

LW050 1.35 scale
Leopard 1 Driver Training Cab
Conversion (Fahrschulpanzer)



Workshop
Leopard 1

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*A conversion set designed for use
with any Leopard 1 (with provisos)*

This conversion has been primarily designed to be used with the *Italeri* Leopard 1 (below) or the older *Revell* Leopard 1 kits. They are the only kits to accurately depict the actual turret ring diameter. However, *Takom* and *HobbyBoss* kits can be used if their 'inner' ring is cut away. The 'outer' rings in their hull tops are correct. The other more recent kits from *Meng*, *Revell* or *HobbyBoss* will need to have their rings enlarged. Remember that the Trainer Cab DOES NOT rotate like a conventional turret.

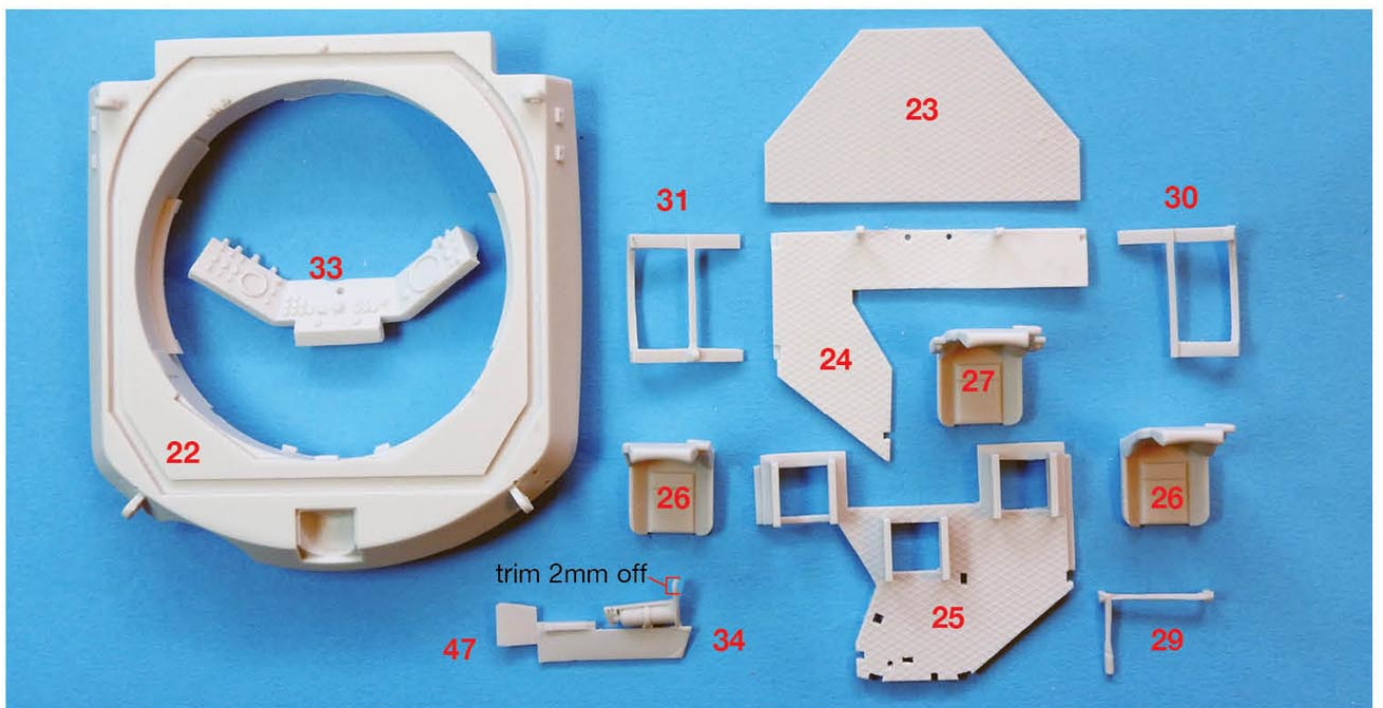
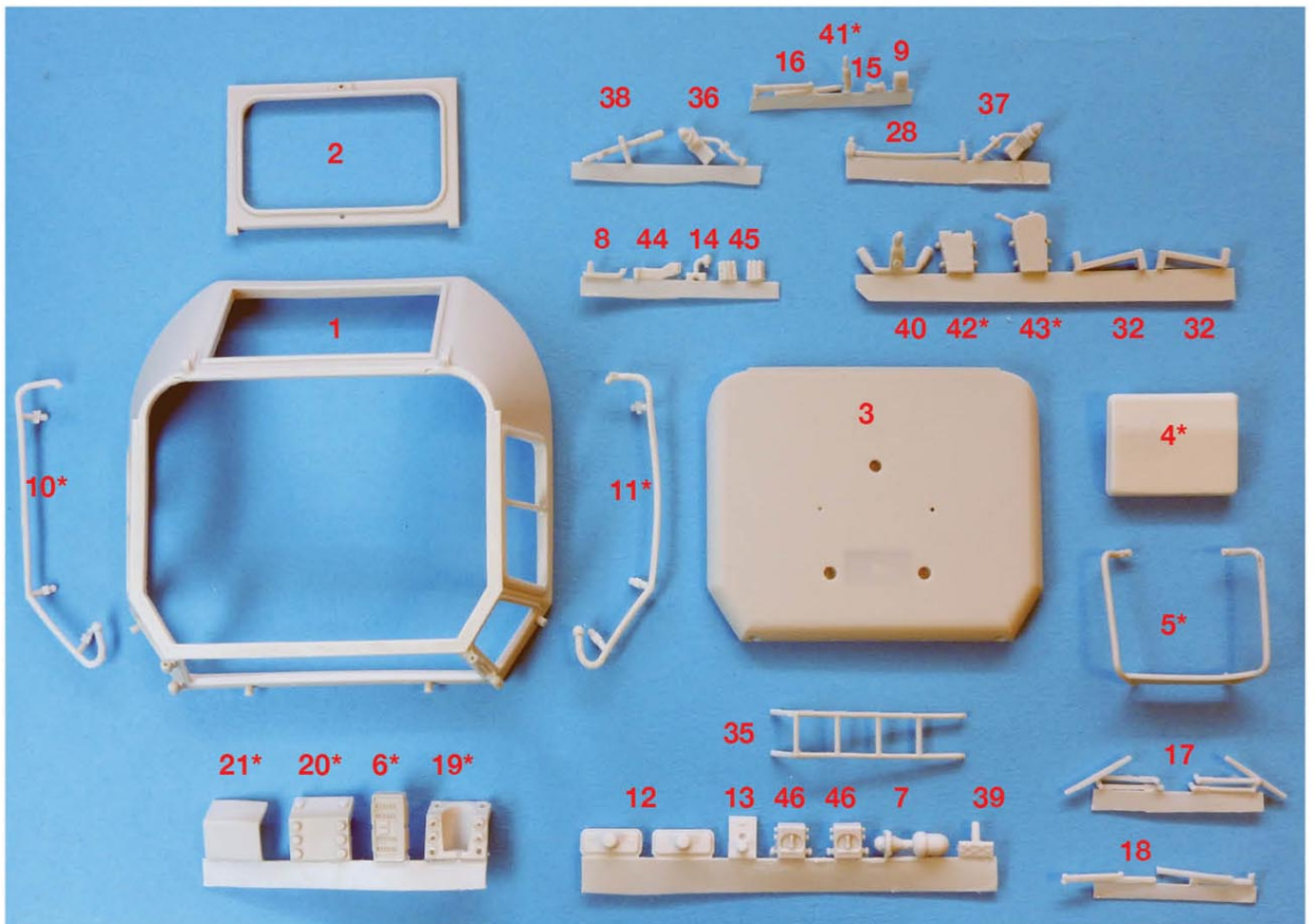
The training of drivers for a modern main battle tank requires a large amount of resources. Most driver training is done in the classroom and on simulators. However, there is no substitute for the real thing. Lack of space in the driving compartment of an actual tank led to the development of a driver training tank. In place of the turret, these vehicles were equipped with an instruction cab with space for two observing trainees seated either side of the instructor. To maintain the characteristics of the original vehicle, the turret weight was compensated for by an 8.5 ton ballast weight. A dummy gun was attached to the front of the cabin to increase realism for the driver (though these were not fitted initially). The original *Bundeswehr* trainers also did not have air-conditioning. The instructor has a system which makes it possible to override the driver under instruction (seated in his normal hull position) when necessary. Most *Bundeswehr Fahrschulpanzer* hulls had their external boxes and their tools and fittings removed.

