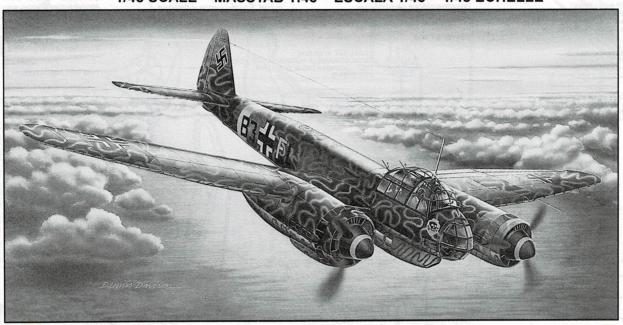


by Revell-Monogram

# **JUNKERS Ju 88A-4 BOMBER**

1/48 SCALE MASSTAB 1:48 ESCALA 1/48 1/48 ECHELLE



Development of the Junkers Ju 88 began in 1935 when requirements were issued for a *Schneilbomber*, a medium sized bomber that could use its speed as part of its defense against enemy fighters. These requirements specified a three-seat aircraft with a maximum speed of 310 miles-per-hour and a bomb load up to 1,765 pounds. Although several German aircraft companies submitted proposals, the Junkers Ju 88 was selected for production, and work on three prototypes began in 1936. The first of these made its initial flight on December 21, 1936.

The first production version was the Ju 88A, and many subvariants of this version were manufactured. The first of these included the basic Ju 88A-1 bomber, the Ju 88A-2, which had more powerful engines and the capability to use rocket assisted take-off packs, and the Ju 88A-3 trainer. The Ju 88A-4, which this ProModeler kit represents, was an improved bomber version with uprated Jumo 211J-1 or J-2 engines and an increased wing area. It could carry a bomb load in excess of 4,000 pounds in its bomb bay and under its wings. Development of the Ju 88A series continued through the Ju 88A-17 anti-shipping aircraft.

The airframe of the Ju 88 was so versatile that it was modified for many additional roles as the war progressed. The next major production version was the Ju 88C, and both Zerstörer (heavy fighter) and night fighter variants of the Ju 88C series were produced. Later, Ju 88G and Ju 88R night fighters were also produced. For the reconnaissance role, the Ju 88D was developed, as was the

long range recon variant known as the Ju 88H. The Ju 88S bomber versions were lighter airframes with BMW 801D radial engines replacing the Jumo powerplants of the earlier variants. A reconnaissance version of the Ju 88S was designated the Ju 88T. Other versions were produced in smaller numbers, and these included the Ju 88P series which had large anti-tank guns.

An interesting use of the Ju 88 was the Mistel program of flying bombs. In this project, the Ju 88 became a large, unmanned flying bomb packed with explosives and a shaped warhead that could penetrate almost any hardened target. It was controlled by an Fw 190 or a Bf 109 fighter which was attached to a framework on top of it. For most of the flight, the fighter and Ju 88 flew as a single unit, but as the pilot of the fighter neared the target, he separated from the Ju 88. As the fighter turned for home, the Ju 88 continued into the target with its load of explosives.

Although it was originally designed as a fast medium bomber, the Ju 88 was an excellent example of how the Luftwaffe modified its aircraft designs of World War II to perform a wide variety of missions. From the Battle of Britain until the final days of the war, Ju 88s operated on every front and remained one of the major weapons of the German air force.

Your ProModeler kit comes with markings for four different Ju 88A-4 bombers. These include 3./KG 54 and 2./LG1 which operated in Italy in 1943, STAB III./KG3 Blitz Geschwader, and 9./KG 51 Edelweiss Geschwader which was assigned to the Russian front.

### READ THIS BEFORE YOU BEGIN

- · Study the assembly drawings.
- Each plastic part is identified by a number.
- Scrape plating from areas to be cemented.
- Check the fit of each piece before cementing into place.
- Do not use too much cement to join parts.
- Use only cement for polystyrene plastic.
- Models may be painted to match photos on box.
- Allow paint to dry thoroughly before handling parts.
- Scrape paint from areas to be cemented.
- For better paint and decal adhesion, wash the plastic parts in a mild detergent solution. Rinse and let air dry.



DO NOT CEMENT NES PAS COLLER NICHT KLEBEN NO US PEGAMENTO



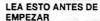
OPTIONAL PARTS
PIECES EN OPTION
PIEZAS OPCIONALES
BAUTEILE NACH WAHL



REPEAT SEVERAL TIMES A REPETER PLUSIEURS FOIS REPITA VARIAS VECES ARBEITSGANG MEHRMALS WIEDERHOLEN

#### LISEZ CE QUI SUIT AVANT DE COMMENCER LE MONTAGE

- Etudier les schémas d'assemblage.
- Chaque piece plastique porte un numéro d' identification.
- Grattez le chromage sur les surfaces a coller.
- Contrôler que chaque pièce soit bien cinfirme avant de la coller a sa place.
- N utilisez pas trop de colle pour réunir les pieces.
- Utilisez uniquement une colle spéciale pour polystyrene.
- Le modele peut etre peint conformement aux photos surboite.
- Laissez sécher la peinture completement avant de manipuler les pieces.
- Grattez la peinture sur les surfaces devante etre collées.
- Pour assurer la meilleure adhésion possible de la peinture des décalomanies, laver les pieces de plastique avecune légere solution savonneuse. Rinse et laisser secher a l'aire.



- Estudie los dibujos de ensamblaje.
- Cada pieza de plástico se identificapor un número.
- Raspe el laminado de las superficies que serán pegadas.
- Verifique que cada pieza encaje bien antes de posición.
- No use demasiado pegamento paraunir las piezas.
- Use unicamente pegamento paraplástico de poliestitina.
- El modelo puede pintarse de acuerdo con las fotografías de la caja.
- Permita que se seque la pintura completa mente antes de tocar las piezas.
- Raspe la pintura de las superficiea que serán pegadas.
- Para una mejor fijacion de la pintura y de las calcoma nias lávense las piezas plásti cas en una solu-ción de detergente suave. Enjua-guense y dejense secar al aire.

**ALLGEMEINE HINWEISE** 

- Die Anordnung der Bauteile ist den Zeichnungen der Anieitung ersichtich.
- Jedes Plastikeil ist durch eine Nummer gekennzeichnet.
- Dei Beschichtung muss von alien Klebestellen vorher entfernt werden.
- Die Teile vor dem Verkieben ungeleimt zusam-menhalten um iher Pass itz zu pr
  üfen.
- Klebstoff nicht zu dick auttragen.
- Nur Modellbaukleber für Polystyrol verwenden.
- Man Kann das modell nach den fotos auf der schachtel anstreichen.
- Bemalte Teile vor der Weiterverwendung gut trocknen lassen.
- Die Farbe muss von allen späteren Klebestellen abgeschabt werden.
- Damit sie Farbe und die Abziehbilder kleben sind die Plastikteile in einer milden Seifenlauge z waschen. Dann abspülen und an der Luft trocknen lassen.



DECAL (DIP IN WATER)
DECALCOMANIE (Á PLONGER DANS L'EAU)
DECALCOMANIA (MOJE CON AGUA)



REMOVE AND THROW AWAY
A RETIRER ET JETER
QUITE Y TIRE
ENTFERNEN (ABFALL)



PAINTING TIPS AND NOTES



MODELING TIPS

Every effort has been made to create and manufacture a model kit that is the finest available. If a part is missing, please write to:

description, and your return address.

Revell-Monogram
Consumer Service Department
8601 Waukegan Road
Morton Grove, Illinois 60053
Be sure to include the <u>kit number</u>, <u>part number</u>,

If you have any problems building this model, call our modeling tips hotline at:

(800) 833-3570

#### To complete this kit as shown, we recommend the following paints.

ENGLISH	FS EQUIVALENT	PROMODELER	GERMAN	SPANISH	FRENCH
GRAY, RLM 02	24226	88-0045	GRAU	FRIS	GRIS
RED, RLM 23	11350	88-0003	ROT	ROJO	ROUGE
LIGHT GREEN, RLM 25	34090	NONE	HELLGRÜN	VERDE CLARO	VERT CLAIR
YELLOW, RLM 27	23538	NONE	GELB	AMARILLO	JAUNE
LIGHT BLUE, RLM 65	24277	NONE	HELLBLAU	AZUL CLARO	BLEU CLAIR
DARK GRAY, RLM 66	26008	NONE	DUNKELGRAU	GRIS BOTELLA	GRIS VAISSEAU
BLACK-GREEN, RLM 70	34052	88-0043	SCHWARZGRÜN	VERDE NEGRO ALEMAN	VERT NOIR-ALLEMANO
DARK GREEN, RLM 71	34079	88-0044	DUNKELGRÜN	VERDE OSCURO	VERT FONCE
DARK GRAY, RLM 74	36081	NONE	DUNKELGRAU	GRIS BOTELLA	GRIS VAISSEAU
LIGHT BLUE, RLM 76	36473	88-0042	HELLBLAU	AZUL CLARO	BLEU CLAIR
LIGHT GRAY, RLM 77	36493	NONE	KOMPASSGRAU	GRIS CLARO	GRIS CLAIR
SAND-YELLOW, RLM 79	13523	NONE	BRAUN-GELB	CANELA-AMARILLO	BRUN-JAUNE
FLAT WHITE	37855	88-0023	MATT-WEISS	BLANCO	BLANC
FLAT BLACK	37038	88-0022	MATT SCHWARZ	NEGRO APAGADO	NOIR TRENE
STEEL	NONE	88-0015	EISENFARBIG	MATALICO	METALLIQUE
SILVER	NONE	88-0013	SILVER	PLATA	ARGENT
GUNMETAL	NONE	NONE	SCHWARZ-EISENFARBIG	NEGRO-METALICO	NOIR-METALLIQUE

