



Maintenance

Stationary Trash Compactor

Models S-V2, S-V2S, S-V3, S-V3S
Manufactured by
Summit Equipment, Inc.

S-V 100331



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INTRODUCTION

The purpose of this manual is to provide you with the information necessary to use your compactor, and to perform routine maintenance and trouble-shooting. Years of experience are behind the design and construction of the compactor's structure and hydraulic and electrical systems, making your Summit compactor one of the most reliable units available.

Following the guidelines presented in this manual will help ensure that you get many years of performance out of your compactor with a minimum of downtime.

Detailed drawings of the construction and design of the compactor are not included in this manual. If you need service or repair that is not covered in this manual, please contact a competent repair service or the factory. Never modify your compactor without consultation with the factory, or you will risk compromising safety and/or performance.

Safety is one of our biggest concerns at Summit. We have built your compactor in compliance with current safety standards. However, no safety features will protect an operator who is untrained or is unwilling to follow safe operating instructions.

Safety and training are ultimately the responsibility of the owner of the compactor. Please be sure that no one ever operates the compactor without first reading this manual completely and carefully. Strict adherence to safety requirements will help ensure the safety of operators and the life and performance of the compactor.



INSTALLATION INSTRUCTIONS

1

IMPORTANT SAFETY INSTRUCTIONS

Your Summit Equipment, Inc waste compactor was designed and manufactured to provide years of reliable performance. *However, if you do not install it correctly, you may compromise operation, durability, or safety, or you may cause damage or failure that would not be covered by warranty.*

The owner of this equipment is responsible to ensure it is installed according to the following instructions, and according to all codes and requirements in effect at the site of installation.

MECHANICAL INSTALLATION

For safety and serviceability, install the equipment with as much clear workspace around it as is practical. When installing the equipment near walls, docks, bollards, roof overhangs, or other such surfaces or fixtures, avoid locating the equipment so that its access panels cannot be opened or removed in the event cleaning, maintenance, or service is required.

If the equipment will be lifted and/or removed from the site for emptying, ensure that it is installed with sufficient clearance to allow removal contractors to lift and remove the equipment safely.

The compactor should be installed by anchoring it or its location guides on a solid surface such as a minimum 4" thickness of 3000 PSI concrete reinforced with either #2 rebar on 2' centers or 6" mesh. If the mounting surface is asphalt, mount the compactor or its location guides to steel rails embedded in the paving or to other solid mounting accepted by local codes.

(Installation Instructions, continued)

ELECTRICAL INSTALLATION

The enclosure of the electrical panel is fabricated to carry a NEMA 4 rating. The factory fabricated the electrical panel to operate with the supply voltage marked on the factory data tag. Use only locally-qualified electricians or electrical contractors to open or perform work on the enclosure in order to bring the correct incoming electrical power to the electrical panel. Do not penetrate the electrical enclosure with anything other than an entrance fitting/assembly that will maintain the NEMA 4 rating of the enclosure.

In the event site conditions require connecting the equipment and its electrical panel to incoming electrical power other than what is marked on the factory data tag, notify the factory, and obtain instructions and a corrected data tag from the factory.

DANGER!

Only qualified electricians should open the electrical enclosure of this equipment. Contact with the electrical power required to operate this equipment can cause injury and even death.

GROUNDING INSTRUCTIONS

This equipment must be connected to a grounded, metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.

SAVE THESE INSTRUCTIONS



SAFETY GUIDELINES

2

!! IMPORTANT !!

Safety is your responsibility

The parts of your Summit Equipment, Inc. compactor are moving with forces measured in 10's of tons. Safety warnings are labeled on the compactor, and it is provided with required safety guards and interlocks to prevent inadvertent injury. However, the best safety protection is strict adherence to safe practices as set forth in these guidelines and by those who are responsible for managing the compactor.

Our publication of these safety guidelines does not guarantee or imply that there are no other safety precautions that are wise or required in your particular installation. Safety requirements vary from area to area, and they are continually changing. Therefore, it is the responsibility of ownership and management to ensure that the use of the compactor is in compliance with all applicable safety standards, rules, and regulations.

Your Summit compactor has been labeled at the factory with decals covering basic operational and safety instructions. Your local codes may require additional decals or labels.

