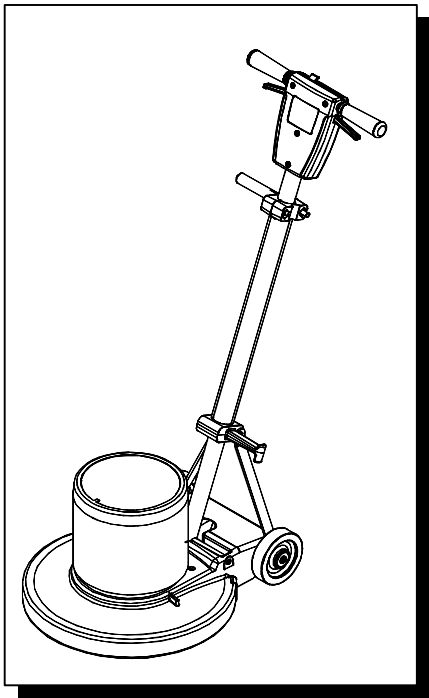


# ***STORM***



Operating Instructions (ENG)

## **FLOOR POLISHER**



MODELS: SP13    SP17X  
          SP15    SP20X  
          SP17    SPDS20  
          SP20

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



*Read these instructions before using the machine.*

**C**

**MACHINE DATA LOG/OVERVIEW**

**MODEL** \_\_\_\_\_

**DATE OF PURCHASE** \_\_\_\_\_

**SERIAL NUMBER** \_\_\_\_\_

**YOUR DEALER**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone 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.*

*NOTE: The 98# on the lower left corner of the front cover is the part number for this manual.*

# IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.



## **WARNING:**

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.**

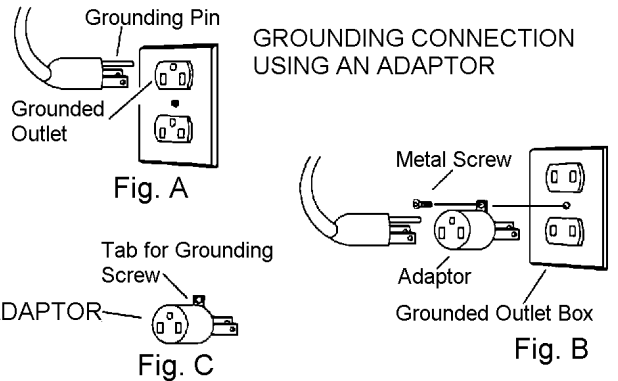
### ELECTRICAL:

In the USA this machine operates on a one 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:**

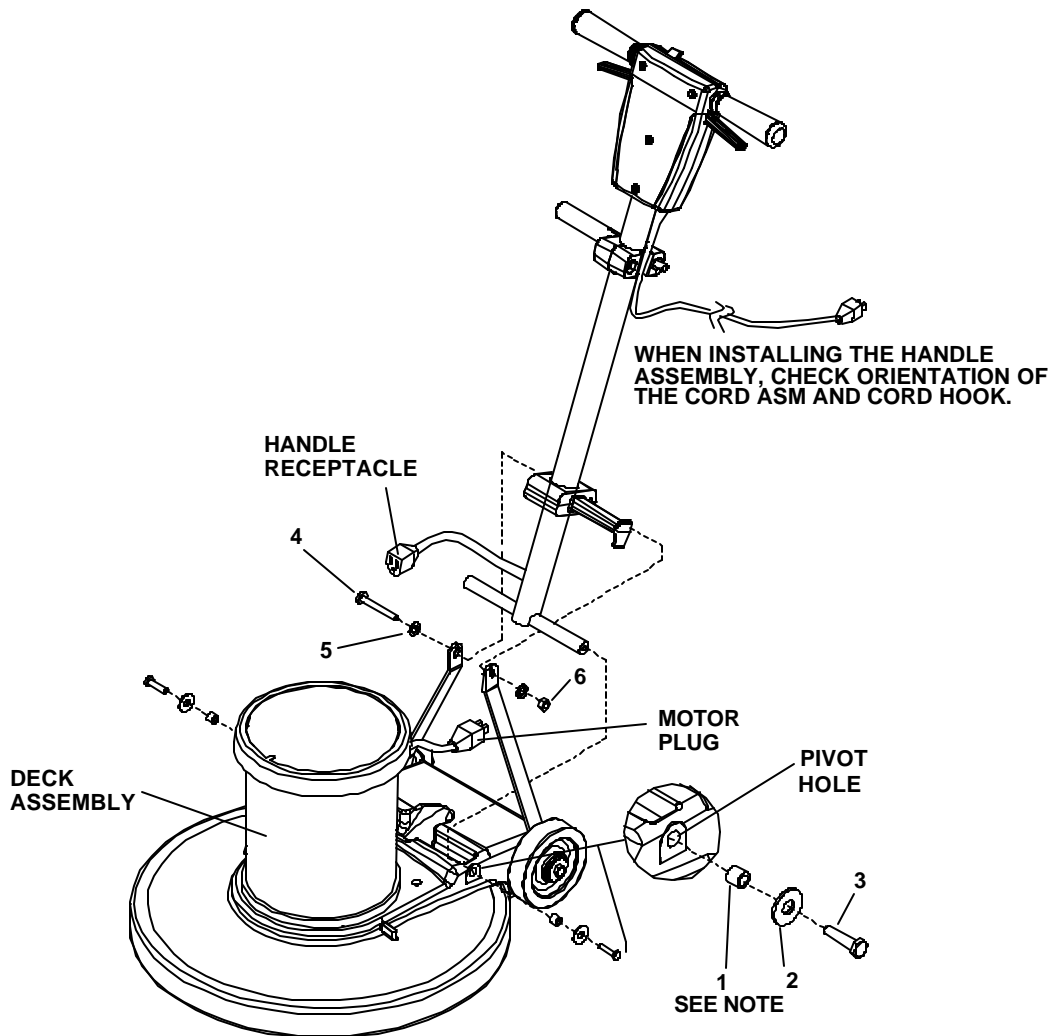
**Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, 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 adjustable handle with die cast aluminum handle housing
Motor	
SP13, SP15, SP17, SP20	1.0 hp
SP17X, SP20X, SPDS20	1.5 hp
Brush/Pad speed	
SP13, SP15, SP17, SP20, SP17X, SP20X	175 rpm
SPDS20	175/300 rpm
Electrical system	115 volts, 60 Hz
Cable	50' (15 m), 14/3, built in cord wrap
Switches	Dual levers with safety lock
Wheels	Two 5" (12.7 cm) dia., 1.25" (3 cm) wide, non-marking tread
Handle	1.5" (4 cm) tubular steel, adjustable, easy to use thumb activated safety lock
Dimensions (L x W x H)	
13" (33 cm) model	21.0" (53 cm) x 14" (36 cm) x 47" (119 cm)
15" (38 cm) model	22.0" (56 cm) x 16" (41 cm) x 47" (119 cm)
17" (43 cm) model	23.0" (58 cm) x 18" (46 cm) x 47" (119 cm)
20" (51 cm) model	24.5" (62 cm) x 21" (53 cm) x 47" (119 cm)



