Computer Electronics shown with 1 inch and 2 inch Turbine Housings which are sold separately.
To the owner...

Congratulations on receiving your GPI Industrial Grade Computer Electronics. We are pleased to provide you with a product designed to give you maximum reliability and efficiency.

Our business is the design, manufacture, and marketing of liquid handling, agricultural, and recreational products. We succeed because we provide customers with innovative, reliable, safe, timely, and competitively-priced products. We pride ourselves in conducting our business with integrity and professionalism.

We are proud to provide you with a quality product and the support you need to obtain years of safe, dependable service.

President
Great Plains Industries, Inc.

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GENERAL INFORMATION

This manual will assist you in operating and maintaining the Computer Electronics of the GPI Industrial Grade Meters. (See Figure 1) Calibration details are given in this manual. Information on turbine housings and accessory modules are contained in other manuals. Please reference those as necessary.

Figure 1

For best results, take the time to fully acquaint yourself with all information about all components of your GPI Electronic Digital Metering System prior to installation and use.

If you need assistance, contact the distributor from whom you purchased your computer.

This symbol is used throughout the manual to call your attention to safety messages.

Warnings alert you to the potential for personal injury.

Cautions call your attention to practices or procedures which may damage your equipment.

Notes give information that can improve efficiency of operations.

It is your responsibility to make sure that all operators have access to adequate instructions about safe operating and maintenance procedures.

Safety Instructions

For your safety, review the major warnings and cautions below before operating your equipment.

1. This equipment is approved to handle only fluids which are compatible with all wetted materials.
If you ordered your computer separately from your turbine, simply mount the computer on the turbine with the four screws at the corners of the faceplate. Make sure the O-ring is fully seated before tightening the screws.

If you ordered the computer with turbine and an accessory module, please review and thoroughly understand all installation instructions before proceeding.

All GPI turbines are designed to measure flow in only one direction. The direction is indicated by the arrow cast-molded in the turbine outlet. If the computer display is upside down, remove the four screws, turn the display 180° and reinstall the screws. See Diagram 1.

Avoid electronically “noisy” environments. Install at least 6 inches (15.2cm) away from motors, relays, or transformers.

Our computer electronics are Factory Mutual Approved, C-UL Classified and carry a Class 1, Division 1 Approval for hazardous environments. In addition, GPI meters have NEMA Type 4 enclosures.

To ensure accurate measurement, remove all air from the system before use.

It is strongly recommended that accuracy be verified prior to use. To do this, remove all air from the system, measure an exact known volume into an accurate container, and verify the volume against the readout or recording equipment. If necessary, use a correction factor to figure final volume. For best results, accuracy should be verified periodically as part of a routine maintenance schedule.

2. When measuring flammable liquids, observe precautions against fire or explosion.

3. When handling hazardous liquids, always follow the liquid manufacturer’s safety precautions.

4. When working in hazardous environments, always exercise appropriate safety precautions.

5. For best results, always verify accuracy before use.

Product Description
These computer electronics are designed specifically for use on GPI Industrial Grade Turbine Housings. They are also designed to work with several accessory output modules.

The CMOS, microprocessor-based electronics have extremely low power requirements and data retention capabilities in both RAM and ROM. Information is clearly displayed on a large 6-digit LCD readout with two-point floating decimal for totals from .01 to 999,999. All operations are easily accessed with the two buttons on the front panel.

Liquid flows through the turbine housing causing an internal rotor to spin. As the rotor spins, an electrical signal is generated in the pickup coil. This pulse data is translated from the turbine into calibrated flow units shown on the computer’s readout.

Upon receipt, examine your equipment for visible damage. The computer is a precision measuring instrument and should be handled as such. If any items appear damaged or missing, contact your distributor.

Make sure your computer model meets your specific needs. Refer to the Specifications Section to confirm required features. The model number of your computer is displayed on the lower front side of the computer and also underneath a battery.

