

77002 Cyclone vs. Metal Sonic

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Appeal to kids and Sonic collectibles fans aged 8 and up who love video game toys with this Cyclone vs. Metal Sonic (77002) building set. This LEGO® Sonic the Hedgehog™ toy features a mech that has articulated legs and a turret with a stud shooter. Kids can turn the mech into a flying mech by folding the legs up and rotating them forward, and there's a set of tool accessories included for maintenance or repairs.

This Sonic playset is a fun toy for boys, girls and kids that everyone will talk about. With 2 minifigures – Metal Sonic and Tails – kids can play out a range of stories: from Tails working on his mech to facing Metal Sonic in a battle to protect the Chaos Emerald tucked in the mech's fuselage.

Mech toy for kids – Treat boys, girls and fans aged 8 and up to this speedy, fun-filled Cyclone vs. Metal Sonic set, which encourages kids to reimagine stories with some well-known Sonic characters.

Collectible Sonic playset – Features a mech with a cockpit, articulated legs and a turret with stud shooter, plus a hidden Chaos Emerald, mech tools, and Metal Sonic and Tails minifigures.

Convertible mech toy – This LEGO® set kick-starts action and fun with a Tails' mech that converts from walking to flying when the legs are folded up and rotated forward.

Sonic character toys – a Tails' mech toy also includes a minifigure cockpit, mech tool storage space and an articulated turret with stud shooter to help defend against Metal Sonic as they do battle.

Measurements – This 290-piece video game set includes a Cyclone mech toy model that measures over 5.5 in. (14 cm) high, 6 in. (15 cm) wide and 5.5 in. (15 cm) deep.

The front of the box shows Tails in his mech fighting and shooting at metal sonic!

The back of the box shows Tails in his mech! His mech can transform from a walking mech with legs to a flying mech!

The top of the box shows a real size image of Tails.

The build is 290 pieces in total and is for ages 8+.

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

- In Front of/Front: towards you.
- Behind/Back: away from you.
- Up: towards the ceiling.
- Down: towards the floor.
- Stud: the bump on a LEGO brick. Example: A 2x1 brick has two studs on it.
- Vertically: with the longest side going from front to back
- Horizontally: with the longest side going from left to right.
- Upright: pointing up towards the ceiling.
- Standing upright: The piece is perpendicular to the ground, like a wall.

- Lying flat: The piece is parallel to the ground, like a piece of toast which fell off the table.
- That one/ppp: previously placed piece.
- Plate: piece with studs.
- Tile: smooth piece without studs (unless otherwise specified)
- A jumper plate is a 1x2 plate with a single stud on top, or a 1x3 plate with only two studs on top.
- "Anti-stud" is a term for the portion of a LEGO piece which accepts studs, like the bottom of a plate or brick.
- Symmetrically: a mirror image. Example: If you place a 2x1 brick with technic connector on the front wall at the right, connector to the front, and then place another such piece symmetrically on the back wall, at the right, the technic connector of the second piece should point to the back, since it will be placed symmetrically.
- Centered-vertically: even amount of space in front of and behind piece
- Centered-horizontally: even amount of space left and right of piece.
- Row: studs lined up horizontally (left to right/side to side).
- Column: studs lined up upright or vertically (top to bottom/back to front).

A note on LEGO Technic™ part names. These parts are somewhat different from regular LEGO bricks. Here are 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.

Technic brick - a brick which contains one or more holes which accept technic pins.

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 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.

For builders with low vision, or a sighted building partner may want to follow along with the printed visual instructions that come with each kit, or PDF versions are always online at LEGO.com for each set: (<https://www.lego.com/en-us/service/buildinginstructions/77002>) As low vision users may benefit from viewing the instructions on a personal device where they can zoom in on content and use assistive technologies to enhance the visuals.

Sorting the pieces:

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

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

Bag 1 - Tails and Cyclone Mech

Group 1 - Page 4.

Group 2 - Steps 1-17.

