

# Messerschmitt Me163B KOMET



1/32 Scale, Kit No. JS-087



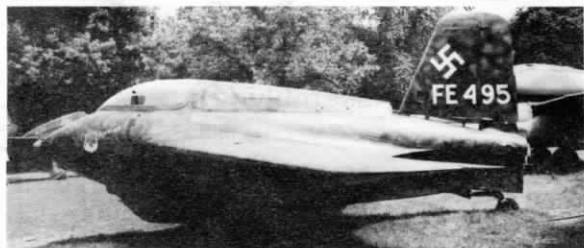
Completed Model



## History

In 1937, the German Research Institute for Gliding Flight (DFS) commissioned Alexander Lippisch to research rocket propulsion for aircraft. He proceeded to design the first experimental powered-glider with tailless configuration, DFS-194. The development of this project was then taken over by the Messerschmitt A.G. in 1939. Installed with a HWK R1 rocket motor, it successfully made its first flight in the summer of 1940. The first prototype of Me 163 (Me 163 V1) was tested in the early spring of 1941. In the meantime the Luftwaffe had planned to develop an interceptor version of the Me 163, which resulted in the variant being assigned the designation Me 163B. Hellnuth Walter developed a new rocket motor, HWK 509, and adapted Me 163B to take it. The rocket motor weighed 100 kg, and consisted of two principal assemblies. The forward assembly was comprised of the turbine housing, the fuel pumps geared to the turbine shaft, the control box, a pressure reducing valve, and the electric starter motor. The aft assembly was formed by the combustion chamber unit, which was connected to the forward assembly by means of a cylindrical tube through which pipes carried fuel to the individual jets. The rocket was fueled with T-Stoff, (80 % hydrogen peroxide plus oxyquinoline or phosphate as a stabilizer) and C-Stoff (30 % hydrazine hydrate solution in methanol). The first production Me 163B-1a was actually accepted by the Luftwaffe in May, 1944. EK 16 was formed, and in May 1944, the just operational Komet squadron, Staffel of the Jagdgeschwader (JG) 400 was formed. Komet's first real success was achieved on August 5th, when three Me 163B Komets knocked down three P-51D Mustangs from the U.S. 352nd Fighter Group. By the end of August, the 2 Staffel of

JG 400 had joined the 1 Staffel of JG 400 at Brandis to protect the Luena synthetic fuel plants. But as these were situated on the outer edge of the Komet's radius of action, the Komet Staffeler could make only limited contact with the intruder. The lack of rocket fuel caused the pilots to abandon their Komets and consequently resulted in the actual liquidation of the JG 400. Due to limited endurance, its battle record was small and the life spanned barely a decade, but the psychological effect to the enemy was tremendous, and it was a most spectacular warplane in World War II.



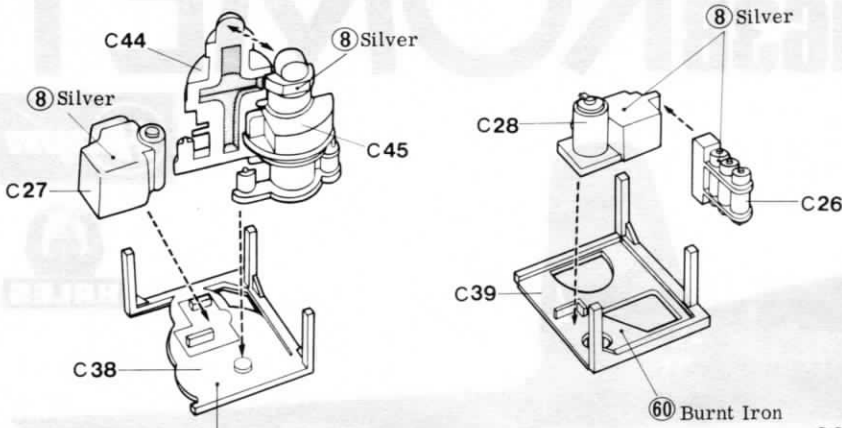
## Data

Engine : Walter HWK 509A-1 (or A-2) Rocket engine  
Thrust: 1,700 kg / Overall length: 5.85 m / Overall width: 9.32 m / Wing area: 18.00 m<sup>2</sup> / Weight (in empty equipped condition): 1,900 kg / Complete weight: 4,300 kg / Armament: 30 mm MK108 cannon x 2 / Maximum speed: 828.81 km (from sea level), 959.17 km (at altitude of 3,000-9,000 m) Rate of climb: 4,800 m/min. / Climbing time: 2 minute 36 seconds, up to 9,000 m / 3 minute 30 seconds, up to 12,000 m / Flight duration: 7 minute 30 seconds

