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THUNDERBIRDS
CLASSIC

Build your own

THUNDERBIRD 2

PACK
07



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Build your own **THUNDERBIRD 2**

STAGE

PAGE

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Warning: Not suitable for children under the age of 14.

This product is not a toy and is not designed or intended for use in play.

Items may vary from those shown.

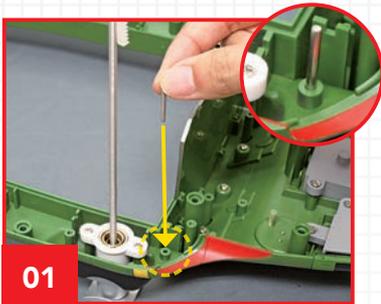
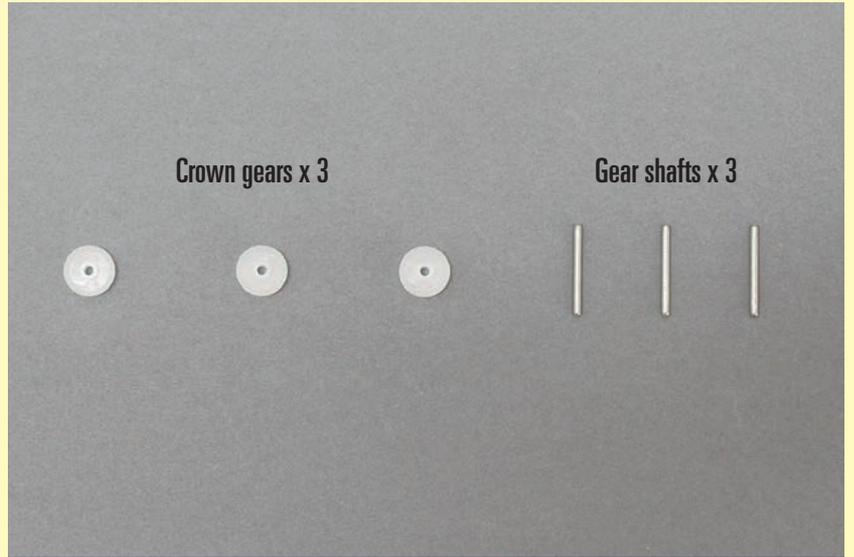
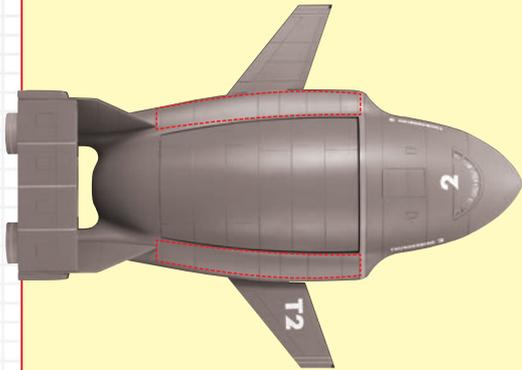


STAGE 40

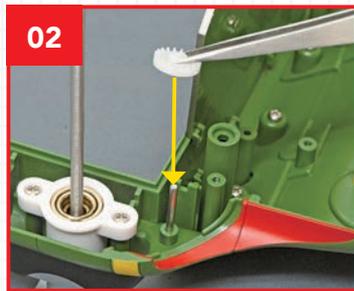
LEG CROWN GEARS + MONOBRAKE

YOUR PARTS

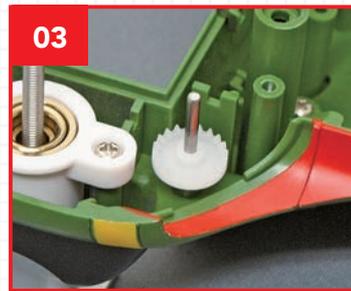
Tools and materials:
Tweezers, superglue



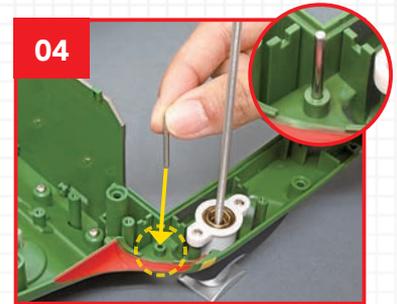
01
Fit a gear shaft into this post, next to the front-right leg base. Push it all the way in, without glue.



02
Lower a crown gear onto it, with its teeth facing upwards, as shown.



03
The parts should look like this.



04
Fit another gear shaft at the front-left of the underframe.



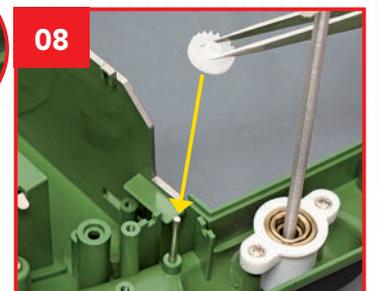
05
And fit another crown gear to it...



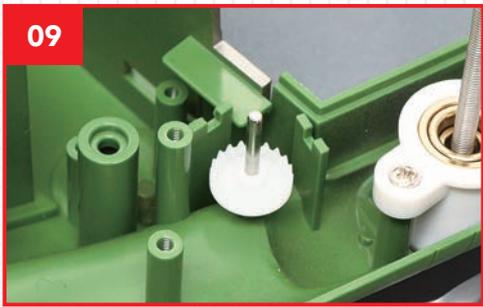
06
... like this.



07
Repeat again for this rear-right post...



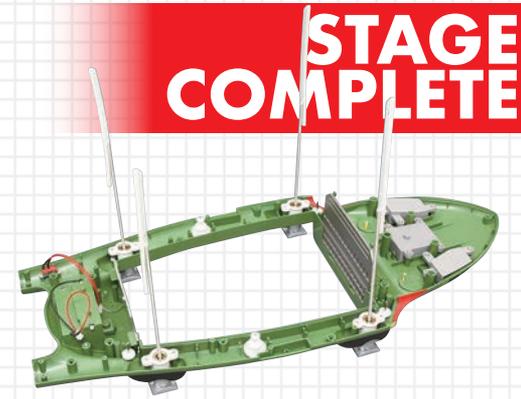
08
... fitting the final crown gear to it...



... like this.

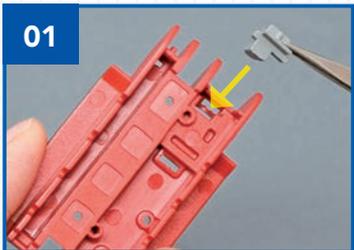
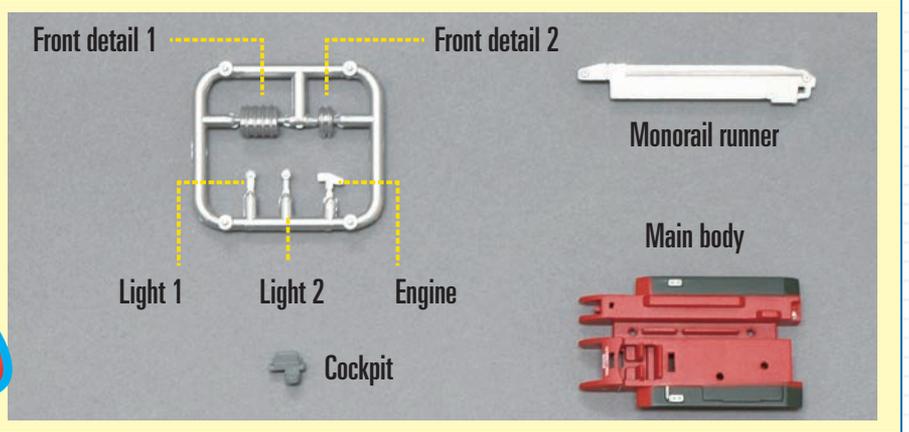
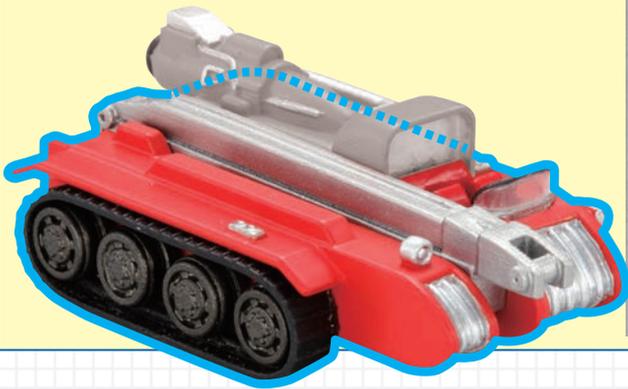


That completes the assembly.



MONOBRAKE

Tools and materials:
Tweezers, superglue



Glue the cockpit to this slot. Orient the part as shown.



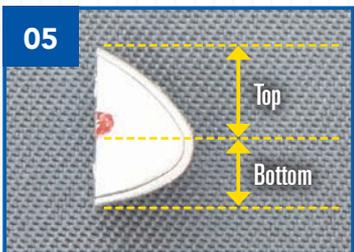
The part should fit neatly.



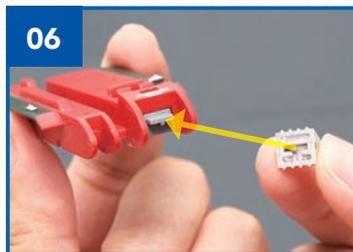
This shows the cockpit base in position, from the top of the main body.



Carefully remove both front details from the sprue. Trim any burrs.



Note the profile of detail 1.



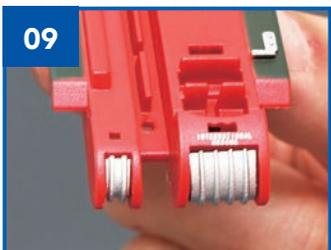
Glue detail 1 here.



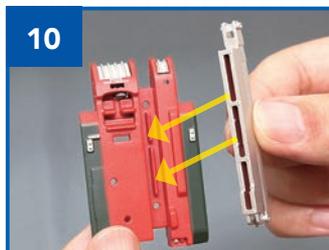
Make sure it is flush with the main body.



Detail 2 goes here...



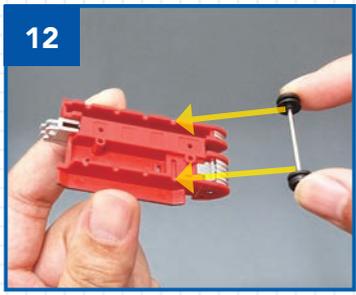
... oriented to match detail 1, like this.



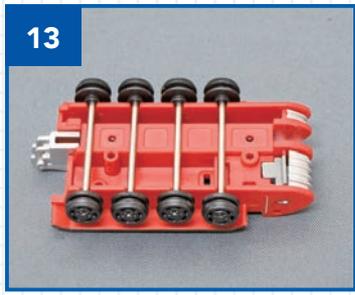
The silver monorail runner will adhere to this slot.



It will overhang the body at the front, like this.



