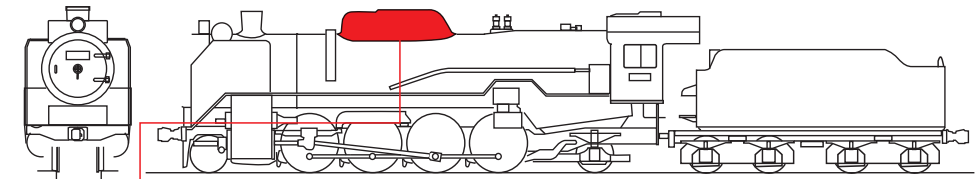


# The sand dome



Sand dome



## Your parts



Sand dome  
Control valve  
Sand pipe taps × 6

### Required tools

Instant adhesive

# 1

## Fitting the control valve

Front



Holes for sand pipe taps    Hole for control valve

Place the sand dome as shown above and identify the position of the holes at the sides and the top.

Hold the control valve in place, turn the dome over and apply instant adhesive to the valve from inside the dome.



Place the control valve in the hole towards the back of the dome, with the square projection pointing down.



## 2 Fitting the left sand pipe taps



Insert one of the taps into the first hole on the left side of the sand dome.

Make sure the tap is positioned as shown, with the spout pointing down.



Apply instant adhesive to the tap on the inside of the dome.

Fit the second and third taps to the left side of the dome.



## 3 Fitting the right sand pipe taps

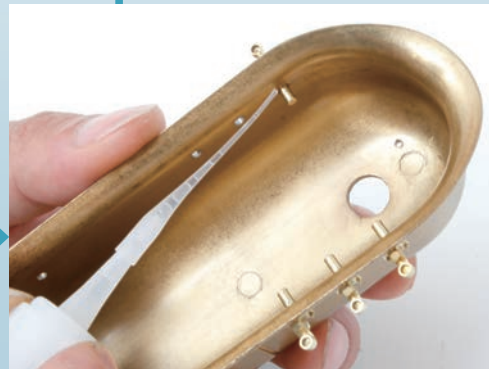


Fit the first tap of the right side of the dome, with the spout pointing down.

Glue the two other taps on the right side of the dome.



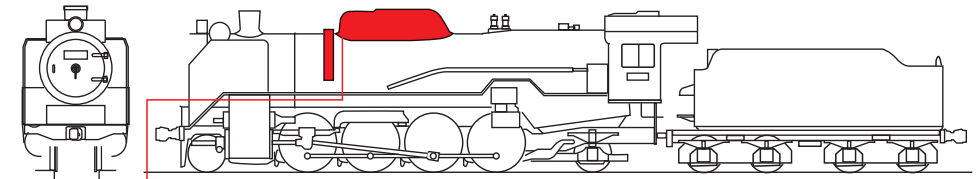
Turn the dome over and apply instant adhesive to the back of the tap.



