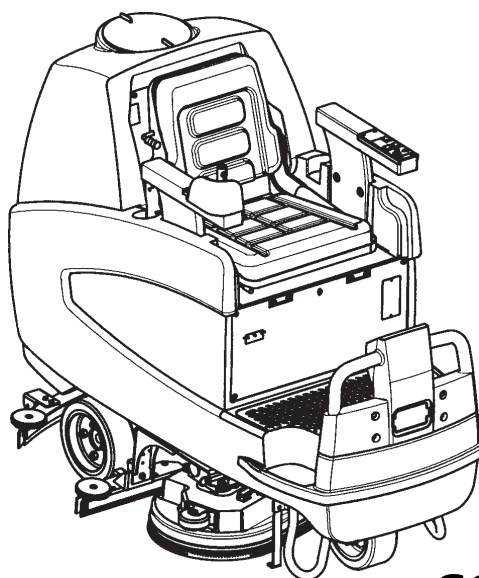


ALTO®

CLARKE
TECHNOLOGY



Operator's Manual

SCRUBTEC R 571
SCRUBTEC R 571 C
SCRUBTEC R 586

U.S. Patent No. 6,105,192; No. 6,493,896; No. 6,557,207

READ THIS BOOK

⚠ CAUTION: Read the Operator's Manual before using the appliance.

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your ALTO machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If operator(s) cannot read this manual, have it explained fully before attempting to operate this machine.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: ALTO, 2100 Highway 265, Springdale, Arkansas 72764.


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OPERATOR SAFETY INSTRUCTIONS


 **DANGER:** Failure to read and observe all **DANGER** statements could result in severe bodily injury or death. Read and observe all **DANGER** statements found in your Owner's Manual and on your machine.


 **WARNING:** Failure to read and observe all **WARNING** statements could result in injury to you or to other personnel; property damage could occur as well. Read and observe all **WARNING** statements found in your Owner's Manual and on your machine.


 **CAUTION:** Failure to read and observe all **CAUTION** statements could result in damage to the machine or to other property. Read and observe all **CAUTION** statements found in our Owner's Manual and on your machine.


 **DANGER:** Failure to read the Operator's Manual prior to operating or attempting any service or maintenance procedure to your ALTO machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.


 **DANGER:** Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine unless it is completely assembled. Inspect the machine carefully before operation. Operate only when lids, doors and access panels are securely closed.


 **DANGER:** Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners, or other flammable materials. This machine is not suitable for picking up hazardous dust or flammable materials. Use only commercially available floor cleaning waxes intended for machine operation. **DO NOT** put gasoline, combustible or flammable materials in the solution or recovery tank.


 **DANGER:** Lead acid batteries generate gases which can cause an explosion. Keep sparks and flames away from batteries. Do not smoke around the machine. Charge the batteries only in an area with good ventilation.


 **DANGER:** Working with batteries can be dangerous! Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tools or other metal objects across the battery terminals, or the tops of the batteries.


 **DANGER:** Using the charger with a damaged power cord could result in an electrocution. Do not use the charger if the power cord is damaged.










 **WARNING:** Do not turn the machine on a ramp. Do not use on surfaces having a gradient exceeding that marked on the appliance.

 **WARNING:** Machines can topple over and cause injury or damage if guided over the edges of stairs or loading docks. Stop and leave this machine only on a level surface. When you stop the machine, put all switches into their "OFF" position. Turn the key switch "OFF" and remove the key.

 **WARNING:** Skidding may occur when traveling at high speeds and attempting sharp turns, especially on wet surfaces.

 **WARNING:** Do not move machine with forklift. Damage could occur to machine.

 **WARNING:** Maintenance and repairs performed by unauthorized personnel could result in damage or injury. Maintenance and repairs must be performed by authorized ALTO personnel only.

-  **WARNING:** Any alterations or modifications of this machine could result in damage to the machine or injury to the operator or other bystanders. Alterations or modifications not authorized by the manufacturer voids any and all warranties and liabilities.
-  **WARNING:** Electrical components of this machine can "short-out" if exposed to water or moisture. Keep the electrical components of the machine dry. Wipe the machine down after each use. This appliance is for dry use only and is not to be used or stored outdoors in wet conditions. For storage, keep the machine in a building.
-  **WARNING:** Operating a machine without observing all labels and instructional information could result in injury or damage. Read all machine labels before attempting to operate. Make sure all of the labels and instructional information are attached or fastened to the machine. Do not cover them for any reason. If labels or decals are missing or become damaged, get replacement labels and decals from your ALTO distributor immediately.
-  **WARNING:** Wet floor surfaces can be slippery. Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put "Caution" signs around/near the area you are cleaning.
-  **WARNING:** Improper discharge of waste water may damage the environment and be illegal. The United States Environmental Protection Agency has established certain regulations regarding discharge of waste water. City, state and national regulations regarding this discharge may also be in effect in your area. Understand and follow the regulations in your area. Be aware of the environment hazards of chemicals that you dispose.
-  **WARNING:** Only use the brushes provided with the appliance or those specified in the Operator's Manual. The use of other brushes may impair safety.
-  **CAUTION:** Use of this machine to move other objects or to climb on could result in injury or damage. Do not use this machine as a step or furniture.
-  **CAUTION:** Your machine warranty will be voided if anything other than genuine ALTO parts are used on your machine. Always use ALTO parts for replacement.
-  **CAUTION:** This machine contains lead acid batteries. The batteries must be disposed of in an environmentally acceptable manner.

 **WARNING: GENERAL SAFETY RULES**

The rules below have to be followed carefully in order to avoid injury to the operator and damage to the machine:

- During the operation of this machine, pay attention to other people around you, especially children.
- Use care when reversing machine in confined areas.
- Do not mix different kinds of detergents. Avoid harmful odors.
- Do not place any liquid containers on to the machine.
- The recommended operating temperature should be between 32° F and 104° F.
- The humidity for operating this machine should be between 30 and 95%.
- Do not use acid solutions that could damage the machine.
- In order to prevent floor damage, do not leave brushes running when machine is standing still.
- In case of fire, use a powder extinguisher. Do not use water.
- Do not strike shelving or scaffoldings, where there is danger of falling objects.
- Adapt the utilization speed to the adhesion conditions.
- Do not exceed the declared hill climbing capacity, otherwise the machine could become unstable.
- For any maintenance operation take off the power supply from the machine.
- Do not disassemble any parts which require the use of a tool to be removed.
- Do not wash the machine with direct water jets or with high water pressure nor with corrosive material.
- After every 200 working hours have machine checked by an authorized service person.

English Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Introduction

Introduction & Machine Specifications

This is a floor cleaning machine which, using the mechanic abrasive action of two rotary brushes or two cylindrical brushes and the chemical action of a water-detergent solution, is able to clean any type of floor. During its forward movement, it picks up the removed dirt and the detergent solution which has not been absorbed by the floor.

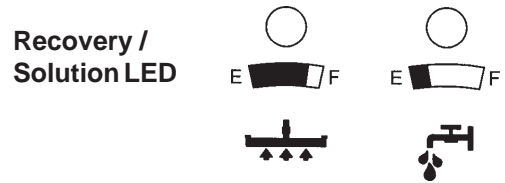
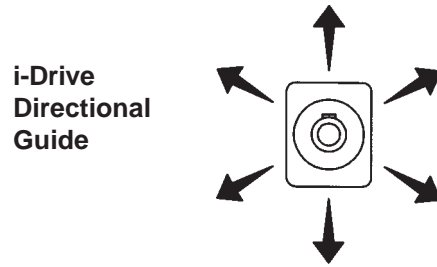
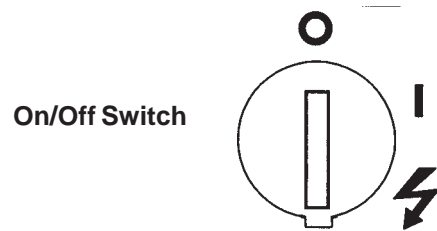
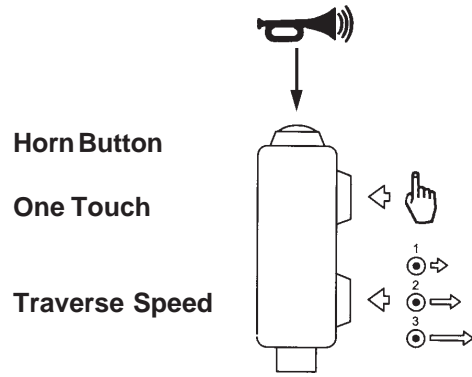
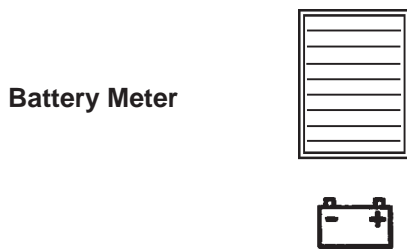
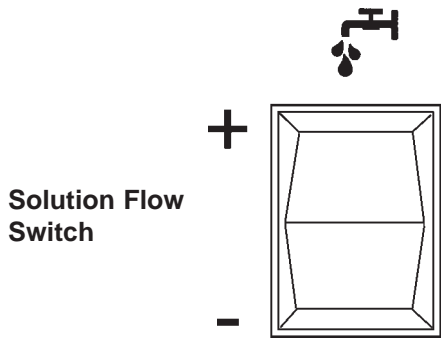
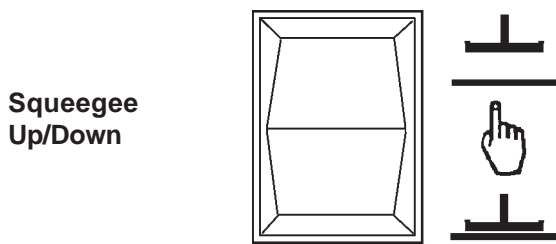
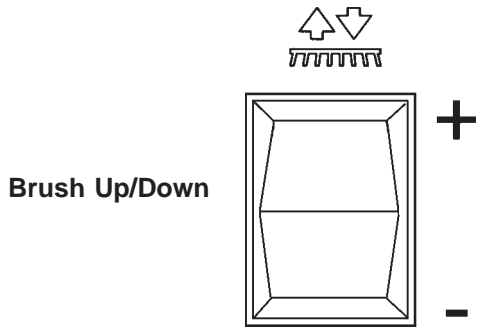
SPECIFICATIONS:

Model	SCRUBTEC R 571	SCRUBTEC R 586	SCRUBTEC R 571 C
Cleaning Width	28 inch (71 cm)	34 inch (86 cm)	28 inch (71 cm)
Brush Deck Side Movement	2 inch (5 cm) *	2 inch (5 cm) *	-----
Squeegee Width	33 inch (83.8 cm)	40 inch (101.6 cm)	40 inch (101.6 cm)
Working Capacity	32,000 sq ft/hr (2970 sq m/hr)	36,000 sq ft/hr (3344 sq m/hr)	32,000 sq ft/hr (2970 sq m/hr)
Brushes (2)	14 inch (33 cm)	17 inch (38 cm)	6 inch diameter Cylindrical
Brush Speed	300 rpm	300 rpm	750 rpm
Brush Pressure	0 - 225 lbs. (77 kg)**	0 - 225 lbs. (86 kg)**	90-130 lbs.
Brush Motor	2.0 hp (900 W)	2.5 hp (900 W)	.75 hp (2 required)
Traverse Motor	1.5 hp (450 W)	1.5 hp (450 W)	1.5 hp (450 W)
Wheel Diameter	10 inch (24.8 cm)	10 inch (24.8 cm)	10 inch (24.8 cm)
Traverse Speed (Max)	350 ft/min (76 m/min)	350 ft/min (76 m/min)	350 ft/min (76 m/min)
Maximum Cleaning Grade	10% (6 degree)	10% (6 degree)	10% (6 degree)
Vacuum Motor	1 hp (670 W)	1 hp (670 W)	1 hp (670 W)
Solution Tank	30 gallon (110 liter)	30 gallon (110 liter)	30 gallon (110 liter)
Recovery Tank	30 gallon (110 liter)	30 gallon (110 liter)	30 gallon (110 liter)
Base Machine Length	65.5 inch (166.4 cm)	65.5 inch (166.4 cm)	65.5 inch (166.4 cm)
Base Machine Height	49.6 inch (126 cm)	49.6 inch (126 cm)	49.6 inch (126 cm)
Base Machine Width	30.0 inch (64.8 cm)	30.0 inch (64.8 cm)	30.0 inch (64.8 cm)
Brush Deck Width	28 inch (74.9 cm)	34 inch (81.3 cm)	28 inch (74.9 cm)
Batteries****	36 volt	36 volt	36 volt
Machine Weight w/Batteries ***	1425 lbs. (532 kg)	1445 lbs. (540 kg)	1445 lbs. (540 kg)
Shipping Weight w/Batteries	1590 lbs. (594 kg)	1610 lbs. (600 kg)	1610 lbs. (600 kg)
Noise (EN ISO 3744:1995)	< 70 dBA	< 70 dBA	< 70 dBA
Vibration (EN ISO 2631-1:1997 (E))	< 2.5 m/s ²	< 2.5 m/s ²	< 2.5 m/s ²

* Movement to left only from R.H. side of machine. ** 125 lbs. to 225 lbs. in 5 - 25 lb. increments.

