

MARTIN B-10B

BACKGROUND: The Martin B-10 was remarkably advanced when introduced during 1932, and was progressively refined over the years, serving actively until at least 1944.

Among the important B-10 milestones were:

- First nearly all-metal U.S. bomber
- First bomber to be equipped with a Norden bombsight
- First production bomber to be equipped with a retractable landing gear
- Winner of the 1932 Collier Trophy

Of the several variations produced, the B-10B was employed in greatest numbers by the U.S. Army Air Corps.

Export versions were sold to foreign countries including: Argentina, Turkey, Siam, China, Russia, and Holland. The latter machines participated in Pacific Theater combat during World War Two.

SPECIFICATIONS:

Wing Span: 70' 6" Top Speed: (approx.) 213 m.p.h.
Gross weight: 14,600 lbs. Crew accommodation: 4-5

IMPORTANT: READ BEFORE STARTING ASSEMBLY!

This is a complex model, and should be approached with patience and care. Allow plenty of time and check the fit of each part before applying cement. Certain parts may require trimming or filling to achieve the best results. Use a good brand of plastic putty if any filling is required.

GENERAL INFORMATION: Before starting assembly, clean all parts in lukewarm water and liquid detergent, so paint will adhere properly. Use only paints which are recommended for plastic.

For best results when brush painting, use sable hair brushes. Small components may be painted while they are still attached to their plastic "trees." Larger assemblies may be painted after they have been cemented together. When cementing components onto already painted parts, first scrape off the mounting area paint, to permit good adhesion.

Liquid type styrene cement is preferred, and may best be applied with a fine-pointed brush. Avoid using excess cement. For safety and efficiency, follow the cement manufacturer's instructions exactly.

Carefully detach parts from "trees" using a sharp modeling knife. Parts should be detached only as they are needed, to prevent loss. Remove any "flash" which may be present, and using a sanding block, dress all mating surfaces until they match perfectly. A suitable sanding block can be made from a piece of No. 400 sandpaper, contact-cemented to a scrap of wood.

FUSELAGE: The fuselage interior should be painted prior to assembly, and all internal details painted, instrument panel decals applied, and parts installed. Also snap lower fuselage side and belly windows in place, and secure with tiny amounts of cement.

Pre-assemble the fuselage halves to check the fit before applying cement. In some instances, a slight amount of trimming may be required. Apply cement to the mating edges, and place fuselage halves together. Rubber bands and masking tape will assist holding parts in firm contact while drying.

LANDING GEAR: Decide whether your model will be displayed with the landing gear in ground position, extended in flight attitude, or retracted. Also, choose between the all-plastic wheels/tires, and the flexible tires. The wheel hub portions should be painted before assembly in either case.

If landing gear are to be installed in the extended in-flight position, cut each main landing gear strut with a razor saw, and cement discs (part No. 34) in place to extend length.

If the landing gear are to be installed in the ground, or retracted position, the struts may be left as is, and in any case should be painted prior to assembly.

Place inboard portions of the wheels or wheel hubs onto their axles, and carefully mushroom ends of axles to retain wheels. This can be done with a tiny soldering iron, or heated metal blade. **CAUTION:** Don't overdo this or wheels will not be free to rotate. Add tires or outer wheel halves, as previously selected. Apply cement sparingly, and hold or clamp parts firmly together until they adhere. **IMPORTANT:** If the flexible tires are employed, they will have a tendency to spread the hubs apart until the cement has dried. If they are not properly held or clamped, the finished wheels will be too wide for the wheel wells.

Fit the main landing gear struts into their mounts inside the nacelles on the lower wing panels. Cement their retaining blocks into place, and before the cement has set, place the struts in their correct position (retracted or extended). Add the rear landing gear struts. If the gears are in a lowered position, the ball ends of the rear struts will fit into the tiny sockets just aft of the wheel wells. If the gears are retracted, the rear struts will fit as shown in the bottom view drawing.

WINGS: Check the fit of top and bottom wing panels before cementing together. When satisfactory, apply cement to mating edges, and use strips of masking tape to hold the edges together while drying.

