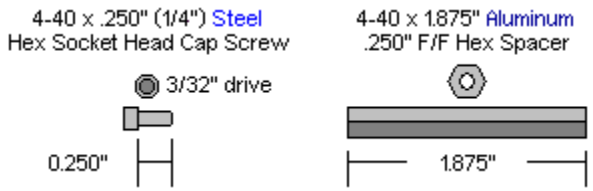
BH3 Body Assembly Instructions Rev. 1.

The purpose of this guide is to construct the chassis, attach the legs, and install the electronics. As long as the servo horns have not been removed from the servos, you do not have to center them during the assembly process.

Step 1.

Use eight 4-40 x 1/4" hex socket screws to attach the spacers to the bottom of the robot.

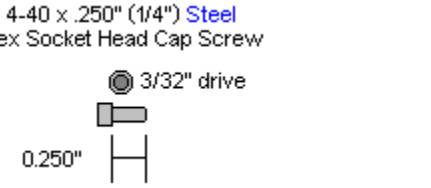
8 x



Step 2.

Mount the top of the robot using eight 1/4" hex screws.

8 x



Step 3.

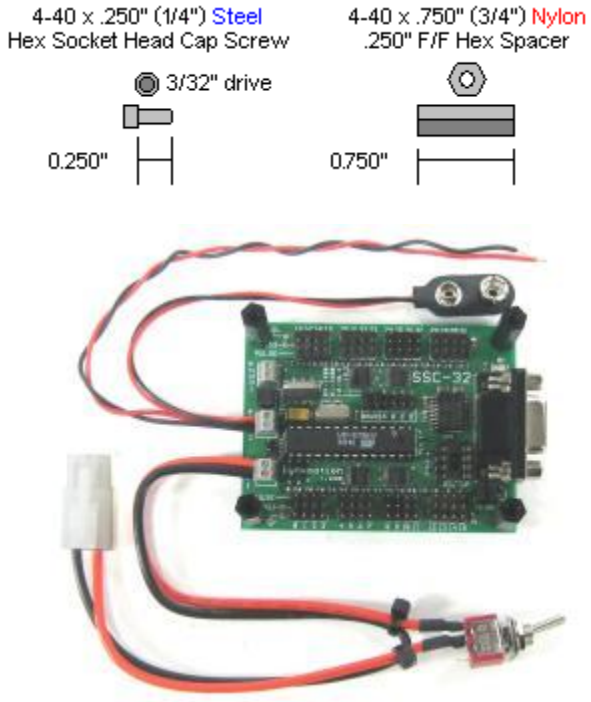
Slide the end panels in as shown, and attach using eight 3mm x 6mm screws.

8 x

Step 4.

The SSC-32 should be configured for 115.2 kbaud and DB9 communication, with the VS2=VS1 jumper installed. Remove the VL=VS jumper. Consult the SSC-32 manual if needed. Attach the wiring harness to VS1. Connect 8" of 24awg wire (not included) AND the 9v battery clip to VL; this will provide power for the electronics. Make sure that the red wires go to (+) and the black wires go to (-). For now, put some electrical tape on the end of the wire. Use four 1/4" hex screws to attach four 3/4" nylon hex spacers to the SSC-32 as shown.

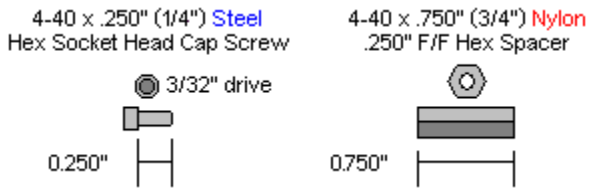
4 x



Step 5.

