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www.goodforgas.com



G450 / G460 Advanced Service Procedures

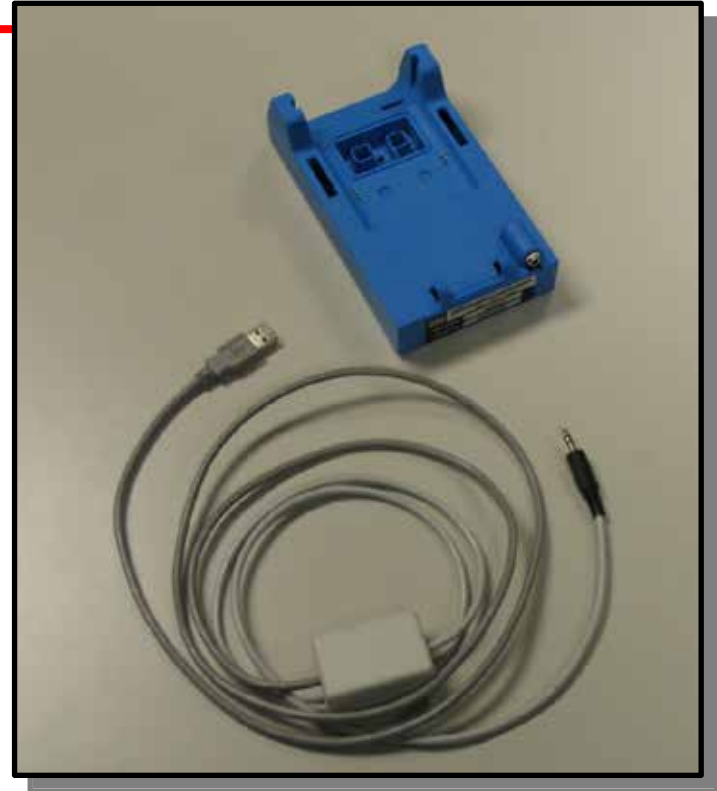


WARNING:
Advanced service procedures should only be undertaken by authorized personnel



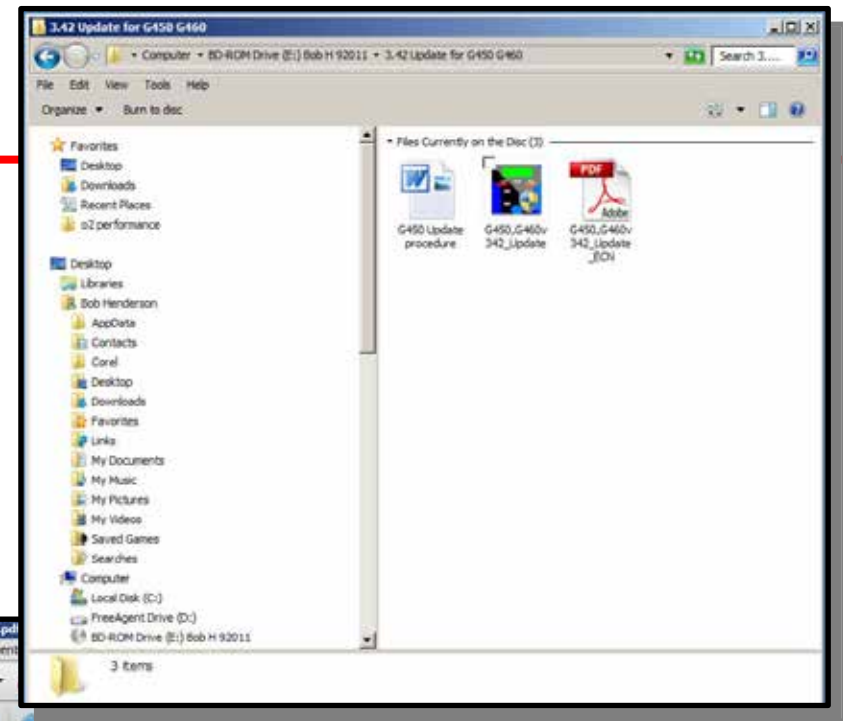
Updating G450 / G460 Firmware

- **You will need:**
 - **Latest firmware version to be installed**
 - **Latest version can be downloaded from www.goodforgas.com**
 - **Charger cradle and data download interface cable**
 - **Make sure the GfG drivers for the interface cable have been installed on your computer**



