XINIEX®

C-1

Propane/CNG Solenoid Valve Control System

Installation and Operation Manual



WARNING

This device is meant to serve as a supplemental warning system. IT IS NOT meant to replace standard safety practices, which should be carried out around explosive gases (i.e., inspect engine compartment, check for loose fuel fittings, smell for fumes, etc.)

NOTE

XINTEX PRODUCTS WILL NOT FUNCTION RELIABLY, AND MAY FAIL TO FUNCTION AT ALL, UNLESS THE INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS DESCRIBED IN THIS MANUAL ARE FULLY COMPLIED WITH AND STRICTLY FOLLOWED. FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL VOID THE WARRANTY.

1. INTRODUCTION

Your Xintex C-1 Propane/CNG Control System is an easily installed solenoid valve control unit for Liquefied Petroleum Gas (LPG or propane) and Compressed Natural Gas (CNG). This device has the capability of manually opening and closing an electric solenoid valve in the supply line. When properly installed, this unit meets United States Coast Guard requirements for Propane and CNG control systems.

2. INSTALLATION

When you receive your Xintex C-1, check that you have received the following components:

- 1. one (1) control module, one (1) snap-on bezel, and six (6) mounting screws
- 2. one (1) electric solenoid valve

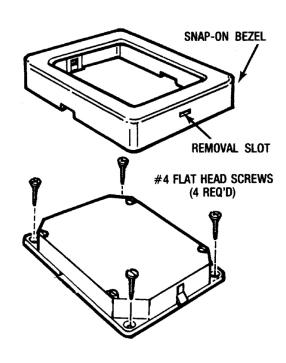


Figure 1

Figure 1 illustrates these components and may be used to verify you have the proper components for a reliable system.

Control Module

The Xintex C-1 should be mounted in a convenient location usually near the LPG/CNG appliance and in a location such that the visual indicator may be seen easily. To mount the control module, you must first remove the snap-on bezel. This can be accomplished by inserting a small flat blade screwdriver into the slot on either side of the module and carefully prying up until the bezel is loosened. With the bezel removed, you may mount the unit by using the housing itself as a template. Four of the enclosed #4 screws will hold the module from the mounting holes in the corners of the case.

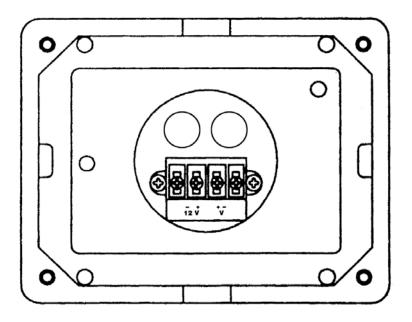


Figure 2

Terminal Strip Connections

- = Module Ground (Negative)

+12VDC = Module Positive

+12VDC = Solenoid Valve Positive -V = Solenoid Valve Negative

Electrical Solenoid Valve SV-1

A. LPG Installation

The electrical solenoid valve should be mounted on the tank side of the LPG regulator, as close to the tank as practical. The tank itself should be mounted outside the cabin or crew quarters to avoid the possibility of gas accumulation due to a leak between the tank and solenoid valve.

B. CNG Installation

Because of the higher tank pressure of CNG, the valve must be installed after the CNG regulator and as close to the regulator as possible. The tank itself should be mounted outside the cabin or crew quarters to avoid the possibility of gas accumulation due to a leak.

NOTE: After installation, all piping or hose joints must be checked for leaks with a soapy water solution. Never use a flame to test for leaks.

NOTE: The solenoid provided is a normally closed solenoid and must have power applied to open.

Voltage and Current Specifications

Voltage: +12 to +15 VDC. This is normal Marine/Automotive battery and alternator

voltage.

Current: The C-1 uses varying amounts of current depending on the status.

Valve off 5.0 mA max. Valve on 0.6 A max.

Maximum Load: Valve control (current sink) 2.0 A max.
Valve Specifications SV-1 0-312 PSI max.

3. OPERATION

When the installation has been completed, the control system is ready for operation.

Apply power to the control module. The LPG/CNG valve may now be energized by pushing the "VALVE ON/OFF" button. When this is done, the valve will open and the red light above the "VALVE ON/OFF" button will light indicating the valve is open and gas may flow. Push the same button again to turn the valve and light off when you no longer need the gas flow. The C-1 will continue to control the solenoid valve as long as the power light is on. If the control module should ever lose power, the valve will close until power is restored and the valve is opened with the "VALVE ON/OFF" button. WHEN THE FUEL FLOW IS NOT NEEDED, THE VALVE SHOULD BE LEFT CLOSED (OFF) TO REDUCE THE POSSIBILITY OF GAS ACCUMULATION DUE TO LEAKS.

The control module installation may be checked by lighting the LPG/CNG appliance with the valve open and then closing the valve using the "VALVE ON/OFF" button. The appliance should extinguish after the fuel in the supply line is consumed.

4. MAINTENANCE

The C-1 requires very little maintenance. Periodic visual inspection of the fuel line, the solenoid valve, and the control module wires should be performed to check for corrosion or potential leaks. Valve operation should be checked occasionally by observing that the flame extinguishes after the valve is turned off.

5. TROUBLESHOOTING

The most likely problem that will be encountered is a non-functional valve. If this should occur, thoroughly check the solenoid wires for loose connections or broken wires.

NOTES:

More LPG Products Available from Xintex:

- S-1/S-1A/S-2A LPG Fume Detectors
- One and Two Stage Regulators
- Hoses
- Adapters
- Brass Fittings
- Accessories

More Safety Products Available from Fireboy-Xintex:

- Automatic Clean Agent Fire Extinguishers
- Manual/Automatic Clean Agent Fire Extinguishers
- Portable Clean Agent Fire Extinguishers
- Carbon Monoxide Detectors
- M-1/M-2A Gasoline Fume Detectors
- MB-1/MB-2 Gasoline Fume Detectors with Blower Control

ONE (1) YEAR LIMITED WARRANTY This warranty is in lieu of all other expressed or implied Warranties

Seller warrants title, materials, and workmanship on Fireboy-Xintex equipment, and assigns the original manufacturer's warranty on those components manufactured by others, as permitted. Seller's warranty shall be for a period of one (1) year from the date of sale to the ORIGINAL CONSUMER. Fireboy-Xintex, Inc., does not assume the costs of removal and/or installation of the product or any other incidental costs which may arise as a result of any defect in materials or workmanship. Any non-conforming equipment returned to the Seller at Buyer's expense and risk shall be repaired or replaced at Seller's option. provided that: (a) the product has not been subjected to abuse, contamination, neglect, accident, incorrect wiring not our own, improper installation or servicing, or used in violation of the instructions furnished by Fireboy-Xintex, Inc.; (b) the product has not been repaired or altered by anyone other than Fireboy-Xintex Inc.; (c) the serial number has not been removed, defaced, or otherwise changed; (d) the product is determined to contain defective materials or workmanship; and (e) use of the product is discontinued upon discovery of defective materials or workmanship and Fireboy-Xintex Inc. is notified immediately.

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This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

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