Pack 07
BUILD INSTRUCTIONS

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STAGE 61
FITTING THE BONNET

In this stage we supply parts and instructions for fitting the bonnet. There are a lot of extra screws supplied with this stage. They will be used in the next two stages, when we go on to fit the lower deck to the chassis and the platform and stairs to the rear of the lower deck.
1. Identify the fixing points for the hinge bars 61A and 61B on the bonnet, 1D. Locate the peg at the end of each hinge bar in the socket on the top of the bonnet and fix in place from below with two CM screws.

For this stage, you will need:
- 5 x red DP screws
- 2 x red VM screws
- 5 x red CM screws
- 4 x red EM screws
- 2 x red FP screws

Put the screws that are not needed safely to one side, as they will be used in the following stages.

If a screw is a tight fit, you may find it helpful to screw in a half turn forwards followed by a quarter turn back until the screw is fully in place.

2. Take the two hinge brackets 61I. Fit the arms between the screw holes in the right and left hinge bars 61A and 61B, which are clearly labelled “R” and “L”. Fix in place with two VM screws, ensuring they go right across the hinged assembly.

3. Take one set of friction hinge links, parts 61E, 61F and 61G. Arrange the three parts as shown, noting the position of the locating peg circled in light blue. (The circled locating peg is closer to the end of part 61F, which is the end that is connected to part 61E.) Fix the hinge links together with an EM screw. Fit the free end of part 61E into the slot in part 61C. Note that the raised sockets on part 61G are on the same side as the slimmer arm of the slot on part 61C, as indicated by the red dotted arrow. Fix with a CM screw.
Repeat to assemble the second set of friction hinge links, parts 61E, 61F and 61G. Again, note the position of the locating peg circled in light blue. Fix the hinge links together with an EM screw. Fit the free end of part 61E into the slot in part 61D. Note, again, that the raised sockets on part 61G are on the same side as the slimmer arm of the slot on part 61D, as indicated by the red dotted arrow. Fix with a CM screw.

Take the bonnet assembly and the bonnet lock 61J. Identify the fixing point for the lock on the side of the bonnet. Align the latch 61K with the latch on the inside of the bonnet and fix in place from the inside with one DP screw.

Take the right friction hinge assembly and identify the fixing point on the right-hand side of the inside of the bonnet. Locate the peg on the underside of part 61C in one hole and fix the hinge in place with a CM screw. Repeat to fix part 61D to the left-hand side of the bonnet (inset below).
7 Take the latch striker 61L and locate the fixing points on the bonnet stiffener 1E. Locate the peg on part 61L into the end hole and fix in place with two FP screws.

8 Take the two friction hinge brackets 61H and align the screw sockets with the sockets on the front wall 47A, locating the peg on each bracket in the hole indicated by the dotted lines. Fix in place with two DP screws.

9 Align the screw sockets on the hinge brackets 61I with the holes in the raised panels beneath the front passenger window on the front wall 47A. Fix in place with two red DP screws.
On the left side of the bonnet, fit the free ends of the friction hinge links 61F and 61G on either side of the friction hinge bracket 61H. Fix in place with an EM screw.

On the right-hand side of the bonnet, repeat to fit the free arms of the friction hinge links 61F and 61G on either side of the friction hinge bracket 61H. Fix in place with an EM screw.

The bonnet is fixed in place, but it is only supported by the hinges, so handle the lower deck with care.
STAGE 62
FITTING THE LOWER DECK TO THE CHASSIS

In this stage, your model takes a major step as the chassis and lower deck are attached. The parts supplied are for seating in the upper deck. Assembly instructions will be given in stage 64.

KEY TO PARTS SUPPLIED

62A  Right seat frame 1 (x2)  JP  2.3 x 4mm (x27)
62B  Right seat frame 2 (x2)
62C  Right seat cushion (x4)
62D  Right seat backrest (x4)
62E  Seat support (x4)

For the body/chassis assembly in this stage you will need the following screws, supplied with stage 61. Get them lined up, ready for use.

3 x GM screws
10 x JP screws
2 x IP screws
1 Position the bus body on the chassis, ensuring that the three tabs on the rear door wall 52A fit over the sockets in the chassis 16A. See also the diagram in step 5. At the same time, check the positions of the raised screw sockets on the underside of the floor panels 43A and 42A. There are four on each side, which fit into sockets down either side of the chassis frames 16A and 17A, as indicated by the dotted lines.

2 AT THE SAME TIME ensure that the D cable 43D is aligned in the same direction as cables A, B, C and E (which are fixed to the chassis frame 16A). Ensure that the ends of the cables are pulled well clear of the body and chassis.

3 AT THE SAME TIME align the peg on the heating line 40F against the hole beneath the bonnet on the front wall 47A. When all these elements are in place, you can start to fix the chassis and body together.
4. Check that all the wires are correctly placed before continuing. Starting at the rear underside of the bus, attach the rear door wall 52A to the rear chassis frame 16A using three GM screws.

