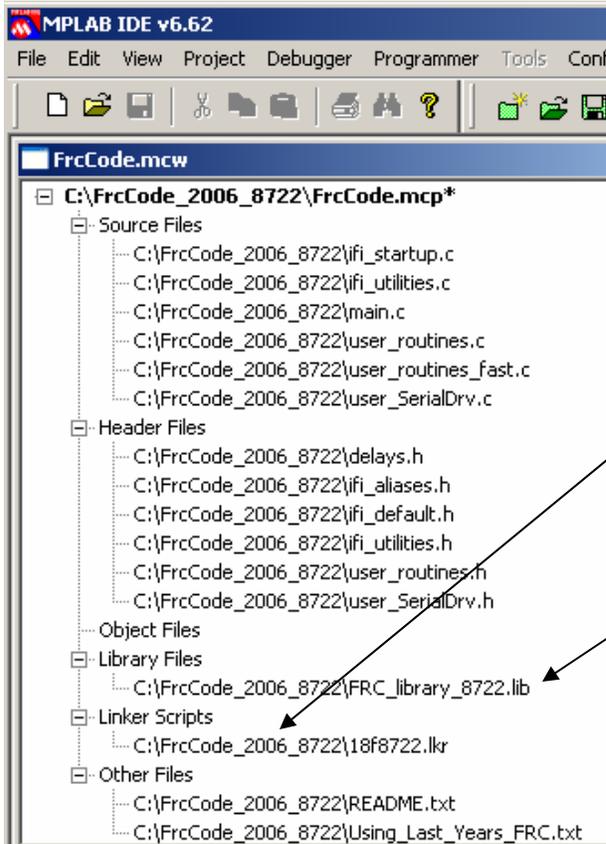**Update** : Data appears to be shifted. The displayed battery voltage is actually the Port4_Aux value. If nothing is connected (on this port) the voltage gets converted to 8.2-8.3 volts.

In Work: There appears to be a location on the 8722 chip that causes this problem. The following procedure is a recommended way to protect this memory area.
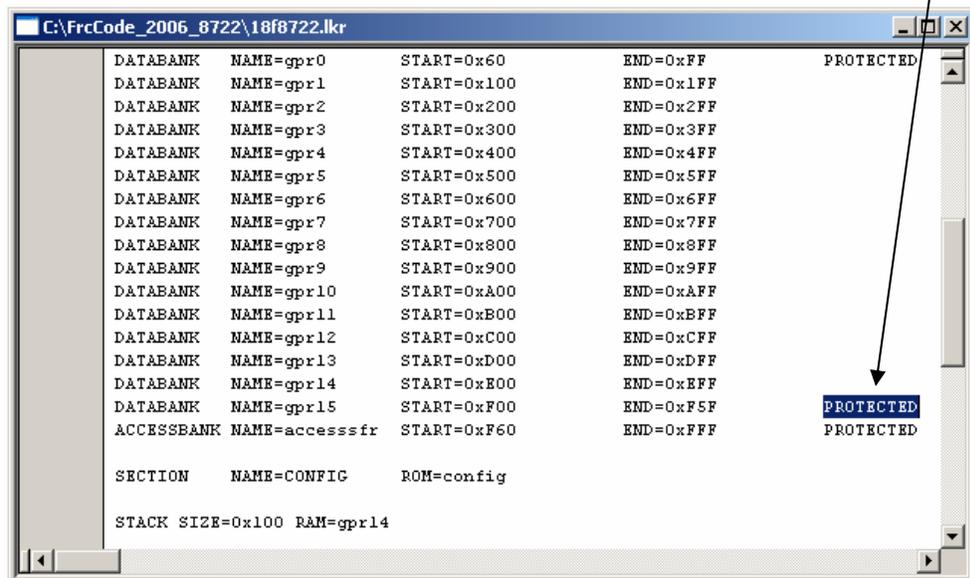
Note: You will not experience this problem with last years controllers because the user processor is an 8520.

Double click on the 18f8722.lkr file in your project.

Add the word PROTECTED to the line containing gpr15.

Make sure you are using the new library file "FRC_Library_8722.lib" as well. This will fix possible data corruption issues.

After the update, do a make (F10 or CTRL+F10) then re-download your code.

```
MPLAB IDE v6.62
File   Edit   View   Project   Debugger   Programmer   Tools   Conf

FrcCode.mcw
□ C:\FrcCode_2006_8722\FrcCode.mcp*
  ├ Source Files
  │    C:\FrcCode_2006_8722\ifi_startup.c
  │    C:\FrcCode_2006_8722\ifi_utilities.c
  │    C:\FrcCode_2006_8722\main.c
  │    C:\FrcCode_2006_8722\user_routines.c
  │    C:\FrcCode_2006_8722\user_routines_fast.c
  │    C:\FrcCode_2006_8722\user_SerialDrv.c
  ├ Header Files
  │    C:\FrcCode_2006_8722\delays.h
  │    C:\FrcCode_2006_8722\ifi_aliases.h
  │    C:\FrcCode_2006_8722\ifi_default.h
  │    C:\FrcCode_2006_8722\ifi_utilities.h
  │    C:\FrcCode_2006_8722\user_routines.h
  │    C:\FrcCode_2006_8722\user_SerialDrv.h
  ├ Object Files
  ├ Library Files
  │    C:\FrcCode_2006_8722\FRC_library_8722.lib
  ├ Linker Scripts
  │    C:\FrcCode_2006_8722\18f8722.lkr
  ├ Other Files
  │    C:\FrcCode_2006_8722\README.txt
  │    C:\FrcCode_2006_8722\Using_Last_Years_FRC.txt
```

```
C:\FrcCode_2006_8722\18f8722.lkr                                    _|□|×
       DATABANK     NAME=gpr0      START=0x60      END=0xFF      PROTECTED
       DATABANK     NAME=gpr1      START=0x100     END=0x1FF
       DATABANK     NAME=gpr2      START=0x200     END=0x2FF
       DATABANK     NAME=gpr3      START=0x300     END=0x3FF
       DATABANK     NAME=gpr4      START=0x400     END=0x4FF
       DATABANK     NAME=gpr5      START=0x500     END=0x5FF
       DATABANK     NAME=gpr6      START=0x600     END=0x6FF
       DATABANK     NAME=gpr7      START=0x700     END=0x7FF
       DATABANK     NAME=gpr8      START=0x800     END=0x8FF
       DATABANK     NAME=gpr9      START=0x900     END=0x9FF
       DATABANK     NAME=gpr10     START=0xA00     END=0xAFF
       DATABANK     NAME=gpr11     START=0xB00     END=0xBFF
       DATABANK     NAME=gpr12     START=0xC00     END=0xCFF
       DATABANK     NAME=gpr13     START=0xD00     END=0xDFF
       DATABANK     NAME=gpr14     START=0xE00     END=0xEFF
       DATABANK     NAME=gpr15     START=0xF00     END=0xF5F     PROTECTED
       ACCESSBANK NAME=accesssfr   START=0xF60     END=0xFFF     PROTECTED

       SECTION      NAME=CONFIG    ROM=config

       STACK SIZE=0x100 RAM=gpr14
```

Update : Programs don't seem to work when they pass the 64K byte boundary.

Resolution: Change the Code Model from small to large. To do this do the following:

1. In MPLAB, open the Build Options window (Project->Build Options->Project)
2. Click on the MPLAB C18 tab.
3. Select Memory Model (from the combo box).
4. Select the Large code model.
5. Verify that a "-mL" appears in the settings text box.
6. Click on APPLY or OK then recompile and redownload your code.