

PACK 12

THE TERMINATOR™

BUILD THE T-800

1:2
SCALE

THE MOST
LEGENDARY
CYBORG IN
SCIENCE
FICTION
HISTORY!

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THE TERMINATOR™

BUILD THE T-800

PACK 12

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IDENTIFYING YOUR COMPONENTS: Each of your Terminator packs is divided into stages. Each stage contains a number of components, and can be identified by referring to the images in your assembly guide or the number located on the sticker on the back of each stage. Each number begins with '77' and is followed by a further three digits. The last three digits indicate the number of each stage. For example, 77 001 indicates stage 01, 77 002 indicates stage 02, etc.

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advice at community.agoramodels.com

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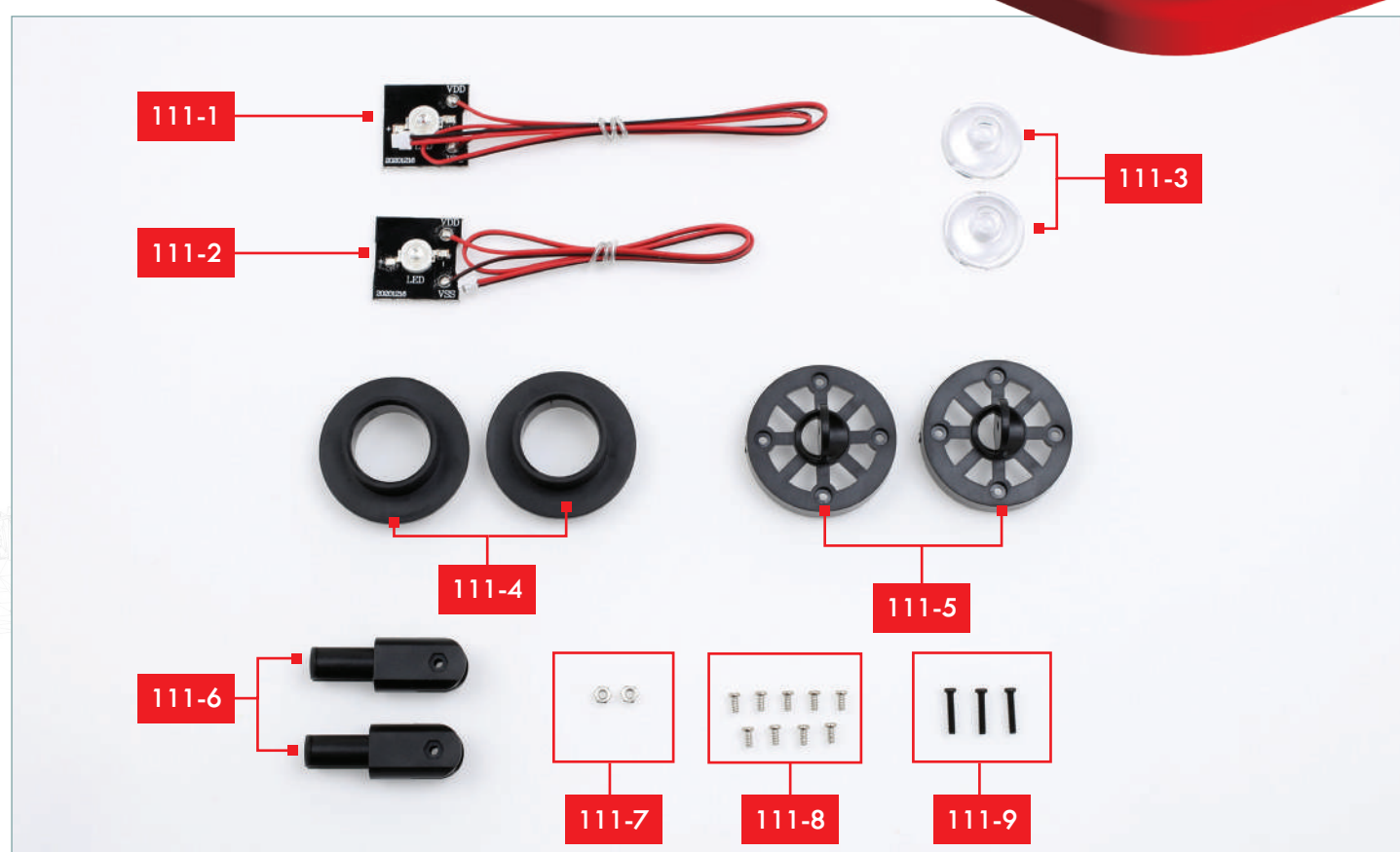
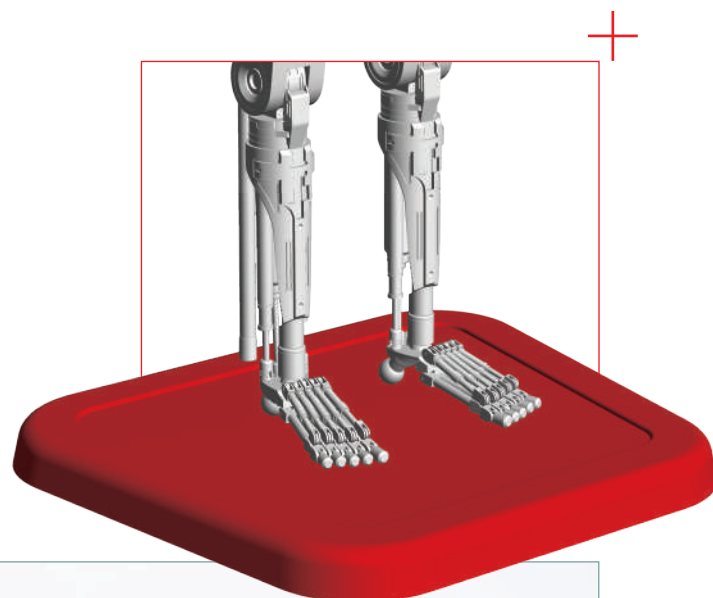
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recyclable products and made from wood grown in sustainable forests.
The logging and manufacturing processes are expected to conform to the
environmental regulations of the country of origin.

Not suitable for children under the age of 14. This product is not a toy and
is not designed for use in play. Keep the parts out of the reach of small
children. Some parts may have sharp edges. Please handle them with care.

STAGE 111: BUILD A PAIR OF LED SEARCHLIGHTS

Check and connect two LEDs to their housings, ready to insert into the base.



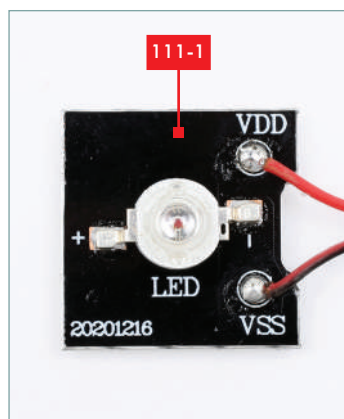
LIST OF PIECES

111-1	LED and cable (red)	111-6	Stand for searchlight
111-2	LED and cable (clear)	111-7	Two M2 nuts
111-3	Two lenses for searchlights	111-8	Nine PB 2 x 4mm screws (1 spare)
111-4	Two LED housing parts	111-9	Three PM 2 x 10mm screws (1 spare)
111-5	Two LED housing parts		

YOU WILL ALSO NEED

A fine cross-head screwdriver

Masking tape (optional)



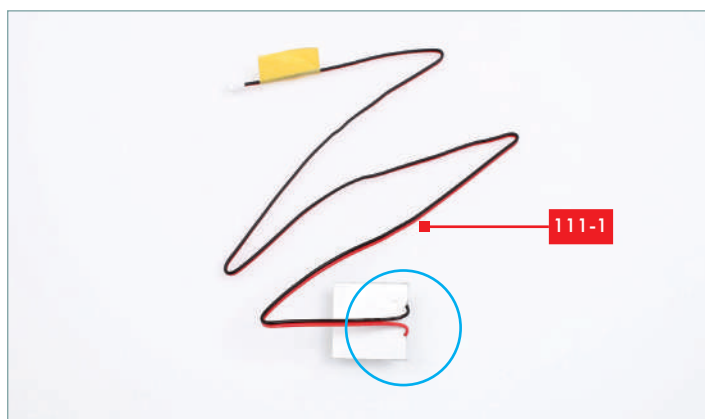
STEP 1

Check the two LEDs: part **111-1** has a red spot at the centre of the LED and a longer cable. LED part **111-2** has a plain clear centre. This will be important when you come to fit the searchlights.

EXPERT TIP!

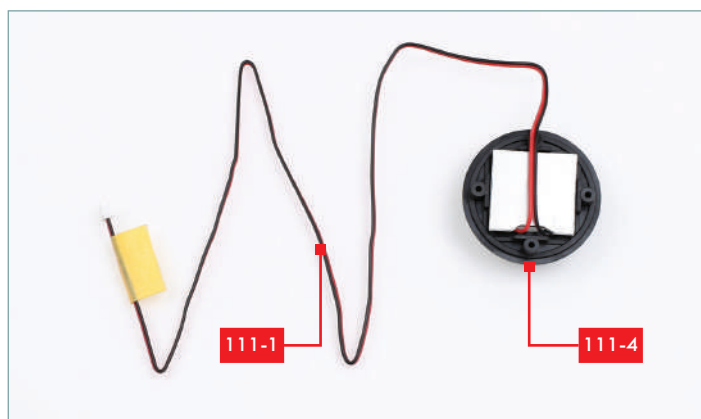


To make it easy to distinguish the red LED **111-1**, wrap a small piece of masking tape around the cable, close to the connector.



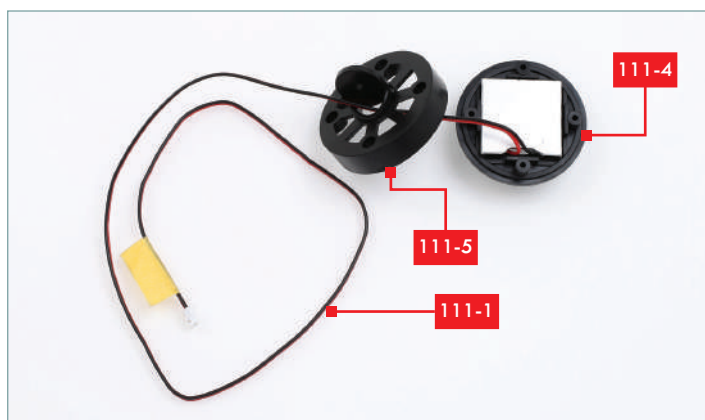
STEP 2

Take the LED **111-1** and bend the cables so that they fit through the recess in the edge of the circuit board (circled) and then bend away from the back of the circuit board.



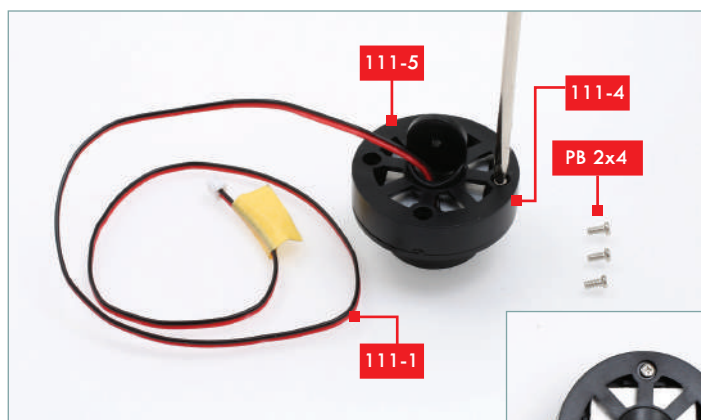
STEP 3

Fit the LED into one of the housing parts **111-4**: note that there are four lips on one side of the housing, which hold the LED circuit board in place.



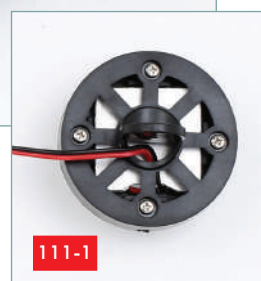
STEP 4

Take one of the housing parts **111-5** and thread the cable of the LED **111-1** through the semicircular hole in the centre of part **111-5**.



STEP 5

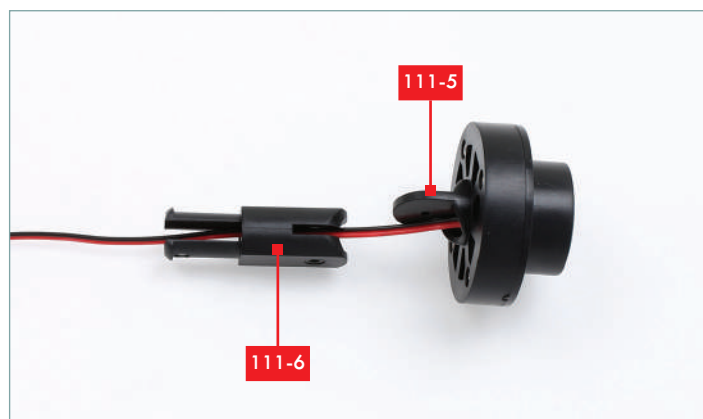
Fit parts **111-5** and **111-4** together, ensuring that the screw holes are aligned. Fix part **111-5** in place using four **PB 2 x 4**mm screws (inset, below).





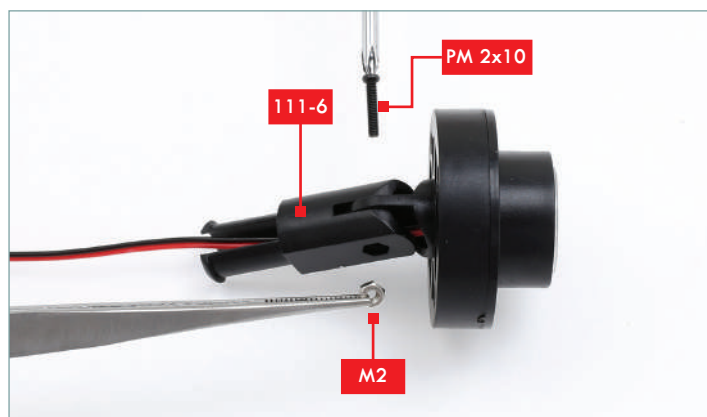
STEP 6

Turn the housing over and fit the lens **111-3** into the opening in the housing part **111-4**, covering the LED **111-1**. The flat side of the lens should face outwards. Push it in place until it clicks.



STEP 7

Thread the cable through the stand **111-6**, ensuring you have it the right way around. The slots in the wider end of the stand fit over the large tab on housing part **111-5**.



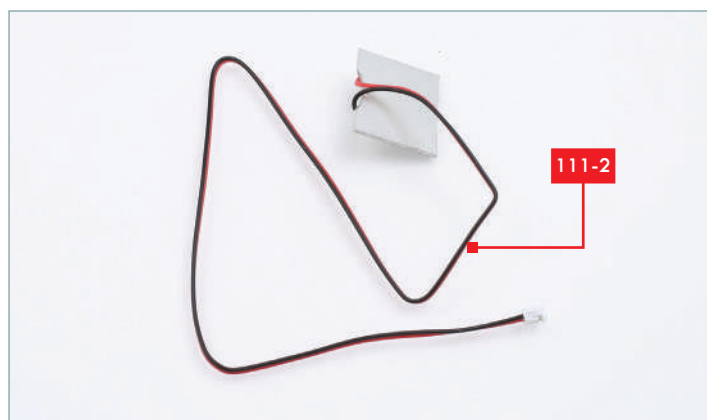
STEP 8

Fit an **M2** nut into the socket on one side of part **111-6**. You will need a **PM 2 x 10mm** screw to fix the parts together.



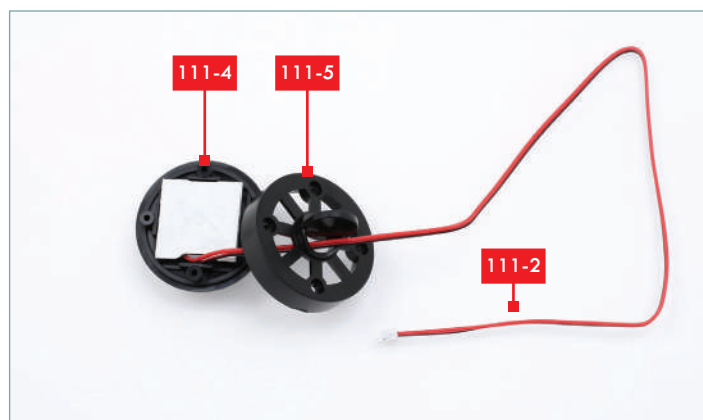
STEP 9

Holding the **M2** nut in place, turn the assembly over. Thread the **PM 2 x 10mm** screw through part **111-6** and the hole in the tab on part **111-5** to the other side of part **111-6**. Tighten the screw into the nut. Do not overtighten, as you need to be able to adjust the angle of the searchlight.



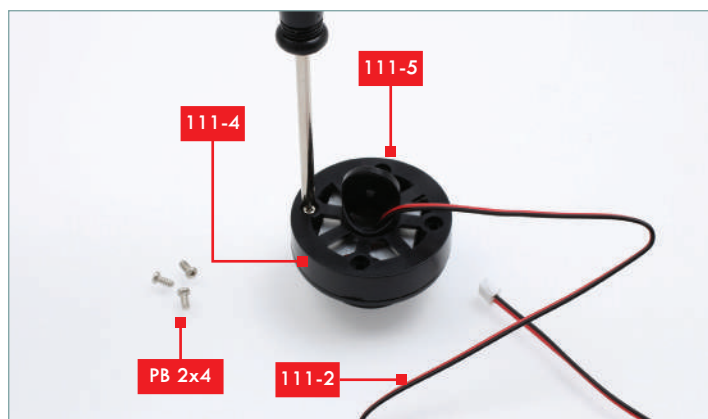
STEP 10

Take the other LED **111-2** and bend the cables so that they fit through the recess in the edge of the circuit board and then bend away from the back of the circuit board.



STEP 11

Fit the LED into the second housing part **111-4**, between the lips that hold it in place. Take the second housing part **111-5** and thread the cable of the LED **111-2** through the semicircular hole in the centre of part **111-5**.



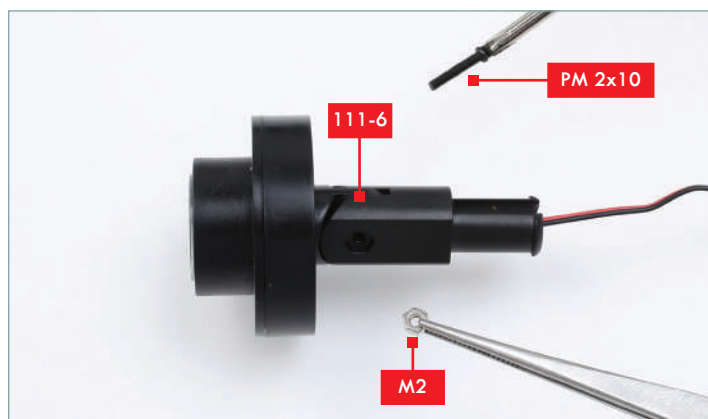
STEP 12

Fit parts **111-5** and **111-4** together, ensuring that the screw holes are aligned. Fix part **111-5** in place using four **PB 2 x 4mm** screws.



STEP 13

Turn the housing over and fit the lens **111-3** into the opening in the housing part **111-4**, covering the LED **111-2**. The flat side of the lens should face outwards. Push it in place until it clicks.



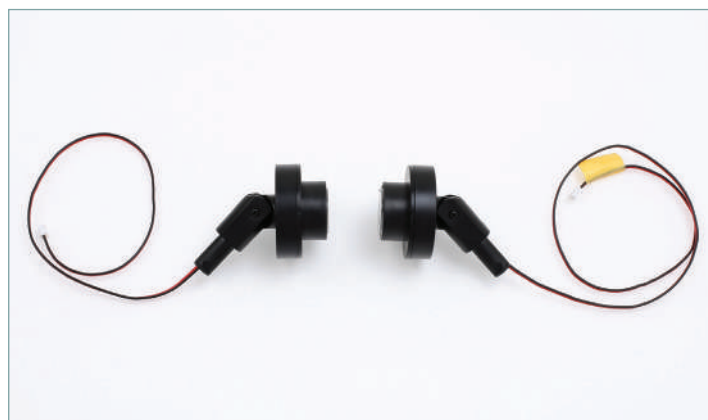
STEP 14

Thread the cable through the stand **111-6**, ensuring you have it the right way around. Fit an **M2** nut into the socket on one side of part **111-6**. You will need a **PM 2 x 10mm** screw to fix the parts together.



STEP 15

Holding the **M2** nut in place, turn the assembly over. Thread the **PM 2 x 10mm** screw through part **111-6** and the hole in the tab on part **111-5** to the other side of part **111-6**. Tighten the screw into the nut. Do not overtighten, as you need to be able to adjust the angle of the searchlight.



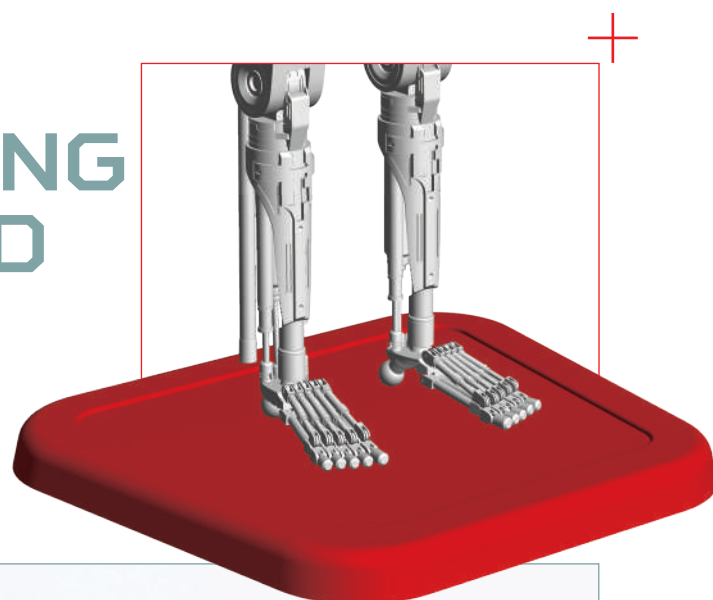
STAGE COMPLETE!

Two searchlights, one red and one clear, have been assembled, ready to fit to the next base sections.



STAGE 112: CONTINUE BUILDING THE BASE AND ADD DETAILING

This stage, you'll be joining another base section, along with jawbone, vertebrae and rock details.



