KIT NO.MM-181A

U.S. MULTIPLE GUN MOTOR CARRIAGE M16

TAMIYA

MODEL RECTIFIER CORPORATION
EDISON, NEW JERSEY 08817

1|35 MILITARY MINIATURE SERIES

Half-track vehicles were developed for the US Army from the early 30s when the US Ordnance Department studied the successful Citroen-Kegresse half-tracks from France. Various firms in the USA developed half-track designs on behalf of the Ordnance Department, the Gunningham motor company producing the first, designated T1, in 1932. By 1940 development work led to the Half-track T14 in which the layout and appearance of all subsequent W.W.II period American half tracks was finalised. Later in 1940 with the war already gripping Europe, the United States commenced a big re-armament programme, and in September 1940 the existing T14 was standardised and ordered into production as the Half-track M2. The half-track was envisaged as an artillery prime mover, the M2 being equipped to tow the 105 mm field howitzer and carry its crew and ammunition. This had been the original role of the French Citroen-Kegresse. The successful use of the Hanomag half-track in the armoured infantry role by the Germans in 1940 demonstrated that such a vehicle would be very useful to the US Army, so the existing T14/M2 design was adapted as an infantry carrier, with seats for infantry and stowage for their arms and equipment. Under the designation Half-track Personnel Carrier M3 this vehicle became known and more widely used than the original M2. While the M2 had internal ammunition lockers, the M3 body was 10 inches longer with a rear door. The later model M3A1, had a 'pulpit' to take an AA machine guh, while the M3 itself had a simple pedestal mount.

The US Forces made a study of the German campaigns in Europe in 1940 and appreciated that anti-aircraft defence of ground forces would be vital in any future operations where similar 'blitzkrieg' tactics involving close Luftwaffe air support would probably be encountered again. In order to produce anti-aircraft vehicles quickly it was realised that the existing half-track design was big and stable enough to be adapted, though as a long term aim the Ordnance Department developed full-track AA vehicles such as the M19. Meanwhile some half-track designs were quickly produced, the T1E1 with Bendix turret, T1E2 with Maxson turret, and T1E3 with Electro-dynamic turret. These were M2 vehicles with the turret placed in the rear compartment. The turrets were of aircraft type, the T1E3 even retaining the perspex canopy. The effectiveness of the idea was proved, the Maxson turret of the T1E2 being preferred. A production prototype, T1E4, was built, with the Maxson turret on a M3 vehicle. Standardised as Multiple Gun Motor Carriage M13, over 500 were built. An improved model, with four .50 cal machine guns was produced in April 1942, the prototype being designated GMC T58. This was standardised as Gun Motor Carriage M16, and 724 were built by White Motor Co in 1942-3. A similar vehicle (but with flat section mudguards and rounded super-structure corners) was the M17 built by International Harvester Co on the similar Half-track M5, over 1,000 of these were made.

Bereits Anfang der 30 er Jahre wurden Halbkettenfahrzeuge (Half-tracks) für die US Armee entwickelt, nachdem das Heereswaffenamt die Erfolge der Citroen-Kegresse Fahrzeuge sehr sorgfältig registriert hatte.

Verschiedene Firmen arbeiteten an der Entwicklung. Produziert wurde das erste Fahrzeug von der Gunningham Motor Company 1932 mit der Bezeichnung T1.

1940 hatte die Entwicklung bereits zum T14 geführt.

Nach Eintreten in den europäischen Krieg, begann die US ein grosses Aufrüsten und im September der T14 als M2 Half-track zur Produktion freigegeben.

Wie vorgesehen, wurde der M2 als Artillerie Zugmaschine eingesetzt, zum Schleppen der 105 mm Feldhaubitze einschliesslich der Bedienungsmannschaft und Munition.

Die erfolgreichen Einsätze der deutschen Halbkettenfahrzeuge "Hanomag Sd.Kfz. 251" bei den deutschen Panzergrenadieren in Polen und Frankreich Feldzug blieben der US Heeresleitung nicht verborgen und führten zu der Erkenntnis, dass diese Fahrzeuge nicht nur reine Zugmaschinen sind, sondern viel mehr Verwendungsmöglichkeiten hatten.

Beim Eintritt der US in den Krieg, waren natürlich viele militärische Objekte durch die Erfolge der Deutschen beeinflusst.

Um den bestehenden T14 – M2 als Mannschaftstransporter einsetzen zu können, mussten natürlich einige Änderungen vorgenommen werden. Geschützte Sitze für 10 Mann, Platz für Waffen und Munition, verlängertes Chassis um 10 inch und eine Austiegstüre ergaben den Half-track Personnal Carrier M3, welcher mehr Verwendung bot und eingesetzt wurde als der ursprüngliche M2.

Der M3 wurde Standartausrüstung für Sturminfantrie im ganzen WW II und noch Jahre danach in vielen Nationen eingesetzt.

Die US Streitkräfte erkannten aber auch, dass eine Flugzeugabwehr vom Boden aus lebenswichting war, um in jeder zukünftigen und ähnlichen Operation wie im Blitzkrieg erfahren, der Luftwaffenunterstützung entgegentreten zu können.

