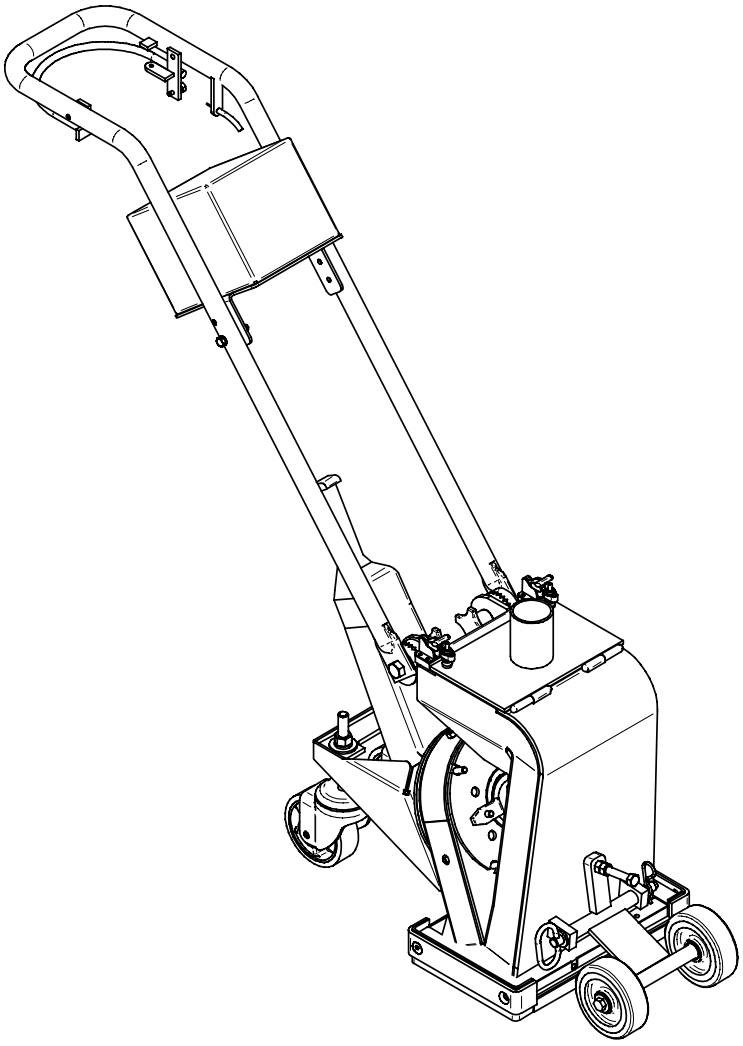
BLASTRAC



MODEL
1-8 DEZ

CREATION DATE: 5-17-02

Section 1

WARNING: ALL OPERATORS AND MAINTENANCE PERSONNEL SHOULD READ AND UNDERSTAND ALL OF THE *OPERATING INSTRUCTIONS* PRIOR TO OPERATING OR MAINTAINING ON THE 1-8DEZ.

These USF/Blastrac® operating instructions have been specifically prepared for operating and maintenance personnel working with the Model 1-8DEZ shot-blasting system. The information in this manual is intended to provide an understanding of the 1-8DEZ to minimize safety risks and maximize 1-8DEZ performance.

1.1 Safety Instructions

All operating and maintenance personnel must observe all warnings and precautions that are listed in this manual for the Model 1-8DEZ. All safety and warning labels posted on the 1-8DEZ and the instructions included in these operating instructions must be followed.

This Blastrac® 1-8DEZ has been manufactured for specific floor preparation applications. The engineering design of this airless media blast machine incorporates several basic elements. These include the airless media blast wheel, the media recycling system and the dust collection system. As a result of many years of operating and engineering experience, the features of these machines when used with the proper operating and maintenance procedures enable them to operate in an efficient and trouble-free manner.

A thorough understanding of your 1-8DEZ will help ensure that it can be operated efficiently and with minimized safety risks. No instructions, written or verbal, can be effective without the use of sound judgment and good work practices in the operation and maintenance of the 1-8DEZ. The U.S. Department of Labor Occupational Safety & Health Administration (OSHA) provides standards and regulations relating to the use of portable tools on construction sites. The operator of this 1-8DEZ should be familiar with, and understand these Regulations and Standards. These Standards and Regulations are posted on the OSHA Website at www.osha.gov.

CAUTION: ALWAYS KEEP THE ABRASIVE VALVE CONTROL LEVER IN THE OFF/CLOSED POSITION EXCEPT WHEN THE 1-8DEZ IS ACTUALLY BLAST CLEANING. IMMEDIATELY CLOSE THE ABRASIVE CONTROL VALVE BY RELEASING THE HANDLE- MOUNTED SHOT VALVE CONTROL IF YOU EXPERIENCE ANY IRREGULAR OR HAZARDOUS SITUATIONS WHILE OPERATING OR MAINTAINING THE 1-8DEZ. UNUSUAL SITUATIONS INCLUDE, BUT ARE NOT LIMITED TO, LOUD NOISE AND EXCESSIVE VIBRATION.

1.1 Cont'd

Before actual shotblasting can begin, the operator should be certain that the 1-8DEZ will clear all obstructions in the work area. Work areas must be dry and clean (no loose debris) before cleaning can begin.

WARNING: INTRODUCTION OF LOOSE DEBRIS MAY CAUSE A CATASTROPHIC FAILURE RESULTING IN SERIOUS INJURY.

WARNING: KEEP ALL GUARDS IN PLACE - THE 1-8DEZ IS EQUIPPED WITH GUARDS OR COVERINGS FOR PARTS THAT MAY BE HAZARDOUS. IF ANY GUARDS ARE REMOVED FOR MAINTENANCE, VERIFY THAT THE GUARDS HAVE BEEN REPLACED AND ARE FUNCTIONING PRIOR TO USING THE 1-8DEZ. REFER TO DRAWINGS 421-0001 FOR CORRECT PLACEMENT OF GUARDS, COVERINGS AND OTHER 1-8DEZ COMPONENT PARTS.

All personnel in the immediate work area must wear safety glasses with side shields whenever the 1-8DEZ is blasting. Protective clothing is also recommended. Long sleeve shirts and safety shoes should be worn. The abrasive used in the 1-8DEZ impacts the work surface at high velocity; therefore any leakage during normal operation may sting personnel in the surrounding area. The blast head must be sealed to the work surface during operation to prevent abrasive leakage. Loose clothing, long hair and jewelry should not be worn when operating or maintaining the 1-8DEZ.

1.2 Safety – Mechanical

Maintenance Mode

Maintenance mode is defined as the state or condition of the 1-8DEZ, which minimizes mechanical and electrical hazards.

The 1-8DEZ should be put into maintenance mode prior to making adjustments or attempting any maintenance. The steps for placing the 1-8DEZ in maintenance mode are listed below.

1. Move 1-8DEZ to level ground.
2. Verify all moving parts have stopped.
3. Turn off main power at electrical box located on steering handle.
4. Release grinder power trigger by simultaneously pressing the grinder power trigger and unlock button located on the back of the grinder.
5. Utilize Lock-Out/Tag-Out procedures on main power on/off switch on the electrical box located on the steering handle.

1.2 Cont'd

Most industrial and many commercial work sites will have already developed their own Lock-Out/Tag-out procedures. The site safety personnel should be contacted to establish the procedure to be used. If the site has no formal Lockout/Tag out procedure the operator of this 1-8DEZ should be prepared to implement their own procedure including training of all operating and maintenance personnel.

All drive guards must be kept in place and in good condition except during maintenance or when repair work is being performed. Once maintenance or repair work is complete, be sure all guards are securely remounted and operating.

Safety glasses with side shields should always be worn when working with or near the 1-8DEZ while in use.

Loose fitting clothing and gloves should not be worn when working with the 1-8DEZ. Gloves can be worn for added protection.

The 1-8DEZ and all areas around the 1-8DEZ should be kept clean. Loose media in particular can become hazardous for foot traffic. All abrasive leaks should be repaired immediately to help keep the work area free of loose abrasive.

Any condition(s) that may result in damage to the 1-8DEZ or cause injury to the operator and/or other personnel should be repaired immediately.

Do not attempt to make adjustments to the feed spout or any control cage components while the 1-8DEZ is in motion or the blast wheel is operating. All adjustments must be made after the 1-8DEZ as been put in Maintenance Mode.

Obey all safety and danger signs posted on the 1-8DEZ, read and understand the *Operating Instructions* thoroughly, and follow all information posted where the 1-8DEZ is being operated.

CAUTION: ALL SAFETY AND WARNING STICKERS MUST BE KEPT IN GOOD, READABLE CONDITION. SEE DRAWING NUMBER 421-0013 FOR STICKER DESCRIPTIONS AND LOCATIONS.

Do not operate the 1-8DEZ in the rain or when heavy moisture is present. Do not expose the abrasive supply to any type of moisture. Sticky, tar related and rubber surfaces should be avoided when using the USF/Blastrac® 1-8DEZ. Always drain unused abrasive from the 1-8DEZ and empty the dust collector hopper before transporting the 1-8DEZ.

1.3 Ventilation

The 1-8DEZ will not operate correctly without a dust collector.

The dust collector aids in the recovery of the abrasive and removes potentially hazardous dust from the air stream. If the machine is leaving shot on the ground or emitting dust, make sure your dust collector is operating correctly. Moreover, the dust collector helps maintain cleaning efficiency and minimizes the wear of the 1-8DEZ component parts.

All abrasive blast equipment must be properly ventilated to be environmentally effective. This benefits the operator, helps maintain efficiency and minimizes wear.

Keep the dust collector filters as clean as possible and dispose of the dust regularly and safely. Follow all environmental regulations when disposing of the dust. Many types of dust have chemical and physical properties that can cause fire or explosion. These hazards are minimized when the dust is removed on a regular basis as recommended.

Be sure to obtain any MSDS that may pertain to the specific use of the 1-8DEZ. Always be aware that the dust generated may require the operator to wear the appropriate breathing apparatus according to the recommendations of the MSDS.

WARNING: AVOID INHALING AIR CONTAMINATED WITH CONCRETE DUST. SHOT BLASTING CONCRETE PRODUCES CONCRETE DUST THAT CONTAINS AIRBORNE CRYSTALLINE SILICA. NEVER OPERATE THE 1-8DEZ WITHOUT AN APPROPRIATE DUST COLLECTOR. MOREOVER, AIRBORN SILICA COULD STILL EXIST EVEN WITH THE USE OF A DUST COLLECTOR IF THE DUST COLLECTOR IS NOT OPERATING CORRECTLY. OBSERVE ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS. FOLLOW OSHA APPROVED RESPIRATORY PROTECTION STANDARDS (REFERENCE OSHA 29CFR 1910.134-RESPIRATORY PROTECTION, 1910.1000-AIR CONTAMINANTS, AND ALL SUBSEQUENT ADDITIONS OR MODIFICATIONS). THE USE OF THE APPROPRIATE RESPIRATORY PROTECTION IS ESPECIALLY IMPORTANT WHEN EXPOSED TO THE INTERNAL COMPONENTS OF THE DUST COLLECTOR WHEN CONCRETE DUST IS PRESENT, IN ADDITION TO NORMAL SHOT BLASTING. IHALATION OF AIRBORN SILICA CAN CAUSE SILICOSIS AND DEATH.

Section 2

2.1 Owner/Operator Responsibilities

2.1 Owner/Operator Responsibilities

1. The owner/operator shall be responsible for the observance of all safety precautions expressed in this manual.

2. The owner/operator shall be trained by a Blastrac® Technician for the operation and maintenance of Blastrac equipment.

3. The owner/operator shall provide the necessary blasting media in accordance with the recommendations of a Blastrac technician so that the 1-8DEZ will operate at maximum efficiency.