LIST OF PIECES

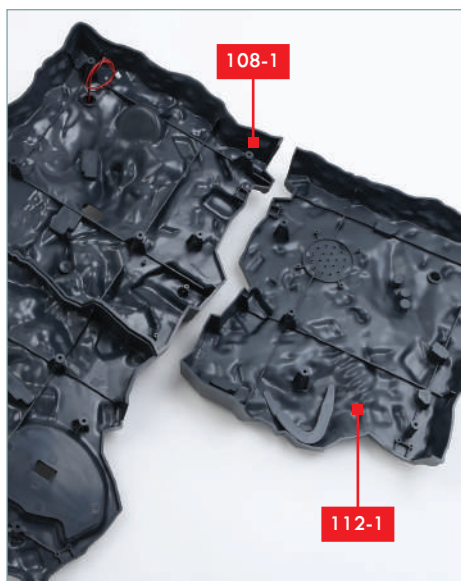
112-1	Third base section	112-4	Vertebrae
112-2	Rock detail	112-5	Connector
112-3	Jawbone	112-6	Five PWB 2 x 4mm screws (1 spare)

YOU WILL ALSO NEED

A fine cross-head screwdriver

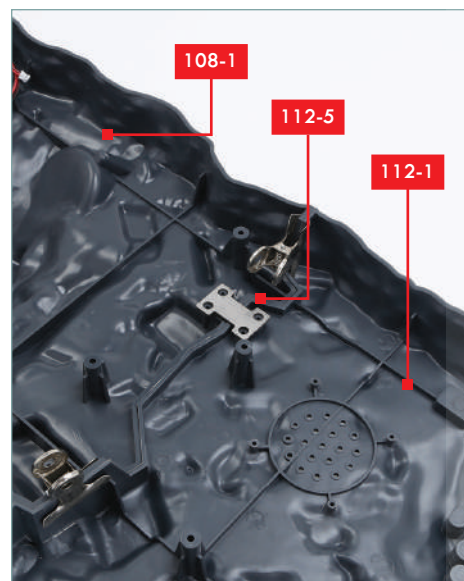
Superglue and a cocktail stick

The LED searchlight assembly from stage 111



EXPERT TIP!

It may be helpful to use bulldog clips or similar to hold the parts together while you fix them.

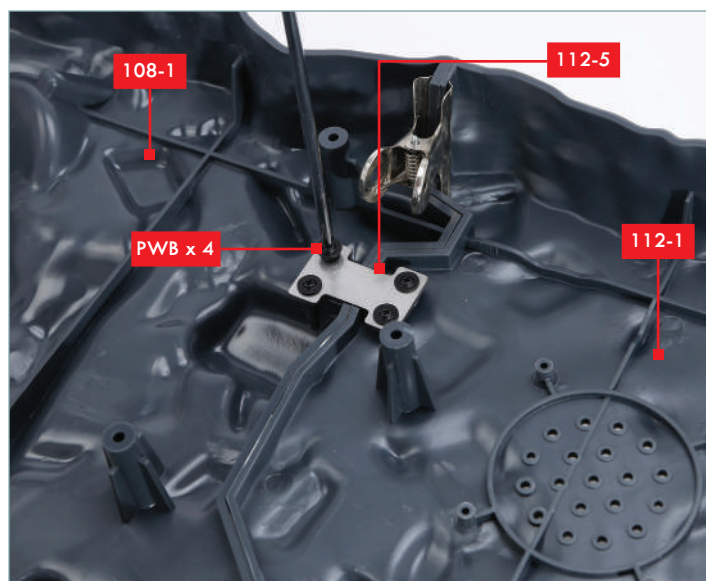


STEP 1

Remove the skull **109-2** from the base assembly. Carefully turn the base assembly upside-down and use sections of packaging (or similar) to support it so that the parts that have been fixed in place are not damaged. Position base section **111-2** next to base section **108-1** so that the edges butt together.

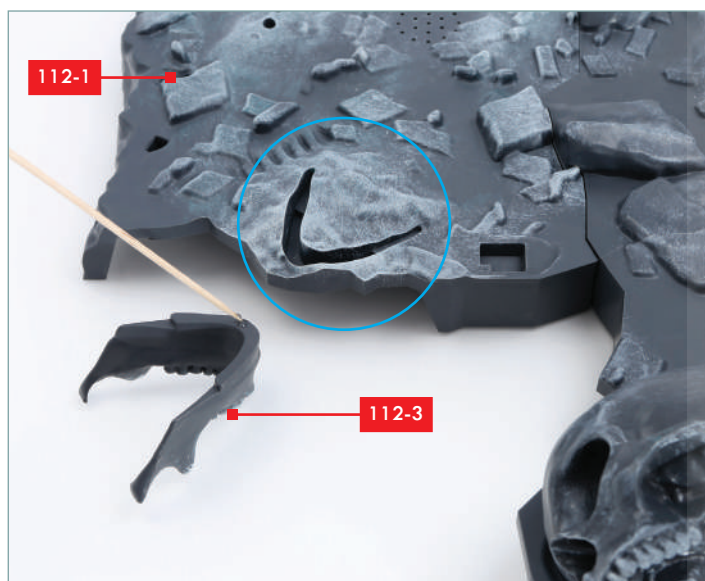
STEP 2

Position the connector **112-5** over the raised screw sockets on parts **108-1** and **112-1**.



STEP 3

Fix the connector **112-5** in place using four **PWB 2 x 4mm** screws.



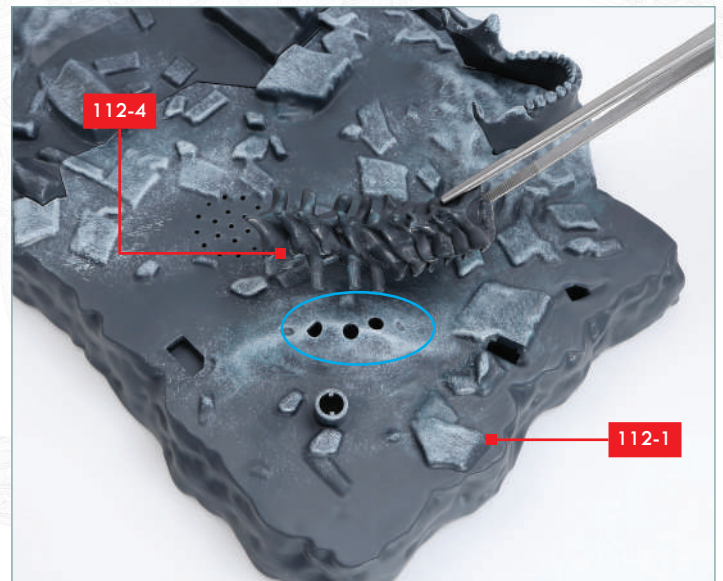
STEP 4

Turn the base assembly the right way up. You can replace the skull **109-2**. Identify the recess for the jawbone (circled). Check how the jawbone **112-3** fits in the recess. Using a cocktail stick, apply superglue to the shaped part of the jawbone that fits in the recess.



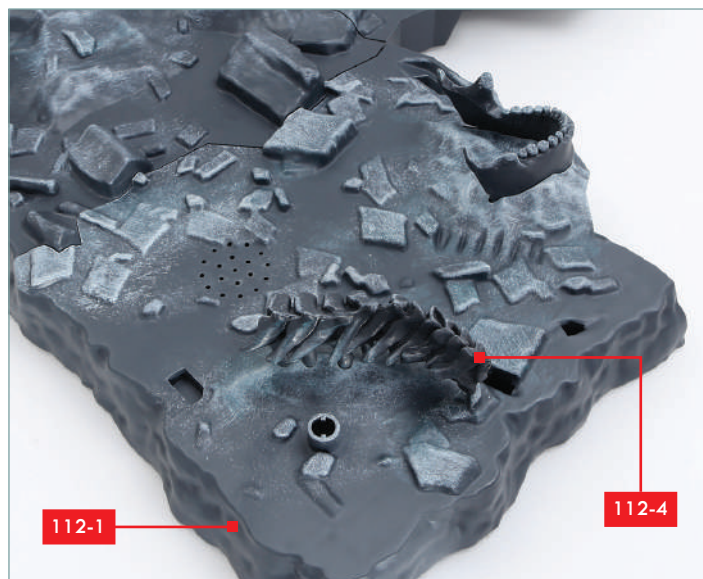
STEP 5

Fix the jawbone in place, as shown.



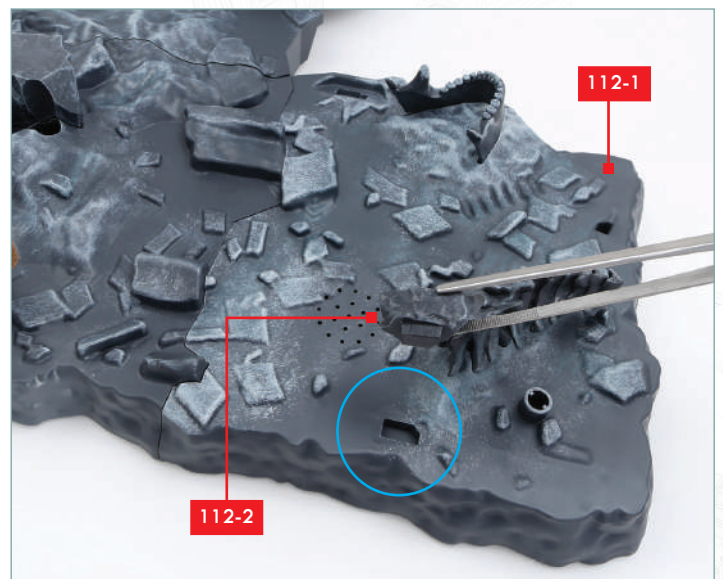
STEP 6

Identify the three holes in the base **112-1** where the vertebrae **112-4** fit (circled). Check how the pegs on the vertebrae fit into the recesses. Apply glue to the pegs on the vertebrae.



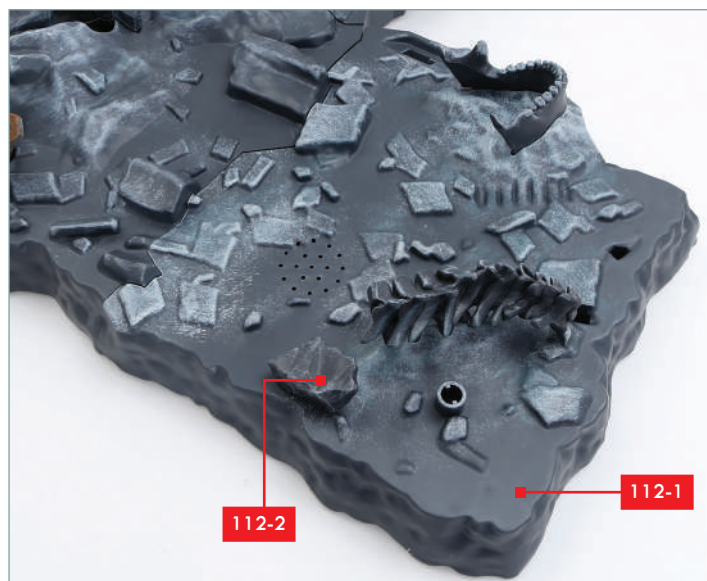
STEP 7

Fix the vertebrae **112-4** in place, as shown.



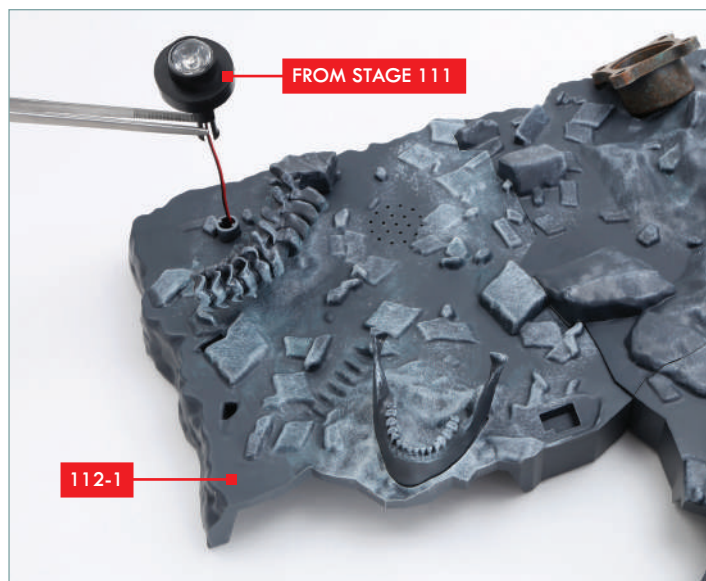
STEP 8

Identify the recess for the rock **112-2** (circled). Check how the rock fits, then apply glue to the shaped part of the rock that fits in the recess.



STEP 9

Glue the rock **112-2** in place on base **112-1**, as shown.



STEP 10

Take the LED searchlight assembly from stage 111. Thread the end of the cable through the hole in base section **112-1**.



STEP 11

Push the stand of the LED into the hole in the base **112-1**: ribs on the inside of the hole fit into slots in the stand. Once in place, the searchlight can be angled and twisted slightly.

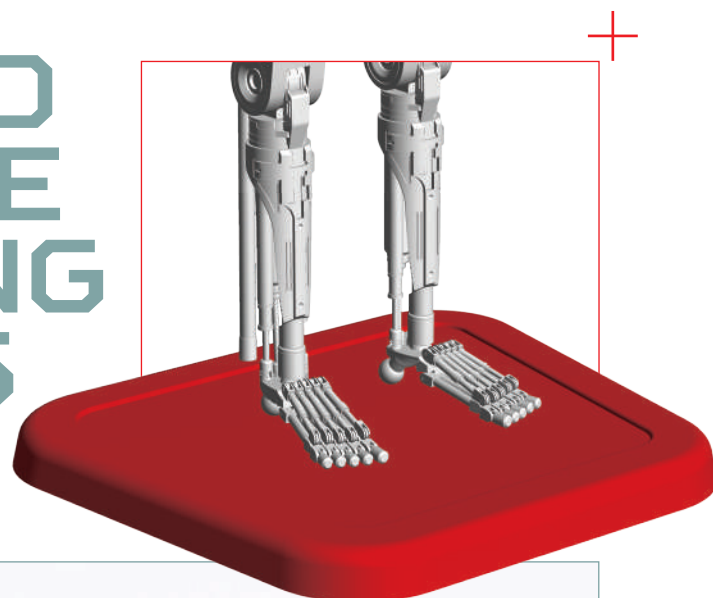


STAGE COMPLETE!

The third section of the base has been fixed in place and details have been added.

STAGE 113: ADD ANOTHER BASE SECTION ALONG WITH DETAILS

This stage, you'll be attaching the fourth base section with additional rusted metal parts and a rock.



LIST OF PIECES

113-1	Fourth base section	113-5	Mechanical detail
113-2	Rock detail	113-6	Two connectors
113-3	Mechanical detail	113-7	Nine PWB 2 x 4mm screws (1 spare)
113-4	Two springs		

YOU WILL ALSO NEED

A fine cross-head screwdriver

Superglue and a cocktail stick

The base section assembly from stage 112

The red searchlight (with tape) from stage 111



STEP 1

Check the fit of the base section **113-1** in the corner, between parts **110-1** and **112-1**. Remove the skull **109-2** and carefully turn the base over, taking care not to damage any of the details.



STEP 2

Position the connector **113-6** over the raised screw sockets on parts **110-1** and **113-1**. You may find it helpful to hold the base sections in place using bulldog clips or similar.



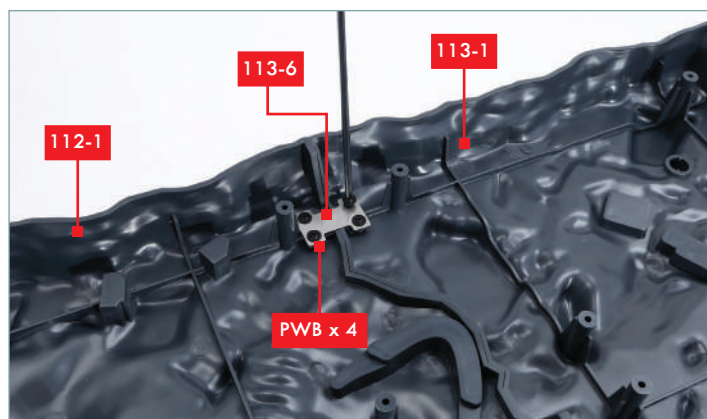
STEP 3

Fix the connector **113-6** in place using four **PWB 2 x 4mm** screws.



STEP 4

Fit the second connector **113-6** in place, over the raised screw sockets in parts **113-1** and **112-1**.



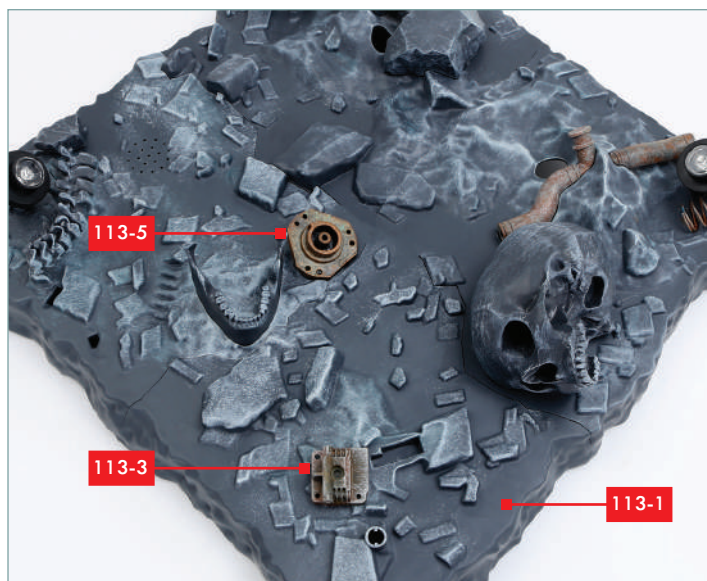
STEP 5

Fix the connector in place using four **PWB 2 x 4mm** screws.



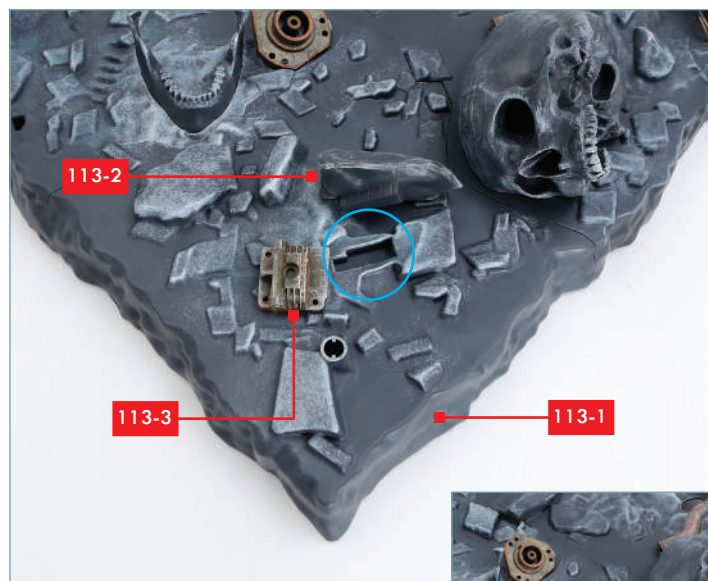
STEP 6

Carefully turn the base the right way up and replace the skull **109-02**. Identify the recesses on parts **113-1** and **112-1** where the mechanical details **113-3** and **113-5** fit (circled). Check the fit of the mechanical details and apply superglue to the shaped parts of the mechanical details that fit in the recesses.



STEP 7

Fix the mechanical details **113-3** and **113-5** in place.



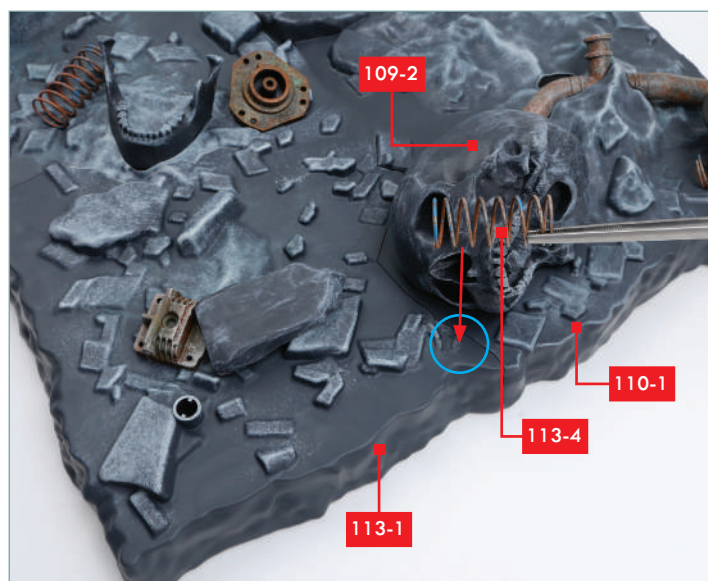
STEP 8

Identify the recess in the base **113-1** where the rock detail **113-2** fits (circled). Check how the rock detail fits, slightly on top of part **113-3**. Apply glue to the shaped part of the rock that fits in the recess. Fix the rock detail in place (inset).



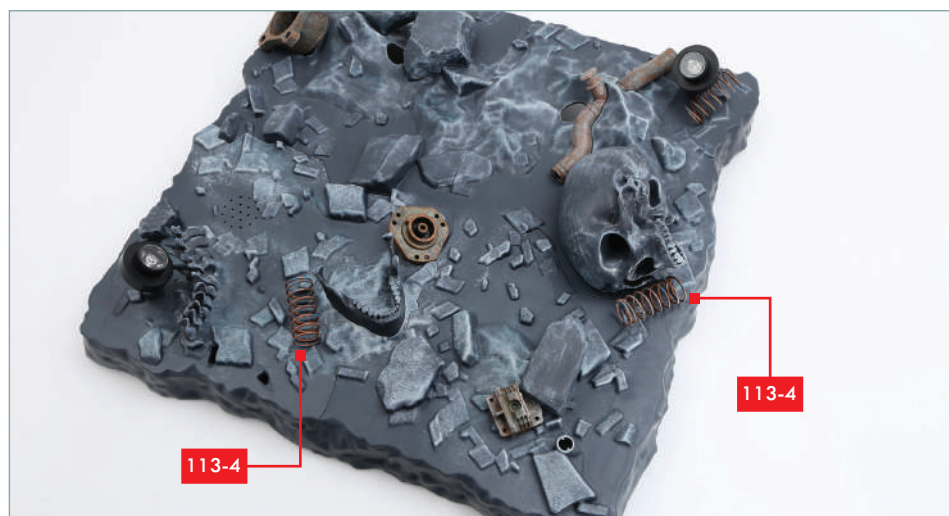
STEP 9

Identify the recess (circled) for the first spring **113-4** on base panel **112-1**, near the jawbone **112-3**. Fix it in place, using a little superglue. The inset shows the spring in place.



