

# Grumman Avenger TBM-3W “Warner”

## Conversion Trumpeter TBM-3 (kitno.02234) in 1/32 scale

### BRIEF HISTORY

One of the famous Grumman Avenger versions was the TBM-3W “Warner”. In the Second World War it was realised that detecting attacking aircraft, particularly flying at low level, required the use and installment of radar in a flying aircraft. The MIT in the United States started experiments as early as 1942 and the result was the S-band APS-20 radar. The Avenger was a logical choice as airframe as it had enough room inside to accommodate the bulky equipment. So the TBM-3W became the world’s first AEW aircraft. The radar had a range of about 100 km. All armor, guns in the wings, gun turret and bombing systems were deleted and the radar was installed below the fuselage in a fiberglass radome. Other equipment were VHF radio sets, and even a primitive IFF. To improve stability, four small fins were fitted on the stabilizer. The radar operator was situated in the lower rear fuselage and below a new back fairing that replaced the “glass house” with the pilot up front.

The prototype TBM-3W flew August 5, 1944. Although envisaged for fleet protection, particularly from Kamikaze attacks, the war ended before Warners were operationally deployed. After the Second World War in 1946 the US Navy put the Warner planes into service. The TBM-3W2 was a version with an updated APS-20 radar. They served with the US Navy until the mid fifties when they were replaced by the Grumman Guardian and Douglas AD Skyraider.

The Warner was also exported to various countries, including The Netherlands, Canada, France and Japan.

Data TBM-3W: Wright Cyclone R2600 14 cylinder engine with 1900 hp take-off power; empty weight about 4850 kg, max take-off weight about 7600 kg, cruise speed 240 km/hr, max speed about 420 km/hr; span 16,52 m, length 12,48 m.

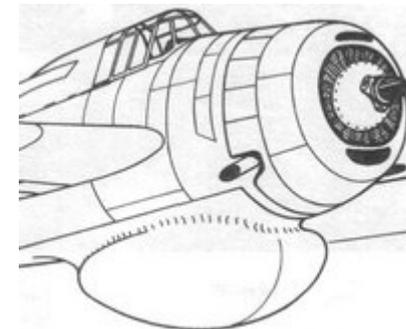
Warners could have different rear doors (large or small), tail hook configurations (inside or external), antenna layouts and various rear window options. Check photographs for your particular plane to model.

The Royal Dutch naval air service (MLD) used the Warner from September 1953 till May 1961. These Warners appeared in various colour schemes. Within the Dutch MLD two main schemes were used:

- (1) Overall Gloss Sea Blue FS25042 (similar to US Navy scheme)
- (2) Extra Dark Sea Grey upper surfaces with Sky lower surfaces (similar to British FAA scheme).

**SAFETY first:** when cutting and sanding resin parts, use hand gloves to avoid skin irritation, plenty of water and a face mask to avoid inhaling resin dust.

Tip: if the resin is a bit “tacky”, wipe it off with “MEKPAK” to remove any residue



Trumpeter kit instructions

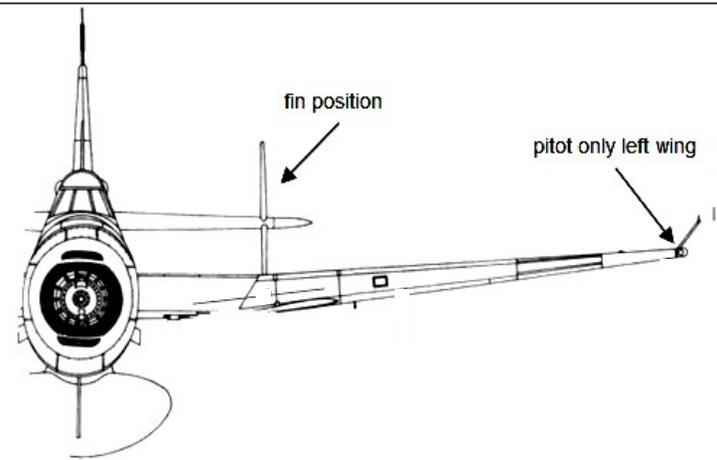
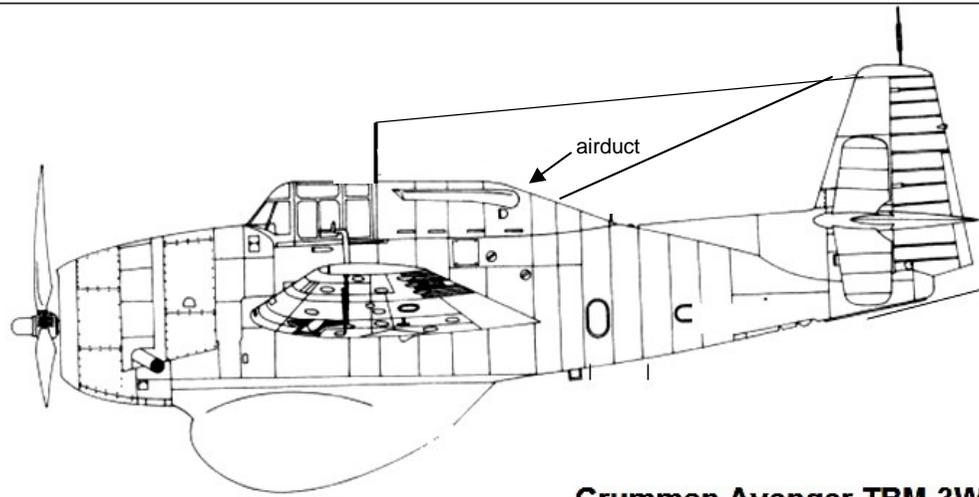
GUNZE Colour Key:

H1 black  
H2 white  
H3 red  
H8 aluminium  
H9 gold  
H13 red ?  
H27 Humbrol 63 (brown/yellow)  
H33 black ?  
H43 green about Humbrol 116  
H61 grey Humbrol 146  
H78 mat oliver drab  
H304 olive drab?  
H340 interior green about Humbrol 151 or  
XTRACOLOR X117

Extra Dark Sea Grey: XTRACOLOR X5

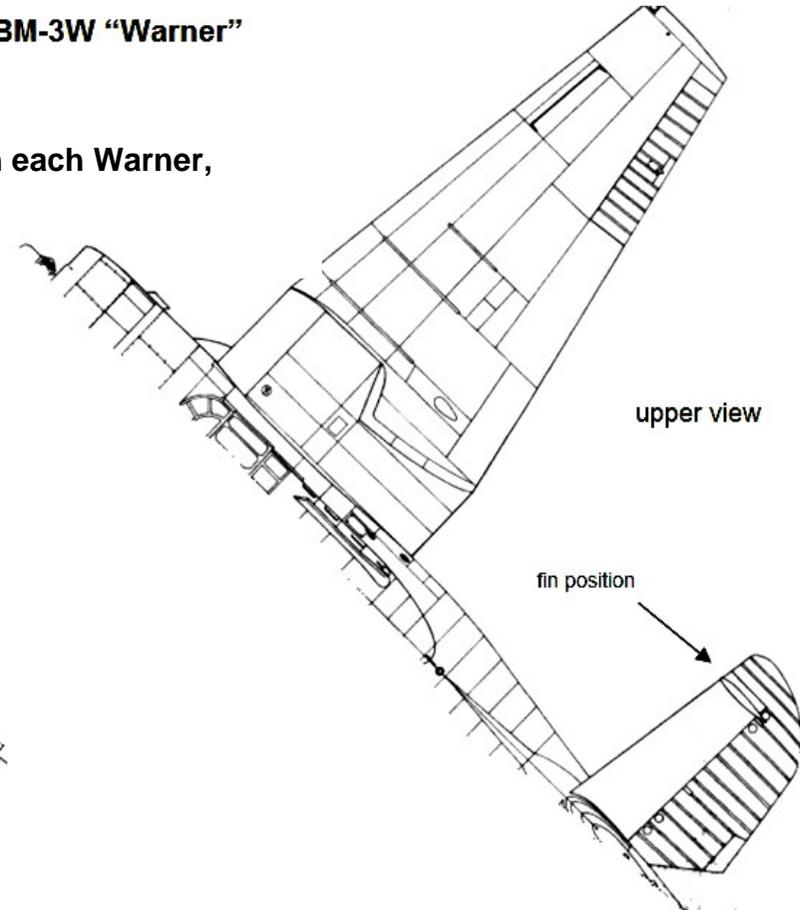
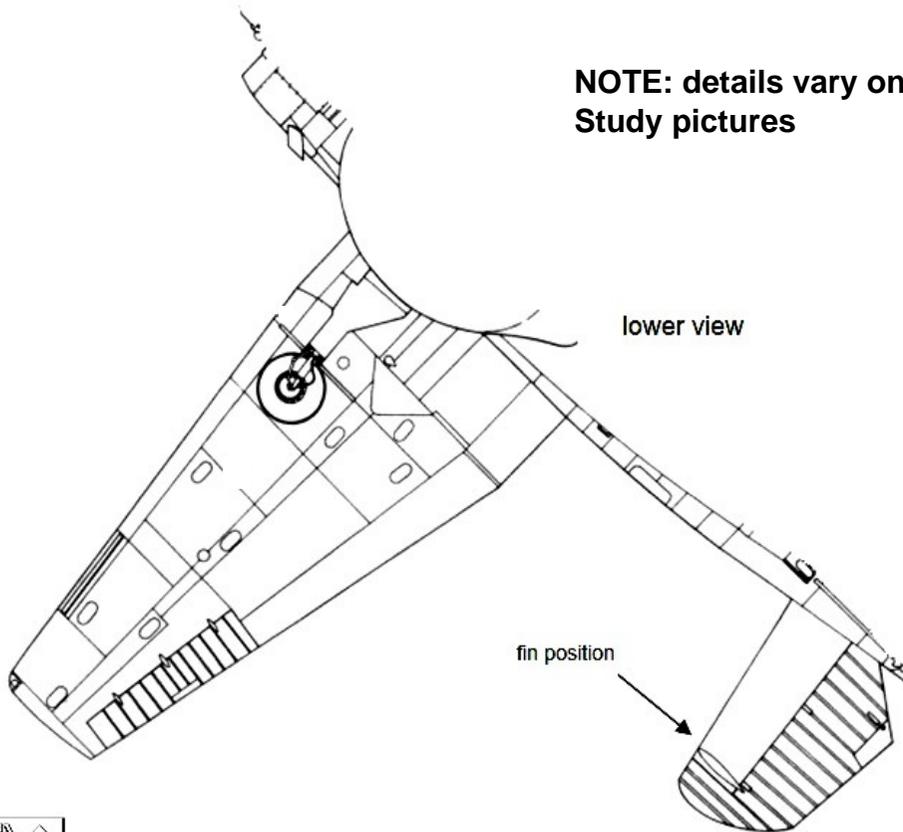
Sky: Humbrol 90

Gloss Sea Blue: XTRACOLOR X121



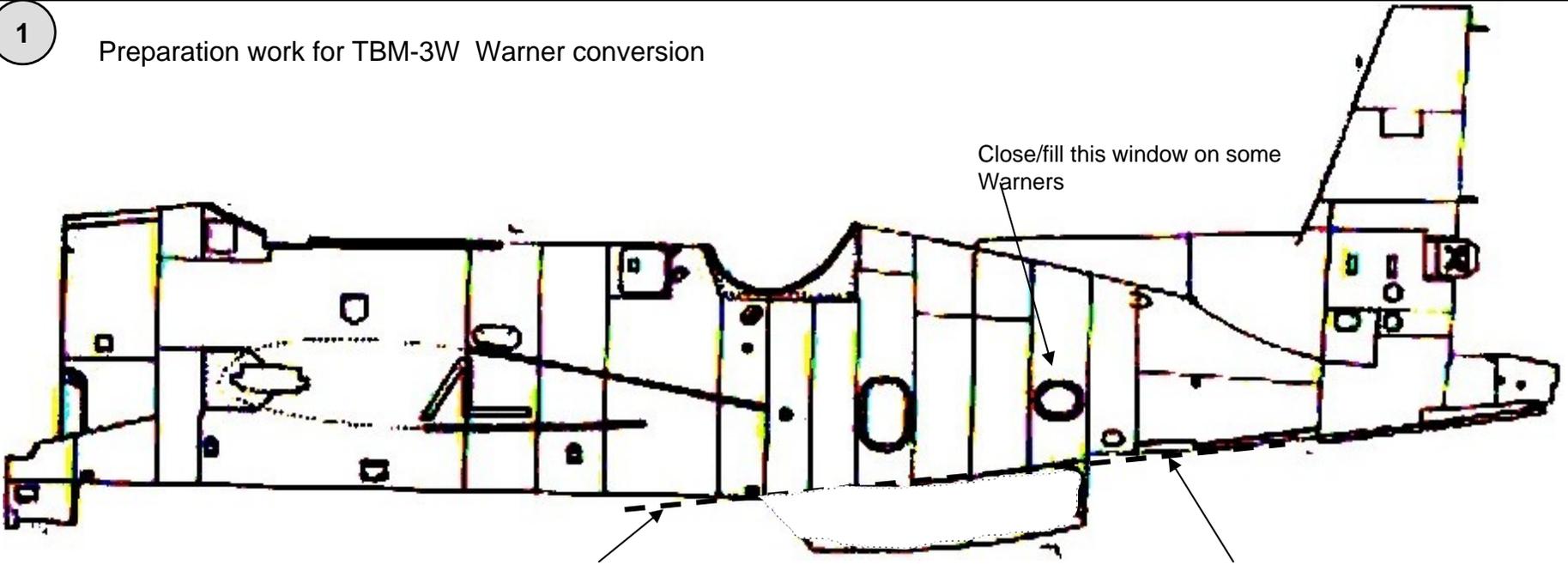
**Grumman Avenger TBM-3W "Warner"**

**NOTE: details vary on each Warner,  
Study pictures**

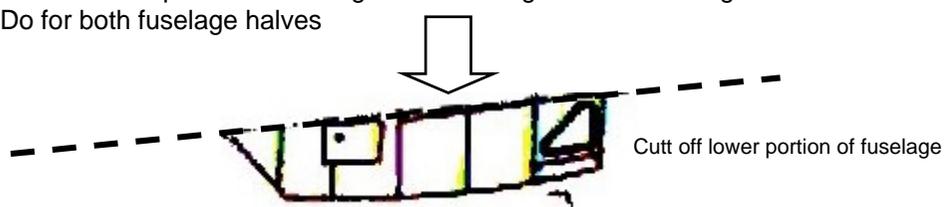


1

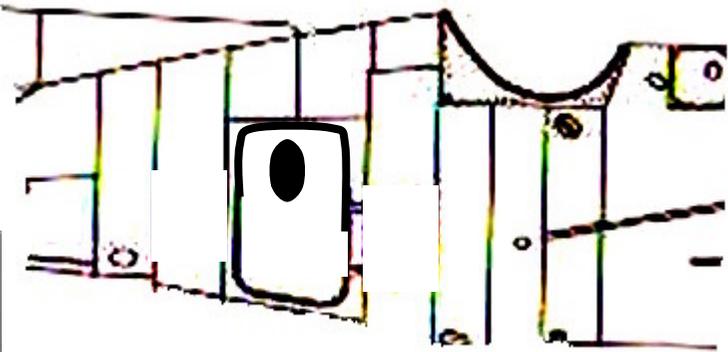
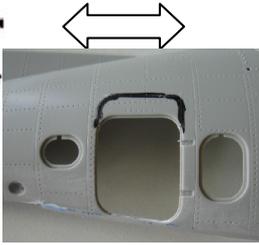
### Preparation work for TBM-3W Warner conversion



