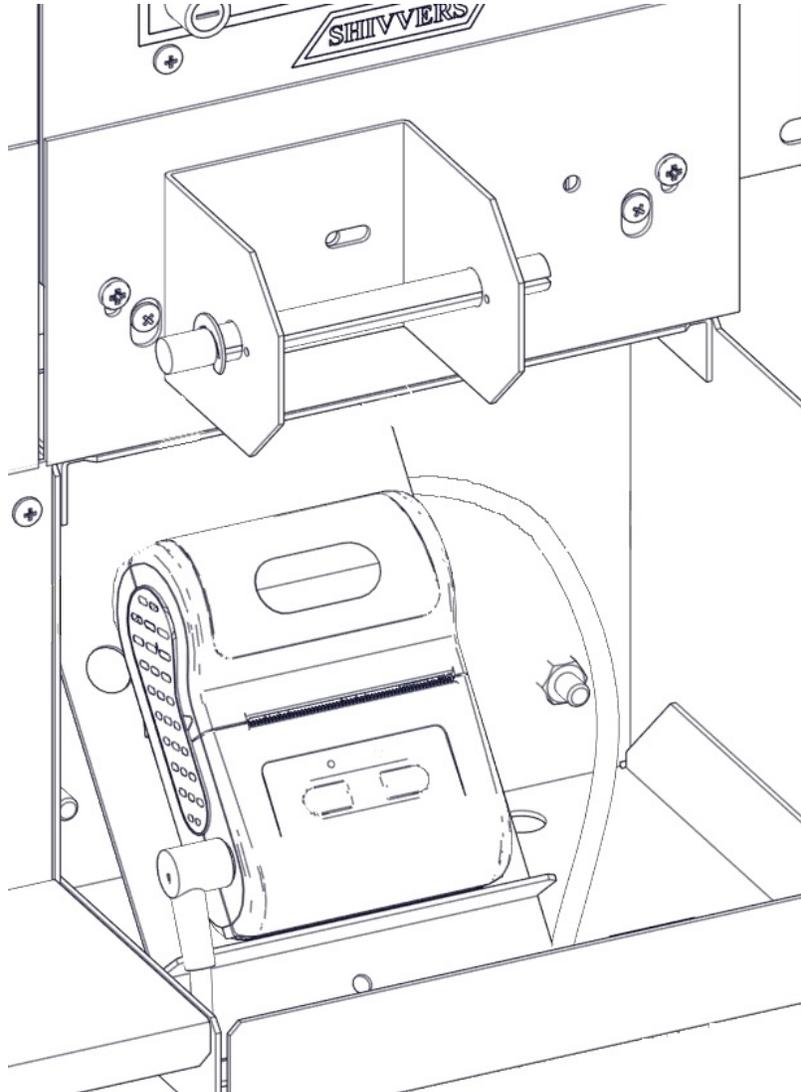


**641G-001A  
PRINTER KIT INSTRUCTIONS  
(Brecknell Thermal Printer)**



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P-13174  
09/03/2014

## **SAFETY**

The installer of this equipment must assume the responsibility for his own safety, and that of those working around him. He must also make sure that the equipment is installed as shown in this manual.

If any items covered in this manual are not completely understood, or there is a concern with the safety of this product, contact Shivvers at the address shown on the front page.



**TAKE NOTE ANYTIME THIS SYMBOL APPEARS. YOUR SAFETY, AND THAT OF PERSONS AROUND YOU, IS AT STAKE.**

ALL ELECTRICAL WIRING SHALL BE INSTALLED IN COMPLIANCE WITH THE LATEST EDITION OF THE ANSI/NFPA STANDARD 70, NATIONAL ELECTRICAL CODE, AS A MINIMUM REQUIREMENT, AND IN COMPLIANCE WITH LOCAL WIRING CODES AS APPLICABLE.

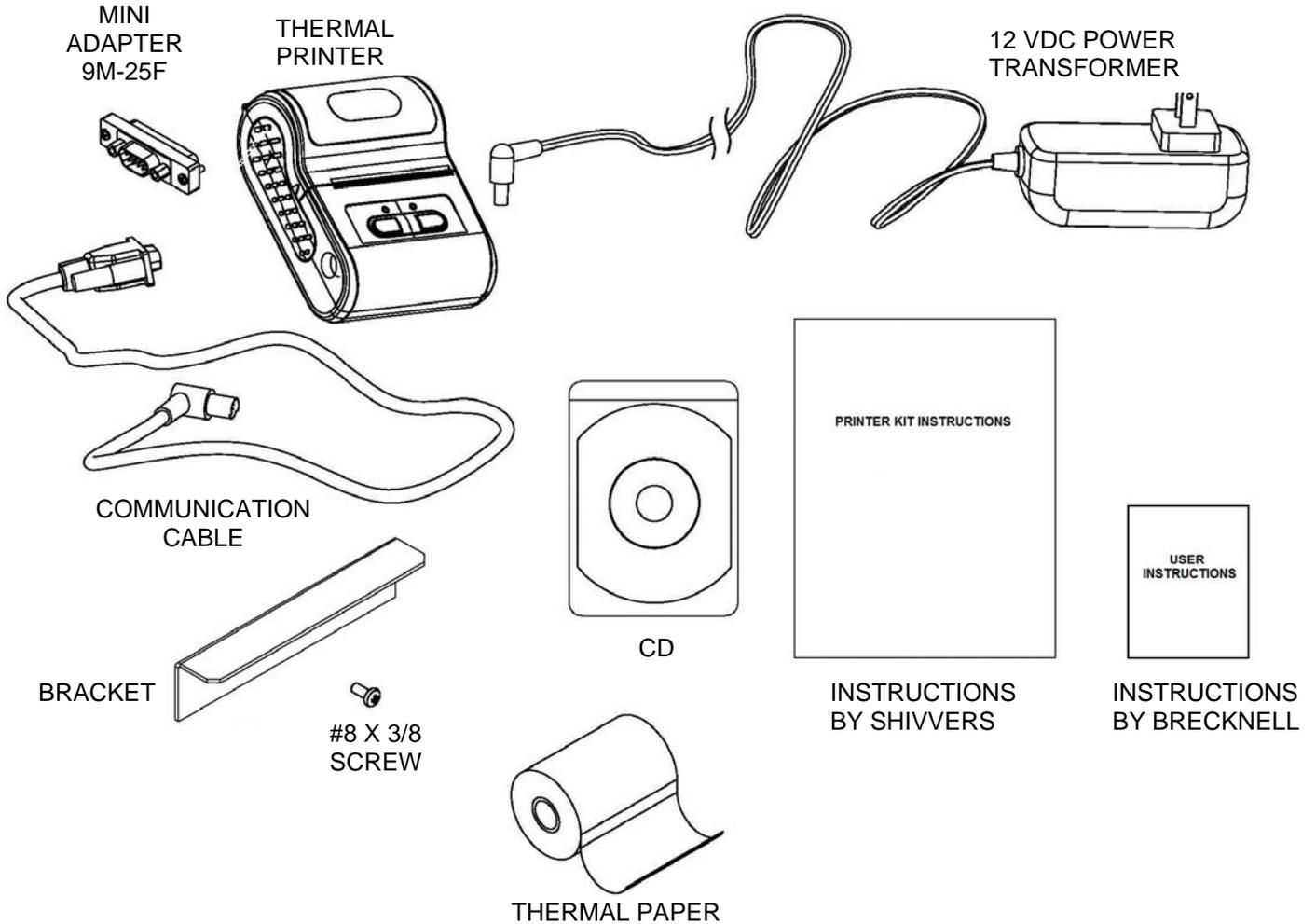
WIRING MUST BE DONE BY A COMPETENT ELECTRICIAN. A LICENSED ELECTRICIAN IS RECOMMENDED, AND MUST BE USED WHEN REQUIRED BY LOCAL OR STATE STATUTES.