INSTALLATION
If you ordered your computer electronics with a turbine housing, it is installed at the factory.
**OPERATIONS**

All operations are reflected in the LCD readout. The top line identifies the calibration curve. The middle line reflects flow information. The bottom line shows information from the totalizer. Words or “flags” display on the top and bottom line to further identify specific information.

The computer is powered by field replaceable batteries. When the readout becomes dim or faded, the batteries need to be replaced. Reference the Maintenance Section for details.

NOTE: Operations can be practiced prior to installation. To simulate flow conditions, blow gently through the turbine.

**Turn On**

The meter is on when any display is present. It turns on automatically when liquid flows through the meter. It can be turned on manually by pressing and releasing the DISPLAY button.

**Turn Off**

Whenever no flow has been sensed for one minute, the unit automatically switches to a power-saving “sleep” mode with a blank display. The unit will automatically “wake up” the moment any flow is sensed and will remain awake as long as fluid is flowing. Totals are never lost during sleep periods.

**Batch and Cumulative Totals**

Total flags are displayed on the bottom line. The Cumulative Total (labeled TOTAL 1 LOCKED) is the total of all fluid measured since the meter’s power was connected. (At your first use, the Cumulative Total may not read zero because of calibration at the factory.) The Batch Total (labeled TOTAL 2) indicates flow during a single use.

**Clearing a Totalizer**

The Batch totalizer register (TOTAL 2) may be independently cleared to 0.00 at any time. To clear a batch totalizer, with the desired totalizer displayed, press and hold the DISPLAY button. At about three seconds, the displayed total will be cleared to “0.00.” You can do this even while fluid is flowing, in which case counting will resume after you release the DISPLAY button.

The Cumulative totalizer register is labeled as TOTAL 1 LOCKED indicating that it cannot be manually zeroed (See Figure 2). The Cumulative totalizer can be cleared only when the batteries are removed or go dead or when the Cumulative Total reaches the maximum value of 999,999.

**Changing Display Registers**

To change to another totalizer register or to FLOWRATE mode during normal operation, watch the bottom line display flags while you briefly press and release the DISPLAY button. When you press and release the display buttons, the mode will advance as follows: TOTAL 1 LOCKED (Cumulative Total), TOTAL 2 (Batch Total), FLOWRATE, TOTAL 1 LOCKED (etc.). You can change registers at any time, even during flow. Non-visible totalizer registers will continue to accumulate.

NOTE: Generally, display registers change when the buttons are released.

**Factory and Field Calibration Curves**

GPI “09” series flow computers have enhanced calibration features. All calibration information is visible to the user as words in the upper part of the display, above the numeric digits.

All units will be configured with a “factory” calibration curve, for which units of gallons or litres may be selected by the user (“GAL” or “LTR” will be visible). This curve is NOT user adjustable: the word “PRESET” is displayed to show this. (See Figure 3) The factory calibration is stored permanently in the computer’s memory.
The “field” calibration curve(s) may be set by the user, and can be changed or modified at any time using the calibration procedure described below in the CALIBRATION section. Totals or flowrate derived from the field calibration are visible when the field calibration setting is selected (“CAL B” or “CAL C” will be visible).

**Selecting a Different Calibration Setting**

You can switch between GAL and LTR modes at will without “corrupting” totalizer contents. For example, the computer can totalize 10.00 gallons. If the user switches to LTR mode, the display will immediately change to “37.85” (the same amount in units of litres). GAL / LTR switching also works in FLOWRATE mode.

To select a different calibration setting, first press and hold the CALIBRATE button. Continue to hold it while also briefly pressing and releasing the DISPLAY button (you may then also release the CALIBRATE button). The flag indicators in the upper area of the display will change to show the newly selected calibration setting. Calibration settings change in this order: GAL, LTR, CAL B, CAL C, GAL (etc.). While fluid is flowing only the GAL and LTR selections may be made, however, when NO fluid flow is occurring, any setting may be selected.

