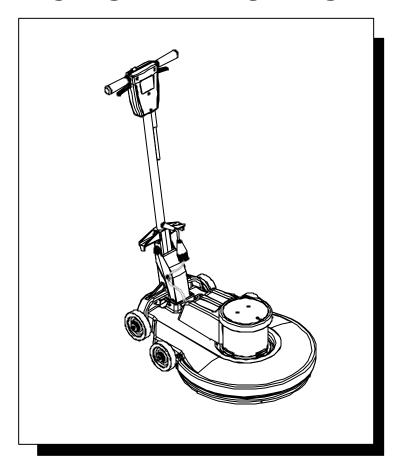




HIGH SPEED BURNISHER



Operating Instructions (ENG)

MODELS: MB2000

QUEST[®] ... for Continuous Improvement. Windsor's Quality Management System is Certified ISO 9001.



Read these instructions before using the machine



MACHINE DATA LOG/OVERVIEW

MODEL
DATE OF PURCHASE
SERIAL NUMBER

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HOW TO USE THIS MANUAL

This manual contains the following sections:

- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized Windsor dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

MODEL
DATE OF PURCHASE
SERIAL NUMBER
SALES REPRESENTATIVE #
DEALER NAME
OPERATIONS GUIDE NUMBER
PUBLISHED

The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards is identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition.

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF** column refers to the reference number on the parts illustration.
- **PART NO.** column lists the part number for the part.
- **QTY** column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** column is a brief description of the part.
- **SERIAL NO. FROM** column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs.
- NOTES column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.



To reduce the risk of fire, electric shock, or injury:

Use only indoors. Do not use outdoors or expose to rain.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs must be done by qualified personnel.

During operation, attention shall be paid to other persons, especially children.

The machine shall only be operated by instructed and authorized persons.

When leaving unattended, unplug the machine.

Do not handle the plug or machine with wet hands.

Do not unplug machine by pulling on cord. To unplug, grasp the plug, not the cord.

Do not use with damaged cord or plug. Follow all instructions in this manual concerning grounding the machine.

Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners.

Do not pull/run machine over cord. **Keep** cord away from heated surfaces.

Connect to a **properly** grounded outlet. See Grounding Instructions.

SAVE THESE INSTRUCTIONS

HAZARD INTENSITY LEVEL

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and **FOR SAFETY.** The level of hazard intensity is determined by the following definitions:

! WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

! CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:

DO NOT OPERATE MACHINE:

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects.

WHEN SERVICING MACHINE:

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use Windsor approved replacement parts.

GROUNDING INSTRUCTIONS

THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

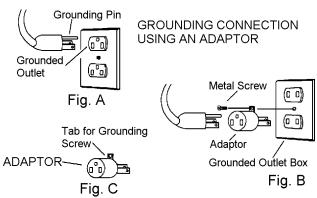
ELECTRICAL:

In the USA this machine operates on a 15 amp nominal 120V, 60 hz, A.C. power circuit. The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

GROUNDING INSTRUCTIONS:

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or the like extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.



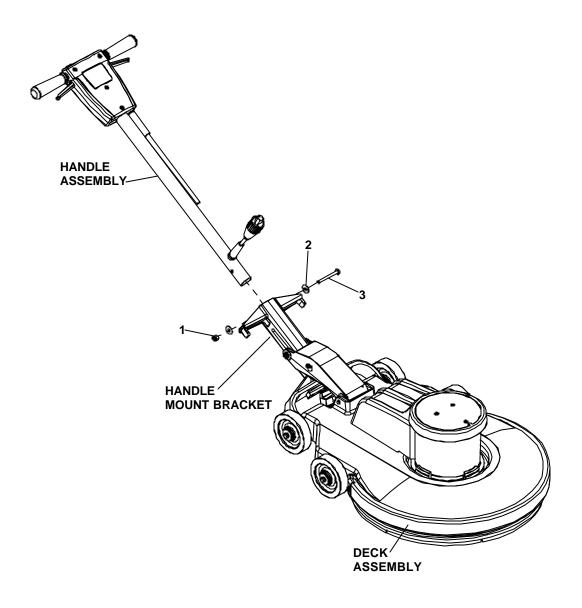
Note: Adaptors are not allowed in Canada.

