

1/48 SCALE AIRCRAFT SERIES NO.86 ★FUSELAGE 230mm. WINGSPAN 259mm.

1/48 楽作機シリーズ NO.86

リパブリック P-47D サンダーボルト "レイザーバック"



REPUBLIC P-47D THUNDERBOLT "RAZORBACK"

In May 1941, while the war was raging in Europe, a single-engine fighter weighing over 4 tons made its first flight. This revolutionary plane was the XP-47B, prototype of the Republic P-47 Thunderbolt, of which a total of 15,683 units would be built in all. This experimental aircraft was equipped with a 2000hp radial R-2800 engine. Even when equipped with eight 12.7mm machine-guns, this prototype was able to reach 633km/h. In January 1942, just after the US went to war, the production of the P-47B began. It was followed by the P-47C, which incorporated various improvements and from April 1943, by the P-47D. The P-47D was equipped with an R-2800-59 engine featuring a water injection system, and could generate up to 2300hp in an emergency combat scenario. Ducts on the sides and below the fuselage connected to the supercharger placed behind the

Im Mai 1941, als in Europa der Krieg wütete, machte ein einmotoriges Jagdflugzeug mit mehr als 4 Tonnen Gewicht seinen ersten Flug. Dieses revolutionäre Flugzeug war die XP-47B, der Prototyp der Republic P-47 Thunderbolt, von welcher insgesamt 15.683 Stück gebaut wurden. Dieses Versuchsflugzeug war mit einem 2000PS R2800 Sternmotor ausgestattet. Selbst bei einer Ausrüstung mit acht 12.7mm Maschinengewehren konnte der Prototyp 633km/h erreichen. Im Januar 1942, als Amerika gerade in den Krieg eingetreten war, begann die Produktion der P-47B. Ihr folgte die P-47C, welche verschiedene Verbesserungen aufwies, und ab April 1943 die P-47D. Die P-47D war mit einer R-2800-59 Motor ausgerüstet, der ein Wasser-Einspritzsystem besaß und in einer Notsituation beim Luftkampf bis zu 2300PS leistete. Luftröhren seitlich und unten im Rumpf führten zu dem hinter dem Pilotensitz angeordneten Turbolader,

En mai 1941, alors que la guerre faisait rage en Europe, une chasseur monomoteur de plus de 4t faisait son premier vol. Il s'agissait du XP-47B, prototype du Republic P-47 Thunderbolt dont un total de 15683 unités seront construites. Grâce aux enseignements de la guerre, cet appareil fut équipé d'un moteur en étoile R-2800 de 2000cv, d'un compresseur de suralimentation et de 8 mitrailleuses de 12,7mm. Le XP-47B devait atteindre 633km/h et en janvier 1942, après l'entrée en guerre des USA, la production du P-47B débute. Il fut suivi par le P-47C, résultant de l'amélioration de divers points et, à partir d'avril 1943, du P-47D, version la plus construite. Le P-47D était propulsé par un moteur R-2800-59 pouvant développer jusqu'à 2300cv. Les conduites passant sur les côtés et en dessous du cockpit pour rejoindre le compresseur de suralimentation

ヨーロッパ上空で英独両空軍が一進一退の空戦を続けていた1941年5月、アメリカでは「1t重4トン以上」という巨大な単発機が初飛行に成功しました。後に15,683機という総生産数を記録し、アメリカ陸軍航空隊を代表する重量級戦闘機となったリパブリックP-47サンダーボルトの原型機、XP-47Bです。その設計思想は、2,000馬力級のP&W R-2800星型空冷エンジンと排気タービン過給器を組み合わせて高速力と高々度性能を徹底的に追及、さらに12.7mm機銃8挺の重武装という当時の戦闘機の常識を覆す革新的なものでした。XP-47Bは期待通り633km/hという高速性能を発揮し、アメリカ参戦直後の1942年1月には初の量産型P-47Bが完成。そして各部に改良を加えたP-47Cを経て、P-47シリーズの中でも主要量産型となったP-47Dの生産が1943年4月に開始されたのです。P-47Dは基本的に水噴射装置付きのR-2800-59エンジンを搭載し、戦闘緊急出力は2,300馬力。最大の特徴とも言える排気タービン過給器は、操縦席後方の中間冷却器やタービン、胴体下部や両側を走るダクト類で構成され、

pilot's seat and contributed to this plane's massive form. Many sub-types of the P-47D, designated D-1 to D-40 were produced, but the first versions were called "Razorback," because of their sharp-edge dorsal fin running from the canopy to the upper fuselage. The P-47D, which equipped many units such as the 56th FG of the 8th Air Force, was used to escort B-17 and B-24 bombers. Whereas the Spitfire could not go beyond the coasts of continental Europe, the P-47 accompanied the bombers as far as the western part of Germany. After the introduction of the longer range P-51 in autumn 1944, the P-47 came to be used for ground attack missions because of its robustness and its 1ton payload capacity. The concept of the P-47 had a great influence on the development of its successors such as the F-84 Thunderjet and the F-4 Phantom II.

was zu der wuchtigen Form des Flugzeugs beitrug. Viele Untervarianten mit der Bezeichnung D-1 bis D-40 wurden hergestellt, aber die ersten Versionen wurden wegen ihrer scharfkantigen Flosse auf dem Rücken, die von der Kanzel zum Rumpfende führte, "Razorback" (Rasiermesser-Rücken) genannt. Die P-47D, mit welcher viele Einheiten wie etwa 56. FG der 8. Air Force ausgerüstet waren, wurde zur Eskorte von B-17 und B-24 Bombern eingesetzt. Während die Spitfire nicht über die Küstenlinie von Kontinentaleuropa hinausfliegen konnte, begleitete die P-47 die Bomber bis zum westlichen Teil Deutschlands. Nach der Einführung der Langstrecken P-51 im Herbst 1944 wurde der Einsatzbereich der P-47 wegen ihrer Robustheit und ihrer Nutzlast von 1 Tonne auf Bodenangriffe erweitert. Das Konzept der P-47 hatte großen Einfluss auf die Entwicklung der Nachfolger wie etwa der F-84 Thunderjet und der F-4 Phantom II.

tion placé derrière le siège du pilote, donnaient à cet avion son aspect massif. De nombreux modèles de P-47D, désignés D-1 à D-40, furent produits, mais les premières versions étaient surnommées "Razorback" en raison de leur arête dorsale. Le P-47 qui équipa de nombreuses unités comme le 56th FG de la 8^e Air Force, fut utilisé pour l'escorte des bombardiers B-17 et B-24. Alors que le Spitfire ne pouvait aller au-delà des côtes de l'Europe continentale, le P-47 accompagnait les bombardiers jusqu'à la partie ouest de l'Allemagne. Avec l'apparition du P-51 à l'autonomie supérieure à l'automne 1944, le P-47 fut utilisé pour l'attaque au sol en raison de sa robustesse et de sa capacité d'emport d'1t. Le concept du P-47 eut une grande influence sur le développement de ses successeurs comme le F-84 Thunderjet ou le F-4 Phantom II.

この巨大なシステムの搭載がP-47のマッシブなスタイルを決定づけたのです。P-47DはD-1から最終型のD-40まで多くのサブタイプが生産され、中でもキャノピーから尾翼にかけての胴体上部が細く絞られた前期の生産型は"レイザーバック"と呼ばれました。第8空軍の第56戦闘航空群などに配備されたP-47は、ドイツ本土へ向かうB-17やB-24爆撃機の護衛任務に活躍。それまでの連合軍主力戦闘機スピットファイアがヨーロッパ沿岸地帯までしか爆撃機に同行できなかったのにに対し、増槽を装着したP-47Dはドイツ西部地域までの護衛が可能で、爆撃機クルーの信頼を集めると共に多くのエースも誕生しました。そして1944年春、より航続距離の長いP-51マスタングが登場すると、P-47Dは頑丈な機体構造と被弾に強い空冷エンジン、そして1トン以上という大武装搭載能力を活かして活躍の場を地上攻撃任務に移しました。タフで重武装の多用途戦闘機というP-47のコンセプトは、F-84サンダージェットやF-4ファントムIIといった大戦後のアメリカ機にも引き継がれたのです。

RECOMMENDED TOOLS

●用意する工具

- Tools recommended
- Benötigtes Werkzeug
- Outil nécessaire

接着剤

(プラスチック用)

Cement

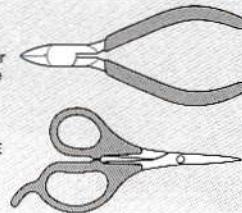
Kleber

Colle



ニッパー

- Side cutters
- Seitenschneider
- Pince coupante



- テカールバサミ
- Scissors
- Schere
- Ciseaux

ナイフ

- Modeling knife
- Modelliermesser
- Couteau de modéliste



ピンバイス (1mm, 1.5mm)

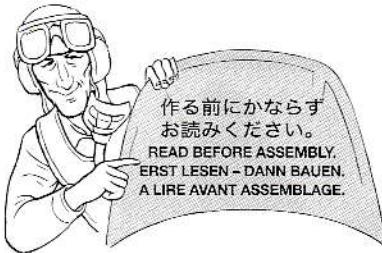
- Pin vise
- Schraubstock
- Outil à percer



ピンセット

- Tweezers
- Pinzette
- Précelles





作る前にかならず
お読みください。

READ BEFORE ASSEMBLY.
ERST LESEN - DANN BAUEN.
A LIRE AVANT ASSEMBLAGE.

塗装指示のマークです。タミヤカラーカーのカラーナンバーで指示しました。

This mark denotes numbers for Tamiya Paint colors. / Dieses Zeichen gibt die Tamiya-Farbnummern an. / Ce signe indique la référence de la peinture TAMIYA à utiliser.

AS-6 ●オーブードラブ(USAAF) / Olive Drab (USAAF)

(XF-62) / Olivgelbgroß (USAAF) / Olive Drab (USAAF)

AS-7 ●ニートラルグレー(USAAF) / Neutral Gray (USAAF)

/ Mittelgrau (USAAF) / Neutral Gray (USAAF)

AS-12 ●シルバーメタル / Bare-Metal Silver / Blank-

Metal Silber / Métal Nu

TS-27 ●マットホワイト / Matt white / Matt Weiß /

Blanc mat

●このキットは組み立てモデルです。作る前に必ず説明書を最後までお読みください。また小学生などの低年齢の方が組み立てる時は、保護者の方もお読みください。

●接着剤や塗料は、必ずプラスチック用をお使いください。(別売)

●Read carefully and fully understand the instructions before commencing assembly. A supervising adult should also read the instructions if a child assembles the model.

●Bevor Sie mit dem Zusammenbau beginnen, sollten Sie alle Anweisungen gelesen und verstanden haben. Fall sein Kind das Modell zusammenbaut, sollte ein beaufsichtigender Erwachsener die Bauanleitung ebenfalls gelesen haben.

●Bien lire et assimiler les instructions avant de commencer l'assemblage. La construction du modèle par un enfant doit s'effectuer sous la surveillance d'un adulte.

