BLASTRAC

Operating Instructions

Model
GPXP1018LPP
Ride-On Shot Blasting System

INTRODUCTION

This manual has been prepared to assist the operator and maintenance personnel in understanding the machine so that it may be operated in the safest and most efficient manner and maintained in the best condition. Therefore, it is necessary that all personnel responsible for the operation and maintenance of the machine read and understand the manual.

Before attempting to operate, service or maintain the machine, the personnel should thoroughly familiarize themselves with the physical make-up of the machine. They should be familiar with the major components of the machine and have a general understanding of overall operations.

The operating and maintenance personnel must obey all the warnings and safety precautions posted on the machine and stated throughout this manual. Serious injury to personnel or severe damage to the equipment may result if the warnings and precautions are not followed.

You will be notified of any changes that occur after this manual is printed. We will send you manual revisions that should be inserted in the manual in accordance with instructions that will be forwarded with them.

Receipt of Machine

Examine the shipment carefully for possible damage that might have occurred while in transit. If any damage is noted, notify the transportation carrier immediately and advise Blastrac.

FORWARD

Blastrac is pleased that you have selected the Model GPX-10-18 Blast Cleaning Machine for you surface preparation requirements. This environmental, closed-cycle, surface preparation machine has been designed and built for abrasive blast cleaning of horizontal surfaces.

This manual has been prepared to assist the operator and the maintenance personnel in understanding the machine so that it may be operated in the most efficient manner and maintained in the best condition. Therefore, it is necessary that all personnel responsible for the operation and maintenance of the machine read the manual thoroughly. By following the instructions in this manual, the GPX-10-18 system can be easily and effectively operated, serviced and maintained by personnel assisted by a brief period of familiarization and training from a Blastrac technician.

Before attempting to operate, service, or maintain the machine, the personnel should thoroughly familiarize themselves with the physical makeup of the machine, be familiar with the major systems of the machine, and have an understanding of its operation.

The operating and maintenance personnel must obey all the warnings and safety precautions posted on the side of the machine and stated throughout this manual. Serious injury to personnel or severe damage to the equipment may result if the warnings and precautions are not followed, or through careless handling of this equipment.

Initial operation and maintenance must be done cautiously. Extreme care should be taken when activating any control devices until the response of the machine and its various components are clearly understood.

If you have any questions or problems in regard to the operation or capabilities of this Blastrac machine, please contact:

Blastrac
13201 North Santa Fe
Oklahoma City, OK 73114
405/478-3440
800/256-3440

or your nearest Service Center.

BLASTRAC®/SAWTEC®
WARRANTY POLICY

This document is to be used as a guide in determining warranty policies and procedures for BLASTRAC/SAWTEC products. It is to be used in determining whether a warranty is justified and also as a procedural guide in completing a BLASTRAC/SAWTEC Warranty Claim form.

Warranty Responsibility:

The distributor or the end user **must** prepare a Machine Warranty Information Card when the machine is delivered. Failure to comply will make any and all warranties on this equipment null and void. Credit for warranty repairs will be given only after receipt of the WARRANTY CLAIM FORM, properly completed with all the required details. Submittal details are described later in this document.

Warranty Policy:

1. Blastrac warrants its products against defects in material and workmanship under normal and proper use for a period of **1 year** from the date of delivery as noted on the returned warranty registration card; in the case of Rental Fleet Machines, date of assignment to Rental Fleet. Such warranty is extended only to the buyer who purchases the equipment directly from Blastrac or its authorized distributor. This warranty does not include expendable parts such as, but not limited to, blades, blast wheel, wear plats, liners and seals. **If the warranty card is not returned within 30 days of delivery date, the warranty period is limited to 6 months from the date of delivery as noted on the warranty registration card.**

2. The obligation under this warranty is strictly limited to the replacement or repair, at Blastrac's option, of machines and does not include the cost of transportation, loss of operating time, or normal maintenance services.

3. This warranty does not apply to failure occurring as a result of abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to the machine without express written consent of Blastrac.

4. Warranty request must be submitted in writing within thirty (30) days after failure.

5. Written authorization to return merchandise under warranty must first be obtained from Blastrac.

Warranty Policy (Continued)

6. Blastrac reserves the right to inspect and make the final decision on any merchandise returned under warranty.

7. Blastrac offers no warranty with respect to accessories, including but not limited to, engines, motors, batteries, tires and any other parts not manufactured by us but which the original manufacturer warrants.

8. Blastrac reserves the right to make product changes or improvements without prior notice and without imposing any obligation upon itself to install the same on its products previously sold.

9. The above warranty conditions can only be altered by Blastrac. Blastrac must confirm alterations in writing for each specific transaction.

10. Blastrac reserves the right to establish specific warranty terms for used or demo machines on an individual transaction basis. Invoices covering such merchandise will clearly state the provisions of the applicable warranty for each specific transaction.

11. WE DO NOT AUTHORIZE ANY PERSON, REPRESENTATIVE OR SERVICE OR SALES OUTFIT TO MAKE ANY OTHER WARRANTY OR TO ASSUME FOR US ANY LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS OTHER THAN THOSE CONTAINED HEREIN.

12. UNDER NO CIRCUMSTANCES SHALL BLASTRAC BE LIABLE TO CUSTOMER OR ANY OTHER PERSON FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF ANY WARRANTY OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.

13. BLASTRAC MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE BLASTRAC PRODUCTS SOLD PURSUANT THERETO.

Blastrac®/Sawtec® Warranty Registration Card

NOTICE!

TO THE DELIVERING DISTRIBUTOR OR END USER

To ensure the proper warranty coverage is extended to the owner of this machine, fill out the attached card **COMPLETELY** and **ACCURATELY** and return to Blastrac.

The warranty period will start on the delivery date entered below.

The distributor or the end user must prepare a machine warranty information card when the machine is delivered. Return of warranty card will extend the warranty period to **1 year** from the date entered below. **Failure to comply will make any and all warranties on the equipment void after 6 months**.

USER'S REFERENCE INFORMATION

Delivery Date _____
Delivering Distributor's Name and Address _____
_____
_____
_____
_____
SIGNATURE OF DELIVERING DISTRIBUTOR'S REPRESENTATIVE

Machine Model No. _____
Machine Serial No. _____
Modifications _____
_____
_____
_____
_____

CUT HERE

WARRANTY REGISTRATION CARD

IMPORTANT! To ensure that your Blastrac/Sawtec machine is covered under warranty, please fill in the following information and mail or fax it to Blastrac, 6215 Aluma Valley Drive, Oklahoma City, OK 73121, Fax No. 405-478-8608.

(Please print)

Company _____
Address _____
_____
City, State, and Zip code _____
Telephone Number _____
Contact Person _____
Date of Purchase _____ Date Received _____
Machine Model No. _____
Distributor Name _____
End User Name _____
End User E-mail _____

Change of Owner or New Address Registration Card

If you are not the owner of record as shown on the manual copy of the warranty registration card, do not operate this machine before contacting Blastrac/Sawtec at 800-256-3440 ext. 3185. Verify the following before operating the equipment:

1. You have the most recent operations and maintenance manual.
2. Any safety related updates have been incorporated in your equipment.
3. You have had training by an authorized Blastrac/Sawtec representative or arrange for the training.
4. Blastrac/Sawtec has a record of your new ownership registration for any future contact that may be necessary on safety related matters.

USER'S REFERENCE INFORMATION

Date _____
Previous Owner's Name and Address _____
_____
_____
_____
_____

Machine Model No. _____
Machine Serial No. _____
Modifications _____
_____
_____
_____
_____

CUT HERE

CHANGE OF OWNER OR NEW ADDRESS REGISTRATION CARD

IMPORTANT! To ensure that your Blastrac/Sawtec machine owner's record is up to date, fill in the following information and mail or fax it to Blastrac, 6215 Aluma Valley Drive, Oklahoma City, OK 73121, Fax No. 405-478-8608.

(Please print)

Company _____
Address _____
_____
City, State, and Zip code _____
Telephone Number _____
Contact Person _____
Date of Purchase _____ Date Received _____
Machine Model No. _____
Distributor or Previous Owner Name _____

Table of Contents

Section 1

1.1 Safety Instructions

1.1 Safety Instructions

Note: Please read these instructions carefully and completely prior to operating this equipment.

1. All personnel in the vicinity of this machine must wear safety goggles and adequate ear protection while it is in operation.

2. Never perform maintenance on the machine while it is running.

3. When operating machine, keep hands away from all moving parts.

4. Do not wear loose fitting clothing or attempt to remove V-belt covers.

5. Do not stand to side of blast housing while machine is in operation due to the possibility of blade failure.

6. If an emergency should occur while machine is in operation, push the top of the throttle assembly down and turn ignition switch to the off position.

7. Do not operate this equipment on wet surface or in the vicinity of flammable liquids.

8. When repairing underside of machine, always use jack stands.

9. Before transporting machine, be sure dust is cleaned out of the dust collector. The extra weight will cause stress on the axles and may cause them to break.

10. In this manual, we have provided an operation/maintenance checklist. These items **must** be checked before each operation for the safety of the operator as well as the machine.

BEFORE STARTING MACHINE, BE SURE ALL V-BELTS ARE IN GOOD CONDITION!

Section 2

2.1 Operator Responsibilities

2.1 Operator Responsibilities

1. The operator shall provide personnel who have been trained by a Blastrac Technician for the operation and maintenance of Blastrac equipment.

2. The operator shall provide the necessary blasting media in accordance with the recommendations of a Blastrac technician so that the machine will operate at maximum efficiency.

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

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

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

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

7. The operator shall provide the following tools & accessories:

Hammer	Screwdrivers
Wrench Set	VOM (meter)
5/16” Allen Wrench	Magnetic Broom
Buckets	

Section 3

3.1 Operator Awareness

The GPX 10-18 machine is designed to blast a concrete surface and reclaim all shot and dust. The machine can very easily destroy the concrete surface if not operated properly. The absence of Operator Awareness will create down time and can prove to be very costly. Read the following precautions carefully prior to operation.

1. When the shot valve is open, the machine is throwing shot! Therefore, you must **be sure the shot valve is closed prior to starting** as well as any time the machine comes to a stop.

2. **The speed of travel controls the depth of your cut**. You should run a test pattern to be sure you are not gouging the floor.

3. Due to variances in concrete, it is necessary to check the pattern every 10 feet as the concrete or coated surface may be softer in different areas.

4. The maintenance checklist is provided for blasting efficiency. This list should be completed after each day of blasting. You will save time and money by maintaining you shot blast machine.

5. **The dust collector must be dumped approximately every two hours. If the dust collector gets too full, you will lose all of your suction.** This will result in loss of all shot from the hopper. Check the dust collector after the first 30 minutes. Determine how long you can operate before dumping. All concrete surfaces are different.

6. The gap between the Blades and the Pinch Bar is very important. If you gap exceeds 1/8”, you will begin to trail shot and eventually lose the whole load.

7. The Porta-Shot Blast machine is equipped with blast seals. These seals provide a seal for the suction required and they contain shot that would otherwise be thrown from the machine. If the seals are worn out, you will lose you seal and shot will fly out from the worn areas.

3.2 Operator Sequence

Refer to **Figure 1** for the location of switches and control identified in this procedure.

1. Complete the Operation/Maintenance check list.

2. Place the transmission control lever in the neutral (center) position.

3. Turn ignition switch to ON and start machine.

4. Pull throttle to the wide-open position. Tach should read between 3630 rpm to 3680 rpm.

5. Push the transmission lever forward to go forward and backward for reverse.

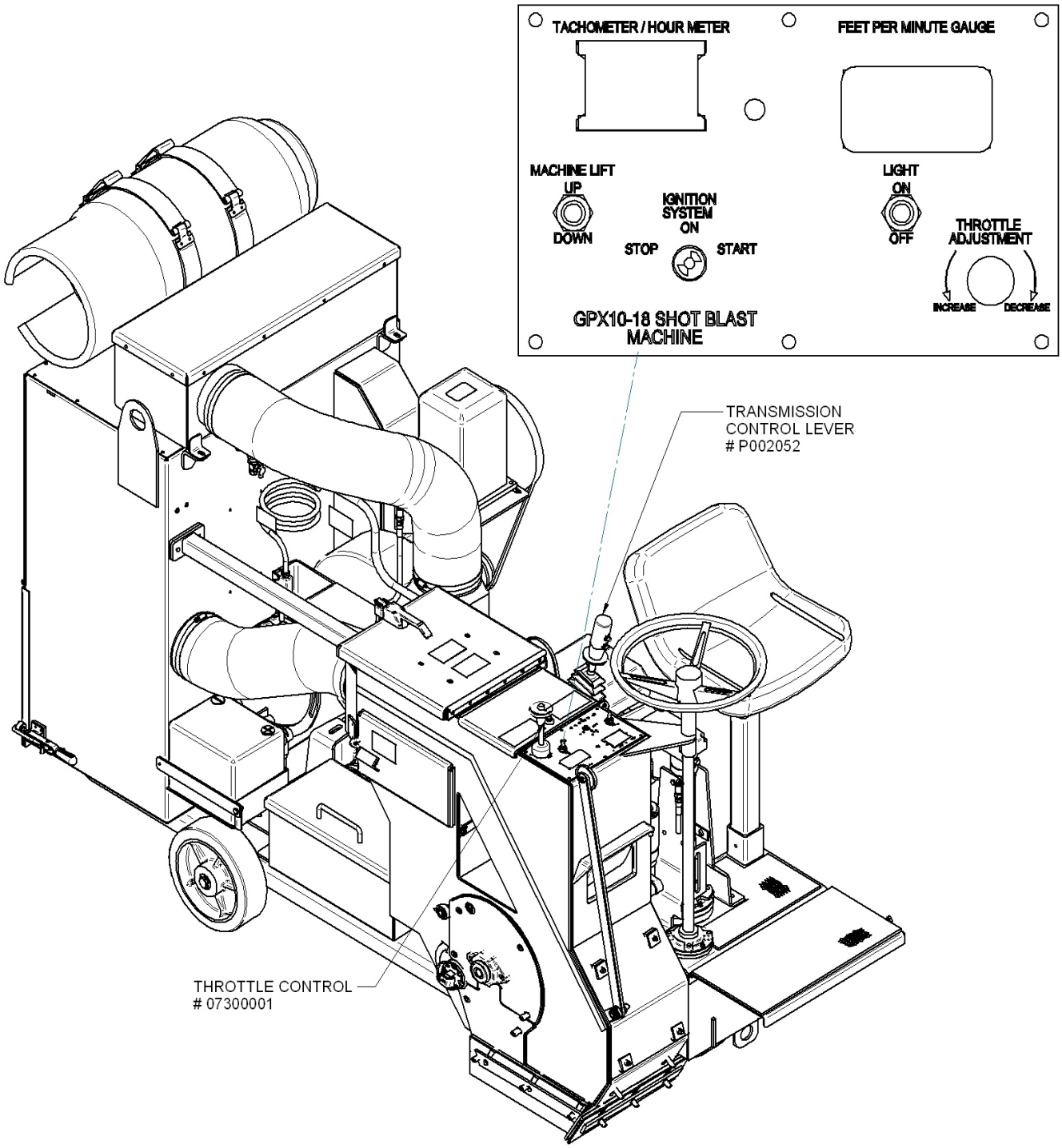
ALWAYS BLAST IN FORWARD DIRECTION

6. Adjust the height of the seals using the Housing Lift switch. Lower seals until they contact the surface. Then lower them an additional ¼ inch.