## HANDLE INSTALLATION



### WARNING:

***This must be installed by qualified personnel. Read all instructions thoroughly. The machine is shipped with handle unassembled.***

The machine is shipped with handle unassembled.

Follow these steps for installation:

1. Remove handle and deck assembly from carton.
2. Attach handle assembly to base using hardware kit **(47331)** (attached to handle in a plastic bag) items 1, 2, and 3.

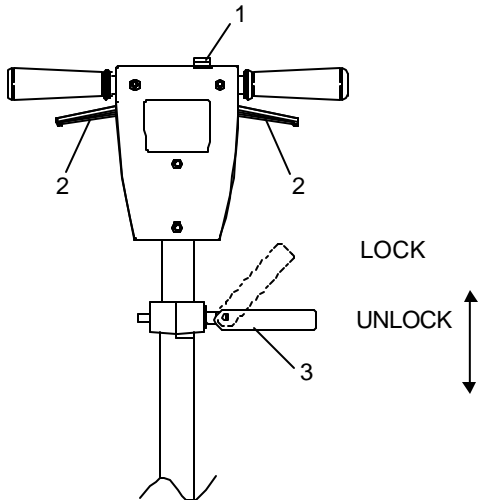
**NOTE:** The spacers (items 1) are required for the correct operation of the handle. The spacers are positioned completely inside the pivot holes in the casting, and are held in place by tightening the bolts and washers (items 2 and 3) against the spacer.

3. Remove bolt, nut and washers (items 4, 5 and 6) from lower block on handle assembly. Attach links as shown. Tighten bolt and nut securely, then back off 1/4 to 1/2 turn.
4. Check handle for movement up and down.
5. Plug motor cord into handle cord receptacle.

# OPERATION

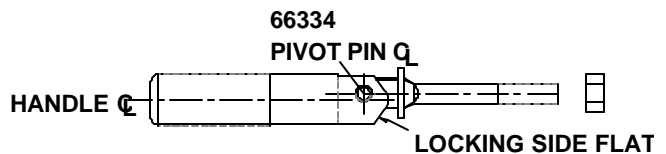
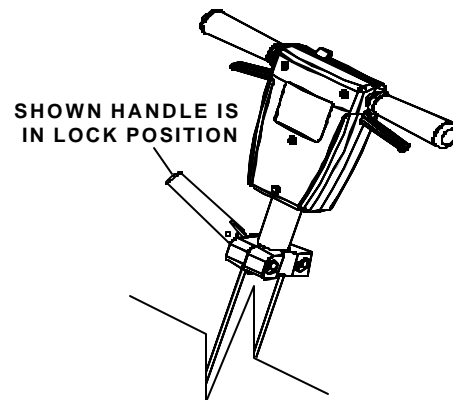
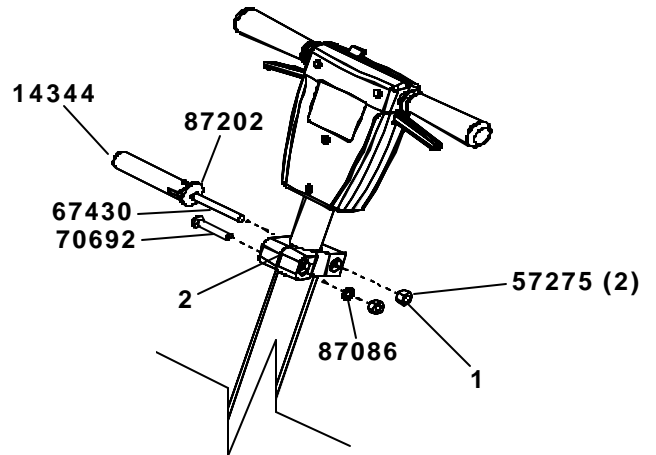
## CONTROLS

1. **Safety Lock** – Prevents unintended operation of the machine.
2. **Switch Levers** – Turns machine on/off.
3. **Adjustment Handle** – Allows the handle to be adjusted to a comfortable operating position.



The handle adjust bar (14344) for the polishers are individually preset at the factory for optimum locking efficiency and minimum effort of engaging. It should not be necessary to adjust the handle adjust bar unless the relationship of the handle adjust bar nut (57275) or fixed clamp bolt (70692) and their corresponding nuts (57275) and washer (87086) have been disturbed. The handle can be positioned to be locked with the handle adjust bar pointing either up or down. In order to change the position the handle and bolt must be removed and rotated 180 degrees. It is incorrect to make it lock opposite from the way it was assembled by applying more force to the nut. From the factory the locking is in the up position when the machine handle is locked. The pivot pin (66334) on the handle adjust bar is off center, in relationship of the screw to the axis of the (see drawing). To adjust handle adjust bar, tighten nut on handle while in the locked position. The handle is locked when the screw is to the outside of the machine and the flat on the opposite side of the handle is flush to the bracket.