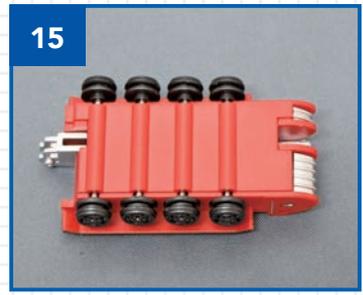
Take one of the wheel/axle sets previously assembled, and fit it to this slot on the main body's underside. Do not glue these parts.



Now add the other wheel/axle sets next to it.



Seal these in with the Monobrake's chassis lower part, gluing it to the arrowed mounting posts.



Make sure no glue has spilled onto the axles, then leave the parts to bond.



Now pull a track over the wheels.



Make sure the tracks are seated neatly over the wheels.



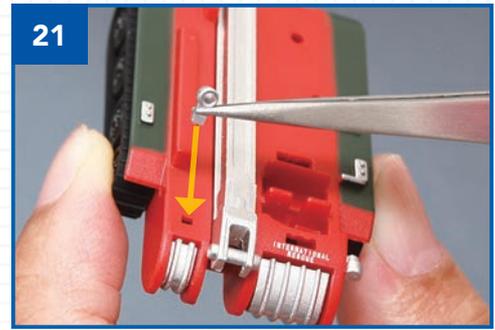
Repeat for the other set of tracks.



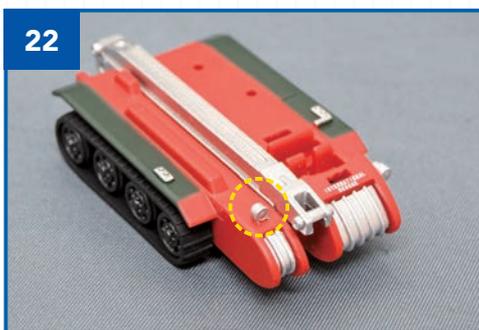
Glue light 2 to this hole.



Make sure it is facing this way.



Glue light 1 to this hole.



It should face this way.

STAGE COMPLETE



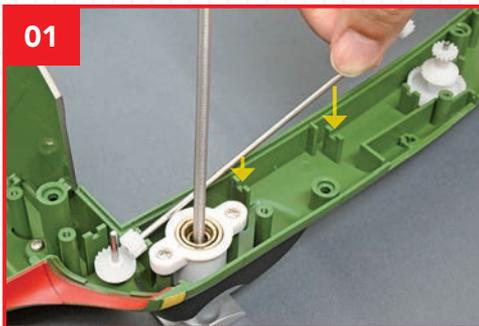
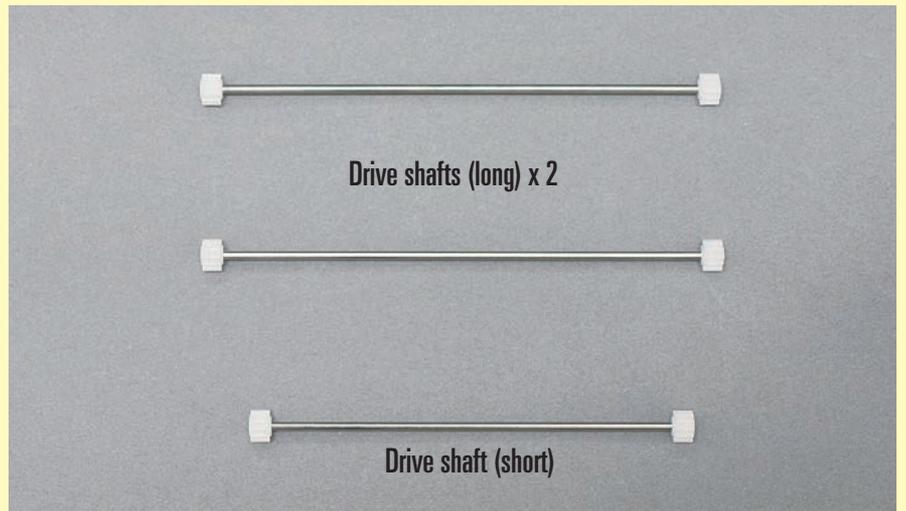
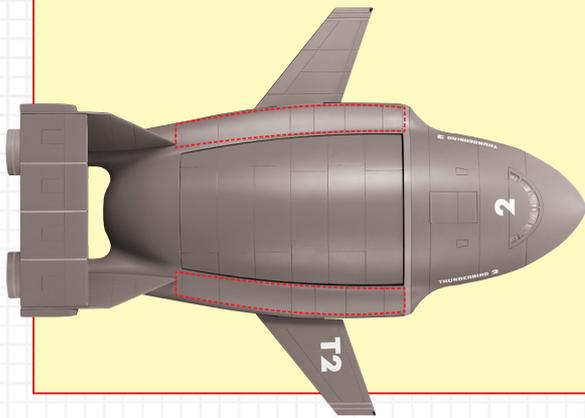


STAGE 41

DRIVE SHAFTS + MONOBRAKE

YOUR PARTS

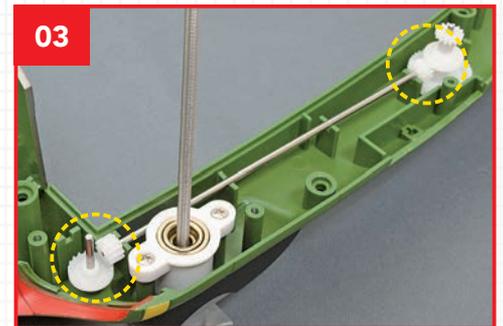
Tools and materials:
Tweezers, superglue



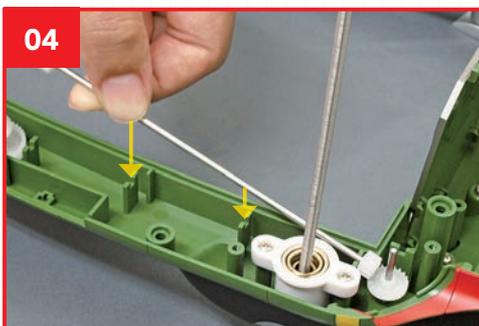
01
Lower one of the longer drive shafts into the left side of the underframe. Its metal length will sit on the arrowed tabs, and its gear head's teeth will engage with those of the front-left crown gear.



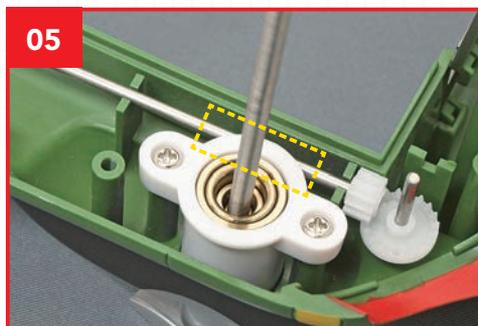
02
The shaft should fit neatly into the space below the leg base, and should not touch or be obstructed by it.



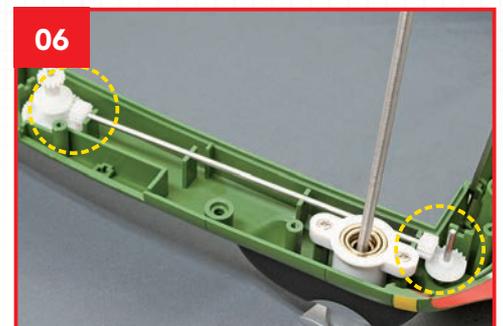
03
Now fit the shaft's rear gear head to engage with the lower section of the rear-left pinion gear. Make sure the front gear stays engaged, too.



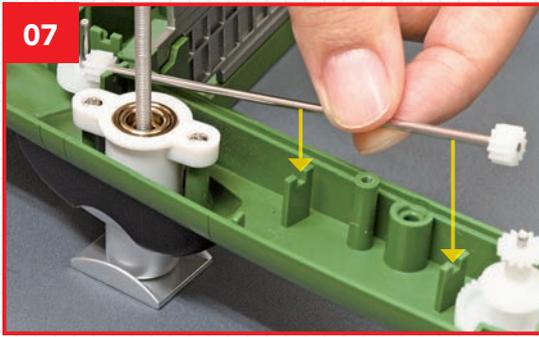
04
Now fit the other long drive shaft to the corresponding space on the right side of the underframe.



05
Make sure it sits neatly in the space below the front-right leg base...



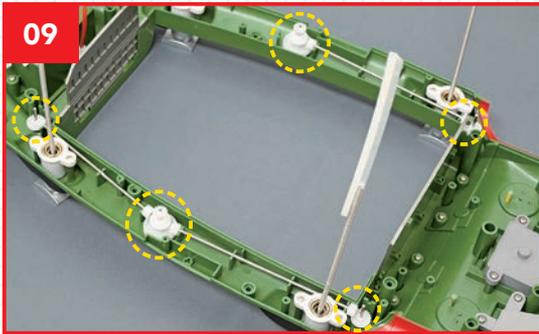
06
...and that both its gear heads are engaged with their respective gears properly.



Now take the short drive shaft and lower it onto these tabs, at the rear-right side of the underframe.

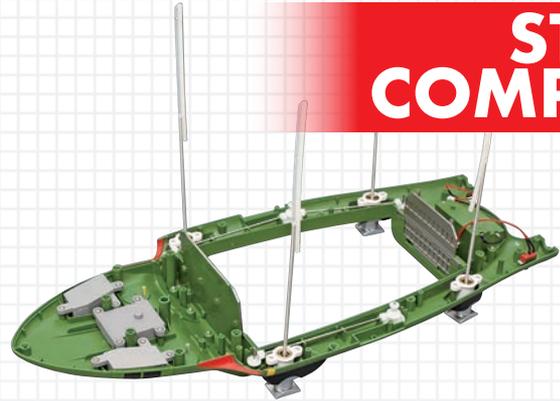


Fit the shaft into the space beneath the rear-right leg base.



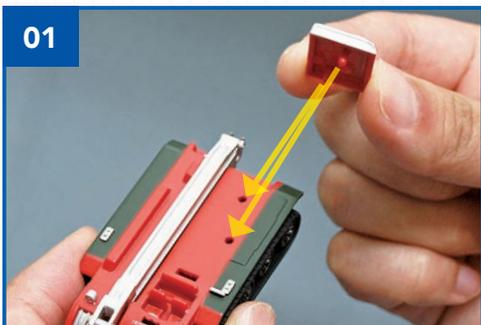
Engage its gear heads with the right-side pinion gear and the right-rear crown gear, as shown. Check again that all the gears fitted in this stage are engaged properly.

STAGE COMPLETE



MONOBRAKE

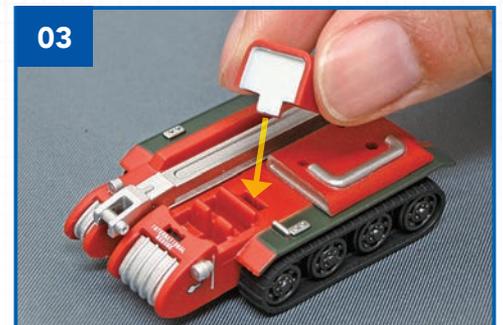
Tools and materials:
Tweezers, superglue



Glue the fuel tank to the top of your Monobrake model. All parts used in this stage will be glued.