7. Start machine moving forward and slowly open the shot valve. The slower the machine travels while the blast wheel is engaged, the deeper the cut.

8. When coming to a stopping point, shut off the shot valve about 5 feet before stopping. (This will allow you to clear the housing of shot keeping you from blasting a hole when you come to a complete stop.) This distance will vary depending on the speed of travel (fast – more than 5 feet, slow – less than 5 feet).

Figure 1


TACHOMETER / HOUR METER
FEET PER MINUTE GAUGE
MACHINE LIFT
UP
DOWN
IGNITION SYSTEM ON
STOP
START
LIGHT
ON
OFF
THROTTLE ADJUSTMENT
INCREASE
DECREASE
GPX10-18 SHOT BLAST MACHINE
TRANSMISSION CONTROL LEVER # P002052
THROTTLE CONTROL # 07300001

3.3 Operation Adjustments

The GPX-10-18 is equipped with two fine tune adjustments to make blasting easier.

1. **FRONT END LIFT**: This is used primarily for loading and unloading the machine. This feature may also be used to adjust your seals while operating machine, opposed to stopping machine and doing it manually.

2. **PINCH BAR**: The pinch bar clearance must be checked before each operation. For best blasting results, rotate the pinch bar to allow 1/8" clearance for all applications.

IMPORTANT: AFTER ADJUSTING THE PINCH BAR TO BLADE GAP, ALWAYS SPIN BLAST WHEEL TO VERIFY CLEARANCE ON ALL BLADES.

Section 4

4.1 Blade Removal and Installation

Refer to **Figure 2** for the location of parts and equipment identified in this procedure.

Caution: All electric power must be disconnected and all rotation parts completely stopped before attempting any maintenance procedure. Always observe Zero Motion Status before attempting any adjustments or maintenance.

Refer to Figure (4) for the location of parts and equipment identified in this procedure.

1. Remove the inspection plate below the blast wheel.
2. Rotate the blast wheel to bring the blade that is to be removed into reach.
3. Remove the two (2) cap screws and retainer plate at the end of the blade.
4. Blow dust and shot out of the threaded hole in the end of the blade.
5. Use a slide hammer to pull the blade out of the blast head.

   NOTE: Slide hammer is provided with all machines containing a pinch bar.

6. Clean dust and shot out of the slot for the blast head for proper installation of the blades.
7. Insert the new blade and replace the retainer plate and cap screws.
8. Inspect gap between blade and Pinch Bar for rotation or replacement of Pinch Bar.
9. Install inspection plate.

4.2 Pinch Bar Removal and Installation

Refer to **Figure 2** for the location of parts and equipment identified in this procedure.

Caution: All power must be disconnected and all rotation parts completely stopped before attempting any maintenance procedure. Always observe Zero Motion Status before attempting any adjustments or maintenance.

1. Remove the Pinch Bar retaining lug.
2. Insert a slide hammer into the threaded hole in the end of the Pinch Bar.

   NOTE: Slide hammer is provided with all Pinch Bar machines.
3. Withdraw the Pinch Bar from the blast head.
4. Insert the new Pinch Bar and tap into place with a hammer.
5. Reinstall the Pinch Bar lug bolt.

4.3 Pinch Bar Rotation and Adjustment

Refer to **Figure 2** and **Figure 3** for the location of parts and equipment identified in this procedure.

Caution: All power must be disconnected and all rotation parts completely stopped before attempting any maintenance procedure. Always observe Zero Motion Status before attempting any adjustments or maintenance.

1. Remove the Pinch Bar retaining lug.
2. Rotate the Pinch Bar clockwise one notch if it does not exceed 1/8 inch from blast wheel blades.
3. If Pinch Bar gap is larger than 1/8 inch, the Pinch Bar should be rotated two (2) notches clockwise.
4. Rotate Pinch Bar with a large adjustable wrench.
5. Reinstall the Pinch Bar lug bolt.

4.4 Blast Wheel Removal

Refer to **Figure 2** for the location of parts and equipment identified in this procedure.

1. **Belts**:
   a) Remove the seat for better access to the work area.

   b) Remove the lower portion of the belt guard and take the three belts off the blast wheel sheave using a flathead screwdriver.

2. **Taper Lock and Sheave Assembly**:
   a) Remove the two set screws from the taper lock.

   b) Install one set screw in the hole, which did not originally have a set screw.

   c) Tighten the set screw until you hear the taper lock “pop”. If the taper lock does not pop, tap the outside of it lightly with a hammer.

   d) Slide the taper lock off the shaft. If the assembly does not slide off the shaft easily, insert a screwdriver in the slot and pull off.

      Note: Be careful not to pry open too far as the taper lock can split in half.

3. **Bearing Collar**:
   a) Remove the two Allen head set screws on each of the two bearing collars.

   b) Remove the bearing collars.

4. **Blast Wheel Bearing**:
   a) Remove the two bolts holding the outside bearing.

   b) Pry the outside bearing off of the shaft.

5. **Inspection Plate**:
   a) Remove the two bolts, which connect the inspection plate to the housing.

   b) Remove the inspection plate.

4.4 Cont'd

6. Cover Plate:

a) Remove the four nuts, which connect the cover plate to the housing.

b) Remove the cover plate.

7. Blast Wheel:

a) Remove the blast wheel drum by pulling the drum shaft through the inside bearing.

Note: If the drum shaft is resistant to come through the bearing, you may use a block of wood and a hammer to force it through.

4.5 Blast Wheel Installation

Refer to **Figure 2** for the location of parts and equipment identified in this procedure.

1. Reverse steps 1-7 under Blast Wheel removal

2. Locate the counter sink holes in the outside of the blast wheel shaft

3. The set screws on the outside blast wheel bearing should be set in these holes. This will align the blast wheel from side to side.

4. Before you tighten the blast wheel bearings, you must align the blades with the Pinch Bar. Refer to operation adjustments for proper setting.

5. When the blast wheel is aligned with the Pinch Bar, you can tighten the inside blast wheel bearing.

4.6 Top Liner Removal and Installation

Refer to **Figure 4** for the location of parts and equipment identified in this procedure.

Before attempting to remove the Top Liner, you must complete steps 1-7 under Blast Wheel Removal. If the Top Liner has completed more than 100 hours of

4.6 Cont'd

blasting, it will have expanded. To remove the expanded Top Liner, you may weld a turn buckle across the inside to return the liner to its natural position. If the liner is worn out, it will be much easier to cut it in half with a torch and then remove it.

1. Remove the two bolts located at the top of the blast housing. These bolts are accessible from the outside of the housing.

2. Loosen the one nut located at the bottom of the liner. This nut is protected by a piece of manganese that may also be used for a handle.

3. You must now rotate the liner at least 3 inches to the right to clear the mounting arms and remove the liner.

4. To install the Top Liner, reverse steps 1-3.

4.7 Dust Collector – General

This unit is equipped with an auto pulse dust collector that provides suction to separate the dust from the shot.

The central part of the dust collector is the filter chamber. Dust laden air enters the chamber from the blast head through the exhaust hose and into the dust collector inlet connection located on the left, front side of the dust collector. The dirty air passes through a plenum and flows through an array of six vertically mounted, specially designed filter cartridges. Dust is captured on the surface of these filters allowing clean air to pass to the clean air portion of the dust collector where it exhausts to the open atmosphere through the silencer box.

The dust that was trapped on the external surface of the filters is periodically removed by injecting the filters with a burst of compressed air released from the header tank by a diaphragm valve. The air is delivered via one of three blow-down tubes. This momentary pulse of air allows the dust to fall into the dust bins at the bottom of the filter chamber. Three filters are pulsed at a time, in sequence, determined by a timer board located in the control box located on the front of the dust collector, just above the inlet. This timer board is usually set to pulse a three filter bank every ten seconds. The timer board determines the time between pulses and the length of each pulse. Venturi valves are located above each filter for maximum filter cleaning efficiency.

4.8 Filter Cartridge Removal and Installation

WARNING: Prior to attempting to change or inspect the filter cartridges place GPX-10-18LPP on level surface to prevent movement. Verify that the ignition is in the off position and the key is removed.

Filters:

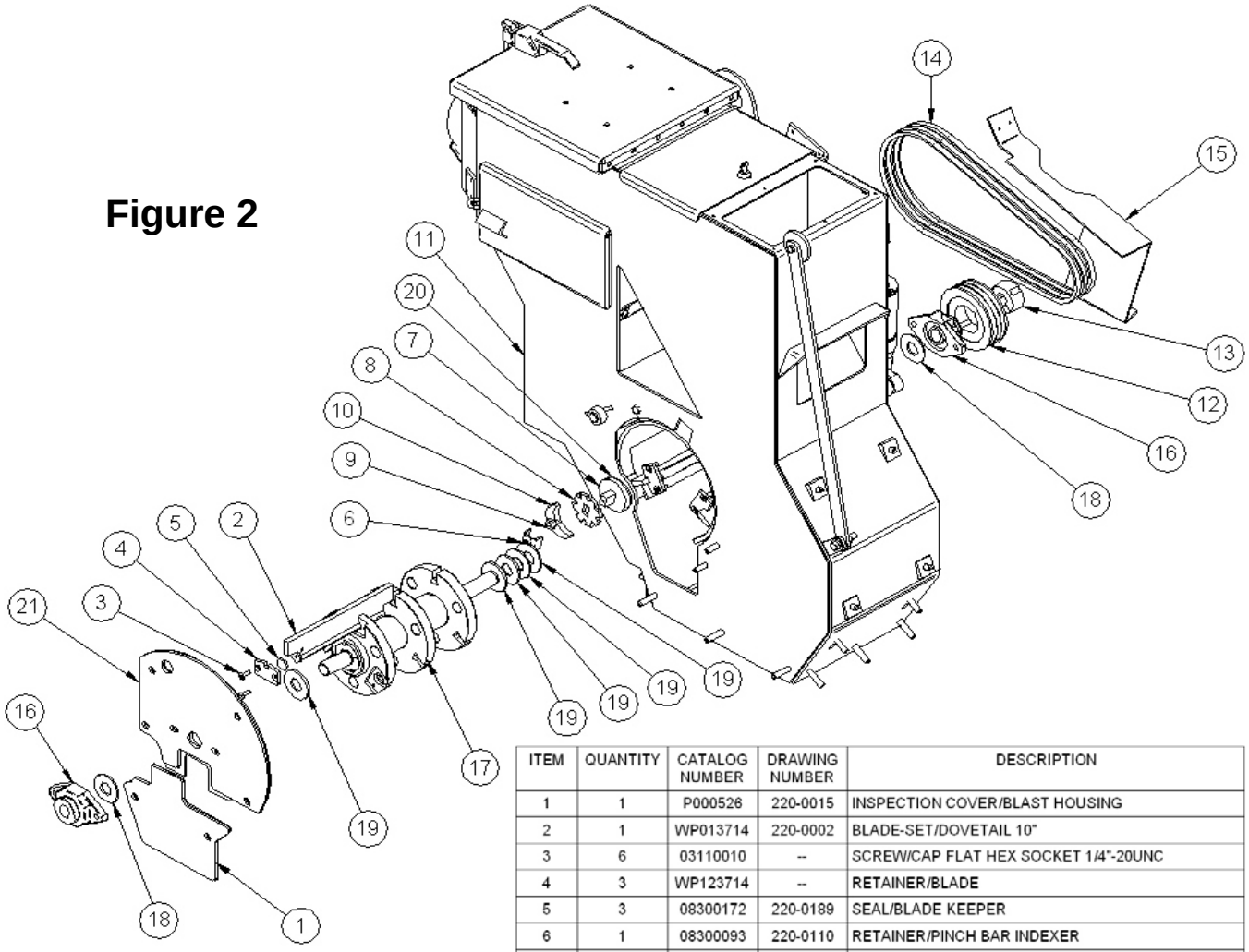
1. Open the back door of the dust collector.
2. Remove the dust bins from the dust collector.
3. Loosen wing nuts and slide filter cartridge down hanger rod.

To replace filter cartridges reverse steps 1-3 above.

Note: Be careful not to damage filters during removal, installation, or inspection.

