



Upgrading the 50-0033 programmer supply unit of the BeeProg+ programmer

How-Do-It Manual

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version 1.02

Upgrading the 50-0033 PSU#1 of the BeeProg+ programmer

Introduction

This how-do-it manual is designated to guide the user with upgrading the internal power supply unit of the BeeProg+ programmer with a new 15VDC/4.33A external power supply unit. Manual contains sequences for removing the internal power supply unit and installing the interface for external power supply unit safely.

PSU upgrade kit #1:

- The new 15VDC/4.33A external programmer supply unit
- The external power supply unit interface replacing the internal PSU
- The cable ties
- The screws M3x6
- The label with external PSU polarity and output voltage
- Detailed replacing manual (you are reading it)
- Transport package

Required tools:

- Bench with smooth surface or with a soft working pad
- Cross-screwdriver PHILIPS #2, a box for screws
- Knife or scissors

Procedure, sequence of steps

Notes:

- *Observe the principles of handling electrostatic sensitive devices; the minimum precautions include operator discharging to a larger metal object prior starting the work itself, and avoiding excessive motions on a chair during operation.*
- *The below described procedure describes the sequence of the steps starting from the top. Omit, please, none step in the sequence.*

1. Removing the upper cover of the programmer

- Remove the supply and the communication cables (in this order) from the programmer.
- Place the programmer on the bench in such a way that the ZIF socket lever points to you.
- Unscrew the two screws from the bottom edge of the front side of the programmer. The screws store in a box.
- Turn the programmer so, that the connectors may point to you.
- Unscrew the two screws from the upper edge of the rear side of the programmer. The screws store in a box.
- Turn the programmer so, that the ZIF socket lever points to you.
- Move the ZIF socket lever to the upper position.
- Carefully lift the upper cover of the programmer. Recommended procedure: Push your right hand thumb against the ZIF socket and lift up the cover by fingers resting on the front side of the programmer. **Be careful, because close to the left edge of the upper cover there is a faston with an earthing cable connected!**
- Pull out the connector attached to the earthing cable, from the upper cover faston by moving it hither and thither. Pull by the connector, or by its plastic insulation. This operation requires a good deal of force in fingers and patience. Avoid to spread the connector or pulling by the cable!
- Put the upper cover in the upside-down position on a safe place.

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2. Removing the internal PSU from the programmer

- Unscrew the two screws fixing the beam over the internal PSU.

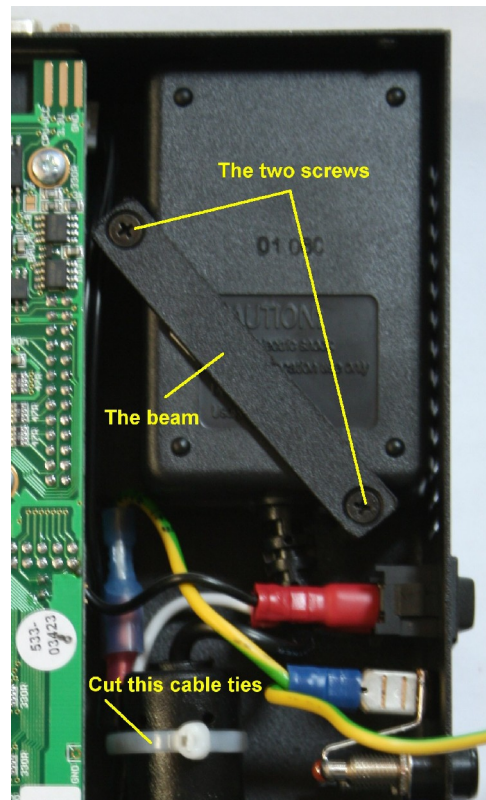


Figure 1: The internal PSU of the programmer

- Cut the cable ties fixing the internal PSU coil to the lower cover of the programmer.
- Withdraw the internal PSU from its position in lower cover of the programmer.
- Disconnect the “-” pole connector of internal PSU from the faston of the earthing cable, also disconnect the “+” pole connector of internal PSU from the power switch. These operations require a good deal of force in fingers.

