60511 Vintage Steam Train
Set adapted by Alex Charbonneau and tested by Natalie Charbonneau.

Treat a train enthusiast to classic railroad adventures with the LEGO® City Vintage Steam Train (60511) building set for kids ages 7 and up. This charming toy train set makes a fun gift idea for boys and girls who enjoy imaginative play. Young builders have everything they need to craft a detailed model with a steam engine, coal tender and passenger car with magnetic couplings, plus a track section and station platform with a canopy bench, lamppost, ramp and working semaphore signal. Kids can play out realistic stories with a conductor minifigure to manage the firebox and controls, and 4 traveler minifigures with their cookies and a thermos. Add the LEGO Power Functions kit (sold separately) to motorize the steam train and control it via the Powered Up app or remote for even more fun. Take kids on a creative journey with the LEGO Builder app, where they can rotate this model in 3D, zoom in and track their progress as they build. Set contains 575 pieces.

CLASSIC TOY TRAIN PLAYSET:
- Treat kids to classic railway adventures with the LEGO® City Vintage Steam Train (60511) building set for a fun creative project that inspires endless pretend play.

STEAM ENGINE STATION:
- Kids have everything they need to construct a detailed toy train with coal tender and passenger car, plus a station platform, canopy bench, track section and signal.

REALISTIC FEATURES FOR ROLE PLAY:
- Explore the cab of the steam train with a firebox and control details, raise and lower the signal arm and seat up to 4 travelers in the classic passenger car.

MINIFIGURES AND ACCESSORIES:
- Storytelling is easy and fun with 5 minifigures, including a conductor and 4 passengers, along with toy cookies and a thermos for on-the-refreshments.

GIFT IDEA FOR TRAIN ENTHUSIASTS:
- This set makes a great birthday or holiday gift idea for boys and girls ages 7 and up who love classic train models and imaginative play.

MORE LEGO® CITY ADVENTURES TO DISCOVER:
- Kids can expand their imaginative world when adding this toy building set to other models (sold separately) in the LEGO City range.

POWER UP THE TRAIN:
- Add the LEGO® Power Functions kit (sold separately) to motorize the steam locomotive and control it with the Powered Upapp or remote for even more play options.

DIMENSIONS:
- The toy train this 575-piece model building kit measures over 3.5 in. (9 cm) high, 17.5 in. (45 cm) long and 2 in. (5 cm) wide.

The box is blue with the LEGO logo in the upper left corner, and the CITY to the right of it. The front of the box shows a steam train pulling into a station! There is a city skyline in the background. A woman and a boy walk next to the train tracks. An older gentleman waits on the platform. The engineer and conductor ride on the train! The train has a green and black steam engine, a dark green tender, and a green and brown passenger car.

The top of the box shows a view of all of the included minifigures and a life-sized image of the conductor minifigure.

The back of the box shows the train pulling away from the platform! The passengers can be seen inside the passenger car. The conductor stands on the platform and waves at the train. There is a small inset image, showing that the roof of the passenger car lifts off to allow easy access to load and unload the passengers! There is a larger inset with text that says “READY FOR POWERED UP.” It shows that the train can be controlled with a remote. There is a small image of the box for this set with a plus sign next to each of the following LEGO parts: 88009 Hub, 88011 Train Motor, and 88010 Remote Control. It says “Powered Up components not included.”

Welcome to Text-Based Building Instructions from Bricks for the Blind. Here is some helpful information on how to best use screen readers and browsers: https://bricksfortheblind.org/help-with-screen-readers. Before you start building, here are some terms we will 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 the 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 who may want to follow along with the printed visual instructions that come with each kit, PDF versions are always online at LEGO.com: (**https://www.lego.com/en-us/service/building-instructions/60511**) 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 six bags labeled 1-6 and five instruction booklets. Sort the pieces into groups as described below. Note that where there are multiple colors of the same brick in a step, the colors will be split across two 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.

This set has NO stickers!

This build is 575 pieces, and 186 building steps.

Bag 1 (10 groups of bricks)

Minifigure Group 1 contains the pieces for the ticket taker minifigure.

Minifigure Group 2 contains the pieces for the first passenger minifigure and a white 1x2 tile with ticket pattern.

Sub-Build: Tracks

Group 1 contains the pieces for steps 1-8 of Booklet 1.

Sub-Build: Platform

Group 2 contains the pieces for steps 9-15.
Group 3 contains the pieces for steps 16-26.
Group 4 contains the pieces for steps 27-34.
Group 5 contains the pieces for steps 35-41.
Group 6 contains the pieces for steps 42-45, not including two white 1x2 plates from step 43 and a transparent green 1x1 round tile from step 44.
Group 7 contains the two white 1x2 plates from step 43 and a transparent green 1x1 round tile from step 44.
Group 8 contains the pieces for steps 46-49.

Bag 2 (6 groups of bricks)

Minifigure Group 3 contains the pieces for the second passenger minifigure.

Minifigure Group 4 contains the pieces for the young passenger minifigure.

Sub-Build: Passenger Car

Group 9 contains the pieces for steps 1-5 of Booklet 2.
Group 10 contains the pieces for steps 6-14.
Group 11 contains the pieces for steps 15-22.
Group 12 contains the pieces for step 23.

Bag 3 (3 groups of bricks)

Group 13 contains the pieces for steps 24-29.
Group 14 contains the pieces for steps 30-32.
Group 15 contains the pieces for steps 33-40.

Bag 4 (4 groups of bricks)

Minifigure Group 5 contains the pieces for the engineer minifigure.

Sub-Build: Tender

Group 16 contains the pieces for steps 1-8 of Booklet 3.
Group 17 contains the pieces for steps 9-18.
Group 18 contains the pieces for steps 19-22.

Bag 5 (6 groups of bricks)

Sub-Build: Steam Engine

Group 19 contains the pieces for steps 1-7.
Group 20 contains the pieces for steps 8-17.
Group 21 contains the pieces for steps 18-20.
Group 22 contains the pieces for steps 21-29, not including two red 1x6 plates from step 24.
Group 23 contains the two red 1x6 plates from step 24.
Group 24 contains the pieces for steps 30-35.

Bag 6 (9 groups of bricks)

Group 25 contains the pieces for steps 36-40.
Group 26 contains the pieces for steps 41-48.
Group 27 contains the pieces for steps 49-56.
Group 28 contains the pieces for steps 57-61.
Group 29 contains the pieces for steps 62-65, not including the dark green 2x4 printed tile from step 63.
Group 30 contains the dark green 2x4 printed tile from step 63.
Group 31 contains the pieces for steps 66-70.
Group 29 contains the pieces for steps 71-75, not including the dark green 2x4 printed tile from step 72.
Group 30 contains the dark green 2x4 printed tile from step 72.

Powered Up Alternate Tender Build - Use these sorting instructions instead of Booklet 3 if you are powering up the tender!

Bag 4 (5 groups of bricks)

Minifigure Group 5 contains the pieces for the engineer minifigure.

Sub-Build: Tender

Group 1 contains the pieces for steps 1-6 of Booklet 5.
Group 2 contains the pieces for steps 7-18.
Group 3 contains the pieces for steps 19-24.
Group 4 contains the pieces for steps 25-32

Building Instructions:

Booklet 1: Train tracks and platform.

Bag 1.

Minifigure group 1

Ticket Taker Minifigure

Assemble the ticket taker minifigure by placing the torso on the legs, the head on the torso, and the hair on the head. The ticket taker is a young woman with blonde hair tied up in a pony tail. She has dark blue pants, a white long-sleeved shirt with a light blue button-up vest over it. She is also wearing a red necktie. She has pink lipstick and wears a smile.

Minifigure group 2

Passenger Minifigure

Assemble the passenger minifigure by placing the torso on the legs, the head on the torso, and the hair on the head. This passenger is an older man with gray hair and glasses. He wears dark brown pants and a gray button-up sweater. He has a gray moustache and wrinkles on his forehead. He can hold a white 1x2 tile with a ticket pattern in his hand.

Sub-Build: Tracks

Group 1.

Step 1.1.

We'll start building the tracks now! There is just a short section with a bumper at the end. We'll build the bumper first. Place a light gray 4x4 plate with a 2x2 hole in front of you.

Step 1.2.

Place a brown 1x2 slope brick, horizontally with the slope on the left, on the back row of the previous piece so the left sides are even. Place another symmetrically to the right of the first.

Step 2.

Place a green 1x1 round plate with three leaves, with the leaves at the front, on the leftmost column in front of the left piece from the previous step.

Step 3.1.

Place a brown 1x2 slope brick, horizontally with the slope on the left, on the front row of the bumper so the left sides are even. Place another symmetrically to the right of the first.

Step 3.2.

Place a green 1x1 round plate with three leaves, with the leaves at the back, on the right column behind the right piece from the previous step.

Step 4.

Place a brown 1x2 slope brick, horizontally with the slope on the left, centered on the front row of the bumper. Repeat symmetrically on the back row.

Step 5.

Place a dark gray 1x1 plate with a stud hanging down from one side, with the side stud on the right, on each of the previous two pieces.

Step 6.1.1.

Now we'll make the actual bumpers. Place a brown 1x6 plate, horizontally, in front of you.

Step 6.1.2.

Place a brown 1x1 round tile with a short bar sticking up on the leftmost stud of the previous piece. Repeat symmetrically on the right side.

Step 6.2.

Push the hollow stud of a black saucer, with the anti-stud on top, onto the short bar of each of the previous two pieces. This piece looks like a circle about 1.5 studs in diameter and it has a stud on one side and an anti-stud on the other.

Step 6.3.

Rotate the bumper assembly so it's upright and vertical with the saucers on the right. Place them, centered vertically, on the two side studs on the right side of the main bumper assembly.

Step 7.

Place a dark gray straight track section, horizontally, in front of you. This piece is about 8x16 and has 1x8 and 2x8 plates serving as the ties between the rails. Place the bumper assembly, vertically with the bumpers on the right, centered vertically between the rails so the left side is even with the left side of the track.

Step 8.

