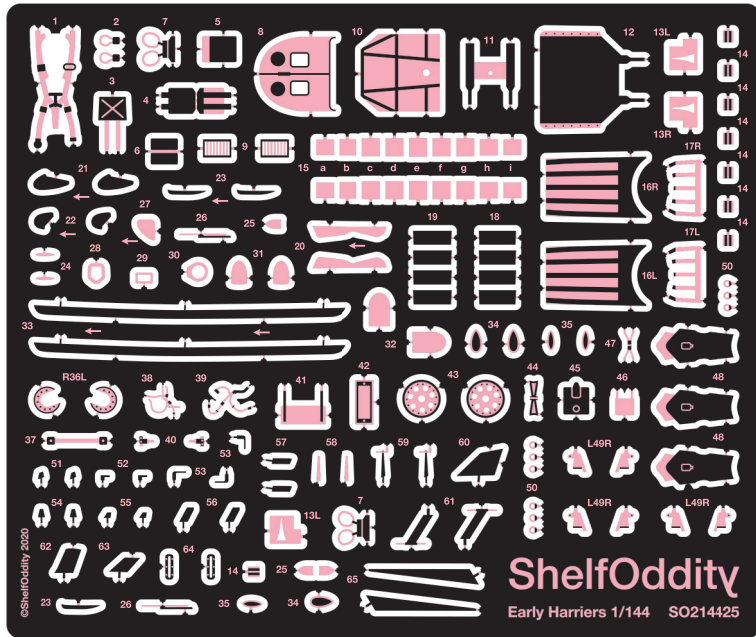


SO214425

1/144 Early Harriers for Mark I kit

Shelf Oddity

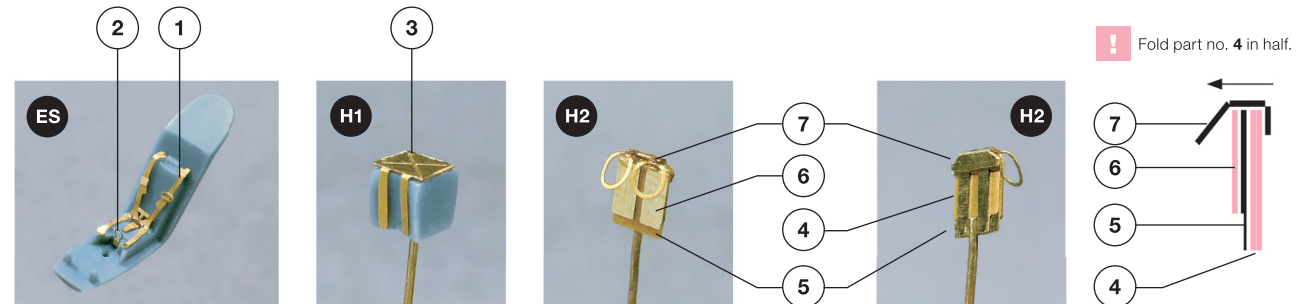
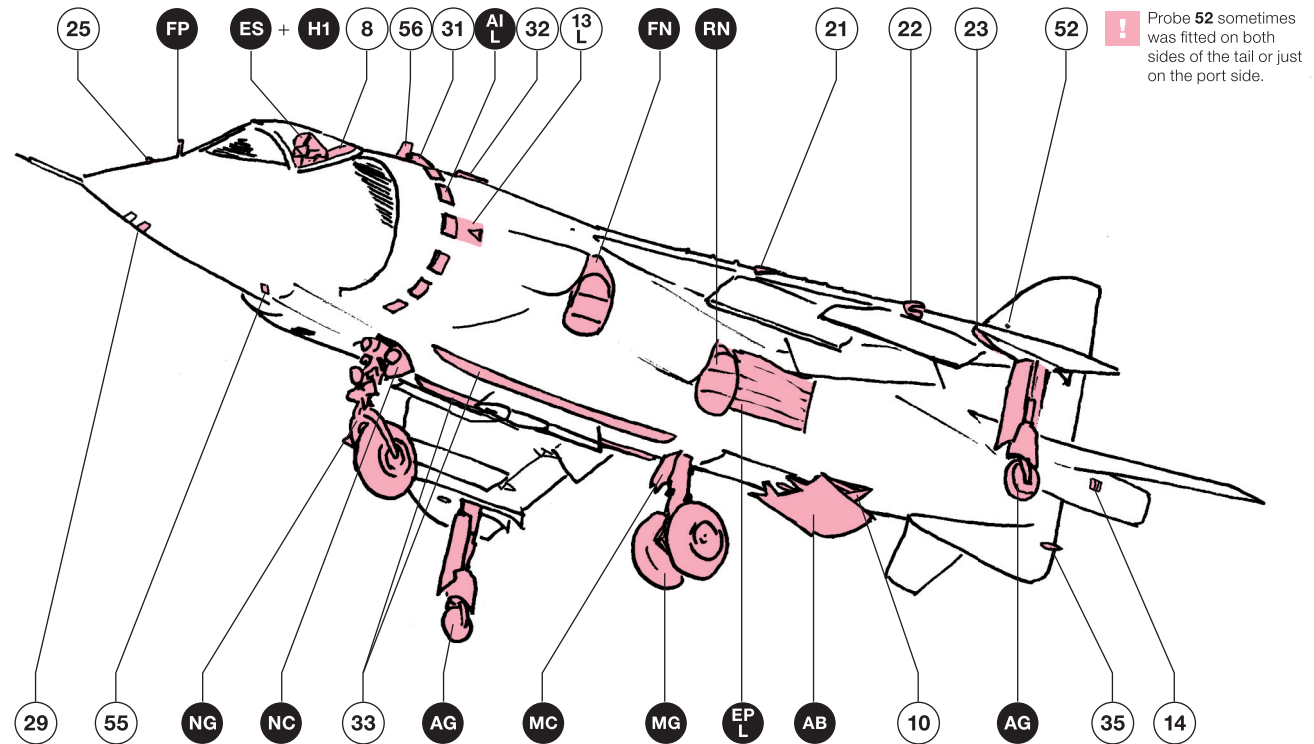


This photo-etched detail set is designed to fit Mark I's recent Harrier GR.1/GR.3/AV-8A/AV-8S kits.