TS-29 ●セミグロスブラック / Semi gloss black / Seidenglanz Schwarz / Noir satiné

X-5 ●グリーン / Green / Grün / Vert

X-6 ●オレンジ / Orange / Orange / Orange

X-7 ●レッド / Red / Rot / Rouge

X-11 ●クロームシルバー / Chrome silver / Chrom-Silber / Aluminium chromé

X-18 ●セミグロスブラック / Semi gloss black / Seidenglanz Schwarz / Noir satiné

X-23 ●クリヤーブルー / Clear blue / Klar-Blau / Bleu translucide

X-27 ●クリヤーレッド / Clear red / Klar-Rot / Rouge translucide

X-31 ●チタンゴールド / Titanium gold / Titan-Gold / Or Titanium

XF-29 ●フラットブラック / Flat black / Matt Schwarz / Noir mat

XF-2 ●フラットホワイト / Flat white / Matt Weiß / Blanc mat

XF-3 ●フラットイエロー / Flat yellow / Matt Gelb / Jaune mat

XF-4 ●イエローグリーン / Yellow green / Grüngelb / Vert jaune

XF-5 ●フラットグリーン / Flat green / Matt Grün / Vert mat

XF-7 ●フラットレッド / Flat red / Matt Rot / Rouge mat

XF-10 ●フラットブラウン / Flat brown / Matt Braun / Brun mat

XF-15 ●フラットフレッシュ / Flat flesh / Fleischfarben Matt / Chair mate

XF-16 ●フラットアルミニウム / Flat aluminum / Matt Aluminium / Aluminium mat

XF-49 ●カーキ / Khaki / Khaki / Kaki

XF-56 ●メタリックグレー / Metallic grey / Grau-Metallique / Gris métallisé

XF-57 ●バフ / Buff / Lederfarben / Chamois

XF-64 ●レッドブラウン / Red brown / Rotbraun / Rouge brun

注意

●工具の使用には十分注意してください。特にナイフ、ニッパーなどの刃物によるケガや事故に注意してください。

●接着剤や塗料は使用する前にそれの注意書きをよく読み、指示に従って正しく使用し、使用する時は換気にしてください。

●小さなお子様のいる所での工作はやめてください。小さな部品の飲み込みや、ビニール袋をかぶっての窒息などの危険な状況が考えられます。

CAUTION

●When assembling this kit, tools including knives are used. Extra care should be taken to avoid personal injury.

●Read and follow the instructions supplied with paint and/or cement, if used (not included in kit). Use plastic cement and paints only.

●Keep out of reach of small children. Children must not be allowed to put any parts in their mouths, or pull vinyl bag over their heads.

VORSICHT

●Beim Zusammenbau dieses Bausatzes werden Werkzeuge einschließlich Messer verwendet. Zur Vermeidung von Verletzungen ist besondere Vorsicht angebracht.

●Wenn Sie Farben und/oder Kleber verwenden (nicht im Bausatz enthalten), beachten und befolgen Sie die dort beiliegenden Anweisungen. Nur Klebstoff und Farben für Plastik verwenden.

●Bausatz von kleinen Kindern fernhalten. Verhü-

ten Sie, daß Kinder irgendwelche Bauteile in den Mund nehmen oder Plastiktüten über den Kopf ziehen.

PRECAUTIONS

●L'assemblage de ce kit requiert de l'outil, en particulier des couteaux de modélisme. Manier les outils avec précaution pour éviter toute blessure.

●Lire et suivre les instructions d'utilisation des peintures et ou de la colle, si utilisées (non incluses dans le kit). Utiliser uniquement une colle et des peintures spéciales pour le polystyrène.

●Garder hors de portée des enfants en bas âge. Ne pas laisser les enfants mettre en bouche ou sucer les pièces, ou passer un sachet vinyl sur la tête.

●機体の仕様などが異なるため以下のマーキングから A、Bどちらか選んで組み立てに入ります。

●Select marking type (A) or (B) prior to assembly.

●Vor dem Zusammenbau den Markierungs-Typ (A) oder (B) wählen.

●Choisir entre les décos A et B avant de débuter l'assemblage.

A ●この機体はフランク・クリッピー中尉搭乗機で、機首に大きく "Little chief (小さな酋長)" の絵を描いています。彼は1944年5月までに7機撃墜し、エースパイロットとしての名をあげています。

●This plane was flown by Lieutenant Frank Klibbe. It had a large drawing of "Little Chief" on its nose. Klibbe earned 7 scores in air combat by May 1944.

●Dieses Flugzeug wurde vom Leutnant Frank Klibbe geflogen. Es trug eine große Zeichnung "Little Chief" auf der Nase. Klibbe erzielte im Luftkampf bis Mai 1944 7 Tschaffter.

●Cet appareil était piloté par le lieutenant Frank Klibbe et arbore un grand dessin de "Little Chief" sur le nez. En mai 1944, Klibbe avait déjà remporté 7 victoires en combat aérien.

B ●この機体はウォーカー・マハリン大尉の搭乗機で、彼は第56戦闘航空群の中で8番目に二桁の撃墜記録をマークしたエースパイロットです。機体側面にはニュージャージー州のアトランティックシティ市民の戦時債券によって車に送られた機体を示す文字が描かれています。

●This plane was flown by Captain Walker "Bud" Mahurin. Mahurin was the 8th ace who shot down more than 10 enemies in the 56th Fighter Group. This plane was purchased via government war bonds by citizens of Atlantic City, New Jersey.

●Dieses Flugzeug wurde von Captain Walker "Bud" Mahurin geflogen. Mahurin war ein Ass, das in der 56. Jagdstaffel mehr als 10 Feinde abschoss. Dieses Flugzeug wurde über öffentliche Kriegsanleihen von den Bürgern aus Atlantic City, New Jersey, finanziert.

●Cet appareil était piloté par le Capitaine Walker "Bud" Mahurin. Mahurin était un ace de la 56e Air Force avec plus de 10 victoires remportées au sein du 56th Fighter Group. Cet avion fut acheté grâce à la récolte de bonds de guerre par les habitants d' Atlantic City dans le New Jersey.

1 機体の組み立て

Cockpit
Kockpit

指示の番号のスライドマークをはります。

Number of decal to apply.

Numer des Abziehbildes, das anzubringen ist.

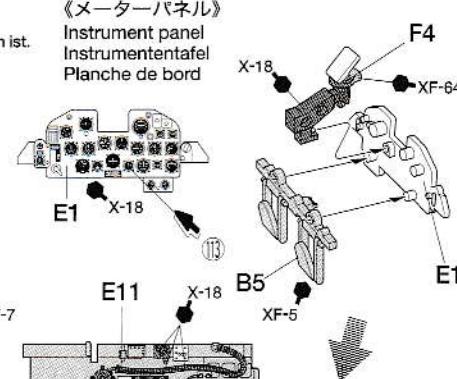
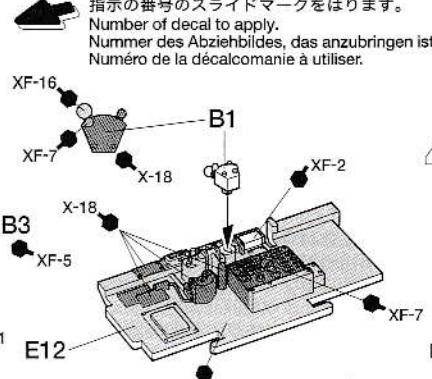
Numéro de la décalcomanie à utiliser.

《メーターパネル》

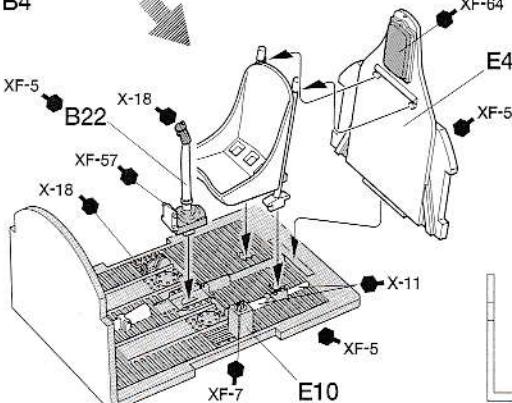
Instrument panel

Instrumententafel

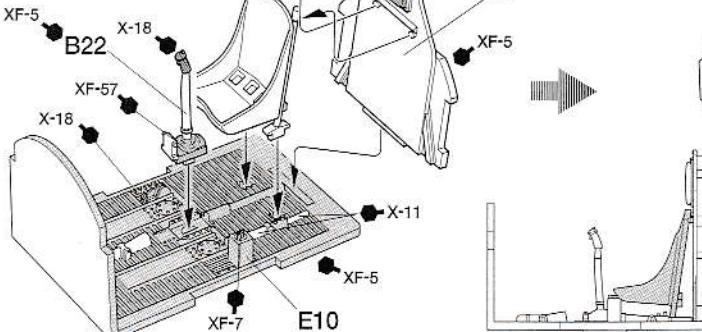
Planche de bord



B4



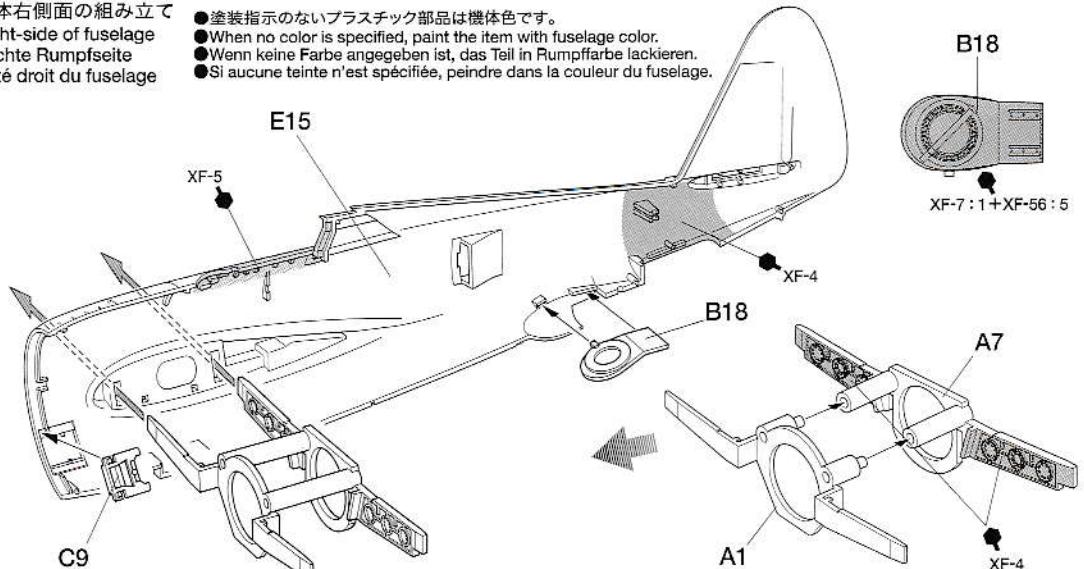
E4



2

機体右侧面の組み立て
Right-side of fuselage
Rechte Rumpfseite
Côté droit du fuselage

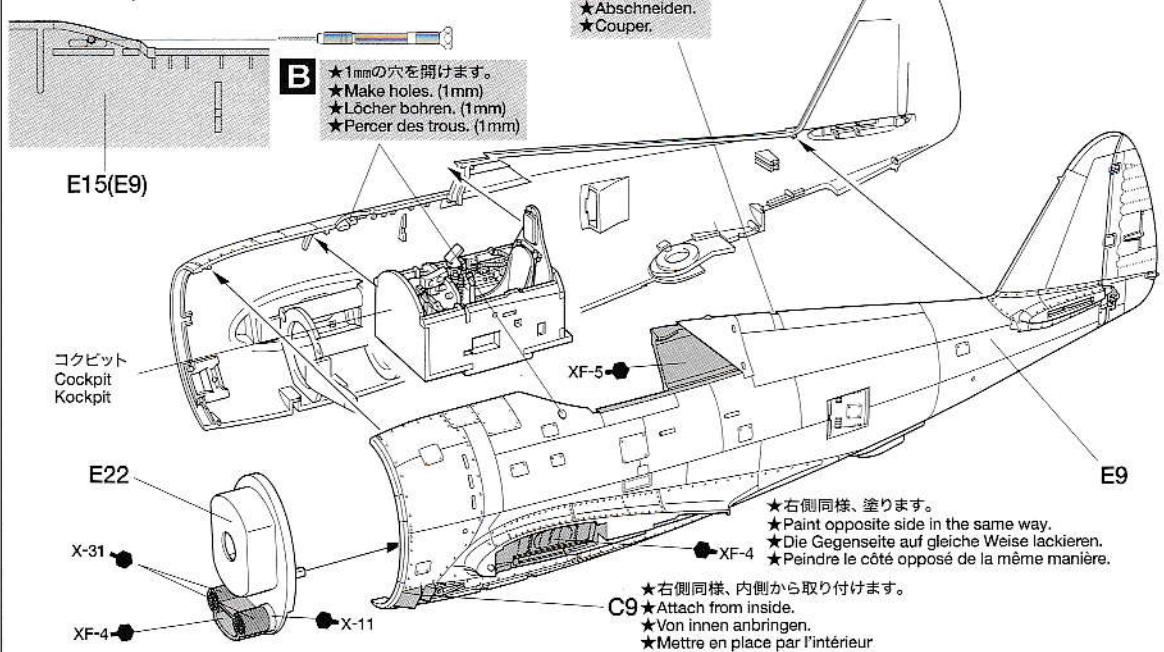
- 塗装指示のないプラスチック部品は機体色です。
●When no color is specified, paint the item with fuselage color.
- Wenn keine Farbe angegeben ist, das Teil in Rumpffarbe lackieren.
- Si aucune teinte n'est spécifiée, peindre dans la couleur du fuselage.