Now we'll extend the tracks. Place another section of track, horizontally, to the right of the first. Push the two track sections together until they audibly click into place.

Sub-Build: Platform

Group 2.

Step 9.1.

Now we'll build the platform. Set the tracks aside for now. Place a dark gray 1x12 brick, horizontally, in front of you.

Step 9.2.

Place the back stud of a black 1x8 plate, vertically, under the leftmost stud of the previous piece.

Step 10.

Place a dark gray 1x4 brick with three holes, vertically, on the previous piece and in front of the 1x12 brick. There will be three studs in front of this piece.

Step 11.

Place the back left corner of a black 2x8 plate, vertically, under the rightmost stud of the 1x12 brick.

Step 12.

Place the leftmost stud of a dark gray 1x12 brick, horizontally, on the back right corner of the previous piece. This piece will be to the right of the first 1x12 brick and the right eleven studs will overhang.

Step 13.

Place the back stud of a black 1x8 plate, vertically, under the rightmost stud of the previous piece.

Step 14.1.

Place a dark gray 1x4 brick with three holes, vertically, on the previous piece and in front of a 1x12 brick. There will be three studs in front of this piece.

Step 14.2.

Place a lime green 2x4 brick, vertically, on the 2x8 plate and in front of the two 1x12 bricks. There should be three rows in front of this piece.

Step 15.

Place the right stud of a dark gray 1x12 brick, horizontally, in front of the left column of the previous piece. The left side should be even with the left side of the platform. Place another symmetrically to the right of the first.

Group 3.

Step 16.

Place a light gray 1x5 plate, vertically, on the leftmost column of the platform so the back sides are even.

Step 17.1.

Place a light gray 1x4 tile with two studs, horizontally, on the back row to the right of the previous piece.

Step 17.2.

Place a light gray 1x2 tile, horizontally, to the right of the previous piece.

Step 17.3.

Place a light gray 1x4 tile with two studs, horizontally, to the right of the previous piece.

Step 18.1.

Place a light gray 1x2 tile, horizontally, to the right of the previous piece.

Step 18.2.

Place a tan 2x4 plate, vertically, in front of the previous piece. This should be on a 2x4 brick.

Step 19.1.

Place a light gray 1x5 plate, vertically, on the rightmost column of the platform so the back sides are even.

Step 19.2.

Place a light gray 1x4 tile with two studs, horizontally, on the back row to the left of the previous piece.

Step 19.3.

Place a light gray 1x2 tile, horizontally, to the left of the previous piece.

Step 19.4.

Place a light gray 1x4 tile with two studs, horizontally, to the left of the previous piece. There should be a 1x2 tile to the left of this piece.

Step 20.1.

Find the four columns of two studs each which extend in front of the front pair of 1x12 bricks. Place the back two studs of a black 1x3 slope brick, vertically with the slope at the front, on the leftmost column. Repeat symmetrically on the rightmost column. The front studs of these pieces will overhang.

Step 20.2.

Place the back two rows of a black 2x3 slope brick, vertically with the slope at the front, on the remaining two columns that extend in front of the 1x12 bricks. The front row will overhang.

Step 21.

Place the left column of a dark gray 2x12 plate, horizontally, on the front two studs on the leftmost column of the platform. This piece will attach to one of the 1x3 slope bricks and the 2x3 slope brick. Place another to the right of the first.

Step 22.1.

Place a light gray 1x8 tile, horizontally, on the front row of the left piece from the previous step so the left sides are even.

Step 22.2.

Place a dark gray 6x8 plate, horizontally, behind the previous piece.

Step 23.1.1.

Now we’ll make a lamppost! Set the platform aside for now. Place a clear saucer in front of you. This is the light of the lamp.

Step 23.1.2.

Place a black 2x2 dish, with the stud on top, on the previous piece. This piece is similar to, but larger than, the previous piece!

Step 23.2.

Find a black bar with curved ends. This piece is about 1L by 3L and it looks like a wide letter U. Push the left end of this piece, with it horizontal and with the ends at the bottom so it looks like an upside down U, into the hollow stud of the previous piece.

Step 23.3.

Place a black 2x2 tile with a decorated pole on it in front of you. This piece is about 7 bricks tall.Push the right bar on the first part of the lamp post assembly into the hollow stud of the pole.

Step 23.4.

Place the platform, horizontally with the slopes at the front, in front of you. Place the lamp, with the light at the front, on the back two rows of the platform so there are three free columns to the left of it.

Step 24.1.

Place a light gray 1x8 tile, horizontally, on the front row of studs on the platform and to the right of another 1x8 tile. The right side will be even with the right side of the platform.

Step 24.2.

Place a dark gray 6x8 plate, horizontally, behind the previous piece.

Step 25.1

Now we'll start building a shelter. Place a black 1x6x6 window frame, horizontally and centered horizontally, on the back row of the previous piece. There should be four studs between this piece and the lamp.

Step 25.2.

Place a light brown 1x1x5 tall brick to the left of the previous piece. Repeat symmetrically on the right side of the window frame.

Step 26.1.

Now we'll add a bench where passengers can sit while waiting in the shelter! Make a stack of two light gray 1x2 plates with rounded ends and place the stack, vertically, in front of the leftmost stud of the 1x6x6 window frame.

Step 26.2.

Repeat the previous step in front of the rightmost stud of the window frame.

Group 4.

Step 27.1.

Place a brown 1x6 tile, horizontally, on the front studs of the two stacks of 1x2 plates with rounded ends. Only the left and right studs will attach.

Step 27.2.

Place a brown 1x6 plate, horizontally, behind the previous piece.

Step 28.

Place a light brown 1x1x3 tall brick to the left of the previous piece. Repeat symmetrically on the right side.

Step 29.

Place the back stud of a light brown 1x3x3 half arch, vertically with the arch at the front, on each of the previous two pieces.

Step 30.1.1.

Now we'll make a couple small assemblies. Place a black saucer, with the stud on top, in front of you.

Step 30.1.2.

Place a green 1x1 flower piece on the previous piece. This piece kind of looks like the bottom of a sphere with a zigzag pattern around the top.

Step 30.2.

Place a black nozzle, with the anti-stud on the bottom and the bar at the back, on the previous piece. This piece has a stud on top, an anti-stud on the bottom, and a bar sticking out of one side.

Step 30.3.

Push the hollow side stud of a light brown 1x2 brick with a stud on one side, horizontally with the side stud at the front, onto the bar on the back side of the previous piece.

Step 30.4.

Repeat steps 30.1.1-30.3.

Step 30.5.

Rotate one of the assemblies we just made so it's vertical with the plant hanging down on the right. Place it on the back two studs on the rightmost column of the shelter. It will go to the right of the 1x6x6 window frame. Repeat symmetrically on the left side of the shelter with the other assembly.

Step 31.1.

Place a reddish brown 1x4 plate, horizontally, on the back row of the shelter so the left sides are even. Place another to the right of the first.

Step 31.2.

Place a reddish brown 2x8 plate, horizontally, in front of the previous two pieces.

Step 32.

Place a reddish brown 2x4 tile, horizontally, on the back two rows of the shelter so the left sides are even. Place another to the right of the first.

Step 33.

Place a reddish brown 2x2 curved slope tile, with the higher side at the back, in front of the left piece from the previous step so the left sides are even. Place three more to the right of the first.

Step 34.1.

Place a light gray 1x8 tile, horizontally, on the front row of studs on the platform and to the right of another 1x8 tile. The right side should be even with the right of the platform.

Step 34.2.

Place a dark gray 6x8 plate, horizontally, behind the previous piece.

Group 5.

Step 35.1.

Now we'll build the right end of the platform. Set the platform aside for now. Place a brown 1x6 plate, horizontally, in front of you.

Step 35.2.

Place a dark gray 1x4 brick with three holes, horizontally, on the previous piece so the right sides are even.

Step 36.

Push a black 2L pin, vertically, from the back into both the left and middle holes of the previous piece. These pins have friction ridges and will not spin freely.

Step 37.

Place a black 1x2 plate with a single click finger on one stud, horizontally with the click finger on the left, on the left two studs of the assembly.

Step 38.1.

Place a sand green 1x1 brick on the right stud of the previous piece.

Step 38.2.

Place a light gray 1x1 plate with a vertical clip on one side, vertically with the clip at the front, to the right of the previous piece.

Step 38.3.

Place a light gray 1x2 tile, horizontally, to the right of the previous piece.

Step 38.4.

Place a light gray 1x1 plate with a vertical clip on one side, vertically with the clip at the front, to the right of the previous piece.

Step 39.

Place a light gray 1x5 plate, horizontally on the assembly so the right sides are even.

Step 40.

Place the platform, horizontally with the shelter at the back, in front of you. Rotate the assembly we just made so it's vertical with the two pins on the left side. Push these pins into the holes on the right side of the platform so the back side is even with the back of the platform.

Step 41.

Place the track assembly, horizontally with the bumper at the left, in front of you. Place the front studs row of the platform onto the studs behind the back rail on the tracks so the left side of the platform is even with the left side of the tracks. The 2x3 slope should attach to the center 2x8 plate on the tracks assembly and the 1x3 slope bricks will attach to the leftmost and rightmost 2x8 plates.

Group 6.

Step 42.1

Now we'll make the crossing arm. Set the platform aside for now. Place a sand green 1x10 plate, horizontally, in front of you.

Step 42.2.

Place a red 1x2 plate with a vertical clip on one short side, horizontally with the clip on the left, on the left two studs of the previous piece so the clip overhangs.

Group 7 contains the white 1x2 plates from the next step and the transparent green 1x1 round tile from step 44.

Step 43.1.

Place a white 1x2 plate from group 7, horizontally, to the right of the previous piece.

Step 43.2.

Place a red 1x2 plate from group 6, horizontally, to the right of the previous piece.

Step 43.3.

Place a white 1x2 plate from group 7, horizontally, to the right of the previous piece.

Step 43.4.

Place a dark gray 1x2 plate with two click fingers on one short side, horizontally with the click fingers on the right, to the right of the previous piece so the click fingers overhang.

Step 44.1.1.

