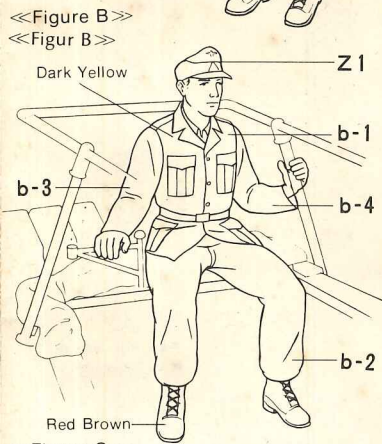
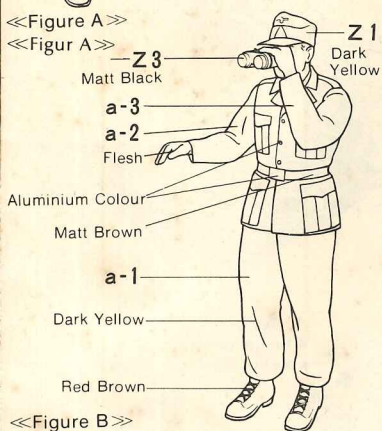
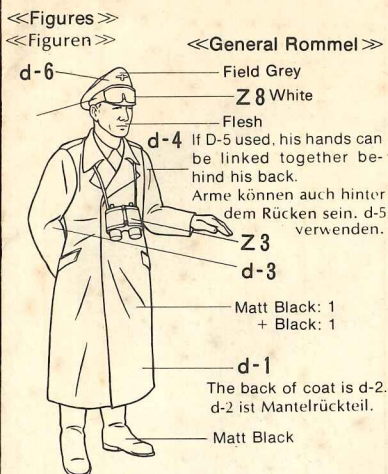


**17** Fixing of Machine Gun  
Einbau Maschinengewehr

Rear Door: open or closed  
Hecktüre: offen oder geschlossen  
einbauen.

