

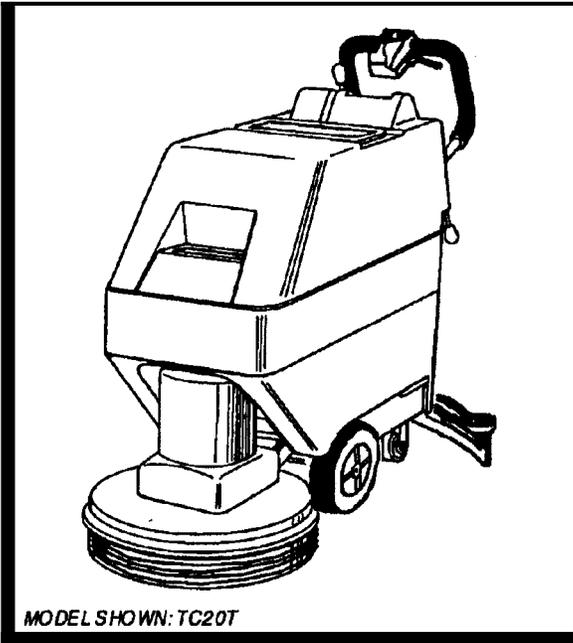
# FRIBENT COMPOCT

HARD FLOOR SCRUBBER

(ELECTRIC VERSIONS)



Operating Instructions (ENG)



**MODEL:**  
**TC20E - (20" Non-Traction)**

**VOLTAGE**  
**115V**

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



---

*Read these instructions before operating the machine.*



<b>MODEL</b> .	_____
<b>DATE OF PURCHASE</b> .	_____
<b>SERIAL NUMBER</b> .	_____
<b>SALES REPRESENTATIVE</b> .	_____
<b>DISTRIBUTOR NAME</b> .	_____
OPERATIONS GUIDE NUMBER . 98447	
PUBLISHED .7/1/96	
©Copyright 1996Windsor Industries. Printed in U.S.A.	

**TABLE OF CONTENTS**

<i>Cover</i> .....	1	<i>Squeegee Assembly</i> .....	14
<i>Data Log/ Table of Contents</i> .....	2	<i>Squeegee Assembly Parts List</i> .....	15
<i>Safety Precautions</i> .....	3	<i>Valve Assembly</i> .....	16
<i>Safety Precautions (cont.)</i> .....	4	<i>Valve Assembly Parts List</i> .....	17
<i>Safety/Operations</i> .....	5	<i>Scrub Deck Assembly</i> .....	18
<i>Operation Controls</i> .....	6	<i>Scrub Deck Assembly Parts List</i> .....	19
<i>Maintenance</i> .....	7	<i>Mechanical Controls</i> .....	20
<i>Maintenance (cont.)</i> .....	8	<i>Mechanical Controls Parts List</i> .....	21
<i>Maintenance (cont.)</i> .....	9	<i>Control Panel Assembly</i> .....	22
<i>Trouble Shooting Guide</i> .....	10	<i>Control Panel Assembly Parts List</i> ..	23
<i>Wiring Diagram (1 15V)</i> .....	11	<i>Vac Motor Assembly</i> .....	24
<i>Tanks. and Frame Assembly</i> .....	12	<i>Scrub Deck Assembly (Hex Drive)</i> ..	25
<i>Tanksand Frame Parts List</i> .....	13	<i>Warranty</i> .....	26



# **IMPORTANT SAFETY INSTRUCTIONS**

When using an electrical appliance, basic precautions should always be followed, including the following:  
**READ ALL INSTRUCTIONS BEFORE USING MACHINE**



## **WARNING**

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY:**

- Connect machine to a properly grounded outlet only. See grounding instructions.
- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- Do not use outdoors on wet surfaces.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Use only as described in this manual. Use only manufacturers recommended attachments.
- Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.
- Do not pull or carry by cord, use cord as a handle, close a door on a cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from opening and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Turn off all controls before unplugging.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Rotating fan blades inside the cover. Before opening cover, switch off machine. Wait until the fan/brush stops completely or dust and debris may be ejected.
- Dry mop floor before using.

**SAVE THESE INSTRUCTIONS**

# SAFETY

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, CAUTION** and **FOR SAFETY**. The level of hazard intensity is determined by the following definitions:



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



**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.**

The following information signals indicate potentially dangerous conditions to the operator or equipment. Read this guide carefully. Know when these conditions can exist. Locate all safety devices on the machine. Report machine damage or faulty operation immediately. Do not use the machine if it is not proper operating condition.

### **For SAFETY:**

#### **DO NOT OPERATE MACHINE:**

- Unless Trained and Authorized
- Unless Operation Guide is Read and understood.
- In Flammable or Explosive areas.

#### **WHEN USING MACHINE:**

- Go slow on grades and slippery surfaces.
- Use care when backing machine.
- Do not carry riders on machine.
- Always follow basic safety and traffic rules.

#### **BEFORE LEAVING OR SERVICING MACHINE:**

- Stop on level surfaces.
- Turn off machine.

#### **WHEN SERVICING MACHINE:**

- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Block machine wheels before jacking machine up.
- Use hoist or jack of adequate capacity to lift machine.
- Use Windsor approved replacement parts.

## **WHEN TRANSPORTING MACHINE INA TRAILER:**

- **Make sure the ramp angle is no more than 10°, and the ramp is strong enough to support the machine.**
- **Make sure ramp is clean and dry.**
- **Put ramp into position.**
- **Remove squeegee assembly & brushes before loading.**
- **Align the machine on a level surface ten (10) feet behind the ramp.**
- **Push machine up ramp carefully.**
- **Securely fasten the machine to the trailer.**

**THIS PRODUCT IS FOR COMMERCIAL USE ONLY.**

## **ELECTRICAL:**

In the USA this scrubber operates on a standard 15 amp 115 volt A.C. power circuit (120V nominal). Special voltage models are available for international applications. 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.



**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.**

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A" below. A temporary adaptor that looks like the adaptor in "Fig. C" below may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B" below. 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: Check local electrical codes before using an adaptor. Adaptors are not allowed in Canada.**



**EXTENSION CORDS:**

If an extension cord is used, the wire size **must** be at least one size larger than the power cord on the machine, and the cord **must** be a type SJTW/SJTW:A.

**HOW IT OPERATES**

The **TRIDENT COMPACT** is a walk-behind scrubber. The main scrubbing components include a solution/recovery tank, single disc-type brush or pad, a rear squeegee and a vacuum motor.

Detergent solution and water flow from the solution tank to the scrub brush. The rotating brush scrubs the floor. As the machine moves forward, the rear squeegee collects the dirty solution and channels it into the vacuum of the squeegee pickup hose. The pickup hose deposits the dirty solution into the recovery tank.

**PREPARING FOR OPERATION  
(PERFORM DAILY MAINTENANCE AS SHOWN ON PAGE 7.)**

**Fill Solution Tank**

- 1.) Remove cover and fill. (see item 19, page 14)
- 2.) Use a clean bucket or hose to fill the tank with water.

**CAUTION** Temperatures in excess of 140°F (60° C) may distort the polyethylene tanks.

3.) Add a cleaning concentrate for use in automatic floor scrubbers. Closely follow the manufacturer's instructions found on container. Read ingredients listed on the container to ensure compatible chemicals are used.

**CAUTION**

Use only the suitable chemicals listed below. Using incompatible chemicals may damage the machine. Damages of this type are not covered under the WINDSOR Three Year Protection Plan. Carefully read ingredients on manufacturer's label before using any product in this machine.

**SUITABLE CHEMICALS**

- Alkalis
- Defoaming Agents
- Detergents
- Hydroxides

**INCOMPATIBLE CHEMICALS**

- Aldehydes
- Carbon Tetrachloride
- Chlorinated Hydrocarbons
- Methyls (MEK)
- Perchloroethylene(perc)
- Phenols
- Trichloroethylene
- D-Limonene

**PREPARING FOR OPERATION(Cont.)**

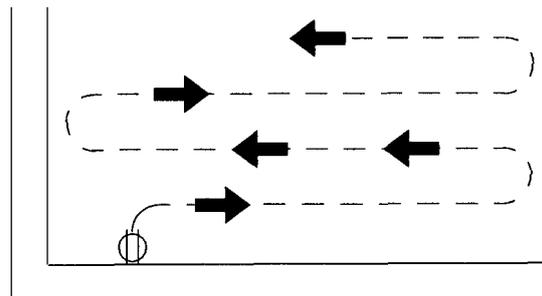
- 4.) Plug the power cords together and twist into locked position. Attach the power cord to the yellow strain relief as shown. Plug power cord into a properly grounded wall outlet.
- 5.) Turn vacuum motor switch on and off to make sure there is electrical power at machine.

**OPERATING THE MACHINE  
(PERFORM DAILY MAINTENANCE AS SHOWN ON PAGE 7.)**

1. Adjust the operator control handle to a comfortable position. (see item 3, page 6)
2. Switch on main power switch. (see item 1, page 5)
3. Release solution. (Pull solution control lever rearward.) (see item 6, page 6) **NOTE:** The amount of solution can be regulated during operation depending on the type of floor and the traverse speed of the machine. Pulling the lever farther rearward releases more solution.
4. Switch on brush drive motor. (see item 1, page 6)
5. Switch on vacuum motor. (see item 2, page 6)
6. Lower scrub deck. Pull scrub deck lift lever rearward. (see item 8, page 6)

**CAUTION**  
Do not leave brush running on floor while machine is stationary.

7. Lower squeegee. Pull squeegee lift lever back. (see item 7, page 6) **NOTE:** Adjust squeegee as shown on page 9.
8. Move machine forward by applying even pressure on the main handle. Forward motion is assisted by the scrubbing action of the brush/pad driver.



