## HED SERIES

### Messerschmitt

Me 410 A-1 FIGHTER BOMBER

Me 410A-1/U4

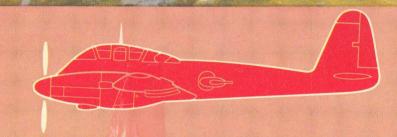


## FRUE

1/72nd SCALE MODEL CONSTRUCTION KIT

MADE IN ENGLAND BY
ROVEX SCALE MODELS LIMITED MARGATE KENT

Messerschmit Me 410 A-1



17.75 17.75

# FROG

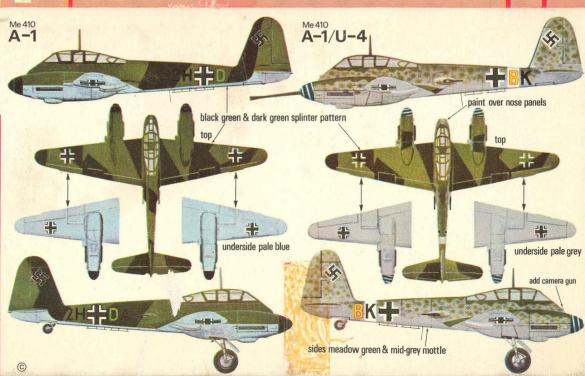
AIRCRAFT PAINTING GUIDE

#### **Messerschmitt Me 410A-1**

Authentically dressed Pilot and Navigator. Movable propellers, wheels, ailerons, elevators, guns and bomb doors. Full instructions, sheet of decals and display stand included. 81 wingspan, 64 long,

Extra parts included for 410A-1/U4 version

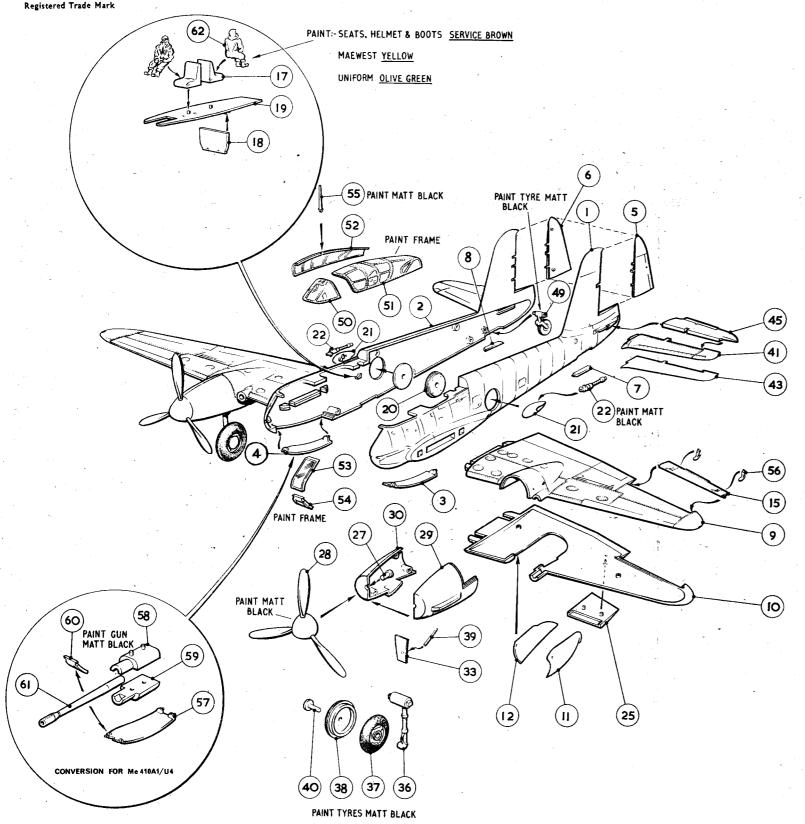
81 parts.





## ME. 410

CAT. No. F.178



#### INSTRUCTIONS.

It is recommended that the instructions and exploded view are studied and assembly practised before commencing.

Use Frog Polystyrene Cement and Frog Paints.

It may be necessary in some cases to mix two or more colours to obtain shades required. Paint all small parts before assembly.

Great care should be taken on handling the capsules of cement to avoid getting the adhesive on the face or clothing, and in particular, in the eyes.

#### HOW TO ASSEMBLE YOUR MODEL.

Sufficient parts to make alternative versions of the ME.410 have been provided in the kit. Before you start assembly you must choose whether you are going to make the Fighter-Bomber ME.410 A-1 or the Bomber-Destroyer ME.410 A-1/U4.

If you intend to paint your model, it is advisable to study the exploded diagram, paint the
pilot and observer, their seats, wheels, propellers and other small parts the recommended
colours before taking the parts off the stem.

#### FUSELAGE ASSEMBLY.

- Cement the seats (parts 17) and Bulkhead (part 18) to the cockpit floor (part 19) and cement the pilot and observer (parts 62) to their seats.
- 3. Pull the machine gun barrels (part 22) through the back of the machine gun casing (part 21) until the pivot of the barrel location is in the slot of the casing. Press the machine gun mountings (parts 20) into the fuselage halves (parts 1 and 2) and cement the casings to the mounting. The casing will hold the mounting in the fuselage and both should rotate freely and allow the gun barrel to elevate.
- 4. Locate and cement the cockpit floor assembly into the Starboard fuselage half (part 2). It will be necessary at this stage to decide whether you wish to make up your model with the undercarriage up or down. If down cement the two halves of the fuselage together trapping the tail wheel (part 49) in place.
- 5. Cement the cockpit canopy front (part 50) in place and then locate and cement the Port and Starboard canopy halves (parts 51 and 52) in place to its rear. Cement the upper front window (part 53) in the nose.

