

60478 Cement Mixer

Set adapted by Alex Charbonneau and tested by Natalie Charbonneau.

Fans of construction toys will love the LEGO® City Cement Mixer (60478) model building kit for ages 7 and up. This detailed concrete mixer truck with 8 rubber tires features a large drum with an Archimedes' screw system. Kids can turn a dial to mix and dispense the LEGO cement down the adjustable chute, just like real cement pouring. This big toy truck also features a driver's cab that tilts to allow access to the engine. Accessories include a wheelbarrow, a road sign and 2 barriers, plus driver, construction worker and architect minifigures for creative play. This kids' LEGO City model construction truck makes a great birthday or holiday gift for 7-year-old boys and girls who love building site vehicles. Add this set to others from the LEGO City range (sold separately) for even bigger adventures. Kids can enjoy intuitive building with this toy vehicle playset in the LEGO Builder app, zooming and rotating with 3D instructions, while saving and tracking progress. Set contains 371 pieces.

CONSTRUCTION TOYS FOR KIDS:

- Fans of big truck toys will love the LEGO® City Cement Mixer (60478) construction vehicle playset for boys and girls ages 7+.

WHAT'S IN THE BOX:

- Includes everything kids need to build a toy cement mixer truck with a revolving drum and 8 rubber tires, plus 3 construction worker minifigures for imaginative play.

CEMENT TRUCK TOY WITH AUTHENTIC FUNCTIONS:

- Kids can lower the cement chute, turn a dial to rotate the drum for mixing and dispensing the LEGO® cement elements and tilt the cab to access the engine.

LEGO® MINIFIGURE ACCESSORIES:

- This cement truck model comes with LEGO accessories including a wheelbarrow, road sign, 2 barriers, a clipboard, spade and broom.

CONSTRUCTION GIFTS FOR KIDS:

- A fun build and gift for 7-year-old boys and girls who love toy vehicles and hands-on creative play.

A FUN WAY TO BUILD:

- The LEGO® Builder app guides kids with 3D zoom and rotate tools, set-saving features and progress tracking to enhance the building journey.

MORE LEGO® CITY SETS TO DISCOVER:

- Kids can expand their play by combining this model with other LEGO City Construction sets (sold separately) for even more adventures.

DIMENSIONS:

- The cement truck toy in this 371-piece model construction vehicle kit measures over 3.5 in. (9 cm) high, 9 in. (22 cm) long and 2 in. (5 cm) wide.

The box is blue with the LEGO logo in the upper left corner, next to the word CITY. The front of the box shows a busy construction site with skyscrapers in the background. A yellow and grey cement mixer truck is driving through the construction site! A worker in overalls waves at the driver while he pushes a wheelbarrow. A man in a suit holding blueprints trips over a red and white striped caution barrier! All of the minifigures wear hardhats to keep them safe!

The top of the box shows a life-sized image of the minifigure wearing the suit. The top also shows an image of each minifigure included in the set.

The back of the box shows the back of the cement mixer. A chute folds down from the back of the mixer to allow concrete to flow! Uh oh, the man in the suit has dropped his blueprints into the concrete!! There are two inset images. The first shows that the cab can tip up to access the truck's engine, there is also a gear on top that spins the drum! The other inset image shows the truck driving through the construction site.

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: 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/60478>) 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.

A note on LEGO Technic™ part names. These parts are somewhat different from regular LEGO bricks. I'll include some definitions in case the builder or helper is not familiar with LEGO Technic™.

Axles - An axle is a connector which has an X shaped cross-section. Because their cross section is not round, anything connected to an axle using an axle-hole will rotate with that axle. Axles are longer than they are wide, and the length of an axle corresponds with how many bricks long it is. Aka a 3L axle is three bricks long. Axles come in a variety of lengths, with a 2L axle being the shortest available. They may be combined with pins, or have circular stops on them. A stop prevents the axle from sliding through an axle-hole at a specific point on the axle.

Pins - A pin is a connector which has a circular cross section and a flanged notch out of one or both ends. This flanged notch allows them to click into bricks with a pin-hole. Pins come with and without friction ridges, which are small bumps on the pin which prevent them from rotating freely. For standard pins, black is a high friction pin, and gray is a low friction pin. A standard length pin is two brick lengths long, with a stop in the middle. This prevents a brick from being pushed from one side of the pin to the other. A 1L pin is one brick long and still retains the stop, however it also includes a hollow stud at the other end. A 3L pin is three bricks long, and only contains a stop at one side, allowing two bricks to be pushed onto the other side of the pin. Pins may also have one side which is an axle.

lift-arms - A lift-arm is a basic structural element, similar to a brick or a plate, but usually without any studs. It is a beam with rounded ends and with holes in it, with the same spacing as the studs on a LEGO brick. lift-arms come in a variety of lengths, including a 1x1 lift-arm which looks like a cylinder. Thick lift-arms are as wide as a LEGO brick, and thin lift-arms are half as wide as a LEGO brick, but not the same thickness as a LEGO plate! The holes in a lift-arm may accept axles or pins. They also come in a variety of shapes, including tees, ells and triangles.

Gears - A gear is a functional element. They are typically discs with teeth on the outside, there are also worm gears which look like a spiraling cylinder! Gears connected by axles transmit or even transform rotational motion!

Axle and Pin Connectors - These elements are typically smaller than lift-arms, and are used to connect some combination of pins or axles. They might have pins or axles, as well as axle or pin-holes. They have a lot of different angle combinations! The simplest just connects two axles or pins together in a straight line.

Bushes/Bushings - LEGO Technic™ uses bushes largely as spacers, but they also can reduce friction between rotating parts, or can form useful elements such as handles. Bushes are typically light gray, generally cylindrical, and have an axle-hole running through the middle. They have a flange at the front and back to make them easier to pull on and off.

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 seven bags labeled 1-7, a sticker sheet, and an instruction booklet. 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 build is 371 pieces, and 111 building steps.

Bag 1 (11 groups of bricks)

Minifigure Group 1 contains the pieces for the architect, including the blue 2x4 tile with a blueprint on it.

Minifigure Group 2 contains the pieces for the truck driver minifigure.

Minifigure Group 3 contains the pieces for the construction worker minifigure.