# STEP 1, COCKPIT ASSEMBLY

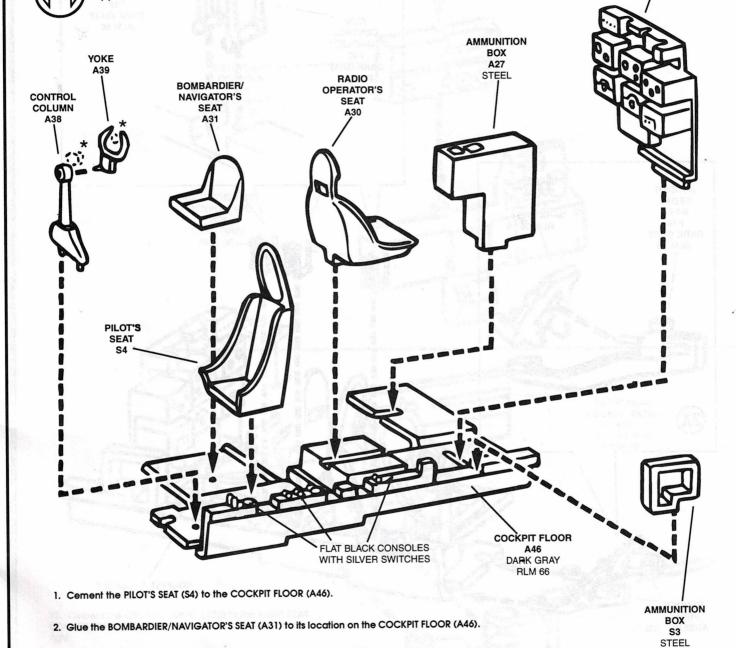
PAINT ALL PARTS BEFORE ASSEMBLY.



PAINTING NOTE: Paint all cockpit parts DARK GRAY, RLM 66, before assembly except as noted. The instrument panel and some of the panels on the side consoles were FLAT BLACK. Details on the instruments were FLAT WHITE or a very pale YELLOW.

RADIO EQUIPMENT
A41
DARK GRAY
RLM 66 WITH
FLAT BLACK

ELECTRONIC GEAR, SILVER SWITCHES, AND WHITE INSTRUMENT DETAILS

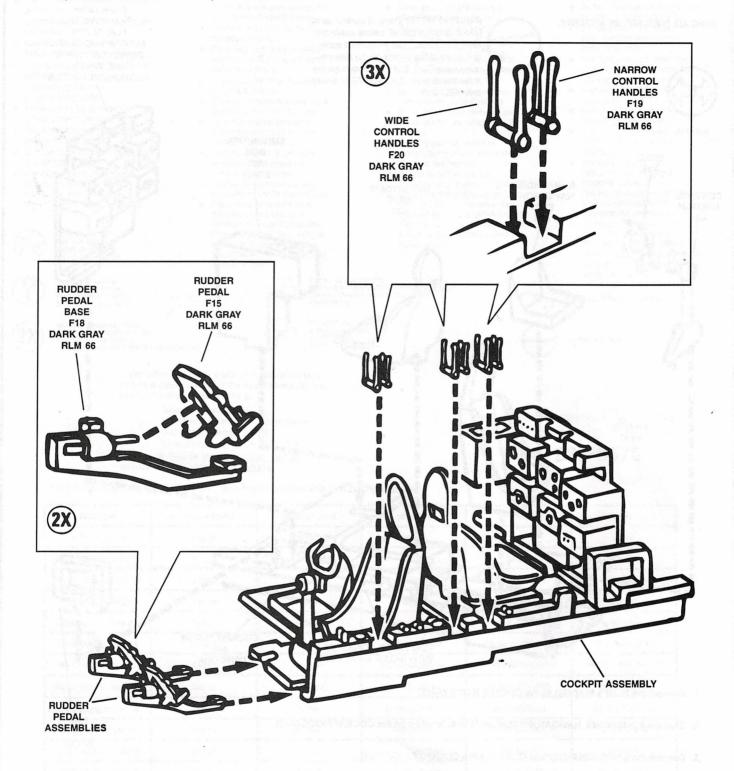


- 3. Cement the RADIO OPERATOR'S SEAT (A30) to the COCKPIT FLOOR (A46).
- 4. Glue the AMMUNITION BOX (S3) to the left side of the COCKPIT FLOOR (A46).
- 5. Cement the AMMUNITION BOX (A27) to the right side of the COCKPIT FLOOR (A46).
- 6. Glue the RADIO EQUIPMENT (A41) to the slot near the rear of the COCKPIT FLOOR (A46).
- 7. Cement the YOKE (A39) to the CONTROL COLUMN (A38), then glue the CONTROL COLUMN (A38) to the COCKPIT FLOOR (A46).

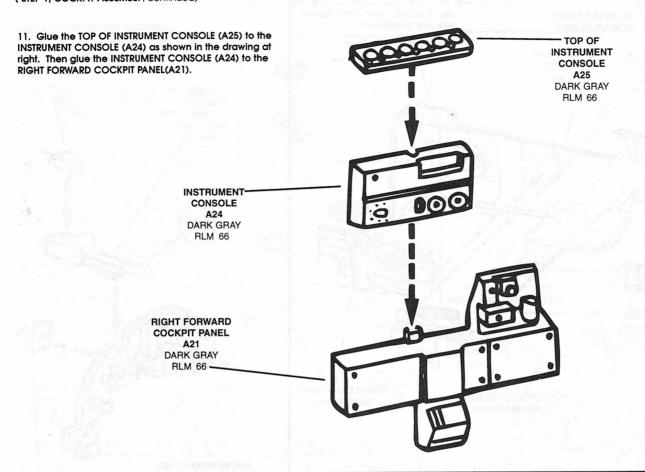


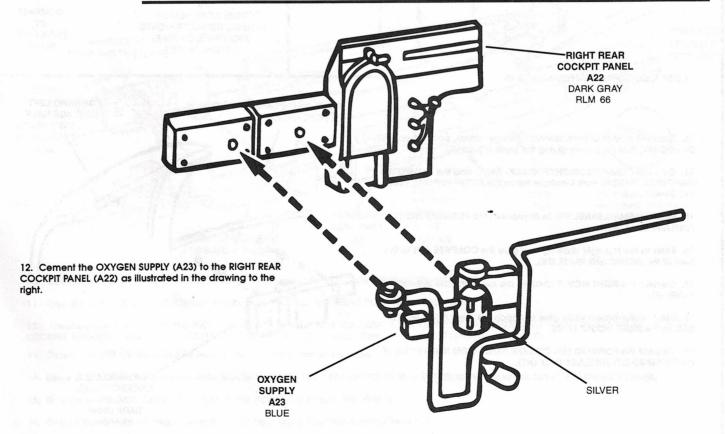
PAINTING TIP: Run some light gray wash around the cockpit details after the basic DARK GRAY, RLM 66, paint is completely dry. This will make the details stand

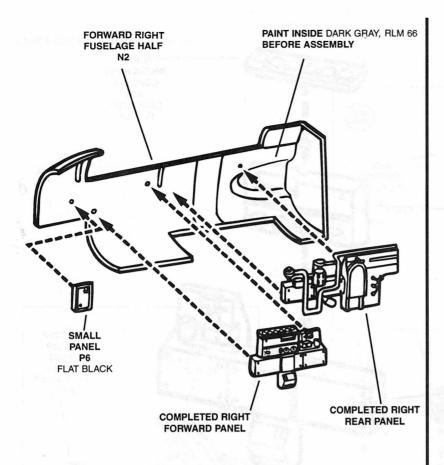
out better after the model is assembled, and it will also add a weathered appearance. Using some flat black wash in some areas will also add to this effect.

