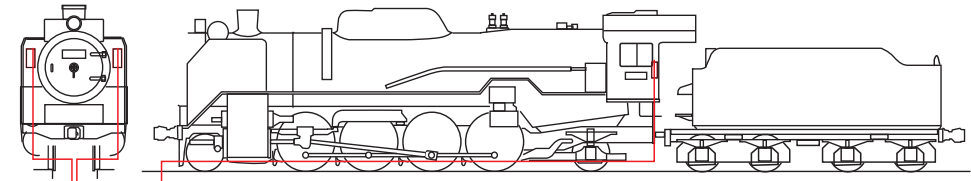


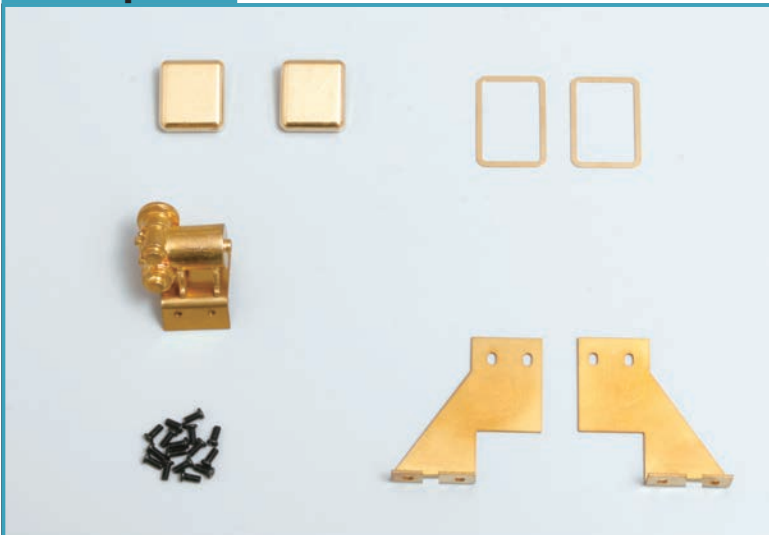
The window frames and back rests



Window frames and back rests



Your parts



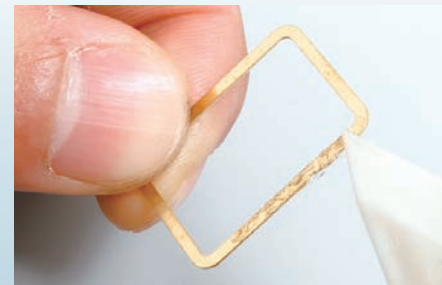
Cab rear window frames × 2
End beam right
End beam left
Seat back rests × 2
Distribution valve
Screws (2 × 4mm) × 16

Required tools

Phillips screwdriver
Contact adhesive
Tweezers

1

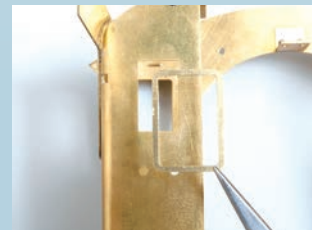
Fitting the rear window frames



Apply contact adhesive to one side of one of the rear window frames.



Before the glue sets, adjust the position of the frame so that it is evenly spaced from the edge of the window on each side.

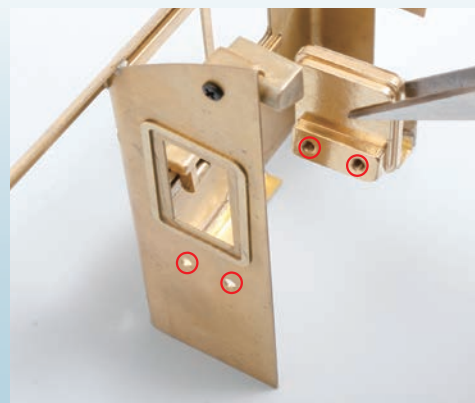


Place the window frame on the rear of the cab, around one of the window cut-outs.



Repeat this process to fit the second rear window frame to the other side of the cab.

