### SCB-1200-K Shotblaster/Scarifier/ Diamond Grinder-Polisher/ Magnet-Broom



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SCB-1200 Seria	1#		
F : 0 :1"			
Engine Serial#		 	

Version 12/2015 Part# D-1460-K

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### INTRODUCTION

### **FORWARD**

WARNING READ THIS MANUAL CAREFULLY PRIOR TO OPERATING THE EQUIPMENT IN ORDER TO UNDERSTAND HOW TO OPERATE AND SERVICE THE EQUIPMENT CORRECTLY. FAILURE TO PROPERLY REVIEW THIS MANUAL COULD RESULT IN PERSONAL INJURY OR EQUIPMENT DAMAGE.

This manual should be considered a permanent part of the equipment and should remain with the equipment at all times. Please note the following:

Measurements in this manual are given in metric and standard U.S. measurement equivalents.

Use only correct replacement parts and fasteners. Fasteners may require specific tools.

Right and left hand sides are determined by facing forward while sitting in the seat behind the steering wheel.

### THIRD-PARTY MANUFACTURER INFORMATION

This equipment contains an engine manufactured by a third-party manufacturer. This engine may be covered by the manufacturer's standard factory warranty and the manufacturer may require that all repairs and/or service be completed pursuant to its warranty terms and conditions. Please refer to the product manual and Warranty Breakdown for additional information on this warranty and any registration requirements.

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### **TERMS AND CONDITIONS OF SALE**

- 1. Parties. "Seller" means BW Manufacturing, Inc. "Buyer" means any entity or individual purchasing goods from Seller.
- 2. <u>Terms and Conditions of Sale</u>. These Terms and Conditions of Sale define the relationship of Buyer and Seller and apply to all sales of equipment (including, but not limited to Shotblasters, Scarifiers, Diamond Grinders/Polishers, Concrete Dust Collection Systems, and Trailers), components incorporated into equipment, parts, supplies, materials or other personal property (individually and collectively, "Equipment") by Seller to Buyer. Buyer acknowledges and agrees that these Terms and Conditions of Sale are incorporated in, and are a part of, any contract of sale and each quotation, purchase order, invoice, and any other document relating to the sale of Equipment by Seller to Buyer (these documents are collectively referred to as the "Agreement").
- 3. Quotation Expiration. Written quotations signed by Seller are valid for a period of 30 days unless otherwise noted by Seller.
- 4. <u>Pricing</u>. Prices for Equipment and other related information shown in any Seller product publication, including but not limited to catalogs, brochures, and websites, are subject to change without notice. Prices do not include related freight charges, use tax, sales tax, excise tax, value-added tax, or similar taxes, or charges of any nature whatsoever imposed by any governmental authority unless otherwise expressly noted by Seller.
- 5. <u>Taxes</u>. Prices quoted do not include (and Buyer shall pay) all taxes and fees of any kind that may be levied or imposed on either party by federal, state, municipal, or other governmental authorities in connection with the sale or delivery of the Equipment by Seller.
- 6. <u>Terms of Payment</u>. Unless Buyer has obtained credit approval from Seller, payment is due and payable to Seller in cash on completion of Seller's delivery obligation (COD). For Buyers with credit approval, any amounts due by Buyer to Seller that are unpaid on or after 30 days of Seller's invoice will bear interest at the simple interest rate of 2 percent (2%) per month or the maximum rate permitted by law, whichever is less. The accrual or payment of any interest as provided above will not constitute a waiver by Seller of any rights and remedies in connection with a default by Buyer. Buyer will pay all court costs, attorney fees, and other costs incurred by Seller in collecting past-due amounts, including interest. If shipment or delivery of Equipment is delayed by or at the request of Buyer, payment will remain due in full on the original delivery date for Buyers without credit approval or 30 days from the date of Seller's invoice for Buyers with credit approval. In either such event, Seller may impose, and Buyer shall pay, storage charges and other incidental expenses incurred by Seller as a result of the delay in addition to any interest on late payments as described above.
- 7. **Security Interest**. As security for payment of all amounts due to Seller, Buyer grants to Seller a security interest in all Equipment sold by Seller to Buyer, and Seller will have all rights of a secured party under the Uniform Commercial Code with respect to the Equipment. Buyer appoints Seller as its attorney-in-fact with authority, at Seller's option, to take actions as Seller deems reasonable in the circumstance to perfect the above security interest in any one or more jurisdictions, and Buyer shall pay all applicable filing fees.
- 8. <u>Limited Express Warranty</u>. For a period of ninety (90) days from the completion of Seller's delivery obligation under this Agreement, Seller warrants that a limited selection of components manufactured by Seller and incorporated into the Equipment will be free of defects in material and workmanship. A complete list of components covered under this warranty ("Warranty Breakdown") and is incorporated in its entirety into this Agreement. In the event Buyer has a claim related to the components covered under this warranty, Buyer shall be bound by the then-current Warranty Breakdown. Buyer's sole remedy for breach of this warranty is limited to repair and replacement, within the warranty period, of defective components manufactured by Seller and covered under this warranty pursuant to the Warranty Breakdown. Buyer is responsible for all shipping costs arising out of any warranty service provided by Seller. SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH REGARDS TO THE EQUIPMENT AND/OR COMPONENTS MANUFACTURED BY SELLER AND INCORPORATED INTO THE EQUIPMENT, WHICH ARE NOT INCLUDED IN THE ABOVE REFERENCED WARRANTY, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. BUYER ASSUMES FULL RESPONSIBILITY THAT THE EQUIPMENT PURCHASED UNDER THE AGREEMENT MEETS THE SPECIFICATIONS AND/OR INTENDED USE OF BUYER, AND SELLER MAKES NO REPRESENTATION WITH RESPECT THERETO.
- 9. <u>Disclaimer of Third-Party Component Warranties</u>. THE SOLE REMEDY AVAILABLE TO BUYER WITH RESPECT TO DEFECTS IN THE COMPONENTS MANUFACTURED BY THIRD PARTIES WILL BE AGAINST THE THIRD PARTY MANUFACTURER UNDER ANY APPLICABLE MANUFACTURER'S WARRANTY TO THE EXTENT AVAILABLE TO BUYER. WITH REGARDS TO COMPONENTS MANUFACTURED BY THIRD PARTIES AND INCORPORATED INTO THE EQUIPMENT, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, RELATING TO THE COMPONENTS, WHETHER BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

