75402 ARC-170 Starfighter

Set adapted by Alex Charbonneau and tested by Natalie Charbonneau.

Recreate Star Wars: Revenge of the Sith[™] missions with this ARC-170 Starfighter building toy (75402) for kids. A top LEGO® Star Wars[™] gift idea for boys, girls and fans aged 9 and up, the brick-built starfighter features 3 opening cockpits, 6 wings, including 4 lever-operated adjustable wings for attack and cruise modes, and 2 spring-loaded shooters.

The buildable starship playset includes 4 LEGO Star Wars characters. The Clone Pilot Odd Ball, Clone Pilot Jag and Clone Pilot LEGO minifigures can be placed in the cockpits, and there is also space on board for the R4-P44 LEGO droid figure.

Enhance kids' creative experience with the LEGO Builder app, where they can zoom in and rotate a digital 3D version of this Star Wars starfighter as they build.

The vehicle and characters in this set can be used with other LEGO Star Wars collectible building toys (sold separately) to open up extra fantasy play possibilities.

Star Wars[™] starfighter building toy for kids:

- Play out epic Star Wars: Revenge of the Sith[™] stories with this detailed LEGO® brick-built model of an ARC-170 Starfighter.

4 LEGO® Star Wars[™] characters:

- Clone Pilot Odd Ball, Clone Pilot Jag and Clone Pilot LEGO Star Wars minifigures, each with blaster pistols, plus an R4-P44 LEGO droid figure.

LEGO® brick-built starfighter:

- Features 3 opening cockpits, a space for R4-P44, 6 wings, including 4 lever-operated adjustable wings for attack and cruise modes, and 2 spring-loaded shooters.

Star Wars[™] buildable playset:

- The Clone Pilot Odd Ball, Clone Pilot Jag and Clone Pilot LEGO® minifigures each have blaster pistols for fantasy action play.

Star Wars[™] gift idea for kids aged 9 and up:

- Gift this high-quality buildable starship playset to creative boys, girls and any fans of Star Wars: Revenge of the Sith™.

A fun way to build:

- Let the LEGO® Builder app guide kids on an intuitive building adventure, where they can rotate a 3D digital version of their construction models as they build, and more.

Collectible building toys for all ages:

- LEGO® Star Wars[™] sets (sold separately) enable kids and adult Star Wars fans to relive iconic scenes, create new stories or simply display the buildable models.

Dimensions:

- The LEGO® Star Wars[™] vehicle in this 497-piece building kit for kids measures over 3 in. (8 cm) high, 11.5 in. (29 cm) long and 14 in. (36 cm) wide.

The box is black. On the front of the box is an image of a red and white starfighter flying over a green planet. The starfighter has three cockpits and six wings which fan out from the fuselage. In the background, we see a blue and white triangular starfighter flying away. This looks like Jedi Master Plo Koon's famous ship. The front shows an image of the four minifigures included in the set: clone pilots Odd Ball and Jag, an unnamed clone pilot, and the astromech droid R4-P44.

The top of the box shows a life-sized image of the clone pilot Odd Ball minifigure.

The back of the box shows an image of the ARC-170 starfighter landed inside the hangar of a starship. Through the open hangar doors, you can see space! The wings of the starfighter are closed and the clone pilots and the droid are all walking around doing various maintenance tasks. There is an inset image showing how the smaller wings fan out from the main wings, and that there are spring loaded shooters at the wing tips.

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 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).

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 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 who may want to follow along with the printed visual instructions that come with each kit, PDF versions are always online at LEGO.com: (<u>https://www.lego.com/en-us/service/building-instructions/75402</u>) 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 four bags labeled 1-4, 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 497 pieces, and 198 building steps.

Bag 1 (13 groups of bricks)

Minifigure Group 1 contains the pieces for the Clone Pilot Odd Ball minifigure, including his blaster pistol. Minifigure Group 2 contains the pieces for the R4-P44 astromech droid.

Main Build: ARC-170 Starfighter Group 1 contains the pieces for steps 1-6. Group 2 contains the pieces for steps 7-14. Group 3 contains the pieces for steps 15-18.

Sub-build 1: S-Foil Mechanism Group A contains all of the black 2L pins from Bag 1. Group B contains all of the blue 3L pins from this Bag 1. Group C contains all of the blue 2L axle/pin combos from this Bag 1.

Group 4 contains the pieces for steps 19-24, not including the pins in groups A, B, and C. Group 5 contains the pieces for steps 25-30, not including the pins in groups A, B, and C. Group 6 contains the pieces for steps 31-37, not including the pins in groups A, B, and C. Group 7 contains the pieces for steps 38-44, not including the pins in groups A, B, and C.

Main Build: ARC-170 Starfighter Continued Group 8 contains the pieces for steps 45-47.

Bag 2 (7 groups of bricks)

Group 9 contains the pieces for steps 48-53.

Group 10 contains the pieces for steps 54-57.

Group 11 contains the pieces for steps 58-63.

Group 12 contains the pieces for steps 64-74. Include two tan 1x12 bricks from step 75.

Group 13 contains the pieces for steps 75-79. Include the white 2x4 slope brick from step 80 with sticker #11. Place stickers #8 and #9 for step 76 and sticker #11 for step 80.

Group 14 contains the pieces for steps 80-82. Include two tan 1x1 slope tiles from step 83. Place sticker #10 for step 80.

Group 15 contains the pieces for steps 83-84.

Bag 3 (8 groups of bricks)

Group 16 contains the pieces for steps 85-91. Place sticker #5 for step 85.

Group 17 contains the pieces for steps 92-95. Include two white 1x3 jumper plates from step 96.

Group 18 contains the pieces for steps 96-98. Place sticker #3 for step 96.

Group 19 contains the dark red pieces for steps 99-102. Place sticker #6 for step 100.

Group 20 contains all the other pieces for 99-102.

Group 21 contains the dark red pieces for steps 103-108. Place sticker #5 for step 105, and sticker #4 for step 106.

Group 22 contains all the other pieces for 103-108.

Group 23 contains the pieces for steps 109-111. Place sticker #7 for step 111.

Bag 4 (12 groups of bricks)

Minifigure Group 3 contains the pieces for the Clone Pilot Jag minifigure, including his blaster pistol. Minifigure Group 4 contains the pieces for the unnamed Clone Pilot, including his blaster pistol.

Group 24 contains the pieces for steps 112-121. Place sticker #1 for step 120. Group 25 contains the pieces for steps 122-130. Place sticker #12 for step 124. Group 26 contains the pieces for steps 131-135. Group 27 contains the pieces for steps 136-144. Group 28 contains the pieces for steps 145-154. Place sticker #1 for step 153. Group 29 contains the pieces for steps 155-164. Place sticker #1 for step 163. Group 30 contains the pieces for steps 165-173. Place sticker #13 for step 167. Group 31 contains the pieces for steps 174-178. Group 32 contains the pieces for steps 179-187. Group 33 contains the pieces for steps 188-199. Place sticker #1 for step 197.

Building Instructions:

Bag 1.

Minifigure Group 1: Clone Pilot Odd Ball

Assemble the Odd Ball minifigure by placing the torso on the legs, the head on the torso, and the helmet on the head. Odd Ball wears a white and gray flight suit, which is printed with various controls, hoses, and pockets. His helmet is white with a large black stripe down the center. The head is printed with a determined expression and orange glasses. Odd Ball can hold a black blaster pistol in his right hand when he's not flying.

Minifigure Group 2:

Now we'll build the astromech droid R4-P44. The body is a 2x2x2 cylinder with holes on the sides. It is printed with various switches and panels. Place the white body in front of you, with the holes on the left and right and the studs on top and the printing at the front. Push the pin of a white leg, with the wide side of the leg at the bottom, into each of the holes. Place the dark green 2x2 round dome on the body. Like the body, the head is printed with various panels, lights, and switches. The printing on the body and head are directional, so you may want to ask a sighted person to get these in the right orientation.

Main Build: ARC-170 Starfighter

Group 1.

1.1. Let's start building the fuselage of the ARC-170! Place a white 2x6 plate, vertically, in front of you.

1.2. Place a dark gray 2x2 plate, centered vertically, on the previous piece.

2. Place a light gray 1x4 tile with two studs, horizontally, in front of the previous piece so the right sides are even. Repeat symmetrically on the back side.

3. Place a white 1x4 plate, vertically, under the previous two pieces and to the left of the 2x6 plate.

4. Place a light gray 2x2 inverted slope brick, vertically with the slope on the right, centered vertically on the rightmost column so the slope overhangs to the right.

5. Place the right stud of a light gray 2x2 corner brick, with the corner at the front left so the studs form a braille letter H, in front of the left column of the previous piece. Place another symmetrically on the back side. The left columns of these pieces should touch.

6. Place a dark gray 2x2 plate, centered vertically, on the previous three pieces so the left sides are even. There should be one column to the right of this piece.

Group 2.

7.1. Now we'll make an extension to the fuselage. Set the first fuselage assembly aside for now. Place a dark red 4x6 plate with two angled corners, vertically with the columns of four studs on the left, in front of you.

7.2. Place a dark red 1x8 plate, horizontally, on the second row from the back on the previous piece so the left sides are even.

8. Place a dark red 1x6 plate, vertically, under the previous piece and to the right of the plate with angled corners so the back side is even with the back of the plate with angled corners.

9. Place a dark red 4x6 plate, vertically, under the 1x8 plate and to the right of the previous piece so the back sides are even.