## **INTRODUCTION**

The Brecknell CP103 thermal printer (E-6590) was first used in Compudry Command Centers starting approximately in 2015. The Command Centers were changed to have most of the printer wiring already in place at the same time. The Thermal Printer uses a 12 VDC power transformer.

See P-11351 for NCI/Avery Weigh-Tronix impact printer (E-6056) instructions. The impact printer was used in Command Centers from 1998 until approximately December 2014. The impact printer used a 9 VAC power transformer. It is not compatible with the thermal printer.

# PRINTER KIT CONTENTS



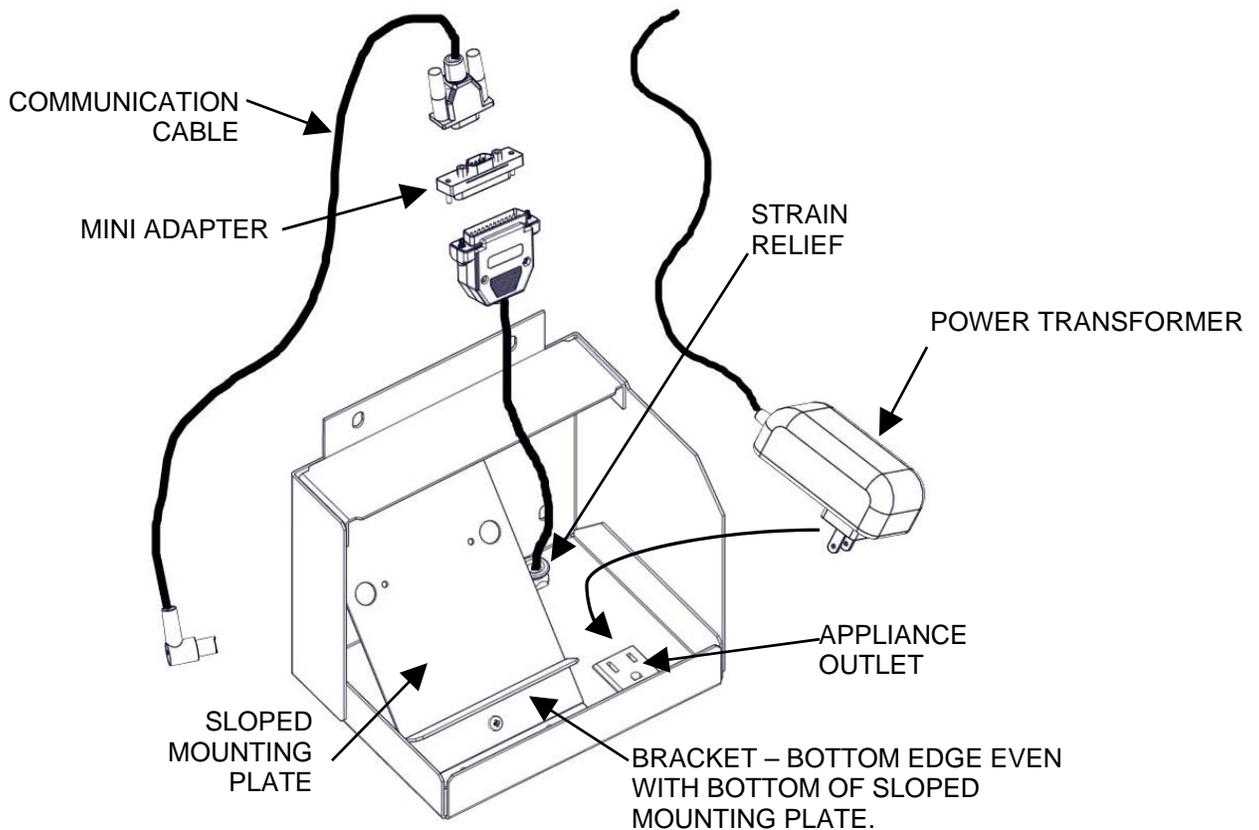
DESCRIPTION	PART #	REPLACEMENT PART #
PRINTER	COMES IN E-6590	
POWER TRANSFORMER		E-6592
THERMAL PAPER		C-6211
COMMUNICATION CABLE		
CD		
INSTRUCTIONS (BY BRECKNELL)		
MINI ADAPTER 9M-25F	E-6591	E-6591
BRACKET	641-082P	641-082P
#8 X 3/8 SELF TAP SCREW	F-1061	F-1061
INSTRUCTIONS (BY SHIVERS)	P-13174	P-13174

## INSTALLATION:

Make sure the Command Center Control Panel power is OFF.

If it isn't already installed, install the printer bracket to the bottom of the sloped mounting plate. It may be necessary to drill a 9/64" (0.140") diameter hole in the sloped mounting plate to attach the printer bracket.

Place the printer on the sloped mounting plate.



Take the printer cable assembly already installed in the printer box and connect it to the 25F-9M mini adapter. Then plug in the printer communications cable to the left side of the printer.

Plug the power transformer cable into the right side of the printer. Plug the transformer into the appliance outlet. The excess wire can go behind the sloped mounting plate.

