

Installation manual 6.0

Wave



play
alive®

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2

Component overview

2.1 Electronics



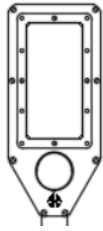
1 x Pigtail Cable
0.3 m



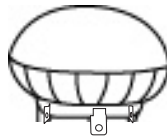
5 x PlayAlive Cable
2 m (Red)
P00254



1 x PlayAlive Cable
5.5 m (Purple)
P00256

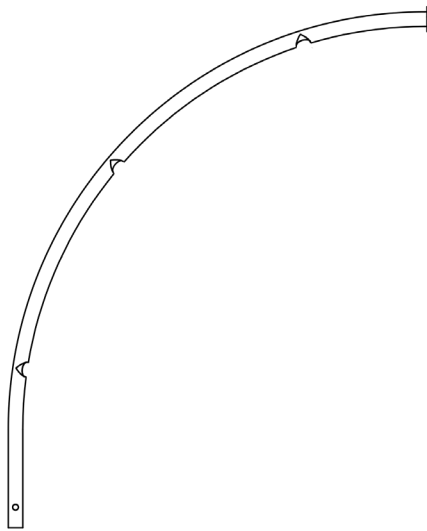


1 x Game controller
P00499

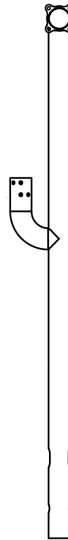


6 x Satellite
P00020

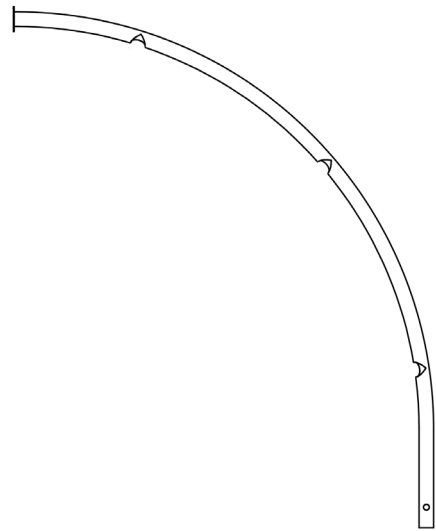
2.2 Steel components



1 x Wave left leg



4 x Wave middle pillar

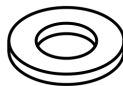


1 x Wave right leg

2.3 Other



18 x Countersunk screw
M5 x 12 mm



16 x Washer M10



8 x Buttonhead
M6 x 12mm



8 x Hexagon bolt
M10 x 25 mm



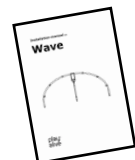
8 x Lock nut bolt
M10



16 x Protection cap
M10



1 x Chogori connector
end plug

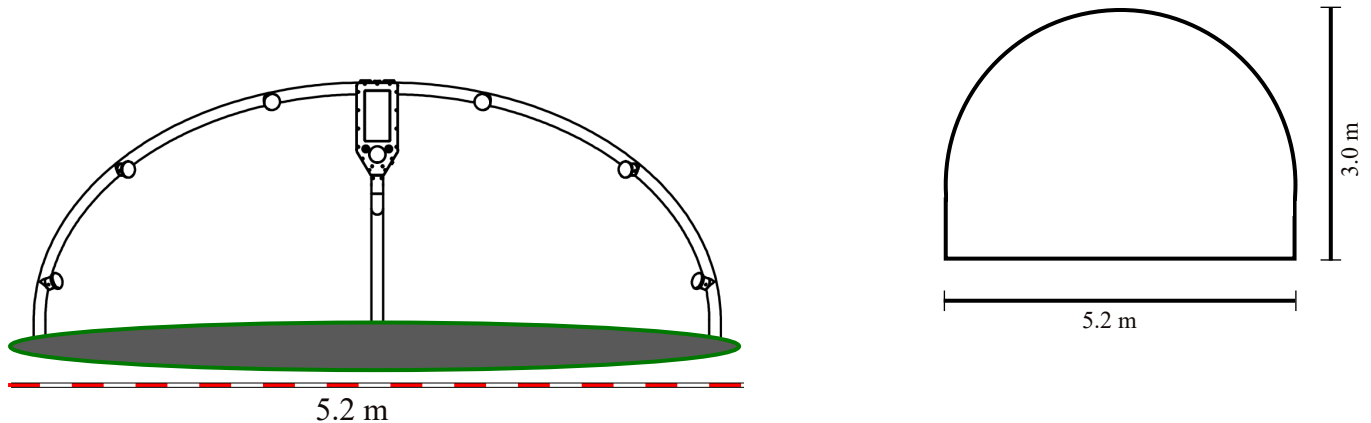


Wave installation manual

3 Construction

3.1 Overview of construction site

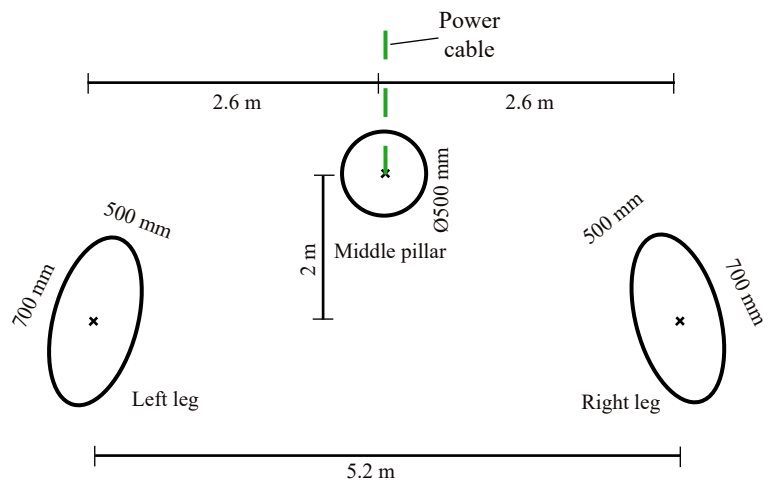