After the wing panels are assembled, use a rat-tail file to open up the lower halves of the landing light openings. Paint the backs of the lights silver, before cementing them in position.

ENGINES: Paint the engines, cowlings and propellers. Cement engines into cowlings, and insert propeller shafts into engine crankcases. Carefully cement prop retainers on to rear of prop shafts. **CAUTION:** Do not use excessive amounts of cement or propellers will not be free to revolve. Tweezers are helpful in positioning propeller retainers. Cement completed engine assemblies onto nacelles.

EXHAUSTS: Paint the exhaust systems prior to cementing in position. Note that the B-10B featured distinctive outlets above the engine nacelles, whereas other types of B-10s had exhaust outlets at the lower sides of the cowlings. One variation is illustrated, and parts are furnished for the conversion. Note, however, that slight modifications may be necessary.

Some B-10Bs were equipped with vertical "blades", which served to prevent exhaust flash glare from interfering with the pilot's night vision. These items have been misidentified in some publications.

FINAL ASSEMBLY: When the various sub-assemblies are completed and painted, check each for proper fit. Some slight trimming or sanding may be required to achieve optimum results.

Cement wings into fuselage, using small strips of masking tape to secure parts while drying, if necessary.

Apply cement to stabilizer lap joints and fuselage mating surfaces, and install. Check alignment carefully, sighting from rear of model.

Add remaining details, such as tail wheel, external bomb rack and bomb (optional equipment), antennas, pitot tubes, and auxiliary winglets, using a minimum amount of cement to avoid marring the surfaces.

PAINTING: All seams should be smoothed and finished prior to painting. Although major parts are molded in appropriate colors, they may be painted for greater realism. The box artwork may be used as a guide, in addition to the following:

- WINGS: Glossy chrome yellow orange
 - HORIZONTAL TAILPLANE: Chrome yellow orange
 - FUSELAGE: Light blue. Modern equivalent is Piper Bahama Blue
 - ENGINE COWLINGS & NACELLES: Light blue
 - FUSELAGE INTERIOR: Aluminum
 - VERTICAL FIN: Chrome yellow orange. Some aircraft had blue fin
 - RUDDER: Red, white and blue stripes (see decals)
 - WHEEL HUBS: Generally, same as wings, but individual variations existed
 - TIRES: Dark matt grey. Note: Flexible tires can be rendered more realistic by sandpapering or steel wooling to remove gloss.
 - EXHAUST STACKS: Steel
 - LANDING GEAR STRUTS: Steel
 - TAIL WHEEL: Steel fork, hub to match wings, dark grey tire
 - PROPELLERS: Polished metal hubs and blades. Area outside cowling area was frequently painted flat black. Some examples were black only on rear of blades. Propeller manufacturer's information plates were often prominent.
 - CANOPY AND TURRET FRAMES: Same color as fuselage (may be neatly applied with strips of thin chart or striping tape)
 - BOMB: Matt black or olive drab
 - ENGINES: Grey crankcases with black cylinders
- Note: Pre-1934 aircraft featured olive drab fuselages. In 1938, a painted aluminum finish for the entire aircraft was adopted.

DECAL INFORMATION: Furnished decals are extra thin, and must be handled carefully for best results. Each decal should be trimmed out separately, and applied as noted on the sheet itself. Avoid getting decals folded back upon themselves. Note auxiliary instrument decals, which are applied to the inboard side of each nacelle, and the tiny block of information which is applied to the left forward side of the fuselage. (See illustrations)

Decals are furnished for your choice of three different aircraft:

Number 164 depicted on the box, represents a machine of the 31st Bombardment Squadron. Number 174 uses the same color scheme as 164 and same markings locations, but uses the "Jiggs" emblem of the 11th Bombardment Squadron. Number 166 represents a machine of the 96th Bombardment Squadron, and should be painted all aluminum. Note also, as shown in the illustrations, its markings locations.

