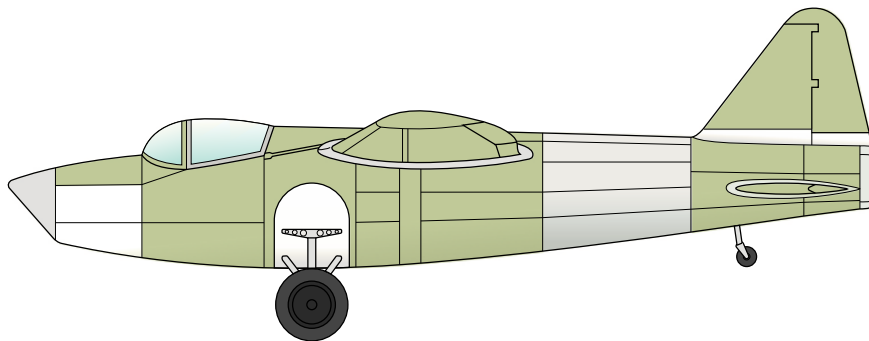




Heinkel He 178 V1

NÁVOD / INSTRUCTION

(CZ)

Události, které vedly k prvnímu letu letounu s proudovým motorem na světě, započaly v roce 1936, když Ernst Heinkel zaměstnal ve svém závodě Dr. Hanse J. Pabst von Ohain a jeho asistenta Maxe Hahna.

V září 1937 byl první ukázkový proudový motor HeS 1 vyzkoušen na zkušební stolici. Přesto, že byl motor poháněn vodíkem a neměl žádné ovládání výkonu, byl schopen vyvinout tah až 250 kg. Po úspěchu s motorem HeS 1, von Ohain začal práce na mnohem výkonnějším motoru HeS 3b, který jako palivo spaloval benzín a byl vybaven ovládacími klapkami pro kontrolu výkonu. Také byly současně zahájeny práce na konstrukci draku letounu, který byl od počátku navržen pro instalaci jednoho proudového motoru.

He 178 V1 byl hornoplošník s kabinou pilota umístěnou do přední části trupu před náběžnou hranou křídla. Měl kovový, skořepinový trup snýtovaný nýty se zapuštěnou hlavou, dřevěná křídla a zatahovací podvozek. Všechny zkušební lety však letoun absolvoval s vytaženým podvozkem a zakrytými podvozkovými šachtami. Zkoušky s pojižděním prototypu vybaveným motorem HeS 3b započaly 24. srpna 1939 a 27. srpna letoun uskutečnil svůj první let na letišti Marienehe. Šlo o lety prvního proudového letounu na světě. Při pokračujících testech byl letoun předveden 1. listopadu vedoucím pracovníkům RLM.

Letoun He 178 V1 celkově provedl 12 letů, pilotoval jej vždy kapitán Erich Warsitz.

Později dostal stroj silnější motor HeS 6, delší křídlo a zatahovací podvozek. Tato varianta je v některých pramenech označována jako He 178 V2.

Letoun byl později umístěn v Leteckém Muzeu v Berlíně, kde byl spolu s letounem He 176 zničen při jednom ze spojeneckých náletů v roce 1943.

Technické údaje:

délka - 7,48 m

rozpětí - 7,20 m (He 178 V1), 8,70 m (He 178 V2)

výška - 2,1 m

prázdná hmotnost - 1 620 kg

vzletová hmotnost - 1 998 kg

maximální rychlost - 598 km/h

(GB)

The events which led to the world's first flight by an aircraft powered solely by a turbojet began when Ernst Heinkel employed Dr. Hans J. Pabst von Ohain and his assistant Max Hahn in March 1936.

By September 1937, the first demonstration turbojet, the HeS 1 (Heinkel Strahltriebwerk Nr. 1 or Jet engine No. 1) was bench - running. Despite being fueled on hydrogen and possessing no throttle control, the unit was able to develop 250 kg thrust. Following the success of the HeS 1, von Ohain began work on a more powerful unit, the HeS 3b which ran on gasoline and was fitted with a proper throttle control. Work also began on an airframe designed from the outset to utilize the power of one jet engine.

The He 178 V1 was to have flush - riveted, metal monocoque fuselage, wooden wings and retractable undercarriage, but for all the tests with He 178 V1 the undercarriage was fixed down and the wheel wells covered over. Taxiing trials with the prototype, fitted with an HeS 3b began on August 24, 1939 and on August 27 the aircraft made its first flight from Marienehe. These were the first flight of the jet aircraft in the whole World. On 1st November was the aircraft demonstrated to the RLM officials during the continuation trials. The He 178 V1 made then about twelve flights in all, these being carried out by Flugkapitan Erich Warsitz.

Later on, the aircraft received more powerful HeS 6 engine, wing with longer span and retractable undercarriage. This version is by some sources designated as He 178 V2.

The He 178 V1 was finally despatched to the Berlin Air Museum where it was destroyed, along with He 176 in a 1943 bombing raid.

