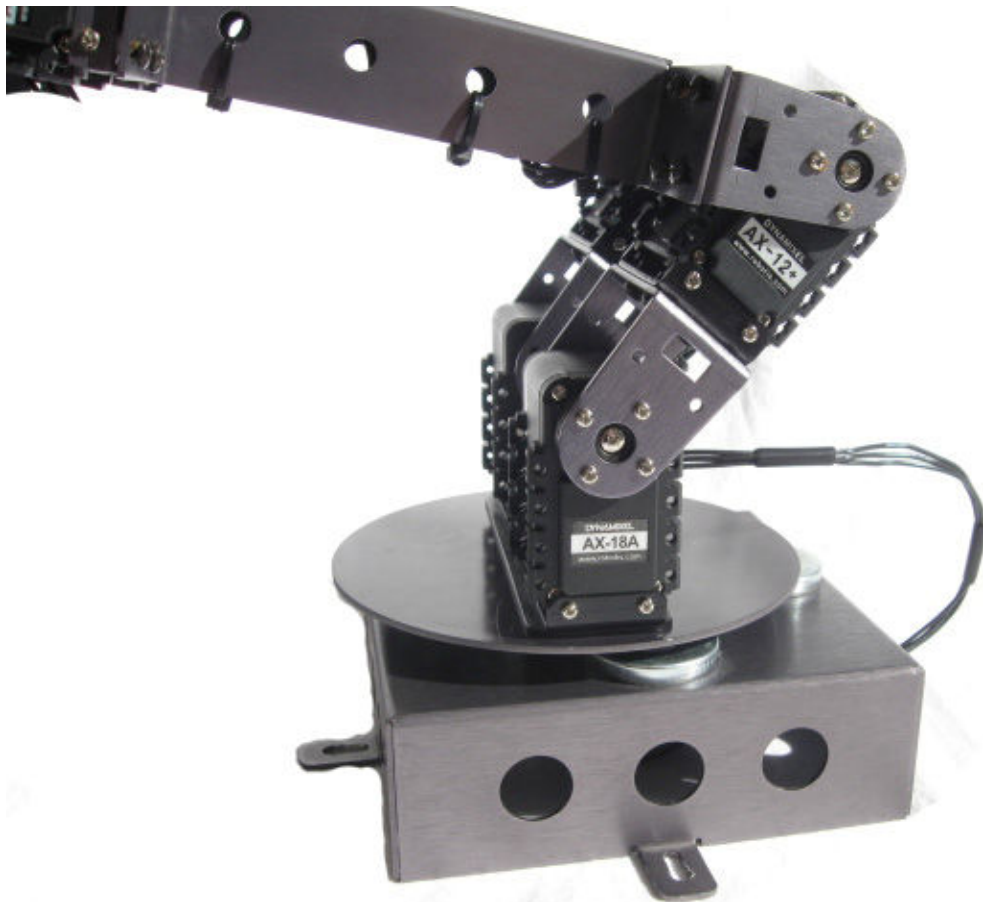


AX-12A / AX-18A Smart Robotic Arm 6-Axis Upgrade



6-Axis Upgrade Features

The 6-Axis upgrade adds additional versatility to the AX-12A / AX-18A Smart Robotic Arms by:

- Replacing the fixed initial angle assembly with a dual AX-18A axis.
- Allows for greater Smart Robotic Arm kinematic articulation

Kit Contents

- (2) AX-18A servos (full kit only)
- (2) AX-12A/AX-18A Side Brackets
- (2) AX-12A/AX-18A Short Brackets
- (1) 6-Axis Adaptor Plate
- (8) #4 1/4" screws
- (8) #4 3/16" screws