The set contains one 0.1 mm thin brass fret as well as three small resin cupolas: one of 1.0 mm (LL) plus two of 0.6 mm diameter (SL) to be used as landing lights on the nose gear leg.

As usual we have focused on the exterior of the kit although the pilot seat and the cockpit area received some treatment too.

Beside the usual pilot harness (ES) we have prepared two versions of the pilot seat headrest – the bulky one (H1) which belonged to Martin Baker Mk.9 ejection seat used by RAF and the slim one (H2) from Stencil SEU-3A seat used by USMC (as well as by Spanish and Thai Navies).



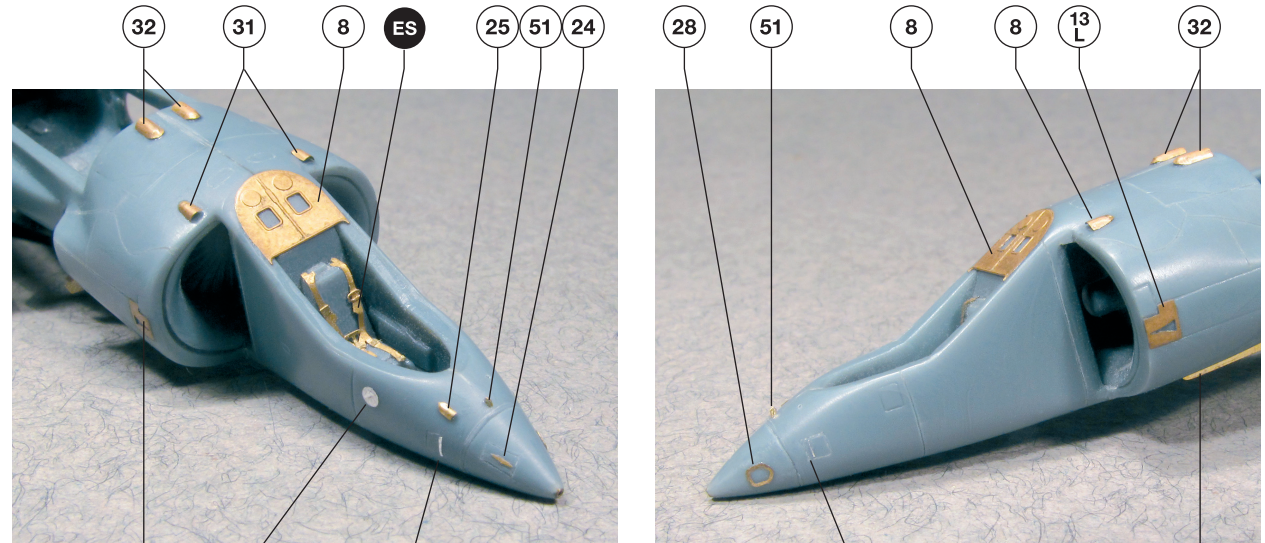
The transition between interior and exterior part of this set is made by cockpit rear shelf (8) visible both inside and outside of the canopy transparency.

Despite of its rather diminutive size Harrier is a pretty complex construction. This set covers a lot of detail omitted in the kit – air scoops, vents, fins and various antennas.

All plastic representations of scoops need to be removed first and all scoops and vents need to be shaped before attaching them onto the model surfaces. To shape them we recommend use of a dental tool applied in gentle rocking motions over part placed on modeller's cutting mat.

The NACA inlets (13L and 13R) need to be flush-mounted and some of the panel lines need to be scribed in order to properly use the parts from this set.

Some access panels and vent covers can be replicated using ultra-thin aluminium foil applied directly on the surface of the kit. Despite its rather exotic provenience such foil can be found in fairly tasty circumstances – some of the chocolate brands are still using the inner aluminium wrap under the colourful layer of paper.



13
R

A 1.5 mm diam circle cut from aluminium foil.

A 2 mm long and 0.1 mm thin strip of aluminium foil. Present on both sides of the fuselage.

