

## INTRODUCTION:

Before installing this Serial Communication Option kit, a TECHNICALLY QUALIFIED INDIVIDUAL, who is familiar with this type of equipment and hazards involved, should READ this ENTIRE INSTRUCTION SHEET.

The Serial Communication Option Kit is an add-on assembly for the GPD315/V7 Adjustable Frequency Drive.

## KIT CONTENTS:

Unpack the Serial Communication Option Kit (Yaskawa Part No.:CM\_\_\_\_). The following should be present:

- 1. Yaskawa Document Entitled *Outline of Option Assembly Kit* (Product Information No. 99001).
- 2. Plastic bag containing one (1) M3X8.5 Decorative Screw, one (1) pan-head screw, two (2) blue ground wires and one metal connection plate.
- 3. If Devicenet, one (1) data diskette (Yaskawa Part No.:49S03011-0000).
- 4. If Profibus, one (1) data diskette (Yaskawa Part No.: 46S03470-0010).
- 5. If CANOpen, one (1) data diskette (Yaskawa Part No.:49S03016-0000).
- 6. Assembled Serial Communication Option Ring Kit (Yaskawa Part No.: 05P00613-0020).
- 7. GPD315/V7 Communication Option Manual (Yaskawa Part No.: TM followed by four digit number depending on given serial protocol).

## **IMPORTANT**

ALL POWER AND CONTROL WIRING TO THE GPD315/V7 SHOULD BE INSTALLED BEFORE CONNECTING THIS SERIAL KIT TO THE DRIVE.

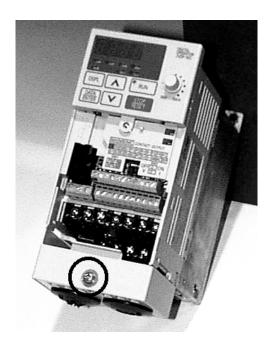
\_ POWER TO DRIVE SHOULD BE TURNED OFF!

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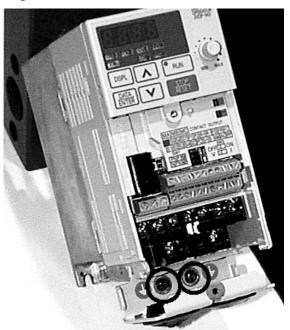
## **INSTALLATION:**

Note: Figure 1 Intentionally deleted.



1) Remove top screw from faceplate 2) Remove the faceplate from the drive and remove bottom screw (highlighted by bottom circle in Figure 2).

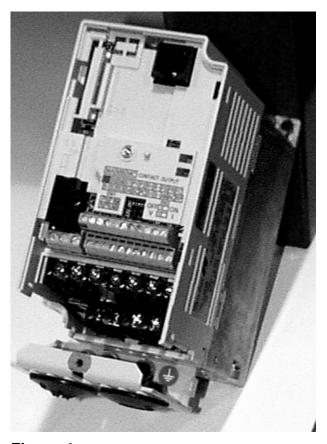
Figure 2



3) After the screw is removed, the NEMA1 Endcap Bracket can be pulled off. The black circles (Figure 3) shows where the ground screws are located. This will be the point of connection for the ground wire from the serial communication kit.

Figure 3





4) Remove the digital operator from the top portion of the drive assembly. Drive should now appear as shown in Figure 4.

Figure 4

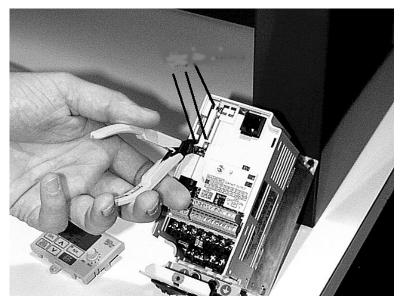
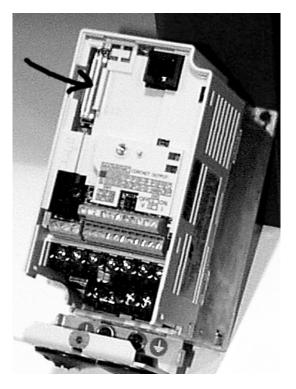


Figure 5

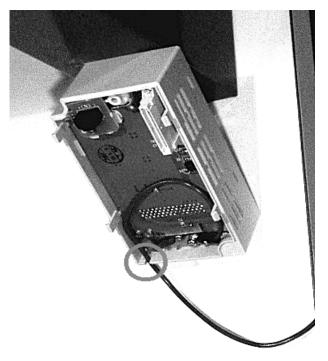
5) Use a diagonal side cutters to cut the three plastic tabs (Figure 5 w/ black lines pointing to them) that secure the protective cover over the GPD315/V7's CN2 port. Remove this protective cover.