**3**

機体の組み立て
Fuselage
Rumpf

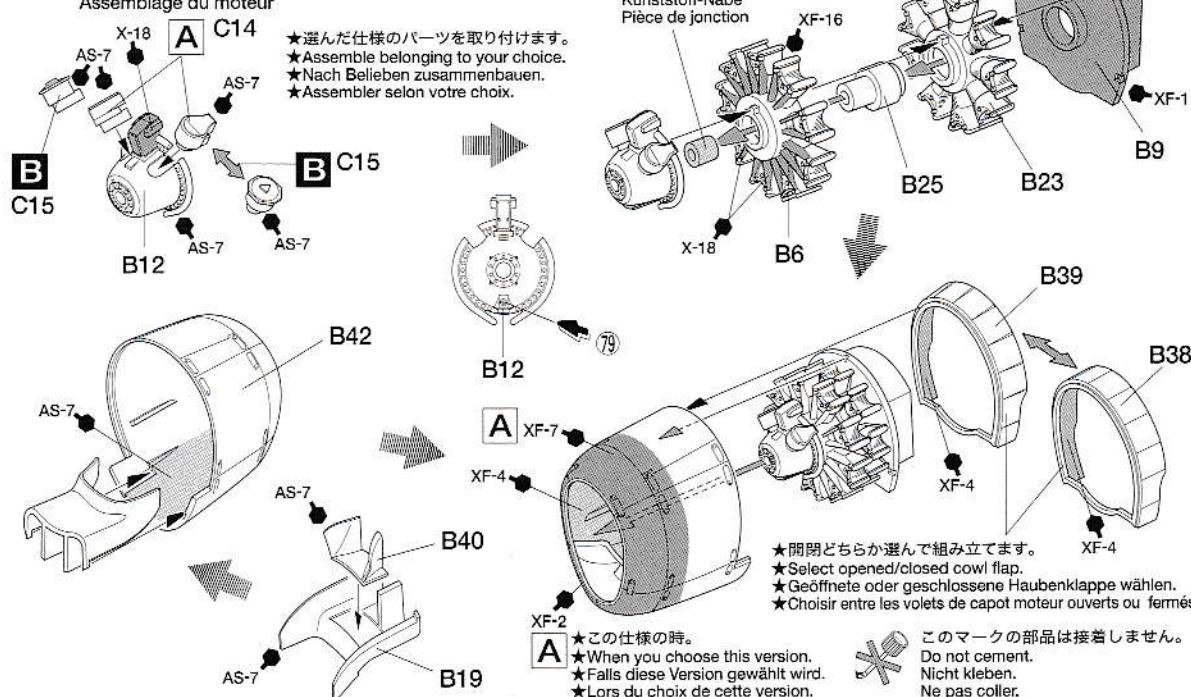
- A**
- ★切りかぎます。
★Cut off.
★Abschneiden.
★Couper.

- B**
- ★1mmの穴を開けます。
★Make holes. (1mm)
★Löcher bohren. (1mm)
★Percer des trous. (1mm)

**4**

エンジンの組み立て
Engine assembly
Motor-Zusammenbau
Assemblage du moteur

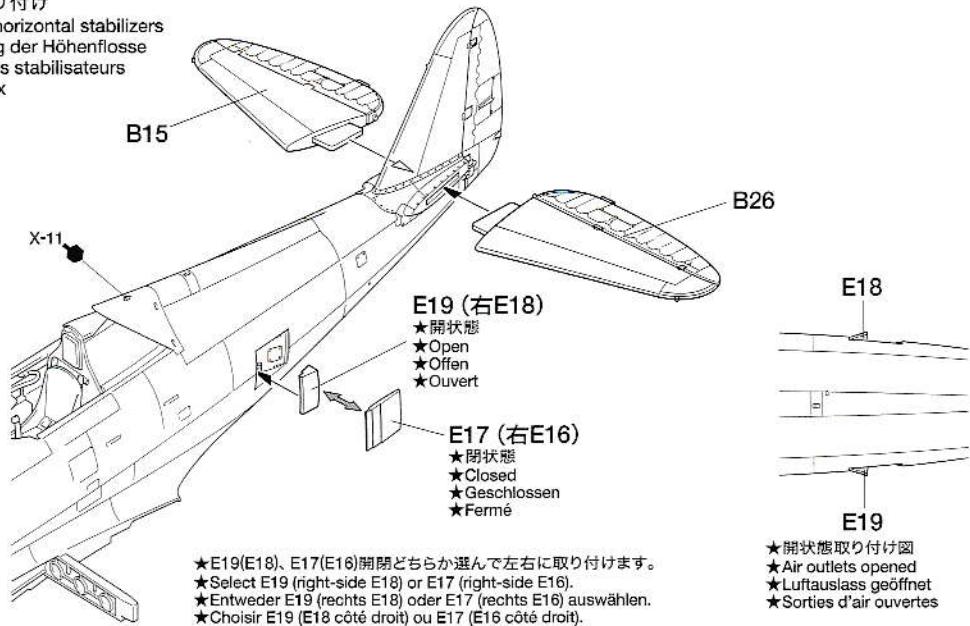
- A** C14
- ★選んだ仕様のバーツを取り付けます。
★Assemble belonging to your choice.
★Nach Belieben zusammenbauen.
★Assembler selon votre choix.



5

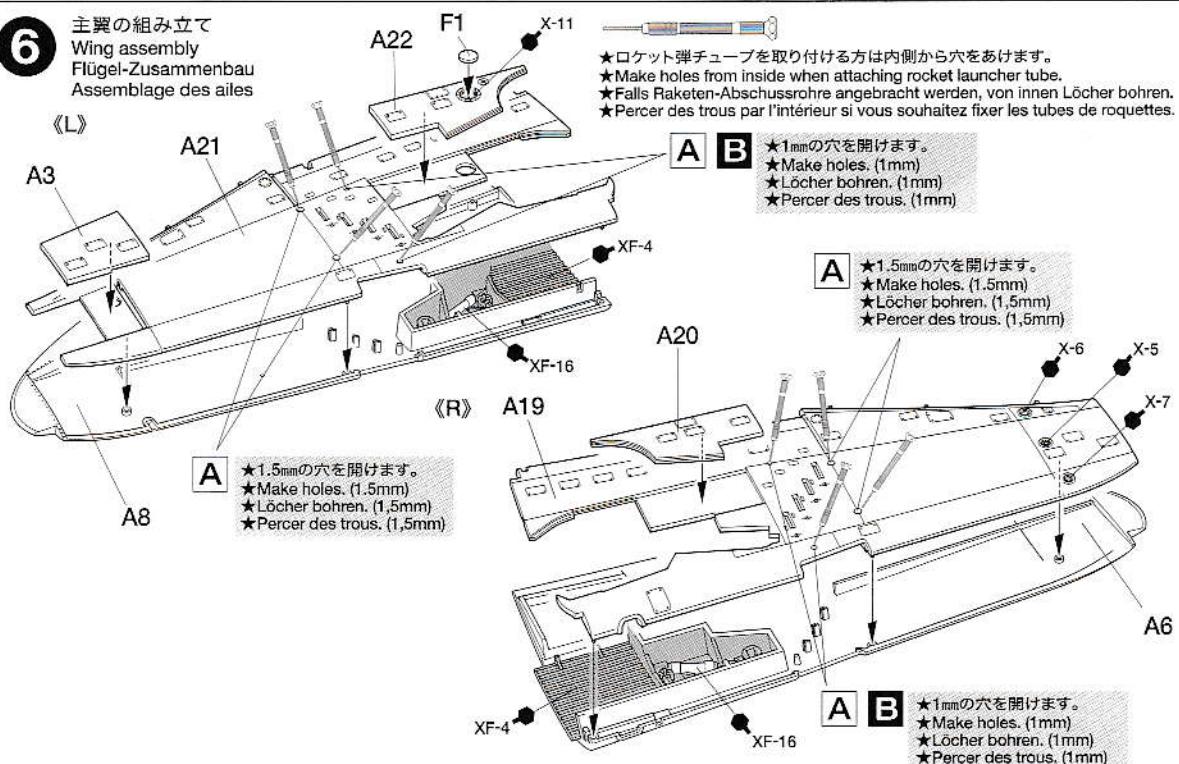
尾翼の取り付け

Attaching horizontal stabilizers
Anbringung der Höhenflosse
Fixation des stabilisateurs horizontaux
Fixation des stabilisateurs horizontaux