Assembly

1. Disassemble the fixed initial angle assembly of the Smart Robotic Arm as shown in figure #1.

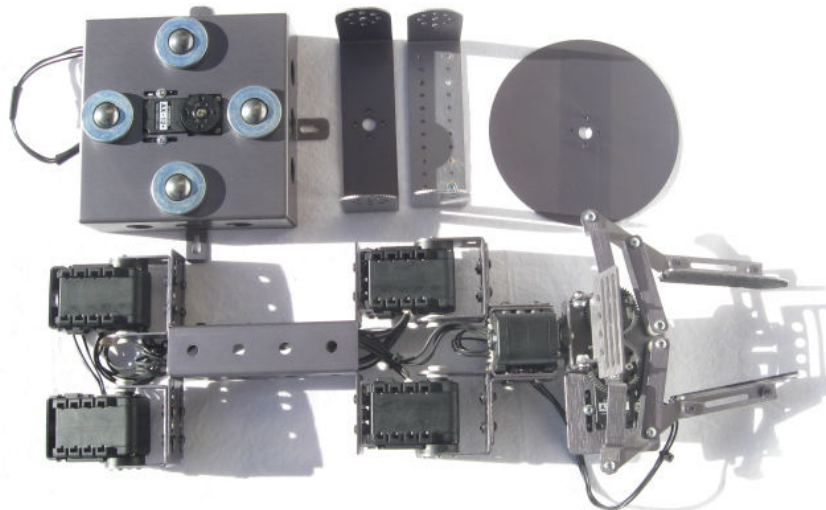


Figure 1

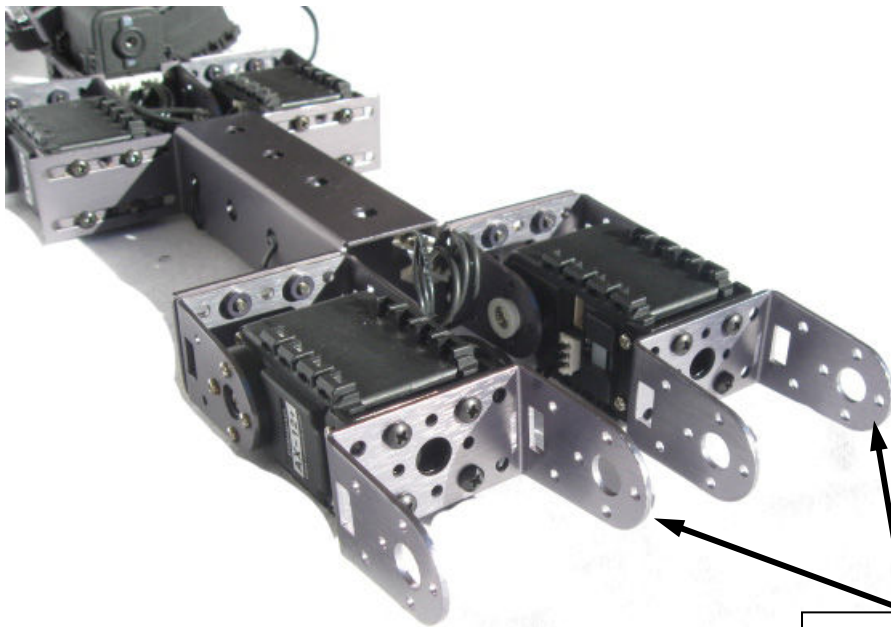
2. Loosen the (8) #4 1/4" screws at the top of the AX servo dual axis as shown in figure #2. This step will help to align the assembly with the 6-axis adaptor plate in step #6.



Loosen all of the #4 screws on both sides

Figure 2

3. Using (8) #4 1/4" screws, install each AX-Short bracket to the bottom of the dual axis assembly as shown in figure #3.



**AX-Short
Brackets**

Figure 3

4. Install an AX-Side bracket to the bottom of each of the AX-18A servos as shown in figure 4. Use the screws and nuts that are included in the AX-18A servo box.

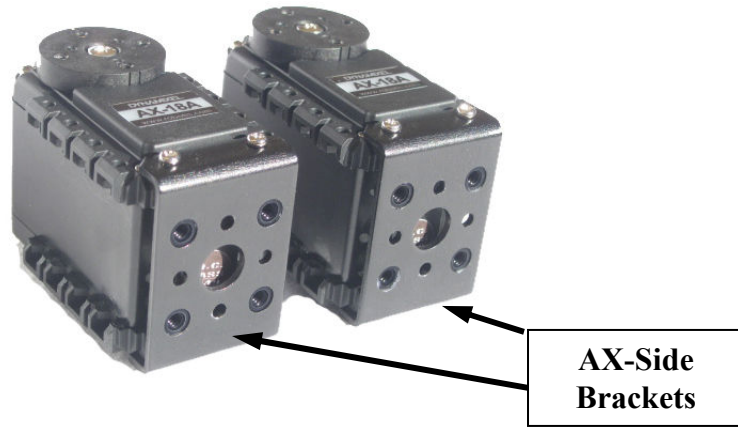


Figure 4

5. Install the (2) AX-18A servos to the AX Short Brackets using the screws and nuts from the AX-18A box as shown in figure 5.

