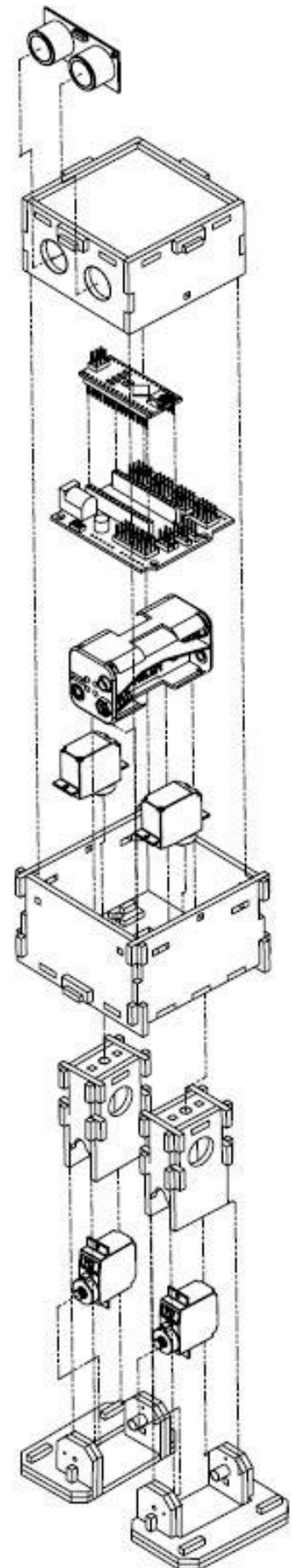# MIIA ASSEMBLY

INSTRUCTIONS

WELCOME

Congratulations! You are now the proud new owner of your own MiiA robot. These instructions will take you through everything you need to know on how MiiA is put together and what makes her tick. MiiA is built in the form of a 3D puzzle, so the fun begins immediately. So without further ado, let's jump in!
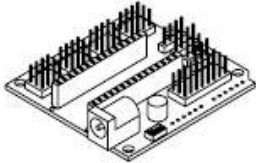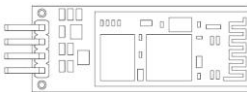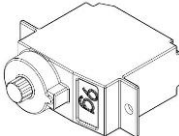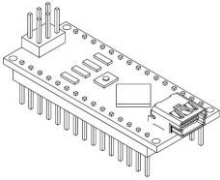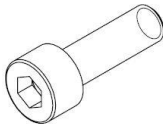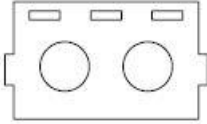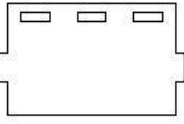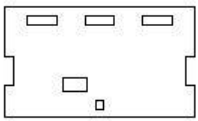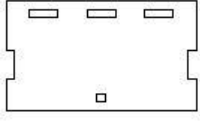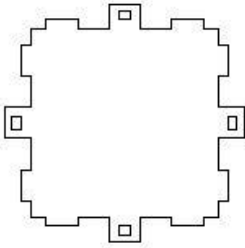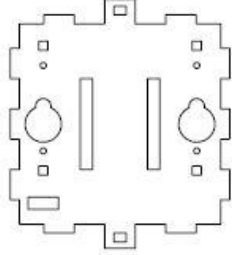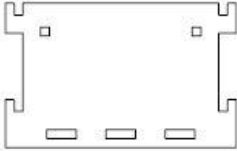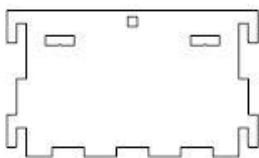
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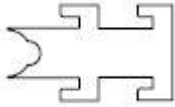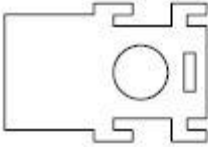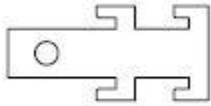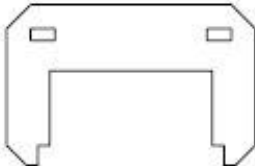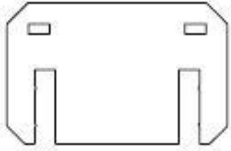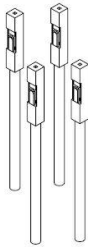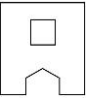
What's in the Box