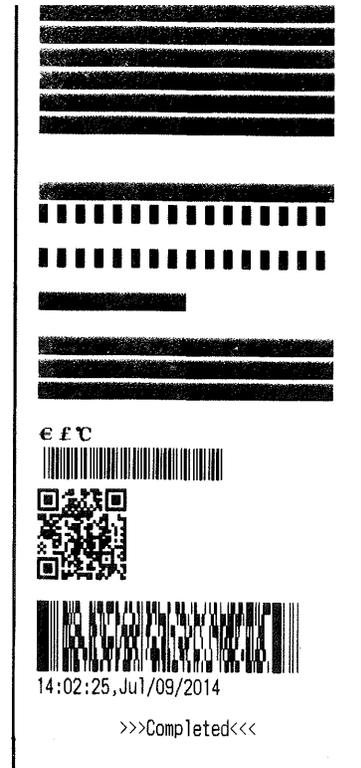
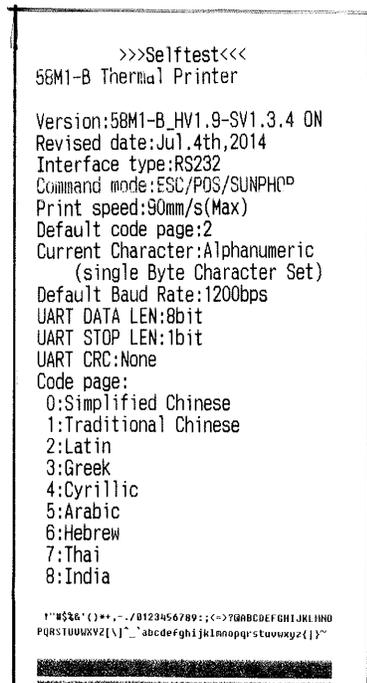
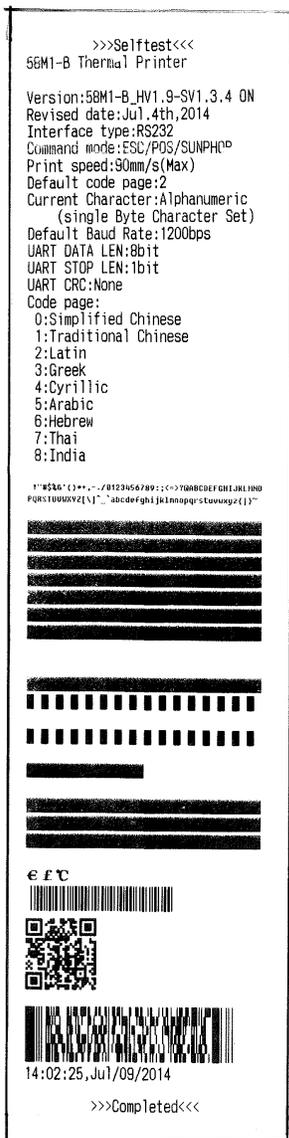
Turn on the Command Center Control Panel power. The red printer Power light and the green Feed light should come on. If it doesn't, disconnect and lock off power and check wiring.

Make sure there is paper loaded into the printer. Quickly press and release the Feed switch and the paper should advance one line.

# SETTING THE PRINTER CLOCK

When the printer is first installed the time and date may need to be set. To check the currently entered time and date either have the Command Center print out information, or perform a self-test on the printer. A self-test is accessed by powering the printer off, then holding down the printer Power switch while the printer is powered up. Once the printer starts printing the self-test, release the printer power switch. At the bottom of the self-test printout, the currently entered time and date will be displayed.

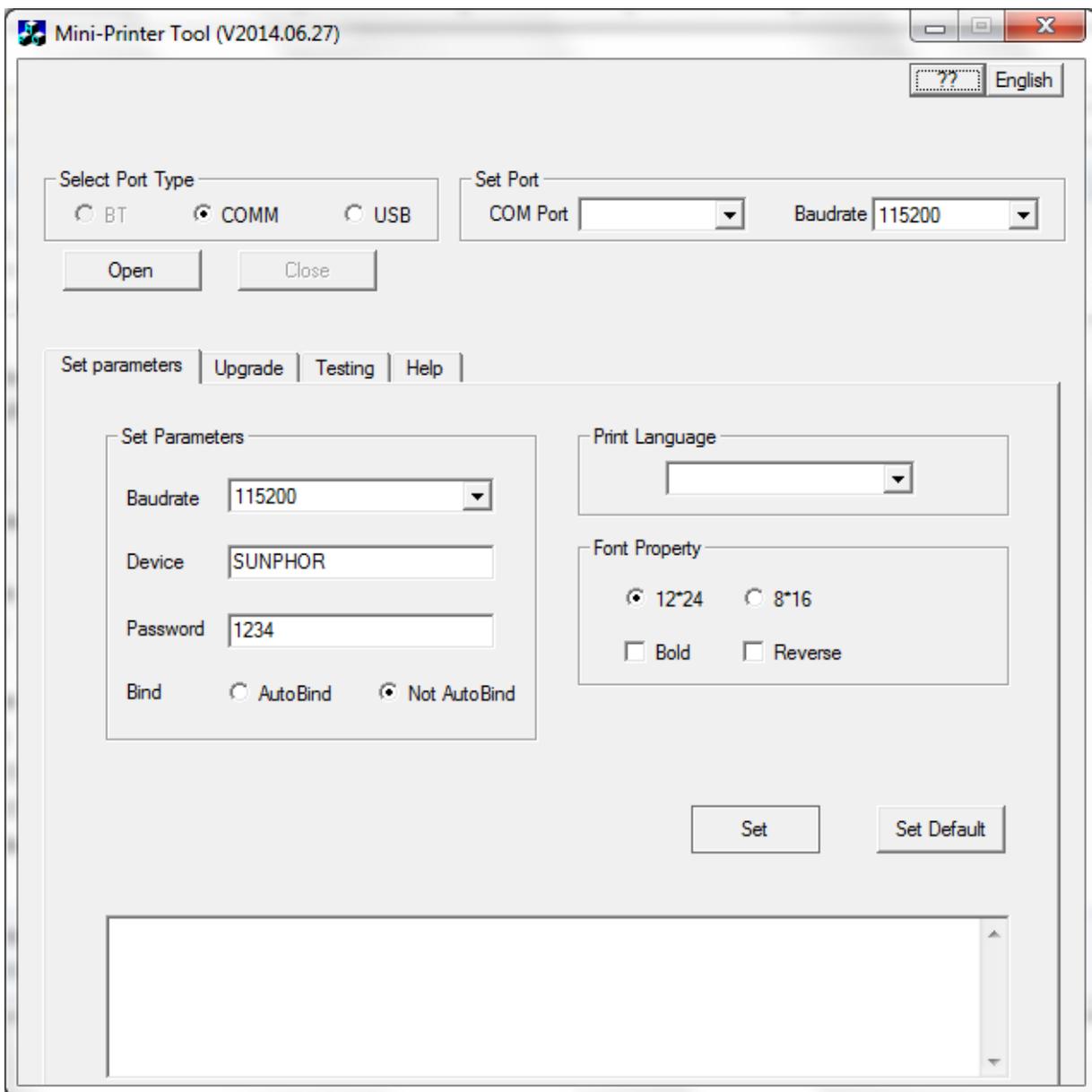
**\*\*NOTICE\*\*** Do not hold down on the power switch after the printer is already powered up, or settings in the printer may be changed.



