

# CVR(T) Jaguar J60 Engine Compartment

## SMM3551



This powerpack set has been primarily designed for use with the Jaguar-powered AFV Club Scorpion and Scimitar kits – the only ones available in plastic, at the moment.

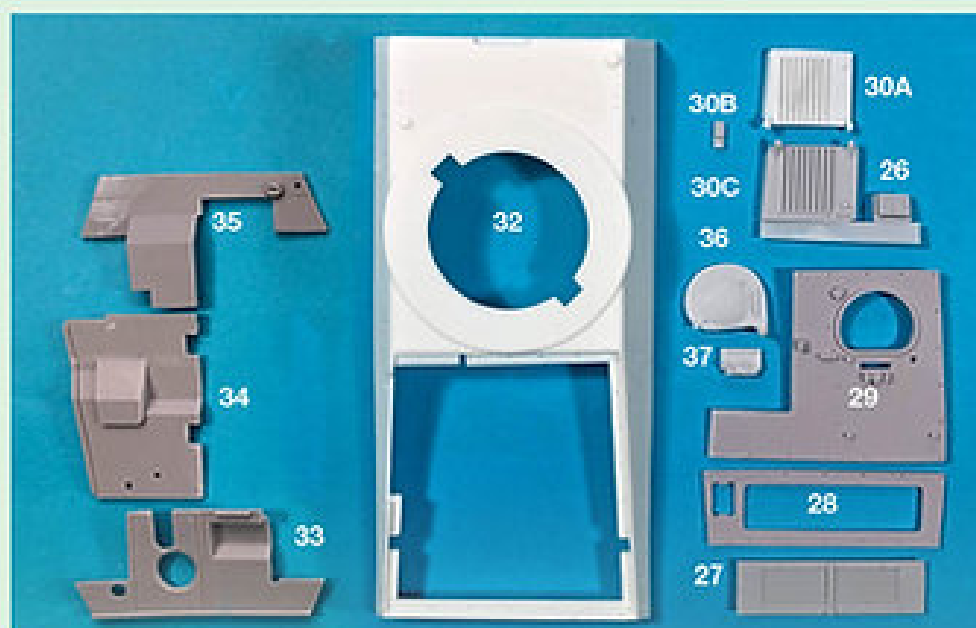
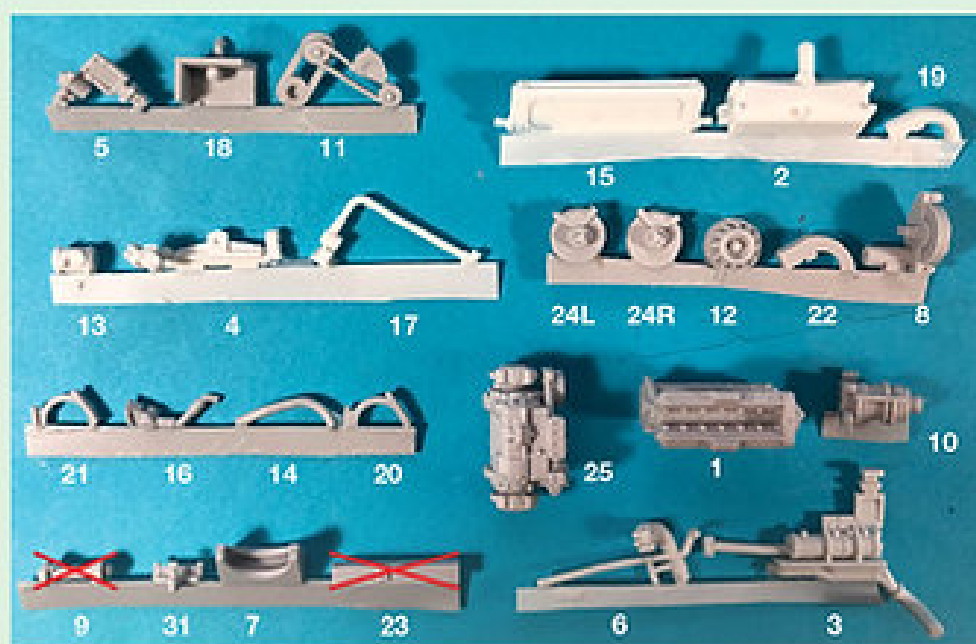
The set provides the engine, gearbox, cooling system, ancillaries and new bulkheads, as well as an open hull top with separate deck panels, detailed on both side, so the engine can be fully displayed.

### IMPORTANT

If using the **SMM3540 Driver Interior Set** companion set, **DO NOT USE** the bulkheads (parts 1/2/3) from that set. The bulkheads in this set are taller as they do not have to fit under the AFV Club hull.

The intention of this set is to have all the elements in place with the decks removed to display the engine compartment. With some work, the transmission and engine CAN be displayed separately.

The transmission has separate floor mounts which would stay in the hull. The outer discs are also separate and stay fitted to the hull sides.