**Flowrate Mode**

The Rate of Flow feature is accessed by briefly pressing and releasing the DISPLAY button as described above. When this feature is activated, the word “FLOWRATE” displays to the left on the bottom line (See Figure 4) and the numbers in the middle of the display reflect the rate of flow (instead of total). Units are set to update the display every five seconds, so the first reading after flow starts or changes and the last reading after flow stops or changes will not be correct. This is normal.

**Propeller**

A small propeller displays to indicate liquid is flowing through the meter.

Factory Calibration settings are programmed into each flowmeter during production, and are correct for light fluids such as water, gasoline, or diesel fuel. Factory Calibration is completed with either stoddard test solvent (on 1” and smaller flowmeters) or water (on 1-1/2” and larger flowmeters) at 70°F (21°C). Readings using the standard factory calibration curves may not be accurate in some situations – for example, if the unit measures a “heavy” fluid such as motor oil, especially under extreme temperature conditions.

For improved accuracy under such conditions, the GPI flow computer allows for “field” calibration, that is, user entry of custom calibration parameters. A “single point” calibration may yield acceptable accuracy with light liquids, however, heavy liquids may require five or more calibration points to achieve a high level of accuracy. Up to 15 custom calibration points can be entered.

NOTE: A Field Calibration below the minimum flowrate can adversely effect accuracy.

The use of a uniformly dependable, accurate calibration container is highly recommended for the most accurate results. Due to high flowrate, it is strongly recommended that
Field Calibration of 1-1/2” and 2” meters be completed with a combination of volume and weight using fine resolution scales.

For the most accurate results, dispense at a flowrate which best simulates your actual operating conditions. Avoid “dribbling” more fluid or repeatedly starting and stopping the flow – these actions will result in less accurate calibrations.

Make sure you meet the meter’s minimum flowrate requirements.

- 1/2 inch meters - 1 GPM (3.8 LPM)
- 3/4 inch meters - 2 GPM (7.5 LPM)
- 1 inch meters - 5 GPM (18.8 LPM)
- 1-1/2 inch meters - 10 GPM (37.5 LPM)
- 2 inch meters - 20 GPM (75 LPM)

For best results, the meter should be installed and purged of air prior to Field Calibration.

