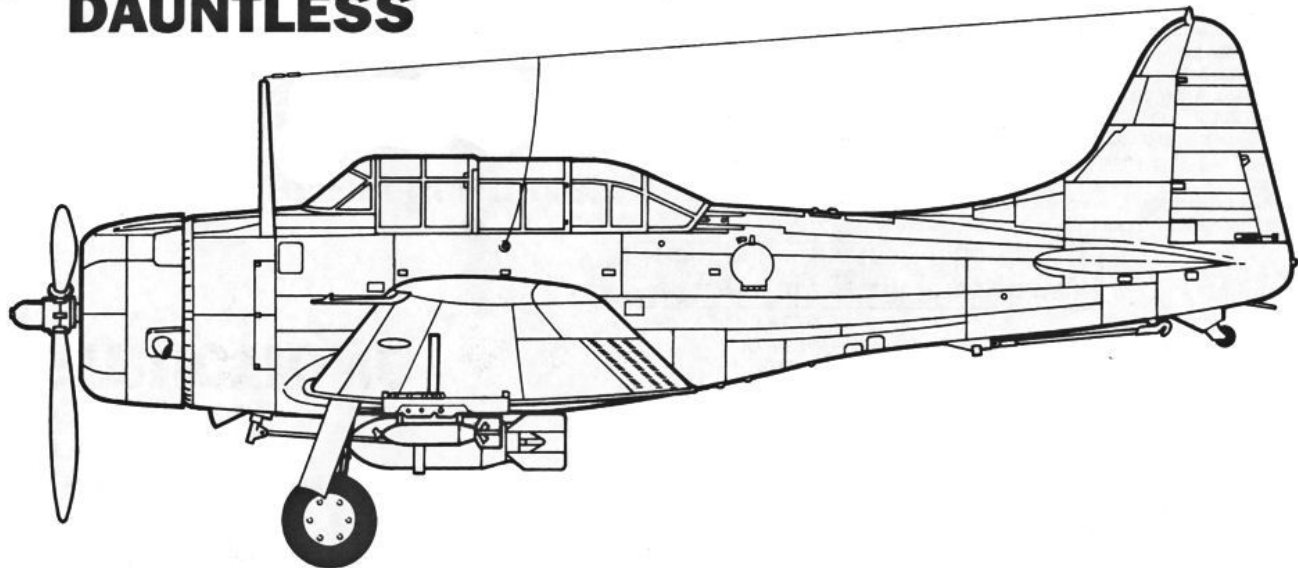


3412-0200

**DOUGLAS**  
**SBD-5**  
**DAUNTLESS**



# SBD-5

## INSTRUCTIONS

Accurate Miniatures knows that almost all instruction sheets are ignored but as fellow modelers who have built many copies of this kit, we can state categorically that it is very important to follow our recommendations. Our sequence of assembly simply works best.

Most other model aircraft kits assemble in a different manner. You usually build up the fuselage interior then put the two halves together, add the wings etc. This kit is different in that it is a "build it from the bottom" airplane. This method of assembly allows for much more detail to be included and a more precise fit. There are some assembly procedures that contain small "fiddly bits" that require more attention than normally found in contemporary kits.

Be Patient!

**It is very important to pay close attention to this instruction sheet.**

### MODEL PAINT REFERENCE CHART\*

	FEDERAL STANDARD	MODEL MASTER	HUMBROL	GUNZE SANGYO AQUEOUS	GUNZE SANGYO MR. COLOR	POLLY S	FLOQUIL CLASSIC MILITARY
ALUMINUM	1717B	1781	11	8	218	1995	303121
BURNT METAL	-	1415	-	76	61	1997	-
FLAT BLACK	37038	1749	33	12	33	10	303010
FLAT WHITE	37875	1768	34	11	62	11	303011
GLOSS BLACK	17038	2721	21	2	2	-	-
GLOSS GREEN	14187	-	2	26	66	-	-
GLOSS ORANGE	12197	2731	18	14	85	-	-
GLOSS RED	11136	2718	19	3	3	-	-
INTERIOR GREEN	34151	1715	151	58	-	821	303187
INTERMEDIATE BLUE	35164	1720	144	56	-	804	303185
NON-SPECULAR SEA BLUE	35042	1718	182	54	-	803	303183

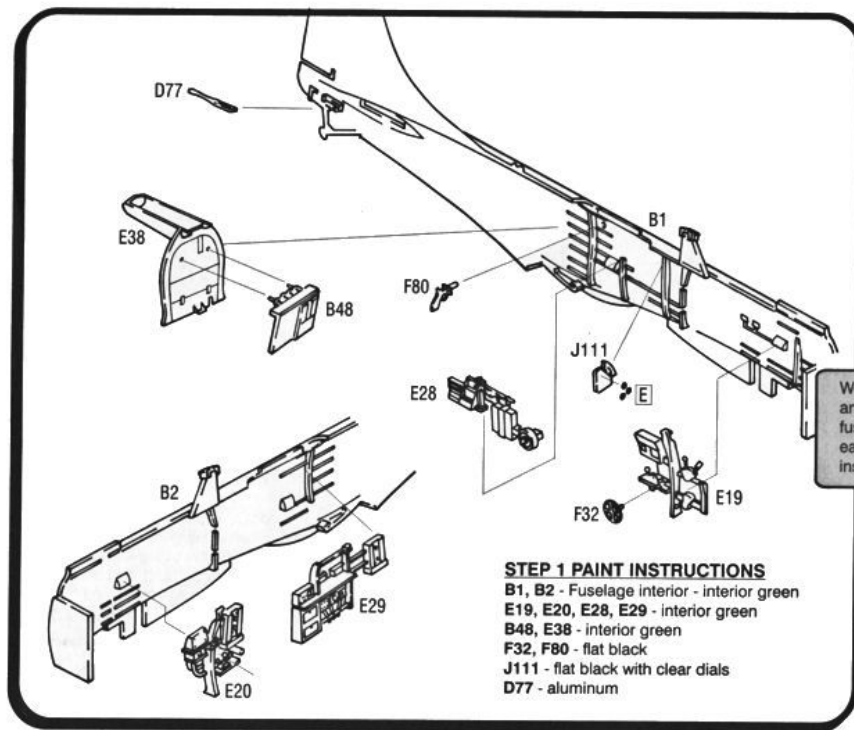
\*This chart is provided only as an aid to the modeler and is the closest match possible from each paint manufacturer at the time of printing.

This kit has been designed and manufactured to very exacting and delicate standards in order to more accurately represent the actual aircraft. Extra care should be exercised in the removal and handling of the smaller parts. Look at the machine gun barrels to see what we mean. This kit at first will appear to be very complex. However, it is not complicated and if you take your time and follow these instructions and do the usual amount of test fitting, you will be proud of the final result. Many of the smaller pieces are added toward the end of the building sequence to avoid breakage. Just use normal caution during assembly. You will note that many of the parts have been molded with thin cross sections in order to maintain scale. It is our recommendation that you use small amounts of your favorite cement to avoid softening these thin pieces and distorting the plastic.

The assembly process will be made much easier by painting many, if not most, of the components before assembly. Many parts will become inaccessible after installation.

Accurate Miniatures wants the building process to be an enjoyable and enlightening experience. DO NOT RUSH! Let the paint and parts dry thoroughly and most of all have fun in the process. We welcome your suggestions and comments on how to improve upcoming kits.

