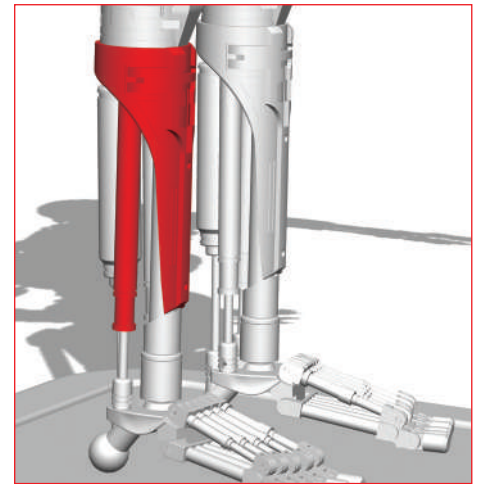
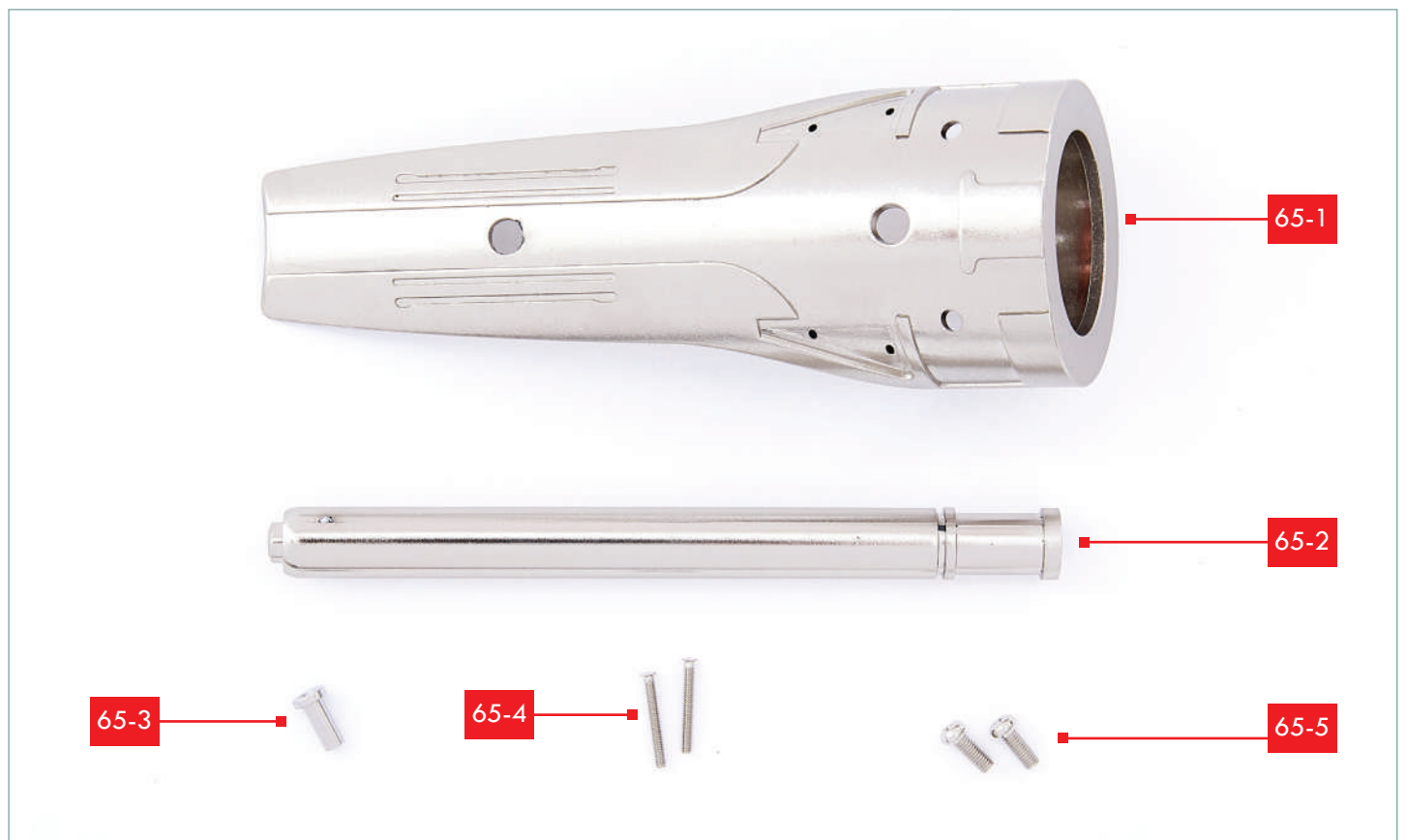


# STAGE 65: ADDING ANOTHER PART TO THE LOWER RIGHT LEG



Connect a third element to the lower right leg, and apply both the external casing and the shin guard.

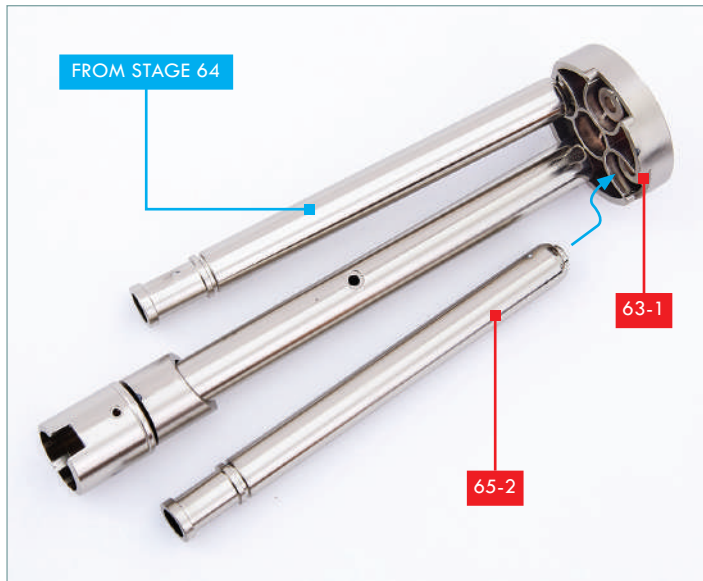


## LIST OF PIECES

65-1	Lower leg casing
65-2	Lower leg part
65-3	Screw housing
65-4	2x KM screws (2x16 mm) (1 spare)
65-5	2x PM screws (3x8 mm) (1 spare)

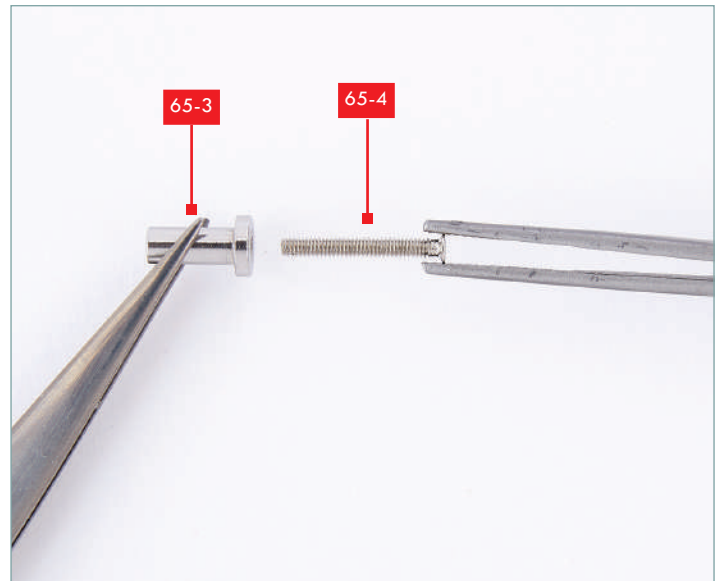
## YOU WILL ALSO NEED

A fine cross-head screwdriver, shin piece 64-1 supplied with stage 64 and tweezers.



## STEP 1

Take the lower leg assembly from stage 64 and the lower leg part **65-2**. Position the parts as shown, so that the narrow end can go into the socket in part **63-1**.



## STEP 2

Fit a KM 2x16 mm screw (**65-4**) into the screw housing **65-3**.



## STEP 3

Fit part **65-2** into the socket on one side of part **63-1**. Insert the screw and housing into the screw hole on the other side of part **63-1** and fix part **65-3** in place. The part will fit quite loosely to allow for movement.



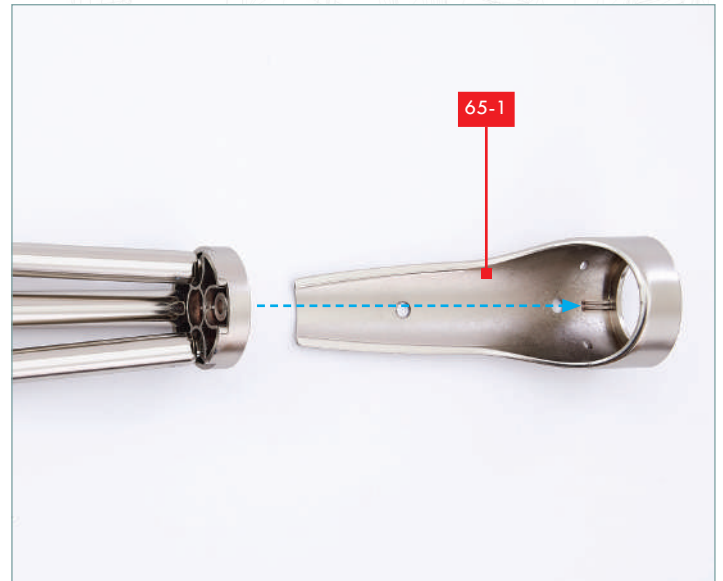
## STEP 4

This shows the two parts **64-2** and **65-2** in place, on either side of part **63-2**. Note the circled notch.



## STEP 5

Take the leg casing **65-1**. Note that there is a double tab in the 'neck' of the part (circled) and a hole half way down (arrow).



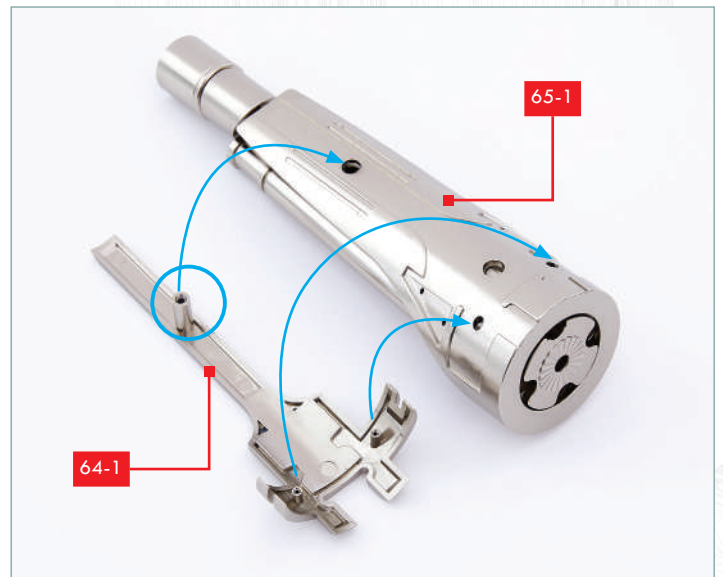
## STEP 6

Fit the assembly from step 4 into the leg casing **65-1** so that the notch (circled in step 4) fits over the tabs (circled in step 5).



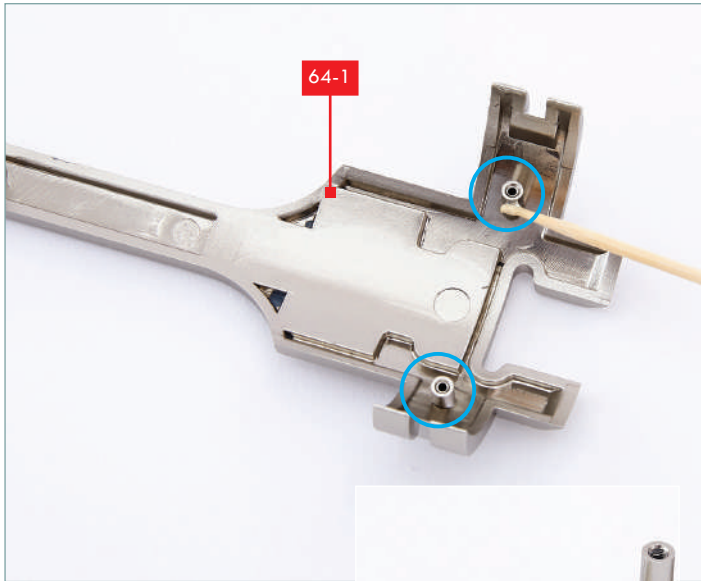
## STEP 7

This shows the leg casing **65-1** in place. The 'neck' of part **65-1** should be flush with the surface of part **63-1**.



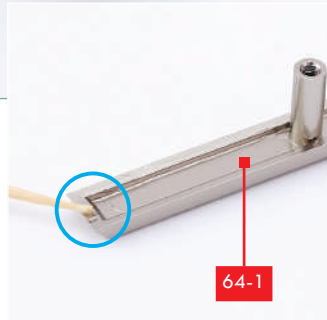
## STEP 8

Turn the lower leg and casing assembly over. Take the shin piece **64-1**, supplied with the previous stage. Identify the three holes in part **65-1** where the pegs on the shin **64-1** will fit, as indicated by the arrows. Check the fit. Note that the larger peg (circled) is a raised screw socket.



## STEP 9

When you are happy with the fit, apply a little superglue to the two pegs in part **64-1** and to the flat area at the tip of the shin (inset).



## STEP 10

Fix the shin part **64-1** on to the leg casing **65-1** as shown here.



## STEP 11

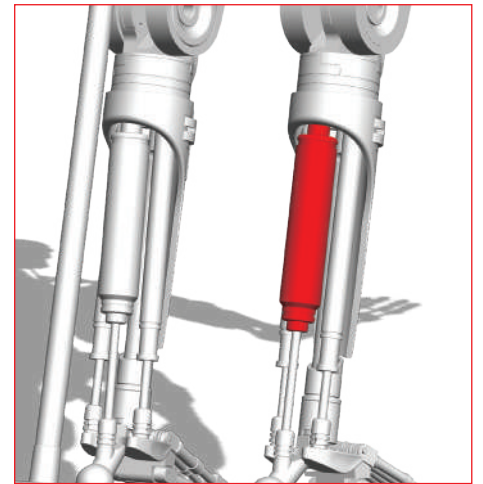
Turn the assembly over and take a PM 3x8 mm screw (**65-5**). Fit the screw through the hole in part **63-2** and into the raised socket on the shin part **64-1**. Fix in place.