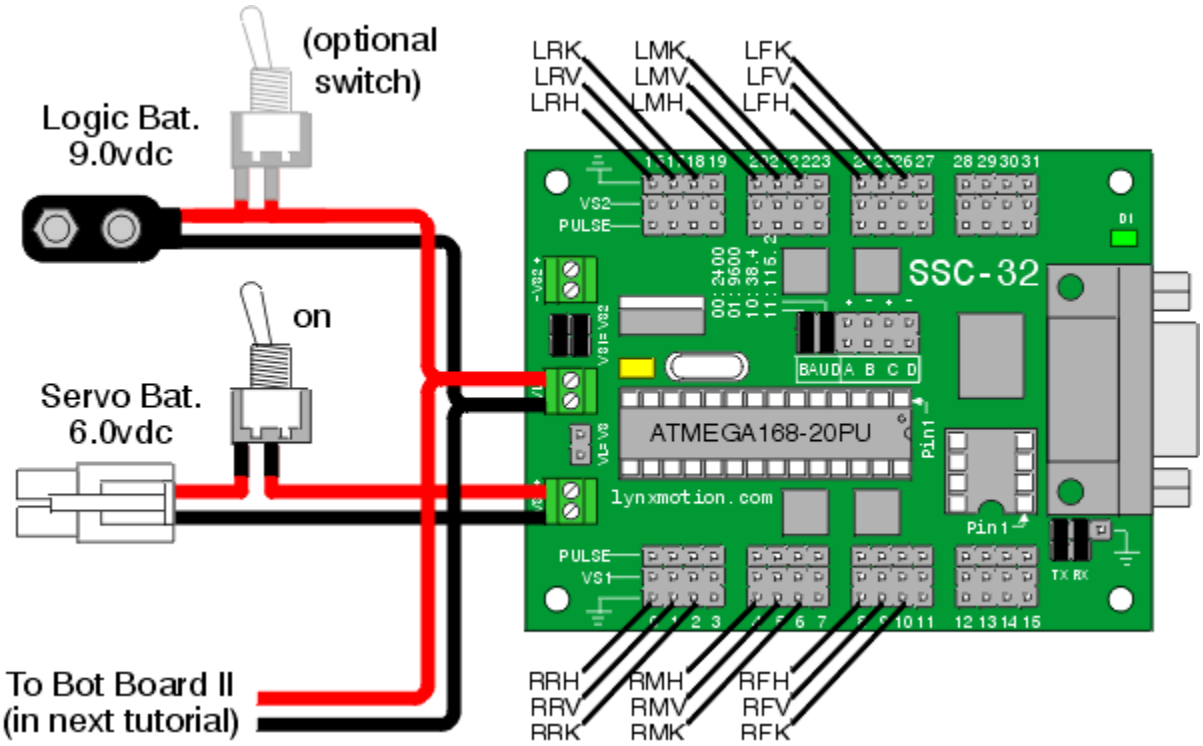
Install the Atom 28 as shown, taking care not to damage the delicate pins. Remove the following jumpers: VS=VL, ABC buttons / LED. Install the following jumpers: speaker enable, VL to I/O 4-7 bus. Consult the Bot Board manual if needed. Use four 1/4" hex screws to attach four 3/4" nylon hex spacers to the Bot Board as shown.

4 x



Schematic.

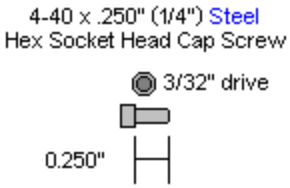
Double check your connections against the schematic below.

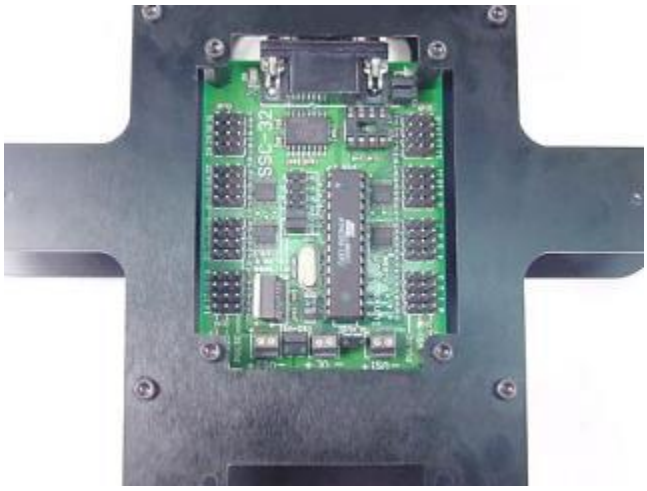


Step 6.