Das Heereswaffenamt entwickelte das Vollkettenfahrzeug AA M19, waren aber auch überzeugt, dass die vorhandenen Halbkettenfahrzeuge verwendet werden könnten.

Es erschien der T1E1 mit Bendix Turm, der T1E2 mit Maxson Turm und der T1E3 mit Electric Dynamic Turm.

Es waren Fahrzeuge der M2 Serie mit dem Geschütz auf dem hinteren Teil des Chassis, Geschütze ähnlich in den Flugzeugen.

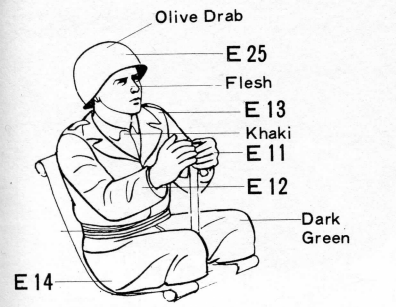
Die Wirksamkeit erprobt - und der Maxson Turm zur Produktion freigegeben. Ein Prototype T1E4 wurde gebaut auf Fahrgestell des M3. Standartisiert als Multiple Gun Motor Carriage M13 und mehr als 500 Fahrzeuge ausgeliefert.

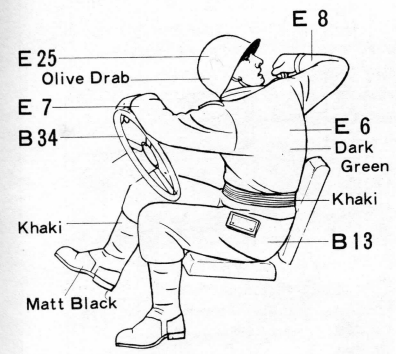
1942 wurden weitere Verbesserungen vorgenommen und der erste Prototype erschien im April mit vier .50 cal Schnellfeuerkanonen. Bez. GMC T58 Als M16 wurden dann 1942 - 43 rund 724 Fahrzeuge von White Motor Comp. gebaut. International Harvester Co. konnten rund 1000 solcher Fahrzeuge jedoch mit flachen Schutzblechen und abgerundeten Aufbauten als M17 zur Auslieferung bringen.

4 〈Fixing of Machine Gun Base〉
〈Maschinengewehrstand〉
Right and Left M.G.Base are designed to rotate with Sight.
M.G. drehen mit Richtobjektiv.

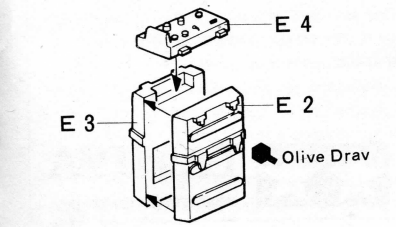
6 〈Fixing of Chassis〉
〈Bau des Chassis〉
First fix Muffler
Erst Auspuff einbauen

