

BOEING B 52D STRATOFORTRESS

ITEM 60025
★ ★
TAMIYA

1/100 MINI-JET SERIES NO.25

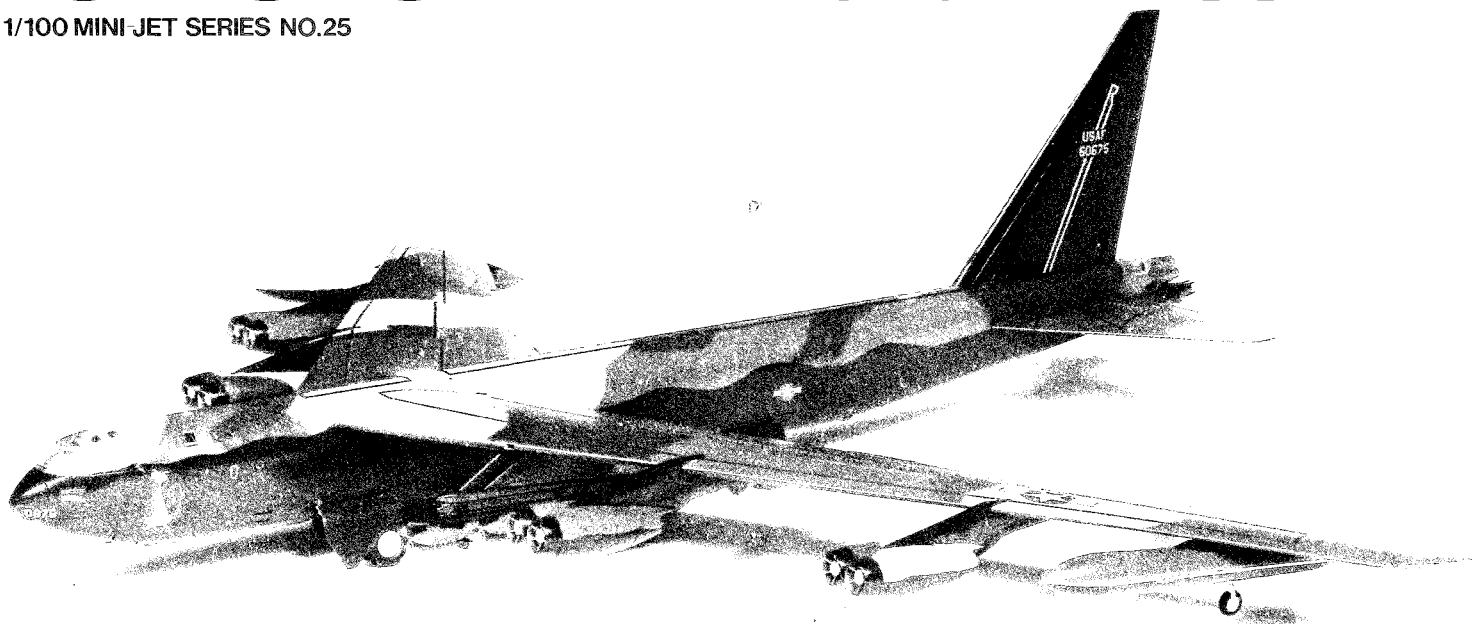


Photo: By courtesy of the AIREVIEW magazine



Like the ICBM (Intercontinental Ballistic Missile) and missile submarines, the Strategic Bomber B-52 — a bomber to remove the

war potential of the enemy by flying across the front and destroying its military, political and economic organizations — serves as America's nuclear deterrent power. The production of the B-52 totaled 743 by June of 1962. At present about 450 serve as the main strength of the SAC (Strategic Air Command). Some of them took part in the aerial operation over Vietnam and became the topic of a talk.

In January 1946, the USAF demanded a larger high-performance bomber succeeding to the Strategic Bomber B-47. The USAF accepted a plane designed by Boeing Company in answer to the demand and gave out an order for two trial-manufacture planes under the name of XB-52 in July 1948. According to the original plan, the plane was to be 163,500kg in weight and equipped with six turboprop engines of 5,500 hp each and the sweep-back angle of its main wings was to be 20°. Appreciating the striking ability of the jet engines of the B-47 which made a successful test flight, the USAF radically changed the plan for the XB-52 only two months after the order and decided to make a super-large bomber powered by eight jet engines. Thus were completed the trial-manufacture planes XB-52 and YB-52 which both employed the B-47's basic components including pod-type engines, thin flexible wings, series cockpits and bicycle-type landing gear. The two planes made their first flight in April and October of 1952. Three B-52A's subsequently constructed were production prototypes, which employed parallel pilot seats of the cabin type in view of crew's fatigue and comfortableness and carried droppable fuel tanks with a capacity of

The B-47 contributed much to the establishment of the SAC. The photograph shows the RB-47H.



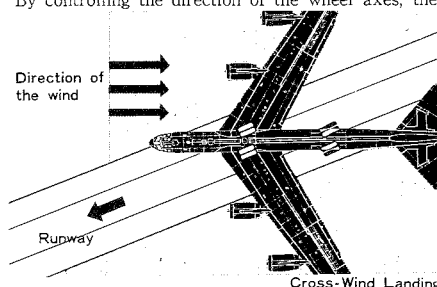
1,000 gallons (3,790 liters) under the wing tips. The first utility plane was the B-52B. This had a variety of fighting equipment such as a machine gun at the tail and was delivered to the 93rd Bomb Wing in June 1955.

The main wings of the B-52 have a sweep-back angle of 35° and are of the flexible type which has the maximum flexibility range at the wing tips of as large as about nine meters. For the reduction of weight, too much strength is not given to the wings. Although they bend loosely over the wing-tip landing gear when the plane is on the land, they stretch tight in the air and, thanks to their flexibility, absorb shock caused by turbulent flow of air. Engines are contained in pairs in the pods fixed under the front edge of the wings and serve as mass balances for preventing the wings from twisting. The pylons supporting them serve as boundary layer plates. This way of mounting engines was first employed by the B-47 and subsequently used for the America's first passenger jet plane Boeing 707. It has become one of the standard ways of mounting engines.