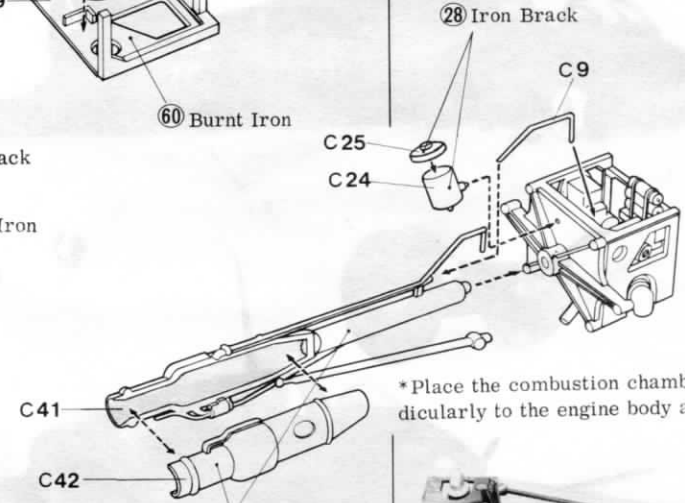
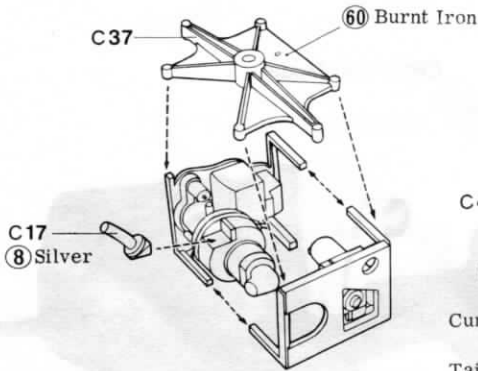
Manufactured in Japan & Packed in England by A. A. Hales Ltd., Hinckley, Leics.

# 1 Engine Assembly

\*Paint the parts and then assemble.



Paint this section in **8 Silver** (same with the back side), and the framework in **60 Burnt Iron**.



Combustion chamber: **60 Burnt Iron** + **9 Gold**  
Tailpipe: **8 Silver** or **10 Copper**

## Read This before Assembly

■ First read all the instructions and follow them when working on the model. Cut off the parts from the stem with a nipper or cutter.

## MODEL COLORS

The model colors are numbered from ①-62. Be sure to paint after the model is assembled.

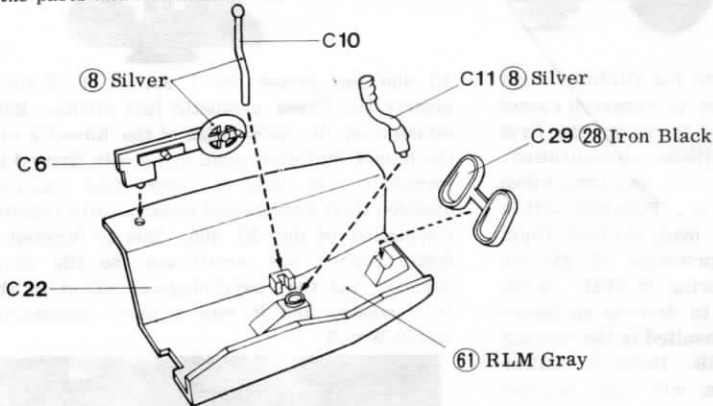
\*Place the combustion chamber perpendicularly to the engine body and cement.



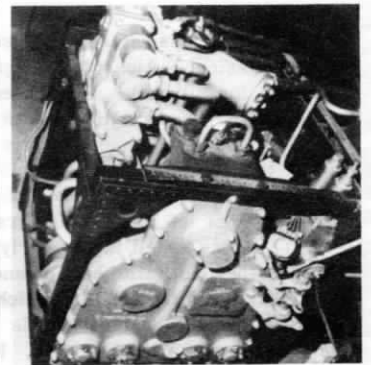
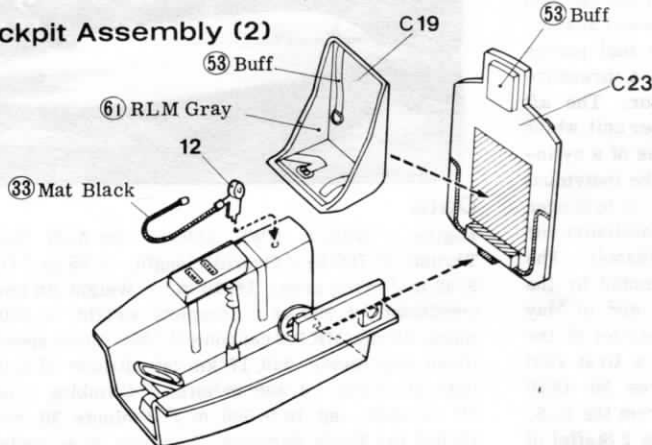
Assembled Engine

# 2 Cockpit Assembly (1)

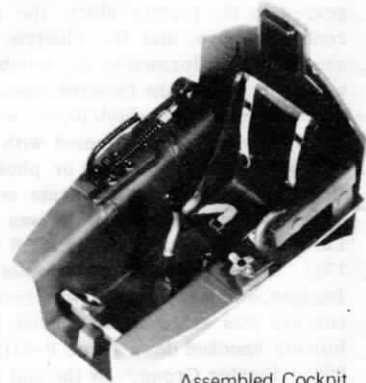
\*Paint the parts and then assemble.