All parts included in the kit are shown in this section.
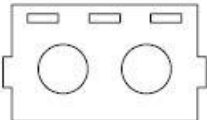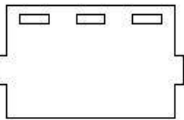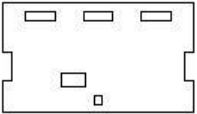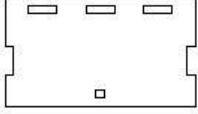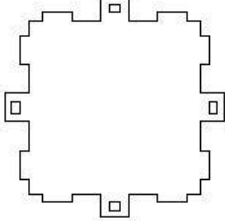
Part	Preview	Part	Preview
Battery holder **(1x)**		**Arduino shield** **(1x)**	
HC06 Bluetooth transceiver **(1x)**		**Servo Motor** **(4x)**	
Arduino Nano **(1x)**		**M2 cap screw** **(8x)**	
Ultrasonic sensor **(1x)**		**M2 nut** **(4x)**	
Head – front **(1x)**		**Head - back** **(1x)**	
Head - left **(1x)**		**Head-right** **(1x)**	
Head - top **(1x)**		**Body - base** **(1x)**	
Body - front and back **(2x)**		**Body - sides** **(2x)**	
Body - corners **(4x)**		**Head and body pin** **(6x)**	

|			
General pin (12x)		**Leg - top** (2x)	
Leg - bottom plate (2x)		**Leg - front** (2x)	
Leg - sides (4x)		**Leg - back** (2x)	
Foot - back (2x)		**Foot - back** (2x)	
Foot - front (2x)		**Foot - front** (2x)	
Foot - top (2x)		**Foot - base** (2x)	
Foot pin (4x)		**Foot - axle** (2x)	
USB mini cable (1x)		**Jumper cables** (8x)	
Nut holder (4x)			

Putting MiiA Together

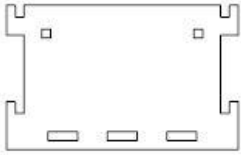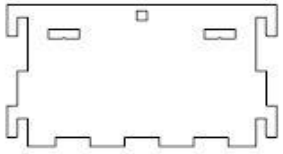This section describes how to assemble the individual parts that make up MiiA.
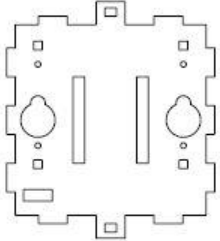
Head

Part	Preview	Part	Preview
Head – front (1x)		**Head - back** (1x)	
Head - left (1x)		**Head - right** (1x)	
Head and body pin (4x)		**Head - top** (1x)	
How to assemble			
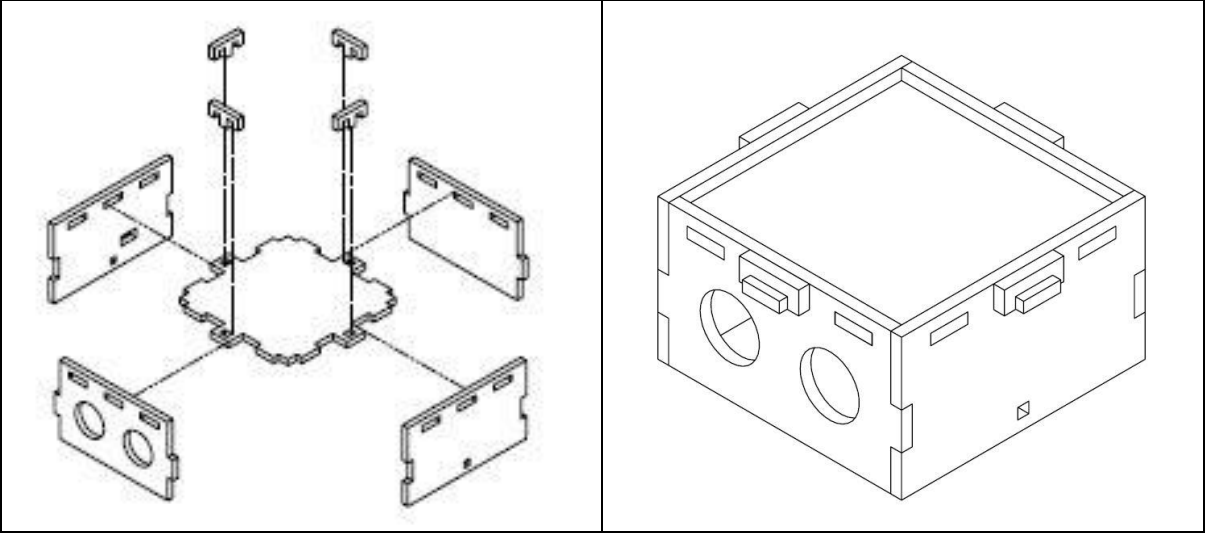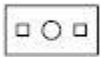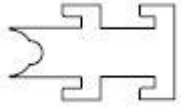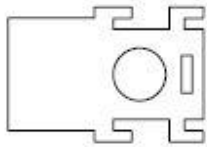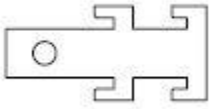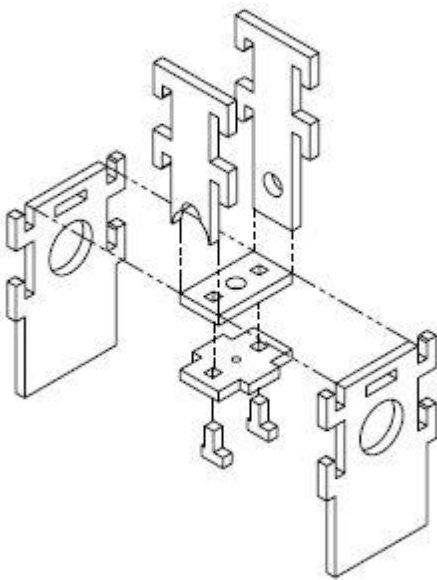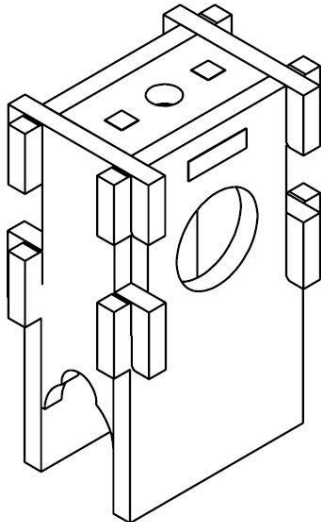
Body

