IONDON TRANSPORT ROUTEMASTER BUS RM 857



Pack 04

BUILD INSTRUCTIONS

STAGE 31: FITTING THE REAR WHEEL ARCHES

STAGE 32: FITTING THE LEFT FRONT WHEEL ARCH AND FOG LAMP

STAGE 33: FITTING THE FRONT RIGHT WHEEL ARCH

STAGE 34: FUEL TANK, FUEL FILLER AND SAFETY BARS

STAGE 35: THE FLOOR OF THE DRIVER'S CAB AND THE HANDBRAKE STAGE 36: THE FLOOR OF THE DRIVER'S CAB AND THE HANDBRAKE

STAGE 37: BRAKE PEDAL AND ACCELERATOR

STAGE 38: FITTING THE DASHBOARD AND ACCESSORIES IN THE CAB

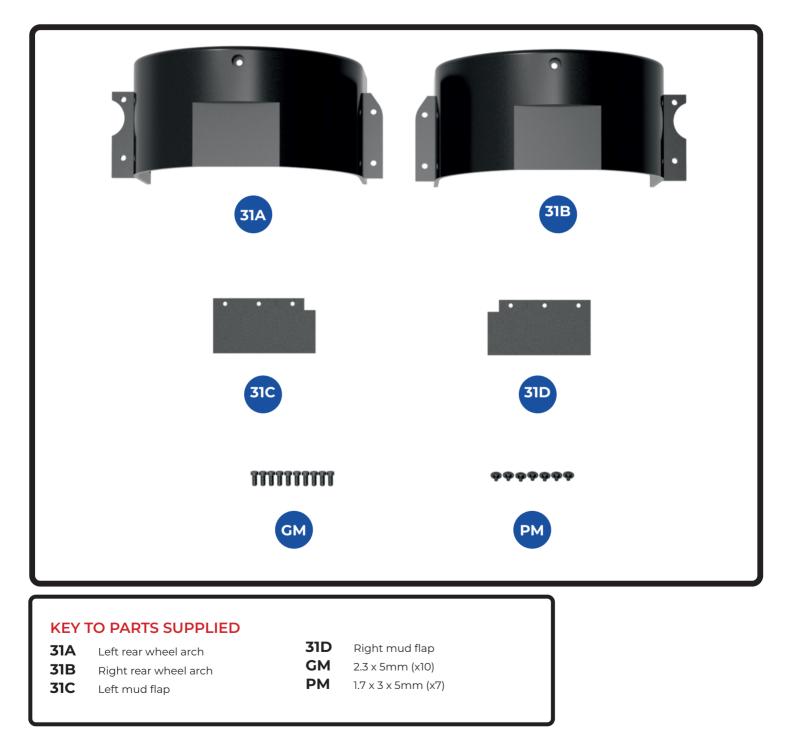
STAGE 39: ASSEMBLING AND FITTING THE DRIVER'S SEAT

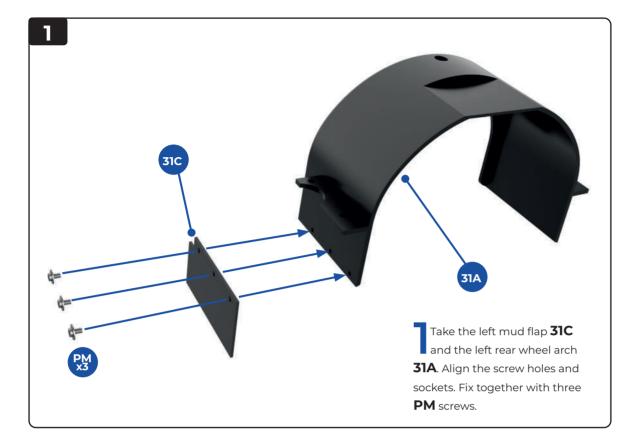
STAGE 40: FITTING ACCESSORIES IN THE DRIVER'S CAB

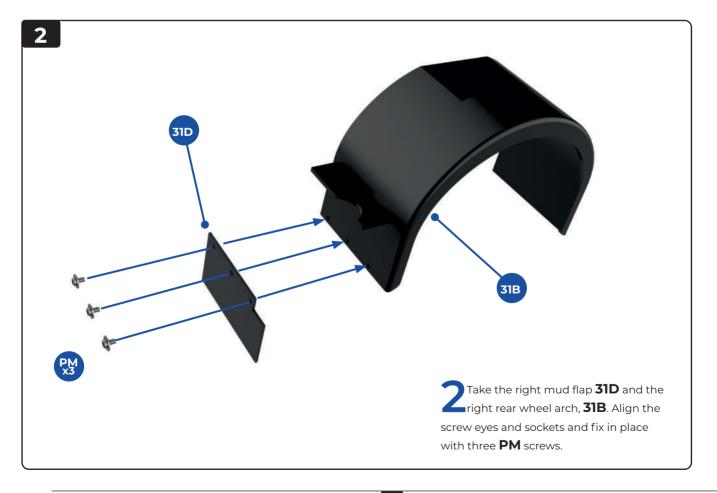


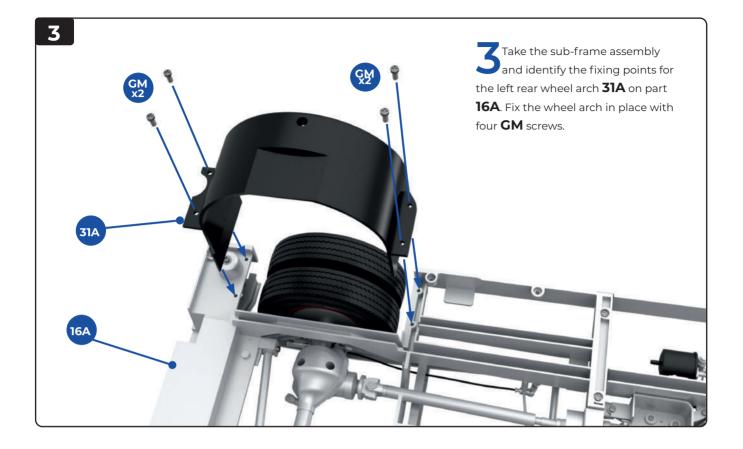
STAGE 31 FITTING THE REAR WHEEL ARCHES

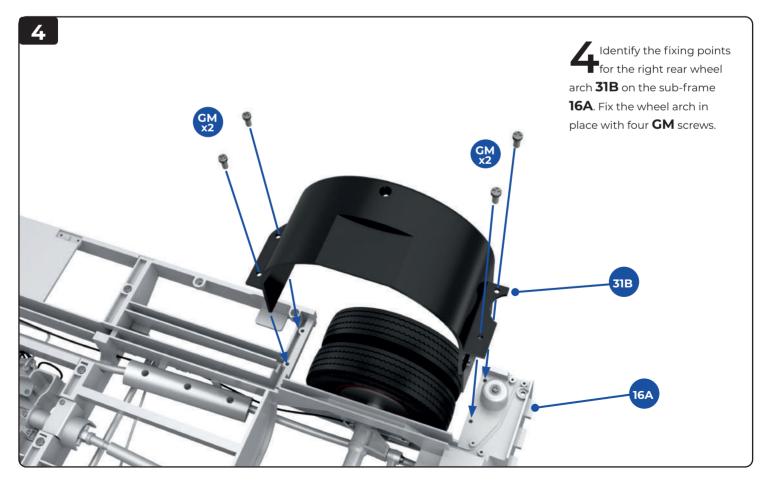
In this stage, the rear mud flaps are attached to the rear wheel arches. The wheel arches are then attached to the sub-frame.





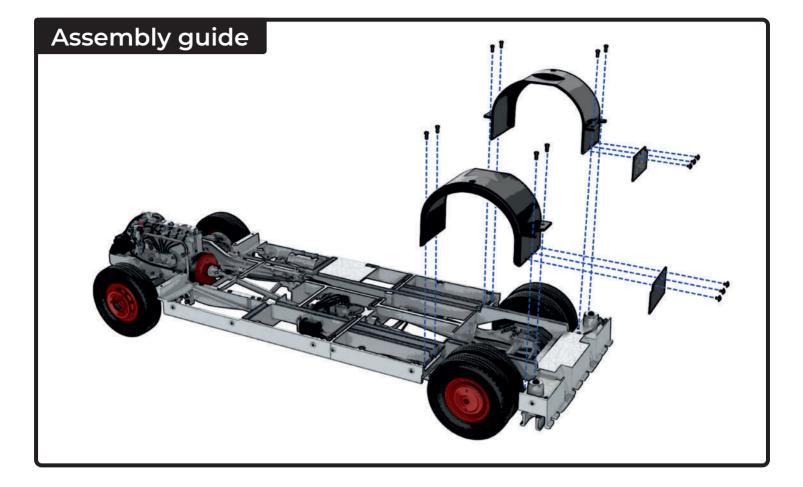






Finished views







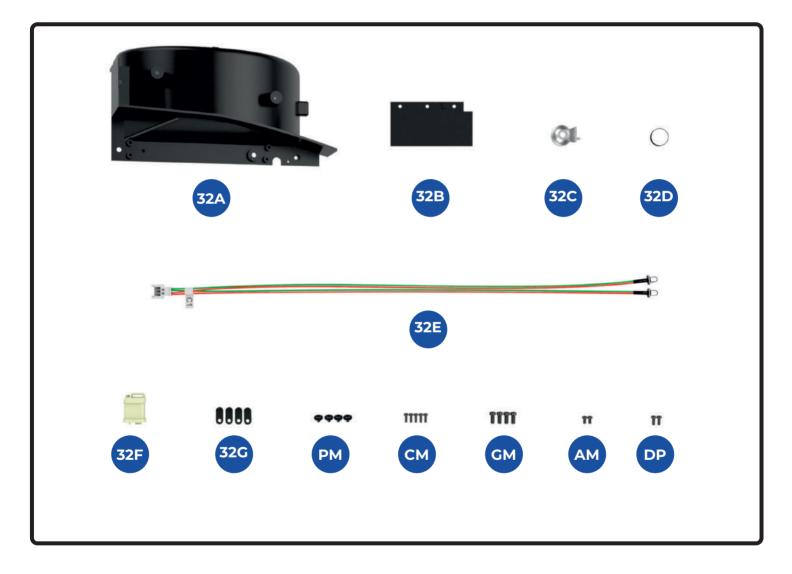
The rear wheel and wheel arch of Routemaster RM1 (left). The mud flap hangs behind the wheel, below the bodywork, to prevent excess mud from splashing up to the suspension mechanism behind the wheels.

On Routemaster RM597 (below), the exhaust is just visible behind the mud flap.

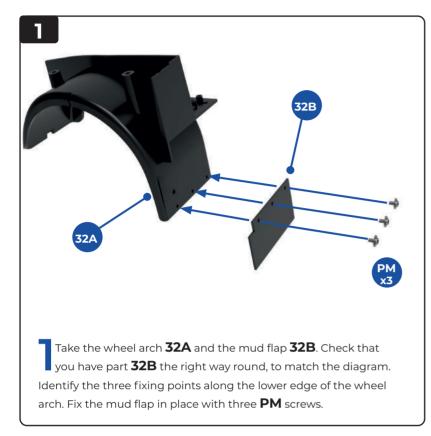


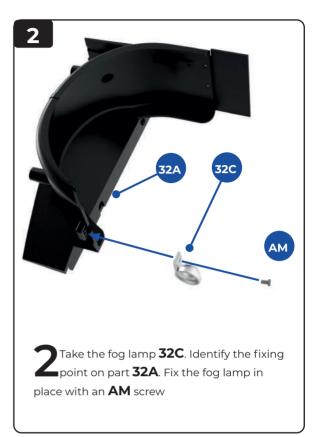
STAGE 32 FITTING THE LEFT FRONT WHEEL ARCH AND FOG LAMP

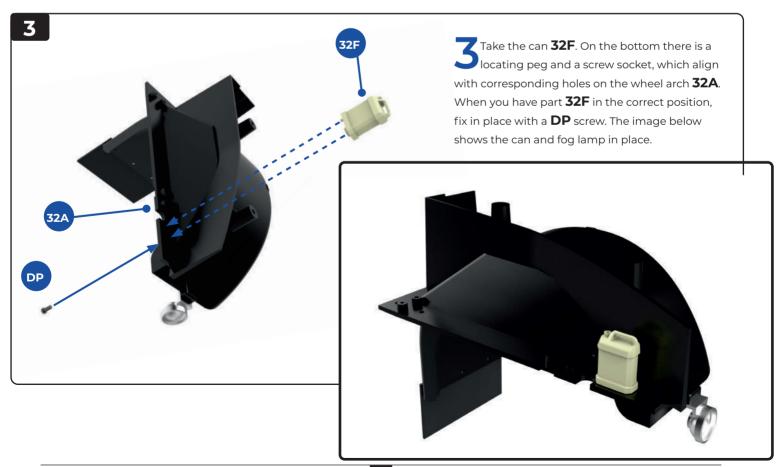
In this stage, we start the electrical wiring, to provide a connection for the fog lamp that is attached to the Left front wheel arch.

