

GERMAN HEAVY TANK KING TIGER

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The German Heavy Tank King Tiger

In the history of tank development, a seesaw game was continued for a long time between fire power and armour protection. While average tanks used by most countries in the initial stage of World War II had a main gun of 40 - 50 mm calibre and armour of 40 - 75 mm thickness, many tanks seen in the last stage of the war had a 75 - 90 mm gun and 75 - over 100 mm armour. It was the German King Tiger (Königstiger) tank with a powerful main gun and strong armour that appeared in the last stage of the war and enjoyed the reputation of the strongest tank in the world by inspiring Allied tank men with awe.

German tank forces exercised their unrivalled power in the invasion of Poland of September 1939 and in the 1940 campaigns against Denmark, Norway, Belgium, the Netherlands and France. They had an inviolable confidence in their power when they started the invasion of the Soviet Union on 22nd June 1941 under the name of "Operation Barbarossa".

Soon after that, however, German confidence in their power was completely shaken and they fully realized that their tanks were becoming outdated owing to the appearance of the Russian new medium tank T-34/76 and heavy tank KV-1. It became apparent that the PzKpfw III and IV, German main tanks of those days, were no match in performance for the T-34/76 with excellent mobility, powerful main gun, sloping armour on essential parts and satisfactory resistance to shells as well as for the KV-1 with powerful main gun and thick armour.

To cope with the Russian tanks, the Germans improved the PzKpfw III and IV in fire power and armour protection and completed the heavy tank Tiger I and masterpiece medium tank Panther. They immediately threw these tanks

into the battlefield. The Tiger I carried the 88 mm tank gun model 36 of 56 length calibre, which developed from the well-known 88 mm anti-aircraft gun model 18 and 36, and its frontal armour thickness reached 100-102 mm. The Panther, based upon the thorough study of the Russian T-34/76, carried the long-barrelled (70 calibres long) 75 mm tank gun model 42 and had weight of 43 tons, maximum speed of 55 km/h and frontal armour thickness of 80 mm.

As the Russians carried out repeated improvements in the T-34/76 and came to use the T-34/85 equipped with the powerful 85 mm gun, however, the Germans were forced to develop immediately a new tank superior in performance to these Russian tanks. Such efforts resulted in the new heavy tank King Tiger.

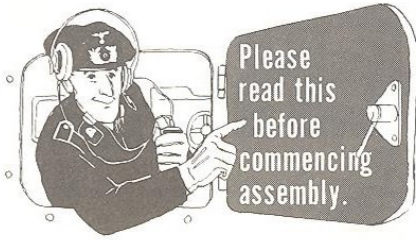
Porsche and Henschel, which had manufactured the Tiger I, made their own new heavy tanks under respective names of VK4502 (P) and VK4502 (H). In February 1943, by which time Porsche manufactured 50 new turrets equipped with the 88 mm gun of 71 length calibre, only Henschel design was adopted to standardize vehicle make and solve problems concerning the body. In October 1943, the heavy tank VI Tiger II known as the King Tiger was born, into which some technical ideas on the Panther II then being trial-manufactured by M.A.N. were incorporated.

The King Tiger carried the long-barrelled (71 calibres long) 88 mm tank gun model 43 which had enormous destructive power. With armour piercing shells, the gun could penetrate the following armour plates fixed at an angle of 60°: 222 mm armour plate at a distance of 100 m, 185 mm armour plate at 500 m and 132 mm armour plate even at 2,000 m. Thus the gun was powerful enough to destroy Allied tank by a single blow. As auxiliary armament,

the King Tiger carried two 7.92 mm machine guns, one in the front part of the body and the other on the anti-aircraft mount on the top of the turret. 50 tanks of this type were equipped with the turret manufactured by Porsche.

The King Tiger was protected with 150 mm frontal armour, 80 mm side armour, 80 mm rear armour and 80-185 mm turret armour. This means that the King Tiger was much more heavily armoured than the Tiger I. As a result, the King Tiger weighed nearly 70 tons. It employed the Maybach HL-230-P30 water-cooled V 12-cylinder engine of 700 hp, which was more powerful than the Tiger I engine. The King Tiger had a maximum speed of 42 km/h on road and could run across the country at speeds of 14-19 km/h. Transmission and other details were designed on the basis of experience in the Tiger I. The King Tiger largely employed sloping armour and had a polished silhouette in the wake of the Panther.

The King Tiger first appeared in the battlefield in mid-1944. As the main body of German heavy tank battalions, it exercised its overwhelming power over Allied tanks on the eastern and western fronts, particularly in the Battle of Ardennes which turned out to be the last full-scale counteroffensive assumed by the Germans. Powerful as it was, the King Tiger could not turn the tide of war in favour of the Germans and shared the fate with German tank forces. The production of the King Tiger totalled 487 including some experimental vehicles. Also produced was the heavy tank destroyer Hunting Tiger that was based on the King Tiger body and equipped with the 128 mm gun in its fixed fighting compartment.



