PowerBoss
The Power of Clean

Users Manual

# ARMADILLO 6X *BATTERY*

All information contained in this manual is current at the time of printing. However, due to constant updates and improvements we reserve the right to make changes at any time without notice.

# SW/62E , SW62IC

## FEATURES

1. Dust Control Filter :50 Sq.Ft.(4.65 $m^2$) in 62E; 92 Sq. Ft. in 62IC (8.56$m^2$)
2. Electric Filter Shaker
3. Exhaust Air Expelled Outside Engine Compartment (only in 62IC)
4. Industrial Liquid-Cooled Engine (only in 62IC)
5. Tri-Phase Air Cleaner (only in 62IC)
6. One-Piece Unitized Steel Frame
7. Hydraulics Protection Package
8. Dual Performance Sweep Mode (only in 62IC)
9. Quick-Change Floating 36" Main Broom
10. Oversized Hopper with RTR™
11. Retractable Quick-Change Side Broom
12. Multi-Level Hopper Dumping
13. Built-In Dust PreFiltering
14. Wet Sweep By-Pass Standard
15. Instant Forward & Reverse using one Pedal
16. Excellent Maneuverability due to Compact Size & Resr Wheel Steering

# BADGER SW/62E

## (LIMITED) PRODUCT WARRANTY

### (NORTH AMERICA ONLY)

AAR PowerBoss,Inc. warrants that the **PowerBoss** Badger SW/62E will be free from defects in material and workmanship for a period of 24 months or 1,250 operating hours from date of installation, whichever comes first. Written notice of any claimed defect must be given to AAR within the warranty period and within thirty (30) days after such defect is discovered. Liability under this warranty is limited to either replacing or repairing, at AAR's election, any part or parts deemed defective after examination by AAR or an Authorized Service Representative. The **PowerBoss** machine or any of its parts returned by customer to AAR or an Authorized Service Representative via prepaid transportation and which is found to be defective, will be repaired or replaced and returned to customer via prepaid surface transportation within the Continental U.S. On the other hand, should a part be found not defective, inspection and handling charges may be charged to the customer by AAR or an Authorized Service Representative.

For one hundred eighty (180) days from date of installation, AAR will provide repair labor, at no charge, solely through an Authorized Service Representative. Thereafter, labor will be charged.

This warranty does not extend to the **PowerBoss** machine, or its parts, that have been subject to misuse, accident or improper handling, installation, maintenance or application, nor does it extend to **PowerBoss** machine and/or parts which have been repaired or altered outside AAR's plant or the facility of Authorized Service Representative.

This warranty does not apply to routine wearable parts of the **PowerBoss** machine such as brushes, flaps, filters, seals, points, plugs, hoses or similar items. Moreover, this warranty does not extend to the **PowerBoss** machine or part replaced or repaired under this warranty.

Only replacement parts supplied by AAR are warranted for 30 days after installation.

***THE WARRANTY SET FORTH HEREIN IS IN LIEU OF AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND CUSTOMER WAIVES ANY OBLIGATION OR LIABILITY OF AAR ARISING IN TORT OR STRICT LIABILITY IN TORT, OR FOR LOSS OR USE, REVENUE OR PROFIT WITH RESPECT TO PowerBoss MACHINE AND/OR PARTS FOR ANY LIABILITY OF CUSTOMER TO ANY THIRD PARTY, OR FOR OTHER DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.***

# BADGER SW/62IC
## (LIMITED) PRODUCT WARRANTY

AAR PowerBoss, Inc. warrants that the **PowerBoss** Badger SW/62 IC will be free from defects in material and workmanship for a period of 24 months or 1,200 operating hours from date of installation, whichever comes first. Written notice of any claimed defect must be given to AAR within the warranty period and within thirty (30) days after such defect is discovered. Liability under this warranty is limited to either replacing or repairing, at AAR's election, any part or parts deemed defective after examination by AAR or an Authorized Service Representative. The **PowerBoss** machine or any of its parts returned by customer to AAR or an Authorized Service Representative via prepaid transportation and which is found to be defective, will be repaired or replaced and returned to customer via prepaid surface transportation within the Continental U.S. On the other hand, should a part be found not defective, inspection and handling charges may be charged to the customer by AAR or an Authorized Service Representative.

For one hundred eighty (180) days from date of installation, AAR will provide repair labor, at no charge, solely through an Authorized Service Representative. Thereafter, labor will be charged.