- 10. <u>No Consequential Damages</u>. IN NO EVENT WILL SELLER BE LIABLE OR RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, OR PUNITIVE DAMAGES, OR FOR EXPENSE OCCASIONED BY THE USE OF DEFECTIVE EQUIPMENT.
- 11. **Delivery**. Any delivery dates or other schedule of performance by Seller are approximations, and the sole obligation of Seller with respect to the schedule of delivery or performance will be to use commercially reasonable efforts to deliver the Equipment, or otherwise to perform, consistent with the reasonable demands of its business. In any event, Seller will have no liability to Buyer or any other person for delays in performance due to strikes or labor disputes of any type; accidents, fire, floods, acts of God, or actions by governmental authorities; acts, omissions, or delays of Buyer or any other third party; shortages of labor; or without limitation of the above, for any causes reasonably beyond the control of Seller.
- 12. <u>Title and Risk of Loss</u>. Title to and risk of loss to the Equipment will pass to Buyer on delivery by Seller F.O.B. Seller's place of business, located at 3706 Mill Creek Dr. NE, Comstock Park, Michigan, 49321.
- 13. <u>Inspection and Acceptance</u>. Buyer will have two (2) days from the date of delivery to inspect the Equipment for defects and nonconformance and to notify Seller, in writing, of any defects, nonconformance, or rejection of the Equipment. After this period, Buyer will be deemed to have irrevocably accepted the Equipment. After acceptance, Buyer will have no right to reject the Equipment for any reason or to revoke acceptance. Seller is not responsible for damage to the Equipment arising out of the shipment of the Equipment to Buyer. Claims for damage due to shipping must be made by Buyer to the freight carrier.
- 14. <u>Return of Equipment</u>. All returns will be pursuant to Seller's instructions. Buyer must contact Seller for a Return Material Authorization (RMA) before returning any Equipment. All returns must reference the RMA number along with the original invoice number and the reason for return.
- 15. <u>Cancellation or Termination</u>. In the event of cancellation of the Agreement by Buyer, or in the event of default under the Agreement by Buyer that is not cured within 30 days after notice by Seller, Buyer will pay to Seller on demand all direct and indirect costs (including, without limitation, all applicable restocking or cancellation charges, including reimbursement for direct costs assessed by the manufacturer) incurred directly or indirectly by Seller in connection with the Agreement, all as reasonably determined by Seller, plus any lost profit. In no event, however, will any amount payable by Buyer under the Agreement exceed the total price payable by Buyer for the Equipment.
- 16. <u>Modifications and Waiver—Entire Agreement</u>. The Agreement contains the entire agreement between Seller and Buyer and can be modified or rescinded only by a writing signed by both parties. If any term of the Agreement is held invalid or unenforceable, all other terms of the Agreement shall remain in effect. Any document submitted by Buyer to Seller confirming its intention to purchase Equipment described in the Agreement will be deemed to constitute a confirmation and acceptance of the Agreement, even if the document states terms in addition to or different from those in the Agreement. All agreements between Seller and Buyer will be solely under the terms and conditions of the Agreement and Seller objects to any and all additional or different terms contained in any document submitted to Seller by Buyer. Any execution by Seller of any other document submitted by Buyer in connection with the purchase of Equipment does not constitute acceptance of or agreement to any terms and conditions in addition to or different from those contained in the Agreement, but will constitute only acknowledgment of receipt of the document. In addition, Buyer's acceptance of these terms shall be conclusively presumed by Buyer's (i) acceptance of delivery of or (ii) payment for Equipment covered under the Agreement.
- 17. <u>Compliance with Laws</u>. Buyer will be responsible for compliance with any and all federal, state, or local laws or regulations respecting safety or respecting use of the Equipment and shall indemnify and hold Seller harmless from and against any and all claims of violations of laws or regulations or other claims of personal injury or property damage directly or indirectly related to the installation, maintenance, or operation of the Equipment.
- 18. **Export Control**. Equipment supplied by Seller may be subject to various export laws and regulations. It is the responsibility of the exporter and Buyer to comply with all laws and regulations. If any required export authorization is denied, Seller will be relieved of any further obligation related to the sale and delivery of the Equipment.
- 19. **Governing Law and Venue**. This Agreement will be governed by and construed in accordance with the laws of the State of Michigan. Buyer submits to personal jurisdiction in Michigan. Seller and Buyer agree that any action arising out of the sale of goods or services in accordance with this document will be brought, heard, and decided in a court located in Kent County, Michigan and that this venue is convenient.
- 20. <u>Authority</u>. Each signatory represents that it has all requisite authority to execute the Agreement on behalf of its principal and that the Agreement is fully enforceable against the principal in accordance with its terms.

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### B W MANUFACTURING, INC.

### GENERAL SAFETY & HAZARDOUS MATERIALS WARNING

WARNING SURFACE PREPARATION EQUIPMENT CAN BE DANGEROUS IF NOT OPERATED PROPERLY. THE OPERATOR IS RESPONSIBLE FOR THE SAFE OPERATION OF THIS EQUIPMENT. The operator must carefully read and follow any warnings or safety instructions provided with the equipment prior to operating the equipment. Do not remove any safety devices or warnings on the equipment.

**WARNING** FLOOR AND/OR DECK SURFACES MAY BE COATED WITH OR CONTAMINATED BY HAZARDOUS MATERIALS. Typical examples of hazardous materials include (i) tile mastic (likely to contain *asbestos*); (ii) stained areas near electrical equipment (potentially containing *PCBS*); (iii) paint (potentially containing *lead*); (iv) stained floor areas in chemical or other industrial facilities (potentially containing toxic *pesticides, cleaning fluids, solvents,* or other *harmful chemicals*).

WARNING Preparation equipment is used to remove surface material from a variety of surfaces. The surface preparation process often generates large amounts of dust and other small particles, which are released into the air. WHEN A SURFACE CONTAINS HAZARDOUS MATERIALS, EXPOSURE TO THE DUST GENERATED BY THE PREPARATION EQUIPMENT MAY POSE A HEALTH RISK. INSPECT ALL SURFACES FOR POSSIBLE CONTAMINATES PRIOR TO USING PREPARATION EQUIPMENT AND CONSULT HAZARDOUS MATERIAL EXPERTS AND GOVERNMENT AUTHORITIES BEFORE OPERATING PREPARATION EQUIPMENT ON SURFACES SUSPECTED OF CONTAINING HAZARDOUS MATERIALS.

WARNING BW MANUFACTURING, INC. IN NO WAY REPRESENTS THAT ITS PREPARATION EQUIPMENT IS SUITABLE OR APPROVED FOR REMOVING HAZARDOUS MATERIALS FROM CONTAMINATED SURFACES. DO NOT ATTEMPT TO USE ANY PREPARATION EQUIPMENT MANUFACTURED BY BW MANUFACTURING, INC. ON ANY CONTAMINATED SURFACE. It is the responsibility of the preparation equipment operator and/or the contractor using the preparation equipment to inspect the proposed worksite for contaminates and obtain approval from contamination experts and/or government authorities before using BW Manufacturing, Inc. preparation equipment. It is also the responsibility of any contractor using preparation equipment to inform its employees or subcontractors of all potential health risks associated with operating preparation equipment and to ensure its employees or subcontractors are protected from exposure to harmful materials.