★ 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.

★ Before finally cementing each part together, be sure that parts fit correctly together. And that you are aware of the next sequence to be followed.

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

☛ This mark shows the colour this part should be painted. Other parts should be painted in colours for tank overall. Refer to "Painting" and paint overall after the whole assembly.

1 (Construction of Wheels)

Construct two Drive Sprockets, two Idler Wheels. Be careful not to apply cement to Poly Caps (D1, D4) which are put between wheels. The cement here will obstruct rotation and installation of tracks.

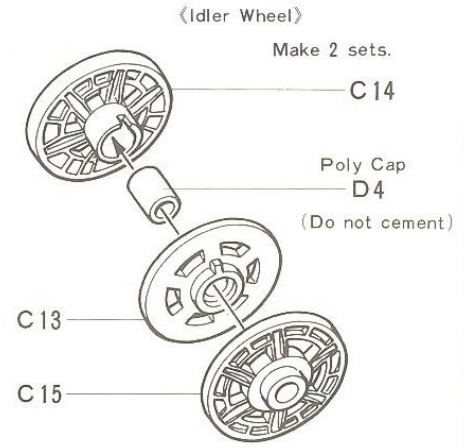
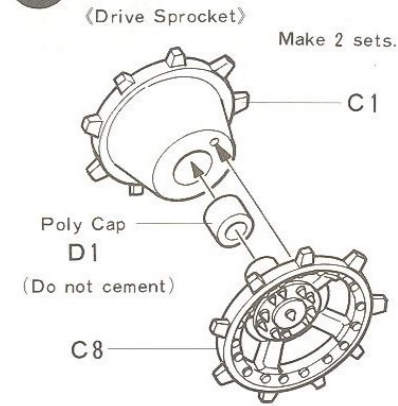
2 (Installation of Wheels Inside)

Fit each Road Wheels Inside to Chassis. Do not cement C11(D) and C10(C) but mount onto shafts with Poly Caps D2. Drive Shafts (C19, C20) and Rear Shafts (C16) are mounted with Drive Sprockets and Idler Wheels respectively. Cement these shafts to Chassis securely.

3 (Installation of Wheels Outside)

Do not cement but just fit each parts. Fix Wheels C12(B) and C9(A) by using Poly Caps D3. Fit other parts to the position as shown. Fit Wheels also to the other side.

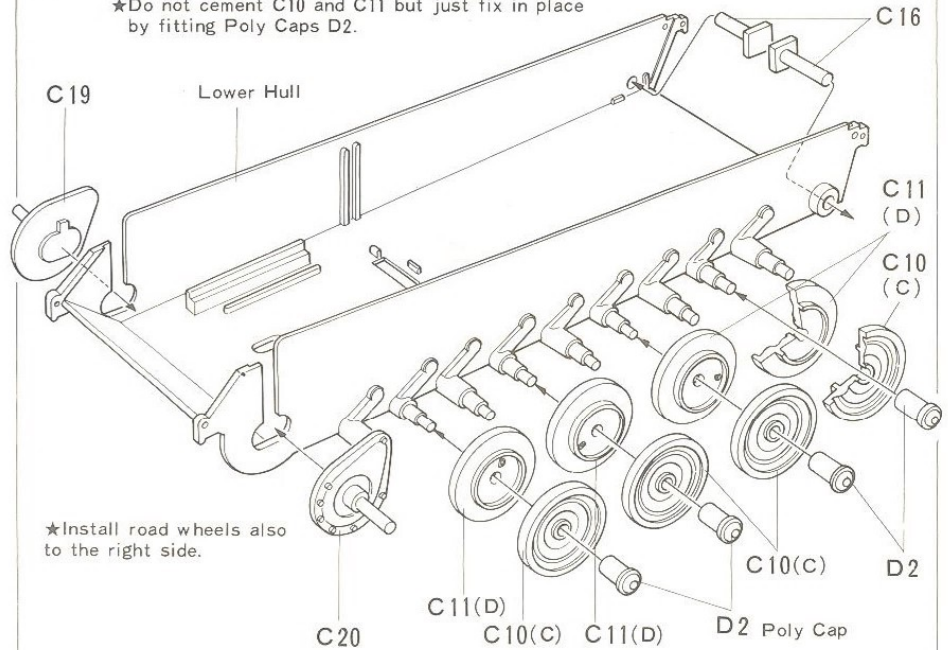
1 Construction of Wheels



Be careful not to put cement on Poly Caps.