The aileron between the two large flouler flaps is used only in low-speed flight and the spoiler is used

in high-speed flight in view of aileron reversal (the condition that the main wings are twisted and the rudder works against the ailerons). The bomb chamber in the fuselage can carry two 24-megaton H-bombs, but when the plane makes a long-distance flight by itself the bomb load is limited to two 10-megaton H-bombs or one 20-megaton H-bomb. The bomb chamber also carries the "Quail", i.e. a decoy missile to derange the enemy's anti-aircraft network, and devices for reconnaissance.

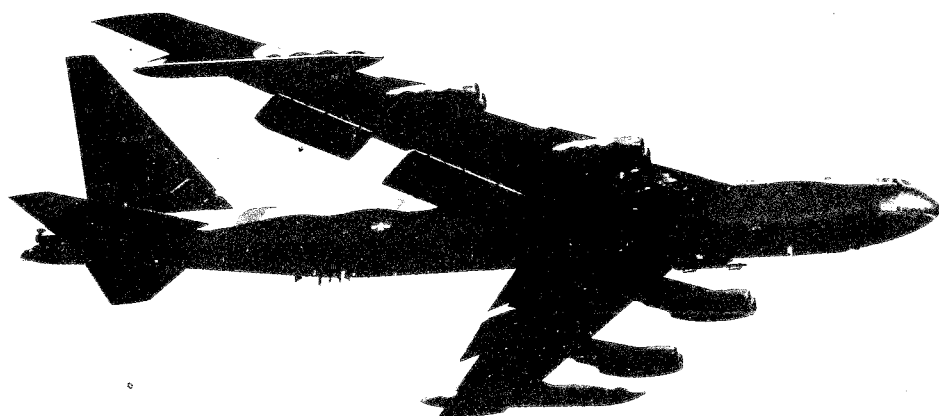
Four struts of the main landing gear equipped with retracting system peculiar to the B-52 are arranged like a bogie on both sides of the bomb chamber. By controlling the direction of the wheel axes, the



plane can make small turns on the ground as well as cross-wind landing.

The horizontal stabilizer is of the full floating type hydraulically operated. The vertical stabilizer can be folded down to the right to facilitate storage. The black or red line seen on the left side is a walkway along which people may walk.

At the tail of the body is the MD-9 revolving mount for a caliber .50 four-barreled machine gun to be used in air fights against enemy planes. The machine gunner does his duty there by himself isolated from the other five crew members. The B-52 has good manoeuvrability for its fuselage size and can take off and land within a relatively short distance. A long fuselage with swept-back wings tends to be affected by cross wind, and the B-52 is equipped with cross-wind landing gear. It is reported that the pilot needs much skill to make cross-wind landing.



Camouflaged B-52D

A B-52 being refueled by a KC-135A in the air.



(Essential Specifications of the B-52D)
 Overall width : 56.42 m Overall length: 47.73 m
 Overall height : 14.73 m Wing area : 371.6 m²
 Max. weight at take-off : 225,000 kg
 Engine : Eight Pratt & Whitney J57-P-29W turbojets, thrust 4,536 kg
 Max. Speed: Mach 0.95 at 12,000 m
 Armament : A quadruple 12.7 mm MG on Bosch Armour MD-9 revolving MG platform
 Crew : Pilot, co-pilot, navigator-bomber (2), ECM operator, and gunner



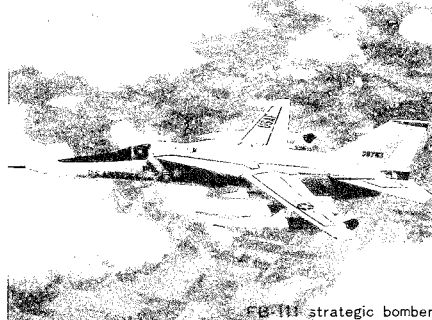
The types D and F used in the Vietnam War since June 1965 employed bomb release gear in each pylon between the root of the main wing and the inside engine pod and their bomb chamber in the body was redesigned. Thus they became regular bombers carrying fifty-one 750-pound (340 kg) bombs or later one hundred and eight 500-pound (225 kg) bombs. About 190 planes of these types were sent to Utopia of Thailand, Kadena of Okinawa and Anderson of Guam. In a period of three years from June 1965 to June 1968, they made a total of 35,000 sorties towards Vietnam and released as much as 886,000 tons of bombs. Since the rate of hitting of the North Vietnamese SAM II (Surface-To-Air Missile) was reduced by American ECM (Electric Counter Measures), the US bombers bombarded the enemy one-sidedly. Thousands of bombs released by tens of planes flying in formation were powerful enough to destroy one area completely. Since B-52's flew over Vietnam at an altitude of 15,000 meters, bombs were rained upon the enemy almost unexpectedly. This had considerable psychological effects on the enemy. The B-52 is originally a strategic bomber for making nuclear attacks and is able to carry two 24-megaton H-bombs which are the most powerful H-bombs that the United States possesses. (One megaton corresponds to the explosive force of a million tons of TNT.) The B-52 usually flies together with the KC-135 air refueling plane and increases its cruising range by being refueled in the air. It is therefore possible to send the B-52 to any target area in the world. To provide against the enemy's nuclear attack, four of the fifteen planes in an air squadron are always ready to take off from each of the 24 bases located all over the United States and launch a counterattack within 15 minutes. It is said that we have come to the age of push-button war by nuclear missiles, but the existence of a manned bomber will be justified by

its superior adaptability and strong striking power (The nuclear head of the Titan ICBM is 10 megatons and that of the Minuteman is 0.8—1.2 megatons.). To provide for the future when the B-52 becomes outdated, it is decided to employ the North American Rockwell B-1A supersonic strategic bomber. The new bomber will begin to enter the service in 1978 and its production will total 200—240.



Strategic Air Command

The SAC (Strategic Air Command) was organized in March 1946 before the Air Force became independent of the US Army Air Forces. It originally consisted of 36,800 personnel and about 600 planes with B-29 bombers and P-47 and P-51 fighters as the main body. In May of that year, nuclear weapons were given to its 509th Combined Group



and the SAC became the first unit in the world to possess nuclear forces. In view of the Korean War and the Russian nuclear test of August 1953, the SAC was rapidly strengthened and now possesses 161,000 personnel, 450 B-52s, 70 FB-111 strategic bombers, about 600 KC-135 air refueling planes,

about 20 SR-71 strategic reconnaissance planes and 1054 Minuteman and Titan ICBMs. Like Polaris submarines, the SAC serves as the main deterrent to the threat of nuclear war. The Headquarters is located at Offutt Air Force Base near Omaha, Nebraska. The underground command protected by thick concrete walls is in constant contact with other bases in the world through the US communication system and thereby take the command of all its planes and missiles. An EC-135 command plane is always in the air by way of precaution against the loss of the command function of the base.

