

Grand Rapids, Michigan, U.S.A. 49504-5298

USER'S OPERATING AND INSTRUCTION MANUAL

MODEL 1908

AUTOMATED PACKAGING SYSTEM



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QUICK SPECS

Weight 300 lbs

Overall Dimensions 30" W x 64" L x 50" H

Loading Station 3 tray carriers

Electrical 1 phase, 60 hz, 115 VAC, 15 amps

Air Supply $90 \text{ psi } \pm 10 \text{ psi}$

Air Connector Size 1/4"

Air Compressor:

Electrical 1 phase, 60 hz, 115/230 VAC,

1.7 run HP, 13 GAL tank

Dimensions 16.625" W x 30.5" L x 33.75" H

Weight 60 lbs Length of Air Hose 70 ft Air Hose I.D. 3/8"



INTRODUCTION AND DESCRIPTION

The *OLIVER Model 1908 Lidder* has been designed and manufactured to provide a high quality machine that is a cost effective approach to producing film lidded trays. The machine can be operated with a 120 V.A.C. outlet. The Model 1908 is an automated system capable of producing a high volume, but it is easy to operate and requires minimal space.

The machine consists of a conveyor system that transports the filled trays, a film feed system, a heated platen and a film cutter unit. These are all packaged together in a stainless steel framework that also houses all the necessary controls. The conveyor is intermittent motion and is capable of running speeds of 5 to 35 packages per minute. The system also includes an air compressor that is a separate unit that can be located remotely.

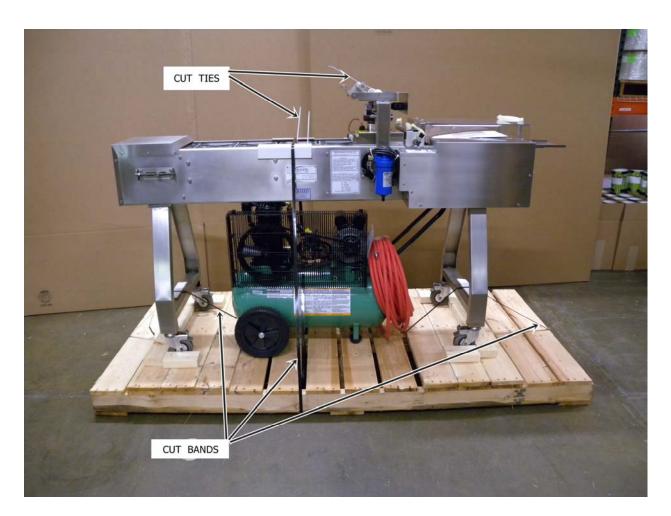




INSPECTING

MODEL 1908

Upon receipt of Machine, inspect the exterior for damage. If damage is noted, Indicate damage on the **Freight Bill** and immediately contact the freight Carrier and notify them of the damage. Have a freight claim filed. **This must be done at the Recipient's location and not at the Shipper's Location.**



Remove the tie-downs that hold the Trays from moving. Cut bands that hold the 1908 Machine and the Air Compressor on the skid. Lift the Air Compressor and then the Machine off the skid in a safe manner.



SAFETY

Various safety devices and methods of guarding have been provided on this machine. Do not operate the machine with guards removed and do not tamper with safety devices. It is essential that machine operators and maintenance personnel observe the following safety precautions. Improper installation or operation of this equipment may cause injury to personnel or damage to equipment.

• Before operating the *OLIVER Model 1908 Lidder* read through this manual. Never allow an untrained person to operate this machine

WARNING

• WARNING PINCH POINT: Keep hands out of machine. Always be sure the machine has been unplugged from power before cleaning or servicing.



• **CAUTION HOT:** The heater cover and upper platen are very **HOT!** Caution must be used to protect yourself and others.



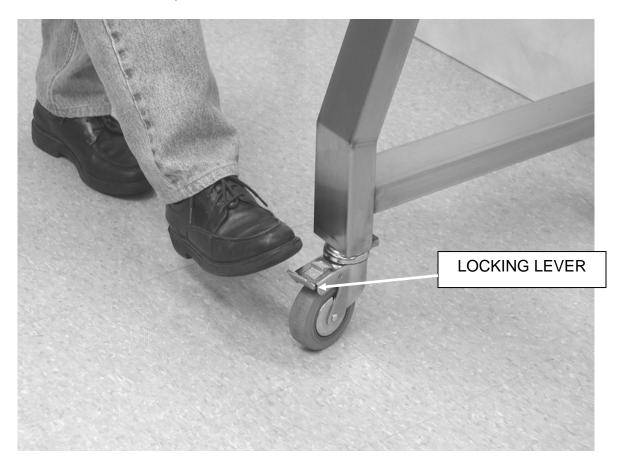
• In addition to these general safety instructions, follow the specific instructions given throughout this manual.



MACHINE PLACEMENT AND UTILITIES

MODEL 1908

Decide on a suitable location for the machine. This location should have ample room to work around all sides of the machine. Once the machine is in the location where it will be used, the brakes on the casters should be locked by stepping down on the brake locking lever. To unlock, lift the lever with your foot. Do not attempt to move machine with casters in locked position.



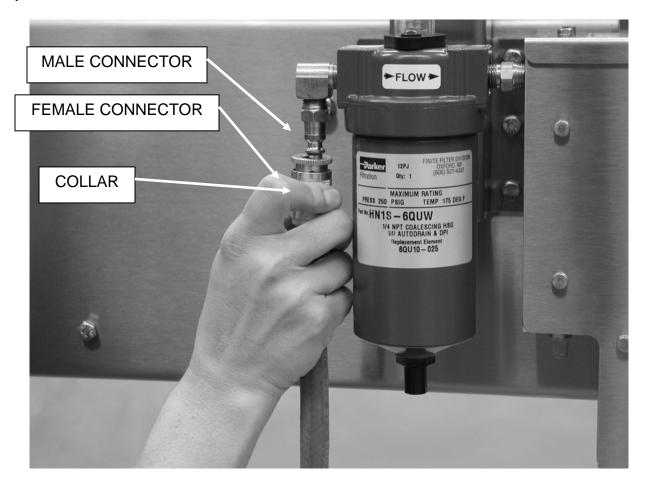
The machine operates on 120 V.A.C., 60 Hz, 15 Amp electrical power. It is recommended that this power be supplied by an overhead drop to prevent the cord from becoming a trip hazard.

The machine needs to be connected to compressed air. This is accomplished by connecting the machine to the air compressor supplied with the machine. This connection should be made using an overhead drop.



Air Compressor

Decide on a suitable location for the air compressor. It is best to locate it out of the way and preferably where the noise will not be a factor. The air compressor operates on 120 V.A.C., 60 Hz, 15 Amp electrical power. The air compressor is supplied with a 70 ft. length of 3/8" ID air hose that needs to be connected between the air compressor and the Model 1908. This air hose has quick-disconnect fittings at both ends for easy connection and disconnection. Pull the collar back on the female portion of the quick-disconnect fitting and then push the female portion onto the male portion and release your hand. Pull on the hose to make sure the connection is secure.