Group 3 - Steps 18-20.

Group 4 - Step 21.

Group 5 - Steps 22-26.

Group 6 - Steps 27-37.

Group 7 - Steps 38-42.

Group 8 - Step 43.

Group 9 - Steps 44-49.

Group 10 - Steps 50-60.

Bag 2 - Metal Sonic and Cyclone Mech

Group 11 - Page 30.

Group 12 - Steps 61-76.

Group 13 - Steps 77-88.

Group 14 - Steps 89-116.

Group 15 - Steps 117-126.

Let's get to building!

Building Instructions (Bag 1, Book 1):

Group 1 - Tails

Sub-build 1. Locate a short light orange, red, and white pair of legs, 1 light orange and white tail, 1 light orange torso printed with a white chest, 1 white and light orange head printed with black eyes, 1 silver wrench, and 1 black crowbar. Assemble your minifigure so the smooth round side of the head faces the back, then attach the tools to his hands! Make sure his tail faces up, then put him away while we make his mech!

Group 2 - Cyclone Mech

1. Horizontally place a black 2x8 plate in front of you.
2. Horizontally place a brown 2x4 plate on the 3 rightmost columns so 1 column overhangs to the right.
3. Place a light grey 2x2 inverted tile underneath the rightmost column so 1 column is exposed to the right.
4. Horizontally place a black set of 2 1x1 plates with 2x6 upright side studs on the front right corner so the side studs face the front. Then repeat symmetrically to the back.
5. Horizontally place a light grey 2x6 plate on the 6 rightmost columns.
6. Horizontally place a yellow 1x2 plate with 2x2 upright side studs on the front left corner so the side studs face the front and 1 column overhangs to the left. Then place a dark grey 1x1 plate with 2 upright side studs to the right of the ppp so the side studs face the front. Now horizontally place a yellow 1x2 plate with 2x2 upright side studs to the right of the ppp so the side studs face the front. Now repeat everything symmetrically to the back.
7. Place 2 blue 2x2 round plates, 1 to the right of the other, on the 2nd to 5th columns from the left.
8. Place a blue 2x2 round plate on the 2 rightmost columns. Then horizontally place a black 2x8 plate to the left of the ppp.
9. Place a light grey 2x2 plate with 2 side studs on the 2 rightmost columns so the side studs face the right. Then place a yellow 2x2 round tile with a stud to the left of the ppp. Now horizontally place a light orange 2x3 plate to the left of the ppp.
10. Vertically place a blue 1x2 tile on the 2nd column from the left. Then place a light grey 2x2 tile with 2 studs to the right of the ppp so the studs are on the left.

11. Vertically place a black 1x2 brick with 2 sides of side studs on the rightmost column so the side studs face the left and right. Then place a transparent green diamond on the 2x2 round tile with a stud that is to the left of the ppp. Now place a blue 2x2 round plate to the left of the ppp.

12. Horizontally place 2 dark grey 1x2 log bricks, 1 in front of the other, on top of the ppp.

13. Horizontally place a light grey 2x6 plate on the 6 rightmost columns. Then vertically place a white 1x2 steering wheel to the left of the ppp so the wheel faces the left.

14. Vertically place a light grey 1x2 rounded plate on the rightmost column. Then horizontally place a dark grey 1x2 plate with 2x4 side studs hanging down on the front row to the left of the ppp so the side studs face the front. Then repeat symmetrically to the back. Now vertically place a light grey 1x2 rounded plate to the left of the 2 ppp.

15. Place a light grey 1x1 plate with 2 side studs hanging down on the front row on the 5th column from the right so the side studs face the front. Then repeat symmetrically to the back.

16. Horizontally place a black 2x8 plate upright on the 8 rightmost columns of front-facing side studs so it is centered vertically on the side studs. It should overhang by 4 studs in the top left corner!

