40220 LEGO® London Bus

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Build this retro bus with turning wheels plus transparent window and light elements. Apply the number plate, route number, destination and advertising banner stickers. With authentic details, this delightful vintage bus makes a perfect gift for fans of LEGO® Creator modular building sets and London.

This buildable LEGO® brick London Bus features authentic details, turning wheels, transparent window and light elements and stickers for the number plate, route number, destination name and advertising banners inspired by LEGO Creator models 21013 Big Ben and 10232 Palace Cinema (not included).

This set includes over 115 pieces and offers an age-appropriate building experience for ages 7 and over.

Measures over 2" (6cm) high, 4" (11cm) long and 1" (3cm) wide.

The front of the box shows the red London bus traveling down the left side of the road!

The back of the box shows the right side of the bus traveling down the road! It has an ad on the side that is advertising the brick separator!

The top of the box shows a picture of a tire and wheel.

The build is 118 pieces in total and is for ages 7+.

Bag 1 includes the pieces for the London Bus

Welcome to text-based instructions from Bricks for the Blind. Before you start building, here are some terms we'll be using:

- In Front of/Front: towards you.
- Behind/Back: away from you.
- Up: towards the ceiling.
- Down: towards the floor.
- Stud: the bump on a LEGO brick. Example: A 2x1 brick has two studs on it.
- Vertically: with the longest side going from front to back
- Horizontally: with the longest side going from left to right.
- Upright: pointing up towards the ceiling.
- Standing upright: The piece is perpendicular to the ground, like a wall.
- Lying flat: The piece is parallel to the ground, like a piece of toast which fell off the table.
- That one/ppp: previously placed piece.
- Plate: piece with studs.
- Tile: smooth piece without studs (unless otherwise specified)
- A jumper plate is a 1x2 plate with a single stud on top, or a 1x3 plate with only two studs on top.
- "Anti-stud" is a term for the portion of a LEGO piece which accepts studs, like the bottom of a plate or brick.
- Symmetrically: a mirror image. Example: If you place a 2x1 brick with technic connector on the front wall at the right, connector to the front, and then place another

such piece symmetrically on the back wall, at the right, the technic connector of the second piece should point to the back, since it will be placed symmetrically.

- Centered-vertically: even amount of space in front of and behind piece
- Centered-horizontally: even amount of space left and right of piece.
- Row: studs lined up horizontally (left to right/side to side).
- Column: studs lined up upright or vertically (top to bottom/back to front).

For builders with low vision, or a sighted building partner may want to follow along with the printed visual instructions that come with each kit, or PDF versions are always online at LEGO.com for each set: (https://www.lego.com/en-us/service/buildinginstructions/40220) As low vision users may benefit from viewing the instructions on a personal device where they can zoom in on content and use assistive technologies to enhance the visuals.

Sorting the pieces:

To begin a successful build, it helps to sort the pieces into groups, bags, or small containers. Have a friend or family member do this in advance following the instructions below. You will see that the pieces should be sorted according to the building steps in the kit. Doing this in advance makes locating the pieces for each step easier. See below on how to sort the pieces to correspond to the steps in this set. Number the containers using letters A-Z, numbers, or meaningful names. The parts will be sorted into one or a small number of steps in the instructions. Example: Steps 1-3 means collect all the parts used in steps 1,2 and 3, and put them in one container.

This LEGO set comes with 2 bags labeled 1 and 2, 2 sets of instructions, and some loose pieces. Sort the pieces into groups or piles as described below. Note that where there are multiple colors of the same brick in a step, the colors will be split into 2 groups to make telling the difference easier for the builder! LEGO includes a few spare parts in case you lose something. Set these into their own group away from the rest, in case you need them later.

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Bag 1 - London Bus
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Group 1 - Steps 1-10.

Group 2 - Steps 11- 20.

Group 3 - Steps 21-22 and 2 black 1x2 bricks from Steps 23 and 25.

Group 4 - Rest of Steps 23 and 25, and Steps 24 and 26.

Group 5 - Steps 27 and 2 transparent 1x1 bricks from Step 28.

Group 6 - Rest of Step 28 and Steps 29-39.

Let's get to building!

