Simple 2DOF Leg Assembly Instructions.
Updated 08/30/2007.

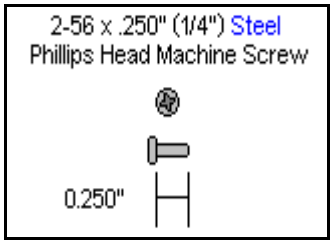
Safety first! Wear eye protection and never touch a powered robot!

Note: Do not use Loctite or thread locks on the assembly. They are not necessary and may cause damage to the Lexan.

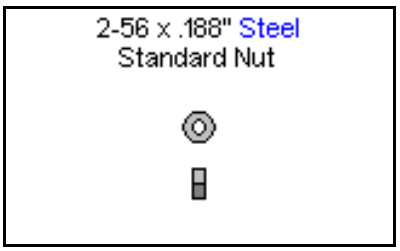
Image of completed Right (robot's right) leg.

Step 1.
Attach the Multi-Purpose brackets together as shown, using two 2-56 x .250 screws and 2-56 nuts.

2 x



2 x



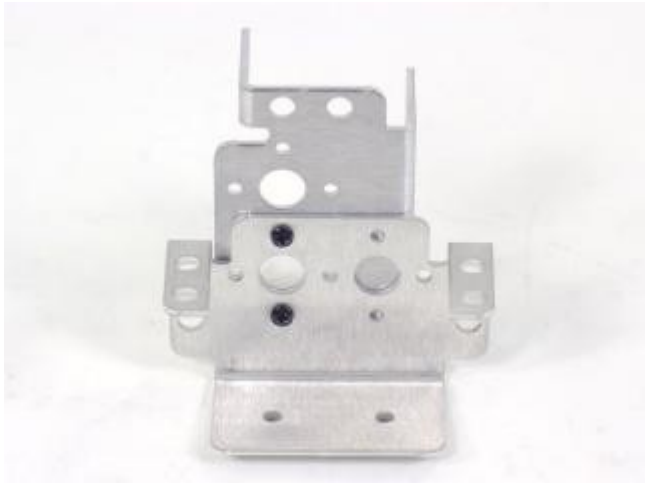


Figure 1.

Step 2.
Attach the ball bearing that comes with the offset "C" bracket to the Multi-Purpose bracket as shown. See the diagram below for detailed information.

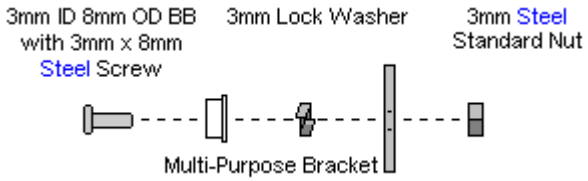


Figure 2-1.

Figure 2-2.

Step 3.
Attach a tubing connector hub to the offset "C" bracket, using two 2-56 x .250 screws and 2-56 nuts.

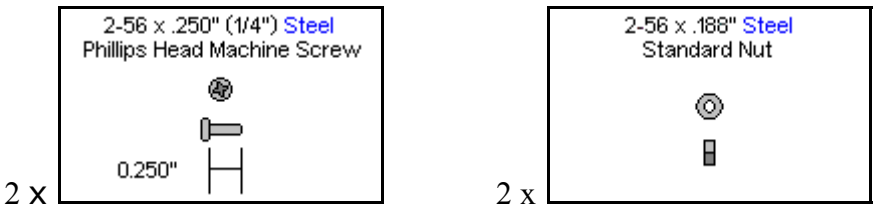


Figure 3.

Step 4.
Attach the offset "C" bracket to the Multi-Purpose bracket as shown. See the diagram below for detailed information.

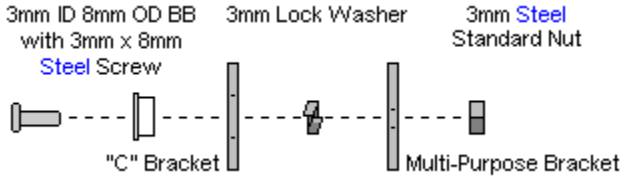


Figure 4-1.

Figure 4-2.

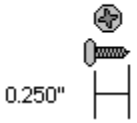
Step 5.
Connect a 3.0" tube to the hub using a 4-40 x .250" screw. Attach a rubber foot to the end of the tube.

1x

Figure 5.

Step 6.
Install the servos as shown, using the included 3mm hardware, and two #2 tapping screws. For quick prototype assembly, you can use rivet fasteners (sold separately: NSRF-01) as illustrated. The HS-422 servo goes in the horizontal position, and the HS-475HB servo goes in the vertical position.

2 x #2 x .250" (1/4") Steel Phillips Head Tapping Screw



8 x 3mm Servo Mounting Hardware Screw, Washer, & Nut

Figure 6.

Step 7.
Now the leg is ready to be attached to a body. Use two #2 tapping screws. These parts are included in the lexan chassis kits or the Long "C" brackets for an aluminum chassis.

2 x #2 x .250" (1/4") Steel Phillips Head Tapping Screw