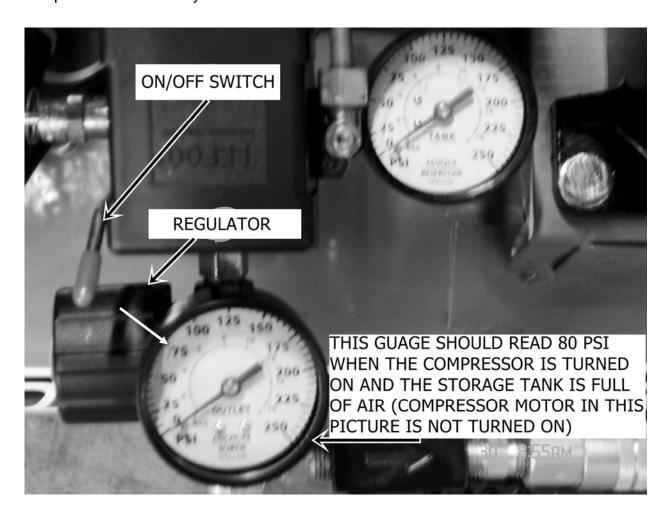
Continued



Air Compressor Continued

The air compressor has been factory set. If for some reason the settings are not correct, the following procedure should be followed to set the output pressure from the compressor.

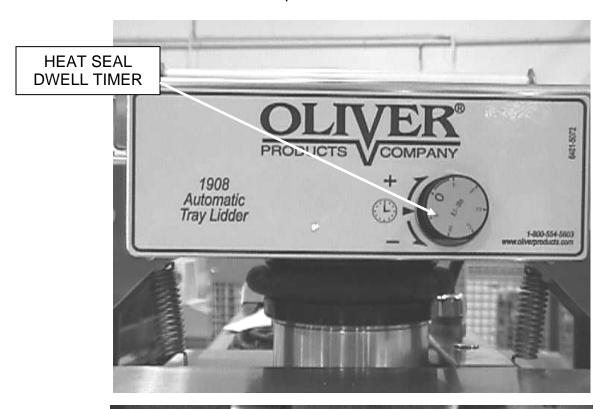
The gage shown below should be set at 80 PSI. This is accomplished by turning the knob on the regulator clockwise to increase pressure or counter clockwise to decrease pressure. It is recommended that the air compressor be left with the switch in the "AUTO" position. The compressor will only run when there is a demand for air when it is set in the "AUTO" position. Leaving the switch in this position assures that the compressor will be ready when it is needed.

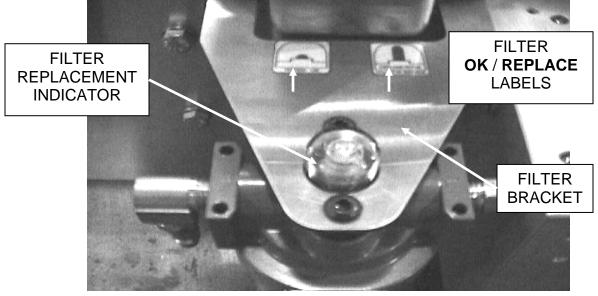




MACHINE COMPONENTS

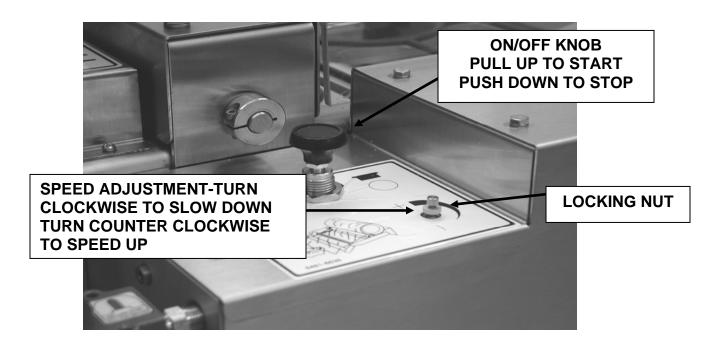
Before proceeding further, take a moment to familiarize yourself with the identification of the machine components as shown in the illustrations below.



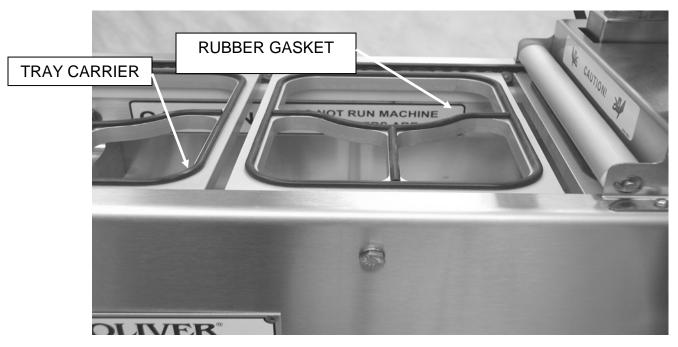






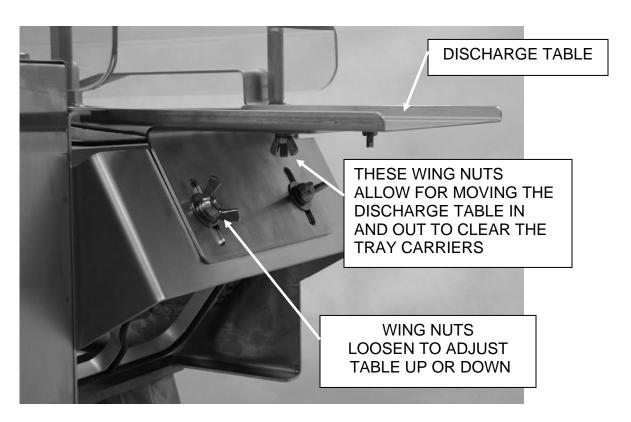


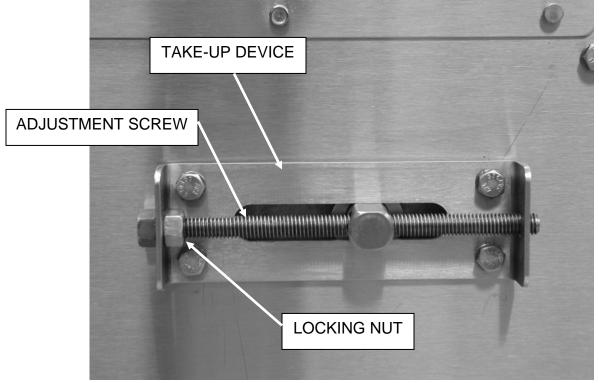














START-UP

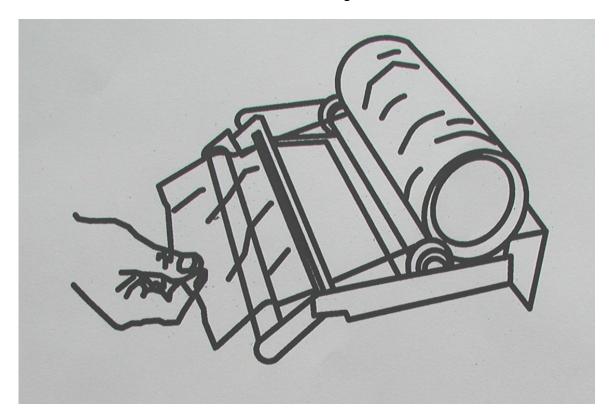
To turn the machine on, plug in the power cord. Wait 30 minutes to allow the heated platen to reach operating temperature. At this time, turn on the air compressor so it can fill the storage tank with compressed air.