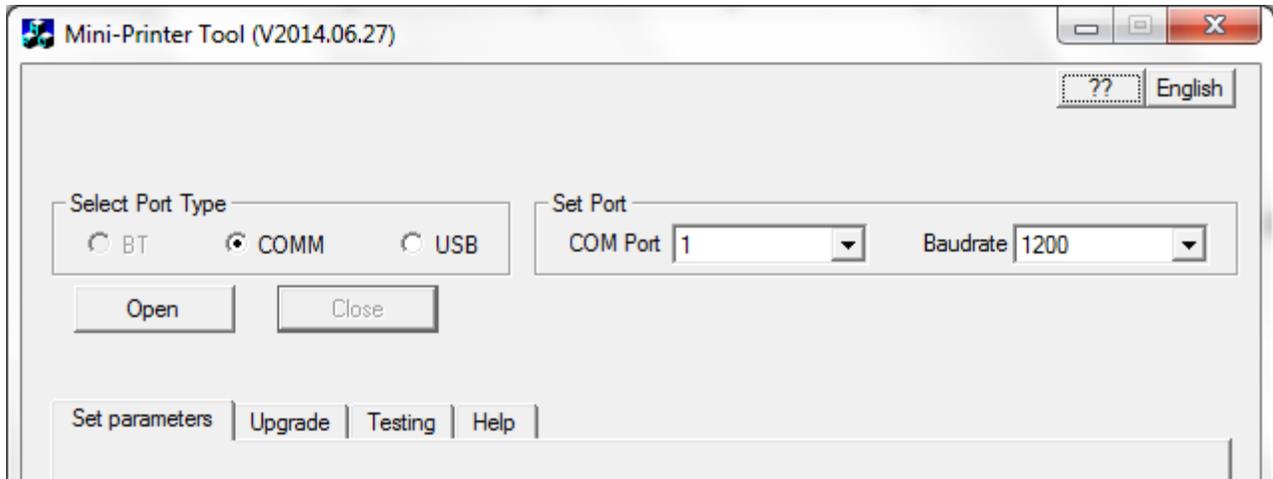
Example of Self-test printout (note the time and date near the bottom)

To set the printer clock, the printer must be connected to a Windows™ computer capable of running the PrintSetTool software provided on the CD sent with the printer. The computer must also have a RS-232 serial port, or a USB to RS-232 adapter (Shivvers number E-6406). The printer and power supply can be removed from the Command Center and taken to a computer, or the computer can be hooked to the printer at the Command Center. Make sure the printer power light is off when disconnecting or connecting the communications cable. Connect the computer to the printer communication cable (usually using the 9 pin connector). Power up the printer. Make sure the computer time and date are set correctly. Start the PrintSetTool software. If a warning screen about allowing the program to make changes on this computer comes up, click on the YES button.

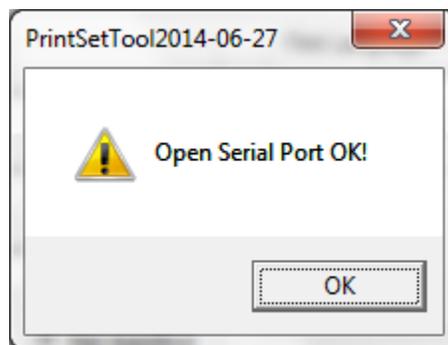
The following screen should come up.



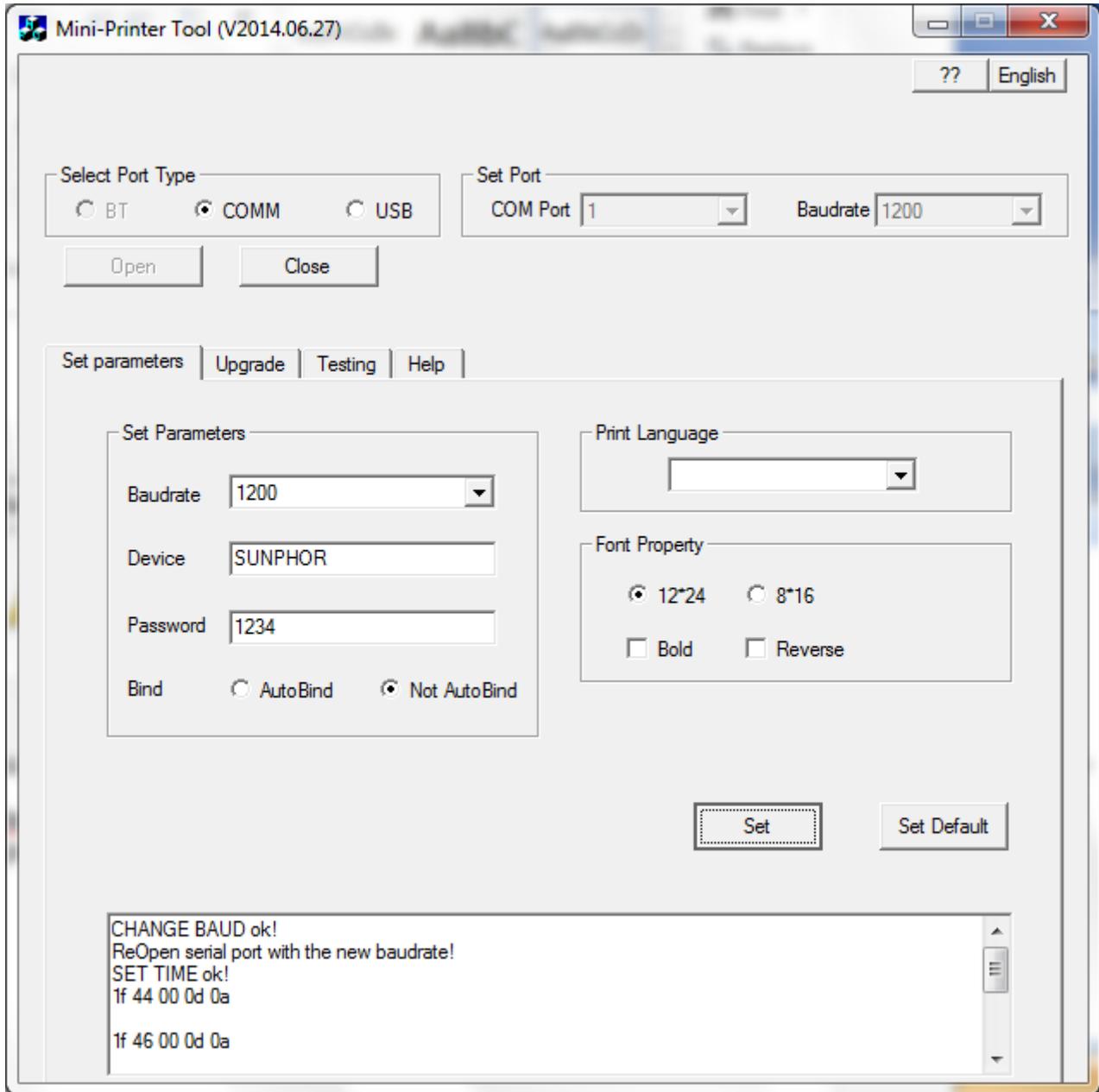
Select the COM Port that is being used (only those available are shown in the pull down list) and set the Baudrate to 1200. Click on the Open button.



