

# ***OWNER'S MANUAL***

## ***20" ProScrub***



**AZTEC**  
AZTEC PRODUCTS, INC.



***READ and UNDERSTAND this material before operating or servicing this equipment. Failure to understand how to safely operate this tool could result in an accident causing injury or death.***

INTRODUCTION

The 20" ProScrub Automatic Scrubber is designed to scrub floors in an indoor environment and is not recommended for any other use. All operators must read and understand this manual before operating the ProScrub.

SCRUBBER SPECIFICATIONS

L 44" W 23" H 35"	Wt. 325#
Solution tank capacity	12 gal.
Recovery tank capacity	15 gal.
Cleaning path	20"
Pad/brush diameter	20"
Squeegee width	30"
Brush Motor	¾ hp, 220 RPM
Vacuum Motor	½ hp, 2 stage, 24volt
Scrubbing pressure	65#
Batteries	2 – 130 amp/hour, 12volt Deep cycle, lead/acid

RECOMMENDED SAFETY PROCEDURES:

1. The ProScrub should only be operated by fully qualified maintenance personnel.
  - a. Do not operate, maintain, or service this scrubber unless you are trained and authorized.
  - b. Do not operate unless this manual is read and understood.
  - c. Do not service or operate this scrubber if it is not in proper operating condition.
2. Never attempt to ride on or otherwise attach any type of rider platform to this scrubber.
3. Extreme caution should be used whenever a ramp is used to load or unload this scrubber. Never attempt to make turns on the ramp.
4. Do not park or leave the scrubber unattended prior to loading or unloading.
5. Never operate this scrubber with the dash panel removed. Always operate this scrubber with the brush cover, battery cover, and all side panels in the correct position.
6. Remove all loose objects from floor before operating. Loose objects may become dangerous projectiles when they come in contact with revolving brushes/pads.

7. Keep scrubber moving along floor to avoid burning or damage to floor surface.
8. Never use flammable or explosive cleaning solutions such as gasoline, kerosene, solvents, thinners, etc. in the solution tank in an attempt to remove grease, oil, tar, etc. from floors. Never operate scrubber where flammable liquids or gases are present.
9. Always turn the master switch to the "OFF" position whenever the scrubber is not in use. Never leave scrubber parked on an uneven floor. Always store scrubber safely.
10. When charging the scrubber, always disconnect the AC plug before connecting or disconnecting the DC plug.

 **WARNING!**

11. **BATTERIES ARE DANGEROUS**
  - a. **BATTERIES EMIT EXPLOSIVE GASES.**  
Always charge them in a well ventilated area, keep hood open, wear eye protection and face shield. Never smoke or use flame or sparks around the batteries.
  - b. **HAZARDOUS VOLTAGE!** Severe shock or electrocution can result. Always unplug power-cord or disconnect batteries before servicing machine.
  - c. **BATTERY ACID CAN CAUSE BURNS.**  
Wear protective gloves when working with them. Do not store them outside or let water, chemicals, or any liquid come in contact with them or the electrical system of the scrubber. Damage will occur.

CHARGING BATTERIES

1. Charger Specifications
  - a. Output voltage – 24 volts
  - b. Output current – 10 to 20 amps
  - c. Automatic shutoff circuit
2. For deep cycle battery charging, life expectancy of a battery is based on the number of charges it receives. To get the most life from your battery, recharge when the meter drops into the red zone.
  - a. Do not continue to run the scrubber after meter has gone into the red zone.
  - b. Do not let batteries sit uncharged for long periods of time.

- c. Make sure that you recharge the batteries in a well-ventilated area.
  - d. Batteries emit explosive gases. Keep away from sparks and flame.
3. Make sure all switches are in the "OFF" position.
  4. Open recovery tank to access batteries.
  5. Plug charger into receptacle near battery compartment.
  6. Plug charger into grounded wall outlet AFTER connecting charger to scrubber. Charger will automatically begin charging and will shut off automatically when batteries are fully charged.
  7. Do not use an adapter or remove grounded blade on plug.
  8. After charger has turned off, first unplug it from the wall outlet, then from the scrubber.

