

# JAPANESE 4×4 LIGHT VEHICLE TYPE 95 KUROGANE



## 1/48 日本陸軍 95式小型乗用車(くろがね四起)



日本陸軍の要求仕様に基づいて日本内燃機が開発した世界初の實用四輪駆動車が95式小型乗用車です。メーカーのブランド名と四輪駆動を意味する“四起”から、一般に“くろがね四起”と呼ばれました。昭和10年の制式化後も様々な改良が重ねられ、昭和12年に生産が開始されたタイプは3人乗りの車体に33馬力のV型2気筒1400cc空冷エンジンを搭載。前輪独立、後輪リーフリジッド式のサスペンションや前進3段、後進1段の変速機、大径タイヤなどを備え、優れた路外走破性能を発揮しました。昭和10年から19年までに各タイプ合わせて約4,800台が生産され、昭和14年のノモンハン事件を皮切りに中国から東南アジア、太平洋戦域など幅広い戦線で偵察や連絡に走り続けました。また一部は海軍にも納入され、陸海軍航空隊の士官用スタッフカーとして使用されています。

Developed by Nihon Nainenki Ltd. to meet a Japanese Army requirement, the Type 95 Light Vehicle, nicknamed "Kurogane," was the world's first practical 4WD vehicle. Originally conceived in 1935, the design underwent several modifications before going into production in 1937. The production model featured an air-cooled, 1400cc 33hp V2 engine, transmission with 3 forward and 1 reverse gears, and could carry up to 3 passengers. Independent front and rigid leaf spring rear suspension system coupled with large diameter tires enabled superb cross-country performance. Approximately 4,800 examples were produced from 1935 to 1944, serving with both the Japanese Army and Navy throughout Asia and the Pacific as reconnaissance, liaison, and staff vehicles.

Von Nihon Nainenki Ltd. entsprechend den Anforderungen der Japanischen Armee entwickelt, war der Typ 95 Leichtes Fahrzeug mit dem Spitznamen "Kurogane" das erste wirkliche 4WD Fahrzeug. Nach einem ursprünglichen Konzept von 1935 durchlief die Konstruktion verschiedene Änderungen, bevor sie 1937 in Produktion ging. Das Serienmodell besaß einen luftgekühlten, 1400 cm<sup>3</sup> 33PS V2 Motor, eine Kraftübertragung mit 3 Vorwärtsgängen und 1 Rückwärtsgang und konnte bis zu 3 Fahrgäste aufnehmen. Ein Aufhängungssystem mit Einzelrad vorne und einer Blattfeder-Starrachse hinten sorgte in Verbindung mit großen Reifen für überragende Fahrleistung im Gelände. Etwa 4.800 Exemplare wurden zwischen 1935 und 1944 gebaut, die bei beiden, der Japanischen Armee und der Marine, überall in Asien und dem Pazifik als Aufklärungs-, Verbindungs- und Stabsfahrzeuge Dienst taten.

Développée par Nihon Nainenki Ltd. en réponse à une demande de l'armée japonaise, le véhicule léger Type 95 surnommé "Kurogane" fut le premier véhicule 4x4 opérationnel au monde. Le projet d'origine de 1935 connut plusieurs modifications avant la mise en production en 1937. Le modèle de série avait un moteur V2 de 1400cm<sup>3</sup> développant 33cv, une transmission à 3 rapports avant et 1 arrière et pouvait emporter 3 passagers. La suspension avant à roues indépendantes et arrière rigide à ressorts à lames ainsi que les pneus de grand diamètre offraient d'excellentes aptitudes tout terrain. Environ 4.800 exemplaires furent produits de 1935 à 1944. Ils servirent dans l'armée et la marine japonaise dans toute l'Asie et le Pacifique comme véhicules de reconnaissance, de liaison et d'état-major.

### READ BEFORE ASSEMBLY

**注意** ●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ときは、保護者の方もお読みください。また接着剤や塗料は、必ずプラスチック用をお使いください。(別売) ●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ぞれの注意書きをよく読み、指示に従って正しく使用し、使用ときは換気に十分注意してください。●小さなお子様のいる所で作業はやめてください。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** ●Read carefully and fully understand the instructions before commencing assembly. A supervising adult should also read the instructions if a child assembles the model. ●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 suck any part, or pull vinyl bag over their heads.

**VORSICHT** ●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. ●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. Verhüten Sie, daß Kinder irgendwelche Bauteile in den Mund nehmen oder Plastiktüten über den Kopf ziehen.

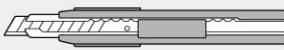
**PRECAUTIONS** ●Bien lire et assimiler les instructions avant de commencer l'assemblage. La construction du modèle par un enfant doit s'effectuer sous la surveillance d'un adulte. ●L'assemblage de ce kit requiert de l'outillage, en particulier des couteaux de modélisme. Manier les outils avec précaution 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.

### RECOMMENDED TOOLS

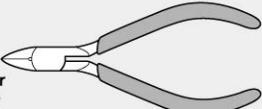
#### 《用意する工具》 Recommended tools Benötigtes Werkzeug Outilsage nécessaire

接着剤 (プラスチック用)  
Cement  
Kleber  
Colle

ナイフ  
Modelling knife  
Modelliermesser  
Couteau de modéliste



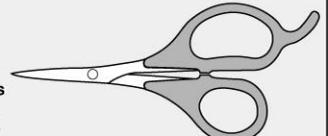
ニッパー  
Side cutters  
Seitenschneider  
Pince coupante



ピンセット  
Tweezers  
Pinzette  
Précettes



ハサミ  
Scissors  
Schere  
Ciseaux



### PAINTS REQUIRED

● 塗装指示のマークです。タミヤカラーのカラーナンバーで指示しました。  
This mark denotes numbers for Tamiya Paint colors.

X-11 ●クロムシルバー / 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-27 ●クリアレッド / Clear red / Klar-Rot / Rouge translucent

XF-1 ●フラットブラック / Flat black / Matt Schwarz / Noir 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-49 ●カーキ / Khaki / Khaki / Kaki

XF-51 ●カーキドラブ / Khaki drab / Braun-Khaki / Vert kaki

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

XF-57 ●バフ / Buff / Lederfarben / Chamois

### APPLYING DECALS

#### 《スライドマークのはり方》

- ①はりたいマークをハサミで切り抜きます。
- 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置きます。
- ③台紙のはしを手で持ち、は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、正しい位置にずらしません。
- ⑤やわらかな布でマークの内側の気泡を押し出しながら、押しつけるようにして水分をとりまします。

#### DECAL APPLICATION

- ①Cut off decal from sheet.
- ②Dip the decal in tepid water for about 10 sec. and place on a clean cloth.