The machine has been shipped from the factory with the speed set at approximately 7 to 10 trays per minute. This speed has been chosen as a good place to start. Depending on your production rates, you may need to speed up or slow down the tray sealer. This adjustment is explained in the "Machine Operation" section of the manual. First, run the machine without trays and film to make sure everything is cycling properly.

NOTE

 Never run the machine with trays and no film. Doing so can possibly cause a jam because the trays can stick to the heated platen and be pulled out of the tray carriers.

Load the film on the film stand as shown on the film-threading diagram located on the side of the machine and also shown in the diagram below.





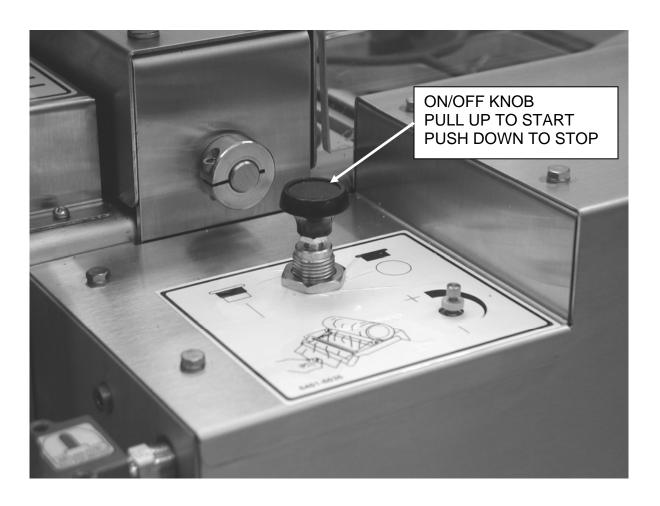
- 1. The adhesive side of the film can be determined by pinching a fold and rubbing the lid material against itself. Test both sides of the lid. The rough or tacky side of the lid will be the adhesive side. The film supplied by Oliver Products Company is wound with the adhesive side toward the inside of the roll. If the film is loaded in accordance with the "FILM FEED" diagram it will be positioned properly for applying the adhesive side of the film to the flange of the tray. If the film is loaded improperly, it can cause the adhesive side to come in contact with the heated platen and the film to stick to the heated platen. If this happens, the platen will need to be cleaned.
- 2. To thread the film through the machine, pull enough film off the roll so that you can insert it into the slot between the tray carrier that is partially under the film stand and the carrier that is upstream from that. After the film is hanging down underneath the tray carrier, reach through the tray carrier and pull the film down so that it touches the tray carriers underneath that are returning to come back up on top. Then insert a tray into the tray carrier next to the film and cycle the machine one time by pulling up on the "Black Palm Button" until the conveyor moves one index, then push the palm button down to stop the machine. This should seal the film to that tray and you can now fill the rest of the conveyor with filled trays and begin running.

Note: Film dancer bar must move freely up and down.

FILM DANCER BAR,









OPERATING PROCEDURE

An abbreviated version of these operating procedures is attached to the Model 1908 for use as a daily reference.

If you miss putting a tray in the machine it will not cause any problems, but the film will be sealed to the top of the empty tray carrier. Let the machine continue to run until that tray carrier goes around the bottom of the conveyor and comes back up on top, then remove the piece of film.

Once you have settled into a fairly consistent production rate, adjust the machine speed to match your production rate as close as possible and lock the speed adjustment knob with the locknut.

To operate the Model 1908, plug in the power cord. Wait 30 minutes to allow the heated platen to reach operating temperature. Turn on the air compressor.

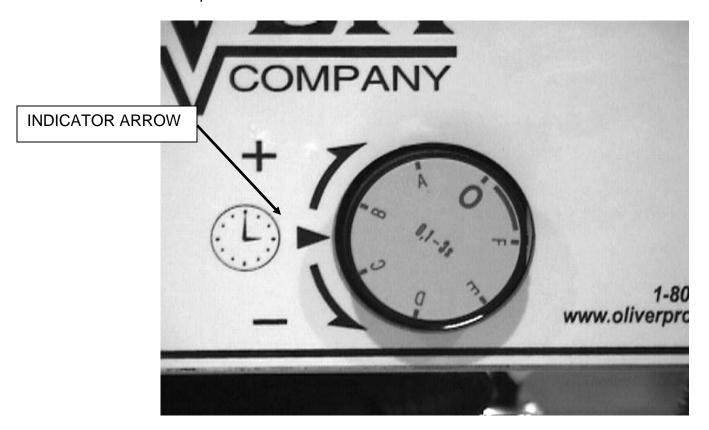
- 1. Load a toll of film onto the film support stand as shown on the "FILM FEED" diagram located on the side of the machine. It is important that the roll of film is centered on the conveyor. There are white plastic film guides on either side of the film roll. These guides can be adjusted from side-to-side by pushing them with your hand. If the film is not centered, move both guides toward the side that the film needs to go to. It may take a little bit of running time before you can tell if the film is in the correct position.
- 2. To get the film threaded through the machine, pull enough film off the roll so that you can insert it in the slot between the tray carrier that is partially under the film stand and the carrier that is upstream from that. After the film is hanging down underneath the tray carrier, reach through the tray carrier and pull the film down so that it touches the tray carriers underneath that are returning to come back up on top. Then insert a tray in the tray carrier next to the film and cycle the machine one time by pulling up on the "Black Palm Button" until the conveyor moves one index, then push the palm button down to stop the machine. This should seal the film to that tray and you can now fill the rest of the conveyor with the filled trays and begin running.
- 3. Place filled trays in tray carriers. Take care to avoid spilling food product on the flange of the tray. Contamination of the flange can result in poor heat seals.



