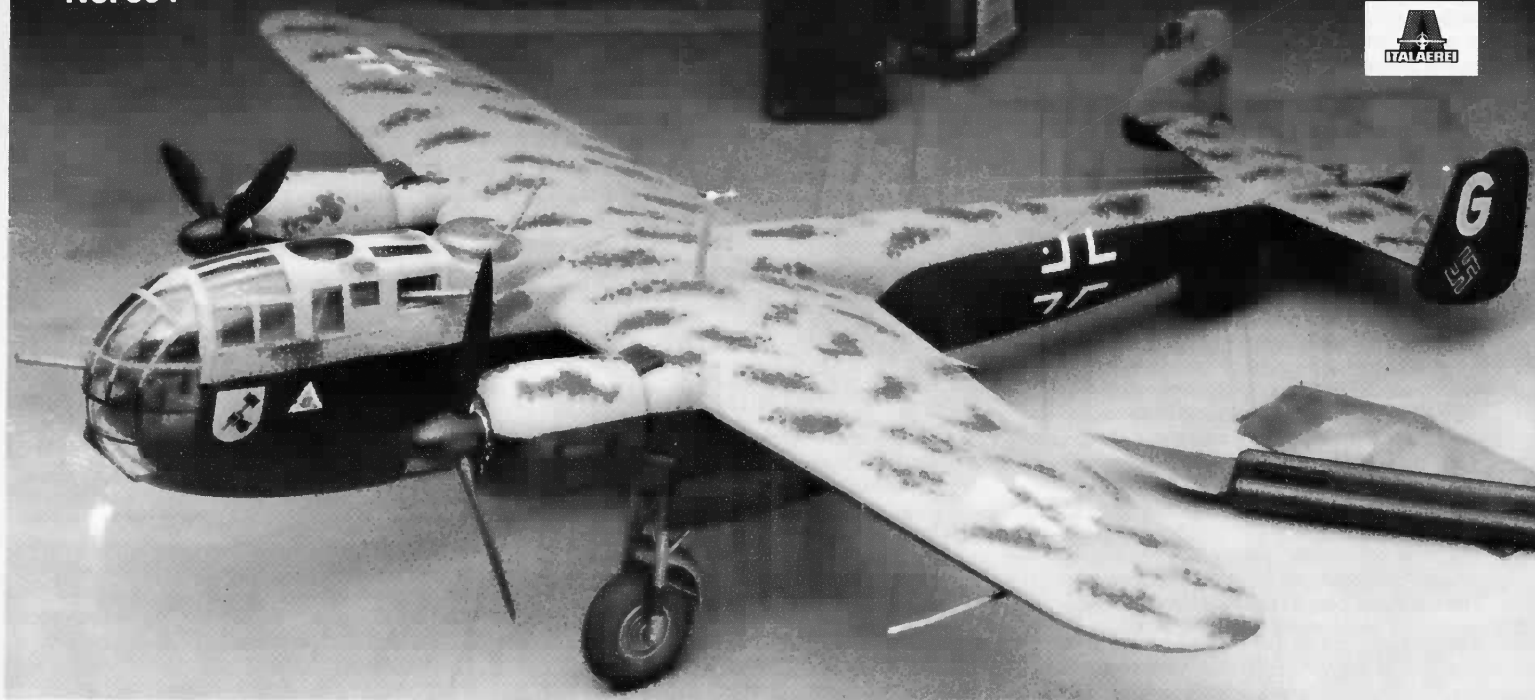


# DORNIER DO 217 K-1

No. 864

TESTORS



## HISTORY

The Do 217 K-1 first flew in early 1942 and became operational in late 1942. It was designed as a night bomber, but was used in many roles as the Luftwaffe struggled to cope with the ever increasing Allied numerical superiority. As was the case with many German bombers, the Do 217 K was required to have dive bombing capability. This capability was not used due to the severe stress it placed on the rear of the fuselage by the dive brake that was mounted in the tail cone. This brake, which opened like the petals of a flower, was also very unreliable. The K-1 along with other Do 217 versions was used as a missile carrier.

### Reference Sources

**Aircraft in Profile #261, Dornier Do 217 Variants,**

A. Price (Profile Publications)

**Warplanes of the Third Reich,** William Green (Doubleday & Co.)

**Hitler's Luftwaffe,** Wood/Gunston (Crescent Books)

**Air International,** Vol. 8 #5, May 1975, E. Brown (Finescroll Publications)

**German Aircraft of the 2nd World War,** Smith, Kay, and Creck (Putnam Publications)

## SPECIFICATIONS

Wing Span	62.34'
Length	55.77'
Weight Empty	19,621 lbs.
Weight Loaded	36,553 lbs.
Maximum Speed	320 mph @ 13,000'
Ceiling	26,900
Range	1,430 mi.
Power	2 BMW 801D engines 14 cylinder 1,700 hp for take off
Armament	One twin 7.9 mm gun in nose Two 13 mm guns in top turret and lower position Two 7.9 mm guns in lateral positions

## BEFORE STARTING

1. Study the illustrations and sequence of assembly before beginning.
2. Decide how much detail you wish to add to your model and whether or not you intend to modify or "convert" the basic model in any way. Study carefully all available reference material before beginning to ensure an authentic model.
3. Due to the amount of parts in this kit, do not detach the parts from the runners (sprue) until you need them. This helps avoid confusion and lost parts.
4. When cementing the parts together, check the way in which one part fits together with another. This ensures a neat job.
5. Always remember, when working with plastic model cement and paint, make sure your work is well-ventilated. The fumes from plastic modeling products can be harmful if inhaled.

## PREPARATION OF PARTS

1. Never tear parts off the runners (sprue). Use a Testor Hobby Knife, nail clippers, or small wire cutters.
2. It is possible some parts may require a little attention with a file or sandpaper to ensure a proper fit and neat appearance. Hobby files and Testor Hobby Sandpaper appropriate for model-building are available in most good hobby shops.
3. If you desire, you may fill any seams (where parts go together) or imperfections with Testor Contour Putty for Plastic Models which is also available at good hobby shops.

## PAINTING

You can obtain an excellent finish on your model using Testor PLA Flat Enamels and over-spraying according to the instructions in the **APPLYING DECALS** section.

First of all, be sure your brushes are soft, clean and flexible. (Keep them that way by cleaning them thoroughly with Testor Paint Thinner.) Never use inexpensive brushes! A selection of Testor Shed-Proof Brushes will serve you well.

