



INSTRUCTIONS

FOR

Miniload Venturi Loaders



MODEL NO.

MVL

SERIAL NO.

Made in the U.S.A. by Plastic Process Equipment, Inc. © copyright 2006



PLASTIC PROCESS EQUIPMENT, INC.

www.ppe.com • e-mail: sales@ppe.com

PPE
WEST

8385 Montessouri Street, Las Vegas, Nevada 89113
702-433-6385 • 800-258-8877 • Fax: 702-433-6388

PPE
SOUTH

11218 Challenger Avenue, Odessa, Florida 33556
727-834-8888 • 800-282-6783 • Fax: 727-834-8873

8303 CORPORATE PARK DRIVE, MACEDONIA (Cleveland), OHIO 44056, USA

216-367-7000 • Toll Free: 800-321-0562 • Fax: 216-367-7022 • Order Fax: 800-223-8305

Toll Free: USA, Canada & Mexico
800-362-0706

Table of Contents

INTRODUCTION.....4

SPECIFICATIONS5

UNPACKING THE UNIT7

INSTALLATION.....8

ADJUSTING THE LEVEL SENSOR SENSITIVITY13

UNIT OPERATION.....14

MAINTENANCE.....14

WARRANTY16

COMPRESSED AIR LINE SIZE17

INSTALLATION OF THE VENTURI LOADER UNIT

INTRODUCTION

The VENTURI LOADER unit is designed specifically to convey plastic PELLETS from a box or drum beside the plastic injection molding machine, extruder or blow molder, to the machine hopper or machine throat. The unit is built with high quality components, assembled by skilled craftsmen, and tested to insure that you receive a high quality, durable piece of equipment.

Thus, it is important that the unit be installed correctly to be sure that you receive the optimum performance from your venturi loader unit. Please read this manual carefully and be sure that your unit is installed correctly.

It is the owner's responsibility to assure proper operator training, installation, operation, and maintenance of the venturi loader unit. All Local, State and Federal codes must be observed in the installation of this venturi loader unit.

ALWAYS DISCONNECT POWER TO THE UNIT BEFORE WORKING ON THE UNIT

SPECIFICATIONS

The unit operates on 120/1/60 electrical power and requires a compressed air supply of at least 80 PSIG.

The specifications on the Miniload Venturi Loader unit are as shown below.

VENTURI LOADER SPECIFICATIONS

ITEM	VIRGIN MODEL NO S.G.	VIRGIN MODEL WITH SG	VIRGIN REGRIND MODEL	GRANULATOR EVACUATION MODEL
MODEL	SINGLE ENTRY	SINGLE ENTRY W/SIGHT GLASS	DUAL ENTRY	GRANULATOR EVACUATION
COMPRESSED AIR USAGE (OPERATING)	14 SCFM	14SCFM	28 SCFM	14 SCFM
COMPRESSED AIR PRESSURE	80 PSIG	80 PSIG	80 PSIG	80 PSIG
MATERIAL LINE SIZE	1¼" ID	1¼" ID	1¼" ID	1¼" ID
AIR SUPPLY LINE (MINIMUM)	½"	½"	½"	½"
ELECTRICAL	120/1/60	120/1/60	120/1/60	120/1/60
RECEIVER HEIGHT X DIA.	18.75" X 8"	18.75" X 8"	18.75" X 8"	18.75" X 8"
SIGHT GLASS HEIGHT	8.5"	8.5"	8.5"	8.5"
SIGHT GLASS FLANGE DIA.	4.75"	4.75"	4.75"	4.75"
OPTIONS:				
SIGHT GLASS	OPTIONAL	INCLUDED	OPTIONAL	OPTIONAL
LEVEL SWITCH	INCLUDED	INCLUDED	INCLUDED	OPTIONAL
"BULLET" MAGNET"	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
¹REMOTE FILTER ASSEMBLY	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
²GRANULATOR EXHAUST ASSEMBLY	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
³SUCTION BOX	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
⁴EXTRA VENTURI (WITH COUPLER)	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
⁵BAG FILTER FOR RECEIVER	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
⁶SLIDE GATE FOR SUCTION BOX	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL
OUT OF MATERIAL ALARM	OPTIONAL	OPTIONAL	OPTIONAL	OPTIONAL

¹ The remote filter assembly includes a 2" elbow welded to cover; 10 feet of 2" hose and filter with bracket

² The GEA is the Granulator Exhaust Assembly to install to the granulator box to evacuate the granulator.

³ The Suction Box is installed on the bottom of drying hoppers or bins to draw out of the hopper or bin.

⁴ The extra venturis can be installed on the GEA or on a Suction Box.

⁵ The Bag Filter includes a new receiver cover, and is to be used for very dusty regrinds.