1. To adjust handle lock, tighten nut on handle while in the locked position. Optimum locking force and ease of locking is accomplished when the locking lever nut is set to a torque of 30 to 50 inch pounds in the locked position.
2. Gap between clamp halves at the front should be to the gap in rear when the handle adjust bar is adjusted properly and in the locked position (gap approximately 1/16").



## **! CAUTION**

For indoor use only.

To prevent possible damage to the floor when using the brush option, use water or other approved cleaning solution while operating. When using the pad option, 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 or brush is installed correctly and in good shape. Install or change pad if necessary.
2. Plug the machine into a wall outlet as described in the grounding instructions.
3. Lower the handle by unlocking the adjustment handle and moving the handle into position. Relock the handle when it is in a comfortable position.

## **! WARNING**

Insure that handle is locked in position before starting machine.

4. Push the safety lock forward, unlocking the switch levers.
5. 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 both of the switch levers.

*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 rear 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

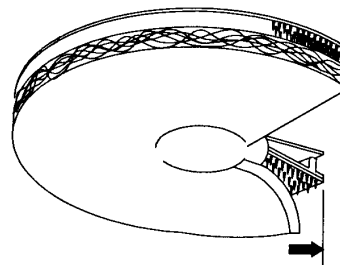
1. Inspect power cord for wear. To prevent electrical shock replace cords with frayed or cracked insulation immediately.
2. Place machine in the storage position.
3. Check pad condition. Change if soiled or torn.

## PAD DRIVER INSTALLATION

1. Lay machine back, exposing the under side.
2. Place pad driver on the motor lug and rotate clockwise until engaged. To remove, turn counter-clockwise.

### **PAD INSTALLATION:**

Ensure Pad is Centered on Pad Driver. Pull Pad to edge of Pad Driver in several directions to check for proper engagement.



## MAINTENANCE

### SCRUB BRUSHES

*NOTE: All original equipment brushes are equipped with "Perform Alert®". This feature will tell the operator when it is time to replace the scrub brushes. "Perform Alert®" brushes have pre-trimmed bright yellow tufts to indicate the length of a worn out brush. When the tufts in the scrub brush wear to a length equal to the yellow tufts, the scrub brushes should be replaced.*

There are five different types of brushes available to cover applications from cleaning heavily soiled floors to polishing. A pad driver is also available to take advantage of the many cleaning pads on the market and further add to the flexibility of the POLISHER.

### FINISHED FLOORS

**Nylon Polish** is the softest brush. It will gently clean finished tile or terrazzo floors without removing floor finish or floor material. Used for washing highly polished or burnished floors.

**Nylon** bristles are used in a variety of applications on coated or uncoated surfaces.

**White Pads** (Polishing) are used for dry polishing to achieve a high-gloss appearance, or surface washing on highly polished or burnished floors.

**Red Pads** (Buffing) are used for light-duty scrubbing. When used with a mild detergent they will provide surface cleaning without removing the finish.

Please refer to the following to assist in selecting the proper brush or pad for the work at hand.

### UNCOATED FLOORS

**Aggressive Grit** is a nylon fiber impregnated with silicone carbide grit. It grinds away stain, soil, and removes surface material.

**Mild Grit** is a less aggressive silicone carbide grit suitable for cleaning medium soil conditions. Advantages are faster ground speed than nylon bristles on light solid applications.

**Nylon** is a general-purpose scrub brush with stiff bristles. Polypropylene works well for maintaining concrete, wood and tile floors.

**Blue Pads** (Scrubbing) are used for heavy-duty scrubbing and light stripping. The blue pads remove less finish than brown stripping pads, yet will remove black marks, stains and dirt.

**Brown Pads** (Stripping) are used for easy and complete removal of old floor waxes/finishes. They will quickly remove ground in dirt, black heel marks, and spills. When used with the proper stripper, this pad leaves the floor clean and ready for finishing.

The scrub brushes should be checked before each days work for wire, string, wear and damage. The scrub brushes should be replaced if brush bristles are missing or if yellow Perform Alert © indicates minimum brush length.

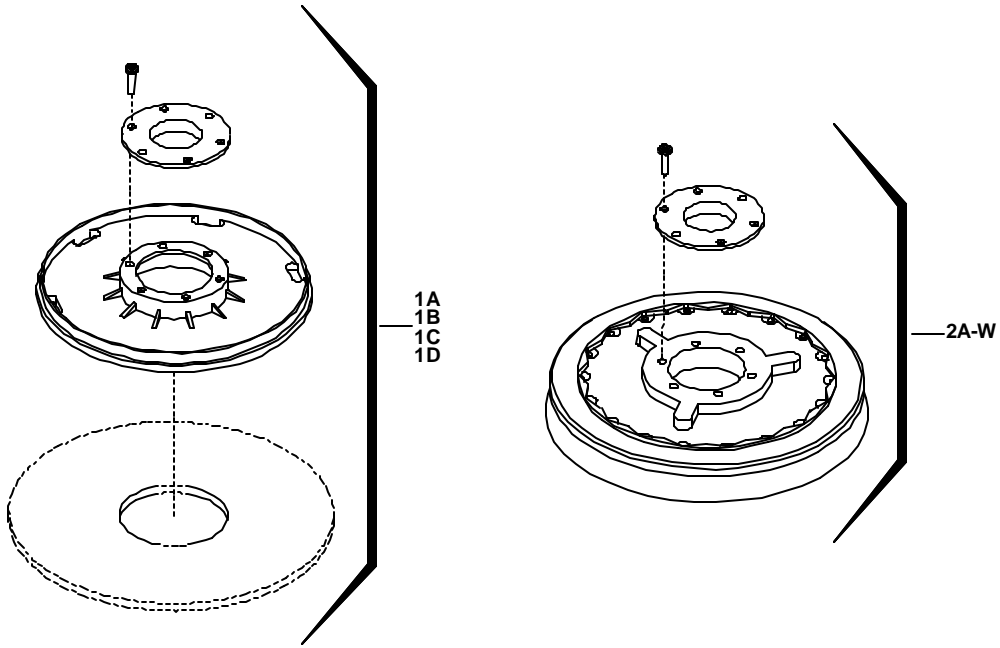
## SERVICE SCHEDULE

MAINTENANCE	DAILY	MONTHLY
Check pad wear to prevent buildup of chemicals	*	
Check pad driver system for damage	*	
Check handles, switches, and knobs for damage	*	
Store with pad off the floor	*	
Check all bearings for noise		*
Check skirt/bumpers for damage and replace as necessary		*
Check overall performance of machine		*