Sub-Builds: Wheelbarrow, Sign, Construction Barriers

Group 1 contains the pieces for the wheelbarrow, sign, and construction barriers.

Main Build: Cement Mixer

Group 2 contains the pieces for steps 1-6 of the cement mixer.

Group 3 contains the pieces for steps 7-10.

Group 4 contains the pieces for steps 11-19.

Group 5 contains the pieces for steps 20-31.

Group 6 contains the white pieces for steps 32-34.

Group 7 contains the red pieces for steps 32-34.

Group 8 contains the pieces for steps 35-37.

Bag 2 (7 groups of bricks)

Group 9 contains the pieces for steps 38-48.

Group 10 contains the pieces for steps 49-59.

Group 11 contains the pieces for steps 60-65.

Group 12 contains the pieces for steps 66-70.

Group 13 contains the pieces for steps 71-81, not including the black 2x2 curved slope tiles and black 2x2 triangular tiles from steps 77, 78, 80, and 81.

Group 14 contains the black 2x2 curved slope tiles and black 2x2 triangular tiles from steps 77, 78, 80, and 81.

Group 15 contains the pieces from steps 82-83.

Bag 3 (5 groups of bricks)

Group 16 contains the pieces for steps 84-88.

Group 17 contains the pieces for steps 89-93.

Group 18 contains the pieces for steps 94-100.

Group 19 contains the pieces for steps 101-105.

Group 20 contains the pieces for step 106.

Building Instructions:

Bag 1.

Minifigure Group 1: Architect

Assemble the architect minifigure by placing the torso on the legs, the head on the torso, and the hardhat on the head. The architect wears black pants, a white long-sleeved shirt with a tie, and a black vest. He also wears a white hardhat and holds a blue 2x4 tile with the train station blueprints on it. His head has two expressions, a smile and a concerned expression. You can turn his head around depending on which face you want to show.

Minifigure Group 2: Truck Driver

Assemble the truck driver minifigure by placing the torso on the legs, the head on the torso, and the hardhat on the head. The driver wears grey work pants, an orange jacket, and a bright yellow reflective safety vest. She holds a broom in one hand and wears a red hardhat. She has a grin on her face.

Minifigure Group 3: Construction Worker

Assemble the construction worker minifigure by placing the torso on the legs, the head on the torso, and the hardhat with earmuffs on the head. The railroad worker wears grey work pants, an orange jacket, and a bright yellow reflective safety vest. He holds a shovel in one hand and wears a red hardhat with earmuffs. He has a smile on his face and orange safety glasses.

Group 1.

Sub-Build: Wheelbarrow

Step 1

Assemble the wheelbarrow by clipping the wheel into the red wheelbarrow body. There are two clips at the front of the wheelbarrow for the pegs on the wheel. This completes the wheelbarrow. Set it aside for now.

Sub-Build: Sign

Step 1.1

Next we'll build a construction sign! Place a light gray 2x2 tile with a single stud in front of you.

Step 1.2

Place a light gray 4L bar with an anti-stud on the bottom of the previous piece.

Step 2

Clip a white triangular sign with a picture of a person digging, with the point at the top, onto the previous piece near the top. This completes the road sign. Set it aside for now.

Sub-Build: Construction Barriers

Step 1.1

Now we'll build some construction barriers! Place a light brown 1x1 plate with two studs sticking up from one side, with the side studs at the front, in front of you.

Step 1.2

Place a black 1x1 slope tile, with the tall side at the bottom, on the bottom side stud on the front side of the previous piece.

Step 2

Place the second stud from the left of a white 1x6 tile with diagonal red and white stripes, horizontally with the anti-stud at the back, above the previous piece.

Step 3.1

Place the top side stud of a light brown 1x1 plate with two studs sticking up from one side, with the side studs at the front, on the second anti-stud from the right on the previous piece. The bottom of this piece should be even with the bottom of the first one.

Step 3.2

Place a black 1x1 slope tile, with the tall side at the bottom, on the bottom side stud on the front side of the previous piece.

Step 4

Repeat steps 3.1 - 3.2 to make another barrier. This completes the barriers. Set them aside for now.

Group 2.

Main Build: Cement Mixer

Step 1.1

Now we'll start on the cement mixer. We'll start by building the truck's body. Place a dark brown 2x10 plate, horizontally, in front of you.

Step 1.2

Place a yellow 1x2 plate, vertically, on the rightmost column of the previous piece.

Step 2.1

Place a light gray 2x4 plate with pins on two opposite sides, vertically and centered vertically with the pins facing front and back, to the left of the previous piece.

Step 2.2

Place a green 2x2 tile, centered vertically, to the left of the previous piece.

Step 2.3

Place a light gray 2x4 plate with pins on two opposite sides, vertically and centered vertically with the pins facing front and back, to the left of the previous piece.

Step 3

Place a yellow 2x6 plate, horizontally and centered vertically, to the left of the previous piece. The left three columns will overhang.

Step 4

Place the right three columns of a dark brown 2x10 plate, horizontally, under the left three overhanging columns of the previous piece.

Step 5.1

Place a light gray 2x4 plate with pins on two opposite sides, vertically and centered vertically with the pins facing front and back, on the previous piece and to the left of a 2x6 plate. There will be five free columns to the left of this piece.

Step 5.2

Place a red 4x4 plate with rounded ends, centered vertically, to the left of the previous piece

Step 6

Place a light gray 2x4 plate with pins on two opposite sides, vertically and centered vertically with the pins facing front and back, to the left of the previous piece. The left column of this piece will overhang.

Group 3.

Step 7.1

Place a blue 2x6 plate, horizontally, on the back two rows of the truck so the right sides are even. The pins on the back side should extend past this plate.

Step 7.2

Place a dark brown 2x10 plate, horizontally, to the left of the previous piece. Place another in front of the first. The pins on the front side of the truck should extend past the second piece.

Step 8

Place a blue 2x6 plate, horizontally, to the right of the front piece from the previous step. It will go in front of the blue 2x6 plate from step 7.1.

Step 9

Place a light gray 1x4 plate with rounded ends, vertically, to the left of the two 2x10 plates from step 7.2. There should be four free columns to the left of this piece.