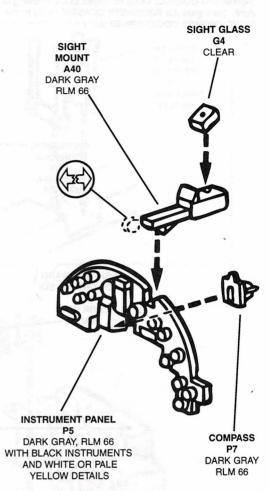


- 8. Glue three sets of WIDE CONTROL HANDLES (F20) and three sets of NARROW CONTROL HANDLES (F19) to the left side console in the cockpit.
- 9. Make top rudder pedal assemblies by gluing a RUDDER PEDAL (F15) to a RUDDER PEDAL BASE (F18) as shown in the detail drawing at the far left.
- 10. Glue the two completed rudder pedal assemblies to the front end of the cockpit assembly.



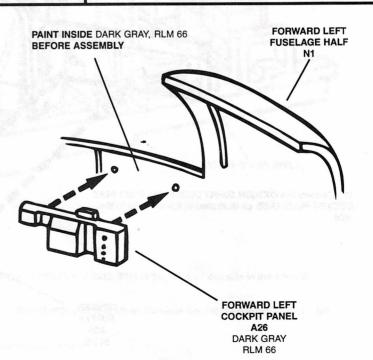






( STEP 1, COCKPIT ASSEMBLY, continued)

- 13. Paint the insides of both forward fuselage halves, parts N1 and N2, DARK GRAY, RLM 66, before gluing the parts in place.
- 14. Glue the COMPLETEDRIGHT FORWARD PANEL and the COMPLETED RIGHT REAR PANEL to their locations inside the FORWARDRIGHT FUSE-LAGE HALF (N2).
- 15. Glue the SMALL PANEL (P6) to its place in the FORWARD RIGHT FUSELAGE HALF (N2).
- Refer to the top right drawing and glue the COMPASS (P7) to the front of the INSTRUMENT PANEL (P5).
- 17. Cement the SIGHT MOUNT (A40) to the top of the INSTRUMENT PANEL (P5).
- 18. Use a water-based white glue to attach the clear SIGHT GLASS (G4) to the SIGHT MOUNT (A40).
- 19. Cement the FORWARD LEFT COCKPIT PANEL (A26) to the inside of the FORWARD LEFT FUSELAGE HALF (N1).



# STEP 2, FUSELAGE ASSEMBLY



PAINTING NOTE: Paint

the inside of the tail gear

well GRAY, RLM 02, prior

to assembly.

COVER

A34

PAINT ALL PARTS BEFORE ASSEMBLY.

- Glue the METALIZED STRIPS (72) to the MOUNT (A28) as shown in the detail drawing immediately to the right.
- 2. Glue the assembly of the MOUNT (A28) and the METALIZED STRIPS (Z2) to the top of the FUSELAGE (RIGHT HALF) (A2) as shown also in the detail to the right.
- 3. Use a water-based glue, and attach the EZ-6 DIRECTION FINDER (G6) to the fuselage right half over the MOUNT (A28).
- 4. Using a water-based white glue, attach the two FuG 10 ANTENNA INSULATORS (G5) to the top of the FUSELAGE [RIGHT HALF] (A2).
- 5. Refer to the detail drawing at the far right and glue the TAIL GEAR GUARD [RIGHT HALF] (A6) to the TAIL GEAR GUARD [LEFT HALF] (A7) while trapping the TAIL WHEEL (A10) between the two guards. Be sure not to let any cement touch the TAIL WHEEL (A10).
- 6. Glue the TAIL GEAR MOUNT (A9) to the top of the assembled tail gear guard and wheel.
- 7. Cement the TAIL GEAR STRUT (A8) to the hole in the front of the TAIL GEAR MOUNT (A9).
- Paint the area of the tail gear well on both fuselage halves, parts A1 and A2, GRAY, RLM 02, prior to adding the COMPLETED TAIL GEAR ASSEMBLY.
- 9. Glue the COMPLETED TAIL GEAR ASSEMBLY to its position at the rear end of the FUSELAGE [RIGHT HALF] (A2).

COMPLETED RIGHT

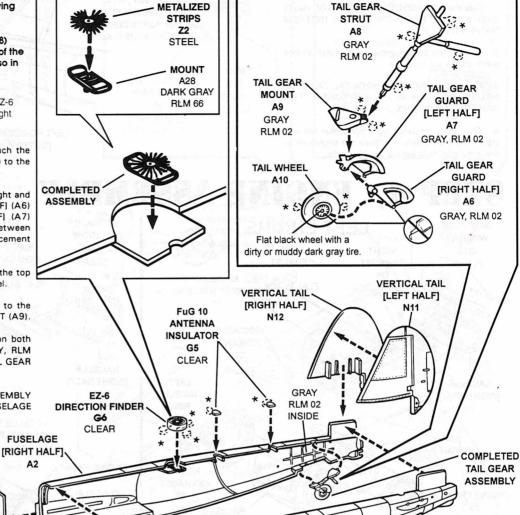
FORWARD FUSELAGE

COMPLETED INSTRUMENT PANEL

COMPLETED

COCKPIT

ASSEMBLY



- 10. Cement the COMPLETED COCKPIT ASSEMBLY into the COMPLETED LEFT FORWARD FUSELAGE.
- 11. Glue the COMPLETED INSTRUMENT PANEL to the COMPLETED RIGHT FORWARD FUSELAGE.

COMPLÉTED LEFT

FORWARD FUSELAGE

12. Carefully join the COMPLETED RIGHT FORWARD FUSELAGE to the COMPLETED LEFT FORWARD FUSELAGE while trapping the COMPLETED COCKPIT ASSEMBLY and the COMPLETED INSTRUMENT PANEL between them. Make sure all parts line up correctly.

**FUSÉLAGE** 

[LEFT HALF]

A1

TRAILING

ANTENNA

MOUNT

G2

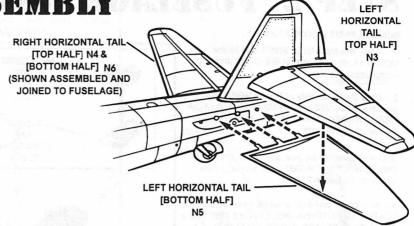
CLEAR

- 13. Cement the COVER (A34) into its hole on the left side of the aft fuselage.
- 14. Use a small drop of water-based white glue to attach the TRAILING ANTENNA MOUNT (G2) to its hole on the left side of the aft fuselage.
- 15. Glue the FUSELAGE (LEFT HALF) (A1) to the FUSELAGE (RIGHT HALF) (A2).
- 16. Cement the forward fuselage assembly to the front end of the main fuselage assembly.
- 17. Glue the VERTICAL TAIL (LEFT HALF) (N11) to the VERTICAL TAIL (RIGHT HALF) (N12), then glue the vertical tail to the aft end of the fuselage.

STEP 3, TAIL ASSEMBLY

PAINT ALL PARTS AFTER ASSEMBLY.

- 1. Glue the LEFT HORIZONTAL TAIL [TOP HALF] (N3) to the LEFT HORIZONTAL TAIL [BOTTOM HALF] (N5).
- 2. Cement the completed left horizontal tail into place on the aft fuselage.
- 3. Cement the RIGHT HORIZONTAL TAIL [TOP HALF] (N4) to the RIGHT HORIZONTAL TAIL [BOTTOM HALF] (N6).
- 4. Glue the completed right horizontal tail into place on the aft fuselage. Check the alignment of the horizontal tails before the glue sets.



NACELLE

[LEFT HALF]

01

INDICATOR

WINDOW

Q10 CLEAR

RIGHT

**NACELLE** 

RING

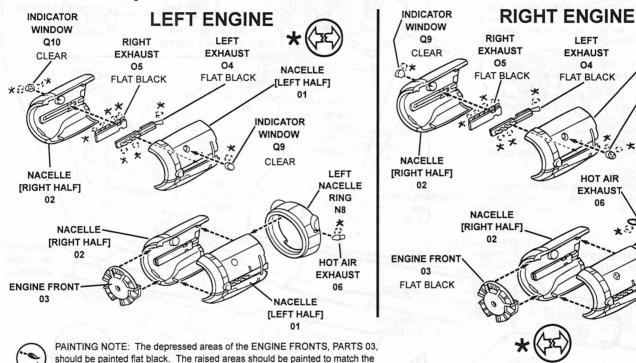
N7

NACELLE

**[LEFT HALF]** 

01

## STEP 4, ENGINE ASSEMBLY



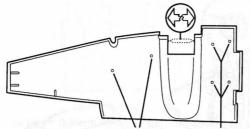
PAINT PARTS 03, 04, AND 05 BEFORE ASSEMBLY. PAINT ALL OTHER PARTS AFTER ASSEMBLY.