330AH *330, 370

Symbols Used On Scrubtec R



Display Screens For Scrubtec R

Traverse speed indicator
 1 = low 0-3 KPH
 2 = med 0-5 KPH
 3 = high 0-6.4 KPH

Position arrow indicating current position of squeegee (up or down)

Indicators are on, showing current settings.

Water "droplets" off when solution is off and they are flashing when solution is on.

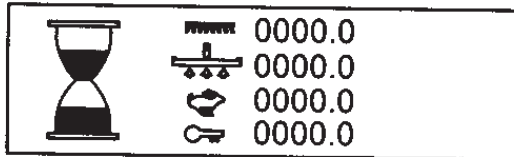
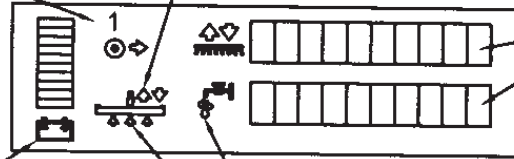
"Battery" blinks when low voltage occurs.

Arrows indicating vacuum status. They are flashing when vac is on and off when vac is off.

Screens Available to Operator

SCREEN1

SCREEN2



Example

SCREEN3 (Diagnostic)



The Diagnostic only. It will not show unless a fault with the machine occurs. When the fault happens the icon and error code will be displayed.

Machine Control Panel

On/Off Key Switch (See figure 1, Item D)

The key switch turns "ON" the power to the control panel. "O" is the "OFF" and "I" is the "ON".

Brush Up/Down Switch (See figure 1, Item A)

To lower brush head, push the brush switch in the down (+) position. To lower the brush head to maximum brush pressure, continue to hold the switch in the down (+) position until the travel stops. The brush motors will start and solution will flow (provided the solution is turned "ON") when the machine begins to traverse. To raise the brush head, push the brush switch in the up (-) position until the brush head travel stops or desired position is reached.

Squeegee Up/Down Switch (See figure 1, Item B)

The squeegee switch is used to raise and lower the squeegee and to turn on and off the vacuum motor. The vacuum motor is turned on when the switch is placed in the middle or lower position. **NOTE: When the squeegee switch is placed in the lower position, the vacuum motor will turn on.**

To raise the squeegee, place the switch in either the middle or up position. The middle position is used for one touch control. The vacuum motor will stop, after a short delay, when the switch is placed in the up position.

Hour Meter (See figure 1, Item E)

The hour meter is located on the front display. You must toggle screens using LCD display button. The hour meter indicates the number of hours the machine has operated. It displays brush motor, vacuum motor, traverse motor and total key on times.

Battery Meter

The battery meter indicates the relative charge on the battery pack. The battery meter is located on screen 1 on the front display. See page 7.

Solution Flow Control (See figure 1, Item C)

The solution flow switch regulates the flow of chemical solution to the floor. To increase the flow, toggle (+). To decrease the flow, toggle (-). To shut off the solution, toggle - until no indicators are visible on display (see figure 2). **NOTE: DO NOT run dry!**
NOTE: No solution will flow when the machine does not traverse.

Circuit Breakers

The circuit breaker reset buttons are located on the back side of the front cover below front display. The breakers are as follows:

- Item A - Main (5 amp)
- Item B - Key Switch (5 amp)

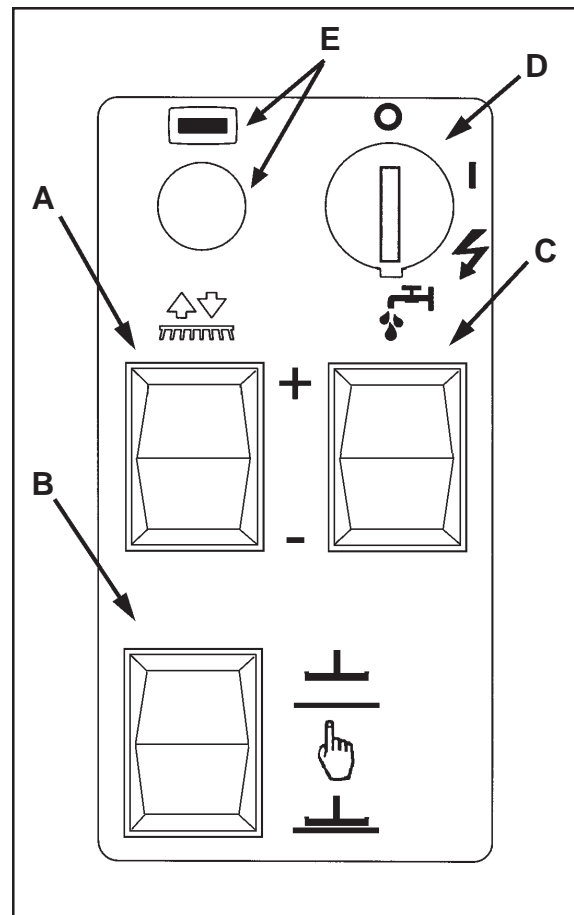


Figure 1

i-Drive Controls

Horn Button (See figure 2, Item A)

The machine is equipped with a horn and is activated by the red button located on the top of the joystick. The horn will sound continuously when pressed.

One Touch (See figure 2, Item B)

The one touch button is a green button located on the upper front of the joystick. NOTE: For more information about the one touch feature see the section titled "How to Operate the Machine".

Speed Selector (See figure 2, Item C)

The speed selector is a black button located on the lower front of the joystick. Pressing will advance speed range in the following manner: 1, 2, 3, 2, 1. You may change speeds while traversing the machine.

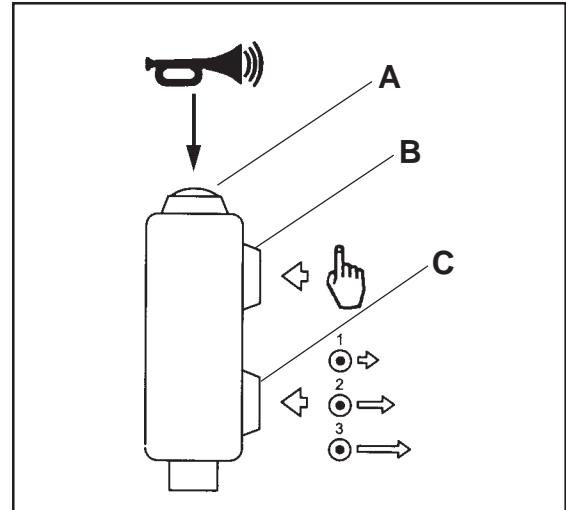


Figure 2

Machine Controls and Features

Recovery Tank Float

The Scrubtec R is equipped with a float that shuts the vacuum off when the recovery tank is full. The squeegee will no longer pick up water. If this should happen, raise the squeegee and empty the recovery tank.

The Traverse

The Scrubtec R is equipped with an electronically controlled traverse system with variable speeds in forward and reverse.

1. To traverse the machine, the power to the machine must be turned on with the key switch and the operator must be properly seated. The joystick must be positioned in either the forward or reverse direction.
2. The traverse speed and direction can be adjusted by varying the pressure and direction of the joystick.
3. The joystick is very responsive. Simply point it in the direction you wish to go. **NOTE: For initial training, keep speed setting in 1 and train in an open area.**

NOTE: During reverse motion, the squeegee raises and the solution flow stops automatically. Reverse also reduces maximum traverse speed.

4. The front wheel always returns to center when you remove your hand from the joystick.

Brakes

The machine is equipped with an electronic braking system. The electronic braking is activated automatically when the operator's hand is removed from the joystick. NOTE: During training, you should allow machine to come to a full stop until you become familiar with stopping distances required.

Parking Brake

The parking brake is activated automatically when the machine comes to a stop. It disengages automatically when you begin to traverse. The transaxle is equipped with a manual brake release. NOTE: Machine will not function when manual brake release is engaged. See figure 3.

Reverse Alarm

The reverse alarm will sound intermittently and automatically when the machine is in reverse.



Figure 3

How To Prepare the Machine For Operation

How To Handle the Packed Machine

The machine is packed in a specific package provided on a pallet so that it can be moved with a forklift.

WARNING: The packages cannot be placed on top of each other.

How to Unpack the Machine

1. Remove the outer package.
2. The machine is fixed on the pallet with banding straps and wooden blocks to prevent movement during shipment. Remove the bands and blocks.
3. The machine is shipped with the batteries already installed. The machine can be driven off of the pallet if the operator is thoroughly familiar with its operation.
4. Remove tie down brackets.
5. Lower the ramp. Release the parking brake and remove the machine. Avoid violent blows to the base unit.
6. Keep the pallet for future transport necessities.

How to Install the Batteries

WARNING: The batteries are heavy. Lifting batteries without help could result in an injury. Get help to lift the batteries.

WARNING: Working with batteries can be dangerous. Always wear eye protection and protective clothing when working near batteries. **NO SMOKING!**

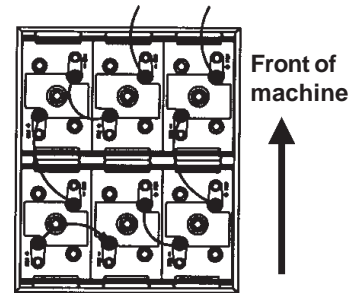
WARNING: Hydrogen gas is formed during the charging operation and is explosive. Only charge batteries in a well ventilated area with the seat base lifted.

The batteries are fitted in the battery compartment under the seat and recovery tank (figure 4). The machine uses six - 6 volt batteries. They must be handled by using appropriate lifting equipment suitable for the weight and for the coupler system. For maintenance and daily recharge of the batteries, it is necessary to follow all instructions given by the manufacturer.

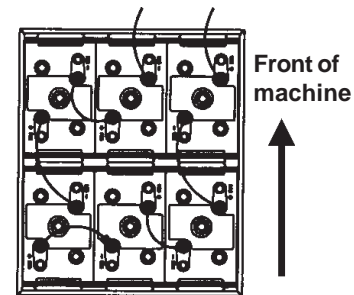
For Battery Installation follow these steps (See figure 4):

1. Make sure that the key switch is in the "OFF" position.
2. Lift and rotate the base support of the seat forward.
3. Lean the seat on it's restraint cable.
4. Lift the front of the recovery tank and rotate it towards the rear until it rests on it's restraint cable.
5. Put the batteries into position and connect the battery cables as shown in figure 4.
6. Rotate the recovery tank and then carefully rotate it forward to the normal operating position.
7. Lower the base support of the seat.
NOTE: Charge the batteries before using.

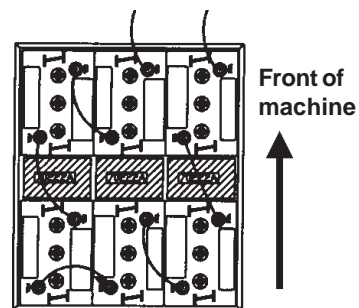
BATTERY CONNECTIONS



370 AH, 6 Volt
(Battery No. 40704A Wet)
(Battery No. 40602A Dry)



330 AH, 6 Volt
(Battery No. 891384 Wet)
(Battery No. 891385 Dry)



250 AH, 6 Volt
(Battery No. 881317 Wet)
(Battery No. 881318 Dry)
Three (3) 70222A Spacers

Figure 4

How To Prepare the Machine For Operation

Battery Maintenance

The electrical power to operate the machine comes from the storage batteries. Storage batteries need preventative maintenance.