Place a sand green 1x2 plate with two studs sticking up from one long side, horizontally with the side studs at the front, on the left two studs of the crossing arm.

Step 44.1.2.

Place a transparent red 1x1 round tile from group 6 on the left side stud on the front side of the previous piece.

Step 44.2.

Place a transparent green 1x1 round tile from group 7 to the right of the previous piece.

Step 45.

Place a sand green 1x4 tile, horizontally, on the crossing arm so the right sides are even. Place another to the left of the first.

Group 8.

Step 46.1.

Now we'll make the end of the crossing arm! Clip the short bar of a white bar connector with a short bar on one end, horizontally with the hole on the left, into the clip on the left side of the crossing arm. This piece looks like a cylinder with a hole on one end and a bar on the other.

Step 46.2.

Push the bar of a white handheld sign, horizontally with the bar on the right and the stud facing the front, into the hole on the left side of the previous piece. This piece is a bar about 2L that has a small circle on one side.

Step 46.3.

Place a red 1x1 round tile on the stud of the previous piece.

Step 47.

Place the platform and tracks, horizontally with the platform at the back, in front of you. Rotate the crossing arm so it's upright with the click fingers at the bottom and the anti-studs at the front. Clip the click fingers onto the single click finger that's on the rightmost column of the platform. You can drop the crossing arm to stop the train from pulling into the station if you need to!

Step 48.

Now we'll add the ramp up to the platform. Clip the bars of a dark gray 4x6 plate with short bars on the corners, horizontally with the bars on the left, into the two clips on the right column of the platform. Tilt the right end of the ramp down so it touches the ground.

Step 49.

Extend the tracks to the right by adding two more track pieces and then adding a track ramp. This last piece lets a LEGO train go up onto the tracks, or back down onto the floor without having to adjust the wheels on the rails! This completes the platform and tracks.

Booklet 2: Passenger Car

Bag 2.

Minifigure group 3

Passenger Minifigure

Assemble another passenger minifigure by placing the torso on the legs, the head on the torso, and the hair on the head. This passenger is a young woman with long red hair. She has brown pants, a white long-sleeved shirt with a light brown sweater vest over it. Her head is printed on two sides so she can show two different expressions. One side shows a small smile, and the other shows a wide smile.

Minifigure group 4

Young Passenger Minifigure

Assemble a younger passenger minifigure by placing the torso on the legs, the head on the torso, and the hair on the head. This passenger is a boy. He wears dark blue pants and a light brown knit sweater. He has messy dark brown hair and wears a big smile. His head is printed on two sides so he can show two different expressions. One side shows a big smile, and the other shows an awestruck face.

Sub-Build: Passenger Car

Group 9.

Step 1.

Now we'll build the first train car! This will be a carriage that holds passengers. Set the platform and tracks aside for now. Place a dark green 2x4 brick, horizontally, in front of you.

Step 2.

Find a black 2x5 bracket. This looks like two 2x2 plates connected by a 1x2 brick. One side is higher than the other. Place the right two columns of this piece, horizontally with the lower plate on the right, under the left two columns of the previous piece. Place another symmetrically to the right of the first.

Step 3.

Place a red 1x2 plate with two studs hanging down from one side, horizontally with the side studs at the front, centered horizontally on the front row of the train car. Place another symmetrically behind the first.

Step 4.

Place a light gray 2x3 tile, horizontally, to the left of the previous two pieces. There will be one free column to the left of this piece. Repeat symmetrically on the right side.

Step 5.1.

Next, we'll add wheel mounts to the carriage! Set the rest of the train car aside for now. Find a black train wheel holder. This piece is about 3x6. It has a clip for a wheel under each end, and it has four rows of three studs. The middle two rows are lower than the outer rows. Place this piece, vertically, in front of you.

Step 5.2.

Place the left column of a light gray 2x3 bracket, horizontally with the higher side on the left, centered vertically on the rightmost column of the previous piece. The bottom of this piece will be even with the bottom of the train wheel holder.

Step 5.3.

Place the back right stud of a tan 2x2 corner brick, with the corner at the front right so the studs form a braille letter J, on the front stud on the rightmost column of the previous piece. The front row will touch the wheel holder. Place another symmetrically behind the first.

Step 5.4.

Find a black train coupler with two bumpers. This looks like a 2x2 tile that has a 1x6 section on one side which has two rounded discs and a magnetic coupler. The coupler is hinged so it can flop around. Place this piece, vertically with the coupler on the right, centered vertically on the rightmost two columns of the assembly.

Step 5.5.1.

Place a light gray 1x2 plate with two rows of two studs hanging down from one side, horizontally with the side studs at the front, on the rightmost two studs on the front row of the assembly. Repeat symmetrically on the back side.

Step 5.5.2.

Place a black 1x2 wall panel, upright and horizontally with the wall at the bottom, on the bottom row of side studs on each of the previous two pieces. Place another above of each of the first two. You'll place four pieces in this step. These form the steps that passengers use to get on and off of the carriage!

Step 5.6.

Repeat steps 5.1-5.5.2.

Step 5.7.

Place the carriage, horizontally, in front of you. Place the left two columns of one wheel mount assembly, with the magnetic coupler on the right, under the rightmost two columns on the carriage. Repeat symmetrically on the left side with the other assembly.

Group 10.

Step 6.

There should be two 2x2 gaps in the tiles that form the center two rows of the carriage. Place a red 2x2 tile in each of these two gaps.

Step 7.

Place a black 6x12 plate, horizontally and centered horizontally and vertically, on the carriage.

Step 8.1.

Now we'll make the ends of the carriage. Place a black 2x3 tile with two vertical clips on one end, horizontally with the clips on the left, in front of you.

Step 8.2.

Place the back row of a black 3x3 plate with a rounded corner, with the rounded corner at the front left, under the front row of the previous piece. Place another symmetrically behind the first.

Step 8.3.

Repeat steps 8.1-8.2.

Step 8.4.

Place one of the assemblies we just made, vertically with the clips on the left, on the carriage to the left of the 6x12 plate. Repeat symmetrically on the right side with the other assembly.

Step 9.1.

Place a brown 1x10 plate, horizontally and centered horizontally, on the back row of the carriage. There should be three studs to the left and right of this piece.

Step 9.2.

Place the back row of a brown 2x2 corner plate, with the corner at the back left so the studs form a braille letter F, to the left of the previous piece. Repeat symmetrically on the right side. Repeat these two pieces symmetrically on the front side. You'll place four pieces in this step.

Step 10.

Place a light gray 1x4 plate, horizontally, to the right of the front stud of the back left piece from the previous step. There will be four rows in front of this piece. Repeat symmetrically on the right side. There will be four studs between these pieces.

Step 11.

Place the back stud of a green 1x4 brick, vertically, to the left of the left piece from the previous step. This will be centered vertically on the third column from the left on the carriage. Repeat symmetrically on the right side.

Step 12.1.

Now we'll add some handles to make it easier to climb up and down into the carriage! Place a dark green 1x1 brick with a recessed stud on one side, with the side stud at the front, in front of each of the previous two pieces. Repeat symmetrically on the back side.

Step 12.2.

Push the short bar of a gold T-shaped bar, with the longest bar upright, into the hollow side stud of each of the four pieces from the previous step.

Step 13.

Place a brown 1x6 plate, vertically, on both the leftmost and rightmost walls on the carriage. These are on the third column from both the left and right.

Step 14.

Place a dark green 2x4 brick, horizontally, on the back two rows to the right of the left wall. Repeat symmetrically on the right side. There will be four columns between these two pieces.

Group 11.

Step 15.1.

Next, we'll make the seats for the passengers. Set the car aside for now. Place a light gray 2x6 plate with only five columns of studs, horizontally, in front of you. There are lips on both the left and right ends of this piece.

Step 15.2.1.

Place a reddish brown 1x2 tile, vertically, on the leftmost column of the previous piece. Repeat symmetrically on the right side.

Step 15.2.2.

Place a reddish brown 2x3 plate, horizontally, between the previous two pieces.

Step 15.3.

Repeat steps 15.1-15.2.2.

Step 15.4.

Set the passenger car, horizontally with the open side of the car at the front, in front of you. Place one seat assembly, horizontally, on the second and third rows from the front to the right of the left wall. Place the other to the right of the first.

Step 16.

Place a brown 1x10 plate, horizontally and centered horizontally, on the front row of the train car.

Step 17.

Place a light brown 1x2 brick, vertically, on the middle column on each of the two seat assemblies. This is behind the second and third studs from both the left and right on the previous piece.

Step 18.

Place a dark green 1x4 brick, horizontally, on the front row of the train and to the right of the left wall. Repeat symmetrically on the right side. There will be a gap of four studs between these pieces.

Step 19.1.

Place a brown 1x4 brick with four studs on one side, horizontally with the side studs at the front, between the previous two pieces. Repeat symmetrically on the back side.

Step 19.2.

Place a brown 1x4 tile with a light brown railroad logo, upright and and horizontally, on the side studs of each of the previous two pieces. The railroad logo is a circle with a dot in the center and two arrows pointing away from the circle.

Step 20.1.

Now we'll add some trim! Place a gold 1x8 plate with a rail, horizontally with the rail at the front, centered horizontally on the front wall of the car. Repeat symmetrically on the back wall.

Step 20.2.

Place a gold 1x2 plate with a rail on one side, horizontally with the rail at the front, to the left of the front piece from the previous step. Repeat symmetrically on the right side. Repeat these two pieces symmetrically on the back side of the car. You'll place four pieces in this step.

Step 21.1.

Let's make some refreshments for the passengers! Place a white 1x2 plate with rounded ends, horizontally, in front of you.

Step 21.2.

Place a light brown 1x1 round tile with a chocolate chip cookie pattern on each of the studs on the previous piece.

Step 21.3.

Place this assembly, horizontally, in front of the back wall so there is one stud between it and the left wall. It will go on the front row of a 2x4 brick.

Step 22.

Place a clear coffee mug, with the handle at the front, on the row in front of the back wall so there are two free studs between it and the right wall. Place another to the left of the first. This also goes on the front row of a 2x4 brick.

