

## XYCOM 2050 Graphics Display Unit Set-Up Information For Use with a PLC-2 (Installation of EPROM 27C010 screen programs in the XYCOM)

**WARNING**  
**Never attempt to open any piece of equipment without disconnecting all external power sources.**

### INTRODUCTION

The XYCOM 2050 is a graphics display unit which interfaces with the Besser PLC-2 Programmable Controller. The graphics unit is comprised of two parts (see Figure 1):

- XYCOM Plant Floor Terminal
- Communication Cable

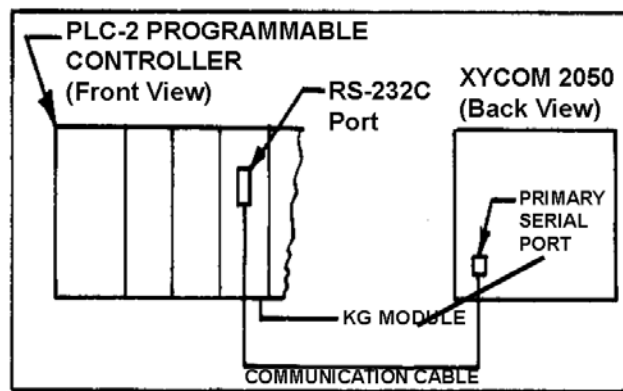


Figure 1

### Applicable Besser Part Numbers

Part Number	
113762	XYCOM 2050 Graphics Display Unit
113761	EPROM (Screens)
113760F00006	EPROM (Firmware) PLC-2
455776F0025 – 455776F0100	Communication Cable (Available 25 Feet – 100 feet in 5 foot increments)

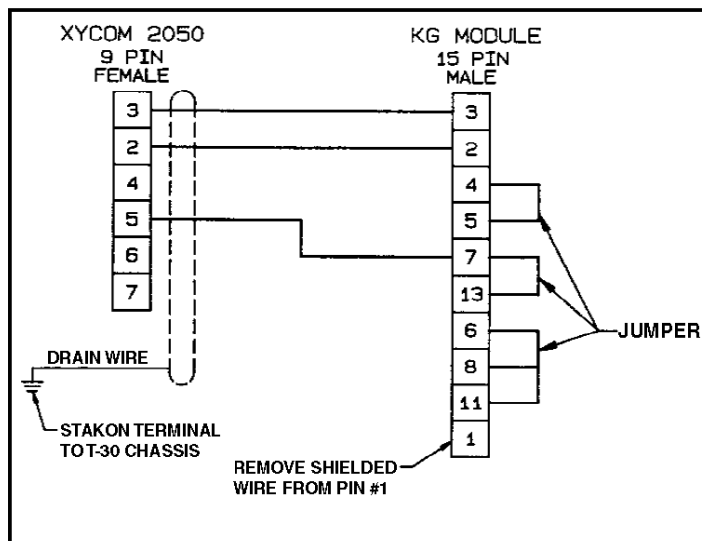


Figure 2

### Configuring the Communications Cable

The communication cable electrically connects the PLC-2 controller with the graphics display unit. The cable wires and connections should be configured as shown in Figure 2.

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### IMPORTANT

- **ALWAYS** shut power "OFF" before setting switches or changing jumpers.
- **ALWAYS** use a ball point pen or paper clip to toggle switches – **NEVER** use a pencil; any graphite build-up will act as a conductor completing the circuit.
- **ALWAYS** make sure the switch is fully tripped, and listen for the "click" as you push it down.

