Pack 01
BUILD INSTRUCTIONS

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STAGE 01
RADIATOR GRILLE AND BONNET ASSEMBLY

Assemble the first two sections of your Routemaster: the radiator grille with front number plate and the bonnet with hinged access panel.

KEY TO PARTS SUPPLIED

1A Grille frame
1B Grille
1C Licence plate
1D Bonnet
1E Bonnet brace
1F Access panel
1G Hinge (x2)
1H Hinge seat (x2)
1I Bush (x6, includes a spare)
AM M1.7 x3mm (x20, includes 4 spares)
BM M1.7 x7mm (x3)

We have also supplied a screwdriver (suitable for use with the screws supplied with this model)

Make sure you have identified all the parts correctly. If you are not using them straight away, it is a good idea to store them in clearly labelled small resealable plastic bags.
1 Take the front registration plate (1C) and locate the pegs on the back of it into the holes at the bottom of the front of the radiator grille frame (1A). Screw in place from the inside of the frame, using two AM screws.

2 Position the radiator grille (1B) on the back of the frame (1A), ensuring that the holes and recesses in the edge of the grille fit over the raised screw sockets on the back of the frame. **TAKE CARE!** The grille is not reversible – position the indent in the upper edge of the grille below the socket on the frame (see dotted line).

3 With the grille in position, at each fixing point take a bush (1I) and pass an AM screw through it from the flat side before securing the screw in the socket. The bushes act as washers to hold the grille in place, forming caps over the raised sockets. Note that there are five fixing points altogether.

If the screw holes have become clogged with paint during manufacture, you can clear them with a fine modelling file or similar.
4 Assemble the hinge mechanism that allows the access panel (1F) to be opened and closed. Align the socket in one hinge (1G) between the sockets in the hinge seat (1H), as shown.

5 Insert one long screw (BM) through the screw holes in both items. NOTE: one socket on the hinge is narrower than the other; insert the screw through the thinner side first. Do not overtighten, the hinge needs to be able to move freely. Repeat for the second hinge.

6 Use the peg (circled) on each hinge mechanism as a guide to position the hinges (1G) on the inside of the access cover (1F). Fit the pegs into the larger holes on the inside of the cover and secure with two AM screws, taking care not to overtighten and cause damage.

7 On the inside of the bonnet (1D), fix the hinges (1H) to the holes indicated, using two AM screws. Check that the access panel opens and closes smoothly and loosen or tighten the long hinge screw fitted in step 5 if necessary.
8 Working from the inside of the bonnet, take the bonnet brace (1E) and check that it fits neatly into the bonnet (1D). Using five AM screws, fix the brace in place at the positions shown.

Spare screws should be stored in clearly labelled resealable bags in case you need them at a later stage.

Viewed from the outside, the access panel fits flush against the side of the bonnet.

On the inside of the bonnet, the brace is screwed firmly in place and fits around the access panel hinges.
You have now completed two important parts for your Routemaster build: the bonnet panel with fleet number on the hinged access panel, and the radiator grille and registration plate. The bonnet will eventually rest on the top of the grille, as you can see in the detail of the model on the right.

These diagrams indicate the fixings that have been made, following the instructions in this stage.
**STAGE 02**

**OFFSIDE AND NEARSIDE HEADLIGHT ASSEMBLY**

In this stage you will find the offside and nearside wings. Follow the instructions to fit the headlights and join the wings to the radiator grille.

