# C-600 DUST COLLECTOR O.M. 06506

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Do not proceed with these instructions until you have READ the preface of this MANUAL and YOU UNDERSTAND its contents. \* These WARNINGS are included for the health and safety of the operator and those in the immediate vicinity. Keep this manual for future reference.

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# **A** WARNING

- Read and follow ALL instructions before using this equipment.
- Failure to comply with ALL instructions can result in serious injury or death.
- In the event that the user, or any assistants of the user of this equipment cannot read or cannot completely understand the warnings and information contained in these instructions, the employer of the user and his assistants must thoroughly educate and train them on the proper operation and safety procedures of this equipment.

# NOTICE TO PURCHASERS AND USERS OF OUR PRODUCTS AND THIS INFORMATIONAL MATERIAL

The products described in this material, and the information relating to those products, is intended for knowledgeable, experienced users of abrasive blasting equipment.

No representation is intended or made as to the suitability of the products described herein for any particular purpose or application. No representations are intended or made as to the efficiency, production rate, or the useful life of the products described herein. Any estimate regarding production rates or production finishes are the responsibility of the user and must be derived solely from the user's experience and expertise, and must not be based on information in this material.

The products described in this material may be combined by the user in a variety of ways for purposes determined solely by the user. No representations are intended or made as to the suitability or engineering balance of the combination of products determined by the user in his selection, nor as to the compliance with regulations or standard practice of such combinations of components or products.

Abrasive Blast Equipment is only a component of the range of equipment used in an abrasive blasting job. Other products may include an air compressor, abrasive, scaffolding, hydraulic work platforms or booms, paint spray equipment, dehumidification equipment, air filters and receivers, lights, ventilation equipment, parts handling equipment, specialized respirators, or equipment that while offered by Clemco may have been supplied by others. Each manufacturer and supplier of the other products used in the abrasive blasting job must be contacted for information, training, instruction and warnings with regard to the proper and safe use of their equipment in the particular application for which the equipment is being used. The information provided by Clemco is intended to provide instruction only on Clemco products. All operators must be trained in the proper, safe, use of this equipment. It is the responsibility of the users to familiarize themselves with, and comply with, all appropriate laws, regulations, and safe practices that apply to the use of these products. Consult with your employer about training programs and materials that are available.

Our company is proud to provide a variety of products to the abrasive blasting industry, and we have confidence that the professionals in our industry will utilize their knowledge and expertise in the safe efficient use of these products.

#### **GENERAL INSTRUCTIONS**

Described herein are some, BUT NOT ALL, of the major requirements for safe and productive use of blast machines, remote control systems, operator respirator assemblies, and related accessories. Completely read ALL instruction manuals prior to using equipment.

The user's work environment may include certain HAZARDS related to the abrasive blasting operation. Proper protection for the blaster, as well as anyone else that may be EXPOSED to the hazards generated by the blasting process, is the responsibility of the user and/or the employer. Operators MUST consult with their employer about what hazards may be present in the work environment including, but not limited to, exposure to dust that may contain TOXIC MATERIALS due to the presence of silica, cyanide, arsenic or other toxins in the abrasive, or materials present in the surface to be blasted such as lead or heavy metals in coatings. The environment may also include fumes that may be present from adjacent coatings application, contaminated water, engine exhaust, chemicals, and asbestos. The work area may include PHYSICAL HAZARDS such as an uneven work surface. poor visibility, excess noise, and electrical hazards. The operator MUST consult with his employer on the identification of potential hazards, and the appropriate measures that MUST be taken to protect the blaster and others that might be exposed to these hazards.

ALL machines, components and accessories MUST be installed, tested, operated and maintained only by trained, knowledgeable, experienced users.

DO NOT modify or substitute any Clemco parts with other types or brands of equipment. Unauthorized modification and parts substitution on supplied air respirators is a violation of OSHA regulations and voids the NIOSH approval.