BW MANUFACTURING, INC. IS NOT RESPONSIBLE FOR ANY INJURY, ILLNESS, DEATH, OR PROPERTY DAMAGE THAT MAY RESULT FROM IMPROPER USE OF ITS PREPARATION EQUIPMENT OR OTHER PRODUCTS

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### **Maintenance Points and Intervals**

Inspect	Interval	Description	Action
Blast Head Seals	Beginning and end of each shift.	Seals should be fully sealed around the bottom of the blast head.	Replaced damaged or worn seals.
Rear Brush	Beginning and end of each shift	Brush should touch the ground and create and even seal at the rear of the blast head.	Replaced damaged or worm brush.
Shot Screen	Throughout shift and end of shift.	Screen should allow the shot to freely move from the shot separator to the hopper.	Empty the screen to remove rocks and debris.
Shot Hopper	End of shift.	Do not allow shot to sit in hopper, especially when exposed to moisture.	Empty shot out of the hopper at the end of each shift.
Dust Hose	Daily	Dust hose should not have leaks or structural damage.	Replace damaged dust hose as necessary.
Empty Dust Collector	Daily	Dust should never sit in the collector for extended periods of time.	Empty dust from the collector.
Blast Head Lid Seal	Daily	Seal should not leak around the perimeter of the blast head	Replace damaged seal as necessary.
Dust Bin Seal	Daily	Seal should not leak around the perimeter of the dust bin.	Replace damaged seal as necessary.
Shot Stop	Throughout the Day	Shot stop should allow the removal of shot from the flow of dust to the dust bin.	Clean with stainless steel scraper to remove build up of shot and debris.

### **Maintenance Points and Intervals**

Blast Head Blades	Every 40 hours or if trailing shot. The leading edge of the blade should not be excessively rounded over.	Gap between blades and the upper rear liner is about 3/16".	Replace blades as a full set if worn. Do not individually replace blades.
Dust Filters		Filter should be free of holes, damage or a thick coating of dust.	Replace 10129-B filters as needed. Wash 10129-H filters from the inside out with a low pressue hose and give ample time to dry. (overnight or a full day)
Belts	Every 40 hours.	All belts should be properly tensioned and free of damage.	Re-tension or replace belts as needed.
Grease Points	As indicated on the machine.		As indicated on the machine.
Motor	Refer to motor manual.		As indicated in motor manual.

### WARRANTY BREAKDOWN

Item	NONE	90 DAYS	1YEAR / 500 HR	2 YEARS / 2000HR	WARRANTED BY:
Chassis		0			B W Mfg., Inc.
Engine				Ο	Kubota Engine
Clutch			0		B W Mfg., Inc.
Compressor			0		B W Mfg., Inc.
Hydraulics			0		B W Mfg., Inc.
Dust Filters	0				B W Mfg., Inc.
Blast Head		0			B W Mfg., Inc.
Blast Wheel	0				B W Mfg., Inc.
Scarifier Head		0			B W Mfg., Inc
Scarifier Cage	0				B W Mfg., Inc.
Scarifier Main Shaft	0				B W Mfg., Inc.
Diamond Grinder/ Polisher Head		0			B W Mfg., Inc.
Diamond Mount	0				B W Mfg., Inc.
Diamond Cutters	0				B W Mfg., Inc.

WARRANTED BY:	Company to Contact
Kubota Engine America Co.	Engine Power Inc.
	1-800-832-7670
	www.enginepower.com
B W Mfg., Inc.	B W Manufacturing, Inc.
	Voice: 616-447-9076
	Fax: 616-447-9078
	E-mail: info@bwmanufacturing.com
	Warranty does not include travel time



### KUBOTA ENGINE AMERICA CORPORATION LIMITED WARRANTY ON INDUSTRIAL ENGINES AND REPLACEMENT PARTS EFFECTIVE MAY 1, 2009

### **OUR WARRANTY TO YOU**

We warrant to you, the original purchaser, that all parts (except those referred to below) of your new Kubota Industrial engine and replacement parts purchased from an Authorized Kubota Industrial Engine Distributor or OEM Distributor in the United States will be free from defects in materials or workmanship during the following periods. (Refer to Service Policy for further details)

- Industrial Engines for 2 years or 2,000 hours, whichever occurs first.
- Industrial Engines Major Component Warranty (MCW), 3 years or 3000 hours, whichever occurs first, parts only.

MCW oovers cylinder block, cylinder head, crankshaft, carnshaft, gears, pistors, rods, flywheel, flywheel housing, oil pump, pulleys, governor, intake manifold, oil pan, ignition distributor.

MCW does not cover rings, bearings, water pump, any electrical component, valve train components, accessory parts, seals, gaskets, carburetors, exhaust manifold, hoses, all fuel system components, muffer, any filters, radiator, fan, belts, thermostat, spark plugs, fuel transfer pumps.

Replacement parts for 1 year.

### WHAT WE WILL DO

We will, at our option, repair or replace any part covered by this warranty which becomes defective, maifunctions or otherwise falls to conform with this warranty under normal use and service during the term of the warranty at no charge for parts or labor. (Parts only for MCW)

### WHAT YOU MUST DO TO OBTAIN WARRANTY SERVICE

In order to obtain warranty repairs, you must deliver the product, together with proof of purchase, to an Authorized Kubota Industrial Engine Distributor or Dealer at your expense. The names and addresses of such Authorized Kubota Industrial Engine Distributors can be found on the Internet at www.kubotaengine.com, by calling 1-800-532-9808, via email at EEWRI@kubotaengine.com or by contacting:

Kubota Engine America Corporation 505 Scheiter Road Lincolnshire, IL 60069

### WHAT THE WARRANTY DOES NOT COVER This warranty does not cover:

- Damage, maillunctions or failures resulting from accidents, abuse, misuse, modifications, alteration, improper servicing, or lack of performance of required maintenance service.
- Normal maintenance services or replacement of maintenance Items such as light bulbs, preheater plugs, indicator and resistant coils, filter elements, lubricants, oils, spark plugs, coolant, or belts.
- Installation of replacement parts, unless originally installed by an Authorized Kubota Industrial Engine Distributor or Dealer.
- Non-genuine Kubota parts.
- Any engines damaged by use of ether or any starting aid, or greater than a 50/50% solution of antifreeze and water.
- Injection nozzie wear or any engine damage caused by injection nozzie wear or sticking.
- Damage caused by water entering the engine due to any cause.
- Used Products.
- Any damage caused by overheating that is not a direct result of a defect in materials or workmanship.
- 10. Any Engine not application reviewed.

APPLICATION REVIEW PROCESS: The Kubota Engine America (KEA) application review process is intended to assist the OEM with engine installation to optimize functionality/performance within the OEM's equipment in order to maintain durability, customer satisfaction, and reduce warranty failures and expenses. Kubota cannot anticipate all potential failures and issues that may occur with the engine or product in the field during an application review. Therefore, machine durability testing by the OEM either in a test facility and/or in the field is critical to further reduce the potential for field failures.

The amount of time spent by KEA on an application review is significantly less than the amount of time spent by the OEM's design engineers on the application. Because of this, the KEA application review is intended to identify issues that are within the scope of the application review testing performed and in some cases recommend possible solutions. The KEA application review should never take the place of proper design and testing of the finished product by the OEM.