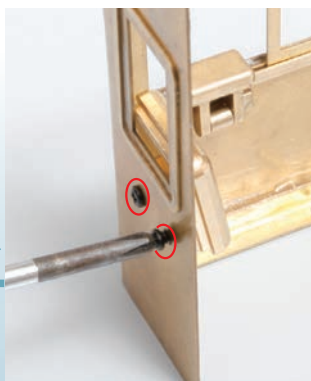
2 Fitting the back rests



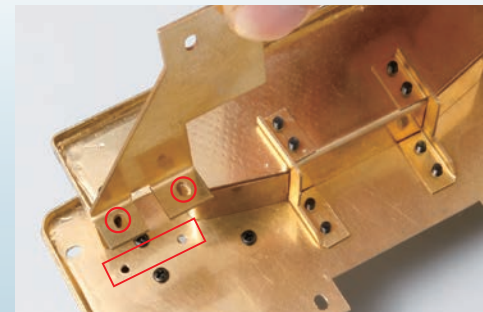
Align the circled holes on the back of the back rest with the two holes in the rear of the cab.

Repeat this process to fit the second back rest onto the other side of the cab.

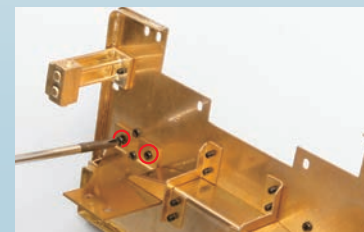
Tighten a 2 x 4mm screw into each of the holes to secure the seat in place.



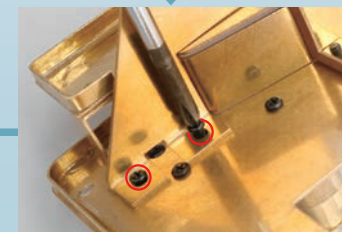
3 Fitting the end beams



Place the cab floor upside down and align the holes of the left cab end beam with the holes in the bottom of the floor.

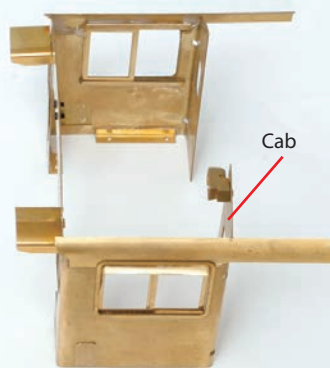
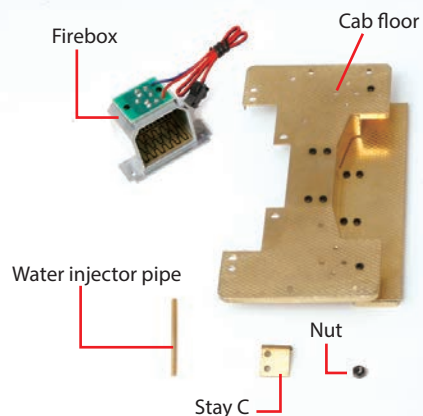


Repeat for the right cab end beam.



Tighten a 2 x 4mm screw into both holes to secure the end beam.

4 Confirmation of parts

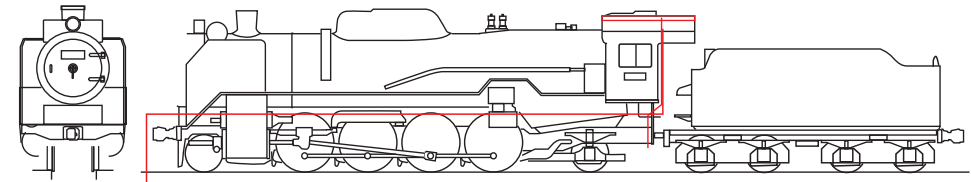


Make sure that you have all the parts shown above. The firebox, stay C and the nut come from Stage 51, and the water injector pipe from Stage 56.