10.1. Place a white 2x6 plate, horizontally, in front of the 1x8 plate on the extension so the right sides are even. There should be one column to the right of this piece.

10.2. Place a dark red 1x8 plate, horizontally, in front of the previous piece so the right sides are even.

11. Place the first fuselage assembly, with the inverted slope brick at the right, in front of you. Place the right column of the extension, centered vertically, under the two overhanging studs on the left side of the first assembly.

12. Place a white 1x8 brick, horizontally, on the second row from the front of the fuselage so there is one free stud to the left of it. This should attach the two assemblies and there should be a one stud gap to the right of these pieces. Repeat symmetrically on the back side.

13.1. Now we'll fill the gap! Place a light gray 7L liftarm, vertically with the holes facing up, in front of you.

13.2. Push the pin side of a red 1L pin with a stud on one side, with the stud at the bottom, into the bottom of the front hole of the previous piece. Repeat symmetrically on the back side.

13.3. Place a black 1x1 round tile, upside down, on the studs of each of the previous two pieces.

13.4. Place this assembly, centered vertically, to the right of the two 1x8 bricks. It will not attach to anything. We'll use this liftarm later to extend the S-foils!

14. Make sure the 7L liftarm is centered vertically before doing this step. Place a white 2x10 plate, horizontally, on the front 1x8 brick so the back and left sides are even. This piece should cover the top of the 7L liftarm. Repeat symmetrically on the back side.

Group 3.

15.1. Place a red 1x1 round plate on the back left corner of the front piece from the previous step. Repeat symmetrically on the back piece.

15.2. Place a white 1x4 plate, vertically and centered vertically, to the right of the previous two pieces.

15.3. Place a tan 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 right of the fuselage so there is one free row in front of its left column. The front left stud is on the back right corner of the front 2x10 plate. Repeat symmetrically on the back side.

16.1. Place a white 1x4 plate, vertically and centered vertically, on the left columns of the previous two pieces.

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

16.3. Place the left stud of a tan $2x^2$ corner plate, with the corner at the front right so the studs form a braille letter J, on the front $1x^1$ round plate near the left side of the fuselage. The right column will attach to a $1x^4$ plate. Repeat symmetrically on the back side. The right columns of these pieces should be on a $1x^4$ plate and should meet in the middle.

17.1. Now we'll extend the fuselage even further! Stack two light gray 2x12 plates and place them, upside down and horizontally, in front of you.

17.2. Stack two white 2x6 plates and place them, upside down and horizontally, on the stack from the previous step so the right sides are even.

17.3. Place a white 1x6 inverted curved slope brick, upside down and horizontally with the slope on the left, on the stack from the previous step so the front sides are even. Place another behind the first.

17.4. Keep the curved slopes on the right and flip the extension so it's rightside up and horizontal. Place it on the left side of the fuselage, between the two 2x2 corner plates. It should overhang ten columns to the left of the fuselage.

18.1. Place a light gray 2x4 plate, vertically, on the two 2x2 corner plates which are around the right side of the assembly we just placed.

18.2. Place a white 1x2 brick, horizontally, in front of the previous piece. Repeat symmetrically on the back side.

Sub-Build 1: S-Foil Mechanism

Group 4 and Groups A, B, and C.

19.1. Now we'll build the mechanism to extend the ARC-170's S-foils. These are wing-like structures that starfighters deploy when going into combat. The ARC-170 has two large wings, and the four S-foils that spread out from them in an X shape. Start by finding a light gray round axle connector with two pin holes and three axle holes. This looks like a cylinder about 3L in diameter, It has three axle holes and two pin holes. Place this piece in front of you, standing upright with holes facing the front and the pin holes to the left and right of the center hole. The axle holes should be in an upright column.

19.2. Push the axle side of a tan 2L axle/pin combo, with the pin at the front, into the center hole of the previous piece.

19.3. Push the axle side of a black 3L axle/pin combo with a 2L axle side, with the pin at the front, into the hole below the previous piece. Push it all the way back so the axle extends 1L behind the round axle connector and the pin extends 1L to the front.

20. Find a black 11L liftarm with perpendicular holes. This looks like a normal 11L liftarm, except that every hole is perpendicular to its neighbors. Push the leftmost hole on this piece, horizontally with the smooth sides at the top and bottom, onto the pin of the previous piece.

21. Rotate the assembly 180 degrees so the pins face the back and the axle faces the front. The round axle connector should be at the right in front of the 11L liftarm. Push the pin side of a blue 2L axle/pin combo from group B, with the axle at the front, into the leftmost hole of the 11L liftarm. This pin has friction ridges and it should not spin freely.

22.1. Push the bottom axle hole of another light gray round axle connector with two pin holes and three axle holes, standing upright with holes facing the front and the pin holes to the left and right of the center hole, onto the axle side of the previous piece.

22.2. Push the axle side of a tan 2L axle/pin combo, with the pin at the back, into the center hole of the previous piece.

22.3. Push a red 2L axle into the front side of the hole above the previous piece. Only push it in until it extends 1L to the front of the round axle connector.

23.1. Push a light gray 2L pin into the right pin hole on the left round axle connector so it sticks out to the front. Repeat symmetrically on the right round axle connector. These pins do not have friction ridges so they should spin freely.

23.2. Push a black 1L liftarm onto each of the previous two pieces. A 1L liftarm looks just like a hollow cylinder.

24. Find a black axle connector with a perpendicular axle hole. This piece has a 1L axle connector on one side, and a perpendicular axle hole on the other. If you were to push axles through both holes they would form a T with the axle connector making the stem. Push the axle hole of this piece, with the axle connector facing to the left, onto the front facing axle on the left round axle connector. Place another, with the axle connector on the right, onto the front facing axle on the right round axle connector. These two pieces will not be symmetrical.

Group 5.

25.1. Now we'll make a second assembly for the S-foil mechanism. Set the first assembly aside. Place a dark gray 15L liftarm, horizontally with the holes facing the front, in front of you.

25.2. Push a black 2L pin from group A into the second and fourth holes from the left on the back side of the previous piece. Repeat symmetrically on the right side. These pins have friction ridges and they should not spin freely.

26. Push a dark blue 3L pin from group C, with the stop ring near the back, from the back into the seventh hole from the left of the 15L liftarm. Push it all the way in so it extends 1L to both the front and back. Repeat symmetrically on the right side. There should be one free hole between these two pieces. These pins have friction ridges and they should not spin freely.

27.1. Push the holes of a light gray 1x6 technic brick, horizontally and centered horizontally, onto the back side of the previous two pieces.

27.2. Push the pin holes of a black round axle connector with two pin holes and three axle holes, upright with the pin holes to the left and right of the center hole, onto the two pins to the left of the previous piece. Repeat symmetrically on the right side.

28. Now we will attach the first and second parts of the S-foil mechanism. Place the first assembly horizontally in front of you, with the round axle connectors at the front and the liftarm at the bottom. Push the third holes from both the left and right sides of the second assembly, onto the pins on the back sides of the round axle connectors on the first assembly.

Let's recap how the mechanism should look. There should be two round axle connectors at the front, the left one should have an axle connector pointing to the left on the front of it, and the right one should have one pointing to the right. There should be an 11L perpendicular liftarm under a 15L liftarm behind them. There should be two pins sticking out of the front near the center of the 15L liftarm. There should be a 1x6 technic brick behind the 15L liftarm, with a round axle connector on each side of it.

29.1. Push the pin side of a blue 2L axle/pin combo from group B, with the axle side at the front, into the front side of the 15L liftarm, to the right of the left round axle connector. Repeat symmetrically on the right side. These pins have friction ridges and they should not spin freely.

29.2. Push a light gray 3L axle connector onto each of the previous two pieces. These pieces look like cylinders that are 3L long and have an axle hole on each end.

29.3. Push the axle side of a blue 2L axle/pin combo from group B, with the pin at the front, into each of the previous two pieces.

30.1. Next up, we'll build the center assembly for the S-foil mechanism. Place a red 3L pin with a center hole, horizontally with the hole facing up, in front of you.

30.2. Push the hole of a dark gray 3L axle with a center hole, vertically with the hole facing left and right, onto the left pin of the previous piece. Repeat symmetrically on the right side.

30.3. Push the axle hole of a lime green 2L liftarm with one axle and one pin hole, upright with the axle hole at the bottom, onto each of the axles on the previous two pieces. You will place a total of four.

30.4. Push a blue 3L pin from group C, with the stop ring at the back, from the front into the top holes of the front two pieces from the previous step so they extend 2L to the front.

30.5. Push the top holes of the back two 2L liftarms onto the two pins extending from the 15L liftarm on the main mechanism.

Group 6.

31.1. Now we'll build the front part of the S-foil mechanism. Set the main assembly aside. Place a light gray round axle connector with two pin holes and three axle holes in front of you, standing upright with holes facing the front and the pin holes to the left and right of the center hole. The axle holes should be in an upright column.

31.2. Push the axle side of a tan 2L axle/pin combo, with the pin at the front, into the center hole of the previous piece.

32.1. Push the axle side of a black 3L axle/pin combo with a 2L axle side, with the pin at the front, into the hole below the previous piece. Push it all the way back so the axle extends 1L behind the round axle connector and the pin extends 1L to the front.

32.2. Push the axle hole of a black axle connector with a perpendicular axle hole, with the axle connector facing to the left, onto the axle side of the previous piece.

