SAFTRONICS

INSTRUCTION MANUAL

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24/120 VAC Interface Option Card Kit for the GP10 / VG10

Part Number 100-0171-01

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SAFETY FIRST !

LETHAL VOLTAGES MAY BE PRESENT

PLEASE READ THIS MANUAL THOROUGHLY BEFORE ATTEMPTING ANY INSTALLATION, OPERATION, MAINTENANCE,OR INSPECTION. FAILURE TO FOLLOW THE RECOMMENDED PROCEDURES OR CAUTIONS IN THIS MANUAL COULD RESULT IN INJURY TO PERSONNEL AND / OR DAMAGE TO THE EQUIPMENT.

CAUTION

1 – CHECK THE NAME WRITTEN ON THE PRODUCT AND INSURE THAT THE PROPER PART HAS BEEN RECEIVED.

2 – THOROUGHLY INSPECT THE PART(S) FOR ANY DAMAGE DUE TO SHIPMENT OR HANDLING.

3 - THE PART(S) MAY CONTAIN CMOS CHIPS AND CAN BE DAMGED BY STATIC ELECTRICITY. HANDLING SHOULD BE IN ACCORDANCE WITH INDUSTRY STANDARDS.

4 - BEFORE INSTALLING THE PART(S) TURN OFF ALL POWER TO THE EQUIPMENT AND INSURE THE CHARGE INDICATOR LAMP ON THE INVERTER IS **OFF**. ***LETHAL VOLTAGES ARE PRESENT***

5 - DO NOT CONNECT OR DISCONNECT WIRING WHILE POWER IS ***ON !***

6 - FOLLOW GOOD STANDARD WIRING PRACTICES AND ANY APPLICABLE CODES THAT MAY

GP10 / VG10 24 / 120 VAC Interface Option Card Kit

P/N 100 – 0171 – 01

Description

The **100 – 0171 – 01** Option Card is designed for use with the **Saftronics GP10 / VG10** Inverter series. It provides a hardware interface between the users' 24 to 120 VAC input control circuitry and the inverter. It has 5 inputs, including FWD and REV with 5Kvac isolation.

Specifications

Input Control Voltage	-	24 to 120 VAC
Input Resistance	-	50 kohm
Input Isolation Voltage	-	5 Kvac