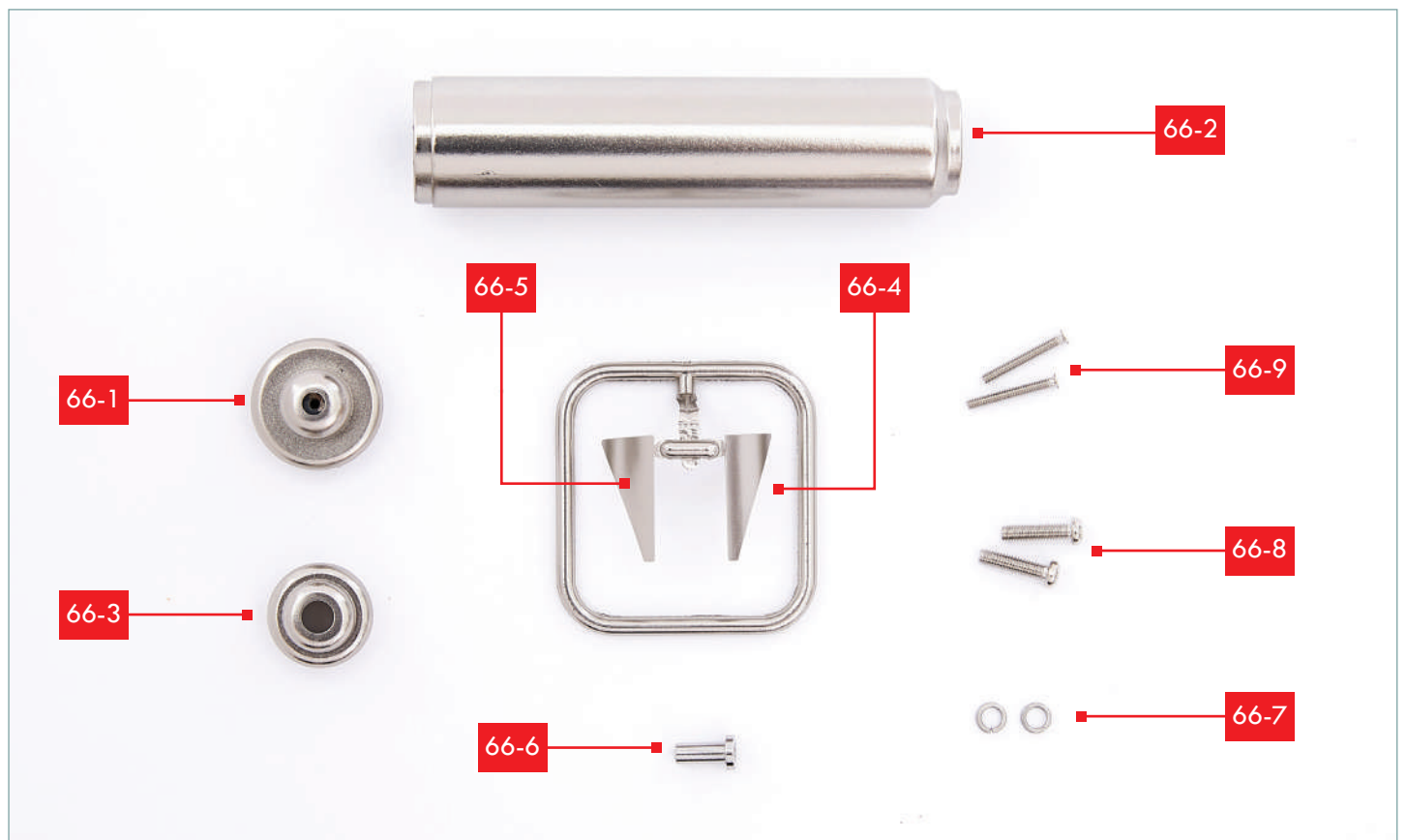
## STAGE COMPLETE!

Further parts have been added to the right lower leg.

# STAGE 66: ADDING ANOTHER PART TO THE LOWER RIGHT LEG



Add a component to the reverse of the right leg, as well as fresh details to its surface.

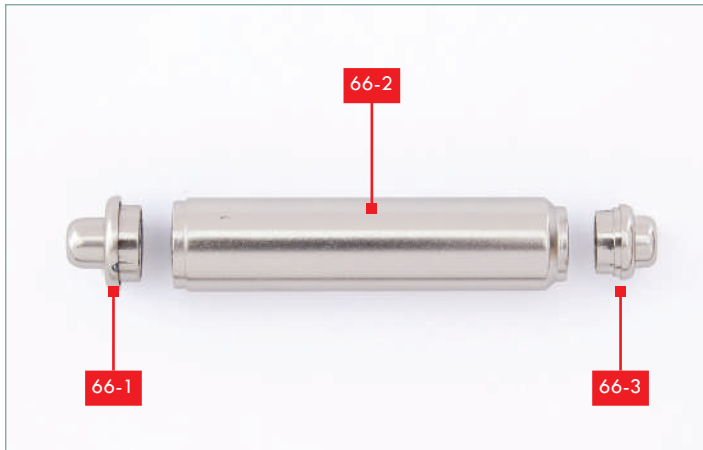


## LIST OF PIECES

66-1	Cap for lower leg part	66-6	Screw housing
66-2	Lower leg part	66-7	M3 spring washer
66-3	Cap for lower leg part	66-8	2x PM screws (3x12 mm) (1 spare)
66-4	Detail for leg casing (inner)	66-9	2x KM screws (2x16 mm) (1 spare)
66-5	Detail for leg casing (outer)		

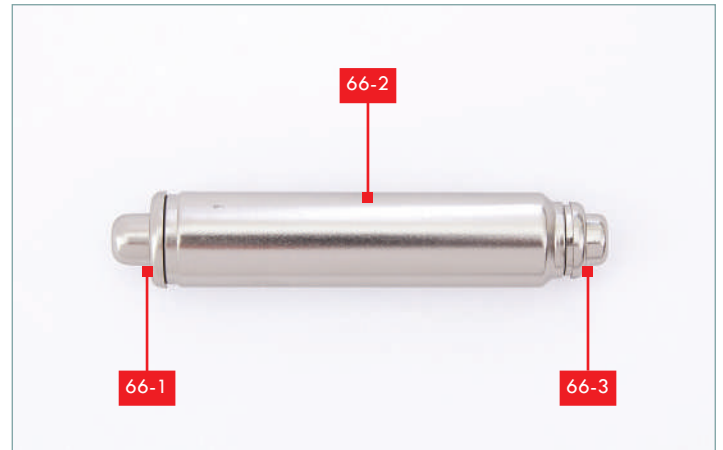
## YOU WILL ALSO NEED

Model assembly from stage 62, a fine cross-head screwdriver, tweezers, a small craft knife, superglue and a cocktail stick.



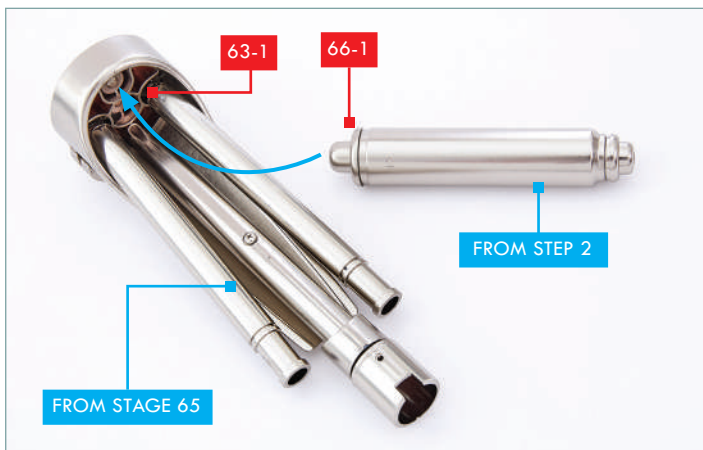
### STEP 1

Take the lower leg part **66-2** and the two end caps **66-1** and **66-3**.



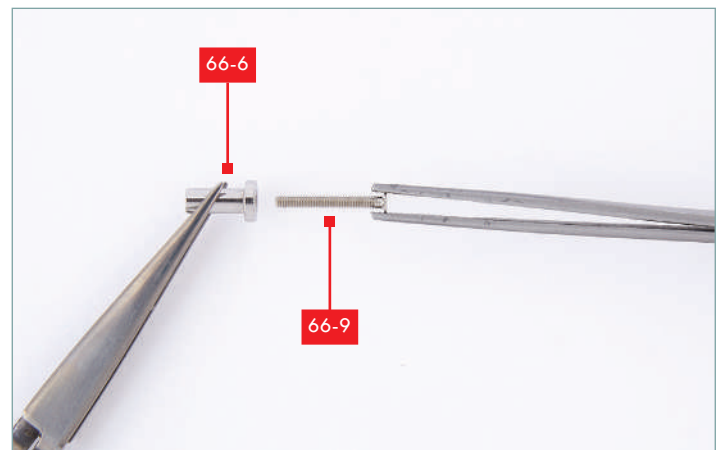
### STEP 2

Fit the end caps **66-1** and **66-3** into part **66-2** as shown.



### STEP 3

Check how the assembly from step 2 fits into the remaining socket in part **63-1** as indicated by the arrow. Note that it is part **66-1** that fits in the socket.



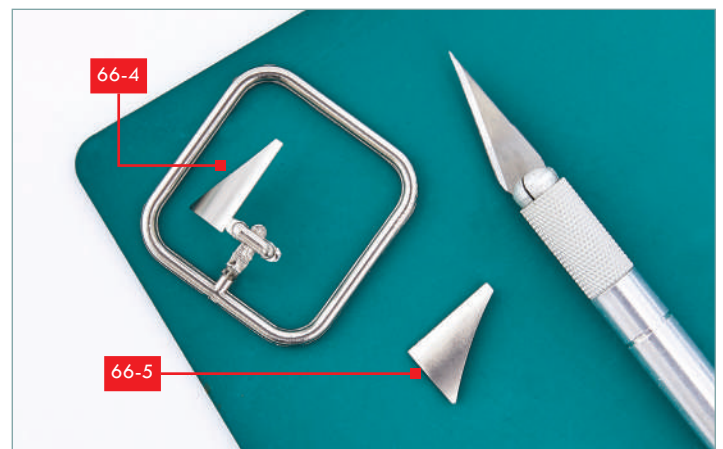
### STEP 4

Fit a KM 2x16 mm screw (**66-9**) into the screw housing **66-6**.



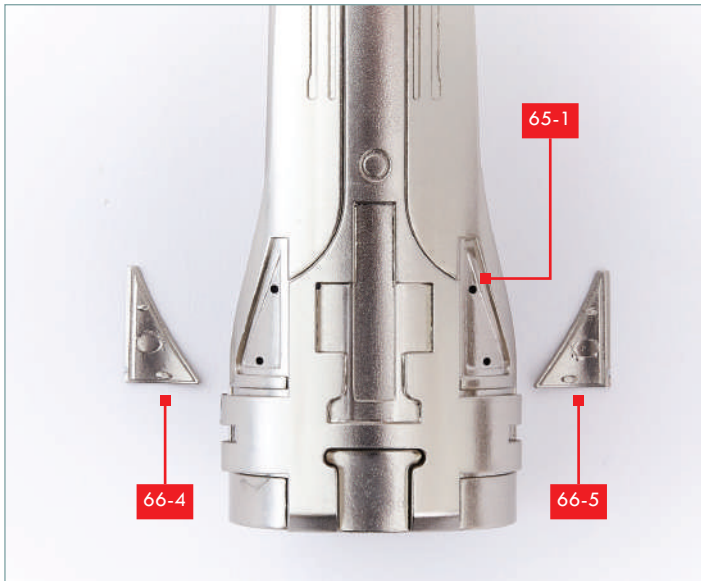
### STEP 5

Fit the screw and housing into the remaining outer socket in part **63-1** (circled) and into the top of part **66-1**. Fix in place, using a fine cross-head screwdriver. If necessary, to help with the fit, temporarily loosen the PM screw fitted in step 11 of the previous stage.



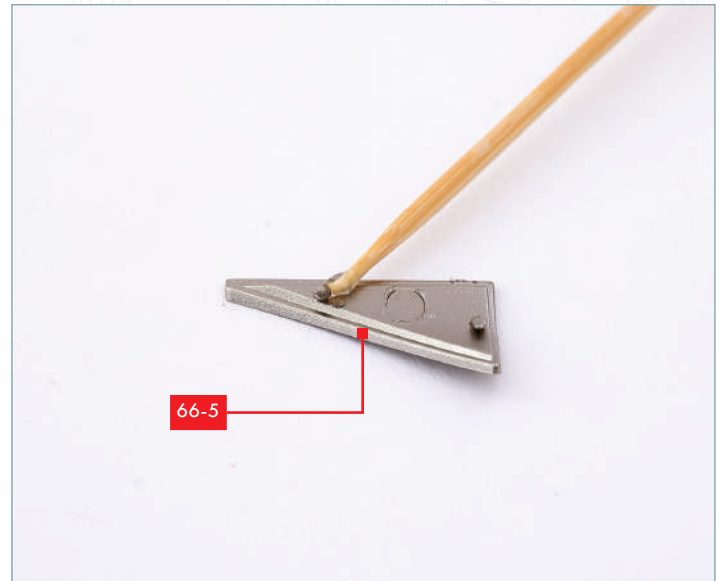
### STEP 6

Taking care while using a craft knife, cut parts **66-4** and **66-5** from the frame and remove any rough edges.



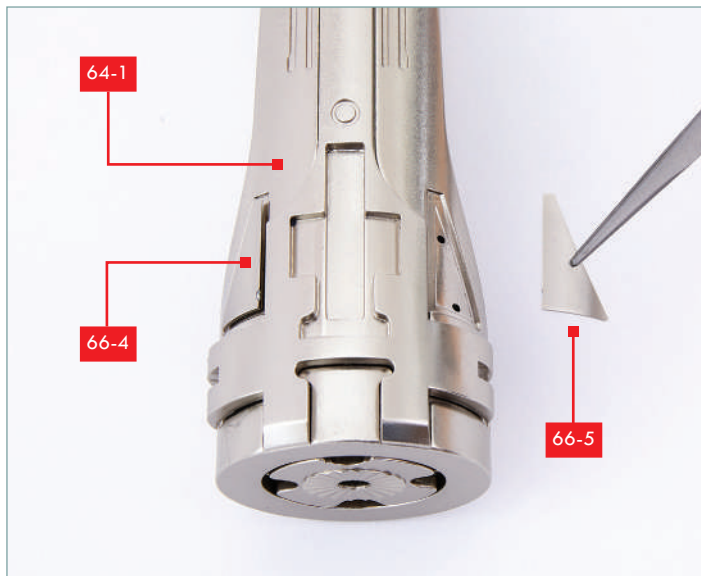
## STEP 7

These parts fit into recesses in the leg casing **65-1**. Identify the pegs on parts **66-5** and **66-4**, and the holes that they fit into, and test the fit.



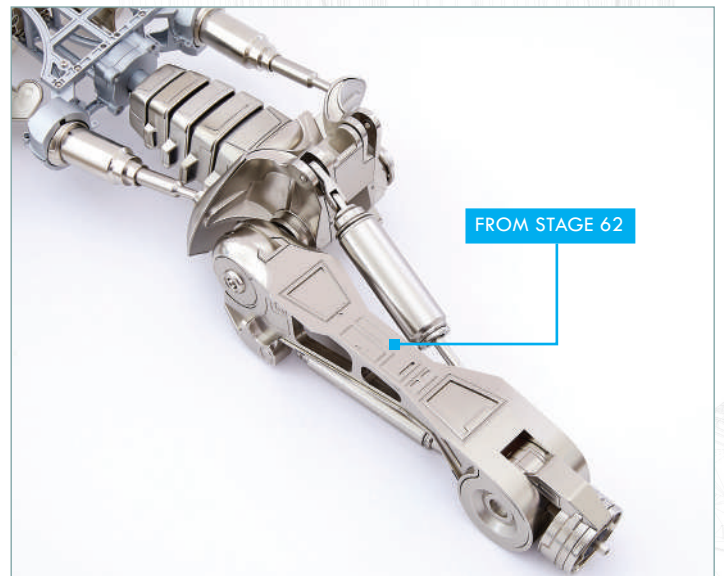
## STEP 8

One at a time, apply a little superglue to the pegs on parts **66-4** and **66-5**.



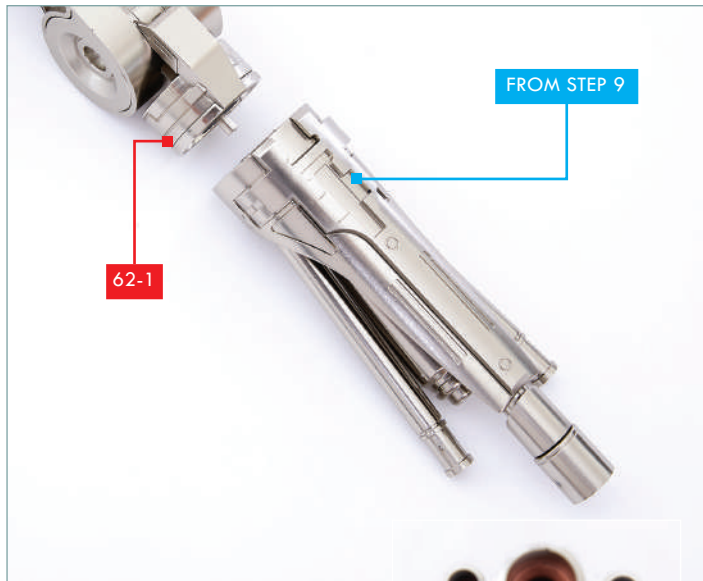
## STEP 9

Fix parts **66-4** and **66-5** in place, as shown.