Building Instructions (Bag 1, Book 1):

Group 1 - London Bus

- 1. Horizontally place a black 2x12 plate in front of you.
- 2. Place a light grey 2x2 plate with 2 pins on the 2 leftmost columns so the pins face front and back. Then vertically place a red 2x4 plate to the right so it overhangs in the front and back.

- 3. Vertically place 2 red 2x4 plates next to each other, to the right of the previous 2x4 plate so they overhang in the front and back. Then place a light grey 2x2 plate with 2 pins to the right so the pins face front and back. Then vertically place another red 2x4 plate to the right so it overhangs in the front and back.
- 4. Vertically place a red 1x2 plate on the leftmost column so it is centered vertically. Then horizontally place a light grey 2x10 plate to the right so it is also centered vertically.
- 5. Vertically place a red 1x4 brick with 4 side studs on the rightmost column so the side studs face the right and it is centered vertically. Then place a red 1x1 brick on the back row to the left of the previous brick. Then place a light grey 1x1 tile on the front row to the left of the previous 1x4 brick.
- 6. Vertically place a red 2x4 plate with raised sides to the left of the previous 1x1 brick and 1x1 tile so it is centered vertically and overhangs in the front and back. Then vertically place a red 2x4 plate with raised sides on the 2 leftmost columns so it is centered vertically and overhangs in the front and back.
- 7. Place a black 2x2 plate on the 2 leftmost columns so it is centered vertically. Then place a red 1x6 brick on the front and back row to the right of the left 2x4 plate with raised sides.
- 8. Vertically place a red 1x2 plate with 2x4 side studs on the leftmost column so it is centered vertically and the side studs face the left. Then vertically place a red 1x2 plate to the right so it is centered vertically.
- 9. Vertically place a red 1x2 brick to the right of the previous 1x2 plate.
- 10. Vertically place a red 1x2 plate on the front right corner so there is no overhang. Then place a red 2x2 corner plate behind it so it looks like the braille letter d and there is no overhang. Now horizontally place a red 1x10 plate on the front and back rows to the left of the previous plate so there is no overhang.

Group 2 - London Bus

- 11. Place a red 1x1 brick in the front right corner. Then vertically place a transparent 1x2 brick behind it. Now horizontally place a red 1x3 brick behind it so there is no overhang.
- 12. Horizontally place a transparent 1x2 brick to the left of the previous 1x3 brick. Then place a red 1x1 brick to the left. Then horizontally place a transparent 1x2 brick to the left, then another red 1x1 brick, then lastly 1 more transparent 1x2 brick.
- 13. Horizontally place a transparent 1x2 brick in front of the previous transparent 1x2 brick that is on the leftmost side. Then vertically place a transparent 1x2 brick in the back left corner so there is no overhang.
- 14. Place a red 2x2 tile in the front left corner so there is no overhang. Then vertically place a transparent 1x2 brick to the right.
- 15. Place a red 1x1 brick on the front row to the right of the previous 1x2 brick. Horizontally place a transparent 1x2 brick to the right, then another red 1x1 brick, then another transparent 1x2 brick, then lastly 1 more red 1x1 brick.

- 16. Vertically place a red 1x2 plate on the rightmost column so it is centered vertically. Then horizontally place a red 1x10 plate behind it so there is no overhang. Now place a red 2x2 corner plate to the left so it looks like the braille letter f.
- 17. Horizontally place a red 1x10 plate on the front row so there is no overhang. Then place a red 2x2 corner plate behind the leftmost stud of the previous plate so it looks like the braille letter d.
- 18. Place a tan 4x4 plate on the 4 rightmost columns so it is centered vertically and overhangs in the middle.
- 19. Horizontally place a tan 1x4 plate on the front and back rows to the left of the previous 4x4 plate. Then place another tan 4x4 plate to the left so it is centered vertically and overhangs in the front left corner.
- 20. Place a black 2x2 plate upright on the left-facing side studs so it is centered horizontally. Then place a red 1x1 tile upright on the bottom row to the left and right of the previous 2x2 plate.

Group 3 - London Bus

- 21. Let's make a part! Place a transparent 1x1 round plate on top of a red 1x1 plate. Then repeat again so you have 2 parts in total! Now place them upright onto the left-facing side studs so they sit above the 1x1 tile.
- 22. Vertically place 2 black 1x2 grill tiles upright onto the left-facing side studs of the 2x2 plate.

