Messerschmitt Bf109G-14 TWEAKS LIST

TYPE: Messerschmitt Bf109-G14/R2/R6

SCALE: 1/32

COMPANY: Hasegawa

KIT NUMBER: ST18 (original release)

MOLD CREATION DATE:

2001 for G-6 sprues
2002 for specific G-14 sprues (D: tail parts & U: canopy parts)

TWEAKS LIST VERSION 1.0 (publication date: September 2005)

Compiled by Thierry Laurent (reviewed and updated by Mike Maben & Charles Metz)

The following list is intended to help modelers in improving scale accuracy of an airplane model replica. In no way is it intended to support or be offensive towards a scale model company. As such, it is only the result of a progressive process and is in no way intended to be absolute or even comprehensive. Hence, it is intended to focus on commonly admitted discrepancies and will probably not cover some errors. It is up to the modeler to decide whether correcting the listed issues is worth the time and money he will have to invest in the quest for accuracy process.

No aftermarket correction or detail set is mentioned in this document as the availability of such items may be very variable. Hence, refer to other LSP sections to find relevant information. Moreover, aftermarket sets do not necessarily correct all listed issues. Please refer accordingly to relevant documentation.

1. NOTICEABLE FUSELAGE ISSUES (from front to rear)

- Spinner is noticeably misshaped as Hasegawa probably copied a wrongly shaped new one on a restored airframe. The spinner base plate diameter should be 23mm long. Correct spinner tapered profile as well as the three propeller blade openings that should taper (cropped teardrop shape). Add a slight indentation where the front portion of the spinner is attached to the rear portion. Enlarge blast tube and drill a 1,5mm diameter hole. Add raised data plates on spinner and backing plates. A simpler option: replace the spinner with a correct aftermarket one.

- Profile of supplied A11 propeller blades supplied is acceptable but not totally correct for a VDM9-12087A propeller. There is no hub detail on the blade root. Modifying the blades is a pain. Replacing them with aftermarket is a solution as far as some are available. Fortunately, this is not as noticeable as the spinner shape discrepancy. VDM9-12159A propeller blades were a little bit more curved and wider and had no gap between them and the spinner where is located the blade shank. They were used on some G-14s.

- Above the exhaust stacks, Me 109G-14s have two small cowl scoops. Most airframes had them in line with one another but kit has these depicted as being offset, the rear being higher than the fore. Hollow them and according to the airframe you want to built, possibly move the front one (possibly using aftermarket parts).

- Thin or replace exhausts cover plates because they are way too thick (parts A14&15).

- Hollow-out engine exhausts or replace them with aftermarket ones.

- There is no panel line between the top cowl and the cowl sides (parts J1 or K1 and fuselage): fill and sand smooth the seam.

- Some details are missing on the supercharger intake: weld seams and eigth screw heads around the forward lip. Possibly grind a little bit inside of parts G6&7 to help in seeing detail of blades molded in the fuselage side. Note that parts should show no seam with the fuselage as part of the intake has been molded with the fuselage.

- Hollow-out MG 131 nose barrel parts (M36).

- Forward lower cowl is a little bit too angular near the first panel line behind the oil tank housing. Curve should be gentler than on the kit area. Sand it to smooth the angle.

- Underbelly oil cooler housing is misshaped (part G4). Correcting this asks for a time-consuming job but the discrepancy is quite noticeable. Part should have a deeper cross section, wider and tapered sides and sharper front edges. Its flap door linkage is missing. Note that FO 870 type had a rod in front of intake mesh whereas FO 827 that was externally identical had none as the kit part. Correct the part or replace it with aftermarket parts.

- Some thin filler is necessary to fill the seam between MG131 gun “beules” and fuselage. Do not forget to move them a little bit forward so that they do not foul the latch molded in front of the windscreen. Another vertical seam line is missing on the middle of each bulge (refer to pictures).

- Similarly, a second seam line for the cowling should be added to depict the missing rubber seal around the rear of the cowling.

- By default airframes had an air scoop under the windscreen on the port side. Check if the plane you want to depict had this scoop and if this was the case, open the aperture with the edge of a new scalpel blade. And on the other windscreen side (starboard side) deepen the flare pistol hole if it was present.