2 Installation of Wheels Inside

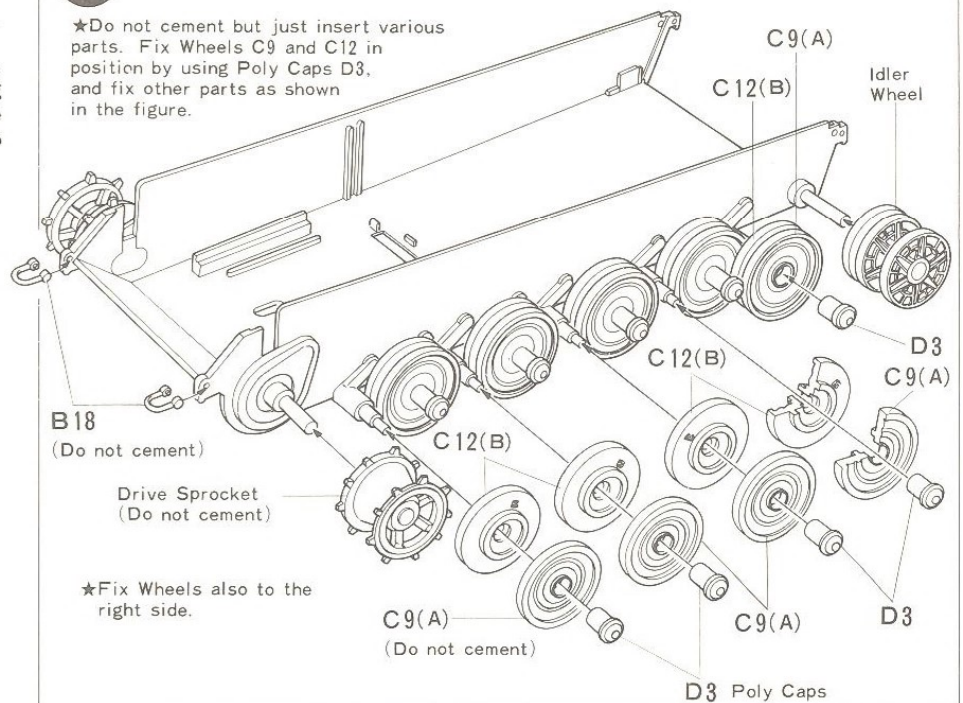
★ Do not cement C10 and C11 but just fix in place by fitting Poly Caps D2.



★ Do not cement C10 and C11.

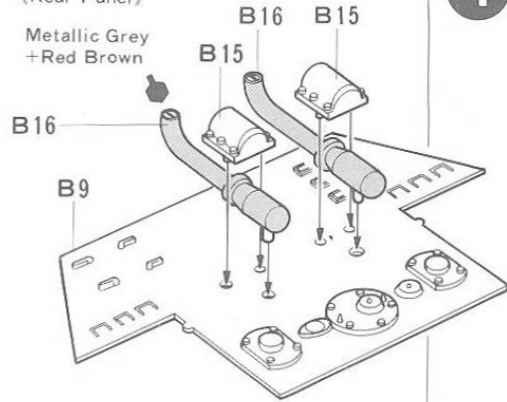
3 Installation of Wheels Outside

★ Do not cement but just insert various parts. Fix Wheels C9 and C12 in position by using Poly Caps D3, and fix other parts as shown in the figure.



Construction and Fixing of Rear Panel

《Rear Panel》



4 Construction and Fixing of Rear Panel

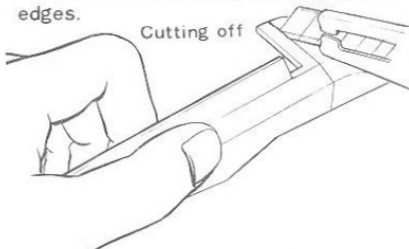
Construct rear panel and firmly cement it to the Upper Hull. Fit Machine Gun B21 to B25 without using glue.

5 Fixing of Armour Skirts

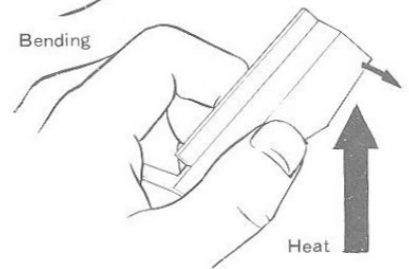
Cement Crank B23 to the Upper Hull after fixing Rope B30 in place.

《Cutting and Bending of Armour Plates》

Because tanks often received projectiles and ran against obstacles on the battlefield, many of their armour plates were partially lost or bent. It may be interesting to create a suitable atmosphere by cutting off some parts from the plates and slightly bending the cut edges.