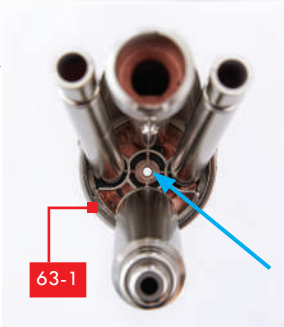
## STEP 10

Take the model assembly from stage 62 and lay it face upwards on your work surface.



## STEP 11

Note that there is a screw socket on the end of the knee joint, part **62-1**. This will fit into the central hole in the joint of the lower leg (**63-1**, visible in the view of the parts from step 9, inset right, arrow).



## STEP 12

Fit an M3 spring washer **66-7** over the shaft of a PM 3x12 mm screw (**66-8**).



## STEP 13

Without letting the washer slip off the screw, insert the screw in the central hole of part **63-1** and into the shaft of part **62-1**. This is easier if you can raise the model, so that the leg is sloping downwards. Tighten the screw to fix in place. It may be easier to fit the part by also turning the model over.



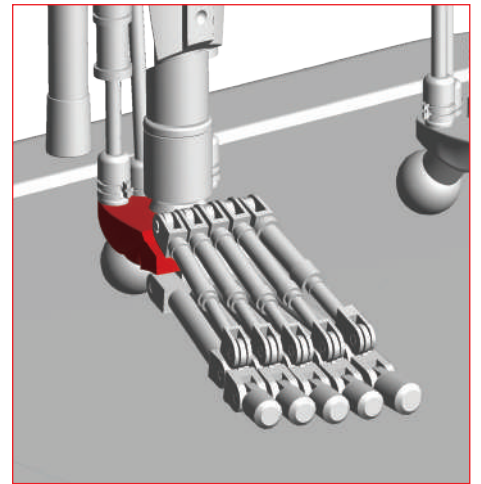
## STAGE COMPLETE!

The lower right leg has been fitted to the knee joint.

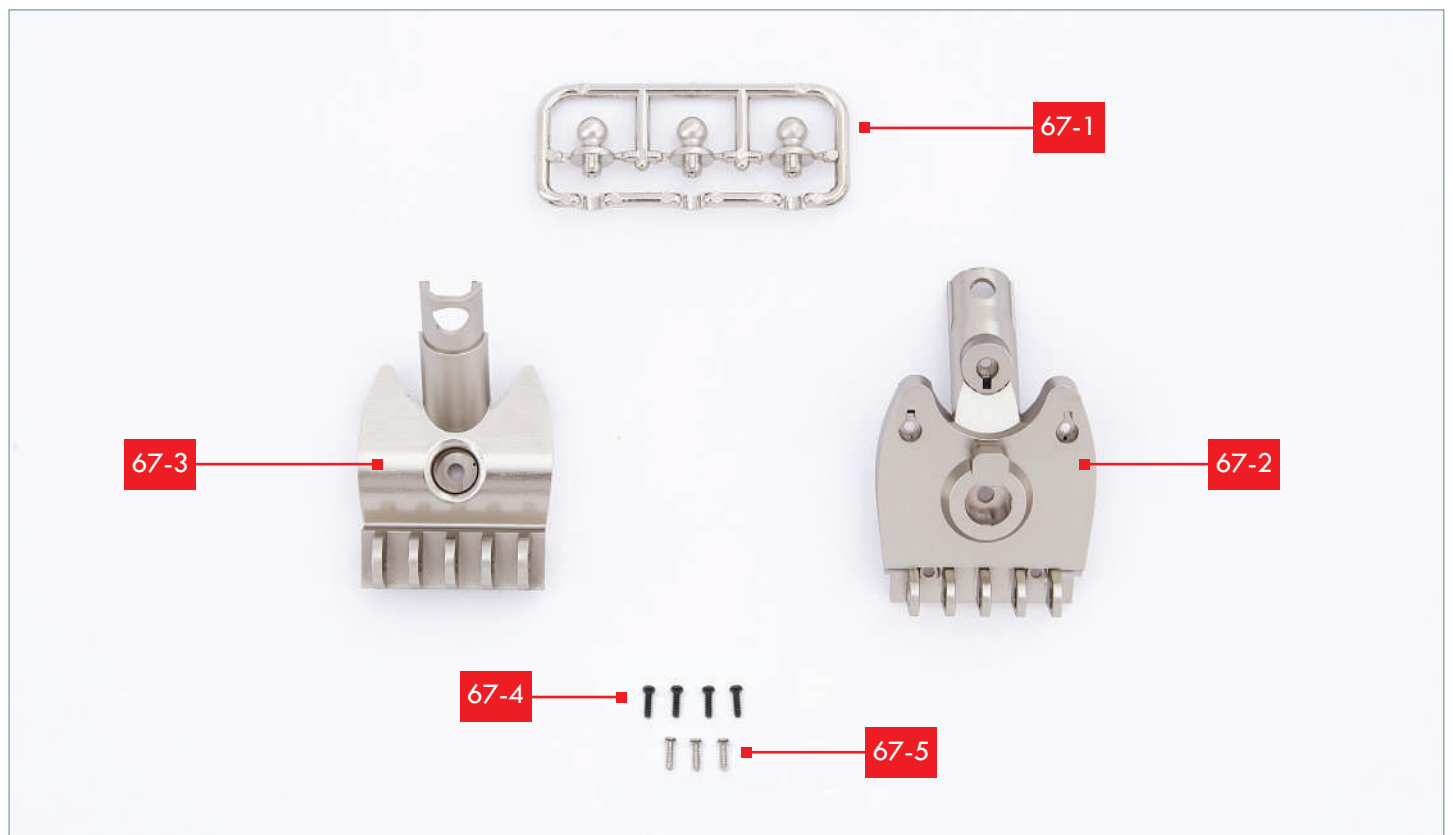




# STAGE 67: ADDING ANOTHER PART TO THE LOWER RIGHT LEG



Construct the right ankle joint that will support the right leg and toes.



## LIST OF PIECES

67-1	3x Ball joints
67-2	Ankle joint (upper)
67-3	Ankle joint (lower)
67-4	4x PB screws (1.7x6 mm) (1 spare)
67-5	3x PB screws (2x6 mm) (1 spare)

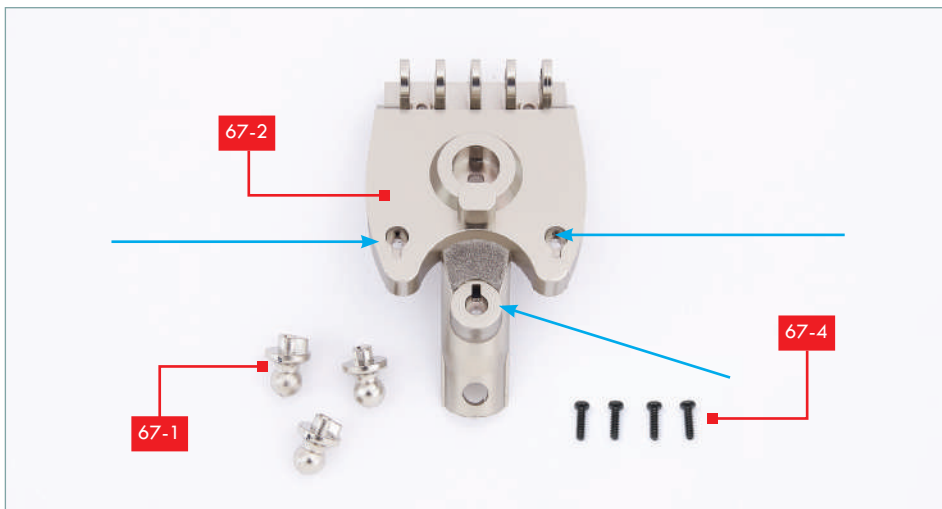
## YOU WILL ALSO NEED

A fine cross-head screwdriver, fine file, sharp craft knife and cutting mat.



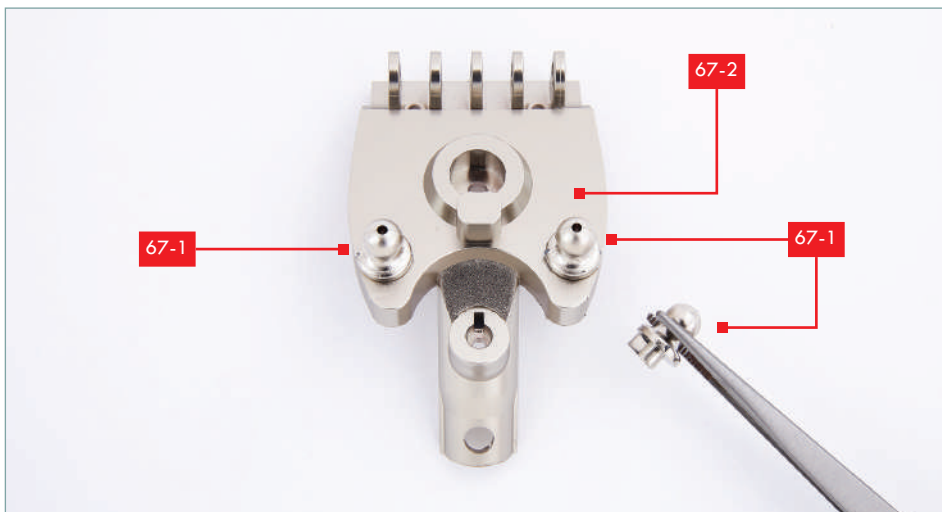
### STEP 1

Remove the three ball joints **67-1** from the frame. Smooth any rough edges where they were joined to the frame with sandpaper or a fine file.



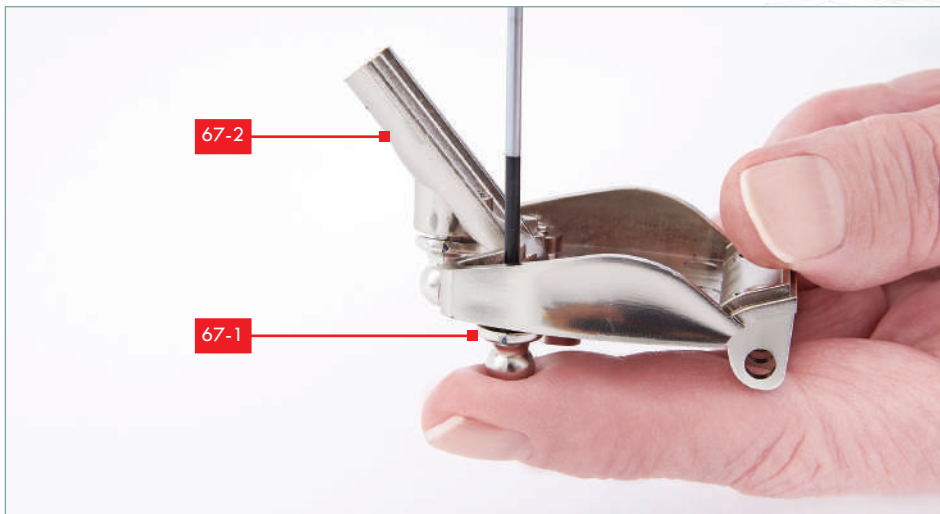
### STEP 2

Take the upper ankle joint **67-2** and identify the three shaped holes where the ball joints **67-1** will fit (arrows). You will also need three PB 1.7x6 mm screws (**67-4**).



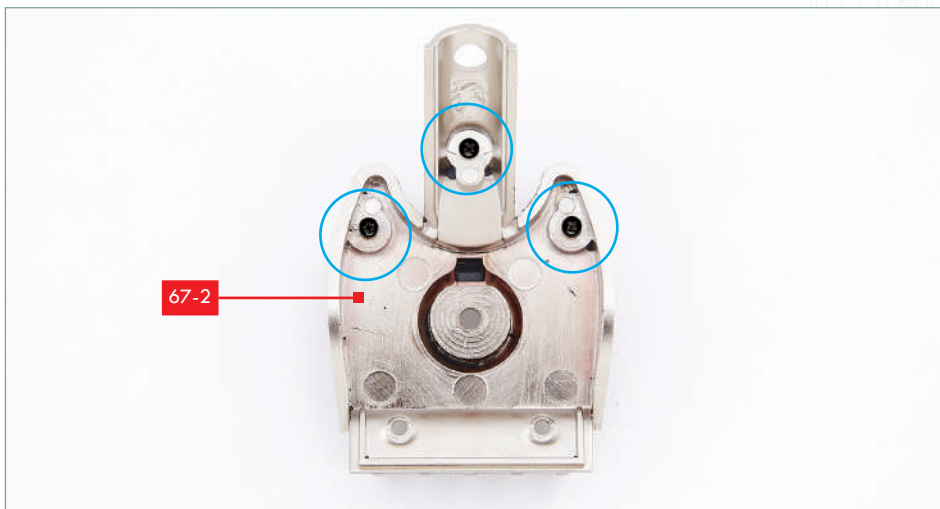
### STEP 3

Fit the ball joints **67-1** into the holes in part **67-2**, so that the tabs on the sides of the ball joints fit into the shaped holes.



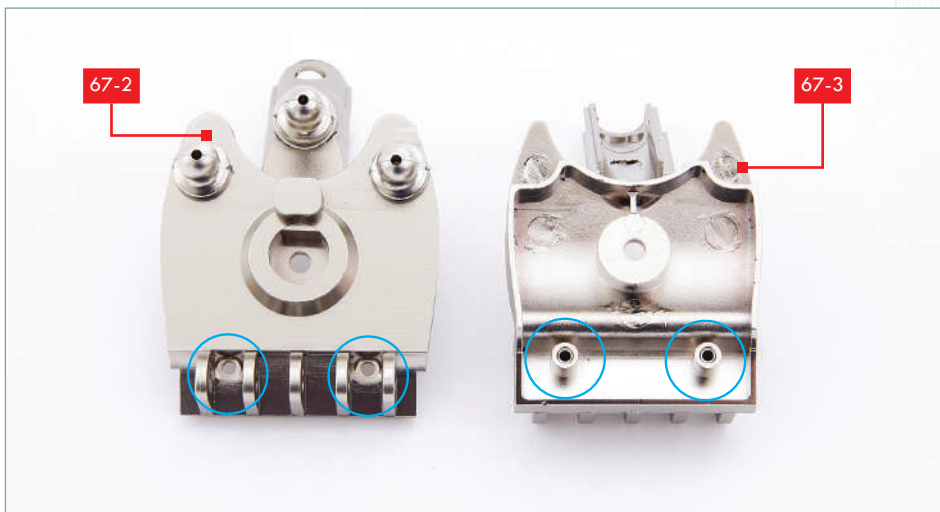
#### STEP 4

Carefully turn part **67-2** over, and fix the ball joints **67-1** in place using three PB 1.7x6 mm screws. You will need to hold the ball joint in place as you tighten the screws.