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Machine will not run	Circuit breaker tripped in building.	Check and reset.
	Power switch failure.	Test switch for continuity and replace if necessary.
	Tripped circuit breaker.	Reset.
	Faulty power cord.	Replace.
	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.
Electrical shock	Equipment not grounded.	Follow grounding instructions exactly.
	Receptacle not grounded.	Have an electrician inspect building's wiring.
	Internal wiring problem	Ensure that the machine wiring matches the appropriate wiring diagram. Replace any wires or components that 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.
Excessive vibration	Pad not centered.	Re-center pad.
	Damaged or unevenly worn pad.	Replace pad. Do not rest machine on pad when not in use.
	Damaged pad driver.	Replace.
Pad does not turn but motor is running	Shear coupling has failed.	Replace coupling.

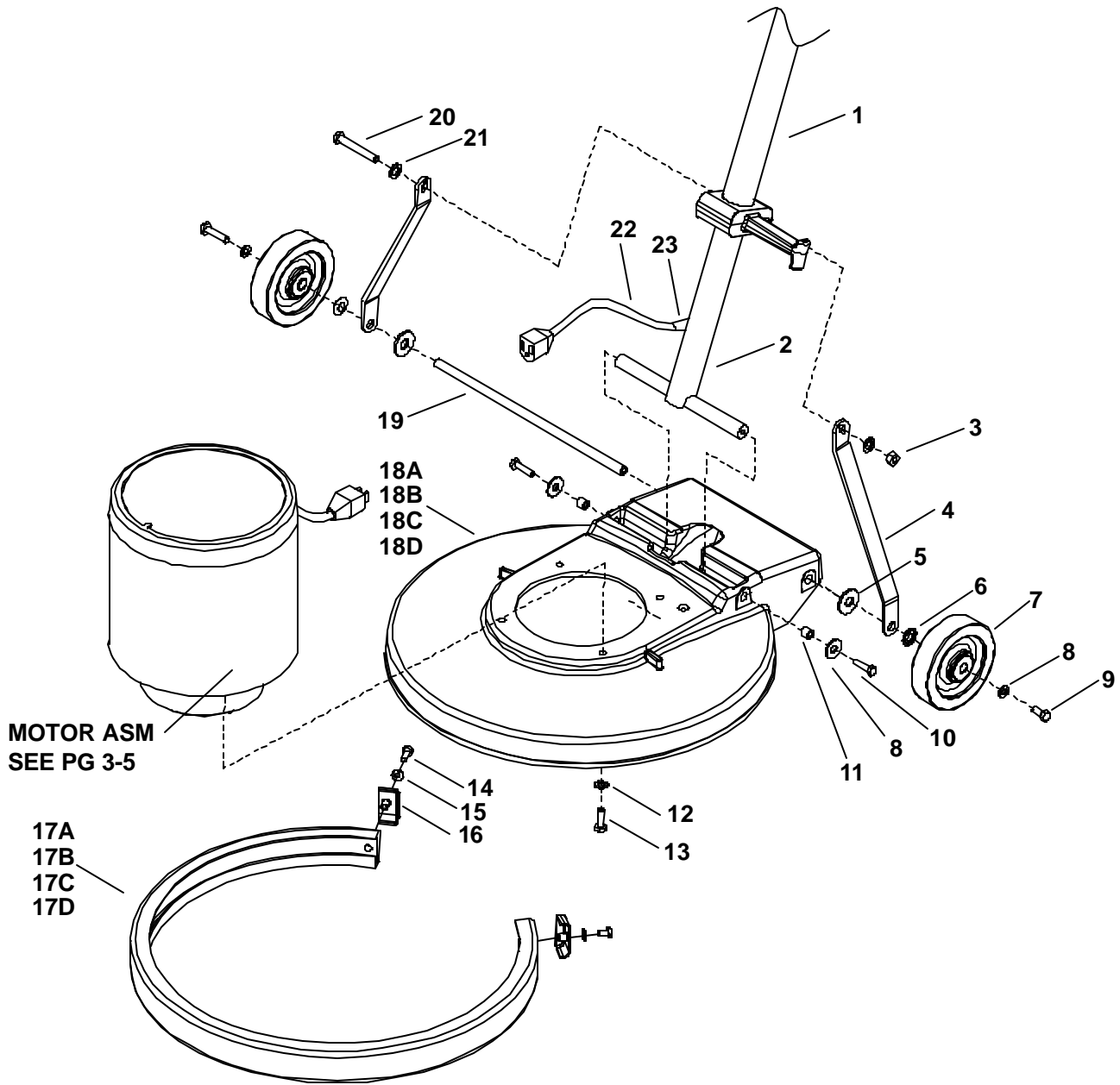
# BRUSH/PAD DRIVER GROUP



## BRUSH/PAD DRIVER GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1A	02216	-	PAD DRIVER, 13" POLISHER		
1B	02396	-	PAD DRIVER, 15" POLISHER		