Cutting off



Bending

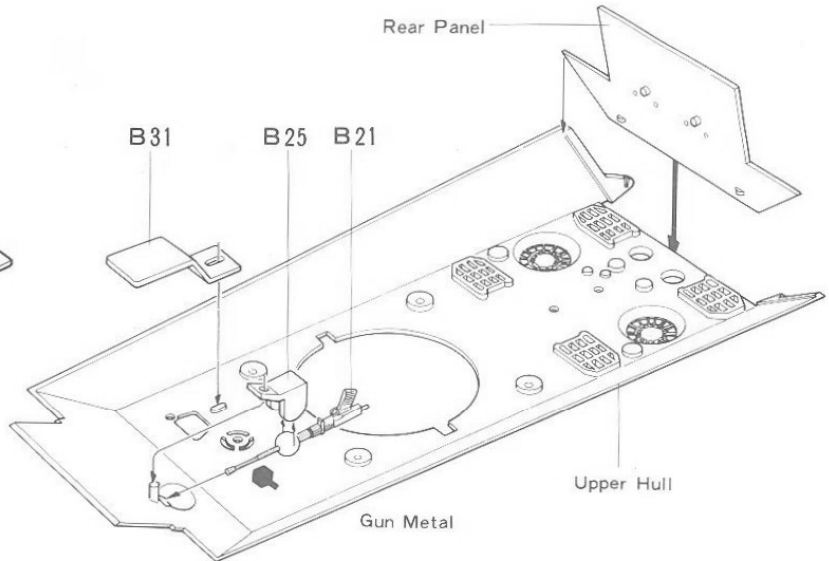
Heat

6 Fixing of Upper Hull Parts

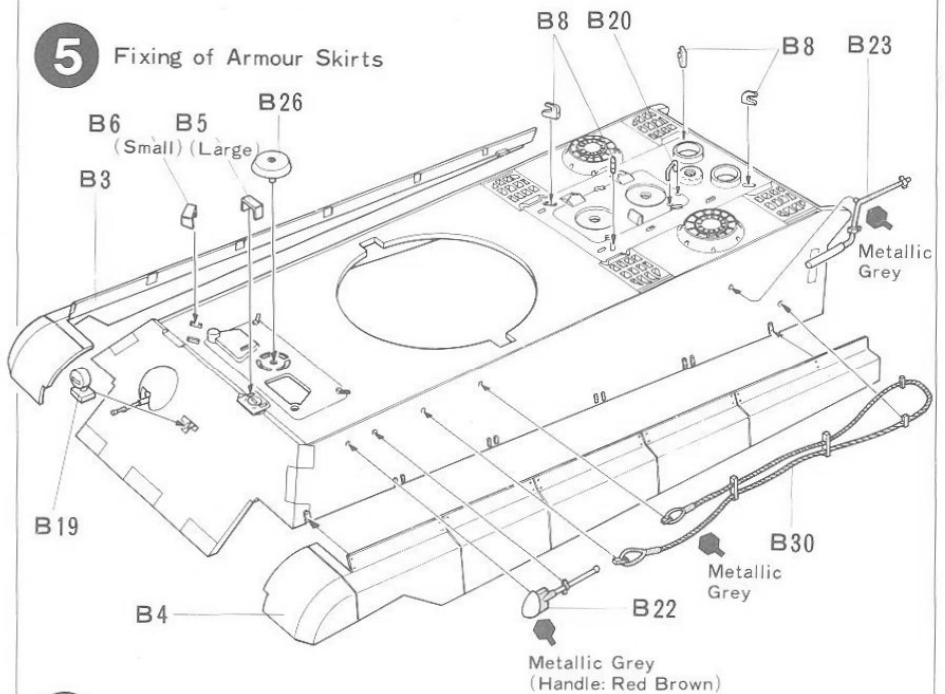
Keep Driver's Hatch B24 open if you are to put the Driver in it. The hatch is designed to rotate and should be just fitted in place without use of cement.



