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## HS300 TRAY SEALER MANUAL



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# Haug Quality Equipment

## HS300 Tray Sealer

### Operation Manual

## 1.0 Overview

1.1 The HS300 Tray Sealer is designed to seal flexible lidstock to compatible preformed plastic trays. The filled tray is placed in the lower carrier plate, the film is manually pulled over the tray, and the sealing surface plate is lowered to seal the film to the tray. The film is cut off during the sealing action and then the sealing surface plate is lifted. Seal dwell time is controlled by the operator. Temperature and dwell times vary with tray material and film material. The lower carrier can be easily changed to permit multiple tray sizes to be sealed.



## 2.0 Safety

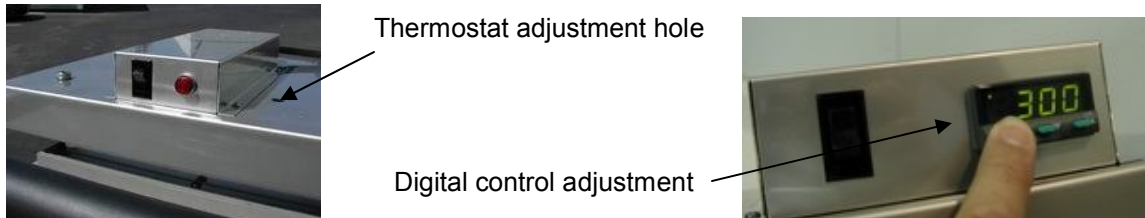
2.1 Read and understand all instructions and procedures outlined in this manual. It is ultimately the responsibility of all operators, maintenance personnel and supervisors to make sure that all safety procedures are followed to prevent personal injury or damage to the equipment.

2.2 The Film Cutting Blade located on the backside of the sealing platen is very sharp. Constant care and attention should be taken while working in these areas. Only qualified personnel should perform adjustment or removal of the film cutting blade.

2.3 The sealing surface plate may be heated to excess of 400 degrees. Constant care and attention should be taken while working in this area. Only qualified personnel should perform adjustment or removal of the heater platen.

## 3.0 Controls

3.1 The thermostat heater control of the standard HS300 is adjusted with an allen wrench through the hole on top of the heater unit; clockwise to raise the heat, and counterclockwise to lower the heat. It takes approximately 20 minutes for the heat setting to stabilize after adjustment. The dial thermometer is for reference only, and it is typically 50 deg. F below the heat platen temperature.



3.2 The heater control of the model HS300D is a Cal Controls #3200 Temperature Controller. Temperature set point control is available for different types of film and trays. By pressing the left button on the controller you can view the current set point. While holding the left button *and* pressing either the up or down button the set point can be changed to the desired temperature.

Your new HAUG HS300D (optional digital heater control) Hand Sealer has a heater controller that was tuned in our manufacturing facility. If you are going to use this sealer in a cold room, re-tuning of the controller may be necessary. Consult the enclosed CAL3200 Controller manual for tuning procedures.

## 4.0 Features and Specifications

### 4.1 Features:

- Quick change tooling for multiple sizes
- Rear film cut off blade
- High wattage heaters for cold room environment
- Thermostat heat control or optional digital heat control
- Stainless steel, anodized aluminum, and plastic

### 4.2 Specifications:

- 10.5" x 13" maximum seal area
- 0 - 400° F heat range
- 5 – 10 trays per minute
- 120VAC standard, 7A / 220VAC, 4A optional
- Size approx. 22" W x 30" L x 20" H (open)

### 4.3 Environmental Specifications:

- |  |                             |
|--|-----------------------------|
| <input type="checkbox"/> Storage Temperature           | -4F to 158 F                |
| <input type="checkbox"/> Ambient Operating Temperature | 32 F to 131 F               |
| <input type="checkbox"/> Ambient Humidity              | 30% - 95% relative humidity |

