



# **PRISM & PRISM PRIME**

**Preventive  
Maintenance  
Manual**

# PRISM & PRISM PRIME

This document is confidential, proprietary and the sole property of Ohio Gravure Technologies Inc ("Ohio GT"). This document shall be used by the customer only in connection with the use of Ohio GT products and only pursuant to Ohio GT's Terms and Conditions of Sale and License.

Information in this manual is believed to be accurate on the publication date, but is subject to change without notice due to continuing product development. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of Ohio Gravure Technologies Inc.

© 2015-2019 Ohio Gravure Technologies Inc.

Ohio Gravure Technologies Inc  
1241 Byers Road, Miamisburg,  
OH 45434 USA

Email: [sales@OhioGT.com](mailto:sales@OhioGT.com)  
[service@OhioGT.com](mailto:service@OhioGT.com)

Phone: 1-937-428-1700

Website: [OhioGT.com](http://OhioGT.com)

Prism & Prism Prime  
Document number: 9420-0050  
Publication Date: December 2019  
Sixth Release



# Contents

|  |          |
|--|----------|
| <b>INTRODUCTION .....</b>                                | <b>1</b> |
| <b>About the Prism Engraver.....</b>                     | <b>1</b> |
| Purpose Of Manual .....                                  | 1        |
| About this manual.....                                   | 1        |
| Document Conventions .....                               | 2        |
| Safety.....  | 2        |
| Replacement Parts .....                                  | 2        |
| <b>SCHEDULE .....</b>                                    | <b>3</b> |
| <b>Preventive Maintenance Schedule .....</b>             | <b>3</b> |
| Master PM Schedule .....                                 | 4        |
| List of Materials.....                                   | 5        |
| Vacuum Bag .....   | 7        |
| Engrave Head Air Filters .....                           | 8        |
| Cooling Fans.....  | 9        |
| Manual Chuck .....                                       | 10       |
| Tailstock Drive Nut .....                                | 11       |
| Tailstock Rail Guides (Bearings) .....                   | 11       |
| Carriage Rail Guides (Bearings) .....                    | 12       |
| Carriage Drive Ballscrew .....                           | 12       |
| Engrave Head Leadscrew & Drive Nut.....                  | 13       |
| Engrave Head Sub-Carriage Guides (Bearings).....         | 13       |
| Expandable Vacuum Hose and Engrave Head Vacuum Hose..... | 14       |
| Embedded Computer .....                                  | 14       |
| Uninterruptible Power Supply (UPS) .....                 | 15       |
| Vital Proof Computer.....                                | 15       |

|  |           |
|--|-----------|
| <b>PROCEDURES .....</b>                                    | <b>17</b> |
| <b>Preventive Maintenance Procedures.....</b>              | <b>17</b> |
| General Maintenance/Cleaning .....                         | 18        |
| Grease Gun Configurations.....                             | 19        |
| Vacuum Bag.....  | 21        |
| Engrave Head Air Filters .....                             | 23        |
| Cooling Fans.....  | 25        |
| Manual Chuck .....   | 27        |
| Tailstock Leadscrew & Drive Nut .....                      | 29        |
| Carriage Drive Ballscrew.....                              | 31        |
| Tailstock Rail Guides (Bearings) .....                     | 33        |
| Carriage Rail Guides (Bearings).....                       | 35        |
| Engrave Head Leadscrew & Drive Nut.....                    | 37        |
| Engrave Head Sub-Carriage Guides (Bearings) .....          | 39        |
| Replacing the Engrave Head Vacuum Hoses.....               | 43        |
| Embedded Computer – RAVE Tower Computer (Black case) ..... | 45        |
| Embedded Computer – Advantech Computer (Tan case).....     | 47        |
| Uninterruptible Power Supply (UPS).....                    | 49        |
| Vital Proof Computer .....                                 | 51        |



Chapter 1

# Introduction

## About the Prism Engraver

Congratulations on your purchase of a Prism engraver from Ohio Gravure Technologies. This engraver was designed with advanced capabilities; however, the machine cannot take care of itself, and routine maintenance is important to the performance of the machine. With that in mind, we present this preventive maintenance program to assist you in this task and protect your investment.

The people of Ohio GT wish to thank you for purchasing this engraver and look forward to a continuing partnership with you.

**CAUTION:** Do not perform any procedures in this maintenance manual without utilizing the correct materials outlined in each procedure. Doing so could cause damage to the machinery and void the warranty.

### Purpose Of Manual

---

This manual was written for Customers and Service personnel to accomplish the following requirements:

- ❖ To implement an ongoing preventive maintenance program for all Ohio GT equipment.
- ❖ To structure guidelines for the period that preventive maintenance is to be performed.
- ❖ To provide concise procedures that enable customers to perform maintenance without training from Ohio GT.
- ❖ To provide all necessary information regarding tools and materials needed for preventive maintenance.

### About this manual

---

This manual is divided into three separate chapters: Introduction/Safety, Preventive Maintenance Schedule, and Preventive Maintenance Procedures.

If specific information is needed, refer to either the table of contents or the Master PM Schedule found on page 4.

## Document Conventions

This manual uses the following conventions:

**BOLD** type to indicate emphasis.

*Italics* to refer to other publications or documents.

*Tip!* To provide helpful hints on performing a maintenance procedure.

**Note:** to indicate important information pertaining to the procedure.

**CAUTION:** to indicate the potential for damage to equipment.

**WARNING:** to indicate conditions that may lead to personal injury.

## Safety

---

Ohio GT equipment is built with the latest technology and is totally safe to operate when used in accordance with provided operation manuals. Improper use of the equipment or inexperienced personnel can lead to dangerous situations. Operating procedures affecting the safety of the equipment is forbidden.

The operator is responsible for

- Ensuring that no unauthorized personnel are working on the machine.
- Reporting any signs of change affecting safety to his supervisor or Ohio GT.
- Operating the machine in good condition only.

Modifications and changes affecting equipment safety are strictly forbidden. Every person operating or maintaining this unit must read and understand the complete operation manual. The correct usage includes following the manufacturer's recommendations for installation, operation and maintenance. Only authorized and trained personnel are allowed to service and install the machine. These people have been instructed about the possible dangers. The operator may perform preventive maintenance routines, provided the instructions are strictly followed.

All service and maintenance work must be performed while the machine is shut off. Safety covers, doors and flaps that are mounted for safety reasons are only to be removed or opened after the machine is shut off.

Ohio GT strongly recommends the use of original parts for repairing or replacing worn parts, and lubrication. Ohio GT regrets that we cannot accept responsibility for machine damage or problems encountered due to outside material.

## Replacement Parts

---

**CAUTION:** Use of non-OHIO parts is strongly discouraged. OHIO warranty coverage requires the customer use of genuine OHIO parts. Failure to do so may limit warranty claims and introduce unexpected engraving results.



# Schedule

## Preventive Maintenance Schedule

An important piece of maintaining equipment is performing the maintenance on a routine schedule. The remainder of this document identifies the various routine maintenance procedures that must occur as well as the schedule.

The *Master PM Schedule* on the next page provides a quick review of all the necessary procedures and the required schedule. The Master PM Schedule is a table that shows the assembly or item, the procedure, the page number for the procedure, and the period for performing the procedure. Use this table to determine which procedures need to be performed and the necessary schedule.

The *Schedules* on pages 6–14 are individual checklists to be used with the maintenance procedures on the following pages. The checklists provide a simple way to track when maintenance is performed and who performed it. Each block on the checklist indicates a maintenance routine must take place. A dated and initialed block indicates that the maintenance has been performed for that period. Questions regarding the structuring of your particular maintenance program can be directed to the Ohio Customer Support.

### Schedule and Checklists

|  |    |
|--|----|
| <i>Master PM Schedule</i> .....                                  | 4  |
| <i>List of Materials</i> .....                                   | 5  |
| <i>Vacuum Bag</i> .....  | 7  |
| <i>Engrave Head Air Filters</i> .....                            | 8  |
| <i>Cooling Fans, Electrical Enclosure</i> .....                  | 9  |
| <i>Manual Chuck</i> .....  | 10 |
| <i>Head &amp; Tailstock Drive Nut</i> .....                      | 11 |
| <i>Head &amp; Tailstock Rail Guides (Bearings)</i> .....         | 11 |
| <i>Carriage Rail Guides (Bearings)</i> .....                     | 12 |
| <i>Carriage Linear Drive Track</i> .....                         | 12 |
| <i>Engrave Head Drive Nut</i> .....                              | 13 |
| <i>Engrave Head Sub-Carriage Guides (Bearings)</i> .....         | 13 |
| <i>Expandable Vacuum Hose and Engrave Head Vacuum Hose</i> ..... | 14 |
| <i>Embedded Computer</i> .....                                   | 14 |
| <i>Uninterruptible Power Supply (UPS)</i> .....                  | 15 |
| <i>Vital Proof Computer</i> .....                                | 15 |