WARNING: Working with batteries can be dangerous. Always wear eye protection and protective clothing when working near batteries. **NO SMOKING!**

To maintain the batteries in good condition, follow these instructions:

1. Keep the electrolyte at the correct level. The correct level is between 1/4" (1/2 cm) below the bottom of the tube in each cell and above the tops of the plates. Check the level of the electrolyte each time you charge the batteries (see figure 5).

NOTE: Check the level of electrolyte prior to charging the batteries. Be sure the plates in each cell are covered with electrolyte before charging. Do not top off the cells prior to charging the battery. Electrolyte expands during charging. As a result, the electrolyte could overflow from the cells. Always top off the cells with distilled water after charging.

CAUTION: Irreversible damage will occur to the batteries if electrolyte does not cover the plates. Keep the electrolyte at the correct level.

CAUTION: Machine damage and discharge across the tops of the batteries can occur if the batteries are over filled. Do not fill the batteries up to the bottom of the tube in each cell. Wipe any acid from the machine or the tops of the batteries. Never add acid to a battery after installation.

CAUTION: Batteries must be refilled with distilled water only. Do not use tap water as it may contain contaminants that will damage batteries.

2. Keep the tops of the batteries clean and dry. Keep the terminals and connectors clean. To clean the top of the batteries, use a damp cloth with a weak solution of ammonia or bicarbonate of soda solution. To clean the terminals and connectors, use a terminal and connector cleaning tool. Do not allow ammonia or bicarbonate of soda to get into the batteries.
3. Keep the batteries charged.

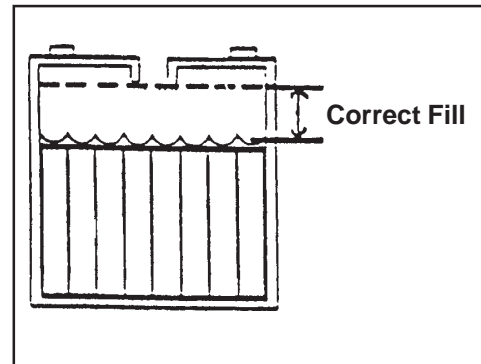


Figure 5

How To Prepare the Machine For Operation

How to Charge the Batteries

⚠ WARNING: Charging the batteries in an area without adequate ventilation could result in an explosion. To prevent an explosion, charge the batteries only in an area with good ventilation.

⚠ WARNING: Lead acid batteries generate gases which could explode. Keep sparks and flames away from batteries. **NOSMOKING!**

To charge the batteries, follow this procedure:

1. Make sure the key switch is in the "OFF" position.
2. Raise the seat base support.
3. Connect the battery charger AC cord to a 15 amp (min) 120V properly grounded wall receptacle.
4. Observe indicator light to ensure the charging process has started (see figure 6, A - Red, B - Yellow, C - Green). For color indications see figure 6A.

Recharging the Batteries

The Scrubtec R comes with an on board charger.

1. Plug into any wall socket and charging is automatic.
2. Observe indicator light to ensure the charging process has started (see figure 6, A - Red, B - Yellow, C - Green). For color indications see figure 6A.

NOTE: Make sure you plug into a circuit that is not loaded by other equipment. Wall breakers may be tripped and no charge will occur.

⚠ WARNING: Never charge a GEL battery with an unsuitable battery charger. Carefully follow the instructions given by the manufacturer of the batteries and battery charger.

NOTE: To prevent permanent damage to the batteries, avoid their complete discharge. Never leave the batteries completely discharged, even if the machine is not being used. When recharging the batteries, keep the base support of the seat lifted. After every 20 recharging operations, check the level of the electrolyte and if necessary top off with distilled water.

Level Indicators for the Charge of the Batteries

The battery meter (see figure 7) on the control panel has a digital read out with 10 fixed positions (A) and also a blinking indicator (B). The bars that appear on the display show the approximate charge level with icon (blinking) discharged battery.

NOTE: A few seconds after the voltage reads 32V it will start blinking. The brush motors will then automatically switch off.



Figure 6

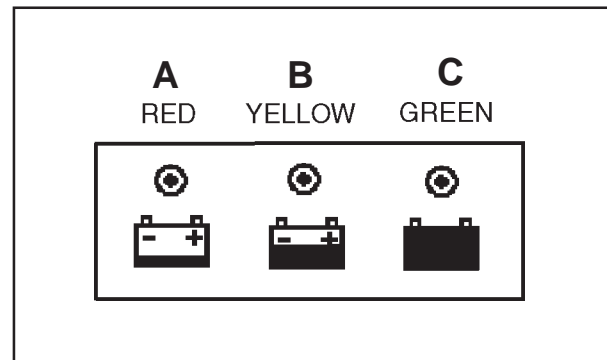


Figure 6A

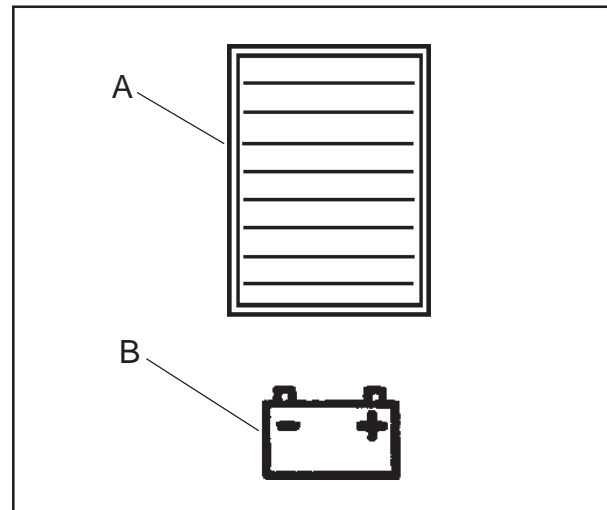


Figure 7

How To Prepare the Machine For Operation

How To Install the Squeegee

To install the squeegee onto the machine, follow this procedure:

1. The squeegee assembly has a break away feature that is also used for mounting the squeegee. Loosen the knobs on the squeegee (figure 8). Slide the stud into the slotted hole in the support frame on the machine.
2. Attach the vacuum hose cuff to the squeegee hose fitting (see figure 9).
3. Tighten knobs. **NOTE: Do not overtighten or break away feature is lost and damage may occur.**

NOTE: To prevent damage to the squeegee or machine, the squeegee was designed to break away from the machine. If the squeegee is impacted and it breaks away from the machine, simply reinstall it by following step 1-3.

How to Adjust the Squeegee

During operation, the rear squeegee blade should have a constant 3/16" minimum flare along the entire squeegee blade (see figure 10).

1. The squeegee body can be tilted to adjust the squeegee blade flare in the middle to match the flare on the ends. To adjust the tilt, loosen the adjusting bolt located on the left and right side of the squeegee (see figure 9).
2. Press down on the squeegee until both sets of guide wheels contact floor.
3. After making adjustments, retighten the screw(s).

NOTE: It is important that the right and left wheels are contacting the floor in order for the squeegee to work.

NOTE: As the rear squeegee blade wears, it can be rotated and/or flipped to obtain four good edges before having to change blades.

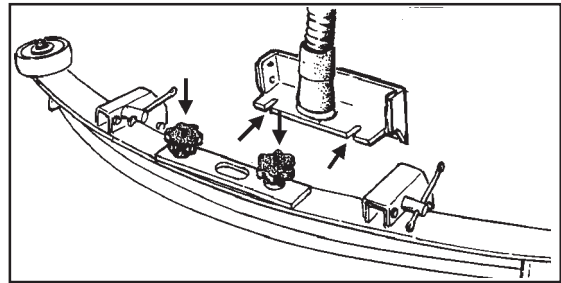


Figure 8

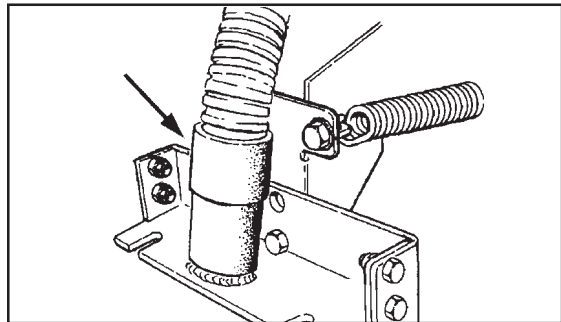


Figure 9

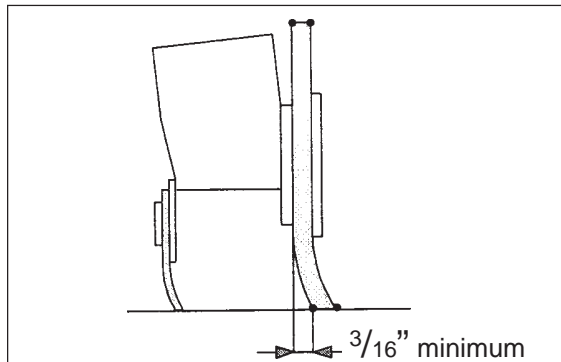


Figure 10

How To Prepare the Machine For Operation

How To Change or Rotate Brushes on Cylindrical Brush Head

To install or rotate brushes on the cylindrical brush head:

1. Raise the brush deck and turn the key switch "OFF".
2. Raise the brush skirt and pull out to remove. See figure 11.
3. Remove thumb screw from brush door. See figure 12.
4. Lower door approximately 12 mm and slide door and hub assembly from brush. See figure 13.
5. Slide brush off hub at opposite end. See figure 14.
6. Rotate brush or replace.
7. Slide brush on drive hub and insert door and hub assembly into brush core.
8. Raise door and install thumb screw.
9. Place side skirt on retainer pins and lower in place.
10. Brushes should be rotated after every 20 hours of use.



Figure 11



Figure 12



Figure 13



Figure 14

How To Operate The Machine

How to Operate the i-Drive Controls

The following controls are located on the joystick:

1. Horn : The horn is a red button located on the top of the joystick (figure 15, item A). **NOTE: The horn sounds continuously when pressed and intermittent and automatic in reverse.**
2. One Touch: The one touch button is a green button located on the upper front of the joystick (figure 15, item B). **NOTE: For more information about the one touch control see below.**
3. Speed Selector: The speed selector is a black button located on the lower front of the joystick (figure 15, item C).

Horn Operation

The horn is a continuous tone when pressing the horn button. In reverse the horn pulses automatically.

One Touch Operation

One touch cleaning is a feature on the Scrubtec R. The factory defaults for this setting are two bars of brush pressure and four bars for solution flow and squeegee in the down position.

1. Press and release the green button for all cleaning functions to begin.
2. The squeegee and brush head lower to the floor and the vacuum starts.
3. The brushes and solution will begin only when you begin to traverse.
4. The cleaning will be at the factory default settings, however you can reprogram these settings to your specifications. See "Reprogramming One Touch" section below.
5. To end cleaning process, press the green button again and solution will stop; brushes will raise; after a short delay squeegee will raise; and the vacuum motor will turn off.

NOTE: It is intended that this be done while traversing. If you stop and do it, some solution can be left on the floor.