### Dispense-Display Field Calibration Procedures

<table>
<thead>
<tr>
<th>Your Actions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hold down CALIBRATE while pressing and releasing DISPLAY until the Field Calibration curve appears (“CAL B” or “CAL C” message will be displayed). Release both buttons.</td>
<td>Remember that Field Calibration curves are not preset.</td>
</tr>
<tr>
<td><img src="image" alt="CAL B" /></td>
<td></td>
</tr>
<tr>
<td>2. To calibrate, press and hold the CALIBRATE button. While continuing to hold CALIBRATE, also press and hold the DISPLAY button. Hold both buttons for about 3 seconds until you see a blinking “dd-CAL” message. Once the “dd-CAL” message appears, release both buttons. You are now in field calibration mode.</td>
<td>This step puts the unit in dispense-display field calibration mode (“dd-CAL”).</td>
</tr>
<tr>
<td><img src="image" alt="dd-CAL" /></td>
<td></td>
</tr>
<tr>
<td>3. Once the buttons have been released from Step 2, the display will show the blinking message “run 01.”</td>
<td>The computer is waiting for you to make a decision to either exit from field calibration mode or to begin a dispense run. If you want to exit the calibration now, go to Step 11.</td>
</tr>
<tr>
<td><img src="image" alt="run 01" /></td>
<td></td>
</tr>
<tr>
<td>4. If you want to continue with the calibration, but have not dispensed any fluid yet, make your final preparations to your pumping system, but don’t start pumping yet.</td>
<td></td>
</tr>
<tr>
<td>Your Actions</td>
<td>Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
</tr>
<tr>
<td>5. Start your pumping system so that fluid flows through the meter. The display will stop blinking and show the “run 01” message. Dispense into a container that allows you to judge the amount of fluid pumped. When you have pumped the desired amount (for example, 10 gallons), stop the fluid flow quickly.</td>
<td>When the computer displays a non-blinking “run 01” message, it is sensing fluid flow. For the most accurate results, dispense at a flow rate which best simulates your actual operating conditions. Avoid “dribbling” more fluid or repeatedly starting and stopping the flow - these actions will result in less accurate calibrations.</td>
</tr>
<tr>
<td>6. Once the flow has stopped, briefly press and release both buttons. At this point the computer display will change to “0000.00” with the left-hand digit blinking.</td>
<td>When the display shows “0000.00” the computer has stopped “watching” for fluid flow and is now waiting for you to enter some numbers.</td>
</tr>
<tr>
<td>7. Enter the volume (amount) of fluid that you dispensed (for example, if your 10-gallon container is full, enter “10.00” for gallons or “37.5” for litres). To enter numbers use the CALIBRATE button to change the value of the digit that is blinking and use the DISPLAY button to shift the “blink” to the next digit.</td>
<td></td>
</tr>
<tr>
<td>8. Once the correct number has been entered, briefly press and release both buttons. The display will now change to a blinking “run 02” message.</td>
<td>You have installed the new calibration point. You are ready to end calibration (Step 10) or enter another new calibration point (Step 9).</td>
</tr>
<tr>
<td>9. To enter another calibration point, go back and repeat Steps 3 through 8.</td>
<td>It is possible to set up to 15 cal-curve points, and the “run ##” message will increment each time you repeat the calibration process (run 01, run 02, run 03, etc., up to run 15).</td>
</tr>
</tbody>
</table>
### Dispense-Display Field Calibration Procedures - cont’d.

<table>
<thead>
<tr>
<th>Your Actions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10.</strong> To end calibration, press and hold both buttons for about 3 seconds until you see the “CAL End” message.</td>
<td>After you release the buttons, the computer will resume normal operations with the new cal point(s) active.</td>
</tr>
<tr>
<td><img src="image" alt="CAL End" /></td>
<td></td>
</tr>
<tr>
<td><strong>11.</strong> If you HAVE NOT dispensed any fluid, you can exit calibration without changing the cal curve. If the message “run 01” is showing and you have not dispensed any fluid, hold both buttons for about 3 seconds until you see a “CAL End” message.</td>
<td>After you release the buttons, the computer will resume normal operation and the old curve (if you have entered one in the past) is still intact.</td>
</tr>
<tr>
<td><img src="image" alt="CAL End" /></td>
<td></td>
</tr>
</tbody>
</table>

### USER CONFIGURATION

The new “09” series GPI flow computer has been programmed with many new features, most of which can be enabled by the end user by way of a configuration process. By disabling “unnecessary” features, day-to-day flowmeter operation can be greatly simplified, making the unit easier to use. There are several features that GPI disables by default when shipping standard meters. (For example, K-Factor Entry Field Calibration, described below.) For more advanced users, it may be desirable to enable ALL possible features. User configurable features include:

- **Totalizers/Modes Enabled (Cumulative Total, Batch 1 Total, Batch 2 Total, Flow-rate Mode)**
- **Flowrate Update Intervals (1, 2, 5, 10 seconds; 1, 2, 10 minutes; 1 hour.)**
- **Flowrate Timebase (Units per Minute, Hour, or Day)**
- **Factory Calibration Curve Units Enabled (Gallons, Imperial Gallons or Litres)**
- **Field Calibration Curve B and/or C Enabled**
- **Dispense/Display or K-Factor Entry Calibration**
- **Maximum Resolution for Field Calibration (0, 1 or 2 Decimals)**

### Changing Configuration Settings

Access to the configuration process is restricted for security until a “password” is entered. Contact your distributor or GPI to get the password and instructions to unlock and reset configuration settings. This information is also available on the GPI website. Configurations are entered and stored as six-digit “codes” where each digit represents a setting for one of the configuration options. New configuration settings are stored in the
The computer electronics are powered by lithium batteries which provide at least 9,000 hours (1 year). Under most conditions, the batteries need to be replaced about once a year. Removing the batteries before storing the meter will extend battery life. If the meter’s readout should become dim or blank, the batteries should be replaced. Replacement batteries can be ordered from your distributor or the factory. See details in the Parts Section.