**Take extra care not to run machine over cord or catch cord on squeegee when turning.**

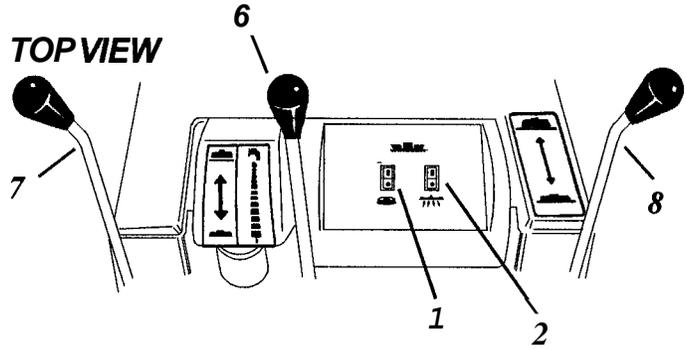
7. Plan your cleaning route to work away from the electrical source. Move machine forward at a steady pace

# OPERATION CONTROLS

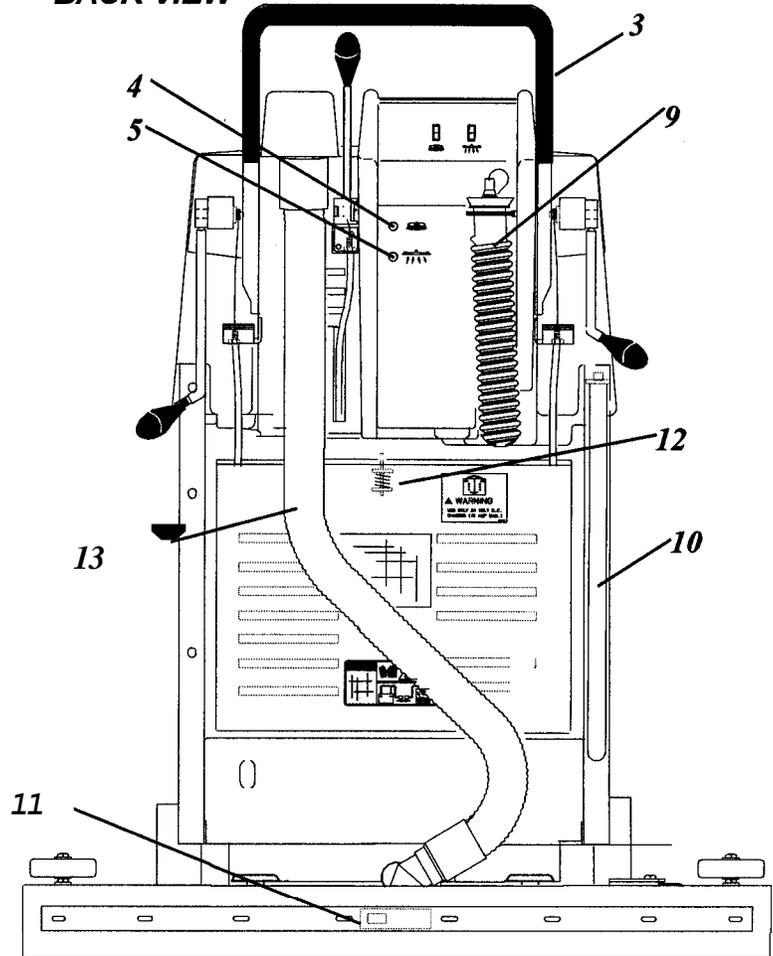


- 1 **Brush Switch.** Turns brush on/off.
- 2 **Vacuum Switch.** Turns vacuum motor on/off.
- 3 **Main Handle.**
- 4 **Brush Motor Circuit Breaker.** Protects brush motor from overheating.
- 5 **Vacuum Motor Circuit Breaker.** Protects vacuum motor from overheating.
- 6 **Solution Lever.** Controls the amount of solution flow to the floor.
- 7 **Squeegee Lift Lever.** Raises and lowers squeegee.
- 8 **Scrub Deck Lift Lever.** Raises and lowers scrub deck.
- 9 **Recovery Tank Drain Hose.**
- 10 **Solution Tank Drain Hose.**
- 11 **Squeegee Release Latch.** Releases the rear squeegee blade for adjustment or replacement.
- 12 **Battery Compartment Door Latch.** Opens back of machine for access to batteries.
- 13 **Vacuum Hose.**

TOP VIEW



BACK VIEW





		Maintenance Item	Daily	Weekly	Monthly	Annually	
<b>Before Starting the Work Period</b>		Check Vacuum Connections	*				
		Clean the Squeegee Pad	*				
		Inspect Brush or Pad	*				
<b>2</b>		Inspect Vacuum Fan Foam Breaker	*				
		Inspect power cord for wear	*				
<b>End of Work Period Before Storing</b>	<b>3</b>	Drain & Rinse Tanks	*				
		Raise Squeegee Assembly	*				
		Remove the Brush/Pad	*				
		Check the Brush/Pad for Damage and or wear	*				
		Clean Squeegee Blades & Foam Breaker	*				
	<b>4</b>		Remove lint build-up from screen in the recovery tank well.	*			
			Remove tank lid and allow recovery to dry between uses.	*			
		Check Solution Strainer		*			
		Check Casters & Wheels for proper lubrication		*			
<b>5</b>		Inspect Tanks and Hoses		*			
		Inspect all Motors for Carbon Motor Brush wear.				*	

- NOTE:**
1. Details on these maintenance items can be found on the following pages.
  2. This cable will lay on wet surfaces. To prevent electrical shock immediately replace cords with frayed or cracked insulation.
  2. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 7-70 bleach to water solution. Wastewater should be disposed of properly.
  3. Occasionally check in line filter screen, rinse with hot water if necessary.
  4. Frayed or cracked hoses should be replaced to avoid vacuum or solution pressure loss.

**LUBRICATION:**

The following symbols are found throughout the manual indicating the items requiring lubrication:



**Apply Grease**



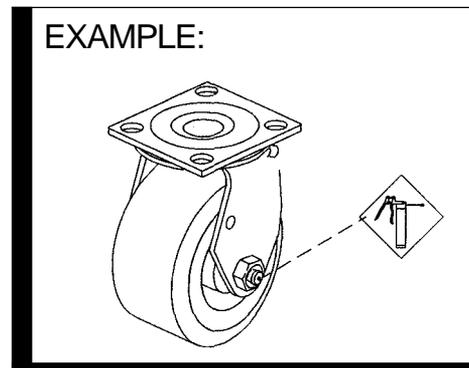
**Use Spray Lubricant.**



**Thread Locker (Red or blue).**



**Use Anti-Seize when repairing.**



## MAINTENANCE



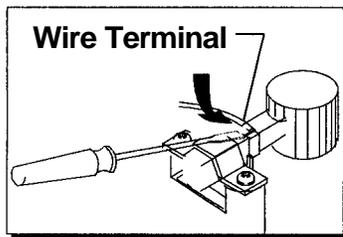
### VACUUM MOTOR

1. Disconnect battery leads and remove batteries from compartment.
2. Remove (6) bolts holding vac motor/ plate assembly to recovery tank.
3. Disconnect vac motor lead from connector and lift out vac motor/ plate assembly.
4. Check motor brushes. When worn to 3/8" replace both brushes.

After the machine has been used for any wet pickup, allow the vacuum motor to run 1-2 minutes, to help reduce moisture build-up in the vacuum motor. Drying out the vacuum motor after each use will extend the life of your vacuum motor.

#### WARNING

**Hazardous Voltage. Shock can result. Disconnect batteries before working on machine. Only qualified personnel should work inside machine.**



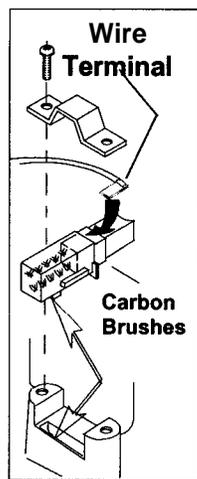
#### **Important:**

When replacing carbon vac motor brushes loosen wire terminal **BEFORE** removing screws on bracket.

#### **Important:**

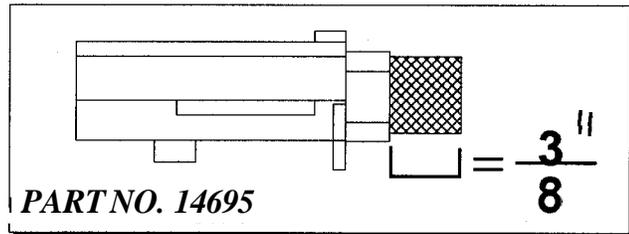
Replace carbon vac motor brushes if worn down to 3/8" in length. These brushes wear quicker as the length shortens due to increased heat.

Spring inside brush housing will damage motor if brushes are allowed to completely wear away



**Note:** Place stop in groove.

**NOTE:** Periodically check the length of the carbon brushes. Replace carbon brushes which are less than 3/8" long.



### BRUSH

#### **Brush Installation:**

1. Slide brush or pad driver under drive plate.
2. Align one metal lug on the brush or pad driver with the scrub deck sight hole and a keyhole in the drive plate.
3. Raise the brush or pad driver upward and twist clockwise until locked.

#### **Brush Removal:**

1. Raise brush or pad driver off floor.
2. Reach under brush or pad driver and rotate so that the metal lug in the drive plate is visible through the scrub deck sight hole.
3. Quickly twist brush or pad driver counterclockwise to release.