Similar Cabs have been used in other armies: Australia, Belgium, Brazil, Canada, Chile, Denmark, Greece, Italy, Netherlands and Norway. All are slightly different in their equipment levels. For example, some have dummy guns, some don't. Likewise with air-conditioning units, which can also vary from country to country. The 'foreign' tank hulls used with the cabs sometimes retain all of the tool clips on the hull sides (though the tools are normally removed), or hull boxes if the MBT was equipped with them. Different versions are illustrated on pages 8 and 9.

This conversion represents a *Bundeswehr* Driver Training Cab with some options for other countries. Reference photographs have been added to the **Leopard Workshop Spotlight** page to help you out.



Parts list – options marked with *



Warped resin

It is inevitable that resin kits, due to their nature, will have some warped parts. This is true in this kit with several thin cast handrails, a thin ladder and floor plates that may not be as flat as they should be. Use hot tap water – not boiling water – to immerse the parts for 20-30 seconds. Use a flat surface (like a tile or the top of a wash basin sink) to flatten the parts out, or bend them back into shape carefully by hand. Sometimes the heat alone will get parts back to their natural shape.

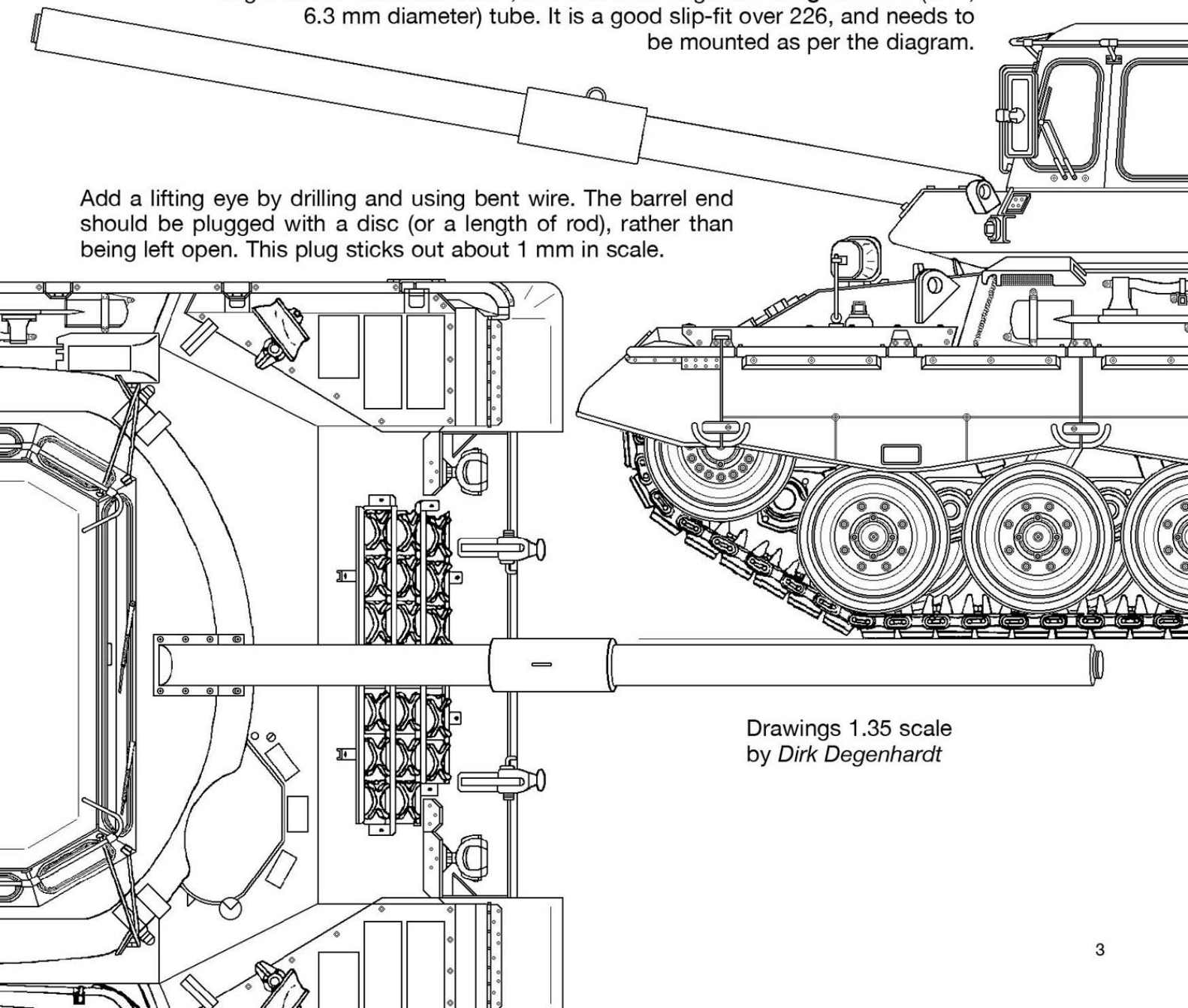
Parts list – options marked with *

- | | | |
|----------------------------------|-------------------------------------|------------------------------------|
| 1 Main cab | 18 Side window wiper single arm (2) | 34 Extinguisher |
