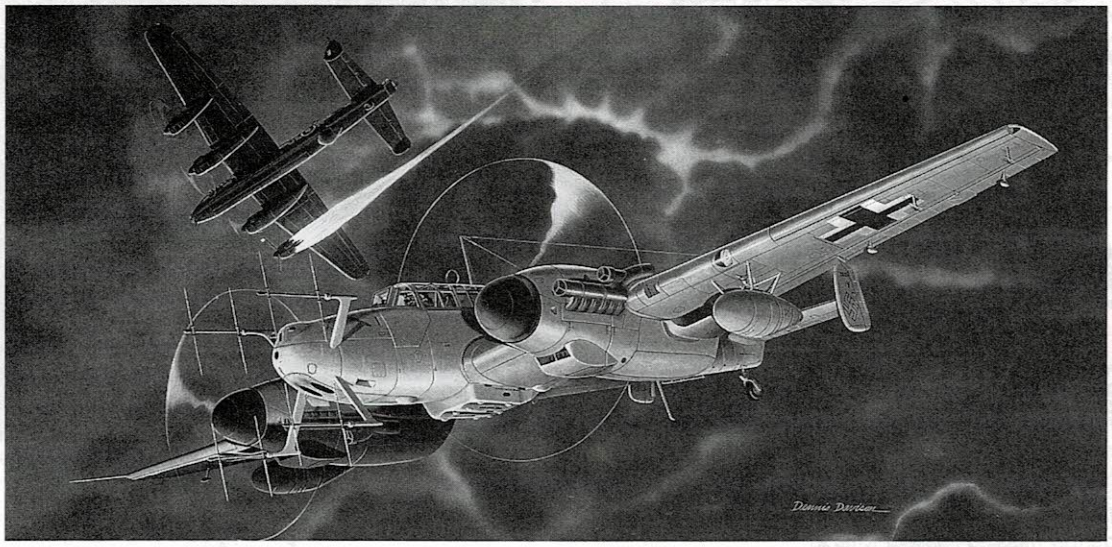
PRO MODELER™

by Revell-Monogram

**KIT 5933**

# MESSERSCHMITT Bf 110G-4 NIGHT FIGHTER

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



In 1934, the Reichsluftfahrtministerium issued a design requirement for Germany's first long-range, strategic fighter that could escort bombers all the way to their targets and back. In response to this requirement, Messerschmitt proposed an aircraft that would eventually become the Bf 110, and the first prototype made its initial flight on May 12, 1936. This aircraft, designated the Bf 110V1, was followed by two more prototypes designated the Bf 110V2 and Bf 110V3. The first production version was the Bf 110A-0, but because it was considered to be underpowered, it was quickly replaced by the Bf 110B and Bf 110C variants.

The large airframe of the Bf 110 permitted it to be adapted for a variety of missions in addition to that of a strategic fighter. Versions designed as fighter-bombers, reconnaissance aircraft, anti-shipping patrol aircraft, trainers, and tank busters with heavy cannon were all produced for the Luftwaffe during World War II. But the Bf 110's biggest contribution was as a night fighter.

The first Bf 110 night fighter was the Bf 110E-1/U1 which was specifically modified for the night fighter role. This was followed by the Bf 110E-1/U2, which carried an extra crew member. But the first true night fighter was the Bf 110F-4. The Bf 110F-4a was fitted with a radar to aid the pilot in locating his target at night. This progression of improvements eventually led to the Bf 110G-4, which was the definitive, radar-equipped, night fighter. It is this version which your ProModeler kit represents.

The Bf 110G-4 was originally equipped with the FuG 212 Lichtenstein C-1 radar, but this was subsequently upgraded to the FuG 220 and 220b Lichtenstein SN-2 radars to counter the allies' use of "window" chaff.

Various armament combinations were tried in most versions of the Bf 110 including the night fighters. Both machine guns and rapid-firing cannon were installed as were other weapons. Even mortars were carried under the wings of some aircraft. Projectiles from these large weapons would assure the destruction of any aircraft they hit. But one of the more interesting weapon installations made its appearance in 1943. Two upward-firing cannon were added in the rear cockpit. To utilize these weapons, the pilot flew the Bf 110G-4 directly under the enemy aircraft. The gunner in the aft cockpit then fired the two cannon up at the target. This proved to be a highly effective night-fighter tactic, particularly against allied bombers. These upward-firing cannon are included in your ProModeler kit.

By the middle of 1944, the Bf 110G-4 equipped the majority of Nachtjagdgeschwaders (NJG) or night-fighter squadrons in the Luftwaffe. The most famous German night-fighter ace was Major Heinz-Wolfgang Schnaufer, who is credited with 121 night victories. Major Schnaufer received the Diamonds to the Knight's Cross for his exploits. He was also the Kommodore of NJG-4, and markings for an aircraft from this squadron are supplied in this ProModeler kit. Markings for another Bf 110G-4 from NJG-6 are also provided.

**REVELL-MONOGRAM, INC.** Morton Grove, Illinois  **85593300200**

**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.

**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 piëce 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.

**LEA ESTO ANTES DE EMPEZAR**

- 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 fotografias 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 prüfen.
- 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.

**CEMENT TOGETHER**
**A COLLER**
**UNIR CON PEGAMENTO**
**VERKLEBEN**

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


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

**OPTIONAL PARTS**
**PIECES EN OPTION**
**PIEZAS OPCIONALES**
**BAUTEILE NACH WAHL**

**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:

**Revell-Monogram**
Consumer Service Department
8601 Waukegan Road
Morton Grove, Illinois 60053

Be sure to include the kit number, part number, description, and your return address.

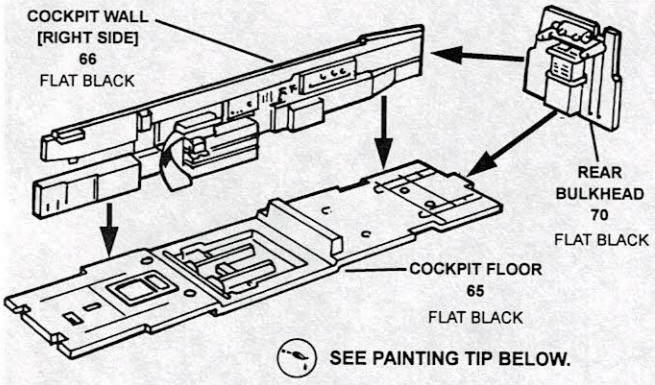
If you have any problems building this model, call our modeling tips hotline at:

**(800) 833-3570**

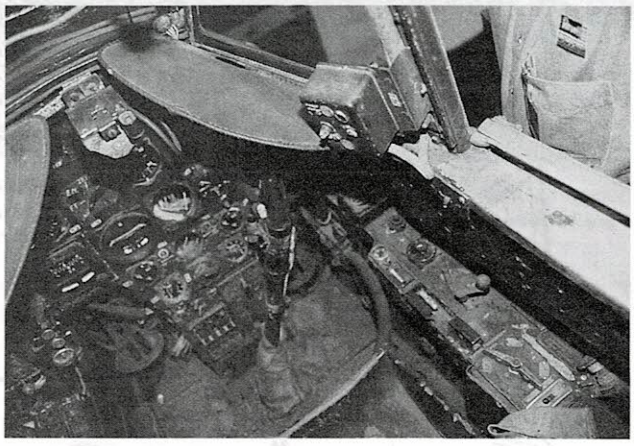
**TO COMPLETE THIS KIT AS SHOWN, WE RECOMMEND THE FOLLOWING PROMODELER PAINTS.**

| ENGLISH | FS EQUIVALENT | PROMODELER | GERMAN | SPANISH | FRENCH |
|---|---|---|---|---|---|
| LIGHT BLUE | 36473 | 88-0042 | HELLGRAU RLM 76 | AZUL CLARO ALEMAN | BLEU CLAIR-ALLEMAND |
| NEUTRAL GRAY | 36173 | 88-0035 | MITTELGRAU | GRIS NEUTRAL | GRIS NEUTRE |
| GUNSHIP GRAY | 36118 | 88-0037 | DUNKELGRAU | GRIS BOTELLA | FRIS VAISSEAU |
| YELLOW | 13507 | 88-0005 | GELB-GLÄNZEND | AMARILLO | JAUNE |
| FLAT BLACK | 37038 | 88-0022 | MATT SCHWARZ | NEGRO APAGADO | NOIR TRENE |
| DARK GREEN | 14090 | 88-0007 | DUNKELGRÜN-GLÄNZEND | VERDE OSCURO | VERT FONCE |
| RED | 11350 | 88-0003 | ROT-GLÄNZEND | ROJO | ROUGE |
| DARK GHOST GRAY | 36320 | 88-0036 | DUNKEL-KOMPASSGRAU | GRIS FANTASMA OSCURO | GRIS FONCE |
| DESERT TAN | 30279 | 88-0025 | HELLBRAUN | CANELA | BRUN CLAIR |
| MILITARY BROWN | 30118 | 88-0027 | DUNKELBRAUN | CAFE MILITAR | BRUN MILITAIRE |
| DARK BLUE | 15052 | 88-0009 | DUNKELBLAU-GLÄNZEND | AZUL OSCURO | BLUE FONCE |
| SILVER | 17176 | 88-0013 | SILVER | PLATA | ARGENT |
| STEEL | NONE | 88-0015 | EISENFARBIG | METALICO | METALLIQUE |

# STEP 1, COCKPIT ASSEMBLY




SEE PAINTING TIP BELOW.



***The right side of the pilot's cockpit is visible in this photograph. The interior of the night fighter's cockpit was painted flat black.***

PAINT ALL PARTS BEFORE ASSEMBLY.

PAINTING TIP: After painting the interior of the cockpit flat black, run a little gray wash around the details on the floor, side walls, and bulkhead. This will help bring out the features and make them look more realistic. Once this wash has dried, dry brush some steel colored paint lightly across the highlights inside the cockpit.

1. Begin construction of the cockpit by gluing the COCKPIT WALL [RIGHT SIDE] (66) to the COCKPIT FLOOR (65).

2. Cement the REAR BULKHEAD (70) to the COCKPIT FLOOR (65) and the COCKPIT WALL [RIGHT SIDE] (66) as illustrated in the top left drawing.

3. Open up the two holes in the COCKPIT FLOOR (65) as shown in the top right drawing. Use the point of a razor knife, and open the holes from the bottom of the floor.

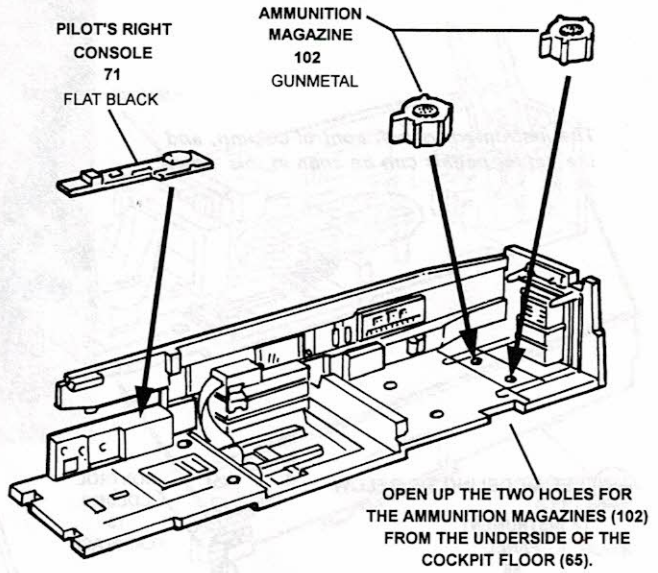
4. Glue two AMMUNITION MAGAZINES (102) into the holes that you have opened up in the COCKPIT FLOOR (65).

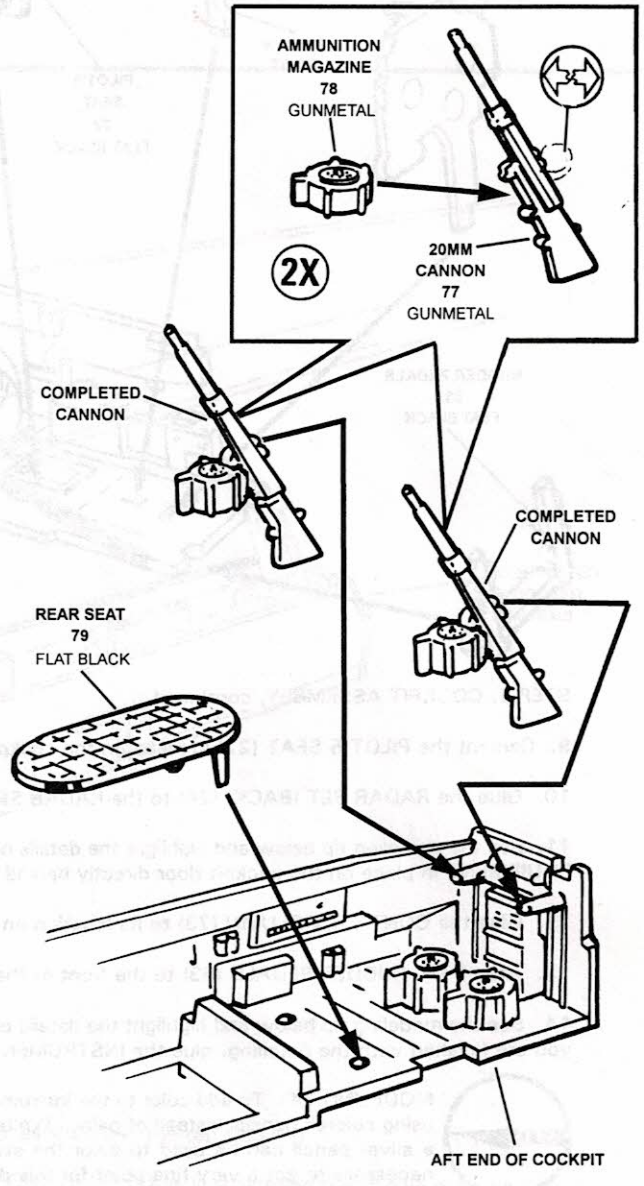
5. Cement the PILOT'S RIGHT CONSOLE (71) into place on the COCKPIT WALL [RIGHT SIDE] (66).

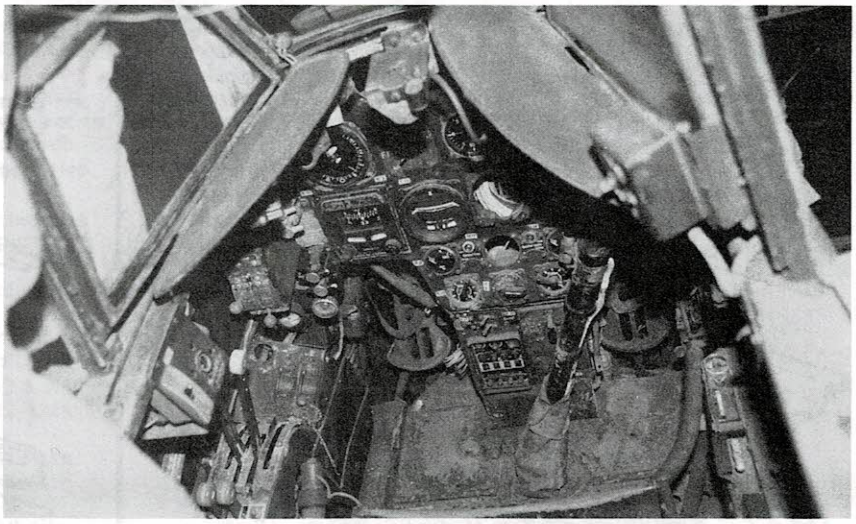
6. Glue an AMMUNITION MAGAZINE (78) to a 20MM CANNON (77) as shown at right. Then make another cannon using a second set of parts 77 and 78.

7. Carefully cement the two COMPLETED CANNON in place at the aft end of the cockpit.

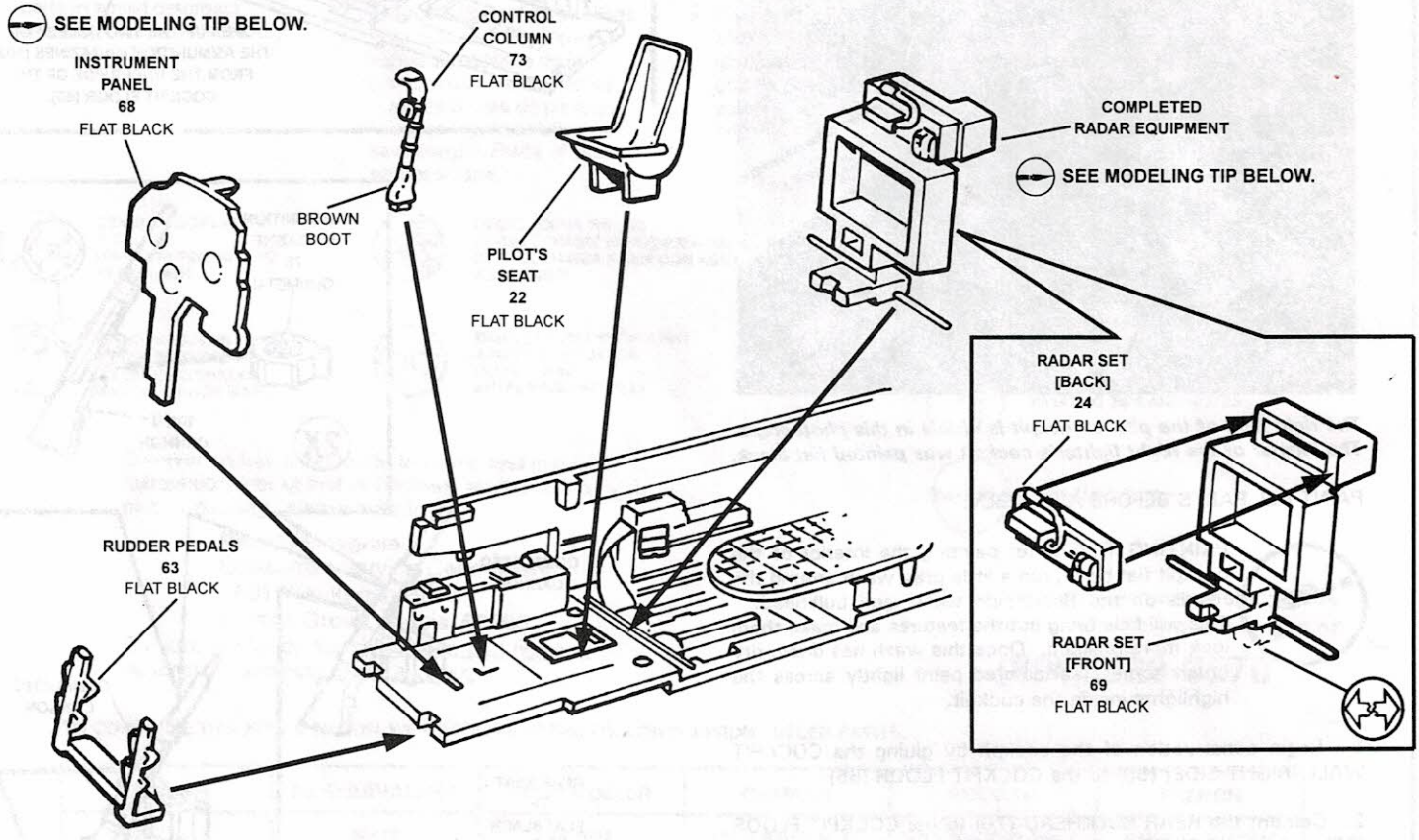
8. Glue the REAR SEAT (79) in position on the cockpit floor.