Cutt off lower portion of fuselage at rear along indicated cutting line  
Do for both fuselage halves



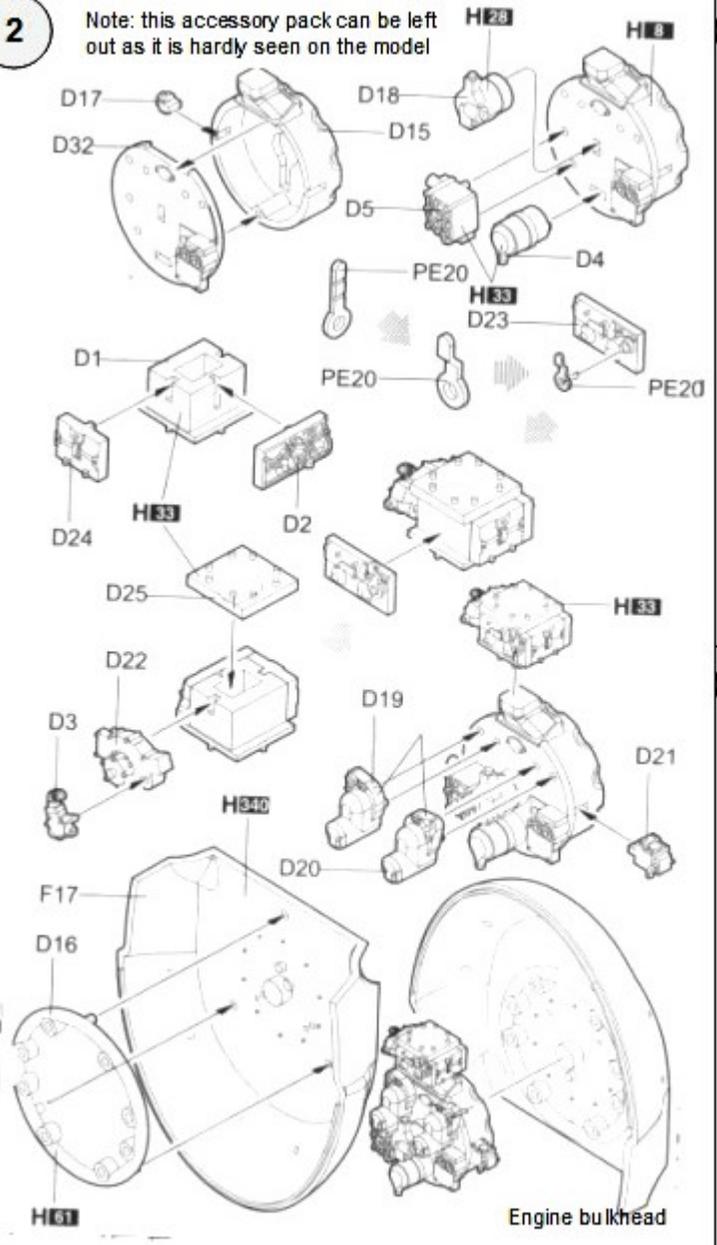
standard rear door variant: unchanged kit part



other rear large door variant: enlarge opening part 1

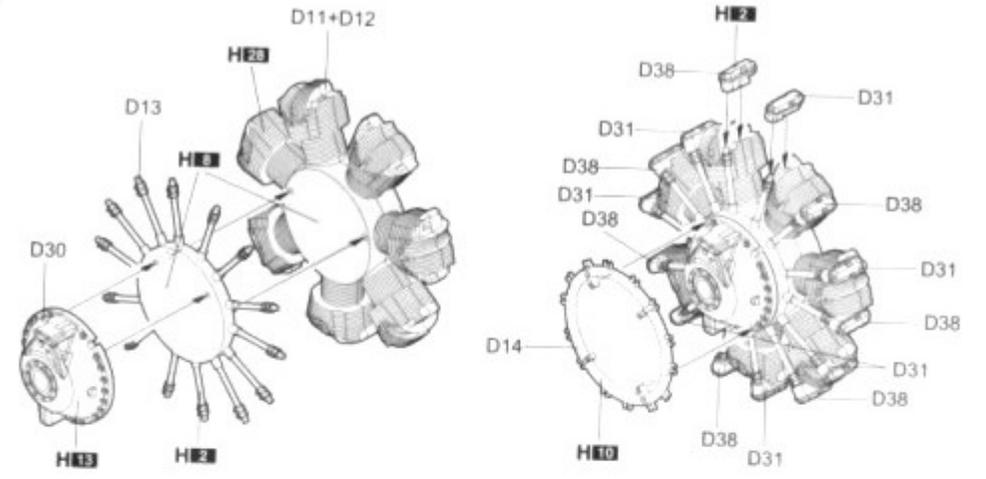
2

Note: this accessory pack can be left out as it is hardly seen on the model



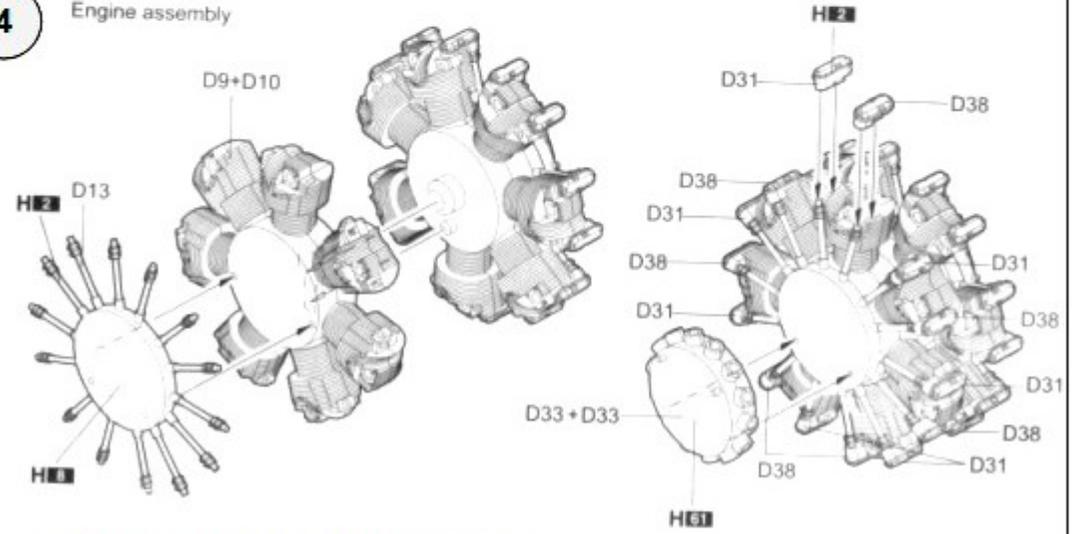
3

Engine assembly



4

Engine assembly

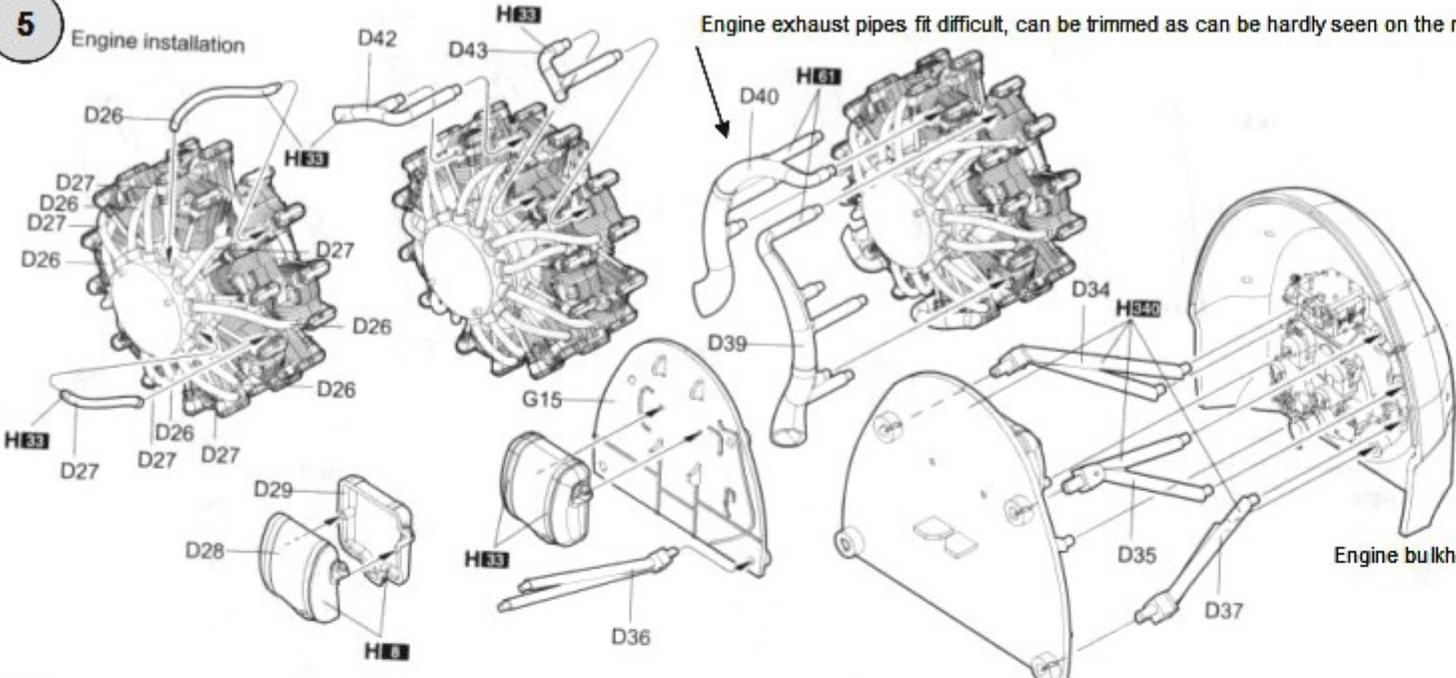


Suggestion: add ignition plug cables on plug heads

As per kit instructions

5

Engine installation



Engine exhaust pipes fit difficult, can be trimmed as can be hardly seen on the model



