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PRECISION GOVERNORS

GRAPHICAL USER INTERFACE OPERATION MANUAL

1.0 FEATURES OF THE GRAPHICAL USER INTERFACE:

Precision Governors Graphical User Interface (PGGUI) is a software product released by Precision Governors LLC. It includes the following features:

1. The PGGUI integrates MS windows, data acquisitions, and data communications in one package
2. The PGGUI has access to all necessary parameters and variables from the ECM (Engine Control Module)
3. The PGGUI updates in real time engine variables/parameter data and displays it
4. The PGGUI supports parameter/variable calibration changes, and suppliers (or displays) diagnostics error code troubleshooting
5. The PGGUI provides all the necessary tools for engine tuning, system integration and troubleshooting

2.0 HARDWARE MINIMUM REQUIREMENTS

1. PC Pentium II computer or more recent with a minimum:
Clock: 100 MHZ
RAM: 32 MB
Hard Disk Space: 30 MB.
Operating System: Window 95/98, Window NT, and Window Me/Window 2000/XP.
Communication port: Serial port COM 1 or USB to Serial port converter
2. Serial Interface Box: Available from Precision Governors
3. Standard serial communication cable with a DB-9 (Female) and DB-9 (Male) connectors

3.0 SOFTWARE:

ECM contains firmware software to control the engine management system, and communicates with PGGUI

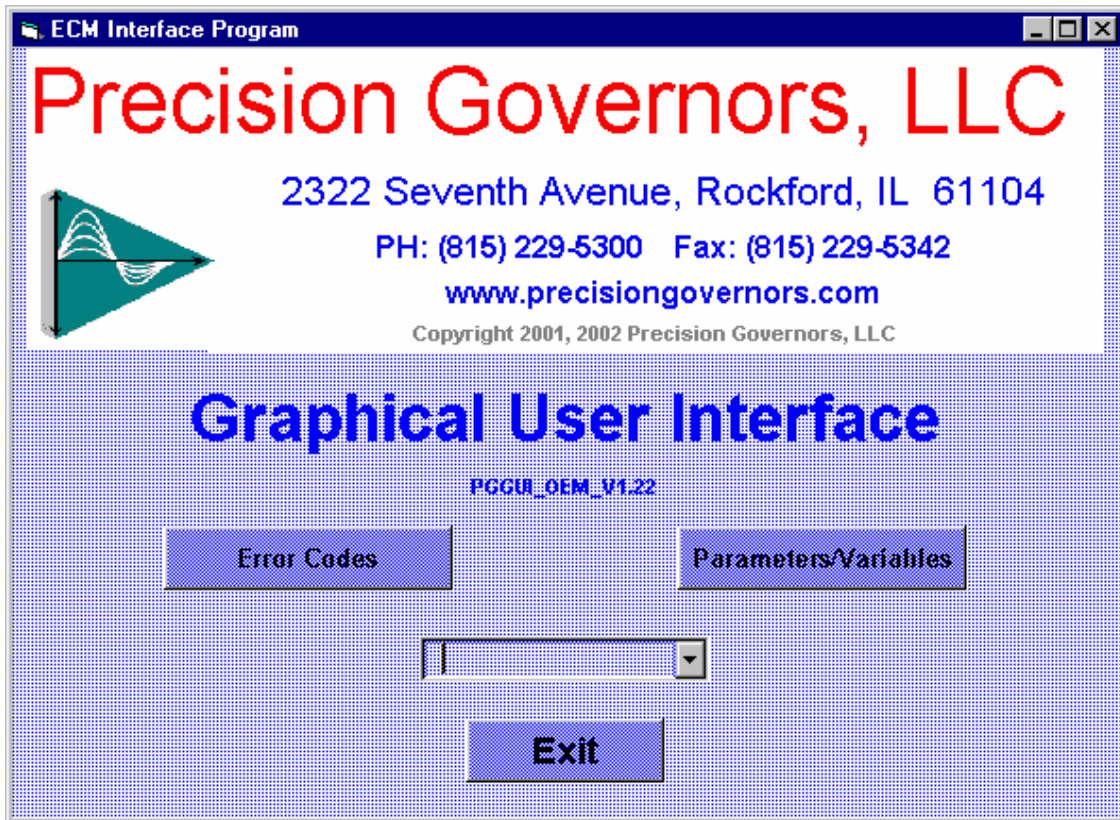
4.0 INSTALLATION OF PGGUI:

1. Close all the applications on your computer
2. Load CD into CD drive, Unzip “InterfaceDealer.zip” into desired folder on hard drive
3. Create a shortcut on the desktop to “GUI_ENG_V1.21_Enc.exe”

5.0 OPERATION PROCEDURE:

The procedures to establish communication between PGGUI and ECM controller, and run PGGUI is as follows:

1. Connect the DB-9 (Female) of standard communication cable to the serial port of PC
2. Connect the DB-9 (Male) of communication cable to the communication interface box
3. Turn the four DIP switches of the interface board to the “RUNING MODE” (Off mode)
4. Connect the 6 pin male connector of communication interface box to the 6 pin female connector of Electrical Controller Module (ECM) harness
5. Before starting of PGGUI, make sure to close other Windows applications using the same serial port or USB
6. Double click PGGUI icon, the main screen should be pop up



7. If not, you see the bottom red circle x box, repeat procedures 5 and 6.



8. Go to Parameters/Variables screen, click “Clear All”, and “Recall” button, pop up the table with all three column and 12 row boxes
9. Toggle the ignition switch ON/OFF, until the bar graphics of data traffic appears in the table (Typically within 10 seconds)
10. Use “Done” button on the bottom of right hand corner to close parameters/variables screen
11. Use “Exit” button to quit PGGUI main application. Do not use “X” in upper right hand

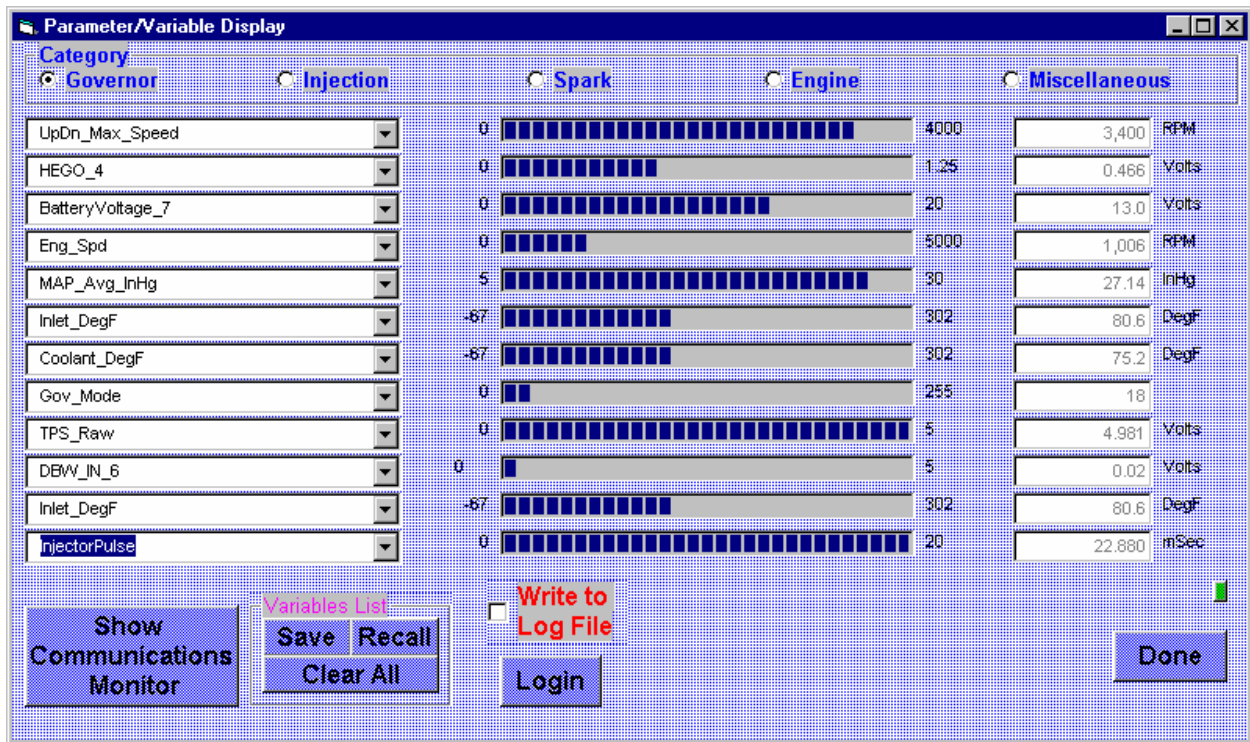
of screen to exit otherwise, it will lose communication

6.0 PARAMETERS AND VARIABLES:

On the Graphical User Interface main menu, click “Parameters/Variables” button for the submenu:

"Parameters/Variables"

You are able to view 12 variables at a time; each of those can display any of the available Parameters and variables in the PGGUI OEM version.