〈Construction and Painting of Figures〉
〈Männchenbau〉

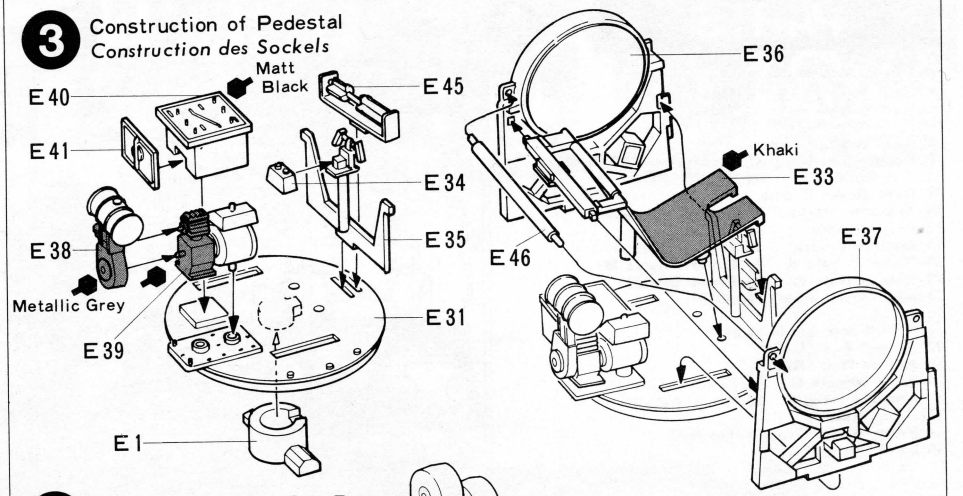




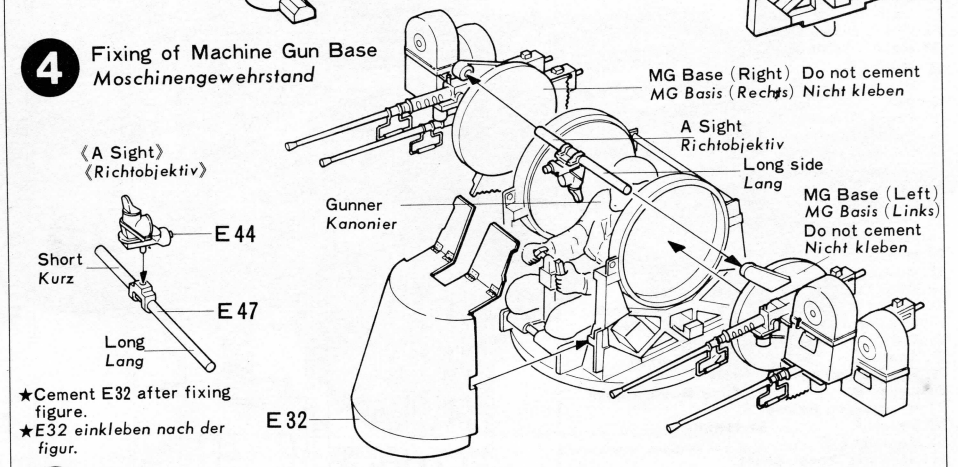
Transceiver
Sprechfunkgerät



3 Construction of Pedestal
Construction des Sockels

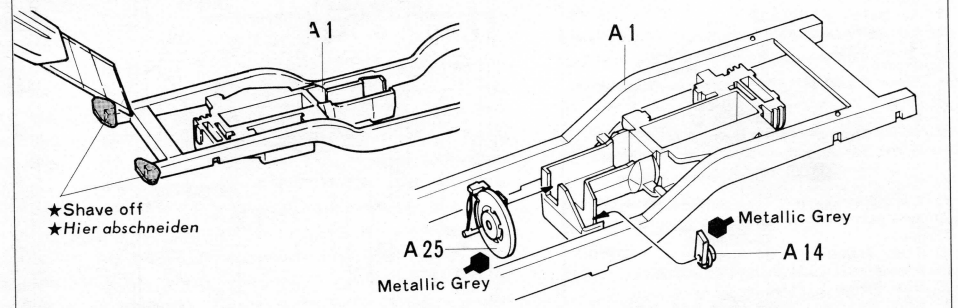


4 Fixing of Machine Gun Base
Moschinengewehrstand

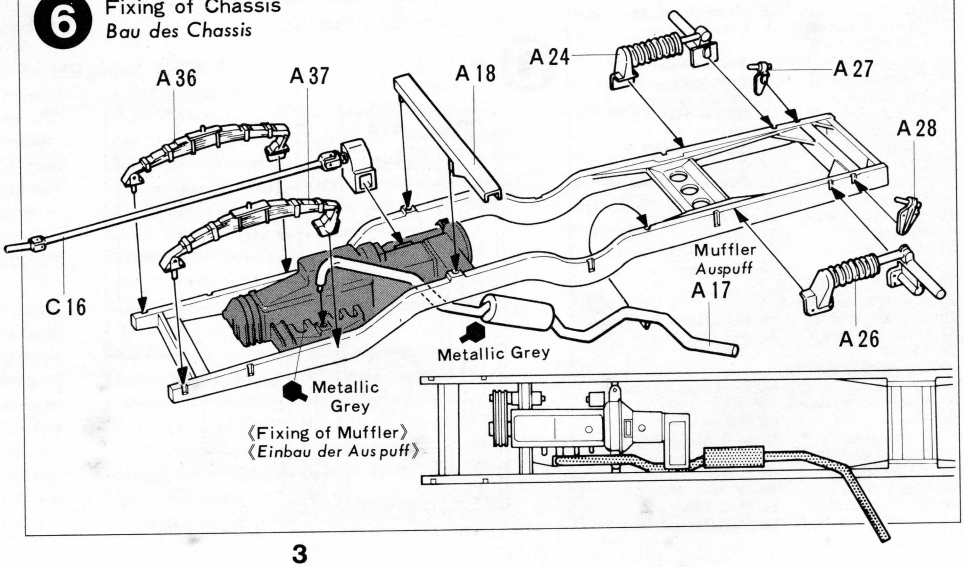


★Cement E32 after fixing figure.
★*E32 einkleben nach der figur.*

5 Fixing of Engine