### Assembled parts



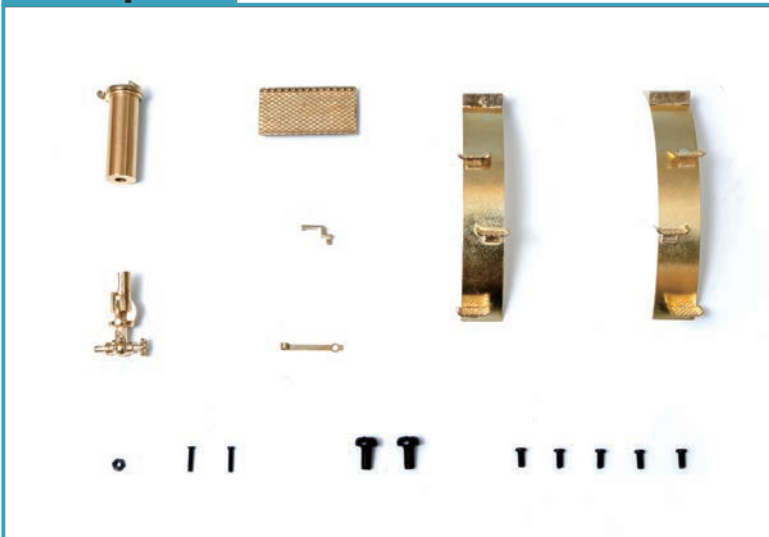
# The dome and steps



Dome and steps



## Your parts



Sand dome lid with holder

Top step

Left steps

Right steps

Whistle

Lock bar holder

Lock bar

Nut 1.4mm

Screws (1.4 × 6mm) × 2

Screws (3 × 6mm) × 2

Screws (2 × 4mm) × 5

## Required tools

Pliers

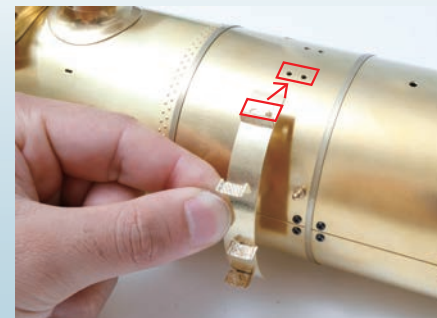
Phillips screwdriver

Contact adhesive

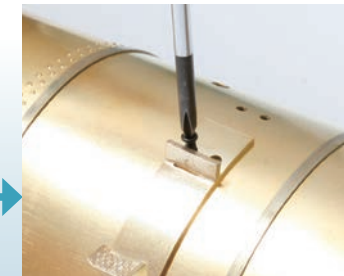
Epoxy adhesive

1

## Fitting the steps



Align the two screw holes of the left steps with those at the top of the boiler.



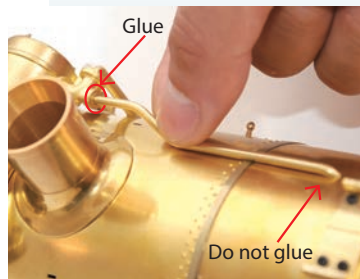
Tighten a 2 x 4mm screw into each hole at the top of the left steps.

Screw the right steps onto the right side of the boiler in the same way as the left.

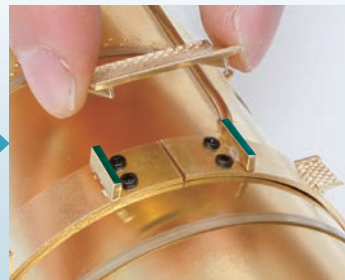




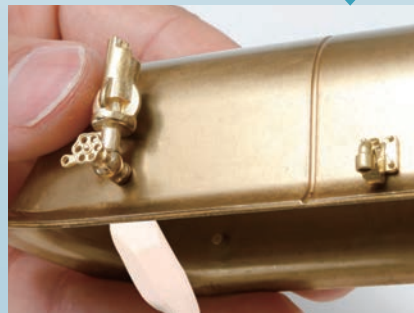
## 2 Fitting the parts



Glue the steam pipe supplied with Stage 32 into the hole at the *rear* of the feedwater system with epoxy.

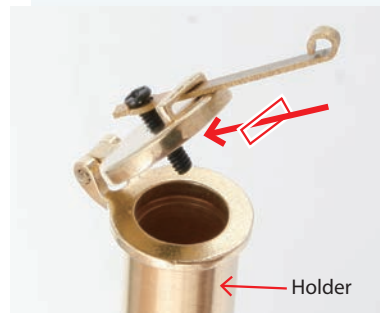


Apply epoxy to the tops of the steps (highlighted) and place the top step onto them.



Glue the whistle into the hole at the back of the sand dome with epoxy.

## 3 Fitting the dome



Pass the lock bar through the rectangular hole at the side of the sand dome lid, then pass a 1.4 x 6mm screw down through the holes of the bar and the lid.

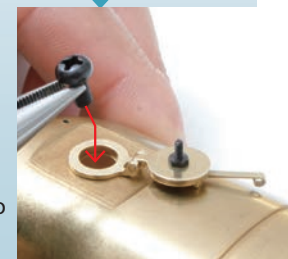


Tighten a nut onto the 1.4 x 6mm screw from under the lid.