**6**

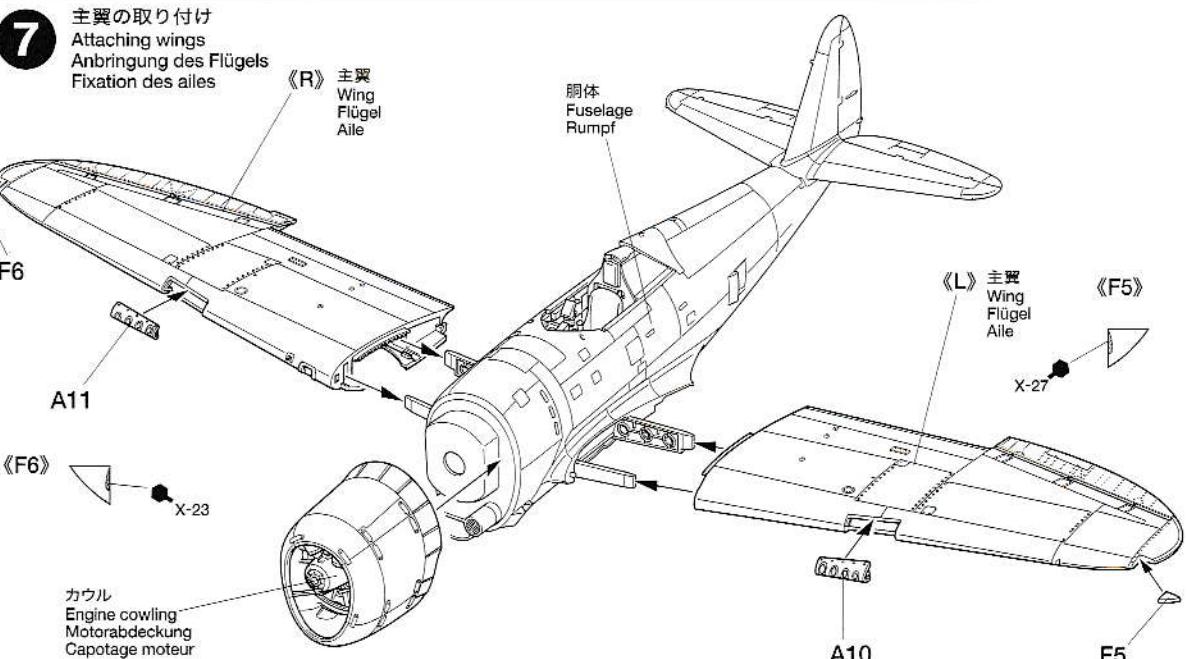
主翼の組み立て

Wing assembly
Flügel-Zusammenbau
Assemblage des ailes

**7**

主翼の取り付け

Attaching wings
Anbringung des Flügels
Fixation des ailes



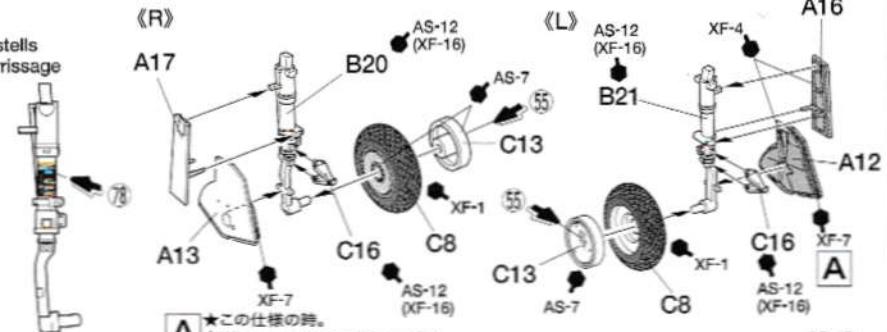
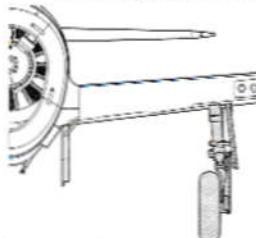
8

脚柱の取り付け

Undercarriage assembly

Zusammenbau des Fahrgestells

Assemblage du train d'atterrissement

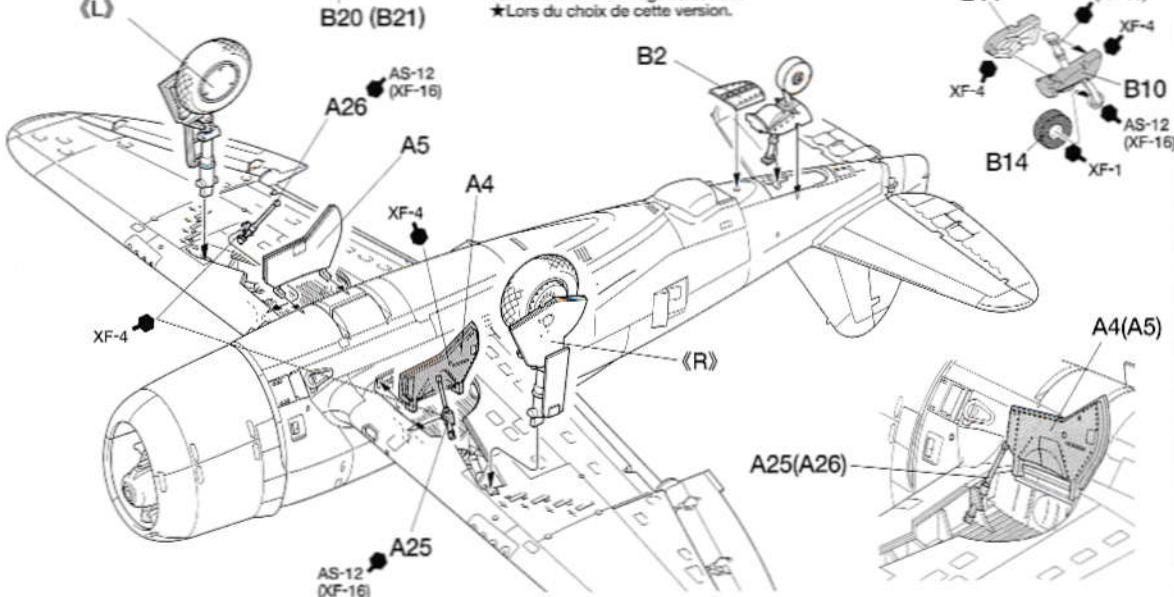


A ★この仕様の時。

★When you choose this version.

★Falls diese Version gewählt wird.

★Lors du choix de cette version.



9

フラップの組み立て

Flap assembly

Zusammenbau der Klappe

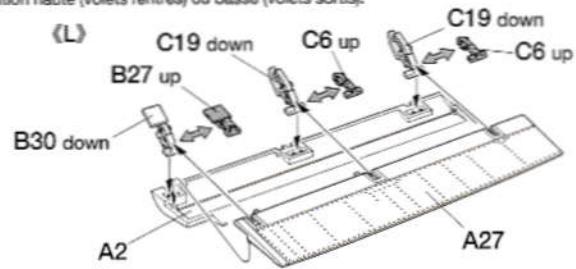
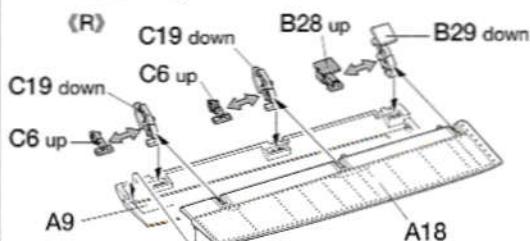
Assemblage des volets

★フラップアップ up (B27,B28,C6)、ダウン down (B29,B30,C19) どちらか選んで組み立てます。

★Select up (retracted flaps) or down (extended flaps).

★Entweder oben (eingefahrene Klappen) oder unten (ausgefahrene Klappen) auswählen.

★Choisir entre position haute (volets rentrés) ou basse (volets sortis).



10

フラップの取り付け

Attaching flaps

Einbau der Landeklappen

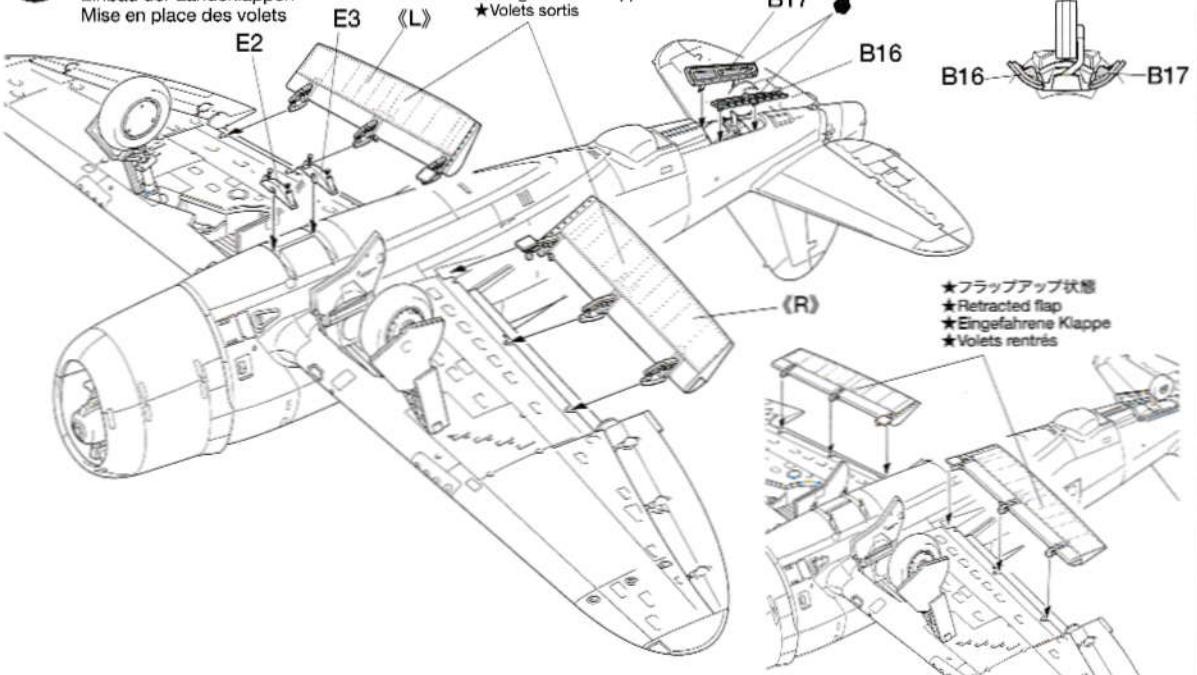
Mise en place des volets

★フラップダウン状態

★Extended flap

★Ausgefahrene Klappe

★Volets sortis



★フラップアップ状態

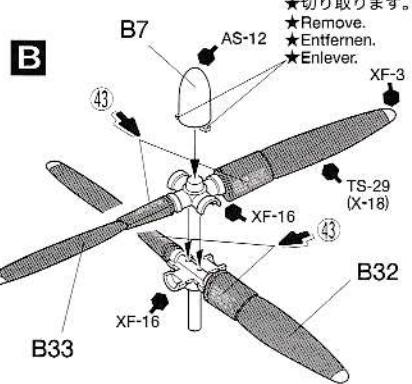
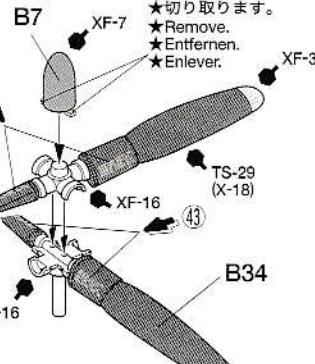
★Retracted flap