55

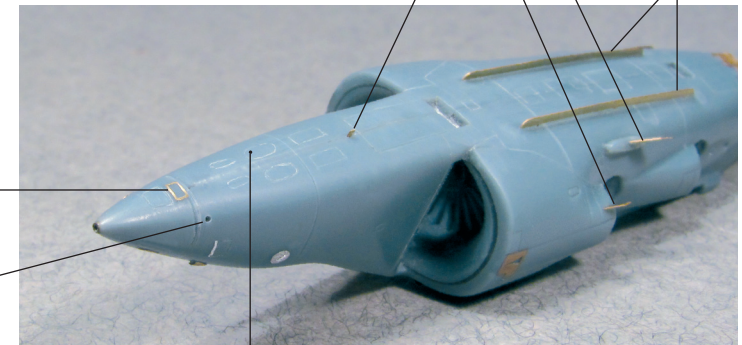
63

60

33

29

A 0.3 mm round opening

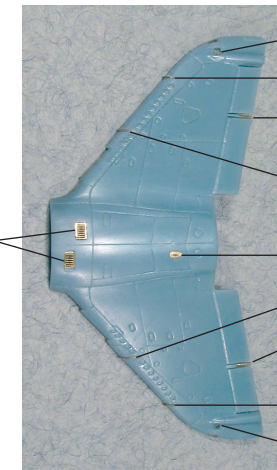
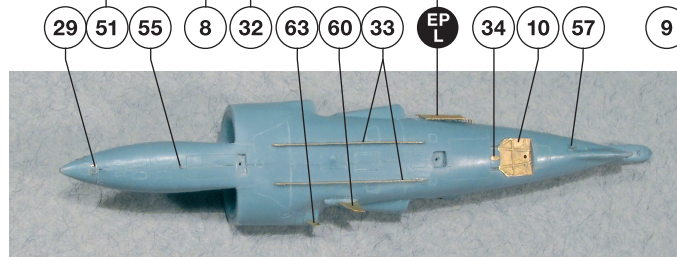
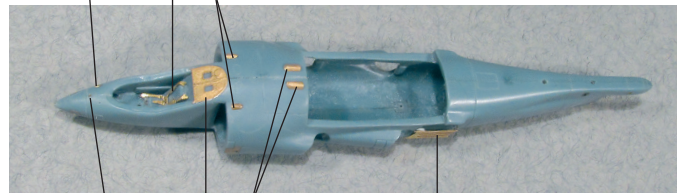
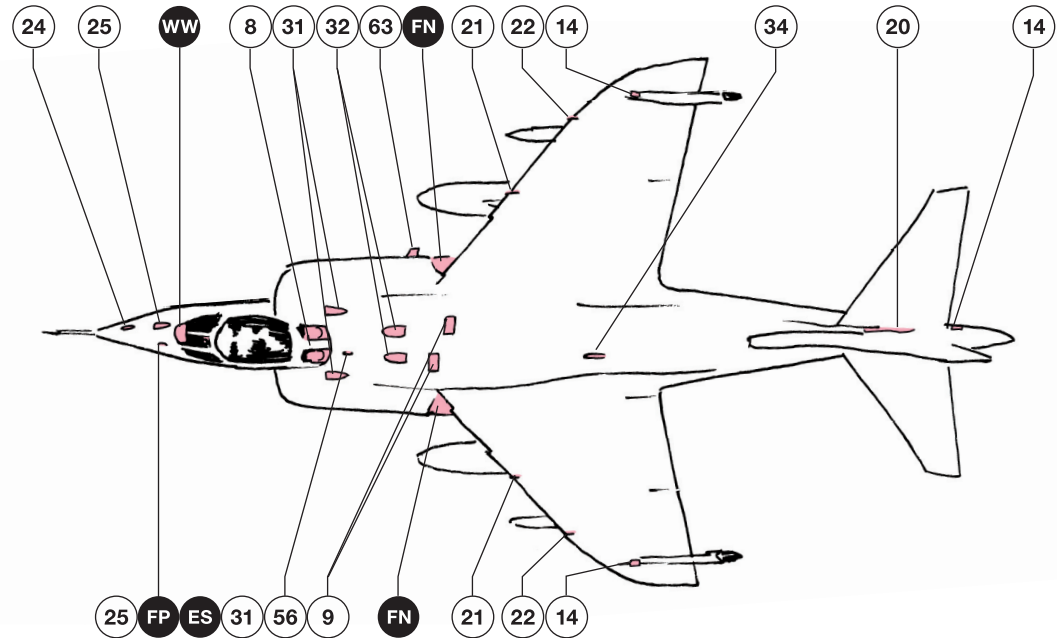


53

! Probe 53 seems to be fitted in the marked spot on pre-production Harriers – it is visible on some pictures of P.1127 XV279.

Here you can see the overall extent of modification we have prepared to the otherwise excellent Mark I kit.

It is recommended to start the update with preparing the opening for the air brake well (**10**). It is also advisable to remove ceilings from both wheel wells and replace them with single plastic pieces installed after the fuselage halves are joined together.



14
22
A 1.9 mm long piece of 0.4 mm brass tube.
21
34
21
A 1.9 mm long piece of 0.4 mm brass tube.
22
14

Another troublesome moment can be found while clearing the openings for the engine aggregates cooling gills (9) as the plastic in this area is quite thick. Note that their positioning in the kit differs slightly from the real machine.

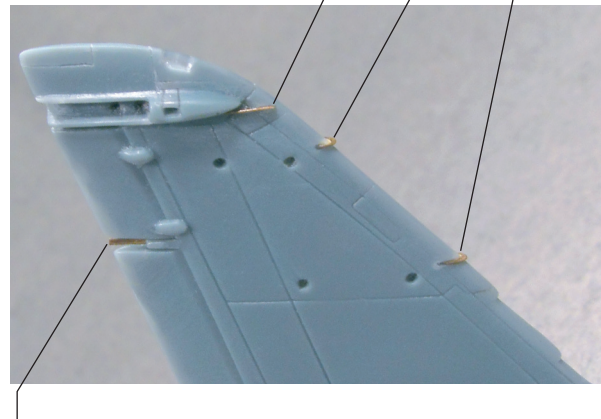
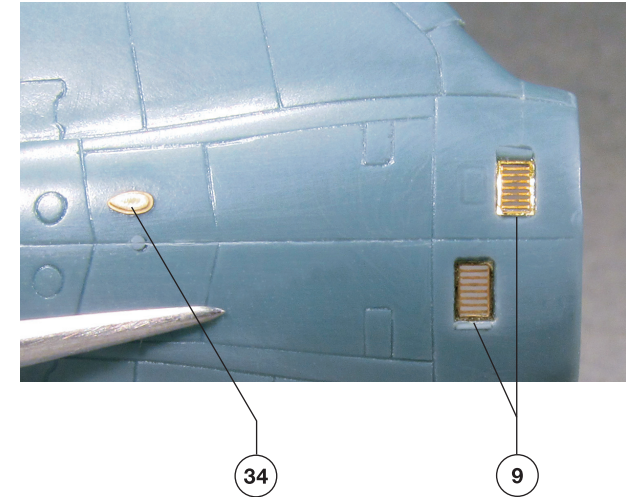
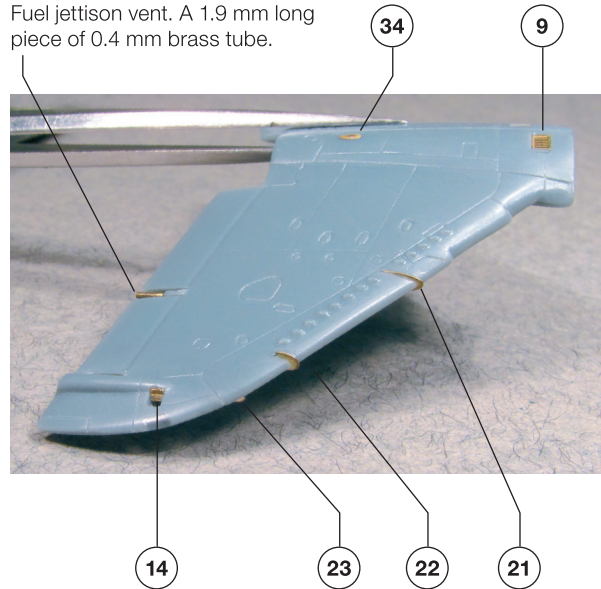
To install aerodynamic fences (21 and 22) a set of shallow slits need to be prepared in leading edge of the wing.