## Master PM Schedule

| Period    | Action            | Item  | Checklist Page | Procedure Page |
|-----------|-------------------|---|----------------|----------------|
| Anytime   | Clean             | General cleaning of machine                 | —              | 16             |
| Bi-Weekly | Replace           | Vacuum Bag                                  | 7              | 21             |
| Monthly   | Replace           | Engrave Head Air Filters                    | 8              | 23             |
| Monthly   | Check             | Cooling Fans                                | 9              | 25             |
| Monthly   | Lubricate         | Manual Chuck                                | 10             | 27             |
| Yearly    | Lubricate         | Head & Tailstock Drive Nut                  | 11             | 29             |
| Yearly    | Lubricate         | Head & Tailstock Rail Guides (Bearings)     | 11             | 31             |
| Yearly    | Lubricate         | Carriage Rail Guides (Bearings)             | 12             | 35             |
| Yearly    | Clean             | Carriage Linear Drive Track                 | 12             | 31             |
| Yearly    | Lubricate         | Engrave Head Leadscrew & Drive Nut          | 13             | 37             |
| Yearly    | Lubricate         | Engrave Head Sub-Carriage Guides (Bearings) | 13             | 39             |
| 2x Yearly | Replace           | Expandable Vacuum Hose                      | 14             | 43             |
| 2x Yearly | Replace           | Engrave Head Vacuum Hose                    | 14             | 43             |
| Bi-Yearly | Clean             | Embedded Computer                           | 14             | 45             |
| Bi-Yearly | Clean and Inspect | Uninterruptible Power Supply (UPS)          | 15             | 49             |
| Bi-Yearly | Clean             | Vital Proof Computer                        | 15             | 51             |



## List of Materials

---

The following items are required for one or more of the maintenance procedures:

- ❖ Vacuum Bag – D1475-0027\*
- ❖ Kit, Air Filter, Engraving Head – D 803.900.042\*
- ❖ Multi-purpose Grease – D1645-0024
- ❖ Grease Gun – D1650-0024
- ❖ Push-On Coupler – D1650-0025
- ❖ Needletip Nozzle – D1650-0026
- ❖ Expandable Vacuum Hose – D807.400.009\*
- ❖ Engrave Head Vacuum Hose – D807.400.034\*

\* Part of the yearly consumables kit.

**CAUTION:** Use of non-OHIO parts is strongly discouraged. OHIO warranty coverage requires the customer use of genuine OHIO parts. Failure to do so may limit warranty claims and introduce unexpected engraving results.



## Vacuum Bag

Replace the bag every two weeks

Instructions on page 21

### January

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### February

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### March

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### April

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### May

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### June

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### July

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### August

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### September

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### October

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### November

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

### December

|        |  |        |  |  |
|--------|--|--------|--|--|
| Week 1 |  | Week 3 |  |  |
|--------|--|--------|--|--|

Each block indicates required bi-weekly maintenance. Check and initial block when maintenance is completed.

## Engrave Head Air Filters

Replace once a month

Instructions on page 23

### January

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### February

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### March

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### April

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### May

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### June

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### July

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### August

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### September

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### October

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### November

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### December

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.

## Cooling Fans

Check and clean once a month

Instructions on page 25

### January

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### February

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### March

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### April

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### May

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### June

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### July

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### August

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### September

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### October

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### November

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### December

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.

## Manual Chuck

Lubricate once a month

Instructions on page 27

### January

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### February

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### March

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### April

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### May

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### June

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### July

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### August

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### September

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### October

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### November

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

### December

|        |        |        |        |        |
|--------|--------|--------|--------|--------|
| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--------|--------|--------|--------|--------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.

---

## Tailstock Drive Nut

---

*Lubricate once a year*

*Instructions on page 29*

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required yearly maintenance. Check and initial block when maintenance is completed.

---

## Tailstock Rail Guides (Bearings)

---

*Lubricate once a year*

*Instructions on page 31*

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required yearly maintenance. Check and initial block when maintenance is completed.

### Carriage Rail Guides (Bearings)

---

*Lubricate once a year*

*Instructions on page 35*

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required yearly maintenance. Check and initial block when maintenance is completed.

### Carriage Drive Ballscrew

---

*Clean and inspect once a year*

*Instructions on page 31*

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.



## Engrave Head Leadscrew & Drive Nut

Lubricate once a year

Instructions on page 37

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.

## Engrave Head Sub-Carriage Guides (Bearings)

Lubricate once a year

Instructions on page 39

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required monthly maintenance. Check and initial block when maintenance is completed.

## Expandable Vacuum Hose and Engrave Head Vacuum Hose

Replace twice a year as a pair

Instructions on page 43

|                  |                  |                  |
|------------------|------------------|------------------|
| Year 20____<br>A | Year 20____<br>A | Year 20____<br>A |
| B                | B                | B                |

|                  |                  |                  |
|------------------|------------------|------------------|
| Year 20____<br>A | Year 20____<br>A | Year 20____<br>A |
| B                | B                | B                |

|                  |                  |                  |
|------------------|------------------|------------------|
| Year 20____<br>A | Year 20____<br>A | Year 20____<br>A |
| B                | B                | B                |

Each block indicates required monthly maintenance. Check and initial when maintenance is completed.

## Embedded Computer

Clean every two years

Instructions on page 45 (RAVE)  
 or page 47 (Advantech)

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

|             |             |             |
|-------------|-------------|-------------|
| Year 20____ | Year 20____ | Year 20____ |
|-------------|-------------|-------------|

Each block indicates required bi-yearly maintenance. Check and initial when maintenance is completed.

---

## Uninterruptible Power Supply (UPS)

---

*Clean every two years*

*Instructions on page 49*

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

Each block indicates required bi-yearly maintenance. Check and initial when maintenance is completed.

---

## Vital Proof Computer

---

*Clean every two years*

*Instructions on page 51*

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

|           |           |           |
|-----------|-----------|-----------|
| Year 20__ | Year 20__ | Year 20__ |
|-----------|-----------|-----------|

Each block indicates required bi-yearly maintenance. Check and initial when maintenance is completed.

# PRISM & PRISM PRIME PREVENTIVE MAINTENANCE MANUAL





# Procedures

## Preventive Maintenance Procedures

This section contains the various preventive maintenance procedures for the Prism engraving system. Information contained here includes procedures for standard equipment as well as optional equipment, auto-chucks and cylinder supports for example.

Photographs used in this section may differ slightly from your machine. This is due to on-going development with the Prism engraver. In some photographs, the machine is shown with the enclosures removed. This was done to provide a better view of the item being identified for maintenance. The maintenance instructions will refer to the missing enclosures where appropriate.

### Procedures

|  |    |
|--|----|
| General Maintenance/Cleaning .....               | 18 |
| Grease Gun Configurations .....                  | 19 |
| Vacuum Bag .....                                 | 21 |
| Engrave Head Air Filters .....                   | 23 |
| Cooling Fans .....                               | 25 |
| Manual Chuck .....                               | 27 |
| Tailstock Leacscrew & Drive Nut .....            | 29 |
| Carriage Drive Ballscrew .....                   | 31 |
| Tailstock Rail Guides (Bearings) .....           | 33 |
| Carriage Rail Guides (Bearings) .....            | 35 |
| Engrave Head Leadscrew & Drive Nut .....         | 37 |
| Engrave Head Sub-Carriage Guides (Bearings)..... | 39 |
| Expandable Vacuum Hose .....                     | 43 |
| Embedded Computer .....                          | 45 |
| Uninterruptible Power Supply.....                | 49 |
| Vital Proof Computer .....                       | 51 |

## General Maintenance/Cleaning

---

*Take pride in your equipment!*

This document addresses specific important maintenance steps. Routine cleaning to keep the machine tidy is also important. We encourage you to clean the machine as needed, not just when preventive maintenance calls for it. This includes:

- Vacuuming any excess copper chips that occur around the engraving head or on the carriage. Use an external vacuum for this clean-up.
- Cleaning up spills immediately that occur during cylinder preparation. This prevents damage to parts, bellows and paint where the liquid may fall.

## Grease Gun Configurations

Grease Gun – D1645-0027

Push-On Coupler and Dispensing Tube – D1650-0025

Needletip Nozzle – D1650-0026

The base grease gun requires some simple configuration changes to work for the two different types of grease fittings. There are two configurations required, as explained below.

### Normal Grease Fitting Configuration

1. The basic grease gun has a pump assembly and a tube with press-fit grease coupling.
2. Install the tube onto the pump assembly if necessary. Leave the press-fit coupling on the tube.



D1645-0027

### Flush Tip Grease Fitting Configuration

1. Locate the Needlepoint nozzle.
2. Insert the assembly into the press-fit coupling. If the needletip assembly won't go in, loosen the press-fit coupling slightly, insert the assembly, and tighten the coupling to hold the flush-tip assembly.

This configuration is used for lubricating the Chuck, on page 27 and the Sub-Carriage Guides on page 39.

To convert back to the Normal configuration, loosen the press-fit coupling and pull the needlepoint nozzle out.