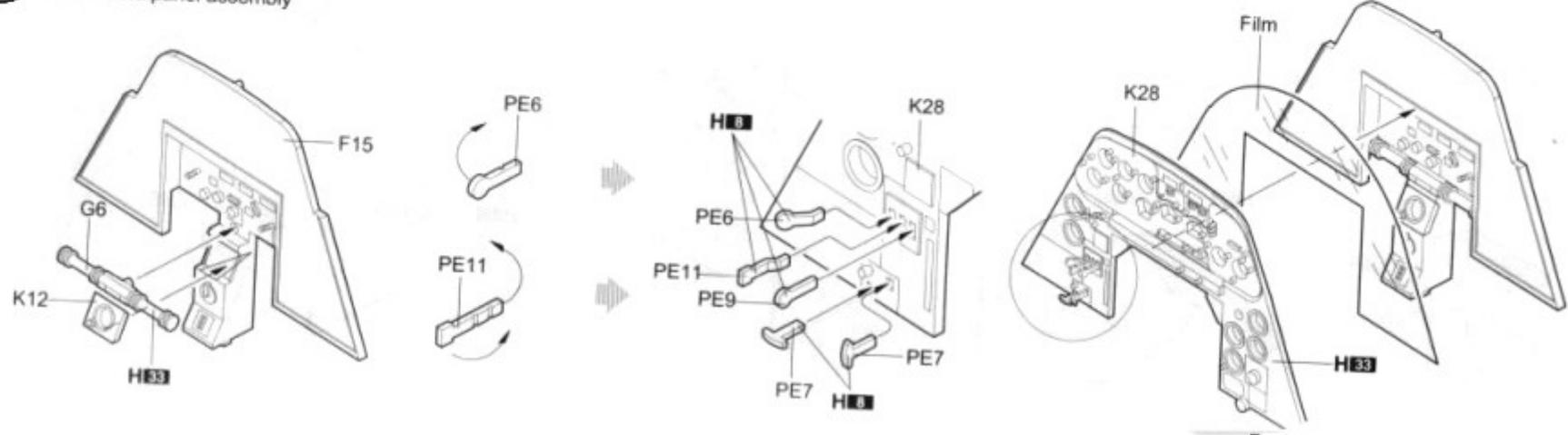
recommended to fit engine later on

Engine bulkhead

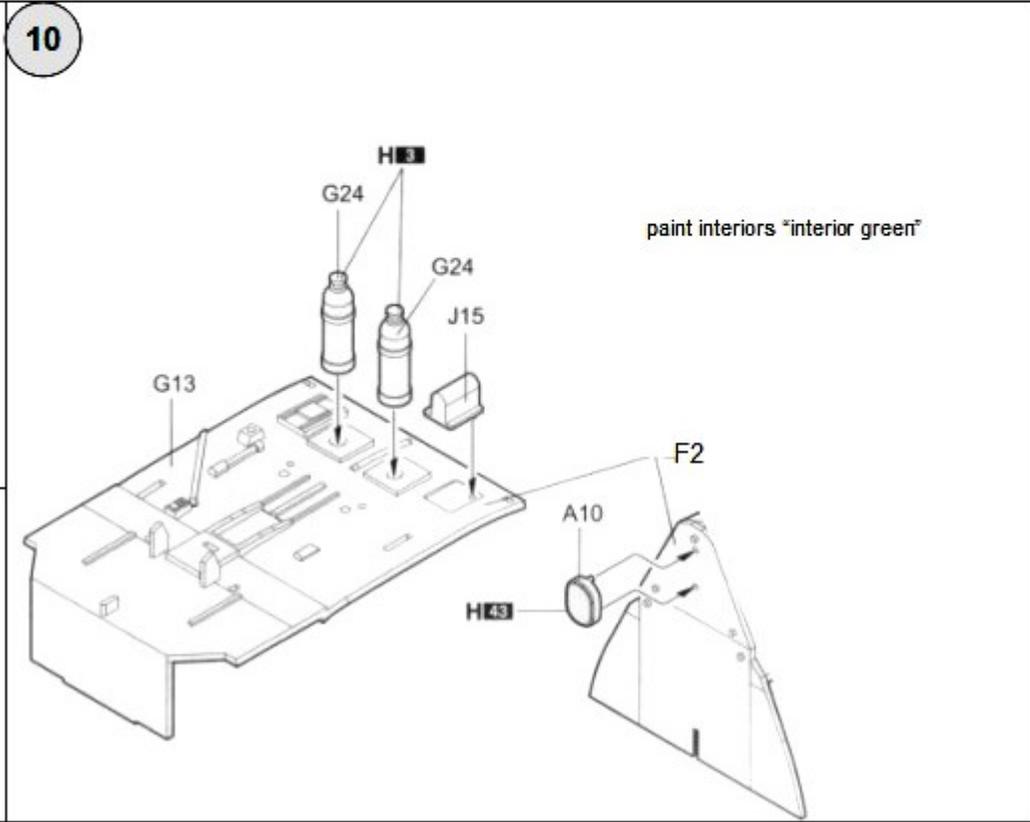
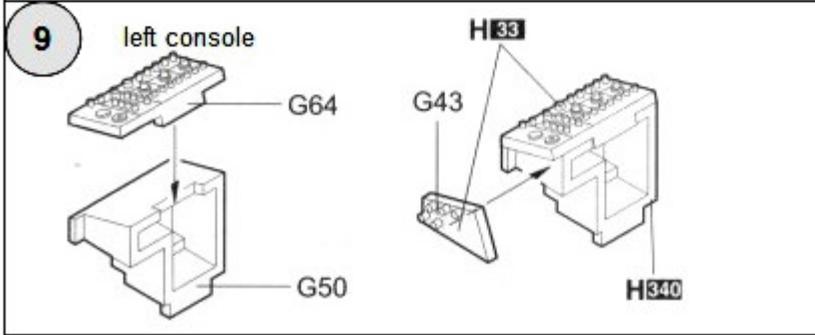
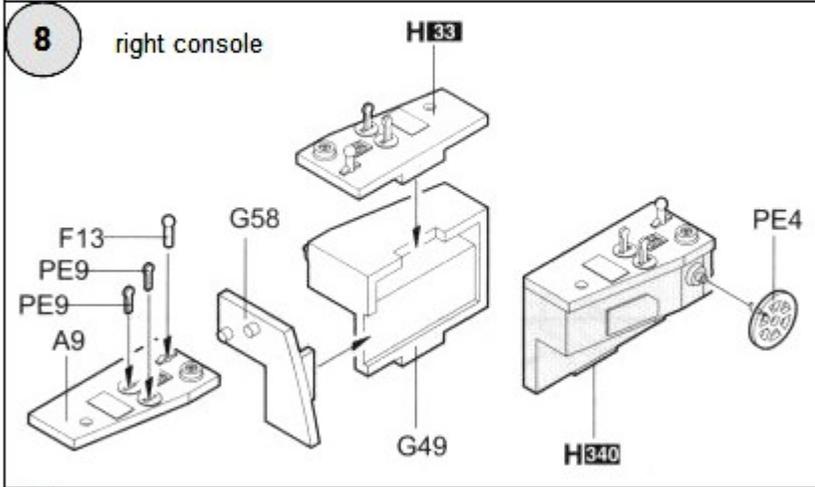
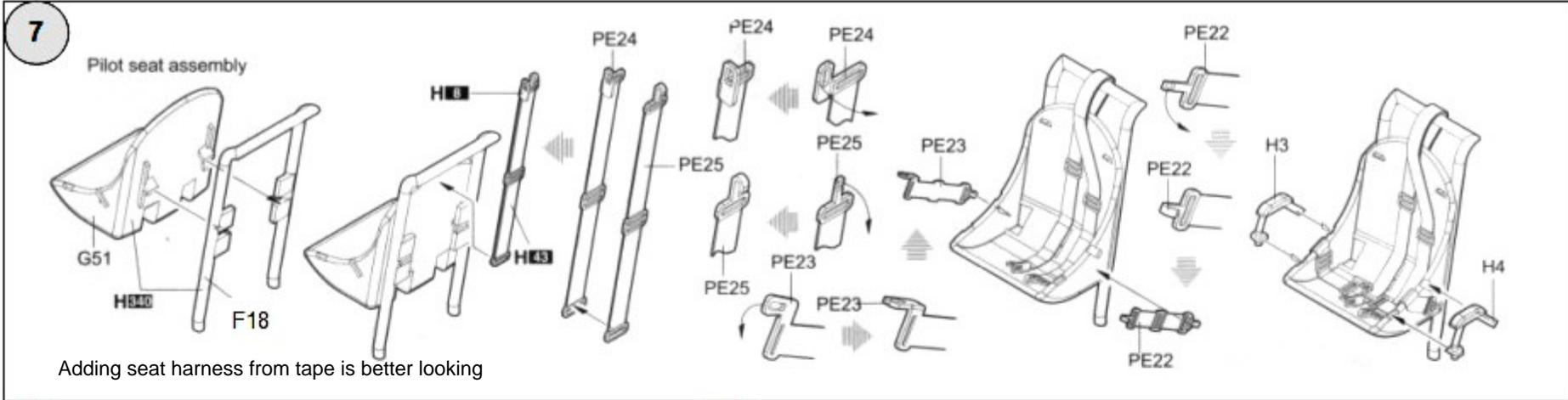
6

Instrument panel assembly

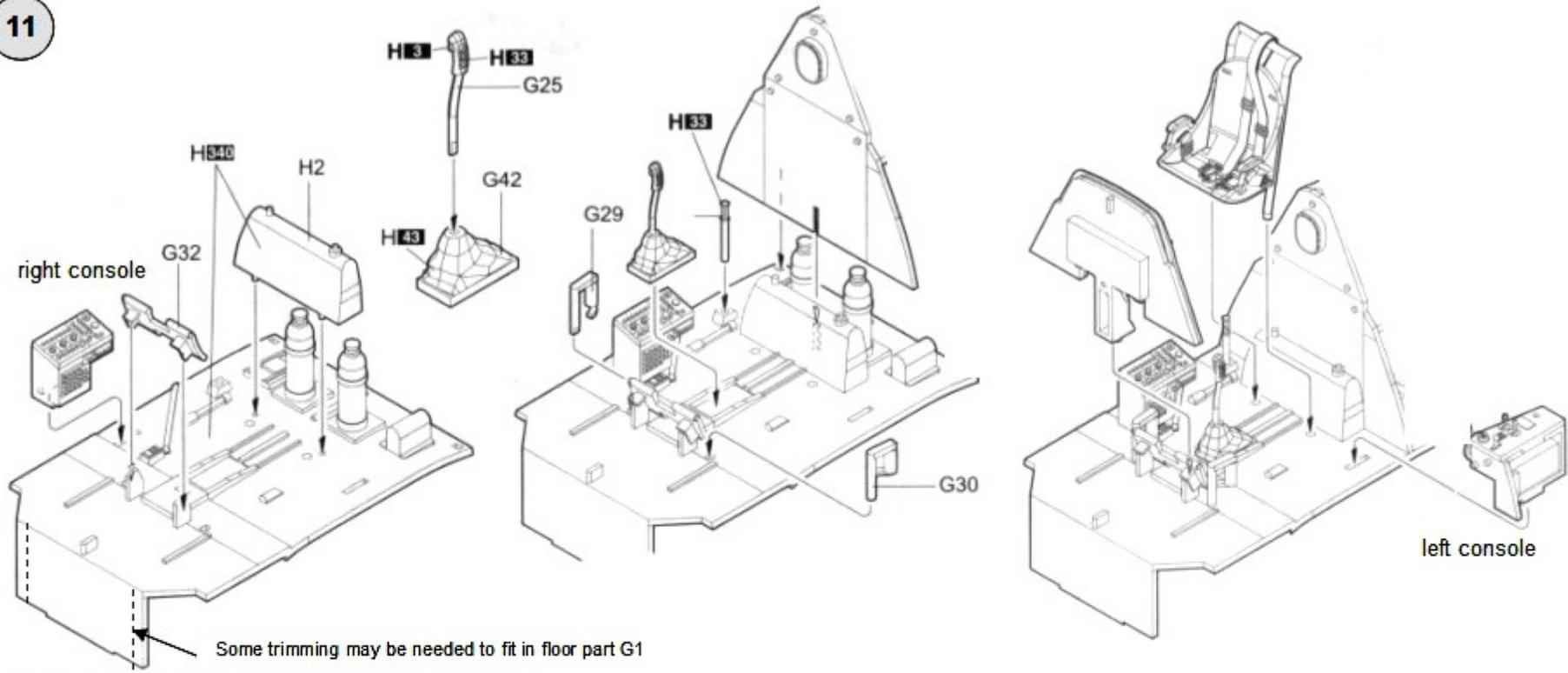
Note: instrument layout TBM-3W Warner panel unknown, but probably common with standard Avenger