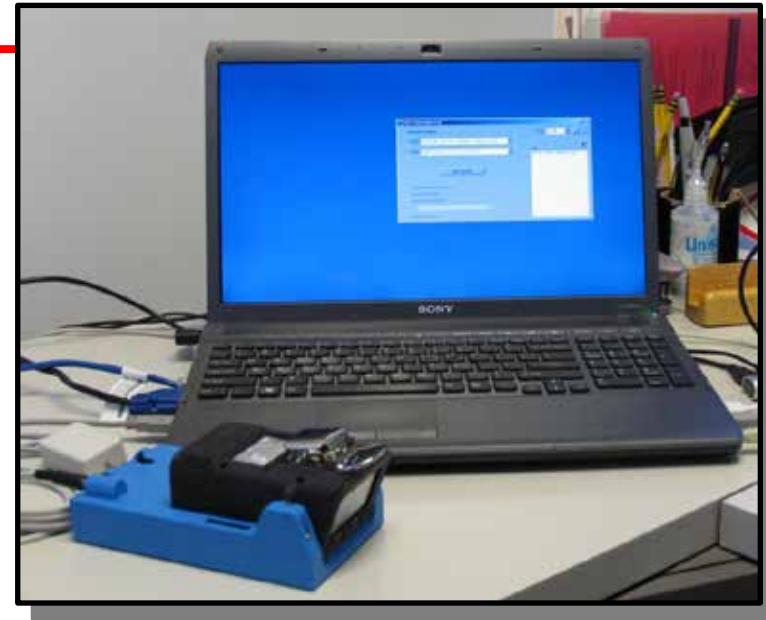
Update firmware: Step 1

- **Load the new “Update firmware” application onto your computer**
 - *The latest version can be downloaded at www.goodforgas.com*
- **Read the description of changes from the previous version**
- **Decide whether to proceed with update**



Update firmware: Step 2

- **Connect download interface cable to cradle and connect cable to USB port in computer**
- **Turn instrument on then place in cradle**



- **Make sure neither the instrument or computer run out of power during update procedure**
- **Make sure battery gauge in LCD shows at least two segments**
- **Do not disconnect or disturb interface cable and instrument during update process**

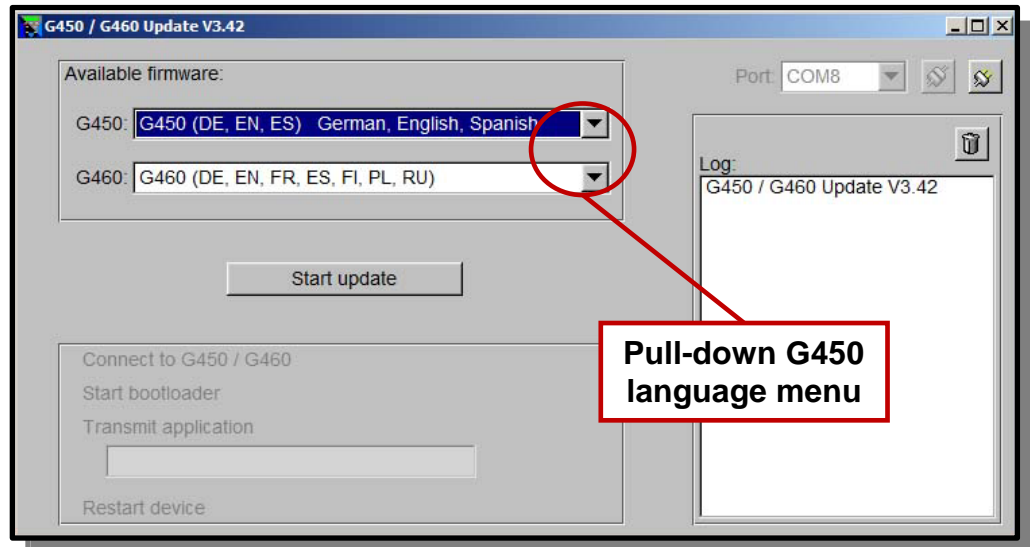
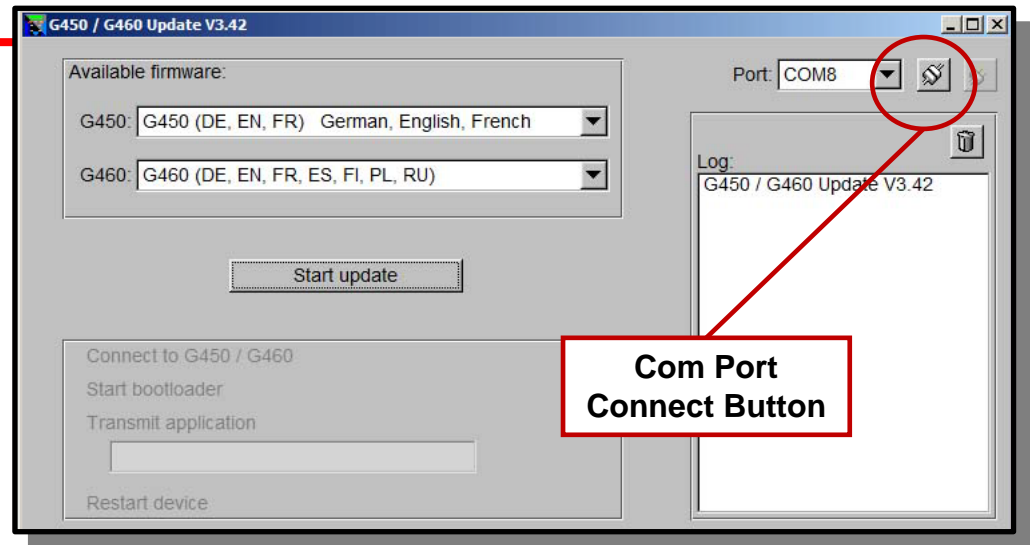