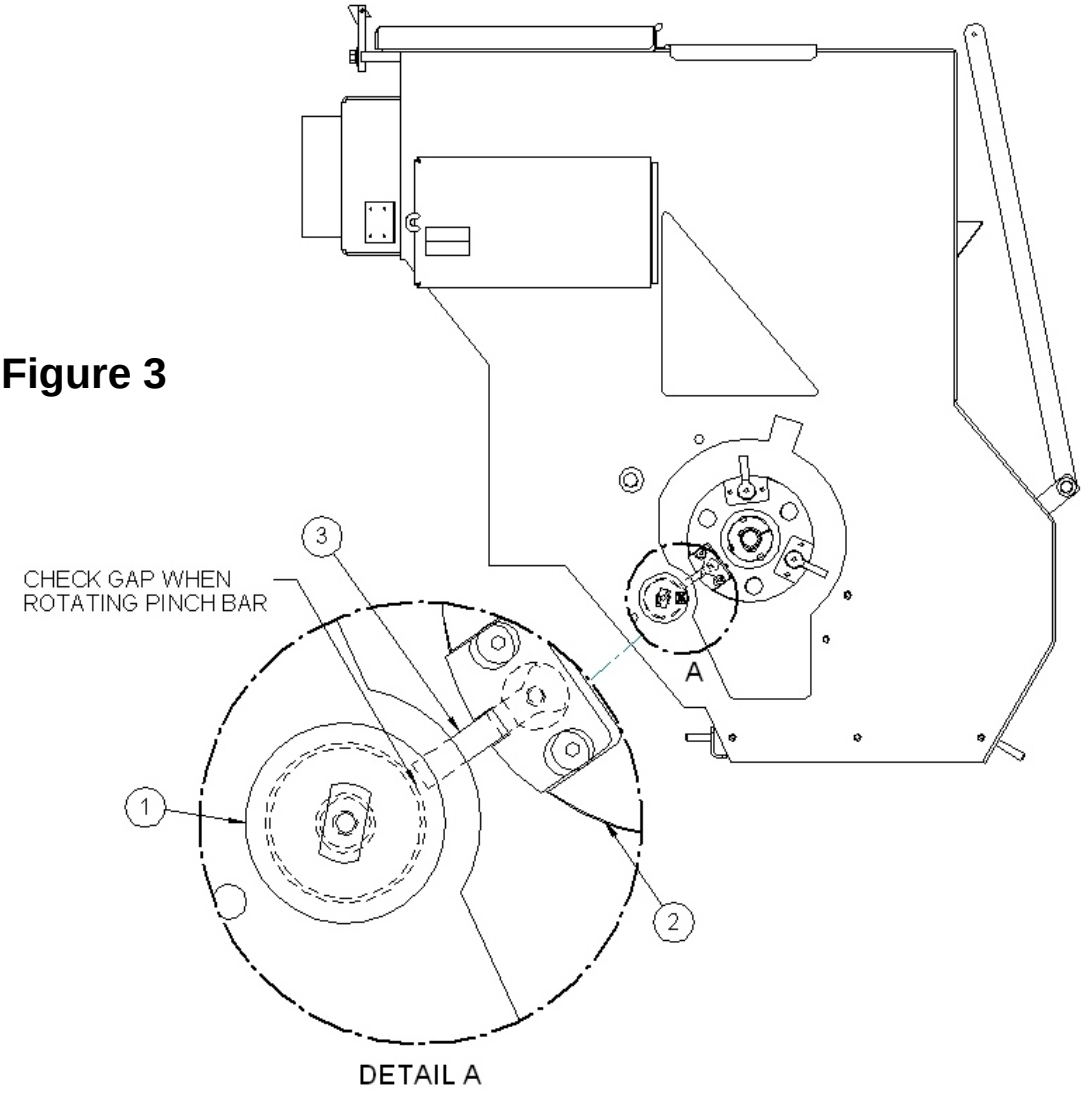
4.9 Machine Diagrams

Figure 2



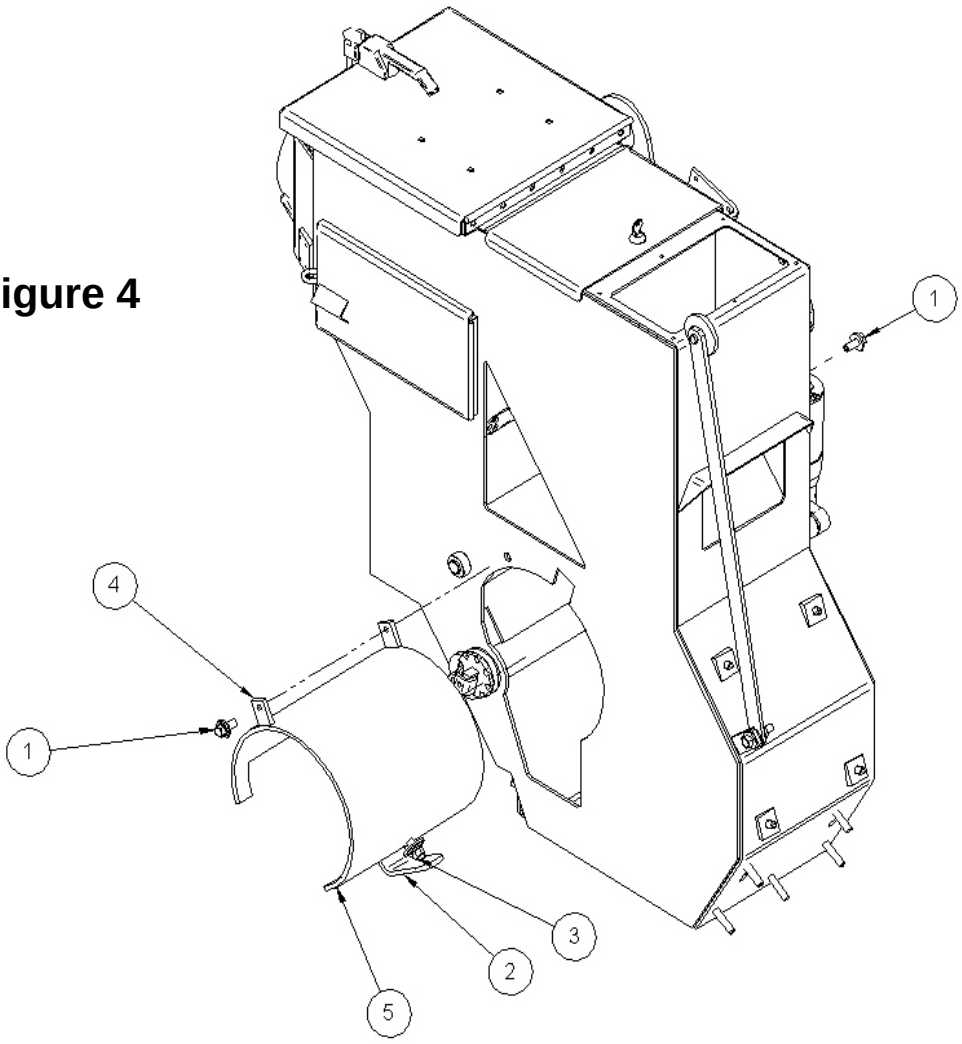
ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	P000526	220-0015	INSPECTION COVER/BLAST HOUSING
2	1	WP013714	220-0002	BLADE-SET/DOVETAIL 10"
3	6	03110010	--	SCREW/CAP FLAT HEX SOCKET 1/4"-20UNC
4	3	WP123714	--	RETAINER/BLADE
5	3	08300172	220-0189	SEAL/BLADE KEEPER
6	1	08300093	220-0110	RETAINER/PINCH BAR INDEXER
7	1	WP033710	220-0261	PINCH BAR
8	1	08300042	220-0059	INDEXER/PINCH BAR
9	1	08300044	220-0061	RETAINER/OUTER PINCH BAR
10	1	08300043	220-0060	RETAINER/INNER PINCH BAR
11	1	P000524	220-0013	HOUSING/BLAST - WELDMENT
12	1	06150031	--	SHEAVE/TAPERLOCK 3/3V4.75-1610 DODGE #112205
13	1	06300024	--	BUSHING/TAPERLOCK 1610 X 1.00 / DODGE #117159
14	3	06100006	--	V-BELT/ 3VX-425
15	1	P001183	220-0288	GUARD/BELT - FRONT **LP ONLY**
16	2	P001083	--	BRG/FG2 DODGE DL 1.000"B 205 D-LOK
17	1	WP123716	220-0007	BLASTWHEEL/DOVETAIL
18	2	08300170	220-0266	SEAL/SHAFT - 1.00" BEARING
19	5	P004038	220-0309	URETHANE SHAFT SEAL
20	1	08300173	220-0190	SEAL/PINCH BAR
21	1	P000525	220-0014	COVER-PLATE/BLAST HOUSING

Figure 3



ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	WP033710	220-0261	PINCH BAR
2	1	WP123716	220-0007	BLASTWHEEL/DOVETAIL
3	1	WP013714	220-0002	BLADE-SET/DOVETAIL 10"

Figure 4



ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	2	2543410	--	SCR/CAP HEX 0.375-16X 1.000 18.8SSTL
2	1	08300157	220-0264	COVER/TOP LINER BOLT
3	1	5000600	--	NUT/HEX 3/8"-16UNC
4	2	08300138	220-0155	EAR/TOP LINER
5	1	WP113721	220-0238	LINER/TOP SLL PINCH BAR - (INCLUDES ITEMS 1-4)

Section 5

5.1 Maintenance Check List

5.2 Maintenance Log

5.1 Maintenance Check List

Operation/Maintenance Check List: The items on this check list **must** be checked before each operation to achieve maximum blasting efficiency and for the safety of the operator as well as the machine.

_____ Blast wheel	Check for balance and excessive wear
_____ Blades	Check for excessive wear
_____ Top liner & Lower liner	Check for excessive wear
_____ Pinch bar	Check clearance and for uneven wear
_____ Gap	To adjust the gap, see operation adjustments
_____ Blast wheel bearings	Check set screws and grease
_____ Shot valve	Check for leaks
_____ Filters	Make sure filters are not clogged or ripped
_____ Engine oil	Check level and change when dirty.
_____ Air cleaner	Change when dirty
_____ Transmission oil	Check for leaks and change when dirty
_____ Axle seals	Check for leaks
_____ Blast seals	Check for excessive wear
_____ Blower bearings	Check set screws and grease
_____ Steering assembly	Check chain tension
_____ Belts	Check quality and tension
_____ Idler assembly	Check bearings
_____ Dust collector latches	Make sure latch is firmly secured to door
_____ Air compressor oil level	Check level and change when dirty
_____ Water relief valve	Drain water from pneumatic system after use

5.2 Maintenance Log

MAINTENANCE LOG

Liners – Inspect for wear	Checked		OK		Change	
Blastwheel - Inspect for wear	Checked		OK		Change	
Filters – Inspect – clean or replace	Checked		OK		Change	
Blades- Inspect for wear	Checked		OK		Change	
Shot valve – Inspect	Checked		OK		Change	
Seals – Inspect for wear	Checked		OK		Change	
Bearings – Inspect set screws and grease	Checked		OK		Change	
Check oil levels -	Checked		OK		Change	
Pinch bar – Inspect for wear, Rotate ¼ turn every 8 hours	Checked		OK		Change	
Belts – Check quality and tension	Checked		OK		Change	
Propane system – check valves for leaks	Checked		OK		Change	

Visit us on the web @ www.blastrac.com

Section 6

6.1 Specifications

6.1 Specifications

The GPX-10-18 Porta-Shot Blast machine is powered by a CH-25 Kohler liquid propane engine. The 25HP machine is capable of cutting up to 1/8" of concrete in one pass. It is driven by a Peerless hydraulic system, controlled by lever arm action.

The GPX-10-18 has a 10" blast pattern using Blastrac's patented blast wheel which reduces hot spots and groves. The blast wheel is a paddle wheel design that is pulley driven at a maximum speed of 5400 RPM continuously. Shot feeds through the shot valve to the blast wheel. The shot and debris rebound to the dust separator and the dust is removed to the dust collector. Clean shot falls back into the hopper for reuse. The machine recycles shot continuously until the machine is shut off. The auto pulse dust collector cleans the six cartridge filters while the machine is running. This machine is capable of cutting up to 1200 square feet per hour, while achieving a brush blast.

Specifications:

Drive Motor……	25 HP Kohler
Propane System……..	Liquid
Motor RPM……	3600 at max idle
Blasting Width……..	10"
Charging System……..	12 volt
Dust Collector……..	600 cfm suction / 135 psi max pulse pressure
Transmission……	Eaton Mod. 700-002 CCW
Transaxle……..	Peerless Mod. ET-12677
Dimensions……	L: 78.5" W: 32" H: 48"
Weight……	1550 lbs

Section 7

7.1 Hazardous Materials Safety Warning

7.1 Hazardous Materials Safety Warning

Some floor or deck surfaces may be coated with or contaminated by **hazardous material**. Typical examples of hazardous materials include tile mastic which is likely to contain **asbestos**, stained areas near electrical equipment which may contain **PCB's**, old paint, which may contain **lead**, stained or surface contaminated floor areas in chemical or other industrial facilities that may contain **pesticides**, **cleaning fluids**, **solvents**, or other **harmful chemicals**.

During the normal operation of shot blasting equipment, surface material is removed and dust is created. When the surface material is contaminated, the dust may contain hazardous material.

It is very probable that dust will be released during the normal operation of Blastrac equipment. If this dust contains hazardous material, there is a danger that exposure to this dust may pose a health risk.

Before using Blastrac equipment on any surface, the area must be inspected for possible contamination.

Blastrac does not warrant its equipment to be suitable for, or approved for, removing hazardous materials.

Before beginning any project involving the removal of hazardous materials, it is the responsibility of the contractor to ensure that the work site and equipment to be used have been inspected and the proposed work has been approved by the proper authorities. It is also the responsibility of the contractor to notify workers of any potential health risks and ensure that workers are properly protected from exposure to hazardous materials and from the long term effects of such exposure.

Blastrac Portable Shot Blast Cleaning Systems are not designed for use to remove, clean, profile, or alter any surface coated with or otherwise contaminated by hazardous material. Blastrac expressly disclaims any liability for injury, illness, death, or damage that might occur or result from such use.

