# The Mirrix Spencer Power Treadle



#### **Getting Started:**

Congratulations on purchasing a Mirrix Spencer Power Treadle. This treadle will make weaving on your Mirrix Loom faster and easier.

This guide will show you how to install the treadle on your loom, how to use the treadle and includes some safety warnings and troubleshooting information. If you have any questions, feel free to contact us (customerservice@mirrixlooms.com).

Please note that to use this treadle you need a Mirrix Loom with a shedding device and wooden clips on the loom.

# The Parts of The Treadle:

In this guide we will be referring to various parts of your treadle. Following are labeled pictures of each part.

Black Bushing (installed on motor)



Cotter Pin



U-Bolt (installed on motor)



Blue or Yellow Bushing (installed on motor)







Control Box (may vary depending on treadle model)



Pedal Switch (may vary depending on treadle model)



Power Supply (may vary depending on treadle model)





#### **Installing the Spencer Power Treadle**

The Mirrix Spencer Power Treadle consists of four connected assemblies: the motor, the pedal switch, the control box and the power supply. The cotter pin secures the black bushing on the motor to your loom's shedding device. Please note that the treadle needs to be installed on the right side of the loom.

Begin with a warped Mirrix Loom complete with a shedding device and heddles. Do not place the shedding device handle on the loom, as the treadle will replace this. Remove the black plastic cap on the right side of the shedding device. This is where the black bushing connected to the treadle motor will be placed.

First, hold the motor so that the U-bolt straddles the end of the wooden clip behind the copper side bar of the loom. One arm should be above the clip and the other (with the blue or yellow plastic bushing) should be below it. Next, you will slide the shaft with the pressed on bushing into the copper shedding device bar and secure it with the cotter pin. Make sure that the holes in the motor shaft, bushing and shedding device are aligned so the cotter pin can pass through all three. If they are not, you can use the end of the cotter pin to align them. Please note that the motor shaft will move fairly easily in the clockwise direction (when viewed from the motor shaft end) but will not move in the counterclockwise direction.

Loosen the nuts on the U-bolt to adjust its position so that the lower arm fits securely in the crotch between the bottom of the clip and the side bar of the loom. Tighten the nuts gently and test to see that the motor moves the shedding device smoothly without binding or wobbling around too much (you will have to plug in the treadle to test this, see below.) Once the best position is found, tighten the nuts completely.

#### **Finishing the installation**

Plug the small power cord from the power supply into the control box. Attach the AC power cord to the power supply and plug it into a wall socket or power strip. Each press of the pedal will move the motor in the direction opposite to the previous move. The motion is stuttered and slow, allowing you to position the shed any way you like from full shed to neutral shed. The control

box has a purple cord threaded through the cover. This can be used to secure the control box to the loom or the stand if you are using one. It is best to not have the control box on the floor. Wherever you place the control box and the power supply, be sure that the power connector where it is plugged into the control box is not strained. It should not be supporting the weight of the power supply via the cord. This could damage the socket as well as the cord. If necessary, use an extension cord to allow everything to be where you want it.

The shedding device bar should move smoothly without binding. The motor should not rock excessively. If it does, the U-bolt should be re-adjusted so it works smoothly without excessive rocking. It is normal for the motor to have a little more power in one direction. This is the nature of motors of this type. However, even the lower powered motion should be adequate for even the highest warp tension if the installation is correctly done.

## Using the Treadle

To operate the treadle, depress the pedal one way or the other to move between sheds. Be sure to release the switch once the desired shed is achieved. *Do not leave your foot on the switch for extended periods of time*. If you leave the switch on in either position it will cause the power supply to go into protection mode and it will shut off briefly. No damage will be done but it is best to avoid shutdowns. It is also possible that the motor will warm up a bit if the switch is left on.

#### **Safety Warnings**

The motor in this device is quite powerful. Do not allow fingers (or anything else you value) to get between moving parts such as the hairpin cotter and the wooden clip. If you need to make adjustments and there is any chance of your finger (or anything else you value) getting caught between moving parts, unplug the power cord while doing these operations or at least make sure you do not depress the pedal switch.

When not using the power treadle, it is best to unplug it.

This treadle is not intended for use by anyone under the age of 18.

If you have any questions about using alternate power sources, please contact us at customerservice@mirrixlooms.com.

# **Troubleshooting:**

No motor movement when pedal is depressed:

Is the power cord securely plugged into the power supply? Is there voltage at the wall or power strip outlet? Plug in a lamp to be sure. Is the power cord damaged? Try another cord. Are the wires connected securely to the motor? Check to be sure the connectors are plugged securely to the motor and that the wire is not loose in the connector. Tug gently on each wire to test. Do not pull hard but if a wire pulls out easily, the connector will need to be replaced and properly crimped on.

# Clunking noises when changing shed or excessive motor wobbling:

Read the installation section above for proper adjustment procedure. The blue or yellow plastic bushing should fit in to the crotch between the wooden clip and upright copper tube but should be loose enough to allow a little motion to prevent binding.

## Binding together with only partial motion (does not achieve full shed):

The U-bolt position needs to be adjusted so there is a little space between the white busing and the wooden clip and upright copper tube.

#### Greater power moving shed in one direction as opposed to the other:

This is normal to an extent. One direction will be a little more powerful. If there is not enough power to move to full shed in the weaker direction, there is most likely some binding and the U-bolt needs to be adjusted.