Motoren Einbau

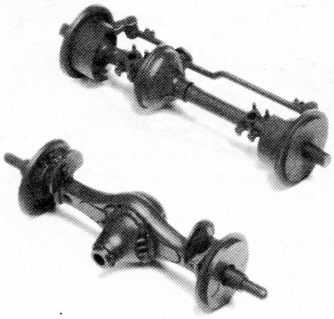


6 Fixing of Chassis
Bau des Chassis

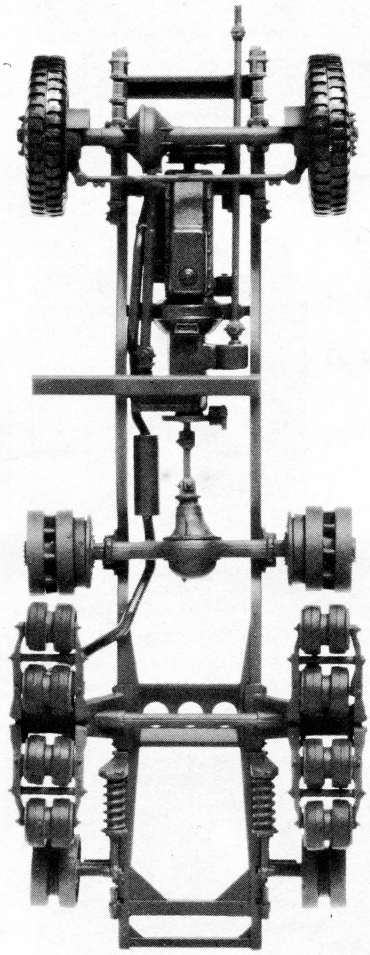


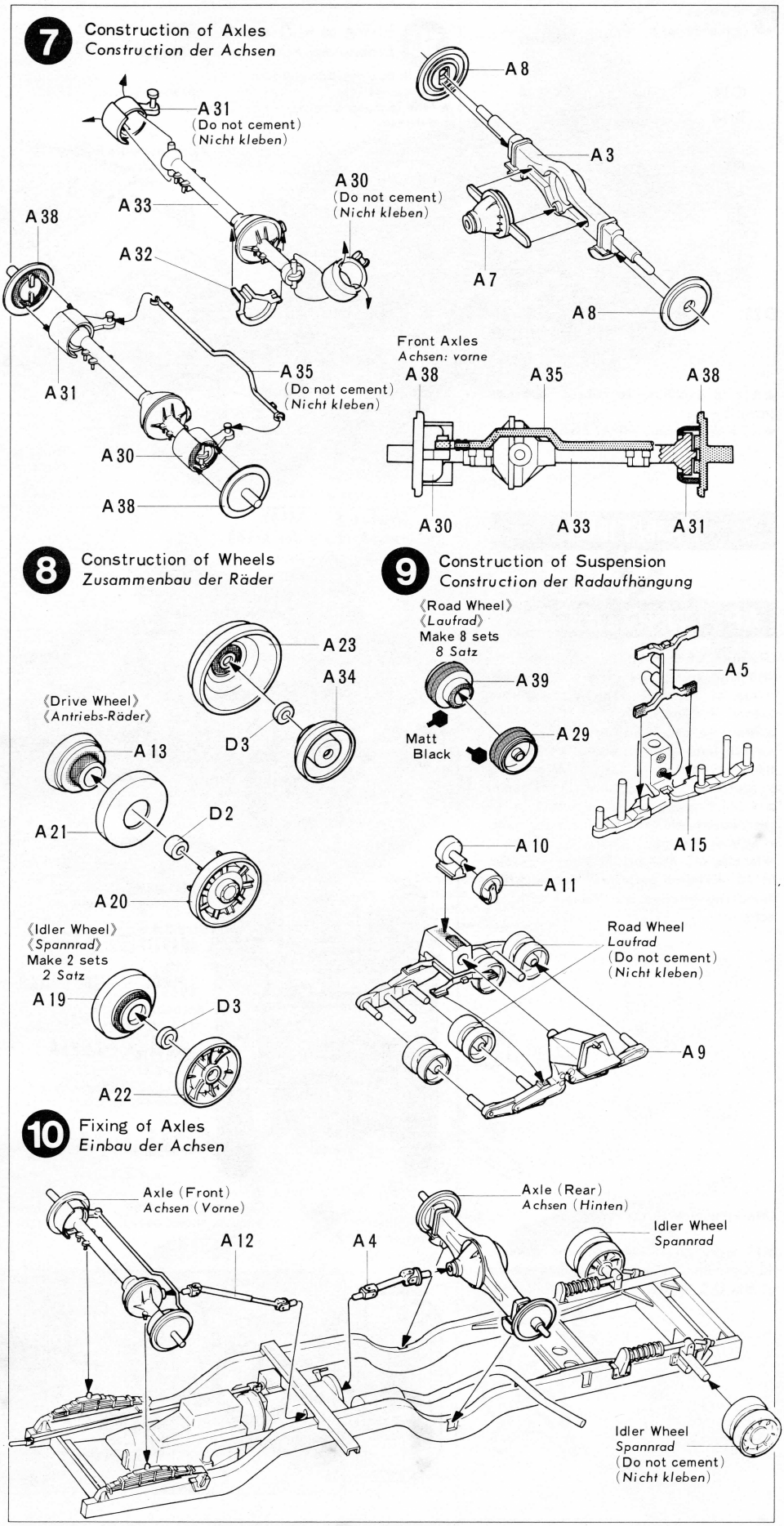
8 《Construction of wheels》
《*Zusammenbau der Räder*》
Poly cap D2 and D3 do not cement.
Poly cap D2 und D3 nicht kleben.

9 《Construction of Suspension》
《*Construction der Radaufhängung*》
Road wheels are designed to rotate.
Die Laufräder sind drehbar.