Reprogramming One Touch

If you do not want to use the factory default settings, you may reprogram the setting by following the procedures below:

1. Place the machine in the desired scrub condition by using the one touch and / or individual switches.
2. Press and hold the green one touch button until you hear a *single beep* from the machine then release the button. **NOTE: The time required should be approximately 5 seconds.**
3. When you activate or deactivate the one touch, it will now be set to your preference for cleaning. These settings will remain until you disconnect power or reprogram them. **NOTE: When programming one touch, be sure squeegee is in automatic (middle) position, otherwise you may program squeegee either up or down all the time.**

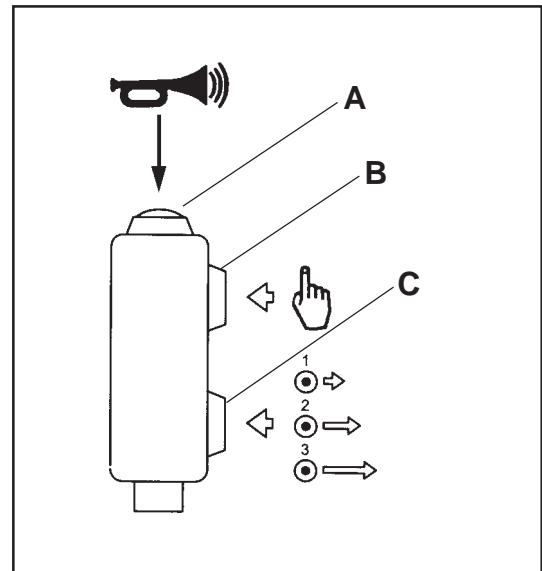


Figure 15

How To Operate The Machine

How to Return One Touch to Factory Default Settings

To restore the factory settings, follow the procedures below:

1. Press and hold the green one touch button (figure 15, B) until you hear a *double beep* from the machine. **NOTE: The time required for this will be approximately 10 seconds.**
2. The settings should be returned to 4 bars of solution and 2 bars of brush pressure. **NOTE: The squeegee vac switch must be in the middle position for default settings to work.**

Directional Control (see figure 16, A and B)

The Scrubtec R is equipped with a joystick for controlling speed and direction of the machine. Simply point the joystick in the direction you want the machine to go (figure 16, A). This is true for both forward and reverse directions. The speed and direction are directly proportional to the position of the joystick. If you want to go slow and straight, apply a slight amount of pressure to the joystick in the forward direction. For more speed, move the joystick further in direction you wish to travel.

NOTE: See example in figure 16, B - the joystick is positioned to where the machine will go in the forward-right direction.

How to Move the Machine Without Power (see figure 17)

1. Engage manual override on brake (see page 9, "Parking Brake").
2. Remove foot plate and 4 screws.
3. Using the knob, turn shaft on motor in direction you wish to turn machine.
4. Slowly push machine to desired location. **NOTE: If you attempt to push machine too fast it will limit top speed. If this happens, stop and restart.**
5. After moving machine, disengage manual brake override. **NOTE: Machine will not function if override is engaged.**

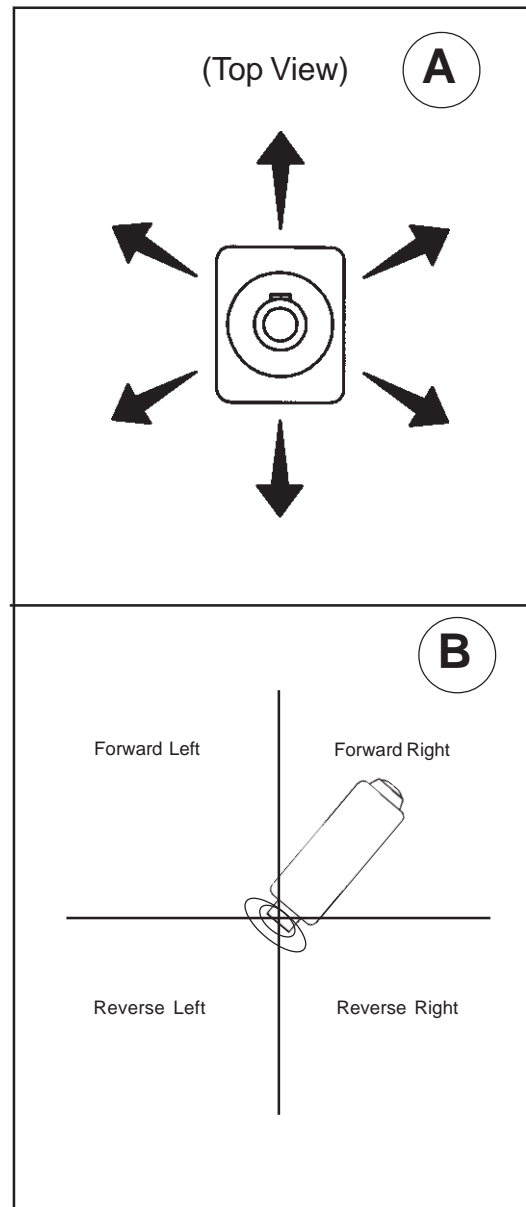


Figure 16



Figure 17

How To Operate the Machine

Seat Adjustment (Standard)

The seat cannot be adjusted.

Seat Adjustment (Deluxe)

The optional deluxe seat is adjustable in three ways:

1. The seat can be adjusted to the forward/backward position by using the lever on the lower right side of the seat. Moving the lever will allow the seat to slide into the preferred position. See figure 18.
2. To adjust the angle of the back support portion of the seat, turn the lever located in the middle right position of the seat. Turning this clockwise will make the seat more vertical. Turning the knob counterclockwise will tilt the seat back. See figure 19, A.
3. To adjust the suspension of the seat for operator comfort, use the lever on the side of the back support section of the seat. This has three positions. The upper position is for light weight operators. The middle position is for medium weight operators. The bottom position is for heavy weight operators. See figure 20, B. **NOTE: The lever must be pressed firmly to change positions.**



Figure 18



Figure 19

How To Operate the Machine

How to Read the Battery Meter (see figure 20, A)

The battery meter is an indicator on the LCD display. This indicator is on the LCD display on the front of the machine. It has 10 bars with 10 bars visible indicating a full charge. As you run the machine the bars will begin to lower. The "Battery Icon" (B) will begin to flash to indicate you are reaching the end of charge.

NOTE: If you continue to run the brushes they will shut down to protect the batteries from over discharging.

NOTE: Run times will vary depending on machine variables, battery size, brush pressure and floor type, etc.

How to Change Displays Screens on the LCD Module

The LCD display has three screens. Two of them can be accessed at any time the key is on. The first screen shows the machine status and the second screen shows the four hour meters (figure 20).

The two screens that can be viewed by the operator can be accessed via the display button (figure 21) on the control panel to the left of the key switch. Pressing this button toggles the display between the available screens.

The third screen is for diagnostics only. This screen displays any errors that might occur or if the system diagnostics finds something wrong. When the diagnostic screen comes up, refer to the trouble shooting guide for suitable action to resolve the error code.

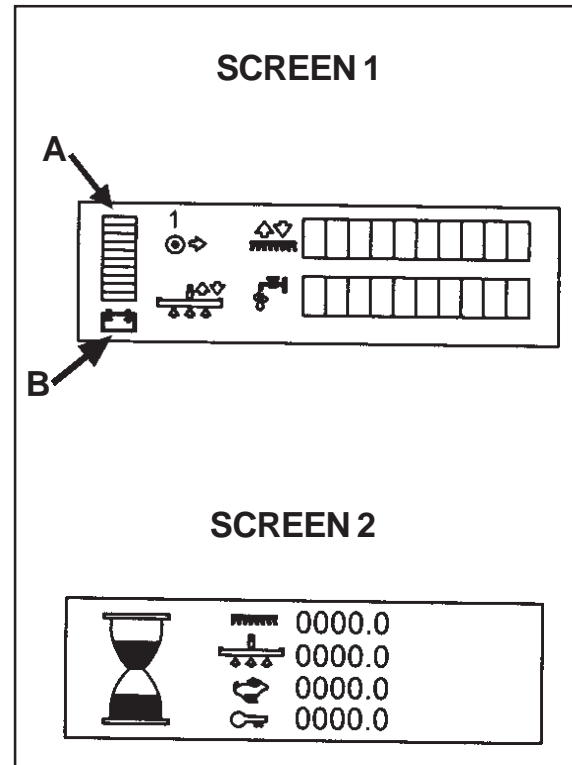


Figure 20

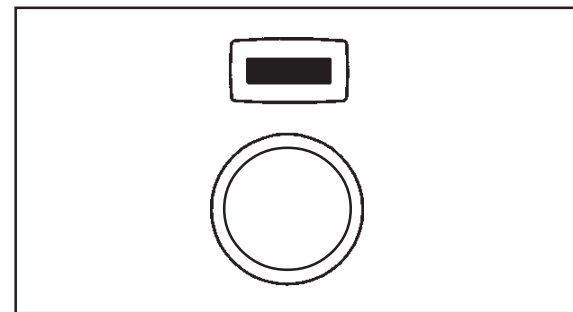


Figure 21

How To Operate the Machine

How to Operate the Squeegee and the Vacuum Motor

The squeegee wipes the floor while the vacuum motor removes the dirty solution from the floor. To operate the squeegee, follow this procedure:

1. To lower the squeegee and start the vacuum motor, press the squeegee up/down switch to the down position (figure 22). **NOTE: The vacuum motor will start immediately when the down position of the switch is pressed, and the squeegee will lower.**
2. To raise the squeegee, press the squeegee up/down switch to the up position (figure 22). The squeegee will then raise and the vacuum motor will shut off after short delay **NOTE: The center position of the squeegee up/down switch is for use with one touch control.**

NOTE: The squeegee will rise automatically when traversing in reverse during scrubbing operations.

How to Operate the Solution Flow

The solution is used to loosen and remove dirt from the floor. The amount of solution applied can be adjusted to five different levels to accommodate many different floor conditions. These different levels are shown on the LCD display on the front of the machine. To adjust the amount of solution applied, use the Solution Flow Switch (figure 23). **NOTE: There are five different settings on the display and they come on two bars at a time. See figure 24, A.**

To increase solution flow:

1. Press the “+” side of the switch (figure 23).
2. Press and hold the “+” switch to achieve the desired level of solution flow.

To decrease solution flow:

1. Press the “-” side of the switch (figure 23).
2. Press and hold the “-” side of the switch to achieve the desired level of solution flow.

How to Operate the Brush Pressure

The brushes are used to supply agitation for the solution, which improves the cleaning process. The amount of brush pressure applied can be adjusted to five different levels to accommodate many different floor conditions. These different levels are shown on the LCD display on the front of the machine (figure 24, B). To adjust the amount of brush pressure, use the brush up/down switch (figure 25).

To increase brush pressure:

1. Press the “+” side of the switch (figure 25).
2. Press and hold the “+” switch to achieve the desired level of pressure.

To decrease brush pressure:

1. Press the “-” side of the switch (figure 25).
2. Press and hold the “-” side of the switch to achieve the desired level of pressure.

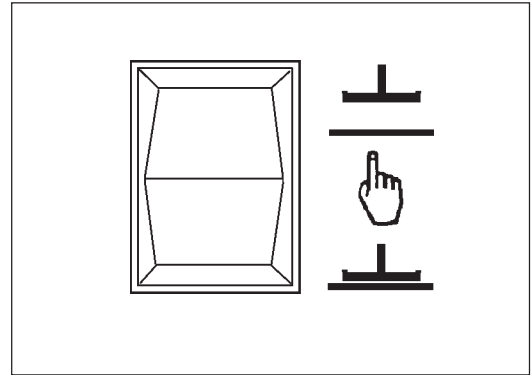


Figure 22

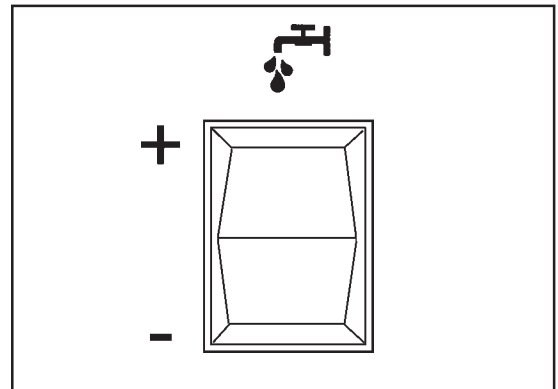


Figure 23

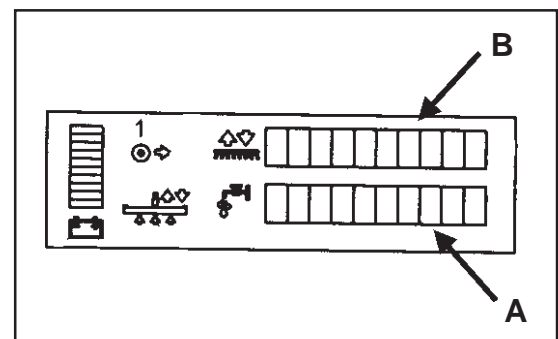


Figure 24

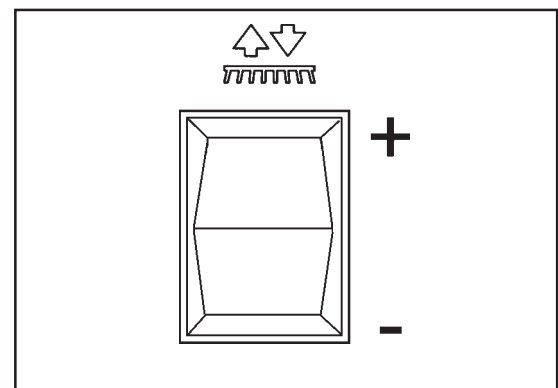


Figure 25

How To Operate the Machine

How to Fill the Solution Tank

The solution tank fill port is located at the left side of the machine (see figure 26). To fill the solution tank, follow this procedure:

1. Turn the key switch to the "OFF" position.
2. Remove lid.
3. Add a cleaning chemical to the solution tank. For the correct amount of chemical, follow the directions shown on the container. **NOTE: Excess foam in the recovery tank could damage the vacuum motor, so use only the minimum amount of detergent necessary.**

⚠ WARNING: Always use low foam detergent. To avoid the production of foam, before starting to clean, put a minimum quantity of antifoam liquid into the recovery tank. **NEVER USE PURE ACID.**

4. Fill the solution tank with clean water (see figure 26).
5. After filling the solution tank, replace the solution tank lid.