WARNING

Improper connection of the equipmentgrounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

TECHNICAL SPECIFICATIONS

ITEM	DIMENSION/CAPACITY
Construction	Heavy-duty die cast aluminum deck
	with heavy-duty rubber bumper,
	tubular steel self adjusting handle
	with die cast aluminum handle
	housing.
Motor	1.75 hp
Transmission	Direct drive from motor shaft.
Pad speed	2000 r.p.m.
Electrical system	115 volts, 60 Hz
Cable	75' [22,9 m], 14/3, built in cord wrap.
Switches	Dual levers with safety lock.
Pad Holder	Ø20" [50,8 cm] flexible disc
Wheels	Four Ø5" [Ø12,7 cm], 1.25" [3,2 cm]
	wide, non-marking tread.
Handle	Ø1.5" [Ø3,8 cm] tubular steel, self
	adjusting handle consistently
	maintains full contact with the floor,
	and easy to use thumb activated
	safety lock.
Dimensions (L x W x H)	32" [81,3 cm] X 23.9" [60,2 cm] X
	48.4" [122,9 cm]



The machine is shipped with handle unassembled.

Follow these steps for installation:

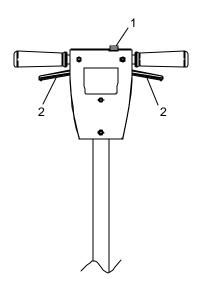
- 1. Remove handle (38302) and deck assembly (29245) from carton.
- 2. Remove bolt (item 3), washers (item 2), and nut (item 1) from deck assembly (29245).
- 3. Install Handle Assembly as shown.
- 4. Slide Bolt (item 3) thru, washers (item 2), Handle Mount Brackets and Handle Assembly (38302) as shown. Tighten bolt (item 3) and nut (item 1) until the handle can not twist in the mount bracket (45-50 foot pounds).
- 5. Check handle for movement up and down.
- 6. Plug cord into handle cord receptacle.

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OPERATION

CONTROLS

- Safety Lock Prevents unintended operation of the machine.
- Switch Levers Turns machine on/off.



OPERATION



For indoor use only.

! WARNING

When using the pad, always keep the machine moving when in contact with the floor.

! WARNING

High starting torque. Hold machine firmly with both hands.

- 1. Ensure that the pad driver is in good shape. Install or change pad if necessary.
- 2. Plug the machine into a wall outlet as described in the grounding instructions.
- 3. Release latch, lower the handle and move into position.
- Push the safety lock forward, unlocking the switch levers.
- With the safety lock forward, squeeze one or both of the switch levers, turning the machine on. (These levers can be operated independently of each other). The safety lock will not re-engage until both levers are released.

- 6. To stop the machine, release the switch levers.
- Do not let machine rest on pad. When finished with the machine, return handle to the storage position.

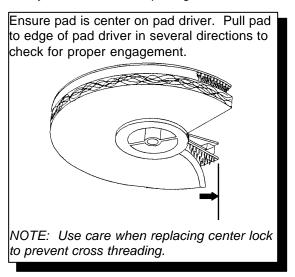
NOTE: The machine is equipped with a circuit breaker to protect the motor in the event an overload condition occurs. The circuit breaker is located on the side of the motor. Push the reset button to restart the machine. If the breaker trips again, correct the cause of overloading before proceeding.

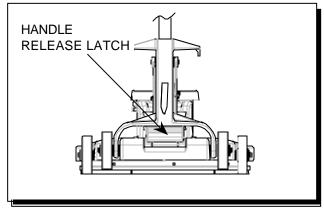
DAILY MAINTENANCE

- Inspect power cord for wear. To prevent electrical shock replace cords with frayed or cracked insulation immediately.
- 2. Place machine in the storage position.
- 3. Check pad condition. Change if soiled or torn.