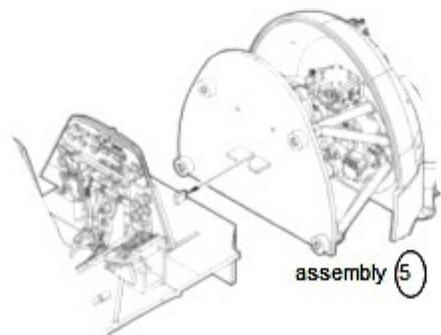
As per kit instructions



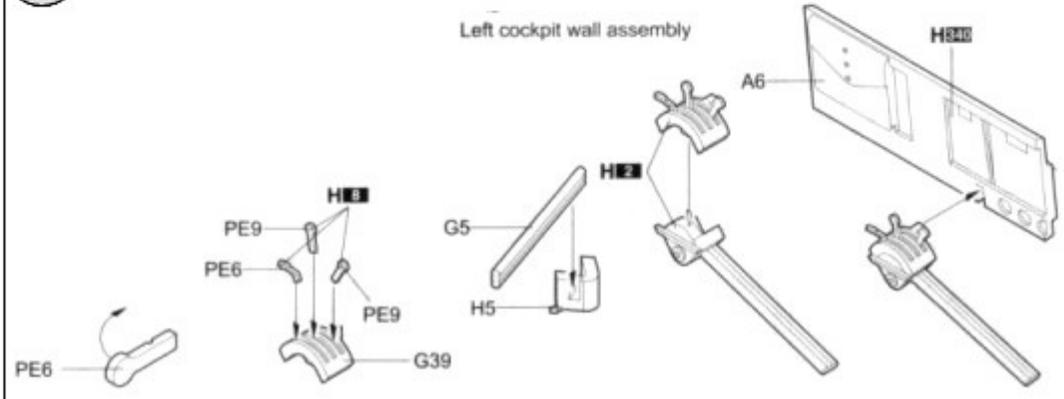
11



12

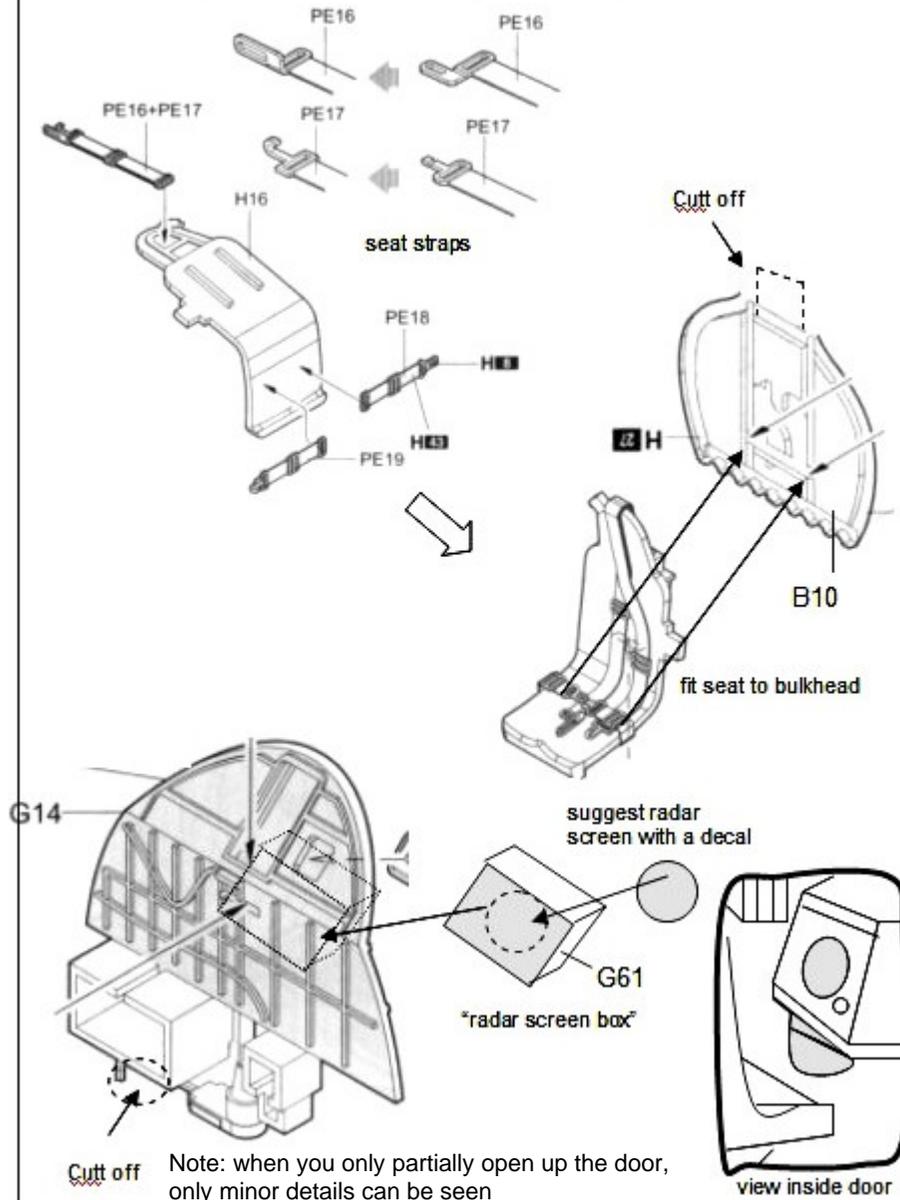


Left cockpit wall assembly

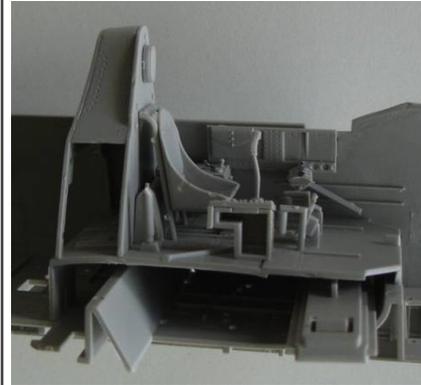


13

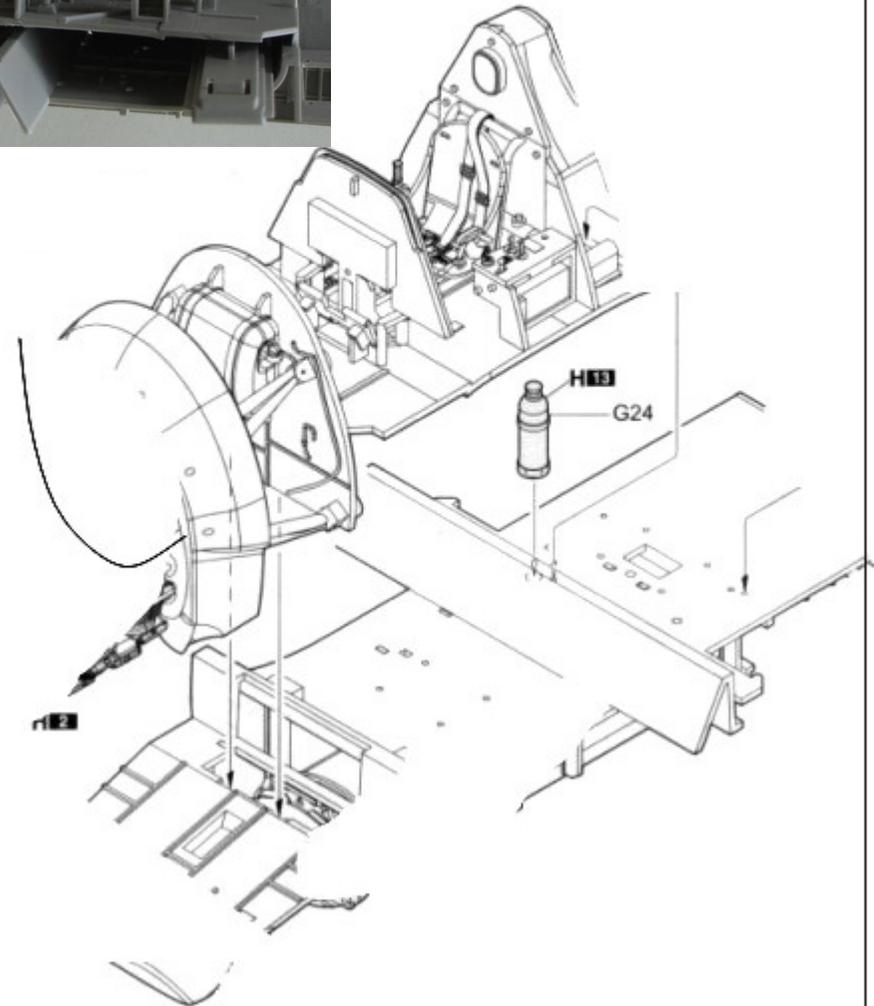
Suggestion to create a simple interior using kit parts for the radar operator crew member (may be visible with opened rear door)

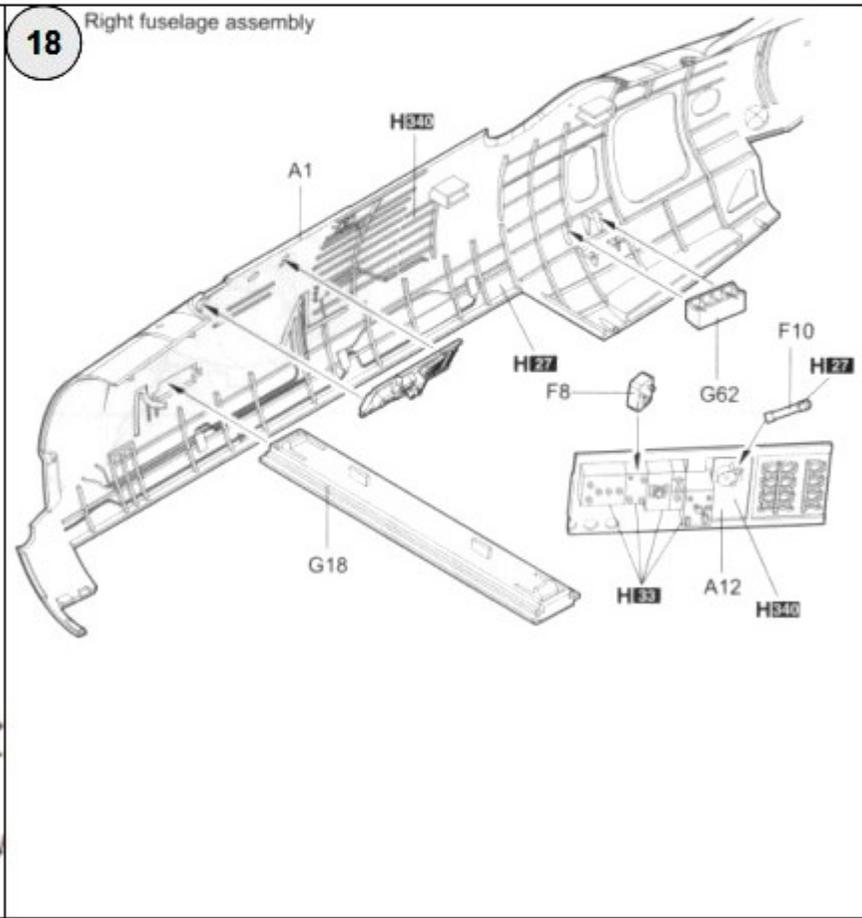
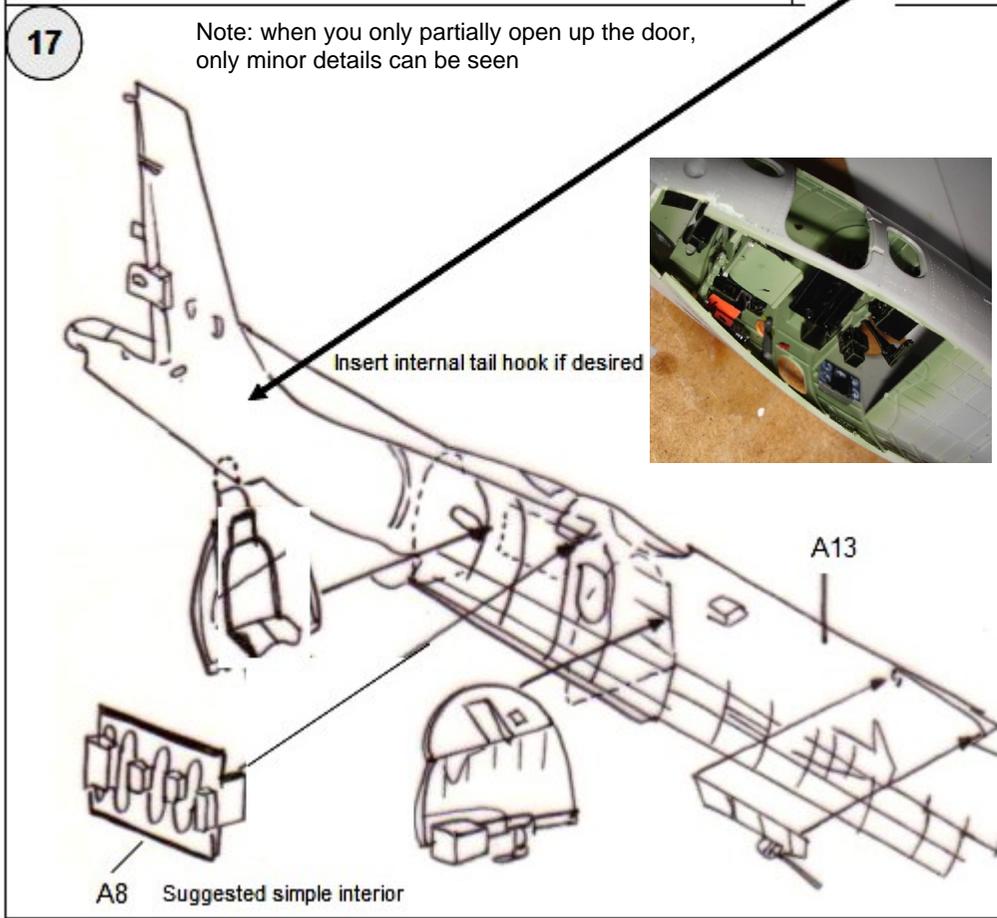
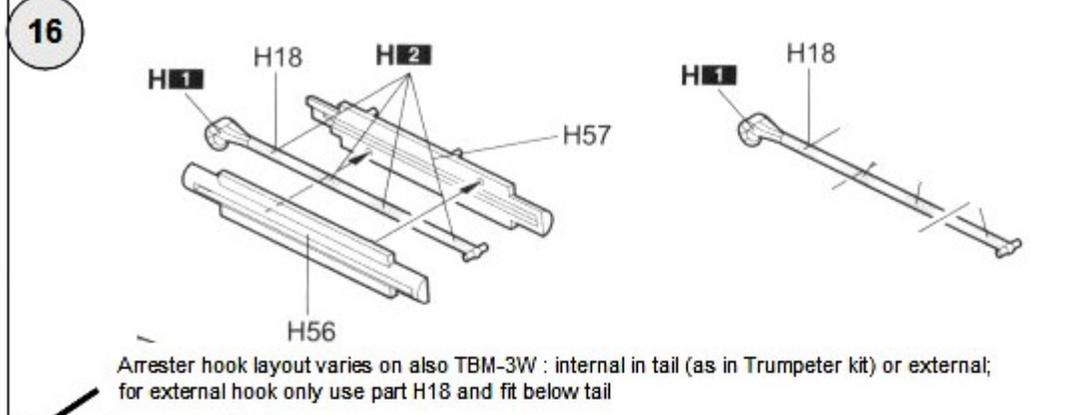
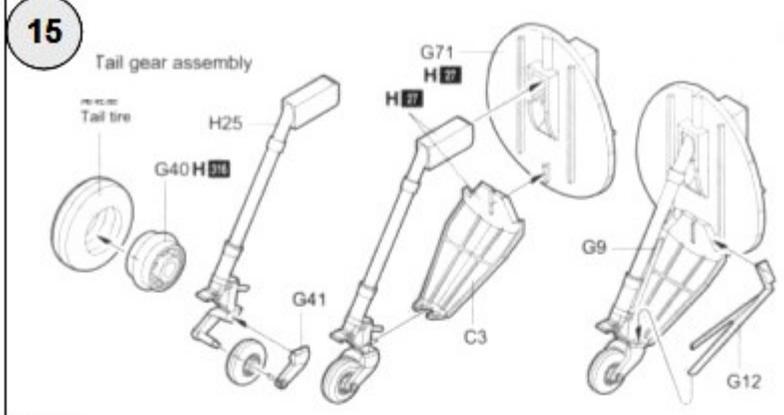


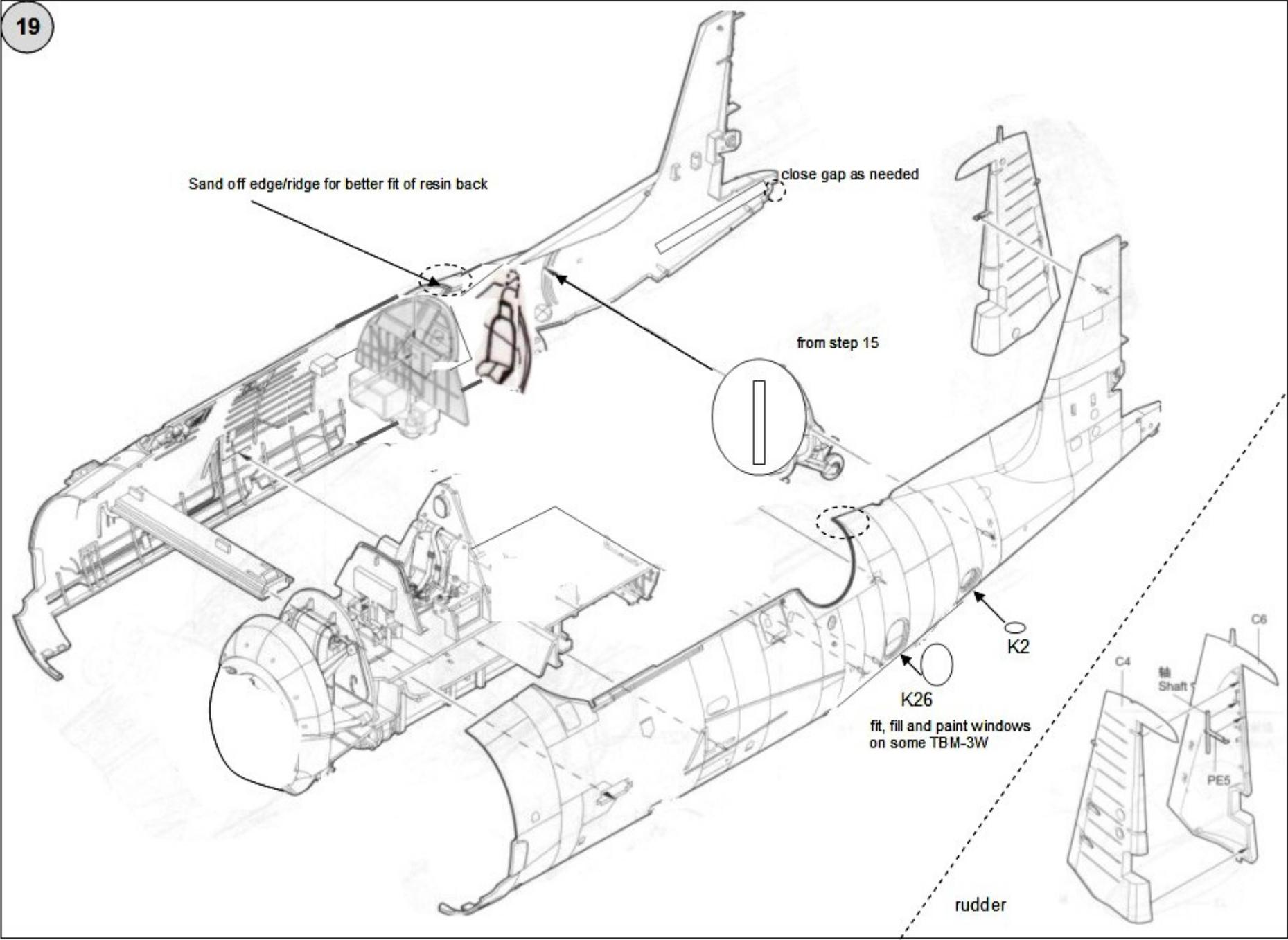
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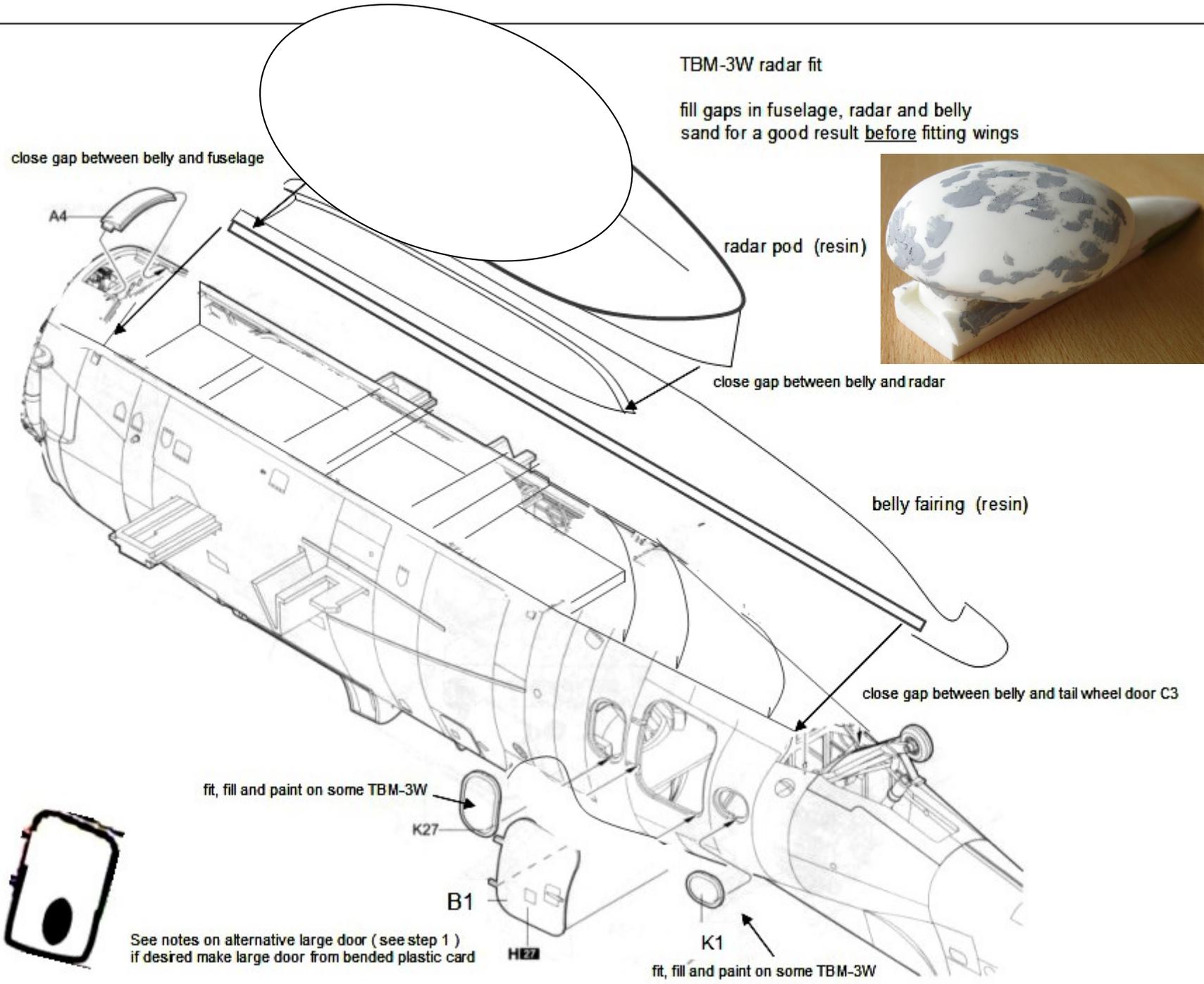