### Parts List

- 1 Engine block
- 2 Air filter
- 3 Exhaust
- 4 Inlet manifold
- 5 Oil filter/engine mount
- 6 Carb and hoses
- 7 Engine mount
- 8 Flywheel
- 9 Driveshaft
- 10 Alternator
- 11 Fan belts
- 12 Fan
- 13 Header tank
- 14 Cable
- 15 Radiator
- 16 Radiator hose 1 lower
- 17 Radiator hose 2 top
- 18 Breather box
- 19 Gearbox floor mount 1
- 20 Gearbox top clamp 1
- 21 Gearbox top clamp 2
- 22 Gearbox floor mount 2
- 23 Tension bar cover
- 24R Brake right
- 24L Brake left
- 25 Transmission
- 26 Breather grille
- 27 Transmission grille
- 28 Transmission cover
- 29 Driver's plate
- 30A Engine grille rear
- 30B Engine grille hinge plate
- 30C Engine grille front
- 31 Periscope and hatch handle
- 32 Hull top
- 33 Front bulkhead
- 34 Engine partition
- 35 Rear bulkhead
- 36 Driver's hatch
- 37 Periscope

Parts 9 and 23 were not used here as they are invisible when completed, but necessary if the compartments are empty.

*Some warping may be evident, so use hot water to straighten parts as necessary.  
Do not bend without heating.*

*Damage may occur on parts with thicker casting tabs.*

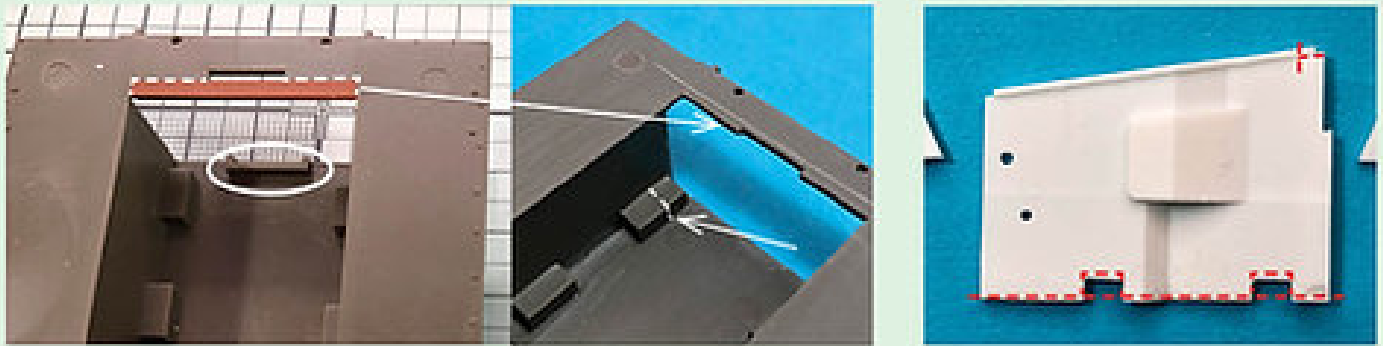
When removing the casting tabs, cut them off instead of snapping them off.

### PLEASE NOTE

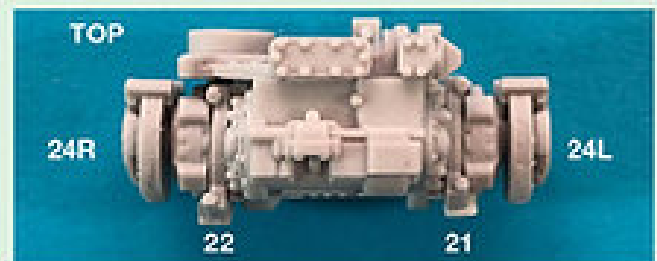
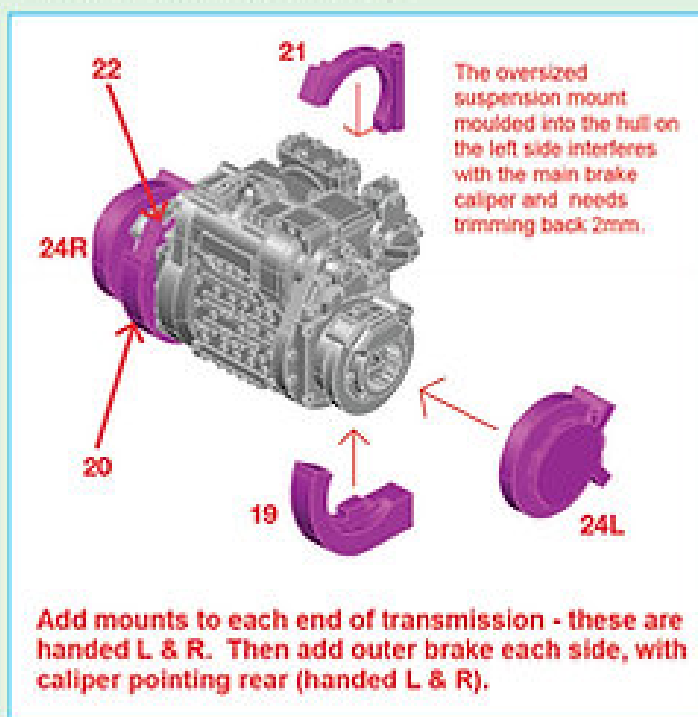
Amendments need to be made to some of the parts in this set – to be pointed out as we go along.

Also, please pay particular attention to the instructions – and read them carefully.