---

### SOLUTION STRAINER

1. An inline solution strainer is located under chassis behind left wheel. Remove sediment bowl and screen periodically and rinse clean with hot water. Be careful not to misplace the gasket.
-



## SQUEEGEE ASSEMBLY

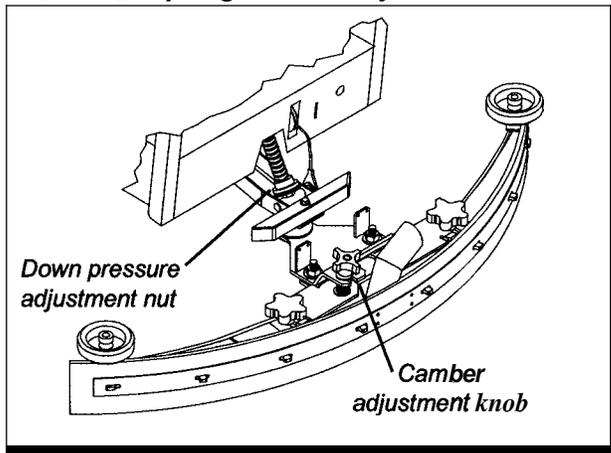
Before and during use of machine, use a damp cloth to wipe the outside and inside of squeegee to remove buildup of foreign material on the squeegee blades. This prevents streaking and residue on the floor.

### Squeegee wear:

After extended use, the squeegee blades will wear. To improve squeegee performance and extend wear, proceed as follows:

1. Turn off all switches and place the machine on a level surface. Raise the squeegee to the transport position.
2. Loosen knobs on the left and right hand sides of squeegee until squeegee can be removed from the squeegee bracket.
3. Loosen the fasteners on front of squeegee to replace or adjust front blade.
4. Unlatch rear squeegee latch to replace rear blade.

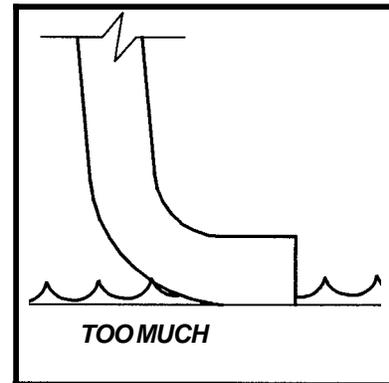
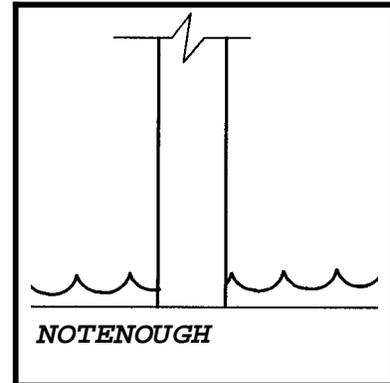
### Adjusting Squeegee Assembly



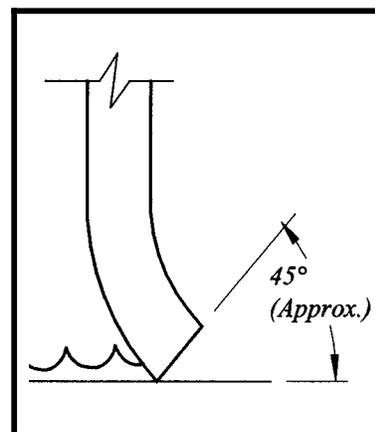
1. Lower the squeegee and move the machine forward.
2. Observe the level of the squeegee for an even curl along the length of the blade. Use camber adjustment knob to achieve even curl if required.
3. Adjust the down pressure nut located on squeegee mounting assembly. Do not apply excessive force.

## SQUEEGEE DEFLECTION

INCORRECT



CORRECT

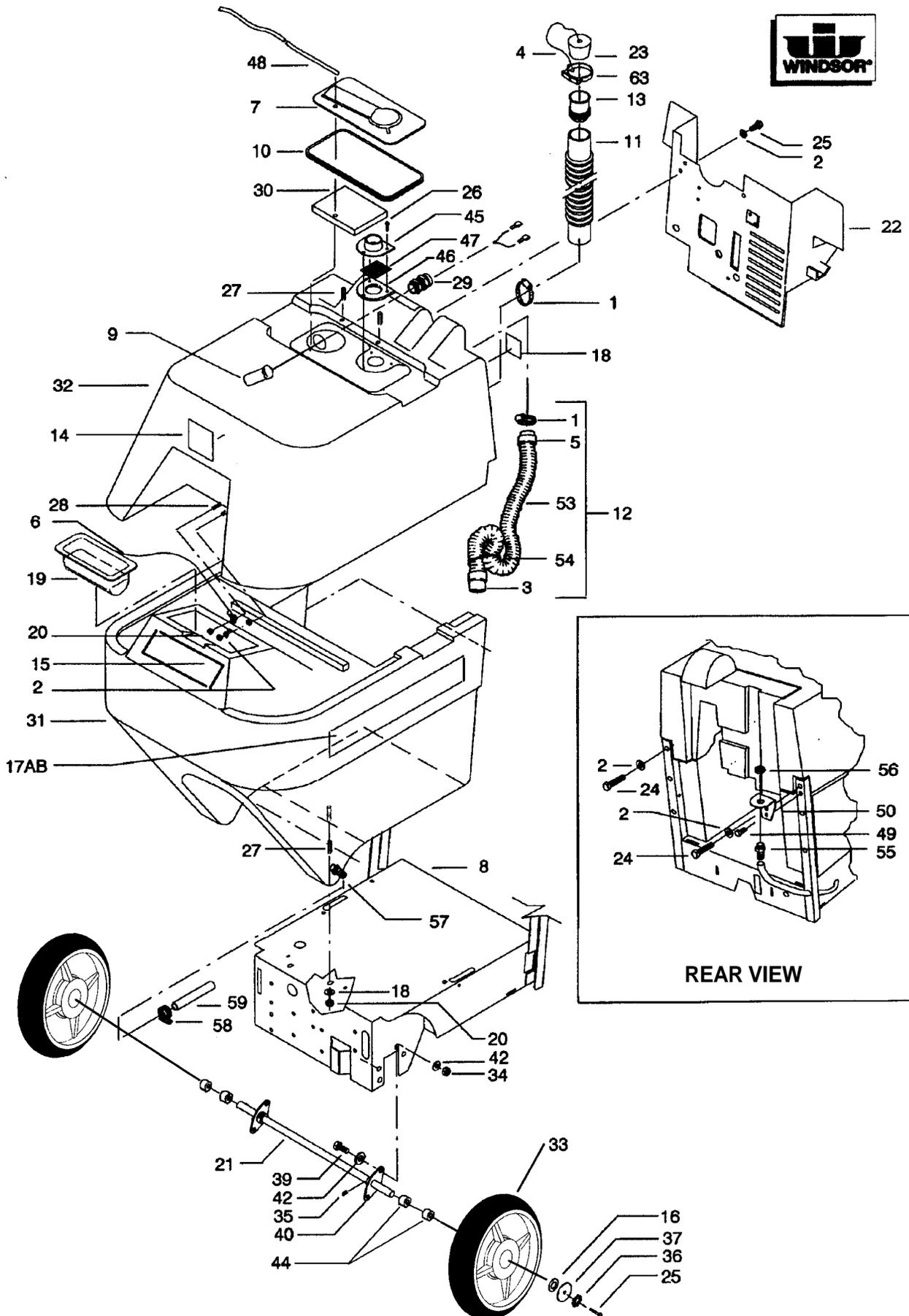




PROBLEM		POSSIBLE CAUSE	SOLUTION
<b>No power to machine</b>	Dead electrical circuit		Check building circuit breaker or fuse box
	Power switch failure		Replace
	Faulty power cord		Replace
<b>Electrical shock</b>	Equipment not grounding		Follow grounding instructions exactly.
	Receptacle not grounded		Contact an electrician to check building's wiring.
	Internal wiring problem		Have a trained service technician check machine's wiring
<b>Vac motor speed varies or doesn't run</b>	Worn motor brushes		Replace
	Motor worn out		Replace
	Faulty switch		Replace
<b>Loss of Vacuum</b>	Loose recovery tank lid		Center and seal dome over tank.
	Crack in recovery tank lid or poor joint.		Replace or repair using acrylic plastic cement only.
	Lint or dirt clogging vacuum screen		With power off clean screen.
	Loose cuffs on vacuum hose		Tighten cuffs turning counterclockwise.
	Vac motor seals leaking		Replace.
	Floor tool vac chamber clogged		Wash out with hose. Pick lint out with a wire.
	Vac motor, hose or dome gasket		Replace.
<b>Solution not flowing properly</b>	Improper solution hose connection		Check for positive connection
	Screen in filter clogged		Remove and clean with hot water.
	Valve clogged		Clean or replace if damaged. Check to be sure filter screen is in place. Be sure to pre-mix cleaning chemicals.



