## **FS200 Electric**

# Portable Deluxe Scarifier

**Parts Manual** 





1-800-653-9311

www.**SmithMfg**.com

Phone: 954-941-9744 • Fax: 954-545-0348



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#### MACHINE SAFETY AND WARNING LABELS

DO NOT REMOVE GUARD WHEN ENGINE IS



DISCONNECT POWER SUPPLY OR SPARK PLUG TO PREVENT INJURY WHEN SERVICING OR CHANGING BLADES OR ACCESSORIES

DESCONECTE LA CORRIENTE ELECTRICA O LA BUJIA PARA EVITAR LESIONES CUANDO SE DE SERCICIO O SE CAMBIEN CUCHILLAS O ACCESORIOS

FAILURE TO COMPLY COULD RESULT IN SERIOUS BODILY INJURY OR DEATH



Part#: LB-50007



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Part#: LB-50026



Part#: LB-50027



#### **Finish Textures**

(CSP1 - CSP9) by selecting the right cutter drum, offset spacing pattern (F, M, C, X) and removal process we call SMITHing. Cutters can be set inline to groove and at narrower widths. Adding spacers increases cutting penetrations.

(F) - 0 spacer (M) - 1 spacer (C) - 2 spacers (X) - 3 spacers

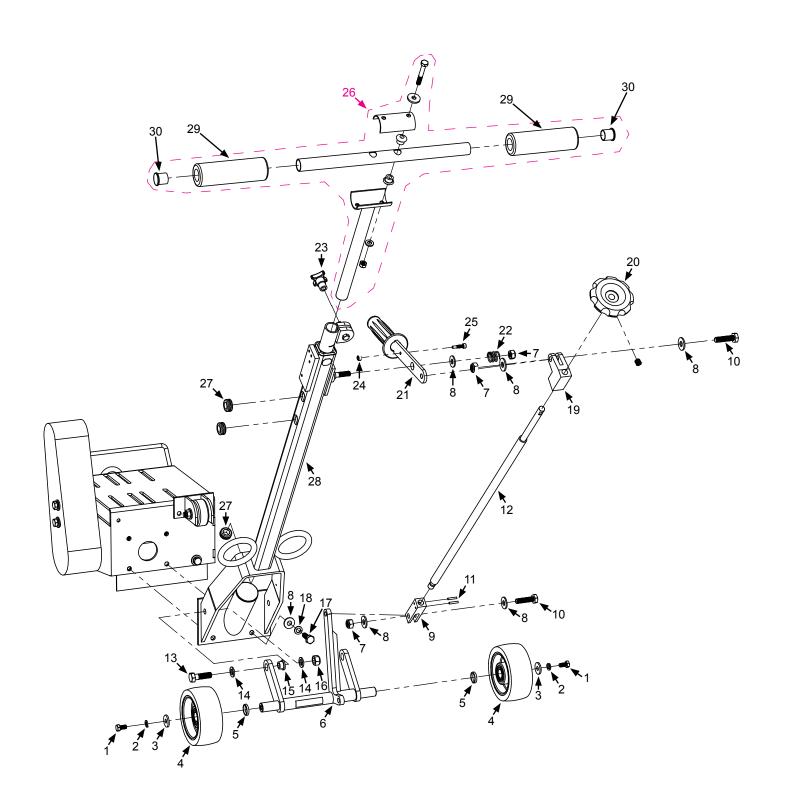