(Safety Guidelines, continued)

In all installations, especially those where the compactor is used in a system with other equipment, it is the responsibility of ownership and management to ensure that:

- all required decals and labels are in place and legible
- the compactor and all of its safety devices are operating properly
- no one operates the compactor until they have read completely through this manual and have been thoroughly instructed in the operation, safety requirements, capacities, and limitations of the compactor.

The owner of this compactor is responsible for the training of all of its operators, and for the proper maintenance of the equipment and its labels and safety devices.

American National Standards Institute periodically affirms a Standard for the design, manufacture, installation, and operation of compactors. Compliance with the Standard is voluntary. Summit Equipment, Inc. complies insofar as it is able to in the design and manufacture of the compactor, and recommends that employers / owners of compactors comply with ANSI Z245.2-1997, section 6.1, as paraphrased and summarized in the following items:

- Make sure that the installation of the compactor is in compliance with any applicable local codes or regulations, and is in accordance with the recommendations of the manufacturer.

- Give complete training to employees before allowing them to operate, clean, or work on the compactor, including training in procedures recommended by the manufacturer. Keep records including the names of employees and the respective dates of their training.
- Monitor the employees who operate the compactor and take whatever action is necessary to be sure they are using it correctly and following safe practices.
- Repair any malfunctions that affect safe operation of the compactor before allowing anyone to operate it.
- Establish and follow a regular inspection program to be sure that all aspects of the compactor are in safe operating condition and adjusted properly. Keep records of all inspections, malfunctions, and repairs.
- Protect workers, either by:
 - a. installing a guard or barrier with a height of at least 42” above where employees stand when near the compactor to prevent entrance into the load chamber, and to prevent personnel from being caught in the path of the moving parts of the compactor, making sure the guard or barrier does not itself create a danger point and that the compactor cannot be operated if the guard or barrier is disabled, bypassed, or removed; or by
 - b. locating constant-pressure-required controls in a location from which the operator will not reach the path of a moving part but will still be able to observe the operation of the moving part.

- If the compactor will be loaded by an in-floor (pit) conveyor, moving floor, or any surface at or below the level of the floor on which employees walk, provide protection for employees by limiting access within six feet (6') of the edge of a pit only to authorized employees, train employees to know and avoid the hazards related to the loading area, require that any other companies whose employees use the pit provide evidence of equivalent training, limit access with signs such as “RESTRICTED AREA: AUTHORIZED EMPLOYEES ONLY”, and provide some kind of device to prevent vehicles from rolling into the pit.
- Prevent the use of compactors that cycle automatically unless the loading chamber is not accessible whenever the compactor cycles.
- Provide guard railings at least 42” high and toeboards around raised platforms or ramps to be used by employees for loading.
- Use the manufacturer’s recommendations when shutting down the compactor and locking out power (OSHA 29 CFR 1910.147, Appendix A recommends procedures for locking out power).
- Provide a work area around the compactor that is sufficient for safe maintenance and cleaning.
- Keep walking areas around the compactor clean and unobstructed.
- Inspect safety devices, interlocks, switches, and guards to be sure they are not disabled, bypassed, or inoperative, and do not allow the compactor to be operated until all safety devices operate as designed.
- Make sure that no compaction containers are used unless they can withstand the maximum forces produced by the compaction system.
- Make sure that only authorized employees 18 years or older operate, inspect, or work on the compactor.

Summit Equipment, Inc. also recommends employees who work with compactors comply with ANSI Z245.2-1997, section 6.2, as paraphrased and summarized in the following items:

- Use all the safety features and devices provided with the compactor.
- Do not operate a compactor until you are fully trained.
- Report any damage or malfunction of the compactor immediately to your employer or the individual responsible for the compactor.
- Make sure that all access doors and service covers are secured and / or locked before you begin operation.
- Be sure the area around any container lifting device and the container to be lifted is clear of personnel during all stages of using the dumping system.
- Make sure all personnel are clear of any moving parts of the compactor before operating the compactor or a dumper, and remain at the controls ready to stop operation if necessary.
- Make sure all personnel are clear of the hydraulic door (if so equipped) before it is opened or closed, and warn all personnel not to pass under or behind the door.
- Use the compaction equipment only according to this Standard and the instructions of the manufacturer, including making sure of the proper functioning of all guards, barriers, and safety devices.
- Make sure that safety interlocks or switches or other safety devices are not disabled, bypassed, or nonfunctional, and that the compactor is not operated unless such devices are working properly.