- ③Hold the backing sheet edge and slide decal onto the model.
- ④Move decal into position by wetting decal with finger.
- ⑤Press decal gently down with a soft cloth until excess water and air bubbles are gone.

#### ANBRINGUNG DES ABZIEHBILDES

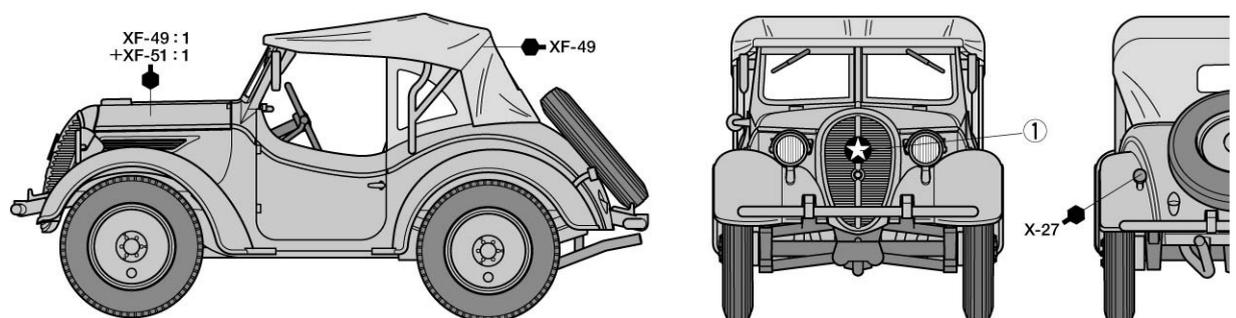
- ①Abziehbild vom Blatt ausschneiden.
- ②Das Abziehbild ungefähr 10 Sek. in lauwarmes Wasser tauchen, dann auf sauberen Stoff legen.
- ③Die Kante der Unterlage halten und das Abziehbild auf das Modell schieben.
- ④Das Abziehbild an die richtige Stelle schieben und dabei mit dem Finger das Abziehbild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

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

#### APPLICATION DES DECALCOMANIES

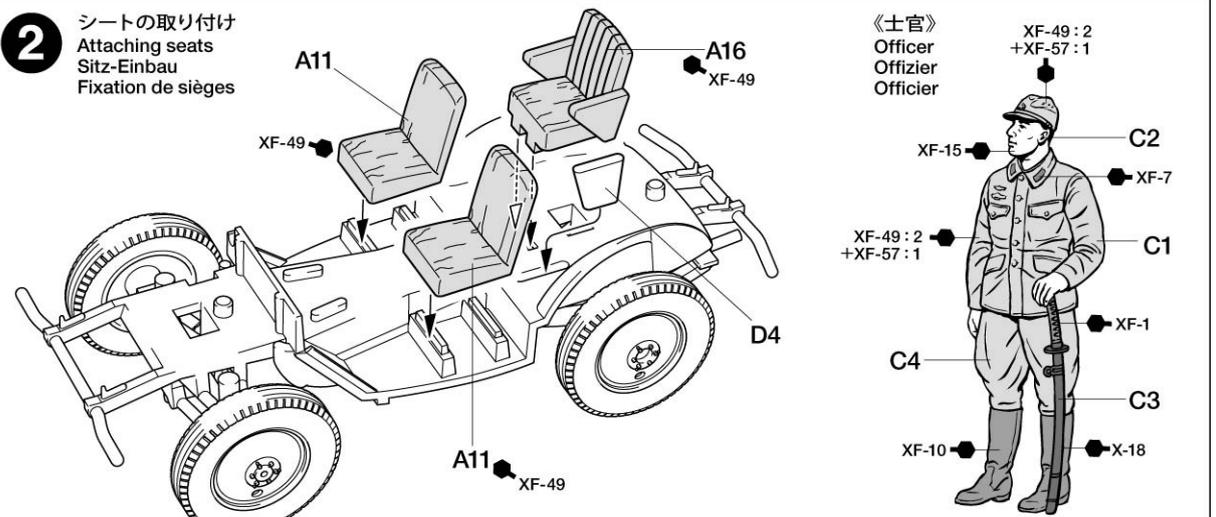
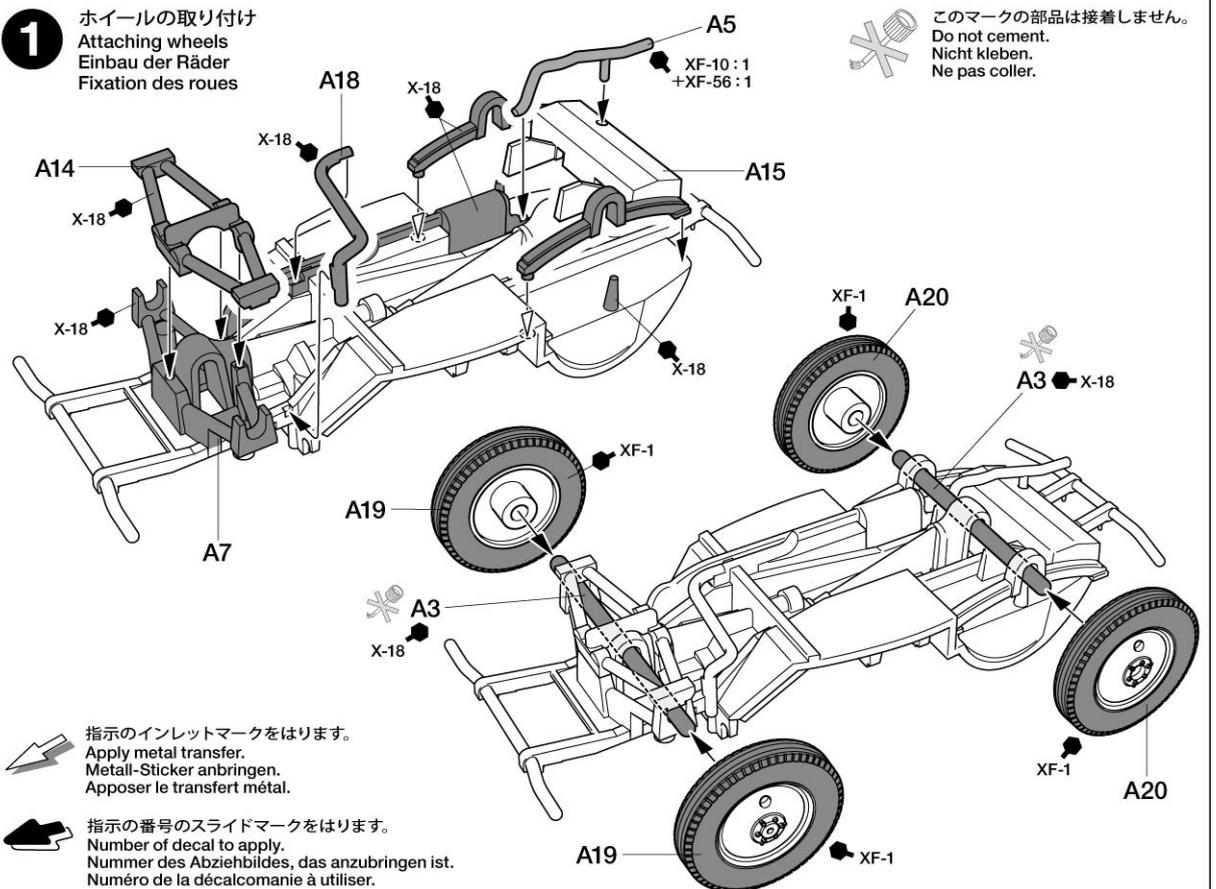
- ①Découpez la decalcomanie de sa feuille.
- ②Plongez la decalcomanie dans de l'eau tiède pendant 10 secondes environ et poser sur un linge propre.
- ③Retenez la feuille de protection par le côté et glissez la decalcomanie sur le modèle réduit.
- ④Placez la decalcomanie à l'endroit voulu en la mouillant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