Part#: LB-50024





### **GUIDE BAR ASSEMBLY**





### **GUIDE BAR ASSEMBLY**

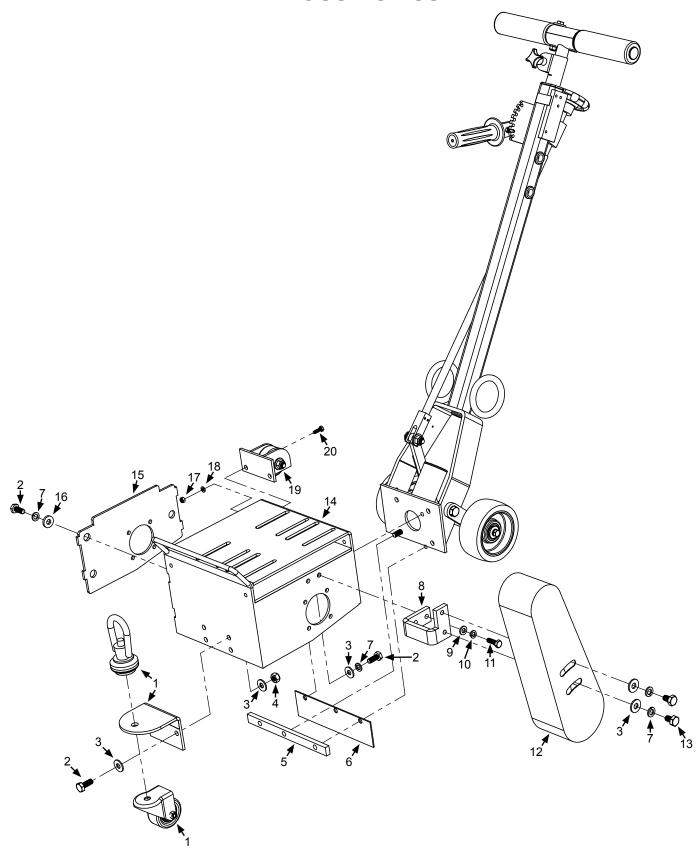


Item	P/N	Qty	Description
1	HX-CS.M8-1.0x20mm	2	Hex Head Cap Screw
2	SLW.M8	2	Lock Washer
3	FNW.M10-30mm	2	Fender Washer
4	905.1000.1	2	Rear Wheel
5	515.1007.1	2	Carrier Spacer
6	515.1007	1	Wheel Carrier
7	NHN.M10-1.5	3	Nylock Nut
8	FLW.M10	9	Flat Washer
9	516.1006D	1	Lower Fork
10	M10-1.5x40HCS10.9	2	Hex Head Cap Screw
11	516.1006D.1	2	Clevis Pin
12	516.1000.16	1	Height Adjustment Rod
13	506.1008	2	Hex Head Cap Screw
14	FLW.M12	4	Flat Washer
15	515.1007.2	2	Bushing
16	NHN.M12-1.75	2	Nylock Nut
17	998.1009.25	4	Hex Head Cap Screw

Item	P/N	Qty	Description
18	991.1020.10	4	Lock Washer
19	516.1005D	1	Upper Fork
20	516.1012	1	Knob
21	10608	1	Height Lever
22	510.1000D.10	1	Spring
23	516.101	1	Hand Knob
24	NHN.M6-1.0	1	Nylock Nut
25	516.1008D.1	1	Socket Head Cap Screw
26	510.1020.D	1	Handlebar Assembly
27	510.1000D.4	3	Rubber Grommet
28	510.1000D	1	Guide Bar
29	1010608.FS200	2	Anti-Vibration Foam Grip
30	PL-CAP.0.875	2	Plastic Tube Plug