1C	02218	-	PAD DRIVER, 17" POLISHER		
1D	02219	-	PAD DRIVER, 20" POLISHER		
2A	02232	-	BRUSH, 13" NYL.POL. W/CLT.PLT		
2B	02233	-	BRUSH, 13" NYL.SCRUB W/CLT.PLT		
2C	02234	-	BRUSH, 13" MILD GRIT W/CLT.PLT		
2D	02235	-	BRUSH, 13" AGG. GRIT W/CLT.PLT		
2E	02236	-	BRUSH, 13" POLYPRO W/CLT. PLT		
2F	02447	-	BRUSH, 15" NYL.POL. W/CLT.PLT		
2G	02448	-	BRUSH, 15" NYL. SCRUB W/CLT.PLT		
2H	02445	-	BRUSH, 15" MILD GRIT W/CLT.PLT		
2J	02444	-	BRUSH, 15" AGG.GRIT W/CLT.PLT		
2K	02446	-	BRUSH, 15" PLOYPRO W/CLT.PLT		
2L	02242	-	BRUSH, 17" NYL. POL. W/CLT.PLT		
2M	02240	-	BRUSH, 17" NYL.SCRUB W/CLT.PLT		
2N	02241	-	BRUSH, 17" MILD GRIT W/CLT.PLT		
2P	02205	-	BRUSH, 17" AGG. MALGRIT W/C.P		
2Q	02206	-	BRUSH, 17" POLYPRO W/CLT. PLT		
2R	02239	-	BRUSH, 20" NYL.POL.W/CLT.PLT.SFT		
2T	02237	-	BRUSH, 20" NYL.SCRUB W/CLT.PLT		
2U	02238	-	BRUSH, 20" MILD GRIT W/CLT.PLT		
2V	02202	-	BRUSH, 20" AGG. MALGRIT W/C.P.		
2W	02203	-	BRUSH, 18" POLYPRO W/CLT. PLT		

# FRAME GROUP

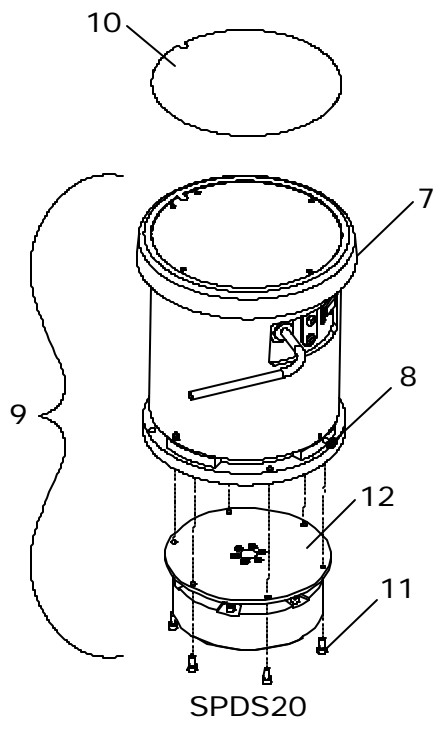
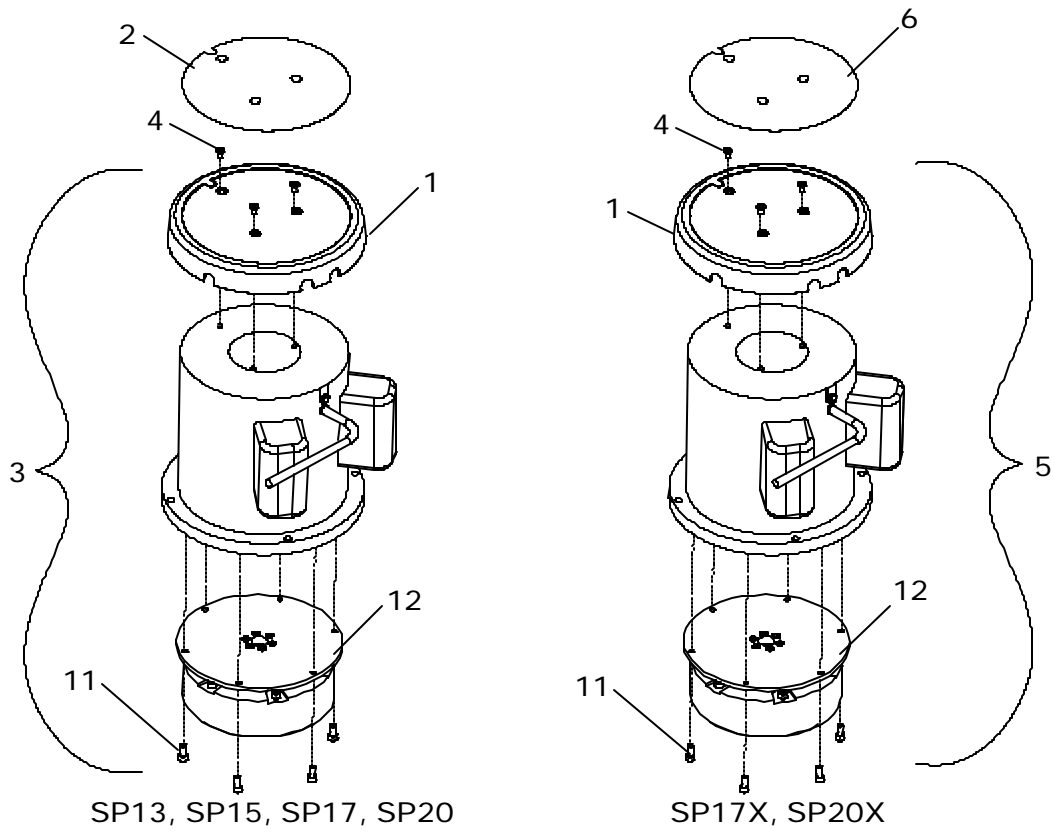