Part	Preview	Part	Preview
Body - front and back **(2x)**		**Body – sides** **(2x)**	
Body - base **(1x)**		**Head and body pin** **(2x)**	
Body - corners **(4x)**		**Nut holder** **(4x)**	
General pin **(4x)**			
How to assemble			
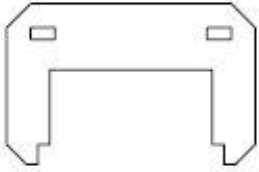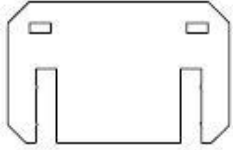
Legs

Part	Preview	Part	Preview
General pin (4x)		**Leg - top** (2x)	
Leg - bottom plate (2x)		**Leg - front** (2x)	
Leg - sides (4x)		**Leg - back** (2x)	
How to assemble			

Legs

Feet

Part	Preview	Part	Preview
Foot - back (2x)		**Foot - back** (2x)	
Foot - front (2x)		**Foot - front** (2x)	
Foot - top (2x)		**Foot - base** (2x)	
Foot pin (4x)		**Foot - axle** (2x)	
General pin (4x)			
How to assemble			
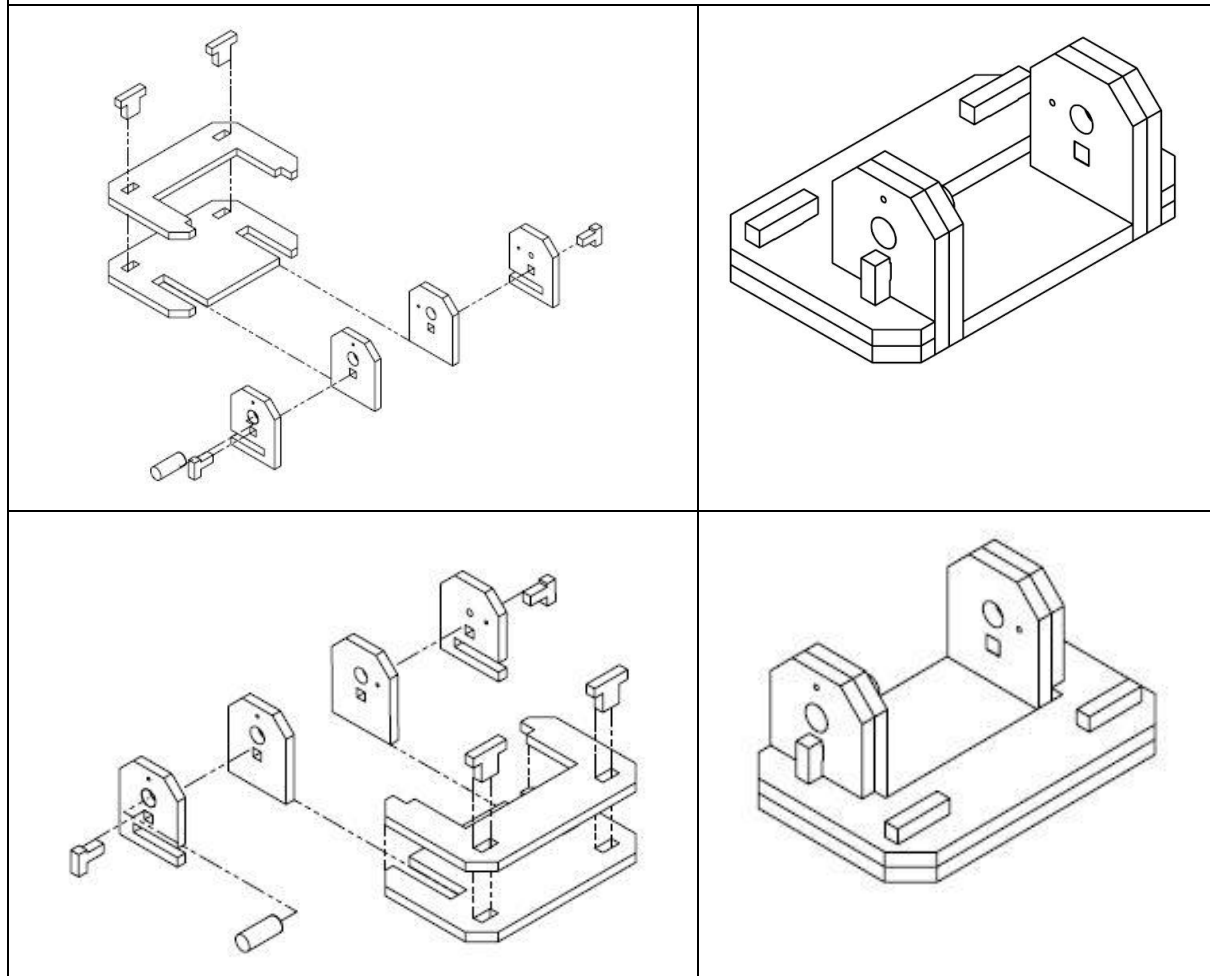
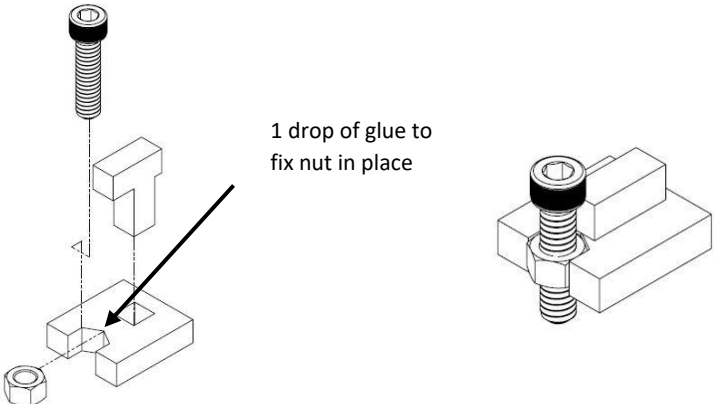# Motor Calibration

