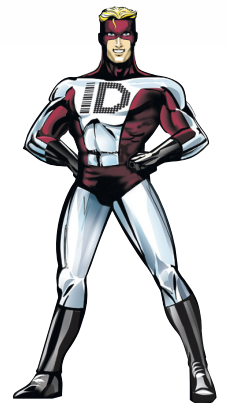


Reliable Barcode Printer Performance

... protect your business from disruptive equipment failures.



Introduction

Today's barcode printers are available in many different sizes, shapes, dpi and graphic capabilities to serve the unique needs of a variety of industries in all types of printing environments.

- Industrial • Warehousing • Rugged Outdoors • Clean Room • Medical Laboratories
- High Volume • Low Volume • RFID • Mobile • Desktop • In-Line Print and Apply

No matter what kind of printer you have, you rely on it to perform when you need it.

Downtime Can Be A Hidden Expense

As reliable as your printers may be, when they do fail, your production lines slow and even halt completely. That's expensive and so are emergency repairs.

This kind of downtime can affect your ability to meet deadlines or deliver product to your customers on time. Reduced worker productivity adds to your costs.



This paper will help you understand the physical and environmental factors that may impact the reliability of your barcode and label printers. It's what you need to know to keep your printers working at their highest performance levels.

... protect your investment



Factors That Affect Printer Performance

The physical condition of your printer and the environment in which it resides are key indicators of performance reliability during periods of high print demand. Other indicators, called Wear Factors, also affect the reliability of your thermal transfer printers over time or with heavy printer use.

Some of the more common wear factors are:

Exterior Elements:

Enclosures that don't close as they should or ones left open during operation affect printer performance. Debris such as dust, lint, grease, and oil, get inside your printer and erode performance. The result can be dirt marks on your labels, marks in the rollers, and broken printhead pins. Interface cables with a loose connection can break away, causing damage to the connector pins and your interrupt printer communications. LCD panels that don't work can lead to damage or print failure when operators miss warning indicators.

Interior Elements:

Debris, grease, oil or other harmful elements in your machine can cause label or ribbon sensors to misread. Therefore, labels won't print or feed at the correct location. Worn parts that are not serviced in time can produce light print, ribbon wrinkle, and printer failure. Using the wrong tools to clean up label jams or adhesive residue can cause damage to the machine and black spots on labels.

Overall Print Quality:

The printer settings, print head, label and ribbon combination, and volume ratings of a printer all contribute to the quality of printed output. Scheduled preventative maintenance is important for reliable performance. Using the right repair tools are important to maintain your printer's ability to produce quality output and avoid accidental damage.

Age of Printer:

Age can be a lead indicator for performance reliability. The older the printer, the greater the chance for worn parts, roller separation, and sensors and printheads that are out of line. As manufacturer's warranties expire, repair costs go up, and replacement parts can be expensive or obsolete.

Usage:

Different printers are rated for different print production volumes. Running a printer at a higher rev or longer than its rated time can cause motors to burn out, printheads to fail, and print quality to fade rapidly.

Media:

Proper and frequent cleaning is imperative to avoid permanent damage from media fibers and ribbon residue that is part of the printing process. Some media have highly abrasive surface materials and require higher pressure and heat to print, causing added pressure and stress on the printhead. This type of wear over time can impact your printer's output quality.

The Printhead



A damaged, dirty, or maladjusted printhead can produce some very noticeable differences in the quality of the barcode output. But sometimes even the smallest imperfections, such as a burnt-out pin, can cause missing bars or data that you may not notice until it is scanned - and that may be too late.

A thermal transfer printhead is the most critical, and expensive, part of your thermal transfer printer and also the most delicate. It is considered a consumable. The amount of wear that a printhead can handle is relative to the environment, type of media, settings, usage, and maintenance.

Many print quality problems result from improper use or care of the printhead. However, most problems can be avoided or easily corrected with proper installation and ongoing maintenance to maximize the life of the printhead. Some factors to be aware of to protect the printhead:

- Common reasons why printheads fail is because of insufficient cleaning or using the wrong cleaning solutions. A cleaning should be scheduled at regular intervals (inches printed, ribbon changes, or by days/weeks) depending on machine use.
- High heat, pressure, and poor quality ribbons can cause pins to wear down or break, resulting in bar codes that don't scan and low quality human-readable text. Your printed output on labels will lose that crisp, dark contrast, high-read rate.
- Do not use sharp tools or allow debris buildup as this can permanently damage the printhead and rollers. Also, care must be taken when removing a printhead to avoid damage to the printhead's image line – the glass surface.
- Always use thermal transfer ribbons that are slightly wider than the width of the printhead to protect all printhead elements from abrasion.
- Electro Static Discharge (ESD) can cause printhead dots to fail, or in more severe cases, cause the entire printhead to fail. Use anti-static measures when handling the printhead for cleaning or jam removal to prevent this damage.

Why Is Scheduled Maintenance For Your Thermal Transfer Printers Important

- **RELIABILITY:** Keeping your printer up to manufacturer's standards can help avoid costly breakdowns, emergency repairs, and downtime.
- **QUALITY OUTPUT:** Increased reliability of printed output scan and readability of barcodes, human readable text, as well as graphics.
- **LOWER COST OF OWNERSHIP:** Regular maintenance, cleaning, and parts replacement are the best ways to ensure print quality, consistent performance and long life of your equipment.
- **CONTINUAL PERFORMANCE:** Critical parts that show wear can be serviced or replaced during planned maintenance times rather than at times of high volume or demands.
- **SAVE ON COSTS:** When mission critical equipment goes down during production, the cost of the downtime is added to costly emergency repairs. Printheads are one of the most costly consumables in your printer. The cost of printhead coverage in your service plan can be less than the cost of the plan and that means added savings.