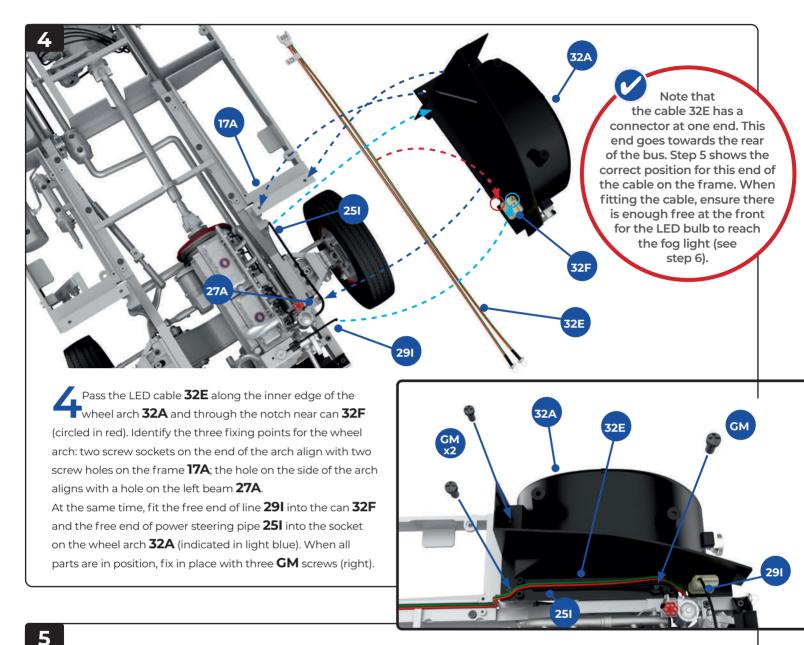


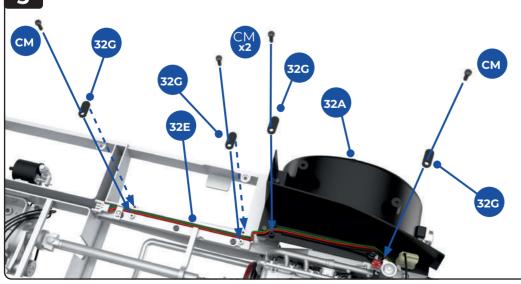
KEY T	O PARTS SUPPLIED			РМ	1.7 x 3 x 5mm (x4)
32A	Left front wheel arch	32F	Can	СМ	1.7 x 4mm (x5)
32B	Mud flap	32G	Cable grips	GM	2.3 x 5mm (x4)
32C	Fog lamp			AM	1.7 x 3mm (x2)
32D	Fog lamp lens			DP	1.7 x 4mm (x2)
32E	LED cable				









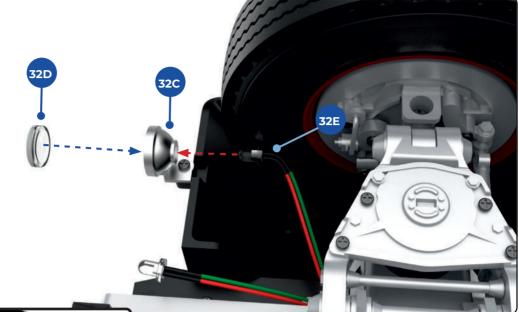


5 Take the four cable clips **32G**. Identify the fixing points: each clip has a peg that fits into a socket on the sub-frame assembly, plus a screw hole that aligns with a screw hole adjacent to each socket. Fix the clips in place with four **CM** screws. **NOTE**: We have indicated the peg positions with dotted lines for the two clips on the left. The other two clips are fitted in a similar manner. The fixing point for the clip on the right is not visible in this diagram.

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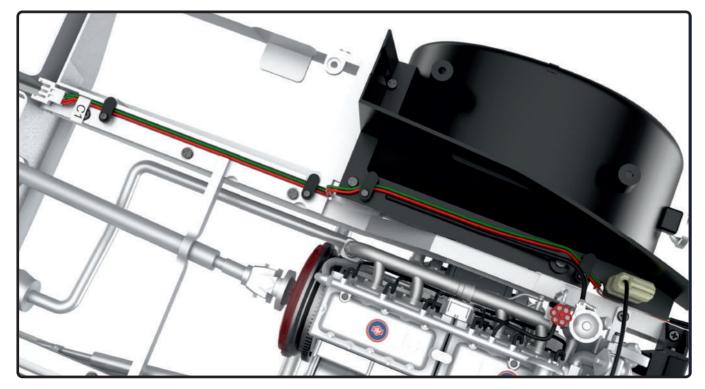
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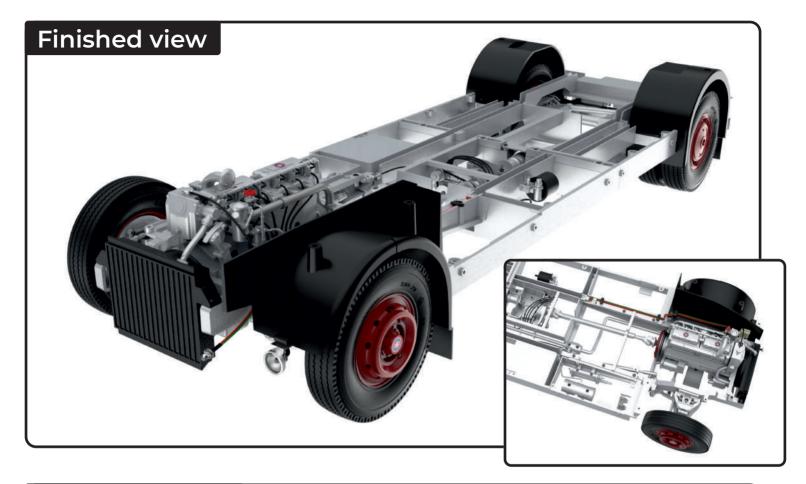
5 Turn the sub-frame assembly on its side, so that you can see the back of the fog lamp **32C**. Take care to protect the engine, to prevent any damage. Fit one of the two ends of the LED cable **32E** into the back of the fog lamp **32C**. Fit the lens **32D** to the front of the fog lamp. These are push-fit connections. The inset, below, shows the fog lamp and cable in place. The other end of the cable will be fitted at a later stage.

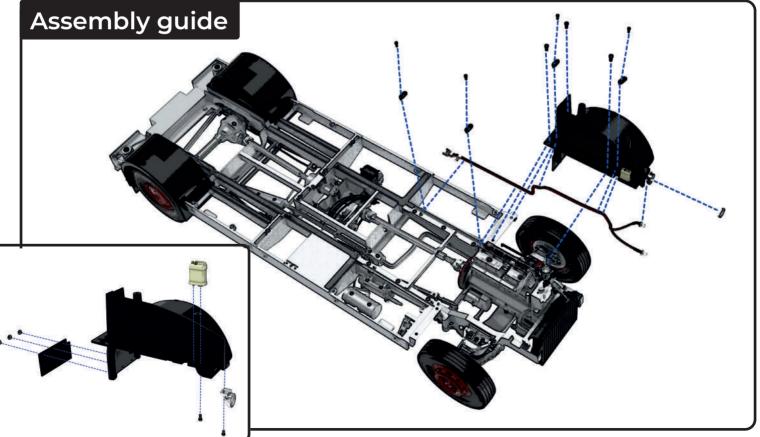




The diagram below shows the LED cable and fog lamp fitted in place.



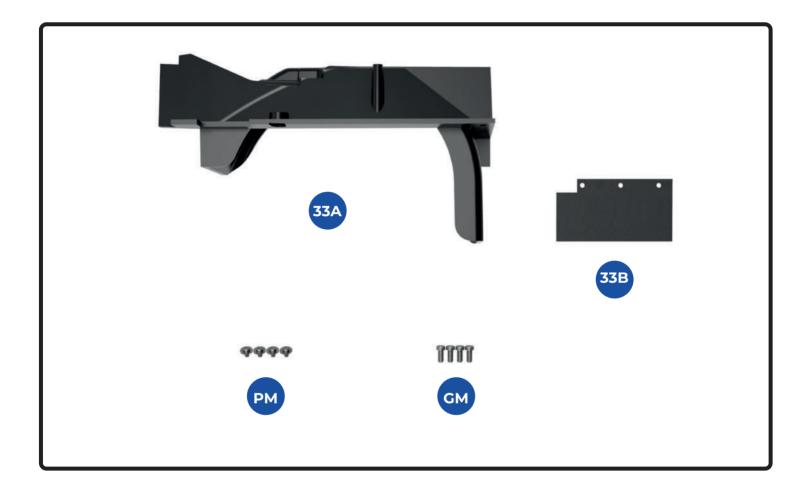




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STAGE 33 FITTING THE FRONT RIGHT WHEEL ARCH

The right front mud flap is fitted to the corresponding wheel arch and then the assembly is attached to the frame.



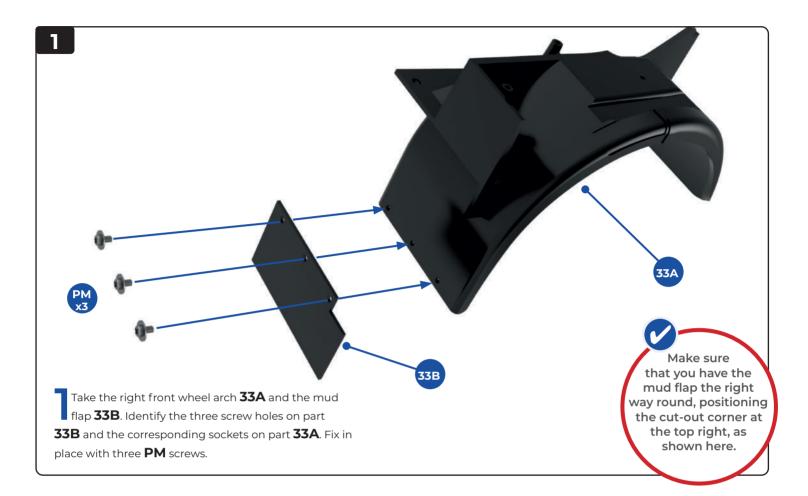
KEY TO PARTS SUPPLIED

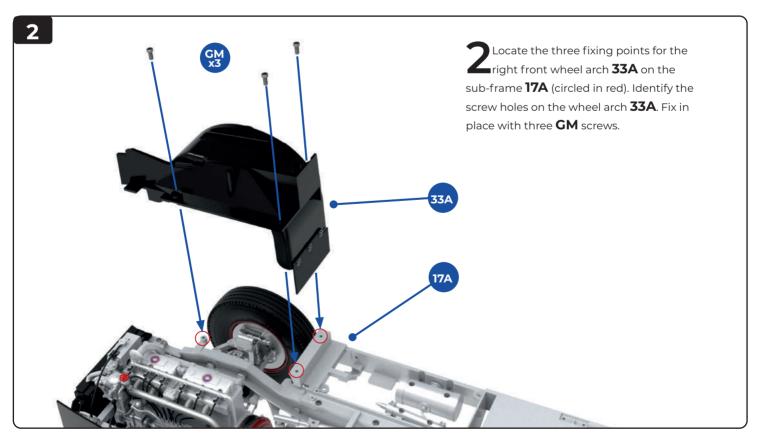
33A	Front right wheel arch
33B	Right mud flap
PM	1.7 x 3 x 5mm (x4)
GM	2.3 x 5mm (x4)

