

SB-6 SHOTBLASTER

Owners Manual



SB-6 Serial # _____

Engine Serial # _____

Version 01/2024
Part # G-162

🌐 bwmanufacturing.com

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MI 49544

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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.

TERMS AND CONDITIONS OF SALE

1. **Parties.** "Seller" means **BW Manufacturing, Inc.** "Buyer" means any entity or individual purchasing goods from Seller.
2. **Terms and Conditions of Sale.** 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. **Pricing.** 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. **Taxes.** 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. **Terms of Payment.** 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. **Limited Express Warranty.** 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. **Disclaimer of Third-Party Component Warranties.** 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. **No Consequential Damages.** 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. **Title and Risk of Loss.** 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. **Inspection and Acceptance.** 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. **Return of Equipment.** 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. **Cancellation or Termination.** 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. **Modifications and Waiver—Entire Agreement.** 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. **Compliance with Laws.** 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. **Authority.** 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.

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 contaminants 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

WARRANTY BREAKDOWN

Item	NONE	90 DAYS	1YEAR / 500 HR	2 YEARS / 2000HR	WARRANTED BY:
Chassis		O			B W Mfg., Inc.
Motor (Metabo)			O*		B W Mfg., Inc.

WARRANTY CONTACT INFORMATION

B W Mfg., Inc.	B W Manufacturing, Inc.
	Voice: 616-447-9076
	Fax: 616-447-9078
	E-mail: sales@bwmanufacturing.com
	<i>Warranty does not include travel time</i>

*METABO MOTOR WARRANTY & WARRANTY REPLACEMENT 122016

The warranty on the Metabo motor is one year (1 yr.) from date of purchase, and will be processed through BW Manufacturing, Inc.

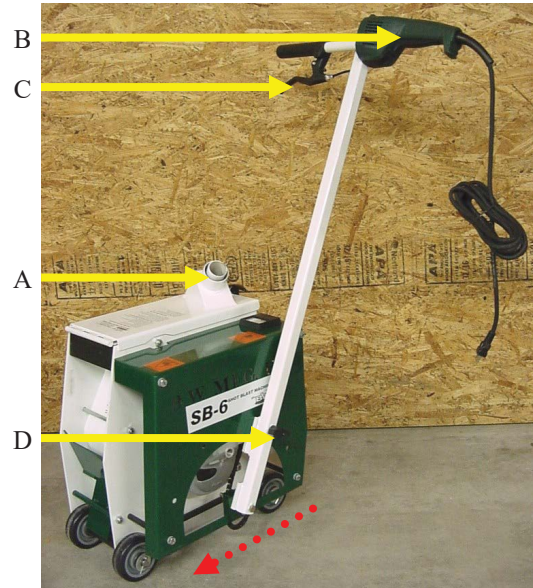
For units 1 year and under the procedure is as follows:

- A) Contact BW Manufacturing, Inc. notifying of the defective motor and the customer will receive an RGA#
- B) The customer may purchase new motor, at ***owners expense***. *Please Note - No credit will be given for new motor purchase.
- C) The defective motor will need be returned to BW Manufacturing, Inc and then forwarded to Metabo for warranty inspection, when the motor is repaired it will be returned to the customer.
- D) All shipments are F.O.B. Shipping Point of Comstock Park Michigan.

SB-6 SHOTBLASTER OPERATION

Equipment Operation

1. Raise lid and fill shot screen to shot level mark.
2. Lower lid and connect vac hose (A).
3. Start motor and lock on (B).
4. Start forward motion and pull shot gate Handle (C).
5. Machine handle can be repositioned by removing pin (D).
6. Amp gauge should not exceed 17 amps.
(REFER TO SHOT GATE ADJUSTMENT IF NECESSARY).