### PRIMARY HOUSING ASSEMBLY





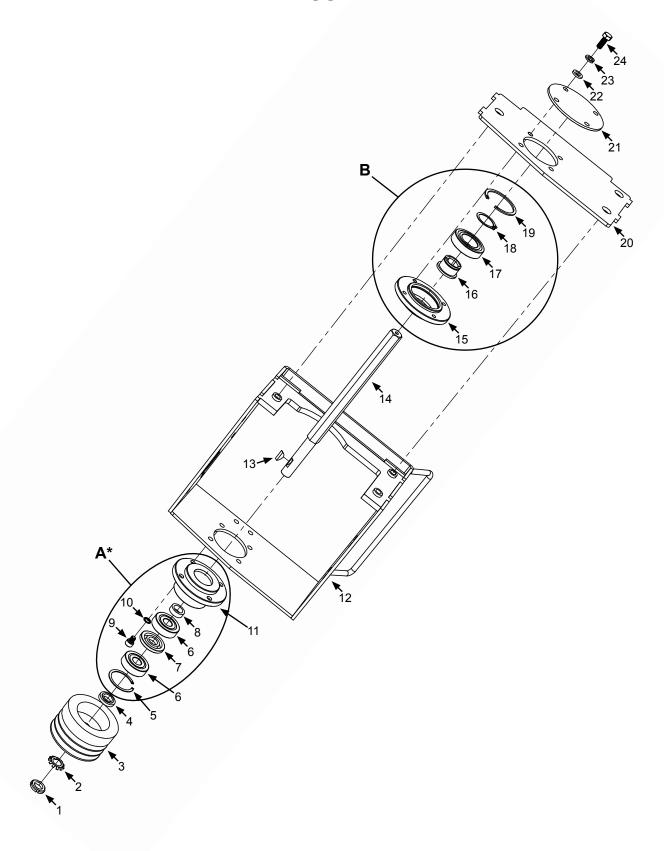
#### PRIMARY HOUSING ASSEMBLY

Item	P/N	Qty	Description
1	510.1020.D2	1	Front Wheel Swivel
2	HX-CS.M10-1.5x25mm	8	Hex Head Cap Screw
3	FLW.M10	7	Flat Washer
4	NHN.M10-1.5	2	Nylock Nut
5	511.1021.240	1	Retention Bar
6	511.1022.240	1	Dust Flap
7	991.1020.10	8	Lock Washer
8	511.1060	1	Belt Guard Bracket
9	991.1002.8	2	Flat Wahser
10	991.1020.8	2	Lock Washer
11	998.1008.30	2	Hex Head Cap Screw
12	505.1001	1	Belt Guard
13	998.1009.25	2	Hex Head Cap Screw
14	511.1063D.2	1	Main Frame Housing
15	511.1055.2	1	Side Plate
16	991.1091.10	1	Fender Washer
17	NHN.M6-1.0	1	Nylock Nut
18	FLW.M6	1	Flat Washer
19	510.1020.D1	1	Front wheel Fixed
20	510.1000D.1	1	Hex Head Cap Screw
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FS200.WPKA - FS200 ESSENTIAL WEAR PARTS KIT: Includes 1 fixed front wheel, 1 front swivel wheel, a set of 2 rear wheels, a rubber dust flap, a height adjustable rod, a lower drive pulley, a woodruff key, a a hex drive shaft, a left hand locking nut, a tabbed washer, and a set of foam grips



### **DRIVE ASSEMBLY**





#### **DRIVE ASSEMBLY**

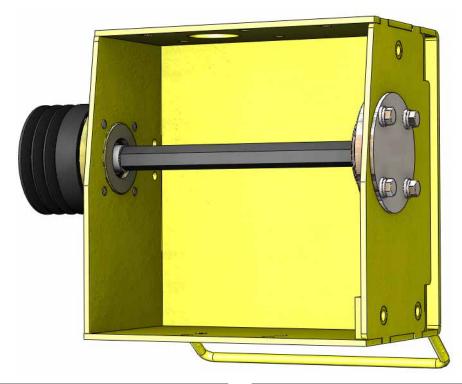
SPS10 BASIC WEAR PARTS KIT: Includes a set of 2 bearing assemblies in retainers, and a set of 3 drive belts.

FS200 - FLAIL

P/N	Motor
FS200D.WPK.E	Electric

A\* - 512.1000A - Pulley Side Bearing Assembly - Includes Item #'s: 5,6,7, and 11 \*Excludes item numbers 8-10

B - 512.1002A - Sideplate Side Bearing Assembly - Includes Item #'s: 15,16,17,18, and 19

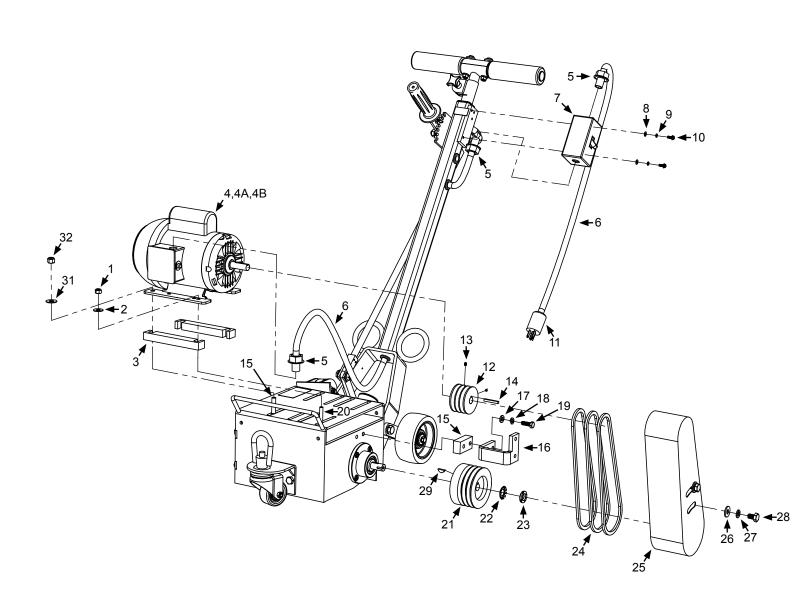


Item	P/N	Qty	Description
1	979.9020.1LH	1	Lock Nut
2	979.1021.1	1	Tabbed Washer
3	518.1006	1	Lower Pulley
4	506.1007	1	Pulley Spacer
5	977.1010.47	1	C-Clip
6	979.1000.12	2	Bearing
7	109.1033.11	1	Spacer set
8	109.1033.7	1	Spacer
9	997.1008.10	4	Socket Head Cap Screw
10	SLW.M8	4	Lock Washer
11	512.1000	1	Bearing Housing
12	511.1063D.2	1	Main Frame Housing