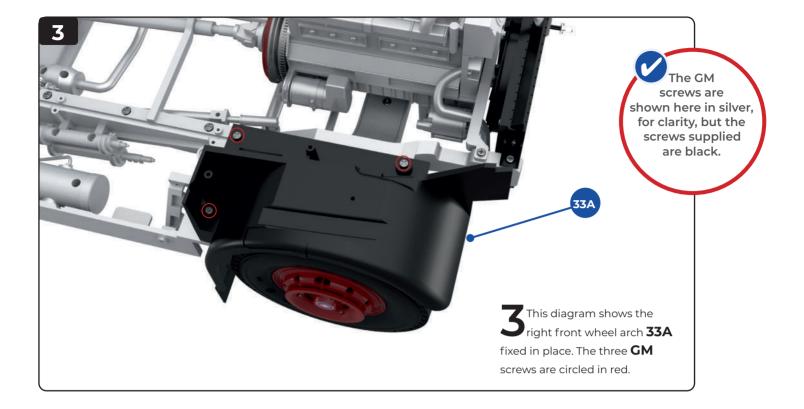


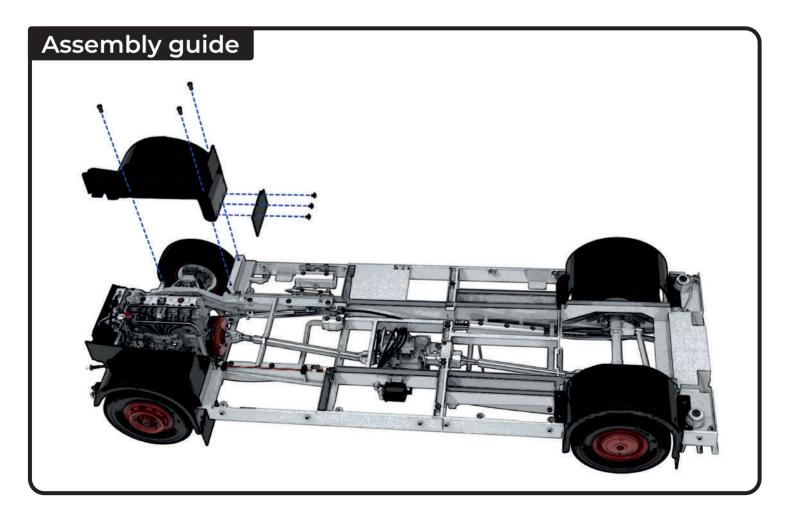
The front right wheel arch of RM652, which was rebuilt and re-engined in 2000.

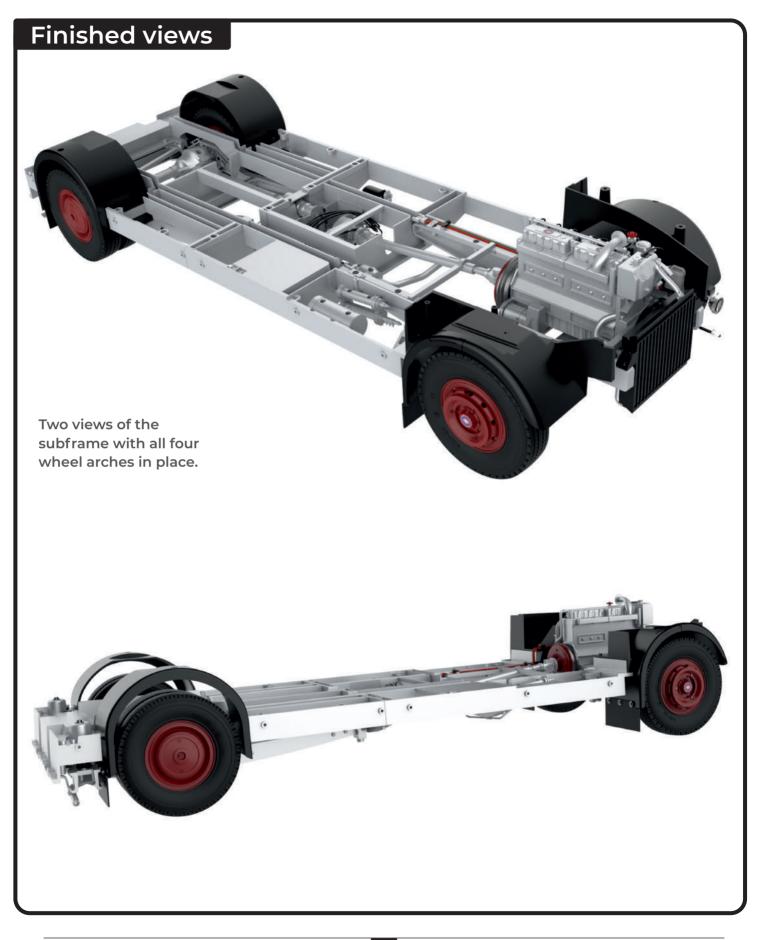
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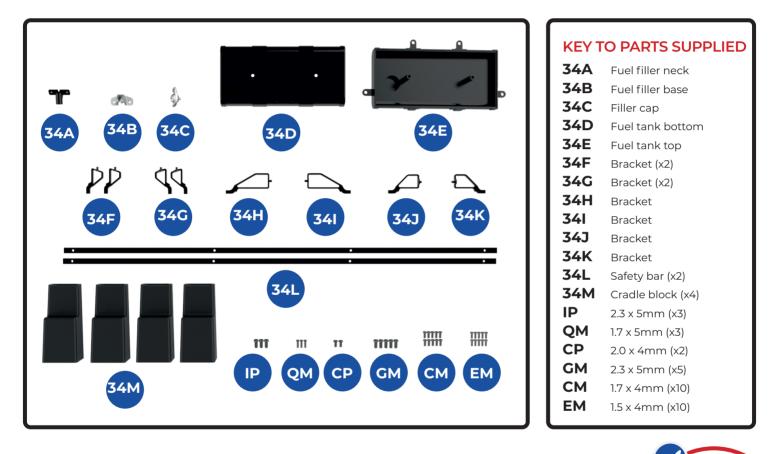


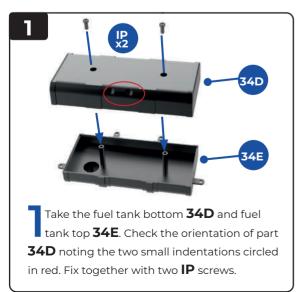


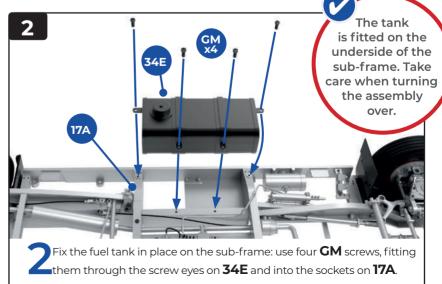


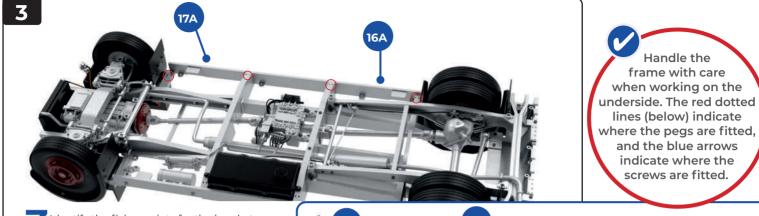
SAFETY BARS

The fuel tank is attached to the sub-frame, and the filler neck and cap are attached. The safety bars are fitted along the length of the frame. Be careful to identify all the parts before starting the build.

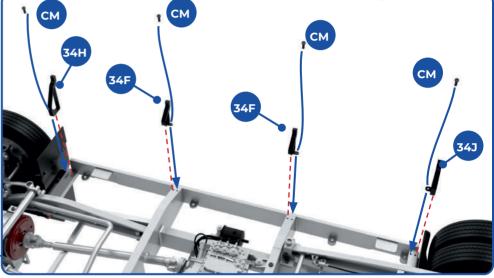


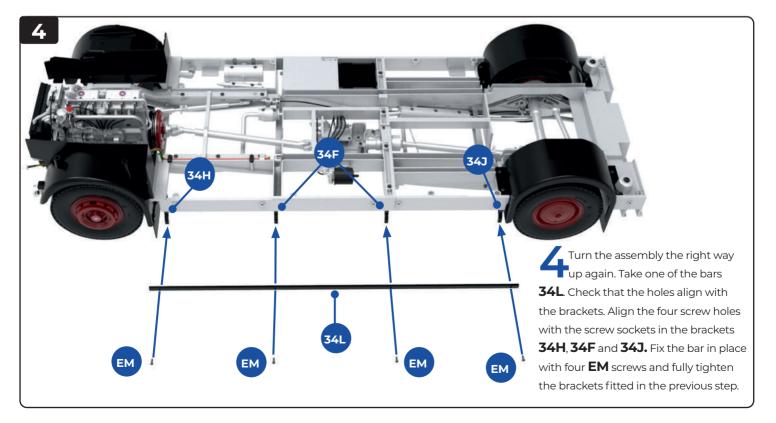






3 Identify the fixing points for the brackets on the underside of the crossbars of the frame 17A and 16A. There is a screw hole and a socket at each point (circled in red, above). Fix bracket 34H at the front of the bus, brackets 34F on the middle two crossbars and bracket 34J at the rear (see inset, right). Check that you have them the right way round, so that the pegs on the brackets match the sockets and the screw holes on the brackets match the screw holes in the crossbars. Fix in place with four CM screws, but do not fully tighten them until the safety bar 34L has been fitted in the next step.

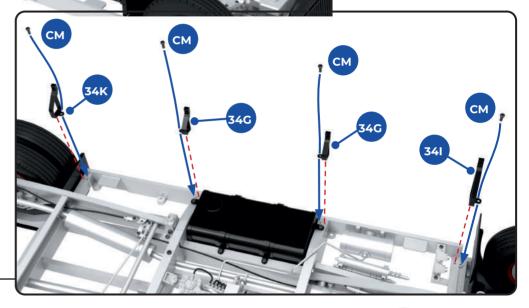




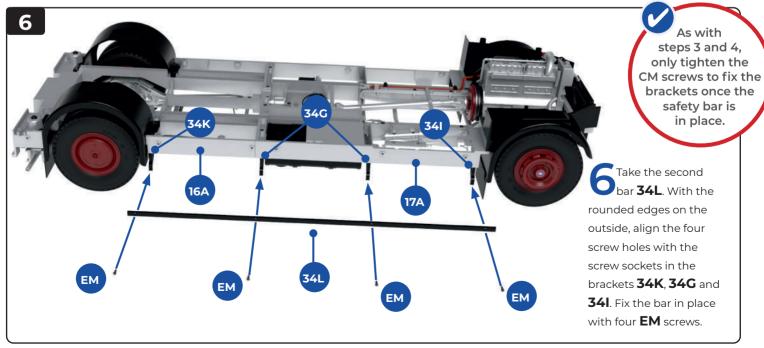
17

5 Identify the fixing points for the brackets on the crossbars of the frame **17A** and **16A** on the other side of the frame. Again, there is a screw hole and a socket at each point. Fix bracket **34K** at the rear of the bus, brackets **34G** on the middle two cross bars and bracket **34I** at the front (see inset, right). Check that you have them the right way round; the red dotted lines indicate which side the peg is fitted. Fix the brackets in place loosely with four **CM** screws as indicated by the blue arrows.