10 《Fixing of Axles》
《*Einbau der Achsen*》



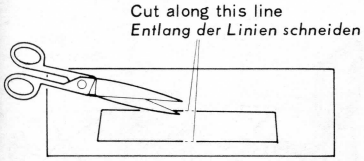


11 《Construction of Cockpit》
《*Construction der Fahrersitz*》

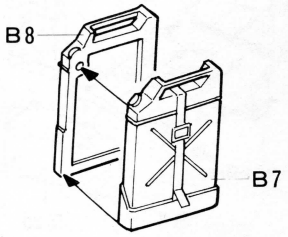
Transparent part for Windshield should be cut out with a knife or scissors as shown in the figure below. The end of Levers B30, B31, B33 and B37 should be painted in Matt Black.

Transparentteil für Windschutzscheibe ausschneiden - siehe Bild. Die Knöpfe der Schalthebel B 30, B 31, B 33, B37 mattblack bemalen.

《Cutting out Windshield》
《*Windschutzscheibe*》

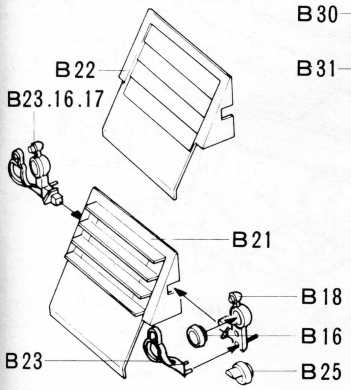


《Construction of Jerrycan》
《*Kanister*》

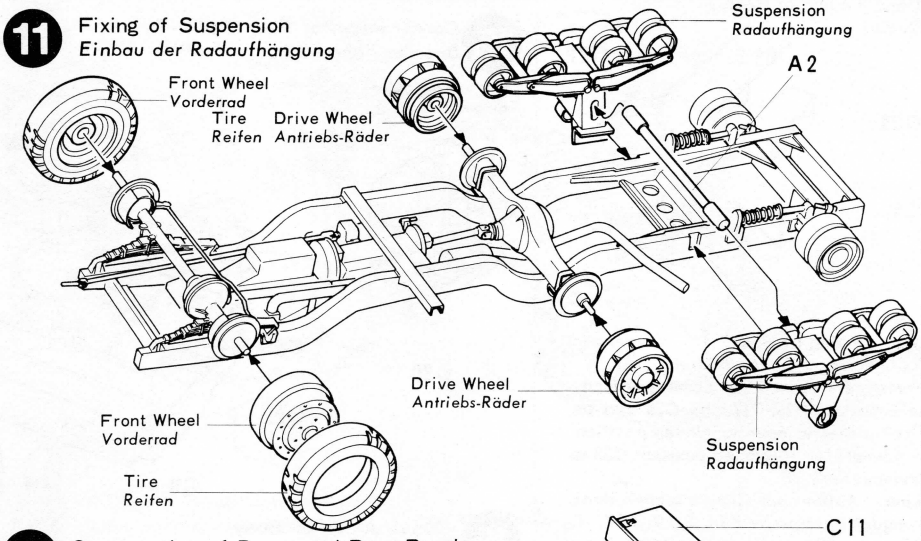


Make 2 sets
2 Satz

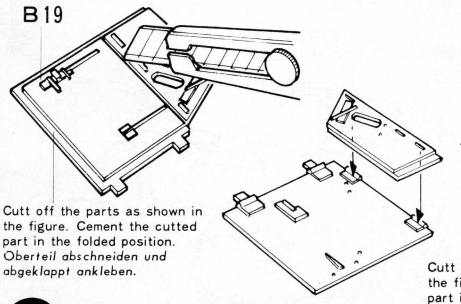
《Radiator Grille》
《*Kühlergrill*》
★Select either B21 or B22.
★*Entweder für B21 oder B22.*



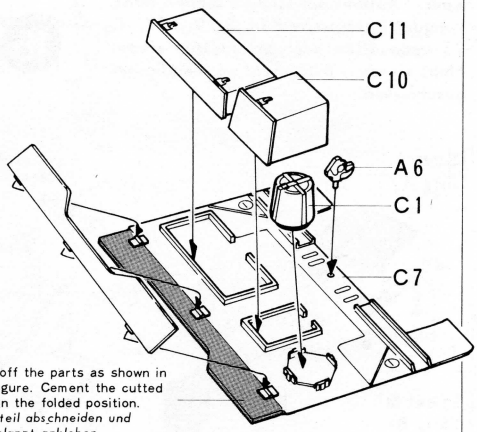
11 Fixing of Suspension
Einbau der Radaufhängung



12 Construction of Doors and Rear Panel
Construction der Hinterfach



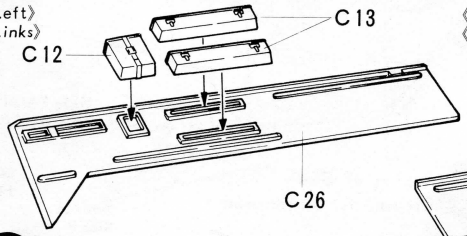
Cutt off the parts as shown in the figure. Cement the cutted part in the folded position.
Oberteil abschneiden und abgeklappt ankleben.