- Never run the machine with trays and no film. Doing so can possibly cause a jam because the trays can stick to the heated platen and be pulled out of the tray carriers.
 - 4. Pull the black palm button up to start the machine running. After a few trays come out of the machine, stop and check to see that the seals are acceptable. Poor seals may be caused if the dwell time of heated platen is set too short. The machine was shipped from the factory with the dwell time set properly. However, it could have come out of adjustment during shipment. The 0.1-3 second dwell time adjustment knob should be set with indicator arrow between the letter "B & C" as shown in the illustration below. Do not turn the knob so that the indicator arrow goes past the letter "F" and before the letter "A". The closer the indicator arrow is to the "A", the shorter the dwell time.

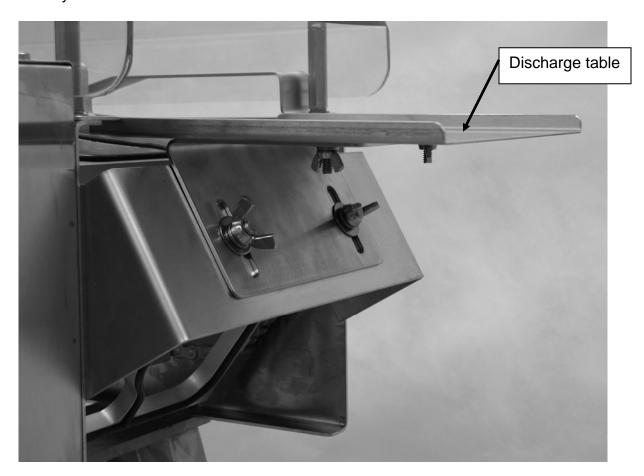
NOTE

 Dwell timer with (0.1-30s) should be set between A &B. The indicator arrow should not be turned past these letters.





- The machine can be stopped at any time by pushing the black palm button down.
 When started again, the machine will pick up sealing where it left off.
 - 5. Once you are running at a constant rate, set the speed of the machine to match your production rate. This is done by turning the "Speed Adjustment" knob clockwise to slow the machine down or counterclockwise to speed the machine up. A locking nut is provided on the speed adjustment knob that can be used to lock the speed adjustment after you have found the desired setting.
 - 6. Make certain that the sealed trays are discharging off the end of the machine smoothly. If they are not, raise or lower your accumulating table or conveyor to allow for a smooth discharge of the trays. The discharge table on the Model 1908 has a height adjustment. The discharge table should be set at the proper height so that the bottoms of the trays are just slightly above it as they leave the tray carriers.



7. At the end of the day, unplug the Model 1908 from the wall outlet. This is the only way to turn off the machine.





 IT IS NOT RECOMMENDED TO LEAVE THE MACHINE PLUGGED IN WHEN IT IS GOING TO BE OUT OF OPERATION FOR AN EXTENDED PERIOD OF TIME.

TECHNICAL SPECIFICATIONS

Model 1908

Tray Capacities: 6-3/8" (162mm) by 8.5" (216mm) maximum top-outside-dimensions of

the tray.

Temperature Range: Factory preset to approx. 300 degrees F.

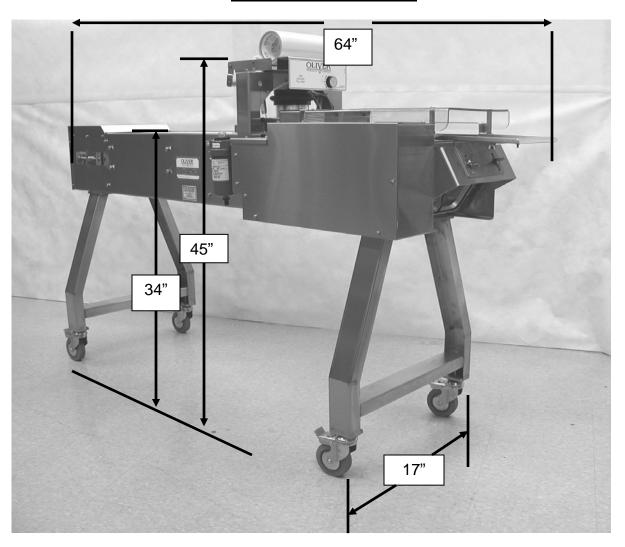
Weight: 300 LBS.

Electrical: 120 VAC, 15 Amps, Single Phase, and 60 Hz

Air Requirements: 6 CFM @ 80 PSI



Machine Dimensions



DO



Air Compressor

Weight: 60 LBS.

Electrical: 115 VAC, 15 Amps, Single Phase, and 60 Hz

Length of Air Hose: 70 Ft.

Air Hose I.D.: 3/8"

Air Connector Size: 1/4" NPT

Oil: Use a full synthetic motor oil like Mobil-1 10w -30

NOT USE REGULAR AUTOMOTIVE OIL SUCH AS 10W-30

Air Compressor Dimensions





CLEANING AND MAINTENANCE

Disconnect the power from the Model 1908 and allow the unit to cool before cleaning. The tray carriers should be removed and cleaned daily. It is better to remove them for cleaning rather than trying to clean them in the machine. The tray carriers can be placed in your dishwasher for cleaning if you desire. Care should be taken so that the rubber gaskets do not become damaged.

CAUTION

 Do NOT run the machine with the tray carriers removed. Doing so could cause damage to the heat seal assembly.

The diagram on the next page shows how to remove the tray carriers. It is a simple process that just requires lifting up on the tray carrier and shifting it over to one side while pulling the carrier next to it to the other side to disengage the pins on the opposite side and then completely removing the carrier as shown. The carriers should be removed in the middle of the in-feed area on the top of the conveyor. As the carriers are removed, the conveyor must be pulled forward to keep getting to the remaining carriers. To move the conveyor forward, grasp a tray carrier toward the infeed-end of the machine and pull the conveyor forward. This must be done with the air connected.

NOTE

When replacing the tray carriers, it is extremely import to make sure that all four pins
on the conveyor chains are fully engaged in the holes of the tray carrier. If the tray
carriers are put in on an angle because the pins are not engaged on one side, it
could cause damage to the cutter assembly.



REMOVING TRAY CARRIERS



NOTE

- These cleaning recommendations are not meant to replace or supersede plantstandard manufacturing procedures or regulatory requirements.
- If the machine has been operating, allow the unit to cool before cleaning.

CAUTION

• **CAUTION HOT:** The heater cover and upper platen are very **HOT!** Care must be taken to protect yourself and others.



WARNING

Make sure the unit has been unplugged from power.

Clean the OLIVER Model 1908 Lidder with a with mild cleaner or sanitizing solution and a damp cloth. It is important that the surface of the heated platen be kept clean and smooth. If food product comes in contact with the surface of the platen it tends to burn on and become hard. This results in an irregular surface on the face of the platen that can result in poor seals. If this happens, it will be necessary to remove this burnt on food material. When cleaning the surface of the platen care must take to avoid scratching or gouging the surface. **DO NOT SCRAPE THE SURFACE OF THE PLATEN WITH SHARP OBJECTS AND AVOID THE USE OF METAL TOOLS**. Instead use a plastic or soft-metal scouring pad such as Scotch Brite® or Chore Boy® brands provide a safe and effective means of cleaning the heated platen. Wipe all surfaces with a sanitizing agent after cleaning.