Step 10.1

Next, we'll make one of the truck's bumpers. Set the truck aside for now. This will be the truck's front bumper, which will go under the cab. Place a dark gray 3x3 L-shaped plate, with the corner at the front, left, in front of you.

Step 10.2

Place the right column of a dark gray 1x2 plate with a 1x2 inverted curved slope on one side, with the curved slope on the left, on the left column of the previous piece so the back sides are even. The curved slope will extend to the left. Place another in front of the first. The front row of the second piece will overhang.

Step 10.3

Place the back left corner of a dark gray 3x3 L-shaped plate, with the corner at the back left, under the overhanging front right corner of the front piece from the previous step.

Step 10.4.1

Place the right column of a dark gray 1x2 plate with a 1x2 inverted curved slope on one side, with the curved slope on the left, on the left column of the previous piece so the front sides are even. This will go in front of the first two 1x2 plates with inverted curved slopes.

Step 10.4.2

Place a yellow 1x2 plate, vertically and centered vertically, on the second column from the right on the bumper assembly.

Step 10.5

Place the rest of the truck, horizontally so the side with two 2x6 plates is on the right, in front of you. There should be a pin on the front and back sides of the truck, between the left two columns. Place the rightmost column of the bumper assembly, centered vertically, under the leftmost column of the truck.

Group 4.

Step 11

Place a yellow 2x6 plate, horizontally, to the right of the leftmost column on the truck so there is one free stud in front of its leftmost column. There will be a 1x4 plate with rounded ends to the right of this piece. Place another 2x6 plate behind the first.

Step 12

Now, let's find the seventh and eighth columns from the left on the truck. This is between the left two pairs of pins. The 1x4 plate with rounded ends is on the eighth column. Place a light gray 1x2 plate with a 2x2 of studs sticking up from one side, horizontally with the side studs at the front, under the front studs on these columns. Repeat symmetrically on the back side.

Step 13

Place a dark brown 2x4 brick, vertically, between the previous two pieces.

Step 14.1

Next, we'll make some engine details! Place a red 2x3 plate, horizontally and centered vertically, to the left of the previous piece.

Step 14.2

Place a blue 1x1 round tile with a short bar on top on each of the studs of the previous piece. You'll place a total of six pieces in this step.

Step 14.3

Clip a black clip with a 1L bar on one side onto the bar of the back left piece, with the bar pointing to the front right so it goes between the upright short bars of the left two 1x1 round tiles from the previous step. Repeat this on the middle 1x1 round tile with a short bar on the engine.

Step 15

Place a green 2x2 corner plate, with the corner at the back left so the studs form a braille letter F, on the second and third columns from the left so there is one free stud in front of the left column. The back row of this piece will be to the left of the front three 1x1 round tiles with bars on the engine. Place another symmetrically behind the first.

Step 16

Place a dark gray 1x1 corner wall panel, with the walls at the back and left, in front of the left column of the front piece from the previous step. Repeat symmetrically on the back side.

Step 17.1

Place a dark gray 1x2 plate with two studs sticking up from one long side, vertically with the side studs on the left, on the leftmost column of the truck so the front sides are even. Repeat symmetrically on the back side. These pieces will be to the left of the previous two pieces.

Step 17.2

Place a dark gray 1x2 plate with two vertical clips on one side, vertically with the clips on the left, between the previous two pieces.

Step 18

Next, we'll add some wheelwells! Place a black 2x4 plate with a mudguard, horizontally with the mudguard at the front, in front of the engine and to the left of a 1x2 plate with a 2x2 of studs on the front side. There will be two columns to the left of this piece, and the leftmost pin on the front side should be centered horizontally inside the mudguard. Repeat symmetrically on the back side.

Step 19

Place a yellow 1x2 plate, vertically, between the leftmost studs of the previous two pieces.

Group 5.

Step 20.1

Place a yellow 1x2 plate, horizontally, on the left two studs on the second row from the front of the truck. This piece will be to the left of the back row of the front mudguard. Repeat symmetrically on the back side. There will be two rows between these two pieces.

Step 20.2

Place two black 1x2 plates with a clip on one stud, horizontally with the clips on the left, between the previous two pieces.

Step 21

Next, we'll add some reflectors for the turn signals! Place a transparent orange 1x1 plate on the front stud of the leftmost column on the truck. Place this on the studs facing up, not the studs facing left. Repeat symmetrically on the back side.

Step 22

Place a black 2x6 tile, vertically, on the second and third columns from the left of the truck.

Step 23.1

Place a black 1x2 half cylinder, vertically, on the leftmost column of the truck so the front sides are even. Repeat symmetrically on the back side.

Step 23.2

Place a black 1x2 half cylinder, vertically, on the rightmost column of the front 2x4 plate with a mudguard. There should be two free columns between this piece and the 2x6 tile. Repeat symmetrically on the back side.

Step 24.1

Let's add some detail to the bumper of the truck! We'll start with some headlights. Place a transparent clear 1x1 quarter circle tile, with the flat sides at the top and back, on the front side stud on the left side of the truck. Repeat symmetrically on the back side.

Step 24.2

Place a white 1x1 tile with a red diagonal stripe pattern on the side stud behind the front piece from the previous step. Repeat symmetrically on the back side.

Step 25.1

Find the 2x4 brick that's to the right of the wheel well on the truck. Place a green 2x4 plate, horizontally and centered vertically, to the right of this piece.

Step 25.2

Place a blue 4x4 hollow plate, centered vertically, to the right of the previous piece. This piece looks like a 4x4 plate with a 2x2 hole in the middle.

Step 26

Place a green 2x2 tile in the hole of the previous piece.

Step 27

Place a light gray 2x8 plate, horizontally and centered vertically, on the 4x4 hollow plate so the right sides are even. The left side of this piece will touch the 2x4 brick we found earlier.

Step 28

Place a black 2x4 plate with a mudguard, horizontally with the mudguard at the front, in front of the left four columns of the previous piece. The second pin from the left should be centered horizontally inside this piece. Repeat symmetrically on the back side.

Step 29

Place a yellow 1x2 plate with a 2x2 of studs hanging down from one side, horizontally with the side studs at the front, to the right of the back row of the front piece from the previous step. Place another to the right of the first. Repeat these two pieces symmetrically on the back side. You'll place a total of four pieces in this step.