### MARKING & PAINTING



### ASSEMBLY

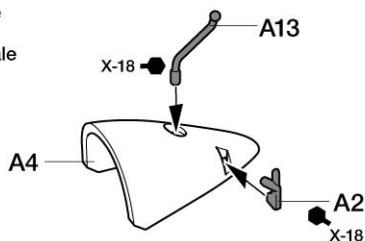
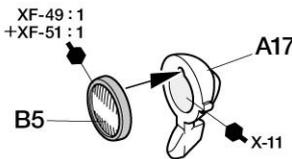
- 組立説明図の中で塗装指示のない部品は車体色で塗装します。
- When no color is specified, paint the item with body color.
- Wenn keine Farbe angegeben ist, Teile mit Karosserie-Farbe bemalen.
- Lorsqu'aucune teinte n'est spécifiée, peindre dans la couleur de la carrosserie.



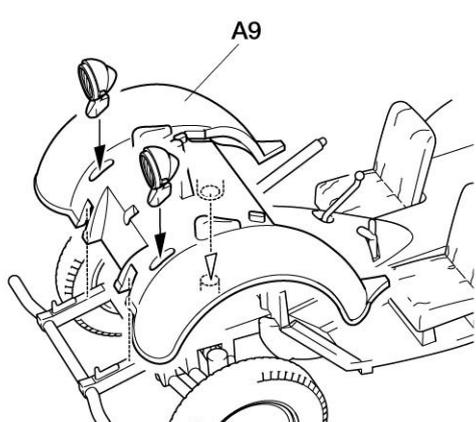
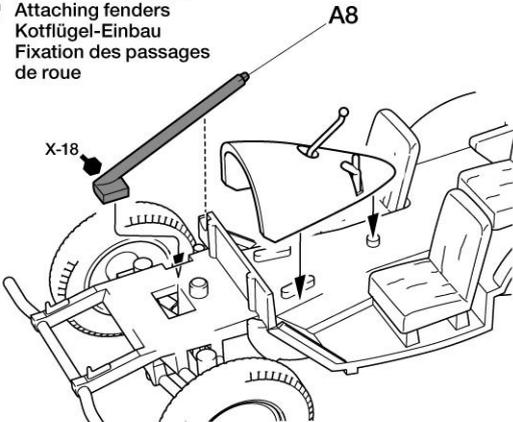
### 3 《ヘッドライト》 Headlight Scheinwerfer Phare

★2個作ります。  
★Make 2.  
★2 Satz anfertigen.  
★Faire 2 jeux.

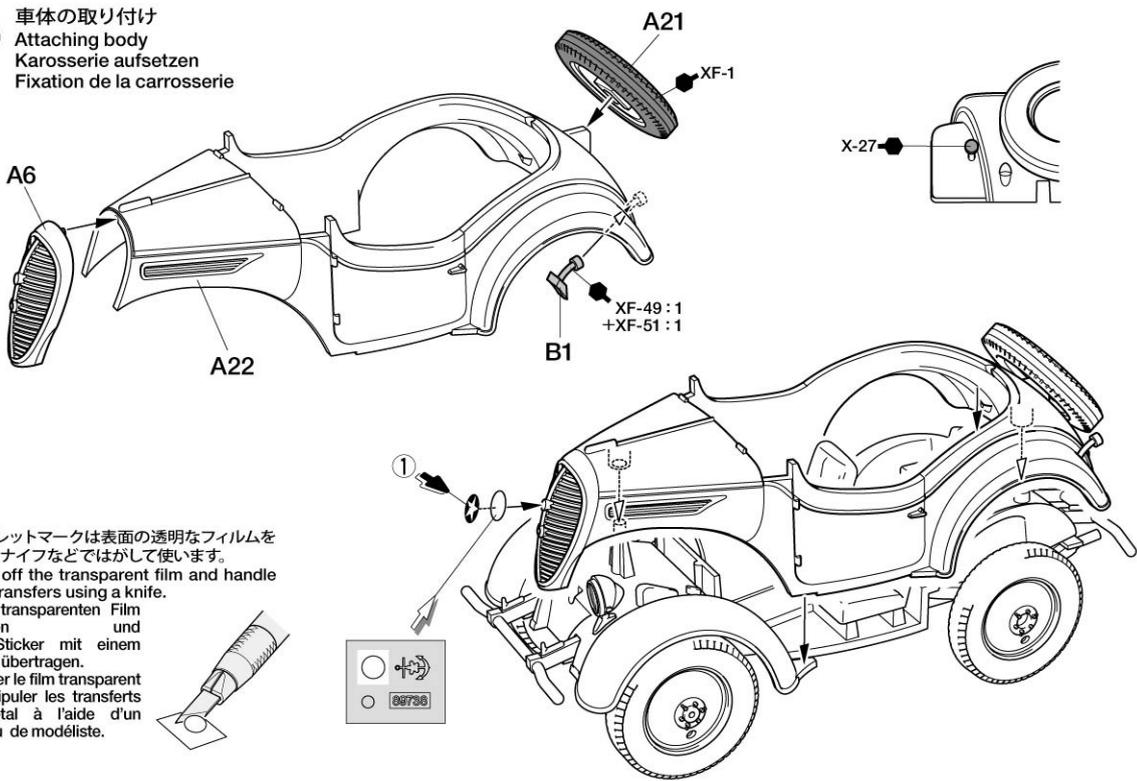
### 《センターコンソール》 Center console Mittelkonsole Console centrale