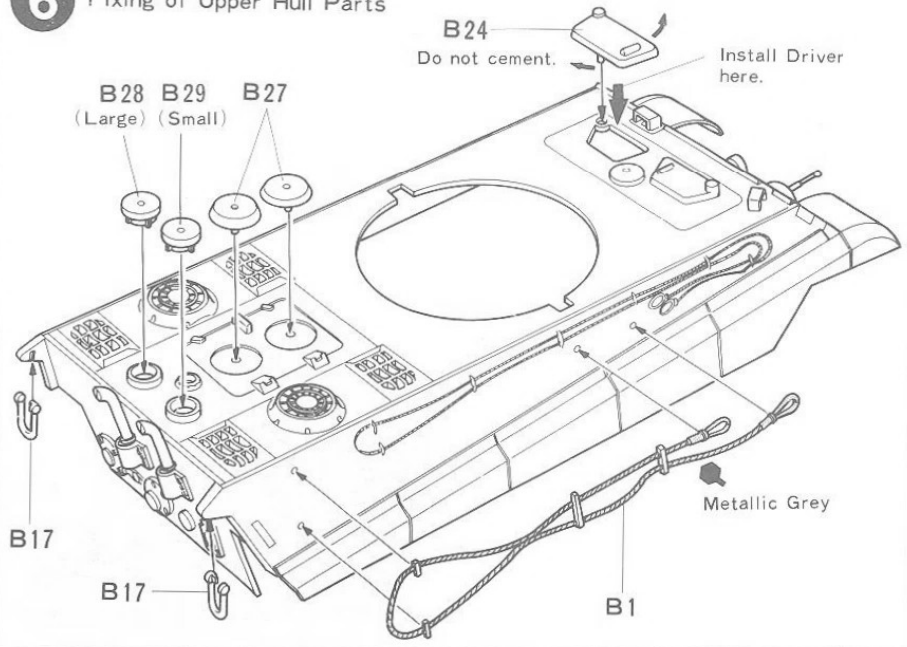
4 Construction and Fixing of Rear Panel



5 Fixing of Armour Skirts

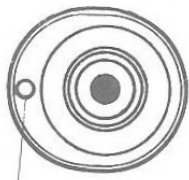


6 Fixing of Upper Hull Parts



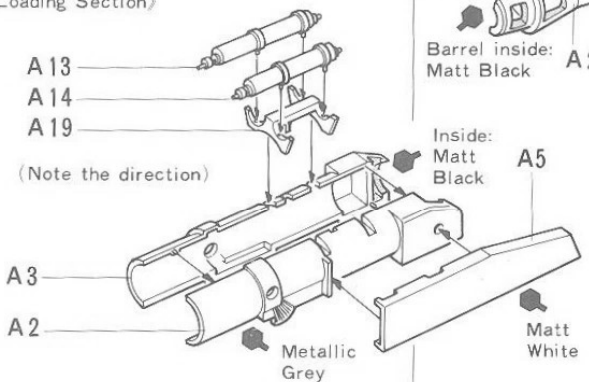
7 Construction and Fixing of Gun

For fixing of A17, see the front view at right.



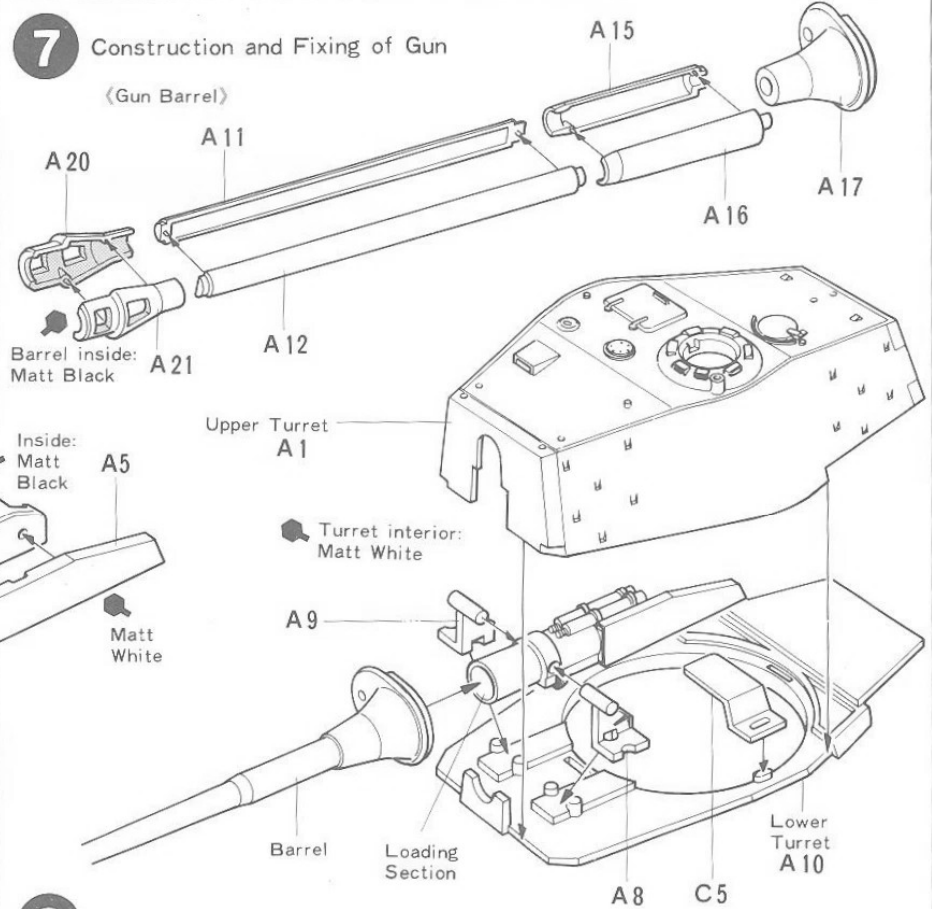
This hole should be at right.