(Safety Guidelines, general, continued)

- Lock out power to the compactor whenever inspecting or working on it in a way that might expose you to moving parts. Be able to identify the type and amount of power the compactor uses, understand the potential dangers, and know how to control the power.
- Attached containers to the compactor as specified by the manufacturer.
- Do not operate the compaction system, or work on it, unless you are 18 years old or older and have been fully trained as called for in the Standard.

(The full text of the ANSI Z245.2-1997 standard is available by contacting the American National Standards Institute, 11 W. 42nd St., New York, NY 10036, tel (212) 642-4900, fax (212) 398-0023.)

Do not perform service or maintenance on the compactor or remove any of its covers or panels until you are sure none of its parts can move, even inadvertently.

Before doing any work on the compactor, use its key to switch it to its “OFF” position, keep the key with you, and disable the compactor as follows:

DISABLING the EQUIPMENT

Disconnect power to the equipment at the master disconnect by switching it to its “OFF” position. Lock the switch in its “OFF” position with a lock for which only you have a key, and keep the key(s) with you.

Each individual working on the equipment must put their own lock on the master power disconnect to prevent the power from being switched back on by someone else when they are finished with their part of the work.

(Safety Guidelines, general, continued)

Even after the electrical power is removed, remove residual hydraulic pressure before getting in the path of any moving parts or disconnecting any hoses or connections.

Never work or reach inside of guards unless the compactor is **completely disabled, as set forth above.**

Even when the compactor is “OFF”, remember that it works by highly pressurized hydraulic fluid, and that hydraulic systems can retain pressure after electrical power is removed. Therefore, slowly bleed away any residual hydraulic pressure that may remain in the lines before removing covers or entering any part of the compactor or getting in the path of moving parts, and before disconnecting any hydraulic lines or fittings.

Hydraulic oil is extremely slippery. Never remove any hydraulic lines or fittings until you have a generous supply of “floor-dry” available to maintain a clean, dry floor area. If there are leaks in the hydraulic system, immediately correct them and clean up any spilled oil.

Hydraulic oil also can operate at high temperatures. Be careful of contact with hoses, fittings, and other hydraulic components.

Always wear any safety equipment specified by the management responsible for the compactor.

Never enter the feed opening or get in the path of the moving parts.

Always report any malfunction or need for service, maintenance, or repair to the management or supervisory personnel responsible for the compactor. Never operate the compactor with malfunctions, or when it is in need of service, maintenance, or repairs.

Never restore operating power to the compactor until all guards and covers have been reinstalled and secured.

ROUTINE PREVENTIVE MAINTENANCE

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Your Summit Equipment, Inc. compactor was engineered to provide years of trouble-free performance as long as routine basic maintenance is performed on a regular basis. A small investment in routine maintenance will yield a large return in equipment longevity. It is the responsibility of the owner or manager of the compactor to ensure that it is properly maintained, and that competent personnel are trained in accordance with the manufacturer's recommendations.

Do not perform any service without reading and following the Safety Guidelines set forth in this manual.

SAFETY

Do not perform service or maintenance work on the compactor until you to ensure that all safety requirements are met (see "Safety Guidelines", Chapter 2, above, in this manual).

OPERATION SITE

A cramped installation makes problems far more likely. Provide enough work area around the compactor so that it is as safe and convenient as possible to operate the compactor, and to perform routine maintenance and cleaning procedures.



CLEANLINESS

Many compactor installations are dirty or dusty. The compactor and its surroundings should be kept as clean as the environment will reasonably allow.

Clean garbage, trash, or other spillage from in and around the compactor. Clean any trash that might have accumulated on top of the platen.

Check to ensure that there is no leakage under the compaction bin. The bin and the area around the compactor may benefit from either a pressure-washing or a steam-cleaning to maintain cleanliness.

Remove hydraulic oil spills or leakage immediately, and correct the cause of the problem.

HYDRAULICS

Hydraulic fluid is the life-blood of the system. At least 70% of all hydraulic system problems are hydraulic fluid problems. If you keep the fluid in good condition, you'll prevent most hydraulic trouble.