The area for the placement of the wave should have a diameter of minimum 5.3 m. The Wave must have a power cable of 230V drawn to the middle pillar. Later in the installation process an electrician must be responsible for the connection, see section 4.1.



3.2 Prepare for installation

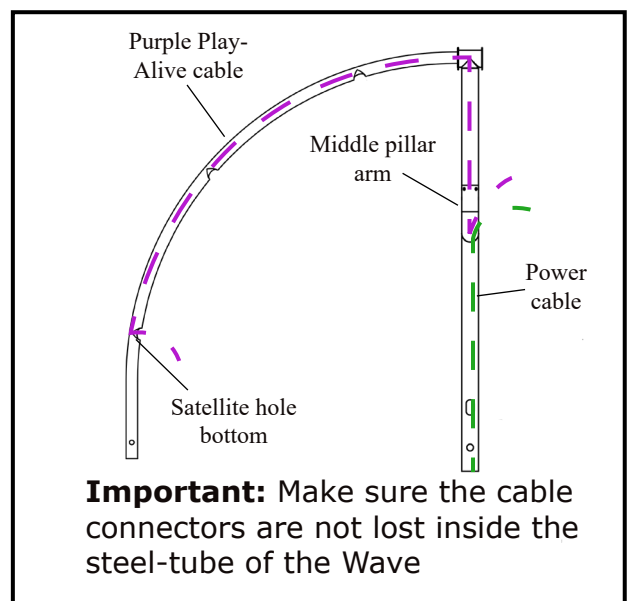
Dig a hole for the Waves middle pillar. The hole should be round with a diameter of 500 mm and a depth of 0.5 meter. This hole should be aligned with the 230 V power cable, as this is where the Wave gets it's power, as seen on the illustration.

Thereafter dig two holes for the Waves legs. The holes should be oval and be 500 mm by 700 mm. The distance between the center of the holes for the legs should be 5.3 meters. The angular distance between the center of the holes for the legs and the center of the hole for the middle pillar should be 2 meters. The hole for the middle pillar should be centered between the holes for the legs. Please prepare for the following installation by reading point 7 "Appendix".