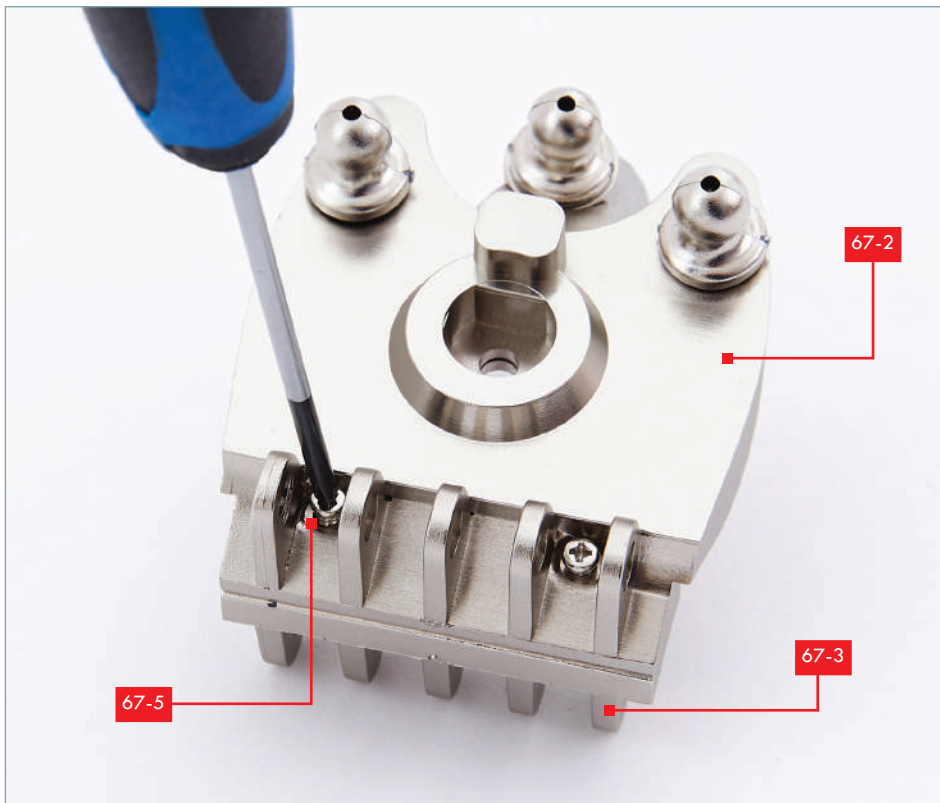
#### STEP 5

This shows the view from the inner side of part **67-2** with the three PM screws in place (circled).



#### STEP 6

The next step is to fit parts **67-2** and **67-3** together. Note the screw holes in **67-2** and raised sockets in **67-3** (circled). These should be aligned when the parts are fitted together.



## STEP 7

When you are happy with the fit, fix the parts together using two PB 2x6 mm screws (67-5).

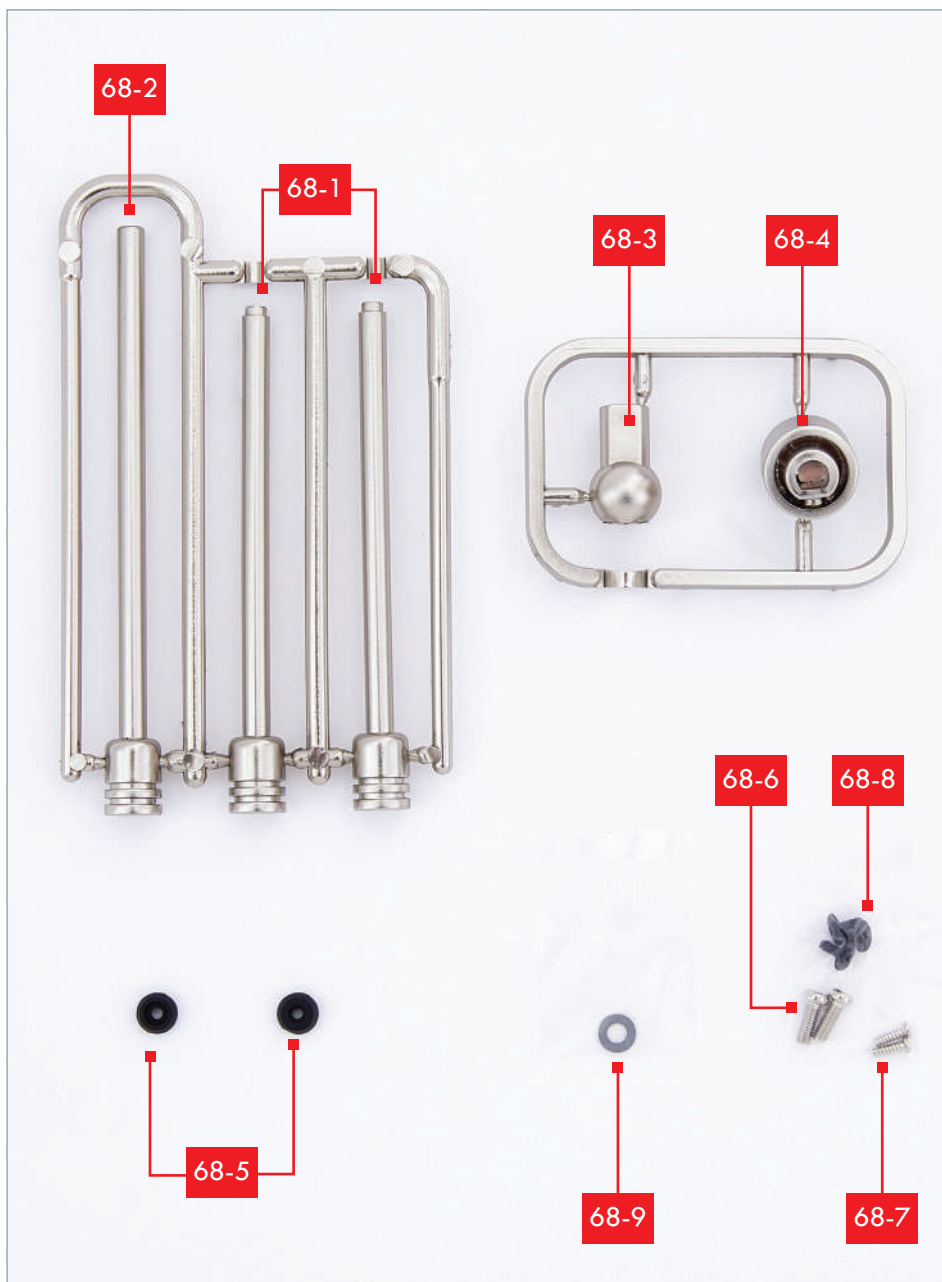
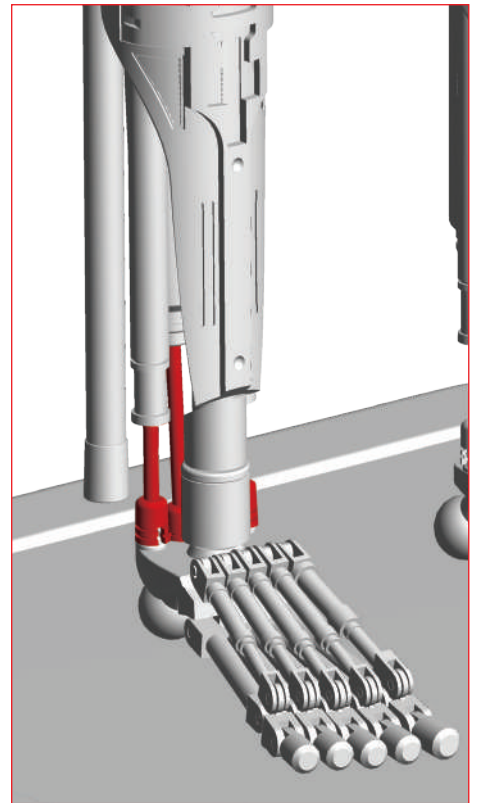


## STAGE COMPLETE!

The first parts of the ankle joint have been assembled.



# STAGE 68: FITTING THE ANKLE JOINT TO THE RIGHT LEG

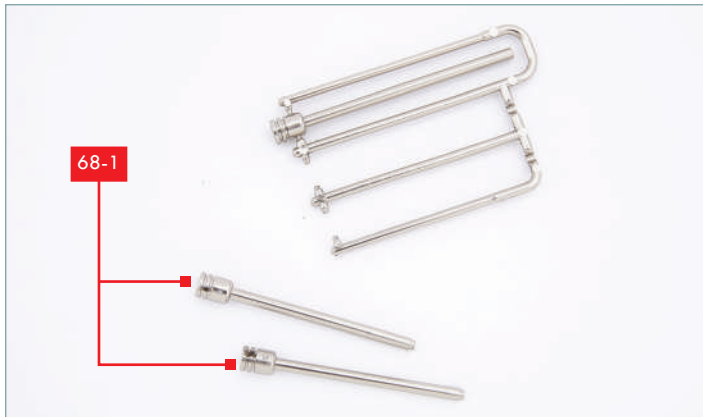


## LIST OF PIECES

- |      |                                      |
|------|--------------------------------------|
| 68-1 | 2x Lower leg connector               |
| 68-2 | Lower leg connector                  |
| 68-3 | Ankle joint (ball)                   |
| 68-4 | Ankle joint (socket)                 |
| 68-5 | 2x Rubber washer                     |
| 68-6 | 2x PM screws (3x8 mm) (1 spare)      |
| 68-7 | 2x PB screws (1.7x6 mm)<br>(1 spare) |
| 68-8 | 3x PWM screws (2x5 mm)<br>(1 spare)  |
| 68-9 | Washer                               |

## YOU WILL ALSO NEED

A fine cross-head screwdriver,  
fine file, sharp craft knife and  
cutting mat.



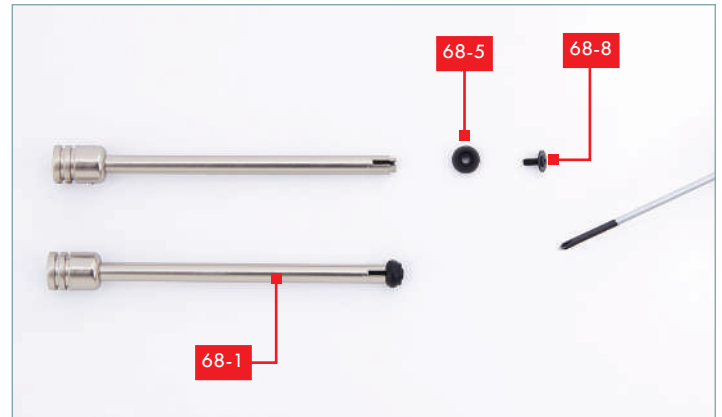
## STEP 1

Cut the two shorter leg connectors **68-1** from the frame and smooth any rough edges where they were connected using a fine file or sandpaper.



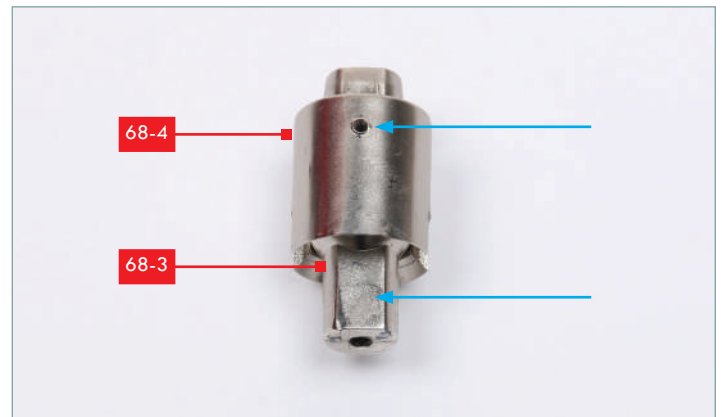
## STEP 3

Repeat step 2 to fit a washer **68-5** to the second leg connector **68-1**.



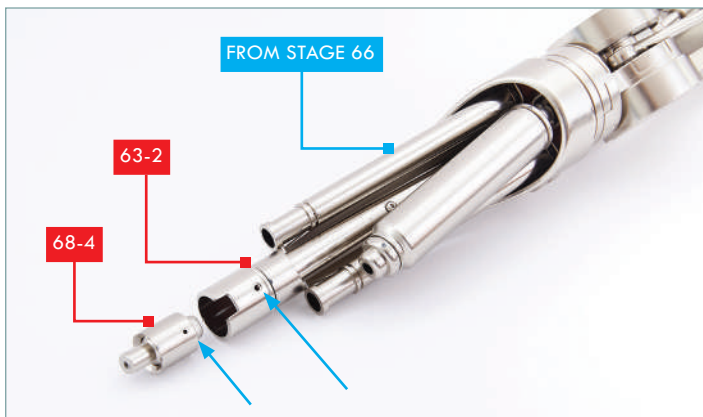
## STEP 2

Fit the larger recess in the rubber washer **68-5** over the end of the first leg connector **68-1** and fix in place with a PWM 2x5 mm screw (**68-8**). Do not overtighten the screw, but ensure that the rubber washer cannot come off.



## STEP 4

Remove the ankle joint parts **68-3** and **68-4** from the frame and smooth any rough edges. After checking that the flat edge of part **68-3** aligns with the screw hole in part **68-4** (blue arrows), fit the ball of the ankle joint **68-3** into the socket **68-4**. You will need to push it firmly until it clicks in place.



## STEP 5

Take the leg assembly from stage 66. Fit the ankle joint assembly **68-4/68-3** into the end of part **63-2**, so that the screw holes (arrows) are aligned.



## STEP 6

Fix the parts together with a PB 1.7x6 mm screw (**68-7**).



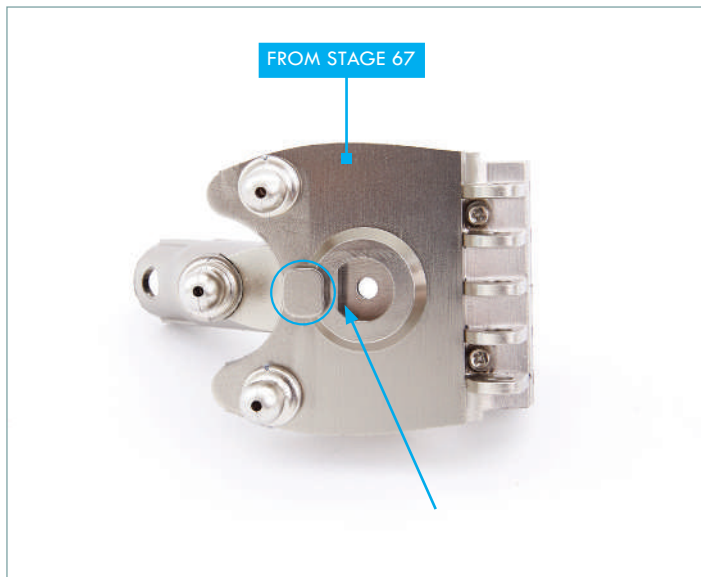
## STEP 7

Remove the longer leg connector **68-2** from the frame and smooth any rough edges. Fit the leg connectors **68-1** into the leg parts **64-2** and **65-2**. (The ends with rubber washers go in first.)



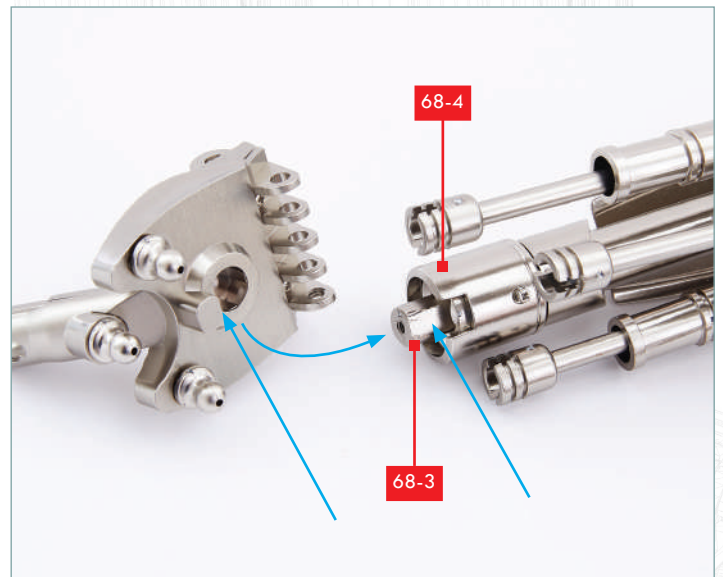
## STEP 8

Fit the leg connector **68-2** into the socket on the end of part **66-2**.