7.0 REAL TIME DIAGNOSTICS:

The Graphical User Interface main menu, has a “Error Codes” button for the following submenu:

"Error Codes"

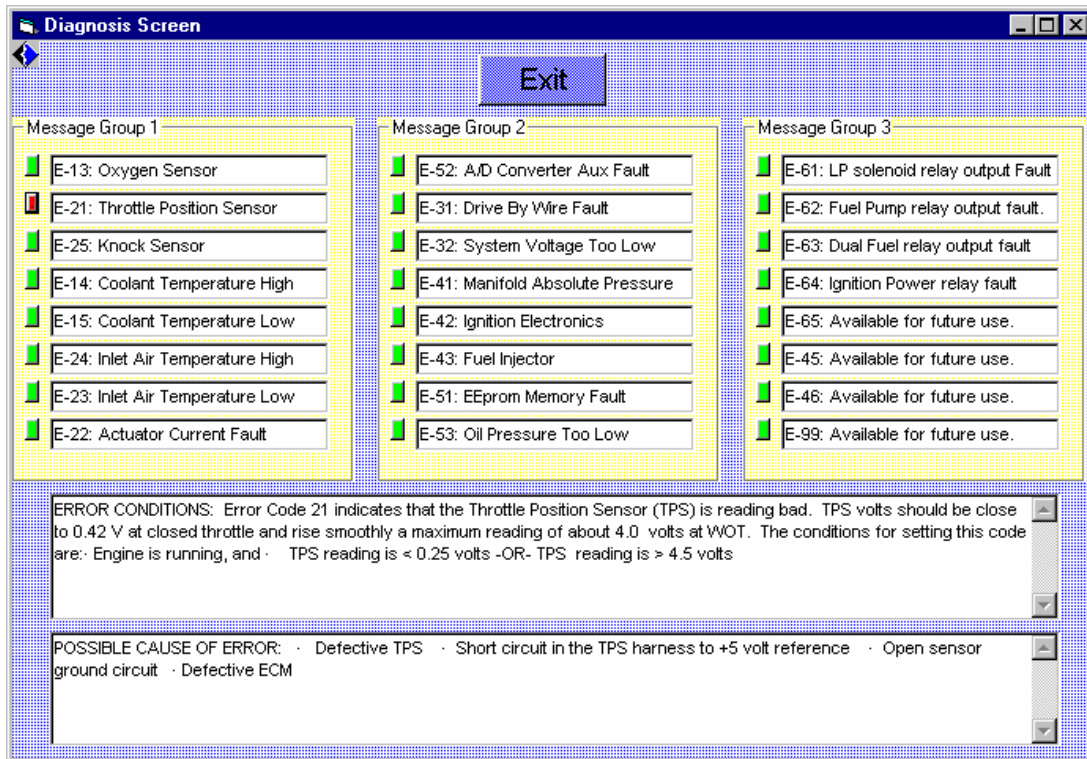
By clicking on the button, the following diagnosis screen will appear,

there are three message groups. Each group contains 8 distinct error codes and Messages. Each Error Code box includes the status indicator, error code number, and error description.

The PGGUI automatically monitors the performance of ECM and detects active errors Normally, the message indicators in the error code windows are green.

If an active error code appears, the corresponding message indicator will turn red.

By clicking on any active error code indicator box, the corresponding 'ERROR CONDITIONS' text in the first message box below and the 'POSSIBLE CAUSE OF ERROR' is displayed in second message box.