Group 12.

Step 23.1.1.

Now we'll build a coffee pot. Set the passenger car aside for now. Place a light gray 1x1 round brick in front of you.

Step 23.1.2.

Place a black 1x1 round plate with a bar hanging off one side, with the bar on the right, on the previous piece. This will be the handle for the pot.

Step 23.2.

Place a black minifigure roller skate, with the wheels at the front and back and the raised side on the left, on the previous piece.

Step 23.3.

Place a light gray 1x1 round tile on the previous piece.

Step 23.4.

Place the passenger car, horizontally with the two coffee mugs near the back, in front of you. Place the coffee pot to the right of the right mug.

Bag 3.

Group 13.

Step 24.

Place the passenger car, horizontally with the seats near the front, in front of you. Place a brown 1x2x3 wall panel, vertically with the wall on the right, on the leftmost wall of the train car so the front sides are even. Skip two studs behind the first and place another. Repeat these two pieces symmetrically on the rightmost wall. You'll place four pieces in this step.

Step 25.1.

Assemble a window by attaching a transparent clear 1x2x3 window pane into a gold 1x2x3 window frame. Find the lip in the frame and rotate the frame so that the window is horizontal with the lip at the front. Push the window pane into the frame from the front until it clicks.

Step 25.2.

Repeat the previous step.

Step 25.3.

Place one window, vertically with the pane on the left, between the two 1x2x3 wall panels on the left wall. Repeat symmetrically on the right side.

Step 26.

Place a black 1x4 tile with two studs, vertically and centered vertically on the leftmost wall of the carriage. Repeat symmetrically on the rightmost wall.

Step 27.1.

Now we'll make some large windows. Assemble eight windows by attaching transparent clear 1x3x3 window panes into brown 1x3x3 window frames like we did with the smaller window.

Step 27.2.

Place one window, horizontally with the pane at the front, on the front wall of the train to the right of the left wall. Place three more to the right of the first. Repeat symmetrically on the back side. The entire wall of the carriage should be covered with windows now!

Step 28.1.

Place a brown 1x8 tile, horizontally and centered horizontally, on the front wall of the carriage. Repeat symmetrically on the back wall.

Step 28.2.

Place a brown 1x3 tile, horizontally, to the left of each of the previous two pieces. Repeat symmetrically on the right side. You'll place four pieces in this step.

Step 29.1.

Now we'll make some details for the underside of the carriage. Find a black 1x2 brick with rounded ends. This piece looks like two 1x2 plates with rounded ends that are connected by short bars between them. Place this piece, horizontally, in front of you.

Step 29.2.1.

Clip the clip of a black bar connector with a clip on one end, horizontally with the clip on the right, onto the left bar on the previous piece. Repeat symmetrically on the right side.

Step 29.2.2.

Push a black 2L bar with a stop in the middle, horizontally, into the hole on each of the previous two pieces.

Step 29.2.3.

Rotate the front end of the left bar towards you just a little bit. Repeat symmetrically on the right side. The assembly should look like a very shallow, upside down V.

Step 29.3.

Repeat steps 29.1-29.2.3 to make another assembly.

Step 29.4.

Place the train car, upside down and horizontally, in front of you. Find the two studs on the front side of the car that are centered horizontally. They are between the wheel mounts and on a section that is only two rows thick. Rotate one assembly so it's upright and horizontal with the studs at the front and the bars pointing slightly upwards. Place this on the front two side studs. Repeat symmetrically on the back side with the other assembly. Push the ends of the bars down as far as they will go.

Group 14.

Step 30.1.

Now we'll make the wheels for the train! Place one black train wheel, laying flat with the smaller side at the bottom, in front of you.

Step 30.2.

Find the two thin metal bars. These come in a small separate box. Push one end of one bar into the hole on the top side of the previous piece.

Step 30.3.

Push the hole of another wheel, laying flat with the smaller side on top, onto the top side of the metal bar.

Step 30.4.

Repeat steps 30.1-30.3 to make another set of wheels.

Step 30.5.

Find the two wheel holders on the train car. The train car should be upside down and horizontal in front of you and the wheel holders should start at the third column from the left and right. There is a raised column with a gap that's centered on each wheel holder. Push the metal bar of one wheel, with the wheel assembly vertical with the wheels at the front and back, into this gap. Push down until it clicks. Repeat with the other wheel.

Step 31.

Now we'll add a railing so people don't fall out of the carriage! Rotate the carriage so it's upright and horizontal with the rows of seats near the front. Find a black 1x6x4 rectangular bar with four studs. Clip the bottom row of this bar, upright and vertically with the studs facing the right, centered vertically on the two clips on the right side of the carriage.

Step 32.1.

Repeat the previous step symmetrically on the left side of the carriage.

Step 32.2.

Let's add a lantern so other trains can see this train if they're coming from behind it! Place the side anti-stud of a white 1x1 brick with a recessed stud on one side, with the side stud on the left, on the front stud on the top bar of the previous piece.

Step 32.3.

Place a transparent red 1x1 round tile on the side stud of the previous piece.

Group 15.

Step 33.1.

Now we'll build the roof of the passenger car! Set the rest of the car aside for now. Place a dark gray 1x6 plate, vertically, in front of you.

Step 33.2.

Place the left column of a dark gray 4x4 plate with a 2x2 hole, centered vertically, on the previous piece. The right three columns will overhang.

Step 34.

Place the back row of a dark gray 2x14 plate, horizontally, under the front row of the previous piece and to the right of the 1x6 plate. Repeat symmetrically on the right side.

Step 35.

Place a dark gray 4x4 plate with a 2x2 hole, centered vertically, on the previous two pieces and to the right of the first 4x4 plate with a 2x2 hole. Place two more to the right of the first. The rightmost column of the right piece will overhang.

Step 36.

Place a dark gray 1x6 plate, vertically and centered vertically, under the rightmost overhanging column on the roof.

Step 37.

Now we'll add some lights for the inside of the car! Keeping it horizontal, rotate the roof so it's upside down. Find the three pairs of columns of anti-studs that are between the two 2x14 plates. Place a transparent yellow 2x2 round plate with a rounded bottom on each of these two columns. There will be 2x2 holes to the left and right of each of these pieces.

Step 38.

Keeping it horizontal, rotate the roof so it's right side up again. Place a dark gray 2x4 tile with two studs, horizontally and centered vertically, on the roof so the left sides are even. Place three more to the right of the first. The right side should be even with the right side of the roof.

Step 39.

Place a dark gray 2x2 curved slope tile, with the higher side at the back, on the front two rows of the roof so the left sides are even. Place seven more to the right of the first. Repeat these eight pieces on the back side of the roof. You'll place sixteen pieces in this step.

Step 40.

Now we'll add the roof to the car! Place the carriage, horizontally, in front of you. It doesn't matter which end is where. Place the roof, horizontally and centered horizontally, on the carriage. You can easily lift the roof off to place the passengers in the seats! This completes the passenger car.

Booklet 3: Tender Car

Note, if you want to power up the train, look at Booklet 5, which contains instructions to do so and the additional parts you'll need!

Bag 4.

Minifigure group 5

Engineer Minifigure

Assemble the engineer minifigure by placing the torso on the legs, the head on the torso, and the hat on the head. The engineer wears dark blue coveralls and a light blue shirt. He has a brown hat and a smile on his face. He can hold a dark gray shovel in his hands for shoveling coal from the tender into the firebox!

Sub-Build: Tender.

Group 16.

Step 1.1.

Now we'll build the tender. This car holds coal and water for the engine! Set the passenger car aside for now. Place a black 1x10 brick with nine holes, horizontally, in front of you.

Step 1.2.

Place a dark gray 1x10 plate, horizontally, on the previous piece.

Step 2.1.

Push a yellow 2L pin, from the front, into both the leftmost and rightmost holes of the previous piece so they extend 1L to the front. These pins don't have friction ridges so they'll spin freely.

Step 2.2.

Push a black 2L pin connector, with the holes at the front and back, from the front onto the front sides of each of the previous two pieces.

Step 2.3.

Push a yellow 2L pin, from the front, into the front sides of each of the previous two pieces so they extend 1L to the front.

Step 3.1.

Push the left and right holes of a black 1x10 brick with nine holes, horizontally, onto the front sides of the previous two pieces. It should be symmetrical to the first 1x10 brick with holes.

Step 3.2.

Place a dark gray 1x10 plate, horizontally, on the previous piece.

Step 4.

Place a brown 2x4 plate, vertically, on the leftmost two columns of the tender. Repeat symmetrically on the right side.

Step 5.

Now we'll add the couplers! Find a black train coupler with two bumpers. This looks like a 2x2 tile that has a 1x6 section on one side which has two rounded discs and a magnetic coupler. The coupler is hinged so it can flop around. Place this piece, vertically with the coupler on the right, centered vertically on the rightmost two columns of the tender. Repeat symmetrically on the left side.

Step 6.1.

Now we'll add the wheels! Place one black train wheel, laying flat with the smaller side at the bottom, in front of you.

Step 6.2.

Push a black 6L axle, upright, from the top into the hole in the middle of the previous piece. Only push it in until the bottom is even with the bottom of the wheel.

Step 6.3.

Rotate the assembly so it's vertical with the wheel at the back. Slide it, from the back, into the leftmost free hole on the back side of the tender. Slide it all the way forward so it extends about 1L to the front.

Step 6.4.

Push the hole of another black train wheel, with the smaller side at the front, onto the front side of the previous piece. Adjust the axle so it's centered vertically on the tender and so the wheels just barely touch the rest of the tender.

Step 7.1.

Now we'll add another wheel. Repeat steps 6.1-6.2.

Step 7.2.

Rotate the assembly so it's vertical with the wheel at the back. Slide it, from the back, into the rightmost free hole on the back side of the tender. Slide it all the way forward so it extends about 1L to the front.

Step 7.3.

Push the hole of another black train wheel, with the smaller side at the front, onto the front side of the previous piece just like we did before.

Step 8.