### **BRUSH/PAD DRIVE ASSEMBLY**

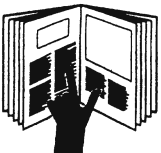
1. Lower brush head by stepping down on top pedal; push pedal forward to lower.
2. Position squeegee so that it is centered behind the scrubber.
3. Tilt scrubber back onto squeegee to access motor hub for installation. Do not leave the scrubber tilted back any longer than necessary to avoid damaging squeegee blades.
4. Pad installation:
  - a. Remove plastic centerlok from pad driver.
  - b. Center pad on a pad driver and re-attach centerlok.
  - c. Be sure to attach pad to pad driver before installing driver to motor hub.

### **DRAINING AND FILLING THE TANKS**

1. Before draining either tank, make sure all switches are at the "OFF" position.
2. When moving the scrubber to either fill or drain, make sure brushes and squeegee are in the "UP" position.
3. Draining the Recovery Tank:
  - a. Remove drain hose from holder. To completely drain, open tank sideways.
  - b. Unscrew clear lid on recovery tank and use hose to rinse out tank.
  - c. Make sure to rinse out thoroughly after each use. This will prevent odors or mildew from forming.
  - d. Replace drain hose. Close tank.
4. The Recovery Tank must be drained every time before refilling. If it is not drained before solution tank is refilled, foam or water will enter the vacuum standpipe and damage will occur. This damage is not covered by warranty.
5. Draining the Solution Tank:
  - a. Pull hose off bracket at back of the machine and drain into a bucket or floor drain.
  - b. Flush solution tank with clean water after each use. This will prevent chemical buildup.
  - c. Drain rinse water out through hose drain.
  - d. Open solution flow lever to clean out solution flow system.
  - e. Reconnect hose to bracket. Make sure it is tightly connected.
6. Filling Solution Tank:
  - a. Make sure solution flow is completely shut off.



### **WARNING!**



A person who has not read and does not understand all operating instructions is not qualified to operate this tool.

Failure to read and understand safety instructions may result in injury or death.



### **WARNING!**



Disconnect power before working

Electric shock may occur

- b. Fill the tank with up to 14 gallons of water and chemical solution.
- c. Use indicator at rear of scrubber to check amount of fluid in tank.
- d. Do not fill with boiling water. Temperature must not exceed 140 F.
- e. Make sure to use non-foaming detergents and dilute according to the manufacturer's instructions. If using powdered cleaners, dissolve thoroughly before adding to solution tank. Use only nonflammable chemicals.

### STORING THE PROSCRUB

1. Store in a dry area in the upright position.
2. Flush both tanks with clean water and drain completely.
3. Remove cover lid to promote air circulation.
4. Raise pad/brush assembly and squeegee off floor to prevent squeegee damage and promote drying.
5. If storing machine in freezing temperatures, be sure to drain it of all water. Damage to your scrubber due to extreme temperature is not covered under the warranty.

### OPERATING INSTRUCTIONS

Please read the Recommended Safety Procedures on pg. 2 before operating the ProScrub.

1. Lower squeegee by releasing squeegee lift lever from the "LOCK" position.
2. Step down on brush lift foot pedal to lower brush head and push pedal forward to release.
3. Turn vacuum switch to "ON" position.
4. Turn solution control knob counter clockwise slightly to activate flow. The further the lever is turned, the faster the flow of solution. Open completely for maximum flow.
5. Turn brush switch to "ON" position. Do not let the scrubber stay in one position for more than a few seconds after brush rotation has started. Damage to floor will result!
6. Begin scrubbing floor by pushing machine forward. Adjust solution flow accordingly. Be sure to keep hands and feet clear of rotating brush/pad driver.

### Helpful hints:

1. While scrubbing, periodically check the recovery tank. If foam buildup is heavy, use a defoamer to prevent damage.
2. If more scrubbing pressure is needed, pull brush lever upwards.
3. If squeegee is leaving streaks, lift squeegee to the "UP" position and wipe blades with clean, dry cloth.
4. Before stopping or turning, shut off solution flow to prevent excess solution on the scrub path.
5. If you are stopping for more than five seconds, shut off brushes/pads to prevent floor damage.
6. Frequently check battery meter for charge level. When it drops to the red zone, a recharge is necessary. Do not continue to operate machine after the needle drops into the red zone. Battery damage will occur.