33. Push the leftmost hole of a black 11L liftarm with perpendicular holes, horizontally with the smooth sides at the top and bottom, onto the bottom pin on the round axle connector.

34. Push the pin side of a blue 2L axle/pin combo from group B, with the axle side at the back, from the back into the rightmost hole of the previous piece so the axle extends 1L to the back. This pin has friction ridges and it should not spin freely.

35.1. Push the bottom axle hole of a light gray round axle connector with two pin holes and three axle holes, standing upright with holes facing the front and the pin holes to the left and right of the center hole, onto the axle side of the previous piece. It should extend above the 11L perpendicular liftarm.

35.2. Push the axle side of a tan 2L axle/pin combo, with the pin at the front, into the center hole of the previous piece.

35.3. Push a red 2L axle into the back side of the hole above the previous piece. Only push it in until it extends 1L to the back of the round axle connector.

35.4. Push the axle hole of a black axle connector with a perpendicular axle hole, with the axle connector facing to the right, onto the back side of the previous piece.

36. Push a dark gray 15L liftarm, horizontally and centered horizontally with the holes facing the front, onto the two front-facing pins above the 11L perpendicular liftarm.

37. Push a black 2L pin from group A into the second and fourth holes from the left on the front side of the previous piece. Repeat symmetrically on the right side. These pins have friction ridges and they should not spin freely.

Group 7.

38. Push the pin holes of a black round axle connector with two pin holes and three axle holes, upright with the pin holes to the left and right of the center hole, onto the left two pins from the previous step. Repeat symmetrically on the right side.

39. Place the rest of the S-foil mechanism, horizontally with the 1x6 technic brick at the back, in front of you and behind the second half. The main assembly has four pins facing the front, two long ones and two short ones. Push all four of these pins, centered horizontally, into the 15L liftarm of the second assembly. Push the two assemblies together so the two long pins extend 1L in front of the 15L liftarm of the second assembly.

40.1. Push the holes of a light gray 1x6 technic brick, horizontally and centered horizontally, onto the two pins extending to the front of the S-foil mechanism.

40.2. Push the pin side of a blue 2L axle/pin combo from group B, with the axle at the front, into the center hole of the previous piece.

40.3. Push the axle hole of a tan 1x2 brick with an axle hole, horizontally, onto the axle side of the previous piece. Rotate this piece so the studs line up with the studs of the 1x6 technic brick.

41. Rotate the mechanism 180 degrees so the previous piece is at the back. Find the 1x6 technic brick which is at the front of the mechanism. Place a white 1x6 arch brick, horizontally, under it.

42.1. Push the pin side of a blue 2L axle/pin combo from group B, with the axle at the front, into the center hole of the front 1x6 technic brick. This pin has friction ridges and it should not spin freely.

42.2. Push the axle hole of a tan 1x2 brick with an axle hole, horizontally, onto the axle side of the previous piece. Rotate this piece so the studs line up with the studs of the 1x6 technic brick.

42.3. Place a white 1x6 arch brick, horizontally and centered horizontally, under the previous piece.

43. Keeping the two arch bricks at the front, flip the mechanism upside down. Push a black 2L pin from group A into the center hole on the top side of each of the two 11L perpendicular liftarms, and another into the hole between them. There should be three pins pointing up behind the two arch bricks.

44.1. Push a light gray 7L liftarm, vertically with the holes facing the top, onto the previous three pieces so the back pin goes into the back hole. The front of the liftarm should be above the front arch.

44.2. Push the pin side of a tan 2L axle/pin combo, with the axle on top, into the front hole of the previous piece. This pin does not have friction ridges and should spin freely. If you hold onto the front 11L liftarm, you can move the 7L liftarm we just placed left and right to move the axle connectors. This will extend or retract the S-foils later on. Make sure the 7L liftarm is oriented vertically for the next step.

Main Build: ARC-170 Starfighter Continued

Group 8.

45.1. Now we need to place the mechanism onto the fuselage of the ARC-170. Place the fuselage, horizontally with the stack of 2x12 plates on the left, in front of you. Starting at the left end, find the first two columns of six studs on top of the fuselage. The left side of the S-foil mechanism will go here. There is a two row gap in the middle of the fuselage to the right of these studs. At the very right end of this gap, there is a 7L liftarm under some plates. Make sure this liftarm is centered vertically on the fuselage. The axle under the mechanism will go in the center hole of this piece.

45.2. Flip the S-foil mechanism over so it's right side up, and rotate it so it's vertical, with the two arch bricks under the right side. Place the left two bricks of the S-foil mechanism, centered vertically, on the first two columns of six studs on top of the fuselage to the right of the stack of 2x12 plates. There should be three columns of studs to the right of the S-foil mechanism and the axle under the mechanism should fit into the hole in the liftarm identified in the previous step.

46.1. Place a light gray 2x2 inverted slope brick, with the slope on the right, centered vertically on the rightmost column of the combined starfighter.

46.2. Place a white 1x2 inverted slope brick, horizontally with the slope on the right, in front of the previous piece and offset one stud to the left. Repeat symmetrically on the back side.

47.1. Find the stud which is in front of the stack of 2x12 plates and to the left of the S-foil mechanism. This stud is two bricks below the top of the 2x12 plates. Place a white 1x2 inverted slope brick, horizontally with the slope on the left, on this piece. Repeat symmetrically on the back side.

47.2. Place a white 1x2 brick, horizontally, on each of the previous two pieces.

Bag 2.

Group 9.

48.1. Next we'll build part of the engine. Place a black 3L axle/pin combo with a 2L axle on one side, horizontally with the pin side on the left, in front of you.

48.2. Push a light gray 1x1 brick with an axle hole, with the axle hole on the left and right, onto the axle side of the previous piece. Push it all the way to the left. Push another onto the axle next to the first.

48.3. Find a dark pearl gray 4x4x2 cylinder with pin holes and a center bar. This piece is a hollow cylinder with a bar running through the center. There are two holes on the sides and one on the center bar. Push one of the holes on the side, with the cylinder standing upright so it looks like a letter O with the holes on the sides and the round side of the bar at the front, onto the pin side of the axle pin combo. This pin has friction ridges and it should not spin freely.

48.4. Push a black 2L pin into the hole on the left side of the previous piece. This pin has friction ridges and it should not spin freely.

48.5. Rotate the fuselage 180 degrees so the stack of 2x12 plates is on the right. Rotate the engine 90 degrees clockwise so the 1x1 bricks are at the front. Place the two 1x1 bricks with axle holes behind the 1x2 brick with an axle hole on the left side of the S-foil mechanism. This brick is on the fifth column from the left.

49.1. Now we'll repeat the last few steps symmetrically to create another engine part. Place a black 3L axle/pin combo with a 2L axle on one side, horizontally with the pin side on the right, in front of you.

49.2. Push a light gray 1x1 brick with an axle hole, with the axle hole on the left and right, onto the axle side of the previous piece. Push it all the way to the right. Push another onto the axle next to the first.

49.3. Push one of the side holes of a dark pearl gray 4x4x2 cylinder with pin holes and a center bar, with the cylinder standing upright so it looks like a letter O with the holes on the sides and the round side of the bar at the front, onto the pin side of the axle pin combo. This pin has friction ridges and it should not spin freely.

49.4. Push a black 2L pin into the hole on the right side of the previous piece. This pin has friction ridges and it should not spin freely.

49.5. Rotate the engine 90 degrees clockwise so the 1x1 bricks are at the back. Place the two 1x1 bricks with axle holes in front of the 1x2 brick with an axle hole on the left side of the S-foil mechanism. This should be symmetrical to the first engine assembly.

50. Push a red 6L axle into the center hole of each of the two 4x4x2 cylinders in the engine parts. Push them in until they stop. They should extend about 4L to the left.

51.1. Place a tan 2x3 brick, horizontally and centered vertically, to the left of the S-foil mechanism. There should be one free column of two studs to the left of it.

51.2. Place two white 2x6 half inverted curved slope wedges, horizontally with the columns of two studs on the right, in front of you. Take the one with the row of six studs at the back and place it in front of the 2x3 brick and to the left of the S-foil mechanism. Place the other symmetrically on the back side of the 2x3 brick.

52. Place a white 2x6 plate, vertically, on the right two columns of the previous three pieces. This piece goes to the left of the S-foil mechanism.

53.1. Now we'll make the first tail gun of the ARC-170! The clones can use this to protect the back of the starfighter when it makes attack runs! There will be a total of two, but we'll build the second one later. Place a black 2L bar with a stud on each end, horizontally, in front of you.

53.2. Push the bar of a dark gray bar with a ball on one side, with the ball on the right, into the right hollow stud of the previous piece.

53.3. Clip the socket of a light gray $1x^2$ plate with a socket, vertically with the socket on the left, onto the ball of the previous piece. This piece looks like a normal $1x^2$ plate with a hollow cube on one side. This cube is the socket.

53.4. Place the leftmost column of a white 2x3 inverted slope brick, horizontally with the slope on the left, under the previous piece.

53.5. Place a black 2x3 plate, horizontally, on the previous piece to the right of the 1x2 plate with a socket.

53.6. Place the tail gun assembly, with the gun on the left, centered vertically on the fuselage, to the left of the vertical 2x6 plate from step 52. The leftmost studs of the tail gun assembly should be even with the left studs of the two curved slope wedges.

Group 10.

