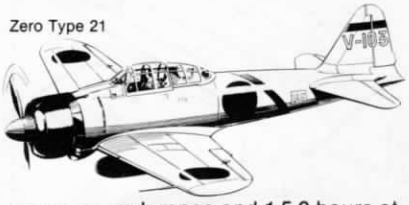
MITSUBISHI A6M3 ZERO FIGHTER (HAMP)

TAMIYA

Much has been written over the years about the Japanese Zero Fighter Aircraft series. Much was based upon hearsay and legend and little upon fact itself. Even the Allied Forces and governments refused at first to acknowledge its existance, and when they did get a copy of it, they could hardly believe the performance it produced. The prototype zero or A6M1 first took place on paper on January 17, 1938, following the Japanese request for a shipboard fighter with a top speed of 270 kph at 12000 ft & 6-8 hours of cruise

Zero Type 21



economy endurance and 1.5-2 hours at normal combat speeds. Armament was to be two 20 mm cannon and two 7.7 mm machine guns plus the normal radio equipment and direction finding gear. These specifications were so far from the existing state of the art that the famous Nakajima Company dropped out of competition, stating that they were impossible to meet. That left Mitsubishi Heavy Industries and their design team headed by Jiro Horikoshi the only company to tackle the problem. First flight was on 1 April 1939 and combat trials were concluded in July 1940 with 15 pre-production A6M2's sent to two squadrons by the end of the month. These aircraft had folding wing tips to accomodate aircraft carrier elevators, and were the ones first seen by Gen. Chennault in China, and at Pearl Harbor in December 1941. Although the A6M2 met or exceeded original design specifications, modifications were taking place at the Mitsubishi factory to improve roll rate, speed up handling aboard carriers, and utilize the uprated Sakae 21, 1,130 hp engine. The first A6M3 type 32 (code named HAMP) took to the air on 15 July 1941 with production beginning in April 42. A total of 343 aircraft were produced by August 43, when the type 52 A6M5 began production. The Type 32 Zero had the most radical change in the entire series and was readily recognized by its squared off wing tips. This reduced total span to exactly 11 meters and eliminated the cumbersome folding tips which consumed time during combat to get the aircraft down carrier elevators. The larger Sakae 21 engine gave the type 32 a better rate of climb and the shorter wing span (1 meter shorter) lessened stick forces and increased roll rate. The Hamp was utilized throughout the war, but saw most of its service off of land based installations in the southern island chains of New Guinea and the Phillipines.

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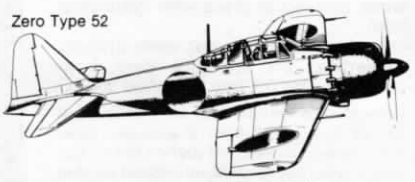
In den vergangenen Jahren wurde vieles über den japanischen Zero Fighter geschrieben, das meiste basierte auf Hörensagen und Legenden, aber nur wenig auf Tatsachen. Sogar die Allied Forces und Regierungen wollten die Existenz dieses aussergewöhnlichen Flugzeuges nicht zur Kenntnis nehmen. Als sie dann ein Flugzeug dieser Type in die Hände bekamen, konnten sie die Flugleistungen kaum glauben.

Es wurde von den japanischen Streitkräften ein Bordflugzeug verlangt, welches 270 km in der Stunde in 12000 feet Höhe erreichen konnte und 6 bis 8 Stunden in der Luft blieb, bezw. 1-1/2 bis 2 Stunden bei normaler Kampfgeschwindigkeit. Die Pläne für den ersten Prototype Zero oder A6M1 konnten bereits am 17. Januar 1938 vorgelegt werden. Bewaffnung waren zwei 20 mm Kanonen und zwei 7,7 mm Maschienengewehre, normale Funkausstattung mit Peilempfänger. Dieses Verlangen war von dem damaligen Stand der Entwicklung soweit entfernt, dass sogar die bekannten Nakajima Werke sich vom Angebot zurückzog mit dem Bemerken, es wäre unmöglich, diese Wünsche zu erfüllen. Somit blieb nur das Team Jiro Horikoshi von Mitsubishi übrig, um dies Problem zu lösen. Und dies Problem wurde von diesen Leuten gelöst, der erste Flug war am 1. April 1939, Kampferprobung erfolgte im July 1940 mit bereits 15 Vorserienflugzeugen. Diese Maschinen hatten klappbare Flügelenden, um in die Flugzeugträger-Aufzüge zu passen. Es waren die Flugzeuge, die man zuerst bei Gen. Chennault in China und in Pearl Harbor im Dezember 1941 sehen konnte. Natürlich wurden von Mitsubishi an der A6M2 laufend Verbesserungen vorgenommen, z.B. wurde der verstärkte Sakae 21 Motor mit 1.130 PS eingebaut um die Startgeschwindigkeit auf den Trägern zu erhöhen. Der erste A6M3 Type 32 (Codename HAMP) ging am 15. July 1941 in die Luft, die Pro-

Zero Type 52

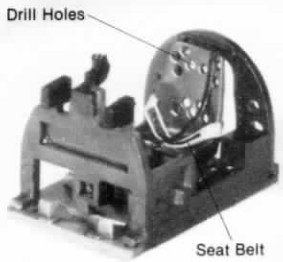


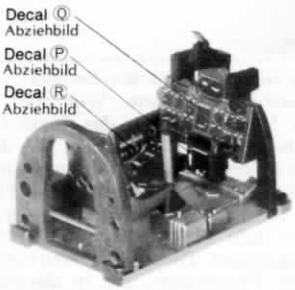
duktion begann im April 1942, bis August 1943 wurden 343 Maschinen gebaut, dann folgte der Type 52 A6M5. Der Type 32 Zero hatte die grössten Änderungen der ganzen Serie, man konnte den neuen Type 52 sofort an den rechteckigen Flügelenden erkennen. Diese Änderung brachte die Spannweite nunmehr genau auf 11 Meter, es konnte das umständliche Abklappen der Flügelenden wegfallen und es wurde viel Zeit beim Transport mit den Trägeraufzügen gespart. Der grössere Sakae 21 Motor gab dem Type 32 eine bessere Steigleistung, die kürzer Spannweite (-1 m) verringerte die Steuerkräfte und erhöhte die Startgeschwindigkeit. Der HAMP war bis Kriegsende im Einsats, haupt-sächlich auf Landbasen der südlichen Inselketten New Guenia's und auf den Phillipinen.