Paint interiors \*interior green\*

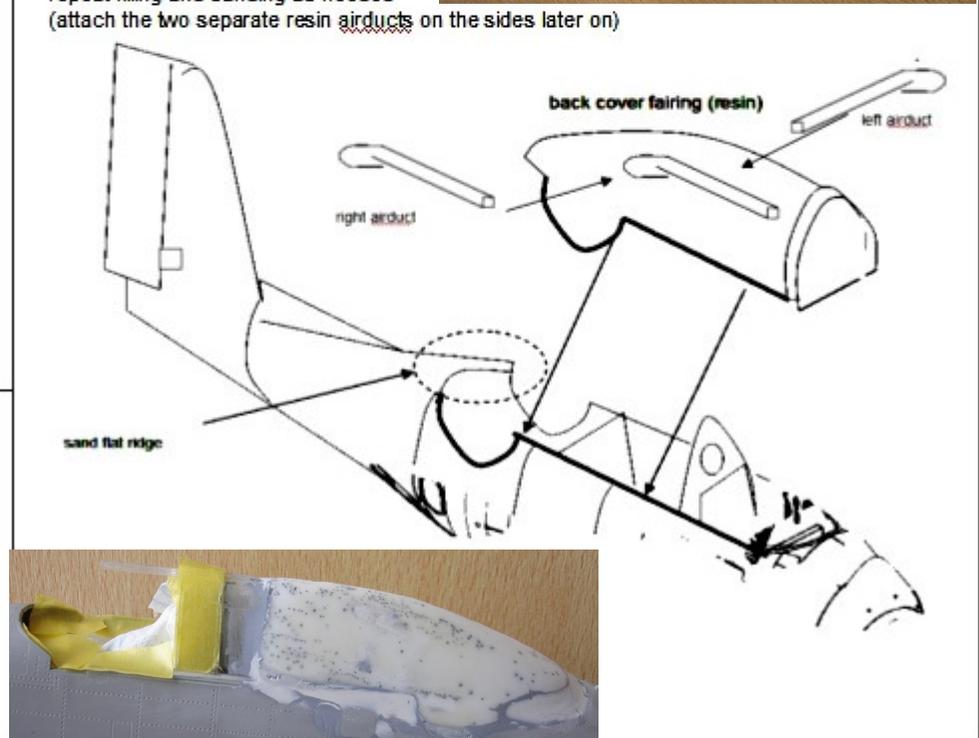
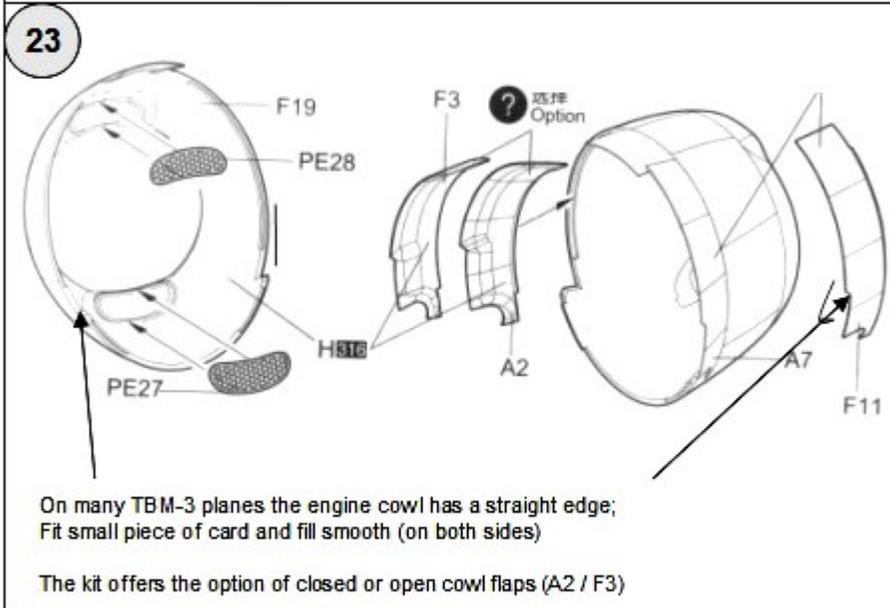
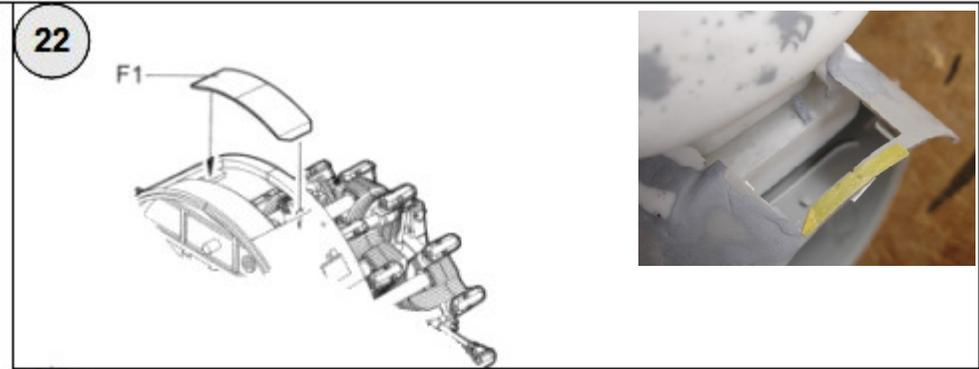
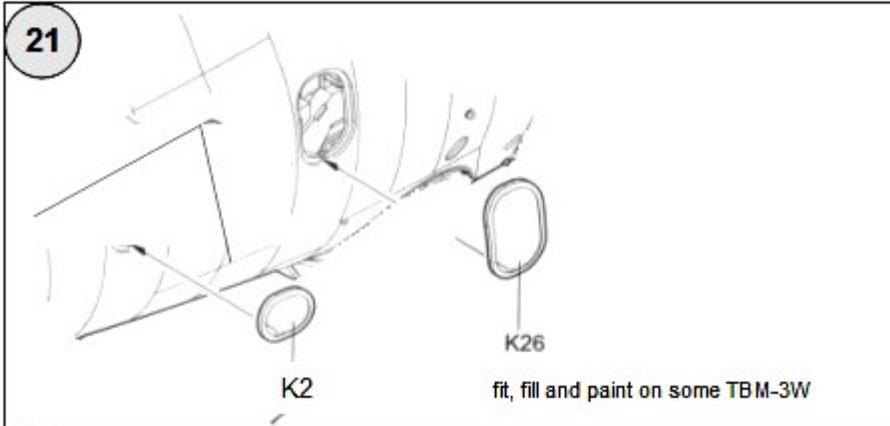




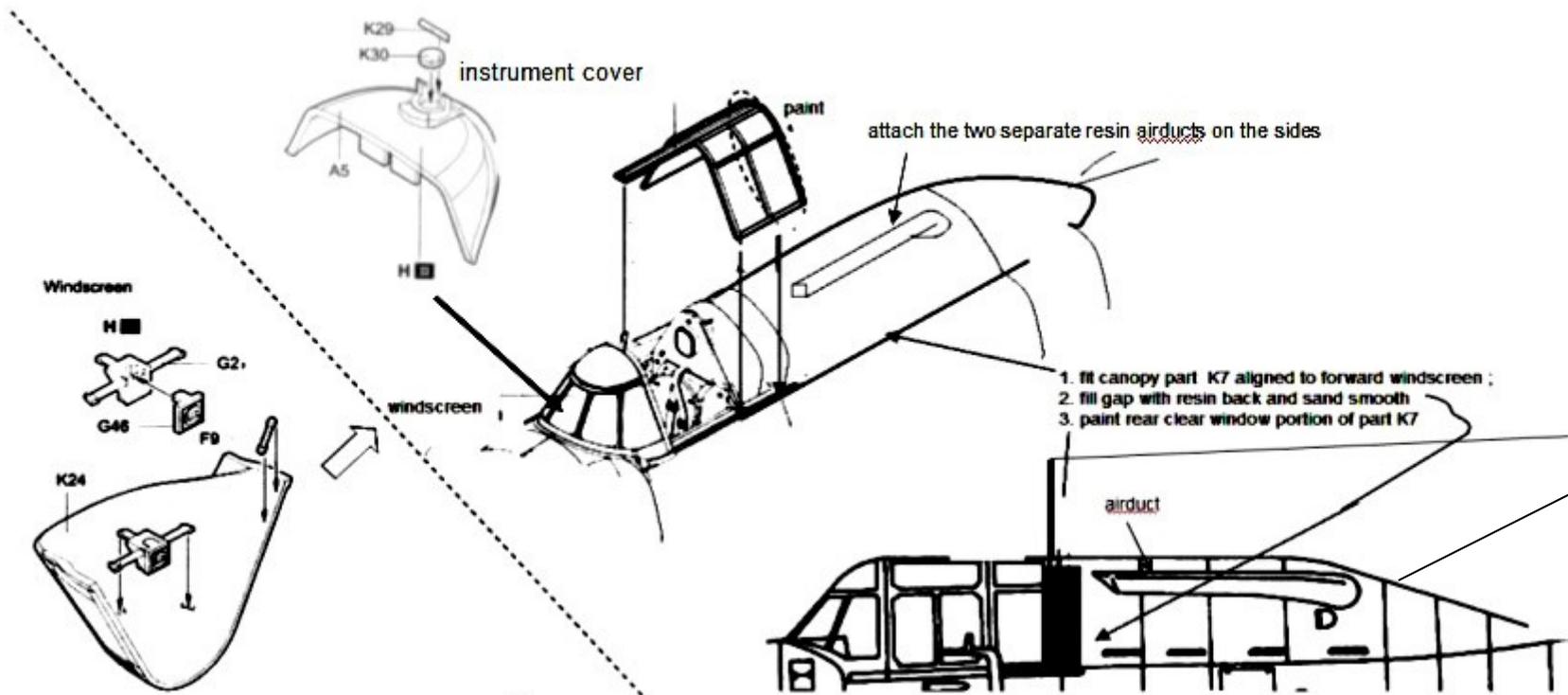




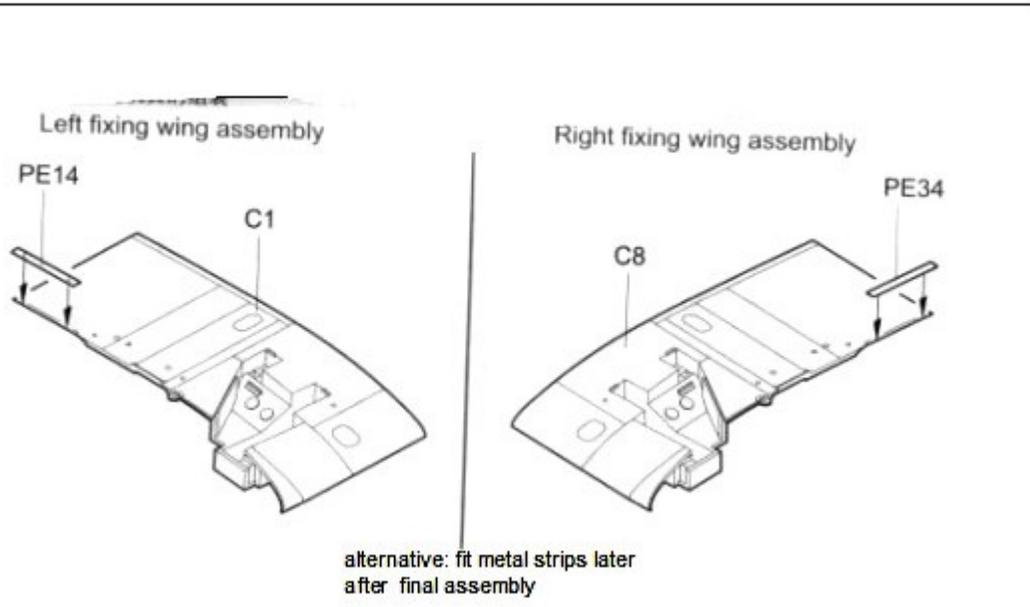
See notes on alternative large door (see step 1) if desired make large door from bended plastic card