# TANKS AND FRAME





# TANKS AND FRAME PARTS LIST

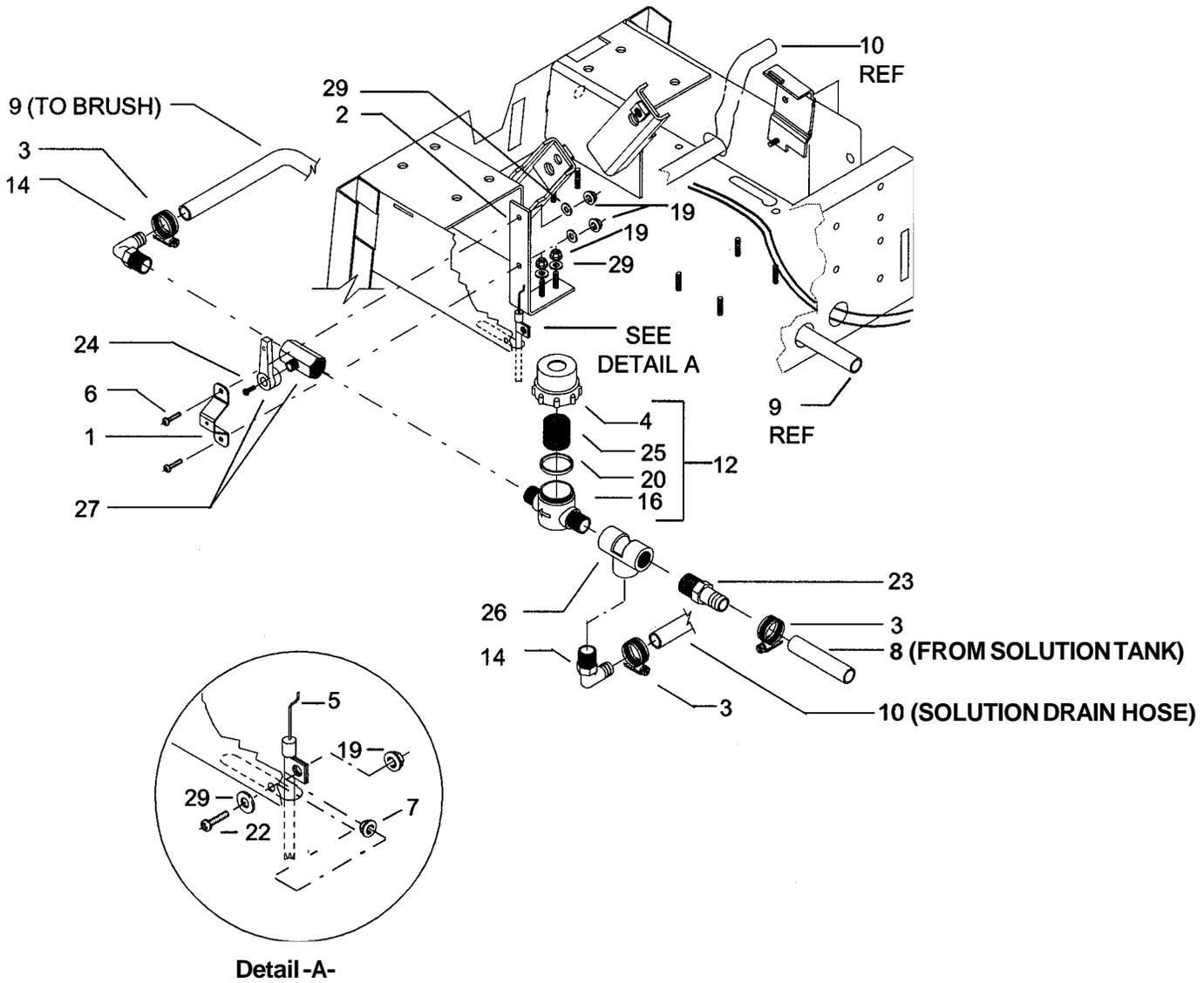
Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	20046	2	CLAMP, 2.25 HOSE			
2	87090	11	WASHER, 1/4 FLAT			
3	27759	1	CUFF, 1.5' BLK HOSE			
4	27188	1	CORD, DRAIN HOSE PLUG			
5	27282	1	CUFF, 1.5 SLIP X 1.5 HOSE			
6	27416	1	CORD, SOLUTION LID			
7	28055	1	DOME, TC MODIF.			
8	34303	1	FRAME, MAIN			
9	34305	1	FLOAT, RECOVERY SHUT-OFF			
10	35060	1	GASKET, DOME			
11	39472	1	HOSE, 1.5 X 24" DRAIN			
12	39383	1	HOSE ASM, VAC			
13	40019	1	HOSE BARB, 1.5 DOUBLE			
14	50485	1	LABEL, WINDSOR LOGO			
15	50742	1	LABEL, EXPLOSION WARNING			
16	80819	2	WASHER, 3/16 X 1.175 O.D X 1/8 NYL.			
17A	50518	2	LABEL, TC17 "COMPACT"			
17B	50519	2	LABEL, TC20 "COMPACT"			
18	-	-	OPEN			
19	51138	1	LID, SOLUTION TANK			
20	57047	3	NUT, 1/4-20 NYLOCK PLTD			
21	03058	1	AXLE, WHEEL 17.8 L X .625 OD			
22	61320	1	PANEL ASM, REAR			
23	66152	1	PLUG, DRAIN HOSE			
24	70010	6	SCR, 1/4-20 X 1.5 HHCS			
25	70011	6	SCR, 1/4-20 X 5/8 HHCS			
26	70114	3	SCR, #10 X 3/4 POLYFAST			
27	70251	3	SET SCREW, 1/4-20 X 1 HHMS			
28	70393	2	SET SCREW, 1/4-20 X 1.25L			
29	81379	1	FITTING, SEALED BULK HEAD	5001372-		
30	34306	1	FOAM BREAKER			
31	75152	1	TANK, SOLUTION			
32	75234	1	TANK, RECOVERY			
33	89181	2	WHEEL, MAIN			
34	57119	4	NUT, 3/8-16 HEX NYLOCK PLTD			
35	70072	4	SET SCR, 5/16-18 X 3/8 KCP			
36	87025	2	WASHER, 1/4 STAR			
37	27266	2	CAP, WHEEL HUB			
38	-	-	OPEN			
39	70266	4	SCR, 3/8-16 X 1.0 HHCS GR5 PLTD			
40	27408	2	COLLAR ASM, AXLE			
41	-	-	OPEN			
42	87003	8	WASHER, 3/8 ID X 7/8 OD SS			
43	-	-	OPEN			
44	73437	4	SPACER, 1.00 OD X .688 ID X .3L			
45	78294	1	TUBE, VAC MOTOR MOD.			
46	36150	1	GASKET, VAC INTAKE			
47	34258	1	INTAKE, FILTER VAC			
48	27417	1	CORD, 1/8 X 12"			
49	70191	2	SCREW, 10-32 X 1/2 HHTC TYPE 23			
50	14665	1	BKKT., TC17 SIGHT TUBE			
51	-	-	OPEN			
52	-	-	OPEN			
53	39338	1	HOSE, 1.5 BLU VAC X 45"			
54	27051	1	CABLE TIE, 11.38" UL/CSA			
55	40013	1	HOSE BARB, 3/8 MPT X 1/2			
56	57044	1	NUT, 3/8 NPT HEX BRASS			
57	40022	1	HOSE BARB, 1/2 MPT X 1/2 POLY			
58	20042	1	CLAMP, 3/8 HOSE D-SLOT			
59	39380	1	HOSE, 1/2 ID NYLO BRAID 6"			
60	-	-	OPEN			
61	-	-	OPEN			
62	-	-	OPEN			
63	20002	1	CLAMP, 2" NYLON			



## GEE ASSEMBLY PARTS LIS

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	09120	2	BEARING, .627 X .502 x .75		
2	140148	1	BRACKET ASM, SUPPORT		
3	140149	1	BLOCK, SPRING SUPPORT		
4	140161	1	BRACKET ASM, SQUARE CABLE		
5	140171	1	BRACKET ASM, SQUARE PIVOT		
6	14748	1	BUSHING, 1/2ID X 5/8OD X 7/16H		
7	18039	2	CASTER, SWIVEL 3.50 X 4.69		
8	27423	2	CAP, SPRING RETAINER		
9	27725	1	CABLE ASM, SQUEEGEE		
10	71143	2	SUPPORT, ROLLER ASM		
11	48069	2	KNOB, 2.25OD, 5/16-18 X 1.00 STUD		
12	57030	6	NUT, 10-32 NYLOCK PLATED		
13	57047	1	NUT, 1/4-20 NYLOCK PLATED		
14	57085	2	NUT, 3/8-16 JAM		
15	57113	3	NUT, 5/16-18 HEX NYLOCK PLTD		
16	57124	1	NUT, CAMBER LOCK		
17	57153	1	NUT, 1/2-13 LOCK THIN NTE PLTD		
18	57254	7	NUT, WING 1/4-20 LOCKING		
19	62597	2	PLATE, SQGE. RTNG. REAR TR20/24		
20	62598	1	PLATE, SQGE. RTNG. FRONT TR20/24		
21	-	-	OPEN		
22	62629	1	AXEL ASM, PIVOT		
23	64090	1	PULLEY, 2.88 X .25 X .40 CABLE		
24	66268	1	PIN, CLEVIS 5/16 X 2.75 LG ZINC		
25	66272	1	PLATE, SQUEEGEE ADJUSTMENT		
26	66274	1	PLATE WELDMENT, SQ. MOUNT		
27	66276	2	PIN, CLEVIS 1/4 X 1.625 LG		
28	73804	1	WELDMENT, SQUEEGEE ASM		
29	67380	4	RIVET, 5/32OD X 1/8 GRIP ALUM.		
30	67355	1	ROD, WELDMENT SQ. LIFT		
31	70018	1	SCR, 1/4-20 X 1 HHCS SS		
32	70255	2	SCR, 3/8-16 X 1.5 HHCS PLTD		
33	70294	2	SHOULDER BOLT, 3/8OD X 5/8L		
34	70296	1	SHOULDER BOLT, 5/16 X 1/2L		
35	70305	11	SCR, 5/16-18 X 3/4 HHCS		
36	73240	2	SPRING, 1/2 X 2.25L EXTENSION		
37	73854	1	SPRING, COMPRESS 1.10 X 2.75 X .142		
38	73859	1	TUBE, 13/32 X .049W X 1.56L CRS		
39	73802	1	BLADE, SQ. TR20/24 DIE CUT FRONT		
40	73803	1	BLADE, SQ. TR20/24 DIE CUT REAR		
41	73809	1	SQUEEGEE ASM, TRID COMPACT		
42	-	-	OPEN		
43	78356	1	SPACER, .314 X .59 X .36 NYLON		
44	-	-	OPEN		
45	80605	3	RING, RUE COTTER 5/16 PLTD		
46	80683	4	WASHER, NEOPRENE 3/8ID X 1 X .01		
47	81488	1	LATCH, SQUEEGEE STRAP REAR		
48	81489	1	STRIKER, SQUEEGEE STRAP REAR		
49	81535	1	KNOB, SQ. ADJUSTMENT PLATE		
50	73855	1	SPRING, COMPRESS .660 X 2.5 X .072		
51	87184	2	WASHER, SPERICAL MALE HALF		
52	87018	6	WASHER, 3/16ID X 9/16OD #10F		
53	-	-	OPEN		
54	87029	11	WASHER, 5/16 FLAT SAE		
55	-	-	OPEN		
56	89058	2	WHEEL, SQUEEGEE ROLLER		
57	87080	1	WASHER, .5 X 1.25 FLAT GR8 PLTD		
58	87083	11	WASHER, 5/16 SPLIT LOCK PLTD		
59	-	-	OPEN		
60	87178	1	WASHER, 5/8ID X 2 X .5 THK		
61	87137	2	WASHER, 5/8ID X 2.00D X 3/32 THK		
62	89059	2	WHEEL, SQUEEGEE BUMPER		