★Eingefahrene Klappe

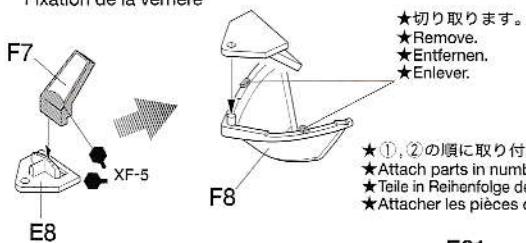
★Volets rentrés

11

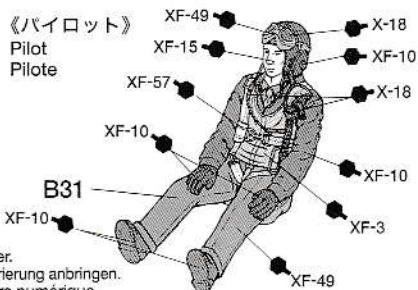
プロペラの組み立て

Propeller
Hélice**12**

キャノピーの取り付け

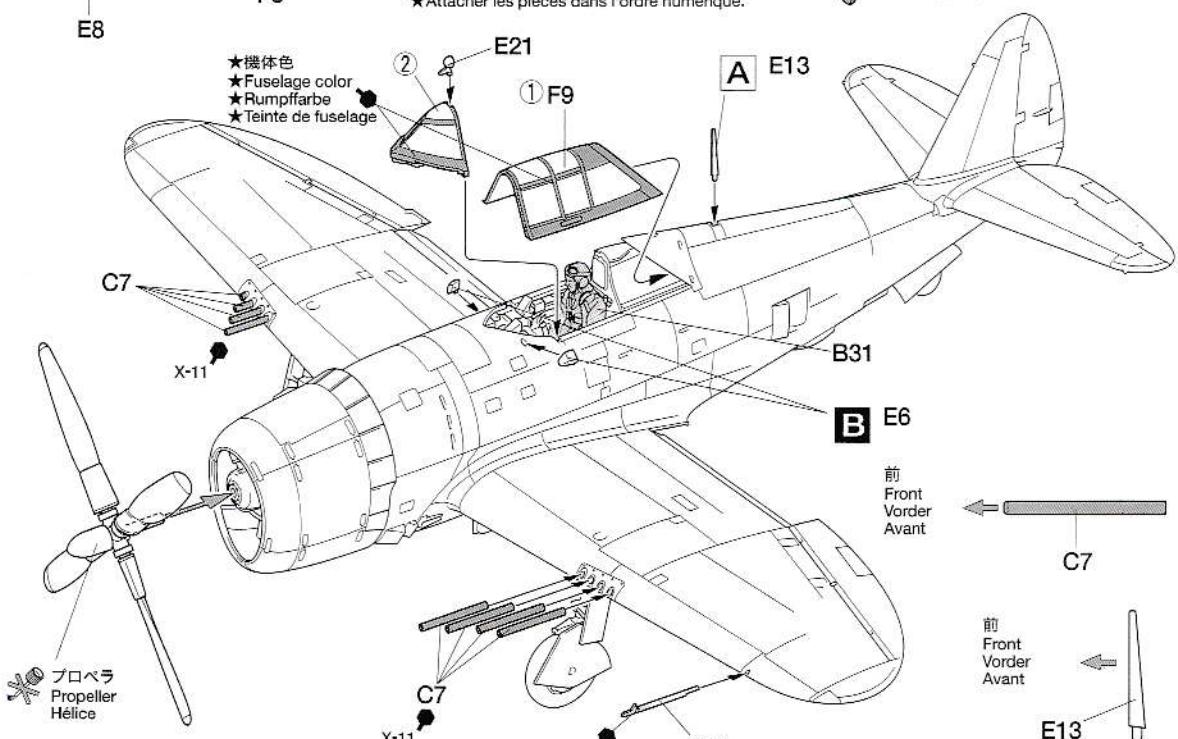
Attaching canopy
Anbringung der Haube
Fixation de la verrière

《パイロット》
Pilot
Pilote



★切り取ります。
★Remove.
★Entfernen.
★Enlever.

★①, ②の順に取り付けます。
★Attach parts in numbered order.
★Teile in Reihenfolge der Nummerierung anbringen.
★Attacher les pièces dans l'ordre numérique.

**13**

兵装の組み立て

Armaments

Bewaffnung

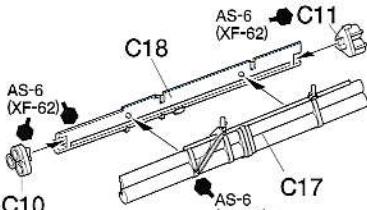
Armement

《4.5インチロケットランチャー A》

4.5in. rocket launcher tube

4,5Zoll Raketen-Abschussrohr

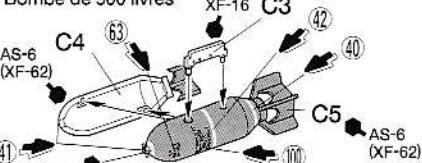
Tude de lancement de roquettes de 4,5 pouces



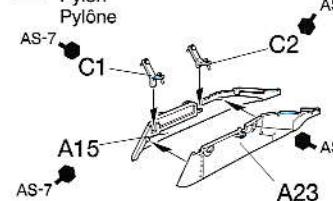
《500ポンド爆弾 B》

500lb bomb

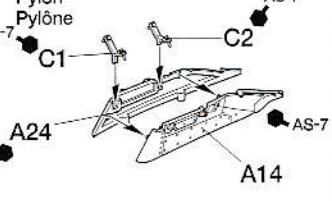
Bombe de 500 livres



《パイロン L》

Pylon
Pylône

《パイロン R》

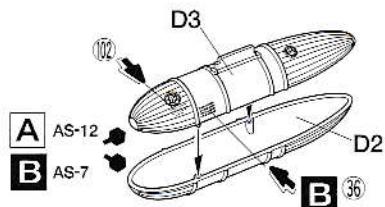
Pylon
Pylône

《108ガロン強化紙製増槽 C》

108gal pressed paper drop tank

108gal Abwurftank aus Presspappe

Réservoir en papier pressé de 108 gallons

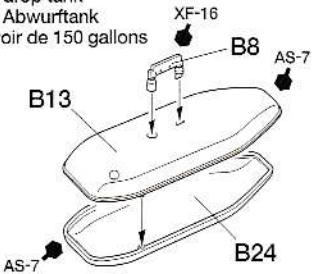


《150ガロン増槽 D》

150gal drop tank

150gal Abwurftank

Réservoir de 150 gallons



14

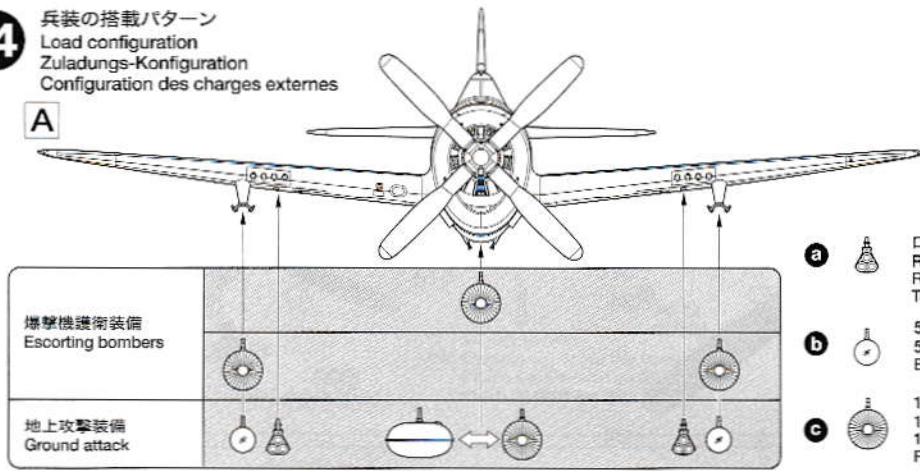
兵装の搭載パターン

Load configuration

Zuladungs-Konfiguration

Configuration des charges externes

A



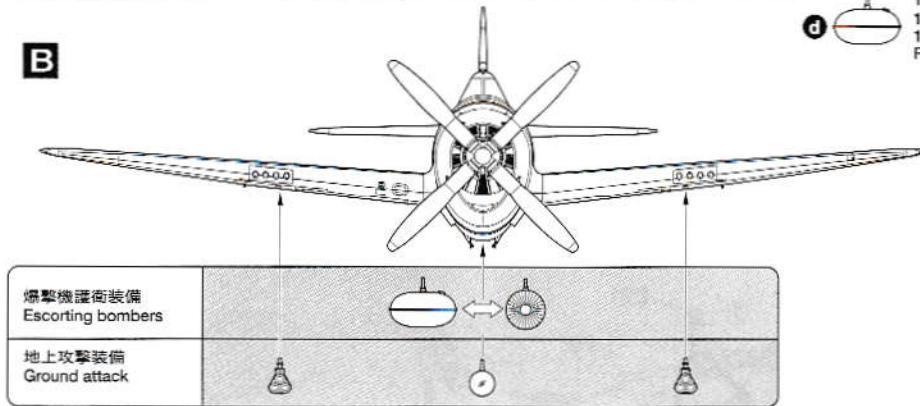
a ロケットランチャー
Rocket launcher
Raketen-Abschusseinrichtung
Tube de roquettes

b 500ポンド爆弾
500lb bomb
Bombe de 500 livres

c 108ガロン塔槽
108gal drop tank
108gal Abwurftank
Réservoir de 108 gallons

d 150ガロン塔槽
150gal drop tank
150gal Abwurftank
Réservoir de 150 gallons

B



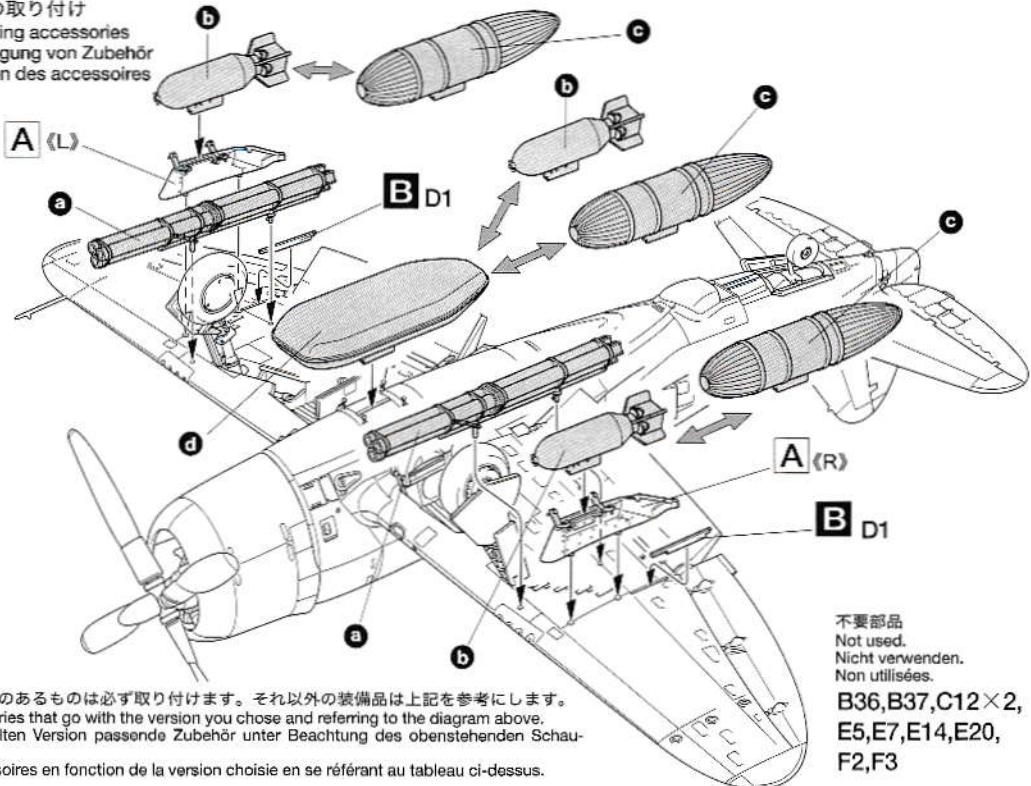
15

兵装の取り付け

Attaching accessories

Anbringung von Zubehör

Fixation des accessoires



不要部品
Not used.
Nicht verwenden.
Non utilisées.

B36,B37,C12×2,
E5,E7,E14,E20,
F2,F3

- AとBの指示のあるものは必ず取り付けます。それ以外の装備品は上記を参考にします。
- Attach accessories that go with the version you chose and referring to the diagram above.
- Das zur gewählten Version passende Zubehör unter Beachtung des obenstehenden Schaubilds anbringen.
- Fixer les accessoires en fonction de la version choisie en se référant au tableau ci-dessus.

PAINTING

《P-47Dレイザーバックの塗装》

アメリカ陸軍機の基本塗装は、上面オリーブドラブ、下面ニュートラルグレイでした。が、1943年12月以降の生産機は全面無塗装とされました。P-47Dレイザーバックの場合はオリーブドラブ塗装が多く見られます。また配備当初は機影の似ているFw190との誤認を避けるため、機首や尾翼の一部を白で塗装し、主翼下面の国籍標識を標準よりも大きく描いた例も多かったようです。後には航空群や飛行隊のユニットカラーでカウリング前縁や方向舵を塗装した機体も多く見られました。細部の塗装は説明書中に●のマークで示してあります。

《Painting the Republic P-47D Thunderbolt》

The basic camouflage of the US Army Air Force was composed of Olive Drab for upper surfaces and Neutral Gray for lower surfaces. However, from December 1943, the newly produced aircraft left bare metal. In the case of the P-47 Razorback, Olive Drab camouflage was widely used. Moreover, during its introduction in units, white bands were applied to the nose and the tail in order to distinguish the P-47 from the Fw190. The undersurface insignias were sometimes enlarged. Later, the front part of engine cowling and rudder were often painted with the unit color.