The KEA application review does not in any way express or imply any additional warranty coverage other than what is stated in Kubota's Limited Warranty Agreement. Kubota and its subsidiary companies are not responsible for (including, but not limited to): failures resulting from any components that are not manufactured by Kubota, misrepresented or incorrect information provided from an OEM, any changes made without KEA's knowledge, any decision by the OEM not to follow KEA's recommendations, or any application related problems or deficiencies that may arise that were not found by KEA's limited application review or the OEM's durability testing.

### THIS IS THE ONLY EXPRESS WARRANTY ON OUR PRODUCTS

We neither assume nor authorize anyone to assume for us any other express warranty. The Kubota Distributor/ Dealer has no authority to make any representation or promise on behalf of Kubota Engine America Corporation or to modify the terms or limitations of this warranty in any way.

LIMITATIONS ON OUR RESPONSIBILITY WITH RESPECT TO PRODUCTS PURCHASED AND USED FOR PERSONAL, FAMILY OR HOUSEHOLD USE.

Our responsibility is to repair or replace defective parts as stated above. We will not be responsible for any other expenses, losses or inconvenience which you may sustain as a result of the purchase, use, maifunction or defective condition of our products. ANY IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE PERIOD SET FORTH ABOVE AND IN NO EVENT WILL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above you specific legal rights, and you may have other rights which vary from state to state.

LIMITATIONS ON OUR RESPONSIBILITY WITH RESPECT TO PRODUCTS USED FOR RENTAL OR FOR COMMERCIAL, INDUSTRIAL OR AGRICULTURAL PURPOSES.

This warranty is in lieu of all other warranties, express or implied, and of any other obligations or liability on our part. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. Our responsibility for any and all losses and damages resulting from any cause whatsoever, including our negligence, alleged damage or defective goods, whether such defects are discoverable or latent, shall be limited to the repair or replacement of defective parts as stated above. IN NO EVENT WILL WE BE LIABLE FOR LOSS OF USE, LOSS OF PROFITS, LOSS OF OR DAMAGE TO OTHER PROPERTY, INCONVENIENCE, COMMERCIAL LOSS, OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER.

### **EQUIPMENT SPECIFICATIONS**

	<u>MODEL</u>	<u>SCB-1200</u>							
	Manufacturer	Kubota							
	Model	Model D902-E3B .898L (54.80cid)							
	Туре	Vertical, Water-Cooled, 3 Cylinder Diesel							
	Number of Cylinders	3							
ne	Bore & Stroke	72mm (2.83in) X 73.6mm (2.90in)							
Engine	Total Displacement	898cc (0.898L) (54.80cid)							
	Engine Gross Power	24.8hp (18.5kW)							
	No Load Fast Idle	3600 rpm							
	Battery	1—12 Volt Deep Cycle Lawn & Garden							
	Fuel	Diesel Fuel No.2 (Above 148F(108C) Diesel Fuel No.1 (Below 148F(-108C)							
	Fuel Tank	9.5 Gallons (36L)							
cities	Engine Crankcase W/Filter	3.92 Quarts (3.7L) 15W-40 Diesel Motor Oil							
Capacities	Engine Coolant	3 Quarts (3.41L) Pre-Mix Coolant 50/50 Mixture							
	Hydraulic System	32oz. (1.10L) Anti-Wear Hydraulic Oil - 100 Viscosity Grade							
	Overall Length	84 in. (213cm)							
suc	Overall Width	35 in. (89cm)							
Dimensions	Overall Height	54 in. (137cm)							
Din	Wheel Base (Length)	48 in. (122cm)							
	Wheel Base (Width)	32 in. (81cm)							
	Front Tire	12" X 3.5" X 8" (30.48cm X 8.89cm X 20.32cm) Non-Marking							
Traveling System	Rear Tire	8" x 2" (20.32cm X 5.08cm) Polyurethane Tread							
ing S	Steering	Manual							
ravel	Brake	Hydraulically Controlled							
I	Travel Speed	3.5 MPH (5.63 km/h)							
	Weight (Chassis)	1220 LBS. (553 Kgs.)							
S	Weight (Blast Head)	350 LBS. (159kgs.)							
Weights	Weight (Scarifier Head)	450 LBS. (204kgs.)							
🕏	Weight (Diamond Grinder)	400 LBS. (182kgs.)							
	Weight (Magnet Sweeper)	150 LBS. (68kgs.)							
фB	Decibel Reading @ 25ft	Diesel - 89dB / Electric - 82dB							

Se	Service Intervals						≟	dicat	o uo	Indication on hour meter	lr me	ter						
<u>8</u>	No. Maintenance Items	Service	٥	20	9	150	00.	50 3	00	50 40	00	20 20	0 55	09 0	0 65	50  100  150  200  250  300  350  400  450  500  550  600  650  700	Schedule	
		Check	0														Daily	
~	1 Engine Oil	Replace		•		0		0		0		0	0	_	$\circ$		Every 100 hrs.	
2	Engine Oil Filter	Replace		•		0		0		0		0	0	_	$\circ$		Every 100 hrs.	
3	Hydrualic Oil	Replace		•		0		0		0		0	0		$\circ$		Every 100 hrs.	
4	Hydrualic Oil Filter	Replace		•		0		0		0		0	0		$\circ$		Every 100 hrs.	
2	Engine Starting System	Check	0														Daily	
9	Greasing	Lubricate	0		0		0		0		0	$\circ$		0		0	Daily	
7	Battery	Check				0		0		0		0	0		$\circ$		Every 100 hrs.	
8	Air Filter*	CK/Replace	0	0	0	0	0	0	0	0	$\circ$	0 0	0	0	0	0	Every 50 hrs.	
6	9 Fuel Filter	Replace		•		0		0		0		0	0		0		Every 100 hrs.	
10	10 Belts	Check				0		0		0		0	0	_	0		Every 100 hrs.	
11	Engine Valve Clearance	Adjust															Every 2000 hrs.	*1
12	12 Fuel Injector Pressure	Check															Every 2000 hrs.	*1
13	13 Injection Pump	Check															Every 2000 hrs.	*1
14	14 Cooling System	Flush															Every 2000 hrs.	*
15	15 Coolant	CK/Replace	0														Daily	
16	16 Radiator Hoses	CK/Replace	0														Daily	
17	17 Blast Wheel For Wear	CK/Replace	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Every 50 hrs.	
18	18 Blast Head Liners	Check	0		0		0		0		0	$\overline{\circ}$	_	0		0	Every 100 hrs.	
19	19 Blast Head Brushes	Adjust	0														Daily	*2

# \* Inspect Engine Air Fliter Daily. Replace After 5 Cleanings or After 50 Hours

### Legend

\*1 = Consult Kubota for this service

\*2 = Operators discretion to replace after inspection ●□□□ = Daily Service ⊙ = Service performed at "break-in" period ○ = Scheduled service

REPAIR ORDER

			F PROBLEM																		
			DESCRIPTION OF PROBLEM										LABOR DESCRIPTION								
		1		AT.							<u> </u>		LABOR DI								
)   	BILL TO: PHONE NUMBER:	CONTACT	QUOTE: YES OR NO	BILL FOR TIME & MAT.	YES OR NO DATE IN:	DATE OUT:		UNIT NUMBER:	UNIT MODEL:	UNIT HOURS:	SERVICE TECH:		HRS LABOR								
PART DESCRIPTION																					
PART DES																					
PARTS QTY.												13									



### Filter Media Specifications

New filters may "puff" a minuscule amount dust for the first 10 to 15 minutes of use or until the filter is adequately coated with material. The stock filter (10129-H) cleans to 99.7% efficiency at 0.3 micron directly out of the box, and the filter will therefore allow a minimal amount of dust through the filter on every pulsation cycle.