Step 30

Place a dark grey 2x4 curved slope tile, horizontally with the thickest side on top, on the two rows of four side studs formed by the front pair of pieces from the previous step. Repeat symmetrically on the back side.

Step 31

Now we'll add wheel wells for the remaining pins! Place the back row of a black 2x4 plate with a mudguard, horizontally with the mudguard at the front, on the front studs of the rightmost four columns on the truck. The rightmost pin should be centered horizontally in this piece. Place another to the left of the first. Repeat these two pieces symmetrically on the back side. You'll place a total of four pieces in this step.

Group 6 contains the white pieces for steps 32-34 and group 7 contains the red pieces.

Step 32.1

The cement mixer has a stripe of alternating red and white along each side. We'll add that now! Find the second wheel well from the left end of the truck. Place the left column of a white 2x2 corner plate from group 6, with the corner at the back left so the studs form a braille letter F, on the left column of this wheel well. There should be two rows of two side studs to the left of this piece. Repeat symmetrically on the back side.

Step 32.2

Place a red 2x2 corner plate from group 7, with the corner at the back right so the studs form a braille letter D, to the right of the front piece from the previous step. The right side should be even with the right side of the second wheel well from the left. Repeat symmetrically on the back side.

Step 33.1

Place a white 1x2 plate from group 6, vertically, to the right of each of the previous two pieces. Only one stud of these pieces will attach.

Step 33.2

Place a red 1x2 plate from group 7, vertically, to the right of each of the previous two pieces. Only one stud of these pieces will attach.

Step 33.3

Place a white 1x2 plate from group 6, vertically, to the right of each of the previous two pieces. Only one stud of these pieces will attach.

Step 33.4

Place a red 1x2 plate from group 7, vertically, to the right of each of the previous two pieces. Only one stud of these pieces will attach.

Step 34.1

Place a white 2x2 corner plate from group 6, with the corner at the back left so the studs form a braille letter F, to the right of the front piece from the previous step. The left side of this piece should be even with the left side of the second wheel well from the right end of the truck. Repeat symmetrically on the back side.

Step 34.2

Place a red 2x2 corner plate from group 7, with the corner at the back right so the studs form a braille letter D, to the right of the front piece from the previous step. The right side should be even with the right side of the second wheel well from the right. Repeat symmetrically on the back side.

Step 34.3

Place a white 2x2 corner plate from group 6, with the corner at the back left so the studs form a braille letter F, to the right of the front piece from the previous step. The left side of this piece should be even with the left side of the rightmost wheel well. Repeat symmetrically on the back side.

Step 34.4

Place a red 2x2 corner plate from group 7, with the corner at the back right so the studs form a braille letter D, to the right of the front piece from the previous step. The right side should be even with the right side of the right end of the truck. Repeat symmetrically on the back side.

Group 8.

Step 35.1

Place a red 2x3 plate, horizontally and centered vertically, on the truck so the right sides are even.

Step 35.2

Place a blue 2x2 plate on the left two columns of the previous piece.

Step 36.1.1

Now we'll build the truck's rear bumper. Set the truck aside for now. Place a black 1x2 plate with two rows of six studs hanging down from one side, horizontally with the side studs at the front, in front of you.

Step 36.1.2

Place a dark gray 1x2 grille tile, horizontally and centered horizontally, on the bottom row of the previous piece.

Step 36.2

Place the bottom stud of a dark gray 2x2 angled corner tile, with the angled corner at the top left, to the left of the previous piece. The right stud will be over the previous piece. Place another symmetrically to the right of the first.

Step 36.3

Place a white 1x1 tile with a red diagonal stripe pattern to the left of the bottom stud of the left piece from the previous step. Repeat symmetrically on the right side.

Step 36.4

Place the left stud of a transparent red 1x2 right wedge tile, horizontally with the point on the right and the longest side on top, above the left piece from the previous step. Repeat symmetrically on the right side with a 1x2 left wedge tile.

Step 36.5

Place the truck, horizontally with the front bumper on the left, in front of you. Rotate the rear bumper so it's vertical with the tiles on the right and the column of two studs on the left. Place the studs, centered vertically, on the rightmost column of the truck.

Step 37

Place a white 1x3 jumper plate, horizontally, on the third row from the front of the truck so the right side is even with the right of the truck. Place another behind the first.

Bag 2.

Group 9.

Step 38

We'll get the bed ready for the drum, which holds the cement! Place the truck, horizontally with the rear bumper on the right, in front of you. There should be a 2x6 tile on the truck near the left end. Find the two columns of four studs that are to the right of the leftmost wheel well. Place a red 2x2 corner brick, with the corner at the back left so the studs form a braille letter F, on these two columns so the front sides are even. There should be four side studs in front of this piece. Place another symmetrically behind the first.

Step 39.1

Place a red 1x2 inverted half arch, horizontally with the slope on the right, to the right of the front stud of the front piece from the previous step. Repeat symmetrically on the back side.

Step 39.2

Place a yellow 1x1 round plate to the right of each of the previous two pieces.

Step 40

Place the front row of a light gray 2x2 curved slope tile, with the higher side at the front, to the right of the front piece from the previous step. Place two more to the right of the first. Repeat these three pieces symmetrically on the back side. You'll place a total of six pieces in this step.

Step 41.1

Place a light gray 1x8 tile, horizontally, to the right of the front right piece from the previous step so there is one free row in front of it. The right side should be even with the right of the truck. Repeat symmetrically on the back side.

Step 41.2

Place a black 2x2 ribbed thick tile, on the two 1x3 jumper plates that are between the previous two pieces near the right side.

Step 42.1

Place a dark gray 1x2 plate with a single click finger on one side, horizontally with the click finger on the right, on the front row of the truck so the right sides are even. Repeat symmetrically on the back side.

Step 42.2

Place a dark gray 1x10 plate, horizontally, to the left of each of the previous two pieces.

Step 42.3

Place a dark gray 1x4 wall panel, horizontally with the wall at the back, to the left of the front piece from the previous step. Repeat symmetrically on the back side.

Step 43

Place a black 1x2 ingot tile, horizontally, to the right of each of the previous two pieces. Place another to the right of each of the first two. You'll place a total of four pieces in this step. There will be seven free studs to the right of the right two pieces from this step.