| 2 Cab rear door | 19* Dummy gun mount | 35 Ladder |
| 3 Cab roof | 20* Gun mount cover | 36 Right-side warning light |
| 4* Air-con unit | 21* Gun mount blanking plate | 37 Left-side warning light |
| 5* Air-con brush guard | 22 Cab base (ballast collar) | 38 Hand brake |
| 6* Air-con interior control unit | 23 Hull floor | 39 Foot brake |
| 7 Flashing beacon | 24 Crew floor lower | 40 Steering yoke |
| 8 Rear door handle | 25 Crew floor upper | 41* Gear lever |
| 9 Rear door wiper motor | 26 Pupil seats (2) | 42* Gear-shifter (old) |
| 10* Right handrail | 27 Instructor's seat | 43* Gear-shifter (new) |
| 11* Left handrail | 28 Floor brace strut | 44 Accelerator pedal |
| 12 Rear view mirrors (2) | 29 Parking brake lever | 45 Instrument panel connectors (2) |
| 13 Large mirror | 30 Right-side floor support | 46 Intercom boxes (2) |
| 14 Large mirror bracket 1 | 31 Left-side floor support | 47 Gearbox support plate |
| 15 Large mirror bracket 2 | 32 Front floor supports (2) | |
| 16 Rear door wiper | 33 Instrument panel | |
| 17 Front wiper twin arms (2) | | |

Building the dummy gun

For the gun tube – if fitted – use **Evergreen 226** (3/16", 4.8 mm diameter) tube, 117 mm long. For the 'fume extractor', use a 15 mm length of **Evergreen 228** (1/4", 6.3 mm diameter) tube. It is a good slip-fit over 226, and needs to be mounted as per the diagram.

Add a lifting eye by drilling and using bent wire. The barrel end should be plugged with a disc (or a length of rod), rather than being left open. This plug sticks out about 1 mm in scale.

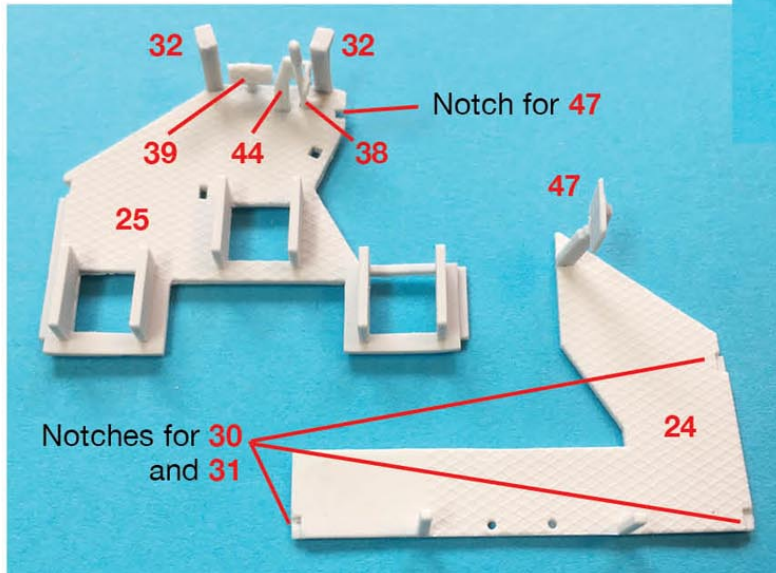
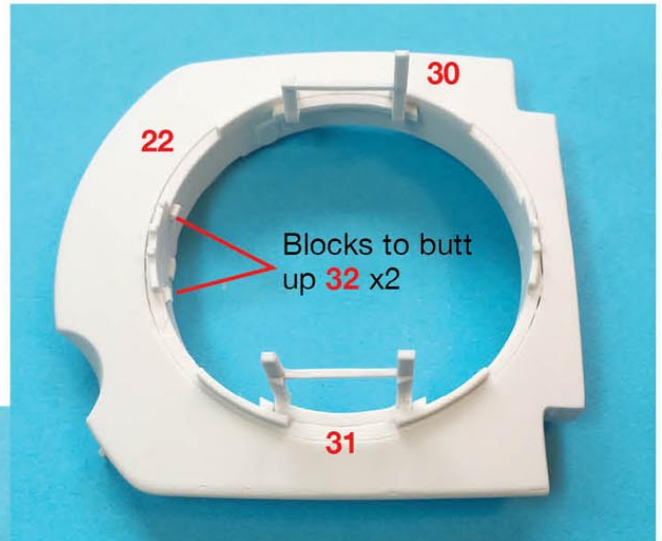