### RECOMMENDED MAINTENANCE SCHEDULE



### WARNING!

Before attempting any maintenance or repair on the scrubber, make sure that it is on a level surface, that all switches are on the "OFF" position, and disconnect batteries and/or battery charger. This will prevent any accidental electrical problems. All maintenance must be performed by authorized personnel.

### DAILY

1. Remove and clean pad or brush. Never use overly soiled pads/brushes when scrubbing a floor.
2. Remove and clean lint from ball float shutoff screen (located in recovery tank).
3. Drain and rinse both tanks. Remove any clogging debris in vacuum intake hole in recovery tank.
4. Raise squeegee and wipe with clean, damp cloth to remove any soil. Store squeegee in the "UP" position to prevent damage.
5. Clean machine housing with nonabrasive, non-solvent cleanser.
6. Recharge batteries if necessary.

**WEEKLY**

1. Flush tanks and solution lines with vinegar solution (1 qt. Vinegar, 3 gals. Water).
2. Rinse with clean water.
3. Clean battery tops to prevent corrosion.
4. Check for loose or corroded battery cables.

**MONTHLY**

1. Lubricate axle and caster grease fittings with water-resistant grease.
2. Lubricate all linkage pivot points with silicone spray, then coat with a water-resistant grease to maintain smooth operation.
3. Check scrubber for water leaks and loose nuts or bolts.

**EVERY 250 HOURS**

1. Check brush motor for carbon brush wear. Replace when down to 3/8" or less.

2. Check vacuum motor for carbon brush wear. Replace when down to 3/8" or less.

**BATTERY MAINTENANCE**

Before any battery maintenance is done, make sure batteries and charger are disconnected and unplugged from wall outlet.

1. Keep battery tops and posts clean and dry. To dissolve corrosion, mix a solution of baking soda and water. Brush solution carefully over battery tops and posts. Do not allow solution to enter battery cells.
2. After drying tops and posts, use a wire brush to clean terminal posts and cable connections.
3. Thoroughly apply a coating of grease to posts to help maintain a good connection and prevent further corrosion.
4. Check for worn or loose cables and replace if necessary.

# PROTECT YOUR WARRANTY!

*Read carefully, any questions regarding the care and safety of this unit, please*

**CALL (800) 331-1423**

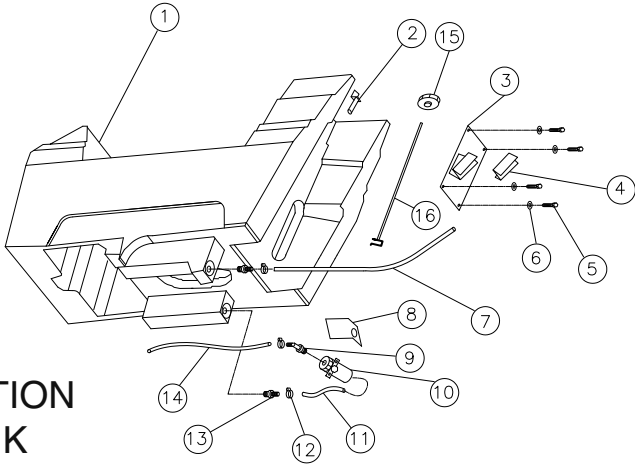
## RETURN GOODS POLICY

The ProScrub is an innovative and unique machine. Since it was first introduced it has undergone a process of continuous improvement. This has been accomplished based on comments and suggestions by customers and by the return of any defective or failed parts. Examining causes of failures firsthand allows us to solve current problems and avoid them in the future. While this may at first seem to be an inconvenience, ultimately you benefit from safer and more reliable products. Please give us the opportunity to serve you better by following these RGA (Return Goods Authorization) rules.

1. We maintain the serial number, date of shipment or sale, and customer name on each piece of equipment sold. If you were the purchaser, please reference that information on your request for replacement or repair. If you purchased the equipment through a dealer, please contact them.
2. Order the replacement part from your distributor or Aztec Products, Inc. by calling 800.331.1423 between 8:30-5:00 Eastern Time. We will ship warranted parts at our expense.