The following window should appear. Click on the OK button.



In the Set parameters tab, select a Baudrate of 1200. Don't change anything else. Click on the Set button. Several lines will be printed in the window below the Set button and the printer will advance a line. Scroll up in the window and you should see the following:



If it says SET TIME ok!, the printer clock has been set to the computer clock.

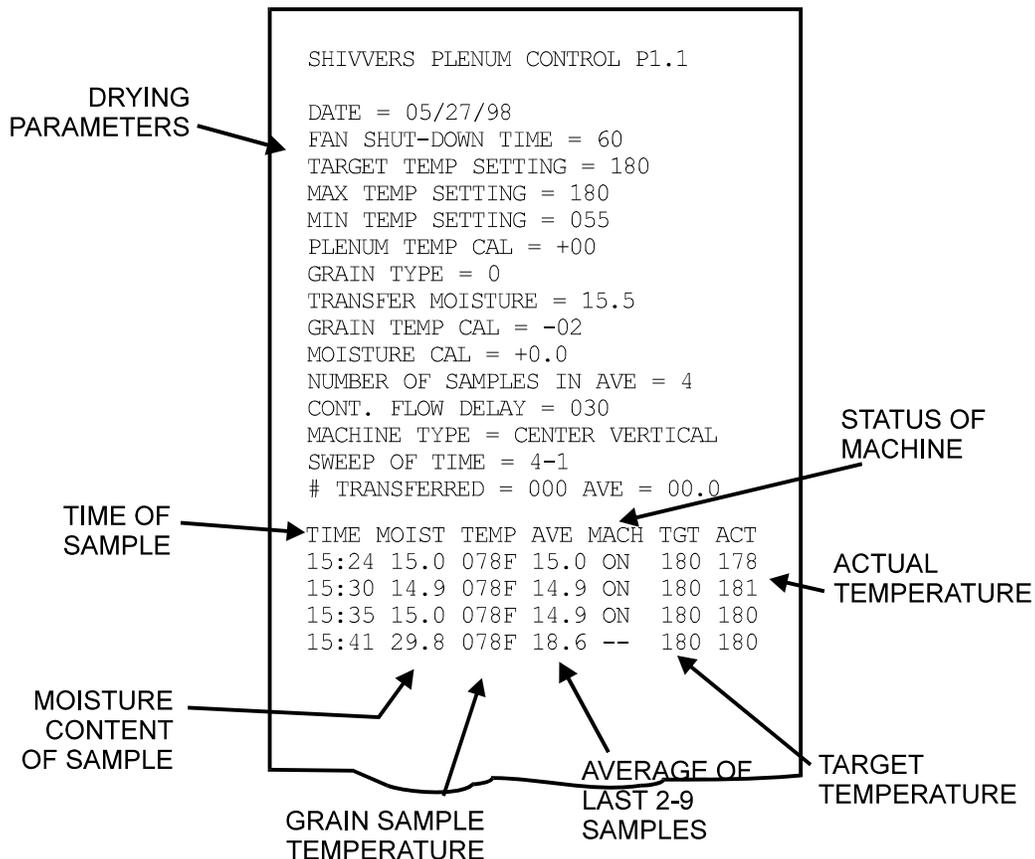
The printer can now be powered off and re-hooked to the Command Center.

# OPERATING THE PRINTER

When control panel power is applied to the printer, Moisture Control and Plenum Control, the red Power and Green Feed lights on the printer should be on. Note that the Low Grain Shut Off light needs to be on and the Machine switch must be in Auto before the Moisture Control will have power. The Moisture Control will flash the program number. Press the adjust switch up or down on the Moisture Control and after a few seconds the Plenum Control will start up. After a few more seconds the printer should start printing out SHIVVERS PLENUM CONTROL, program version, and the current drying parameters. If the printer does not print after a few seconds, the printer is not properly connected to the Plenum Control, or it is not properly configured.

The printer power cannot be turned off. It is configured to always be on when Control Panel power is on.

Below is a sample printout of the Command Center drying parameters and data.



The drying parameters will also be printed out after 72 and 144 "on" samples, or when the " Set Transfer Moisture " is changed.

Once enough paper is printed out, start winding it up on the paper spindle. The spindle will need to be manually wound up periodically.

When the paper roll is getting near the end of the roll, a red stripe will be shown on the edge of the paper. It is not recommended to run the printer without paper. Unplug the printer power if the printer is out of paper. The paper has a thermal coating on one side only and it will not print on the opposite side.

Because of the large clear window on the Command Center access door, it may be necessary to provide shade from direct sunlight. The printer paper may get so hot that it will turn black and be unreadable. Do not operate the Command Center with the off season cover over the window. The lights must be visible during operation for safety.