### 4 フェンダーの取り付け Attaching fenders Kotflügel-Einbau Fixation des passages de roue

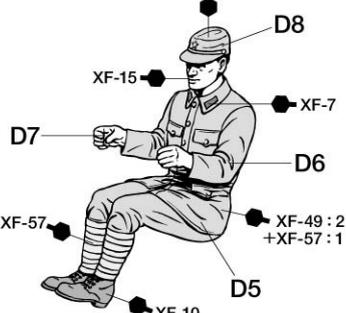


### 5 車体の取り付け Attaching body Karosserie aufsetzen Fixation de la carrosserie

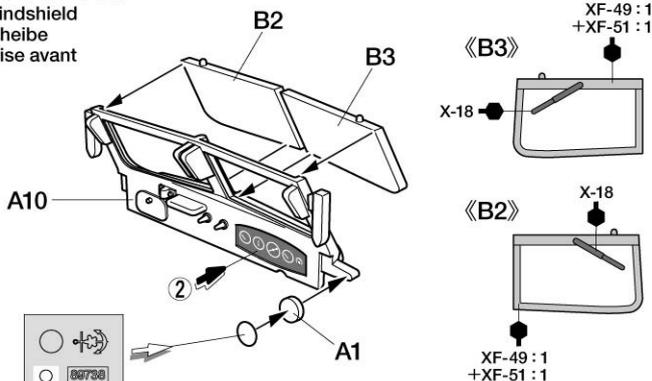


★インレットマークは表面の透明なフィルムを  
めくり、ナイフなどではがして使います。  
★Peel off the transparent film and handle  
metal transfers using a knife.  
★Den transparenten Film  
abziehen und  
Metall-Sticker mit einem  
Messer übertragen.  
★Retirer le film transparent  
et manipuler les transferts  
en métal à l'aide d'un  
couteau de modéliste.

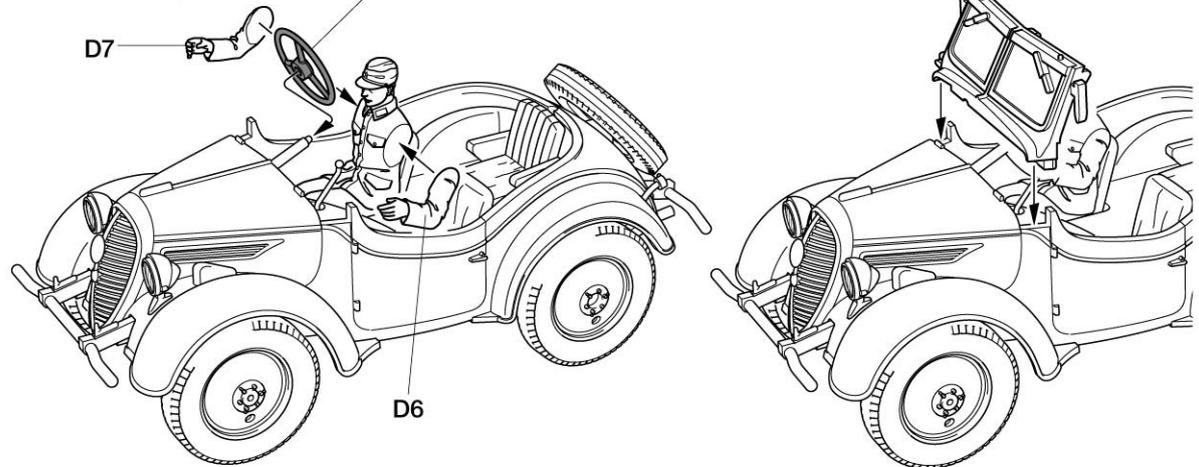
### 6 《ドライバー》 Driver Fahrer Conducteur



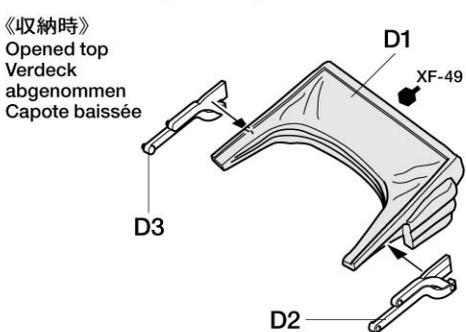
### 《フロントウインドウ》 Front windshield Frontscheibe Pare-brise avant



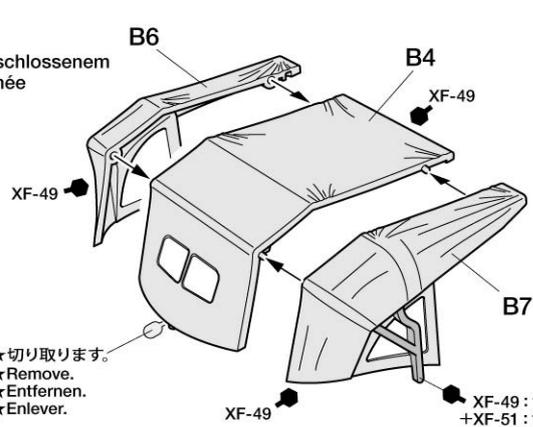
### 7 人形の取り付け Attaching figure Einbau der Figur Fixation du pilote



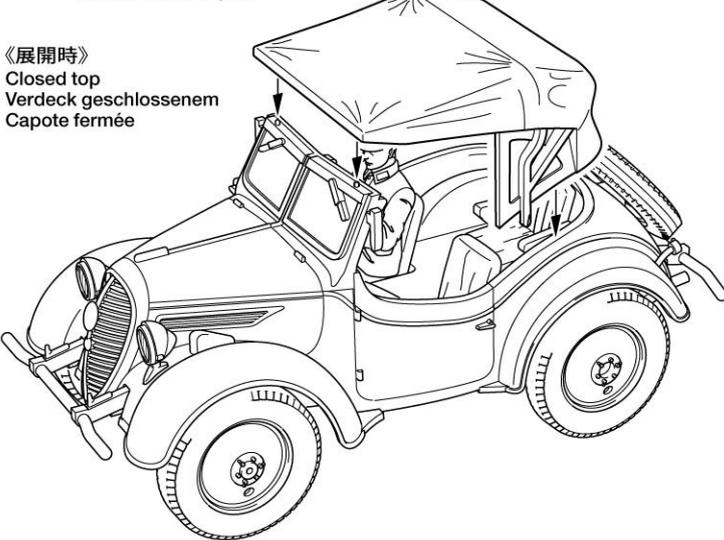
### 8 幌の組み立て Top assembly Dach-Einbau Assemblage de la capote