The outer wing manoeuvring nozzles require some further surgery as they are omitted in the kit. The moveable flap situated inside of each rectangular nozzle is represented by parts no. 14.

Another interesting feature of early Harriers are the fuel jettison pipes located on each wing between ailerons and flaps. Those pipes can be represented by 1.9 mm long pieces of 0.4 mm brass tube.

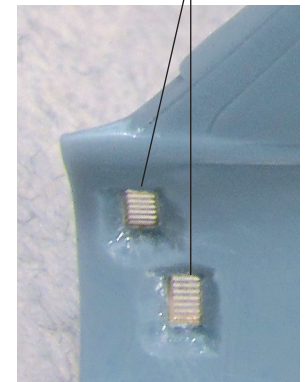
The position beacons (34) visible on the upper and bottom part of the fuselage can be further enhanced by a drop of thick transparent glossy lacquer or by a drop of non-fogging CA glue. Both beacons should be coloured transparent red.

Fuel jettison vent. A 1.9 mm long piece of 0.4 mm brass tube.



Fuel jettison vent. A 1.9 mm long piece of 0.4 mm brass tube.

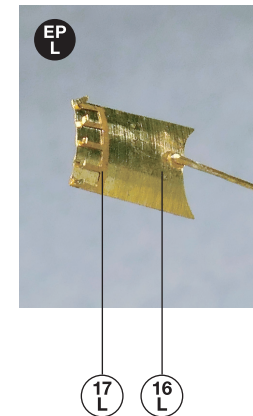
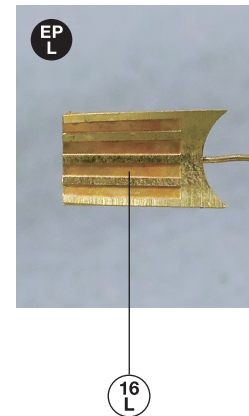
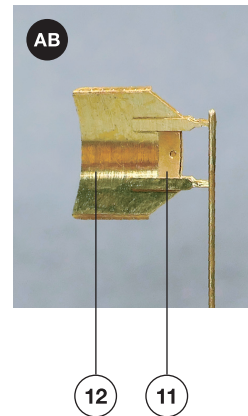
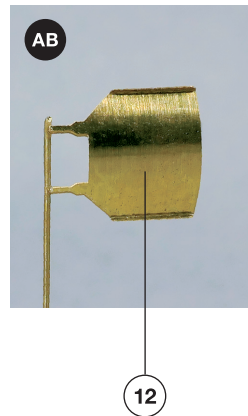
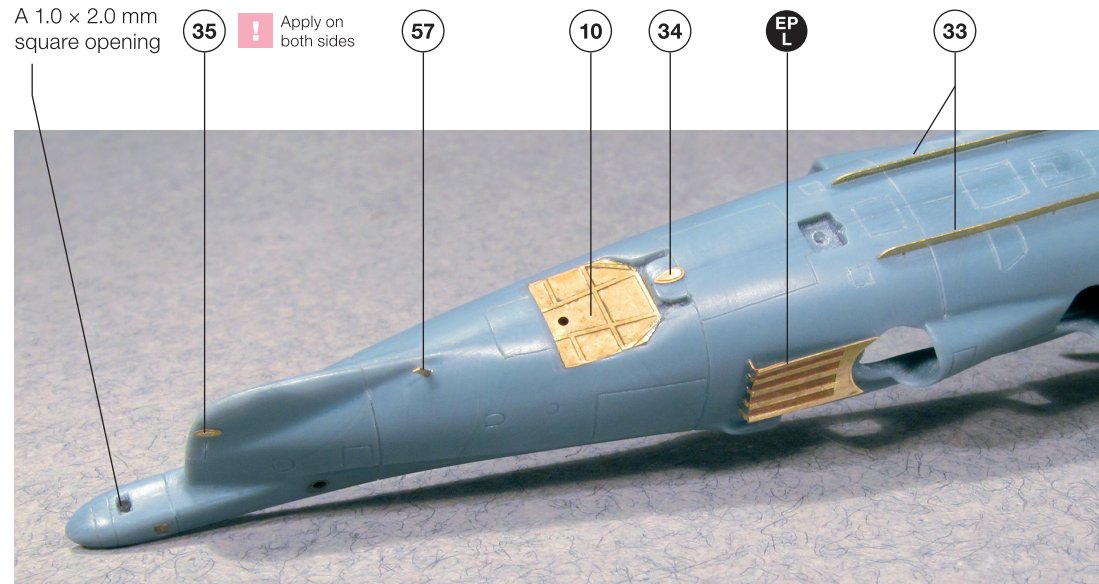
! As the plastic in this area is quite thick, a careful hollowing work is required.



A glimpse on the underside of the fuselage. The positioning of ventral strakes (33) as well as various antennas and beacon is clearly visible.

Both parts of the air-brake (11 and 12) as well as all parts of exhaust plates need to be shaped before the glue application. The hydraulic jack for the air-brake (AB) needs to be scratchbuilt, e.g. from brass and stainless steel tubing.

Please note that the fully thick (0.1 mm) tips of both exhaust plates' supports (17L, 17P) need to be folded at a straight angle before shaping the whole parts.

