Heat Sealer

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Heat Sealer

Table of Contents

Heat Sealer

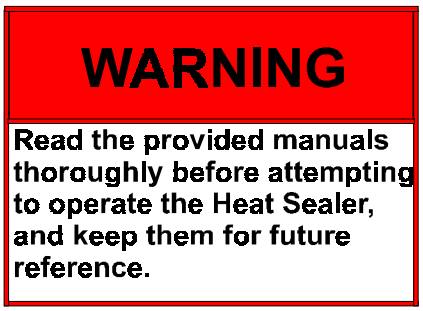
Safety Instructions

These instructions describe the procedures you must follow to safely operate the Heat Sealer. Read all instructions before operating the Heat Sealer, and keep for future reference.

Safety Introduction

In these instructions you will find:

- Important definitions of safety markings
- Important safety guidelines to follow when operating the Heat Sealer



The intended use of the Heat Sealer is to seal parts into carrier tape. Use of this equipment in any other fashion may lead to personal injury.

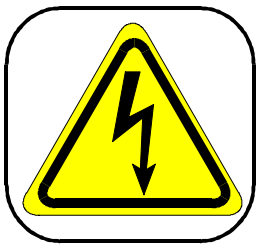
The safety guidelines provided in the following pages are intended to educate the user on all safety issues in order to operate the Heat Sealer safely.

Pay close attention to these statements as they contain important information on avoiding potential hazards to yourself or to the equipment.

Safety Marking Definitions

Attention

This mark is placed on the equipment near the adjustment or danger zone.



Dangerous Voltage

This mark indicates potential hazards arising from dangerous voltage.

High Temperature

This mark indicates a hot surface

Crushed Hand

This mark is placed near areas that can cause personal injury or equipment damage if unsafe practices are used.

Open Book

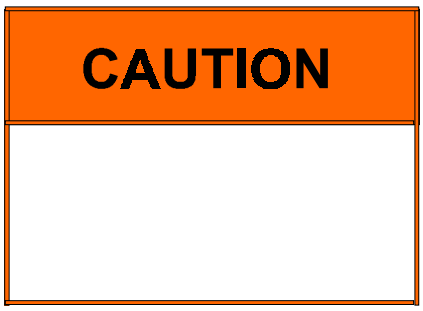
Refer to the Operator's Instructions before performing maintenance procedures on the Heat Sealer.

Safety Marking Definitions (cont.)

All safety information is coded according to the following scheme.

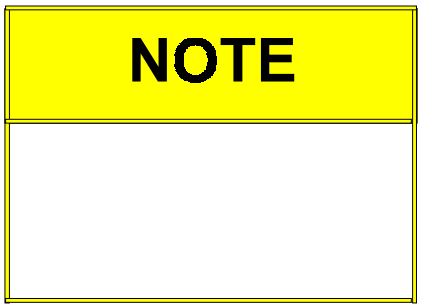
Warning

Used when there is a risk of physical injury to people around the machine.



Caution

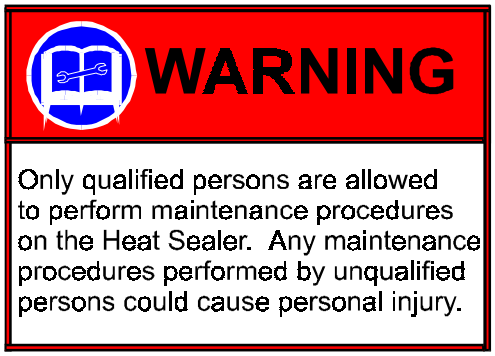
Used when there is a risk of damage to the Heat Sealer.

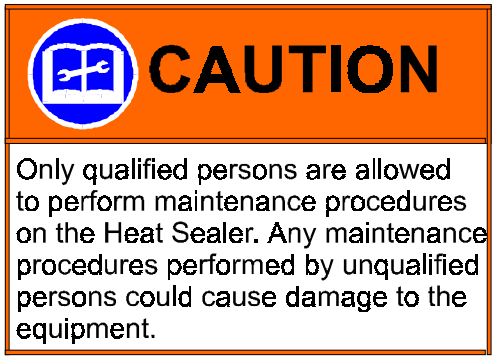


Note

Used to call your attention to important information.

