SECTION 3
OPERATOR MAINTENANCE AND CLEANING

3.1 OPERATOR MAINTENANCE

Your plotter has several sliding surfaces. These are made of smooth metals and plastics so that they are essentially friction-free and require no lubricants. These will, however, collect dust and lint which will adversely affect the performance of the plotter. Keep the plotter as clean as possible by using a dust cover. When necessary, clean the unit with a soft cloth dampened with isopropyl alcohol or mild detergent. (Do not use abrasives.)

Ink On Plotter Surface:

Use a clean cloth dampened in a concentrated solution of soap and water; squeeze out excess water and then scrub the affected surface. Be sure that no water drips into the plotter as this will cause electrical shorting of the internal components. Do not use any aerosol cleaners, such as TV contact cleaner, household wall cleaners, or anything containing a solvent; these may damage certain components.

Care of Media:

The plotting media should be handled by its edges. Pen skipping may occur if the media has smudges or has been permeated with oil, grease, perspiration, or other contaminants.

Optical Chart Sensor Care:

Improper chart sensing may result if dirt, dust, or other debris should collect in the chart sensor hole, which is located on the top right side of the rear platen. When necessary, use compressed air or a small soft brush to clear debris from the hole above

3.1.1 Cleaning Friction Drive Wheels

The friction drive wheel area of the plot drum can become clogged with accumulated residue from the plotting materials. This can cause slippage of the plotting material between the plot drum and the pinch rollers, resulting in inaccurate plots.

The following procedure explains how to clean the friction drive wheels when necessary. Note that the special cleaning strips (part number DMP40-303) are available from Houston Instrument or your product distributor.

1. Remove plotting material from the unit.

2. Place the plotter into manufacturing setup mode level 1 (MSM/L1) as explained in Appendix B.

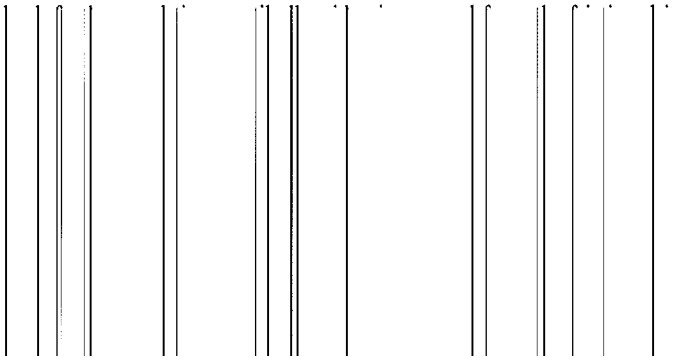
3. Remove the plotting media if installed, and then place the plotter in MSM/L1 local mode. This enables you to use the control panel manual movement keys without a chart installed in the plotter.

4. Remove the protective liner from the cleaning strip.

5. Open the right pinch roller arm.

6. Place the cleaning strip between the pinch roller and the plot drum, with the tacky side of the cleaning strip toward the friction drive wheel as shown in Figure 3-1.

7. Using the ▲ and ▼ switches on the control panel, slew the cleaning strip



10. Set the plotter's power switch to off.

11. Residue can be removed from the cleaning strip by washing it in cold water. Thoroughly dry the cleaning strip and replace its protective lining.

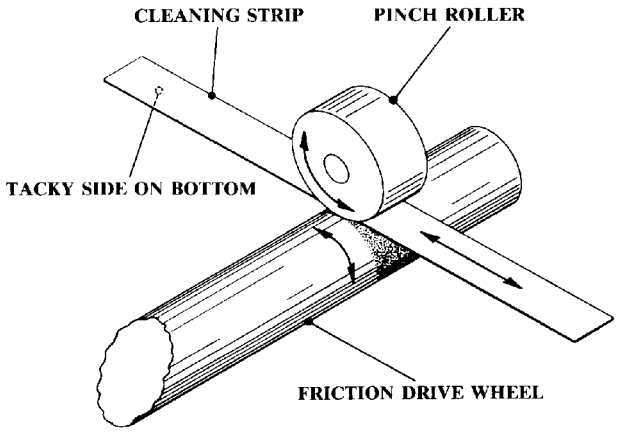


Figure 3-1.
CLEANING FRICTION DRIVE WHEELS

3.2 OPERATING VOLTAGE CONVERSION

The plotter will operate on either 100, 120, 220, or 240 Vac line voltage (see Table 1-1 for the minimum/maximum voltage ranges). To convert the plotter's operating voltage, follow the procedure below.