3. When dealing with Aztec Products, Inc., ask for an RGA number when you are ordering the replacement part. Return the failed part to us within 30 days, freight prepaid, exactly as it was at the time of failure. Our inspection and evaluation will attempt to determine the probable cause of failure.
4. If our inspection reveals that the failed part was defective, we will credit your account for the entire amount of the part including your cost of return freight.
5. We intend to be reasonable on any matter that is related to our warranty service or other wear-related problems which our customers feel need attention. Please help us to help you. Before assuming that a part is defective, check the repair manual to see if the problem might be something that you or one of your employees might be capable of correcting. If it is not, follow the above policy and depend on us to respond quickly and responsibly.

SOLUTION  
TANK



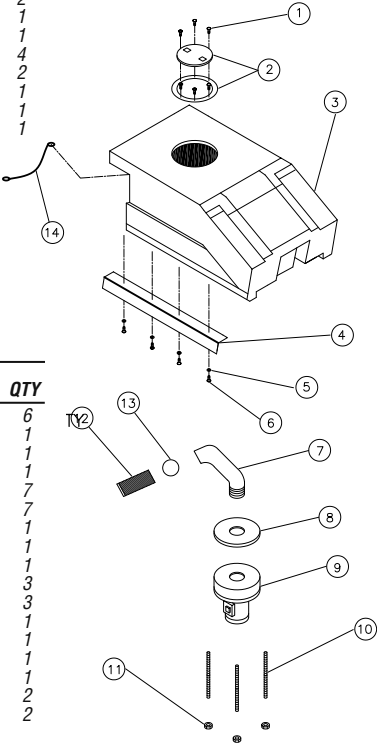
PARTS LIST

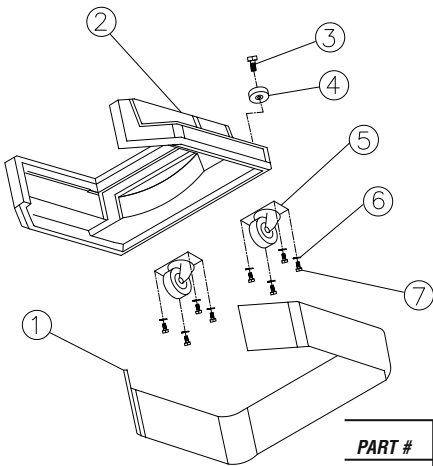
PART #	DESCRIPTION	PART #	QTY
1	SOLUTION TANK	108-AS-1	1
2	DRAIN HOSE BRACKET	288-030-1000	1
3	MOTOR LIFT ADJUST. BRKT.	288-030-700	1
4	FOOT LEVER ADJUST. BRKT.	283-030-105	1
5	3/8 - 16*3/4" BOLT	164-10111	4
6	5/16 USS FLAT WASHER	164-20156	4
7	DRAIN HOSE (SOLUTION TANK)	216-0212	1
8	BRACKET (SOLUTION VALVE)	283-030-115	1
9	VALVE FITTING	166-EL1412	2
10	SOLUTION VALVE	030-20-117	1
11	HOSE	216-0212	1
12	HOSE CLAMP	233-62P08	4
13	TANK FITTING	166-030	2
14	SOLUTION HOSE	216-0212	1
15	SOLUTION CONTROL KNOB	030-20-103	1
16	SOLUTION CONTROL ROD	288-030-100	1

VACUUM TANK

PARTS LIST

PART #	DESCRIPTION	PART #	QTY
1	SCREW	S2-97	6
2	4" LID	S2-04	1
3	RECOVERY TANK	108-AS-2	1
4	HINGE	030-20H	1
5	WASHER	164-20153	7
6	1/4 - 20*1/2" BOLT	164-10003	7
7	OVERFLOW ASSEMBLY	030-20-119	1
8	VACUUM MOTOR GASKET	S2-20	1
9	VACUUM MOTOR	030-VACM	1
10	1/4 - 20 STUD	164-254	3
11	1/4 - 20 LOK NUT	164-22831	3
12	FLOAT SCREEN	030-20-112	1
13	FLOAT BALL	030-20-111	1
14	SUPPORT CABLE	030-20-116	1
not shown	RECOVERY TANK DRAIN HOSE	030-20-121	1
not shown	SQUEEGEE VAC HOSE	S2-47	2
not shown	HOSE CUFFS	S2-47-CUFF	2