## STEP 9

Take the ankle joint assembly from stage 67. Note that in the centre there is a shaped hole (one side is flat, as shown by the arrow) and a rectangular block (circled).



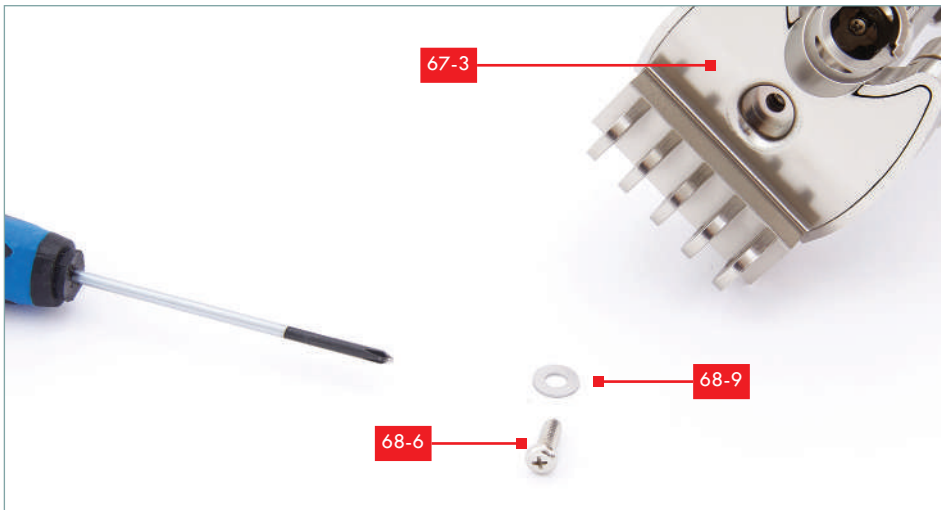
## STEP 10

Fit the ankle joint assembly over the end of the ball and socket joint, so that the flat face of the hole matches the shape of the end of the ball joint **68-3** and the rectangular block fits into the recess in the socket joint **68-4**.



## STEP 11

Fit the sockets on the ends of parts **68-1** and **68-2** on to the ball joints **67-1**. Push them firmly so that the balls click into place, as shown. You may prefer to wait until after the next step to do this.



## STEP 12

Fit the washer **68-9** over a PM 3x8 mm screw (**68-6**). Insert the screw through the recessed hole in the centre of part **67-3** and into the screw hole in the end of the ball joint part **68-3** (not visible). Tighten the screw to fix the joint together securely (inset).



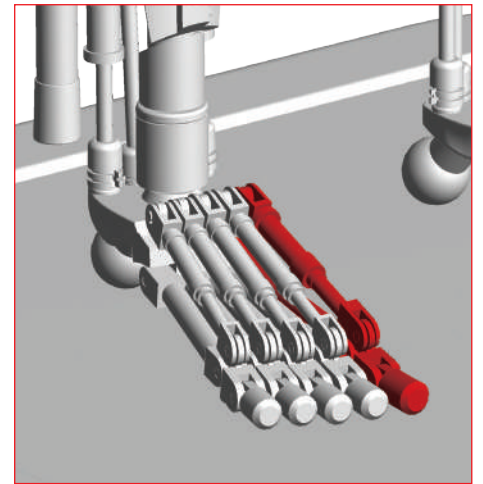
## STAGE COMPLETE!

The ankle joint has been fitted to the lower end of the right leg.

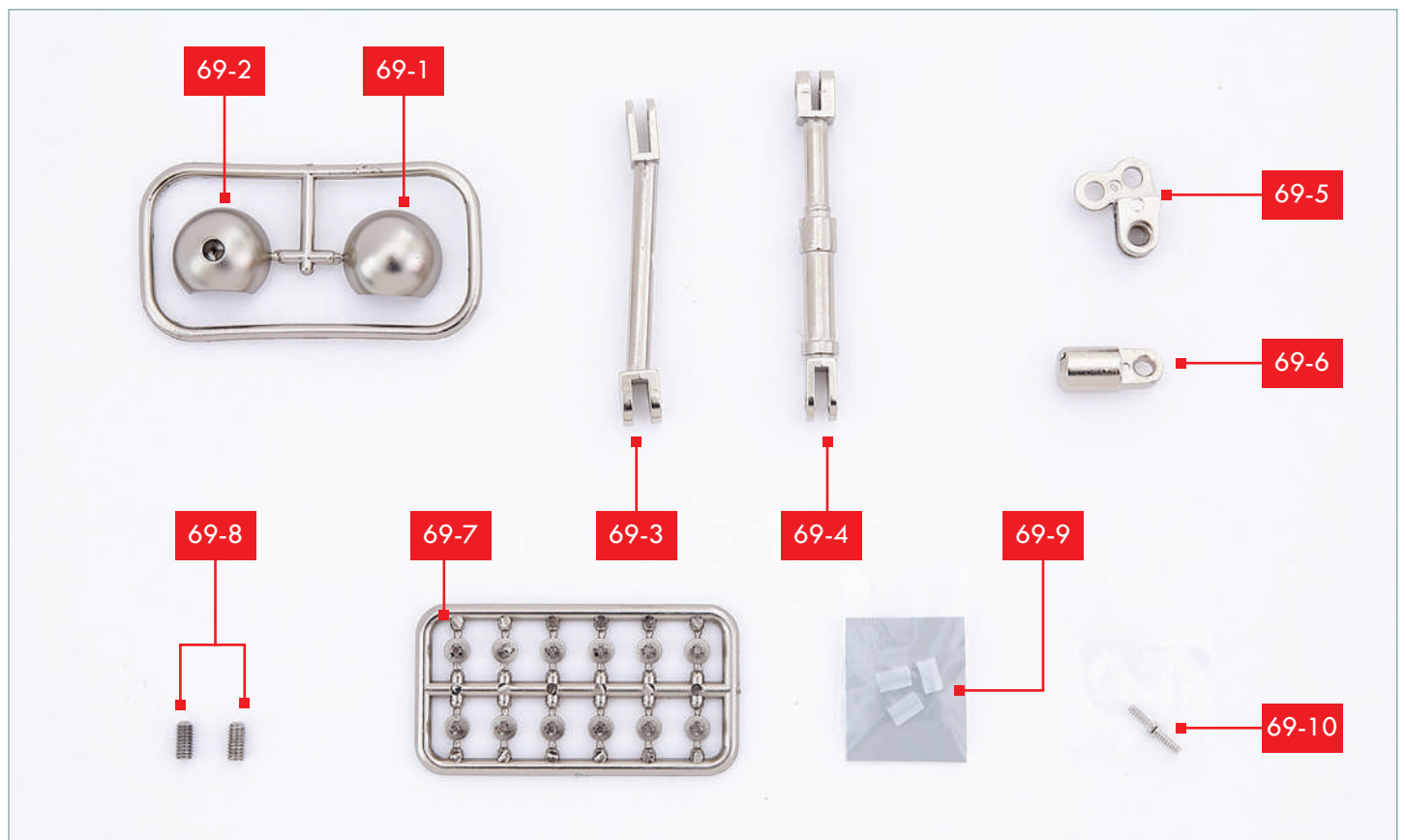




# STAGE 69: ADDING A HEEL DETAIL AND ASSEMBLING FOOT PARTS



Begin to construct the toes of the right foot - and remember to hold onto the foot joint pins for future stages!

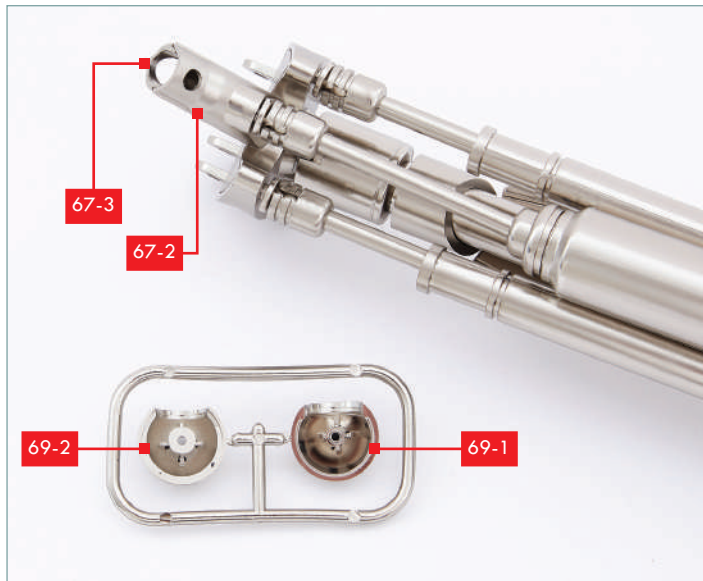


## LIST OF PIECES

69-1	Heel detail	69-6	Toe
69-2	Heel detail	69-7	12x Foot joint pin (includes spares)
69-3	Foot part (marked 1)	69-8	2x grub screws (1 spare)
69-4	Foot part (marked 1)	69-9	3x plastic sleeves (1 spare)
69-5	Toe joint	69-10	2x PB screws (2x6 mm) (1 spare)

## YOU WILL ALSO NEED

A fine cross-head screwdriver, fine file, Allen key (supplied with an earlier stage), sharp craft knife and cutting mat.



## STEP 1

Take the assembly from stage 68. The 'stalk' formed by parts **67-2** and **67-3** forms the heel of the model. Note the smaller and larger holes in parts **67-2** and **67-3**. Cut the two heel details **69-1** and **69-2** from the frame and smooth any rough edges with a fine file.



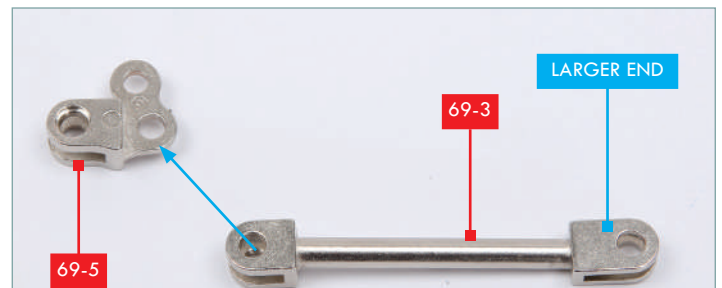
## STEP 2

Fit part **69-1** over part **67-2** so that the raised screw socket on the inside of part **69-1** fits into the small hole. Fit part **69-2** on the other side of the heel.



## STEP 3

Fit a PB 2x6 mm screw (**69-10**) through the hole in part **69-2** and into the socket in part **69-1** and tighten to fix the parts in place.

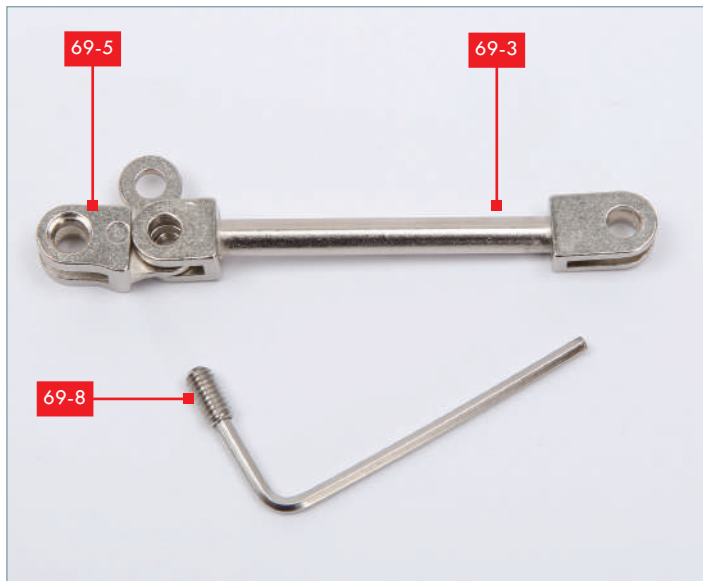


## EXPERT TIP!

Note that the bars that form the foot are carefully shaped. They must be put together the right way round to ensure the foot has its proper shape. Examine the photographs carefully as you work through the steps.

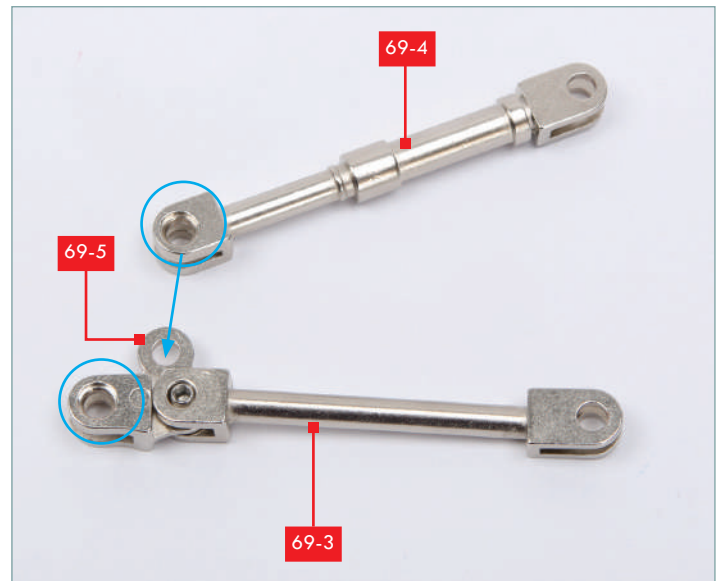
## STEP 4

Take the first foot part **69-3** (marked 1) and the toe joint **69-5**. The ends of part **69-3** form hinge joints. Note that one end (on the right in the photograph) is larger than the other. Position the parts as shown, with the number marking on part **69-3** facing downwards. The smaller hinge joint of part **69-3** slots over the hole in part **69-5** as indicated (arrow).



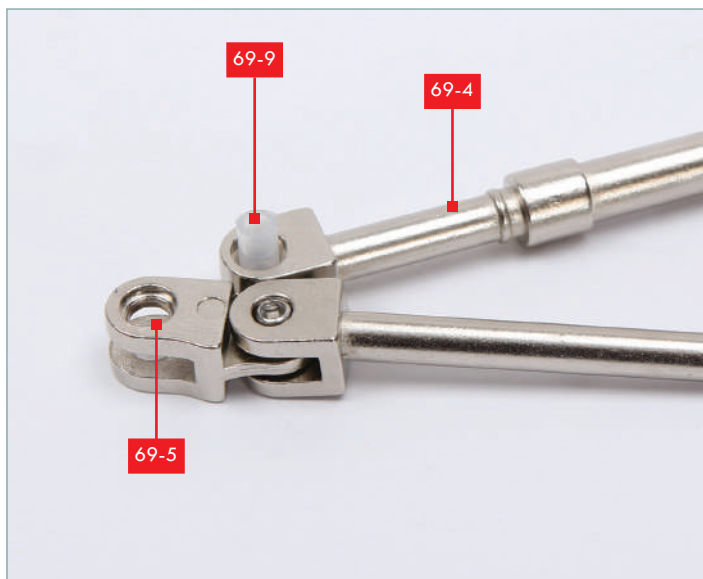
## STEP 5

Use an Allen key to fit the grub screw **69-8** into part **69-3** and through part **69-5** to the other side of part **69-3** to hold the joint together. Keep the grub screw central so that it does not protrude beyond part **69-5**.



## STEP 6

Take the foot part **69-4** (marked 1). Position as shown, so that the marking '1' is facing downwards. Note that the holes in parts **69-5** and **69-4** that are circled have recessed rims. The arrow indicates how the smaller end of part **69-4** fits on to part **69-5**.