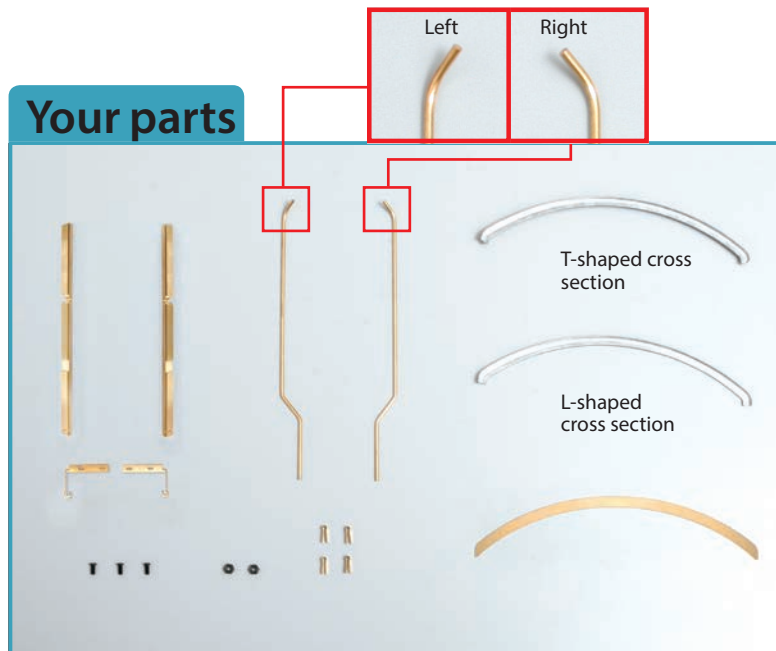
Assembled parts



The cab roof 1



The cab roof gutters



Your parts

Left

Right

T-shaped cross section

L-shaped cross section

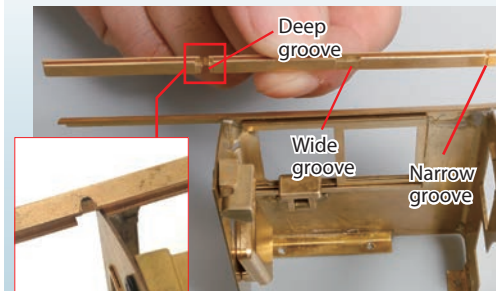
Right gutter
Left gutter
Right gutter pipe
Left gutter pipe
Right gutter holder
Left gutter holder
Gutter pipe clips × 4
Nuts × 2
Screws (2 × 4mm) × 3
Cab roof middle strut (T)
Cab roof rear strut (L)
Cab roof end

Required tools

Instant adhesive
Epoxy adhesive

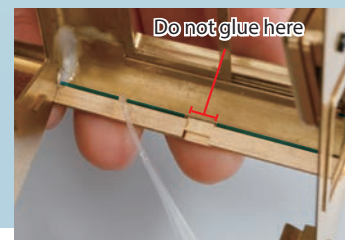
1

Fitting the gutters



Place the left gutter on the top of the left side of the cab, with the deep groove positioned at the rear, as shown in the photograph.

Apply instant or contact adhesive to the join between the top and the gutter inside the cab.



Push the gutter up against the cab top so there is no gap between them, with the narrow groove positioned over the front wall of the cab.

Repeat this for the right gutter.

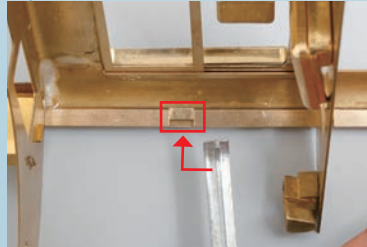


2 Fitting the roof struts



Apply epoxy adhesive to the ends of the cab roof middle strut (T-shaped cross section).

Push the ends of the strut down until they rest on top of the inner window frames.



Fit the ends of the strut into the wide gaps in the gutters on the inside of the cab.



Apply epoxy adhesive to the point where the gutters and cab rear wall meet.

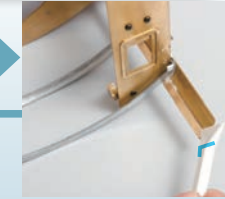


Place the cab roof rear strut between the gutters, up against the rear wall.

3 Fitting the roof end



Place the cab roof end between the ends of the two gutters.



Turn the cab over and apply epoxy adhesive to the ends of the gutters and top sides of the cab.

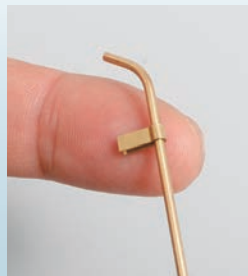
Make sure the roof end is positioned correctly on both sides, and leave it to dry before continuing.



Place the cab roof end back into position between the gutters.