Explanation of each type of the B-52s

B-52A: The first production type. The engine used was the P & W J57-P-9W. This and later types employed parallel pilot seats of the cabin type and cross-wind landing gear. It carried fuel tanks with a capacity of 1,000 gallons under the main wings. The production totaled three.

B-52B: The engine used was the J57-P-19W, -29W or -29WA. Bomb release gear and navigational equipment were improved. Seventeen were manufactured as reconnaissance planes under the name of RB-52B but later became bombers. This and later types employed the MD-9 revolving mount. The production totaled 50.

NB-52A & NB-52B: These were remodeled into a launching plane of the X-15 and X-24 respectively.

B-52C: An improved version of the B-52B. Fuel tanks under the main wings had a capacity of 3,000 gallons. The production totaled 35.

B-52D: Having a reconnaissance pack in the bomb chamber, this type also served as a reconnaissance plane. This type and the B-52F were remodeled into regular bombers and bombed North Vietnam, Laos and Cambodia. The production totaled 170.

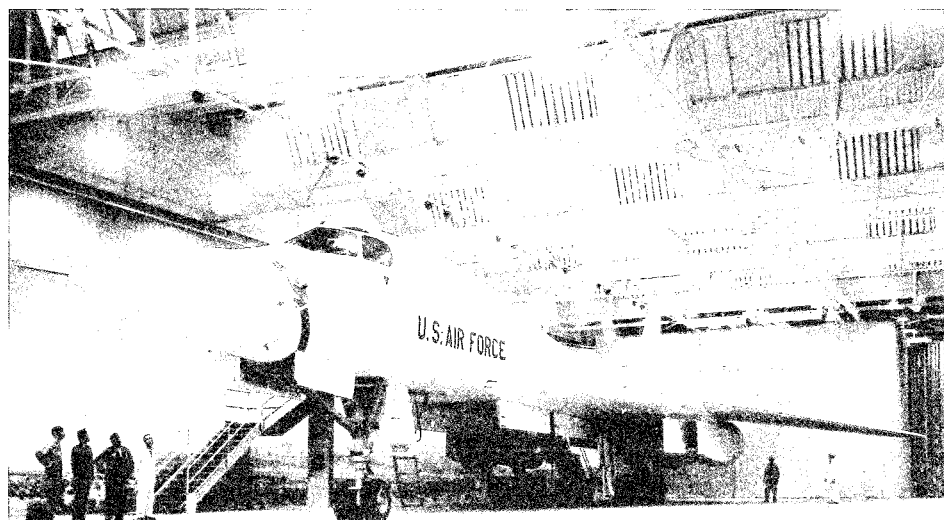
B-52E: An improved version of the B-52D in electronic system. The production totaled 100.

B-52F: An improved version of the B-52C, D and E. The J57-P-43W engine was employed and, as a result of it, main-wing construction and engine pods were changed. The production totaled 88.

B-52G: A remodeled version of the B-52F. Construction was radically changed for reducing weight and increasing cruising range. Fixed fuel tanks with a capacity of 1,000 gallons were employed under the main wings in place of the droppable ones used so far. The machine gunner moved to the crew compartment at the nose to control remotely the machine gun at the tail. In appearance, the radome on the nose was made larger and the vertical stabilizer was increased in width and decreased in height by about 1.3 meters. The production totaled 193.

B-52H: The TF 33 turbo-fan engine was employed in place of the engine used in the B-52G. The machine gun at the tail was changed to a 20 mm M61 Vulcan gun. The production totaled 102.

The B-52G and B-52H can carry the AGM-28 Hound Dog (air-to-ground missile) and the SRAM (Short Range Attack Missile) in addition to H-bombs.



Full size model of the B-1A with VG wing



BOEING B-52D

TAMIYA

★Read before your assembly work.
★This kit can be assembled into either of the following two states—a landing or a flying state. So, select the one you prefer before you start your assembly work.

★Read through and take note of all instructions and explanatory figures below at least once before you start your assembly work.

★When taking any parts off the runner, never wrest it from the latter with your hand but cut it off carefully with a knife or a pair of nippers.

★The painting instructions will be found in respective figures. When painting, do the easier job while they are still on the runner.

★It will be very handy for you to have necessary utensils such as cello tapes, a pair of tweezers, a knife, a pair of nippers and a file ready.

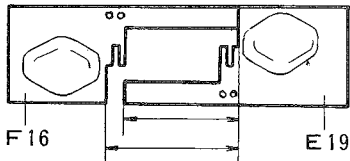
Fig. 2 Construction of Undercarriage

★Zinc chromate colour = Yellow + Green

Fig. 4 Fixing of Undercarriage into Fuselage

Insert and glue edge (that is, edge of Undercarriage Storeroom Panel) of Undercarriage, which has been constructed according to Fig. 2, into the groove on Bulkhead, A.

★Undercarriage Storeroom Panel consists of two side-panels (right and left ones) as shown in the figure below.



★There are four kinds of Bulkheads—A, B, C, and D—as shown in the figure below. So, be sure not to confuse one with the other.

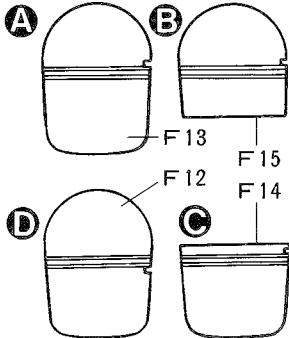


Fig. 5 Construction of Right Fuselage

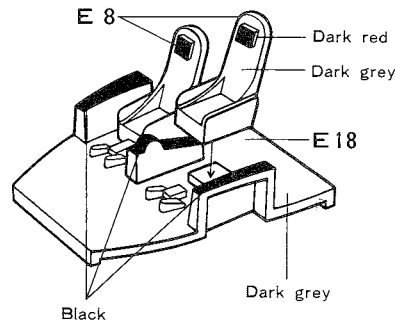
Bomb Storeroom should be glued onto Fuselage after Undercarriage have been fixed.