# STEP 1 - FUSELAGE AND SIDE CONSOLES



## STEP 1 PAINT INSTRUCTIONS

B1, B2 - Fuselage interior - interior green  
 E19, E20, E28, E29 - interior green  
 B48, E38 - interior green  
 F32, F80 - flat black  
 J111 - flat black with clear dials  
 D77 - aluminum

- Begin by painting the interiors of the left fuselage half (B1) and the right fuselage half (B2).
- Carefully remove the overflow plugs on the gunner's left console (E28), pilot's right console (E20) and the gunner's right console (E29). There are no overflow plugs on the pilot's left console (E19).
- After painting these pieces, glue them to the fuselage interior as indicated.
- Glue the trim wheel (F32) to the pilot's left console.
- Glue the flare pistol (F80) into the hole in the left fuselage in the gunner's compartment.
- After painting the gunner's instrument panel (J111), add decal (E) to its rear surface and glue the instrument panel to the left fuselage half as indicated.
- Remove the overflow plug from the catapult hold down (D77), then glue the catapult hold down into the slot in the rear of the left fuselage half.

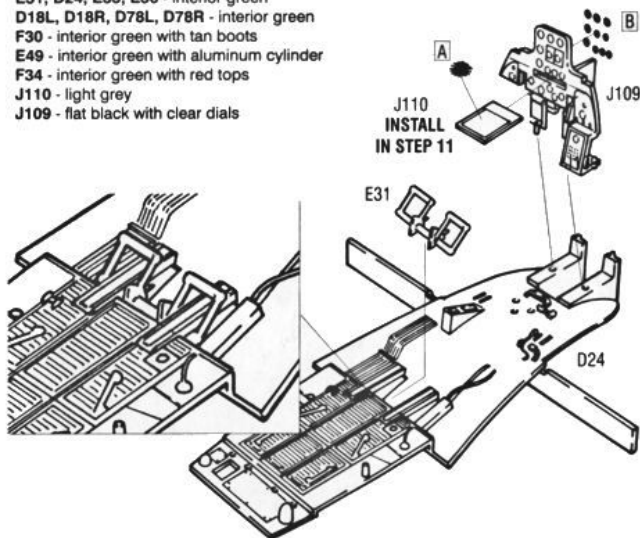
We recommend that you assemble the rear gunner's bulkhead and install it at this time. It can also be put in place after the fuselage halves are glued together. Doing it later will make it easier to locate properly, while doing it now makes it easier to install. The choice is yours.

- Glue the ammo canister (B48) into the two upper holes of the rear gunner's bulkhead (E38) (The tray should be oriented as shown). If you decide to install the bulkhead assembly at this time, glue it in place now. The forward face of the bulkhead assembly will rest against the rearmost surfaces of the fuselage stringers on both fuselage halves.
- Finally, test fit and glue the fuselage halves together. Set this assembly aside and let it dry.

## STEP 2 - COCKPIT AND GUNNERS FLOOR

### STEP 2 PAINT INSTRUCTIONS

E31, D24, E33, E36 - interior green  
D18L, D18R, D78L, D78R - interior green  
F30 - interior green with tan boots  
E49 - interior green with aluminum cylinder  
F34 - interior green with red tops  
J110 - light grey  
J109 - flat black with clear dials



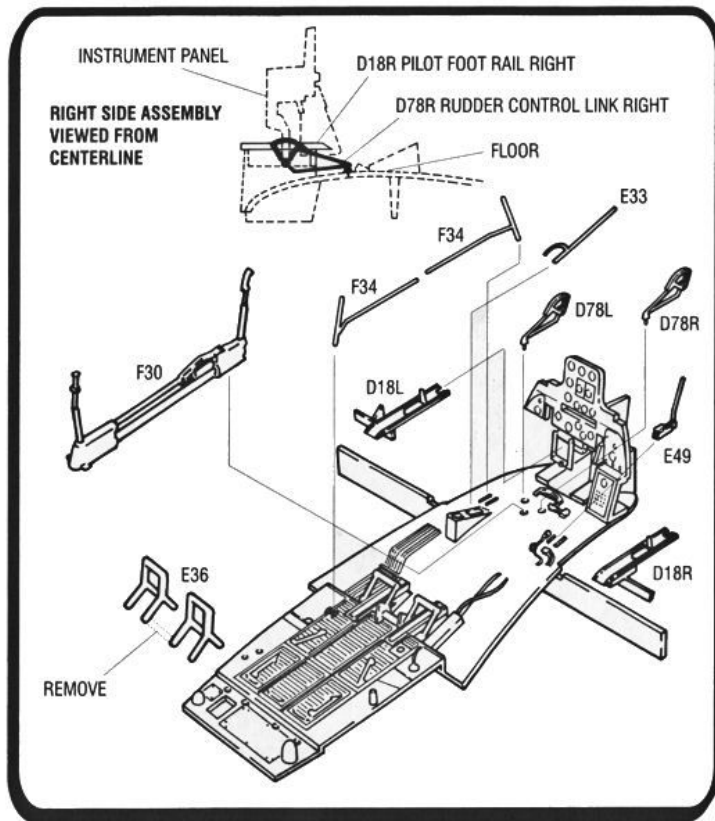
This assembly contains many small pieces and will present the greatest challenge to build. Be patient! These pieces fit together in a straightforward and logical manner. You will be rewarded with a very realistic cockpit assembly. The handiest tool for this assembly will be tweezers. Nobody has fingers small enough to assemble the rudders!

- Begin by sliding the gunner's rudder pedals (E31) onto the heel troughs on the interior floor (D24) and pushing them all the way to the rear. The two small protuberances on the rudder pedals should point forward.
- Before beginning the instrument panel assembly, it should be noted that Accurate Miniatures has provided a separate map table (J110) that slides into the instrument panel. This table may be glued in the closed or extended position. To allow for ease of access to other parts, it should not be glued in position until later in the assembly process. If you choose to place the table in the extended position, you may also elect to place the navigation calculator Decal (A) on the table. This table provided a work space for the pilot who was also responsible for the navigation chores. It is not known how many SBD's were lost while the pilot devoted time to finding his way rather than concentrating on maintaining flying control!

**DO NOT GLUE THE MAP TABLE INTO THE INSTRUMENT PANEL AT THIS TIME. (SEE STEP 11)**

- Apply Decal (B) to the back of the instrument panel (J109). Carefully align the dials so they may be seen from the front of the panel. The front of the panel may now be painted in the usual way and the raised dials highlighted by drybrushing.
- After you are satisfied with the instrument panel finishing, glue the instrument panel to the floor. The two locating pins on the bottom of the rudder pedals locate into the holes on the raised portion of the pilot's cockpit. Make sure that the panel is perpendicular to the floor. Let this dry thoroughly.

While the instrument panel is drying prepare the pilot's foot rails for installation. This will be the most difficult part of the kit so be patient and go slowly.



