Parts list included in Kit

Four @ 12” - 2”x4” (Motor box)

12” x 8' -1/2” OSB:
Cut into
12” x 77” OSB (Base)
12” x 15” OSB (Motor box front)
12” x 4” OSB (“Rocker Plate”)

Eight @ 3” Deck Screws (tan)

Ten @ 1-5/8” Deck Screws (brown)

2” Fence Post Bracket (remove screw before installing motor and DO NOT OVERTIGHTEN screw later)

Seven @ 1” 1/4” carriage bolts (I had a box of 1-1/2” on hand and I used them to fill some kits)

Four @ 2” 1/4” carriage bolts

Nineteen @ 1/4” hex nuts

One Wiper Motor

One screw in 5 mm female barrel connector

One power supply - AC 100-240V to Variable Voltage DC 3-24V 2A 48W

14 @ 1/2” #8 flat head screws

One 5” T-Hinge

Two 3” Strap Hinges

One 2' Aluminum 1” tube.

One 12” Aluminum 3/4” C-Channel

Two 1-1/2” 1/4”Hex bolt

One 2” 1/4” Hex bolt

One 1” 1/4” Hex bolt

Eight 1/4” Flat washers

Two 1/4” Nylon lock nuts

Two 1/8” 1-1/2” Screw Eyes (for anchoring skeleton wrists to bone)

Assemble the Motor Box using the four 2”x4”s. I used two 3” screws on each corner. If you are nervous about the wood splitting you can either pre-drill 1/8” pilot holes or use one 3” screw on each corner. Mount the motor box front with the label “Top” to the inside to the box using eight 1-5/8” screws. The motor box front is predrilled for the motor mount.

Set the motor box on the base about 1-1/2” from the front and 3” from the side. Mark the base where the mount attaches and then mount the motor box to the base using the remaining two 1-58” screws from underneath the base being sure that the “TOP” label is on the top. Remove the screw from the fence post bracket locate the silver rivet on the motor

Install the motor in the fence post bracket so the “rivet is under the bracket to help hold the motor in place. Reinstall the screw in the bracket. Mount the motor using four 1” carriage bolts and hex nuts. Insert all four bolts before fully tightening any of the nuts.

Verify the motor shaft is close to horizontal. Insert the screw back into the fence bracket and carefully tighten. DO NOT OVERTIGHTEN AS YOU CAN DAMAGE THE MOTOR. The barrel connector is attached to the high speed leads to the motor and the remaining wires are taped back out of the way.

Attach the power supply in the motor box using two 1/2” #8 flat head screws. Plug the power supply into the motor. Attach the pre-drilled square tube to the T-Hinge as shown using two 1-1/2” Hex bolt and 1/4” hex nuts.

Attach the 2” hex bolt to the square tube with a 1/4” hex nut as shown. Attach 1” hex bolt to the small hole in the motor arm (included with motor) and secure with a 1/4” hex nut as shown. Attach the c-channel bar to the motor arm using 1/4” flat washers on either side of the c-channel bar. Use 1/4” nylon lock nut.

Attach the c-channel bar to the square tube using 1/4” flat washers on either side of the c-channel bar. Use 1/4” nylon lock nut. Be sure to not over tighten the lock nuts so the joints move smoothly.

Position the motor arm on the motor shaft so that it is in the “back” position and secure with the nut included with the motor. Position the hinged tube so it is close vertical and mark where to drill to mount the hinge to the base. Drill a 1/4” hole in the base carefully not to drill into your work surface.

Secure the hinge to the base with a 1” carriage bolt and 1/4” hex nut. Test run the motor and verify the movement. You may decide you want to move the mount point of the hinge to get the desired movement. Once you are happy with the hinge placement drill the two other mounting holes for the hinge and secure with 1” carriage bolts and 1/4” hex nuts.

Mount the two 3” strap hinges to the rocker board using three1/2” #8 flat head screws in each hinge. Verify the hinges are mounted properly and will fully close.

Now the hard part, positioning the skeletons

Run the motor so the arm is fully extended and attach your skeleton to the tube. Run the motor so the arm is fully retracted which should lift the skeleton slightly off the base.

Attach the skeleton to the dog while fully retracted to determine where the front legs of the dog should be mounted on the rocker board while in the most upright position. Position the rocker board with the hinge to the rear of the dog and mark the position.

Attach each hinge with a 1/2” #8 flat head screws near the hinge. Verify that the rocker board moves freely. Add another screw to each hinge near the base and reconfirm the movement then install the last screws in the hinge. Put the front feet of the dog on the rocker plate and drill 1/4” hole through the feet and into the rocker.

Insert a 2” 1/4” carriage bolts through the bottom of the rocker board, add a 1/4” flat washer, and secure with 1/4” hex nut. Slid the dog's feet over the bolts and secure with 1/4” hex nut. I plan on cutting off the top of the bolt with and oscillating tool and then trying to cover the nut and bolt to hide them.

Position the motor to the fully extended position and mark where the rear feet of the dog should be on the base. Be sure to place the feet far enough back that the hips of the dog do not drop below the knees and bind up. Position the motor to the fully retracted position and verify where you marked the rear feet. After verifying the position of the rear feet, drill 1/4” hole through the rear feet and base being careful to not drill into you work surface and secure the same way you secured the front feet with 2” 1/4” carriage bolts, 1/4” flat washers, and 1/4” hex nuts.