Apply some contact adhesive to the highlighted edge of the sand dome.



Place the sand dome lid holder into the hole at the top of the sand dome, and place a 3 x 6mm screw down through the lid until it projects from the bottom of the holder. Then place the dome on top of the boiler, tightening the screw into the hole behind the top step.



## 4 Fitting the lock bar holder

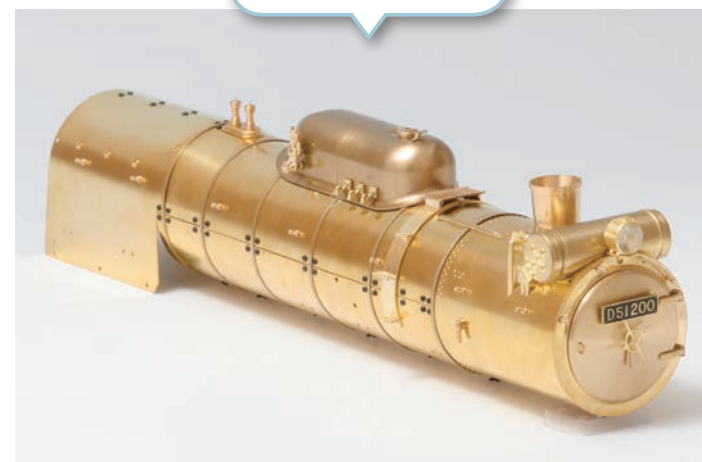


Glue the lock bar holder in place at the front of the sand dome.

Close the sand dome lid, positioning the lock bar under the holder.



## Assembled parts



# The sand pipes

1

## Preparing the parts

### Your parts



The images above should help you identify the six sand pipes

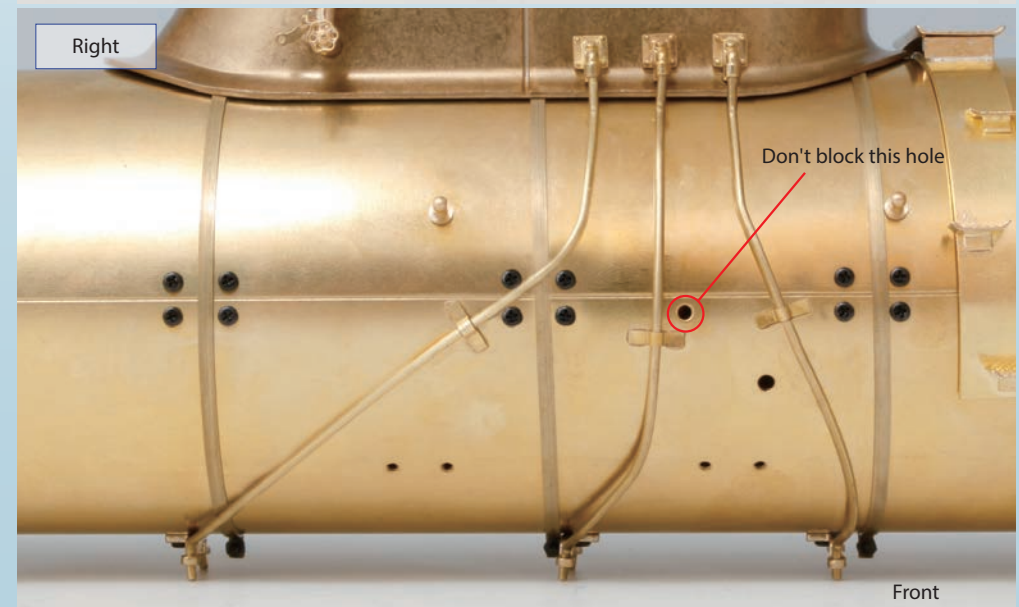
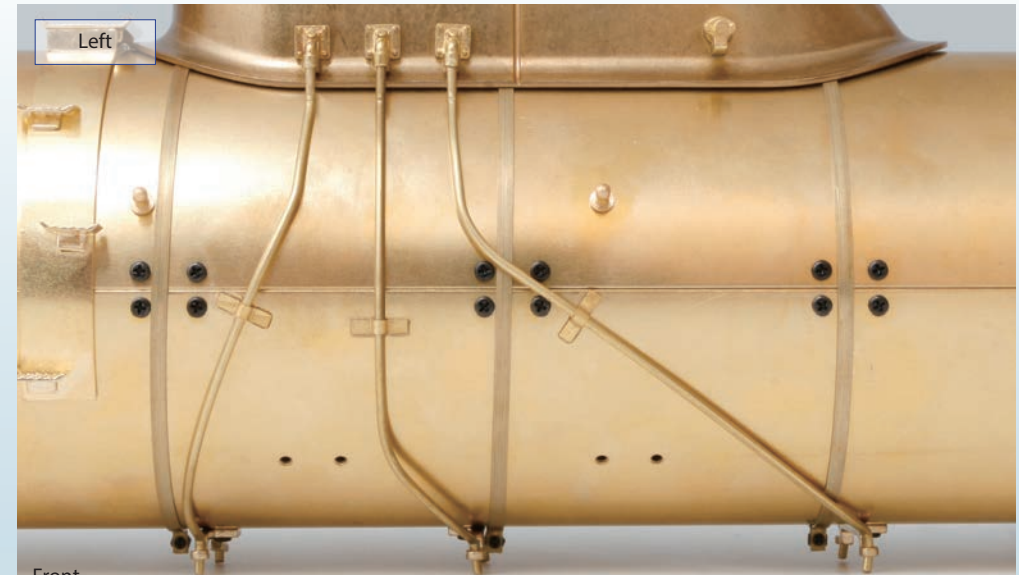