4. The owner/operator shall perform all maintenance and basic repair functions as stated and described in this manual.

5. The owner/operator shall maintain an inventory of wear parts as outlined in this manual.

6. The owner/operator shall dispose of all dust collector refuse.

7. The owner/operator shall provide the following tools and accessories:

Hammer	Screwdrivers
Metric Wrench Set	U. S. Wrench Set
Utility Knife	Metric Hex Key Set
5/16” Allen Wrench	Magnetic Broom
Buckets	Imperial Hex Key Set

Section 3

3.1 Blast Unit – General

The Blastrac® equipment series described herein includes the 1-8DEZ Blast Unit. This model is used in conjunction with the Turbo Vacuum Dust Collector. Each combination comprises a horizontal surface preparation, closed cycle, shotblasting system. The blast unit directs high velocity, metallic abrasive toward the work surface. The impact of each individual particle causes the surface to fracture and become loose. The abrasive and the loose surface particles are then directed upward due to the force of the impact and a strong airflow created by the dust collector. The mixture of shot and contaminants enters the rebound plenum and continues its upward movement until directed into a specially designed chamber called the separator. Inside this chamber, an air wash cleans the abrasive and allows the contaminants to be extracted back to the dust collector. The clean abrasive is then gravity fed to the blast wheel and the process repeats. The blast unit is manually propelled. Please refer to section 1.3 ventilation. The blast units consist of the following elements:

- Abrasive Cleaning Head
- Abrasive Control Valve
- Rebound Chamber
- Deflector Plate / Hopper
- Abrasive Seals
- Chassis
- Ventilation System
- Cleaning Media (Abrasive)

3.2 Blast Unit – Abrasive Cleaning Head

This section (3.2) refers to Figure Number 1 on page 13.

The center of the patented abrasive cleaning head is the four bladed, six-inch blast wheel that accelerates the abrasive towards the surface being cleaned. This center fed blast wheel propels the abrasive by centrifugal force at a speed of more than 200 mph.

This blast wheel is enclosed in an abrasion resistant housing that is also lined with abrasion resistant liners. These liners are located in areas where the most wear is present. The operator must change them periodically to protect the housing. The blast wheel is directly connected to an 8,000 RPM, 110V angle grinder.

3.2 Cont'd

The blast wheel is equipped with a cast in place impeller for easy maintenance. This impeller pre-accelerates the abrasive to the wheel blades in controlled portions. The impeller also acts as a timing device to ensure proper placement of abrasive on the blade face. Abrasive that is gravity fed to the center of the wheel is pre-accelerated by impeller segments and directed through the control cage. The control cage determines where the abrasive is introduced onto the rotating blades of the wheel which in turn determines where the abrasive is being "aimed". The setting of the control cage is very important when setting up the "blast pattern." Refer to Section 5 for setting the correct blast pattern.

3.3 Blast Unit – Abrasive Control Valve

This section (3.3) refers to Figure Number 2 on page 14.

The abrasive control valve regulates the amount of abrasive delivered to the blast wheel. The main component of this device is a butterfly valve surrounded by a magnetic strip. A slight gap exists between the disk on the butterfly assembly and the inner wall of the valve. When the disk is horizontal, the magnetic strip provides a seal that closes the gap with steel shot and stops the flow of abrasive. The valve is manually operated with the actuator below the handle. Should the abrasive valve need to be replaced, the lever arm should be oriented at approximately 45 degrees when the valve is closed (see figure #2) after inserting the new valve.

3.4 Blast Unit – Rebound Chamber (Plenum)

Once the abrasive has impacted the work surface, the shot is directed into the rebound plenum. This curved portion of the plenum absorbs a large percentage of the force exerted by the high velocity abrasive and helps dissipate the heat generated by the blast process.

3.5 Blast Unit – Deflector Plate / Hopper

This section (3.5) refers to Figure Number 3 on page 15.

Once the contaminated abrasive leaves the rebound plenum, it enters the separator and immediately encounters the deflector plate. The deflector plate slows the abrasive down even more before it enters a tray at the bottom of the deflector plate. The contaminated abrasive hits the abrasive already at the bottom of the plate and effectively absorbs any residual force left in the moving mixture. The contaminated abrasive then falls through a curtain of high velocity clean air, which physically separates the heavy abrasive and the lighter contaminants. The air wash pulls the contaminants through the separator towards the exhaust and eventually to the dust collector. The clean abrasive falls to the bottom of the separator, then into a hopper where it can be recycled.

3.6 Blast Unit – Abrasive Seals

This section (3.6) refers to Figure Number 4 on page 25.

Magnetic abrasive seals are present on all sides of the rectangular opening at the bottom of the blast housing. These magnets should be charged with a load of abrasive before the blasting process begins. During the blasting process, they will attract any loose abrasive onto their surface, thus providing a “seal” to help contain the high impact abrasive from escaping the blast chamber. The leading and trailing edges of the blast chamber are equipped with additional brush seals mounted on the outside of the magnetic seals. The brush seals drag across the work surface allowing clean air to be drawn inside the 1-8DEZ. The air draw aids in the cooling and the reclaiming process.

3.7 Blast Unit – Chassis

All components on the blast unit are mounted on a mobile transporter. This transporter, or carriage, is a two-wheeled hand propelled unit. A two-wheeled caster kit is installed in front of the rebound plenum for additional stability.

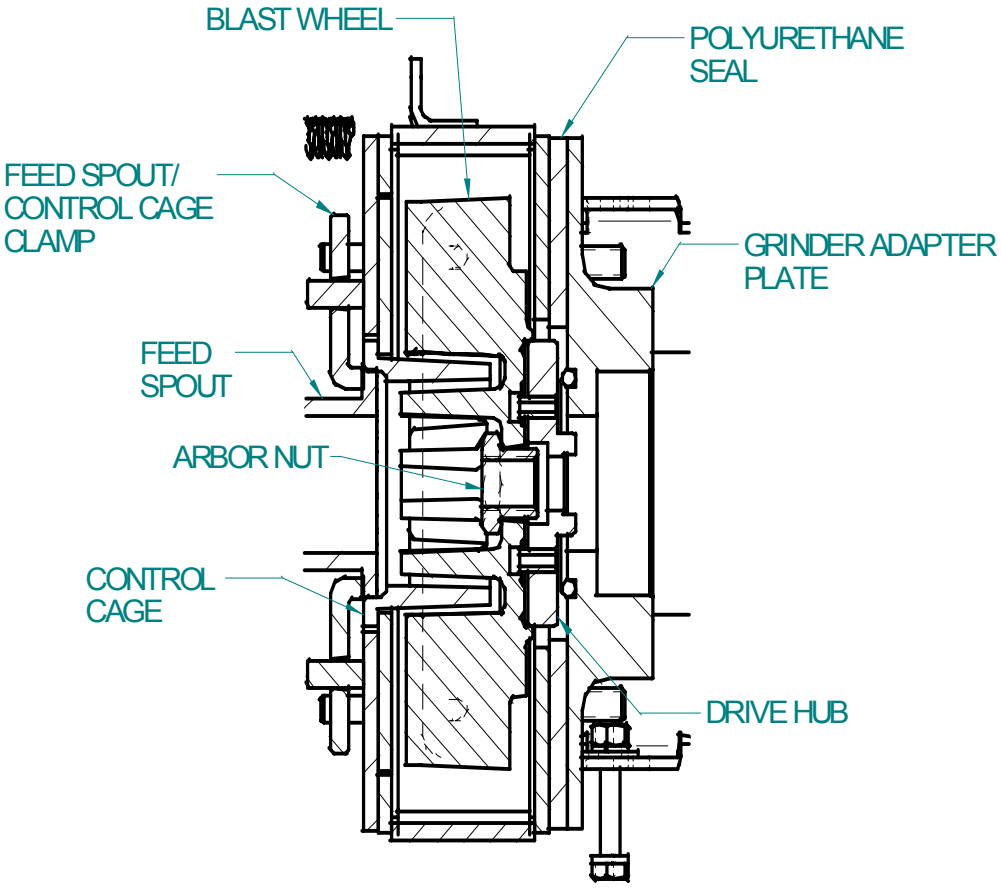
The operator’s handle is rigidly connected to the chassis and may be pushed down to allow the operator to lift the blast seal over small obstructions. For safety reasons, we recommend that the bottom of the front urethane seal not be lifted more than approximately 1/8“ off the surface being cleaned. Lifting the seal edge beyond this may allow high velocity abrasive to escape the blast chamber.

3.8 Cleaning Media (Abrasive)

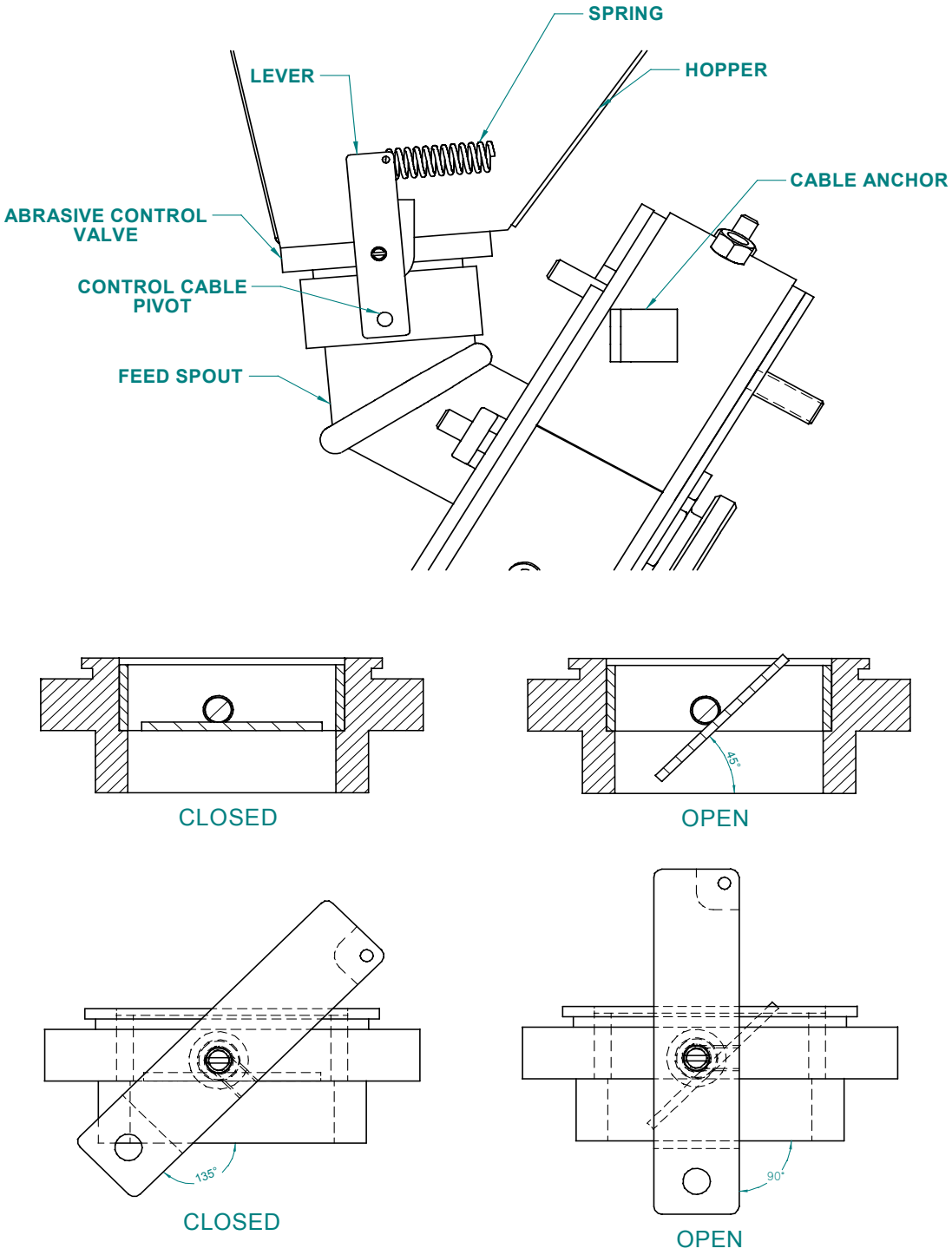
Blastrac provides a variety of specially sized, high quality abrasive for Blastrac shot cleaning systems. This steel abrasive is made of high quality martensitic steel to provide long operating life and minimal abrasive breakdown.

