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USERGUIDE

IMB-106-0694

CAML

Compressed Air Material Loader

⚠ **WARNING - Reliance on this Manual Could Result in Severe Bodily Injury or Death!**

This manual is out-of-date and is provided only for its technical information, data and capacities. Portions of this manual detailing procedures or precautions in the operation, inspection, maintenance and repair of the product forming the subject matter of this manual may be inadequate, inaccurate, and/or incomplete and cannot be used, followed, or relied upon. Contact Conair at info@conairgroup.com or 1-800-654-6661 for more current information, warnings, and materials about more recent product manuals containing warnings, information, precautions, and procedures that may be more adequate than those contained in this out-of-date manual.

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COMPRESSED AIR MATERIAL LOADER "CAML"

GETTING STARTED - READ THIS PAGE!

THIS MANUAL WILL GUIDE YOU STEP BY STEP TO A SUCCESSFUL INSTALLATION AND START UP. TAKE THE TIME TO FAMILIARIZE YOURSELF WITH THIS MANUAL AND YOUR PARTICULAR EQUIPMENT COMPONENTS.

THE CAML IS A RELATIVELY SIMPLE CONVEYING SYSTEM TO INSTALL AND OPERATE. IT IS VERY IMPORTANT, HOWEVER, TO APPLY AND INSTALL IT CORRECTLY DUE TO THE UNIQUE NATURE OF ITS POWER SOURCE (THE MTD) AND INHERENT CONVEYING LIMITATIONS. ALSO, THERE ARE SEVERAL OPTIONS OF FILTERS, LOADERS, AND PICK-UP TUBES THAT MAY AFFECT YOUR INSTALLATION!

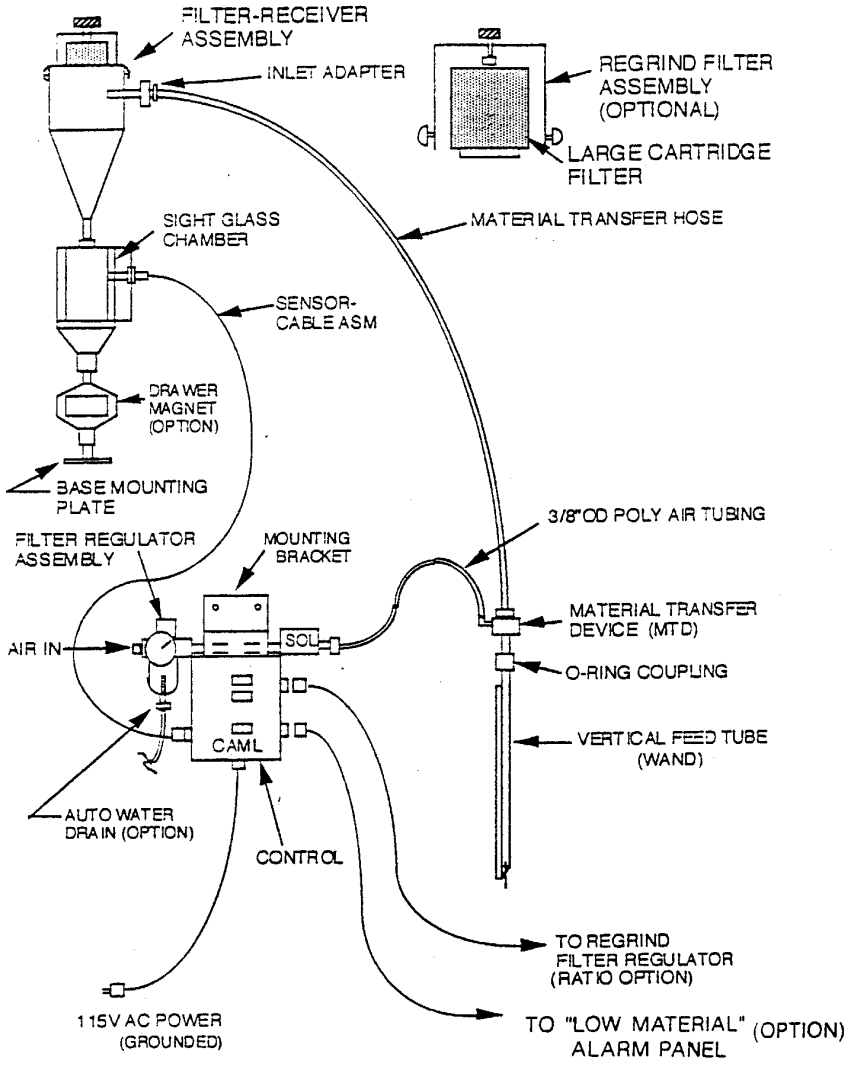
CUSTOM DESIGNED LOADERS

The instructions in this manual refer to standard Conair Franklin Compressed Air Material Loaders which operate with standard Conair control systems. These standard loaders are designed to convey pellets and regrinds from a storage source to a receiving point in a process, such as a bin or a machine throat.

Some or all of the loaders in your installation may vary from these standard designs to include features for special tasks not described in this manual. In such cases, Conair Franklin usually documents the special designs and functions with engineering prints that are included with this manual, or with the loading equipment itself.

Always refer to the engineering prints accompanying this manual, or shipped with the equipment for specifics of your loader(s) which may differ from those in this manual!!!

DESCRIPTION



NOTE: SEE SECTION 1 FOR FOR DESCRIPTION OF ALL OPTIONS

FIGURE 1 - CAML SYSTEM COMPONENTS

SECTION

1

DESCRIPTION

A Compressed Air Material Loader utilizes compressed air as a source of power to entrain and amplify ambient air by means of a Venturi-type transducer. In this application, the amplified air moves plastic pellets thru a line to a receiving vessel. Material is vacuum drawn from a container to the transducer and then pressure-conveyed to a receiving vessel that separates the material from the air stream and fills the sight glass chamber or vessel with material. Clean air is discharged thru the filter, back to ambient plant air. The proximity-type level sensor detects the absence or presence of material in the glass vessel and actuates an air solenoid valve in the compressed air line to start and stop the loading cycle.