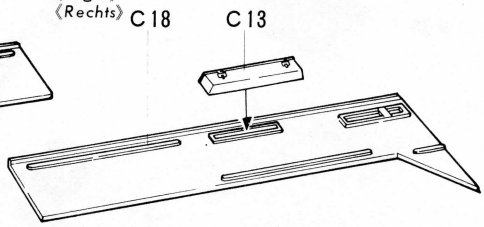
Cutt off the parts as shown in the figure. Cement the cutted part in the folded position.
Oberteil abschneiden und abgeklappt ankleben.

13 Construction of Side Panel
Bau der Seitenteile

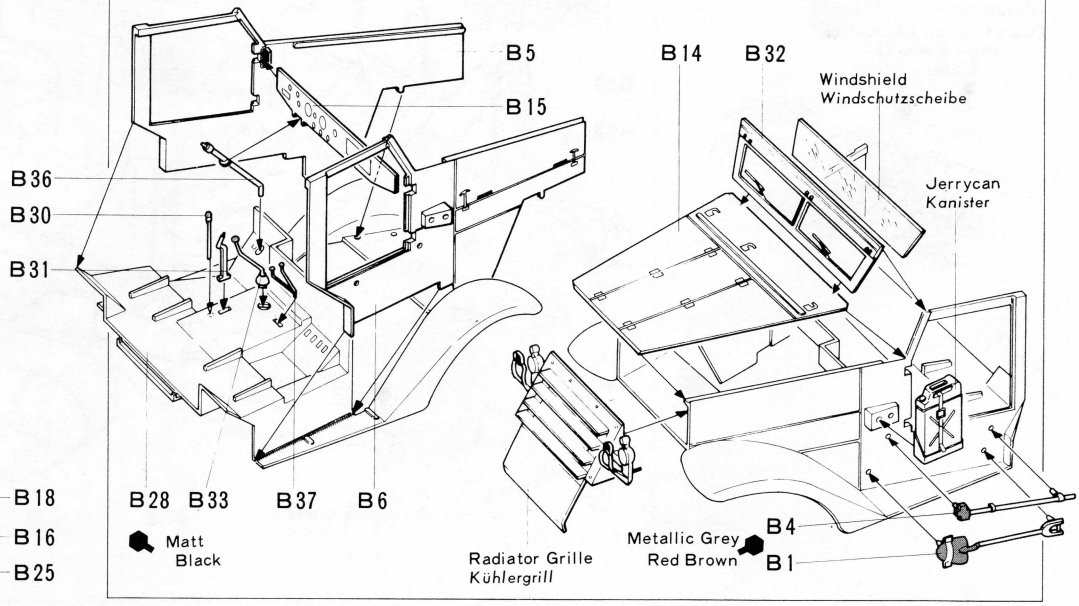
《Left》
《*Links*》



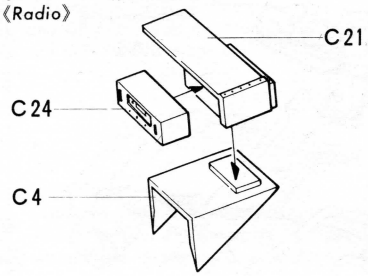
《Right》
《*Rechts*》



14 Construction of Cockpit
Construction des Fahrersitz



《Construction of Radio》
《Radio》

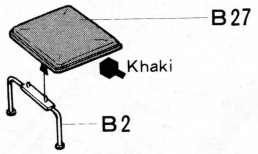


16 《Fixing of Body》 《Einbau der Aufbauten》

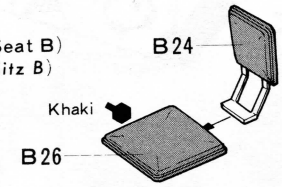
Fixing each parts after cementing Body to Chassis. B29, C17, and C25 can be fixed either in open or closed position. If you prefer to closed position, B38 is unnecessary.

Zuerst Aufbau auf Chassis kleben, dann komplettieren, siehe Bild. B 29, C 17, C 25 kann offen oder geschlossen eingeklebt werden. B 38 nicht notwendig bei geschlossen.

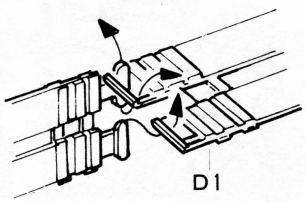
(Seat A)
(Sitz A)



(Seat B)
(Sitz B)



《Construction of Tracks》
《Construction der Ketten》
Make 2 sets
2 Satz



15 Construction of Rear Deck
Bau des Fahrzeughecks

《Magazine Holder》
《Magazin Halter》

C 9
C20

C28
Magazine Holder
Magazin Halter
C19
C27
Radio
Radio
C9
C8
C5
C23
C9

《Light》
《Links》
C2
C3

16 Construction of Body
Fahrzeug - Aufbau

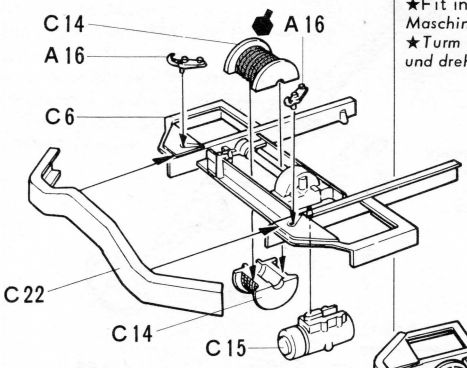
Seat B
Sitz B
Light
Light
Side Panel Left
Seitenteil Links
Rear Panel
Hecklappe
Jerrycan
Kanister
Metallic Grey
B3
B25
Rear Deck
Fahrzeugheck
Side Panel Right
Seitenteil Rechts