54.1. Now we'll build the intakes for the engines! Rotate the starfighter 180 degrees so the tail gun is on the right. Place a black 3L axle/pin combo with a 2L axle on one side, horizontally with the pin side on the left, in front of you.

54.2. Push a light gray 1x1 brick with an axle hole, with the axle hole on the left and right, onto the axle side of the previous piece. Push it all the way to the left. Push another onto the axle next to the first.

54.3. Push one of the side holes of a light gray 4x4x2 cylinder with pin holes and a center bar, with the cylinder standing upright so it looks like a letter O with the holes on the sides and the round side of the bar at the front, onto the pin side of the axle pin combo. This pin has friction ridges and it should not spin freely.

54.4. Push a black 2L pin into the hole on the left side of the previous piece. This pin has friction ridges and it should not spin freely.

54.5. Rotate the intake 90 degrees clockwise so the 1x1 bricks are at the front. Place the two 1x1 bricks with axle holes behind the 1x2 brick with an axle hole on the left side of the S-foil mechanism. There should be eleven columns to the left of this brick.

55.1. Let's make another intake! Place a black 3L axle/pin combo with a 2L axle on one side, horizontally with the pin side on the right, in front of you.

55.2. Push a light gray 1x1 brick with an axle hole, with the axle hole on the left and right, onto the axle side of the previous piece. Push it all the way to the right. Push another onto the axle next to the first.

55.3. Push one of the side holes of a light gray 4x4x2 cylinder with pin holes and a center bar, with the cylinder standing upright so it looks like a letter O with the holes on the sides and the round side of the bar at the front, onto the pin side of the axle pin combo. This pin has friction ridges and it should not spin freely.

55.4. Push a black 2L pin into the hole on the right side of the previous piece. This pin has friction ridges and it should not spin freely.

55.5. Rotate the engine 90 degrees clockwise so the 1x1 bricks are at the back. Place the two 1x1 bricks with axle holes in front of the 1x2 brick with an axle hole on the left side of the S-foil mechanism. This should be symmetrical to the first intake assembly.

56. Push a light gray 5L axle into the center hole of each of the two 4x4x2 cylinders in the engine parts. Push them in until they stop. They should extend about 3L to the left.

57. Place a dark gray 2x2 plate with two studs on one side, with the side studs at the front, to the left of the S-foil mechanism so the front side is even with the front side of the fuselage. Repeat symmetrically on the back side. The backs of these two pieces should be touching and there should be nine columns to the left of them.

Group 11.

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

59.1. Place a white 1x2 plate, vertically, on the left studs of the previous two pieces.

59.2. Place a tan 2x3 brick, horizontally, to the right of the previous piece.

60.1. Place a white 1x2 plate, vertically, on the front two studs on the column to the right of the previous piece. This is the leftmost column of the S-foil mechanism. Repeat symmetrically on the back side.

60.2. Place a white 1x1 brick to the right of the front piece from the previous step so the front sides are even. Repeat symmetrically on the back side.

61.1. Place a black 1x2 brick with two studs on one side, horizontally with the side studs at the front, in front of the 2x3 brick from step 59.2 so the right sides are even. This should be to the left of the S-foil mechanism and above two other side studs. Repeat symmetrically on the back side.

61.2. Place a tan 1x1 tile with a 1x1 slope tile hanging down on one side, horizontally with the slope on the left, to the left of the front row of the 2x3 brick from step 59.2. The slope should be on the stack of 2x12 plates and there should be six studs to the left of it. Place another behind the first.

62. Place a tan 2x14 plate, horizontally and centered vertically, on top of the starship so there are three free columns to the right of it. The left side should be even with the left side of the two 1x2 bricks with two side studs from step 61.1.

63.1. Now we'll extend the right side of the fuselage. Place the leftmost column of a white 1x6 wedge plate, horizontally with the row six studs at the front, behind the rightmost column of the previous piece. The column of two studs should be on the left.

63.2. Place a white 2x3 wedge brick, horizontally with the row of three studs at the front, on the previous piece so the right and front sides are even. The widest side should be on the left.

63.3. Place a white 1x1 brick to the left of the previous piece so the front sides are even.

Group 12.

64.1. Now we'll make the second tail gun. Set the ARC-170 aside for now. Place a black 2x3 plate, horizontally, in front of you.

64.2. Place a light gray 1x2 plate with a 2x2 of studs sticking up from one side, vertically with the side studs on the right, on the previous piece so the right sides are even.

65. Place a white 2x2 plate to the left of the previous piece.

66. Place a black 2x2 tile with two studs, with the studs on the left, on the assembly so there is one free column to the left.

67.1. Now we'll build a small hinge assembly which will mount the gunner's windshield. Place a dark gray 1x2 plate with two studs sticking up from one side, vertically with the side studs on the right, in front of you.

67.2. Place a light gray 1x2 plate with two vertical clips on one side, upright and vertical with the clips on top, on the side studs of the previous piece.

67.3. Place a light gray 1x2 ingot tile, vertically, on the previous piece.

67.4. Place this assembly, with the ingot tile on the right, on the second column from the left on the second tail gun assembly.

68. Place a light gray 1x1 tile with a 1x1 slope tile on one side, horizontally with the slope on the left, on the front row of the assembly. Place another behind the first.

69.1. Next, we'll make a small assembly which will allow the second tail gun to swivel. Place a white 1x2 plate, vertically, in front of you.

69.2. Place a light gray 2x2 tile on the previous piece so the right sides are even.

70. Place a light gray 1x2 plate with a socket, vertically with the socket on the left, under the left column of the previous piece.

71.1. Clip the ball of a dark gray bar with a ball on one side, with the ball at the bottom and the bar upright, into the socket of the previous piece.

71.2. Push the bottom hollow stud of a black 2L bar with a stud on each end, upright, onto the bar of the previous piece.

72. Rotate the small assembly we just made so the tile is on the right and the tail gun is on top, pointing to the right. Place it on the four side studs on the right of the rest of the tail gun assembly.

73. Place the rest of the ARC-170 back in front of you, horizontally with the stack of 2x12 plates on the left. Place the tail gun assembly, with the tail gun pointing to the right, centered vertically on the right three columns of the fuselage. The second tail gun should be directly over the first one.

74.1. Place a white 2x6 wedge plate, horizontally with the row of six studs at the back, in front of the tail gun assembly so it extends one stud to the left of it. It should be even with the 2x6 wedge plate on the back side of the fuselage. The column of two studs should be on the left.

74.2. Place a white 2x3 wedge brick, horizontally with the row of three studs at the back, on the previous piece so the right and back sides are even. The widest side should be on the left.

74.3. Place a white 1x1 brick to the left of the previous piece so the back sides are even.

You will have two tan 1x12 bricks leftover when you finish this group.

Group 13.

75.1. Place a leftover tan 1x12 brick, horizontally, to the left of the previous piece. Repeat symmetrically on the back side.

75.2. Place a white 1x12 brick, horizontally, in front of the front piece from the previous piece and offset one stud to the right. Repeat symmetrically on the back side.

76. Place two white 2x4 double slope bricks, horizontally with the longest column on the left, in front of you. Place the one with the longest row at the back on the front two columns of the fuselage so the right sides are even. Place the other symmetrically on the back side. These two pieces have a red and white sticker on one slope.

77. Place a white 2x2 slope brick, with the slope at the front, to the left of the front piece from the previous step. Repeat symmetrically on the back side.

78.1. Place a white 1x1 plate with a 1x1 slope tile on one side, vertically with the slope tile at the front, to the left of the front piece from the previous step. Place another to the left of the first. Repeat symmetrically on the back side. You'll place a total of four pieces in this step.

78.2. Place a tan 1x2 slope tile, horizontally with the tall side at the front, on the front two pieces from the previous step. Repeat symmetrically on the back side.

79.1. Place a tan 1x2 hollow slope with a handle bar on top, vertically with the tall side on the left, between the previous two pieces so the left sides are even. This will be the gunner's backrest.

79.2. Place a light gray 2x4 plate, horizontally, to the left of the previous piece.

79.3. Place a black 1x2 jumper plate, vertically, on the rightmost column of the previous piece.

79.4. Place another black 1x2 jumper plate, vertically, on the leftmost column of the 2x4 plate. The astromech droid's feed will attach to these two studs when he's placed in the ship!

You will have a white 2x4 slope brick with a sticker when you finish this group.

Group 14.

80.1. Place the leftover white 2x4 slope brick with a sticker, horizontally with the slope at the front, in front of the 2x4 plate. The sticker shows some panel lines and a small red stripe.

80.2. Place another white 2x4 slope brick with a sticker symmetrically on the back side of the fuselage. This piece's sticker is the mirror of the previous piece.

81. Place four 2x3 wedge plates, horizontally with the widest side on the right, in front of you. Stack the two with the row of three studs at the back. Find the four columns of side studs on the front side of the ARC-170, which are to the left of the S-foil mechanism. Place the left two studs of the wedge plate stack on the front two rows of the fuselage above the right two columns of side studs. Repeat symmetrically on the back side with the remaining two wedge plates.

82.1. Place a white 2x2 brick between the two stacks of wedge plates so the left sides are even.

82.2. Place a white 2x2 slope brick with an instrument panel print, with the slope on the right, to the right of the previous piece.

82.3. Skip two columns to the right and place a tan 1x2 hollow slope with a handlebar on top, vertically with the tall side on the right. This is the backrest for one of the pilots.

You will have two tan 1x1 slope tiles leftover when you finish this group.