17. Vertically place a blue 1x2 sloped curved tile upright on the bottom right corner of front-facing side studs so it slopes down. Then place a blue 2x2 sloped curved tile upright to the left of the ppp so it slopes down.

Group 3 - Cyclone Mech

18. Place a blue 2x2 sloped curved tile printed with a white and light orange tail logo upright on the top right corner of front-facing side studs so it slopes up. Then vertically place a yellow 1x2 angled sloped curved tile upright to the left of the ppp so it slopes up and the angled side faces the left. Now horizontally place a silver 1x2 grill slope tile upright on the top row of front-facing side studs to the left of the ppp so it slopes to the right.

19. Rotate your build 180 degrees. Then horizontally place a black 2x8 plate upright on the 8 leftmost columns of front-facing side studs so it is centered vertically on the side studs. It should overhang by 4 studs in the top right corner!

20. Horizontally place a light grey 1x2 rounded plate upright on the 2nd row of front-facing side studs from the bottom, on the 2nd and 3rd columns from the right. Then repeat symmetrically to the back.

Group 4 - Cyclone Mech

21. Vertically place a blue 1x2 sloped curved tile upright on the bottom left corner of front-facing side studs so it slopes down. Then place a blue 2x2 sloped curved tile upright to the right of the ppp so it slopes down.

Group 5 - Cyclone Mech

22. Place a blue 2x2 sloped curved tile printed with a white and light orange tail logo upright on the top left corner of front-facing side studs so it slopes up. Then vertically place a yellow 1x2 angled sloped

curved tile upright to the right of the ppp so it slopes up and the angled side faces the right. Now horizontally place a silver 1x2 grill slope tile upright on the top row of front-facing side studs to the right of the ppp so it slopes to the left.

23.1. Let's make a part! Horizontally place a white 1x2x1 2/3 brick with 2x2 side studs in front of you so the side studs face the front. Then horizontally place a light grey 1x2 rounded plate on top of the ppp.

23.2. Horizontally place a light grey 1x2 plate with a socket on the long side on top so the socket faces the front. Now horizontally place a light grey 1x2 rounded plate on top of the ppp.

23.3. Place a light grey 1x1 plate with 2 side studs hanging down on the left column so the side studs face the left. Then repeat symmetrically to the right.

23.4. Vertically place your part on the rightmost column so the socket faces the right.

24. Vertically place a blue 1x3 plate upright on the bottom 3 front-facing side studs of the rightmost column. Then repeat symmetrically to the back.

25.1. Let's make a part! Horizontally place a light grey 1x2 rounded plate in front of you. Then place a black 1x1 plate with a clip on the right column so the clip faces the right and the clip hands face up and down. Then repeat symmetrically to the left.

25.2. Vertically place a blue 1x1 tile with a 1x1 slope tile on the left column so it slopes and overhangs to the front. Then repeat symmetrically to the right.

25.3. Place your part upright on the 2x2 right-facing side studs so it slopes down.

26. Flip your build upside down so it is horizontal and the 2x2 inverted tile is on the left. Place a dark grey 2x2 inverted slope brick on the 2 leftmost columns of anti-studs so it slopes to the left.

27. Let's make a part! Stack 2 light grey 4x4 round plates with a 2x2 gap in front of you.

28. Let's make another part! Vertically place a red 2x4 brick on top of a transparent orange 2x2 round inverted tile with a rounded bottom so it is centered vertically. Now vertically place your part on top of your previous part so it is centered vertically.

29. Vertically place a light grey 4x6 brick with pinholes and a 2x4 gap on top so it is centered vertically. The 2x4 brick should fit in the 2x4 gap!

30. Horizontally place a light grey 2x4 tile on the front 2 rows. Then repeat symmetrically to the back.

31. Insert a black 2L pin into the middle left-facing pinhole. Then insert a blue 3L pin into the middle right-facing pinhole so the 2L pin faces the right.

32.1. Let's make 2 identical parts! Vertically place a blue 1x2 brick with a pinhole in front of you. Now place a dark grey 1x1 plate with 2 side studs sticking up underneath the front row so the side studs face the front. Then repeat symmetrically to the back.