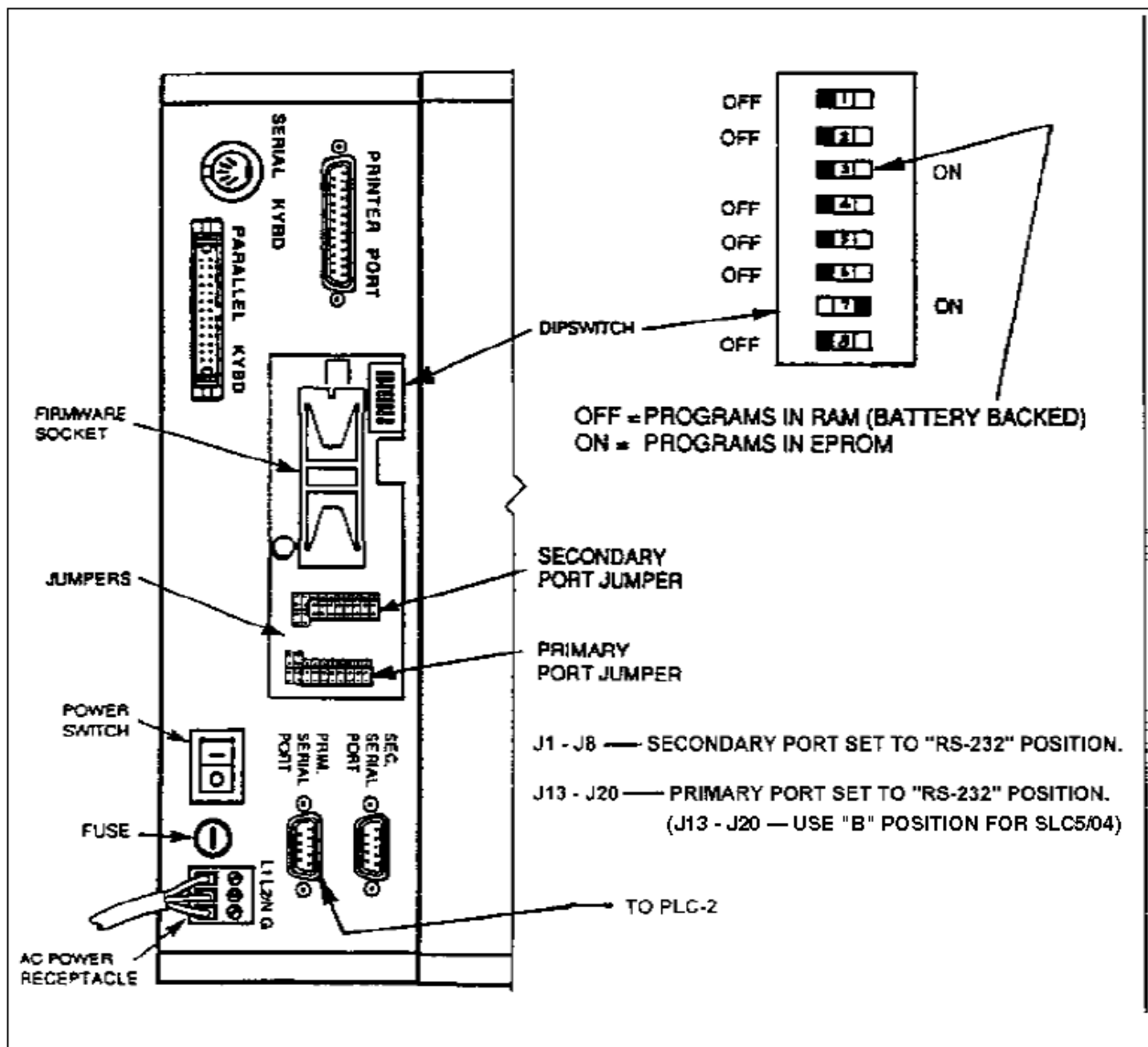


Figure 3

### Dip Switch and Port Jumpers Selections

The Dip Switches and Port Jumpers must be set at shown in Figure 3.

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- **ALWAYS** shut off power before setting switches.
- **ALWAYS** make sure the switch is fully tripped, and listen for the “click” as you push it down.