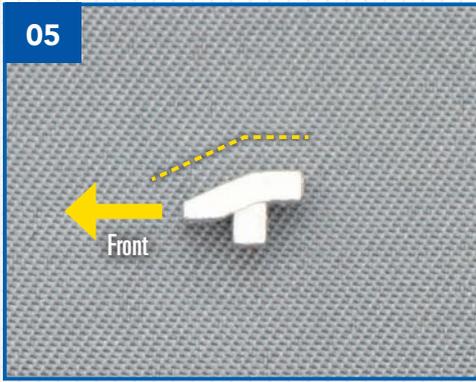
It should be positioned like this.



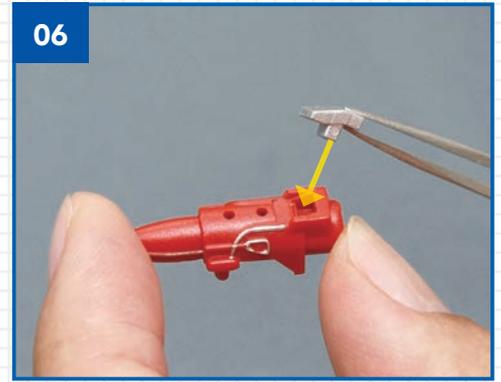
The cockpit hood will go here...



... like this.



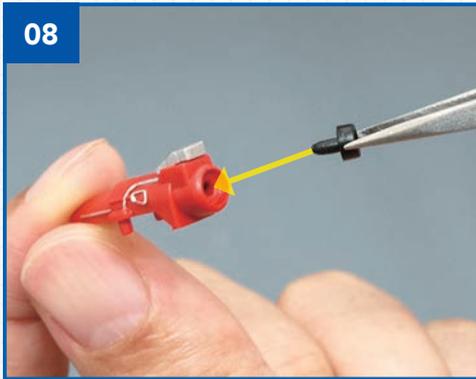
Take the engine supplied in the previous stage and note its profile.



Glue it to the power unit, here.



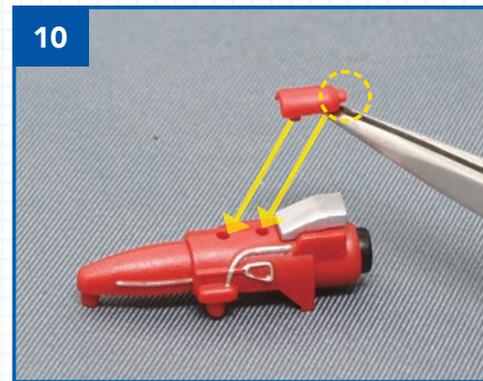
The part should look like this.



Fit the nozzle to the power unit's rear...



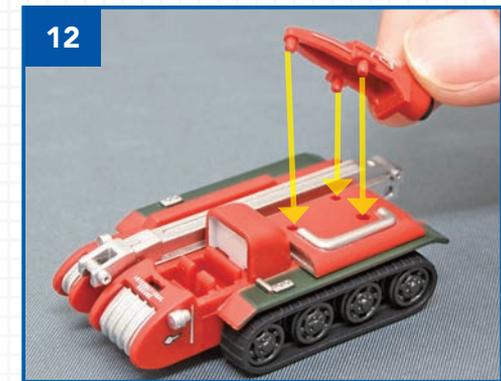
... like this.



The intake cover, with its circled pin facing backwards, goes here...



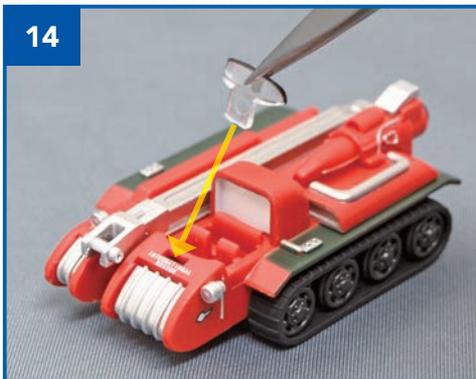
... like this.



The power unit assembly will fit to these three holes.



Press the parts into place.



Lastly, add the windscreen.

STAGE COMPLETE





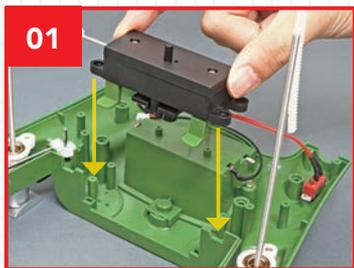
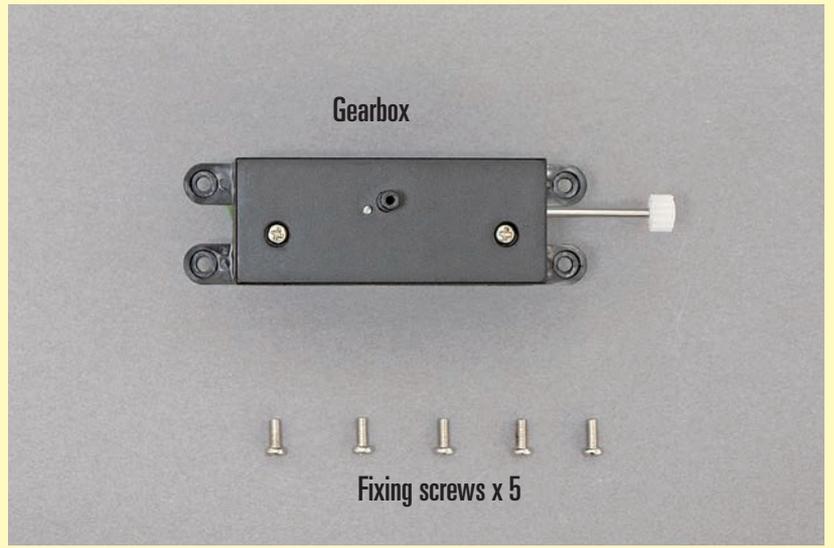
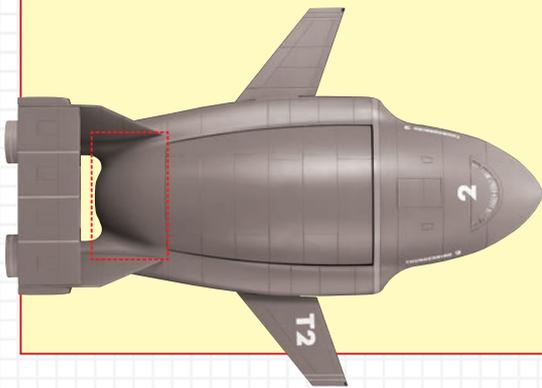
STAGE 42

GEARBOX

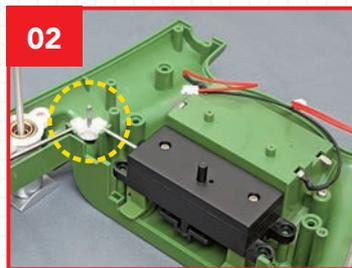
+ LASER CUTTER

YOUR PARTS

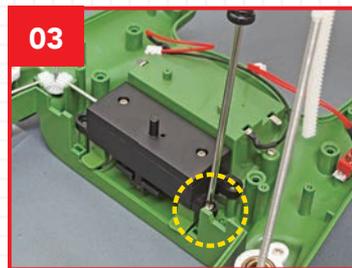
Tools and materials:
Tweezers, superglue



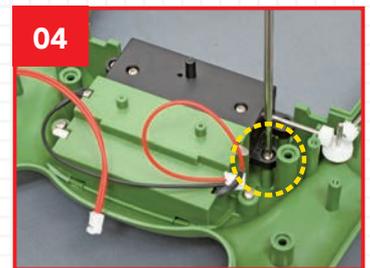
01
The gearbox will sit in this slot, at the rear of the underframe, its gear shaft sticking out to the right. Its four corner tabs will sit on the four mounting posts.



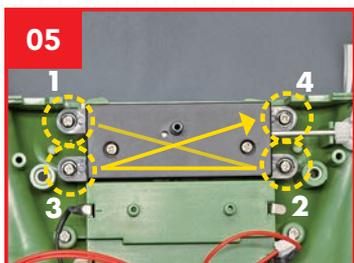
02
Lower the gearbox into position – the gear head engaging with the right-rear crown gear, like this.



03
Making sure the gears are properly engaged, tighten a screw into the front-left tab/post. Do not fully tighten this screw yet.



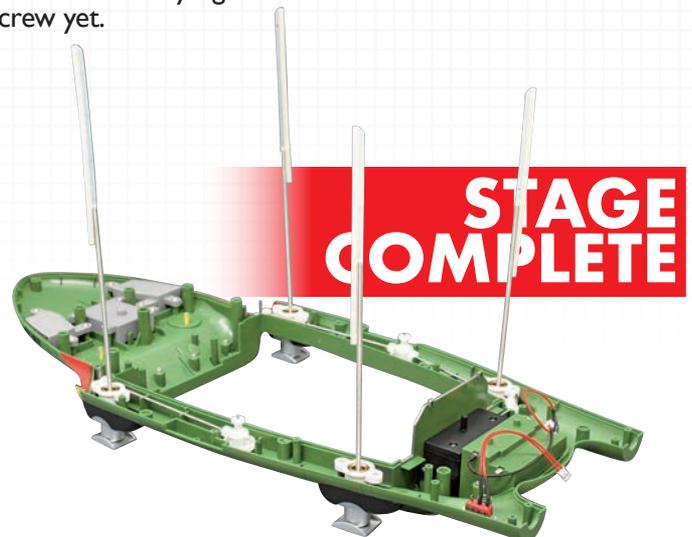
04
Now lightly tighten the screw at the opposite corner (rear right).



05
Fit the other screws, then tighten each, in this order, fully. (This will ensure the gearbox remains level as each screw applies pressure.)