Further tests have shown that humidity and concrete dampness will affect the efficiency of the pulsation system to clean the filter.

#10129-H Spun Bond W/PTFE Coating (Standard Filter in all BW Manufacturing equipment):

- SpunBond P.T.F.E., 70 pleats, 31 Sq. Ft media.
- Efficiency of 99.7% @ 0.3 Microns (Minimum Efficiency Rating Value (MERV) 16 Rating Out of the box)

#10129-B Cellulose Paper/Polyester Blend Filter (Optional Replacement Filter):

- 80/20 Blend, 120 pleats, 53 Sq. Ft media.
- Efficiency of 99.9% @ 1.0 Micron with a seasoned (caked) filter.

### **Technical Notes:**

- OSHA Standard#: 1926.1153 for Respirable crystalline silica requires a filter with 99.0% or greater efficiency.
- All values are averages
- Specifications are subject to change without notice
- To qualify as HEPA by US government standards, an air filter must remove (from the air that passes through) 99.97% of particles that have a size of 0.3 µm\*. HEPA was commercialized in the 1950s, and the original term became a registered trademark and later a generic term for highly efficient filters. Products that claim to be "HEPA-type", "HEPA-like", "HEPA-style" or "99% HEPA" do not satisfy these requirements and may not have been tested in independent laboratories. Some of these sub-par quality filters may come reasonably close to HEPA filtration, while others will fall significantly short, making them truly inferior.
- \* The symbol µm or micrometer/micron is one thousand of a millimeter, 0.001mm or about 0.000039 inch

### **Equipment Starting & Operating Instructions**

To start machine stand behind tray step (A) and turn ignition key (B) until glow plug light goes out then start engine. After the engine starts, to operate machine in forward or reverse, step onto the tray step (A) pushing the tray handle (C) forward and using the directional control lever (D). If the operator steps off of the tray step (A) while the machine is in motion, it will come to a stop.

Engine speed is controlled through the throttle lever (F) and monitored through the tachometer (G).

Clutch engagement is controlled with the Clutch Switch (H). Engagement should only be done at an idle to prevent damage to the machine.

For head raising & lowering use the control switch (E) located next to the directional control lever.

Use the SHOT/DIAMOND switch (J) to operate shot gate and raise and lower diamond cutters/polishing pads.

During normal operation with new filters vacuum gauge (I) should read no more than 5 inches of water.

### Safety Switches

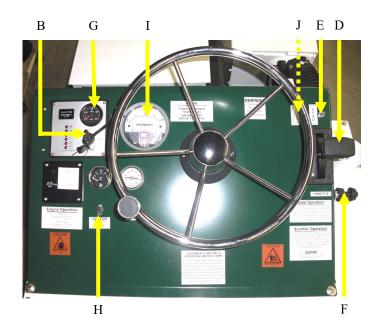
Upon release of the safety handle, the machine will stop moving and the flow of shot will be shut off.

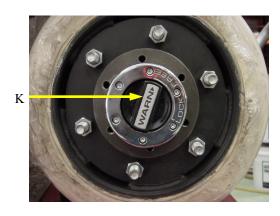
The shot gate, diamond cutters/polishing pads and SHOT/DIAMOND switch will not function with the head in a raised position.

### **Freewheeling of Machine**

To move machine with out running engine, switch front wheel hub (K) to the FREE position. Once the machine is in place switch the front wheel hub back to the LOCK position and the machine will move under power.











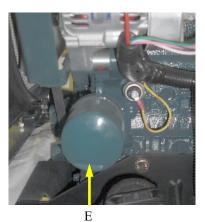


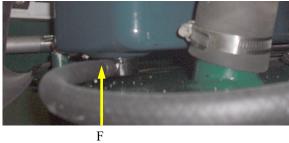
### Filter & Fluid Replacement

The hydraulic fluid should be replaced every 200 hours. Removing the relief plug from the wheel motor (A) allowing fluid to drain. At this time replace the hydraulic filter (B). Refill the system thru the reservoir (C) to approximately 2 inches below the hydraulic tank breather cap (D), with heavy-duty hydraulic fluid.

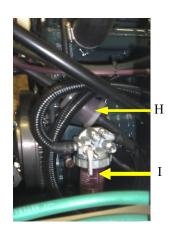
The engine oil and filter (E) can be changed using the engine oil drain tube (F) every 100 hours with 15W40 Diesel Engine Oil.

Also at 100 hours, change the air filter (G), fuel filter (H), and clean the water separator/fuel filter (I).







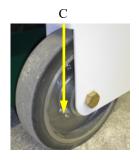


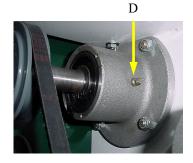
### **Greasing the machine**

Steering Spindle (A), Steering Cable (B), Rear Wheel (C), and Blower Shaft Bearing (D) should be greased every 8 hours of operation. Use high temp Teflon grease.





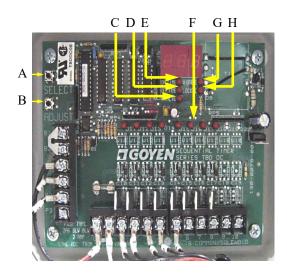




### **To Set Pulsation Board**

- Press "Select" (A) to illuminate the "On Time" LED (E)
- Press "Select" (A) to illuminate the "On Time" LED (E)
  Press "Adjust" (B) to the required setting of 30 seconds (030)
  Press "Select" (A) to illuminate the "Off Time" LED (D)
  Press "Adjust" (B) to the required setting of 1milliseconds (001)
  Press "Select" (A) to illuminate the "# Valve" LED (C)
  Press "Adjust" (B) to the required setting of 5 (005)
  Press "Select" (A) to illuminate the "# Off's" LED (G)
  Press "Adjust" (B) to the required setting of all zeros (000)
  Press "Select" (A) to illuminate the "Locked" & # Off's LED (H)

The indicator lights (F) will come on each time it pulsates a filter.



### Pressure Switch

Air pressure is pre-set by a pressure switch and does not need adjustment.

For generation 3 upgrade requires additional wiring.



### **Dust Filter Cleaning & Replacement.**

Watch the Magnehelic Gauge and when it reaches 10, then the filters will need to be cleaned or replaced.

To clean filter manually, rotate the filter and gently tap the filter sides on the ground. Adverse conditions on the filters such as heavy grease, oil, glues, and moisture may require more frequent manual cleaning or replacement.