《Lackierung der Republic P-47D Thunderbolt》
Der ursprüngliche Tarnanstrich der US Army Air Force bestand aus einem Olivton für die obliegenden Flächen und einem neutralen Grau für die Unterseite. Die ab Dezember 1943 produzierten Flugzeuge beliebte man jedoch in blankem Metall. Was die P-47 Razorback angeht, wurde überwiegend die Tarnfarbe mit Olivton verwendet. Dar-

über hinaus wurden in der Zeit der Einführung bei den Einheiten an der Nase und am Heck weiße Streifen angebracht, um die P-47 von der Fw190 zu unterscheiden. Später wurde der vordere Teil der Motorhaube und das Seitenruder oft in der Farbe der Einheit gestrichen.

《Peinture du Republic P-47D Thunderbolt》

Le camouflage de base de l'US Air Force se composait d'Olive Drab pour les surfaces supérieures et de Neutral Gray pour les surfaces inférieures mais à partir de décembre 1943, les nouveaux appareils produits étaient laissés en métal nu. Dans le cas du P-47 "Razorback", le camouflage Olive Drab était très répandu. De plus, lors de son introduction en unités, des bandes blanches furent appliquées sur le nez et l'empennage afin de distinguer le P-47 du Fw190. Parfois même, les insignes de nationalité d'intrados étaient surdimensionnés. Plus tard, la partie avant du capot moteur et le gouvernail furent souvent peints avec la couleur d'unité.

APPLYING DECALS

《スライドマークのはりかた》

- ①はりたいマークをハサミで切りぬきます。
- ②マークをぬるま湯に10秒ほどひたしてからタオル等の布の上におきます。
- ③台紙のはしを手で持ち、貼るところにマークをスライドさせてモデルに移してください。
- ④指に少し水をつけてマークをぬらしながら、正しい位置にすらします。
- ⑤やわらかい布でマークの内側の気泡をおし出しながら、おしつけるようにして水分をとります。

DECAL APPLICATION

- 1.Cut off decal from sheet.

- 2.Dip the decal in tepid water for about 10 sec. and place on a clean cloth.
- 3.Hold the backing sheet edge and slide decal onto the model.
- 4.Move decal into position by wetting decal with finger.
- 5.Press decal gently down with a soft cloth until excess water and air bubbles are gone.

ANBRINGUNG DES ABZIEHBILDES

- 1.Abziehbild vom Blatt ausschneiden.
- 2.Das Abziehbild ungefähr 10 Sek. in lauwarmes Wasser tauchen, dann auf sauberen Stoff legen.
- 3.Die Kante der Unterlage halten und das Abziehbild auf das Modell schieben.
- 4.Das Abziehbild an die richtige Stelle schieben und dabei mit dem Finger das Abzieh-

bild naßmachen.

5.Das abziehbild mit weichem Stoff ganz andrücken, bis kein überflüssiges Wasser und keine Luftblasen mehr vorhanden sind.

APPLICATION DES DECALCOMANIES

- 1.Découpez la décalcomanie de sa feuille.
- 2.Plongez la décalcomanie dans de l'eau tiède pendant 10 secondes environ et poser sur un linge propre.
- 3.Retenez la feuille de protection par le côté et glissez la décalcomanie sur le modèle réduit.
- 4.Placez la décalcomanie à l'endroit voulu en la mouillant avec un de vos doigts.
- 5.Pressez doucement la décalcomanie avec un tissu doux jusqu'à ce que l'eau en excès et les bulles aient disparu.

《各機共通機体マーク》

Common markings

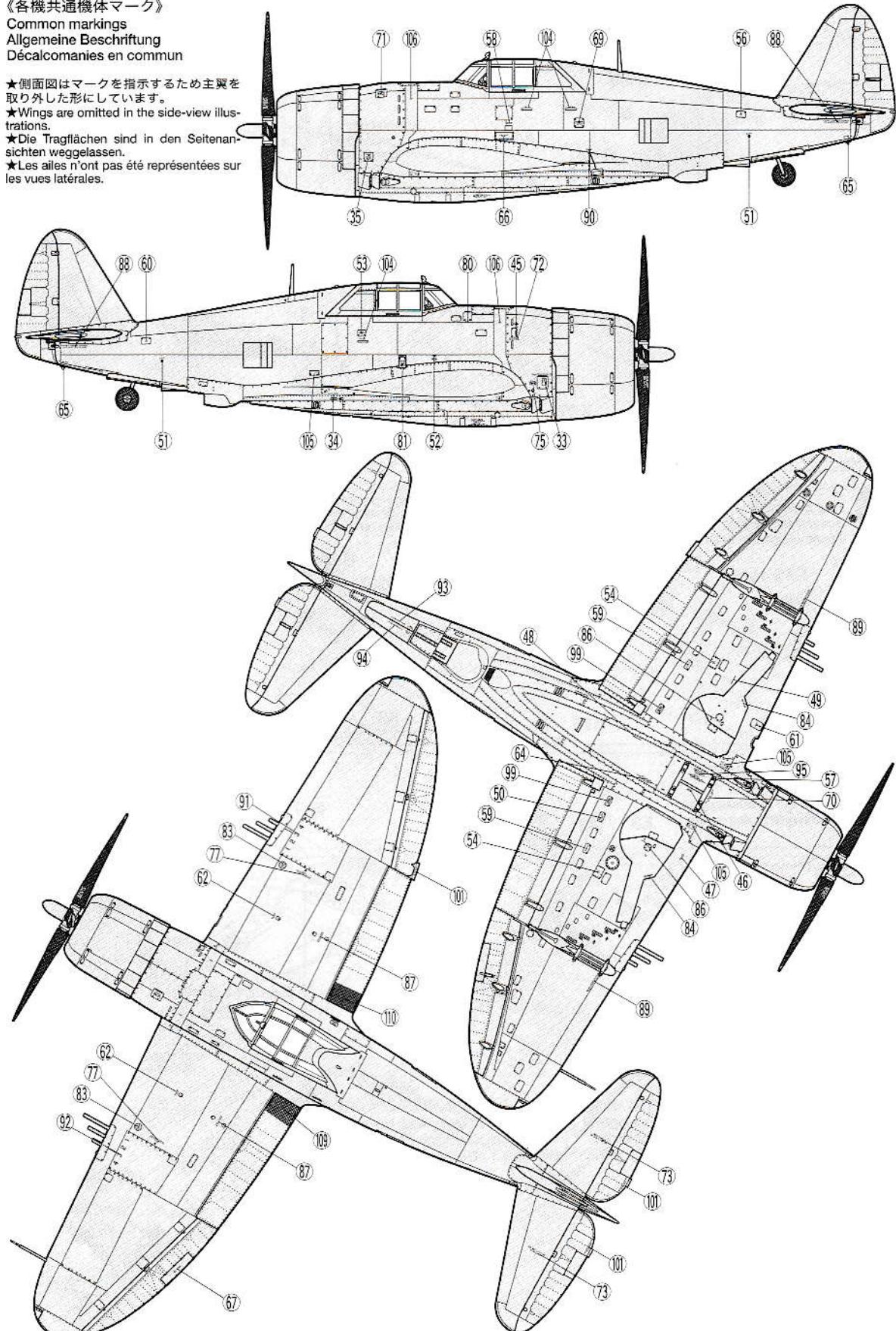
Allgemeine Beschriftung
Décalcomanies en commun

★側面図はマークを指示するため主翼を取り外した形にしています。

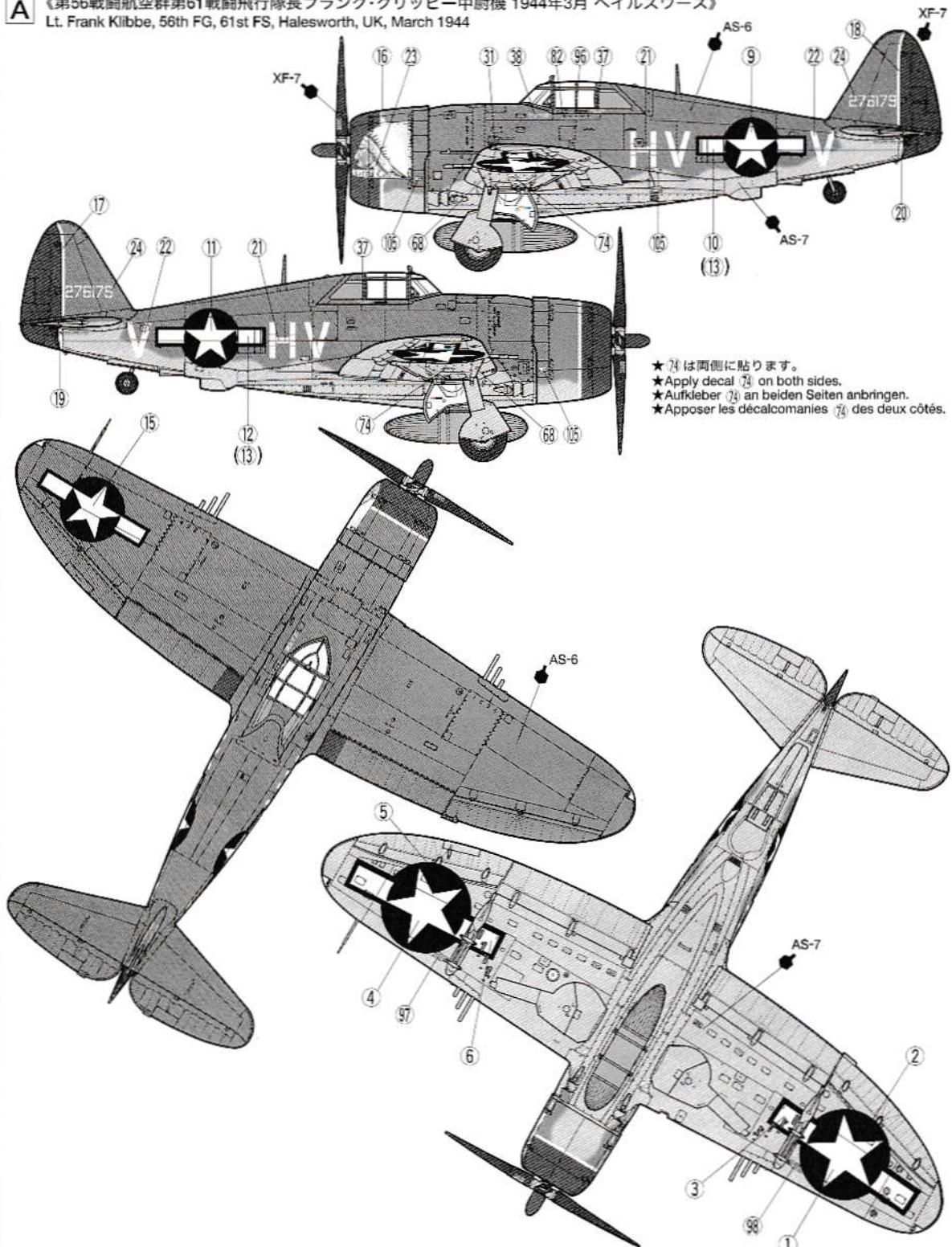
★Wings are omitted in the side-view illustrations.

★Die Tragflächen sind in den Seitenansichten weggelassen.