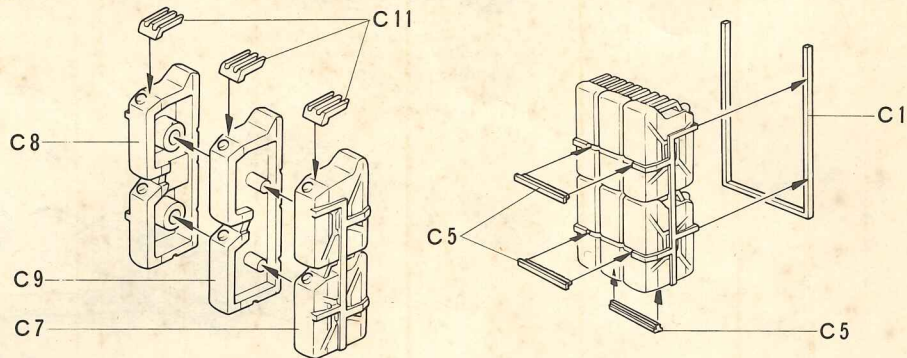
<<Fixing of C13>>  
<<Einbau der C13>>





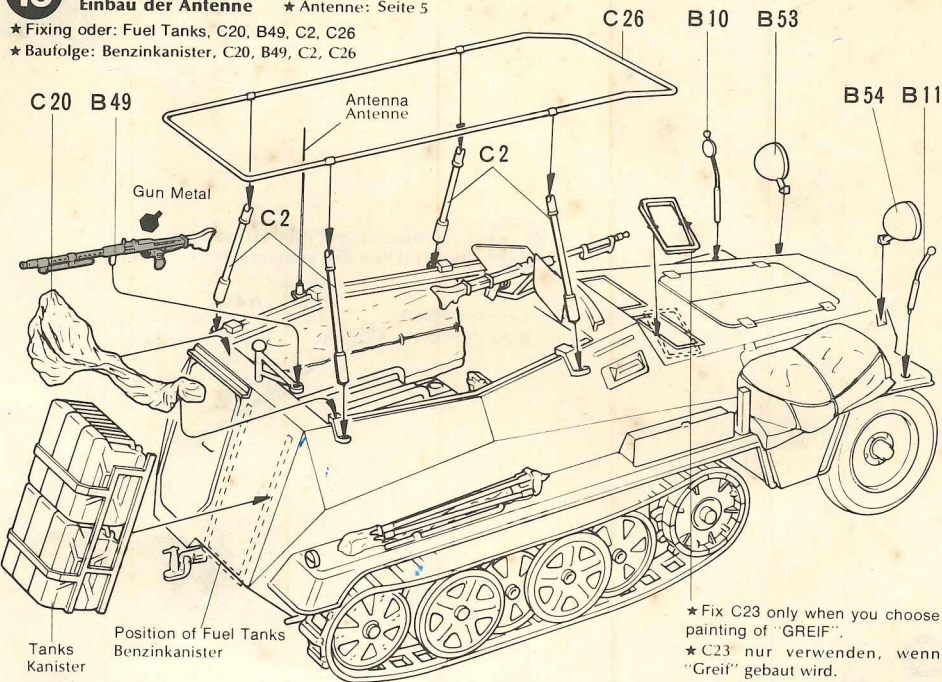
★ You may use unnecessary Z parts as accessories on the body.  
★ Unbenötigte Z Teile können auch in das Fahrzeug gelegt werden.

**18 Construction of Fuel Tanks**  
**Benzinkanister**



**19 Fixing of Antenna**  
**Einbau der Antenne**

★ Antenna: refer to page 5  
★ Antenne: Seite 5  
★ Fixing order: Fuel Tanks, C20, B49, C2, C26  
★ Baufolge: Benzinkanister, C20, B49, C2, C26



★ Fix C23 only when you choose painting of "GREIF".  
★ C23 nur verwenden, wenn "Greif" gebaut wird.

«Fixing of Figures»  
«Einbau der Figuren»

★ The picture on page 1 also serves as a good reference.  
★ Siehe auch Bild auf Seite 1.





# MILITARY MINIATURES

1/35 SCALE

D.A.K. GERMAN AFRICA CORPS

German Sd Kfz 250/3  
Rommel's Half Track  
& 11 Afrika Korps Soldiers

MM213A



**TAMIYA**  
Model Rectifier Corp



# PAINTING APPLYING DECALS

## <<Painting of the Sd.Kfz 250/3>>

The colour scheme of German Military Vehicles was changed in February 1943. Before that, their basic colour was panzer grey, but all the vehicles in the African theatre of war were repainted dark yellow except the interior of most of them which remained panzer grey. In February 1943, the Army gave orders that all the existing colours should be discontinued and dark yellow should be used as the basic colour. In various theatres of war, some vehicles were camouflaged by applying dark green or red brown onto the dark yellow bodies.

## <<Bemalung des Sd.Kfz.250/3>>

Bis Februar 1943 waren alle deutschen Militär-Fahrzeuge einheitlich in "Panzergrau" bemalt. Die in Afrika eingesetzten Fahrzeuge wurde dort aussen dunkelgelb umgespritzt.

Ab Februar 1943 wurde die dunkelgelbe Farbe als Einheitsfarbe eingeführt. Zur Tarnung wurden dunkelgrüne oder/und rotbraune Farbflächen aufgemalt oder aufgespritzt.

## <<Appearance of right side of the Greif>>

On the left side of the vehicle there were the red letters "GREIF" with white borders. On the right side, the letters consisted of the white borders only and were not painted red. A similar decal as that used for the left side is enclosed in the kit as a spare.

