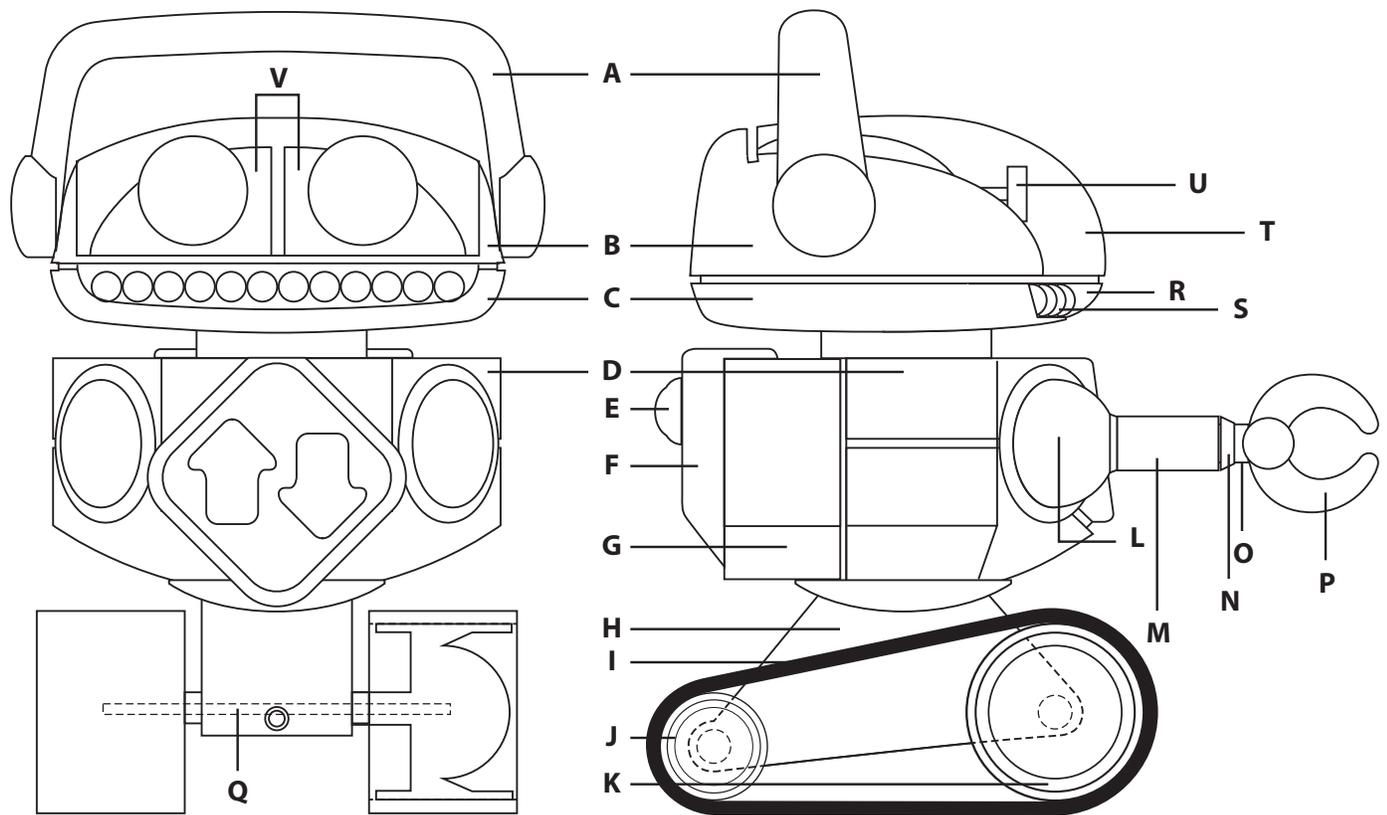


Toy Story Robot Kit Instructions



SUPPLIES NEEDED

Rustoleum 7724 Sail Blue
 Rustoleum 7765 Regal Red
 Rustoleum 214084 Orange
 Rustoleum 7747 Sunburst Yellow
 Rustoleum 249100 Meadow Green