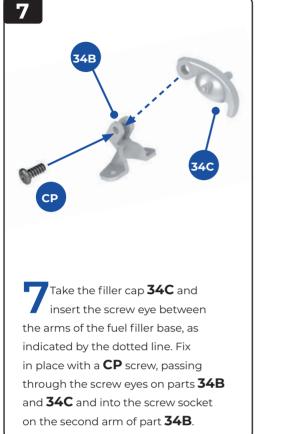
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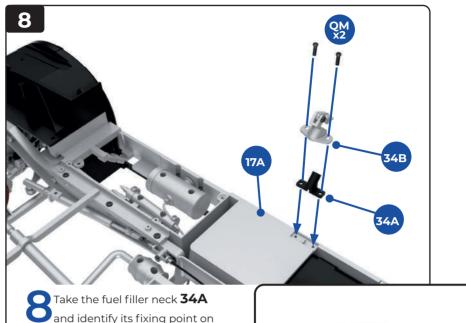


The positions of the fixing points are indicated by red circles. They are not clearly visible in this diagram.



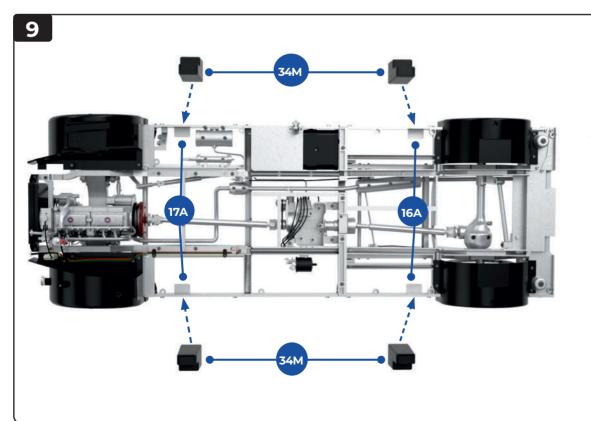
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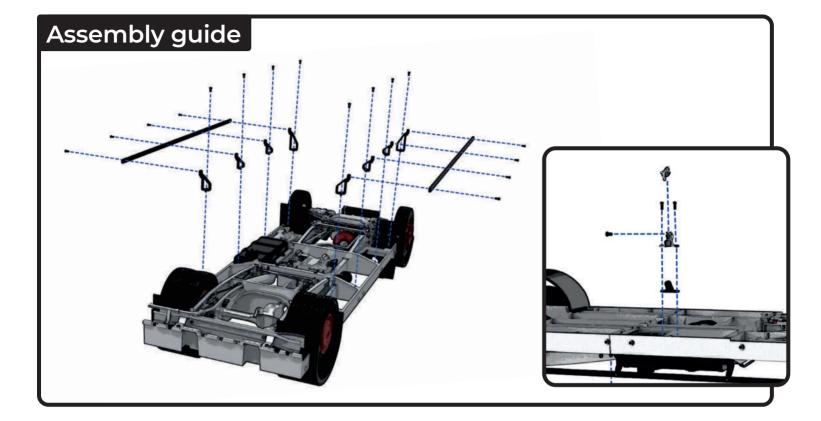


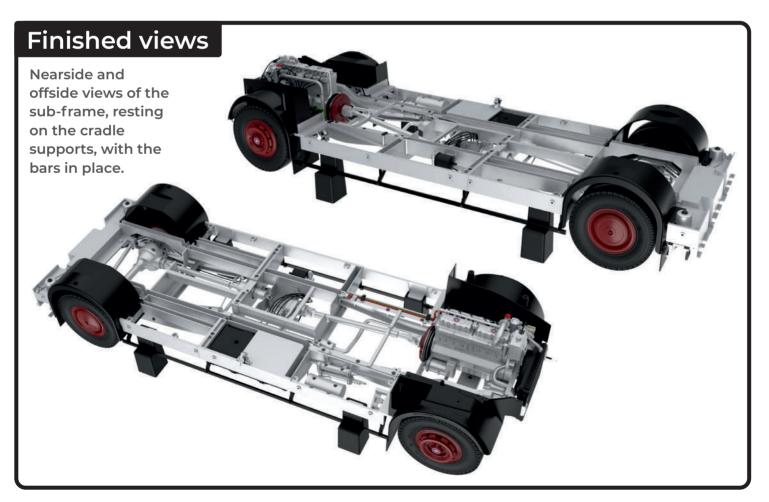
and identify its fixing point on the frame **17A**. Fix the fuel filler cap assembly in place with two **QM** screws so that they pass through the screw holes in parts **34B** and **34A** and into frame **17A**. The inset (right) shows the fuel filler fixed in place.





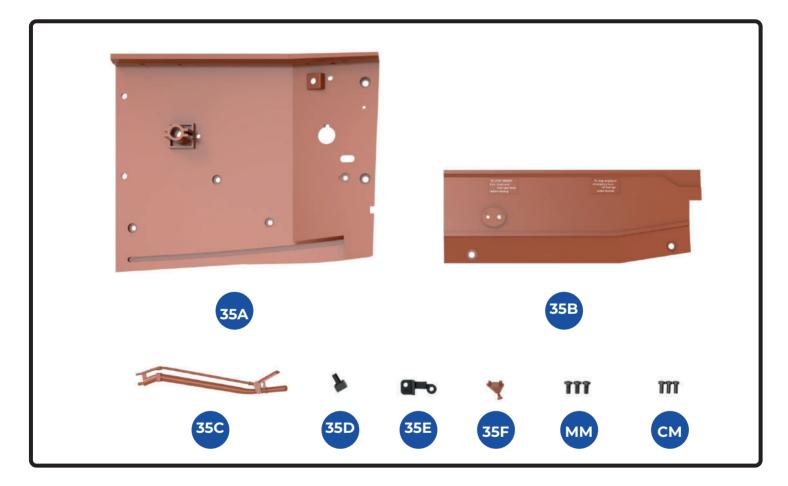
9 The four cradle supports 34M fit under the tabs on the frame 17A and 16A. They are not fixed to anything at this stage, so store them safely until they are needed.





THE FLOOR OF THE DRIVER'S CAB AND THE HANDBRAKE

The floor and nearside wall of the driver's cab are fitted together and some of the controls are then fitted in place.

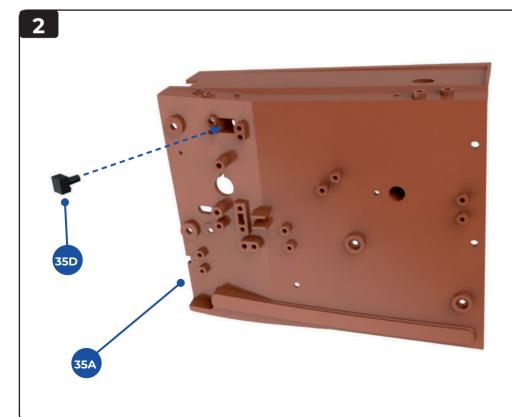


KEY TO PARTS SUPPLIED		
35A	Driver's cab floor	
35B	Driver's cab left wall	
35C	Handbrake	
35D	Dip switch	
35E	Support bracket	
35F	Engine stop switch	
MM	2.0 x 4mm (x3)	
СМ	1.7 x 4mm (x3)	

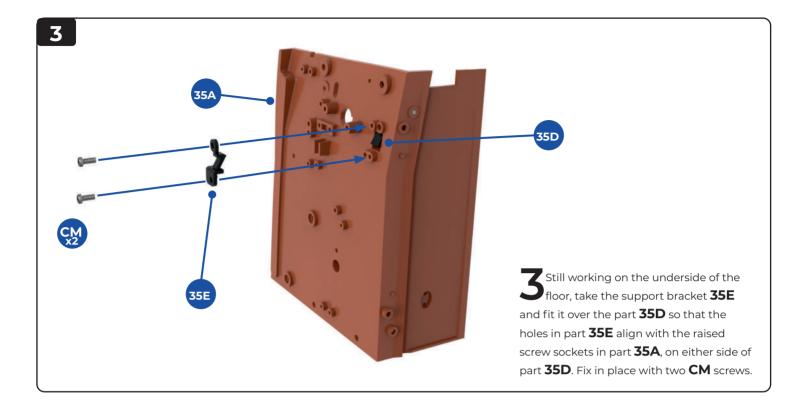


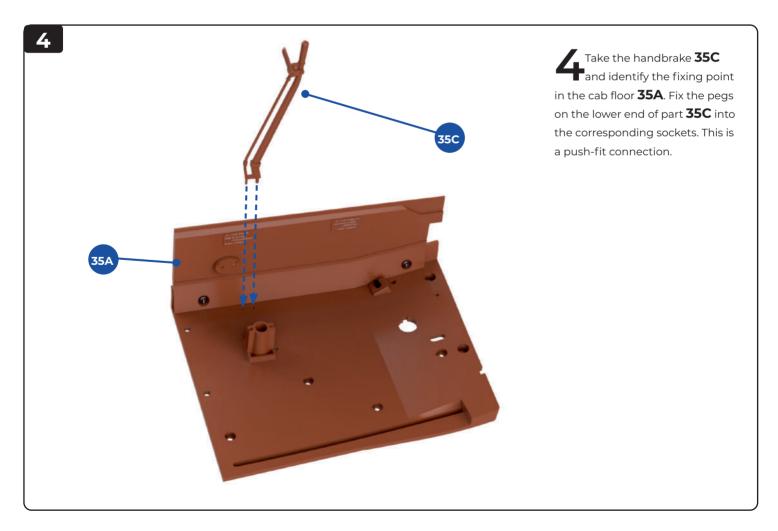
The handbrake is positioned on the nearside of the driver's cab, against the left wall.

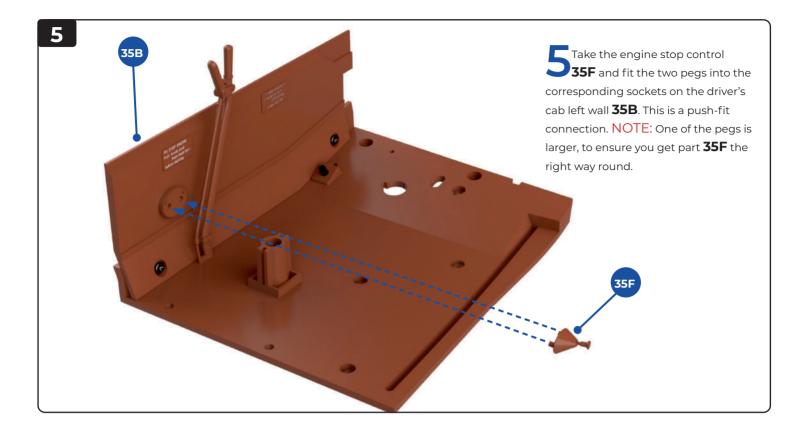


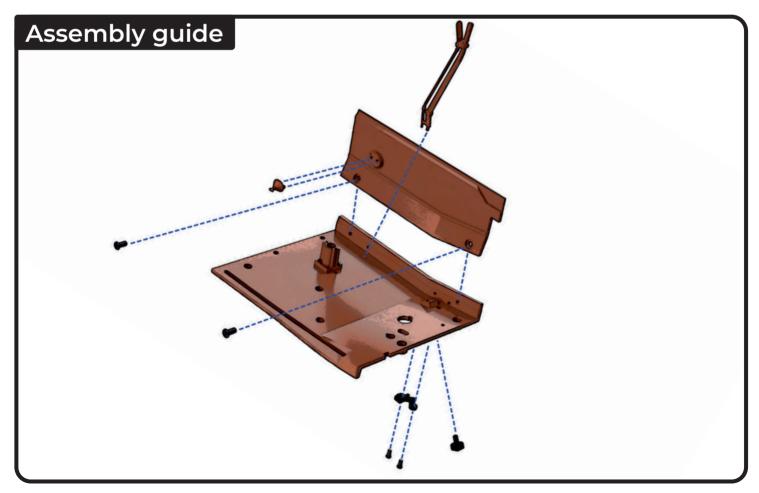


Turn the floor and wall assembly so that you can see the underside of the floor. Take part **35D** and fit it into the square socket on the underside of the floor. It will be fixed in place in step 3.