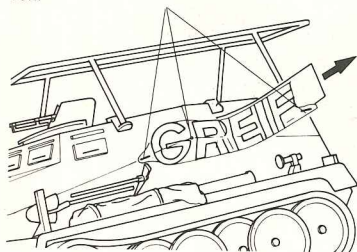
Auf der linken Fahrzeugseite stand "Greif" in roter Farbe mit weissem Rand. Auf der rechten Seite nur weiss. Siehe Kartonsbilder.

## <<Decal Application>>

- ① Remove all dust, dirt and adhesive smears with a wet cloth before applying any decal.
- ② The decal to be applied should be removed beforehand from the decal sheet. Leave some excess around decal as this aids application.
- ③ Dip the decal in tepid water for about 10 seconds and then remove it onto a cloth, such as a towel.
- ④ Hold backing sheet edge and slide the decal onto the model.
- ⑤ Wet the decal with a little water on your finger so that it can be moved more easily into position.
- ⑥ Press the decal down with a soft cloth, such as a towel, to remove air bubbles. Continue dabbing gently with the cloth until all excess water has been fully absorbed.

When a decal has to be applied to a surface which is uneven or curved, press the decal down with a hot towel so that the decal will fit the contours perfectly.

Apply decals making sure reference points are in the correct position.



## <<Gen. Rommel's Favourite Vehicle, GREIF>>

Basic colour: Panzer Grey/Camouflage colour: Dark Yellow

★ Gen. Rommel had two 250/3 type vehicles whose names were Greif and Adler. Greif and Adler were written in the same position on each body.

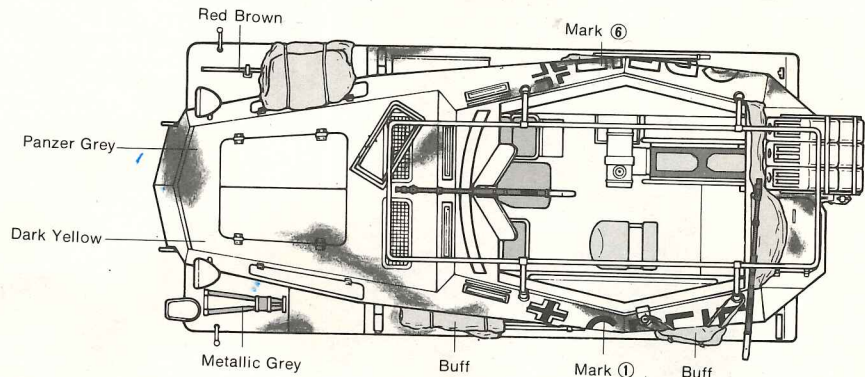
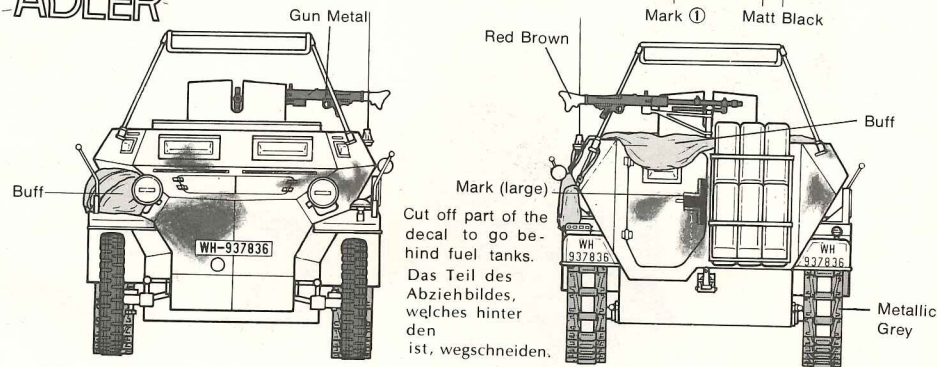
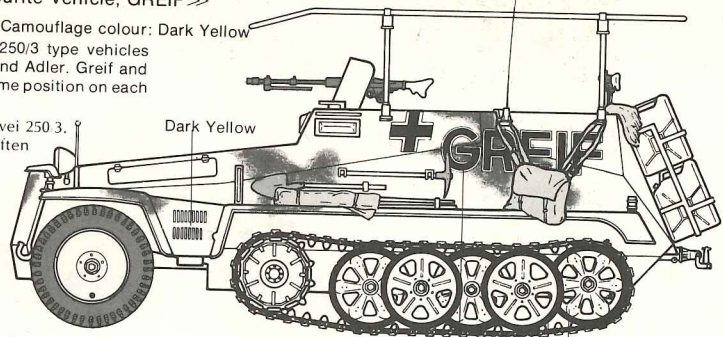
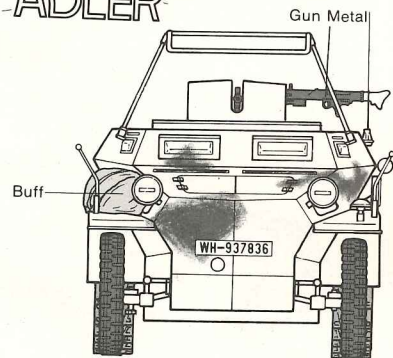
★ General Rommel hatte zwei 250.3. Greif und Adler Die Schritten waren an gleicher Stelle angebracht.

