

Customer Unpacking Instructions for The Digital Group Printer

Please read the documentation and revision materials before assembling the printer as it contains pertinent information and changes.

Inspect the printer mechanism for any damage that might have occurred in shipping. Before operating the printer, remove the foam block or tape used to secure the print head. Inspect the print head to see that it moves freely. The margin detecting circuitry (photo cell) referred to in the documentation and in the P.A. Manual is located on the right as you face the front of the printer. Check to see if it is still in place and that a flat metal bar mounted on the print head breaks the path of the photo cell with the print head moved to the far right. This is used for starting the left printing margin (note convention for left). The bar may be adjusted by carefully pushing it through the head.

Inspect the ribbon inking spools and ribbon posts and install the ribbon as detailed in Figure 7 of the P.A. Manual.

The print head makes connections to the interface card via a 16-pin DIP plug. This DIP plug has been mounted in the printer mechanism PC card to prevent shipping damage and should be removed before making any connections to the printer PC card. This DIP plug will be installed as detailed in later assembly instructions and is shown in a photo in the documentation.

A corrected Figure 2 shows connections between the interface card and the printer mechanism. Please check the connections to pin 21 and pin 32 of the printer mechanism PC card before applying power. A diode mounted on the printer mechanism PC card is reverse biased by the +35V DC supply. An incorrect connection will apply +35V DC in a forward biased direction and burn out this diode.

The 40-conductor cable connects to the printer mechanism PC card with the lower numbers on top. These numbers are labeled on the face of the cable plug with odd numbered cables on the right (facing the front of the printer) and even numbers on the left side of the PC card.

The routines in the tape begin at address 006011 in the 64-character version, and at address 012006 in the 32-character version. To operate the printer with the tape supplied, load the version of MAXI-BASIC compatible with your system (32- or 64-character). After loading properly, check MAXI-BASIC, Option 7 to see that your system is operating correctly.

Testing as detailed in the revision documentation packet uses MAXI-BASIC, Option 7. MAXI-BASIC commands OUT and INP may be used to directly test the printer; read and follow the troubleshooting section in the documentation revision packet. Note that MAXI-BASIC instructions require decimal parameters while the printer routines use octal or hex parameters. MAXI-BASIC, Option 9 directly interfaces MAXI-BASIC to the printer routines.

Printer Documentation Revisions

A packet is included that contains corrections as well as additional information on the printer. Please read it before beginning assembly.

A fuse modification has been detailed in the revisions to prevent damage to the print head in the event of excess current from the solenoid drive circuitry. Parts for this modification are also included.

Several changes in the Parts List and the Assembly Instructions have been made and are also listed in the revision.

Diodes D5 - D11 have been changed from IN4001 to IN4004 as originally specified. These have been included in your kit and should be installed in place of the IN4001's in Step 4. D1 should be added to Step 4 also.

The layout sheet shows diodes D33 and D34 installed. These diodes are not installed and have not been included in the kit.

Q3 was shown incorrectly on the layout. This transistor may be correctly installed by bending the base lead between the collector and emitter leads. The tab will then be directly opposite that shown.

For making I/O connections per Steps 40 - 42 of the documentation revision packet, 18-conductor flat cable, approximately 18" long, is recommended for the interface card to the printer backplane dual edge connector (see photo). Molex connections can be made to the dual edge connector. Solder the flat cable directly into connector 3 (interface card pins 1 - 18). Then, using the schematic or Step 40A, make connections to the Molex blocks (one each, input port and output port). For making a cable per Steps 41 and 41A, use a shielded cable approximately 4 - 6 feet in length and two 22-pin paddlecards (single or double sided). GND may be carried through the shielded cable from the CPU backplane to the printer backplane connector. Be sure to verify all connections before applying power.