(Loading Section)



7 Construction and Fixing of Gun

(Gun Barrel)



8 Fixing of Turret Parts, A

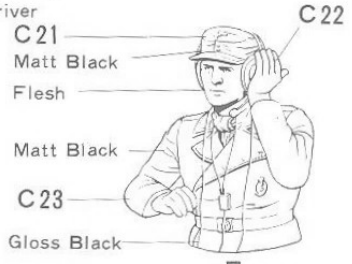
Keep A7 open if you are to mount the Commander. Just fit A7 in place without using glue.

9 Fixing of Turret Parts, B

Fix four Spare-Track Hooks B2 respectively to the front and rear. Also fix each two B7 to the front and rear.

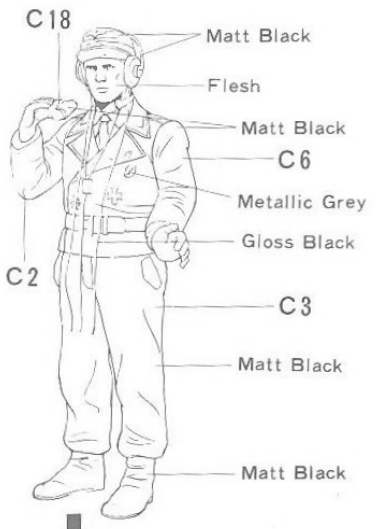
(Construction and Painting of Model Figures)

Driver



Fix to B31

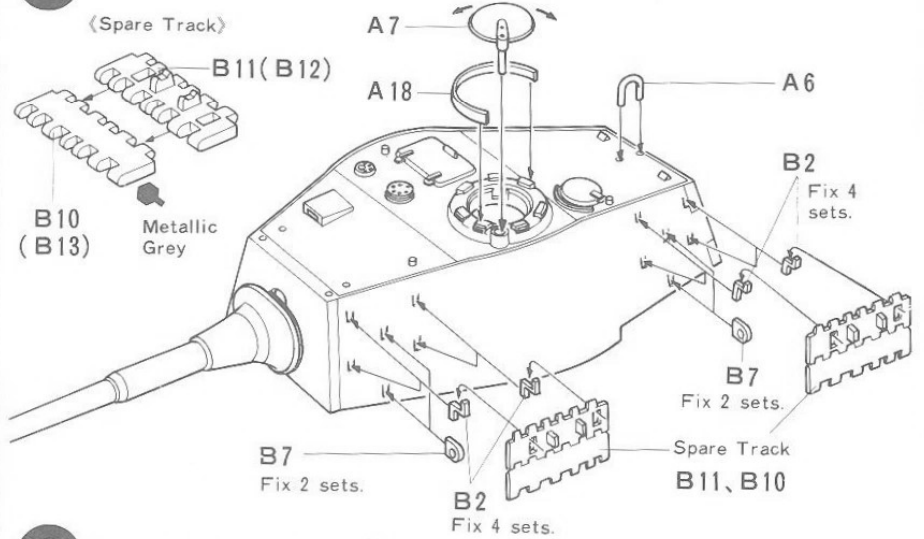
Commander



Fix to C5.

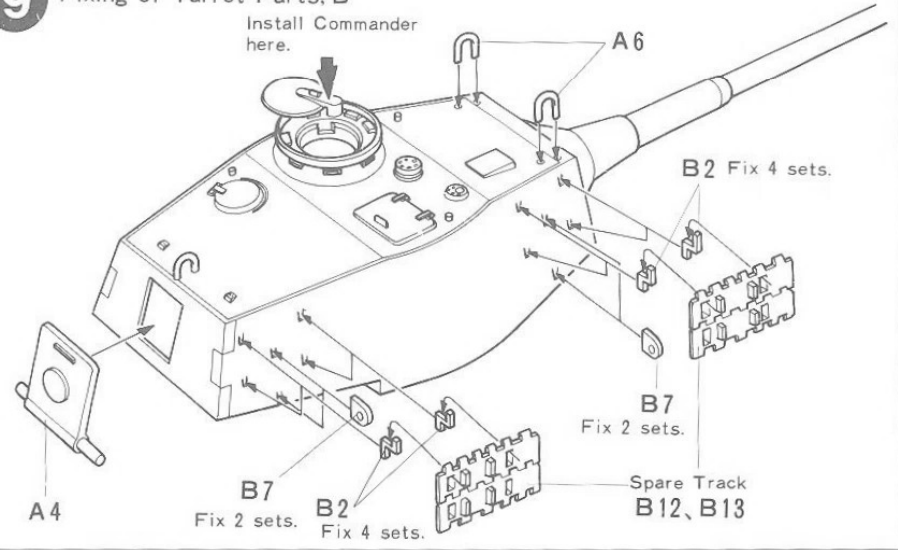
8 Fixing of Turret Parts, A

(Spare Track)



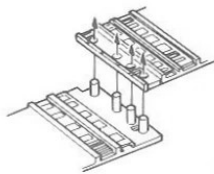
9 Fixing of Turret Parts, B

Install Commander here.