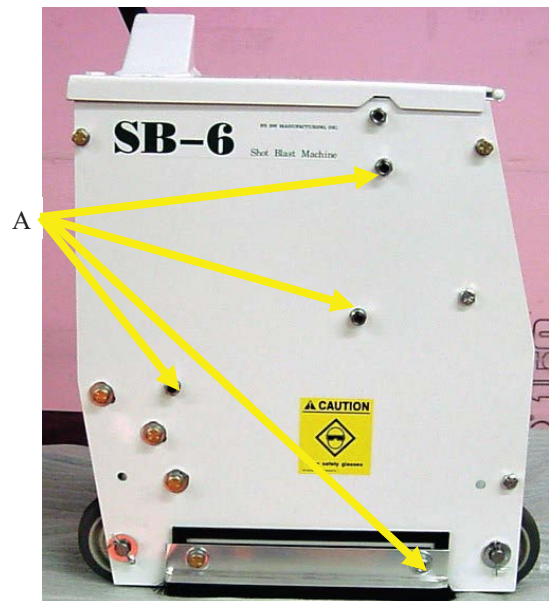


Recommended Steel Shot Size

Use only 230-330 size steel shot only.

Caution

Liner studs have silicone and loc-tite. Do not remove liner studs unless removing feed liner



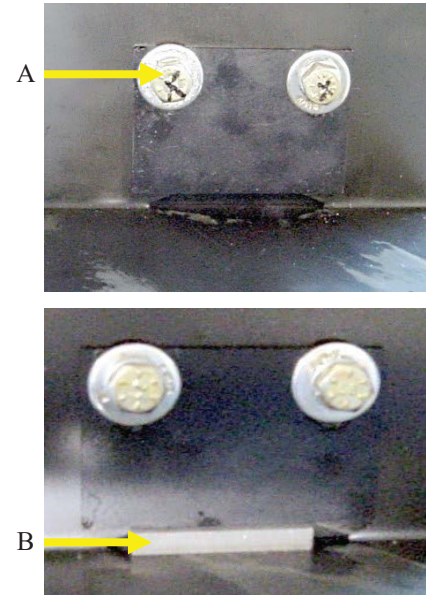
SB-6 SHOTBLASTER SERVICE

Shot Gate Adjustment.

To adjust shot load loosen but do NOT remove Shot Gate Bolts (A). Slide Shot Valve in hopper [UP] to increase shot and [DOWN] to decrease shot.

Stock adjustment should be at 5/16". This can be set buy using a 5/16" piece of key stock (B) as a gauge. To check proper setting, load machine with new clean shot, set on a steel plate, hook up vacuum and run machine.

Amp gauge should not exceed 17 amps under load.

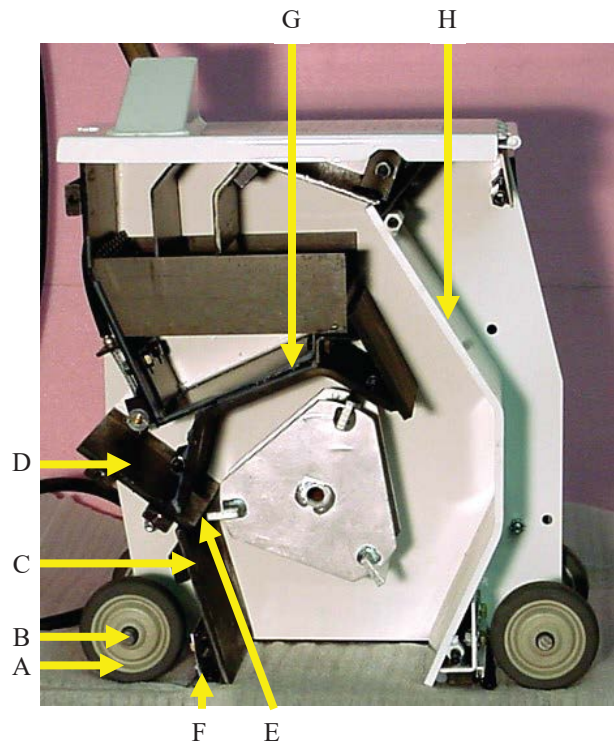


Replacing Rear Liners

Both rear liners can be rotated for extended life. To replace liners, tilt machine forward, remove rear wheels (A) and axle (B), remove lower rear liner (C) then upper rear liner (D). Install new upper rear liner and adjust to a clearance of 3/16" between blade (E) and liner (D). Install lower rear liner and adjust to fit tight to upper liner. Install rear brush seal (F), rear wheels and axle. Adjust rear brush until it makes contact with the ground.