Mark ③: left : links

ADLER

Mark ④: right : rechts

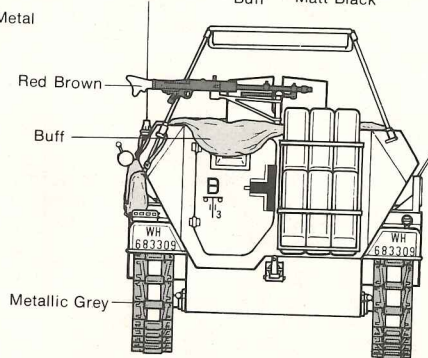
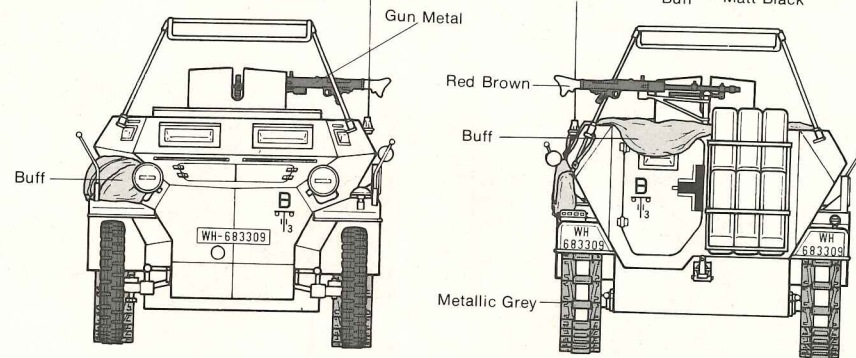
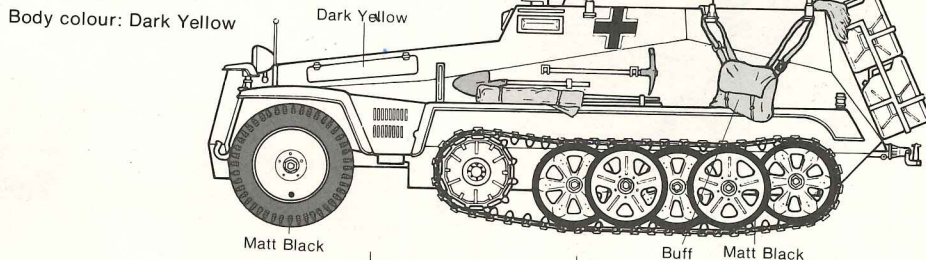
ADLER



<<Vehicle belonging to 3rd Company in Mechanised Artillery Battalion, 21st Division, Afrika Korps>>