#### **OPERATIONAL INSTRUCTIONS**

### **OPERATOR SAFETY EQUIPMENT**

# **A** WARNING

- Blast operators and others working in the vicinity of abrasive blasting must always wear properlymaintained, NIOSH-approved, respiratory protection appropriate for the job site hazards.
- DO NOT USE abrasives containing more than one percent crystalline (free) silica. Ref. NIOSH Alert #92-102
- Inhalation of toxic dust (crystalline silica, asbestos, lead paint and other toxins) can lead to serious or fatal disease (silicosis, asbestosis, lead or other poisoning).
- ALWAYS wear NIOSH-approved supplied-air respirators as required by OSHA, in the presence of any dust including, but not limited to, handling or loading abrasive; blasting or working in the vicinity of blast jobs; and cleanup of expended abrasive. Prior to removing respirator, an air monitoring instrument should be used to determine when surrounding atmosphere is clear of dust and safe to breathe.

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- NIOSH-approved, supplied-air respirators are to be worn ONLY in atmospheres:
  - NOT IMMEDIATELY dangerous to life or health and,
  - from which a user can escape WITHOUT using the respirator.
- Clemco supplied-air respirators DO NOT REMOVE OR PROTECT AGAINST CARBON MONOXIDE (CO) OR ANY OTHER TOXIC GAS. Carbon monoxide and toxic gas removal and/or monitoring device must be used in conjunction with respirator to insure safe breathing air.
- Air supplied to respirator MUST BE AT LEAST GRADE D QUALITY as described in Compressed Gas Association Commodity Specification G-7.1, and as specified by OSHA Regulation 1910.139 (d).
- ALWAYS locate compressors to prevent contaminated air (such as CO from engine exhaust) from entering the air intake system. A suitable in-line air purifying sorbent bed and filter or CO Monitor should be installed to assure breathing air quality.
- ALWAYS use a NIOSH-approved breathing air hose to connect an appropriate air filter to the respirator. Use of a nonapproved air hose can subject the operator to illness caused by the release of chemical agents used in the manufacture of non-approved breathing air hose.
- ALWAYS check to make sure air filter and respirator system hoses are NOT CONNECTED to in-plant lines that contain nitrogen, acetylene or any other non-breathable gas. NEVER use oxygen with air line respirators. NEVER modify air line connections to accommodate air filter/respirator breathing hose WITHOUT FIRST testing content of the air line. FAILURE TO TEST THE AIR LINE MAY RESULT IN DEATH TO THE RESPIRATOR USER.
- Respirator lenses are designed to protect against rebounding abrasive. They do not protect against flying objects, glare, liquids, radiation or high speed heavy materials. Substitute lenses from sources other than the original respirator manufacturer will void NIOSH-approval of this respirator.

### **BLAST MACHINES AND REMOTE CONTROLS**

## WARNING

- ALWAYS equip abrasive blast machines with remote controls.
- Abrasive blast machine operators must wear NIOSHapproved supplied-air respirators (ref: OSHA regulations 1910.94, 1910.132, 1910.139 and 1910.244).
- NEVER modify OR substitute remote control parts. Parts from different manufacturers are NOT compatible with Clemco

- equipment. If controls are altered, involuntary activation, which may cause serious injury, can occur.
- Inspect the air control orifice DAILY for cleanliness.
   NEVER use welding hose in place of twinline control hose. The internal diameter and rubber composition are UNSAFE for remote control use.
- UNLESS OTHERWISE SPECIFIED, maximum working pressure of blast machines and related components MUST NOT exceed National Board approved 125 psig (8.5 BAR).
- NEVER weld on blast machine. Welding may affect dimensional integrity of steel wall and WILL VOID National Board approval.
- Point nozzle ONLY at structure being blasted. High velocity abrasive particles WILL inflict serious injury. Keep unprotected workers OUT of blast area.
- NEVER attempt to manually move blast machine when it contains abrasive. EMPTY machines, up to 6 cu. ft.(270kg) capacity, are designed to be moved:
- on flat, smooth surfaces by AT LEAST two people;
- with the Clemco "Mule"; or
- with other specially designed machine moving devices.
- Larger empty blast machines or ANY blast machine containing abrasive MUST be transported by mechanical lifting equipment.