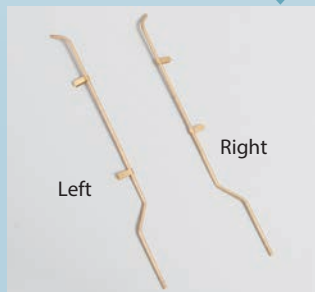
4 Fitting the pipes



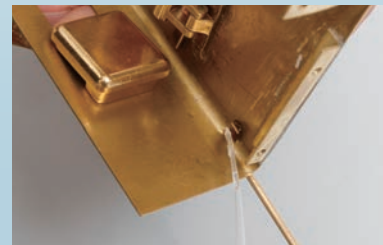
Pass the circular part of a pipe clip over the end of one of the pipes.



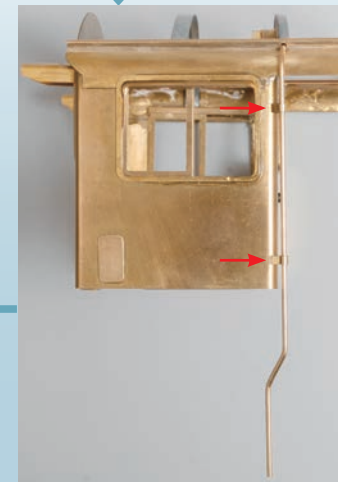
Insert the left pipe into the hole in the side of the left gutter (circled).



Place two clips onto each gutter pipe, as shown.



Apply glue to the ends of the two clips from the inside of the cab to secure them and the pipe in place. Repeat this for the right pipe.

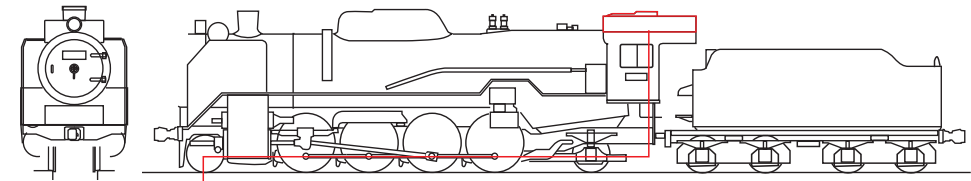


Insert the two clips into the two holes in the corner of the cab wall (arrowed).

Assembled parts



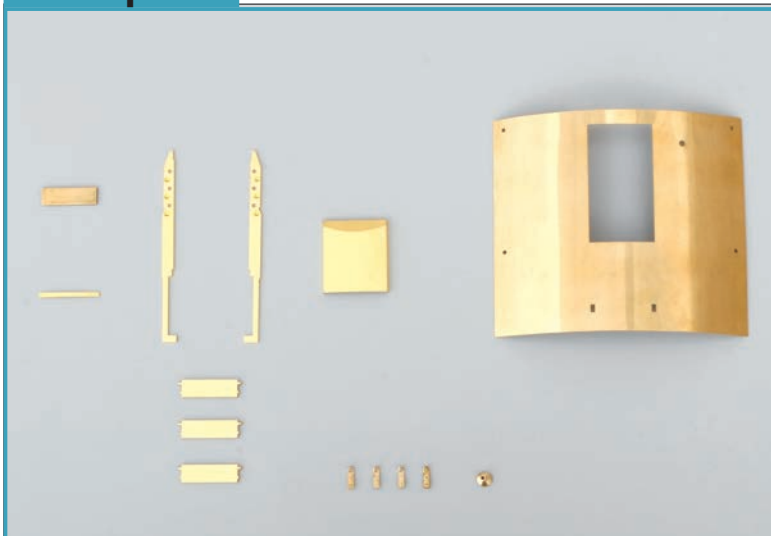
The cab roof 2



The cab roof



Your parts



Skylight front plate
Skylight curved plate
Right skylight frame
Left skylight frame
Skylight plates × 3
Skylight top plate
Cab roof
Roof brackets × 4
Safety valve

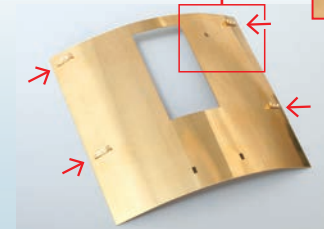
Required tools

Instant adhesive
Nipper
Tweezers

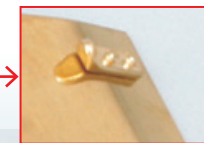
1 Assembling the cab roof



Place one of the roof brackets in one of the holes (circled) at the edge of the cab roof.