WARNING

- If the platen will be cleaned while it is still hot make sure hand protection is used to prevent skin contact with the platen.
- The heat seal platen needs to be cleaned to remove food deposits. This must be done while the tray carriers are removed from the machine.

WARNING

 Disconnect and Lock out air supply / Electrical cords before performing maintenance. The cutter assembly is very sharp!

Clean the cutter assembly with a mild cleaner or sanitizing solution and a damp cloth



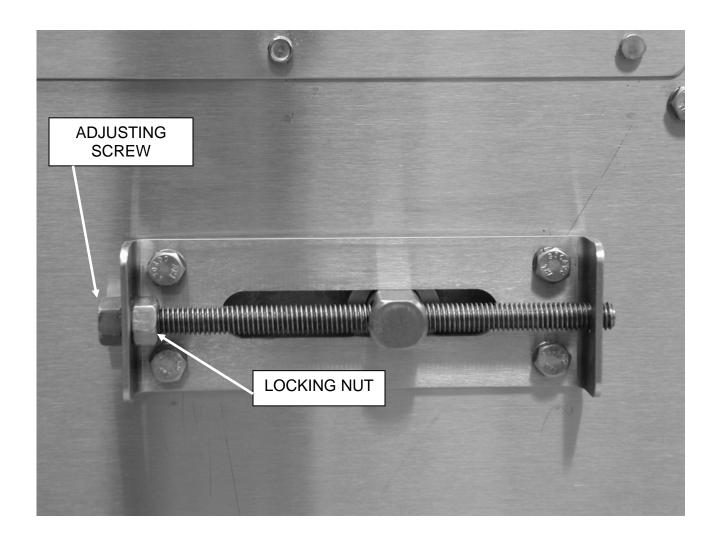
 The use of plastic or soft-metal scouring pads such as Scotch Brite® or Chore Boy® brands provide a safe and effective means of cleaning the cutter assembly. Wipe all surfaces with a sanitizing agent after cleaning.

Once a month the conveyor chains should be lubricated with vegetable oil such as cooking spray. If you use hose-down cleaning, this should be done twice a month.



Once a month the conveyor chains should be checked for proper tension. The tension can be checked by lifting the lower tray carriers at the middle of the machine. If you can easily lift them up more than 3 inches, the chains are too loose and should be tightened by adjusting the tensioners at the infeed-end of the machine. Loosen the locking nuts and turn the adjusting screws clockwise to tighten the chains then retighten the locking nut. It is important to adjust both sides equally. The easiest way to do this is to count the turns that you tighten one side and then do the same on the other side. The best method is to adjust each side in ¼ turn increments and then recheck the chain tension.







TROUBLESHOOTING

There are no user serviceable parts on your *OLIVER Model 1908 Lidder* except for the cutter blade. Should you experience problems with your machine call the **Oliver Products Company 24 Hour Emergency Service number** @ 1 800-253-3893. Please have the serial number of your machine available to give to the Customer Service representative.

Before calling for assistance please check the list below to see if the problem you are experiencing is listed. If it is, try the corrective action items listed for that problem before calling for assistance.

<u>SYMPTOM</u>

CORRECTIVE ACTION

Machine does not cycle

Make sure that the compressor is plugged in and there is power at the outlet

Make sure that the airline is connected to the compressor and the Model 1908

Make sure the air compressor is turned on

Check the air regulator to see that it is set between 70 and 80 PSIG - If not, adjust it to this setting - Turning the knob counterclockwise lowers the pressure and clockwise raises the pressure

Check to see that dwell setting knob is not past "O" or "A"

Check to see if that conveyor chain tension is not overly tight

Check to make certain that a tray carrier is not installed improperly where the pins on the conveyor chains are not engaged in the holes of the tray carrier

Check to see that film has not wound around the cutter mechanism to the point that it is bound up on the tray carriers



SYMPTOM	CORRECTIVE ACTION
Poor seal quality	Verify that the platen is heated by placing your hand near the platen and try to detect if there is heat radiating out from it-DO NOT TOUCH THE PLATEN
	Check to see if the platen is dirty
	Check rubber gasket on tray carriers for damaged or missing pieces
	Check to see that the film is centered on the tray
	Check to see that the heat seal dwell is set properly
	Make sure that the tray flanges are not contaminated with product
Platen does not heat up	Verify that the power cord is plugged into outlet
	Verify that there is power at the outlet
Film does not cut	
	Check to see if there is film wrapped around the cutter blade-You must remove the cutter guard to do this and if there is film wrapped around it the film must be cut away and pulled off- THE CUTTER BLADE IS SHARP, DO NOT TOUCH-REMOVE AIR AND ELECTRICAL POWER PRIOR TO REMOVING GUARD
	Check to see if cutter blade is missing
	Check to see if cutter blade is dull
	Check to see if the cutter blade is dirty
Film is not centered on tray	Adjust the plastic guides on the film holder so that the film is centered over the trays



WARNING: Disconnect and lock out Air supply / Electrical cords before performing Maintenance 1908 Machine: D Clean Tray carriers/Chain (pg 24&25) 2 Insp Rubber Gaskets in tray carriers (pg 24) D Line pressure is at 80 psi (pg10) D Check/Clean hot platten (pg 26) Oil chain (pg 27) D Blue filter- check for replacement (pg 11) W Insp/Clean cutter blade (pg 13 & 26) Film dancer bar is moving freely (pg 16) D Compressor: D Check Oil level (pg 4 comp. manual) **10** Drain water out of tank (pg 2 comp. manual) D W 11 Check safety valve (pg 6 comp. manual) 6M 12 Insp/Replace air filter (pg 2 comp. manual)

MAINTENANCE CHECK LIST

D = Daily

13 Change oil (pg 4 comp. manual)

W= Weekly

M= Monthly

3M= 3 Months

6M= 6 Months

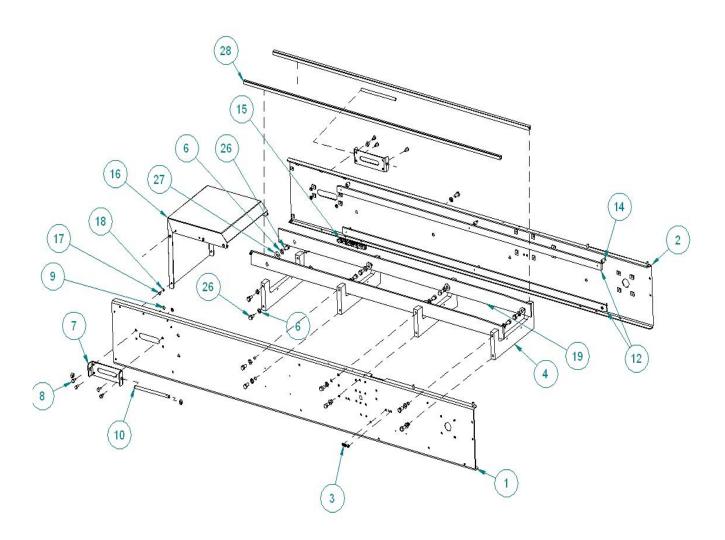
Note: Refer to Manuals for instructions

Rev. 8/16/05

3M



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (FRAME)