★Study the instructions and photographs before commencing assembly.
★You will need a sharp knife, a screwdriver, a file and a pair of pliers.
★Do not break parts away from sprue, but cut off carefully with a pair of pliers.
This mark denotes paint color, and the color names and numbers are for Tamiya Acrylic Paints
★Vor Beginn die Bauanleitung studieren und den Nummern nach die Elemente zusammenbauen.
★Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abzwicken.
Dieses Zeichen zeigt die Farbe und Farbnummer der Tamiya Acryl Farben.

1 ≪Cockpit Detailing≫ ≪Cockpit≫

Drill out seat back indentations with a 0.9mm drill. Seat belt and harness is painted masking tape.
Die Einkerbungen der Rückenlehne mit 0,9mm Bohrer einbohren. Sitzgurt wird aus bemaltem Abdeckband hergestellt.

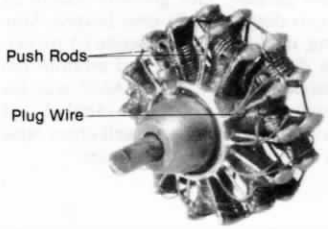




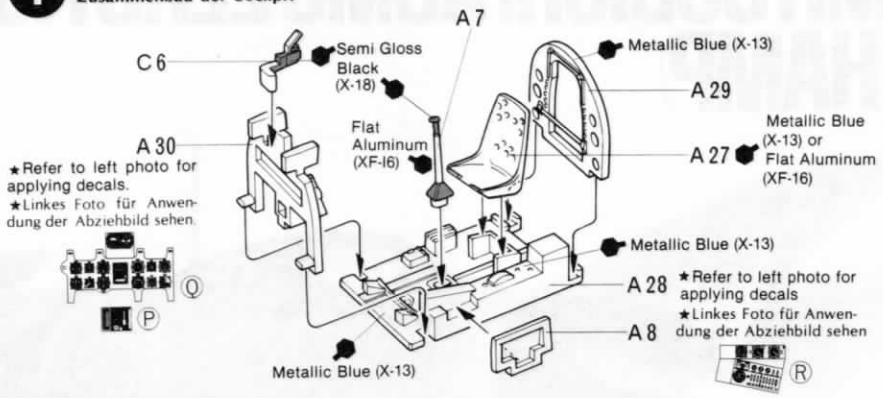
4 ≪Engine Detailing≫ ≪Sternmotor≫

Pushrods are stretched sprue 5.4mm long and 0.4 in dia. (28 req) Attach to, and below, projecting pins on front cylinder bank and to rocker boxes on rear bank. Fine copper wire is used for ignition and runs from 14 0.2MM holes drilled in ignition ring, two wires per hole. Front bank wiring runs up front cylinders right pushrod and into .02mm holes drilled in each head, front and rear. Rear bank wires run up left pushrod. (total of 28 wires secured in place with cyanoacrylate)
Oil tubing runs between each cylinder rockerbox, on opposite side from pushrods. Use 0.4 mm stretched sprue.

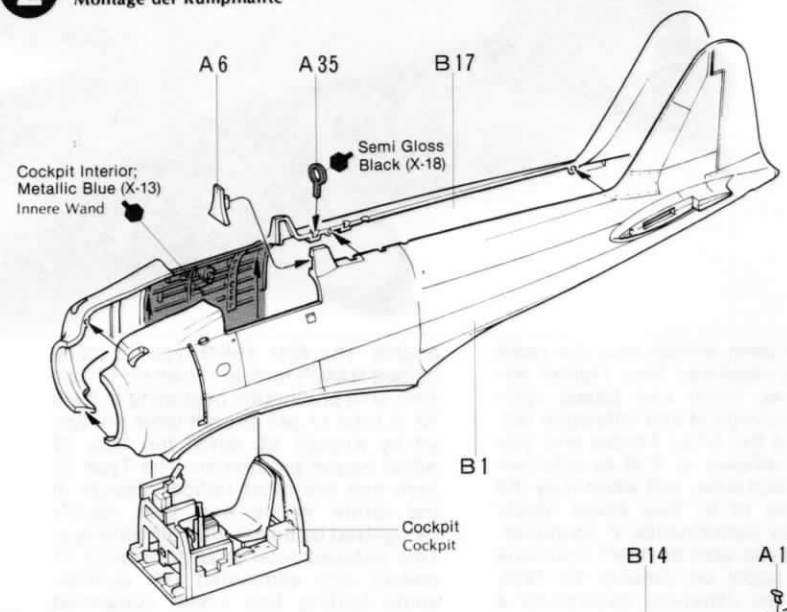
Es werden 28 Ventilstössel aus Plastikabfall 5,4mm lang und 0,4mm ⌀ gezogen. (über Kerze warmmachen und drehen bezw. auseinanderziehen) Diese Ventilstössel werden an der vorderen und hinteren Zylinderbank an die vorstehenden Zapfen angeklebt.
Für die Zündung wird feiner Kupferdraht genommen. Aus den 14 Löchern (0,2mm) gehen je 2 Drähte am Zündungsring heraus. An den vorderen Zylindern rechts am Ventilstössel vorbei in das Loch am Zylinderkopf. Die hinteren Drähte gehen am linken Ventilstössel vorbei. Die Drähte mit Bombenkleber befestigen. Ölschläuche werden aus 0,4mm Abfall gezogen und auf der anderen Seite der Ventilstössel zwischen jedem Zylinder angeklebt.