### To determine if you have a bad dust filter.

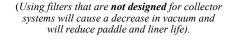
Watch the indicator lights on the timer board and blower exhaust while the machine is in operation. If a puff of dust follows an indicator light, that filter is bad and should be replaced. Or when inspecting filters you find a layer of dust on the top of the filter inside the rubber seal ring, this is an indication that the filter is bad and needs to be replaced.







Bad Filter



Clean or replace filters when

gauge reads above 10 inches

This is a competitors filter.

This is the 10129-B Filter that is the stock filter in all BW Manufacturing, Inc. equipment.

Both filters were installed in the same machine and you can see that the filter on the right has more pleats along with dust packed near the top rim.



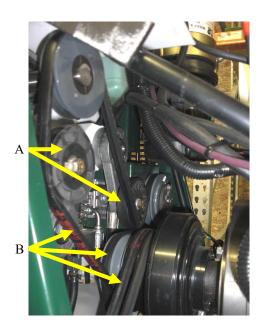
The 10129-B Filter on the left weighs over 2 lbs. less then the competitors filter due to better air flow during the pulsation process.





### **Pulleys & Belts**

All idler pulleys (A) and belts (B) need to be inspected every 100 hours of operation.



### **Belt Tensioner Settings**

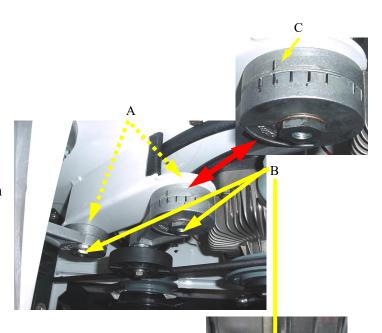
To adjust belt tensioners, loosen rear bolt (A) and use a wrench on front nut (B) and turn until proper tension is achieved, then retighten rear bolt (A).

Hydraulic Belt: 2 1/2 marks past center.

Blower Belt: 3 marks past center.

Gear Box: 2 marks past center.

Markings on tensioner should be lined up as shown ( C ) to proper setting.



Dia. SCB-1200-K-1

1.	D-1254	Collector Draw Latch
2.	P-46-RAS	Right Tray Lift Arm
3.	P-08-AC	Collector Tray
4.	D-1236	Rear Wheel
5.	P-02-AS	Collector
	P-05-AS	Collector Top
7.	D-1237-AS	Lift Cylinder
8.	P-11-AS	Lift Arm



1.	O-89	Front Bumper
	P-41-AS	Front Wheel
3.	P-14-AS	Hood
4.	P-06-AS	Fuel Tank
5.	P-01-AS	Frame
6.	D-1323	Air Compressor
7.	P-12-AS	Gauge Panel
8.	P-46-LAS	Left Tray Lift Arm

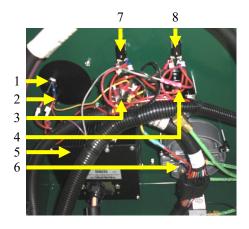


1.	C-1798	Vacuum Gauge	8.	C-1626	Switch (Lights)
2.	D-XXXX	Control Panel	9.	D-1318	Shot Switch
3.	D-1260	Air Pressure Gauge	10.	D-1243	Lift Switch
4.	D-1513	Fuel Gauge	11.	D-1319	Directional Control Lever
5.	D-1411			D-1322	Throttle Control
6.	C-1805	In-Dash Fuse Holder	13.		Steering Wheel
7.	C-1626	Switch (Clutch)	14.	P-12-AS	Dash/Gauge Panel



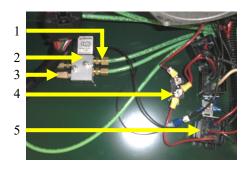
### Dia. SCB-1200-K-4

- C-1805 In-Dash Fuse Holder
- D-1411 Air Filter Light
- 3. D-1513 Fuel Gauge4. D-1260 Air Pressure Gauge
- 5. D-XXXX Control Panel
- 6. C-1798 Vacuum Gauge
- 7. C-1626 Switch (Clutch)
- 8. C-1626 Switch (Light)



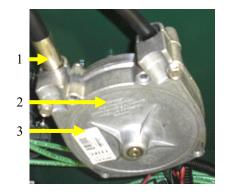
### Dia. SCB-1200-K-5

- C-1633 Fitting
- C-1625 Solenoid Valve
- C-1644 Muffler
- D-1313 Circuit Breaker (15A)
- 5. D-1333 Relay

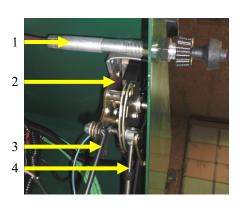


### Dia. SCB-1200-K-6

- 1. D-1455 Steering Cable
- D-1328 Steering System (Includes Cable & Helm)
- D-1451 Steering Helm



- 1. D-1322 Throttle Control
- D-1319 Directional Control Lever
- 3. O-110-AS Dash Prop Rod
- 4. D-1320 Directional Control Cable



### Dia. SCB-1200-K-8

- M-41 Blower Bearing Housing
- D-1302 Blower Sheave 2.
- 3. D-1295 Blower Bushing
- 4. O-02 Blower Shaft
- 5. D-1300 Idler Pulley (Blower)
- 6. D-1311 Belt Tension Arm
- 7. D-1241 Fuel Pump
- 8. O-104 Idler Pulley (Hyd. Pump)
- 9. D-1311 Belt Tension Arm
- 10. O-84-AS Hyd. Oil Tank
- 11. P-68-AS Hyd. Pump Mount

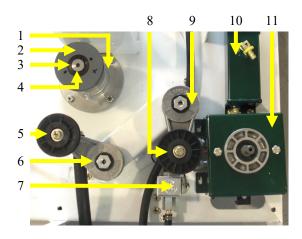
### Dia. SCB-1200-K-9

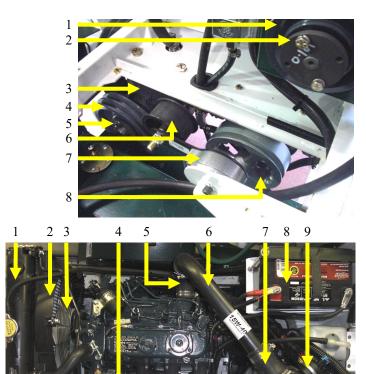
- D-1306 Hyd. Pump Sheave
- O-101 Hyd. Pump Bushing
- D-1204 Gear Box
- D-1305 PTO Input Sheave 4.
- D-1297 PTO Input Bushing D-1321 Idler Pulley (Clutch)
- D-1312 Belt Tension Arm
- D-1323 Air Compressor

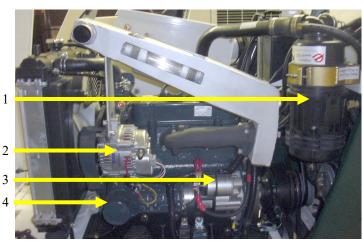
### Dia. SCB-1200-K-10

- Radiator 1.
- 2. Fan Shroud
- Engine Fan 3.
- 4. P-105 Converter/Muffler (Kubota)
- 5. D-1461 Intake Hose (90 Degree)
- O-59-K Intake Tube 6.
- D-1462 Intake Hose (Straight) 7.
- D-1240 Battery 8.
- D-1498 Air Filter Indicator