Safety Instructions

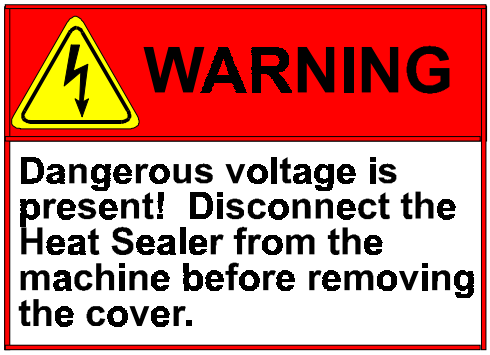




Maintenance of the Heat Sealer

If your organization intends to provide its own service and maintenance to the Heat Sealer, only qualified personnel are to perform those procedures. To be considered qualified, personnel must have the proper technical training, have experience working on this type of equipment, and have an awareness of the hazards to which they will be exposed. The Operator's Instructions is intended to be a supplement to training, NOT A REPLACEMENT for training.

Safety Instructions (cont.)



Cover

Danger:
Dangerous voltage and high temperatures may be present. Follow the procedure below before removing the Heat Sealer Cover for service or maintenance.

1. Turn the main power to the machine to the OFF position.
2. Turn off any air supply coming into the machine.
3. If the Heat Sealer has been in use, allow it to cool for at least 20 minutes before touching any part of the sealer.
4. Disconnect the Heat Sealer Connector from the machine.

Transporting

Never hold the Heat Sealer by the Sealer Connector Cord. This can cause damage to the Heat Sealer.

Heat Sealer

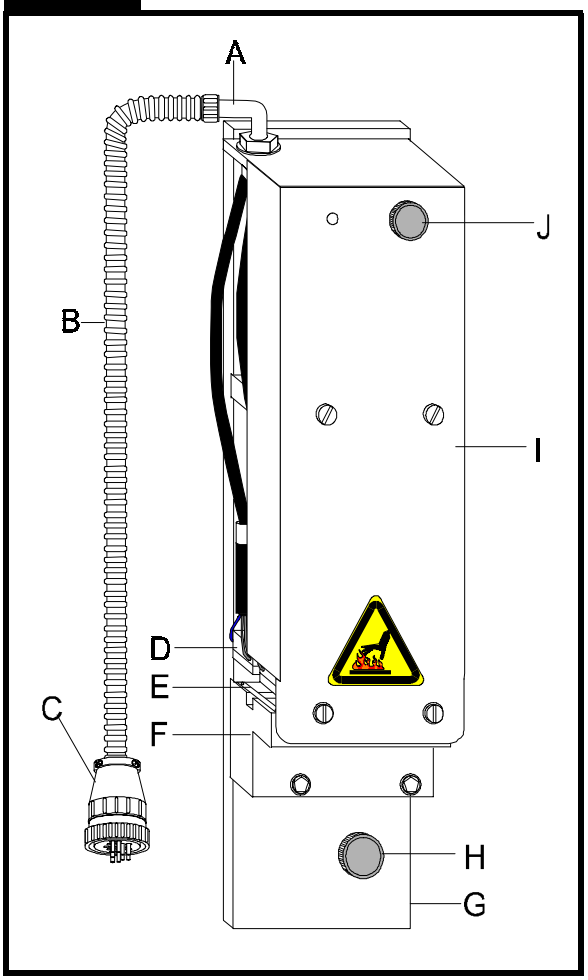
Operator's Instructions

These instructions describe the operation of the Heat Sealer. Read all instructions before using the Heat Sealer, and keep for future reference.

Description of Components

Refer to Figure 1 for the information below.

Figure 1



Sealer Cord Elbow (Ref. A)

Used in positioning the sealer cord.

Sealer Cord (Ref. B)

Used to connect the heat sealer to the machine. Do not pull excessively on the sealer cord or the sealer could be damaged.

Sealer Connector (Ref. C)

Used to connect the Heat Sealer to the sealer receptacle on the machine.