PAD INSTALLATION

1. Lay machine back, exposing the under side.



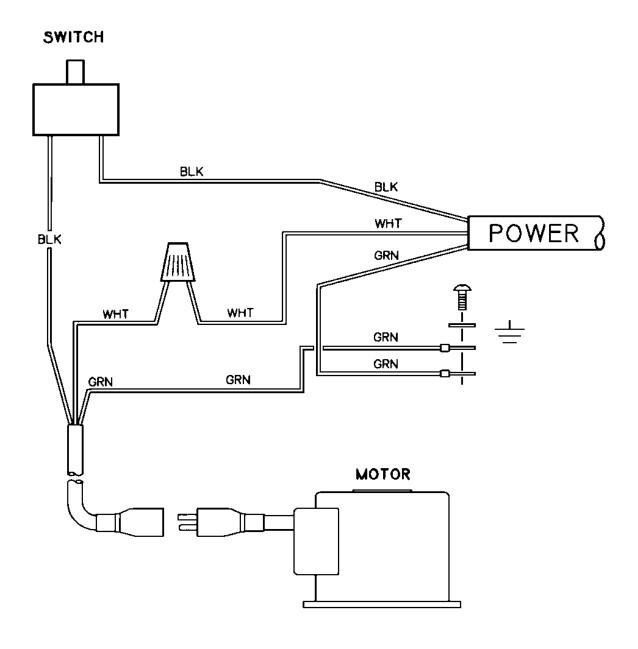


MACHINE TROUBLESHOOTING

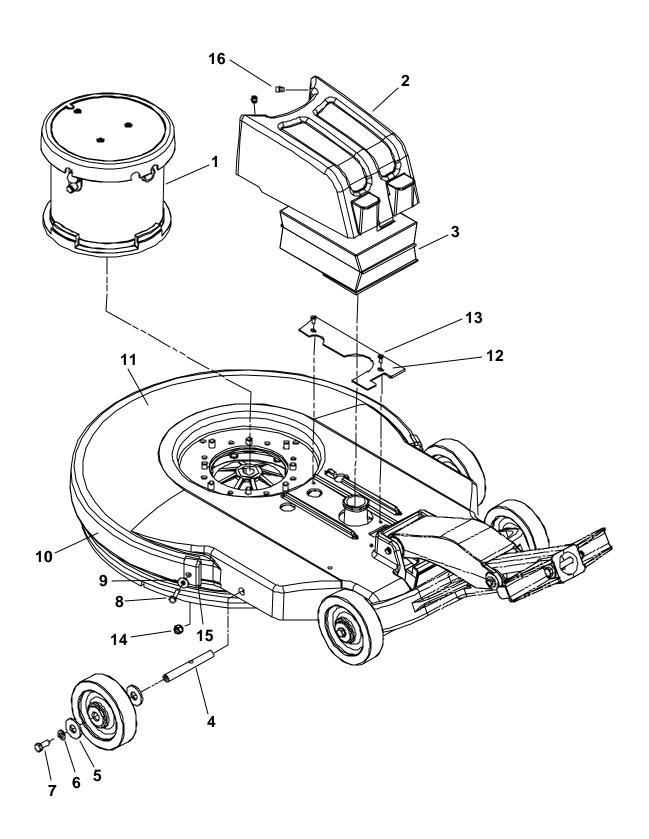
PROBLEM	CAUSE	SOLUTION
	Circuit breaker tripped in building.	Check and reset
	Power switch failure	Test switch for continuity and replace if necessary.
	Tripped circuit breaker	Reset
Machine will not run	Faulty power cord	Replace
Machine will flot full	Fuse in motor is blown	Replace CAUTION: To reduce the risk of electrical shock, unplug the machine before opening fuse holder. Fuse will only open under extreme conditions. Investigate cause before replacing.
	Equipment not grounded	Follow grounding instructions exactly.
	Receptacle not grounded	Have an electrician inspect building's wiring.
Electrical shock	Internal wiring problem	Ensure that the machine wiring matches the appropriate wiring diagram. Replace any wires or components which are short circuiting.
Repeated circuit breaker tripping	Mechanical problem	Higher amp draws indicate a mechanical problem, find the problem before using the machine.
	Faulty circuit breaker	Test circuit for continuity. Replace circuit breaker if necessary.
	Pad not centered	Re-center pad.
Excessive vibration	Damaged or unevenly worn pad.	Replace pad. Do not rest machine on pad when not in use.
	Damaged pad driver.	Replace.

