

# LONDON TRANSPORT ROUTEMASTER BUS

RM 857



## Pack 05

### BUILD INSTRUCTIONS

STAGE 41: FITTING THE WINDOWS TO  
THE DRIVER'S CAB

STAGE 42: FITTING THE CAB, GRILLE AND WIRING  
TO THE SUBFRAME

STAGE 43: THE REAR SECTION OF THE LOWER DECK

STAGE 44: ASSEMBLING AND FITTING THE FIRST  
FOUR SEATS

STAGE 45: ASSEMBLING AND FITTING THE NEXT  
FOUR SEATS

STAGE 46: FITTING THE LAST SEATS AND  
ASSEMBLING THE BENCHES

STAGE 47: FRONT WALL AND ACCESSORIES

STAGE 48: FITTING THE FRONT SIDE WALLS

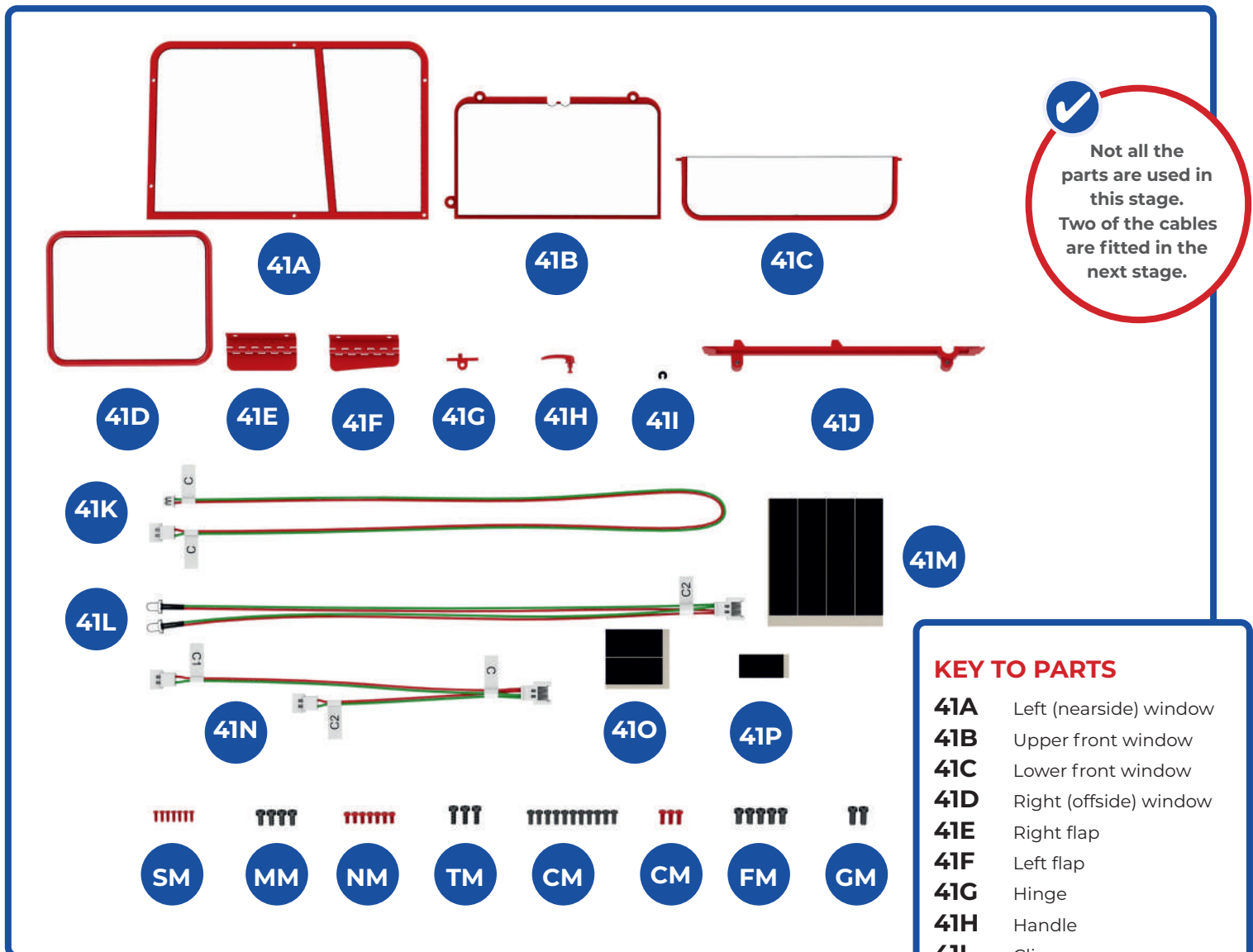
STAGE 49: FITTING THE REAR SIDE WALLS

STAGE 50: FITTING THE CANOPY  
ROUTE INDICATOR

## STAGE 41

# FITTING THE WINDOWS TO THE DRIVER'S CAB

The windows are fitted to the driver's cab, along with other parts.  
The driver's cab is then fitted to the wing and grille assembly.

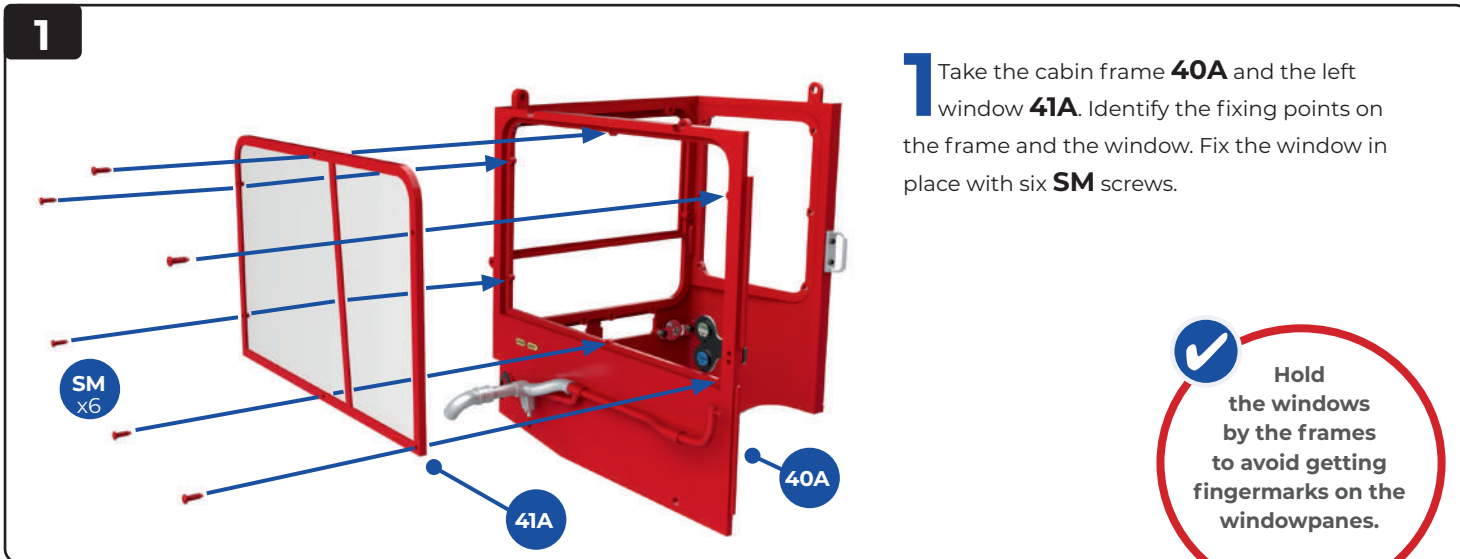


✓  
 Not all the parts are used in this stage.  
 Two of the cables are fitted in the next stage.

- KEY TO PARTS**
- 41A** Left (nearside) window
  - 41B** Upper front window
  - 41C** Lower front window
  - 41D** Right (offside) window
  - 41E** Right flap
  - 41F** Left flap
  - 41G** Hinge
  - 41H** Handle
  - 41I** Clip
  - 41J** Support bar
  - 41K** C cable
  - 41L** C2 LED cable
  - 41M** Sticker
  - 41N** C, C1, C2 cable link
  - 41O** Sticker
  - 41P** Sticker

- KEY TO SCREWS**
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>SM</b> 1.2 x 3.5mm (x7, red)</li> <li><b>MM</b> 2.0 x 4mm (x4)</li> <li><b>NM</b> 1.5 x 3mm (x7, red)</li> <li><b>TM</b> 2.0 x 5mm (x3)</li> </ul> | <ul style="list-style-type: none"> <li><b>CM</b> 1.7 x 4mm (x11)</li> <li><b>CM</b> 1.7 x 4mm (x3, red)</li> <li><b>FM</b> 2.3 x 4mm (x5)</li> <li><b>GM</b> 2.3 x 5mm (x2)</li> </ul> |
|--|--|

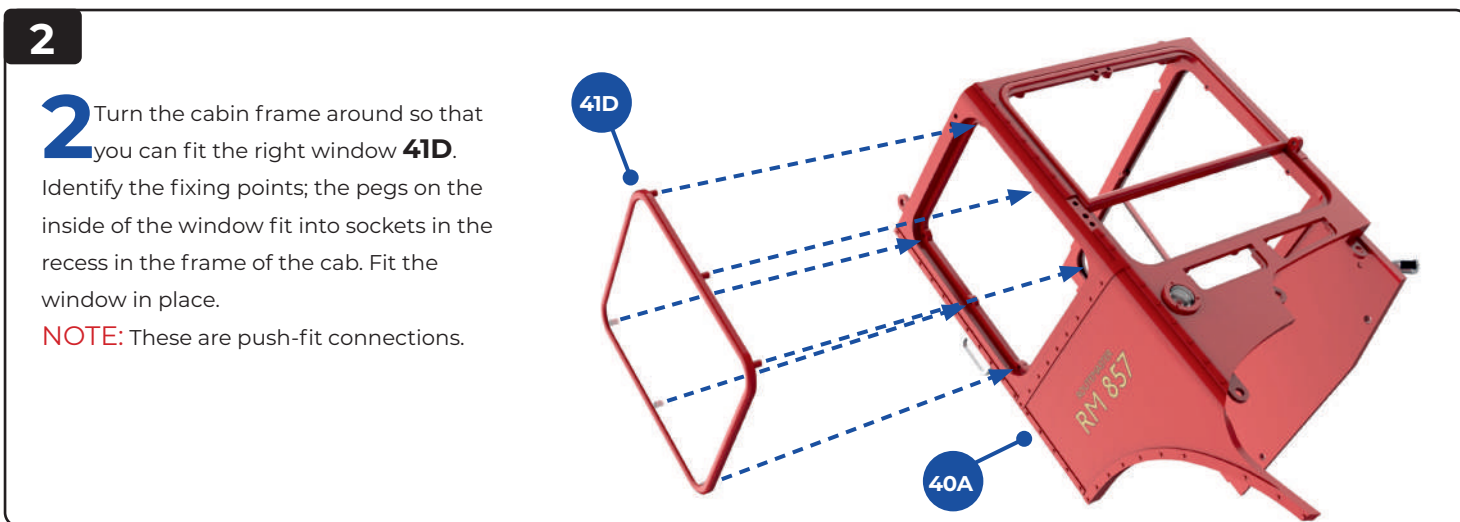
**1**



Take the cabin frame **40A** and the left window **41A**. Identify the fixing points on the frame and the window. Fix the window in place with six **SM** screws.

Hold the windows by the frames to avoid getting fingermarks on the windowpanes.

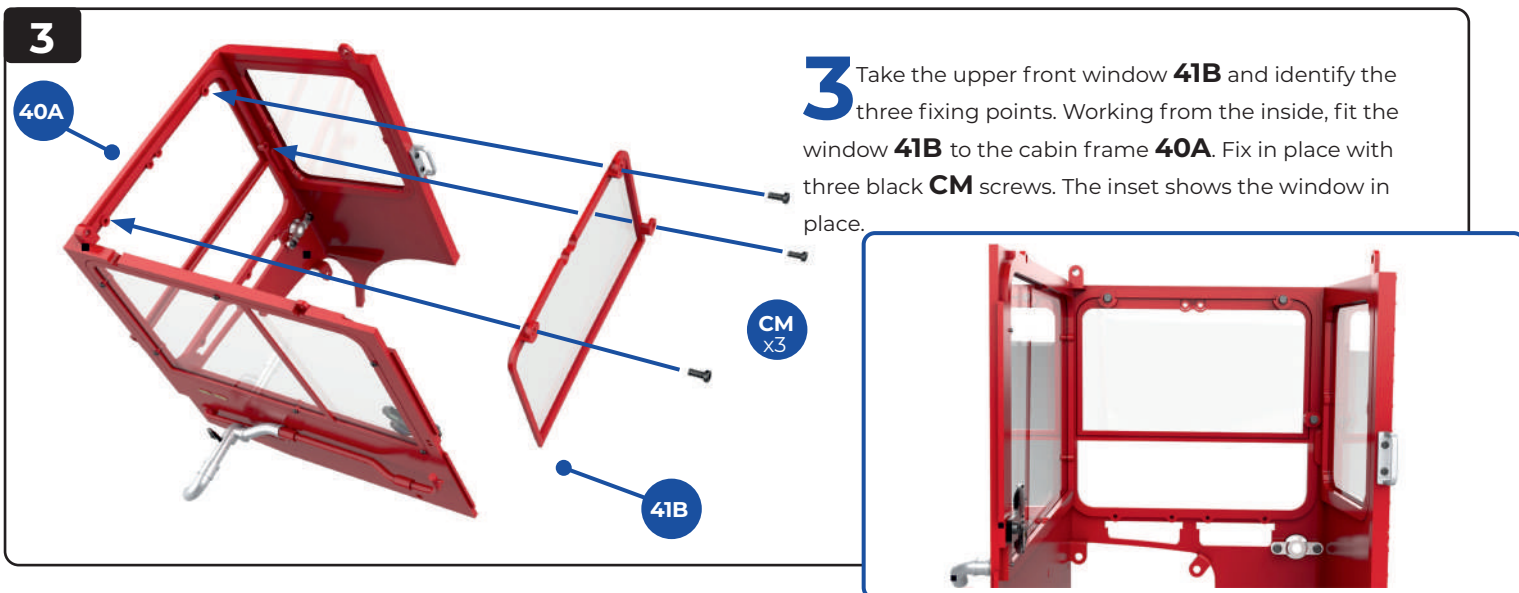
**2**



Turn the cabin frame around so that you can fit the right window **41D**. Identify the fixing points; the pegs on the inside of the window fit into sockets in the recess in the frame of the cab. Fit the window in place.

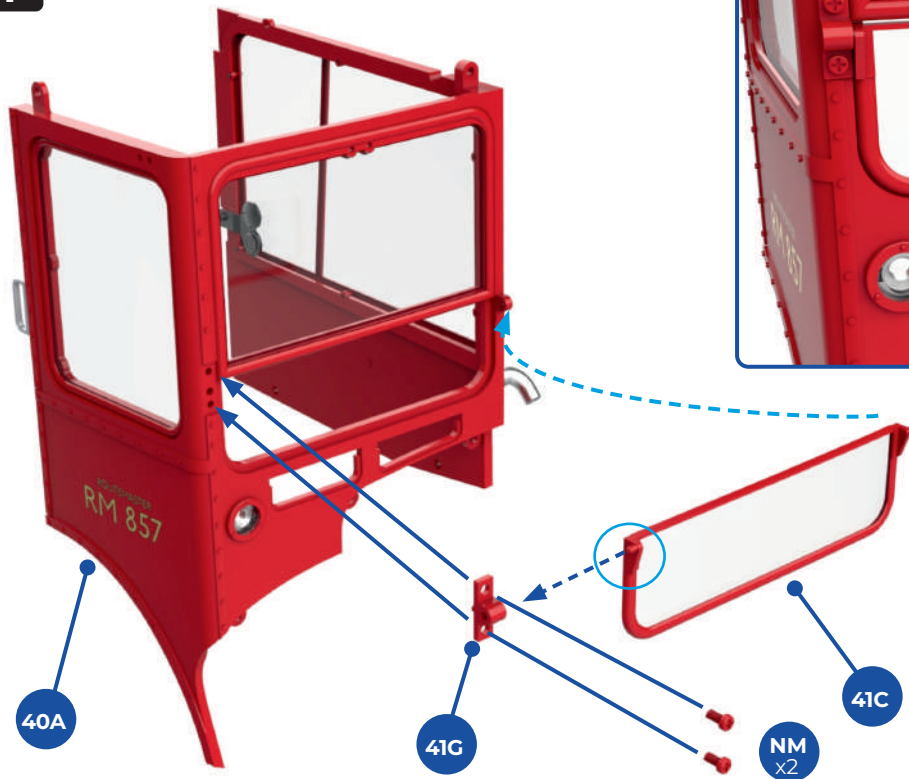
**NOTE:** These are push-fit connections.

**3**



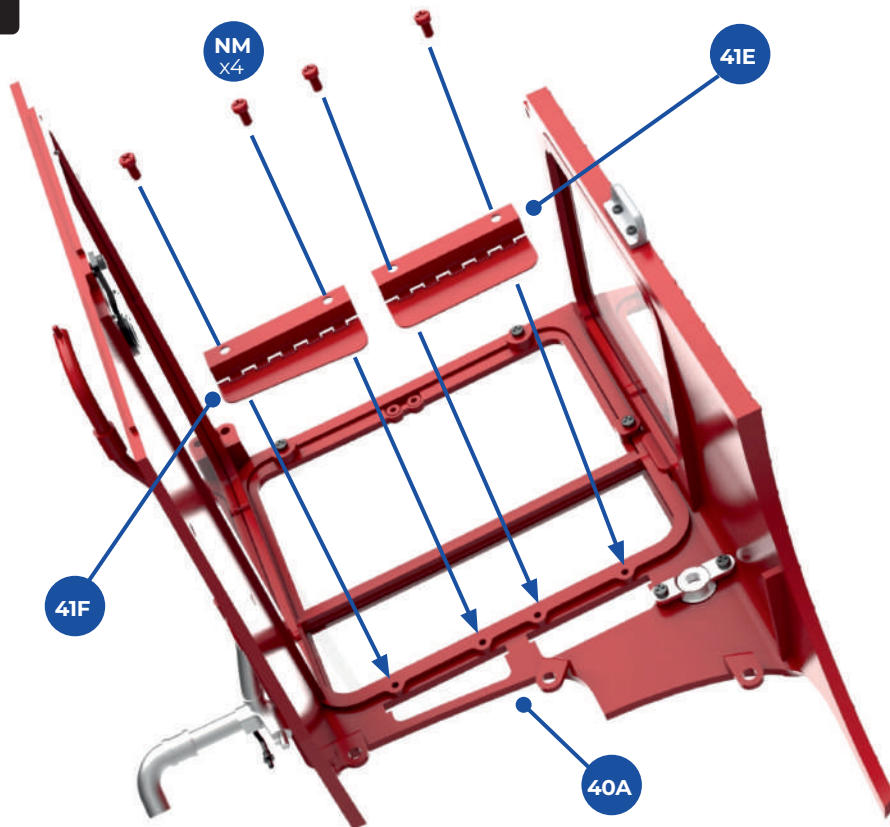
Take the upper front window **41B** and identify the three fixing points. Working from the inside, fit the window **41B** to the cabin frame **40A**. Fix in place with three black **CM** screws. The inset shows the window in place.

**4**



**4** Take the lower front window **41C** and the hinge **41G**. Fit the peg on the window (circled in light blue) into the socket in the hinge. Fit the peg on the other side of the window into the socket on the edge of the cabin frame, as indicated by the light blue dotted line. Fix the hinge in place with two red **NM** screws. The inset shows the window in place.

**5**



**5** Take the two flaps **41E** and **41F**. **NOTE:** Viewed from inside the cabin, the left flap **41F** is more tapered than the right flap. Feed the front edge of each flap through the slot at the top of the openings in the cab frame **40A**. When the flaps are in place fix each one with two **NM** screws. The inset below shows the flaps fixed in place, viewed from inside the cab.

**6**

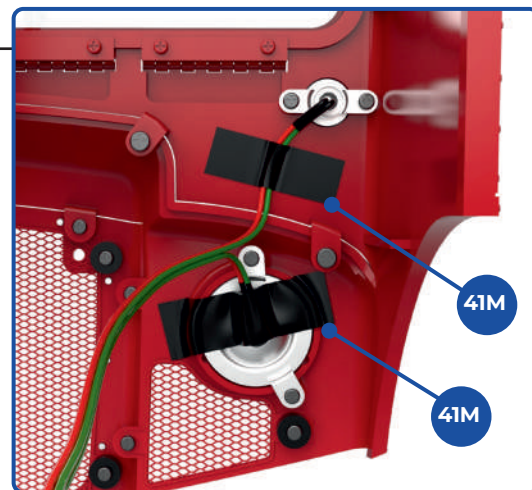
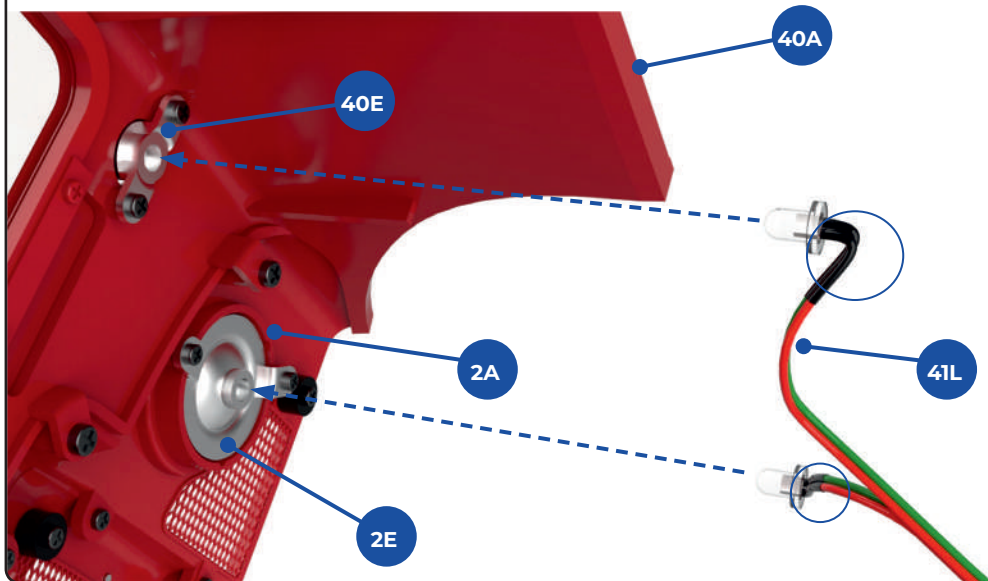


**6** Take the front grille assembly (from Stage 2). Align the three fixing points on the front of the cabin **40A** with the screw sockets along the top edge of the offside headlight panel **2A**. Fix in place with three **MM** screws.

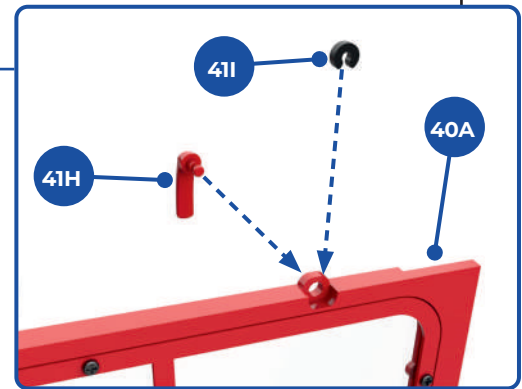
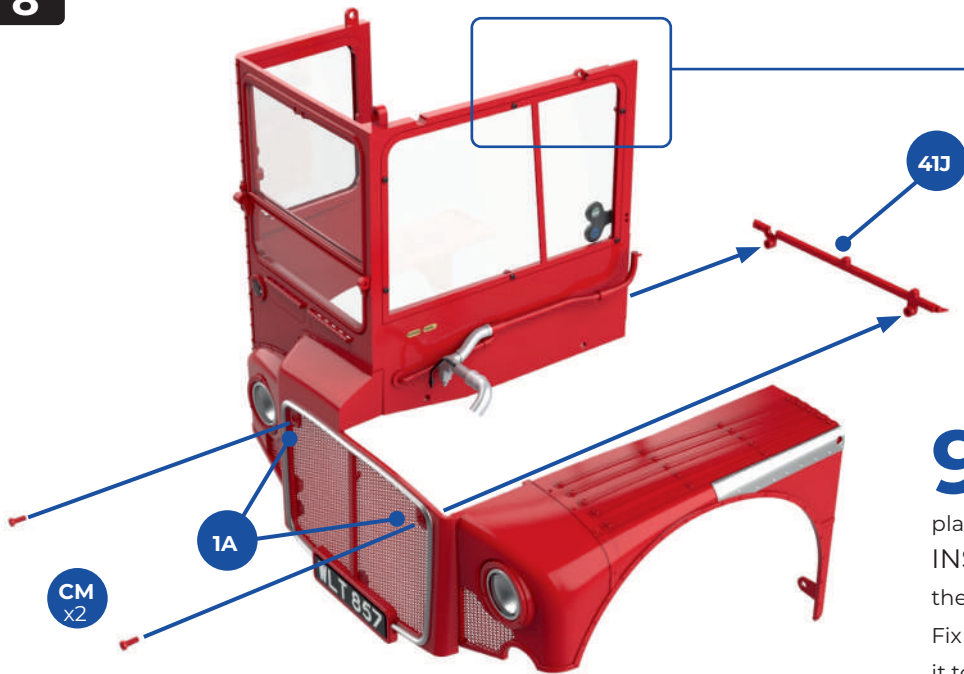
✓ Support the front grille assembly from behind as you attach it to the cabin.

**7**

**7** Fit the LEDs on the end of C2 LED Cable **41L** into the offside reflectors. Notice how the insulated wires leading directly from the LED are bent in slightly different ways (circled in blue). The one that is slightly longer before being bent goes into the sidelight reflector **40E** and the shorter goes into the headlight reflector **2E**. Remember to take great care when gently bending the wires. Hold the LEDs in place with stickers **41M** as shown in the inset right; these may need cutting to fit.

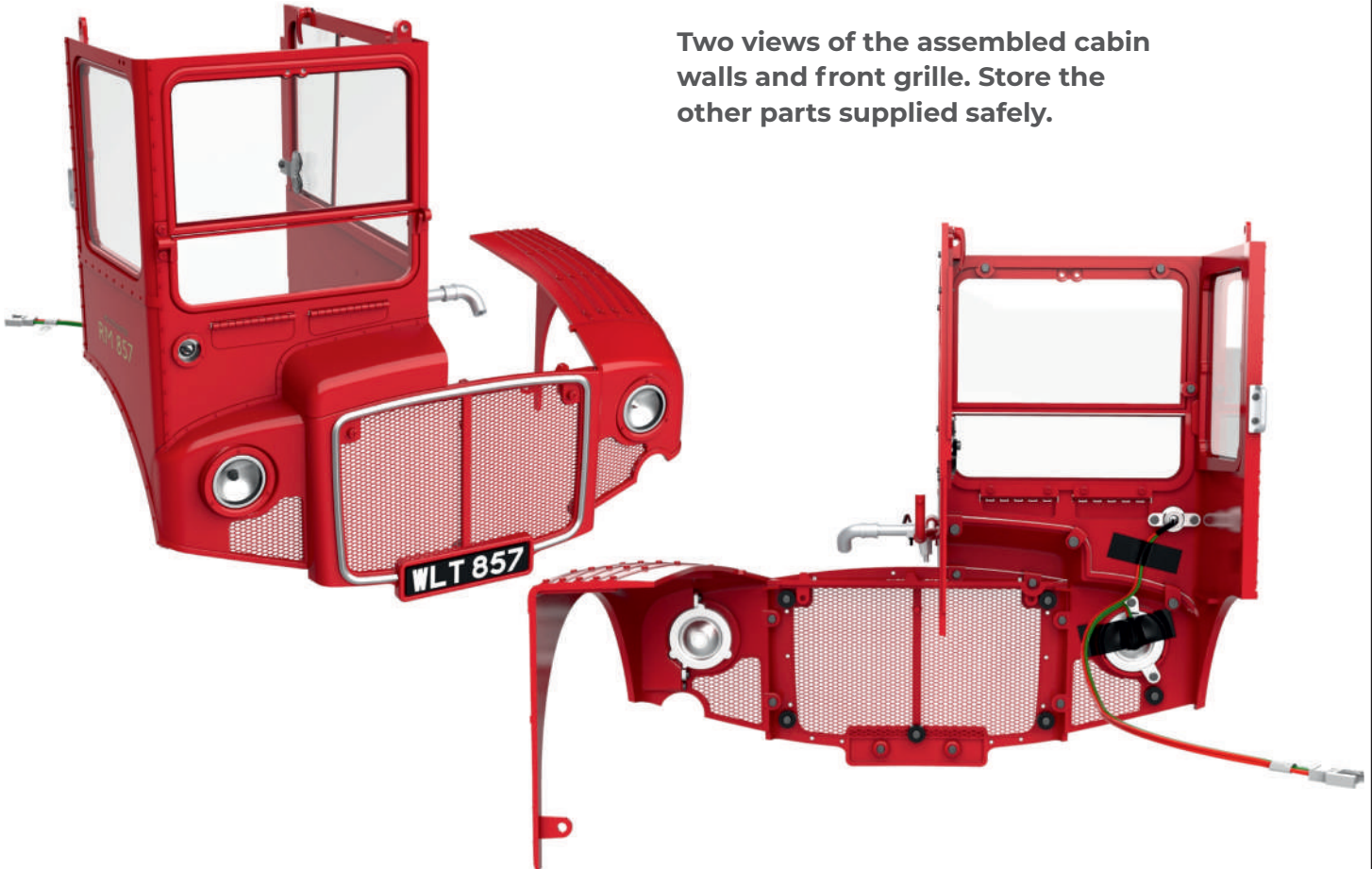


8



**9** Take the support bar **41J** and fit it to the back of the grille frame **1A**. Fix in place with two red **CM** screws.  
**INSET:** Fit the peg on the handle **41H** into the socket on the top of the cab frame **40A**. Fix in place with the clip **41I**, which will allow it to move.

## Finished views

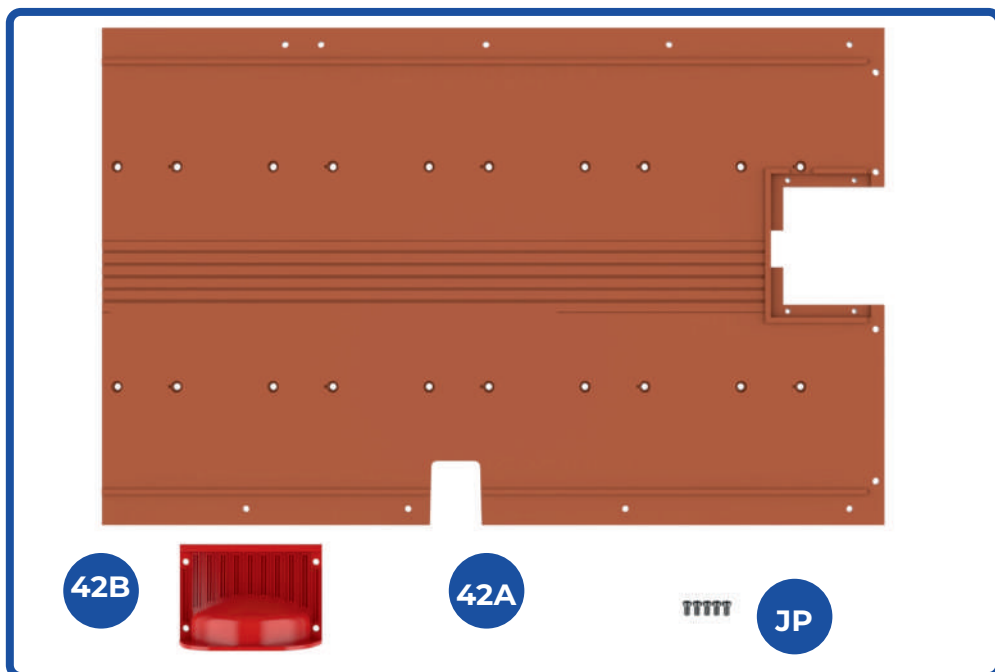


Two views of the assembled cabin walls and front grille. Store the other parts supplied safely.

## STAGE 42

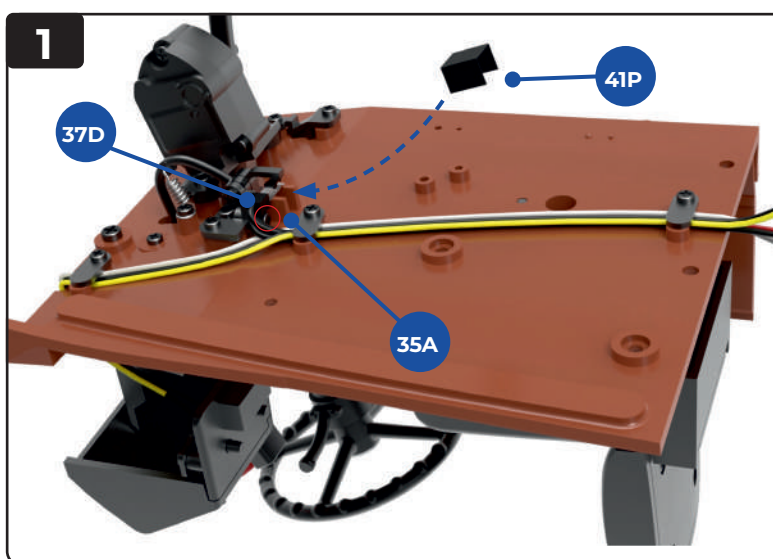
# FITTING THE CAB, GRILLE AND WIRING TO THE SUBFRAME

This stage is an important stage in the assembly as the cab is fitted to the subframe. The first part of the lower deck flooring is also supplied.

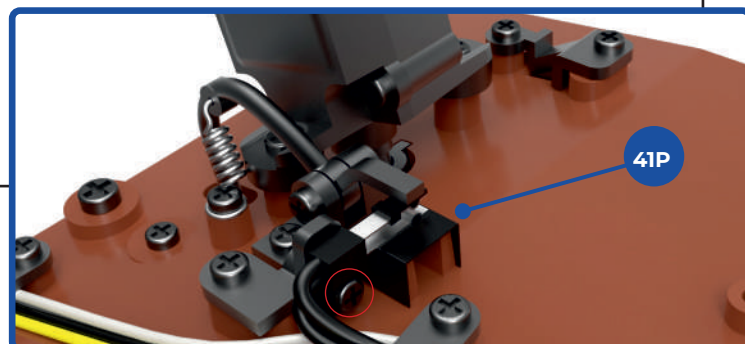


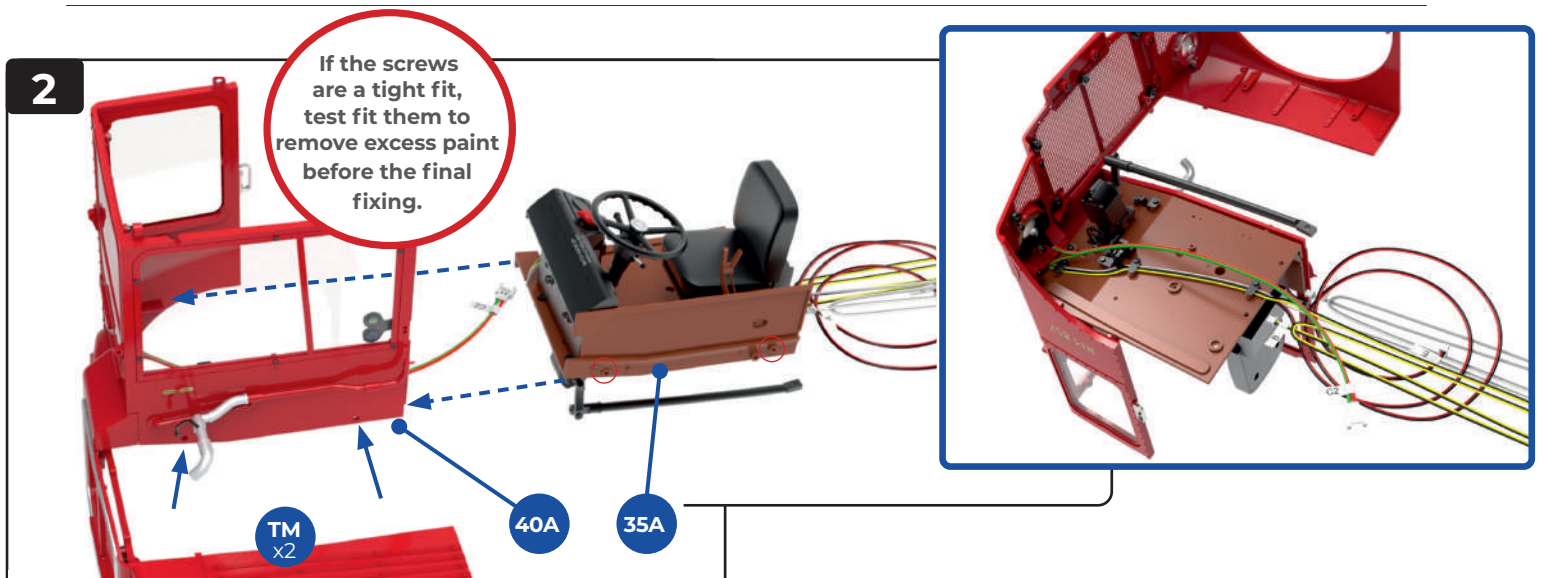
### KEY TO PARTS SUPPLIED

- 42A** Front lower deck
- 42B** Engine cover
- JP** 2.3 x 4mm (x5)

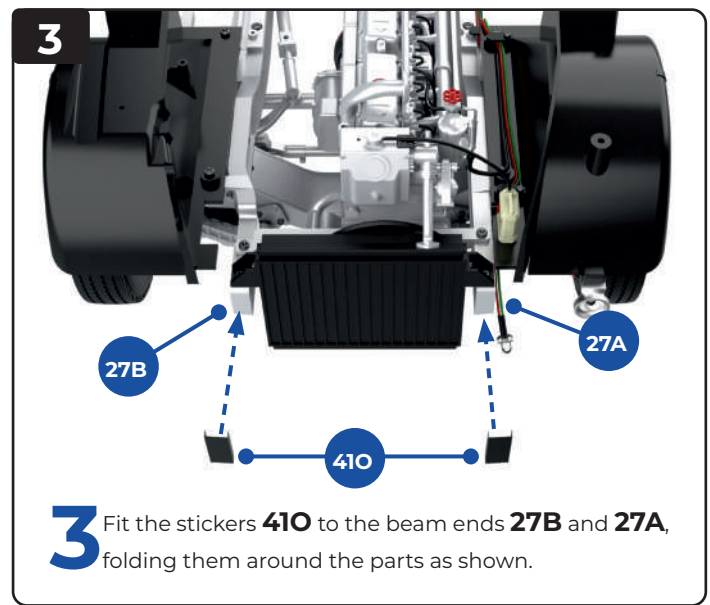
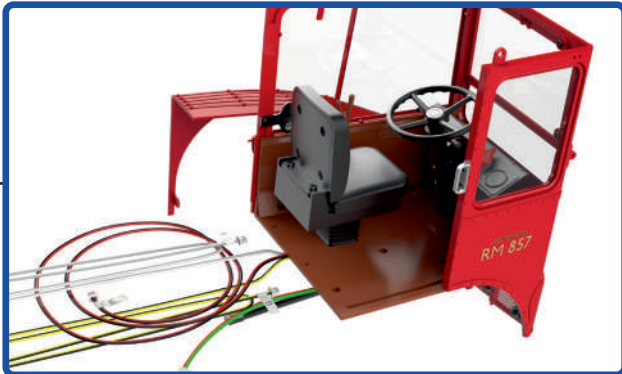


**1** On the underside of the cab floor, fit the insulating sticker **41P** between the brake switch contact **37D** and the cabin floor **35A**, folding it around the part as shown. The purpose of this insulating sticker is to ensure there is no contact between the floor and the switch.  
**NOTE:** This is easier if you loosen the **FP** screw, circled in red. The inset below shows part **41P** in place. Again, the **FP** screw is circled in red.