1 Cockpit Assembly
Zusammenbau der Cockpit

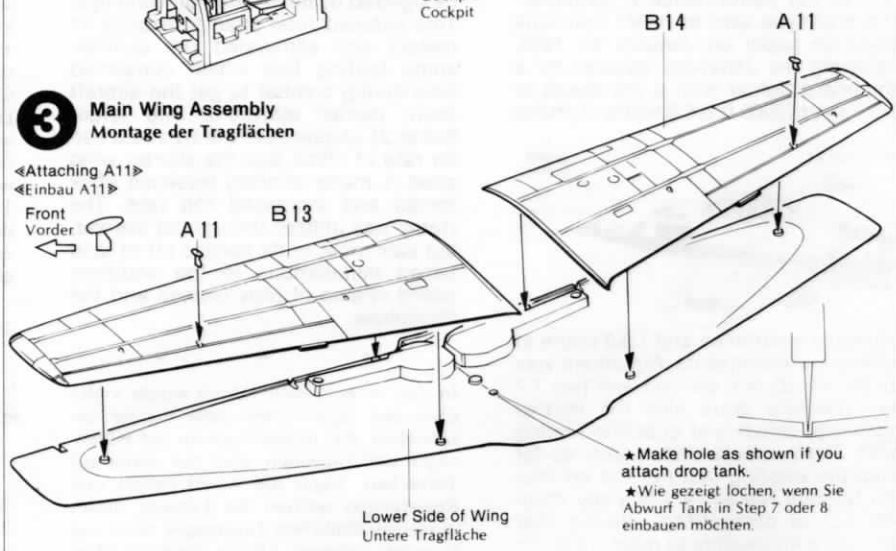


2 Fuselage Assembly
Montage der Rumpfhälfte

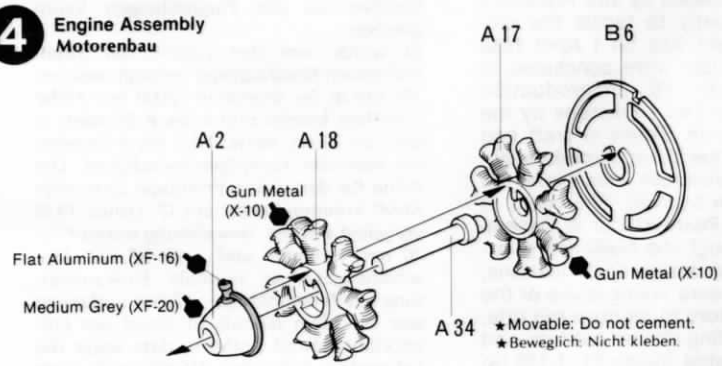


3 Main Wing Assembly
Montage der Tragflächen

≪Attaching A11≫
≪Einbau A11≫



4 Engine Assembly
Motorenbau



6 ≪Landing Gear Detailing≫ ≪Fahrwerk≫

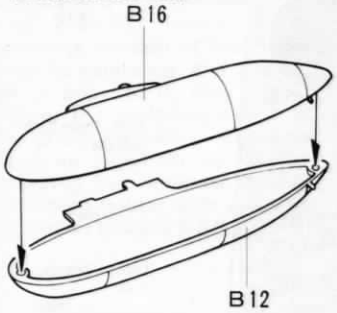
Drill out and shape oleo strut scissors (top) and cut away center portion of main gear door attachment bars. Run copper wire (brake tubing) from wheel well, down between center of gear door and strut, thru top scissors and fasten at moulded fitting on wheel. Small gear doors attach to wing and rest on main doors at an acute angle. See drawing.

Zwischen Fahrwerkstrebe und Verkleidung wird ein Kupferdraht als Bremsleitung gelegt.

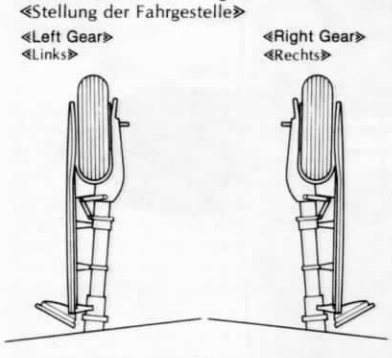
Brake Oil Pipe
Bremsölschlauch

7 ≪Lower Surface Details: Gear Down≫ ≪Zusammenbau der Unterseite≫

≪Drop Tank Assembly≫
≪Abwurf Tank Einbau≫

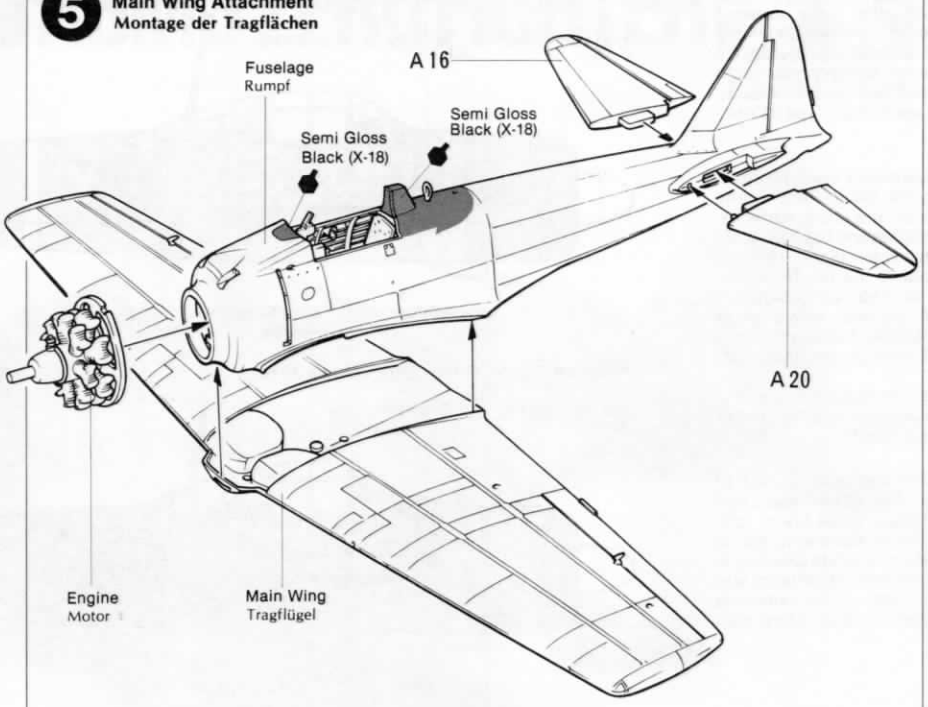


≪Main Gear Positioning≫
≪Stellung der Fahrgestelle≫

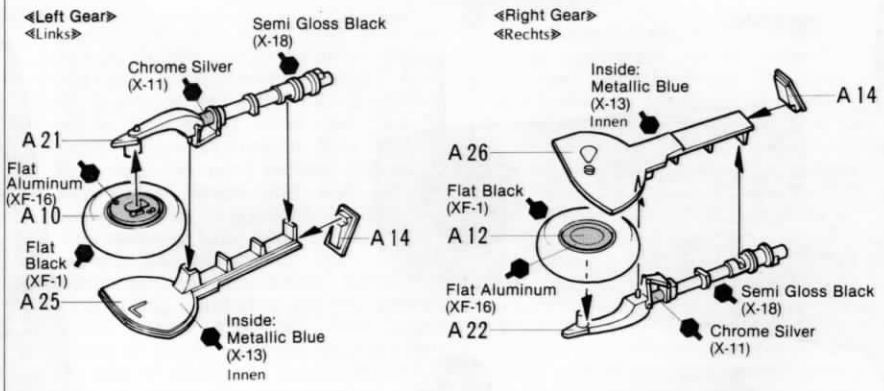


★Gear struts angle inwards slightly.
★ Fahrgestellstreben sind etwas nach innen geneigt.