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115V Diagram Single Speed



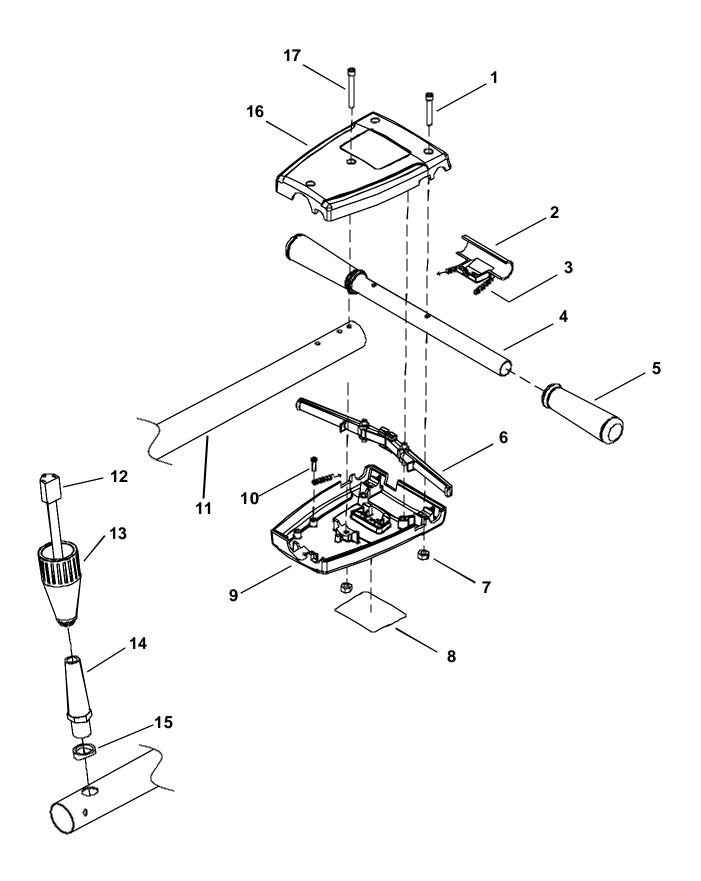
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DECK GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	53256	1	MOTOR, 115 VOLT 1.5HP 2000RPM		
2	27918	1	COVER, FILTER BAG		
3	140441	1	BAG, DUST (PACKAGE OF 10 BAGS)		
4	05156	2	AXLE, FRONT		
5	87203	4	WASHER, 14MM ID X 36 MM OD		
6	87054	2	WASHER, M8 FLAT DIN125A PLT		
7	70262	2	SCR, M8 X 20 HHMS PLTD		
8	70691	2	SCR, M6 X 25 HHMS BLK		
9	87211	2	WASHER, M6 FLAT BLK		
10	140423	1	BUMPER, EXTRUSION		
11	29244BLU	1	DECK, 20 IN BURNISHER, BLUE		
12	70738	2	SCR, M5 X .8MM X 10 MM PPHMS BLK		
13	67463	1	RETAINER, CORD		
14	57220	2	NUT, M6 X 1 HEX NYLOCK PLTD		
15	27871	2	CAP EXTRUSION		
16	140449	4	BUMPER, RUBBER		