Appendix

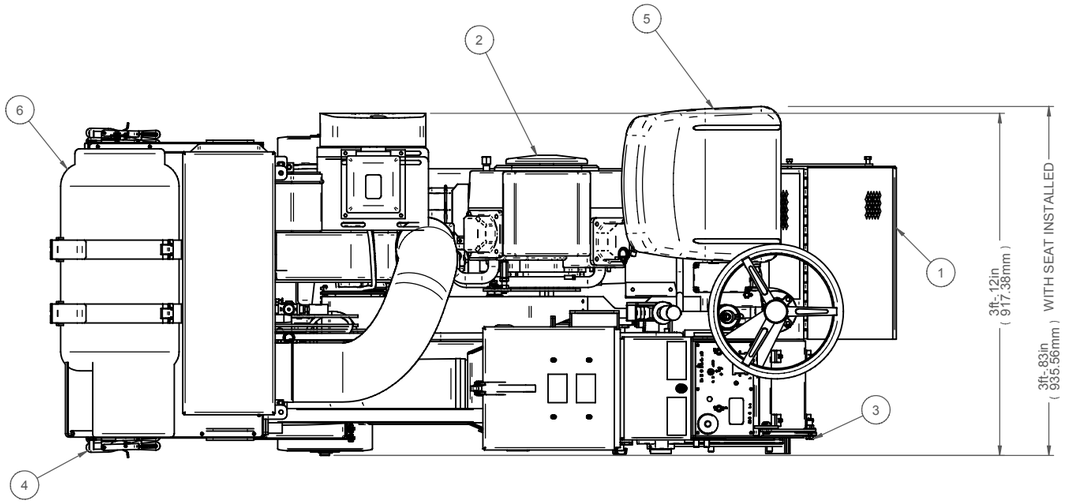
Appendix A – Kohler LPG Fuel System Manual

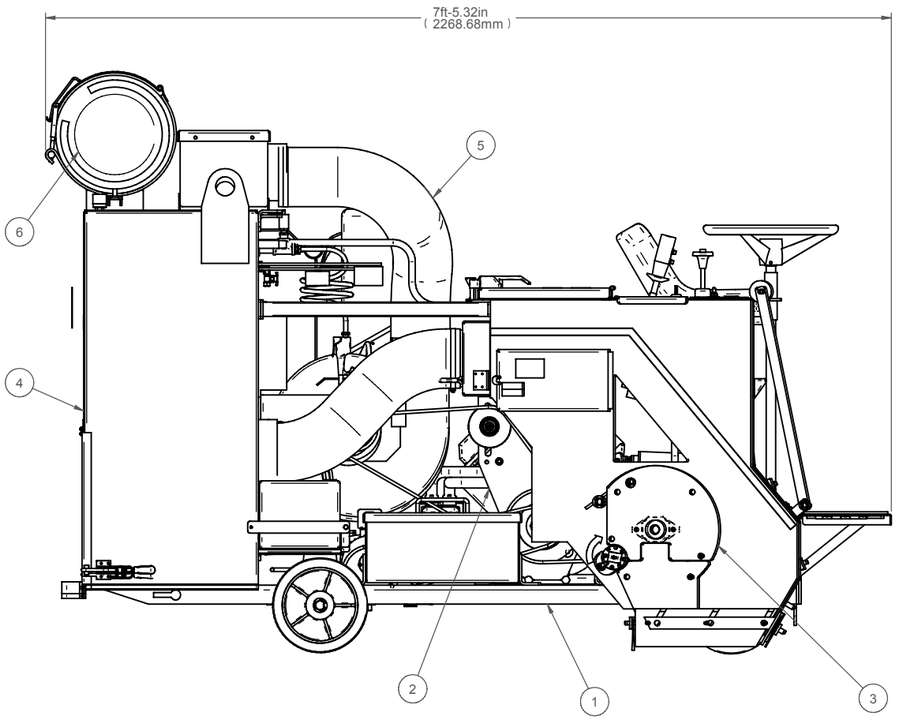
Appendix B – Machine Assembly Drawings

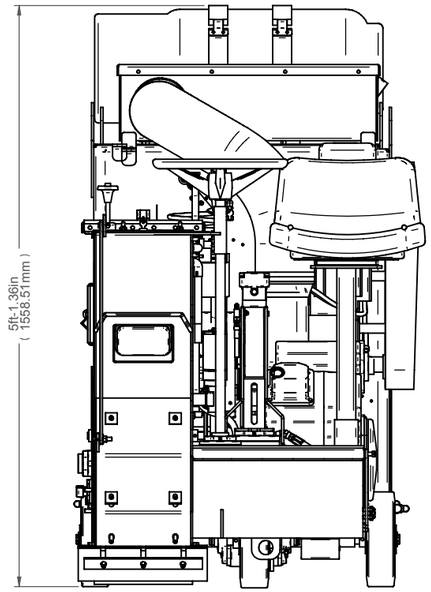
Appendix A – Kohler LPG Fuel System Manual

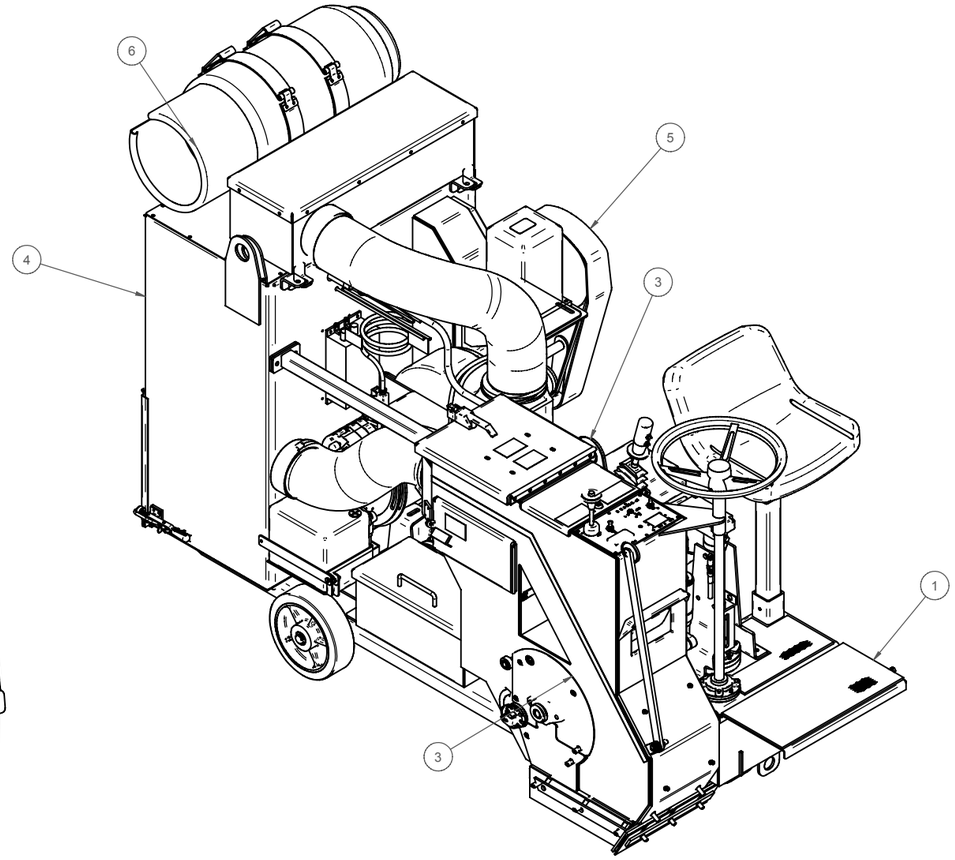
Appendix B – Machine Assembly Drawings

ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	10180001	220-0017	DECK ASSEMBLY
2	1	P004104	--	ENGINE ASSEMBLY - KOHLER 25 HP **PULSE JET ONLY**
3	1	10180003	220-0270	BLASTHEAD ASSEMBLY - 10"
4	1	P004043	220-0314	PULSE JET DUST COLLECTOR ASSEMBLY
5	1	P004091	220-0318	FINAL ASSEMBLY COMPONENTS **PULSE JET ONLY**
6	1	10180008	--	PAINT AND SHIPPING KIT









ISOMETRIC VIEW
1:8

NOTE:

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

REV	ZONE	DESCRIPTION	DATE	BY	NCR#

REVISION

APPROVAL	APPROVED BY: INITIAL	APPROVAL DATE:	DATE

NEXT ASSY	REF DWG	TYP QTY PER MACHINE	PART NO
--	--	--	GPXP1018LPP

DIMENSIONAL TOLERANCES

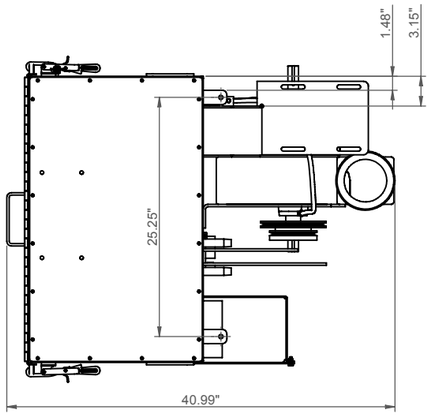
FABRICATING (SHEARING, BURNING, PUNCHING)		WELDING & ASSEMBLY		RELATIONAL	
TWO PLACE DECIMALS	+/- 0.06"	TWO PLACE DECIMALS	-/+ 0.06"	FLATNESS (IN OVERALL	+/- 0.06"
(AND FRACTIONS)		(AND FRACTIONS)		LENGTH THROUGH 60.00")	
ANGULAR (POSITIONAL)	+/- 1/2"	ANGULAR (POSITIONAL)	+/- 1/2"	SQUARENESS (CORNER	+/- 0.12"
BEND RADIUS IS EQUAL TO MATERIAL		SLL WELDMENTS	+/-0.12"	CORNER, MAX. DIFFERENCE	
THICKNESS, UNLESS OTHERWISE NOTED.				IN DIAGONALS)	

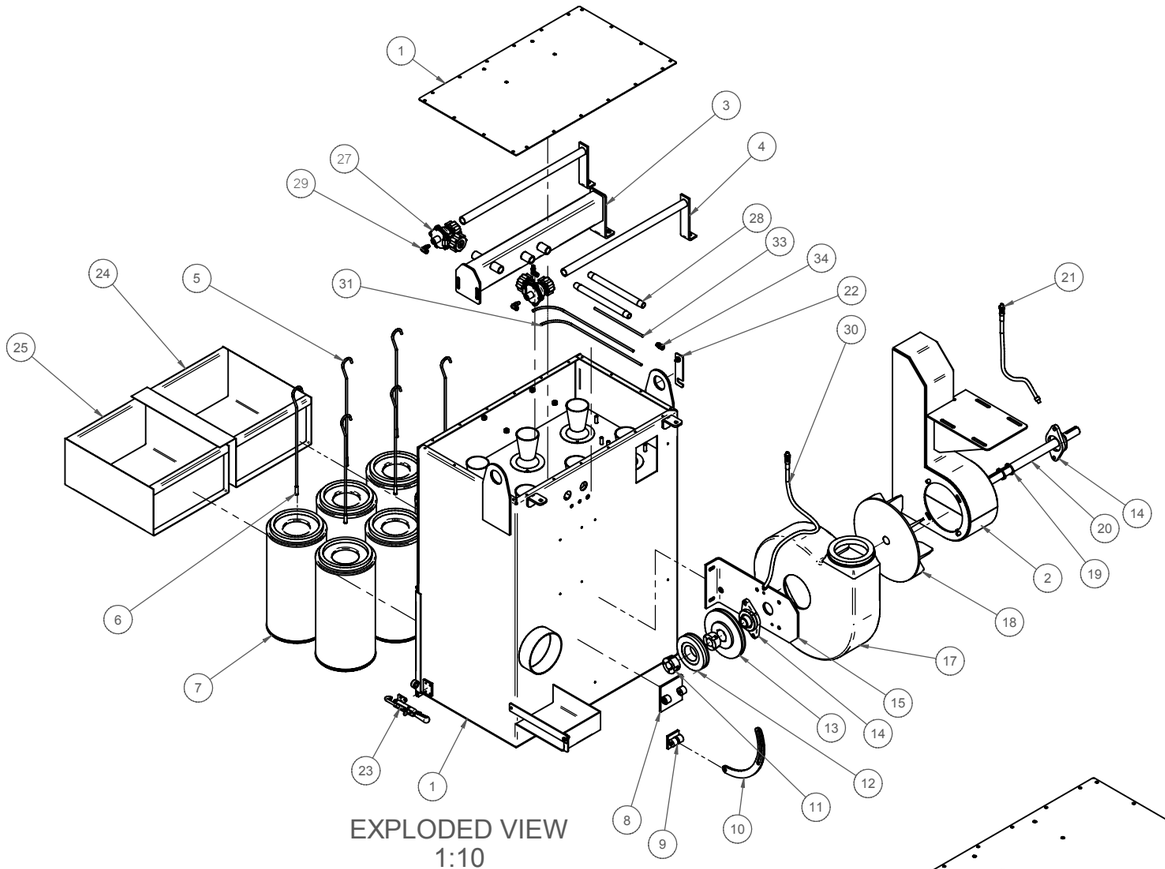
TOLERANCE MACHINING
ANGLES ± .500°
1 PL DEC ± .060
2 PL DEC ± .010
3 PL DEC ± .005

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

MACHINE-ASM/BLASTRAC GPX 10-18 W/ PULSE JET
GPX10-18LPP

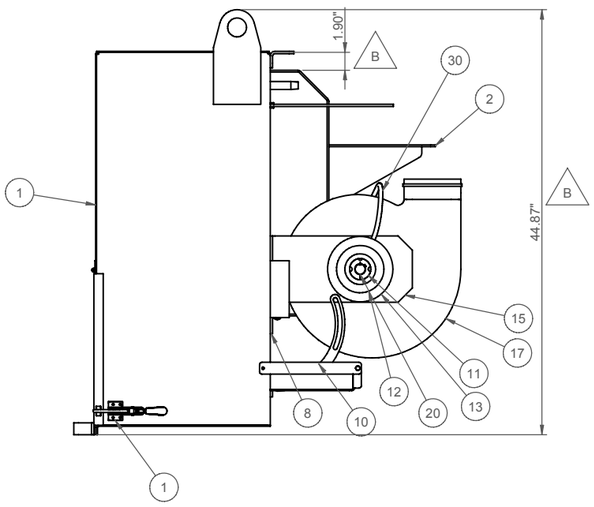
SCALE	1:8	DRWN	IZL	ISSUED FOR GEN	220-0317
DATE	9/29/2006	SHT	1 OF 1		