Group 15.

83.1. Place a white 1x1 plate with a 1x1 slope tile on one side, vertically with the slope tile at the front, in front of the previous piece. Place another to the left of the first. Repeat symmetrically on the back side. You'll place a total of four pieces in this step.

83.2. Place a leftover tan 1x1 slope tile, with the tall side at the front, on the front right piece from the previous step. Repeat symmetrically on the back side.

83.3. Place a transparent blue 1x1 slope tile, with the tall side at the front, to the left of the front piece from the previous step. Repeat symmetrically on the back side.

84. Place two white 2x4 wedge slope bricks, horizontally with the longest column on the right, in front of you. Place the one with the row of four studs at the back to the left of the front piece from the previous step so the back sides are even. Repeat symmetrically on the back side with the other piece.

Bag 3.

Group 16.

85. Now we'll add the canopy for the tail gunner! The ARC-170 should be horizontal in front of you with the tail guns on the right. Find a transparent black 6x4x2 round canopy with a bar on one side. This piece has a sticker with the canopy frame printed on it. Rotate it so it's horizontal with the bar on the right and so the rounded side is on top. Clip the bar into the two clips that are to the left of the top tail gun.

86. Now we'll add some detail to the right side of the engines. Find the two 6L axles which are extending to the right of the engines. Find a white wheel that is about 2 studs in diameter and 2 studs tall. It has a central pin hole, two grooves on the side, and one end has a flat pattern of six spokes. The other end is recessed. Slide one of these wheels, with the flat, spoked side on the right, over each of the two axles. Slide them all the way to the left. These pieces will not actually connect to anything.

87. Find a black cylinder that is a little less than 2 studs in diameter. One end has a smaller cylinder sticking up. Slide one of these, with the smaller cylinder on the right, over the axles until they touch the pieces from the previous step. These pieces will not actually connect to anything.

88.1. Now we'll add the very ends of the engine. Stack two dark gray 2x2 round plates.

88.2. Place a transparent red 1x1 round plate between the four studs of the stack.

88.3. Place a transparent red 2x2 dish on the previous piece.

88.4. Repeat steps 88.1-88.3.

88.5. Rotate one assembly so the dish is on the right. Slide the hollow, center anti-stud on the left side of the stack over the axle on the right side of the front engine. Push it as far left as it will go. Repeat on the back side with the other assembly.

89.1. Now we'll work near the gunner's canopy again. Stack two white 1x2 plates and place the stack, horizontally, to the left of the canopy so the front sides are even. Repeat symmetrically on the back side.

89.2. Place a white 1x2 quarter cylinder, horizontally with the tall side at the back, on the front stack. Repeat symmetrically on the back side.

90.1. Now we'll add the mount for the first pilot's windshield. Place a light gray 2x2 plate to the left of the 2x2 slope brick with the instrument panel print, which is between two 2x4 wedge slope bricks. The left side of the 2x2 plate should be even with the left side of the tall portion of the fuselage and the right column should be between two 2x4 wedge bricks.

90.2. Place a dark gray 1x2 plate with a clip on top of one stud, horizontally with the clip on the right, on the previous piece so the front sides are even. Place another behind the first.

91. Place the back stud of a white 1x2x2 curved slope tile, vertically with the tall side at the back, on the front piece from the previous step. Repeat symmetrically on the back side.

Group 17.

92. Clip the bar of a transparent black 6x4x2 round canopy with a bar on one side, horizontally with the bar on the left and the round side on top, into the two clips to the right of the previous two pieces. This canopy has a sticker with more framing on it. There should be two columns between the two canopies.

93. Now we'll start working towards the nose of the starfighter. Find the leftmost two columns of side studs on the front side of the starfighter. These are on either side of the stack of 2x12 plates. Place a light gray 2x2 plate on these side studs. Repeat symmetrically on the back side.

94.1. Place a tan 1x2 hollow slope with a handle bar on top, vertically with the tall side on the right, between the previous two pieces so the right sides are even. There should be a column of tiles and a column of slopes to the left of this piece.

94.2. Place a tan 1x2 tile, vertically, to the left of the slopes to the left of the previous piece.

94.3. Place a tan 1x2 panel with a T-shaped wall, vertically with the long wall on the left, to the left of the previous piece.

95.1. Now we'll build an assembly that holds the hinge for the last pilot's canopy. Place a light gray 1x2 plate with a 2x2 of studs sticking up from one side, horizontally with the side studs at the back, in front of you.

95.2. Place a dark gray 1x2 slope tile with an instrument panel print, vertically with the tall side at the left, on the right stud of the previous piece so it overhangs one stud to the front.

95.3. 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 overhanging stud of the previous piece so the right sides are even.

95.4. Place white 2x2 brick on the previous piece to the left of the 1x2 slope tile. It should also connect to the first 1x2 slope tile with side studs and it should overhang one column to the left.

95.5. 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 overhanging stud of the previous piece so it extends one stud to the left. Repeat symmetrically on the back side.

95.6. Place a white 1x2 plate, vertically, on the previous two pieces and to the left of the 2x2 brick.

95.7. Place a dark gray 1x2 plate with a clip on top of one stud, horizontally with the clip on the right, on the front row of the 2x2 brick. Place another behind the first.

95.8. Place this assembly, with the instrument panel on the right, on the left four columns of the ARC-170. It should go to the left of the 1x2 panel with a T-shaped wall.

You will have two white 1x3 jumper plates leftover when you finish this group.

Group 18.

96.1. The nose of the ARC-170 narrows to nearly a point. We'll start making some of the internal structure to support this. Place a white 1x10 plate, horizontally, in front of you.

96.2. Place a leftover 1x3 jumper plate, horizontally, on the previous piece so the right sides are even. Place another to the left of the first.

96.3. Place a light gray 1x2 brick with two studs on two sides, horizontally, to the left of the left piece from the previous step. Place another to the left of the first.

96.4. Place a light gray 1x5 plate, horizontally, on the previous two pieces so it overhangs one stud to the left.

96.5. Place a yellow 1x3 jumper plate, horizontally, on the previous piece so the right sides are even.

96.6. Place a blue 1x2 jumper plate, horizontally, to the left of the previous piece.

96.7. Now we'll place this on the starfighter. Place the right two jumper plates, centered horizontally, under the left six columns of the nose. The raised part of the assembly should be to the left of the leftmost column of the starfighter.

97.1. Now we'll add another assembly in the nose. This will be hidden when the nose is complete. Place a tan 1x2 brick with an axle hole, vertically, in front of you.

97.2. Push a red 6L axle into the left side of the axle hole in the previous piece. Only push it in until the right side is even with the previous piece.

97.3. Push a yellow thin bushing over the left end of the previous piece. Push it all the way to the right until it touches the 1x2 brick.

97.4. Push four light gray 1x1 bricks with an axle hole over the axle.

97.5. Push a yellow thin bushing over the left end of the axle. Push it all the way to the right until it touches the leftmost 1x1 brick.

97.5. Place the leftmost brick in this assembly, horizontally with the 1x2 brick on the right, on the leftmost jumper plate on the left side of the starfighter. The 1x2 brick should connect to the left of the clips for the second pilot's canopy.

98. Rotate the ARC-170 180 degrees so the tailguns point to the left. Find the right four side studs on the front side of the ship. These are below the assembly we just placed. Place the top row of a white 3x6 wedge plate, horizontally with the row of six studs at the top, on these side studs. The columns of two studs should be on the right and the right side should extend below the rest of the ship and should overhang one column to the right.

Group 19 and 20. Group 19 contains all the dark red pieces for steps 99.1 - 102.8. Group 20 contains the rest of the pieces.

99.1. Place a dark red 1x10 curved slope from group 19, horizontally with the studs on the left, on the side studs above the previous piece so the right sides are even.

99.2. Place a white 1x10 curved slope, horizontally with the studs on the left, on the side studs above the previous piece so the right sides are even.

100.1. Now we'll build an assembly to cover the side of the lower cockpit. Place a white 2x6 plate, horizontally, in front of you.

100.2. Place a white 1x2 curved slope tile, horizontally with the tall side on the left, on the back right corner of the previous piece so it overhangs one stud to the right.

100.3. Place a dark red 1x2 curved slope tile from group 19, horizontally with the tall side on the left, in front of the previous piece.

100.4. Place a dark red 1x1 tile from group 19 to the left of the previous piece.

100.5. Place a white 1x1 tile behind the previous piece.

100.6. Place a white 1x6 tile, horizontally, to the left of the previous piece. This piece has a white and dark gray paneling sticker on it.

100.7. Place a dark red 1x6 tile from group 19, horizontally, in front of the previous piece.

100.8. Keeping the curved slope tiles on the right, flip this assembly upside down. Place a tan 1x3 plate, upside down and horizontally, on the back row so there are two free anti-studs to the right of it.

100.9. Keeping the curved slope tiles on the right, rotate the assembly so the tiles are at the front. Place it on the side studs on the front of the ARC-170, to the left of the curved portion of the two 1x10 curved slopes.

101.1. Next, we'll make an assembly that will connect the two sides of the nose together. Stack two dark red 1x2 plates with rounded ends from group 19.

101.2. Push a reddish brown 2L bar with a center stop ring into both hollow anti-studs of the stack. Push these all the way in. The bars should extend about 1L below the stack.

101.3. Push the hollow anti-stud of a dark red 1x2 plate with rounded ends from group 19, upside down, over the two bars. Push it up until it touches the first stack. Push another over the first.