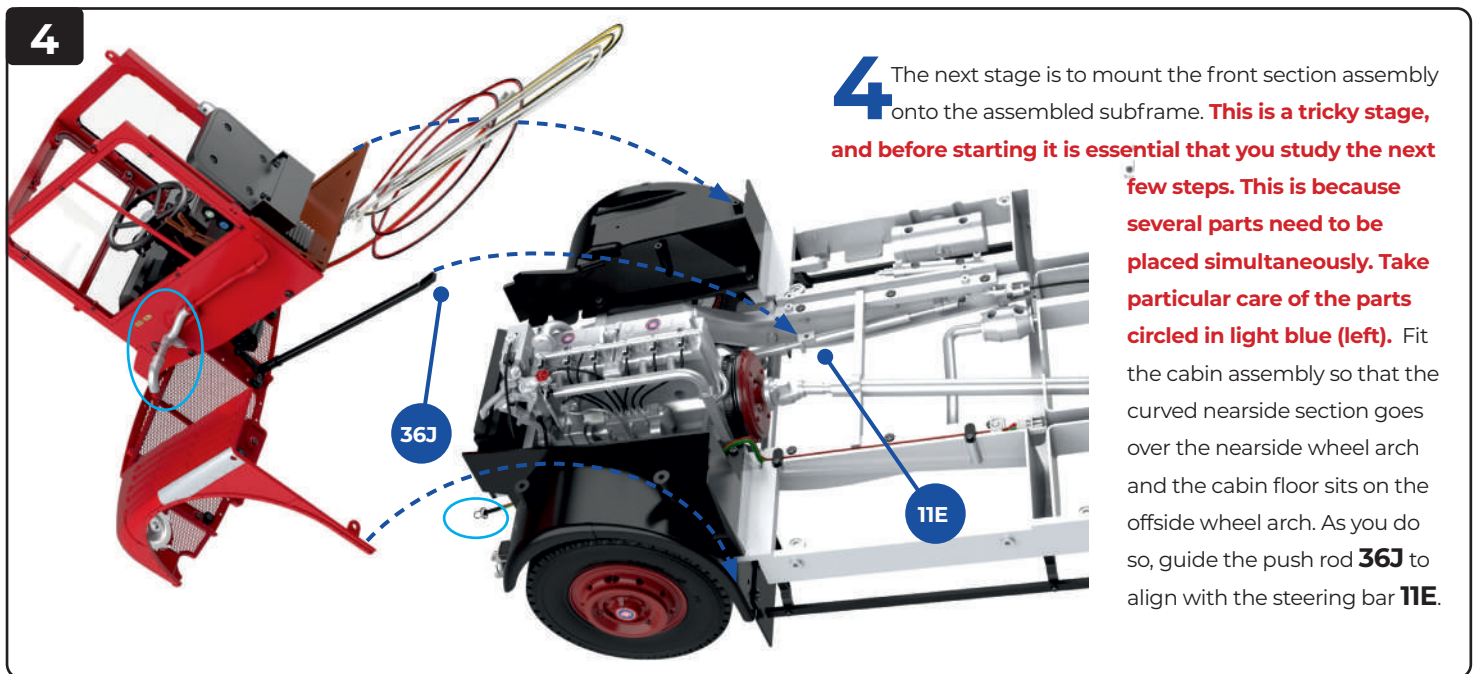




**2** Fit the driver's cab floor **35A** into the cab frame **40A**.  
**2** Fix in place with two **TM** screws (supplied with issue 41).  
**NOTE:** The screws go through the side of the cabin frame as indicated, and into the screw sockets are circled in red. The insets below and top right show the cab floor in place.



**3** Fit the stickers **410** to the beam ends **27B** and **27A**, folding them around the parts as shown.

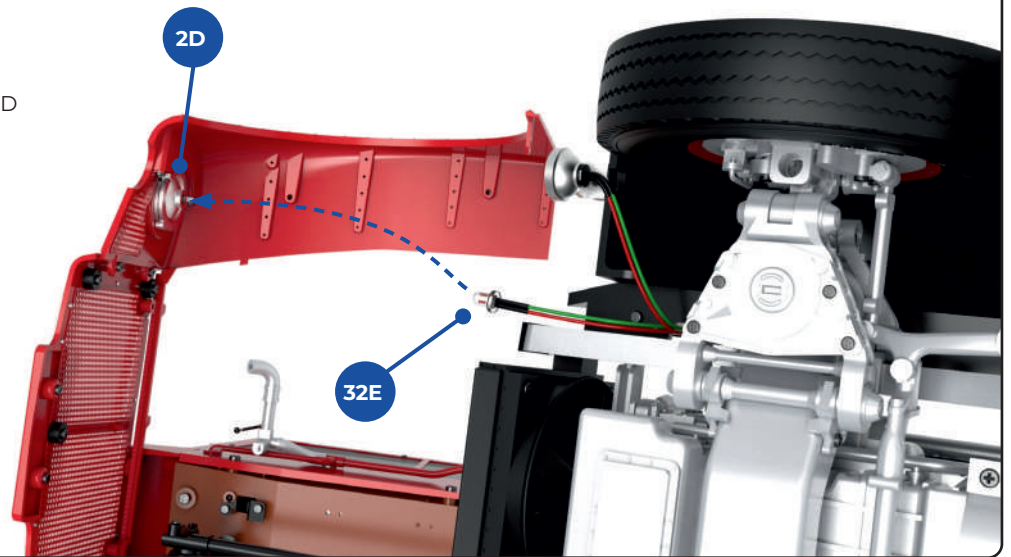


**4** The next stage is to mount the front section assembly onto the assembled subframe. **This is a tricky stage, and before starting it is essential that you study the next few steps. This is because several parts need to be placed simultaneously. Take particular care of the parts circled in light blue (left).** Fit the cabin assembly so that the curved nearside section goes over the nearside wheel arch and the cabin floor sits on the offside wheel arch. As you do so, guide the push rod **36J** to align with the steering bar **11E**.



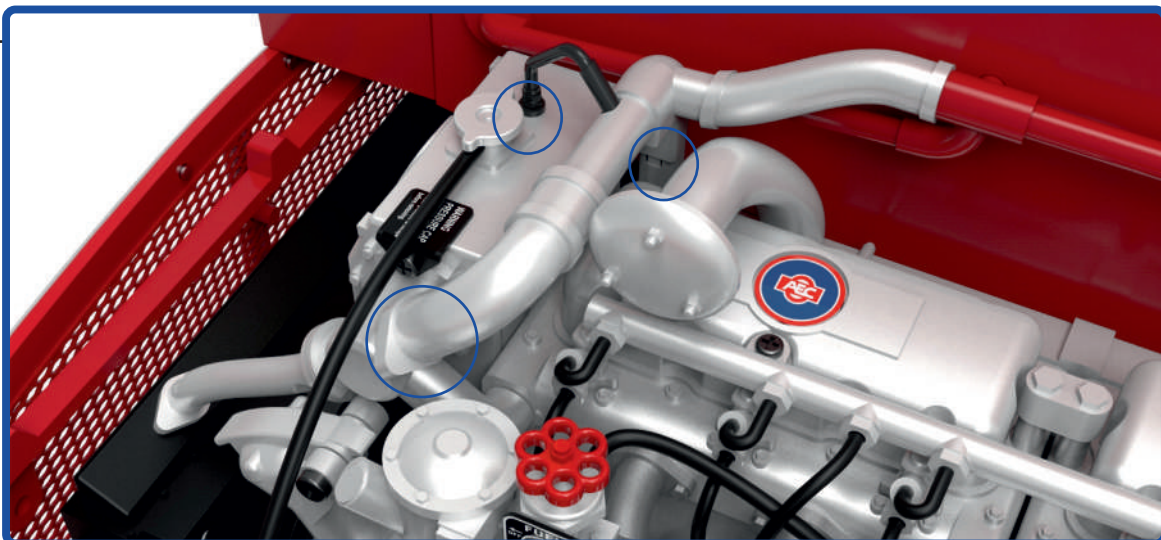
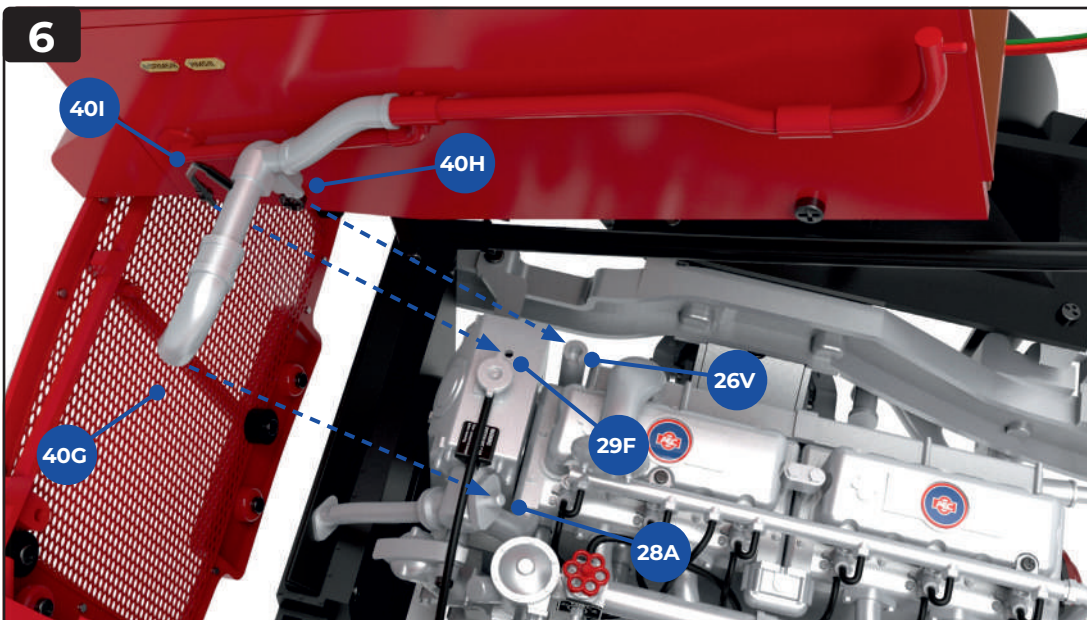
**5**

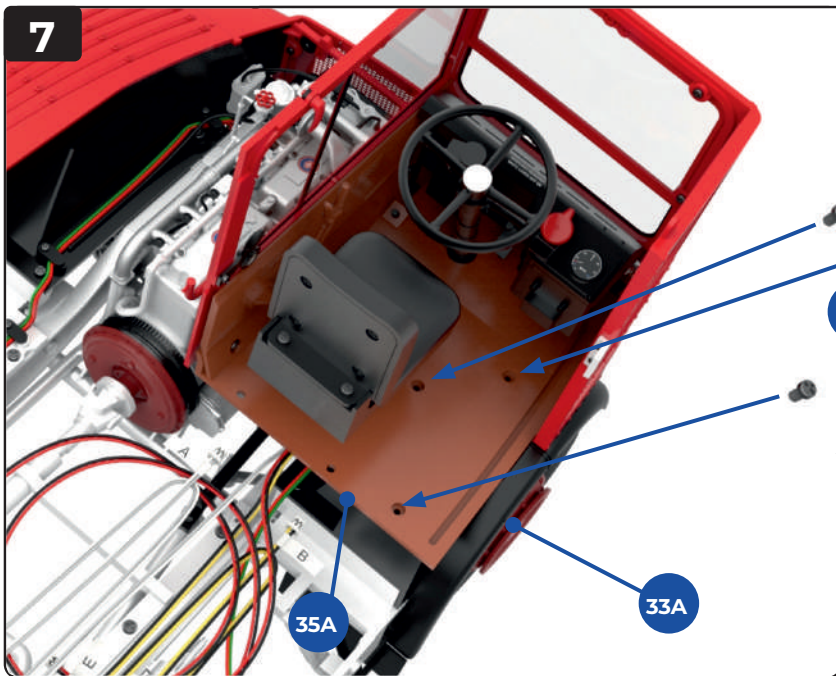
**5** **At the same time** as you position the driver's cab assembly, fit the LED on the end of LED cable **32E** into the nearside headlamp reflector **2D**. This is easier if you use tweezers.



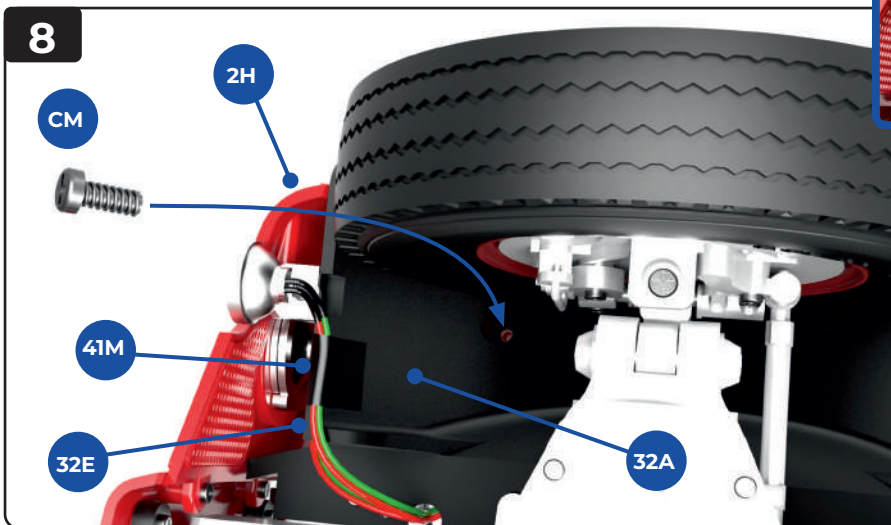
**6**

**6** **At the same time** as you position the driver's cab assembly, fit the water pipe **40H** to the stub pipe **26V**; fit section of water pipe **40G** to the thermostat **28A**; and fit the relief pipe **40I** to the coolant header tank **29F**. The inset below shows all parts in place with the connections circled in blue.

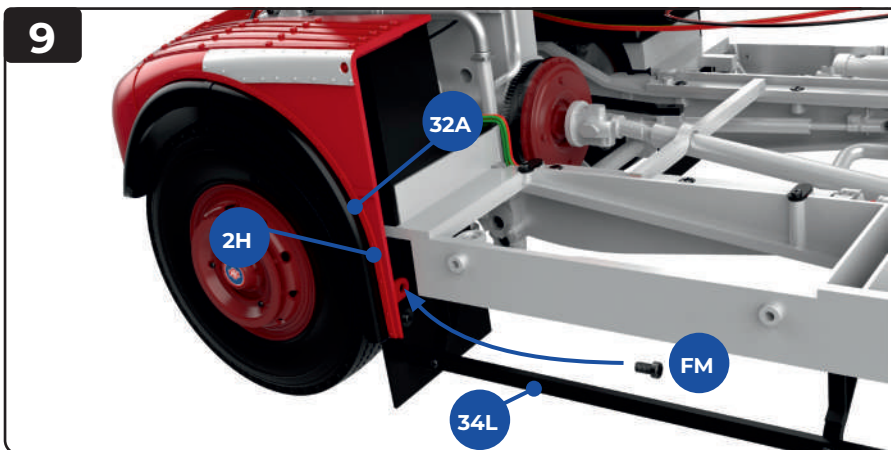




**7** When the steering bar, LED and pipes are in position, fix the cab floor **35A** in place over the front offside wheel arch **33A**. Fix in place with three **FM** screws (supplied with stage 41).



**8** Fix the nearside wing **2H** to the nearside wheel arch **32A** using a black **CM** screw. If necessary, tidy the LED cable **42E** by securing it to the wheel arch using sticker **41M**. Use another black **CM** screw to fix the wing **2A** on the cabin assembly to fix the rear of the wing **2H** to the wheel arch **32A** (inset above).

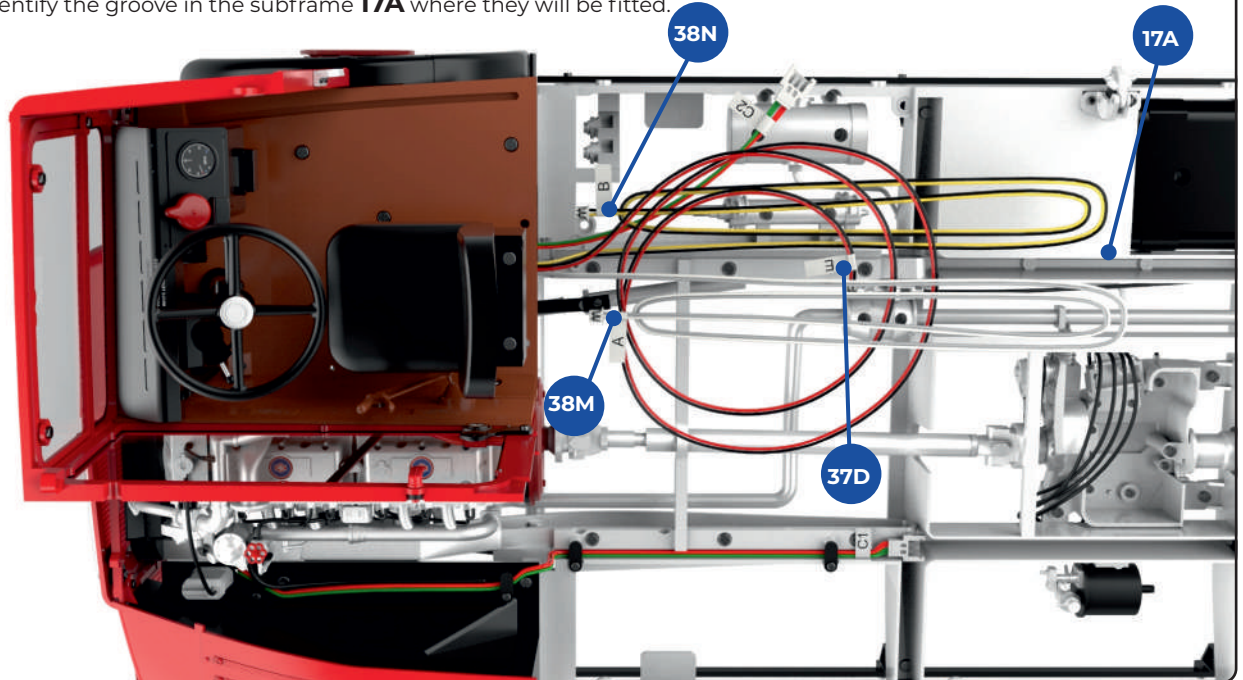


**9** Fix front nearside wing **2H** to the nearside wheel arch **32A** using an **FM** screw.

 It is easier to fit the FM screw if you temporarily remove the bracket **34H** which holds the side bar **34L** in place.

**10**

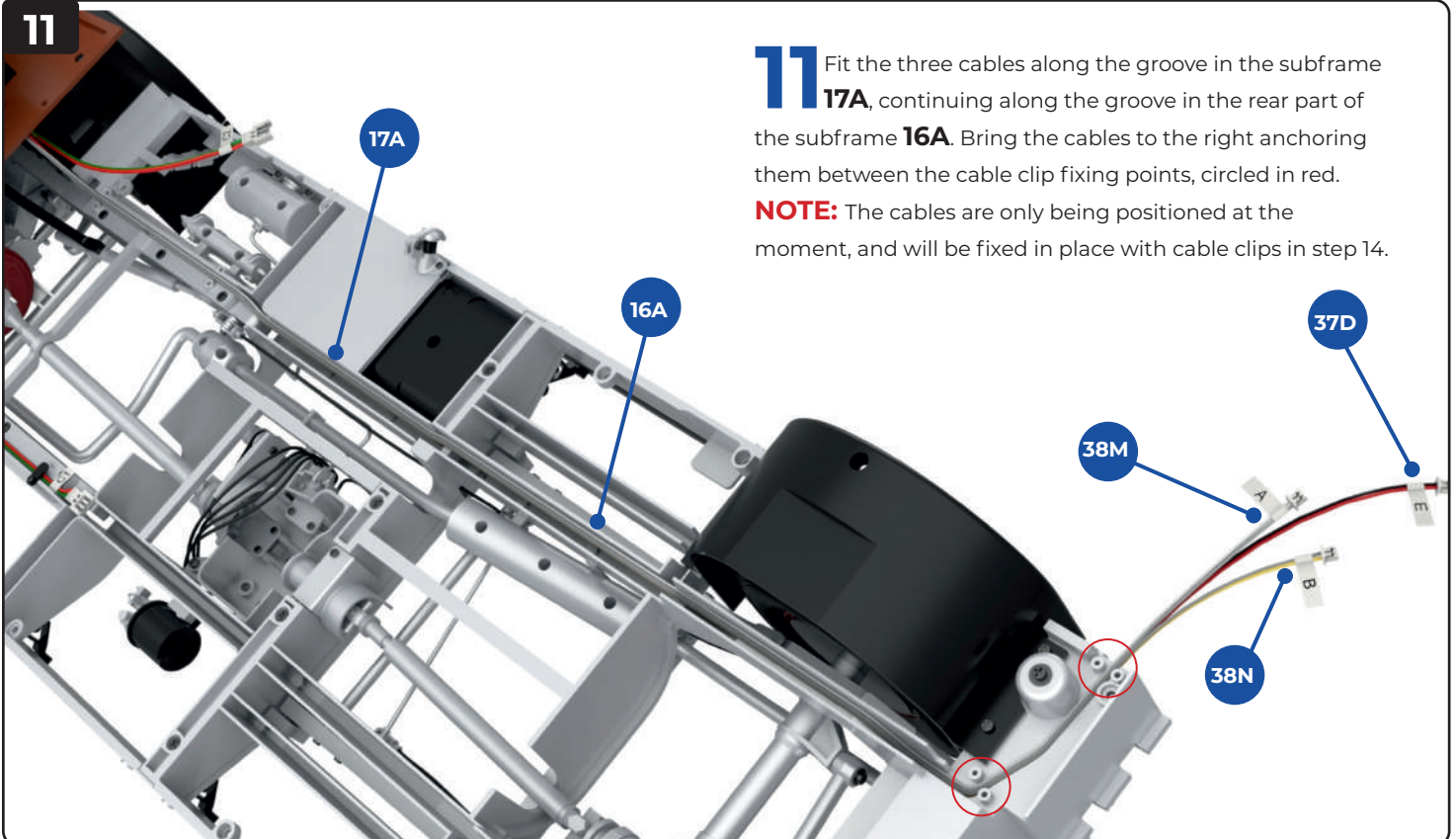
**10** The next stage is to fit the cables along the subframe **17A**. Start by identifying the cables to be fitted: Grey and white cable, labelled **A**, **38M**; Black and yellow cable, labelled **B**, **38N**; Red and black cable, labelled **E**, **37D**. Identify the groove in the subframe **17A** where they will be fitted.



**11**

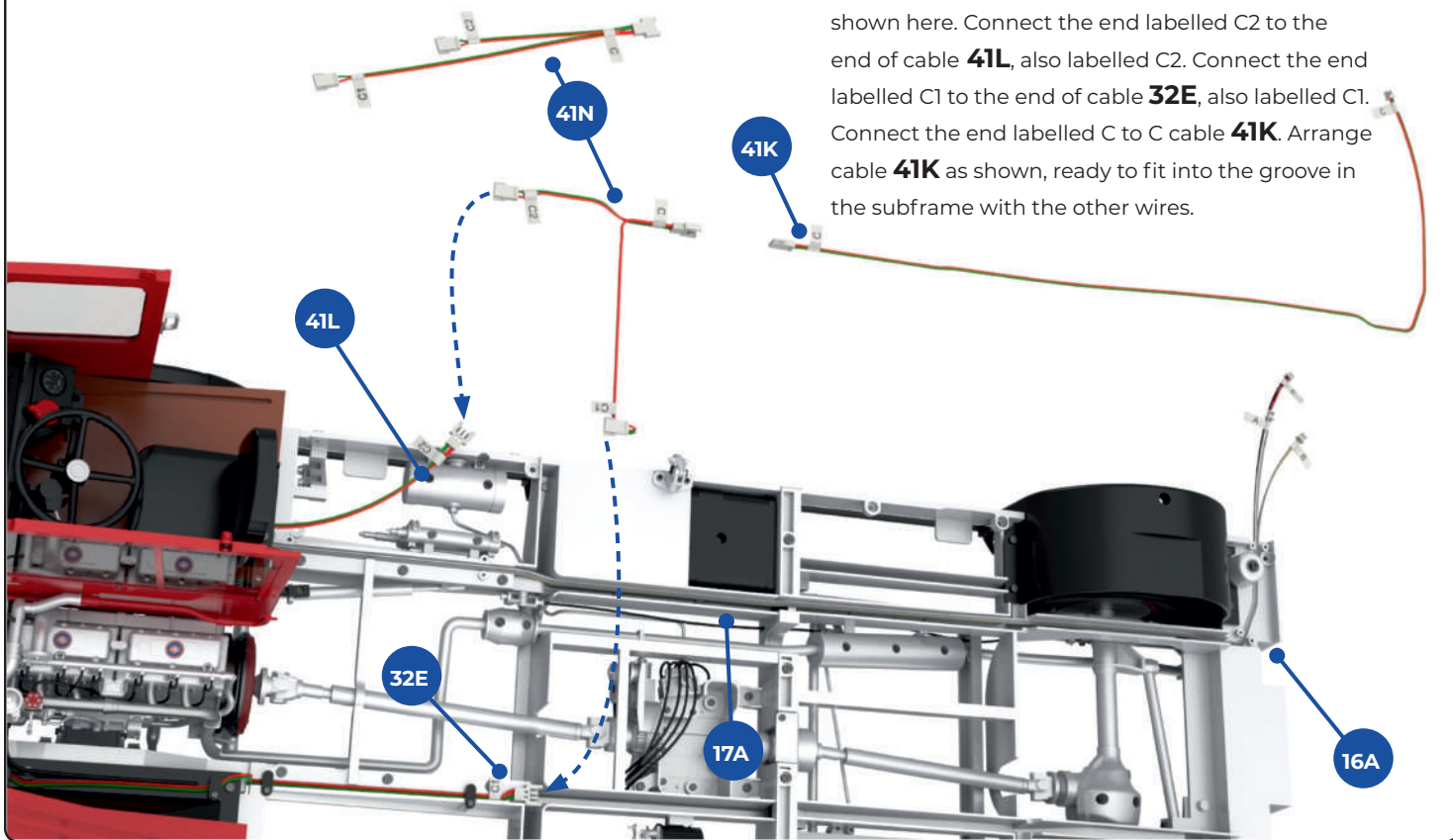
**11** Fit the three cables along the groove in the subframe **17A**, continuing along the groove in the rear part of the subframe **16A**. Bring the cables to the right anchoring them between the cable clip fixing points, circled in red.

**NOTE:** The cables are only being positioned at the moment, and will be fixed in place with cable clips in step 14.



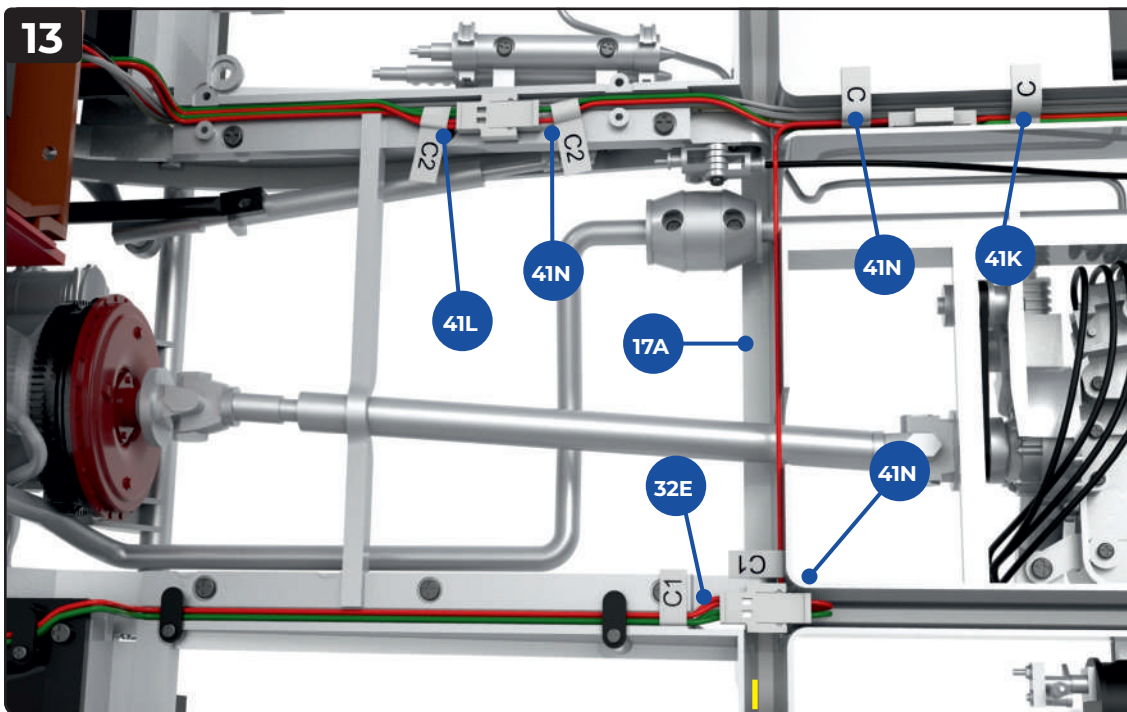
**12**

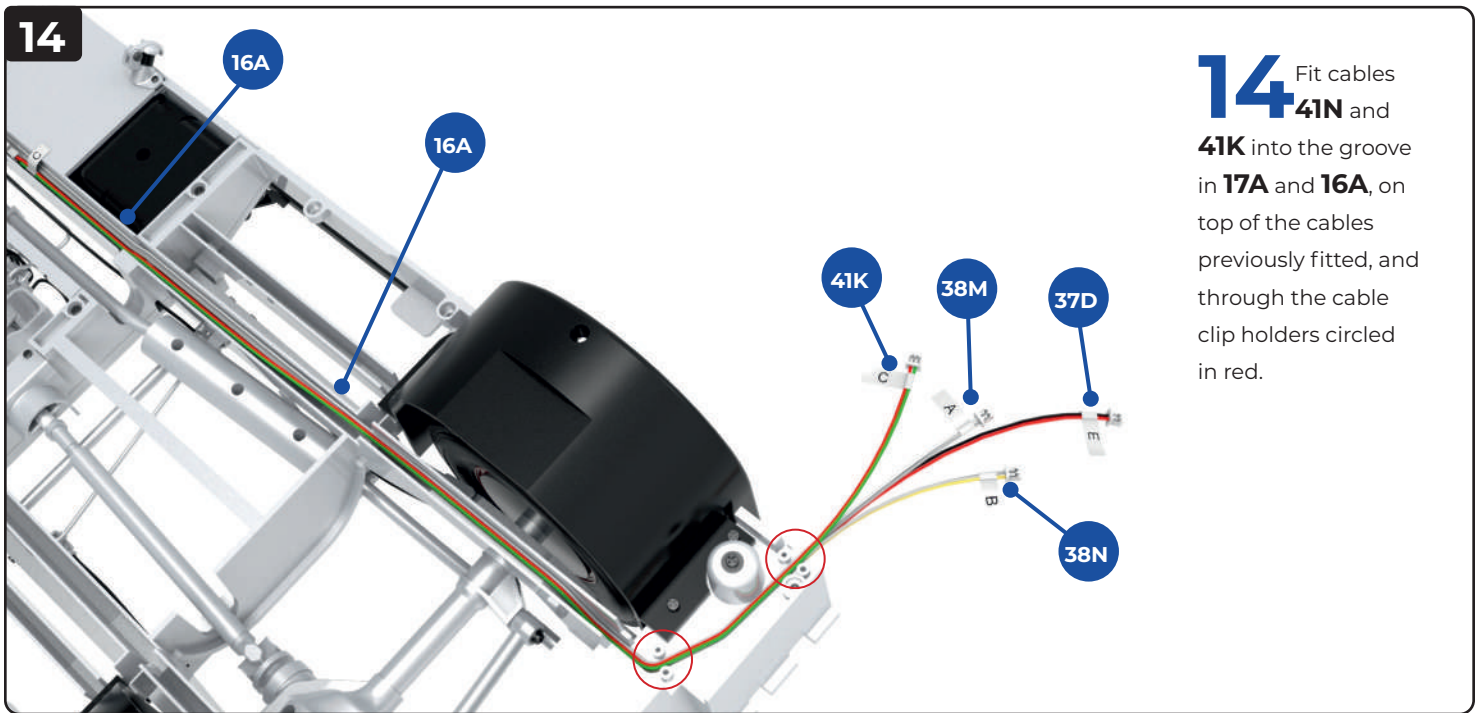
**12** Take the C, C1, C2 cable link **41N** and separate the ends in the arrangement shown here. Connect the end labelled C2 to the end of cable **41L**, also labelled C2. Connect the end labelled C1 to the end of cable **32E**, also labelled C1. Connect the end labelled C to C cable **41K**. Arrange cable **41K** as shown, ready to fit into the groove in the subframe with the other wires.



**13**

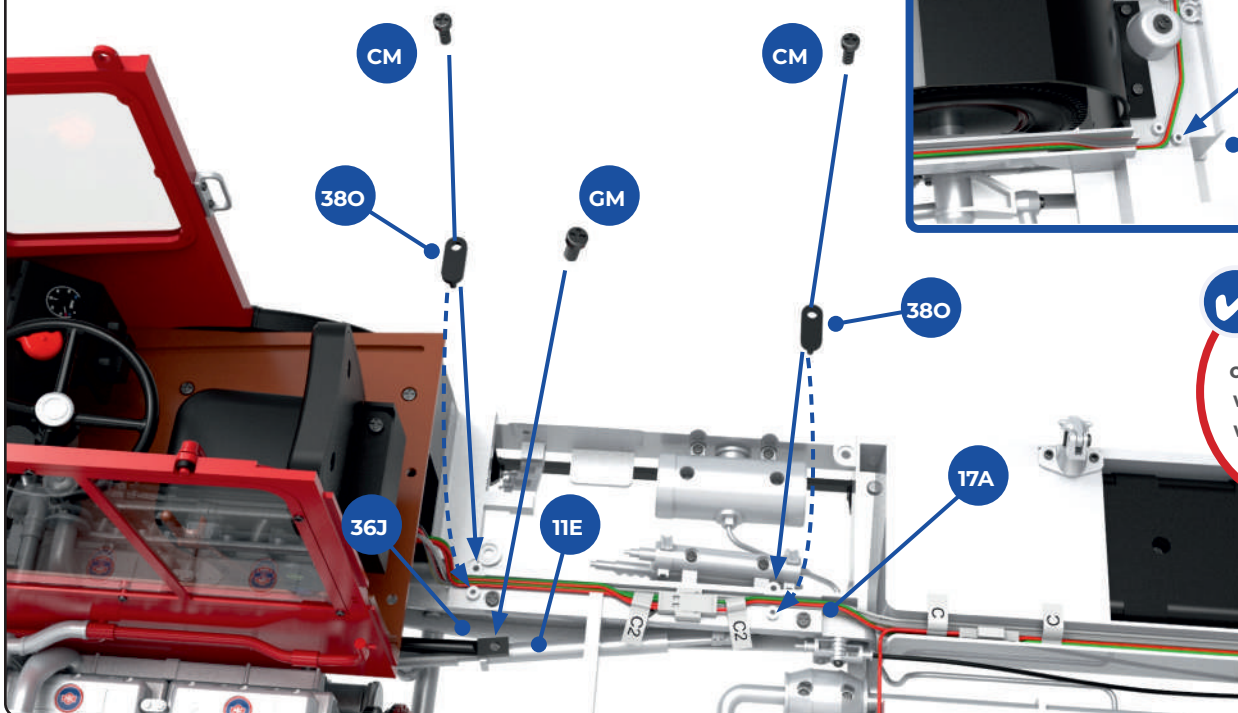
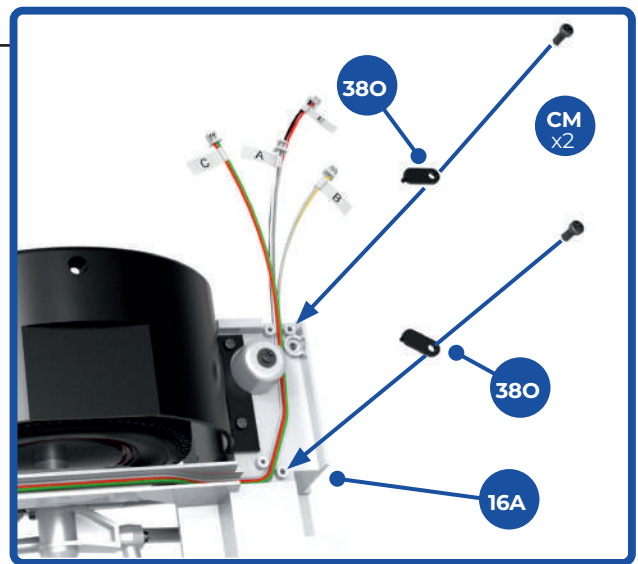
**13** Place the linking cable **41N** as shown, so that it runs across the subframe in line with the crossbeam of **17A**; the C2 connection between **41L** and **41N** sits on the flat section of **17A**. The C connection between **41N** and **41K** sits on in the groove of **17A**.