Sand pipe (left front)  
Sand pipe (right front)  
Sand pipe (left middle)  
Sand pipe (right middle)  
Sand pipe (left rear)  
Sand pipe (right rear)  
Sand pipe brackets × 6  
Sand pipe holders × 3

Screws (2 × 4mm) × 4

### Required tools

Masking tape  
Phillips screwdriver  
Instant adhesive

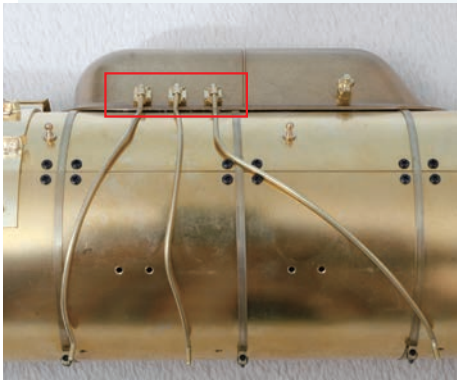


The best way to tell the sand pipes apart is to try them against the boiler, using the photos above to determine the correct position for each pipe. The position of the brackets in the photos is slightly different from the real locomotive, as they depend on how the pipes are positioned on the boiler, so try to keep them close to where they are shown, but don't try to place them in exactly the same positions if they won't go there.

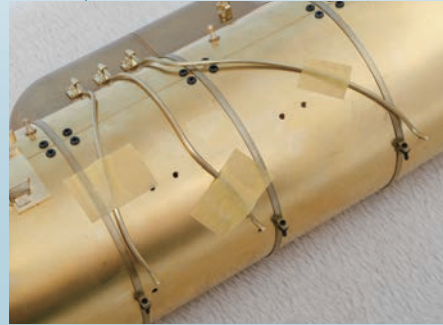


**2**

## Fitting the sand pipes



Once you have identified the three left sand pipes, insert them into the holes in the bottom of each tap. They should appear as in the photo on the left.



Once you have the three left pipes in their correct positions, temporarily fix in place with masking tape. Repeat this process to fit the three pipes on the right side.