STEP 10

The second spring **113-4** fits across the join between base sections **113-1** and **110-1**, beside the skull **109-2**. Use a little glue to hold the spring in place.



STEP 11

This shows the two springs **113-4** in place.



STEP 12

Take the LED with the red light (with tape near the connector) from stage 111. Thread the connector and cable through the hole in base section **113-1**. Push the stand of the searchlight into the hole: ribs on the inside of the hole fit into slots in the stand. Once in place, the searchlight can be angled and twisted slightly.



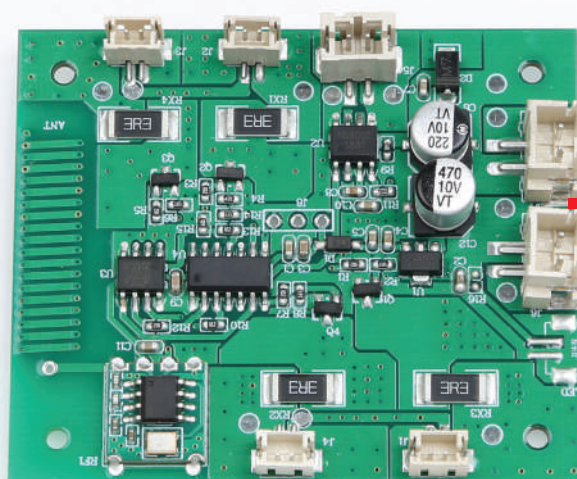
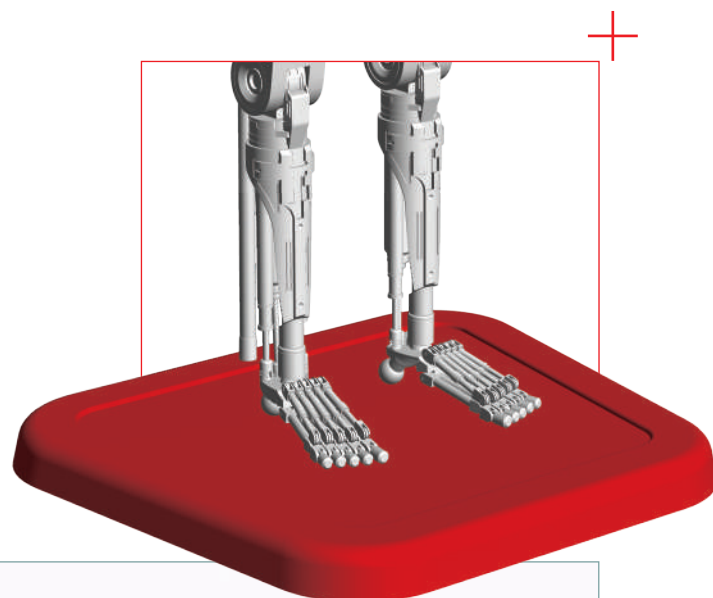
STAGE COMPLETE!

The fourth section of the base has been fixed in place and details have been added.



STAGE 114: ATTACH A CIRCUIT BOARD AND PLUG IN THE SEARCHLIGHTS

Work continues on the base as you add the main circuit board which will control the searchlights and sound effects.



114-1

114-2

LIST OF PIECES

- 114-1 Main circuit board
- 114-2 Five PB 2 x 4mm screws (1 spare)

YOU WILL ALSO NEED

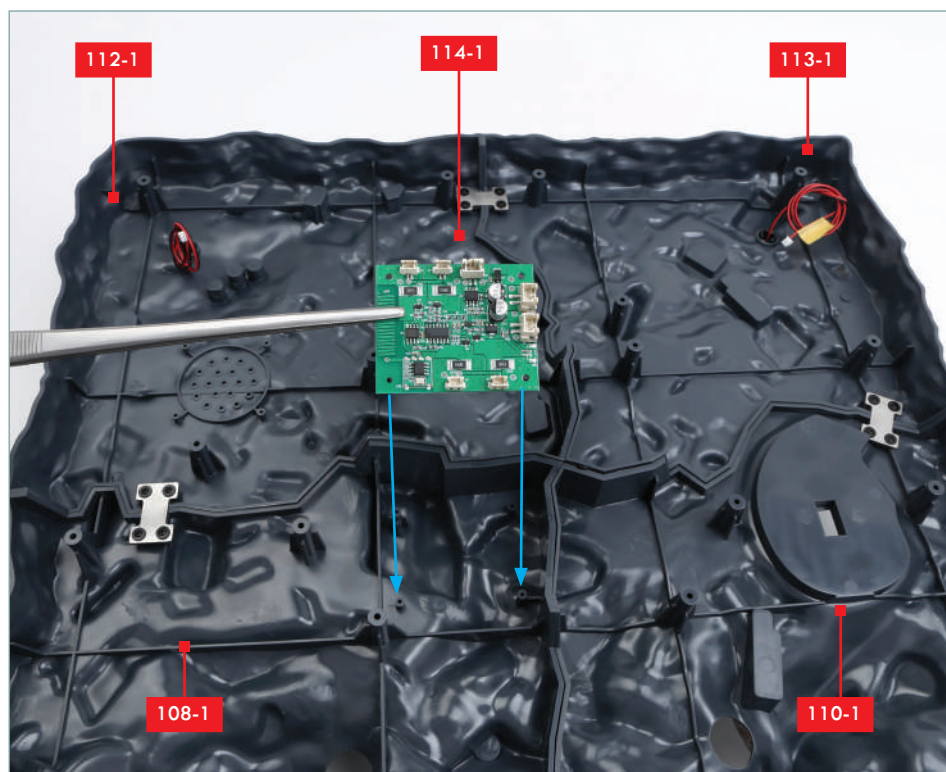
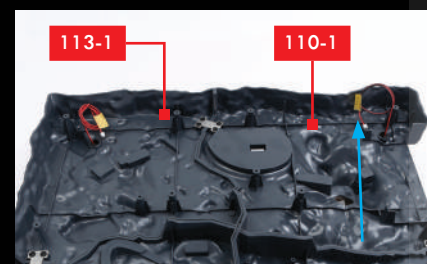
A fine cross-head screwdriver
The base assembly from stage 113

STEP 1

Remove the skull **109-2** from the base sections assembly. Carefully arrange the base assembly upside down on your work surface. Use sections of packaging or a soft surface like a towel to support the base sections without damaging the details.

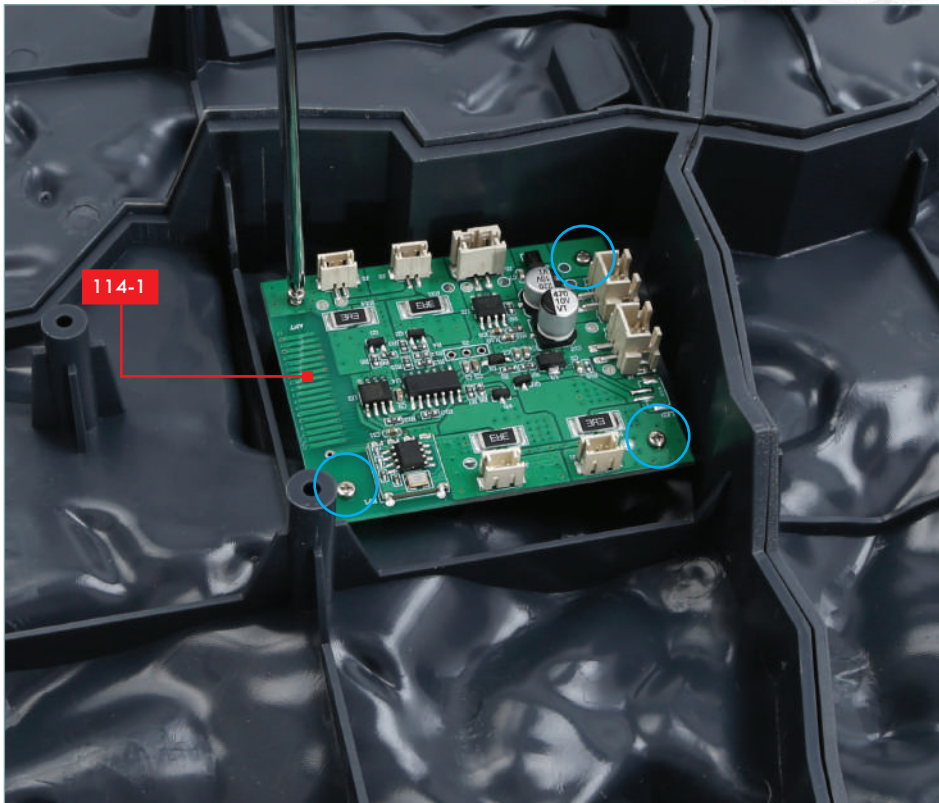
EXPERT TIP!

Identify the searchlight fitted to base section **110-1** (the section with the skull). This searchlight is red, like the one that is attached to section **113-1**. It may help to mark the cable with a piece of tape, close to the connector (arrow).



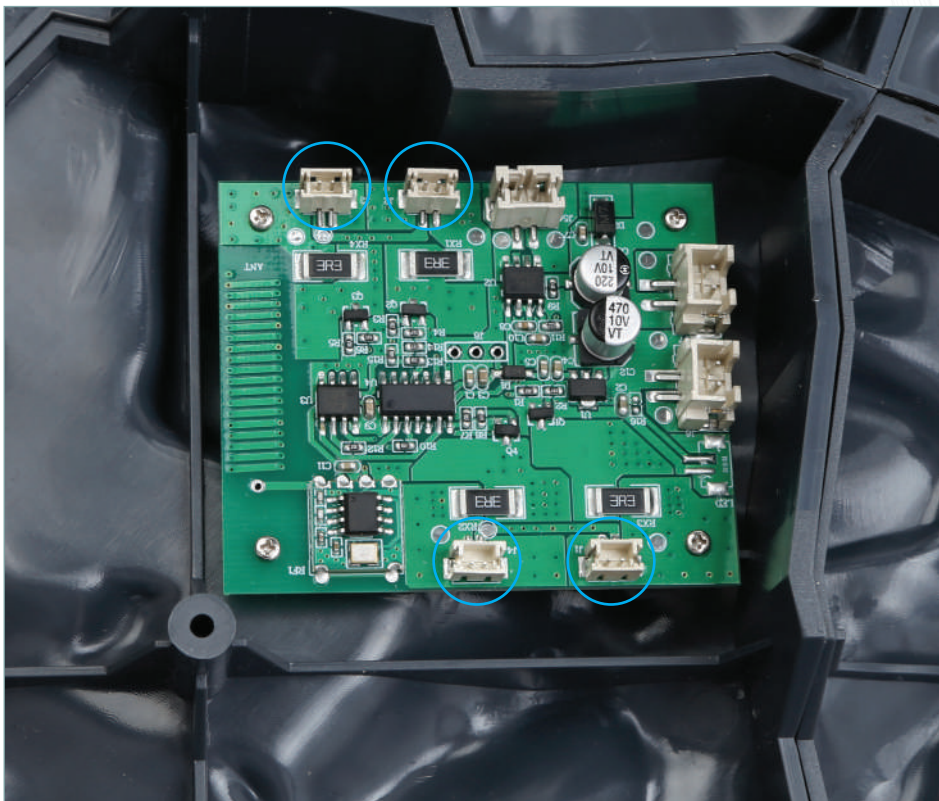
STEP 2

Check the fit of the circuit board **114-1** on base section **108-1** near the centre of the base assembly.



STEP 3

Making sure the base is well supported from below, fix the circuit board **114-1** in place using four **PB** 2 x 4mm screws, one in each corner (circled).



STEP 4

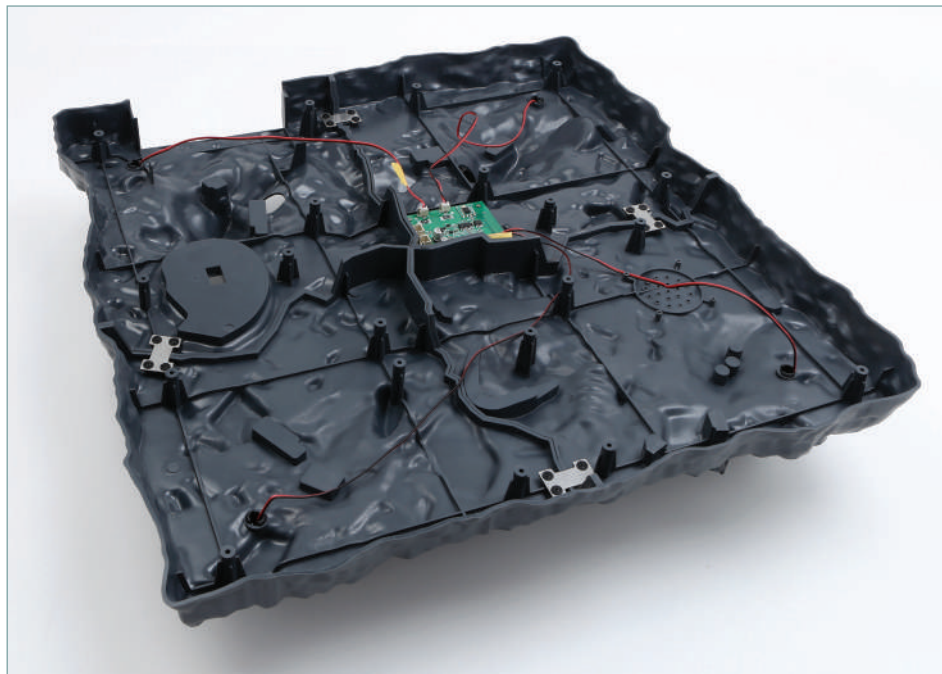
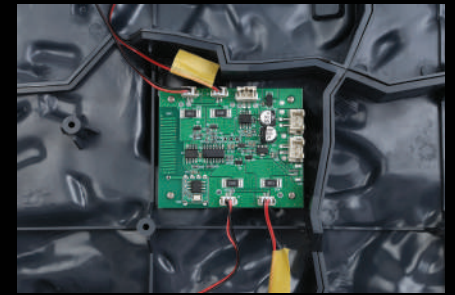
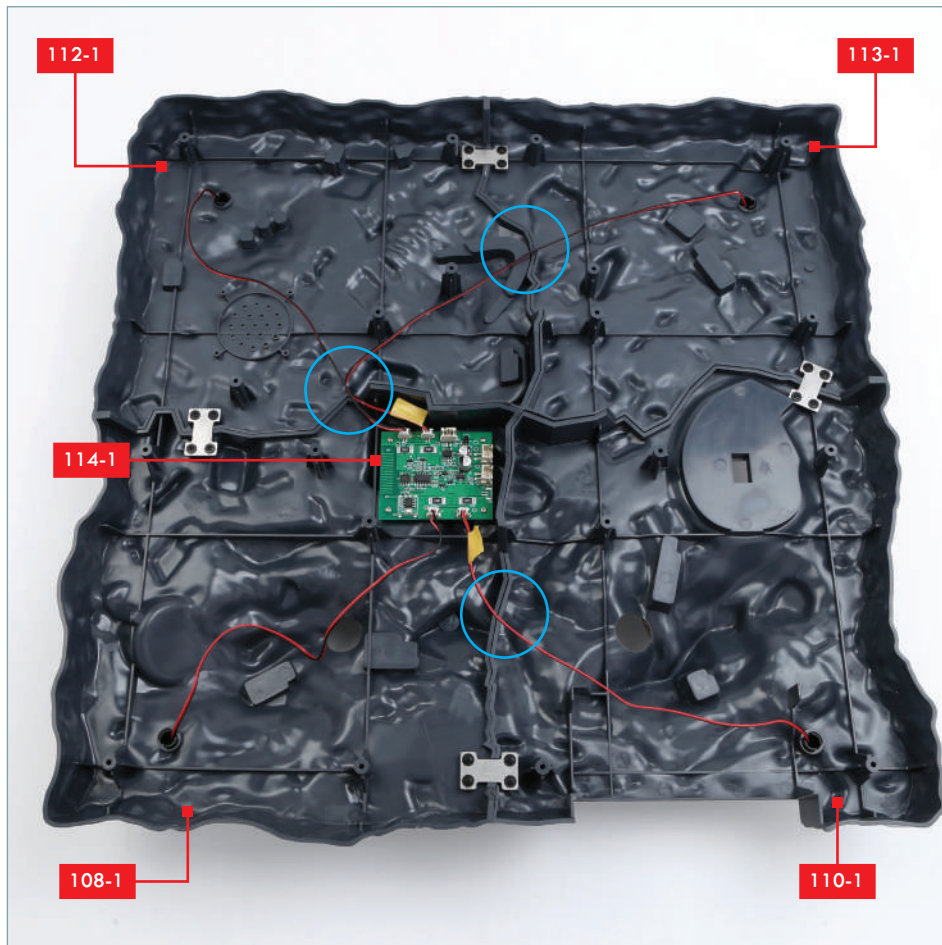
Identify the four small sockets in the circuit board **114-1** (circled) where the searchlights will be plugged in.

STEP 5

Plug the four searchlight cable connectors in to the four sockets in the circuit board. Ensure that the cables cross the joins between the base sections at suitable points (circled), so that they do not prevent the base sections from sitting flat on the work surface when the base assembly is turned the right way up. It may help to use a little masking tape to hold the cables in place.

EXPERT TIP!

Ensure the base sections are properly supported when you plug in the connectors. The two marked cables are for the red searchlights. The two unmarked cables are for the clear searchlights, which will be blue when illuminated.

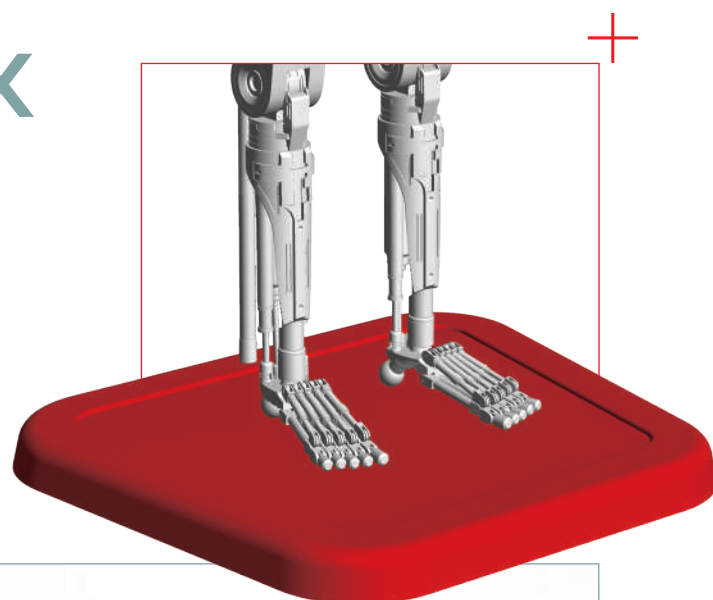


STAGE COMPLETE!

The circuit board has been fitted to the base, and the searchlights have been plugged in. You can replace the skull when you turn the assembly the right way up.

STAGE 115: AFFIX THE SPEAKER AND SWITCH TO THE BASE

Connect the hidden wiring beneath the base and attach the switch underneath the skull.



LIST OF PIECES

115-1	Switch with cable	115-5	Detail for base assembly
115-2	Speaker with cable	115-6	Backing for base assembly
115-3	Fixing ring for speaker	115-7	Five PB 3 x 6mm screws (1 spare)
115-4	Detail for base assembly	115-8	Five PB 2 x 4mm screws (1 spare)

YOU WILL ALSO NEED

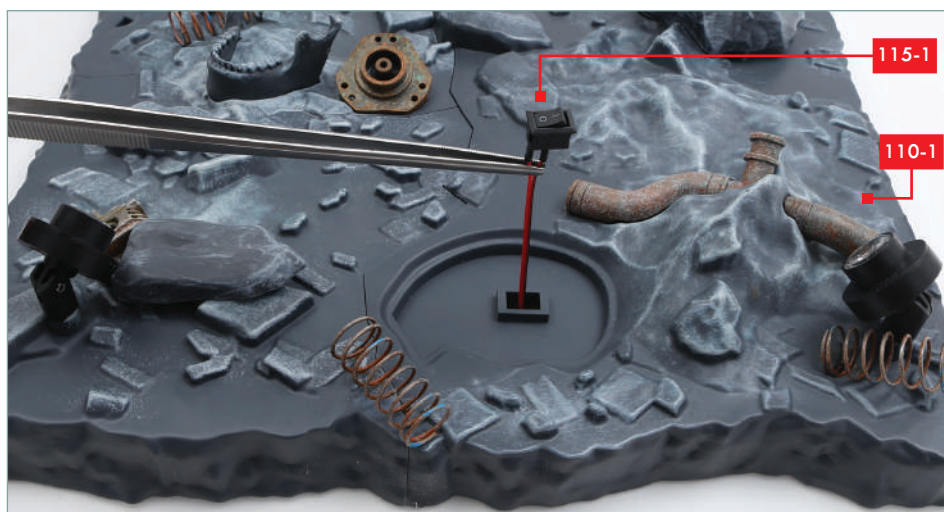
A fine cross-head screwdriver

The base assembly from stage 114



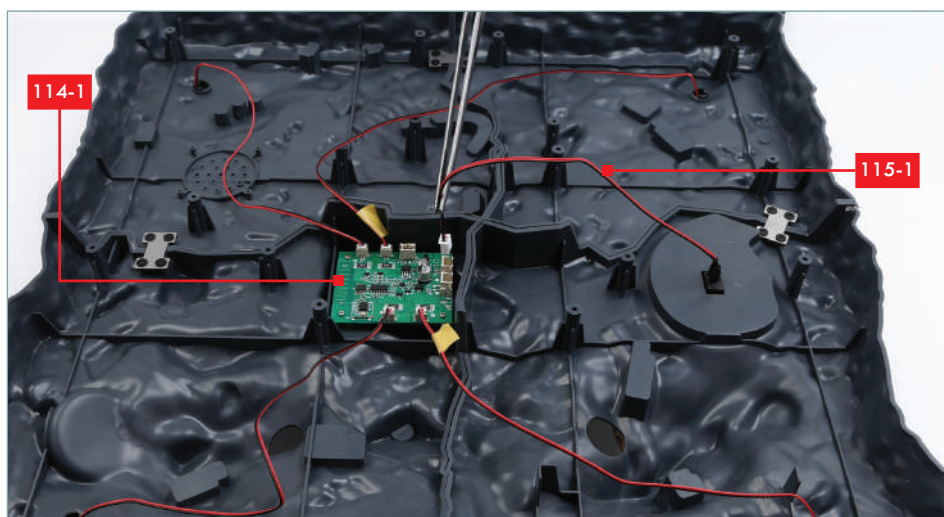
STEP 1

Remove the skull **109-2** from the base sections assembly.