Wash plastic parts before detaching them from the sprue. Use warm water and liquid detergent. Let the parts air dry and avoid excessive handling.

Most parts should be painted while still attached to the sprue. Paint in one direction only. If your paint is the correct consistency, brush strokes will disappear as the color dries. If the paint seems too thick, thin it with Testor Paint Thinner. Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember, cement will not stick to painted surfaces. Using your Testor Hobby Knife, carefully remove paint from all surfaces to be cemented. After you have assembled your model you may touch up areas where cement has marred the finish.

## DETAIL PAINTING

It is best to paint small parts before assembly if you are to produce a neat model. They may be painted while still attached to the sprue or may be detached and held with tweezers or "magic" type transparent tape. Remember to allow the painted parts to dry thoroughly before handling, and always scrape paint away from the surfaces that are to be cemented, as the paint will not allow the part to stick.

Wheels may be detached from the sprue and fitted onto toothpicks or matchsticks for painting. Then just hold the paintbrush against the edge of the wheel and rotate the wheel to obtain a neat, fast finish.

**NOTE:** The Dornier Do 217 K-1 may be painted in your choice of two overall patterns. Both are "Dark Green" over a "Light Gray" background with a Black bottom. Instructions for mixing the paint and applying these color schemes are given in the **APPLYING DECALS** section. Refer frequently to photos on the box. All parts not singled out in **Preliminary Painting** should be painted the primary body colors.

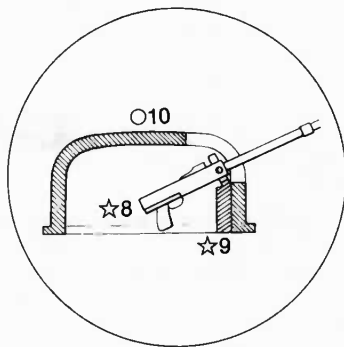
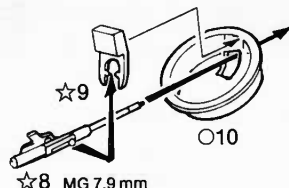
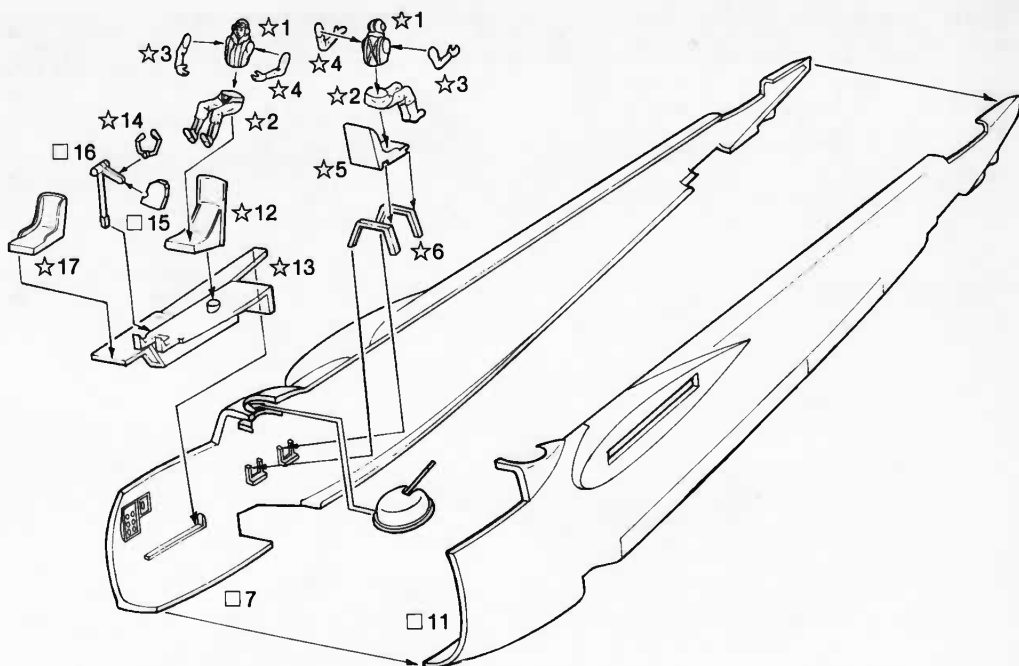
# 1 PARTS 1-17

## Preliminary Painting

- ☆1 vest:  
"Yellow" (Mix two parts #1169 Flat Yellow, one part #1166 Flat Military Brown, and one part #1168 Flat White.)
- ☆2, ☆3, ☆4 uniform:  
#1166 Flat Military Brown
- ☆1, ☆2 straps:  
"Dirtied White" (Mix twenty parts #1168 Flat White with one part #1166 Flat Military Brown.)
- ☆1 helmet and collar:  
"Dark Brown" (Mix one part #1166 Flat Military Brown with one part #1149 Flat Black.)
- ☆1 face, ☆3, ☆4 hands:  
"Flesh" (Mix two parts #1167 Flat Desert Tan with one part #1168 Flat White.)
- ☆2 boots, □7 instrument panel, ☆14 wheel, □16 control column:  
#1149 Flat Black
- ☆5, ☆12, ☆17 seats, ☆6 supports, ☆8 machine gun:  
#1180 Steel
- 7, □11 interior of fuselage, ☆13 floor, □15 instrument cluster:  
"Gray Green" (Mix four parts #1168 Flat White, two parts #1164 Flat O.D. Green, and one part #1149 Flat Black.)
- 7 instruments on panel:  
#1168 Flat White

**NOTE:** For more information on painting the figures, refer to the **FIGURE PAINTING/WEATHERING** page. However, the facial detail is recommended only for experienced model builders.

- 1. To assemble the figures, first cement (2) ☆1 to (2) ☆2. Then cement arms (2) ☆3 and (2) ☆4 to body ☆1.
- 2. To assemble the cockpit attach seat ☆12 to floor ☆13 as shown and then add seat ☆17 to ☆13.
- 3. Build up the control column □16 by adding the instrument cluster □15 and the wheel ☆14. Place decal on instrument cluster.
- 4. Mount instrument cluster, assembled above, to floor ☆13 as shown. Now mount the floor to the left side of fuselage □7.
- 5. Build gunner's seat ☆5 by adding supports ☆6 as shown. Mount seat to left side of fuselage □7 in position shown.
- 6. Assemble the top turret mount ☆9 to gun ☆8. Making sure that turret is cleaned with a soft cloth and polished, mount this assembly to turret ○10. Be sure to clean the windows—a dirty smudge or fingerprint can ruin an otherwise neat model.
- 7. Install the figures, as assembled in stage 1 above, in their seats ☆5 and ☆12.
- 8. Prefit the other side of the fuselage □11 to side □7. When the fit is satisfactory, try it with the turret ○10 in place as shown. If these parts fit well, glue the fuselage sides together. In order for the turret to move, it should not be glued.