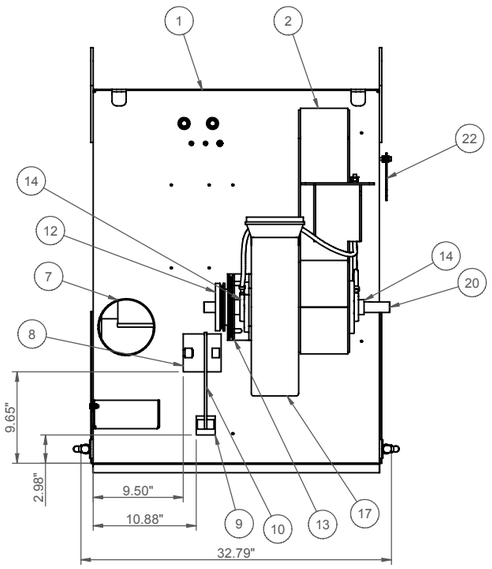


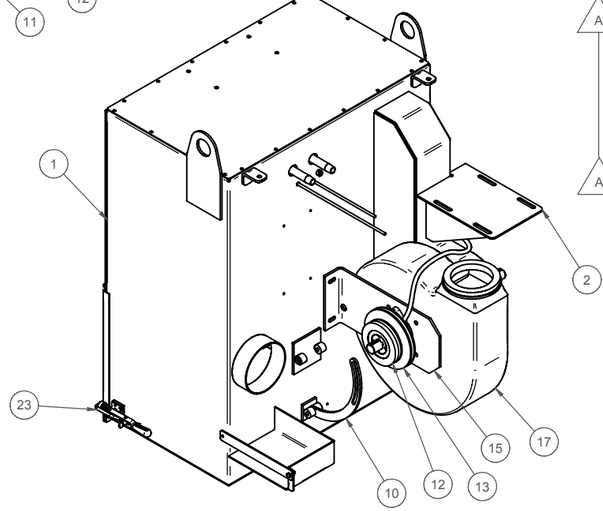


EXPLODED VIEW
1:10

ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	P004039	220-0310	DUST COLLECTOR WELDMENT
2	1	P004040	220-0311	PULSE JET AIR PLENUM
3	1	P004041	220-0312	PULSE JET HEADER
4	2	P004042	220-0313	HEADER/BLOW DOWN
5	6	4984990	--	HANGER/ROD TORIT #6MM 1884600
6	6	6770020	--	CAPLUG/PROTECTIVE CLOSURE 1/4" ID X 1 3/4"
7	6	493206		ELEMENT/FILTER - 54 SQ. FT.
8	1	10250002	220-0230	BRACKET/ ALTERNATOR MOUNTING
9	1	08300088	220-0105	BRACKET/ ALTENATOR ADJUSTING ARM
10	1	08300085	220-0102	BRACKET/ ARM ALTERNATOR
11	2	06300025	--	BUSHING/1610 x 1.125" DIA. T/L
12	1	06150003	--	SHEAVE 1GR3V 5.0-1610 T/L
13	1	06150007	--	SHEAVE 1GR3V 6.9-1610 X 1-1/8" T/L
14	2	02110003	--	BRG/ 2 BOLT FLANGE 1-1/8"
15	1	08300092	220-0109	BRACKET/ BLOWER HOUSING
17	1	09100002	--	PB-12 CCW HOUSING
18	1	09200003	--	BLOWER/ WHEEL PB-14
19	2	03400001	--	RETAINER-RING 1-1/8 X 0.093"THK #SHR-112
20	1	P004045	220-0316	PULSE JET SHAFT/BLOWER
21	1	04540001	--	HOSE/GREASE 1/4"NPT SWIVEL X 3/16"NR703 X 1/4"NPT X 20"OAL
22	1	08300086	220-0103	LATCH/ DUST COLLECTOR DOOR
23	2	4835510	--	CLAMP/TOGGLE DE-STA-CO 351
24	1	P000883	220-0224	DUST TRAY - LH
25	1	P000884	220-0225	DUST TRAY - RH
26	1	P003172	--	KIT-HARDWARE/GPX10-18 DUST COLLECTOR
27	2	6765530	--	VALVE/ DIAPHRAGM
28	2	P004117	--	NIPPLE/PIPE 1/2"NPT X 10"
29	3	4933970	--	FTG/UNION ELBOW 90° 0.25OD TUBE X .125MNPT
30	1	04540002	--	3R7DA2MS2NP-30" HOSE 3/16"ID
31	2	6861660	--	TUBING/POLYURETHANE BLU.25" OD X .17" ID
33	1	4848100	--	TUBING/NYLON 1/4 OD .040 WALL
34	1	P004093		BULKHEAD FITTING 1/4" TUBE 1/8 NPT PARKER P/N 66MLBH-4-2 (OR EXACT EQUIVALENT)







ISOMETRIC VIEW

NOTE:

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

REV	ZONE	DESCRIPTION	DATE	BY
B	B6,C6	WAS 1.40", WAS 44.37"	5/1/2006	IZL
A	J6	ADDED ITEMS #27- #34	12/16/2005	IZL

REVISION

APPROVAL	APPROVED BY: INITIAL	APPROVAL DATE: DATE

NEXT ASSY	REF DWG	TYP QTY PER MACHINE	PART NO
--	--	--	P004043

DIMENSIONAL TOLERANCES

FABRICATING (SHEARING, BURNING, PUNCHING)	WELDING & ASSEMBLY	RELATIONAL
TWO PLACE DECIMALS +/- 0.06"	TWO PLACE DECIMALS -/+ 0.06"	FLATNESS (IN OVERALL +/- 0.06"
(AND FRACTIONS)	(AND FRACTIONS)	LENGTH THROUGH 60.00")
ANGULAR (POSITIONAL) +/- 1/2"	ANGULAR (POSITIONAL) +/- 1/2"	SQUARENESS (CORNER +/- 0.12"
BEND RADIUS IS EQUAL TO MATERIAL	SLL WELDMENTS +/-0.12"	CORNER, MAX. DIFFERENCE
THICKNESS, UNLESS OTHERWISE NOTED.		IN DIAGONALS)

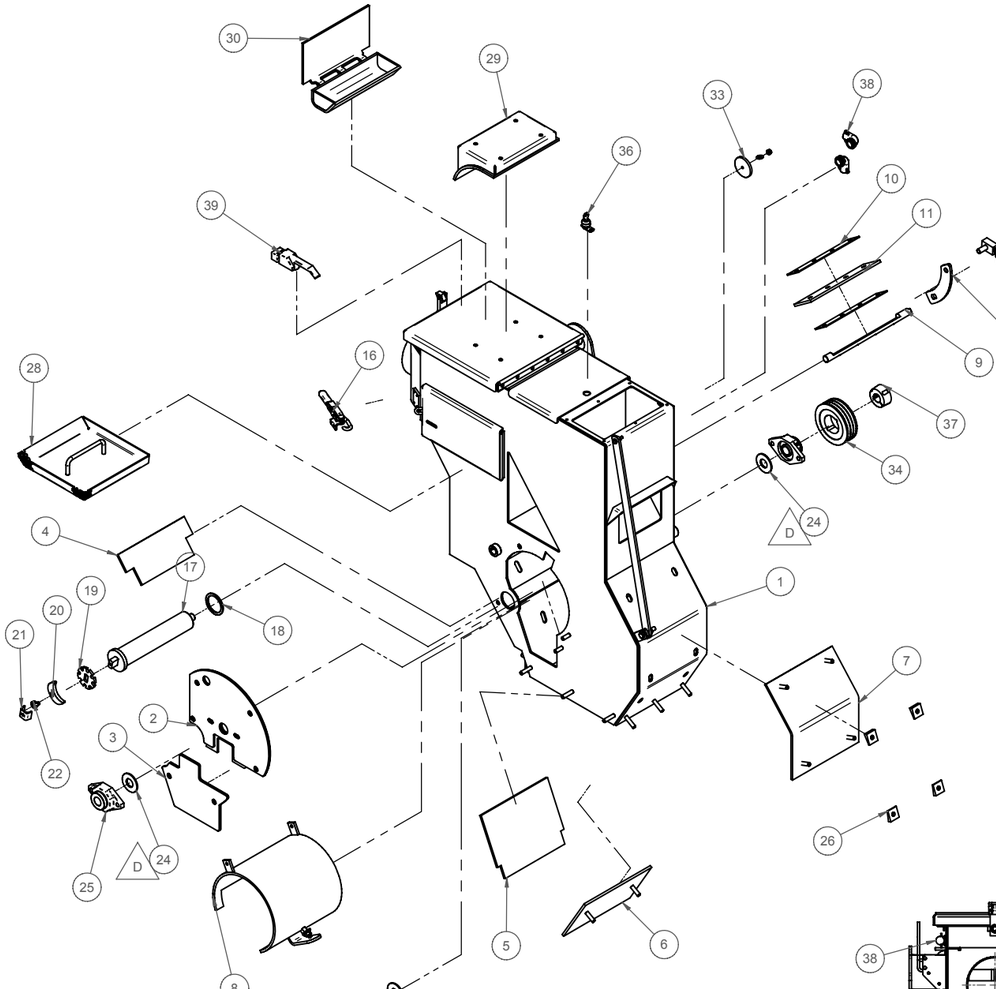
TOLERANCE MACHINING
ANGLES ± .500"
1 PL DEC ± .060
2 PL DEC ± .010
3 PL DEC ± .005

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

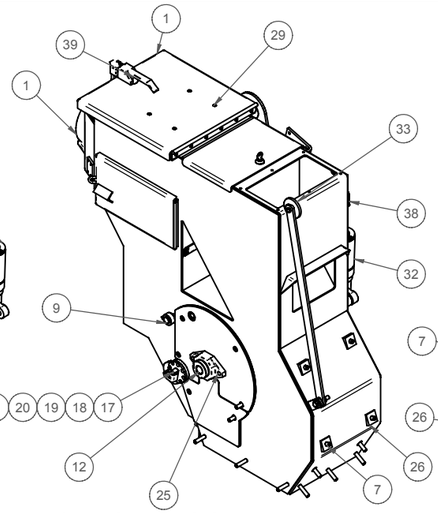
PULSE JET DUST COLLECTOR ASSEMBLY
GPX10-18LPP

SCALE 1:8 | DRWN KMK | SOLID EDGE GEN
DATE 6/21/05 | SHT 1 OF 1

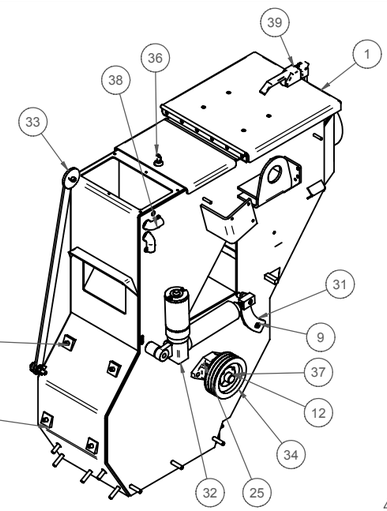
220-0314



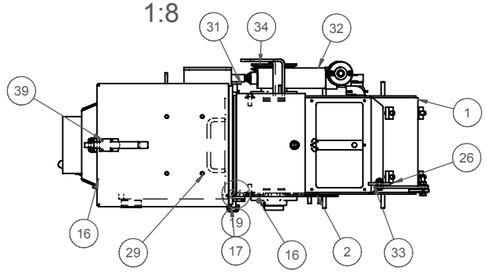
EXPLODED ISOMETRIC VIEW
1:8

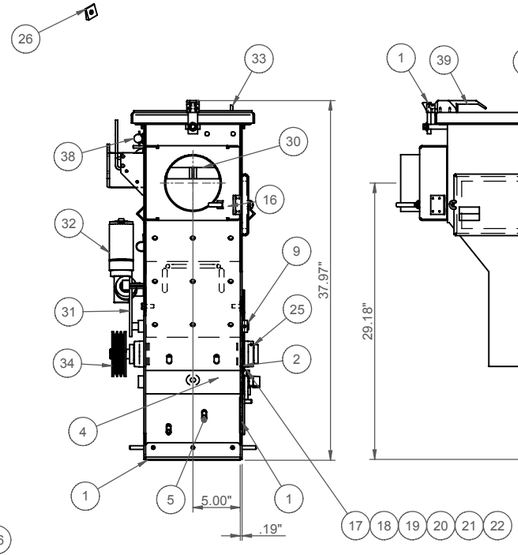


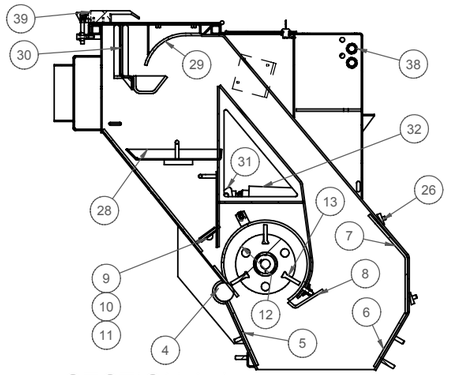
OUTSIDE ISOMETRIC VIEW
1:8



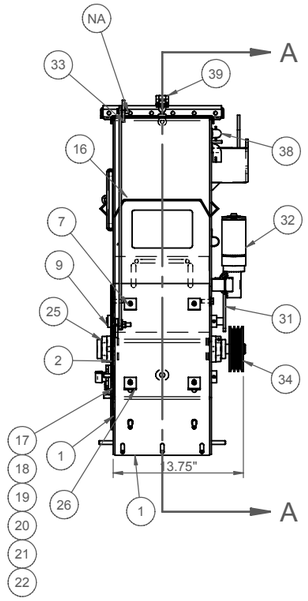
INSIDE ISOMETRIC VIEW
1:8







SECTION A-A



NOTE:

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

ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	P000524	220-0013	HOUSING/BLAST - WELDMENT
2	1	P000525	220-0014	COVER-PLATE/BLAST HOUSING
3	1	P000526	220-0015	INSPECTION COVER/BLAST HOUSING
4	1	WP103710	220-0260	LINER/PINCH BAR SLL
5	1	WP103713	220-0210	LINER/GPX10-18 PINCH BAR BLAST HOUSING LOWER BACK WALL
6	1	WP043710	220-0254	LINER/LOWER FRONT - SLL
7	1	WP043703	220-0255	LINER/UPPER FRONT SLL
8	1	WP113721	220-0238	LINER/TOP CURVED SLL
9	1	WP203710	220-0246	SHAFT/ABRASIVE CONTROL VALVE
10	2	WP183709	220-0244	RETAINER/ABRASIVE CONTROL VALVE SEAL
11	1	WP193708	220-0245	SEAL/ABRASIVE CONTROL VALVE
12	1	WP123716	220-0007	BLASTWHEEL/DOVETAIL
13	1	WP013714	220-0002	BLADE-SET/DOVETAIL 10"
14	3	08300172	220-0189	SEAL/BLADE KEEPER
15	3	WP123714	--	RETAINER/BLADE
16	1	03600003	--	CLAMP/DE-STA-CO #351
17	1	WP033710	220-0261	PINCH BAR
18	1	08300173	220-0190	SEAL/PINCH BAR
19	1	08300042	220-0059	INDEXER/PINCH BAR
20	1	08300043	220-0060	RETAINER/INNER PINCH BAR
21	1	08300093	220-0110	RETAINER/PINCH BAR INDEXER
22	1	08300044	220-0061	RETAINER/OUTER PINCH BAR
23	5	P004038	220-0309	URETHANE SHAFT SEAL
24	2	08300170	220-0266	SEAL/SHAFT - 1.00" BEARING
25	2	P001083	--	BRG/FG2 DODGE DL 1.000"B 205 D-LOK
26	4	03500001	--	WASHER/CHANNEL 3/8"
28	1	08300107	220-0124	SCREEN/SHOT HOPPER
29	1	08300131	220-0148	HALF-PIPE WELDMENT
30	1	08300100	220-0117	TRAY/SHOT
31	1	08300030	220-0047	ARM/ABRASIVE CONTROL VALVE
32	1	06300065	- -	ACTUATOR/500# W/WELDED STUD
33	1	01920007	220-0268	POINTER/ALIGNMENT BAR
34	1	06150031	--	SHEAVE/TAPERLOCK 3/3V4.75-1610 DODGE #112205
35	6	03110010	--	SCREW/CAP FLAT HEX SOCKET 1/4"-20UNC
36	1	03250001	--	KEY LOCK W/NUT
37	1	06300024	--	BUSHING/TAPERLOCK 1610 X 1.00 / DODGE #117159
38	2	05200016	--	CONNECTOR/CONDUIT 3/8" X 90 DEG.
39	1	03600007	--	DRAW-LATCH/OVER-CENTER W/TOGGLE ACTION
40*	1	P003847	220-0308	SHOT HOPPER DAMPER PLATE