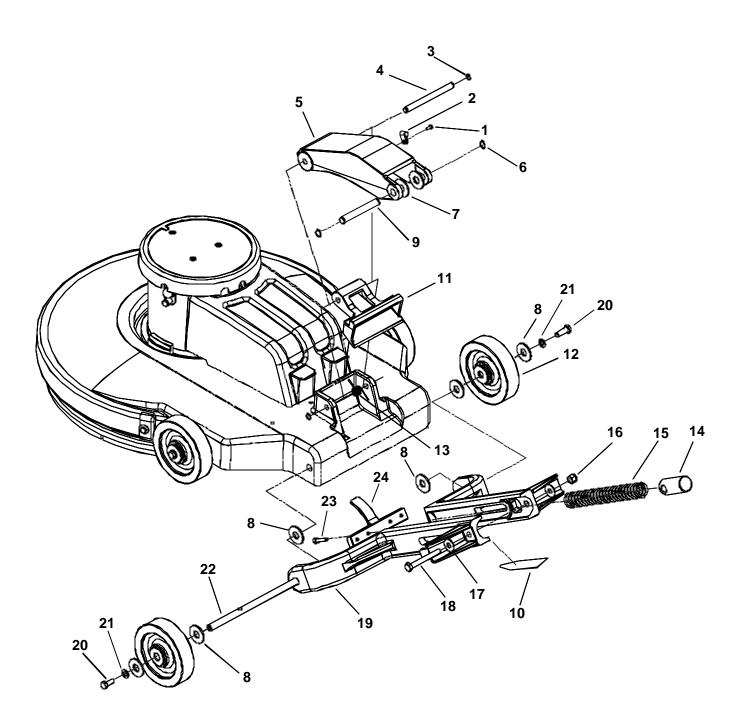
HANDLE GROUP



HANDLE GROUP

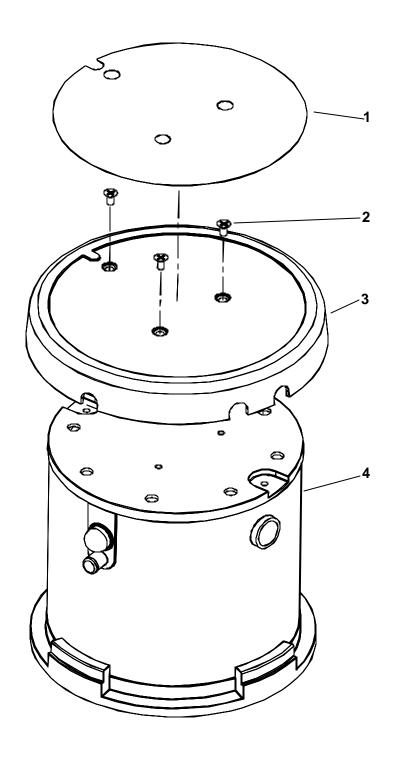
REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	70686	2	SCR, M6 X 45 SHCS BLK		
2	51326	1	LOCK, SAFETY HANDLE		
3	73990	2	SPRING, EXT5OD X 3.5L		
4	140428	1	BAR, HANDLE		
5	36196	2	GRIP, POLISHER HANDLE		
6	51327	2	LEVER, SWITCH		
7	57274	4	NUT, M6 X 1		
8	500194	1	LABEL, WARNING		
9	41363	1	HOUSING, POLISHER HANDLE FRONT		
10	70689	2	SCR, M4.8 X 10 HHTF TYPE B		
11	78473	1	TUBE HANDLE		
12	23209	1	CORDSET, 14/3 X 38 IN, SJT, BLK		
13	14407	1	BOOT, TWIST LOCK		
14	730012	1	STRAIN RELIEF, 14/3 STRAIGHT		
15	730021	1	SPACER, POLISHER HANDLE		
16	41366	1	HOUSING, POLISHER HANDLE FRONT		
17	70687	2	SCR, M6 X 50 SHCS BLK		