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**KEY TO PARTS SUPPLIED**

- **2A** Offside headlamp panel
- **2B** Headlamp lens (x2)
- **2C** Headlamp inner rim (x2)
- **2D** Nearest headlamp reflector
- **2E** Offside headlamp reflector
- **2F** Headlamp outer rim (x2)
- **2G** Offside grille washer
- **2H** Front nearside wing
- **2I** Wing protector trim
- **2J** Nearest grille
- **2K** Offside grille
- **AM** 1.7 x 3mm (x5 includes a spare)
- **CM** 1.7 x 4mm (x9 includes a spare)
- **DM** 1.0 x 3mm (x24 includes four spares)

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When working on your model, as well as an uncluttered working surface you will need a storage area for the parts you have assembled. It is a good idea to collect old shoe boxes or large sandwich containers where you can store everything, using tissue paper or bubble wrap to protect them.
1 Take the offside grille (2K) and check the fit against the inside of the offside headlamp panel (2A). The hole in the square tab fits over the screw socket on the panel. Use a bush (2G) to hold the square tab in place, aligning the notches (circled) and fixing it with an AM screw. (The rounded tab will be fixed in place in step 7.)

2 Take one of the headlamp lenses (2B) and fit it onto one of the inner rims (2C), aligning the recess and notch (circled). The narrower side of the lens fits into the lipped edge of the inner rim. Keeping the outer rim in place, from the inside fit the inner rim into the headlamp socket in the offside headlamp panel (2A). **NOTE:** Position the lip of the inner rim as shown in relation to the wing panel, so that the notches align with the fittings on the inner edge of the headlamp socket.

3 Take the offside headlamp reflector (2E) and fix it to the headlight socket in the panel (2A) using two AM screws. The lens and inner rim are now held in place.

4 Take the offside grille (2K) and check the fit against the inside of the offside headlamp panel (2A). The hole in the square tab fits over the screw socket on the panel. Use a bush (2G) to hold the square tab in place, aligning the notches (circled) and fixing it with an AM screw. (The rounded tab will be fixed in place in step 7.)
Using a craft knife, and working on a suitable surface (a cutting mat, kitchen chopping board or similar) remove the first wing protector strip from the fret (2I). Be careful not to bend it. Position the protector strip along the outer edge of the nearside front wing (2H) so that the holes are aligned and the ‘non slip’ side of the trim is uppermost. Fix in place with four DM screws.

a. Continue in the same way to fit the remaining four strips in place.

The nearside headlamp is assembled and attached in a similar way to the offside headlamp. First, fit the outer rim (2F) to the front nearside wing (2H).

a. Working from the inside, fit the lens (2B) and inner rim (2C) as described in Step 2.

b. Fit the nearside headlamp reflector (2D). NOTE: the screw fittings on the nearside are at a different angle to those on the offside. Fix in place with two CM screws.

C. Finally, fit the nearside grille (2J). Again, the fixings are different on this side. Fix in place with one AM screw.

Always take care when using a craft knife.
7 Fit the offside headlamp panel (2A) to the radiator grille frame (1A), assembled in the previous stage, using four CM screws. **NOTE:** the lowest screw on the right goes through the radiator grille panel tab to hold it in place (circled).

8 Fit the front nearside wing (2H) to the radiator grille frame using two CM screws – this will also fix the rounded tab on the nearside grille in place (circled). **TAKE CARE!** Because of the shape of these parts when assembled, take particular care to avoid putting any strain on them when you store them.
This completes the work for Stage 2 – the headlamps with vents beneath them, and the front nearside wing with strips of grip trim. Details of how to fit the electrics for the headlamps will be given in a future stage.

These diagrams indicate the fixings that have been made, following the instructions in this stage.
STAGE 03
LOWER PART OF THE STAIRCASE

The treads are fitted to the first four steps and the steps are joined together. A side panel is added to the outer edge of the steps to form the lower part of the staircase.

KEY TO PARTS SUPPLIED

3A Stair riser 1
3B Tread 1
3C Stair riser 2
3D Tread 2
3E Stair riser 3
3F Tread 3
3G Stair riser 4
3H Tread 4
3I Stair side panel
AP 1.7 x 3mm (x25, including three spares)

NOTE: AP screws are the same size as the AM screws in stages 1 and 2, but they have a self-tapping thread, to go into plastic. They are NOT interchangeable.