Caution

Do not separate the two sides of the blast machine unless you are replacing the top liner (G) and the front housing (H) .



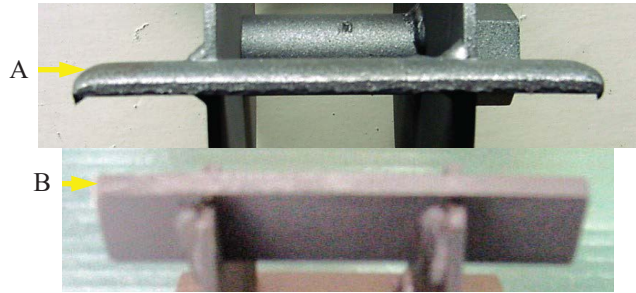
SB-6 SHOTBLASTER SERVICE

Blast Wheel Wear & Replacement

Depending on wear, the blast wheel will need to be replaced every 40 to 60 hours.

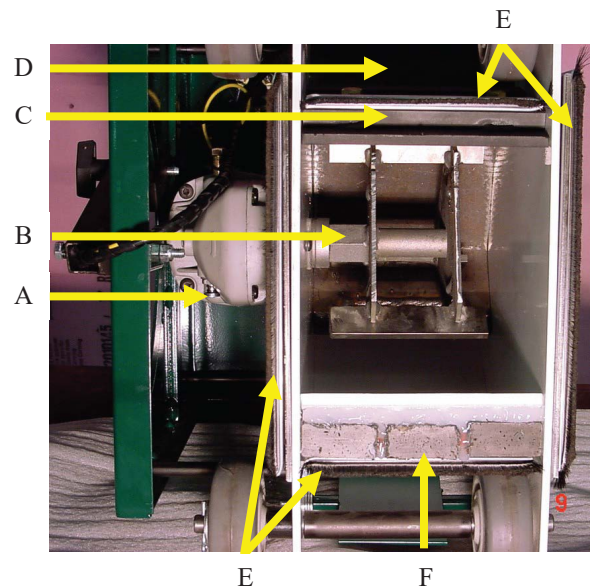
Exceeding the recommended replacement time may cause severe damage to blast head.

Blast wheel wear consists of the leading end of the paddles rolling over to the trailing end of the paddles (A) vs. new paddles (B).

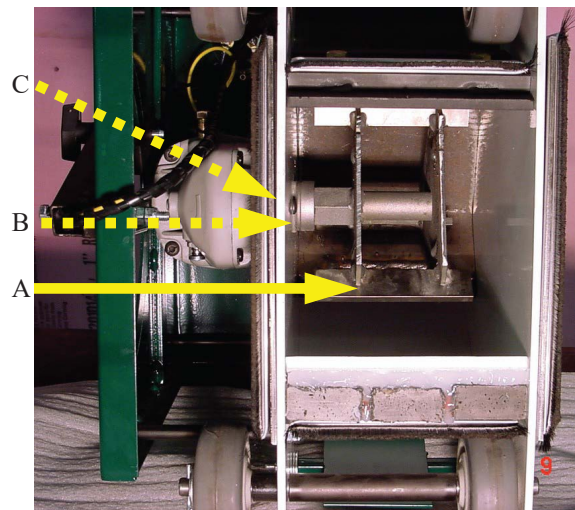


Blast Wheel Replacement.

When replacing worn blast wheel, hold in motor lock (A) break blast wheel loose on the blast wheel shaft to remove and reinstall hand tight only. Inspect lower rear liner (C), upper rear liner (D), brush seals (E) and magnets (F). Replace and adjust as needed.



Upon replacement of the Blast Wheel (A), you will need to inspect the Motor Seal (B) and Spacer (C) for wear.