LOWER HANDLE GROUP



LOWER HANDLE GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO.	NOTES:
1	70738	1	SCR, M5 X .8MM X 10 MM PPHMS BLK		
2	20005	1	CLAMP, 5/16 NYLON		
3	67468	2	RING, 10MM EXTERNAL SNAP		
4	66340	1	PIN, DOWEL 10MM DIA X 124 MM LG		
5	140421	1	BRACKET, HANDLE LINK		
6	67469	2	RING, 13MM EXTERNAL SNAP		
7	87234	2	WASHER, 14MM ID X 36MM OD X 2MM		
8	87203	8	WASHER, 14MM ID X 35 MM OD		
9	730052	1	SPACER, LINKAGE		
10	500542	1	LABEL, HANDLE RELEASE		
11	51358	1	LATCH, HANDLE		
12	89206	2	WHEEL. 5D X 1.25 X 13MM ID GRY		
13	730055	1	SPRING, 180 DEGREE TORSION		
14	140420	1	BLOCK, SPRING COMPRESSION		
15	730054	1	SPRING, COMP 1.140 OD X 8.40 L X .150 W		
16	57119	1	NUT, 3/8-16 HEX NYLOCK		
17	87171	2	WASHER, 3/8 FLAT		
18	70069	1	SCR, 3/8-16 X 3 HHCS GR5		
19	140419	2	BRACKET, HANDLE MOUNT		
20	70262	1	SCR, M8 X 20 HHMS PLTD		
21	87054	2	WASHER, M8 FLAT DIN125A PLT		
22	05157	1	AXLE, REAR		
23	70733	4	SCR, M6 X 30 SHCS PLTD		
24	730053	1	STRIKER, LATCH		



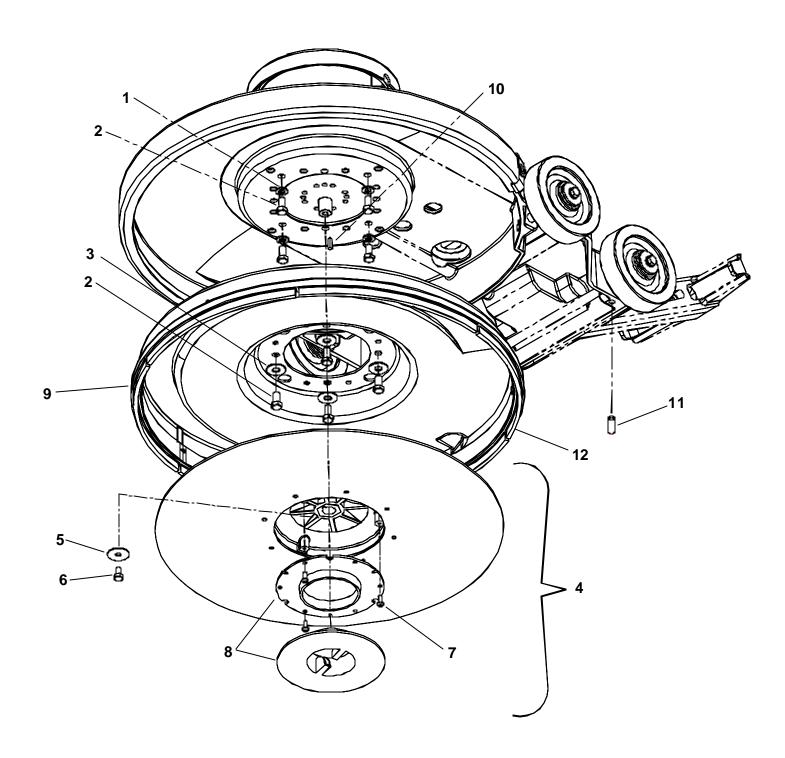
MOTOR GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	500421	1	LABEL, MB2000 MAIN		
2	70702	3	SCR, M5 X .8 X15MM BLK		
3	27884	1	COVER, MOTOR 1.25HP		
4	53256	1	MOTOR, 115VOLT 1.75HP 2000RPM		

MOTOR COMPONENTS (NOT SHOWN)

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
	140411	1	CIRCUIT BREAKER, 20 AMP		
	67029	1	RECTIFIER		
	14404	1	BRUSH SET MP MOTOR (PKG OF 4)		
	34378	1	FUSE		
	34379	1	FUSE HOLDER		
	09134	2	BEARING, MOTOR		