25

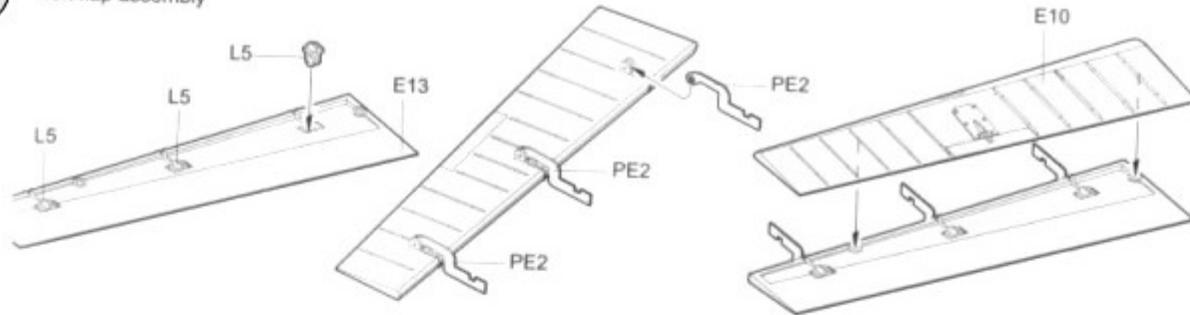


26



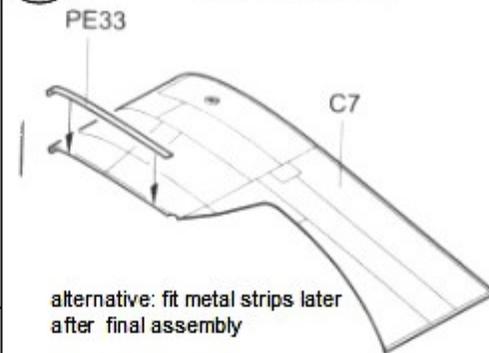
27

Left flap assembly



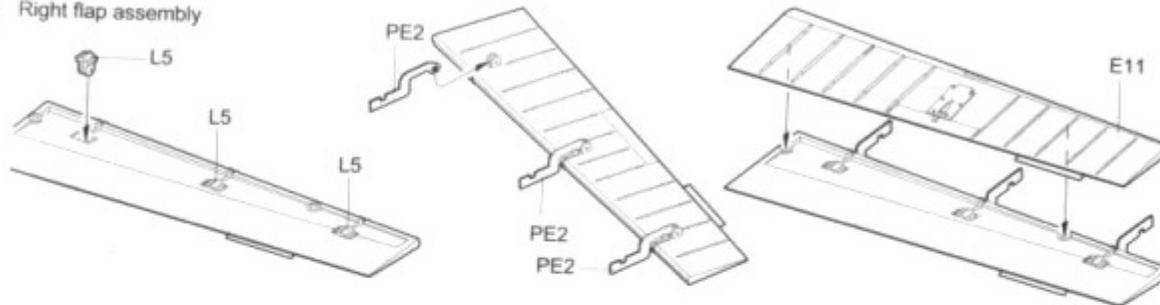
28

Left fixing wing assembly

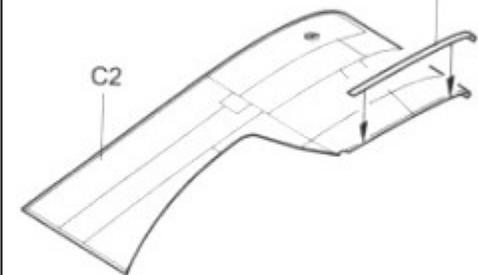


29

Right flap assembly

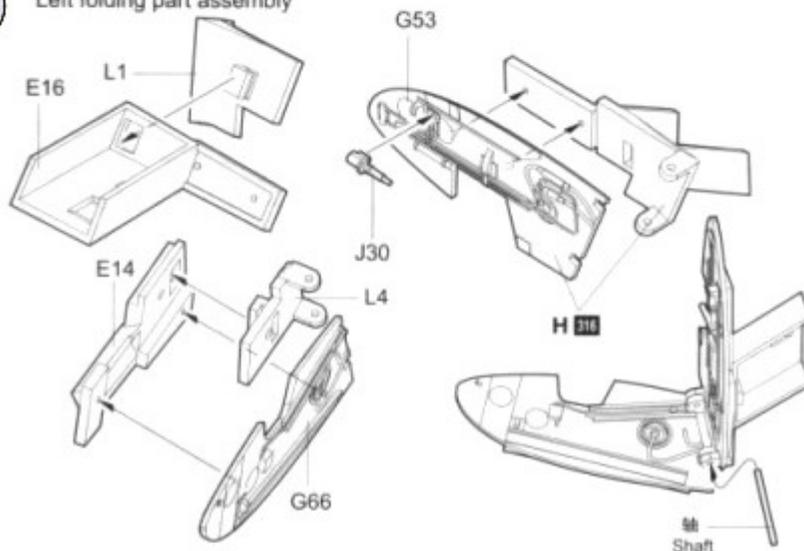


Right fixing wing assembly



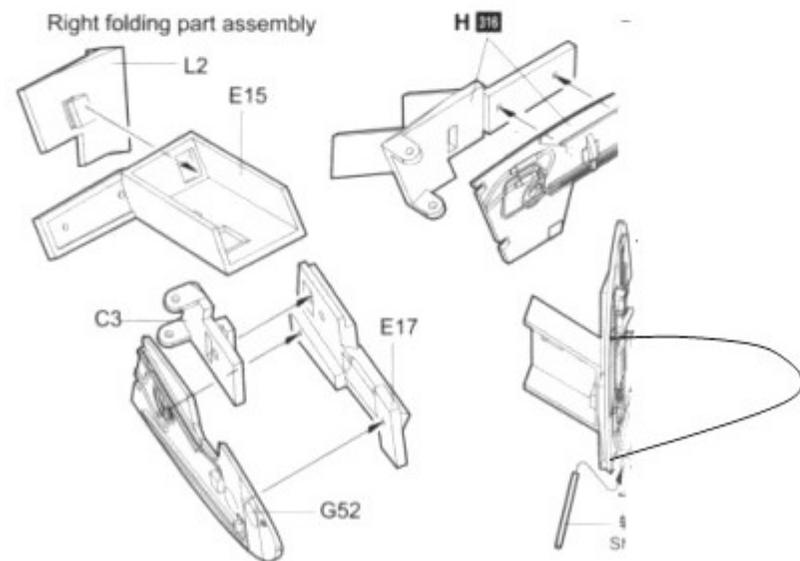
30

Left folding part assembly



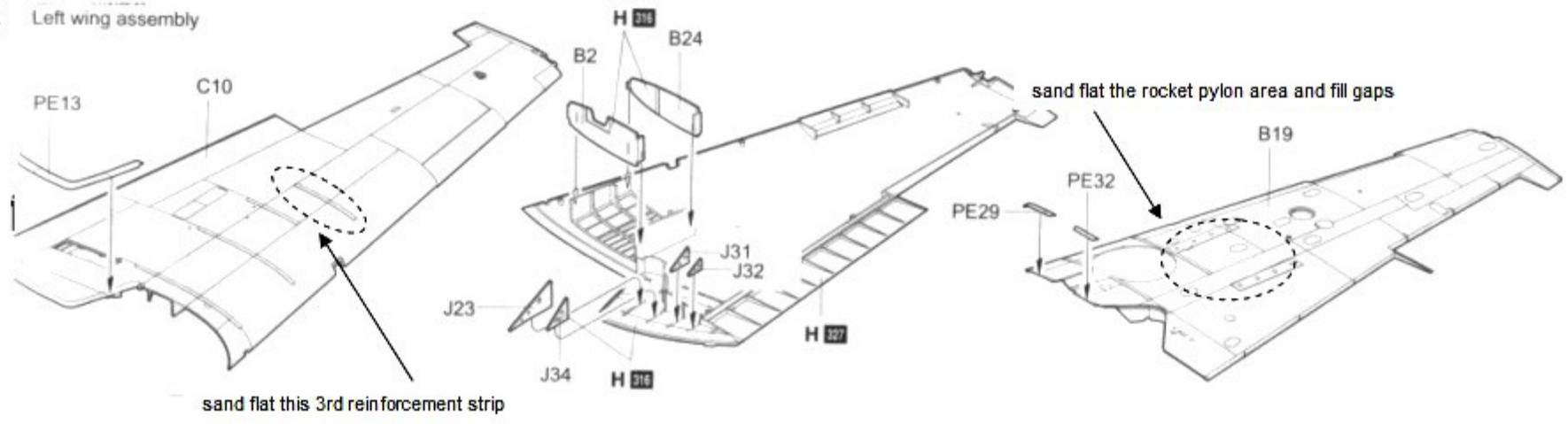
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Right folding part assembly