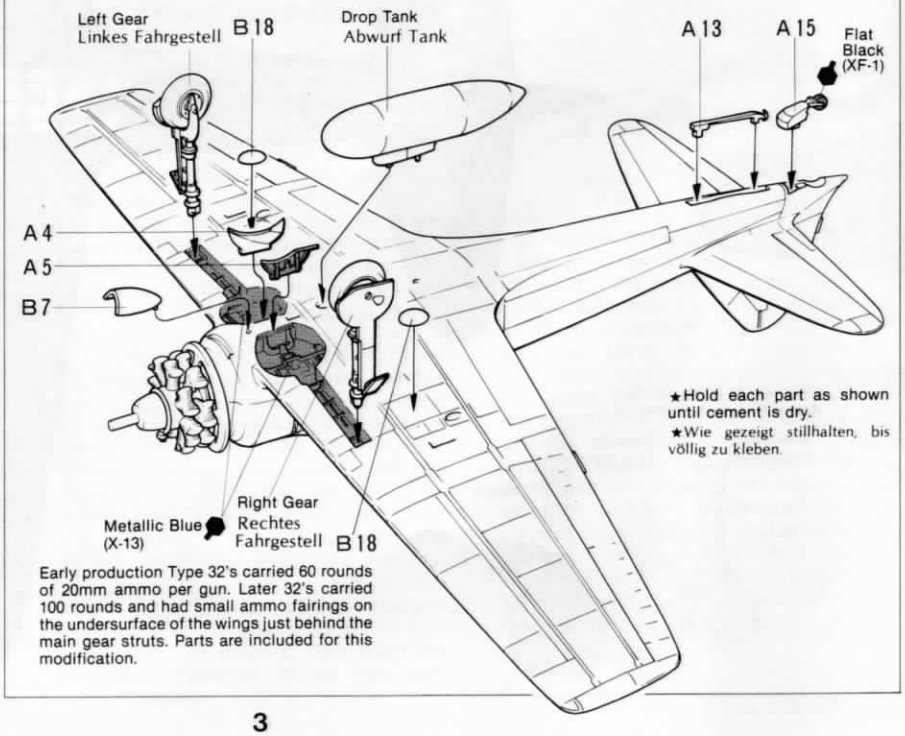
5 Main Wing Attachment
Montage der Tragflächen



6 Landing Gear Assembly
Fahrgestell



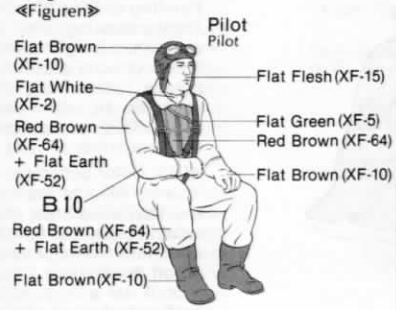
7 Under Surface Details: Gear Down
Zusammenbau der Unterseite (Ausgefahren)

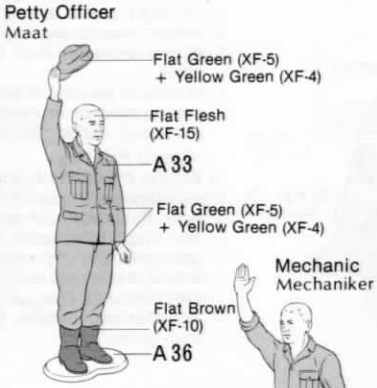


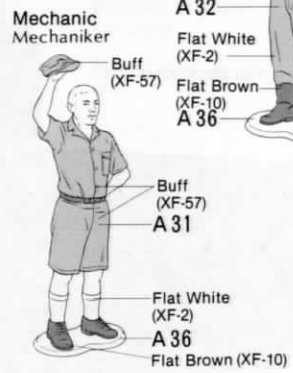
★Hold each part as shown until cement is dry.
★Wie gezeigt stillhalten, bis völlig zu kleben.

Early production Type 32's carried 60 rounds of 20mm ammo per gun. Later 32's carried 100 rounds and had small ammo fairings on the undersurface of the wings just behind the main gear struts. Parts are included for this modification.

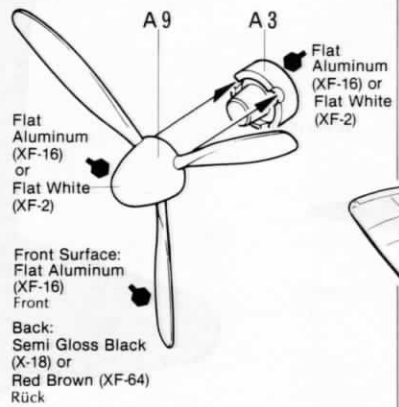
≪Figures≫
≪Figuren≫



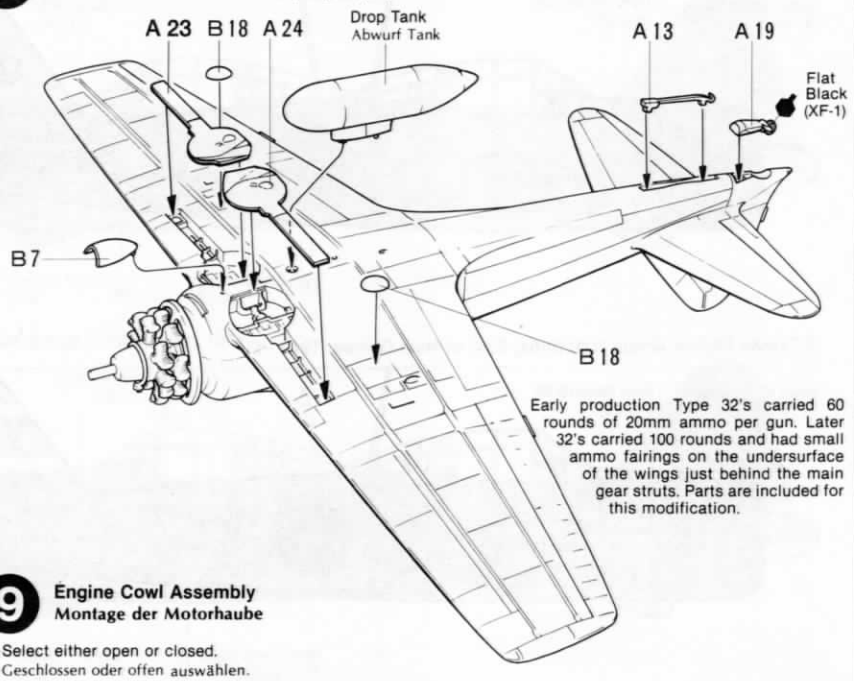




≪Propeller Assembly≫
≪Propeller≫



8 Under Surface Detail: Gear Up
Zusammenbau der Unterseite (Eingezogen)



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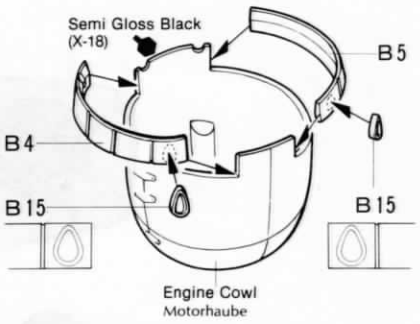
9 Engine Cowl Assembly
Montage der Motorhaube