#### AIR HOSE, BLAST HOSE, COUPLINGS, AND NOZZLE HOLDERS

- Air hose, air hose fittings and connectors at compressors and blast machines MUST be FOUR times the size of the nozzle orifice. Air hose lengths MUST be kept as short as possible AND in a straight line. Inspect DAILY and repair leakage IMMEDIATELY.
- Blast hose inside diameter MUST be THREE to FOUR times the size of the nozzle orifice. AVOID sharp bends that wear out hose rapidly. Use SHORTEST hose lengths possible to reduce pressure loss. Check blast hose DAILY for soft spots. Repair or replace IMMEDIATELY.
- ALWAYS cut loose hose ends square when installing hose couplings and nozzle holders to allow uniform fit of hose to coupling shoulder. NEVER install couplings or nozzle holders that DO NOT provide a TIGHT fit on hose. ALWAYS use manufacturers recommended coupling screws.
- Replace coupling gaskets FREQUENTLY to prevent leakage. Abrasive leakage can result in dangerous coupling failure. ALL gaskets MUST be checked SEVERAL times during a working day for wear, distortion and softness.
- Install safety pins at EVERY coupling connection to prevent accidental disengagement during hose movement.
- ALWAYS attach safety cables at ALL air hose AND blast hose coupling connections. Cables relieve tension on hose and control whipping action in the event of a coupling blow-out.

### **MAINTENANCE**

- ALWAYS shut off compressor and depressurize blast machine BEFORE doing ANY maintenance.
- Always check and clean ALL filters, screens and alarm systems when doing any maintenance.
- ALWAYS cage springs BEFORE disassembling valves IF spring-loaded abrasive control valves are used.
- ALWAYS completely follow owner's manual instructions and maintain equipment at RECOMMENDED intervals.

### **ADDITIONAL ASSISTANCE**

- Training and Educational Programs.
   Clemco Industries Corp. offers a booklet, Blast-Off 2, developed to educate personnel on abrasive blast equipment function and surface preparation techniques. Readers will learn safe and productive use of machines, components and various accessories, including selection of abrasive materials for specific surface profiles and degrees of cleanliness.
- The Society for Protective Coatings (SSPC) offers a video training series on protective coatings including one entitled "Surface Preparation." For loan or purchase information, contact SSPC at the address shown below.

### **TECHNICAL DATA AND RESEARCH COMMITTEES**

 The following associations offer information, materials and videos relating to abrasive blasting and safe operating practices.

#### The Society for Protective Coatings (SSPC)

40 24th Street, Pittsburgh PA 15222-4643 Phone: (412) 281-2331 • FAX (412) 281-9992 Email: research@sspc.org • Website: www.sspc.org

### National Association of Corrosion Engineers (NACE)

1440 South Creek Drive, Houston TX 77084
Phone: (281) 228-6200 • FAX (281) 228-6300
Fmail: msd@mail.nace.org • Website: www.nace

Email: msd@mail.nace.org • Website: www.nace.org
American Society for Testing and Materials (ASTM)

100 Barr Harbor Dr., West Conshohocken, PA 19428 Phone (610) 832-9500 • FAX (610) 832-9555 Email: service@astm.org • Website: www.astm.org

#### **NOTICE**

This equipment is not intended to be used in an area that might be considered a hazardous location as described in the National Electric Code NFPA 70 1996, article 500.

#### **WARRANTY**

The following is in lieu of all warranties express, implied or statutory and in no event shall seller or its agents, successors, nominees or assignees, or either, be liable for special or consequential damage arising out of a breach of warranty. This warranty does not apply to any damage or defect resulting from negligent or improper assembly or use of any item by the buyer or its agent or from alteration or attempted repair by any person other than an authorized agent of seller. All used, repaired, modified or altered items are purchased "as is" and with all faults. In no event shall seller be liable for consequential or incidental damages. The sole and exclusive remedy of buyer for breach of warranty by seller shall be repair or replacement of defective parts or, at seller's option, refund of the purchase price, as set forth below:

- 1. Seller makes no warranty with respect to products used other than in accordance hereunder.
- 2. On products seller manufactures, seller warrants that all products are to be free from defects in workmanship and materials for a period of one year from date of shipment to buyer, but no warranty is made that the products are fit for a particular purpose.
- 3. On products which seller buys and resells pursuant to this order, seller warrants that the products shall carry the then standard warranties of the manufacturers thereof, a copy of which shall be made available to customer upon request.
- 4. The use of any sample or model in connection with this order is for illustrative purposes only and is not to be construed as a warranty that the product will conform to the sample or model.
- 5. Seller makes no warranty that the products are delivered free of the rightful claim of any third party by way of patent infringement or the like.
- 6. This warranty is conditioned upon seller's receipt within ten (10) days after a buyer's discovery of a defect, of a written notice stating in what specific material respects the product failed to meet this warranty. If such notice is timely given, seller will, at its option, either modify the product or part to correct the defect, replace the product or part with complying products or parts, or refund the amount paid for the defective product, any one of which will constitute the sole liability of seller and a full settlement of all claims. No allowance will be made for alterations or repairs made by other than those authorized by seller without the prior written consent of seller. Buyer shall afford seller prompt and reasonable opportunity to inspect the products for which any claim is made as above stated.

Except as expressly set forth above, all warranties, express, implied or statutory, including implied warranty of merchantability, are hereby disclaimed.

### **DAILY SET-UP CHECK LIST**

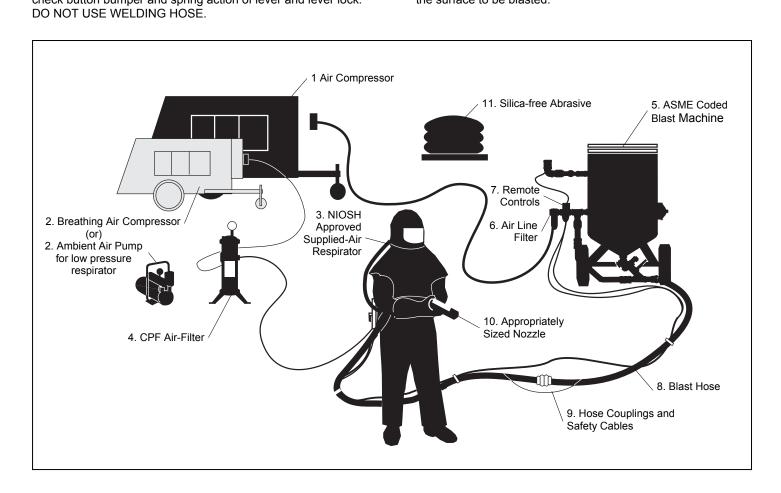
# **A** WARNING

- ALL piping, fittings and hoses MUST be checked DAILY for tightness and leakage.
- ALL equipment and components MUST be thoroughly checked for wear.
- ALL worn or suspicious parts MUST be replaced.
- ALL blast operators MUST be properly trained to operate equipment.
- ALL blast operators MUST be properly outfitted with abrasive resistant clothing, safety shoes, leather gloves and ear protection.
- **BEFORE** blasting ALWAYS use the following check list.

☐ 1. PROPERLY MAINTAINED AIR COMPRESSOR sized
to provide sufficient volume (cfm) for nozzle and other tools
PLUS a 50% reserve to allow for nozzle wear. Use large
compressor outlet and large air hose (4 times the nozzle orifice
size). FOLLOW MANUFACTURERS MAINTENANCE
INSTRUCTIONS.