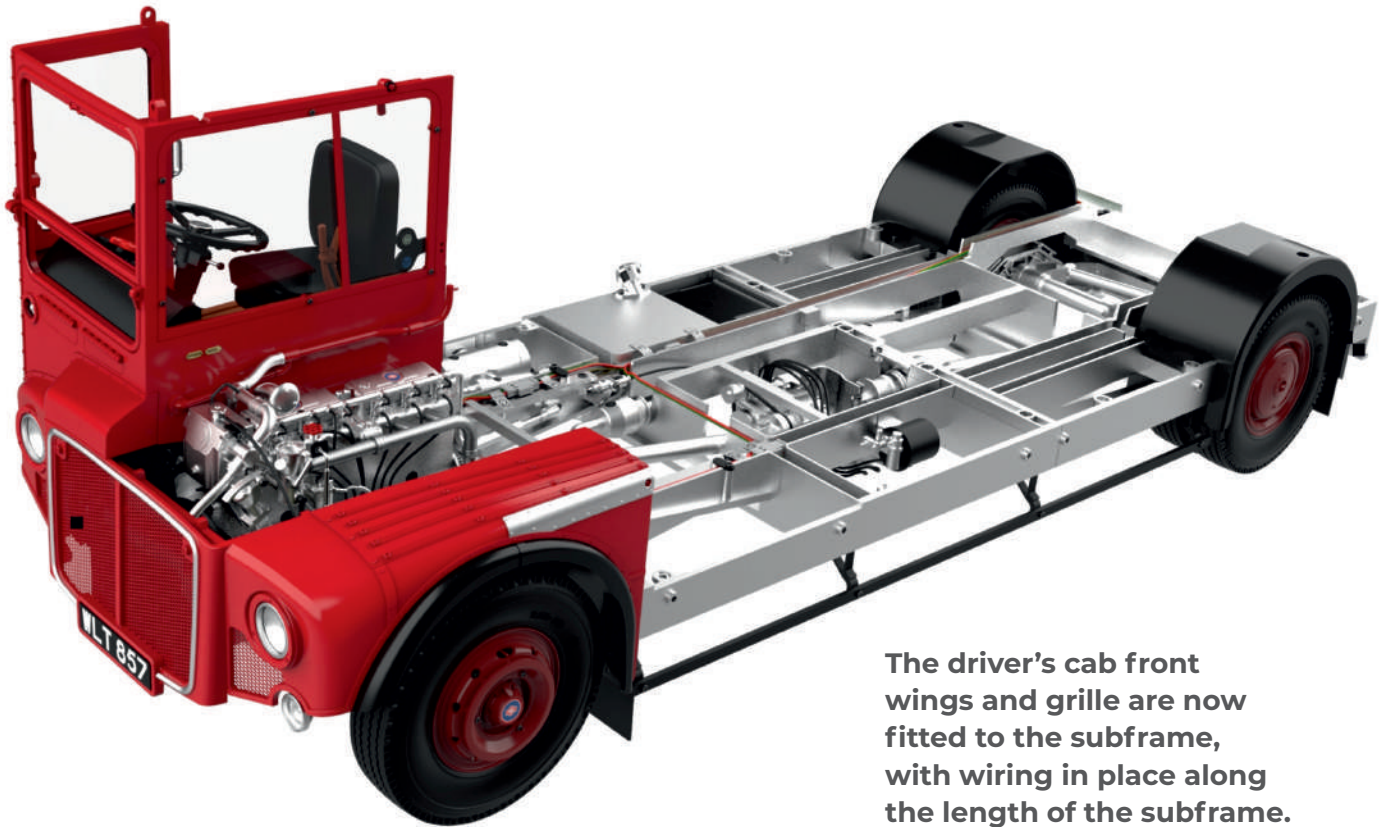
**14** Fit cables **41N** and **41K** into the groove in **17A** and **16A**, on top of the cables previously fitted, and through the cable clip holders circled in red.

**15** Align the screw hole in the push rod **36J** with the corresponding socket in the steering column **11E**. Firmly supporting part **11E** from below, fix in place with a **GM** screw. Identify the two cable clip sockets on subframe **17A**. Fit two cable clips in place: a peg on each cable clip goes into one of the cable clip sockets. Fix in place with black **CM** screws. Fit the cable clips at the end of part **16A** in the same way (inset, right).

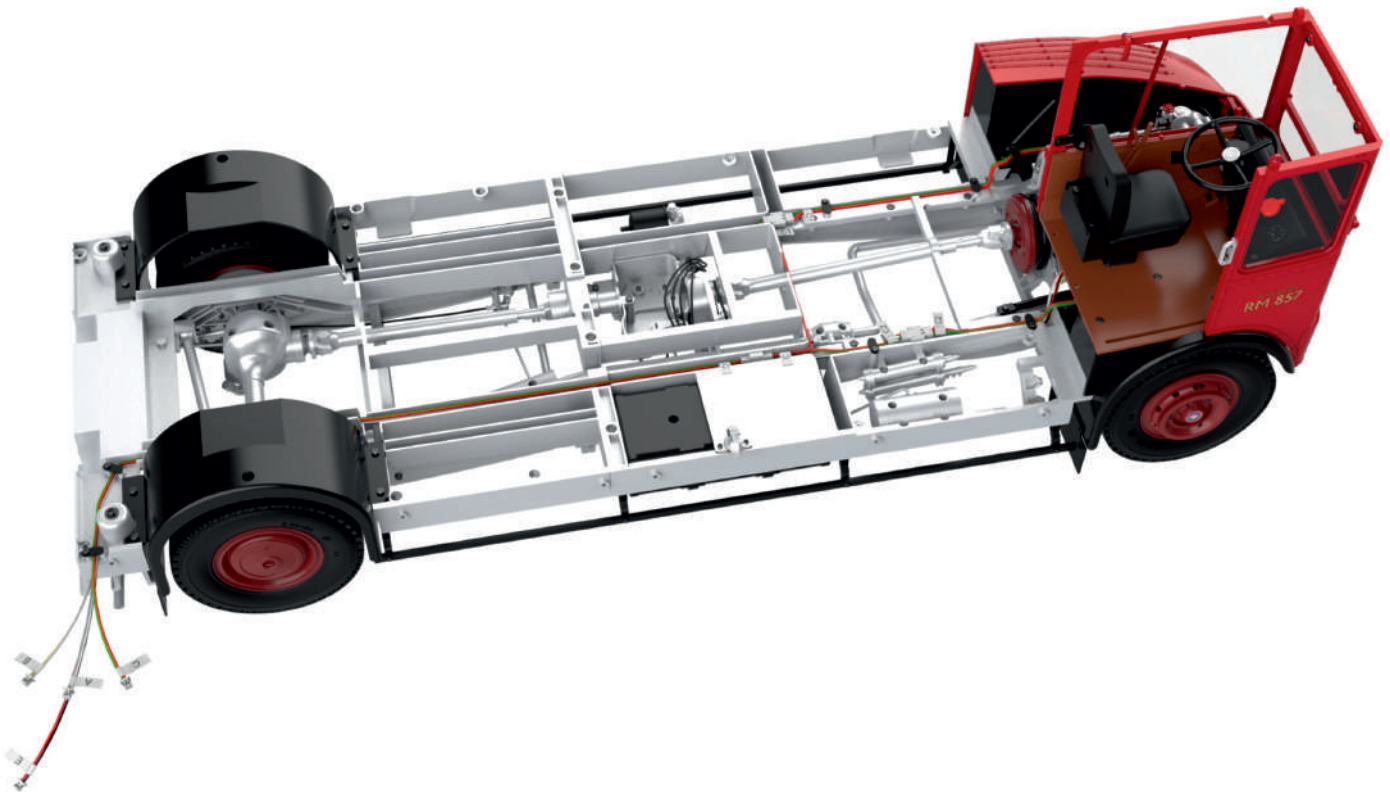


The cable clips used here were supplied with stage 38.

## Finished views

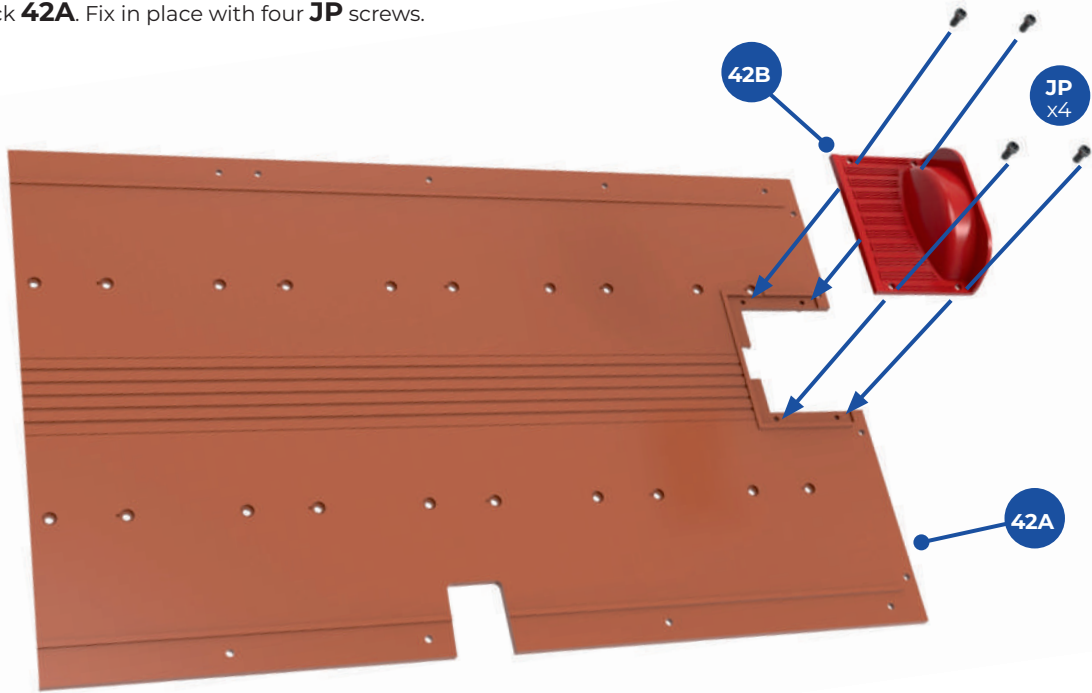


The driver's cab front wings and grille are now fitted to the subframe, with wiring in place along the length of the subframe.

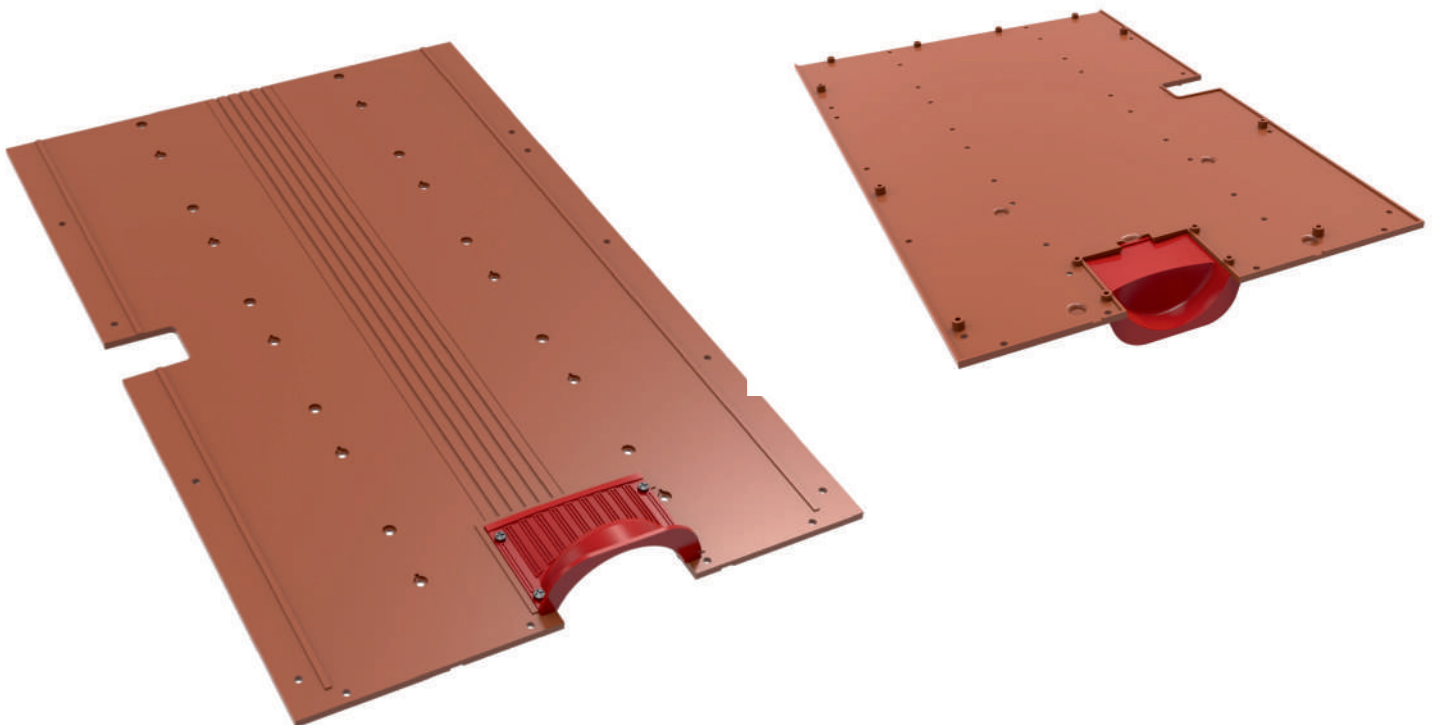


**16**

**16** Position the engine cover **42B** on the front lower deck **42A**. Fix in place with four **JP** screws.



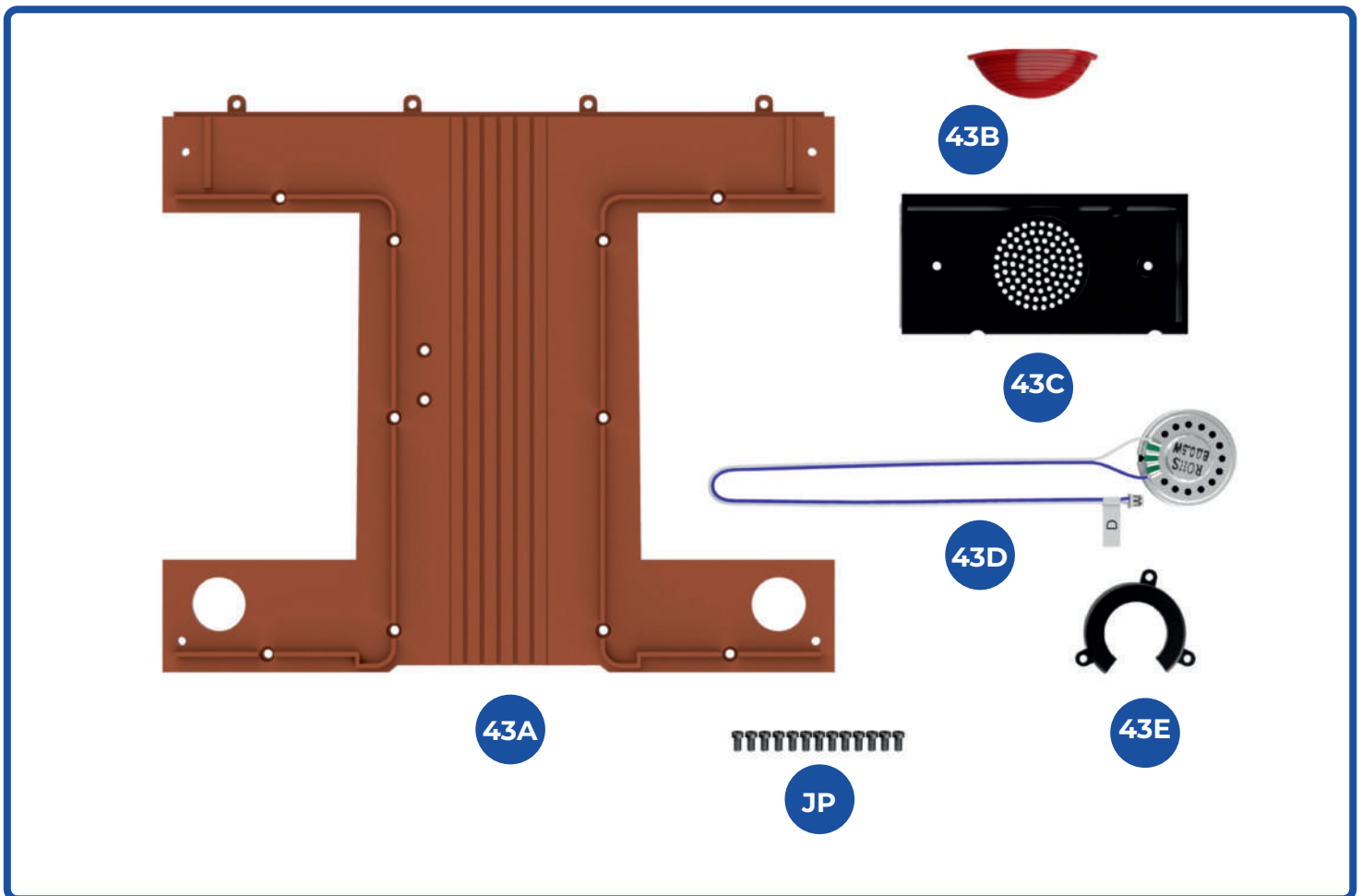
## Finished views



**STAGE 43**

# THE REAR SECTION OF THE LOWER DECK

A speaker is fitted to the rear section of the lower deck. This will produce the engine sound effect. The rear section of the lower deck is then joined on to the section supplied in the previous stage.



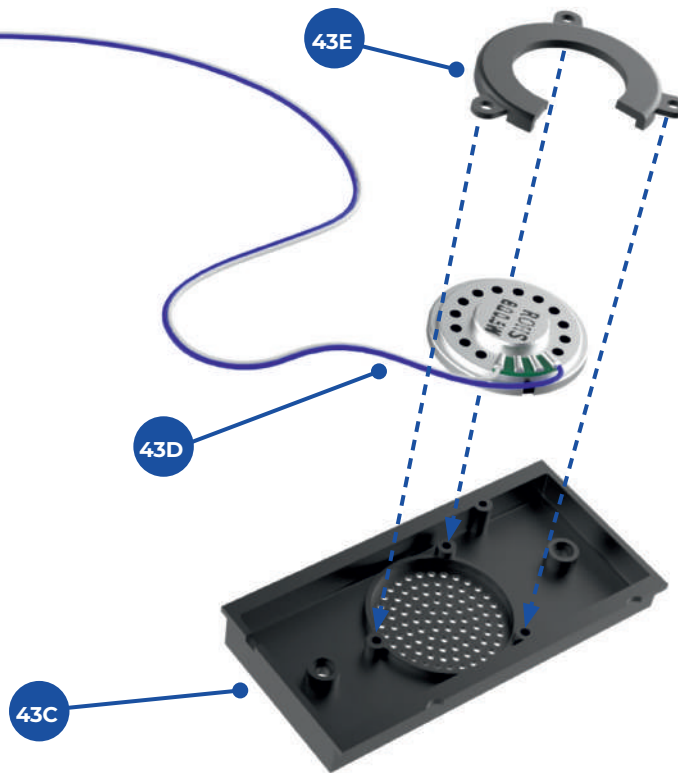
**KEY TO PARTS SUPPLIED**

- 43A** Rear lower deck
- 43B** Cover
- 43C** Sound box
- 43D** Speaker
- 43E** Fixing ring
- JP** 2.3 x 4mm (x13)



## 1

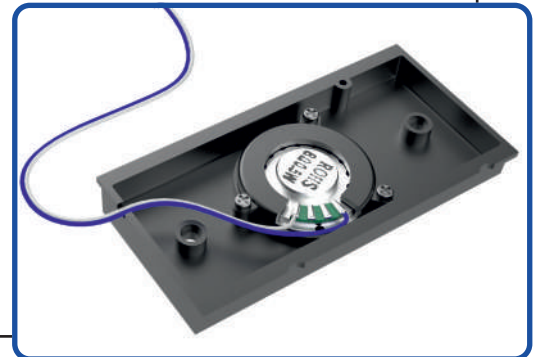
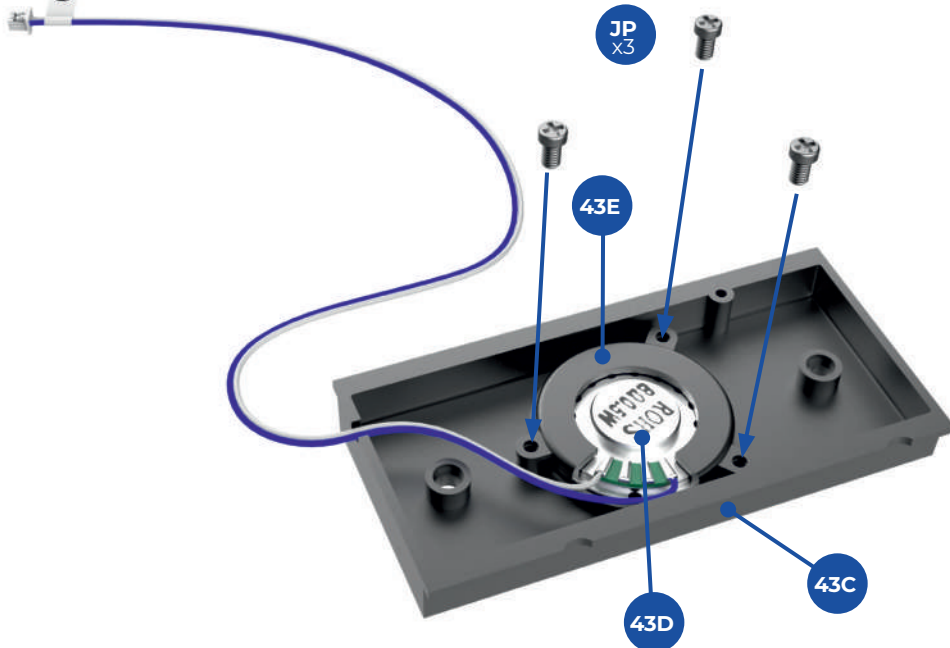
Take the sound box **43C** and fit the speaker **43D** into the perforated recess. Take the fixing ring **43E** and fit it over the speaker so that the screw holes on **43E** are aligned with the screw sockets on **43C** as indicated by the dotted arrows.



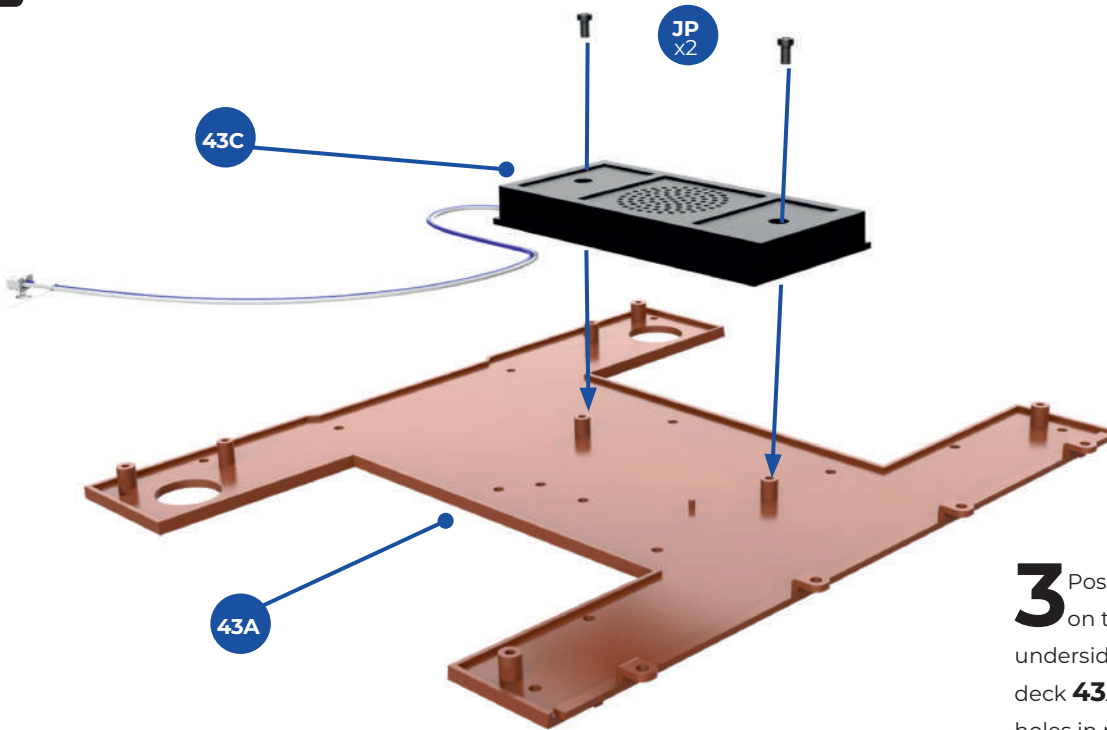
Note that the gap in the fixing ring **43E** is aligned with the wiring connection point on the speaker.

## 2

Attach the fixing ring **43E** in place with three **JP** screws. The inset below shows the speaker in place.

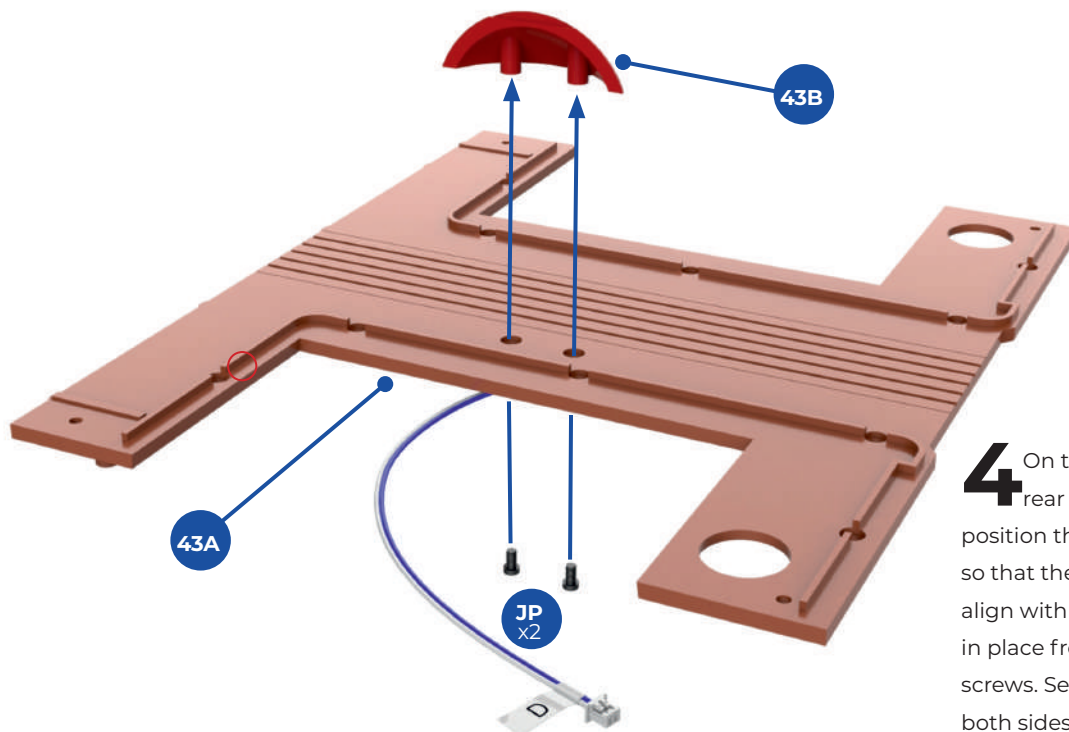


**3**

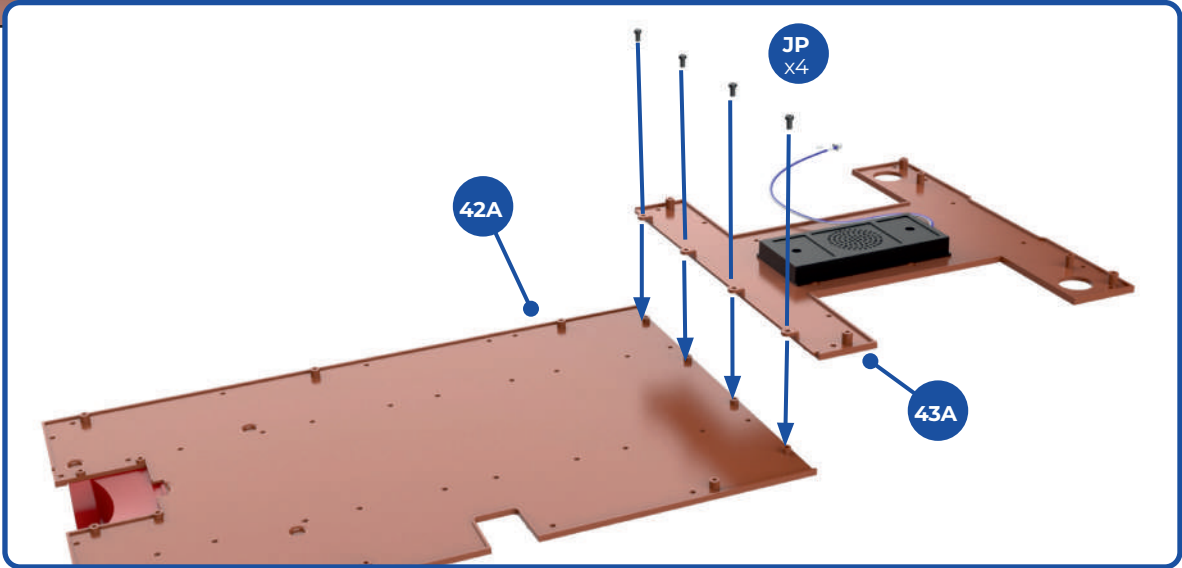
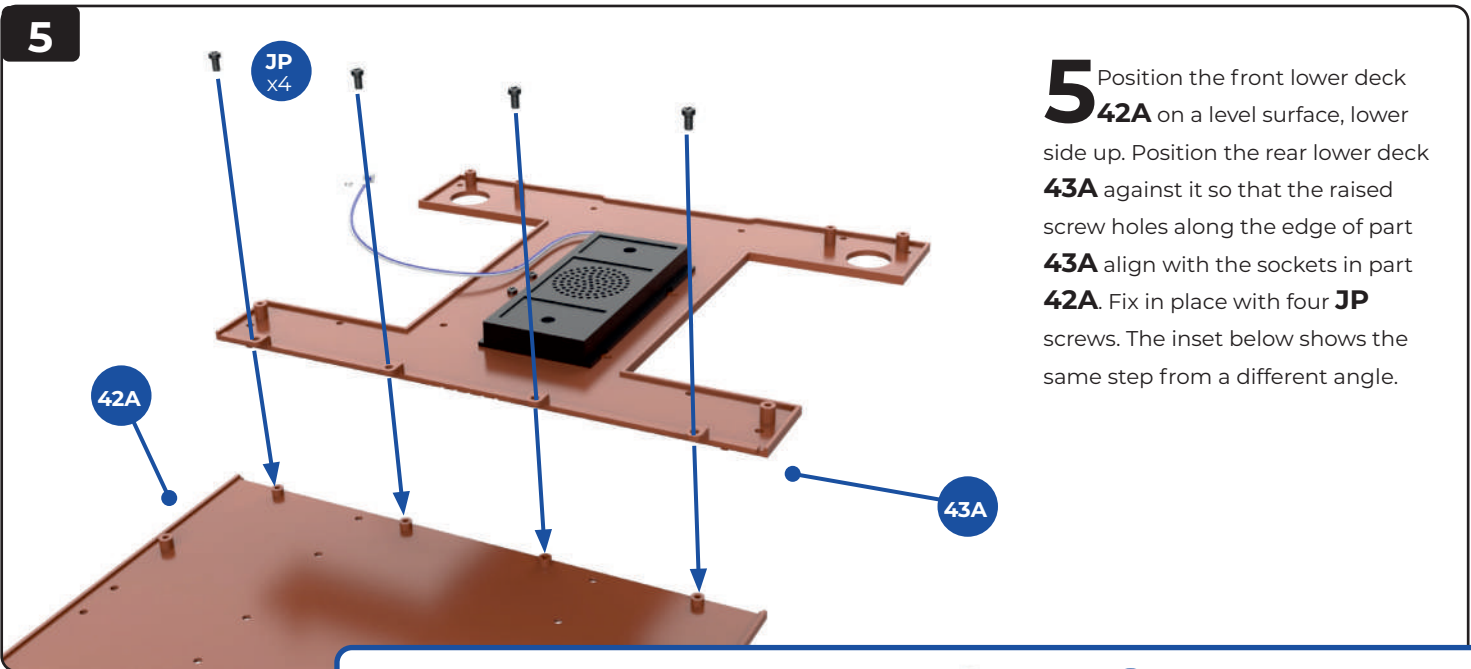
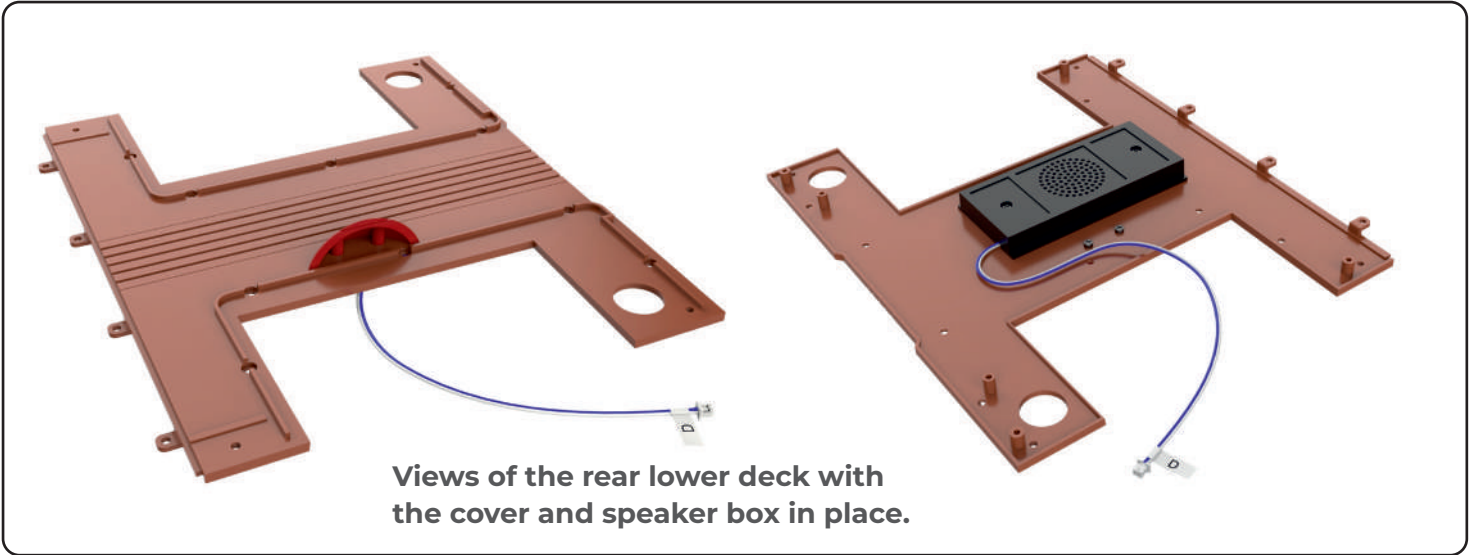


**3** Position the speaker box on the centre of the underside of the front lower deck **43A** so that the screw holes in part **43C** are aligned with the sockets on part **43A**. Fix in place with two **JP** screws.