# VALVE GROUP

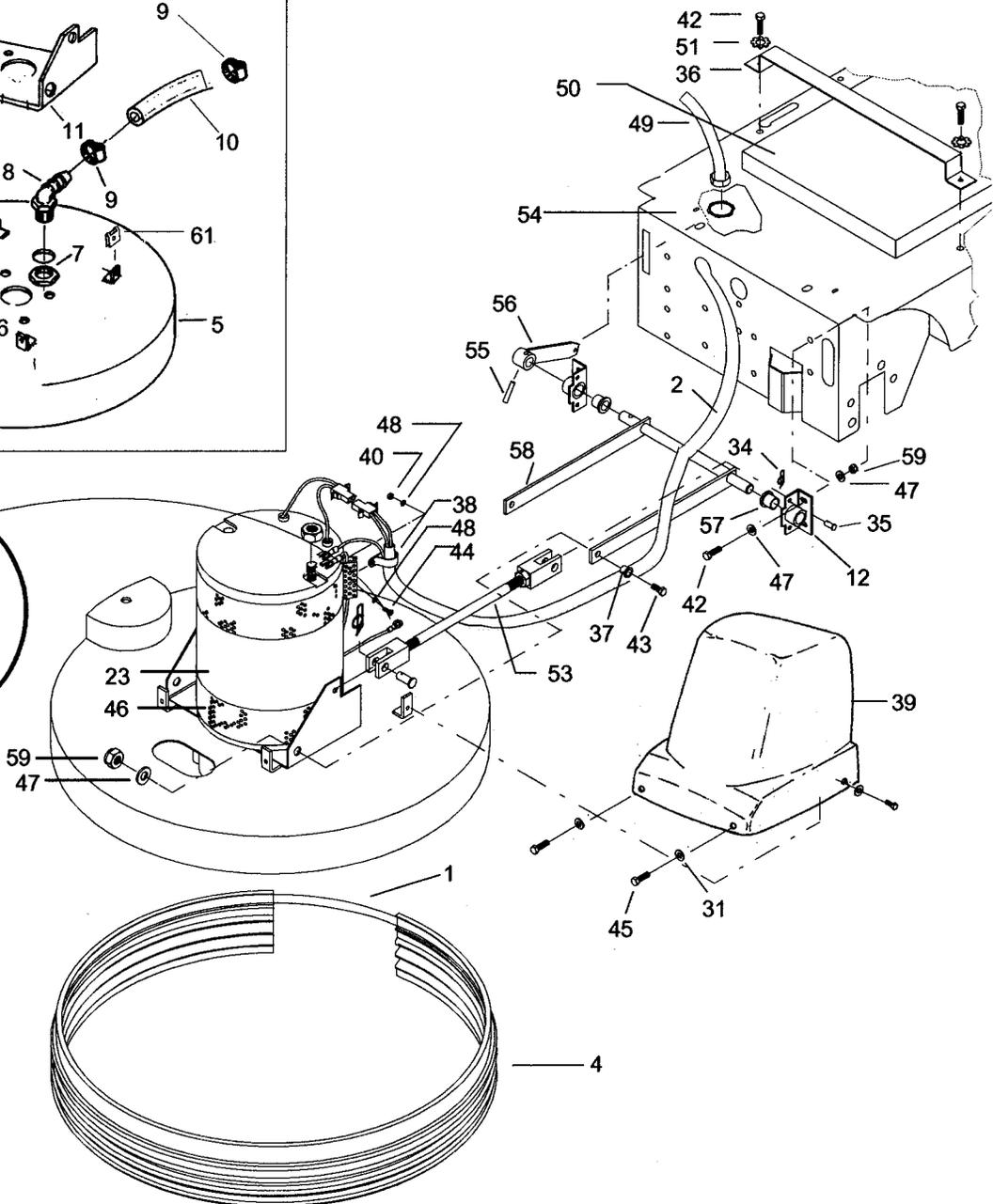
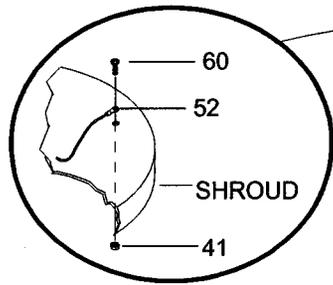
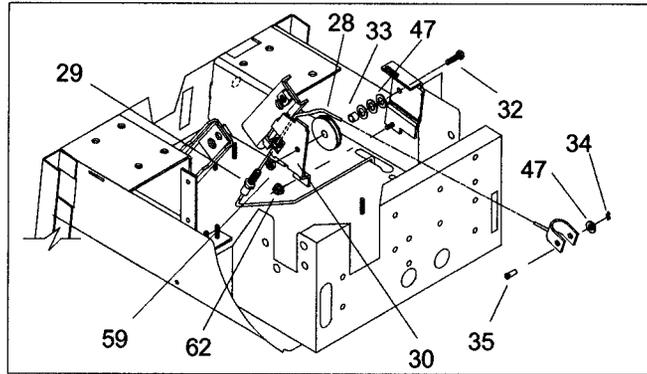
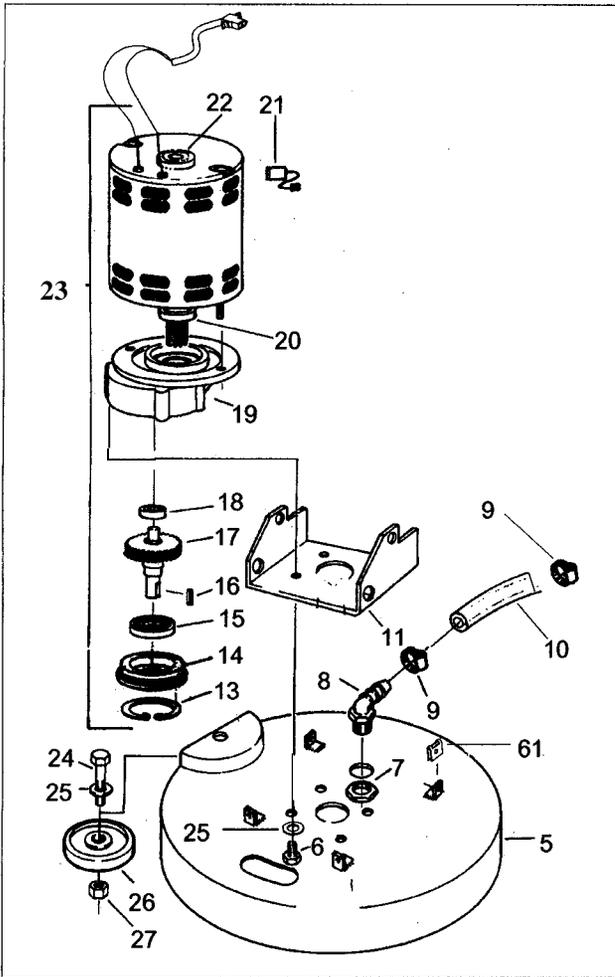




## VALVE ASSEMBLY PARTS LIST

Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	14454	1	Brkt. Valve			
2	140146	1	Brkt, Solution Valve Mtg.			
3	20042	3	Clamp, 3/8 Hose			
4	27372	1	CAP, STRAINER			
5	27726	1	Cable, Solution			
6	70088	2	Scr, 10-32 x 1/2 PPHMS SS			
7	57104	1	Nut, 10-32w/star washer PLTD			
8	39380	1	Hose, 1/2 id nylobraid 6"			
9	39381	1	Hose, 1/2 ID Clear x 22"			
10	39444	1	Hose, 1/2 x 5" Clear			(All models except X)
11	-	-	OPEN			
12	73383	1	STRAINER, 3/8 NPT 20 MESH			
13	-	-	OPEN			
14	40027	2	Hosebarb, 3/8 MPTx1/2 90°nyl			
15			OPEN			
16	41184	1	Housing, strainer			
17			OPEN			
18	-	-	OPEN			
19	57030	5	NUT, 10-32 NYLOCK PLTD			
20	59021	1	o-ring, filter seal			
21	-	-	OPEN			
22	70066	1	Scr, 10-32x 3/4 PPHMS SS			
23	40013	1	Hosebarb, 3/8 MPT x 1/2			
24	70403	1	Scr, #10 x 1/2 Polyfast Ph Phil			
25	73405	1	Screen, 80 mesh			
26	78212	1	Tee, 3/8 FPT			