Find a black train wheel decoration. This piece is about 10 studs long, it only has two studs on top, and it has a pretty complex shape. One side is decorated and textured, and the other is not. Place this piece, horizontally with the studs on top and the decorated side at the front, centered horizontally on the front row of the tender. The front side will hang down over the wheels. Repeat symmetrically on the back side.

Group 17.

Step 9.

Place a dark gray 1x4 plate, horizontally, on the front row of the front piece from the previous step. This row only has two studs. Repeat symmetrically on the back side.

Step 10.

Place a light gray 1x6 brick, horizontally and centered horizontally, behind the front piece from the previous step. Repeat symmetrically on the back side.

Step 11.1.

Now we've completed the frame of the tender, it's time to build the body of the tender! Set the frame aside for now. Place a black 2x6 plate, horizontally, in front of you.

Step 11.2.

Place a red 1x4 brick, horizontally and centered horizontally, on the back row of the previous piece.

Step 12.

Place a red 1x1 round tile with a short bar sticking up to the left of the previous piece. Repeat symmetrically on the right side.

Step 13.

Place a dark gray 1x4 plate, horizontally and centered horizontally, on the front row of the assembly.

Step 14.1.

Now we'll add some red lights to the tender! Find a black 1x1 brick with a stud on one side and with one rounded end. Push the hollow side stud of this piece, with the rounded end on top and the anti-stud at the front, onto the short bar sticking up from the back left corner of the assembly. Repeat symmetrically on the right side. There should now be two studs facing to the back of the tender.

Step 14.2.

Place a transparent red 1x1 round tile on the back studs of each of the previous two pieces.

Step 15.1.

Place the back stud of a red 1x8 brick, vertically, on the front left corner of the assembly. Repeat symmetrically on the right side. The front five studs will overhang.

Step 15.2.

Place a black 1x6 plate, vertically, under each of the previous two pieces and in front of a 2x6 plate. There will be one free anti-stud in front of these two pieces.

Step 16.1.1.

Now we'll make the other end of the tender's body. Set the body of the tender aside for now. Place a black 3x3 plate in front of you.

Step 16.1.2.

Place a red 1x2 inverted half arch, vertically with the slope at the back, on the leftmost column of the previous piece so the back sides are even.

Step 16.2.

Place a dark gray 1x4 plate, horizontally, on the back row to the right of the previous piece. The right two studs will overhang.

Step 16.3.

Place the back row of a black 3x3 plate under the right two overhanging studs of the previous piece and to the right of another 3x3 plate.

Step 16.4.

Place a red 1x2 plate, vertically, on the second column from the right on the previous piece and in front of a 1x4 plate. Repeat symmetrically on the left side. There will be two free columns between these pieces.

Step 16.5.1.

Place a brown 1x2 tile with a sloped handle bar, horizontally with the slope at the back, between the back studs of the previous two pieces.

Step 16.5.2.

Place a red 1x2 inverted half arch, vertically with the slope at the back, on the rightmost column of the assembly so the back sides are even.

Step 16.6.

Place the body, horizontally with the two 1x1 round tiles on the left, in front of you. Rotate the end of the body so it’s vertical with the 1x2 inverted half arches on the right. Place the leftmost column under the rightmost column of the body.

Step 17.1.

Place a dark green 1x4x2 wall panel, vertically with the wall on the right, centered vertically on the left wall of the tender body.

Step 17.2.

Place a dark green 1x4x2 wall panel, horizontally with the wall at the back, on the left four studs on the front wall of the body. Place another to the right of the first. There will be a 1x2 inverted half arch to the right of this piece. Repeat these two pieces symmetrically on the back side. You’ll place four pieces in this step.

Step 18.1.

Now we’ll add some handles to make it easier to climb up and down into the tender! Place a dark green 1x1 brick with a recessed stud on one side, with the side stud at the right, to the right of each of the right two pieces from the previous step.

Step 18.2.

Push the short bar of a gold T-shaped bar, upright with the short bar on the left, into the hollow side stud of each of the two pieces from the previous step.

Step 18.3.

Place a dark green 1x1 brick on each of the two 1x1 bricks with recessed side studs from step 18.1.

Group 18.

Step 19.1.

Place a brown 1x2 plate with a rail on one side, vertically with the rail on the right, centered vertically on the leftmost wall of the tender body.

Step 19.2.

Place the left column of a brown 2x2 rounded corner plate, with the rounded corner at the front left so the studs form a braille letter E, in front of the previous piece. Repeat symmetrically on the back side.

Step 19.3.

Place a brown 1x8 plate, horizontally, to the right of the front row of the front piece from the previous step. This will be on the front wall of the tender. Repeat symmetrically on the back wall.

Step 20.1.

Place a brown 1x4 wall panel, vertically with the wall on the right, centered vertically on the leftmost wall of the tender body.

Step 20.2.

Place a brown 1x4 wall panel, horizontally with the wall at the back, on the left four studs on the front wall of the body. Place another to the right of the first. There will be one free stud on the wall to the right of the right piece. Repeat these two pieces symmetrically on the back side. You'll place four pieces in this step.

Step 21.

Now we'll add this to the tender frame. Place the frame, horizontally, in front of you. Place the body, horizontally, on the frame so the two 1x6 bricks on the frame fit in the hollow space of the body. The body will be offset slightly to the right.

Step 22.1.1.

Next up, we'll build an assembly that looks like a pile of coal. Set the tender aside for now. Place a dark gray 4x8 plate, horizontally, in front of you.

Step 22.1.2.

Place a black 1x6 plate, horizontally and centered horizontally, on the back row of the previous piece.

Step 22.2.1.

Now we'll add some 1x1 slope tiles that look like irregular pieces of coal sticking up. Place a black 1x1 slope tile, with the tall side at the front, to the left of the previous piece.

Step 22.2.2.

Place a black 1x1 slope tile, with the tall side at the right, on the second stud from the left on the 1x6 plate.

Step 22.2.3.

Place a black 1x1 slope tile, with the tall side at the back, on the back right corner of the coal assembly.

Step 22.3.

Place a black 2x2 slope brick, with the slope on the left, centered vertically on the left two columns of the assembly. Place another symmetrically to the right of the first. There should be four free columns to the right of the right piece.

Step 22.4.1.

Place a black 1x1 slope tile, with the tall side on the right, to the right of the front row of the right piece from the previous step. Place another behind the first.

Step 22.4.2.

Place a light gray 2x3 plate, horizontally, to the right of the previous two pieces.

Step 22.5.1.

Place a black 1x6 plate, horizontally and centered horizontally, on the front row of the coal assembly.

Step 22.5.2.

Place a black 1x1 slope tile, with the tall side on the left, to the left of the previous piece.

Step 22.6.1.

Place a black 1x1 slope tile, with the tall side at the left, on the second stud from the left on the front 1x6 plate.

Step 22.6.2.

Place a black 1x1 slope tile, with the tall side at the front, on the front right corner of the coal assembly.

Step 22.7.

Place a black 2x3 tile with two vertical clips on one side, horizontally with the clips on the right, centered vertically on the right three columns of the assembly. It will attach to a 2x3 plate.

Step 22.8.

Now we'll add the coal to the tender. Place the rest of the tender, horizontally with the open side on the right, in front of you. Find the 1x2 tile with a sloped handle bar that's on the second column from the right. Rotate the coal assembly so it's upright with the clips at the bottom and the anti-studs at the left. Clip the clips onto the bar we just found, then tilt the top end down and to the left. This will make it look like a sloping pile of coal, ready to be shoveled into the firebox! This completes the tender. The engineer can stand on the four studs on the rightmost column.

Booklet 4: Steam Engine

Bag 5.

Sub-Build: Steam Engine

Group 19.

Step 1.1.

Now we'll build the steam engine! Set the tender aside for now. Place a dark gray 4x4 plate with a 2x2 hole in front of you.

Step 1.2.

Place a dark gray 1x2 brick with a log pattern, vertically and centered vertically, on the rightmost column of the previous piece.

Step 2.

Place the leftmost stud of a black 1x10 brick with nine holes, horizontally, in front of the previous piece. The right nine studs will overhang. Repeat symmetrically on the back side.

Step 3.1.

Place the leftmost column of a dark gray 4x4 plate with a 2x2 hole under the rightmost studs of the previous two pieces. The right three columns will extend past the rest of the engine.

Step 3.2.

Place a dark gray 1x2 brick with a log pattern, vertically and centered vertically, on the leftmost column of the previous piece. This will be between the two 1x10 bricks with holes.

Step 4.

Find a black 2x5 bracket. This piece looks like two 2x2 plates connected by a 1x2 brick. Place this piece, horizontally with the upper 2x2 plate on the right, on the front two rows of the engine so the left sides are even. The right two columns will be on a 1x10 brick with holes. Place another behind the first. Repeat these two pieces symmetrically on the right side. You'll place four pieces in this step.

Step 5.

Place a brown 1x12 brick, horizontally and centered horizontally, on the second row from the front. This will attach to the higher portions of two 2x5 brackets. Place another behind the first.

Step 6.1.

Place a tan 2x2 ribbed tall plate, centered vertically, on the left two columns of the engine.

Step 6.2.

Place a dark gray 1x2 brick with a log pattern, horizontally, in front of the previous piece. Repeat symmetrically on the back side.

Step 7.

Find a black train coupler with two bumpers. This looks like a 2x2 tile that has a 1x6 section on one side which has two rounded discs and a magnetic coupler. The coupler is hinged so it can flop around. Place this piece, vertically with the coupler on the left, centered vertically between the previous two pieces.

Group 20.

Step 8.

Place a dark green 2x2 corner plate, with the corner at the front left so the studs form a braille letter H, on the second and third columns from the left so the front sides are even. There will be a 1x12 brick behind the right stud. Place another symmetrically behind the first.

Step 9.

Place a black 2x6 plate, vertically and centered vertically, to the left of the previous two pieces. Only the right column will attach.

Step 10.

Place a light gray 2x4 plate, vertically, on the right two columns of the engine.

Step 11.1.

Place a light gray 1x4 arch brick, vertically, on the left column of the previous piece.

Step 11.2.