101.4. Rotate the ARC-170 180 degrees so the tailguns are on the right. Rotate the assembly we just completed so it is upright and vertical, with two studs facing the front and two facing the back. Place it on the leftmost two anti-studs on the ARC-170, above the 6x3 wedge plate. The assembly with four 1x1 bricks with axle holes should be to the right of it.

102.1. Next, we'll build the very tip of the nose. Place a light gray 1x2 brick with two studs on two sides, horizontally, in front of you.

102.2. Place a white 1x1 plate on the right stud of the previous piece.

102.3. Place a white 1x1 plate with a stud hanging down from one side, with the side stud on the left, to the left of the previous piece.

102.4. Place a dark red 1x1 plate with a stud sticking up from one side from group 19, with the side stud on the left, on the previous piece.

102.5. Place the leftmost stud of a dark red 1x4 curved slope tile from group 19, horizontally with the tall side on the left, on the previous piece. This will overhang the assembly by two studs to the right.

102.6. Place a dark red 1x2 plate with rounded ends from group 19, upright, on the left two side studs of the assembly.

102.7. Place a lime green 1x2 plate with rounded ends, upright, on the previous piece.

102.8. Rotate the assembly so the 1x4 curved slope tile is on the left and the previous two pieces are on the bottom. Place the back sides studs onto the 3x6 wedge plate below the assembly of four 1x2 plates with rounded ends that we placed in step 101.4.

Group 21 and 22. Group 21 contains all the dark red pieces for steps 103 - 108. Group 22 contains the rest of the pieces.

103. Place the leftmost column of a white 3x6 wedge plate, horizontally with the row of six studs at the top, on the front two side studs from the assembly we just placed. This is below the sideways 1x2 plate with rounded ends, on the front side of the ARC-170. The columns of two studs should be on the left and this should be symmetrical to the one on the back side.

104.1. Place a dark red 1x10 curved slope from group 21, horizontally with the studs on the right, on the side studs above the previous piece so the left sides are even.

104.2. Place a white 1x10 curved slope, horizontally with the studs on the right, on the side studs above the previous piece so the left sides are even.

105.1. Next, we'll cover the other side of the lower cockpit. Place a white 2x6 plate, horizontally, in front of you.

105.2. Place a white 1x2 curved slope tile, horizontally with the tall side on the right, on the back left corner of the previous piece so it overhangs one stud to the left.

105.3. Place a dark red 1x2 curved slope tile from group 21, horizontally with the tall side on the right, in front of the previous piece.

105.4. Place a dark red 1x1 tile from group 21 to the right of the previous piece.

105.5. Place a white 1x1 tile behind the previous piece.

105.6. Place a white 1x6 tile, horizontally, to the right of the previous piece. This piece has a white and dark gray paneling sticker on it.

105.7. Place a dark red 1x6 tile from group 21, horizontally, in front of the previous piece.

105.8. Keeping the curved slope tiles on the left, flip this assembly upside down. Place a tan 1x3 plate, upside down and horizontally, on the back row so there are two free anti-studs to the left of it.

105.9. Keeping the curved slope tiles on the left, rotate the assembly so the tiles are at the front. Place it on the side studs on the front of the ARC-170, to the right of the curved portion of the two 1x10 curved slopes.

106.1. Place a dark gray 2x2 tile on top of the fuselage, to the left of the two clips near the nose. There should be a row of four studs to the left of this piece.

106.2. Place a white 2x6 tile with a sticker, horizontally and centered horizontally, to the left of this piece. The four studs to the left of the previous piece should attach to the circular anti-studs under this piece. The sticker shows a large dark gray half arch extending towards the nose of the ARC-170. The sticker on this piece is directional, so you might want to ask a sighted person or use an app to get the orientation right.

107. Now we'll start working on the left sides of the engines. Find the two light gray axles pointing to the left from the engines. Push a yellow thin bushing onto each of these axles. Push them all the way to the right.

108. Find a large white cylinder. This has seven holes on one end and the other end is recessed. Slide the center hole, with the recessed end on the left, over the axle on the front engine. Repeat on the back side. These pieces will not actually connect to anything.

Group 23.

109.1. Now we'll finish the engine intake. Place a dark red 4x4 cylinder in front of you.

109.2. Place a black 2x2 round tile with a single stud on the previous piece.

109.3. Flip the assembly upside down. Stack two dark gray 2x2 round plates and place them, upside down and centered vertically and horizontally, on the 4x4 cylinder.

109.4. Repeat steps 109.1-109.4.

109.5. Rotate one of the intake assemblies so the stack of 2x2 round plates is on the right. Push the hollow center anti-stud of the stack over the front axle. Push it all the way to the right. Repeat on the back side.

110.1. Push the short bar of a black 1x1 round tile with a bar on top into the hollow center stud of each inlet.

110.2. Rotate the ARC-170 90 degrees counterclockwise so the tail guns point away from you. Place a pearl gray ice skate, with the curved part of the blade at the top, on the right piece from the previous step. Rotate it 45 degrees clockwise. If you look at the skate from the front, it should point to 1:30 on the clock. Repeat symmetrically on the left side.

111. Rotate the ARC-170 90 degrees clockwise so the tailguns are on the right. Clip the bar of a 6x4x2 canopy, with the bar on the left and the rounded side on top, into the two clips on the nose.

Bag 4.

Minifigure Group 3: Clone Pilot Jag

Assemble the Jag minifigure by placing the torso on the legs, the head on the torso, and the helmet on the head. Jag wears a white and gray flight suit, which is printed with various controls, hoses, and pockets. His helmet is white with a few blue stripes down the center. The head is printed with a determined expression and orange glasses. Jag can hold a black blaster pistol in his right hand when he's not flying.

Minifigure Group 4: Unnamed Clone Pilot

Assemble the last clone pilot minifigure by placing the torso on the legs, the head on the torso, and the helmet on the head. Like the other clones, he wears a white and gray flight suit, which is printed with various controls, hoses, and pockets. His helmet is white with a red and yellow stripe down the center. The head is printed with a determined expression and orange glasses. He can hold a black blaster pistol in his right hand when he's not flying.

Group 24.

112.1. Now we'll start building the S-foils! Set the rest of the ARC-170 aside for now. Place a white 2x8 plate, horizontally, in front of you.

112.2. Place the front row of a white 2x2 tile with a sticker, centered horizontally, on the back row of the previous piece. The sticker on this piece shows the symbol of the Republic Navy: a dark red circle with a tan interior.

113. Place the front row of a white 3x8 wedge plate, horizontally with the row of eight studs at the front, centered horizontally, under the back row of the previous piece. The columns of two studs should be on the left.

114. Place a white 3x3 round tile on the rightmost two columns of the S-foil so it overhangs one column to the right. This piece is printed with some light gray panel lines and one half of the circle is dark red. This dark red portion should overhang. You may want to ask a sighted person or use an app to get the orientation correct.

115.1. Place the rightmost column of a white 2x3 tile, vertically, on the leftmost column of the S-foil so the front sides are even.

115.2. Place a white 2x2 tile behind the previous piece.

116.1. Keeping the 3x3 round tile on the right, flip the S-foil upside down. Place a white 1x2 half circle jumper plate, upside down and vertically with the round side on the right, on the rightmost column of the 3x3 round tile.

116.2. Place a light gray 1x2 plate with a hole under one side, upside down and vertically with the hole at the front, on the back two anti-studs on the leftmost column of the S-foil. Place another in front of the first.

117. Place a light gray 2x3 C-shaped plate, upside down and vertically with the C opening to the left, on the two leftmost columns of the S-foil so the back sides are even. The open part of the C should wrap around the hole of the back 1x2 plate with a hole.

118. Push a black 2L pin into each of the two holes on the left side of the S-foil.

119.1. Push a white 3L thick liftarm with a center axle hole, vertically with the holes facing left and right, onto the two previous pieces.

119.2. Push a red 2L axle into the center hole of the previous piece.

120. Keeping the previous piece on the left, flip the S-foil right side up.

121. Place the ARC-170 in front of you, with the tail guns on the left. Turn your attention to the S-foil mechanism. There are two pins facing forwards, and between the two pins are two axle connectors, one over the other. Rotate the S-foil so it is upside down and vertical, with the 2L axle at the back. Push the axle into the bottom axle connector.

Group 25.

122.1. Next, we'll make one of the large wings. Set the ARC-170 aside. Place a light gray 4x8 plate, horizontally, in front of you.

122.2. Place a light gray 1x4 plate, vertically, on the rightmost column of the previous piece so it overhangs one stud to the back.

123. Place the front right corner of a white 3x8 wedge plate, horizontally with the row of eight studs at the front, under the overhanging stud of the previous piece. The columns of two studs should be on the right.

124. Place a light gray 4x4 tile with four studs, with the studs on the right, to the left of the 1x4 plate. This piece has a sticker showing dark gray and light gray paneling details.

125.1. Place a white 3x8 wedge plate, horizontally with the row of eight studs at the front, behind the previous piece so the left sides are even. The right side should overhang three columns to the right.

125.2. Place a white 2x8 plate, horizontally, in front of the 4x4 tile with four studs so the left sides are even. The right side should overhang three columns to the right.

126. Place a white 1x8 plate, horizontally, under the front row of the previous piece so it extends three studs to the left. The columns of two studs should be on the right. The left side should be even with the left of the wing.