32.2. Now you should have 2 identical parts! Vertically attach the pinhole of 1 part to the left-facing pin. Then vertically attach the other 1 to the right-facing pin so it goes all the way in.

33. Attach a light grey cylinder with a ridged side to the right-facing pin so the ridged side faces the right.

34. Vertically place your part on top of the anti-studs of the main build, to the right of the 2x2 inverted slope brick, so it is centered vertically and the cylinder with the ridged side faces the right.

35. Flip your build over so it is horizontal and the 2x2 side studs face the right. Now place a dark grey 2x2 corner plate upright on the front-facing side studs underneath the 1x2 rounded plate that is on the 2nd and 3rd columns of front-facing side studs from the left so it looks like the braille letter f. Now place another 1 upright to the right of the ppp so the top rows have a 2 column gap in between them and it looks like the braille letter d.

36. Vertically place a light grey 1x2 sloped curved tile upright on the bottom row of each of the 2 ppp so it slopes and overhangs 1 row down.

37. Horizontally place a blue 1x6 tile upright on the front-facing side studs above the 2 ppp. Now place a blue 1x1 slope tile upright to the right of the ppp so it slopes down.

Group 7 - Cyclone Mech

38.1. Let's make a part! Horizontally place a white 1x4 plate in front of you. Then horizontally place a yellow 1x6 plate on top of the ppp so it is centered horizontally. Now horizontally place a yellow 1x6 tile on top of the ppp.

38.2. Horizontally place a yellow 1x1 plate with a 1x1 slope tile underneath the leftmost column so it slopes and is exposed to the left. Then repeat symmetrically to the right.

38.3. Horizontally place your part upright above the front-facing 1x6 tile so it is centered horizontally to it.

39. Place a blue 1x1 slope tile upright on the top leftmost front-facing side stud so it slopes up. Then horizontally place the leftmost column of a blue 1x4 double sloped curved tile upright below the ppp.

40. Place a light grey 1x1 plate with a side stud hanging down upright on the front-facing side studs to the right of the ppp so the side stud faces up. Now vertically place a blue 1x2 angled sloped curved tile to the right of the ppp so 1 row slopes and overhangs to the top, and the angled side faces the left. Now horizontally place a light grey 1x2 rounded plate upright on the front-facing side studs to the right of the bottom row of the ppp.

41. Rotate your build 180 degrees. Place a dark grey 2x2 corner plate upright on the front-facing side studs underneath the 1x2 rounded plate that is on the 2nd and 3rd columns of front-facing side studs from the right so it looks like the braille letter d. Now place another 1 upright to the left of the ppp so the top rows have a 2 column gap in between them and it looks like the braille letter f.

42. Vertically place a light grey 1x2 sloped curved tile upright on the bottom row of each of the 2 ppp so it slopes and overhangs 1 row down.

Group 8 - Cyclone Mech

43. Horizontally place a blue 1x6 tile upright on the front-facing side studs above the 2 ppp. Now place a blue 1x1 slope tile upright to the left of the ppp so it slopes down.

Group 9 - Cyclone Mech

44.1. Let's make a part! Horizontally place a white 1x4 plate in front of you. Then horizontally place a yellow 1x6 plate on top of the ppp so it is centered horizontally. Now horizontally place a yellow 1x6 tile on top of the ppp.

44.2. Horizontally place a yellow 1x1 plate with a 1x1 slope tile underneath the leftmost column so it slopes and is exposed to the left. Then repeat symmetrically to the right.

44.3. Horizontally place your part upright above the front-facing 1x6 tile so it is centered horizontally to it.

45. Place a blue 1x1 slope tile upright on the top rightmost front-facing side stud so it slopes up. Then horizontally place the rightmost column of a blue 1x4 double sloped curved tile upright below the ppp.