⚠ WARNING: Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put CAUTION signs near the area you are cleaning.

⚠ WARNING: Machines can ignite flammable materials and vapors. Do not use with or near flammables such as gasoline, grain dust, solvents and thinners. Only use a cleaning concentration recommended by the chemical manufacturer.

⚠ WARNING: ALTO recommends a maximum water temperature of 120°F (49°C).

Operating the Machine

NOTE: Before scrubbing with the machine, become familiar with the operations and handling of the machine. Run the machine at the lowest traverse speed. Use the machine in an area that has no furniture or objects until you can do the following:

1. Traverse the machine in a straight direction, forward and backward.
2. Stop the machine safely.
3. Turn the machine both left and right and return to a straight direction.
4. Turn a 180° turn where one rear wheel just pivots.



Figure 26

How To Operate the Machine (cont.)

To traverse the machine follow this procedure:

1. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
2. Turn the key switch to the "ON" position.
3. Raise the brush to the highest position.
4. Raise the squeegee.
6. Gently press on the joystick in the direction you want to travel. The machine will begin to move.
7. To change the speed of the machine move the joystick. Move it in the direction you want to travel.
8. To stop, release pressure on the joystick and allow it to re-center.
9. To travel in reverse, move the joystick in the reverse position. **NOTE: Keep the joystick pointed in the direction you wish to go.**
10. To stop, release the joystick.
11. To turn the machine, move the joystick in the direction you want to turn.
12. When you stop the machine, turn the key switch "OFF" and remove the key.

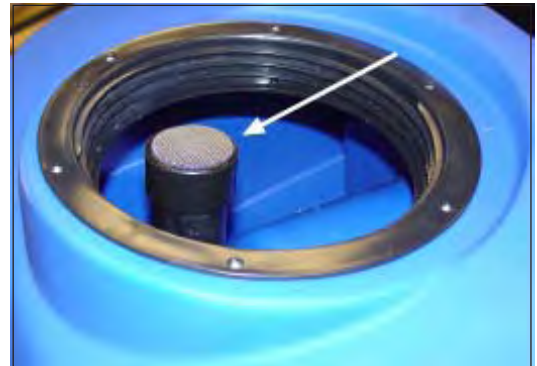


Figure 27

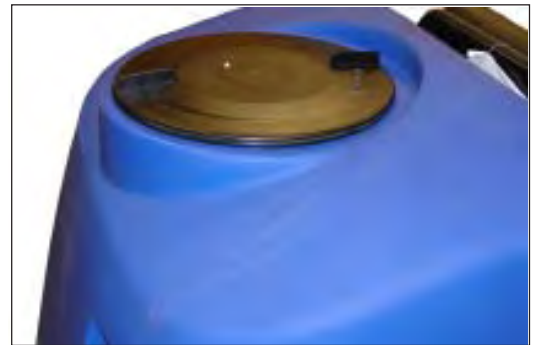


Figure 28

Do These Procedures When You Begin Your Work Period

1. Make sure the key switch is in the "OFF" position.
2. Disconnect AC power from battery charger (follow charger instructions).
3. Make sure the filter screen (1) to the vacuum motor is clean and installed properly in the recovery tank (see figure 27).
4. Make sure the recovery tank lid is in place and has been tightened (see figure 28).
5. Close and secure the lower cleaning port cover on the recovery tank.
6. Make sure that the plug in the recovery drain hose is in place and has been tightened (see figure 29).
7. Make sure that the brushes/pads are in position and installed correctly.
8. Make sure the brush housings are in position on the brush head.
9. Check the installation of the squeegee and squeegee hose.



Figure 29

How To Operate the Machine

How to Clean a Floor

WARNING: Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put CAUTION signs near the area you are cleaning.

For one touch automatic cleaning follow this procedure:

1. Turn the key switch to the "OFF" position.
2. Put the water and a cleaning chemical in the solution tank.
3. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
4. Turn the key switch "ON". **NOTE: The key switch turns on the battery and LED screen displays, which shows the machines condition.**
5. The machine has a one touch button on the joystick (see figure 30) that is preset for brush pressure and solution flow. Momentarily depress the one touch button if you wish to use these settings. **NOTE: If this is not the settings that you desire see page 15 or one touch operation.**

For manual control of cleaning process, follow these procedures:

1. Turn the key switch to the "OFF" position.
2. Put the water and a cleaning chemical in the solution tank.
3. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
4. Turn the key switch "ON". **NOTE: The key switch turns on the battery and LED screen displays, which shows the machines condition.**
5. Lower the squeegee. **NOTE: The vacuum motor will turn on when the squeegee up/down switch is placed in the lower position.**
6. Lower the brush head until it reaches the full stroke down. **NOTE: The brushes will start rotating only when the machine begins to traverse.**
7. Reset the solution flow valve by using the + / - solution switch. **NOTE: The solution will flow only if the machine is moving forward.**
8. Press the joystick in the desired direction/position. After the joystick is pressed the machine will begin to move and the brushes will start to rotate and solution will begin to flow.
9. After a few feet of scrubbing, check to see that the amount of solution being applied is correct and that the squeegee is picking up water and drying the floor. Make adjustments as required.
10. Once the machine is set properly continue to scrub until the solution low indicator comes on or until you run out of solution.

WARNING: If the machine develops operating problems while working, remove your hand from the joystick. After resolving the problem, continue working.

NOTE: When making multiple passes across the floor, overlap the brush cleaning path approximately 2 inches (5 cm) of the area already cleaned by the brush.

NOTE: During most cleaning procedures, apply and remove the solution in one operation.

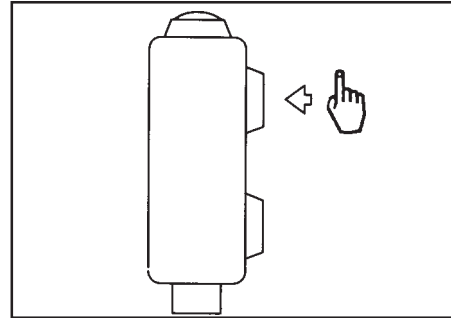


Figure 30

How To Operate the Machine

How to Clean a Very Dirty Floor

To clean a very dirty floor, follow this procedure:

1. Apply solution to the floor.
2. Do not lower the squeegee. This will keep the vacuum motor off.
3. Lower the brush or pad and scrub the floor.
4. Scrub the floor again with additional solution and lower the squeegee.
5. Pick up all the solution with the squeegee.



Figure 31

Do These Procedures When You End Your Work Period

Having finished the job and before any type of maintenance is done, follow these procedures:

For one touch cleaning shut down process, press and release the one touch button.

For manual shut down follow these procedures:

1. Turn the solution flow off by decreasing the flow to its minimum position.
2. Press the brush up/down switch to the up position until the brush head has reached its up most position.
3. Place the squeegee up/down switch in the up position to raise the squeegee and allow the vacuum motor to continue to run. The vacuum motor will run for another 20 seconds and then place the squeegee up/down switch to the up position. This will shut the vacuum motor off.
4. Take the machine to a water drain.
5. Turn the key switch "OFF".
6. Remove the drain hose from the holding hook.
7. Put the end of the hose over a drain or bucket.
8. Turn the valve housing to the left (see figure 31).
9. To open the valve completely, turn the housing fully to the left. Pull the housing off of the valve.
10. Empty the recovery tank. **NOTE: When hose is lowered below water level, water will flow.**



WARNING:


Use gloves to protect your hands from contact with dangerous solutions when performing the steps listed above.


How To Operate the Machine

11. Rinse the tank. Put clean water in the tank through the opening at the top. Be careful not to allow water into the vacuum intake tube (with screen).
12. If the tank or drain hose has an obstruction, use water pressure to flush the tank or hose. Put the water hose into the drain hose.
13. Leave the tank and drain plug removed to air dry.
14. Check the squeegee blade. Use a cloth to clean the squeegee blade. If the squeegee blade is damaged or worn, turn or replace the blade.

NOTE: To avoid damage to the squeegee, the squeegee must be lifted when the machine is not in operation.

15. Take off the brushes and clean them with a jet stream of water.
16. Use a clean cloth and wipe the surface of the machine.
17. Check the batteries and add distilled water as needed. The correct level is between $\frac{1}{4}$ " ($\frac{1}{2}$ cm) below the bottom of the tube in each cell and above the tops of the plates. See the instructions in the section of this book called "Battery Maintenance".

 **CAUTION:** Tap water may contain contaminants that will damage batteries. Batteries must be refilled with distilled water only.

 **WARNING:** Lead acid batteries generate gases which can cause an explosion. **NO SMOKING.** Always wear eye protection and protection clothing when working near batteries.

18. Charge the batteries. See the instructions in the section of this book called "How to Charge the Batteries".

Maintenance

Maintenance To Be Done Every Week

⚠ WARNING: Maintenance and repairs must be done by authorized personnel only. Always empty the solution tank and the recovery tank before doing any maintenance. Keep all fasteners tight.

⚠ WARNING: Always wear eye protection and protective clothing when working near batteries. **NO SMOKING!** Do not put tools or other metal objects across the battery terminals or the tops of the batteries.

⚠ CAUTION: To prevent damage to the machine, and discharge across the tops of the batteries, do not fill the batteries above the bottom of the tube in each cell. Wipe any acid from the machine or the tops of the batteries. Do not add acid to batteries after installation.

Battery Inspection and Cleaning

1. Turn the key switch to the "OFF" position.
2. To inspect batteries, rotate seat support forward. Lift and rotate recovery tank. Be sure the recovery tank is empty before lifting.
3. Disconnect the batteries. Use a cloth and a solution of ammonia or bicarbonate of soda to wipe the top of the batteries. Clean the battery terminals. Reconnect the batteries. See the instructions in the section of this book called "Battery Maintenance".
4. When battery inspection is completed, close the recovery tank. Rotate the seat support back to the operating position.

Cleaning the Recovery Tank and Filter

1. Turn the key switch to the "OFF" position and set the parking brake.
2. Empty the recovery tank using the flexible drain hose by unscrewing the knob and taking off the plug (see figure 32).
3. If the machine is equipped with the optional clean-out port, open the lower cleaning port cover by unscrewing the four knobs (see figure 33). **NOTE: Make sure that the tank is empty first.**
4. Rinse the tank and clean the drain plug.



Figure 32

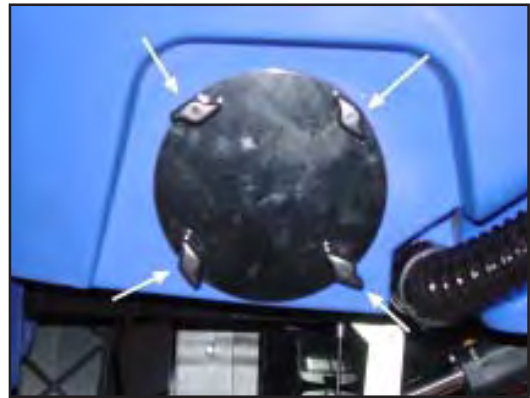


Figure 33

Maintenance

5. Clean the hose fitting in the recovery tank and spray water down the squeegee hose to clean out debris.
6. Reattach the squeegee hose.