127. Place a dark red 2x4 wedge plate, horizontally with the row of four studs at the front, on the left three columns of the wing so there are five free rows in front of it. The widest side should be on the right. The back side should be in line with the wedge plate to the right of it, and it should overhang one stud to the left.

128. Place the back right corner of a white 3x6 plate with two angled corners, vertically with the column of six studs on the right, under the overhanging stud of the previous piece. The front side of this piece should be even with the front of the wing.

129.1. Place a dark red 1x4 tile, horizontally, in front of the 1x4 wedge plate.

129.2. Place a dark red 1x2 tile, vertically, in front of the previous piece so the right sides are even.

129.3. Place a dark red 2x4 tile, horizontally, to the left of the previous piece.

130.1. Place a dark red 3x6 half circle plate, vertically with the rounded side on the left, centered vertically to the left of the previous piece. The left column of the 2x4 tile should fit into the 1x2 cutout in this piece.

130.2. Place a dark red 2x4 tile, horizontally, to the right of the previous piece so the front side is even with the front of the wing.

Group 26.

131.1. Place a silver 1x2 grille tile, vertically, on the second and third studs from the back on the fourth column from the right of the wing. There should be a cutout in the wing to the right of the front stud of this piece.

131.2. Skip the next three studs to the left of the back stud of the grille tile and place a lime green 1x1 tile. There should be no free studs behind or to the left of this piece.

132.1. Flip the wing upside down so it is horizontal with the 3x6 half circle plate on the right. Place a tan 1x3 plate, upside down and horizontally, on the front row of the wing so the left sides are even.

132.2. Place a white 1x4 plate, upside down and horizontally, behind the previous piece so the right sides are even.

132.3. Place a white 1x4 plate, upside down and horizontally, on the back row of the wing so it overhangs one stud to the left. The back of the wing will extend a little bit behind this piece.

132.4. Place a tan 1x3 plate, upside down and horizontally, in front of the previous piece so the right sides are even.

133.1. Place the front stud of a light gray 1x2 plate with a hole under one stud, upside down and vertically with the hole at the back, under the overhanging stud of the back 1x4 plate on the left side of the wing.

133.2. Place a white 2x3 tile, upside down and vertically, under the previous piece so the back and left sides are even.

134.1. Place the back stud of a light gray 1x2 plate with a hole under one stud, upside down and vertically with the hole at the front, under the overhanging stud of the front 1x4 plate on the left side of the wing.

134.2. Place a white 2x3 pentagonal tile, upside down and horizontally with the point at the right, under the previous piece so the left sides are even.

135.1. Now we'll add some parts to reinforce the wing. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, on the front two rows of the wing so there are three columns to the left of it. The big gap in the wing should be behind the left column of this piece. Repeat symmetrically on the back side.

135.2. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, in front of the back piece from the previous step and offset one column to the right. This piece should be to the right of the big gap in the wing.

135.3. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, on the front two rows of the wing so the right column attaches to the left column of the 3x6 plate with two angled corners. Repeat symmetrically on the back side.

Group 27.

136.1. Now we'll build the wing-mounted laser cannons! Set the wing aside for now. Place a black 1x1 brick with a hole, with the hole facing left and right, in front of you.

136.2. Push the pin side of a black 2L pin with bushing on one side, with the bushing on the left, into the hole on the left side of the previous piece. Push it all the way in so the pin extends 1L to the right

137. Push the hole of a black 1x1 brick with a hole onto the right side of the previous piece.

138. Place a black 1x3 plate, horizontally, under the two 1x1 bricks so it extends one stud to the right.

139. Place a dark gray 1x2 inverted slope, horizontally with the slope on the right, on the right stud of the previous piece.

140.1. We want this laser cannon to be able to shoot lasers, so we'll add a spring loaded shooter! Place a dark and light gray 1x4 spring loaded shooter, horizontally, in front of you. A spring loaded shooter looks like a 1x4 brick that rattles if you shake it because it has a spring inside.

140.2. Place the back stud of a black 1x1 plate with a 1x1 inverted slope on one side, vertically with the slope at the front, under the rightmost stud of the previous piece. Place three more to the left of the first.

140.3. Place this assembly on top of the two 1x1 bricks and 1x2 inverted slope.

140.4. Place a white 1x4 plate, horizontally, in front of the spring loaded shooter.

141.1. Push the end of a black 6L bar with a stop ring on one side, with the stop ring on the left, into the bushing sticking out of the left side of the assembly. Push it in as far as it will go so it extends 5L to the left of the rest of the assembly.

141.2. Push the hollow stud of a dark brown 1x1 cone, with the anti-stud on the left, onto the left side of the previous piece. Push it right until it touches the stop ring.

142. Flip the laser cannon assembly upside down, keeping the bar and cone on the left. Place a black 1x1 round plate, upside down and centered horizontally, on the front row.

143. Place the wing, upside down and horizontally, in front of you, with the rounded end on the right. Rotate the laser cannon so the bar and cone are at the front and place it, centered vertically, on the second and third columns from the right.

144. Now we'll add the wing to the rest of the starfighter! Place the ARC-170 in front of you, with the tail gun at the left. The first S-foil should be at the front. Find the two pins on the S-foil mechanism, these are on either side of the S-foil. Rotate the wing we made so it's vertical and rightside up with the laser cannon at the front and pointing to the right. Push the holes on the back side of the wing onto the two pins we just found.

Group 28.

145.1. Now we'll build the top S-foil on this side. Set the ARC-170 aside for now. Place a white 2x8 plate, horizontally, in front of you.

145.2. Place the back row of a white 2x2 tile with a Republic Navy sticker, centered horizontally, on the front row of the previous piece. The columns of two studs should be on the left.

146. Place the back row of a white 3x8 wedge plate, horizontally with the row of eight studs at the back, centered horizontally, under the front row of the previous piece.

147.1. Place a white 3x3 round tile on the rightmost two columns of the S-foil so it overhangs one column to the right. This piece is printed with some light gray panel lines and one half of the circle is dark red. This dark red portion should overhang. You may want to ask a sighted person or use an app to get the orientation correct.

147.2. Place the rightmost column of a white 2x3 tile, vertically, on the leftmost column of the S-foil so the back sides are even.

148. Place a white 2x2 tile in front of the previous piece.

149.1. Keeping the 3x3 round tile on the right, flip the S-foil upside down. Place a white 1x2 half circle jumper plate, upside down and vertically with the round side on the right, on the rightmost column of the 3x3 round tile.

149.2. Place a light gray 1x2 plate with a hole under one side, upside down and vertically with the hole at the back, on the front two anti-studs on the leftmost column of the S-foil. Place another behind the first.

150. Place a light gray 2x3 C-shaped plate, upside down and vertically with the C opening to the left, on the two leftmost columns of the S-foil so the front sides are even. The open part of the C should wrap around the hole of the front 1x2 plate with a hole.

151. Push a black 2L pin into each of the two holes on the left side of the S-foil.

152.1. Push a white 3L thick liftarm with a center axle hole, vertically with the holes facing left and right, onto the two previous pieces.

152.2. Push a red 2L axle into the center hole of the previous piece.

153. Keeping the previous piece on the left, flip the S-foil right side up.

154. Place the ARC-170 in front of you, with the tail guns on the left. Find the one axle connector above the big wing. Rotate the S-foil so it is rightside up and vertical, with the 2L axle at the back. Push the axle into the axle connector we just found.

Group 29.

155.1. Now we'll start building the S-foils on the other side of the starfighter! Place a white 2x8 plate, horizontally, in front of you.

155.2. Place the back row of a white 2x2 tile with a Republic Navy sticker, centered horizontally, on the front row of the previous piece.

156. Place the back row of a white 3x8 wedge plate, horizontally with the row of eight studs at the back, centered horizontally, under the front row of the previous piece. The columns of two studs should be on the left.

157.1. Place a white 3x3 round tile on the rightmost two columns of the S-foil so it overhangs one column to the right. This piece is printed with some light gray panel lines and one half of the circle is dark red. This dark red portion should overhang. You may want to ask a sighted person or use an app to get the orientation correct.

157.2. Place the rightmost column of a white 2x3 tile, vertically, on the leftmost column of the S-foil so the back sides are even.

158. Place a white 2x2 tile in front of the previous piece.

159.1. Keeping the 3x3 round tile on the right, flip the S-foil upside down. Place a white 1x2 half circle jumper plate, upside down and vertically with the round side on the right, on the rightmost column of the 3x3 round tile.

159.2. Place a light gray 1x2 plate with a hole under one side, upside down and vertically with the hole at the back, on the front two anti-studs on the leftmost column of the S-foil. Place another behind the first.

160. Place a light gray 2x3 C-shaped plate, upside down and vertically with the C opening to the left, on two leftmost columns of the S-foil so the front sides are even. The open part of the C should wrap around the hole of the front 1x2 plate with a hole.

161. Push a black 2L pin into each of the two holes on the left side of the S-foil.

162.1. Push a white 3L thick liftarm with a center axle hole, vertically with the holes facing left and right, onto the two previous pieces.

162.2. Push a red 2L axle into the center hole of the previous piece.

163. Keeping the previous piece on the left, flip the S-foil right side up.

164. Place the ARC-170 in front of you, with the tail guns on the right. Find the two axle connectors on the S-foil mechanism. Just like on the other side, these are between the two pins. Rotate the S-foil so it is upside down and vertical, with the 2L axle at the back. Push the axle into the bottom axle connector.