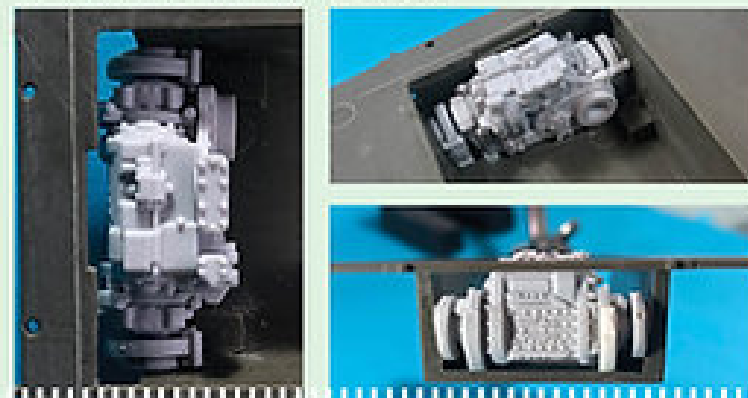
There are a lot parts that have to be squeezed into a small space, so make sure every sub-assembly fits comfortably. With every step, dry fit the parts first **BEFORE** committing to glue.



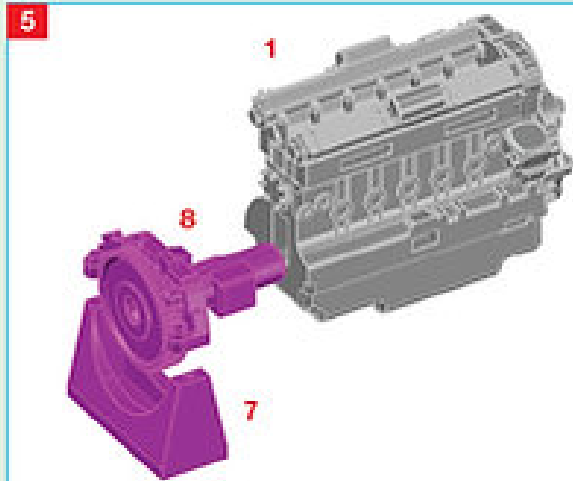
- 1 The forward part of the hull needs to be cut away. From the REAR edge of the slot at the front, cut away the area indicated above. The front cover 'guide' was cut away here, but this is not absolutely necessary. The front 2–3 mm of the first 'suspension box' has to be cut away to avoid clashing with brake disc.
- 2 The bottom edge of the engine partition (part 34) needs to be trimmed slightly (including the torsion bar slots). The top edge needs to be cut forward slightly to fit snugly under the hull top.
- 3 Main construction **HAS** to start at the front with the transmission assembly.



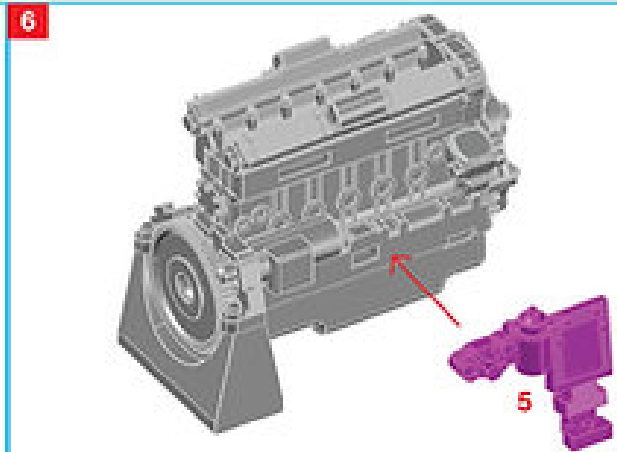
Make sure everything is square.



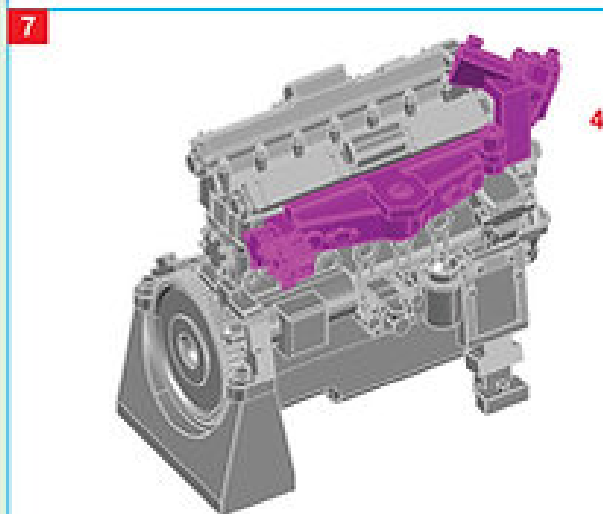
- 4 With the kit's nose plate fitted (no need to glue it), position the transmission unit as far forward as it will go. The outer faces of the brakes will need to be sanded slightly for a good fit.