Make sure the fluid is visible at least half-way up the sight glass (if so equipped) or at the correct mark on the dipstick when the cylinders are in their fully retracted position. If fluid level drops, there is probably a leak, because fluid has nowhere to go unless there is a leak.

Vibration can loosen fittings and cause small leaks to develop. Inspect hydraulic lines, hoses, and fittings for leaks or wear. This will help prevent a small leak from growing into a large leak.

(Routine Preventative Maintenance, continued)

Use only approved hydraulic fluid, an AW-type at ISO 32 viscosity, or equivalent.

Contaminants in the hydraulic oil will greatly accelerate wear on expensive components of the hydraulic system (cylinder, pump, valves, etc.). Once per year or every 4,000 operating hours, whichever comes first, the reservoir (tank) air vent filter should be cleaned or replaced. In particularly dirty or windy environments, this cleaning should be more frequent. If the fluid is the color of motor oil or honey, it is probably suitable for continued use. If it is darkening, or is as dark as coffee, it has probably been overheated and should be replaced. Hydraulic fluid temperature should not regularly exceed 150°F.

MECHANICAL

Routine maintenance of mechanical parts of the compactor consists primarily of checking for breakage, lubrication, and tightness of fasteners.

Any time you are removing covers, or entering the compactor in a way that will expose you to moving parts, you must **disable the compactor as explained on page 2.6**. Check the fully-extended cylinder rods to ensure there are no nicks or scratches (these will wear on seal surfaces, causing leaks and possible contamination of the hydraulic fluid).

Inspect all screws, bolts, and other fasteners, particularly those associated with guards, switches, and other safety devices. Tighten or replace as necessary.

(Routine Preventative Maintenance, continued)

Inspect door hinges, ratchets, and latch mechanisms, and lubricate as necessary.

Lubricate and check the security of the pins on the cylinder clevis ends. Lubricate grease zerker fittings provided at xx.

ELECTRICAL

Vibration can loosen connections over time. Check to be sure that all panels and control boxes are properly covered and latched.

After disabling the compactor as explained on page 2.6, look inside of boxes and inspect starters, controllers, relays, terminal strips, and other mounted components, checking for loose connections or exposed wires that could create problems.

Make sure that all covers on limit switches, pressure switches, and solenoid valves are secure.

Inspect for frayed conduit or insulation, or exposed wires.

Inspect all limit switches to ensure they are mounted securely and aligned for proper operation.

INSPECTION AND MAINTENANCE RECORDS

Those who own and manage the operation of the compactor are responsible for establishing and maintaining a program of regular inspection and service, to ensure that all parts of the compactor continue to function as designed, to ensure that all safety devices remain in place and functional, and to ensure that safe practices are being followed. Records should be kept of all regular inspections and service or maintenance work performed on the compactor.

In addition to the specific inspection and maintenance areas mentioned above, there is another good habit found among those who traditionally get long life and performance out of their equipment. That habit involves a simple “walk-around” inspection. It is the recommendation of the factory that, on a regular basis, someone makes a careful walk-around inspection of the compactor and the power unit. This will alert you to potential problems early, before they become hazards to safety or to the performance and long life of the compactor.

TYPICAL ROUTINE MAINTENANCE PROCEDURE

I. Familiarization

Before beginning on the following checklist, ensure that you understand how the compactor is supposed to operate. The normal operating sequence of the compactor is as follows:

- A. Enter correct code in keypad (if so equipped), enabling the compactor controls for about 3 minutes.
- B. With load door closed and STOP button pulled out, press START button.
- C. If the controls get a signal from the top limit switch indicating that the compaction platen is correctly at its top position, the compactor will start and the compaction platen will descend.
- D. When the compaction platen reaches the bottom of its compaction stroke, it should trip the bottom limit switch, which will signal the controls to reverse direction. The compaction platen will then ascend to its top position, trip the top limit switch, and shut down. If there is still time left on the timer, pressing the START button will cause the compaction platen to begin another cycle.
- E. If the compaction platen descends and meets enough resistance from waste material that it cannot reach the bottom limit switch, hydraulic pressure will build until the hydraulic pressure switch signals the controls that the container bin is getting full and will shut the compactor off with the compaction platen in its down position.
- F. If the down-and-up cycle of the compaction platen is interrupted by pressing the STOP button, by opening the loading door, by the timer expiring, or by the pressure switch signaling that the bin is getting full, then the next time you enter the correct code in the keypad and start the compactor with the START button, the compaction platen will ascend to its top position, trip the top limit switch and shut down.

