

Patton Robotics ESRA[®] II Arm Kit

Expressive System for Robotic Animation

Assembly and Operation Instructions

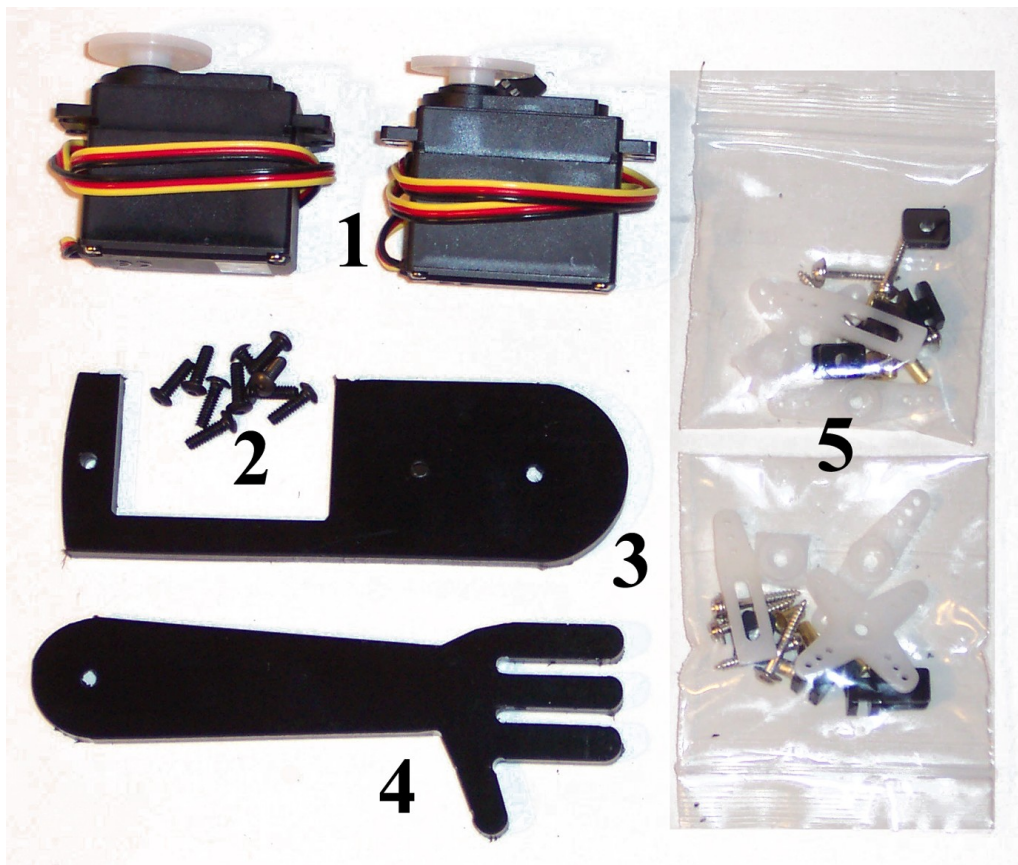
Version 1.0

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ESRA II Shoulder and Base kit contents:



1 Servos

2 Misc. Screws

3 Forearm

4 Hand

5 Misc. Servo Parts

Assembly Instructions

Be sure to look up the proper part for each step.

Some basic tool and supplies are required for assembly, including:

- Needle Nose Pliers
- Allen Wrenches
- Phillips Screwdriver



Figure 1

**Remove the round hub from the Servos(1).
Locate the square hubs from the Misc. Servo
Parts bags(5).**

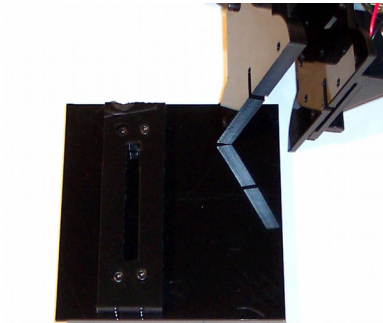


Figure 2

**Remove the ESRA II from its Base Plate,
leaving the lower Shoulder Plate attached to
the Base Plate.**

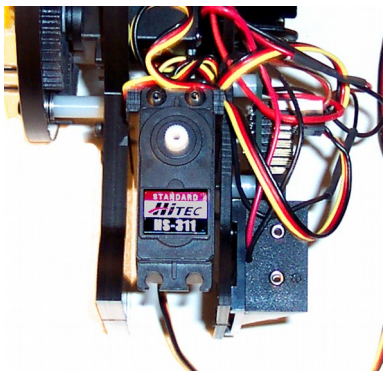


Figure 3

**Attach a Servo(1) with two of the included
screws(2) as shown.**

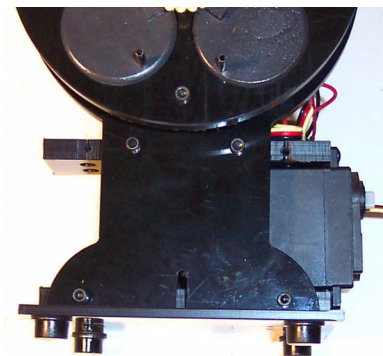


Figure 4

**Re-attach the Base Plate to the Servo Plate
and Back Plate.**

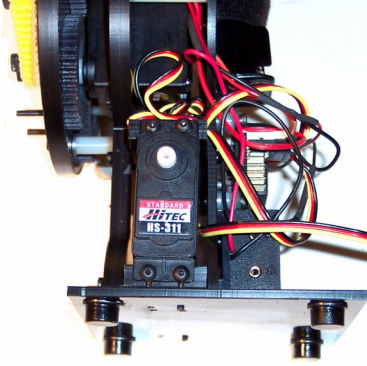


Figure 5

Attach the bottom of the Servo(1) to the lower Shoulder Plate as shown.

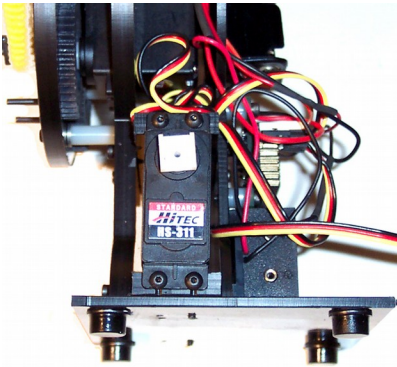


Figure 6

Place a square hub onto the Servo(1).

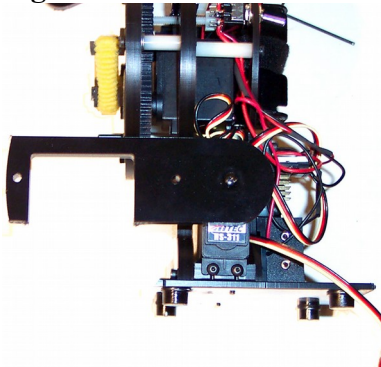


Figure 7

Place the Forearm(3) over the square hub and screw in the Phillips screw included with the Servo(1). Check the range of motion of the Forearm(3). It may be necessary to remove and relocate the square servo hub to get the proper range of motion.

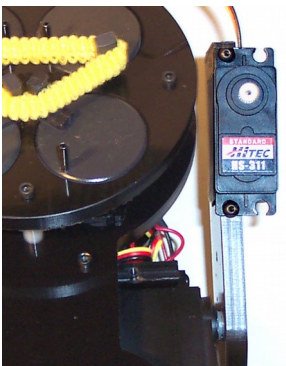


Figure 8

Attach the remaining Servo(1) to the Forearm(3) as shown.

Place a square hub onto the Servo(1) as shown.

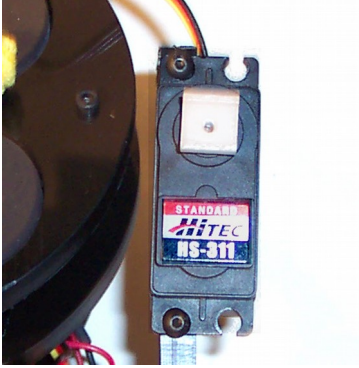
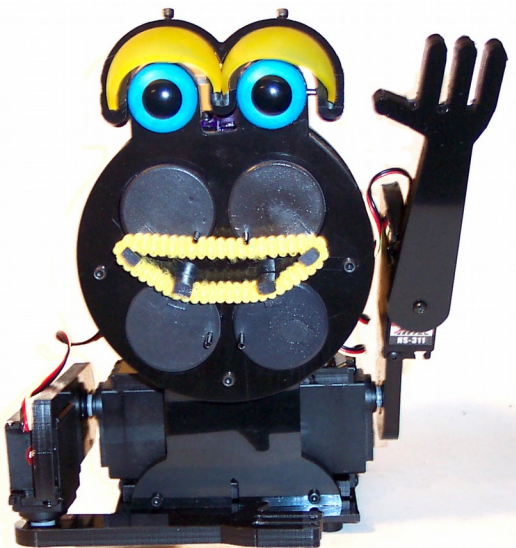


Figure 9



Figure 10

Place the Hand(4) over the square hub and screw in the Phillips screw included with the Servo(1). Check the range of motion of the Hand(4). It may be necessary to remove and relocate the square servo hub to get the proper range of motion.



ESRA II with two attached arms.

