

AIRFIX
CONSTRUCTION KIT

1/72 SCALE MODEL CONSTRUCTION KIT

B.24 J LIBERATOR

Produced in larger numbers than any other American aircraft, the Liberator had a long and distinguished career with the U.S. and Allied forces. Never as glamorous a machine as the B-17 Fortress with which it shared the daylight heavy bombing, the B-24 was even more versatile and was used as transport, a tanker, reconnaissance and anti-submarine bomber and for maritime reconnaissance in addition to its normal purpose.

The design of the Liberator began in 1939 and the prototype XB-24 flew in December of the same year. Range was one of the main aims of the designers and instrumental in achieving this was the high aspect ratio Davis wing, the unusual form of which gave the maximum space for fuel.

By the time of the first flight the Liberator had already been ordered by the U.S.A. and France and in 1940 the R.A.F. ordered 164. Development of the first aircraft continued in 1940 and in January 1941 the first of the R.A.F. bombers was delivered. The first R.A.F. aircraft were not however employed in the bombing role but as transport, their great range making possible non-stop flights across the Atlantic by B.O.A.C. and the Trans-Atlantic Return Ferry Service.

The next batch of Liberators arrived in mid-1941 and were modified for use by Coastal Command, where their long range and useful load made them an obvious choice. These aircraft were equipped with radar and a gun pack containing four 20 mm cannon was fitted beneath the nose.

In June 1941 the U.S.A.A.F. received its first B-24 A's: these also were used mainly in the transport role, but at the same time bomber development was continuing and the first major production variant, the B-24 D, appeared. 2,425 B-24 D's were produced not only by Consolidated, but also by Douglas and the Ford Motor Company at an enormous new plant at Willow Run. B-24 D's were used in large quantities by the R.A.F. Coastal Command but the majority went to the U.S.A.A.F., initially in the Middle East and England. On August 1st, 1943, B-24's carried out their catastrophic raid on the oil-fields at Ploesti; of the 177 that set out 57 were lost and the remainder scattered all over the Middle East. More success was being achieved in the Pacific, where the Liberator was the supreme heavy bomber until the appearance of the B-29 Superfortress in 1944.

The Liberator version which was built in the largest numbers of all was the B-24 J, 6,678 of these being constructed, 1,200 of which went to the R.A.F.

The B-24 J which is the subject of the model is one of the bombers operated by the 392nd Bombardment Group of the Second Air Division of the U.S. 8th Air Force based in England from 1942 until 1945.

When the last Liberator was completed in May 1945, a total of 18,188 B-24's had been produced by Consolidated, Douglas, Ford and the North American Aviation Company.

The B-24 J Liberator was powered by four Pratt & Whitney R-1830 engines, each of 1,200 h.p., giving a maximum speed of 300 m.p.h. and a range of 1,700 miles with bomb load. Defensive armament consisted of the 0.5 in. machine guns and bomb load varied up to a maximum of 12,800 lb.

Wing span was 110 ft. and length 67 ft. 2 in.