## STEP 7

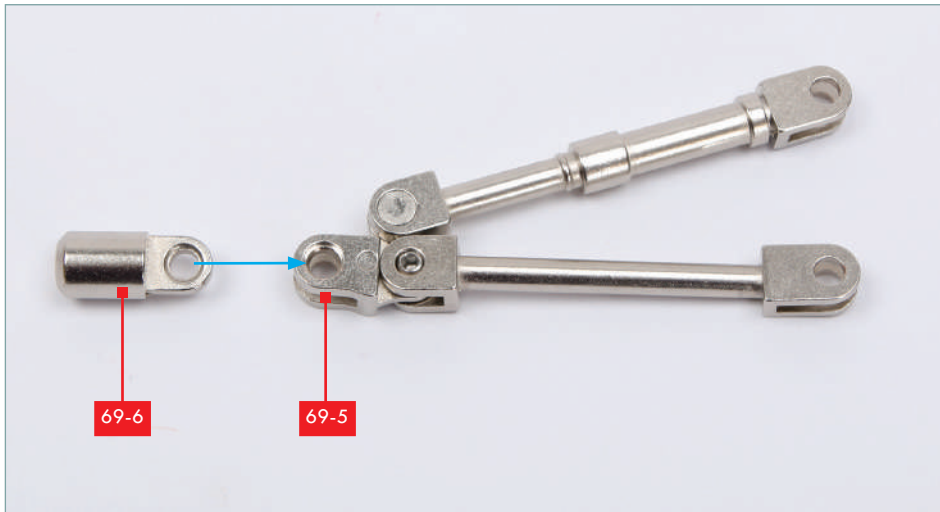
Fit a plastic sleeve **69-9** through the joint where the hinge joint of part **69-4** fits over the hole in part **69-5**.



## STEP 8

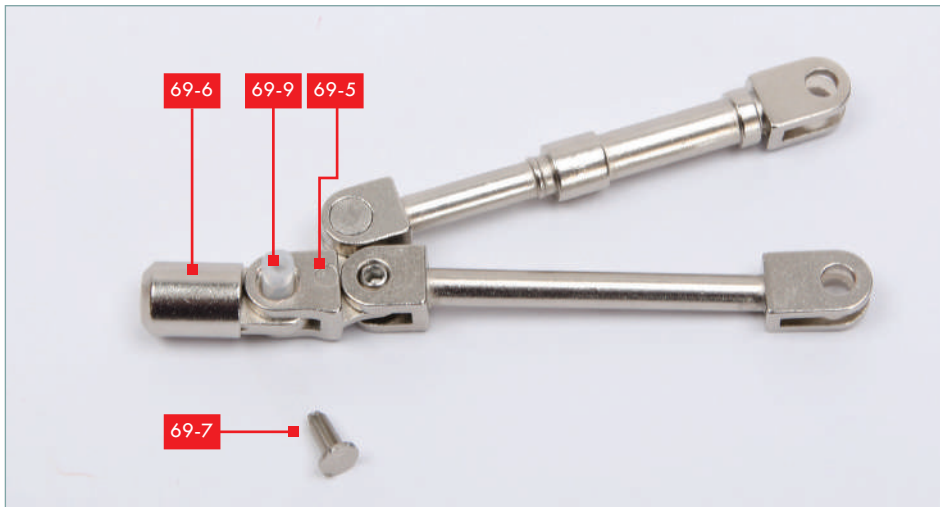
Cut a ribbed pin **69-7** from the frame and remove any rough edges. Whilst supporting from below, fit the pin into the plastic sleeve. As you push it in, the grip in the joint becomes firm, but it is still flexible. The inset picture shows how the head of the pin (blue arrow) should look once fitted in the recess.





## STEP 9

Fit the hole in the end of part **69-6** between the holes in the end hinge of part **69-5** (arrow).



## STEP 10

Fit a plastic sleeve **69-9** into the joint between the parts, as shown. Cut a ribbed pin **69-7** from the frame and smooth any rough edges. Whilst supporting from below, push the pin **69-7** into the plastic sleeve **69-9** to create a firm but flexible joint (above).

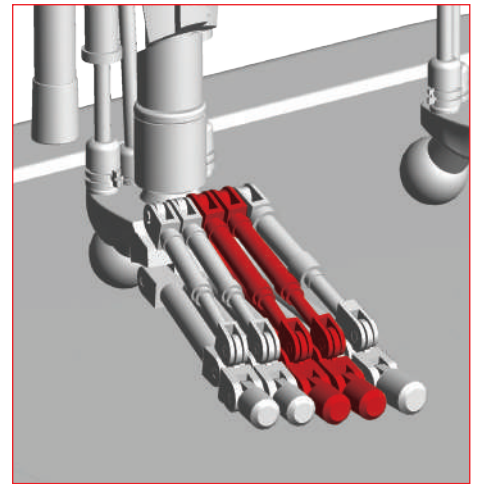


## STAGE COMPLETE!

A detail has been fitted to the heel of the model and the first parts of the right foot have been assembled. Note that only two of the pins have been used. Eight more are needed for future stages, so store them carefully.

# STAGE 70: ASSEMBLE TWO MORE ELEMENTS OF THE RIGHT FOOT

Using the pins from the previous stage, we'll assemble two more sections of the foot, including toes.



## LIST OF PIECES

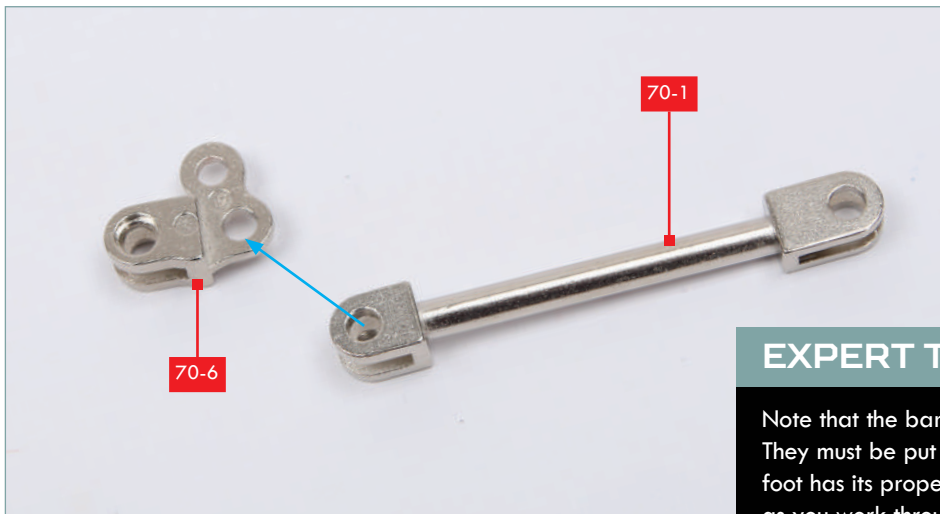
70-1	Foot part (marked 2)	70-5	2x Toe
70-2	Foot part (marked 3)	70-6	2x Toe joint
70-3	Foot part (marked 2)	70-7	3x grub screws
70-4	Foot part (marked 3)	70-8	5x plastic sleeves (1 spare)

## YOU WILL ALSO NEED

Ribbed pins 69-7 (supplied with stage 69), a fine cross-head screwdriver, fine file, Allen key (supplied with an earlier stage), sharp craft knife and cutting mat

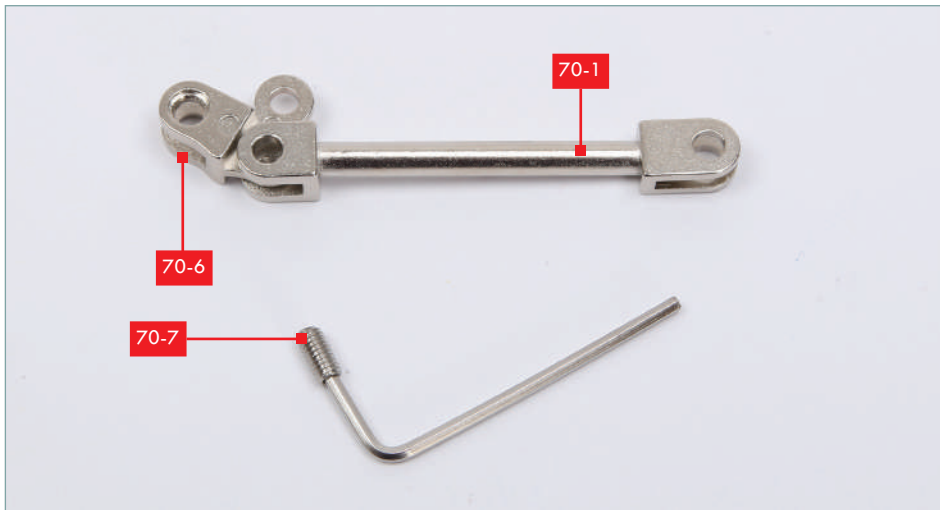
## STEP 1

Take the first foot part **70-1** (marked 2) and the toe joint **70-6**. The ends of part **70-1** form hinge joints. Note that one end (on the right in the photograph) is larger than the other. Position the parts as shown, with the number marking on part **70-1** facing downwards. The smaller hinge joint of part **70-1** slots over the hole in part **70-6** as indicated (arrow).



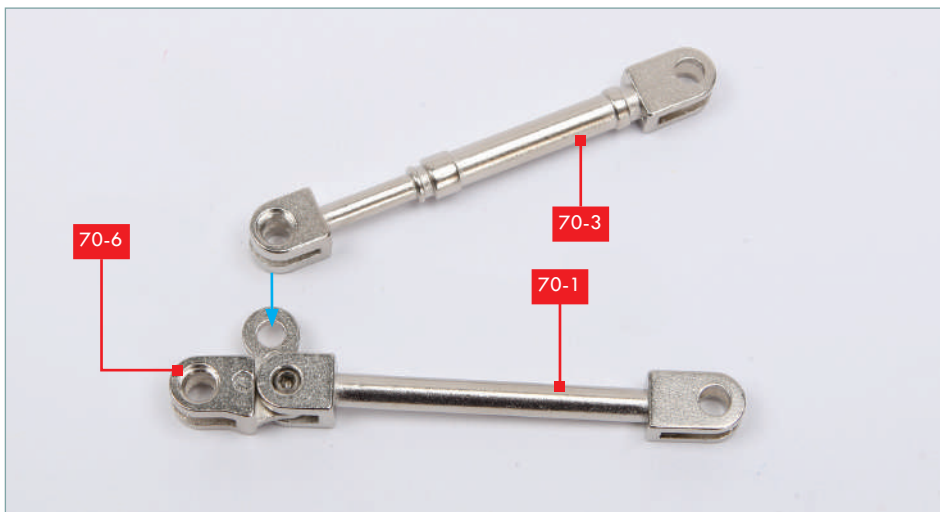
### EXPERT TIP!

Note that the bars that form the foot are carefully shaped. They must be put together the right way round to ensure the foot has its proper shape. Examine the photographs carefully as you work through the steps.



## STEP 2

Use an Allen key to fit the grub screw **70-7** into part **70-1** and through part **70-6** to the other side of part **70-1** to hold the joint together.



## STEP 3

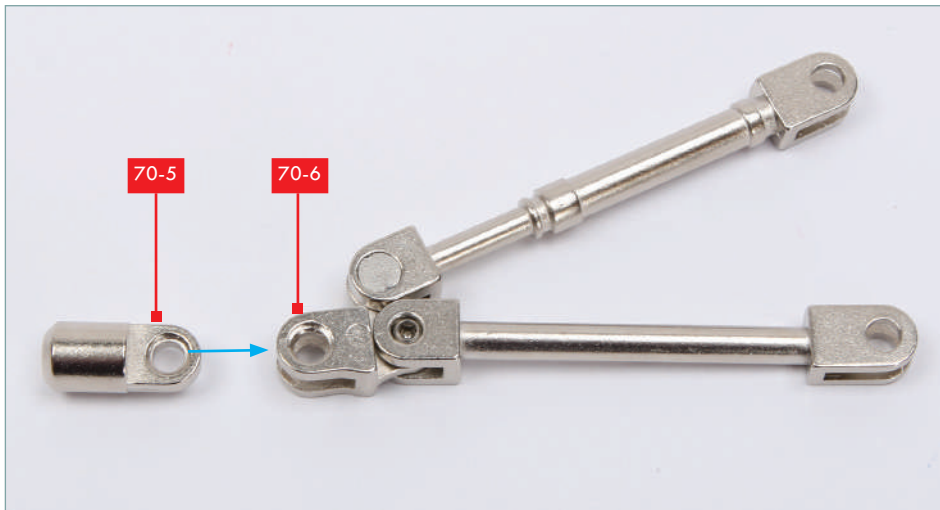
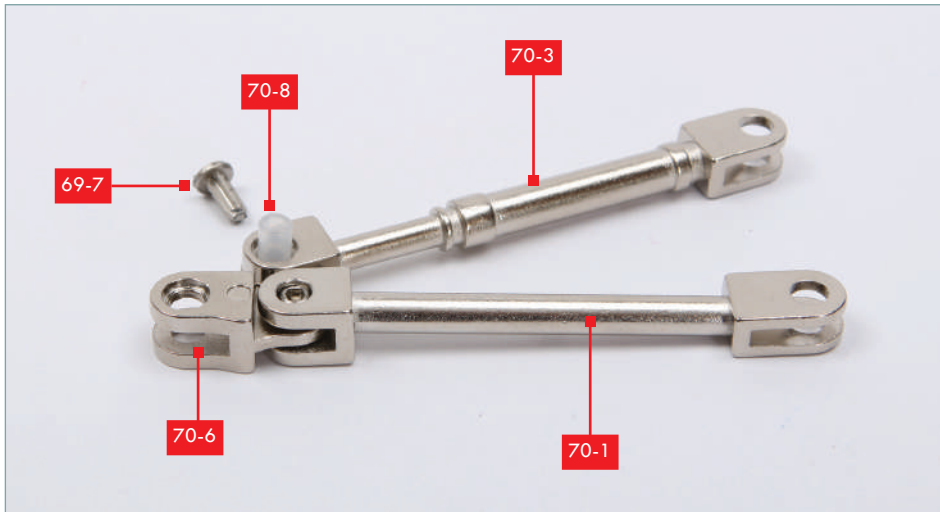
Take the foot part **70-3** (marked 2). Position as shown, so that the marking '2' on both parts **70-1** and **70-3** is facing downwards. The arrow indicates how the smaller end of part **70-3** fits on to part **70-6**.

**EXPERT TIP!**

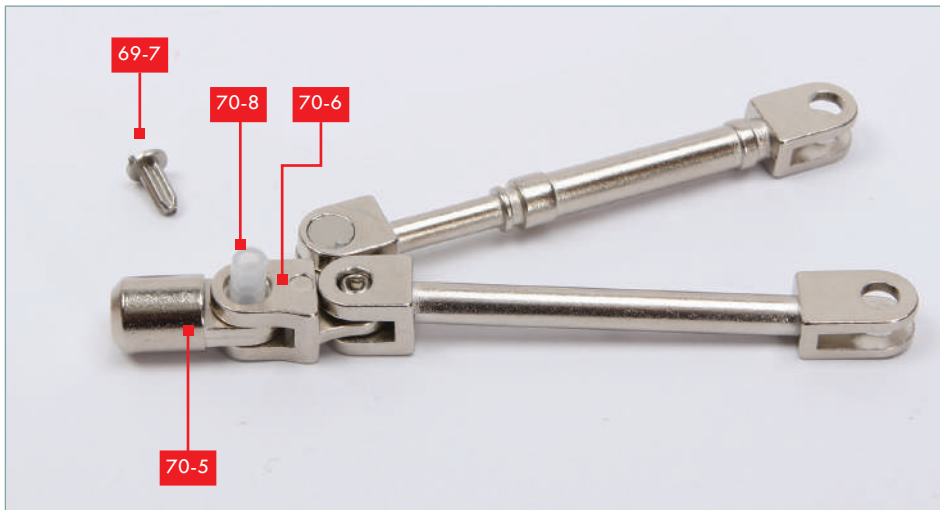
On the following steps, ensure the plastic sleeves are supported from below when inserting the pin.