5. Continue down the right-hand side of the underside of the bus, using four JP screws to fix the chassis frames 16A and 17A to the floor sections of the lower deck, 42A and 43A.

6. Continue down the other side of the bus, using four JP screws to fix the chassis frames to the floor. Note the position of the screw on the right in this picture, which is fitted more centrally than the other ones (circled in red).
At the rear right-hand corner, fix the deck 43A to the chassis frame 16A using an IP screw. Repeat at the rear left-hand corner (inset below).

Finally, fix the left rear wheel arch 31A to the left side wall 49A with a JP screw. Repeat to fix the right rear wheel arch 31B to the right side wall 49C with a JP screw (inset above).
Finished Views
STAGE 63
FITTING THE PLATFORM AND CONNECTING CABLES

In this stage, the platform is fitted to the rear of the bus. Cables are connected to the circuit board that is under the stairs. The seat parts supplied with this stage will be assembled later.

KEY TO PARTS SUPPLIED

63A Right seat frame 1 (x2)
63B Right seat frame 2 (x2)
63C Right seat cushion (x4)
63D Right seat backrest (x4)
63E Seat support (x4)
JP 2.3 x 4mm (x27)

Instructions for assembling the parts supplied in this stage will appear in stage 64. For this stage you will need:
4 x black FM screws
4 x black JP screws supplied with stage 61.
1 Locate the rear platform and stairs assembly to the rear wall of the bus. There are four tabs on the underside of rear platform 56A which fit into recesses on the rear chassis frame 16A.

2 Fix the rear platform 56A to the rear chassis frame 16A using four black FM screws.

3 Fix the right side wall 49C to the stair section 58A and the staircase structure 57D using four black JP screws.

If you have fixed the pole 59B to the rear platform (see stage 59) remove it before fixing the platform, to avoid damaging the pole.
The next step is to fit all the cables to the circuit board 57E on the right-hand side of the bus, under the stairs. Fit the cable labelled D, part 43D, into the socket labelled D on the circuit board (the D label on the circuit board is circled in red). Fit the cable labelled P (56B, attached to the battery box) to the socket labelled P.

Fit B cable 38N into the socket labelled B on the circuit board.

You may find it helpful to use tweezers when connecting the cables.

Fit K cable 53D into the socket labelled K on the circuit board.
7. Fit the A cable 38M into the socket labelled A on the circuit board.

8. Fit the E cable 37D into the socket labelled E on the circuit board.

9. Fit the C cable 41K into the socket labelled C on the circuit board.

Cable 41K is too short to reach the C socket. We are aware of this problem and will be supplying you with an extension cable in stage 71. Please leave the cable unplugged until then.
The body of the bus is now fitted to the chassis frame, and the stairs and platform are attached to the back of the bus. The cables have been connected to the circuit board under the stairs (right).
STAGE 64
SEATING FOR THE UPPER DECK (1)

In this stage, we assemble the parts supplied with stages 62 and 63 – seating for the right-hand side of the upper deck. Instructions for assembling the parts supplied with this stage will appear in stage 65.

**KEY TO PARTS SUPPLIED**

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>64A</td>
<td>Left seat frame 1 (x2)</td>
<td></td>
</tr>
<tr>
<td>64B</td>
<td>Left seat frame 2 (x2)</td>
<td></td>
</tr>
<tr>
<td>64C</td>
<td>Left seat cushion (x4)</td>
<td></td>
</tr>
<tr>
<td>64D</td>
<td>Left seat backrest (x4)</td>
<td></td>
</tr>
<tr>
<td>64E</td>
<td>Seat support (x4)</td>
<td></td>
</tr>
<tr>
<td>JP</td>
<td>2.3 x 4mm (x27)</td>
<td></td>
</tr>
</tbody>
</table>

*Note the difference between parts 64A and 64B: 64B has fixing points for the upright poles at the ends of alternate seats.*
YOU WILL NEED THE FOLLOWING PARTS:

- **62A and 63A** Right seat frames
- **62B and 63B** Right seat frames 2
- **62C and 63C** Right seat cushion
- **62D and 63D** Right seat backrest
- **62E and 63E** Seat support

1. Fit a right seat backrest **62D** to a seat frame **62A**. Fix in place with two **JP** screws.

2. Fit a right seat cushion **62C** into the seat of the same right seat frame **62A**. Fix in place with two **JP** screws.
3. Fit a seat support 62E on the underside of the seat frame 62A. **NOTE:** The rear leg of the seat support is shorter than the front leg, to ensure that the seat slopes back slightly. Fix in place with two JP screws. Repeat steps 1–3 to make a second seat (see inset, right).