Place a red 1x2 plate with a handle bar on one side, vertically with the bar on the right, centered vertically to the right of the previous piece.

Step 12.

Place the left stud of a red 1x2 plate with two studs hanging down from one long side, horizontally with the side studs at the front, in front of the previous piece. Repeat symmetrically on the back side.

Step 13.

Place the front row of a dark green 2x2 corner plate, with the corner at the front left so the studs form a braille letter H, on the right two columns of the engine. Place another symmetrically behind the first.

Step 14.

Place a black 2x6 plate, vertically and centered vertically, on the previous two pieces.

Step 15.

Place the right column of a red 2x2 triple curved slope brick, with the studs on the left, centered vertically on the left column of the previous piece. There will be two 1x12 bricks to the left of this piece.

Step 16.

Place a light gray 2x2 tile to the left of the two 1x12 bricks that are to the left of the previous piece.

Step 17.

Place a red 1x2 inverted half arch, horizontally with the slope on the left, on the left two columns of the engine so the front sides are even. Repeat symmetrically on the back side.

Group 21.

Step 18.1.1.

Now we'll make a small assembly which has some of the controls on it. Set the engine aside for now. Place a red 2x2 inverted slope brick, with the slope on the right, in front of you.

Step 18.1.2.

Place a tan 1x2x2 tall brick with four studs on one side, horizontally with the side studs at the back, on the back row of the previous piece.

Step 18.2.1.

Place a red nozzle, with the anti-stud on the bottom and the bar at the front, in front of the left stud of the previous piece. This piece has a stud on top, an anti-stud on the bottom, and a bar sticking out of one side.

Step 18.2.2.

Place a light gray 1x1 tall plate to the right of the previous piece.

Step 18.3.

Place the engine, horizontally with the coupler on the left, in front of you. Find the 1x2 inverted half arch that's on the back row of the engine, near the left. Place the assembly we just made to the right of the half arch so the back sides are even. Only the front stud will attach.

Step 19.1.

Now we'll assemble some flames! Place a dark gray 1x1 round tile with a short bar on top in front of you.

Step 19.2.

Push the short bar on the bottom of a transparent orange flame into the hollow bar on top of the previous piece.

Step 19.3.

Repeat steps 19.1-19.2

Step 19.4.

Place the flame assemblies on the middle two studs on the fourth column from the left. There will be a 2x2 tile to the left of these assemblies.

Step 20.1.1.

Now we'll make the mirror of the first control assembly. Set the engine aside for now. Place a red 2x2 inverted slope brick, with the slope on the right, in front of you.

Step 20.1.2.

Place a light gray 1x1 tall plate on the back right corner of the previous piece.

Step 20.2.

Place a red nozzle, with the anti-stud on the bottom and the bar at the back, to the left of the previous piece.

Step 20.3.

Place a tan 1x2x2 tall brick with four studs on one side, horizontally with the side studs at the front, in front of the previous two pieces.

Step 20.4.

Place the engine, horizontally with the coupler on the left, in front of you. Find the 1x2 inverted half arch that's on the front row of the engine, near the left. Place the assembly we just made to the right of the half arch so the front sides are even. Only the back stud will attach. It should mirror the first assembly.

Group 22.

Step 21.1.1.

Now we'll add some handles to give the engineer something to hold onto! Place a dark green 1x1 brick with a recessed stud on one side, with the side stud at the left, on the 1x2 inverted half arch that's on the front row of the engine, near the left. Repeat symmetrically on the back side.

Step 21.1.2.

Stack two dark green 1x1 plates and place the stack on each of the previous two pieces.

Step 21.2.

Push the short bar of a gold T-shaped bar, upright with the short bar on the right, into the hollow side stud of each of the two 1x1 bricks with recessed studs from step 21.1.1.

Step 22.

Place a brown 4x6 plate, horizontally and centered vertically, on the engine to the right of the two flames. There will be four columns to the left of it.

Step 23.

Place a light gray 2x2 tile, centered vertically, to the right of the previous piece. Skip two columns to the right and place another. The right column of the right piece will attach to a red 2x2 triple curved slope brick.

Group 23 contains the red 1x6 plates for the next step.

Step 24.1.

Now we'll make a couple of small assemblies. Set the engine aside for now. Place a light gray 1x6 brick, horizontally, in front of you.

Step 24.2.

Place a red 1x2 plate with two rows of two studs sticking up from one side, horizontally with the side studs at the front, under the right two studs of the previous piece. Place two more to the left of the first.

Step 24.3.1.

Place a red 1x6 plate from group 23, upright and horizontally, on the top row of studs on the front side of the assembly.

Step 24.3.2.

Place a dark green 1x6 plate from group 22, upright and horizontally, on the previous piece.

Step 24.4.

Repeat steps 24.1-24.3.2 to make another assembly.

Step 24.5.

Now we'll add these to the engine. Place the engine, horizontally with the coupler on the left, in front of you. Find the 4x6 plate that's to the right of the built-up portion of the engine. There will be four columns to the left of this piece. Place one of the assemblies we just made, horizontally with the side studs at the front, on the front row of this piece. Repeat symmetrically on the back row of the 4x6 plate with the other assembly.

Step 25.

Place a light gray 1x4 arch brick, vertically and centered vertically, on the fourth column from the left. This will be to the left of the 1x6 bricks from the assemblies we just placed.

Step 26.

Now we'll add windows so the engineer can look outside! Place a dark green 1x2x2 wall panel with a circular window, horizontally with the wall at the front, on the leftmost two studs on the front row of the engine. Repeat symmetrically on the back side.

Step 27.1.1.

Now we'll add some more controls! Place a black 1x2 brick with two studs on one long side, vertically with the studs on the left, in front of you.

Step 27.1.2.

Place a light gray 1x1 round tile with a gauge print on the back stud on the left side of the previous piece.

Step 27.2.

Place a light gray steering wheel on the side stud in front of the previous piece.

Step 27.3.

Place this assembly, vertically with the steering wheel facing left, centered vertically, on the 1x4 arch brick that's on the fourth column from the left.

Step 28.1.

Place a dark green 1x2 brick, vertically, on the assembly we just placed.

Step 28.2.

Now we'll add some more windows so the engineer can see what's in front of him. Place a dark gray 1x2x2 wall panel with a circular window, vertically with the wall on the left, in front of the previous piece. Repeat symmetrically on the back side.

Step 29.1.

Place a dark green 1x3 tile, horizontally, on the left three studs on the front wall of the engine. This is the top of the wall of the cab and it will be over the front wall panels with windows. Repeat symmetrically on the back wall.

Step 29.2.

Place a dark green 1x4 plate, vertically, between the previous two pieces so the right sides are even.

Group 24.

Step 30.1.

Now we'll make an assembly that covers the top of the engine in front of the cab. Set the engine aside for now. Place a brown 4x6 plate, horizontally, in front of you.

Step 30.2.

Place a tan 2x6 brick, horizontally and centered vertically, on the previous piece.

Step 31.1.

Now we'll make some small assemblies to give the engine the appropriate curve. Place a dark green 2x2 tile with two studs, with the studs at the back, in front of you.

Step 31.2.

Place a dark gray 1x2 quarter cylinder, horizontally with the tall side at the back, on the previous piece.

Step 31.3.

Repeat steps 31.1-31.2 five times.

Step 31.4.

Place the back row of one assembly, with the quarter cylinder at the back, on the left two studs on the front row of the top assembly. The front row will overhang. Place two more to the right of the first. Repeat these three assemblies on the back side.

Step 32.1.

Place a black 1x1 tile with a clip on top, with the fingers of the clip at the left and right, on the front stud on the leftmost column of the assembly. Place another behind the first.

Step 32.2.

Clip the long bar of a gold T-shaped bar, with the long bar vertical and the short bar sticking up, centered vertically into the clips of the previous two pieces.

Step 33.

Place a dark green 1x3 tile, horizontally, on the left three free studs on the front row of the top assembly. Place another behind the first. There are only two rows on top of the assembly.

Step 34.

Place a black 2x2 dome top to the right of the previous two pieces.

Step 35.

Place the steam engine, horizontally with the cab on the left, in front of you. Place the top assembly, horizontally with the dome on the right, to the right of the cab. It will attach to a raised part of the engine.

Bag 6.

Group 25.

Step 36.

Now we'll start working on the other side of the engine. Place the engine, horizontally with the cab and coupler on the left, in front of you. Place a red 1x2 inverted half arch, vertically with the slope at the back, on the front two studs on the second column from the right. Repeat symmetrically on the back side. There will be a 2x2 triple slope brick between these two pieces.

Step 37.

Place a red 1x1 round tile with a short bar on top on the front stud on the rightmost column of the engine. Repeat symmetrically on the back side.

Step 38.1.

Next up, we'll make the bumpers for the right side of the engine. Set the rest of the engine aside for now. Find a black 1x2 brick that has two studs on three sides and a cylinder with a single anti-stud on one end. Place this, horizontally with the studs at the front, top, and back and the cylinder on the right, in front of you.

Step 38.2.

Place a black 1x2 ingot tile, horizontally, on each of the three rows of two studs on the previous piece.

Step 38.3.

Place a black saucer on the anti-stud on the right side of the assembly.

Step 38.4.

Make another bumper by repeating steps 38.1-38.3.

Step 38.5.

Place the engine, horizontally with the cab and coupler on the left, in front of you. Find the two side studs that are under the rightmost two columns of the engine, facing the front. Place one bumper assembly, horizontally with the saucer on the right and the two anti-studs at the back, on these side studs. Repeat symmetrically on the back side.

Step 39.

Find the 1x2 inverted half arches that are on the second column from the right. Place a dark green 1x1 quarter cylinder, with the higher side on the left, on each of these two pieces. These will be on the front and back rows of the engine.

Step 40.1.

Now we'll add some headlights for the train! Push the hollow bottom stud of a black 1x1 brick with a stud on one side and one rounded end, with the rounded end on top and the anti-stud on the left, from the top onto the short bar that sticks up from the front right corner of the train. Repeat symmetrically on the back side.

Step 40.2.