This warranty does not extend to the **PowerBoss** machine, or its parts, that have been subject to misuse, accident or improper handling, installation, maintenance or application, nor does it extend to **PowerBoss** machine and/or parts which have been repaired or altered outside AAR's plant or the facility of Authorized Service Representative.

This warranty does not apply to routine wearable parts of the **PowerBoss** machine such as brushes, flaps, filters, seals, points, plugs, hoses or similar items. Moreover, this warranty does not extend to the **PowerBoss** machine or part replaced or repaired under this warranty.

Only replacement parts supplied by AAR are warranted for 30 days after installation.

The warranty for optional engines shall be limited to the warranty extended to AAR by the supplier.

***THE WARRANTY SET FORTH HEREIN IS IN LIEU OF AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND CUSTOMER WAIVES ANY OBLIGATION OR LIABILITY OF AAR ARISING IN TORT OR STRICT LIABILITY IN TORT, OR FOR LOSS OR USE, REVENUE OR PROFIT WITH RESPECT TO PowerBoss MACHINE AND/OR PARTS FOR ANY LIABILITY OF CUSTOMER TO ANY THIRD PARTY, OR FOR OTHER DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.***

(April 1993)

# SAFETY SYMBOLS

Five symbols are used throughout this manual to emphasize various levels of safety information. These symbols and the meaning of each are listed below.


**DANGER:** To warn of immediate hazards which will result in severe personal injury or death.


**WARNING:** To warn of hazards or unsafe practices which could result in severe personal injury or death.


**CAUTION:** To warn of hazards or unsafe practices which could result in minor personal injury.

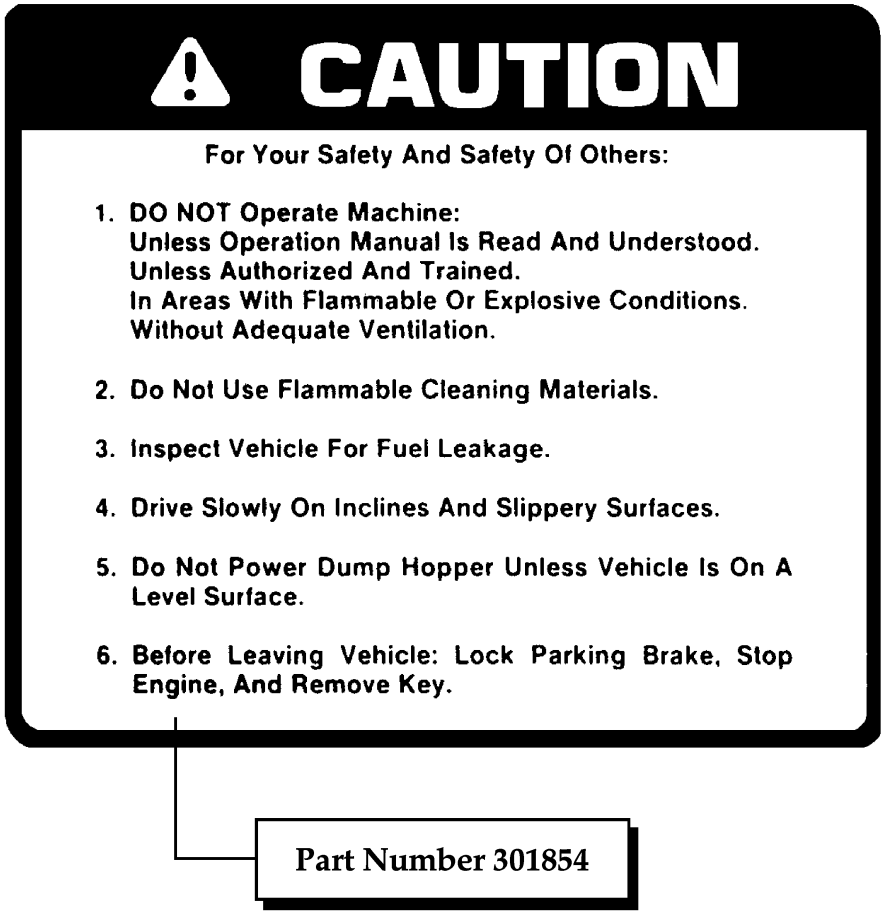

**ATTENTION!** To warn of practices which could result in extensive equipment damage.


**NOTE:** To direct your attention to important equipment information or special instructions for preventing damage to equipment.

Symbols at the top of the list are the strongest warnings. However, all symbols represent important information which should be observed to protect you and others from harm and injury, and to prevent damage to equipment.