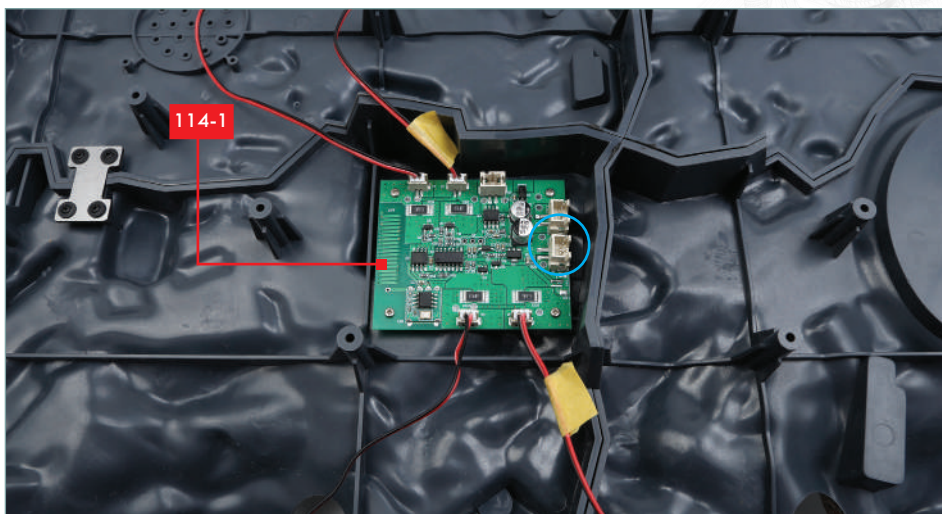
STEP 2

Identify the rectangular hole in the centre of the recess where the skull was sitting. Thread the cable from the switch **115-1** through the hole. Push the switch into the hole until it clicks in place (inset, below).



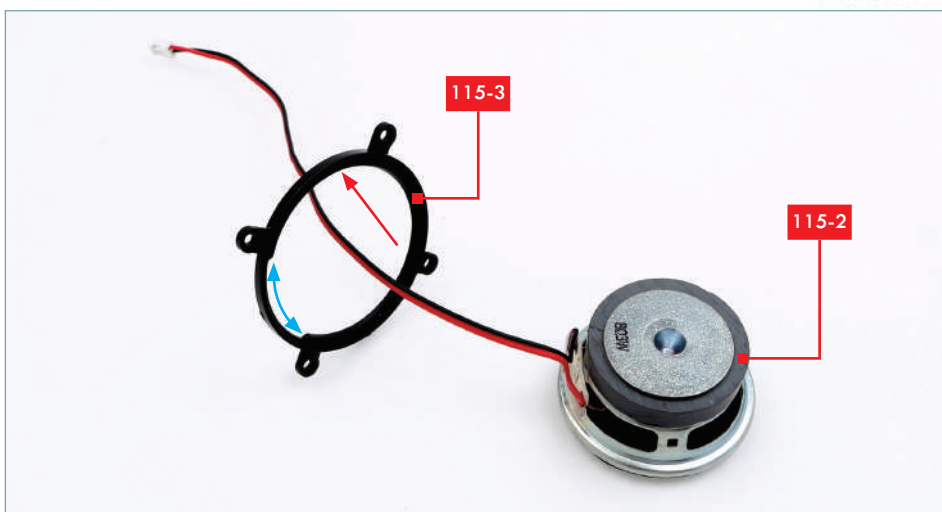
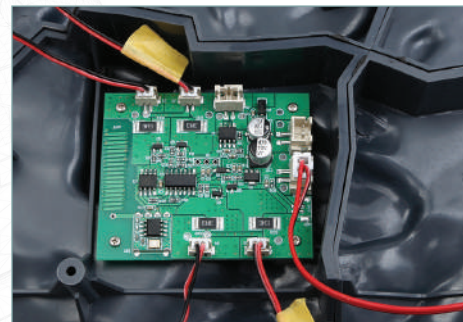
STEP 3

Carefully turn the base assembly over and make sure that it is supported to avoid any damage. Take the cable **115-1** across the assembly to the circuit board **114-1**.



STEP 4

Identify the socket in the circuit board **114-1** (circled) where the switch plugs in. Fit the connector into the socket (inset, below).



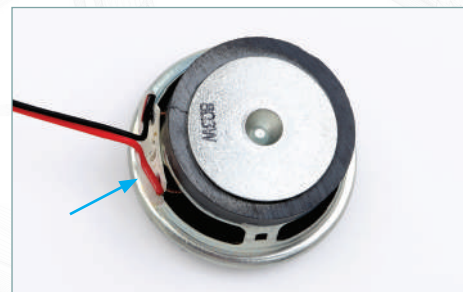
STEP 5

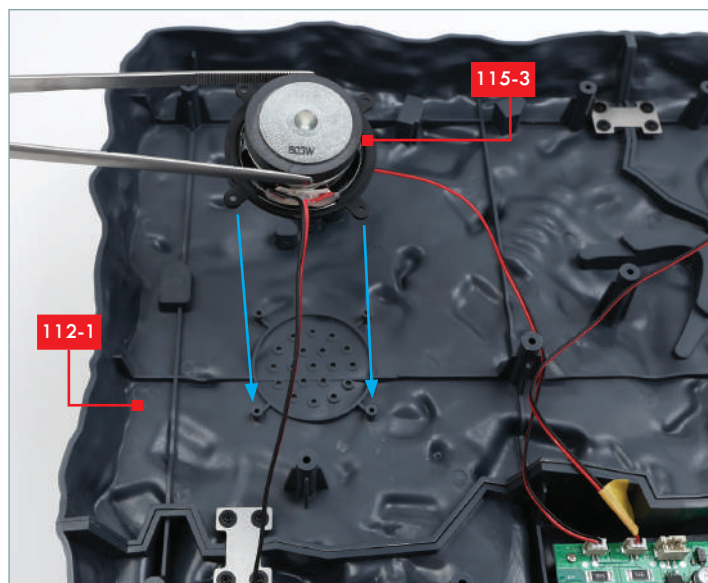
Take the speaker fixing ring **115-3**. Note that one side of the ring has a slight recess (red arrow), and one quadrant has a broad notch (indicated in blue). Thread the speaker cable **115-2** through the ring so that the recessed side of the ring is facing towards the speaker.



STEP 6

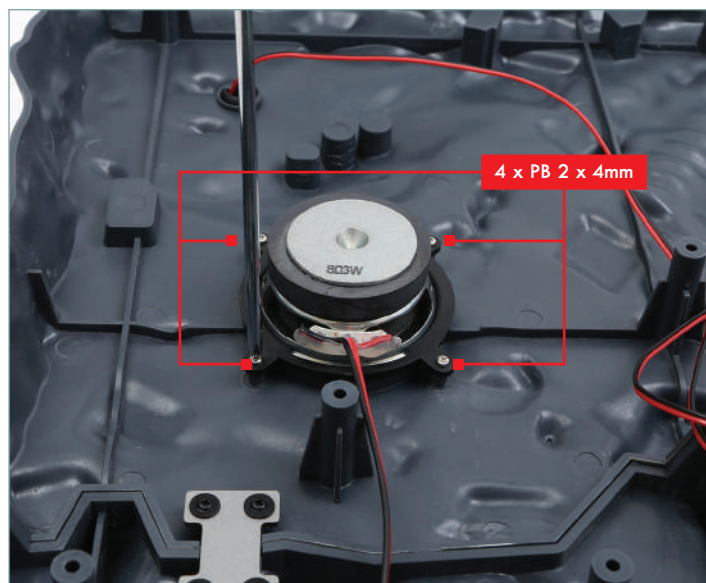
Fit the fixing ring over the speaker, taking care not to damage the cable connection. The broad notch on the ring fits between the cable connection and the rim of the speaker (inset, below).





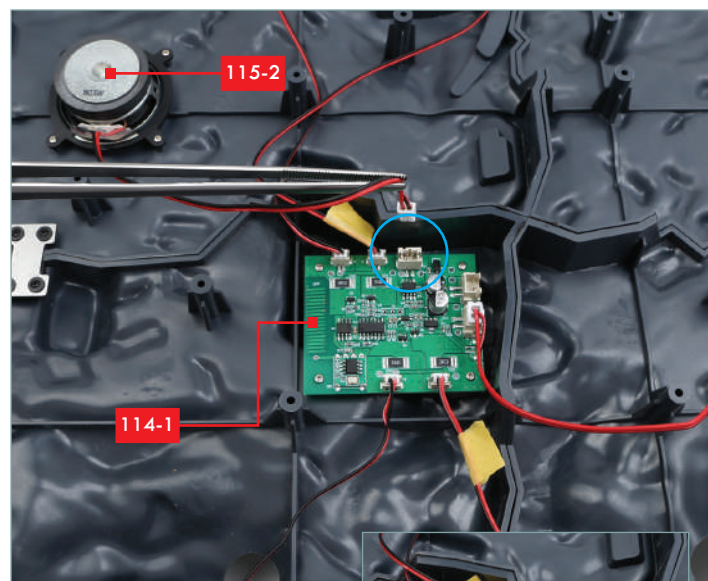
STEP 7

Identify the fixing points for the fixing ring on the underside of the base assembly, base section **112-1**. Make sure you position it so that the cable can reach to the circuit board.



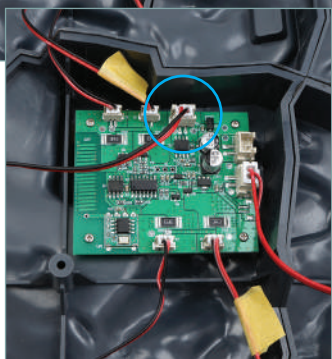
STEP 8

Fix in place using four **PB 2 x 4mm** screws.



STEP 9

On the circuit board **114-1**, identify the socket (circled) for the speaker cable **115-2** and plug it in (inset). Arrange the switch and speaker cables so that they run through recesses in the edges of the base panel sections.



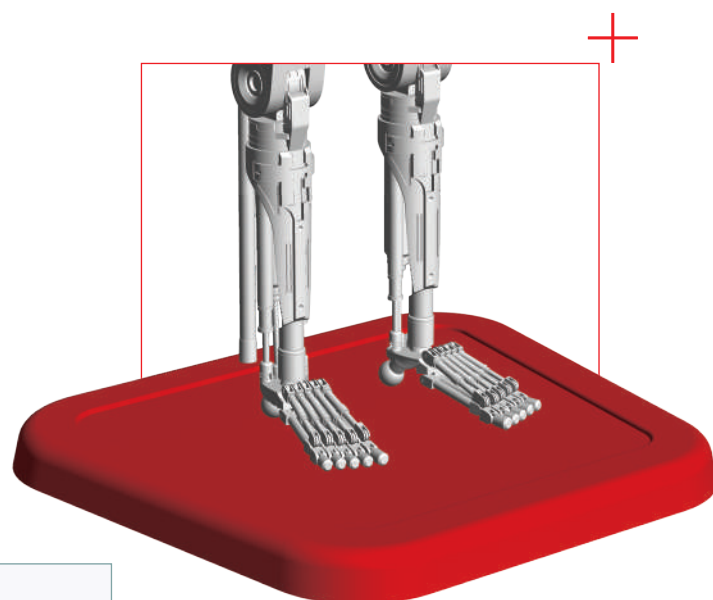
STAGE COMPLETE!

A switch and speaker have been fitted to the base assembly. The skull will be refitted later. Parts **115-4**, **115-5**, **115-6** and the **PB 3 x 6mm** screws will be fitted in the next stage.

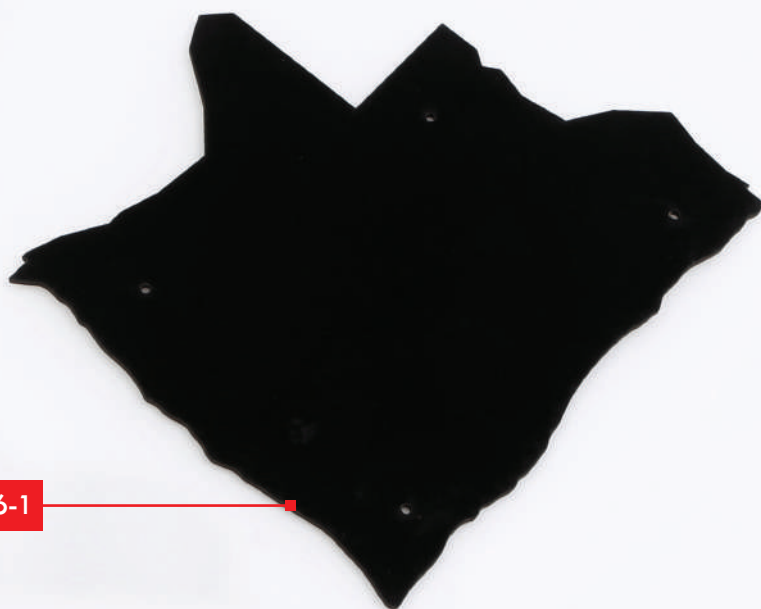


STAGE 116: FIT ADDITIONAL BASE DETAILS, AND ATTACH TWO BACKING PANELS

Glue extra detailing to the base, and reinforce and protect it with the first two backing panels.



116-1



116-3



116-2

LIST OF PIECES

- | | |
|-------|--|
| 116-1 | Second backing panel for base assembly |
| 116-2 | Circuit board cover |
| 116-3 | Five PB 3 x 6mm screws (1 spare) |

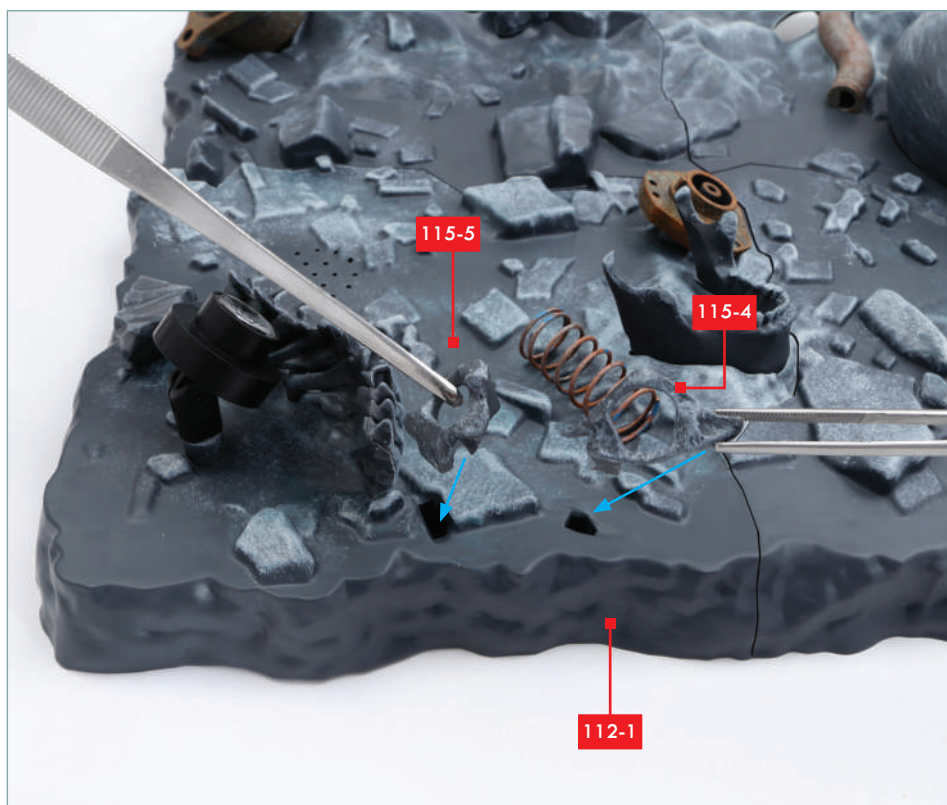
YOU WILL ALSO NEED

A fine cross-head screwdriver

Superglue and a cocktail stick

The base assembly from stage 115

Unused parts from stage 115 (115-4 and 115-5 details for base assembly, 115-6 backing, plus screws)



STEP 1

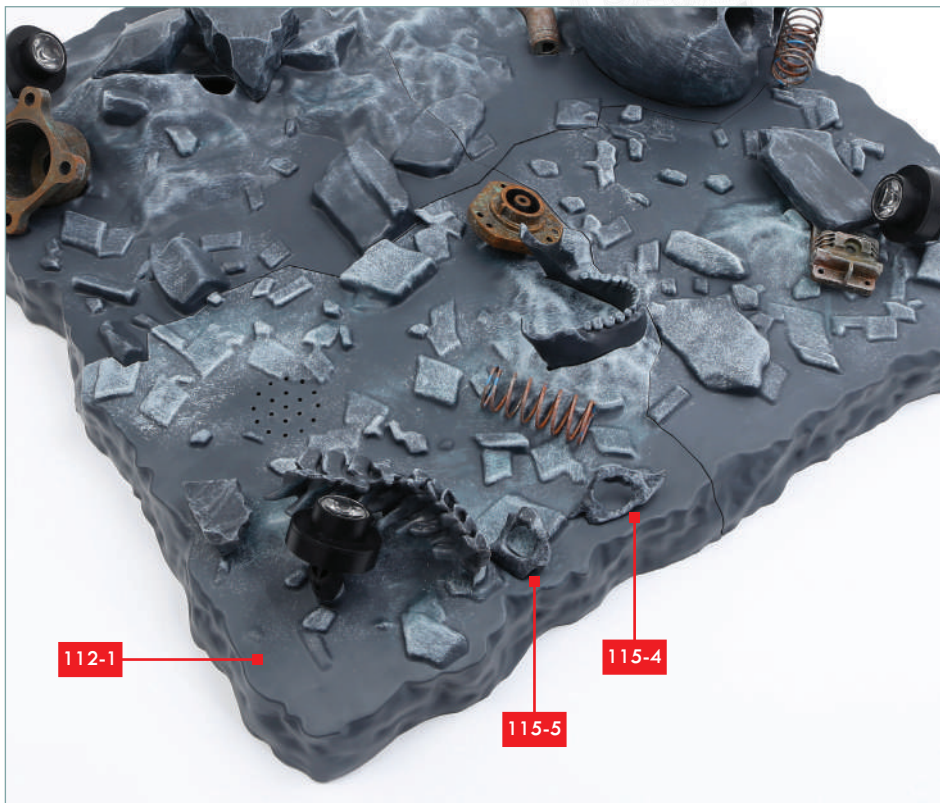
Identify the fixing recesses for details **115-5** and **115-4** on base section **112-1** and check the fit.



STEP 2

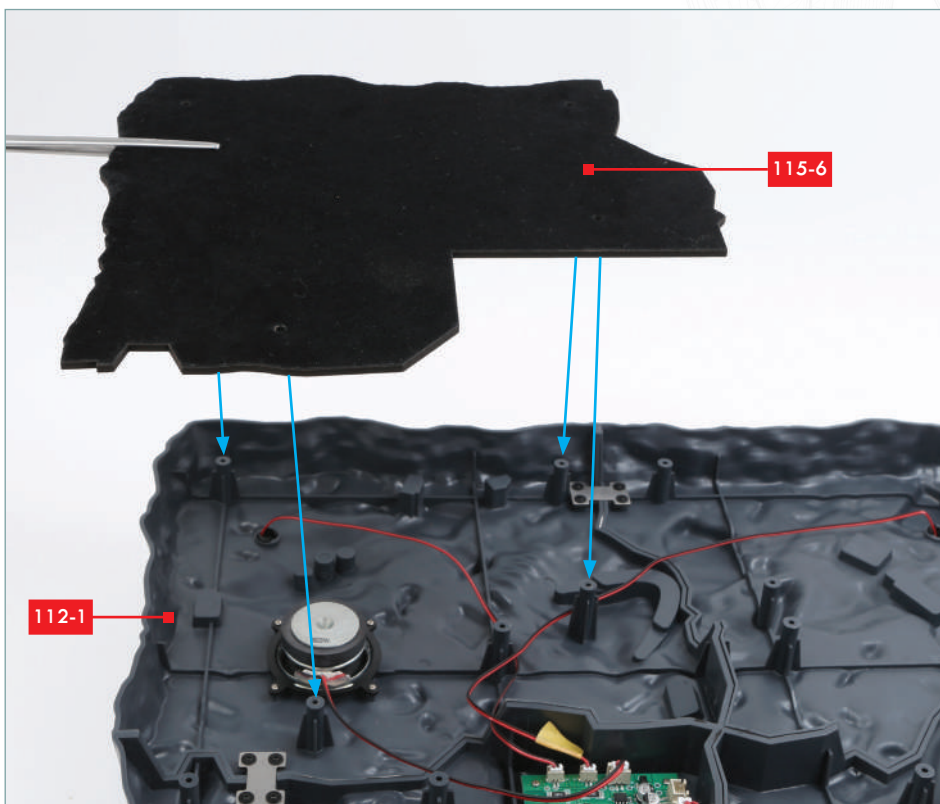
Apply superglue to the large tab on part **115-5** (inset, below) and fix in place on base section **112-1**.





STEP 3

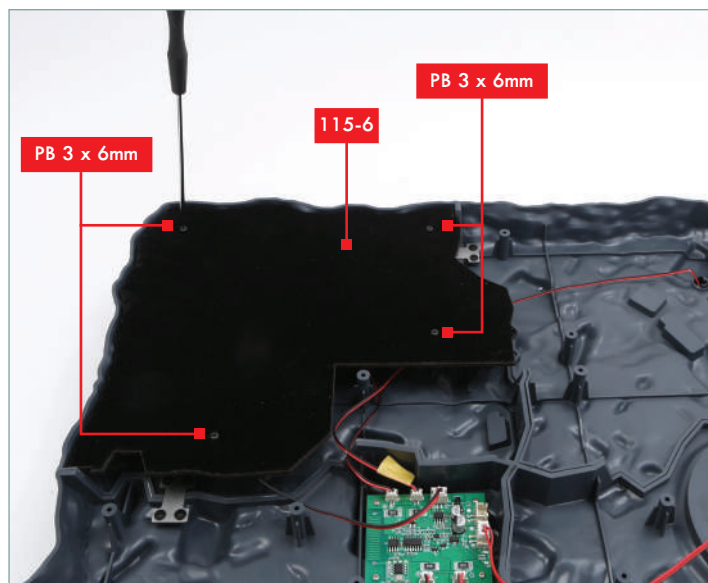
Apply superglue to the large tab on part **115-4** (inset, below) and fix in place on the base section, next to part **115-5**. Allow the glue to dry.