Drawings 1.35 scale
by Dirk Degenhardt

Instructions

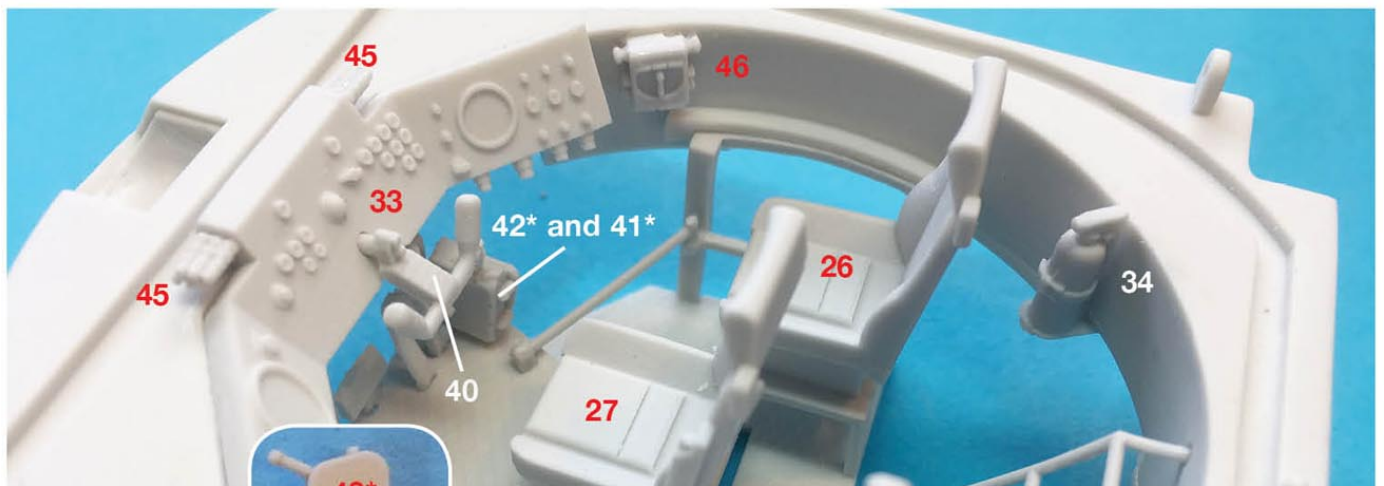
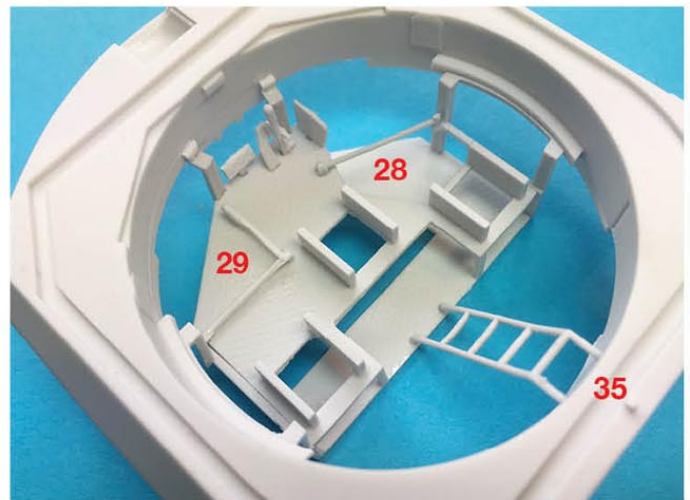
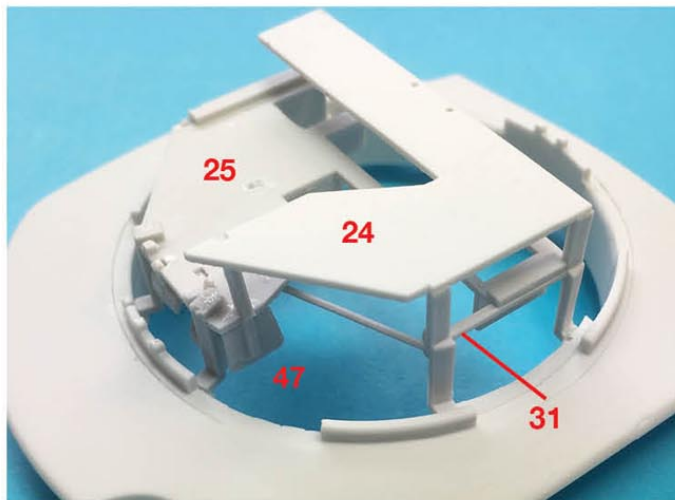
Take your time to check and double-check the fit of all parts before committing to glue.

- 1 Start with the ballast collar (22) and glue the two main floor supports (30 and 31). Make sure they are vertical.
- 2 Add the foot pedals and hand brake (39, 44, 38) to the main floor (25). Add the two short floor supports (32) into the slots in the floor. Make sure they are vertical.

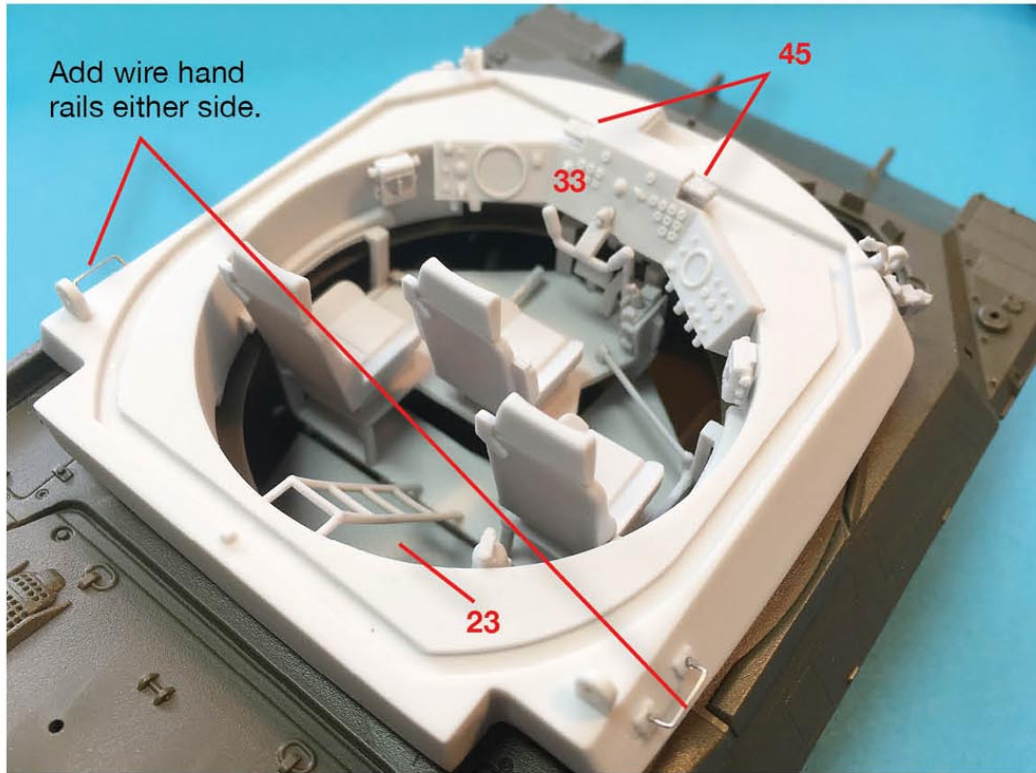


- 3 Glue 47 into the slot in the lower floor (24). The plate at the top is vertical.
- 4 The main floor rests on the horizontal bars of 30 and 31. The short supports butt up to the blocks at the front of the collar. Part 47 slots into the upper floor alongside the foot pedals.
- 5 Add the brace (28), parking brake (29) and the ladder (35).

Paint the interior as you go along.
See the web link on page 12.