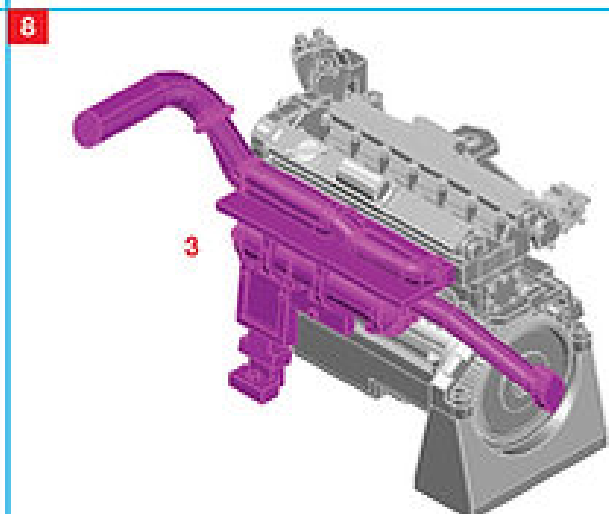
Add flywheel at front, then add engine mount.



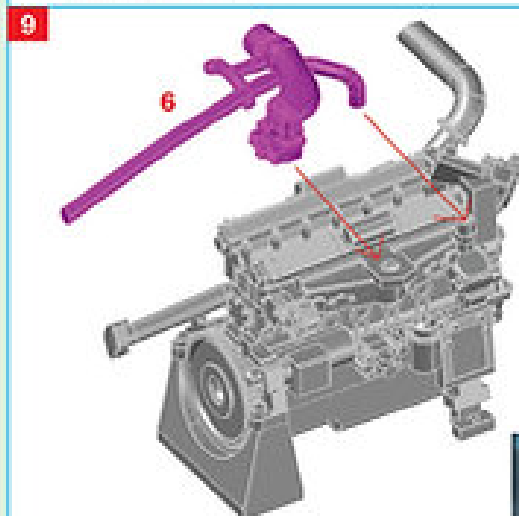
Add left-side engine mount/oil filter assembly.



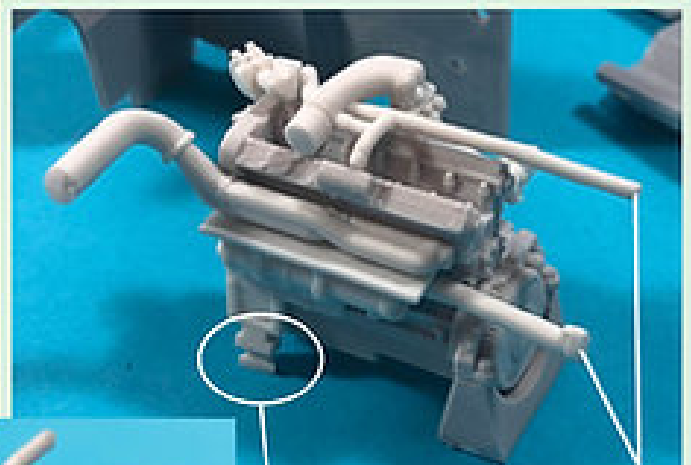
Manifold added.



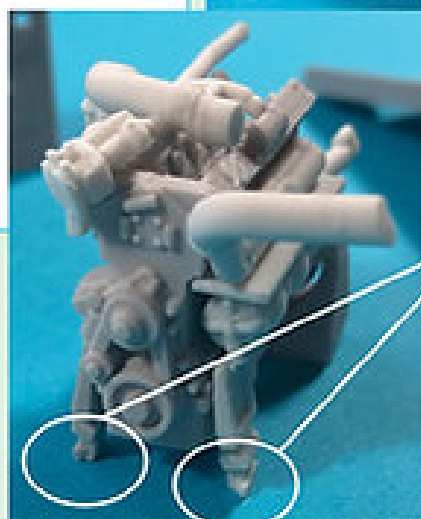
Right-side engine mount/exhaust assembly in place.



Carb & hoses - note dimples and nubs.



These pipes butt against the front bulkhead.



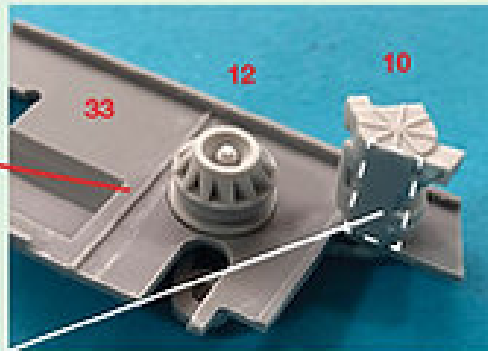
It maybe necessary to cut the horizontal portions of the feet to fit them in.

You may not need to, so check the fit before you do.

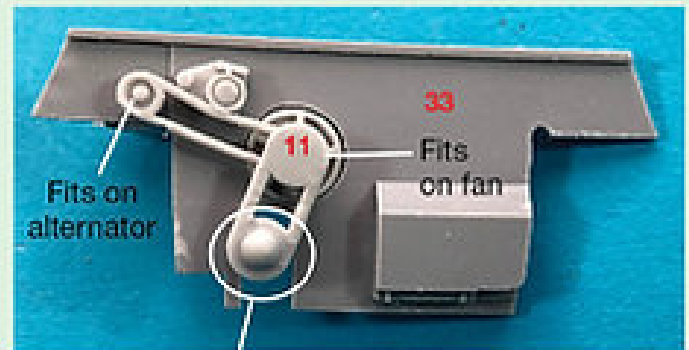
*Plan your painting alongside the building.*  
 Photo references are on pages 7-8 and also on the website:  
<https://www.scorpion-miniature-models.co.uk/scimitar-scorpion-jaguar-j60>

## 10 Add the accessories to the front bulkhead.

Part 34 (engine partition – see below) HAS to butt against this side of the rib.