## FRAME GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	78447	1	TUBE ASSY, HANDLE ADJ		
2	38290	1	HANDLE, POLISHER		
3	57275	1	NUT, M10X1.5 HEX NYLOCK PLTD		
4	51328	2	LINK, HANDLE ADJUST		
5	87203	2	WASHER, 14MMID X 36MMOD		
6	57276	2	NUT, PUSH FLAT RD .51D		
7	89206	2	WHEEL, 5D X 1.25 X 13MMID GRY		
8	87054	2	WASHER, M8 FLAT DIN125A PLT		
9	70262	2	SCR, M8 X 20 HHMS PLTD		
10	70135	2	SCR, M8 X 30 HHMS		
11	730008	2	SPACER, .317ID X .50D X .44LG		
12	87067	4	WASHER, 5/16 LOCK INT STAR PLT		
13	70698	4	SCR,5/16-18 X 3/4 HHCS GR5 BLK		
14	70691	2	SCR, M6 X 25 HHMS BLK		
15	87211	2	WASHER, M6 FLAT BLK		
16	27871	2	CAP, EXTRUSION		
17A	14341	-	BUMPER, EXTRUSION 30.5"		
17B	14371	-	BUMPER, EXTRUSION 37.3"		
17C	14372	-	BUMPER, EXTRUSION 43.8"		
17D	14373	-	BUMPER, EXTRUSION 53.4"		
18A	29211	-	DECK, 13 IN POLISHER, BLUE		
18B	29212	-	DECK, 15 IN POLISHER, BLUE		
18C	29213	-	DECK, 17 IN POLISHER, BLUE		
18D	29214	-	DECK, 20 IN POLISHER, BLUE		
19	03111	1	AXLE, MAIN POLISHER		
20	70701	1	SCR, M10 X 90 HHMS		
21	87086	2	WASHER, M10 X 30 PLTD		
22	23206	1	CORDSET, 14/3 X 47", SJT, BLK		
23	730012	1	STRAIN RELIEF, 14/3 STRAIGHT		

# MOTOR GROUP



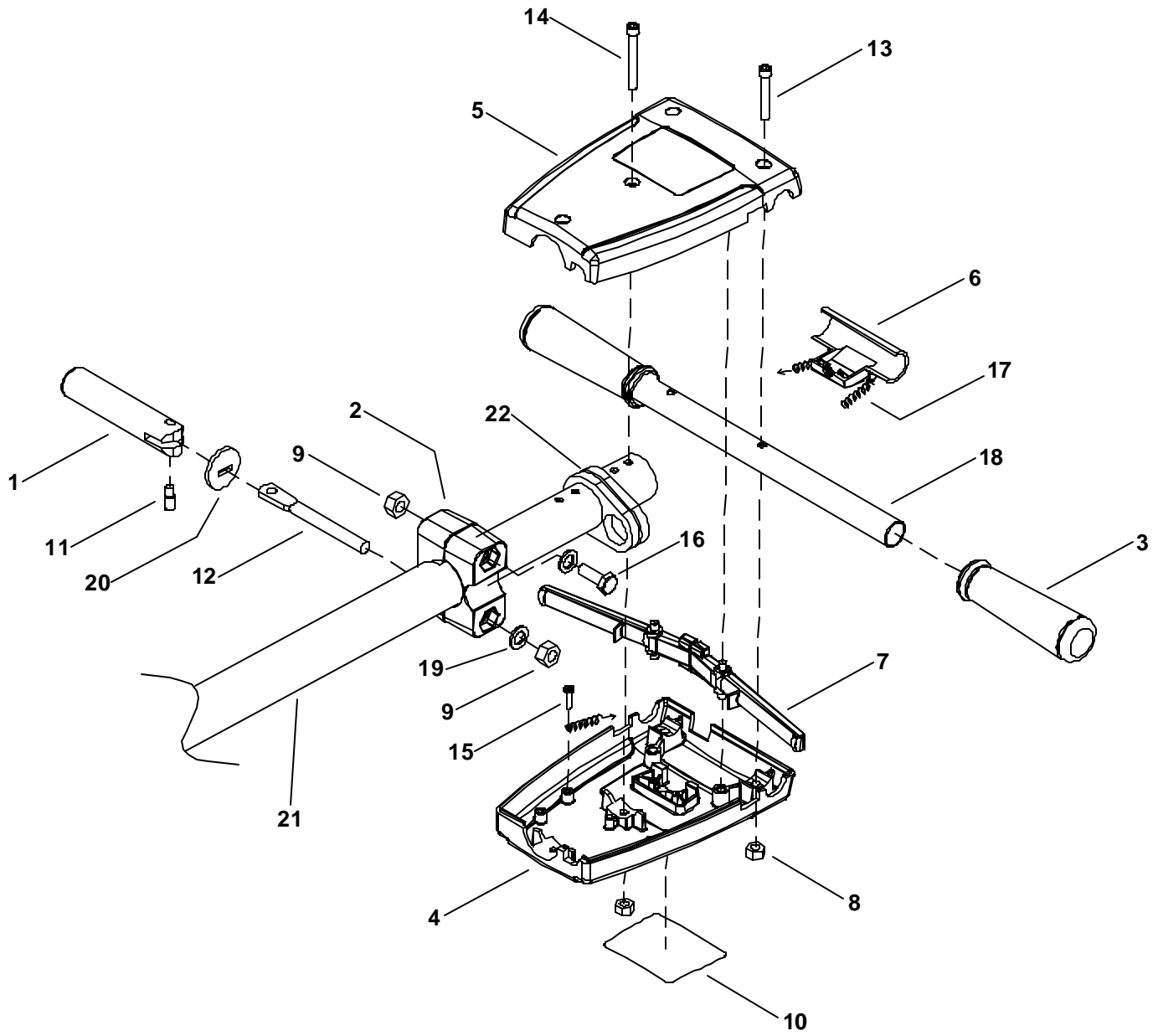
## MOTOR GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	27884	1	COVER, MOTOR		
2	500763	1	LABEL, STORM MAIN		
3	53263	1	MOTOR, 1 HP 115V INDUCTION		
4	70702	3	SCR, M5 X .8 X 15MM BLK		
5	53264	1	MOTOR, 1.5 HP 115V INDUCTION		INCLUDES ITEM 4, 1, 12, & 11
6	500764	1	LABEL, STORM DELUXE MAIN		
7	27892	1	COVER, ASM, MOTOR		
8	70700	8	SCR, M5 X .8 X 10MM PHMS BLK		
9	53253	1	MOTOR, 115V 1.75 HP 175/300 RPM		
10	500765	1	LABEL, STORM DUAL SPEED MAIN		
11	70723	6	SCR, M5 X .8 X 15MM SHCSM		
12	62917	1	PLATE, ADAPTER MOTOR		