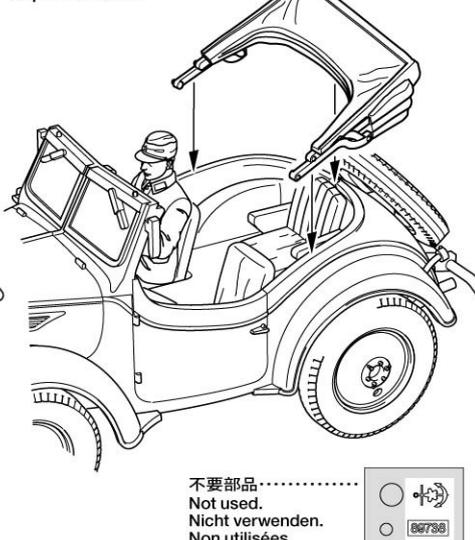
### 《展開時》 Closed top Verdeck geschlossenem Capote fermée



### 9 幌の取り付け Attaching hood Anbringung des Verdecks Fixation de la capote



### 《収納時》 Opened top Verdeck abgenommen Capote baissée



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

## 部品請求について

For Japanese use only!

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《お問い合わせ電話番号》  
静岡 054-283-0003  
東京 03-3899-3765 (静岡へ自動転送)  
営業時間/平日▶8:00~20:00 土、祝日▶8:00~17:00

《カスタマーサービスアドレス》  
[http://tamiya.com/japan/customer/cs\\_top.htm](http://tamiya.com/japan/customer/cs_top.htm)



1/48  
MM  
Military Miniature

## 1/48 日本陸軍95式小型乗用車 (くろがね四起) ITEM 32558

★価格は予告なく変更となる場合があります。

部品名	価格	部品コード
ボディ	340円	9338050
A・Cパーツ	580円	9008092
Bパーツ	370円	9008093
Dパーツ	330円	9003862
マーク	210円	1408016
インレットマーク	200円	1428253
説明図	270円	1053465

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

Parts code	ITEM 32558
9338050	Body
9008092	A & C Parts
9008093	B Parts
9003862	D Parts
1408016	Decal
1428253	Metal Transfer
1053465	Instructions

32558 Type 95 Kurogane (11053465)

# 1/48 疾風 HAYATE (FRANK)



## NAKAJIMA KI84 IA

## TAMIYA



A plane which since July 1942 the Nakajima Aircraft Mfg. Company had designed and manufactured for trial under the name of KI-84 was officially adopted in April 1944 by the Army as the Fighter Type 4 "Hayate" and the mass production was started. The number of the Hayate produced by the end of World War II totalled about 3,500, which ranks next to that of the Zero and the Hayabusa but is the largest in the Japanese aircraft history in view of the number produced in about a year. The performance of the Hayate was equal to, or higher than that of the Allies' fighters of those days. This was the first fighter worthy of the name having excellent speed (climbing ability), firepower and maneuverability that became available to the Army. Those days when Japan feared she might lose the command of the air even over Japan proper, the Hayate called "the decisive fighter to turn the fate of the Greater East Asia" was accepted by fighter units with hopes as a new fighter to beat enemy combat planes. It made its first campaign over Central China as a member of the 22nd Air Flotilla. As the main-strength fighter of the Japanese Army, it later showed activity against overwhelming American planes in the Battle of Leyte in the Philippines and the Battle of Okinawa. Many were used as bomb-laden suicide attack planes to smash bodily into the enemy. The Hayate also bravely intercepted B29 bombers and ship-planes of US task forces invading Japan proper. The Allies' pilots had an extreme horror of the Japanese fighter and called it "Frank". The Hayate had a maximum speed of 624 km/h, which was higher than that of any other fighter of Japan. The high speed was much due to the excellent performance of the Nakajima's HA-45 en-

### PAINTING AND APPLYING DECALS

#### 〈Basic Painting〉

Basic colours are: dark green (top and sides of the fuselage, upper surface of the main wings and horizontal stabilizer); light greyish blue (lower surface); and orange yellow-identification colour (half-nearer to the fuselage-of the main wing front edges). Towards the end of the war, some planes had dark green painting called "special attack painting" and some had no overall painting with silver duralumin exposed except on the top of the nose which was painted black for prevention of reflexion. (The black paint was also applied to the nose top of some planes with green painting.) It was a general rule that Japanese planes in oversea territories should have a narrow white line called the border breakthrough line or field identification mark. Planes belonging to interception forces in Japan proper had a national insignia on a white line or square so that ground units could distinguish them from enemy planes. The inside of the fuselage and the wheel cover wells were painted in transparent blue preservatives (some say these were dark opaque bluish grey) directly on duralumin material. See colour drawing.

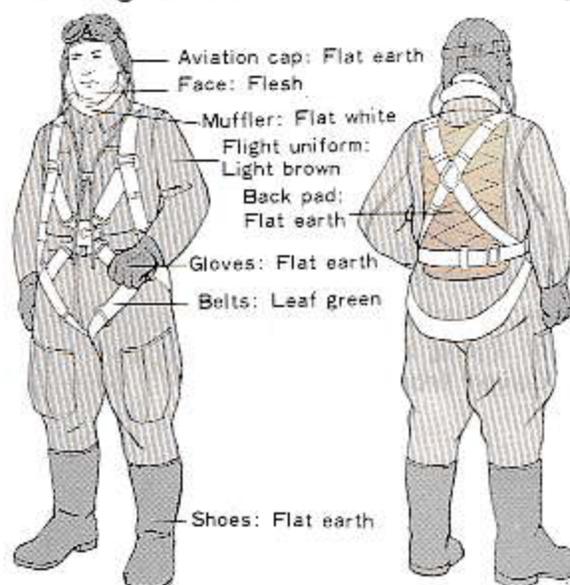
gine employed. The engine had take-off output of 2,000 hp and was 1,180 mm in maximum diameter, i.e. output per unit front area was 1.83 hp/sq cm, which was remarkable high for an air-cooled engine. Thus the engine was ideal for a fighter that was expected to fly faster. (A large number of the HA-45 engines were also mounted on the Navy's famous high-speed reconnaissance planes such as the Saiun and the Shidenkai under towards of Homare engine.) Many of the engines produced towards the end of the war, however, did not show such high performance as originally designed because of the shortage of materials and lowered working technique. Consequently, the Hayate's working ratio and flying performance were extremely lowered, and the fighter could not display its ability in full. The bad condition of the engines also resulted from the fact that the octane rating of fuel was lowered towards the end of the war. When the Hayate using fuel of 140 octane rating and high-quality ignition plugs was tested in the United States after the war, it made a record of a maximum speed of 689 km/h, and was praised as "the best one of all Japanese fighters appeared in the Pacific War".