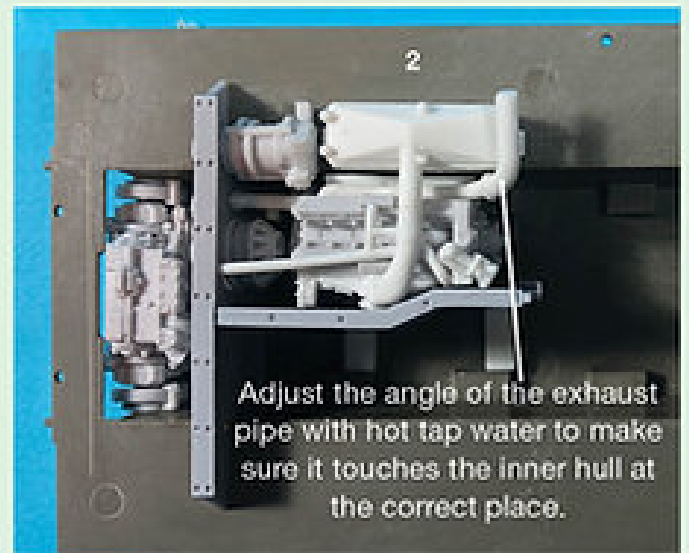


The bottom of the alternator has to be removed so it sits flat on top of the kit sponson. The bottom is not visible once in place.



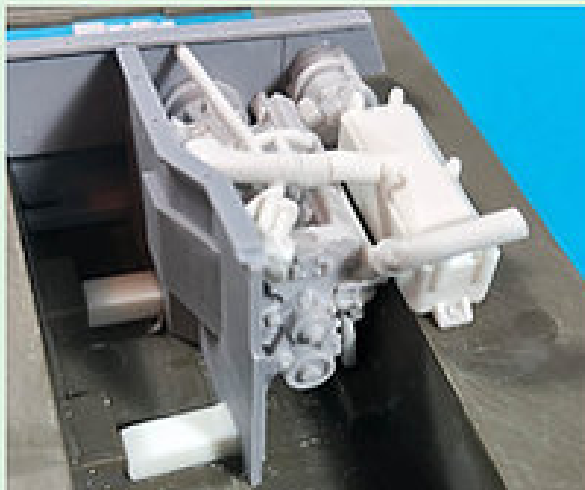
With bulkhead in place, this dome meets the recess in the back of the transmission.

11 At this point (left), make sure everything fits. The most important thing is to make absolutely sure the front bulkhead fits into the slots in the hull top. It has to push up to the transmission and be absolutely square across the hull – and vertical.



12 Then check the fit of the engine, the torsion bar covers (from the **SMM3540** set) and the airbox (part 2) which sits on the sponson top.