★Paint in Zinc chromate colour both white portions inside Fuselage as shown in Figs. 5 and 6.

★Assembly works according to Figs. 5 and 6 are those for landing-state construction.

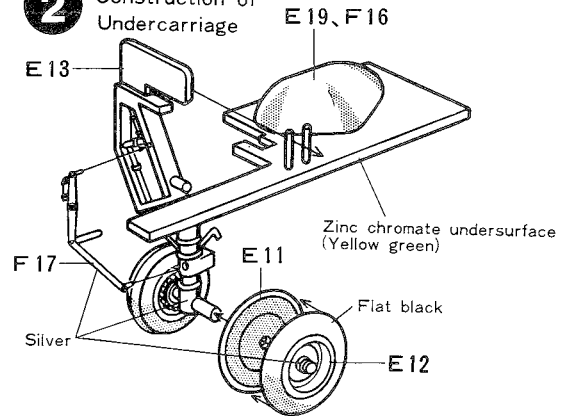
★So, if flying-state construction is preferred, don't fix Undercarriage which has been completed according to Fig. 2, into Fuselage.

1 Construction of Cockpit

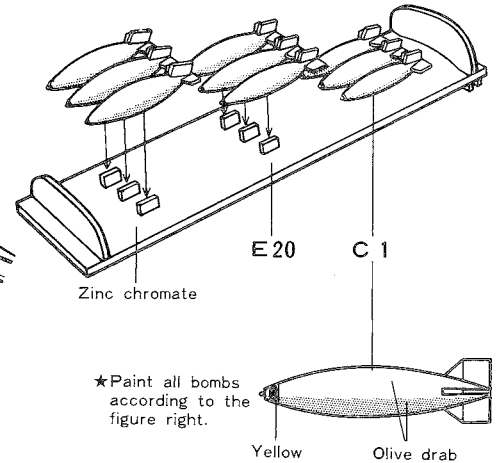


★All paints noted in the figure are half-matted ones.

2 Construction of Undercarriage

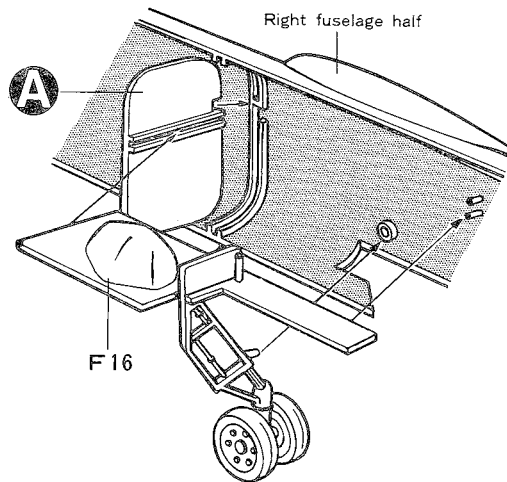


3 Fixing of Bombs

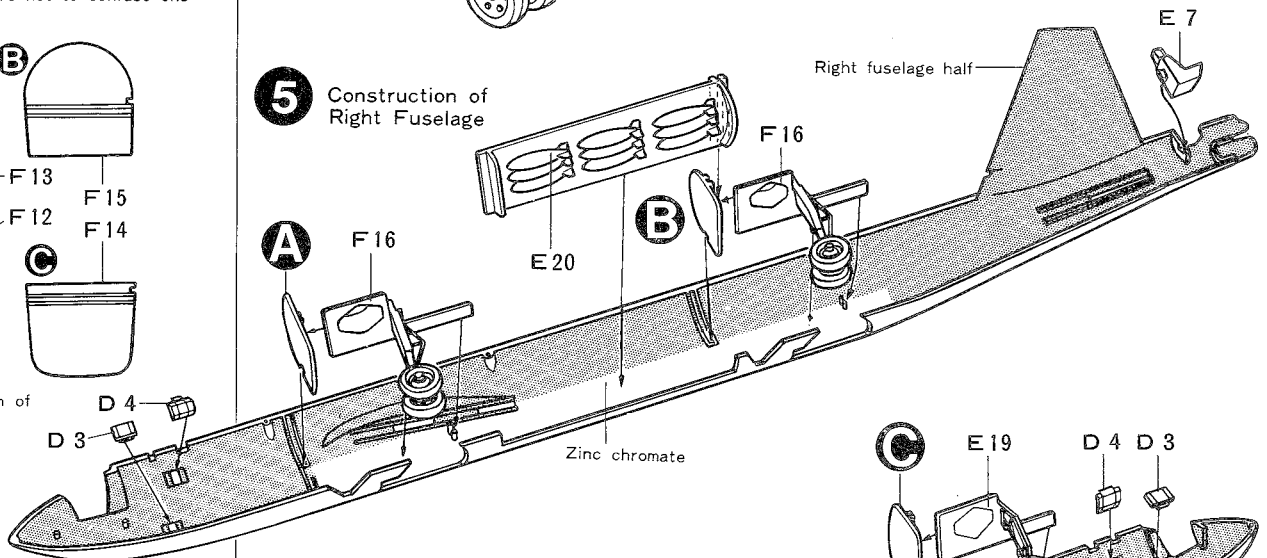


★Paint all bombs according to the figure right.