(Photo by Koku Joho "AIREVIEW")

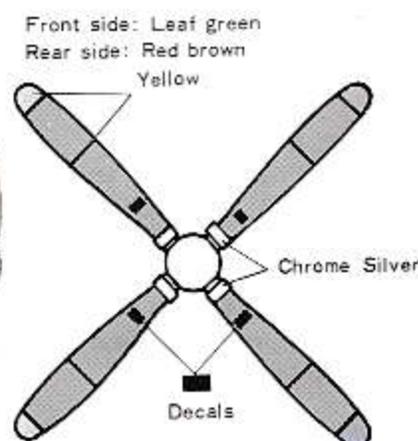
#### 〈Essential Specifications〉

Length of fuselage: 9.92 m      Overall width: 11.238 m  
 Overall weight: 2,698 kg (tare); 3,890 kg (including regular equipment)  
 Engine: Air-cooled HA-45 engine of Hoshi type, 18-cylinder;  
 (Nominal output): 1,780 hp/6,200 rpm.  
 Maximum speed: 624 km/h (6,500 m)  
 Cruising range: 2,168 km/3,898 kg (a reserve fuel tank carried)  
 Armament: Two 12.7 mm HO-103 machine guns (fuselage).  
 Two 20 mm HO-5 machine guns (main wings).  
 Two 30-250 kg bombs.

#### Painting of Pilot

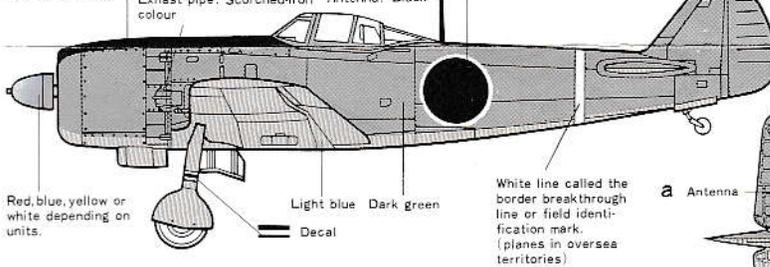


#### Painting of Propeller

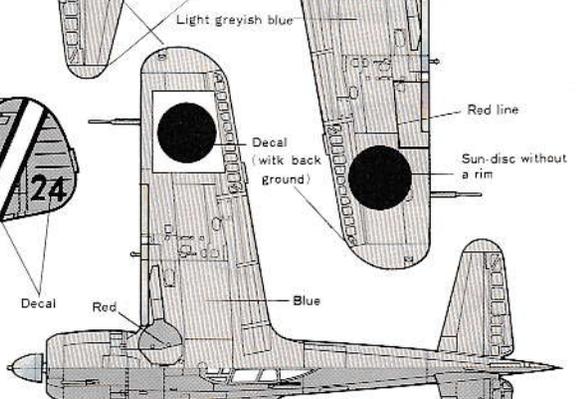
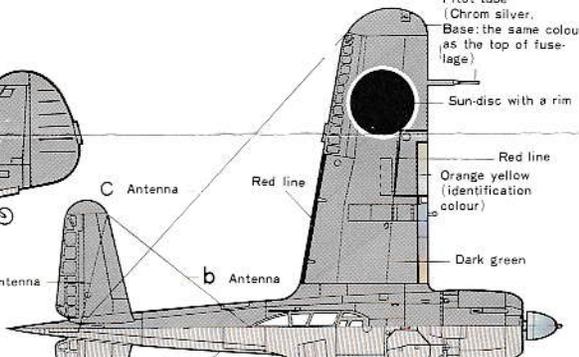
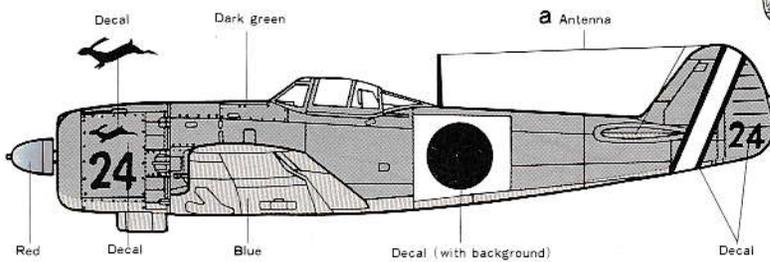


# Basic Painting

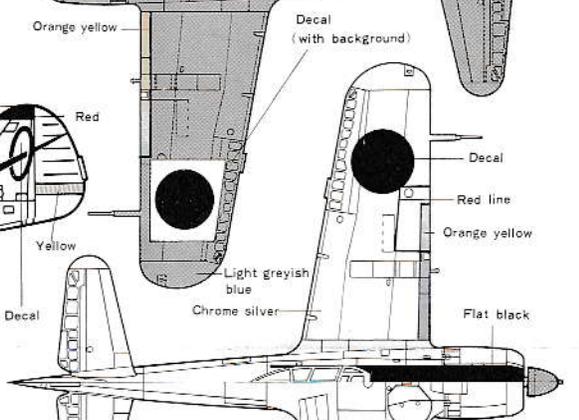
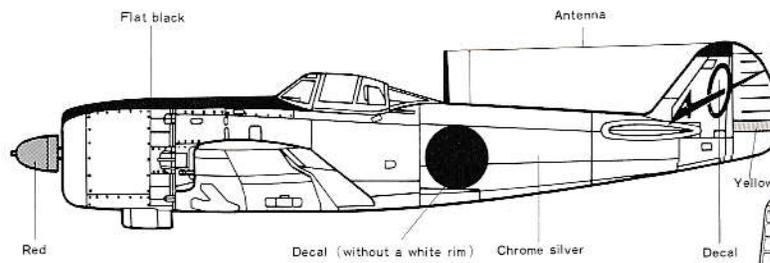
Flat black for prevention of reflexion applied to silver planes with no overall painting.