II. General Check-Up

- ❑ A. Perform a “walk-around” visual inspection inside and outside of the compactor and its site. Note any obvious problems, such as leaks, broken parts, loose hinges or fittings, spilled trash, etc. Note any needs for diagnosis or repair.
- ❑ B. Enter the correct code into the keypad and run the compactor for at least one cycle. Watch for smooth operation. Listen for any unusual sounds. Ensure that all parts of the cycle function correctly. Note any needs for diagnosis or repair. Note: The correct code entered into the keypad (if so equipped) allows operation of the compactor for a pre-set amount of time (enough time to ensure a cycle can completely finish). If the timer times out, you will not be able to operate the compactor until you re-enter the correct code in the keypad.

III. Safety Verification

- ❑ A. The compactor should not operate unless you first enter the correct code into the keypad (if so equipped). Without entering the code, press the START button, turn the Emergency Ram Control switch to both of its positions with the STOP button pushed in and with the STOP button pulled out. Nothing should make the compactor operate. ***DANGER! If the compactor will start and run without entering the correct code in the keypad, disable the compactor immediately as on page 2.6 of this manual, and do not restore it to service until you have diagnosed and repaired the problem.***

- ❑ B. When the loading door is open, the compactor should not operate. Open the loading door, enter the correct code into the keypad (if so equipped), and try to start the compactor. ***DANGER! If the compactor will start and run with the door open, disable the compactor immediately as on page 2.6 of this manual, and do not restore it to service until you have diagnosed and repaired the problem.***
- ❑ C. When the loading door is open, the compactor should not operate. With the door closed, enter the correct code into the keypad (if so equipped) and start the compactor. As it is running, open the door to ensure that the compactor immediately shuts down. ***DANGER! If the compactor does not immediately shut down when you open the feed door, disable the compactor immediately as on page 2.6 of this manual, and do not restore it to service until you have diagnosed and repaired the problem.***
- ❑ D. When the STOP button is pushed (when you push it “in,” it stays “in”), the compactor should not operate. Press the STOP button, enter the correct code into the keypad (if so equipped), and try to start the compactor. ***DANGER! If the compactor will start and run with the STOP button pushed in, disable the compactor immediately as on page 2.6 of this manual, and do not restore it to service until you have diagnosed and repaired the problem.***
- ❑ E. When the STOP button is pushed (when you push it “in,” it stays “in”), the compactor should immediately stop. Ensure the STOP button is pulled out, enter the correct code into the keypad (if so equipped), and start the compactor. As the compactor is running, push the STOP button in. ***DANGER! If the compactor will run with the STOP button pushed in, disable the compactor immediately as on page 2.6 of this manual, and do not restore it to service until you have diagnosed and repaired the problem.***

IV. Service

No individual should perform service work on the compactor unless he or she is qualified by his or her employer for service on electrical and hydraulic equipment. Improper service techniques, allowing contact with live electrical power or exposing body parts to moving parts of the equipment can result in injury and even death. Remember that even when the equipment is off, hydraulic lines may retain some pressure. Do not expose any body parts to the path of moving parts without suitable blocking devices. Before beginning, operate the compactor to ensure all cylinders are fully retracted.

- A. DISABLE the equipment as set forth on page 2.6 of this manual before entering the compactor or exposing yourself to either live electrical power or the path of moving parts. Insert appropriate blocking devices in the path of moving parts.
- B. Lubricate the grease zerk fittings provided at 3 points on each of the sliding shoes (supporting the compaction platen as it slides up and down). On the S-V2 and S-V3, there is one sliding shoe on each side of the compactor for a total of six grease zerks.. On the side-eject versions of the S-V2 and S-V3 (models in which the container bin ejects out the end instead of out the front under the loading door), there are four sliding shoe assemblies, one in each corner, for a total of 12 grease zerks.
- C. Cylinders are connected to the compactor with keepers composed of pins with hairpins, clips, or snap rings. Confirm they are mechanically sound and secure.