Liquid cement, Testor #3502, is recommended for construction since it can produce the neatest, quickest, and strongest glue joints. Apply small amounts of cement, using the tip of a 00 brush, to the surfaces to be joined while holding the parts in place. Do **not** use large amounts of cement.

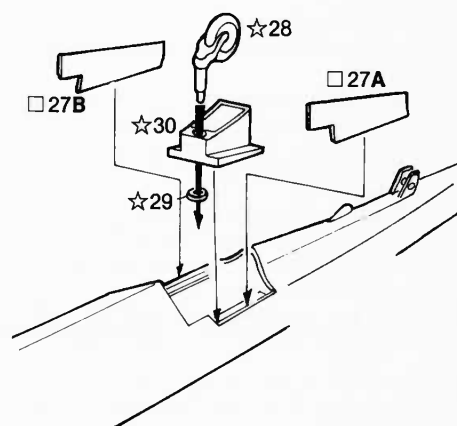
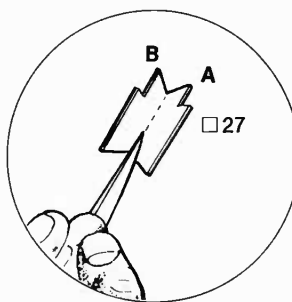
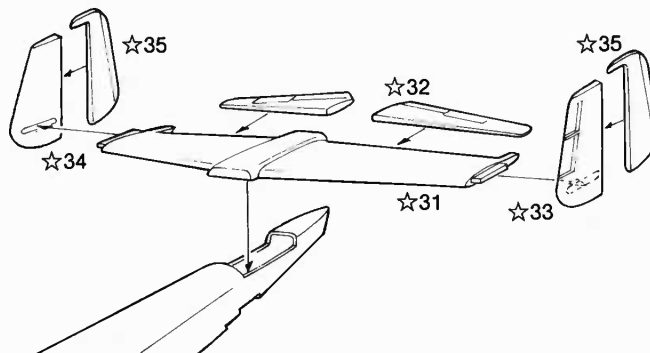
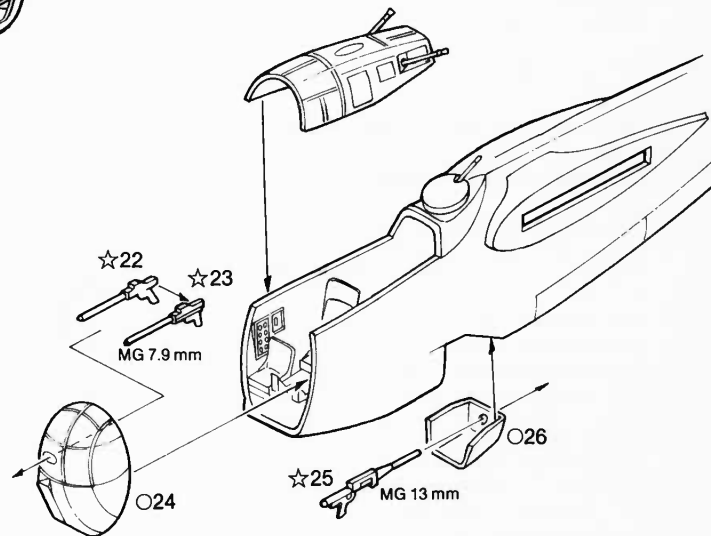
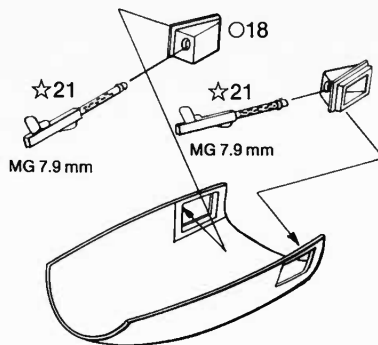
## Preliminary Painting

☆21, ☆22, ☆23, ☆25 machine guns, ☆28 wheel strut:  
#1180 Steel

□27 A and B cover doors, ☆28 wheel:  
"Gray Green" (Mix four parts #1168 Flat White, two parts #1164 Flat O.D. Green, and one part #1149 Flat Black.)

☆28 tire:  
#1183 Rubber (Or mix two parts #1149 Flat Black with one part #1185 Rust.)

- 1. Assemble the guns (2) ☆21 in the window mounts ○18 and ○20. Then place these assemblies in the cockpit cover ○19. Use glue sparingly.
- 2. Glue gun ☆22 and ☆23 together and install in nose ○24 as shown.
- 3. Install guns ☆25 in belly glazing ○26.
- 4. At this point, you may install the parts assembled in stages 1, 2, and 3 above as shown in the drawing. But the guns are delicate, and if knocked loose they would be hard to repair. We suggest that you set these parts aside and install them near the end of the project, such as after Step 5.
- 5. Assemble the tail surfaces ☆34 and ☆33 to opposite ends of the horizontal stabilizer ☆31. Check for alignment as they dry.
- 6. When above assembly is dry, add moveable surfaces as follows: ☆35 to ☆34, ☆35 to ☆33, and (2) ☆32 to ☆31. When dry, glue ☆31 to fuselage as shown. Check alignment.
- 7. To build up tail wheel assembly, slip wheel caster ☆28 into hole in ☆30. Glue retainer ☆29 onto ☆28. Be careful not to get glue on ☆30, so that the assembly will swivel.
- 8. Install tail wheel assembly to bottom of fuselage as shown.
- 9. Cut apart cover doors □27 into A and B pieces. These may now be glued in place to bottom of fuselage. Note that these doors will be very delicate, since the glued edge is very narrow. You may want to delay installing these until nearly the last. To determine the proper mounting angle, swing the wheel 90° to either side. Set doors for minimum clearance of the wheel.