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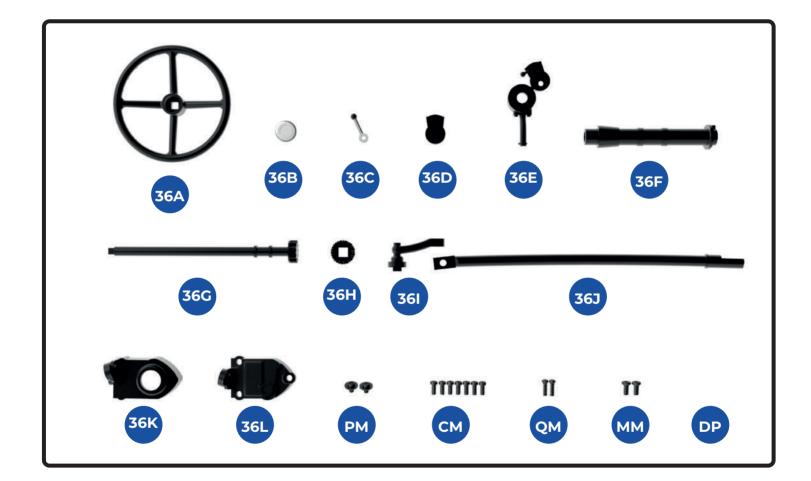
Two views of the driver's cab floor with the handbrake, dip switch and engine stop switch fixed in place.

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STAGE 36

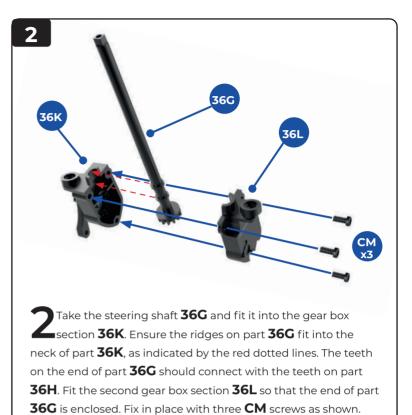
THE FLOOR OF THE DRIVER'S CAB AND THE HANDBRAKE

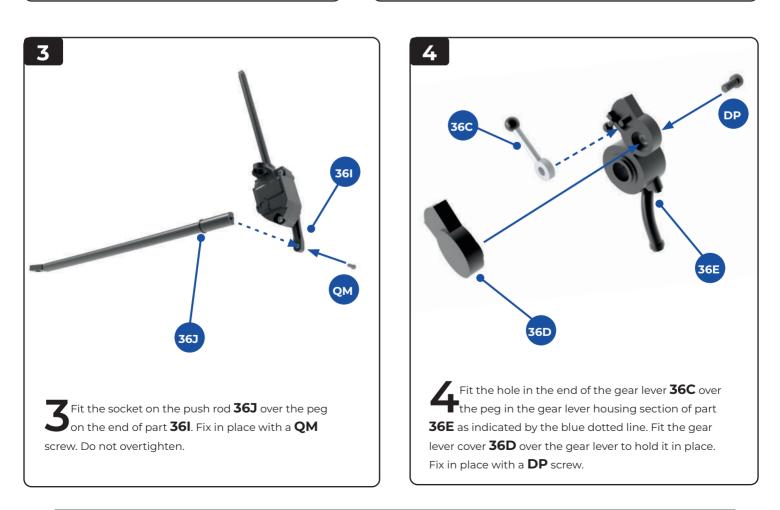
The floor and nearside wall of the driver's cab are fixed together and some of the controls are then fitted in place.

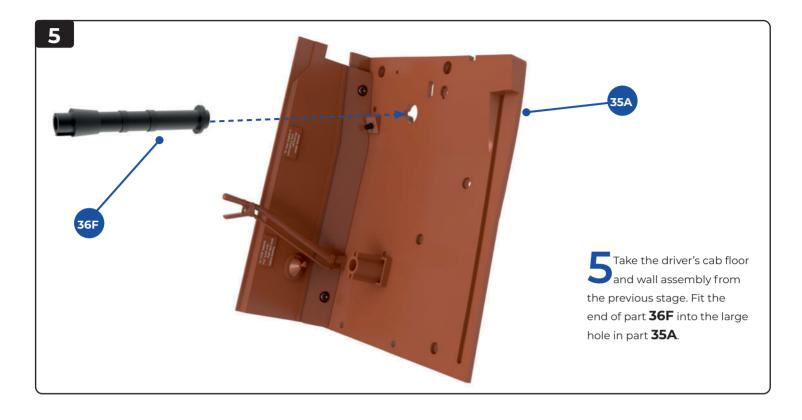


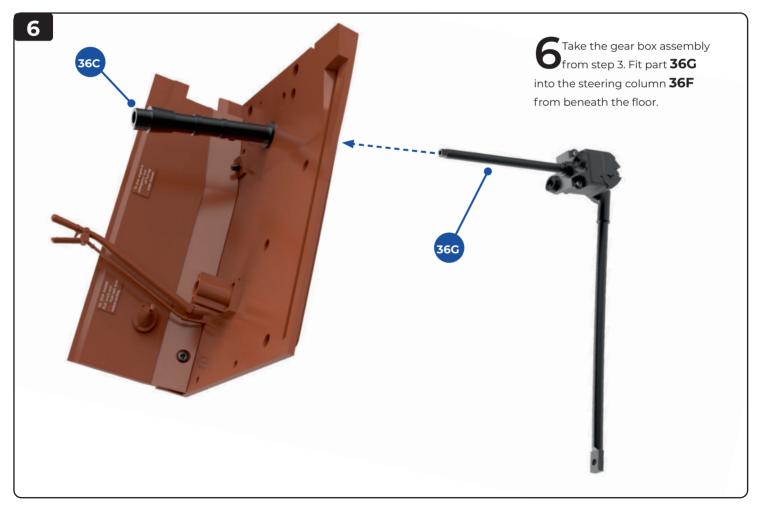
KEY TO PARTS SUPPLIED 36J Push rod			
36A	Steering wheel	36K	Gear box
36B	Сар	36L	Gear box
36C	Gear lever		
36D	Gear lever cover	PM	1.7 x 3 x 5mm (x2)
36E	Horn column and gear lever housing	СМ	1.7 x 4mm (x6)
36F	Steering column	QM	1.7 x 5mm (x2)
36G	Steering shaft	MM	2.0 x 4mm (x2)
36H	Steering gear	DP	1.7 x 4mm (x2)
361	Rocker lever		

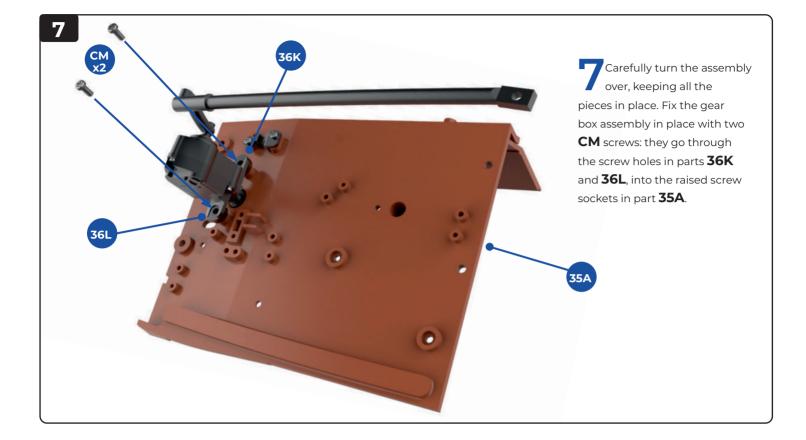
Fit the raised square section of the rocker lever **36I** into the opening in the gear box section **36K**. Fit the square opening in the steering gear **36H** over the raised square section of **36I**. Fix in place with a **PM** screw.