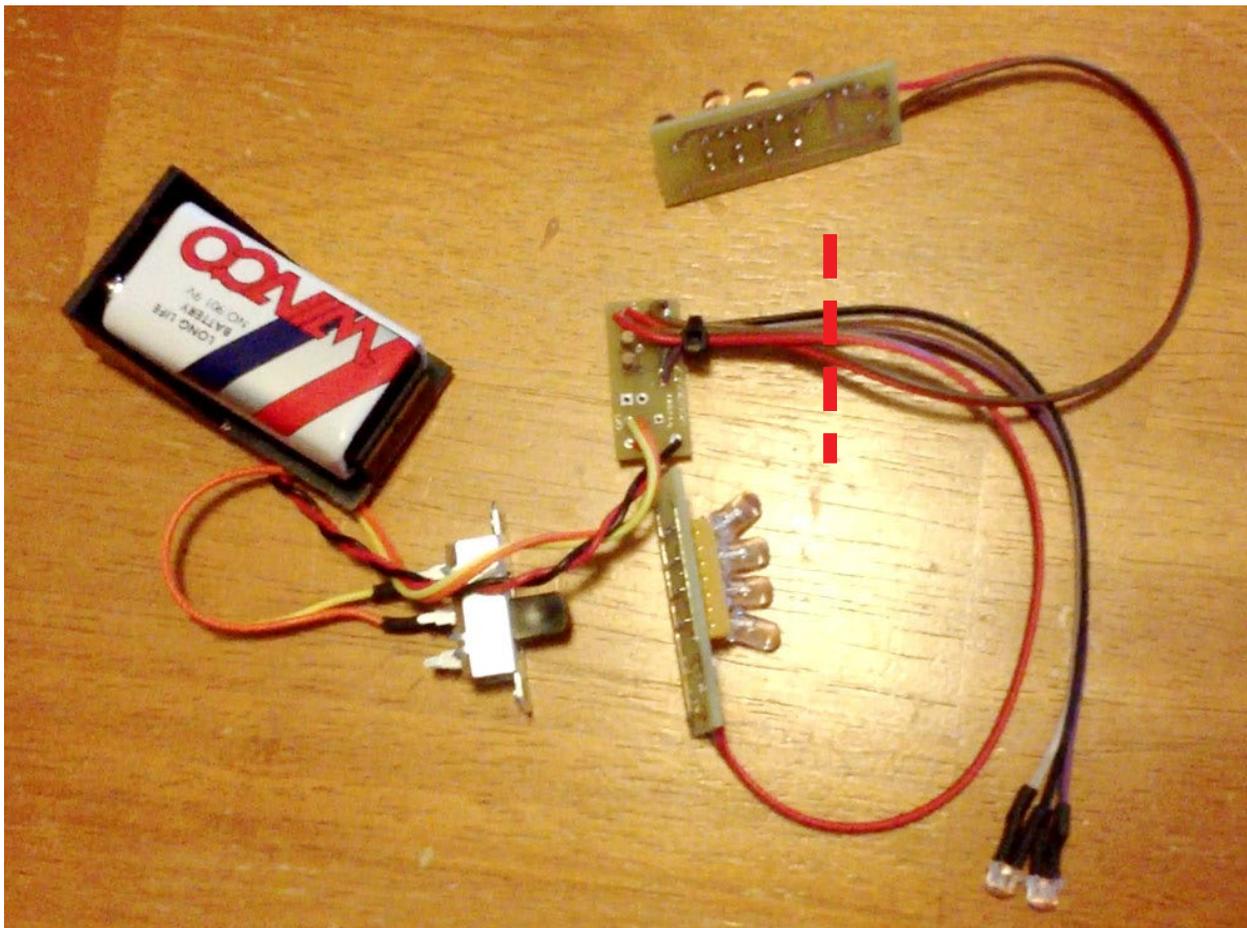
Spray White
 Hob-E-Lube Dry White Lubricant with Teflon
 Sandpaper
 Spot filler putty