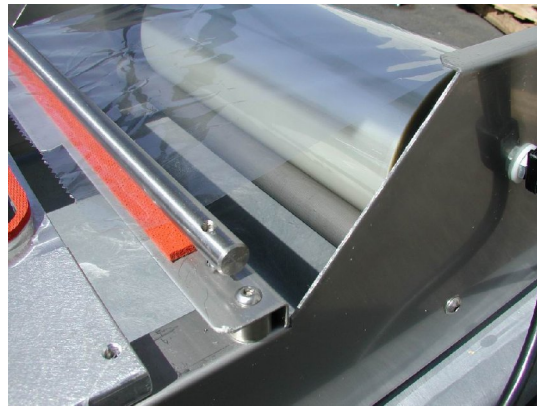
4.3 The HS300 Tray Sealer is to be used on a level surface. Use of the HS300 Tray Sealer on an uneven surface may cause improper tray sealing characteristics and could damage the unit.

## 5.0 Operation Set-up

**CAUTION:** The Film Cutting Blade located on the backside of the sealing platen is very sharp. Constant care and attention should be taken while working in these areas.

**CAUTION:** The sealing surface plate may be heated to excess of 400 degrees. Constant care and attention should be taken while working in this area.

5.1 The film roll is placed between the round bars at the back of the machine. The two split collars should be adjusted to align the film with the tray (as shown on left).



5.2 Pull film between the guide bar and the silicone pressure pad (as shown on right).

5.2 Adjust the Heater Control set point for the sealing surface plate to the correct operating temperature.

## 6.0 Basic Operation

6.1 Place the tray to be sealed in the tray carrier. Be sure to wipe off any moisture that may be on the sealing surface of the tray.

6.2 Pull a length of film over the tray, placing the edge of the film at the edge of the tray.



6.3 In two steps, lower the heater platen until it contacts the tray and then, in a quick downward motion, compress the heater platen down and hold down for the desired dwell time.

Note: Some trays may require the dwell position to be slightly above the fully pressed position to allow an even pressure on the seal. Some experimentation with technique will help produce the best sealing method.

6.4 Raise the handle and verify that the film has been cut and a proper seal has been achieved. Carefully remove the sealed tray from the carrier.

# HS300 Carrier Plate Gasket Replacement

## Required Tools

1. Gasket material (McMaster part #8608K222, 1/8" silicone, plain back, firm density)
2. Silicone adhesive (Haug part #910078)
3. X-Acto knife or similar type knife
4. Silicone adhesive remover (not necessary but recommended)
5. 180 grit sand paper and a suitable sanding block
6. Cleaning solvent
7. Large, heavy and flat object

## Carrier Plate Preparation

1. Using a sharp X-Acto knife or other type blade, carefully cut off the old silicone gasket, making sure the blade stays flat and level with the carrier plate sealing surface, taking care as not to nick or damage the plate surface.



2. Using a quality silicone adhesive remover, liberally spray the carrier plate surface.
3. Remove the old silicone adhesive with an old rag.

NOTE: If silicone adhesive remover is not used, you can remove the existing adhesive by gently scraping it with your X-Acto knife.

4. Once you have removed all the old gasket and adhesive, lightly sand the surface of your carrier plate gasket area using 180 or 220 grit sandpaper with a suitable sanding block.



5. Using a suitable cleaning solvent, wipe down the carrier plate removing any dust from sanding, fingerprints, or any other foreign substance that might be present.

## Application of Adhesive and Gasket

1. Cut the silicone gasket so you have about 1" of excess material all the way around the sealing surface. Pieces may be used to make the complete gasket, be sure to leave less than 1/16" gap.
2. Now apply a small (about 1/8") even bead of silicone adhesive around the whole sealing surface of the carrier plate.