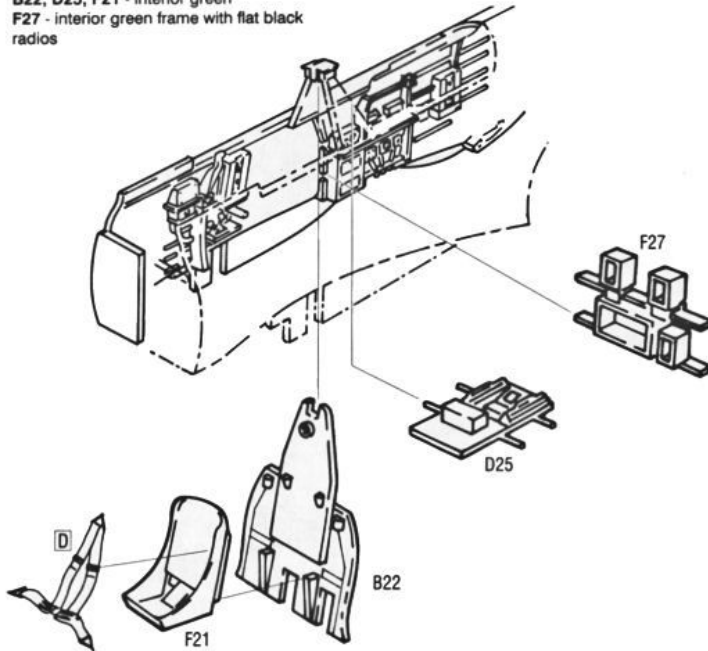
- ❑ Start by removing the pilot's left foot rail (D18L) from the tree. Lightly sand the sides. The pilot's foot rails will be placed in the openings directly below the rudder pedals on the instrument panel; the clearance is tight. You may also want to clean up the mold seams on the openings below the rudder pedals. Every little bit will help make the fit easier.
- ❑ Now carefully slide the pilot's left foot rail forward through the opening and glue it to the tab on the very front of the floor. The flat surface of the foot rail should be parallel to the surface of the floor.
- ❑ Ok, now repeat this operation using the pilot's right foot rail (D18R). When this piece is properly in place, the horizontal bar should rest on the bottom right of the instrument panel electrical box.
- ❑ Glue the left rudder control link (D78L) and the right rudder control link (D78R) to the appropriate sides of the rudder pedals on the instrument panel and to the two locating holes on the cockpit floor. This is where those tweezers become essential! These parts really were there and add a great deal to the overall look of the cockpit assembly. We suggest that you glue the control links to the floor first, then carefully locate them to the rudder pedals as the glue dries. Take a break. It gets easier from here on.
- ❑ Before gluing the pilot / gunner control column (F30) to the cockpit floor, you will find it easier to paint the horseshoe shaped device located just ahead of the pilot's column insignia red. This was a gust lock and was used to hold the column and control surfaces in place when the aircraft was parked.
- ❑ After the control column is glued in place, locate and cement the dive flap actuator (E49) to the right side of the cockpit floor. This locates between the slightly raised detail just to the right of the pilot's relief tube.
- ❑ Glue the arresting hook lever (E33) into the raised locator to the left of the pilot's cockpit.
- ❑ The two wobble pump handles (F34) are now glued into the raised locators in the pilot's cockpit and gunner's cockpit on the left side. The two long horizontal portions of these parts should point toward each other and slightly overlap. Glue the horizontal portions together, keeping them parallel to the floor.
- ❑ Carefully remove the horizontal bar connecting the gunner's foot rests (E36) (misnumbered as part 39.) Now glue the foot rests to the four indentations on the rearmost portion of the floor. Set assembly aside for later installation in Step 5.

## STEP 3 - INTERIOR COMPONENTS

### STEP 3 PAINT INSTRUCTIONS

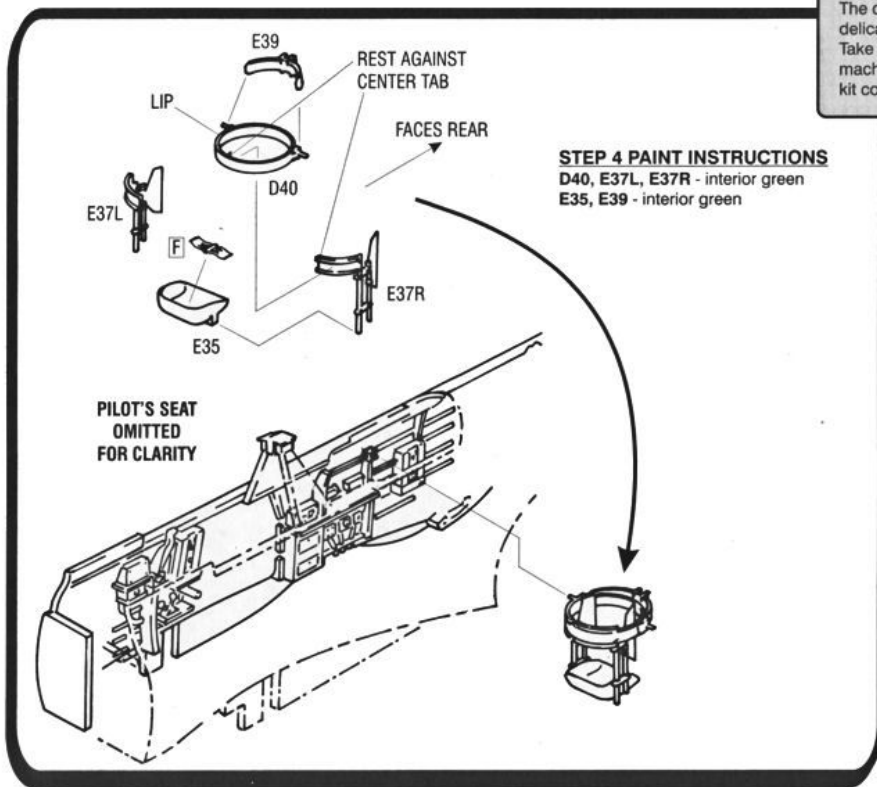
B22, D25, F21 - interior green

F27 - interior green frame with flat black  
radios



- After painting the pilot's seat (F21), you may elect to apply the pilot's seat belt Decal (D). If you choose to not use the seat belt decal you may use your favorite seat belt technique.
- Glue the pilot's seat to the pilot's bulkhead (B22). The bottom of the seat rests on the two small raised ledges on the bottom of the bulkhead.
- Test fit and glue the bulkhead into the fuselage from the bottom until it rests against the forward portion of the fuselage roll over hoop.
- Working from the bottom of the fuselage, glue the cockpit shelf (D25) into the fuselage and forward until it rests against the rear surface of the pilot's bulkhead.
- Locate and test fit the gunner's radio equipment (F27) up into the fuselage. This piece locates into the notches in the fuselage sides and against the forward surface of the right gunner's side console.