<<3.Komp.mot.Ari.Batt.21.Div. Afrika Korps>>

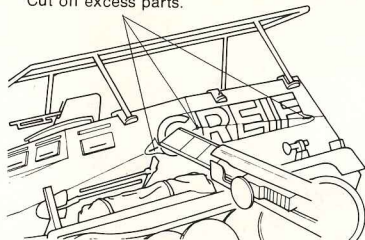
Body colour: Dark Yellow



<<Abzeihbilder>>

- ① Bild erst genau ausschneiden.
- ② In Wasser legen, wenn Bild abhebt, auf trocknen Stoff legen.
- ③ 1-2 Minuten später, Papier an Ecken halten und Bild abschieben auf Modell.
- ④ Etwas Wasser auf Finger und Bild auf genauen Platz schieben.
- ⑤ Mit Stoff Luftblasen herausdrücken, überflüssiges Wasser aufsaugen. Wenn Fläche uneben oder geboggen ist, Bild mit nassem heissem Tuch aufdrücken.

Cut off excess parts.



Cut off the excess transparent portion around decal. The decal must then not be touched until dry.

<<Marks>>

Number Plates

WH-937836	WH 937836	WH 937836
WH-937939	WH 937939	WH 937939
WH-683309	WH 683309	WH 683309
WH-312945	WH 312945	WH 312945

Divisional Marks

X 5th Panzer Division	 24th Panzer Division.
A Afrika Korps 15th Panzer Division	B Afrika Korps 21st Panzer Division
Y 16th Panzer Division	 Tank Grenadier Division
K Vehicle belonging to 1st Panzer Division under the control of Gen. Kleist.	

Tactical Marks

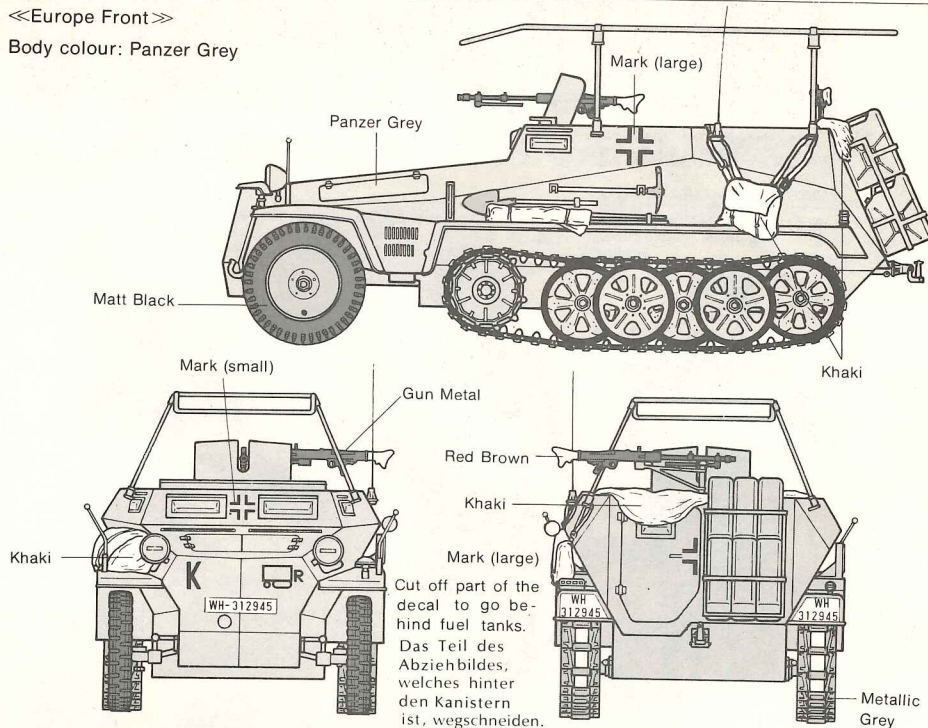
 Tank Reconnaissance Unit	 Armoured Vehicles Unit
 Mechanised Artillery Battalion	 Mechanised Artillery Battalion 3rd Company
 Battalion Hq. Vehicle	 Tank Regiment Hq. Vehicle