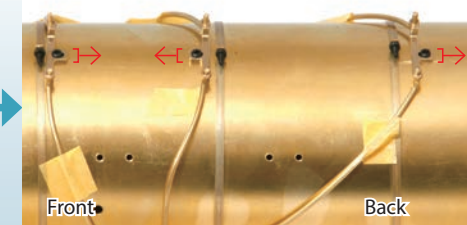
**3**

## Fitting the pipe holders



Turn the model over and place one of the holders over the ends of the front pipes, aligning the hole with the one on the boiler.

Tighten a 2 x 4mm screw into the hole, securing the holder to the boiler.



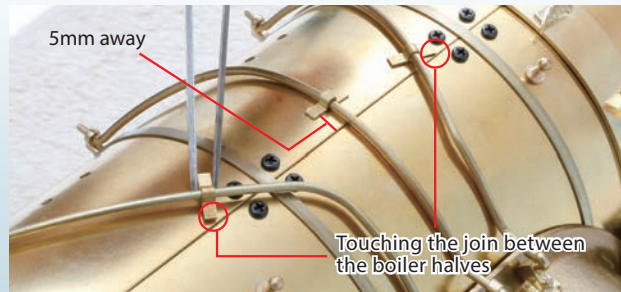
Using the photo above as a guide, fit the second and third holders over the middle and rear pipes. Note the positions of the holders.

Apply instant adhesive to the tops of the pipes, securing them to the taps. Peel off the masking tape when the glue is dry.



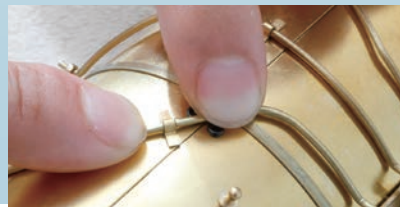
**4**

## Fitting the pipe brackets

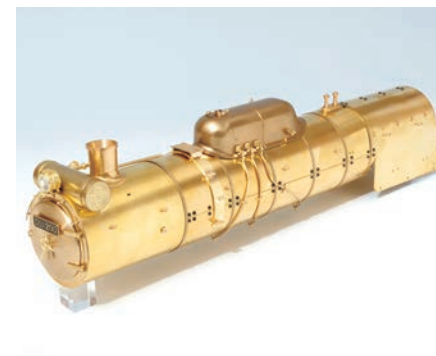


Glue three brackets over the three pipes on the left side. The front and rear brackets should touch the joint between the boiler halves, and the middle one should be positioned 5mm away from the joint. Use the photo on the previous page to help.

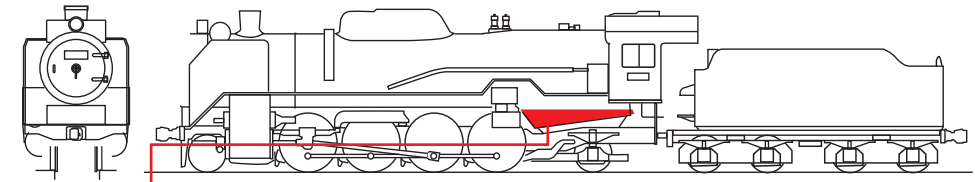
Hold the pipe against the boiler on either side of the bracket as the glue dries. Repeat for the right side brackets.



## Assembled parts



# The lower firebox



The lower firebox



## Your parts



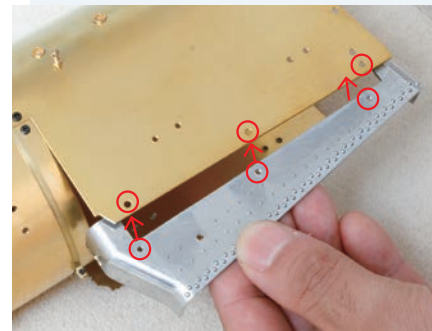
Left lower firebox  
Right lower firebox  
Screws (2 x 6mm) x 7  
Pipe A  
Discharge reservoir  
Pipe B  
Bleed valve