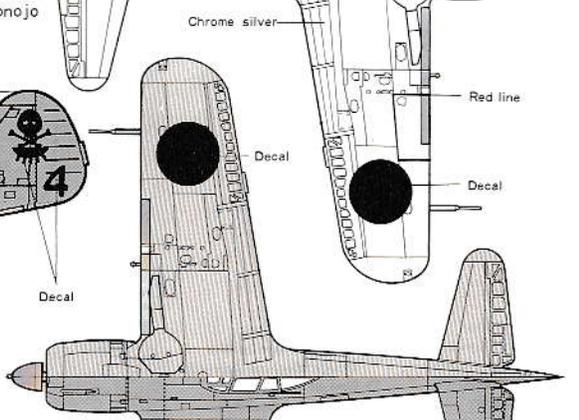
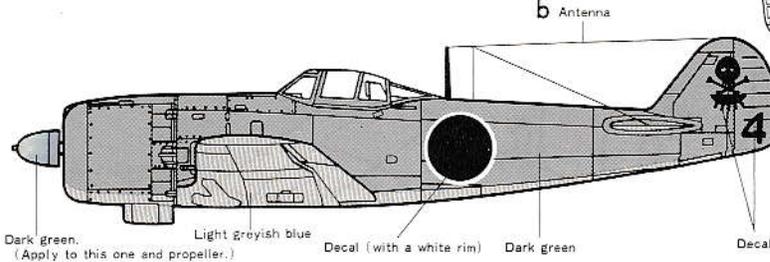
① Plane piloted by Staff Sergeant Joten Naito of the Kurai Unit of the 502nd Temporary Interception Corps (March - May, 1945. Nakatsu Airfield)



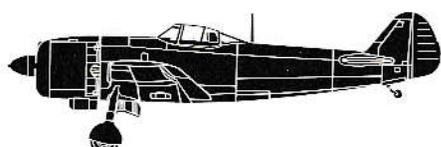
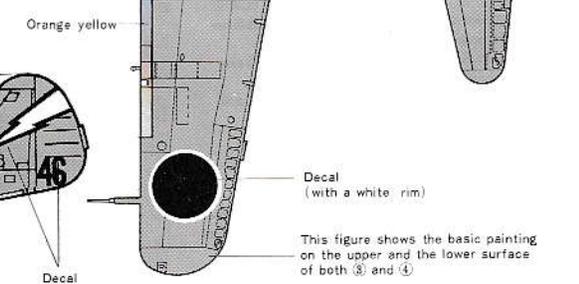
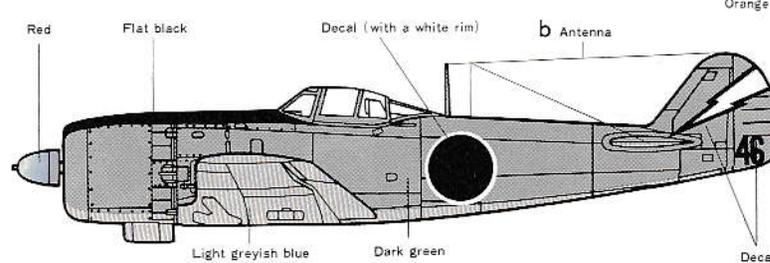
② Plane belonging to the 1st Unit of the 104th Air Group (1945. Anshan Airfield in South Manchuria)



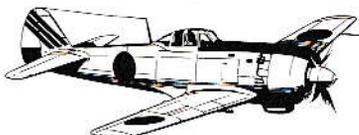
③ Plane belonging to the 58th Shimbu Unit of the Special Attack Corps (Miyakonojo Airfield in Miyazaki Prefecture, Okinawa)



④ Plane belonging to the 2nd Squadron of the 11th Air Fleet (1944, Philippine)



# KI84-IA HAYATE



**Read before Your Assembly Work**  
 This kit can be constructed in a state of either staying on the land or flying in the air. Parts should be cut off the runner in the order of construction with a knife or a pair of nippers. Parts should be assembled for trial before the application of adhesive to make sure that they are assorted properly. Overall painting is illustrated overleaf. For painting of small parts, see instructions given in the construction figures.

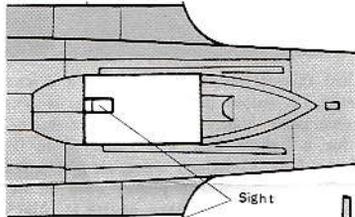
**Fig. 3**  
 Apply Decal in place before gluing Fuselage Parts 3 and 29 together.



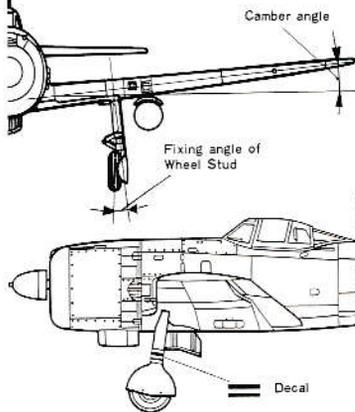
★Cut Decal on the center line in two together with pastebord and glue them to Fuselage.