The 1-8DEZ is designed to operate with abrasive in sizes S-110 through S-330. The selection of proper abrasive is very important to the performance of the Blastrac shot cleaning system. Your Blastrac representative can help with the proper selection of abrasive for your particular application.

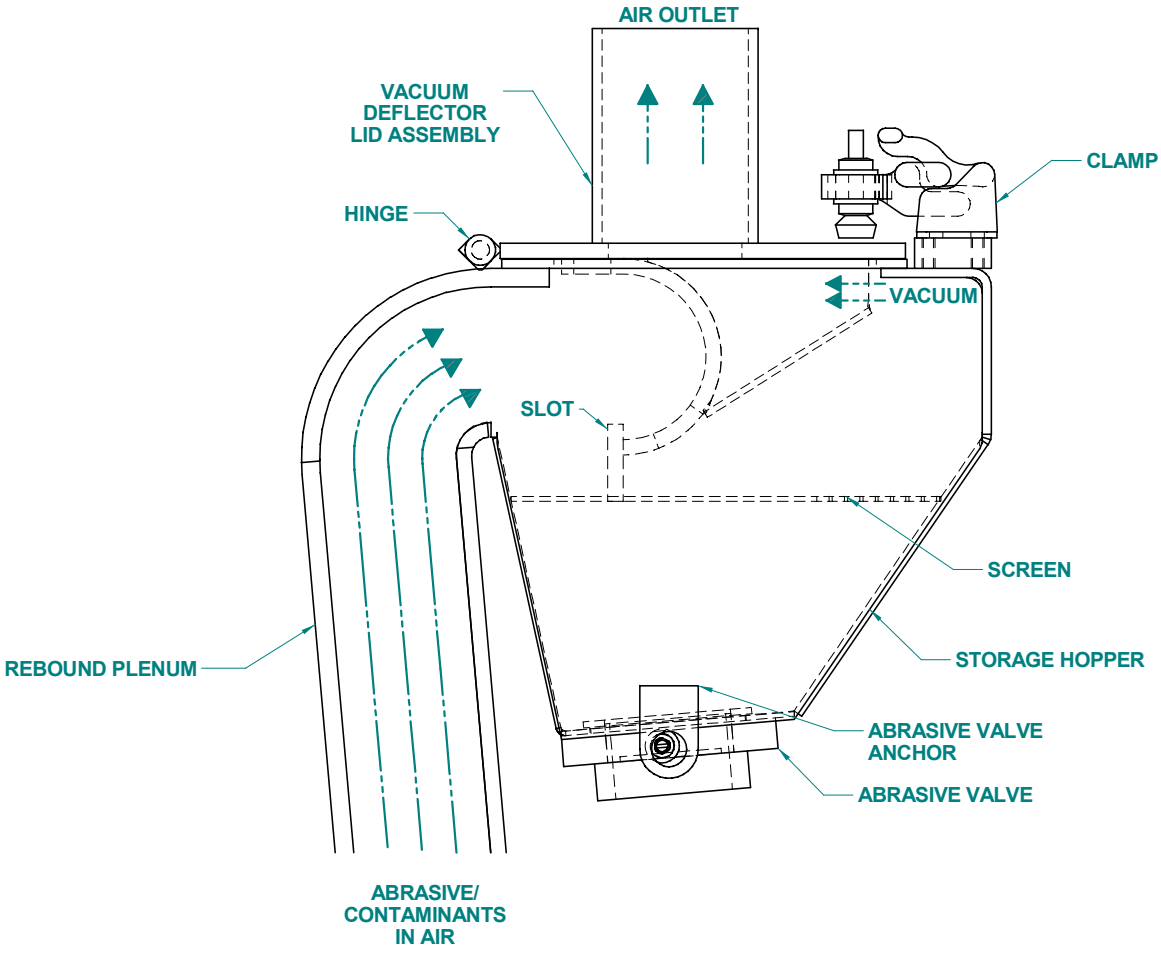
The steel abrasive causes minimum wear on the internal blast components. The dust and contaminants are the principal causes of component wear. A well-maintained ventilation system will minimize abrasive contamination, which helps reduce operating costs and increases the overall efficiency of the shotblasting system.



ABRASIVE CLEANING HEAD
FIGURE #1



ABRASIVE CONTROL VALVE
FIGURE #2



SEPARATOR 1-8DEZ
FIGURE #3

Section 4

4.1 Start-Up

WARNING: ALL OPERATING AND MAINTENANCE PERSONNEL ASSIGNED TO THE 1-8DEZ SHOULD READ AND UNDERSTAND THE *OPERATING INSTRUCTIONS* BEFORE ATTEMPTING TO OPERATE OR MAINTAIN THE 1-8DEZ. IN ADDITION, BLASTRAC® HIGHLY RECOMMENDS THAT ALL OPERATING AND MAINTENANCE PERSONNEL RECEIVE TRAINING FROM AN AUTHORIZED BLASTRAC REPRESENTATIVE BEFORE ATTEMPTING TO OPERATE OR MAINTAIN THE 1-8DEZ.

1. The 1-8DEZ and the dust collector should be moved to the cleaning site. Both machines can be hand-towed or moved by a lift truck.
2. Check the dustbin of the dust collector to be sure that it is empty. At the end of each job, the dustbin should be emptied.
3. Check the blast wheel, control cage, feed spout, liners, seals and hopper parts for wear. Replace parts where necessary.
4. Check the exhaust hose for holes, deformities, potential leaks or restrictions. Repair or replace all defective items before continuing.
5. Connect the exhaust hose and clamps to the blast unit and the dust collector. Be sure the clamps are secure.
6. All personnel in the immediate vicinity must now wear safety glasses with side shields.
7. Verify that the main power switch located on the electrical box on the steering handle is in the OFF position.
8. Check the area you are about to clean. Be sure that it is free of all debris that can clog or damage the 1-8DEZ. Be sure that the surface is moisture free. Blastrac machinery is designed to work on surfaces free from debris.
9. Make certain that the abrasive control valve is in the closed position. Remove the separator lid and check that the shot hopper is free of debris and abrasive. Remove the screens and check the butterfly valve at the bottom of the hopper. It should be in the horizontal position. Replace the bottom screen and add approximately eight (8) to ten (10) pounds of abrasive. The level of this abrasive

4.1 Cont'd

should reach the bottom of the screen. Do not overfill. Replace the separator lid and secure clamps (see figure #3, page 15).

10. Check the magnetic seals on the bottom of the blast unit for metallic contaminants such as nuts, bolts, etc. remove any foreign objects. Push the blast unit forward at a normal working pace. Deposit a layer of abrasive on the floor in front of the magnets. Drive the machine over the abrasive to charge the magnets with a layer of abrasive. The abrasive will form a seal between the magnets and the floor. Remove any excess abrasive from the floor.

11. Connect grinder power cord to electrical box power.

12. Lock grinder trigger in ON position.

13. Connect electrical box power cord to site power outlet.

14. Turn on dust collector

15. Turn on main power on electrical box

16. After cleaning a five-foot test strip, close the abrasive valve, stop the machine and check the cleaned area.

17. If the brightness or texture of the test strip is uneven, refer to Section 5,"BlastPattern", to adjust the "HOT SPOT".

4.2 Blast Cleaning

1. Ease the abrasive valve open. The operator will be walking forward to operate the machine in the forward direction.
2. If the cleaning is too severe or inadequate, adjust your travel speed accordingly. A faster pace will result in a lighter surface profile while a slower pace will be more aggressive and result in a deeper profile. If irregular surfaces are encountered, adjust your speed accordingly (see Section 7 - "Equipment Calibration").

4.2 Cont'd

3. The blast unit and the dust collector should be arranged so that the dust collector is centrally located. Blasting in straight lines will always give the best, most consistent results. Keep the duct hose situated between the two units so that you never have to pass across it or the power cord. Blasting during a turn will create an uneven profile. Once an area has been cleaned, the blast unit and the dust collector can be moved to an adjacent location to continue cleaning.

4. The blast unit will clear small obstructions by pushing down on the steering handle. Caution should be observed when clearing obstructions in this manner since the abrasive seal on the work surface may be broken. This may allow high velocity abrasive to escape (see section 3.7).

5. The blast pattern of the machine may change when the blast components start to wear. The operator should always note the blast pattern during normal cleaning and make adjustments or replace parts when necessary. (See Section 5 and 8.)

6. Check dust level in the dust collector at regular intervals while keeping track of the number of feet traveled. This will establish a cleaning interval for the dust collector.

4.3 Shut Down

1. Close the abrasive valve.
2. Turn the main power to OFF.
3. Turn dust collector off.

4. Be sure all rotating parts are fully stopped and the 1-8DEZ is in Maintenance Mode, as described in section 1.2, before attempting to inspect or maintain the blast unit or the dust collector.

5. At the end of each job, the dustbin and the shot hopper should be emptied. Abrasive and dust left in the 1-8DEZ or the dust collector will stick together when exposed to moisture.

Section 5

5.1 Setting the Correct Blast Pattern

5.1 Setting the Correct Blast Pattern

Setting the correct blast pattern is essential before an even, clean profile can be achieved when shotblasting with a Blastrac® machine. An uneven blast pattern can leave shadows on either side of the floor surface and can cause premature wear to the internal components. The importance of setting the proper blast pattern cannot be overstressed.

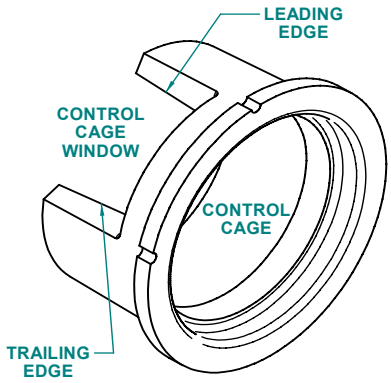
There are four major factors that can affect the blast pattern. They are:

1. **Wheel Rotation** - The blast wheel must be rotating in the proper direction indicated on the housing that surrounds the blast wheel. Most Blastrac® machines rotate in a clockwise direction when looking at the machine from the operator's position.

2. **Worn Wheel Kits** - Wheel kit components such as blades, impellers and control cages vary in different machines but perform similar functions. These kits must be periodically replaced to ensure that they produce the proper blast pattern and to eliminate excessive wear, which can cause internal component damage.

3. **Abrasive Size** - The size of the abrasive will affect the blast pattern. Different sized abrasives have different masses that will alter the "hot spot" setting. See Figure B. page 22.

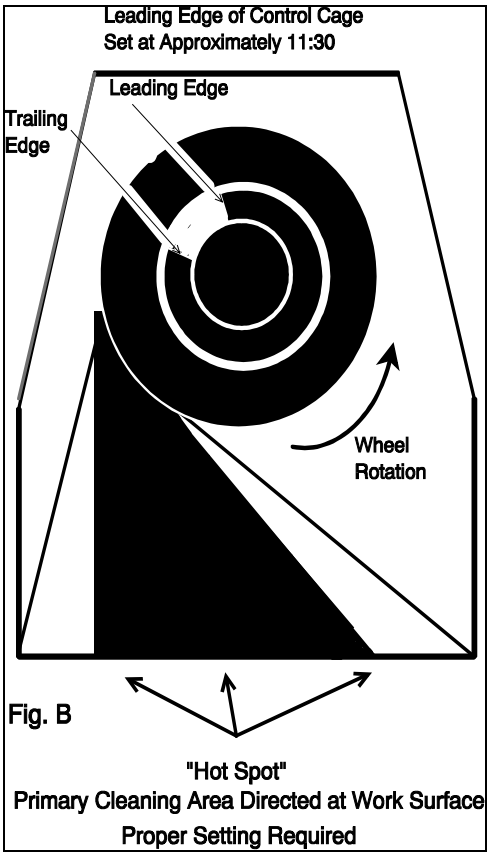
4. **Control Cage Setting** -The setting of the control cage is the most critical factor in determining where the blast pattern is directed. Ideally, the blast pattern is centered so that the area being cleaned receives a consistent, even distribution of high velocity abrasive. Altering the setting of the control cage can move the blast pattern to the left or right depending on which direction the control cage is moved. Moving the control cage too far in either direction will direct the abrasive blast pattern to the side of the machine and cause premature wear to the internal components. The exact positioning of the control cage is done by trial and error.



