

# MISSING

# LINKS

## *tweaks list*



### VEHICLE

Sd.Kfz 142/1  
7,5cm StuG. 40 Ausf. G

### MANUFACTURERS

Revell kit number 03007 and  
Dragon kit number 9012

### SCALE

1/35

### AUTHOR

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### VERSION

1.0 September 9, 2002

Each MISSING LINKS Tweaks List is designed to assist the modeller enhance and refine the kit detail. We welcome comments that would help make each Tweaks List a more accurate reference tool.

Design and illustration by Dan Oldfield.

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This kit has also been available from Dragon, no 9012, itself a re-issue of a Gunze Sangyo Hi-Tech kit.

### Lower Hull

- The drive sprockets are usually seen without the kits moulded on hub caps. Replace with Modelkasten StuG/Pz III sprocket and differential set (set A-6) or with spare sprockets from Dragon's StuG IV Early kit or rebuild by removing the moulded on detail and replacing with a card ring and Grandt Line nuts and bolts. Sprocket casting numbers, if used, from Slaters 1.5mm numbers and/or P E or shaved off sprue numbers.
- If using the kits' differential housings add two p/d (punch & die) oil drain plugs per diff on the underside.
- The kits' tracks are more correct for an earlier G but if used fill in the ejector pin marks. Replacements are available from ModelKasten or Fruil.
- Three types of steel return rollers are seen on StuGs, the kit ones e.g. roller with six lightening holes, a roller with six stiffening ribs and lastly, one with ribs and lightening holes.
- On the hull front side extensions, some chassis had a small additional section of steel on the underside of the tow shackle cut outs, check refs. for placement.
- Add the interlocking weld seams on the lower hull rear. Add weld beads around the sides of parts B7 and B8.
- The cooling air exhaust deflector is the later of two types to match the centred tow pintle, both are supplied in the kit. As this was often bent or damaged, this can be replaced (and the sides around the exhausts) with pie dish or lead foil with the strengthening ribs scribed in from the rear with a fine pen or similar.
- Add light weld beads around the tow pintle structure and add p/d bolts 2 upper, 2 lower on each side where it attaches to the hull rear.
- Remake the tow pin from brass/plastic rod and add the retaining chain with fine etched or real chain.
- Make up the circular reflector using a suitably sized punch from the p/d set.

### Upper Hull

- Add p/e mesh to the cooling air exhaust grille.
- Add p/d bolts to the L- shaped strips that join upper and lower hull at rear alongside the engine deck. The bolts that join the two strips are represented but the ones that bolt each L angle to the hull sides are not. Add four bolts per L angle, these are slightly offset between upper and lower halves.

### selected detail sets

#### ABER

35023	Etched Detail set
35A27	Etched Mudguard set
35A23	Schurzen set

#### EDUARD

3532	Etched detail set
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#### TAMIYA

35199	Etched Grille Set
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#### THE SHOW MODELLING

086	Detail set
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#### GUNZE SANGYO

2011	Resin Interior Detail Set
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#### VERLINDEN

1215	Resin Engine Bay Set
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#### ELEFANT

EL35426G	Replacement barrel
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#### JORDI RUBIO

35005	Replacement barrel
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- The rear plate, part B8, had some variations in the number of the conical headed bolts. Per Achtung Panzer 5 the mid to late vehicles had the plate as supplied in the kit. Late Ausf G would have the two outer vertical rows of bolts deleted, Final Ausf G, with the centered tow pintle, had the middle bolt in the RH row deleted.
- On the crew compartment rear wall, add weld bead where it interlocks with the side walls.
- Mudguards - add the underside supports from thin card and p/d bolts.
- Mudguards - if not using the front sections (parts I13 & 14) which are often seen missing, drill five small holes on the front edge of the mudguard (where the treadplate stops) opposite the existing five bolts where these would normally locate. Again, check refs. for placement.
- Mudguards - if not fitting the schurzen mounts add two small p/d bolts to each of the two "plates" just in front of the triangular fillets (the ones roughly in the centre of the mudguards).
- Mudguards - the mudguard supports, parts E4 and E5 are too thick, carefully reduce the thickness by sanding from the bottom. Check refs if making a particular model, as there was also a more simplified type.