Item	P/N	Qty	Description
13	979.9021	1	Woodruff Key
14	513.1000.1	1	Hex Shaft
15	512.1002	1	Bearing Housing
16	514.1000	1	Hex Bushing
17	169004	1	Bearing
18	977.1010.30	1	C-Clip
19	977.100.55	1	C-Clip
20	511.1055.2	1	Sideplate
21	511.102	1	Bearing Cover
22	991.1002.8	4	Flat Washer
23	991.1020.8	4	Lock Washer
24	998.1020.20	4	Hex Head Cap Scew



### **ELECTRIC MODEL ASSEMBLY**





### **ELECTRIC MODEL ASSEMBLY**

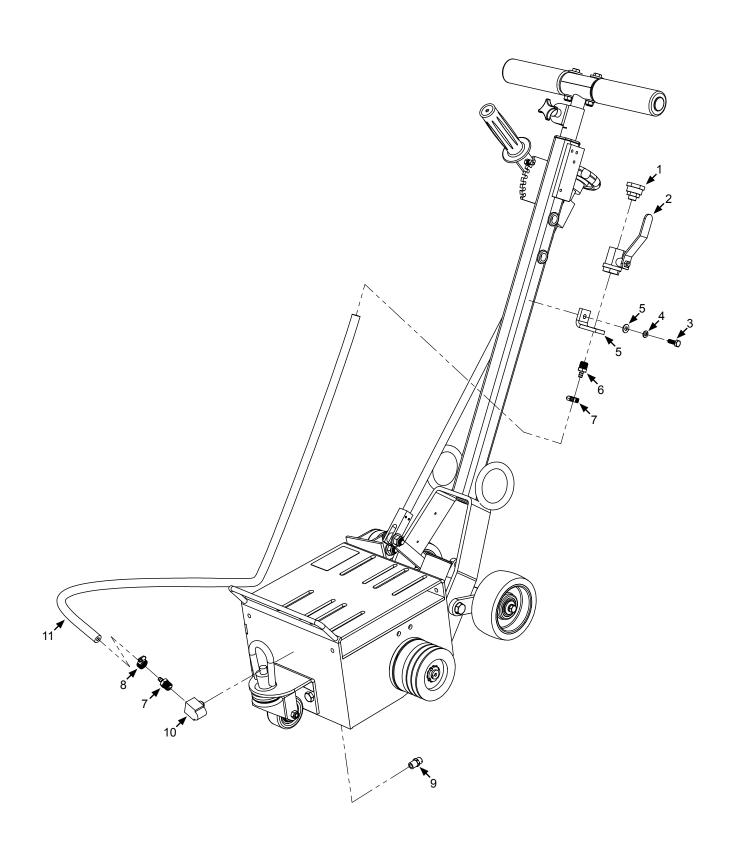


Item	P/N	Qty	Description
1	NHN.312-18	4	Lock Nut
2	FLW.312	4	Flat Washer
3	FS2E-0114-2	2	Electric Motor Spacer
4	FS2E-0100-2	1	2 HP single phase Electric Motor
4A	FS2E-0100-3-220	1	3 HP single phase Electric Motor
4B	FS2E-0100-3-50HZ	1	3 HP single phase Electric Motor (50Hz)
5	FS2E-0102-2	3	Strain Relief
6	FS2E-0107-2	1	Electric Cord
7	FS2E-0111-2	1	Manual Switch
8	10831	2	Flat Washer
9	SLW10	2	Lock Washer
10	FHX-CS10-32x.50	2	Hex Head Machine Screw
11	FS2E-0113-2	1	Electric Plug
12	SHSS10-32x.25	2	Set Screw
13	518.1007	1	Electric Engine Pulley
14	10115	1	Key
15	511.1062	1	Belt Guard Spacer