# 3 Cockpit Assembly (2)

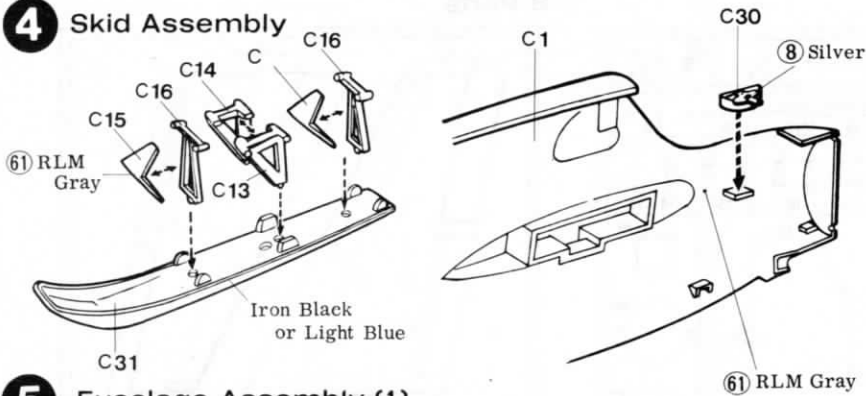


Walter HWK 509C Engine

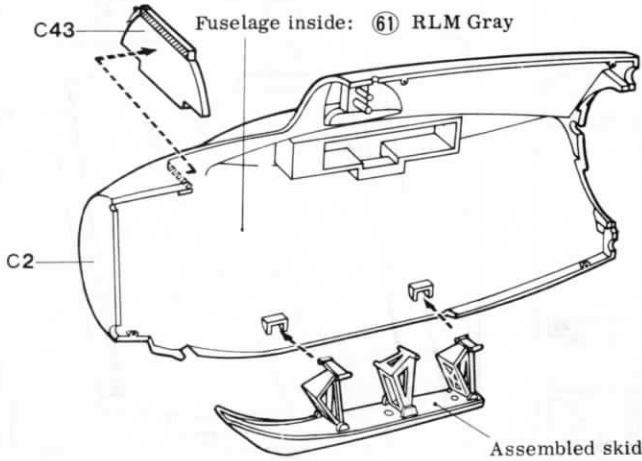


Assembled Cockpit

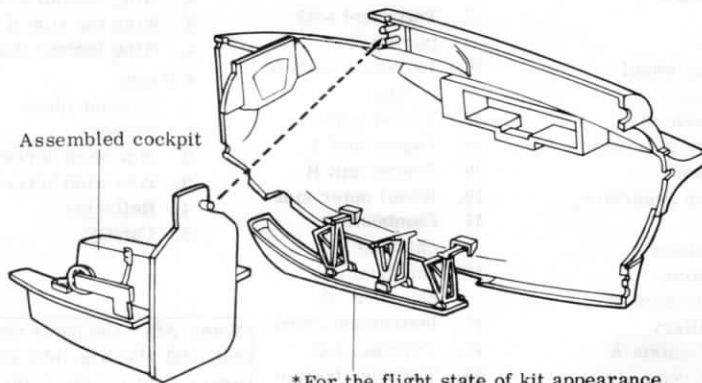
#### 4 Skid Assembly



#### 5 Fuselage Assembly (1)

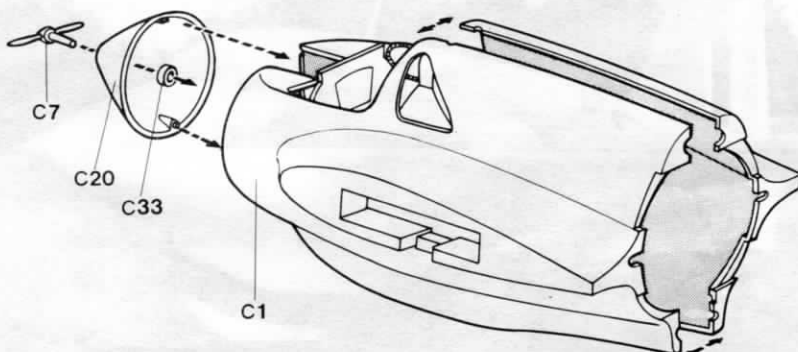


#### 6 Cockpit Installation



\*For the flight state of kit appearance, cement part C31 directly to the fuselage.

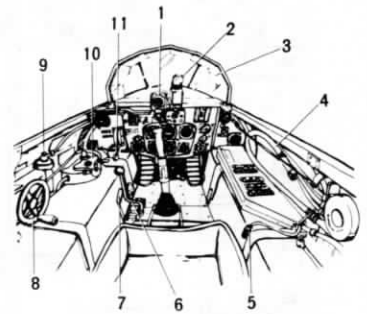
#### 7 Fuselage Assembly (2)



#### Drawing-4 Skid Assembly

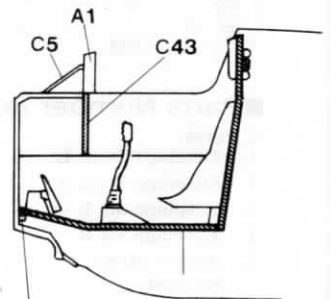
Assemble so that the bracket C16 is perpendicular to C31. Do not move the cemented parts until they are completely dried.

#### Reference Drawing of Cockpit



1. Compass
2. Revi 16 gunsight
3. 90 mm armour glass screen
4. Pilot oxygen mask
5. Helmet receiver leadwire
6. Hand pump for flap
7. Flap position adjusting lever
8. Trim tab adjusting handwheel
9. Oil pressure tank
10. Throttle lever
11. Landing skid switch-over lever

#### Assembly Reference Drawing



Install the floor on this section.