Battery power gauge



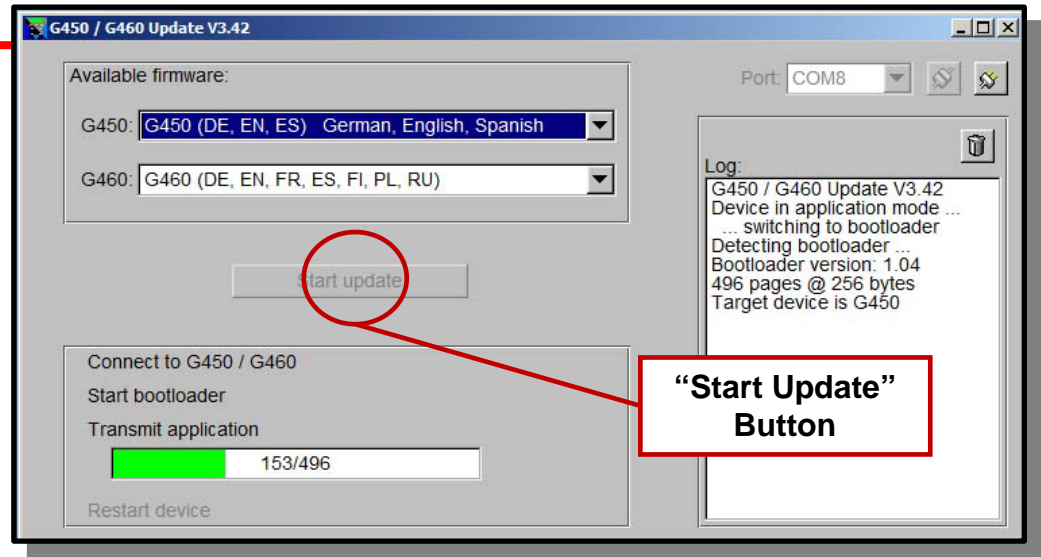
Update firmware: Step 3

- **Open G450 / G460 Update program**
- **Select com port from pull down menu then click on “connect” button**
 - **Note: Correct com port is usually the one with the highest number**
- **Choose desired set of languages from pull-down menu**
 - **G450 supports sets of three languages at a time as choices in on-board memory**
 - **G460 supports all available languages at same time in on-board memory**