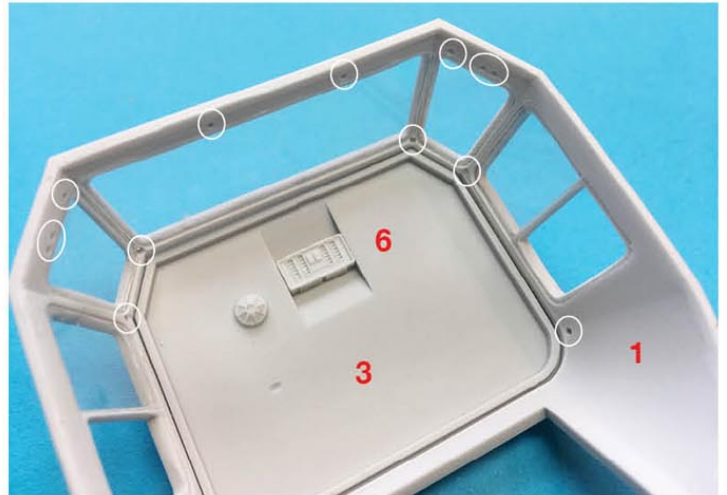


*optional later gear-shifter

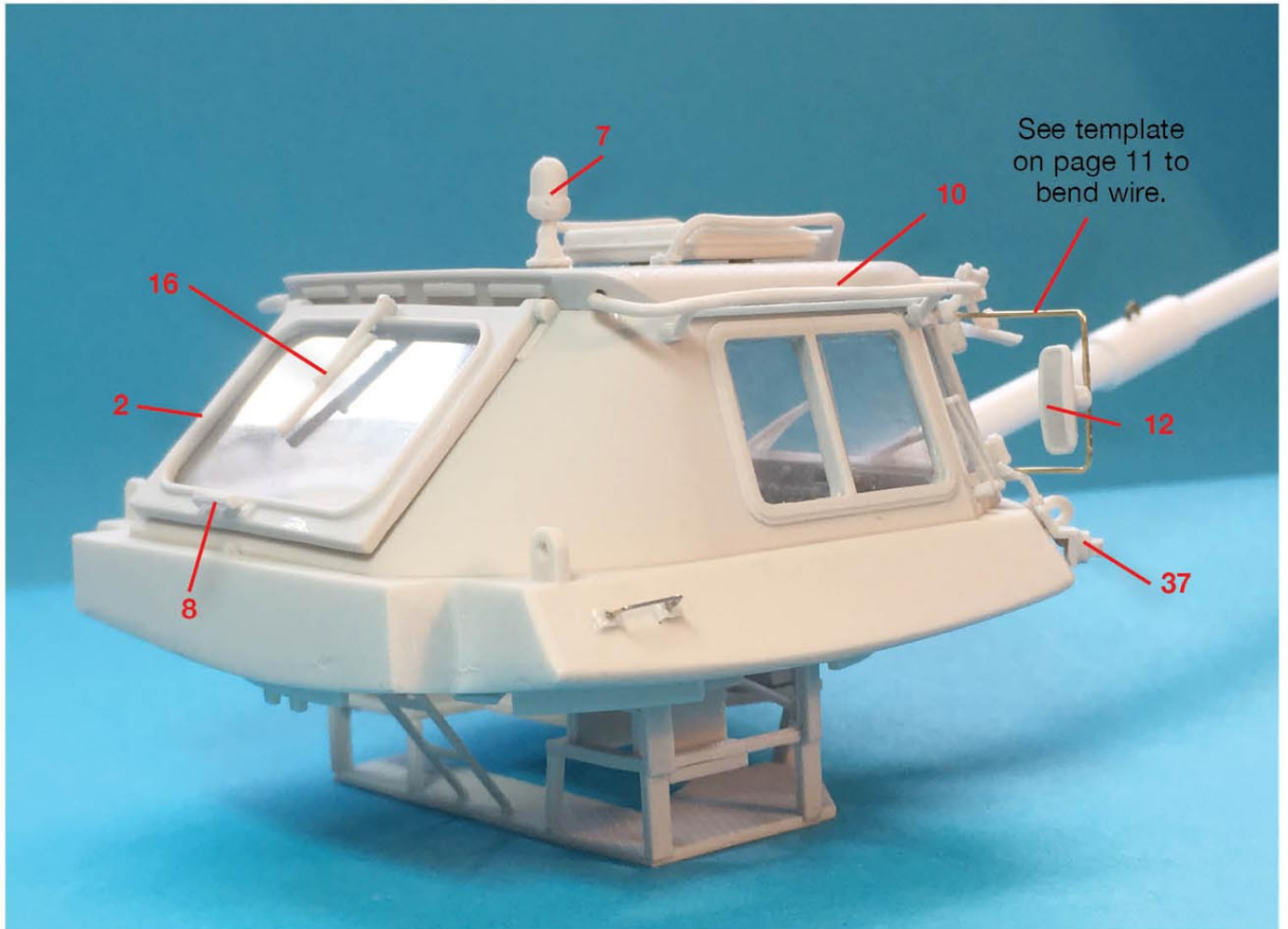


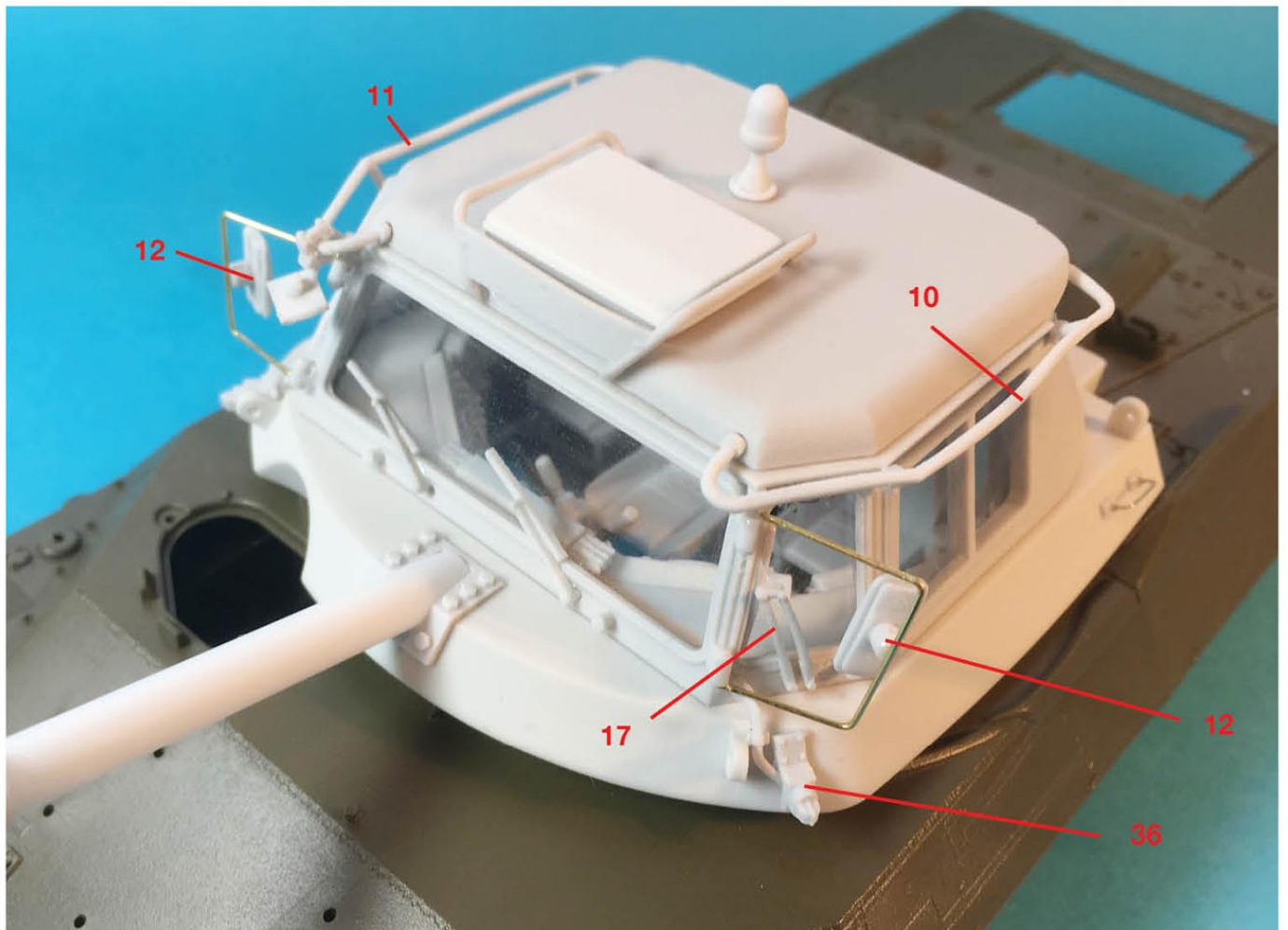
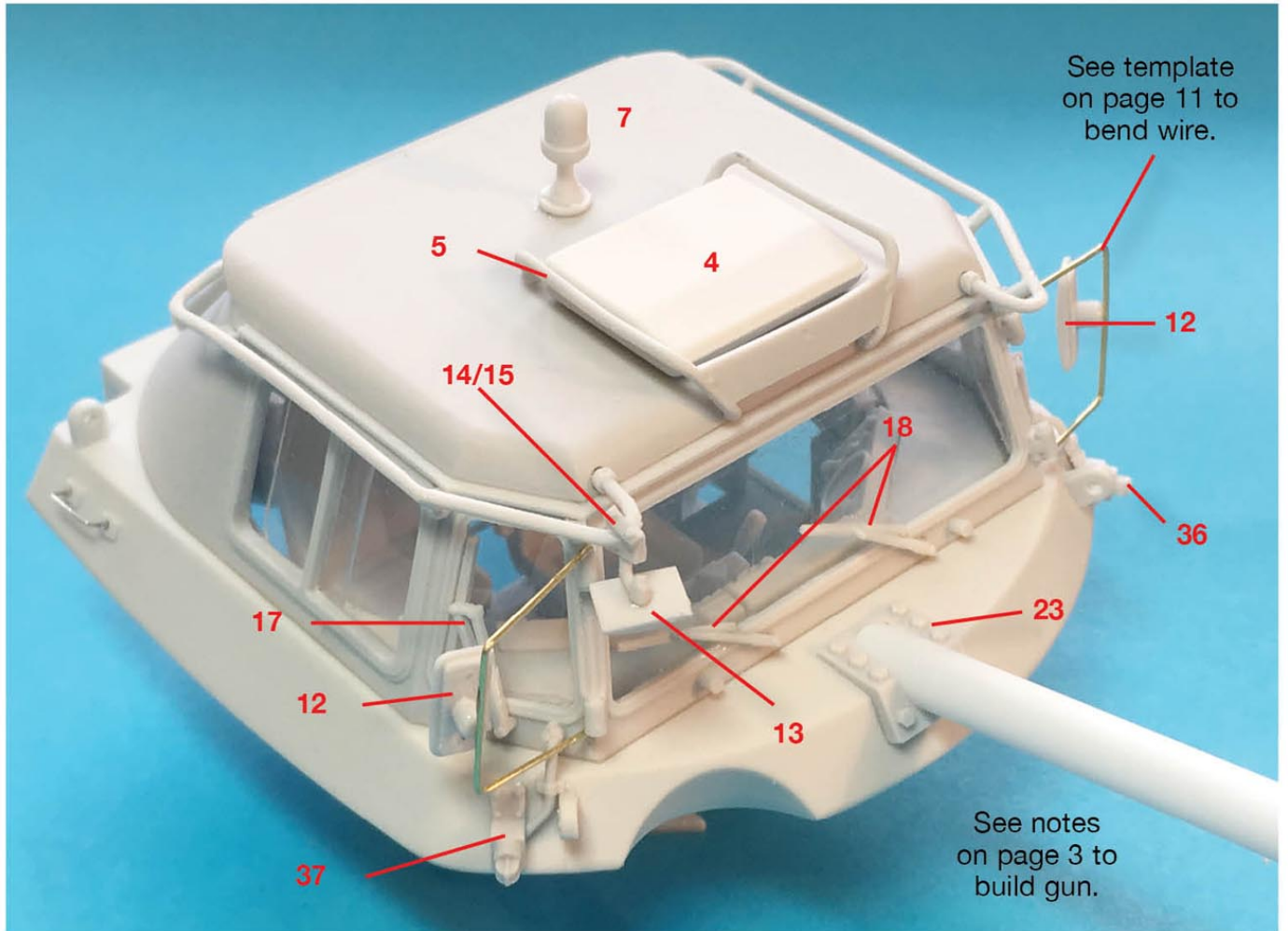
- 6 Fit out the cabin interior with the remaining parts. Floor piece **23** can be fixed to the rear of **24** to hide the kit hull floor. No hull interior is supplied as none will be visible with the cab in place.
- 7 If fitting the exterior handrails **10** and **11** – some versions do not have them – warning lights and wipers, drill out the blind holes from the interior as circled.