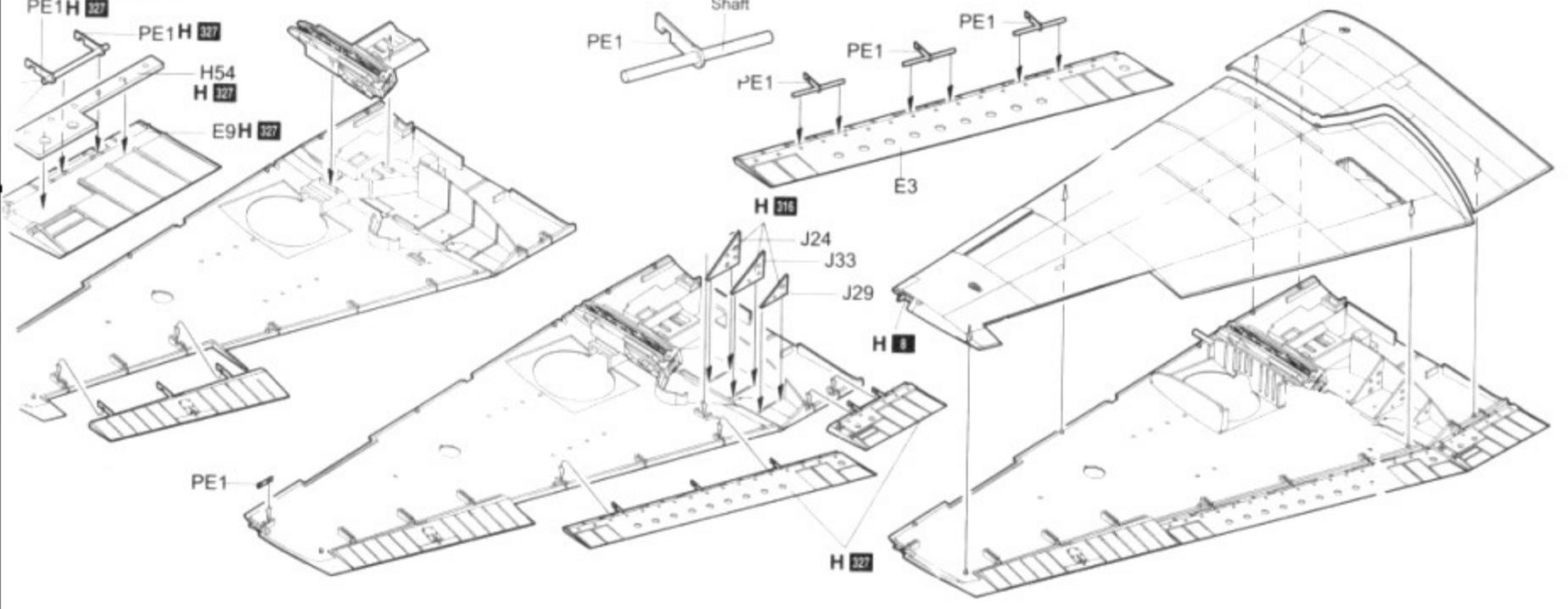
32

Left wing assembly



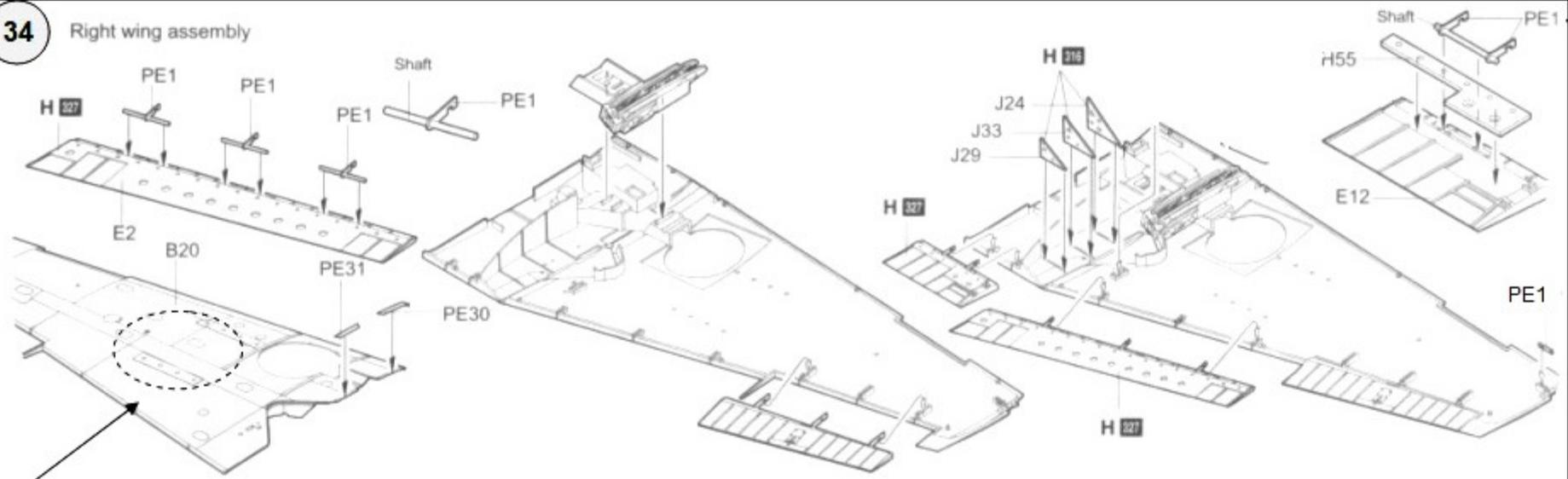
33

Left wing assembly



**34**

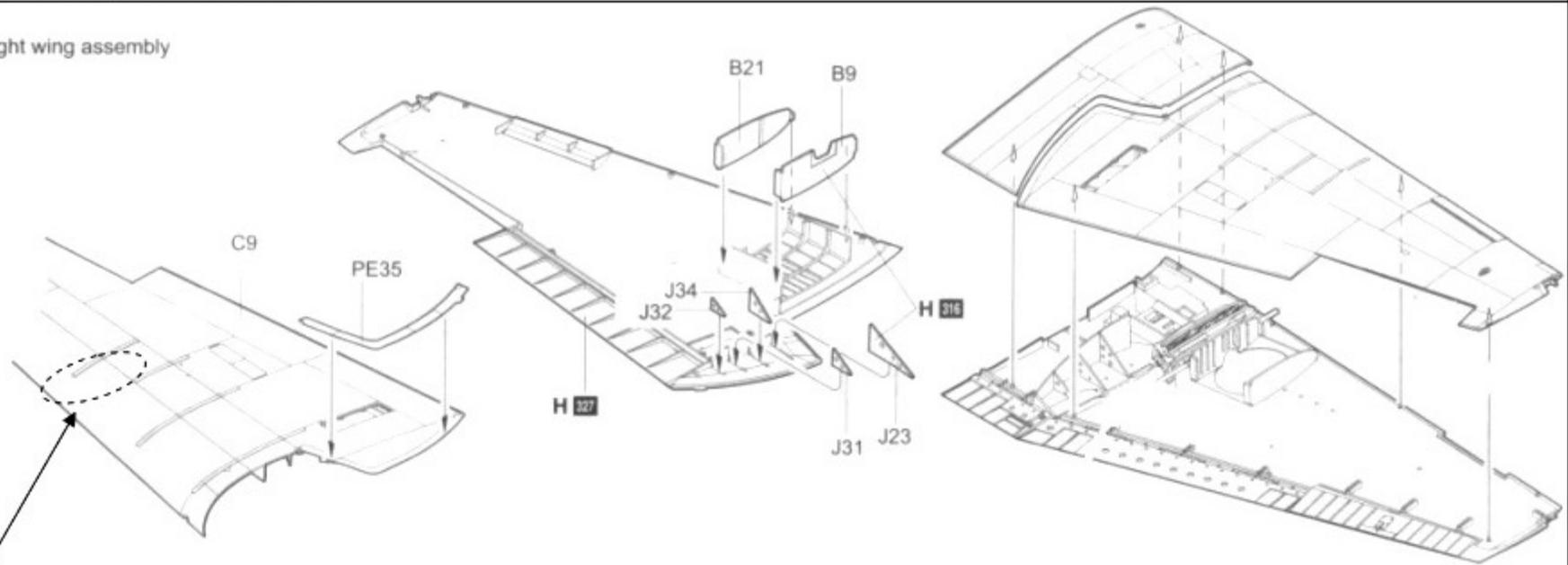
Right wing assembly



sand flat the rocket pylon area and fill gaps

**35**

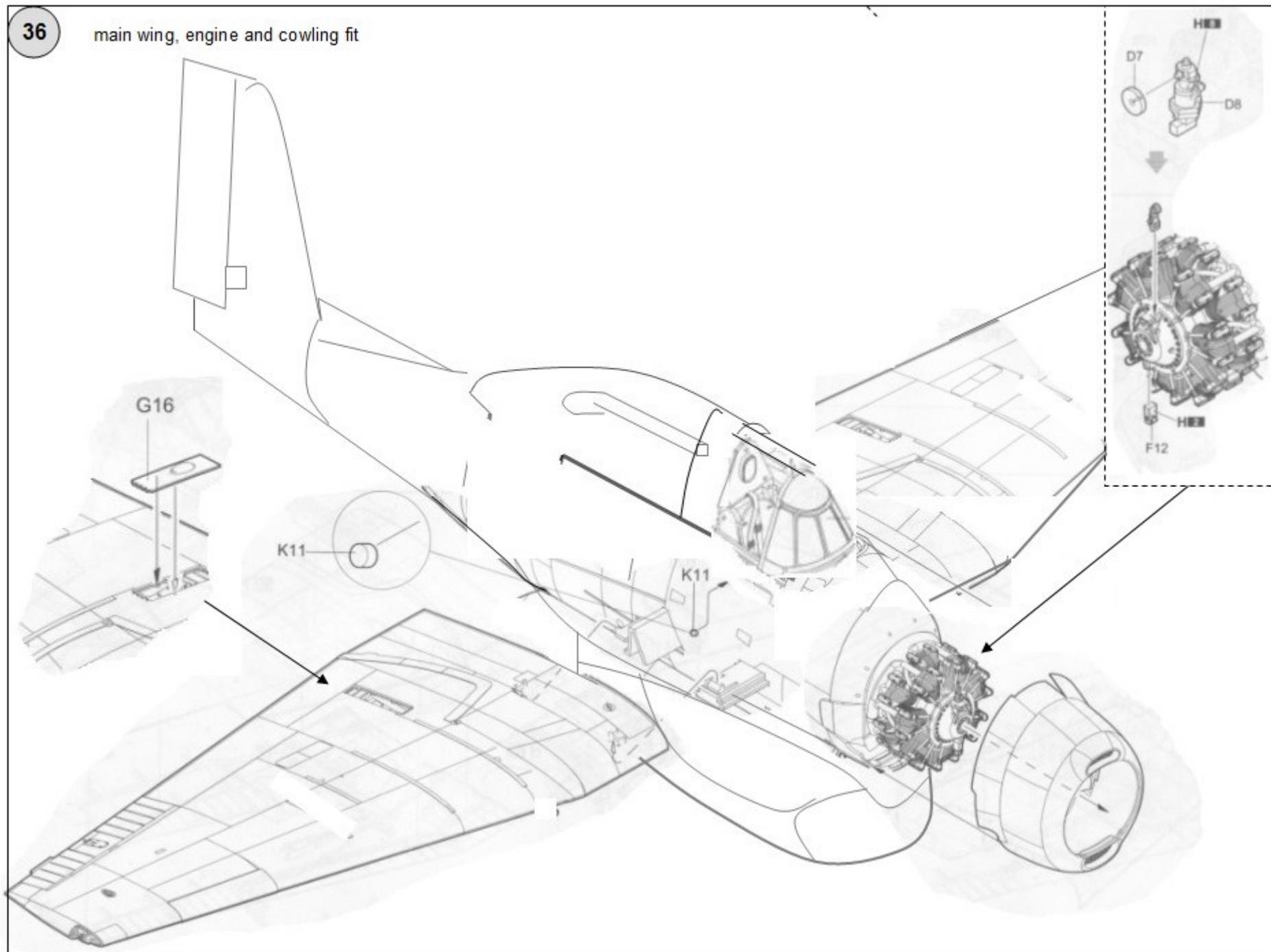
Right wing assembly

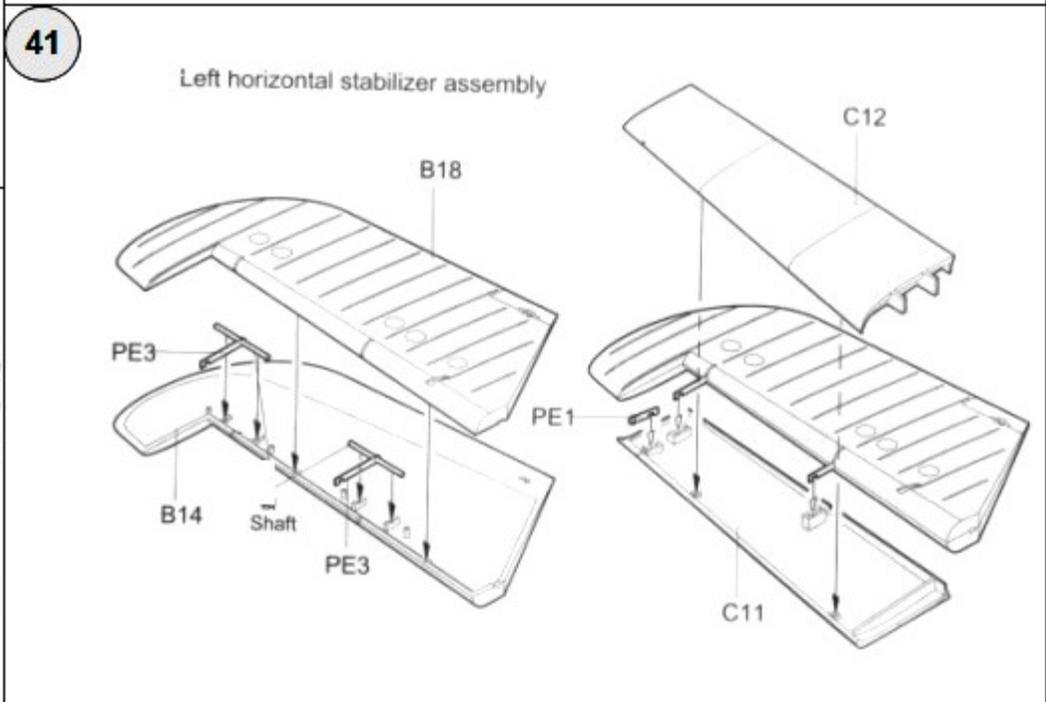
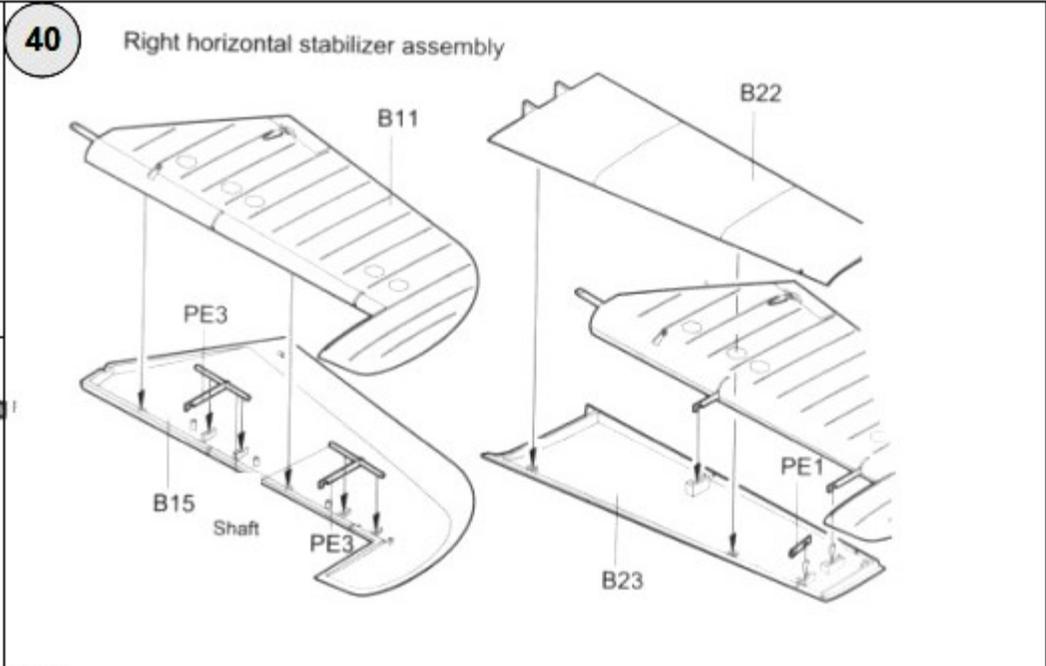
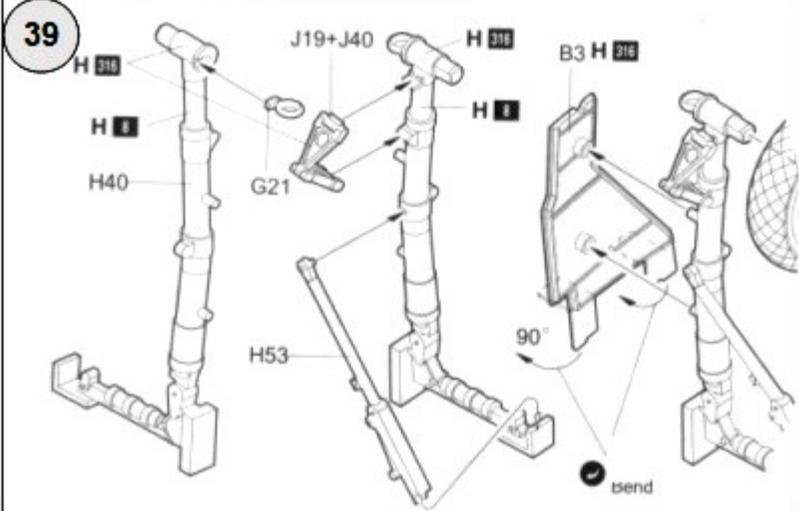
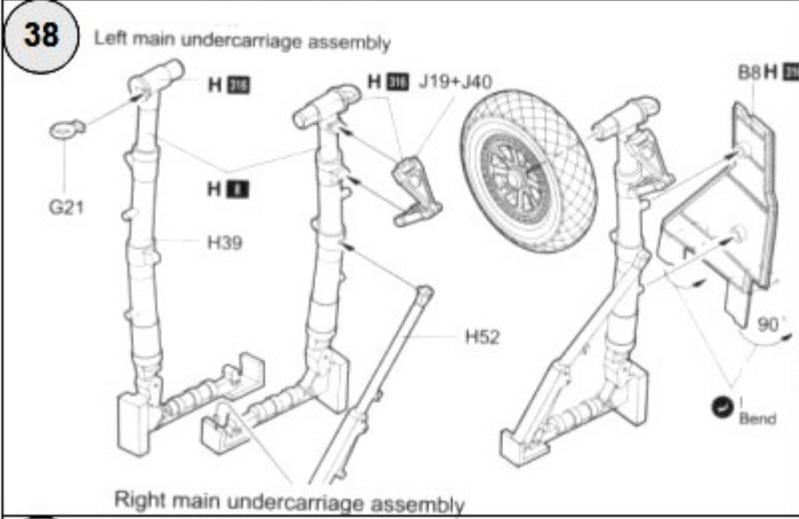
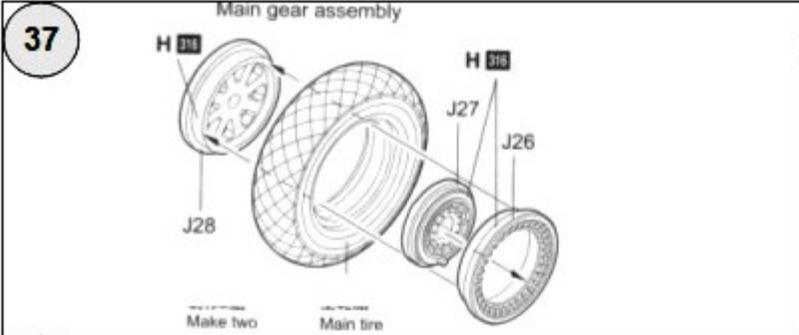


