

<i>Printronic Technical Bulletin</i>	Number 7-0010	Revision A
	Product Type P7000	Date 04/10
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Subject

Introducing the new P7000 Cartridge Printer with a new ink delivery system called the Cartridge Ribbon System.

Implementation Date

The P7000 Cartridge Printer will phase into production approximately May, 2010.

Information

The Printronix P7000 Cartridge Line Matrix printer family consists of a 500, 1000, and 1500 line per minute (lpm) tabletop, pedestal and floor cabinet models for 500, 1000, 1500 and 2000 line per minute printers. The family has a high degree of commonality between the various speeds and cabinetry. There is also spare parts commonality with the existing P7000 Series on some parts.

The main difference is that the P7000 Cartridge Printer now uses a new ink delivery system called the Cartridge Ribbon System (CRS). The ribbon used in the CRS is contained in a plastic container (cartridge) and feeds in only one direction in a continuous mobius loop. Both the ribbon and ink used by the CRS are the same as what is used in the ribbon spools used by the existing P7000 Series. The mechanical and electronic changes done to support the CRS including only using one ribbon motor and doing away with the ribbon guides assures that the P7000 Cartridge Printer cannot be downgraded to accept spooled ribbons.

Each printer incorporates the Printronix System Architecture 3 (PSA3), Power PC controller (PPC). The PSA3 architecture, in conjunction with the Power PC printer controller board, enables any one of multiple resident emulations and graphic options to be run without additional graphic processors or protocol converters. This simplifies the support of the broad array of options available. The specific characteristics of each printer are dictated by the active emulation and are described in the individual emulation specifications.

The P7000 Cartridge Printer firmware will run on a P7000 Spool-based printer. Great care was taken to maintain compatibility between the P7000 Cartridge and Spool-based printers. The critical area of emulation and system compatibility was not changed.

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Minimum Software Requirement

The minimum software required to support the configuration, operator interaction and machine operation of the RibbonMinder feature used in conjunction with the P7000 Ribbon Cartridges are listed below.

This software and all later versions will retain full backwards compatibility with existing Spool Ribbon-based P7000 Series printers.

P7000 Cartridge ASCII Printers

CT/IPDS/IGP	Version 2.12P	370930-001
ANSI/IGP	Version 2.12P	370931-001
TN/IGP	Version 2.12P	370932-001
PCL2/IGP	Version 2.12P	370933-001
LG/IGP	Version 2.12P	370934-001
HD-LP+	Version 1.04J	370936-001

How to Identify P7000 Cartridge Printer via Serial Number

Newly built P7000 Cartridge Printers will be provided with a new serial number sequence as listed below.

RoHS Printronix P7000 Printers 12-Digit Serial Number

1st Digit - 4 = IRV (Irvine), 5 = SXN (Singapore), 6 = HOL (Holland), 7 = CMP (China)

2nd Digit - R = RoHS

3rd- 4th Digits - C6 (V6 PPC Controller and Ribbon Cartridge)

5th Digit – F (Flat Shuttle)

6th - 7th Digits - Last 2 digits of year built (08 = 2008)

8th - 9th Digits - Week of year listed on 6th and 7th digits (01 thru 52)

10th -12th Digits - Numeric sequence of tracking numbers (001 - 999)

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RibbonMinder

Similar to the P7000 Spool-based printers, this new RibbonMinder notifies the user when a ribbon cartridge should be changed. This feature works with a small programmable board that is located on the underside of the ribbon cartridge. When the cartridge is installed, this board makes contact with the Cartridge Interface Board which is mounted in the printer. The printer will then read the data contained in the cartridge to determine expected yield and other parameters. Maintaining yield data onboard allows the cartridge to be moved to a second printer where the RibbonMinder settings can determine if enough ink remains to provide desired image density.

Unlike the barcode system used by the P7000 Spool-based printers, the cartridge board will be able to communicate with the printer logic, storing usage data onboard and will indicate to the printer logic when it has reached end-of-life to prevent its re-use. Since usage data is managed onboard the cartridge, there is no need to maintain a log of cartridge ID numbers, depleted or partially used cartridges in the printer.

Weld Skip Sensing

The ribbon includes an optically recognizable patch (weld skip patch) that can be sensed so that printing will be halted as this weld patch moves through the print station. When the printer first starts printing, the ribbon is moved fifteen inches without any printing in order to skip the possible presence of the weld patch. After the initial pass, there will be a lag in printing whenever the weld is skipped.

The printer's configuration printout will contain a new item called "RWP" (Ribbon Weld Program) near the top of the printout and will contain the version of the weld code contained in the program file.

Cartridge Ribbons

Below is a list of the ribbon cartridges to be used by the P7000 Cartridge Printer.

255049-101 - Std Life Cartridge (EMEA)	All P7000 except HD	1 Pack
255049-102 - Std Life Cartridge (Americas)	All P7000 except HD	1 Pack
255048-101 - Ext Life Cartridge (EMEA)	All P7000 except P7X05 and HD	1 Pack
255048-102 - Ext Life Cartridge (Americas)	All P7000 except P7X05 and HD	1 Pack
255048-401 - Ext Life Cartridge (EMEA)	All P7000 except P7X05 and HD	4 Pack
255048-402 - Ext Life Cartridge (Americas)	All P7000 except P7X05 and HD	4 Pack
255050-401 - Ext Life Cartridge (EMEA)	P7000HD and P7000HDZT	4 Pack
255050-402 - Ext Life Cartridge (Americas)	P7000HD and P7000HDZT	4 Pack
255542-401 - Security (non-inked) Cartridge (Worldwide)	All P7000 except HD	4 Pack

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Unique Field Spares

This is the list of Field Spares that are totally unique to the P7000 Cartridge Printer and are not compatible w/ current P7000 Spool-based printers.

Cable Assembly, Weld Sensor, P7C	254475-001
Motor Assembly, P7C, Ribbon Cartridge	254507-901
PCBA, Cartridge Interface Board, LF	254161-001
PCBA, Ribbon Weld Processor	254476-001
Ribbon Mask/Cover Assembly, P7X05C	254350-901
Ribbon Mask/Cover Assembly, P7X10C	254353-901
Ribbon Mask/Cover Assembly, P7X15C	254356-901
Ribbon Mask/Cover Assembly, P7X20C/HD	254138-901
Scale, Paper, P7C	254478-901
Shroud Assembly, P7C (incl. Paper Scale)	254991-901
Shuttle Assembly, P7X05C	254504-901
Shuttle Assembly, P7X10C	254496-901
Shuttle Assembly, P7X15C	254488-901
Shuttle Assembly, P7X20C	254135-901
Shuttle Assembly, P7X08HC/HD	254506-901