Check the stair sections to make sure that you have identified them correctly: stair riser 2 (3C) and tread 2 (3D) have straight sides; stair riser 3 (3E) and tread 3 (3F) have angled sides. The other pieces have curved edges that must match up. Lay the stair risers and treads out in the right order, ready for assembly.
1. Fit tread 1 (3B) on the top of stair riser 1 (3A): the peg in the middle of the tread fits into the hole in the middle of the stair riser (see dotted line) and the screw sockets in the tread fit into the recesses in the top of the stair riser. Fix in place with two AP screws.

2. Assemble the second step, fitting tread 2 (3D) on the top of stair riser 2 (3C) with the pegs and sockets located in the same way as the first step. Fix in place with two AP screws.

3. Assemble the third step in the same way, so that tread 3 (3F) fits on stair riser 3 (3E), fixing with two AP screws.

4. Assemble the fourth step in the same way, so that tread 4 (3H) fits on stair riser 4 (3G), fixing with two AP screws.
After fitting the treads to the stair risers, you now have four steps ready to join together to form the lower part of the staircase.

5. Fit the second step to the bottom step, positioning the tabs on stair riser 2 (3C) over the screw sockets on the underside of the tread of the bottom step (3A). The middle tab on part 3C is located in the recess in part 3A, so the peg in the recess goes through the hole in the tab (see dotted line). Fix the outer tabs in place with two AP screws.

6. Join the third step to the second step in the same way, so that the tabs on stair riser 3 (3E) fit the sockets and recess on the underside of tread 2 (3D). Fix in place with two AP screws.
7 Join the fourth step to the third step so that the tabs on stair riser 4 (3G) fit the sockets and recess on the underside of tread 3 (3E). Fix in place with two AP screws.

8 With the stairs the right way up, fit the stair side panel (3I) to the side of the steps. There are pegs on the edges of the treads (circled) that should be located in the holes between the screw holes on the side panel (circled).

The four steps have now been joined together to form the lower part of the staircase.
You have now completed the lower part of the staircase. The kick panels visible in the photograph (right) will be added in the next stage.

These diagrams indicate the fixings that have been made, following the instructions in this stage.
STAGE 04
KICK PLATES, STAIR SIDE PANEL AND PLATFORM

Continue building the stairs, adding the kick plates to the risers. The side panel keeps the stairs straight, and the boarding platform is added beneath the stairs.

KEY TO PARTS SUPPLIED

4A Rear platform
4B Stair side panel
4C Large kick plate
4D Small kick plate (x3)
CP 2.0 x 4mm screws (x7)
AP 1.7 x 3mm screws (x3)
BP 1.5 x 3mm screws (x29)

• When fitting the kick plates, note that only one side is textured: this should face outwards. Also, two of the corners of each kick plate are rounded: the rounded corners go at the top of the plates when they are fitted.
• Check the platform to identify the ribbed upper surface.
1. Take the stairs that were assembled in Stage 3 and the large kick plate for the bottom step 4C. Position the kick plate against the bottom step (part 3A, assembled in previous stage). Fit six BP screws in the first six holes. Bend the end of the kick plate around the side of the bottom step and fix in place with two BP screws.

When fitting the curved edge of the kick plate, first insert the screws through the holes and then hold the end firmly in place around the curve of the stair as you tighten the screws.

2. Take the first of the three short kick plates 4D and use six BP screws to fit the plate to the riser (part 3C) of the second step.
3. Repeat step 2 to fit the second kick plate 4D to the riser of the next step, 3E, and then the third kick plate 4D to the front of the top 3G (right), using six BP screws for each kick plate.

4. Working from below, fit two AP screws through the screw flanges on the ‘stepped’ edge of the side panel 4B. Position the side panel against the stair assembly so that you can fix the side panel in place by securing the screws into the holes in the second and top steps (circled). Viewed from the outside, the side panel should be flush with the edges of the steps (right).
The first four steps are now attached to the platform of the bus. You can see how they curve to fit the back offside (driver's side) corner of the vehicle.