Cleaning the Solution Tank and Filter

1. Move the machine so that the solution tank filter assembly is located directly over a floor drain.
2. Turn the key switch to the "OFF" position.
3. Clean inside the solution tank with a jet stream of water.
7. Close the solution flow valve.
8. Clean the filter inside the housing and reinstall on machine.

Manually Draining the Solution Tank

1. Remove sight gauge hose from top connector (see figure 34).
2. Rotate lower fitting to allow drain hose to rest over drain.
3. Drain solution tank (see figure 35).

Vac Assisted Solution Tank Drain

1. Remove vacuum hose from squeegee plate.
2. Turn vac on.
3. Remove and place solution hose into vac hose until washer rest against hose cuff.

NOTE: Using vac assist will help to rinse recovery tank. This will help to reduce cleanup and maintenance times.

Squeegee Maintenance

Clean the squeegee with a jet stream of water and a damp cloth. Inspect the front and rear squeegee blades for wear. Readjust or replace if necessary.

Front Squeegee Blade Replacement

To replace the front squeegee blade, follow this procedure:

1. Remove the squeegee assembly from the machine.
2. Remove clamp and front squeegee blade.
3. Install new front squeegee blade and reinstall clamp.
4. Replace squeegee on machine.



Figure 34



Figure 35

Maintenance

Rear Squeegee Blade Replacement

If the rear squeegee blade is worn and does not dry the floor well, follow this procedure:

1. Remove the squeegee assembly from the machine.
2. Remove the squeegee blade and inspect it.
3. Rotate the squeegee blade to obtain a new cleaning edge. Replace if necessary.
4. Reinstall the squeegee blade.
5. Reinstall the squeegee assembly on the machine.
6. Readjust the settings on the squeegee as required (see "How to Adjust Squeegee").

Squeegee Maintenance

The squeegee blade may be rotated for longer life. Keep sharp corner on floor for best cleaning results. See figure 36. To rotate follow this procedure:

1. Remove Clamp.
2. Remove blade and rotate to new edge.
3. Replace squeegee.
4. Replace clamp.

Cleaning the Vacuum Hoses

Make sure the squeegee is over a suitable drain.

1. Use a garden hose to flush through the recovery hoses.
2. Side Squeegee - Position garden hose to the squeegee side of the hose and flush thoroughly.
3. Recovery Hose - Position garden hose inside recovery tank. **NOTE: Do not place hose in vacuum intake (see figure 37), damage will occur.**

Re-center Front Wheel

If the front wheel gets out of adjustment and the machine does not drive straight when the joystick is pointed forward, follow this procedure:

1. Remove 4 screws holding foot plate to solution tank (see figure 38).
2. Locate two black wires tied together and marked "reset sw" (see figure 39).



Figure 36

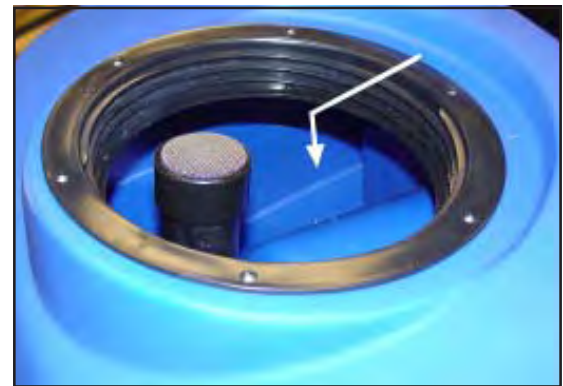


Figure 37

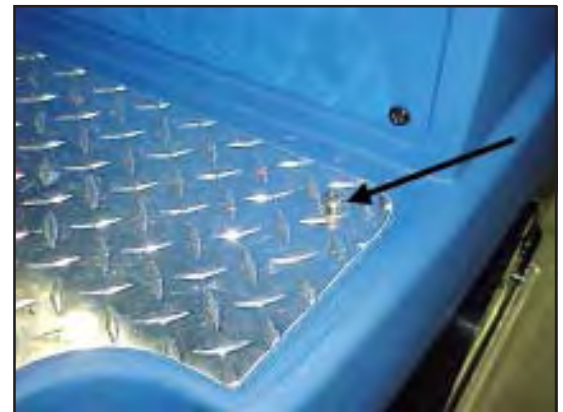


Figure 38



Figure 39

Maintenance

3. Using the joystick, position the front wheel straight by doing one of the following:
 - a) Using black indicator marks on steering system, realign front wheel (see figure 40).
 - b) Place front wheel straight by visually estimating it's position (see figure 41).
4. Hold joystick in corrected position and connect black wires together and key off the machine (see figure 42).
5. Disconnect black wires.
6. Key machine on. If machine drives straight, then proceed to step 7. If not, then repeat steps 2-5.
7. Replace foot plate and screws.
8. Key machine on.



Figure 40



Figure 41



Figure 42

HOW TO CORRECT PROBLEMS IN THE MACHINE

PROBLEM	CAUSE	ACTION
Insufficient water onto the brushes	<p>The solution flow is not set</p> <p>There is no water in the solution tank.</p> <p>The solution filter is dirty.</p> <p>A circuit breaker has tripped.</p> <p>Insufficient flow.</p>	<p>Make sure the solution flow is set.</p> <p>Fill the solution tank.</p> <p>Clean the solution filter.</p> <p>Reset the circuit breaker.</p> <p>Increase flow with solution switch.</p>
The machine does not clean satisfactorily	<p>The brushes are worn.</p> <p>Need to use a different kind of brush/pad</p>	<p>Check the brushes and replace if necessary. (the brushes have to be replaced when the bristles reach approximately .59 inches (15mm height.)</p> <p>Use a different kind of brush. For cleaning operations on floors where the dirt proves to be particularly resistant, we recommend using special brushes. See Accessories page.</p>
The squeegee does not dry the floor	<p>The squeegee is dirty.</p> <p>Recovery drain hose is not closed.</p> <p>The suction hoses need to be cleaned.</p> <p>The squeegee blades are worn.</p> <p>The recovery tank is full.</p>	<p>Clean the squeegee.</p> <p>Close the drain plug.</p> <p>Clean the vacuum hoses. See "Routine Maintenance" section.</p> <p>Replace/ or rotate the squeegee blades. See "Routine Maintenance" section.</p> <p>Drain recovery tank.</p>
The vacuum motor does not function	<p>The squeegee up/down switch in not in the low or middle position.</p>	<p>Put the squeegee in the low or middle position or reprogram "one touch".</p>
The machine does not start	<p>The operator is not properly seated.</p> <p>The key is not in the "ON position".</p> <p>The charger is still connected.</p> <p>The batteries are not charged or not connected properly.</p> <p>The circuit breaker has tripped.</p>	<p>The operator must be properly seated in the driving position.</p> <p>Turn the key to the "ON" position.</p> <p>Remove the A/C cord from the wall.</p> <p>Check to make sure the batteries are connected properly and charge if necessary.</p> <p>Reset the circuit breaker.</p>
The brush motors do not work WARNING: To avoid damage to the floor, the motor starts only when the machine is traversing.	<p>The brush head unit is not down.</p> <p>The batteries are not charged or not connected properly.</p> <p>Poor electrical connection at the brush head unit.</p>	<p>Put the brush head unit down.</p> <p>Check to make sure the batteries are connected properly and charge if necessary.</p> <p>Connect the electrical connection at the brush head unit.</p>

Scrubtec R Common Error Codes

ERROR CODE	CAUSE	ACTION
1500 1501 1507	Check brake and wiring for short circuit.	Make sure manual override is not engaged.
1600	High battery voltage.	Poor or corroded connection to the battery.
3100 3101 3102 3103 3104 3105	Probable short circuit of output device.	Check the traction, brush and vac motor connections on the trio and check wiring from these connectors down to the traction, brush and vac motors.
7600	Open circuit on brush motors or brush motor wiring.	Check the brush motor connection on the trio and check the wiring from this connector down to the brush motor.
7602	Brush motor overload.	Scrub in lower pressure setting.
7603	Possible short circuit on brush motors or wiring.	Check the brush motor connection on the trio and check the wiring from this connector down to the brush motor.
7700	Open circuit on vacuum motor	Check connector to trio and vacuum motor
7800	Open circuit on traction motor.	Check the traction motor connection on trio and wiring down to motor.
7802	Traction motor current has exceeded current limit for the fold back time.	Excessive driving up an incline, or machine driven up against an obstacle or step.
9000	Brushes not fitted.	Place brushes or pads onto machine.
2F01	Drive system activated prior to turning key switch "ON".	Release traverse switch and reactivate.

Accessories and Options

BRUSHES AND PAD DRIVERS

Scrubtec R 571 Disc Model	
PART NO.	DESCRIPTION
17521C	Pad Driver Assembly (2 req.)
10383A	Lite Grit Disc Brush (2 req.)
11431B	Clean Grit Abrasive (2 req.)
11426B	Supergrit (2 req.)
11427B	Polypropylene (2 req.)
10874A	Nylon (2 req.)
Scrubtec R 586 Disc Model	
PART NO.	DESCRIPTION
17520C	Pad Driver Assembly (2 req.)
10384A	Lite Grit Disc Brush (2 req.)
11430B	Clean Grit Abrasive (2 req.)
11425B	Supergrit (2 req.)
11424B	Polypropylene (2 req.)
10875A	Nylon (2 req.)
Scrubtec R 571 C Cylindrical Model	
PART NO.	DESCRIPTION
30614A	Polypropylene (2 req.)
30615A	Nylon (2 req.)
30616A	Clean Grit Abrasive (2 req.)
30617A	Supergrit (2 req.)