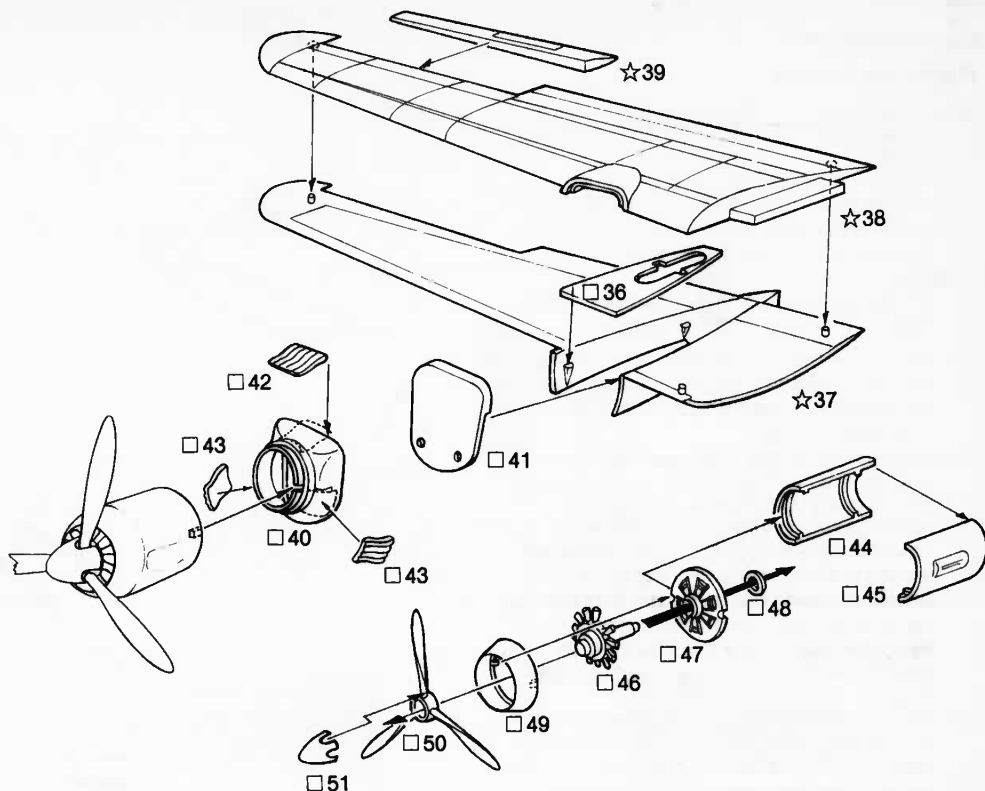
### 3 PARTS 36-51

#### Preliminary Painting

- 42, □43 exhausts:  
#1185 Rust (Or mix one part #1149 Flat Black with three parts #1185 Rust.)
- 46 fan, □47 motor:  
#1180 Steel
- 50 propeller:  
#1149 Flat Black

#### (Right wing sub-assembly)

- 1. Glue support □36 into lower right wing ☆37.
- 2. Glue bulkhead □41 to upper right wing ☆38.
- 3. Assemble wing half ☆38 to wing half ☆37.
- 4. To build up engine assembly, glue spinner □51 to propeller □50. Then slip fan □46 into motor □47 and glue retainer □48 to □46.
- 5. Next fit cowl nose □49 over fan □46 and carefully glue to □47. Make sure the fan is free to rotate. When this is dry, glue propeller □50 to fan.
- 6. Glue nacelle halves □44 and □45 together. Glue motor □47 to front of nacelle. Next glue nacelle to fairing □40 as shown. Fit and glue exhausts □42 and (2) □43 onto □40 as shown.
- 7. Install this assembly onto bulkhead □41.
- 8. Finally insert and glue aileron ☆39 into wing.



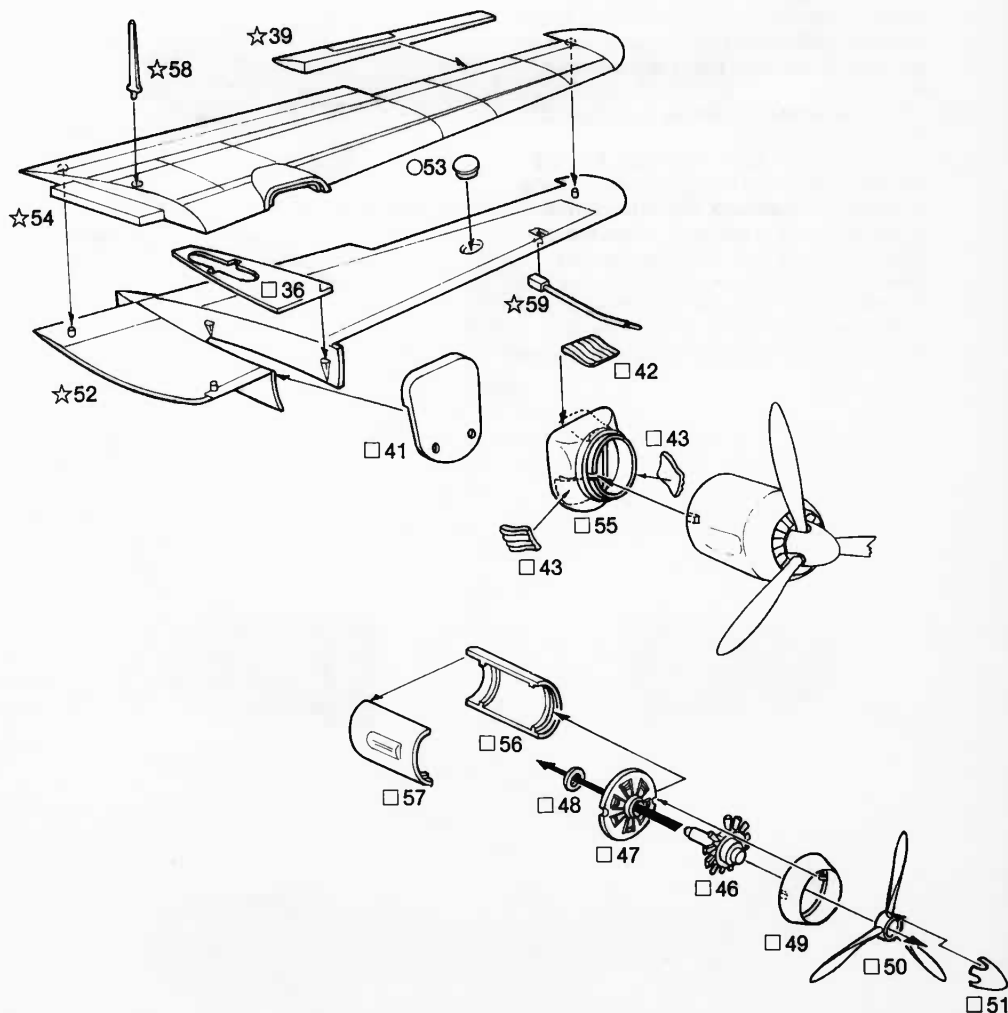
### 4 PARTS 36, 39, 41-43, 46-58

#### Preliminary Painting

- 42, □43 exhausts:  
#1185 Rust (Or mix one part #1149 Flat Black with three parts #1185 Rust.)
- 46 fan, □47 motor:  
#1180 Steel
- 50 propeller:  
#1149 Flat Black