- 8 The bottom of the instrument panel **33** has 'sockets' with holes in them if you would like to detail with your own wiring. See the **Spotlight** on the **Leopard Workshop** website. Similarly, cable bundles run along the top of the panel to parts **45**.
- 9 Clean away the lip from the inner edge of the cabin walls. It is a very tight fit in the groove in the ballast collar, so make sure you do it before detailing the cab top.
- 10 Templates are provided on pages 10 and 11 to cut the window panels which fit in the recesses. Use White Glue/PVA to fix.



- 11 Decide which collar fitting you need, depending on your version.
 - 21** is a simple blanking plate which should be glued and filled to create a smooth collar.
 - 22** is a bolted blanking plate to cover the dummy gun hole.
 - 23** is the fitting for the dummy gun. Build your 'gun' as per the instructions on page 3.
- 12 Build up the rest of the model as per your selected version. If not fitting the air-conditioning unit on the roof, fill in the holes and smooth off. Omit pieces **4**, **5** and **6**.





Australia



Belgium



Brazil (ex-Belgian)



Brazil (ex-German)



Canada



Chile (ex-Dutch)



Denmark



Greece



Germany



Italy



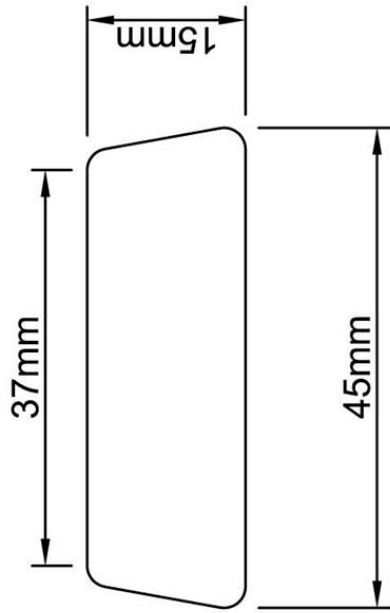
Norway



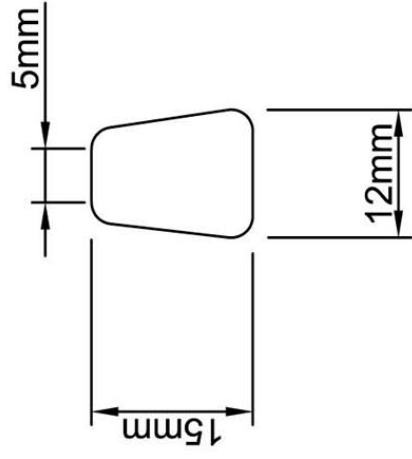
Netherlands



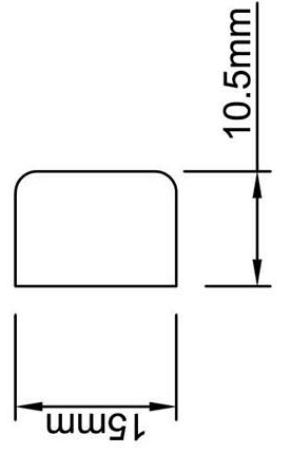
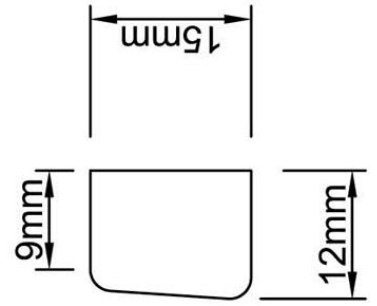
Thanks to Mike Cecil, Thomas Hartwig, Sotiris Kon, NIMH, Gerd Schwiens and Michael Shackleton for the photographs, plus others from unknown internet sources.



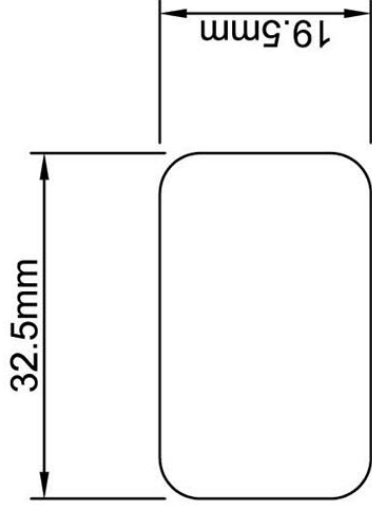
FRONT WINDOW



QUARTER-LIGHT (x2)



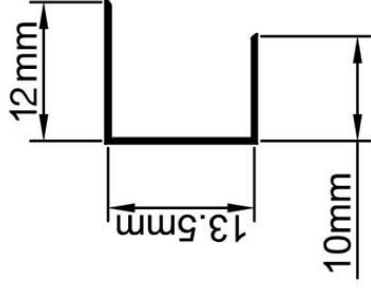
SIDE WINDOW FRONT (x2)



REAR WINDOW

SIDE WINDOW REAR (x2)

MIRROR BRACKET



(R) (L)
V V

(TOP VIEW)

Window cutting templates are actual size. Side windows are made of two parts each.

Mirror bracket is bent from 39.5 mm length of 0.5 mm diameter wire.

(Top view shows how to bend top bar relative to bottom bar due to slope of the window pillar.)