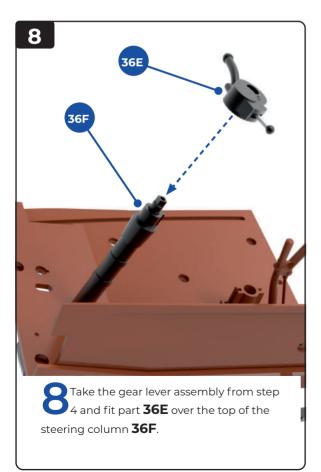


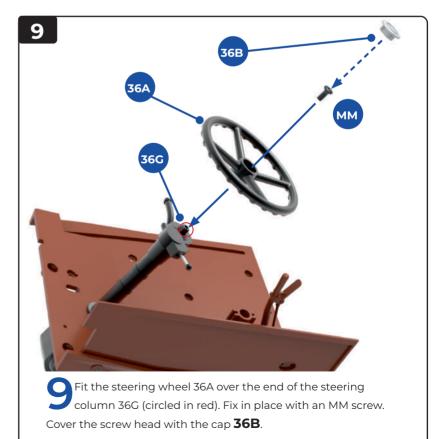


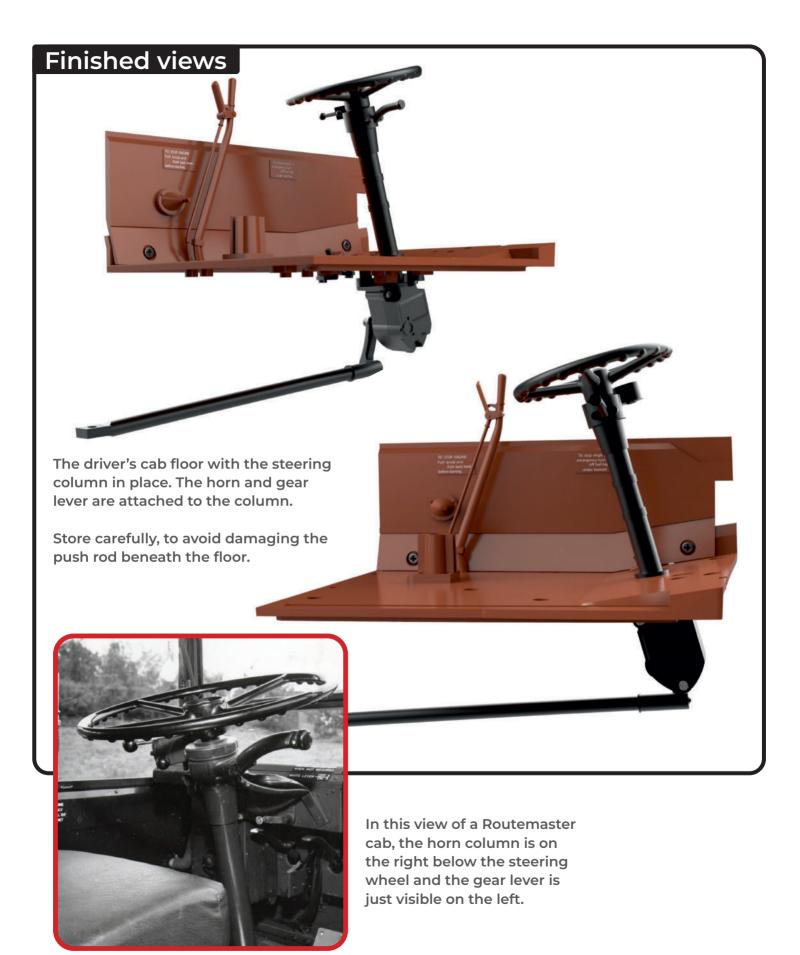






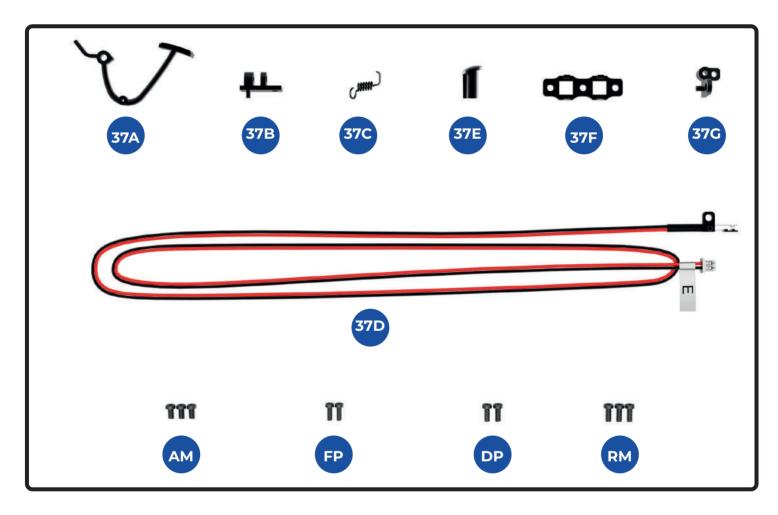




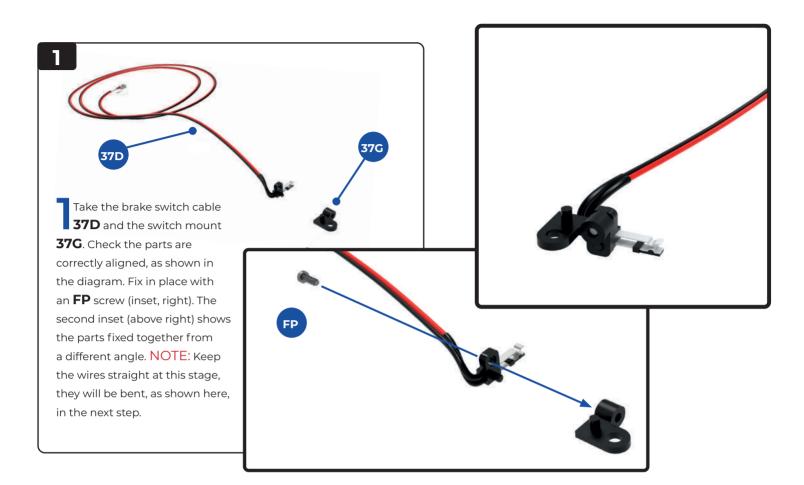


STAGE 37 BRAKE PEDAL AND ACCELERATOR

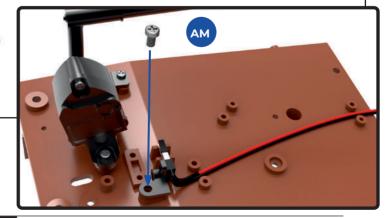
Several small parts are supplied in this stage, which enable you to fit the brake pedal and accelerator pedal. The brake pedal has a cable connection that will eventually connect with the rear brake lights.



KEY 1	TO PARTS SUPPLIED	AM	1.7 x 3mm (x3)
37A	Brake pedal	FP	1.5 x 4mm (x2)
37B	Brake pedal hinge	DP	1.7 x 4mm (x2)
37C	Return spring	RM	1.7 x 4mm (x3)
37D	Brake switch cable		
37E	Accelerator pedal		
37F	Back panel (keep for use in stage 38)		
37G	Switch mount		



2 Turn over the cabin floor (**35A**), with all parts carefully supported. Identify the fixing point (circled in blue, left) for the switch mount **37G**. With the cable bent away from the switch mount, fit the peg on the switch mount into the hole on the right in the diagram. Fix the switch mount in place with an **AM** screw, into the hole on the left (inset, below).



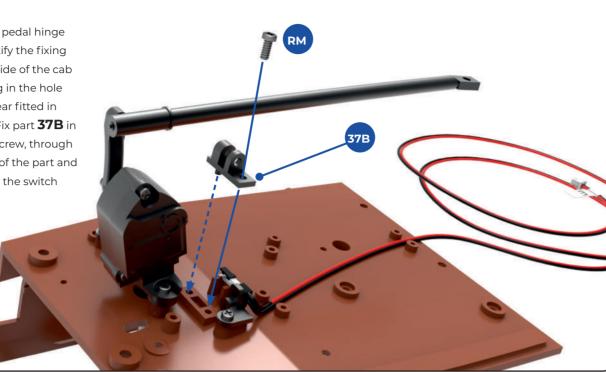
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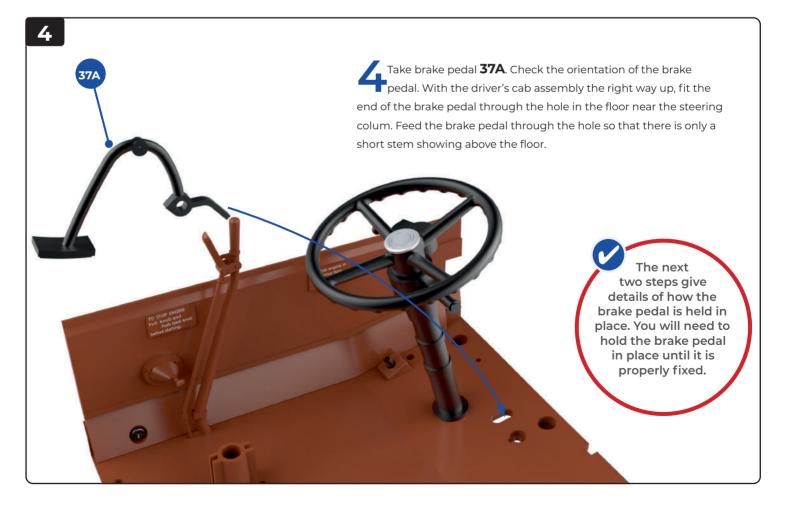
370

35A

3

3Take the brake pedal hinge **37B** and identify the fixing point on the underside of the cab floor. Locate the peg in the hole near the steering gear fitted in the previous issue. Fix part **37B** in place with an **RM** screw, through the hole at the end of the part and into the socket near the switch fitted in step 2.





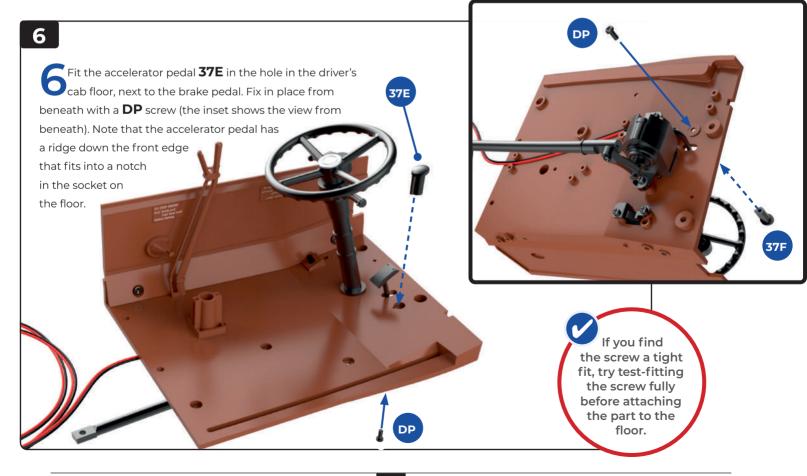
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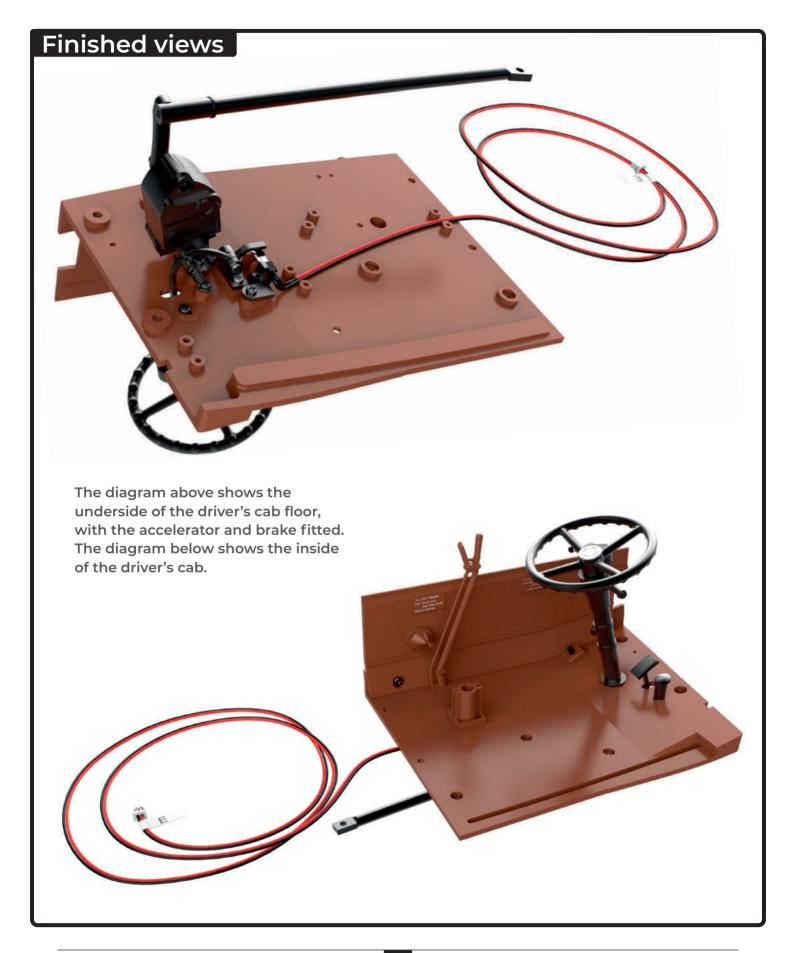
37C

5 Working on the underside of the floor, align the large socket on the brake pedal **37A** with the gap in the brake pedal hinge **37B** as indicated by the red dotted line. Using an **RM** screw, pass it through the hole in the brake pedal and the brake hinge to secure the pedal in place (inset). Take the spring **37C** and check the orientation. Fit one end into the socket half-way along the brake pedal, as indicated by the blue dotted line. Fit the other, looped end over the screw socket (circled in red) on the underside of the cab floor and fix in place with an **AM** screw (inset).

You may find it easier to temporarily remove the cable assembly fitted in step 2 whilst completing this step.

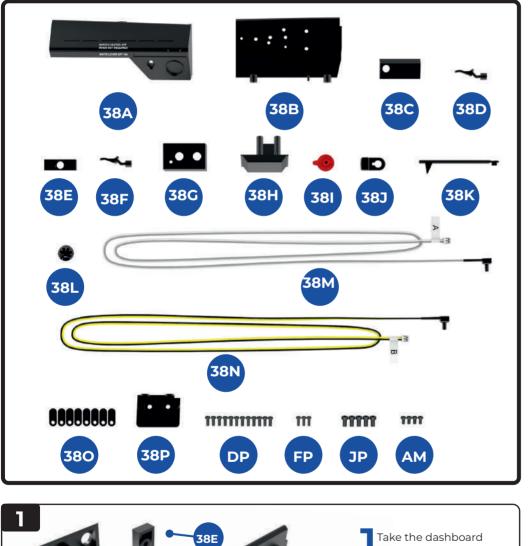
37C





FITTING THE DASHBOARD AND ACCESSORIES IN THE CAB

The main elements of the dashboard are supplied with this stage. The indicator switch and speedometer are fitted in place and the assembly is fixed to the cab floor, with cables attached.