- Remove the two umbrella mounts on the port fuselage side cockpit area (only present on planes intended to be used in tropical environment).

- Replace DF FuG 16ZY loop antenna with the correct flat cross-section.

- Drill the MG131 cartridges ejection holes in the belly and possibly add plastic card-made boxes to add depth to the chutes.

- It seems that G-14/U4 had no more fume vents on the belly. Hence, if you use a Mk108 breech cover in the cockpit, possibly fill the vents.

- Add and drill the fuel fill ventilation outlet hole under the fuselage section 3. This should protrude from the belly.

- Add FuG25 IFF antenna under the same section 3.

- Correct trim tabs elevators as they were always offset on the ground.

- Add antenna between the point behind the rear portion of the canopy and the tail mast (do not forget to add insulators). Note that some G-14s had a short mast behind the canopy.

- Do not forget to leave a seam on the top and bottom and rear fuselage sections.

2. NOTICEABLE WING/WEAPONS ISSUES

- Lower wing parts have details for gun and rockets whereas they should only have either the former or the latter for an early airframe (on the outboard panel just after the edge of wheel bay). The elliptical hatch and four small holes (for rockets) only appear on fall 1944 whereas the rounded hatch was only present on Kanonenboot planes equipped with MG151/20 gun

gondolas. If you want to depict an early G-14, leave the correct details according to the airframe you choose.

- There is a panel line on the top of the wing (outboard of the wing root) that does not continue to the bottom half of the wing.

- There is a riveted strip at the wing root that runs along the underside of the aircraft but does not continue to the top side. It should continue back to the vertical line on the wing root fairing.

- Kit has steps in the leading edges of the wing into which the slats retract. On real airframe, these steps are no thicker than the wing's aluminum covering. There are two solutions to fix this. The most accurate but also most complicated option asks for carefully cutting a thin piece of sheet styrene to fit into the slat well, with the sheet stock's thickness chosen to leave a very small step; cementing the filling piece into the slat well, being careful to keep the new step heigh constant; and then filing down the leading edge of the filling piece where it disappears under the slat. Second option is simpler: since the real aircraft's step is so small, an adequate and much easier fix would be simply to fill the step with putty and then file it to shape. Add one big bolt head (e.g. Grandt line) under the end of each arm of the opened leading edge slat. Reduce the thickness of the upper and lower rear edges of the slats by scraping those edges with a No. 11 knife blade. True nitpickers may also want to accurize slat sides as they are no flat as the kit part edges.

- Thin, replace or rebuild radiator flaps and add the missing activating levers. If you want to use them as such, fill the ejector pin holes in them.

- The wing radiators are well done with inserts providing the radiator faces for both the front and rear. However, Front face part is not correctly located: they are ten or eleven millimeters far too backwards. Move accordingly the parts to the front. Add the flap actuating arm.

- If you drill holes in upper wing parts intended to locate the bean-shaped parts on the wings, do not forget filling them afterwards.

- Drill the four elliptical holes in the landing gear leg well. Add missing oleo actuator behind them.

- Drop tank has too many weld seams. Fill the forward segment line and add the tank hanging strap. Possibly replace with aftermarket parts.

- Thin ETC rack part and drill recessed holes as the actual part is made of an embossed iron sheet. Correct drop tank anti-sway brace legs and add fuel connectors. Possibly replace the rack with aftermarket parts.

3. NOTICEABLE COCKPIT ISSUES

- The kit instructions give two options regarding front instrument part: either paint engraved details or sand them off and then apply the decal on a flattened surface. However, another option will give better result if you use kit part. Cut the nice decal in parts before applying it on engraved instruments.

- Add cockpit UV lights on the windscreen frame.

- Add seat belts and their attachment points.

- Add oxygen hose, missing wires and details on the cockpit sides and on the right side of the floor (throttle, oxygen system, etc.).

- Remove section of tube on the upper edge of right cockpit side and replace it by clear tube to depict clear section intended to control fuel flow from external tank to internal ones.