Kit Includes

(1) 100-0164-01 OPTION CARD
(3) P/N 026-6008 SUPPORTS
(1) P/N 020-0212 M3-6 SCREW

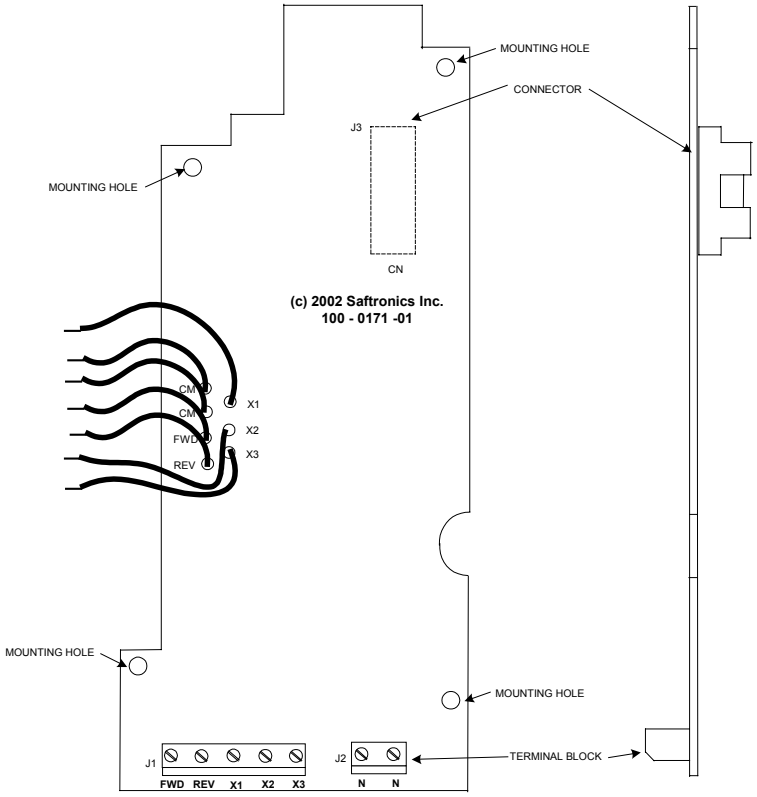


Fig. 1 Product Appearance

Installation

Please read this manual in its' entirety before attempting any installation!

Turn off all power to the equipment being worked on before attempting any installation. **Fig. 1** Shows the appearance of the option card. Ensure that the proper option card has been received along with the accessories listed and that no damage has occurred to the parts.

Following **Fig. 3** or **Fig. 4**, install the option card for the **GP10** / **VG10** Inverter HP ranges listed. Using Good standard practices and, in accordance with applicable codes, make the connections to the option card in accordance with **Fig. 2**, Connection Diagram, and the application requirements.

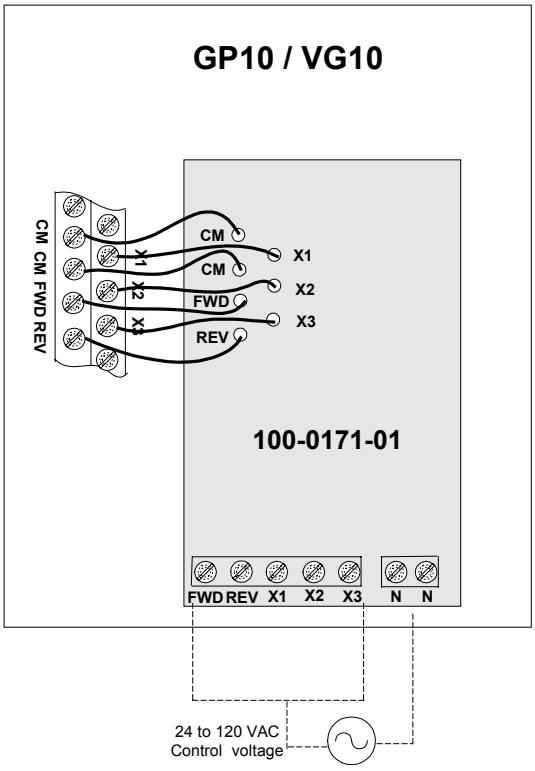
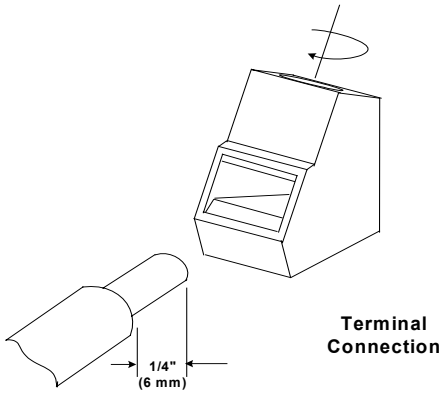