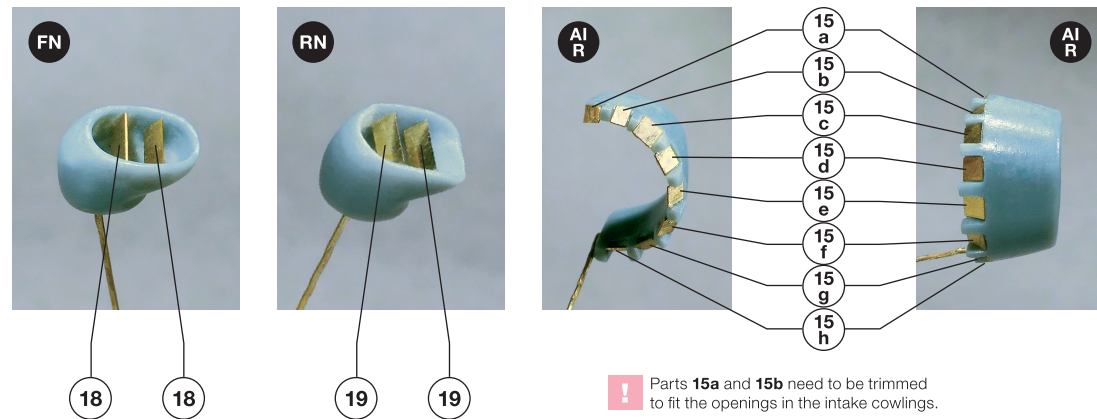
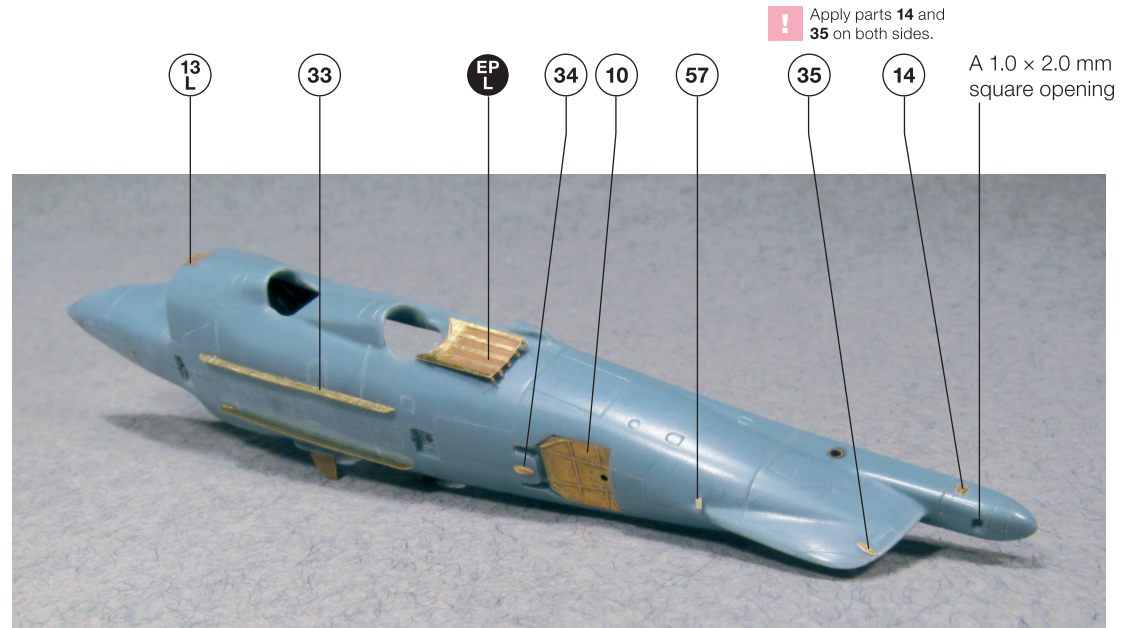


! Use parts 16R and 17R for the starboard exhaust plate.

Both front- and rear engine nozzles (**FN** and **RN**) need to be hollowed before installing the splitters (**18** and **19**).

The spaces for bleed flaps in engine air intake cowlings (**AIL** and **AIR**) need to be hollowed before the installation of the flaps.

Note that the width of some flaps (**15a – i**) might need to be adjusted in order to match the openings made in both cowlings.

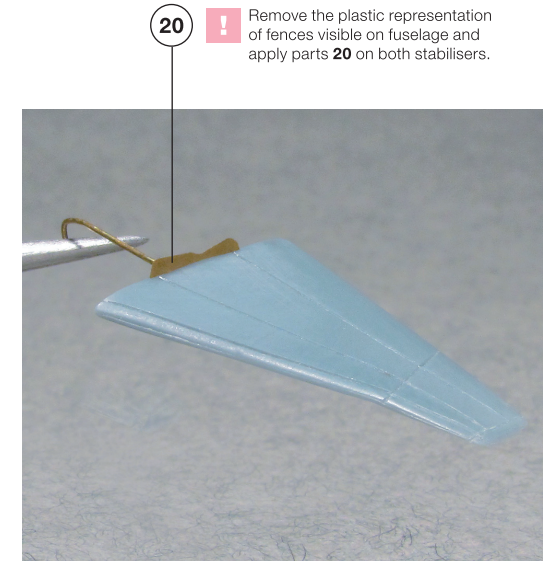
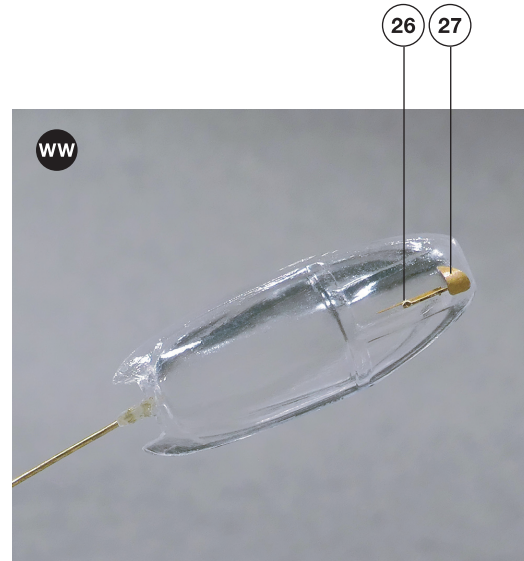


! Parts **15a** and **15b** need to be trimmed to fit the openings in the intake cowlings.