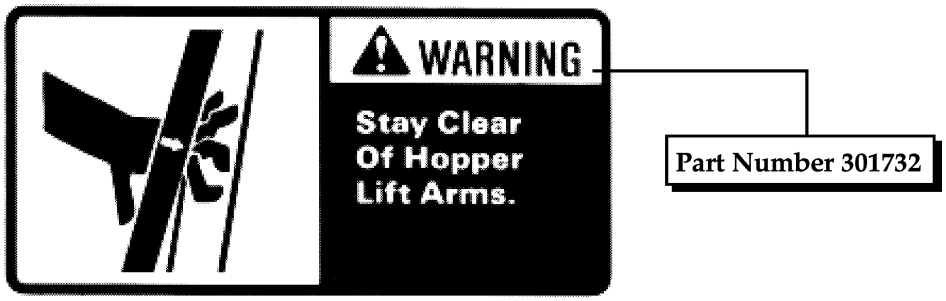
# SAFETY DECALS

Decals directly attached to various parts of the sweeper are highly visible safety reminders which should be read and observed. Make sure the decals are replaced if they become illegible or damaged. The decal below is located in the drive compartment. Other safety decals on your machine appear on the next page.

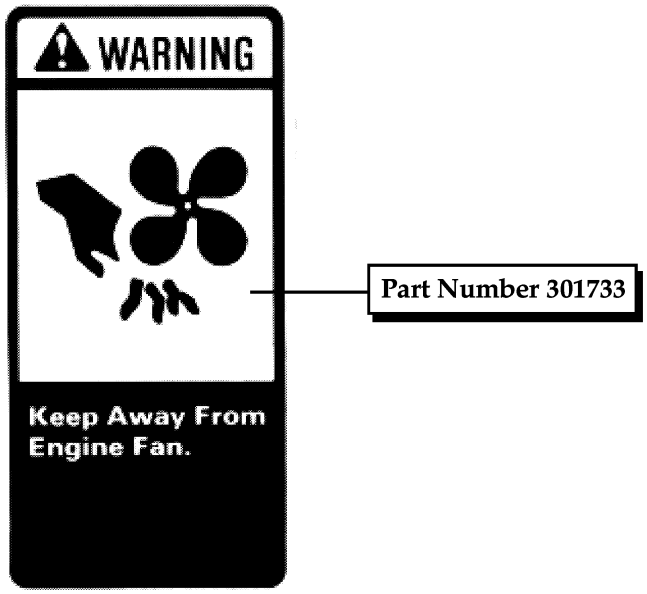


Located at the Impeller :


Located on the high dump hopper:




Located on the shroud of the radiator (62IC):



# BASIC PowerBoss® SAFETY

**PowerBoss sweepers should never be operated unless: 1. the operator is trained and authorized to operate the equipment and, 2. the equipment is free of malfunctions. Malfunctioning equipment should be removed from service.**

**⚠ DANGER**

1. Keep cigarettes, matches, and all other flame sources away from the sweeper. Gasoline, LP gas, and diesel fuel are highly flammable. Lead acid batteries are equally dangerous due to the highly explosive hydrogen gas they emit.

**⚠ WARNING**

1. Before starting the engine, make sure that:

   - You are securely seated in the operator's seat.
   - The parking brake is locked.
   - The directional control pedal is in neutral.
   - The throttle is in idle. (For 62IC models)
   - Hydraulic controls are in OFF position.

2. During operation:

   - Keep your hands and body clear of moving parts, especially when the hopper or lift arms are partially or fully raised.
   - Make sure others in the area stay clear of the equipment and moving parts.
   - Never attempt to dump debris from a dock or mezzanine. Dump from ground level only.

3. When leaving the sweeper unattended:

   - Place the controls in OFF position.
   - Set the parking brake.
   - Shut off the machine.

4. During cleaning and maintenance:

   - Always shut off all power and set the parking brake before servicing.
   - Never use detergents or cleansers that are flammable or combustible.
   - Never inflate a pneumatic tire without using a safety cage.
   - Do not attempt any impeller adjustment unless you have turned off the machine. Never place your hands near the intake hoses or inlet when the engine is running (on 62IC models).
   - Always engage the safety arm before getting under the hopper. Do not rely on the hydraulic cylinder to keep the hopper raised.
   - Never test for hydraulic hose leaks using your hand or any other part of your body. High pressure leaks can be very dangerous and should only be checked using a piece of paper.