**Fig. 4**  
 Glue 38, and then 36 and 37 to Fuselage.

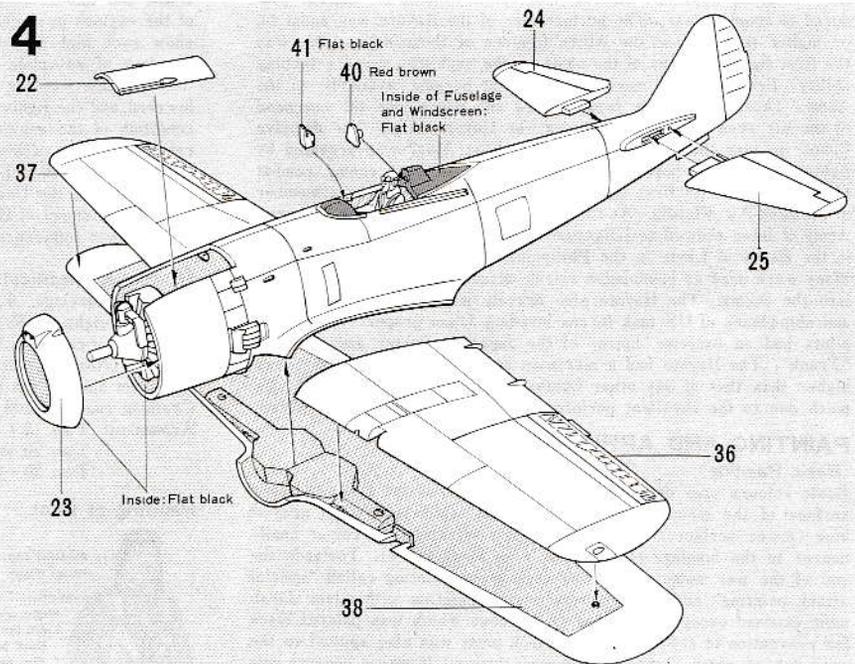
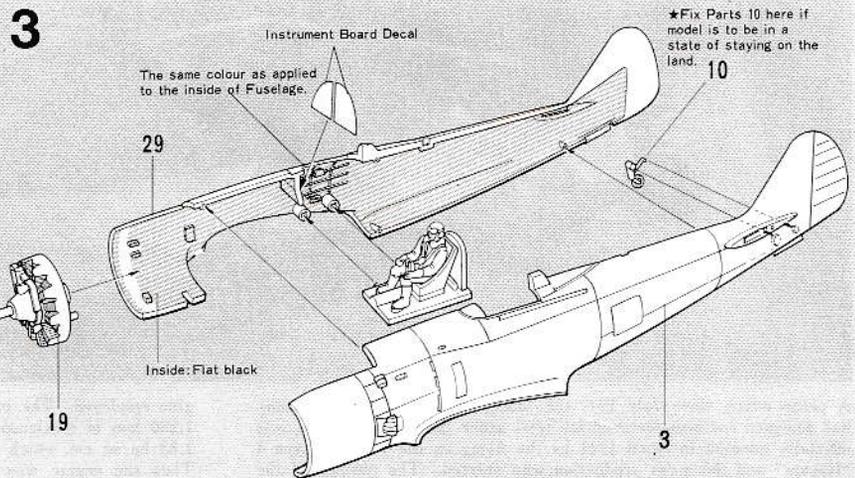
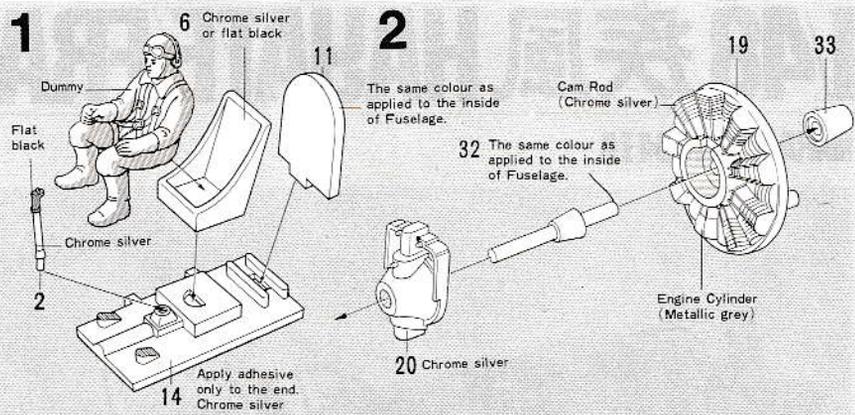
Where to fix Sight



Fixing angle of Main Wing and Wheel Stud

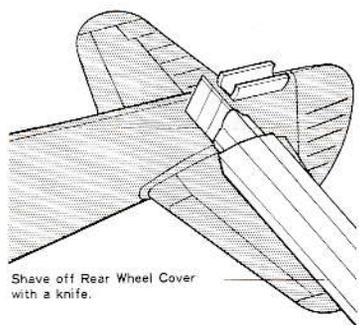


**Fig. 5**  
 Fit 4 to 12, and then fix 12 to Main Wing. It is easier to fix 27 and 28 in the order of 27, 28, 29 and 27 from the

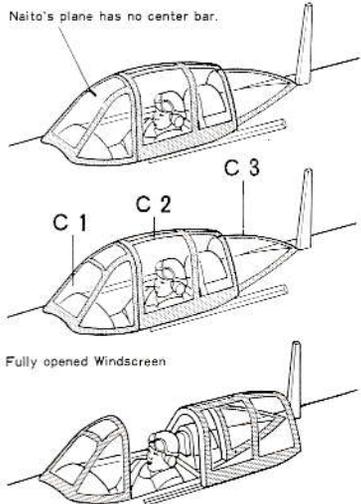


the order of 27, 28, 29 and 27 from the front to the rear of Main Wing. If your model is to be in a state of flying in the air, remove Rear Wheel Cover from Fuselage.

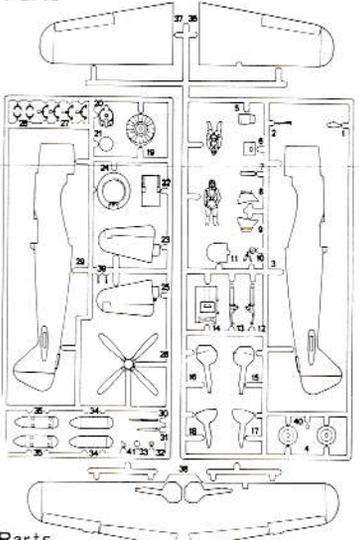
**How to remove Rear Wheel Cover**



**Fig. 6**  
After the model has been completely assembled, install Antenna.



**Parts**



- Parts**
- |   |  |
|---|--|
| 1. Fuel Cooler                          | 21. Propeller Spinner                          |
| 2. Control Lever                        | 22. Outside Plate of Fuselage Machine Gun Hole |
| 3. Fuselage (Left)                      | 23. End of Cowling                             |
| 4. Main Wheel                           | 24. Horizontal Stabilizer (Left)               |
| 5. Oil Cooler                           | 25. Horizontal Stabilizer                      |
| 6. Seat                                 | 26. Propeller                                  |
| 7. Rear Wheel Cover                     | 27. Reserve Fuel Tank Mount                    |
| 8. Wheel Cover (Left)                   | 28. Reserve Fuel Tank Mount                    |
| 9. Wheel Cover (Right)                  | 29. Fuselage (Right)                           |
| 10. Rear Wheel                          | 30. Pitot Tube                                 |
| 11. Bullet-Proof Plate of Seat          | 31. Antenna Support                            |
| 12. Main Wheel Stud (Left)              | 32. Propeller Shaft                            |
| 13. Main Wheel Stud (Right)             | 33. Propeller Shaft, Upper                     |
| 14. Cockpit Floor                       | 34. 200-litre Reserve Fuel Tank (Lower)        |
| 15. Main Wheel Cover, Closed (Right)    | 35. 200-litre Reserve Fuel Tank (Upper)        |
| 16. Main Wheel Cover, Closed (Left)     | 36. Left Main Wing (Lower)                     |
| 17. Main Wheel Stud Cover, Open (Left)  | 37. Right Main Wing (Lower)                    |
| 18. Main Wheel Stud Cover, Open (Right) | 38. Main Wing (Lower)                          |
| 19. Engine Plate                        | 39. Machine Gun                                |
| 20. Reduction Gear Case                 | 40. Head Pad                                   |
| C1. Windscreen (Front)                  | 41. Sight                                      |
| C2. Windscreen (Center)                 | C3. Windscreen (Rear)                          |
| C4. Landing Lamp Cover                  |  |