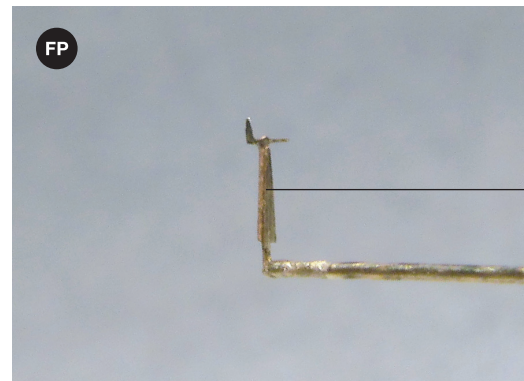
! Port side engine air intake (**AIR**) should be assembled just as the starboard one. Parts **15i** act as spare ones.

The windscreen can be adorned by a wiper arm (26) and the cover of its mechanism (27).

The front pitot probe (FP) can be used as it is – the part (59) alone or with its base thickened by the part (58). Due to its delicate nature a spare set of parts needed to prepare the probe is included in our set.



! Remove the plastic representation of fences visible on fuselage and apply parts 20 on both stabilisers.

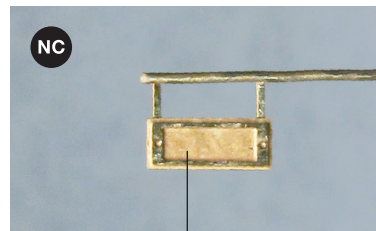
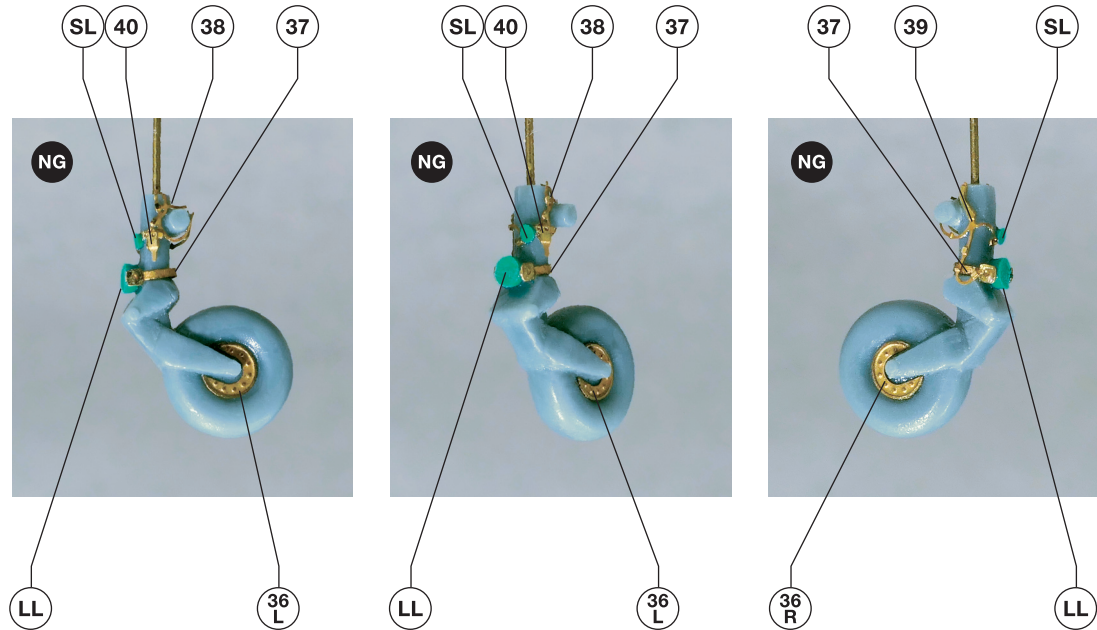


59 + 58

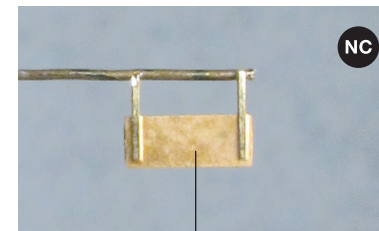
Harrier's nose gear is a rather complicated assembly. Please note that the smaller light (**SL**) sometimes was not fitted to the leg. Check your references here.

Just in case, the smaller 0.6 mm resin cupola is supplied in two instances to satisfy the appetite of your carpet monster.

The two small dots in the front part of the nose gear cover (**NC**) are prepared for pieces of 0.1 mm wire acting as a set of actuators of the cover.



42 ! Front view of nose gear cover.



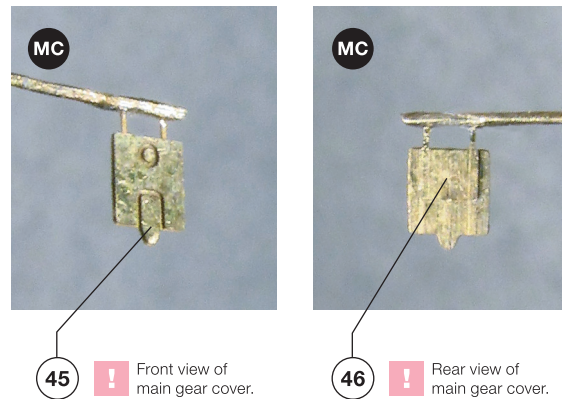
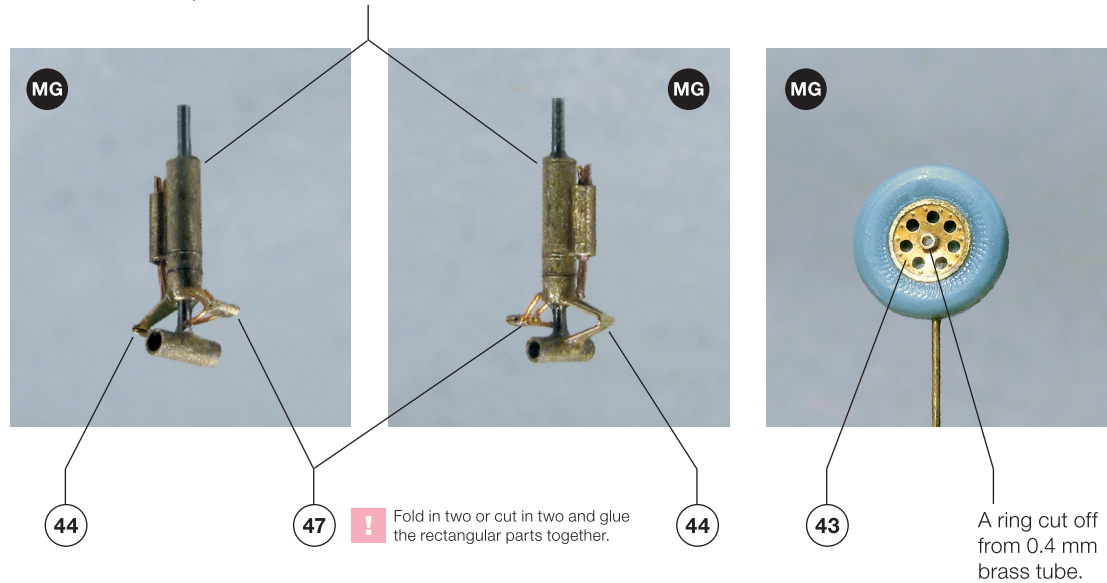
41 ! Rear view of nose gear cover.