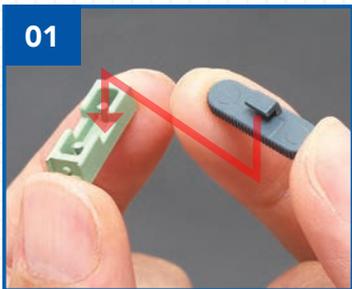
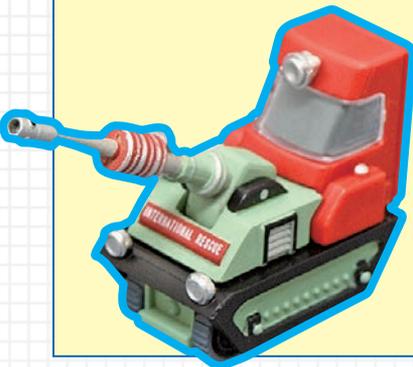
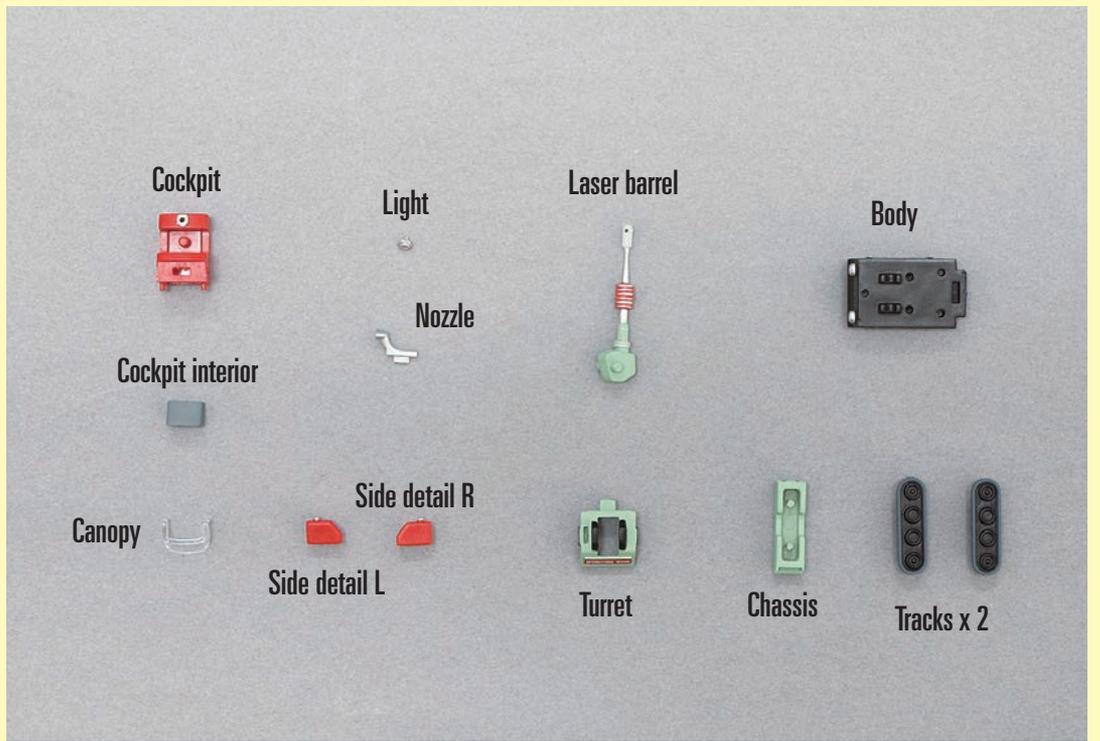
06
Take the bulkhead B supplied in Stage 11, and lower it into the arrowed slot, neatly sealing off the gearbox.



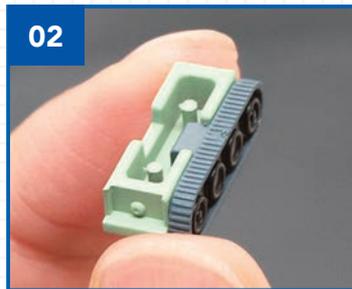


LASER CUTTER

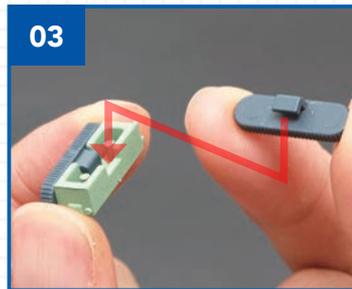
Tools and materials:
Tweezers, superglue



01 Slot one of the tracks into the side-facing recess on the chassis.



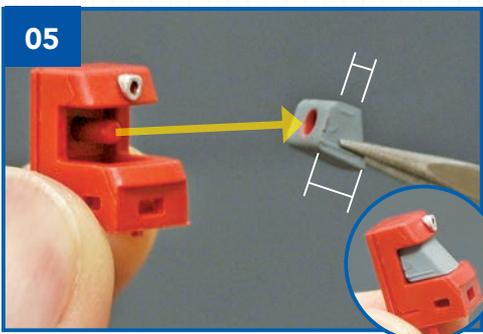
02 Glue the part in position. Unless specified, all parts will be glued in this stage.



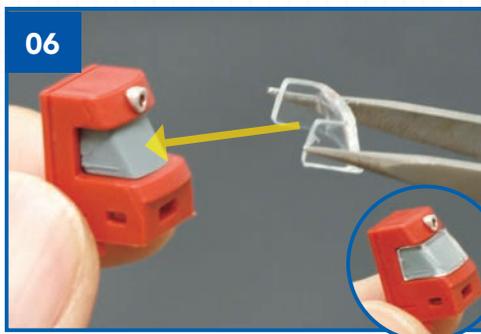
03 Now fit the other tracks like this.



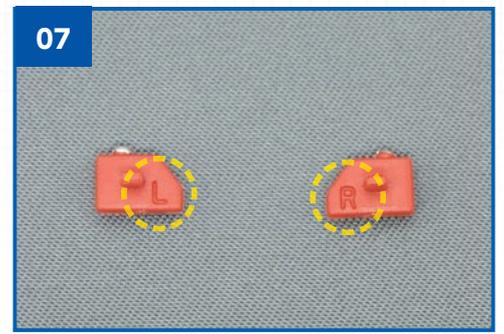
04 Make sure the parts are flush with the chassis.



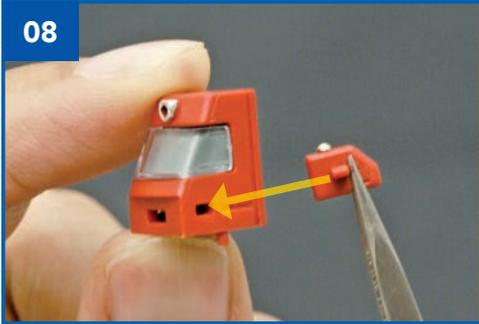
05 Fit the cockpit interior to the cockpit like this. Be sure to orient the parts as shown.



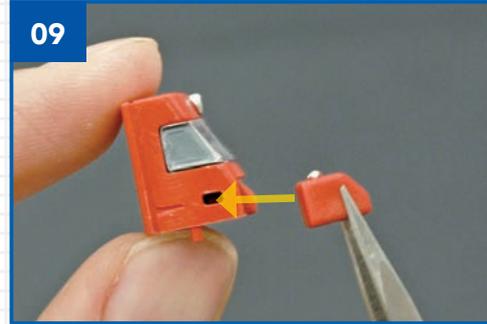
06 Now fit the canopy over it.



07 Find the L and R marks on the side details.



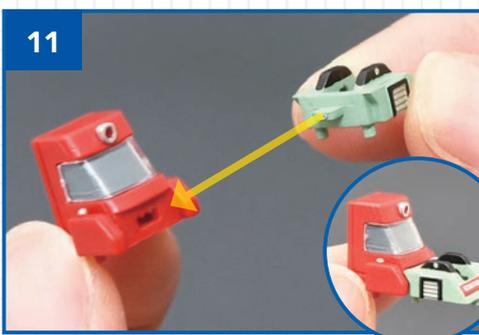
Fit the left detail into this slot.



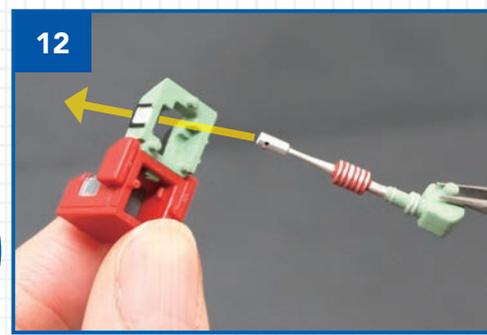
Fit the right one here.



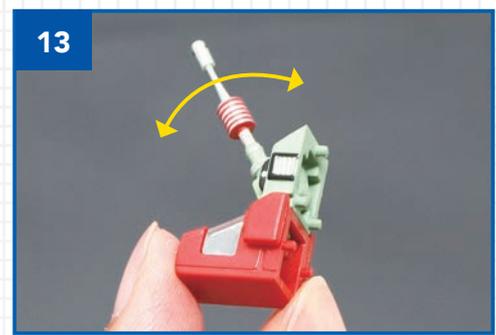
The parts should look like this.



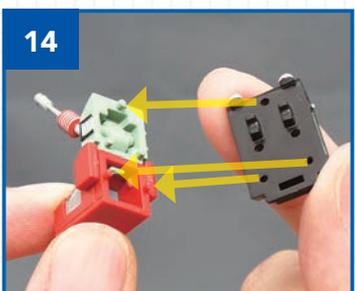
Fit the turret to this slot.



The laser barrel will fit into the turret through its underside, like this. **Do not glue these parts.**



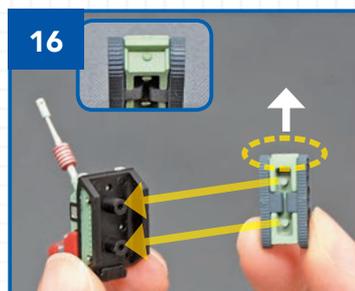
The pins on either side of the laser's base will fit into the slots in the turret, so the laser shaft can swing up and down.



With the laser still in place, join the cockpit/turret assembly to the body.



Your assembly should look like this.



Now add the chassis, oriented as shown here. The end with the detailing is the front of the chassis.



Check the parts are secure.



Fit the light here...



... and the nozzle here.



Check the laser can swing up and down freely.