6) The CN2 port should be exposed (highlighted by black arrow: Figure 6) after performing this operation.

Figure 6



7) The backside of the Serial Communication Option Kit is shown in Figure 7. Make sure that the blue ground wire on the back side of unit is looped through the case cut-out (highlighted by grey circle).

Figure 7



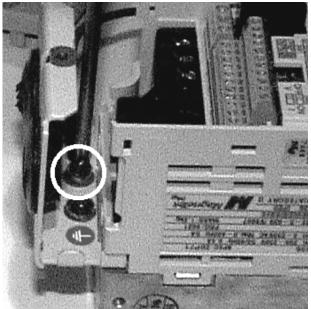


Figure 8

8) Remove Philips-head Ground screw and associated washer from the GPD315/V7 (white circle in Figure 8 and also shown previously in Figure 3).

Put this screw through the blue wire lug on the Serial Communication Option Kit, and the put the washer back on the screw. Reinstall this back into the drive in location highlighted by white arrow.

NOTE: If the blue wire previously installed on the Serial Communication Kit appears too long or too short, there are two other different size wires provided in the plastic bag in the kit.

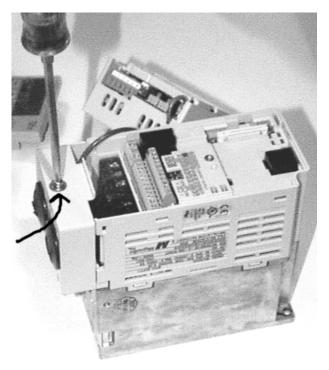


Figure 9

9) Reinstall the NEMA1 Endcap Bracket. Make sure that blue ground wire is routed out of the way so as not to obstruct this installation (Figure 9).

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10) Remove the pan-head screw (brass-colored) and the metal connection plate from the plastic bag containing hardware.

There are two holes in the connection plate: One is for the pan-head screw, and one is for the plastic mounting hub. Place the metal connection plate on the in the manner shown in figure 10, and tighten with Philips screwdriver.

Figure 10

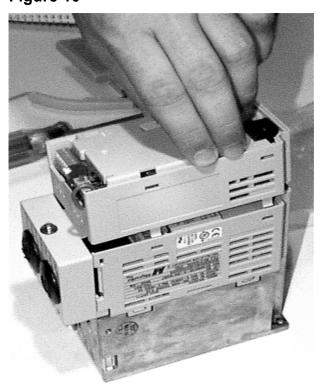
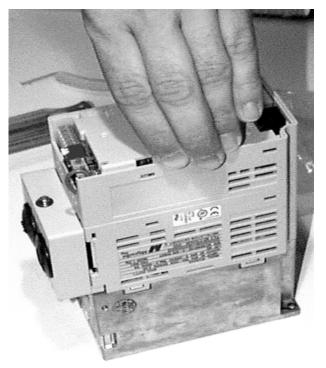


Figure 11

11). If necessary, tuck the blue wire into the enclosure of the GPD315/V7 drive and position the Serial Communication Kit on top of the drive in the manner shown in Figure 11. MAKE SURE THAT BLUE WIRE IS NOT GETTING PINCHED BETWEEN THE SERIAL COMMUNICATION KIT AND THE DRIVE OR ELSEWHERE!!





12) Snap Serial Communication Kit securely in place as shown in Figure 12.

Figure 12

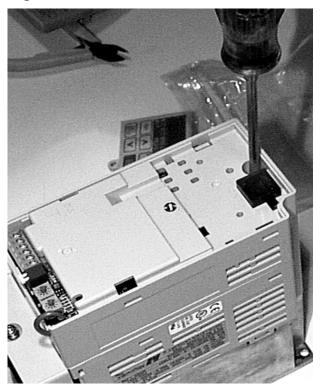
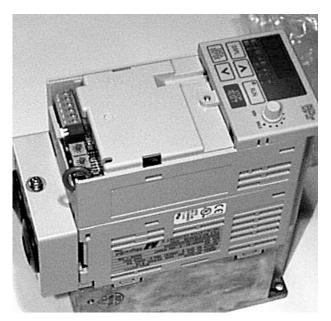


Figure 13

13) Remove Decorative M3X8.5 Screw from plastic bag (silver colored) and place in recessed circular hole at top of Serial Communication Kit (where screwdriver is presently located in Figure 13).

Tighten this screw with Philips screwdriver.





14) Install Digital Operator as shown in Figure 14.

Figure 14



15) Reinstall faceplate and associated screw.

Figure 15

Physical installation of the kit is now complete. For electrical and software set-up, consult the manual accompanying this kit as well as the *GPD315/V7 Technical Manual* that accompanies the drive.