SB 6

Service Interval Chart

DATE :

Mach. # :

Maintenance Service Intervals

Item	Daily	10 Hour	50 Hour	100 Hour	500 Hour
Check Blast Wheel	O	O			
Check Upper Rear Liner		O	O		
Check Rear Liner		O	O		
Check Floater Plates	O				
Adjust Brushes	O				
Clean Magnets and Hopper	O				
Check Front Housing Liner				O	
Check Top Liner				O	
Check Amp Draw With New Shot		O			

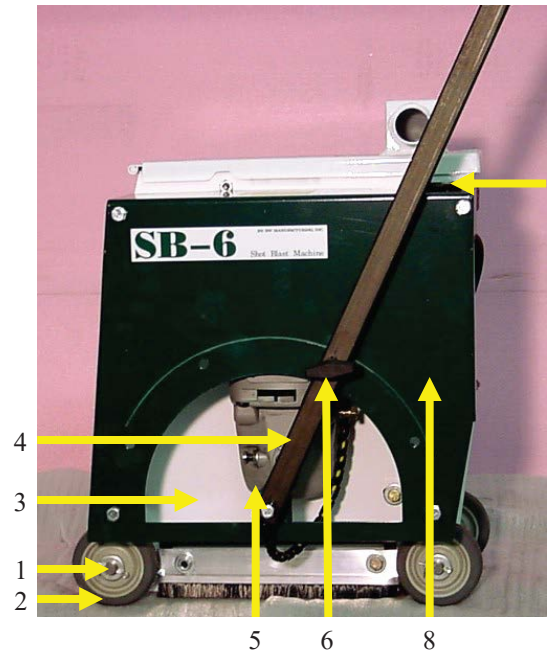
NOTES:

BLADE WEAR 1/4 1/2 3/4

PARTS

SB-6 SHOTBLASTER PARTS

1. G-50 AXLE
2. A-8613 WHEEL
3. G-02-AS SIDE PLATE (INNER)
4. G-42-AS HANDLE
5. G-101-M MOTOR
6. G-100 T-HANDLE
7. G-108 AMP GAUGE
8. G-15-AS HANDLE PLATE



Dia. SB-6-1

1. G-12-AS DUST COVER
2. G-03-AS SIDE PLATE (OUTER)
3. G-18-AS SIDE FLOATER PLATE
4. G-23 SIDE BRUSH



Dia. SB-6-2

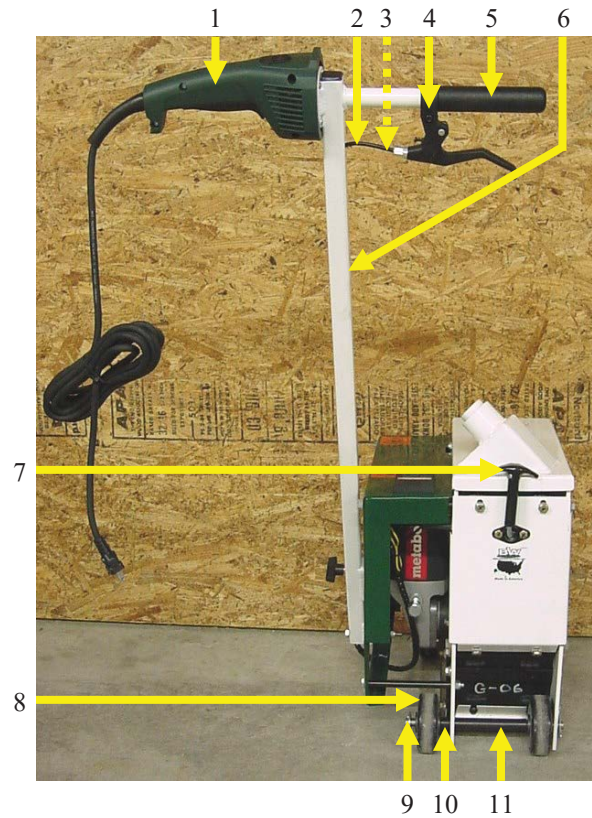
1. G-13-AS UPPER FRONT HOPPER
2. G-28-AS GUIDE PLATE