- 1. Begin building the left engine by cementing a LEFT EXHAUST (O4) into the inside of a NACELLE (LEFT HALF) (01).
- 2. Glue a RIGHT EXHAUST (05) into the inside of a NACELLE [RIGHT HALF] (02)
- 3. Cement the NACELLE (LEFT HALF) (01) to the (NACELLE) (RIGHT HALF) (02).
- 4. Glue an ENGINE FRONT (03) to the front of the nacelle assembly.

camouflage on the surrounding nacelle.

- 5. Cement the LEFT NACELLE RING (N8) to the rear of the nacelle assembly.
- 6. Glue a HOT AIR EXHAUST (06) to the left side of the LEFT NACELLE RING (N8).
- 7. Using water-based white glue, attach the INDICATOR WINDOW (Q9) to the left side of the nacelle assembly and an INDICATOR WINDOW (Q10) to the right side of the nacelle assembly as shown in the middle left drawing above.
- 8. Refer to the middle right drawing above, and repeat items 1 through 4 to begin building the right engine.
- 9. Cement the RIGHT NACELLE RING (N7) to the right nacelle assembly.
- 10. Glue a second HOT AIR EXHAUST (O6) to the right side of the RIGHT NACELLE RING (N7).
- 11. Using water-based white glue, attach the INDICATOR WINDOW (Q9) to the right side of the right nacelle assembly and an INDICATOR WINDOW (Q10) to the left side of the right nacelle assembly as shown in the middle right drawing above.

### STEP 5, WING & LANDING GEAR ASSEMBLY



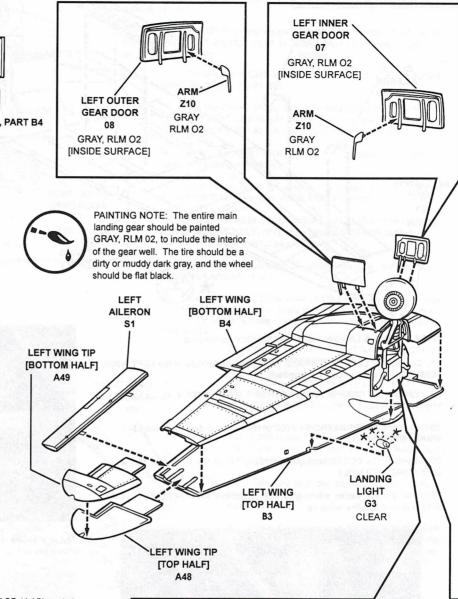
OPEN UP THESE 6 HOLES IN THE LEFT WING BOTTOM, PART B4

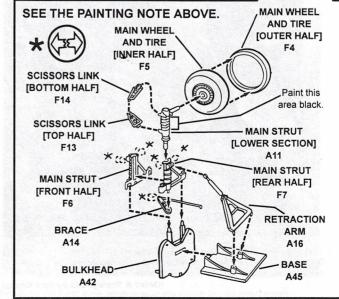
PAINT ALL PARTS FOR THE LANDING GEAR BEFORE ASSEMBLY. PAINT ALL WING PARTS AFTER ASSEMBLY.

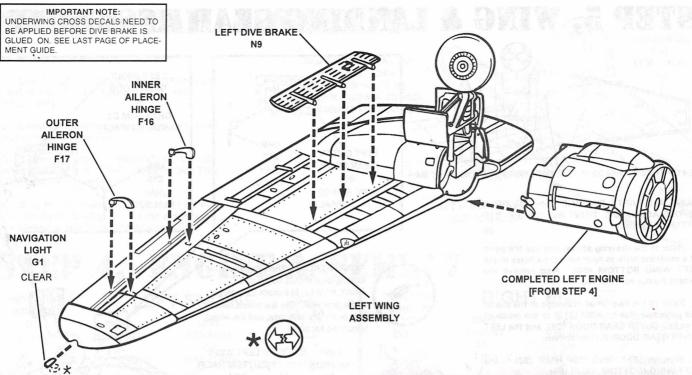
- Refer to the drawing above, and use the point of a modeling knife to open up the six holes in the LEFT WING BOTTOM (B4). Also remove the excess plastic as indicated.
- 2. Refer to the two detail drawings at the top of the page and glue an ARM (Z10) to the inside of the LEFT OUTER GEAR DOOR (08), and the LEFT INNER GEAR DOOR (07) as shown.
- 3. Glue the LEFT WING [TOP HALF (B3) to the LEFT WING [BOTTOM HALF] (B4).
- 4. Cement the LEFT WING TIP [TOP HALF] (A48) to the LEFT WING TIP [BOTTOM HALF] (A49).
- 5. Glue the completed wing tip into the slot at the end of the assembled wing.
- 6. Cement the LEFT AILERON (S1) into place on the trailing edge of the wing.
- 7. Using a drop of water-based white glue, attach the LANDING LIGHT (G3) in the hole on the leading edge of the left wing.
- 8. Refer to the detail drawing below, and glue the BULKHEAD (A42) to the BASE (A45).
- Glue the MAIN STRUT (FRONT HALF (F6) to the MAIN STRUT (REAR HALF) (F7), then glue the BRACE (A14) to the pin on the main strut assembly.
- 10. Cement the completed main strut assembly to the pins on the BULKHEAD (A42).
- 11. Cement the RETRACTION ARM (A16) to the BASE (A45) and the main strut. Note that the end of the long arm on the BRACE (A14) should come in contact with the side of the RETRACTION ARM (A16).
- 12. Glue the MAIN STRUT (LOWER SECTION) (A11) to the strut assembly.
- 13. Cement the SCISSORS LINK [TOP HALF] (F13) and the SCISSORS LINK [BOTTOM HALF] (F14) to the MAIN STRUT [LOWER SECTION] (A11).
- 14. Glue the MAIN WHEEL AND TIRE [OUTER HALF] (F4) to the MAIN WHEEL AND TIRE [INNER HALF] (F5), then cement the completed main wheel and tire to the completed landing gear strut.
- 15. Carefully glue the completed left main landing gear inside the wing assembly. Check the alignment before the glue sets.
- Cement the completed inner and outer gear doors to their locations on each side of the landing gear well.



PAINTING TIP: The landing gear struts and wheel wells were usually dirty and greasy. This can be simulated with some black and brown washes on the parts. Because German aircraft often operated from dirt or grass fields during World War II, the tires often had dirt and mud on them. Simulate this with dirty brown and gray washes.

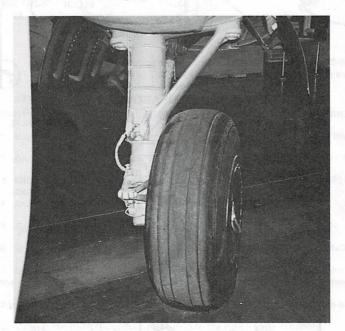






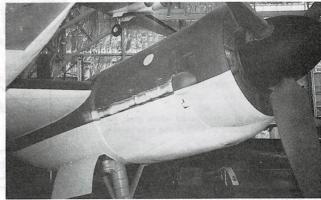
(STEP 5, WING & LANDING GEAR ASSEMBLY, continued)

- 17. Cement the LEFT DIVE BRAKE (N9) to the underside of the LEFT WING ASSEMBLY (after decals are applied).
- 18. Cement the COMPLETED LEFT ENGINE [FROM STEP 4] to the LEFT WING ASSEMBLY.
- 19. Glue the INNER AILERON HINGE (F16) to the underside of the LEFT WING ASSEMBLY.
- 20. Cement the OUTER AILERON HINGE (F17) to the underside of the LEFT WING ASSEMBLY.
- 21. Use a water-based white glue and attach the NAVIGATION LIGHT (G1) in the hole in the wing tip.



The left main landing gear is shown here from the front. The strut is GRAY, RLM 02. It should be noted that the oleo portion of the strut is compressed, and the black boot that covers it has been removed.