<<Marks of Helmets>>



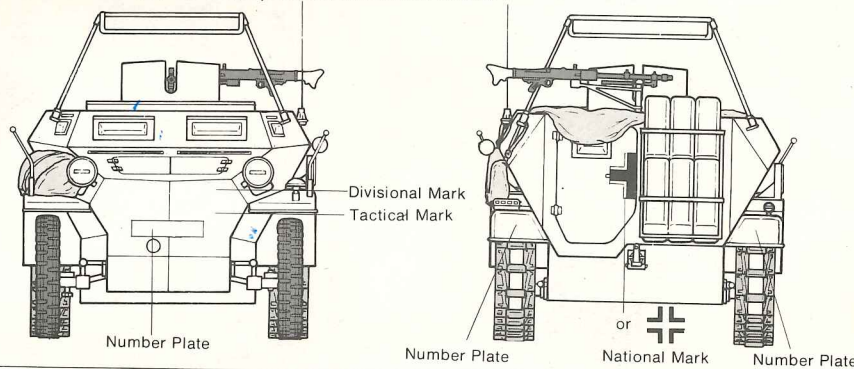
<<Europe Front>>

Body colour: Panzer Grey



<<Standard Type>>

\* Apply national marks in the same positions as shown above.



<<Europe Front>>



Completion

# MILITARY MINIATURES

1/35 SCALE

D.A.K. GERMAN AFRICA CORPS

## Painting Instructions

**1** Refer to Fig.5 for placement of gas mask case, canteen, knapsack.

**2** Refer to Fig.5 for placement of gas mask case, canteen, knapsack.

**3** Refer to Fig.5 for placement of gas mask case and shovel.

**4** Attach bayonet to shovel (scoop) as shown in Fig. 5. In this case it is not necessary to attach scoop.

**5** Field Cap (No.14) can be put on any figure instead of helmet.

**6**

**7** Attach bayonet to scoop as shown in Fig.5 or leave scoop off this fig.

**8** Attach magazine case as shown in Fig.1.

To Create Orange-Brown Color, Mix Flat Red and Flat Yellow

**AFRICA CORPS HISTORY:** At the onset of World War II, Italian troops marched into Egypt. After much fighting they were bitterly defeated by British forces. At that point the German Africa Corp, commanded by General Rommel, known as the Desert Fox because of his brilliant strategy, was dispatched to help save the Italian armies and to secure a foothold in North Africa. For a time Rommel did just that, as he fought his way to within sight of Cairo. For over two years battles raged between the British Eighth Army Corps and the German Africa Corps. Eventually, General Montgomery and his British troops defeated the short on supply, overextended German forces.

**THE UNIFORMS OF THE AFRICA MM-137:** The Africa Corps wore special

uniforms suited to the tropical climate. They were Khaki or Olive in color, made of a cotton blended material. The style was patterned after that of the Italian and British uniforms of the day. Often the color faded when exposed to the intense heat and sun. The uniform was also used in Greece, where the weather was extremely hot. When in shirt sleeve attire, their military designations were shown by shoulder straps worn without any collar badges or stripes. When in field jackets, a special National Crest of the Eagle was shown on the right breast along with collar badges and stripes. The stripes were given only to volunteers. Their combat uniforms were so varied that no one style could be considered standard. At times, the Africa Corps even wore

captured British uniforms. An Africa Corps arm band was worn about 5½" from the cuffs. Three kinds of arm bands are shown on this box. The one shown in black being the earliest style, the green next and the khaki colored one making its appearance in 1943 as the last style.



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