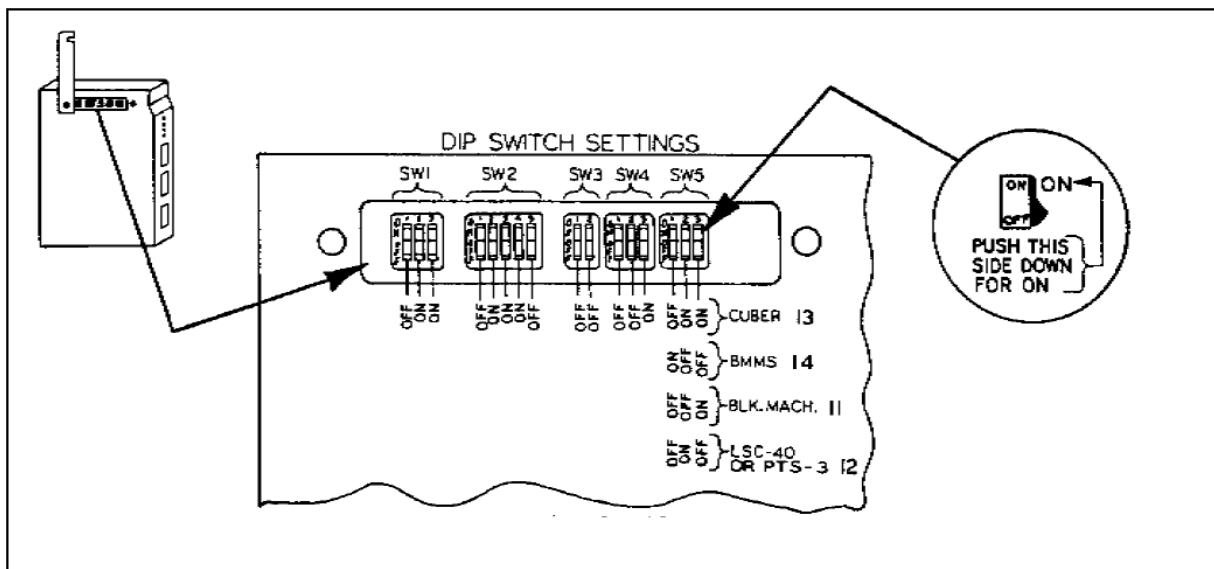


Figure 4

### Configuring the KG Communication Module

The KG communication module resides in the PLC-2 rack. It has a bank of dip switches that must be set according to Figure 4. To access the dip switches, loosen both screws on the side panel that hold the flip plate in place. The flip plate is slotted so that it can be opened without removing it from the module.

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### XYCOM 2050 CONFIGURATION

**(Press C & Enter keys to start)**

Then **Press 1**

- 1) Configuration
- 2) Program Utilities
- 3) Backup/Restore
- 4) Diagnostics
- 5) Terminal Mode
- 6) Set Password

<p><b>Press C</b>  <b>Data Highway Port Configuration Menu (P)</b>                      6 -Baud = 9600                      0 -No Parity                      0 -Foreground Mode                      6 -ACK Timeout Value                      030 -RESPONSE Timeout Value                      013 -Station Number                      0 -Disable Multiplex Handshaking</p>	<p><b>Press C</b>  <b>Secondary Serial Port (S)</b>                      3 -Baud (1200)                      0 -Parity                      0 -Disables                      1 -8 Data Bits                      1 -Full Duplex                      0 -Disables                      1 -RTS/CTS                      0 -Don't Echo Input</p>
<p><b>Press C</b>  <b>Miscellaneous Configuration Menu</b>                      0 -Block Cursor                      1 -60 HZ. (0-50Hz)                      1 -Add printer linefeeds                      1 -Process all serial data                      0 -Lock Keypad Menu Entry                      1 -Parallel Input Port Strobe                      001 -Start-up Program Block Number                      0000 -Number of Extra Date Registers                      1 -Number of Status Lines (0 -24)</p>	<p><b>Press C</b>  <b>Real Time Clock Configuration Menu</b>                      0 -Clock Display Disabled                      0 -12 Hour Clock                      00 -Year                      01 -Month                      01 -Day                      00 -Hour                      00 -Minute                      00 -Second</p>

Figure 5

Press **ENTER** to quit.  
 Press **C** to continue.

### Configuring the Graphics Display Unit

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The display unit must be configured as shown in Figure 5. The configuration menu screen can be brought up on the terminal by:

1. First turn the electric power to the terminal to the "ON" position. (The electrical power switch is located on the back of the unit.)
2. Then simultaneously pressing "C" and "ENTER" keys.

### Installation of EPROM 27C010 screen programs into the XYCOM 2050 graphics display.

1. Remove the cover from the top of the graphics display unit. The display must be removed from pedestal style enclosures to remove the top cover. This may be accomplished by removing the bezel screws on the front of the enclosure and sliding the display out through the front with the bezel attached.
2. Locate the controller board as shown in Figure 6.
3. Install EPROM 27C010 into socket U25. The gray ribbon cable may be disconnected during this procedure.
4. Place Jumper J10 to the "B" position (See Figure 6).
5. Remove the cover plate from the back panel of the unit by loosening the two screws as shown to the right.
6. Remove the firmware EPROM and insure it is VERSION 3 (See Figure 3). Replace with the correct version EPROM if necessary.
7. Place dip switch 3 in the on/closed position (See Figure 3).
8. Ensure the gray ribbon cable is attached; replace the display cover and the small access panel.