D1650-0026





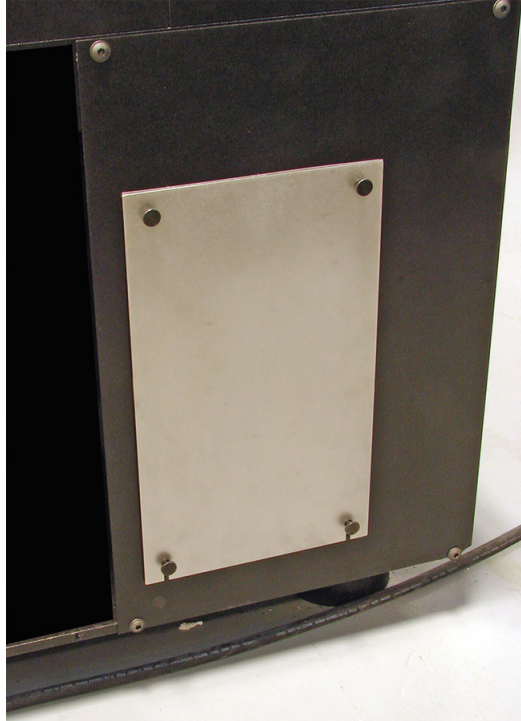
## Vacuum Bag

*Replace the bag every two weeks*

Vacuum Bag: P/N D1475-0025

To replace the vacuum bag

3. Ensure the machine is not engraving.
4. Open the vacuum cover found on the rear of the machine.



3. Pull the existing bag off the exhaust nozzle.
4. Clean the exhaust nozzle at the top of the cavity to remove excess copper chips and to promote a good seal. Also clean out any copper chips from inside the vacuum cavity.



A view of the exhaust nozzle (top)

5. Gently pull a new bag to open it slightly then place over the exhaust nozzle. Slide the bag back until a good seal is achieved over the large diameter of the exhaust nozzle. Make sure the bag is over the large diameter of the nozzle to prevent copper chips from escaping from the bag and filling the cavity.
6. Replace the vacuum cover.

## Engrave Head Air Filters

*Replace once a month*

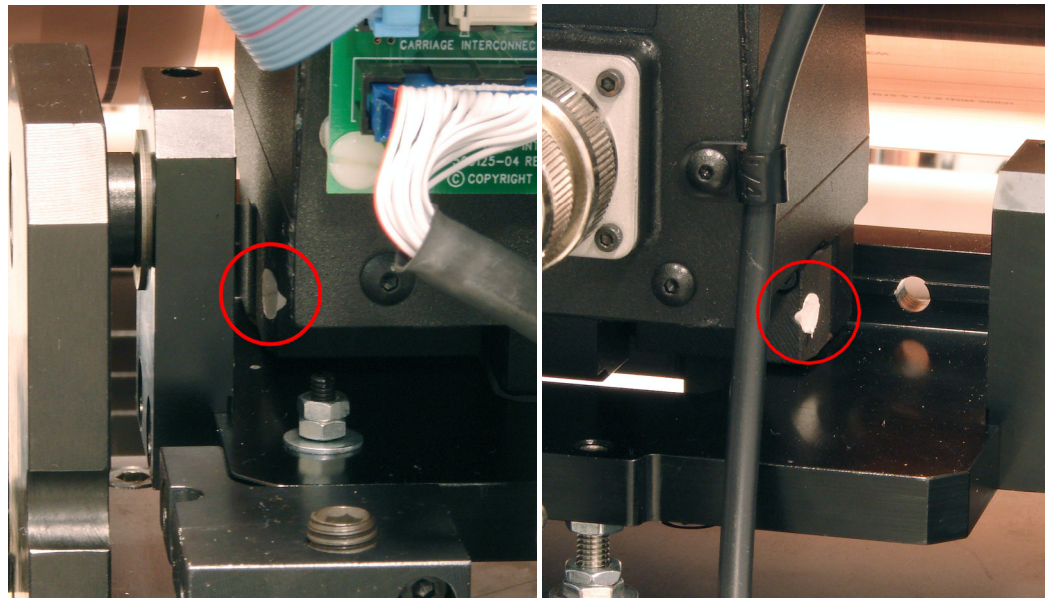
Engrave Head Air Filter: P/N D803.900.042

The Engrave Head Air Filters are located on the bottom of the engrave head. These filters clean the air entering the head to cool the head motor. It is important to replace these filters on a regular basis to prevent the filters from becoming blocked and also to prevent dirt from entering the engrave head.

**Note:** Dirt in the engrave head will affect the performance of the head and will require factory service to clean the head.

To access the Engrave Head Air Filters:

1. Using a pair of needle-nose pliers, remove the air filters from the nozzles beneath the engrave head.



Left Air Filter

Right Air Filter

2. Using your fingers, insert a new air filter into each nozzle.



## Cooling Fans

*Check once a month, clean if necessary*

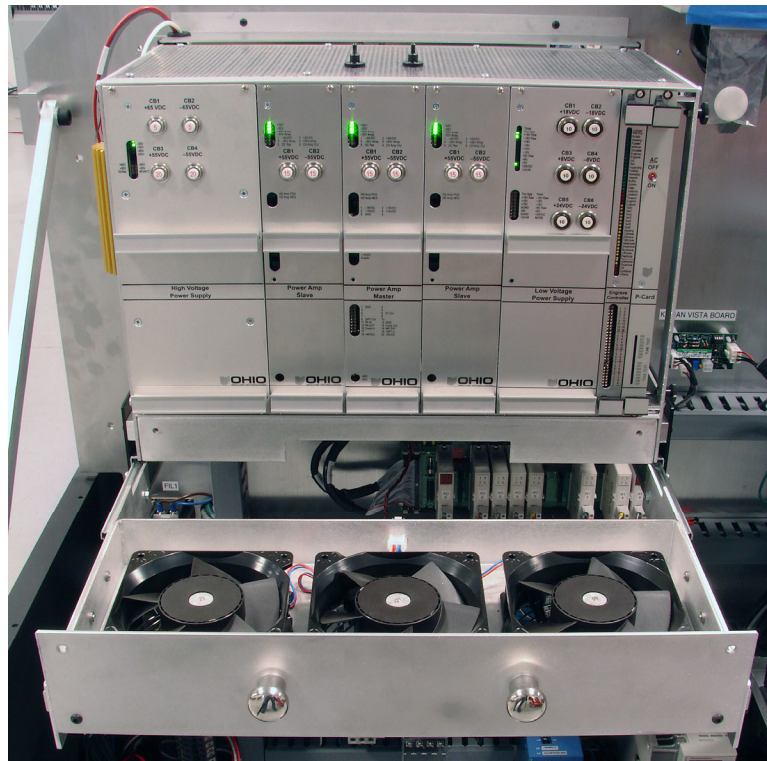
The fans on the electronics rack provide cooling air to the power supplies and engrave head amplifiers. Verify the fans are running and that they are clean from excessive dust and dirt.

To check the cooling fans:

1. Ensure the machine is not engraving but power is ON to the machine.
2. Remove the end panel from the electronics enclosure by removing nine (9) thumbscrews. The end panel will lift off the machine. Set it aside in a safe place.
3. Use a flashlight to look under the electronics rack at the fans beneath. Verify that all are three (3) fans are running.

**DANGER:** There is electricity running to the unit. Do not touch anything, simply look under the rack to verify the fans are running.

4. Turn OFF power to the machine. This stops the fans rotation.
5. The fans are mounted in a sliding tray. Remove the two (2) black thumbscrews, one from each side, that hold the tray and slide the fan tray out from under the electronics rack.



6. Clean the fans if they are excessively dirty using a vacuum and soft brush.  
**NOTE:** If the fans are extremely dirty, with one mm or more of dirt attached to the fan blades and housing, call Ohio GT or an authorized service organization. The power supplies and amplifiers in the electrical rack will need to be cleaned to prevent the possibility of serious electronic failures.

7. Slide the fan tray back under the electronics rack and secure with the two thumbscrews.
8. Re-install the end cover using the nine thumbscrews.

## Manual Chuck

*Lubricate once a month*

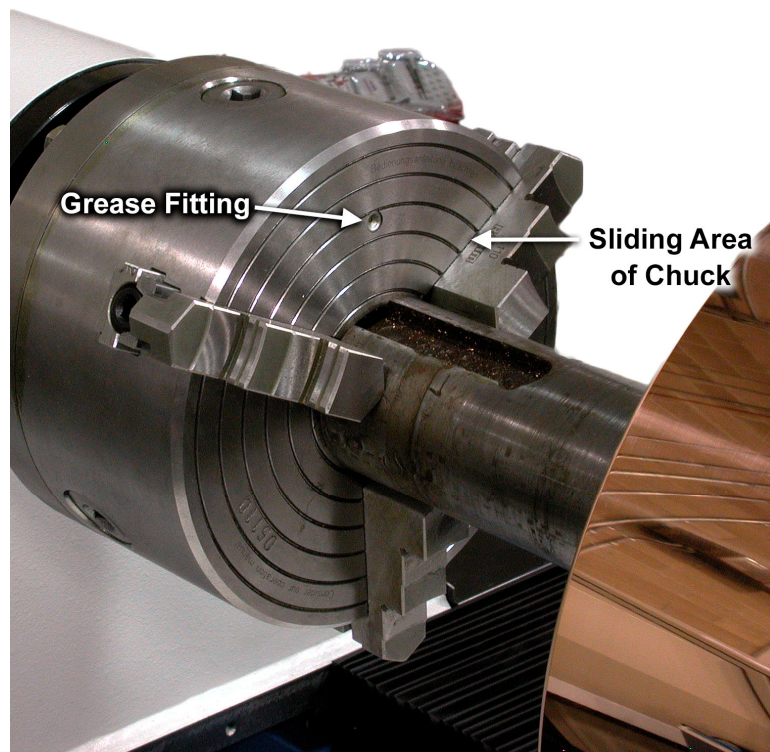
Lubricant: Multi-purpose grease, P/N D1645-0024

To lubricate the chuck:

1. Remove cylinder from the machine.
2. Change the grease gun to use the needletip configuration.
3. Add two (2) pumps of grease in the button head grease fitting on the face of the chuck.
4. Open the chuck to expose the sliding surfaces of the jaws.