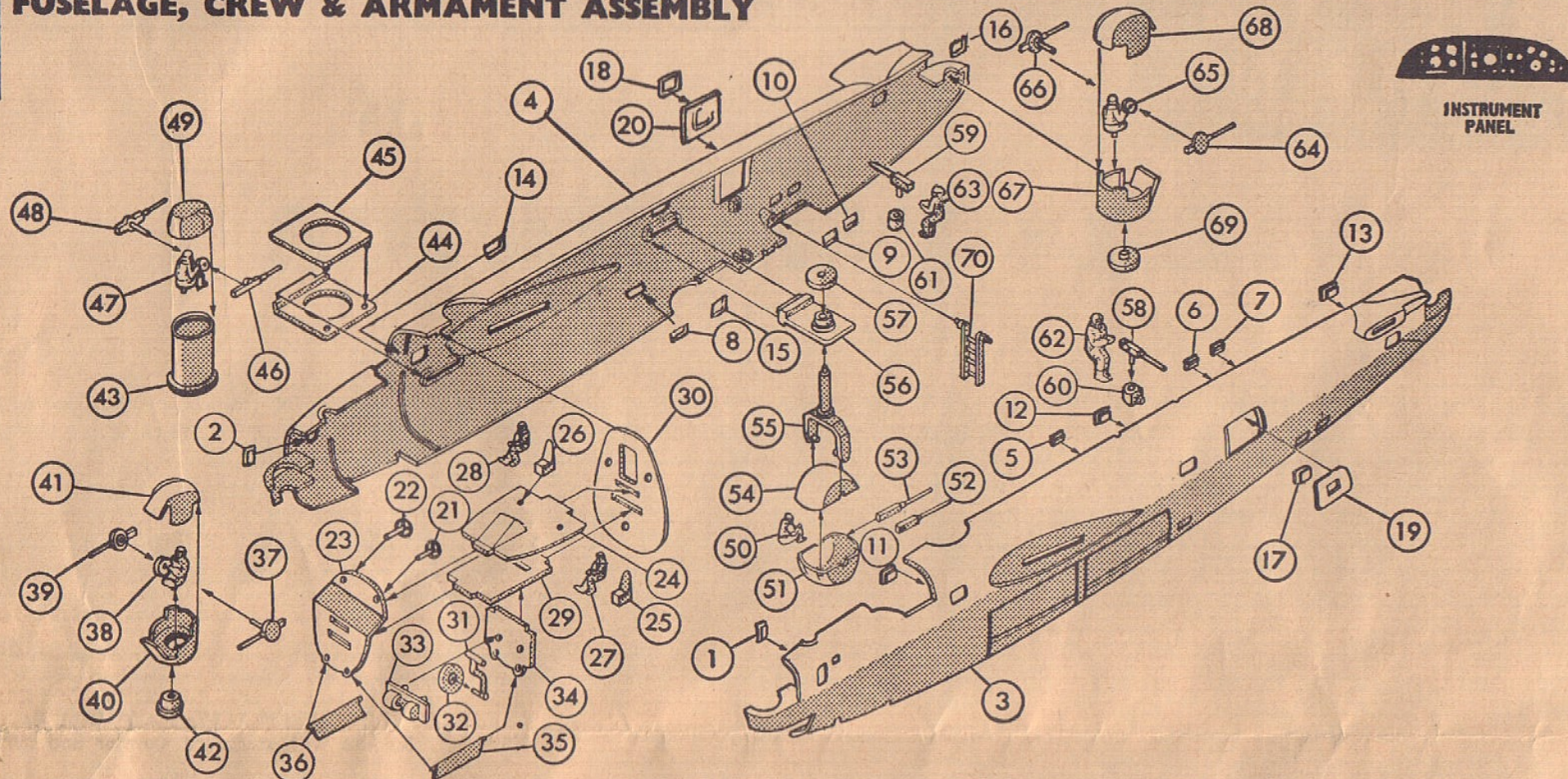
All Airfix Aircraft Construction Kits in series (1, 2, 3, 4 & 5) are made to a constant 1/72 scale. All models are designed with the same skill and attention to details so that a large and varied collection can be built up. Each model is true to scale and realistic in relationship to all other models. Other fine Airfix Construction Kits are available in various series such as Historical Ships, 00 Trackside Houses and Accessories, 1/32 Vintage Cars and 1/12 Model Figures. A list of the many other Airfix models which you can make will be found on a slip in this package.

INSTRUCTIONS

PAINT ALL DETAILS AND LET DRY BEFORE ASSEMBLING (SEE SECTION 4)
N.B. FOR PAINTING USE "AIRFIX" PAINTS, FOR FIXING USE "AIRFIX" POLYSTYRENE CEMENT

1

FUSELAGE, CREW & ARMAMENT ASSEMBLY



It is recommended that the instructions and exploded view are studied and the assembly practised before cementing together. If it is wished to paint internal details such as crew, turrets and cockpit interiors, this is best done before assembly.