Technical specifications:

Length: 7.48 m (24 ft 6 in)

Wingspan: 7.20 m (23 ft 3 in - He 178 V1). 8.70 m (28 ft 4 in - He 178 V2)

Height: 2.10 m (6 ft 10 in)

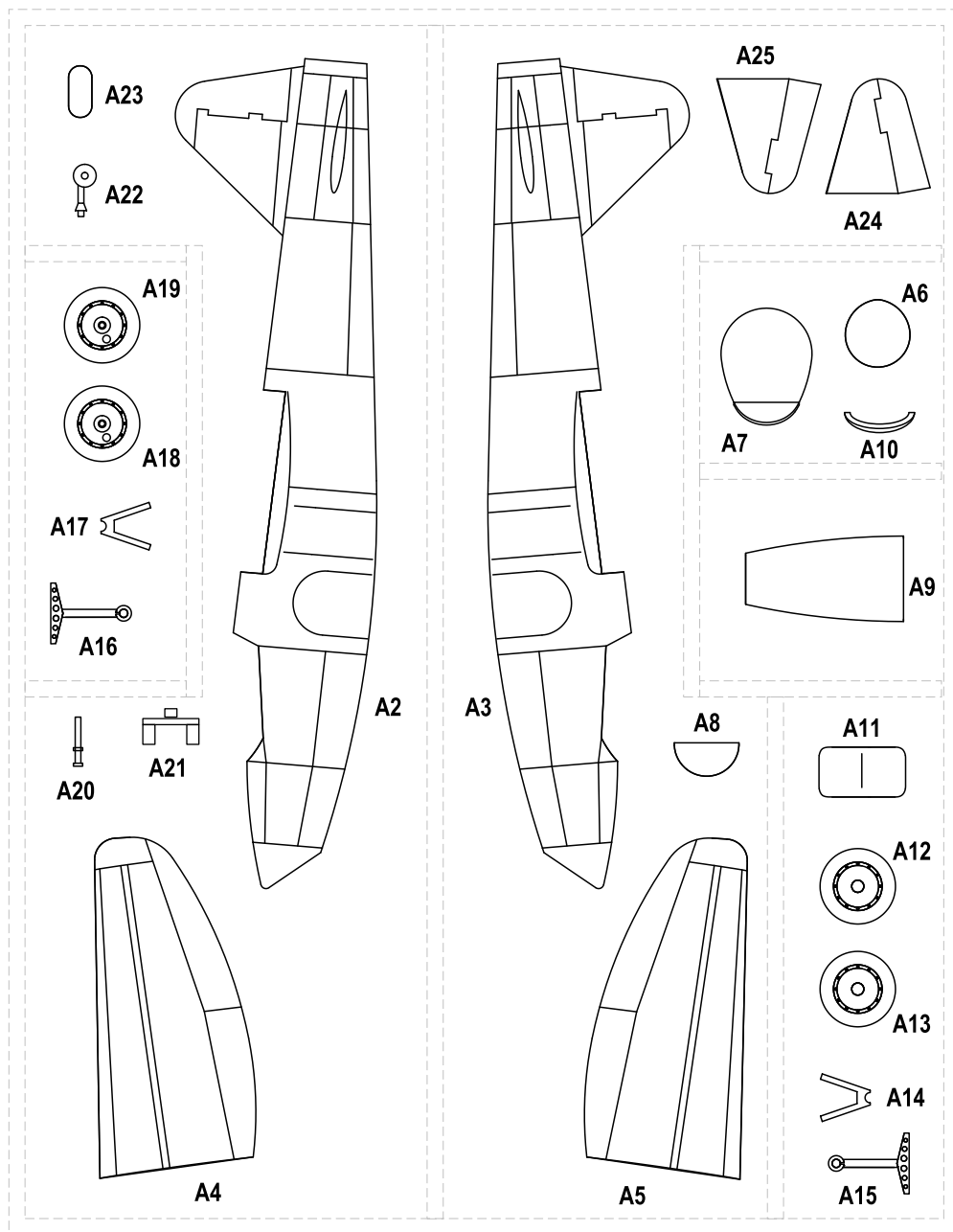
Empty weight: 1,620 kg (3,572 lb)

Max takeoff weight: 1,998 kg (4,405 lb)

Performance:

Maximum speed: 598 km/h (375 mph)

DÍLY - PARTS



FILM



CLEAR part

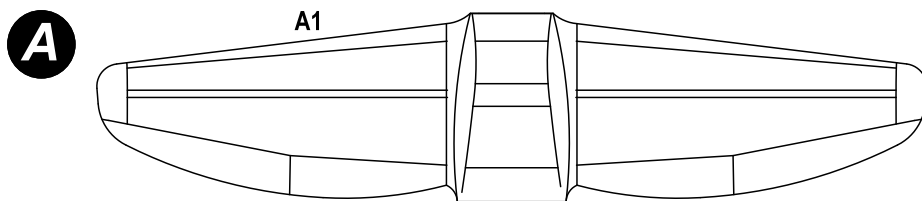
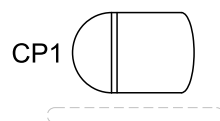
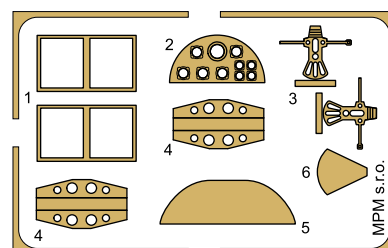


