SMM3546E Challenger 1 Detail Set Small

Intended for use with the Tamiya Challenger 1 Mk.3 (35154).

This set should be used in conjunction with the earlier SMM3546D Large Set.

The first *Tamiya* Challenger 1 kit (35134) is difficult to find, even though most parts also appear in the more recent Challenger 1 Mk.3 (35154) kit – depicting Gulf War 1.

The parts in this set allows you to:

- a) add further detail to the SMM3546D Challenger 1 Detail Large Set.
- b) build an earlier Challenger 1 before Gulf War 1.
- c) build a more updated Challenger 1 to the end of service, including in IFOR, SFOR and KFOR service.

Unmarked resin parts in these instructions are from the *SMM3546D* Detail Set Large set. *Tamiya parts are marked in italics.*

EARLY SERVICE

TURRETS These largely remained clear of clutter and only had stowage baskets left rear and right rear, the front left basket, and the rear bin.

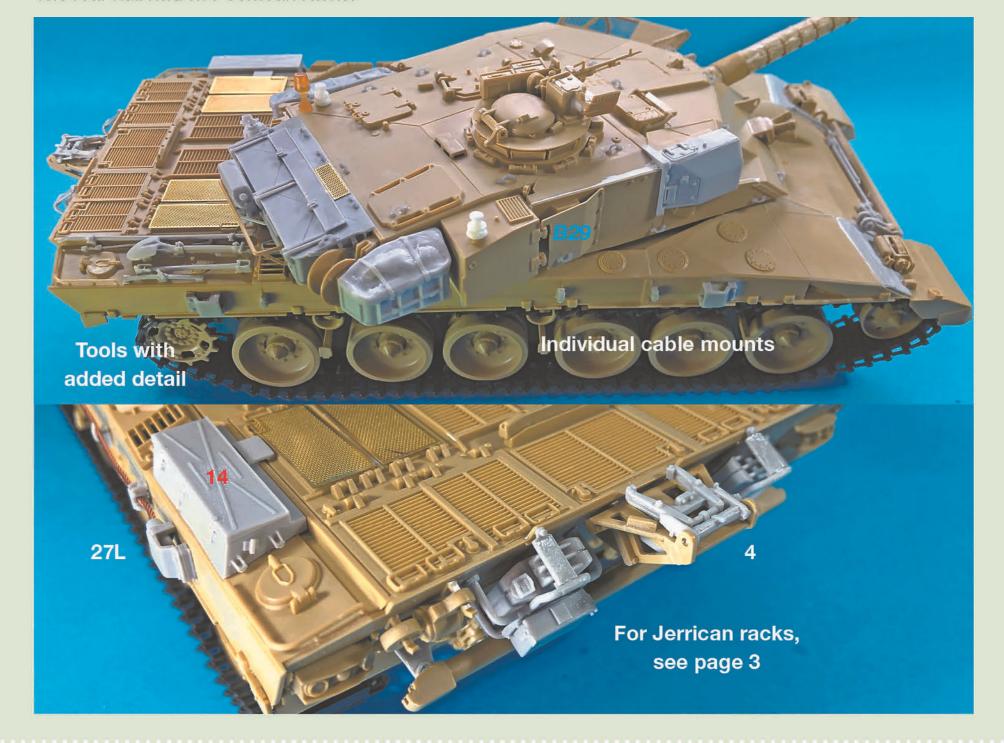
There were no reinforcements around the turret well in front of the gunner's sight or in front of TOGS.

A Ferret box (SMM3546D) started to appear behind the TOGs which means part B29 (see below) should be left off – and the rectangular box underneath should also be cut off the turret side.

HULLS The original exhausts were as supplied by *Tamiya* (A29 – in both kits) and BCF extinguishers (A16) were fitted behind the headlights (as per *Tamiya*).