Working from below, fit the platform to the bottom of the staircase by locating the protrusions at the base of the staircase (circled) into the corresponding holes in the platform. Secure in place by fitting five CP screws through the holes in the platform into the screw sockets on the lower edge of the side panel 4B and the bottom step 3A. Three holes remain unused along the side of the stairs (inset, circled). Make sure you have the platform the right way round. The curved corner is below the curve of the top step.
This Routemaster was running a few years ago when it operated as one of Transport for London’s Heritage routes. The spacious platform and risers with kick plates are clearly visible. The yellow edging was a more recent addition.

These diagrams indicate the fixings that have been made, following the instructions in this stage.
STAGE 05
SUSPENSION ARM ASSEMBLY

Brackets, axles and links are fitted to each end of the suspension arm in the first steps towards building the front suspension system of the Routemaster.

**KEY TO PARTS SUPPLIED**

- **5A** Suspension arm
- **5B** Trailing link brackets (x4)
- **5C** Turn axle link (x2)
- **5D** Lower trailing link (right-handed, x2)
- **5E** Lower trailing link (left-handed, x2)
- **5F** Trailing link spacer (x2)
- **5G** Trailing link axle (x2)
- **EM** 1.5 x 4mm (14 supplied)
- **FM** 2.3 x 4mm (5 supplied)

Note that the lower trailing links operate in pairs. At each end of the suspension arm (5A) you will need a ‘left-handed’ lower trailing link (5E) and a ‘right-handed’ one (5D).
1. Take two of the trailing link brackets (5B) and fit them to one side of the suspension arm (5A). **NOTE:** There are pegs on the corners of the trailing link brackets (circled) that fit into holes in the suspension arm (see dotted lines). Use two EM screws to fit each bracket to the suspension arm, passing through the two small holes in the trailing link brackets.

2. After turning the assembly over, take the two trailing link axles (5G) and put one end into the large holes in the brackets (5B) as indicated (see also step 3, with the axles in position). They are not fixed in place at this stage. **NOTE:** The trailing link axles (5G) are slightly shorter than the trailing link spacers (5F).

3. Repeating Step 1, take the other two trailing link brackets (5B) and fit them to the other side of the suspension arm (5A). Locate the pegs in the holes as before, and ensure that the free ends of the trailing link axles (5G, circled) are held in place in the large holes in the brackets. Fix each bracket in place with two EM screws.
4. Take one of the ‘left-handed’ lower trailing links (5E). You will see that one end has a flange, and there are two small holes facing upwards (circled). Fit the part, as shown, over the end of the trailing link axle (5G, circled). **NOTE** that the end of part 5G has a flat side, which matches a flat side of the hole in part 5E. Fix in place with an EM screw, which goes into the end of the axle.

5. Take one of the trailing link spacers (5F) and fit one end into the hole in link 5E (fitted in Step 4). At the same time, fit the larger end of the turn axle link (5C) into the other end of link 5E, as shown. The pieces are not fixed at this stage.

Have a ‘right-handed’ lower trailing link (5D) ready as you prepare Step 5. It will be used to anchor the trailing link spacer (5F) in the next step.
6 Take one of the ‘right-handed’ lower trailing links (SD) and position it so that it aligns with the ends of the axle (SG), the trailing link spacer (SF) and the axle link (SC). These ends are all circled and slot neatly into the recesses in link SD. Secure in place using an EM screw at the left end and two FM screws at the right, as shown. Do not overtighten as there will need to be slight movement between these parts.

