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PROCON INSTALLATION INSTRUCTIONS - MODBUS

1. Connect +12/24Volt and GND to appropriate terminals of the PROCON connector. If power and ground are connected properly the red LED should now be on.
2. Connect the plus and minus bus wires of the engine bus to the appropriate terminals of the PROCON connector. If the unit is for J1939 use, connect to +J1939 and -J1939 terminals. If the unit is for J1587/1708 use, connect to +J1708 and -J1708 terminals. The cable should be a twisted pair with shield grounded at the engine end only.
3. With the proper communication connections to the engine ECM, the green LED should be on. If the LED fails to turn on, try reversing the bus wires. Measure the voltages at the bus terminals. +J1939 should be 2.5 to 3.5Volts. -J1939 should be 1.3 to 2.3Volts. +J1708 should be 3.5 to 4.5 Volts. -J1708 should be 0.5 to 1.5Volts.
4. Connect the MODBUS wires to the appropriate terminals of the PROCON connector. The PROCON should now be ready for MODBUS requests.
5. Two additional LED are provided for diagnostic purposes:
 - looking at the connector strip, to the left is an LED for indicating receipt of a MODBUS request.
 - to the right, there is an LED for indicating the transmission of a MODBUS answer.
6. If there are no MODBUS messages from the PROCON:
 - Make sure MODBUS wires are connected to proper terminals.
 - Is the controller sending the proper slave address?
 - Is the controller compatible with the PI - MBUS - 300 Rex. J document?
7. RS485 wiring:
 - a: termination of the bus is not required unless distance is greater than 300 feet.
 - b: if terminating resistors are necessary, use two 120ohm resistors placed between the RS485+ and RS485- lines, one on each end of the bus.
 - c: fail-safe resistors are built inside the PROCON and are therefore unnecessary.

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