#### WING ASSEMBLY.

- 6. Cement the upper and lower wing halves (parts 9 and 10) and (parts 23 and 24) together, trapping in place the ailerons (parts 15 and 16) in their correct wings. Cement the four aileron balances (parts 56) to the ailerons and the Port and Starboard radiators (parts 25 and 26) to the underside of the wings.
- 7. Cement the outer and inner wheel halves (parts 37 and 38) together and then secure the wheels, which should be free to rotate, to the undercarriage legs (parts 35 and 36) with the pins (parts 40).
- 8. Cement the propeller pins (parts 27) to the propellers (parts 28). Then cement the engine halves (parts 29 and 30) and (parts 31 and 32) together trapping the undercarriage assembly in the position required.
- 9. Loate the engine assemblies on to their wings and cement in place. Then locate and cement the wing assemblies to the fuselage. Attach the main undercarriage doors (parts 11 and 12) and (parts 13 and 14) into position and the smaller undercarriage doors (parts 33 and 34) with the door legs (parts 39).

#### TAIL.

i0. Cement the two halves of the rudder (parts 5 and 6) together and locate on the fin. Cement the upper and lower tailplane halves (parts 41 and 43) and (parts 42 and 44) together trapping in place the elevators (parts 45), the elevators being free to move. The complete tailplane assemblies may then be attached to the fuselage.

#### FINISHING.

- 11. Cement the rear undercarriage doors (parts 7 and 8) open or shut as required and locate the Radio mast (part 55) in place.
- 12. ME.410 A-1/04. For this version cement the Cannon barrel (part 61) into the two cannon mounting halves (parts 58 and 59). The complete assembly may then be located and cemented to the underside of the cockpit floor. Clip into position the underspan (part 57) and cement in place the front lower window (part 60).
- ME.410 A-1. For this version the bomb doors (parts 3 and 4) should be fixed in the open position and the lower front window (part 54) cemented in place.
- 14. If it is desired to paint the model, it is necessary at this stage to choose between the two alternative colour schemes shown on the box back. Note that there are appropriate aircraft markings to suit each colour scheme.
- 15. Apply the transfers when the paint is dry. First, cut the sheet into two halves along the dotted line selecting the transfers which are to be used. Then separate the individual transfers noting from the box back where each should be placed. Soak the transfers required in warm water for not more than 30 seconds, then slide the transfer off the backing paper and position. Press well down wiping from the centre outwards to squeeze out surplus water and air bubbles, before leaving to dry.
- Locate the arm of the stand in the base slot and cement together. Apply the name transfer
  of your model to the base.

#### ME.410 HISTORY.

The Me.410 Hornisse, or Hornet, was a development of the Me.210 which was first projected in 1937 as a more versatile successor to the Me.110. It was envisaged that the aircraft would be capable of the roles of medium range 'heavy bomber destroyer', reconnaissance and dive bomber. The first prototype was commenced in 1938 and from the outset a very advanced remotely-controlled armament system for rear defence was proposed. The first prototype flew on 2nd September, 1939 and featured twin tailplanes.

The first prototype was not a success and, due to the lack of stability whilst flying, the second prototype appeared with a single fin and redesigned cockpit canopy. Despite these changes the aircraft still suffered instability and eventually crashed on 5th September, 1940 during a test flight.

The German Air Ministry, however, had placed an order for 1,000 aircraft before the first prototype flew and this proved to be a grave error. Quantity deliveries of fighter and fighter-bomber versions of the aircraft, began to reach the Luftwaffe squadrons in 1941 but numerous accidents were suffered by units equipped with the new aircraft and the production lines were frequently halted whilst modifications were made. Despite these problemss, the aircraft was thrown into service on the Russian front and in 1942 an example, the first to be encountered by the RAF, was shot down over Southern England by a Typhoon whilst carrying out a sneak attack.

As so many Me.210's were in the course of production, rather than radically redesign the aircraft, the Me.410 was proposed. This aircraft incorporated the progressive modifications of the Me.210, such as a lengthened fuselage and the introduction of leading-edge slots which improved the qualities of the aircraft in a side slip and the fitting of more powerful Daimler Benz 603A engines.

Production started in 1943 using components of the former aircraft and 291 machines were delivered that year and 722 in 1944. Some production of the aircraft also took place in Hungary until the factory South of Budapest was destroyed in an Allied Air Raid in July, 1944.

Initial production of the Me.410 was the A.1 version, the light bomber, the subject of our kit, which had a fixed forward firing armanent of two 7.9 mm. machine guns and two 20 mm. cannon, plus two 13 mm. guns firing from the remotely-controlled rotatable barbettes. The maximum internal bomb load was 2,200 lb. bombs, but a more usual bomb load was eight 110 lb. bombs internally and four similar bombs externally on racks beneath the wing roots.

Other versions which were manufactured were a photo-reconnaissance plane with two guns deleted and a camera installed in the bomb bay and 'destroyer' version in which two cannon were installed with their ammunition in the bomb bay supplanting the standard machine guns.

The Me.410A-1/U4, the Frog conversion kit, was also a bomber destroyer carrying a 50 mm. BK 5 cannon — an armoured car gun adapted for aircraft use. To enable the installation of this gun all standard forward firing armament was deleted.

Later variants of the aircraft, mounting more powerful nose armanent, were produced for the 'destroyer', light bomber and armed reconnaissance roles, the latter necessitated a swollen bomb bay to incorporate the cameras and standard armament. A specialised mark was produced for an anti-shipping role equipped with search radar and an externally carried torpedo.

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#### **CONSTRUCTION KITS**

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> Rovex Scale Models Limited, Service Department, Westwood. Margate, Kent.

Please give the Number of the Part shown in the exploded assembly diagram of your instruction leaflet.

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