7 At the other end of the suspension arm, repeat the assembly process of Step 4 to fix a ‘left-handed’ lower trailing link (SE) to the end of the axle SG. NOTE how the two small holes (circled) face upwards. Secure in position with an EM screw, as shown.
Following the diagram, repeat the assembly process in Step 5 to position a spacer (5F) to link 5E and axle link (5C). Repeat Step 6 to position the remaining link (5D) so that it aligns with the ends of parts 5G, 5F, and 5C. Again, these ends slot neatly into recesses in part 5D. Secure part 5D in place using an EM screw at the left end and two FM screws at the right end, as shown. Do not over-tighten as there will need to be slight movement between these parts.

This completes the work for Stage 5 – the first part of the front suspension, which revolutionised the smoothness of the ride when the Routemaster took to the roads.
STAGE 06
FITTING SHOCK ABSORBERS

In this stage, we continue work on the suspension, adding shock absorbers and a cover to the suspension arm assembled in the previous stage.

KEY TO PARTS SUPPLIED

- **6A**: Trailing link mount (x2)
- **6B**: Upper trailing link (x2)
- **6C**: Shock absorber fixture (x2)
- **6D**: Shock absorber spring (x2)
- **6E**: Suspension arm cover
- **6F**: Cap (x8)

**GM**: 2.3 x5mm (x13)
**HM**: 2.3 x6mm (x5)
**EM**: 1.5 x4mm (x9)

In this issue, we continue to build the suspension. You will need the suspension arm and parts that you assembled in Issue 5.
1. Fit the suspension arm cover (6E) to the open side of the suspension arm (5A). Fix in place with three GM screws. **NOTE:** the screws go through the suspension arm cover into the screw sockets in the suspension arm.

2. Fit a trailing link mount (6A) to each end of the suspension arm (5A). There is a peg on part 6A that locates neatly into a hole in the suspension arm 5A. Fix each of the mounts in place with two HM screws, screwing them into the raised sockets (circled) on the suspension arm.

3. Turn the suspension arm over to reveal the large holes. Test fit a shock absorber spring (6D) into each of the holes.
When you are happy with the position of the shaft, turn the suspension arm back over and further tighten the first two EM screws (circled in red). Then insert two more EM screws through the holes in the corners of the shock absorber fixture into the sockets in the lower trailing links (5E and 5D). Turn the assembly over and check that the shaft of fixture 6C aligns with the hole in the suspension arm 5A (inset).

When you are happy with the position of the shaft, turn the suspension arm back over and further tighten the first two EM screws (circled in red). Then insert two more EM screws through the holes in the corners of the shock absorber fixture into the sockets in the lower trailing links. Tighten all the screws to secure the fixture in place.

Repeat steps 4 and 5 to fit the spring 6D and shock absorber fixture 6C in place at the other end of the suspension arm, checking that the shaft is correctly aligned.
7 The upper trailing links (6B) are positioned on the opposite side of the suspension arm to the lower trailing links (5E and 5D x2) that were fitted in the previous issue. Position the parts as shown, and check the fit.

8 When the upper trailing links (6B) are correctly positioned, fix each in place with four GM screws. At each end, one screw is fitted to either side of the link (5C) and one into each side of the mount (6A).
You have now completed the front suspension arm. The realism of the model can be seen by the springy effect when the suspension is compressed as shown by the arrows.

The eight caps (6F) fit into the screw socket recesses at each end of each of the links (5E and 5D). They are push-fit fixings. The domed ends give a neat finish (inset, below).
STAGE 07
FITTING THE FIRST BRAKE DISC

The parts in this stage are connected to the suspension arm assembly, completed in stage 6. This stage builds the first part of the braking system of your routemaster.

KEY TO PARTS SUPPLIED

7A  Brake disc (the side with a spindle is shown here)
7B  Lower hinge joint
7C  Upper hinge joint
7D  Steering arm
7E  Bracket
7F  Brake lever
7G  Brake cylinder
7H  Return spring
DP  1.7 x 4mm (2 supplied)
CM  1.7 x 4mm (6 supplied)
FM  2.3 x 4mm (5 supplied)

The parts supplied in this stage are attached to one end (circled) of the suspension assembly from Stages 5 and 6.
1 Take the suspension arm assembled in Stages 5 and 6 and check you have it the right way round, as shown. Take the lower hinge joint (7B) and fit it into one end of the turn axle link (5C, fitted to the suspension arm in Stage 5) and secure with an FM screw. Do not overtighten the screw as hinge joint (7B) swivels about the axle link (5C).