You will have 2 extra black 1x2 bricks. Save them for later.

Group 4 - London Bus

- 23. Vertically place a black 1x2 brick from group 3 on the rightmost column so it is centered vertically. Then horizontally place a red 1x2 brick in front and behind the previous brick so there is no overhang.
- 24. Horizontally place a white 1x8 brick on the front and back rows to the left of the previous 1x2 bricks.
- 25. Horizontally place a red 1x2 brick on the front and back rows to the left of the previous 1x8 bricks. Then vertically place a black 1x2 brick from group 3 on the leftmost column in between the 2 previous bricks.
- 26. Vertically place a red 1x4 plate on the leftmost column so there is no overhang. Then repeat symmetrically to the right. Now horizontally place a red 1x10 plate on the front and back rows in between the 2 previous plates.

Group 5 - London Bus

27. Vertically place a transparent 1x2 brick on the rightmost column so it is centered vertically. Then place a red 1x1 plate in front of and behind it.

You will have 2 extra transparent 1x1 bricks. Save them for later.

Group 6 - London Bus

- 28. Place a transparent 1x1 brick from group 5 to the left of each of the previous 1x1 plates. Then place a red 1x1 brick to the left of each of the previous 1x1 bricks.
- 29. Horizontally place a transparent 1x2 brick to the left of each of the previous 1x1 bricks. Then place a red 1x1 brick to the left of each of them. Then horizontally place another transparent 1x2 brick to the left of each of the previous 1x1 bricks.
- 30. Place a red 1x1 brick on the front and back rows to the left of the previous 1x2 bricks. Then place a transparent 1x2 brick on the front and back rows to the left of the previous bricks.
- 31. Place a red 1x1 plate in the front left and back left corners. Then vertically place a transparent 1x2 brick in between them.
- 32. Vertically place a red 1x2 slope tile on the rightmost column so it is centered vertically and slopes to the right. Then place a red 1x1 sloped curved brick attached to a 1x1 plate in front of and behind the previous slope tile so they slope to the right. They should not overhang.
- 33. Horizontally place a red 1x2 plate on the front and back rows to the left of the previous pieces. Then horizontally place a red 1x6 plate on the front and back rows to the left of the previous plates.
- 34. Repeat step 32 symmetrically on the leftmost column.
- 35. Vertically place 5 red 2x4 tiles next to each other on top of the build so they cover all the studs and there is no overhang.
- 36.1. Place sticker 2 on the left-facing side of the build so it attaches to the 1x6 brick. This sticker is black and says 211b.
- 36.2. Place sticker 4 on the front-facing side of the build so it attaches to the 1x10 brick. This sticker is a Great Britain flag with a clock tower (Known as Big Ben) on it and says "Now's the time to visit!".
- 37. Horizontally place a white 1x2 tile upright onto the right-facing side studs so it is centered horizontally. Then place a transparent red 1x1 round plate upright onto the right-facing side studs so they sit to the left and right of the previous 1x2 tile.
- 38.1. Rotate your build 180 degrees so the previous 1x2 tile faces the left. Now place sticker 1 on the previously-placed white 1x2 tile. This sticker is a license plate that says MLC 75.
- 38.2. Place sticker 2 on the left-facing side of the build so it attaches to the 1x6 brick. This sticker is black and says 211b.
- 38.3. Place sticker 3 on the front-facing side of the build so it attaches to the 1x10 brick. This sticker is a movie ad and the title reads "The Brick Separator" and featuring a dinosaur chasing a minifigure!

39. Insert 4 light grey wheels into 4 black tires. Then attach them to the front-facing and back-facing pins so the rounded side with the hole faces outwards.

Thank you so much for building this set!

Visit <u>bricksfortheblind.org</u> for more accessible instructions, sign up for our newsletter, and follow us on <u>Facebook</u> and <u>Instagram</u> to be the first to know when new instructions are available!

We also love seeing your completed builds, so please tag our <u>Facebook</u> and <u>Instagram</u> accounts in any photos of your builds so we can share your accomplishments with our Bricks for the Blind community.

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