STAGE COMPLETE

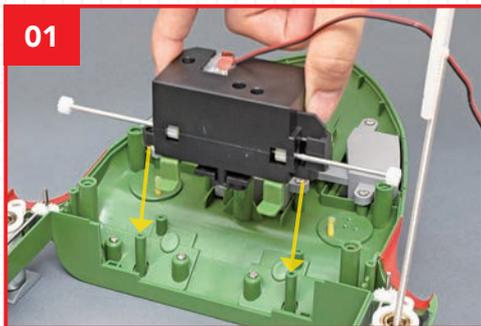
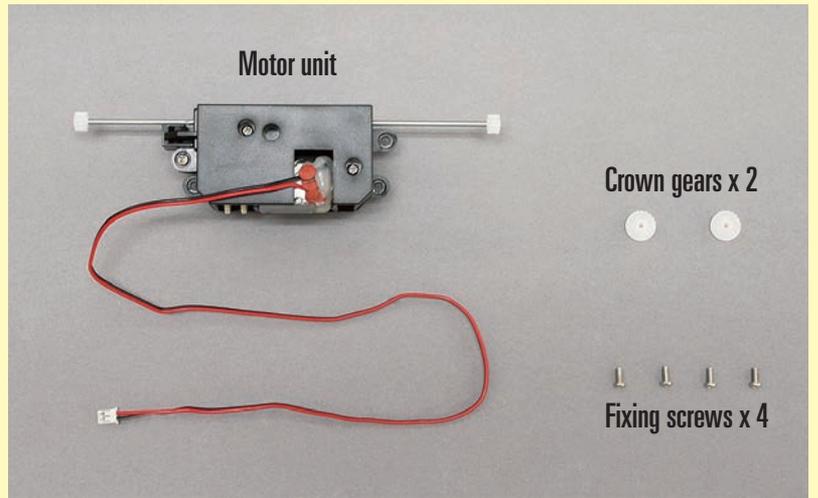
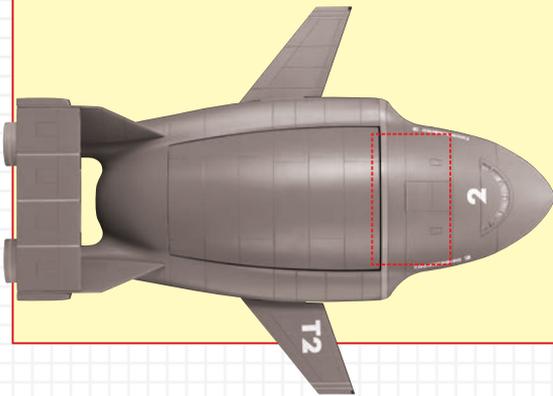


STAGE 43

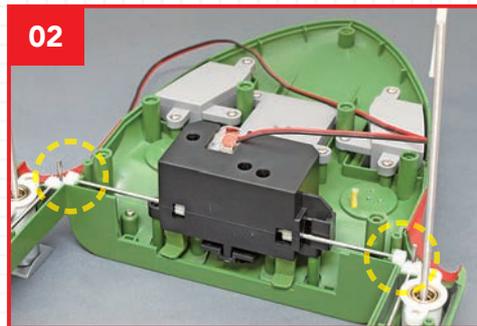
MOTOR UNIT + WEATHERING TECHNIQUES

YOUR PARTS

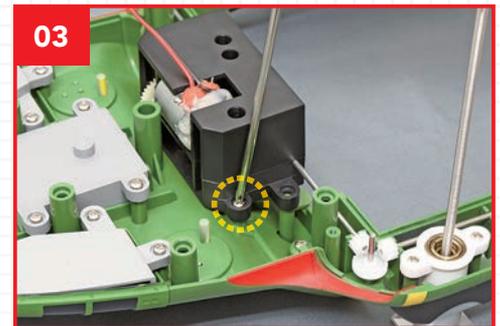
Tools and materials:
Tweezers, superglue



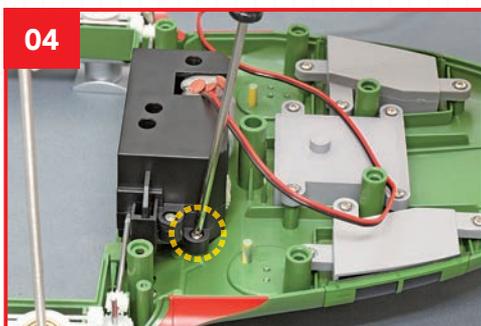
01 The motor unit will sit on the arrowed mounting posts, at the front end of the underframe.



02 Lower the unit onto the posts, guiding the gear heads on either side onto the front crown gears previously fitted to the underframe. Make sure all the gears' teeth engage.



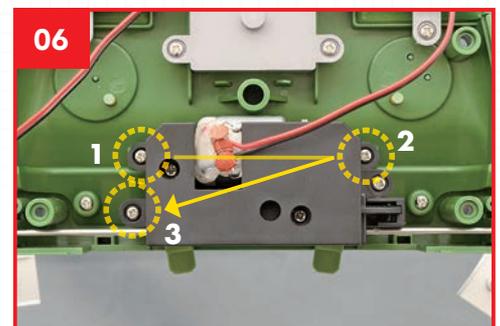
03 Turn a screw lightly through this tab.



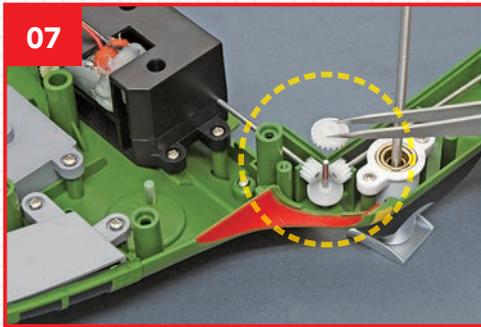
04 Do the same for the opposite tab.



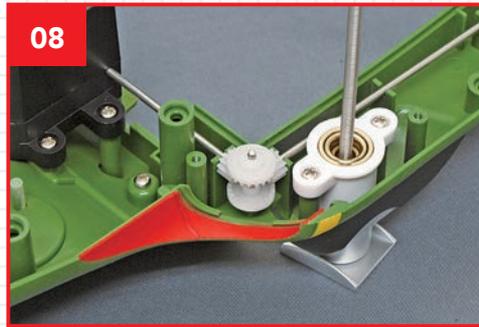
05 And then fit this screw, next to the first.



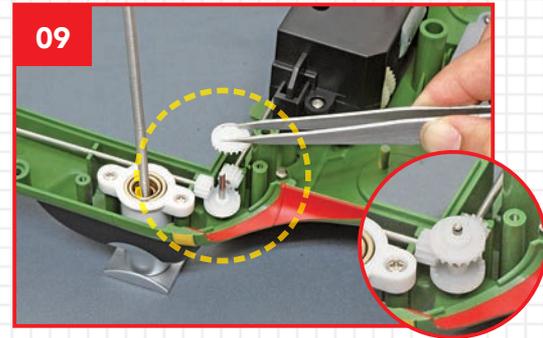
06 Go back and tighten each screw fully in this order to ensure an even fix.



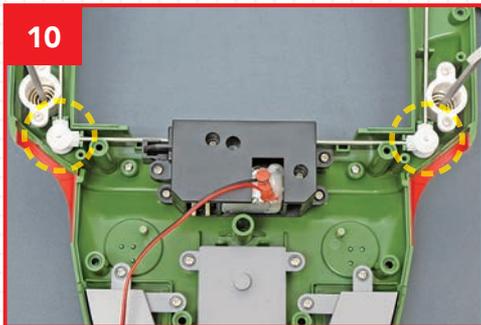
07 Combine the motor unit's left gear, the left-side drive shaft's gear and the front-left crown gear using one of the crown gears supplied this time.



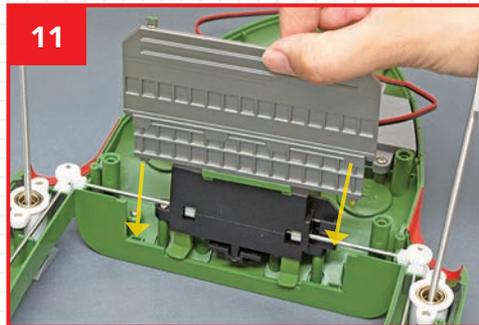
08 Make sure all the gears are engaged properly, and aligned exactly as shown.



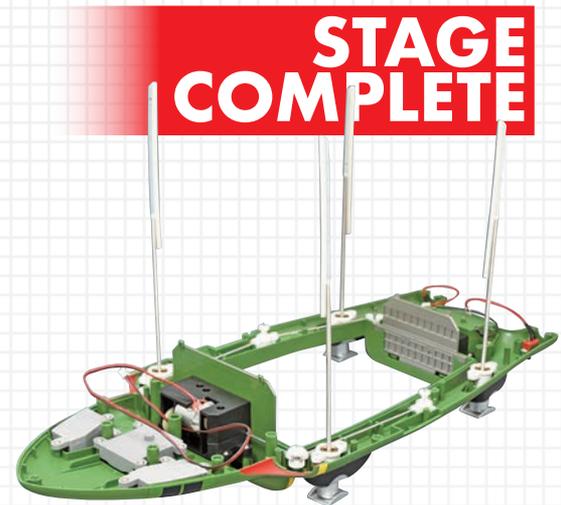
09 Repeat this for the right side of the assembly.



10 Both sets of gears are in position. Double-check that all the gears' teeth are properly engaged, and none is misaligned or 'floating' away from its join.



11 Take the bulkhead A supplied in Stage 9 and slot it into place here.



WEATHERING TECHNIQUES: I.R.3

Tools and materials:

Cotton swabs,
Paint dish,
Diorama texture paints in:
snow effect white and
powder snow effect white,
Solvent-based paint thinner,
Clear topcoat/varnish (matt finish),
Masking tape,
Display base or firm cardboard base,
Dry paints in brown and white,
Wash paints in brown and 'multi-white',
Flat paintbrush,
Sponge-tipped dabber,
Sculpting tool,
Toothpick and wooden pencil/chopstick.



Weathering effects: snow

International Rescue's Transmitter Truck, also known as I.R.3 appeared in the episode *Sun Probe*, in which Virgil pilots the vehicle to the top of Mount Arkan to transmit a powerful radio beam to the stranded Sun Probe spacecraft. The steps in this section show you how to create a diorama reflecting the snowy scenes in the episode.



01 Smear brown wash paint across I.R.3's grille, with the flat paintbrush.



02 Carry on doing this so all parts of the model have a brown hue.



03 Use a cotton swab with a little thinner on it to wipe the paint from the flat surfaces – leaving it in the recesses.



04 Use the paintbrush again to apply a multi-white wash paint to the wheels.



05 And continue to cover the tracks, too.



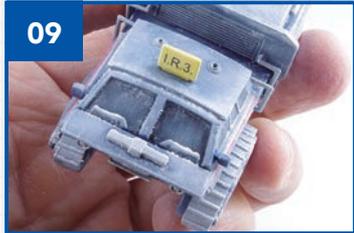
06 Now move on to the rest of the model. The effect should be a whitish mask. Separating the model's sections will help.



07 Now use a sponge-tipped dabber to apply a diorama texture paint in powder snow effect white to the model.



08 Work around the model to cover it on all sides.



09 You can add a thicker layer to the top of the windscreen cover and wipers to create the effect of built-up snow.



10 Similarly, work the snow-effect white paint into the wheels and tracks.



11 The top of the antenna parts would also collect snow, so apply a thicker layer here, too.



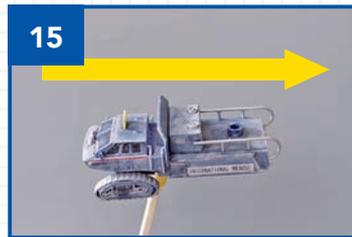
12 Dust more onto the cockpit, especially onto the top of the model parts.



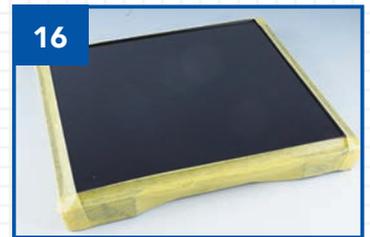
13 The dabbing work should create this effect.



14 Now, to 'freeze' I.R.3 over, hold the model in the air using a pencil or wooden chopstick, and spray a clear matt topcoat over it.