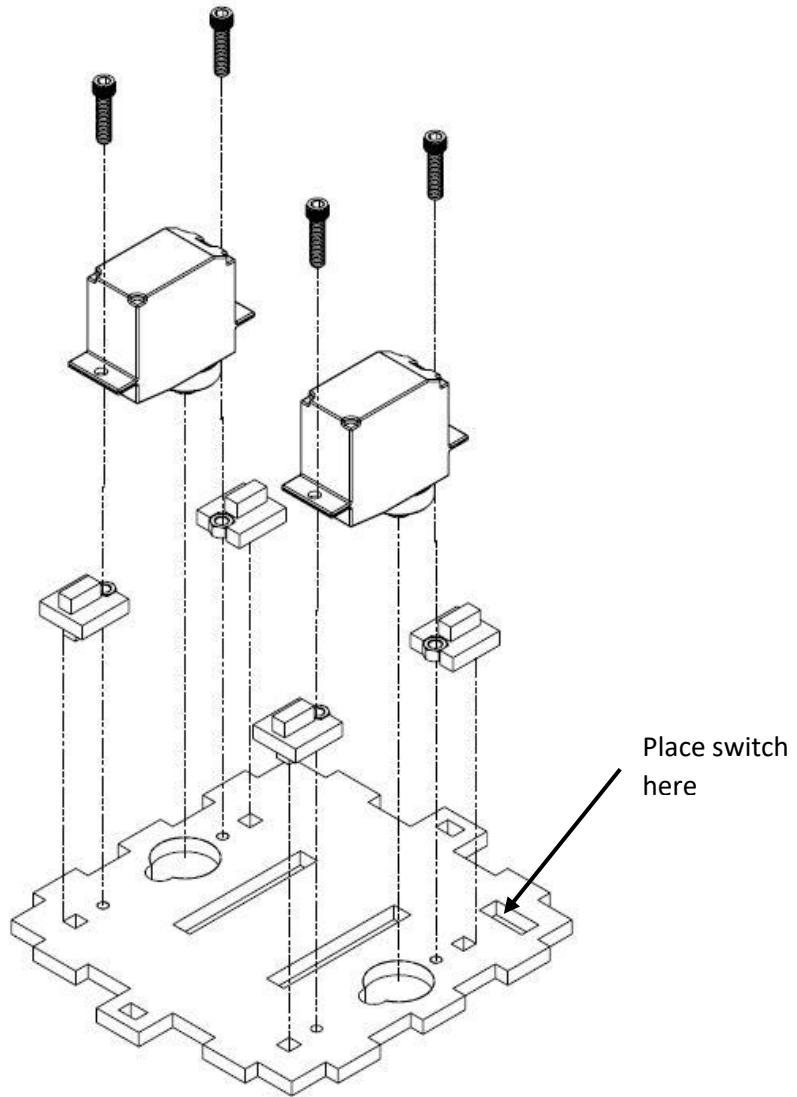When inserting motors into the robot, please ensure that the servo motors have been set to 90 degrees. Have a look at our calibration video here. You can also find our calibration code here.