PHOTO-ETCHED parts (L1-L6)



MOŽNOST VOLBY
OPTIONAL
NACH BELIEBEN
OPTION



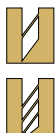
POUŽÍŤ LEPIDLO NA KOV
INSTANT GLUE FOR METAL
METALLKLEBER
COLLE A METAL



ZHOTOVIT NOVĚ
SCRATCH BUILD
FERTIGSTELLEN
ACHEVER



OHNOUT
BEND
BIEGEN
COURBER

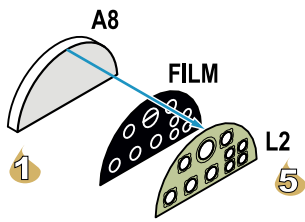


SYMBOLS

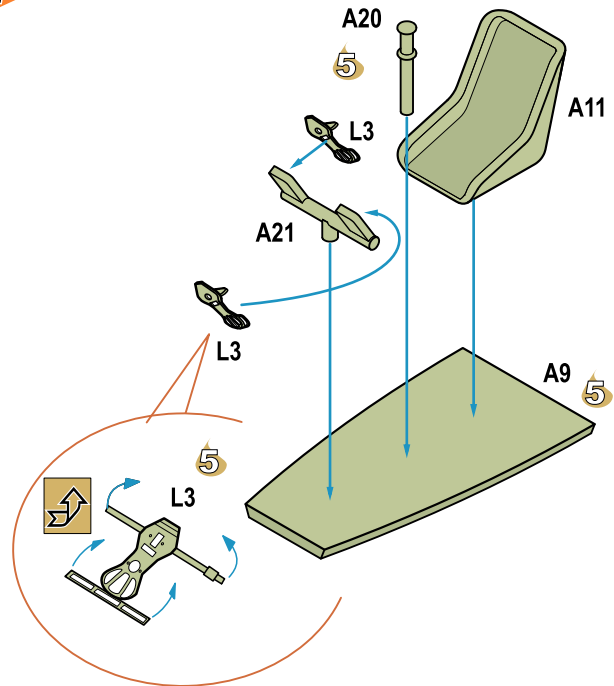
ŘEZAT/VRTAT
CUT OFF/DRILL
ENTFERNEN
DETACHER