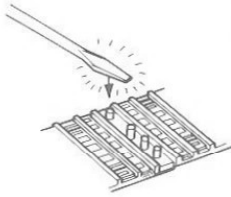


10 <Completion of King Tiger>

<How to make tracks>

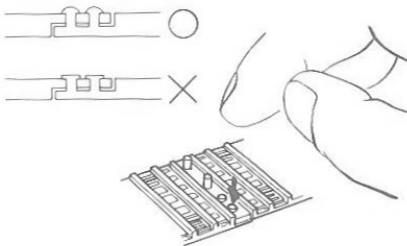


① Put pins on end through holes on the other. Two tracks are needed.



② Press the pins carefully by means of a slender screwdriver or nail head with handle which has been heated with heating device such as a candle fire.

③ Immediately after that, hold them in place with your fingers for a while.



★If the track is cut or its connection is too weak, reinforce it with thread, etc.

PARTS

A PARTS

- 1. Upper Turret
- 2. Loading Section Left
- 3. Loading Section Right
- 4. Turret Rear Hatch
- 5. Protection Plate
- 6. Turret Hook
- 7. Commander's Hatch
- 8. Loading Section Holder Right
- 9. Loading Section Holder Left
- 10. Lower Turret
- 11. Barrel A
- 12. Barrel B
- 13. Loading Section Parts A
- 14. Loading Section Parts B
- 15. Barrel C
- 16. Barrel D
- 17. Gun Shield
- 18. Cupola Rail
- 19. Loading Section Parts C
- 20. Muzzle Brake A
- 21. Muzzle Brake B

B PARTS

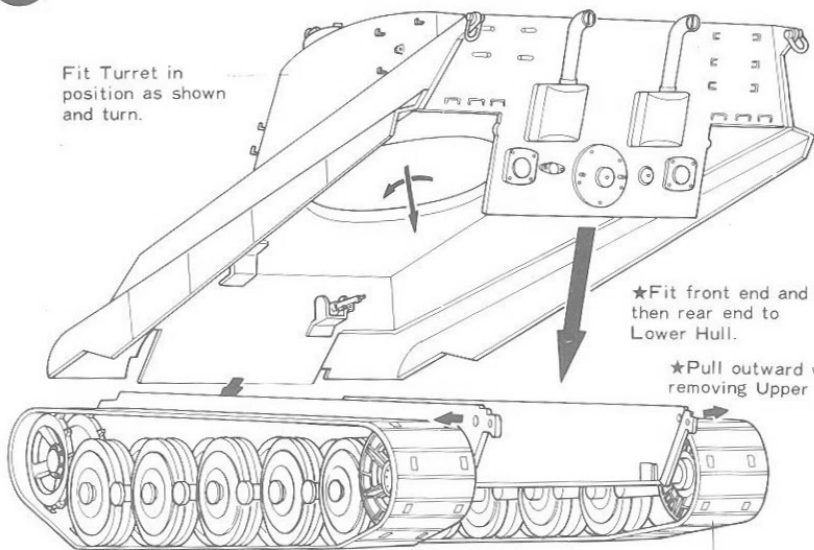
- 1. Wire Rope A
- 2. Turret Hook A
- 3. Armour Skirt Right
- 4. Armour Skirt Left
- 5. Periscope Cover A
- 6. Periscope Cover B
- 7. Turret Hook B
- 8. Upper Hook
- 9. Rear Panel
- 10. Spare Track A
- 11. Spare Track B
- 12. Spare Track C
- 13. Spare Track D
- 14. Unnecessary
- 15. Muffler Cover
- 16. Muffler
- 17. Rear Hook
- 18. Front Hook
- 19. Light
- 20. Engine Cover Hinge
- 21. Machine Gun
- 22. Shovel
- 23. Crank
- 24. Driver's Hatch
- 25. Machine Gun Rack
- 26. Ventilator A
- 27. Ventilator B
- 28. Ventilator C
- 29. Ventilator D
- 30. Wire Rope B
- 31. Drive's Base

C PARTS

- 1. Drive Sprocket A
- 2. Commander's Right Arm
- 3. Commander's Body
- 4. Unnecessary
- 5. Commander's Base
- 6. Commander's Left Arm A
- 7. Commander's Left Arm B
- 8. Drive Sprocket B
- 9. Road Wheel A (Inside)
- 10. Road Wheel B (Inside)
- 11. Road Wheel B (Outside)
- 12. Road Wheel A (Outside)
- 13. Idler Wheel A
- 14. Idler Wheel C
- 15. Idler Wheel B
- 16. Rear Shaft
- 17. Unnecessary
- 18. Binoculars
- 19. Front Shaft Right
- 20. Front Shaft Left
- 21. Driver's Upper Half
- 22. Driver's Left Arm
- 23. Driver's Right Arm

10 Completion of King Tiger

Fit Turret in position as shown and turn.