46. Place a light grey 1x1 plate with a side stud hanging down upright on the front-facing side studs to the left of the ppp so the side stud faces up. Now vertically place a blue 1x2 angled sloped curved tile to the left of the ppp so 1 row slopes and overhangs to the top, and the angled side faces the right. Now horizontally place a light grey 1x2 rounded plate upright on the front-facing side studs to the left of the bottom row of the ppp.

47. Place a light grey 1x1 round plate with a hollow stud on the front stud of the 7th column from the left. Then repeat symmetrically to the back.

48. Vertically place a transparent 2x4 windshield on the 2 ppp so it is centered vertically and slopes to the left. Now vertically place a blue 1x2 slope tile on the rightmost column so it slopes to the left.

49. Place a yellow 2x2 plate with 2 studs and a hinge on the 2 leftmost columns so the hinge is on the left. Now horizontally place a blue 2x3 sloped curved tile with a wing and 2 studs to the right of the ppp so the studs are on the right.

Group 10 - Cyclone Mech

50. Vertically place a yellow 1x2 ingot tile on the leftmost column of studs so it is centered vertically.

51.1. Let's make a part! Place a yellow 4x4 round plate in front of you. Then place a dark grey 2x2 round tile with a pinhole printed with lines on top so it is centered.

51.2. Place a yellow 1x2 sloped curved brick on the front left corner so it slopes to the front left. Then repeat symmetrically to the right. Now repeat both parts symmetrically to the back.

51.3. Place your part upright on the 2x2 left-facing side studs so it is centered on them.

52.1. Let's make a part! Place a silver 2L pin connector in front of you so the pin connector faces up. Now insert a black 2L pin into the top-facing pin hole. Then place a silver 2L pin connector on top.

52.2. Insert a blue 2L pin axle to the top-facing pinhole so the axle faces up. Now place a black axle connector with a hinge connector on the top-facing axle so the hinge hands are on the left and right.

52.3. Attach the hinge connector of your part to the top-facing hinge that is on the leftmost column so the pin connector faces the left.

53. Place a blue knife with a handle upright on the leftmost front-facing side stud of the upright 1x2 rounded plate so it is horizontal and the angled side faces the left. Then repeat symmetrically to the back.

54. Let's make a part! Horizontally place a black 1x3 rounded plate in front of you. Then horizontally place a black 1x2 brick with side studs on 2 sides on the 2 rightmost columns so the side studs face the front and back.

55.1. Let's make 2 identical parts! Horizontally place a light grey 1x1 plate with a 1x1 slope tile in front of you so it slopes to the right. Now place a dark grey 1x1 plate on top. Then horizontally place a dark grey 1x1 tile with a 1x1 slope tile on top so it slopes and overhangs to the left.

55.2. Horizontally place your part upright on the 2 front-facing side studs so the 1x1 tile with a 1x1 slope tile overhangs to the left. Then repeat symmetrically to the back.

56. Place a blue 1x1 slope tile on the rightmost column so it slopes to the right. Then place a transparent green 1x1 plate to the left of the ppp.

57.1. Let's make a part! Horizontally place a light grey 1x4 stud shooter with a stud in front of you so the stud is on the right. Now place a transparent green 1x1 round brick on top. Then horizontally attach a dark grey trigger to the top of the stud shooter so the rounded part faces down.

57.2. Horizontally place your part on the leftmost column of your previous part so the stud shooter overhangs 3 columns to the left.

58. Horizontally place a blue 1x2 tile on top.

59.1. Let's make a part! Horizontally place a dark grey 3L bent axle connector with a pinhole in front of you so the axle connectors face the front left and front right. Now insert a red 2L bar with a stop into the left facing axle hole. Then attach a light grey 1L axle with a ball to the right-facing axle.

59.2. Attach the bar of your part to the middle anti-stud of the 1x3 rounded plate of your part so the ball faces the bottom left.

60. Attach the ball of your part to the right-facing socket of the main build so the stud shooter is on top and the barrel of it faces the left.