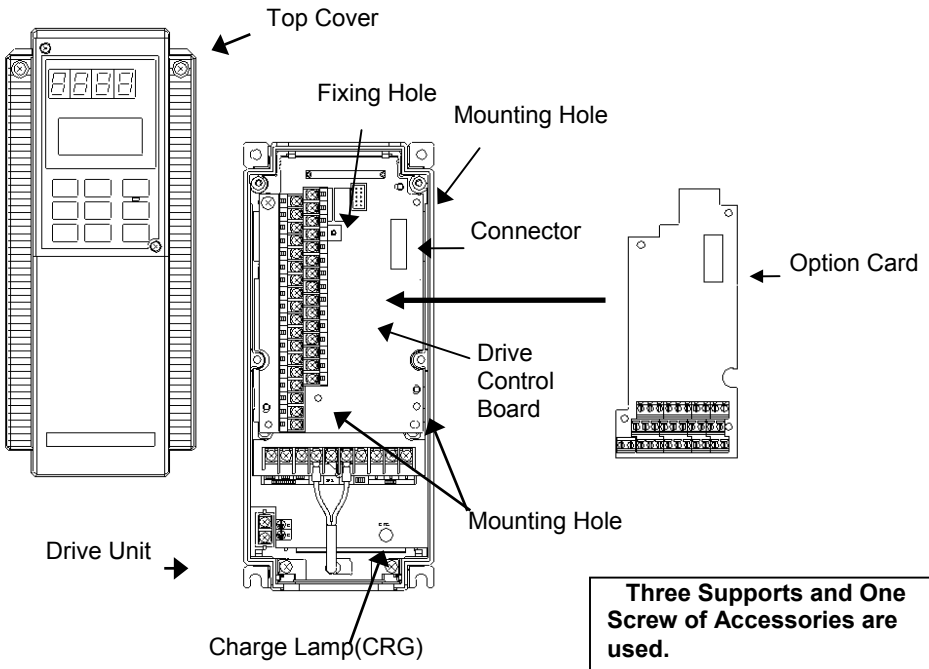
Fig. 2 Connection Diagram

Terminal Connection on Option Card

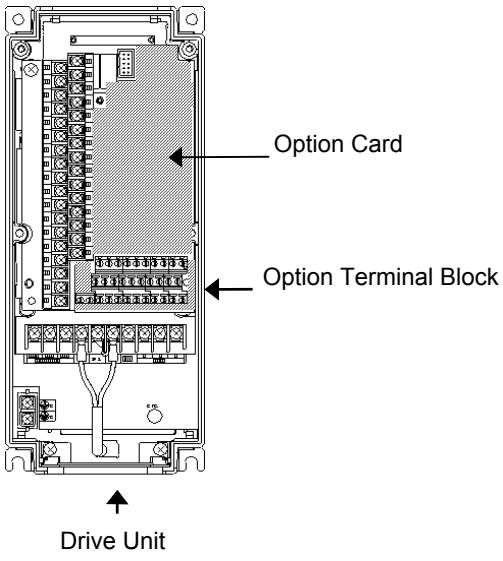
The wire size range that the option card connection terminal(s) can accommodate, is AWG: 16-26.
Referring to the figure below, strip the wire back about 1/4 " (6 mm) and make the connection to the terminals by inserting wire into the upper side of the metal bracket on the terminal block, and tighten the screw.



GP10 / VG10 30 HP or less



Three Supports and One Screw of Accessories are used.



Step1

Remove the top cover, and insert the accessory supports into the three mounting holes on the drive control board.

Step2

Set the supports inserted in step 1 on the option card, and insert the drive control board connector to the option card connector. After that, check that you can see the pins of the supports on the option card.

Step3

Insert and tighten the screw (M3 x 6) in the fixing holes to secure the option card.

Step4

Wire the option according to the basic connection diagram.