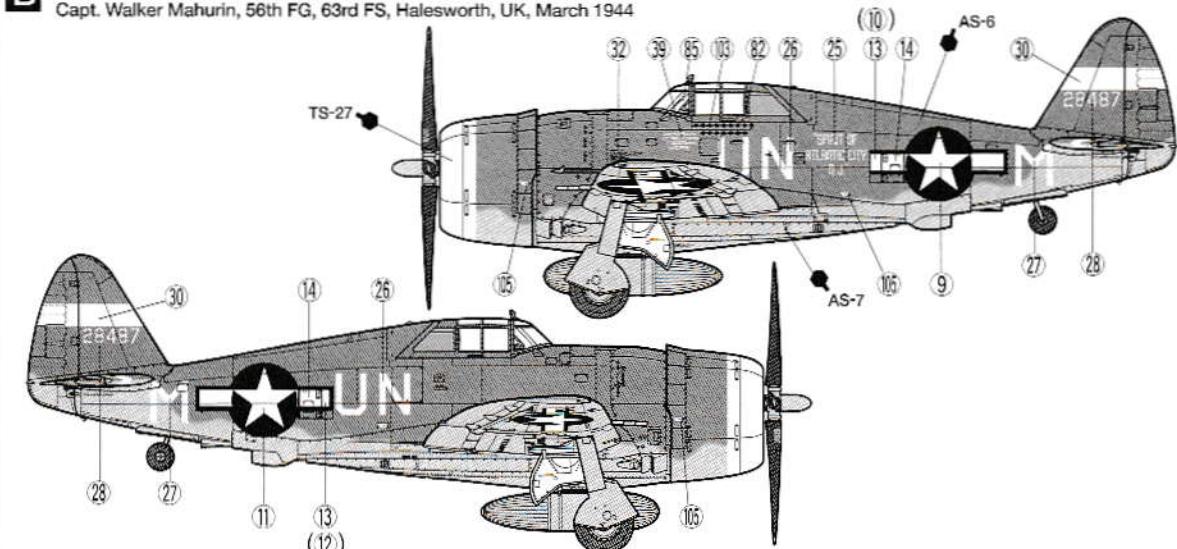
★Les ailes n'ont pas été représentées sur les vues latérales.

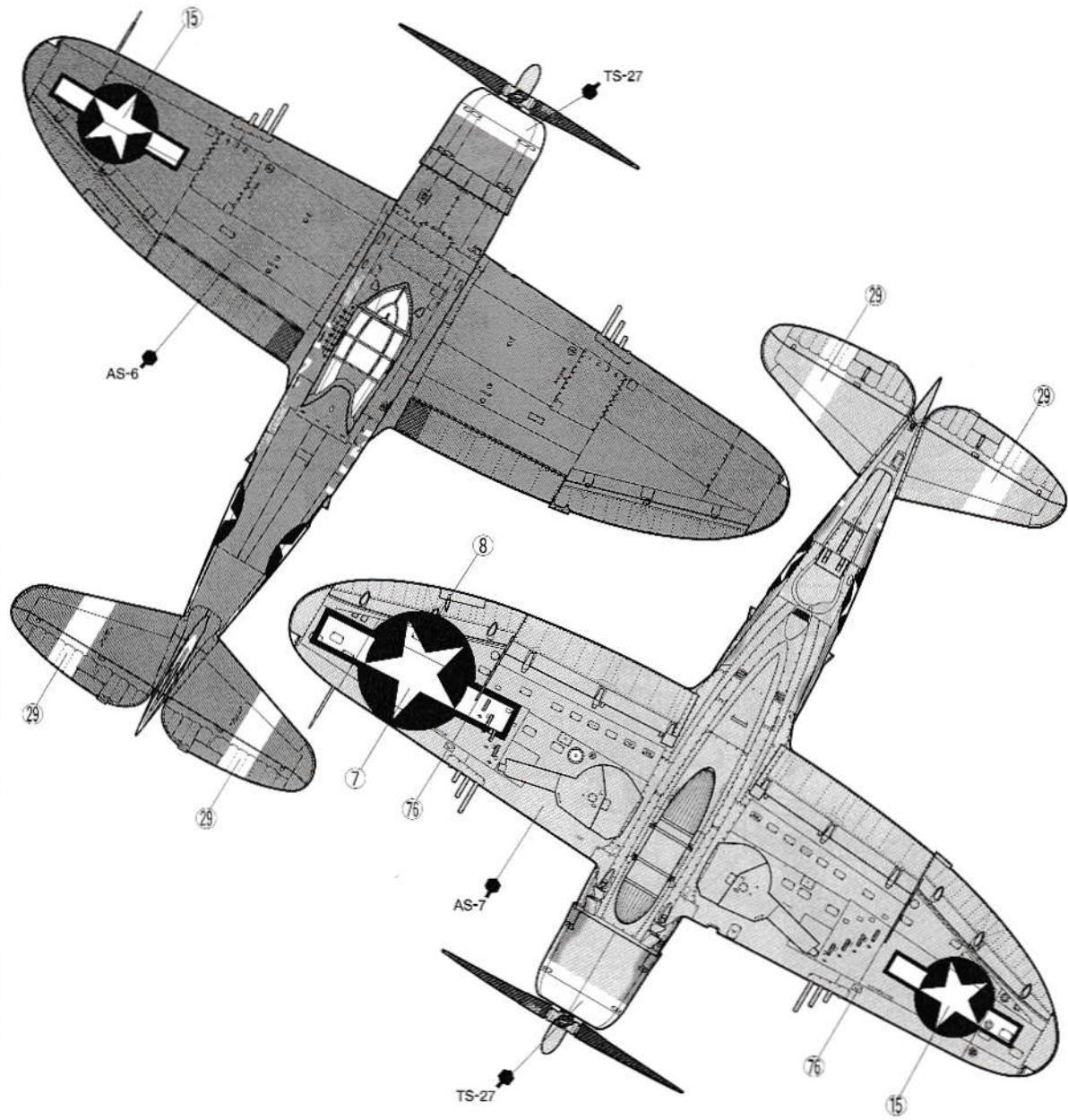


A 《第56戦闘航空群第61戦闘飛行隊フランク・クリッピー中尉機 1944年3月 ヘイルズワース》
Lt. Frank Klibbe, 56th FG, 61st FS, Halesworth, UK, March 1944



B 《第56戦闘航空群第63戦闘飛行隊ウォーカー・マハリン大尉機 1944年3月 ヘイルズワース》
Capt. Walker Mahurin, 56th FG, 63rd FS, Halesworth, UK, March 1944





部品請求について

★部品をなくしたり、こわした方は、このステッカーが貼られたカスタマーサービス取次店でご注文いただけます。また、当社カスタマーサービスに直接ご注文する場合は、右記の方法でご注文することができます。詳しくは当社カスタマーサービスまでお問い合わせください。



①《現金書留のご利用法》

下のカードにあなたの氏名、住所、郵便番号、電話番号をしっかりと記入してください。必要部品を○でかこみ、代金を現金書留または、定額小切手(100円以下は切手可)と一緒にお申し込みください。

②《郵便振替のご利用法》

郵便局の払込用紙の通信欄に下のカードを参考にITEM番号、スケール、製品名、部品名、数量を必ず記入ください。振込人住所欄には電話番号もお書きいただき、口座番号:00810-9-1118、加入者名:田宮模型でお振込ください。

③《電話でのご注文もご利用いただけます》

部品代金に加えて代引き手数料(315円)

をご負担いただければ、代金着払いにより電話でのご注文も承ります。

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●タミヤのホームページには豊富な情報が満載です。ぜひご覧ください。

www.tamiya.com

REPUBLIC P-47D THUNDERBOLT "RAZORBACK"

1/48 リバブリック P-47D
サンダーボルト "レイザーバック"

A/パーツ	910円	9006371
B/パーツ	870円	0006370
C & D Parts (1 pc.)	400円	0006371
E/パーツ	830円	0006372
F/パーツ	340円	9006375
2x3mm Poly Cap (2個)	100円	9406058
マーク	400円	9496022
説明図	320円	1056284

For Japanese use only!

ITEM 61086

住所

[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
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電話 () -

氏名

1102

 **TAMIYA**
株式会社タミヤ
静岡市駿河区原3-7 〒422-8610

AFTER MARKET SERVICE CARD

When purchasing Tamiya replacement parts, please take or send this form to your local Tamiya dealer so that the parts required can be correctly identified and supplied. Please note that specifications, availability and price are subject to change without notice.

Parts code	ITEM 61086
9006371	A Parts
0006370	B Parts
0006371	C & D Parts (1 pc.)
0006372	E Parts
9006375	F Parts
9406058	2x3mm Poly Cap (2個)
9496022	マーク
1056284	説明図

REPUBLIC P-47D THUNDERBOLT "RAZORBACK"

TAMIYA



«Thunderbolt's birth»

In June 1940, during the beginning of WWII, the Luftwaffe was overwhelming the French Armée de l'air and the Royal Air Force during the Battle of France. When France surrendered after about 40 days of fighting, danger had come to Great Britain's door. Unfortunately for the US, the Seversky P-35 and Curtiss P-36 that were in service with US Army Air Force, as well as the Bell P-39 and the Curtiss P-40 that were about to be delivered, were inferior in many aspects to the Messerschmitt Me109 and the Spitfire that were fighting over the European skies. Moreover, when relations with Japan took a downturn in the Pacific, the US Army Air Force realized that the development of new high performance fighters were of top priority.

Republic's (created from Seversky) chief engineer Alexander Kartveli responded to this requirement by developing a plane equipped with a Pratt & Whitney R-2800 engine, that was to become one of the most powerful fighter-bombers in WWII, the P-47 Thunderbolt.

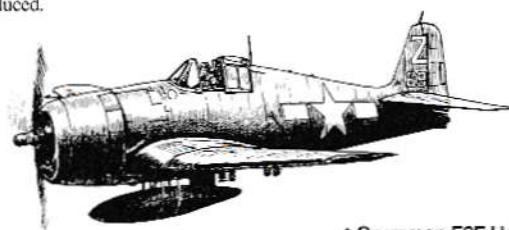
Starting in 1939, Republic was developing the light fighter AP-10, which was intended to be equipped with a 1150hp Alison liquid-cooled inline engine and two 12.7mm machineguns. In June 1940, after studying the dogfighting situation in Europe, the design underwent a complete revolutionary change with the adoption of a 2000hp R-2800 air-cooled radial engine connected to a supercharger and eight 12.7 machineguns. The design was proposed to the US Army Air Force and in September a contract was awarded for the production of a prototype designated XP-47B. Only a few months later, in May 1941, the XP-47B made its maiden flight and reached a top speed of 633km/h. In December of that same year, the first production P-47B was completed and in March 1942, deliveries began. Unfortunately, many accidents occurred because of the fabric skinned rudder and it was decided to replace this with a metal skinned one to cure the problem. In September 1942, the overall length increased 20cm, giving birth to the P-47C. Whereas the P-47B was only used for training, the P-47C started to be delivered by the end of 1942 to the 8th Air Force based in England and to see combat use. Then, in April 1943, cowling flaps, armor and supercharger were improved resulting in the well-known design of the P-47D. The D version included sub-types designated D-1 to D-40 and were produced in the Farmington (RA) and the Evansville (RE) factories. Until P-47D-22-RE and D-23-RA, the aircraft featured fastback canopies and for this reason were called "Razorback" whereas subsequent versions were equipped with bubble canopies for improved visibility.

The P-47D had a top speed of 690km/h at 9,150m and 560km/h at sea level, a maximum ceiling of 12,800m, a range of 950km (standard), 1,650km (maximum), and was able to reach 6,000m in 9 minutes. This high performance fighter was a great asset to the US Army Air Force units in the second half of WWII.

