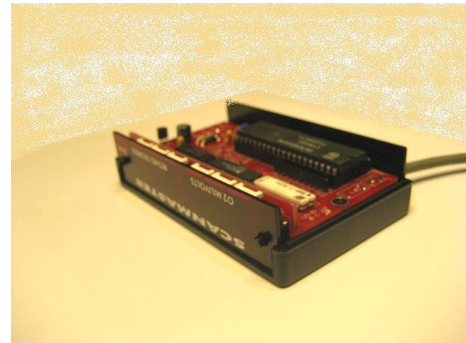


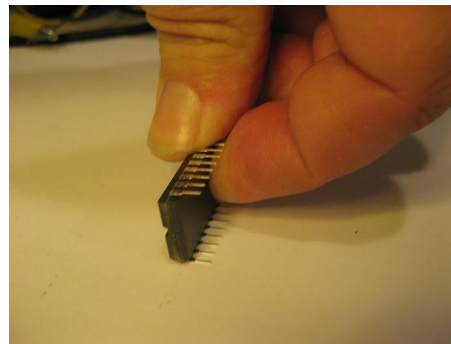
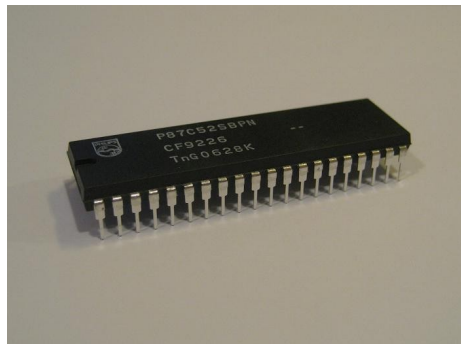
Scanmaster Update Procedure.

The 2.2 update chip for the Scanmaster allows the Scanmaster to receive its data directly from the PowerLogger. The update process has 4 steps they are as follows.

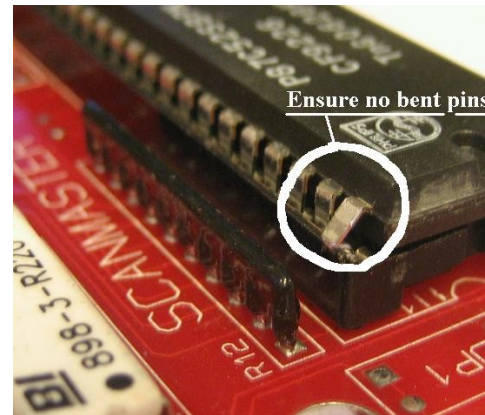
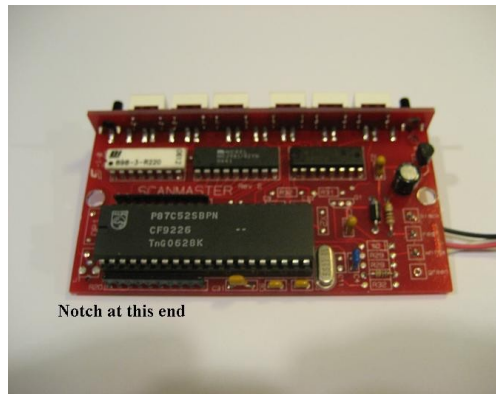
1. **Install updated software:** Open My Documents, open the PowerLogger folder. The software updates are distributed in a ZIP file or on a CD. Open the Zip or CD and copy or drag the contents to the PowerLogger folder. If the computer warns about overwriting older files, click yes.
2. **Install the new chip in the Scanmaster:** To do this, turn the Scanmaster upside down and remove the 2 screws holding the bottom case. The Scanmaster must have the large 40 pin chip in order to be upgradable.



Use a small screwdriver to pry up on the main chip slightly on one end then the other until the chip is free from its socket. Inspect the upgrade chip and straighten any bent pins. You can use a flat surface to align the pins as shown.



Insert the new chip into the Scanmaster, ensuring that the notch in the end of the chip matches the outline on the circuit board and socket. Ensure all the chip pins are straight and engage the socket. If there are any bent pins remove the chip and straighten them, then reinstall. Reassemble the Scanmaster.



3. **Update the PowerLogger:** The PowerLogger must be installed, connected to your laptop, and the vehicle key must be on. Open My Documents, and open the PowerLogger folder. Double click on the UpdatePL20.exe file (some computers may not show the .exe) The software will open a window and request the serial port. This the same port that PLC uses to communicate with the PowerLogger. Type the port number and press enter. The Software will request the update file name, type PL020 and press enter. The Software will send the new update to the PowerLogger. Note, PowerLogger update files all end in .S19, enter the filename without this S19 extension.
4. **Connect the Scanmaster data wire:** Disconnect the white Scanmaster wire from the ECM data wire. Extend this wire if necessary and connect to the SCM terminal of the PowerLogger connection unit.

The new version of PLC has a Scanmaster Options button on the F3 (Configure) page. This button opens a window with checkboxes to select which optional data will be displayed on the Scanmaster. Additionally, the Scanmaster uses the MAF scaling selection, the Pro/Gen-2 spark control selection, the analog input configuration, and the TPS recording threshold from the PLC F3 page. The Scanmaster update rate is currently 5 frames per second. This is 7.5 times faster than the standard Scanmaster update rate.

The analog inputs are displayed on the Scanmaster as follows.

- Wideband O2, displayed on the default display instead of the O2 sensor
- EGT is displayed as E in degrees F, from 32 to 1832.
- MAP is displayed in KPA.
- Boost is displayed as BSt and is in PSI when positive, and inches or mercury when negative (like a boost gauge). If auto calculate BARO is selected, then the PowerLogger captures the MAP sensor reading at key on and uses this to determine zero psi boost. If this option is not checked, then the “Baro” reading in PLC is sent to the PowerLogger.