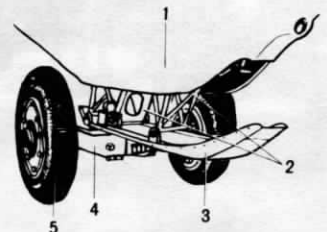
#### Drawing-6 Cockpit Installation

Cement the pilot seat to the position as shown on the above drawing.

#### Drawing-7

For mobility of propeller, do not put any adhesive on the generator drive propeller shaft.

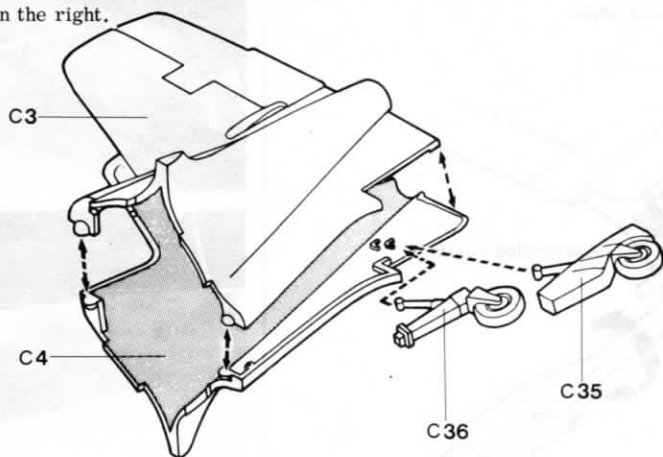
#### Reference Drawing of Skid and Dolly



1. Landing-skid mounting
2. Landing-skid mounting bracket
3. Landing-skid
4. Take-off dolly
5. Large diameter wheel

## 8 Aft Fuselage Assembly

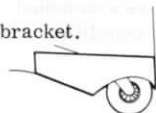
\*Choose the tailwheel by referring to the drawing on the right.



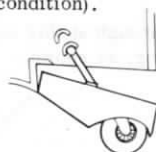
### Reference Drawing on Tailwheel Installation

(1) Tailwheel fairing (flying condition).

Remove the bracket.

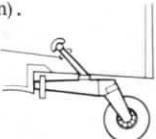


(2) Tailwheel fairing (take-off and landing condition).



(3) Tailwheel without fairing (flying condition).

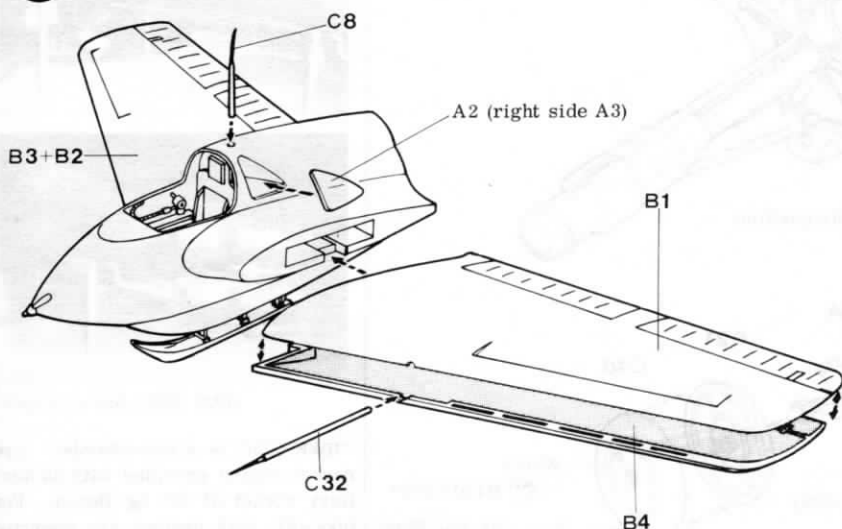
Remove.



(4) Tailwheel without fairing (take-off and landing condition).



## 9 Wing Assembly

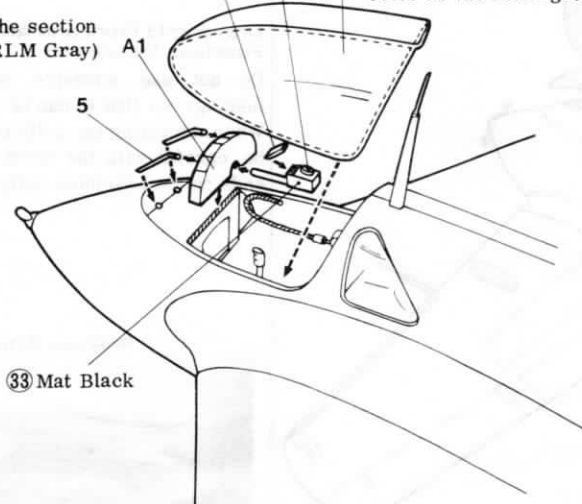


Reference Picture of Tail Section

## 10 Canopy Installation

(Paint the section RLM Gray) A1 A4 C18 A5 (Paint the framework the same color as the fuselage.)

(Paint the section RLM Gray)



33 Mat Black

### Drawing-10 Canopy Installation

Cement the armour glass screen (A1) to the top of the instrument panel by referring to the drawing on the left. Insert the one end of bracket C5 into the hole on A1, and cement the other end to the designated position. First cement together the gun sight parts C18 and A4, and then finally cement the canopy A5 to the fuselage.