The Venturi unit will be referred to as the Material Transfer Device (MTD). The MTD is an integral part of several components that make up a Compressed Air Loading System (See Figure 1):

1. MTD (Material Transfer Device)
2. Material Pickup/Feed Tube (Various Designs)
3. Material Transfer Hose
4. Receiver-Filter Assembly, various designs (5.5 Sq. Ft. is STD).
5. Sight Glass - Receiver Assembly (8 oz.)
   (Includes the level sensor with adjusting bracket)
6. Base Mounting Plate (2 Sizes)
7. Control Assembly with Filter-Regulator, Solenoid

OPTIONS/ACCESSORIES

A. Regrind Filter (13.8 Sq. Ft Filter Area)

B. Large sight glass - receiver assembly (33 oz.)

C. Drawer Magnet

D. "Low Material" alarm with strobe light and horn

E. Remote-mounted filter (13.5 Sq. ft filter area)

F. Floor-mounted filter (58 Sq. ft filter area)

G. Ratio loading kit (for loading regrinds & virgin)

H. Base mounting plates: 4" x 4" or 6" x 6"

I. Material Pickups:

   a. Vertical feed tube/wand (stainless steel)

   b. Horizontal bin tube (stainless steel)

   c. Distribution box (aluminum) - custom-mount by customer to various types of existing material supply hoppers and bins.

   d. MTD O'ring adapters for adapting MTD's to existing collection box material tubes: 1-1/4" x 1-1/4"; 1-1/4" x 1-1/2"; and 1-1/4" x 1-3/4" (in aluminum or stainless)

J. Wear kit with bolt-in, replaceable wear plate.

K. Energy Miser - for intermittent conveying and granulator collection box (saves on compressed air usage)

L. Automatic water drain - from the compressed air filter/regulator

NOTE: The Compressed Air Loader system has been designed to be completely modular, permitting the user the choice of options, add-on kits, and accessories. You buy only what you need for your application.

The control comes equipped with one (1) input jack for the Level sensor, plus two (2) output jacks for the add-on of a Ratio Unit, and/or a "Low Material" alarm box.

SECTION 1

DESCRIPTION

FOLLOWING ARE ILLUSTRATIONS AND DESCRIPTIONS OF THE VARIOUS OPTIONS AVAILABLE FOR THE CONAIR COMPRESSED AIR MATERIAL LOADER SYSTEM.

CONSULT WITH CONAIR OR YOUR LOCAL CONAIR SALES REPRESENTATIVE ON ANY QUESTIONS OR SPECIAL NEEDS YOU MAY HAVE REGARDING THIS EQUIPMENT.

RATIO LOADING (See Figure 2, Next Page)

Ratio loading is a way of conveying simultaneously from two material sources to one filter receiver unit. The amount of each material conveyed is controlled by independently adjusting the compressed air flow to both Material Transfer Devices (MTD's). Adjustments are made by turning the pressure regulator knob on each filter/regulator unit to achieve the pressure and resultant conveyance desired. A gauge on each regulator indicates the pressure setting.

Ratio loading is usually used to convey virgin material from a container and regrinds from granulators, bins, drums, and other sources.

The Compressed Air Loader may have been purchased as a ratio unit. If not, a ratio kit can be ordered and simply installed to an existing single tube loader. In either case, installation and operation is the same.

DESCRIPTION

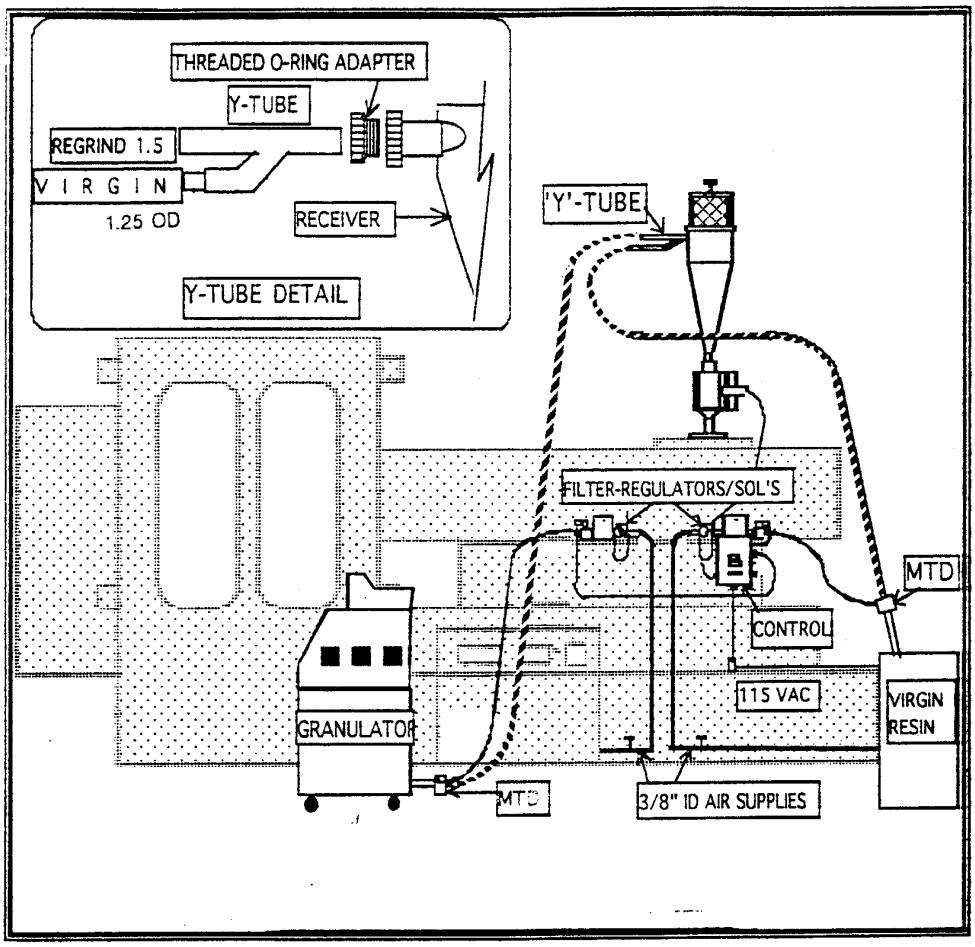


FIGURE 2 - RATIO LOADER SETUP

NOTICE THE "Y" TUBE FOR HANDLING VIRGIN AND REGRIND, THE 2 MTD'S WITH THEIR OWN FILTER-REGULATORS AND SEPARATE AIR SUPPLIES, ALL OPERATED FROM A SINGLE CONTROL.