Assembly

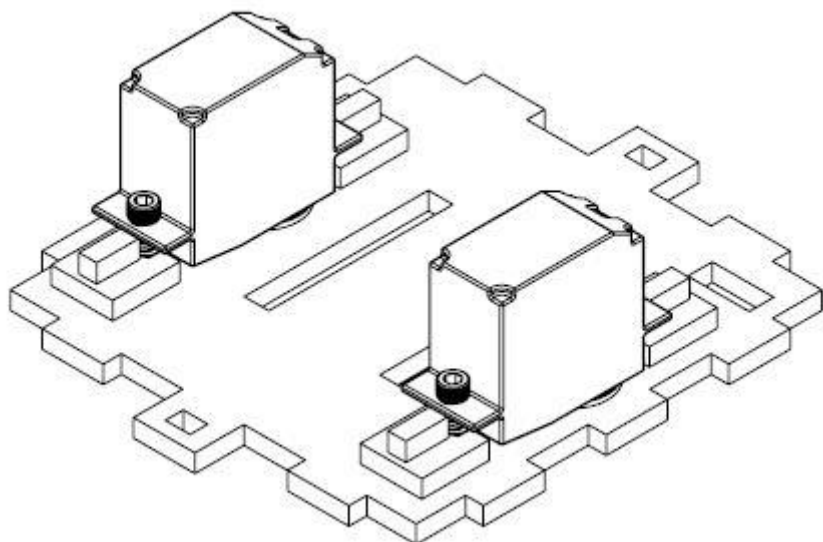This section shows how to install the motors that make MiiA move.

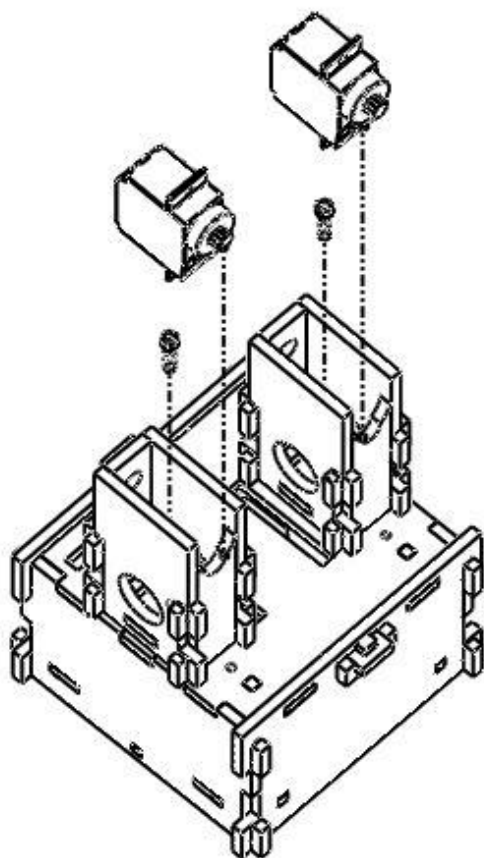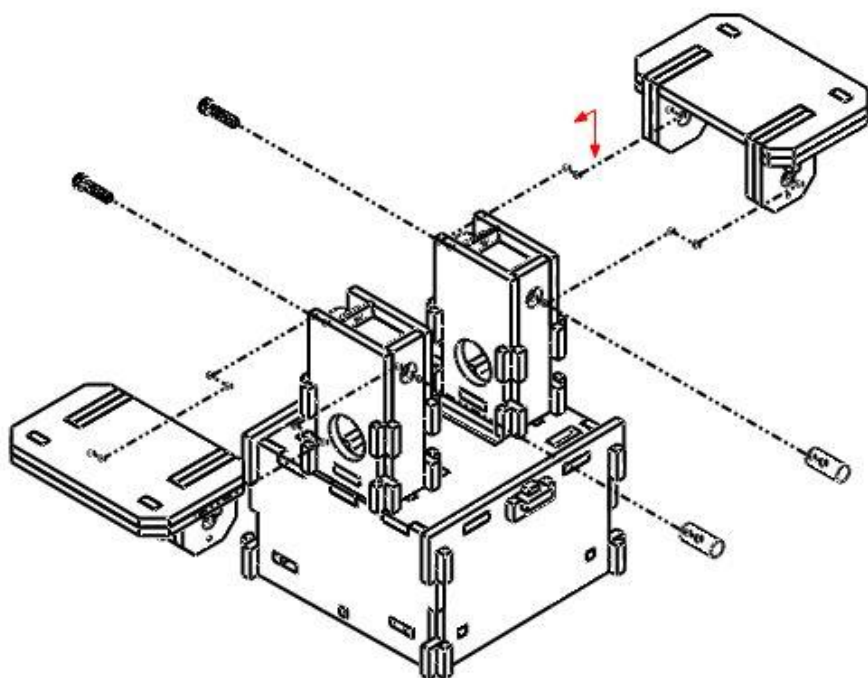| Description	Assembly Instruction
Nut holder assembly	1 drop of glue to fix nut in place