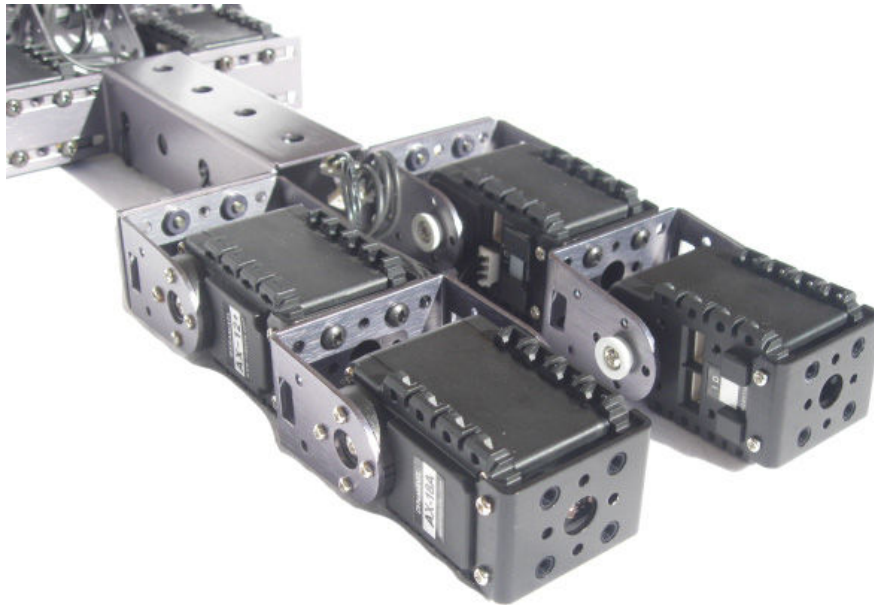


Figure 5

- Using (8) #4 3/16" screws, mount the 6-axis adapter plate to the bottom of the assembly from step 5. Be sure to orient the 6-axis mounting plate so that the screw heads fit into the counter sunken holes in the adapter plate as shown in figure 6.