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- Mudguards - usually damaged, bent or distorted to some extent once in service. Remake the more easily damaged front sections from foil if required. Using very carefully applied heat and pliers, distort the rest to taste.
- Drill out the tow cable clamps (or replace with foil) and add a wing nut to each.
- Replace jack and mounts with better one from Tamiya Pz. IV OVE set or similar. Drill out the handle. Add lifting handles to the jack from thin wire.
- Replace jack block or very lightly scribe in missing grain on the sides. Detail with better strap and buckle.
- Replace or improve the existing OVE and add better holders/clasps from p/e parts or foil. The wire cutters (part F28) while not shown in the Revell instructions, and if used, should be fitted to the LHS rear engine deck opposite the sledgehammer on the RHS.
- Add p/e mesh to air intake grilles.
- Add weld bead down the sides of the cooling air intakes.
- Make up from brass strip, the three-sided stowage guard that goes around the rear of the engine deck. Note on the upright stays which attach the guard to mounts on the engine deck, the foot on the three rear stays faces outward, the rest face inward. Add a p/d bolt to each foot. This guard is probably best left off until last to avoid damage. NB Take the measurements from the kit not from plans.
- On all the lifting hooks drill a very small hole at the very bottom.
- Add the gun travel lock release spring. Make this up from thin wire wrapped around a pin, attach to a small length of fine etched chain and attach to the travel lock. The spring attaches to a hasp on the glacis. Check refs for placement. Add a p/d bolt to the front and rear of the travel lock where it pivots.
- Add two p/d bolts to the bottom and two at top of the Notek light mount where it attaches to the glacis.
- Add three small p/d bolts around the circular base of the Notek light.
- Add large slightly conical "bolt head" to the LHS drivers' compartment representing the pistol port, behind and down from the lifting hook.
- Add a wing nut to each end of the spare track holder. To the brackets that attach the track holder to the rear wall of the crew compartment, add a p/d bolt either side.
- From thin card (two strips approx. 8mm x 1.5mm joined at right angles) add bracket for the two engine hatch retaining rods (from fine wire with an eye at one end and a 90° bend at the other) to the rear of the superstructure just above the rear extractor fan outlet.

### further reading

- Achtung Panzer No.5*, Sturmgeschutz III, Stug IV & SIG. 33., Dainippon Kaiga Co.Ltd, Tokyo Japan, 1995.
- Anderson, Thomas, *Sturmartillerie in Combat (1)* Concord No. 7029 Armour at War Series.
- Anderson, Thomas, *Sturmartillerie in Combat (2)* Concord No. 7030 Armour at War Series.
- Cockle, Tom *Walk Around Sturmgeschutz III Ausf G. Armour No. 2* Carrollton, TX, U.S.A.: Squadron Signal Publications, 2001
- Culver, Bruce *Sturmgeschutz in Action* (Armor in Action Series, Vol. 14) Carrollton, TX, U.S.A.: Squadron Signal Publications, 1976
- Doyle, Hilary & Jentz, Tom & Fuller, Mike & Sarson, Peter *New Vanguard 37: Sturmgeschutz III & IV 1942 - 45* Oxford, England: Osprey Publishing, Limited, 2001
- Feist,Uwe & Fleischer, Wolfgang, *Sturmgeschutz*, Ryton Publications
- Fleischer Wolfgang & Eiermann, Richard, *The German Sturmgeschutz in World War II 1939 - 1945 A Photo Chronicle*, Schiffer Military Atgen, Pa , 1999.
- Gray, Fraser & Crosby, Bruce *Stug III - German Assault Gun* Great Britain: Fraser Gray, 1998
- Jentz, Tom and Doyle, Hilary Louis *Panzer Tracts No. 8, Sturmgeschuetz - s.Pak to Sturmmoerser*. Darlington Productions, Inc. Darlington, Maryland USA, 2000.
- Ledwoch, Janusz & Borawski, Zbigniew *No. 006 - Sturmgeschutz III* Warszawa Czech Republic: Wydawnictwo Militaria, 2001
- Parada, George & Jablonski, Stanislaw & Hryniewicki, Waldemar *Stug III Ausf. G Vol. 2* Photosniper Series, Kagero, Lublin Warszawa, 2000
- Scheibert, Horst, *Sturmgeschutz 40 (L/43 & L/48) #33: The Long Gun Versions*, Schiffer Military Atgen, Pa, USA 1991
- Spielberger, Walter J., and Feist, Uwe *Sturmartillerie: From Assault Guns to Hunting Panther, Part 1* (Armor Series, Vol. 4) Fallbrook, CA: Aero Publishers, Inc., 1967
- Spielberger, Walter J., *Reihe Militarfahrzeuge: Sturmgeschutz*, Motobuch Verlag 1991
- Spielberger,Walter J., *Sturmgeschutz & Its Variants*. Schiffer Military Atgen, Pa, USA 1993
- Svirin, M, *Sturmgeschutz III* (Armada) Russia

### web page references

Andreas Lärkas' site at

<http://www.geocities.com/~fi1877/>

Lots of close up photo references, with modellers in mind, of museum StuGs in Finland.