Motor plate assembly	 Place switch here
Motor plate assembly	

Leg plate assembly	
Feet assembly	

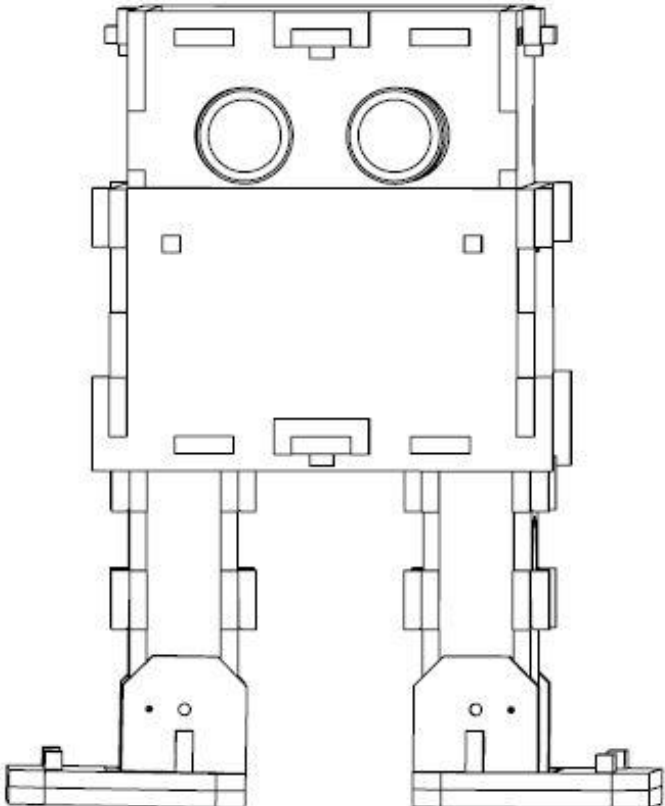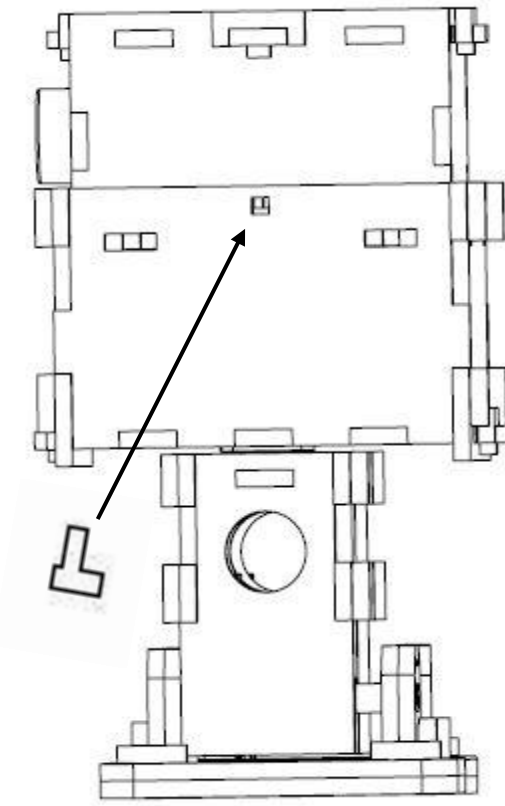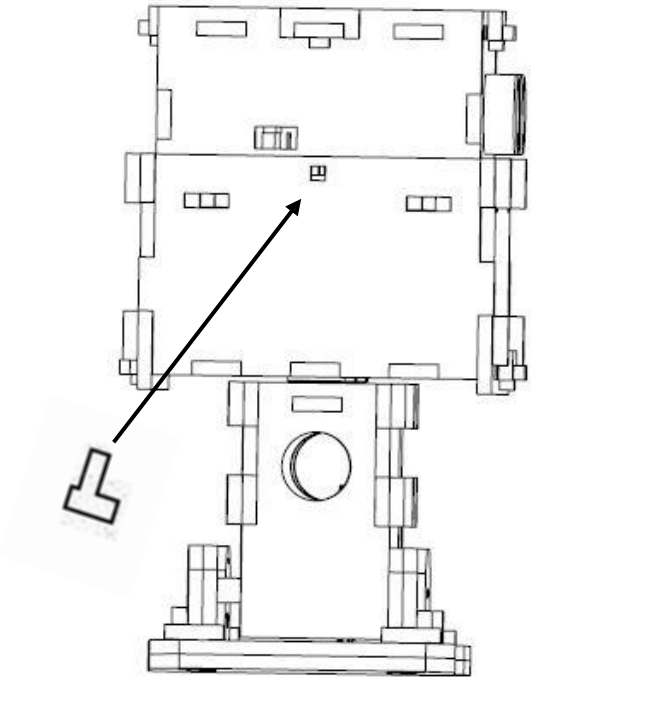