1. Insert the two large vertical nose windows into locating holes in the nose of the port and starboard halves of the fuselage so that the surrounds project inside fuselage halves, cement in place, applying cement to the window surround only (1-4).
2. In the same way cement in place the six narrow rectangular lower windows three in each lower fuselage half (5-10).
3. Again in the same way cement in place six of the basic windows, three in each of the fuselage halves, the remaining two basic windows are cemented to the detachable waist windows (11-20).
4. Cut out and cement printed instrument panel to top and inside of forward bulkhead then cement the control wheels into the locating holes in the panel (21, 22 & 23).
5. Cement pilot seats to locating holes in cockpit floor, then cement pilots to seats (24-28)
6. Cement smaller tab on cockpit floor into small slot at rear of forward cockpit bulkhead, instrument console on floor, fitting against angled back section of bulkhead.
7. Cement small tab on undercarriage bay floor into lower slot at rear of forward cockpit bulkhead (29).
8. Cement remaining tabs on cockpit and undercarriage bay floors into upper and lower slots in aft cockpit bulkhead.
(Ensure raised bosses on bulkhead are facing forward, see illustration.) (30).
9. Apply a drop of cement to stub axle on nose wheel leg and press nose wheel on to axle (31 and 32).
10. Lay pivot bar at top of nose wheel assembly into recess in rear of nose wheel retainer, wheel on port side (33).
11. Press locating pins on nose wheel retainer into upper holes in undercarriage bay plate, apply cement to projecting ends of pins only (34)
12. Cement tab at top of undercarriage bay plate into slot at rear and bottom of undercarriage bay floor, at same time insert, but do not cement locating pins on each end of nose wheel doors into locating holes at bottom of forward cockpit bulkhead and undercarriage bay plate leaving doors free to move. Set completed assembly aside to dry (35 & 36).
13. Press pivot pin of port nose gun through gunner's hands and cement starboard gun on to projecting pin 37, 38 & 39). ENSURE NO CEMENT COMES INTO CONTACT WITH GUNNER.
14. Locate and cement pin on nose gunner into hole in nose turret base (40).
15. Carefully locate and cement turret transparency to turret base, guns protruding between slots in transparency (41).