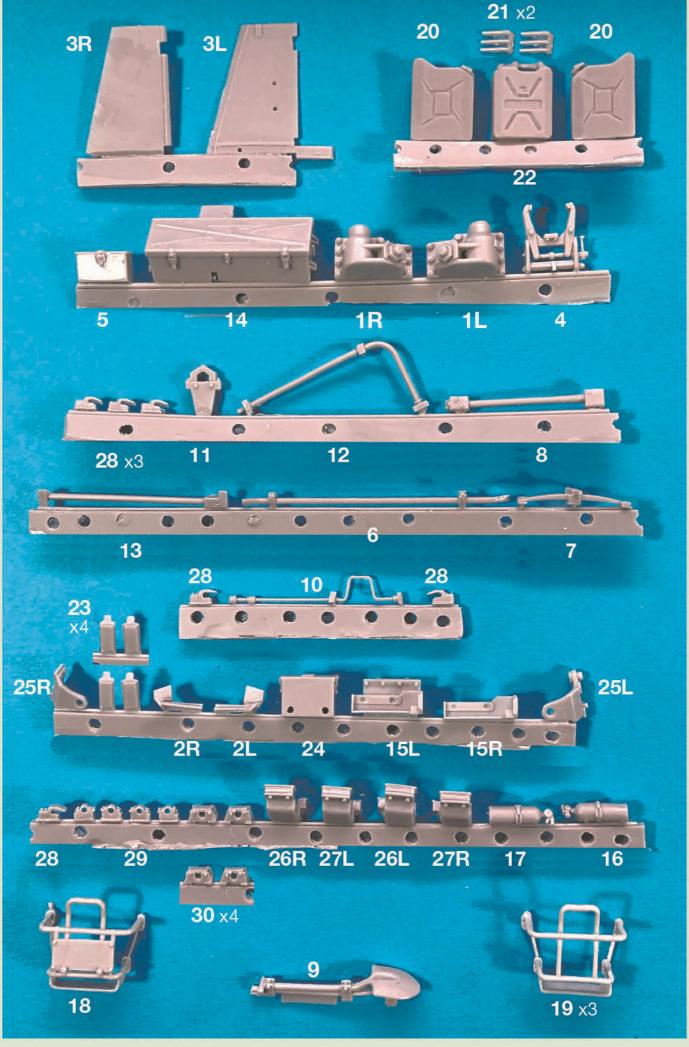
Mesh only covered the outer pairs of engine grilles.

The rear hull had two Jerrican racks.





Parts List





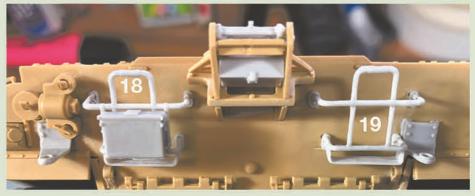
- **1L/R** Idler mounts, left/right (2)
- 2L/R Front mudguard support brackets, left/ right (2)
- **3L/R** Glacis extension plates, left/right
- 4 Gun crutch
- 5 Infantry phone box
- 6 Crowbar
- 7 Pick head
- 8 Pick handle
- 9 Shovel/sledgehammer
- 10 Muff coupler tool
- 11 Track adjust ratchet spanner
- 12 Track adjust handle
- 13 Track adjust handle extension
- 14 Driver's toolbox
- 15L/R New pattern fire extinguisher mounts, left/ right (2)
- 16 Later fire extinguisher, left
- 17 Later fire extinguisher, right
- 18 Rear Jerrican rack, left
- 19 Rear Jerrican rack, right and turret (3)
- 20 POL Jerrican (2)
- 21 3-grip Jerrican handles (2)
- 22 Water Jerrican
- 23 Jerrican retaining straps (4)
- 24 First-aid box
- 25L/R Tow bar mount brackets, left/right (2)
- 26L/R Tow cable head covers, front (2)
- 27L/R Tow cable head covers, rear (2)
- 28 Cable hooks (6)
- 29 Old pattern cable clips (4)
- 30 New pattern cable clips (4)
- 31 Warning beacon (3D-printed)



Some warping may be evident, so use hot water or a hair drier to straighten parts as necessary.

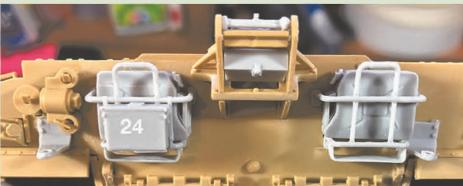
Do not bend without heating.

Damage may occur on parts with thicker casting tabs. When removing the casting tabs, cut them off instead of snapping them off.