When batteries are disconnected or fail, the Batch and Cumulative Totals return to zero. Factory and Field Calibration Curves are retained in the meter’s computer when power is lost.

It is strongly recommended that battery check and terminal cleaning be a part of a routine maintenance schedule. Battery terminals should be cleaned annually. Batteries can be replaced without removing the meter from the piping system.

### Replace Batteries

1. Remove the corner screws from the meter face and lift the computer electronics from the turbine.
2. Remove the batteries.
3. Check the battery terminals and remove any corrosion.
4. Install the new batteries and make sure the positive posts are positioned correctly. When the batteries are installed correctly, the computer powers on automatically and the readout displays information.
5. Make sure the O-ring is fully seated before placing the computer electronics on the turbine. Tighten the four screws.
6. Do not clean exterior of computer assembly with Isopropyl Alcohol.

### MAINTENANCE

The computer electronics are powered by lithium batteries which provide at least 9,000 hours (1 year). Under most conditions, the batteries need to be replaced about once a year. Removing the batteries before storing the meter will extend battery life. If the meter’s readout should become dim or blank, the batteries should be replaced. Replacement batteries can be ordered from your distributor or the factory. See details in the Parts Section.

When batteries are disconnected or fail, the Batch and Cumulative Totals return to zero. Factory and Field Calibration Curves are retained in the meter’s computer when power is lost.

It is strongly recommended that battery check and terminal cleaning be a part of a routine maintenance schedule. Battery terminals should be cleaned annually. Batteries can be replaced without removing the meter from the piping system.
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter is not accurate</td>
<td>1. Field Calibration not performed properly</td>
<td>Field calibrate again or select Factory Calibration.</td>
</tr>
<tr>
<td></td>
<td>2. Factory Calibration not suitable for liquid being measured</td>
<td>Perform a Field Calibration according to Calibration Section.</td>
</tr>
<tr>
<td></td>
<td>3. Meter operated below minimum flowrate</td>
<td>Increase flowrate.</td>
</tr>
<tr>
<td></td>
<td>7. Installed too close to fittings</td>
<td>Install correctly.</td>
</tr>
<tr>
<td></td>
<td>8. Installed too close to motors or electrically “noisy” environment</td>
<td>Install correctly.</td>
</tr>
<tr>
<td>Readout faded or blank</td>
<td>1. Batteries weak, dead, or not connected</td>
<td>Remove computer, check and replace batteries if necessary.</td>
</tr>
<tr>
<td></td>
<td>2. Computer defective</td>
<td>Contact the factory.</td>
</tr>
<tr>
<td>Normal flowrate but meter does not count</td>
<td>1. Field Calibration not performed correctly</td>
<td>Field Calibrate again or select Factory Calibration.</td>
</tr>
<tr>
<td>(Meter comes on when DISPLAY button pushed)</td>
<td>2. Rotor stuck or damaged</td>
<td>Remove meter. Make sure rotor spins freely.</td>
</tr>
<tr>
<td></td>
<td>3. Sealant material wrapped around rotor</td>
<td>Remove meter. Make sure rotor spins freely.</td>
</tr>
<tr>
<td></td>
<td>4. Computer defective</td>
<td>Contact the factory.</td>
</tr>
<tr>
<td>Reduced flowrate and meter does not count</td>
<td>1. Meter clogged with dried liquids</td>
<td>Remove meter. Clean carefully. Make sure rotor spins freely.</td>
</tr>
<tr>
<td>(Meter comes on when DISPLAY button pushed)</td>
<td>2. Below minimum flowrate</td>
<td>Increase flow.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptom</td>
<td>Probable Cause</td>
<td>Corrective Action</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cannot get meter into field calibration</td>
<td>1. Factory Calibration (PRESET) curve active</td>
<td>Hold down CALIBRATE and push and release DISPLAY until PRESET flag goes off. Proceed with calibration according to the Calibration Section.</td>
</tr>
<tr>
<td></td>
<td>2. Computer circuit board defective</td>
<td>Replace computer. Contact the factory.</td>
</tr>
<tr>
<td></td>
<td>3. Button defective</td>
<td>Replace computer. Contact the factory.</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