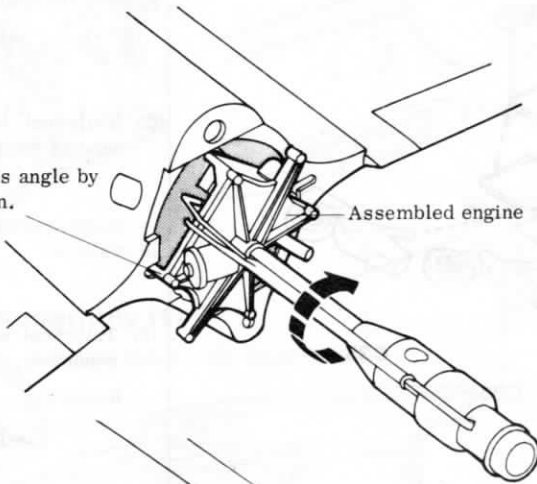
Reference Picture of Canopy



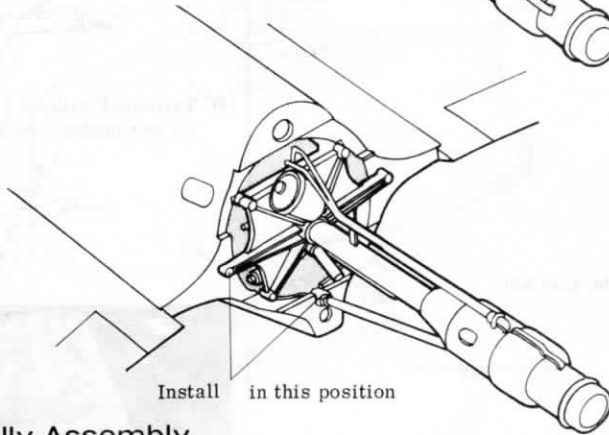
## 11 Engine Installation

\*The engine should be installed after the fuselage is assembled. Carefully check the drawing when installing.

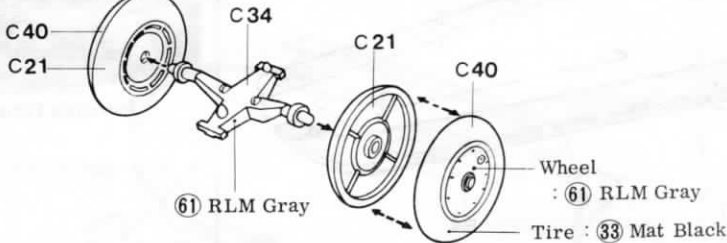
Fit through at this angle by turning, as shown.



Install in this position

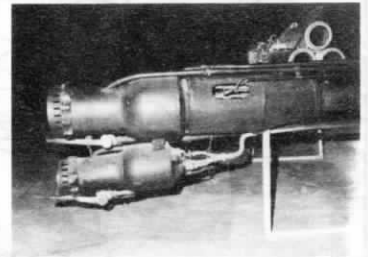
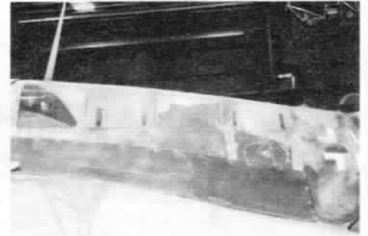
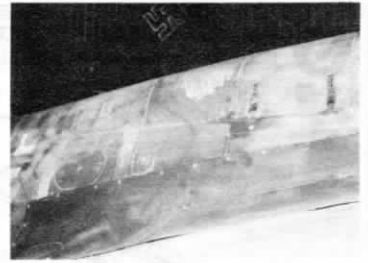
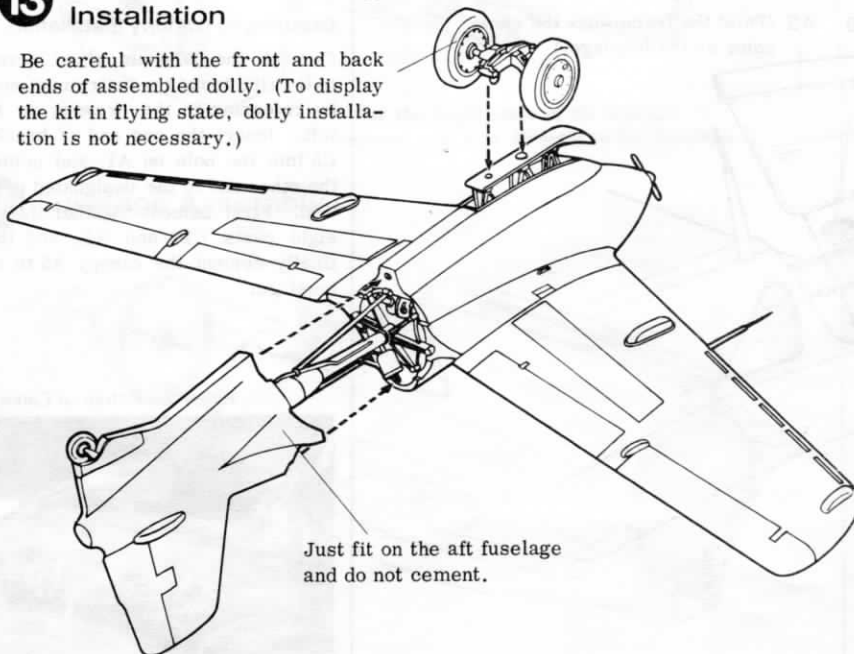


## 12 Dolly Assembly



## 13 Front and Aft Fuselage Installation

Be careful with the front and back ends of assembled dolly. (To display the kit in flying state, dolly installation is not necessary.)