The investment you make in caring for your printers can pay off over the life of a printer by reducing the total cost of ownership. So whether you choose to maintain your thermal transfer printers using your own staff or contracting with professional service technician, you could save headaches and costs with regular maintenance and timely repairs.

When Is A Service Contract A Good Decision

When To Choose Service Contract

- You run mission critical applications
- Want to minimize downtime and interruptions that your business can't afford.
- Need to stay within an annual budget and/or control costs.
- You don't have time or staff to stop to fix a printer.

Benefits of a Service Contract

- Dependable factory-certified technicians for repairs and maintenance.
- Flexible, on-site response times.
- Scheduled preventative maintenance.
- Increase productivity.
- Cost-effective coverage.
- Extend the life of thermal transfer printers and printheads.

WincoID is factory-certified for most major brands of Thermal Transfer Printing equipment. With flexible plans available, you are guaranteed the service and response time you need to keep operating. Our technicians keep a large inventory of parts in repair vehicles for on site repairs without the wait. Our in-house support staff is available for technical support and dispatch for fast response.

Sample Of Our Most Popular Service Plan On-Site Service with Preventative Maintenance

- Four hour telephone response time for technical support and/or scheduling a repair service call.
- 48-hr on-site response.
- Two scheduled maintenance visits per plan year.
- Parts & labor included. (Printhead coverage is optional.)
- Unlimited help-desk support.
- Time and travel included.

Upgrades Available

Gold - our fastest response service

- Same Day Service, 4 hour on-site response
- Includes additional software support.
- Optional on-site spares

Silver - for mission-critical systems

- Next Business Day - Within 24 hour response

Flexible Maintenance and Service Coverage from WincoID

Multi-Vendor Service Solutions

Factory-Trained Technicians

Genuine Parts

On Site Service Calls

Depot Service

Nationwide Support

Guaranteed Response Time

Preventative Maintenance

Installation & Training

Repair & Maintenance

Replacement Parts/Printheads

Coverage for Thermal Transfer Printers,
Barcode Scanners, Mobile Computers,
Automatic Labeling Systems

Professional Services

Penalty-Free Compliance Verification

Support Features

Phone & Help Desk Support

Warranty Services

Extensive Parts Inventory

Many factors may go in to choosing the type of service coverage you need. When choosing to outsource service and maintenance, go with the plan that offers you the most flexible options and reliable coverage to meet your needs.

With a WincoID Service Plan, we work with you to create the right mix of service coverage to keep your equipment running at top performance and help stay within your budget.

- On-site or depot service for thermal transfer barcode printers.
- Choice of frequency of preventive maintenance visits for variable use equipment.
- Standard and custom service coverage plans and response times.
- Choice of comprehensive coverage plans inclusive of time, labor and parts or T&M. Unlimited Help Desk support on most plans.
- Service all your barcode equipment including thermal transfer printers, barcode scanners, mobile computers and automatic labeling equipment.
- Multiple vendor equipment covered under one plan with one source.
- Multiple locations within a company are covered nationwide.



Save on operational costs and lower the total cost of ownership
with professional services and repairs.

When Response Matters - Experience Counts



From the company that delivers complete barcode, automatic identification and ID security solutions, comes the most reliable **service** for your thermal transfer print systems.

WincoID's Service Team:

Our professional service team is factory-trained to provide quality care for your barcode printers and other barcode equipment. Each technician has the experience and is trained to look for worn parts and environmental factors that might be harmful to your printer. It's fixed it before it's a problem in production or customer delivery.

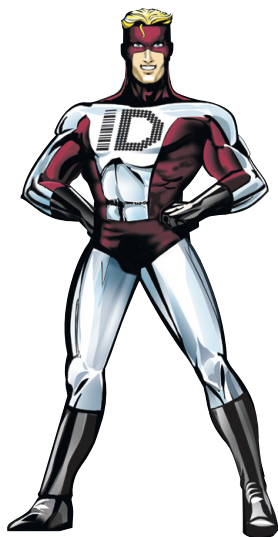
With genuine manufacturer parts, our expert team will keep your barcode equipment at optimal performance at all times - no matter where you are located nationwide. You'll save time, money and gain confidence that all it takes is one call when you choose Winco ID's Service Team to protect your business.

When your business depends on smooth operations, get the best, uninterrupted protection with WincoID.

About Winco Identification

Winco Identification, an ID Technology company, specializes in label and barcode solutions to maximize productivity across many industries. Over 30 years experience in designing labeling, bar code and security solutions is behind everything we do for our customers, WincoID provides service and repairs on most major brands of thermal transfer printers, barcode scanners, mobile computers, and automatic labeling systems. Many top Fortune 500 companies have recognized WincoID for dependable, full-system service and support for thousands of machines.

As part of the ID Technology service team, we can support our clients just about everywhere in North America.



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Asset Tracking Software
Inventory Control
Label Design and Printing Software

Print and Apply Labeling Systems

Service and Support

Label and Bar Code System Design Consultations
Thermal Transfer Printer
Maintenance and Repair Services
Choice of On-site or Depot Service
Coverage For Data Collection and Mobile Computers
Software Support
Installation and Training Services
Seminars and Educational Tools