**CAUTION:** Do not remove the jaws from the chuck.

5. Place a small amount of grease on a piece of cloth or your finger and apply a light coating to the six (6) sliding areas of the jaws.
6. Move the jaws in and out to distribute the grease on the sliding areas.







## Tailstock Leadscrew & Drive Nut

*Inspect Leadscrew, Lubricate Leadscrew and Drive Nut once a year*

Lubricant: Multi-purpose grease, P/N D1645-0024

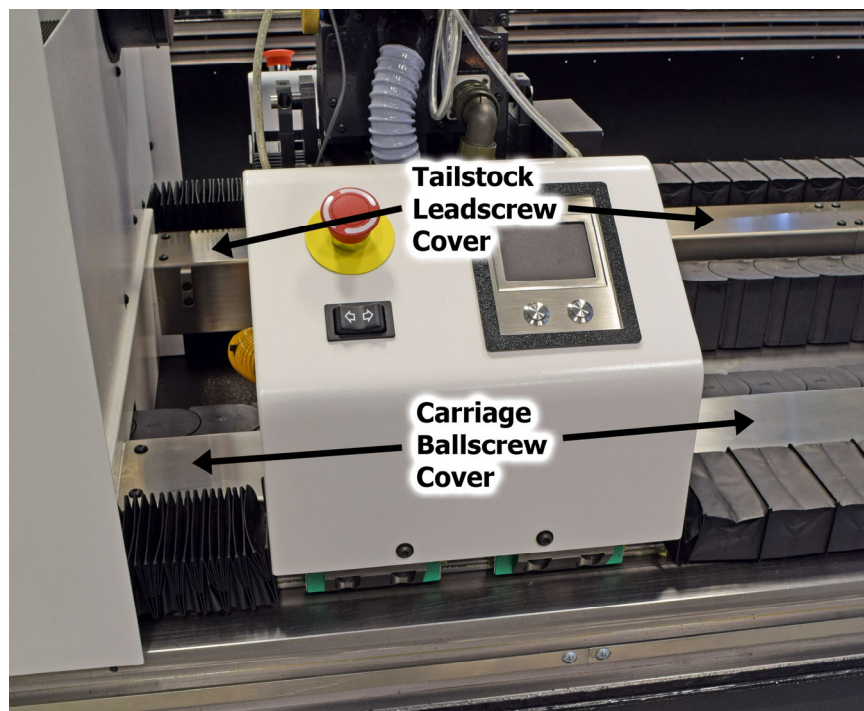
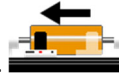
The tailstock is driven by a leadscrew on the top of the machine bed. The tailstock has a drive nut riding on the leadscrew.

To lubricate the tailstock leadscrew drive nut:

1. Remove the cylinder from the machine.

2. Move the carriage to the left end of the machine.

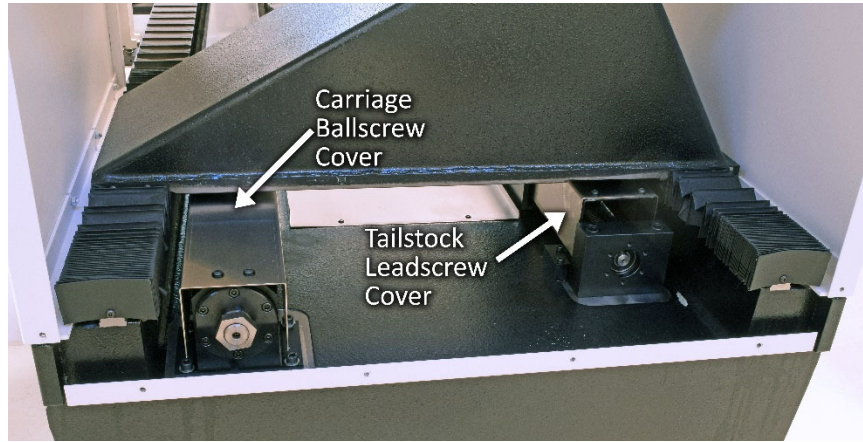
Position the carriage as shown in the picture.





Carriage Position for removing tailstock leadscrew cover



3. Move the tailstock left and position as shown in the picture above. This allows access to the screws holding the cover on and for removal of the cover. Make sure the two screws at the end of the Tailstock Leadscrew Cover are accessible and not covered by the tailstock.
4. Remove the 13 screws holding the cover plate on the right end of the machine. Use a 4 mm hexkey wrench to remove the screws.
5. The tailstock leadscrew covers is made in two pieces, a long section on the right and a short section on the left. Remove the four (4) screws holding the long section of tailstock leadscrew cover. Two (2) screws are found on each end of the cover. Use a 4 mm hexkey wrench. Do not remove screws from the short section of the cover.



Right end of cover

6. Carefully lift and slide the leadscrew cover to the right, and remove from the machine. Place the cover in a safe place.
7. Inspect the leadscrew for dirt and debris. If debris is present, use a clean soft-bristled brush to remove the dirt and debris. If necessary for inspection and cleaning, turn the leadscrew using the Stock In/Out controls on the read pod.
8. Remove the needle tip tube and the press-fit connector from the grease gun tube. This will leave an open tube at the end.
9. Apply two (2) pumps of grease on to the leadscrew to the left side of the nut.
10. Move the tailstock to the left end of the machine using the tailstock controls. 
11. Apply two (2) pumps of grease on to the leadscrew to the right side of the nut.
12. Move the tailstock to the right end of the machine using the tailstock controls.   
Position the tailstock so that the cover can be re-installed.
13. Carefully re-install the tailstock cover. Secure using the four (4) screws removed in step 5.
14. Go to the next procedure, *Carriage Drive Ballscrew*.

## Carriage Drive Ballscrew

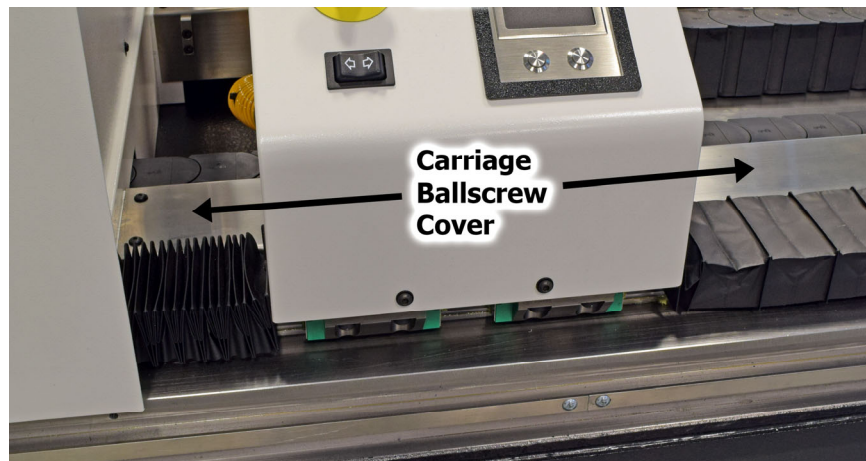
*Inspect and lubricate once a year*

Lubricant: Multi-purpose grease, P/N D1645-0024

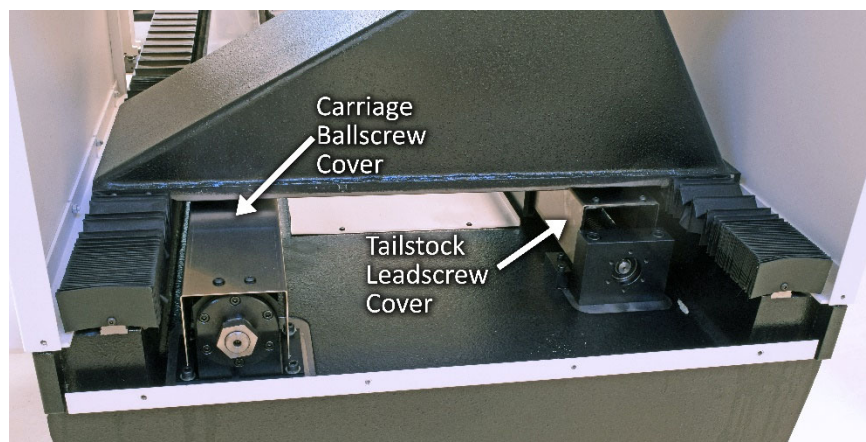
The carriage uses a ballscrew to move left and right across the machine. This ballscrew should be kept clean and free from debris to prevent problems with carriage movement. The ballscrew drive nut is also greased after inspecting the ballscrew to maintain smooth operation.