Building Instructions (Bag 2, Book 1):

Group 11 - Metal Sonic

Sub-build 2. Locate 1 blue pair of legs printed with red shoes and dark grey shorts, 1 blue torso printed with light grey arms and a yellow core, 1 blue and black head printed with yellow ears, and 2 transparent

hand orange blasters. Assemble your minifigure, make sure the wavy part of the head faces the back, then attach the blasters to his hands! Now put him away while we continue to build.

Group 12 - Cyclone Mech

61. Let's make a part! horizontally place a blue 1x2 plate in front of you. Then horizontally place a yellow 1x2 brick with an axle hole on the left column so 1 column overhangs to the left.

62. Horizontally place a blue 1x2 brick with a pinhole on the right column so 1 column overhangs to the right.

63. Horizontally place a blue 1x4 plate on top.

64. Place a dark grey 1x1 plate with 2 upright side studs sticking up underneath the leftmost column so the side studs face the left. Then repeat symmetrically to the right.

65. Horizontally place a blue 1x4 plate on top.

66. Horizontally place a yellow 1x2 brick with an axle hole on the 2 leftmost columns. Now horizontally place a blue 1x2 brick with a pinhole on the 2 rightmost columns.

67. Place a light grey 1x1 plate with 2 side studs hanging down on the leftmost column so the side studs face the left. Then repeat symmetrically to the right.

68. Stack 2 short light grey 1x1 bricks on the leftmost column.

69. Place a light grey 1x1 plate with 2 side studs hanging down on the leftmost column so the side studs face the left.

70. Horizontally place a blue 1x2x2 slope brick on top so it is centered horizontally and slopes to the right.

71. Horizontally place a light grey 1x2 tile on the 2 leftmost columns.

72. Vertically place a light grey 1x6 tile upright on the 6 left-facing side studs.

73. Vertically place a blue 1x4 plate upright on the right-facing side studs. Then vertically place a yellow 1x2 grill slope tile upright on the bottom 2 right-facing side studs so it slopes down. Then vertically place another 1 upright above the ppp so it slopes up.

74. Insert a black 3L pin axle into the bottom front-facing axle hole so the axle faces the back and the pin faces the front. Now attach a dark grey pin connector with an axle connector to the front-facing pin so the axle hole is on the bottom left.

75.1. Let's make a part! Place a dark grey 3x3 disc with 2 pins, an axle hole and ridged side in front of you so the pins face the back. Now attach a light grey 3x3 disc with 2 pins, a pinhole, and a smooth side to the front of the ppp so the pins face the front. Now insert a black 2L pin into the front-facing pinhole.

75.2. Attach the 2 back-facing pins of your part to the 2 front-facing pinholes of the previous part so the 3 front-facing pins are horizontal.

76. Attach a black ball to the back-facing axle.

77-78. Rotate your part so it is vertical and the ball faces the right. Now attach a large dark grey socket with an axle connector to the ball so it faces down and to the back, and the axle hole on the end faces the right.

79. Attach a dark grey L-shaped axle with a pinhole to the top right-facing axle hole so the other axle faces the front. Now attach a blue wing with an axle hole to the front-facing axle of the ppp so it faces the right and slopes to the back.

80. Let's make a part! Place a black axle connector with an axle hole in front of you so the axle connector faces left and right, and the axle hole faces the front. Now insert a dark tan 3.2L axle with a stud into the left-facing axle so the axle goes all the way in and faces the right, and the stud faces the left.

81. Attach a black ball to the right-facing axle so it goes all the way in. Now attach a black axle connector with an axle hole to the right-facing axle so it goes all the way in and the other axle hole faces the front.

82. Insert a yellow 5L axle into the left front-facing axle hole. Then insert a black 6L axle into the right front-facing axle hole.

83. Attach 3 black 1x1 bricks with an axle hole to the left front-facing axle so they go all the way back. Then repeat symmetrically to the right. Now attach a thin yellow bushing to the right front-facing axle.