4 Fixing of Undercarriage into Fuselage



5 Construction of Right Fuselage



6 Construction of Left Fuselage

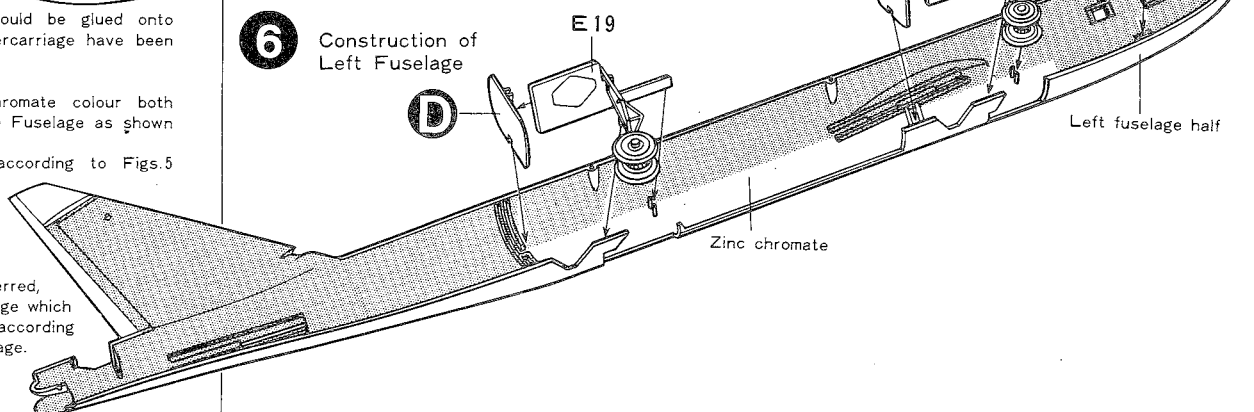


Fig. 7 Construction of Fuselage
To have Bomb Storeroom Door in opened state, cut the Door, E21, in half with a knife along a dotted line as shown in the figure below.

★However, in closed state, use the Door as it is.



Decal
Instrument Panel

★Fix respective pair of Undercarriage pins into each underside groove of Undercarriage Covers, E (14, 15, 16 and 17). Then, glue Undercarriage Covers onto Fuselage.

In so doing, note well the difference between four kinds of right and left Undercarriage Covers.

★Suspenders, C3, should be used only when you prefer to have the kit suspended from the ceiling above, for instance.

★After right and left Fuselage halves have been glued together, fasten the completed Fuselage enough with cello-tapes so that any gap will be left.

Fig. 8 Construction of Engine Pod
There are two pairs of Engine Pylon halves, each different in kind.

★Construct four pairs of Engine Pods and Pylons.

Fig. 9 Fixing of Bombs onto Pylon
In gluing Bombs onto Pylon, be sure to have Bombs right in position as shown in the figure below.

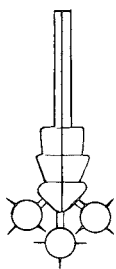
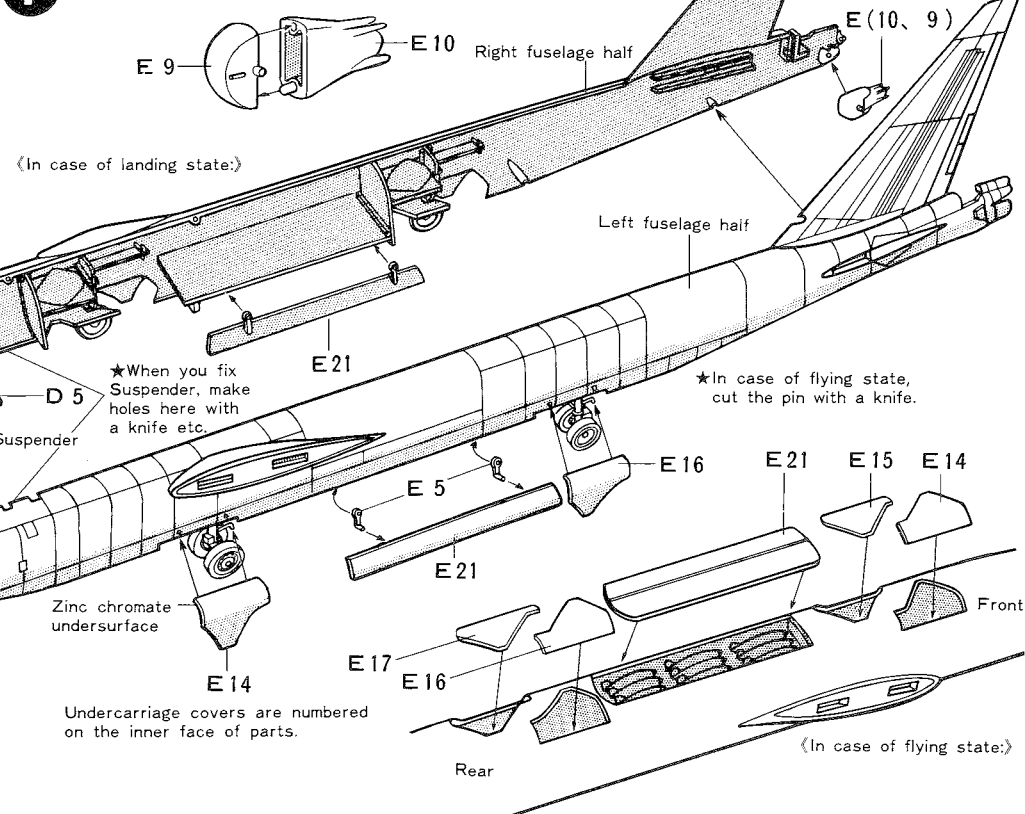


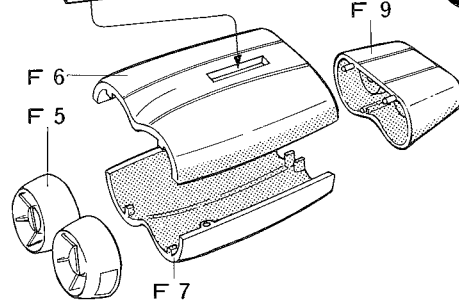
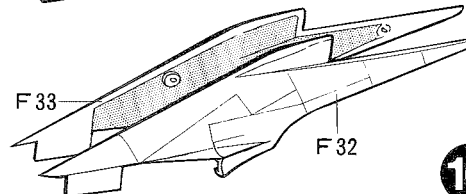
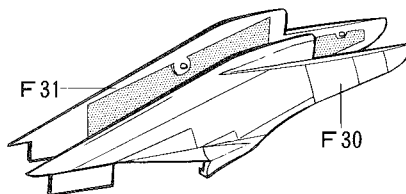
Fig. 11 Construction of Wing, A
When Suspenders, C3, is used, make a hole in a spot in left, Wing upside H2, as shown in the figure. Then, pass Suspenders through the hole and glue its upper end onto Wing. (Hole-making is needed only when the completed model is to be suspended from the ceiling later).

★First, apply adhesives onto upper and lower Wing quarters. Then, fasten the quarters together with cello-tapes.