Dia. SB-6-3

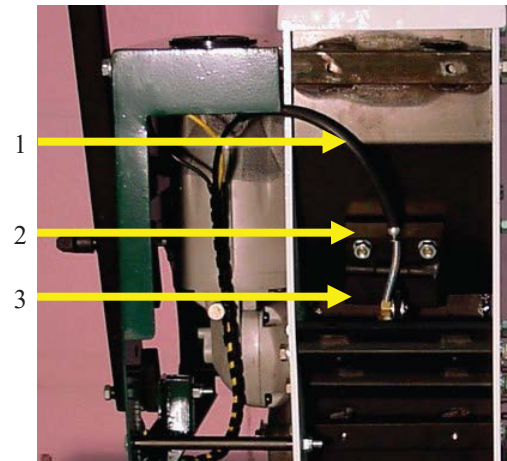
SB-6 SHOTBLASTER PARTS

- | | | |
|-----|----------|-----------------------------------|
| 1. | G-101-RH | REPLACEMENT HANDLE |
| 2. | G-157 | SHOT GATE CABLE HOUSING |
| 3. | G-153 | SHOT GATE CABLE <i>(not show)</i> |
| 4. | G-154 | SHOT GATE HANDLE |
| 5. | G-104 | GRIP |
| 6. | G-42-AS | HANDLE ASSEMBLY |
| 7. | V-1037 | DRAW LATCH |
| 8. | A-8613 | WHEEL |
| 9. | G-50 | AXLE |
| 10. | G-49 | OUTER WHEEL SPACER |
| 11. | G-48 | INNER WHEEL SPACER |



Dia. SB-6-4

- | | | |
|----|---------|-------------|
| 1. | G-114 | CABLE BOOT |
| 2. | G-52-AS | CABLE MOUNT |
| 3. | G-38-AS | SHOT GATE |



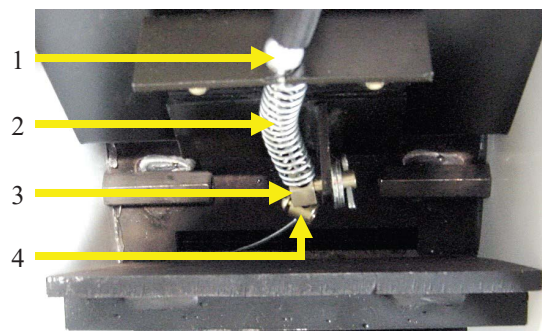
Dia. SB-6-5

Dia. SB-6-6

SB-6 SHOTBLASTER PARTS

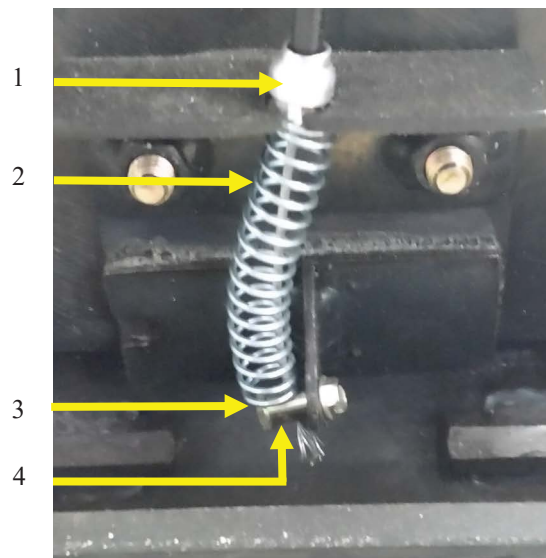
Generation 1

- | | | |
|----|-------|---------------------|
| 1. | G-155 | CABLE END |
| 2. | G-111 | CABLE SPRING |
| 3. | G-109 | CABLE SWIVEL & LOCK |
| 4. | G-110 | CABLE LOCK |