⁶ The slide gate is used above the suction box to shut off the material flow for cleaning of the suction box. This is only necessary when the bin does not already have a slide gate.

The maximum particle size to be conveyed with the venturi loader is 3/16" pellets.

The venturi loader is designed to convey **PLASTIC PELLETS** or in the case of the regrind unit, plastic regrind, from beside the injection molding machine, extruder, or blow molder, to the machine hopper or throat.

THE VENTURI LOADER UNIT IS NOT DESIGNED TO CONVEY POWDERS

The venturi loader will convey up to 500 Pounds Per Hour of Plastic Pellets weighing 35 #/FT³, over a distance of ten feet. The rated conveying capacity is based on polystyrene pellets, when the VENTURI LOADER regulator is supplied with 80 PSIG air pressure, and the pressure regulator is set for an outlet pressure of 40 PSIG. Longer distances, larger particle size, reduced air pressure, or different bulk densities, will reduce this conveying capacity. A higher regulator outlet pressure will increase the conveying rate.

The compressed air supply line must be sized large enough to provide the above listed operating CFM of air quantity and pressure, to the pressure regulator on the VENTURI LOADER unit. If a long run of compressed air supply hose is required, it will be necessary to size this line larger than that listed in the above table. The compressed air line sizing chart on Page 16 will give you the proper compressed air line size for the venturi loader. The recommended size line must be run to the pressure regulator on the unit.

Quick-change air fittings frequently have restrictions in them, which can reduce the flow of compressed air to the unit. Be sure that if quick-change fittings are used, they have a full size air opening.

UNPACKING THE UNIT

Before accepting the unit from the freight company, visually inspect the unit for any shipping damage. If there is any indication that the package was mishandled, further inspection should be done **IMMEDIATELY**, in front of the delivery driver. Note all visual damage on the delivery receipt prior to acceptance of the package.

Remove the unit from the package and again inspect for any damage that could have occurred during shipment. If damage is noted, be sure to file a claim **IMMEDIATELY** with the carrier. Remove any packing materials and support materials from the unit.

Check to be sure that you have received all of the materials with the unit. The materials you should receive are listed below under the appropriate model.

VIRGIN MATERIAL MODEL NO S.G.	VIRGIN MATERIAL MODEL WITH S.G.	DUAL ENTRY MODEL VIRGIN/REGRIND	GRANULATOR EVACUATION
1. ONE SUCTION WAND VENTURI ASSEMBLY	1. ONE SUCTION WAND VENTURI ASSEMBLY	1. TWO SUCTION WAND VENTURI ASSEMBLIES	1. ONE SUCTION WAND VENTURI ASSEMBLY
2. ONE AIR CONTROL ASSEMBLY	2. ONE AIR CONTROL ASSEMBLY	2. ONE AIR CONTROL ASSEMBLY (MASTER) 3. ONE AIR CONTROL ASSEMBLY (SLAVE)	2. ONE AIR CONTROL ASSEMBLY
3. ONE 10' LENGTH OF 1¼" HOSE	3. ONE 10' LENGTH OF 1¼" HOSE	4. TWO 10' LENGTHS OF 1¼" HOSES	3. ONE 10' LENGTH OF 1¼" HOSE
4. TWO HOSE CLAMPS	4. TWO HOSE CLAMPS	5. FOUR HOSE CLAMPS	4. TWO HOSE CLAMPS
5. ONE 10' LENGTH OF 3/8" POLY AIR LINE	5. ONE 10' LENGTH OF 3/8" POLY AIR LINE	6. TWO 10' LENGTHS OF 3/8" POLY AIR LINE	5. ONE 10' LENGTH OF 3/8" POLY AIR LINE
6. ONE RECEIVER FILTER ASSEMBLY	6. ONE RECEIVER FILTER ASSEMBLY	7. ONE RECEIVER FILTER ASSEMBLY (DUAL ENTRY)	6. ONE RECEIVER FILTER ASSEMBLY
7. ONE LEVEL SENSOR	7. ONE LEVEL SENSOR	8. ONE LEVEL SENSOR	7. ONE HOPPER FLANGE
8. ONE HOPPER FLANGE	8. ONE SIGHT GLASS	9. ONE HOPPER FLANGE	8. ONE O & I MANUAL
9. ONE O & I MANUAL	9. ONE O & I MANUAL	10. ONE O & I MANUAL	

If any of the above items are missing, check the packing list; contact the freight company; and contact the factory **IMMEDIATELY**.

INSTALLATION

AIR CONTROL ASSEMBLY INSTALLATION

There are general arrangement drawings for each model in the Appendix of this manual. Determine the model that was delivered from the packing list and review the appropriate arrangement drawing in the Appendix prior to starting the installation.