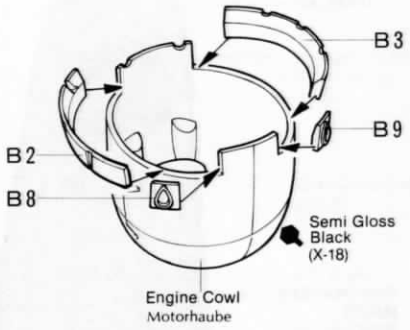
★Select either open or closed.
★Geschlossen oder offen auswählen.

Cowl Flaps were open when engine was "run-up" on the ground; during taxing, and during climb-out, to keep engine head temperatures in the green.

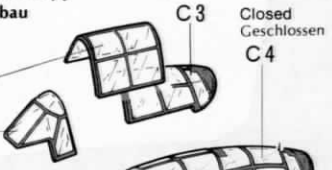
≪Flap-closed≫
≪Geschlossen≫



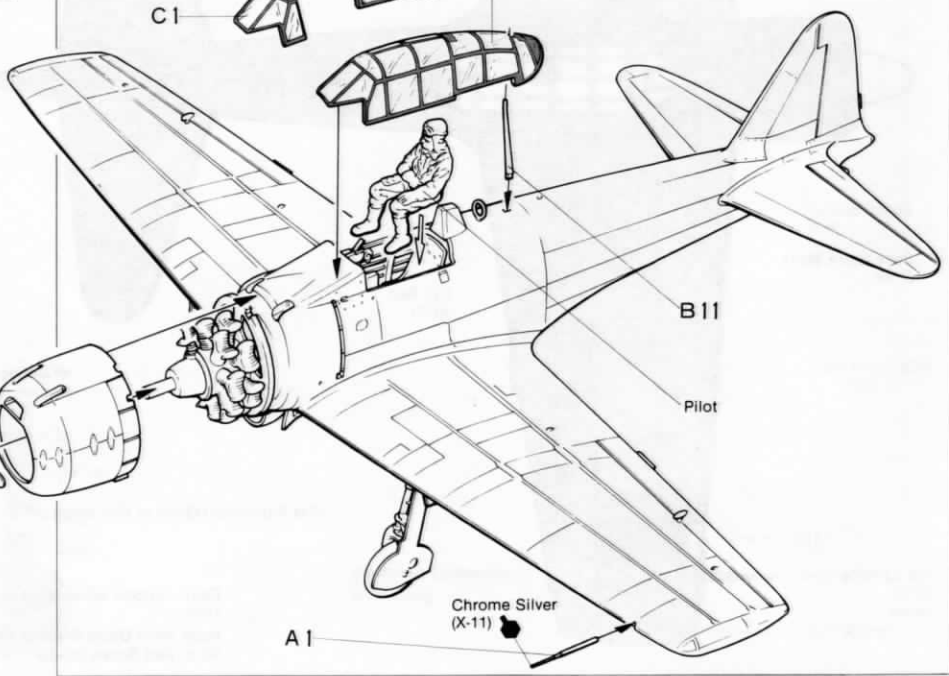
≪Flap-open≫
≪Offen≫



10 Attaching Canopy
Kanzel Einbau



★Canopy: Select either open or closed.
Canopy Frame: body color.
★Kanzel: Geschlossen oder offen auswähren.
Kauzelrahmen: Wie Rumpf bemalen.

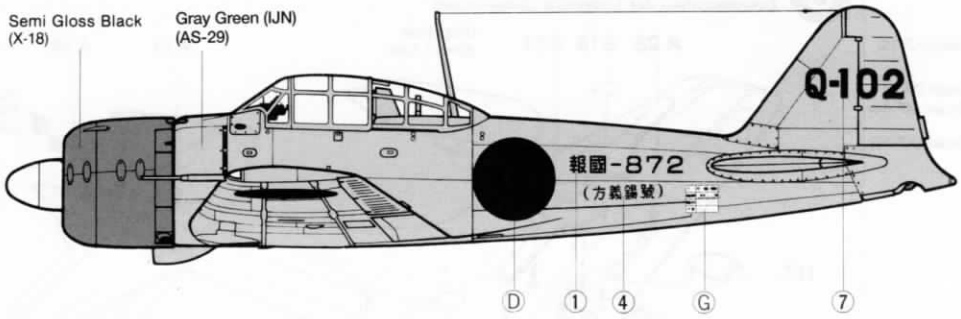


Engine Cowl:
Do not cement.
Motorhaube: Nicht kleben.

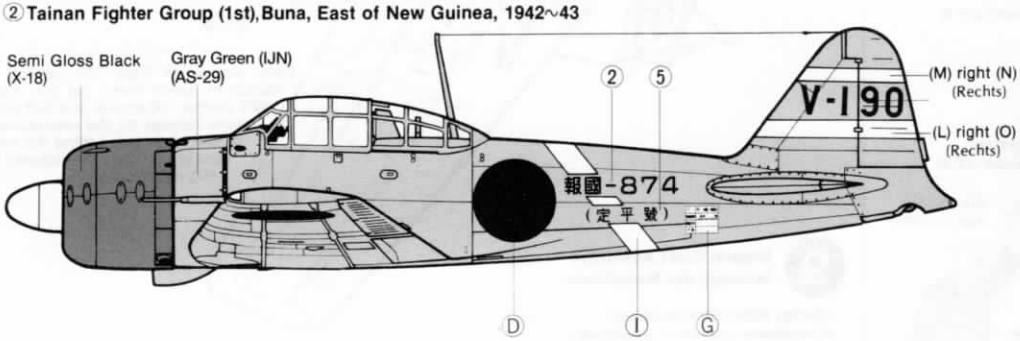
Propeller: Do not cement.
Propeller: Nicht kleben.

★C5: Not used.
/Nicht nützen.