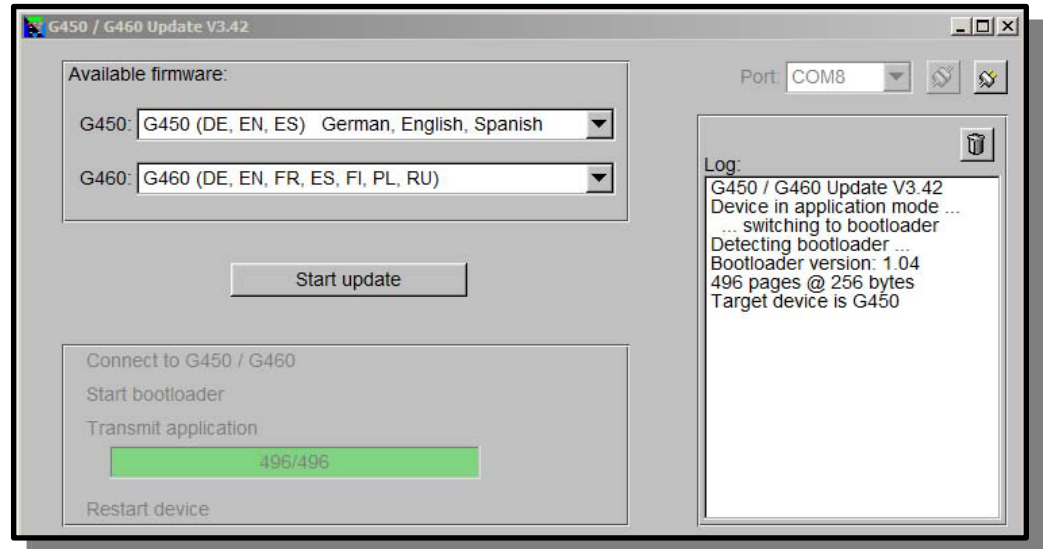


Update firmware: Step 4

- **Click on “Start Update” button**
 - **A green status bar will indicate progress**
- **The instrument will turn itself back on in normal operation when the update is complete**



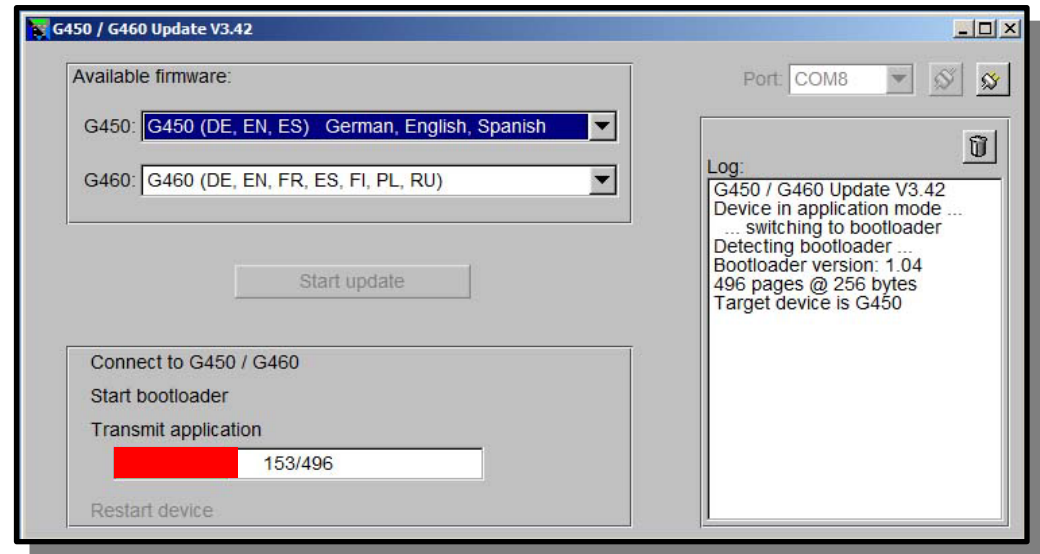
- **The instrument must be calibrated before it is put back into service!**



Update firmware: If a problem is encountered

- ***A red status bar indicates a problem has been encountered***
- ***Remove the instrument from the cradle, then replace in cradle and click on the start button to repeat the update process***

- ***If the update application fails to restart the procedure, try momentarily disconnecting the interface cable from the computer, and / or closing and restarting the update application***



Returning the instrument to service

- ***Calibrate ALL sensors in the instrument (whether or not they have been changed) before returning the instrument to service***
- ***It is best to let new sensors stabilize in the instrument for 30 minutes prior to calibration***