Heat Shoes (Ref. D)

When hot, these shoes seal the cover tape to the carrier tape.

Anvil Covers (Ref. E)

The anvil covers are used to guide the tape through the sealer. Both the cover and carrier tape run underneath the two anvil covers.

Anvil (Ref. F)

The anvil contains a groove for the cover and carrier tape to be run through. It also serves as a rest for the heat shoes.

Slide Bolster (Ref. G)

The slide bolster is used to mount the heat sealer to the machine.

Lower Sealer Fastener (Ref. H)

Used to mount the heat sealer to the machine.

Sealer Cover (Ref. I)

Used to cover the sealing assembly.

Upper Sealer Faster (Ref. J)

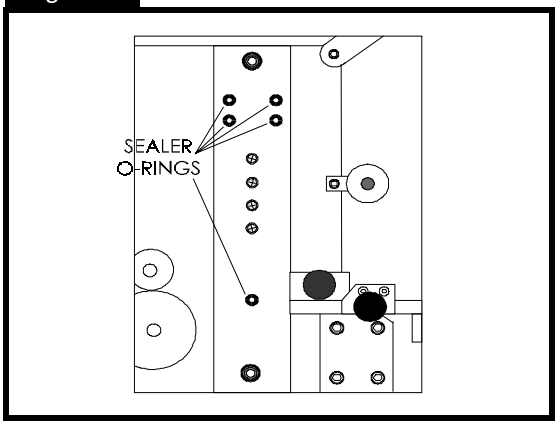
Used to mount the heat sealer to the machine.

Setting Up the Heat Sealer

CAUTION

Turn off the main power to the machine before disconnecting any Heat Sealer.

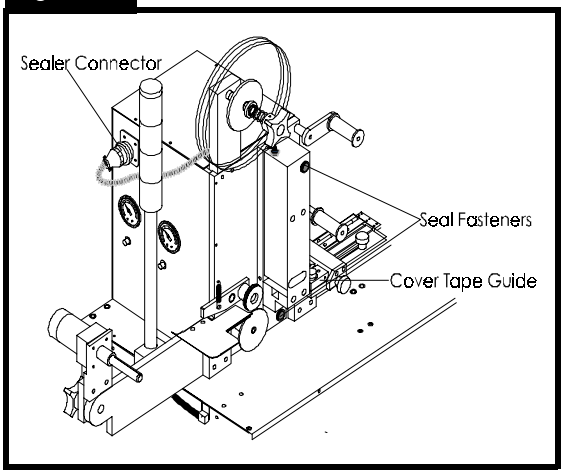
Figure 2



Mounting the Heat Sealer Assembly

1. Turn the power to the machine to the OFF position and disconnect the incoming air supply.
2. Inspect the O-rings on the upright plate where the sealer is to be mounted. Make sure that all five O-rings are in place as shown in Figure 2. Replace any damaged or missing O-rings.
3. Carefully lower the sealer into position. DO NOT HIT THE EXPOSED CORNERS OF THE LOADING TRACK WITH THE SEALER OR THEY MAY BE DAMAGED.
4. Tighten the sealer to the upright plate, using the two sealer fasteners shown in Figure 3.
5. Run the sealer connector and cord over the top of the upright plate and carefully plug the connector into the sealer on the back of the controller.
6. There is a cover tape guide which accompanies every sealer (Figure 3). When mounting a sealer, this guide must also be changed. To do so, remove the knurled knob which secures it and slide the guide straight off. Once the new sealer is in place, mount the new cover tape guide, making sure its marked tape width matches that of the sealer.

Figure 3

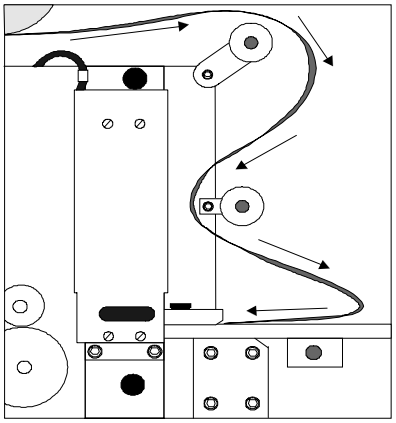


CAUTION

Line up the sealer connector pins with the sealer receptacle holes before tightening them together. If they are not lined up, serious damage to the sealer could occur.