*The instrument panel, control column, and the rudder pedals can be seen in this view.*




STEP 1, COCKPIT ASSEMBLY, continued

9. Cement the PILOT'S SEAT (22) in place on the cockpit floor.

10. Glue the RADAR SET [BACK] (24) to the RADAR SET [FRONT] (69).

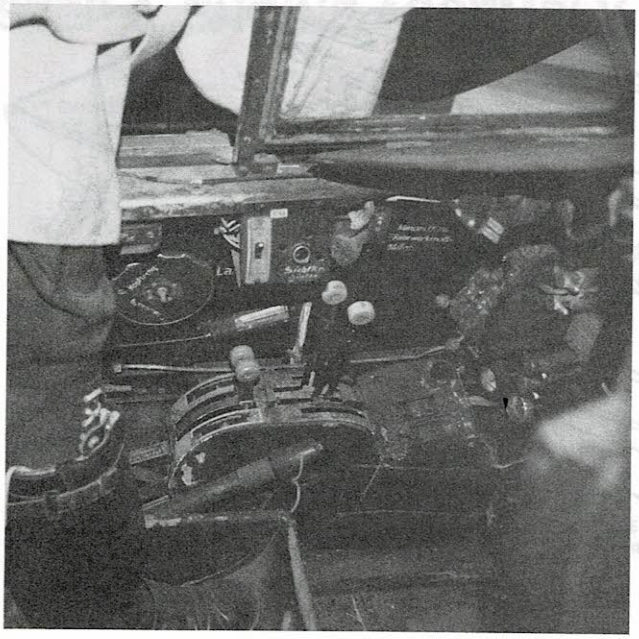
11. See the modeling tip below and highlight the details on the COMPLETED RADAR EQUIPMENT. Cement the COMPLETED RADAR EQUIPMENT in place on the cockpit floor directly behind the PILOT'S SEAT (22).

12. Glue the CONTROL COLUMN (73) to its location on the cockpit floor.

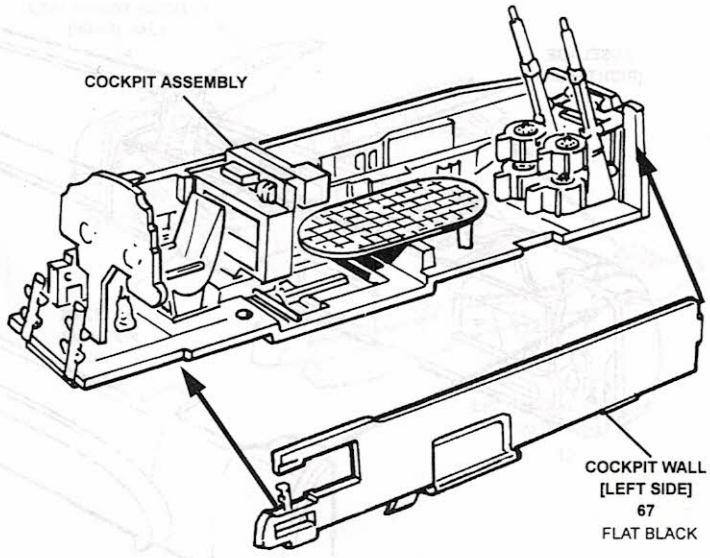
13. Attach the RUDDER PEDALS (63) to the front of the cockpit floor.

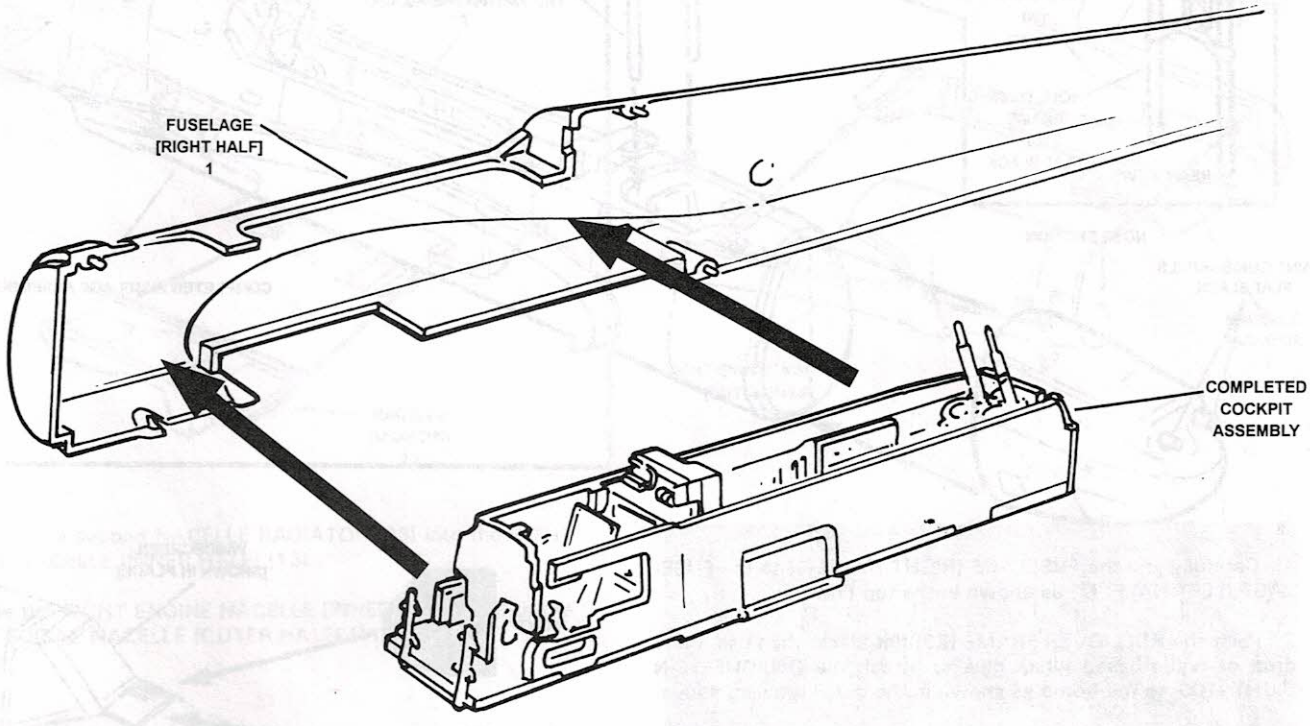
14. See the modeling tip below and highlight the details on the INSTRUMENT PANEL (68) as you did for the radar equipment. When you are finished with the detailing, glue the INSTRUMENT PANEL (68) in place on the cockpit floor.

MODELING TIP: To add color to the instruments and other details on the instrument panel and the radar equipment, try using colored pencils instead of paint. White and yellow pencils can be used for the instrument rings and details, while a silver pencil can be used to color the switches and other highlights. These pencils can be sharpened as much as necessary to get a very fine point for this detailing work. If you make a mistake, simply erase it and start over.



***Details on the left side of the pilot's cockpit can be seen here. Again, the basic color is flat black. The knobs at the ends of the levers on the throttle quadrant are red.***



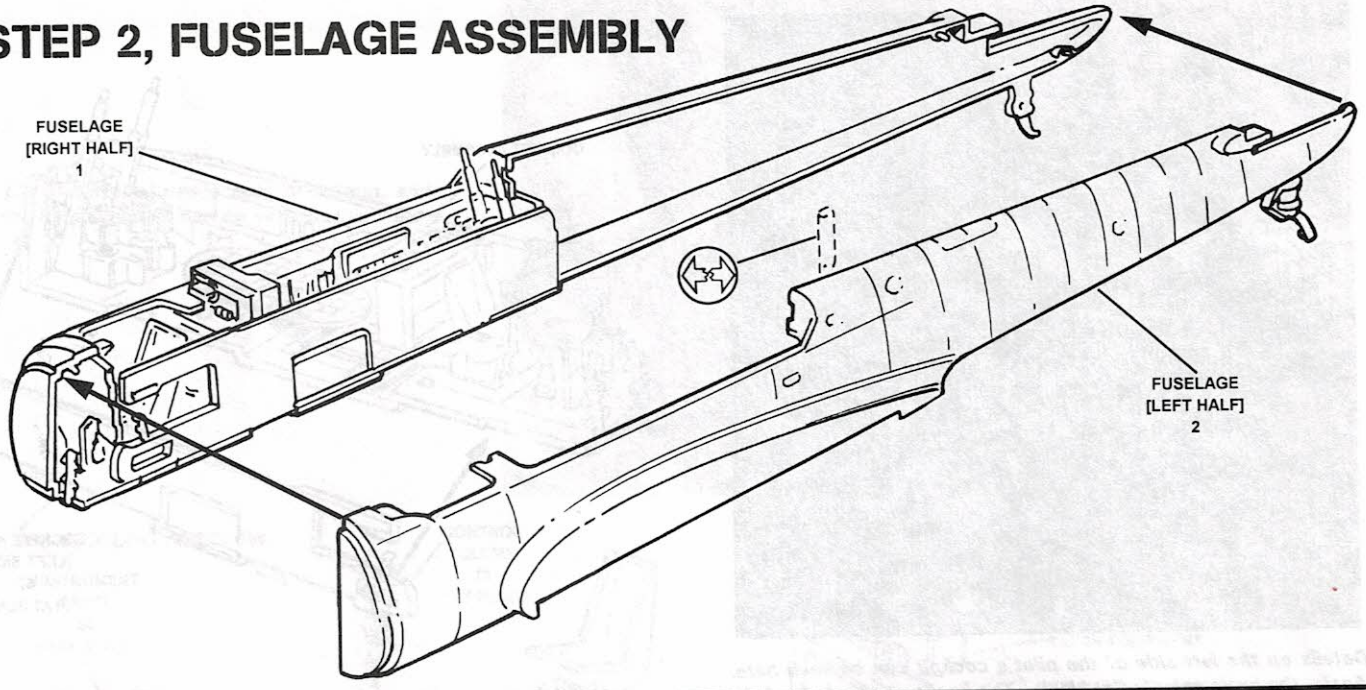



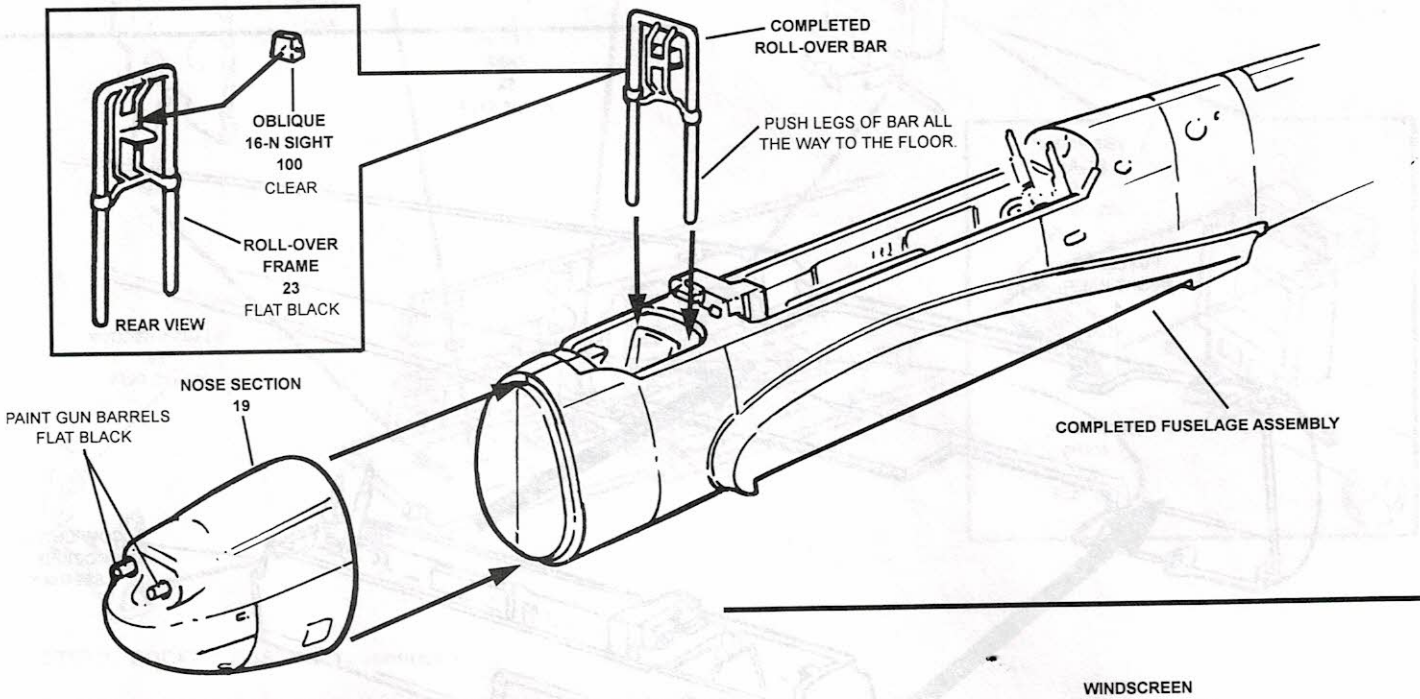

STEP 1, COCKPIT ASSEMBLY, continued

14. Glue the COCKPIT WALL [LEFT SIDE] (67) to the COCKPIT ASSEMBLY as shown in the top drawing.

15. Cement the COMPLETED COCKPIT ASSEMBLY into the FUSELAGE [RIGHT HALF] (1) as illustrated in the middle drawing.

# STEP 2, FUSELAGE ASSEMBLY



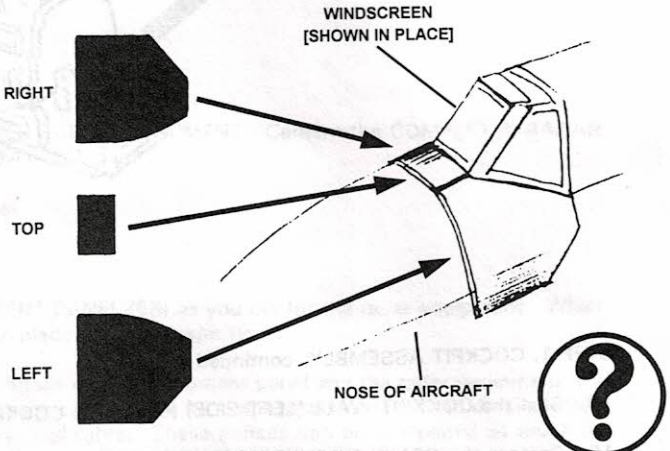

1. Carefully join the FUSELAGE [RIGHT HALF] (1) to the FUSELAGE [LEFT HALF] (2) as shown in the top drawing.

2. Paint the ROLL-OVER FRAME (23) flat black, then use a tiny drop of water-based white glue to attach the OBLIQUE 16-N SIGHT (100) to the frame as shown in the detail drawing above.

3. Glue the COMPLETED ROLL-OVER BAR to its position inside the cockpit.

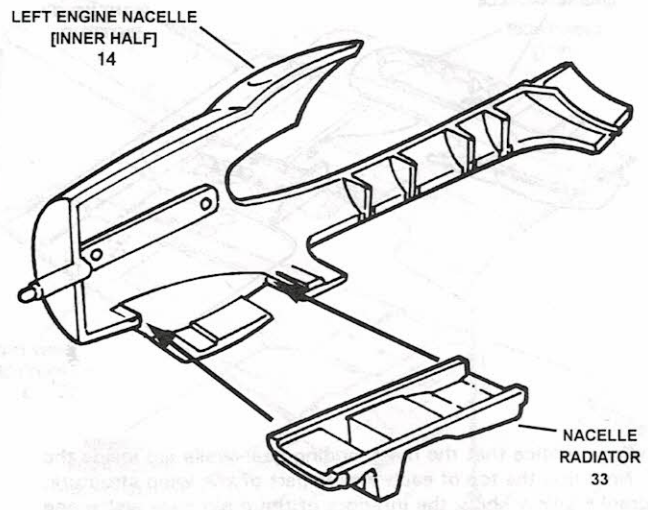
4. Cement the NOSE SECTION (19) to the front end of the COMPLETED FUSELAGE ASSEMBLY.

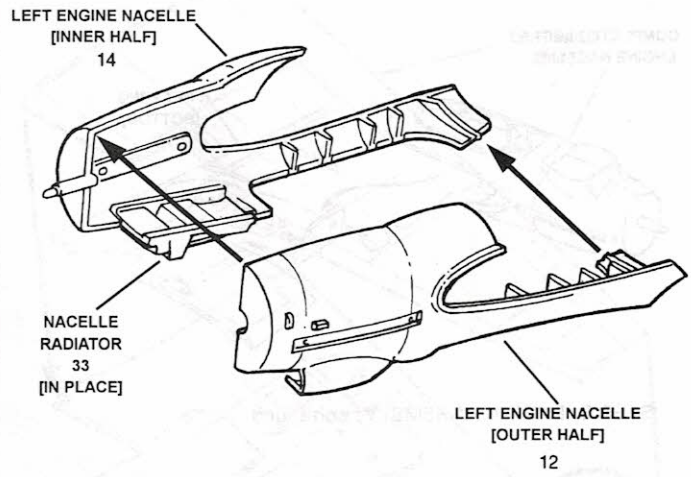
5. Some Bf 110s had pilot's armor added to the fuselage just forward of the windscreen. The full-size templates for these armor plates are provided in the drawing at right. You may add these to your model as an option if you desire. To do so, simply use the templates to cut the pieces from .002 sheet styrene, then glue them in place as illustrated.