17 Fixing of Body
Einbau der Aufbauten

Driver
Führer
C17 (Closed Position)
(*Hochgeklappte Position*)
Seat B
Sitz B
B20
(Closed Position)
(*Geschlossene Tür*)
B29
B38
Chassis
Chassis
B19
C25
Track
Ketten

18 《Bumper》 《Stoßfänger》

Metallic Grey



★A14 is designed to rotate. Do not cement.
★*A14 ist drehbar. Nicht kleben.*

18 Fixing of M.G. and Bumper
Einbau der M.G. und Stossfänger

★Fit in this position and turn
Maschinengewehr
★*Turm in dieser Richtung einstecken und drehen.*

Machine Gun

Bumper
Stossfänger

Refer to Page 3
Nachschlagen Seite 3

PAINTING & APPLYING DECALS

《Painting of the M16》
M16 Half track, like other military vehicles of the U.S. Army, was painted overall in Olive Drab.
★What we call "weathering" is a good way to lend additional realism to your military vehicles. It many be interesting to represent the following, for instance: dirt which stuck to the vehicle in a desert, swamp, etc.; and bullet marks made in actual fighting.
Wie alle US Militärfahrzeuge war der M 16 olivedrab gespritzt. "Verdreckte" Bemalung machen des Modell wirklich echt.

《Marking of M16》

M16 wore unit numbers and vehicle numbers as well as star marks symbolic of the U.S. Army.

《Marking of M16》
《Markierung des M16》

Olive Drab

Vehicle number
Fahrzeug-Nummer

C

U.S.A.
4049777

① ② ③

M16 used after W.W.II
M16 nach dem WW II

U.S.A. 4049777 — IA482AA — B242

U.S.A. 4049777 — IA203AA — A122

M16 used in W.W.II
M16 im WW II

U.S.A. 4050337S — IΔ2AA — A132

M16 used in Korean War
M16 in Korea

U.S.A. 4050337S — 8Δ50AA — B162

IA482AA B242

MAX SPEED 20MPH CAUTION LEFT HAND DRIVE

D D

② ③

Cut with dotted line
Schneiden

Cut along the dotted lines as shown above.
An punktierter Linie ausschneiden.

A or E
A oder E

PARTS

A PARTS

1. Frame
2. Cross Tube
3. Rear Axle
4. Rear Shaft
5. Spring Arm
6. Hooks
7. Rear Axle Parts
8. Rear Brake Covers
9. Suspension B
10. Top Rollers A
11. Top Rollers B
12. Front Shaft
13. Rear Brake Drums
14. Transfer Parts
15. Suspension Part
16. Front Hooks
17. Muffler
18. Battery Frame
19. Idler Wheels A
20. Drive Wheels A
21. Drive Wheels B
22. Idler Wheels B
23. Front Wheels
24. Idler Wheel Shaft (Right)
25. Discs
26. Idler Wheel Shaft (Left)
27. Adjust Rod (Left)
28. Adjust Rod (Right)
29. Road Wheels B
30. Knackle (Left)
31. Knackle (Right)
32. Front Axle B
33. Front Axle A
34. Front Brake Drum
35. Tie Rod
36. Leaf Spring (Left)
37. Leaf Spring (Right)
38. Front Brake Cover
39. Road Wheels A

B PARTS

1. Shovel
2. Seat Support
3. Ax
4. Hammer
5. Front Side Panel (Left)
6. Front Side Panel (Right)
7. Spare Tank B
8. Spare Tanks A
9. Unnecessary
10. Unnecessary
11. Unnecessary
12. Unnecessary
13. Driver's Feet
14. Bonnet
15. Instrumentation Panel
16. Headlight B
17. Headlight A (Left)
18. Headlight A (Right)
19. Door (Left)
20. Door (Right)
21. Radiator Grille A
22. Radiator Grille B
23. Headlight Guards
24. Seat Back Rest
25. Battery Case
26. Seat A
27. Seat B
28. Front Fender
29. Windscreen Armour Plate
30. Lever B
31. Side Brake Lever
32. Windscreen Frame
33. Lever A
34. Handle
35. Headlight C
36. Steering Wheel Shaft
37. Twin Lever
38. Windscreen Armour Plate Support

C PARTS

1. Bucket
2. Air defence Light B
3. Air defence Light A
4. Radio Stay
5. Bulkhead
6. Winch
7. Rear Panel
8. Floor Panel B
9. Magazine Case B
10. Box B
11. Box A
12. Box C
13. Box D
14. Winch Roller
15. Gear Box
16. Shaft for Winch
17. Side Panel R (Lower)
18. Side Panel R (Upper)
19. Rotary Plate A
20. Ammunition Box Holder
21. Radio
22. Bumper
23. Floor Panel
24. Radio
25. Side Panel L (Lower)
26. Side Panel L (Upper)
27. Rear Seat
28. Rear Seat Back