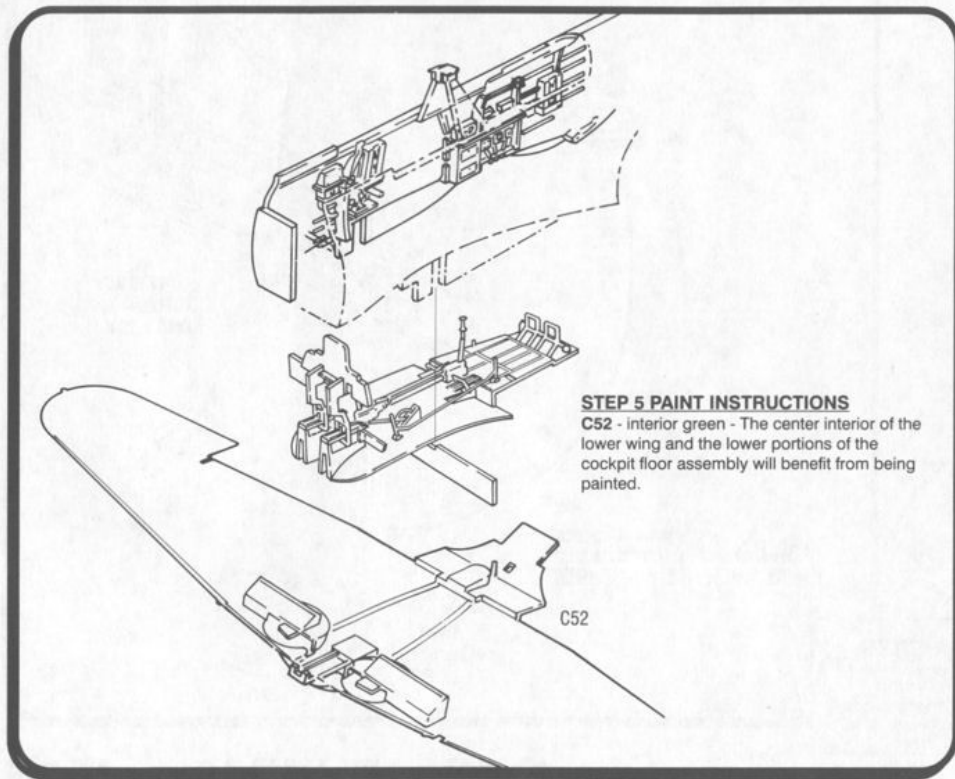
## STEP 4 - TURRET RING



The components that make up the turret ring, seat and gun are delicate and molded in scale. They should be handled with care. Take your time and allow plenty of drying time. The rear gunner's machine gun is best assembled and installed toward the end of the kit construction to avoid breakage. (See Step 13)

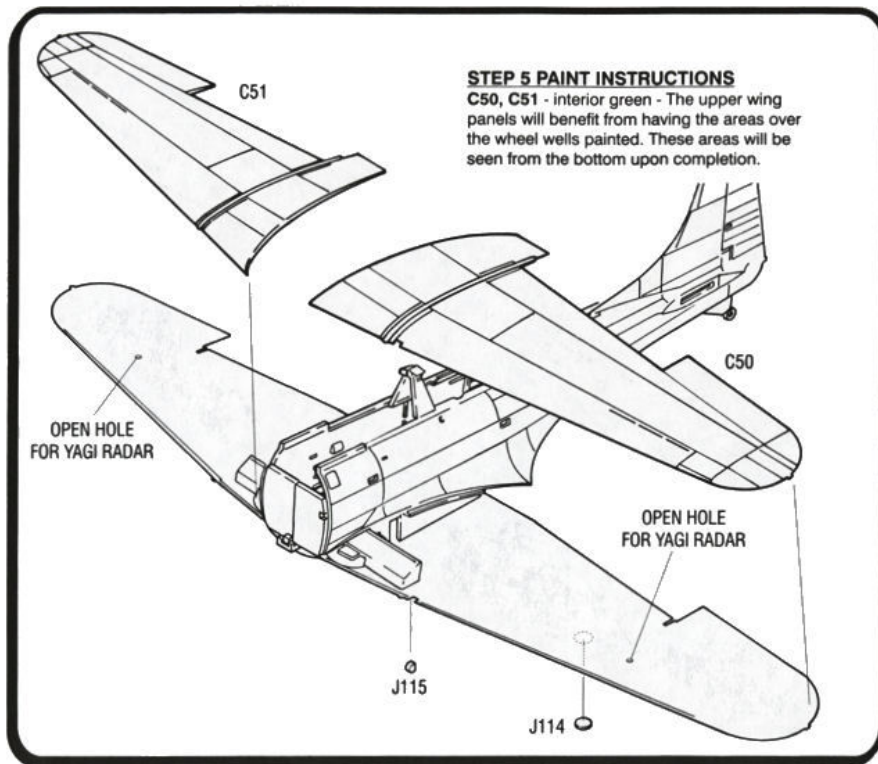
- Carefully remove the turret ring (D40) from the tree. With the lip on the turret ring to the top, glue the right gunner's seat frame (E37R) and the left gunner's seat frame (E37L) to the inside of the turret ring. Make sure these pieces are perpendicular to the ring. Allow to dry thoroughly.
- Apply the gunner's seat belt decal (F) to the gunner's seat (E35).
- After the decal has dried, glue the gunner's seat to the bottom of the legs on the gunner's seat frame. The dip in the seat should point toward the gun mount. Again, allow to dry thoroughly.
- Carefully glue the gun mount (E39) to the gunner's ring. This piece should be parallel to the gunner's ring when viewed from the side. As mentioned in Step 2, there are two parts numbered 39.
- When you are satisfied that all of these parts are properly aligned and thoroughly dry, carefully locate the gunner's seat assembly into the fuselage. The two locating pins on the sides of the gunner's ring are placed into the two slots on the left and right gunner's side consoles. The gunner's seat assembly may be placed into position from the opening in the bottom of the fuselage or from above. Either way works. When you are satisfied that the seat assembly is properly aligned, carefully glue it into place. Allow to dry.

## STEP 5 - FLOOR AND WINGS



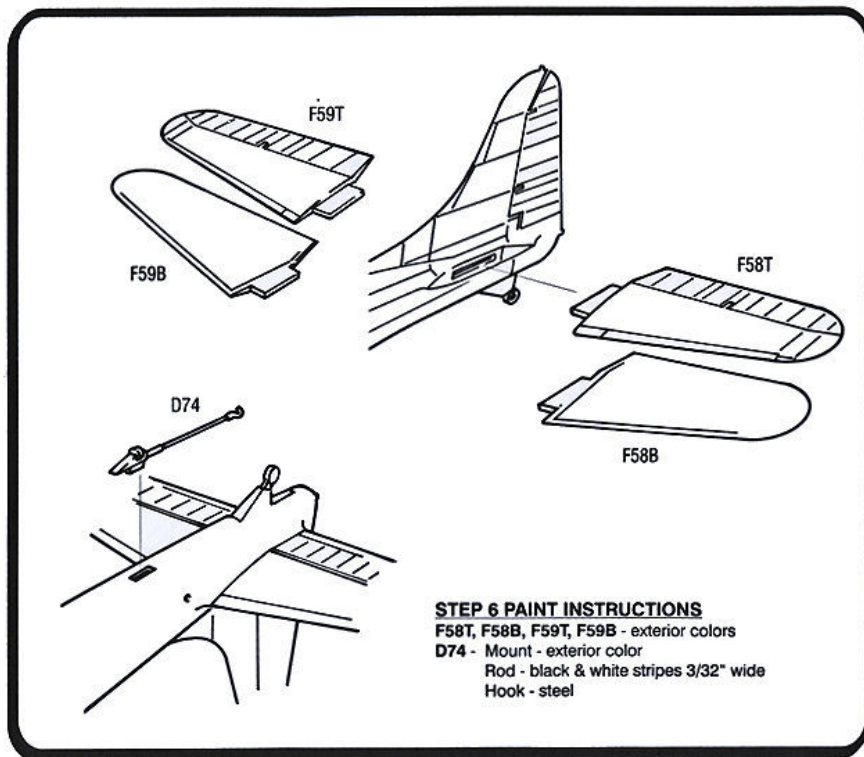
- After test fitting, glue the completed floor assembly from Step 2 into the fuselage. If you have not already done so, it is a good idea to paint the underside of the floor as some of the openings in the wing bottom will allow the floor bottom to be seen when the model is completed.
- Locate and cement the wing bottom (C52) to the fuselage.