**Note:** Perform this procedure after the preventive maintenance on the tailstock leadscrew and drive nut (see page 29).

1. Remove the four (4) screws holding the carriage ballscrew cover on the machine. Two (2) screws are found on each end of the cover, as shown in the following pictures. Use a 3 mm hexkey wrench on the left end of the cover and a 4 mm hexkey wrench on the right end of the cover.



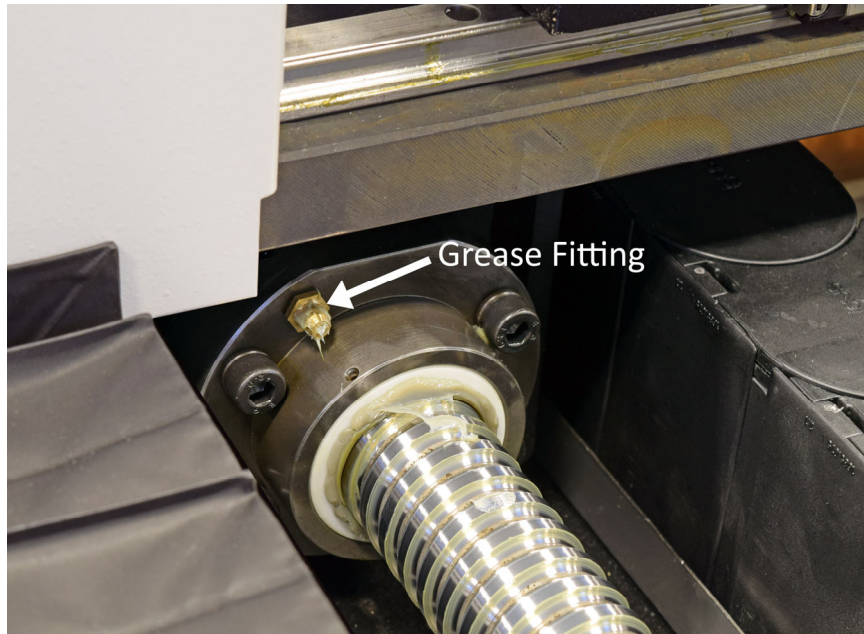
Left end of cover  
Showing two screws holding cover




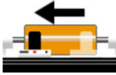
Right end of cover

2. With two people holding the ballscrew cover, slide the cover out of the machine. Be careful when sliding it under the carriage and tailstock to prevent any damage to the ballscrew or cover.

3. Inspect the carriage ballscrew for dirt and debris. If debris is present, use a clean soft-bristled brush to remove the dirt and debris. If necessary for inspection and cleaning, turn the ballscrew using the carriage controls on the operator pods.
4. Re-install the press-fit grease coupling then locate the carriage ballscrew nut under the carriage. Apply two (2) pumps of grease to the nut.



Grease Fitting on Carriage Ballscrew Nut

5. Move the carriage the the far right to spread the grease over the nut and ballscrew. 
6. Apply one (1) pump of grease to the nut and then return the carriage to the left side of the machine in the proper position to re-install the ballscrew cover. 
7. Re-install the ballscrew cover. Be careful to avoid damaging the ballscrew when sliding the cover under the tailstock and carriage.
8. Secure the cover using the four (4) screws removed from step 1.
9. Re-install the cover plate on the tailstock end using 13 screws (performed in step 4 of the *Tailstock Leadscrew & Drive Nut procedure*).

## Tailstock Rail Guides (Bearings)

*Lubricate once a year*

Lubricant: Multi-purpose grease, P/N D1645-0024

Rail guides (also called bearings) ride on the front and back linear rails of the engraver. There are four rail guides to lubricate:

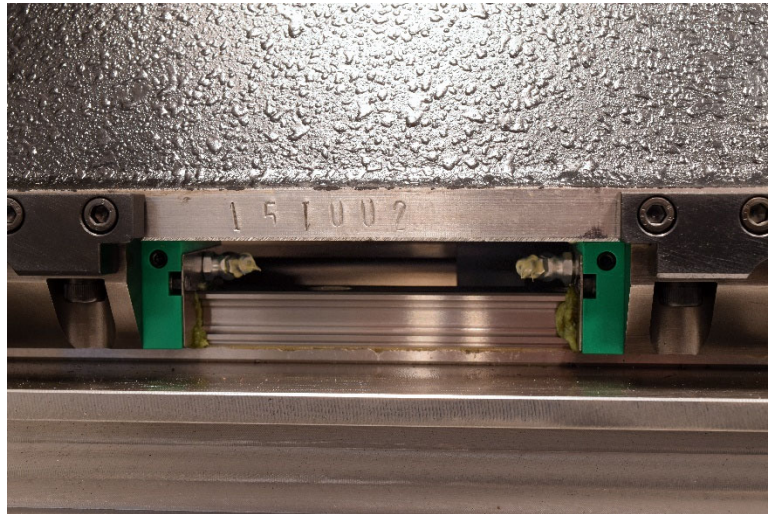
To lubricate the rail guides:

1. Remove the cylinder from the machine if a cylinder is loaded.



Tailstock, shown from the back of the machine

2. Locate the four rail guides on the corners of the tailstock unit, two on the front and two on the rear. The grease fittings are mounted on the rail guides, facing the center of the tailstock.



Grease fittings on rail guides

3. Add two (2) pumps of grease into each fitting.

4. Move the tailstock across the guide rails to distribute the grease through the rail guides and on the linear rails. Leave the tailstock at the furthest right position and move on to the next procedure, Carriage Rail Guides.

## Carriage Rail Guides (Bearings)

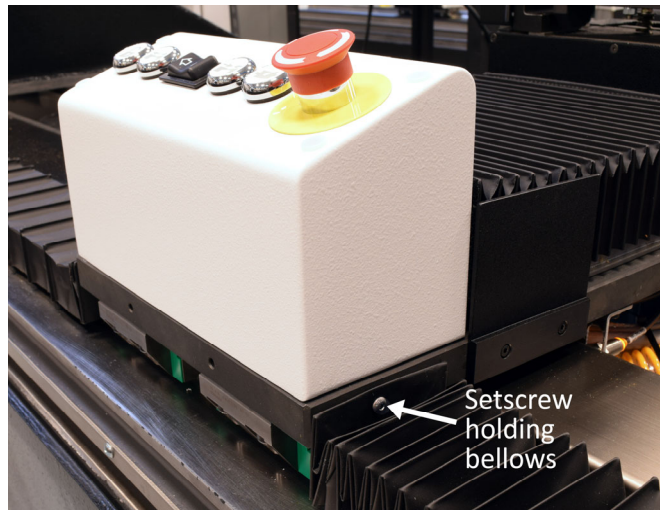
*Lubricate once a year*

Lubricant: Multi-purpose grease, P/N D1645-0024

The carriage has four (4) rail guides, also known as bearings. These guides ride on linear rails. Two (2) guides ride on the front linear rail, and two (2) on the rear linear rail.

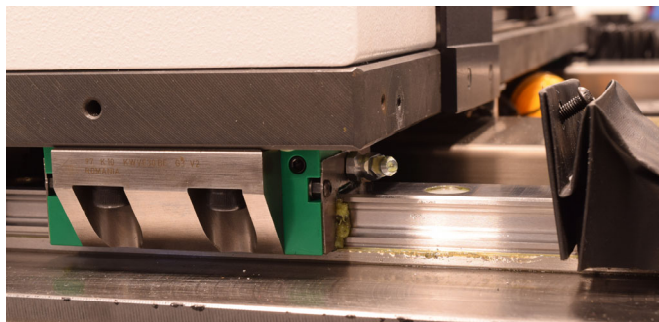
To lubricate the carriage rail guides:

1. Remove the screws holding the bellows to the carriage. There are four (4) screws, one on each corner, that hold each bellows. Use a 3 mm hexkey to remove the screws.



Setscrew holding back right bellows

3. Add two (2) pumps of grease into each grease fitting.
4. Re-install the bellows to the carriage using the screws removed from step 1.



View of the back right rail guide showing the grease fitting.

5. Using the carriage controls, move the carriage left and right over the length of the machine to distribute the grease through the rail guides and onto the linear rails.