**STEP 4**

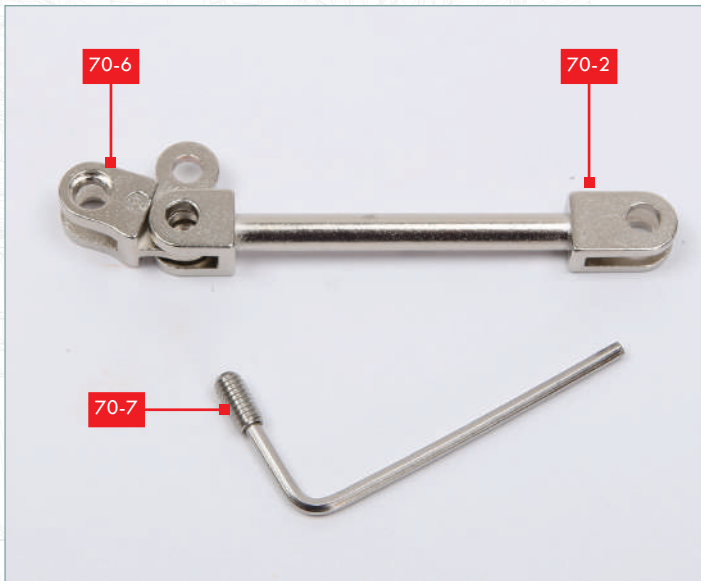
Fit a plastic sleeve **70-8** through the joint where the hinge joint of part **70-3** fits over the hole in part **70-6**. Cut a ribbed pin **69-7** from the frame and remove any rough edges. Fit it into the plastic sleeve. As you push it in, the grip in the joint becomes firm, but it is still flexible.

**STEP 5**

Fit the hole in the end of the toe part **70-5** between the holes in the end hinge of part **70-6** (arrow).

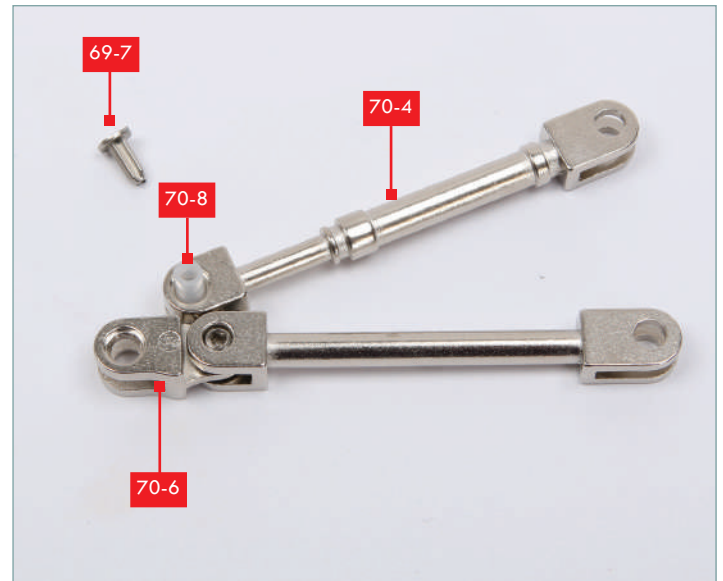
**STEP 6**

Fit a plastic sleeve **70-8** into the joint between the toe parts, as shown. Cut a ribbed pin **69-7** from the frame and smooth any rough edges. Push the pin **69-7** into the plastic sleeve **70-8** to create a firm but flexible joint. The inset picture shows how the head of the pin should look once fitted in the recess.



## STEP 7

Take the foot part **70-2** (marked 3) and the second toe joint **70-6** (marked 6). Check the orientation, including that the number marking is facing downwards, and then fit the shorter hinge joint on part **70-2** over the hole in part **70-6** as shown. Fix together with a grub screw **70-7**.



## STEP 8

Take the foot part **70-4** (marked 3) and check the orientation so that the marking '3' on both part **70-2** and **70-4** is facing downwards. Fit the shorter hinge joint over the hole in the toe joint **70-6**. Fit a plastic sleeve **70-8** through the joint. Cut a ribbed pin **69-7** from the frame and fit it into the plastic sleeve to create a firm but flexible joint.



## STEP 9

Fit a toe **70-5** into the hinge joint in part **70-6** and fix together with a plastic sleeve **70-8** and a ribbed pin **69-7**.



## STAGE COMPLETE!

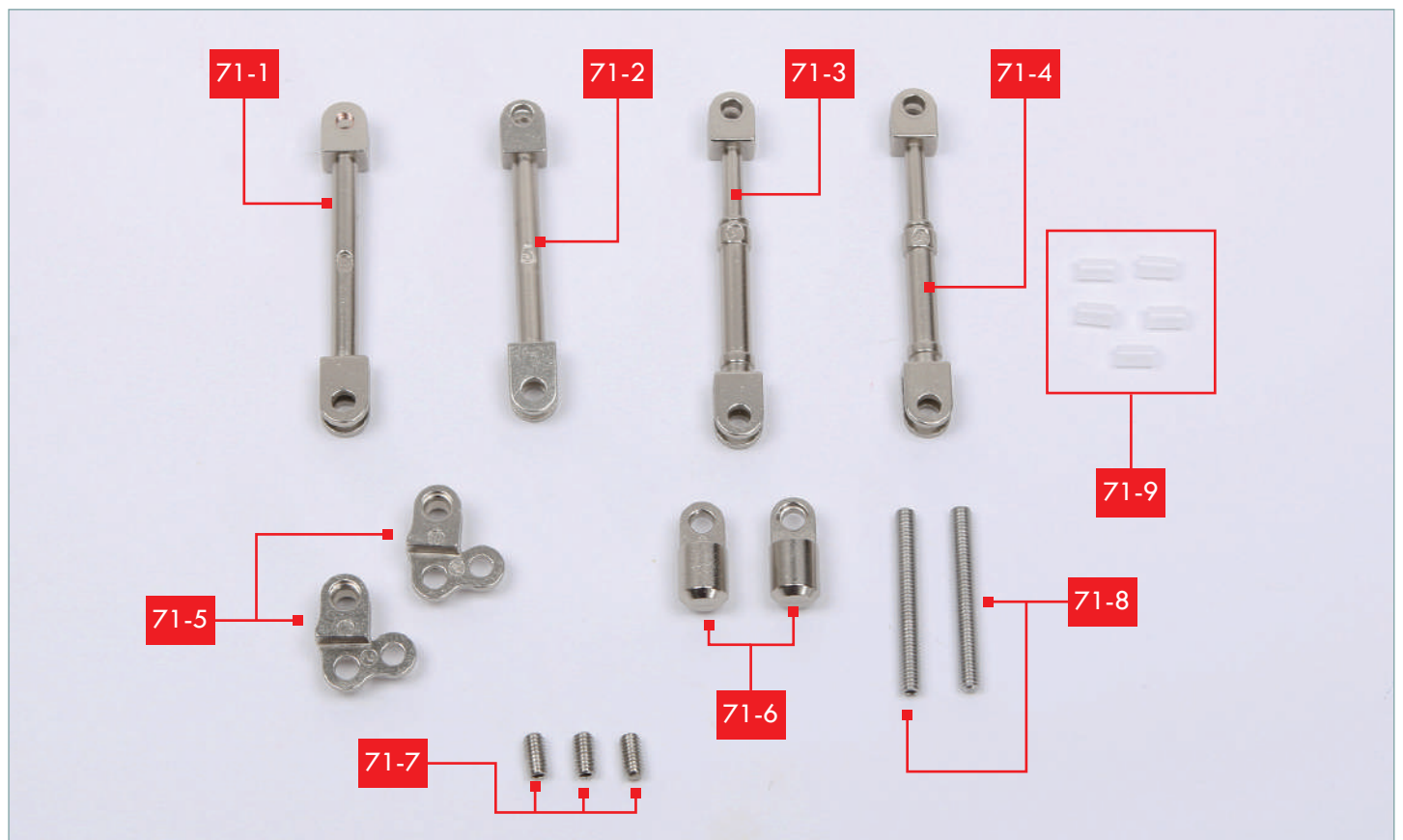
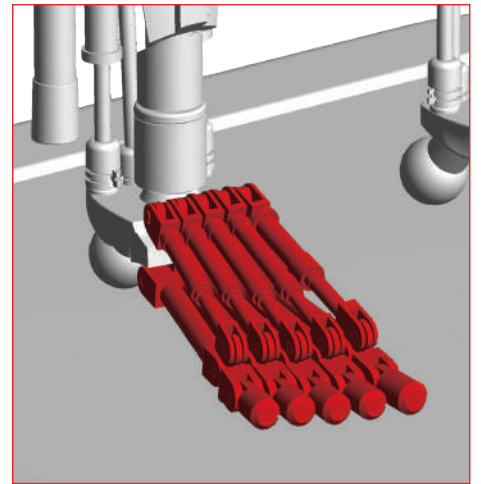
Two more sections of the foot, complete with toes, have been assembled.





# STAGE 71: ASSEMBLING FOOT PARTS AND ATTACHING THEM TO THE RIGHT LEG

Put together the fourth and fifth foot parts for the right foot, attach the toes, and bolt them into place.

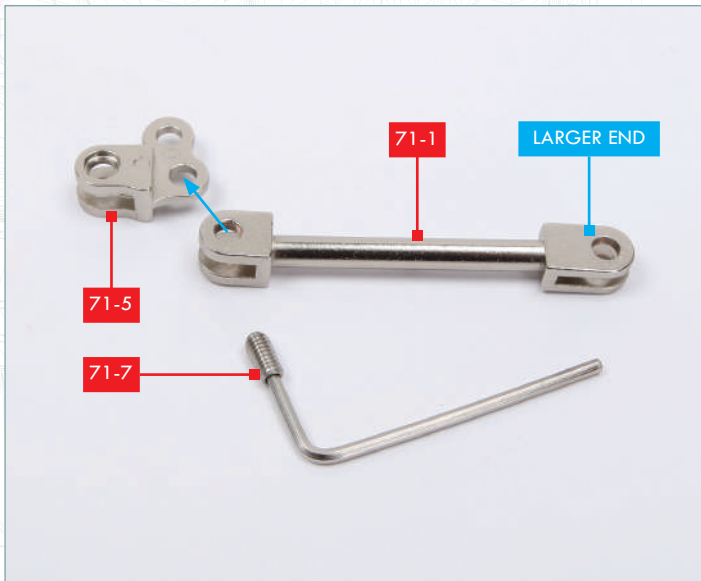


## LIST OF PIECES

71-1	Foot part (marked 4)	71-6	2x Toe
71-2	Foot part (marked 5)	71-7	3x grub screws (4x8 mm) (1 spare)
71-3	Foot part (marked 4)	71-8	2x grub screws (4x35 mm)
71-4	Foot part (marked 5)	71-9	5x Plastic sleeves (1 spare)
71-5	2x Toe joint		

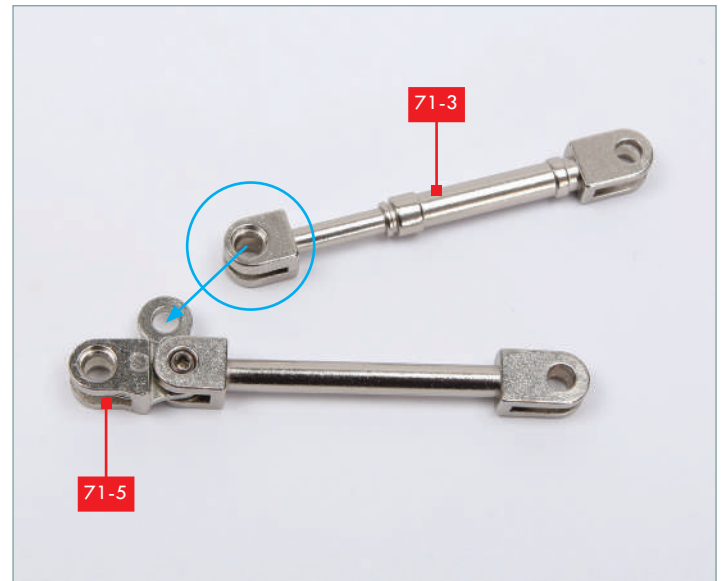
## YOU WILL ALSO NEED

The remaining plastic pins 69-7 on the frame supplied with stage 69, Allen key (supplied with an earlier stage), sharp craft knife and cutting mat.



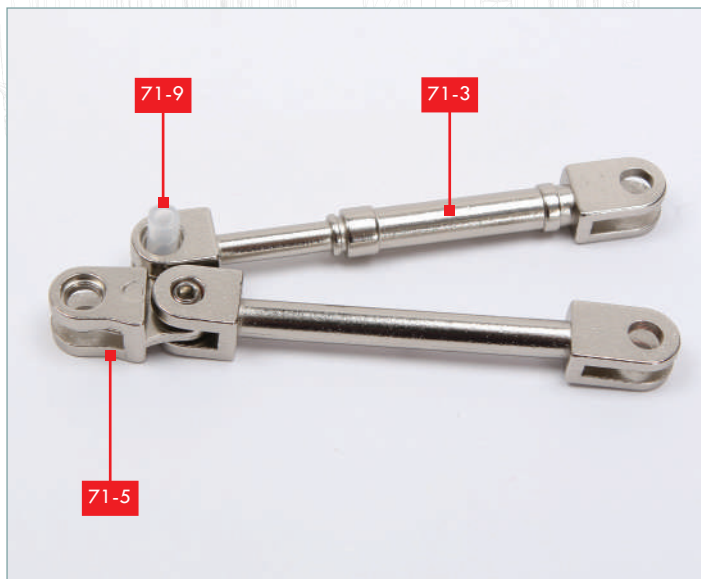
## STEP 1

Take the lower foot part **71-1** (marked 4) and one of the joints **71-5**. You will also need a short grub screw **71-7** and an Allen key. Place part **71-1** on the work surface with the embossed number facing downwards. Fit the joint together as indicated and fix the parts in place with the screw **71-7**. As with previous foot parts, note that one of the joints on the numbered bars of the foot is larger than the other. The smaller part needs to be fitted to the joints **71-5**.



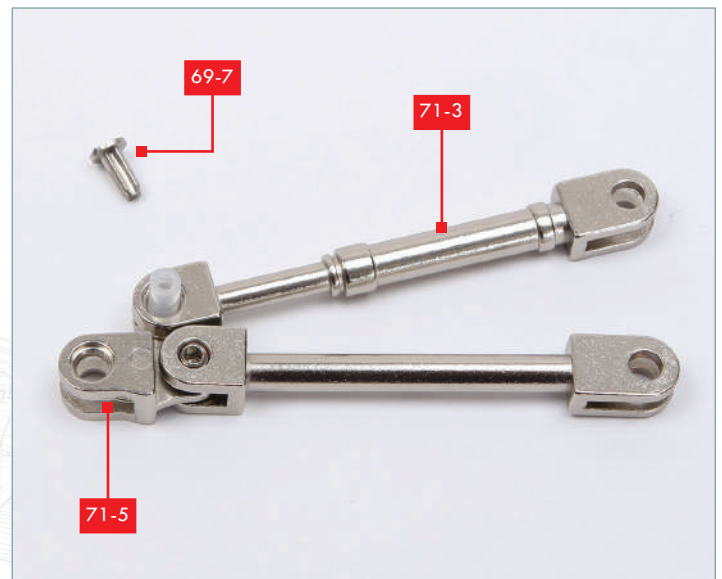
## STEP 2

Take part **71-3** (marked 4) and position it with the embossed number facing downwards. Fit part **71-3** over the upper hole in part **71-5**, as indicated. Note that one of the holes in the joint of part **71-3** is recessed (circled).