DESCRIPTION

REMOTE MOUNTED FILTER OPTION (Figure 3)

This option provides a much larger filter in a dust collection style canister that is readily available bracketed to your machine for ease of access. Advantages include safety, more efficient dust control, longer filter life, easier filter maintenance, and improved contamination control by virtue of the filter not being directly over the throat of the machine.

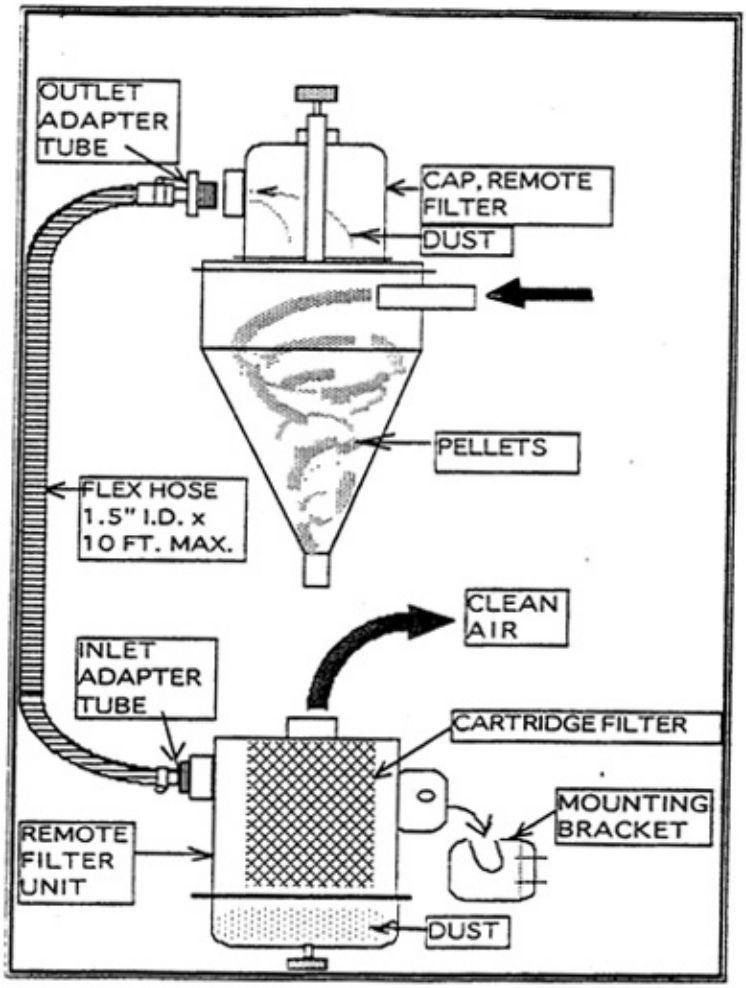


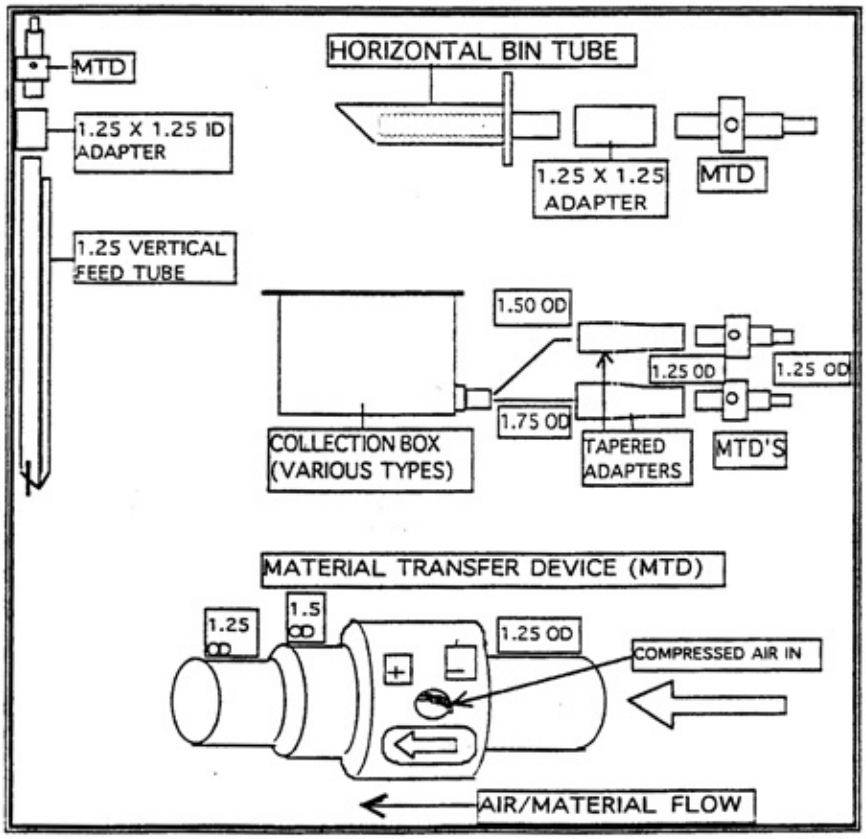
FIGURE 3 - REMOTE MOUNTED FILTER

DESCRIPTION

MATERIAL PICK-UP TUBE OPTIONS (See Figure 4)

Several optional material pick-up devices and associated hardware are illustrated in Figure 4. These provide the necessary flexibility to enable conveyance of materials from a variety of sources, such as boxes, bins, drums, gaylords, etc...Notice that the MTD's are adapted to the tubes with O'ring couplings. Note also, that the MTD's are air flow **directional**, and are so indicated by arrow and + and - symbols.

FIGURE 4 - MATERIAL PICK-UP DEVICES



DESCRIPTION

CUSTOM DISTRIBUTION BOX (See Figure 5, Next Page)

The **Custom Distribution Box Option** provides a means of adapting one or two MTD's to an existing bin, hopper, etc... for efficient conveyance of material to one or two receivers. This "Kit" is depicted in Figure 5. Notice that the box slides into its mounting plate and latches securely with two cam-lock type latches (real easy to remove and clean). Note the dual outlets with O'ring gaskets for receiving the MTD's. A plug is provided in one outlet to permit the standard of one MTD employed. To employ a second MTD, remove the box, and push the plug out.