Item	P/N	Qty	Description
16	511.106	1	Belt Guard Bracket
17	991.1002.8	2	Flat Washer
18	SLW.M8	2	Lock Washer
19	998.1008.30	2	Hex Head Cap Screw
20	CB.312-18x1.75	2	Carriage Bolt
21	518.1006	1	Lower Pulley
22	979.1021.1	1	Tabbed Washer
23	979.9020.1LH	1	Lock Nut
24	967.1010.722	3	Drive Belt
25	505.1001	1	Belt Guard
26	FLW.M10	2	Flat Washer
27	991.1020.10	2	Lock Washer
28	998.1009.25	2	Hex Head Cap Screw
29	979.9021	1	Woodruff Key
30	CB.375-16x1.75	2	Carriage Bolt
31	FLW.375	2	Flat Washer
32	NHN.375-16	2	Nylock Nut



### **WATER CONTROLS ASSEMBLY**





### **WATER CONTROLS ASSEMBLY**



Item	P/N	Qty	Description
1	WT65084	1	Hose Connector
2	WT65083	1	Ball Valve
3	HX-CS.25-20x.75B	1	Hex Cap Screw
4	SLW.25	1	Lock Washer
5	FLW.25	1	Flat Washer
6	WT6585.2	1	Mount Bracket
7	WT65082	2	Male Fitting
8	WT65088	2	Hose Clamp
9	WT65092	1	Nozzle
10	1066040	1	Elbow Fitting
11	WT65089	1	Clear PVC Hose



#### **MAINTENANCE LOG**



#### **MAINTENANCE LOG**

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#### **WARRANTY CLAIMS**

The manufacturer reserves the right to change or improve the machine design without assuming any obligation to update any products previously manufactured before this manual. It is the customer's responsibility to complete the warranty card and mail it to the seller within 10 days from the date of purchase. If a failure occurs during the warranty period, the customer must contact the seller to determine the appropriate action. Any and all transportation charges are to be borne by the purchaser.



#### **Limited Equipment Warranty**

All statements, technical information and recommendations contained in SMITH's literature are based on tests believed to be reliable, but the accuracy or completeness thereof is not guaranteed and the following is made in lieu of all warranties, expressed or implied. SMITH warrants all equipment or part referenced in this document which is manufactured by SMITH and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser under normal use and maintenance as herein provided. This warranty does not apply to components manufactured by others such as, but not limited to, bearings and engines; such components that may or may not have their own warranties.

With the exception of any special, extended, or limited warranty published by SMITH, SMITH will, for a period of three months (90 days) from the date of sale or up to five hundred (500) hours of use by buyer, whichever shall occur first; repair or replace any part of the equipment determined by SMITH to be defective. This warranty applies only when the equipment or part is installed, operated and maintained in accordance with SMITH's written recommendations

SMITH's sole obligation for any breach of warranty or breach of contract for defects, deliberate or accidental omissions, shall be limited to repairing, replacing or allowing credit for, at SMITH's option, any part which, under normal and proper use and maintenance, proves defective in material or workmanship within warranty period, provided, however, that notice of any such defect or omission and satisfactory proof thereof is promptly given by buyer to SMITH, and thereafter, such defective part is returned to SMITH with transportation charges prepaid, and SMITH's examination proves such part to have been defective. This warranty does not obligate SMITH to bear any transportation charges or personnel time in connection with the replacement or repair of defective parts. This warranty does not obligate SMITH to bear any expense for travel time or of personnel in connection with any service calls. SMITH will not, in any event, be liable to the user for any consequential damages arising out of this sale for the loss of use, lost profits or revenue, interest, lost goodwill or work stoppage. SMITH shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product or for environmental claims. It being understood that SMITH has no means of controlling the products final use; therefore, it shall be buyer's responsibility to determine suitability of product for intended use and buyer assumes all risks and liabilities whatsoever, in connection therewith. In no event shall SMITH be liable for consequential or special damages. Used products are sold on an "as is" basis, and there is no implied warranty of merchantability or of fitness for a particular purpose, unless made in writing by an officer at SMITH's office.

This warranty does not cover, and SMITH shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-SMITH component parts. Nor shall SMITH be liable for malfunction, damage or wear caused by the incompatibility of SMITH equipment with structures, accessories, equipment or materials not supplied by SMITH, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by SMITH. This warranty does not apply in respect to damages to any product or accessory or attachment thereof caused by overloading or other misuse, neglect or accident, nor does this warranty apply to any product or accessory or attachment thereof, which has been repaired or altered in any way which, in the sole judgment of SMITH, affects the performance, stability or general purpose for which it was manufactured. In the manufacture of buyer's equipment, parts may be omitted or equivalent functioning equipment and components may be substituted for the original specified equipment upon the sole judgment and discretion of SMITH.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized SMITH Reseller for verification of the claimed defect. If the claimed defect is verified, SMITH will repair or replace free of charge any defective parts and return of merchandise back to the customer freight collect. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor and transportation.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

SMITH's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

SMITH MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY SMITH.