① 2 Fighter Group, Buna, East of New Guinea, 1940



② Tainan Fighter Group (1st), Buna, East of New Guinea, 1942~43



Painting of Type 32 ≪Early Color Scheme≫

Engine cowling: Matt Black. All other outer surfaces were a matt light grey. Propeller front was polished aluminum and rear was black or dark red brown. Two narrow red warning bands were located near each blade tip. No white band surrounded the national insignia. This color scheme was seen on all Type 32's until the summer of 1943.

≪Late Color Schemes≫

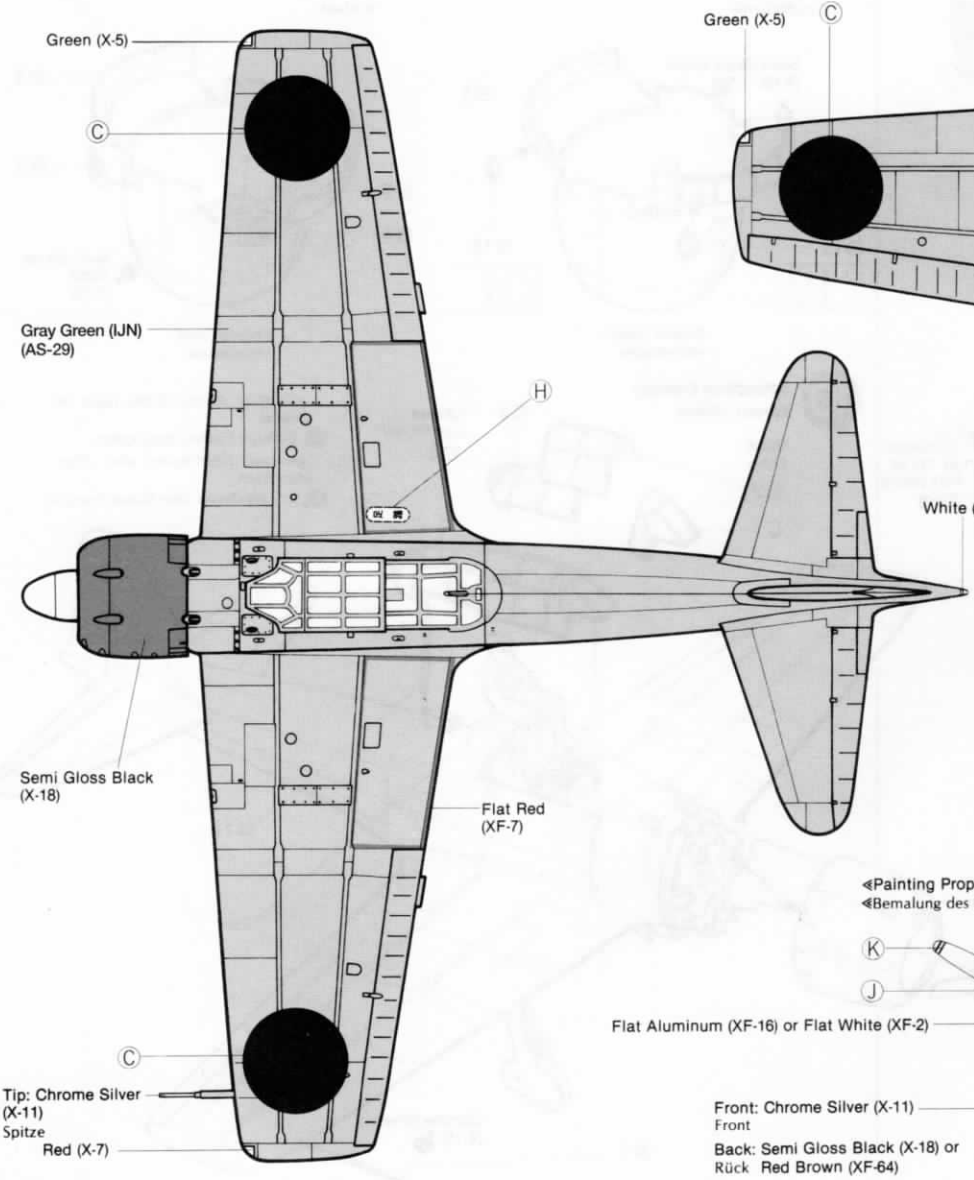
In July 1943, the Japanese Government issued a directive that all aircraft utilized in the South Pacific area would be painted jungle green on the upper surfaces, and that an orange yellow identification band be placed on the leading edge of each main plane from the root of the wing to half way out to the tip. Those aircraft already in the field were painted over in blotches of jungle green. Some aircraft are seen with a white border around the national insignia; however, this is exception, rather than a rule. Cowlings remained matt black.

Interior of all A6M series aircraft were protected with a preservative paint metallic blue/green in color, and in Japanese, called "Blue Bamboo Color".