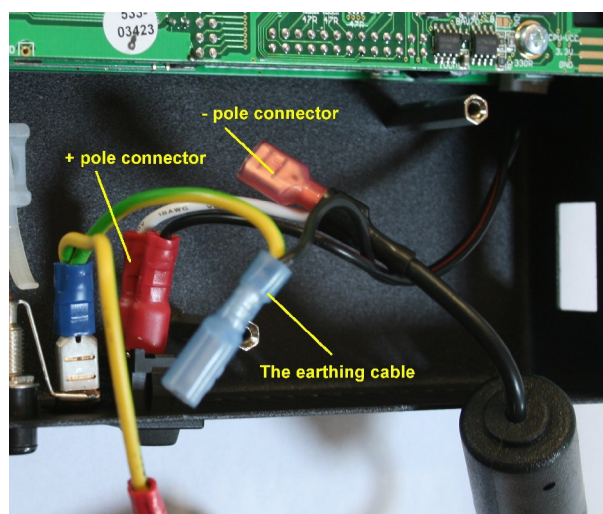


Figure 2: The internal PSU connectors

- Remove the internal PSU from the programmer, the internal PSU is not needed longer.

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3. Replacing the internal PSU

- Take the external power supply unit interface (from PSU upgrade kit #1).
- The “+” pole wire of the interface connect to the connector on the switch. The “+” pole wire is marked by “red” line.

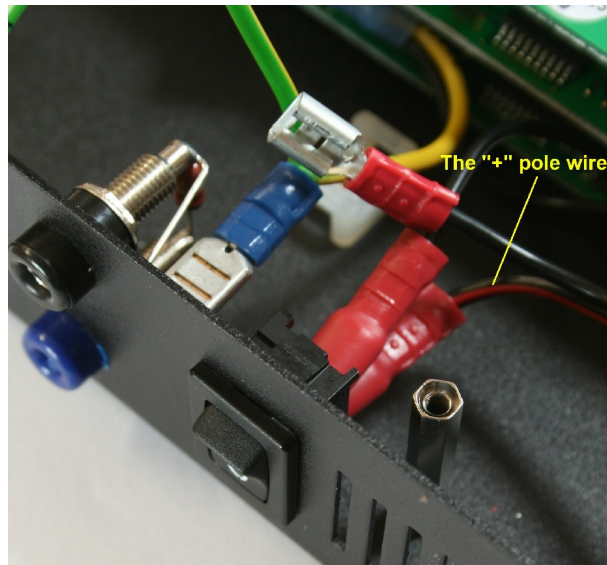


Figure 3: The "+" pole wire of the external PSU interface

- The “-” pole wire of the interface connect to the faston of the earthing cable.

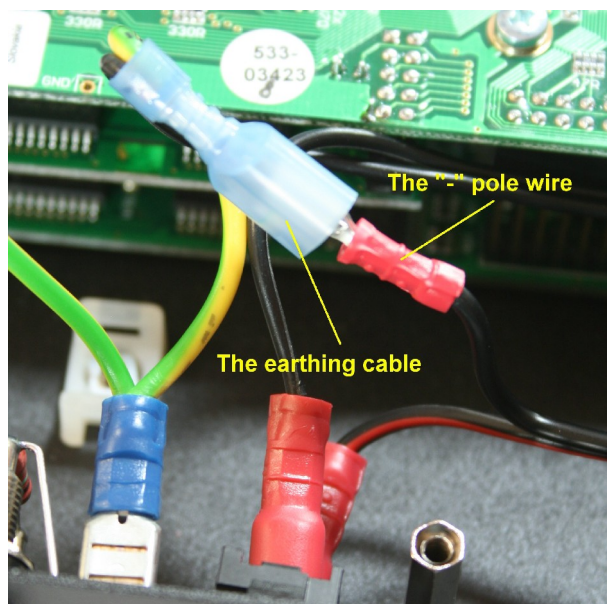


Figure 4: The "-" pole wire of the external PSU interface

- Place the external power supply unit interface into the lower cover of the programmer in such a way, that you will be able fix it using the two screws M3x6 (from PSU upgrade kit #1). **Take a care of the cable supplying the programmer's DPS. The cable must be lead between the programmer's DPS and the external power supply unit interface. The cable has to be loose-jointed after assembled and has not be hanged on!** Screw the screws.