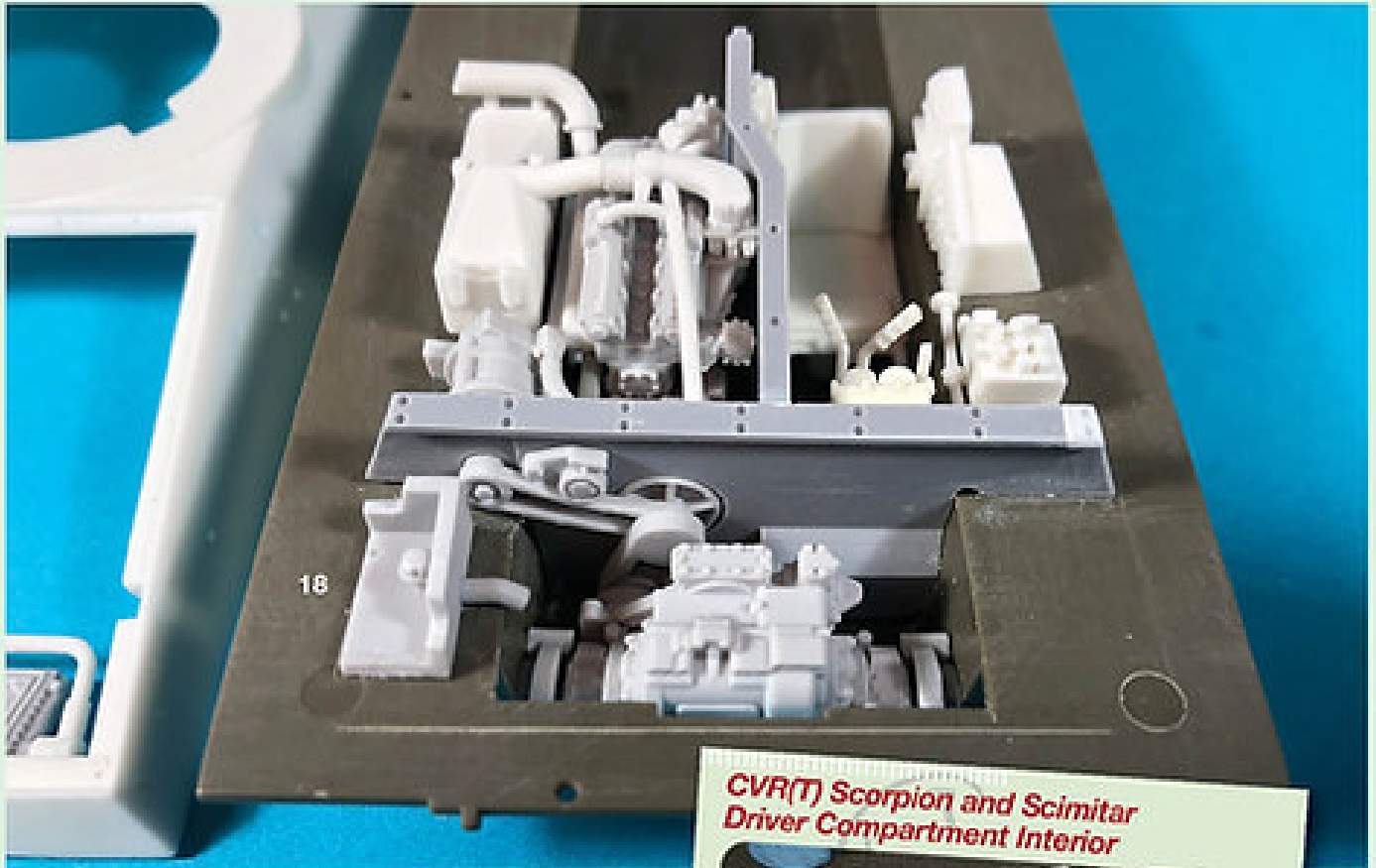
The engine needs to sit on the kit floor, **NOT** on top of any of the suspension boxes or torsion bar covers. It also pushes up against the hull wall. The engine partition (part 34) goes in last and should butt against the front bulkhead to the left (not the right) of the vertical rib.



**Don't forget – DO NOT GLUE anything in place until you are happy with the fit of everything.**

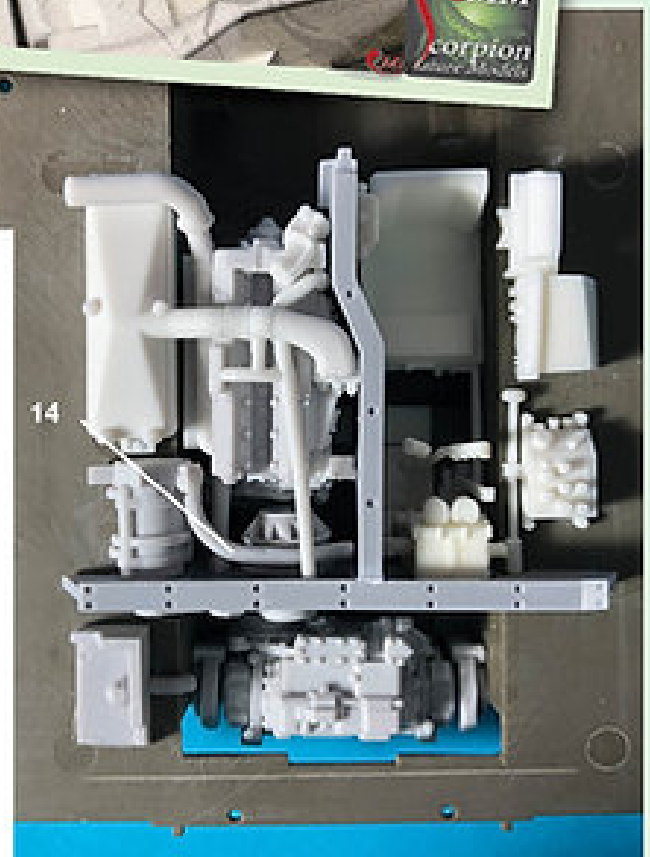
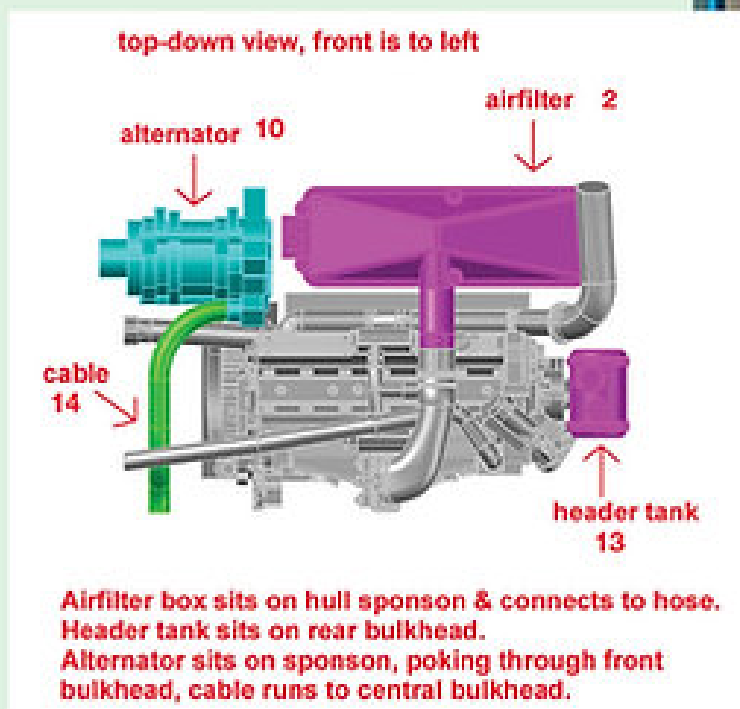
A cheat here is to cut the torsion bar covers at the partition. They cannot be seen under the engine when it is in place.