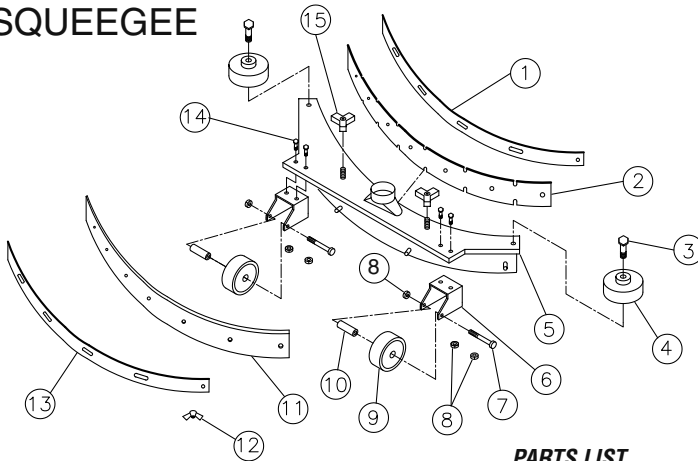


## SHROUD

### PARTS LIST

PART #	DESCRIPTION	PART #	QTY
1	SPLASH SKIRT	030-20-118	1
2	BRUSH SHROUD	108-AS-20	1
3	1 3/4" SHOULDER BOLT	196-70212	2
4	POLY WHEEL	156-PB03041-08	2
5	SWIVEL CASTER	156-030	2
6	FLAT WASHER	164-20153	8
7	1/4 - 20*1/2" BOLT	164-10003	8

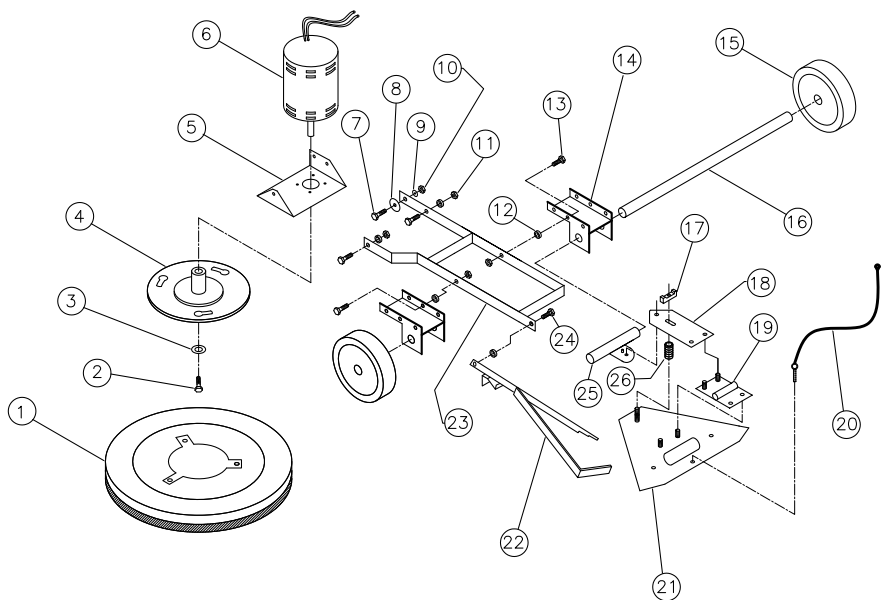
## SQUEEGEE



### PARTS LIST

PART #	DESCRIPTION	PART #	QTY
1	FRONT SUPPORT	283-030-235	1
2	SQUEEGEE BLADE (FRONT)	030-20-SRF	1
3	SHOULDER BOLT	196-70212	2
4	POLY WHEEL	156-PB-03041-08	2
5	SQUEEGEE (WELDED ASSBLY)	288-030-200	1
6	WHEEL BRACKET	288-030-221	2
7	WHEEL BOLT	164-1129087	2
8	WHEEL & BRACKET NUT	164-1137015	6
9	WHEEL	156-030-1	2
10	WHEEL BUSHING	030-20-99	2
11	SQUEEGEE BLADE (REAR)	030-20-SRR	1
12	WING NUT	625-6477K58	16
13	REAR SUPPORT	283-030-240	1
14	WHEEL BRACKET BOLT	164-1129061	4
15	SQUEEGEE KNOB	030-20-104	2