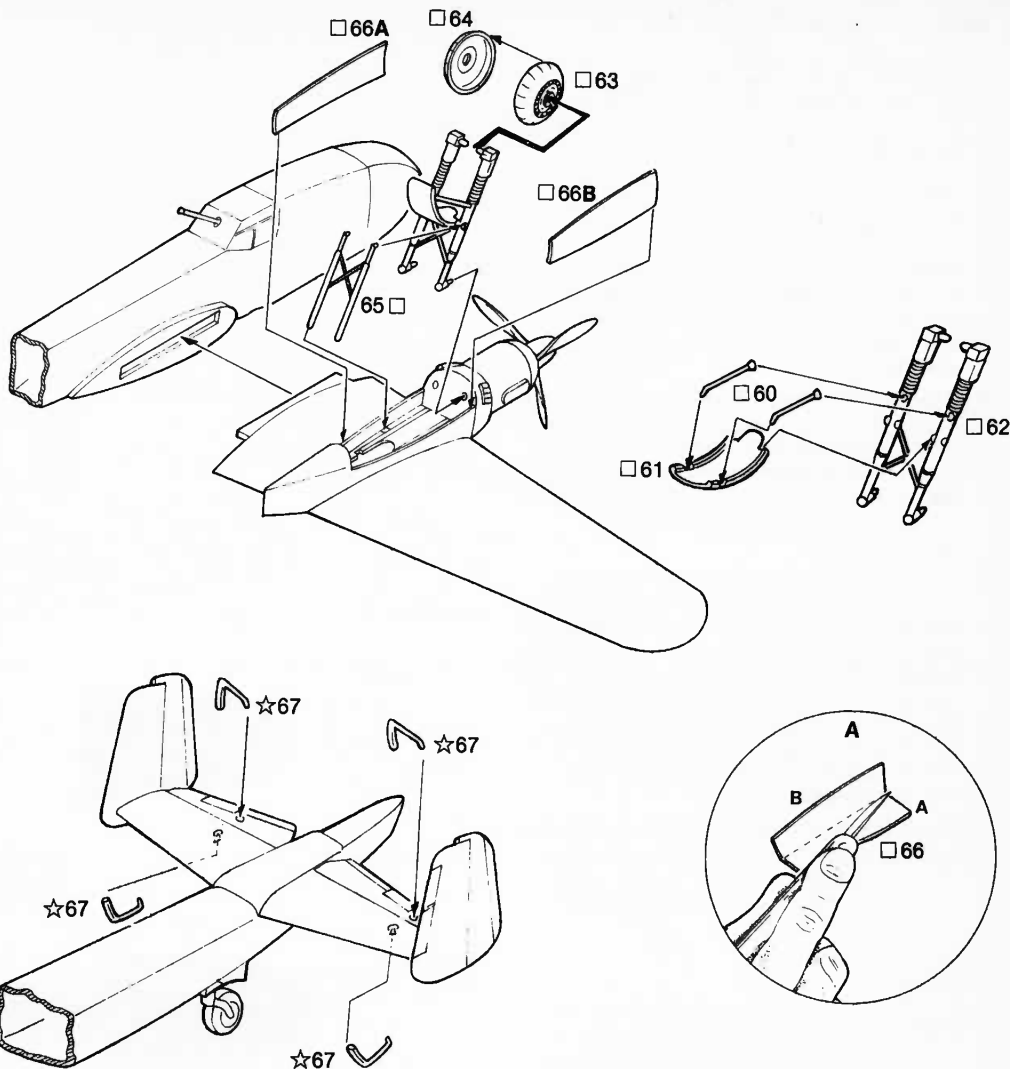
#### (Left wing sub-assembly)

- 1. Glue support □36 into lower left wing half ☆52.
- 2. Glue bulkhead □41 to lower wing half ☆52.
- 3. Install landing light ○53 in lower wing half as shown. Use glue sparingly.
- 4. Glue pitot ☆59 into lower wing.
- 5. Assemble left wing half ☆54 to wing half ☆52.
- 6. To build engine assembly glue spinner □51 to propeller □50. Then slip fan □46 through motor □47 and glue retainer □48 to fan shaft □46.
- 7. Place cowl nose □49 over fan □46 and glue to engine □47. Glue propeller □50 to fan front.
- 8. Glue nacelle halves □56 and □57 together. Then glue □47 to front of nacelle □56/□57.
- 9. Glue completed engine nacelle to fairing □55. Then add exhausts (2) □43 and □42 to □55.
- 10. Glue fairing □55 to bulkhead □41.
- 11. Install aileron ☆39 into wing assembly as shown.
- 12. Antenna post ☆58 may be installed now, but this is best held until last to avoid damage during the later stages of assembly.



**Preliminary Painting**

- ☐ 62 main strut, ☐ 65 rear strut:  
#1180 Steel
- ☐ 62 shock cover on main strut:  
#1149 Flat Black
- ☐ 63, ☐ 64 tire:  
#1183 Rubber (Or mix two parts #1149 Flat Black with one part #1185 Rust.)
- ☐ 63, ☐ 64 wheel:  
"Gray Green" (Mix four parts #1168 Flat White, two parts #1164 Flat O.D. Green, and one part #1149 Flat Black.)
- ☐ 1. Glue wing assemblies to fuselage sides. Be sure that they are parallel to the tail surfaces.
- ☐ 2. When these are dry, lay the model on its back and assemble the main landing gear. (Note that both sides are alike.) Glue wheel halves ☐ 63 and ☐ 64 together. Glue fenders ☐ 61 to main struts ☐ 62 and add supports ☐ 60. Allow to dry.
- ☐ 3. Install the wheels in the main struts by spreading the ends of the struts slightly. Then glue struts into holes in bulkhead of engine nacelles as shown. These holes may need to be enlarged a little with the tip of a knife. Then add the rear struts ☐ 65. Refer to drawing. Check alignment carefully.
- ☐ 4. Add the balance horns (4) ☆67 to the bottom of the stabilizer ☆31.
- ☐ 5. Cut the wheel cover doors (2) ☐ 66 into A and B sides as shown in Drawing A. Glue doors ☐ 66A and ☐ 66B to either side of main landing gear. Refer to diagram on this page and also front view drawing on **APPLYING DECALS** page for positioning.