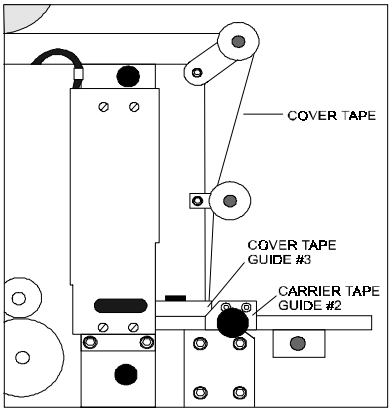
Loading Tape Into the Sealer

Figure 4



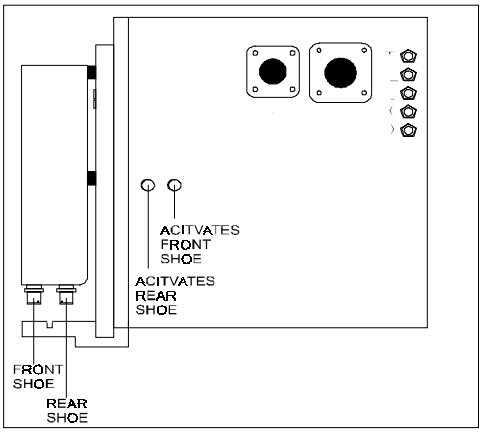
COVER TAPE PATH

Figure 5



COVER TAPE IN OPERATING POSITION

Figure 6



NOTE

The instructions below are simply a guide to how tapes can be loaded into the sealer. Check the Operator's Manual that came with your machine for exact instructions.

1. Load the Carrier Tape

Guide the carrier tape under the carrier tape guide. For the correct carrier tape loading procedure please refer to the Operator's Instructions that came with your machine.

2. Load Tapes Into Sealer

Pull the cover tape down through the cover tape guides as shown in Figure 5. Pull about 12" of cover tape out and lay it over the carrier tape, with the free end pointing toward the sealer. The shiny side of the tape should be up. Allow about 2" of the free end of the cover tape to hang over the end of the carrier tape. Push the tapes under the cover tape guide and through the sealer by pushing on the carrier tape. Keep enough slack in the cover tape so it follows the carrier tape through the sealer. It may be helpful at this time to perform a manual seal using the manual override switches. Using a blunt object perform a manual seal by pressing the blunt object through the correct hole. The hole closest to the sealer operates the rear shoe. The hole furthest from the sealer operates the front shoe. Performing a manual seal makes loading the tape an easier task.

General Seal Setting Information

APPROXIMATE STARTING POINTS FOR SEAL CONTROL

CARRIER TAPE TYPE	COVER TAPE TYPE	TEMPERATURE IN CELSIUS	PRESSURE IN PSI	DWELL TIME IN SECONDS
3M TYPE 3000 CONDUCTIVE CARRIER	3M TYPE 2675 CONDUCTIVE COVER	180°	40	.30
3M TYPE 2701/2703 NON-CONDUCTIVE CARRIER	3M TYPE 2675 NON-CONDUCTIVE COVER	180°	40	.30
3M TYPE 2701/2703 NON-CONDUCTIVE CARRIER	3M TYPE 2675 NON-CONDUCTIVE COVER	180°	40	.30
3M TYPE 3000 CONDUCTIVE CARRIER	3M TYPE 2675 NON-CONDUCTIVE COVER	180°	40	.30
ADVANTEK CONDUCTIVE CARRIER	ADVANTEK TYPE AA COVER	150°	40	.30
ADVANTEK NON-CONDUCTIVE CARRIER	ADVANTEK TYPE S COVER	160°	40	.30

Use this chart as a guide for setting the controls for the first time. These values may need to be altered due to variations in lot materials and customer requirements.

General Information

The cover tape peel force is determined by three things at the time the cover tape is sealed into the carrier tape; the temperature of the heat shoes, the dwell time, and the amount of pressure applied to the heat shoes. These three items are variable. Refer to your machine Operator's Instructions for information on how to change these settings on your machine.