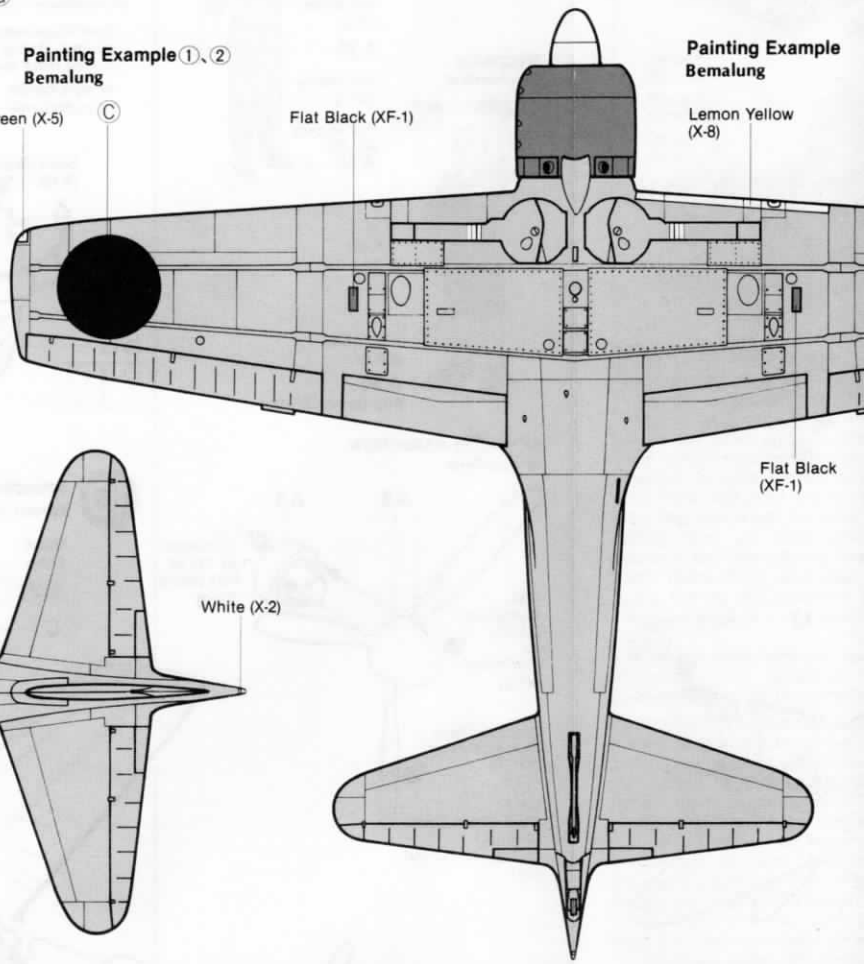
≪Detail Painting≫

Engine cylinders. Aluminum. Finished with a wash of very thin matt black to bring out fins. Crankcase: Light grey. Pushrods, wiring and oil lines: gloss black. Ignition ring: aluminum. Propeller: Front aluminum, rear is dark red brown. Spinner: aluminum or white Cowling is a matt black, not flat or glossy. All exposed interior surfaces (cockpit etc.) were painted with an anti-corrosive preservative, metallic blue/green in color. More blue than green.

Painting Example ①、②
Bemalung



Painting Example ①、②
Bemalung



Painting Example
Bemalung

≪Painting Propeller≫
≪Bemalung des Propellers≫

≪Marking on Gear Doo
≪Abziehbild der Fahrgest

Painting of Type 32 ≪Early Color Scheme≫
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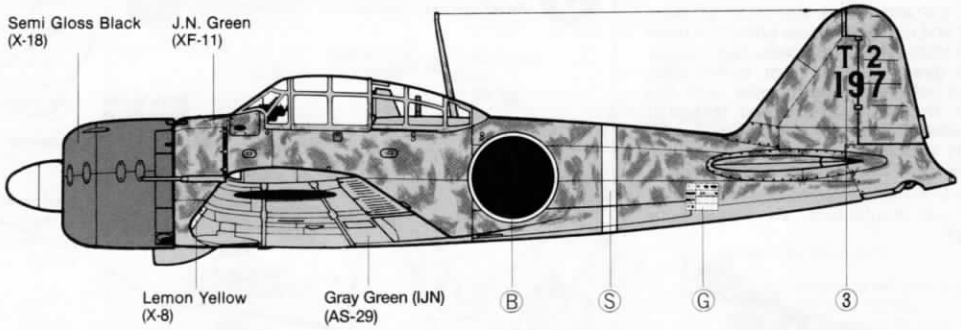
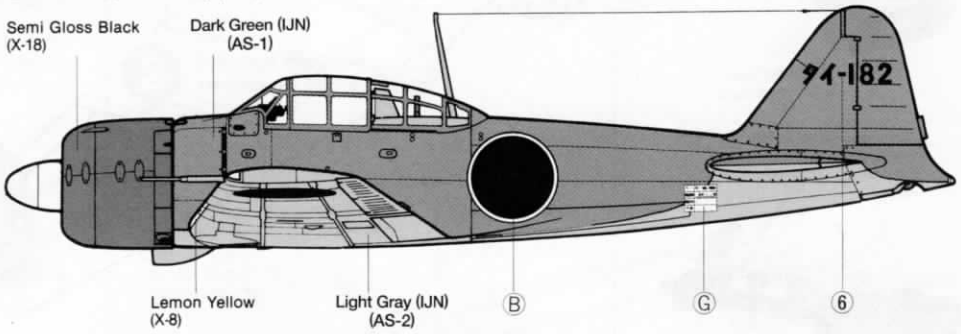
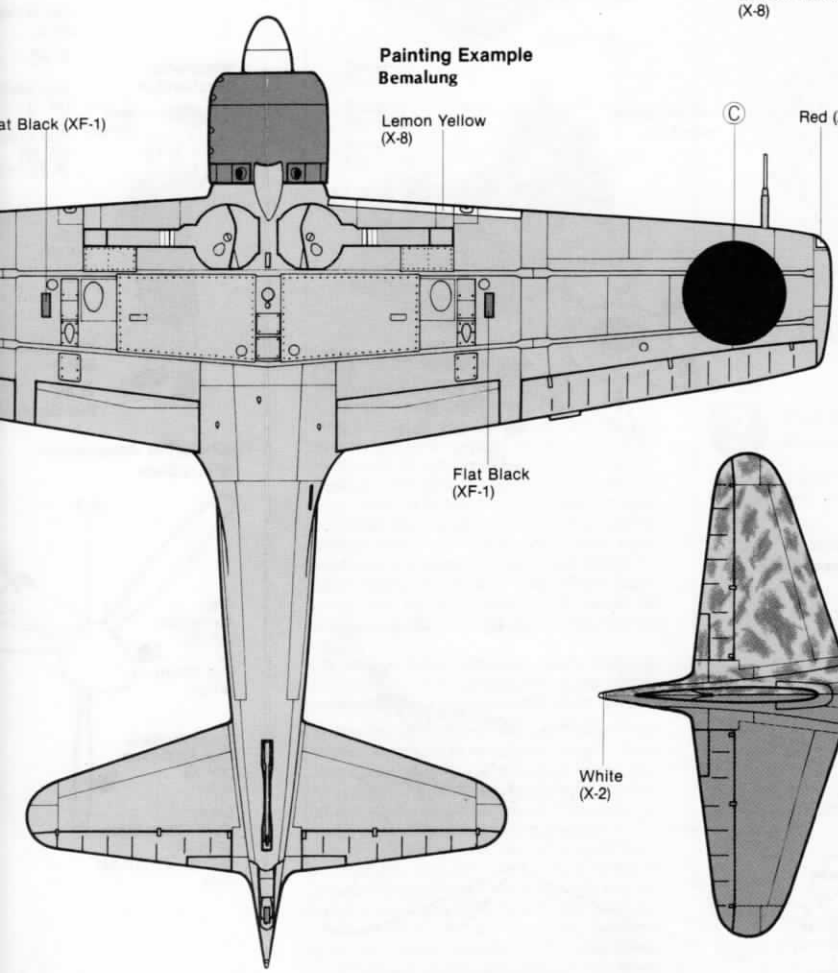
③ 204 Fighter Group, Rabaul, 1943, (Painted over in blotches of jungle green)