**FULL SIZE TEMPLATES**

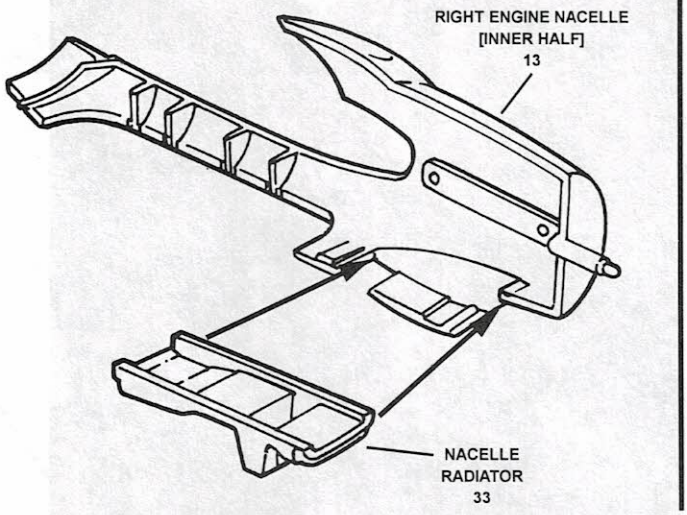
# STEP 3, ENGINE ASSEMBLY

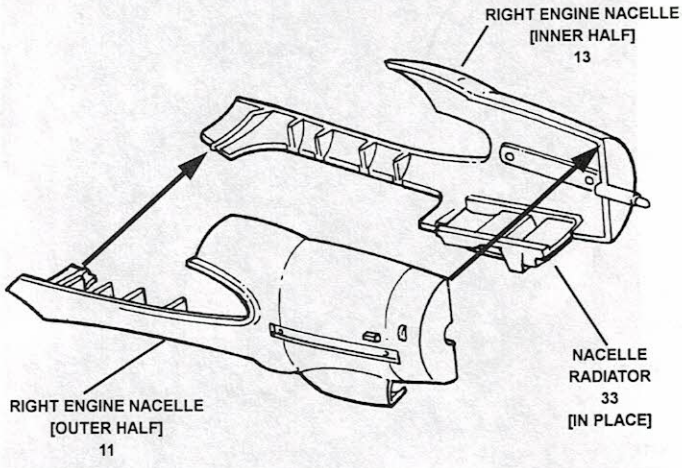



1. Cement a NACELLE RADIATOR (33) into the LEFT ENGINE NACELLE [INNER HALF] (14) as shown in the drawing at left.

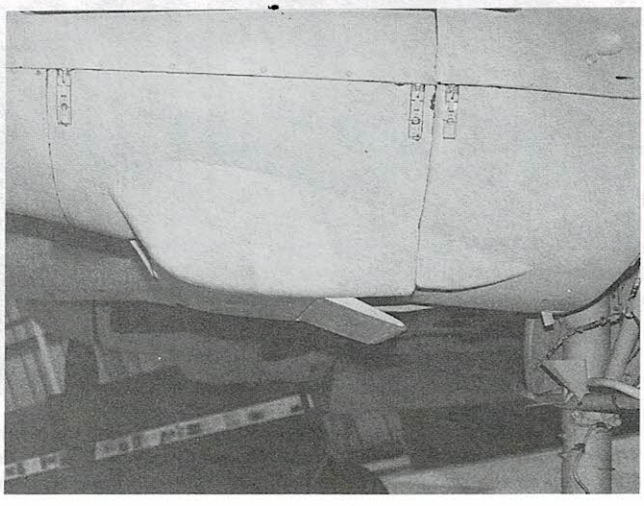
2. Glue the LEFT ENGINE NACELLE [INNER HALF] (14) to the LEFT ENGINE NACELLE [OUTER HALF] (12) as illustrated at right.



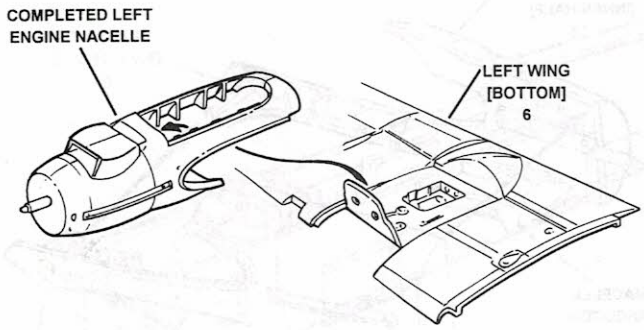



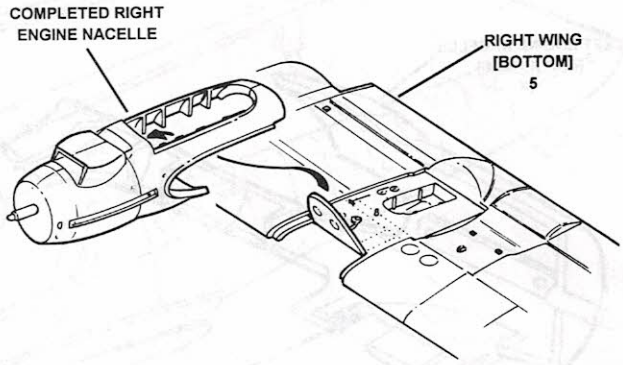

3. Cement a second NACELLE RADIATOR (33) into the RIGHT ENGINE NACELLE [INNER HALF] (13).

4. Glue the RIGHT ENGINE NACELLE [INNER HALF] (13) to the RIGHT ENGINE NACELLE [OUTER HALF] (11).



***Right: The nacelle radiator under the left engine can be seen here from the side. The exhaust door was in the open position when this photograph was taken.***



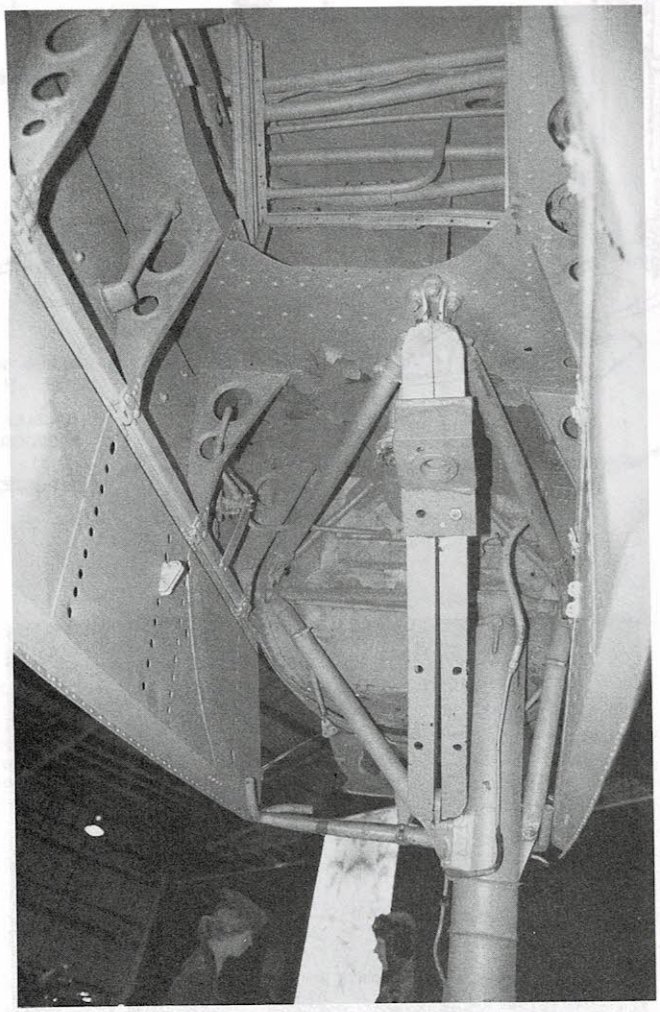






PAINTING TIP: Before gluing the nacelles in place on the wings, notice that the main landing gear wells are inside the nacelles. Paint the interior of the wheel wells Neutral Gray. Note that the top of each well is part of the wing structure, and this should also be painted Neutral Gray. The photographs below show the interiors of the main gear wells, and should prove helpful in painting and detailing the wells.

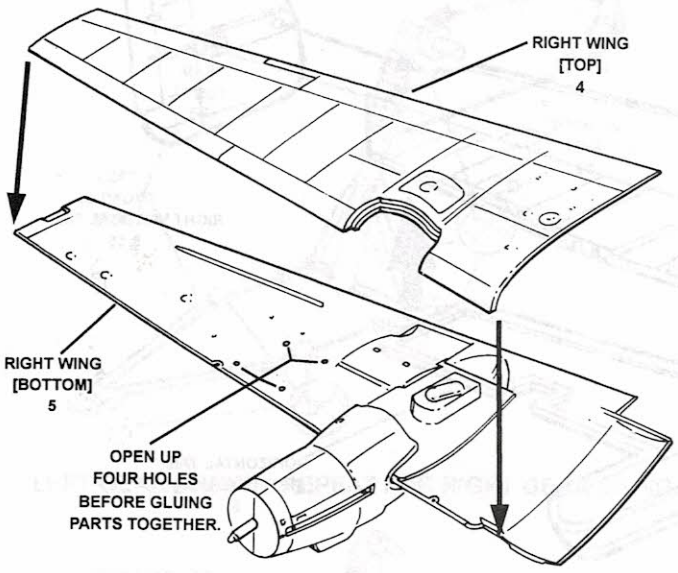
5. Glue the COMPLETED LEFT ENGINE NACELLE to the LEFT WING [BOTTOM] (6) as shown in the drawing at left.

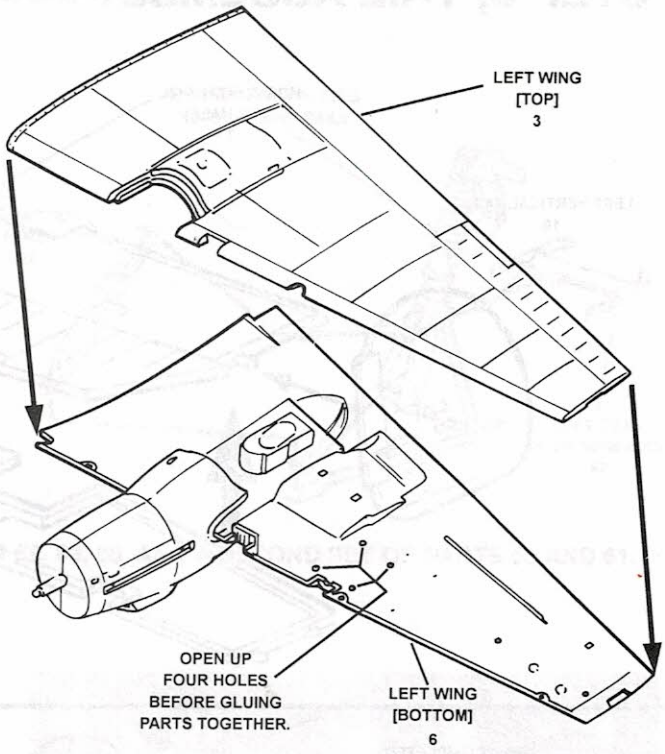
6. Cement the COMPLETED RIGHT ENGINE NACELLE to the RIGHT WING [BOTTOM] (5) as illustrated at right.



***The photograph at left looks forward and up into the left main landing gear well. The view at right looks up and aft into the same well. The interior of the wells was painted Neutral Gray which is a medium gray color. The insides of the gear doors are painted the same light gray as the underside of the wings. The right main landing gear well would be a mirror image of what is seen here.***

# STEP 4, WING ASSEMBLY

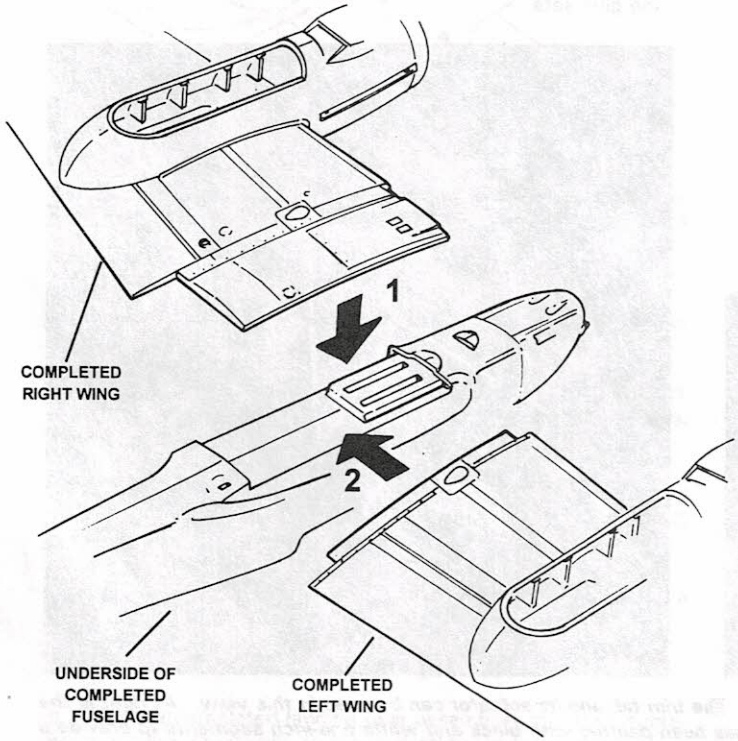



1. Use the point of a razor knife to open up the four holes in the RIGHT WING [BOTTOM] (5) and in the LEFT WING [BOTTOM] (6) as shown in the two drawings above.

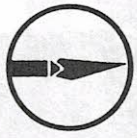
2. Glue the RIGHT WING [TOP] (4) to the RIGHT WING [BOTTOM] (5).

3. Cement the LEFT WING [TOP] (3) to the LEFT WING [BOTTOM] (6).



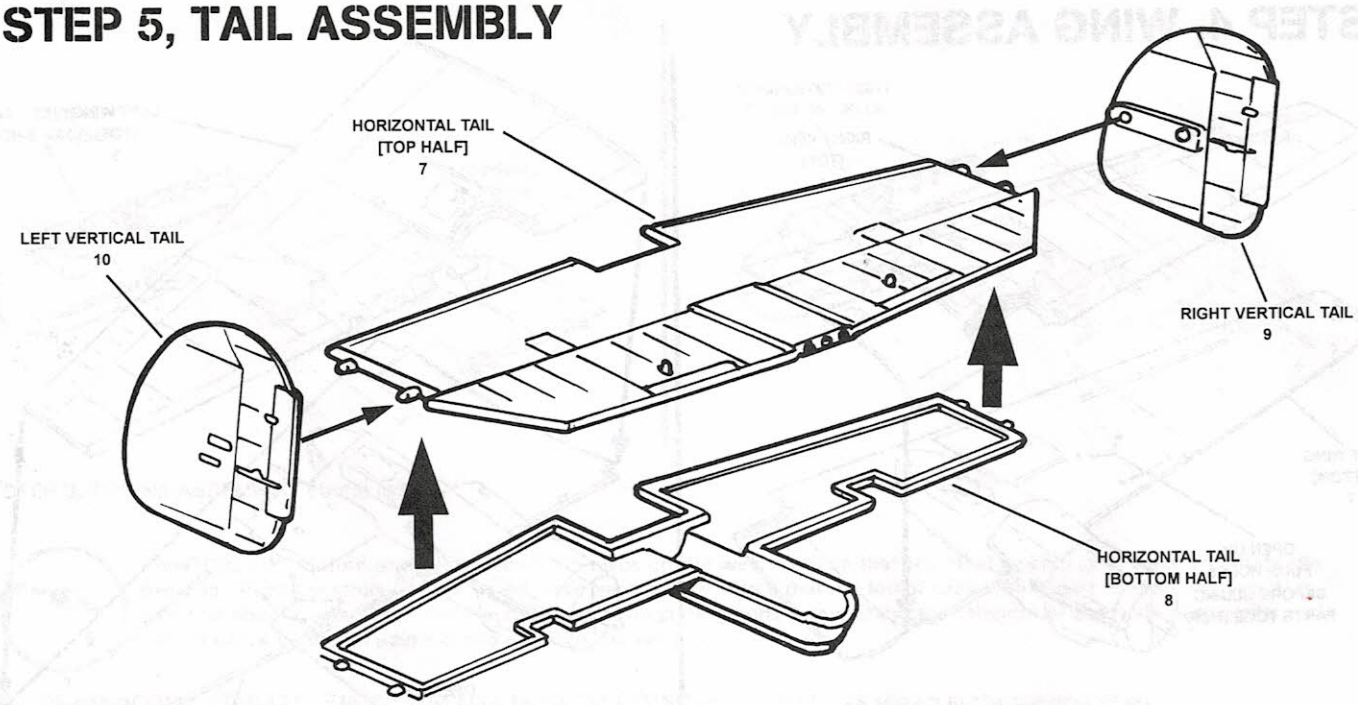

4. Carefully glue the COMPLETED RIGHT WING to the UNDERSIDE OF THE COMPLETED FUSELAGE.

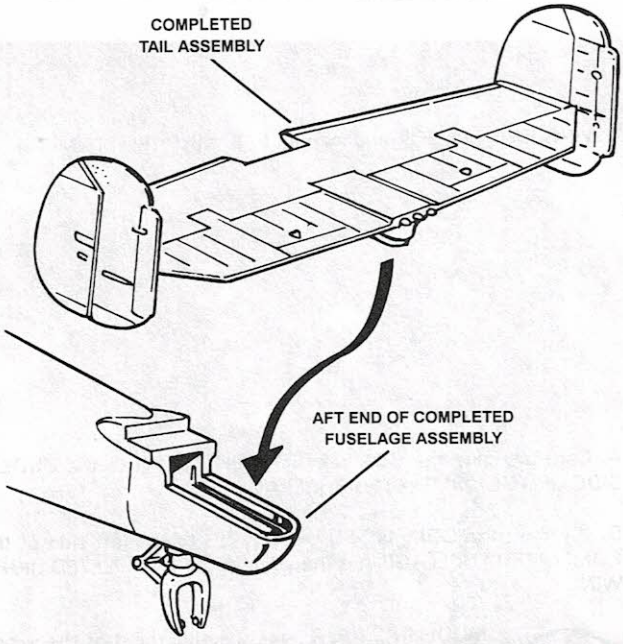
5. Cement the COMPLETED LEFT WING to the left side of the COMPLETED FUSELAGE and the edge of the COMPLETED RIGHT WING.



MODELING TIP: Check the alignment of the wings and fuselage carefully before the glue sets. Inspect the seams between the two fuselage halves and between the wings and the fuselage sides for any small cracks. If necessary, fill the cracks with modeling putty. Once the putty has hardened, sand it smooth. Spray a flat gray paint over the seams to act as a primer. Once the paint has dried, sand it with some very fine wet/dry modeling sandpaper. Check again for any small imperfections in the assembly, and repeat the process if necessary. Once you are satisfied, set the model aside while you continue with the tail assembly on the next page.