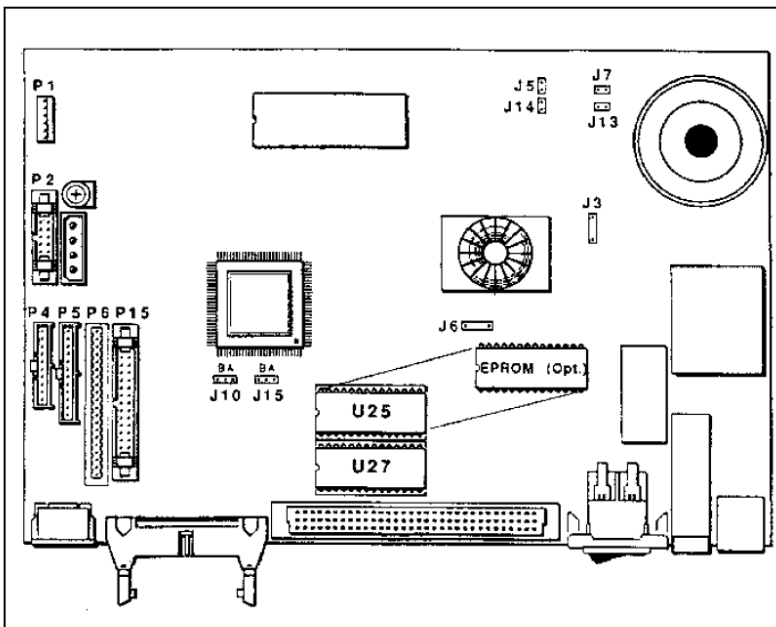
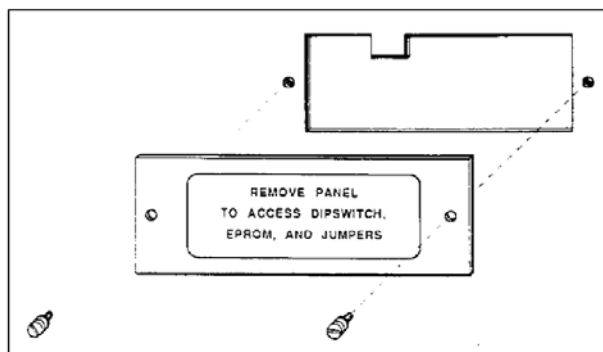


Figure 6



## XYCOM 2050 Graphics Display Unit Set-Up Information For Use with a PLC-2 *(Installation of EPROM 27C010 screen programs in the XYCOM)*

### **SAFETY BULLETIN**

This notice is issued to advise you that some previously accepted shop practices may not be keeping up with changing Federal and State Safety and Health Standards. Your current shop practices may not emphasize the need for proper precautions to insure safe operation and use of machines, tools, automatic loaders and allied equipment and/or warn against the use of certain solvents or other cleaning substances that are now considered unsafe or prohibited by law. Since many shop practices may not reflect current safety practice and procedures, particularly with regard to the safe operation of equipment, it is important that you review your practices to ensure compliance with Federal and State Safety and Health Standards.

### **IMPORTANT**

The operation of any machine or power-operated device can be extremely hazardous unless proper safety precautions are strictly observed. Observe the following safety precautions:

#### **ALWAYS:**

- ✓ Be sure proper guarding is in place for all pinch, catch, shear, crush, and nip points.
- ✓ Be sure that all personnel are clear of the equipment before starting it.
- ✓ Be sure the equipment is properly grounded.
- ✓ Turn the main electrical panel off and lock it out in accordance with published lockout/tagout procedures prior to making adjustments, repairs, and maintenance.
- ✓ Wear appropriate protective equipment such as safety glasses, safety shoes, hearing protection, and hard hats.
- ✓ Keep chemical and flammable material away from electrical or operating equipment.
- ✓ Maintain a safe work area that is free from slipping and tripping hazards.
- ✓ Be sure appropriate safety devices are used when providing maintenance and repairs to all equipment.

## XYCOM 2050 Graphics Display Unit Set-Up Information For Use with a PLC-2 *(Installation of EPROM 27C010 screen programs in the XYCOM)*

### **NEVER:**

- ✓ Exceed the rated capacity of a machine or tool.
- ✓ Modify machinery in any way without prior written approval of the Besser Engineering Department.
- ✓ Operate equipment unless proper maintenance has been regularly performed.
- ✓ Operate any equipment if unusual or excessive noise or vibration occurs.
- ✓ Operate any equipment while any part of the body is in the proximity of potentially hazardous areas.
- ✓ Use any toxic flammable substance as a solvent cleaner.
- ✓ Allow the operation or repair of equipment by untrained personnel.
- ✓ Climb or stand on equipment when it is in operation.

It is important that you review Federal and State Safety and Health Standards on a continual basis. All shop supervisors, maintenance personnel, machine operators, tool operators, and any other person involved in the setup, operation, maintenance, repair or adjustment of Besser-built equipment should read and understand this bulletin and Federal and State Safety and Health Standards on which this bulletin is based.