DRIVE ASSEMBLY

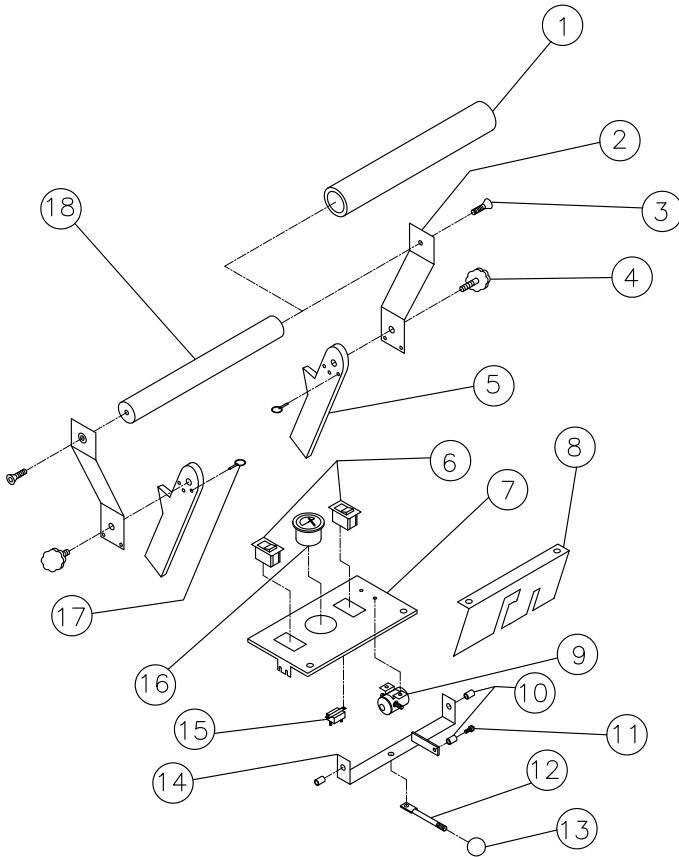


DRIVE ASSEMBLY PARTS LIST

PART #	DESCRIPTION	PART #	QTY
1	20" PAD DRIVER	030-20-262	1
2	5/16 - 18*3/4" BOLT	164-10059	1
3	1/4" FLAT WASHER	164-20155	1
4	MOTER BRUSH ADAPTER	288-030-800	1
5	MOTOR SWIVEL PLATE	283-030-130	1
6	BRUSH MOTOR	030-BRUSHM	1
7	5/16 - 18*1" BOLT	164-10063	1
8	5/16" FENDER WASHER	164-20207	1
9	5/16" USS FLAT WASHER	164-20156	1
10	5/16 - 18 STOVER LOK NUT	164-22833	1
11	1/2 - 13 STOVER LOK NUT	164-22836	4
12	CHASSIS BUSHING	030-20-100	5
13	1/2 - 13*1" BOLT	164-12011	4
14	CHASSIS MOUNT BRACKET	288-030-500	2
15	8" WHEEL	156-XA-08251-12	2
16	AXLE	283-030-280	1
17	KNOB	625-6477K58	1
18	SQUEEGEE PIVOT BRACKET	283-030-250	1
19	SQUEEGEE PIVOT HINGE	030-20-106	1
20	SQUEEGEE LIFT CABLE	030-20-115	1
21	SQUEEGEE MOUNT PLATE	283-030-245	1
22	MOTOR LIFT FOOT BRACKET	288-030-600	1
23	PIVOT CHASSIS	288-030-400	1
24	3/8 - 16*3/4" BOLT	164-10111	1
25	AXLE/SQUEEGEE PIVOT BRKT.	288-030-900	1
26	SQUEEGEE ADJ. SPRING	030-20-105	1