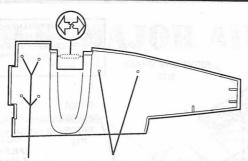
(Detail & Scale photo by Bert Kinzey)



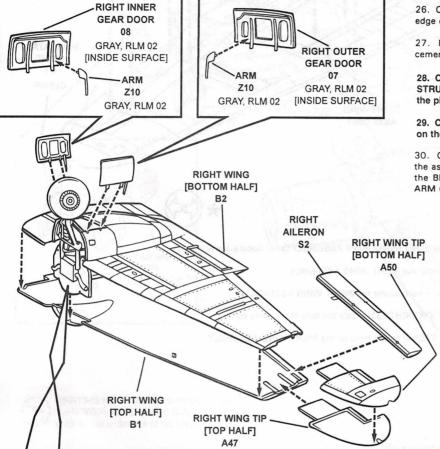
The left engine nacelle is shown here. Note the round indicator window above the exhausts. (Detail & Scale photo by Bert Kinzey)



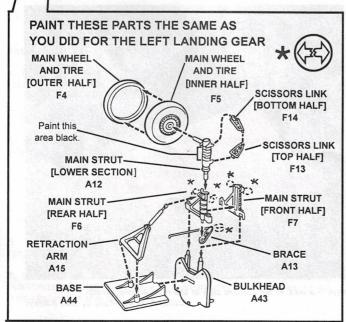
Here is a look at the left main landing gear from the outside. Note that the wheel was painted flat black. (Detail & Scale photo by Bert Kinzey)

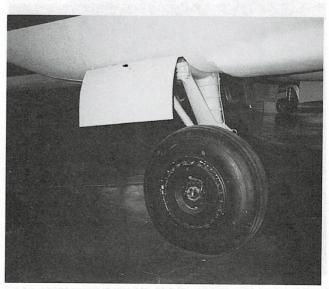


OPEN UP THESE 6 HOLES IN THE RIGHT WING BOTTOM, PART B2

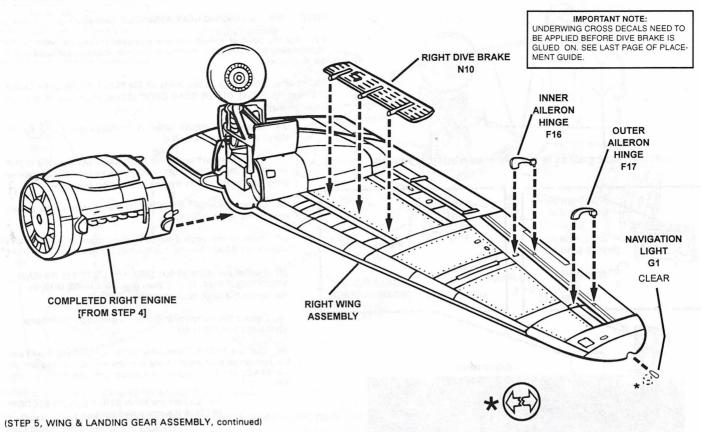


- (STEP 5, WING & LANDING GEAR ASSEMBLY, continued)
- 22. Use the point of a modeling knife to open up the six holes in the RIGHT WING BOTTOM (B2). Remove the excess plastic as indicated in the drawing at left.
- 23. Glue an ARM (Z10) to the inside of the RIGHT INNER GEAR DOOR (08) and the RIGHT OUTER GEAR DOOR (07) as illustrated in the two detail drawings at left.
  - 24. Cement the RIGHT WING [TOP HALF] (B1) to the RIGHT WING [BOTTOM HALF] (B2).
  - 25. Glue the RIGHT WING TIP [TOP HALF] (A47) to the RIGHT WING TIP [BOTTOM HALF] (A50), then cement the completed wing tip into the slot at the end of the wing assembly.
  - 26. Cement the RIGHT AILERON (S2) into position on the trailing edge of the wing assembly.
  - 27. Refer to the detail drawing at the bottom of the page and cement the BASE (A44) to the BULKHEAD (A43).
  - 28. Cement the MAIN STRUT (REAR HALF) (F6) to the MAIN STRUT (FRONT HALF) (F7), then glue the BRACE (A13) to the pin on the main strut assembly.
  - 29. Cement the completed main strut assembly to the pins on the BULKHEAD ( ${\it A43}$ ).
  - 30. Glue the RETRACTION ARM (A15) to the BASE (A44) and the assembled main strut. Note that the end of the long arm on the BRACE (A13) should make contact with the RETRACTION ARM (A15).
    - 31. Cement the MAIN STRUT [LOWER SECTION] (A12) to the assembled strut.
    - 32. Glue the SCISSORS LINK [TOP HALF] (F13) and the SCISSORS LINK [BOTTOM HALF] (F14) to the MAIN STRUT [LOWER SECTION] (A12).
    - 33. Cement the MAIN WHEEL AND TIRE (OUTER HALF) (F4) to the MAIN WHEEL AND TIRE (INNER HALF) (F5), then glue the completed wheel and tire to the strut assembly.
    - 34. Carefully glue the completed right landing gear assembly into the wheel well in the right wing assembly.
    - 35. Glue the completed RIGHT INNER GEAR DOOR and the RIGHT OUTER GEAR DOOR to the sides of the wheel well under the right wing assembly. Check alignment of all parts carefully.

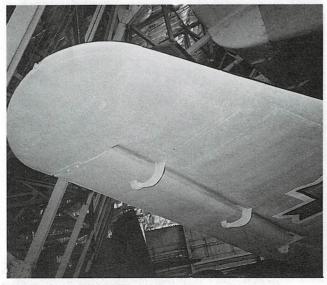




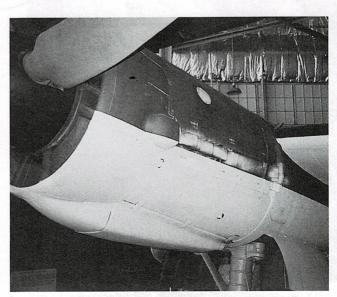
Details of the right main landing gear are visible in this photograph. (Detail & Scale photo by Bert Kinzey)



- 36. Cement the RIGHT DIVE BRAKE (N10) to the underside of the RIGHT WING ASSEMBLY (after decals are applied).
- 37. Glue the INNER AILERON HINGE (F16) to its location under the RIGHT WING ASSEMBLY.
- 38. Cement the OUTER AILERON HINGE (F17) into its locator holes under the RIGHT WING ASSEMBLY.
- 39. Use a water-based white glue and attach the NAVIGATION LIGHT (G1) inside the hole in the wing tip.
- 40. Carefully glue the COMPLETED RIGHT ENGINE [FROM STEP 4] to the front of the RIGHT WING ASSEMBLY.



The two aileron hinges under the right wing are illustrated in this view. The navigation light on the wing tip is barely visible. (Detail & Scale photo by Bert Kinzey)

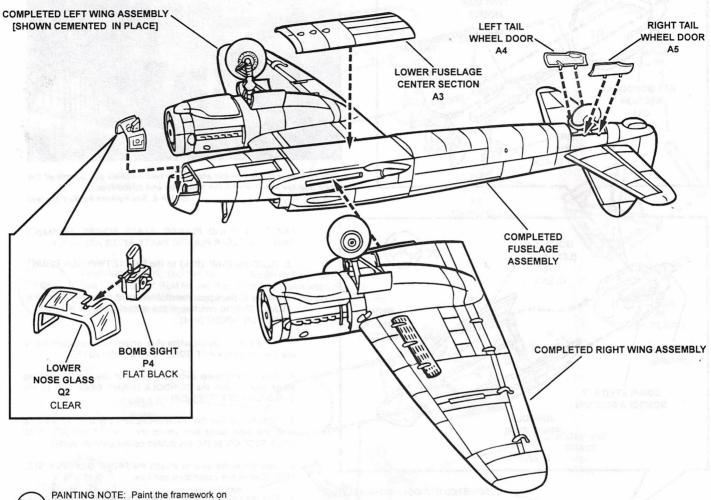


Here is a look at the inboard side of the right engine nacelle.
(Detail & Scale photo by Bert Kinzey)

# STEP 6, MAJOR AIRFRAME ASSEMBLY



PAINTING NOTE: Paint the inside surfaces of the tail wheel doors GRAY, RLM 02. Paint the outside surfaces the same color as the underside of the fuselage.





PAINTING NOTE: Paint the framework on the LOWER NOSE GLASS (Q2) the same color as the underside of the fuselage.

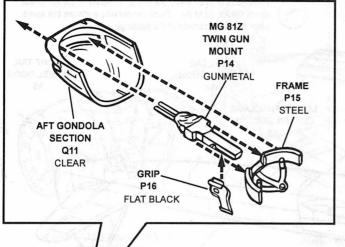
#### PAINT ALL PARTS BEFORE ASSEMBLY.

- 1. Use a water-based white glue and attach the BOMB SIGHT (P4) to the LOWER NOSE GLASS (Q2) as illustrated in the detail drawing.
- 2. Continuing to use the white glue, attach the LOWER NOSE GLASS (Q2) to the front of the fuselage.
- 3. Cement the LOWER FUSELAGE CENTER SECTION (A3) to the underside of the fuselage.
- 4. Glue the LEFT TAIL WHEEL DOOR (A4) to the left side of the tail wheel well at the aft end of the fuselage.
- 5. Cement the RIGHT TAIL WHEEL DOOR (A5) to the right side of the tail wheel well at the aft end of the fuselage.
- 6. Glue the COMPLETED RIGHT WING ASSEMBLY to the COMPLETED FUSELAGE ASSEMBLY.
- 7. Cement the COMPLETED LEFT WING ASSEMBLY to the COMPLETED FUSELAGE ASSEMBLY. Be sure to carefully check the alignment of the wings before the glue sets.