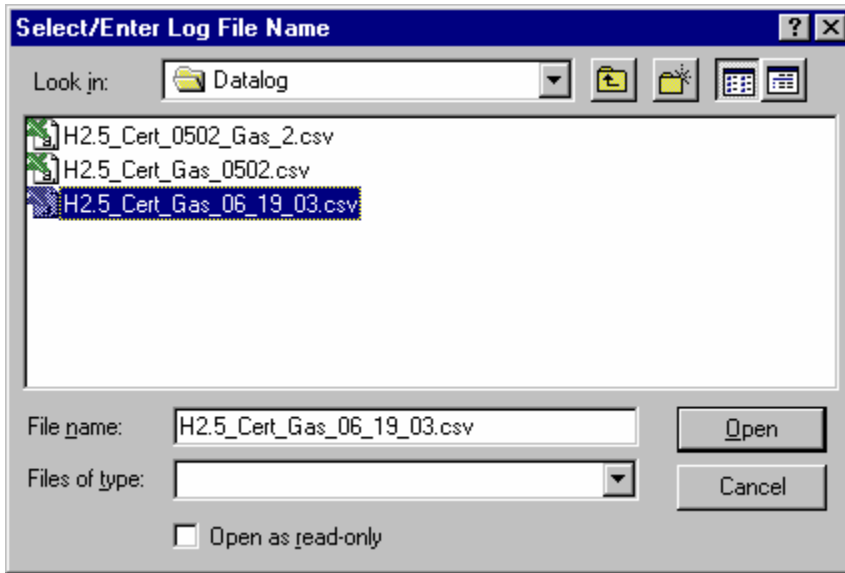


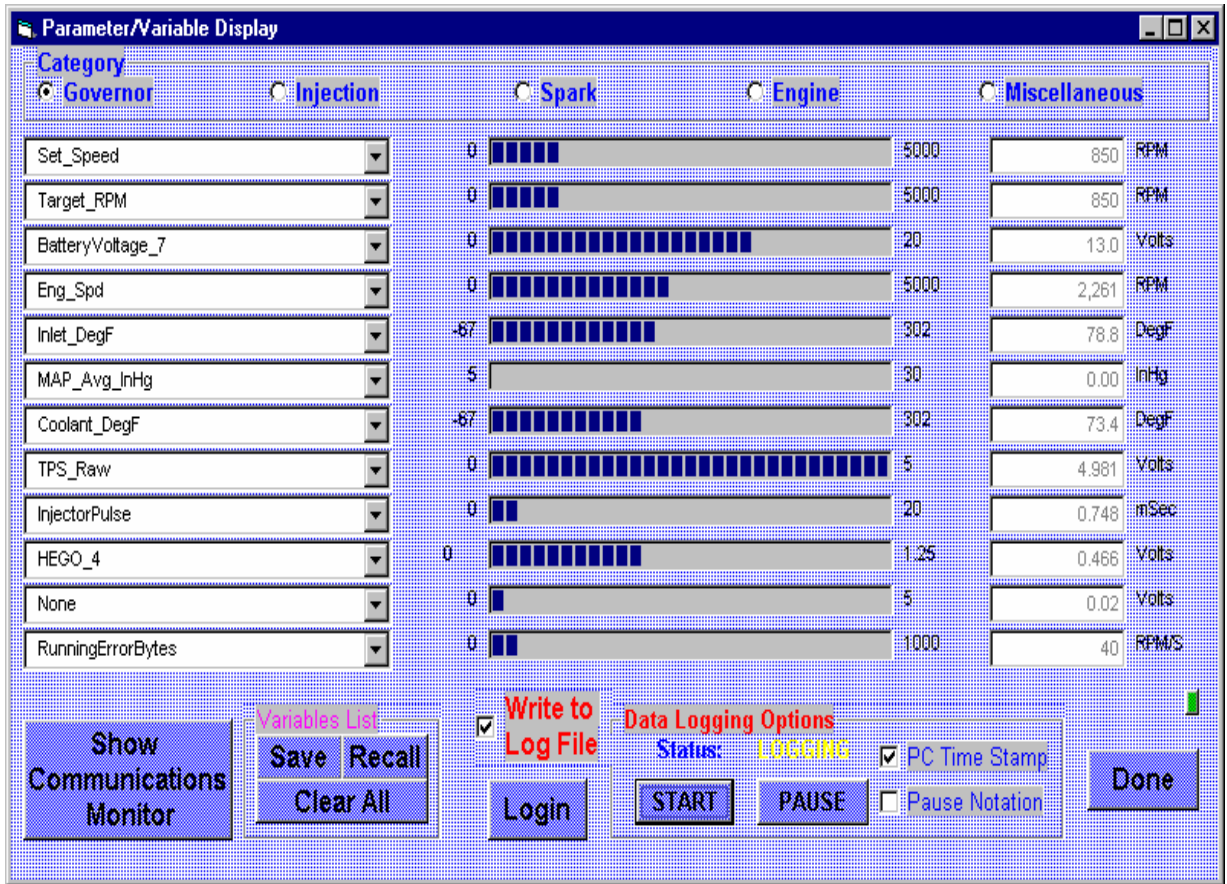
8.0 DATA LOGGING:

The PGGUI has data logging capabilities that will record real time data from the Parameter/Variables Screen table.

The Data logging procedure:

1. On the Parameter/Variables table screen, click the check box "Write to Log File". From the "Log File Name" selection message box, choose the path name and file name with extension ".csv", click "Open".





1. Check the “PC Time Stamp” box, then click the ‘Start’ bottom in the Parameter/Variables Screen to start data logging.
2. Click “Pause” if you want to pause the data logging.
3. Uncheck “Write to Log File” to close and save the Data logged file.
4. All data has been saved in specified ‘Datalog_name. CSV’ file with comma delimited Excel format.

9.0 RE-ESTABLISHING COMMUNICATION:

In case of improper operation, the following tips will help you re-establish communication:

- . Go to Parameters/Variables screen, click “Clear All”, “Recall” button.
- . **Toggle ignition switch** ON/OFF until communication has resumed.
- . Exit PGGUI by using “Exit” button in the main screen, restart PGGUI again.
- . If needed, check wire connection.

10.0 COPYRIGHT

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