REV	ZONE	DESCRIPTION	DATE	BY
E	BOM	ITEM #23 WAS 20000001, QTY WAS 3; ADDED ITEM #40	6/14/05	PTR
D		ITEM 24 IS P001187 WAS 08300170	2/7/00	TLH
C		ITEM 25 WAS 02110002	11/22/99	SCS
B		CORRECTED ITEM 7 - WAS WP043709; ITEM 23 QTY. WAS 2	10/6/99	SCS
A		CORRECTED ITEM 30 - WAS 08300133	9/25/99	SCS

REVISION

NEXT ASSY: GPX10-18 | REF DWG: -- | PART NO: **10180003**

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

U.S. FILTER BLASTRAC

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

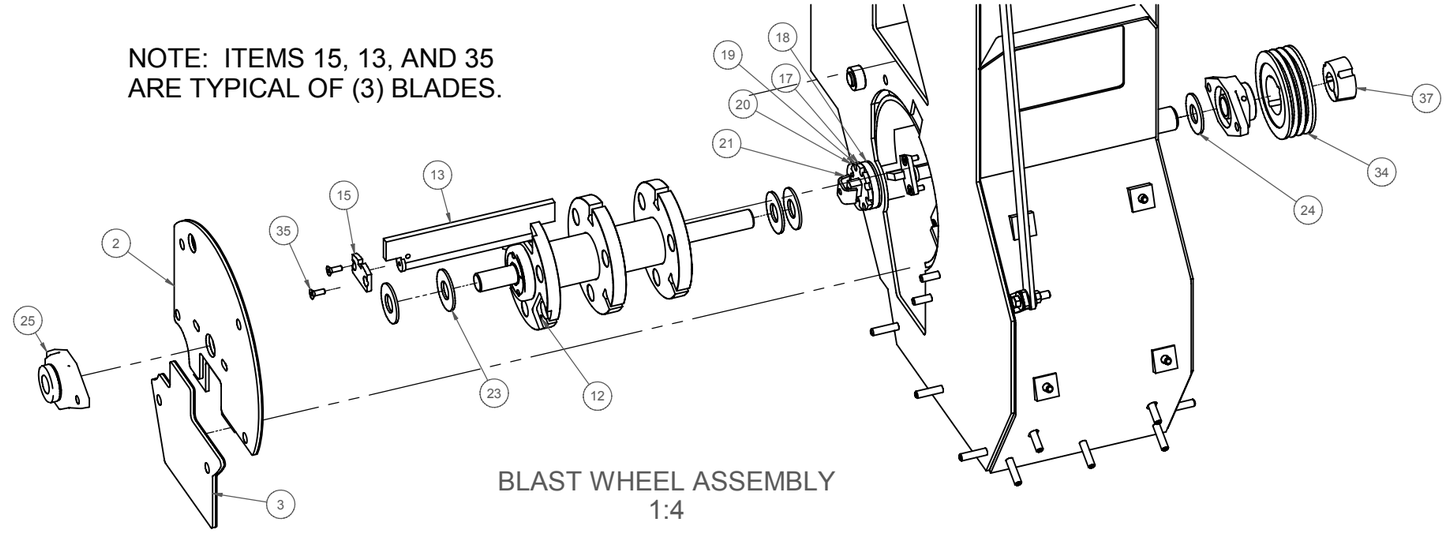
BLAST HEAD ASSEMBLY
GPX10-18 BLAST UNIT

SCALE 1:8 | DRWN SCS | DATE 9/3/99 | SHT 1 OF 2

SOLIDWORKS GEN

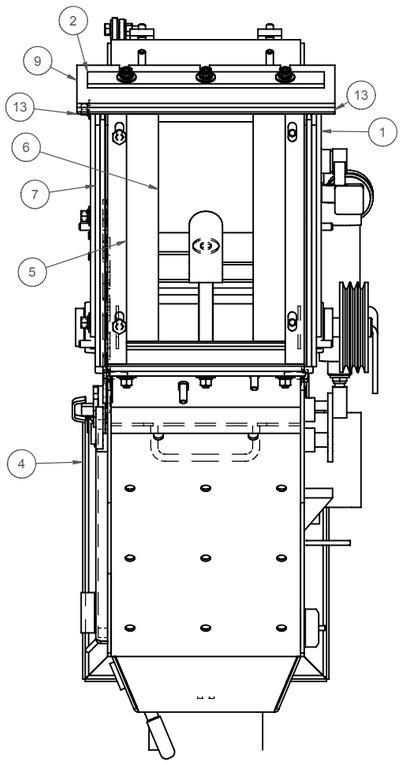
220-0270

NOTE: ITEMS 15, 13, AND 35
ARE TYPICAL OF (3) BLADES.

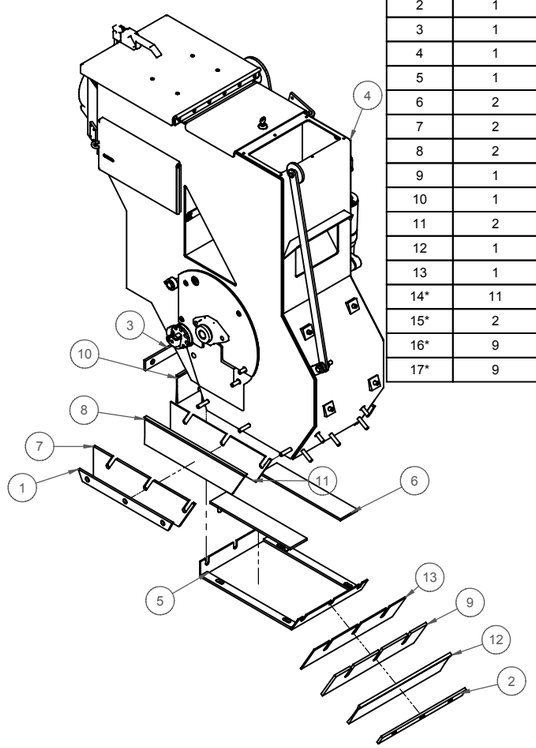


BLAST WHEEL ASSEMBLY
1:4

BLASTHEAD SHOWN WITH SEALS AND OPTIONAL LINE STRIPING ATTACHMENTS



BOTTOM VIEW OF BLASTHEAD



OPTIONAL LINE STRIPING ASSEMBLY
1:8

ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION	WIDTH	LENGTH
1	2	08300035	220-0052	RETAINER/SIDE SEAL	--	--
2	1	08300059	220-0076	RETAINER/FRONT SEAL	--	--
3	1	08300063	220-0080	RETAINER/REAR SEAL	--	--
4	1	10180003	220-0270	BLASTHEAD ASSEMBLY - 10"		
5	1	P000912	220-0239	BRACKET/BLAST PATTERN LINER		
6	2	P000916	220-0243	LINER/BLAST PATTERN - 2-1/2" SLL		
7	2	SL023506P	220-0302	1/4" BLUE URETHANE DURO 90	4.00"	15.06"
8	2	01950001	--	BRUSH STRIP	3.50"	15.06"
9	1	SL023507P	220-0304	1/4" BLUE URETHANE DURO 90	4.00"	13.63"
10	1	WP163711	220-0282	SEAL/DRAG-BRUSH	--	10.38"
11	2	019000041	220-0303	SEAL / SIDE	4.00"	15.06"
12	1	01950001	--	BRUSH STRIP	3.50"	13.63"
13	1	01940001	220-0305	1/8" BLACK NEOPRENE DURO 60	4.00"	13.63"
14*	11	5001150	--	WASHER/LOCK 3/8"	--	--
15*	2	076291	91D0108	NUT/HARDENED CAP 3/8"-16UNC	--	--
16*	9	5001040	--	WASHER/FLAT 3/8"	--	--
17*	9	5000600	--	NUT/HEX 3/8"-16UNC	--	--