2-Part epoxy
 CA Glue ("Super glue")
 etching primer

ASSEMBLY

1. Wash resin parts in water with a mild dish soap like Dawn. Use a toothbrush to get in all the small areas.
2. Paint base (H) Blue. Insert threaded nipple in top hole. Test fit torso and make sure enough thread pokes through the torso hole so that you can add the nut. You may have to remove material from the inside of the torso around the hole. Once you've successfully tested the fit, remove the torso and glue nipple into base hole, making sure the tube sits at 90°.
3. Test fit axles (Q) in base holes. Enlarge with a 3/16" drill bit until axle spins freely.
4. Paint the wheels (J, K) Orange. They should press on and stay without glue. Be careful to press perpendicular to the axle. any sideways movement could snap off the wheel stem.
5. Mask off the neck area of the torso (D) so that paint doesn't constrict the joint. Paint the top Blue and the bottom Red. Paint the chest shield Yellow and the arrows Green.
6. Drill out the arm holes 1/4" deep. You'll want to flare the inside of the hole to accept the round shoulder (L). Remove material until the sholder fits within the ring snugly.
7. I recommend NOT painting the shoulder as it will be rubbing withing the torso joint. Any paint will eventually scratch off leaving a rough finish. The raw plastic can be sanded and polished to a smooth surface.

8. Insert shoulder and insert shoulder bracket to back of shoulder. The flat end of the bracket should rest against the top of the torso. Depending on the thickness of the casting, the bracket may not fit tightly against the shoulder. Remove excess plastic from the torso or bracket so the the bracket can press the shoulder into the correct position while still maintaining contact with the top/bottom and or side of the torso. Once you have a fit, hot glue the bracket in place. The hot glue has enough flex to it to allow the shoulder to move. Alternately, if you're not concerned with possibility of the arms you can glue the shoulders in place.
9. Paint jaw (C) Red. Insert threaded nipple into center hole. The threads of the nipple should not be visible in the center hole when in place. Test fit on torso and make sure enough thread pokes through the torso hole so that you can add the nut. You may have to remove material from the inside of the torso around the hole. Make sure jaw rotates freely on torso. Add white lube if necessary.
10. Paint head (B) Blue.
11. IF YOU DO NOT PLAN ON ADDING ELECTRONICS, SKIP TO STEP 23
12. You'll need to cut the wires leading to the LEDs far enough away from the lights but leaving enough room to easily solder them back together. BE VERY CAREFUL TO MARK WIRES SO YOU RE-CONNECT THEM PROPERLY! (Obviously, don't have a battery in there when you're doing all this!)



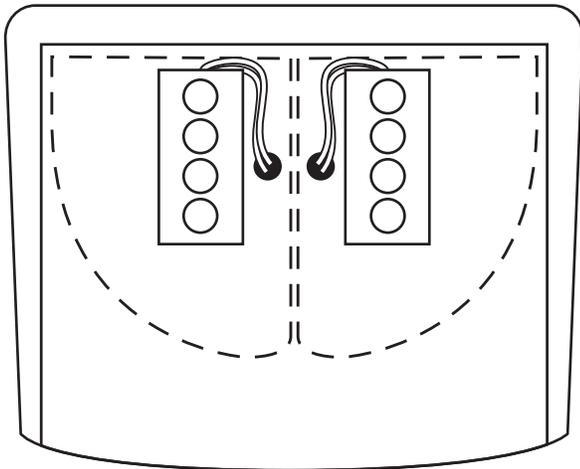
13. Thread LED wires through holes in the head (Brain bank of lights and eye LED (set of) wires in each hole. You can tape the LEDs down to the head to keep them from flopping around while you work.
14. Thread all LED wires through nipple in jaw. Epoxy head to jaw.
15. Thread wires down into torso and connect jaw to torso with nut. Tighten until seated but still moving freely. Secure nut with drop of glue.
16. Solder wires back together with rest of kit.
17. Glue white back plate (G) to torso.
18. Glue switch to battery hatch (F), with "OFF" setting to the left.
19. Test fit switch plate (E) to see how it fits on switch lever. The lever may need to be cut down so that the switch

sits 1-2mm over the battery hatch. You may also have to open the hole in the switch plate to fit better on the switch lever. Apparently, the design of readily available switch changes all the time...it may fit perfectly or you may need to make adjustments.

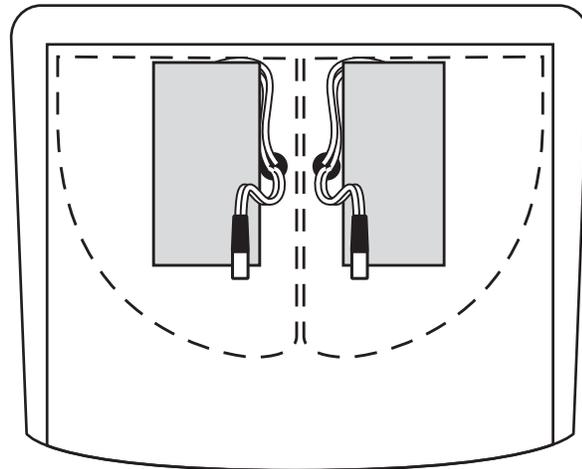
20. Glue Switch plate on switch.