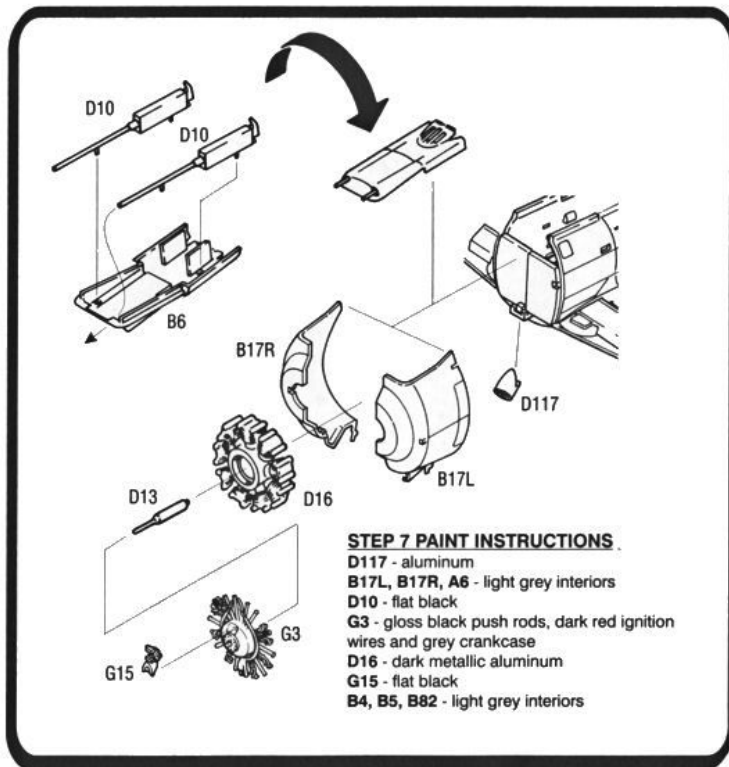
- Open the two holes in the wing bottom to allow for later installation of the Yagi radar antenna. (To be installed in Step 14)
- When the wing bottom is dry, glue the left top wing (C50) and the right top wing (C51) to the wing bottom and the fuselage wing fillet. It is recommended that you glue the wing tops to the fuselage wing fillet first and glue toward the wing tips to insure a good tight fit at the wing root.
- After cleaning up the glue joint, paint the area behind the approach light (J115) on the left wing leading edge bright silver and glue the light in place. We recommend you use white glue or clear gloss acrylic paint to secure the clear pieces in place to avoid smearing or crazing the clear plastic.
- Repeat the painting procedure for the landing light (J114) on the left wing bottom. Glue the landing light in place.

## STEP 6 - STABILIZERS

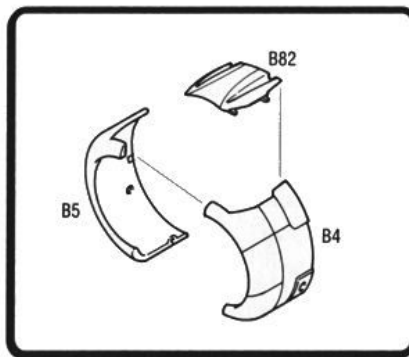


- Glue the left stabilizer top (F58T) to the left stabilizer bottom (F58B).
- Glue the right stabilizer top (F59T) to the right stabilizer bottom (F59B).
- Now glue the left and right stabilizers to the fuselage. Make sure that you keep these assemblies level with the ground.
- Finally, glue the arresting hook (D74) to the bottom rear of the fuselage.

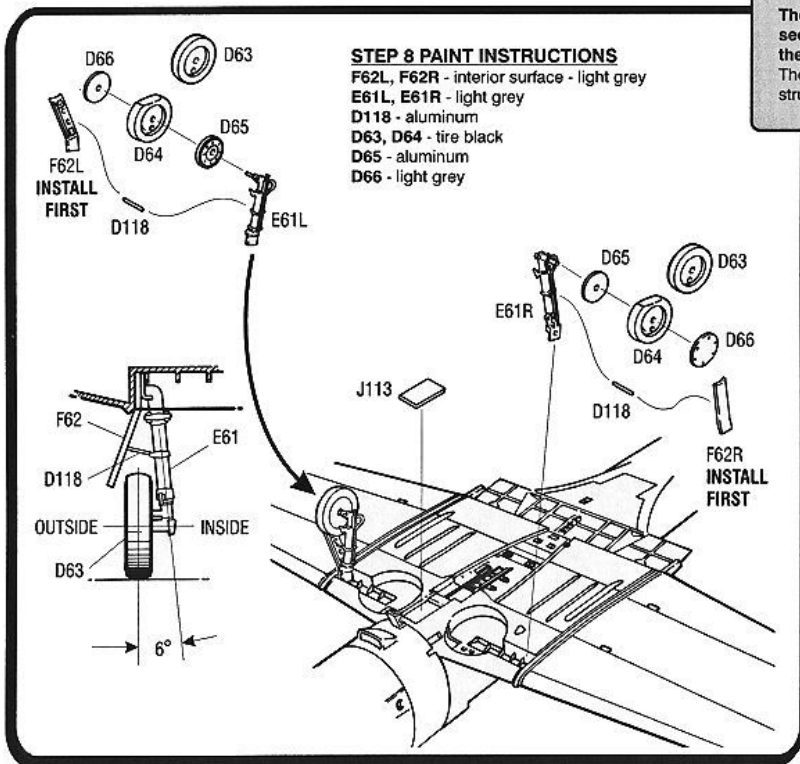
## STEP 7 - NOSE AND ENGINE



- Glue the oil cooler (D117) to the lower front center of the fuselage / wing assembly. The screen should point forward and downward, and the longer side of the V-notch should be oriented vertically as shown.
- Glue the left intermediate cowl (B17L) to the right intermediate cowl (B17R). Glue this assembly to the fuselage.
- Glue the nose machine guns (D10) to the underside of the nose gun cover (B6). (The front barrel tips must protrude through the two holes.)
- Now glue the nose gun assembly to the top of the intermediate cowl.
- Glue the prop governor (G15) to the pushrod / harness (G3). Glue the pushrod / harness to the engine cylinders, trapping the propeller shaft (D13) between these two pieces. Do not allow glue to come into contact with the propeller shaft.
- Now glue the completed engine assembly to the front of the intermediate cowl.
- Glue the left cowl half (B4) to the right cowl half (B5).
- Glue the cowl top (B82) to the cowl assembly. The cowl assembly may be glued to the intermediate cowl or placed on the fuselage after painting and weathering if you chose.