# SCRUB DECK ASSEMBLY

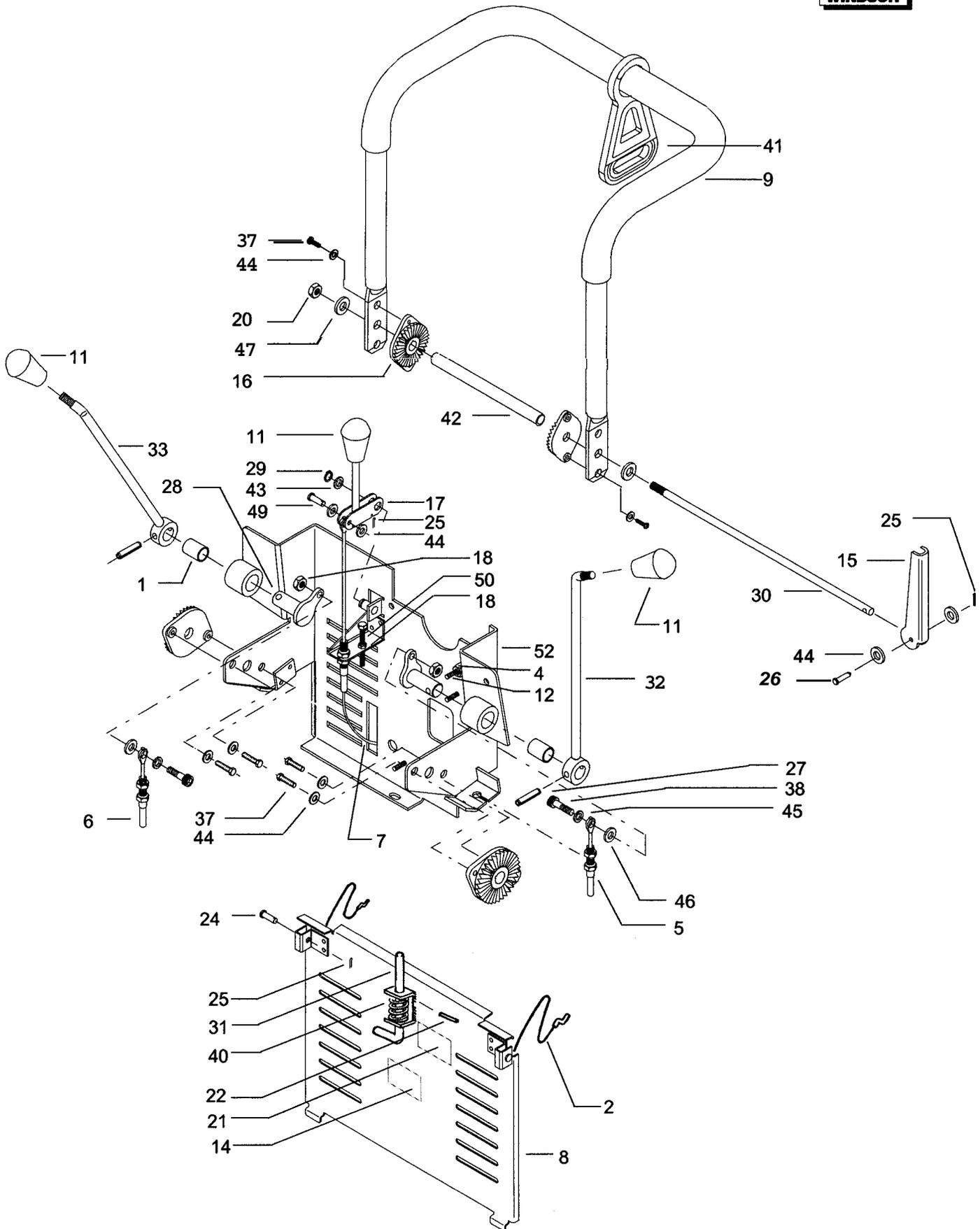




# SCRUB DECK ASSEMBLY PARTS LIST

Ref	Part No.	Qty	Description	serial No.		Notes
				From	To	
1		1				
2	27527	1	CONDUIT, PT17E BRUSH MOTOR			
3	-	-	OPEN			
4	73790	1	SKIRT, SHROUD 3.25 X 58.0 L			
5	73826	1	SCRUB DECK, TC20			
6	70266	4	SCR, 3/8-16 X 1.0 HHCS			
7	57044	1	NUT, 3/8 NPT HEX BRASS			
8	40027	1	HOSEBARB, 3/8 MPTX1/2 90 DEG.			
9	20042	2	CLAMP, 3/8 HOSE			
10	39381	1	HOSE, 1/2 X 22" CLR SOL. FEED			
11	14663	1	BRKT, SCRUB DECK MTG			
12	27384	2	COLLAR ASM, SCRUB DECK			
13	73404	1	SNAP RING, 3.12 INTERNAL			
14	73430	1	SEAT, BEARING			
15	09047	1	BEARING, LOWER GEAR BOX			
16	48040	1	KEY, 1/4 SQ X 1.0			
17	36105	1	GEAR, BRUSH MOTOR DRIVE			
18	09046	1	BEARING, UPPER GEAR BOX			
19	41182	1	HOUSING, BRUSH MOTOR			
20	09045	1	BEARING, LOWER BRUSH MTR			
21	14695	1	BRUSH SET, BRUSH MOTOR			
22	09044	1	BEARING, UPPER BRUSH MTR			
23	53779	1	MOTOR ASM, BRUSH			
24	70368	1	SCR, 3/8-16 X 1-3/4 HHMS			
25	87003	5	WASHER, 3/8 ID X 7/8 OD			
26	89059	1	WHEEL, SCRUB DECK BUMPER			
27	57022	1	NUT, 3/8-16 LOCK			
28	64090	1	PULLEY, 2.88 X 2.25 X .40 CABLE			
29	27724	1	CABLE ASM, SCRUB DECK			
30	140140	1	BRKT, LIFT PULLEY			
31	87018	4	WASHER, #10 X 9/16 OD			
32	70249	1	SCR, 1/4-20 X 1.25 HHCS PLTD			
33	78359	1	TUBE, 13/32 X .049W X 1.56 L CRS			
34	80604	5	RING RUE, COTTER 1/4" PLTD			
35	66116	5	PIN, 1/4 X 3/4 CLEVIS			
36	14845	2	BRKT, PTC17E/TC20E COUNTER BAL.			
37	14493	2	BUSHING, .25 ID X .37 OD FLNG			
38	20008	1	CLAMP, 5/8 NYLON UL/CSA			
39	27412	1	COVER MOTOR			
40	57012	2	NUT, 6-32 HEX PLTD			
41	57104	1	NUT, 10-32 W/STAR WSHR PLTD			
42	70011	8	SCR, 1/4-20 X 5/8 HHCS SS			
43	70015	2	SCR, 1/4-20 X 3/4 HHCS			
44	70239	2	SCR, 6-32 X 3/4 PHMS PLTD			
45	70406	4	SCR, 10B X 3/8 PHMS BLACK			
46	73506	2	SCREEN, TC20E BRUSH MTR			
47	87013	14	WASHER, 1/4 FLAT			
48	87161	4	WASHER, #6 FLAT			
49	880107	1	WIRE ASM, TC20E BRUSH MTR			
50	89073	1	WEIGHT, TCE COUNTER BAL.			
51	87025	4	WASHER, 1/4 LOCK EXT STAR SS			
52	88640	1	WIRE, 18" GRN/14 76010 X 76010			
53	51166	2	LINKAGE ASM. TC20 SEC ROD			
54	57040	1	NUT, 1/2 NPT CONDUIT			
55	66192	1	PIN, ROLL 1/4 X 1.25L			
56	05110	1	ARM ASM, SCRUB DECK			
57	14664	2	BUSHING, PRIMARY S.D.			
58	67384	1	ROD ASM, SCRUB DECK 20			
59	57047	8	NUT, 1/4-20 NYLOCK			
60	70088	1	SCR, 10-32 X 1/2 PHMS			
61	57028	4	NUT, 10-24 TINNERMAN			
62	57105	1	NUT, 1/4-20 HEX W/STAR WSHR.			