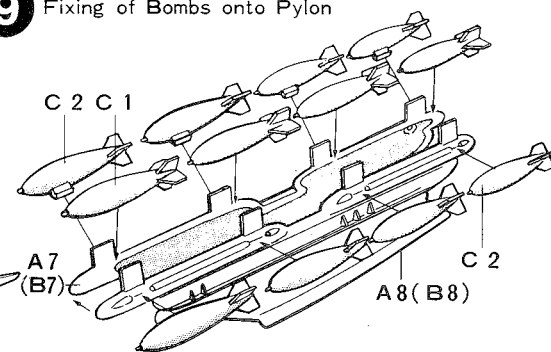
7 Construction of Fuselage



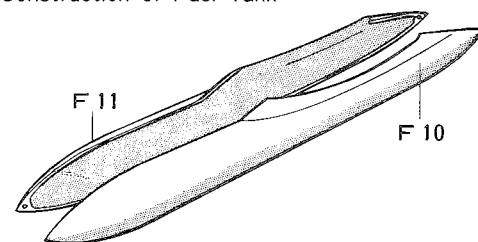
8 Construction of Engine Pod



9 Fixing of Bombs onto Pylon



10 Construction of Fuel Tank



11 Construction of Wing, A

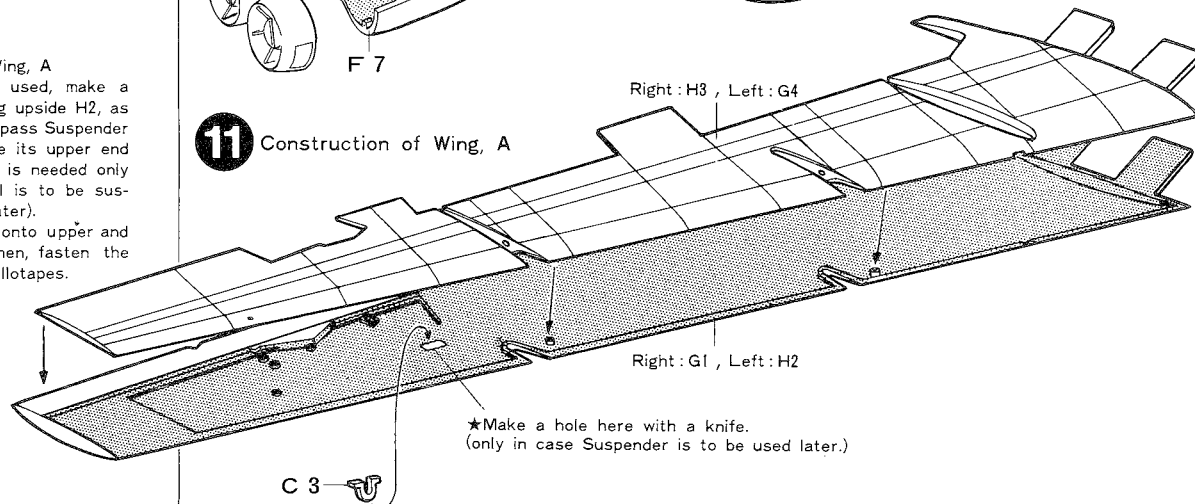


Fig. 12 Construction of Wing, B
(in landing state)

★When Bomb Pylon is not fixed, fix instead Pylon, F18.

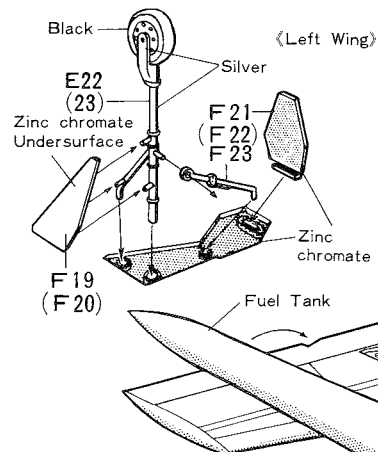


Fig. 13 Construction of Wing, B
(in flying state)

To have Flap in a retracted state, cut off rods jutting out from Flap along the dotted line as shown in the figure below.

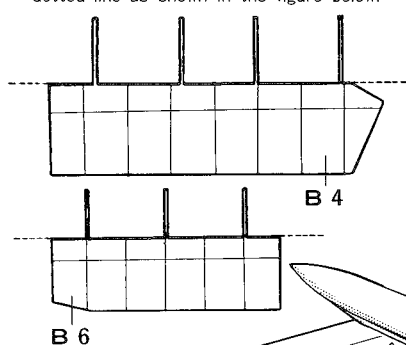
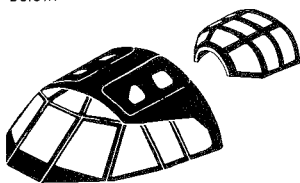


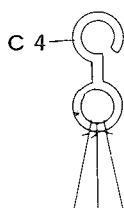
Fig. 14 Construction of Fuselage

★In painting Canopy, paint only the blackened portions as shown in the figure below.



★Tie a string to each of three Suspenders, C3, one of which has been fixed onto Fuselage, while the other two, onto each side of Wing in Figures 7 and 11. Then, tie each free end of those three strings together to Suspenders, C4, which has already been fixed onto the ceiling, for instance, in order to suspend the completed B-52D model from there.

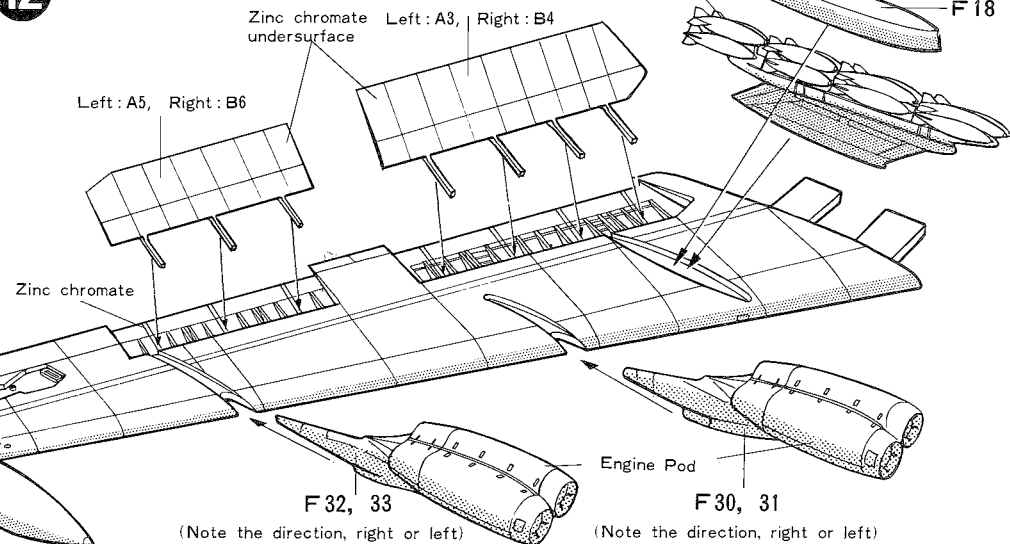
➡ How to Suspend Three Strings together.