84. Place a black 3x3 plate underneath the 6 previous 1x1 bricks with an axle hole. Then vertically place a black 1x3 tile on top so it is centered horizontally.

85. Vertically place a black 1x3 tile on the rightmost column. Now place a black 1x2 slope tile on the front left corner so it slopes to the left. Then place a black 1x1 slope tile behind the ppp so it slopes to the left.

86. Rotate your previous part 180 degrees so the wing faces the left. Now attach the 2 axles of your part to the back side of the 2 axle connectors that face down and to the back so the tiles are on top, and it faces down and to the back. Make sure the 1x2 slope tile is on the left.

87. Attach a thin yellow bushing to the front-facing axle of the previous part.

88. Bring back your main build and orient it so the pin connector faces the left. Now attach the 3 pins of your part to the 3 front-facing pinholes so the wing is in the front.

Group 14 - Cyclone Mech

89. Let's make a part! horizontally place a blue 1x2 plate in front of you. Then horizontally place a yellow 1x2 brick with an axle hole on the right column so 1 column overhangs to the right.

90. Horizontally place a blue 1x2 brick with a pinhole on the left column so 1 column overhangs to the left.

91. Horizontally place a blue 1x4 plate on top.

92. Place a dark grey 1x1 plate with 2 upright side studs underneath the leftmost column so the side studs face the left. Then repeat symmetrically to the right.

93. Horizontally place a blue 1x4 plate on top.

94. Horizontally place a yellow 1x2 brick with an axle hole on the 2 rightmost columns. Now horizontally place a blue 1x2 brick with a pinhole on the 2 leftmost columns.

95. Place a light grey 1x1 plate with 2 side studs hanging down on the leftmost column so the side studs face the left. Then repeat symmetrically to the right.

96. Stack 2 short light grey 1x1 bricks on the rightmost column.

97. Place a light grey 1x1 plate with 2 side studs hanging down on the rightmost column so the side studs face the right.

98. Horizontally place a blue 1x2x2 slope brick on top so it is centered horizontally and slopes to the left.

99. Horizontally place a light grey 1x2 tile on the 2 rightmost columns.

100. Vertically place a light grey 1x6 tile upright on the 6 right-facing side studs.

101. Vertically place a blue 1x4 plate upright on the left-facing side studs. Then vertically place a yellow 1x2 grill slope tile upright on the bottom 2 left-facing side studs so it slopes down. Then vertically place another 1 upright above the ppp so it slopes up.

102. Insert a black 3L pin axle into the bottom front-facing axle hole so the axle faces the back and the pin faces the front. Now attach a dark grey pin connector with an axle connector to the front-facing pin so the axle hole is on the bottom right.

103.1. Let's make a part! Place a dark grey 3x3 disc with 2 pins, an axle hole and ridged side in front of you so the pins face the back. Now attach a light grey 3x3 disc with 2 pins, a pinhole, and a smooth side to the front of the ppp so the pins face the front. Now insert a black 2L pin into the front-facing pinhole.

103.2. Attach the 2 back-facing pins of your part to the 2 front-facing pinholes of the previous part so the 3 front-facing pins are horizontal.

104. Attach a black ball to the back-facing axle.

105-106. Rotate your part so it is vertical and the ball faces the left. Now attach a large dark grey socket with an axle connector to the ball so it faces down and to the back, and the axle hole on the end faces the left.

107. Attach a dark grey L-shaped axle with a pinhole to the top left-facing axle hole so the other axle faces the front. Now attach a blue wing with an axle hole to the front-facing axle of the ppp so it faces the left and slopes to the back.

108. Let's make a part! Place a black axle connector with an axle hole in front of you so the axle connector faces left and right, and the axle hole faces the front. Now insert a dark tan 3.2L axle with a

stud into the right-facing axle so the axle goes all the way in and faces the left, and the stud faces the right.