# MECHANICAL CONTROLS ASSEMBLY

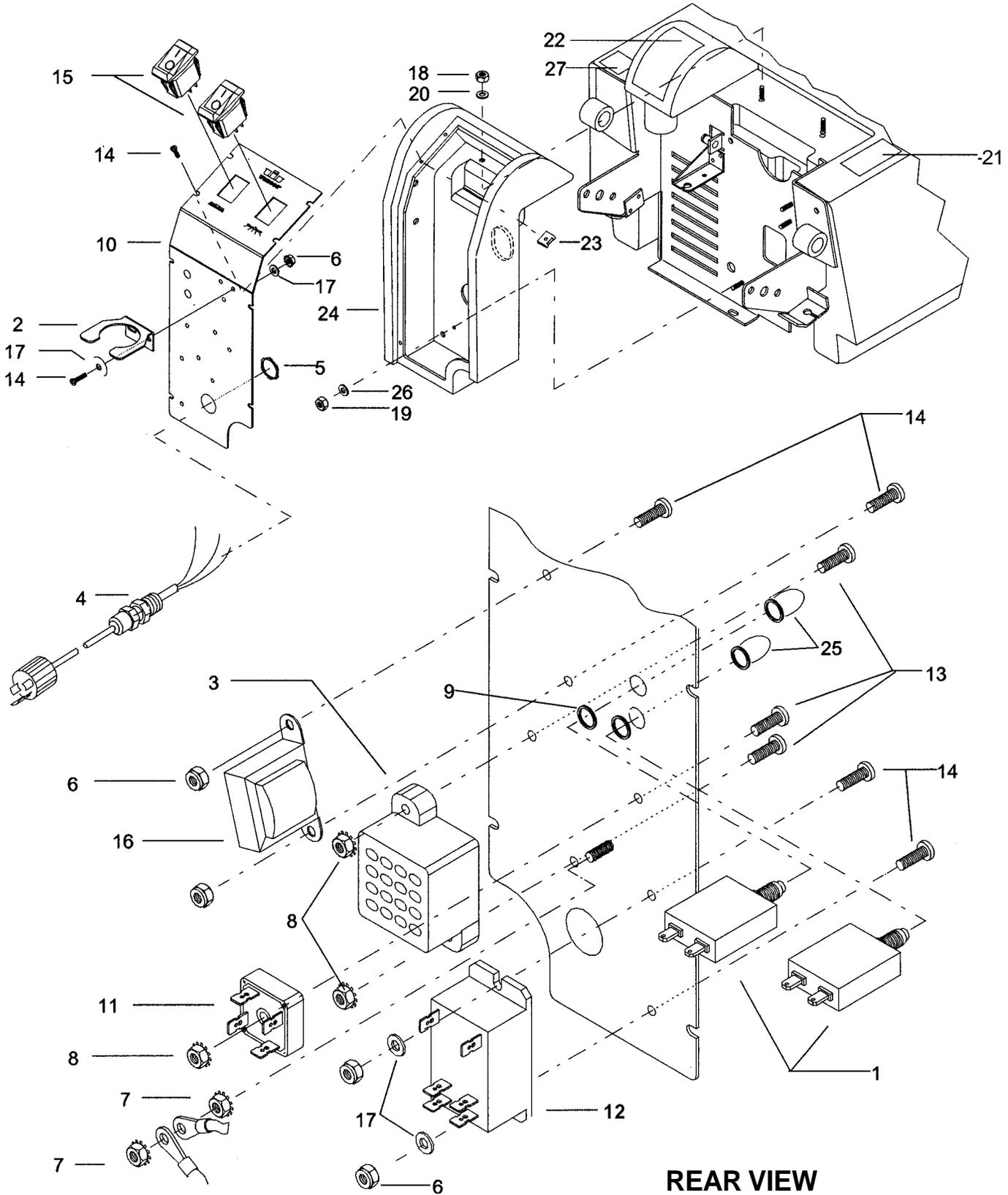




## MECHANICAL CONTROLS PARTS LIST

Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	140153	2	BEARING 753 X 627 X 1 0 I			
2	27413	2	CABLE, REAR CMPRT. DOOR			
3		-	OPEN			
4	73659	1	STANDOFF, 1/4-20X 1.0 HEX INS			
5	27724	1	CABLE, SCRUB DECK			
6	27725	1	CABLE, SQUEEGEE			
7	27726	1	CABLE, SOLUTION			
8	29151	1	DOOR, REAR COMPARTMENT			
9	38184	1	HANDLE W/ FOAM			
-	36132	-	GRIP, HANDLEX21.5"			
-	38208	-	HANDLE, TC17/20 MAIN			
10		-	OPEN			
11	48030	3	KNOB, HANDLE			
12	70251	1	SET SCR, 1/4-20X 1.0 PLTD			
13		-	OPEN			
14	50477	1	LABEL, PT17 CHARGER WARNING			
15	51142	1	LEVER, HANDLE CLAMP			
16	51184	4	LOCK, HANDLEADJ.			
17	51185	1	LEVER, SOLUTION			
18	57006	4	NUT, 1/4-20 HEX			
19		-	OPEN			
20	57032	1	NUT, 3/8-16 SERRATED FLNG.			
21	50926	1	LABEL, OPERATIONAL SLOPE			
22	66068	1	PIN, 1/8 X 5/8 ROLL			
23		-	OPEN			
24	66116	2	PIN, 1/4 X 3/4 CLEVIS			
25	80604	4	RING, RUE COTTER 1/4 PLTD			
26	66133	1	PIN, 3/16 X .88 L CLEVIS			
27	66055	2	PIN, ROLL 1/4 X 1.0 L			
28	66257	2	PIVOT, CABLE LEVER			
29	67138	1	RING, 3/8 EXT SNAP			
30	67224	1	ROD, HANDLE ADJ.			
31	67226	1	ROD, CMPRTMNT DOOR LOCK			
32	67360	1	ROD ASM, SCRUB DECK LIFT			
33	67361	1	ROD ASM, SQUEEGEE LIFT			
34		-	OPEN			
35		-	OPEN			
36		-	OPEN			
37	70228	8	SCR, 10-32 X 1/4 PHMS SS			
38	70298	2	SHOULDER BOLT, 5/16ODX3/8L			
39		-	OPEN			
40	73236	1	SPRING, 1.12 COMPRESSION			
41	73169	1	STRAIN RELIEF, CORD HOOK			
42	78220	1	TUBE, HANDLE ADJ.			
43	87003	1	WASHER, 3/8 IDX 7/8 OD			
44	87018	12	WASHER, #10 FLAT			
45	87029	2	WASHER, 5/16 FLAT			
46	87030	2	WASHER, 3/8 X 3/4 NYLON			
47	87080	2	WASHER, 1/2" FLAT			
48		-	OPEN			
49	66270	1	PIN CLEVIS, 3/16 X .75 L			
50	70249	1	SCR, 1/4-20X1.25 HHCS PLTD			
51		-	OPEN			
52	61320	1	PANEL ASM, REAR			