CONVERSIONS: it is possible to convert this kit to other versions of the Martin bomber, and we refer you to the list of published references. Caution should be exercised, however, as misleading drawings and information have appeared. Photographs are, by far, the most trustworthy source of information. Be aware though, that photo captions are very frequently in error!

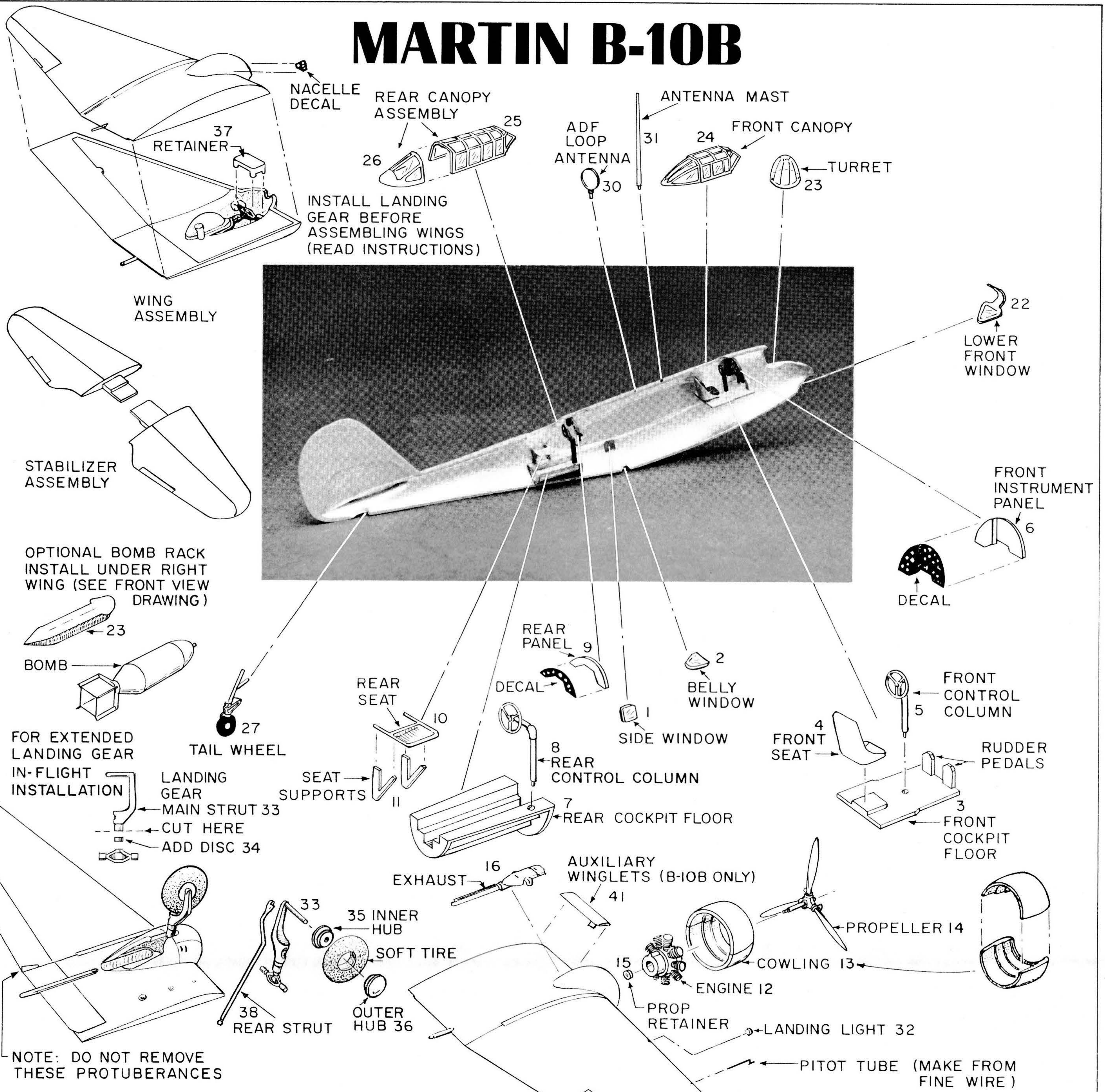
PUBLISHED REFERENCES:

1. AIR POWER, May, 1972
2. RAF FLYING REVIEW, Vol. 18, No. 4
3. FLYING REVIEW INTERNATIONAL, Vol. 20, No. 11
4. UNITED STATES MILITARY AIRCRAFT SINCE 1909, Putnam
5. MODEL AIRPLANE NEWS, November, 1944
6. AIR CLASSICS, 1966 Annual

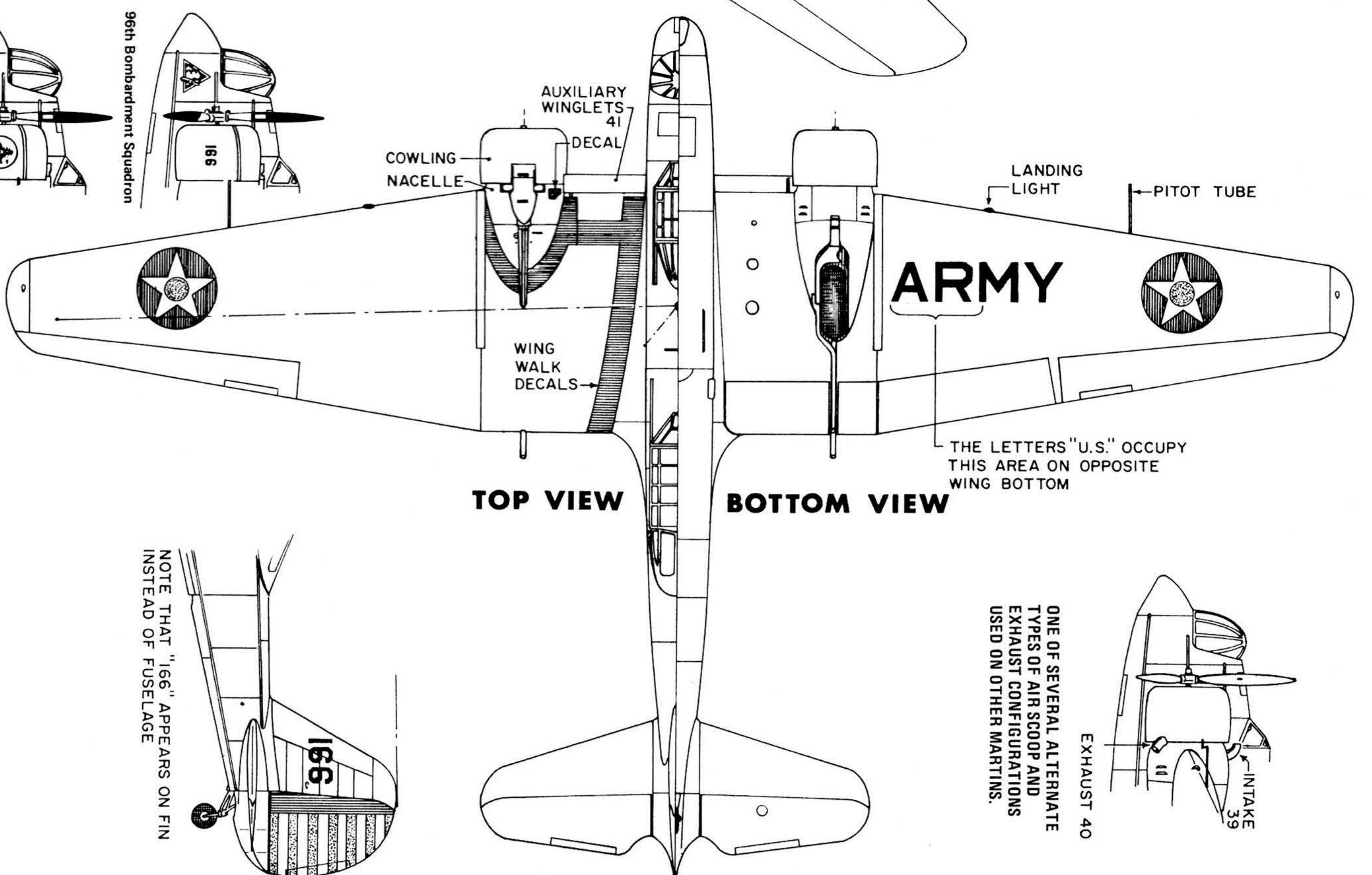
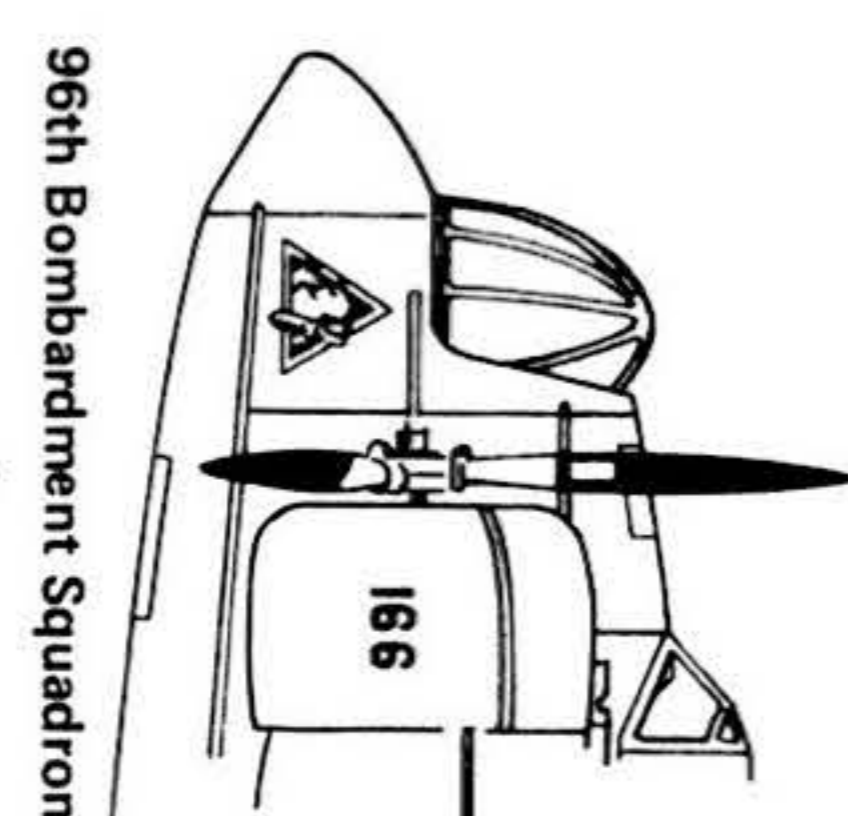
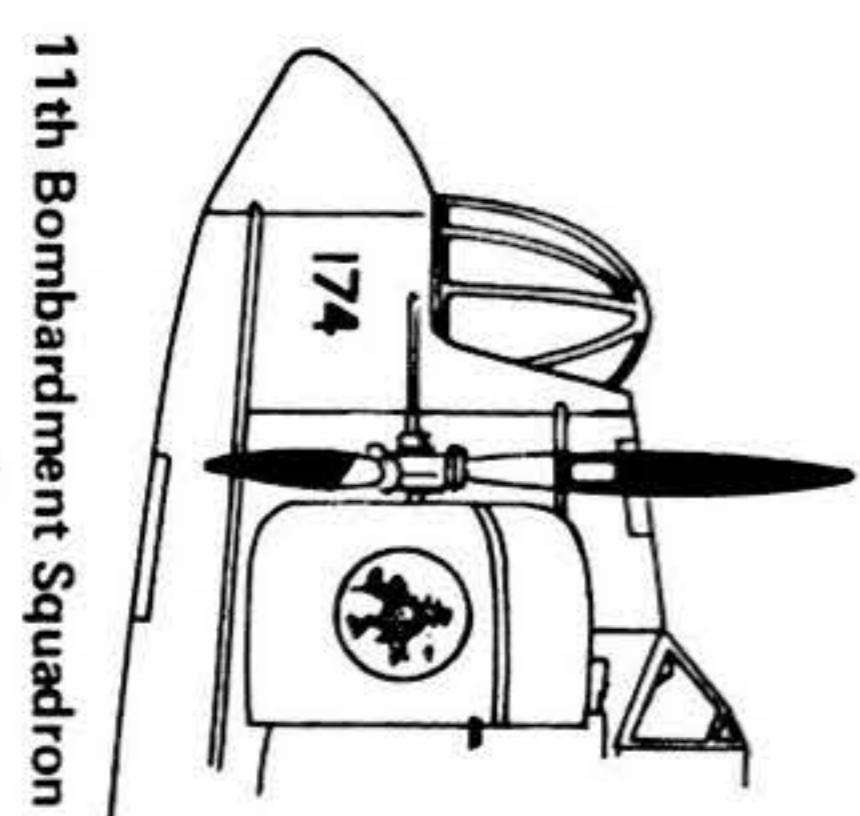
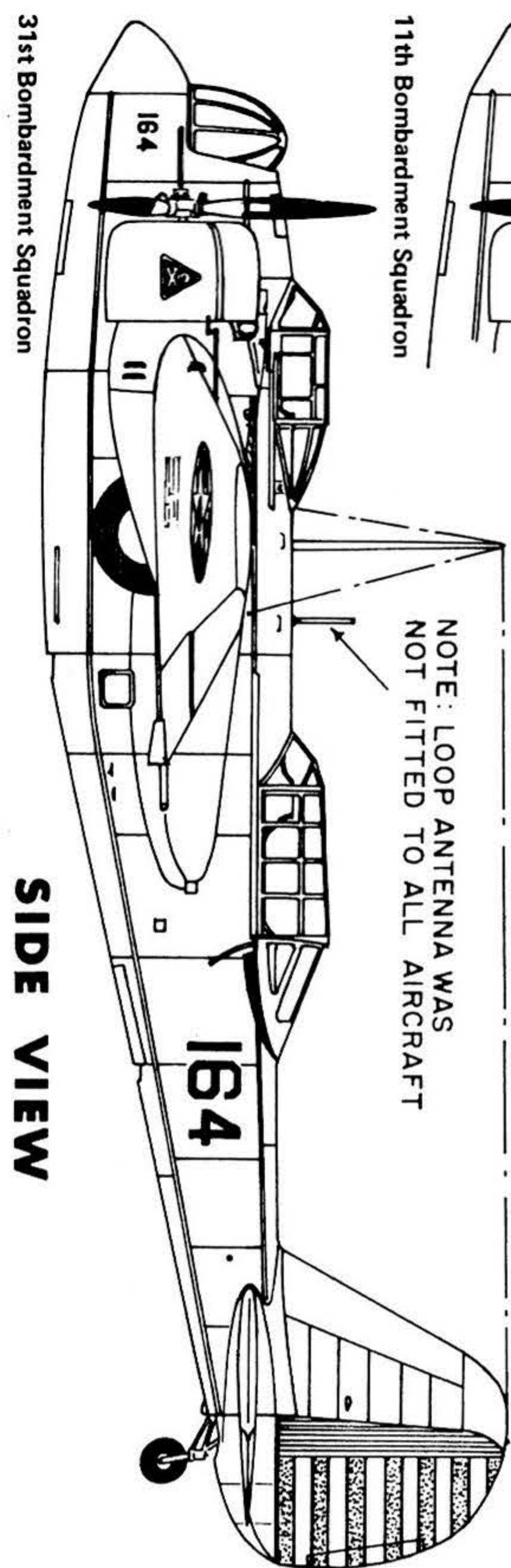
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MARTIN B-10B



NOTE: DO NOT REMOVE THESE PROTUBERANCES



ONE OF SEVERAL ALTERNATE TYPES OF AIR SCOPES AND EXHAUST CONFIGURATIONS USED ON OTHER MARTINS.