5. When servicing or repairing the fuel system (on 62IC models):

   - Work in a properly ventilated area, do not smoke, or allow an open flame near the fuel system.
   - Never bypass safety components unless you are testing them.
   - Never bypass the fuel filter lock, except when testing them (and always reconnect them after testing).
   - Wear gloves to disconnect the tank coupling.

6. (on 62 IC models) Do not operate an LPG powered sweeper when any component in the fuel system is malfunctioning or leaking.

7. Replace any defective safety components before operating the sweeper.

**⚠ CAUTION**

1. Do not drive with the hopper in the raised position except the few feet necessary to position the hopper over the dumpster or receptacle. Driving with the hopper raised reduces visibility and creates conditions for striking overhead objects, throwing the machine off-balance, and other hazards.

2. Travel slowly on grades.

3. Place a block or chock behind the wheels when parking on inclines.

4. Use special care when traveling on wet surfaces.

5. Observe all proper procedures for operation and maintenance of the sweeper, as outlined in this manual.

6. Remain alert at all times to people and equipment in and around your area of operation.

**ATTENTION !**

1. Do not operate the #2 RTR lever before the #1 light illuminates.

2. Never push or tow a machine faster than specified.

# SW/62E

| | |
|---|---|
| Motors/Batteries | 1.9 HP (1.43 kw) accessory motor powers brushes, vacuum fan and hopper lift. 1.2 HP (0.9 kw) propels motor. 36-volt system. 295 AH and 440 AH heavy-duty batteries are optional. |
| Frame | Unitized steel frame with 1.5-inch (38 mm) x 5-inch (127 mm) box section reinforcement. |
| Drives | Direct drive of rear wheel through gearbox by electric motor with solid state speed control. Variable speed to 6 mph (10 kmh). Main brush and vacuum fan are belt-driven. |
| Steering | Standard automotive recirculating ball type through rear wheel. |
| Turning Radius | Left Hand - 59.50-inches (234.25 mm).<br>Right Hand - 77.00-inches (303.15 mm).<br>U-Turn - 92.38-inches (363.70 mm). |
| Sweep Path | 48-inch (1200 mm) Sweep Path Including Side Brush |
| Sweeping Coverage | 126,700 sq. ft. (11,400 $m^2$) per hour based on a 48-inch (1200 mm) path at 6 mph (10 kmh) with 6-inch (152 mm) overlap. At typical sweeping speed of 4 mph (6 kmh) with 6-inch (152 mm) overlap, covers up to 74,000 sq. ft. (6800 $m^2$) per hour. |
| Sweeping Brushes | Main Broom: 14-inch (356 mm) diameter, 36-inch (914 mm) length. Cylindrical, one-piece plastic core disposable runs at constant RPM. Five minute broom change. Raised and lowered from operator compartment. Floats for uneven surfaces. Adjustment for pressure, wear.<br><br>Side Brush: 17-inch dia. (432 mm) rotary, one-piece disposable. Quick-change in seconds. No tools required. Bumper protected. Features retractable housing that swings away from obstructions. Adjustment for angle, pressure and wear. |

# SW/62E (CONT.)

| | |
|---|---|
| Vacuum System | Fully enclosed, positive sealed, reusable panel filter. 50 sq. ft. (4.65 $m^2$) of filtering area. High-volume, low-pressure 9-inch (229 mm) dia. impeller provides constant air flow. Filter cleaned with electric shaker. |
| Debris Hopper | 10 cu. ft. (.2831 $m^3$); holds up to 650-lbs. (295 kg). Multi-level hydraulic high-dump up to 60-inches (1524 mm). Features RTR™ (Rotary Trash Relocator) as standard item. Also features Remote (operates from driver's seat) Wet Sweep By Pass as standard item. |
| Controls | Operator controls all functions of sweeping and debris disposal while seated. Instant forward, reverse and braking using one pedal. Foot and hand lever activated emergency/parking brake. |
| Tires | Front - Two 18-inch (457 mm) Solid or non-marking solid.<br>Rear - One 16-inch (406 mm) Solid or non-marking solid. |
| Weight | Net: 2330-lbs. (1057 kg) with 295 AH batteries/2500-lbs. (1134 kg) with 440 AH heavy-duty batteries. Add 250-lbs. (114 kg) for shipping weight. All approximate. |
| Dimensions | Machine:<br>Length - 77.5-inches (1968 mm).<br>Width - 48-inches (1219 mm).<br>Height - 53-inches (1345 mm).<br>83-inches (2108 mm) with overhead guard/cab.<br><br>Battery Compartment:<br>(Two battery compartments of equal size)<br>Length - 19.75-inches (77.75 mm).<br>Width - 12.06-inches (47.48 mm).<br>Height - 23.06-inches (90.79 mm).<br>**Note - Height measurement denotes maximum height of battery case that can be used with machine.* |