# STEP 5, TAIL ASSEMBLY



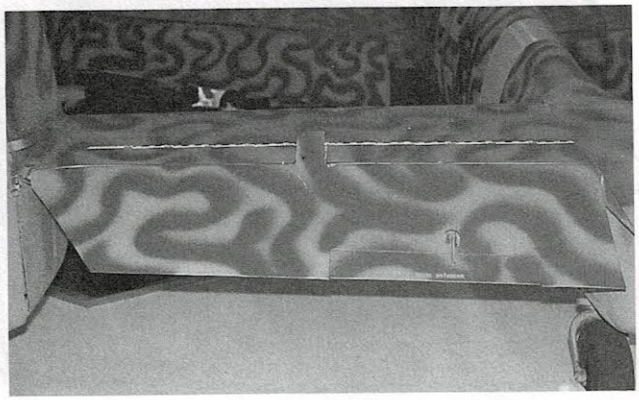



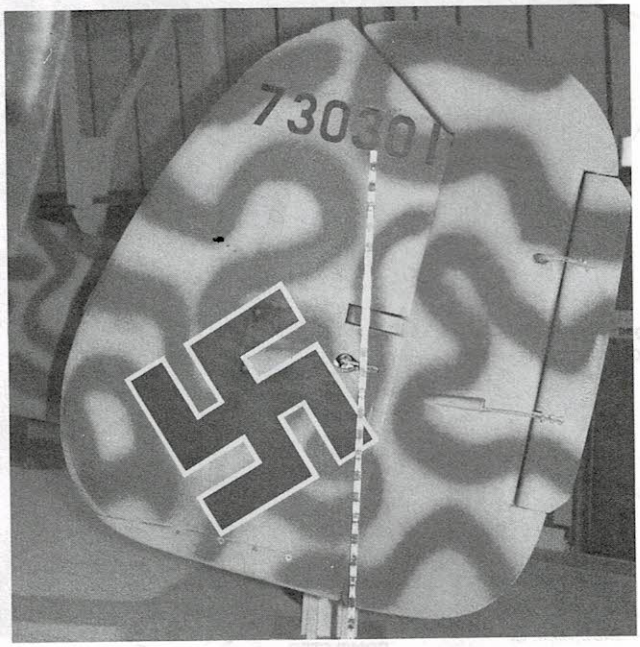

1. Glue the HORIZONTAL TAIL [TOP HALF] (7) to the HORIZONTAL TAIL [BOTTOM HALF] (8).

2. Glue the RIGHT VERTICAL TAIL (9) to the assembled horizontal tail.

3. Cement the LEFT VERTICAL TAIL (10) to the assembled horizontal tail.

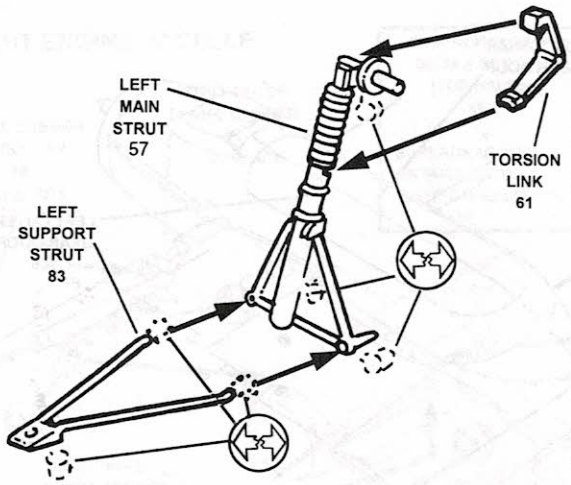
4. Glue the COMPLETED TAIL ASSEMBLY to the AFT END OF THE COMPLETED FUSELAGE ASSEMBLY. Check the alignment of both the horizontal and vertical tail surfaces carefully before the glue sets.

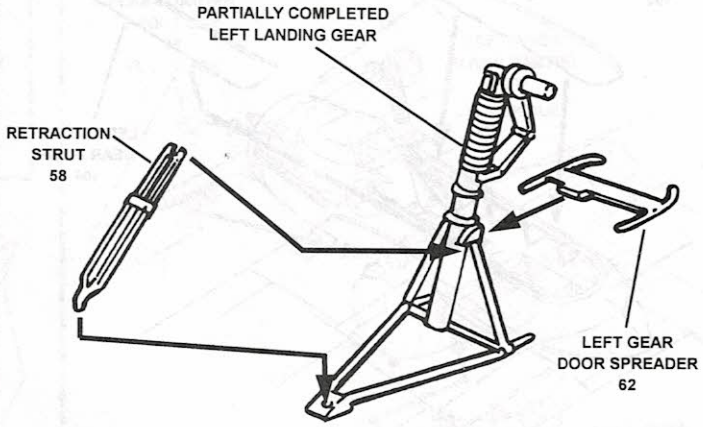




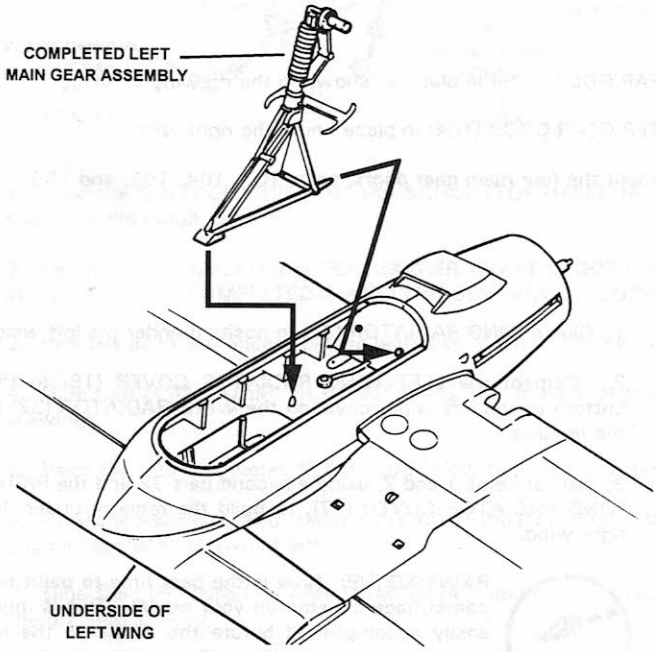
***At left is a photograph of the left elevator on the horizontal tail. The trim tab and its actuator can be seen in this view. At right is the left vertical tail. The marker in both pictures is a ruler which has been painted with black and white one-inch segments to provide a reference for size.***

# STEP 6, MAIN LANDING GEAR ASSEMBLY




**LEFT GEAR SHOWN, REPEAT FOR RIGHT GEAR USING PARTS 56, 83, 80, AND A SECOND SET OF PARTS 58 AND 61.**




NOTE: If you wish to build your model with the landing gear retracted, skip the items on this page, and continue with Item 9 on the next page. If you want to have your landing gear in the extended position, continue on with Item 1 immediately below.

1. Remove all of the excess plastic pieces from the landing gear parts as indicated.

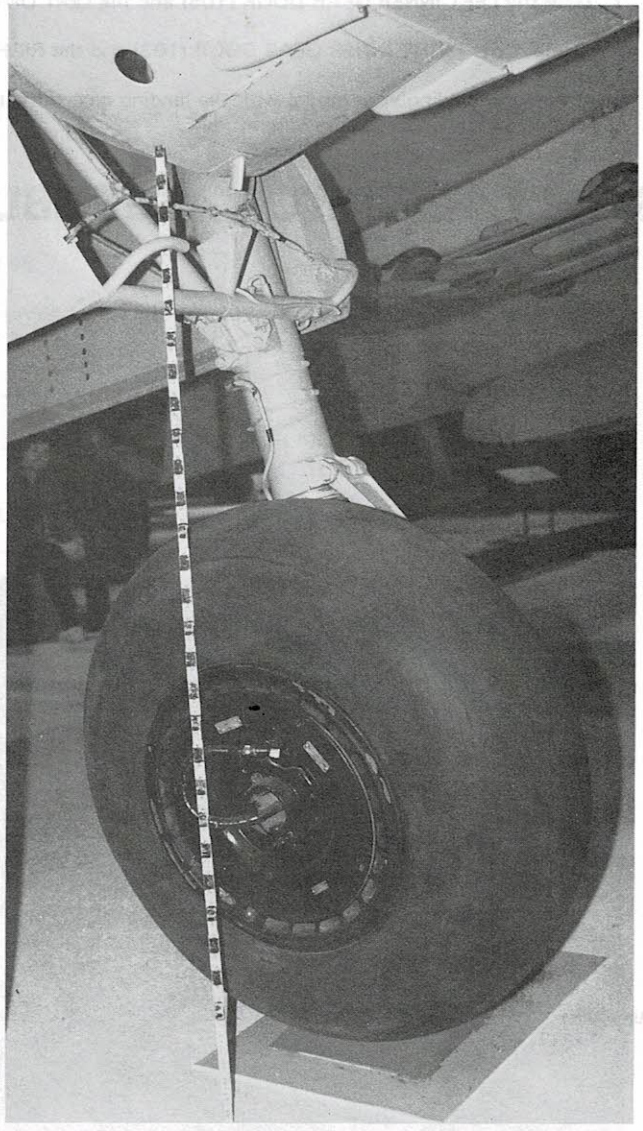
2. Build the left main landing gear by gluing the LEFT SUPPORT STRUT (83) and the TORSION LINK (61) to the LEFT MAIN STRUT (57) as shown in the top left drawing.

3. Glue the RETRACTION STRUT (58) and the LEFT GEAR DOOR SPREADER (62) to the PARTIALLY COMPLETED LEFT LANDING GEAR as indicated in the top right drawing.

4. Repeat items 2 and 3 above using parts 56, 84, 80, and a second set of parts 58 and 61 to build the right landing gear.

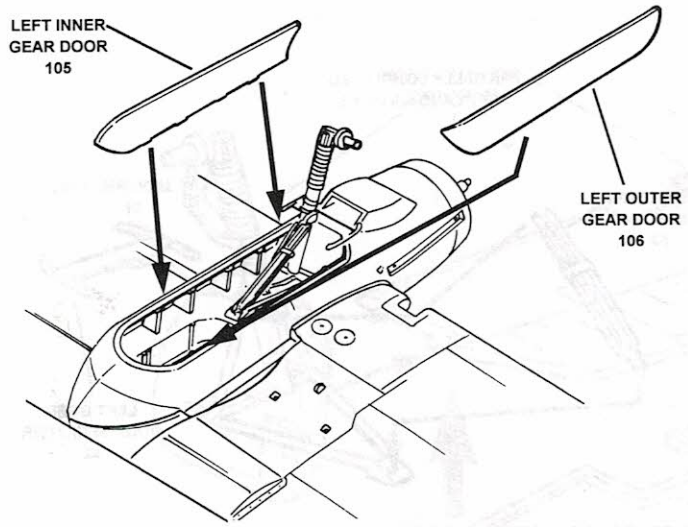
5. Paint the completed landing gear assemblies light gray.

6. Glue the completed landing gear assemblies into their appropriate landing gear wells on the undersides of the wings.

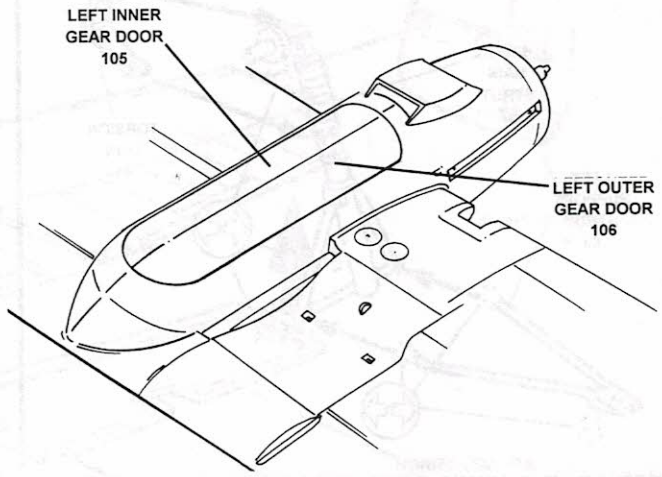


***Here is a look at the right main landing gear as viewed from the outside and slightly from the front.***

LANDING GEAR EXTENDED




LANDING GEAR RETRACTED




**LEFT SIDE SHOWN, REPEAT FOR RIGHT SIDE USING PARTS 103 AND 104.**

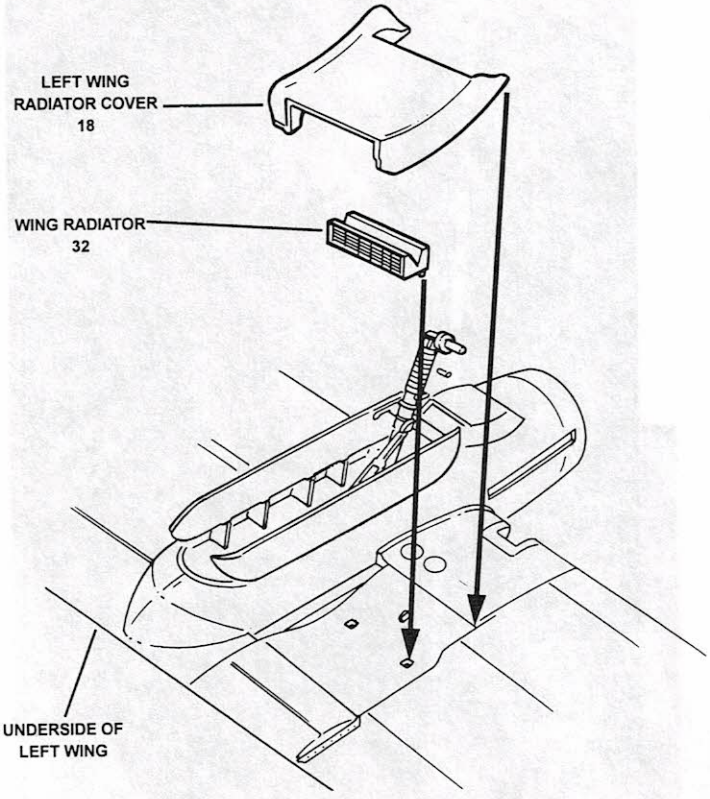
STEP 6, MAIN LANDING GEAR ASSEMBLY, continued

7. Glue the LEFT INNER GEAR DOOR (105) and the LEFT OUTER GEAR DOOR (106) in place as shown in the drawing at left.

8. Cement the RIGHT INNER GEAR DOOR (103) and the RIGHT OUTER GEAR DOOR (104) in place under the right wing.

9. If you are building your model with the landing gear retracted, cement the four main gear doors, parts 103, 104, 105, and 106, in position as shown in the drawing at right.

# STEP 7, RADIATOR ASSEMBLY



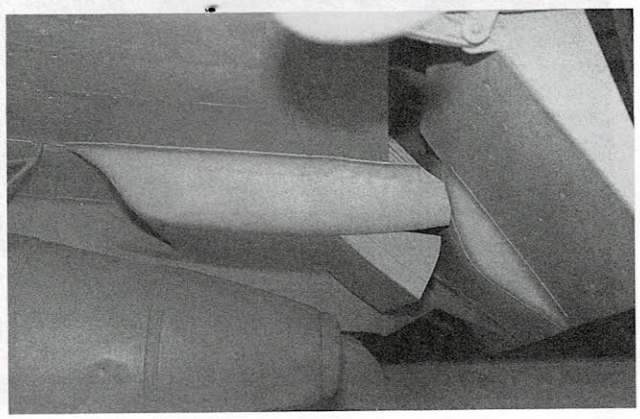

**REPEAT FOR RIGHT WING USING PART 17 AND A SECOND PART 32.**

1. Glue a WING RADIATOR (32) in position under the left wing.

2. Cement the LEFT WING RADIATOR COVER (18) to the bottom of the left wing, covering the WING RADIATOR (32) in the process.

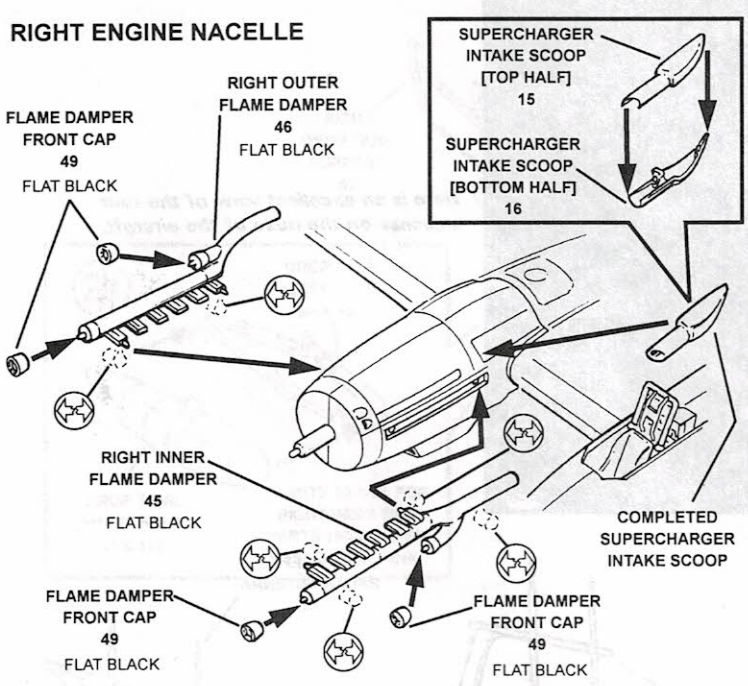
3. Repeat items 1 and 2, using a second part 32 and the RIGHT WING RADIATOR COVER (17), to build the radiator under the right wing.

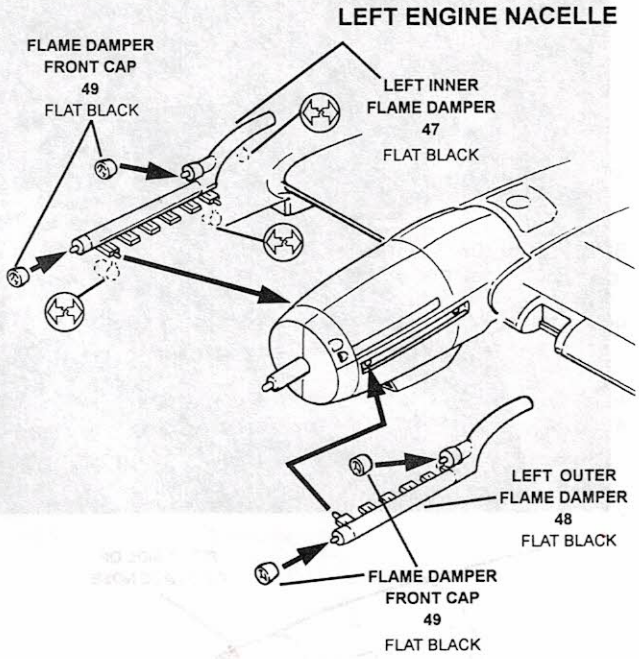
PAINTING TIP: Now is the best time to paint the camouflage scheme on your model. This is more easily accomplished before the details in the remaining steps are added. Be sure to check your model for cracks, and fill any with modeling putty. Sand smooth and prime before applying the paint. Once the paint has dried, continue with the assembly of the details in the remaining steps.