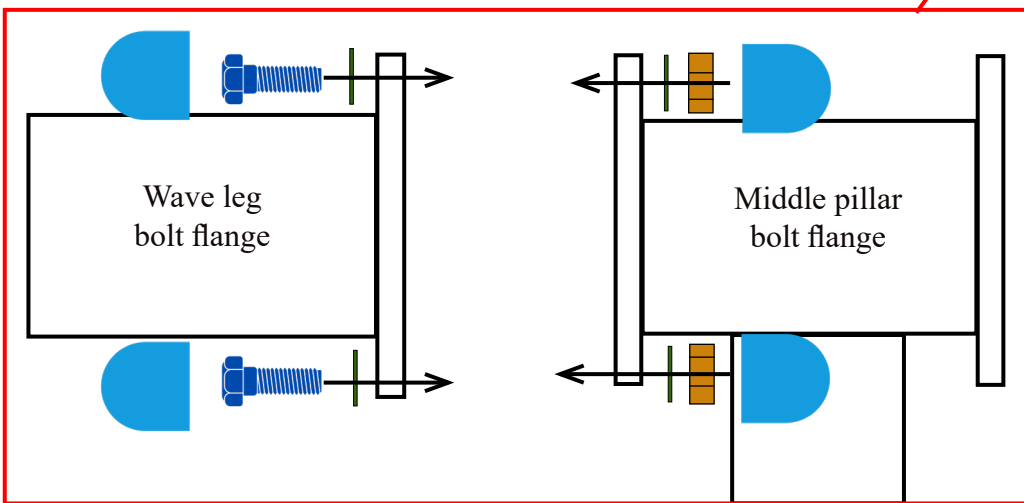
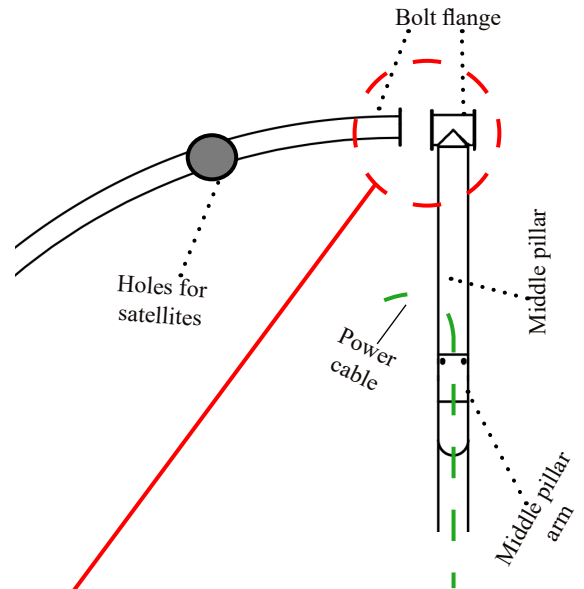
3.3 Initial pulling of cables

The purple PlayAlive cable should be pulled through to the display **before any assembly** is begun. Push the cable from the middle pillar arm up through the middle pillar all the way to the top. Then pull the cable through the Waves left leg and pull it through the bottom hole in the leg. Leave the connector of the cable outside the hole and make sure it stays outside the hole for the next steps of the installation process. Only do this process for the left leg of the Wave. Two or more people are advised for the rest of the installation process.



3.4 Assembling Wave

Assemble the Wave by bolting the Wave's legs to the middle pillar. Make sure the legs are turned the correct way, so the bolt flange is at the top. Also make sure that the satellite holes on each leg are faced the same way as the middle pillar arm. When the legs are turned correctly, the Wave can be assembled by bolting the bolt flange on the left leg to the top left side of the middle pillar. Start by putting an **M10 washer** onto the **Hexagon bolt** and push the bolt through the legs bolt flange and thereafter the middle pillars bolt flange. Put an **M10 washer** on the other side of the bolt and lock it in place with a **lock nut**. Finish by mounting one **protection cap** into the lock nut and one onto the bolts head. Repeat this process in all four bolt holes. Do the same for the Wave's right leg just mirrored. The bolts head should be on the legs bolt flange and the lock nut on the middle pillars bolt flange.



Notice: This installation step is symmetrical and the procedure is therefore the same for both legs. Do remember to mirror the process, so the bolt's head is on the leg's side and the lock nut is on the middle pillar's side.

3.5 Casting the Wave

Once the Wave has been assembled it is ready to be placed in the dug out holes and thereafter cast. Please note, that the Wave's legs and middle pillar should be cast around 0.4 meters below the surface. The distance from the ground to the lowest satellites should be 0.3 meters, and the distance from the ground to the top of the Wave should be between 1.65 and 1.7 meters depending on the usage. For children under 8 years old the recommended height is 1.65 meters and for children 8+ years old the recommended height is 1.7 meters.