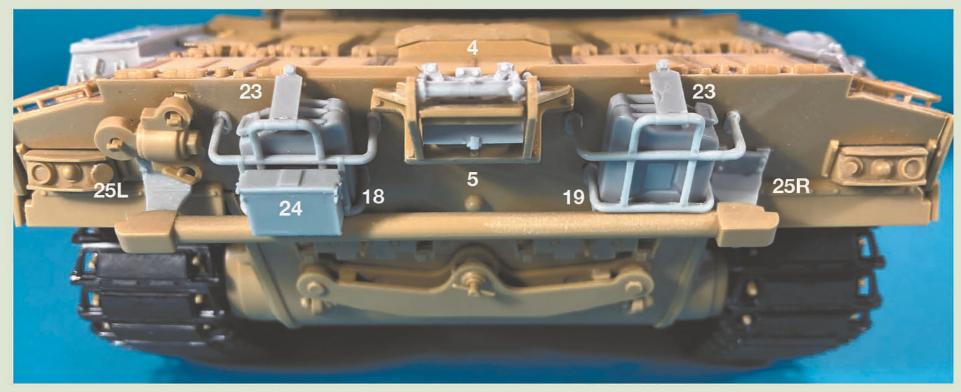




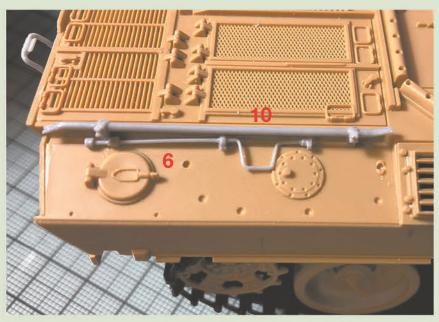
Jerricans could be stowed either standing up or ...



... laying down.



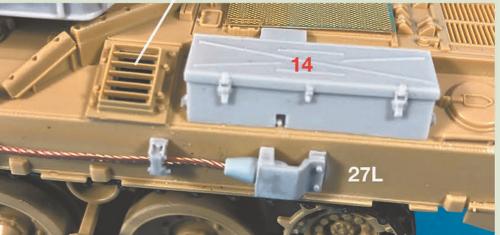
Build the gun cradle as per the Tamiya instructions for the NATO version (Stage 5), replacing B97 with part 5 and B89 with part 4. Early exhausts are as supplied by Tamiya (A29) in both kits.

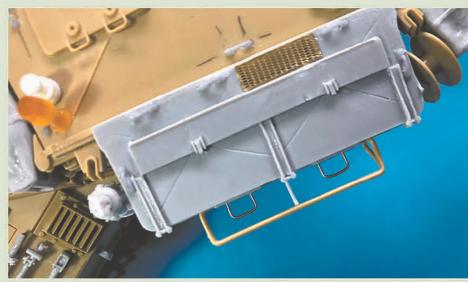


When adding the tools, start with the crowbar (part 6) and then add the muff coupler (part 10). The mount under the shovel (part 9) goes inside the crank of Part 6.

The driver's toolbox (14) has mounting points either end, unlike the kit part.









One cheat here is to level up the front armour which *Tamiya* did incorrectly with steps either side. Strictly speaking, the centre front plate should be made level (where *Tamiya* have moulded lines across the front). For appearance sake/ease of building, two plates have been supplied to add to either side. Also, the holes further back should be filled and shaped with putty. These remain largely hidden under the turret.



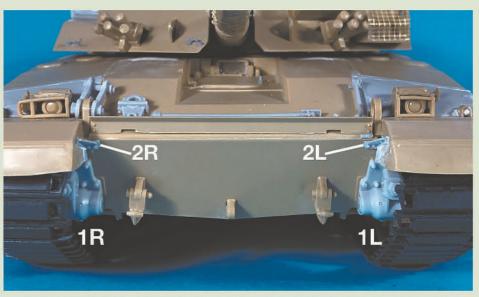
Add two U-shaped supports 4 mm wide x 3 mm deep at the bottom of the rear turret bin.

Drill holes centrally under the small boxes.