**IMPORTANT**

Every effort was made to insure the completeness of this kit — however, should any part be missing, write directly to:

**THE TESTOR CORPORATION**  
620 BUCKBEE STREET  
ROCKFORD, ILLINOIS 61101

Print your name and address plainly, when writing. Request parts by name and include the kit name and number.

**DORNIER DO 217 K-1 STOCK #864**

NAME

STREET

CITY

STATE

ZIP

PART DESCRIPTION

KIT NAME

STOCK #

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## APPLYING DECALS

1. Spray entire model with Testor Glosscote #1261. Decals adhere best to a smooth surface and the shinier the finish, the smoother it is. Allow the Glosscote to dry thoroughly before going further.
2. Select the decals you plan to use, and cut each of them out from the decal sheet with small scissors or Testor Hobby Knife.
3. Working with only one decal at a time, dip the decal in clean water for no more than five seconds, then remove it from the water and place on a dry paper towel for about one minute.
4. When the decal slides easily on the backing paper, slide it to the edge of the paper and onto the surface of the model with a soft paintbrush or tweezers. Remember: the decals are very thin and can be easily ripped if care is not taken. Work slowly and patiently.
5. Once the decal is in the desired position, apply a small amount of Testor Decal Set #8804. This will help the decal to conform to any irregularities in the surface of the model (rivets, curves, etc.). Allow the decal to dry undisturbed. Should you find the decal has moved or should you desire to purposely move it, apply a little Decal Set to a soft brush and push the decal slowly into the desired position.
6. When the decals are completely dry (usually overnight), apply a coat of Testor Dullcote #1260 to the entire model. This will give it an authentic, dull finish and protect the surface of the model.

## Paint Mixing

"Dark Green" (Mix four parts #1164 Flat O.D. Green with one part #1149 Flat Black.)

"Light Gray" (Mix eight parts #1168 Flat White, one part #1149 Flat Black, one part #1162 Flat Sky Blue, and one part #1164 Flat O.D. Green.)



#1149 Flat Black



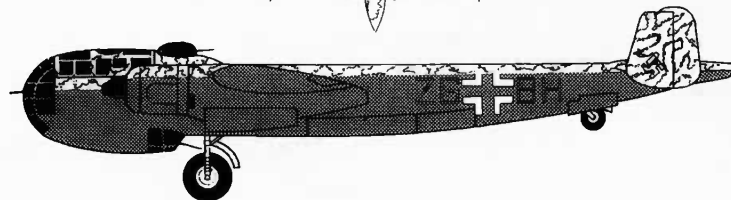
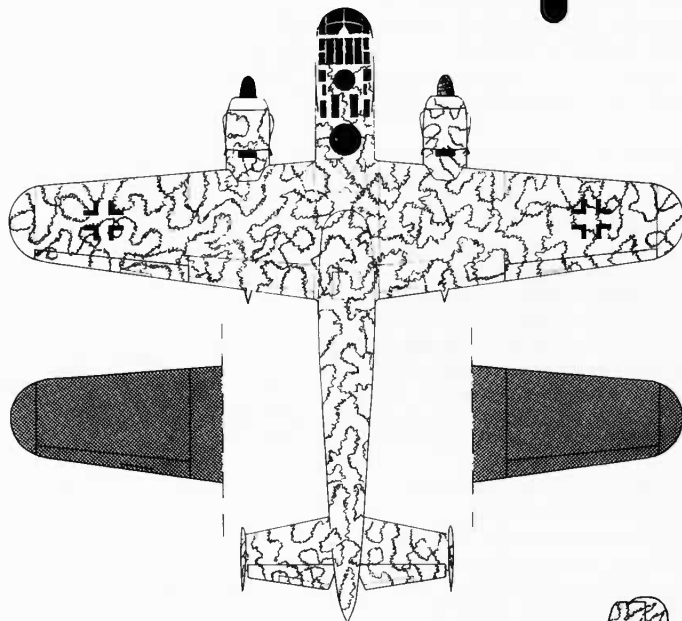
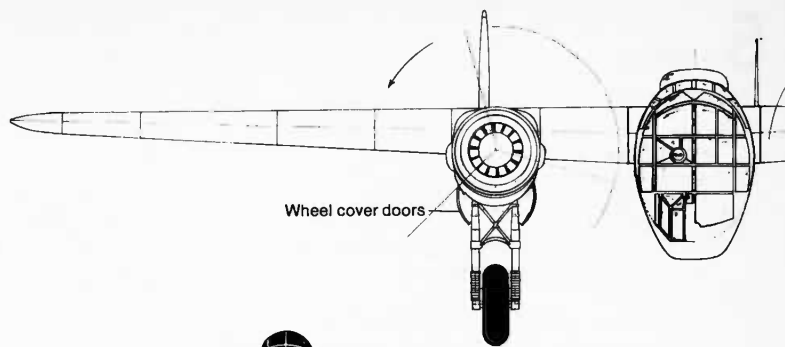
"Dark Green" pattern over "Light Gray" background (See above for mixing instructions).