Repeat this to fit the remaining three brackets to the roof.



Glue the safety valve into the hole (circled) next to the cut-out in the middle of the roof.



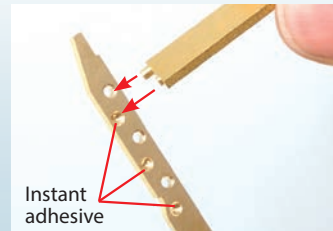
Apply glue to the bracket from the underside of the roof.



The roof should now look like this.

2

Assembling the skylight 1

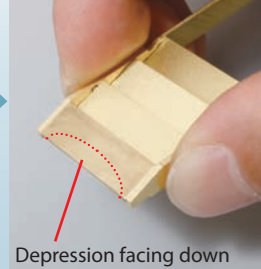


Instant adhesive
Glue one of the skylight plates into the left skylight frame, as shown.



Glue the right frame onto the bare sides of the plates.

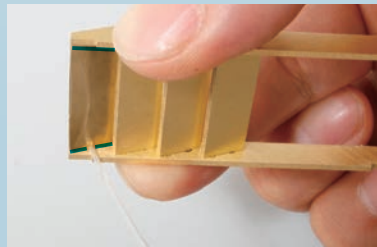
Place the skylight front plate between the two frames, matching the angle of the other plates.



Depression facing down



Glue the next two plates to the left frame, behind the first.



Apply glue to the edges of the front plate in contact with the frames.

3

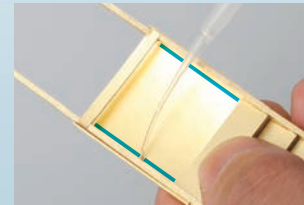
Assembling the skylight 2



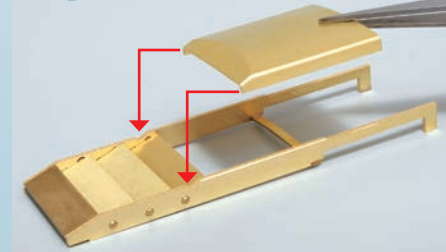
The curved plate is attached to the underside of the skylight.



Turn the skylight assembly over and glue the curved plate into the stepped part of the frames.



Turn the assembly over and apply glue along the edges of the frames.

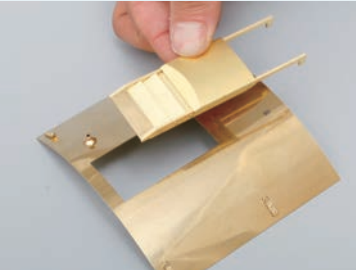


The skylight is now completed.

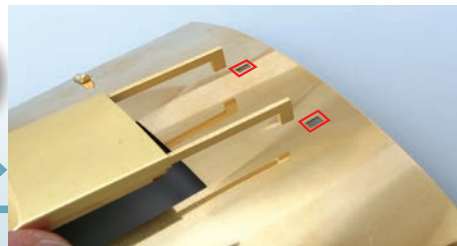
Place the front of the skylight top plate into the two notches in the frames.

4

Fitting the skylight



The skylight fits into place on top of the cab roof.

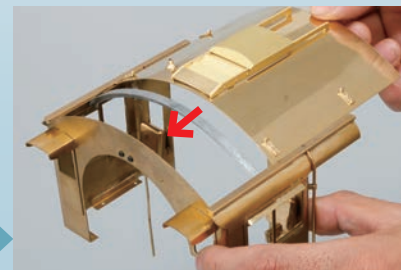


If you want to glue the skylight in place, the projections will prevent the roof from fitting properly, so you will need to cut them off.



Apply glue to the projections to secure the skylight in place. If you would prefer to leave it removable, then don't glue it.

Place the two projections at the back of the skylight into the highlighted holes in the back of the cab roof.



Slide the cab roof along the grooves in the gutters.