KEY TO PARTS
SUPPLIED

38A	Dashboard
38B	Dashboard base
38C	Panel
38D	Right control lever
38E	Panel
38F	Left control lever
38G	Instrument box
38H	Cover
38 I	Indicator switch
38 J	Switch base
38K	Post
38L	Speedometer
38M	Electric switch
38N	Electric switch
380	Cable clips (x8, five
	spare)
38P	Electric switch panel
DP	1.7 x 4mm (x12)
FP	1.5 x 4mm (x3)
JP	2.3 x 4mm (x5)
AM	1.7 x 3mm (x4)

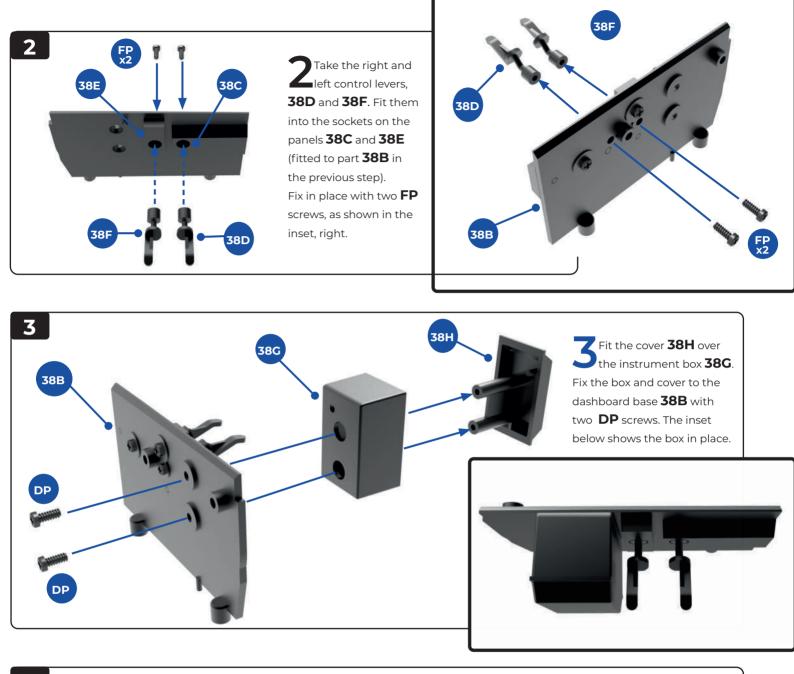
Take the dashboard base **38B** and identify the fixing points for the panels **38C** and **38E**. Fix the panels in place with two **DP** screws.

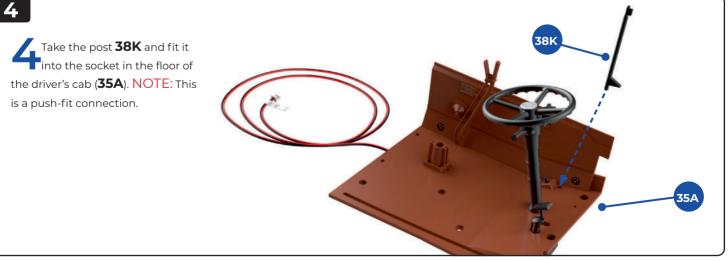
There are many small parts supplied with this stage. It is a good idea to lay them out and identify them before you start assembly.

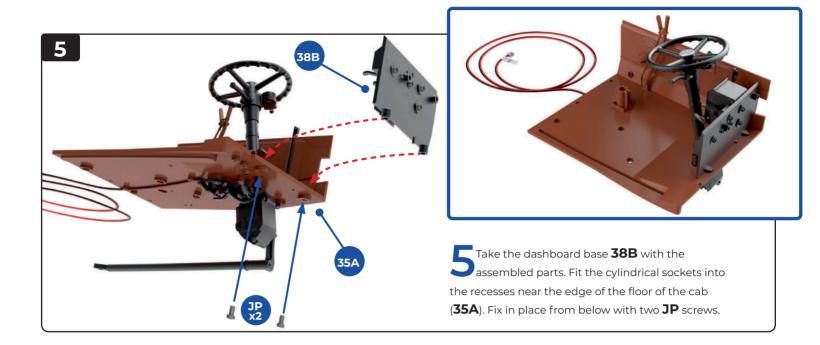
38B

36

DP x2

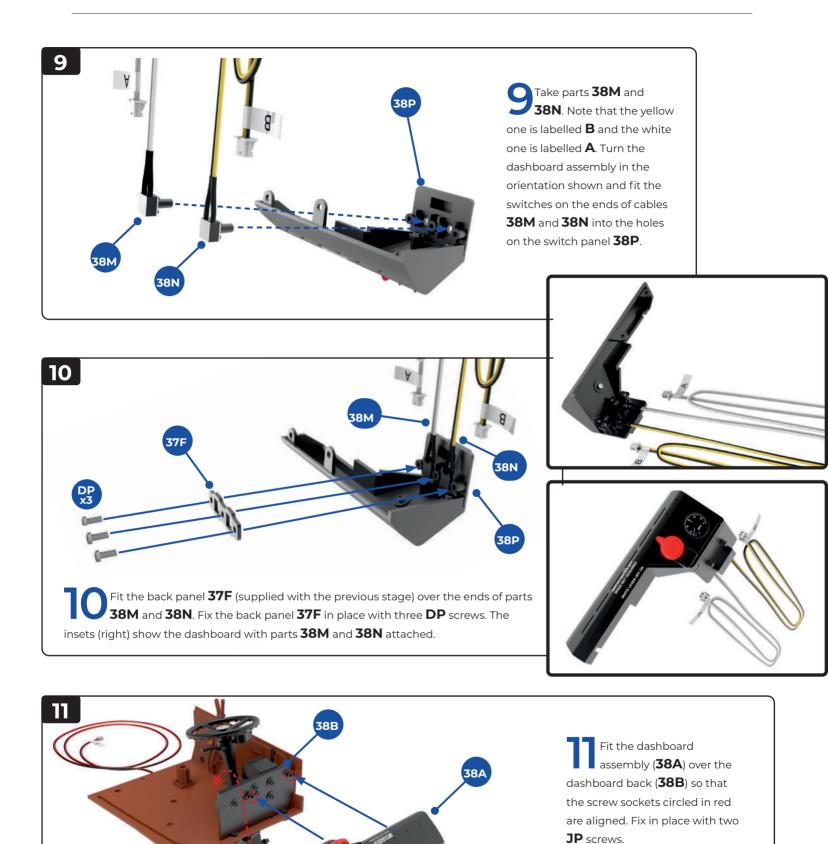










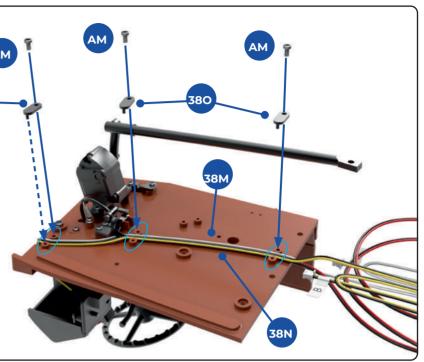


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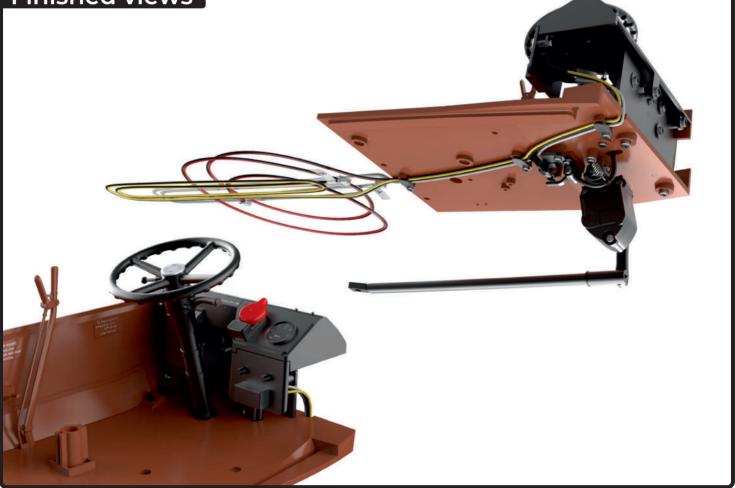
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ΗР

12 Guide the white and yellow switch cables (38M and 38N) through the notch in the edge of the cab floor 38A (inset above). Take the cables across the underside of the cab floor, between the pairs of sockets circled in light blue. Fix the cables in place with the three cable clips 38O. The pegs on the cables go into one socket and the other side is held in place with an AM screw, as indicated on the left hand side in the diagram.

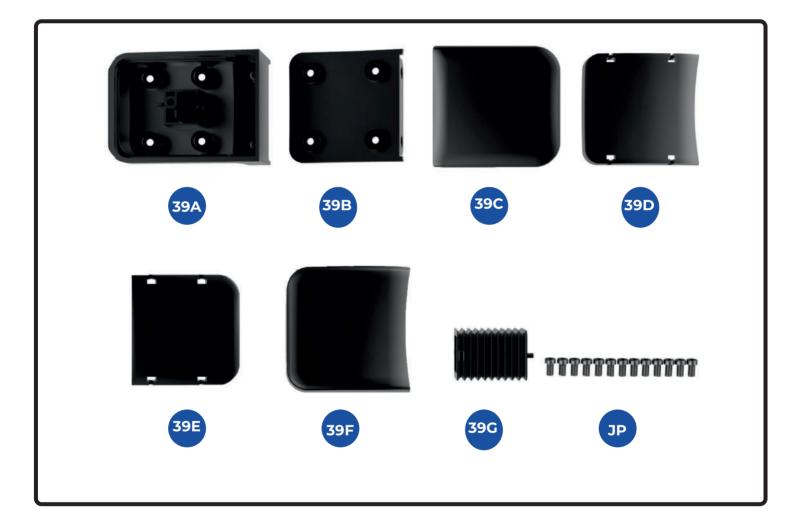


Finished views

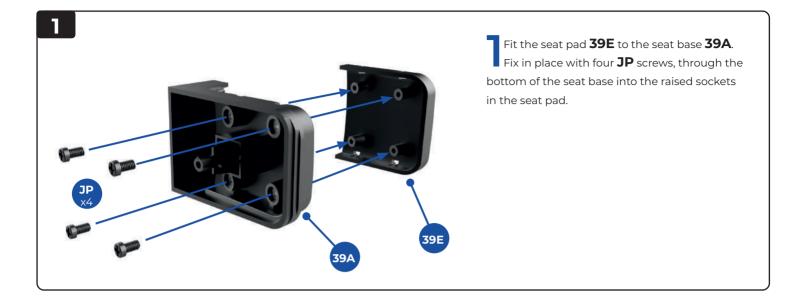


STAGE 39 ASSEMBLING AND FITTING THE DRIVER'S SEAT

With this stage, parts are supplied for the driver's seat and support. The parts are assembled and fitted to the driver's cab.

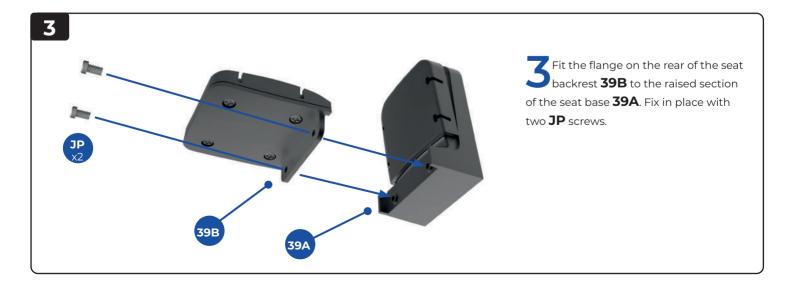


	TO PARTS SUPPLIED		
39A	Seat base	JP	2.3 x 4mm (x13)
39B	Backrest		
39C	Seat upholstery		
39D	Backrest pad		
39E	Seat pad		
39F	Backrest upholstery		
39G	Seat support		

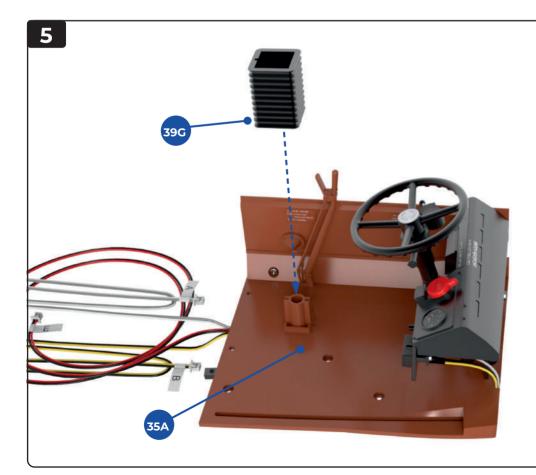




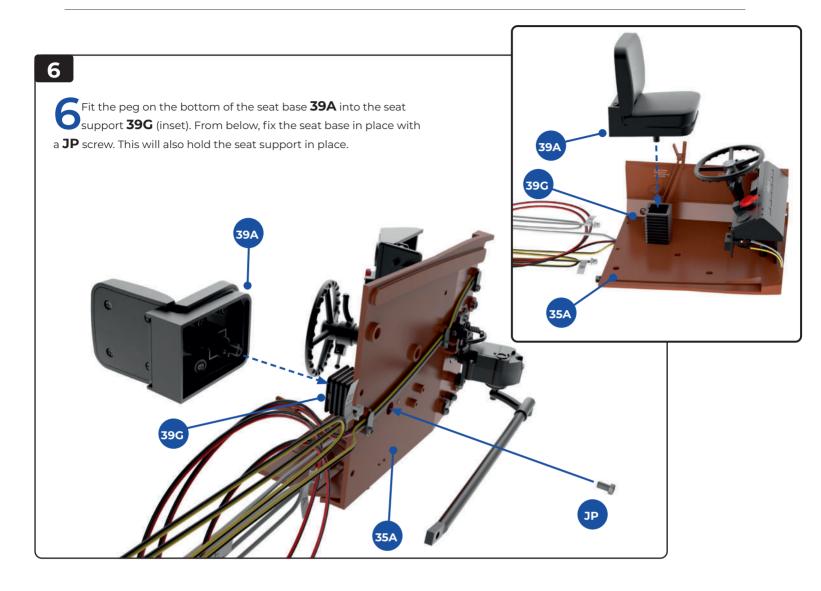
A subscription of the backrest pad 39D and the backrest 39B. Check the orientation of the backrest: the flange at the base of the backrest is to the rear of the seat. Fit the parts together and fix with four JP screws.