### Required tools

Phillips screwdriver  
Instant adhesive

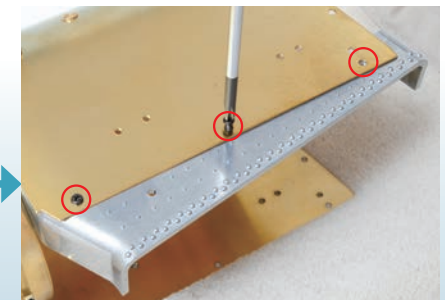
1

## Fitting the lower firebox

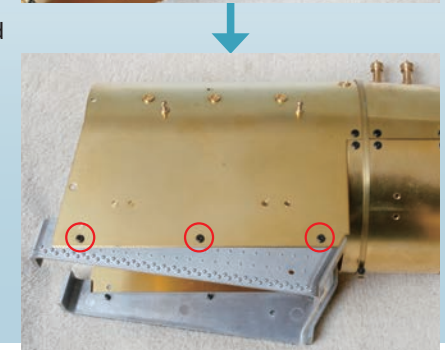


Place the left lower firebox on the inside of the left side of the firebox, aligning the holes.

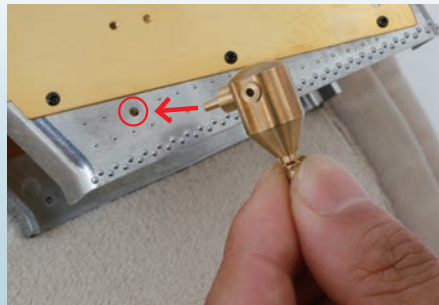
Tighten a 2 x 6mm screw into each of the three circled holes.



Repeat this to screw the right lower firebox into place on the right side of the firebox.



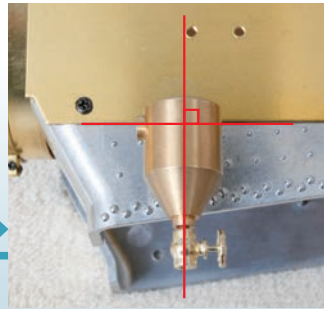
## 2 Fitting the reservoir



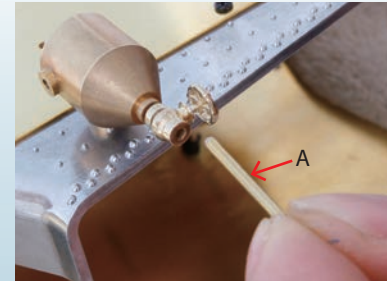
Place some instant adhesive on the discharge reservoir and place it into the circled hole on the lower firebox.

Apply some instant adhesive to the reservoir on the inside of the smoke box.

Before the glue dries, position the reservoir as shown.

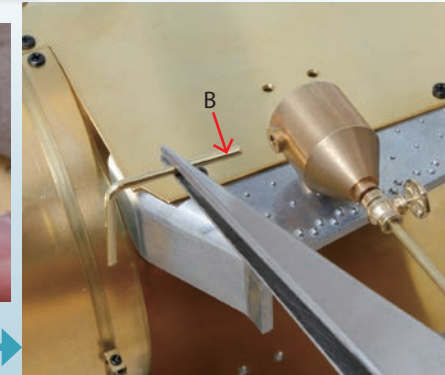


## 3 Fitting the pipes

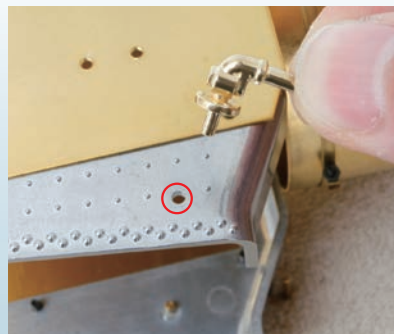


Place a small amount of instant adhesive into the hole at the bottom of the reservoir and place pipe A into it.

Then place a small amount of instant adhesive into the hole at the side of the reservoir and place pipe B into it, positioned horizontally.



## 4 Fitting the bleed valve



Glue the bleed valve into the circled hole on the right lower firebox.

Before the glue dries, position the bleed valve vertically and apply some more glue from the inside of the firebox.



## Assembled parts