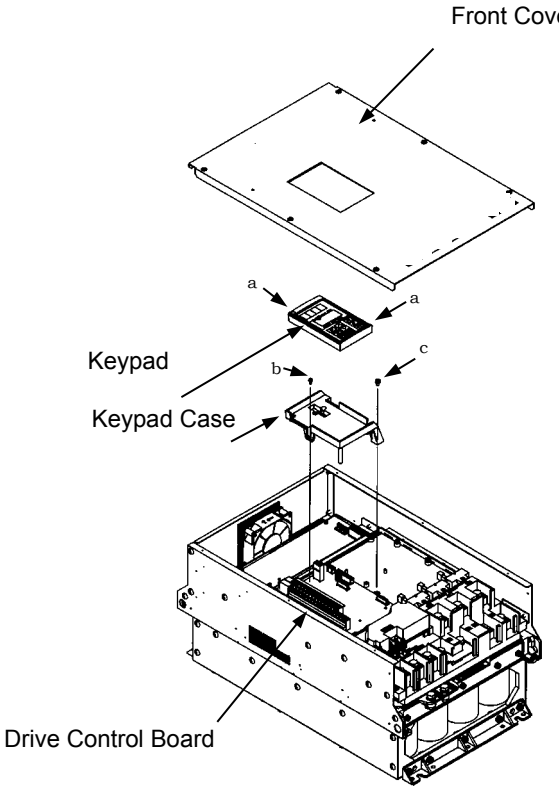
Step5

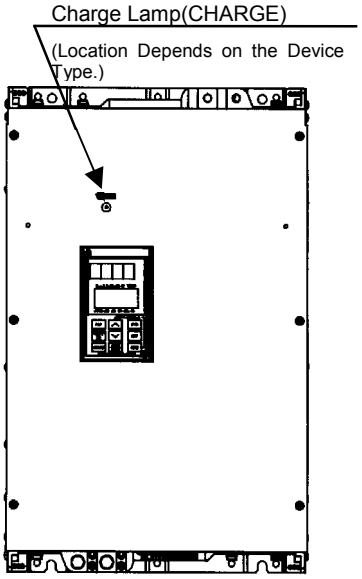
Confirm that the option card and all wires are installed correctly, then replace the top cover of the drive.

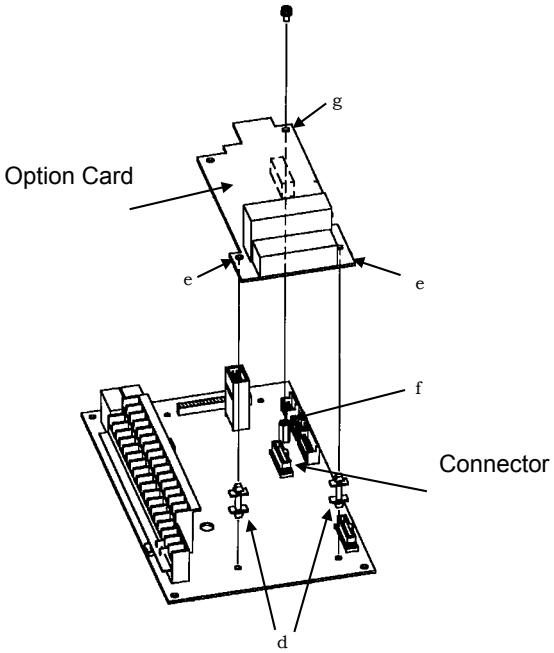
Fig. 3 30 HP or Less

VG10 40 HP and above

Two Supports and One Screw of Accessories are used.







Step 1

Remove the front cover and loosen the two M3 screws (a) to remove the keypad panel.

Step 2

Remove one M3 screw (b) and one M4 screw (c) to remove the keypad panel case.

Step 3

Insert the two accessory supports (d) into the drive control board.

Step 4

Insert the two supports (d) into the holes (e) on the option card. Align the support (f) with the hole (g) on the option card, then and insert one connector.

Step 5

Insert and tighten the accessory screws (M3 x 6) at (f) and (g) to secure the option card.

Step 6

Replace the keypad panel, case, keypad, and the front cover. then reassemble the drive.

Fig. 4 40 HP and Above

WARNING!

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Under no circumstances should any *Saftronics* product be incorporated into any product or design as the exclusive or sole safety control. Without exception, all controls should be designed to dynamically fault detect and fail safe under all circumstances. All products designed to incorporate a component part manufactured by *Saftronics*, must be supplied to the end user with appropriate warnings and instructions as to the safe use and operation. Any warnings provided by *Saftronics* must be passed through to the end user.

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