# CONTROL PANEL ASSEMBLY



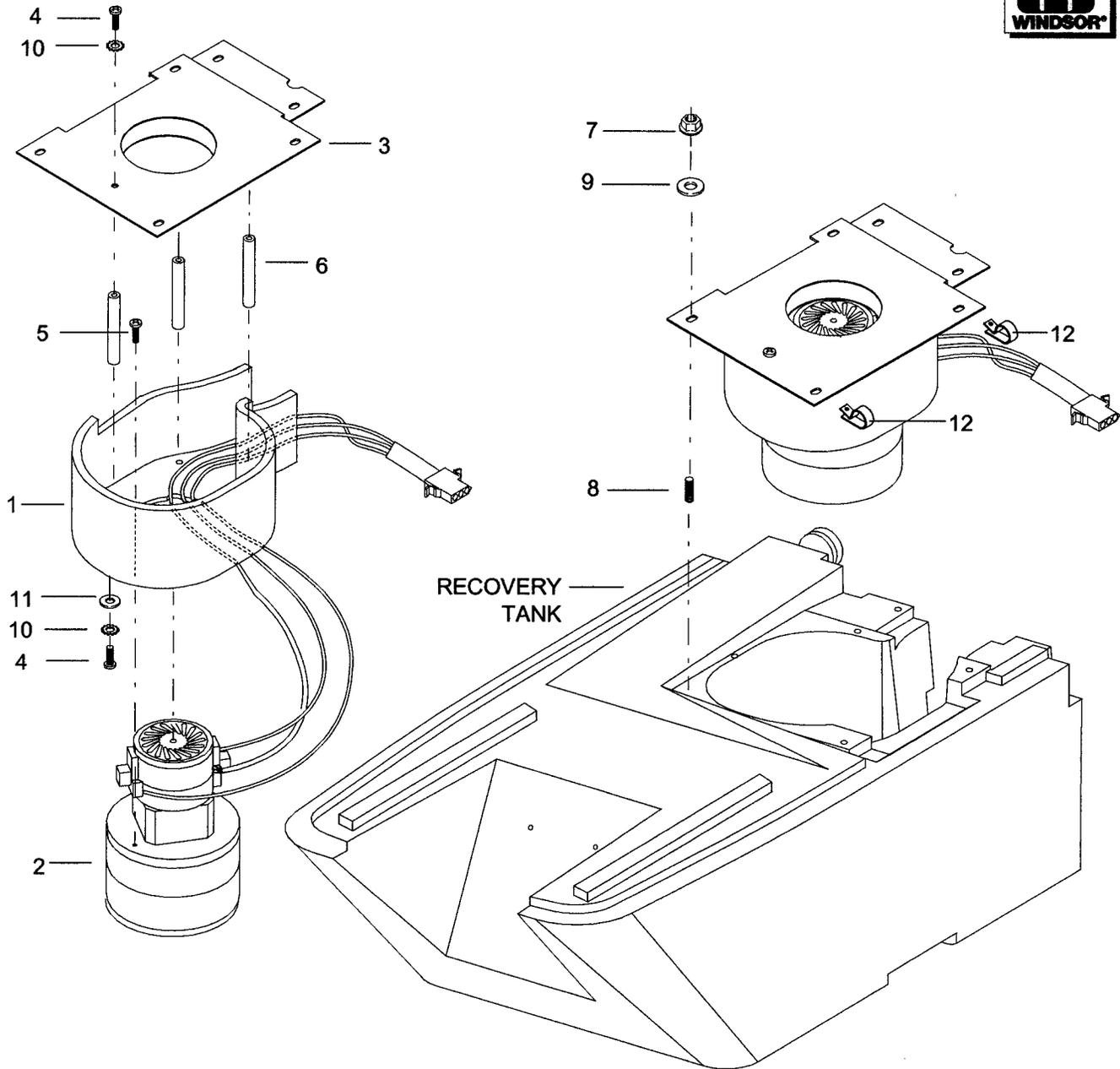
**REAR VIEW  
(CONTROL PANEL)**



## CONTROL PANEL ASSEMBLY PARTS LIST

Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	140074	2	BREAKER 9A CIRCUIT			
2	14520	1	CLIP, DRAIN HOSE			
3	14462	1	TERM. BLOCK, 25A 250V 1-1-2			
4	23556	1	WIRE ASM, TC-E PIGTAIL			
5	57040	1	NUT, 1/2 MPT CONDUIT			
6	57049	6	NUT, 6-32 NYLOCK SS			
7	57104	2	NUT, 10-32W/STAR WSHR PLTD			
8	57106	3	NUT, 8-32 W/STAR WSHR PLTD			
9	57132	2	NUT, 3/8-27 DRESS PANEL			
10	61341	1	PANEL, CONTROL COVER			
11	67029	1	RECTIFIER, BRIDGE			
12	67382	1	RELAY. DPST-NO 30A			
13	70248	3	SCR, 8-32 X 1.0 PHMS BLK NYL.			
14	70394	14	SCR, 6-32 X 1/2 THMS BLK			
15	72067	2	SWITCH, 125V SPST LIT RKR W/BT			
16	78373	1	TRANSFORMER ASM, 115V/24V			
17	87161	6	WASHER, #6 FLAT			
18	57047	2	NUT, 1/4-20 NYLOCK PLTD			
19	57030	1	NUT, 10-32 NYLOCK PLTD			
20	87090	2	WASHER, 1/4-20 X 3/4 OD PLTD			
21	50486	1	LABEL, SQUEEGEE/SOLUTION			
22	50487	1	LABEL, SCRUB DECK			
23	57157	8	NUT, 6-32 U-TINNERMAN			
24	32042	1	ENCLOSURE, CONTROL PANEL			
25	14942	2	BOOT, 3/8 CIRCUIT BREAKER			
26	87018	1	WASHER, #10 X 9/16 OD			
27	50776	1	LABEL, FOR SAFETY			

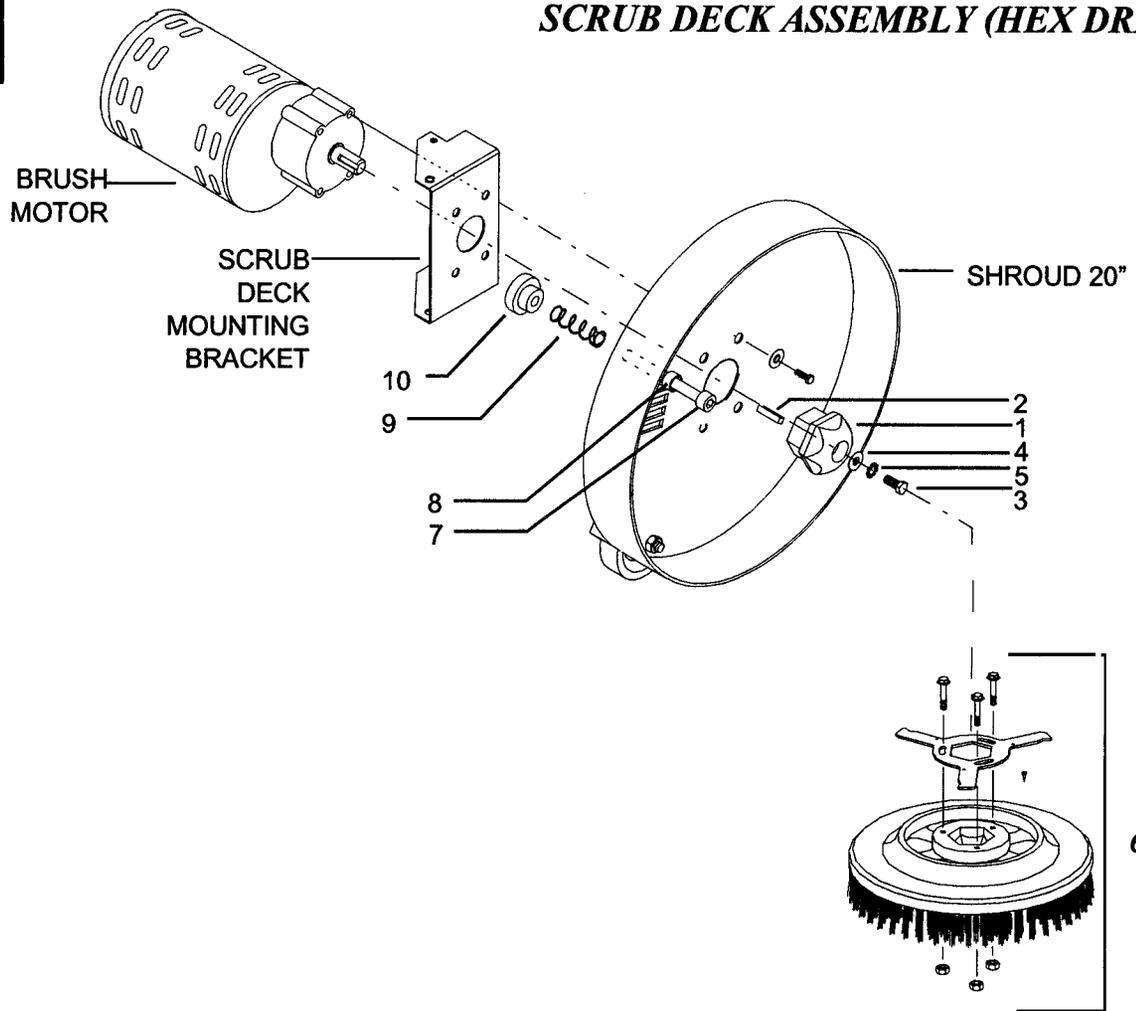
# VAC MOTOR ASSEMBLY



Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	27519	1	COVER, VAC MOTOR			
2	53778	1	VAC MOTOR ASM, TC17/20E			
3	62360	1	PLATEASM, PT17E VAC			
4	70085	6	SCR, 1/4-20 X 1/2 PHMS			
5	70114	4	SCR, #10 X 3/4 POLYFAST			
6	73419	3	SPACER, VAC MOTOR			
7	57030	6	NUT, 10-32 NYLOCK PLTD			
8	70607	6	SET SCREW, 10-32 X 1.00			
9	87018	6	WASHER, #10 X 9/16 OD			
10	87025	6	WASHER, 1/4 STAR			
11	87090	1	WASHER, 1/4 ID X 3/4 OD PLTD			
12	20035	2	CLAMP, 7/16 DIA NYLON UL			



## SCRUB DECK ASSEMBLY (HEX DRIVE)



Ref	Part No.	Qty	Description	Serial No.		Notes:
				From	To	
1	29119	1	DRIVER, BRUSH			
2	48040	1	KEY, 1/4 SQ. X 1.00			
3	70305	1	SCR, 5/16-18 X 3/4 HHCS PLTD			
4	87029	1	WASHER, 5/16 FLAT SAE			
5	87067	1	WASHER, 5/16 LCK INT STAR PLTD			
6	81578	1	PAD DRIVER ASM, 2 0 POLY			
7	70577	1	SCR. 3/8-16 X 3.5 SCHS STL			
8	78362	1	TUBE, .50 OD .058W .85L DOM			
9	73576	1	SPRING, COMP .60D X 2.0L X .045W			
10	48025R	1	KNOB, 1.75 X 3.8-16 F			

### BRUSH AND PAD (20"3 OPTION LIST:

PN	DESCRIPTION
02340	PAD DRIVER, 20" HEX
02357	BRUSH, 20" POLYPROPYLENE HEX
02358	BRUSH, 20" NYLON HEX
02359	BRUSH, 20" NYLON POLISH HEX
02360	BRUSH, 20" MILD GRIT HEX
02361	BRUSH, 20" SUPER AGGRESSIVE HEX



## **LIMITED WARRANTY**

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. The warranty period is subject to the conditions stated below.

### **3 YEARS FOR PARTS AND 1 YEAR FOR SERVICE LABOR**

Exceptions: Rotationally molded polyethylene tanks carry a **6 year** parts and 1 year service labor warranty. VERSAMATIC® models carry a 3 year warranty on brush motors, vacuum motors, and belts, and a 1 year service labor warranty. SENSOR® models carry a 2 year warranty on vacuum motors and belts, and a 1 year service labor warranty. Extractor brush motors, pump motors, pc boards and electronics, vac motors (other than VERSAMATIC® and SENSOR®), pumps, and FLEXSOL™ diaphragms, all RADIUS™ and TITAN™ Wet/Dry Vacs carry a 1 year parts and service labor warranty. Propane equipment has a 2 year manufactured parts warranty. The Onan® engines have a 3 year manufacturers' warranty. The Honda® /Kawasaki® engines have a 2 year manufacturers' warranty. **NOTE:** The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items 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, tires, Propane batteries and wheels 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 date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.

### **90 DAY WARRANTY EXTENSION AVAILABLE**

Upon receipt of the Machine Registration Card, Windsor will extend the warranty period an additional 90 days from the purchase date. Does not include items warranted 90 days for manufacturing defects.

### **STATED WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.**

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.

This warranty shall not apply to: 1.damage in transit; 2.misuse or abuse(including the use of incompatible or corrosive chemicals or overloading of capacity); 3. failure due to lack of proper maintenance and care (including cleaning); 4.any design alterations performed by an organization not authorized or specified by Windsor; 5.batteries and chargers. 6. high pressure washing. 7.electrical components exposed to moisture.

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

### **USE OF PARTS NOT APPROVED BY WINDSOR, 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.



**WINDSOR INDUSTRIES, INC., 1351 W. Stanford Ave., Englewood, CO 80110 USA**  
Phone: 303-762-1800 Fax: 303-762-0817 Internet: [www.windsorind.com](http://www.windsorind.com)