The tail landing gear is shown here from the left side. The correct angle of the gear doors is illustrated. (Detail & Scale photo by Bert Kinzey)

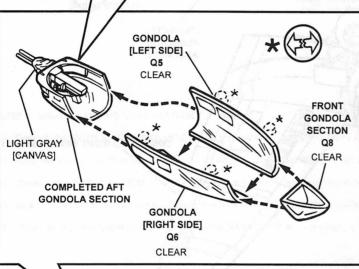
### STEP 7, GONDOLA ASSEMBLY





A right rear view of the gondola shows the two machine gun barrels at the aft end and the windows on the right side and at the rear.

(Detail & Scale photo by Bert Kinzey)



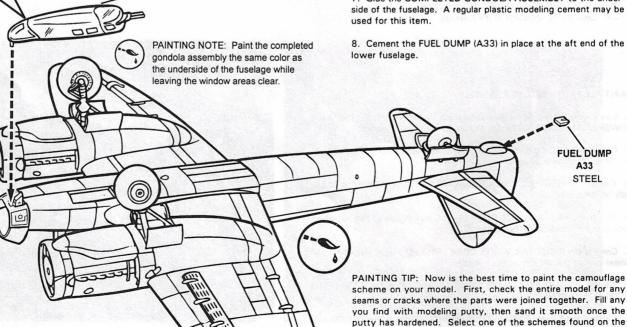
PAINT ALL SOLID PLASTIC PARTS BEFORE ASSEMBLY. PAINT ALL CLEAR PLASTIC PARTS AFTER ASSEMBLY.

- 1. GLUE the GRIP (P16) to the MG 81Z TWIN GUN MOUNT
- 2. Refer to the upper detail drawing at left and cement the FRAME (P15) to notches at the midpoint on the MG 81Z TWIN GUN MOUNT (P14).
- 3. Using a water-based white glue, attach the gun assembly to the slot inside the AFT GONDOLA SECTION (Q11).
- 4. Refer to the lower detail drawing and use the water-based white glue to join the GONDOLA [RIGHT SIDE] (Q6) to the GONDOLA (LEFT SIDE) (Q5)
- 5. Continue to use the water-based white glue when working with the clear parts and attach the COMPLETED AFT GON-DOLA SECTION to the assembled center gondola section.
- 6. Use the white glue to attach the FRONT GONDOLA SEC-TION (Q8) to the assembled gondola.
- 7. Glue the COMPLETED GONDOLA ASSEMBLY to the underside of the fuselage. A regular plastic modeling cement may be used for this item.

last five pages of this instruction booklet and apply it carefully to your model. Let the model dry while you continue working

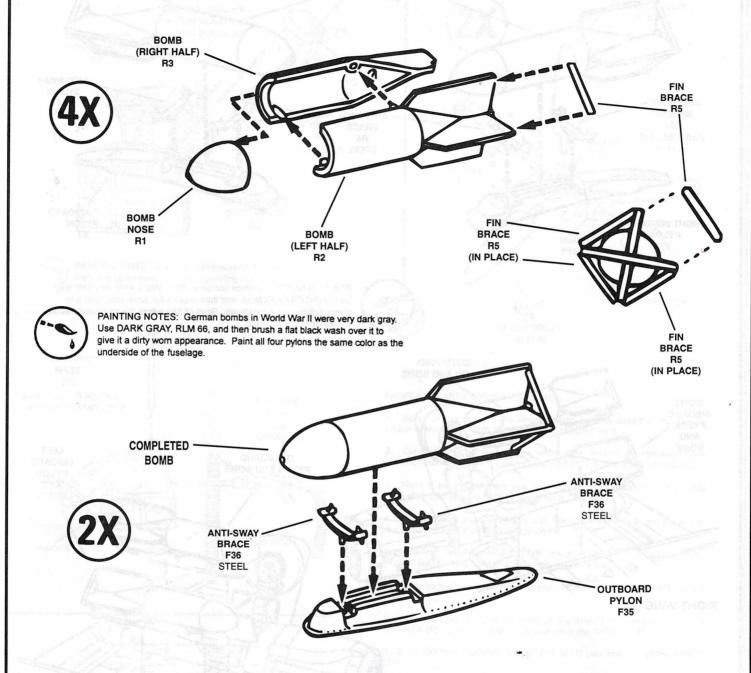
on the bombs and pylons in the next step.

FUEL DUMP A33 STEEL



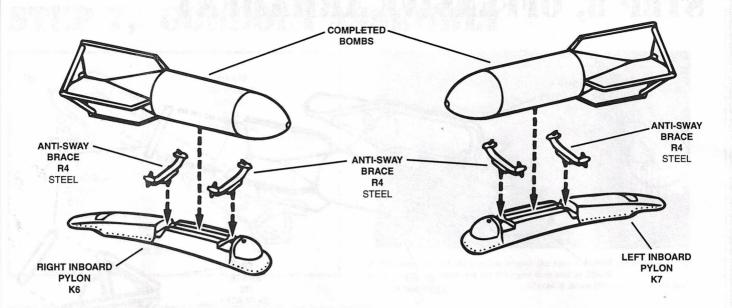
COMPLETED GONDOLA ASSEMBLY

# STEP 8, OFFENSIVE ARMAMENT



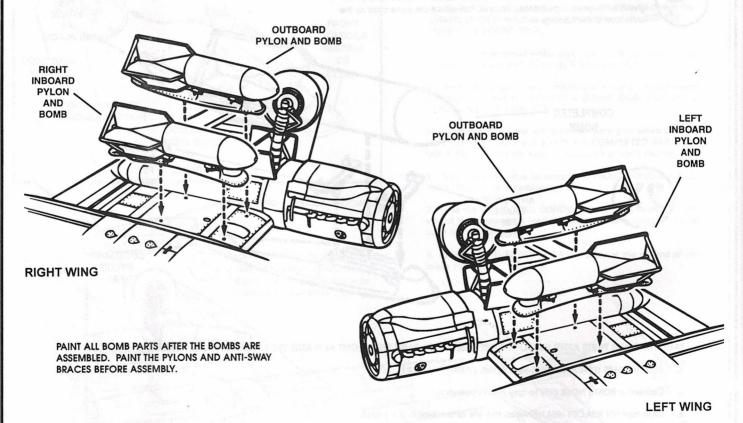
PAINT ALL BOMB PARTS AFTER THE BOMBS ARE ASSEMBLED. PAINT THE PYLONS AND ANTI-SWAY BRACES BEFORE ASSEMBLY.

- Glue a BOMB (LEFT HALF) (R2) to a BOMB (RIGHT HALF) (R3).
- 2. Cement a BOMB NOSE (R1) to t;he bomb assembly.
- 3. Glue four FIN BRACES (R5) between the fins at the rear of the bomb.
- 4. Repeat items 1,2, and 3 above three more times to build a total of four bombs.
- 5. Cement two ANTI-SWAY BRACES (F36) to an OUTBOARD PYLON (F35) as shown in the above detail drawing.
- 6. Glue a COMPLETED BOMB to the assembled outboard pylon.
- 7. Repeat items 5 and 6 above to make a second outboard pylon with bomb.





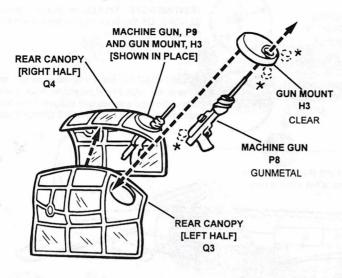
PAINTING NOTES: German bombs in World War II were very dark gray. Use DARK GRAY, RLM 66, and then brush a flat black wash over it to give it a dirty worn appearance. Paint all four pylons the same color as the underside of the fuselage.



( STEP 8, OFFENSIVE ARMAMENT, continued)

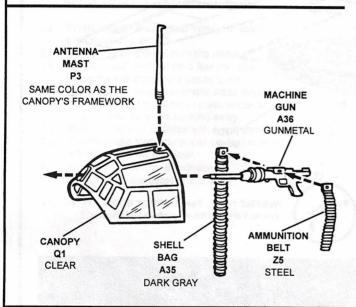
- 8. Cement two ANTI-SWAY BRACES (R4) to the LEFT INBOARD PYLON (K7), then glue a COMPLETED BOMB to the pylon assembly
- 9. Glue two ANTI-SWAY BRACES (R4) to the RIGHT INBOARD PYLON (K6), then cement a COMPLETED BOMB to the pylon assembly.
- 10. Cement the four completed pylons with their bombs to the underside of the wings as illustrated in the two drawings above.

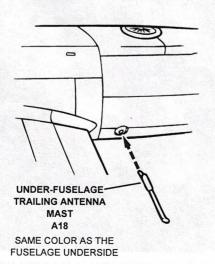
# STEP 9, FINAL DETAILS

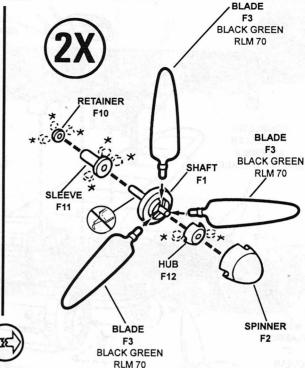




PAINTING NOTE: Paint the framework on all clear parts the same color as the surrounding fuselage.