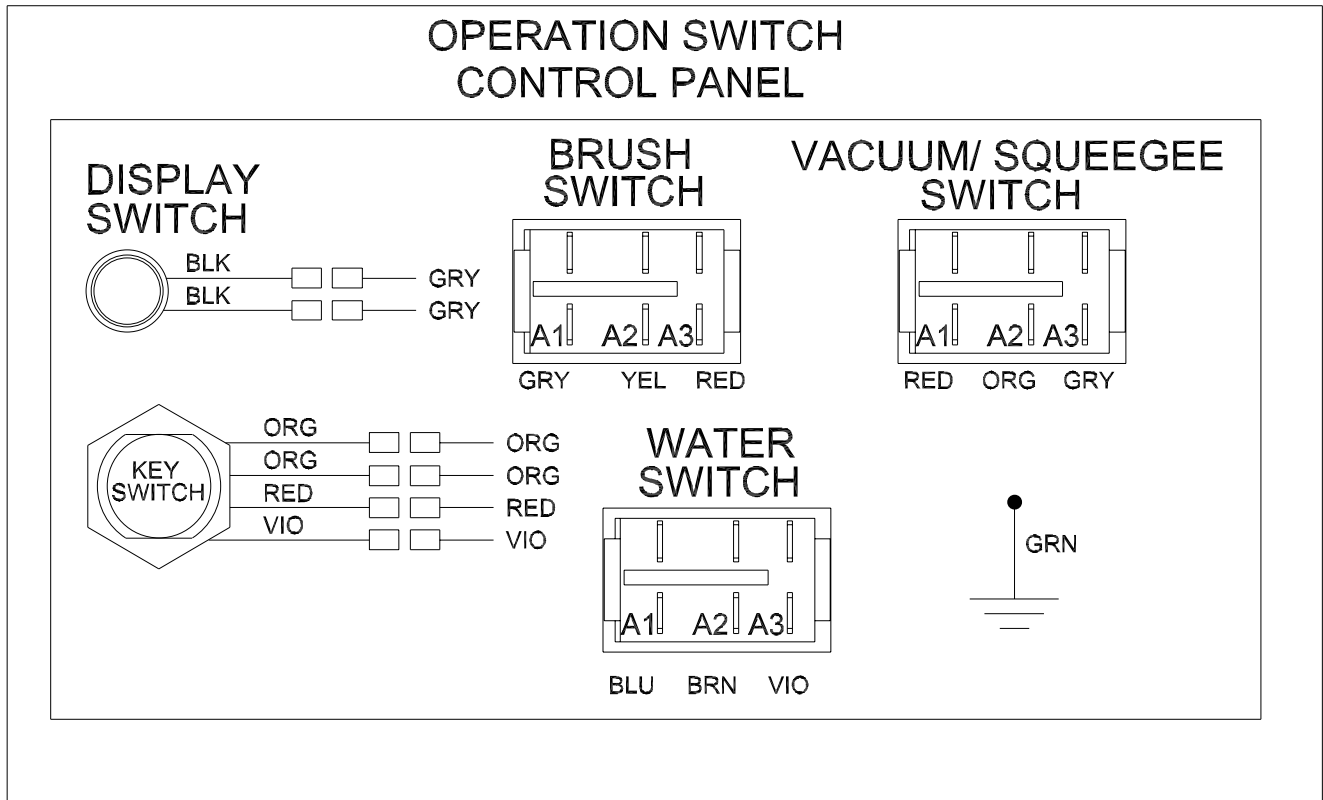
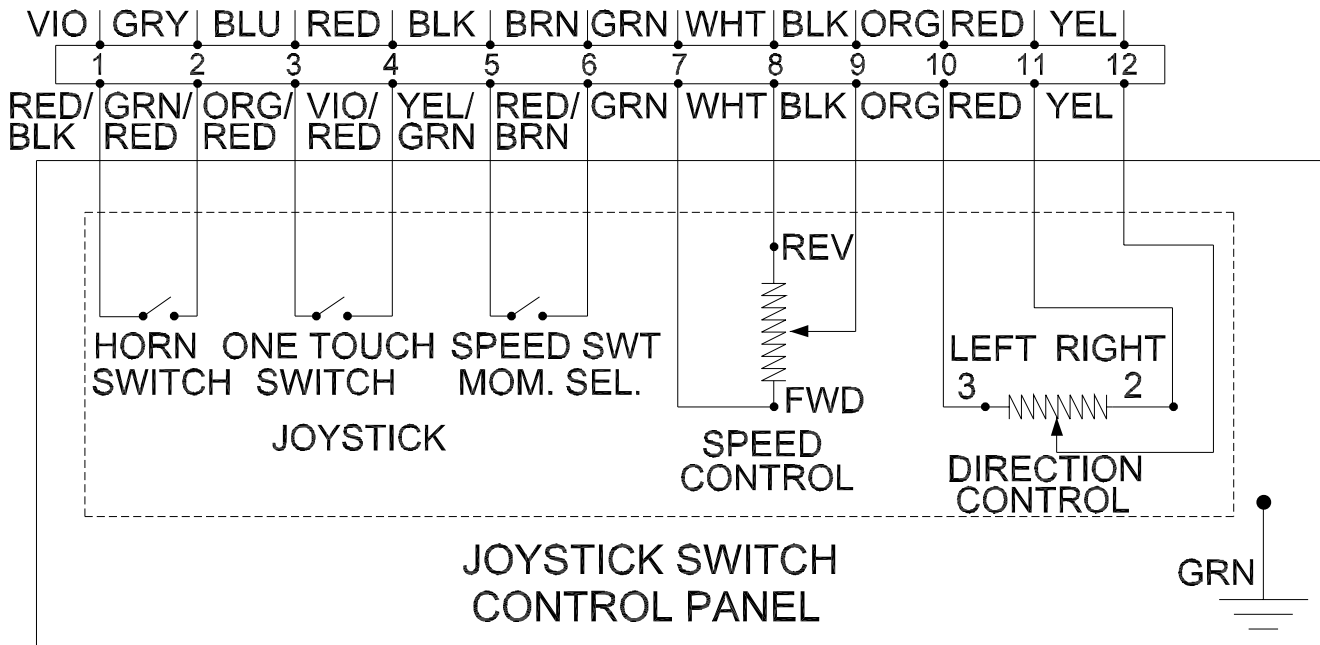
SQUEEGEE BLADES

Scrubtec R 571 Disc Model	
PART NO.	DESCRIPTION
30556A	Rear Squeegee, Back Gum Rubber Blade
30067L	Rear Squeegee, Back Linatex Blade
30066A	Rear Squeegee, Front Ribbed Urethane Blade
30540A	Side Squeegee, Back Gum Rubber Blade
30540L	Side Squeegee, Back Linatex Blade
30541A	Side Squeegee, Front Ribbed Urethane Blade
Scrubtec 586 R Disc Model & 571 C Cylindrical Model	
PART NO.	DESCRIPTION
30557A	Rear Squeegee, Back Gum Rubber Blade
30069L	Rear Squeegee, Back Linatex Blade
30091A	Rear Squeegee, Front Ribbed Urethane Blade
30540A	Side Squeegee, Back Gum Rubber Blade
30540L	Side Squeegee, Back Linatex Blade
30541A	Side Squeegee, Front Ribbed Urethane Blade

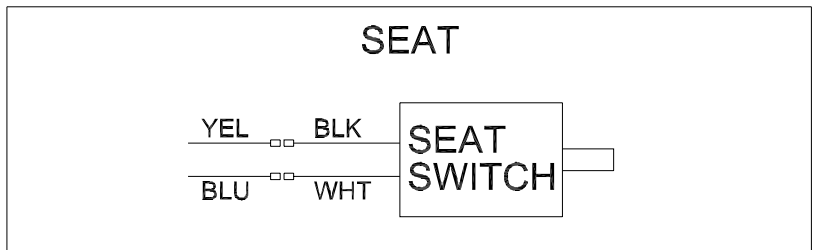
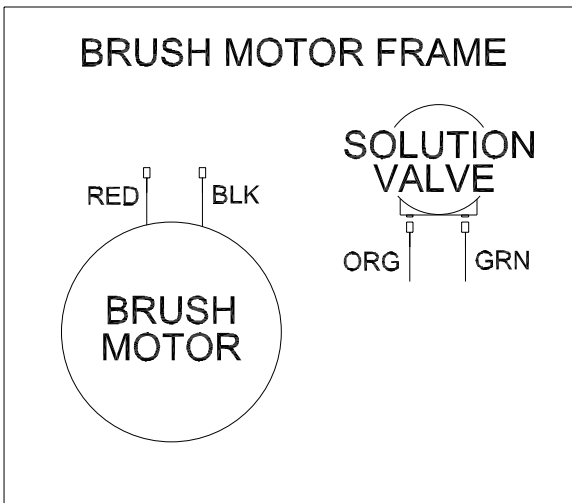
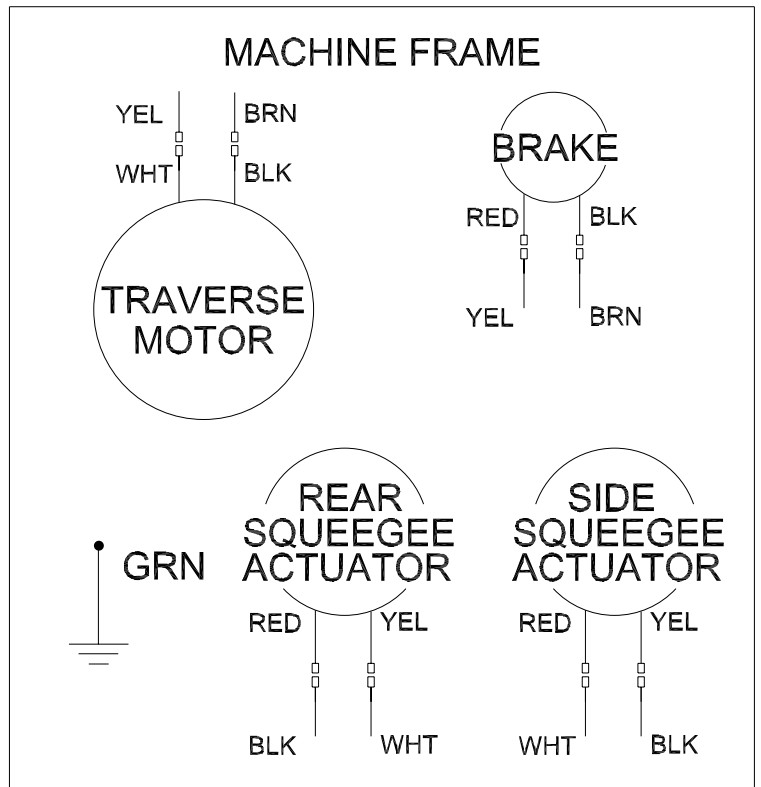
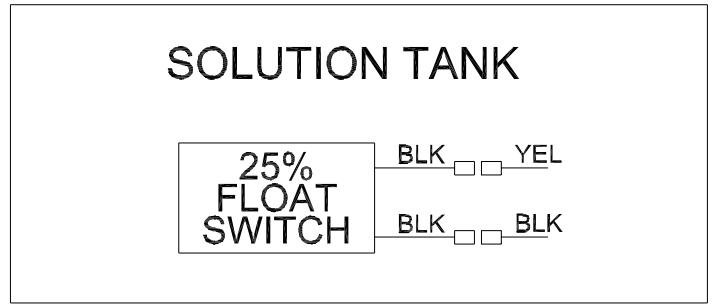
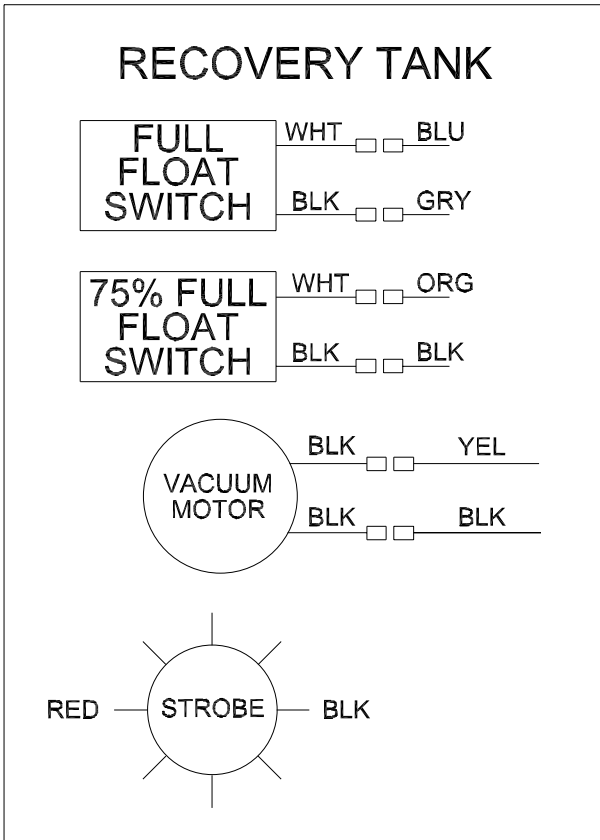
FIELD INSTALLED OPTION KITS

PART NO.	DESCRIPTION
10880A	ESP - Extra Scrub Productivity, Recycling
10881A	Off Aisle Spray Tool and Vac Wand (includes pump)
10876A	Solution and Recovery Tank Level Indicator Lights
10877A	Caution Strobe Light (Amber)
10878A	Deluxe Seat
10879A	Head Light
53390A	CBMS - Clarke Battery Maintenance System