5.1 Cont'd

5. The initial setting of a machine rotating in a counter-clockwise direction should be between 9:30 and 11:30 as indicated in Figures B and C. The resultant-cleaning path will determine the final setting.

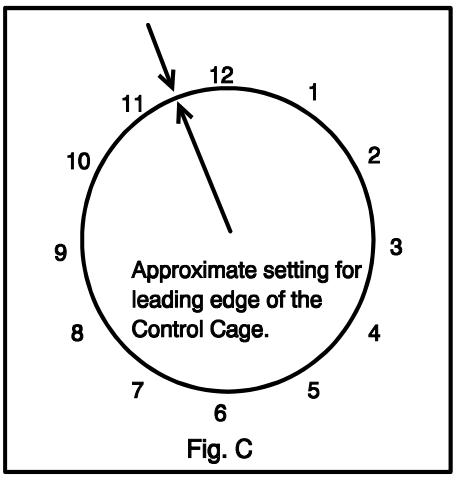
These settings will vary with the abrasive size and the surface being cleaned. Once the proper control cage setting is obtained, the blast pattern should remain consistent. If the pattern begins to vary, check the blast wheel components for wear.



Control Cage "Trial & Error" Setting

The initial setting of the control cage for a machine that has the blast wheel rotating in a counter-clockwise direction is between 9:30 and 11:30. The leading edge should be at 11:30. Refer to Figures A, B and C. Place a 3/16" or 1/4" steel plate beneath the machine and blast with the abrasive control valve at full open for about 45 seconds. Do not move the machine during this test. The resulting "hot spot" should be centered as it appears on Figure B. If the "hot spot" is too far to the left, rotate the control cage in a counter-clockwise direction about 1/4" and recheck the blast pattern on the test strip. Small changes in the rotation of the control cage can move the "hot spot "significantly. If the "hot spot" is too far to the right, rotate the control cage in a clockwise direction. Once again, move the control cage in small increments until the blast pattern ("hot spot") is centered.

Note: If the blast pattern cannot be centered, check the blast wheel and be sure it is properly mounted and seated on the wheel hub located behind the blast wheel. The two pins on the hub must be seated on the back of the blast wheel before the wheel can be secured. This check must be made whenever the blast wheel is changed.



Section 6

6.1 Changing The Edging Mode

6.1 Changing The Edging Mode

Refer to Figure Number 5

The model 1-8DEZ is capable of cleaning surfaces within 1 / 2 inch of vertical obstructions. (This is along the side of the machine. The 1-8DEZ can be pushed as close as 1-1/2 inches from the front of the machine.) Performing the following steps sets up the edging mode:

1. Remove the two hex screws holding the retainer, seal and magnet on the side of the machine where the edging is required. This requires a 3/16” hex key. Be careful to keep abrasive from entering the holes in which the screws were secured. You may want to cover these two holes with duct tape while in the edging mode to protect the threads.

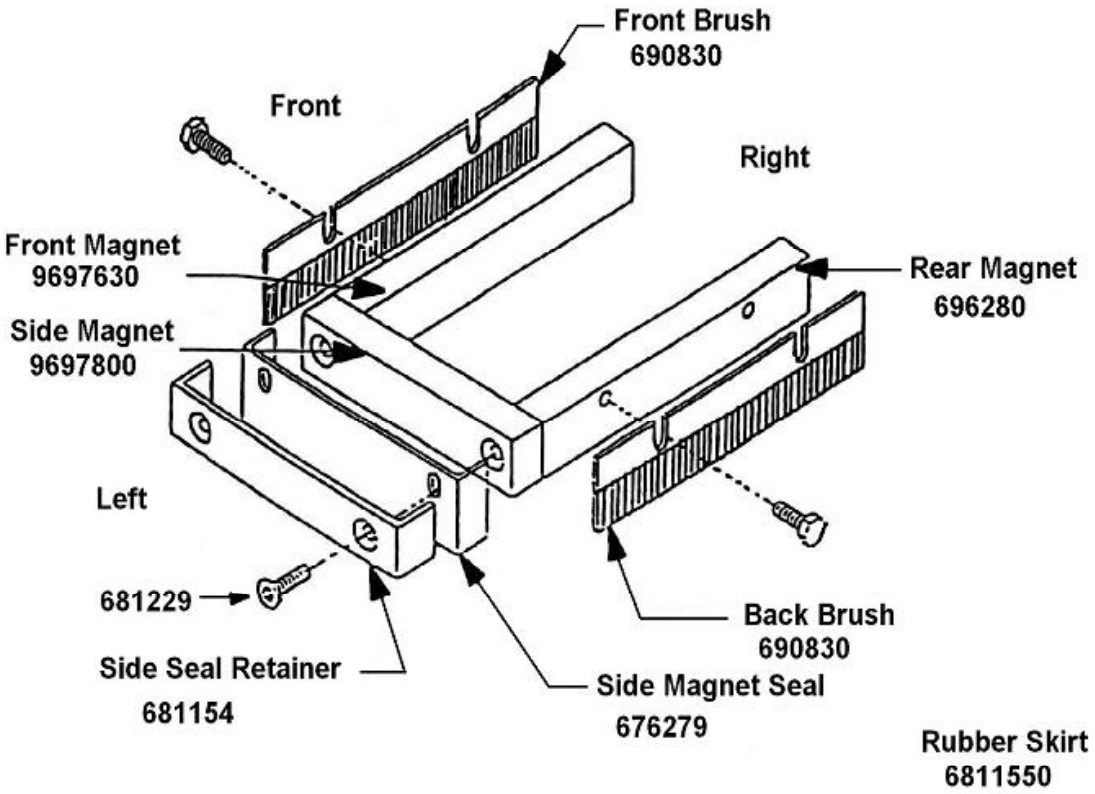
2. Move the machine to the area in which the edging will be done and see if the machine can be moved freely. Adjust the height of the machine if necessary.

3. Begin cleaning in the normal fashion. Do not blast when the machine is away from the vertical surface in the edging mode since the magnetic seal is no longer present. Abrasive will disperse more readily from the side if the magnet is not in place. Keep in mind that the machine will tend to lose more abrasive while in the edging mode since the magnetic seal has been removed.

WARNING: DO NOT USE THE MACHINE FOR NORMAL BLASTING WHEN IT HAS BEEN PREPARED FOR EDGING. THE MAGNET, SEAL AND RETAINER MUST BE REINSTALLED FIRST.

WARNING: CLOSE THE ABRASIVE VALVE BEFORE MOVING THE 1-8DEZ AWAY FROM THE VERTICAL SURFACE. FAILURE TO DO SO MAY EXPOSE NEARBY PERSONNEL TO HIGH VELOCITY ABRASIVE.

Right Side Edge Mode



This magnet and seal illustration shows how the machine is set during the right side edging mode. This is achieved by simply removing the right side retainer, right side magnet seal and the right side magnet. For normal (non-edging) operation, the right and left side arrangements are identical. For left hand edging, reverse the above arrangement from right to left.

MAGNETIC SEAL ASSEMBLY
FIGURE #4

Section 7

7.1 Equipment Calibration

7.1 Equipment Calibration

The following list of recommended set-up adjustments and reference values should be used to help obtain the optimal performance from your blast cleaning system. These should be used as starting points and can be fine-tuned after trial and observation.

WARNING: **CALIBRATION OF ITEMS 1, 2 AND 6 MUST BE MADE WITH THE 1-8DEZ IN MAINTENANCE MODE (SEE SECTION 1.2).**

1. **Blast Housing Height** - The bottom of the blast housing (magnets) should be between 1/8" to 1/2" above the surface being cleaned. A smaller clearance can be obtained for smooth surfaces but height may need to be adjusted for rough surfaces.

2. **Control Cage Setting** - See Section 5, "Setting the Correct Blast Pattern", figures A, B and C.

3. **Abrasive Selection Recommendations** (Steel Shot Size)
   - Brush blast of smooth concrete: S-170 to S-280 (smaller size will produce a brighter etch)
   - Rough concrete etch for coatings: S-330

4. **Exhaust Hose Length** - 25 feet of 2" I.D. exhaust hose; longer or shorter sections of hose may affect abrasive consumption or abrasive cleaning. Contact your Blastrac® representative before changing the exhaust hose length.

5. **Dust Collector** – Inspect Dust Collector at 15-minute intervals to see how quickly the dustbin is being filled. Do not allow dustbin to overfill. Once fill time is determined, dump the dust at the corresponding time interval.

6. **Handle Height** – The handle height can be adjusted to match the individual operator's height. This is accomplished by loosening the knobs and then moving the handle to the desired position. Secure the knobs when finished.

Section 8

8.1 Wear Parts

8.2 Maintenance Log

8.1 Wear Parts

Certain portions of the blast unit are continuously exposed to high velocity abrasive. These areas and their corresponding parts must be periodically inspected for wear and erosion to keep from damaging components that are not normally exposed to the abrasive blast. The parts are identified on the service drawings later in this manual along with part numbers. These 'wear" parts are designed to be easily replaced by the machine operator when necessary. A preventive maintenance program should be performed to monitor these areas on a regular basis. The following list outlines these areas and the time intervals involved.

WARNING: THE 1-8DEZ MUST BE PLACED IN MAINTENANCE MODE (SEE SECTION 1.2) PRIOR TO CARRYING OUT ANY INSPECTION OR PART REPLACEMENT ON THE 1-8DEZ.

Part	Inspection Interval	Wear Indication	Replacement Method
Blast Wheel	5 Hrs.	Blades Worn by more than 50%	Remove hub nut and replace (see section 9.1)
Feed Spout	50 Hrs.	Thin at Wheel Entry	Remove and replace
Control Cage	5 Hrs.	Eroded Edges	Remove and replace; adjust pattern
Rebound Chamber	50 Hrs.	Thin Sections; Wear on Welds.	Contact Blastrac® Service Center
Abrasive Hopper	20 Hrs.	Thin Sections; Wear at Welds; warpage	Contact Blastrac® Service Center
Liners	15 Hrs.	Thin Sections; Warpage; Holes	Loosen bolts, remove and replace
Blast Wheel Hub	Blast Wheel Replacement	Abrasive wear; pins missing	Remove and replace

Keep in mind that other portions of the machine require periodic inspections and maintenance. The parts mentioned above are associated with the internal abrasive blast. The power cords and exhaust hose, for example, also require close inspection and maintenance as described in other sections of this manual.

If the power cord(s) are found to have splits or cuts, they must be repaired in a manner that brings them to a same condition, function and safety, as that of a new cord(s). If this is impossible, they must be replaced.

8.2 Maintenance Log

MAINTENANCE LOG

Liners – Inspect for wear	Checked		OK		Change	
Blastwheel/cage - Inspect for wear	Checked		OK		Change	
Filters - Inspect – clean or replace	Checked		OK		Change	
Power Cords - Inspect for splits or cuts	Checked		OK		Change	
Shot valve – Inspect	Checked		OK		Change	
Seals – Inspect for wear	Checked		OK		Change	
Magnets & Seals – Inspect for wear	Checked		OK		Change	

Section 9

9.1 Blast Wheel Replacement

9.1 Blast Wheel Replacement

WARNING: THE 1-8DEZ MUST BE PLACED IN THE MAINTENANCE MODE (SEE SECTION 1.2) PRIOR TO ATTEMPTING TO INSPECT, CHANGE, OR ADJUST THE BLAST WHEEL.

1. Loosen the two control cage clamps that secure the feed spout and control cage.

2. Remove the feed spout and the control cage.

3. Outline the area around the control cage mounting assembly with a marking pen or pencil. This will allow for easier alignment when reinstalling this part later during this procedure. Remove the four mounting nuts, flat washers and lock washers that secure the control cage mounting assembly to the blast housing. Do not loosen any other screws on the control cage mounting assembly since they are used to set the gap between the blast wheel and the control cage. Remove the control cage mounting assembly.