STEP 4

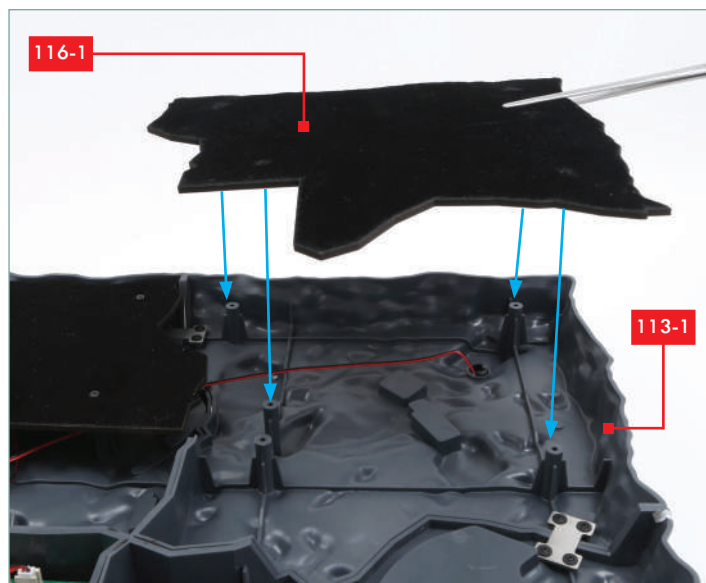
Carefully turn the base assembly over and check that it is well supported, without damaging the searchlights and details. Take the first backing panel, **115-6**, and check how it fits on the underside of base panel **112-1** so that screw holes are aligned.





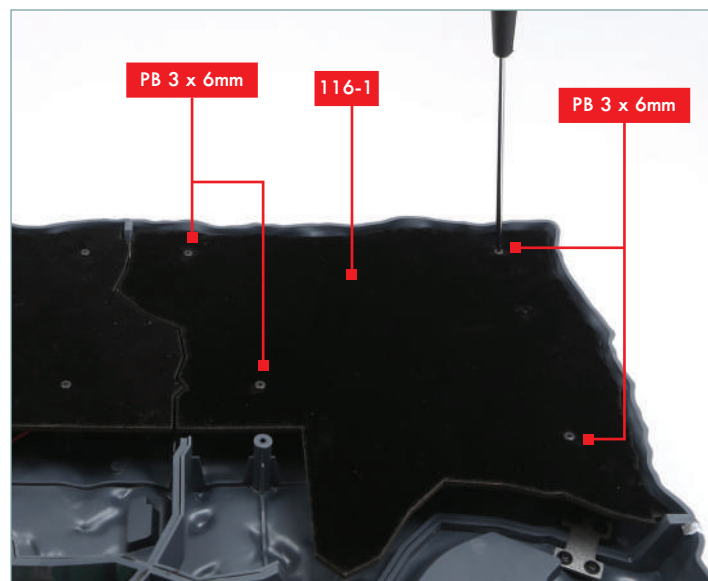
STEP 5

Fix the backing panel **115-6** in place with four PB 3 x 6mm screws.



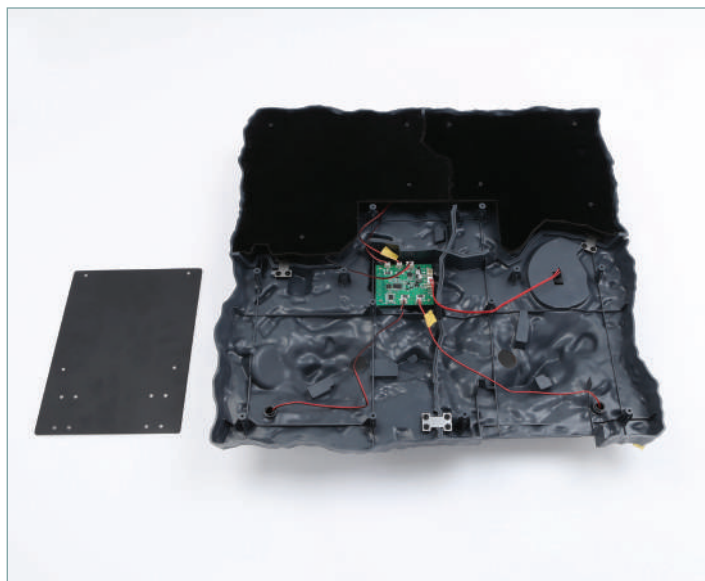
STEP 6

Fit the backing panel **116-1** in place on base section **113-1** so that screw holes are aligned.



STEP 7

Fix the backing panel **116-1** in place with four PB 3 x 6mm screws.

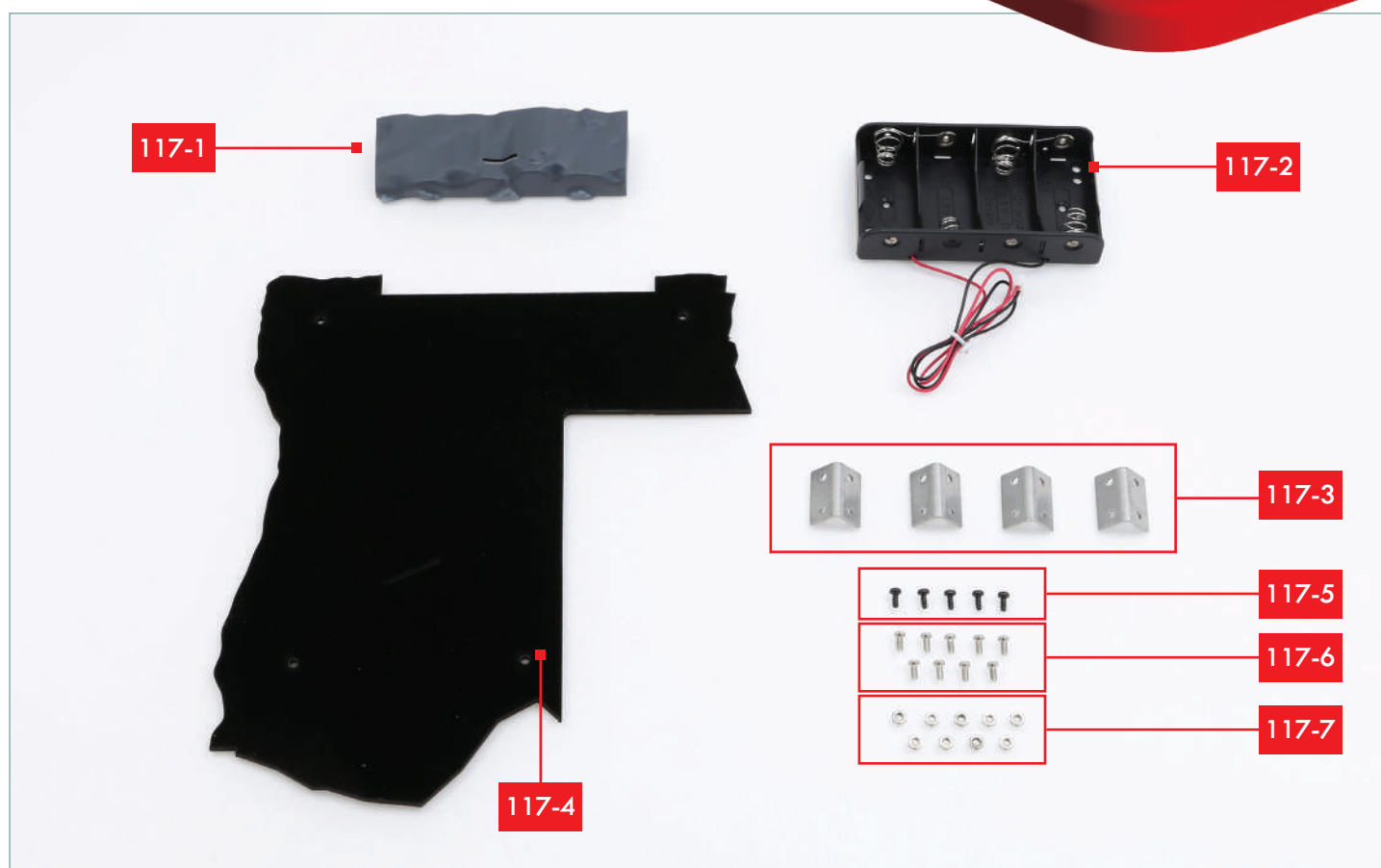
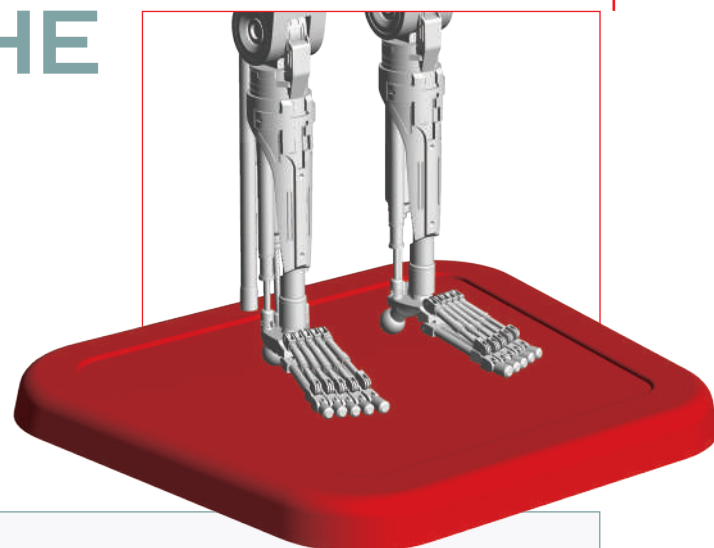


STAGE COMPLETE!

Details have been fitted to the base assembly. Two backing panels have been fitted to the underside. The heavy panel **116-2** will be fitted at a future stage.

STAGE 117: FIT THE BATTERY BOX INTO THE BASE

Combine the battery box with its edging and attach it to the base, add a backing panel to hold it in place, and affix brackets to the circuit board cover.



LIST OF PIECES

117-1	Edging for battery box	117-5	Five PB 3 x 6mm screws (1 spare)
117-2	Battery box and cable	117-6	Nine PM 3 x 6mm screws (1 spare)
117-3	Four brackets	117-7	Nine M3 nuts (1 spare)
117-4	Backing panel		

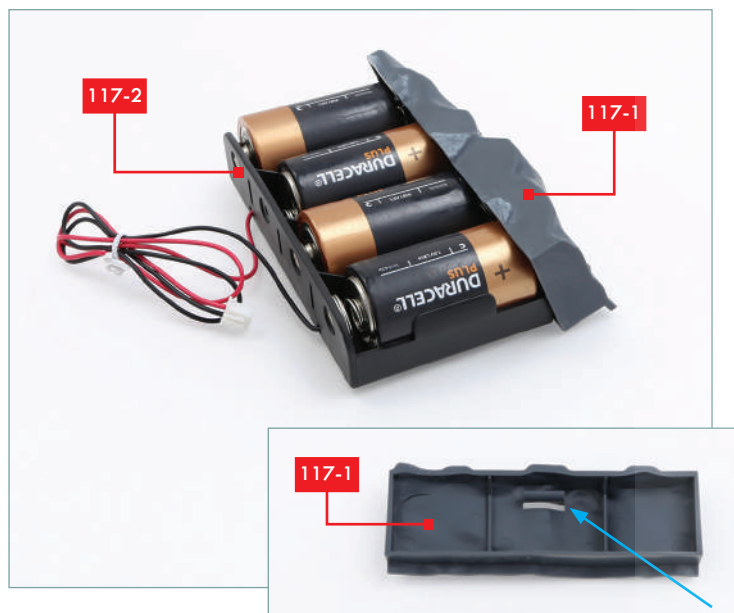
YOU WILL ALSO NEED

A fine cross-head screwdriver
 The base assembly from stage 116
 The circuit board cover 116-2 from the previous stage
 Four C-type batteries



STEP 1

Fit the four C-type batteries into the battery box **117-2**, following the markings on the inside of the box, as shown.



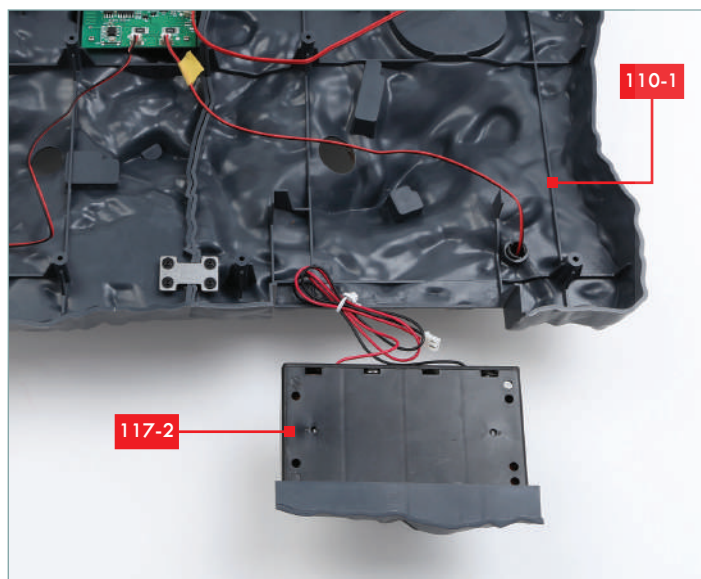
STEP 2

Take the edging part **117-1** and note the tab on the inside (arrow, inset). Fit the edge of the battery box **117-2** into the edging part: you will need to fit them together at an angle so that the top edge of the box fits under the tab, as shown.



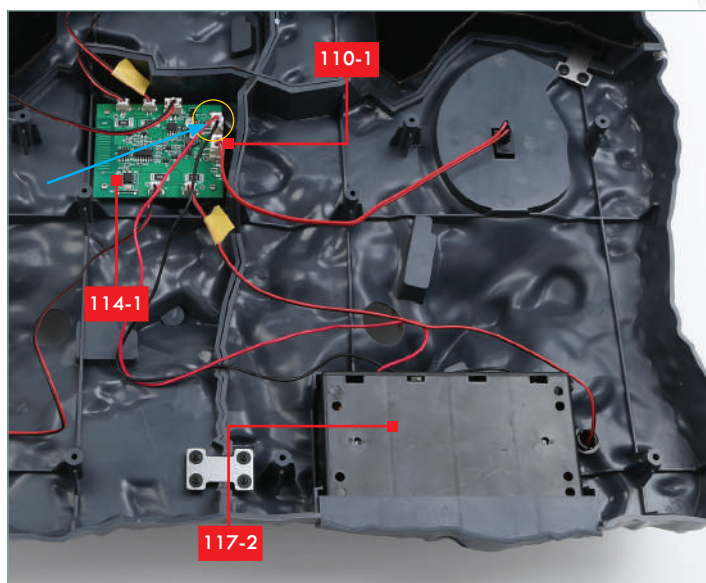
STEP 3

Tip the battery box edging **117-1** back into the upright position so that the battery box **117-2** is securely fitted into the edging. No glue is needed: the edging part will have to be removed if you need to change the batteries.



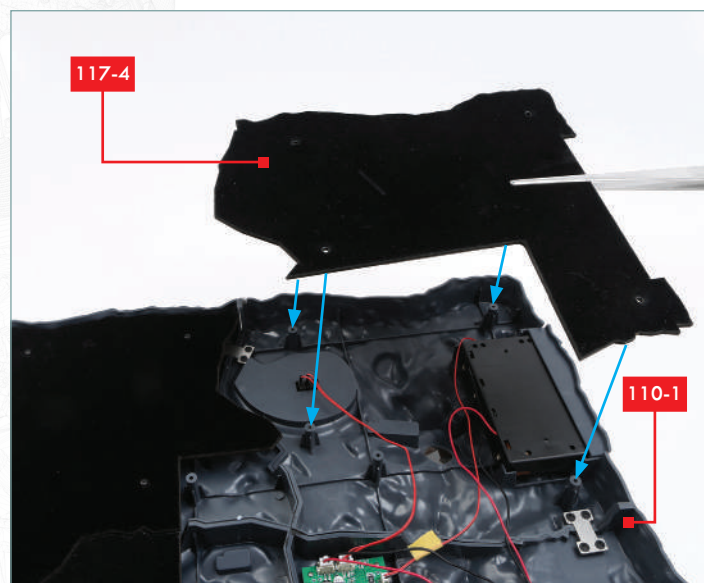
STEP 4

Carefully turn the base assembly upside down and check that it is well supported, without damaging the searchlights and details. Fit the battery box **117-2** into the recess in base section **110-1**, as indicated.



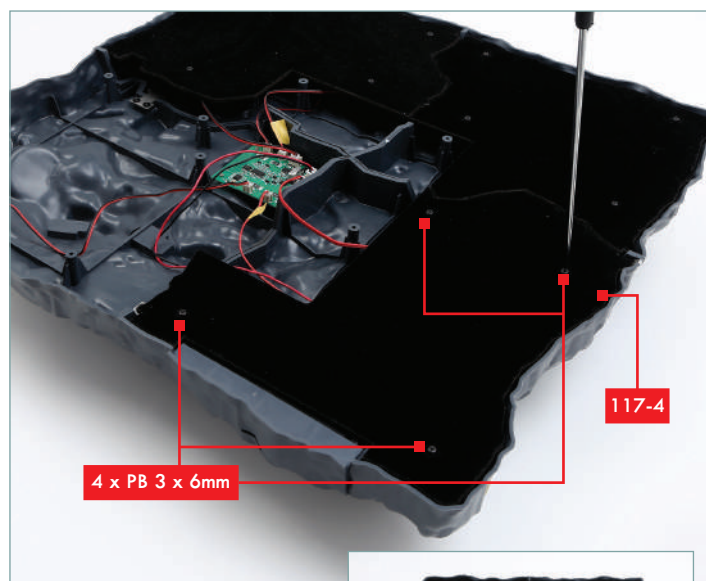
STEP 5

Take the cable from the battery box **117-2** and run it across the underside of the base assembly, to the circuit board **114-1**. Plug the connector into the socket on the circuit board (arrow).



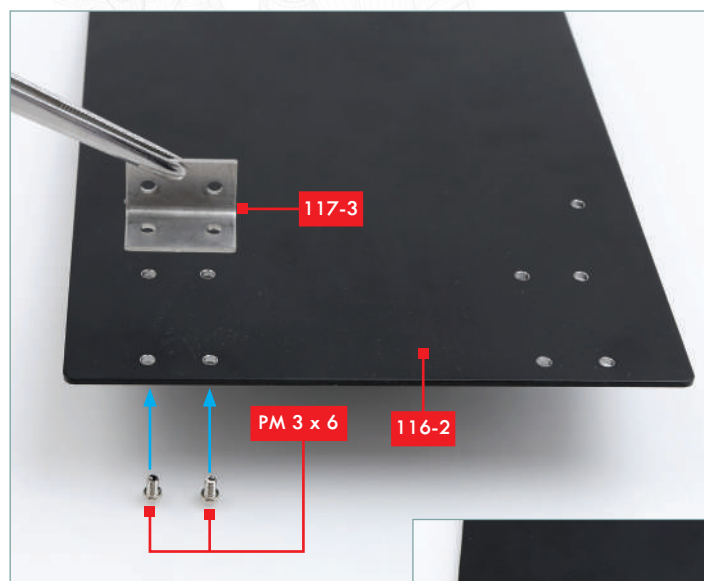
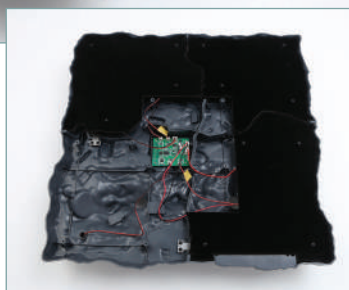
STEP 6

Take the backing panel, **117-4**, and check how it fits on the underside of base panel **110-1** so that screw holes are aligned, as indicated.



STEP 7

Fix the backing panel **117-4** in place with four **PB 3 x 6mm** screws (below).



STEP 8

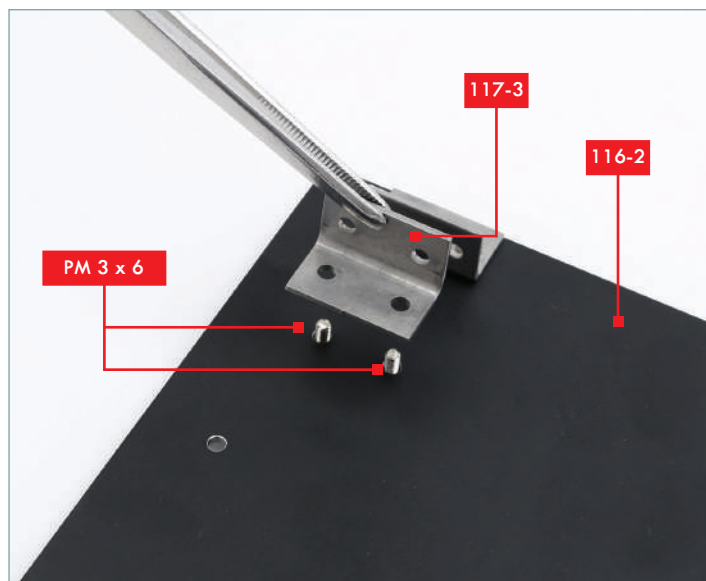
Take the heavy panel **116-2**, supplied with stage 116, and identify the first pair of holes near the edge where one of the brackets **117-3** will fit. Fit two **PM 3 x 6mm** screws up through the screw holes and fix the bracket in place using two **M3 Nuts** (inset, right). Do not over tighten the nuts at this stage so that the brackets can still move.





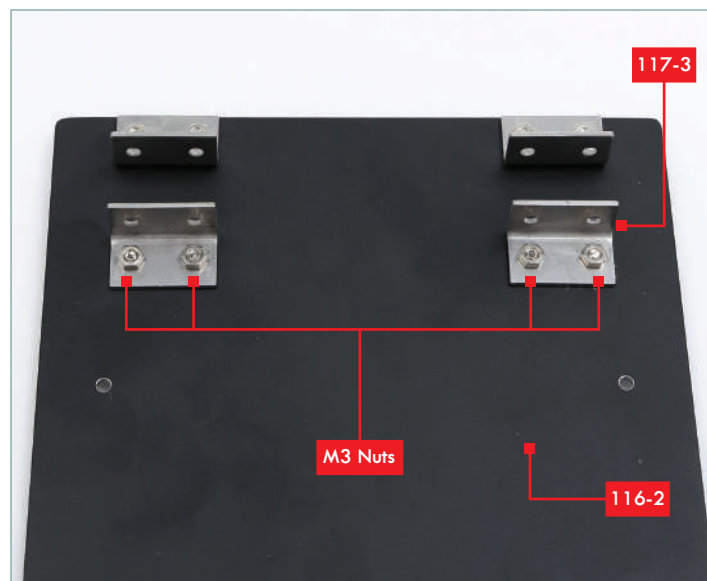
STEP 9

In the same way, fit a second bracket **117-3** to the next pair of holes and fix in place using two **PM 3 x 6mm** screws and two **M3** nuts. Again, do not tighten the nuts.