Place a clear 1x1 round tile on the stud on the right side of each of the previous two pieces.

Group 26.

Step 41.1.

Now we'll make the boiler! Set the rest of the engine aside for now. Place a gold 4x4 round plate in front of you.

Step 41.2.

Place a black 2x4x2 half cylinder, horizontally with the curved side on the back, on the back half of the previous piece.

Step 42.

Place a light gray 1x2 plate with two rows of anti-studs on one side, horizontally with the two rows of anti-studs at the back, centered horizontally on the back row of the previous piece. We'll use this to attach the boiler to the engine!

Step 43.

Place the back stud of a black 1x2 plate with two rows of two studs on one side, vertically with the side studs on the left, to the left of the previous piece. Only the front stud of this piece will attach to the 2x4x2 half cylinder. Repeat symmetrically on the right side.

Step 44.

Place a black 2x4x2 half cylinder, horizontally with the curved side at the front, on the front half of the 4x4 round plate.

Step 45.

Place a gold 2x2 quarter circle plate, with the corner at the back right, on the left half of the previous piece. Place another symmetrically to the right of the first.

Step 46.

Place a black 2x4x2 half cylinder, horizontally with the curved side at the back, on the back half of the boiler.

Step 47.

Place a gold 2x2 quarter circle plate, with the corner at the front right, on the left half of the previous piece. Place another symmetrically to the right of the first.

Step 48.

Place a black 2x4x2 half cylinder, horizontally with the curved side at the front, on the front half of the boiler. This will be in front of the previous two pieces.

Group 27.

Step 49.

Place the back stud of a gold 1x2 right wedge tile, vertically with the point at the front and the longer side on the right, on the back left stud of the previous piece. Repeat symmetrically on the right side with a gold 1x2 left wedge tile.

Step 50.

Place a black 1x2 plate with two rows of two studs on one side, horizontally with the side studs at the front, on the front row between the previous two pieces. We'll add the smokestack to this piece later on.

Step 51.1.

Place a black 4x4 cylinder on top of the boiler. The center of this piece is recessed with two rows of two studs.

Step 51.2.

Place a dark green 2x2 round tile with a single stud in the recessed portion of the previous piece.

Step 52.

Place a black 3x3 dish, centered, on the previous piece. This will be the front of the boiler.

Step 53.

Find the two rows of two side studs on the front side of the boiler. Place a dark green 2x2 round tile with a single stud, upright, on these studs.

Step 54.1.

Now we'll add another headlight! Push the bar of a black 1x1 round plate with a bar hanging down, with the bar hanging down at the back, into the hollow stud that's centered on top of the boiler. This will attach to the 3x3 dish and the stud should be facing up near the front.

Step 54.2.

Place a clear 1x1 round tile on the previous piece.

Step 55.

Place the engine, horizontally with the cab and coupler on the left, in front of you. Rotate the boiler so it's horizontal with the two rows of two anti-studs at the bottom and the headlight on the right. Place the boiler, centered vertically, on the engine to the right of the built up portion. The anti-studs will attach to two columns of two studs that are between two 2x2 tiles on the engine.

Step 56.1.

Now we'll make the roof of the cab. Set the engine aside for now. Place a dark gray 4x4 plate with a 2x2 hole in front of you.

Step 56.2.

Place a black 2x6 plate, horizontally and centered, on the previous piece. The left and right columns will overhang.

Step 56.3.

Place the back row of a black 2x3 curved slope tile, vertically with the higher side at the back, on the front row of the previous piece so the left sides are even. Place two more to the right of the first. Repeat these three pieces symmetrically on the back side of the roof.

Step 56.4.

Place the engine, horizontally with the cab and coupler on the left, in front of you. Place the roof, with the flat ends at the left and right, on the cab so the right side is even with the right side of the cab. The left three columns will overhang.

Group 28.

Step 57.1.

Now we'll start adding the wheels! Find the nine pin holes that are on the front side of the engine, near the bottom. Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the leftmost hole.

Step 57.2.

Find a flanged train wheel. This wheel is about 4L in diameter and has a flange on one side that is wider than the rest of the wheel. Push the center hole of this wheel, with the flange at the back, onto the front side of the previous piece.

Step 58.1.

Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the rightmost hole on the front side of the engine.

Step 58.2.

Push the center hole of a flanged wheel, with the flange at the back, onto the front side of the previous piece.

Step 59.1.

Now we'll add another wheel that does not have a flange! Not having the flange allows the train to navigate turns without getting stuck! Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the middle hole on the front side of the engine.

Step 59.2.

Push the center hole of a wheel without a flange, with the smooth side at the front, onto the front side of the previous piece. Notice that this wheel is a little bit smaller than the other two!

Step 60.

Next, we'll add a connecting rod to get all the wheels moving at the same time! There is a pin hole on each of the three wheels. Push the 1L side of a tan 1.5L pin, with the 0.5L side at the front, into each of the three holes.

Step 61.

Find a silver 9L connecting link. This piece has three evenly spaced holes and rounded ends. Push the holes onto the front side of each of the three previous pieces. You will need to rotate the wheels to make this work. Now when one wheel turns, all of them will turn!

Group 29.

Step 62.1.1.

Now we'll make the side of the engine. Set the engine aside for a minute. Place a brown 1x12 plate, horizontally, in front of you.

Step 62.1.2.

Place a red 1x2 plate with a rail on one side, horizontally with the rail at the front, on the left two studs of the previous piece.

Step 62.2.1.

Place a red 1x8 plate with a rail on one side, horizontally with the rail at the front, to the right of the previous piece.

Step 62.2.2.

Place the back row of a red 2x2 angled corner plate, with the angled corner at the front left so the studs form a braille letter D, to the right of the previous piece.

Step 62.3.

Place the engine, horizontally with the cab on the left, in front of you. The front side of the engine has two rows of eight side studs, and a 2x2 square of side studs. Rotate the assembly we just made so it's upright and horizontal with the rail at the bottom. Place the top row of the assembly on the bottom row of side studs so there are two free studs to the left of it. The right end will be as far to the right as it can go.

Group 30 contains the printed dark green 2x4 tile from the next step.

Step 63.1.

Place the dark green 2x4 printed tile from group 30, upright and horizontally, on the left four columns of side studs on the front side of the train. This piece is printed with a black box with "317" printed in gold letters. It is directional, so you may want to ask a sighted person or use an app to get the orientation right.

Step 63.2.

Place a dark green 2x4 tile, upright and horizontally, to the right of the previous piece.

Step 63.3.

Place a dark green 1x6 tile, upright and horizontally, to the right of the previous piece so the bottom sides are even. There should be one stud below the right end of this piece and two side studs above the center of it.

Step 64.

Place a black 1x1 tile with a clip, upright with the fingers of the clip on the top and bottom, on each of the two side studs above the previous piece.

Step 65.

We're going to add a handrail to the clips we just placed! Clip a gold 6L bar with a stop near one end, horizontally with the stop near the left, centered horizontally into the clips of the previous two pieces.

Group 31.

Step 66.1.

Now we'll add wheels to the other side of the engine. Rotate the engine 180 degrees so the cab is on the right. Find the nine hole on the front side, near the bottom. Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the right hole.

Step 66.2.

Push the center hole of a flanged wheel, with the flange at the back, onto the front side of the previous piece.

Step 67.1.

Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the leftmost hole on the front side of the engine.

Step 67.2.

Push the center hole of a flanged wheel, with the flange at the back, onto the front side of the previous piece.

Step 68.1.

Push the pin side of a tan 2L axle/pin combo, with the axle at the front, from the front into the middle hole on the front side of the engine.

Step 68.2.

Push the center hole of a wheel without a flange, with the smooth side at the front, onto the front side of the previous piece. This wheel should be a little smaller than the first two.

Step 69.

Next, we'll add a connecting rod to this side. There is a pin hole on each of the three wheels. Push the 1L side of a tan 1.5L pin, with the 0.5L side at the front, into each of the three holes.

Step 70.

Find a silver 9L connecting link. This piece has three evenly spaced holes and rounded ends. Push the holes onto the front side of each of the three previous pieces. You will need to rotate the wheels to make this work.

Group 32.

Step 71.1.

Now we'll make an assembly for this side of the engine. Set the engine aside for now. Place a brown 1x12 plate, horizontally, in front of you.

Step 71.1.2.

Place a red 1x2 plate with a rail on one side, horizontally with the rail at the front, on the right two studs of the previous piece.

Step 71.2.1.

Place a red 1x8 plate with a rail on one side, horizontally with the rail at the front, to the left of the previous piece.

Step 71.2.2.

Place the back row of a red 2x2 angled corner plate, with the angled corner at the back left so the studs form a braille letter F, to the left of the previous piece.

Step 71.3.

Place the engine, horizontally with the cab on the right, in front of you. The front side of the engine has two rows of eight side studs, and a 2x2 square of side studs. Rotate the assembly we just made so it's upright and horizontal with the rail at the bottom. Place the top row of the assembly on the bottom row of side studs so there are two free studs to the right of it. The left end will be as far to the left as it can go.

Group 33 contains the printed dark green 2x4 tile from the next step.

Step 72.1.

Place the dark green 2x4 printed tile from group 33, upright and horizontally, on the right four columns of side studs on the front side of the train. Like the other side, this piece is printed with a black box with "317" printed in gold letters. It is directional, so you may want to ask a sighted person or use an app to get the orientation right.

Step 72.2.

Place a dark green 2x4 tile, upright and horizontally, to the left of the previous piece.

Step 72.3.

Place a dark green 1x6 tile, upright and horizontally, to the left of the previous piece so the bottom sides are even. There should be one stud below the left end of this piece and two side studs above the center of it.

Step 73.

Place a black 1x1 tile with a clip, upright with the fingers of the clip on the top and bottom, on each of the two side studs above the previous piece.

Step 74.

Let’s add a handrail to this side! Clip a gold 6L bar with a stop near one end, horizontally with the stop near the right, centered horizontally into the clips of the previous two pieces.

Step 75.