# SW/62 IC

| | |
|---|---|
| Engine | Kubota 24.5 HP (18.2 kw), 3 Cyl Liquid-Cooled Gasoline<br>Kubota 22 HP (16.4 kw), 3 Cyl Liquid-Cooled LPG<br>Kubota 20 HP (14.9 kw), 3 Cylinder Liquid-Cooled Diesel<br>8-gallon (30 liter) Gas Tank. Electric Start / 12-volt Battery.<br>40 Amp Alternator Standard. |
| Frame | Unitized steel frame with 1.5-inch (38 mm) X 5-inch (127 mm) box section reinforcement. Heavy-duty, shock-mounted steel wraparound bumper. |
| Drives | Hydraulically-driven through Rear Wheel.<br>Variable Speeds to 6 MPH (9.66 kmh). Main Broom, Side Broom, Hopper Dump and Vacuum Impeller are Hydraulically Driven. |
| Steering | Standard automotive recirculating ball-type through rear wheel. |
| Turning Radius | Left Hand - 58 inches (1471 mm)<br>Right Hand - 56 inches (1421 mm)<br>"U" Turn - 110.5 inches (2804 mm) |
| Sweep Path | 53" (1345 mm) Sweep Path Including Side Brush |
| Sweep Coverage | 124,080 Sq. Ft. (11,527 $m^2$) Per Hour based on a 53-inch Path at 6 MPH (9.66 kmh) with 6-inch (152 mm) overlap. At typical sweeping speed of 4 mph (6 kmh) with 6-inch (152 mm) overlap, covers up to 82,720 Sq. Ft. (7,685 $m^2$) per hour. |
| Sweeping Brooms | Main Broom: 14-inch (355 mm) diameter, 36-inch (914 mm) length. Cylindrical, one-piece plastic core disposable runs at constant RPM. Five minute broom change. Raised and lowered from operator compartment. Floats for uneven surfaces. Adjustable for pressure and wear. |

# SW/62 IC (CONT.)

| | |
|---|---|
| | Side Broom: 24-inch dia. (610 mm) rotary, one-piece disposable. Quick-change in seconds. No tools required. Bumper protected. Features retractable housing that swings away from obstructions. Adjustment for pressure and wear. |
| Vacuum System | Fully-enclosed, positive-sealed, reusable panel filter. 92 Sq. Ft. (8.56 $m^2$) of filtering area. Filter cleaned with standard electric shaker motor. High-volume, low-pressure 9-inch (228 mm) dia. impeller provides constant air flow. Wet-sweep Bypass feature is standard. |
| Debris Hopper | 10 Cu. Ft. (0.28 $m^3$) holds up to 650 lbs. (295 kg) multi-level high dump up to 60-inches (1523 mm). Features RTR™/ Rotary Trash Relocator system. |
| Controls/Accessories | Operator controls all functions of sweeping and debris disposal while seated. Instant forward and reverse using one pedal. Foot pedal travel brake. Hand-activated emergency/parking brake. Head- and tail-lights. Horn button. |
| Instruments | Fuel gauge, hour meter, high engine temperature indicator light, low engine oil pressure indicator light and battery charge indicator light. RTR®/Rotary Trash Relocator indicator lights. |
| Tires | Front -Two 18-inch (457 mm) Pneumatic, solid, or soft shoe<br>Rear - One 16-inch (406 mm) Pneumatic, solid, or soft shoe |
| Weight | Net - 2,550 Lbs. (1159 kg).<br>Shipping - 2,950 Lbs. (1340 kg).<br>All approximate. |
| Dimensions | Length - 77.5-inches (1967 mm)<br>Width - 53-inches (1345 mm)<br>Height - 53-inches (1345 mm)<br>79.5-inches (2018 mm) with overhead guard |

# COMPONENTS

**THE AIR INTAKE SYSTEM**

(For 62 IC models) Engines are equipped with a dry cartridge type air filter with a rubber dust cup in the housing. The filters are accessible for easy removal and cleaning.

All engines have tangential inlet air filters.

**THE ELECTRICAL SYSTEM**

Circuit Breakers

There are five circuit breakers located to the left of the driver.