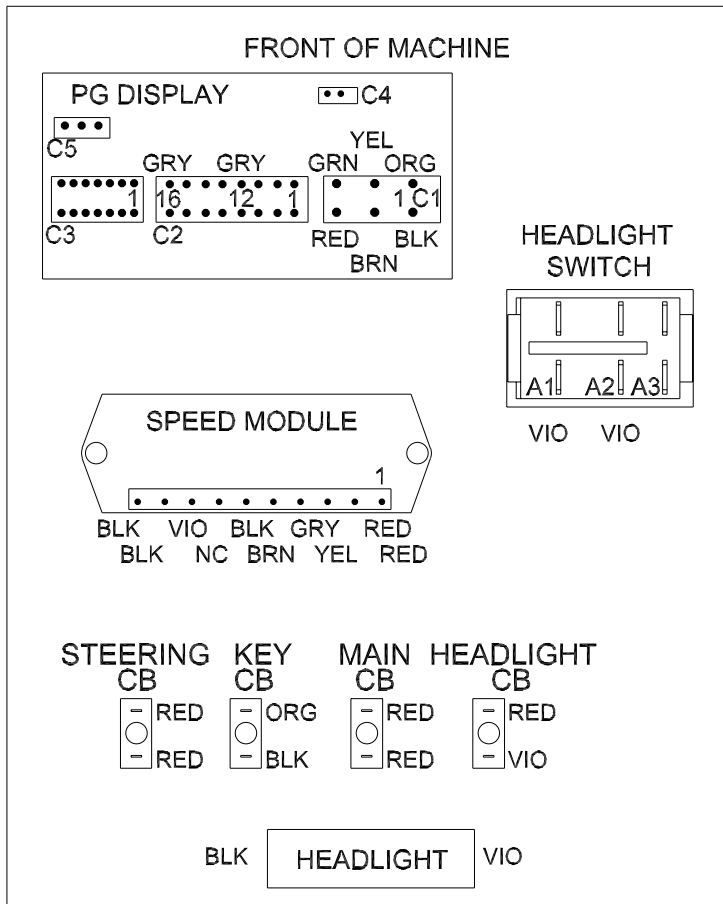
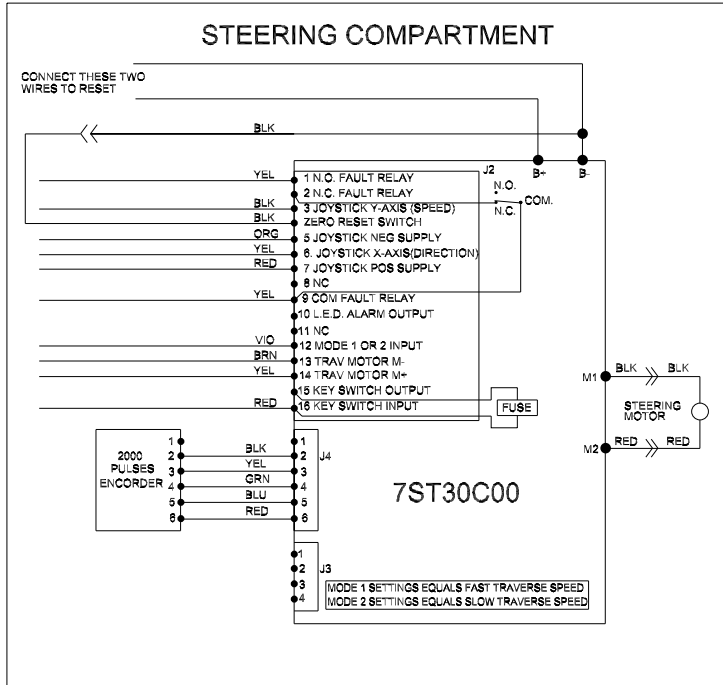
CLARKE TECHNOLOGY
SCRUBTEC R 571, 586, 571 C
 Electrical Connection Diagram 5/05
 Drawing # 70794A (pages 61-64)



CLARKE TECHNOLOGY
SCRUBTEC R 571, 586, 571 C
 Electrical Connection Diagram 5/05
 Drawing # 70794A (pages 61-64)



CLARKE TECHNOLOGY
SCRUBTEC R 571, 586, 571 C
Electrical Connection Diagram 5/05
Drawing # 70794A (pages 61-64)

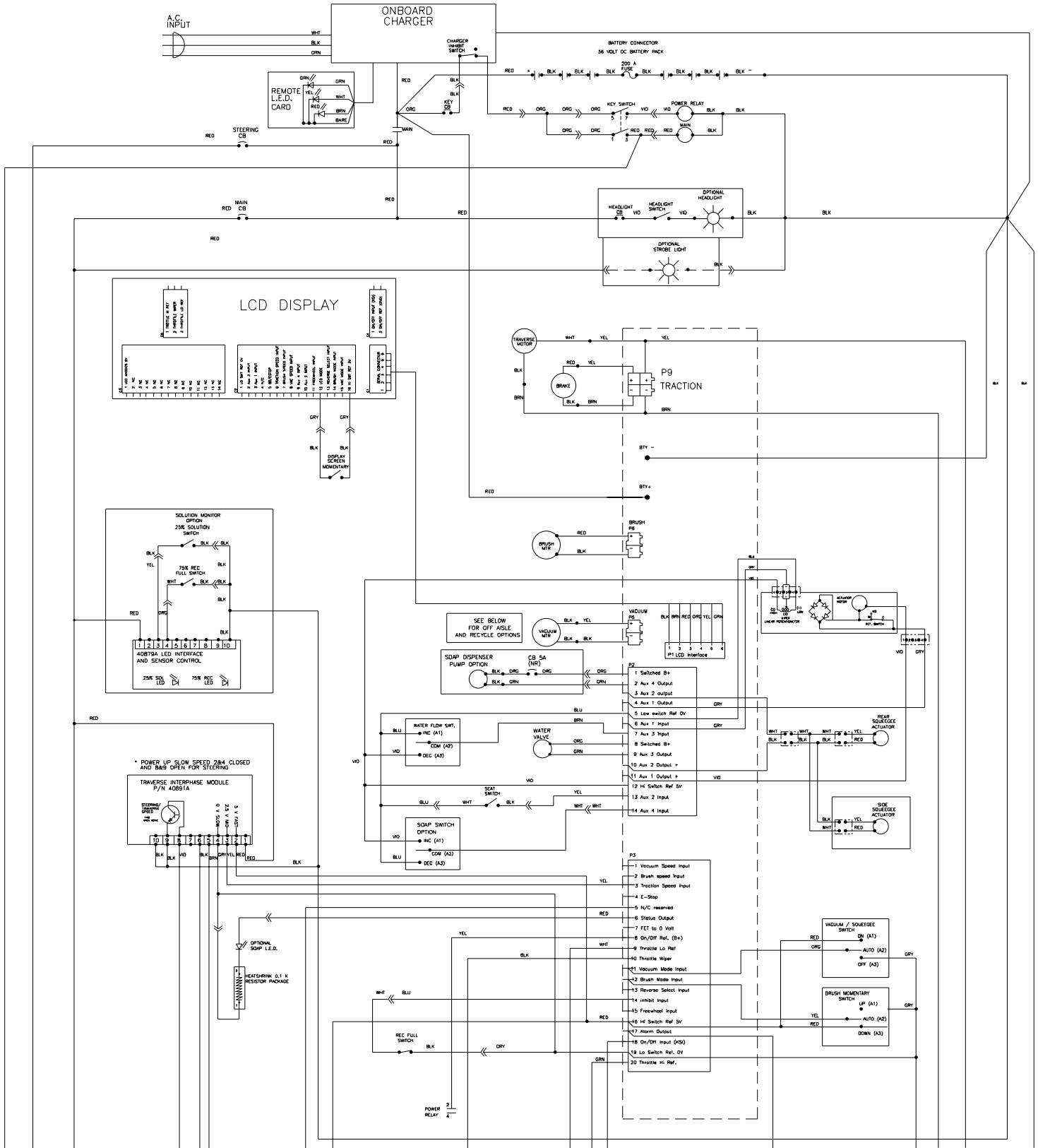


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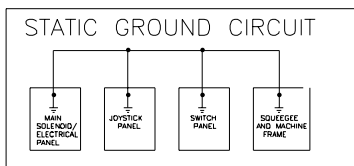
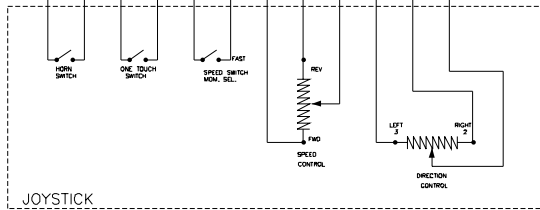
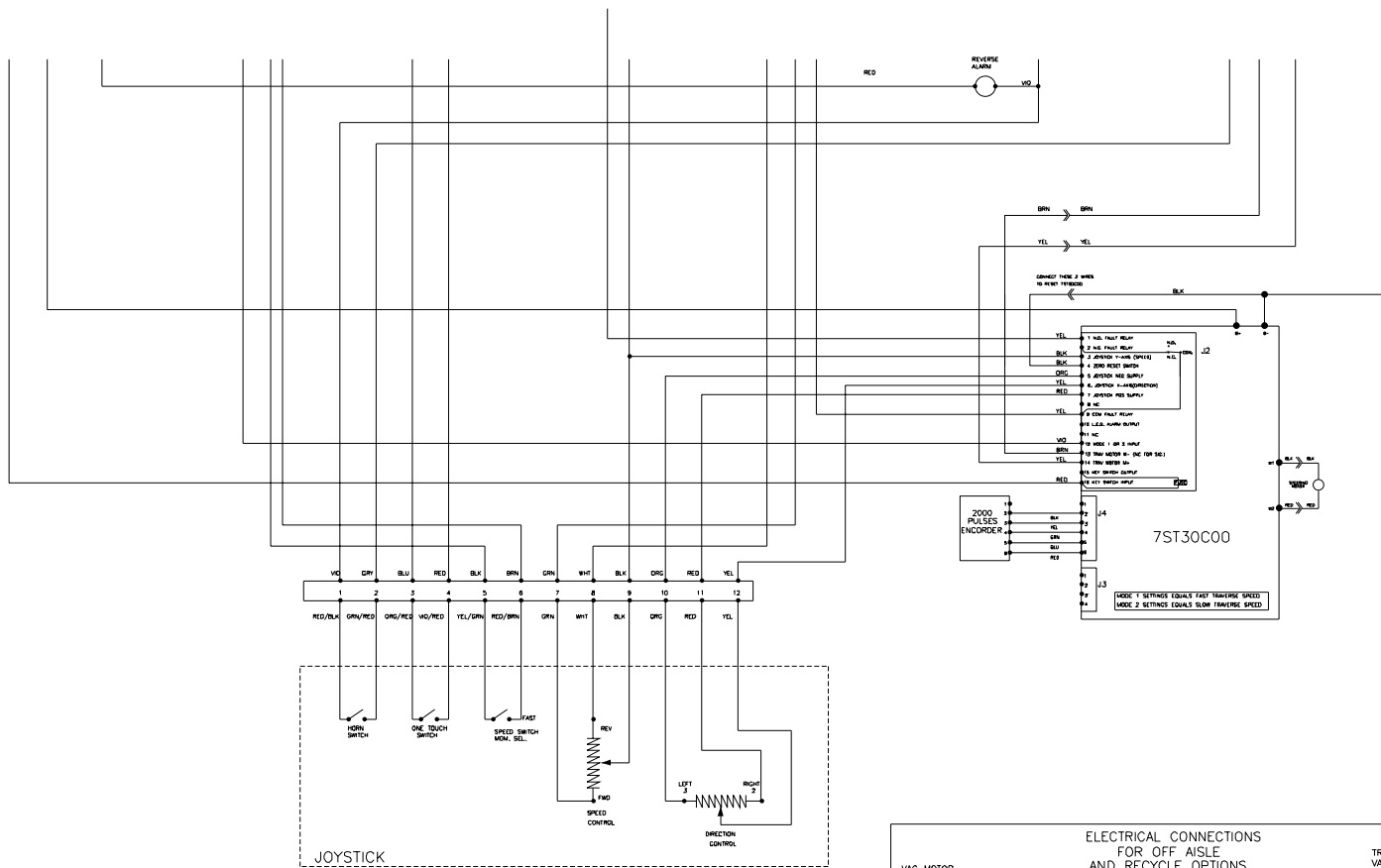
SCRUBTEC R 571, 586, 571 C

Electrical Schematic (pages 65-66) 5/05

Rider Electrical Options



CLARKE TECHNOLOGY
SCRUBTEC R 571, 586, 571 C
 Electrical Schematic (pages 65-67) 5/05
 Rider Electrical Options



SOAP L.E.D. FLASH CODE
 20% FLASH 2X THEN OFF 20 SEC. THEN REPEAT
 40% FLASH 4X THEN OFF 20 SEC. THEN REPEAT
 60% FLASH 6X THEN OFF 20 SEC. THEN REPEAT
 80% FLASH 8X THEN OFF 20 SEC. THEN REPEAT
 100% ON CONTINUOUS