With the single entry unit there is one Air Control Assembly. Bolt the Air Control Assembly to a suitable solid vertical surface close to the drum or gayload of material. A location on the injection molding machine, extruder, or blow molding machine is preferred.

With the dual entry unit, there are two air control assemblies: a “Master Air Control Assembly” and a “Slave Air Control Assembly”. The Air Control Assembly with the On/Off switch is the “Master” unit and is used for the virgin suction wand/venturi; and the plain Air Control Assembly (without the On/Off switch) is the “Slave Air Control Assembly”, and is used with the regrind suction wand/venturi. The two air control assemblies are connected electrically by the square, four (4) pronged plug and receptacle. In this way, when the level switch calls for material, both venturis are activated.

If you have the granulator evacuation model, the Air Control Assembly should be mounted close to the granulator exhaust tube. Mounting on the granulator itself is preferred.

SUCTION WAND/VENTURI ASSEMBLY INSTALLATION

Place the box or drum of material at its normal operating location. Put the suction wand/venturi assembly into the box.

If you have a granulator evacuation model, the unit requires that there be a 1¼” OD exhaust tube on the granulator box (if this is not the case, contact the factory). The venturi assembly is then connected to this tube using the coupler provided (NOTE: THIS COUPLER/ADAPTOR MUST BE PROVIDED WITH THE VENTURI LOADER UNIT. IF YOU DID NOT GET THIS COUPLER, PLEASE CONTACT THE FACTORY.)

Cut the 3/8” poly air line to the proper length to reach from the solenoid valve on the Air Control Assembly, to the venturi(s) on the bottom of the suction wand. Be sure that the poly air line is long enough to reach the venturi(s) when the venturi(s) are at the bottom of the container and at the farthest corner away from the Air Control Assembly.

Push the poly air line into the outlet fitting on the Air Control Assembly(s), and into the fitting on the venturi(s) on the suction wand/venturi assembly(s). It is only necessary to push the poly air line into these fittings. Because these are “push on” fittings, the poly air line will lock in place. Wire ties can be used to strap the poly air line to the suction wand/venturi assemblies to “neaten” up the installation. One poly air line should run from the “Master” Air Control Assembly to the “Natural Material” suction wand/venturi assembly; and the poly air line should run from the “Slave” Air Control Assembly to the regrind suction wand/venturi assembly.

If you have the granulator evacuation model, you will run the poly air line from the Air Control Assembly to the venturi on the granulator exhaust tube.

RECEIVER ASSEMBLY (MACHINE MOUNT) INSTALLATION

The VENTURI LOADER receiver/filter assembly comes in two general mounting configurations. One configuration is the “hopper mount”; and the other configuration is the “machine mount” where the unit is mounted on the sight glass on the machine throat. We will discuss the “hopper mount” in this section, and the “Machine Mount-Sight Glass” installation below. If your unit is going to be mounted on the sight glass on the machine throat, skip to the next section, “Machine Mount Configuration-Sight Glass”.

NOTICE

NOTICE

NOTICE

THERE IS A RED STRIPE ON THE RECEIVER COVER AND ON THE RECEIVER INLET TUBE.

BE SURE THAT THESE RED STRIPES ARE ALIGNED WHEN INSTALLING THE COVER ON THE LOADER.

WHEN REMOVING THE RECEIVER COVER AND REINSTALLING THE RECEIVER COVER, BE SURE THESE RED STRIPES ARE ALIGNED.

The “hopper mount” configuration has a flange/coupler on the bottom of the receiver/ filter assembly. This flange mounts on the existing machine hopper cover, on the injection molding machine, extruder, or blow molder. The receiver/filter can be removed from the flange and coupler by pulling the receiver from the coupler. The coupler on the flange is an O’ring coupler so it may be necessary to pull quite hard to remove it. To reinstall, lubricate the O’ring with Vaseline or other suitable O’ring lubricant. After the flange has been mounted to the machine hopper cover, slide the receiver back into the O’ring coupler on the flange. NOTE: IF THE FLANGE IS BOLTED TO THE HOPPER COVER, BE SURE THE NUTS ARE LOCKED ON THE BOLTS SO THEY CANNOT BECOME DISLODGED AND FALL INTO THE MACHINE HOPPER.

The level sensor will then need to be mounted in the side of the machine hopper some distance down from the top of the hopper. The height of the level sensor will determine the amount of material normally present in the machine hopper (be sure to account for the natural “angle of repose” of the material when determining the level switch location). The

lower the level switch is located in the hopper, the less material is carried as inventory in the hopper during operation.