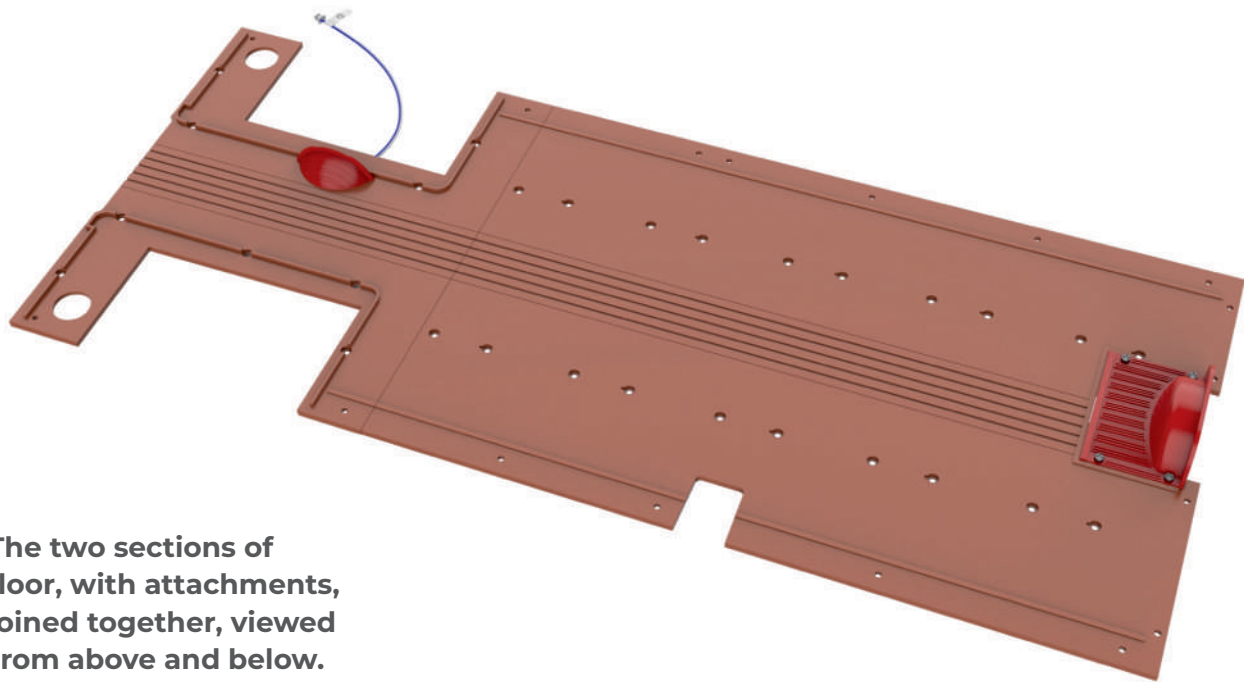
**4**



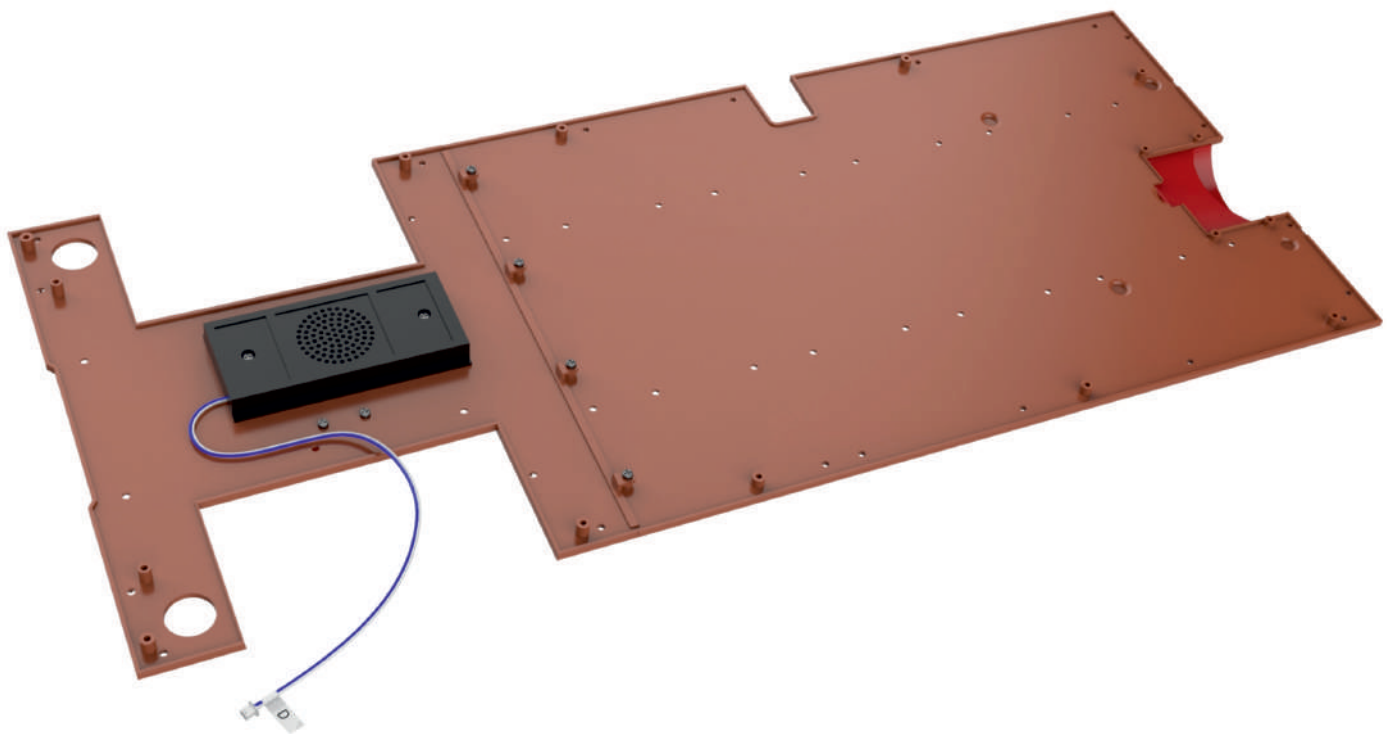
**4** On the upper side of the rear lower deck **43A**, position the cover **43B** as shown, so that the screw holes in **43A** align with the sockets in **43B**. Fix in place from below with two **JP** screws. See overleaf for views of both sides of the rear lower deck at this stage.



## Finished views



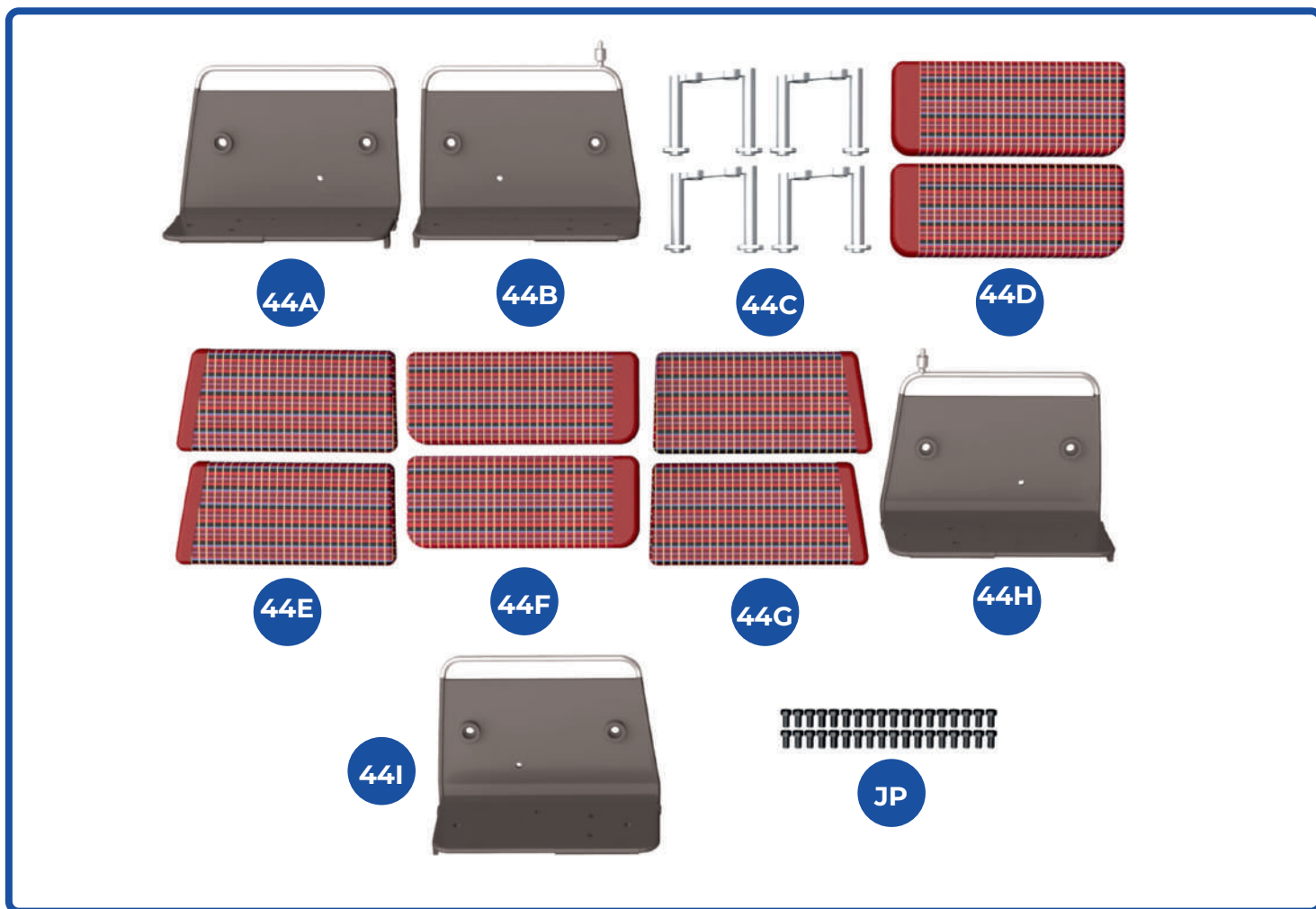
The two sections of floor, with attachments, joined together, viewed from above and below. Note that viewed from above the floor panels butt together neatly.



**STAGE 44**


# ASSEMBLING AND FITTING THE FIRST FOUR SEATS

The first four seats, with their authentic pattern, are assembled and fitted to the lower deck. The ends of the seats will not be attached until the side panels are supplied.

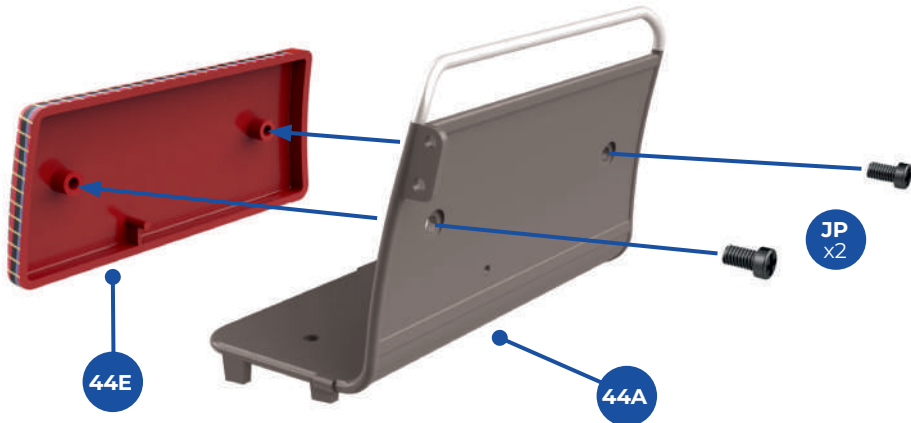


**KEY TO PARTS SUPPLIED**

- |   |   |
|---|---|
| <b>44A</b> Left seat frame                | <b>44G</b> Right seat backrest (x2)       |
| <b>44B</b> Right seat frame (with socket) | <b>44H</b> Left seat frame                |
| <b>44C</b> Seat support (x4)              | <b>44I</b> Right seat frame (with socket) |
| <b>44D</b> Left seat cushion (x2)         | <b>JP</b> 2.3 x 4mm (x36)                 |
| <b>44E</b> Left seat backrest (x2)        |   |
| <b>44F</b> Right seat cushion (x2)        |   |

 Note that two of the seat frames have sockets on the top of the rails, where the grab poles will be attached. Make sure you position these in the correct order.

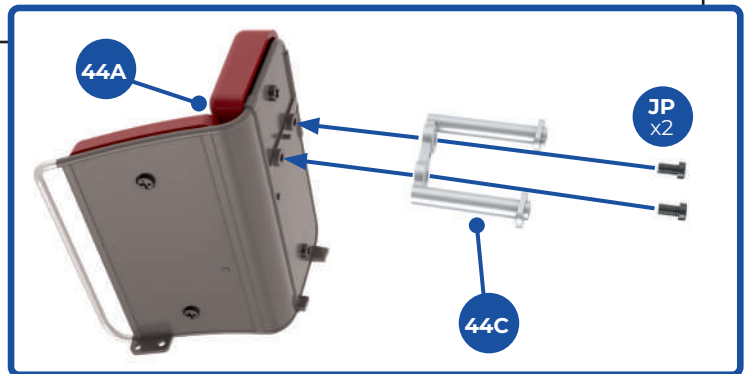
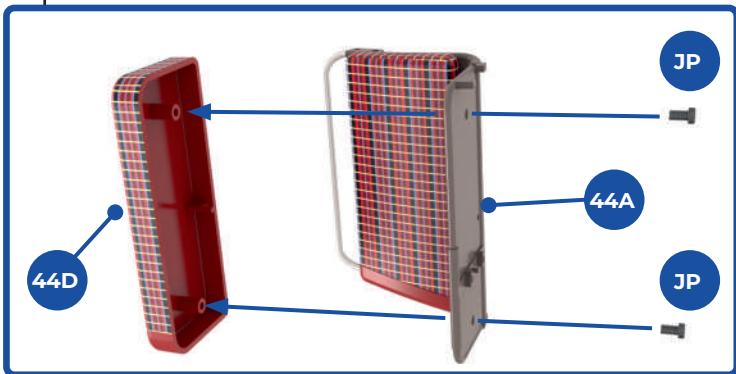
**1**



**1** Take the left seat frame **44A** and one of the left seat backrests **44E**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take one of the left seat cushions **44D** and fit it into part **44A**. Fix in place with two **JP** screws (inset, below left).

Take one of the seat supports **44C** and fix to underside of the seat frame **44A** with two **JP** screws (inset, below right).

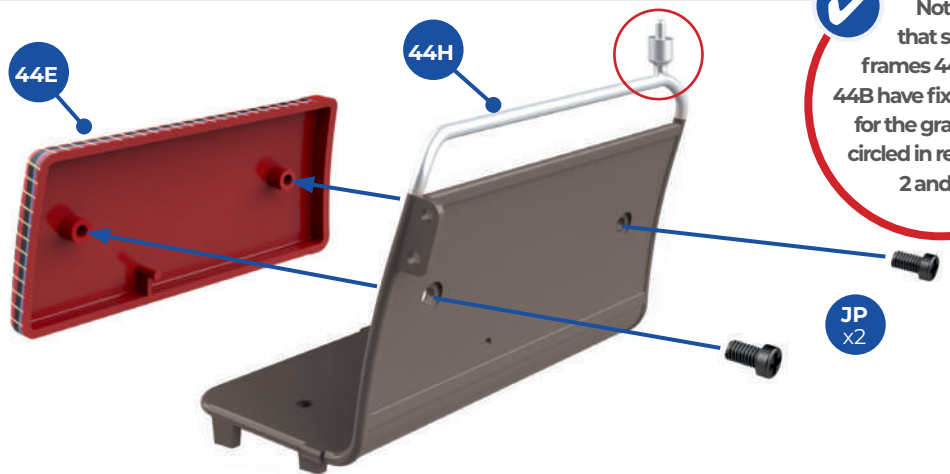


**2**

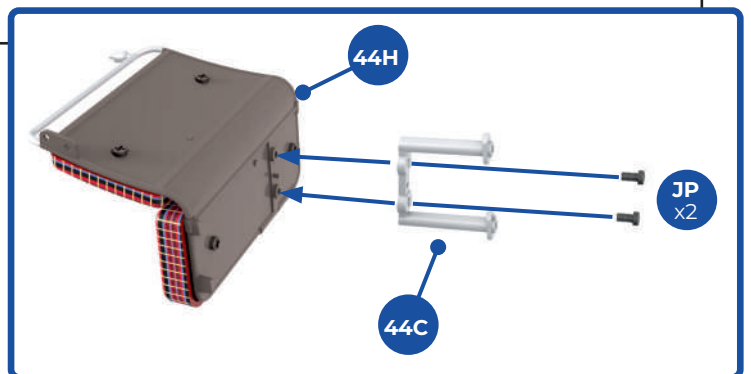
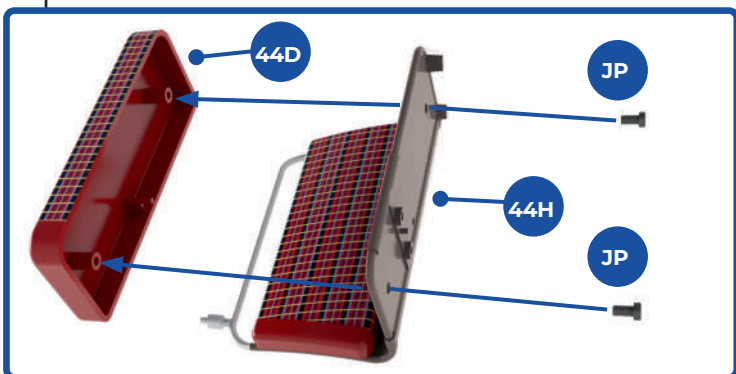
**2** In the same way as step 1, fit the second left seat backrest **44E** to the left seat frame **44H** and fix in place with two **JP** screws.

Fit the second left seat cushion **44D** into part **44H** and fix in place with two **JP** screws (inset, below left).

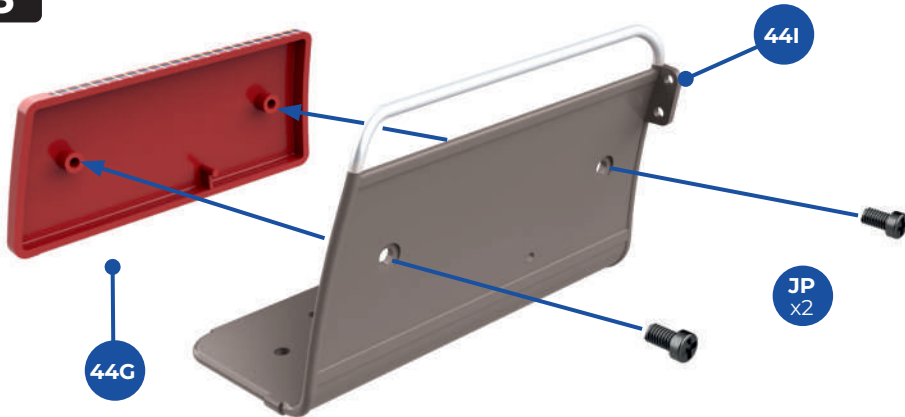
Take one of the seat supports **44C** and fix to underside of the seat frame **44H** with two **JP** screws (inset, below right).



**Note** that seat frames **44H** and **44B** have fixing points for the grab poles, circled in red (steps 2 and 4).



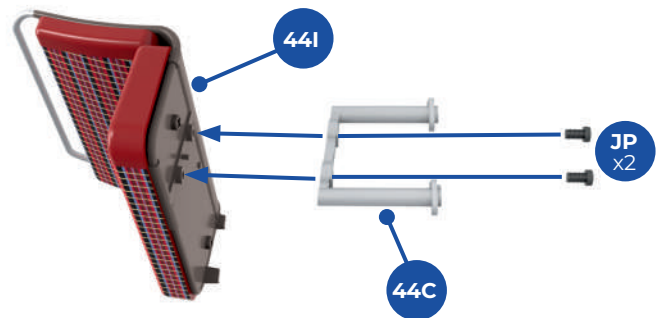
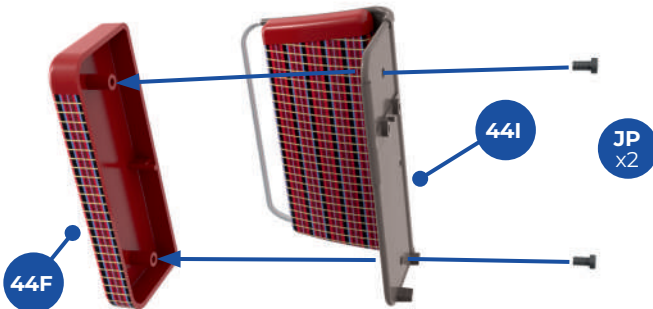
**3**



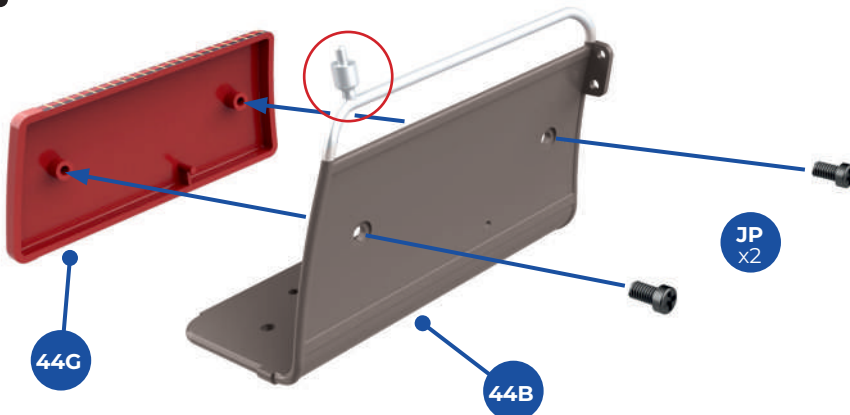
**3** Take the right seat frame **44I** and one of the right seat backrests **44G**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take one of the right seat cushions **44F** and fit it into part **44I**. Fix in place with two **JP** screws (inset, below left).

Take one of the seat supports **44C** and fix to underside of the seat frame **44I** with two **JP** screws (inset, below right).



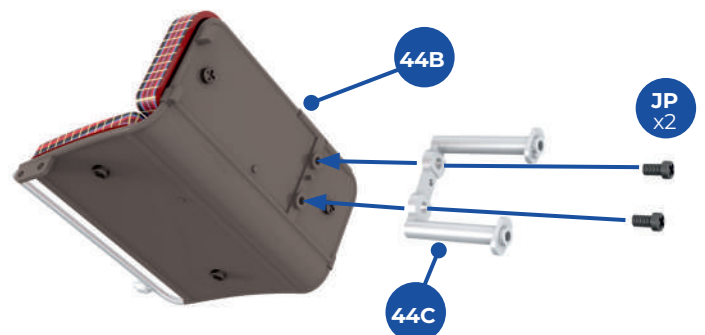
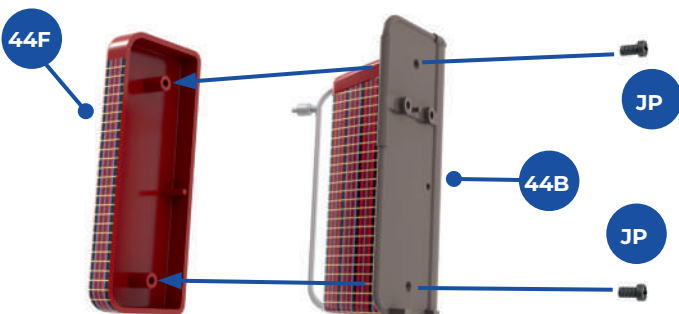
**4**



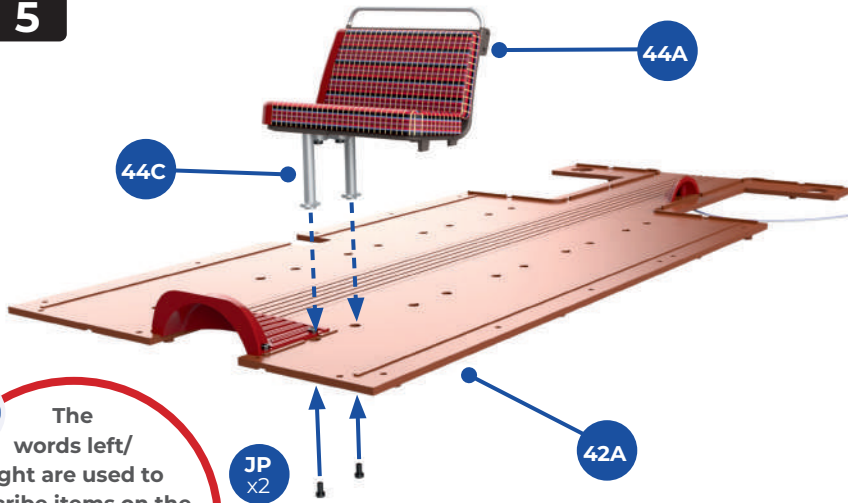
**4** Take the right seat frame **44B** and the second right seat backrest **44G**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take the second right seat cushion **44F** and fit it into part **44B**. Fix in place with two **JP** screws (inset, below left).

Take the fourth seat support **44C** and fix to underside of the seat frame **44B** with two **JP** screws (inset, below right).



**5**

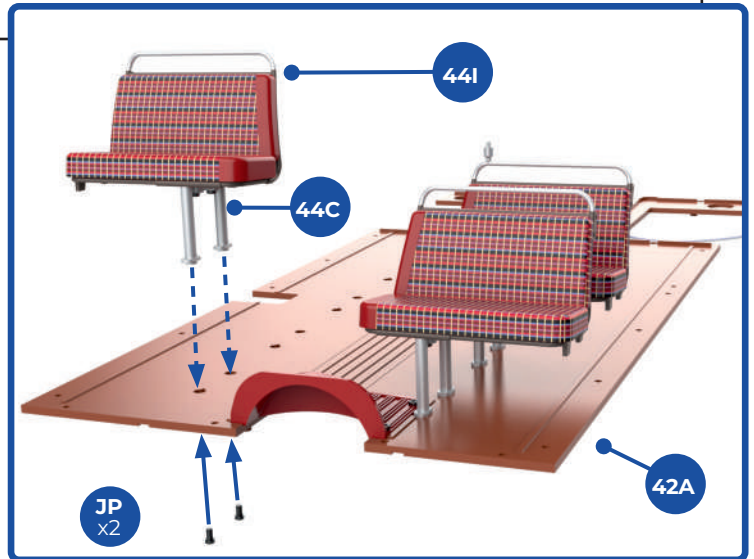
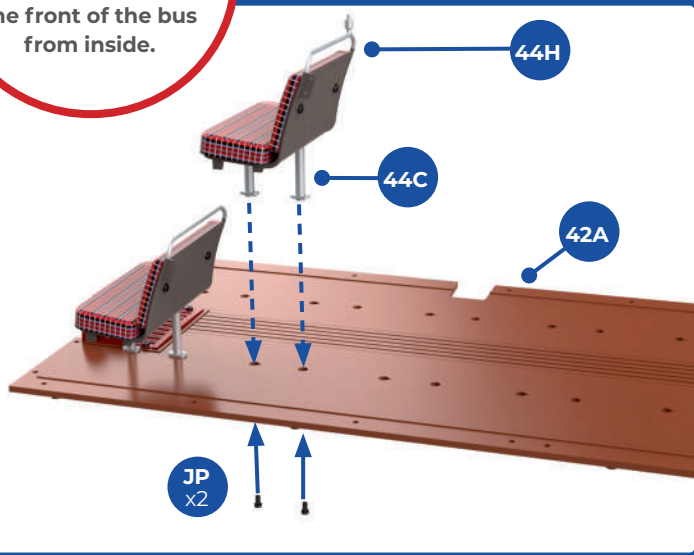


**5** Fit the support of left seat frame **44A** into the first two holes on the lower deck floor **42A**. Screwing through from underneath, fix the support **44C** in place with two **JP** screws.

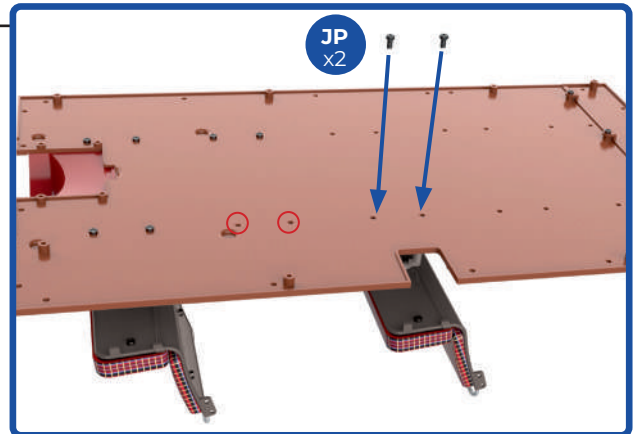
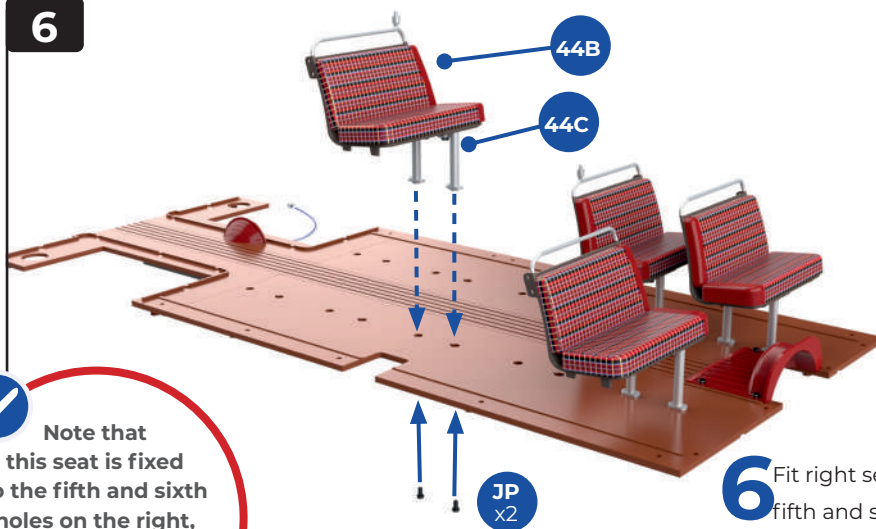
In the same way, fit left seat frame **44H** in place, aligning the support with the next two holes in the floor. Fix in place with two **JP** screws (inset, below left).

Fit right seat frame **44I** in place so that the support **44C** is aligned with the first two holes in the floor on the right. Fix in place with two **JP** screws (inset, below right).

✓ The words left/right are used to describe items on the left/right when facing the front of the bus from inside.



**6**

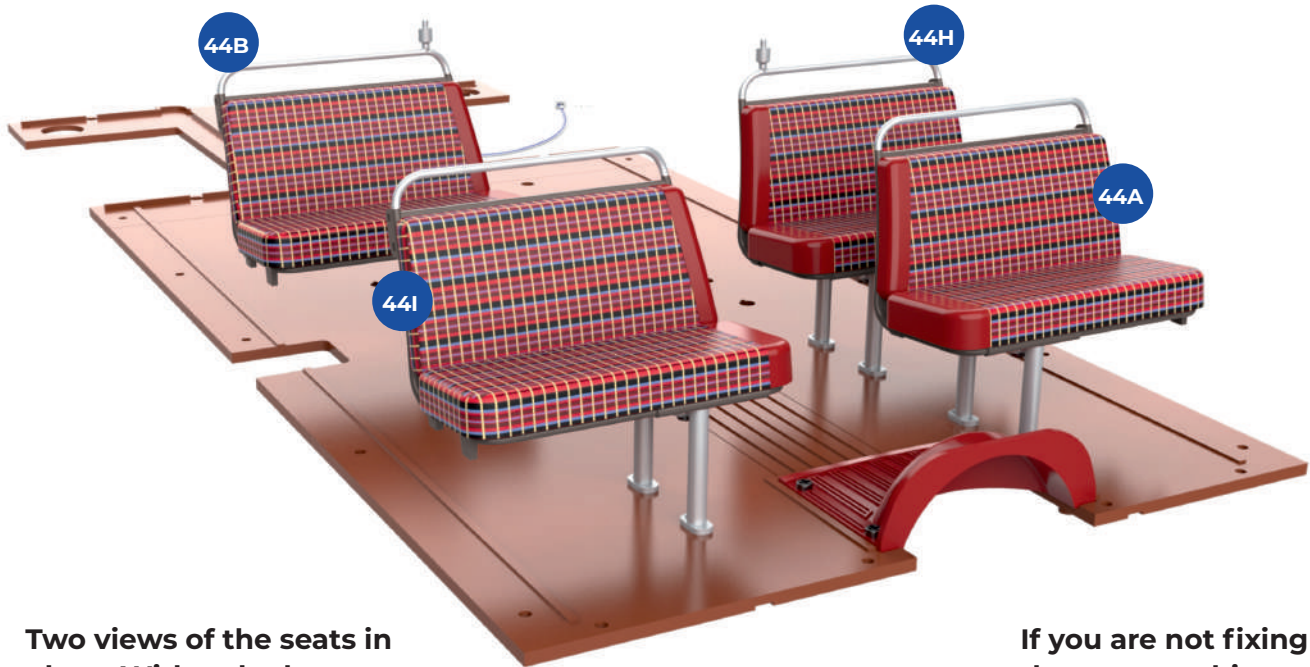


✓ Note that this seat is fixed to the fifth and sixth holes on the right, leaving room for a seat without a grab pole.

**6** Fit right seat frame **44B** in place, aligning the supports with the fifth and sixth holes in the floor on the right. Fix in place with two **JP** screws. The inset shows the view from below. Two screw holes remain unused between the right seats at this stage (circled in red).

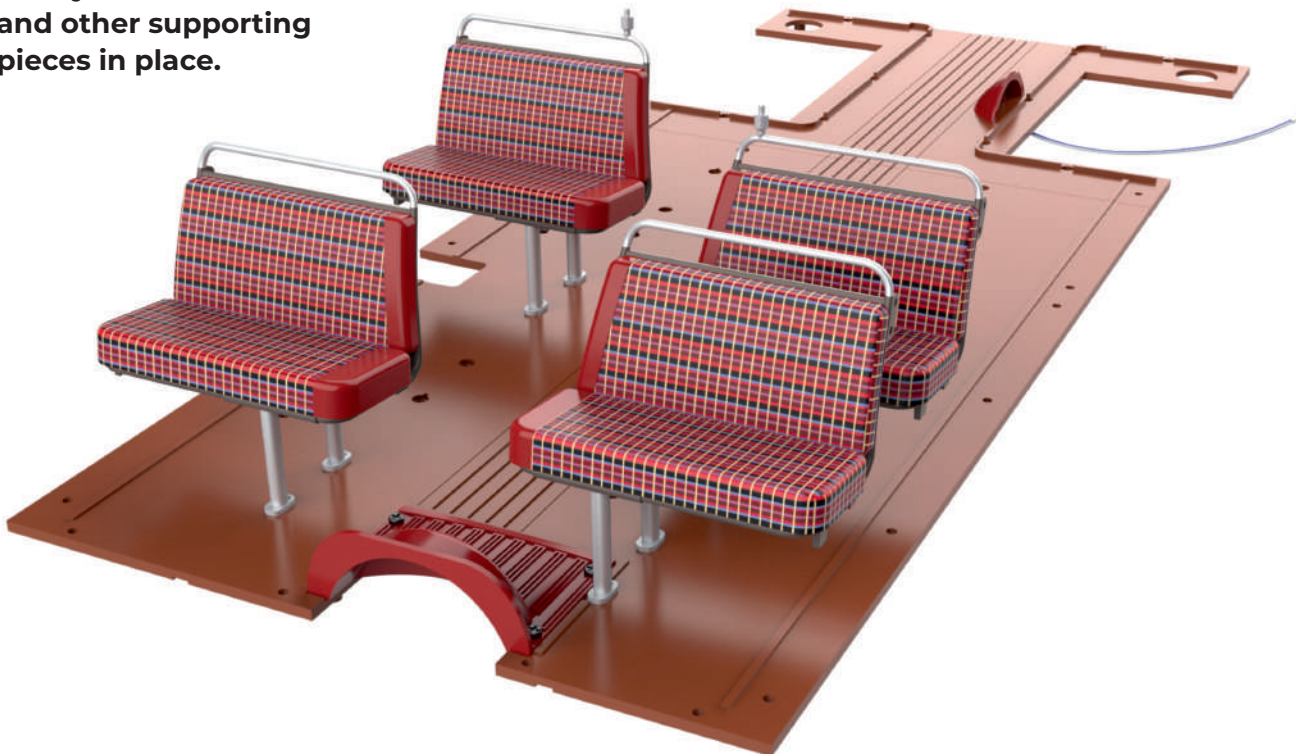


## Finished views



Two views of the seats in place. With only the outer supports for each seat in place, the seats are not very secure. You may prefer to put off this fixing until you have all the seats and other supporting pieces in place.