4. Remove the arbor nut and remove the blast wheel.

5. Check the wheel hub for wear and replace if necessary.

6. Install new blast wheel using the arbor nut that is included in the wheel kit. Be sure that the new blast wheel is seated properly on the wheel hub before tightening the socket head cap screw.

7. Reinstall the control cage mounting assembly to the blast housing using the outline made before removing the assembly.

8. Install the new control cage that was included with the wheel kit. Rotate the wheel by hand to be sure the control cage and the wheel do not make contact. The initial window setting for the control cage should be between 9:30 and 11:30.

9. Reinstall the feed spout.

10. Energize the grinder momentarily to check for good balance and proper clearance before shotblasting.

9.1 Cont'd

11. See Section 5, "Blast Pattern", before adjusting the control cage for the correct blast pattern.

The assembly of the blast wheel and its associated parts are illustrated on Figure 1 page 13 in Section 3, Description and Function. Original Blastrac® wheels are designed and dynamically balanced for use at high speeds. Use of any other blast wheel may cause damage to the 1-8DEZ and/or injury to operator and surrounding personnel.

Section 10

10.1 Mechanical Troubleshooting

WARNING: PLEASE REFER TO THE SPECIFIC SAFETY AND MAINTENANCE RECOMMENDATIONS THROUGHOUT THIS MANUAL AND THE MANUALS OF THE COMPONENTS BEING MAINTAINED BEFORE ATTEMPTING ANY MAINTENANCE. FAILURE TO ADHERE TO THESE RECOMMENDATIONS COULD RESULT IN EQUIPMENT DAMAGE, SERIOUS INJURY OR DEATH.

Trouble	Possible Cause	Remedy
Excessive vibration - usually indicates that the blast wheel is out of balance. This condition will eventually cause bearing failure in the motor or bearing unit.	**a.** Unevenly worn wheel. **b.** Chipped, broken blades.	**a.** Replace wheel kit. Check separator and ventilation system. **b.** Chipped or broken blades will permanently unbalance the blast wheel and can cause damage to other components. Change wheel kit immediately.
Excessive noise - usually indicates misaligned components which causes premature wear and component failure.	**a.** Improper clearances or alignments between rotating parts, usually the control cage and the blast wheel.	**a.** Check alignment of control cage and wheel. Allow sufficient clearance between rotating parts.
Excessive wear on blast housing rebound chamber/liners.	**a.** Improper setting of control cage.	**a.** Abrasive is being misdirected into internal components instead of work area. Check blast pattern and readjust.
Abrasive leakage.	**a.** Improper sealing. **b.** Feed spout **c.** Improper control cage setting. **d.** Abrasive valve setting	**a.** Check all seals for wear. **b.** Check feed spout alignment and rubber seal. **c.** Abrasive rebounding from side of machine. Check blast pattern. **d.** Be sure abrasive valve closes when handle is released. Readjust if necessary.

10.1 Cont'd

Trouble	Possible Cause	Remedy
Increased cleaning time.	**a.** Storage hopper. **b.** Contaminated abrasive. **c.** Abrasive feed and abrasive control valve. **d.** Wheel impeller, control cage wear. **e.** Loss of consistent blast pattern, "hot spot". **f.** Choked wheel.	**a.** Check abrasive level. **b.** Abrasive may contain substantial percentage of fines and contaminants. Check ventilation. **c.** Check for obstructions in the abrasive feed, i.e. feed spout, abrasive control valve, and separator screen. **d.** May be worn. Replace wheel kit. **e.** Check blast pattern. Check the blast wheel for proper seating with the wheel hub. **f.** Close abrasive valve and gradually reopen. Check abrasive valve operation.
Machine hang-up.	**a.** Uneven work surface/ floor obstruction.	**a.** Pull up on steering handle to raise machine to clear small obstructions or uneven work surfaces. Shut abrasive valve if obstruction cannot be cleared. Pull back machine to clear. Use caution when raising seal due to high velocity abrasive exposure.
Loss of cleaning action.	**a.** Machine travel speed too fast. **b.** Abrasive contaminated.	**a.** Slow travel speed. **b.** Clean storage hopper and replace abrasive. Check ventilation system.

10.2 Dust Collector – Ventilation System

Note: Once the Dust Collector has been in operation for several minutes, a stable operating level will result. Sudden changes in operation can usually be traced to a malfunction.

Trouble	Possible Cause	Remedy
Contaminated abrasive - fines and contaminants not being removed from abrasive.	**a.** Very soft concrete removal. Excessive dust quantities entering system (will cause excessive component wear). **b.** Insufficient airflow being delivered by dust collector.	**a.** Increase machine speed to reduce the amount of concrete removal or reduce abrasive flow to wheel. **b.** Check filter: Clean or change if necessary.
Visible dust discharge.	**a.** Torn, punctured or improperly installed filter cartridges. **b.** Improper filter installation.	**a.** Check filters. Replace or reinstall. **b.** Refit properly.

10.3 Vacuum Adjustment – Operating Tips

For normal concrete surfaces, Blastrac® does not recommend using more than the 25 feet of exhaust hose supplied with the blast system. Adding additional hose can cause insufficient suction, which will allow unwanted dust and contaminants to accumulate in the abrasive, thereby causing premature wear to the blast wheel and liners. Additional hose can only be added when cleaning steel surfaces. Contact your Blastrac® representative for your specific steel cleaning application.

Normal shotblasting with the blast unit will usually be accomplished with the vacuum adjustment gate partially open. Too much suction will sometimes allow abrasive to be pulled from the blast unit and deposited into the dustpan. This is particularly true when using small sizes of abrasive such as S-170 and S-230. A period of trial and error may be necessary for specific job applications. Generally speaking, the more dust generated by your shotblasting unit, the greater the suction you will need from the dust collector to keep the abrasive as clean as possible.

Section 11

11.1 Specifications – Blast Unit

11.1 Specifications – Blast Unit

1-8DEZ MECHANICAL DATA	
Length (Base)	24 inches
Length (including handle in normal position)	45 inches
Height (excluding handle)	19.5 inches
Height (including handle in normal position)	38 inches
Width	12-3/8 inches
Weight	123 pounds
Vacuum Hose Length	25 feet
Production Capacity	Approx. 215 square feet / hour
Cleaning Path	8 inches
Power Source	110 VAC
Travel Speed	Manual

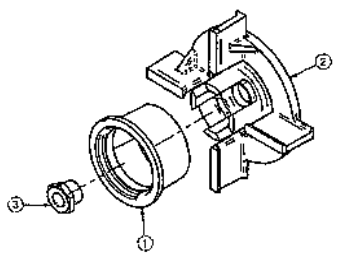
Section 12

12.1 Recommended Spare Parts List

12.1 Recommended Spare Parts List

Part #	Description
P002649	Wheel Kit
*451476	Control Cage/55 Deg.
*459556	Wheel/6 ½" Open Face
690825	Liner/Left Hand Side
690826	Liner/Right Hand Side
497307	Liner/Top
P000001	Abrasive Control Valve
**967577	Feed Spout
**684912	Feed Spout Seal
*P002639	Arbor Nut

*Items included in Wheel Kit.
**Items included in Abrasive Control Valve kit



PARTS INCLUDED IN WHEEL KIT P002649
1:2

ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	REV	DESCRIPTION
1	1	451476	7680200		CONTROL CAGE/ 55 DEG.
2	1	459556	77D0663	--	WHEEL/ 6-1/2" OPEN FACE
3	1	P002639	421-0009	–	ARBOR NUT/1-80EZ

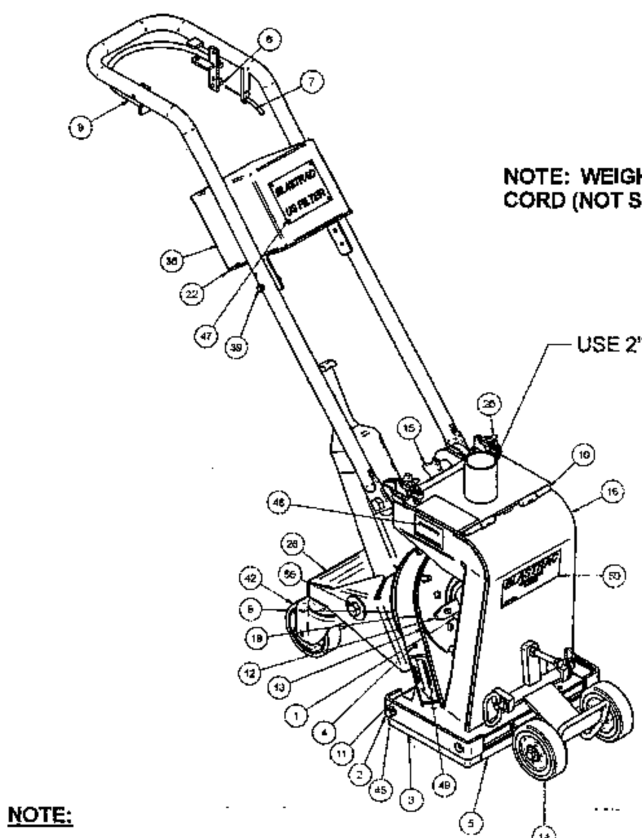
REPLACEMENT BLAST WHEEL PARTS

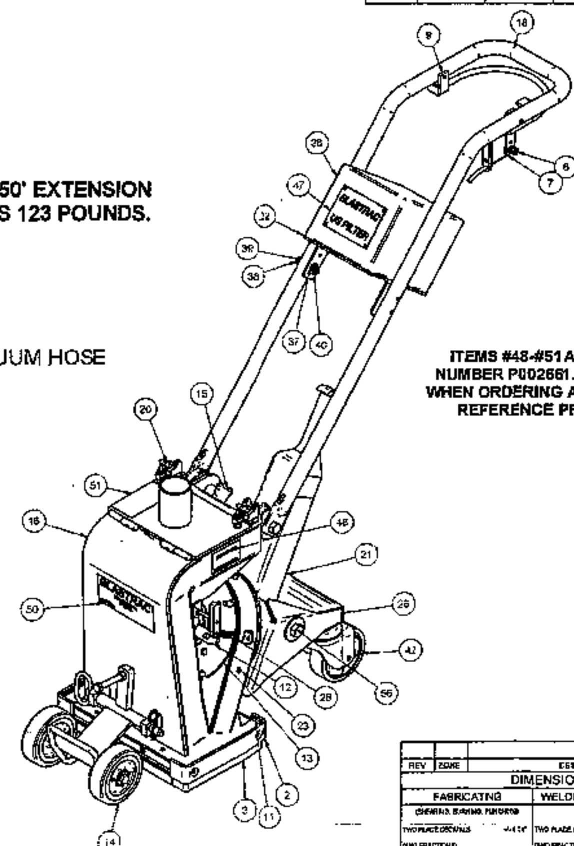
ITEMS #1, #29, AND #35 IN THE MAIN BILL OF MATERIAL ARE INCLUDED IN THE WHEEL KIT. WHEN ORDERING REPLACEMENTS FOR THESE PARTS USE PART NUMBER P002649.

	ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
C	43	2	P003129	421-0019	GRINDER HEAD STIFFENER
C	44	2	500107	–	WASHR/FLT 0.625 G8 STL
	45	4	P001682	--	SCREW/SOC. FLAT 5/16-18 S.S.
A	46	2	500778	–	SCREW/CAP HEX. 3/8"-16UNC GR5
	47	1	P000818	–	PLATE/SERIAL NUMBER - USF/BLASTRAC
	48	2	P001420	–	DECAL/MADE IN THE USA-SMALL
	49	1	4726530		SIGN/SAFETY-VERIFY ROTATION
	50	1	P002735	–	DECAL/1-80EZ US FILTER/BLASTRAC
	51	1	P001419		DECAL/CAUTION EYE AND EAR PROTECTION REQUIRED
B	52	4	P002825		LOCATOR POST/GRINDER ADAPTER PLATE
C	53	2	500104	–	WASHER/FLAT 3/8"
C	54	2	500115	–	WASHER/LOCK 3/8"
C	55	2	500070	–	NUT/HEX JAM 3/8"-16UNC
C	56	2	5036860		SCR/CAP HEX M14 0 X 2 00 X 75 G12 BSTL

	ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
	1	1	451476	7680200	CONTROL CAGE/ 55 DEG.
	2	2	681154	90C0244	RETAINER/SIDE
	3	2	681155	90C0245	SKIRT/SIDE
	4	1	690628	95B0016	LINER/R.H. SIDE - SLL
	5	2	690630	420-0029	BRUSH/FRONT-REAR
	6	1	681812	--	NIPPLE/THROTTLE & NUT
	7	1	693232	--	ABRASIVE VALVE CONTROL CABLE
	8	1	P001125	420-0012	SEAL/BEARING UNIT
	9	1	688297	420-0022	HANDLE/ABRASIVE CONTROL
	10	1	696317	420-0024	SEAL/SEPARATOR LID
	11	2	959780	420-0028	MAGNET/SIDE
	12	2	970012	–	CLAMP/CONTROL CAGE
	13	1	976324	420-0030	BRACKET/CONTROL CAGE
	14	1	P002858	–	FRONT CASTER ASSEMBLY
	15	2	P001433	--	KNOB/ALUMINUM HAND
	16	1	P002818	421-0005	BLAST HOUSING
	17	1			
	18	1	688298	420-0021	HANDLE/STEERING
	19	1	P002628	421-0008	MOUNTING PLATE/GRINDER
	20	2	03800001	--	CLAMP/TOGGLE MODEL #305U
	21	1	P002829		GRINDER/METABO
	22	1	P002847	421-0011	MOUNTING PLATE/ELECTRICAL BOX
	23	1	690625	95B0016	LINER/L.H. SIDE - SLL
	24	1	497307	95B0063	LINER/TOP - SLL
	25	1	P000001	420-0015	VALVE/ABRASIVE CONTROL
C	26	1	P003128	421-0018	CASTER BRACKET/WIDE WHEEL BASE
	27	1	P002617	421-0004	HUB/WHEEL
	28	1	696287	--	SPRING/COIL .048 WIRE
	29	1	459556	77D0663	WHEEL/ 6-1/2" OPEN FACE
	30	2	959783	420-0027	MAGNET/ FRONT- REAR
	31	1	696288	420-0016	SCREEN/SEPARATOR
	32	4	P001683	--	SCREW/SOC. FLAT 5/16-18 S.S.
	33	4	500114	–	WASHER/LOCK 5/16"
	34	4	P001684		SCEW/SHCS 5/16"-18 SS
	35	1	P002639	421-0009	ARBOR NUT/1-80EZ
	36	1	P002844	421-0010	ELECTRICAL ENCLOSURE
	37	4	500102	–	WASHER/FLAT 1/4"
	38	8	500953	–	WASHER/LOCK 1/4" GR5
	39	4	500178	–	SCREW/CAP HEX. 1/4"-20UNC
	40	4	500058	–	NUT/HEX 1/4"-20UNC
	41	1	P002856	421-0012	SEAL/FELT GRINDER ADAPTER PLATE
C	42	2	698294	–	CASTER/SWIVEL 4" X 1-1/4"

NOTE: WEIGHT WITH 50' EXTENSION CORD (NOT SHOWN) IS 123 POUNDS.





ITEMS #48-#51 ARE CONTAINED IN PART NUMBER P002661. USE THIS PART NUMBER WHEN ORDERING AN ENTIRE SET OF DECALS. REFERENCE PRINT NUMBER 421-0013.

REV	ZONE	DESCRIPTION	DATE	BY	NCR#
C	BOM	ADDED ITEMS #53-#56; ITEM #42 WAS P002646; REMOVED P/N P002701; ITEM #26 WAS P/N P002619; ADDED P/N P003129 & 500107 (ITEMS #43 & #44 RESPECTIVELY); REMOVED P/N'S 500106, 500118, & 500062	11/10/03	PTR	
B	F2	ADDED ITEM #52	3/13/03	PTR	
A	F1	ADDED ITEM #46	8/13/02	PTR	

REVISION

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APPROVAL | APPROVED BY: PTR | APPROVAL DATE: 11/10/02

PART NO. 1-80EZ

DIMENSIONAL TOLERANCES: FABRICATING | WELDING & ASSEMBLY | RELATIONAL

TOLERANCE MACHINING: ANGLES ± .500°; 1 PL DEC ± .030; 2 PL DEC ± .010; 3 PL DEC ± .005

BLASTRAC

GENERAL ASSEMBLY

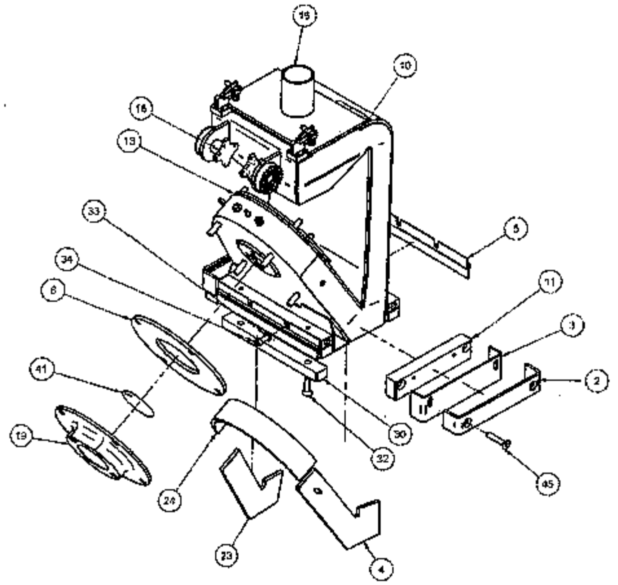
1-80EZ

SCALE 1:4 | DRAWN PTR | DATE 4/3/02 | SHT 1 OF 3

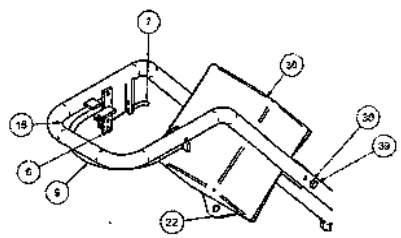
421-0001

NOTE:

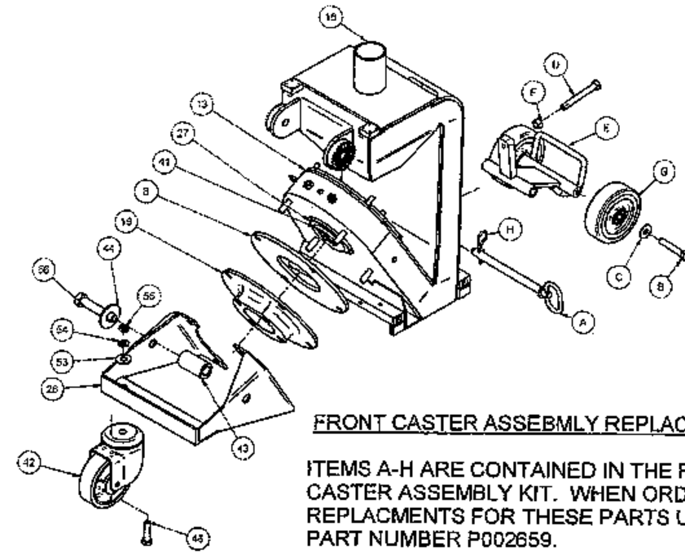
1. PART TO BE FREE OF SHARP EDGES, BURRS, SLAG AND WELD SPATTER



LINERS, MAGNETS AND SEALS



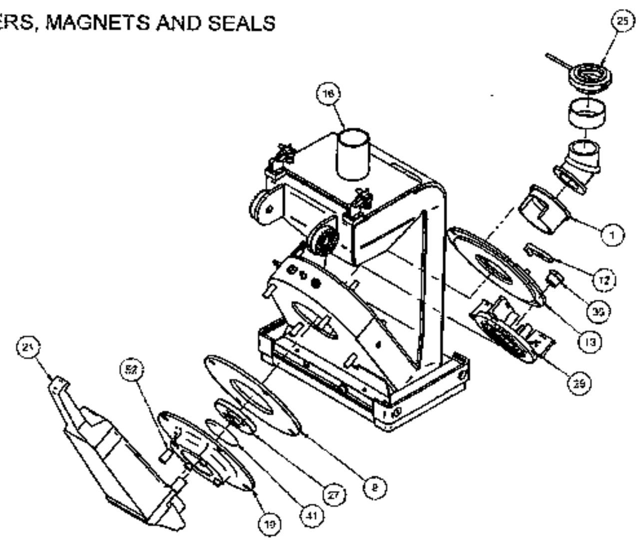
VIEW OF OPERATOR CONTROLS



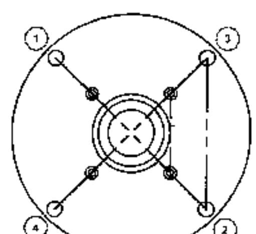
CASTER ASSEMBLY

FRONT CASTER ASSEBMLY REPLACEMENT

ITEMS A-H ARE CONTAINED IN THE FRONT CASTER ASSEMBLY KIT. WHEN ORDERING REPLACMENTS FOR THESE PARTS USE PART NUMBER P002659.



BLAST WHEEL AND ABRASIVE VALVE STACK-UP



NOTE: WHEN ATTACHING THE GRINDER TO THE ADAPTER PLATE AND THE ADAPTER PLATE AND CHASSIS TO THE HOUSING, USE A CROSSING PATTERN WHEN TIGHTENING CAP SCREWS AND NUTS. SEE FIGURE AT LEFT

TORQUE SPECIFICATIONS

ARBOR NUT:	20 ft-lb
ADAPTER PLATE/CHASSIS TO HOUSING:	20 ft-lb
GRINDER TO ADAPTER PLATE:	45 in-lb

NOTE:

1. PART TO BE FREE OF SHARP EDGES, BURRS, SLAG AND WELD SPATTER

REVISION

DIMENSIONAL TOLERANCES

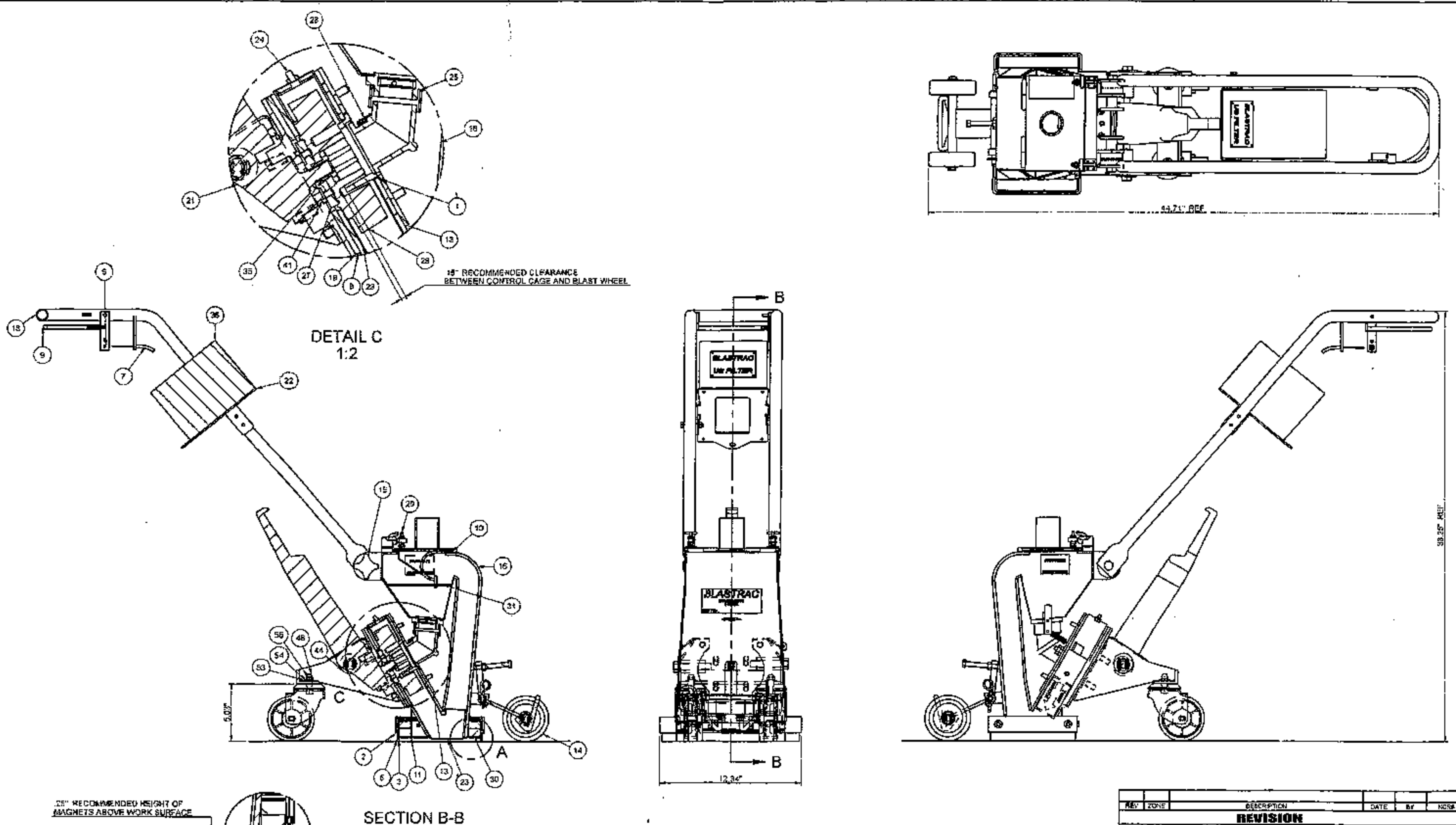
BLASTRAC

GENERAL ASSEMBLY

1-8DEZ

SCALE 1:4 DRAWN PTR DATE 4/3/02 SHT 3 OF 3

421-0001



NOTE:

1. PART TO BE FREE OF SHARP EDGES, BURRS, SLAG AND WELD SPATTER

REV	ZONE	DESCRIPTION	DATE	BY

DIMENSIONAL TOLERANCES

FABRICATING	WELDING & ASSEMBLY	RELATIONAL
TWO PLACE DECIMALS +/-0.03"	TWO PLACE DECIMALS +/-1.06"	FLATNESS +/-.06"
FRACTIONS	FRACTIONS	LENGTH THROUGH
ANGULAR (POSITIONAL) +/- 1/2°	ANGULAR (POSITIONAL) +/- 1/2°	SQUARENESS +/-0.12"
BEND RADIUS IS EQUAL TO MATERIAL THICKNESS, UNLESS OTHERWISE NOTED	ALL WELDMENTS +/-0.12"	CORNER, MAX DIFFERENCE IN DIAGONALS

REV	ZONE	DESCRIPTION	DATE	BY	NOSA

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APPROVAL | APPROVED BY: PTR | APPROVAL DATE: 11/18/02

PART NO. 1-8DEZ

TOLERANCE MACHINING

ANGLES ±.500°
1 PL DEC ± .060
2 PL DEC ± .010
3 PL DEC ± .005

BLASTRAC

OKLAHOMA CITY, OK 73121 USA

GENERAL ASSEMBLY
1-8DEZ

SCALE 1:4 | DRAWN PTR
DATE 4/3/02 | SHT 2 OF 3

421-0001

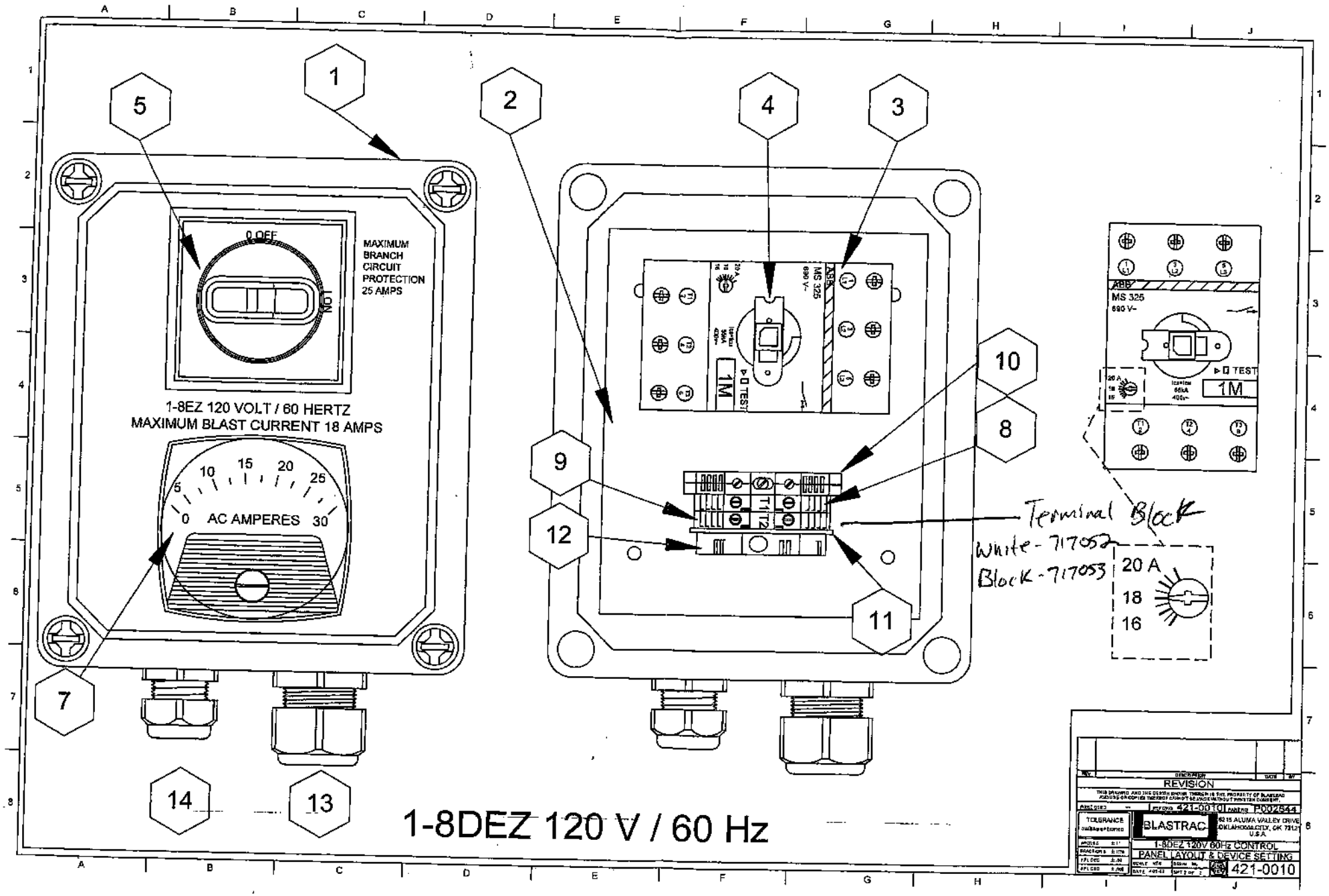
John P.

2/29/2008

P004262
1-8DEZ / 1-9DEZ
120V 60 HZ POLY V2 BOM

ITEM NUMBER	QTY	PN	DESCRIPTION
1	1	P004258	ENCLOSURE, 8X6X4, MODIFIED w/ HOLES
2	1	P004249	ALUMINUM BACK PANEL
3	1	P004250	MOTOR CIRCUIT PROTECTOR, ROTARY OPERATOR, 17-23 AMP
4	1	P004251	MOTOR CIRCUIT PROTECTOR, ROTARY OPERATOR HANDLE, SHAFT & ADAPTER
5	1	P000443	AMMETER, AC, 2.5", UL VERSION, 30 AMP, SELF-CONTAINED
6	1	717053	TERMINAL/ TERMINAL BLOCK, BLACK
7	1	717052	TERMINAL/ RK2.5-4/TERMINAL BLOCK, WHITE
8	1	717050	TERMINAL/ GRD TERMINAL BLOCK
9	1	717048	TERMINAL/ END BARRIER, KBL6-10 AND AP2.5-10 TERMINAL BLOCK
10	1	717045	TERMINAL/ ES35, TERMINAL END STOP
11	1	P003096	CORD GRIP 1/2" LARGE W/ LOCK NUT
12	1	P003097	CORD GRIP 3/4" W/LOCK NUT
13	1	P000712	PLUG, 2 POLE W/ GROUND, 120VAC, 15 AMP
14	1	P000329	LINK, QUICK, 5/16, CLIP CLOSURE
15	1	714657	STRAIN RELIEF, DOUBLE EYELET, .75 CORD DIA
16	50	P002254	WIRE, 10AWG, 3 CONDUCTOR TYPE SO
17	1	P004550	ENGRAVED FACEPLATE

P002250 Circuit P
2251 Shaft
2252 Knob

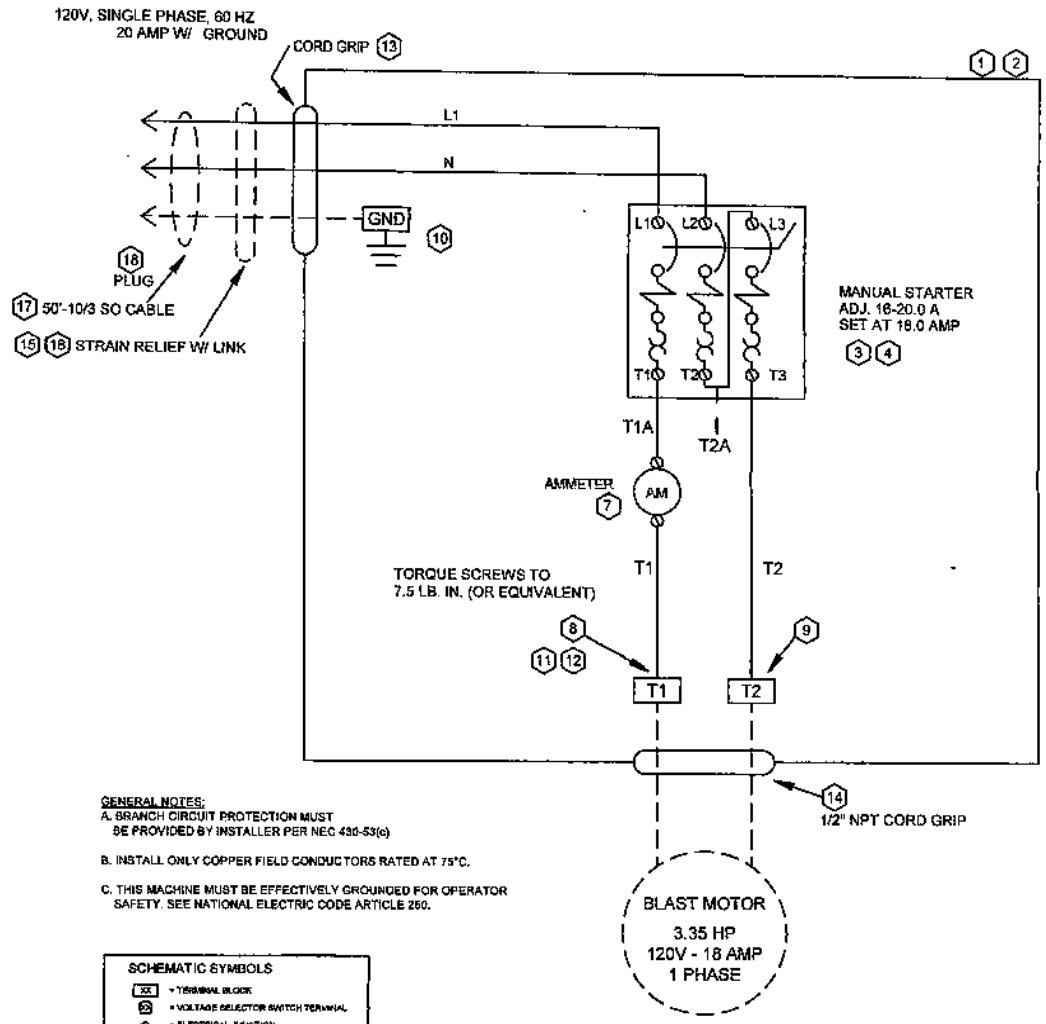


REVISION

TOLERANCE	BLASTRAC	1-8DEZ 120V 60Hz CONTROL	
		PANEL LAYOUT & DEVICE SETTING	421-0010

1-8DEZ CONTROL PANEL FOR 120V/60Hz

TOTAL FLA	LARGEST MOTOR FLA @ SUPPLY VOLTAGE
18.0 AMPS	18.0 AMPS 120V
PHASE - 1	ENCLOSURE - TYPE 1
HERTZ - 60	MODEL - 1-8EZ
MAX. BRANCH CIRCUIT PROTECTION	25 AMPS