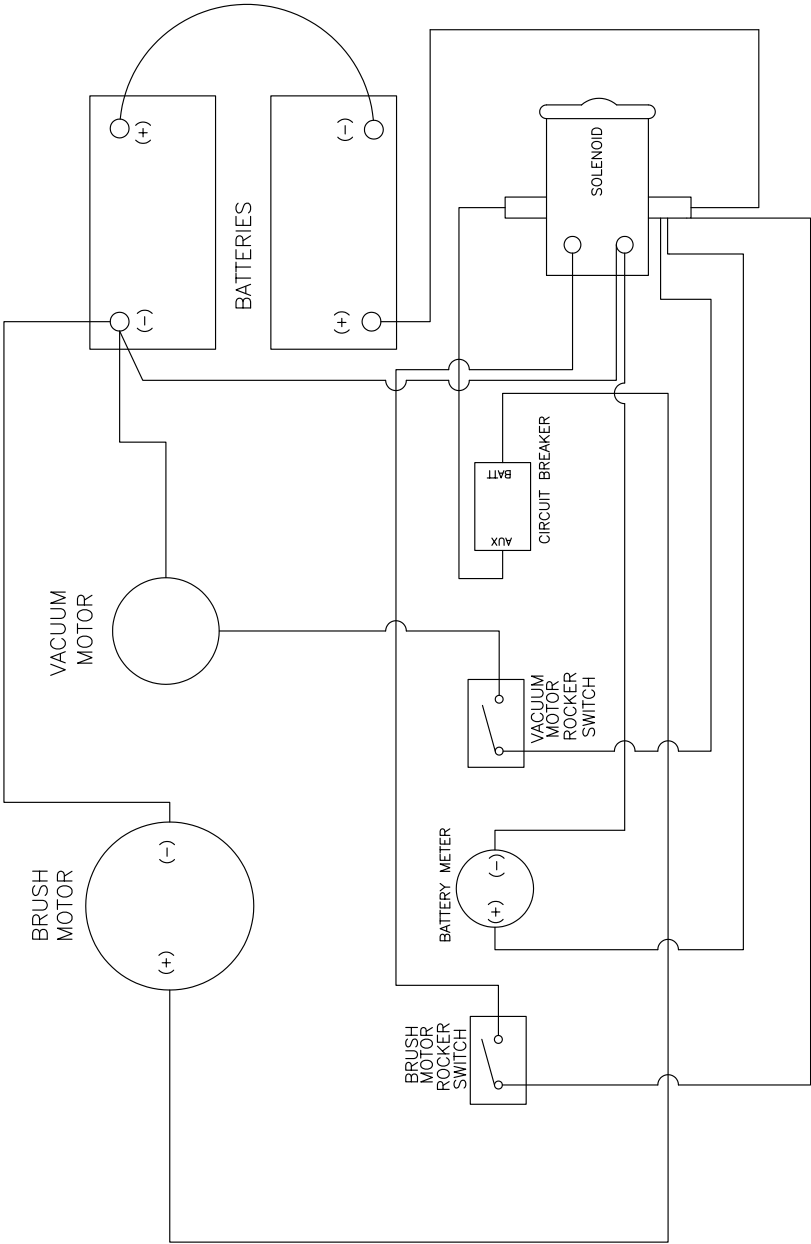
# CONTROL PANEL



## CONTROL PANEL PARTS LIST

PART #	DESCRIPTION	PART #	QTY
1	HANDLE GRIP (FOAM)	030-GRIP	1
2	HANDLE ADJUSTMENT BRKT.	283-030-125	2
3	HANDLE BOLT	164-132DA23020P	2
4	HANDLE ADJUSTMENT KNOB	030-20-114	2
5	HANDLE BASE BRACKET	283-030-120	2
6	ROCKER SWITCH	030-20-108	2
7	CONTROL PANEL PLATE	283-030-275	1
8	COVER PLATE	283-030-270	1
9	SOLENOID	153-030	1
10	BUSHING	030-20-101	3
11	BOLT	164-10007	1
12	SQUEEGEE LIFT ARM	288-030-300	1
13	SQUEEGEE LIFT KNOB	030-20-102	1
14	SQUEEGEE LIFT BRACKET	288-03-1100	1
15	CIRCUIT BREAKER	030-20-109	1
16	BATTERY CONDITION METER	153-314	1
17	HANDLE ADJUSTMENT PIN	030-20-107	2
18	HANDLE BAR (NO FOAM GRIP)	2880030-1300	1