HWK 509C Rocket Engine

\*HWK 509C is a two-chamber type rocket engine provided with an auxiliary rocket of 300 kg thrust. For take-off both engines are operated and while cruising only the auxiliary rocket is operated. The Me 163C and Me 263 (Ju 248) adopted this type of rocket engine.

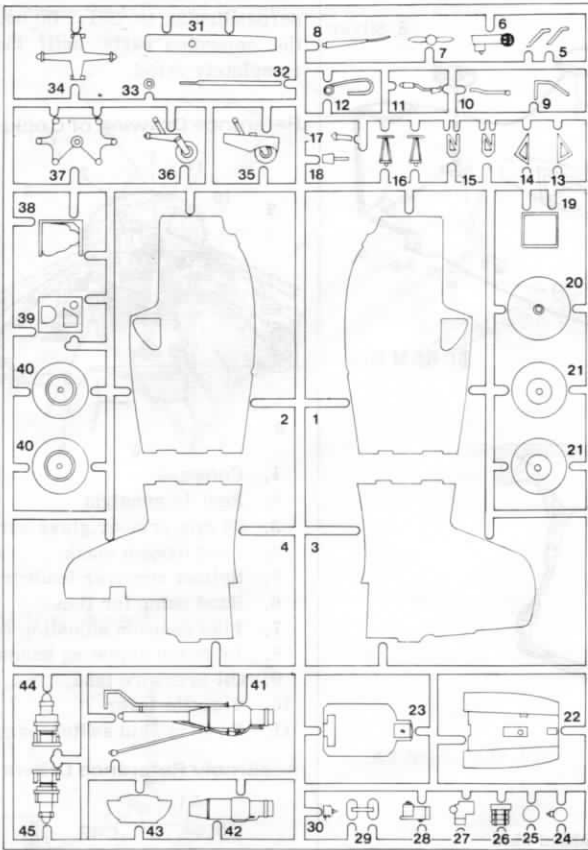
### Drawing-13 Front and Aft Fuselage Installation

Do not use adhesive on the aft fuselage so that it can be removed. When cementing the dolly to the skid, be careful with the front and back ends on the assemble dolly.

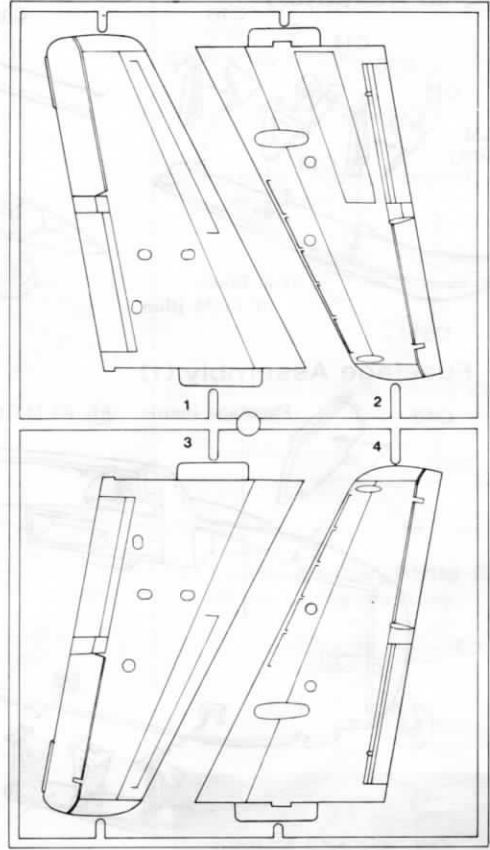
Reference Picture of Dolly



## C Parts



## B Parts



### Parts Number and Name

#### C Parts

- |                              |                             |
|------------------------------|-----------------------------|
| 1. Fuselage front L          | 17. Steam gas outlet        |
| 2. Fuselage front R          | 18. Gunsight                |
| 3. Fuselage aft L            | 19. Seat                    |
| 4. Fuselage aft R            | 20. Nose                    |
| 5. Armour glass bracket      | 21. Inside wheel            |
| 6. Trim wheel                | 22. Cockpit                 |
| 7. Generator drive propeller | 23. Armour plate            |
| 8. Antenna                   | 24. Steam generator, bottom |
| 9. Engine pipe               | 25. Steam generator, top    |
| 10. Throttle lever           | 26. Regulator               |
| 11. Control column           | 27. Auxiliary mechanism B   |
| 12. Oxygen regulator         | 28. Auxiliary mechanism A   |
| 13. Skid bracket B, L        | 29. Foot pedal              |
| 14. Skid bracket B, R        | 30. Throttle lever          |
| 15. Skid bracket A, front    | 31. Skid                    |
| 16. Skid bracket A, aft      | 32. Pitot tube              |