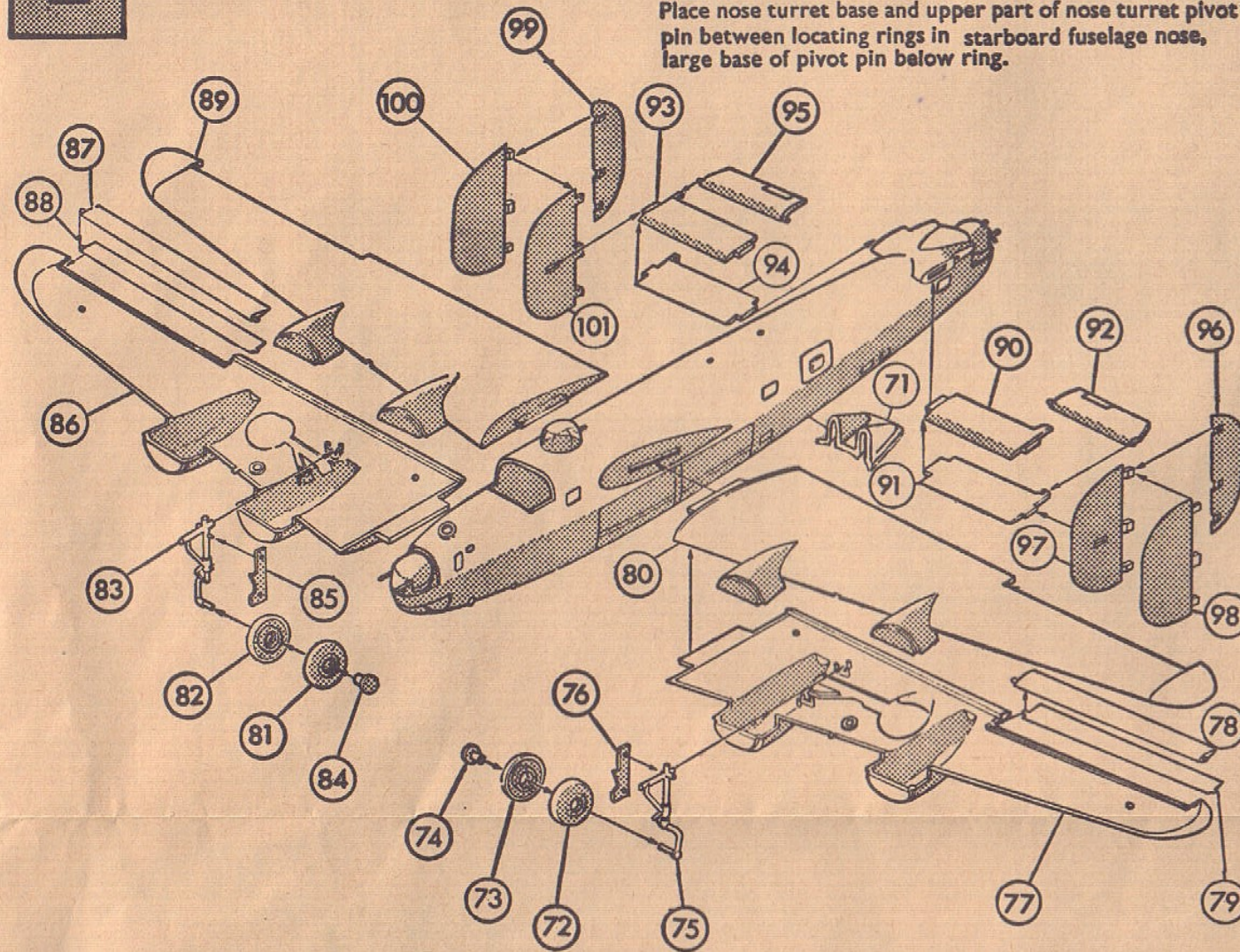
16. Cement nose turret pivot pin into ring recess below turret base. Set assembly aside to dry (42).
17. Place bottom of mid upper turret in large circular opening in mid upper turret platform, note that rib on platform is uppermost. DO NOT CEMENT (43 & 44).
18. Place top upper turret platform over turret and carefully cement locating pins beneath into locating holes, and to top of rib on turret base bottom platform (45). ENSURE NO CEMENT COMES INTO CONTACT WITH TURRET SO THAT IT IS FREE TO TURN.
19. Press pivot pin of starboard mid upper gun, (with small boss) through gunner's hands and cement port gun on to projecting pin. ENSURE NO CEMENT COMES INTO CONTACT WITH GUNNER (46, 47 & 48).
20. Locate and cement pin on mid upper gunner into hole in gunner's seat inside mid upper turret.
21. Press guns through slots in turret transparency and cement transparency on to turret base. Set aside to dry (49).
22. Cement ball turret gunner into transparent bottom half of turret, then cement one of the plain guns into each of the locating slots in transparency (50-53).
23. Engage and cement silver ball turret top to bottom and allow to dry (54).
24. When turret is quite dry clip the ball turret pivot mechanism on to turret, the pins on the pivot engaging in holes on turret sides, set aside to dry (55)
25. Pass projecting shaft on pivot mechanism through hole in turret rest ensure boss on platform is uppermost then cement ball turret retaining bush to projecting pin at end of shaft (56 and 57)
26. Press, do not cement, projecting pins on the waist guns into locating holes in waist gun mountings then cement small rectangular locating studs on the waist gun mountings into the rectangular recesses in boxes beneath waist window openings on port and starboard fuselage halves (58-61).
27. Position and cement tabs on waist gunner's feet between locating ribs on fuselage floor in line with waist windows on port and starboard fuselage halves (62 and 63)
28. Press pivot pin of gun through rear gunner's hands and cement port gun on to projecting pin. ENSURE NO CEMENT COMES INTO CONTACT WITH GUNNER (64, 65, 66).
29. Locate and cement pin of rear gunner into hole in turret base (67).
30. Carefully locate and cement turret transparency to turret base guns protruding between slots in transparency (68).
31. Cement rear turret pivot pin into recess in boss below turret base.
Set assembly aside to dry (69).
32. Press one of the locating pins on crew ladder into locating hole in starboard fuselage half. DO NOT CEMENT (70).