IMPORTANT: A material shroud is chained to the box and must be in place for efficient conveying. Its tabs seat into notches on the box rim for proper location and for dust-tight seating of the box to the gasket.

DESCRIPTION

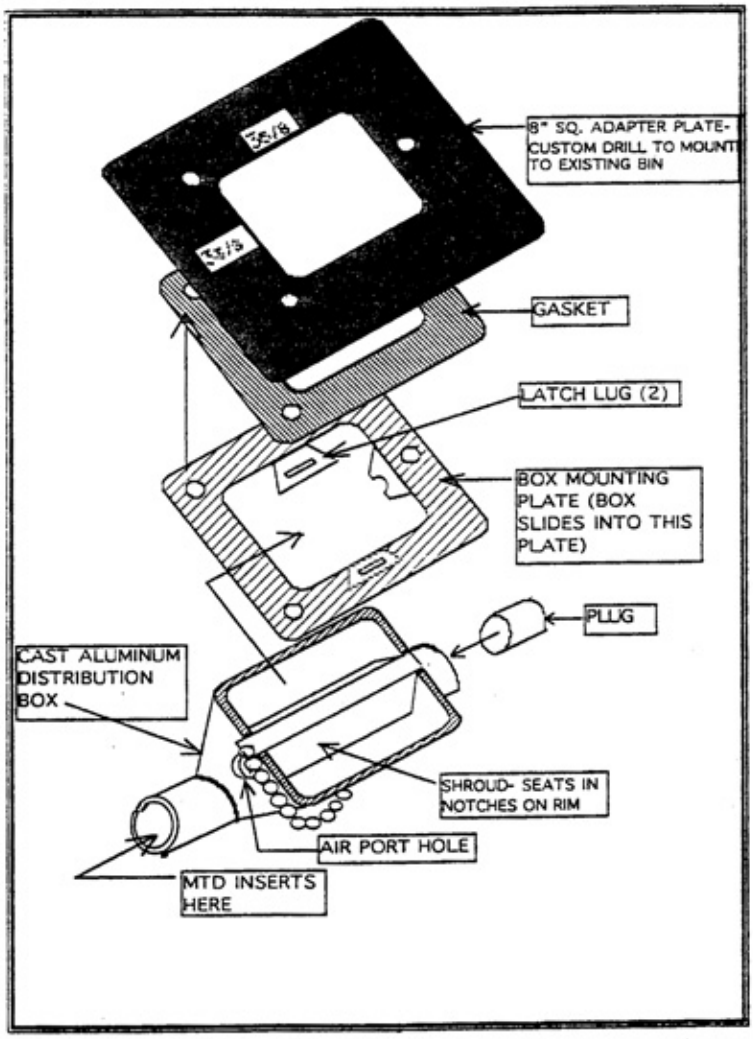


FIGURE 5 - CUSTOM DISTRIBUTION BOX

DESCRIPTION

"LOW MATERIAL" ALARM OPTION (See Figure 6).

This option provides an audible and a visual alarm at the process in the event of a material outage. It consists of a small electrical box with mounting bracket and 15 ft of signal cord with plug that connects to the CAML control (See Figure 6). The box is equipped with a red strobe light and a horn for alarming the operator or material attendant. An alarm silence push button is provided to acknowledge the alarm and silence the horn (the strobe light stays on until the material sensor demand is satisfied). A 0 - 60 second pot-type timer inside the box must be set 5 - 10 seconds longer than the average process fill time, so that if material fails to load and satisfy the demand at the sensor on the sight glass chamber, the alarms will activate.

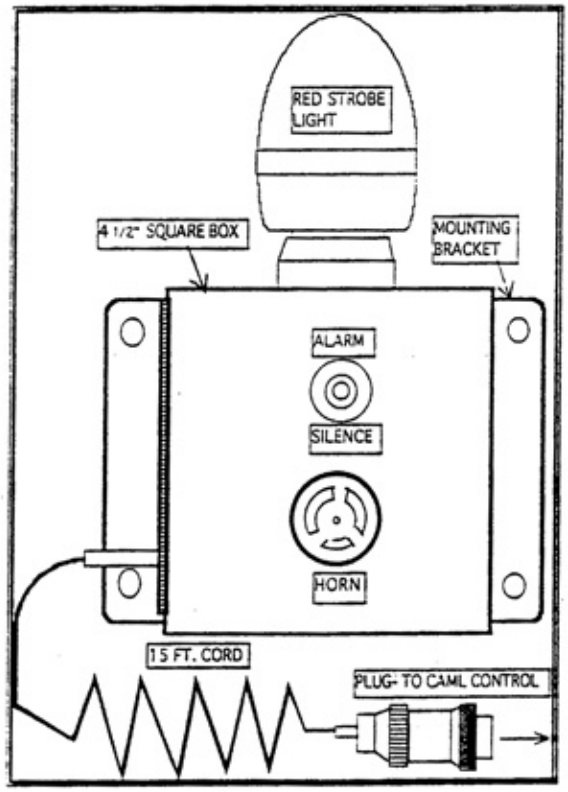


FIGURE 6 - LOW MATERIAL ALARM

HIGH WEAR KIT OPTION (Figure 7)

This option is necessary when processing abrasive materials such as mineral or glass-filled plastics. The items provided are designed to protect and prolong the life of the system components that tend to wear in abrasive applications:

1. Bolt-in wear plate for inside receiver.

2. MTD (Material Transfer Device), treated *

3. "Y" Tube (If system is ratio)

* All of the above components are PEG treated to 69 Rockwell C hardness. (PEG is a proprietary coating process)

NOTE: Receiver inlet and MTD adapter hardware are stainless steel. When field installing, the two (2) clamp mount screw holes must be clearance-drilled to permit the longer 8-32 kit screws to be installed.