The following information will describe the controls for these three variables and give some general starting points for each. Experience will suggest variations from these settings that will provide the desired seal characteristics.

1. The Temperature of the Heat Shoes

As a general rule, the temperature should be altered first when adjusting the seal properties. Start with increments of 5°.

2. The Dwell Time

The dwell time is the time the heat shoes are in contact with the tape. The dwell time should be kept as small as possible to decrease machine cycle time. Increase the dwell as an alternative to a large increase in temperature. Change the dwell time in increments of 0.05 sec.

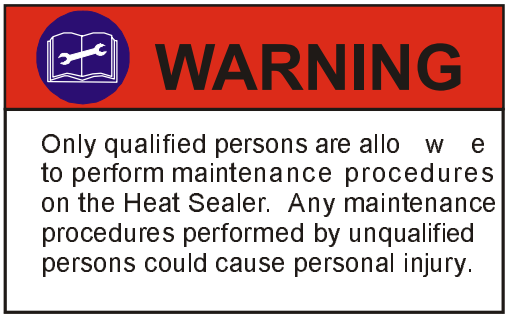
3. The Amount of Pressure Applied to Shoes

Under normal conditions, the seal pressure should not need to be changed. It can be decreased for very small parts to minimize part movement, or increased for tapes that are extremely difficult to seal.

Heat Sealer

Maintenance Instructions

These instructions describe the maintenance procedures for the Heat Sealer. Read all instructions before performing any maintenance procedures and keep for future reference. Refer to the Safety portion of this manual before removing the Heat Sealer.



Maintenance Instructions

CAUTION

DO NOT USE ALCOHOL ON A HOT SEALER

Figure 7

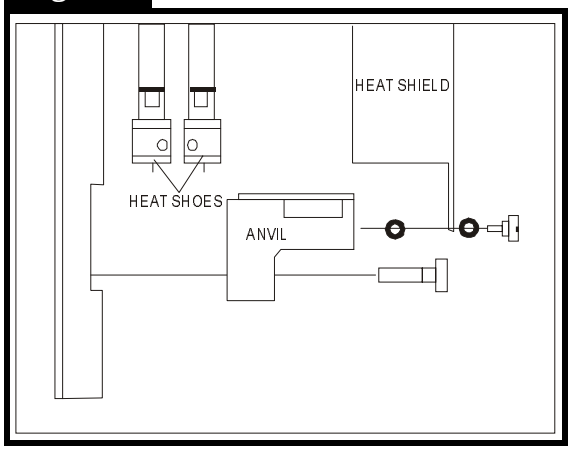
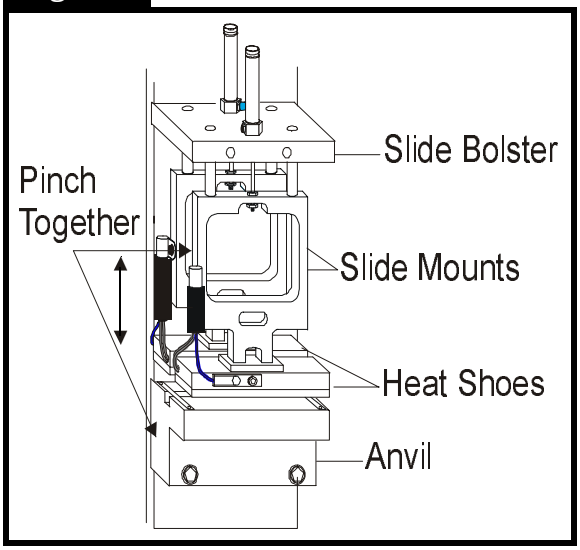


Figure 8



Heat Sealer

Heat sealer maintenance consists mainly of cleaning built-up residues from the heat shoes. These residues occur due to a mixture of dust, tape debris and cover tape adhesive which accumulate during taping. Follow the steps below to clean the heat shoes. **LET A HOT SEALER COOL FOR 20 MINUTES BEFORE PERFORMING ANY MAINTENANCE PROCEDURES.**