2

WING, TAIL & UNDERCARRIAGE ASSEMBLY

33. NOSE TURRET ASSEMBLY.

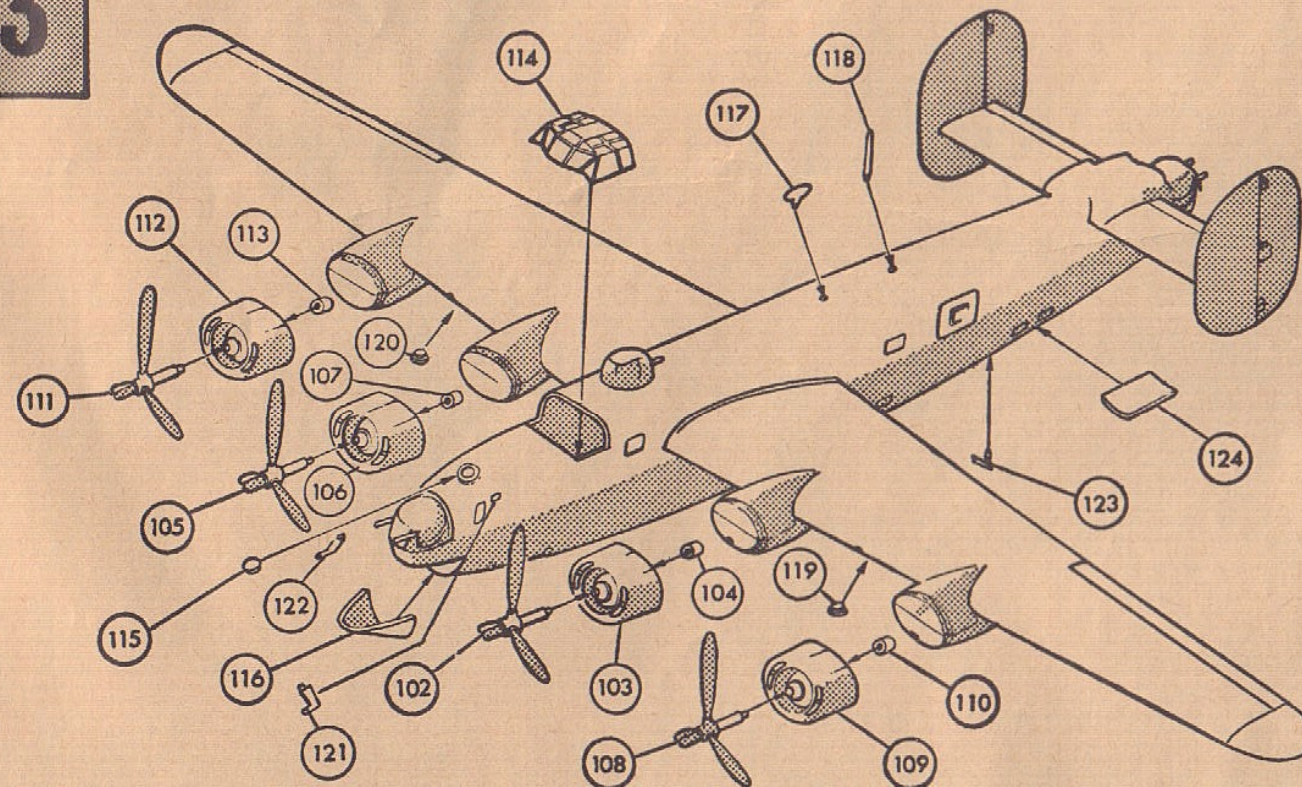
Place nose turret base and upper part of nose turret pivot pin between locating rings in starboard fuselage nose, large base of pivot pin below ring.