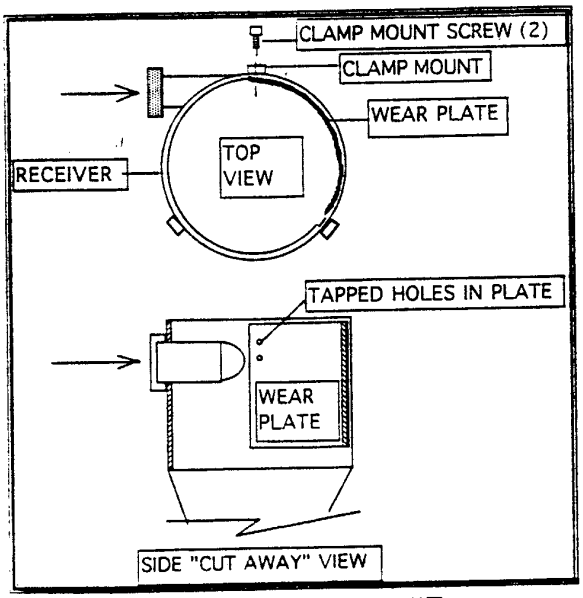


FIGURE 7 - HIGH WEAR KIT

DESCRIPTION

ENERGY MISER OPTION (See Figure 8)

The energy miser enables the user to force an on/off cycle time in the CAML loader when the source material simply cannot satisfy the demand. This option utilizes a Micro Logic Timer (MLT) din connector with internal timer circuit in place of the solenoid's standard din connector. The MLT has two pot-type timing adjustment screws of 1/2 to 50 seconds for on/off time, plus a red indicating light for "On".

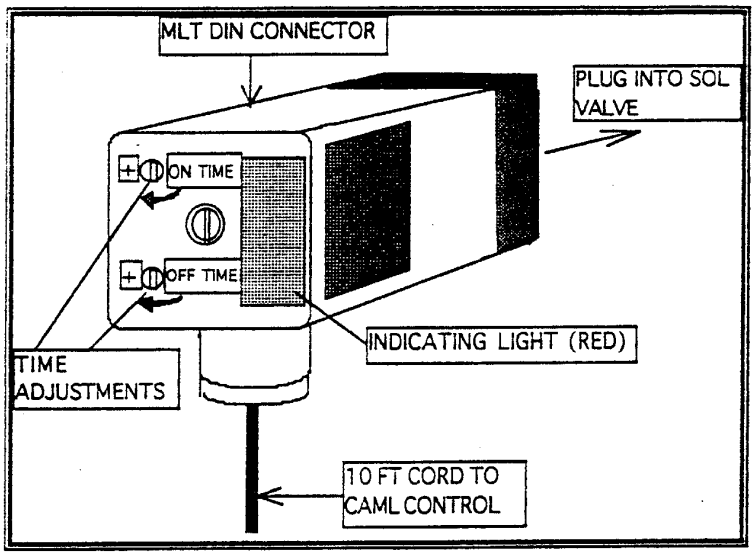


FIGURE 8 - MLT/ENERGY MISER

Applications:

1. Granulator Unloading - to reuse regrinds as generated, but minimize air consumption. Simply set the "Off" time a little less than the process cycle time and then set enough "On" time to empty the granulator each cycle. The energy miser could be installed on the regrind feed line of a ratio model, or on the main feed line into a CAML loading regrind to a blender.

AUTO DRAIN - FILTER/REGULATOR (See Figure 9)

This option provides automatic water removal from the filter/regulator. The auto drain device installs in the bowl in place of the standard manual drain device (See Figure 9):

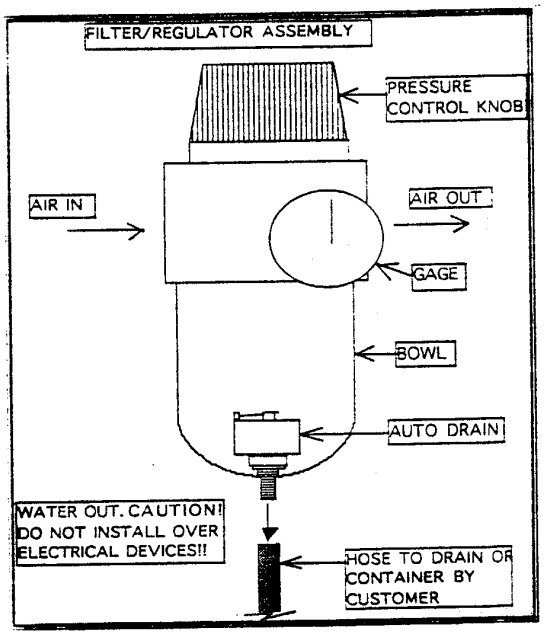


FIGURE 9 - AUTO DRAIN

To retrofit in the field:

1. Disconnect air supply! **IMPORTANT!**
2. Unscrew and remove filter bowl.
3. Unscrew and remove manual drain device.
4. Place AUTO DRAIN into position inside bowl and secure with nut.
5. Install plastic drain hose to AUTO DRAIN and run to drain or container. NOTE: When the water level in the bowl reaches a certain level, the drain device will automatically open and air pressure purges the water from the bowl.

HANDLING AND PREPARATION

Your Compressed Air Material Loading system is shipped in carefully protected cartons and boxes. Check each for any damage and unit completeness against the bill of lading as soon as the shipment arrives. Report any damage or discrepancies immediately to the carrier and/or Conair Franklin.

Keep all system components protected and in safe storage until ready to install.

Familiarize yourself with the system and this manual. Note the assembly and mounting requirements, brackets, provided, length of cables, hoses, etc...

Pre-plan your machine mounting details. You will need 115V power and compressed air source of at least 60 PSI, close to the control assembly, and close to the material source. The maximum practical conveying distance is approximately 25 ft, but should be minimized for maximum efficiency and economy. The material hose, along with the air tubing, should be as direct and short as possible to minimize conveying friction, wear, kinking, etc....

INSTALLATION INSTRUCTIONS

SINGLE MATERIAL SYSTEM (See Figure 10)

1. **Remove existing hopper** from machine throat.