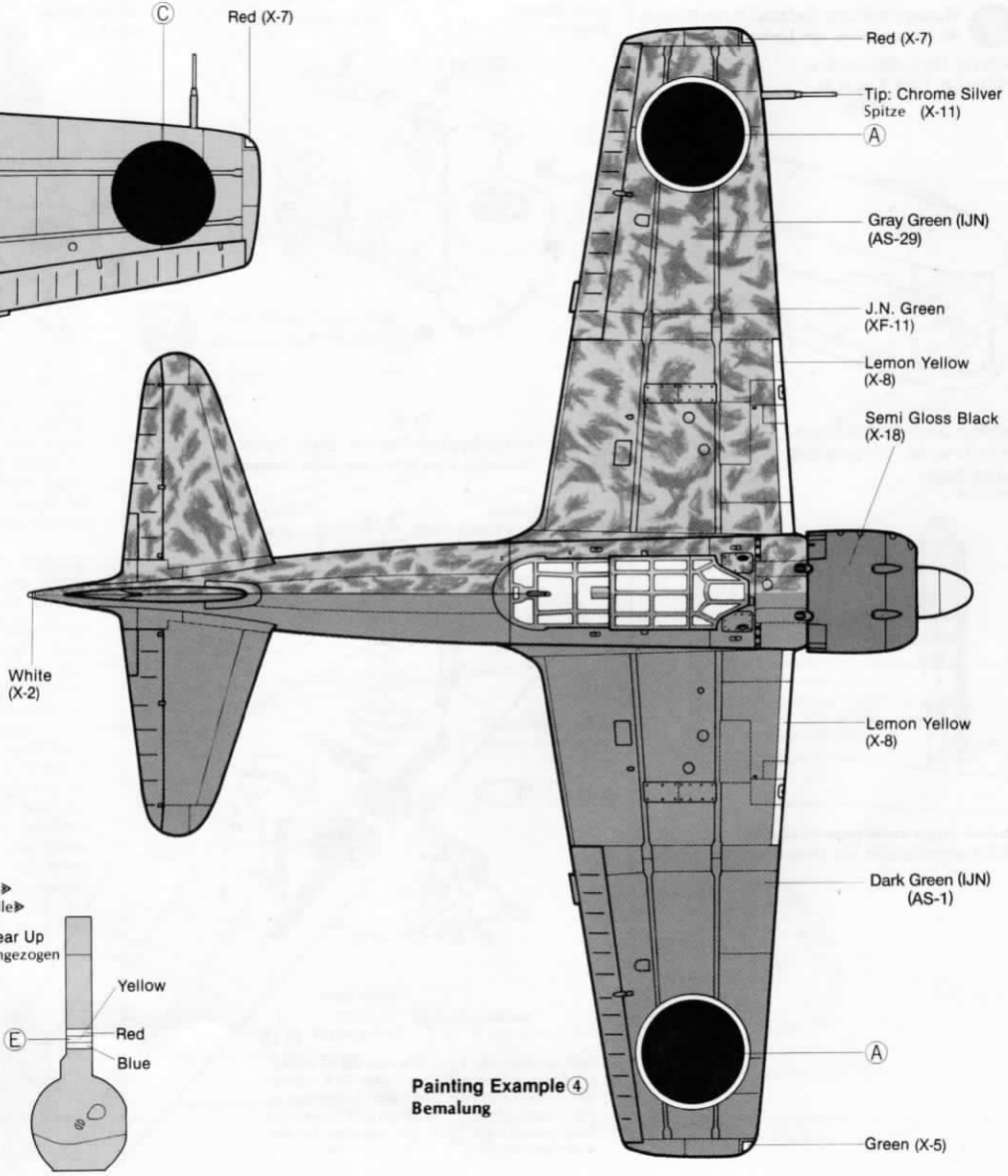
④ Tainan Fighter Group (2nd), Taiwan, 1944



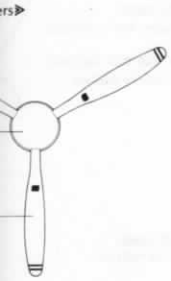
Painting Example
Bemalung



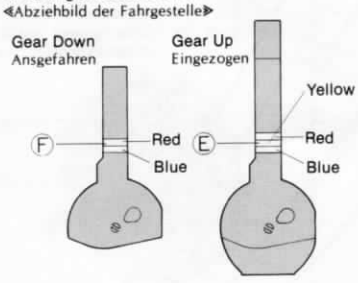
Painting Example ③
Bemalung

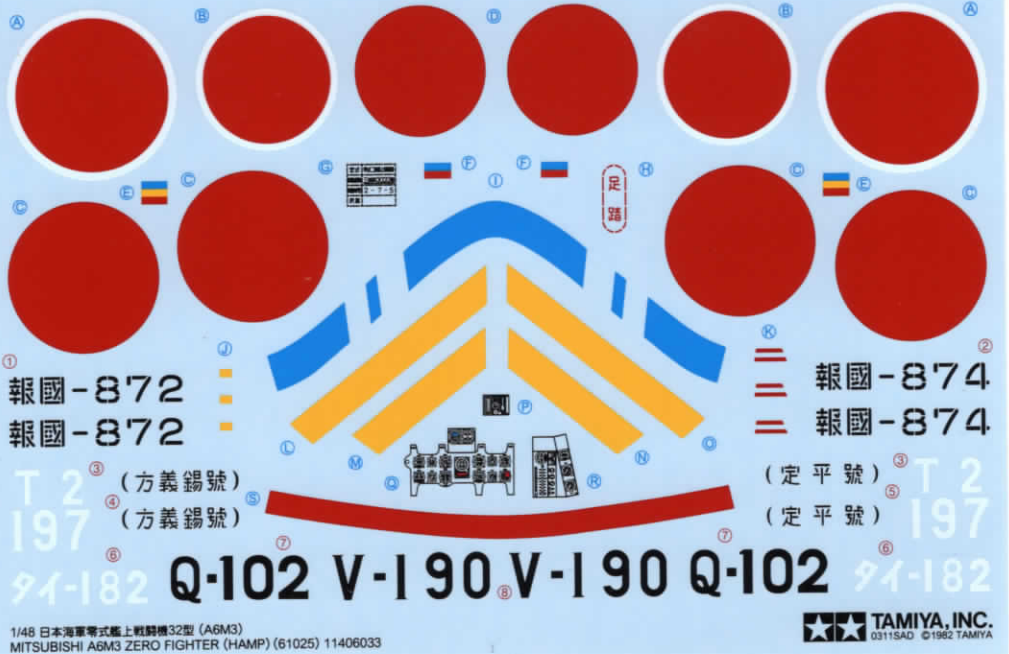


Painting Example ④
Bemalung



≪Marking on Gear Doors≫
≪Abziehbild der Fahrgestelle≫





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