SESTAVA - ASSEMBLY

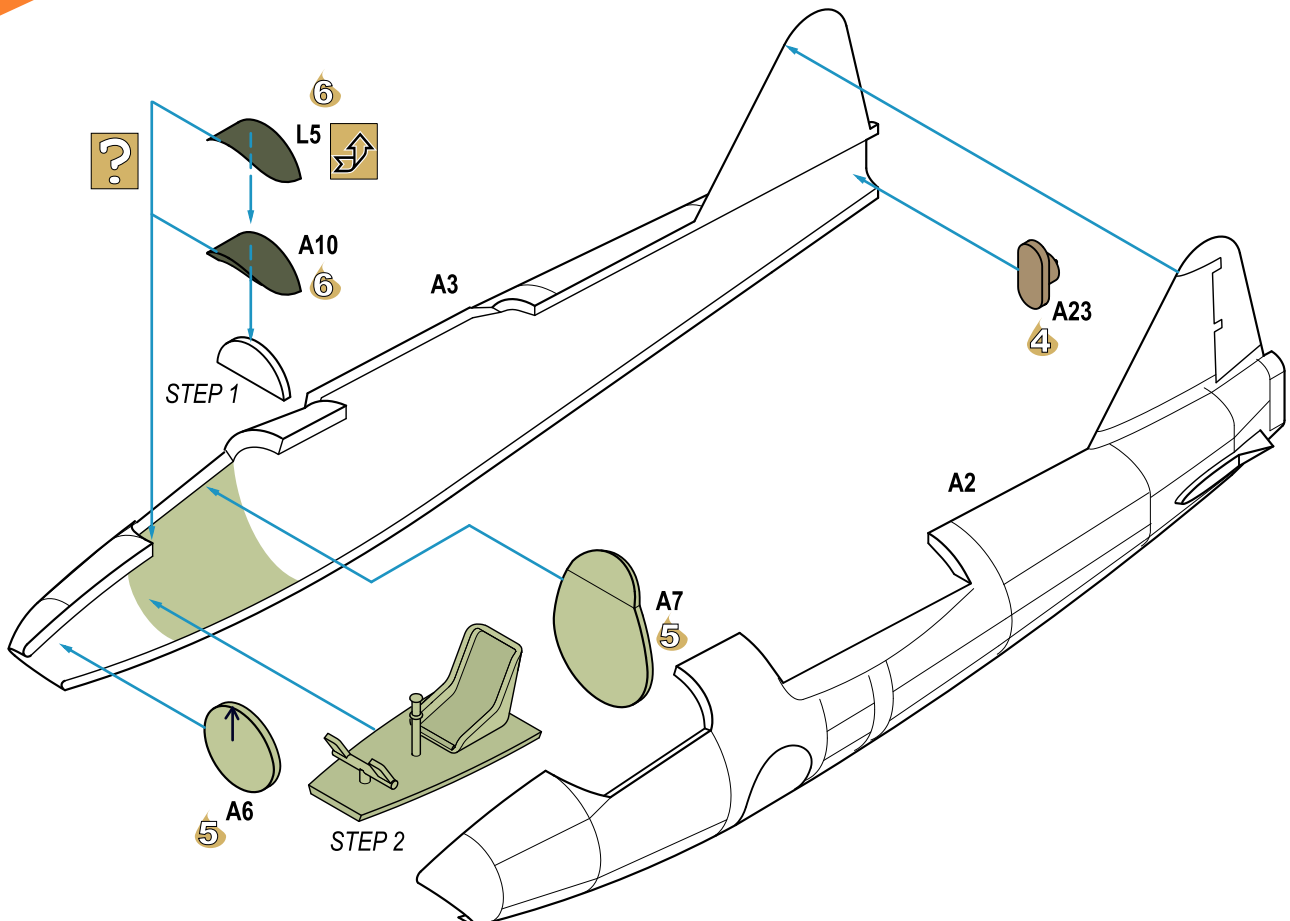
1



2

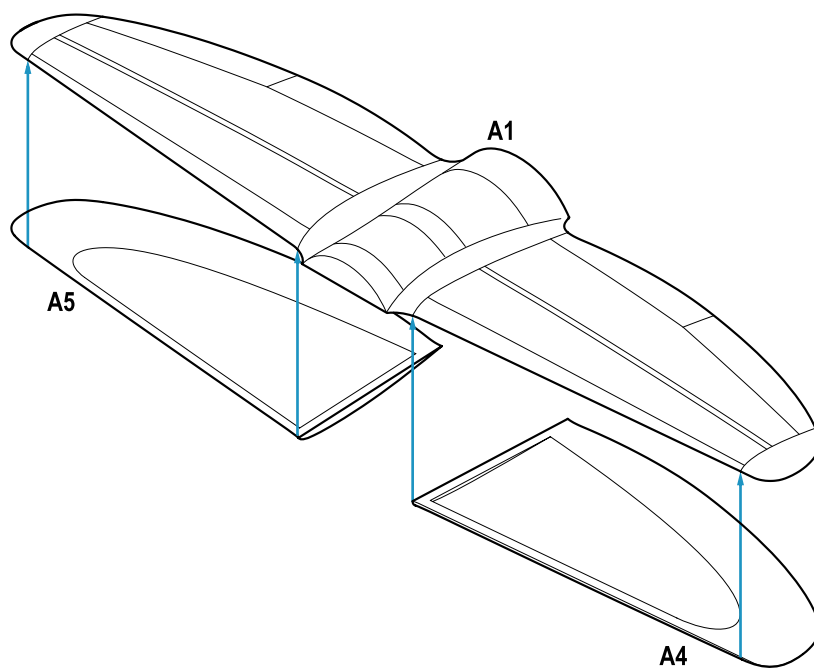


3