***This view shows the outboard side of the radiator under the left wing.***

# STEP 8, EXHAUST & SUPERCHARGER INTAKE ASSEMBLY




1. Glue the SUPERCHARGER INTAKE SCOOP [TOP HALF] (15) to the SUPERCHARGER INTAKE SCOOP [BOTTOM HALF] (16) as shown in the detail drawing.

2. Cement the COMPLETED SUPERCHARGER INTAKE SCOOP to the top left side of the right engine nacelle as indicated in the drawing at left. Paint the COMPLETED SUPERCHARGER INTAKE SCOOP the same camouflage colors at the surrounding nacelle.

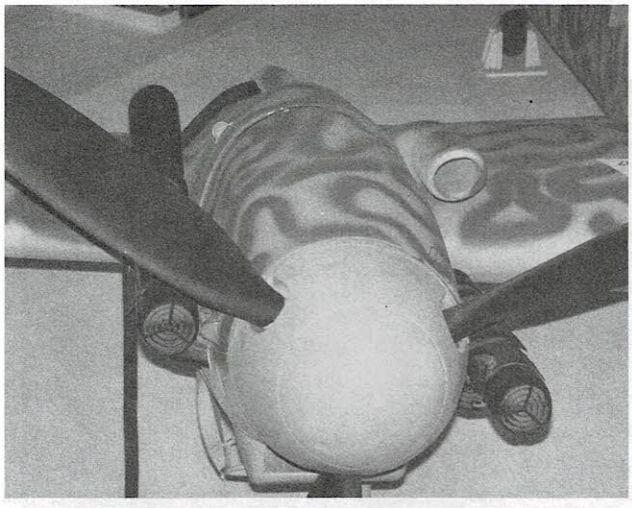
3. Remove all of the excess plastic pieces from parts 45, 46, 47, and 48.

4. Glue two FLAME DAMPER FRONT CAPS (49) to each of the four FLAME DAMPERS (45, 46, 47, and 48) as illustrated in both drawings.

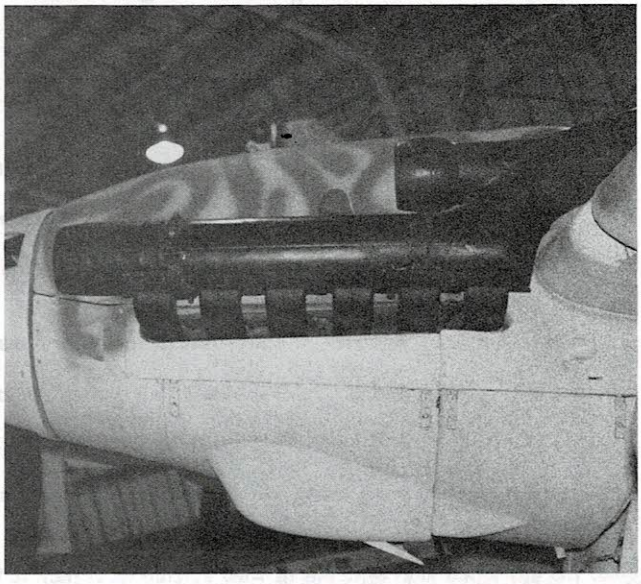
5. Paint the four completed FLAME DAMPERS flat black and set them aside to dry.

6. Once the paint has dried, cement the RIGHT INNER FLAME DAMPER (45) and the RIGHT OUTER FLAME DAMPER (46) to the right engine nacelle as shown at left.

7. Glue the LEFT INNER FLAME DAMPER (47) and the LEFT OUTER FLAME DAMPER (48) to the left engine nacelle as indicated in the drawing at right.

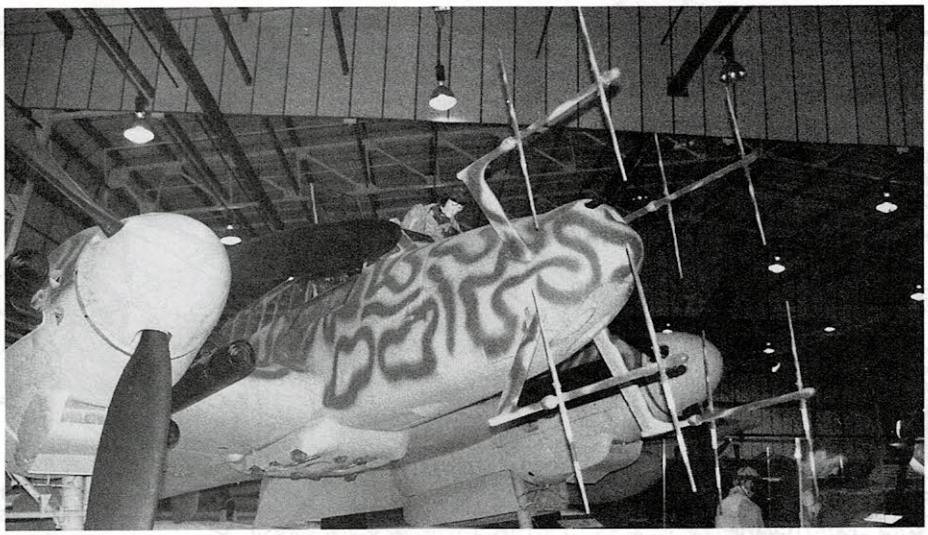


***In this front view of the right engine, note that the supercharger intake scoop is painted the same camouflage colors as the rest of the top of the aircraft. The fronts of both flame dampers are also visible.***

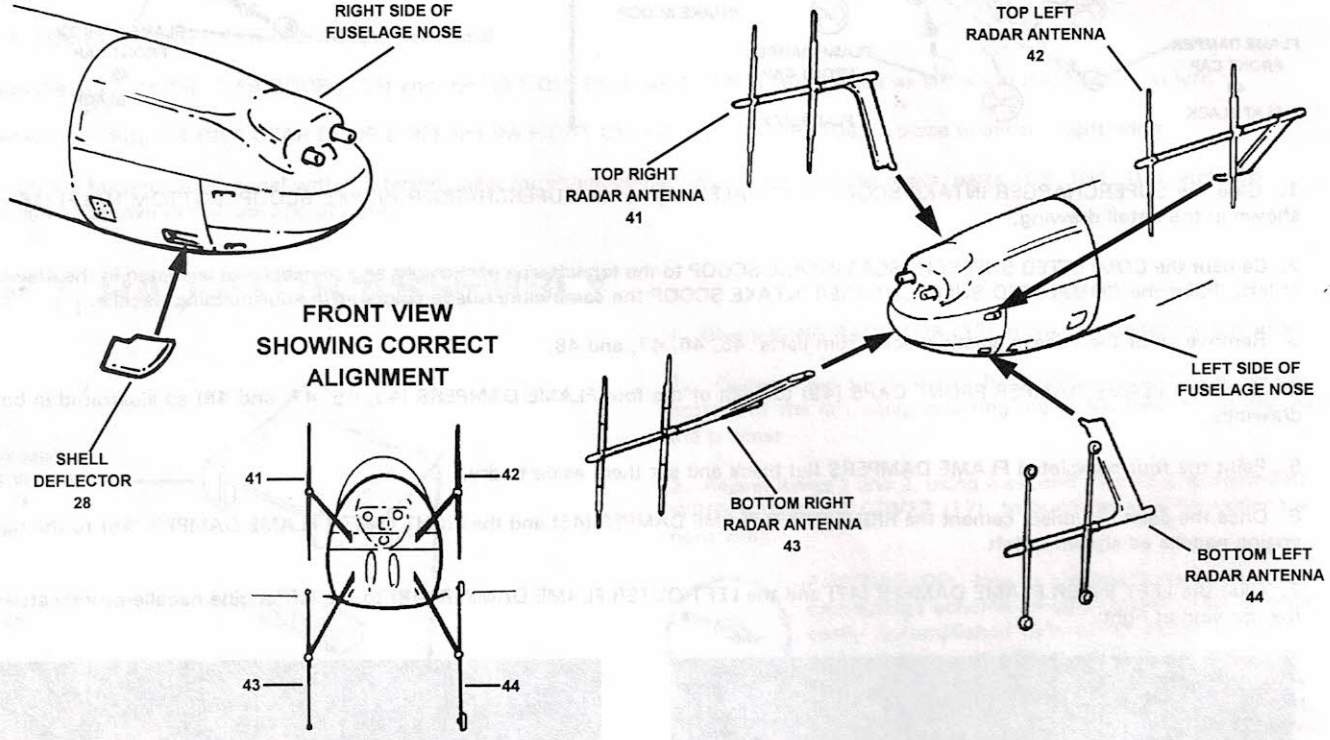


***The outer flame damper on the left engine is shown here.***

# STEP 9, ANTENNA ASSEMBLY



*Here is an excellent view of the four antennae on the nose of the aircraft.*




1. Glue the SHELL DEFLECTOR (28) to the lower right side of the nose as shown in the upper left drawing.

2. Cement the TOP RIGHT RADAR ANTENNA (41) to the upper right indention on the nose of the fuselage.

3. Glue the TOP LEFT RADAR ANTENNA (42) into place on the upper left side of the nose section. Check the alignment of the top two radar antennae carefully.

4. Attach the BOTTOM RIGHT RADAR ANTENNA (43) to the small indention in the lower right side of the nose.

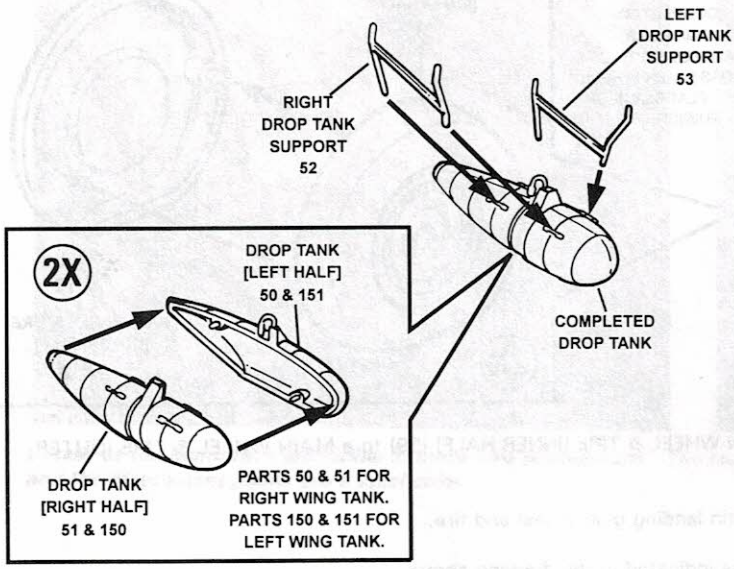
5. Cement the BOTTOM LEFT RADAR ANTENNA (44) to the lower left side of the nose.

6. Check the alignment of all four radar carefully again.

7. Paint the four radar antennae to match the camouflage scheme on the aircraft. Refer to the painting instructions at the end of this booklet.

IMPORTANT NOTE: Now that the radar antennae have been attached to the model, extra care will be needed when handling the model in order to avoid breaking these delicate parts.

# STEP 10, DROP TANK ASSEMBLY



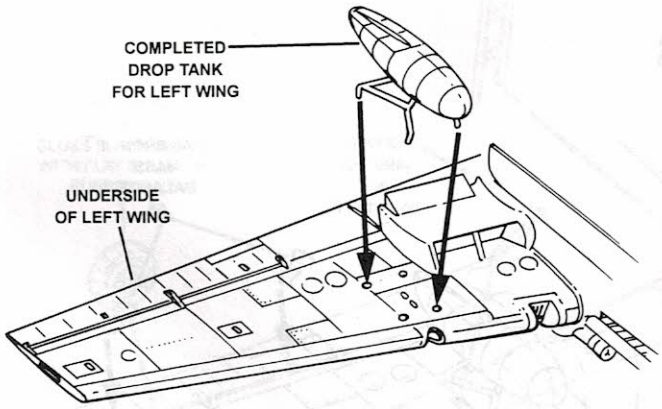

1. Glue the DROP TANK [LEFT HALF] (50) to the DROP TANK [RIGHT HALF] (51) to build the drop tank for the right wing.

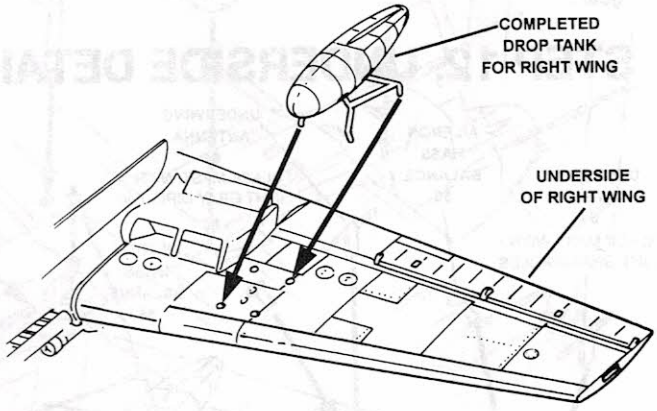
2. Cement the DROP TANK [RIGHT HALF] (150) to the DROP TANK [LEFT HALF] (151) to make the drop tank for the left wing.

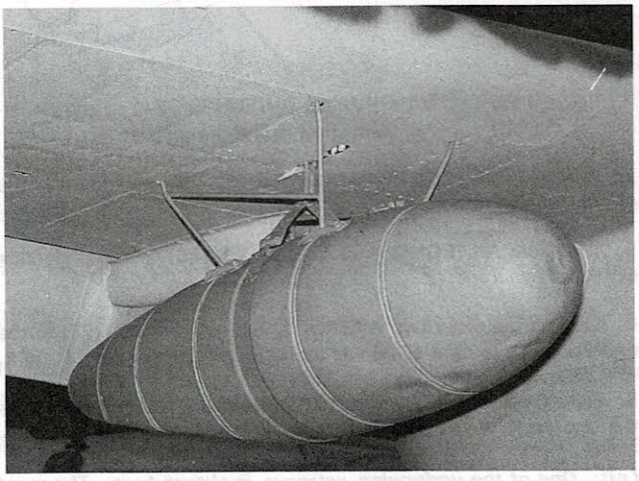
3. Glue a RIGHT DROP TANK SUPPORT (52) and a LEFT DROP TANK SUPPORT (53) to each COMPLETED DROP TANK.

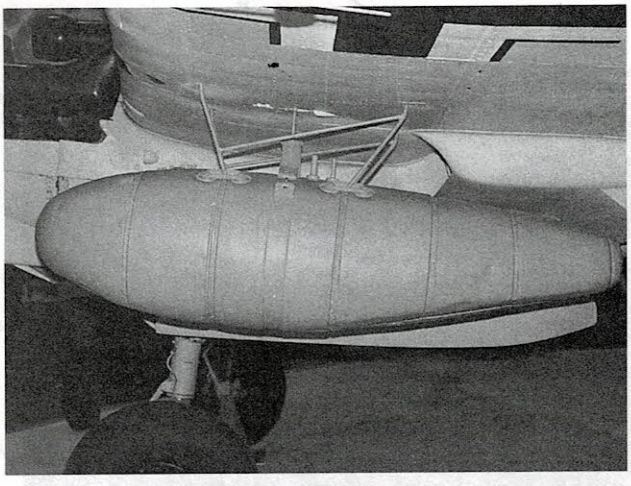
4. Glue the two COMPLETED DROP TANKS under the wings of the model. The supports are glued into the four holes under each wing that were opened up in Step 4.

5. Paint the drop tanks to match the underside of the wings.



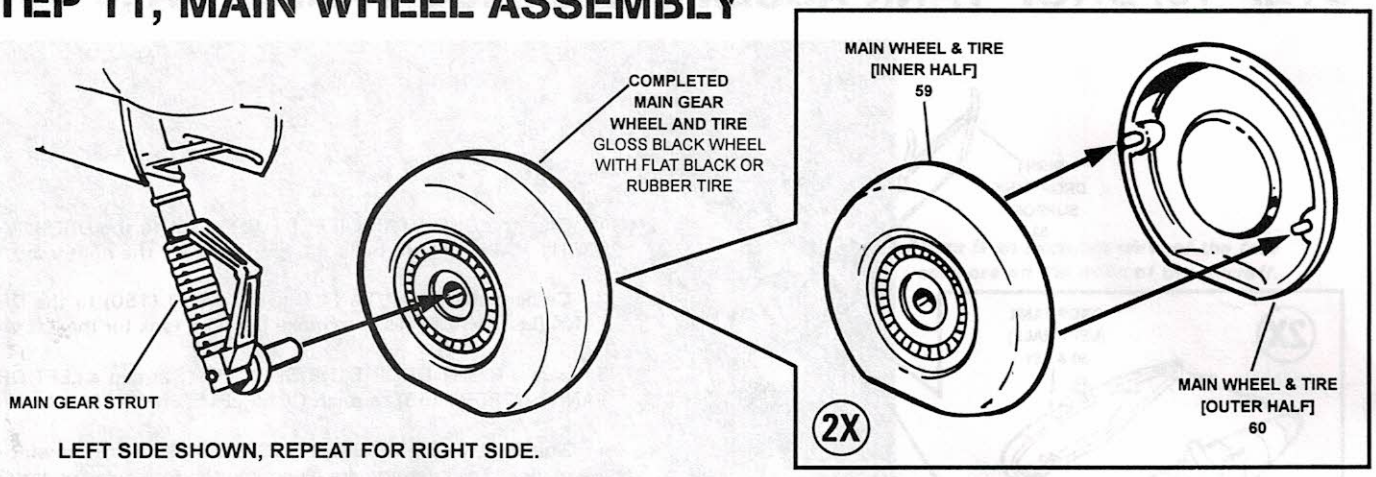





***The photograph at left shows the drop tank under the right wing, and at right is an outside view of the drop tank under the left wing. The framework of the supports and the fuel line connections to the wings are visible.***

# STEP 11, MAIN WHEEL ASSEMBLY




**LEFT SIDE SHOWN, REPEAT FOR RIGHT SIDE.**

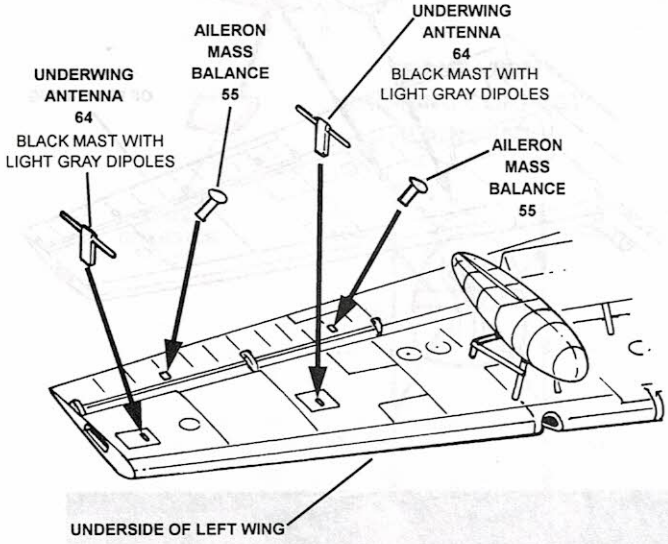
1. Make one main landing gear wheel and tire by gluing a MAIN WHEEL & TIRE [INNER HALF] (59) to a MAIN WHEEL & TIRE [OUTER HALF] (60).