2. BREATHING AIR COMPRESSOR (oil-less air pump) capable of providing Grade D Quality air located in a dust free, contaminant free area. If oil-lubricated air compressor is used to supply respirator, it should have high temperature monitor and CO monitor or both. If CO monitor is not used, air MUST

be tested FREQUENTLY to ensure proper air quality. ■ 8. BLAST HOSE with ID 3 to 4 times the nozzle orifice. Lines MUST be run AS STRAIGHT AS POSSIBLE from ☐ 3. Clean, properly maintained NIOSH-APPROVED machine to work area with NO sharp bends. Check DAILY for SUPPLIED-AIR RESPIRATOR. ALL components should internal wear and external damage. ALWAYS be present. NEVER operate without inner lens in place. Thoroughly inspect ALL components DAILY for 9. HOSE COUPLINGS, NOZZLE HOLDERS fitted cleanliness and wear. ANY substitution of parts voids NIOSH approval i.e. cape, lenses, breathing hose, breathing air supply SNUGLY to hose end and installed using PROPER coupling hose, air control valve, cool air or climate control devices. screws. Coupling lugs MUST be snapped FIRMLY into locking position. Gasket MUST form positive seal with safety pins inserted through pin holes. Check gaskets and replace if ANY 4. OSHA required BREATHING AIR FILTER for removal sign of wear, softness or distortion. ALWAYS install safety of moisture and particulate matter from breathing air supply. cables at every connection to prevent disengagement. Check THIS DEVICE DOES NOT REMOVE OR DETECT CARBON nozzle holder for worn threads. NEVER MIX DIFFERENT MONOXIDE (CO). ALWAYS USE CO MONITOR ALARM. BRANDS OF COMPONENTS. Check each of these components DAILY. 5. ASME CODED BLAST MACHINE sized to hold 1/2 ☐ 10. Inspect NOZZLE and GASKET DAILY for wear. hour abrasive supply. ALWAYS ground machine to eliminate static electricity hazard. Examine pop up valve for alignment. Replace nozzle when 1/16" larger than original size or if liner Blast machine MUST be fitted with a screen to keep out foreign appears cracked. Check nozzle threads for wear. objects and a cover to prevent entry of moisture overnight. 11. Use abrasive that is properly sized and free of harmful ☐ 6. AIR LINE FILTER installed AS CLOSE AS POSSIBLE substances; such as, free silica, cyanide, arsenic or lead. to machine inlet. Sized to match inlet piping or larger air supply Check material data sheet for presence of toxic or harmful line. Clean filter DAILY. Drain OFTEN. substances. 7. REMOTE CONTROLS MUST be in PERFECT 12. Test surface to be blasted for toxic substances. Take operating condition. ONLY use APPROVED spare parts. appropriate, and NIOSH required, protective measures for operator and bystanders which pertain to substances found on including twin- line hose. DAILY: test system operation and check button bumper and spring action of lever and lever lock. the surface to be blasted.



#### 1.0 INTRODUCTION

### 1.1 Scope of Manual

- **1.1.1** These instructions cover set-up, operation, maintenance, troubleshooting, and replacement parts for the Clemco C-600 Dust Collector.
- **1.1.2** These instructions also contain important information required for safe operation of the collector. Before using this equipment, all personnel associated with the blasting operation must read this entire manual, and all accessory manuals to become familiar with the operation, parts and terminology.

### 1.2 Safety Alerts

**1.2.1** Clemco uses safety alert signal words, based on ANSI Z535.4-1998, to alert the user of a potentially hazardous situation that may be encountered while operating this equipment. ANSI's definitions of the signal words are as follows:



This is the safety alert symbol. It is used to alert the user of this equipment of potential personal injury hazards.

Obey all safety messages that follow this symbol to avoid possible injury or death.

# **CAUTION**

Caution used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

# **A** CAUTION

Caution indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

# **A** WARNING

Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

# **▲** DANGER

Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

### 1.3 Description

**1.3.1** The dust collector is designed to ventilate Clemco's abrasive cleaner, when it is not possible or practical to connect the abrasive cleaner to blast room's ventilation dust collector. The collector is intended for light duty applications when using non aggressive abrasive. The general arrangement of the C-600 is shown in Figure 1.