Before casting make sure to pull the power cable through the middle pillar, so it is reachable from the middle pillar's arm, Make sure the purple PlayAlive cable can be reach at both ends (the bottom satellite hole on the left leg and the middle pillar's arm). Lastly make sure the Wave is completely leveled.

After all of this is checked and done correctly, the Wave can be cast.

Important: Make sure the power cable of 230 V is pulled through the middle pillar, so it is reachable from the middle pillar's arm.

Important: Make sure the purple PlayAlive cable is still in place and is reachable and operable in two places after casting.

Important: Prior to casting, assess whether the height alligns with the specifications suitable for the children in this particular area.

4 Installation of electronic components

4.1 Connecting the power cable

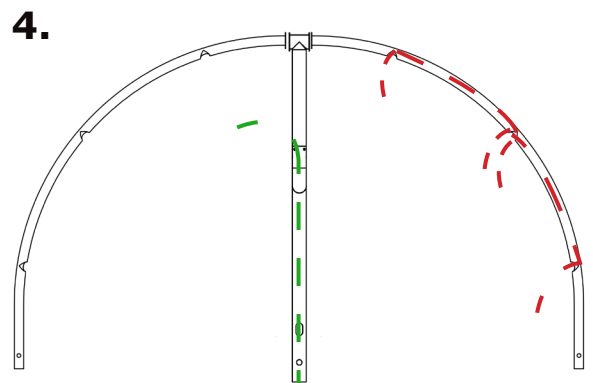
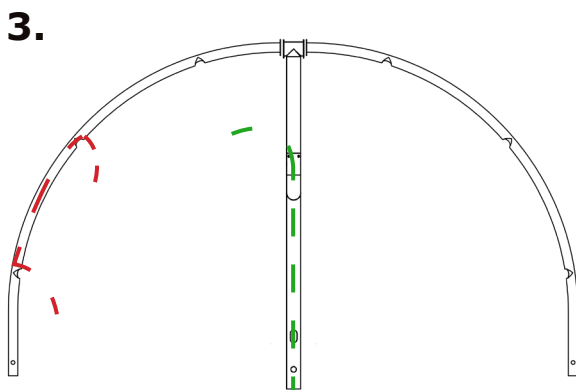
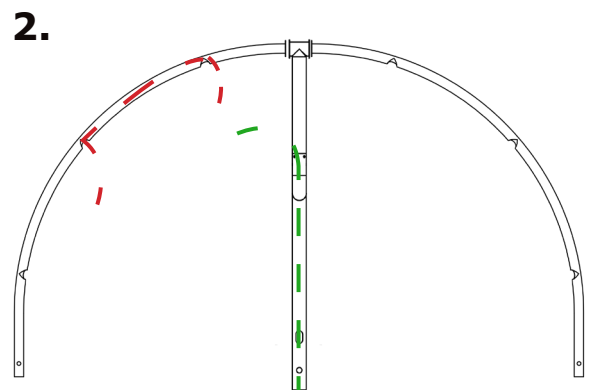
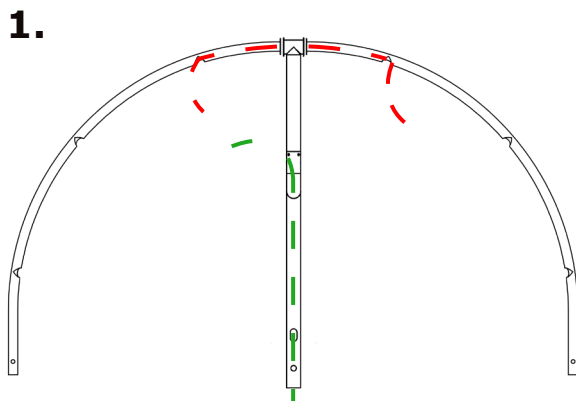
Once the Wave has been cast and secured, the electronics can be installed. Firstly have an electrician connect the power cable to the pigtail cable. Make sure the cable is long enough to reach the top of the middle pillar and is operable afterwards.

Important: This must be performed by an electrician.

4.2 Pulling devicenet cables

The devicenet cables will be pulled through the holes for the staellites. It's easier to start at the top and guide the cables downwards.