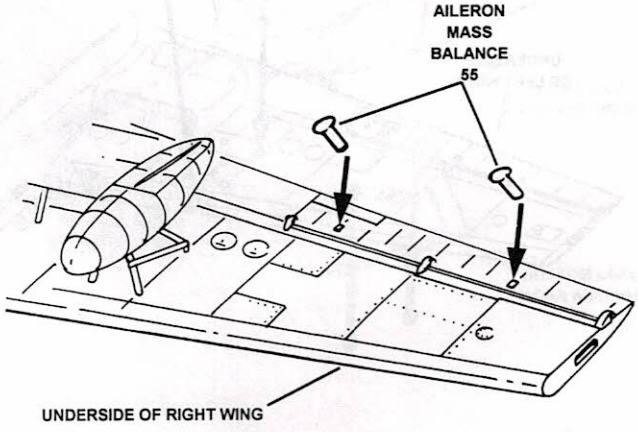
2. Use a second set of parts 59 and 60 to make a second main landing gear wheel and tire.

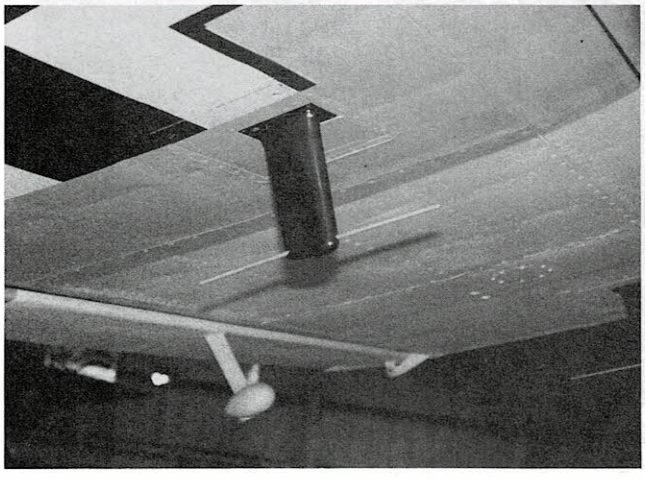
3. Paint the COMPLETED MAIN GEAR WHEELS AND TIRES as indicated in the drawing above.

4. Once the paint has dried, glue the two COMPLETED MAIN GEAR WHEELS AND TIRES to the MAIN GEAR STRUTS. Check the alignment carefully, and make sure that the flattened part of the tire sits squarely on the ground when the model is resting on its landing gear.

# STEP 12, UNDERSIDE DETAILS



1. Cement the two UNDERWING ANTENNAE (64) to the underside of the left wing as illustrated in the drawing at left.

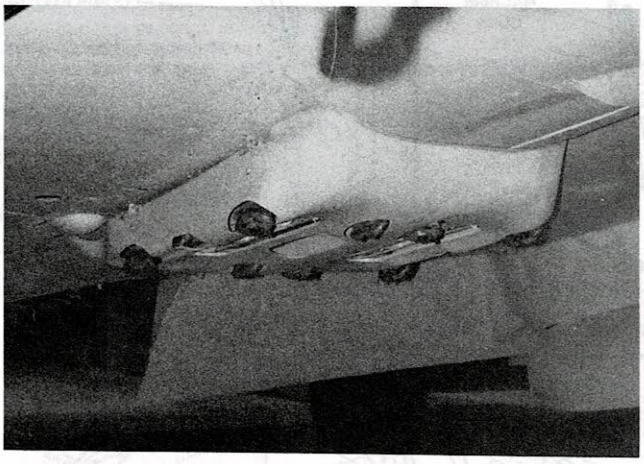
2. Paint the two UNDERWING ANTENNAE (64) as shown in the photograph at left.

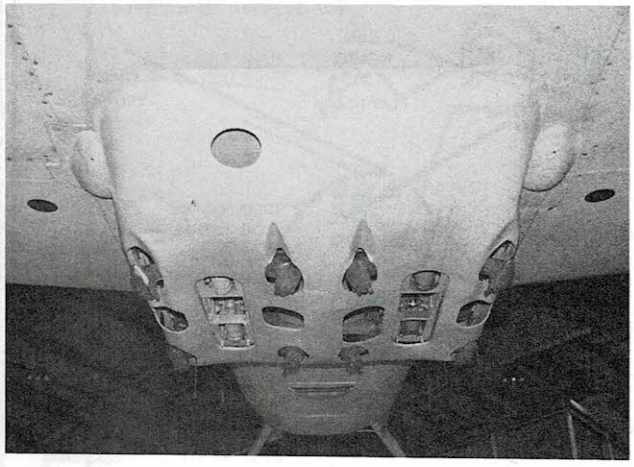
3. Glue two AILERON MASS BALANCES (55) to the underside of the left aileron.

4. Cement the other two AILERON MASS BALANCES (55) to the underside of the right aileron as indicated in the drawing at right.

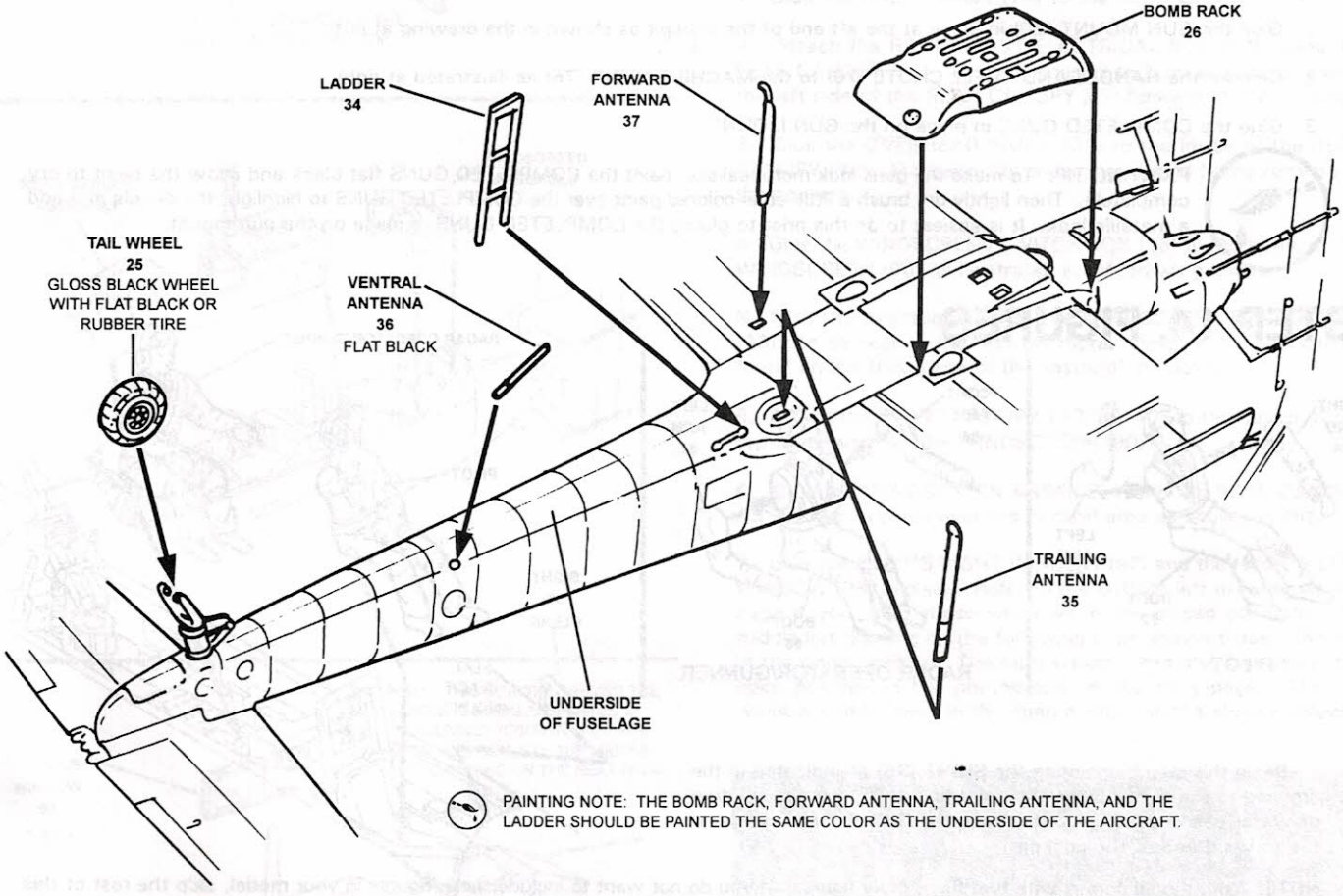
5. Paint the four AILERON MASS BALANCES the same color as the underside of the aileron where they are located.

***Left: One of the underwing antennae is shown here. The mast is flat black, and the dipoles are light gray. One of the aileron mass balances can be seen in the background.***





***Details of the bomb rack are visible in these two photographs. The rack is painted the same color as the underside of the fuselage, and the attachment points are a steel color.***




STEP 12, UNDERSIDE DETAILS, continued

6. Paint the TAIL WHEEL (25) as indicated. Once the paint has dried, glue the part in place.

7. Cement the VENTRAL ANTENNA (36) to the underside of the fuselage. Paint this part flat black.

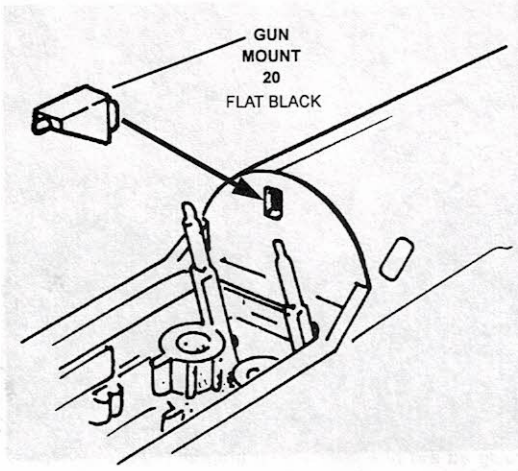
8. Attach the BOMB RACK (26) to its location under the fuselage. Paint this part as described in the caption for the photographs above.

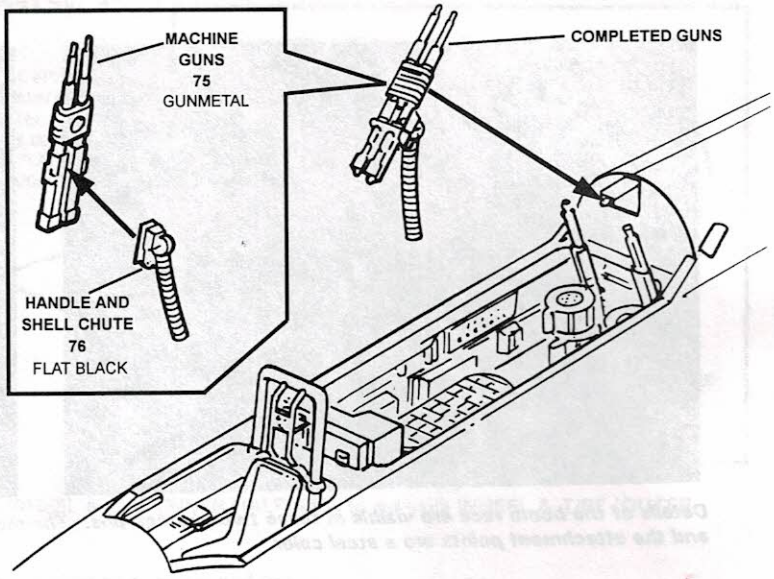
9. Glue the TRAILING ANTENNA (35) and the FORWARD ANTENNA (37) to their locations under the fuselage and wing.

10. Cement the LADDER (34) in place under the fuselage.

11. Paint parts 34, 35, and 37 to match the underside of the aircraft where they were located.

# STEP 13, GUN ASSEMBLY



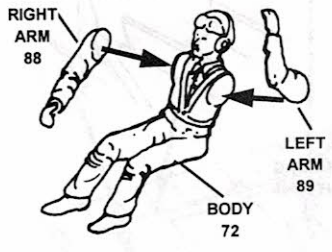




PAINT ALL PARTS BEFORE ASSEMBLY.

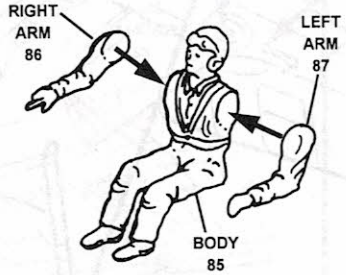
1. Glue the GUN MOUNT (20) in place at the aft end of the cockpit as shown in the drawing at left.
2. Cement the HANDLE AND SHELL CHUTE (76) to the MACHINE GUNS (75) as illustrated at right.
3. Glue the COMPLETED GUNS in place on the GUN MOUNT.

PAINTING TIP: To make the guns look more realistic, paint the COMPLETED GUNS flat black and allow the paint to dry completely. Then lightly dry brush a little steel colored paint over the COMPLETED GUNS to highlight the details and add a metallic look. It is easiest to do this prior to gluing the COMPLETED GUNS in place on the gun mount.

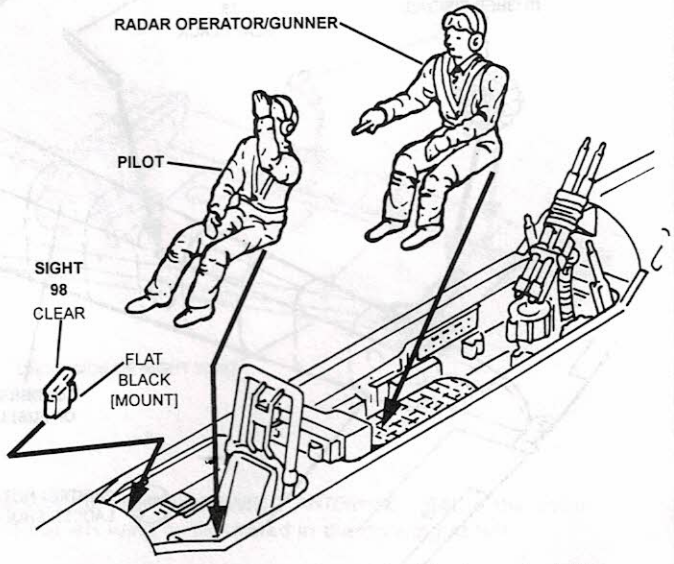
# STEP 14, FIGURES




PILOT




RADAR OPERATOR/GUNNER




1. Begin this step by painting the SIGHT (98) as indicated in the drawing to the right. Once the paint has dried, use a small drop of water-based white glue to attach the SIGHT (98) in place at the forward end of the cockpit.

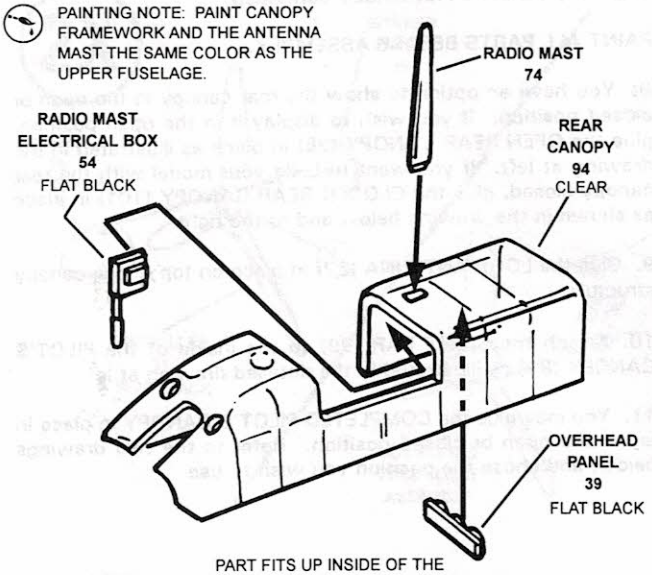
NOTE: Your model comes with two flight crew figures. If you do not want to include these figures in your model, skip the rest of this step. If you do want to add the figures, continue on with the remaining items in this step.

2. Make the pilot by gluing the RIGHT ARM (88) and the LEFT ARM (89) to the BODY (72).
3. Make the radar operator/gunner by cementing the RIGHT ARM (86) and the LEFT ARM (87) to the BODY (85).
4. Paint the two figures as indicated in the painting notes below.
5. Glue the two figures in place inside the cockpit.

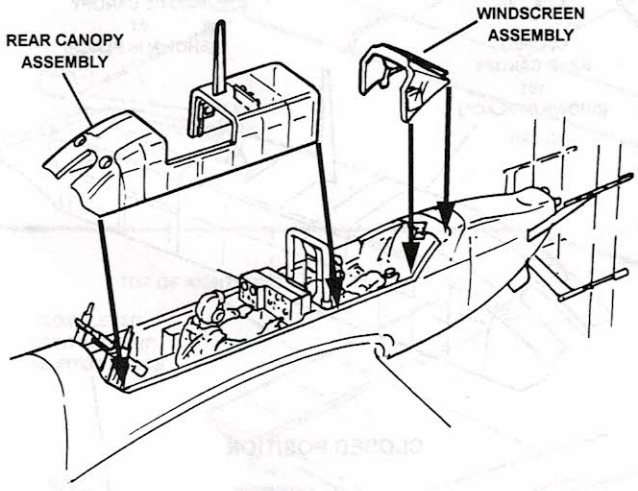
PAINTING NOTES: The leather flying jackets varied from blue-gray to black. The standard leather flying cap was dark brown or black. In winter, the flying suits were tan, dark blue, or dark gray with a cotton or fleece lining. The summer flying suit included tan overalls over the standard flight uniform. The boots were usually black leather with a white fleece lining. The parachute was light gray with off-white straps, while the life vest was yellow to include the straps.