## **STORAGE AND MAINTENANCE**

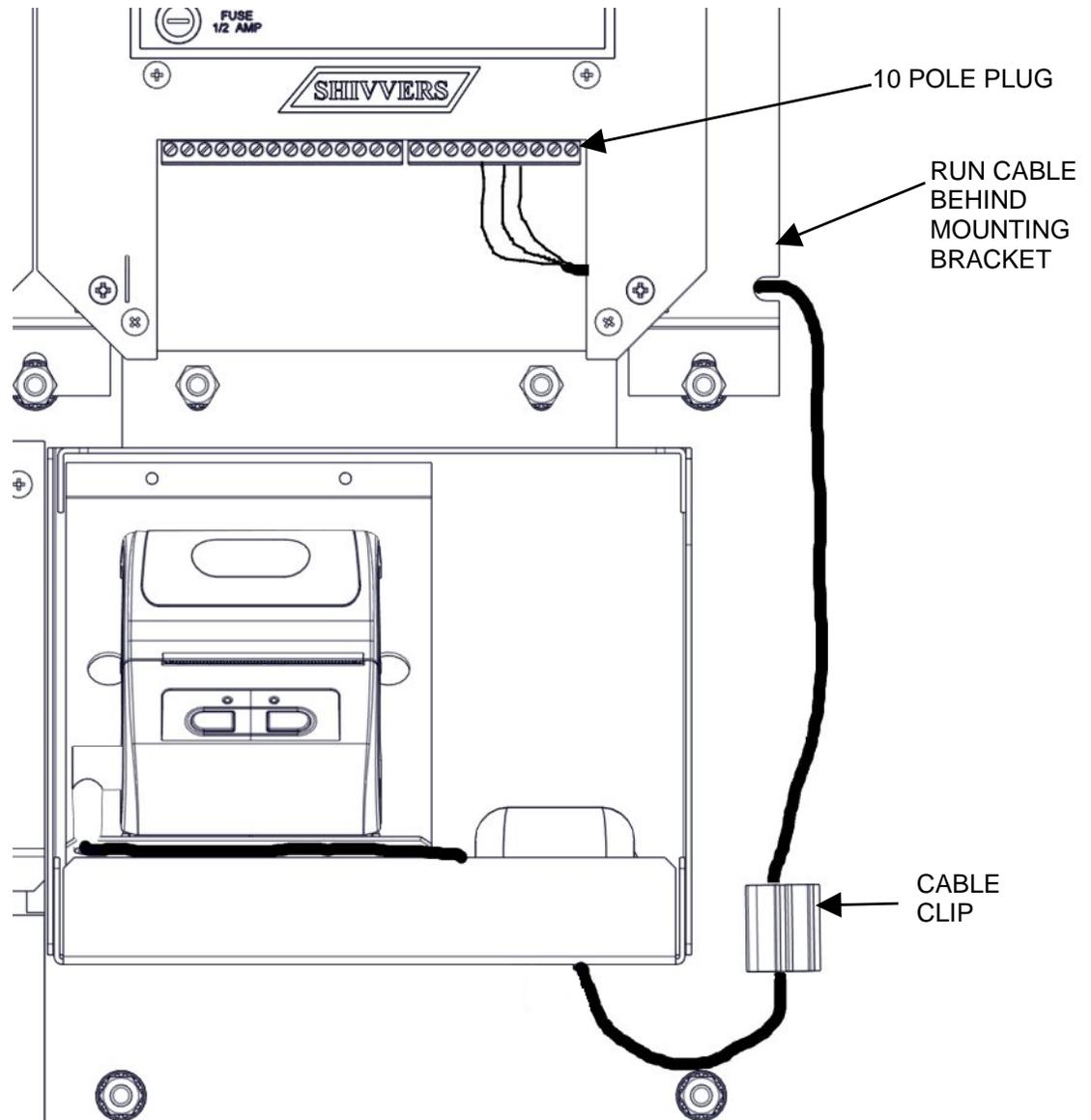
Although the printer is in a weather resistant enclosure, it is a good idea to remove the printer and store it inside during the off season. To do this simply remove the printer communications cable and the power supply connector from the printer and store the printer and any extra paper in a cool, dry location.

Replacement paper can be ordered from Shivvers. The part # for the paper is (C-6211). The paper is standard thermal paper 2-1/4" wide. The roll diameter cannot be larger than 1.7". This is usually a 50' or 55' roll. See the printer user's manual for details on replacing the paper. Keep the paper cool and dry.

## REFERENCE

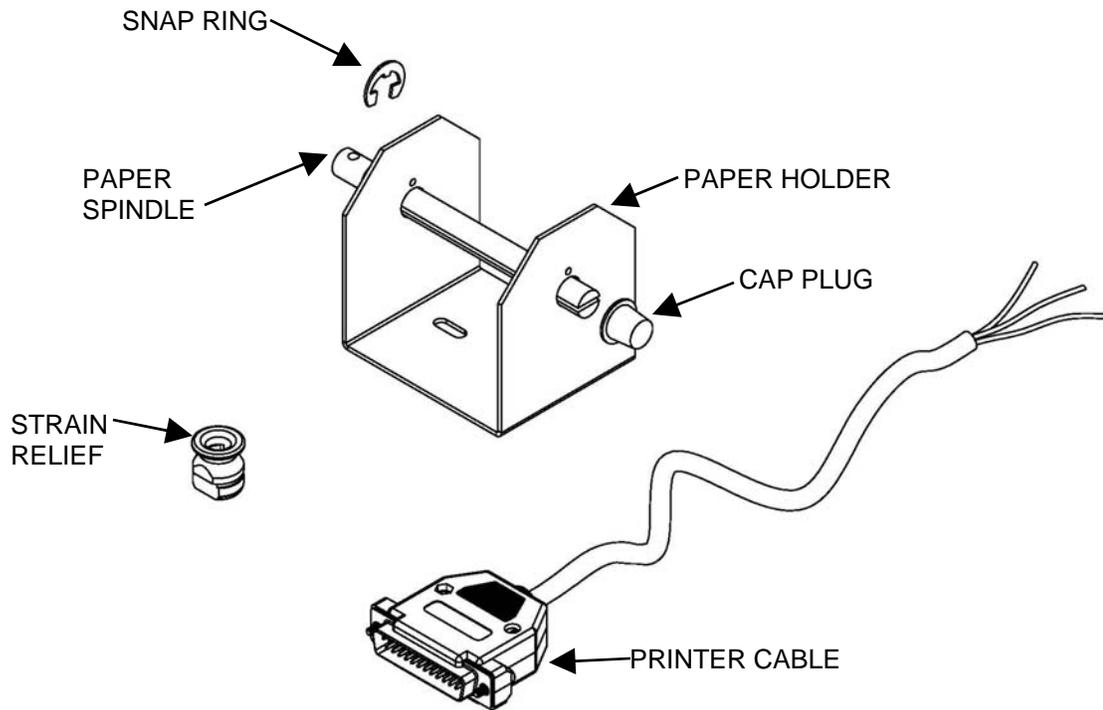
**! DANGER**

DISCONNECT AND LOCK OUT POWER TO THE ENTIRE DRYING SYSTEM BEFORE OPENING THE MAIN COVER ON THE CONTROL BOX.