2. Carefully **unpack your CAML** equipment at your installation site.

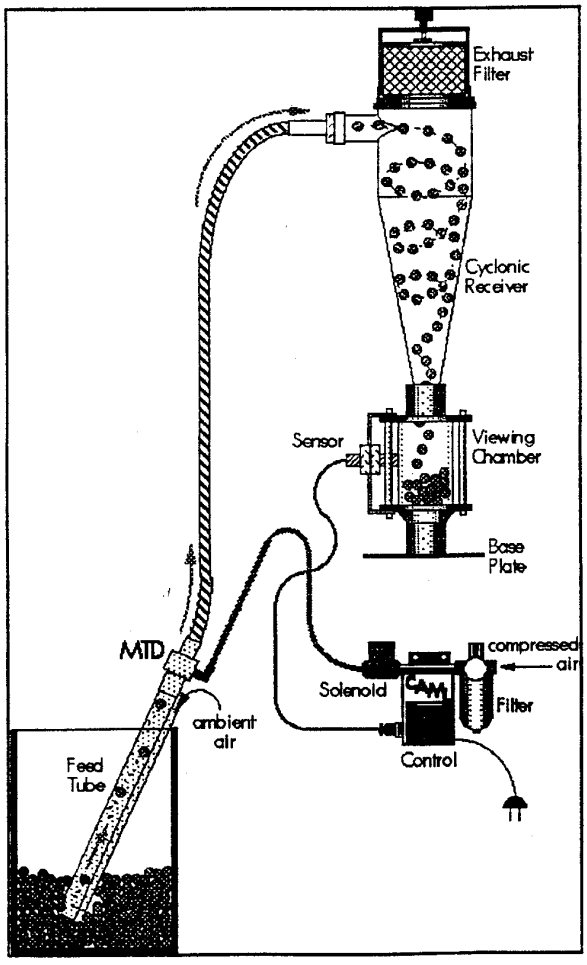


FIGURE 10 - SINGLE MATERIAL SYSTEM

SECTION

3

INSTALLATION INSTRUCTIONS

3. Install the **Base Mounting Plate** to the machine throat. Drill plate if necessary, to match the machine bolt-hole pattern and size.

4. Mount the **Control Unit** (with the filter/regulator - solenoid) near the machine throat and on the same side as the material source. Orient the solenoid valve port towards the material source location. **Make sure power switches on the control are off!**

5. Provide grounded 115V AC power to the **control unit.** A 10 ft grounded power cord is provided with this unit, which is fused at 1 Amp. **A qualified electrician should install any required power.**

6. **Provide an ample supply of clean, dry, compressed air to the filter/regulator's 3/8" NPT inlet fitting.** A shut-off valve in the line is recommended for safety and maintenance purposes. Avoid quick couplers that can restrict air flow and affect the system performance.

7. **Slip the sight glass assembly onto the base mounting plate** using a twisting motion to seat it down on the tube (the fit is air-tight due to an O'ring gasket in the sight glass coupling). Orient the sensor as desired, and set it to the desired material level on the glass. Insure the face of the sensor is snug to the glass and secure.

8. **Slip the filter/receiver assembly** outlet tube down **into** the top O'ring coupling of the **sight glass unit.** Use a twisting motion to fully seat the tube air-tight and orient the receiver's material inlet tube towards the material source.

9. Connect the Sensor cable to the Sensor input jack on the control unit (bottom left).

10. Connect the MTD to the feed tube using the O'ring adapter coupling (1-1/4" x 1-1/4") provided. NOTE: There are several types of feed tubes:

    a. Vertical or "Wand" type - for pickup from drums or gaylords.

    b. Horizontal bin-type for pickup from granulators or bins.

    c. Distribution box-type for custom mounting under material bins.

        NOTE: Can accommodate 2 mounted MTD's for conveying to 2 filter-receivers.

    d. Existing distribution box or feed tubes:
    O'ring coupling is provided to connect the MTD to existing feed tubes: 1.25 x 1.25; 1.25 x 1.50; 1.25 x 1.75

    An arrow on the MTD indicates the direction of material flow. Flow is from (-) to (+) as marked on the MTD. The suction/vacuum (-) end connects to the feed tube with the O'ring adapter for items 10a and 10b above, and directly to item 10C. (See Figure 4, Page 1-8)

11. With hose clamps provided, slide one end of the Material Hose onto the material inlet tube of the filter receiver unit, and the other end onto the MTD's pressure/positive (+) side. Position and tighten the 2 hose clamps. NOTE: Keep the material transfer hose as short and direct as possible!

12. Connect 3/8" Poly Air Tubing to the ell fitting on the MTD and the other end to the straight fitting of the solenoid valve outlet at the control unit. Simply push hose ends into the fittings. No tools or hose clamps are required.

    NOTE: Tubing can be disconnected by pushing in the ring on the fitting and pulling the tube end out of the fitting.

SECTION

3

RATIO MATERIAL SETUPS WITH "Y" TUBES:

Follow the same steps as with the single tube loader, **except (refer to Figure 2, Page 1-6):**

1. Install SEPARATE 3/8" ID air supply lines to each filter/regulator unit. (Optional: Install a 3/8 x 1/2 x 3/8 Tee between the two filter/regulators and connect a 1/2" ID air supply hose and source.)

2. Plug the regrind solenoid valve cable into the "regrind" jack on the control unit. (Upper right jack)

3. Connect the MTD to the regrind pickup tube.

4. Connect the "Y" tube to the filter/receiver assembly using the provided threaded O'ring adapter.

5. Connect the 3/8" Poly Air tubing from the regrind solenoid valve to the regrind MTD.

6. Connect both virgin and regrind material hoses to the "Y" tube and to their respective MTD's with hose clamps.

NOTE: 1-1/2" ID flex hose is provided with the "Y" tube as standard for conveying regrind.

THE LOADING SYSTEM IS NOW READY FOR OPERATION. SEE OPERATING INSTRUCTIONS IN SECTION 4.

OPERATING INSTRUCTIONS

SINGLE TUBE LOADER

1. Provide a **supply of material** to be conveyed at the pickup source. Make sure the feed tube material inlet is in or covered with a supply of material.