# STEP 15, CANOPY ASSEMBLY

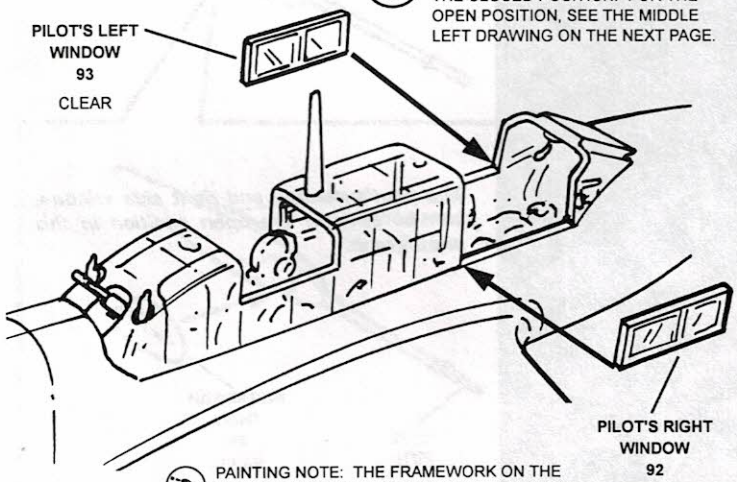
PAINTING NOTE: PAINT CANOPY FRAMEWORK AND THE ANTENNA MAST THE SAME COLOR AS THE UPPER FUSELAGE.




PART FITS UP INSIDE OF THE REAR CANOPY AT THE TOP.

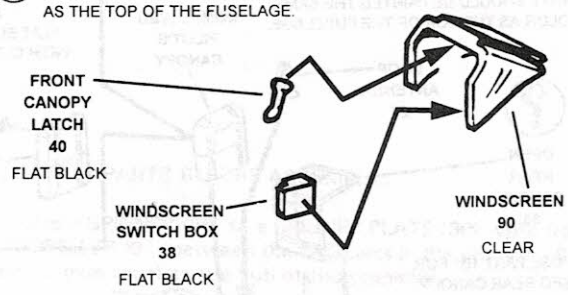



NOTE: THIS DRAWING SHOWS THE WINDOWS BEING ASSEMBLED IN THE CLOSED POSITION. FOR THE OPEN POSITION, SEE THE MIDDLE LEFT DRAWING ON THE NEXT PAGE.




PAINTING NOTE: THE FRAMEWORK ON THE PILOT'S WINDOWS SHOULD BE PAINTED THE SAME COLOR AS THE TOP OF THE FUSELAGE.

PAINTING NOTE: PAINT THE FRAMEWORK ON THE WINDSHIELD THE SAME COLOR AS THE TOP OF THE FUSELAGE.




PAINT ALL PARTS BEFORE ASSEMBLY.

MODELING TIP: Use a water-based white glue when working with all clear parts. This applies when gray plastic parts are attached to the clear parts. If any glue gets on the clear parts, simply wash it off with water before it dries.

1. Glue the RADIO MAST (74) to the REAR CANOPY (94).

2. Attach the RADIO MAST ELECTRICAL BOX (54) inside the REAR CANOPY (94). The part goes as high up as possible inside the left side of the REAR CANOPY just forward of the opening.

3. Glue the OVERHEAD PANEL (39) to the inside of the REAR CANOPY (94). The panel fits under the second frame forward of the opening.

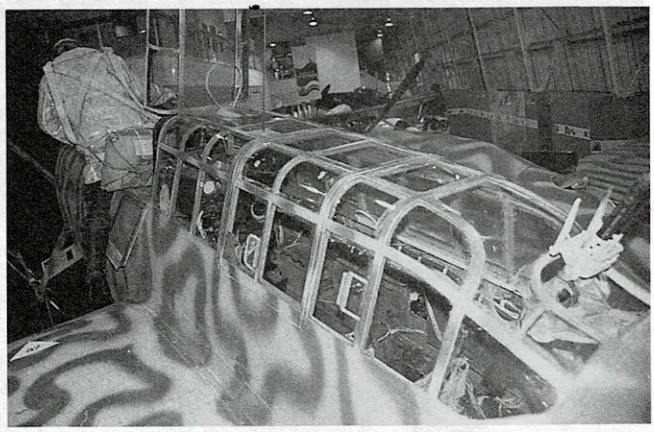
4. Glue the WINDSCREEN SWITCH BOX (38) to the inside of the WINDSCREEN (90) as illustrated in the drawing above.

NOTE: The exact location of the WINDSCREEN SWITCH BOX (38) can be seen in the first photograph in Step 1. This can be found on the third page of this instruction booklet.

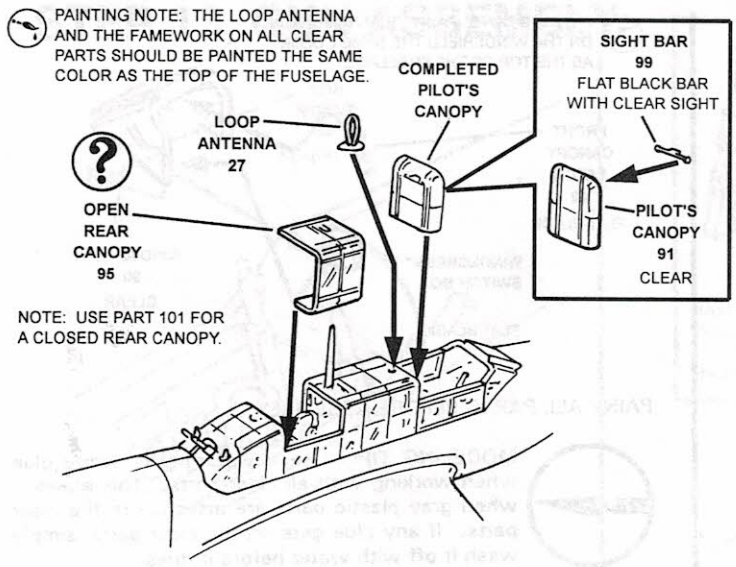
5. Attach the FRONT CANOPY LATCH (40) to the center of the top framework on the WINDSCREEN (90).

6. Glue the WINDSCREEN ASSEMBLY and the REAR CANOPY ASSEMBLY in place over the cockpit area as shown at left.

7. Glue the PILOT'S RIGHT WINDOW (92) and the PILOT'S LEFT WINDOW (93) in place. Refer to the bottom left drawing on this page if you want these windows in the closed position. The middle left drawing on the following page shows these windows in the open position. The right window can also be seen in the open position in the photograph on the next page. The left window can be seen in the open position in the picture below.



***Here is an overall look at the large canopy on the Bf 110G-4. Note the open left window under the pilot figure.***




STEP 15, CANOPY ASSEMBLY continued

PAINT ALL PARTS BEFORE ASSEMBLY.

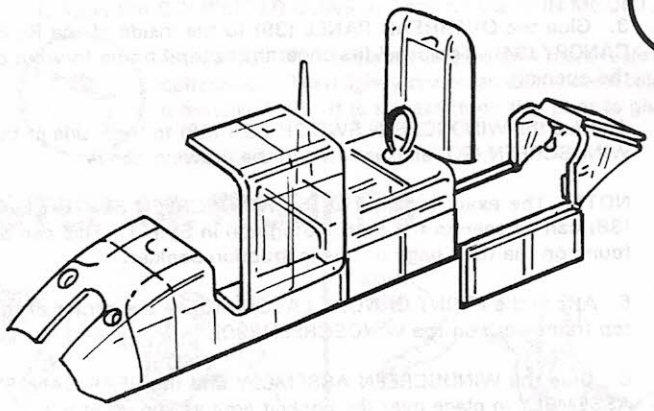
8. You have an option to show the rear canopy in the open or closed position. If you wish to display it in the open position, glue the OPEN REAR CANOPY (95) in place as illustrated in the drawing at left. If you want to build your model with the rear canopy closed, glue the CLOSED REAR CANOPY (101) in place as shown in the drawing below and to the right.

9. Glue the LOOP ANTENNA (27) in place on top of the canopy structure.

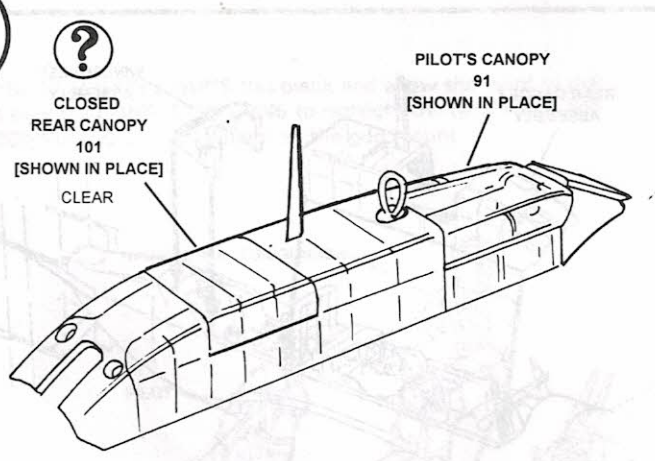
10. Attach the SIGHT BAR (99) to the inside of the PILOT'S CANOPY (91) as illustrated in the detailed drawing at left.

11. You may glue the COMPLETED PILOT'S CANOPY in place in either the open or closed position. Refer to the two drawings below, and chose the position you wish to use.

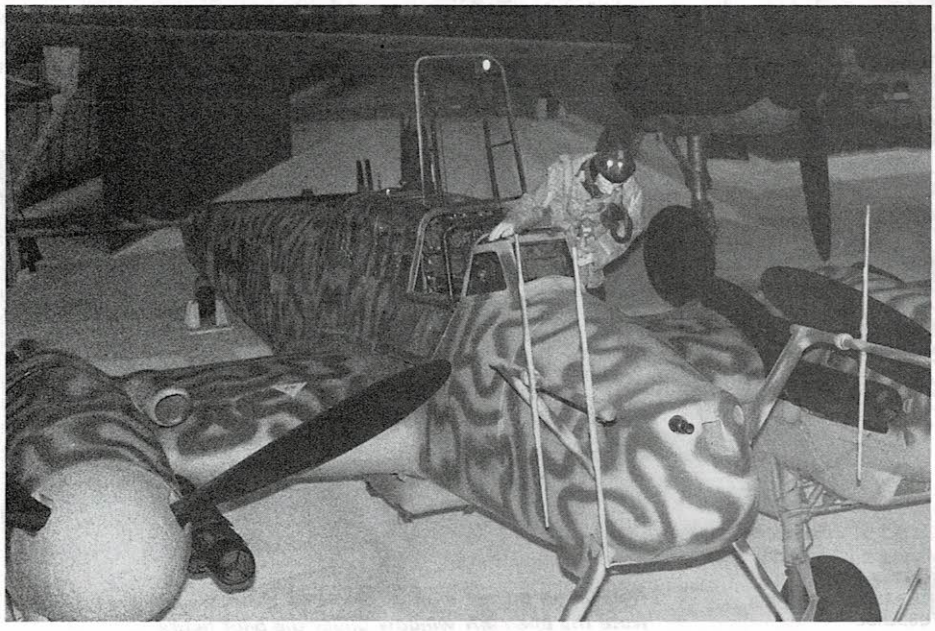
THIS DRAWING SHOWS THE CORRECT POSITION OF THE PARTS IF THE CANOPIES ARE DISPLAYED IN THE OPEN POSITION.



**OPEN POSITION**

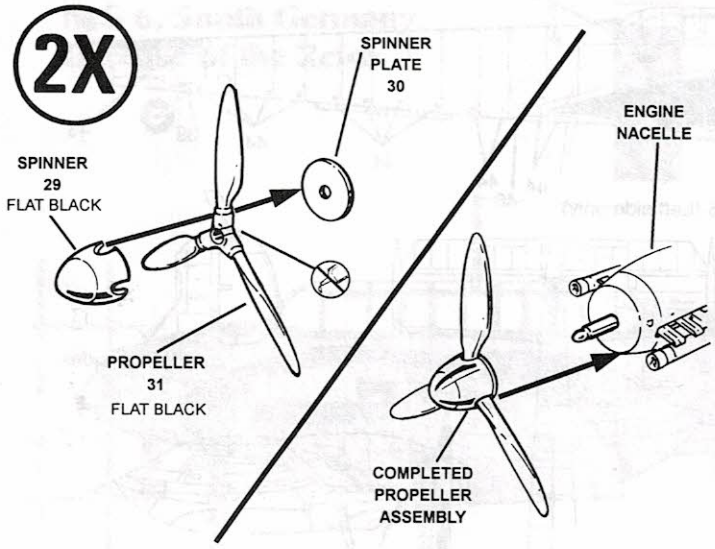



**CLOSED POSITION**



***The pilot's canopy and right side window can be seen in the open position in this photograph.***

# STEP 16, PROPELLER ASSEMBLY



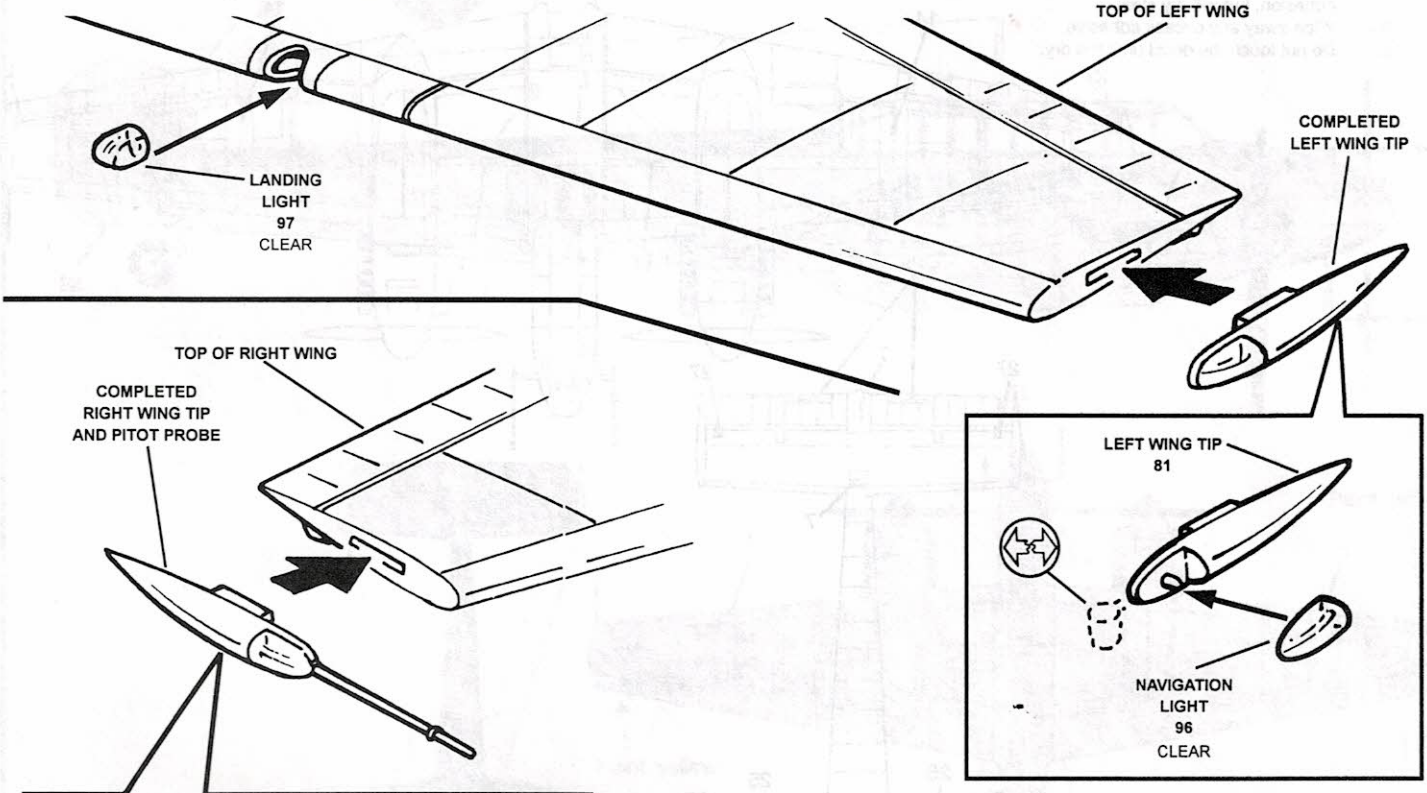

PAINT ALL PARTS BEFORE ASSEMBLY.

1. Glue a SPINNER (29) to a SPINNER PLATE (30) while trapping a PROPELLER (31) between the two parts in the process. Be sure that no glue touches the hub of the propeller.

2. Repeat Item 1 above using another set of parts to make a second propeller assembly.

3. Press, DO NOT CEMENT, a COMPLETED PROPELLER ASSEMBLY onto the shaft at the front of each ENGINE NACELLE.

# STEP 17, FINAL WING ASSEMBLY




PAINT ALL PARTS AFTER ASSEMBLY.

1. Using a small amount of water-based white glue, attach the LANDING LIGHT (97) to the leading edge of the left wing.

2. Remove the excess plastic from the LEFT WING TIP (81).

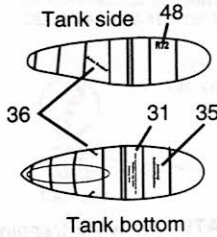
2. Using the water-based white glue, attach a NAVIGATION LIGHT (96) to the LEFT WING TIP (81) and a second NAVIGATION LIGHT (96) to the RIGHT WING TIP AND PITOT PROBE (82).

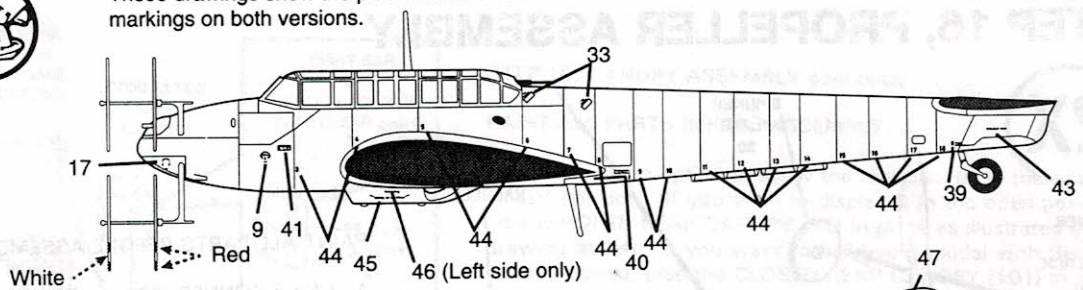
3. Using regular plastic modeling cement, glue the COMPLETED LEFT WING TIP and the COMPLETED RIGHT WING TIP to the tips of the wings.

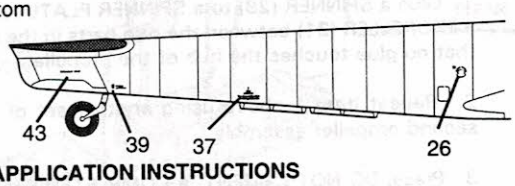
4. Paint the wing tips to match the camouflage on the rest of the wings, but do not let any paint get on the navigation lights.

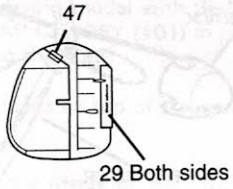
PRO MODELER
by Revell-Monogram

These drawings show the placement of the common markings on both versions.