Step 44

Place a black 1x3 plate with rounded ends, horizontally, on the right three studs on the front row of the truck. This will be to the left of the single click finger. Repeat symmetrically on the back side.

Step 45

Place the right two studs of a black 1x6 slope tile, horizontally with the tall side on the right, on the left two studs of each of the previous two pieces.

Step 46

Place a black 1x1 half cylinder, with the flat sides at the front and back, to the right of each of the previous two pieces.

Step 47.1.1

Next, we'll make the attachment point for the cement chute. Place a dark brown 1x2 plate with a bar sticking up from one side, vertically with the bar on the right, in front of you.

Step 47.1.2

Place the right column of a black 2x2 curved slope tile, with the taller side on the right, on the previous piece.

Step 47.2

Find a dark gray robot arm. This piece has a clip on one side, and a box on the other. The box has a hole on one side that can accept a bar. Rotate this piece so the side of the box with the hole is at the bottom and so the clip points to the right. Push the hole down onto the top of the bar on the right side of the attachment point.

Step 47.3

Place the attachment point assembly on the 2x2 ribbed thick plate that's near the right end of the cement mixer.

Step 48

Now we'll add the cement chute! Find a dark gray 2x6 curved windshield with a bar on one side. Rotate this piece so it's horizontal with the studs on the bottom and the bar on the left. Clip the bar, centered vertically, into the clip on the chute attachment point.

Group 10.

Step 49

Next, we'll build the frame that holds the back of the cement drum. Set the truck aside for now. Place a light gray 1x4 plate with rounded ends, vertically, in front of you.

Step 50

Place the right column of a black 3x3 L-shaped plate with a rounded corner, with the rounded corner at the front right, on the front two studs of the previous piece. The front row of this piece will overhang. Place another symmetrically behind the first.

Step 51

Place the right two studs of a dark gray 1x6 plate, horizontally, under the front row of the front piece from the previous step. Repeat symmetrically on the back side.

Step 52

Place a black 1x2 plate with a single click finger on one long side, horizontally with the click finger at the back, on the front piece from the previous step and to the left of a 3x3 L-shaped plate with a rounded corner. There will be two free studs to the left of this piece. Repeat symmetrically on the back side.

Step 53

Place a black 1x2 plate with two click fingers on one short side, horizontally with the click fingers on the left, to the left of each of the previous two pieces.

Step 54

Place a light gray 1x4 plate with rounded ends, vertically and centered vertically, on the rightmost column of the assembly.

Step 55

Place a red 1x2 plate with a vertical clip on one long side, horizontally with the clip at the front, on the left two studs on the front row of the frame. Repeat symmetrically on the back side.

Step 56

Place the left two studs of a black 1x6 slope tile, horizontally with the taller side on the left, on each of the previous two pieces.

Step 57

Place a black 1x2 tile with a sloped handle bar on top, vertically with the slope on the left, centered vertically on the rightmost column of the frame assembly.

Step 58

Push the short bar of a black long claw, with the bar at the bottom and the claw hooking to the left, into the hollow stud in front of the previous piece. Repeat symmetrically on the back side.

Step 59

Place the truck, horizontally with the chute on the right, in front of you. Rotate the chute all the way down. Find the single click fingers that are on the front and back rows of the truck, all the way at the right. Clip the click fingers on the left side of the frame assembly onto these two click fingers. You may need to angle the right side of the frame up to make this work. Make sure the chute is below the frame!

Group 11.

Step 60

Find the two columns of four studs that are to the right of the leftmost wheel well. These columns are raised above the rest of the truck. Place a blue 1x2 plate with a clip on one stud, horizontally with the clip at the right, on these columns so there is one free row in front of it. Place another behind the first.

Step 61

Place a yellow 1x2 plate with a 2x2 of studs hanging down from one side, horizontally with the side studs at the front, in front of the front piece from the previous step. There should be two rows of side studs below the side studs on this piece. Repeat symmetrically on the back side.

Step 62.1

Next, we'll build the drum! Set the rest of the truck aside for now. Find a dark gray 7x15x5 half drum. This piece is half of a cylinder which is tapered at each end. One end is hollow, and one end has a row of three holes on it. Place this piece, horizontally with the three holes on the left and the rounded side at the bottom, in front of you.

Step 62.2

In addition to the three holes on the left end of the previous piece, there are four holes on top of the drum, forming a square near the center. Push a light gray 2L pin, from the top, into the right two holes.

Step 63

Push a blue 3L pin, with the stop ring at the bottom, into the front and back holes on the left side of the drum half so they extend 2L above it.

Step 64.1

Now we'll make an assembly that will let the drum rotate to keep the cement from setting! Find a black 28 tooth turntable. This piece looks like a large gear with two pin holes on one side. The center of this piece is hollow. Place it in front of you, with the pin holes at the bottom facing front and back.

Step 64.2

Find a light gray small turntable top. This is a thin cylinder with two pin holes on one side. Push this piece, with the pin holes on top, into the hollow on top of the turntable. Push it down until it clicks. When it clicks, it should spin easily. The orientation of the pin holes does not matter right now.

Step 64.3

Rotate the assembly we made so the pin holes are on the right facing up and down. Push them, from the top, onto the two pins on the left side of the drum. Push it all the way down so the pins extend 1L above it. The gear should be to the left of the drum, and the other two pin holes should be to the left of the gear and free to spin.

Step 65.1.1

Next, we'll add another small assembly to help mount the drum on the truck. Place a teal 3L liftarm whose center hole is an axle hole, vertically with the holes facing up and down, in front of you.

Step 65.1.2

Push a red 2L axle, from the top, into the center axle hole of the previous piece so it extends 1L above it.

Step 65.2

Find a dark gray bushing with a perpendicular bar on it. Rotate it so the holes on the bushing face up and down and so the bar is vertically on the left. Push the bushing, from the top, onto the previous piece. Push it down until it touches the 3L liftarm.

Step 65.3

Push a blue 3L pin, with the stop ring at the bottom, into the front and back holes on the 3L liftarm so they extend 2L above it.

Step 65.4

Now, rotate the two pin holes on the left side of the drum so they face up and down. Push the two pins on the assembly we made, from the bottom, into these holes. Push them all the way up so they extend 1L above the pin holes.

