Bell Tone Synth Works "Bender Perfecter" Installation - Moog Memorymoog and Memorymoog Plus

The Bell Tone Synth Works "Bender Perfecter" bender symmetry clamp allows you to trim the haphazard, asymmetrical intervals yielded by your Memorymoog's pitch bend wheel to instead be a perfect octave up and down when the synth's "Pitch Bend Amount" control is fully clockwise. When you use the "Pitch Bend Amount" to adjust the bend depth, the bend range will remain symmetrical as the interval changes.

Installation Steps

1. DISASSEMBLY

Open up the Memorymoog and prop it open with the top half of the synth sitting up.

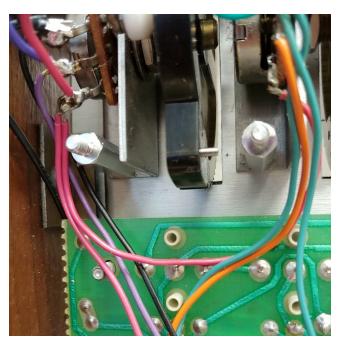


2. WIRING

Add wire connections between the pads on the Bender Perfecter board and the lugs of the bender and modulation potentiometers as follows:

- a) "BEND" pad connect to wiper of bender pot (middle lug of bender pot, purple wire in photos)
- b) "-V" pad connect to lug 1 of bender pot (black wire)
- c) "+V" pad connect to lug 3 of bender pot (red wire)
- d) "GND" pad connect to lug 1 of modulation pot (green wire)

The colors indicated above have been the colors of these wires in every Memorymoog we have seen, but in case they are not, ensure that you are connecting the wires from the "Bender Perfecter" board to the correct pot lug *locations* as shown in the photo above.



3. MOUNTING

Two standoffs must be installed to mount the Bender Perfecter board.

Remove the nut and lock washer that is closest to the octave switch board from each of the wheels' mounting brackets, and save them. Install the male/female standoffs in their place (photo at left). Place the Bender Perfecter board on the standoffs as shown and secure with the original nuts and washers that were previously removed (see photo on previous page).

5. TUNING

Set up a patch without any modulation and with only one oscillator. Set the "Pitch Bend Amount" control on the front panel to its full clockwise (maximum) position. Hold down any key and using a tuner, confirm your starting pitch is in tune; if not, autotune the synthesizer and adjust the master tuning control for concert pitch. Turn the wheel all the way to its fully upward bend position and adjust the "TRIM HIGH" trimmer on the Bender Perfecter board for a perfect octave above the starting pitch. Now turn the wheel all the way to its fully downward bend position and adjust the "TRIM LOW" trimmer for a perfect octave below the starting pitch.

That's it!