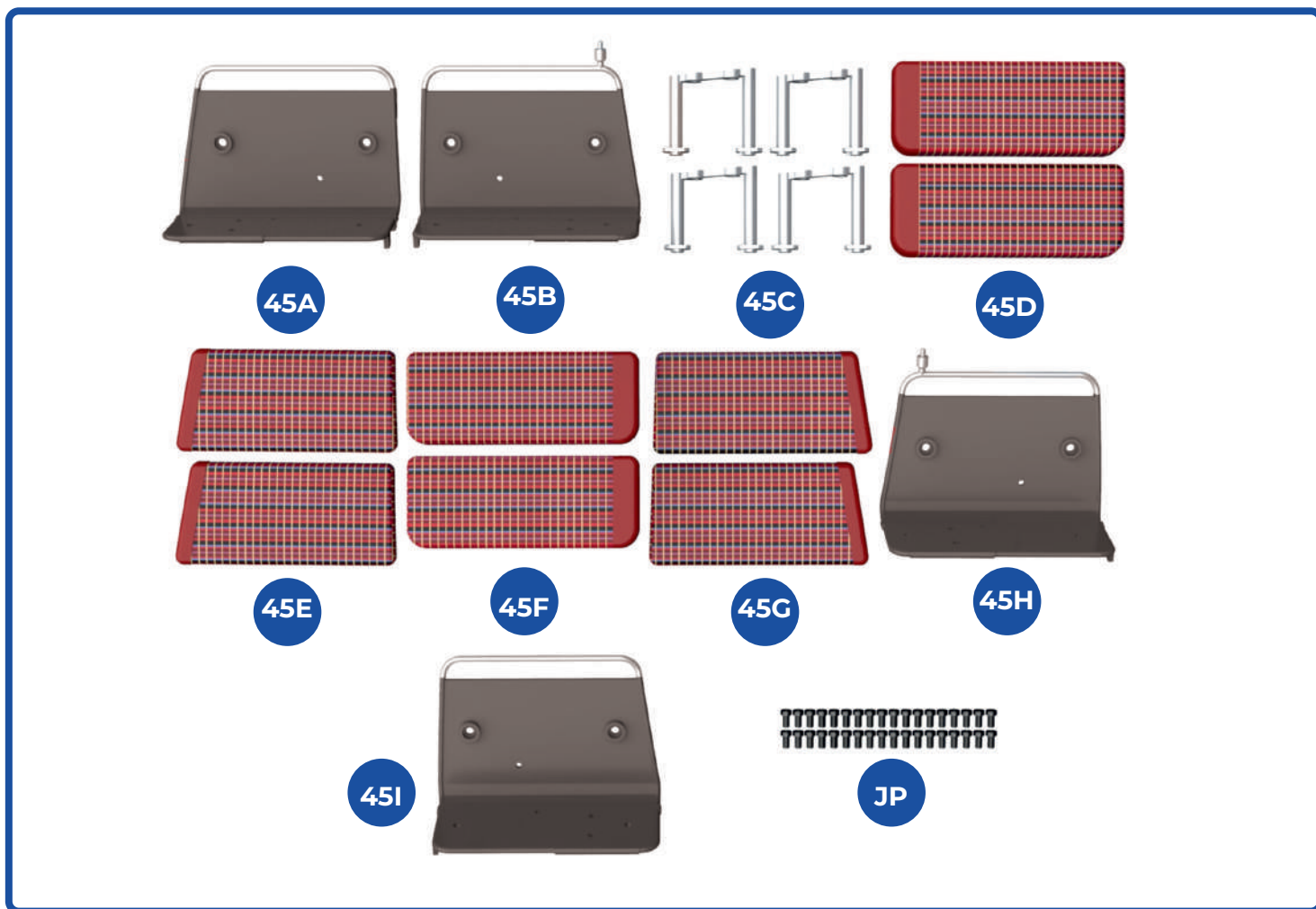
If you are not fixing the seats at this stage, label them carefully, according to the seat frame numbers, 44A, 44H, 44I and 44B.



**STAGE 45**

# ASSEMBLING AND FITTING THE NEXT FOUR SEATS

The next set of seats is assembled and fitted to the lower deck, in a similar way to the first four seats in the previous stage.

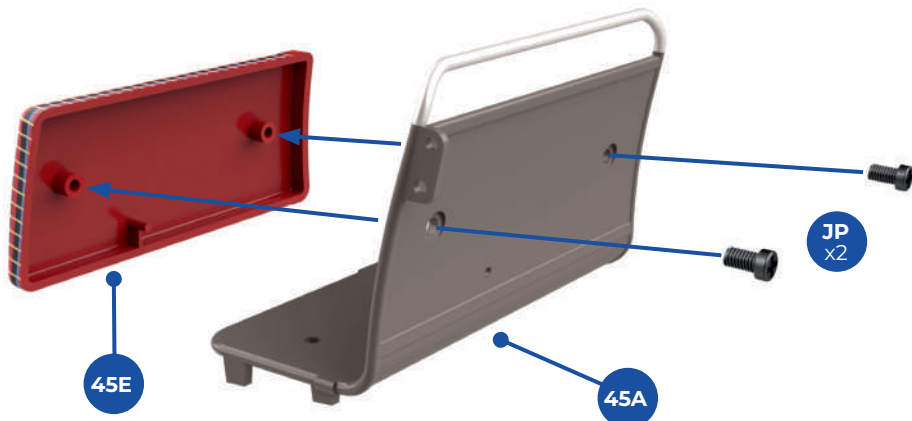


**KEY TO PARTS SUPPLIED**

- |            |                                |            |                               |
|------------|--------------------------------|------------|-------------------------------|
| <b>45A</b> | Left seat frame                | <b>45G</b> | Right seat backrest (x2)      |
| <b>45B</b> | Right seat frame (with socket) | <b>45H</b> | Left seat frame (with socket) |
| <b>45C</b> | Seat support (x4)              | <b>45I</b> | Right seat frame              |
| <b>45D</b> | Left seat cushion (x2)         | <b>JP</b>  | 2.3 x 4mm (x36)               |
| <b>45E</b> | Left seat backrest (x2)        |            |                               |
| <b>45F</b> | Right seat cushion (x2)        |            |                               |

 Note that, as in the previous stage, two of the seat frames have sockets on the top of the rails, where the grab poles will be attached.

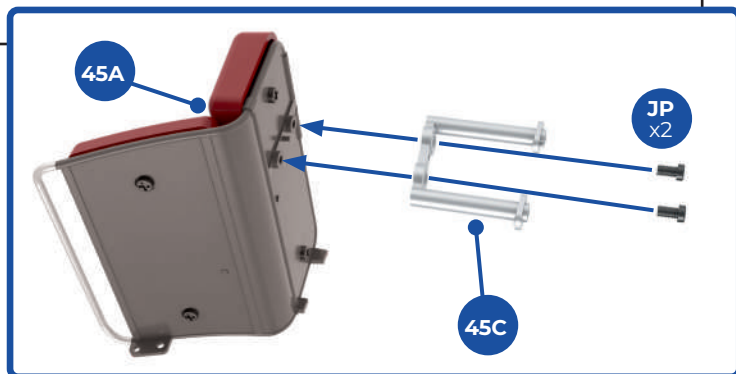
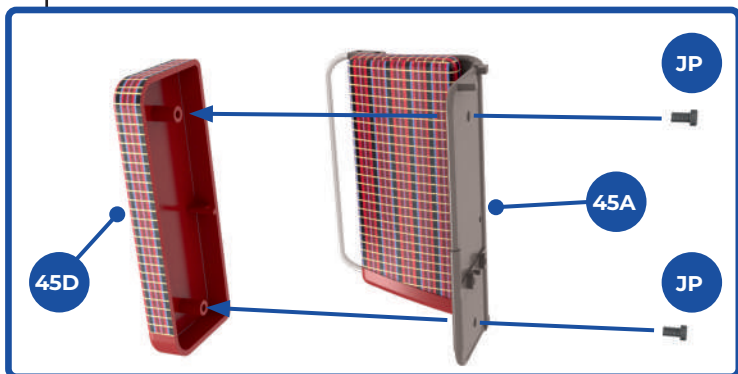
**1**



**1** Take the left seat frame **45A** and one of the left seat backrests **45E**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take one of the left seat cushions **45D** and fit it into part **45A**. Fix in place with two **JP** screws (inset, below left).

Take one of the seat supports **45C** and fix to underside of the seat frame **45A** with two **JP** screws (inset, below right).

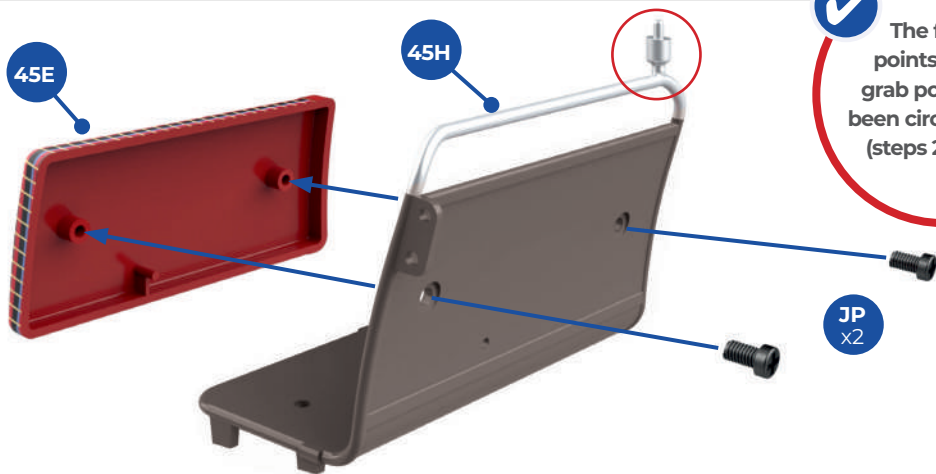


**2**

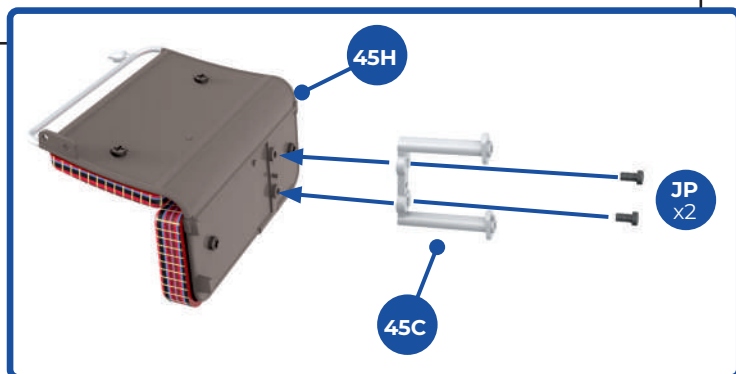
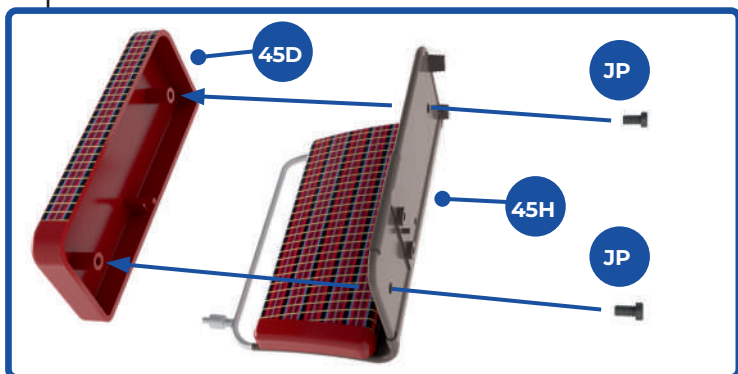
**2** In the same way as step 1, fit the second left seat backrest **45E** to the left seat frame **45H** and fix in place with two **JP** screws.

Fit the second left seat cushion **45D** into part **45H** and fix in place with two **JP** screws (inset, below left).

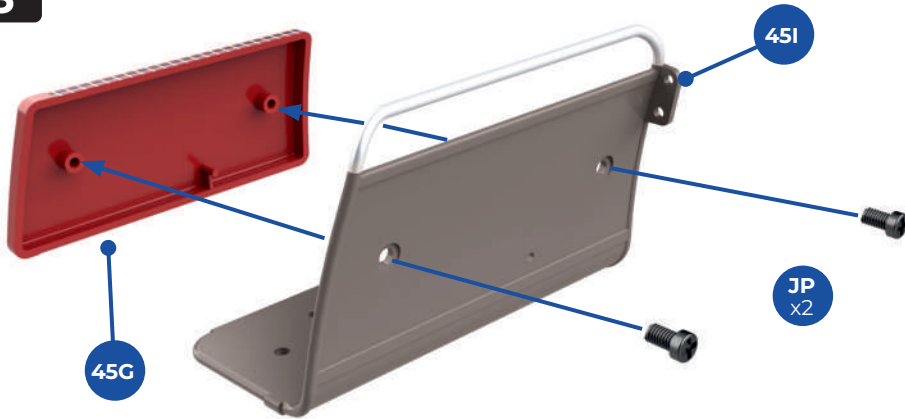
Take one of the seat supports **45C** and fix to underside of the seat frame **45H** with two **JP** screws (inset, below right).



The fixing points for the grab poles have been circled in red (steps 2 and 4).



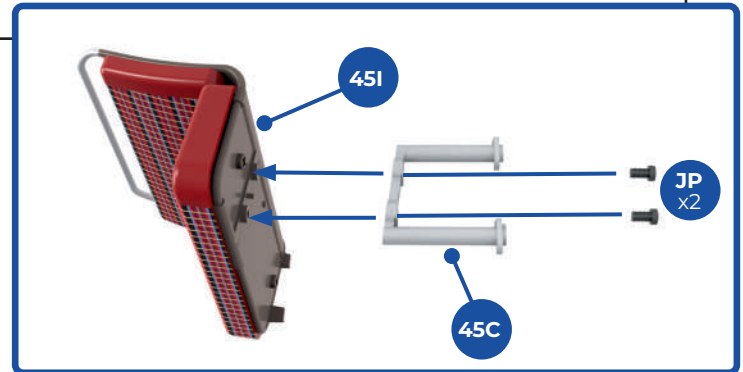
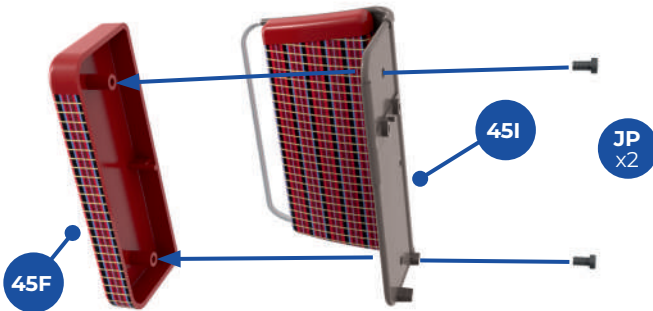
**3**



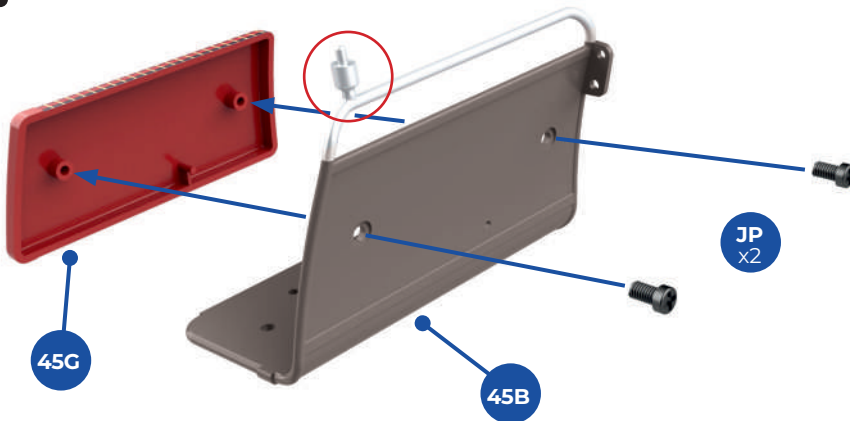
**3** Take the right seat frame **45I** and one of the right seat backrests **45G**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take one of the right seat cushions **45F** and fit it into part **45I**. Fix in place with two **JP** screws (inset, below left).

Take one of the seat supports **45C** and fix to underside of the seat frame **45I** with two **JP** screws (inset, below right).



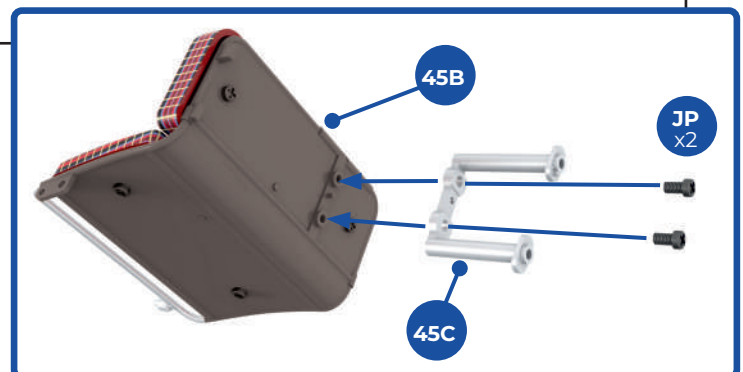
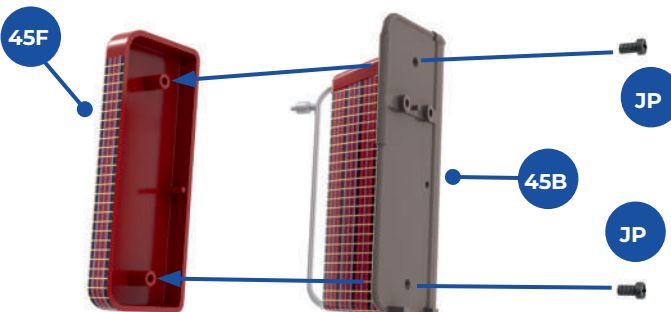
**4**



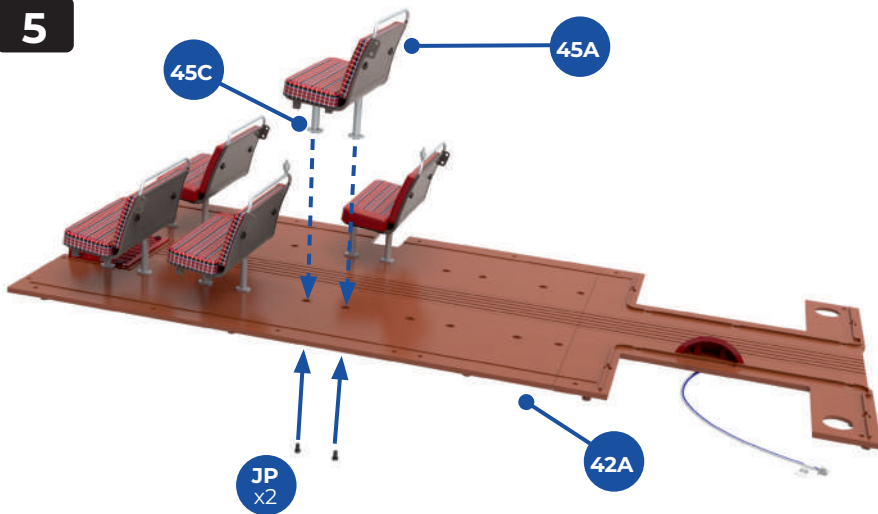
**4** Take the right seat frame **45B** and the second right seat backrest **45G**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take the second right seat cushion **45F** and fit it into part **45B**. Fix in place with two **JP** screws (inset, below left).

Take the fourth seat support **45C** and fix to underside of the seat frame **45B** with two **JP** screws (inset, below right).



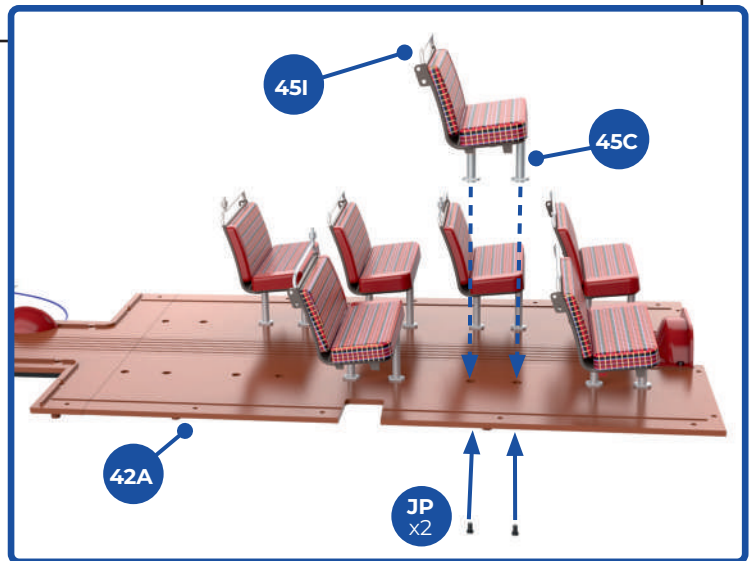
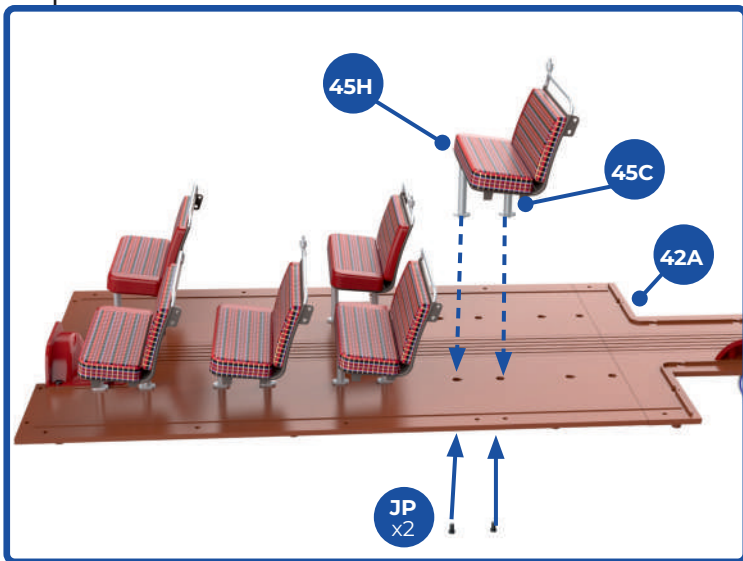
**5**



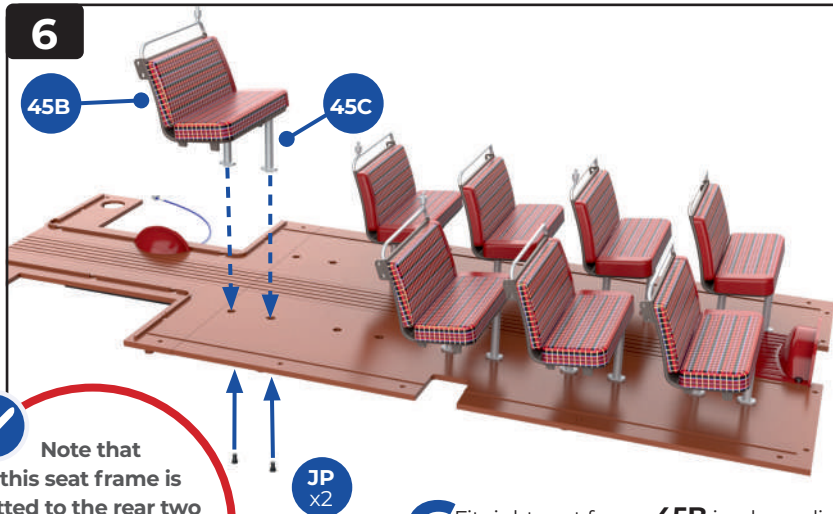
**5** Align the support of left seat frame **45A** with the next two holes on the left of the floor **42A**. Screwing through from underneath, fix the support **45C** in place with two **JP** screws.

In the same way, fit left seat frame **45H** in place, aligning the support with the next two holes in the floor. Fix in place with two **JP** screws (inset, below left).

Fit right seat frame **45I** in place between the two right-hand seats fitted in the previous stage. Fix in place with two **JP** screws (inset, below right).

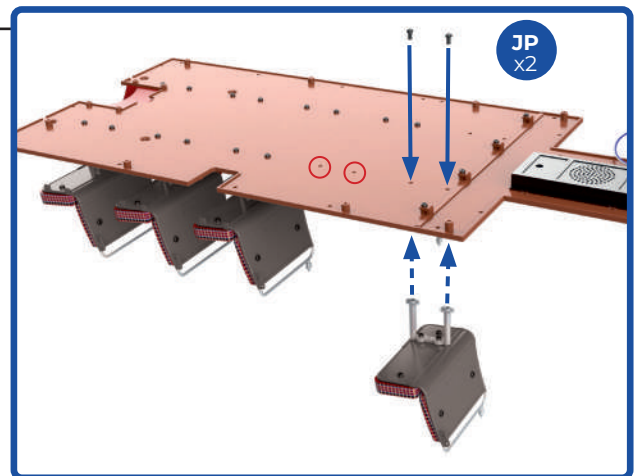


**6**



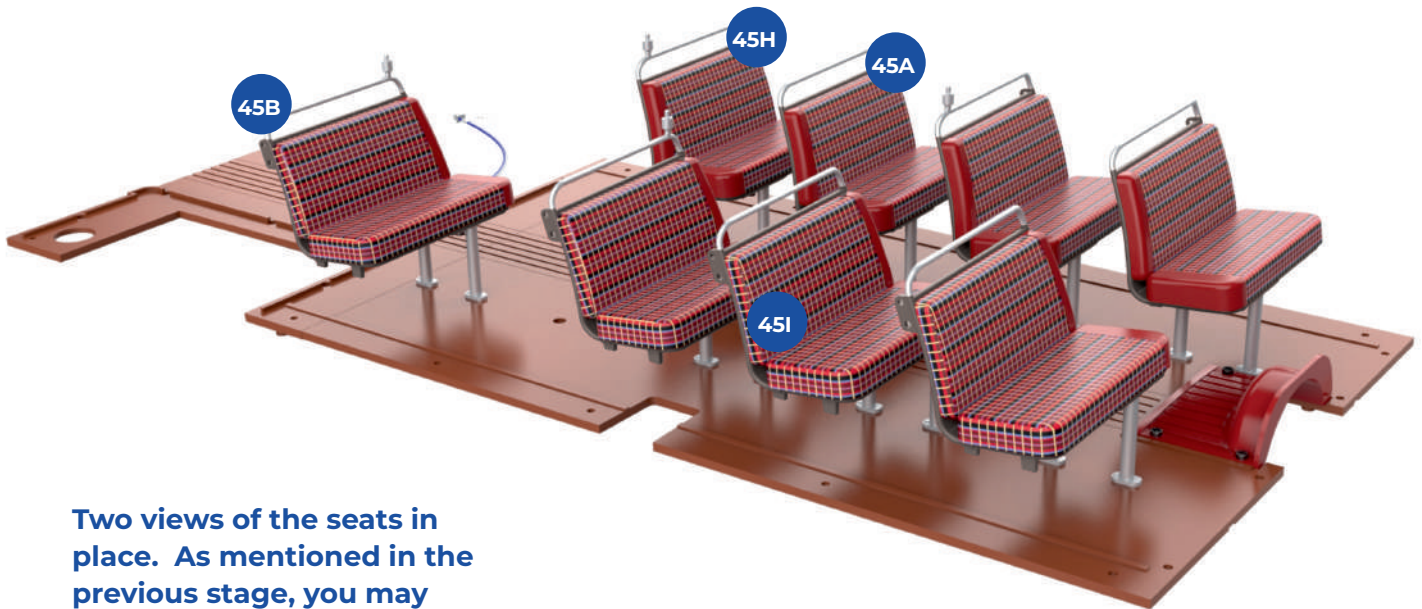
**Note that this seat frame is fitted to the rear two holes on the right, leaving room for a seat without a grab pole.**

**6** Fit right seat frame **45B** in place, aligning the supports with the rear (ninth and tenth) holes in the floor on the right. Fix in place with



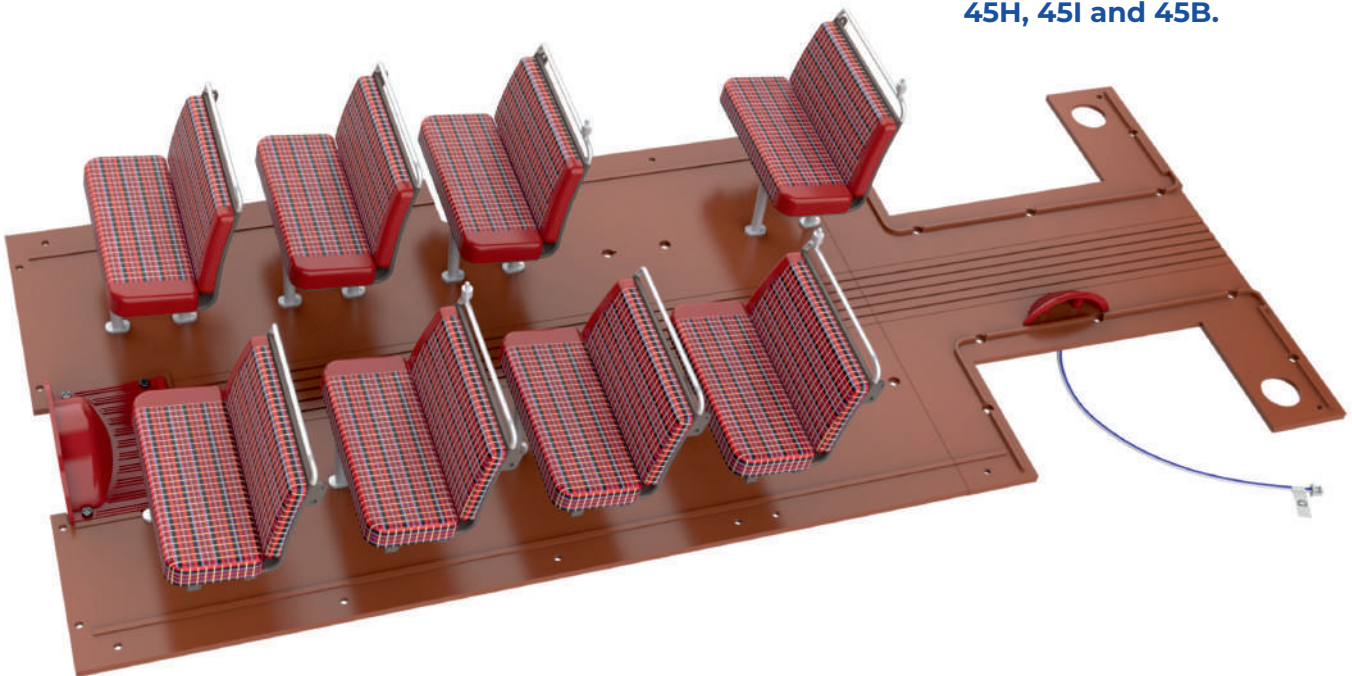
two **JP** screws. The inset shows the view from below. Two screw holes remain unused between the right seats at this stage (circled in red).

## Finished views



Two views of the seats in place. As mentioned in the previous stage, you may prefer not to fix the seats at this stage, but wait until some of the surrounding elements have been supplied, in order to ensure a firm fixing.

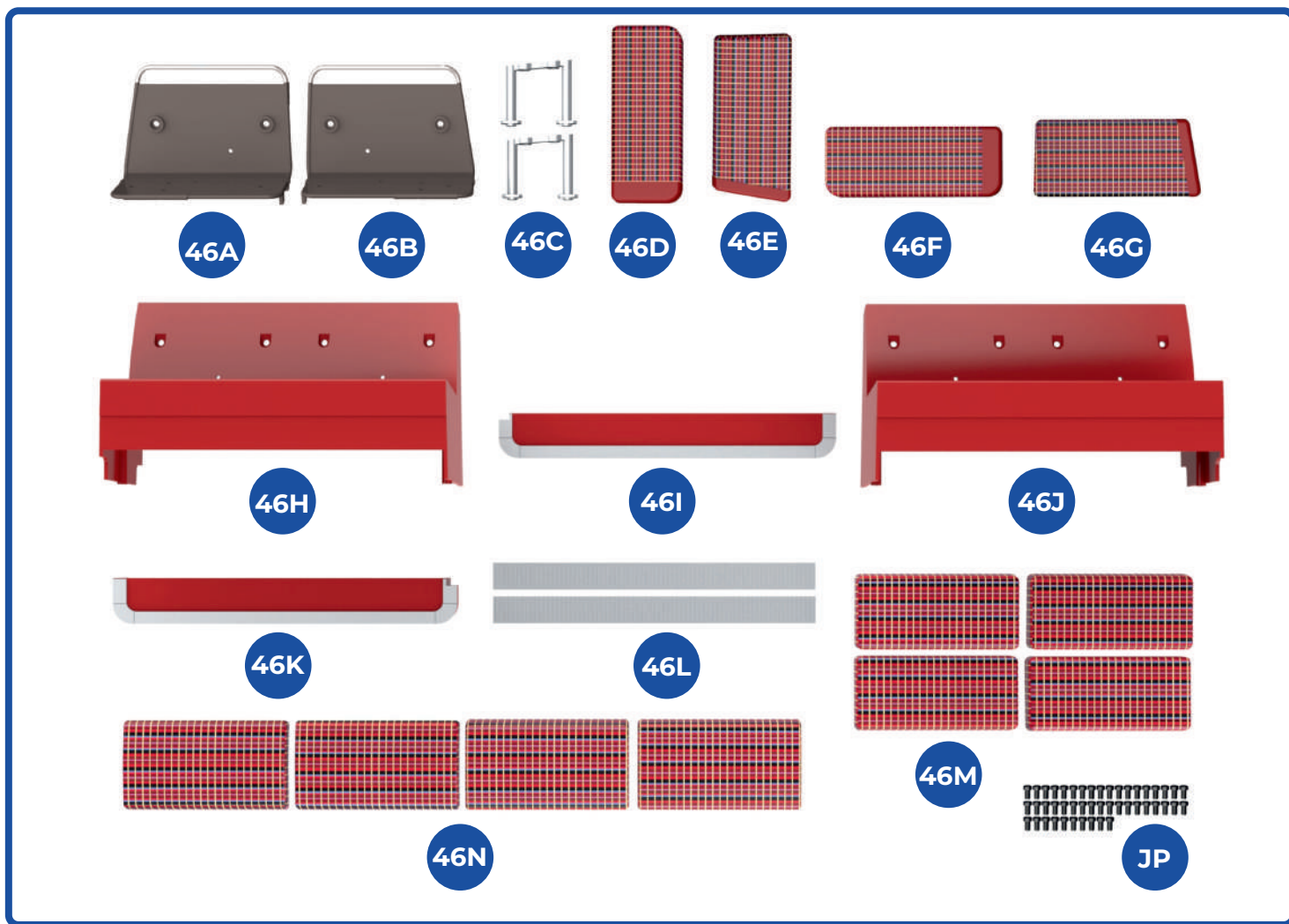
If you are not fixing the seats at this stage, label them carefully, according to the seat frame numbers, 45A, 45H, 45I and 45B.



**STAGE 46**

# FITTING THE LAST SEATS AND ASSEMBLING THE BENCHES

In this stage, the last of the forward facing seats on the lower deck are assembled and fitted. We also assemble the two bench seats at the rear of the lower deck.



**KEY TO PARTS SUPPLIED**

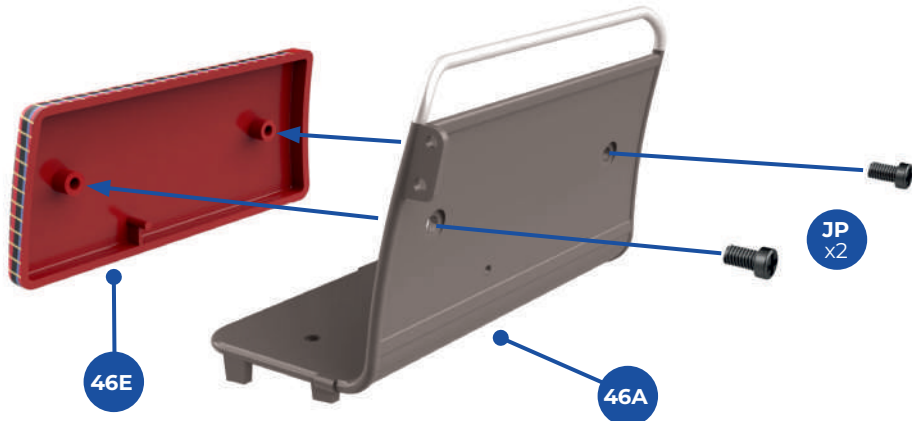
- 46A** Left seat frame
- 46B** Right seat frame
- 46C** Seat support (x2)
- 46D** Left seat cushion

- 46E** Left seat backrest
- 46F** Right seat cushion
- 46G** Right seat backrest
- 46H** Left rear seat frame
- 46I** Left footrest
- 46J** Right rear seat frame

- 46K** Right footrest
- 46L** Protector plate (x2)
- 46M** Rear seat cushion (x4)
- 46N** Rear seat backrest (x4)
- JP** 2.3 x 4 mm (x46)

 You will find there are several spare JP screws. These will be used to fix the footrests and bench seats in the next stage.