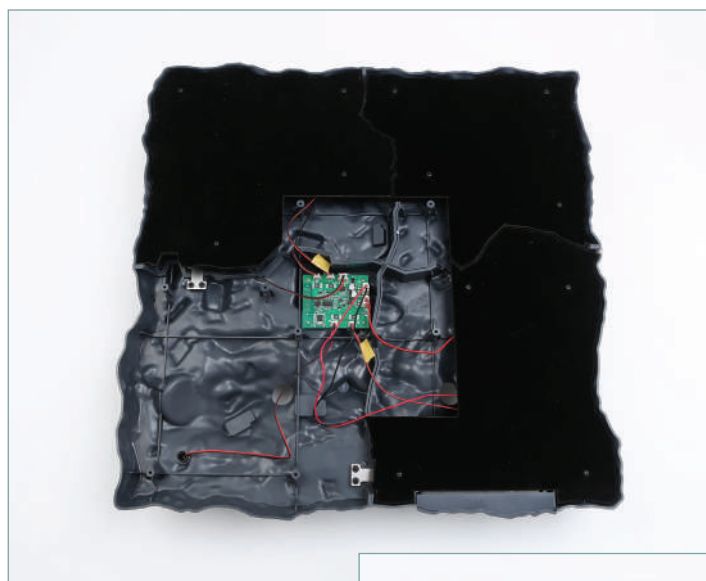
STEP 10

Turn the panel **116-2** around and identify the screw holes for the remaining two brackets **117-3**. Fix the first bracket **117-3** in place using two **PM 3 x 6mm** screws and two **M3** nuts. Again, do not tighten the nuts.



STEP 11

Fit the fourth bracket **117-3** on panel **116-2** and fix in place using two **PM 3 x 6mm** screws and two **M3** nuts. Do not tighten the nuts.



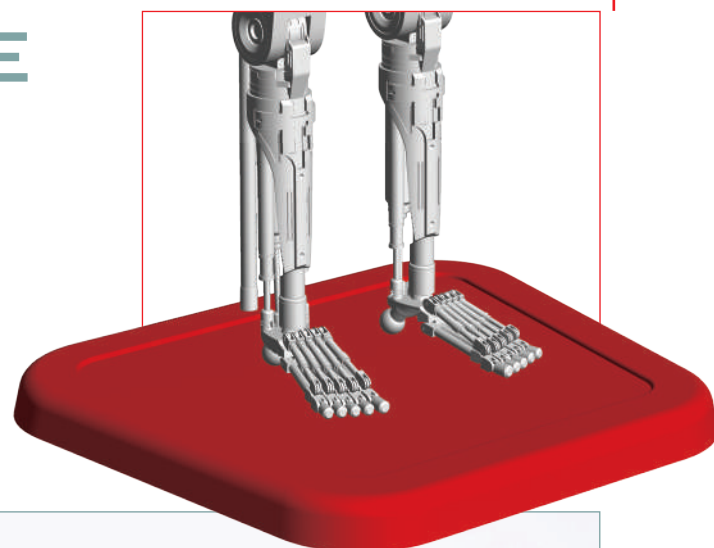
STAGE COMPLETE!

The battery box and edging have been fitted into the base assembly. A backing panel holds the battery box in place. Four fixing brackets have been attached to the circuit board cover.



STAGE 118: ASSEMBLE THE LOWER HALF OF THE STAND AND CONNECT IT TO THE BASE

Attach the stand to the brackets, combine it with the base by threading it through from the underside, then add the last backing panel and pads.



LIST OF PIECES

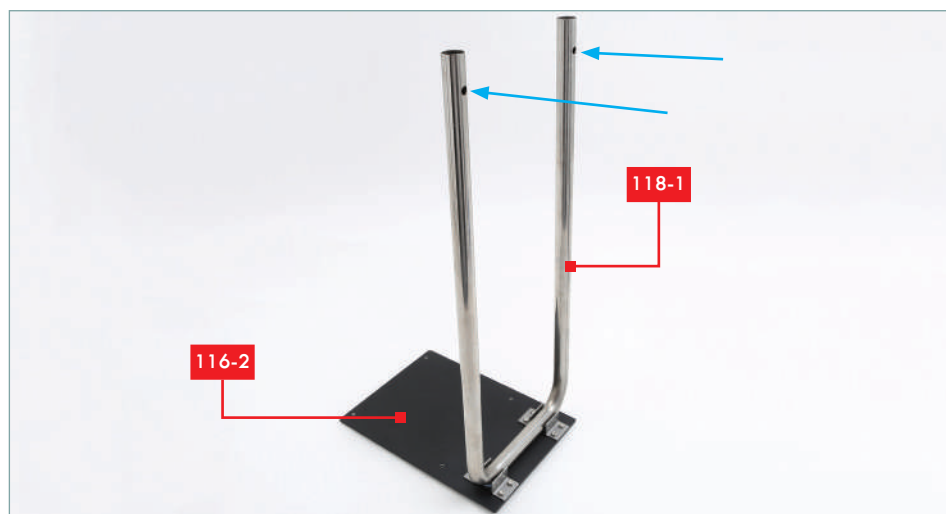
118-1	Lower part of stand	118-5	Five PM 3 x 35mm screws (1 spare)
118-2	Stand inserts	118-6	Five M3 nuts (1 spare)
118-3	Backing panel	118-7	Nine PB 3 x 6mm screws (1 spare)
118-4	Adhesive pads		

YOU WILL ALSO NEED

A fine cross-head screwdriver

Tweezers or fine-nosed pliers, to help when tightening the nuts

The base assembly and panel with brackets from stage 117



STEP 1

Take the panel **116-2** with brackets fitted in the previous stage and stand it flat on your work surface. Fit the bottom bar of the stand **118-1** between the brackets so that screw holes are aligned. Note the position of the holes, which will face the back of the stand (arrows).



STEP 2

Take four **PM 3 x 35mm** screws and fit them through the screw holes in the bracket, the bottom bar of the stand and the next bracket,

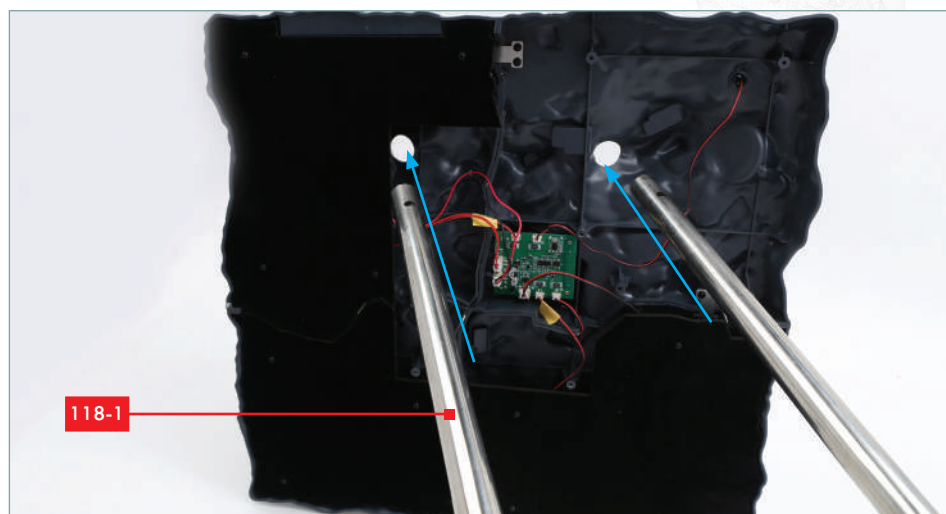


STEP 3

Use four **M3** nuts to fix the **PM 3 x 35mm** screws in place, so that the stand is held upright between the brackets. Make sure that the nuts are completely tight, drawing the brackets close to the bar of the stand. Now you can fully tighten the eight M3 nuts, fitted in the last stage, that fasten the brackets to the base **116-2**.

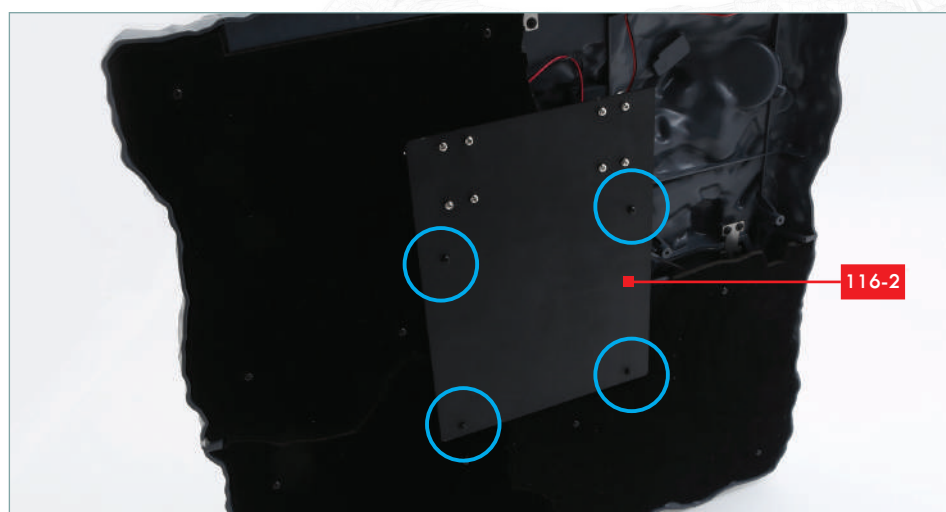
EXPERT TIP!

The next steps are easier if someone can help you by holding the stand on its side. You may find it easier if you remove backing panel 117-4 before fitting the stand.



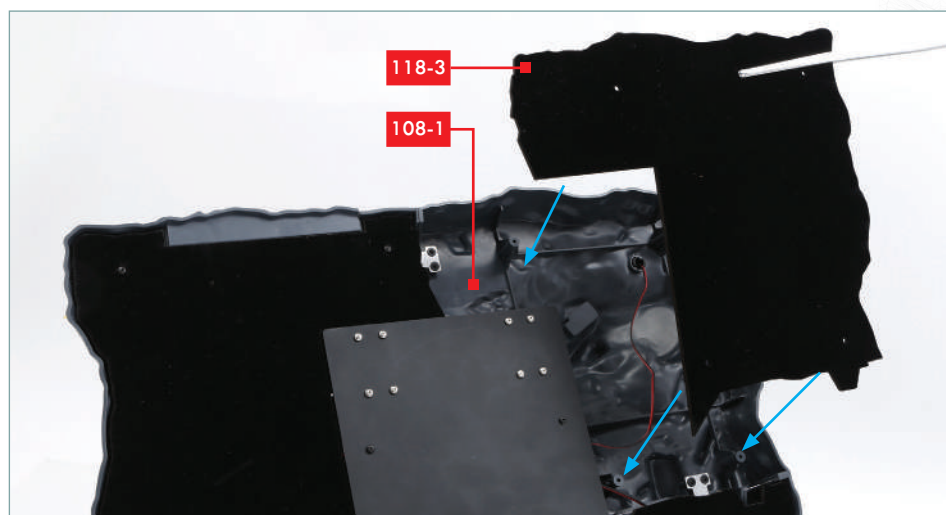
STEP 4

Working from the underside of the base assembly, fit the two upright bars of the stand **118-1** through the holes in the base, as indicated.



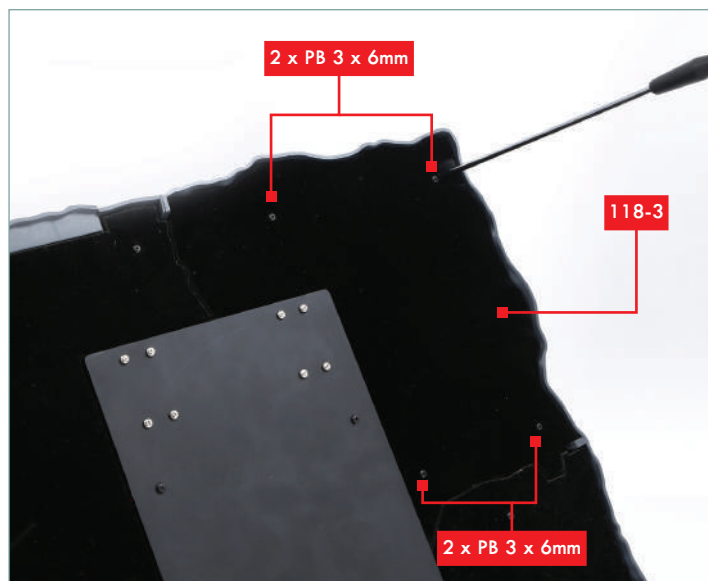
STEP 5

Push the bars through the holes so that the heavy panel **116-2** fits against the underside of the base assembly, covering the circuit board. Use four **PB 3 x 6mm** screws to fix the panel in place (circled).



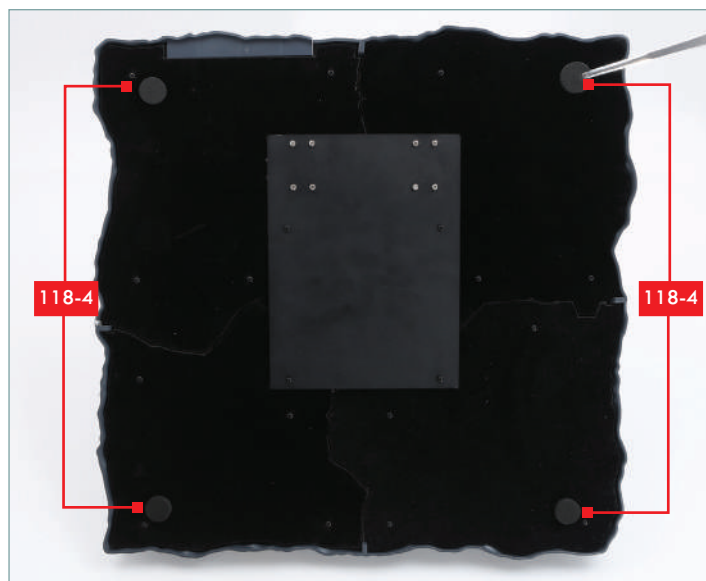
STEP 6

Replace backing panel **117-4** if you removed it. Take the backing panel, **118-3**, and check how it fits on the underside of base panel **108-1** so that screw holes are aligned, as indicated.



STEP 7

Fix the backing panel **118-3** in place with four **PB 3 x 6mm** screws.



STEP 8

One at a time, remove the adhesive pads **118-4** from their backing. Stick them in place at the four corners of the underside of the base.



STEP 9

Turn the base and stand the right way up. Take the two inserts **118-2** and gently squeeze them into a 'U' shape. Fit the bent ends of the inserts into the open ends of the stand **118-1**. As you push them down, ensure that the pegs on the inserts are in line with the holes near the tops of the shafts of the stand. When correctly positioned, the pegs on each of the inserts come through the holes in the stand (inset).



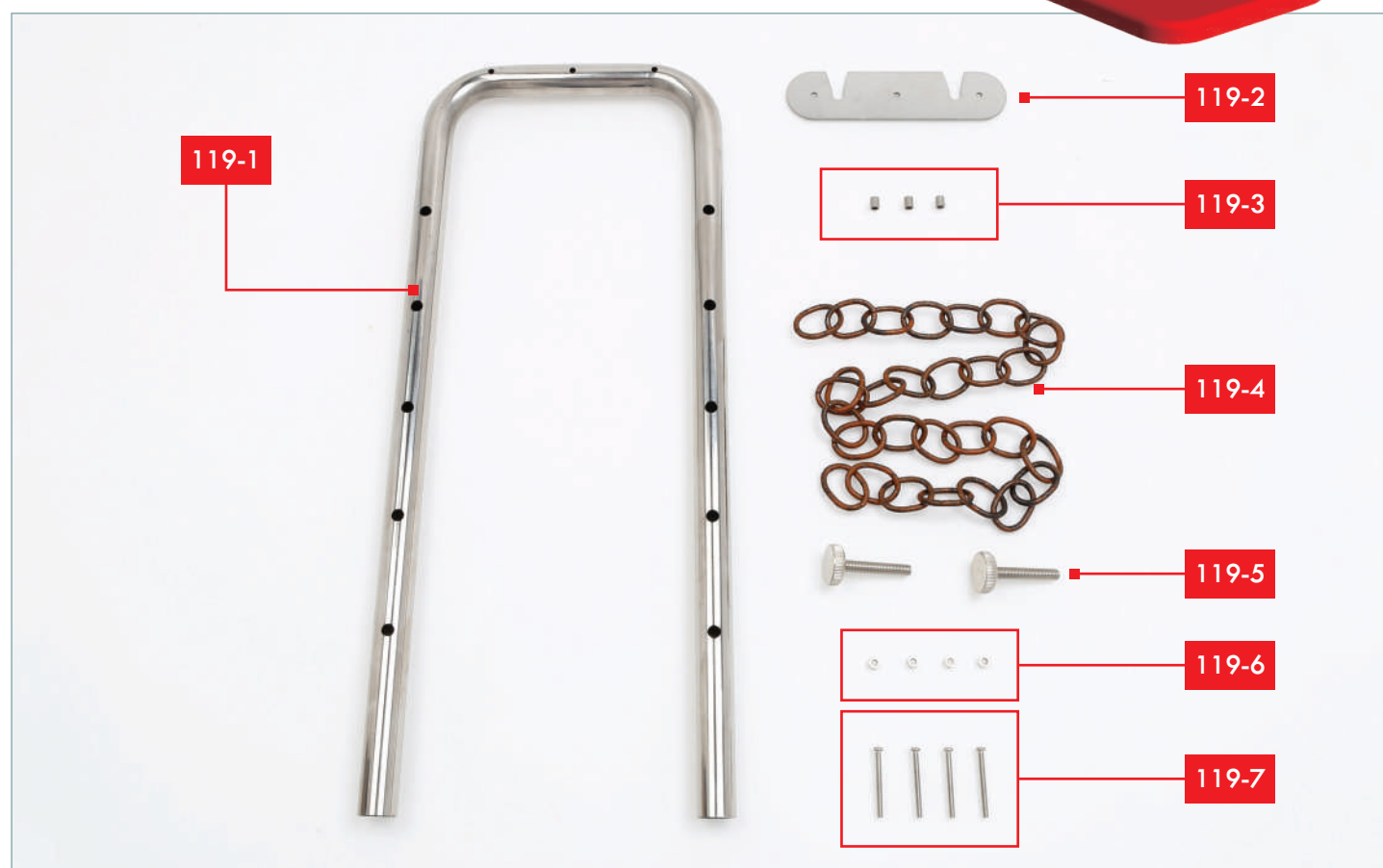
STAGE COMPLETE!

The lower part of the stand has been fixed in place. The last backing panel has been fitted to the underside of the stand, together with pads.



STAGE 119: AFFIX YOUR TERMINATOR T-800 ENDOSKELETON MODEL TO THE STAND

Attach the support plate to the upper part of the stand, and connect the Terminator model to the stand using thumbscrews.



LIST OF PIECES

119-1	Upper part of stand	119-5	Two 6 x 35mm thumbscrews
119-2	Support plate	119-6	Four M3 nuts (1 spare)
119-3	Three screw sleeves	119-7	Four PM 3 x 30mm screws (1 spare)
119-4	Chain		

YOU WILL ALSO NEED

A fine cross-head screwdriver
The base assembly from stage 118
Superglue and a cocktail stick (optional)
Terminator model from stage 107



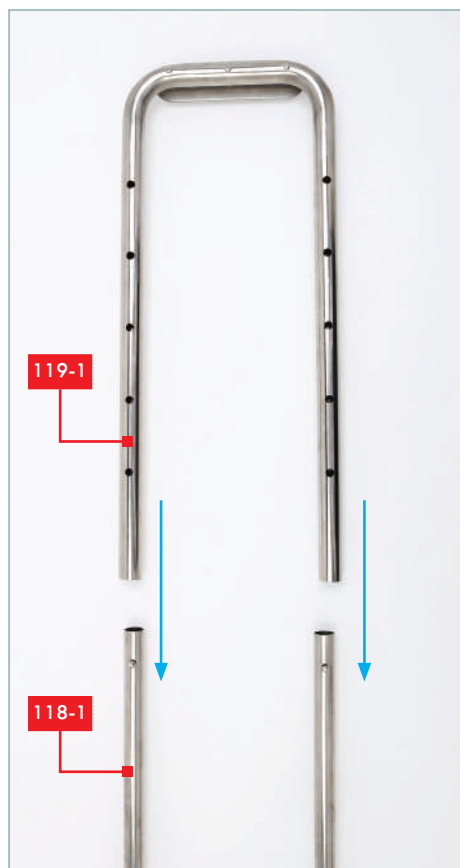
STEP 1

Take the upper part of the stand **119-1** and fit three **PM 3 x 30mm** screws into the three holes across the top of part **119-1**. The screws must be inserted from the back of the stand, the side with the holes (shown in the parts photograph). Fit a sleeve onto each of the screws, as shown.



STEP 2

Fit the support plate **119-2** on to the three screws, so that it is spaced away from the bar of the upper part of the stand by the sleeves. Fix in place with three **M3** nuts (right).



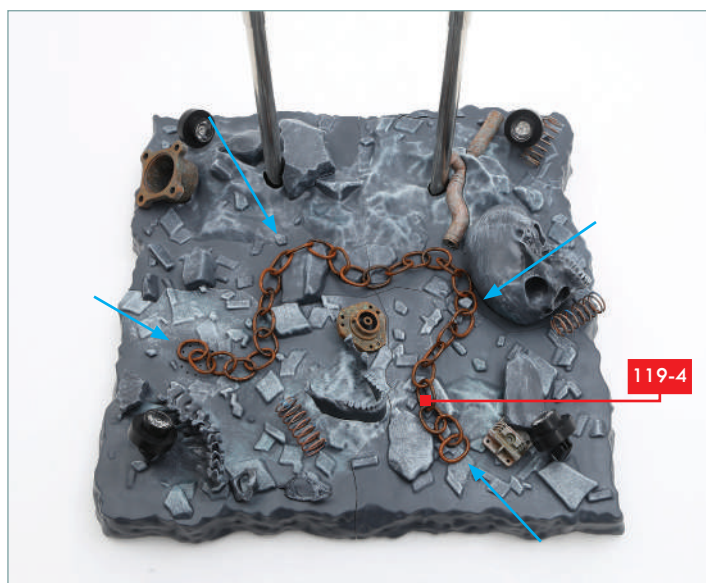
STEP 3

Fit the ends of the upper part of the stand **119-1** onto the ends of the lower part of the stand **118-1**. The support plate is at the front of the stand (see also next step).