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- Put the cable ties through the tie mount and fix the wires, see figure below.

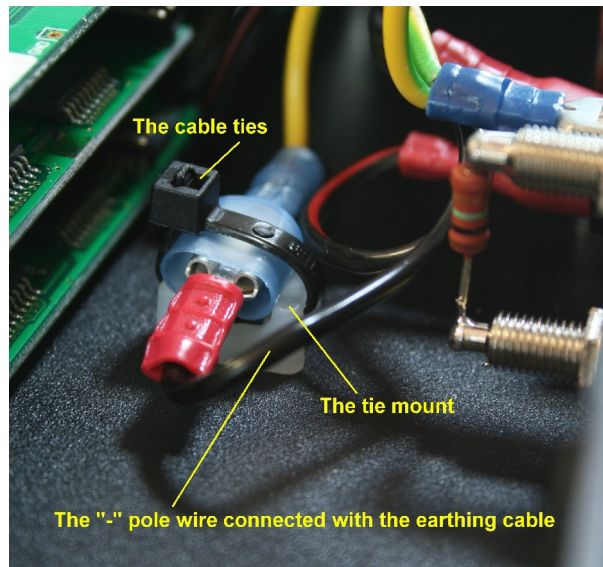


Figure 5: Fixing the cables

- The label with drawn polarity of the external power supply unit stick on the back side of the lower cover of the programmer as shown in figure below.

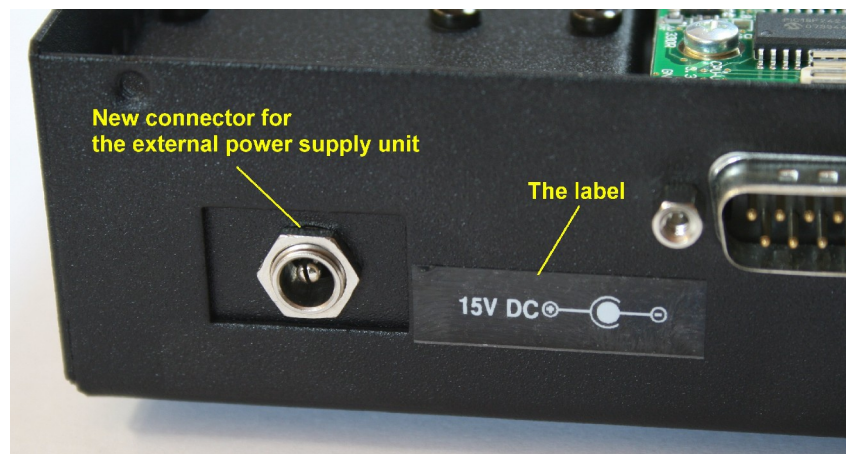


Figure 6: Position of the label

4. Assembling the upper cover of the programmer

- Take the upper cover and insert the faston of the earthing cable into the connector of the upper cover.
- Move the ZIF socket lever to the upper position.
- Shut the upper cover by tilting it down on the programmer. Check the LED and the YES button for correct position!
- Screw on the two screws at the bottom edge of the programmer front face.
- Turn the programmer so, that connectors point to you
- Screw on the two screws at the back side of the programmer.
- Insert the communication and the external power supply cables (in this order) into the programmer
- **Close the works by running of Selftest Plus procedure (Menu item Programmer). Test must be performed without an error message.**