This kit does not contain a hook. Get a hook like in the left figure at a hardware store, and hang your model on the ceiling etc.

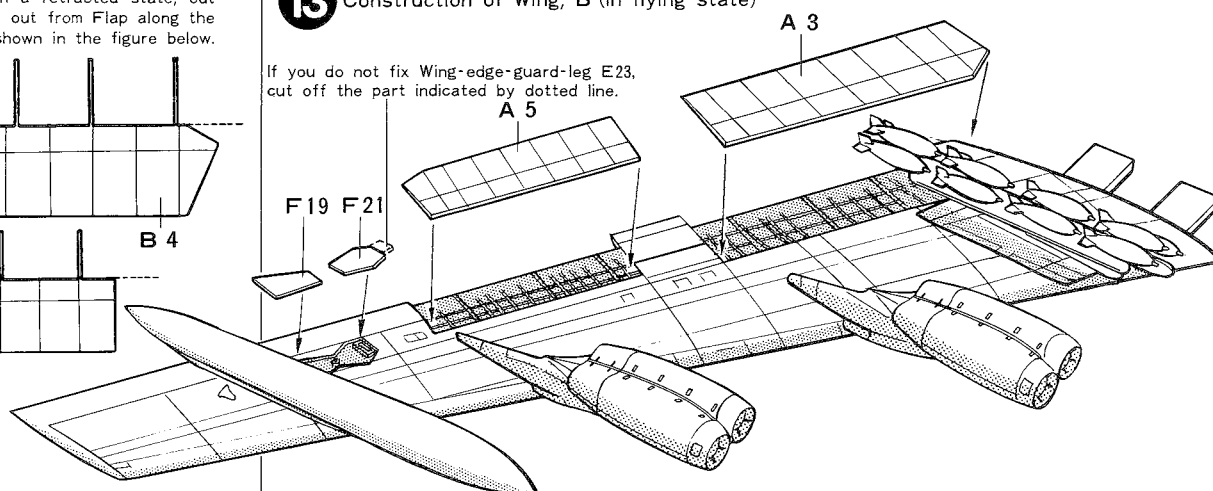


12 Construction of Wing, B (in landing state)

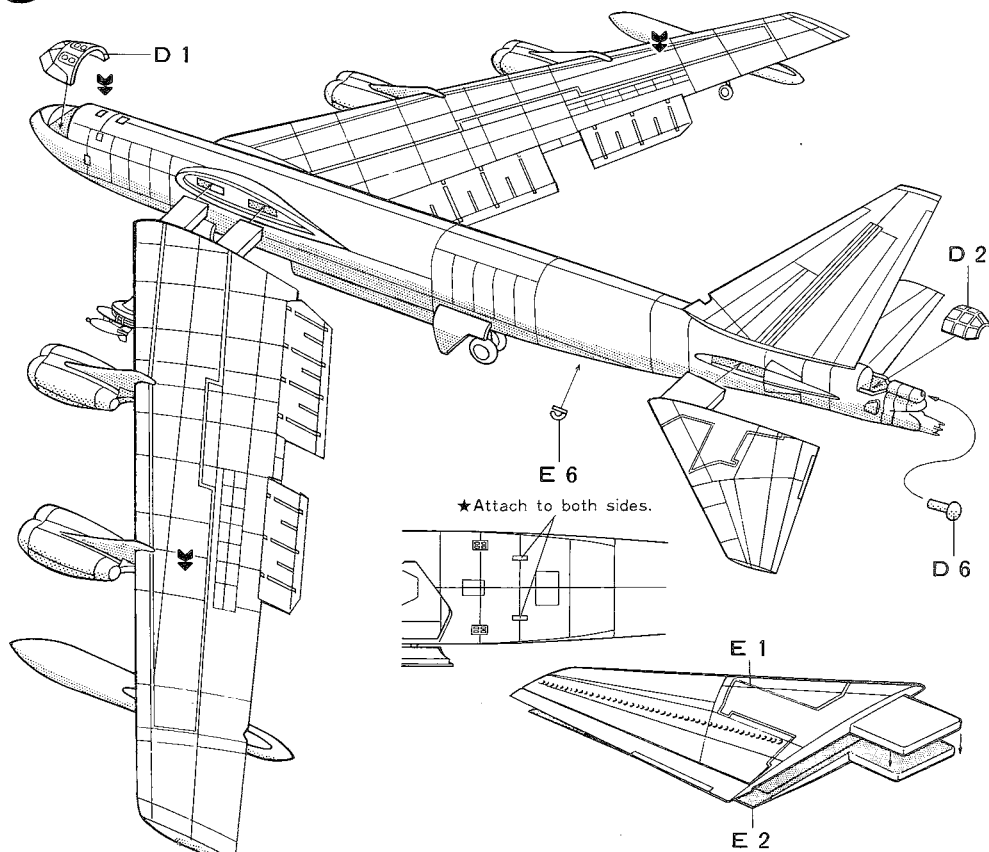


13 Construction of Wing, B (in flying state)

If you do not fix Wing-edge-guard-leg E23, cut off the part indicated by dotted line.



14 Construction of Fuselage



Fairchild Air Force Base, Washington State, 1971.