2 Turn the suspension arm over and fit the upper hinge joint (7C) to the other end of the axle link 5C. Secure with an FM screw. Again, do not overtighten the screw so that part 7C can swivel about the axle link.

3 Take the brake disc (7A) and check the screw sockets and indents (on the side without the spindle). Take the steering arm (7D) and fit the peg on one end into the socket on the disc (circled). Secure the brake link with a CM screw.

4 Take the bracket (7E) and check you have it the right way round. Fit the peg on the bracket into the socket in the brake disc (circled) and secure the bracket with a CM screw. NOTE: We have rotated the view of the disc compared to the view shown in step 3.
5 Take the brake cylinder (7G) and the brake lever (7F). Fit the flat arm of the lever into the slot in the cylinder as shown. (see detail, inset).

6 The next step is to fit the cylinder and lever assembly from step 5 to the disc (7A). There is a peg on the back of part 7F that locates into a hole in the disc (circled). There is also a similar locating peg on the back of part 7G. The arm on part 7F locates in the hole in the rounded end of the bracket (circled in red). Secure the two parts with two CM screws, through the lower holes in the parts, as shown.

7 Position the return spring (7H) against the two large holes at the top of parts 7G and 7F. Secure the return spring using a CM screw on the left and a DP screw on the right. NOTE: The fixing points at the ends of the spring are raised so that when it is fitted correctly the body of the spring is close to the brake disc, rather than being raised away from it (see inset).

8 Attach the disc assembly to the suspension arm. First, fit the pegs on the hinge joints (7B and 7C) into the holes in the disc (circled). Secure the disc in place from the other side, using two FM screws, which go through the holes in the disc into the hinge joints. Before securing the disc in place, check that you have the suspension arm and disc in the orientation shown above.
The brake disc assembly (above) is fitted to the hinge joints on one end of the suspension arm (below).
STAGE 08
FITTING THE FIRST TYRE AND WHEEL

In this stage we give instructions for fitting the tyre to the wheel rim. The wheel is fitted to the first brake disc and then the nut guard, hub cover and logo are attached.

KEY TO PARTS SUPPLIED

8A Tyre
8B Hub cover
8C Logo
8D Nut guard
8E Wheel rim
8F Washer
JM 1.2 x 3mm (x4)
IM 2.6 x 5mm (x2)

The parts supplied with this issue enable you to complete the first wheel, complete with hub cap and logo.
1. Soften the tyre (8A) in warm water and dry it carefully. Fit the wheel rim (8E) into the tyre, ensuring that the outer edges of the rim are properly enclosed in the tyre.

2. Take the suspension arm and brake disc assembly (assembled in Stage 7) and the washer (8F). Pass the end of an IM screw through the washer, through the centre of the wheel rim and into the spindle of the brake disc (7A). Tighten the screw to hold the wheel in place.
3 Take the nut guard (8D) and fix it to the wheel rim using three JM screws. **NOTE:** The screws fit into the three holes in the inner part of the rim (circled).

4 Fit the hub cover (8B) to the centre of the wheel: it is a push-fit connection. Fit the logo (8C) to the centre of the hub cover, ensuring that both prongs fit into the holes in the hub cover (inset). Again, it is a push-fit connection.
Assembly guide

This diagram indicates the parts that have been fitted in this stage. Follow the steps to assemble the parts in the correct order.

Finished views

One wheel is now fitted to the brake disc and suspension arm.
STAGE 09
FITTING THE SECOND BRAKE DISC

Continuing work on the suspension arm, we fit the second brake disk to the other end of the arm. Note that not all pieces are the same as those supplied in stage 7 – many are a mirror image.