## Engrave Head Leadscrew & Drive Nut

*Lubricate once a year*

Lubricant: Multi-purpose grease, P/N D1645-0024

The engrave head is driven into and away from the cylinder by a small leadscrew. The drive nut is mounted on the moving base below the engrave head. To lubricate the drive nut:

1. Remove the cylinder from the machine if a cylinder is loaded.

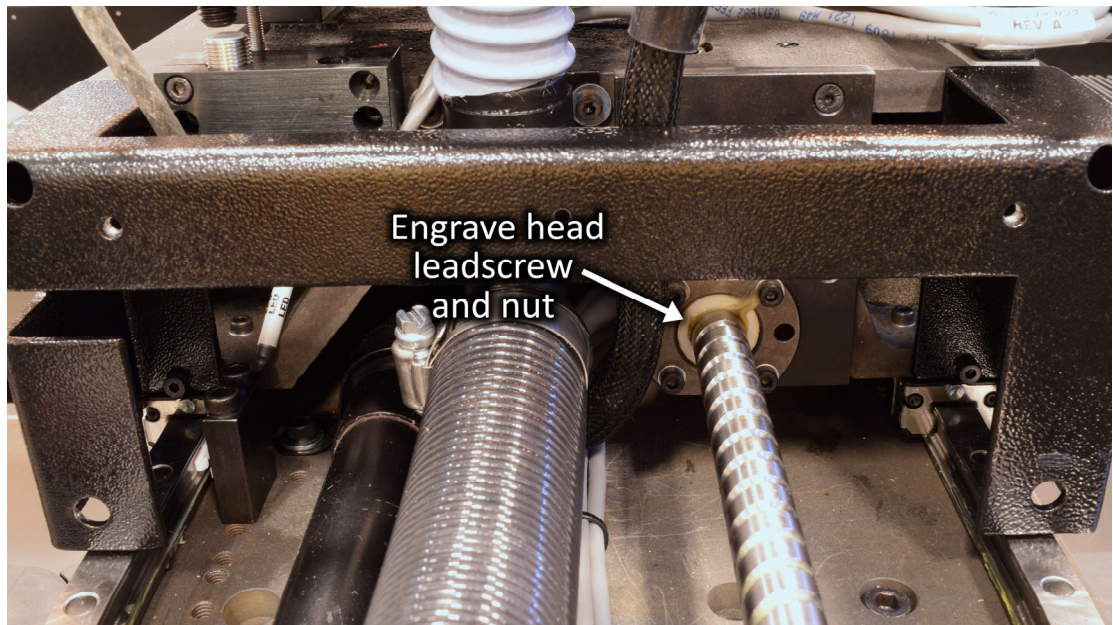
2. Position the head away from the chucks or cones and lower the head until it stops. 

3. Remove both sets of bellows from the top of the carriage. These bellows run between the engrave head platform and the front and back control pods. The bellows are attached using Velcro so remove simply by pulling away from the control pods and engrave head platform.


4. Inspect the carriage ballscrew for dirt and debris. If debris is present, use a clean lint-free towel to wipe the screw clean.

**Note:** There is likely to be copper chips on the leadscrew and the face of the nut.

5. On the operator side of the machine, use your finger to add a small amount of grease to the leadscrew near the drive nut.



Engrave Head Drive Nut

6. Retract the engrave head fully to move the nut over the length of the leadscrew. 

7. On the back of the machine, again use your finger to add a small amount of grease to the leadscrew near the drive nut. Because the nut is quite far back, add grease as far back as your finger will reach.

8. Lower the engrave head until it stops. 

9. Cycle the engrave head several times to spread the grease over the leadscrew.

**Note:** If you are going to lubricate the sub-carriage railguides next, skip step 9 and continue to the next procedure, *Engrave Head Sub-Carriage Guides*.

10. Replace the bellows.

## Engrave Head Sub-Carriage Guides (Bearings)

*Lubricate once a year*

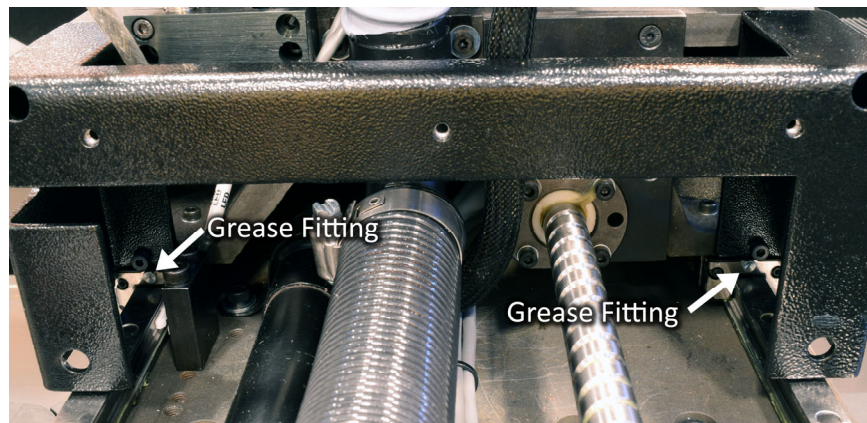
Lubricant: Multi-purpose grease, P/N D1645-0024

The engrave head moves into and away from the cylinder on a sub-carriage riding on two rails. Use this procedure to lubricate the rail guides on these rails.

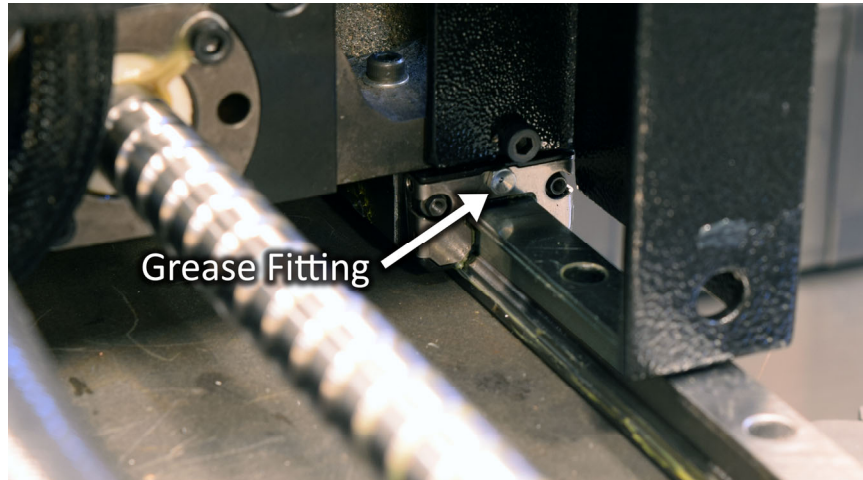
To lubricate bearings:



1. Turn ON power to the machine and retract the head fully.
2. Turn OFF power to the machine.
3. Remove both sets of bellows from the top of the carriage. These bellows run between the engrave head platform and the front and back control pods. The bellows are attached using Velcro so remove simply by pulling away from the control pods and engrave head platform.
4. Remove the operator pod from the front of the machine to gain access to the rear of the vacuum hose. Four (4) screws hold the pod to the carriage and these can be removed using a 2.5 mm hex key wrench.
  - a. Carefully lift the pod up and disconnect the cables running to the pod.
5. The grease fitting for the front rail guides are accessed through a hole aligned with each on the lower outside corners of the metal cover. If Velcro is on the cover and the holes are not there, use a knife to cut the Velcro from the holes.



Grease Fitting locations on the Sub-Carriage Rail Guides

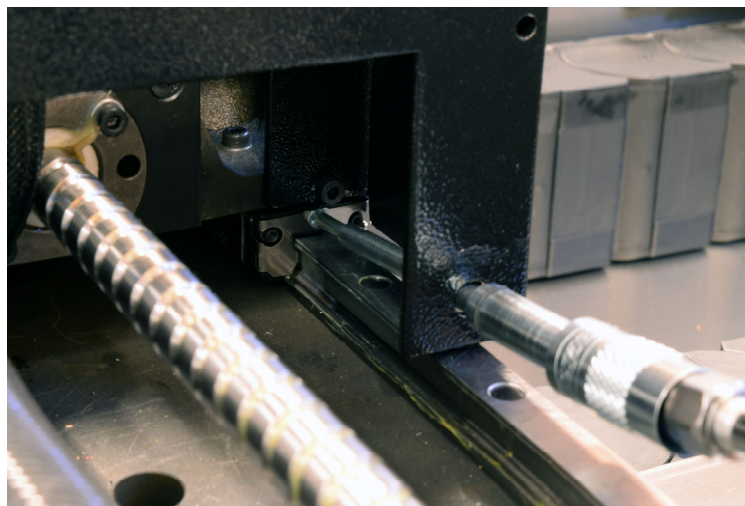


Closeup of front right grease fitting

6. Mount the needlepoint grease tube to the grease gun.

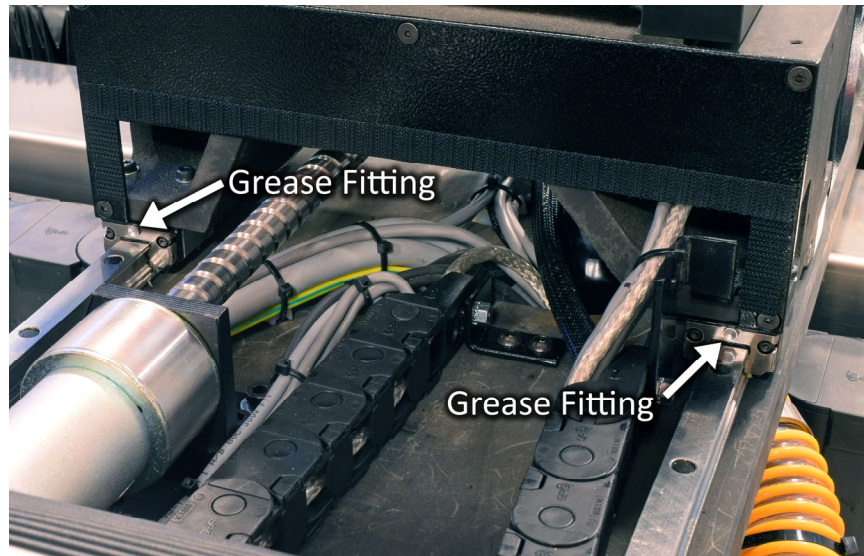


7. Press the needlepoint tube against the grease fittings and add one (1) pump of grease to the two (2) front rail guides.