These items sold, but not manufactured by SMITH (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. SMITH will provide purchaser with reasonable assistance in making any claim for breach of these warranties. In no event will SMITH be liable for indirect, incidental, special or consequential damages resulting from SMITH supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of SMITH, or otherwise.

ADDITIONAL WARRANTY COVERAGE - SMITH does provide extended warranty and wear warranty for products.

Corrections - typographical or clerical errors contained herein are subject to correction by SMITH.

Assignment - buyer shall not assign or transfer this warranty without SMITH's written consent.

Entire agreement and applicable law - the rights and obligations of SMITH and buyer shall be governed by the laws of the state of Florida, U.S.A. In force on date hereof. The provisions hereof are intended by buyer and SMITH as a final expression of their agreement, and are intended also, as a complete and exclusive statement of all terms apply cable to buyer's order. No waiver, modification, or addition to any of the terms hereof shall be binding on SMITH, unless made in writing by an officer at SMITH's office as stated herein. In the event of conflict between buyer's purchase order and the terms hereof, the latter shall control. If any provisions herein are to any extent invalid or unenforceable, the remainder of the warranty shall not be effected thereby and shall be valid and enforceable to the fullest extent permitted by law.

Legal action - buyer shall be responsible for all costs of collection of outstanding indebtedness, including but not limited to attorney's fees and court costs to seller. Buyer shall reimburse seller for any and all litigation expenses seller incurs as a result of an unsuccessful buyer claim. The jurisdiction and venue of the court for any litigation, state or federal, brought by the buyer and/or seller shall be located in venue determined by seller.

Fair labor standards - seller's products are produced in the United States and in conformity with all applicable provisions of the fair labor standards act of 1938 as amended and any regulations and orders of the United States Department of Labor issued thereunder.

All written and visual data contained in this document reflects the most current product information available at the time of this publication. SMITH reserves the right to make changes at any time without notice.

TO ORDER, contact your SMITH distributor or call 1-800-653-9311 to identify the nearest distributor.

**SMITH Manufacturing Co, Inc.** 1610 South Dixie Highway Pompano Beach, FL 33060 www.smithmfg.com



#### **PRE-OPERATION INSPECTION - WARRANTY ACTIVATION PRODUCT REGISTRATION**

Thank you for purchasing a SMITH. Please complete this form upon receipt of your equipment and prior to use on the job. A pre-operation inspection is required to activate your warranty. All sections must be completed. Should you

have any questions, please add them to the comments section below. Fax the completed form to (954) 545-0348.
Organization
Name JobTitle
Phone Email
Address
City
StateZip
SMITH Product
Machine Serial #
Date of Purchase (MM / DD / YYYY)
Purchased from
PRE-OPERATION INSPECTION (PLEASE CHECK ALL)
1. No parts or components on the machine appear damaged or lost in shipment.  Yes No
2. All bolts and fasteners are in place and tightly secured.  Yes No
3. Grease points have been identified for future maintenance requirements and appear lubricated.   Yes   No
4. Wheels are operational.  Yes No
5. Motor has been started and in good working condition.   Yes No
6. All Decals appear in place and securely attached.  Yes No
7. Equipment runs and tested to assure all components are operating correctly.   Yes   No
8. Do you have a Wear Parts Kit with an Extra Cutter set in stock?  Yes  No
9. Did you join Remove Faster News for tech updates, experience sharing and special offers?   Yes No
Comments (add any additional or from above answers below)

**NOTE:** All power equipment is warranted directly from the motor/engine manufacturers direct and not from SMITH Manufacturing. Prior to starting your equipment, please find the name of your engine/motor repair center for warranty and service:

- Honda: http://engines.honda.com/dealer-locator/
- Subaru: http://robinamerica.com/dealerusacan.aspx
- · Leeson: http://www.leeson.com/leeson/servicecenter.do?invoke=viewServiceCenterLocator
- US Motors: http://www.usmotors.com/Contact-Information.aspx
- Kohler: http://www.kohlerengines.com/contact/contact.htm

IMPORTANT: Gas Engine owners: Never tip engine forward which will lock the recoil pull cord until the fuel and oil returns back into their respective fuel chambers and the carburetor is free before it can be started.



## **SMITH Manufacturing**

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