109. Attach a black ball to the left-facing axle so it goes all the way in. Now attach a black axle connector with an axle hole to the left-facing axle so it goes all the way in and the axle hole faces the front.

110. Attach a yellow 5L axle to the right front-facing axle hole. Then insert a black 6L axle into the left front-facing axle hole.

111. Attach 3 black 1x1 bricks with an axle hole to the left front-facing axle so they go all the way back. Then repeat symmetrically to the right. Now attach a thin yellow bushing to the left front-facing axle.

112. Place a black 3x3 plate underneath the 6 previous 1x1 bricks with an axle hole. Then vertically place a black 1x3 tile on top so it is centered horizontally.

113. Vertically place a black 1x3 tile on the leftmost column. Now place a black 1x2 slope tile on the front right corner so it slopes to the right. Then place a black 1x1 slope tile behind the ppp so it slopes to the right.

114. Rotate your previous part 180 degrees so it is vertical and the wing faces the right. Now attach the 2 axles of your part to the back side of the 2 axle connectors that face down and to the back so the tiles are on top, and it faces down and to the back. Make sure the 1x2 slope tile is on the right!

115. Attach a thin yellow bushing to the front-facing axle of the previous part.

116. Bring back your main build and orient it so the pin connector faces the right. Now attach the 3 pins of your part to the 3 front-facing pinholes so the wing is in the front.

Group 15 - Cyclone Mech

117. Let's make 2 identical parts! Horizontally place a black 1x2x2 window frame in front of you so the ridged side faces the front. Then horizontally place a yellow 1x2 brick with an axle hole on top.

118. Vertically place a blue 1x1 plate with a 1x1 slope tile on the left column so it slopes and overhangs to the back. Then repeat symmetrically to the right.

119. Place a black 1x1 round brick with a side stud on the left column so the stud faces the left. Then repeat symmetrically to the right.

120. Horizontally place a black 1x2 grill tile on top.

121. Place a yellow 1x1 brick with a side stud underneath the left column so the side stud faces the left. Then repeat symmetrically to the right.

122. Vertically place a yellow 1x6 tile upright on the 2 left-facing side studs. Then repeat symmetrically to the right.

123.1. Lay your part on its side so the 1x2 grill tile faces the left, and the 1x1 slope tiles face up.

123.2. Let's make a part! Place a dark grey socket with an axle hole connector in front of you so the socket faces the back and the axle hole is in the front and faces up. Now insert a dark grey L-shaped axle with a pinhole into the left-facing axle hole so the other axle faces the front.

123.3. Insert the axle of your part into the top-facing axle hole of your previous part so the socket is on the right and faces up.

124. Now you should have 2 identical parts! These are the feet! Bring back your main build so the pin connector faces the right. Now attach the front bottom-facing ball of the leg of your build to the socket of 1 of your parts so the 1x1 slope tiles are on the right and face up. Then repeat symmetrically to the back.

125.1. Let's make 2 identical parts! Attach a dark grey wheel to a black tire. Now attach it to the 2 clips of a light grey 2x2 plate with 2 clips underneath.

125.2. Now you should have 2 identical parts! Now rotate your main build so the 1x1 slope tiles of the feet face the back. Then orient the legs so the 3x3 anti-studs face the front. Now place 1 part upright on the left 3x3 anti-studs so it is centered on it and the wheel faces up. Then repeat symmetrically to the right.

126. Locate 4 transparent green 1x1 round plates. This is ammo for the stud shooter! Load them into the barrel and then press on the trigger to shoot them out!

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!

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At the end of the instruction booklets are advertisements for the following 6 LEGO Sonic the Hedgehog Theme kits:

77002 Cyclone vs. Metal Sonic

77001 Sonic's Campfire Clash

77003 Super Shadow vs. Biolizard

76997 Tails' Adventure Boat

76999 Super Sonic vs. Egg Drillster

76998 Knuckles and the Master Emerald Shrine