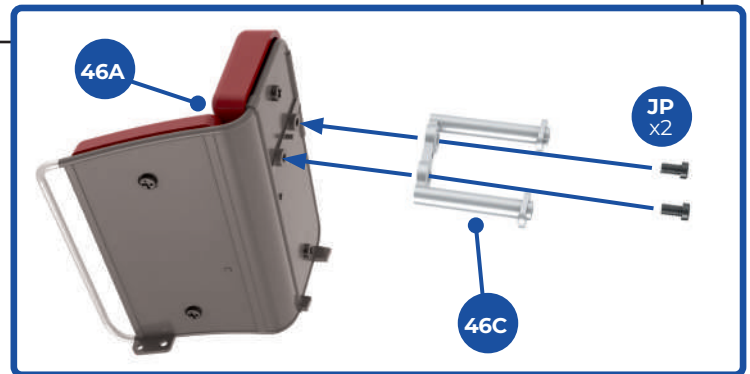
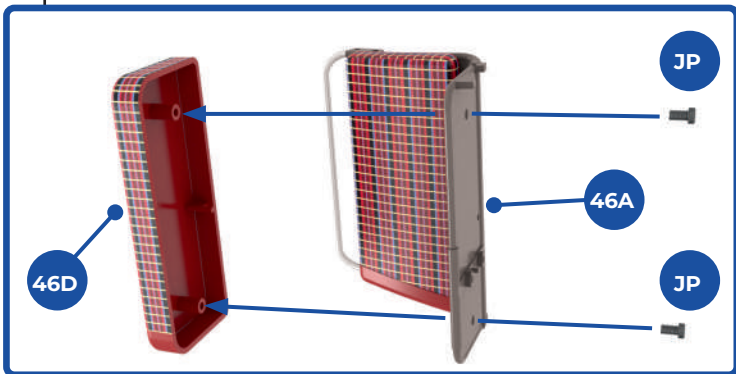
**1**



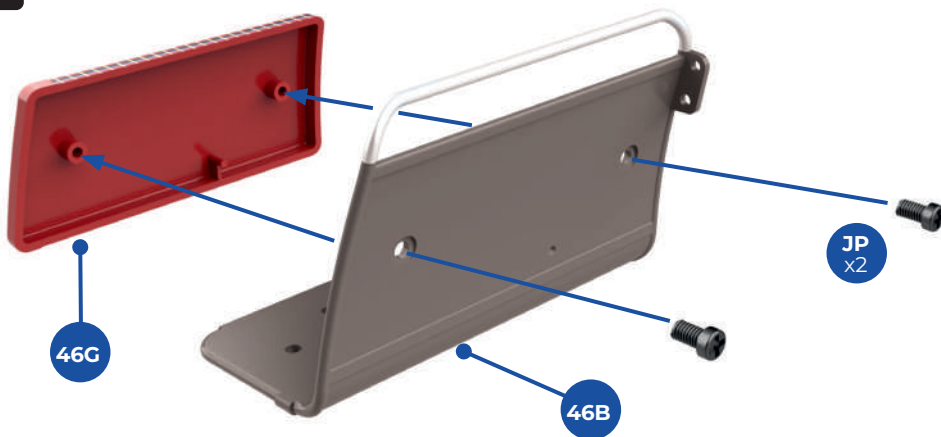
**1** Take the left seat frame **46A** and the left seat backrest **46E**. Fit the backrest into the frame and fix in place with two **JP** screws.

Take the left seat cushion **46D** and fit it into part **46A**. Fix in place with two **JP** screws (inset, below left).

Take one of the seat supports **46C** and fix to underside of the seat frame **46A** with two **JP** screws (inset, below right).



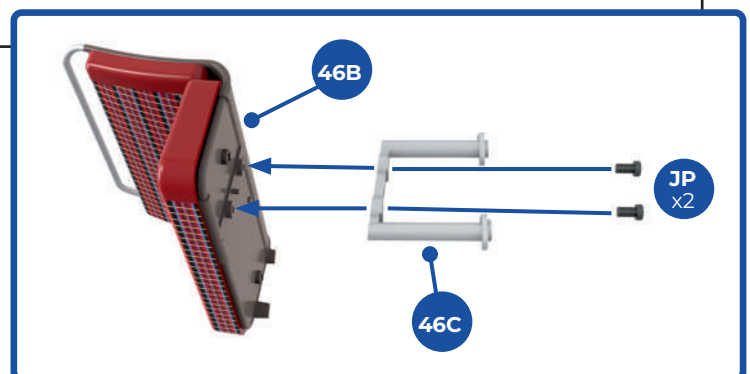
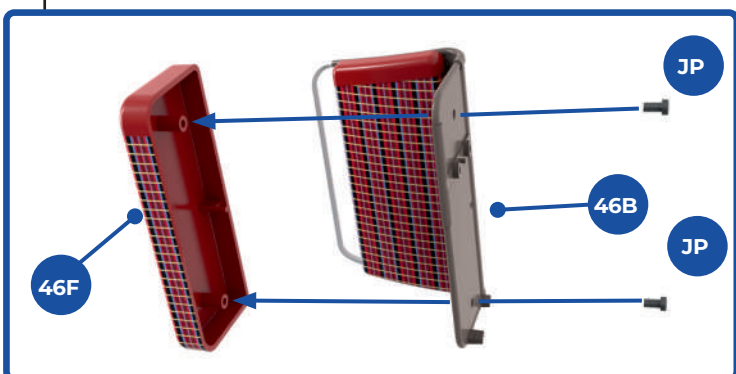
**2**



**2** Take the right seat frame **46B** and the right seat backrest **46G**. Fit the backrest into the frame and fix in place with two **JP** screws.

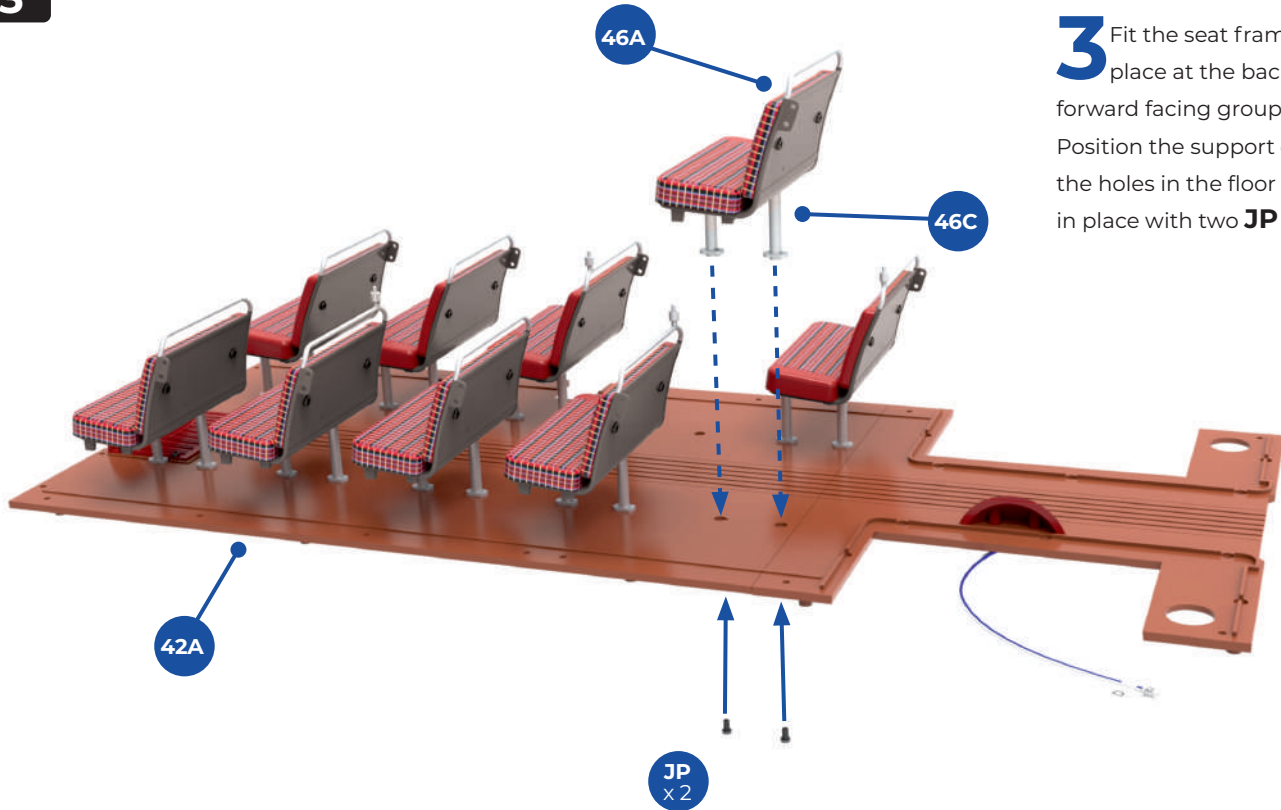
Take the right seat cushion **46F** and fit it into part **46B**. Fix in place with two **JP** screws (inset, below left).

Take the other seat support **46C** and fix to underside of the seat frame **46B** with two **JP** screws (inset, below right).



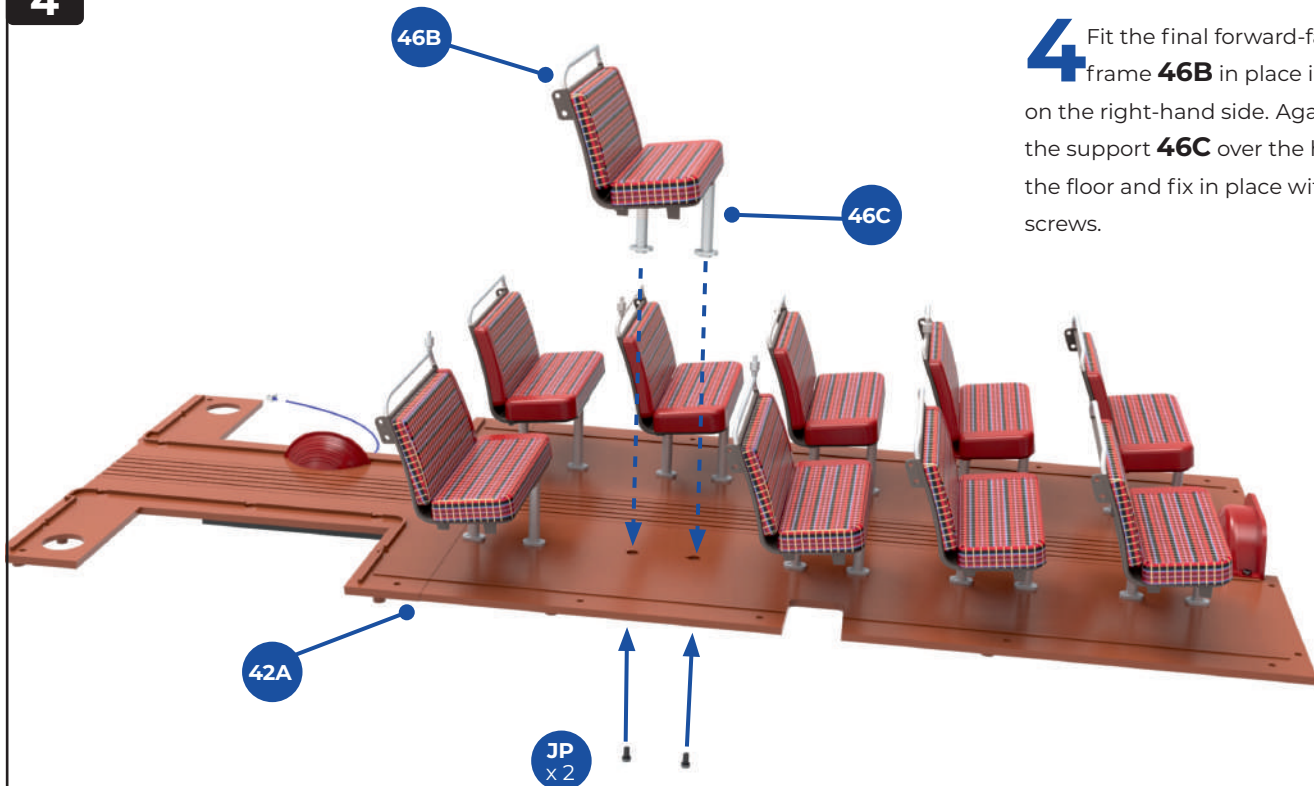


## 3



**3** Fit the seat frame **46A** in place at the back left of the forward facing group of seats. Position the support **46C** over the holes in the floor and screw in place with two **JP** screws.

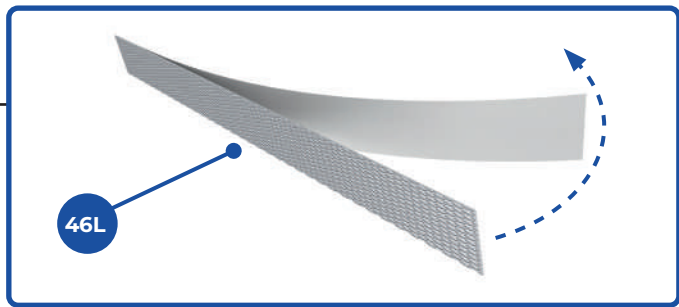
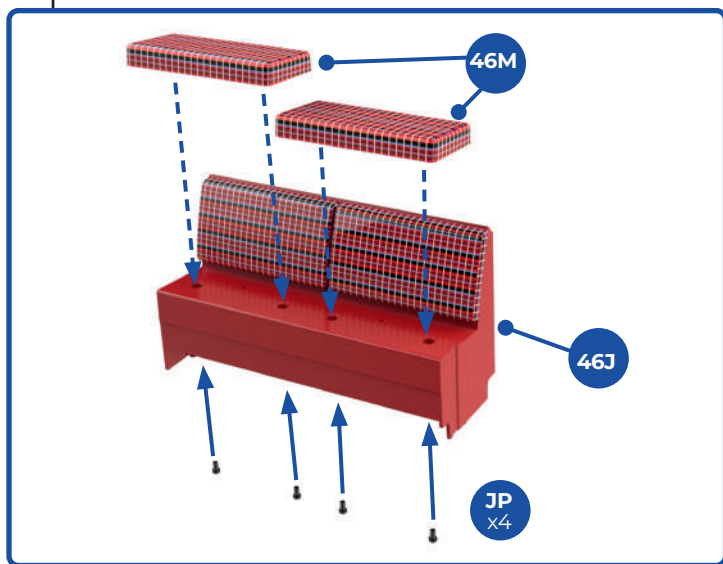
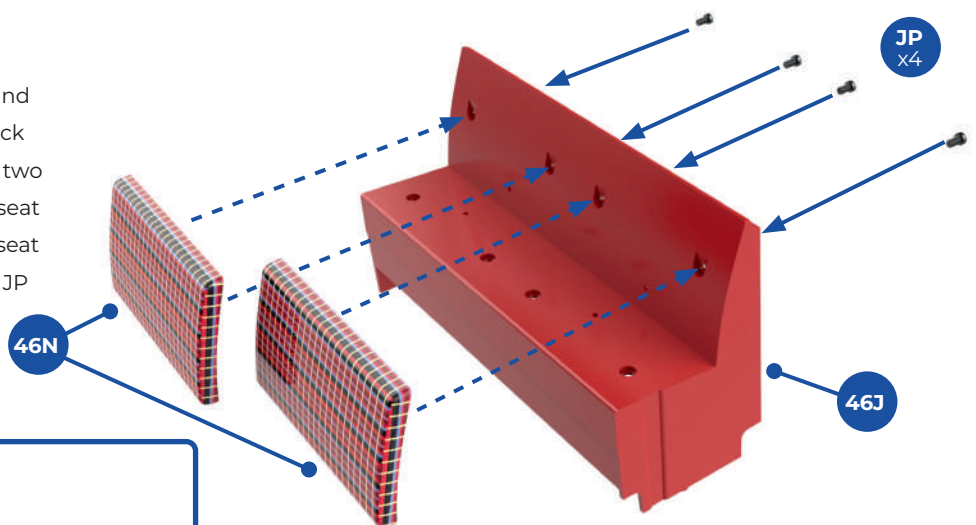
## 4



**4** Fit the final forward-facing seat frame **46B** in place in the gap on the right-hand side. Again, position the support **46C** over the holes in the floor and fix in place with two **JP** screws.

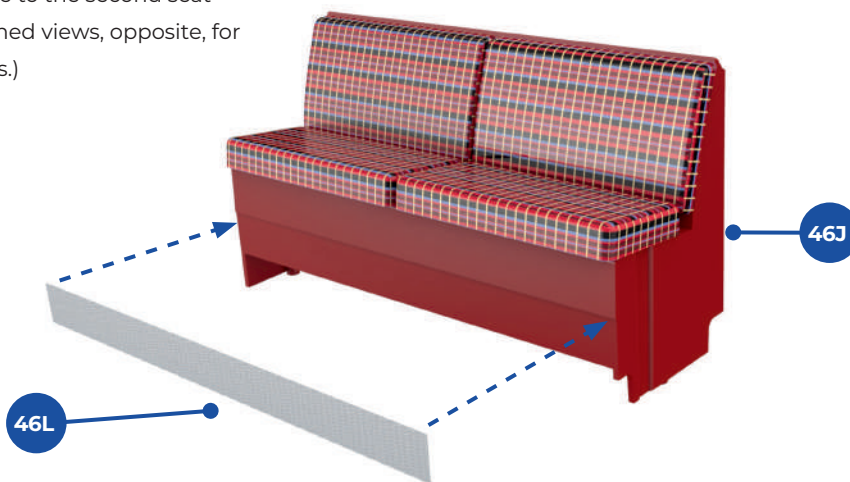
**5**

**5** Take the right rear seat frame **46J** and fit two back cushions **46N** to the back of the seat. Fix each cushion in place with two **JP** screws, inserted from the back of the seat frame. Fit two seat cushions **46M** to the seat of part **46J**, fixing each in place with two JP screws (inset, below). Repeat these steps to fit back cushions and seat cushions to the left rear seat frame, **46H**.



**6**

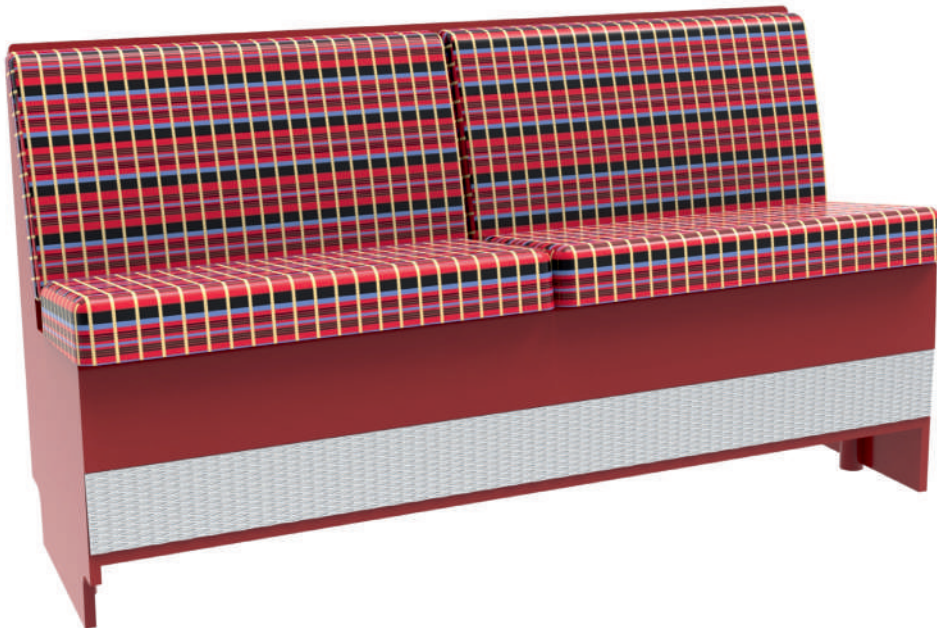
**6** Peel the protective backing off one of the protector plates **46L** (inset, right). Stick in place in the recess on the front of the seat frame **46J**. Repeat to stick a protector plate to the second seat frame **46H**. (See also the finished views, opposite, for positioning the protector plates.)



## Finished view



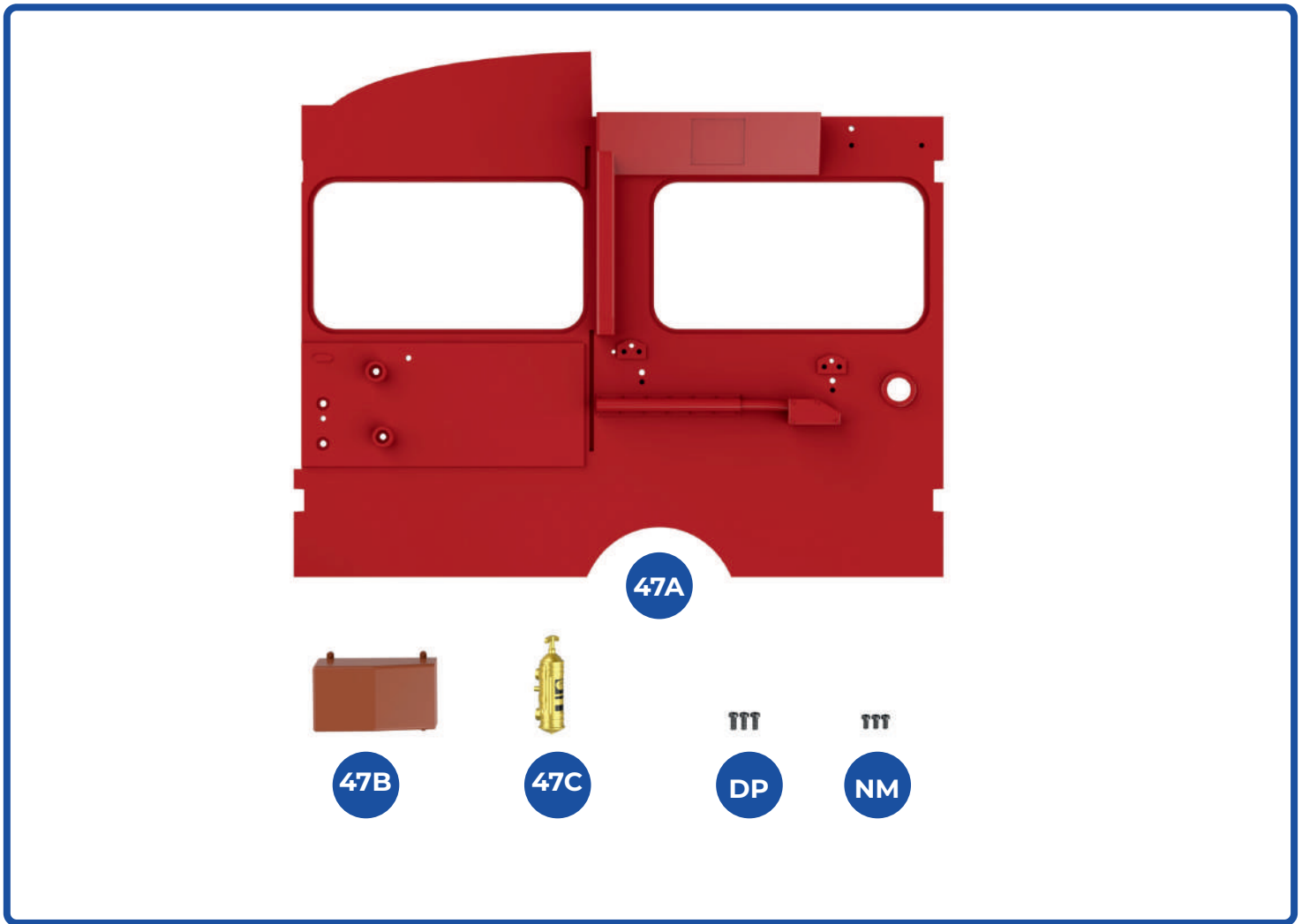
The rear bench seats and footrests will be fitted to the lower deck in the next stage.



## STAGE 47

# FRONT WALL AND ACCESSORIES

We start by fitting the rear bench seats on the lower deck, which were assembled in the previous stage. The front wall of the bus extends across the width of the vehicle, behind the driver's seat, forming the back wall of the cab, and extending across beneath the canopy, in front of the front left passenger seats.



### KEY TO PARTS SUPPLIED

<b>47A</b> Front wall	<b>DP</b> 1.7 x 4mm (x3)
<b>47B</b> Utility box	<b>NM</b> 1.5 x 3mm (x3)
<b>47C</b> Fire extinguisher	

**1**

**1** Position the right footrest **46K** so that the edge of the footrest sits outside the raised rim on the floor and the three screw sockets on the underside of the footrest are aligned with the three holes in the floor circled in red. Fix in place with three **JP** screws.

**JP x3**

**46K**

**42A**

✓ The footrests, bench seats and screws needed for steps 1-4 were supplied with stage 46.

**2**

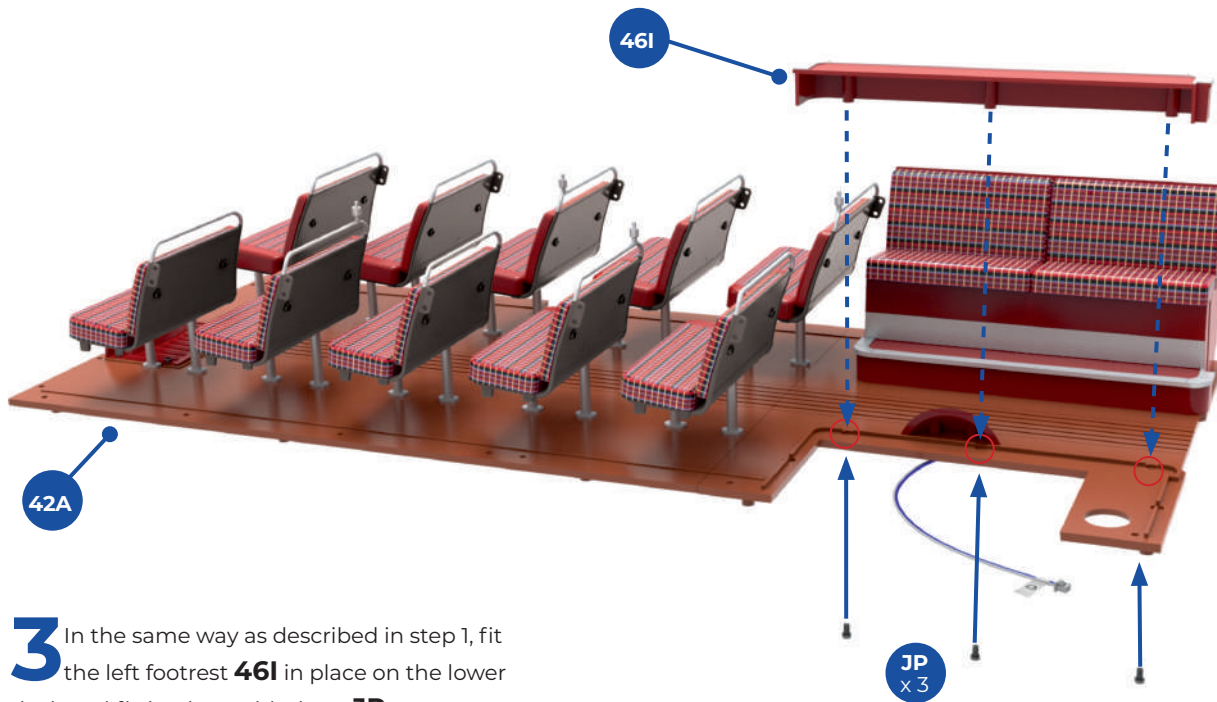
**2** Position the right rear seat frame **46J** behind the footrest so that the screw sockets on the underside of the seat frame are aligned with the screw holes circled in red. Fix in place with two **JP** screws.

**46J**

**JP x2**

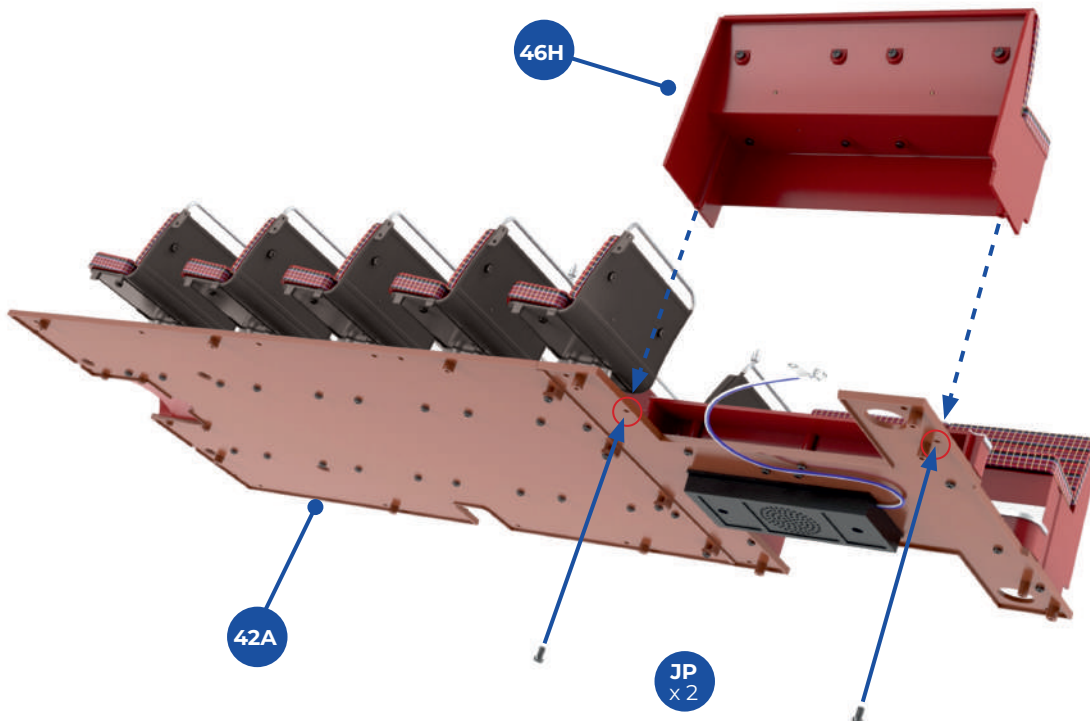
**42A**

**3**



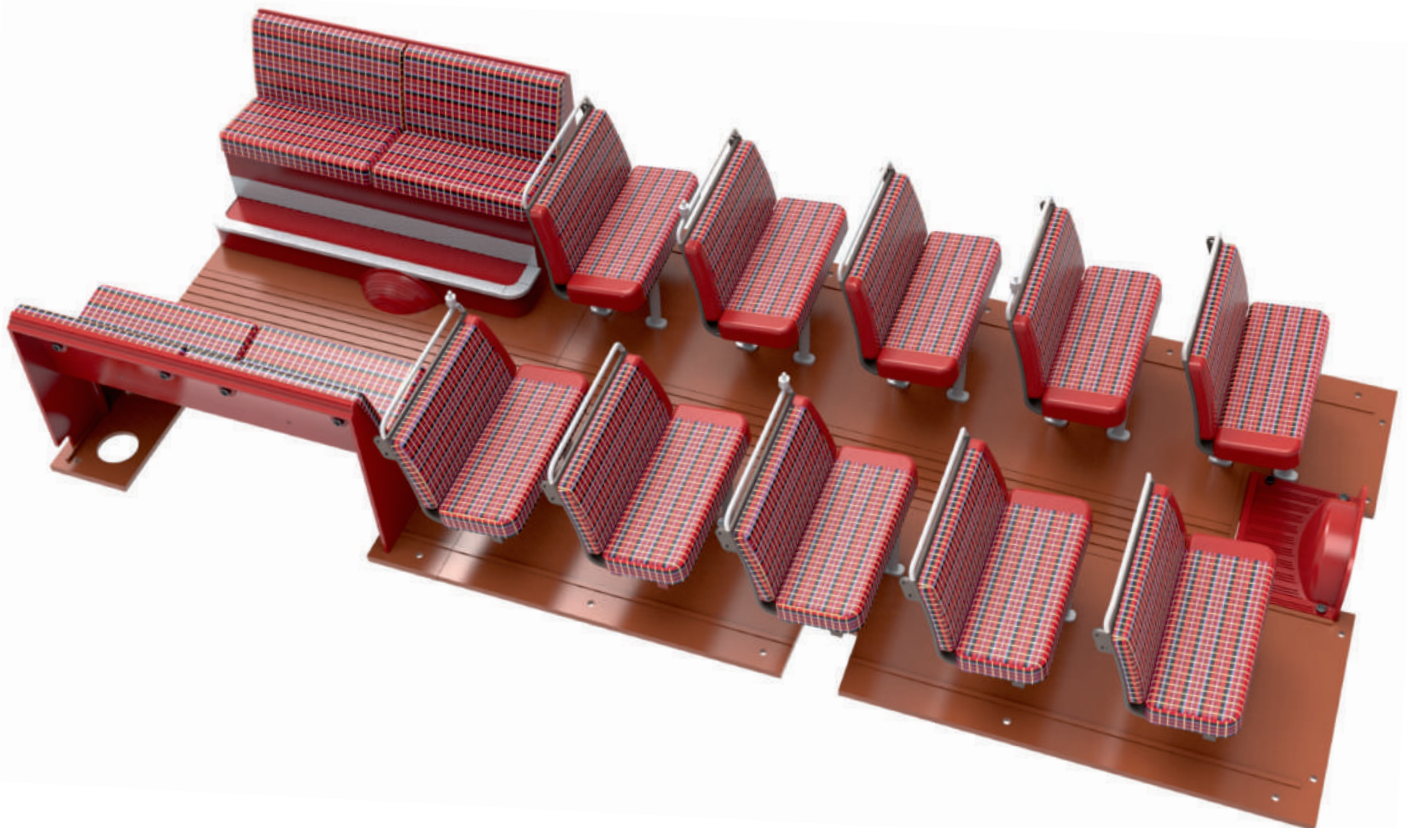
**3** In the same way as described in step 1, fit the left footrest **46I** in place on the lower deck and fix in place with three **JP** screws.

**4**



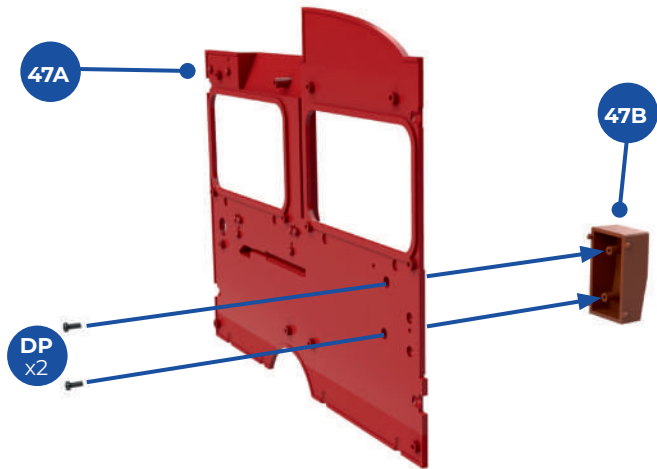
**4** In the same way as described in step 2, fit the left rear seat frame **46H** behind the left footrest and fix in place with two **JP** screws.

## Finished view



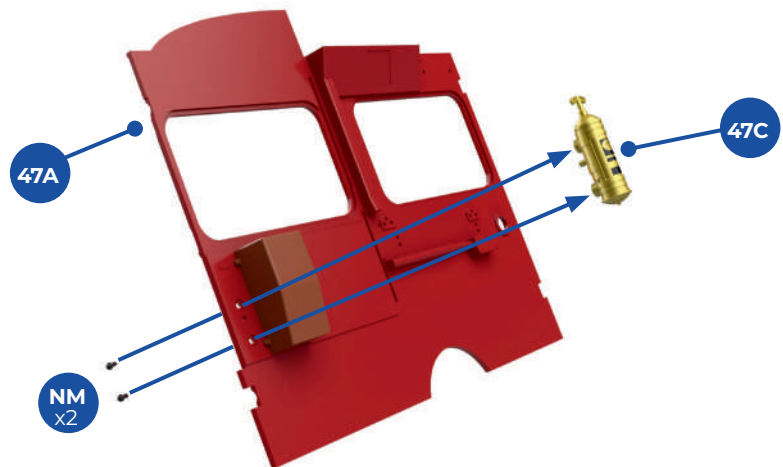
**5**

**5** Position the front wall **47A** in the alignment shown: this is the inside (bus side) of the front wall, with the passenger window on the left. The right-hand side of the wall forms both the front of the passenger compartment and the rear of the driver's cab. Take the utility box **47B** and position it on the driver's side of the wall, so that the screw holes are aligned. Fix in place with two **DP** screws.