Assembled parts

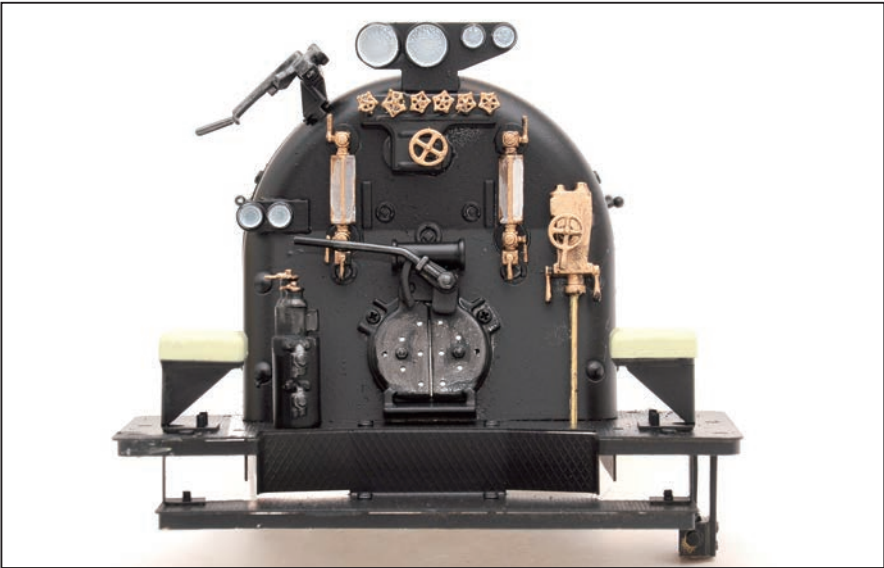


D51 Paintwork

Painting the backhead

If you have decided to paint your model, it is best to paint the backhead at this stage in the build.

Painted backhead



The painted backhead shown above is only an example of the way you can paint it. You can choose to paint as much or as little as you would like, and for a more authentic look, you can use the photo of the real locomotive as a guide.

It is better to use a matt black paint to give the impression of the age of the locomotive and the dust from the coal. You may want to weather the look of the firebox doors to give the impression of wear and heat discoloration.

The table below shows the combinations of base coat and top coat paints that will work.

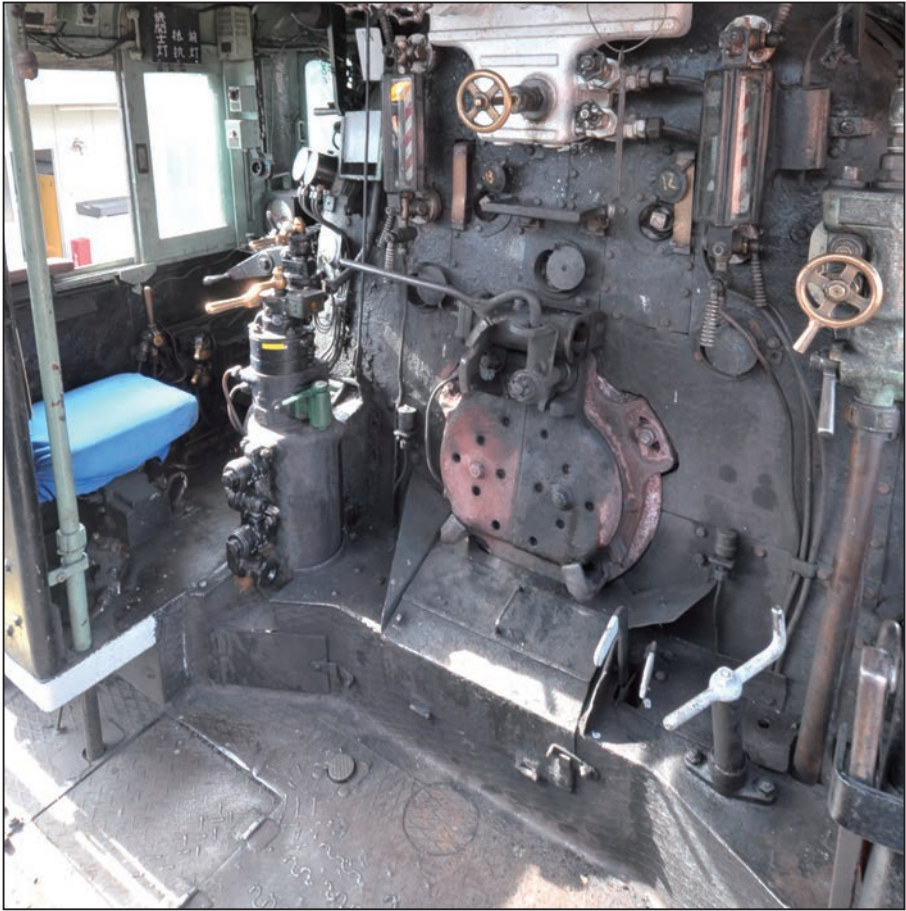
Top coat				
Base coat		Lacquer	Acrylic	Enamel
	Lacquer	√	√	√
	Acrylic	×	√	√
	Enamel	×	√	√