Slide the SSC-32 in from the top, orient as shown with the DB9 connector toward the front, and attach using four 1/4" hex screws. At this point you will want to attach the power switch to the robot's body. You can use any of the holes the power switch will reach.

4 x





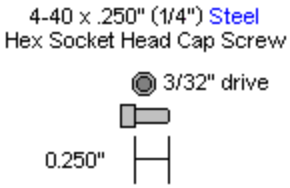
Step 7.

Attach the power wires from the SSC-32 to the Bot Board's VL input as shown. Make sure the red wire goes to (+) and the black wire goes to (-).

Step 8.

Slide the Bot Board in from the top, orient as shown with the power terminals toward the rear, and attach using four 1/4" hex screws.

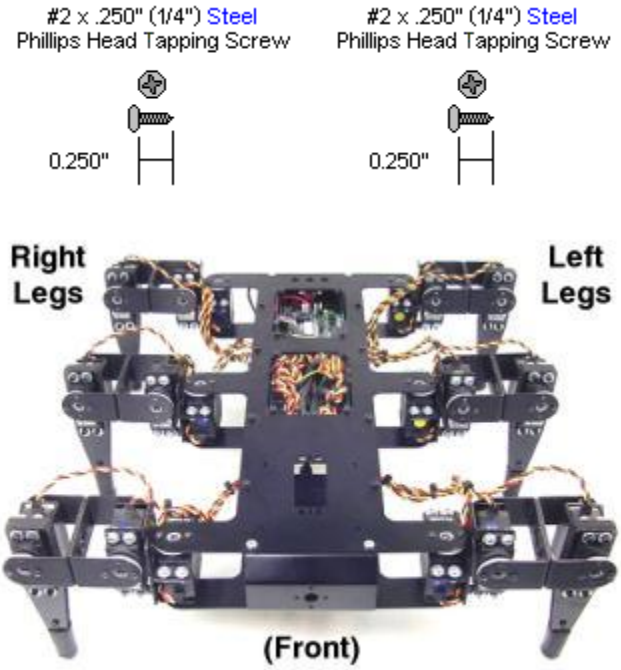
4 x



Step 9.

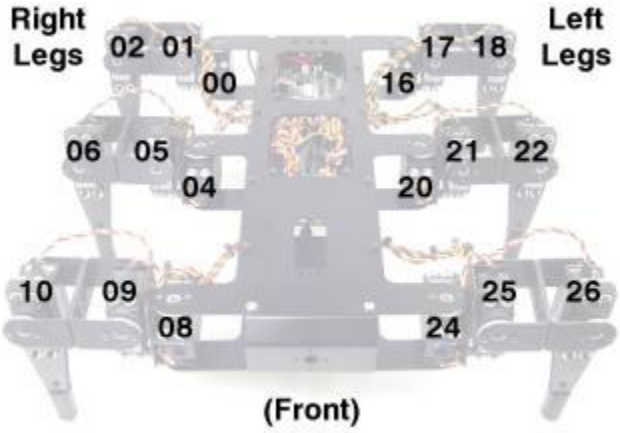
Attach the legs as shown, making sure to use right or left legs as indicated. Use twelve #2 x .250" tapping screws.

12 x



Step 10.

Plug the servos into the SSC-32 as illustrated in Figure 10. Simply plug in the servo associated with the function to the corresponding pin. If oriented correctly, the I/O port (group of four pins) will be closest to its corresponding leg.



Step 11.

This completes the mechanical assembly. You can now move on to the Complete H3/H3-R Tutorial.