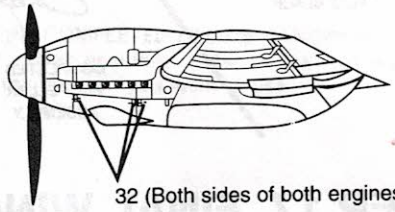




## DECAL APPLICATION INSTRUCTIONS

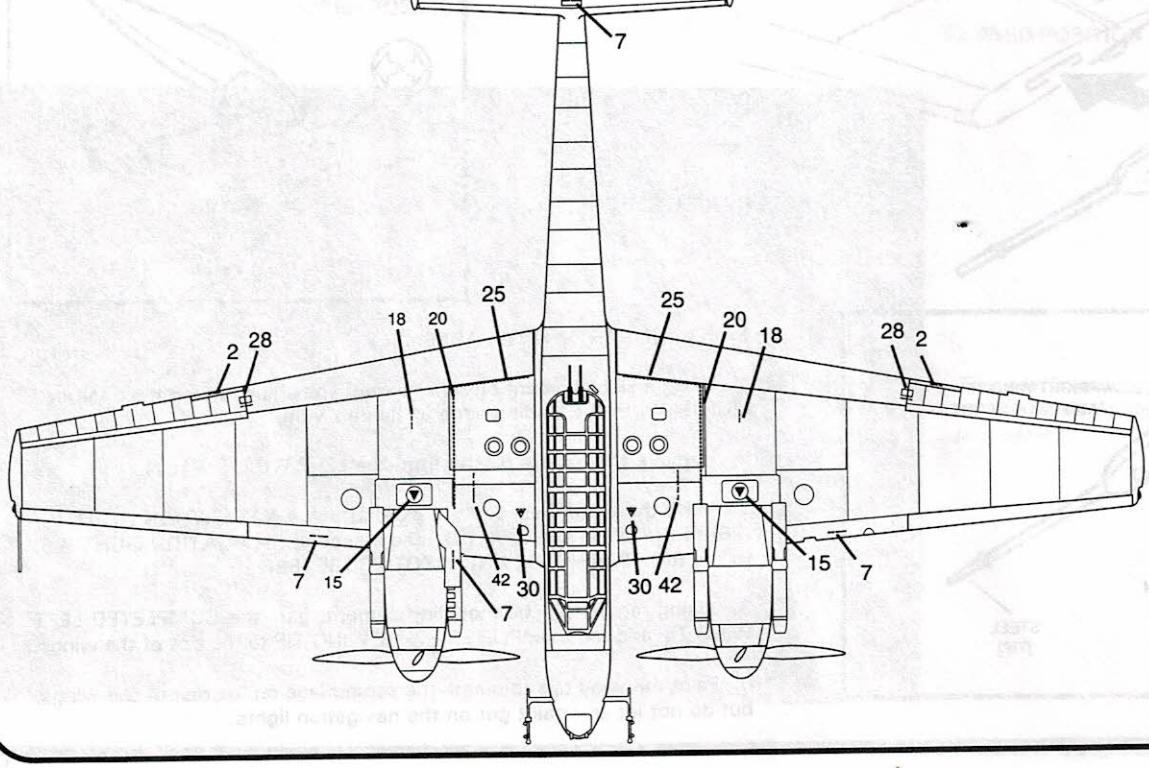
1.) Wash plastic parts in mild detergent solution, then rinse and let dry.
2.) Cut the desired decal from the sheet.
3.) Dip the decal in water for a few seconds.
4.) Place the wet decal on a paper towel.
5.) Wait until the decal is movable on its backing paper.
6.) Place the decal in position on the model with its face up, then slide the backing away.
7.) Press out any air bubbles with a soft damp cloth.
8.) The milkiness that may appear is for better decal adhesion, but will dry clear.
9.) Wipe away any excess adhesive.
10.) Do not touch the decal until it is dry.









**MESSERSCHMITT Bf 110G-4,**
**NJG 6, South Germany**
**Defense of the Reich**

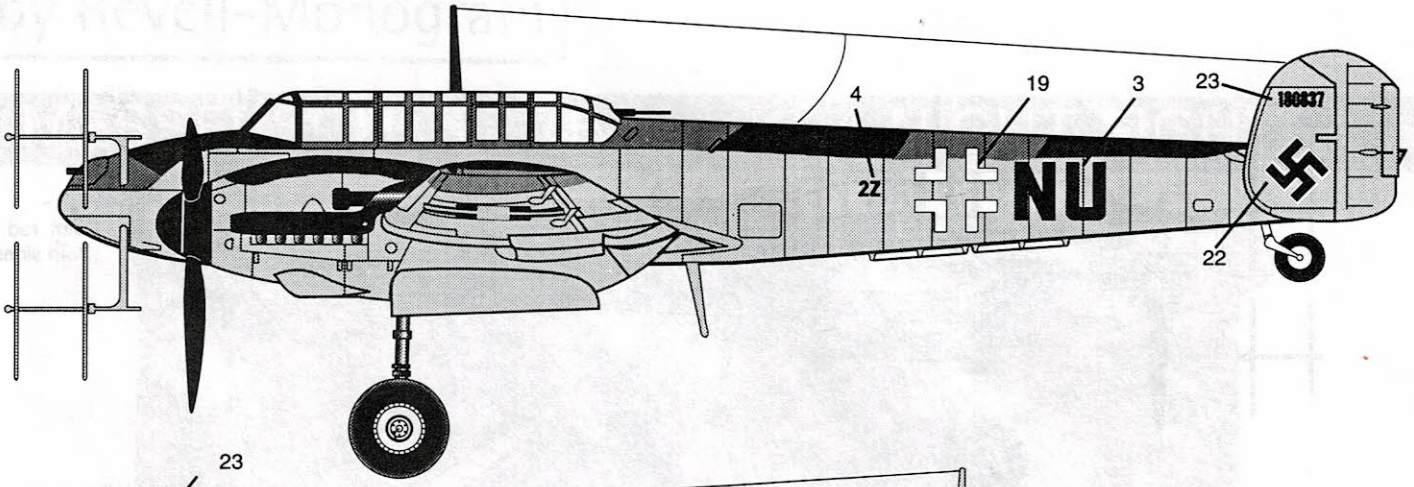
RLM 76 Light Gray

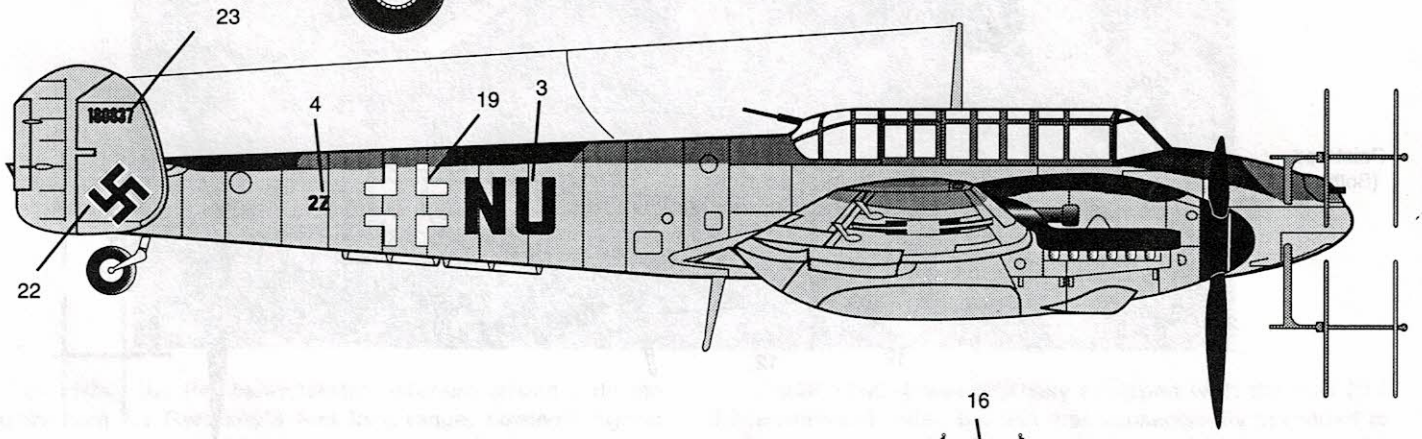
RLM 75 Gray (Neutral Gray)

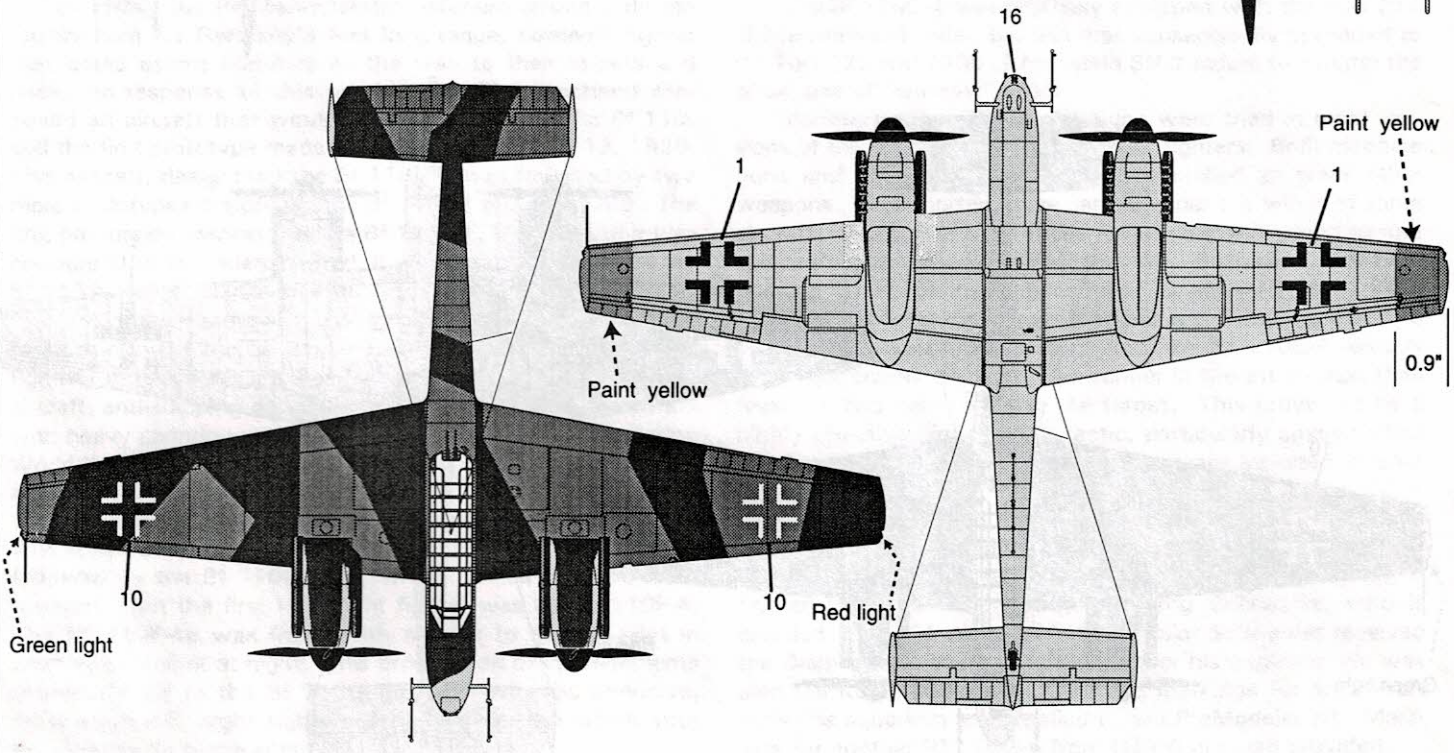
RLM 74 Dark Gray (Gunship Gray)

RLM 04 Yellow

RLM 22 Black



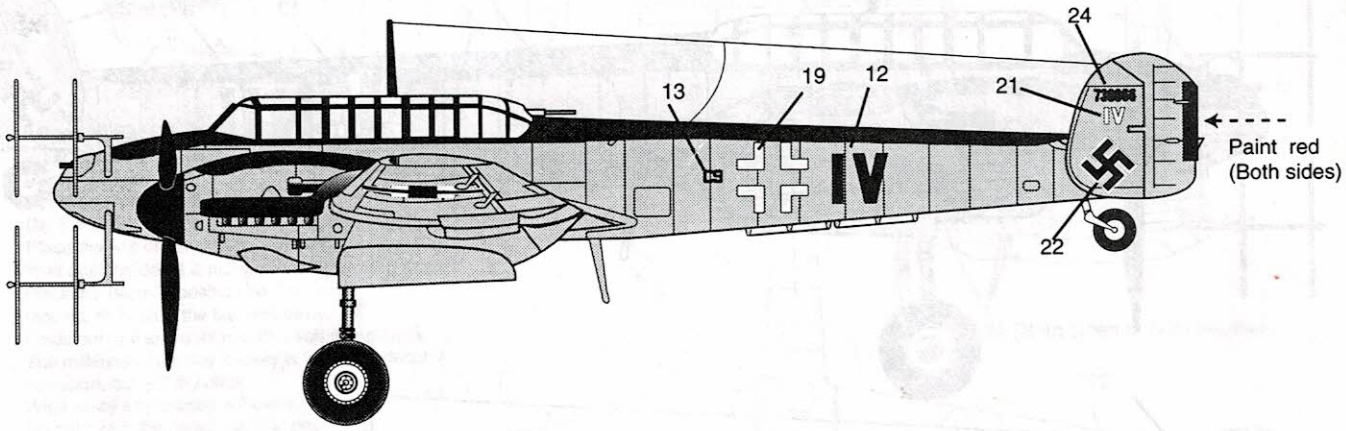
# MESSERSCHMITT Bf 110G-4, NJG 5, Defense of the Reich

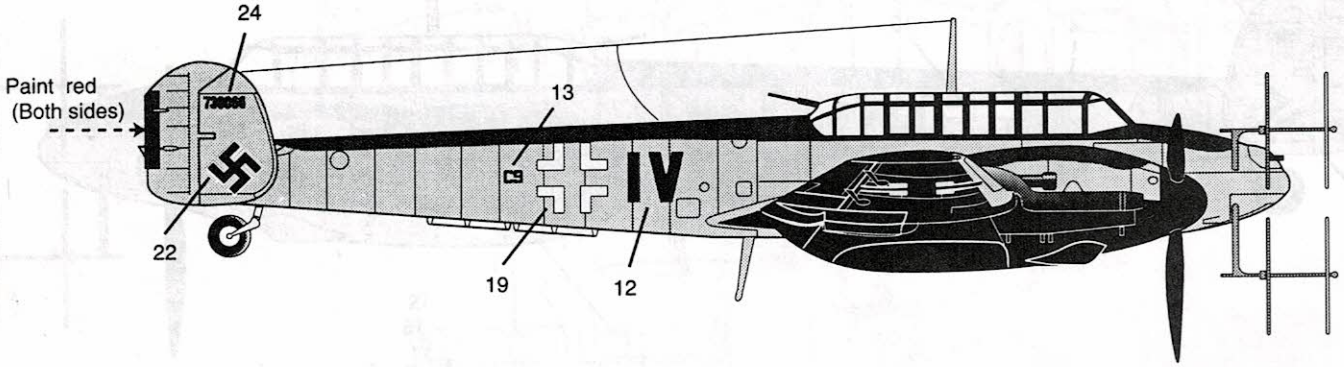
RLM 76 Light Gray

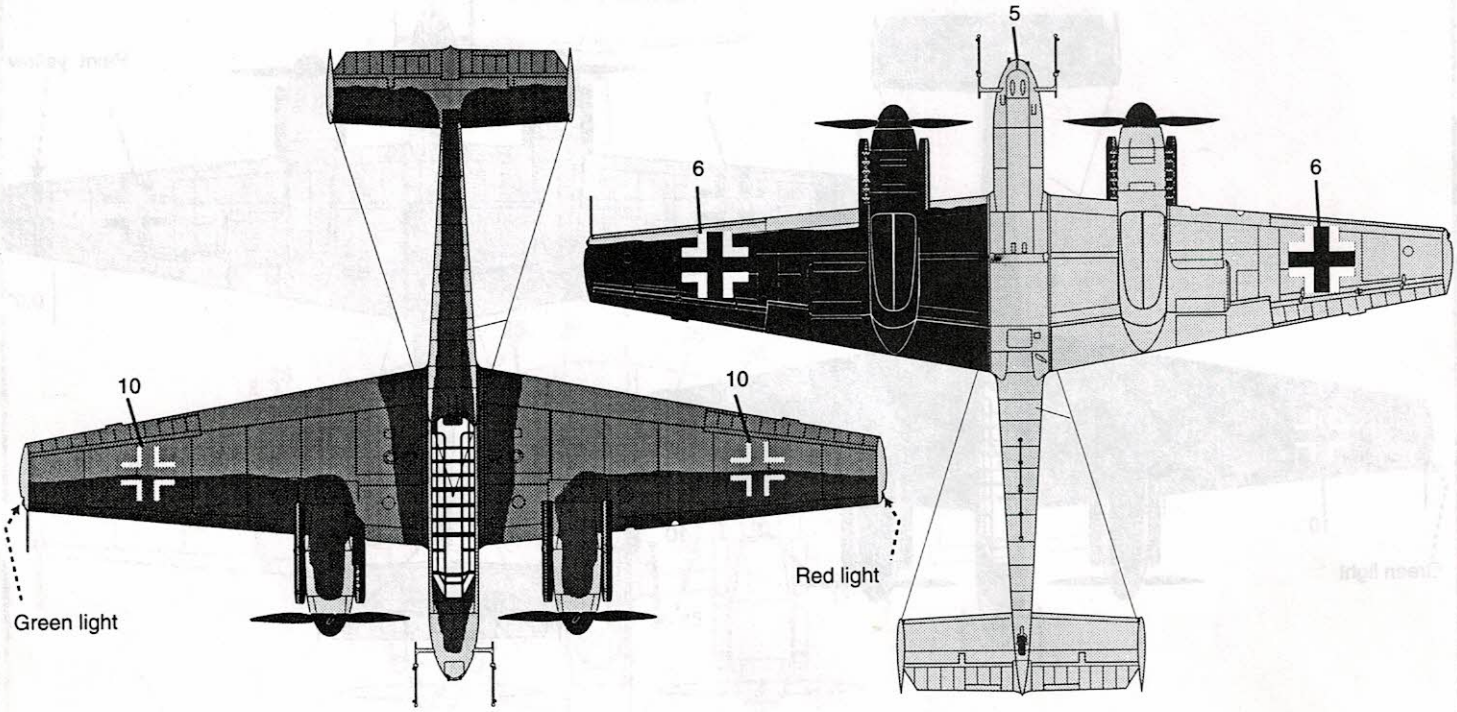
RLM 74 Dark Gray (Gunship Gray)

RLM 23 Red

RLM 22 Black

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