To mount the level sensor in the side of the hopper, drill a 1-3/16" hole in the hopper at the desired level. BE SURE TO COLLECT THE RESIDUE FROM THE DRILLING SO THAT IT DOES NOT FALL INTO THE THROAT OF THE MACHINE. Clean the residue from the machine hopper. Using the two locking nuts that come with the level sensor, install the level sensor in the hopper.

MACHINE MOUNT-SIGHT GLASS INSTALLATION

NOTE: THE TUBE IN THE SIGHT GLASS ASSEMBLY IS GLASS. DO NOT DROP OR HIT THE GLASS TUBE OR IT WILL BREAK.

The bottom of the receiver/filter assembly slides into the O'ring coupler on the top of the sight glass assembly. This can be removed easily for cleaning of the hopper and sight glass assembly. Some Vaseline can be used to lubricate the O'ring to make it slide in more easily.

The level sensor is mounted in the bracket on the sight glass assembly, and arranged so that it slides up and down the sight glass assembly at the desired material level in the sight glass tube. Screw the level sensor against the sight glass for a "friction" lock to keep it at the desired level.

Mount the bottom flange of the sight glass directly on the machine throat. If an adapter plate is necessary, please contact the factory.

RECEIVER ASSEMBLY MOUNT-GRANULATOR EVACUATION MODEL

If you have the granulator evacuation model, you may wish to mount the hopper/filter assembly on a stand over a material collection box or barrel, or on the cover of the box or barrel. The flange of the receiver assembly can be bolted to the cover of a barrel, or to a flange on a receiver stand.

If you have the "standard acting" operating level switch, the switch can be mounted in the barrel at the level at which you wish to have the VENTURI LOADER unit shut off. This should be mounted as described above. The level switch will then shut off the VENTURI LOADER unit when the barrel is full.

If you have the "reverse acting" level switch, this should be mounted in the granulator box below the material exhaust tube. Mount it at a location where the material will contact it so that it will start the VENTURI LOADER unit when material is present and shut off the VENTURI LOADER unit when material is not present (after it has been conveyed away from the granulator box).

MATERIAL HOSE INSTALLATION

Install the 1¼” material conveying hose(s) on the suction wand/venturi(s) and on the hopper. Secure the hose(s) in place on the tubes using the hose clamps provided. If you have a dual entry hopper, install the hose from the VIRGIN or NATURAL material on the TOP inlet tube and the hose from the REGRIND venturi on the BOTTOM inlet tube of the receiver.

IF YOU ARE CONVEYING DUSTY REGRINDS, IT MAY BE NECESSARY TO PURCHASE THE “RECEIVER BAG FILTER” OPTION FOR THE RECEIVER.

ELECTRICAL

Plug the cord from the level sensor into the matching plug that is on the Air Control Assembly.

With the dual entry system, there are two air control assemblies: a “Master Air Control Assembly” and a “Slave Air Control Assembly”. The Air Control Assembly with the On/Off switch is the “Master” unit and is used for the virgin suction wand/venturi; and the plain Air Control Assembly (without the On/Off switch) is the “Slave Air Control Assembly”, and is used with the regrind suction wand/venturi. The two air control assemblies are connected electrically by the square four (4) pronged plug and receptacle. In this way, when the level switch calls for material, both venturis are activated.

IT IS ONLY NECESSARY TO RUN 120/1/60 ELECTRICAL POWER TO THE “MASTER” AIR CONTROL ASSEMBLY. ELECTRICAL POWER IS THEN TRANSMITTED TO THE “SLAVE” ASSEMBLY THROUGH THE 4 PRONGED PLUG AND RECEPTACLE MENTIONED ABOVE.

Be sure there is a 120/1/60 grounded electrical outlet close to the VENTURI LOADER unit. Do not plug in the unit at this time. Please read “Unit Operation” and “Adjusting Level Sensor Sensitivity” before plugging in the unit.

COMPRESSED AIR INSTALLATION

Install a fitting to the ¼” FPT connection on the regulator assembly that matches the compressed air fittings in your plant. If quick-change fittings are used, be sure they provide a full size air opening to the unit.

Run the recommended size air line (see Page 16) and a full size air hose to the VENTURI LOADER unit and plug it into the fitting just installed on the Air Control Assembly.

If you have the dual entry receiver model, it is necessary to run compressed air to both Air Control Assemblies.

Do not connect the compressed air at this time. Please read “Adjusting Level Sensor Sensitivity” and “Unit Operation” before connecting compressed air to the unit.

NOTICE

NOTICE

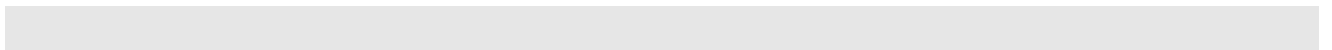
NOTICE

THERE IS A RED STRIPE ON THE RECEIVER COVER AND ON THE RECEIVER INLET TUBE.