For Service Parts Call Oliver Products @ 800-253-3893

3/31/09 1908S2003 3-1



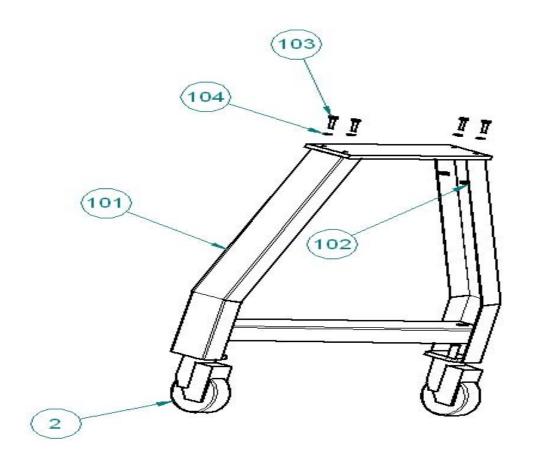
MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (FRAME)

ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
1	FRAME FRONT	1908-0001	1
2	FRAME REAR	1908-0002	1
3	BEARING-FLG NYLNR THOM.4L2FF	5257-0205	7
4	SPACER FRAME	1908-0003	4
5	SCREW HEX HD 3/8 -16	5843-1052	16
6	WASHER 3/8 STST SPRING LOCK	5851-9359	16
7	TAKE UP - FRAME	1908-0054	2
8	SCREW - HEX HD 1/4 - 20	5843-1001	8
9	WASHER - LOCK 1/4 "	5851-9357	8
10	SCREW - TAKE UP 6.250 LONG	1908-0005	2
	NUT - HEX FULL 3/8 - 16	5832-0522	2
12	SUPPORT CHAIN UPPER AND LOWER	1908-0007	4
15	MAIN-CHAIN (266 PITCHES) HYDRO	5603-4928	2
16	GUARD INFEED	1908-0021	1
17	SCREW HEX HD 10-24	5843-1231	10
18	WASHER - #10 STST SPRING LOCK	5851-9355	10
19	STRIP CARRIER SUPPORT	1908-0024	2
26	SCREW - HEX HD 3/8 - 16	5843-1052	8
27	WASHER - FLAT 3/8"	5851-9306	8
28	STRIP – WEAR 48.5 LONG	1908-0052	2

For Service Parts Call Oliver Products @ 800-253-3893

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MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (LEGS & CASTERS)

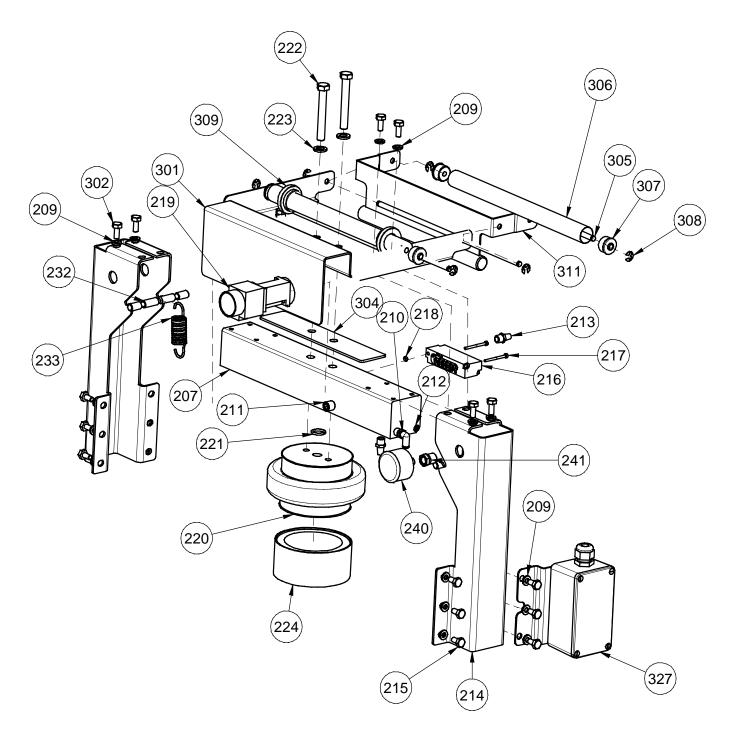
ITEM NO	PART DESCRIPTION	PART NUMBER	(PER LEG) QUANITY
101	LEG SENIOR MEAL UNIT	1908-0027	1
102	NUT – HX FULL 1/4 -20	5832-0520	4
103	SCREW - HEX HD 1/4 -20	5843-1005	4
104	WASHER - LOCK 1/4 " STST SPRING	5851-9357	4
105	CASTER - STEM, 4" WHEEL	5902-2409	2

For Service Parts Call Oliver Products @ 800-253-3893

3/27/09



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (ARCH & HEATER PLATEN)



3/27/09 1908S20003 3-4



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (ARCH & HEATER PLATEN)

ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
207	MANIFOLD-MAIN	5130-0023	1
209	WASHER-SPRING LOCK	5851-9357	20
210	FITTING-ELBOW 90 SWIVEL	5115-1775	4
211	PLUG-PIPE CSNK 1/4	5115-1428	1
212	PLUG-PIPE BR CSNK 1/8	5115-1427	2
213	MUFFLER-EXHAUST	5130-7005	2
214	ARCH	1908-0122	2
215	HEX HD 1/4-20	5843-1001	12
216	4-WAY VALVE	5148-5531	1
217	SCREW - ROUND HD 4-40	5843-5196	1
218	O-RING	6909-3102	1
219	TIMER PNUEMATIC 1-3 SEC.	5148-6511	1
220	SPRING AIR ACTUATOR	5143-2002	1
221	O-RING	6909-3113	1
222	SCREW HEX HD 3/8-16	5843-1061	2
223	WASHER - 3/8 SPRING LOCK	5851-9359	2
224	PUSHER – SPACER HEATER PLATEN	1508-0018-3	1
232	PIN SPRING SUPPORT	1908-0123	2
233	SPRING TENSION	7024-4104	2

For Service Parts Call Oliver Products @ 800-253-3893

3/27/09



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (ARCH & HEATER PLATEN)