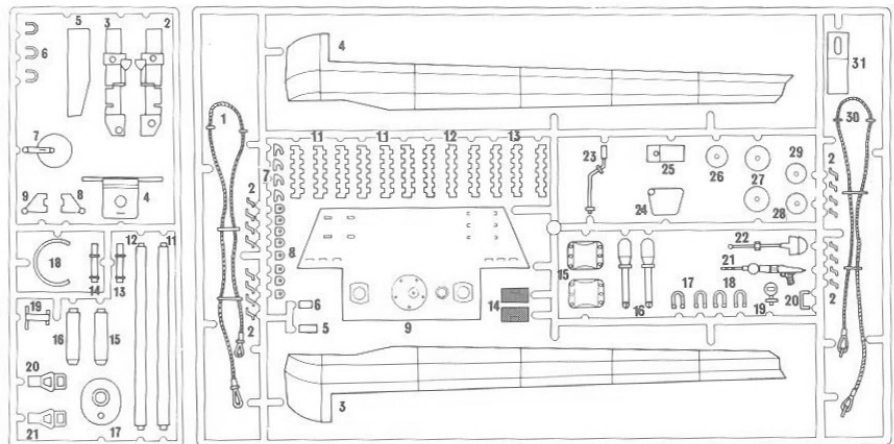


★Fit front end and then rear end to Lower Hull.

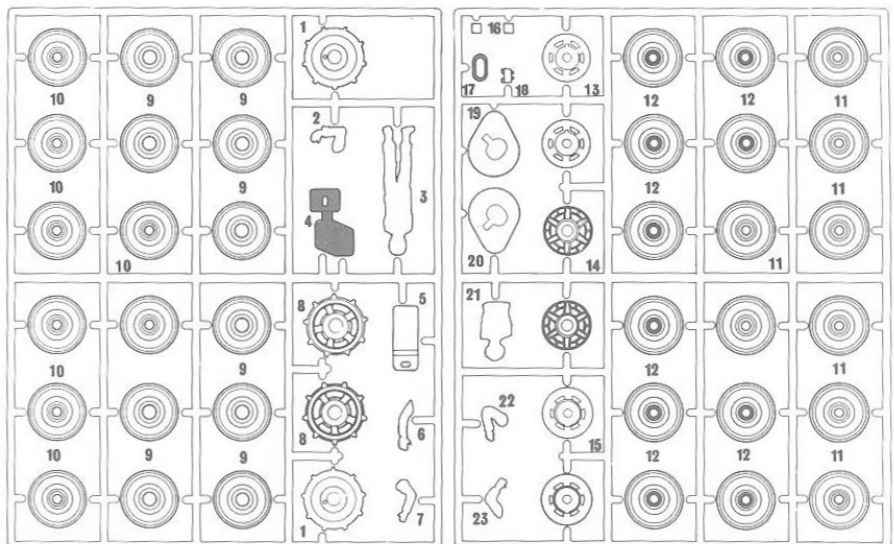
★Pull outward when removing Upper Hull.

Mount Tracks.

A PARTS B PARTS



C PARTS



PAINTING



APPLYING DECALS

《Painting of the King Tiger》

German military vehicles were painted differently according as they were used before or after August 1943. Until then, German military vehicles in Europe had been painted in the basic colour of German grey and those in Africa in that of dark yellow. In August 1943, the German military authorities ordered to use only dark yellow as the basic colour. To camouflage their vehicles, field forces often painted dark-green or reddish-brown pattern on the dark yellow ground. The King Tiger manufactured in 1944-45 was generally painted in dark yellow. Toward the end of the war, however, some tanks of this type were painted in German grey because paint factories in Germany were destroyed by bombing raids and could not supply sufficient paint.

《Marking of the King Tiger》

The King Tiger usually wore national marks, divisional marks and turret numbers. In addition to them, crew often painted a "Kill" mark on their tank. This mark showed the number of enemy tanks which they had destroyed. The turret number painted on both sides of the turret consisted of three figures which represented the company, platoon and vehicle.

《Camouflage Pattern and Marking of King Tiger》