To save time needed for proper cleaning of the seams on the plastic part the main gear leg shown here has been recreated using various tubing.

The original kit's part can also be updated with photo-etched oleo scissors – parts no. **44** and **47** respectively.

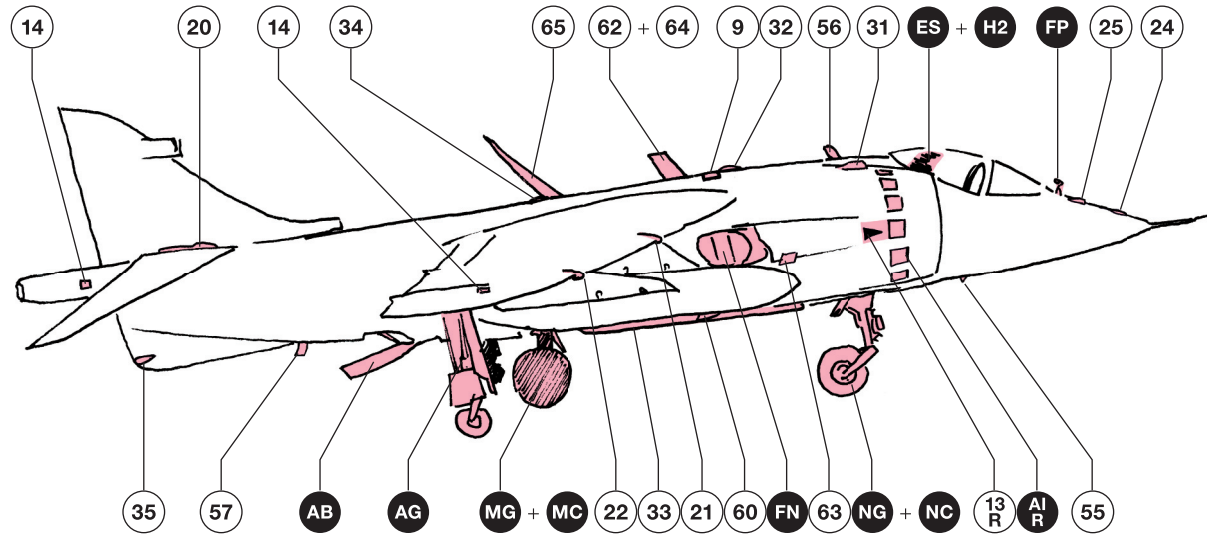
Please note that the rear scissors (**47**) were not always present – check your references.

The main gear leg was recreated using 0.25 mm stainless steel syringe needle and several pieces of 0.9 mm and 0.6 mm and 0.4 mm brass tubes.

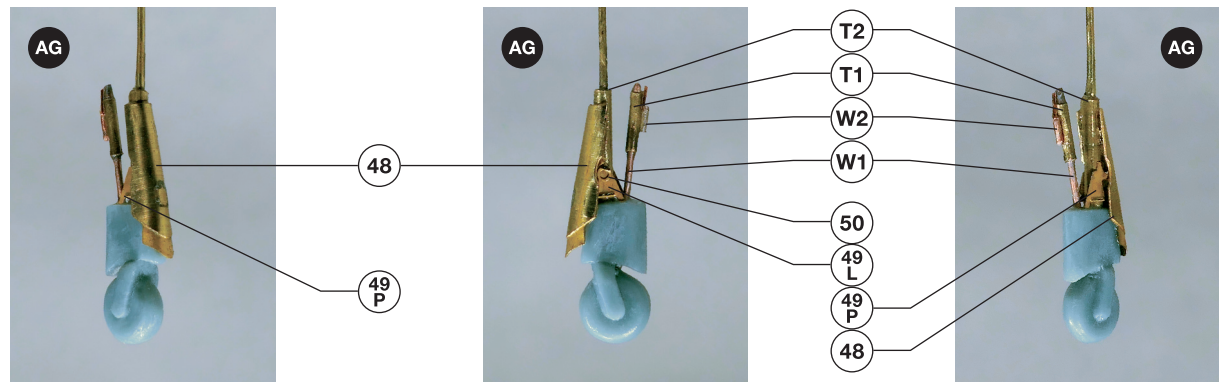


Beside the auxiliary gear legs close-ups this page features a diagram of antenna placement for AV-8A and AV-8S versions.

The prominent triangular mast (65) was present in both USMC and Spanish Navy machines. The other kind of fin antenna (62, 64) was visible on Spanish and Thai Harriers.



The auxiliary gear legs were partially recreated using 4.2 mm long piece of 0.1 mm silver wire (W1), 2.0 mm long piece of 0.3 mm brass tube (T1), 3.7 mm long piece of 0.6 mm brass tube (T2) and 0.9 mm long piece of 0.1 mm brass wire (W2).



! Starboard-front quarter view of auxiliary gear.
! Note: Both auxiliary gear legs are identical.

! Port side view of auxiliary gear.
! Note: The tie-down eyelets (50) are visible on planes based on ships only.

! Starboard-rear quarter view of auxiliary gear.

Early Harriers collection could not be complete without GR.3 version. It features a different nose as well as different antennas set.