4. Now take one of the seat frames 62B. Fit a seat backrest 62D into the frame and fix in place with two JP screws.
5 Fit a seat cushion 62C into the same seat frame 62B. Fix in place with two JP screws.

6 Fit a seat support 62E to the underside of seat frame 62B, ensuring that the seat slopes down at the back. Fix in place using two JP screws. Repeat to fit the cushions and support to the second seat frame 62B.

Repeat steps 1 to 6 to assemble the parts supplied with stage 63.
The eight seats for the right-hand side of the upper deck are complete.
STAGE 65
SEATING FOR THE UPPER DECK (2)

In this stage, we assemble the parts supplied with stage 64 and with this stage, to build the seats for the left-hand side of the upper deck.

KEY TO PARTS SUPPLIED

65A  Left seat frame 1 (x2)
65B  Left seat frame 2 (x2)
65C  Left seat cushion (x4)
65D  Left seat backrest (x4)
65E  Seat support (x4)

JP  2.3 x 4mm (x27)

You will also need the identical parts supplied with stage 64.

Note the difference between parts 65A and 65B: 65B has fixing points for the upright poles at the ends of alternate seats.
1. Fit a left seat backrest 64D to a seat frame 64A. Fix in place with two JP screws.

2. Fit a left seat cushion 64C into the seat of the same left seat frame 64A. Fix in place with two JP screws.
3 Fit a seat support 64E on the underside of the seat frame 64A. **NOTE:** The rear leg of the seat support is shorter than the front leg, to ensure that the seat slopes back slightly. Fix in place with two JP screws. Repeat steps 1–3 to make a second seat (see inset, right).

4 Now take one of the seat frames 64B. Fit a seat backrest 64D into the frame and fix in place with two JP screws.
5 Fit a seat cushion 64C into the same seat frame 64B. Fix in place with two JP screws.

6 Fit a seat support 64E to the underside of seat frame 64B, ensuring that the seat slopes down at the back. Fix in place using two JP screws. Repeat to fit the cushions as support to the second seat frame 64B.

Repeat steps 1 to 6 to assemble the parts supplied with this stage.
The eight seats for the left-hand side of the upper deck are complete.
STAGE 66
REAR SEATS FOR THE UPPER DECK

Continuing with the seating for the upper deck, the rear two left-hand seats are supplied with this stage. The back seat is fitted to panels that will be positioned above the stairs.

KEY TO PARTS SUPPLIED

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>66A</td>
<td>Rear seat back panel</td>
</tr>
<tr>
<td>66B</td>
<td>Rear seat backrest</td>
</tr>
<tr>
<td>66C</td>
<td>Rear seat cushion</td>
</tr>
<tr>
<td>66D</td>
<td>Rear seat base</td>
</tr>
<tr>
<td>66E</td>
<td>Left seat frame</td>
</tr>
<tr>
<td>66F</td>
<td>Seat support</td>
</tr>
<tr>
<td>66G</td>
<td>Left seat cushion</td>
</tr>
<tr>
<td>66H</td>
<td>Left seat backrest</td>
</tr>
<tr>
<td>JP</td>
<td>2.3 x 4mm (x14)</td>
</tr>
</tbody>
</table>
1. Fit the left seat backrest 66H into the left seat frame 66E. Fix in place with two JP screws.

2. Fit the left seat cushion 66G into the left seat frame 66E and fix in place with two JP screws.

3. Fit the seat support 66F to the underside of the seat frame 66E, ensuring the locating peg on the underside of the seat (circled in light blue) fits into the hole in the seat support. Fix in place with two JP screws.
4. Take the rear seat base 66D and the rear seat back panel 66A. Check how they fit together (the view shown here is from below/behind). Fix together with two JP screws.

5. Align the holes in the rear seat backrest 66B with those in the rear seat backpanel 66A and fix in place with two JP screws.

6. Fit the rear cushion 66C onto the rear seat base 66D. Fix in place with two JP screws. The inset below shows the view from below.
The last two seats at the rear of the upper deck have been assembled.
STAGE 67
FITTING THE REAR SEATS TO THE UPPER DECK

In this stage we supply the rear section of the upper deck. Seats assembled in previous stages are fitted to the deck.

KEY TO PARTS SUPPLIED

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>67A</td>
<td>Upper deck (rear)</td>
</tr>
<tr>
<td>JP</td>
<td>2.3 x 4mm (x14)</td>
</tr>
</tbody>
</table>
1. Take the rear seat assembly from the previous stage and the rear section of the upper deck 67A supplied with this stage. Check the orientation of the floor and fit the rear seat base 66D to the upper deck 67A. Fix in place with two JP screws.

2. Take the rear left seat assembled in the previous stage, and the assembled left seat frame 64A. Identify the fixing points on the upper deck 67A. Fix each seat support in place with two JP screws, so that the screws fit into the socket in the base of the seat supports 66F and 64E.
3 Take the next right-hand seat, seat frame 64B. Position it at the front of the rear upper deck section 67A and identify the fixing points. Fix in place with two JP screws, locating them in the base of the seat support 64E.