BE SURE THAT THESE RED STRIPES ARE ALIGNED WHEN INSTALLING THE COVER ON THE LOADER.

WHEN REMOVING THE RECEIVER COVER AND REINSTALLING THE RECEIVER COVER, BE SURE THESE RED STRIPES ARE ALIGNED.

NOTE: THE TUBE IN THE SIGHT GLASS ASSEMBLY IS GLASS. DO NOT DROP OR HIT GLASS TUBE OR IT WILL BREAK.



ADJUSTING THE LEVEL SENSOR SENSITIVITY

NOTICE: DUST AND FINES WILL COLLECT ON THE LEVEL SENSOR HEAD (IN THE CASE OF THE “HOPPER MOUNT” CONFIGURATION) OR ON THE GLASS (IN THE CASE OF THE “MACHINE/SIGHT GLASS CONFIGURATION”). IT MAY BE NECESSARY TO READJUST THE LEVEL SENSOR SENSITIVITY AFTER A FEW HOURS OF OPERATION. IT MAY BE NECESSARY TO ADJUST THE SENSITIVITY ON THE LEVEL SENSOR PRIOR TO THE FIRST OPERATION OF THE VENTURI LOADER UNIT.

Empty Adjustment

The unit must be adjusted after installation in the empty Sight Glass or Hopper. These can be considered to be “empty” when the material to be detected is min 20 mm away from the active zone. If the sensor detects material after adjustment, its switching status changes.

For the normally closed version, hold down the right (OUT ON) programming **pushbutton** until the Yellow LED flashes (for a min of 2sec, max of 6sec). The yellow LED remains on after adjustment.

For the normally open version, hold down the left (OUT OFF) programming **pushbutton** until the Yellow LED flashes (for a min of 2sec, max of 6sec). The yellow LED remains off after adjustment.

Note:

The sensor is operational just with empty adjustment. However, it is recommended to carryout a “full adjustment” with the active zone being completely covered after empty adjustment. On the basis of the values for the empty state/full state the internal microprocessor determines the optimum position of the switching thresholds between the two states. Using both adjustment criteria (empty and full adjustment) results in the maximum operational reliability for the application. For empty adjustment the internal microprocessor generates 2 values.

The first value corresponds to the sensor signal measured in the empty state. The second value is an assumed measured value for the full state. It is calculated from the just measured empty state and a factory signal preset. For full adjustment this second value is replaced by a real measured value.

Full Adjustment

After empty adjustment, achieve the full state so that the switching status changes. Then perform the following:

For the normally closed version, hold down the right (OUT ON) programming **pushbutton** (for a min of 6sec) until the Yellow LED flashes quickly. The yellow LED remains on after adjustment.

For the normally open version, hold down the left (OUT OFF) programming **pushbutton** (for a min of 6sec) until the Yellow LED flashes quickly. The yellow LED remains off after adjustment.

The full adjustment can be repeated as often as you like. The stored value for the empty state is not overwritten by the full adjustment. After a new empty adjustment both values are automatically set again, the values last defined are overwritten.



Therefore always carry out the empty adjustment first, then if necessary, the full adjustment!

UNIT OPERATION

The VENTURI LOADER unit is designed so that when the level sensor in the hopper or sight glass indicates that the machine needs material, the compressed air solenoid valve opens and compressed air flows into the venturi, conveying material to the receiver/filter assembly by venturi action in the compressed air venturi. The general arrangements for the VENTURI LOADER units are shown in the Appendix of this manual.

Adjust the pressure regulator on the Air Control Assembly(s) so that the outlet (conveying) pressure reads about 40 PSIG.

This pressure can be adjusted later. If you wish to convey more material raise the pressure; less material reduce the pressure. The 40 PSIG setting is a good starting point.

The VENTURI LOADER unit is now ready to convey material. To convey more material, you can increase the pressure setting on the regulator---however, more compressed air will be used.

To conserve compressed air, reduce the air pressure until you still obtain smooth material flow, and also are able to maintain the material level in the hopper or sight glass.

DUST AND FINES WILL COLLECT ON THE LEVEL SENSOR HEAD (IN THE CASE OF THE “HOPPER MOUNT” CONFIGURATION) OR ON THE GLASS (IN THE CASE OF THE “MACHINE/SIGHT GLASS CONFIGURATION”). IT MAY BE NECESSARY TO READJUST THE LEVEL SENSOR SENSITIVITY AFTER A FEW HOURS OF OPERATION.

MAINTENANCE

ALWAYS DISCONNECT POWER TO THE UNIT BEFORE WORKING ON THE VENTURI LOADER UNIT

Water separated from the air will collect in the Air Control Assembly filter bowl. It must be drained at least once per shift by opening the valve at the bottom of the filter bowl.