1. Remove the two bottom screws holding the heat shield to the sealer. Do not lose the o-rings which are under the heads of these screws and are also between the heat shield and anvil.
2. Remove the two bolts which hold the anvil to the sealer assembly. Remove the anvil by sliding it to one side. **DO NOT REMOVE THE HEAT SHOES OR DISASSEMBLE THE SEALER ANY FURTHER.**
3. Clean the residues from the heat shoes by using a plastic or brass brush soaked in alcohol. **DO NOT USE A STEEL BRISTLED BRUSH.** If there are some tough spots, such as melted plastic, which will not come clean the sealer can be heated by plugging it into the taping machine and then scraped with the handle of a wood brush or some other wooden implement.
4. Once finished with the above steps, check the contact surface of the heat shoes. If they are still not clean, repeat the procedure above.
5. Reassemble the sealer. Place an anvil on the bolster but don't tighten the bolts. Using two fingers, pinch both slide mounts to the anvil (Figure 8). Make sure the heat shoes are firmly pressed to the anvil. Tighten the anvil bolts and replace the heat shield.
6. Make sure the sealer seals properly. If not, repeat the procedure above a second time. If the heat sealer is still malfunctioning, call your V-TEK representative.

Heat Sealer

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Your questions are important to us. For customer service, please call or write:

Phone: 507-387-2039 Extension 145
Email: vteksvc@gotocrystal.net

Please provide the machine model and serial numbers with all inquiries.

To order spare parts, please call:

Phone: 507-387-2039 Extension 133

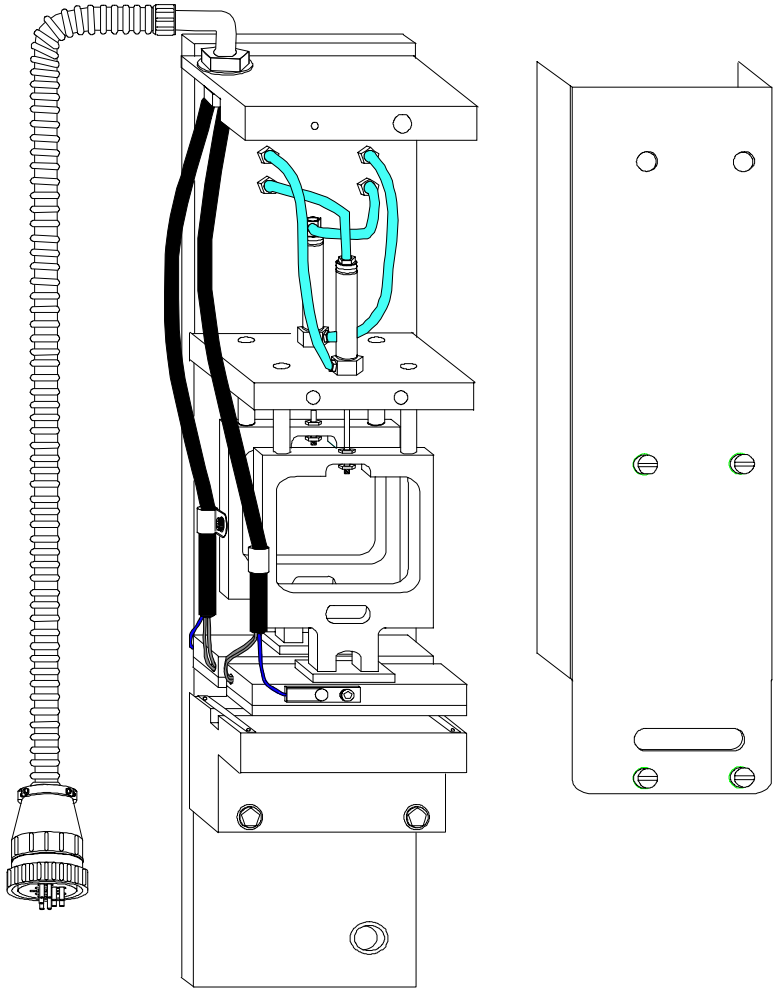
For tape and reel supplies, please call:

Phone: 507-387-2039 Ask for CPM Sales

NOTES

HEAT SEALER

Operator’s Manual



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