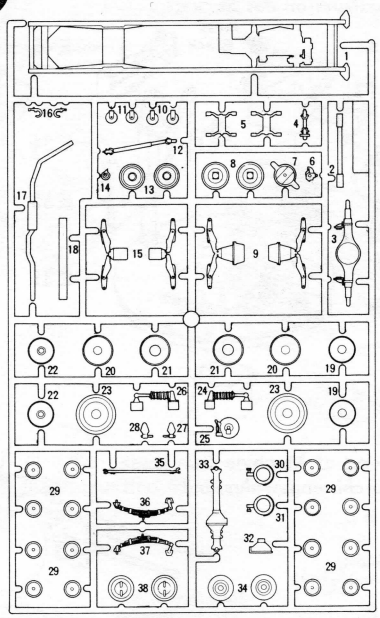
D PARTS

1. Track
2. Wheel Bush B
3. Wheel Bush A
4. Front Tyres

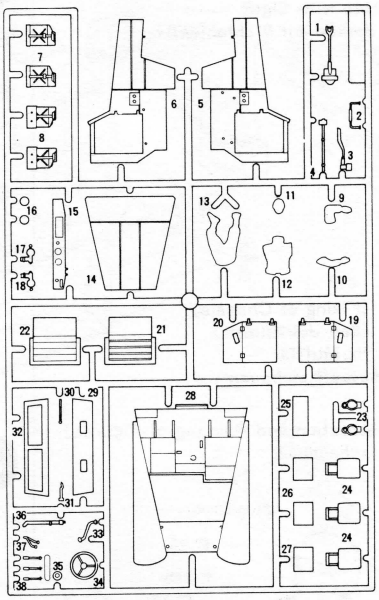
E PARTS

1. Rotary Plate B
2. Transceiver B
3. Transceiver C
4. Transceiver A
5. M1 Carbine
6. Driver Body
7. Driver Hand R
8. Driver Hand L
9. Shoulder Bag
10. Bag
11. Gunner Hand L
12. Gunner Hand R
13. Gunner Body
14. Gunner Leg
15. Operator Hand L
16. Operator Hand R
17. Operator Body
18. Operator Leg R
19. Operator Leg L
20. Tommy Gun
21. Bayonets
22. Shovel
23. Blanket A
24. Blanket B
25. Helmet
26. Canteen
27. Ammunition Box A, R
28. Ammunition Box A, L
29. M.G. Base A, R
30. M.G. Base A, L
31. Rotary Plate C
32. Armour Plate
33. Sheet
34. Firing Switch Box
35. Handle
36. Pedestal Frame L
37. Pedestal Frame L
38. Fuel Tank
39. Engine
40. Battery A
41. Battery B
42. M.G. Mount L
43. M.G. Mount R
44. Sight
45. Sheet roller
46. Shaft
47. Sight Stay
48. 12.7mm M.G. L
49. 12.7mm M.G. R
50. M.G. Mount C
51. M.G. Mount B, R
52. M.G. Mount B, L

A PARTS



B PARTS



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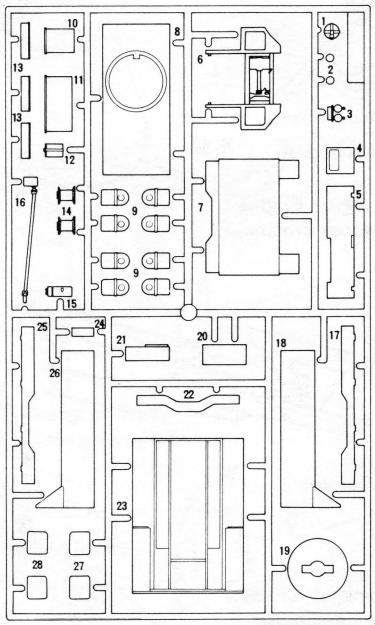

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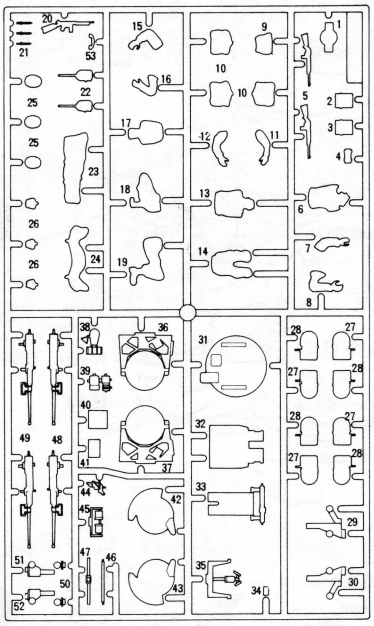

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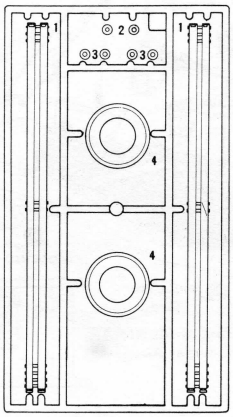

FRONT SCREEN

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