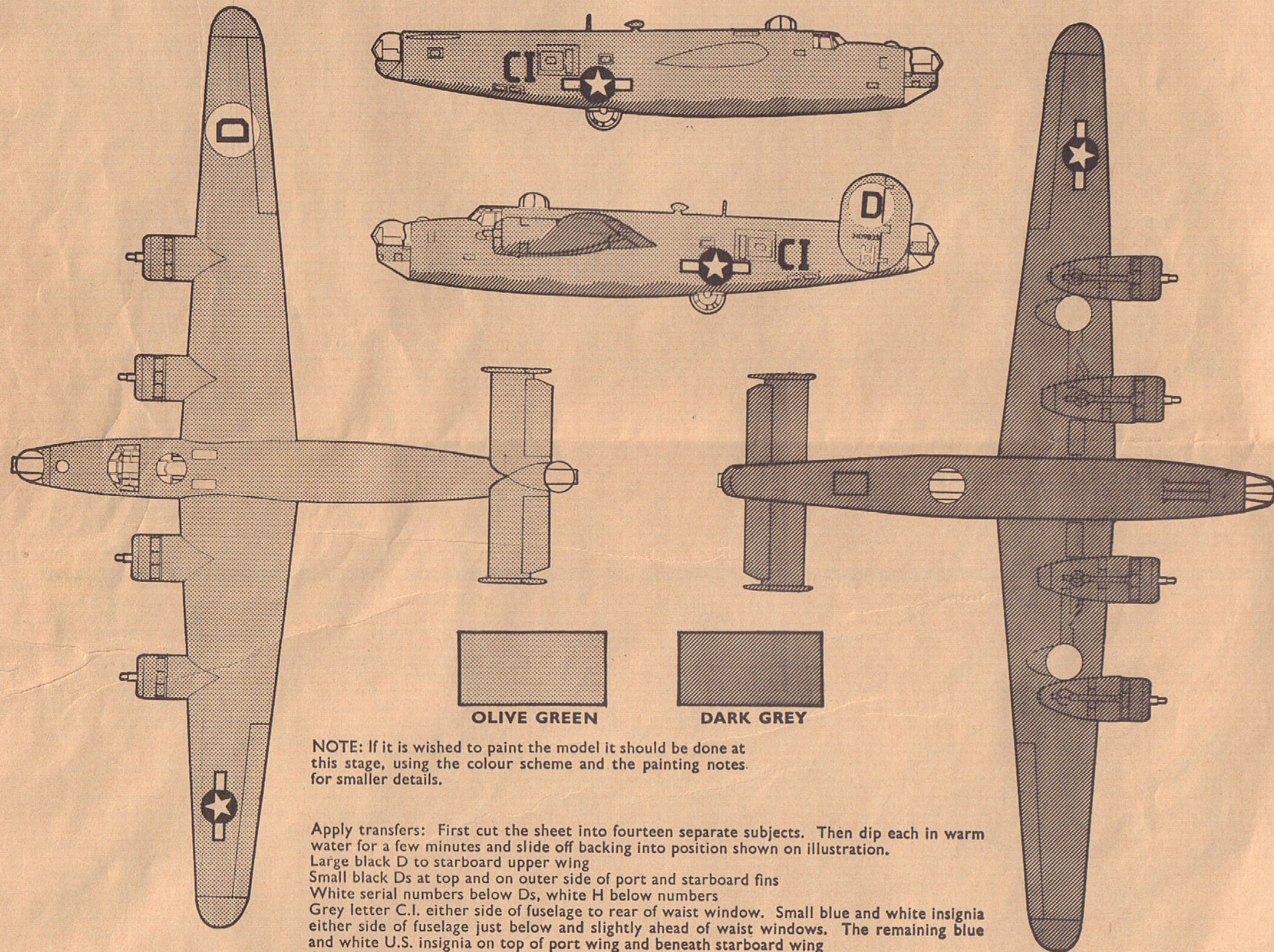
34. COCKPIT ASSEMBLY
Cement cockpit interior into starboard fuselage half, locating between ribs within fuselage.
35. MID UPPER TURRET ASSEMBLY
Cement projecting rib on mid upper turret rest into locating slot inside starboard fuselage half.
36. REAR TURRET ASSEMBLY
Locate base of turret and tail pivot pin either side of cut out in rear gun position.
37. BALL TURRET ASSEMBLY
Cement tongue on platform into recess in box in starboard fuselage half.
38. Carefully cement port fuselage half to starboard. ENSURE NO CEMENT COMES INTO CONTACT WITH MOVING TURRETS OR WHEEL.
39. Cement square end of ball turret fairing into square cut out in fuselage behind ball turret opening, fairing projecting inside and bottom flush with fuselage (71).
40. Cement together one male and one female wheel half, press hub through wheel and cement on to projecting axle of port undercarriage leg, leaving wheel free to turn (72-75).
41. Cement locating holes in port wheel cover to projecting pins on port undercarriage leg (76).
42. When dry engage top pivot rod of port undercarriage leg, axle facing inwards and shock absorber to the front, into locating box within port wing (77).
43. Cement together upper and lower halves of port aileron then lay assembled aileron in location within lower wing. Cement upper wing half to lower. ENSURE NO CEMENT COMES IN CONTACT WITH MOVING AILERON (78-80).
44. Cement assembled wing into fuselage location then repeat the above procedure for starboard wing and undercarriage assembly (81-89).
45. Cement together upper and lower halves of port tail plane (90-91).
46. Locate and cement tab on tailplane into fuselage slot at same time locating pivot pins on elevator into locating holes in fuselage and tailplane. ENSURE NO CEMENT COMES INTO CONTACT WITH MOVING ELEVATOR (92).
47. Repeat procedure with starboard elevator and tailplane (93-94-95).
48. Place port rudder pivot bars into hinge recesses in inner port fin which has slot. Cement outer port fin without slot to inner (96-98). ENSURE NO CEMENT COMES IN CONTACT WITH MOVING RUDDER. Cement tab on end of tailplane into slot in port fin.
49. Repeat procedure with starboard fin and rudder (99,100,101)