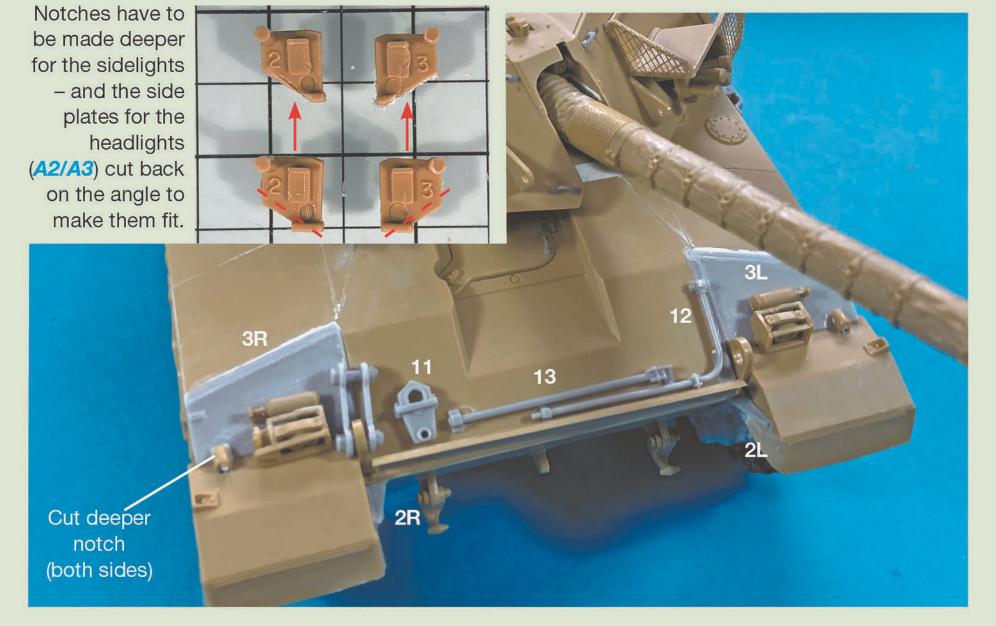
15-amp fuse wire was used here.

Also – add a third central support to the top rail.

Jerricans (water) can then be stored here.



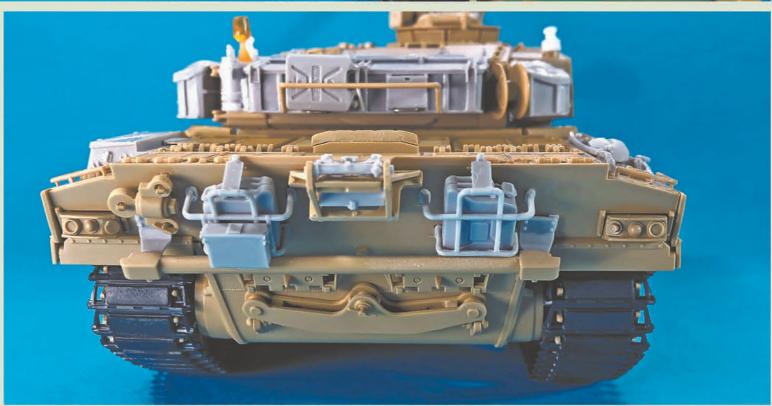
Also missing from the *Tamiya* kit were supports for the front mudguards. These need to be blended in with putty as well. The idler mounts have more detail.

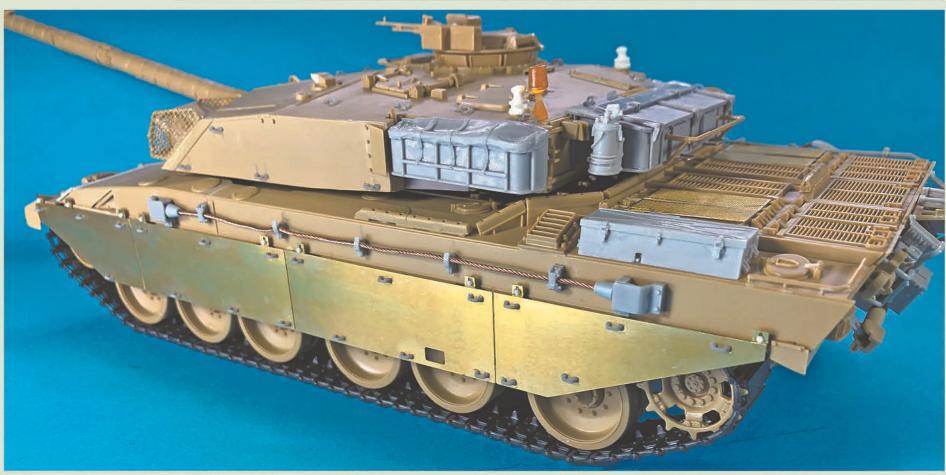


Early Service



The photoetch sideskirts shown here are from the SMM3546F set which includes 3D-printed handles for both the skirts and also the turret.

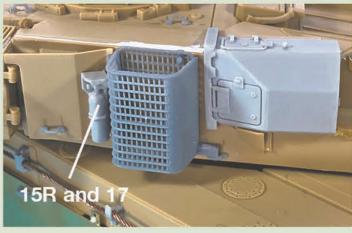




LATER SERVICE - AFTER GULF WAR 1

TURRETS Because of GW1, extra crew stowage became a problem and several makeshift solutions were built devised for the campaign. Standardised baskets became available soon after (SMM3546G).