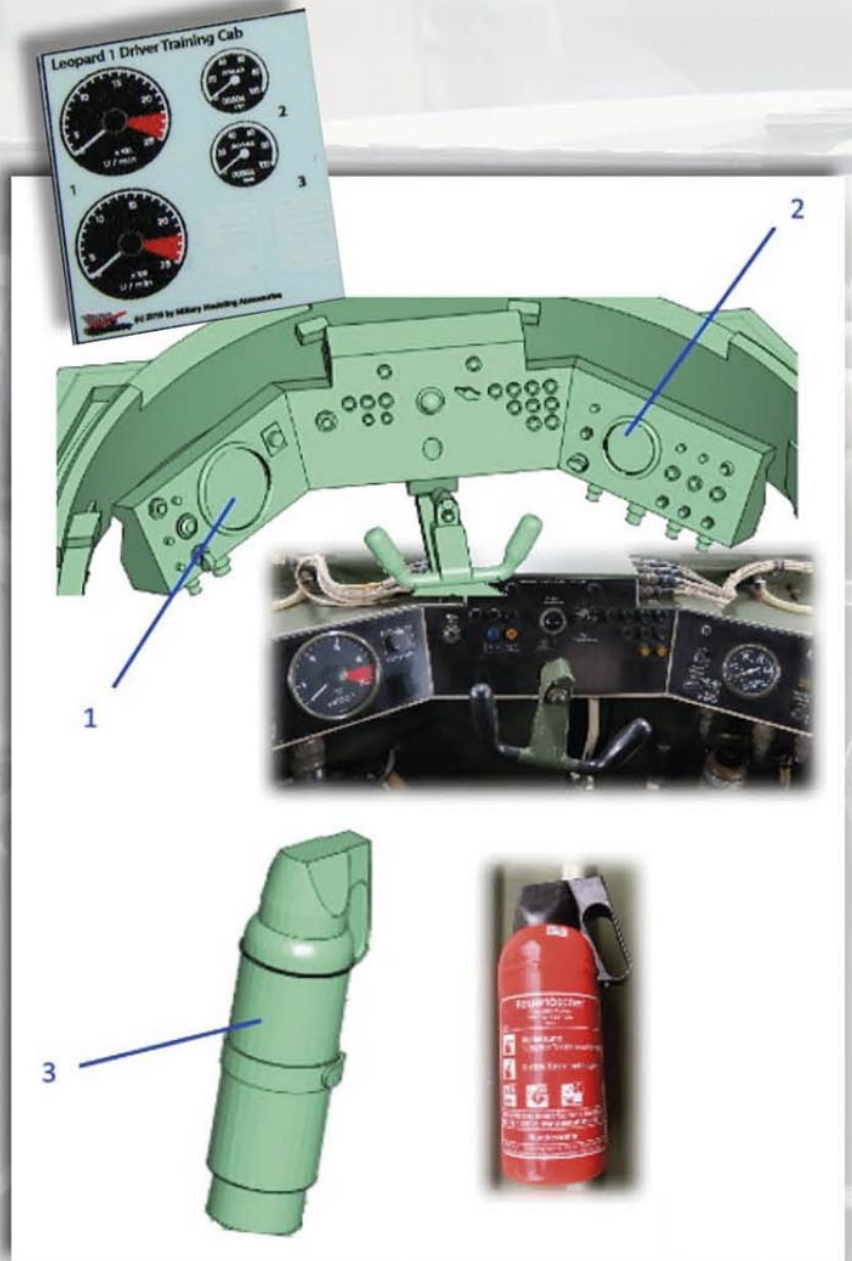
Reference photos: <http://leopardclub.ca/Spotlight/Germany/Fahrschulpanzer/>
Many thanks to Tom Cromwell (TGC) for the CAD design work and the original inspiration.

Leopard Workshop

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Customers have suggested that instrument panel decals should have been included with the LW050 Leopard Driver Training Cab. Here they are.

Parts list
Instrument
and fire
extinguisher
decal pack

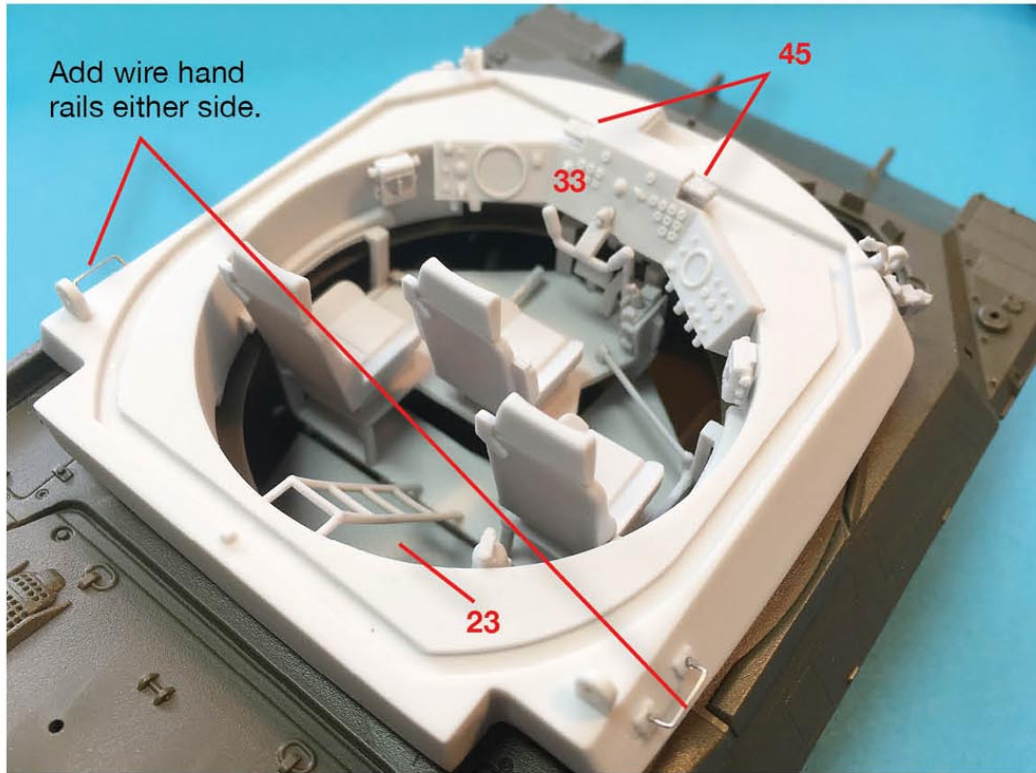


Thanks to Alan Ng for the photos.



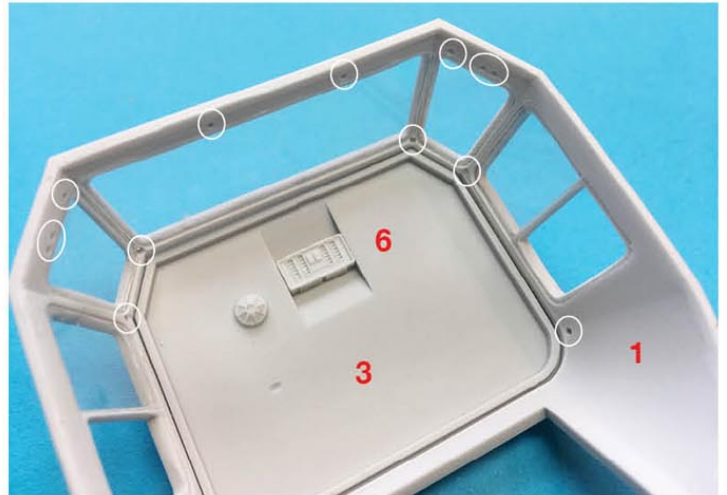
Many thanks to Military Modelling Accessories
for the decal design (and the photos).





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