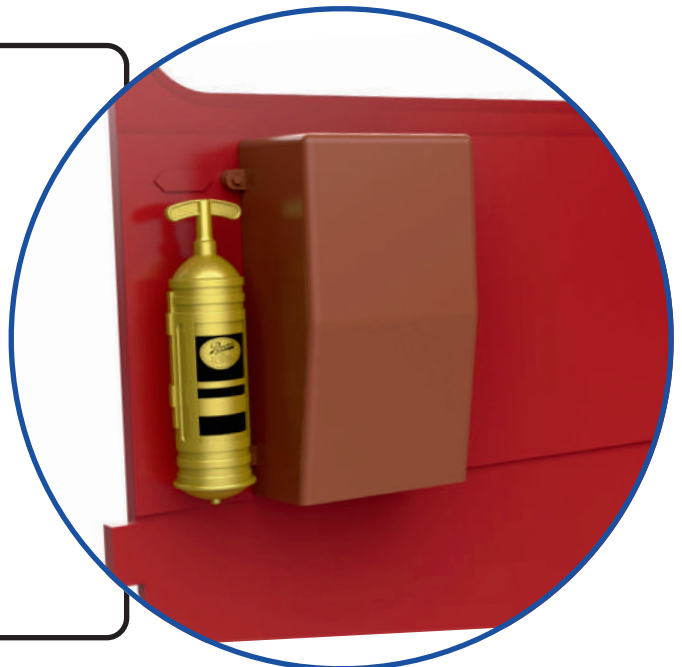


**6**

**6** Position the fire extinguisher **47C** next to the utility box and fix in place with two **NM** screws.



## Finished view

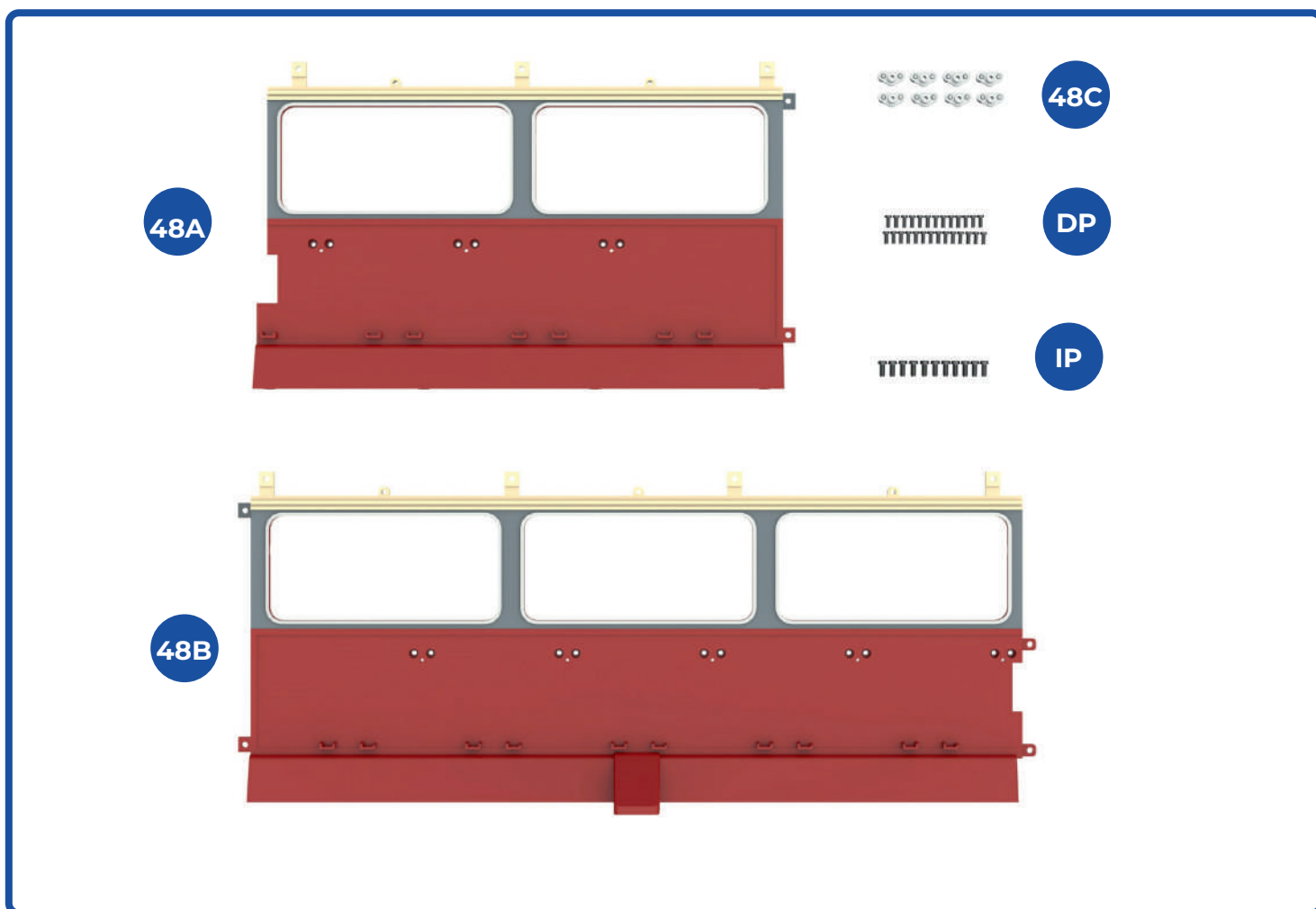




## STAGE 48

# FITTING THE FRONT SIDE WALLS

In this stage, the front part of the left and right side walls are supplied. They are fitted and attached to the seats and the floor of the lower deck.

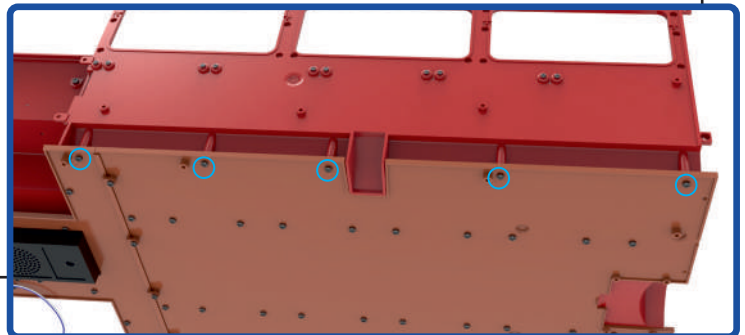
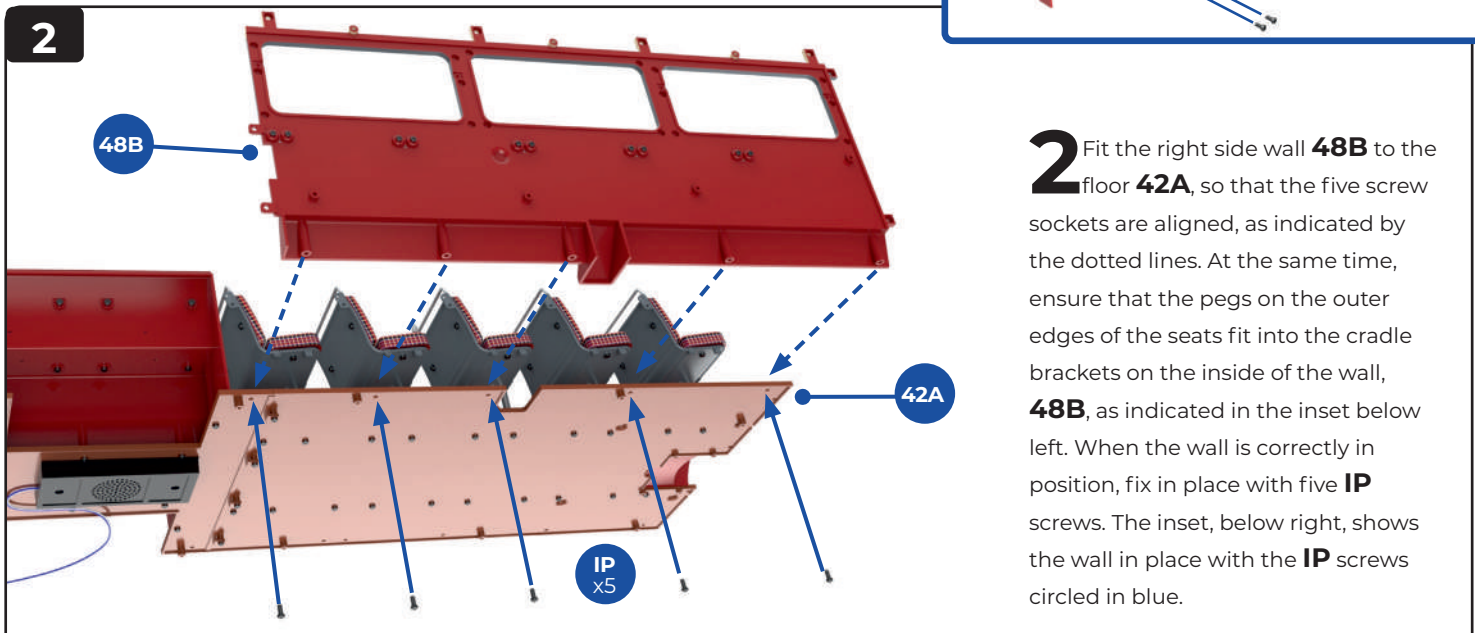
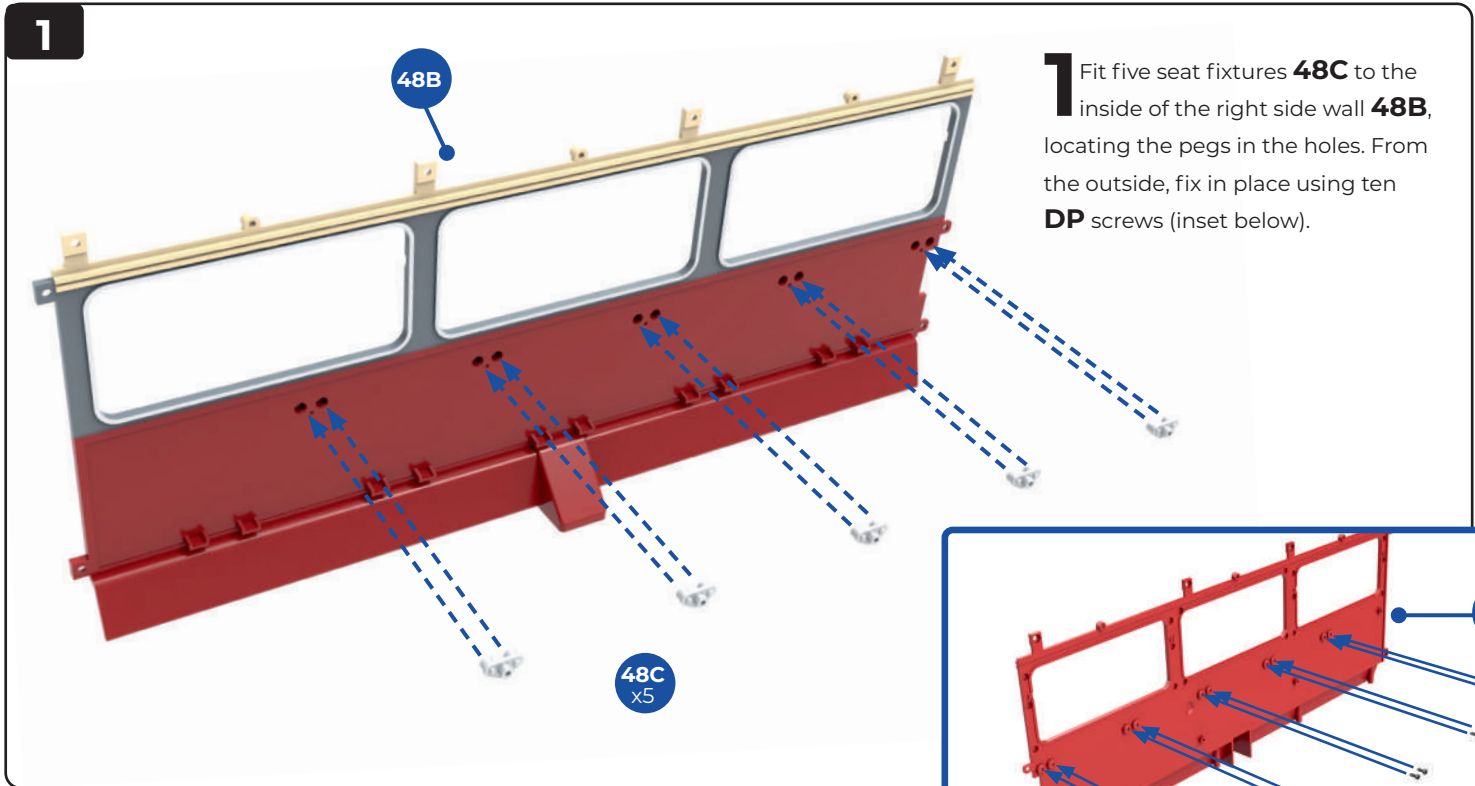


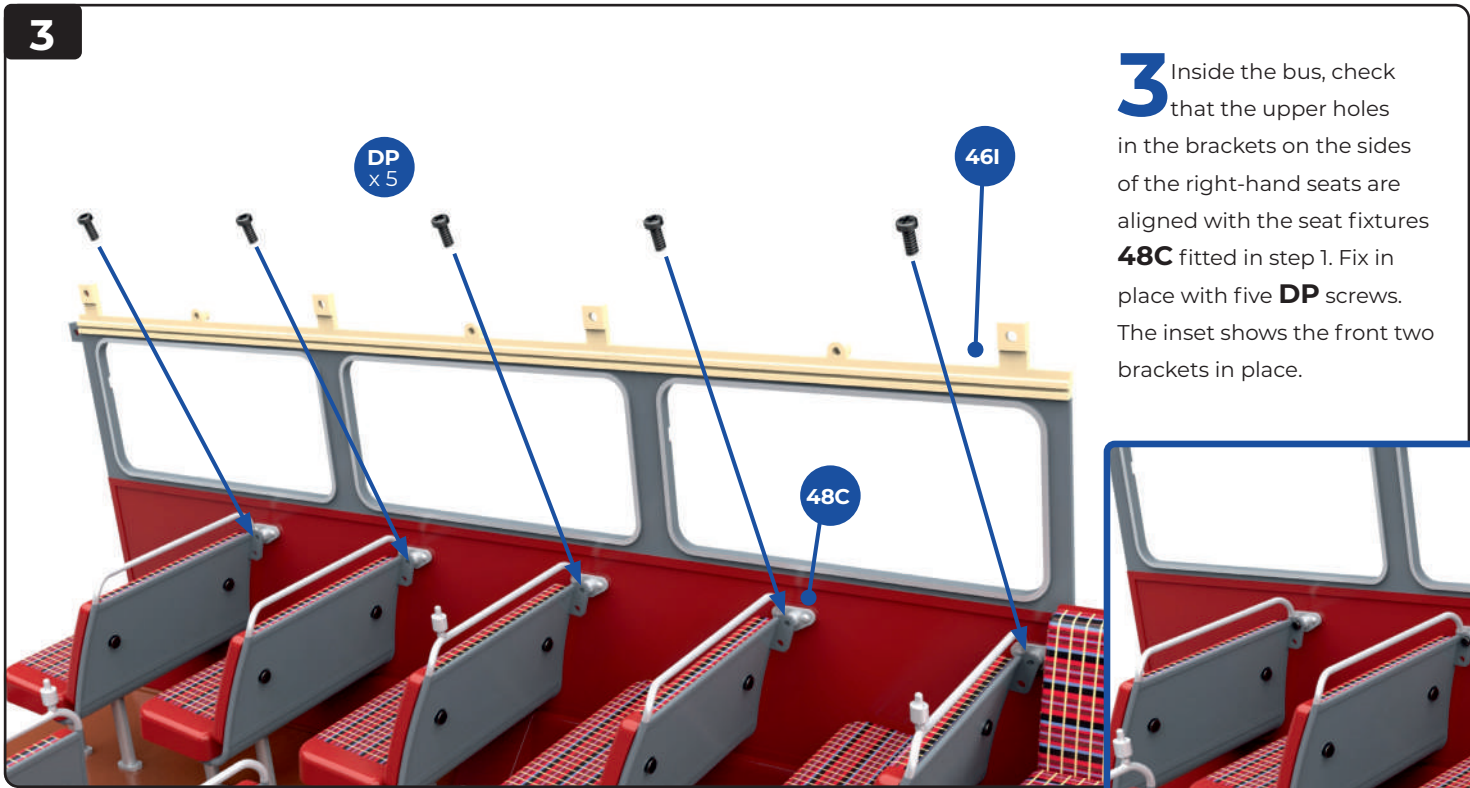
### KEY TO PARTS SUPPLIED

- 48A** Left side wall
- 48B** Right side wall
- 48C** Seat fixture (x8)
  
- DP** 1.7 x 4mm (x27)
- IP** 2.3 x 5mm (x11)

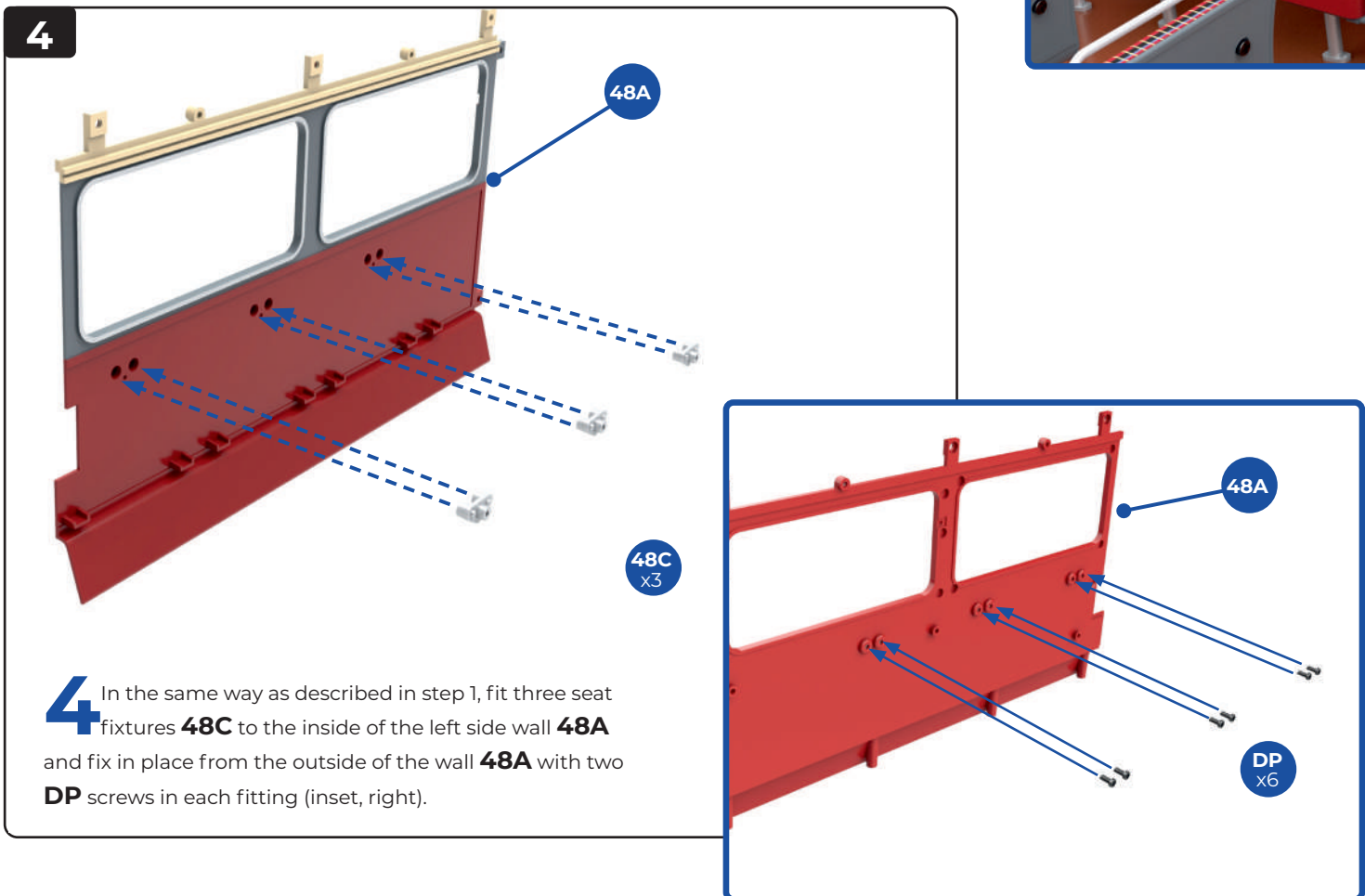


Once the side walls are correctly fitted, the seats will be firmly anchored in place – and they will help to keep the side wall rigid. If you did not fit the seats earlier, follow the instructions in stages 44 and 45 to fit them. The rear bench seats should also be in position.

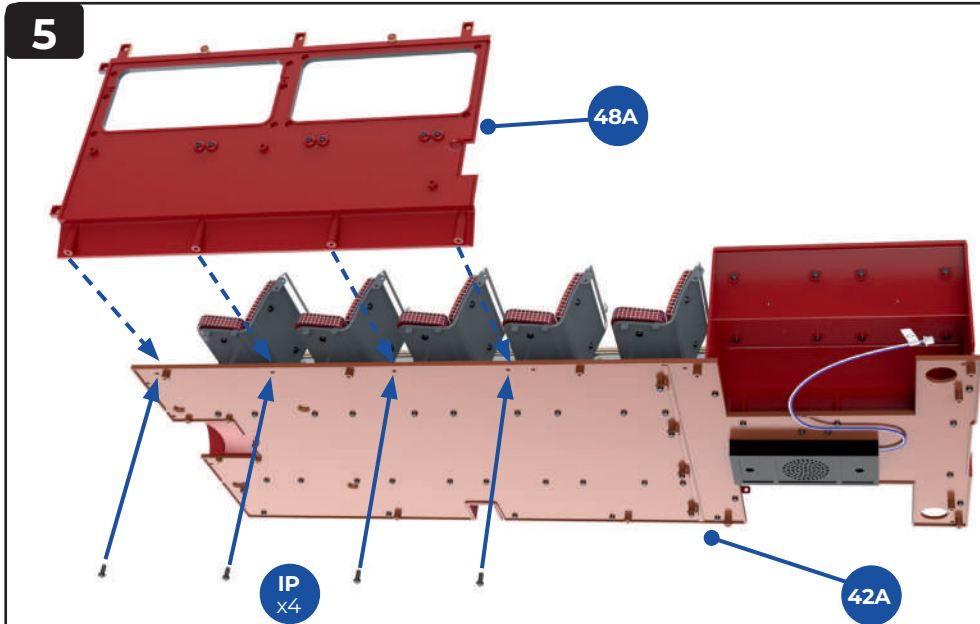




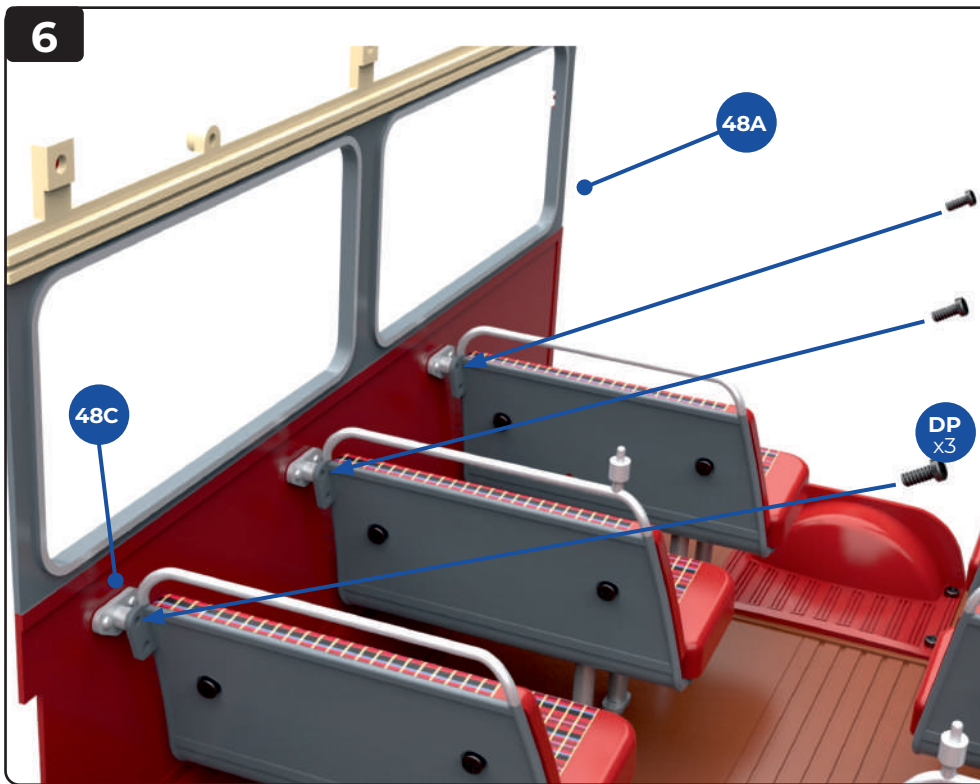
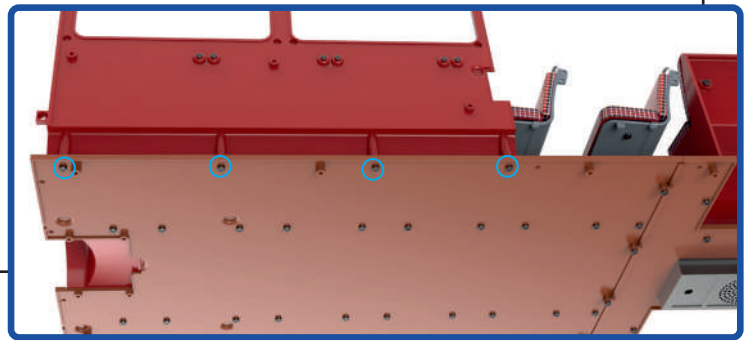
**3** Inside the bus, check that the upper holes in the brackets on the sides of the right-hand seats are aligned with the seat fixtures **48C** fitted in step 1. Fix in place with five **DP** screws. The inset shows the front two brackets in place.



**4** In the same way as described in step 1, fit three seat fixtures **48C** to the inside of the left side wall **48A** and fix in place from the outside of the wall **48A** with two **DP** screws in each fitting (inset, right).



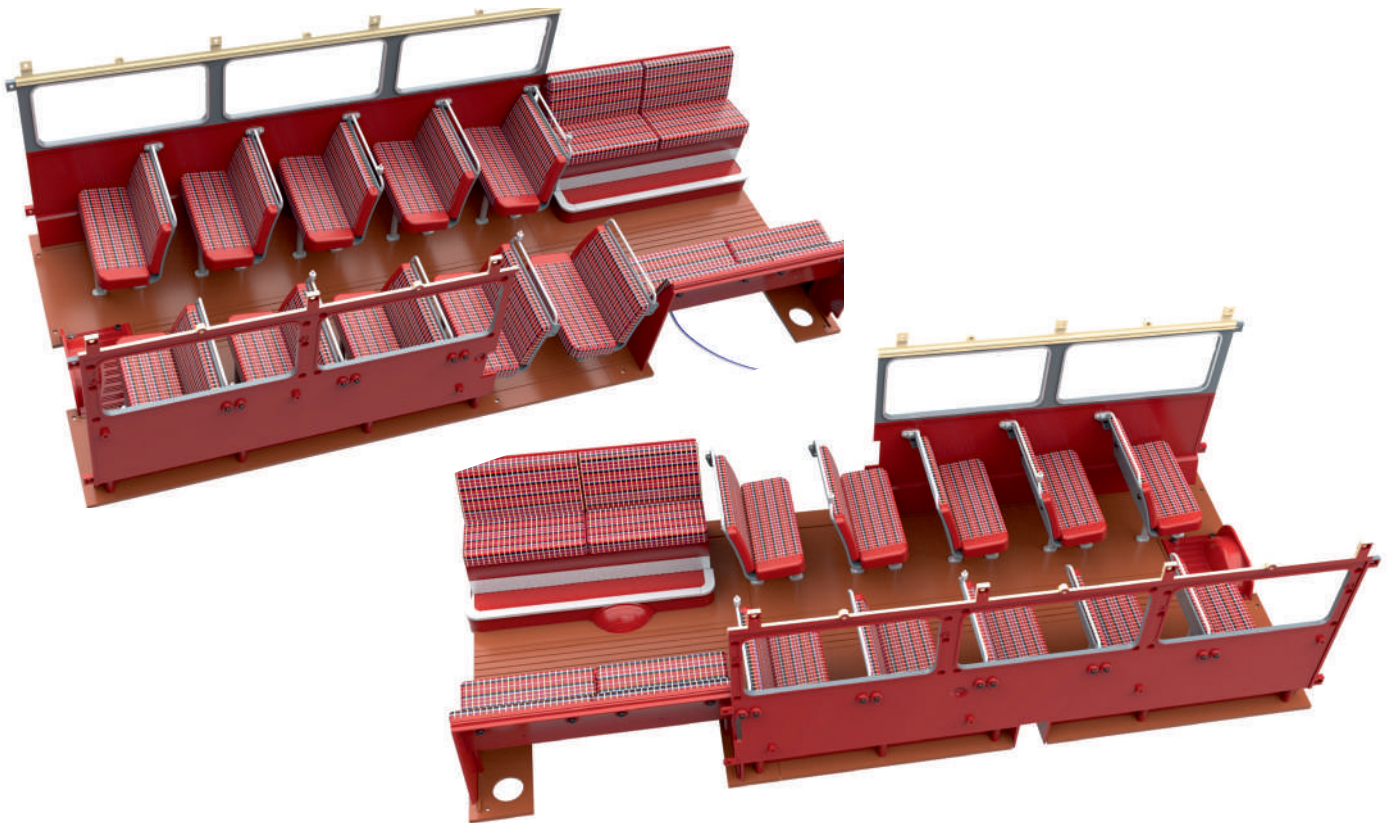
**5** In the same way as described in step 2, fit the left side wall **48A** to the floor **42A**, so that the four screw sockets are aligned, as indicated by the dotted lines. At the same time, ensure that the pegs on the outer edges of the seats fit into the cradle brackets on the inside of the wall, **48A**, as indicated in the inset below left. When the wall is correctly in position, fix in place with four **IP** screws. The inset, below right, shows the wall in place with the **IP** screws circled in blue.



**6** Inside the bus, check that the upper holes in the brackets on the sides of the three front left-hand seats are aligned with the seat fixtures **48C** fitted in step 4. Fix in place with three **DP** screws. The inset below shows the front two brackets in place.



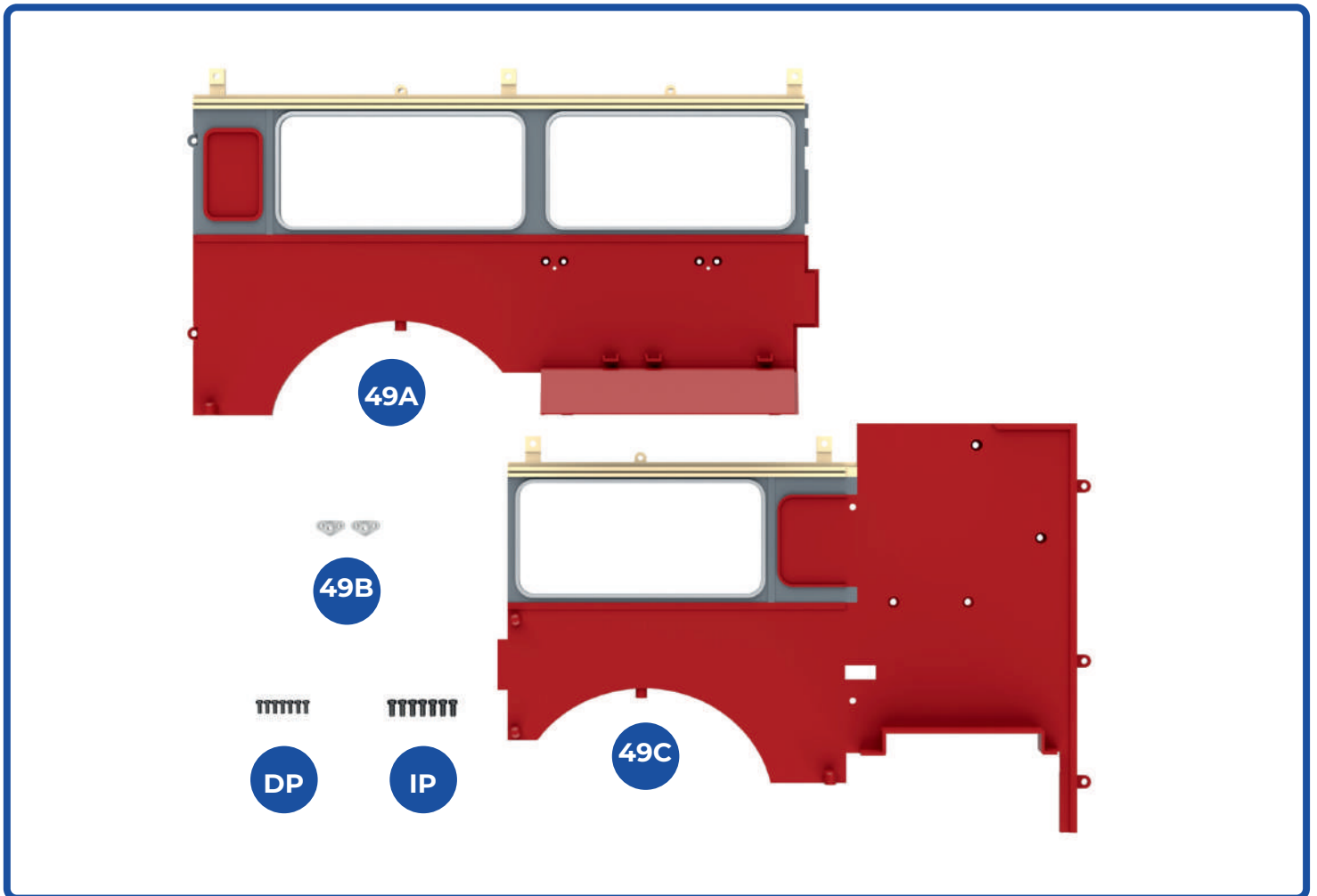
## Finished view



## STAGE 49

# FITTING THE REAR SIDE WALLS

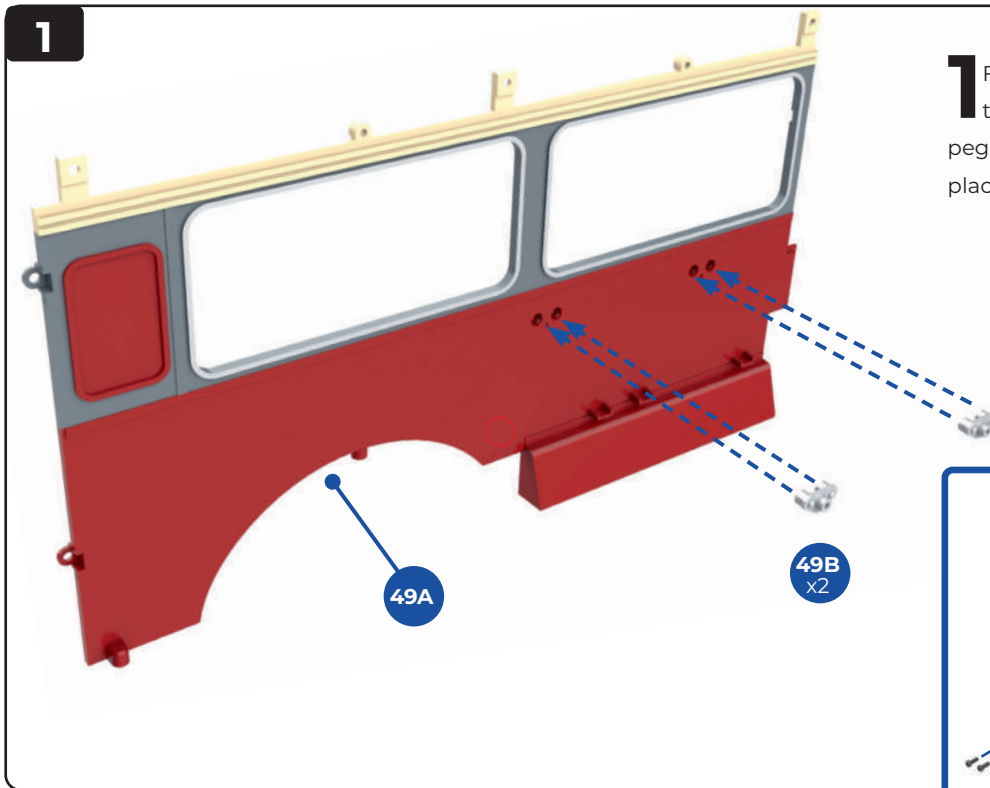
In this stage, the rear part of the left and right side walls are supplied. They are fitted and attached to the front side walls, forward facing seats and the floor of the lower deck.