(For 62E)

1. Ignition Switch, Safety Switch on Clip, Main Contactor Inside Control Box
2. Battery Condition/ Hourmeter, Horn
3. Filter Shaker Motor
4. Headlights, Taillights
5. RTR™ Indicators

(For 62IC)

1. Headlights
2. Curb Broom, Horn, Filter Shaker
3. RTR™ indicators, Fuel Gauge, Hourmeter
4. Oil Pressure Indicator, Water Temperature Indicator, Charge Indicator
5. Main (Ignition Switch - Battery, Starter - Battery)

**THE FUEL SYSTEM (For 62IC Models)**

Gasoline

Major fuel system components for gasoline-fueled engines are:

- fuel tank
- fuel filter
- mechanical fuel pump
- carburetor
- manually operated carburetor choke

Liquid Propane Gas (LPG)

Major fuel system components for LPG-fueled engines are:

- fuel tank
- pressure relief valve/fuel filter
- vacuum lock-off valve
- combination water heated vaporizer and primary regulator
- combination carburetor and secondary regulator

| | |
|---|---|
| Diesel | Major fuel system components for diesel-fueled engines are:<br><br>• fuel tank<br>• fuel water trap<br>• fuel filter<br>• fuel lift pump<br>• fuel injection pump<br>• fuel injectors |
| **THE COOLANT SYSTEM (For 62IC)** | *Radiator Capacity:* Gas/LPG :1.2 qts, US, Diesel: 1.9 qts, US ; *Total System Capacity:* Gas/LPG: 2.5 qts.,US, Diesel: 3.25 qts, US circulates through hoses and engine block which bring the total system capacity to 3.25 quarts.<br><br>A spring-loaded valve in the radiator pressure cap, designed to open at 13 psi, closes the outlet to the overflow pipe. |
| **THE LUBRICATION SYSTEM** | Grease fittings supply lubrication to:<br><br>• steering cylinder pivot points<br>• steering fork assembly<br>• pillow blocks supporting dump arms (on 62IC) |
| **THE HYDRAULICS SYSTEM** | Hydraulic fluid is pumped from a one-gallon capacity reservoir (62E) and a six-gallon capacity reservoir (62IC).<br>The fluid passes through a 100 mesh suction strainer into supply lines which circulate fluid through two systems: the propulsion system and the accessory system. In the 62E, the hydraulic pump is controlled by an electric auxiliary drive motor and is activated with an auxiliary power switch located on the operator's console.<br><br>Fluid returns through a heat exchanger and a filter equipped with a condition gauge. |
| Propelling System | For the 62E, the major component of the propelling system is a potentiometer. The potentiometer regulates fluid to drive the wheel motor which controls the forward and reverse speed of the machine, as well as dynamic braking.<br>For the 62IC, the major component of the propelling system is a variable displacement piston pump protected by relief valves. |

| | |
|---|---|
| Accessories System | The major component of the accessories system is, for the 62E, a belt-driven pump, and for the 62IC, a gear pump. Both of these pumps, protected by a relief valve, send fluid through a control valve to raise and lower hopper, to rotate hopper, and to drive brooms, brushes, and other accessories in their respective machines.<br><br>Brooms are driven by hydraulic, high torque, low speed motors. |
| **THE VACUUM SYSTEM** | The vacuum system consists of a hydraulically-driven impeller (in the 62IC), and a belt-driven impeller (in the 62E), connected to a damper type hopper vacuum shut-off. |
| Filters and Shakers | SW/62E models have one fully enclosed, positive sealed, quick-change filter providing 50 sq. ft. (4.65 $m^2$) of filtering area and one electric shaker for cleaning the filter. The SW/62IC has one filter providing 92 sq. ft . (8.56 $m^2$). |
| **HOPPERS** | |
| Rotary Trash Relocator™ | The rotary trash relocator (RTR™) on high dump models increases the debris-holding capacity of the hopper, extending the sweeping time before dumping. By rotating the hopper about halfway through the dump rotation, the debris at the lip of the hopper moves to the front wall, leaving the entrance area clear to receive and hold more debris. |
| **BRAKES AND TIRES** | |
| Brakes | All models have drum brakes with a hand lever activated mechanical parking brake. |
| Tires | Front - (62IC) Two 18" pneumatic, solid, or soft shoe. (62E) Two 18" solid, or non-marking solid.<br>Rear - (62IC) One 16" pneumatic, solid, or soft shoe. (62E) One 16" solid, or non-marking solid. |

# BASIC OPERATING CONTROLS

**IGNITION SWITCH** The one position keyswitch is used to turn the machine's power on and off.

**STARTER (62IC)** To start gasoline powered machines, turn the key to ON position and press START button. When engine starts, release button. To stop engine, turn key to OFF. To start diesel powered machines, turn key to rear position (counter-clockwise) and hold for 5 to 10 seconds to heat glow plugs. Then, turn key to START position. When engine starts, release switch. To stop engine, turn key to OFF.