WIRING DIAGRAM



**TROUBLESHOOTING**

<b>PROBLEM</b>	<b>SYMPTOM</b>	<b>SOLUTION</b>
<i>No power, nothing runs</i>	<i>Batteries need charging Batteries faulty Loose battery cable Batteries not connected properly</i>	<i>Charge the batteries Replace batteries Tighten cable connection</i>
<i>Brush motor does not run</i>	<i>Faulty brush switch Machine circuit breaker has tripped.  Faulty wiring Faulty brush motor Carbon brushes worn Faulty solenoid</i>	<i>Contact service center Allow motor to cool down, breaker will automatically reset. Contact service center Contact service center Replace if worn to 3/8 or less Contact service center</i>
<i>Vacuum motor does not run</i>	<i>Faulty vacuum switch Faulty wiring Faulty vacuum motor Carbon brushes worn</i>	<i>Contact service center Contact service center Contact service center Replace if worn to 3/8 or less</i>
<i>Short run time</i>	<i>Batteries not fully charged Bad cell in one or more batteries Batteries need maintenance Faulty charger</i>	<i>Charge batteries Replace battery See "Battery Maintenance" Replace charger</i>
<i>Little or no solution flow</i>	<i>Solution flow lever is not activated Solution line is clogged  Solution valve is clogged  Solution flow adjustment knob needs adjusting</i>	<i>Push flow lever forward Remove hose and blow compressed air through it. Then flush with clean water Remove valve and clean. Do not scratch or damage inside Turn knob down to increase flow</i>
<i>Poor squeegee pickup</i>	<i>Recovery tank is full Ball float shutoff screen is clogged Squeegee is clogged with debris Squeegee blades are worn Squeegee thumbscrews are loose Vacuum hose connections are loose Vacuum hose is worn or has a hole Vacuum is clogged with debris Tank gasket is defective Recovery tank water inlet is plugged  Recovery tank lid is loose Vacuum motor is loose  Battery charge is low</i>	<i>Empty tank Remove screen and clean Clean squeegee Replace blades Tighten screws Push hose firmly onto connections Replace Remove debris Replace gasket Empty recovery tank and tilt sideways to remove clogged debris Tighten lid Tighten down vacuum motor Do not over-tighten! Do not run scrubber if meter is in the red zone</i>

## **PROSCRUB WARRANTY**

*This quality product is warranted to be free from defects in workmanship and materials. The warranty is limited as follows:*

<b>Component</b>	<b>Term of Warranty</b>
Rotational molded parts	3 years
Vacuum Motor	1 year
Brush Motor	1 year

*The warranty does not apply to certain consumable or wear parts such as:*

*Squeegee Blades  
Motor Carbon Brushes*

*The warranty does not apply to damage or failure caused by abuse, misuse, neglect, disassembly, alteration or repair, lack of proper maintenance, theft, or damage by freight carriers. The warranty applies to parts, labor, and ground freight only. It does not cover incidental or consequential damages.*

*In order to obtain parts warranty the following procedure must be followed:*

- 1. Call your direct purchase source, distributor or Aztec to obtain an RGA (Return Goods Authorization) number.*
- 2. Return defective part via prepaid ground freight to your purchase source with RGA number clearly marked on packaging. Enclose a copy of the original purchase invoice.*
- 3. Pack machine or parts carefully for return. We are not responsible for inbound freight damage.*
- 4. Only authorized dealers may make warranty repairs.*

*The need for proper care and maintenance for this product cannot be overstated. Poor maintenance, neglect or abuse can void this warranty. Never leave your machine in a truck or outside storage area where there is a potential for freezing. Read and follow the Maintenance Schedule in your Owner's manual.*

*Vacuum motors carry a one year warranty, however motors showing any of the following signs of abuse will be excluded from coverage:*

- a. Signs of moisture in or on the fan/mount chamber area. (This means that water or foam has been sucked through the motor, voiding the warranty.)*
- b. Dirty motors, where failure has been caused by inadequate filtering resulting from a failure to maintain motor and keep filter clean.*

*You have purchased a quality product. Each of its components has been tested and approved for use in this application. It is unlikely that you will ever have a warranty claim if you properly maintain your machine.*

***This warranty is non-transferable.***



**201 COMMERCE DRIVE • MONTGOMERYVILLE, PA 18936**

**215-393-4700 • 800-331-1423 • FAX 215-393-4800**