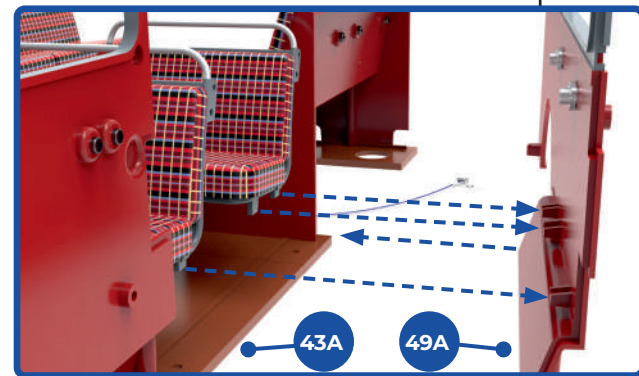
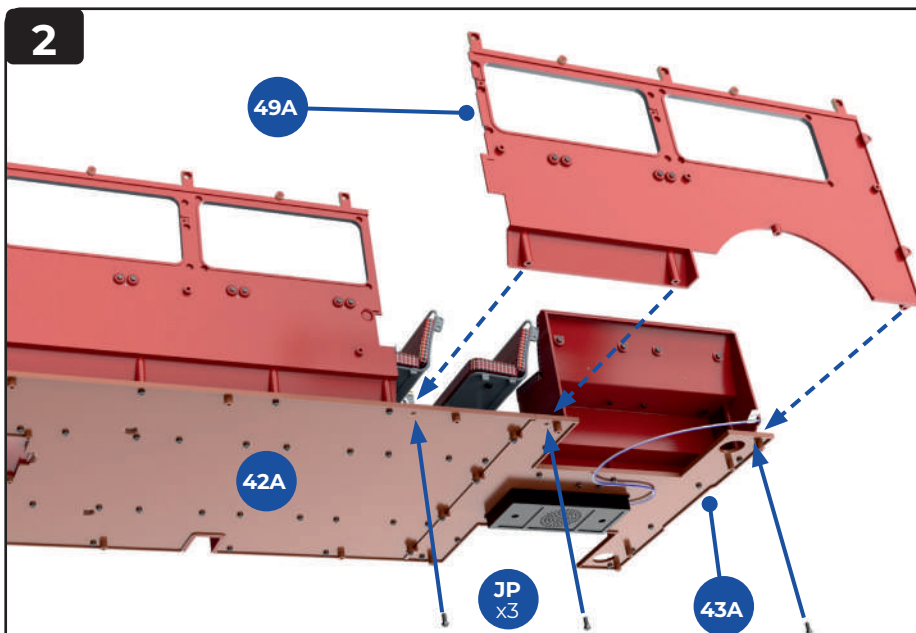
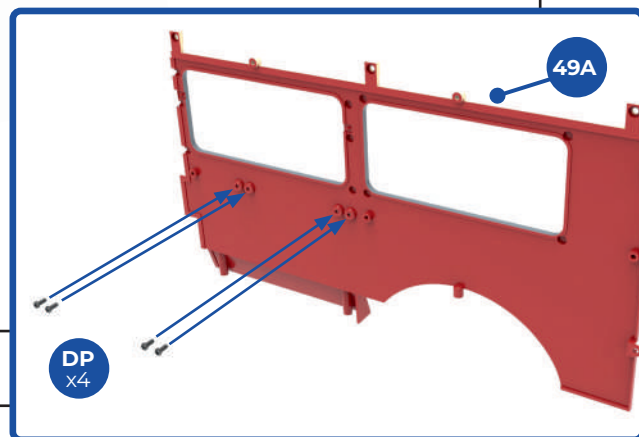
### KEY TO PARTS SUPPLIED

- 49A** Left rear side wall
- 49B** Seat fixture (x2)
- 49C** Right rear side wall

- DP** 1.7 x 4mm (x7)
- IP** 2.3 x 5mm (x7)

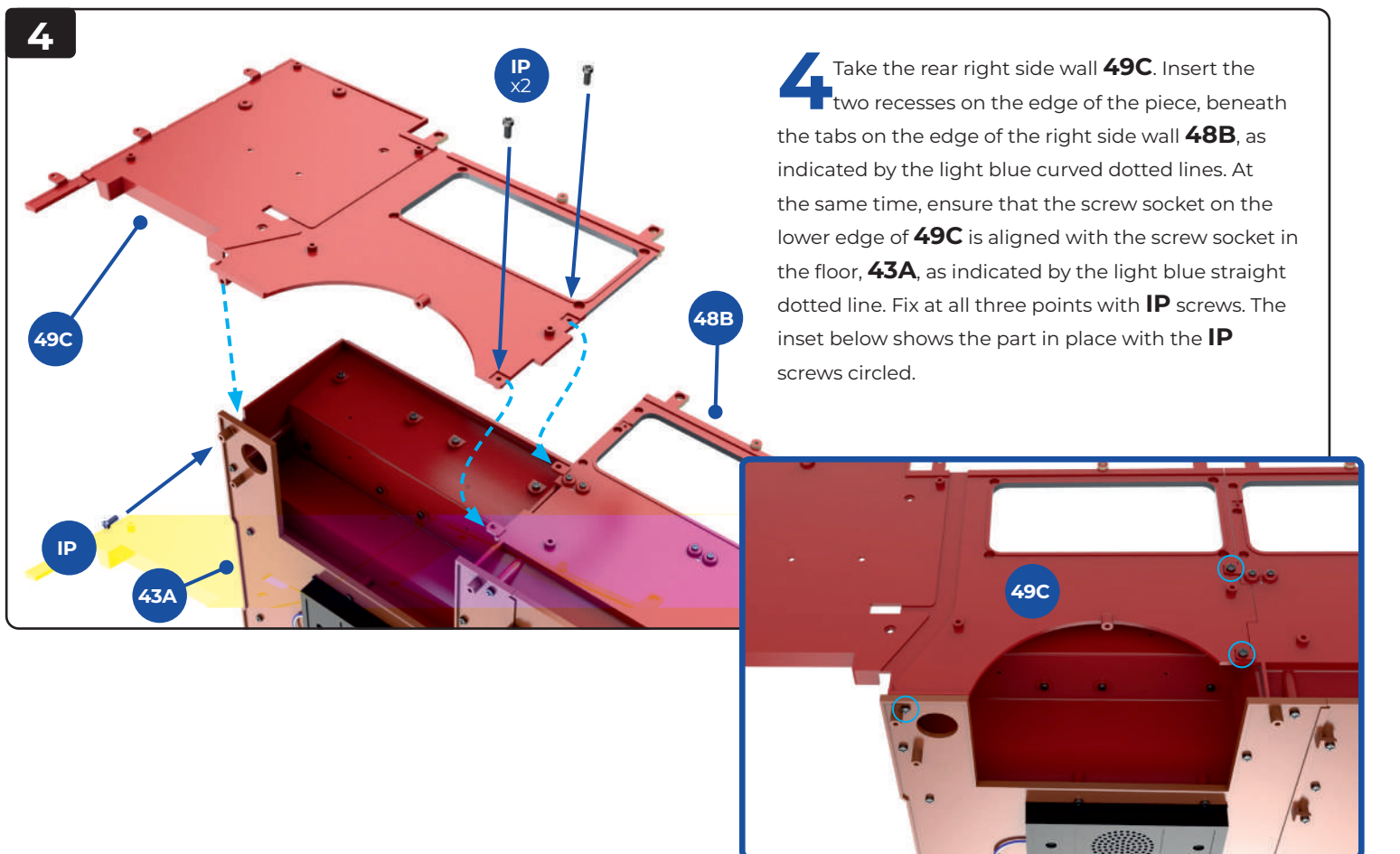
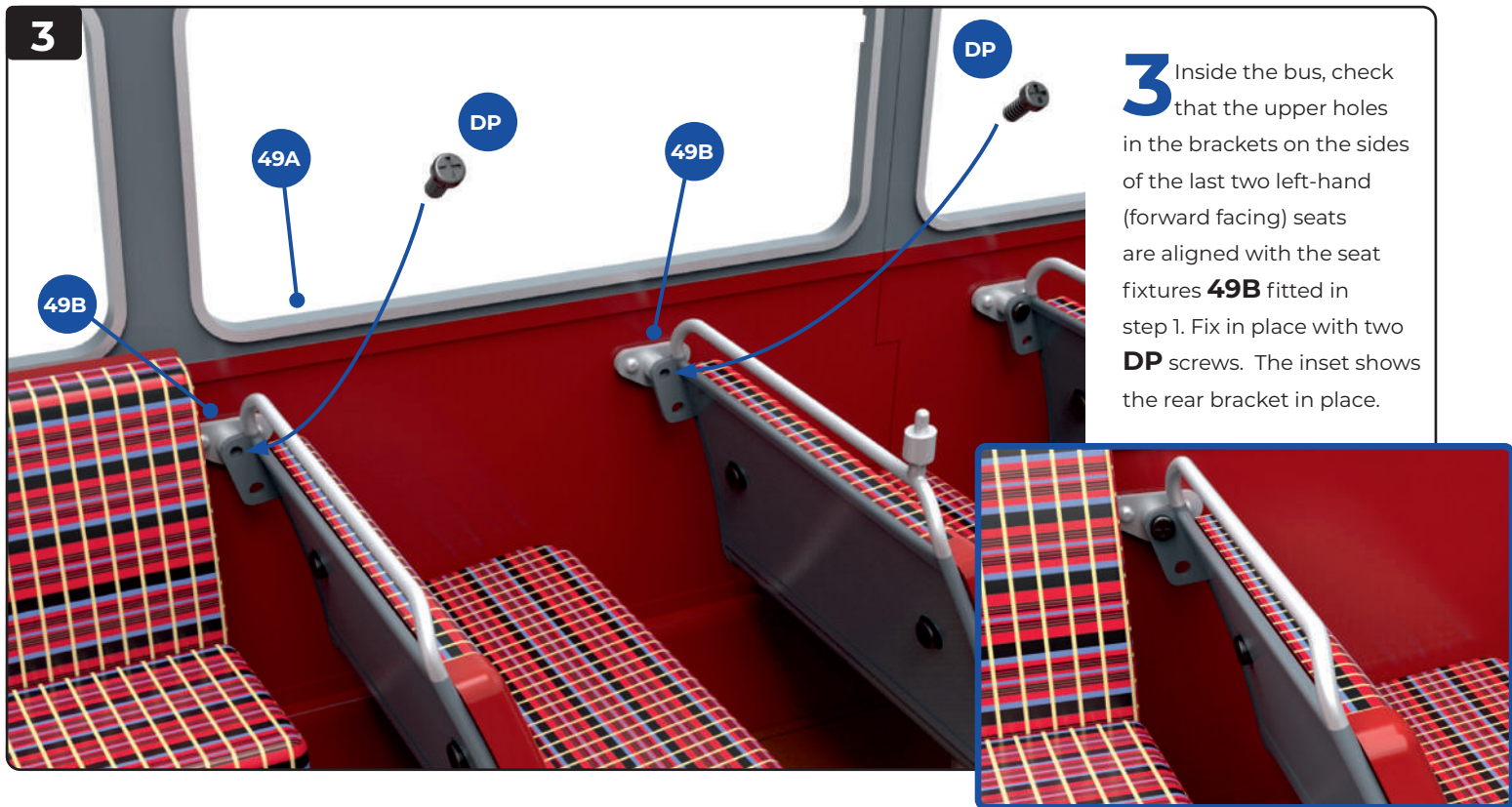


**1** Fit two seat fixtures **49B** to the inside of the rear left side wall **49A**, locating the pegs in the holes. From the outside, fix in place using four **DP** screws (inset).



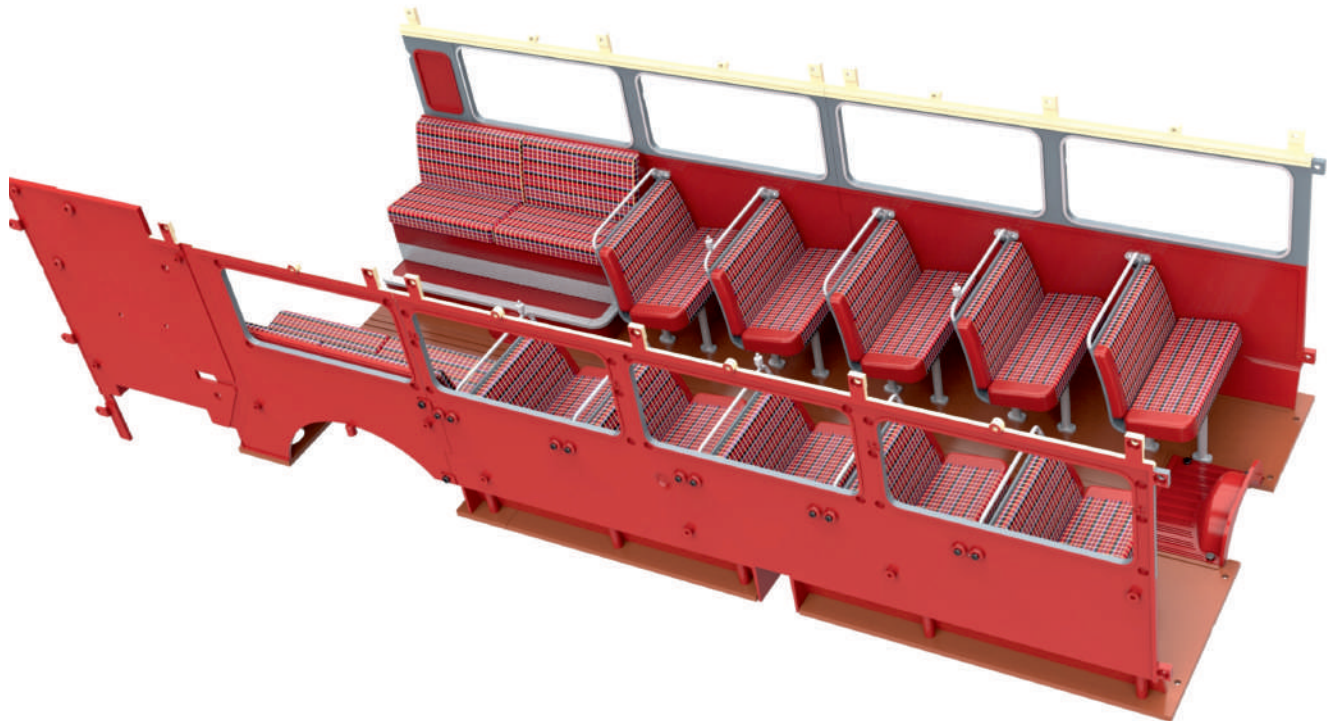
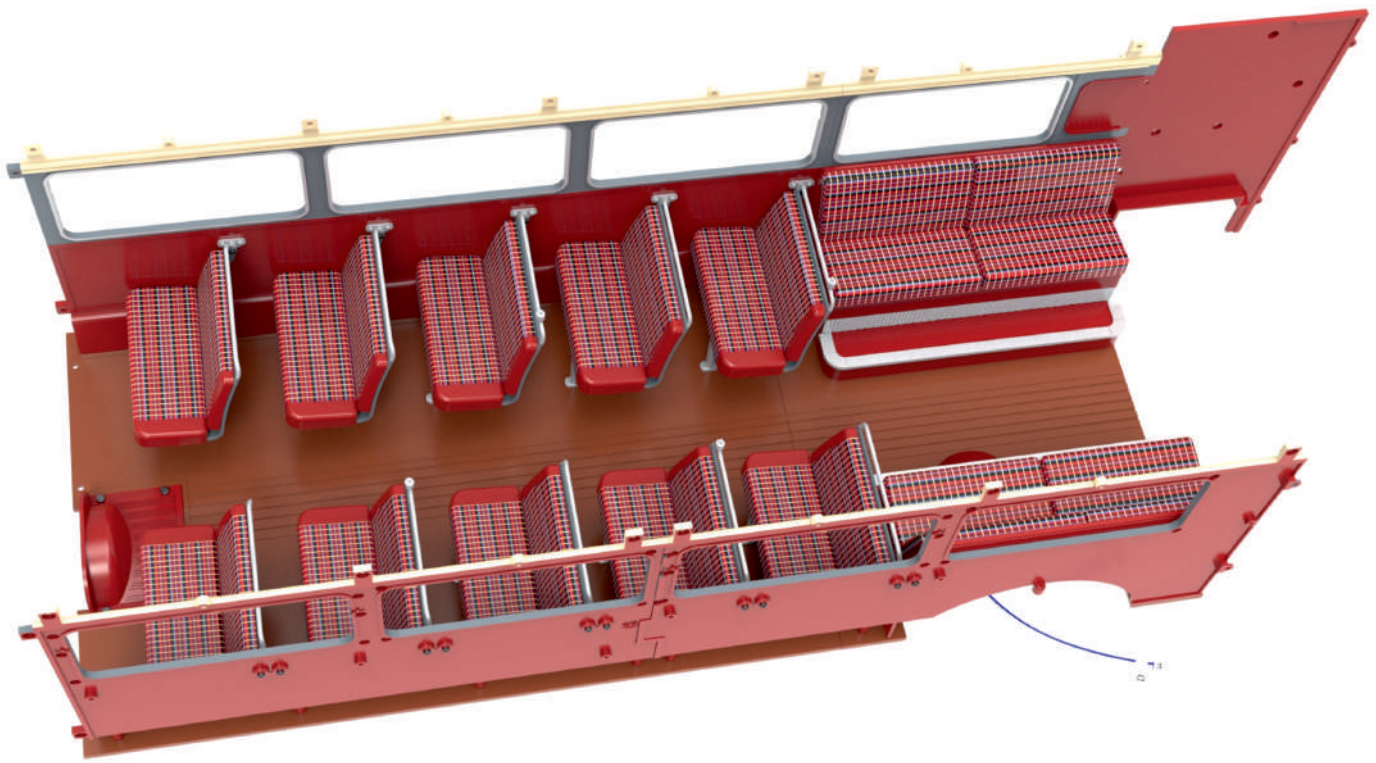
**2** Fit the rear left side wall **49A** to the floor **42A**, and **43A** so that the three screw sockets are aligned, as indicated by the dotted lines. At the same time, ensure that the pegs on the outer edges of the seats fit into the cradle brackets on the inside of the wall, **49A**, as indicated in the inset above right. When the wall is correctly in position, fix in place with three **JP** screws. The inset right shows the wall in place, with the **JP** screws circled in blue.

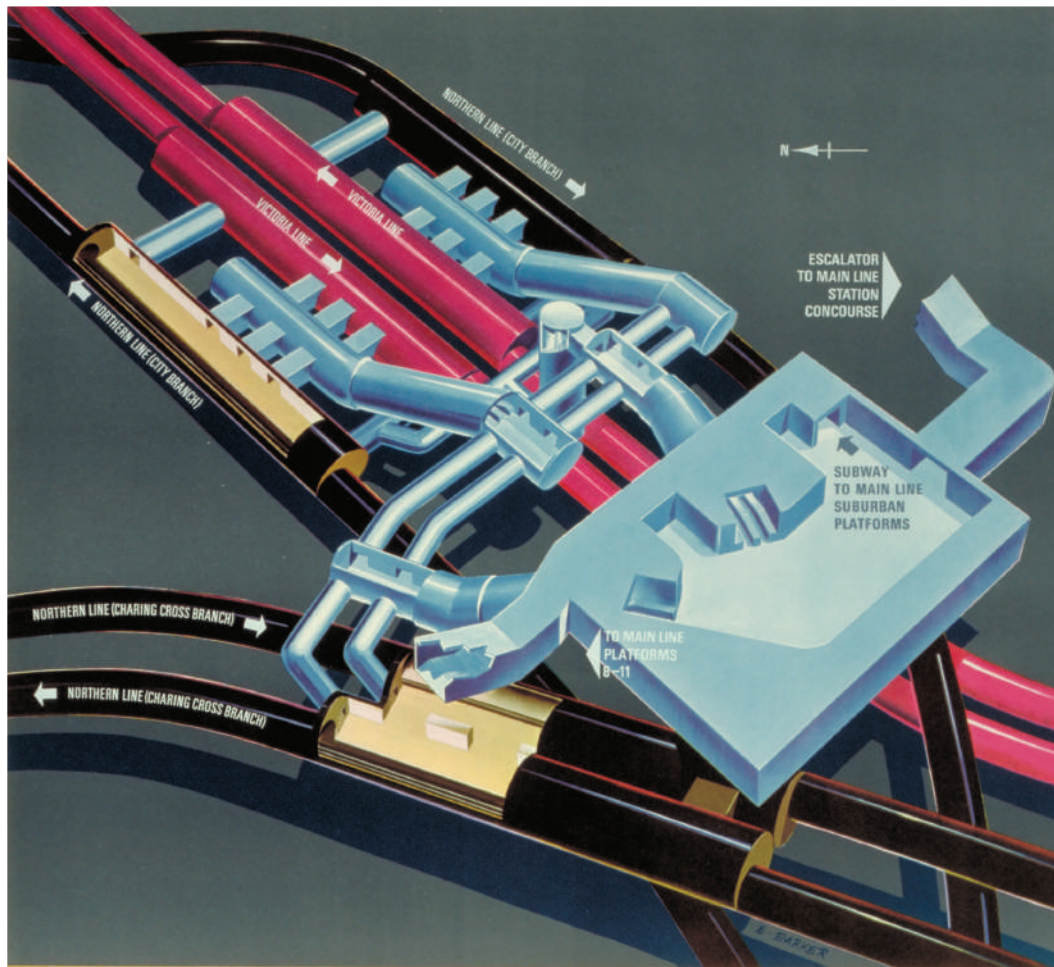






## Finished views





The Victoria Line opened in four stages, between 1968 and 1971, with Pimlico station being added in 1972. The work had to be carefully planned to avoid disrupting passengers at the interchange stations. This poster shows how the new platforms and connections to the Northern Line and National Rail services were arranged at Euston Station.

## EUSTON UNDERGROUND STATION



A new Underground station is being built at Euston. It will have exits and entrances to the Main Line station and will serve both branches of the Northern Line and the new Victoria Line. There will be a new ticket hall and four pairs of escalators serving the Tube lines. A fifth flight of escalators will lead from the booking hall to the Main Line station. The northbound Northern Line City branch will be diverted to provide cross-platform interchange between this branch and the Victoria Line.

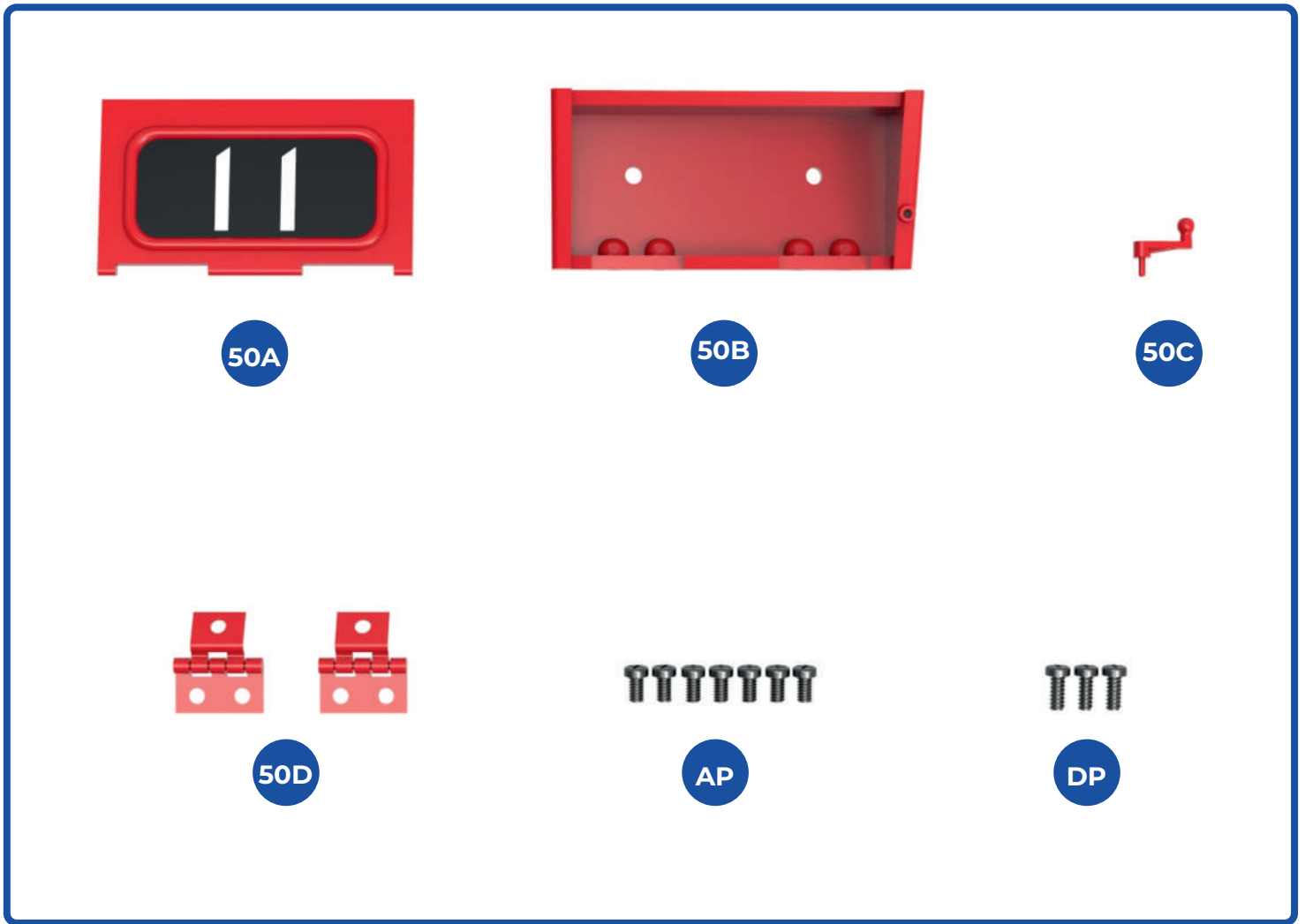
Much of the work has already been completed and part of the new ticket hall is in use, with one pair of escalators which serve the Charing Cross branch, and the subway to the Main Line station. The remainder of the ticket hall, the escalators for the City branch, and the new platform for the northbound service are due to come into use towards the end of this year. The sketch shows the general layout of the new station.

London Transport Museum/TfL

**STAGE 50**

# FITTING THE CANOPY ROUTE INDICATOR

The canopy route indicator is positioned under the overhang at the front of the bus, above the window in front of the lower deck front left seat.

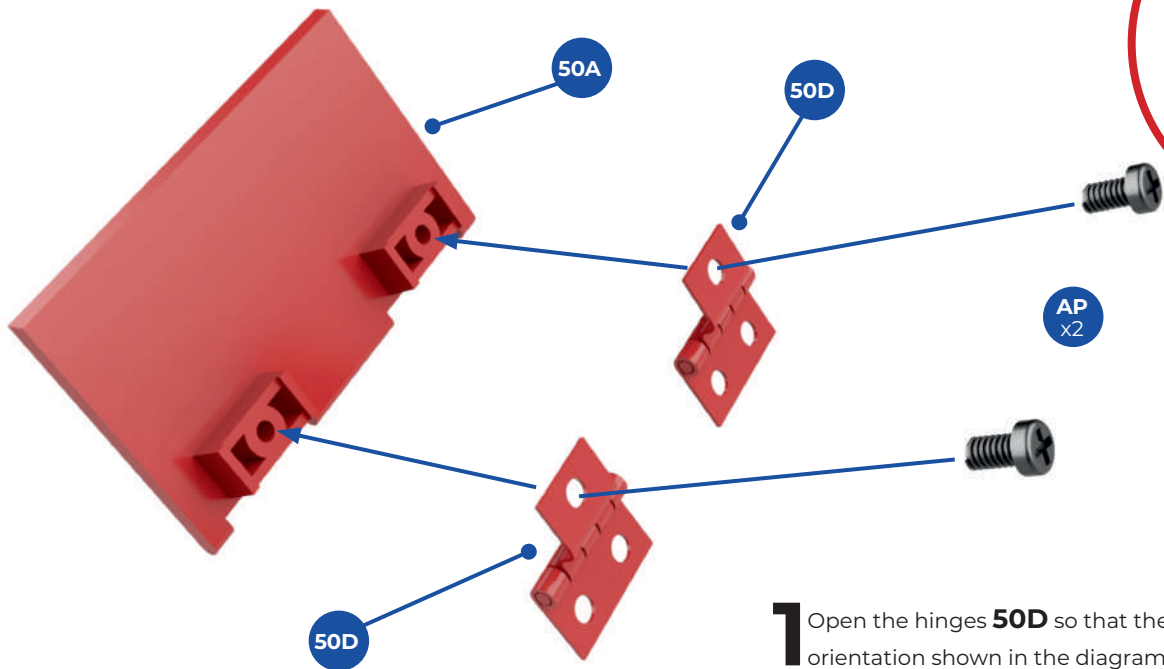


**KEY TO PARTS SUPPLIED**

- |            |                   |           |                |
|------------|-------------------|-----------|----------------|
| <b>50A</b> | Indicator box lid | <b>AP</b> | 1.7 x 3mm (x7) |
| <b>50B</b> | Indicator box     | <b>DP</b> | 1.7 x 4mm (x3) |
| <b>50C</b> | Control handle    |           |                |
| <b>50D</b> | Hinges (x2)       |           |                |

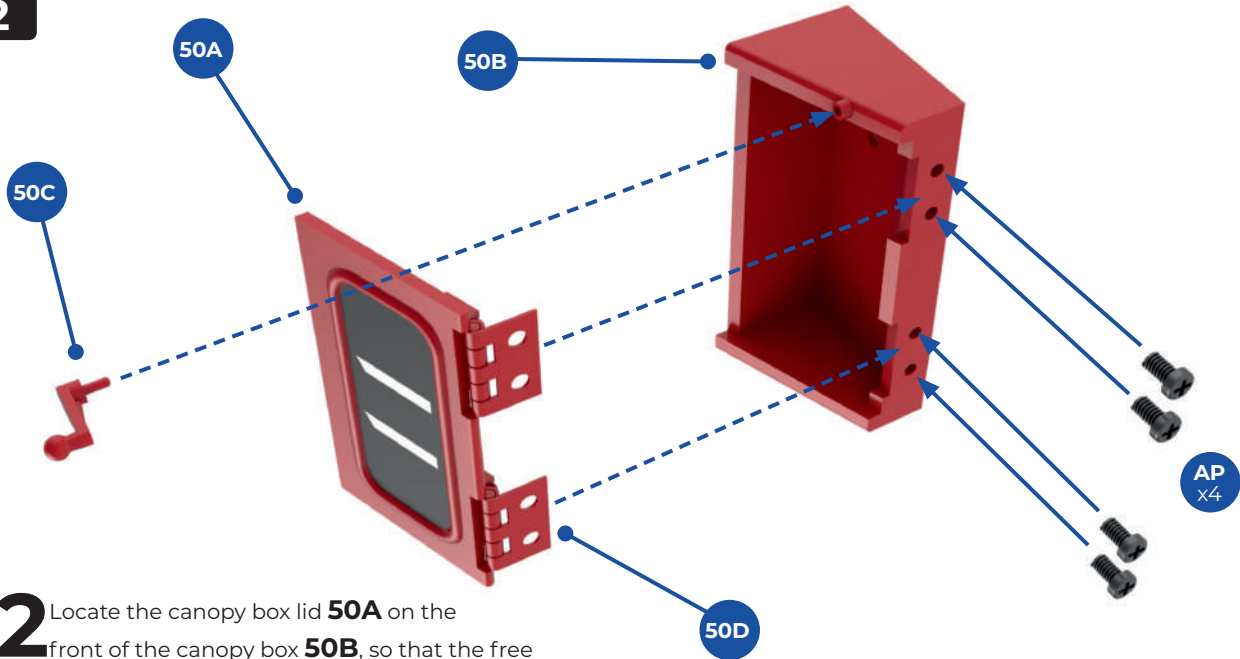
Check that you have the hinges in the right orientation, so that the flanges with two holes can move forwards at right-angles to the flanges with single holes.

**1**



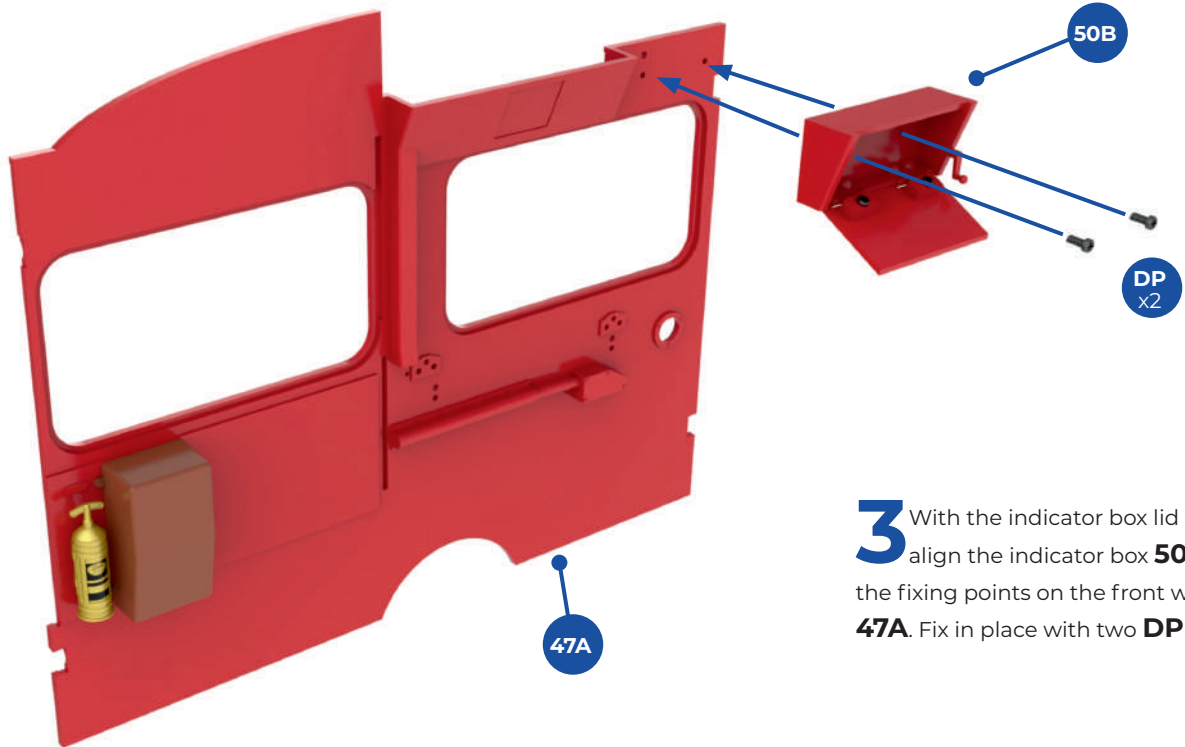
**1** Open the hinges **50D** so that they are in the orientation shown in the diagram. Identify the fixing points on the indicator box lid **50A**. Fix in place with two **AP** screws, through the single hole in the hinges.

**2**



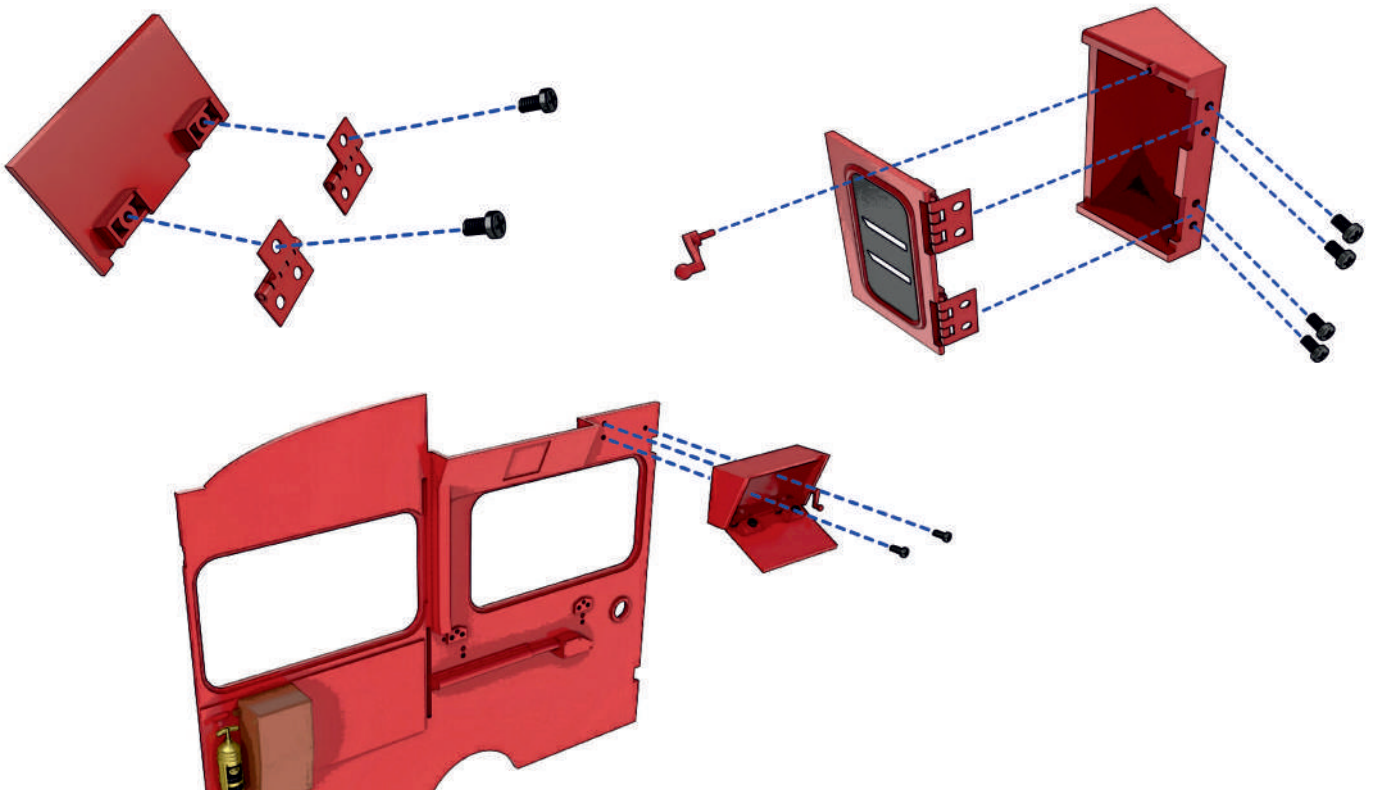
**2** Locate the canopy box lid **50A** on the front of the canopy box **50B**, so that the free flange of the hinges **50D** align with the underside of the box. Fix the hinges in place with four **AP** screws. Fit the control handle **50C** in the socket in the side of the box **50B**. This is a push-fit connection.

**3**



**3** With the indicator box lid open, align the indicator box **50B** with the fixing points on the front wall **47A**. Fix in place with two **DP** screws.

## Assembly diagrams



## Finished views



## Route Indicator beneath the Canopy

The Routemaster followed a design feature of the RT-Type bus, with a route indicator positioned beneath the canopy. This made it easy for passengers queuing for a bus to check that the bus they were boarding was on the route that they wanted.

**1** The completed model of RM 857 with the route indicator beneath the canopy.

**2** A close-up shot of the route indicator on RM 1, on an outing to the London Bus Museum at Brooklands, Surrey.

**3** A Routemaster design drawing shows the indicator beneath the canopy.

**4** Passengers queuing for an RT-Type bus in 1952 can easily see the illuminated indicator.

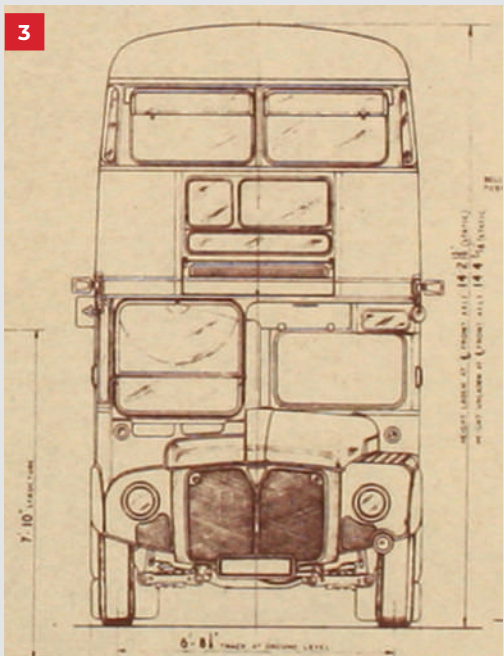
1



2



3



4