The printer cable connects to the plenum control on the 10 pole plug located to the right in the plenum control. The Red wire in the printer cable connects to terminal 5 of the 10 pole plug. The Black wire connects to terminal 6 of the 10 pole plug. The shield connects to terminal 7 of the 10 pole plug. See wiring decal inside main cover for further reference.

## REFERENCE PARTS

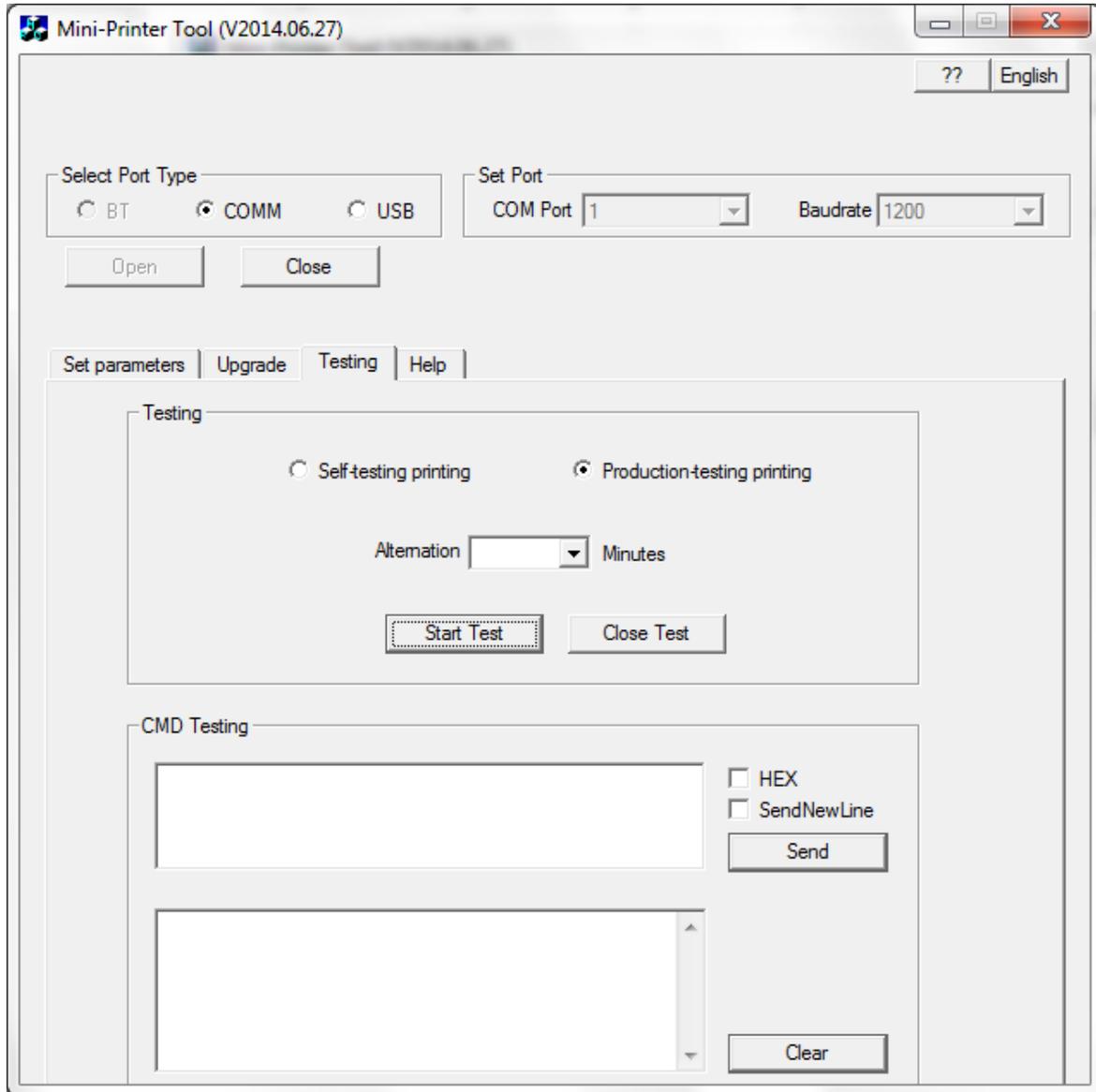


DESCRIPTION	PART #
PAPER HOLDER	641-035P
PAPER SPINDLE	597-391P
CAP PLUG	H-1900
SNAP RING	F-1080
PRINTER CABLE	E-6272
STRAIN RELIEF	E-6111

## ALTERNATE WAY TO SET THE PRINTER CLOCK

Open the serial port at 1200 Baudrate.

Click on the Testing tab and the following window will appear.