Reinforcement strips around the well in front of the gunner's sight and in front of TOGS had already appeared for GW1. These are in SMM3546D.



At some point, the BCF extinguishers were replaced by much larger powder/foam extinguishers (parts 15–17) which were mounted on the turret sides. See above.

HULLS The GW1 fuel drum set-up reverted to the double Jerrican racks at the rear.

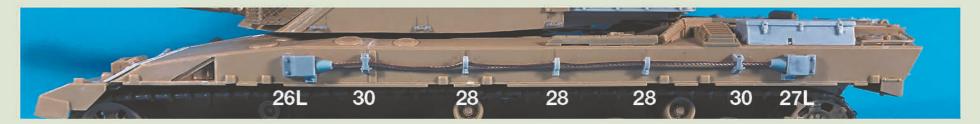
The exhaust had already been changed before GW1 to the sideways style in SMM3546D.

As mentioned above, BCF extinguishers were replaced, so nothing was fitted behind the headlights. Also, at some point, the tow cable locks (29) were made stronger/bigger (30) (see below).



Tow cable mount points are supplied separately if you want to display them empty – or if aftermarket cables are preferred (such as *Eureka ER3513* from the *SMM* website shop). Use the kit's one-piece tow cables to mark where the mounts should be positioned, and attach the replacement mounts. The *Eureka* cables slide through the holes provided in the locking clips at either end. They only have to be trimmed to length. Easy!

There are two kinds of locking clip – early (29) and later (30). Some tanks had a mixture of both, so check references.



IFOR and SFOR



For the **IFOR** mission to Bosnia (1995), after intial experience without them, front hulls were fitted with addon glacis armour plates previously used in Gulf War 1 (part **2** from **SMM3546C** and also individually in **SMM3546H**). **SFOR** (1996) followed with the same equipment.

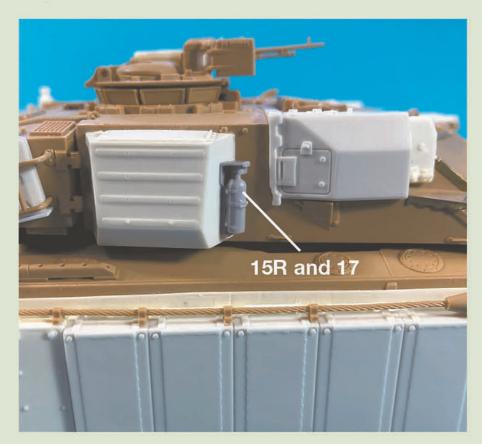
The fuel drums also reappeared for IFOR on a small number of tanks. However, these were used as additional stow boxes by cutting open the outer end and covered/protected either with strapped on wooden circular blanking plates, or canvas covers.

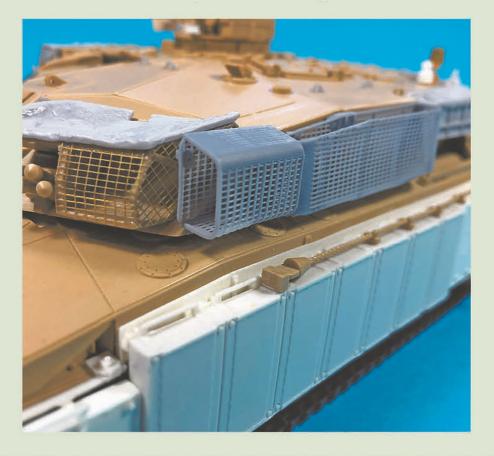




KFOR

For **KFOR** (1999), the full armour suite from Gulf War 1 (*SMM3546C*) was fitted. Once again, Ferret boxes (*SMM3546D*) largely replaced the small net basket on the right turret side as per GW1. The right side extinguisher (parts **15R/17**) was fitted on the front face of the Ferret box. Some photos show the displaced small wire basket fitted in front of the left side basket, with its open end facing forwards.



















A gallery of reference photographs can be found on the SMM website: https://www.scorpion-miniature-models.co.uk/challenger-1

Happy modelling and keep on building!

Master parts built by Andrew Crutchley

© SMM 2022 http://www.scorpion-miniature-models.co.uk Cast by LZ Models Photo-etch by PPD Ltd



Photos from various unattributed internet sources, Michael Shackleton and Richard Stickland