REV	ZONE	DESCRIPTION	DATE	BY
		REVISION		

NEXT ASSY: GPX10-18 | REF DWG: -- | PART NO.: 10180003

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

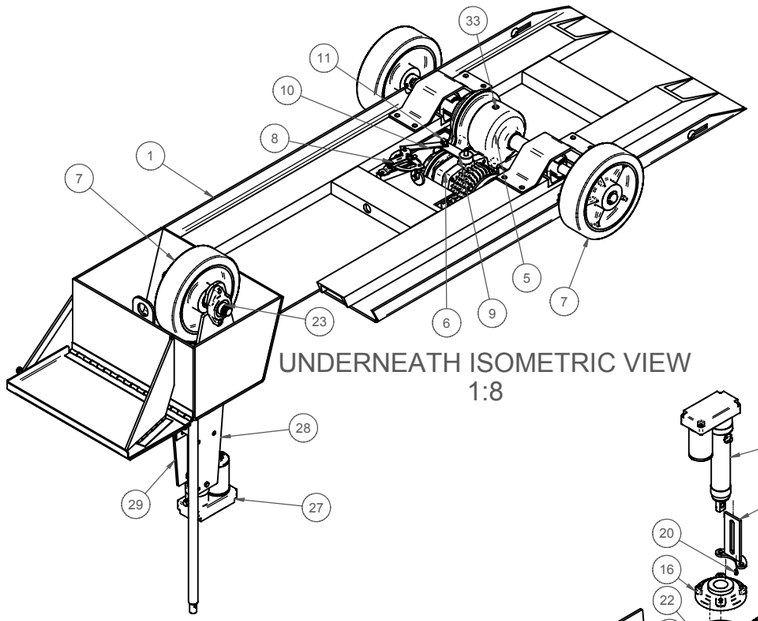
U.S. FILTER BLASTRAC

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

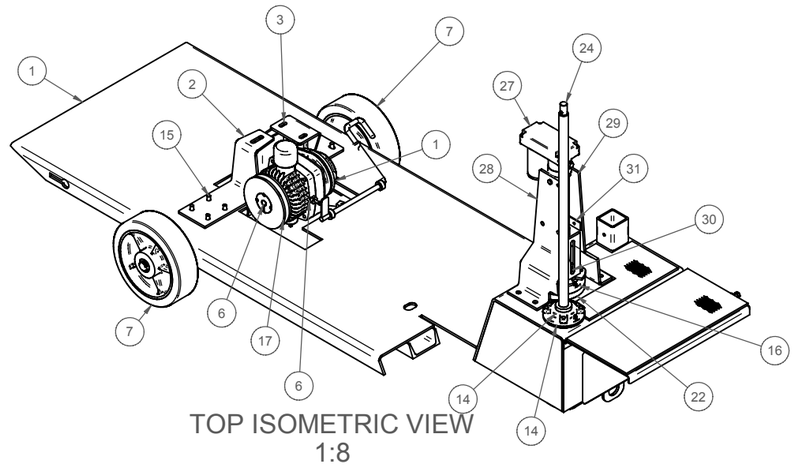
BLAST HEAD ASSEMBLY
GPX10-18 BLAST UNIT

SCALE 1:8 | DRWN SCS | DATE 9/3/99 | SHT 2 OF 2

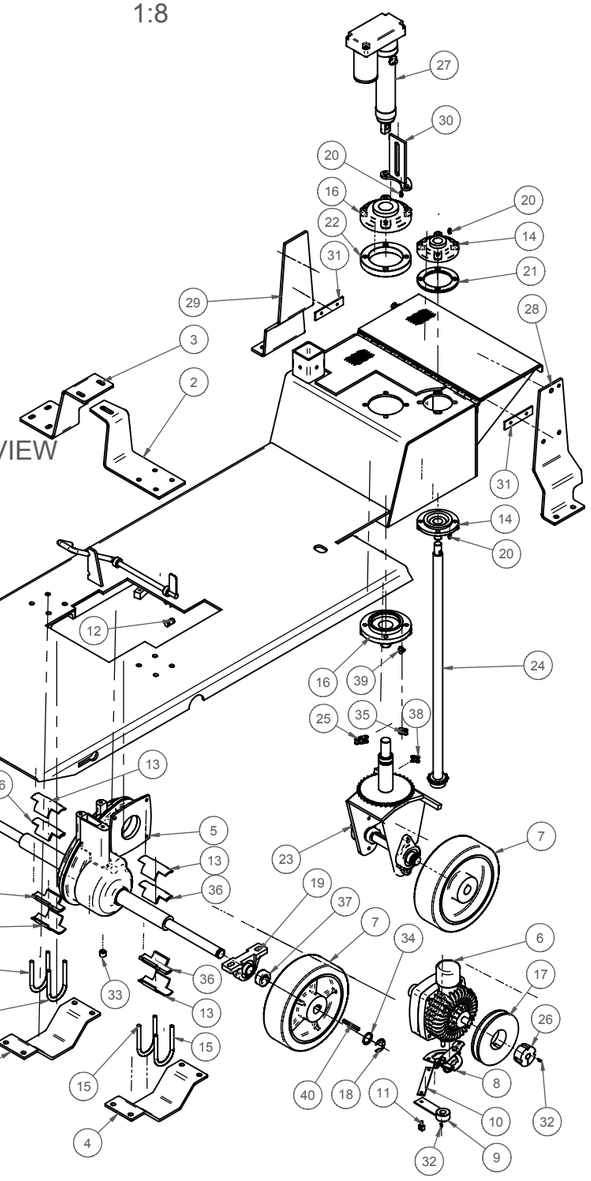
220-0270



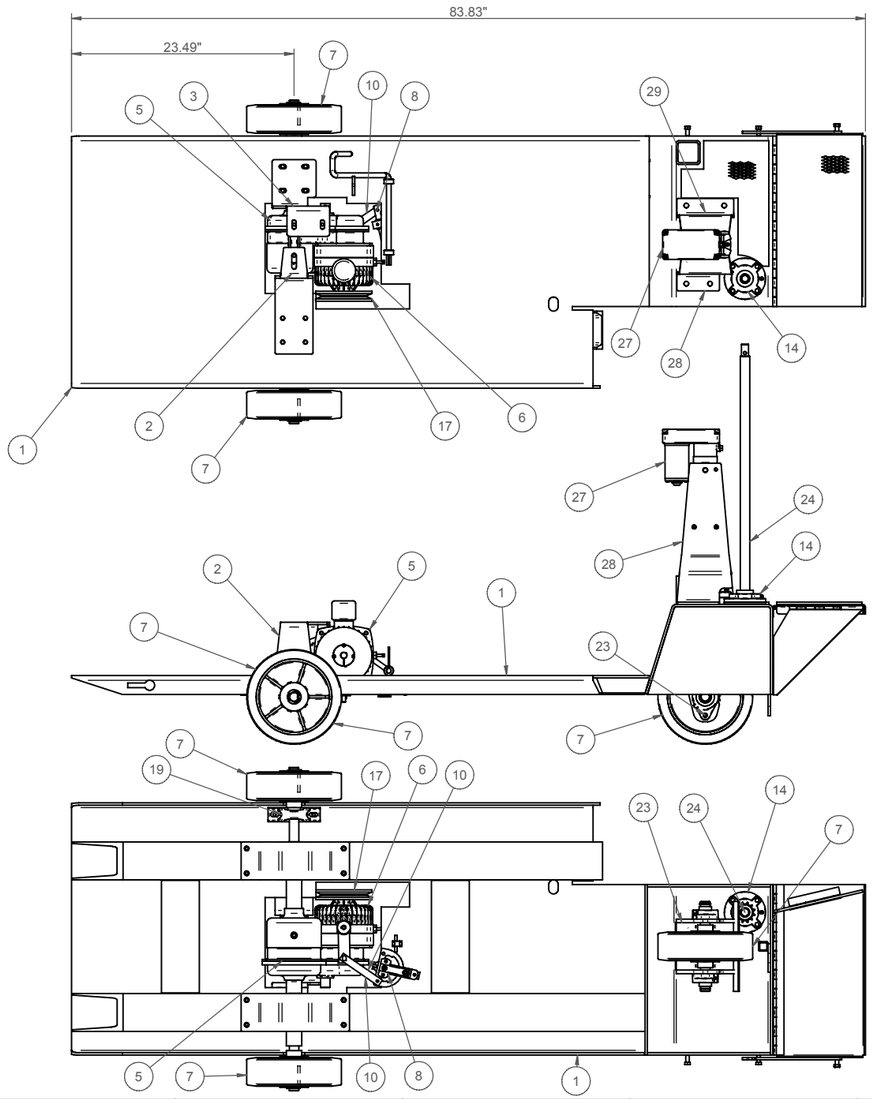
UNDERNEATH ISOMETRIC VIEW
1:8

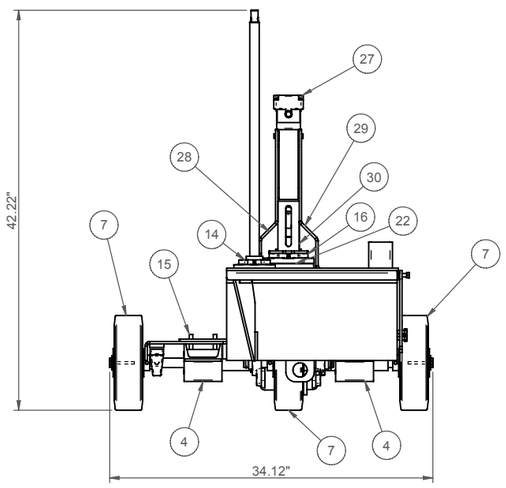


TOP ISOMETRIC VIEW
1:8



EXPLODED ISOMETRIC VIEW
1:8





ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION
1	1	P000510	220-0012	DECK WELDMENT
2	1	P000874	220-0216	BRACKET/ TRANSAXLE MOUNTING - L.H.
3	1	P000873	220-0215	BRACKET/ TRANSAXLE TOP RIGHT
4	2	P000872	220-0214	BRACKET/ LOWER TRANSAXLE
5	1	06600001	--	TRANSAXLE ASSEMBLY/ MODEL #ET-12677
6	1	06800001	--	PUMP/ TRANSAXLE CCW ROTATION #700-002
7	3	06430030	--	CASTER/ 10" X 3" W/GREY TREAD 1.000" B & STD. KWY.
8	1	06900001	--	TENSIONER/ CABLE #C72111
9	1	08300077	220-0094	LINKAGE/ TRANSAXLE SHIFTER
10	1	08300079	220-0096	ROD/ TENSIONER LINKAGE
11	1	08300135	220-0077	ADAPTER/ TRANSAXLE CABLE
12	1	07300010	--	CABLE/ TRANSAXLE #173 - LTG - 2 - 71
13	4	08300071	220-0088	SUPPORT/ TRANSAXLE
14	2	02110025	--	BRG/ PILOT FG4 RFC 1.000"B FAFNIR
15	4	03130002	--	U-BOLT 3/8" X 2" X 5"
16	2	02110026	--	BRG/ PILOT FG4 RFC 1.500"B FAFNIR
17	1	06150002	--	SHEAVE/ 1A5.2B5.6-1610 X 17MM T/L
18	2	03400013	--	E-CLIP/ 1" ID X 0.050" THICK
19	1	02100002	--	BRG/PB2 DODGE SC 1.000"B
20	3	02230004	--	FITTING/ GREASE - ZERK 1/8"NPT X STRT #1610-BL
21	1	08300070	220-0087	SPACER/ STEERING SHAFT BEARING
22	1	08300069	220-0086	SPACER/ WHEEL SHAFT BEARING
23	1	08300007	220-0024	FRONT FORK ASSEMBLY
24	1	08300137	220-0154	SHAFT-ASM/ STEERING
25	1	06500002	--	CHAIN/ ROLLER ASA #40 - 1/2" PITCH X 36" LG
26	1	06300030	--	BUSHING/ TAPERLOCK #1610 X 17MM
27	1	06300064	- -	ACTUATOR / 1500LB 12V #5704114
28	1	P000875	220-0217	BRACKET/ ACTUATOR - R.H.
29	1	P000876	220-0218	BRACKET/ ACTUATOR L.H.
30	1	P000878	220-0219	GUIDE/ ACTUATOR
31	2	08300115	220-0132	SPACER/ FRONT LIFT ACTUATOR
32	2	03300001	--	KEY/ WOODRUFF 1/8" X 1/2"
33	1	06900007	--	PLUG/ TRANSAXLE - MAGNETIC
34	2	03500004	--	WASHER/ THRUST
35	1	06530002	--	LINK/ OFFSET ASA#40 1/2" PITCH
36	4	08300143	220-0265	TRANSAXLE SUPPORTS (URETHANE)
37	2	02200006	--	COLLAR/SHAFT 1.000"B
38	1	06520002	--	LINK/ MASTER ASA#40 1/2" PITCH W/CLIP
39	1	02230003	--	FITTING/GREASE ZERK 1/8"NPT 90 DEG.
40	2	08300075	220-0092	KEY/ REAR WHEEL

REV	ZONE	DESCRIPTION	DATE	BY
		REVISION		

NEXT ASSY	REF DWG	PART NO.
GPXP1018	GPXP1018	10180001

TOLERANCE UNLESS SPECIFIED

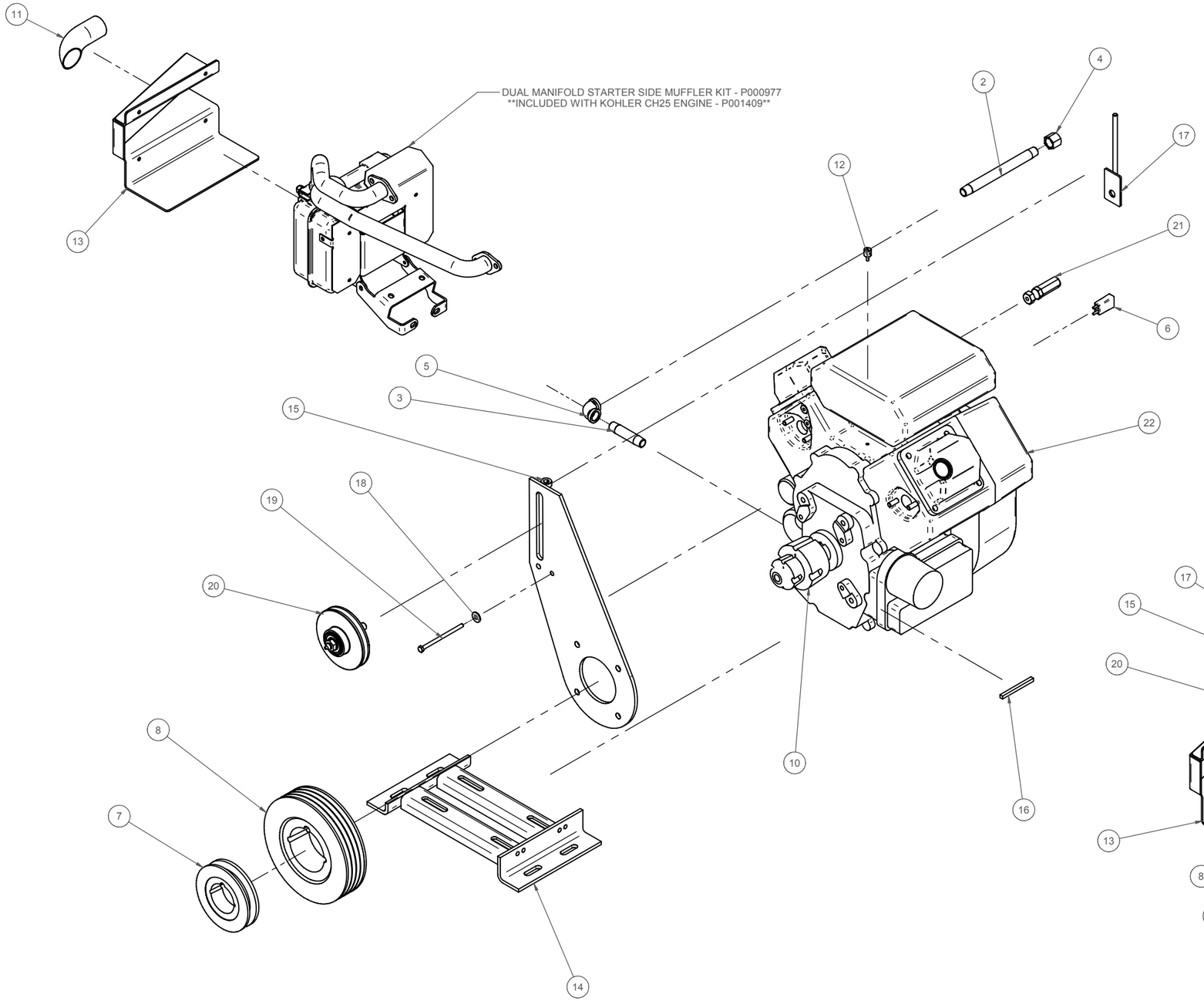
ANGLES ± .500°
1 PL DEC ± .060
2 PL DEC ± .010
3 PL DEC ± .005

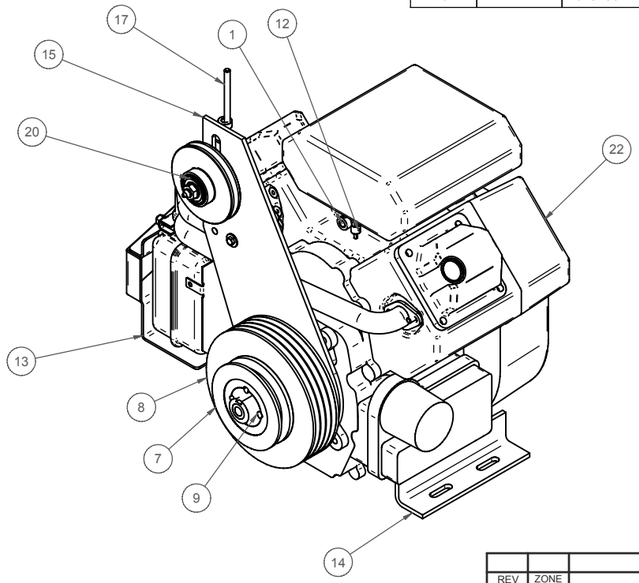
U.S. FILTER BLASTRAC

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

DECK ASSEMBLY
GPX 10-18

SCALE 1:8 | DRWN MJP | SOLIDWORKS GEN | **220-0017**
DATE 10/10/99 | SHT 1 OF 1





ITEM	QUANTITY	CATALOG NUMBER	DRAWING NUMBER	DESCRIPTION	Length
1	1	P002198	--	COLLAR/SHAFT 3/8" SS W/ 2 SET SCREWS @ 90 DEG	--
2	1	04970014	--	NIPPLE/PIPE 3/8" X 7"	7.00
3	1	04970015	--	NIPPLE/PIPE 3/8" X 3"	3.00
4	1	04980002	--	CAP/PIPE HEX 3/8"	--
5	1	04980079	--	ELBOW/PIPE 3/8" X 90DEG.	--
6	1	05110004	- -	FUSE BLOCK/ 12V x 30 AMP	- -
7	1	06150001	- -	SHEAVE/MOTOR 1A 4.6"DIA	- -
8	1	06150045	- -	SHEAVE/MOTOR 8.00" 4 GR 3V T/L	- -
9	1	06300025	--	BUSHING/1610 x 1.125" DIA. T/L	- -
10	1	06300052	- -	BUSHING/2517 x 1.125"DIA T/L	- -
11	1	07100030	220-0280	MUFFLER-TIP	
12	1	07100031	- -	FITTING/THROTTLE CABLE 25HP	--
13	1	07100035	220-0269	GUARD/MUFFLER - CH25	
14	1	07100036	220-0275	BRACKET/MOTOR MOUNTING	- -
15	1	07100037	220.0274	BRACKET/IDLER PULLEY 25 HP	- -
16	1	08300076	220-0093	STEP SUPPORT STOP	--
17	1	08300198	220-0276	BRACKET/IDLER PULLEY ADJUSTMENT	- -
18	1	5001020	--	WASHER/FLAT 1/4"	--
19	1	502868	--	SCREW/CAP HEX M6-1.0	100mm
20	1	P000882	220-0223	IDLER ASSEMBLY	- -
21	1	P001179	220-0285	SPACER/ADJUSTABLE - IDLER BRACKET	
22	1	P001409	- -	ENGINE KOHLER 25 HP **LP ONLY**	- -
23*	1	04520006	--	HOSE/LPG 5/16"ID R5/R6 350PSI MAX.	10.8 ft
24*	1	07520014	- -	FITTING/3/8 FLARE x 1/4 NPT ELBOW	- -
25*	1	07520029	--	COUPLING/SWIVEL SAE#6 X 5/16"ID R5/R6 HOSE	--
26*	1	07520012	--	CONNECT/ QUICK	--