# CAUTION

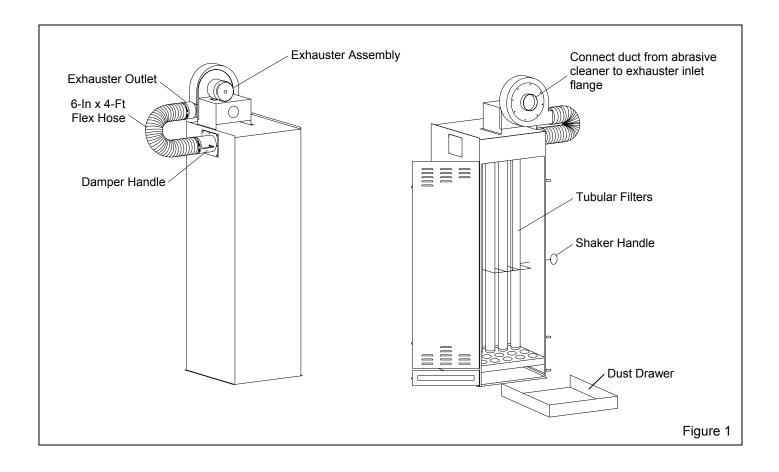
When cleaning abrasive with heavy dust concentration or when using aggressive abrasive such as silicon carbide, aluminum oxide, or garnet, use a Clemco reverse pulse dust collector. The exhauster assembly on the C-600 dust collector is not designed to operate under heavy dust concentration or dust produced from aggressive abrasive.

**1.3.2** The collector provides 600 SCFM of air at 4" static pressure. It is used to draw air through the airwash abrasive cleaner, which removes dust and fines (abrasive worn too small for most applications) from reusable abrasive. Refer to the abrasive cleaner instructions for operation of the cleaner.

# **CAUTION**

A substantial amount of abrasive cleaning should take place within the blast enclosure by the ventilation and dust collection system. Should the abrasive to be cleaned by this equipment contain excessive concentrations of fine contaminants due to the absence of an efficient ventilation and dust collection system, this cleaning process may not be able to remove all fines in a single pass.

- **1.3.3** Dust laden air is drawn into the exhauster assembly and is blown out through the duct hose on the side of the exhauster, and into the dust collector. The dry filter uses tubular filters, which collect dust on their inner surfaces.
- **1.3.4** The filters must be periodically cleaned and the dust drawer emptied, as described in Section 4.0.



#### 2.0 INSTALLATION

- **2.1** Position the collector and connect the 6" inlet hose between the abrasive cleaner outlet and exhauster inlet, with as few bends as possible.
- 2.2. It is easier to slip the hose over the pipe adaptors to create a tighter seal if the first two or three inches of wire are removed from the inside of the hose. Use care not to damage the hose. Clamp flex hose securely in position with worm clamps provided. NOTE: The hose wire helps dissipate static electricity in the conveying hose, and also helps to ground each segment. In order for the hose wire to dissipate static electricity, the wire must touch the metal of each segment.

#### 2.3 Connect Electrical Service

# **WARNING**

Electrical power must be locked out and tagged out before continuing. Shorting electrical components could result in serious electrical shocks or equipment damage. All electrical work must be performed by a qualified electrician and comply with applicable codes.

- **2.3.1** Wiring from the user's disconnect and control panel must be provided by the user.
- **2.3.2** After wiring is completed, check the motor rotation by jogging the starter (momentarily turn switch on and off). This will cause the motor to rotate slowly so the rotation of the fan can easily be observed. Correct rotation is indicated by the arrow on the exhauster housing. The fan should rotate toward the exhauster outlet.

### 3.0 ADJUSTMENTS

### 3.1 Damper Setting

- **3.2.1** Set the damper fully open. Fully open is when the handle is in line with the inlet as shown in Figure 1.
- **3.2.2** Adjust the damper on the abrasive cleaner as instructed in the abrasive cleaner owners manual.

#### 4.0 MAINTENANCE

**4.1** A shaker arm accessible from the outside of the collector is used to shake dust from the filters. Every two hours, turn off the exhauster and vigorously shake the filters.

# **CAUTION**

Do not shake the filters when the exhauster is on. Doing so will accelerate wear on the filters around the shaker assembly, but not loosen the dust.