The fin antenna (56) located just after cockpit was usually doubled. Some aircraft were fitted with tall fin antenna with extending dipoles (61) on the top of the fuselage.

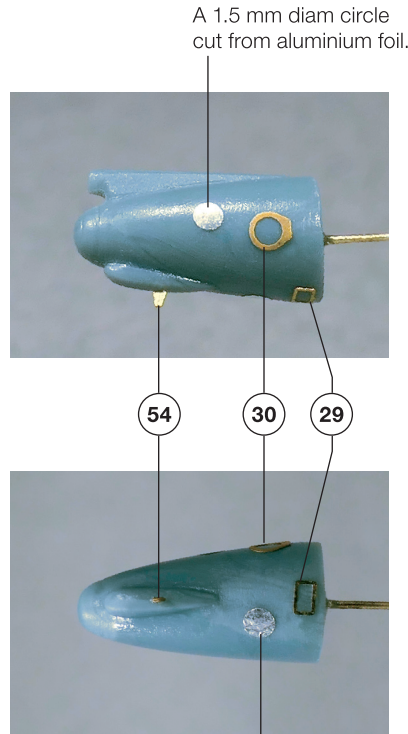
The use of the small chin antenna (54) was connected with the presence of the bulbous fairing under the nose.

The tail pitot probes (52) were mostly fitted symmetrically – both on port side as well as on starboard. Some AC however were fitted with the port side probe only.

To further refine your model we recommend the turned brass pitot tubes AM144-036 (GR.1/AV-8A/AV-8C) and AM144-037 (GR.3) being scheduled for October 2020 release by the renowned Master company.

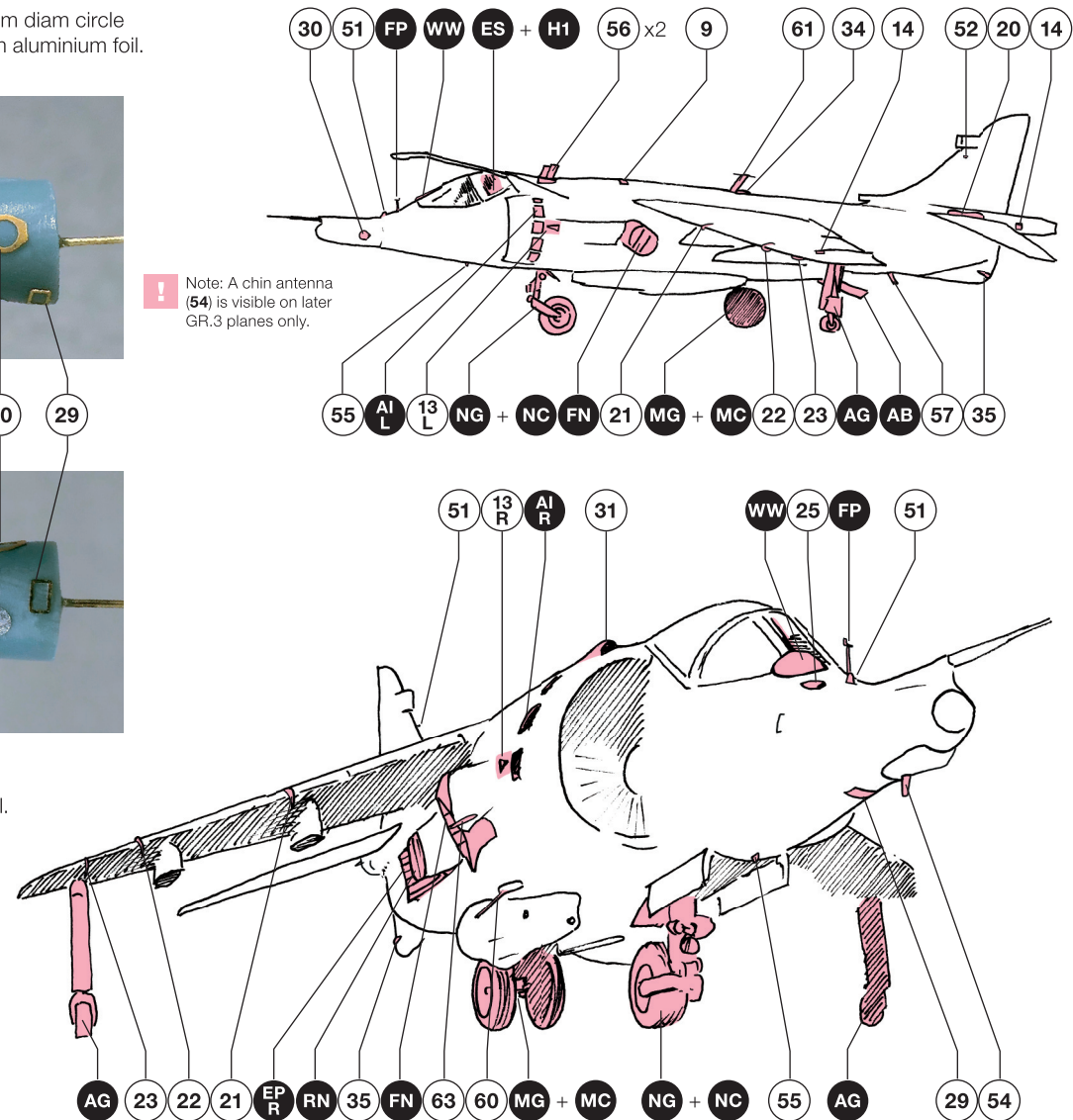
Sources:

- Harrier – Aero Technika Lotnicza 4/1991
- British Harriers Vol1 – AirDoc – Post WWII Combat Aircraft 14
- Hawker Harrier – Aeroplane Icons
- Harrier GR.1/3/AV-8A – Koku Fan Modelling Manual
- HS Harrier – Bunrin Do FAOW 047
- HS Harrier GR Mk.3/T Mk.4 – Linewrights Aeroguide 12



A 1.5 mm diam circle cut from aluminium foil.

A 1.5 mm diam circle cut from aluminium foil.



! Note: A chin antenna (54) is visible on later GR.3 planes only.