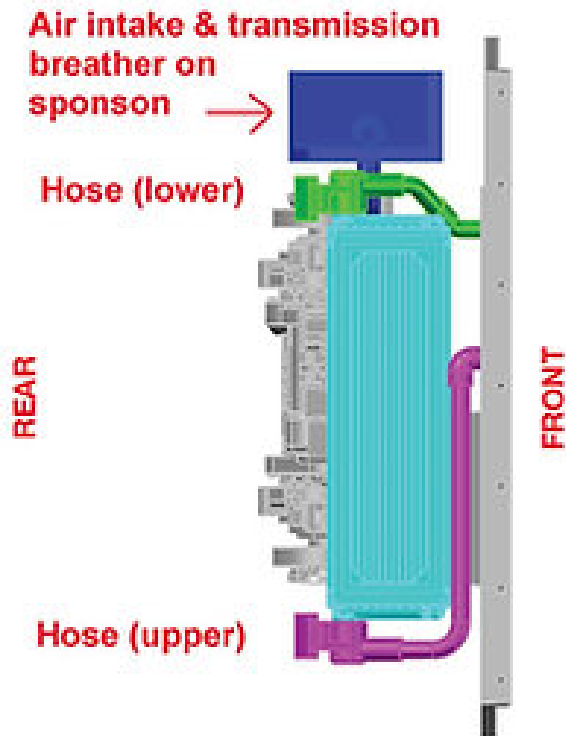
Add the rear bulkhead loosely, and check the fit of the hull top. If it is not good, explore where the fit is poor and adjust whichever component needs it. It could be the height of the bulkheads is too great, so sand a little off the bottom. Possibly remove some resin from under the hull roof.



**13** Once happy that everything fits nicely, the parts can be glued in place. Do not fix the rear bulkhead as it will give you more room to add the driver's compartment **SMM3540 Driver Interior Set** before you do so.

**14** The breather box (part **18**) has to be notched to fit under the rails on the hull sides. Do not glue this in place just yet.

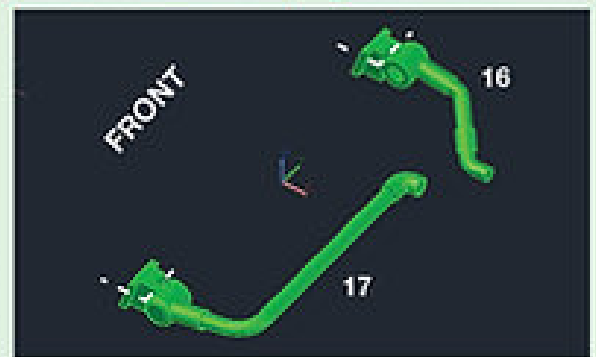
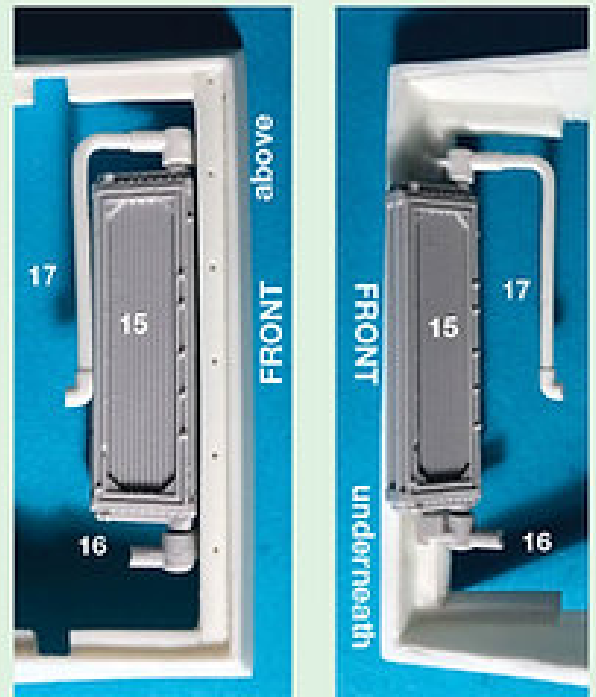




**Radiator (blue) trapped by mounts.  
Mounts are attached to front wall of hull top.**

**15** This is the fiddliest bit. As you may have worked out, the adjustments that need to be made in this kit are because the upper hull was a bit of an after-thought after the engine had been designed. It had to be cut out to show off the interior and have rails added around the edges. These rails have caused the problems. The whole project is delicate microsurgery from start to finish.