- Kit pedals are correctly shaped but far too thick. Sand them and drill holes or replace them with photoetched ones and add their leather straps.

- Kit has a REVI C12/D gunsight whereas G-14s generally had the REVI 16B one. According to the specific plane you want to depict, possibly replace it with an aftermarket REVI 16B.

- Detail area behind the upper belts fixture points (e.g. tubes of the rear canopy structure). If you depict a later plane, modify door as the personal luggage compartment became the relocated battery compartment (its prior location was used by the MW50 power boost device). Accordingly, the door had a noticeable bump. Depending on the airframe you depict, add the bump or replace the door part with an aftermarket one.

- Note that many G-14s had a nose Mk108 30mm gun rather than the classical MG 151. This means that the breech cover in the cockpit has to be replaced by the more rounded one used for the Mk108.

4. NOTICEABLE CANOPY ISSUES

- Add the two missing handholds on the top of the internal side of the windscreen part.

- Add purple/red-brown paint on the small engraved disk in the front armored glass of windscreen. This was the silicate dehumidifier capsule.

- Add canopy release lever as well as retainer spring lock (with spring-shaped copper wire)

- Smooth a little bit the edges of Erla Haube canopy part

5. NOTICEABLE LANDING GEAR ISSUES

- Add flexible brake hose on each main landing gear leg (between the wheel and the leg) and possibly replace existing molded section.

- Main landing gear doors are too thick. Sand or rebuilt them. Moreover, kit part actually depicts two different parts on the actual airframe. Upper section needs adding the mounting and guide rod.

- Dress up the side of the main landing gear wells (holes, canvas dust cover, radiator hydraulic line, etc.).

- Tail wheel is a little bit undersized. Moreover, the tail wheel yoke vertical portion should be located under the fuselage bulkhead. Correct the position and at least separate the wheel from its yoke or engrave the seam to simulate different parts or replace it with aftermarket parts. Unfortunately, the kit does not give the long leg tail wheel option that appeared in the summer 1944.

6. OTHER NOTICEABLE ISSUES & MISCELLANEOUS REMARKS

- General kit dimensions are nearly perfect and overall fit is excellent.

- All panel lines and prominent rivets are recessed (more particularly on the belly). They are raised on specific locations such as wing roots. However, there are no rivets where they were flushed (on the upper wings and the rear fuselage). Engine area has very well done door fasteners. Fabric surfaces are smooth with tape strips topped with delicate stitching detail.

- Optional parts such as ones for G-5-based production are included. Kit has two different styles of upper cowl panel: one with pressed metal gun troughs: typical original G-6 one and another with insert gun troughs: typical G-5. Regarding the G-14, the type of used cowl seems to depend on the plane producer: Erla-produced G-14s had the G-5 type and WNF ones had the other one. Kit also has the starboard side gun bulge with compressor housing for the G-5 (also on Erla-built G-14s) and the windscreen with scoop. Note that the kit does not depict an Erla-built aircraft as they had the oil fill on the left side of the nose (behind the propeller) moved up as on the G-10 or K-4.

- G-14 form evolved noticeably during the production. Early ones were virtually identical to G6 marks. Many very late ones had no aerial mast, Erla-Haube canopy, various types of tall wooden rudder, wooden stabilizers, longer tail wheel leg, thicker 660x190 tires, large oblong bulges on wings, etc. Hence, as such, the kit may also be built as a late G-6.

- Kit has MG151/20 gun gondolas parts but they are only showed in the instructions as “not for use” ones. As explained in G-6 list, they are not too short and some details may be improved.

- A strong "H" shaped wing spar part ensures perfect dihedral and a good fit at the wing root.

- The flaps and the slats parts may be positioned (even if on the ground actual flaps were generally retracted).

- Erla Haube canopy part is not intended to be glued closed.

- Possibly separate underwing forward radiator flaps.

- Possibly separate oil cooler intake rear flap.

- To ease assembly of the separate tail parts with fuselage sides, do not comply with Hasegawa directions and glue each tail side with each fuselage side.

- Possibly remove and reposition control surfaces.