- |                               |
|-------------------------------|
| 33. Propeller lock            |
| 34. Dolly                     |
| 35. Tailwheel with fairing    |
| 36. Tailwheel without fairing |
| 37. Thrust plate              |
| 38. Engine unit L             |
| 39. Engine unit R             |
| 40. Wheel outer side          |
| 41. Combustion chamber, L     |
| 42. Combustion chamber, R     |
| 43. Instrument panel          |
| 44. Turbine, top              |
| 45. Turbine, bottom           |

#### B Parts

- |                       |
|-----------------------|
| 1. Wing top side L    |
| 2. Wing bottom side R |
| 3. Wing top side R    |
| 4. Wing bottom side L |

#### A Parts

- |                        |
|------------------------|
| 1. Armour glass screen |
| 2. Side wind screen L  |
| 3. Side wind screen R  |
| 4. Reflector           |
| 5. Canopy              |

Note: After the parts are taken out, cut the bag into pieces to prevent the infants from covering their head.

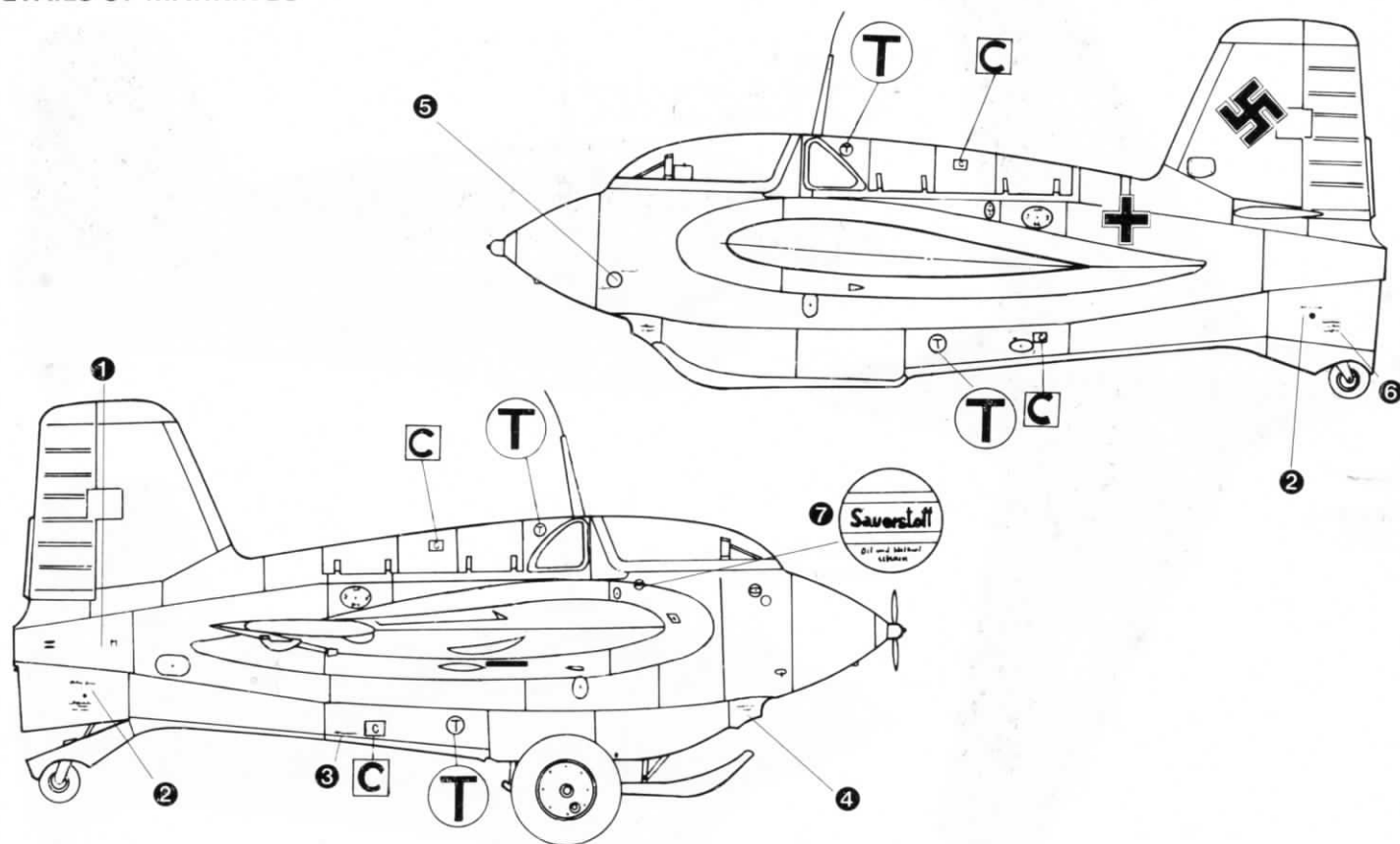
Me 163B (Airframe captured by Royal Air Force)



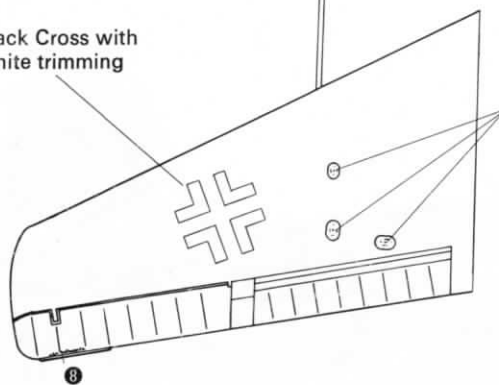
# Messerschmitt Me163B "Komet"