**4.2** Empty the dust collector drawer regularly. Begin by checking the drawer daily and adjust frequency based on usage and breakdown rate of media. Dump the contents into a suitable disposal container. Check with proper authorities for disposal restrictions.

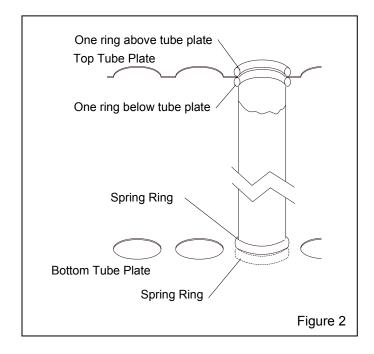
# **A** CAUTION

Do not open the dust drawer door while the exhauster is operating. During operation the dust door is under positive pressure. Opening the door while the exhauster is operating will allow dust to escape.

4.3 Tube Replacement, Figure 2

# **CAUTION**

- Do not bend spring ends tight enough to cause ends to kink.
- Do not use a sharp instrument to force spring rings into the opening. This could damage the filter and seriously impair the function of the dust collector.
- Install one filter at a time. Check the seating of the top and bottom spring rings, and that tube is not twisted, before proceeding to the next.
- **4.3.1** Replace damaged filters immediately. Remove the old filters by pulling the spring rings off the bottom and top tube plates. Working from the back to the front, install one filter at a time. To install new filters, form the end of the spring ringed tubular filter into a shallow "c" shape, push the filter far enough into the hole of the top plate to allow one spring ring to snap into place above the tube plate and the other to snap into place below it. Refer to the illustration in Figure 2.



**4.3.2** The filters are held firmly by spring rings above and below the perimeter of the hole in the top and bottom tube plates. The filters fit tight to prevent dust leakage. Force may be required by the installer. Check for proper seating at both ends, and remove any twist in the tube before proceeding to the next filter.

### 5.0 TROUBLESHOOTING

# **A** WARNING

Failure to wear approved respirators and eye protection when servicing dust-laden areas of the dust collector and when emptying the dust drawer could result in serious eye irritation and lung disease or death. Toxicity and health risk vary with type of dust generated. Identify all material removed by blasting process, and obtain a material safety data sheet for the blast media.

### 5.1 Poor Air Flow

- **5.1.1** Dirty tube filters. Shake tube filters, and empty dust drawer regularly.
- **5.1.2** Motor rotating backwards. The motor should rotate as indicated by the arrow on the housing. If it does not rotate in the proper direction, Lockout and tagout power and switch the motor leads as shown on the motor plate.

- **5.1.3** Using friable media that rapidly breaks down, or using media that is too fine or worn out.
- **5.1.4** Inlet damper closed or partially closed. Open damper to increase air flow.
- **5.1.5** Hole worn in flex hose between the abrasive cleaner and exhauster inlet. Replace hose and route it with as few bends as possible to prevent wear.
- **5.1.6** Paddle wheel worn. Check wheel for wear.

## 5.2 Dust Leaking from Dust Collector

- **5.2.1** Check for damaged or loose filters.
- **5.2.2** Check for a faulty seal on the dust drawer.
- **5.2.3** Make sure that the upper and lower tube sheets are sealed on the sides, front, and rear.

## 6.0 REPLACEMENT PARTS, Figure 3

ltem	Description	Stock No.
(-)	C-600 Dry filter, complete	06496
1.	Hose, 6" flex, specify length	40450
2.	4-ft. standard	
3.	Gasket, 6" inlet adaptor	
4.	Gasket, dust drawer door	
5.	Clamp, hose, 6-1/2"	
6.	Spring latch assembly	12263
7.	Drawer, dust	14275
8.	Plate, inlet cover	
9.	Gasket, inlet cover plate	11761
10.	Tubular filter, each, 25 required	11503
11.	Shaker, tube filter	12414
12.	Handle, shaker	12899
13.	Exhauster assembly	
	with impeller, less motor	
14.	Impeller, replacement	24099
15.	Motor, 1 HP, 230/460, 3-Ph	
16.	Adaptor plate, exhauster outlet	06495