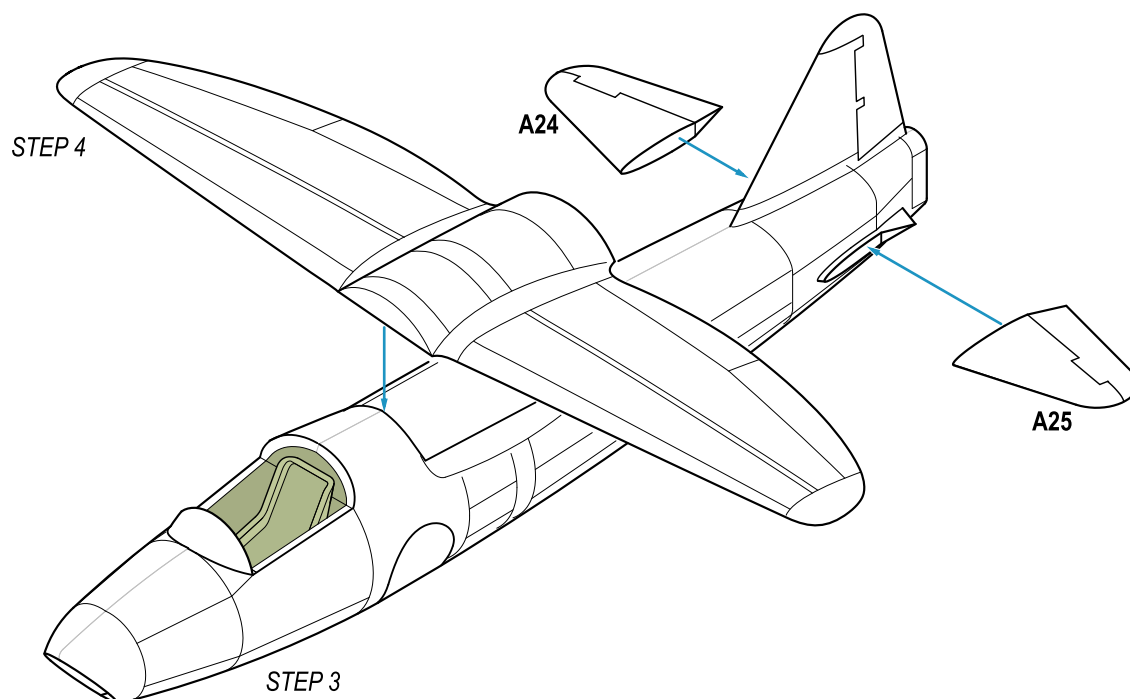


SESTAVA - ASSEMBLY

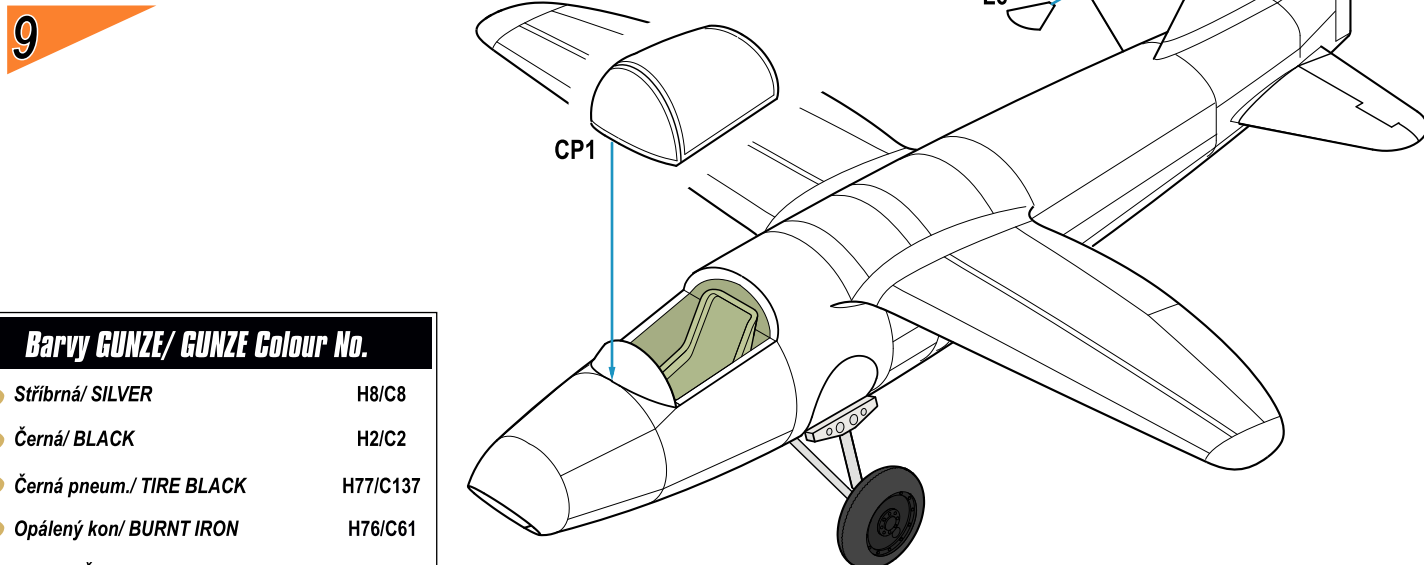
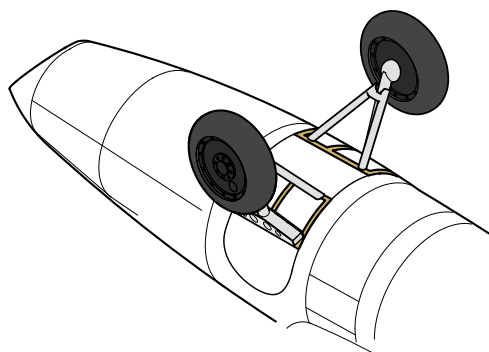