√ = Combination will work
× = Combination won't work

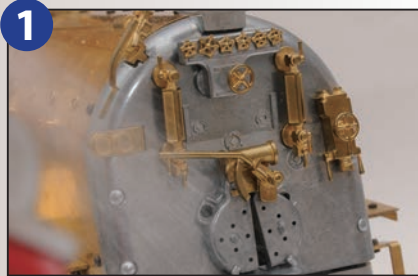
What you need



- Spray paint – matt black
- Model paint – enamel or acrylic.
- Paint thinner – specific to the paint used.
- Brushes – various sizes will be useful, as well as cotton swabs.
- Base coat paint – such as transparent primer.
- Masking tape
- Degreasing/cleaning agent



Base coat

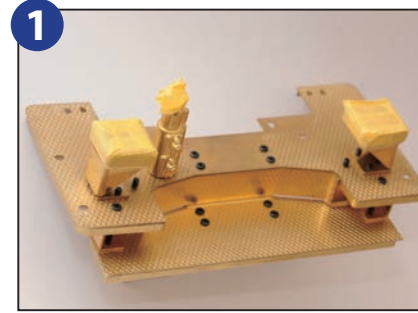


Before beginning the painting process, you should remove the backhead from the rest of the model and clean off all grease and dirt.



Spray the backhead with a transparent primer, making sure to spray from the sides to cover all of the parts.

Masking

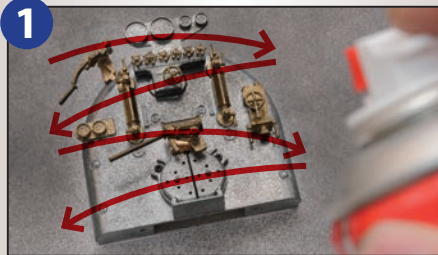


Using the completion shot on the previous page as a guide, mask off the parts not painted black.



Parts such as the valves should remain unpainted. You can achieve this by masking them, or removing the paint.

Top coat



Using a matt black paint, spray the backhead from around 30cm away, starting at the top and criss-crossing down, following the arrows.



Once mostly painted, check the backhead from different angles to detect any parts that you have missed.

Details



Before the paint dries, use paint thinner to remove it from parts that you want to leave brass coloured.



You can remove the paint more efficiently by using a flat brush in larger areas.



In order to simulate the glass fronts of the water gauges, use a gloss white or grey paint.

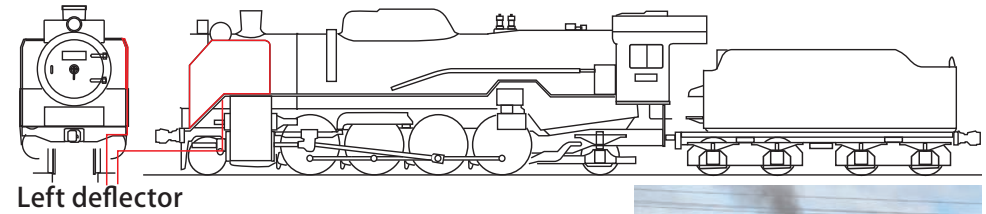


Use the same gloss paint for the set of gauges at the top. When dry, touch up any black paint.



You can choose whichever colour you like to paint the seats. The example here is a pale yellow and the seat shown in the photo on the previous page is blue.