Once again, some careful cutting is needed. The pipe mounts to be reduced in height by half (see above right). Alternatively, simply cut against the circular collars and glue them to the front rail.



**Below** – Note how the pipes align against the bolt holes. Fix one end, add the radiator (unglued so it can swing upwards), then fix the other end. The upper pipe aligns with the pipe on the other side of the bulkhead. The bottom pipe should be cut so it meets the bulkhead **UNDER** the fan belt and align with the lower pipe.





Interestingly, in these images showing gearbox lifts, the front bulkhead and the front part of the engine partition have both been removed first.

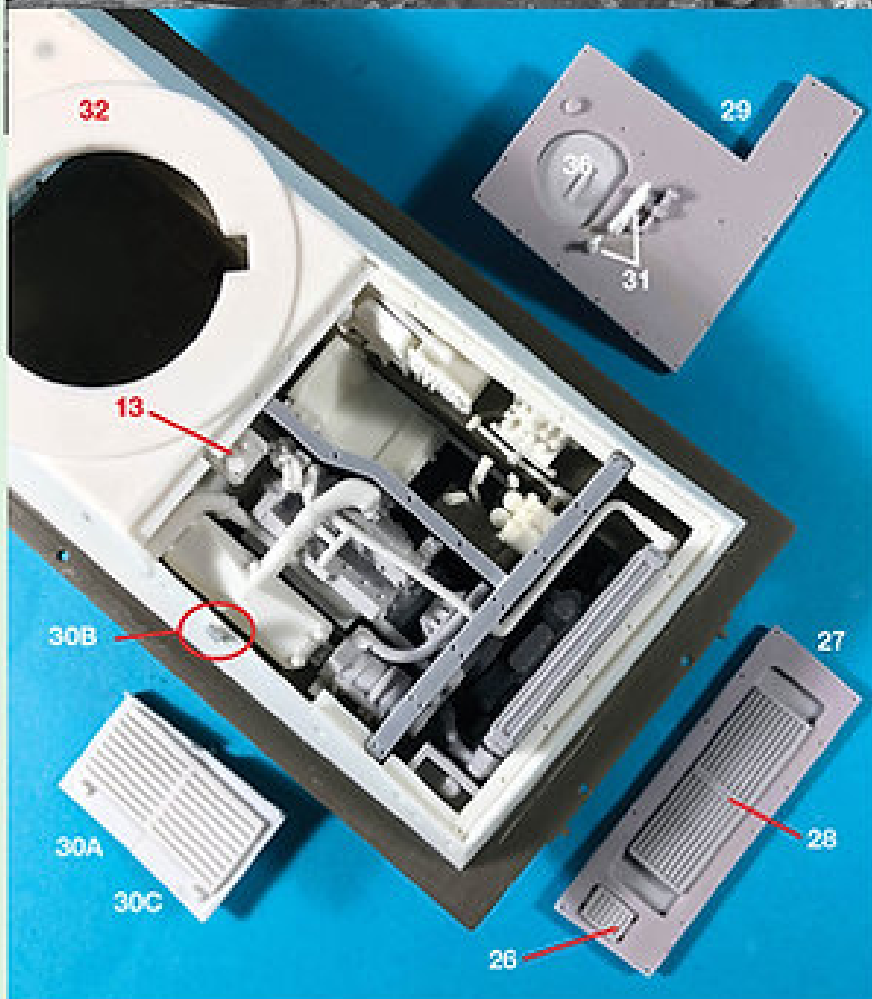


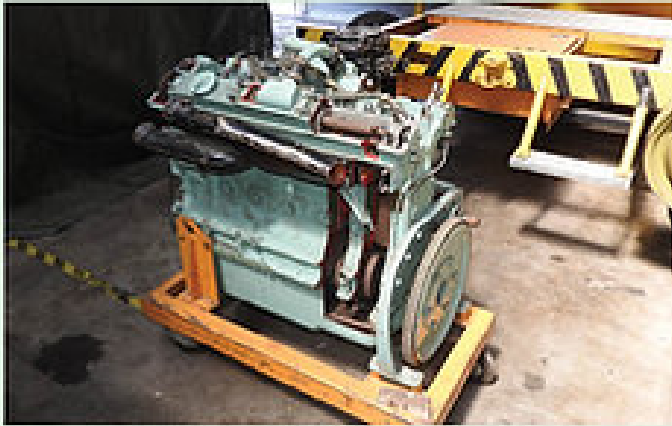
*Simon Dunstan*

**16** The rear bulkhead and the hull top can now be fixed.

**17** The deck panels are meant for display, propped up on the hull sides or sat on the ground. For this reason, they are detailed on both sides. The transmission grille (**28**) can be fitted inside the hull plate (**27**) facing forwards or backwards. Both can be seen in service, possibly dependant on how the squaddy fitted it! The breather grille (**26**) normally faced rearwards.

Please note they are not a good fit in the hull top as this was not the intention.





*Photographs from Michael Shackleton and Patrick Winnepenninckx.*

**More reference can be found on the SMM website:**  
<https://www.scorpion-miniature-models.co.uk/scimitar-scorpion-jaguar-j60>

**Happy modelling and keep on building!**  
 Master parts CAD-designed by Tom Cromwell (TGC)