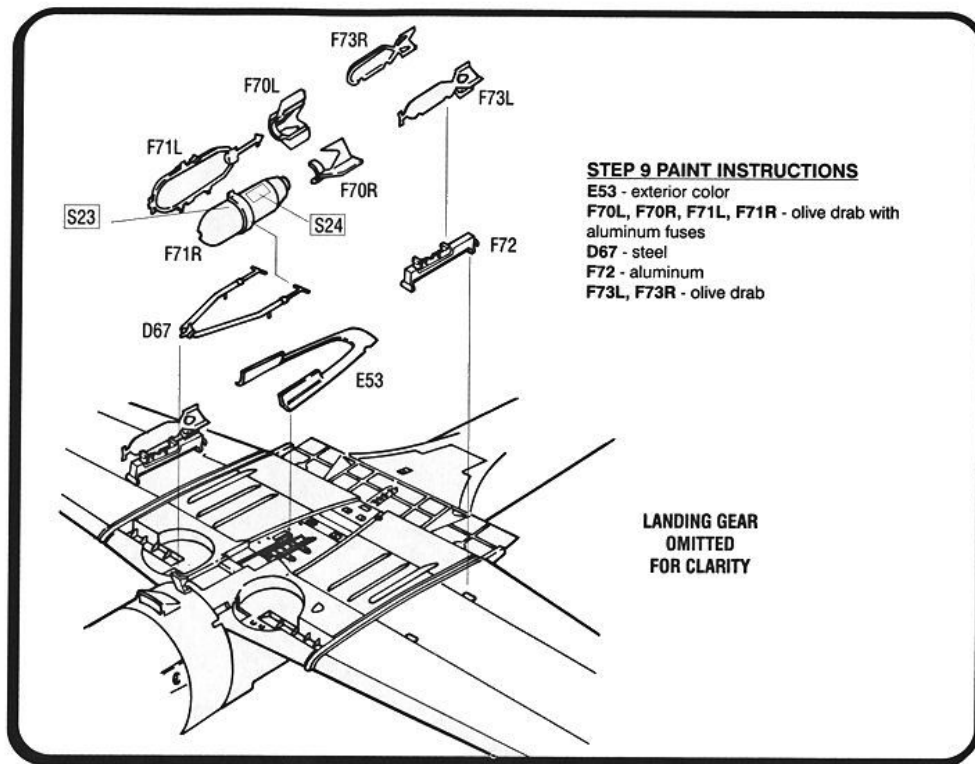
## STEP 8 - LANDING GEAR



The landing gear assembly on this kit will "self align" if you follow this sequence of assembly. Difficulty with alignment can occur if you alter the sequence. ( We told you it was a good idea to read these instructions!) The locating area in the wheel wells are designed to force the landing gear strut cover and the strut to have a precise relationship with each other.

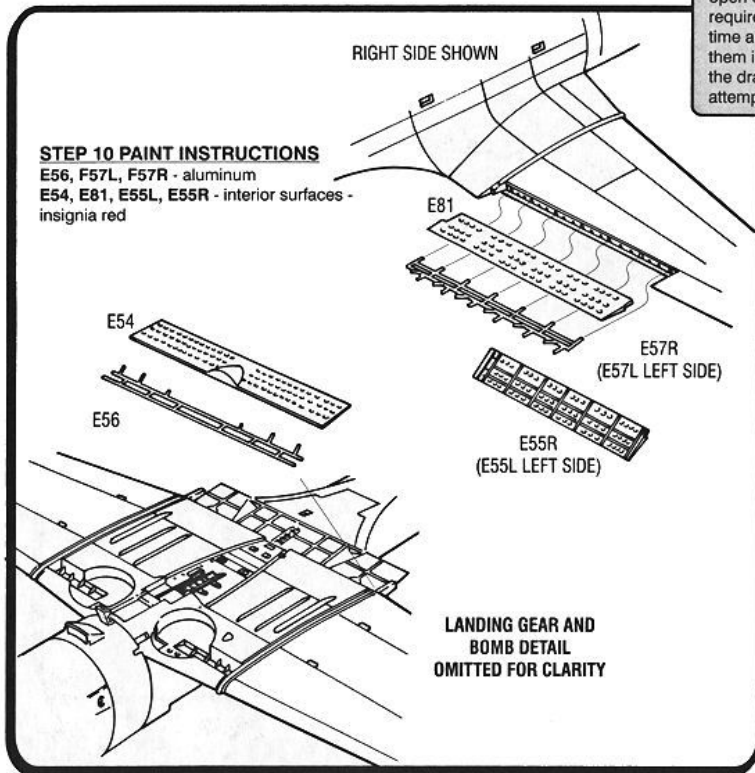
- Glue the left strut cover (F62L) and the right strut cover (F62R) into the left and right wheel wells respectively. The doors should point outward and forward.
- Now glue the left landing gear strut (E61L) and the right landing gear strut (E61R) into the wheel wells and up against the strut covers. These parts should have their axles parallel to the ground when viewed from the front. The gear legs should have a 6 degree inward angle when viewed from the front.
- After these parts have dried, carefully glue two strut cover arms (D118) between the landing gear struts and the strut covers.
- Accurate Miniatures has provided both weighted (D64) and unweighted (D63) tires. Select the ones you wish to use and glue the brake drums (D65) and the wheel cover (D66) into the center of your selected tires. The wheels have been molded separately to make painting easier.
- Glue the tire / wheel assemblies onto the axles making sure that the flat spot on the weighted tire sits level on the ground when viewed from all angles.
- Glue the pilot's bomb release window (J113) into the opening in the wing bottom.

## STEP 9 - 1000 LB. AND 100 LB. BOMBS



- Glue the centerline bomb fairing (E53) to the center of the wing bottom.
- Glue the left 1000 lb. bomb half (F71L) to the right 1000 lb. bomb half (F71R).
- Glue the left bomb fin (F70L) to the right bomb fin (F70R). After painting, apply stencils (S23 and S24) to bomb body.
- Line up the locating tabs and glue the fin assembly to the bomb. The fins must be parallel to the wing bottom.
- Glue the bomb trapeze (D67) to the sides of the bomb. Before the glue sets firmly, glue the bomb trapeze into the hinge mechanism on the bottom of the intermediate cowl. The two small pins on the trapeze arms should point toward the bottom of the airplane. The bomb trapeze allowed the bomb to swing free of the propeller arc.
- Now glue the two 100 lb. bomb wing racks (F72) to the bottoms of the wings.
- Glue the left 100 lb. bomb half (F73R) to the right 100 lb. bomb half (F73L). Make two sets. Ignore the fact that the "L" and "R" are mislabeled. Most bombs have the pointy end forward.
- Glue the 100 lb. bombs to the bomb wing racks.

# STEP 10 - DIVE FLAPS



The dive flaps on this kit may be assembled in any one of three positions: closed, full open or landing (lower flaps lowered only). The dive flap actuators are delicate and require care in the removal from the trees and installation on the model. Take your time and do not remove the parts from the tree until you are ready to paint and glue them in place. If you become confused as to where the flaps and actuators go, consult the drawings. The dive flaps and actuators will only fit where they belong so do not attempt to force them into place.

**Due to a numbering error, the upper dive flaps have the "L" and "R" designations reversed. Since they will only fit one way, this should only present a minor inconvenience.**

#### Closed Position:

Dive flap actuators (E56, F57L & F57R) are not used for the closed position.

- Glue the center dive flap (E54) to the center wing bottom.
- Glue the upper dive flaps (E81) to the wing tops in the closed position.
- Glue the lower dive flaps (E55L & E55R) to the wing bottoms in the closed position.