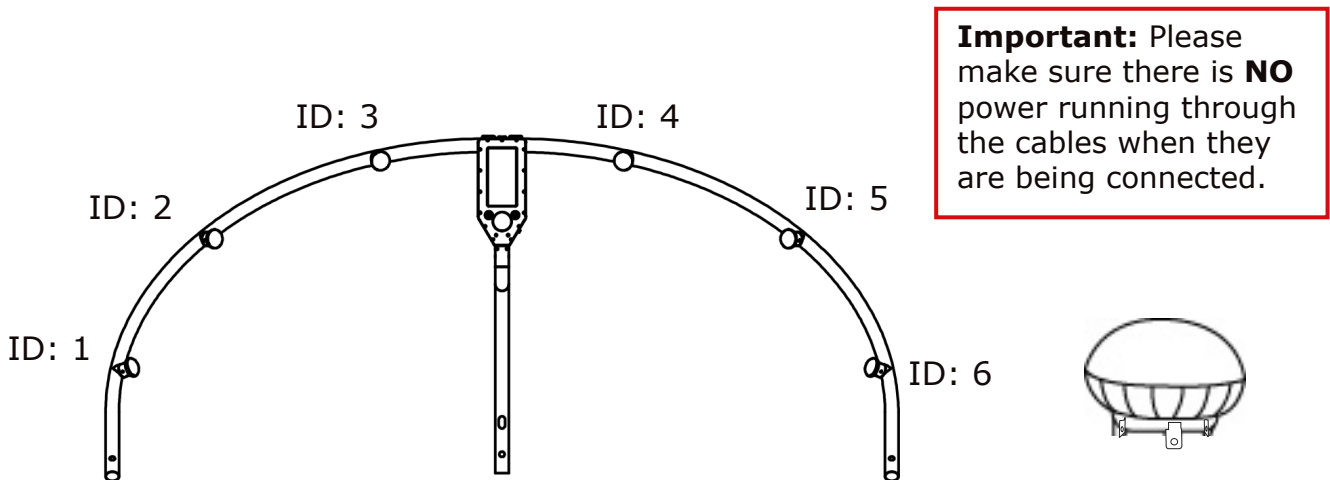
1. Start by pushing a red PlayAlive cable through the satellite hole at the top of the left leg. Push this cable upwards and past the middle pillar to the satellite hole at the top of the right leg.
2. Push a new red PlayAlive cable through the satellite hole at the top of the left leg (Same hole as the starting point in step 1.). Push the cable downwards and pull it out of the satellite hole in the middle of the left leg.
3. Take a new red PlayAlive cable and push it through the satellite hole in the middle of the left leg. Push it downwards and pull it out of the satellite hole at the bottom of the right leg.
4. Repeat step 2 and 3 for the Wave's right leg.



4.3 Installation of satellites

Once the devicenet cables have been pulled through the holes, the electronic components can be connected.

1. Start by identifying the satellites ID. All satellites have an individual ID labelled on the back. Make sure the satellites are placed in the correct order as illustrated.



2. Connect the satellites to the cables pulled through to each hole. The cables can't be connected wrong to the satellite, as the cable only fits the satellites in one way. Satellites 1 through 5 will be connected to two cables whereas satellite 6 will only be connected to one cable. The other cable outlet on satellite 6 should be blocked with the Chogori Connector end plug.

3. The satellites must be fixed to the Wave with 3 Countersunk M5 x 12 mm screws. The screws can be screwed into the Wave with just the use of ones fingers. Do not use force as it might cause cold welding. The 3 brackets for the screws on each satellite can be adjusted if needed. For questions please feel free to contact PlayAlive.

Note: The holes on the Wave's legs are asymmetrical to ensure the correct orientation of the satellites. The correct orientation puts the PlayAlive logo in the danish reading direction, which is from left to right.

It is advised to **NOT** screw the screws in completely until installation step 5 has been completed and everything is working correctly.

Important: Please start by screwing with your fingers to avoid a possible cold welding. Make sure all three holes are aligned when starting to screw.

Important: When installing the satellites, make sure they are turned the correct way. The logo should be right side up.