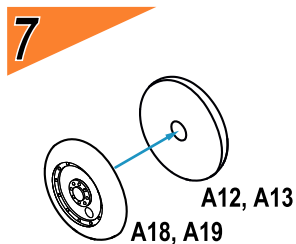
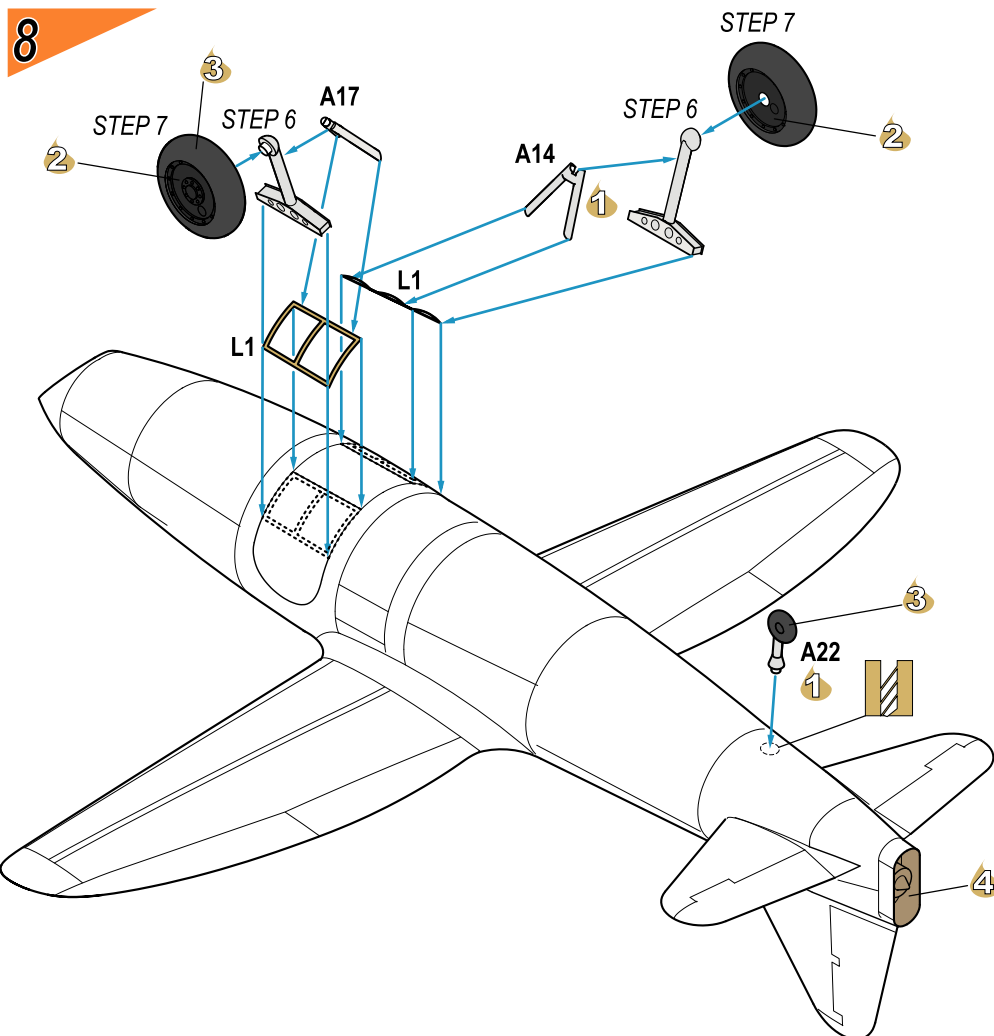
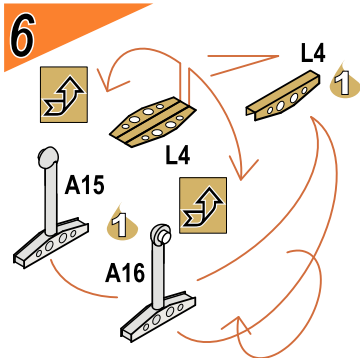
4