In the CMD Testing upper window, type the current date and time using the following format (four digits for the year and 24 hour format for the hour):

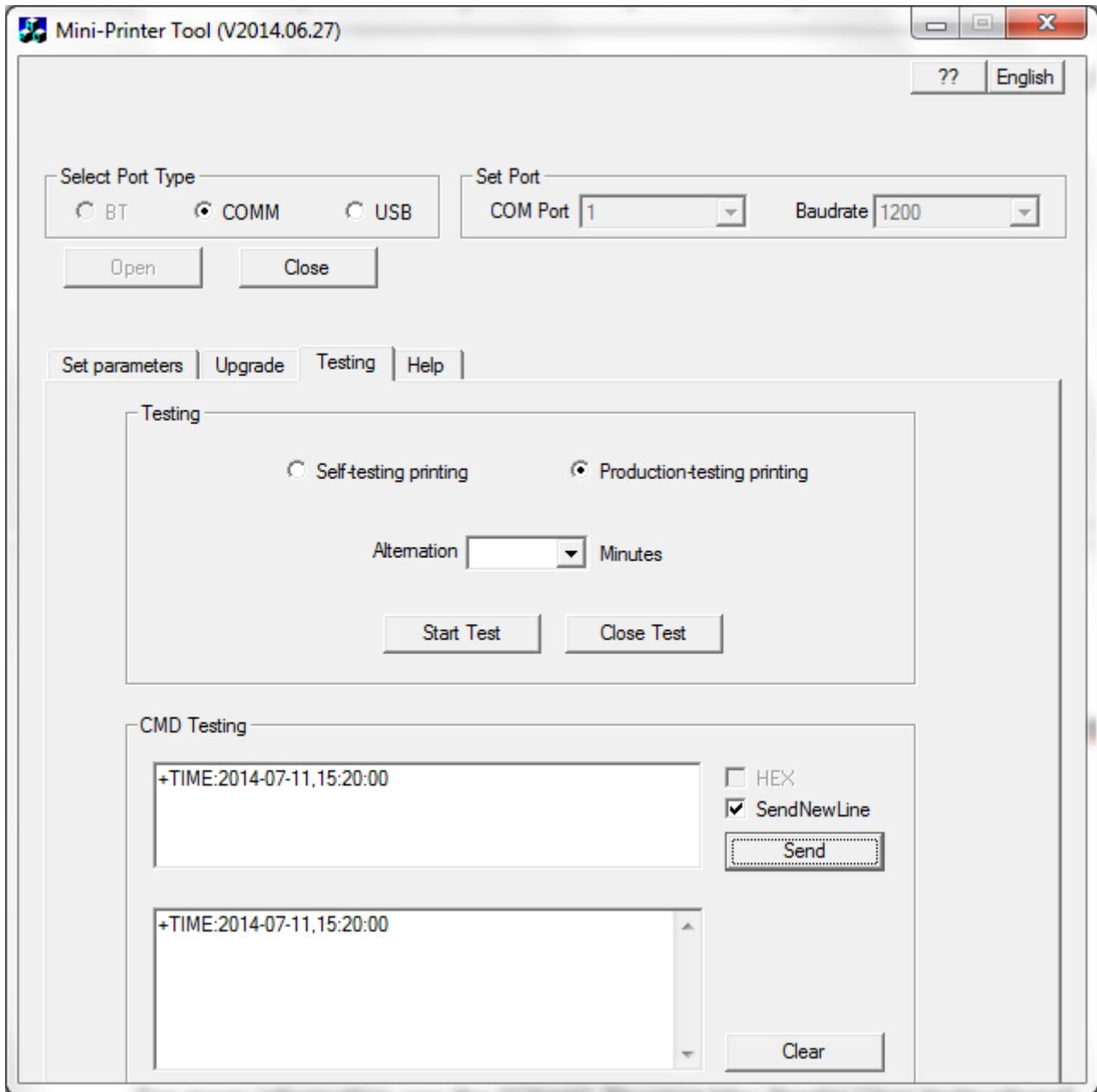
+TIME:year-month-day,hour:minute:second

or

+TIME:yyyy-mm-dd,hh:mm:ss

For example, for July 11, 2014 at 3:20 PM: +TIME:2014-07-11,15:20:00

Once the date and time are typed in the CMD Testing upper window, click on the SendNewLine box, then click on the Send button.



The TIME command will be displayed in the lower window and the clock should now be set in the printer.

To check the time and date setting, either perform a self test by powering up the printer with the printer Power key pressed (described earlier in this manual), or by sending the following HEX codes to the printer.

Click on the SendNewLine box that is already checked to turn it off.

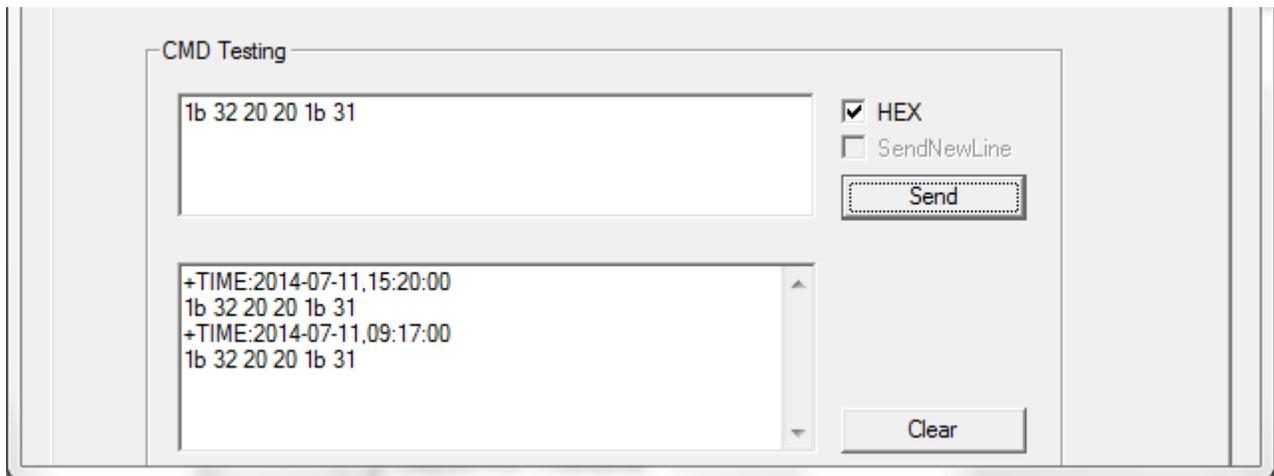
Click on the HEX box to turn it on. The +TIME command will go away in the upper window.

In the CMD Testing upper window, type "1b 31 20 20 1b 32" (don't include the quotation marks and there must be a space between every two digits).

Click on the Send button.

The printer will print a line. Quickly press and release the feed button on the printer to read the printer date and time.

If both the time and date are correct, programming is finished. If something is not correct, then click on the HEX box to turn it off. The +Time Command should re-appear in the CMD Testing upper window. Modify the line to the correct date and time format, click on the SendNewLine box, then click on Send button. Re-check the printer time and date.



If the printer is not responding, double check the baud rates to make sure they match on the printer and the software. The printer baud rate is shown in the self-test printout. The software program can also be closed and re-started to help clear out any communication errors.

For more information see the "CP103 Thermal Mini Printer User Instructions". This procedure is explained in both the printed manual and on the CD supplied by the manufacturer.