This bracket should have a small hole at either end and the eyes of the rods fit into these holes. The rods retain the engine inspection hatches when open. The corresponding bracket on the inspection hatches is

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- situated in the middle of the two of the rearmost engine cover supports that run along each side. From thin card make up a very small squareish piece with a hole in the middle.
- Add a wing nut to the barrel cleaning rod clamp.
  - Directly behind this clamp is the solidly moulded support for the spare aerals that could lay transversely across the vehicle and retained at each end by kit parts E15. Replace this projection with a flattened U shape piece from strip.
  - Add the retaining bracket and bolt (1 front and 1 rear) and improve the lockwork on the toolbox parts I15 & I16. The toolbox may have a guard for the hasp.
  - To match the originals, which were stamped from sheet steel, the five engine deck covers, parts H3 and I31 & I32 should have a slight curve (achieved by lightly scraping with a scalpel) around their underside edges with the highest point in the middle of each side. The upper profiles could also do with being slightly more rounded.
  - In front of both the two rearmost hatches on the engine deck, covering the cooling fans, add a small rectangular block which acted as a support when the hatch was open.
  - Either replace or improve the solidly moulded spare wheel mounts, parts I32 & 33 (improve by seperating from the engine covers, the mounts are hollow in the horizontal plane from the underneath to the level of the triangular attachment points). Check refs for clarification.
  - On the flat portion of the glacis add an L angle strip, from 5 thou card approx. 1mm wide each angle, a small strip each side running from the welded join between the flat and sloping sections of the glacis back to where the mudguards angle back. This should butt up against the mudguards. Add six dome headed rivets equidistantly along the upper or vertical length. On the sloping section of the glacis add a small tab with a p/d bolt at an angle just behind the vertical section of trackguard. On top of the mud guards there are several small rivets that attach the upper treadplate sections parts to the sides.
  - The sliding cover for the gun sight may have some sink marks in it, fill and/or carefully file down.
  - To the armour in front of the commanders' cupola, add a weld bead.
  - On the cupola, in the four corners of each of the sections seperating the periscopes add a tiny p/d bolt or dot of superglue. The periscopes were protected by a sheet of Perspex retained by these screws.
  - If opening the cupola hatch make up the locking mechanism for the scissors scope hatch and the protective cushion.
  - Later production vehicles may not have had the rubber hatch stop, part A5, fitted to the (solidly moulded) inverted U shape bracket per the kit. Shave off the bracket and make a new hatch stop from rod. The hatch itself should lay flat when opened.
  - The scissors scope hatch, per Achtung Panzer 5, had three variations on the handle. Replace the solidly moulded handle with either a) a fine wire handle with a 'stud' from square plastic section either side b) a length of wire welded across the two studs to form a handle c) no handle but the two 'studs'. The studs had notches on the outside that the levers on the hatch proper engaged thus locking the scope hatch.
  - The scissors scope needs a small p/d bolt on the inside of each tube where they join the lens heads at the top. The lens heads sometimes also had sun visors fitted; make up from plastic tubing.
  - If opening the loaders hatch, make up the locking lever on the LH door and on the RH door add a retainer along the inside edge, to stop the LHS hatch falling through, from strip. Add the bolts that go through from the outside hinges.
  - The roof bolts are slightly too small. Replace with p/d bolts.
  - Add weld marks around pilze.

### Upper Hull Roof

- Rundumfeuer (Remote MG). Add two small p/d bolts over the holes in the kits shield parts. Add periscopic sighting lens. Make up cradle. Add fine wire for the trigger mechanism on the RHS. Replace or rework the MG34 by drilling out barrel, adding serrated collar. Butt sometimes removed. NB This is a complicated structure to describe adequately and I recommend the drawings in Achtung Panzer 5 page 84 for clarification.
- Viewed from above the brackets attaching the topfblende to the main gun trunnions are visible on the vehicle. Make these up from card and add three p/d bolts per attachment point.
- Add three L shaped clips for attaching the canvas rain cover to the back of the topfblende, two clips on the bar at the front of the main superstructure.
- Add four rectangular slots around the muzzle brake locking ring.

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- Add strip and p/d bolt for the muzzle brake locking nut.
- Add notched baffle ring from p/d card to inside of muzzle brake.

### Schurzen

- For mass produced items, StuGs, like many other vehicles, can seem to be very individual machines at times. A look through period photos will provide many examples of the crew adding extra protection to the vehicle, the addition of spare track lengths to the front of the crew compartment stations is a good example.

There are several variations of schurzen, if fitted at all and I direct you to one of the books listed below for ideas.

- If using the kit items and not rebuilding or using p/e parts; each of the triangular mounts need two p/d bolts where they sit on top of the side rail. Where the 'A' Frames join the side rail there should be two p/d bolts on the inside of the apex of the 'A'. There is a pad welded on to the roof at each corner (the rearmost sitting just in front of the crew compartment rear wall) where the 'A' frames are bolted onto. The 'L' brackets will need the moulded bolts replacing with p/d ones.