Fines from the material will collect over time in the paper filter on the top of the receiver. This will be apparent when the material will no longer convey at the desired rate. It will be necessary to remove this filter (by removing the knob and cap on the top of the receiver) and blow the filter out with compressed air, and replace the filter on the top of the receiver. **DO NOT OPERATE THE UNIT IF THIS FILTER IS NOT IN PLACE.** The frequency of filter cleaning will depend on the dustiness of the material being conveyed.

It will be necessary to install a new filter after a period of time when the filter can no longer be cleaned with compressed air. Contact the factory for new filters.

If a very dusty material is being conveyed, it may be necessary to purchase the VENTURI LOADER'S optional "Bag Filter Assembly". This filter will also need to be cleaned when the material is no longer being conveyed at the desired rate. The cloth filter is washable. A spare filter should be purchased to use while this filter is being washed and dried. After a number of washes, a new filter will need to be installed. Contact the factory for new filters.

NOTICE
**CHECK FILTER ON TOP OF THE RECEIVER REGULARLY
FOR CLEANLINESS. A DIRTY FILTER WILL REDUCE THE
CONVEYING RATE.**

WARRANTY

The manufacturer warrants all equipment manufactured by it to be free from defects in workmanship and material when used under recommended conditions. The manufacturer's obligation is limited to repair or replace, F.O.B. the factory, any parts that are returned freight prepaid within one year of equipment shipment to the original purchaser. Warranty is limited to the manufacturer's warranty on components but in no case will it be less than one year. All components are subject to inspection at the manufacturer's factory. The warranty is limited only to those components, which in the manufacturer's opinion are defective. Any replacement part assumes the used portion of this warranty.

This parts warranty does not cover any labor charges for replacement of parts, adjustment repairs or any other work. This warranty does not apply to any equipment, which in the manufacturer's opinion has been subjected to misuse, negligence or operation in excess of recommended limits. The warranty does not cover components, which have been repaired or altered without the manufacturer's express, written authorization. This warranty does not cover filters, or hoses or tubing that becomes worn due to abrasion from materials; or any other components subject to normal wear and maintenance replacement in the operation of the unit. Defective parts become the property of the warrantor and are to be returned. If there is an outstanding payment due on the unit, the warranty will not apply until payment in full has been received by the factory.

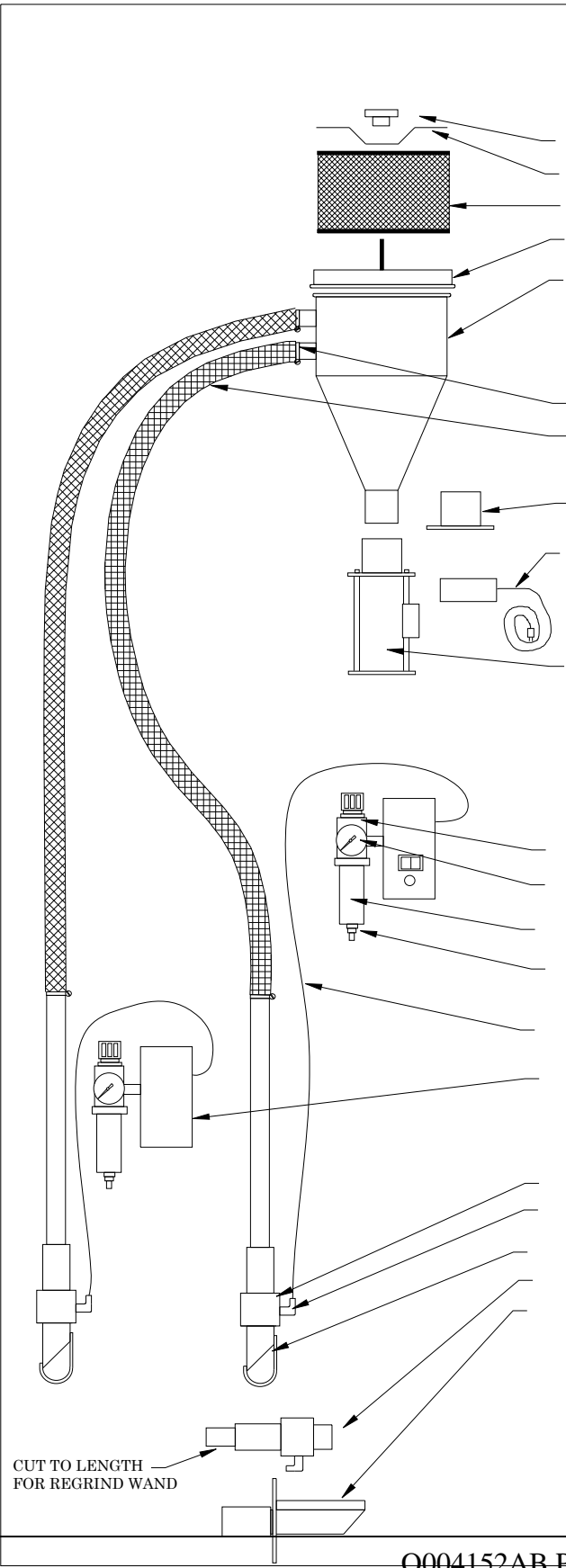
The manufacturer is not liable for any incidental, consequential or special damages or expenses. The manufacturer is not liable for parts not furnished as a part of its manufactured equipment.