Group 12.

Step 66

Push the front and back holes of a light gray 3L liftarm, vertically with the holes facing up and down, from the top onto the tops of the two pins on the left side of the drum.

Step 67.1

Push the pin side of a white 3L axle/pin combo with a 1L pin side and a 2L axle side, with the axle side on top, from the top into the center hole of the previous piece.

Step 67.2

Push a black 12 tooth gear, from the top, onto the axle side of the previous piece. Push it all the way down. Its teeth should mesh with the teeth on the drum.

Step 68

Now we'll attach the other side of the drum! Push a dark gray 7x15x5 half drum, horizontally with the three holes on the left and the rounded side at the top, onto the pins on top of the assembly so the right sides of the drum are even. The left holes of this half of the drum will attach to the pins to the right of the gear.

Step 69.1

Now we'll attach the drum to the truck. Place the truck, horizontally with the chute on the right, in front of you. Find the two clips that are on the raised portion between the left two wheel wells on the truck. Find the bar that's on the left side of the drum, and clip it into these clips. You may need to raise the right end of the drum to make this work. The axle on the left side of the drum should be pointing up. Once it's clipped in, allow the right side of the drum to rest on the truck. It should angle up and to the right slightly.

Step 69.2

Hinge the right end of the frame counterclockwise until it touches the right end of the drum.

Step 70.1

Place a yellow 1x2 plate, vertically and centered vertically, on the left column of the raised portion of the truck. This will be directly to the left of the bar we used to attach the drum.

Step 70.2

Place a light gray 1x2 plate with a 2x2 of studs sticking up from one side, horizontally with the side studs at the front, in front of the previous piece so the left sides are even. Repeat symmetrically on the back side.

Group 13.

Step 71

Place a black minifigure telescope, upright, on the right studs of each of the previous two pieces.

Step 72.1

Place a light gray 1x4x2 wall panel, vertically with the wall on the left, centered vertically to the left of the previous two pieces.

Step 72.2

Place a yellow 1x2 plate, vertically and centered vertically, on the previous piece.

Step 73.1

Next, we'll make a couple of small assemblies. Place a yellow 1x2 plate, horizontally, in front of you.

Step 73.2

Place a light gray 1x4 plate with rounded ends, horizontally and centered horizontally, on the previous piece.

Step 73.3

Repeat steps 73.1-73.2.

Step 73.4

Place the leftmost stud of one assembly, horizontally, on the front stud of the 1x4x2 wall panel from step 72.1. The right three studs will overhang. Repeat symmetrically on the back side. The axle on top of the drum will be between these pieces.

Step 74.1

Place a blue 4x4 hollow plate on the previous two assemblies. The axle on the drum should be in the hole of this piece.

Step 74.2

Place a yellow 1x4 tile, vertically, on the left column of the previous piece.

Step 75

Place a black 1x2 plate with two rows of four studs hanging down from one side, horizontally with the side studs at the front, on the front row to the right of the previous piece. Repeat symmetrically on the back side.

Step 76

Find the bottom row of side studs between the left two wheel wells on the front side of the truck. Place a dark gray 1x2 slope tile, horizontally with the tall side on top, on this row.

Group 14 contains the black 2x2 curved slope tile and black 2x2 triangular tile for steps 77-78 and 80-81.

Step 77.1.1

Now we'll add some color to the sides of the truck! Set the truck aside for now. Place a yellow 2x6 plate, horizontally, in front of you.

Step 77.1.2

Place the left column of a yellow 2x2 curved slope tile, with the tall side on the left, on the rightmost column of the previous piece.

Step 77.2

Place a yellow 1x2 plate, vertically, to the left of the previous piece.

Step 77.3.1

Place a yellow 2x2 triangular tile, with the 90 degree corner at the back right, to the left of the previous piece.

Step 77.3.2

Place a black 2x2 triangular tile from group 14, with the 90 degree corner at the front left, in front of the previous piece so they form a square.

Step 77.3.3

Place a black 1x2 ingot tile, vertically, to the left of the previous piece.

Step 77.4

Place a dark gray 1x1 round tile on each of the two studs to the left of the previous piece.

Step 77.5

Place the truck, horizontally with the chute on the right, in front of you. Find the side studs on the front side of the truck, between the left two wheel wells. Rotate the assembly we finished so it's upright with the anti-studs at the back and the two 1x1 round tiles at the bottom. Place it on the left two columns of side studs, above the 1x2 slope tile. The top should be even with the top of the truck.

Step 78.1.1

Now we'll make another small assembly. Set the truck aside again. Place a light gray 2x3 plate, vertically, in front of you.

Step 78.1.2

Place the left column of a black 2x2 curved slope tile from group 14, with the tall side on the left, on the rightmost column of the previous piece so the back sides are even.

Step 78.2

Place a black 2x3 tile, horizontally, to the left of the previous piece. The left two columns will overhang.

Step 78.3

Place the back two rows of a light gray 2x3 plate, vertically, under the left two overhanging columns of the previous piece.

Step 78.4.1

Place a black 2x3 right wedge plate, horizontally with the row of three studs at the back and the point at the front left, on the front row of the previous piece so the left sides are even.

Step 78.4.2

Place a black 1x2 right wedge curved slope tile, horizontally with the point on the right and the longest side at the back, to the right of the previous piece.

Step 78.5

Place the truck, horizontally with the chute on the right, in front of you. Rotate the assembly we just made so it's upright with the anti-studs at the back and the two curved slope tiles on top. Place it on the side studs on the front side of the truck and to the right of the first colored assembly so the top sides are even. The curved slopes on the two assemblies should match up.

Step 79

Now we'll do the same on the other side of the truck. Rotate the truck 180 degrees so it's horizontal with the chute on the left. Find the bottom row of side studs between the right two wheel wells on the front side of the truck. Place a dark gray 1x2 slope tile, horizontally with the tall side on top, on this row.

Step 80.1.1

We'll build the color assemblies for this side now! Set the truck aside for now. Place a yellow 2x6 plate, horizontally, in front of you.

Step 80.1.2

Place the right column of a yellow 2x2 curved slope tile, with the tall side on the right, on the leftmost column of the previous piece.