3

ENGINE ASSEMBLY



50. Select two engines and press pins of propellers through cowlings and retaining bushes. Apply cement to ends of pins projecting through bushes. When dry cement to inboard nacelles (102-107).
51. Similarly assemble and cement in position the two outboard engines (108-113)
52. Carefully cement in place transparent cockpit canopy (114).
53. Locate and cement circular transparent astrodome into location on top of fuselage ahead of cockpit (115)
54. Carefully cement in place beneath nose, transparent bomb aimers panel (116).
55. Cement direction finding loop into locating hole on top of fuselage to rear of mid upper turret (117).
56. Cement aerial into locating hole behind D.F. loop (118).
57. Cement landing light transparencies into recesses below port and starboard wings (119, 120).
58. Cement pitot heads into locating holes behind nose windows on port and starboard sides of fuselage (121 and 122).
59. Cement tail bumper into locating holes beneath fuselage, behind ball turret (123).
60. NOTES:
61. If the model is to stand upon it's undercarriage the ball turret should be raised, the undercarriage lowered, also the crew ladder which supports the fuselage. If the model is to be mounted on the stand in flying position the crew ladder is raised and the hatch cover cemented in place (124).
62. If the waist guns are not to be shown in use, remove from their mounting and press waist windows in place.
63. Cement together both parts of stand.
64. Cement arm of stand into slot provided in fuselage.

4**SUGGESTED COLOUR SCHEME.**

NOTE: If it is wished to paint the model it should be done at this stage, using the colour scheme and the painting notes for smaller details.

Apply transfers: First cut the sheet into fourteen separate subjects. Then dip each in warm water for a few minutes and slide off backing into position shown on illustration.
 Large black D to starboard upper wing
 Small black Ds at top and on outer side of port and starboard fins
 White serial numbers below Ds, white H below numbers
 Grey letter C.I. either side of fuselage to rear of waist window. Small blue and white insignia either side of fuselage just below and slightly ahead of waist windows. The remaining blue and white U.S. insignia on top of port wing and beneath starboard wing
 Aircraft name to display stand.

OLIVE GREEN M.3. Upper surfaces
DARK GREY M.2. Under surfaces
MATT BLACK M.6. Tyres propellers engine fronts machine guns.