«The heart of the Thunderbolt»

The heart of the Thunderbolt was the Pratt & Whitney R-2800 "Double Wasp". This air-cooled 18-cylinder radial engine had a diameter of about 1.3m and a dry weight of over 1ton, and was very powerful. The R-2800-59

that equipped the P-47D and featured a water injection combat emergency system, had an output of up to 2,300 hp and the R-2800-57 that equipped the P-47N had an output of up to 2,600hp. Moreover, air-cooled engines have the advantage of better reliability, as they don't suffer malfunction related to complex cooling systems. This masterpiece of an engine was also used to power Navy fighters such as the F6F Hellcat, the F7F Tigercat, the F8F Bearcat and the F4U Corsair, and a total of over 100,000 units were produced.



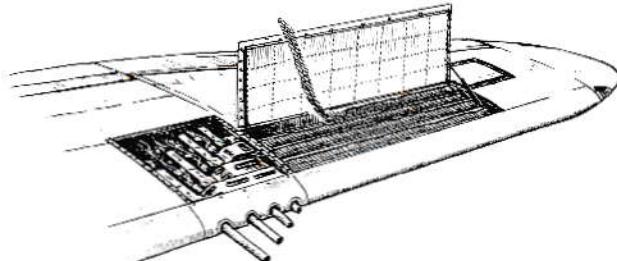
◆Grumman F6F Hellcat

To use as effectively as possible the power of the R-2800, the P-47 mounted Curtiss C642S-A6 (3.71m diameter) or paddle blade C542S-A114 (3.96m diameter) or a Hamilton Standard 24E50-65 (4.01m diameter) 4-blade propellers.

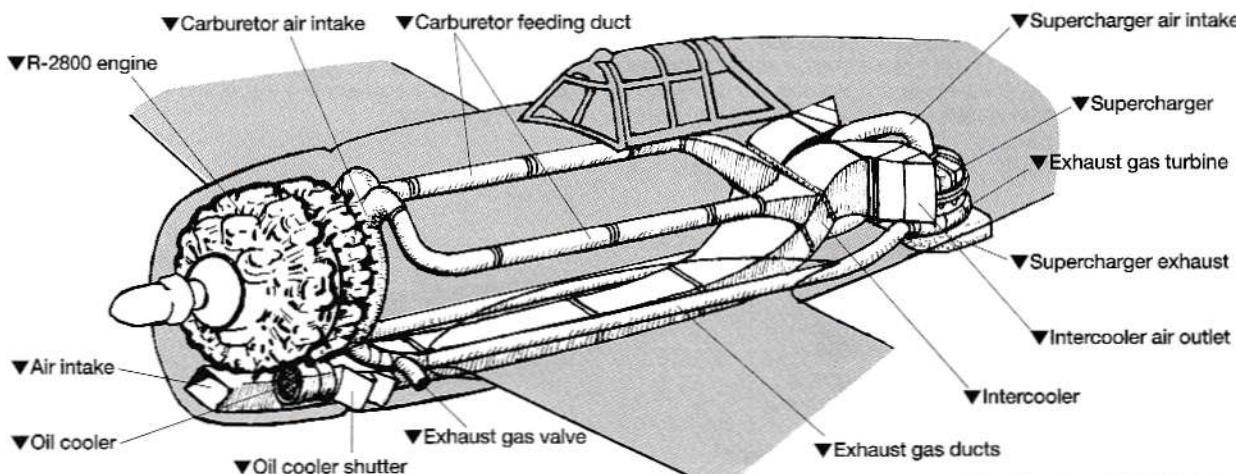
In order to keep these performances even at high altitude, the P-47D was the first single engine fighter to be equipped with a supercharger. The air entering the cowling air intake was brought to the supercharger turbine placed behind the cockpit via an air duct passing through the plane's belly where it was compressed. The turbine used engine exhaust gas to run. The compressed air, which was brought to a high temperature passed then through the intercooler to be cooled down prior entering engine carburetor via air ducts placed on each side of the cockpit. This device allowed the P-47 to retain its great performances when escorting B-17 bombers cruising at very high altitude.

«P-47 armament»

In each wing the P-47 was armed with four 12.7mm Colt-Browning machineguns, the US military aircraft standard weapon, each one loaded with 267 to 425 rounds. Because of this 8-machinegun armament which was an unique feature for a fighter at this time, the P-47 was considered as one of the most powerful planes of WWII. Besides its fixed armament, the Thunderbolt could carry over 1 ton payload of bombs and rockets thanks to its underwing pylons and belly attachment points. The P-47 was also able to carry drop tanks, but its load varied depending on the type of mission and many configurations were used as shown below.



◆P-47 wing-mounted machineguns and ammunitions



- One 75gal. Drop tank + Two 500lb bombs
- One 250lb bomb + 24 × 30lb cluster bombs
- 40 × 30lb cluster bombs
- Two 4.5in rocket launchers + One 150gal drop tank or Two 500lb bombs
- Two 1000lb bombs + One 500lb bomb or One 108gal drop tank
- 10 × 5in rockets (P-47N)

This massive 1ton capacity was also a unique feature for a fighter in the WWII era.

■ Specifications of main fighters in the late period of WWII

Specification Aircraft	Max power (hp)	Armament	Payload (kg)	Max speed (km/h)	Range (km)
Spitfire Mk. IX	1565hp	7.7mm×4, 20mm×2	227kg	674km/h	698km
Me109 G	1475hp	13mm×2, 20mm×1	250kg	640km/h	650km
Fw190 A-8	1700hp	7.92mm×2, 20mm×4	700kg	640km/h	1450km
A6M5 Zeke	1130hp	7.7mm×2, 20mm×2	120kg	565km/h	1920km
P-51D Mustang	1450hp	12.7mm×6	900kg	703km/h	3703km
P-47D Thunderbolt	2000hp	12.7mm×8	1134kg	690km/h	1650km

※ Figures in "Armament" cells indicate diameter of rounds and number of guns.
Figures in "Range" cells show the maximum range of each aircraft with drop tanks.

◆ About P-47 name

Although the P-47 was officially called "Thunderbolt," pilots didn't use this name much. Instead they nicknamed the versions featuring fastback canopies "Razorback" and those with bubble canopies "Jug".

The nickname "Jug" was given because the P-47's bulky form made it look like a milk jug. Later, all versions of the thunderbolt were commonly called "Jug".

◆ Thunderbolt on the European Front

The P-47 was used both on the European front and in the Asian Theater in the Pacific. In Europe the Thunderbolt was employed for two types of missions.

1) Escorting bombers

From 1943, the US Army Air Force and the Royal Air Force started to launch bombing raids on German occupied territories and the German homeland. But, the Spitfire, which represented the main Allied fighter on that front at this time, even if being easy to handle, didn't have enough range to escort the bombers that were by themselves in German sky. The twin-engine fighter P-38 had enough range but it was first introduced on the Pacific Theater and the P-47 had to take over the B-17 and B-24 bombers escorting mission. The Thunderbolt was not as easy to handle as the Spitfire but was able to fly at the same high altitude as bombers which was a great advantage for such duty. Because of the trust they put in the P-47, the bomber's crews nicknamed the Thunderbolt "Little Friend". However, even when using drop tanks, the P-47D could only escort bombers until the cities in the western part of Germany such as Bremen and Frankfurt. When the P-51 was first deployed, the bombers were escorted everywhere they went over Germany.

During the introduction of the Thunderbolt, the fourth Fighting Groups that transitioned from Spitfires had many difficulties to handling the heavy P-47 but as they slowly got used to it, they started to shoot down German planes en masse. As a result of this, many pilots became aces like the 28-victory ace F. Gabresky, the 27-victory ace R. Johnson and, the 22.5 victory ace D. Schilling. Although the P-47 was inferior to its rivals, the Bf109 and the

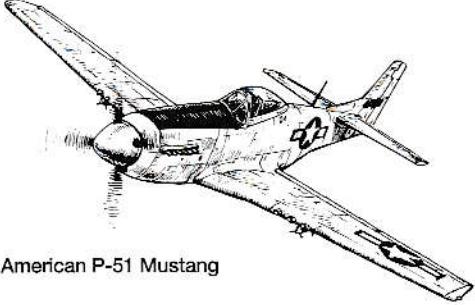
Fw190 with regards to handling, its high speed and heavy armament made this fighter a serious threat when using the shoot and run tactic.

2) Ground attack role

The second task that was assigned to the P-47 was the ground attack role where it could use all its firepower. When the P-51 which, had greater range and maneuverability, made its appearance, the Thunderbolt was relegated to ground attack missions. When attacking the German Army with 8 machineguns, bombs and rockets, the P-47 lived up to the name of 'thunderbolt' as it rained down thunderous mayhem on the German ground forces that opposed it. The armor that effectively protected the pilot and the internal fuel tank from ground fire, fire extinguisher and the air-cooled R-2800 engine that was able to take a lot of damage without breaking down, allowed many pilots to come back safely to the base. The roaring sound of the P-47 inspired fear in German forces as it began relentless assault on airbases, ground troops, railways, locomotives, factories, and all ships within its reach.

◆ Thunderbolt on the Pacific Front

Starting in the middle of 1943, the P-47 made its appearance in Asia on the pacific front with the 5th and the 10th Air Force. The Thunderbolt was used in New Guinea, the Philippines, Burma and then in Okinawa. With the meager resources the Japanese Navy and the Japanese Army had after the loss of their best pilots, the heavily armed high speed P-47 was one of their most feared opponents. However, as long range was necessary on the Pacific Theater, the role of the Thunderbolt was quite limited in favor of the P-38 and the P-51.



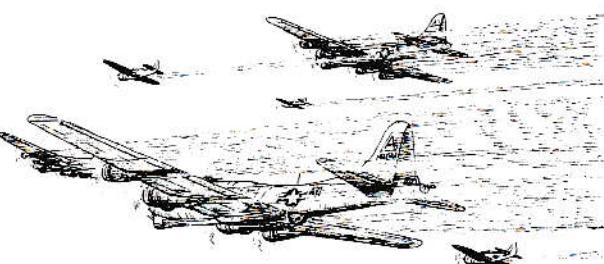
◆ North American P-51 Mustang

◆ P-47 variations and production

Several subsequent versions of the P-47 were produced. The P-47G was a Curtiss licensed built version as the demand for airplanes exceeded Republic production capabilities and was identical to the P-47C and D. The P-47M was an attempt by Republic to get maximum performance from the P-47 design. This was the fastest version of the series with a top speed of 766km/h thanks to its R-2800-57 engine. The P-47M was used only by the 56th FG, which, at that time was the only P-47 equipped unit in the 8th Air Force, as they didn't want to transition to the P-51 like other units. The last version, and the most powerful, was the P-47N. The P-47N featured extended wing inner part and clipped wings to increase internal fuel capacity and received the same engine as the P-47M. The P-47N was only used in the Pacific Theater where long range was essential. A total of 15,683 Thunderbolts were produced. As only 14,819 P-51's were built, the P-47 is considered as the most widely built American fighter in history. Sixty-five percent of the 15,683 P-47's completed were P-47D and seventy percent of these were equipped with bubble canopies.

During WWII around 800 examples were delivered to the Royal Air Force, about 450 to the Free French Forces and about 200 to the Soviet Union. Some P-47s were also provided to Brazil, Mexico, Turkey, Peru and Iran. Starting in July 1947, the designation of the P-47 was changed to F-47 (F for Fighter) when the Air Force became a separate branch and kept it until all Thunderbolts were replaced by jet fighters.

Nowadays, 6 specimens of this marvelous fighter that inspired so many superlatives, are maintained in flying condition and regularly demonstrate their capabilities during air shows in Europe and in America.



◆ Boeing B-17 Flying Fortress