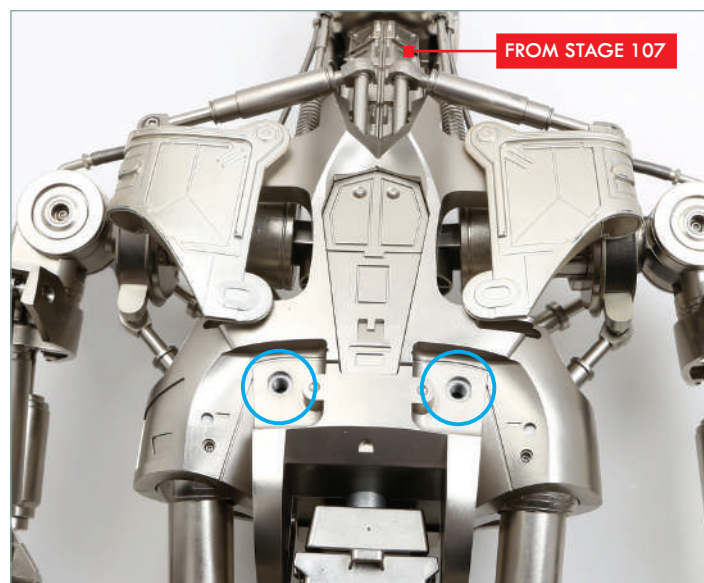
STEP 4

The pegs on the inserts in the lower part of the stand click into the holes in the upper part of the stand. The height of the upper part of the stand is adjustable.



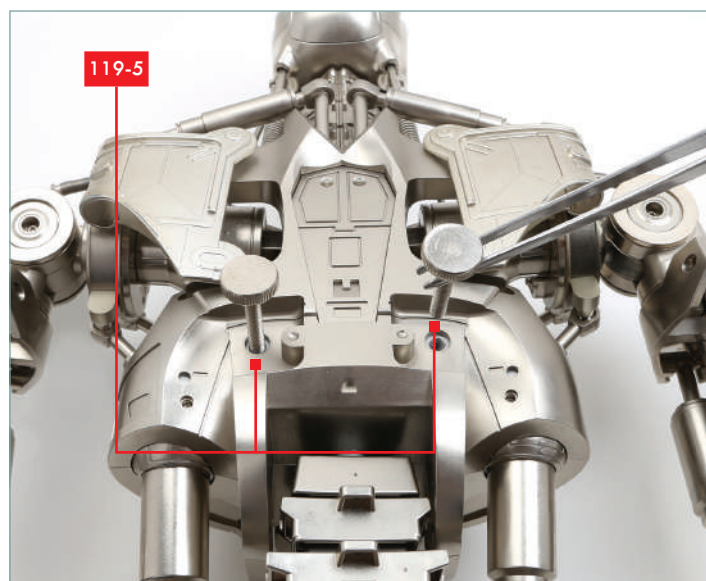
STEP 5

Decide how to arrange the chain **119-4** on the base. It need not be fixed in place. If preferred, apply a little superglue to four or five links of the chain **119-4** and stick them in place on the base.



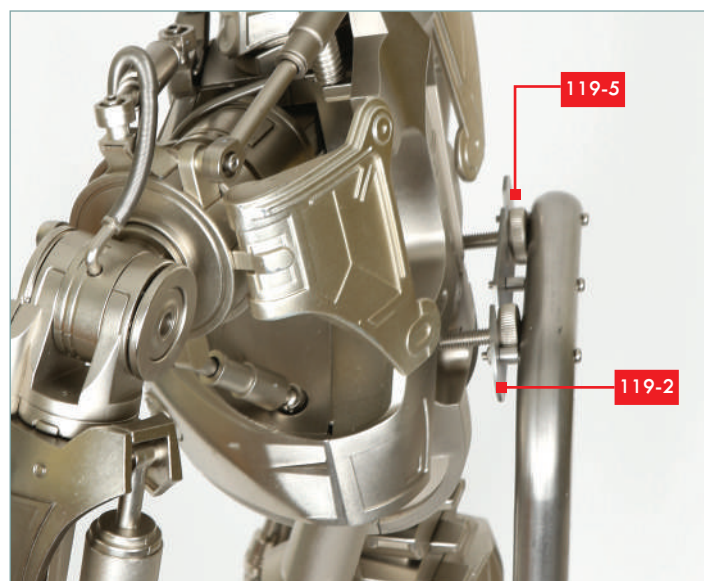
STEP 6

Take your Terminator model from stage 107 and identify two screw holes in the back (circled).



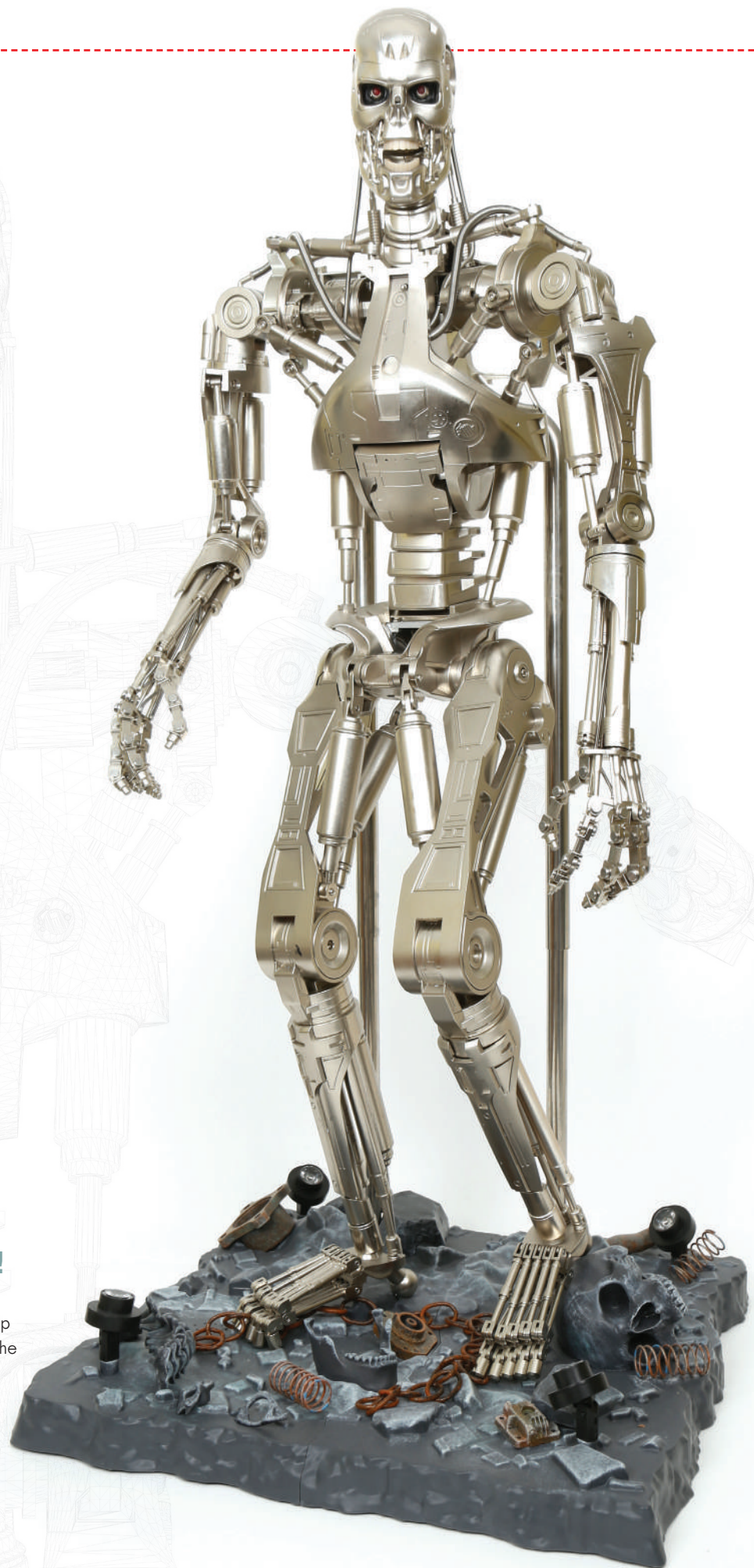
STEP 7

Take the two thumbscrews **119-5** and screw them in to the holes by hand.



STEP 8

Fit the thumbscrews **119-5** into the notches in the support plate **119-2**, as shown, so that your model stands up.



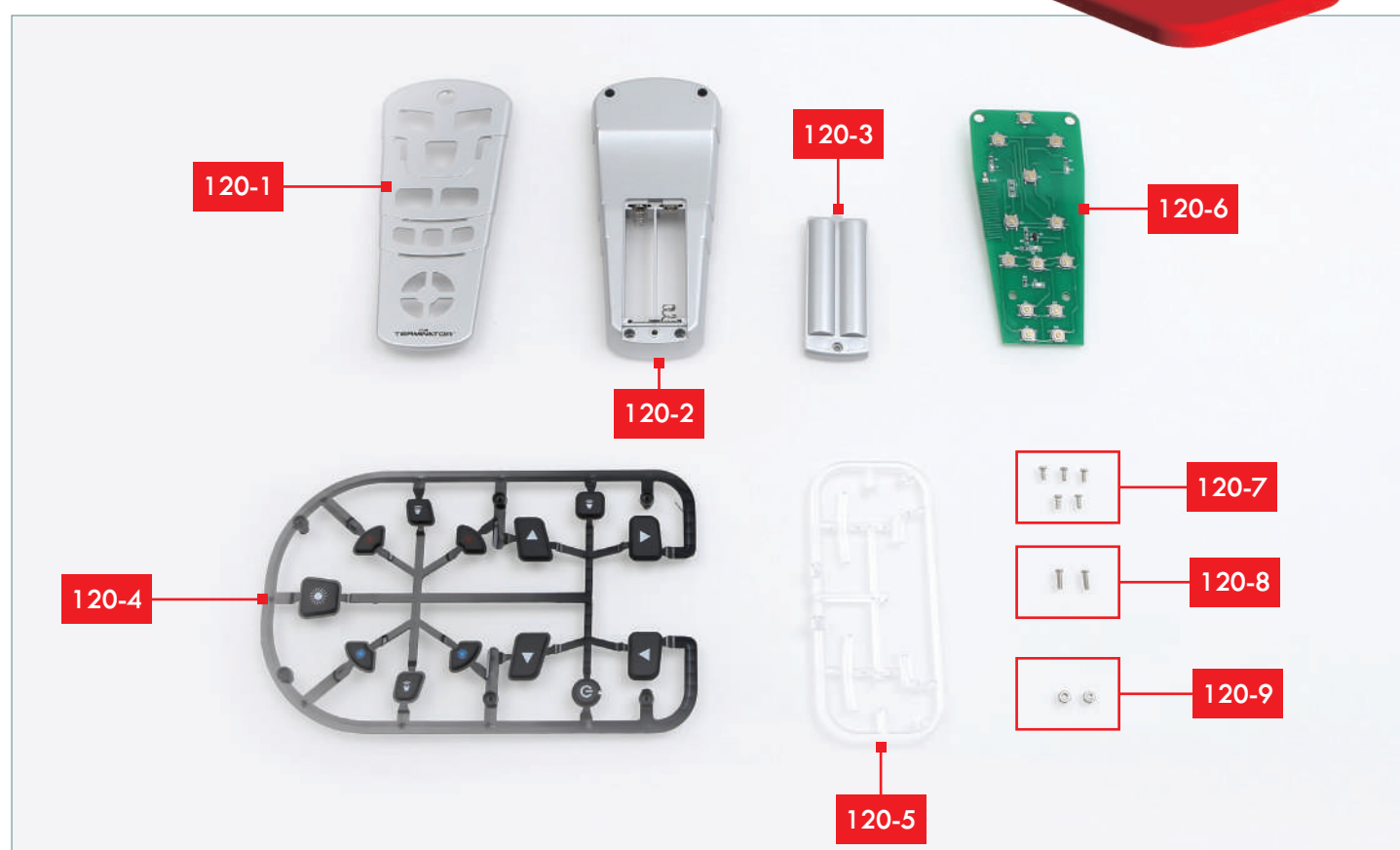
STAGE COMPLETE!

Your model has been fitted to the stand. If desired, the model can be made to stand up straighter by tightening the hex screws at the hips and knees.



STAGE 120: ASSEMBLE THE REMOTE CONTROL AND LEARN HOW TO USE IT TO CONTROL YOUR MODEL

Insert the buttons and circuit board into the remote control frame, insert batteries, and screw closed.



LIST OF PIECES

120-1	Remote control case (front)	120-6	Circuit board
120-2	Remote control case (back)	120-7	Five PB 2 x 4mm screws (1 spare)
120-3	Battery cover	120-8	Two PM 2 x 6mm screws (1 spare)
120-4	Control buttons	120-9	Two M2 nuts (1 spare)
120-5	Transparent elements		

YOU WILL ALSO NEED

A fine cross-head screwdriver
Your model on its stand
Superglue and a cocktail stick
Fine file or sandpaper
Two AAA batteries



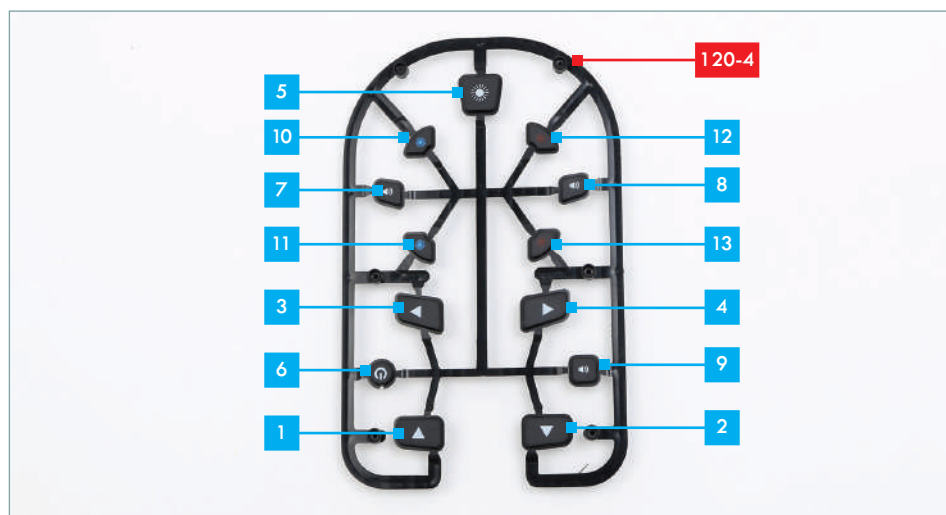
STEP 1

Take the front of the remote control case **120-1** and identify the openings for the four clear elements on part **120-5** (arrows).



STEP 2

Remove the four transparent elements from frame **120-5** and check the fit in the openings. Remove any rough edges with a fine file or sandpaper. One at a time, apply a little glue to the rims around the edges of the parts and fit them into the front of the case (inset).



STEP 3

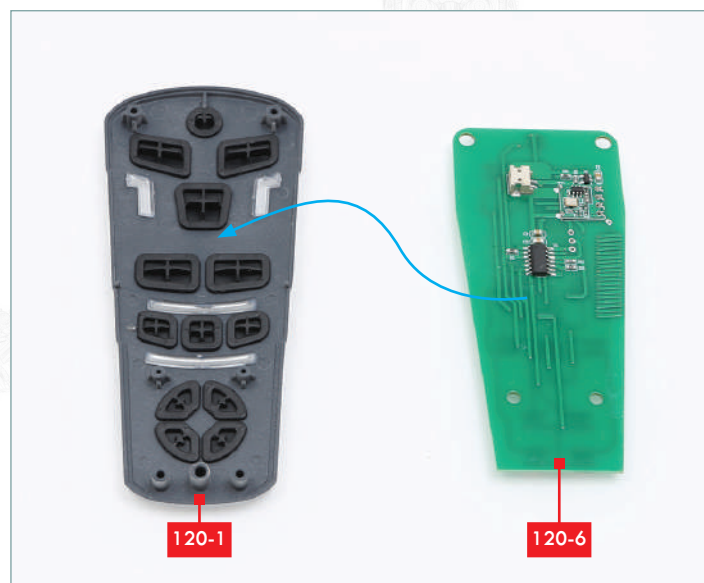
Identify the various control buttons on frame **120-4**:

- 1, 2 – up, down (jaw)
- 3, 4 – left, right (eyes)
- 5 – light (eyes)
- 6 – power
- 7, 8, 9 – sound
- 10, 11 – searchlights (blue)
- 12, 13 – searchlights (red)



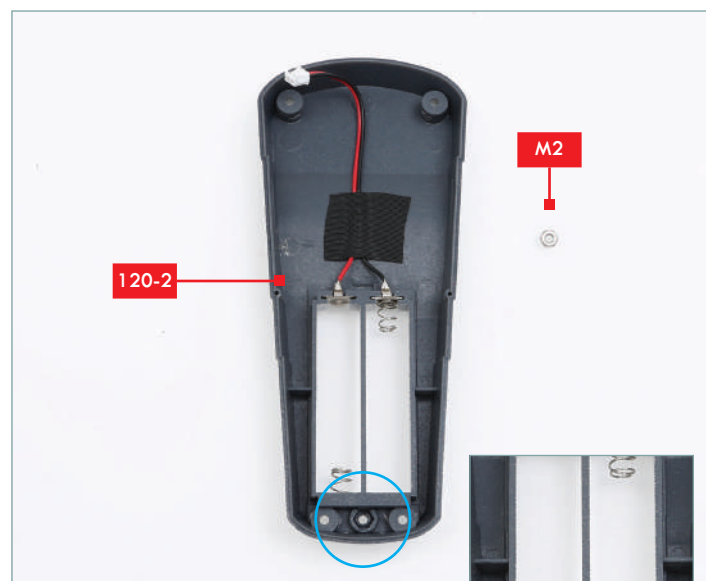
STEP 4

One at a time, remove the parts from frame **120-4**, smooth any roughness and fit them into the appropriate holes in the front of the remote control case **120-1**. Do not use any glue. The inset shows the buttons in place, for reference, but do not turn the assembly over at this stage.



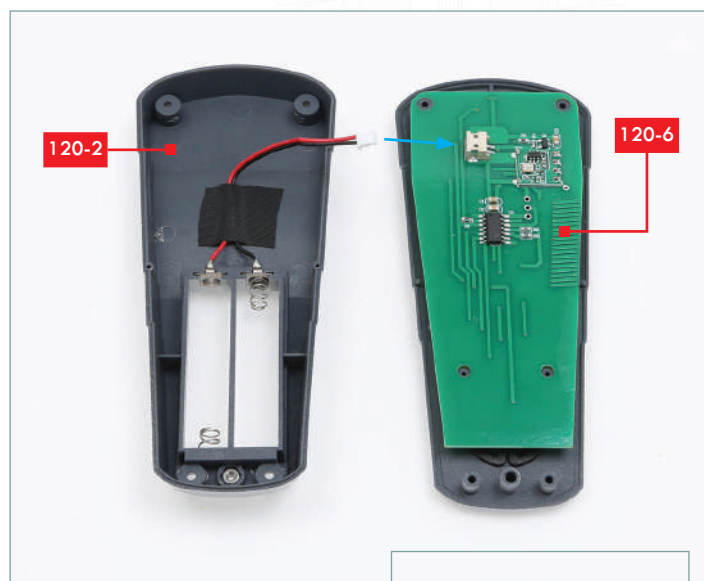
STEP 5

Position the circuit board **120-6** over the buttons, so that the contact points on the circuit board (not visible) connect with the buttons. Four holes in the circuit board fit over pegs in the front of the remote control **120-1**.



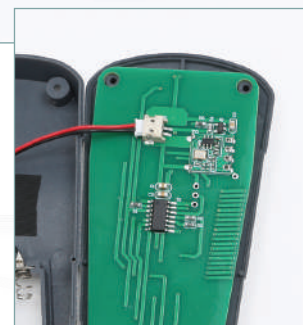
STEP 6

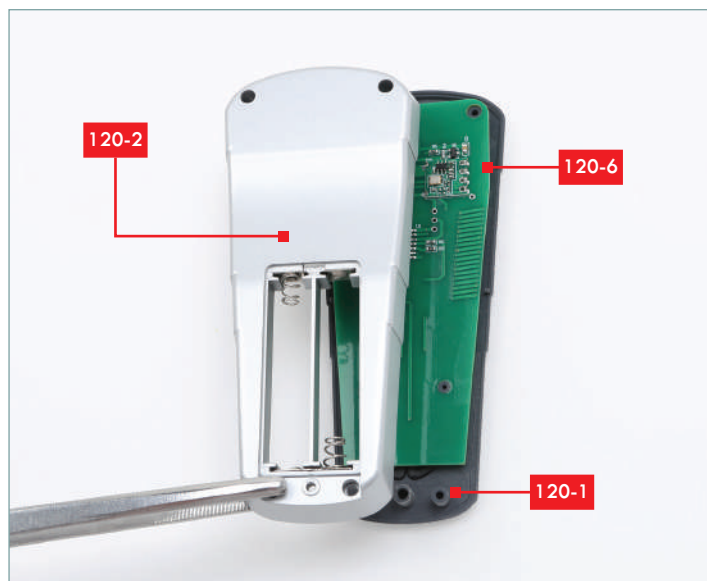
Take the back of the remote control **120-2** and identify the hexagonal recess where an **M2** nut will fit. Use a cocktail stick to apply a little glue in the recess and fix the nut in place (inset).