Step 80.2

Place a yellow 1x2 plate, vertically, to the right of the previous piece.

Step 80.3.1

Place a yellow 2x2 triangular tile, with the 90 degree corner at the back left, to the right of the previous piece.

Step 80.3.2

Place a black 2x2 triangular tile from group 14, with the 90 degree corner at the front right, in front of the previous piece so they form a square.

Step 80.3.3

Place a black 1x2 ingot tile, vertically, to the right of the previous piece.

Step 80.4

Place a dark gray 1x1 round tile on each of the two studs to the right of the previous piece.

Step 80.5

Place the truck, horizontally with the chute on the left, in front of you. Find the side studs on the front side of the truck, between the right two wheel wells. Rotate the assembly we finished so it's upright with the anti-studs at the back and the two 1x1 round tiles at the bottom. Place it on the right two columns of side studs, above the 1x2 slope tile. The top should be even with the top of the truck.

Step 81.1.1

Let's make another assembly for this side! Set the truck aside again. Place a light gray 2x3 plate, vertically, in front of you.

Step 81.1.2

Place the right column of a black 2x2 curved slope tile from group 14, with the tall side on the right, on the leftmost column of the previous piece so the back sides are even.

Step 81.2

Place a black 2x3 tile, horizontally, to the right of the previous piece. The right two columns will overhang.

Step 81.3

Place the back two rows of a light gray 2x3 plate, vertically, under the right two overhanging columns of the previous piece.

Step 81.4.1

Place a black 2x3 left wedge plate, horizontally with the row of three studs at the back and the point at the front right on the front row of the previous piece so the right sides are even.

Step 81.4.2

Place a black 1x2 left wedge curved slope tile, horizontally with the point on the left and the longest side at the back, to the left of the previous piece.

Step 81.5

Place the truck, horizontally with the chute on the left, in front of you. Rotate the assembly we just made so it's upright with the anti-studs at the back and the two curved slope tiles on top. Place it on the side studs on the front side of the truck and to the left of the first colored assembly so the top sides are even. The curved slopes on the two assemblies should match up.

Group 15.

Step 82

Find the 2x2 hole that's on top of the truck and to the right of the drum. There should be a column of four studs to the left of this hole. Place a black 1x4 tile, vertically, on this column.

Step 83.1

Next, we'll make the knob you can turn to rotate the drum! Place a black 2L axle connector, horizontally, in front of you.

Step 83.2

Push a red 2L axle, from the right, into the previous piece so the right side extends 1L.

Step 83.3

Push a black 12 tooth gear onto the right side of the previous piece.

Step 83.4

Rotate the knob so the gear is on top and the free hole of the axle connector is at the bottom. Push the knob onto the axle that's in the 2x2 hole to the right of the drum. When you rotate the gear on the knob, the drum should rotate.

Bag 3.

Group 16.

Step 84

Next, we'll build the cab of the truck! Place the truck, horizontally with the chute on the right, in front of you. We'll add the floor of the cab first. Find the two 1x2 half cylinders that are vertical and to the left of the raised portion of the truck. Place a black 4x6 plate, vertically, to the left of these pieces. It will only attach to two 1x2 plates. There will be two more 1x2 half cylinders to the left of it.

Step 85.1

We'll build a small assembly now. Place a yellow 2x6 plate, vertically, in front of you.

Step 85.2

Place a green 2x2 corner plate, with the corner at the front right so the studs form a braille letter J, on the second and third rows from the front on the previous piece. Place another symmetrically behind the first.

Step 85.3.1

Place a yellow 1x2 tile, horizontally, in front of the front piece from the previous step. Repeat symmetrically on the back side.

Step 85.3.2

Place a blue 1x2 jumper plate, vertically and centered vertically, on the leftmost column of the assembly.

Step 85.4

Place a brown 1x2 plate, vertically and centered vertically, to the right of the previous piece.

Step 85.5

Place the left column of this assembly, vertically with the 1x2 plate on the right, on the rightmost column of the 4x6 plate that will be the cab's floor.

Step 86

Find a yellow 2x6 plate that has only five rows of two studs, and has low walls on the ends. This piece is specifically designed for vehicles so two minifigures can sit side by side! Place this piece, vertically and centered vertically, to the left of the assembly we just placed.

Step 87

Next, we'll attach a hinge to allow the cab to tilt so the workers can access the engine! Find the two clips on the leftmost column of the truck. Clip the bar of a yellow 2x2 plate with a bar under it, with the bar vertically under the left column, into these two clips. This piece will be to the right of the previous piece and the right column will attach to the 4x6 plate.

Step 88

Place a yellow 1x2 plate, horizontally, in front of the previous piece. Only the right stud of this piece will attach. Repeat symmetrically on the back side.

Group 17.

Step 89

Place a brown 1x2 plate, horizontally and centered vertically, on the third and fourth columns from the left. This will go on the 2x6 plate with only five rows of studs.

Step 90.1

Place a light gray 1x2 tile with a steering wheel, vertically with the steering wheel on the right, on the second and third studs from the front on the second column from the left of the truck.

Step 90.2

Place a light gray 1x2 tile, vertically, behind the previous piece.

Step 91

Find the 1x2 plate we placed in step 89. Place the middle two studs of a light gray 1x4 plate with rounded ends, horizontally, on this piece so the right stud attaches to a jumper plate and so the left stud rests on the 1x2 tile and 1x2 tile with a steering wheel that we just placed.

Step 92

Place a light gray 1x2 plate with a 2x2 of studs on one side, horizontally with the side studs at the front, on the front row of studs that's to the left of the raised part of the truck. This is on the fifth and sixth columns from the left. Repeat symmetrically on the back side.

Step 93.1.1

Next, we'll make the cab's back wall. Place a light gray 1x4 plate with rounded ends, vertically, in front of you.

Step 93.1.2

Place the right column of a light gray 1x4 plate with a 1x4 curved slope on one side, vertically with the curved slope on the left, on the previous piece.

Step 93.2

Place a light gray 1x4x2 wall panel, vertically with the wall on the right, on the previous piece.

Step 93.3

Place this assembly, vertically with the curved slope on the left, between the two 1x2 plates with 2x2s of side studs from step 92.