21. Hot glue the light banks close to the center and back. Leave enough room in back for the brains.

22. Notch diffusion box for wires and hot glue over each light bank. Hot glue the eyes on top of the diffusion box so that it lines up behind the eyes.



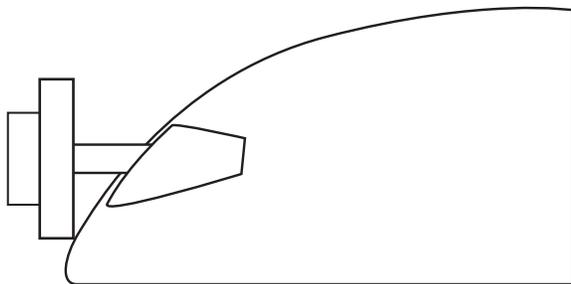
21.



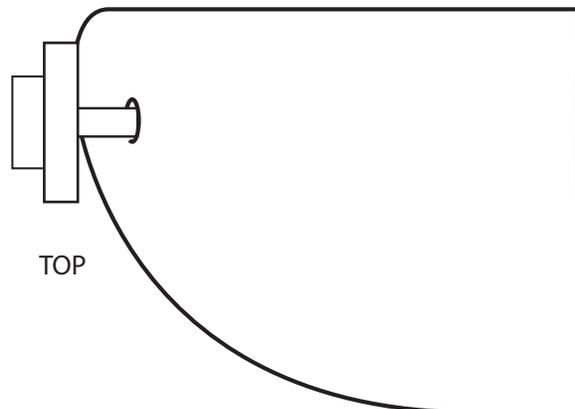
22.

23. Trim each eye (U) stem to 13 mm. Feed the stem of each eye through the brain (V) hole

25. Glue brains into head.



SIDE



TOP

26. Put in the battery and see glowing eyes and brain!

27. Place teeth (S) into mouth at the top of the cavity. The end teeth will need to be cut for all the teeth to fit and the mouth shield (R) to slide under them.



28. Trim mouth shield to guide line and test fit. Trim small amounts off the dome and test fit until the piece fits. Watch the tutorial video at http://youtu.be/buFCK_76um0 to see me doing it. It's not hard, you just need to be careful as you trim.

29. Glue mouth shield in place with Elmer's white glue or Testors Clear Parts Cement. Superglue and some epoxies will haze the plastic.
30. The head visor (T) can be fitted much the same way. I started by cutting the back and the left side. From there you can see how much needs to be cut off the right side. Once that fits in place, mark the overlap along the front edge and carefully trim until it fits. This side is the most critical so I recommend trimming outside your mark, test fitting and then trimming a little more. If you have to do that a half dozen times, you're doing it right!

WATCH VISOR TRIMMING VIDEO: https://youtu.be/S_9-g0ERCGQ

31. Glue the head visor in place with the clear parts cement. Some glues can etch clear plastic. ALWAYS TEST on a scrap first.
32. Spray etching primer on copper bicep pipes (M). Glue "elbow" flange (N) into ends of each pipe. Putty up the seams and paint white.
33. Sand flash off wide end of forearm (O) until it fits nicely in biceps. DO NOT paint the forearms! Insert forearm in bicep.
34. Paint claws (P) Orange. Glue claw to forearm.
35. Test fit bicep into shoulder joint. If it doesn't fit easily, Dremel out material until it slides in. Add epoxy inside shoulder and slide bicep in all the way. Extend claw while epoxy sets.
36. Paint the handle (A) Yellow. Paint the ear caps on the end orange.
37. Glue the handle in place with the slanted side facing front. The back of the handle should sit vertically.
38. Stretch treads (I) over wheels. While facing the Robot, The letters will be on the right (Robot's left) and the numbers on the right. All characters should be right-reading as they roll over the front wheel (not upside down.)
39. That's it, Andy! Your Robot is ready to join his friends on your shelf!