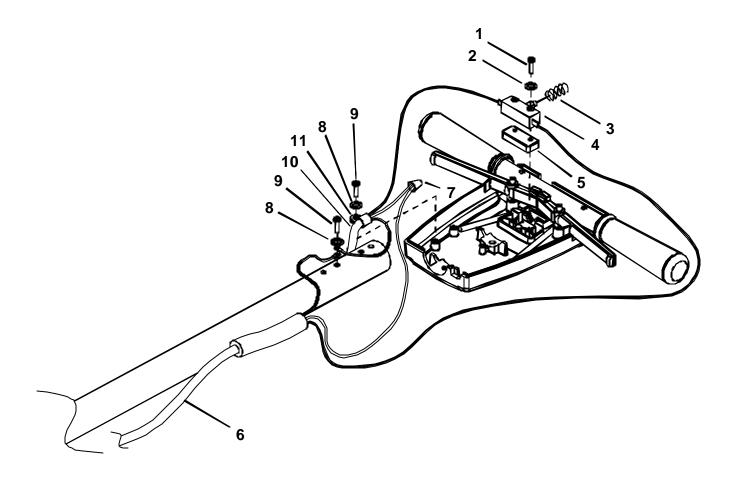
PAD/DRIVER GROUP



PAD/DRIVER GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO.	NOTES:
1	87163	4	WASHER, 3/8 SPLIT LOCK PLTD		
2	70507	8	SCR, 3/8-16 X 3/4 HHCS PLT		
3	87086	4	WASHER, M10 X 30 PLTD		
4	64108	1	PAD DRIVER, 20 INCH BURNISHER		INCLUDES ITEMS 7 & 8
5	87102	1	WASHER, 5/46 ID X 1 1/4 OD		
6	70244	1	SCR, 5/16-24 X 1/2 HHMS SS		
7	70720	3	SCR, #10 X 3/8 PPHST TYPE B		
8	51353	1	LOCK, PAD DRIVER BLUE		
9	730065	1	SHROUD, ASM. 20 IN BURNISHER		INCLUDES ITEM 12
10	48082	1	KEY, 3/16 SQ X 11/16 LG CRS		
11	70736	3	SET SCR, M8 X 20MM CUP PT		
12	730074	1	BRUSH, STRIP (PACKAGE OF 6)		

WIRING GROUP



WIRING GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	70688	2	SCR, M3.5 X 30 HHTF TYPE B		
2	87057	2	WASHER, M4 SHAKEPROOF		
3	73993	1	SPRING, COMP, .48OD X .875L		
4	72123	1	SWITCH, 25A SPST 125-250V SNAP		
5	73989	1	SPACER, SWITCH POLISHER		
6	23154	1	CORD SET, 14/3 STO X 75' YLW		
7	57069	1	NUT, ORG WIRE (2-5 18G/2-14G)		
8	87208	2	WASHER, M5 SHAKEPROOF PLTD		
9	70689	2	SCR, M4.8 X 10 HHTF TYPE B		
10	23207	1	CORDSET, 14/3 X 48", SJT, BLK		
11	20005	1	CLAMP, 5/16 NYLON		

SUGGESTED SPARE PARTS

PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
73990	SPRING		
73993	SPRING		
72123	SWITCH		
140411	CIRCUIT BREAKER, 20 AMP		
67488	RECTIFIER		
14404	BRUSH SET MP MOTOR (PKG OF 4)		
34378	FUSE		
34379	FUSE HOLDER		
09135	BEARING, MOTOR		
51353	LOCK, PAD DRIVER BLUE		
140441	BAG, DUST (PACKAGE OF 10 BAGS)		
140420	BLOCK, SPRING COMPRESSION		
730074	BRUSH, STRIP (PACKAGE OF 6)		



WINDSOR INDUSTRIES New Machine Warranty

Limited Warranty

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Windsor will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing, performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the buyer. The warranty period is subject to the conditions stated below.

6/3/1 Warranty: 6 Years Polyethylene (PE) Housings, 3 Years Parts, and 1 Year Service Labor Subject to conditions outlined below, Windsor Industries warrants rotationally molded PE housings and parts on all of its machines to

Subject to conditions outlined below, Windsor Industries warrants rotationally molded PE housings and parts on all of its machines to be free from defects in material and workmanship, under normal use and service for six (6) years to the original owner.