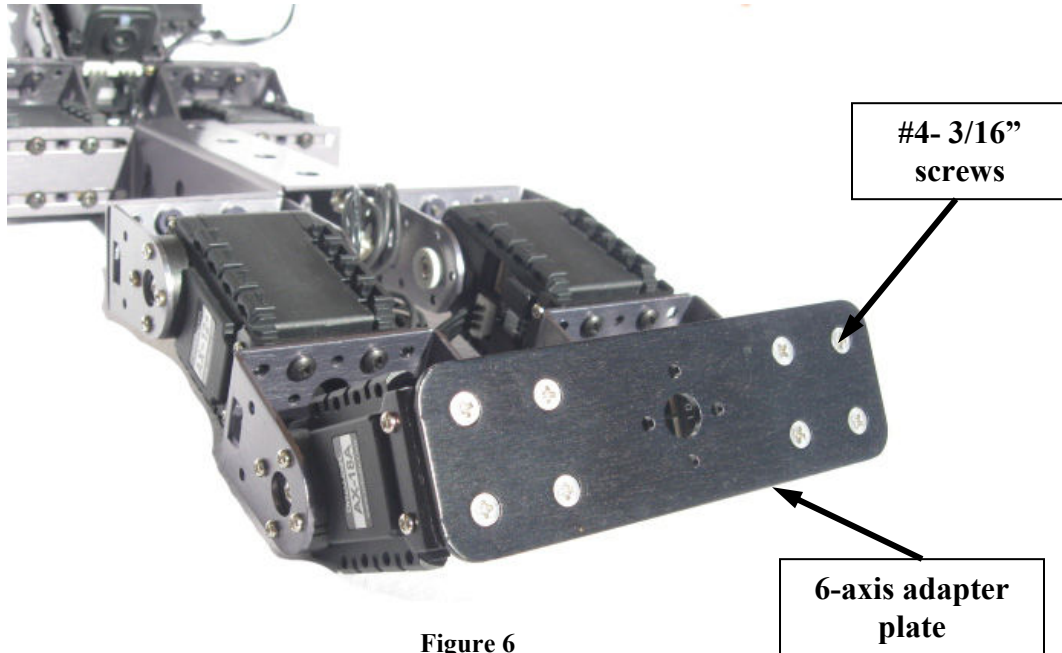


Figure 6

- Re-tighten the (8) #4 – 1/4" screws from step # 2

8. Using the 14mm screw assembly removed from the disassembly from step #1, re-install the turntable and turntable spacer as shown in figure #7. Be sure to install the screw so that about 1/16" of the screw is past the plastic spacer. This makes installing and orienting the turntable assembly easier by allowing the screws to seat into the AX-12A or AX-18A servo mounting holes.

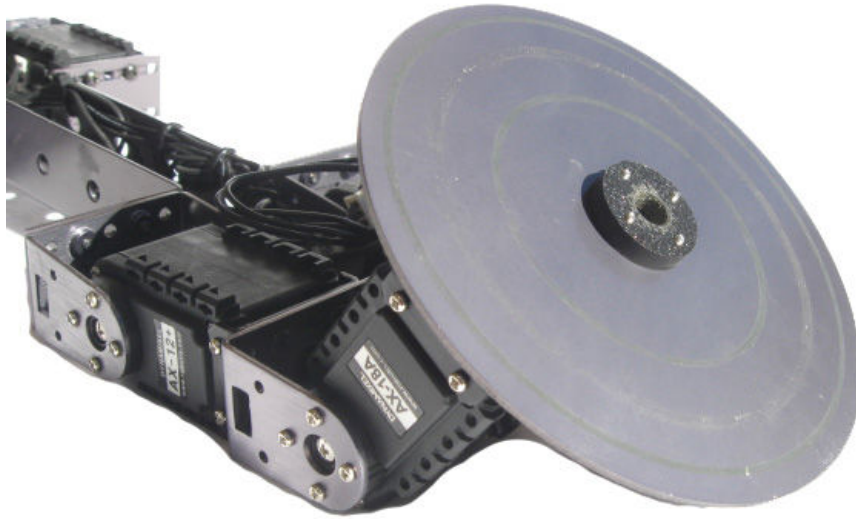
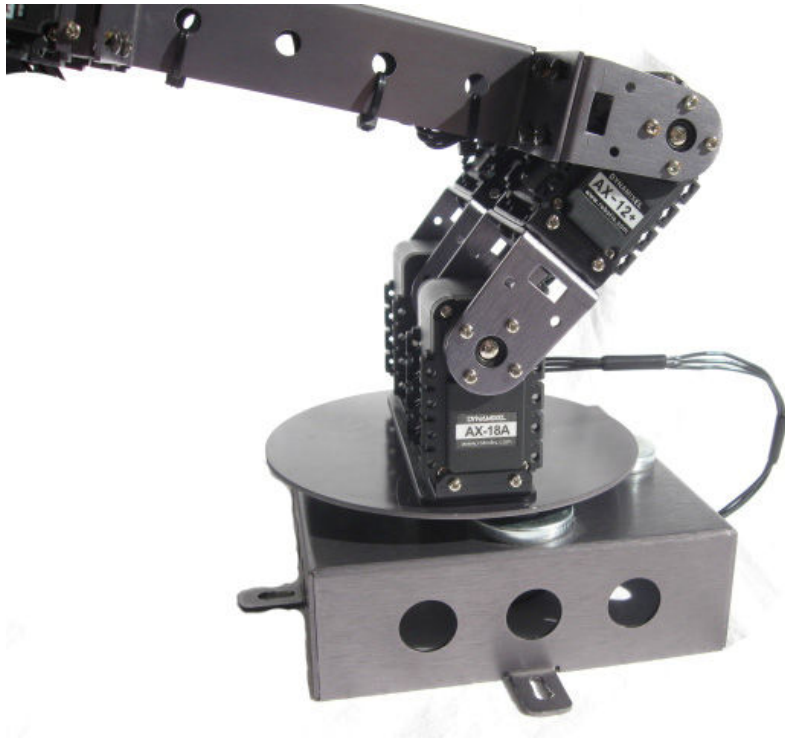


Figure 7

9. Once the turntable assembly from step 8 is aligned with the servo located in the turntable box, tighten the (4) #4 -14mm screws securely.



10. The competed assembly