### MOTOR COMPONENTS (NOT SHOWN)

PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
140411	1	CIRCUIT BREAKER, 20 AMP		SP13/15/17/17X/20/20X
140401	1	CIRCUIT BREAKER, 30 AMP		SPDS20
67488	1	RECTIFIER, 50A 600V BRIDGE		SPDS20
14404	1	BRUSH SET MOTOR (PKG OF 4)		SPDS20
34378	1	FUSE		
34379	1	FUSE HOLDER		
09135	2	BEARING, MOTOR		
27352	1	COUPLING, MTR/GEAR BOX		
730039	1	SWITCH ASM, DUAL SPEED		SPDS20 (FOR 2 SPEED ONLY)
140416	1	BOOT, CIRCUIT BREAKER		
67489	1	RING, MOTOR SHAFT		
05176	1	ARMATURE, MOTOR REPAIR 53253		SPDS20

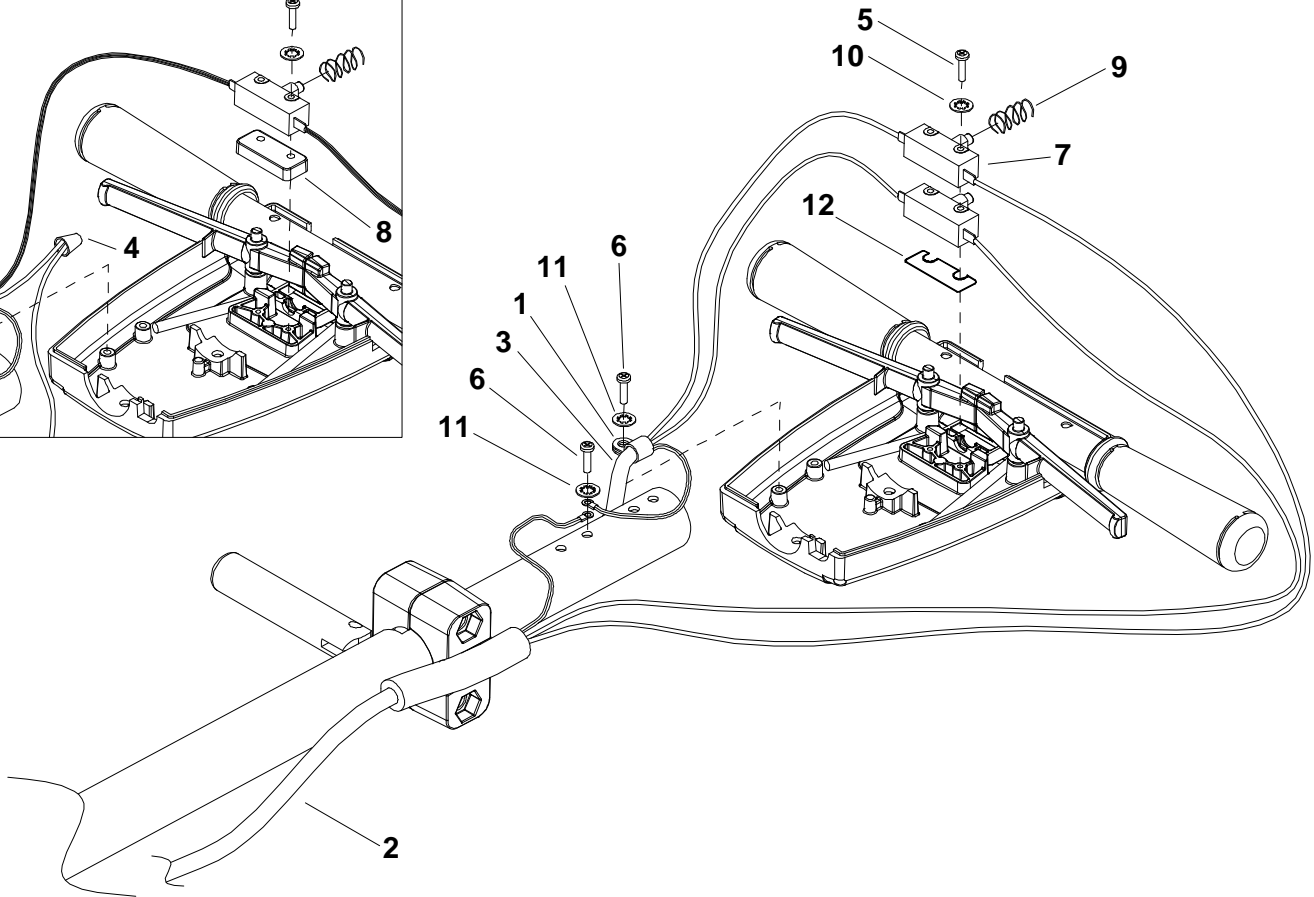
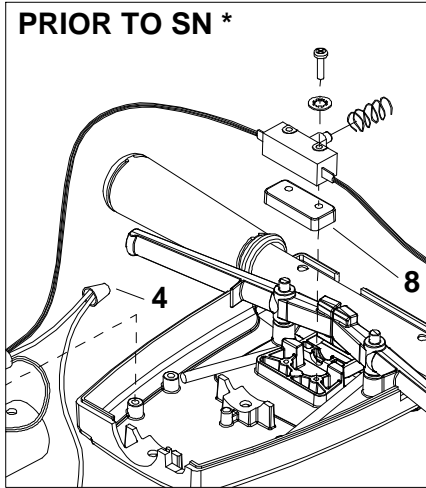
# HANDLE GROUP