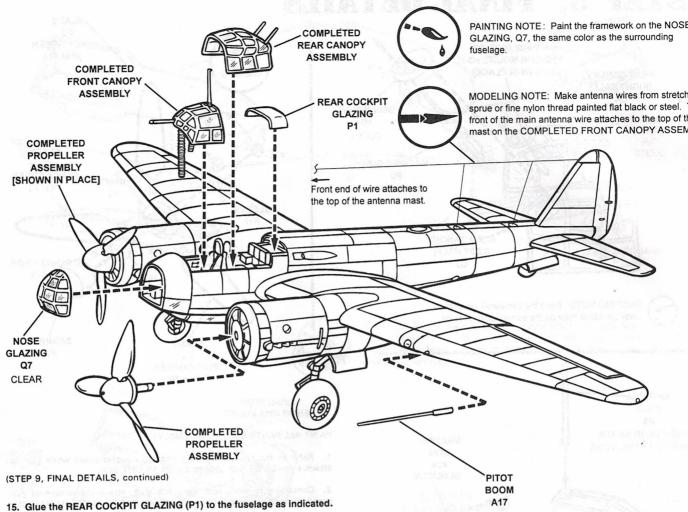






#### PAINT ALL PARTS BEFORE ASSEMBLY.

- 1. Refer to the top left drawing and use a water-based white glue to attach a MACHINE GUN (P8) to a GUN MOUNT (H3).
- 2. Continuing to work with the white glue, attach the completed gun assembly to the mounting hole in the REAR CANOPY [LEFT HALF] (Q3).
- Make a second machine gun assembly by gluing a second MACHINE GUN (P9) to a second GUN MOUNT (H3).
- 4. Glue the second gun assembly into the mounting hole at the aft end of the REAR CANOPY (RIGHT HALF) (Q4).
- 5. Join the REAR CANOPY [LEFT HALF] (Q3) to the REAR CANOPY [RIGHT HALF] (Q4). Set the assembly aside to dry.
- 6. Refer to the top right drawing and cement three BLADES (F3) to the SHAFT (F1).
- 7. Glue the HUB (F12) to the front of the SHAFT (F1), then cement the SPINNER (F2) over the HUB (F12) and onto the SHAFT (F1).
- 8. Slide, DO NOT CEMENT, the SLEEVE (F11) over the rear of the SHAFT (F1).
- 9. Carefully glue the RETAINER (F10) to the end of the SHAFT (F1). Be very careful not to let any cement touch the SLEEVE (F11).
- 10. Repeat items 6 though 9 to make a second propeller assembly. Refer to the last five pages of this instruction booklet for further information about painting the propellers.
- 11. Refer to the middle drawing at left, and use a water-based white glue to attach the ANTENNA MAST (P3) to the top of the CANOPY (Q1).
- 12. Use regular modeling cement to attach the SHELL BAG (A35) and the AMMUNITION BELT (Z5) to the MACHINE GUN (A36).
- 13. Use the water-based white glue and carefully attach the completed machine gun assembly to its hole in the front of the CANOPY (Q1).
- 14. Refer to the bottom left drawing, and attach the UNDER-FUSELAGE TRAILING ANTENNA MAST (A18) to its mount on the aft fuselage.



- 16. Glue the COMPLETED REAR CANOPY ASSEMBLY in place over the rear area of the cockpit.
- 17. Attach the COMPLETED FRONT CANOPY ASSEMBLY to its location above the forward cockpit area.
- 18. Glue the NOSE GLAZING (Q7) to the front of the fuselage.
- 19. Use regular modeling cement to attach the PITOT BOOM (A17) to the hole in the leading edge of the left wing.
- 20. Carefully glue the two COMPLETED PROPELLER ASSEMBLIES in place on the front of the engine nacelles. The SLEEVE (F11) part of each propeller assembly should be glued to the hole in the front of the engine but be sure not to get any cement on any other parts if you want the propellers to turn.
- 21. Use some stretched sprue or fine nylon thread to make the antenna wires. The main wire runs from the top of the vertical tail to the top of the antenna mast which is located on the COMPLETED FRONT CANOPY ASSEMBLY. Secondary wires run from the main wire down into the fuselage by passing through the two clear insulators on the aircraft's spine.



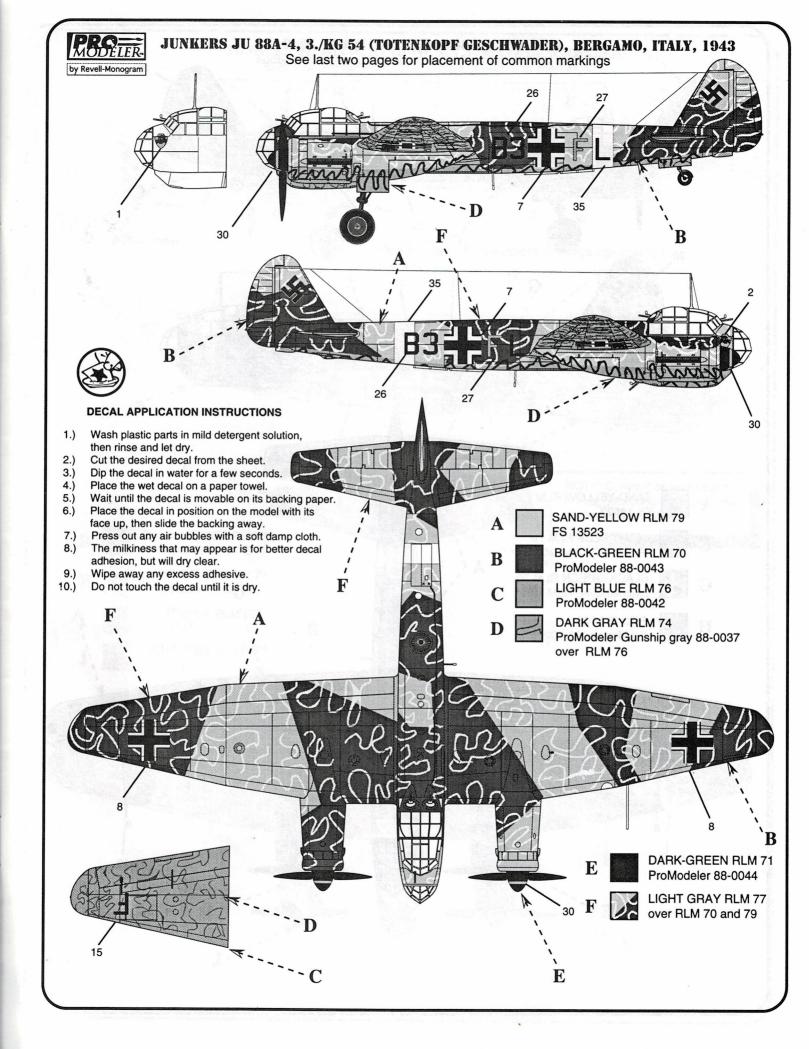
The pitot probe and the landing light on the leading edge of the left wing (Detail & Scale photo by Bert Kinzey) can be seen in this view.