#### Full Open Position:

- Glue the center dive flap actuator (E56) to the center wing bottom. The center actuator should have the two long parallel rods placed in a horizontal position against the bottom surface of the wing.
- Glue the left dive flap actuator (F57L) to the left wing and the right dive flap actuator (F57R) to the right wing. The left and right dive flap actuators have longer "fingers" that should point toward the bottom and center of the model.
- Glue the center dive flap (E54) to the wing bottom and actuator.
- Glue the left lower dive flap (E55L) to the wing bottom and the actuator in the open position and the right lower dive flap (E55R) to the right wing bottom and actuator in the open position.
- Glue the left top dive flap (E81) and the right top dive flap (E81) in the open position to the respective wing tops.

#### Landing Position:

- Begin by gluing the upper dive flaps (E81) to the wing tops in the closed position.
- Now glue the left and right dive flap actuators (F57L & F57R) into the wings.
- Glue the left and right lower dive flaps (E55L & E55R) to the lower wings and actuator "fingers."

## STEP 11 - COCKPIT DETAILS

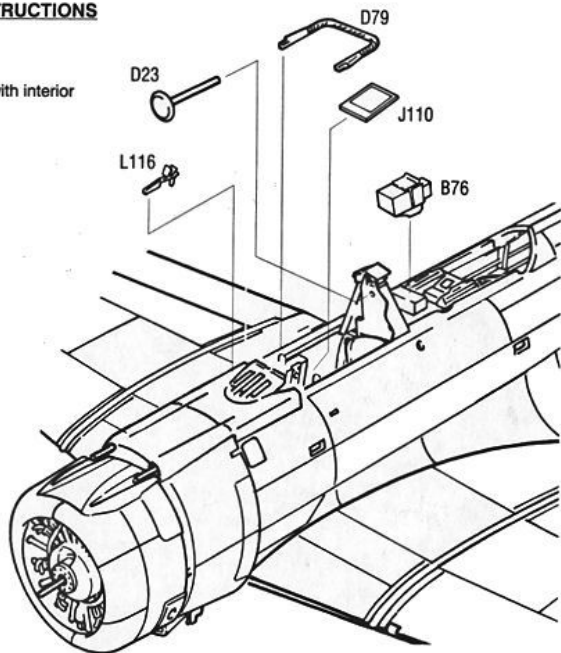
### STEP 11 PAINT INSTRUCTIONS

D79 - aluminum

L116 - flat black

B76 - flat black

D23 - leather headrest with interior green shaft

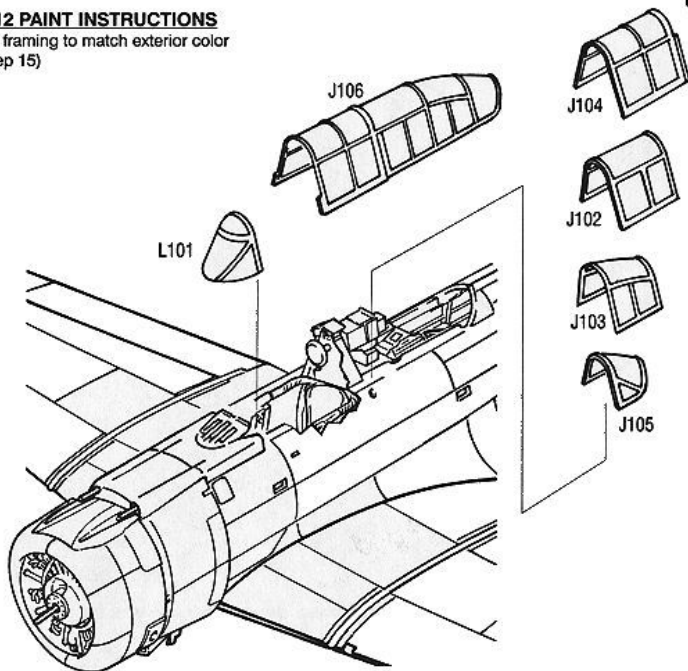


- Carefully remove the hoisting cable (D79) from the tree and locate onto the two raised clevises on the sides of the pilot's cockpit. The cable rests behind the pilot's seat. This cable was used on the real aircraft to raise the plane from dockside to the carrier deck. It was also used to suspend the plane from the ceiling when space was at a premium below carrier decks.
- Glue the radar unit (B76) onto the mid-fuselage shelf.
- Carefully locate and glue the gunsight (L116) to the upper cowl.
- Finally, glue the pilot's headrest (D23) to the pilot's bulkhead. This part was adjustable on the real aircraft and the mounting pin will need to be trimmed to your desired length before gluing.
- Install map table (J110) from Step 2 at this time.

## STEP 12 - CANOPIES

### STEP 12 PAINT INSTRUCTIONS

Canopy framing to match exterior color  
(See Step 15)



The canopies may be installed in the closed or opened (stacked) position.

- Begin the installation of the clear parts by gluing the pilot's windscreen (L101) onto the cowl. Remember to use your non-crazing glue.

#### Closed Position:

If you are building the closed version, the gunner's machine gun will need to be stored under the turtle deck or removed. (See Step 13)

- For the closed version, simply glue the closed canopy (J106) onto the fuselage.

#### Open Position:

If you are building the open version it is very important to follow the assembly sequence exactly.

- Begin by gluing the rear canopy (J105) over the radar unit and onto the top of the fuselage deck. This canopy was frequently removed from the real aircraft so it may be left off to expose more detail on your kit.
- While the rear canopy is drying, glue the gunner's canopy (J103) onto the rear deck.
- Now glue the fixed canopy (J102) over the gunner's canopy.
- The pilot's canopy (J104) may be positioned open or closed or any place in between.

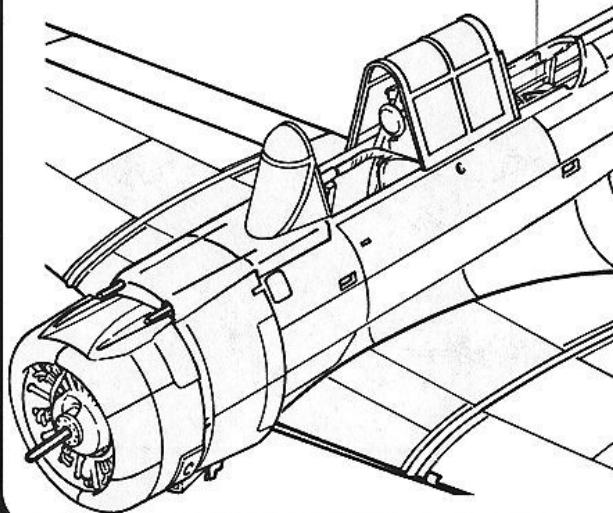
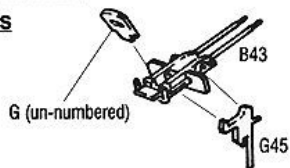