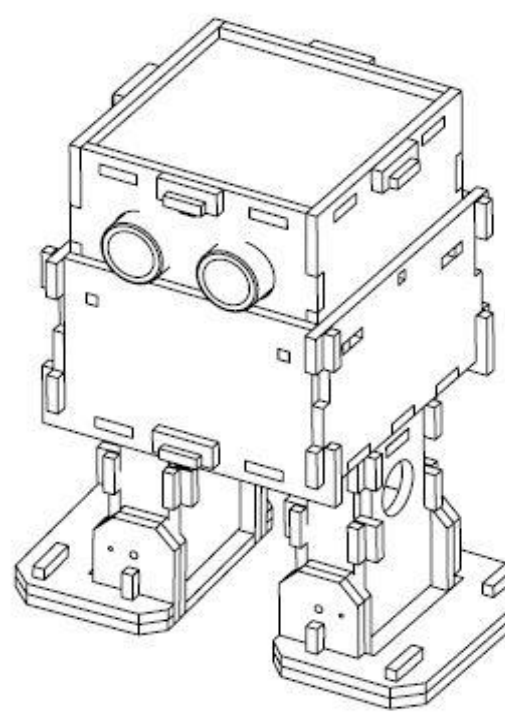|	
Complete bottom body assembly	
Complete assembly	
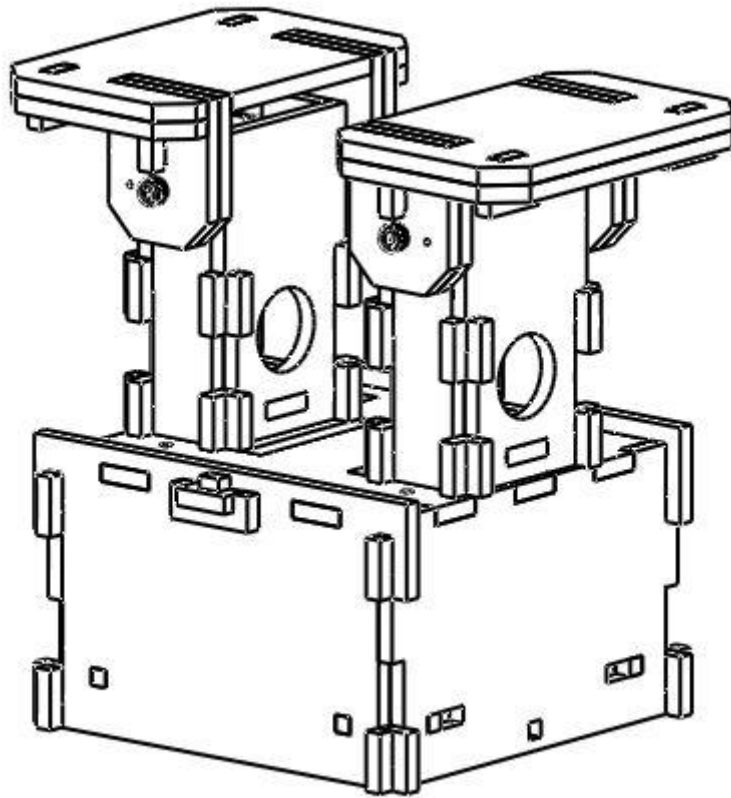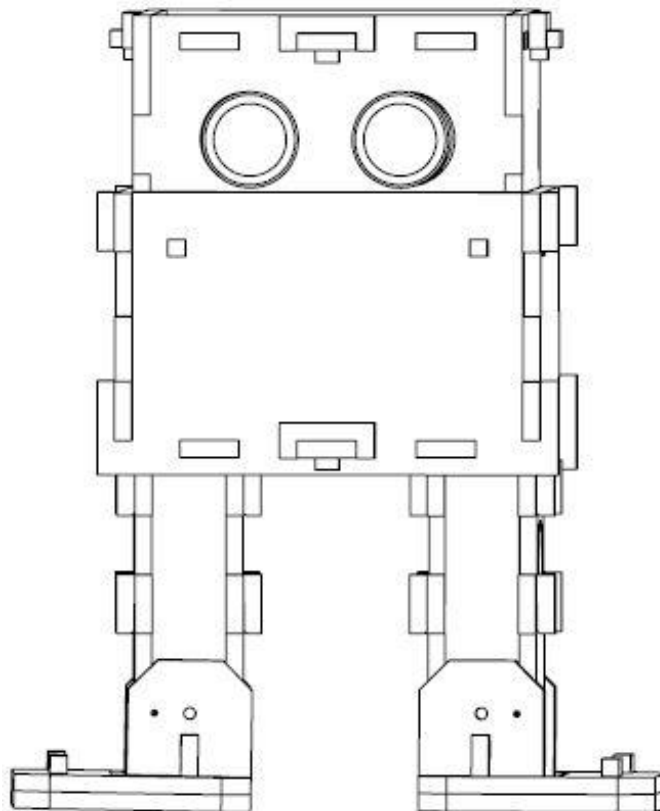
Electrical Connections