Grease gun with needlepoint tube

8. Move to the back of the machine and grease the two (2) rail guides on the rear of the sub-carriage.



Grease fittings on rear rail guides

9. Add one (1) pump of grease to the two (2) rear rail guides.

**Note:** If you are going to replace the vacuum hose, go to the next procedure, *Replacing the Vacuum Hose* at this time. If not, continue at step 10.

10. Install the operator pod onto the carriage.
  - a. Connect the two cables.
  - b. Secure the pod to the carriage using four (4) screws removed in step 4.
11. Turn ON power to the machine.



12. Cycle the head in and out using the head raise and lower controls.
13. Install the bellows on the rear of the carriage and also at the front of the carriage.



## Replacing the Engrave Head Vacuum Hoses

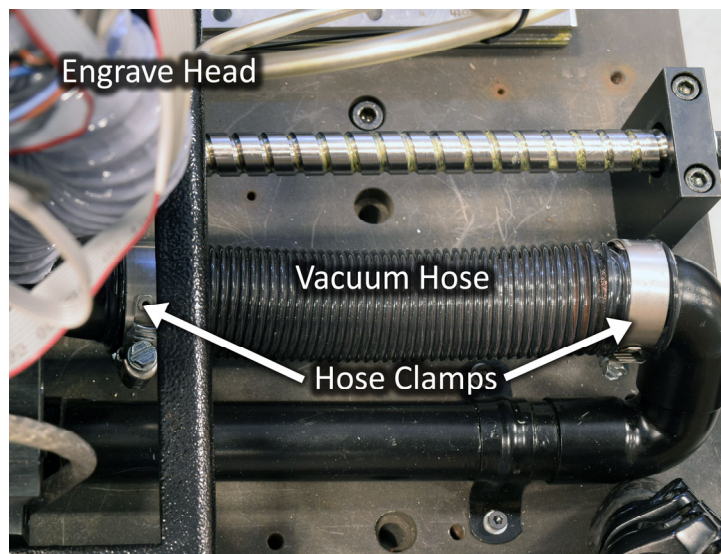
*Replace twice a year as a pair*

Part Required: 1) Expandable Vacuum Hose, P/N D807.400.009  
2) Engrave Head Vacuum Hose, P/N D807.400.034

**CAUTION:** Use of non-OHIO parts is strongly discouraged. OHIO warranty coverage requires the customer's use of genuine OHIO parts. Failure to do so may limit warranty claims and introduce unexpected engraving results.

The expandable vacuum hose connects the engrave head with the primary vacuum hose running the length of the machine. This hose stretches to accommodate the movement of the engrave head to different cylinder diameters. To replace the vacuum hose:

1. Turn OFF power to the machine.
2. Remove the bellows from between the engrave head and the operator pod.
3. Remove the operator pod from the front of the machine to gain access to the vacuum hose. Four (4) screws hold the pod to the carriage:
  - Two (2) on the front of the pod near the bottom using a 4 mm hexkey wrench.
  - One on each side which also hold the bellows to the cover. These can be removed using a 2.5 mm hexkey wrench.
  - a. Carefully lift the pod up and disconnect the two cables running to the pod.
4. Replace the expandable vacuum hose. This hose runs from below the engraving head to the operator side of the carriage and is black and grey in color.



- a. Release two hose clamps that secure the hose to the two metal tubes. An 8 mm (5/16 inch) nut driver or socket makes this an easy task. A medium flat-blade screwdriver can also be used.
- b. Slide the hose off the two tubes.
- c. Separate the two hose clamps from the hose. Discard the hose.

- d. Slide a hose clamp over each end of the new vacuum hose. Open the clamps as necessary to allow the hose to go through with minimal effort.



Expandable Vacuum Hose (shown with hose clamps installed)  
P/N D807.400.009

- e. First, slide the new vacuum hose onto the tube below the engrave head. Rotate the clamp to allow access to the locking screw on the hose clamp and then tighten.
  - f. Slide the free end onto the rear tube. Again rotate the hose clamp to allow easy access to the screw on the clamp and then tighten.
5. Remove the hose running between the engrave head and brass tube. This is the first flexible hose coming off the engrave head.



Engrave Head Vacuum Hose  
P/N D807.400.034

- a. Connect the two cables as appropriate.
  - b. Secure the pod using the four (4) original screws and nylon washers.
8. Turn ON power to the machine. The engrave head should retract when powered up.
  9. Turn ON the engrave head and listen for the vacuum. Check for air leaks around the hose clamps. Correct as necessary to eliminate leaks.
  10. Re-install the bellows between the pod and engrave head.



## Embedded Computer – RAVE Tower Computer (Black case)

*Clean every two years*

No Parts or Lubricant Required – A shop vacuum and compressed canned air are recommended.

The embedded computer is located in the electronics enclosure of the Prism. This computer should be checked for dirt and cleaned if necessary every two years. To clean the computer:

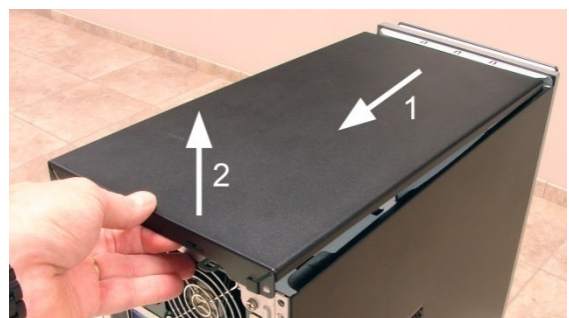
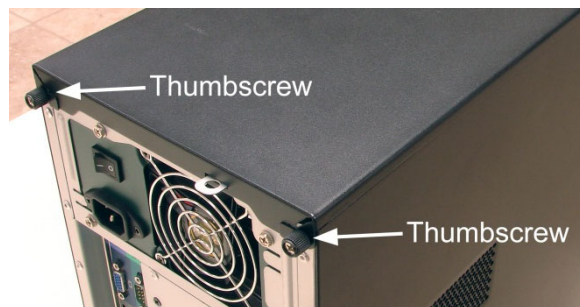
1. Turn OFF the computer. Do this using the Shutdown routine from the Prism application software.
2. Turn OFF the machine.
3. Remove the end panel from the electronics enclosure removing nine (9) screws holding the panel. Use a 4 mm hex key wrench for these screws. The end panel will lift off the machine. Set it aside in a safe place.
4. Remove the lower panel from the machine end. This is held on with seven (7) screws. Again use a 4 mm hex key wrench.
5. Locate the embedded computer on the right side of the cavity.

**Note:** If there is a Firewire repeater on the top of the PC, disconnects the wires running into the repeater. Be sure to pay attention to where they connect so you can re-connect them later.

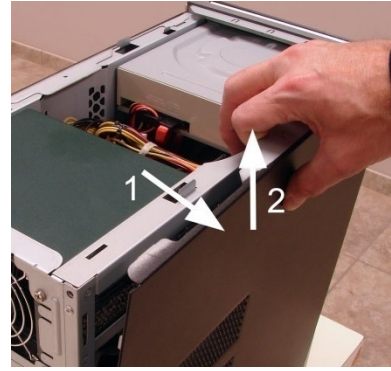
There are two black thumbscrews on the top rear of the embedded computer. Remove these two screws.

Slide the top cover back and then lift up to remove from the computer case.

Carefully lay the top cover on the floor of the machine, being cautious if there is a FireWire hub on the top.



- Slide the side panel up then pull away from the top and remove it from the computer.



- Inspect the interior of the computer for dirt and dust. If necessary, clean the interior using a soft brush. Vacuum up the dust and dirt being careful not to put the hose too close to the parts inside. Using the brush while holding the vacuum hose is a good option.



Pay particular attention to the fans mounted in the computer and be sure they are clean.

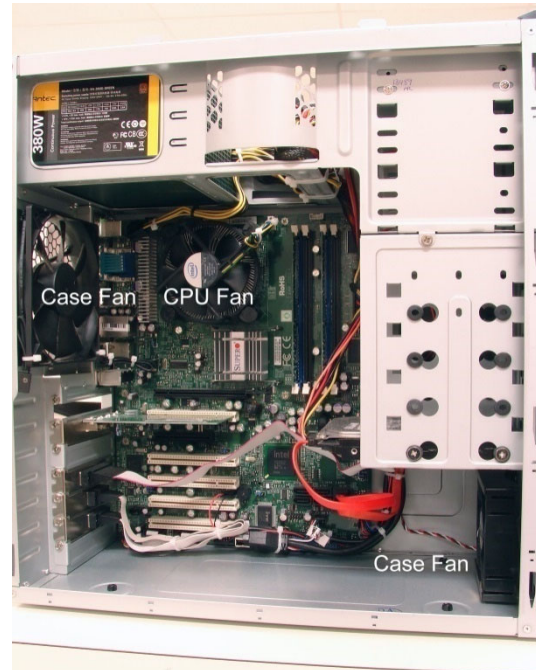
- Clean the vents leading into the power supply. The power supply is at the top of the computer.