1/32nd SCALE

## DETAILS OF MARKINGS



Black Cross with White trimming



Mark in black on check hatch



1 Sporn vor Start verriegeln

2 Hier aufbocken

3 Schleppseil

4 Schleppseil hier einhängen

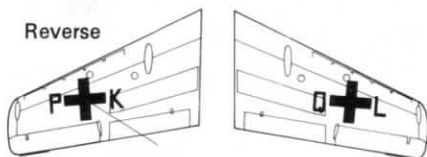
5 Presluft  
130atv

6 Reifendruck 4.5  
Beivollast



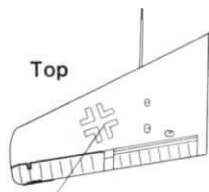
8 Nicht Anfassen

Reverse



Black Cross

Top



White

### THE HASEGAWA DE LUXE 1/32nd SCALE SERIES INCLUDES:

- JS 060 FOCKE-WULF FW190
- JS 061 BOEING P-12E
- JS 064 CURTISS BF-2C
- JS 066 BOEING F4B-4
- JS 070 MITSUBISHI A6M5 ZERO (ZEKE)
- JS 073 MESSERSCHMITT BF-109E
- JS 079 MESSERSCHMITT ME-262A
- JS 081 GRUMMAN HELLCAT F6F-3/5
- JS 084 SABRE F-86F
- JS 086 P51D MUSTANG
- JS 087 MESSERSCHMITT 163B KOMET
- JS 089 NAKAJIMA OSCAR
- JS 092 BOEING P-26A PEASHOOTER



Walter 509A Rocket Motor

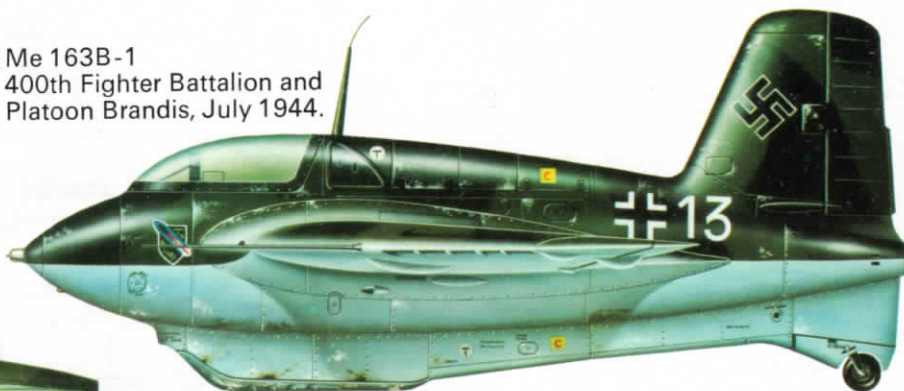
# Messerschmitt Me163B "Komet"

1/32nd SCALE

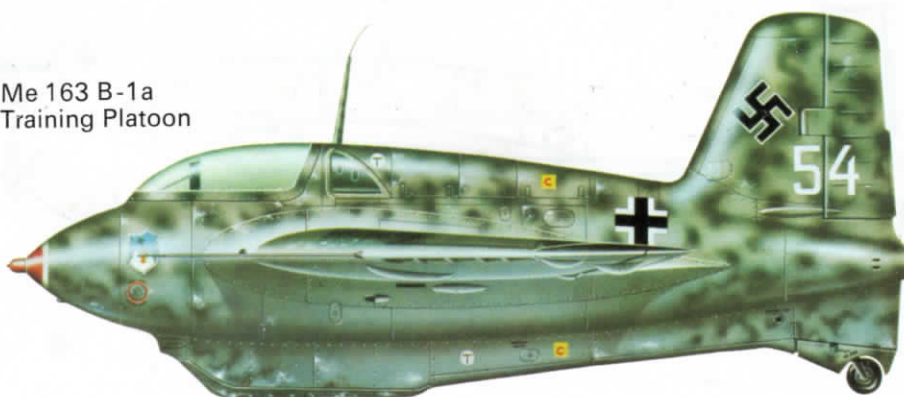
HASEGAWA  
COLOUR GUIDE



- ① Me 163B-1  
400th Fighter Battalion and  
Platoon Brandis, July 1944.



- ② Me 163 B-1a  
Training Platoon



- ③ Me 163 Ba-1  
400th Fighter Battalion,  
1st Platoon



- ④ Me 163 B-O V41  
16th Test Flight Squadron,  
May 1944.  
(Red all over)

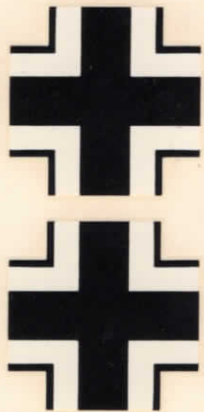


Standard  
Top Side.

Standard  
Reverse Side.

*Gyotoku*





P Q  
K L

5454

163107

163107

190599

190599

C C T T

C C T T



- ① 190599
- ② 190599
- ③ 190599
- ④ 190599
- ⑤ 190599
- ⑥ 190599
- ⑦ **V41**
- ⑧ **V41**

PK QL  
PK QL

4 4

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