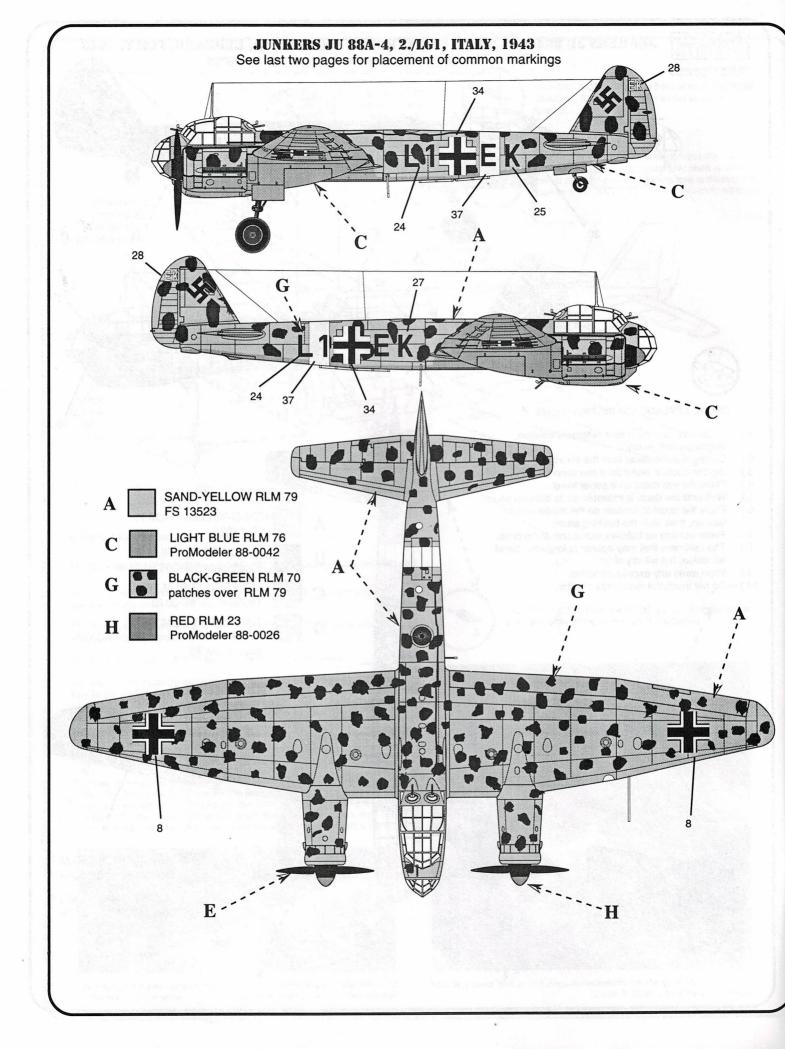


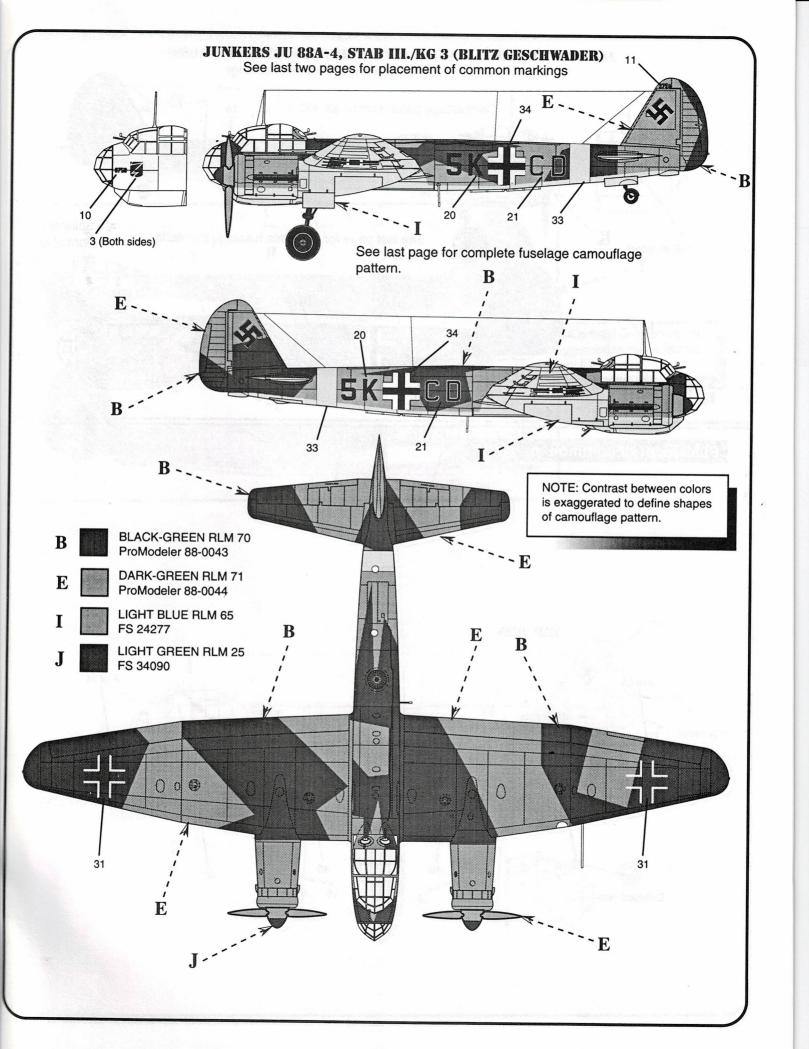
PAINTING NOTE: Paint the PITOT BOOM, A17, the same color as the top of the wing where it is attached.

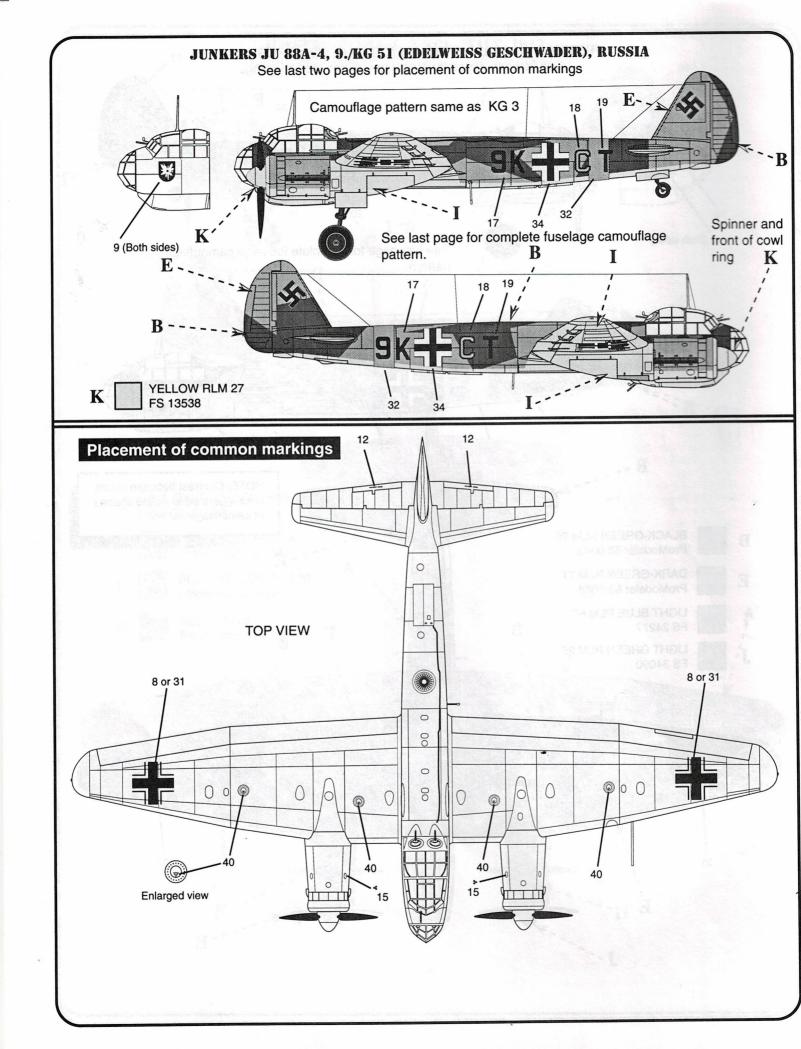


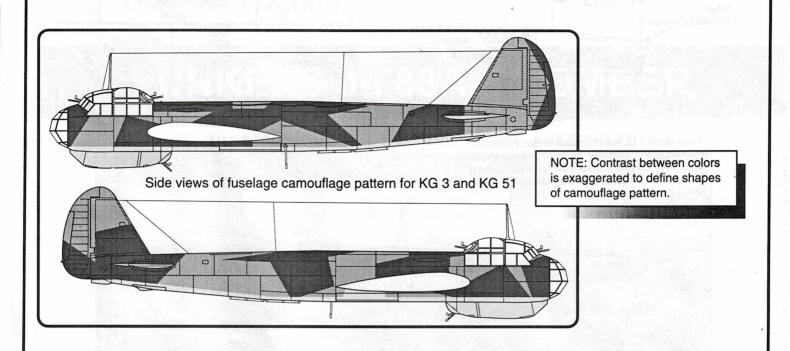
Here is a good look at the propeller assembly on the right engine. (Detail & Scale photo by Bert Kinzey

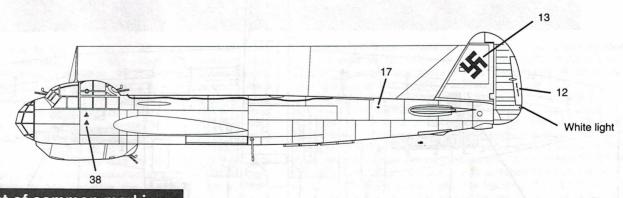




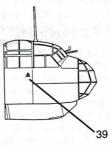




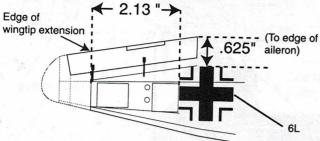




Placement of common markings



### POSITION OF UNDERWING CROSSES



Apply decal # 6L in this position under the wings before attaching the dive flaps. Place corresponding decals on the dive brakes, then align the marking and trim the decal between the slats before cementing the brakes in place. Repeat for right wing.