GENERAL NOTES:

A. BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC 430-53(c)

B. INSTALL ONLY COPPER FIELD CONDUCTORS RATED AT 75°C.

C. THIS MACHINE MUST BE EFFECTIVELY GROUNDED FOR OPERATOR SAFETY. SEE NATIONAL ELECTRIC CODE ARTICLE 250.

SCHEMATIC SYMBOLS

- XX = TERMINAL BLOCK
- = VOLTAGE SELECTOR SWITCH TERMINAL
- = ELECTRICAL JUNCTION
- -S-XX = COMPONENT TERMINAL AND NUMBER
- XX = WIRE NUMBER
- (GO) = WIRE COLOR AND AWG
- (000) (000) = PLUG/RECP TERMINAL NUMBER
- PTT = PUSH TO TEST PILOT LIGHT
- = WIRE EXTERNAL TO ENCLOSURE

REV	DESCRIPTION	DATE	BY

REVISION

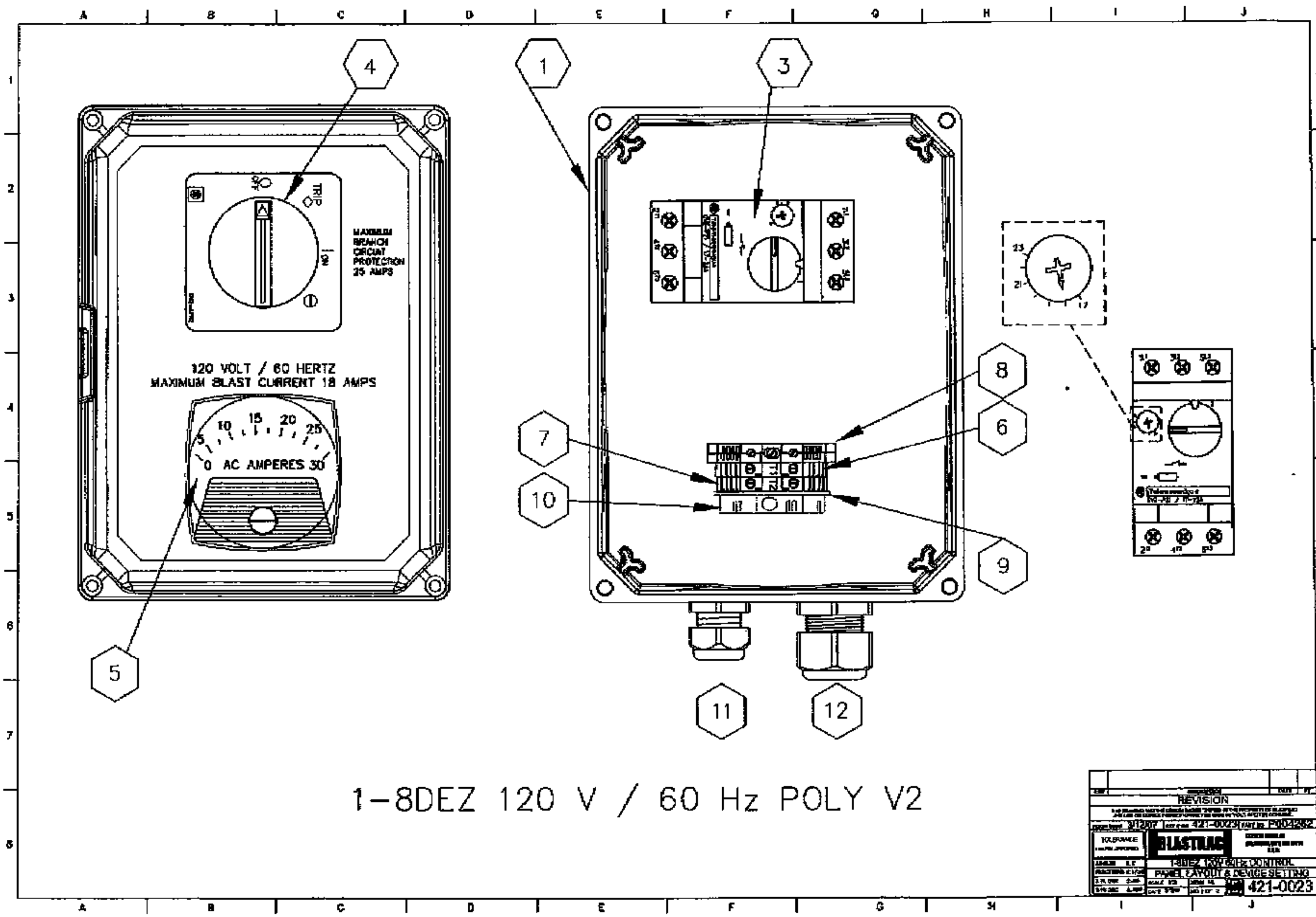
BLASTRAC
6215 ALUMA VALLEY DRIVE
OKLAHOMA CITY, OK 73121
U.S.A.

DATE	DWG.	NO.	SCALE	DRWN
4-29-02	421-0010	P002644	NTS	ML

1-8DEZ BLAST UNIT 120V 60 Hz.
SCHEMATIC

SHEET 1 OF 2

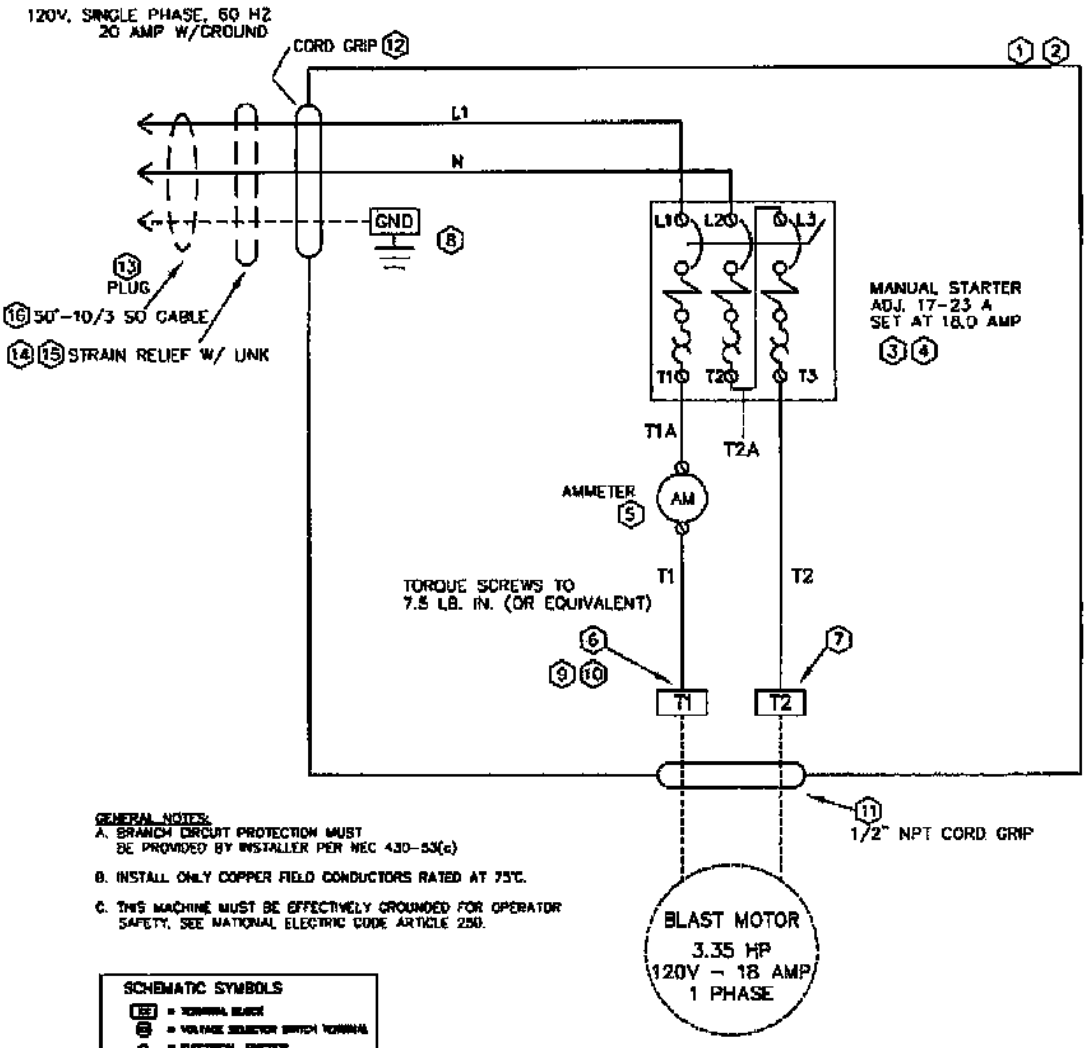
CAD GEN 421-0010



1
3
4
5
6
7
8
9
10
11
12
TRIP
OFF
ON
MAXIMUM BRANCH CIRCUIT PROTECTION 25 AMPS
120 VOLT / 60 HERTZ
MAXIMUM BLAST CURRENT 18 AMPS
0 5 10 15 20 25 30
AC AMPERES
1-8DEZ 120 V / 60 Hz POLY V2
REVISION
BLASTRAC
421-0023
P004282
1-8DEZ 120V 60Hz CONTROL
PANEL LAYOUT & DEVICE SETTING

1-8DEZ CONTROL PANEL FOR 120V/60Hz POLY VERSION 2

TOTAL F.L.A	LARGEST MOTOR F.L.A @ SUPPLY VOLTAGE
18.0 AMPS	18.0 AMPS 120V
PHASE - 1	ENCLOSURE - TYPE 1
HERTZ - 60	MODEL - 1-8DEZ
MAX. BRANCH CIRCUIT PROTECTION	25 AMPS
SHORT CIRCUIT CURRENT: 18 kA RMS SYMMETRICAL 120 V MAXIMUM	



GENERAL NOTES:

A. BRANCH CIRCUIT PROTECTION MUST BE PROVIDED BY INSTALLER PER NEC 430-53(c)

B. INSTALL ONLY COPPER FIELD CONDUCTORS RATED AT 75°C.

C. THIS MACHINE MUST BE EFFECTIVELY GROUNDED FOR OPERATOR SAFETY. SEE NATIONAL ELECTRIC CODE ARTICLE 250.

SCHEMATIC SYMBOLS

REV	DESCRIPTION	DATE	BY
	REVISION		

BLASTRAC	DATE 3-12-07	DWG. 421-0023	P.O. P004262	SCALE NTS	DRWN ML
	1-8DEZ BLAST UNIT 120V 60 Hz.			SHEET 1 OF 2	421-0023
	SCHEMATIC - POLY VERSION 2				