**HORN** The horn is activated by pressing the horn button located tothe left of the driver.

**FUEL LEVEL GAUGE (62IC)** The fuel gauge indicates the amount of fuel remaining in the tank.

**CHARGE LIGHT** The charge light indicates a discharge of current being used by the sweeper when the alternator is not charging.

**HOUR METER** The hour meter records the number of hours the machine has been operated, providing a helpful guide for performing routine maintenance tasks.

**ENGINE CHOKE KNOB (62IC)** The choke knob on gasoline-powered machines is connected to a cable which controls the engine choke.

- Pull the knob out for aid in cold-starting the engine.
- Push the knob in after the engine starts.

**ENGINE OIL PRESSURE (62IC)** The engine oil pressure gauge ranges from 0 psi to 60 psi. A reading below 6 psi indicates problems which may result in damage to the engine.

**ENGINE TEMP. LIGHT (62IC)** The engine coolant temperature light is activated when the temperature of engine coolant goes above 230° F. Temperatures above 230° F indicate an overheating engine.

**FILTER SHAKER** The filter shaker button activates the filter shaker motor prior to dumping or as needed during normal sweeping.

**AUXILIARY POWER (62E)** The auxiliary power switch turns the auxiliary drive motor on/off, and controls the hydraulic pump, main broom, and the impeller.

**THROTTLE (62IC)** The throttle adjusts the engine speed from idle to the operating speed.

- The throttle should be in the IDLE position when starting the engine and immediately before shutdown.
- Full throttle position should be used during operation to ensure proper broom speed and dust control.

**DIRECTIONAL CONTROL PEDAL** The directional control pedal controls the speed and direction of the machine. It is also used for slowing the machine or stopping.

- To propel the machine forward, apply pressure to the front of the pedal, increasing pressure to increase speed.
- To propel the machine backward, apply pressure to the rear of the pedal.
- To slow or stop the machine, move foot pedal into neutral.
- For emergency stops move foot pedal past neutral into opposite position. ***(Use for emergency stops only! Constant use of this braking method may result in damage to drive components.)***

⚠ CAUTION

**PARKING BRAKE** The hydraulic drum brakes on the two front wheels are operated by pressing on the brake pedal. The parking brake is cable activated. To engage the parking brake pull upward on the hand brake lever located on the left side of the front wall of the operator's compartment.

# SWEEPING CONTROLS

**BROOM CONTROL LEVER** The broom control lever activates the brooms. ("Side Broom ON" position activates the side broom.)

NOTE **Note:** The main broom and side broom may be lowered independently

NOTE **Note:** The "OFF" position is achieved by placing the broom control lever in the center of the slot. Both broom motors (main & side) are de-activated by taking this action.

**MAIN BROOM HANDLE** The main broom handle to the immediate left of the driver raises and lowers the main broom. For normal sweeping, position the handle at LOWER on the handle slot.

NOTE
- When not sweeping, position and lock handle at RAISE position on the handle slot.

**SIDE BROOM HANDLE** The side broom handle to the immediate left of the driver raises and lowers the side broom.

- When not sweeping, the side broom should remain in the RAISE position.
- To lower the side broom, position the handle at LOWER in the handle slot.

# DEBRIS HOPPER CONTROLS

**HOPPER FILTER SHAKER BUTTON**

This button is used to activate the filter shaker prior to dumping or as needed during sweeping operation. It is located to the left of the driver and beside the horn button.

To shake filter:

1. Bring the machine to a complete stop.
2. For 62E, press the "AUX. POWER" switch to turn the brooms off. For 62IC, place the broom control lever in the OFF position.
3. Press and hold the filter shaker button for 20 to 30 seconds.
4. For 62E, press the "AUX. POWER" switch to turn brooms on and resume sweeping. For 62IC, place the broom control lever in the ON position and resume sweeping.

⚠ CAUTION

***Do not leave the hopper in RAISE position for an extended period of time.***

**HIGH DUMP MODELS**

The two levers directly in front of the RTR™ lights are used to raise the hopper to any height up to 60" (1.52 m) and dump it.