- D-1340-K Air Cleaner Housing
- 2. Alternator
- Starter Gen 1 D-1409 Gen 2: D-1509 3.
- Oil Filter







Dia. SCB-1200-K-12

1. D-1359 Stub Shaft

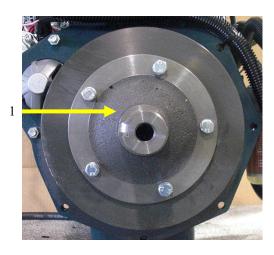
Dia. SCB-1200-K-13

1. Clutch Key (3/8" x 3/8" x 2-1/2")

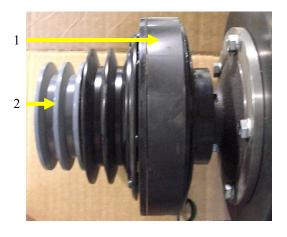
Dia. SCB-1200-K-14

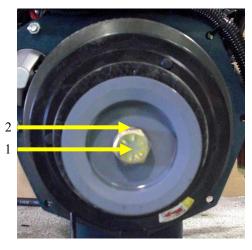
- 1. D-1329-A Electric Clutch
- 2. M-02 Sheave (Diesel Engine)

- 1. 5/8-18x3 Hex Head Bolt
- 2. 5/8LW Lock Washer









### Dia. SCB-1200-K-16

- D-1292 Blower Belt
- 2. D-1293 Clutch Belt (Requires 2)
- M-02 Sheave (Diesel Engine) D-1329-A Electric Clutch D-1321 Idler Pulley (Clutch) 3.
- 5.
- O-58 Clutch Bracket
- 7. D-1312 Belt Tension Arm

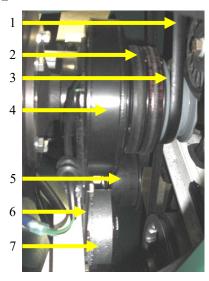
### Dia. SCB-1200-K-17

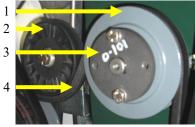
- D-1306 Hyd. Pump Sheave
- O-104 Idler Pulley (Hyd. Pump)
- O-101 Hyd. Pump Bushing
- 4. D-1217 Hyd. Pump/Air Compressor Belt

### Dia. SCB-1200-K-18

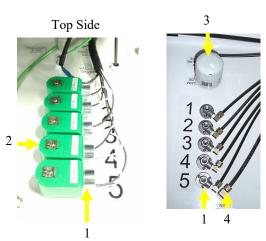
- 1. D-1325 Solenoid Valve
- 2. C-1612-C Coil Pack
- 3. V-1034-A Vacuum Gauge Filter
- V-1031 Air Line Fitting

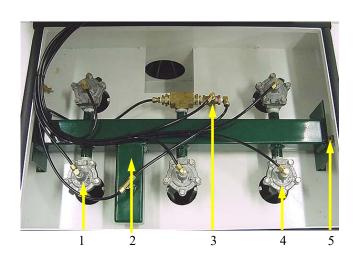
- V-1013 Popet Valve
- O-29-AS Air Tank
- C-1621 Check Valve 3.
- V-1013 Popet Valve 4.
- C-1623 Pressure Relief Valve





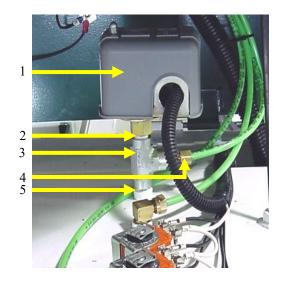
Bottom Side





### Dia. SCB-1200-K-20

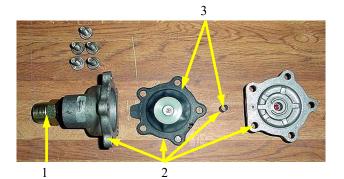
- I-132-B Pressure Switch V-1039 Pipe Nipple
- 2.
- C-1645 Adapter V-1045 Fitting 3.
- 4.
- V-1039 Pipe Nipple



### Dia. SCB-1200-K-21

### 5 Bolt Poppet Valve (older models)

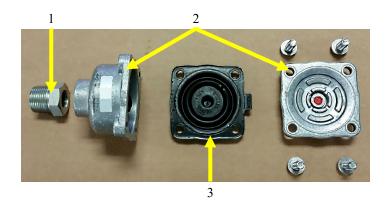
- V-1019 Orifice Bushing V-1013 Popet Valve 1.
- 2.
- V-1068 Popet Valve Repair Kit



### 4 Bolt Poppet Valve (newer models)

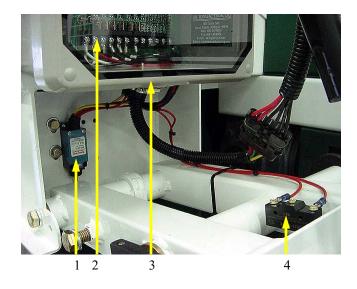
Orifice Bushing Popet Valve Popet Valve Repair Kit V-1019 V-1013

V-1107



### Dia. SCB-1200-K-22

- D-1280 Safety Handle Switch
- C-1719-A Timer Board
- C-1660 Timer Board Enclosure
- 4. C-1718 Shot Safety Switch



### **To Set Pulsation Board**

When power is **ON** the "**OFF**" will be displayed on the digital display.

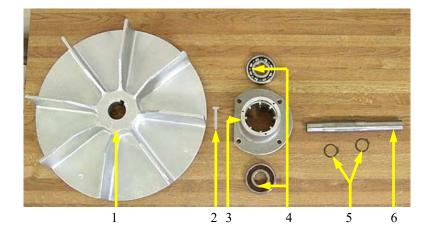
### To program:

- 1.Press "SET" and F02 will show on display. (A)
- 2. Press "OK" to show Solenoid Valve Activation Time. (D)
- 3. Press "+ or -" to adjust to 0.05 (B or C)
- 4. Press "**OK**" (D) 5. Press "+ or -" to show F03 (B or C)
- 6. Press "**OK**" to show solenoid pulse time (D)
- 7. Press "+ or -" to adjust to 003 (B or C)
- 8. Press "**OK**" (D)
- 9. Press "+ or -" to show F04 (B or C)
- 10. Press "**OK**" to show Number of Valves (D)
- 11. Press "+ or -" to adjust to 02 (B or C)
- 12. Press "**OK**" (D)
- 13. Press "SET and OFF will show on the display. (A)



