



## HOW TO ASSEMBLE THE MOJOTONE TS-OD PEDAL KIT

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*The TS-OD Pedal Kit provides an affordable means of obtaining a modified, vintage-style overdrive with added tone-sculpting features that add versatility to a classic circuit.*

### TOOLS NEEDED FOR ASSEMBLY:

Adjustable crescent wrench  
#2 phillips head screwdriver  
Soldering iron  
Lead solder

### STEP ONE: ASSEMBLE THE MAIN CIRCUIT BOARD.

The main circuit board has a Mojo logo printed on the side on which most of the surface mounted components are soldered. We'll call this side the "Logo Side." Solder the two ¼" input jacks and the DC input jack to this side of the board. Bend the pins of the input jacks over, flush to the other side of the board, before soldering. This will allow the potentiometers to lay flat against the board later on.

Flip the board over to the non-logo side. Solder the potentiometers, three-position switch, and the LED to this side of the board. Refer to the labeling printed on the board for the correct location of each value of potentiometer. There is no direction to consider for the switch; it can be installed either way. The LED should be installed with the shorter lead installed into the cathode side, or the side with the flat portion of the LED symbol printed on the board. The cathode side also happens to be closest to the bottom edge of the board.

This particular model features space on the board for you to add diodes of your choice for clipping. The spaces are labeled D4, D5, D6, and D7. This is totally optional, and not necessary for the basic function of the pedal, but if you want to add these, this is the time to do it.

### STEP TWO: ASSEMBLE THE FOOT SWITCH BOARD.

Solder the 3PDT foot switch to the side of the foot switch board that is **opposite** the side with the six pin connector hub. There is no direction to consider when installing the switch to the board.

### STEP THREE: INSTALL THE MAIN CIRCUIT BOARD INTO THE PEDAL ENCLOSURE.

Remove all of the hardware (nuts and washers) from the jacks, potentiometers, and switch. The spacer washers for the input jacks, and the lock washers for the potentiometers and switch are not necessary for this build. Gently work the board assembly into the appropriate holes in the enclosure. Gently secure the input jacks to the enclosure with the beveled washers and chrome nuts. Tighten them up until the point at which the DC jack is centered in its hole in the enclosure. Do not over tighten the nuts for the input jacks or the plastic threads in the jacks will strip or break. Finally, install the

washers and nuts for the potentiometers and switch, and tighten with the adjustable wrench.

### STEP FOUR: INSTALL THE FOOT SWITCH ASSEMBLY INTO THE PEDAL ENCLOSURE.

Remove the nylon washer and nut from the foot switch leaving the lock washer on the bushing. Install the switch assembly into the enclosure. Install the nylon washer and nut, but do not tighten them yet. The switch should be allowed to rotate in the enclosure. Connect the two boards together using the six-prong connector assembly. Each side of the connector assembly should simply snap into the hubs on the boards. Tighten the nut for the foot switch.

### STEP FIVE: INSTALL THE KNOBS.

Turn the potentiometer shafts all the way to the left. Line up the white lines on the knobs to where you would visualize the beginning of the sweep, and push down firmly on the knobs until they stop near the surface of the pedal enclosure.

### STEP SIX: UNDERSTAND THE CONTROLS.

Find the red, four-pole DIP switch on the logo side of the main board. The first three switches control the filtering of the diode clipping portion of the circuit. Switch number one will add higher frequencies to the gain structure. Switch number two will add midrange frequencies. Switch number three will add lower frequencies. Note that any combination of the three can be turned on or off for a multitude of voicing options.

Switch number four is a bypass for the 'add-your-own-diode' feature. The added diodes will not be active if the number four switch is turned off. This becomes useful when you want to bypass the diode-clipping portion of the circuit altogether. This feature can only be accessed when the switch on the front is in the MOD position.

Moving on to the top-side of the pedal, the potentiometers control the overall level or volume of the effect, the tone or EQ of the effect, and the overdrive or intensity of the effect. The three position switch controls the diode-clipping portion of the circuit. You can choose between silicon diodes, add-your-own diodes or clipping bypass (MOD), or LED diodes.

Finally, the footswitch switches the effect from active to fully-bypassed in the signal chain.

### STEP SEVEN: SEAL THE DEAL.

Fasten the bottom lid to the enclosure using the four phillips head screws supplied with the enclosure. Plug a ¼" mono cable from a guitar into the In jack. Plug another ¼" mono cable from an amplifier into the Out jack. Apply 9Vdc with negative tip polarity in the DC jack. Turn on the pedal using the foot switch and enjoy.