1. Turn the plotter's power off.

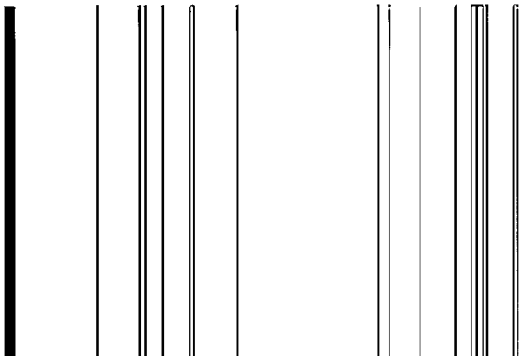
2. Unplug the ends of the power cord from the ac wall outlet and from the ac receptacle on the bottom panel of the plotter.

3. Slide the protective window to the left (see Figure 3-2).

4. Pull the "FUSE PULL" lever out and remove the fuse.

5. Pull the voltage select board, which is located inside the fuse cavity below the fuse holder, out from the fuse cavity. As shown in Figure 3-2, one side of the voltage select board has the numbers "120" and "240" printed on it, and the other side has the numbers "220" and "100." The numbers indicate the operating voltage of 120, 240, 220, and 100 Vac. Hold the board in your hand so the number that reflects the desired operating voltage ("100," "120," "220," or "240") appears upright on the left side of the voltage select board. (The other number will appear upside down.) While holding the board in this position, slide it back into its place inside the fuse cavity (see Figure 3-2). The number that indicates the operating voltage will now be visible from the outside of the fuse cavity window.

WARNING



6. Close the protective window over the fuse cavity by sliding it to the right.

7. Connect the power cord. The plotter is now ready to be operated on the selected ac line voltage.

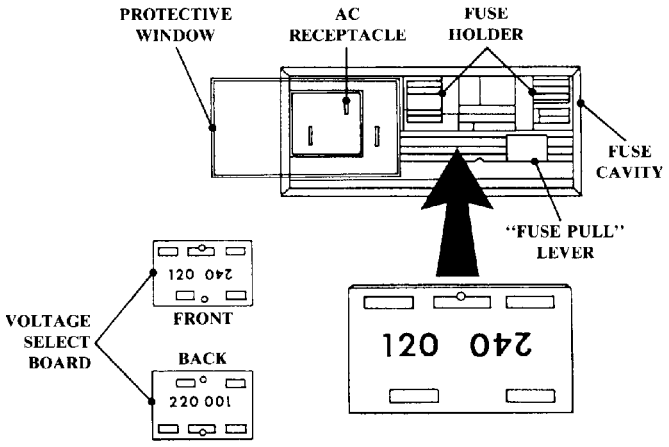


Figure 3-2.
EXAMPLE OF 120 VAC CONVERSION

3.3 PRODUCT SERVICE SUPPORT

If you need technical assistance or if you suspect a problem with your Houston Instrument equipment, contact the Houston Instrument Service Department toll-free inside Texas at 1-800-252-8008 or toll-free outside of Texas at 1-800-624-4786.

Please have the following information available *before* contacting our service personnel:

- The plotter's model and serial number, which is printed on the plotter's identification tag,
- The type of computer with which the plotter is being used,
- The name and revision number of the computer's software package,
- The cable configuration between the plotter and the computer,
- A copy of the last menu settings (if the plotter has ever been operated),
- A copy of the service test plot, which provides the plotter's ROM revision levels (see Appendix B). If the plotter will not run the service test plot, write down the error code displayed on the control panel LEDs (see Appendix A).