**Standard Features Include:**
- 2 Totalizing Registers
- 1 Factory Calibration Curve
- 2 Field Calibration Curves
- Rate of Flow Feature
- Flowrate Time Base in Minutes

**Input Pulse Rate:**
- Minimum Pulse In: DC
- Minimum Coil Input: 10 Hz
- Maximum Raw: 1,000 Hz

**K-Factor:**
- Minimum: .01 pulses/unit
- Maximum: > 999,999 pulses/unit

**Field Calibration:**
- Minimum Time: 10 seconds

**Readout Totals:**
- Minimum Display: 0.01
- Maximum Display: 999,999

**Temperatures:**
- Operational: +14° to +140°F (-10° to +60°C)
- Storage: -40° to +158°F (-40° to +70°C)

If wider operating temperature ranges are desired, reference information on GPI Remote Kits.

**Power:**
- Internal Power Supply: 2 Lithium Batteries at 3 volts each
- Minimum Battery Life: 9,000 hours of use (1 year)
- Optional External Power Module: 7-30 VDC
**Computer Electronics Terminal Connections**

**J-1**  
Reset  
Programming interfaces. Not accessible to user.

**J-2**  
Pulse Signal Output  
This supplies a high-level amplified open collector signal. Output will withstand a maximum open-circuit voltage of 60 volts DC and a maximum closed-circuit of 100 mA.

**J-4**  
Pulse Signal Input  
Requires a sine or square wave with open-circuit voltage of 3-30 volts P-P, a maximum rise/fall rate of 0.01 V/µ second and a maximum frequency of 750 Hz.

**J-5**  
Power Input  
When used with Ground (J1-6), this has reverse polarity protection, but no on-board voltage regulation. Supplied voltage may be 5 volts to 10 volts DC.

**J-6**  
Ground

**J-7, 8, 9, 10**  
Programming interfaces. Not accessible to user.

**NOTE:** Safety approvals are void if any external connections are made to computer electronics.
**PARTS**

The factory, when provided with model number and serial number, can replace your entire Computer Electronics Assembly.

Order replacement kits, parts, and accessories with the part numbers given here.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>113520-1</td>
<td>Battery Replacement Kit</td>
</tr>
<tr>
<td>901002-52</td>
<td>O-Ring</td>
</tr>
<tr>
<td>116000-1</td>
<td>Large (5 gal.) Calibration Container</td>
</tr>
</tbody>
</table>

For warranty consideration, parts, or other service information, please contact your local distributor. If you need further assistance, call the GPI Customer Service Department in Wichita, Kansas, during normal business hours.

1-888-996-3837

To obtain prompt, efficient service, always be prepared with the following information:

1. The model number of your computer electronics.
2. The serial number or manufacturing date code of your computer electronics.
3. Specific information about part numbers and descriptions.

For warranty work always be prepared with your original sales slip or other evidence of purchase date.

**Returning Parts**

Please contact the factory before returning any parts. It may be possible to diagnose the trouble and identify needed parts in a telephone call. GPI can also inform you of any special handling requirements you will need to follow covering the transportation and handling of equipment which has been used to transfer hazardous or flammable liquids.