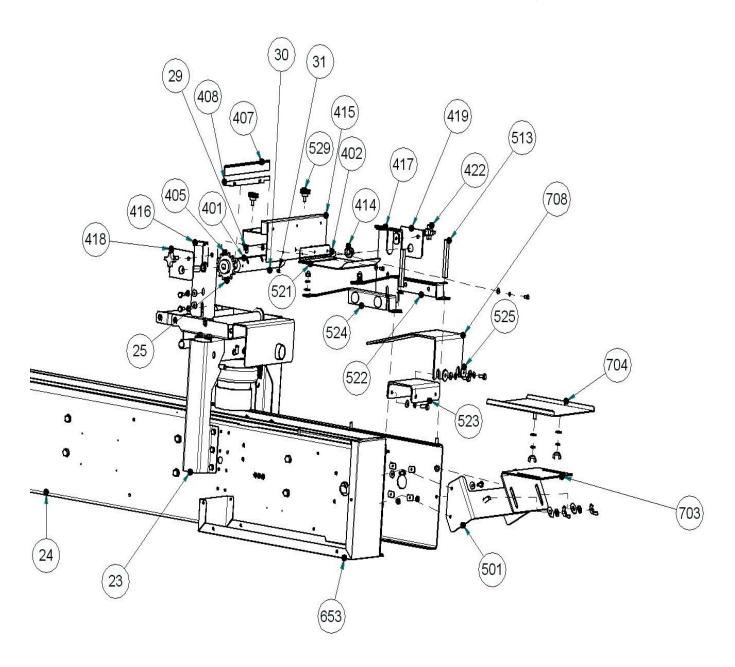
ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
240	GAUGE - PRESS 0-160 P.S.I.	5118-0533	1
241	BUSHING - REDUCING 1/4 TO 1/8	5115-1250	1
301	FILM DISPENSER	1908-0042	1
302	SCREW HEX HD 1/4-20	5843-1002	8
304	SPACER FILM DISPENSER	1508-0016-1	1
305	ROD FILM DISPENSER	1908-0043	3
306	TUBE	4639-1414-1115	2
307	BEARING ROLL END	5252-3002	4
308	RING RETAINER (G)	5840-1273	6
309	ROLLER FILM GUIDE	1908-0041	2
311	BRACKET FILM TAKEUP ROLLER	1908-0163	1
327	SEE NEXT LAYOUT		1

For Service Parts Call Oliver Products @ 800-253-3893

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MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (CUTTER & DISCHARGE)



For Service Parts Call Oliver Products @ 800-253-3893

3/27/09



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (CUTTER & DISCHARGE)

ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
23	(SEE OTHER ASSEMBLY –ARCH)		1
24	(SEE OTHER ASSEMBLY -FRAME)		1
25	SPROCKET SET SCREW 1/4 -20	5843-2031	1
26	SAME AS (4)	5843-1002	4
27	SAME AS (5)	5851-9357	4
28	SAME AS (6)	5851-9304	4
29	SCREW SOCSET CUPPT 1/4-20	5843-2034	2
30	PIN SPRING 1/8"	5835-6572	2
31	SCREW SOCSET CUPPT 1/4-20	5842-6131	3
401	HOLDER BLADE 7"	1908-0030	1
402	SHAFT BLADE HOLDER	1908-0029	2
405	SPROCKET TYPE B HUB 40B14 1/2B	4617-4014-1631	1
407	BLADE CUTTER – STST	1808-0071	1
408	STRIP BACKER	1908-0031	1
414	BEARING SINT BRZ FLNG FB812-4	5254-3110	2
415	COVER CUTTER	1908-0032-001	1
416	BRACKET SIDE CUTTER – RH	1908-0065-0001	1
417	BRACKET SIDE CUTTER – LH	1908-0065-0002	1
418	RETAINER FRONT BUSHING W/TAB	1908-0066-1001	1

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MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (CUTTER & DISCHARGE)

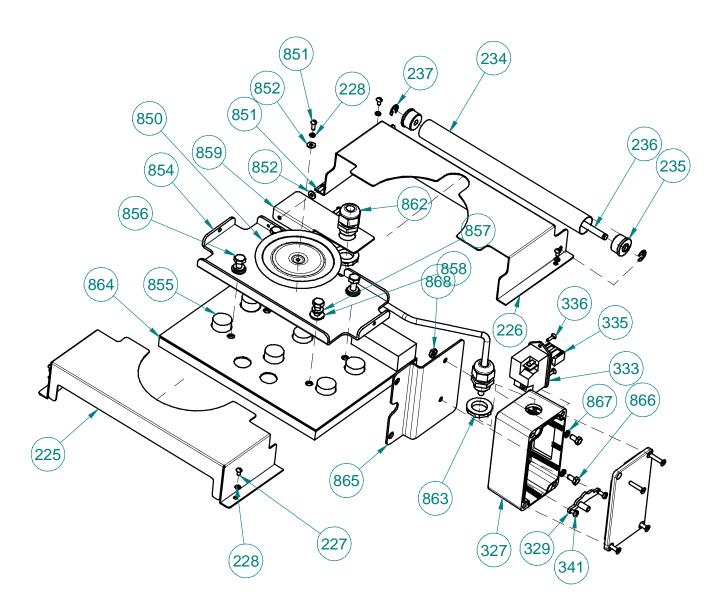
ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
419	RETAINER REAR BUSHING W/TAB	1908-0066-1002	1
422	KNOB -4-PRONG 5/16-18	5911-7118	2
501	MOUNTING BRACKET DISCHARGE	1908-0085	1
513	SPACER COVER	1908-0058-001	2
521	HOLD DOWN—CUP ASSY	1908-0113	1
522	BASE LIFT TRAY GUIDE (L)	1908-0090	1
523	BRACKET SPACER	1908-0074	1
524	BASE LIFT TRAY GUIDE	1908-0089	1
525	RETAINER- LIFT RAMP INSIDE	1908-0084	2
529	KNOB KNRLD - 1/4 - 20	5911-7024	2
653	COVER BOTTOM DRIVE	1908-0047	1
703	SUPPORT SHELF	69042	1
704	ADJUSTABLE GUIDE SHELF	69043	1
708	LIFT SENIOR MEALS TRAY	1908-0088	1

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MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (PLATEN)



For Service Parts Call Oliver Products @ 800-253-3893



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (PLATEN)

ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
209	WASHER - 1/4" STST SPRING LOCK	5851-9357	4
225	COVER - FRONT PLATEN	1908-0269	1
226	COVER - REAR PLATEN	1908-0270	1
227	SCREW RND HD 6-32	5843-5210	4
228	WASHER #6 SPRING LOCK	5851-9353	5
234	TUBE	4639-1414-1115	1
236	ROD FILM DISPENSER	1908-0040	1
237	RING RETAINER G	5840-1273	2
307	BEARING ROLL END	5252-3002	2
327	ENCLOSURE ELECT. W/L	1308-0060-2	1
329	BRACE GROUND	1308-0062	1
333	ENTRY 1 POLE W/LIGHT RED	5746-7910	1
335	FUSE DRAWER W/SHORTING BAR	5746-7950	1
336	SCREW - FLAT HD 4-40	5843-5022	2
341	SCREW - STST PN HD SLOTTED M3.5	8843-2261	2
850	INSULATOR – PUSHER SILICONE	6516-0070	1
851	SCREW RND HD 6-32 STST	5843-5211	1
852	WASHER - #6 FLAT STST	5851-9300	1
854	SPRING BRACKET PLATE	1908-0265	1
855	SPACER - PLATEN	1908-0266	6
3/27/00	For Service Parts Call Oliver Products	6 @ 800-253-3893	2-11