NOTE

**Note:** Levers are spring loaded to a center off position.

- To raise the hopper, pull back Lever 1 to the RAISE position and hold until the hopper raises to the proper height for the dumpster or container.
- To empty debris, pull back Lever 2 to the DUMP position to rotate the hopper forward and empty the debris.
- To rotate the hopper back, push Lever 2 forward to the RETURN position until the hopper rotates and stops.
- To lower the hopper, push Lever 1 forward to the LOWER position until the hopper stops.
- For 62E, to turn on vacuum & hydraulics, turn on "AUX. POWER" switch.

**ROTARY TRASH RELOCATOR (RTR™)**

Rotary Trash Relocator (RTR™) is standard on high-dump models. Its purpose is to increase the holding capacity of the debris hopper to make dumping the hopper necessary less frequently.

# OPERATING PROCEDURES

**PRE-OPERATION CHECKS**

Prior to starting the engine, check the following:

- (62IC) Engine oil level
- (62IC) Engine coolant level
- (62IC) Fuel level
- (62E) Battery condition
- Hydraulic fluid level
- Brakes, steering, and directional controls
- The floor beneath the machine for signs of fluid leaks

Fluid levels should be correct. Brakes, steering, and directional controls should be functioning properly. Hoses, lines, and tanks should be free of damage and leaks.

**STARTING**

**⚠ WARNING** ***Before turning the machine on, seat yourself in the operator's seat and make sure the parking brake is locked.***

1. Make sure the directional control pedal is in neutral position.

2. For 62IC, make sure the throttle is in idle position.

3. **Electric:** Turn ignition key to START position.
   **Gasoline-powered:** Turn ignition key to START position, push button located just below key. When engine starts, release button. If the engine is cold, pull out the choke knob and repeat procedure. When engine is running smoothly, push choke knob in.

**NOTE**

**Note:** If the engine fails to start, do not continue cranking for more than ten seconds. Allow the starter motor to cool between attempts.

4. Move the machine forward or backward as follows:

   - **Forward:** Apply pressure to the front of the directional control pedal, increasing pressure to increase speed.
   - **Reverse:** Apply pressure to the rear of the pedal, increasing pressure to increase speed.

**SLOWING AND STOPPING**

1. Allow the directional control pedal to move into neutral. The machine will slow and coast to a stop.

**OPERATING ON GRADES**

1. Always travel slowly.
2. Exercise extreme caution when traveling across or turning on grades.

**SWEEPING**

1. Lower the brooms.
   - Lower the side broom by positioning the side broom handle at LOWER in the handle slot.
   - Lower the main broom by positioning the main broom handle at LOWER on the handle slot.
2. Activate the broom motors.
   - To activate the main broom motor only: On the 62E, press the "AUX. POWER" switch to turn on the vacuum and hydraulics. On the 62IC, push the Hopper Raise/Lower lever to the "BROOMS ON" position. (Be sure that the Side Broom On/Off switch is in the "OFF" position.
   - To activate both main and side broom motors: On the 62E, press the "AUX. POWER" switch to turn on the vacuum & hydraulics. Push the Hopper Raise/Lower lever to the "SIDE BROOM ON" position. On the 62IC, push the Hopper Raise/Lower lever to the "BROOMS ON" position, then activate the Side Broom ON/OFF Switch.
3. Drive the machine over the area to be swept.

## EMPTYING THE HOPPER

**High Dump Models**

1. Drive the machine to the dumping area.

2. Use the directional control pedal to position the machine so that the space between the machine and the container or dumpster is adequate to raise the hopper.

NOTE

**Note:** Broom controls must be in OFF positions.

3. For 62E, be sure that "AUX. POWER" switch is on. For 62IC, reduce the engine speed.
4. Pull back Lever 1 to RAISE position and hold until the bottom of the hopper is high enough to clear the top of the container.

⚠ WARNING

***Never place your hands or other body parts near the lift arms when the hopper is operating.***

5. Use the directional control pedal to slowly and carefully move the machine forward until the hopper is properly positioned to dump debris into the container.

⚠ CAUTION

***It is unsafe to travel an extended distance with the hopper raised. Travel only the distance necessary to position the hopper.***

6. At this point, shake filters for 20 - 30 seconds. Pull back Lever 2 to DUMP position to rotate the hopper forward and empty the debris.

7. After hopper empties, push Lever 2 forward to RETURN position until the hopper rotates and stops.
8. Slowly back machine away from dumpster approximately 5 feet.
9. Push Lever 1 forward to the LOWER position until the hopper stops.

PowerBoss®

*"The Power of Clean"*

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