The last bit to add is the smokestack! Find a black flowerpot. This looks kind of like an upside down cone with the bottom cut off. Place this piece on the 2x2 round tile with a single stud that’s on top of the boiler, near the left end of the engine.

This completes the steam engine! Now you can attach the cars together using the magnetic couplers. There is an image showing the engine, with the cab on the left at one end. The tender, with the open side on the right, to the left of the engine, and the passenger car, with the lantern on the left, to the left of the tender. All three cars are on the tracks, just to the right of the platform. The engineer stands on the rightmost column of the tender.

Booklet 5: Tender Powered Up Alternate Build

This set is ready to be powered and run just like a normal model train! This powers up the tender. It requires one each of a part number 88009 Hub, 88011 Train Motor, and 88010 Remote Control. These are all part of the PoweredUp line.

Minifigure group 5

Engineer Minifigure

Assemble the engineer minifigure by placing the torso on the legs, the head on the torso, and the hat on the head. The engineer wears dark blue coveralls and a light blue shirt. He has a brown hat and a smile on his face. He can hold a dark gray shovel in his hands for shoveling coal from the tender into the firebox!

Group 1.

Step 1.

We’ll start by assembling the train motor. This piece is a large rectangle with a pin sticking up from the middle and two columns of studs on either side of the pin. There is a cable on one end. Place the train motor, horizontally with the cable on the right, in front of you.

Step 2.

There are three holes on both the front and back sides of the motor. Push an axle with a wheel through both the leftmost holes, then put a wheel on the free end of each axle.

Step 3.

Repeat the previous step on the rightmost hole.

Step 4.

Place a train wheel decoration, horizontally, on both the front and back sides of the train motor.

Step 5.

Find a black train coupler with two bumpers. This looks like a 2x2 tile that has a 1x6 section on one side which has two rounded discs and a magnetic coupler. The coupler is hinged so it can flop around. Place this piece, vertically with the coupler on the right, centered vertically on the leftmost two columns of the assembly. Repeat symmetrically on the right side.

Step 6.

Place a dark gray 1x4 plate, horizontally, on the front row of the front piece from the previous step. This row only has two studs. Repeat symmetrically on the back side.

Group 2.

Step 7.1.

Now we'll build the body of the tender. Set the motor aside for now. Place a black 2x6 plate, horizontally, in front of you.

Step 7.2.

Place a red 1x4 brick, horizontally and centered horizontally, on the back row of the previous piece.

Step 8.

Place a red 1x1 round tile with a short bar sticking up to the left of the previous piece. Repeat symmetrically on the right side.

Step 9.

Place a dark gray 1x4 plate, horizontally and centered horizontally, on the front row of the assembly.

Step 10.1.

Now we'll add some red lights to the tender! Find a black 1x1 brick with a stud on one side and with one rounded end. Push the hollow side stud of this piece, with the rounded end on top and the anti-stud at the front, onto the short bar sticking up from the back left corner of the assembly. Repeat symmetrically on the right side. There should now be two studs facing to the back of the tender.

Step 10.2.

Place a transparent red 1x1 round tile on the back studs of the previous two pieces.

Step 11.1.

Place the back stud of a red 1x8 brick, vertically, on the front left corner of the assembly. Repeat symmetrically on the right side. The front five studs will overhang.

Step 11.2.

Place a black 1x6 plate, vertically, under each of the previous two pieces and in front of a 2x6 plate. There will be one free anti-stud in front of these two pieces.

Step 12.1.

Now we'll make the other end of the tender's body. Set the body of the tender aside for now. Place a black 3x3 plate in front of you.

Step 12.2.

Place a red 1x2 inverted half arch, vertically with the slope at the back, on the leftmost column of the previous piece so the back sides are even.

Step 13.

Place a dark gray 1x4 plate, horizontally, on the back row to the right of the previous piece. The right two studs will overhang.

Step 14.

Place the back row of a black 3x3 plate under the right two overhanging studs of the previous piece and to the right of another 3x3 plate.

Step 15.

Place a red 1x2 inverted half arch, vertically with the slope at the back, on the rightmost column of the previous piece so the back sides are even.

Step 16.

Place a red 1x2 plate, vertically, on the second column from the right on the previous piece and in front of a 1x4 plate. Repeat symmetrically on the right side. There will be two free columns between these pieces.

Step 17.

Place a dark red 1x2 tile with a sloped handle bar, horizontally with the slope at the back, between the back studs of the previous two pieces.

Step 18.

Place the body, horizontally with the two 1x1 round tiles on the left, in front of you. Rotate the end of the body so it’s vertical with the 1x2 inverted half arches on the right. Place the leftmost column under the rightmost column of the body.

Group 3.

Step 19.1.

Place a dark green 1x4x2 wall panel, vertically with the wall on the right, centered vertically on the left wall of the tender body.

Step 19.2.

Place a dark green 1x4x2 wall panel, horizontally with the wall at the back, on the left four studs on the front wall of the body. Place another to the right of the first. There will be a 1x2 inverted half arch to the right of this piece. Repeat these two pieces symmetrically on the back side. You’ll place four pieces in this step.

Step 20.1.

Now we’ll add some handles to make it easier to climb up and down into the tender! Place a dark green 1x1 brick with a recessed stud on one side, with the side stud at the right, to the right of each of the right two pieces from the previous step.

Step 20.2.

Push the short bar of a gold T-shaped bar, upright with the short bar on the left, into the hollow side stud of each of the two pieces from the previous step.

Step 20.3.

Place a dark green 1x1 brick on each of the two 1x1 bricks with recessed side studs from step 18.1.

Step 21.1.

Place a brown 1x2 plate with a rail on one side, vertically with the rail on the right, centered vertically on the leftmost wall of the tender body.

Step 21.2.

Place the left column of a brown 2x2 rounded corner plate, with the rounded corner at the front left so the studs form a braille letter E, in front of the previous piece. Repeat symmetrically on the back side.

Step 22.

Place a brown 1x8 plate, horizontally, to the right of the front row of the front piece from the previous step. This will be on the front wall of the tender. Repeat symmetrically on the back wall.

Step 23.1.

Place a brown 1x4 wall panel, vertically with the wall on the right, centered vertically on the leftmost wall of the tender body.

Step 23.2.

Place a brown 1x4 wall panel, horizontally with the wall at the back, on the left four studs on the front wall of the body. Place another to the right of the first. There will be one free stud on the wall to the right of the right piece. Repeat these two pieces symmetrically on the back side. You'll place four pieces in this step.

Step 24.

Now we'll add this to the tender frame. Place the motor, horizontally with the cable on the right, in front of you. Pull the cable up through the hollow center of the body, then place the body, horizontally and centered horizontally, on the motor.

Group 4.

Step 25.

Now we'll add the hub to the tender. Set the tender aside for now. Find the hub. This is a 4x8x4 rectangle with two holes on one side, and a button on top near one end. Place this, horizontally with the holes on the right, in front of you.

Step 26.1.

We want to decorate the hub so it looks like a pile of coal!

Step 26.2.

Place a black 1x6 plate, horizontally and centered horizontally, on the back row of the previous piece.

Step 26.3.

Now we'll add some 1x1 slope tiles that look like irregular pieces of coal sticking up. Place a black 1x1 slope tile, with the tall side at the back, to the left of the previous piece.

Step 27.1.

Place a black 1x1 slope tile, with the tall side at the right, on the second stud from the left on the 1x6 plate.

Step 27.2.

Place a black 1x1 slope tile, with the tall side at the right, on the back right corner of the hub.

Step 28.

Place a black 2x2 slope brick, with the slope on the right, centered vertically on the right two columns of the hub. Place another symmetrically to the left of the first. There should be one free column between the left piece and the button on the hub.

Step 29.

Place a black 1x1 slope tile, with the tall side on the left, to the left of the front row of the left piece from the previous step. Place another behind the first.

Step 30.1.

Place a black 1x6 plate, horizontally and centered horizontally, on the front row of the hub.

Step 30.2.

Place a black 1x1 slope tile, with the tall side at the front, to the left of the previous piece.

Step 31.1.

Place a black 1x1 slope tile, with the tall side at the left, on the second stud from the right on the front 1x6 plate.

Step 31.2.

Place a black 1x1 slope tile, with the tall side at the back, on the front right corner of the hub.

Step 32.

Place the rest of the tender, horizontally with the open side of the tender on the right, in front of you. Place the hub, with the two holes on the right, inside the three walls of the tender. Push the end of the cable into the front hole on the right side of the hub. You can now connect the tender to the locomotive and passenger car and control the train with the PoweredUP remote!

The remote has seven buttons, two columns of three, and a center button. Each column of buttons has a plus button on one side and a minus button on the other, with a stop button in between. These will speed up, or slow down, the train motor. To sync the remote to the hub, press the center button on the remote at the same time as you press the button on the hub. There are lights on both, and they will flash the same color when pairing is successful, but you can also see if it worked by pushing the plus or minus buttons. The train will only be paired to one of the columns of buttons.

This completes the Vintage Steam Train.

Thank you so much for building this set!

There is one page of ads after the instructions for the tender end and one page after the instructions for the engine end.

The page after the tender instructions includes four sets. The first is set number 60496 Pizza Delivery Experience with Vehicles, the second is set number 60501 Lava Land Roller Coaster Park, the third is set number 60506 Classic Beach Streetcar, and the fourth is for this set, set number 60511 Vintage Steam Train.

The page after the engine instructions includes four sets. The first is set number 60492 Passenger Jet, the second is set number 60494 Dump Truck & Front End Loader, the third is set number 60497 Drive-Through Car Wash, and the fourth is set number 60480 Yellow Backhoe Loader.

Congratulations on finishing your build! Would you like to inspire other blind people to build LEGO sets? Let's feature your build on our Builders page. It's easy and we will do all the work! Just contact us at info@bricksfortheblind.org and together we will make it happen!

We hope you enjoyed building your LEGO set! Bricks for the Blind are able to create these text-based building instructions thanks to generous donations from our builders. If you enjoy the instructions we create, please consider making a $5 donation at: https://www.gofundme.com/f/bricks-for-the-blind-gofundme.

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