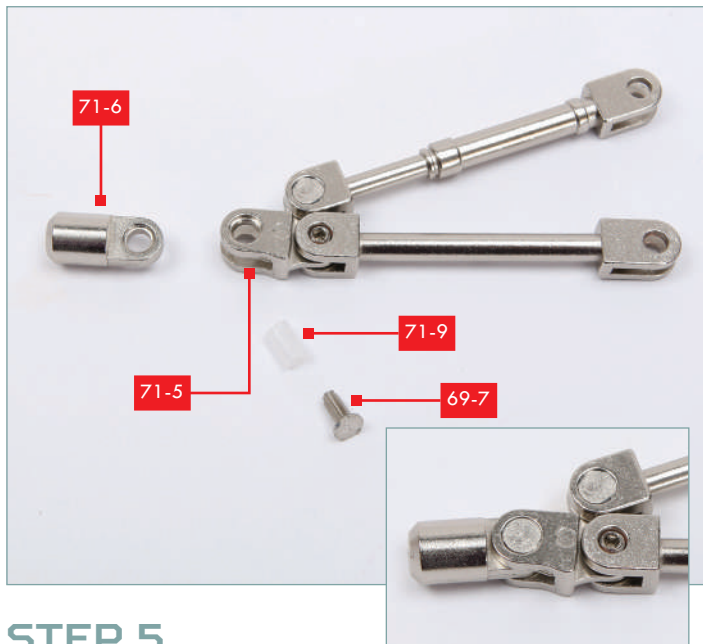
## STEP 3

Fit a plastic sleeve **71-9** into the joint between **71-5** and **71-3**.



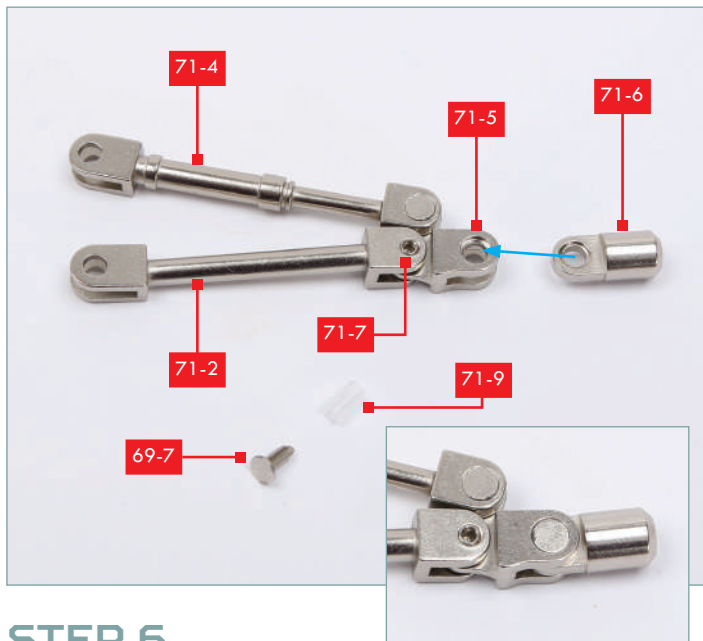
## STEP 4

Remove a pin **69-7** from the frame and fit it into the plastic sleeve. The head of the pin should be pushed firmly into the recess to give a flush finish to the joint.



## STEP 5

Take a toe **71-6** and fit the hole into the joint **71-5** as indicated. Fit a plastic sleeve **71-9** into the joint and then a pin **69-7**. Again, the head of the pin should be pushed into the recess to give a flush finish. The inset shows the pin in place.



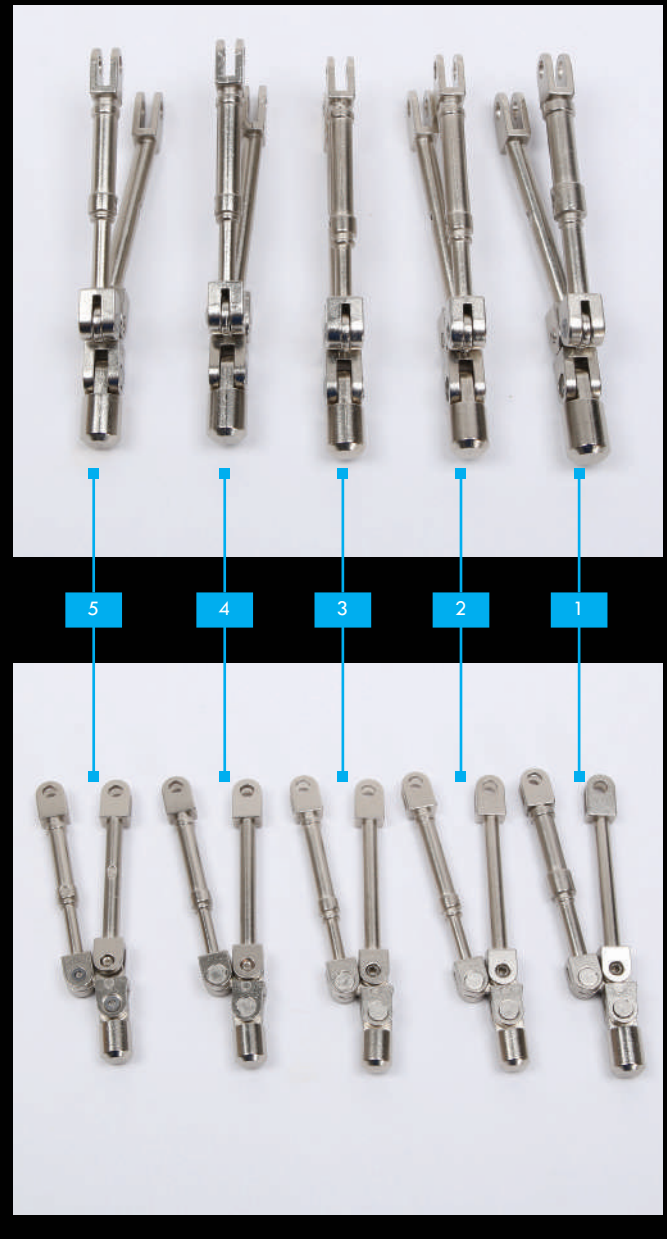
## STEP 6

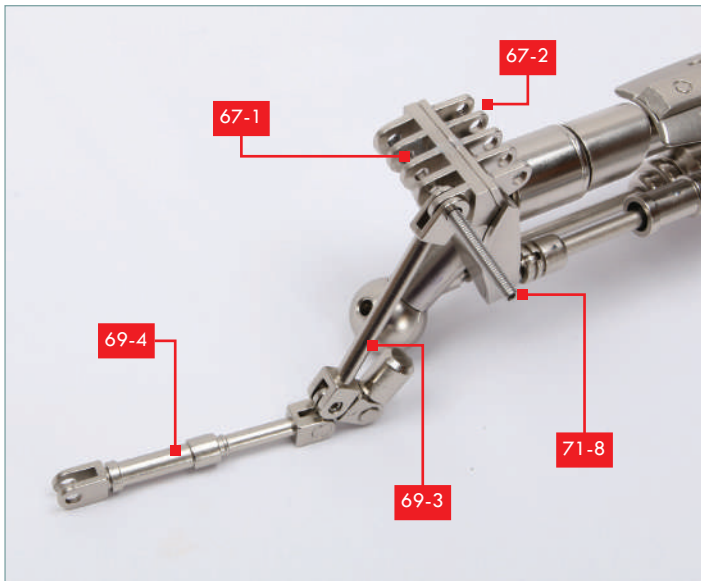
The fifth part of the foot is assembled in a similar way. However, in order to fit the parts together correctly, with the embossed numbers (5) and recessed holes in the right positions, you will find that you need to position the parts the other way round, as shown. This will give a flush finish on the outer side of the foot when it is assembled (inset).

## EXPERT TIP!

Note that the bars that form the foot are carefully shaped. They must be put together the right way round to ensure the foot has its proper shape and the elements fit together properly. These photographs show the five elements of the foot from above (top), to show how the lower 'bones' of the foot parts are angled to splay out from the ankle/heel towards the toes.

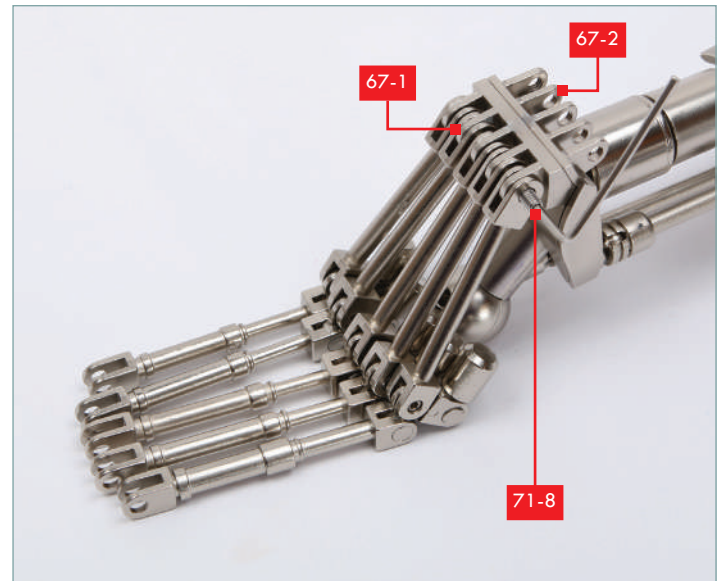
When the foot parts are turned on their sides, you can see that foot parts 1–4 all have the heads of the pins flush in the joints on the same side. Foot part 5 has been assembled the other way round, so that the flush pin heads are on the outside of the foot.





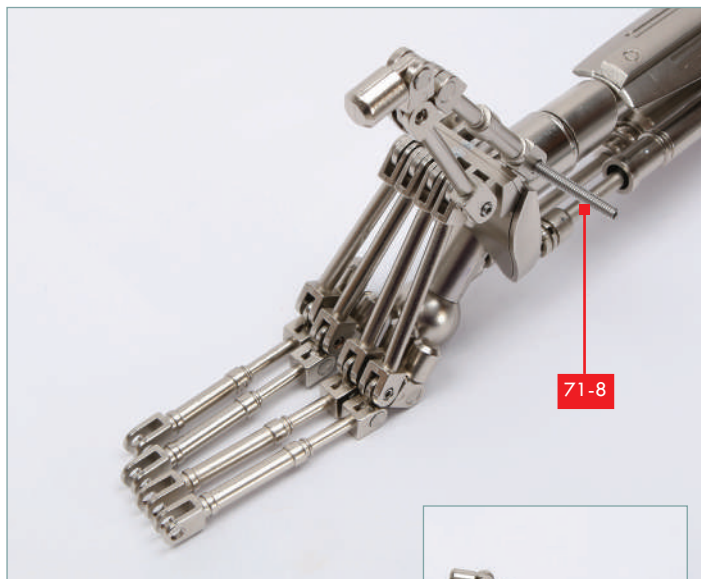
## STEP 7

Take the assembly from stage 69 and position it so that you can access the ankle parts **67-2** and **67-1**. Take the foot section with the bars marked 1 and fit the joint on the end of the lower foot part **69-3** on to the first tab on part **67-1**. Start to slide a long grub screw **71-8** into the joint. The upper foot part **69-4** will eventually be fitted to the matching tab on part **67-2**.



## STEP 8

Following the number sequence, fit foot sections 2, 3, 4 and 5 in place on part **67-1**, threading the grub screw **71-8** through the holes. When the foot sections are all in place, use the Allen key to screw the grub screw into the thread in the last tab on part **67-1**.



## STEP 9

In a similar way, fit the upper foot parts of each foot section in place on part **67-2**, threading a second grub screw **71-8** through the holes. As before, use the Allen key to screw the grub screw through the thread of the last tab in part **67-2**.

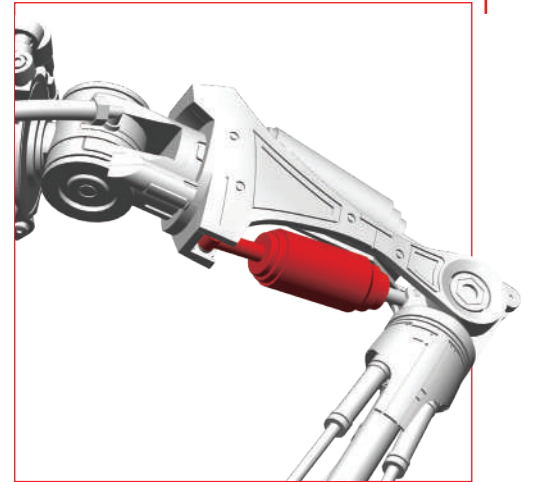


## STAGE COMPLETE!

Two more foot sections have been assembled and the foot parts have been fitted to the bottom of the right leg.



# STAGE 72: THE FIRST PARTS FOR THE LEFT ARM



Construction of the 'sinister' side of the Terminator T-800 Endoskeleton begins with the assembly of the left bicep muscle.



## LIST OF PIECES

72-1	Left arm part
72-2	Shaft for arm part
72-3	Cap for arm part
72-4	2x PM screws (3x8 mm) (1 spare)

## YOU WILL ALSO NEED

A fine cross-head screwdriver.



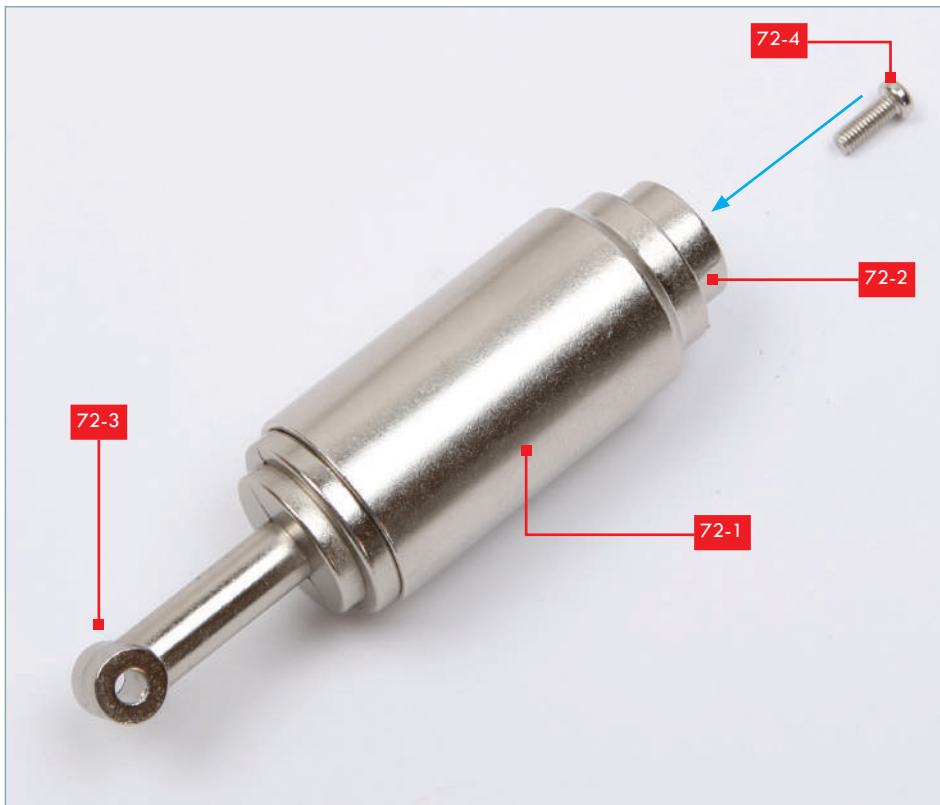
## STEP 1

Fit the shaft **72-2** into the left arm part **72-1**.



## STEP 2

Fit the cap **72-3** over the other end of the arm part **72-1**. Note that there is a screw socket in the centre of the cap, which should align with the hole in the end of the shaft **72-2**, as indicated by the arrow.



### STEP 3

Fit a 3x8 mm PM screw (72-4) down through the hole in the shaft so that you can screw it into the socket in the cap 72-3. Fix the parts together.



### STAGE COMPLETE!

The first part of the left arm has been assembled.