COMPRESSED AIR LINE SIZE

PROPER COMPRESSED AIR LINE SIZES FOR VENTURI LOADERS

PIPE LENGTH	PIPE SIZE FOR ONE VENTURI	PIPE SIZE FOR TWO VENTURIS
10 FEET	3/8"	3/8"
25 FEET	3/8"	1/2"
50 FEET	1/2"	3/4"
75 FEET	1/2"	3/4"
100 FEET	1/2"	3/4"

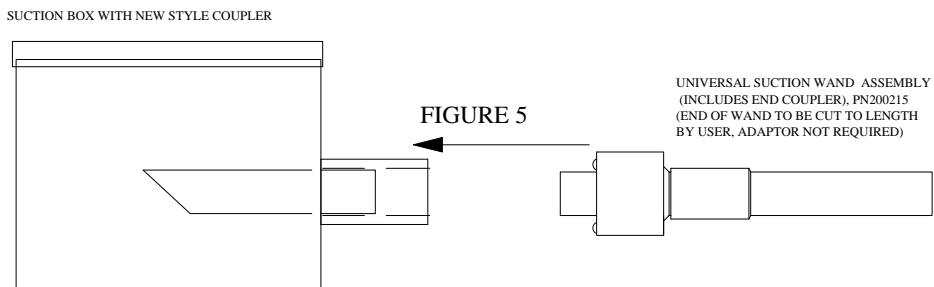
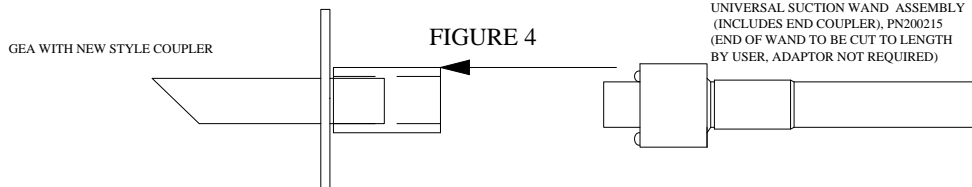
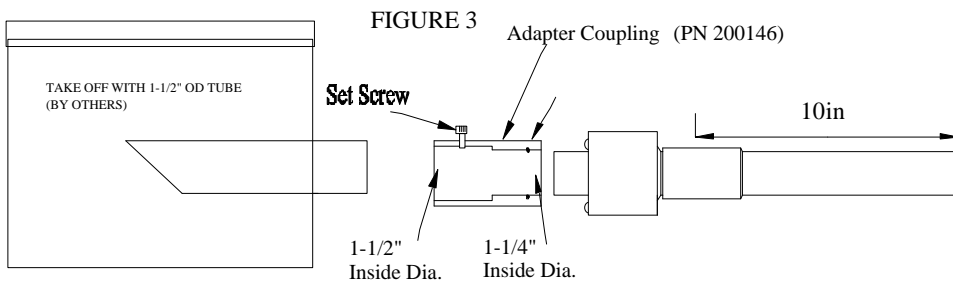
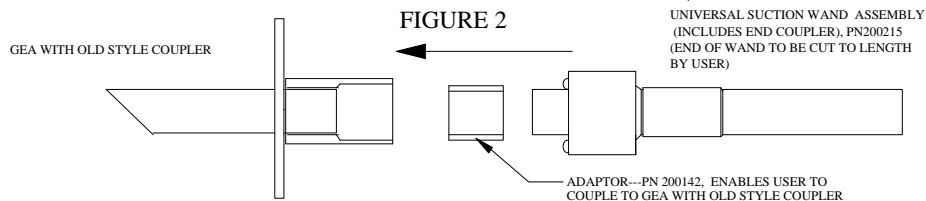
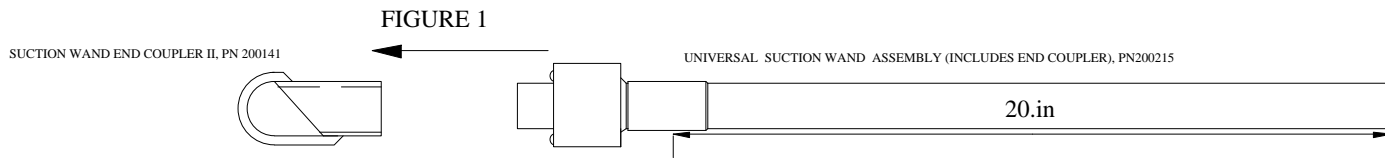
THIS CHART IS BASED ON A MAXIMUM PRESSURE DROP OF 5 PSI THROUGH THE AIR LINE OVER THE ABOVE DISTANCES TO PROVIDE THE REQUIRED VENTURI AIR FLOWS.