Because of the power supply location, it may be difficult to get the vacuum to the vents. Another option is to use a can of clean compressed air.

**Caution:** Do not use shop air from a hose.

Place a damp paper towel over the fan at the rear of the power supply to catch dust when blowing out the power supply with air.

- Re-install the side panel onto the computer.
- Re-install the top cover onto the computer and secure with the two black thumbscrews. Also reconnect the FireWire cables to the Firewire repeater.



- Turn ON the computer by pressing the power button on the front. After start-up, verify the monitor shows the Prism desktop and the “Waiting for Power’ graphic.
- Replace the two end covers on the electronics enclosure.
- Clean the Uninterruptible Power Supply. Go to the page 49.

## Embedded Computer – Advantech Computer (Tan case)

*Clean every two years*

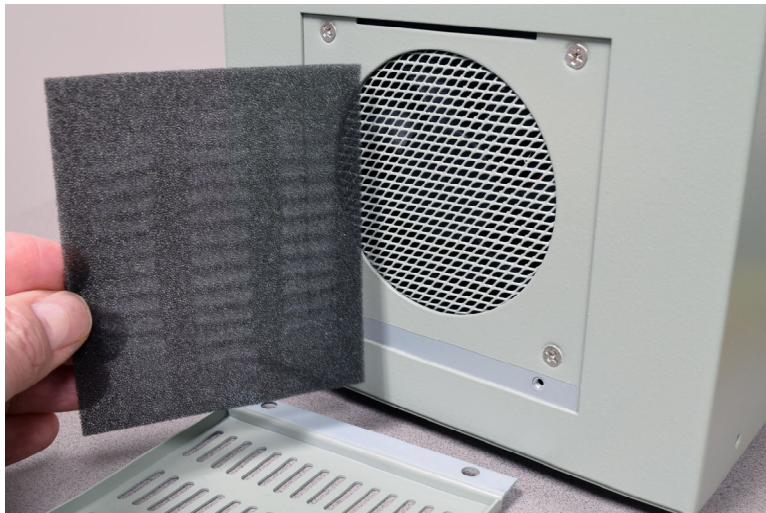
No Parts or Lubricant Required – A shop vacuum and compressed canned air are recommended.

The embedded computer is located in the electronics enclosure of the Prism. This computer should be checked for dirt and cleaned if necessary every two years. To clean the computer:

1. Turn OFF the computer. Do this using the Shutdown routine from the Prism application software.
2. Gently tilt the computer to see the front of the computer. On the face is a ventilation grill that is held in place by two screws beneath it. Remove these screws and lift the grill free of the computer.



3. Remove the air filter from the grill and thoroughly clean or replace it.
4. Vacuum the screen on the computer behind the air filter.



5. Re-install the air filter and grill.
6. Clean the Uninterruptible Power Supply. Go to the page 49.

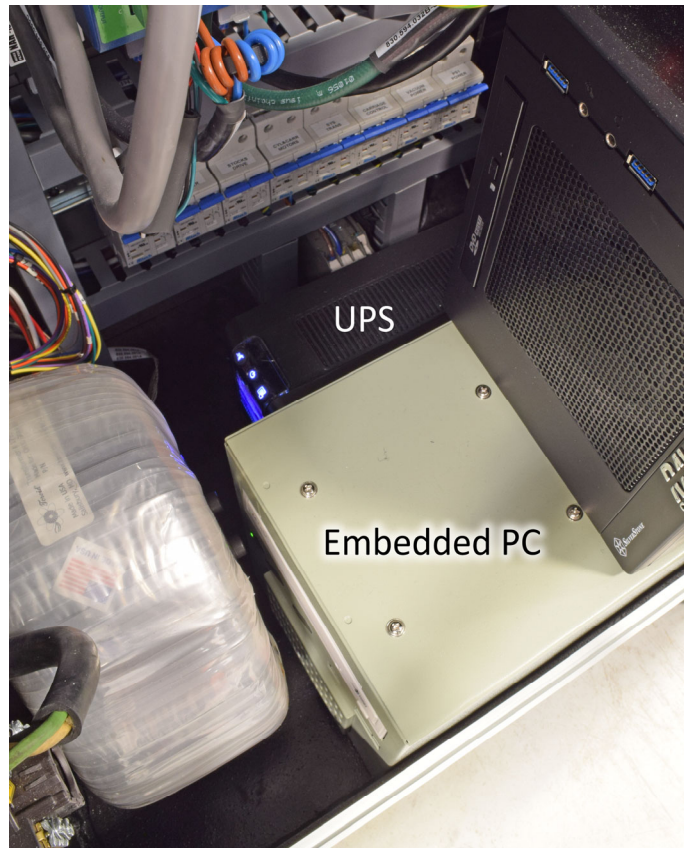


## Uninterruptible Power Supply (UPS)

*Clean and inspect every two years*

No Parts or Lubricant Required – A shop vacuum and compressed canned air are recommended.

The UPS is located in the electronics enclosure of the Prism. This UPS should be checked for dirt and cleaned if necessary every two years. Additionally, the battery condition should be evaluated to determine if the battery needs to be replaced.



UPS shown behind Embedded computer.  
UPS display faces left.

To clean the UPS:

1. Disconnect the machine from the main input power.
2. Turn OFF the UPS. Press and hold the Power button until the unit beeps, indicating the unit is shutting off. The UPS is located on the floor of the engraver behind the Embedded PC.
3. Vacuum the UPS and the area around the UPS. The space is limited so be careful when vacuuming.
4. Turn ON the UPS and check the battery condition. The UPS will beep indicating that no input power is connected. Check the display of the UPS. There are two battery icons shown on the UPS display. If both icons are ON, then the UPS battery is in need of replacement.

The replacement battery part number is: APC RBC 110  
(This is an APC part number. OHIO GT does not stock these batteries.)

5. Turn OFF the UPS.

6. Perform the preventive maintenance required for a Vital Proof computer (if installed). See the next page.

If no Vital Proof computer is installed, Preventive Maintenance is done.

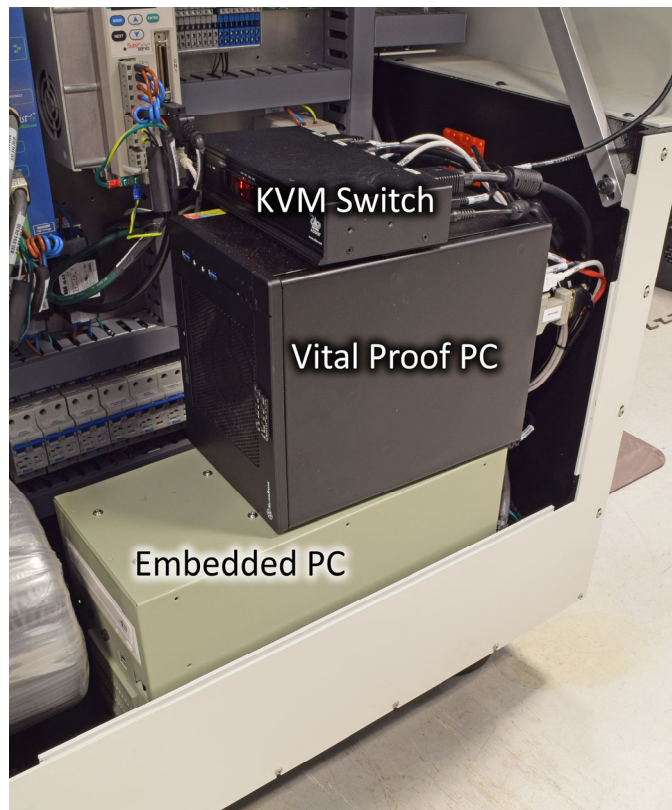
- Re-connect the main input power to the machine.
- Turn ON the UPS.
- Turn ON the machine.

## Vital Proof Computer

*Clean every two years*

No Parts or Lubricant Required – A shop vacuum and compressed canned air are recommended.

The Vital Proof computer is located in the electronics enclosure of the Prism. The unit sits on top of the embedded computer. The Vital proof computer should be checked for dirt and cleaned if necessary every two years.



Vital Proof computer sits on top of Embedded computer. Unit shown is a Spectrum engraver but Prism uses the same positioning.

To clean the computer:

1. Vacuum the ventilation grill on the front of the Vital Proof computer.
2. Vacuum the ventilation grill on the top of the Vital Proof computer.
3. Carefully vacuum the fan at the back of the computer. There are many cables so this can be challenging. Use a small brush with the vacuum to help remove dirt.
4. Re-connect the main input power to the machine.
5. Turn ON the UPS.
6. Turn ON the machine.