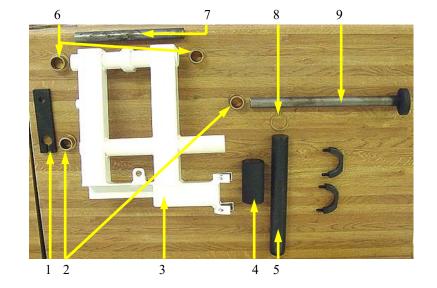
### Dia. SCB-1200-K-23

- 1. D-1205 Blower Fan
- 2. 5/16-18x1 Blower Fan Bolt
- 3. M-41 Blower Fan Bearing Housing
- 4. D-1290 Blower Fan Bearing
- 5. D-1309 Blower Fan Main Shaft Snap Ring
- 6. O-02 Blower Fan Main Shaft



### Dia. SCB-1200-K-24

- 1. L-009 Tension Arm
- 2. D-1296 Tension Rod Bushing
- 3. O-11-AS Lift Assembly
- 4. O-17-AS Lift Support Bushing Tube W/Bushings
- 5. L-010 Lift Support Shaft
- 6. D-1296 Pivot Shaft Bushing
- 7. O-12 Lift Assembly Pivot Shaft
- 8. C-1663 Lift Support Shaft Snap Ring
- 9. O-18-AS Tension Rod

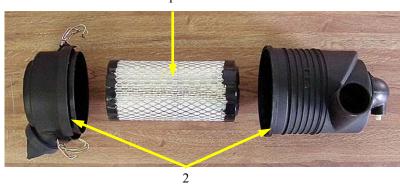


- 1. 3/8-24N Nut
- 2. 3/8LW Lock Washer
- 3. O-90 Head Stop Brace
- 4. C-1631 Rod End
- 5. 3/8-24N Nut
- 6. O-70-2 Head Stop Rod
- 7. 1/2-13N Nut
- 8. E-1212 Yoke End
- 9. E-2108 Quick Release Pin



Dia. SCB-1200-K-26

- D-1340-K Air Cleaner Housing
   D-1255 Air Cleaner Element

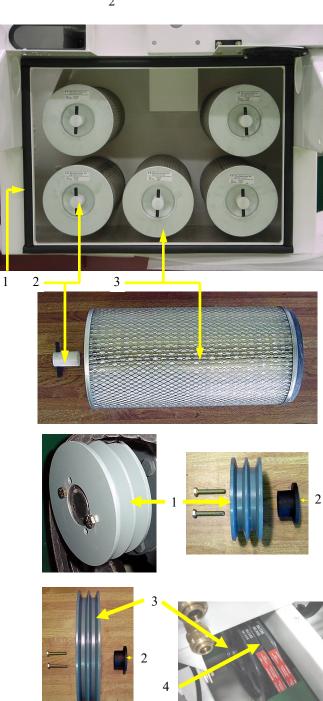


### Dia. SCB-1200-K-27

- D-1203 Collector Seal (sold by the foot)
- V-122-AS Filter Nut
- 10129-B Blend Filter

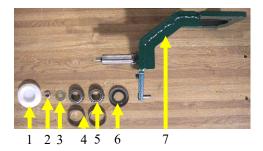
Optional Filters: 10129-H Moisture Resistant 10129-B Blend (Disposable)

- O-103 Scarifier/Diamond Grinding Head PTO Drive Sheave
- D-1297 Bushing
- O-102 Blasthead PTO Drive Sheave
- 4. E-1214 Head Drive Belt



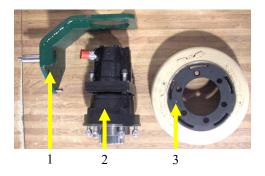
### Dia. SCB-1200-K-29

- 1. P-99 Spindle Cap
- 1/2-20NLJN Nylon Lock Jam Nut 2.
- 1/2USSFW Flat Washer 3.
- 4. D-1480 Spindle Bearing
- 5. D-1481 Spindle Bearing Race (Installed In Frame)
- 6. D-1483 Spindle Grease Seal
- 7. P-19-AS Wheel Mount

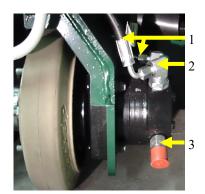


### Dia. SCB-1200-K-30

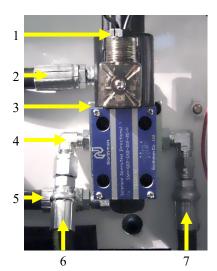
- 1. P-19-A Wheel Mount
- 2. D-1209 Wheel Motor
- 3. P-41-AS Front Wheel



- D-1218-AS Safety Valve To Wheel Motor Hose
   D-1211 Adapter
- D-1210 Drive Motor Pressure Relief Valve



- 1. D-1207 Safety Stop Valve
- 2. D-1218-AS Hyd. Hose (Valve to Wheel Motor)
- 3. D-1208 Safety Valve Sub Plate
- 4. D-1214 Adapter (used on all four ports)
- 5. D-1218-AS Hyd. Hose (Valve to Wheel Motor)
- 6. D-1389-AS Hyd. Hose (Pump to Valve)
- 7. D-1220-AS Hyd. Hose (Pump to Valve)



### Dia. SCB-1200-K-32

- 1. D-1386 Hydraulic System Filter
- 2. D-1385 Hydraulic Filter Housing

### Dia. SCB-1200-K-33

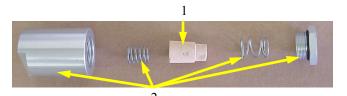
- 1. O-25-AS Tray Handle
- 2. P-10-AS Step
- 3. A-8623 Handle Lock Grip
- 4. P-57-AS Handle Lock
- 5. D-1278 Safety Switch Spring
- 6. V-1035 Cotter Pin
- 7. 1SAEFW Washer
- 8. P-56-AS Safety Switch Arm
- 9. P-08-AS Tray
- 10. O-71 Tray Front Axel
- 11. V-1035 Cotter Pin
- 12. D-1249 Cart Wheel

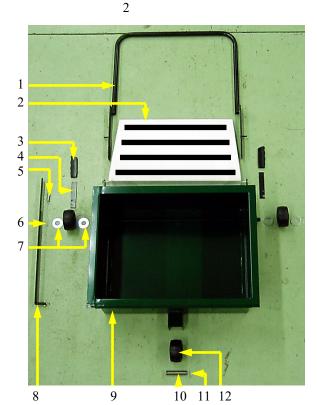
Unit Can be purchased as an assembly using part number **P-08-AC** 

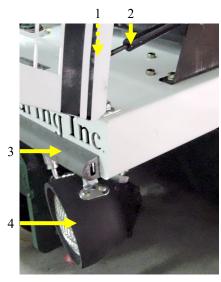
### Dia. SCB-1200-K-34

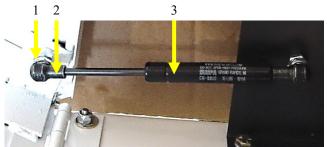
- 1. C-1671 Hood Strut End (not shown)
- 2. D-1279 Hood Strut
- 3. O-89 Bumper
- 4. C-1711 Headlight

- 1. C-1635 Ball Stud
- 2. C-1671 Strut End
- 3. D-1279 Strut (Hood)









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