2. Turn on the compressed air to the filter/regulator and **set the air pressure at 60 PSI** on the gage by adjusting the twist knob on the regulator. Lift knob **up to turn/adjust** - push knob **down to lock.**

3. Turn the control **"power" switch on.**

4. Turn the **"Virgin" material switch on.**

   NOTE: THE SENSOR LED LIGHT (YELLOW) SHOULD BE ON. IF NOT, IT MUST BE ADJUSTED. SEE ADJUSTMENT INSTRUCTIONS ON PAGE 4-2.

   a. Material will begin flowing to the receiver and down into the sight glass chamber or bin receiver.

   b. When the material level reaches the sensor, the solenoid is de-energized, the LED light on the sensor turns off, and the material stops conveying.

   NOTE: If the sensor fails to shut off the material flow as intended, turn the Virgin switch off. SENSOR ADJUSTMENT IS REQUIRED!! (See page 4-2 for adjustment instructions)

5. **Check the material flow.** To increase the amount of material flow, increase the air pressure at the regulator. To decrease the amount of material flow, decrease the air pressure at the regulator.

NOTE *: Tests performed at CONAIR indicate that an operating pressure of 60 psi or higher will provide the most efficient use of compressed air (cu ft/lb of material conveyed).

LEVEL SENSOR ADJUSTMENT

The Capacitive Level Sensor (See Figure 11) generates an adjustable capacitive field that, when interrupted by the presence of material, creates an electrical signal, which in this application, is used to actuate a solenoid valve to shut the compressed air to the MTD off. When properly adjusted, the LED light on the back of the sensor will be off when material is present in front of the face of the sensor, and on when material is not present, indicating a material "Demand" condition. When lit, the virgin on switch should be lit (red) as well, and compressed air conveying should take place.

NOTE: MAKE SURE THE SENSOR FACE IS FLUSH AGAINST THE SIGHT GLASS!!

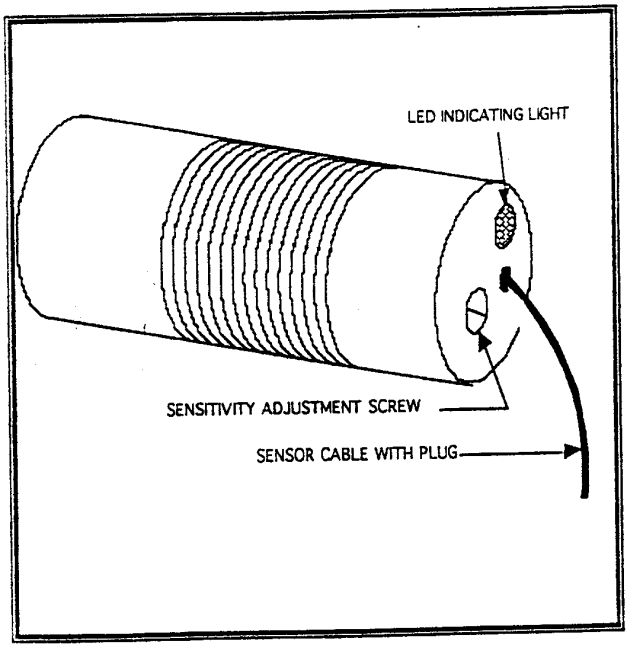


FIGURE 11 - CAPACITANCE LEVEL SENSOR

INITIAL ADJUSTMENT OF LEVEL SENSOR

Disconnect from the material source and purge the system of material. Make sure the sight glass chamber is clean, then turn the Power and Virgin switches on:

a. If the LED light on the sensor is ON, slowly turn the adjusting screw (with the small screwdriver provided) CLOCKWISE until the LED light turns off. Then turn the screw COUNTERCLOCKWISE slowly until the LED light turns on, and continue 1/4 turn.

b. If the LED indicating light is OFF, turn the screw COUNTERCLOCKWISE slowly until the light just comes on, and then continue 1/4 turn.

NOTE: Sensors are capable of sensing material DUST or FINES and, therefore, may need to be readjusted after a period of operation so that it will, in effect, "ignore" the dust and fines, yet sense the pellets.

FINE TUNING ADJUSTMENT OF LEVEL SENSOR

With the unit operating and material covering the face of the sensor, its sensitivity can be finely tuned:

1. Turn the screw **SLOWLY** CLOCKWISE until the LED light just turns off and material stops loading.

   NOTE: If material overfills much above the sensor after the solenoid de-energizes, try reducing the air pressure at the filter/regulator to minimize the condition. The sensor position can be lowered as well, in order to compensate for overfill.

SENSOR POSITIONING - LEVEL ADJUSTMENT

The level sensor can be positioned up or down along the face of the sight glass chamber (See Figure 12) in order to control the amount of material inventory in the chamber. When positioning, use the following guidelines:

1. If you are conveying moisture sensitive material or otherwise wish to minimize the material inventory at the machine, move the sensor DOWN on the sight glass. If larger shot sizes are involved, you may need to maximize the inventory by moving the sensor UP on the sight glass.

2. Insure that the sensor is positioned flush against the sight glass. With the thumb nuts loose, first rotate the INNER NUT clockwise until the face of the sensor pushes gently, but snug, against the sight glass. Then, lock it in position by rotating the OUTER NUT clockwise until tight.

CAUTION! Because the sensor is designed to sense a change in density of materials near its face, positioning too close to the metal frame of the sight glass may result in a false reading. Make sure the sensor is only sensing plastic material in the glass chamber when positioning in the maximum low or high locations.

CLEANOUT INSTRUCTIONS:

1. Turn Virgin Switch off ahead of runout if possible to minimize material waste and cleanup. Turn power switch off.

2. Remove the filter/receiver assembly from the sight glass assembly by lifting, while twisting back and forth. Set aside carefully.

   NOTE: In most cases you should be able to leave the material transfer hose connected - just make sure any pellets trapped in the hose are drained back to the material source.

3. Remove the SIGHT GLASS ASSEMBLY from the BASE MOUNTING PLATE. TWIST while lifting off.

   NOTE: If some material inventory remains in the sight glass chamber, carefully raise it until the O'ring coupling is about to clear the throat adapter tube. Then, use one hand to lift the unit, while quickly slipping the other hand under the end of the coupling as it clears the tube to keep the material from spilling. Return the material to the source (gaylord, drum, etc..).

4. Blow down and/or wipe out the sight glass chamber. Be sure the dual O'rings on each end coupling are clean. Remove only if necessary to insure clean.

5. Unlatch and remove the filter lid from the receiver. Clean or replace the filter cartridge as necessary. To clean, blow out the dust and pellets with clean shop air.