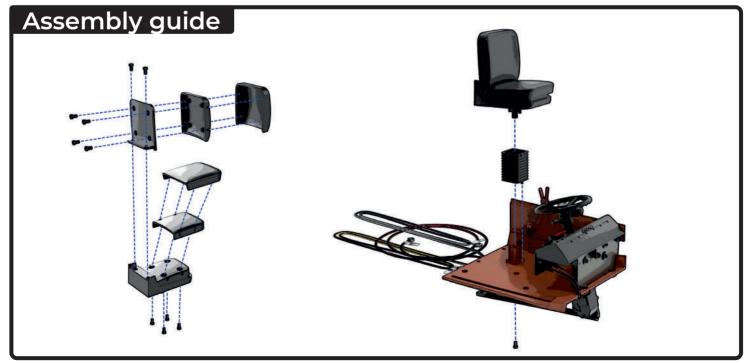






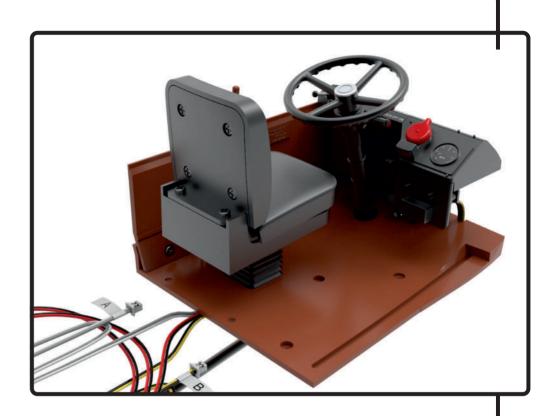
5 Fit the seat support **39G** over the cylindrical peg on the cab floor **35A**. **NOTE**: There is a pin on part **39G**, which locates in the cab floor to prevent it from twisting.The support is not fixed in place at this stage (see step 6).

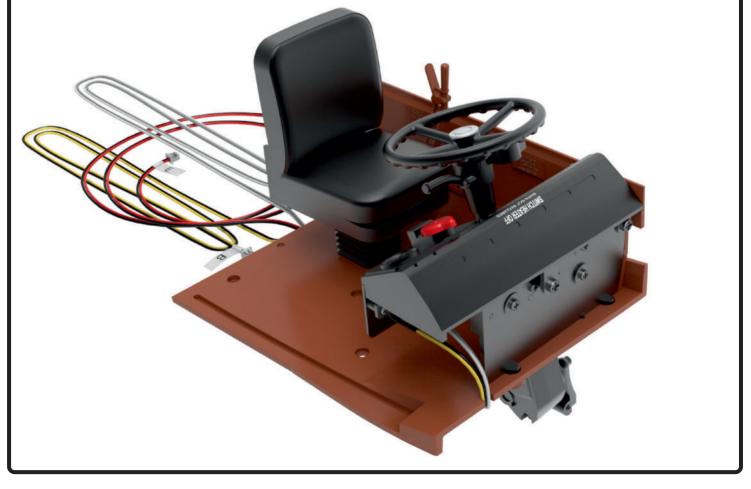




Finished views

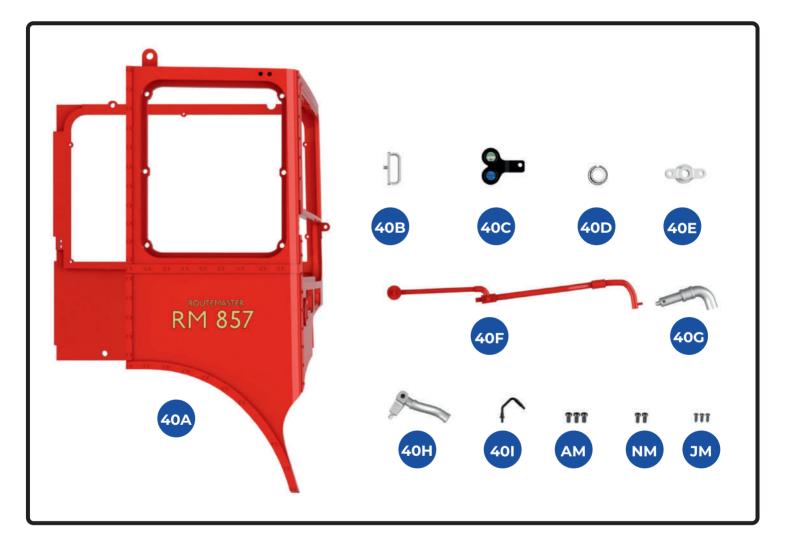
This completes the work for Stage 39. The illustration on the right shows the seat from behind; the illustration below shows the view from the front.



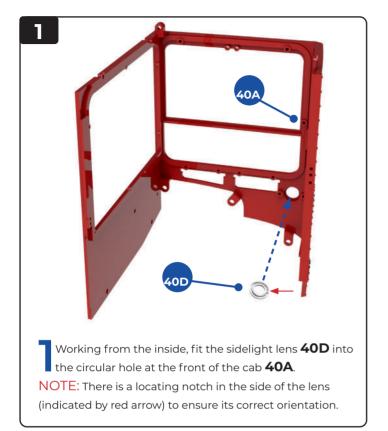


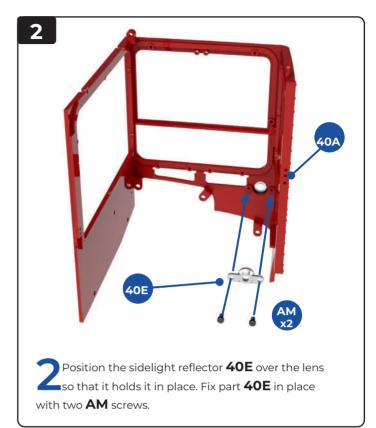
STAGE 40 FITTING ACCESSORIES IN THE DRIVER'S CAB

Small items, including the licence holder, and water pipes are fitted to the driver's cab. There is also a climb handle for the driver to use as he gets into the cab.



KEY TO PARTS SUPPLIED						
40A	Cabin frame	40H	Water pipe			
40B	Climb handle	401	Relief pipe			
40C	Licence holder	AM	1.7 x 3mm (x3)			
40D	Sidelight lens	NM	1.5 x 3mm (x2)			
40E	Sidelight reflector	Л	1.2 x 3mm (x3)			
40F	Heating line					
40G	Water pipe					



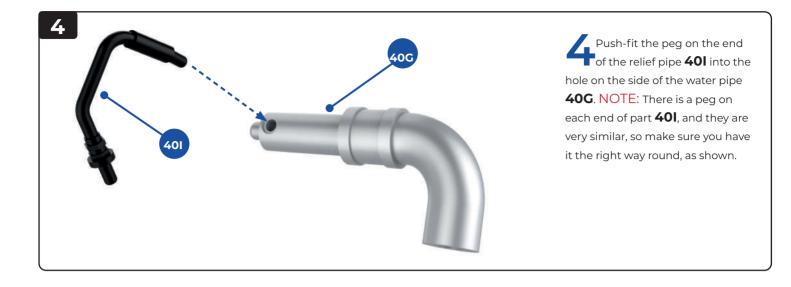


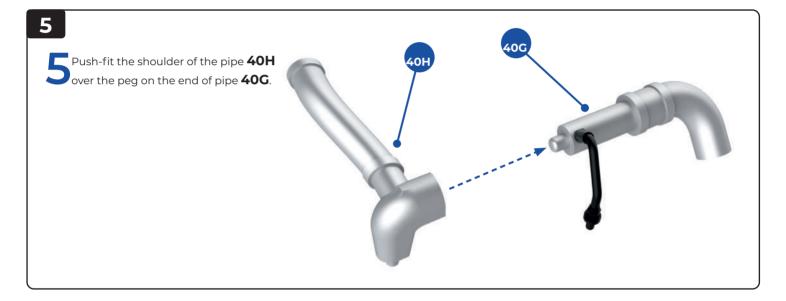


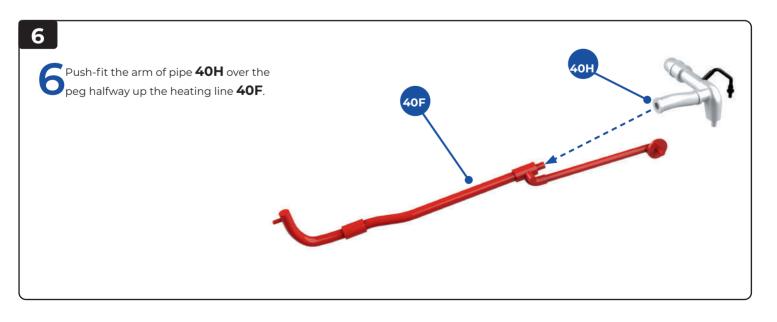
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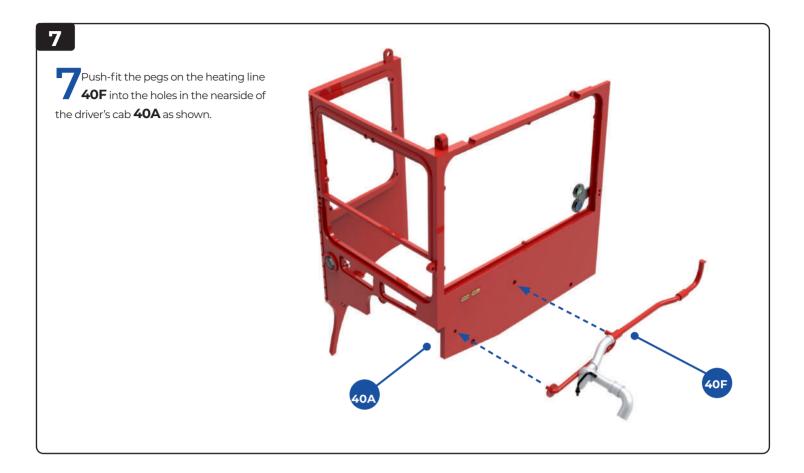
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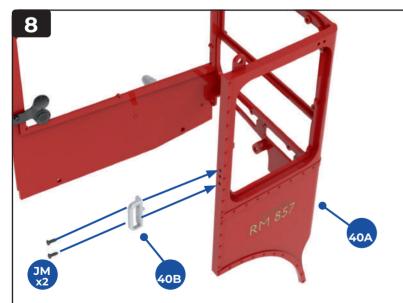
ROUTEMASTER BUS











8 Take the climb handle **40B** and identify the fixing point on the offside of the cab **40A**. Fix in place with two JM screws. The inset shows the handle in place. **NOTE:** Make sure you have the handle the right way round, so that it sits on the outer edge of the cab.



Finished views

Three views of the driver's cab with the pipes, licence holder and climb handle in place.