5



SESTAVA - ASSEMBLY



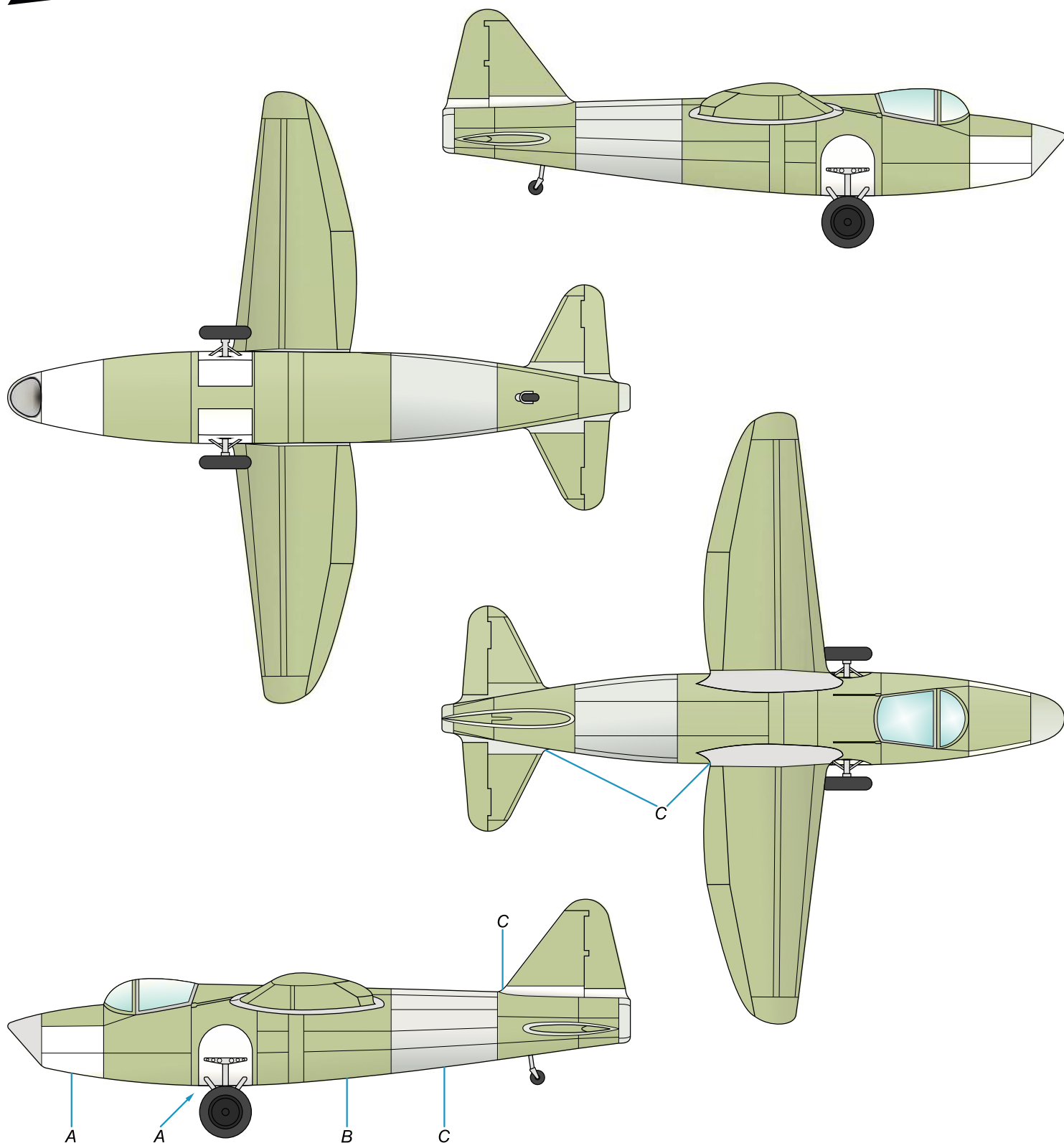
Barvy GUNZE/ GUNZE Colour No.

1	Stříbrná/ SILVER	H8/C8
2	Černá/ BLACK	H2/C2
3	Černá pneum./ TIRE BLACK	H77/C137
4	Opálený kov/ BURNT IRON	H76/C61
5	RLM 02 Šedá/ GREY	H70/C60
6	RLM 66 Černošedá/ BLACK GREY	H416/C116

Heinkel He 178 V1, první proudový letoun světa, tovární letiště firmy Heinkel, srpen - září 1939.

Heinkel He 178 V1, the World's first jet aircraft, Heinkel factory airfield, August - September 1939.

CAM. A



A Leštěný kov
Polished Metal
SM01

B RLM 02
RLM 02
H70/ C60

C Barva kovu
Natural Metal
H8/ C8

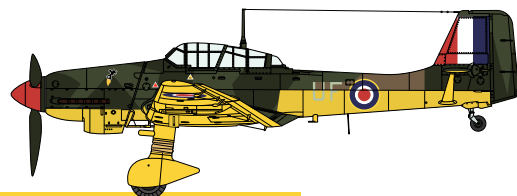
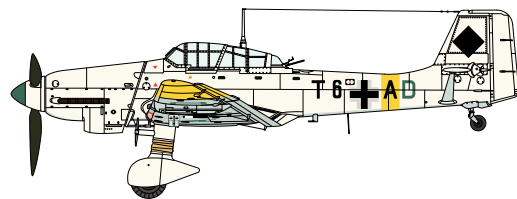
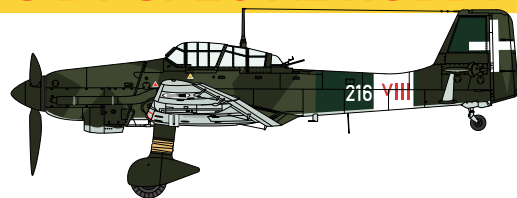


GERMAN PLANES AS EXCELLENT 1/72 KITS BY SPECIAL HOBBY



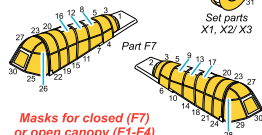
Junkers Ju 87D-1/3 'Combat & Captured'

SH 72542



RECOMMENDED FOR OUR JUNKERS JU 87 STUKA KITS

M72038 Junkers Ju 87D/G Stuka 1/72



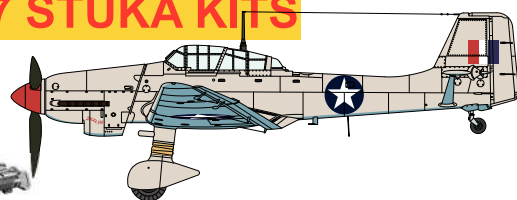
Masks for closed (F7) or open canopy (F1-F4)