Under this warranty we guarantee the performance of non-polyethylene parts and components to be free from defects and for up to three (3) years to the original end user. Parts replaced or repaired under this warranty are guaranteed for the remainder of the original warranty period. (See table below)

Service labor charges are covered for up to one (1) year from the date of purchase through authorized Windsor service provider. No travel coverage is extended for cord-electric models. See table below for each general product model warranty coverage.

Product	PE Housing & Parts	Non- PE Parts	Service Labor	Travel
Rider Scrubbers	6 years	3 years	1 years	6 Months
Rider Sweepers	6 years	1 year	1 years	6 Months
Walk Behind Scrubbers	6 years	3 years	1 years	6 Months
Walk Behind Sweepers	6 years	1 year	1 years	6 Months
Extractors	6 years	3 years	1 years	-
Polishers / Elec. Burnishers / GH	6 years	3 years	1 years	-
Wide Areas Vacuums	6 years	3 years	1 years	-
VacPak Vacuums	6 years	1 year	1 year	-
Air Movers / Dri-matic / TITAN™	1 year	1 year	1 year	-
Propane Burnishers / Strippers	-	2 year	1 year	-
Tracer/Flex Sweepers/Scrubbers	6 years	2 year	6 months	90 days

VERSAMATIC®	Brush motor, Vacuum motor, Belts – 3 years	All other parts – 1 year
SENSOR®	Vacuum motor, Belts – 2 years	All other parts – 1 year

Product exceptions and Exclusions:

- Extractor brush motors, pump motors, **ALL** PC boards and electronics, **ALL** Vacuum motors (other than VERSAMATIC® and SENSOR®), **ALL** pumps, and FLEXSOL™ diaphragms carry a one (1) year parts and service labor warranty.
- The Onan® engines have three (3) year manufacturer's warranty. The Honda® and Kawasaki® engines have two (2) year manufacturer's warranty. **NOTE:** The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items and accessories including, but not limited to, belts, brushes, capacitors, carbon brushes, casters, clutches, cords, filters, finishes, gaskets, hoses, light bulbs, rectifiers, switches, squeegees, bearings, pulleys, relays, actuating cables, wheels, tires, propane tanks, and batteries will be warranted for manufacturing defects for 90-days from the purchase date.

The warranty commences on the purchase date by the original end user from an authorized Windsor agent, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after the date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.



WINDSOR INDUSTRIES New Machine Warranty

90 Day Warranty Extension Available

Upon receipt of the Machine Registration Card, Windsor will extend by 90 days, from the date of purchase, all items included under the one-year provision. This applies only to one-year items and does not include 90-day wear items.

This Warranty Shall Not Apply To:

- 1. Any product that has been subject to abuse, misuse, neglect or unauthorized alteration (including the use of incompatible or corrosive chemicals or overloading of capacity).
- 2. Products that have experienced shipping or freight damage.
- 3. Repairs necessary to correct any failure due to improper pre-delivery service and inspection by the selling dealer.
- 4. Excessive time for cleaning units in preparation for repair.
- 5. Any repairs resulting from poor initial service work or improper diagnosis.
- 6. Tune-up parts such as plugs, plug wires and condensers.
- 7. Any design alterations performed by an organization not authorized or specified by Windsor.
- 8. Battery and charger warranties are handled directly with the manufacturer (Trojan® batteries and Lester® chargers).
- 9. High-pressure washing.
- 10. Electrical components exposed to moisture.

If difficulty develops during the warranty period, contact the authorized Windsor agent from whom the product was purchased. Windsor Industries, Inc. may elect to require the return of components to validate a claim. Any defective part to be returned must be shipped freight prepaid to an authorized Windsor Distributor/Service Center or to the Windsor factory.

Use Of Parts Not Approved By Windsor Industries, Inc. Will Void All Warranties

This warranty is valid only for all products sold after July 1, 1995. A product sold before that date shall be covered by the limited warranty in effect at the date of sale to the original purchaser.