15 Do this with short, sharp burst, from front to back.



16 To create the diorama base, line the edges of a display base, or piece of firm cardboard, with masking tape.



17 Apply a thick layer of diorama texture paint in snow effect white to the base. Do this in a deliberately uneven way.



18 Once dry, begin adding powder texture paint, again in an uneven fashion.



19 Before this paint dries, roll I.R.3's tracks back and forth over it, so they create paths in the "snow".



20 Use the tip of a toothpick to work the powder paint into the tracks further.



21 You can add more to the upper sections of the model.



22 Keep going until you are satisfied your model looks like the one seen on-screen in *Sun Probe*.

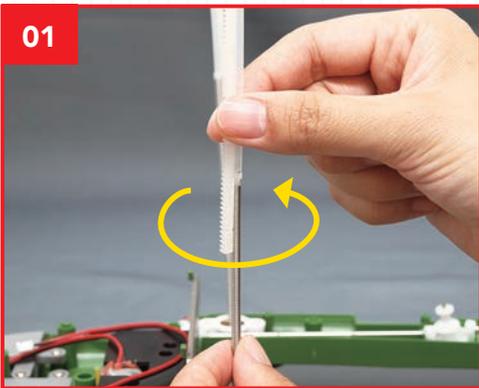
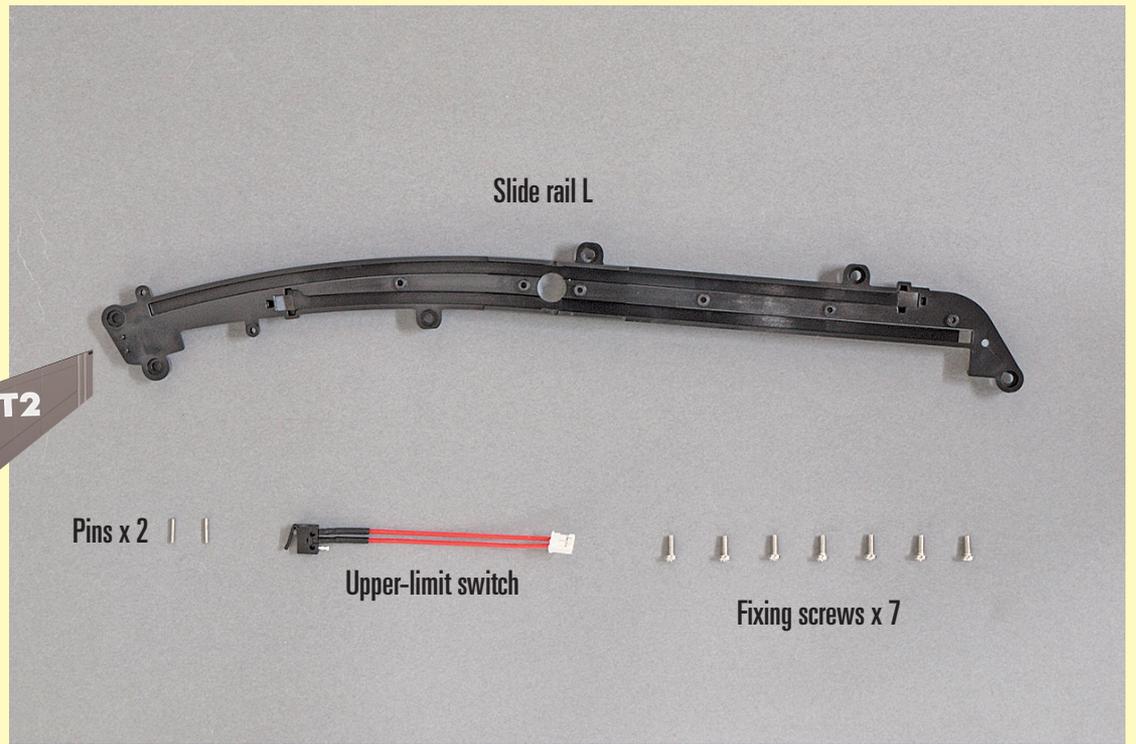
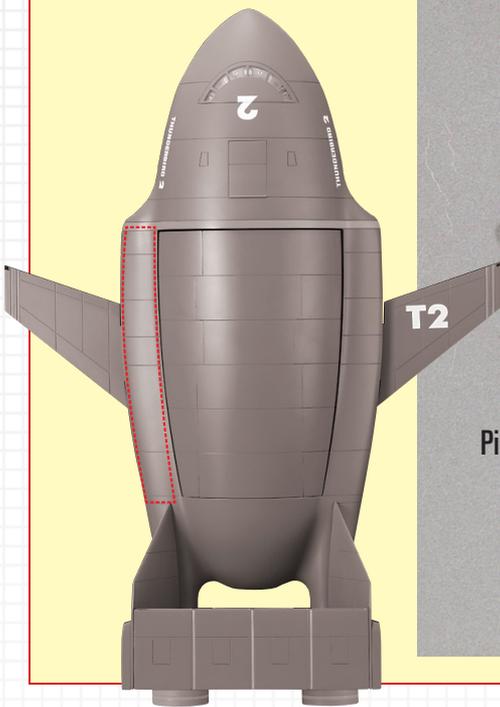


STAGE 44

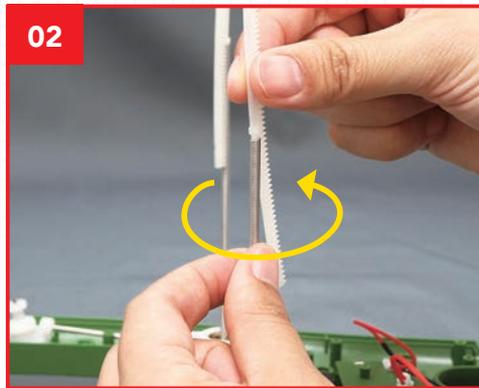
LEFT SLIDE RAIL

YOUR PARTS

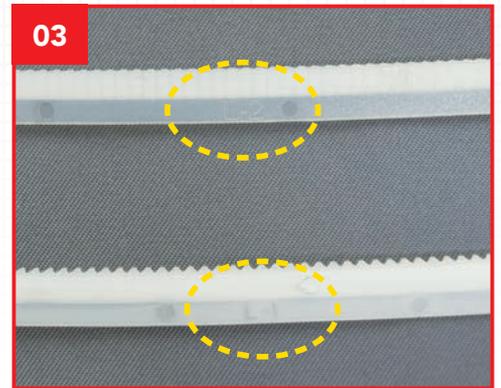
Tools and materials:
Tweezers, superglue



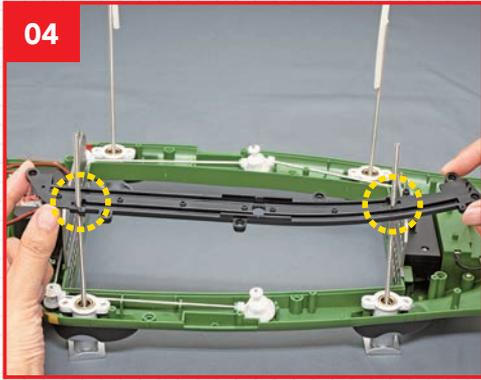
01 Unscrew the front-left rail-gear rack from its spring.



02 Do the same for the left-rear rack.



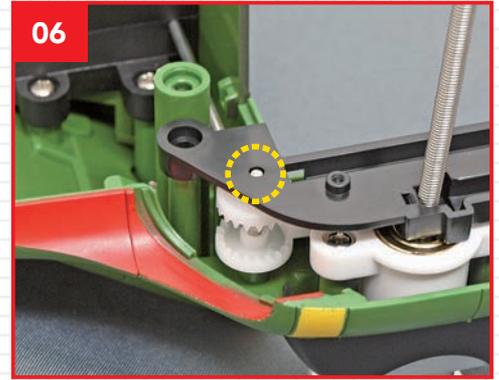
03 Note again the L1 and L2 marks printed on the parts.



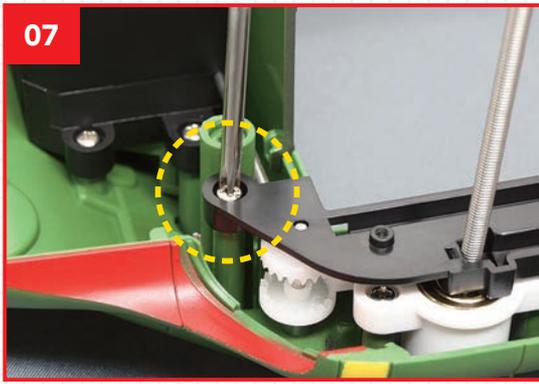
Lower the slide rail over the left-sided springs. Its contour will match that of the underframe.



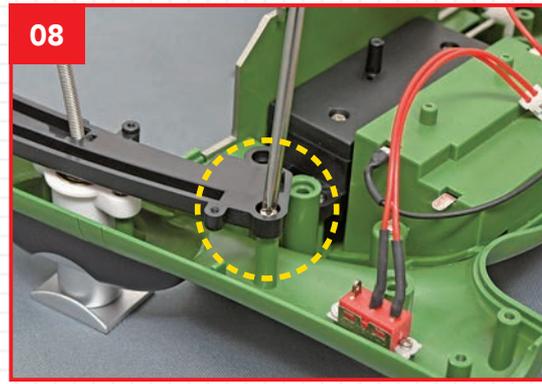
Bring the slide rail to rest onto these six mounting posts.



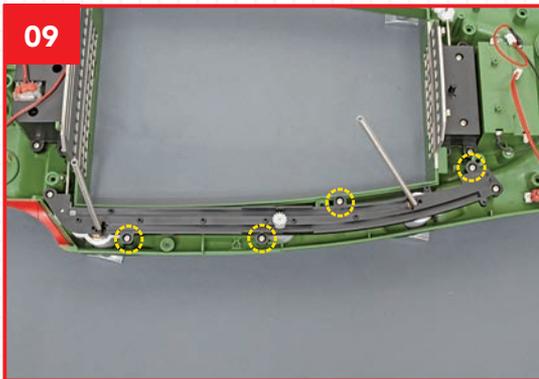
This pin, at the top of the pinion gear, should fit neatly into the slide rail's circled hole.



Tighten a screw into the front hole.



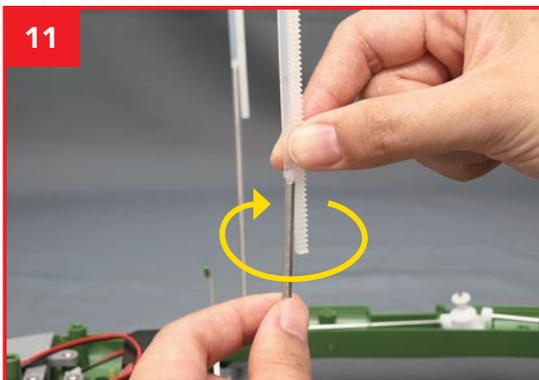
Then the back.