Note that seat frame 64B has a bracket for an upright pole.

4 Take the rear right-hand seat, seat frame 62B. Identify the fixing points on the rear section of the upper deck 67A. Fix in place with two JP screws, locating them in the base of the seat support 62E.

Note that seat frame 62B has a bracket for an upright pole.

5 Take the next right-hand seat, seat frame 62A. Check the position where it fits at the front of the rear upper deck section 67A. Fix in place with two JP screws, into the base of the seat support 62E.
The rear seat, three left-hand seats and two right-hand seats are fitted to the rear section of the upper deck. Note which seats should have brackets for upright poles (circled in light blue).
STAGE 68
CENTRAL SEATING 
ON THE UPPER DECK

The central section of the upper deck is supplied. Six of the seats that were assembled earlier are fitted to the upper deck and the central and rear deck sections are joined together.

KEY TO PARTS SUPPLIED

68A  Central section of upper deck

JP   2.3 x 4mm (x21)
1. Take the assembled left seat 64B. NOTE: This seat has a fixing point for an upright pole (circled in red). Fit on the left-hand side of the floor 68A between the previous two seats. Fix in place with two JP screws through the floor and into the seat support 64E.

2. Fit the left-hand seat 65A in place at the front left of the central section of the upper deck 68A. Fix in place using two JP screws, through the floor and into the legs of the seat support 65E. Repeat to fit the seat 64A at the rear left of the floor section.
3 Take the right-hand seat 62A. This seat should be fitted to the two central holes on the right-hand side of the floor section 68A. Fix in place with two JP screw through the floor and into the legs of the seat support 62E.

4 The last two seats to be fitted in place are right-hand seats with fixing points for the upright poles (circled in red). Fit seat 63B at the rear of the floor section and seat 62B at the front, using two JP screws for each seat.
The six seats have been fitted to the central section of the upper deck. Before proceeding, double check that you have the seats with fixing points for the upright poles in the correct position. The fixing points have been circled in red.

5 Take the rear floor section 67A and position the tabs at the front so that they are aligned with the raised screw holes at the rear of floor section 68A. The raised screw holes on part 68A fit into the recesses on the tabs on part 67A. Fix each tab in place with two JP screws.
Finished Views

ROUTEMASTER BUS

RM 857
STAGE 69
FRONT SEATING ON THE UPPER DECK

The front section of the upper deck is supplied. Six of the seats that were assembled earlier are fitted to the front section of the upper deck, which is then connected to the rest of the upper deck.

KEY TO PARTS SUPPLIED

69A  Front section of upper deck

JP   2.3 x 4mm (x19)
1. Fit a left-hand seat 65A in place in the middle of the front section of the upper deck 69A. Fix in place using two JP screws, through the floor and into the legs of the seat support 65E.

2. Take two assembled left seats 65B. **NOTE:** These seat have fixing points for upright poles (circled in red). Fit on the left-hand side of the floor 69A; position one at the front of the floor section and the other at the back. Fix each seat in place with two JP screws through the floor and in to the seat support 65E.
3 Take a right-hand seat 63B, which has a fixing point for an upright pole (circled in red). This seat should be fitted to the two central holes on the right-hand side of the floor section 69A. Fix in place with two JP screws through the floor and into the legs of the seat support 63E.

4 The last two seats to be fitted in place are right-hand seats 63A. Fit one seat at the front of the floor section and one at the back. Fix in place, using two JP screws for each seat.
Six seats have been fitted to the front section of the upper deck. Before proceeding, double check that you have the seats with fixing points for the upright poles in the correct position. The fixing points have been circled in light blue.

Take the central and rear floor sections, 68A and 67A, which were assembled in the previous stage. Position the tabs at the front of 68A so that they are aligned with the raised screw holes at the rear of floor section 69A. The raised screw holes on part 69A fit into the recesses on the tabs on part 68A. Fix each tab in place with two JP screws.
STAGE 70
LOWER DECK CEILING FRAMEWORK

In this stage, we fit a framework to the underside of the upper deck, so that the ceiling of the lower deck can be fixed to it.

KEY TO PARTS SUPPLIED

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>70A</td>
<td>Ceiling framework</td>
</tr>
<tr>
<td>JP</td>
<td>2.3 x 4mm (x6)</td>
</tr>
</tbody>
</table>
Carefully turn the assembled upper deck floor upside down and make sure it is well supported so that the seats do not get damaged. Position the lower deck ceiling framework 70A on the underside of the rear section of the floor 67A. The five corner sockets on the framework (circled in red) should align with five raised screw sockets on the underside of the floor (circled in blue). Fix in place with five JP screws.