F72377 1/72

Ju-87D/G Stuka Pilot and Gunner recommended for Academy, Special Hobby and other kits



Sculpted by M. Antkowiak

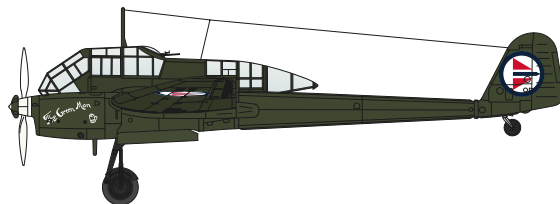
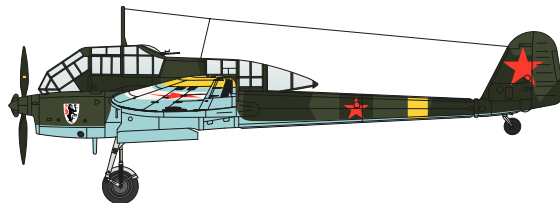
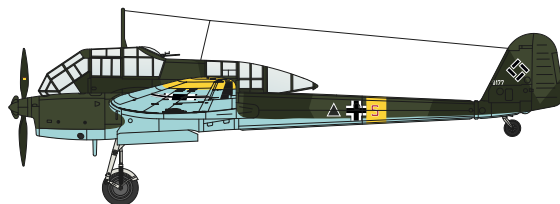
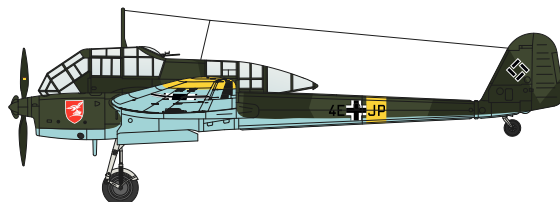


P72002 Gunner's Seat and MG 81Z machine gun



Focke Wulf Fw 189A 'Owls over the Eastern Front'

SH 72546

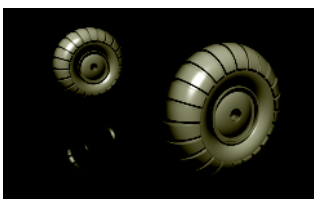


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Q72 284 1/72

Fw 189A-1/-2 Mainwheels Set



Q72 290 1/72

Fw 189A - Corrections Propellers



special HOBBY

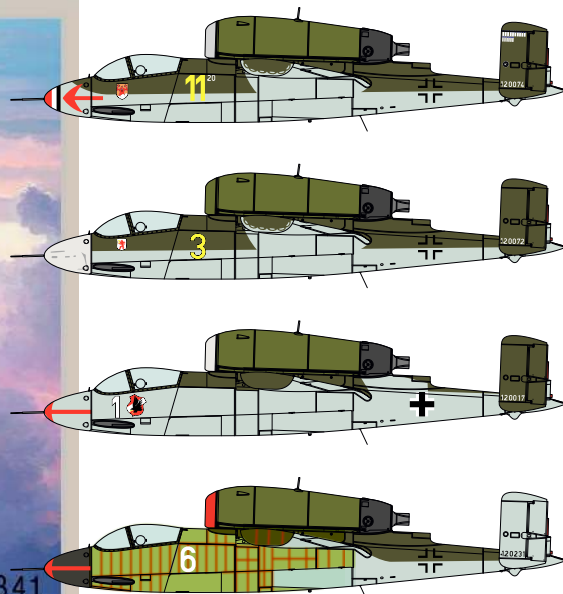
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CZECH MASTER'S KITS

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Heinkel He 162 Spatz 'German WWII Jet Fighter' SH 72341



RECOMMENDED FOR OUR HEINKEL HE 162 KITS



Q72361
Heinkel He 162A
Ejection Seat

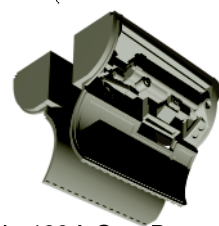


Q72362
Heinkel He 162A Wheels

7443
Heinkel He 162A Engine
(BMW 003 Jet)



7444
Heinkel He 162A Gun Bays



Messerschmitt Bf 109E-7Trop 'Braving Sand and Snow'



RECOMMENDED FOR OUR MESSERSCHMITT BF 109E KITS



7455
Bf 109E
Engine



7457
Bf 109E-3/4/7
Wing Guns



7458
Bf 109E
FuG VII Radio
Equipment



7460
Bf 109E-1/5
Wing
Machine Guns



7461
ESK 2000 B
German WWII
Gun Camera



Q72390
Bf 109E
Exhausts



Q72384
Bf 109E
Wheels



Q72391
Bf 109E
Tailwheel with
Strengthened Leg



Q72389
Bf 109E
Propeller
Spinner



F72369
Bf 109E Ace
A. Galland and
Mechanic

Messerschmitt Bf 109E-4/7 Mask
M72009

Messerschmitt Bf 109E-1/3 Mask
M72010

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MASK**

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