3. Smooth out the bead with your finger to assure complete and level adhesive coverage.



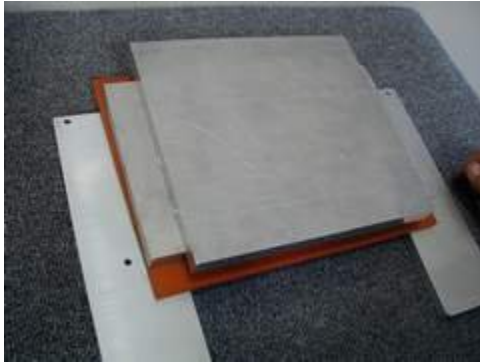
4. Lay the cut out piece (or pieces) of silicone gasket on to the sealing surface of the carrier plate. Be careful not to push down the gasket with your fingers. This will cause high and low spots on your new gasket.



5. Using a large, heavy and flat object, lay it on top of the new gasket and push down evenly, causing any excess silicone adhesive to squeeze out the sides.



6. Stack an extra metal plate or heavy book on top of the carrier plate and let sit for at least 4 hours. Cure time may vary, depending on room temperature.



### Trimming the Gasket

1. After the silicone adhesive has completely cured, use an X-Acto knife with a new blade to remove the excess material from the carrier. Start with removal of the inside waste piece. Keep the blade **perpendicular** to the plate and follow around the inside edge of the sealing surface of the carrier plate.



2. Continue with removal of the outside waste piece. Keep the blade **perpendicular** to the plate and follow around the outside edge of the sealing surface of the carrier plate.



3. Carrier is now ready for use.



## PARTS LIST

Haug P/N	Part Description	Vendor Part No.	Vendor	QTY
910185	Gas Springs / 40 lbs.	9416K332	McMaster	2
910038	Ball Stud	9512K73	McMaster	4
910037	End Fitting	9416K86	McMaster	4
910049	Springs, .091 wire x .75 OD x 3.125"	1986K26	McMaster	4
910180	Springs, .055 wire x .50 OD x 1.50"	9435K129	McMaster	24
176416	Plunger end (film clamp)	176416	Haug	1
910039	Shoulder Bolts 2 3/4 x 3/8	90298A635	McMaster	4
910178	Shoulder Bolts 3/8 x .250	90298A615	McMaster	2
910076	Shoulder Bolts 5/16 x 1.750	90298A589	McMaster	2
910002	Clamp-on Shaft Collars 1"	6157K18	McMaster	2
801250	On / Off Switch	7395K11	McMaster	1
801295	Fuse, ABC ceramic, 10 A (120VAC unit)	71385K34	McMaster	1
801294	Fuse, ABC ceramic, 5 A (220VAC unit)	71385K3	McMaster	1
910186	Thermometer, pocket (standard HS300)	3950K14	McMaster	1
801101	Temperature Controller (digital HS00D)	CAL 3200	Johnson Asso.	1
801278	Thermostat, appliance (standard HS300)	263193	Chromalox	1
801160	Heater, strip, 400w, 120v	129656	Chromalox	2
801102	Solid State Relay (digital HS00D)	RSSDN-25A	IDEC	1
801002	Thermocouple "J type "	JMS 1DLJCCX60A X=7JTT242	Johnson Associates	1
801104	Heater Wire	HTTG-1CU-3125	Omega	7
910044	Handle, Foam	9754K13	McMaster	1
910042	Rubber Feet, tall	9540K49	McMaster	4
910045	Silicone sheet, 1/8", plain back, firm density	8608K222	McMaster	
910158	Silicone adhesive- Best	910078	Haug	
115191	Foam gasket replacement kit- Includes silicone adhesive & 18" x 12" foam	115191	Haug	
210041	Blade	210041	Haug	1

**Parts can be conveniently ordered from Haug Quality Equipment or direct from manufacturer**

**McMaster-Carr** [www.mcmaster.com](http://www.mcmaster.com): **Los Angeles:** 562.692.5911 **Atlanta:** 404.346.7000 **Chicago:** 630.833.0300  
**NYC:** 732.329.3200 **Cleveland:** 330.995.5500

**OMEGA Engineering** : 800.826.6342  
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