KEY TO PARTS SUPPLIED

9A  Brake disc
   (the side with a spindle is shown here)
9B  Lower hinge joint
9C  Upper hinge joint
9D  Steering arm
9E  Bracket
9F  Brake lever
9G  Brake cylinder
9H  Return spring
DP  1.7 x 4mm (2 supplied)
CM  1.7 x 4mm (7 supplied)
FM  2.3 x 4mm (5 supplied)
1 Take the brake disc (9A) and check the screw sockets and indents (on the side without the spindle). Take the steering arm (9D) and fix it to the corresponding holes on the disc (circled) using two CM screws. Take the bracket (9E) and check you have it the right way round. Fit the peg on the bracket into the socket in the brake disc (circled, inset) and secure the bracket with a CM screw.

3 Take the brake cylinder (9G) and the brake lever (9F). Fit the flat arm of the lever into the slot in the cylinder as shown (see detail, inset).

4 The next step is to fit the cylinder and lever assembly from step 3 to the disc (9A). There is a peg on the back of part 9F that locates into a hole in the disc (circled). There is a similar locating peg on the back of part 9G. The arm on part 9F locates in the hole in the rounded end of the bracket (circled in red). Secure the two parts with two CM screws, through the lower holes in the parts, as shown.
5 Position the return spring (9H) against the two large holes at the top of parts 9G and 9F. Secure the return spring using a CM screw on the left and a DP screw on the right.

Ensure that you have the spring the right way round, so that the body of the spring is close to the brake disc.

6 Take the suspension arm assembled in Stages 5 and 6 and check you have it the right way round, as shown. Take the lower hinge joint (9B) and fit it into one end of the turn axle link (5C, fitted to the suspension arm in Stage 5) and secure with an FM screw. Fit the upper hinge joint (9C) to the other end of part 5C and secure with an FM screw. Take care not to over-tighten the screws as the joints swivel about the axle link 5C.

7 Attach the disc assembly to the suspension arm by fitting the pegs on the hinge joints (9B and 9C) into the holes in the disc (circled). Secure the disc in place from the other side, using two FM screws, which go through the holes in the disc into the hinge joints.
The second brake disc assembly (above) is fitted to the hinge joints on the free end of the suspension arm (left).
STAGE 10
ASSEMBLING AND FITTING THE SECOND WHEEL

To complete this section of work on the suspension, we assemble the second wheel and fit it to the brake disc on the end of the suspension arm.

KEY TO PARTS SUPPLIED

10A  Tyre
10B  Hub cover
10C  Logo
10D  Nut guard
10E  Wheel rim
10F  Washer
JM   1.2 x 3mm (x4)
IM   2.6 x 5mm (x2)

The parts supplied in this issue are the same as those supplied with Stage 8 and enable you to assemble and fit the second front wheel, complete with hub cap and logo.
1. Soften the tyre (10A) in warm water to make it more pliable and dry it thoroughly. Fit the wheel rim (10E) into the tyre, ensuring that the outer edges of the rim are properly enclosed in the tyre.

2. Take the suspension arm and brake disc assembly (assembled in Stage 9) and the washer (10F). Pass the end of an IM screw through the washer, through the centre of the wheel rim and into the spindle of the brake disc (9A). Tighten the screw to hold the wheel in place.
3 Take the nut guard (10D) and fix it to the wheel rim using three JM screws. NOTE: The screws fit into the three holes in the inner part of the rim (circled).

4 Fit the hub cover (10B) to the centre of the wheel: it is a push-fit connection. Fit the logo (10C) to the centre of the hub cover, ensuring that both prongs fit into the holes in the hub cover (inset). Again, it is a push-fit connection.
Assembly guide

This diagram indicates the parts that have been fitted in this stage. Follow the steps to assemble the parts in the correct order.

Finished views

Both wheels are now fitted to the brake discs and suspension arm.