The left deflector



Your parts



Left deflector outer frame
Left deflector plate
Left deflector stays × 2
Screws (2 × 2mm) × 3
Left deflector inner frame

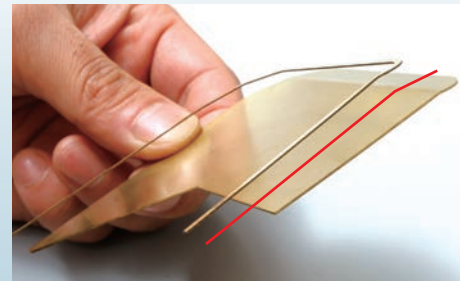
Required tools

Phillips screwdriver
Instant adhesive
Clips

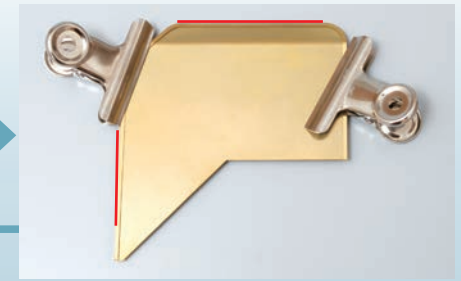
1

Fitting the outer frame

Hold the outer frame and plate in position with clips, as shown.



Align the left deflector outer frame with the left deflector plate, as shown.



Apply instant adhesive along the top edge. Wait for the glue to dry before continuing.



Work along the rest of the edge, applying glue. Wait until the glue has dried before removing the clips.

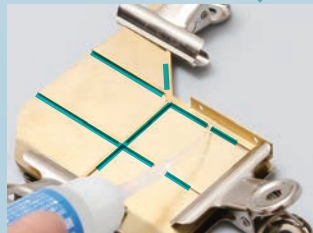
2 Fitting the inner frame



Fix the inner frame to the plate with clips.



Turn the deflector over and align the inner frame with it.

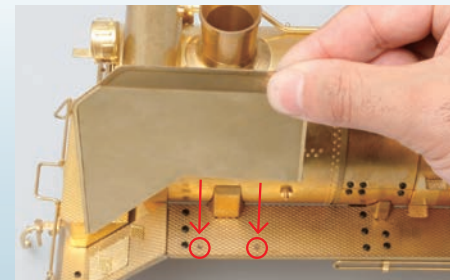


Apply glue along the edges of the frame to secure it to the plate.



When the frame has dried, remove the clips and apply glue to areas that were covered by clips.

3 Mounting the deflector

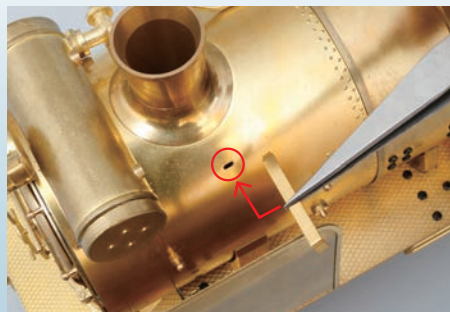


Align the screw holes in the bottom of the inner frame with the two holes on the left running board.



Tighten a 2 x 2mm screw into each of the holes from below.

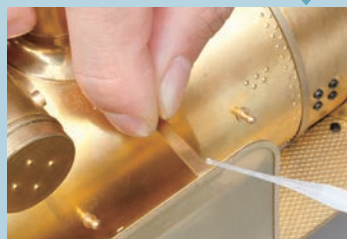
4 Fitting the deflector stays



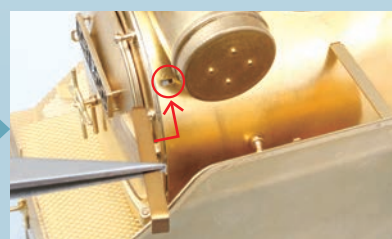
Place the deflector stay into the hole next to the chimney.



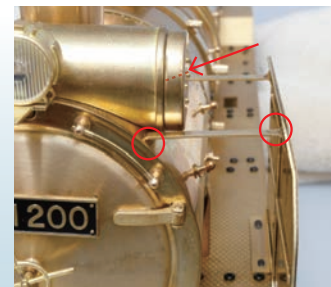
Position the end of the stay up against the deflector.



Apply glue to the end of the stay in contact with the deflector.



Insert the end of the second stay into the hole in front of the feedwater heater.



Apply glue to both ends of the second stay, and the unsecured end of the first.

Assembled parts