Group 18.

Step 94.1

Place a yellow 1x2 tile, vertically and centered vertically, on the 1x4x2 wall panel on the assembly we just placed.

Step 94.2

Place a black 1x1 plate with two studs hanging down from one side, with the side studs at the front, in front of the previous piece. Repeat symmetrically on the back side.

Step 95.1

Next, we'll make a couple of side assemblies for the cab. Place a dark gray 2x4 plate, horizontally, in front of you.

Step 95.2.1

Place a yellow 2x2 with a black elephant head print, centered horizontally, on the previous piece. The printing on this piece is directional, so you may want to ask a sighted friend for help or use an app to get the orientation correct.

Step 95.2.2

Place a yellow 1x2 tile, vertically, to the left of the previous piece. Repeat symmetrically on the right side.

Step 95.3

Repeat steps 95.1-95.2.2.

Step 95.4

Rotate one of the side assemblies so it's upright and vertical. Place it on the six side studs on the front side of the cab. Repeat symmetrically on the back side of the cab with the other assembly.

Step 96

Now we'll add the grille to the truck. Place a black 1x2 brick with horizontal grooves on one side and vertical grooves on the other, vertically with the horizontal grooves on the left, on the front two studs on the leftmost column of the truck. Place another behind the first.

Step 97

Place a black 1x4 plate with a bar hanging down from one side, vertically with the bar on the right, on the previous two pieces. The bar will go into the leftmost hollow stud of a 1x4 plate with rounded ends.

Step 98.1

Let's make a couple more small assemblies. Place a yellow 1x1 plate with two studs sticking up from one side, with the side studs on the left, in front of you.

Step 98.2

Place a yellow 1x2 half cylinder on the two side studs on the previous piece.

Step 98.3

Repeat steps 98.1-98.2.

Step 98.4

Place one of these assemblies, with the half cylinder on the left, on the leftmost stud on the front row of the truck. This will be in front of the grille. Repeat symmetrically on the back side.

Step 99.1

Find a yellow 1x3 left door. This piece looks like a 1x1 round brick with a flat panel sticking off of it. If you place this horizontally in front of you with the brick portion on the left, the brick will be at the back. Place this piece, horizontally with the brick on the left, on the leftmost stud on the front row of the cab. This will be the stud on the front assembly we just placed.

Step 99.2

Repeat the previous step symmetrically on the back side with a yellow 1x3 right door.

Step 100

Place a yellow 1x1 round plate on each of the previous two pieces.

Group 19.

Step 101.1.1

Now we'll build the truck's windshield. Set the truck aside for now. Place a clear 2x6x2 windscreen, vertically with the slope on the left, in front of you.

Step 101.1.2

Place a black 1x4 tile, vertically and centered vertically, on the previous piece.

Step 101.2

Place a black 1x1 plate with two studs hanging down from one side, with the side studs at the front, in front of the previous piece. Repeat symmetrically on the back side.

Step 101.3

Place a black 1x2 ingot tile, upright and vertically, on the side studs of each of the previous two pieces.

Step 101.4

Place the truck, horizontally with the cab on the left, in front of you. Place the windscreen, vertically with the slope on the left, on the cab so the left sides are even.

Step 102.1.1

Now we'll build the roof of the cab. Set the truck aside for now. Place a yellow 5x6 triple curved slope, vertically with the column of studs on the right, in front of you. This piece has a hole in the middle which acts as a sunroof!

Step 102.1.2

Clip a clear 4x3 window pane, with the pegs on the left, into the hole on top of the previous piece. Push the left side down until it clicks into place. Now you can hinge the sunroof open and closed!

Step 102.2

Place the left column of a blue 2x2 plate, centered vertically, under the rightmost column of the roof.

Step 102.3.1

Place the back stud of a black 1x3 plate with rounded ends, vertically, on the front right stud of the previous piece. Place another symmetrically behind the first.

Step 102.3.2

Place a yellow 1x2 plate, vertically, under the front two studs of the front piece from the previous step. Repeat symmetrically on the back side.

Step 102.4

Place a yellow 2x4 curved slope tile with an elephant head print, vertically with the tall side on the right, centered vertically, on the roof so the right sides are even.

Step 102.5

Place a transparent orange 1x1 dome in front of the right column of the previous piece. Repeat symmetrically on the back side.

Step 102.6

Let's add the roof to the cab! Place the truck, horizontally with the cab on the left, in front of you. Place the roof, horizontally with the 2x4 curved slope on the right, on the cab so the left column of the roof overhangs.

Step 103.1

Now let's assemble the truck's four rear wheels. Do this by pushing a dark gray wheel hub into a black rubber tire.

Step 103.2

One side of the wheel will be flat with a spoke pattern, and the other side will be recessed with a stud inside. Rotate one of the wheels so the stud is at the front. Push the pin hole on the back side onto the rightmost pin on the front side of the truck.

Step 103.3

Repeat this with the three other wheel wells on the right side of the truck.

Step 104.1

Repeat steps 103.1-103.2 four more times.

Step 104.2

Place a silver 1x1 round tile with a lug bolt pattern on the stud of each of the four wheels we just made.

Step 104.3

Place one wheel, with the 1x1 round tile facing out, on each of the remaining four pins for the wheels.

Step 105.1

Clip the top bar of a black bumper, laying flat and vertically with the offset bar at the right, into the two clips on the left side of the truck. The front and back sides of the bumper should angle down slightly.

Step 105.2

Rotate the previous piece down so it touches the bumper.

Group 20.

Step 106

Now we can add 32 light gray 1x1 round plates to the drum of the truck to act like cement! If you fold the chute down, and then turn the knob on top of the truck to spin the drum and pour the cement!

The cab can be hinged open to allow access to the engine, or the roof can be removed to allow you to put in the minifigures!

This completes the Cement Mixer.

Thank you so much for building this set!

There are two pages of ads after the instructions end. The first page has pictures of four sets: set number 60490 Snowplow, set number 60478 Cement Mixer, set number 60495 City Recycling Truck, and set number 60498 Tractor.

The second page has pictures of four more sets: set number 60502 Airport with Airplane, set number 60489 Jet vs Car, set number 60499 Airport Fire Truck, and set number 60487 Yellow Taxi.

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