CAUTION! ALWAYS USE PROPER EYE PROTECTION AND OBSERVE ALL OSHA AND OTHER SAFETY REGULATIONS PERTAINING TO USE THE USE OF COMPRESSED AIR!!

An alternative is to clean with a vacuum source, which is safer and cleaner.

To replace the filter, loosen the knob and top of the filter bracket, discard the dirty filter, wipe the lid clean, and put a new filter in place. Make sure the filter is properly seated in the lid and then tighten the knob securely for an air-tight seal.

6. Clean out the receiver unit as necessary. Blow down the material hose out through the MTD and pickup if necessary, using all proper safety precautions.

7. Insure that all components of the system are now sufficiently clean.

NOTE: **Wiping with clean, lint-free cloth, soaked with alcohol is effective for critical, difficult cleanouts.**

THE SYSTEM IS NOW CLEAN AND READY FOR RE-ASSEMBLY!!

ROUTINE MAINTENANCE

1. Keep the system filter(s) clean. Inspect all filters on a regular basis and clean or replace as required (The frequency will vary with material, throughputs, and dust/fine(s).

2. Keep the compressed air bowl drained of water that may accumulate. For auto drain option, see Section 1, Page 14.

3. Check the control system lights, sensor, and any alarms and timers that are installed for proper working order. Sensor should be snug to sight glass, secure and properly positioned and adjusted correctly (See Section 4).

4. Inspect system components for any wear, holes, tears, or broken parts, especially where abrasive materials or other adverse conditions may exist. Check sight glass for cracks. Check that all system O'rings are in place and in good condition. System should be vacuum tight.

5. Check all compressed air hoses/tubing for condition and that all connections are tight. Insure that no compressed air leaks exist in the system.

6. Check material transfer hoses for holes, tears or leaks.

7. Check control cords and panel for general condition. Repair any cut or frayed cords. Panel door/cover should be closed and secured.

SECTION 7

TROUBLESHOOTING

SYMPTOM	PROBLEM	SOLUTION	REFER TO
No Material to receiver	Material out at source	Check material supply	
	Material not flowing to pick-up	Check for bridging or rat-holing of material supply	
	Loss of air to MTD	Check compressed air pressure and solenoid	Section 4
	Loss of electric power to control	Check control fuse and power source	
	Sensor failure or out of adjustment	Check sensor, and adjust	Section 4
Poor conveying rate	Air pressure too low	Check PSI setting	Section 4
	Filters dirty	Check, clean, or replace	
	MTD dirty	Check and clean	
	System leaks	Repair all leaks	
Nuisance alarms/material outages	Poor conveying	See above symptom	
	Sensor position	Raise sensor position	
	Sensor setting	Decrease sensitivity	Section 4
	Alarm timer	Increase time setting	Section 1
	Energy Miser settings	Adjust miser timers	Section 1
Overfilling	Sensor position	Lower sensor	Section 4
	Sensor setting	Increase sensitivity	Section 4
	Air pressure high	Decrease pressure	
Ratio Wrong	Air pressure set wrong	Adjust air pressure	Section 4
	Material outages & source	Check material source	Section 4
	Loading regrinds too fast	Adjust air pressure, or use Miser Timer. Adjust Miser timer setting	Section 4 Section 1

We're Here to Help

Conair has made the largest investment in customer support in the plastics industry. Our service experts are available to help with any problem you might have installing and operating your equipment. Your Conair sales representative also can help analyze the nature of your problem, assuring that it did not result from misapplication or improper use.

How to Contact Customer Service

To contact Customer Service personnel, call:

From outside the United States, call: 814-437-6861

You can commission Conair service personnel to provide on-site service by contacting the Customer Service Department. Standard rates include an on-site hourly rate, with a one-day minimum plus expenses.

Before You Call ...

If you do have a problem, please complete the following checklist before calling Conair:

- ❒ Make sure you have all model, serial and parts list numbers for your particular equipment. Service personnel will need this information to assist you.
- ❒ Make sure power is supplied to the equipment.
- ❒ Make sure that all connectors and wires within and between loading control and related components have been installed correctly.
- ❒ Check the troubleshooting guide of this manual for a solution.
- ❒ Thoroughly examine the instruction manual(s) for associated equipment, especially controls. Each manual may have its own troubleshooting guide to help you.
- ❒ Check that the equipment has been operated as described in this manual.
- ❒ Check accompanying schematic drawings for information on special considerations.

Additional manuals and prints for your Conair equipment may be ordered through the Customer Service or Parts Departments for a nominal fee.

EQUIPMENT GUARANTEE

Conair guarantees the machinery and equipment on this order, for a period as defined in the quotation from date of shipment, against defects in material and workmanship under the normal use and service for which it was recommended (except for parts that are typically replaced after normal usage, such as filters, liner plates, etc.). Conair's guarantee is limited to replacing, at our option, the part or parts determined by us to be defective after examination. The customer assumes the cost of transportation of the part or parts to and from the factory.

PERFORMANCE WARRANTY

Conair warrants that this equipment will perform at or above the ratings stated in specific quotations covering the equipment or as detailed in engineering specifications, provided the equipment is applied, installed, operated and maintained in the recommended manner as outlined in our quotation or specifications.

Should performance not meet warranted levels, Conair at its discretion will exercise one of the following options:

- Inspect the equipment and perform alterations or adjustments to satisfy performance claims. (Charges for such inspections and corrections will be waived unless failure to meet warranty is due to misapplication, improper installation, poor maintenance practices or improper operation.)
- Replace the original equipment with other Conair equipment that will meet original performance claims at no extra cost to the customer.
- Refund the invoiced cost to the customer. Credit is subject to prior notice by the customer at which time a Return Goods Authorization Number (RGA) will be issued by Conair's Service Department. Returned equipment must be well crated and in proper operating condition, including all parts. Returns must be prepaid.

Purchaser must notify Conair in writing of any claim and provide a customer receipt and other evidence that a claim is being made.

WARRANTY LIMITATIONS

Except for the Equipment Guarantee and Performance Warranty stated above, Conair disclaims all other warranties with respect to the equipment, express or implied, arising by operation of law, course of dealing, usage of trade or otherwise, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.