## HANDLE GROUP

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	14344	1	BAR, HANDLE ADJUST		
2	140393	1	BLOCK, HANDLE MOUNT		
3	36196	2	GRIP, POLISHER HANDLE		
4	41363	1	HOUSING, POLISHER HANDLE REAR		
5	41366	1	HOUSING, POLISHER HANDLE FRONT		
6	51326	1	LOCK, SAFETY HANDLE		
7	51327	2	LEVER, SWITCH		
8	57274	4	NUT, M6 HEX FINISH		
9	57275	1	NUT, M10X1.5 HEX NYLOCK PLTD		
10	500194	1	LABEL, WARNING		
11	66334	1	PIN, PIVOT, HANDLE ADJUSTMENT		
12	67430	1	ROD, HANDLE ADJUST		
13	70686	2	SCR, M6 X 45 SHCS BLK		
14	70687	2	SCR, M6 X 50 SHCS BLK		
15	70689	1	SCR, M4.8 X 10 HHTF TYPE B		
16	70692	1	SCR, M10 X 75 HHCS PLTD		
17	73990	2	SPRING, EXT, .5OD X 3.5L		
18	78437	1	TUBE, GRIP HANDLE		
19	87086	2	WASHER, M10 X 30 PLTD		
20	87202	1	WASHER, BEARING (HANDLE ADJ)		
21	78447	1	TUBE ASSY, HANDLE ADJ		
22	14434	2	BUMPER, HANDLE		

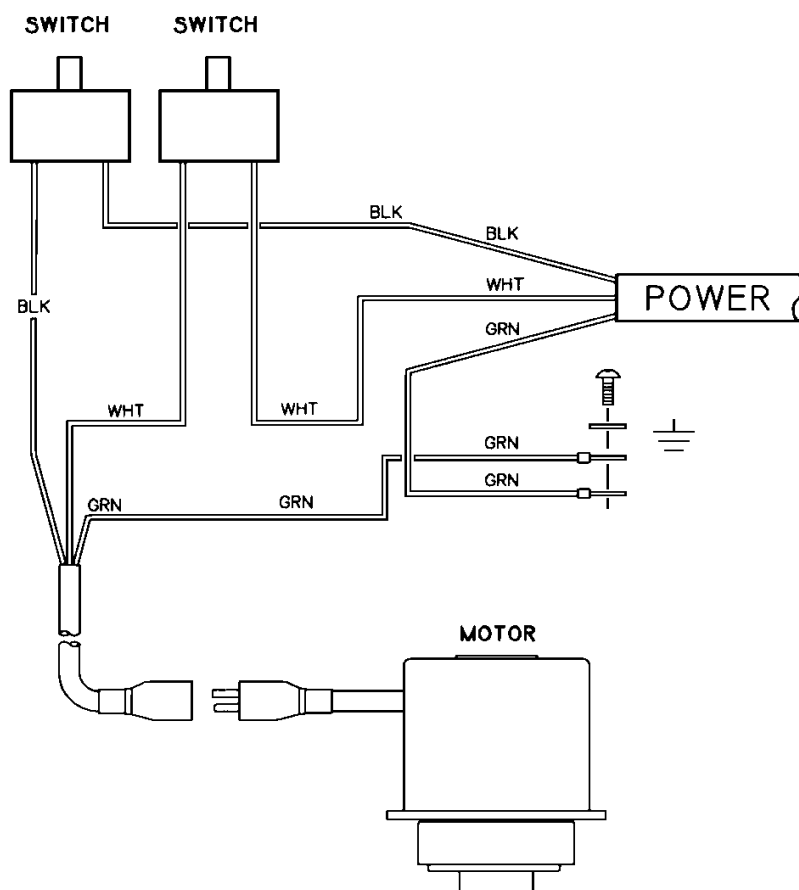
# WIRING GROUP



**WIRING GROUP**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	20054	1	CLAMP, 3/8 NYLON UL/CSA		
2	23167	1	CORD SET, 14/3 STO X 50' YLW		
3	23206	1	CORDSET, 14/3 X 47", SJT, BLK		
4	57069	1	NUT, ORG WIRE (2-5 18G/2-14G)		
5	70801	2	SCR, M3.5 X 40 PHTF TYPE B	*	WAS 70688
6	70689	2	SCR, M4.8 X 10 HHTF TYPE B		
7	72123	2	SWITCH, 25A SPST 125-250V SNAP	*	WAS QTY 1
8	73989	1	SPACER, SWITCH POLISHER		
9	73993	1	SPRING, COMP, .48OD X .875L		
10	87057	2	WASHER, M4 SHAKEPROOF		
11	87208	2	WASHER, M5 SHAKEPROOF PLTD		
12	140674	1	BARRIER SHEET	*	

## WIRING DIAGRAM / SPARE PARTS



## SUGGESTED SPARE PARTS

PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
87202	WASHER, BEARING (HANDLE ADJ)		
73990	SPRING, EXT .5 OD X 3.5L		
73993	SPRING, COMP .48 OD X .91 L		
72123	SWITCH. 25A SPST 125-250V SNAP		
14344	BAR, HANDLE ADJ		
66334	PIN, PIVOT, HANDLE ADJ		
67430	ROD, HANDLE ADJ		
34378	FUSE		
34379	FUSE HOLDER		
27352	COUPLING, MTR/GEAR BOX PLSHER		
67488	RECTIFIER, 50A 600V BRIDGE		SPDS20
140401	CIRCUIT BREAKER, 30AMP MPX		
140411	CIRCUIT BREAKER, 20AMP MP/MB		





# 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 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

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### **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.