NOTE:

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

DIMENSIONAL TOLERANCES		
FABRICATING	WELDING & ASSEMBLY	RELATIONAL
(SHEARING, BURNING, PUNCHING)		
TWO PLACE DECIMALS +/- 0.06"	TWO PLACE DECIMALS -/+ 0.06"	FLATNESS (IN OVERALL +/- 0.06"
(AND FRACTIONS)	(AND FRACTIONS)	LENGTH THROUGH 60.00")
ANGULAR (POSITIONAL) +/- 1/2"	ANGULAR (POSITIONAL) +/- 1/2"	SQUARENESS (CORNER +/- 0.12"
BEND RADIUS IS EQUAL TO MATERIAL	SLL WELDMENTS +/-0.12"	CORNER, MAX. DIFFERENCE
THICKNESS, UNLESS OTHERWISE NOTED.		IN DIAGONALS)

REV	ZONE	DESCRIPTION	DATE	BY	NCR#

REVISION

APPROVAL	APPROVED BY: INITIAL	APPROVAL DATE: DATE

NEXT ASSY	REF DWG	TYP QTY PER MACHINE	PART NO
- -	- -	- -	P004104

TOLERANCE MACHINING
ANGLES ± .500"
1 PL DEC ±.060
2 PL DEC ±.010
3 PL DEC ±.005

BLASTRAC
13201 North Santa Fe
OKLAHOMA CITY, OK 73114
U.S.A.

ENGINE-KIT/KOHLER 25HP ** PULSE JET ONLY **
GPX10-18LPP

SCALE 1:4	DRWN IZL	SOLID WORKS GEN	220-0326
DATE 10/6/2006	SHT 1 OF 1		

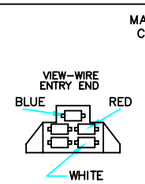
NOTES B

NOTE 1 – 5 CIRCUIT CONNECTOR REPLACEMENT HOUSING (ITEM 15) AND 3 EACH MALE LOCKING SPADE TERMINALS (ITEM 14).

WHEN REPLACING DEVICES OR CONNECTION ELEMENTS PAY CLOSE ATTENTION TO POLARITY OF DEVICE AS INDICATED ON THIS SCHEMATIC.

REFERENCE DETAIL A IMMEDIATELY BELOW

DETAIL A



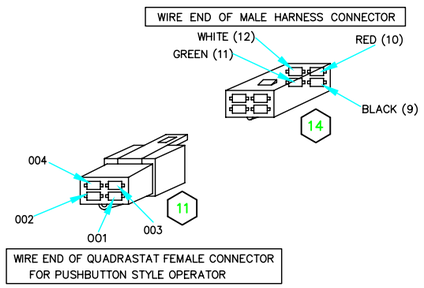
NOTE 2: 4 CIRCUIT CONNECTOR REPLACEMENT FEMALE HOUSING (ITEM 11) AND FEMALE LOCKING SPADE TERMINALS (ITEM 12)

REPLACEMENT MALE HOUSING (ITEM 13) AND MALE LOCKING SPADE TERMINALS (ITEM 14)

WHEN REPLACING DEVICES OR CONNECTION ELEMENTS PAY CLOSE ATTENTION TO POLARITY OF DEVICE AS INDICATED ON THIS SCHEMATIC.

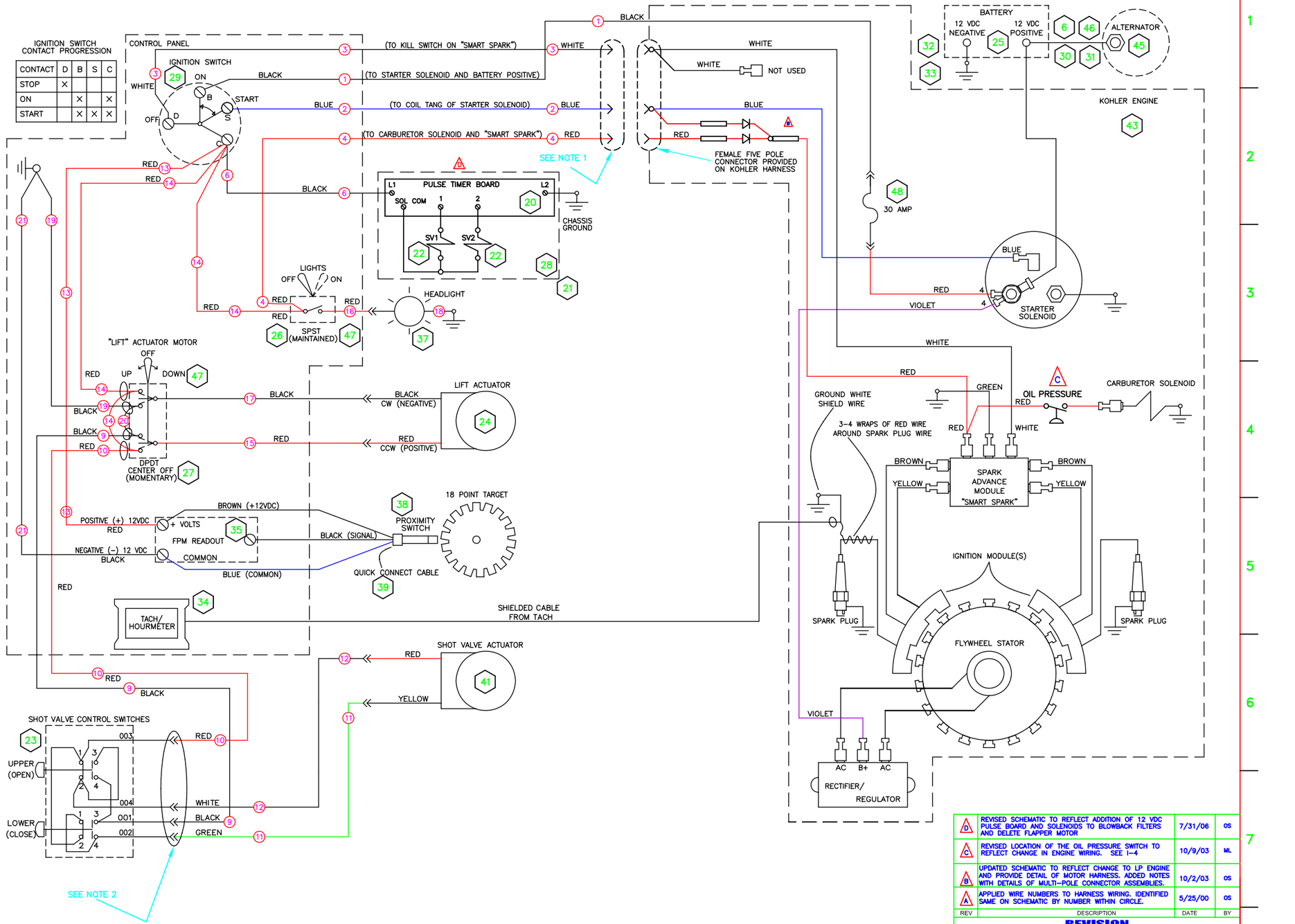
REFERENCE DETAIL B IMMEDIATELY BELOW

DETAIL B



IGNITION SWITCH CONTACT PROGRESSION

CONTACT	D	B	S	C
STOP	X			
ON		X		X
START		X	X	X



△ (#) DENOTES HARNESS WIRE NUMBER

△ (#) DENOTES HARNESS WIRE NUMBER

REV	DESCRIPTION	DATE	BY
D	REVISED SCHEMATIC TO REFLECT ADDITION OF 12 VDC PULSE BOARD AND SOLENOIDS TO BLOWBACK FILTERS AND DELETE FLAPPER MOTOR	7/31/06	OS
C	REVISED LOCATION OF THE OIL PRESSURE SWITCH TO REFLECT CHANGE IN ENGINE WIRING. SEE I–4	10/9/03	ML
B	UPDATED SCHEMATIC TO REFLECT CHANGE TO LP ENGINE AND PROVIDE DETAIL OF MOTOR HARNESS. ADDED NOTES WITH DETAILS OF MULTI–POLE CONNECTOR ASSEMBLIES.	10/2/03	OS
A	APPLIED WIRE NUMBERS TO HARNESS WIRING. IDENTIFIED SAME ON SCHEMATIC BY NUMBER WITHIN CIRCLE.	5/25/00	OS

REVISION

FIRST USED: --
REF DWG: 220-0287
PART NO: P001181

TOLERANCE UNLESS SPECIFIED
ANGLES ± 1°
FRACTIONS ± 1/16
2 PL DEC ± .06
3 PL DEC ± .005

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

GPX 1018 BLAST UNIT
WIRING HARNESS SCHEMATIC

SCALE NTS | DRWN OS | DATE 7/30/99 | SHT 1 OF 1

CAD KEY 220-0287

ITEM NUMBER	BLASTRAC PART NUMBER	DESCRIPTION	QUANTITY
1	SHOP STOCK	TERMINAL, RING, 16-14 AWG (BLUE), 6 STUD, INSULATED	3
2	SHOP STOCK	RING TERMINAL, 16-14 AWG, 10 STUD, INSULATED	21
3	SHOP STOCK	TERMINAL, RING, 16-14 AWG (BLUE), 1/4 STUD, INSULATED	2
4	SHOP STOCK	RING TERMINAL, 16-14 AWG, 5/16 STUD, INSULATED	2
5	SHOP STOCK	RING TERMINAL, 16-14 AWG, 3/8 STUD, INSULATED	1
6	SHOP STOCK	RING TERMINAL, 12-10 AWG, 1/4 STUD, INSULATED	2
7	SHOP STOCK	RING TERMINAL, 12-10 AWG, 5/16 STUD, INSULATED	1
8	SHOP STOCK	BULLET CONNECTOR, MALE, 16-14 AWG, INSULATED	9
9	SHOP STOCK	BULLET CONNECTOR, FEMALE, 16-14 AWG, INSULATED	9
10	SHOP STOCK	SPADE TERMINAL, FEMALE, 16-14 AWG, .25, TOTALLY INSULATED	1
11	P003069	TERMINAL, HOUSING, 4 POLE FOR FEMALE TERMINALS, PACKARD PN 38007THF4	1
12	P003068	TERMINAL, HOUSING, 4 POLE FOR MALE TERMINALS, PACKARD PN 38006THM4	1
13	P003066	TERMINAL, HOUSING, 5 POLE FOR MALE TERMINALS	1
14	P003067	TERMINAL, SPADE, LOCKING, .25", FEMALE, 16-14AWG	4
15	P003065	TERMINAL, SPADE, LOCKING .25", MALE, 16-14AWG	7
16		NYLON GROMMET, .5" MOUNTING HOLE, 3/8" ID, HEAD DIA.-37/64, OAH-13/32"	2
17	P003063	FUSE BLOCK, 30 AMP W/ 8" LEADS	1
18	SHOP STOCK	TERMINAL, BUTT CONNECTOR, 16-14 AWG (BLUE), INSULATED	1
19	SHOP STOCK	TERMINAL, FORK, 16-14 AWG, 6 STUD, INSULATED	2
20	P003092	PULSE BOARD, 12VDC, 4 CHANNEL	1
21	5400004	ENCLOSURE, 8 X 6 X 3 1/2	1
22	P002963	VALVE, SOLENOID / 12 V WITH WIRES	2
23	6910001	FORWARD/REVERSE CONTROLLER W/ INTERGRATED SHOT FEED - OPEN/CLOSE SWITCHES	1
24	6300064	1500 LB. ACTUATOR, FOR LIFT UP/DOWN	1
25	7530022	BATTERY	1
26	5100002	SPST, ON/OFF, MAINTAINED, LIGHT SWITCH, 6 A/125 VAC	1
27	5100006	DPDT, CENTER OFF, MOMENTARY, LIFT - UP/DOWN, 20 A/277 VAC	1
28	P003804	PULSE BOARD ASSEMBLY FOR GPX 10-18. CONSISTS OF (1) P003092 (ITEM 20), (2) P002963 (ITEM 22), and (1) 5400004 (ITEM 21) ASSEMBLED & WIRED	1
29	7150007	IGNITION SWITCH	1
30	7530010	46" POSITIVE BATTERY CABLE (RED) W/ 14" WHITE PIGTAIL	1
31	7530013	TERMINAL INSULATOR, BATTERY CABLE, RED	1
32	7530011	14" NEGATIAVE BATTERY CABLE (Black)	1
33	7530012	TERMINAL INSULATOR, BATTERY CABLE,	1
34	7100007	TACH/HOUR METER	1
35	5730005	FOOT PER MINUTE (FPM) METER	1
36	8900001	PANEL OVERLAY	1
37	8000025	HEADLIGHT (PN CONTAINS TWO HEADLIGHTS)	1
38	P002245	PROXIMITY SENSOR, NON-SHIELDED, 4 MM SENSING DISTANCE, DC	1
39	5730007	CORDSET, EUROFAST	1
40	5600009	WIRING HARNESS ASSY	1
41	6300065	500LB. ACTUATOR 12V	1
42	5910001	WIPER MOTOR FOR FLAPPER	1
43	10180002	MOTOR KIT	1
44	5200016	3/8" X 1/2", 90 DEGREE GREENFIELD CONNECTOR FOR 1/2" ID LOOM	2
45	7530019	ALTERNATOR	1
46	7530018	TERMINAL INSULATOR, RED (USED ON ALTERNATOR)	1
47	5100001	WEATHER-PROOF BOOT FOR TOGGLE SWITCHES	2
48	P003064	FUSE, 30 AMP	1