

1. Cut out the section outlined in red here (see left). You will need 2 claws, so cut out both sides of the box. For the people re-creating this project without one of these boxes, I have highlighted the places where folds need to be made in the image to the right. Black lines are folded inwards and green are folded outwards. Warning: getting these folds just right on a plain piece of cardboard can be a bit tricky. You may want to cut the top black line instead of just folding it.

 When folded together the two pieces with a red X on them (see left) should be touching. You should now have a cupped claw. Then tape <u>one</u> of the claws together as shown with the red markings on the rightmost image.





3. On the claw you have taped closed you will also want to trim off the section highlighted in red here on both sides. This allows the other claw to move freely with the servo. If you leave this section in, it will block the motion of the servo.

 Slide an 11x4 cm (4.3x1.6 inches) piece of cardboard (Or use one of the smaller flaps on the bottom of the box) into the <u>trimmed</u> claw as shown in the image to the right. Attach with tape as shown on the left <u>on</u> <u>both sides</u>. If you have glue you may wish to use it, but tape will work fine to fix the pieces together.







5. On the second claw you will need to cut the fold highlighted in the image. Make the cut to about 2/3 of the fold's length. Then make a hole through both sides of the cardboard. You will want it to be roughly in the center of the triangle as this will be our pivot point.

 Slide the second claw onto the cardboard strip and use it as a guide to poke a hole the strip in the same place as the one on your claw. Finally, fix the two pieces together with the paper fastener.







After following these steps you should now have a claw that looks like the one above and that freely pivots around the paper fastener. Now, our last steps will be to add the servo motor onto the pivot point.



7. Stick a lump of tack onto the servo's arm as shown in the image on the right. The loop on the arm is it's pivot point so leave it exposed. Stick the arm onto the movable claw as shown and make sure the pivot points line up together.

8. The final step is to put the actual servo onto the claw. To do this simply stick it onto the arm's pivot point. Try to get the servo as close to 90° as possible, like shown in the image to the right (The red line is for the motor and the green is for the arm). You will want it to be exactly as shown in the image so that when we apply our program to it, it will move as we want it to, and not in unexpected ways. For reference I have included a GIF in the instructable of how the claw will move when it is programmed.