**NOTE:** This scheme is quite difficult unless you have an airbrush and are quite experienced in using it.

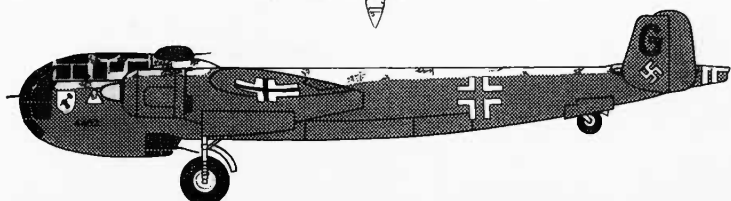
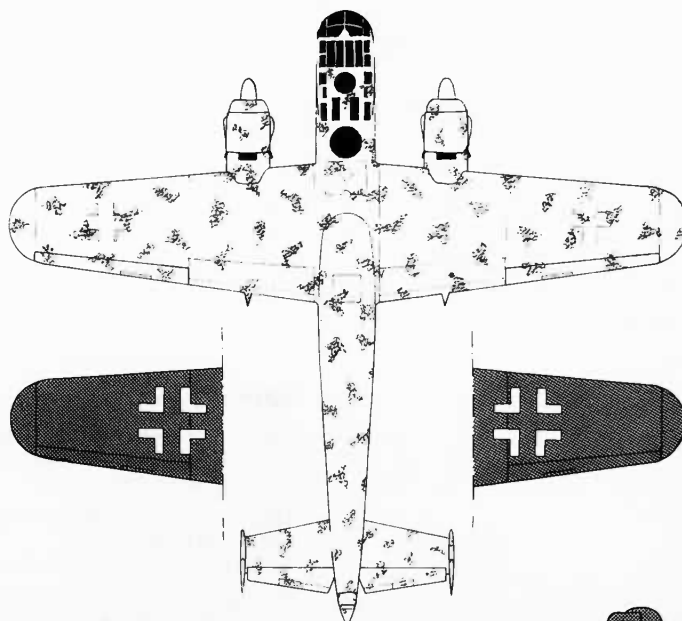


"Dark Green" pattern over "Light Gray" background (See above for mixing instructions).

**NOTE:** The green over-blotches can be applied by hand using a small piece of sponge rubber cut in an irregular shape. Dip the sponge lightly in paint and experiment with it first on flat, smooth paper until you get the feel of it. Then apply to the model. This method is not difficult if you work slowly. Notice that the blotches are irregular, so make sure that yours are also.



France 1943, 1st Group of Squadron 66



France 1943-44, Night Bomber of 3rd Group of Squadron 2



## FIGURE PAINTING

Figures add dimension and life to your models. Painting figures is considered by many to be the most difficult aspect of modeling. However, if you are willing to take your time and practice, it can become the most rewarding.

After you have assembled your figure, it should be primed with a coat of #1168 Flat White. Use Testor spray paint or an airbrush if you have one. It is nearly impossible to get proper coverage with a brush. Accessories may be glued on at this point, but this sometimes makes certain areas of the figure difficult to reach with a brush. In these cases it is more convenient to paint these pieces separately and attach them to the finished figure.

Always use flat paints. Testor Flat Paints are manufactured for use on military vehicles and airplanes. However, when using Flat Paint for clothing on the figures, it is necessary to add talcum powder to the paint in order to make the painted surface appear really flat. Add powder to the paint gradually, testing it until the paint has no gloss. A #0 brush with a fine point is best for painting figures. Smaller brushes do not hold enough paint. Put some #1170 Flat Light Tan on a palette and mix in a little thinner so the paint flows smoothly off your brush. Apply an even coat over all the flesh areas. A second coat may be required for proper coverage. Now paint the eyes with #1149 Flat Black. These can be indicated by black slits. If they need shaping up, you can do this by painting around them with #1170 Flat Light Tan.

Begin shading by adding a very small amount of #1185 Rust with Flat Light Tan. Fill in under cheek bones. Proceed mixing progressively darker tones using Flat Light Tan and Rust until you finally use pure Rust. Use this color to outline all areas where the flesh meets the clothing (collar, cuffs, gloves, etc.). Finally, mix a small amount of #1183 Rubber with the Rust and paint fine lines in the mouth, nostrils, under eyebrows, inside ears and between fingers. Add highlights by mixing #1168 Flat White with Flat Light Tan.

Now begin shading the clothing. After the uniform is painted the proper color, hold it directly underneath a strong light. Notice where all the shadows fall. Mix #1149 Flat Black with your uniform color and fill in these areas, carefully following the sculpted wrinkles on the figure. You can blend the color on the uniform to this shadow color by lightly moistening your clean brush with thinner and carefully going over where these colors meet.

After you are satisfied with the shadows, hold the figure under the light again. Notice the areas where the light hits the strongest. Mix a little #1168 Flat White with the base color and

carefully apply the highlights to these areas. Remember, the shadows go *under* the folds and the highlights go *on top* of the folds. Finally, you can outline all straps, belts, pockets, collars, and edges of clothing with a thin wash of #1149 Flat Black.

Observe real faces and clothing and notice how the light falls on them. Adapt these ideas to your figures, trying to make them as realistic as possible. You can also learn a lot from studying other people's figures. Don't be too subtle in your shading — contrast is what gives figures life.

Practice and experience are the best teachers, so do not be discouraged if you aren't pleased with your first few attempts. Always take your time and strive for a neat, crisp appearance. Have patience. It takes time to learn a new skill and it's worth it.

## WEATHERING HINTS

Nearly all military aircraft show some signs of wear. The process by which the modeler imparts this look to the model is referred to as weathering. Many times the weathering, that is, the representing on the model of soot, oil stains, or chipped paint, etc., can really make a model stand out and give it amazing authenticity.

After you have painted your model the proper colors, you can add the decals. If you first paint your model with Testor Glosscote, the decal carrier film will seem to disappear. Apply one or two coats of Glosscote for a smooth, glossy finish. Then, after the paint dries, apply the decals. This gives them a "painted on" look. If you want your model to have a matte finish, wait 24 hours for the decals to dry. Then spray on one or two coats of Testor Dullcote. After this dries, you can begin weathering.

Always try to be logical in applying weathering techniques. For instance, you wouldn't want to put exhaust stains on a model and then apply a bright clean decal to the sooty area. Airplanes are normally well cared for, so they don't usually appear very battered. However, soot stains do tend to collect behind exhaust stacks and sometimes oil leaks onto the outside of the plane. Paint chips sometimes appear on leading edges or where crew members or maintenance men walk across the plane. However, try to remember that any well kept plane would only show minimum amounts of wear.

There are two methods of showing exhaust stains. The first is with an airbrush. This is a rather expensive item and requires practice to get the right effect. The second method is by using soft artist pastels or charcoal in shades of gray or black. Begin by grinding this material into a fine powder. Apply the powder to the model by rubbing it on with an old paint brush. Apply the color thicker and blacker near the exhaust outlet, and feather it out as it gets further away from the outlet. You should practice this on an old model or on a scrap of

paper before trying it on your model. This technique is not very permanent, so it is a good idea to give your model a coat or two of Testor Dullcote to avoid rubbing off the stains.