<u>DESCRIPTION</u>	<u>PART #</u>	<u>QUANTITY</u>			
SINGLE RECEIVER ASSEMBLY	-200201	1	1		1
DUAL RECEIVER ASSEMBLY	-200213			1	1
KNOB	-200105	1	1	1	1
RECEIVER CAP	-200112	1	1	1	1
AIR FILTER	-200100	1	1	1	1
RECEIVER COVER	-200111	1	1	1	1
RECEIVER BODY (SINGLE)	-200110	1	1		1
RECEIVER BODY (DUAL)	-200166			1	1
HOSE CLAMPS	-200125	2	2	4	2
1 1/4" MATERIAL HOSE (10')	-200122	1	1	2	1
FLANGE	-200108	1		1	1
PROXIMITY SWITCH	-PRX1	1	1	1	1
SIGHT GLASS ASSEMBLY	-200202			1	1
SIGHT GLASS TUBE	-200101			1	1
CONTROL ASSY (GRANULATOR)	-200226				1
CONTROL ASSEMBLY	-200208	1	1		
CONTROL ASSY (MASTER)	-200203			1	1
SOLENOID VALVE	-200188	1	1	2	1
FILTER/REGULATOR	-200186	1	1	2	1
PRESSURE GAUGE	-200102	1	1	2	1
FILTER BOWL	-200185	1	1	2	1
3/8" AIR HOSE (10 FEET)	-200123	1	1	2	1
CONTROL ASSEMBLY (SLAVE)	-200204			1	1
SUCTION WAND ASSEMBLY	-200215	1	1	2	2
VENTURIS ONLY	-200137	1	1	2	1
90 PUSH ON FITTINGS	-200136	1	1	2	1
END COUPLER (WAND)	-200141	1	1	2	2
GEA WAND (CUT TO LENGTH)	-200215				1
GEA ASSEMBLY	-200207				

SINGLE ENTRY
 SINGLE W/ SIGHTGLASS
 DUAL ENTRY
 DUAL W/ SIGHTGLASS
 GRANULATOR MODEL

UNIVERSAL WAND ASSEMBLY WITH COUPLING ARRANGEMENTS



NOTES FOR USE:

1. UNIVERSAL SUCTION WAND ASSEMBLY IS PART NUMBER 200215.
2. THE END COUPLER (WITH LOOP) IS COMPONENT PART NUMBER 200141, AND IS INCLUDED WITH UNIVERSAL SUCTION WAND ASSEMBLY PART NUMBER 200215.
3. THE UNIVERSAL WAND ASSEMBLY IS USED WITH END COUPLER INSTALLED, TO LOAD INJECTION MOLDING MACHINE FROM BOXES.
4. TO LOAD INJECTION MOLDING MACHINE FROM A GRANULATOR USING GEA, REMOVE END COUPLER FROM WAND ASSEMBLY (IT SLIDES OFF), AND SLIDE WAND ASSEMBLY INTO COUPLER ON GEA. IF THE GEA IS EQUIPPED WITH AN OLD STYLE COUPLER, (PRIOR TO 1-98), THE ADAPTOR, PN 200142 IS REQUIRED.
5. TO LOAD INJECTION MOLDING MACHINE FROM A SUCTION BOX REMOVE END COUPLER FROM WAND ASSEMBLY (IT SLIDES OFF), AND SLIDE WAND ASSEMBLY INTO COUPLER ON SUCTION BOX. IF THE SUCTION BOX IS EQUIPPED WITH AN OLD STYLE COUPLER, (PRIOR TO 1-98), THE ADAPTOR, PN 200142 IS REQUIRED.

SUBJECT	UNIVERSAL WAND ASSEMBLY		
FOR			
ADDRESS			
DRAWN BY	JAC	DATE	4-23-04
		SCALE	NONE
JOB NUMBER	NONE		DRAWING NUMBER L002002

NOTES