Group 30.

165.1. Next, we'll make the other large wing. Set the ARC-170 aside. Place a light gray 4x8 plate, horizontally, in front of you.

165.2. Place a light gray 1x4 plate, vertically, on the rightmost column of the previous piece so it overhangs one stud to the front.

166. Place the back right corner of a white 3x8 wedge plate, horizontally with the row of eight studs at the front, under the overhanging stud of the previous piece. The columns of two studs should be on the right.

167. Place a light gray 4x4 tile with four studs, with the studs on the right, to the left of the 1x4 plate. This piece has a sticker showing dark gray and light gray paneling details.

168.1. Place a white 3x8 wedge plate, horizontally with the row of eight studs at the back, in front of the previous piece so the left sides are even. The columns of two studs should be on the right and the right side should overhang three columns to the right.

168.2. Place a white 2x8 plate, horizontally, behind the 4x4 tile with four studs so the left sides are even. The right side should overhang three columns to the right.

169. Place a white 1x8 plate, horizontally, under the back row of the previous piece so it extends three studs to the left. The left side should be even with the left of the wing.

170. Place a dark red 2x4 tile, horizontally, on the left three studs of the previous piece so the back sides are even and so it overhangs one column to the left.

171. Place the back right corner of a white 3x6 plate with two angled corners, vertically with the column of six studs on the right, under the overhanging column of the previous piece so the back sides are even.

172.1. Place a dark red 1x2 tile, vertically, in front of the 2x4 tile so the right sides are even.

172.2. Place a dark red 2x4 tile, horizontally, to the left of the previous piece.

172.3. Place a dark red 1x4 tile, horizontally, in front of the previous piece and offset one stud to the right.

173.1. Place a dark red 2x4 wedge plate, horizontally with the row of four studs at the front, in front of the previous piece. The widest side should be on the right.

173.2. Place a dark red 3x6 half circle plate, vertically with the rounded side on the left, to the left of the previous piece so the front sides are even. The back side should be even with the back of the wing.

Group 31.

174.1. Place a silver 1x2 grille tile, vertically, on the second and third studs from the front on the fourth column from the right of the wing. There should be a cutout in the wing to the right of the front stud of this piece.

174.2. Skip the next three studs to the left of the front stud of the grille tile and place a lime green 1x1 tile. There should be no free studs in front of or to the left of this piece.

175.1. Flip the wing upside down so it is horizontal with the 3x6 half circle plate on the right. Place a tan 1x3 plate, upside down and horizontally, on the back row of the wing so the left sides are even.

175.2. Place a white 1x4 plate, upside down and horizontally, in front of the previous piece so the right sides are even.

175.3. Place a white 1x4 plate, upside down and horizontally, on the front row of the wing so it overhangs one stud to the left. The front of the wing will extend a little bit in front of this piece.

175.4. Place a tan 1x3 plate, upside down and horizontally, behind the previous piece so the right sides are even.

176.1. Place the front stud of a light gray 1x2 plate with a hole under one stud, upside down and vertically with the hole at the back, under the overhanging stud of the back 1x4 plate on the left side of the wing.

176.2. Place a white 2x3 pentagonal tile, upside down and horizontally with the point at the right, under the previous piece so the left sides are even.

177.1. Place the back stud of a light gray 1x2 plate with a hole under one stud, upside down and vertically with the hole at the front, under the overhanging stud of the front 1x4 plate on the left side of the wing.

177.2. Place a white 2x3 tile, upside down and vertically, under the previous piece so the front and left sides are even.

178.1. Now we'll add some parts to reinforce the wing. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, on the back two rows of the wing so there are three columns to the left of it. The big gap in the wing should be in front of the left column of this piece. Repeat symmetrically on the front side.

178.2. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, behind the front piece from the previous step and offset one column to the right. This piece should be to the right of the big gap in the wing.

178.3. Place a light gray 2x2 rounded plate with a rounded bottom, upside down, on the front two rows of the wing so the right column attaches to the left column of the 3x6 plate with two angled corners. Repeat symmetrically on the front side.

Group 32.

179.1. Now we'll build the wing-mounted laser cannons! Set the wing aside for now. Place a black 1x1 brick with a hole, with the hole facing left and right, in front of you.

179.2. Push the pin side of a black 2L pin with bushing on one side, with the bushing on the right, into the hole on the right side of the previous piece. Push it all the way in so the pin extends 1L to the left

180. Push the hole of a black 1x1 brick with a hole onto the left side of the previous piece.

181. Place a black 1x3 plate, horizontally, under the two 1x1 bricks so it extends one stud to the left.

182. Place a dark gray 1x2 inverted slope, horizontally with the slope on the left, on the left stud of the previous piece.

183.1. Next we'll add a spring loaded shooter! Place a dark and light gray 1x4 spring loaded shooter, horizontally, in front of you.

183.2. Place the back stud of a black 1x1 plate with a 1x1 inverted slope on one side, vertically with the slope at the front, under the rightmost stud of the previous piece. Place three more to the left of the first.

183.3. Place this assembly on top of the two 1x1 bricks and 1x2 inverted slope.

183.4. Place a white 1x4 plate, horizontally, in front of the spring loaded shooter.

184.1. Push the end of a black 6L bar with a stop ring on one side, with the stop ring on the right, into the bushing sticking out of the right side of the assembly. Push it in as far as it will go so it extends 5L to the right of the rest of the assembly.

184.2. Push the hollow stud of a dark brown 1x1 cone, with the anti-stud on the right, onto the right side of the previous piece. Push it left until it touches the stop ring.

185. Flip the laser cannon assembly upside down, keeping the bar and cone on the right. Place a black 1x1 round plate, upside down and centered horizontally, on the front row.

186. Place the wing, upside down and horizontally, in front of you, with the rounded end on the right. Rotate the laser cannon so the bar and cone are at the back and place it, centered vertically, on the second and third columns from the right.

187. Now we'll add the wing to the rest of the starfighter! Place the ARC-170 in front of you, with the tail gun at the right. There should only be one S-foil on the front side. Find the two pins on the S-foil mechanism, these are on either side of the S-foil. Rotate the wing we made so it's vertical and rightside up with the laser cannon at the front and pointing to the left. Push the holes on the back side of the wing onto the two pins we just found.

Group 33.

188.1. Now we'll make the last S-foil! Set the rest of the ARC-170 aside for now. Place a white 2x8 plate, horizontally, in front of you.

188.2. Place the front row of a white 2x2 tile with a Republic Navy sticker, centered horizontally, on the back row of the previous piece.

189. Place the front row of a white 3x8 wedge plate, horizontally with the row of eight studs at the front, centered horizontally, under the back row of the previous piece. The columns of two studs should be on the left.

190.1. Place a white 3x3 round tile on the rightmost two columns of the S-foil so it overhangs one column to the right. This piece is printed with some light gray panel lines and one half of the circle is dark red. This dark red portion should overhang. You may want to ask a sighted person or use an app to get the orientation correct.

190.2. Place the rightmost column of a white 2x3 tile, vertically, on the leftmost column of the S-foil so the front sides are even.

191. Place a white 2x2 tile behind the previous piece.

192.1. Keeping the 3x3 round tile on the right, flip the S-foil upside down. Place a white 1x2 half circle jumper plate, upside down and vertically with the round side on the right, on the rightmost column of the 3x3 round tile.

192.2. Place a light gray 1x2 plate with a hole under one side, upside down and vertically with the hole at the front, on the back two anti-studs on the leftmost column of the S-foil. Place another in front of the first.

193. Place a light gray 2x3 C-shaped plate, upside down and vertically with the C opening to the left, on two leftmost columns of the S-foil so the back sides are even. The open part of the C should wrap around the hole of the back 1x2 plate with a hole.

194. Push a black 2L pin into each of the two holes on the left side of the S-foil.

195.1. Push a white 3L thick liftarm with a center axle hole, vertically with the holes facing left and right, onto the two previous pieces.

196. Push a red 2L axle into the center hole of the previous piece.

197. Keeping the previous piece on the left, flip the S-foil right side up.

198. Place the ARC-170 in front of you, with the tail guns on the right. Find the last axle connector which is above the wing on the front side. Rotate the S-foil so it is rightside up and vertical, with the 2L axle at the back. Push the axle into the remaining axle connector.

Now, to extend the S-foils, find the 7L liftarm which is on the bottom of the fuselage. It is vertical and it should be centered. With the tail guns on the right, push this liftarm away from you and the S-foils should open outwards! Push it back, or push the S-foils down to close them again.

199. The last step is to load the spring loaded shooters! These are located under the wingtips and above the laser cannons. Remember, these are 1x4 bricks with a hole on each of the short sides. Find a transparent green spring loaded projectile. These are long bars which have a thick rounded end. Slide the bar end, horizontally with the rounded end on the left, into the hole on the left side of one of the spring loaded shooters. Repeat with the other. You may need to rotate these to get them to slot into the grooves. Once they click in, you can push down on the bar end to have them launch out! The set includes one spare projectile.

This completes the ARC-170 starfighter!

Thank you so much for building this set!

There is one page of ads after the instructions end. This page shows ads for four LEGO Star Wars sets. The first is for set number 75403, Grogu[™] with Hover Pram. The second is for this set: set number 75402, the ARC-170 Starfighter. The third is for set number 75410, Mando and Grogu's N-1 Starfighter[™]. The last is for set number 75401, Ahsoka's Jedi Interceptor.

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