MECHANICAL REPLACEMENT PARTS LIST EXPLODED VIEW (PLATEN)

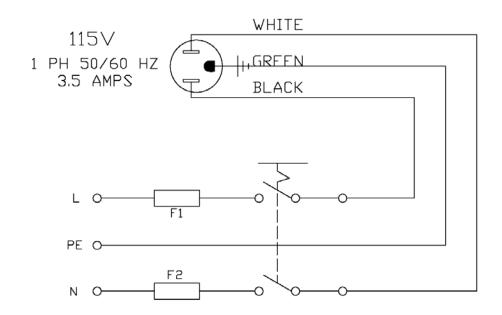
 ITEM NO	PART DESCRIPTION	PART NUMBER	QUANITY
856	SCREW HEX HD 1/4 - 20 STST	5843-1004	4
858	WASHER - 1/4" FLAT STST	5851-9304	4
859	BRACKET STRAIN RELEIF	1908-0267	4
862	BUSHING STRAIN RELIEF	5765-1110	2
863	NUT HEX HD LOCK (MET)	5766-7786	2
864	PLATE - HEATER 115V	1908-0264	1
865	ELECTRICAL ENCLOSURE BRACKET	1908-0268	1
866	SCREW HEX HD 10-24 STST	5843-1231	2
867	WASHER #10 STST SPRING LOCK	5851-9355	2
868	NUT - HEX MACHINE # 10-24 STST	5832-0578	2

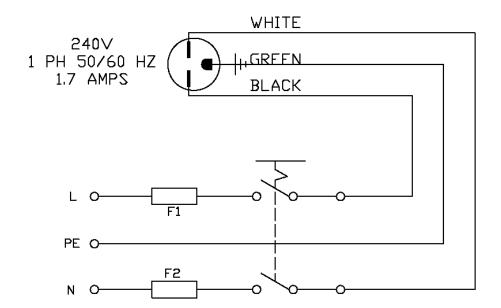
For Service Parts Call Oliver Products @ 800-253-3893

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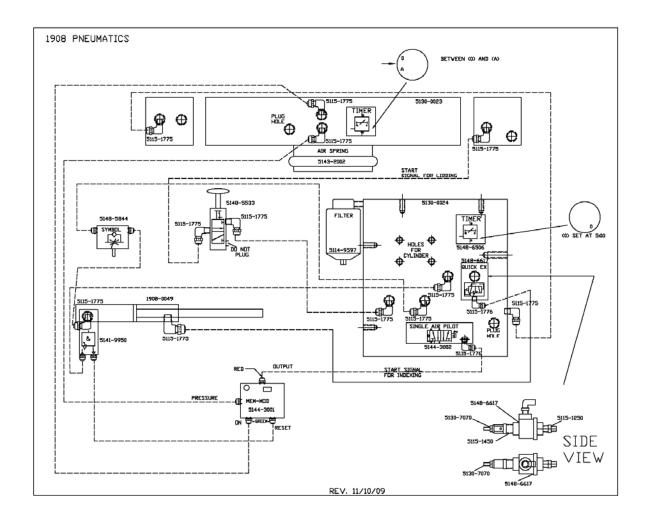
ELECTRICAL







PNEUMATIC DIAGRAM





WARRANTY

PARTS

Oliver Products Company (Oliver) warrants that if any part of the equipment (other than a part not manufactured by Oliver) proves to be defective (as defined below) within one year after shipment, and if Buyer returns the defective part to Oliver within one year, Freight Prepaid to Oliver's plant in Grand Rapids, MI, then Oliver, shall, at Oliver's option, either repair or replace the defective part, at Oliver's expense.

LABOR

Oliver further warrants that equipment properly installed in accordance with our special instructions, which proves to be defective in material or workmanship under normal use within one (1) year from installation or one (1) year and three (3) months from actual shipment date, whichever date comes first, will be repaired by Oliver or an Oliver Authorized Service Dealer, in accordance with Oliver's published Service Schedule.

For purposes of this warranty, a defective part or defective equipment is a part or equipment which is found by Oliver to have been defective in materials workmanship, if the defect materially impairs the value of the equipment to Buyer. Oliver has no obligation as to parts or components not manufactured by Oliver, but Oliver assigns to Buyer any warranties made to Oliver by the manufacturer thereof.

This warranty does not apply to:

- 1. Damage caused by shipping or accident.
- 2. Damage resulting from improper installation or alteration.
- 3. Equipment misused, abused, altered, not maintained on a regular basis, operated carelessly, or used in abnormal conditions.
- 4. Equipment used in conjunction with products of other manufacturers unless such use is approved by Oliver Products in writing.
- 5. Periodic maintenance of equipment, including but not limited to lubrication, replacement of wear items, and other adjustments required due to installation, set up, or normal wear.
- 6. Losses or damage resulting from malfunction.

The foregoing warranty is in lieu of all other warranties expressed or implied AND OLIVER MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE REGARDING THE EQUIPMENT COVERED BY THIS WARRANTY. Oliver neither assumes nor authorizes any person to assume for it any other obligations or liability in connection with said equipment. OLIVER SHALL NOT BE LIABLE FOR LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, INCIDENTAL OR CONSEQUENTIAL DAMAGES.



WARRANTY PROCEDURE

- 1. If a problem should occur, either the dealer or the end user must contact the Customer Service Department and explain the problem.
- 2. The Customer Service Manager will determine if the warranty will apply to this particular problem.
- 3. If the Customer Service Manager approves, a Work Authorization Number will be generated, and the appropriate service agency will perform the service.
- 4. The service dealer will then complete an invoice and send it to the Customer Service Department at Oliver Products Company.
- 5. The Customer Service Manager of Oliver Products Company will review the invoice and returned parts, if applicable, and approve for payment.



RETURNED PARTS POLICY

This policy applies to all parts returned to the factory whether for warranted credit, replacement, repair or re-stocking.

Oliver Products Company requires that the customer obtain a Return Material Authorization (RMA) number before returning any part. This number should appear on the shipping label and inside the shipping carton as well. All parts are to be returned prepaid. Following this procedure will insure prompt handling of all returned parts.

To obtain an RMA number contact the Repair Parts Deptartment toll free at (800) 253-3893.

Parts returned for re-stocking are subject to a **RE-STOCKING CHARGE**.

Thank you for your cooperation,

Repair Parts Manager Oliver Products Company