- From 1944, most Gustav used 660x160 smooth tires. Hence, possibly fill and sand tire grooves or replace them with aftermarket parts. Also note that even if this is far from being very noticeable, angle of main wheels is not totally correct. To possibly solve this, shorten a little bit the wheel axle and set the angle to a more correct position.

- Pilot figure is seated a little bit too low. If you use it, bring it up to a higher position (with a plasticard spacer)

- Up to now, kit has only been released as reference ST18 with JG 52/53 Erich Hartmann schemes. The accuracy of the decals will not be assessed here as many interpretations are possible and there are a lot of aftermarket options.

The list of references about the Messerschmitt 109 is an endless one. The list author focused on sources that are more oriented towards plane components rather than plane colors. Many excellent books have been printed about the later topic but this is out of the limited scope of such a list. As such, sources dedicated to Luftwaffe paints and camo, 109s colors or 109s used by Germany allies have not be used here.

Accordingly, the following sources were used to build this list:

Modelling essentials:

- Abe, Yokoyama & Kano, *Messerschmitt Bf 109 G-6*, Modeler's Eye series N° 3, Dai Nippon Kaiga, 2002.

- Hladik, Sumichrast & Andal, *Messerschmitt Bf-109G-6*, HT Model Special N°909, no publishing date.
- Nohara & Shiwaku, *Messerschmitt Bf 109 G*, Aero Detail series, N°5; Dai-Nippon Kaiga Co., Ltd., 1992.
- Peczkowski, M*esserschmitt Bf-109G,* Mushroom model magazine special Vol.1, N° 6011, 2000.
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- Plawka, M*esserschmitt Bf-109G,* Vol. 1, Kagero, 2005.
- Plawka & Zelechowski, *Bf 109 G-6*, N°11004, Kagero, 2005.
- Prien & Rodeike, *Messerschmitt Bf 109 F, G, & K Series*, Schiffer, 1993.
- ---, *Messerschmitt Bf 109 G/K Augsburg Eagle*, Model Art Special Issue series N°290, Model Art, 1987.
- ---, *Messerchmitt Bf-109G in Detail*, Militaria in Detail, Wydawnictwo Militaria, 2000.

Other used references:

- Beaman, *Messerschmitt Bf 109 in Action Part 2,* Aircraft in Action series, N° 57, Squadron Signal Publications, 1983.
- Donald, *Messerschmitt Bf 109 – Supermarine Spitfire – Supermarine Seafire*, Air Combat Legends Vol.1, Airtime Publishing, 2005.
- Green, *Augsburg's Last Eagles: Colors, Markings and Variants*, Eagle Files series N° 3; Eagle Editions, 2000.
- Hitchcock, *Messerschmitt 'O-Nine' Gallery,* Monogram Aviation Publications, 1973.
- Hitchcock, *Gustav: Messerschmitt 109G Part 2*, Monogram Close-Up series N°7, Monogram Aviation Publications, 1977.
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- Mermet, *Les Messerschmitt Bf 109 G-1 a K-4 - Moteurs et Aménagements* , Self-published, no date.
- Merrick, *German Aircraft Interiors 1935-1945: Vol. 1*, German Aircraft Interiors series, No. 1, Monogram Aviation Publications, 1996.
- Michulec, *Messerschmitt Me 109 pt. 2*, Aircraft Monograph series, N°17; AJ Press, 2002.
- Michulec, *Messerschmitt Me 109 pt. 3*, Aircraft Monograph series, N°18; AJ Press, 2002.
- Verlinden & Letterman, *Messerschmitt Bf 109 G-2*, Lock On Aircraft Photo File series N° 28; Verlinden Publications, 1997.
- ---, *Messerschmitt Bf 109 / Focke Wulf Fw 190*, Maru Mechanic series N° 50, Maru, 1985.
- ---, *Messerschmitt Bf109*, Military Aircraft Special issue, Delta Publishing, 2001.

- Buffie's Best Cd-ROM, Me-109 G-10, Restorations Illustrated Vol.1.

- some magazines articles (more particularly from Replic & Air Modeller)
- some web pages (more particularly LSP, Hyperscale & 109 Lair)