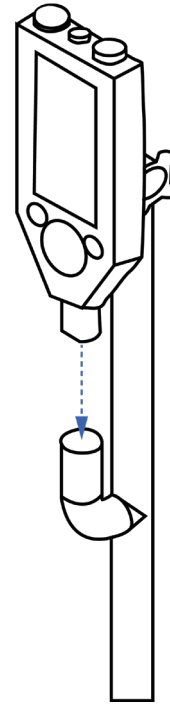
4.4 Installation of game controller

Now the game controller can be installed.

1. Connect the game controller to the purple PlayAlive cable from the satellite. It is very important the game controller is connected to the satellites **before** it is connected to the power cable as the system otherwise will take longer time to start up.

2. When the satellites have been connected to the game controller, the power cable can be connected. This will be the last cable connected.

3. Place the game controller in the middle of the middle pillar's arm. Make sure the display on the game controller is facing forward (away from the middle pillar). Secure the game controller with 8 Buttonhead M6 x 12 mm screws. The screws can be screwed into the Wave with just the use of ones fingers. Don't screw the screws in too tight as it might cause cold welding.



Important: Please start by screwing with your fingers to avoid a possible cold welding. Make sure all three holes are aligned when starting to screw.

5 Start up

5.1 Turn the system on

Turn on the power and the system will start up. Be aware that this can take some time as the start-up time depend on pending updates and internet connection. It will typically be between 5 and 10 minutes. Once started the game controller will light up and the system is ready.

If the system doesn't turn on after some time, please check that the power cable is properly inserted and the game controller is receiving power.

5.2 Start a game and test the setup

Go to the display and tap the satellite until you reach the game combo. Hold in on the satellite to choose the gamemode combo. Tap on the satellites lighting up and make sure they turn upon the contact. Please study the games in section 6.1 and test them out on the Wave. For questions please feel free to contact PlayAlive.

If the satellites aren't working as stated, please see installationsteps 3.3 and 4.1-4.4 again.

Complete the installation by fastening the screws securing the satellites and the game controller.

Important: Please finish this installation by ensuring the screws holding the game controller and the satellites are properly fastened

6.1 Wave games

Games will rotate so the Wave is always new and exciting. An example of a rotation of 4 games can be seen below.

Agent	In the game "Bloks," players are challenged to match blocks of the same color with each other. To match the blocks, they need to touch each other in groups of at least three blocks. Once the blocks are matched, they will disappear from the board and earn points at the bottom of the screen.
Bloks	In the game "Agent," the objective is to locate sensors with matching colors or patterns. With each round, it becomes increasingly challenging as the sensors acquire more colors, and a series of copycats sneak in. The key is to be quick, as points are earned based on the amount of time remaining after completing a mission.
Memory	The game "Memory" involves remembering as many colors in a sequence as possible. The game begins with a sequence of three colors, displayed by the corresponding sensors lighting up and making a sound in the correct order. It is now up to the player to replicate this sequence by pressing the sensors in the displayed order. With each round the player successfully completes, an additional color is added to the sequence.
Versus	In the "Versus" game, players compete against each other in four different rounds of challenges. The main objective is to capture their color on the sensors, but as the game progresses, it becomes more difficult and intense.

Each month the games will rotate. Either there will be a new game launched or there will be an improved or changed version of a game that's been out of rotation. We constantly develop new games to continue the fun and learning.

7.1 General introduction to PlayAlive's technology platform

The PlayAlive system is an interactive system, where the technical elements communicate with each other and make it possible to engage people in all ages in activities.

The visible part of the installation are the satellites and the game controller. The satellites are intelligent units containing light, sound, communication and a touch sensor. They act as the user interface for the system. The cables connected to the satellites supply the satellites with power and enables communication to the game controller.

The PlayAlive technology elements are highly advanced electronics. Despite the fact they are very robust after installation, they can easily be damaged before or during installation if not handled correctly.

You should also be careful when pulling cables during the installation. Please be aware that the PlayAlive cables are not designed to be pulled in the connector. Therefore when pulling the cables, please pull on the cable and not on the connector.

Please be aware that when connecting and disconnecting PlayAlive components to each other, they must **NOT** be supplied with power, as this can cause components to break.

NOTE: ALL PARTS ARE DESIGNED TO FIT TOGETHER WITHOUT THE NEED OF USING FORCE.

You can risk cold welding by using force when fitting parts together.

Important: Be careful when handling the parts and working with electricity.