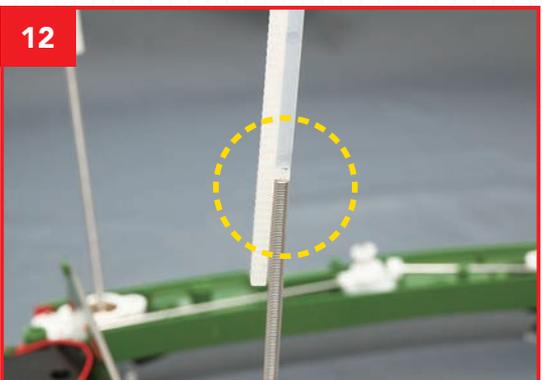
Repeat for all the remaining circled holes.



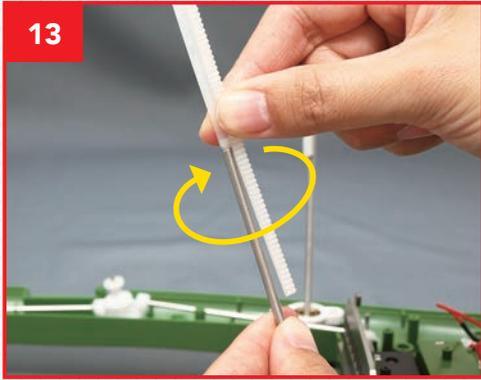
The slide rail is in place – it is fine that the rear leg spring is tilted forward like this.



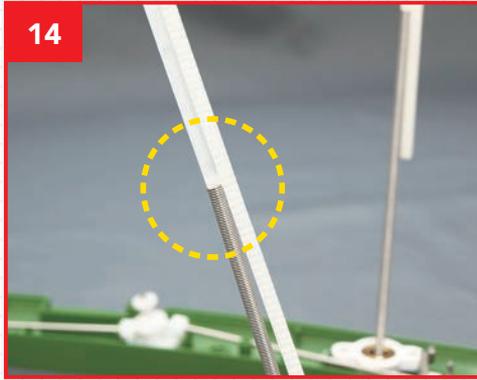
Reattach the rack marked L2 to the front leg spring.



It should reach all the way up the threaded section.



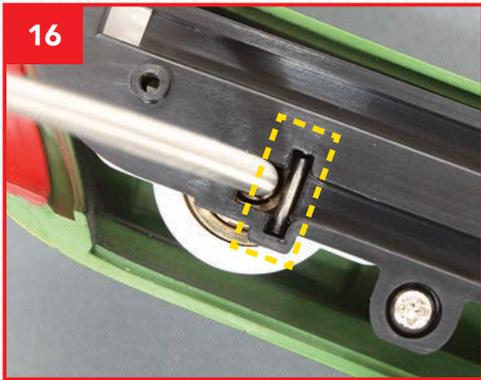
13 Reattach the rack marked LI to the rear leg spring.



14 Again, fit the spring securely.



15 Use tweezers to place one of the pins into this slot, by the front leg spring.



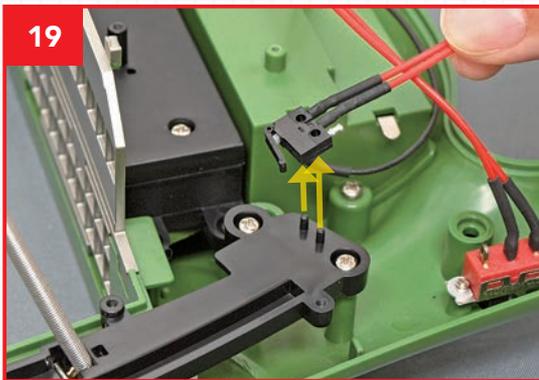
16 Make sure the pin is seated perfectly inside the slot. Be careful not to let it drop out.



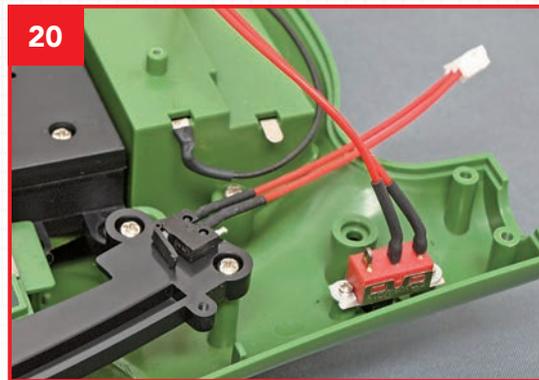
17 Place the other pin into the slot by the other spring.



18 Again, check it is securely seated.



19 Next, take the upper-limit switch and fit it to the rear of the slide rail, via these two pins. Do not glue the parts.



20 This stage is complete.



**STAGE
COMPLETE**

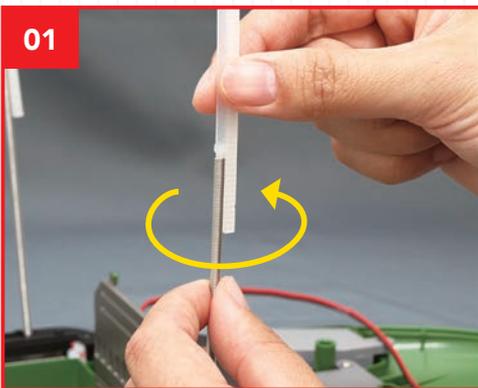
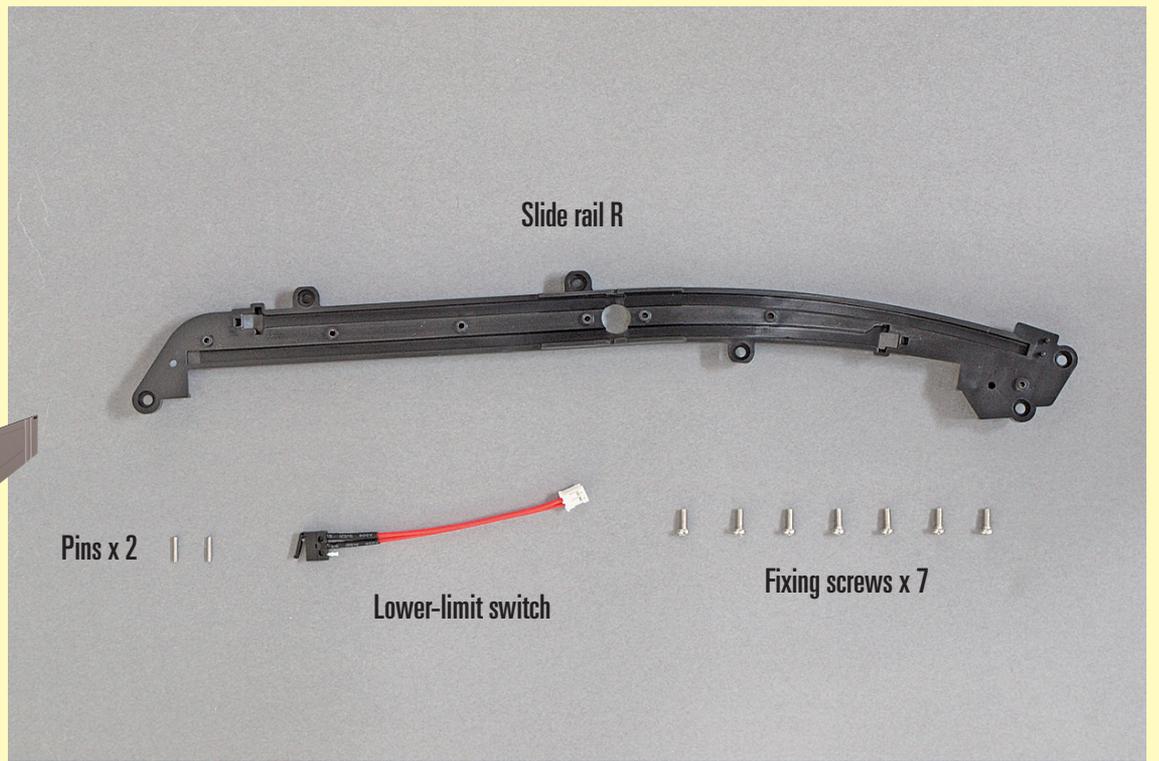
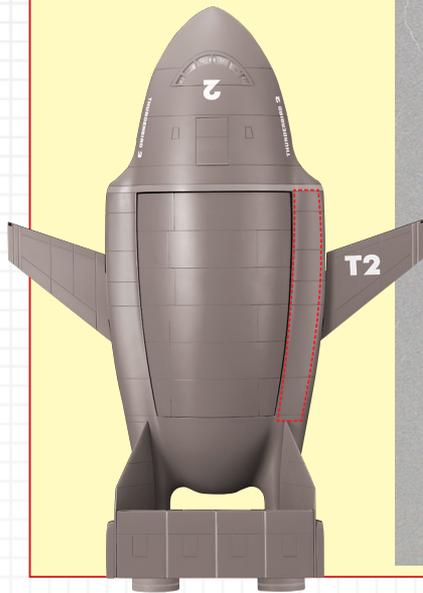


STAGE 45

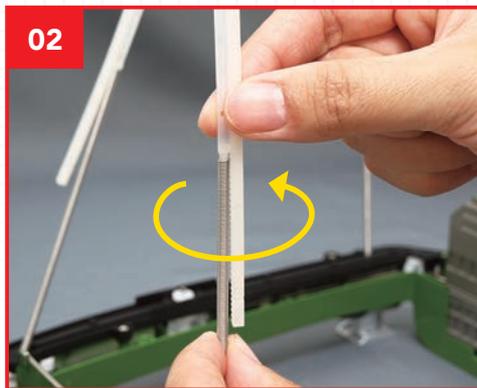
RIGHT SLIDE RAIL

YOUR PARTS

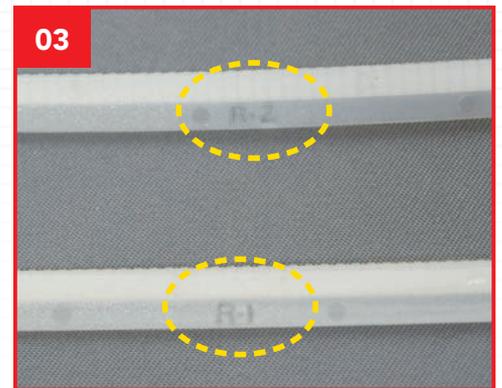
Tools and materials:
Tweezers, superglue



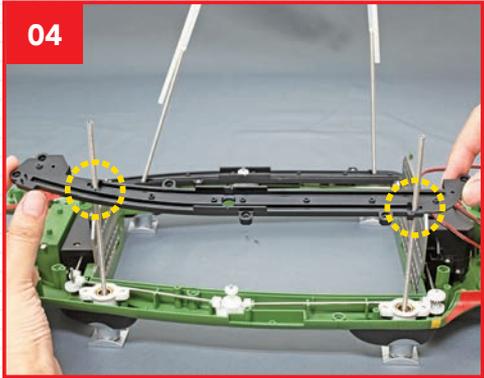
01 Unscrew the front-right rail-gear rack from its spring.