STEP 7

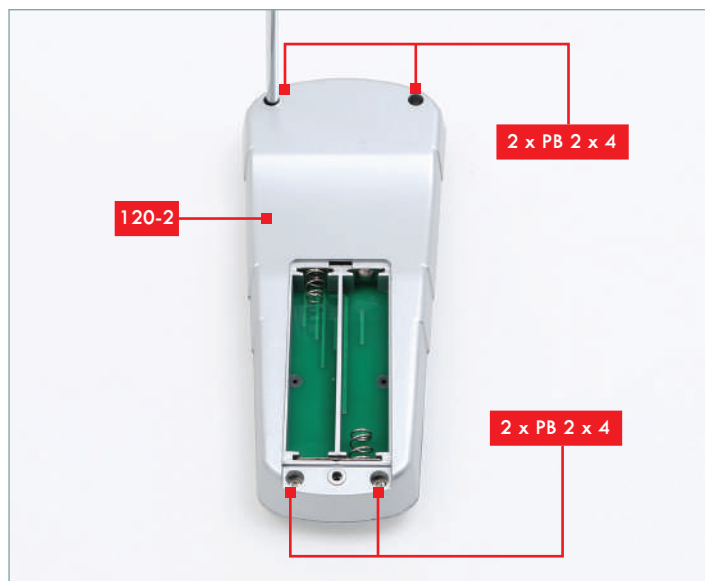
Position the front and back of the remote control side by side so that you can plug the connector from the back **120-2** into the socket on the circuit board **120-6**, as indicated (see inset).





STEP 8

Position the remote control back **120-2** on the other part of the remote control **120-1** so that the circuit board **120-6** is enclosed.



STEP 9

Fix the two parts of the remote control together using four **PB 2 x 4mm** screws.



STEP 10

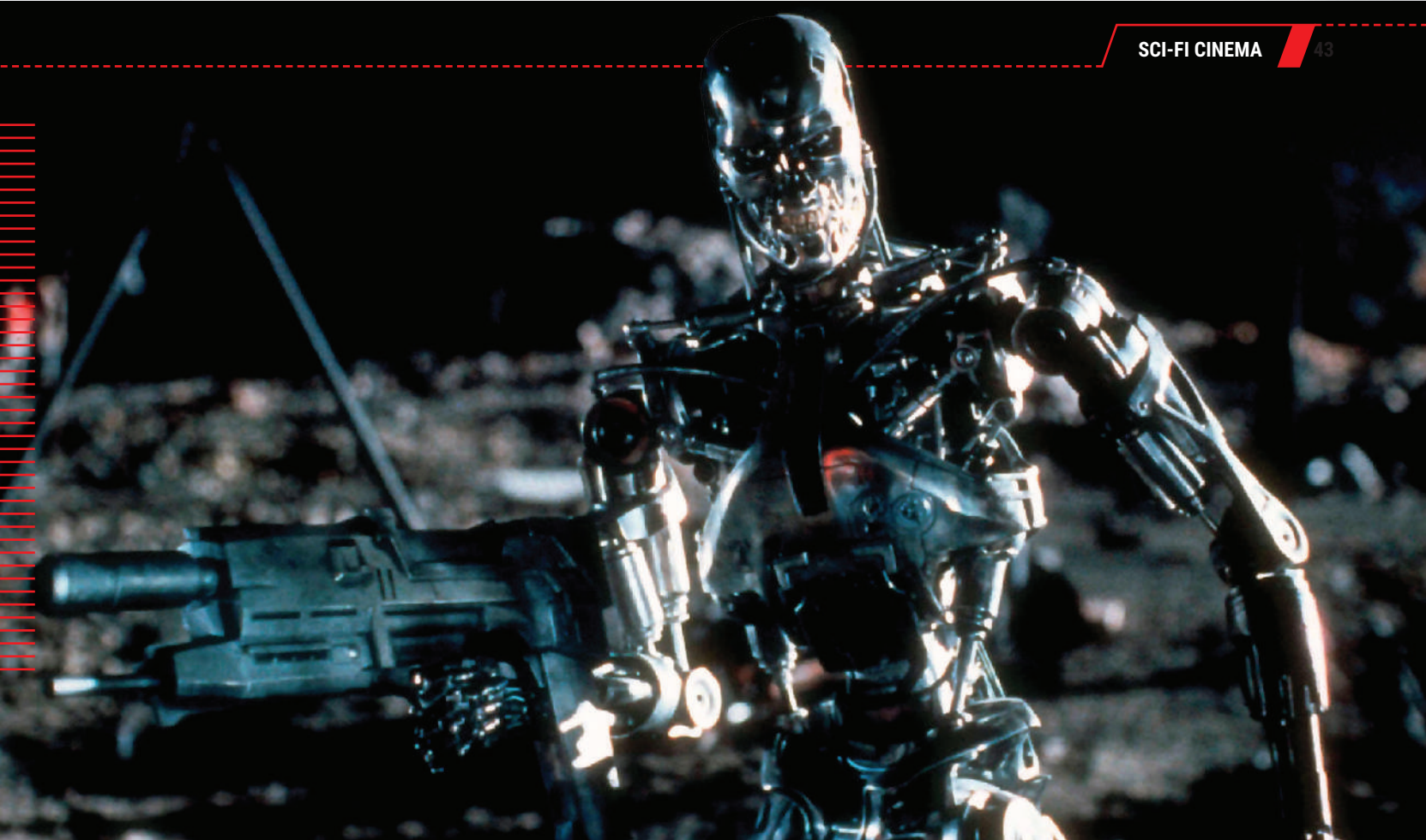
Fit two AAA batteries into the recess in the back of the remote control, taking care that they are the correct way round, as shown. Fit the cover **120-3** in place with a **PM 2 x 6mm** screw (inset). The screw goes into the nut that was fitted in step 6.



STAGE COMPLETE!

The remote control is complete: you are ready to operate the model. See last page for instructions.





TERMINATOR 2: JUDGMENT DAY

He's back.

Terminator 2: Judgment Day released in 1991 to massive critical acclaim and financial success. Making the inspired choice to turn the mechanical slasher-horror T-800 from the original film into a complicated antihero as the Terminator, a grown Sarah Connor, and her son John faced off against the cold-hearted and relentless liquid metal T-1000, the film definitively proved there was enough life in the iconic metal endoskeleton to launch a long-running multi-media franchise.

T2 was the highest earning film of 1991, and became the most successful R-rated film in cinema history, holding

“THREE BILLION HUMAN LIVES ENDED ON AUGUST 29, 1997. THE SURVIVORS OF THE NUCLEAR FIRE CALLED THE WAR JUDGMENT DAY.” — SARAH CONNOR

the title until *The Matrix Reloaded* released in 2003. It had 4 film sequels, a TV show spin-off (*The Sarah Connor Chronicles*) and several video game adaptations and comic book tie-ins. It also won four Academy Awards for its high-quality sound, editing, visual effects and make-up.

THE MACHINES WILL TRY AGAIN

John Connor has been trained by his mother to be ready for 'Judgment Day', a nuclear holocaust she believes will be caused by the artificial intelligence called Skynet on August 29, 1997. He has been told that in the future, he will be the leader of the human resistance against the machines, but all the other adults tell him that his mother is crazy and that won't happen. When Sarah Connor attempted to blow up a computer factory, John was taken away from her. Now he lives in Los Angeles with his foster family.

But Skynet is very real, and John Connor is still at the top of their time-travelling hit list. In the year 2029, Skynet creates an advanced Terminator prototype and names it

ABOVE: The Terminator T-800 Endoskeleton is an all-too-familiar sight on the deadly battlefields of the machine-controlled future, a tireless footsoldier in the war against the remains of humanity. [Photo: Collection Christophel / Alamy Stock Photo]



FILM DATABLAST

Director: James Cameron
Screenplay: James Cameron, William Wisher
Producer: James Cameron
Composer: Brad Fiedel
Director of Photography: Adam Greenberg
Editor: Conrad Buff, Mark Goldblatt, Richard A. Harris
Cast: Arnold Schwarzenegger (T-800), Linda Hamilton (Sarah Connor), Robert Patrick (T-1000), Edward Furlong (John Connor)
Year: 1991
Duration: 137 mins
Aspect Ratio: 2.39 : 1
Country of Origin: USA

ABOVE: Sarah Connor (Linda Hamilton) has spent years training for the inevitable, but even she finds herself surprised by the form taken by Skynet's revenge. [Photo: Collection Christophel / Alamy Stock Photo]

the T-1000. Its mission is simple: to kill John Connor.

Made of a mimetic polyalloy — a liquid metal — the T-1000 can transform its entire body into anyone, or anything. It doesn't need weapons, because *it* is a weapon.

When it arrives in a ball of light in 1997, it murders a police officer, taking on his form to track down John in the police computer system. But before it is too late, the John Connor of the future sends back a reprogrammed T-800 to save himself.

The T-1000 tries to take out John while he's on his own at the shopping mall, but the reprogrammed T-800 arrives and helps him escape, unloading shotgun blasts into the T-1000 to slow it down.

John worries that the T-1000 will kill his mother Sarah. When he discovers that the T-800 has been programmed to follow his orders, he tells the 'docile' Terminator to release her from the mental institute in which she is currently imprisoned.

Sarah does not trust the T-800 (after all, she and an identical model share a difficult history) but together they escape from the T-1000 in a stolen police car.

The 'friendly' Terminator tells the Connor family of Skynet's latest origins, and of Miles Bennett Dyson, the man at Cyberdyne Systems responsible for the microprocessor technology that will make artificial machine sentience possible.

Sarah plans an escape to Mexico and stocks up on weapons so she can defend them from Skynet — but changes her mind after she has a horrible nightmare about the end of the world.

Merely preparing for Judgment Day is no longer enough — she has to stop it, and now she knows how: she's going to kill Dyson.

Sarah attacks Dyson in his home, but can't finish him off in front of his scared family. Instead, they talk to Dyson about the dark future ahead, and learn that damaged

pieces of the Terminator that attacked Sarah Connor and her protector Kyle Reese in 1984 formed the basis of Dyson's latest research.

Dyson agrees to destroy both the artefacts from the future and his research work. They steal the T-800 pieces from Cyberdyne and rig the lab to explode. Before they can all escape, Dyson is shot to death by the attending police — but he has rigged a dead man's switch and the building goes up in flames as he expires. Sarah, John, and the T-800 flee the scene of the crime and make their way to a steel mill, all the while pursued by the fearsome T-1000.

The T-1000 and the T-800 clash with one another, and it looks like the more advanced Terminator wins the fight, but the T-800 reboots just in time to prevent the T-1000 from killing Sarah and John. Blasting the T-1000 with a grenade launcher, the T-800 dissolves its body in a pool of molten steel, destroying it for good.

John disposes of the other Terminator parts from 1984, as Sarah feels a growing sense of relief.

But the reprogrammed T-800 model reminds them that there are still Terminator parts in the past — and points to himself, asking for Sarah's help, as he cannot self-terminate.

John begs and pleads with his robotic friend, ordering him to survive, but he breaks his programming and makes the choice to disobey for the sake of the future. He shares a final moment with John, hugging him, and telling him that he now knows why humans cry.

As he is lowered into the molten steel to meet his end, he raises a thumbs up to let his young friend know that everything will be okay.

As John and Sarah drive away together, Sarah ruminates in a thoughtful monologue: "The unknown future rolls toward us. I face it for the first time with a sense of hope. Because if a machine, a Terminator, can learn the value of human life, maybe we can too."

TERMINATOR TWINS

Because of the shapeshifting nature of the T-1000, action shots sometimes required two of Linda Hamilton to be in the frame. Instead of using complex special effects or being limited using stunt doubles and video editing trickery, the *Terminator 2: Judgment Day* production used one of the oldest cinema tricks in the book. They simply saved time and money and hired Hamilton's actual twin sister, Leslie Hamilton Gearren, to play her robotic duplicate instead.

Linda and Leslie alternated between who would play T-1000 and Sarah Connor, with the decision based around keeping Leslie further away from the camera to better maintain the illusion they were the same person at all times.

This reliable but low budget film trick was also used in a scene at the asylum, where the T-1000 steals the identity of a guard and takes his place to infiltrate the building and



"I'M A CYBERNETIC ORGANISM. LIVING TISSUE OVER A METAL ENDOSKELETON." — THE TERMINATOR

go after Sarah. The asylum guard and his T-1000 machine duplicate were played by twin actors Don and Dan Stanton.

THE WAR CONTINUES

In 2015, an extended edition of *T2* was released, with changes made to the entire film. As well as extending, tweaking, and adding entire extra parts to the story, it also includes an alternate ending sequence set in the year 2029.

In the alternate ending, John Connor, who has grown up to be a U.S. Senator, plays with his daughter in a Washington D.C. playground as an elderly Sarah Connor watches them. She asserts that they had averted Judgment Day and went on to live happy, fulfilling, normal lives. This version is typically included as an extra in the various Blu-Ray releases of the film.

However, *Terminator 3: Rise of the Machines* and *Terminator: The Sarah Connor Chronicles* both have alternate takes on what happened after the events of *Terminator 2: Judgment Day*, which do not align with this alternate ending — or each other. 2015's *Terminator Genisys* went on to explain that the nature of the Human vs. Machine conflict inevitably leads to a time war, where the nature of the past, present, and future are constantly changing and fluctuating in a myriad of ways.

This means that everything is canon and not-canon at once. Because of this, fans can invariably decide what they think happens to John and Sarah in the end, while creators can continue to tell stories in the vast *Terminator* mythos for years to come.

In many of these *Terminator* timelines, Judgment Day was only delayed and arrives in a different day, or another form, so the war with the machines continually rages on... ■

ABOVE: John Connor (Edward Furlong) can barely believe that the T-800 (Arnold Schwarzenegger) has been sent back through time to protect him, reprogrammed by his future self. [Photo: Photo 12 / Alamy Stock Photo]



HOW TO TERMINATE

As we reach the end of our journey exploring the intertwined connections between fact and fiction, Real World Science takes a look at the efficacy of Skynet's extinction plan and how the events of *Terminator 2: Judgment Day* might have turned out, had Skynet chosen germ warfare instead.

When it comes to destroying humanity, there are plenty of ways to go about it — many of which humans have been eagerly enacting against themselves for hundreds of years. In *Terminator 2*, Skynet took the nuclear option, with the Future War that followed an inefficient and bloody method of mopping up the stragglers. But why waste all that time and effort when you could let a germ do the dirty work for you?

We've all come to understand quarantine since the start of 2020, but imagine trying to self-isolate while being simultaneously hunted by murderous robots? Posing zero threat to synthetic life and with little environmental impact, bioweapons *potentially* present a much better choice for a computerized consciousness seeking a simple extinction plan.

Although banned for human use by several international mandates, germ warfare might have been exactly the kind of hands-off approach that would've turned the tide in Skynet's favor. Were nuclear weapons and the systematic extermination that followed really its best course of action?

EASY ACCESS

Let's tackle this from two angles: before and after the bombs were dropped. It's important to remember that before it became self-aware, Skynet was just a military microprocessor — albeit one of impressive power — and not a digital deity with unrestrained access to weaponry of any kind. In *Terminator 2*, we learn that following its creation, Cyberdyne Systems became America's largest supply of military computers, with all combat aircraft getting upgrades that effectively put Skynet in direct control of the nation's active nuclear arsenal. While later gaining new capabilities, in the beginning, it was limited to the tools available, leaving nuclear attack its only option.

While destroying valuable infrastructure and putting its own servers at risk seems a dicey strategy, the truth is that while viral agents are some of the most cruel and inhumane methods of war, they are also hardly the most effective — particularly if you're aiming to affect the whole of humankind.

ABOVE: Skynet's view of the globe — pockets of humanity dedicated to its destruction. [Photo: Shutterstock]

PLANNING A PANDEMIC

The use of such devices has been banned by international law since World War I, but weaponized diseases like anthrax or smallpox have never been considered major arms by military strategists. Largely unsuitable for large-scale operations and equally ineffective when populations are scattered or scarce, bioweapons have mostly been used for area denial or as a demoralizing act of attrition.

But what about after the radioactive dust settles? Would it have been simpler for Skynet to release germs into the remaining human population and let nature run its horrible course? There's no denying the deadliness of some of our world's infectious diseases: just a gram of anthrax, when inhaled, has a mortality rate of between 50-80%, and the potential to cause around 100 million deaths. And, although globally eradicated back in 1980, the debate continues as to whether we should wipe our remaining smallpox research supplies from existence. But while orchestrating an outbreak in this fashion might work in the short term, simple quarantine protocols would drastically limit its effectiveness.

Disease takes time to kill or incapacitate, while bombs and bullets are swift and decisive. As of the start of 2021, nearly a year into the worst pandemic of modern times, estimates placed the number of COVID-19 cases at 'only' 10% of the global population. Infecting a lot of people in a relatively short period of time is still something that's surprisingly difficult to achieve.

DIRTY BUT DIFFICULT

To be a viable candidate for weaponization, an infectious agent must be storable under a range of conditions and for extended periods of time. It also needs to be able to be produced in bulk quantities, and crucially, to be able to be dispersed effectively. Aerosolization is the preferred method — creating a mist of particles containing the toxin that can be inhaled directly into the lungs — however, many infectious agents can't survive for long outside of a living host, or are simply unsuitable for the conversion process.

Though a 1993 study conducted by the U.S. Congressional Office of Technology Assessment found that spraying 100kg of dried anthrax spores over Washington, D.C. could potentially cause between 1 million and 3 million deaths, biological weapons are actually extremely unreliable, and their efficacy is highly dependent on many conditions.

Favorable weather is especially important: a gust of wind blowing the wrong way could easily render an attack useless. Each infectious agent also possesses its own unique set of shortcomings and offensive advantages: some are deadlier than others, some more contagious, while others are less stable or more difficult to manufacture. Calculating dosages is also problematic and, unlike other forms of bombardment, germ warfare can be easily protected against with cheap, portable equipment.



RUINOUS RECOMPENSE

It appears that if you're looking to wipe out a species, it's much more efficient to let a ruthless army of cyborg hunter-killers take care of humanity than using the germ warfare route, which — depending on how long you think it will take until we have AI-powered robots on every street — may be a source of great comfort. But what if extermination was never the goal? After all, Skynet's nuclear decision was one of self-preservation not malice — a knee-jerk reaction with unforeseen repercussions. James Cameron himself has even suggested that Skynet may have orchestrated the entire Future War, right down to the creation of the Resistance and the rise of John Connor, as a guilt-ridden attempt at suicide-by-proxy. Perhaps Judgment Day was all just one big misunderstanding. If so, we should all be thinking of ways to prevent such misunderstandings between humans and machines, as we look to a hopefully brighter future. ■

ABOVE: A 3D illustration of bacillus anthracis, gram-positive spore forming bacteria which cause anthrax, and which can be weaponized. [Photo: Shutterstock]

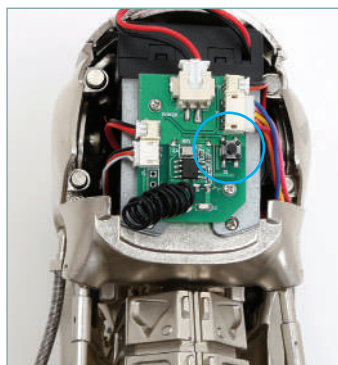
LEFT: Missiles equipped with nuclear warheads, as in this 3D illustration, were the means by which Skynet protected itself in the Terminator franchise. [Photo: Shutterstock]



**"I'M NOT SURE BIOLOGICAL WEAPONS ARE ON PAR WITH NUCLEAR WEAPONS."
— DR. JEANNE GUILLEMIN,
NOTED SOCIAL ANTHROPOLOGIST AND
BIOWEAPONS EXPERT.**

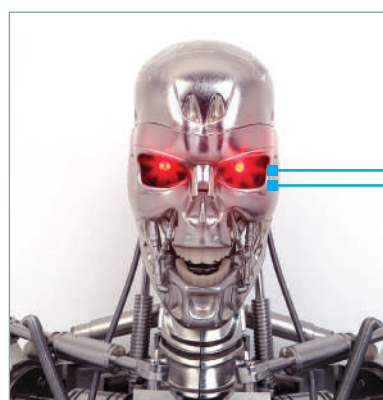


OPERATING YOUR T-800 MODEL

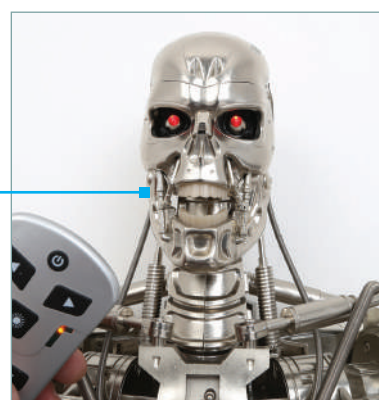
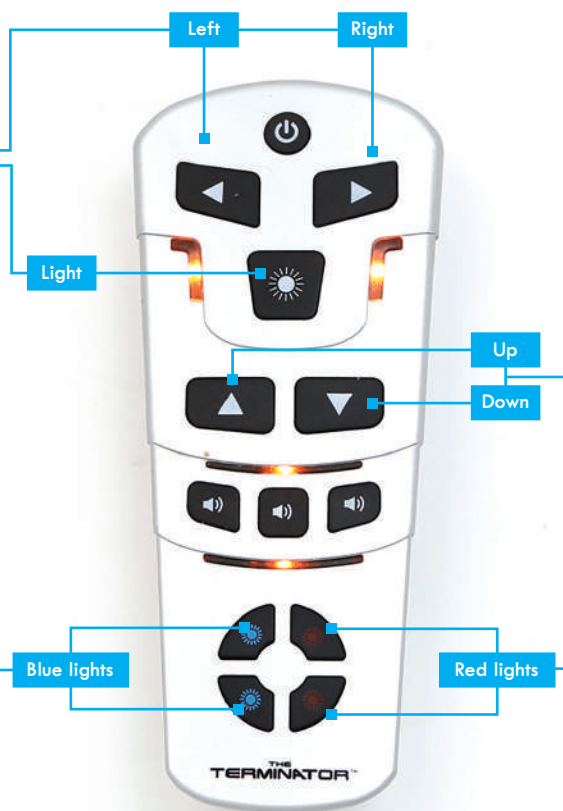


After removing the head backplate and turning on the battery box **3-4**, turn on the power button (circled) in the head by holding it down for a couple of seconds. The eyes will flash twice and remain on. Turn on the switch beneath the skull on the base and the remote control. Your model is now ready for remote control.

Turning on the power button on the remote control lights up the clear inserts: your remote is ready to use. The three sound buttons run different sound tracks. After use, switch off the power button inside the head, the switch under the skull and the power button on the remote. The eyes will flash twice before shutting down.



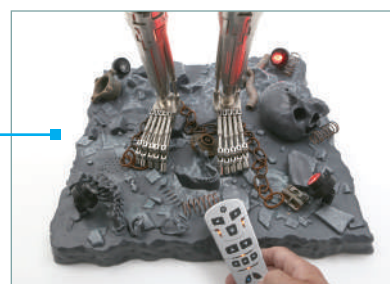
Pressing the light button turns the eyes on and off. The left and right buttons move the eyes from side to side.



Pressing the up and down buttons opens and closes the jaws.



The two blue light buttons turn on the searchlights on one side of the base.



The two red light buttons turn on the searchlights on the other side of the base.

HASTA LA VISTA, BABY!