## STEP 13 - REAR GUN

### STEP 13 PAINT INSTRUCTIONS

G45 - aluminum

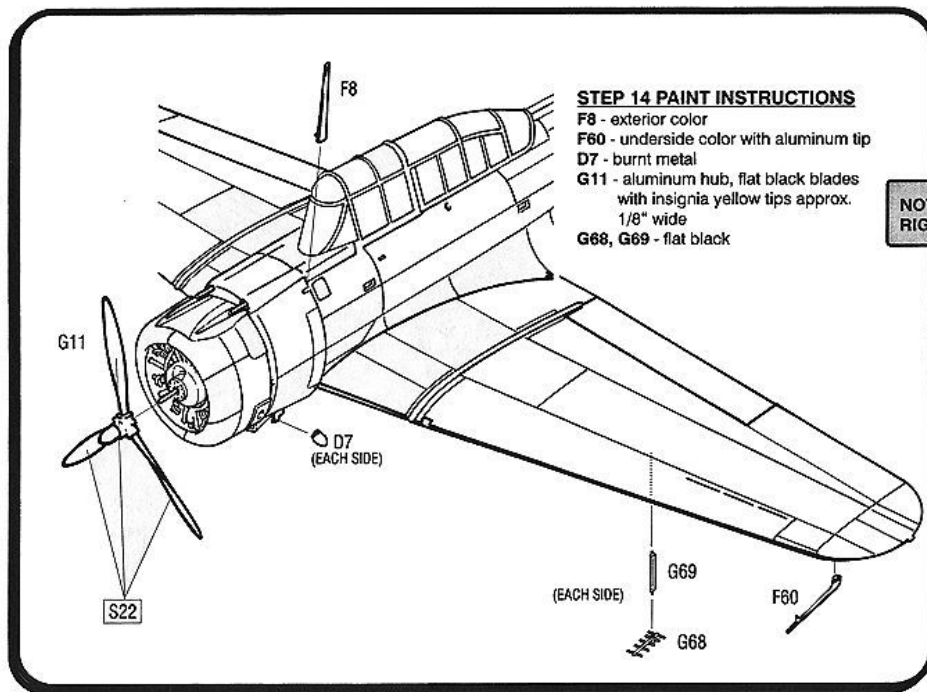
B43, G(un-numbered) - flat black



The machine gun parts are very delicate. Use extra care in handling and installation.

- Glue the twin .30 cal. gun mount (G45) into the long and short slots between the twin .30 cal. guns (B43) as shown.
- Glue the .30 cal. gun armor plate (G un-numbered) to the top of the twin .30 cal. guns (The tab on the bottom of G un-numbered glues to the forward surface of the small vertical tab at the top center rear of the twin guns).
- The machine gun may now be glued to the gun ring. If you are building your kit with a closed canopy, position the gun in the trough behind the gunner's position, or you may leave the gun assembly out altogether.

## STEP 14 - FINAL DETAILS



### STEP 14 PAINT INSTRUCTIONS

- F8 - exterior color
- F60 - underside color with aluminum tip
- D7 - burnt metal
- G11 - aluminum hub, flat black blades with insignia yellow tips approx. 1/8" wide
- G68, G69 - flat black

- Glue the radio mast (F8) to the left side of the fuselage. An antenna may be added from this mast to the top of the tail as a final step after the mast is thoroughly dry.
- The two exhausts (D7) are now glued in place.
- Glue the pitot tube (F60) to the bottom of the left wingtip.
- Apply stencils (S22) to front surfaces of propeller (G11). Carefully push the propeller onto the propeller shaft.

**NOTE:** Do not install Yagi Radar assembly to underside of RIGHT wing until AFTER application of decals in Step 15.

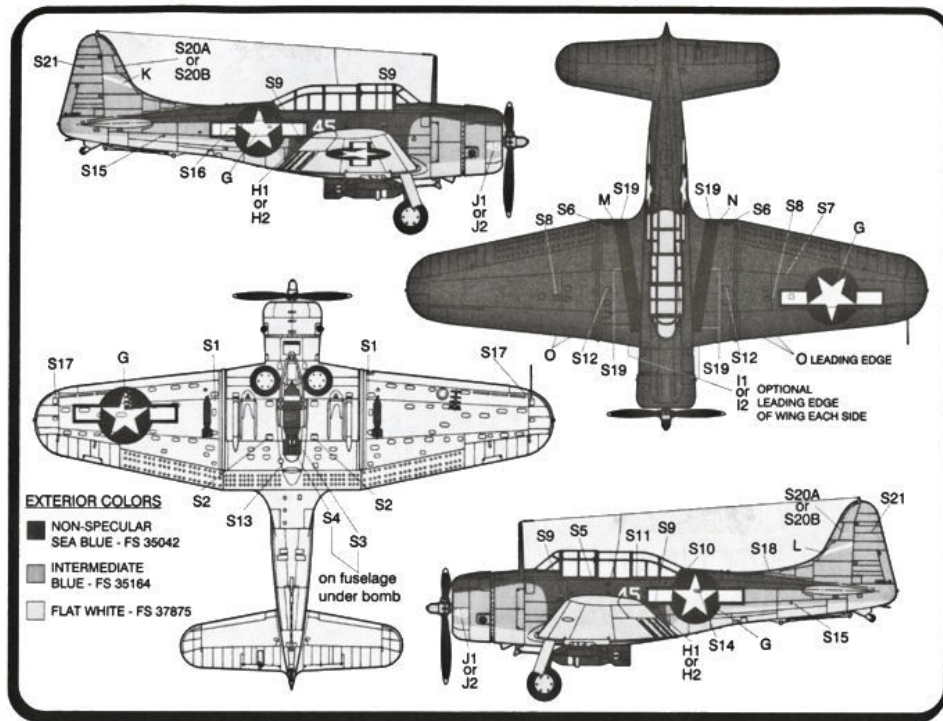
- Assemble two sets of Yagi Radar using the Yagi radar support (G69) and Yagi radar antenna (G68). After these parts dry, glue them into the open holes in the wing bottoms (see Step 5). These units rotated outward slightly and faced forward. However, they should point outward at the same angle.

The assembly of your SBD-5 is now complete.

Accurate Miniatures, Inc. would like to thank the following organizations and individuals for their generous help in the preparation of this kit:

Dale Caldwell  
 Clark Macomber  
 Larry Fuller  
 US Naval Museum and Hill Goodspeed  
 US Navy History Office and Steve Hill  
 Jim Sawruk  
 John Elliot  
 Thomas E. Doll  
 Bob Willis and the staff/Kalamazoo Air Museum  
 Lawrence D. Webster, Aero Historian

## STEP 15 - DECAL PLACEMENT AND FINISHING



Research into the history of the two particular aircraft represented in this kit has turned up historically interesting SBD's. These planes were assigned to VB-16 aboard the USS Lexington (CV-16) during Operation Galvanic (the Marine landings on Tarawa). Both aircraft were lost during the operation, apparently as a result of hard landings. They were written off on November 19, 1943. It also appears that these were the only dash five Dauntlesses to be assigned to the Lexington since they were just coming into service at this time.

Both aircraft were finished in the tri-tone finish of non-specular sea blue over intermediate blue over flat white and due to their newness showed little wear and tear. This kit may be built to represent planes with blue surround on the national insignia. Red surrounds were ordered in place from June 28, 1943 to July 31, 1943. This short 34 day period was a time of extreme confusion. Some units complied immediately while other units never did repaint the markings. Most units simply didn't like the change and it's safe to say nobody wanted to see **anything** red on a US airplane, least of all the pilots. If it looked like red, it got shot at! November, 1943 is well outside the designated time frame for the red surround and practical experience had by now proven that red markings were a bad idea in the Pacific Theater.