**CAUTION:** Do not return computer electronics or meters without specific authority from the GPI Customer Service Department. Due to strict regulations governing transportation, handling, and disposal of hazardous or flammable liquids, GPI will not accept computer electronics or meters for rework unless they are completely free of liquid residue.

**CAUTION:** Meters not flushed before shipment can be refused and returned to the sender.

**WEEE DIRECTIVE**

The Waste Electrical and Electronic Equipment (WEEE) directive (2002/96/EC) was approved by the European Parliament and the Council of the European Union in 2003. This symbol indicates that this product contains electrical and electronic equipment that may include batteries, printed circuit boards, liquid crystal displays or other components that may be subject to local disposal regulations at your location. Please understand those regulations and dispose of this product in a responsible manner.
Copy the information located on the Turbine housing. This information will be required by Customer Service.

Model No: ________________________________
Serial No: ________________________________
MFD: ____________________________________
Distributor Name: _________________________
Distributor Phone Number: ___________________
Declaration of Conformity

Manufacturer’s Name: Great Plains Industries, Inc.
Manufacturer’s Address: 5252 East 36th Street North
Wichita, KS USA 67220-3205

Declares, that the product:

Product Name: Electronic Digital Meter
Model Numbers: 03*****
               A1***********
               A2***********
               G2********

Model numbers include all combinations of an alpha-numeric series as illustrated above.

Conform to the following Standards:

EMC: EN 50081-1 (Reference EN 55022)
     EN 50082-1

Energy - Limited Apparatus: EN 50021
I.P. Code: BS EN 60529

Supplementary Information:

“The products comply with the requirements of the EMC Directive 89/336/EEC and the ATEX Directive 94/9/EC (ANNEX VIII).”

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Signature: Mr. Grant Nutter
Full Name: Mr. Grant Nutter
Position: President
Great Plains Industries, Inc.
Place: Wichita, KS USA
May 2003
Limited Warranty Policy

Great Plains Industries, Inc. 5252 E. 36th Street North, Wichita, KS USA 67220-3205, hereby provides a limited warranty against defects in material and workmanship on all products manufactured by Great Plains Industries, Inc. This product includes a 1 year warranty. Manufacturer's sole obligation under the foregoing warranties will be limited to either, at Manufacturer's option, replacing or repairing defective Goods (subject to limitations hereinafter provided) or refunding the purchase price for such Goods theretofore paid by the Buyer, and Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer. The warranty shall extend to the purchaser of this product and to any person to whom such product is transferred during the warranty period.

The warranty period shall begin on the date of manufacture or on the date of purchase with an original sales receipt. This warranty shall not apply if:

A. the product has been altered or modified outside the warrantor's duly appointed representative;
B. the product has been subjected to neglect, misuse, abuse or damage or has been installed or operated other than in accordance with the manufacturer's operating instructions.

To make a claim against this warranty, contact the GPI Customer Service Department at 316-686-7361 or 888-996-3837. Or by mail at:

Great Plains Industries, Inc.
5252 E. 36th St. North
Wichita, KS, USA 67220-3205

The company shall, notify the customer to either send the product, transportation prepaid, to the company at its office in Wichita, Kansas, or to a duly authorized service center. The company shall perform all obligations imposed on it by the terms of this warranty within 60 days of receipt of the defective product.

GREAT PLAINS INDUSTRIES, INC., EXCLUDES LIABILITY UNDER THIS WARRANTY FOR DIRECT, INDIRECT, INCIDENTAL AND CONSEQUENTIAL DAMAGES INCURRED IN THE USE OR LOSS OF USE OF THE PRODUCT WARRANTED HEREUNDER.

The company herewith expressly disclaims any warranty of merchantability or fitness for any particular purpose other than for which it was designed.

This warranty gives you specific rights and you may also have other rights which vary from U.S. state to U.S. state.

Note: In compliance with MAGNUSON MOSS CONSUMER WARRANTY ACT – Part 702 (governs the resale availability of the warranty terms).