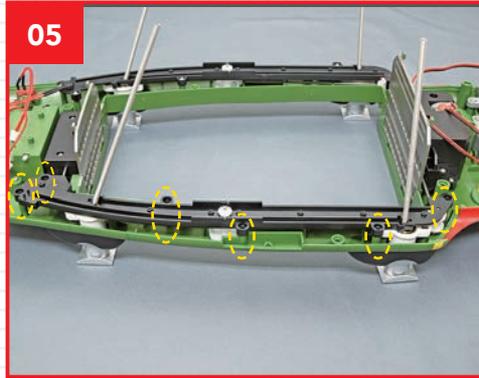
02 Do the same for the right-rear rack.



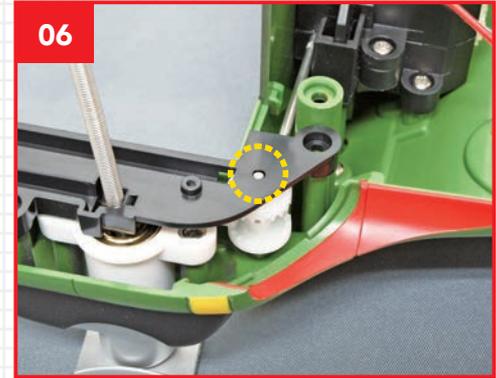
03 Note again the R1 and R2 marks printed on the parts.



04 Lower the slide rail over the right-sided springs. Its contour will match that of the underframe.



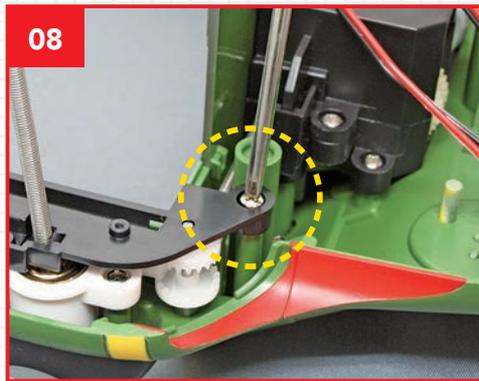
05 Bring the slide rail to rest onto these six mounting posts.



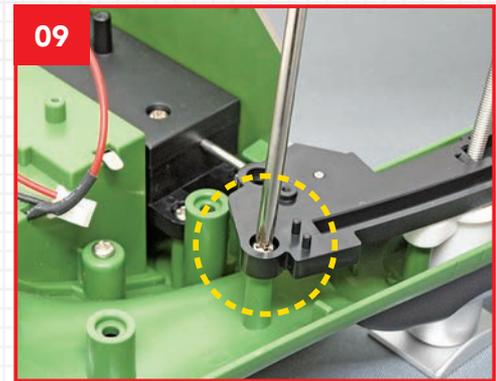
06 This pin, at the top of the pinion gear, should fit neatly into the slide rail's circled hole.



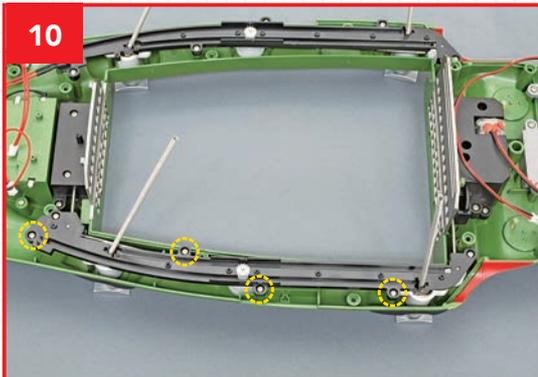
07 The right side also has a rear pinion gear, which should fit neatly into the slide rail's other hole.



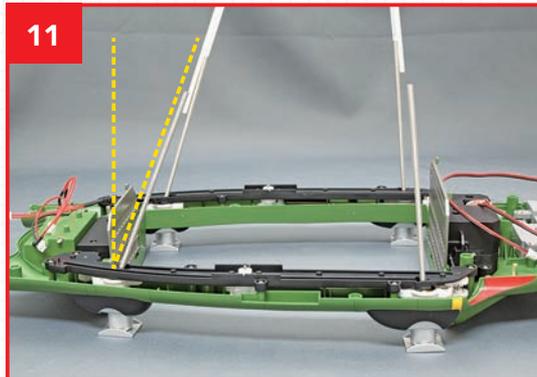
08 Tighten a screw into the front hole.



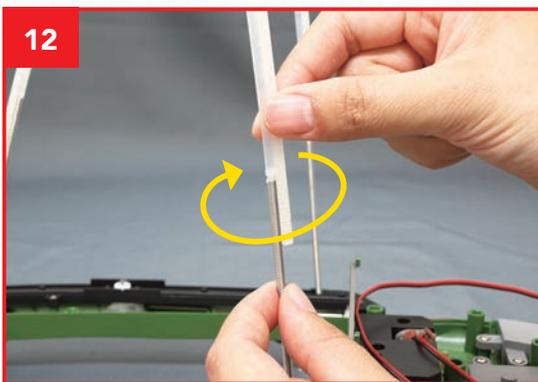
09 Then the back.



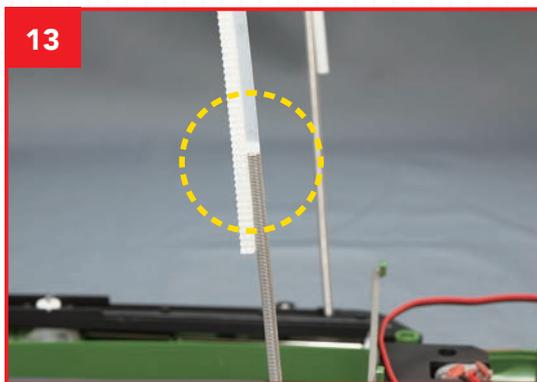
10 Repeat for all the remaining circled holes.



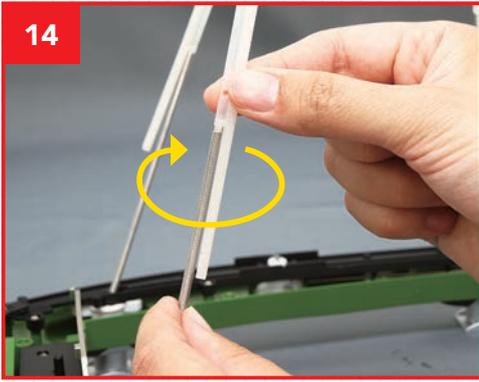
11 The slide rail is in place – it is fine that the rear leg spring is tilted forward like this.



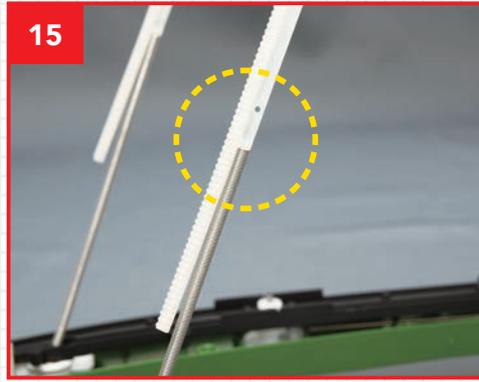
12 Reattach the rack marked R2 to the front leg spring.



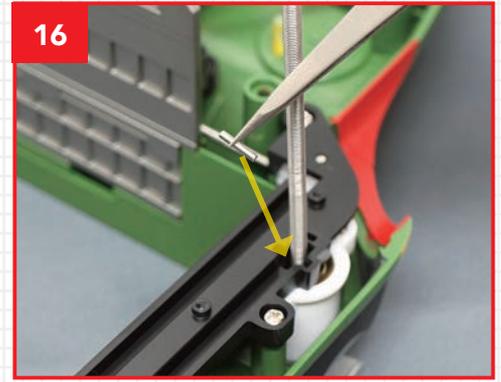
13 It should reach all the way up the threaded section.



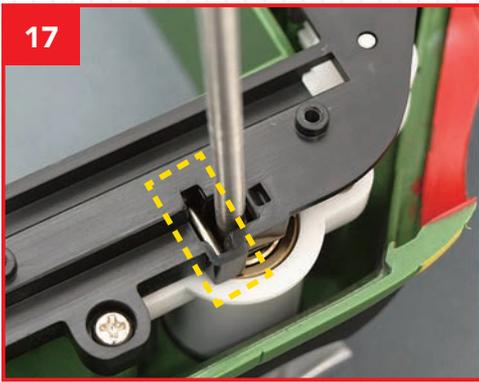
14 Reattach the rack marked R1 to the rear leg spring.



15 Again, fit the spring securely.



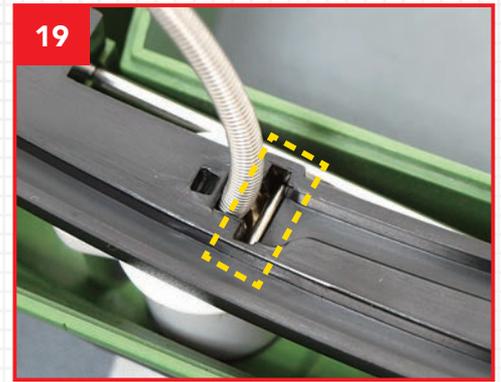
16 Use tweezers to place one of the pins into this slot, by the front leg spring.



17 Make sure the pin is seated perfectly inside the slot. Be careful not to let it drop out.



18 Place the other pin into the slot by the other spring.



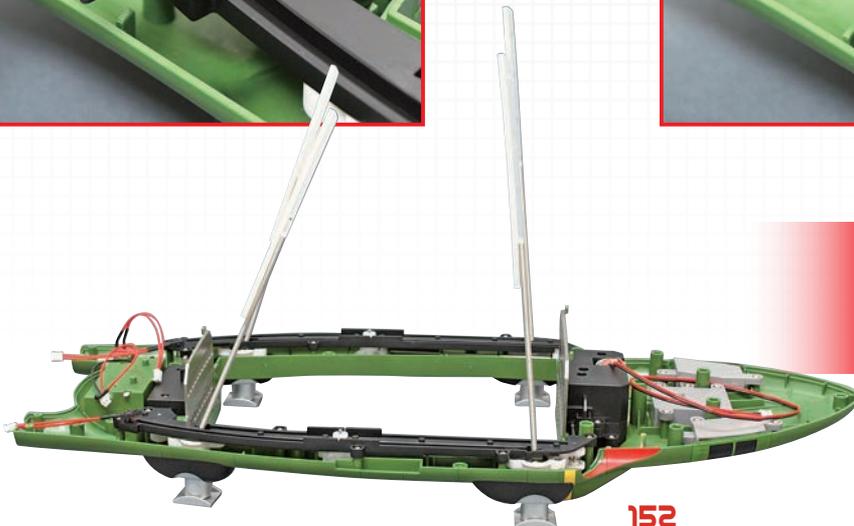
19 Again, check it is securely seated.



20 Next, take the lower-limit switch and fit it to the rear of the slide rail, via these two pins. Do not glue the parts.



21 This stage is complete.



STAGE COMPLETE