By connecting all the electrical component as shown below, MiiA will be able to be programmed and controlled to move.
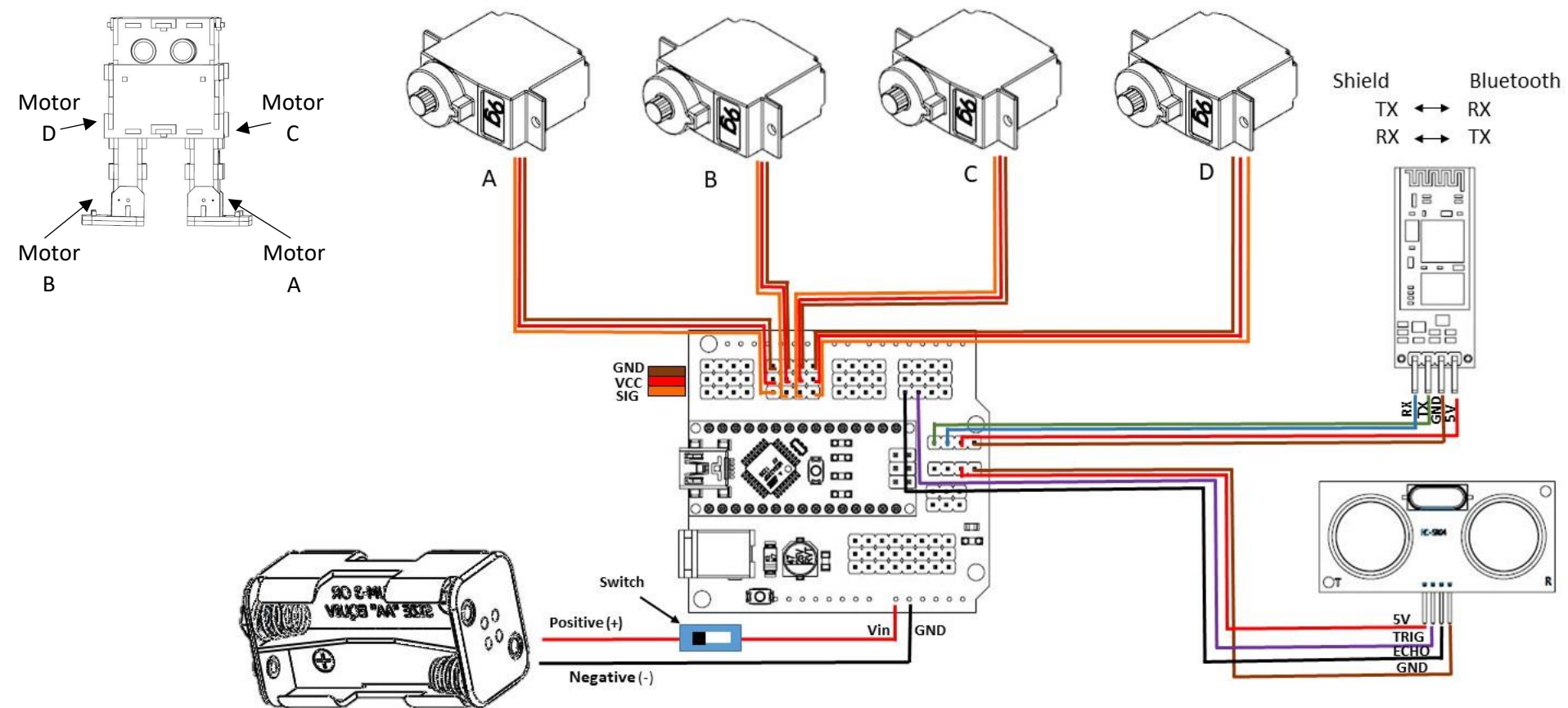
Final Assembly

Front View and Left View	Right View and Isometric View

Well Done! MiiA is now complete and ready to be programmed.

 To start your robotics journey please go to our website for instructions on getting started with programming her.

If you are having any issues with the kits, please do not hesitate to contact us at info@rd-9.co.za