PARTS

FUSELAGE PARTS

1. Left fuselage half 2. Right fuselage half

A PARTS

3. Flap A (left) 5. Flap B (left)
7. Bomb rack (left) 8. Bomb rack (right)

B PARTS

4. Flap A (right) 6. Flap B (right)
7. Bomb rack (left) 8. Bomb rack (right)

C PARTS (Bomb Parts)

1. 340kg bomb A (17) 2. 340kg bomb B (16)
3. Suspender A (3) 4. Suspender B

D PARTS (Transparent)

1. Cockpit windshield
2. Windshield for gunner's seat
3. Window glass A (2) 4. Window glass B (2)
5. Window glass C 6. Sight

E PARTS

1. Stabilizer upside (left)
2. Stabilizer underside (left)
3. Stabilizer upside (right)
4. Stabilizer underside (right)
5. Bomb storeroom parts (4) 6. Fuselage parts (2)
7. Gunner's seat 8. Pilot seat
9. MG platform A 10. MG platform B
11. Wheel A (8) 12. Wheel B (8)
13. Undercarriage support (4)
14. Undercarriage cover A
15. Undercarriage cover B
16. Undercarriage cover C
17. Undercarriage cover D
18. Cockpit floor
19. Undercarriage storeroom panel A (2)
20. Bomb storeroom 21. Bomb storeroom door
22. Wing-edge-guard-leg (left)
23. Wing-edge-guard-leg (right)

F PARTS

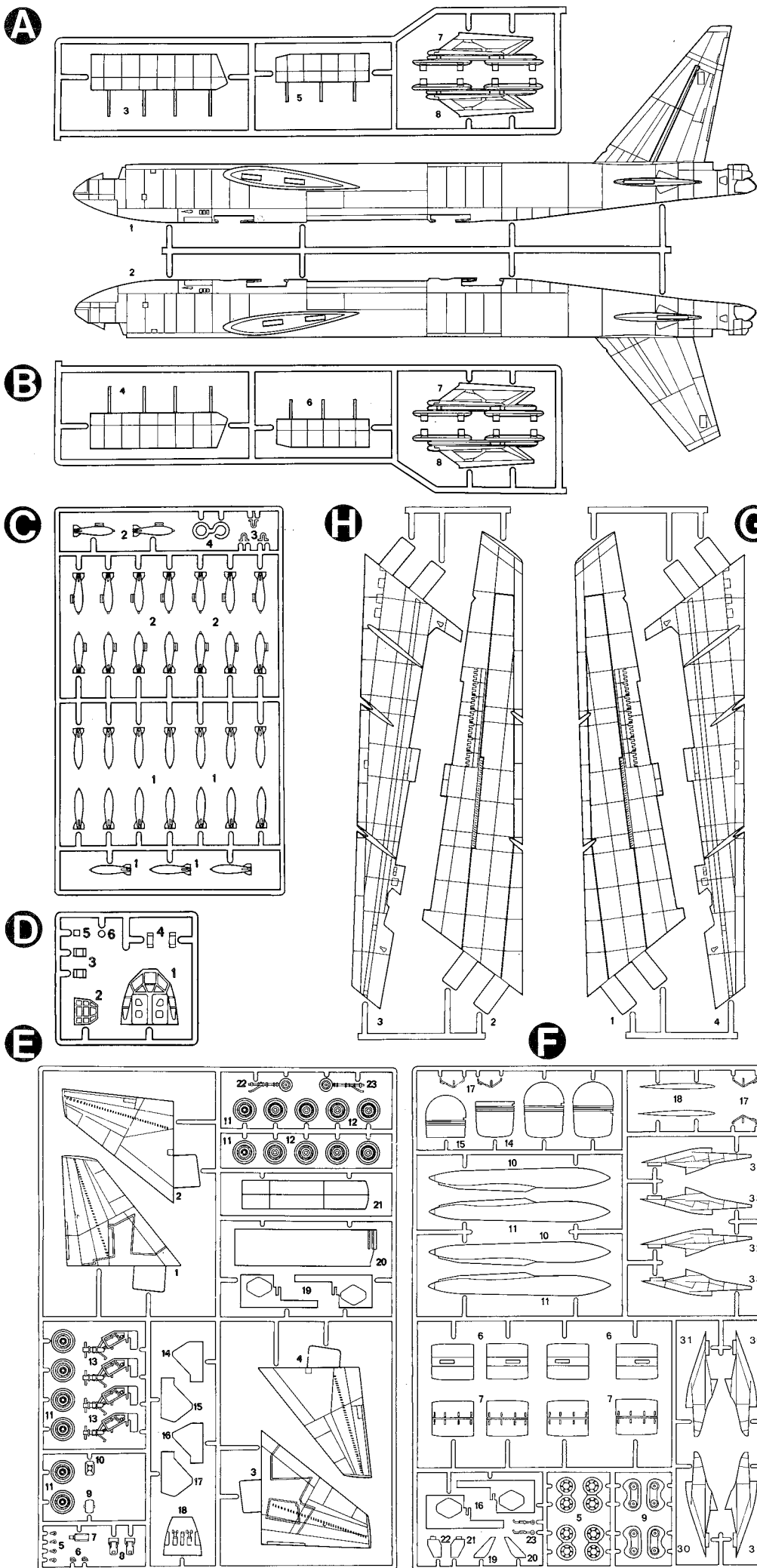
32. Engine pylon A (left) (2)
33. Engine pylon A (right) (2)
30. Engine pylon B (left) (2)
31. Engine pylon B (right) (2)
5. Engine pod A (4) 6. Engine pod B (4)
7. Engine pod C (4) 9. Engine pod D (4)
10. 3,000 gallon tank (left) (2)
11. 3,000 gallon tank (right) (2)
12. Bulkhead D 13. Bulkhead A
14. Bulkhead C 15. Bulkhead B
16. Undercarriage storeroom panel B (2)
17. Undercarriage support (4)
18. Pylon (2)
19. Wing-edge-guard-leg cover (left)
20. Wing-edge-guard-leg cover (right)
21. Wing-edge-guard-wheel cover (left)
22. Wing-edge-guard-wheel cover (right)
23. Wing-edge-guard-leg (2)

G PARTS

1. Wing upside (right)
4. Wing underside (left)

H PARTS

2. Wing upside (left)
3. Wing underside (right)



TAMIYA COLOUR CATALOGUE

The latest in cars, boats, tanks and ships. Motorized, radio controlled and museum quality models are all shown in full colour in Tamiya's latest catalogue. At your nearest hobby supply house.



TAMIYA
TAMIYA, INC.
3-7, ONDWARA, SHIZUOKA-CITY, JAPAN.