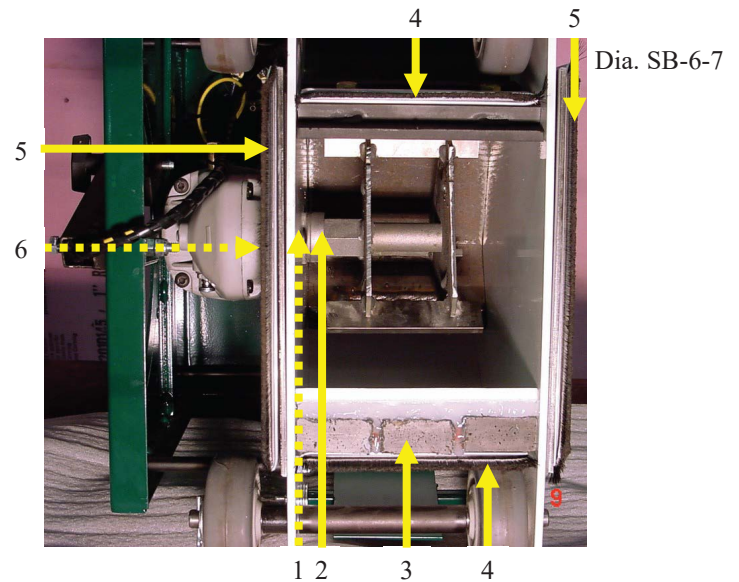
Generation 2

- | | | |
|----|-------|---------------------|
| 1. | G-155 | CABLE END |
| 2. | G-111 | CABLE SPRING |
| 3. | G-109 | CABLE SWIVEL & LOCK |
| 4. | G-110 | CABLE LOCK |

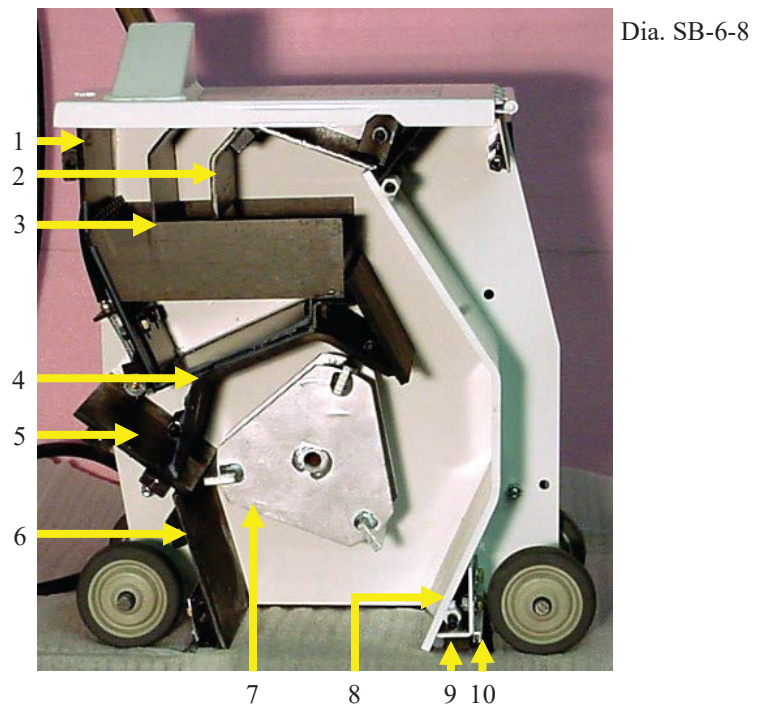


SB-6 SHOTBLASTER PARTS

1. G-62-A MOTOR SEAL (*not shown*)
2. G-63-A SPACER
3. G-112 MAGNET
4. G-16 FRONT/REAR BRUSH
5. G-23 SIDE BRUSH
6. G-25 MOTOR ADAPTER (*not shown*)



1. G-09-AS LOWER HOPPER
2. G-11-AS SHOT STOP
3. G-08-AS SCREEN
4. G-07-AS TOP LINER
5. G-05-AS UPPER REAR LINER
6. G-06-AS LOWER REAR LINER
7. G-24-AS BLAST WHEEL
8. G-10-AS FRONT HOUSING
9. G-112 MAGNETS
10. G-16 FRONT/REAR BRUSH



SB-6 SHOTBLASTER TROUBLESHOOTING

<i>PROBLEM</i>	<i>TEST</i>	<i>SOLUTION</i>
Not Blasting	1. Check shot gate adjustment (<u>17 amps max</u>) with new shot.	1. Empty shot hopper clean and install new shot.
Leaves excessive amount of shot.	1. Check Blast Wheel for wear. 2. Check upper rear liner for proper adjustment. 3. Check Floater plates. 4. Not enough vacuum	1. Replace Blast Wheel 2. Adjust upper rear liner. 3. Clean or replace floater plates.
Motor over heats or trips fuses.	1. Check shot gate adjustment. (<u>17 amps max</u>).	1. Adjust shot gate.
Shot does not shut off.		1. Empty shot hopper and clean shot gate.



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