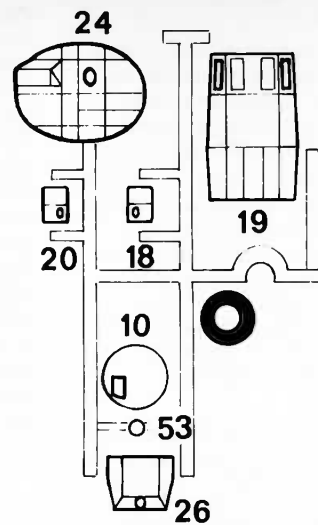
Oil stains should be done very subtly. Oil really has very little color, so it only leaves light stains. Tint a small amount of thinner lightly with black paint. Add a small drop to the area you want to appear oily. Now with a strong breath, blow the "oil" back along the plane. Keep in mind the direction in which the plane flies, making sure you are blowing the "oil" from front to back. It is very easy to overdo this, so remember, one or two places are usually enough.

Paint chips are the simplest technique, but like the others, are easily overdone. An average military plane wouldn't have very many chips. They usually appear on the cutting edges of the propeller blades, the leading edges of wings and flying surfaces, and any areas where crew members or mechanics walk across the plane (i.e., wing roots). Use #1181 Testor Aluminum for paint chips, applying with a fine pointed brush. With a very little amount of paint on the brush, apply the chips in small dots, the smaller the better. Large amoeba shaped chips look too obtrusive. Be wary of fabric covered control surfaces though; they don't chip.

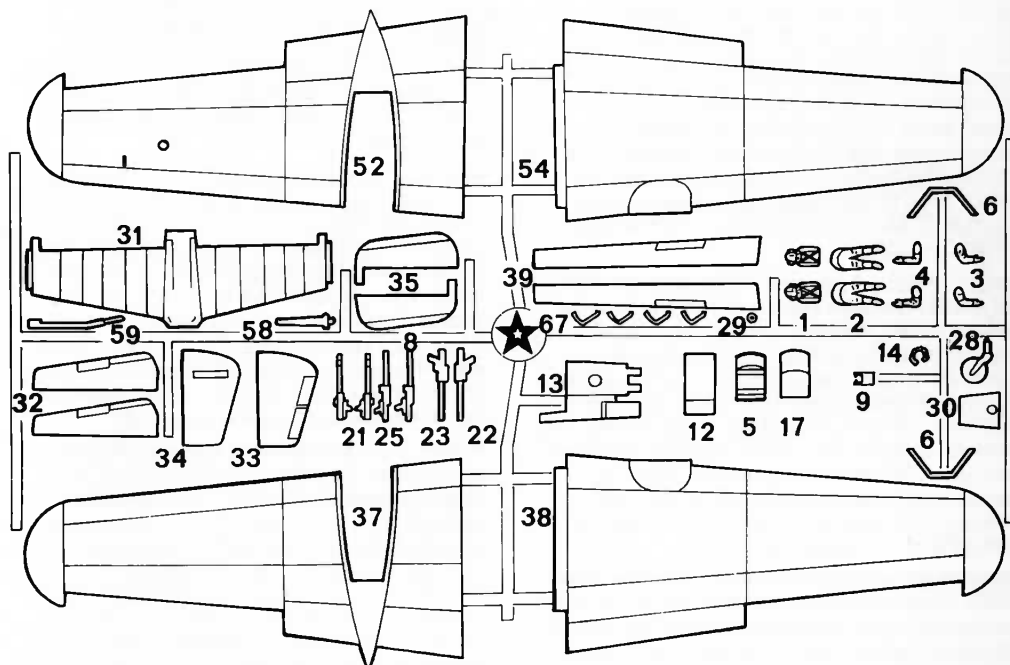
Experienced modelers do several things to aid them in their hobby. One of the most helpful is attending meetings of their local International Plastic Modeling Society chapter. Here they see and discuss modeling techniques. Your local hobby shop will help you locate your local I.P.M.S. group. Serious modelers also collect books and photographs to use as reference when they finish their models. Again, your local hobby shop can help. Last, but certainly not least, your own observation will prove helpful. Visit museums. Look at buildings and vehicles around you. Notice how rust streaks a metal roof. See the oil and dirt on a piece of road grading equipment. Study railroad boxcars and locomotives to see what the weather has done to them. Your own observation can be the best aid of all.

Remember: try not to overdo weathering — and *keep practicing*. Be patient, it takes time to discover and master all the tricks of this fascinating hobby.

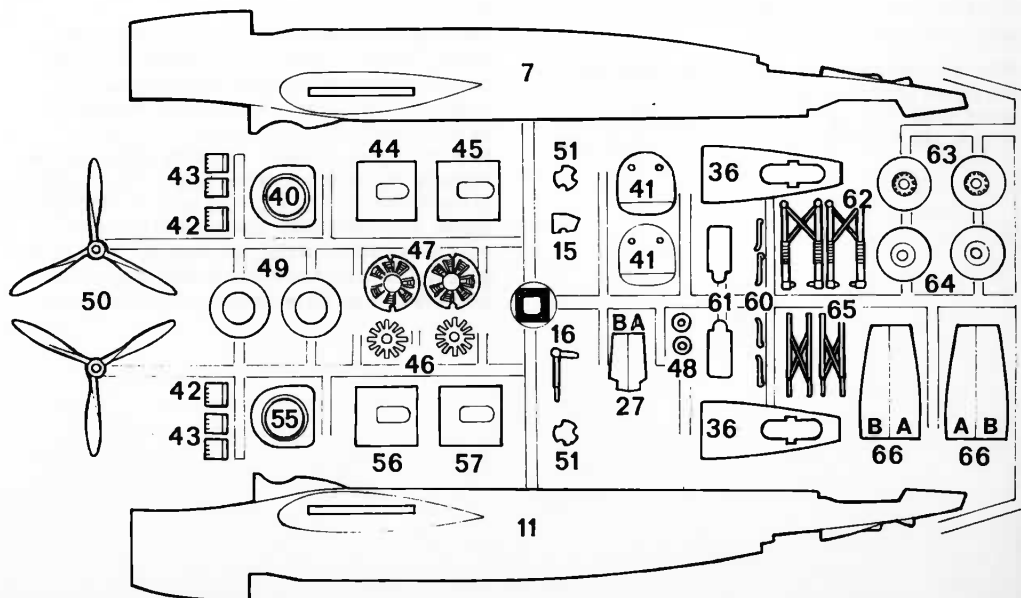
Remove this page from the instruction sheet by cutting along indicated line. Use the drawings of the complete sprue as a part-locating reference when building the model.



Parts from this section are identified with this symbol: ○



Parts from this section are identified with this symbol: ☆



Parts from this section are identified with this symbol: □

Cut and remove this sheet