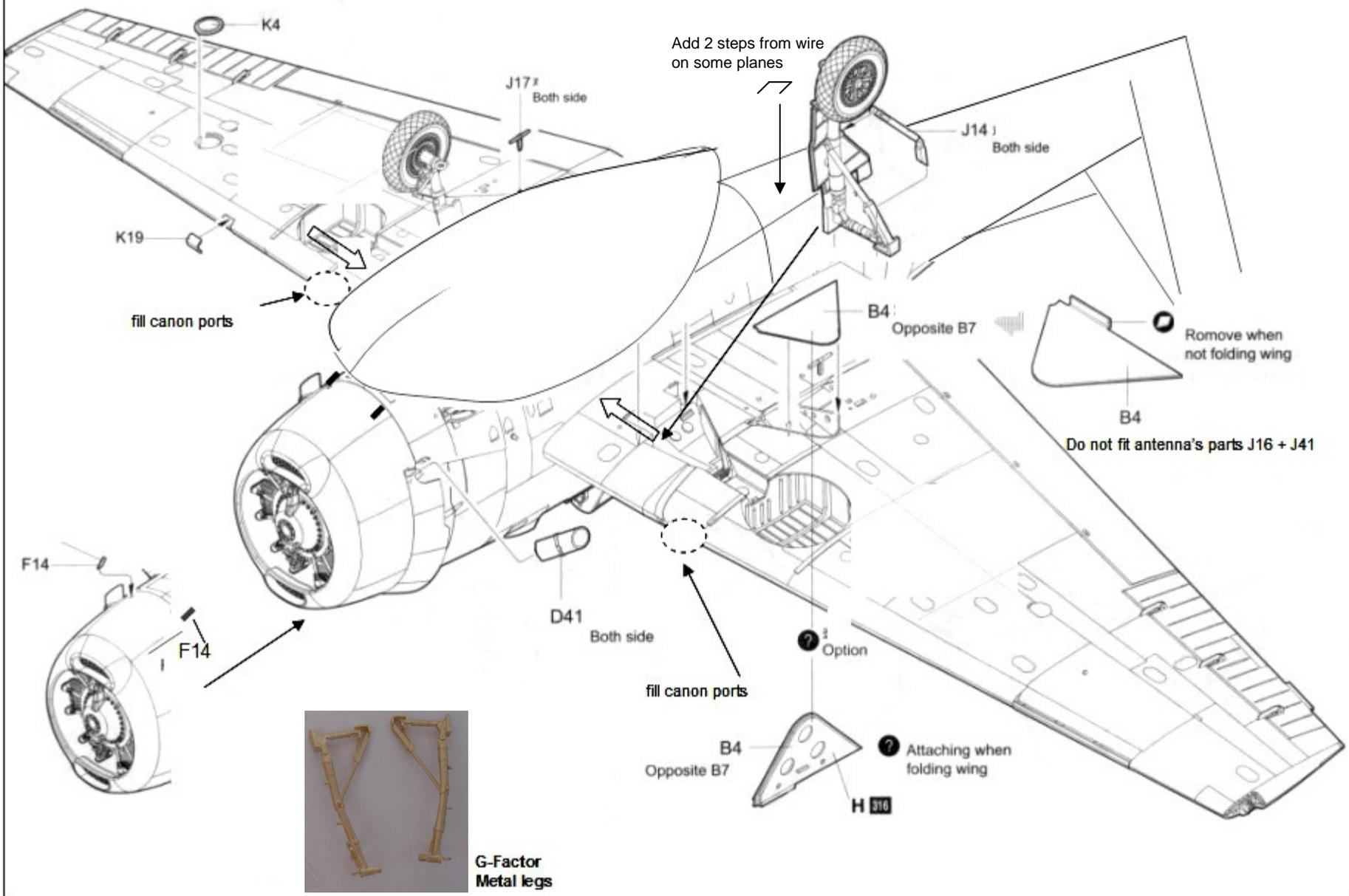
sand flat this 3rd reinforcement strip

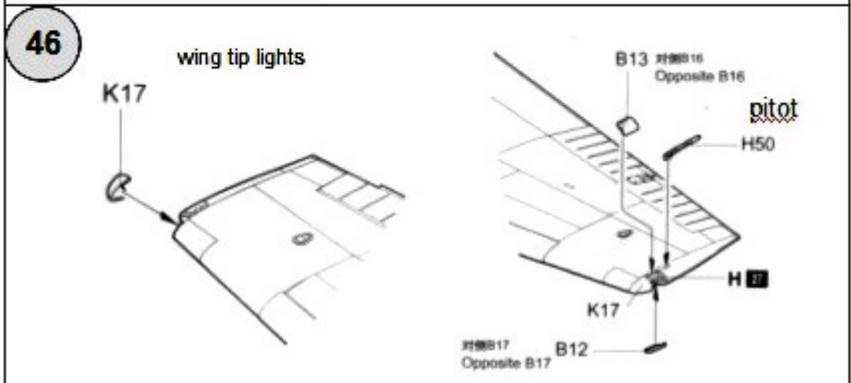
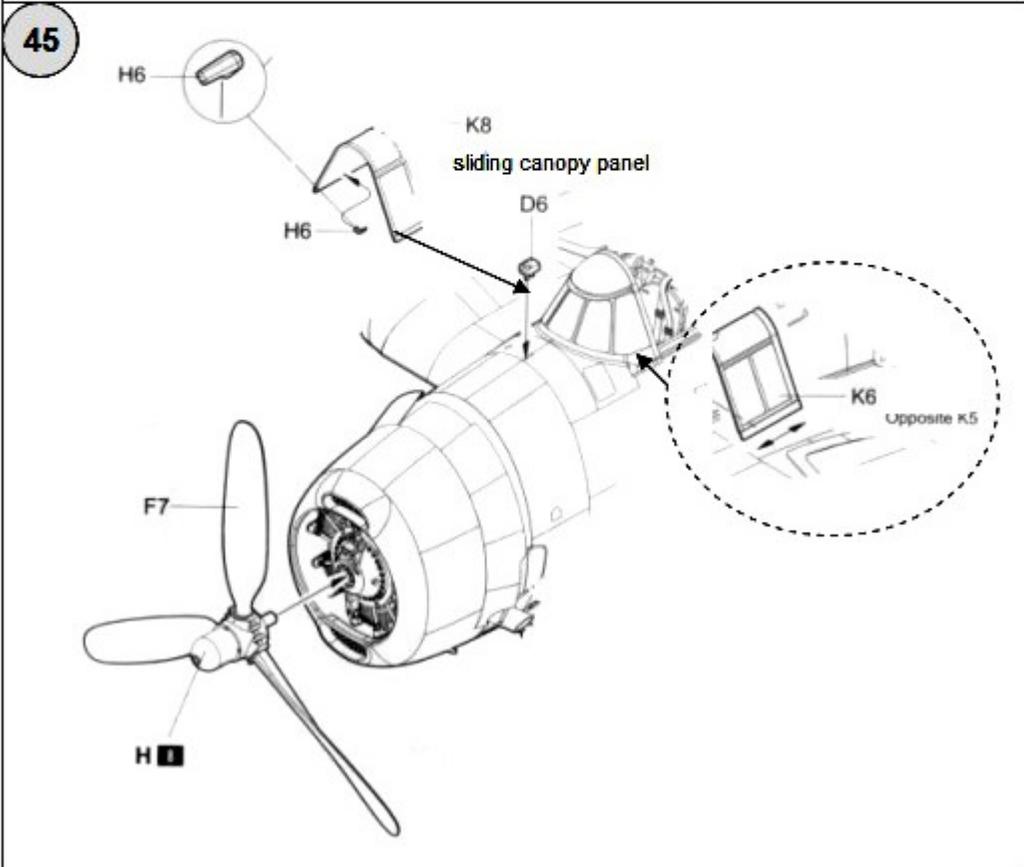
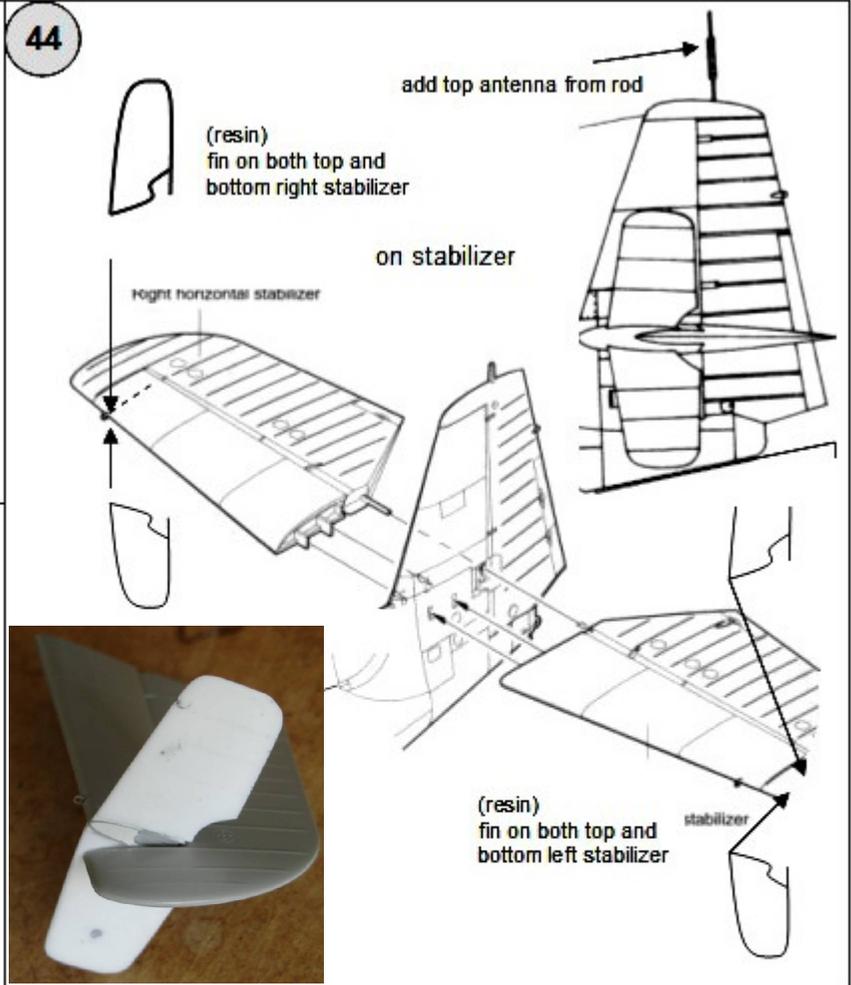
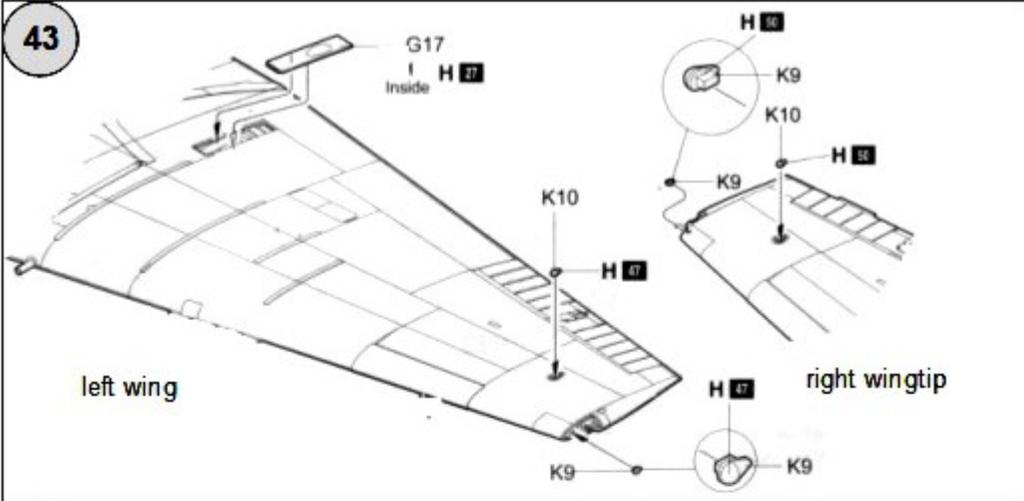
36

main wing, engine and cowling fit

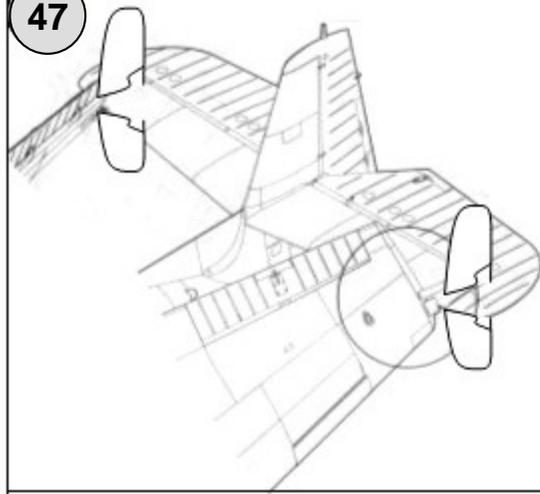




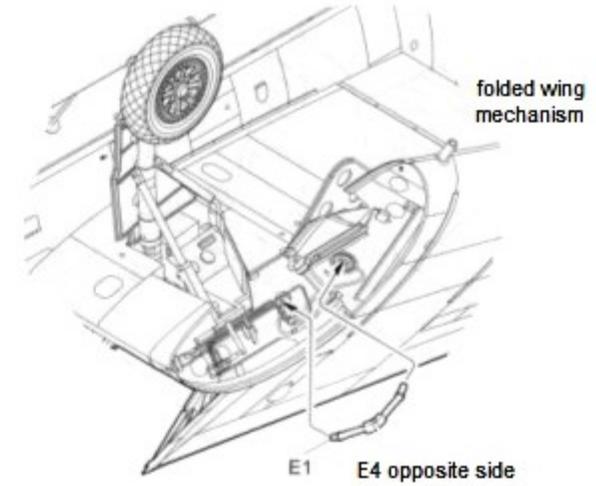
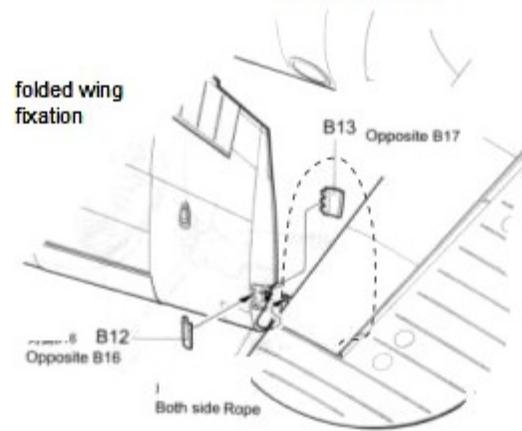




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wing folding



Add antenna wires from fishing line, study pictures.  
On most Warners, 2 wires run from stabilizer to spine and spine antenna

- Fill all gaps
- Add paint scheme
- Add decals and markings of your choice

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