(Routine Preventative Maintenance, continued)

- D. Obtain access to the power unit components by removing the bolts holding the upper cabinet doors closed. With the cylinders fully retracted, confirm hydraulic fluid level. If level is low:
 - 1. Top off the reservoir with ISO 32 AW-type hydraulic fluid
 - 2. Search for leaks at hoses, fittings, and cylinder rods. The hydraulic system is closed, and if fluid level drops, it indicates a leak somewhere.
- E. Ensuring power is locked out according to the instructions on page 2.6 of this manual, open the electrical enclosure on the power unit. Check for loose wires or components. Obviously, if there are signs of excess heat (scorched wire coverings or components), tighten or service as needed.
- F. Once per year, clean the breather/filler cap on the reservoir.

V. Diagnosis & Repair

No individual should perform diagnosis or repair work on the compactor unless he or she is qualified by his or her employer for diagnosis and repair of electrical and hydraulic equipment. Improper diagnosis and repair techniques, allowing contact with live electrical power or exposing body parts to moving parts of the equipment can result in injury and even death. Remember that even when the equipment is off, hydraulic lines may retain some pressure. Do not expose any body parts to the path of moving parts without suitable blocking devices.

- A. If the compaction platen descends and does not return to its top position, but the compactor continues to run, confirm the compaction platen has reached the bottom limit switch. If it has, then locate and confirm proper function of the bottom limit switch. If the compaction

platen has not reached the bottom limit switch, then it may be that the container bin is full but the pressure switch is not sending its signal to the controls to shut the compactor off. Locate and confirm proper function of the pressure switch.

- B. If the compaction platen ascends to its top position but does not shut off, locate and confirm function of the top limit switch.
- C. If enabling the controls with the keypad (if so equipped) and pressing-and-releasing the START button causes the compactor to start and then immediately shut off, locate and confirm proper function of both the top and bottom limit switches. If, for example, both switches are activated at once, the compactor cannot operate. Check to see if one or the other of the switches is fouled, broken, missing its arm, or has come out of adjustment.
- D. If there is a whining or howling noise when the power unit runs, it may be air in the hydraulic lines. Normal running of the compactor for several strokes will usually cause the air to be purged from the system. If the noise persists, diagnose for other problems.
- E. If the motor runs but the pump does not, confirm proper connection of the pump to the motor via the coupler assembly.

NOTE: The service, diagnosis, and repair items covered in this manual are not exhaustive. If the routine suggestions contained herein do not resolve problems with the compactor, then contact competent service help for further diagnosis and repair. Do not attempt service or repair work beyond the scope of your training and experience.

A compaction system is composed of two basic units. One is the compactor (or compaction head) with its power unit. The other is a container. Compacting is accomplished as the hydraulic system moves the structural parts of the compactor, compressing more and more material into the container until the container needs to be emptied.

The system is designed so that when material is deposited into the load area, the compactor platen (or "ram") will push the material into the container. The effect is the same as you may achieve at home if you stomp down on the garbage in a can in order to fit more material in. The compaction takes place in the container as the powerful compaction head forces more and more material into the container.

Even though the container may appear full, more material may be forced into it with sufficient pressure. Depending on the type of material, your Summit compactor will put from 3 to 6 times as much material into the container as its capacity. A container with a capacity of 2 cubic yards of loose waste will hold 6 to 12 cubic yards of compacted waste. In other words, the "compaction ratio" of your Summit compactor can range from 3-to-one to 6-to-one, depending on the type of material.

"Stationary" compactors are designed to be fastened to the ground or floor. Containers are mechanically secured in position so stationary compactors can pack them full, and then they are released for emptying. Horizontal stationary compactors are used primarily where material leakage is not a problem (such as for dry waste). However, since your Summit vertical compactor uses a container with its opening on top, it offers the advantages of a self-contained compactor in situations where material leakage must be controlled (such as for liquid or granular waste).

Using the compactor is simple.

1. Ensure that the compaction container is in position.
2. Open the loading door and deposit material into the top opening of the compaction container.

(Compacting Process, continued)

3. Close the loading door.
4. Using the keypad as instructed in the CONTROL chapter below (if so equipped), enable the controls. Press and release the "START" button. The compactor's power unit will start, and the platen will travel down against the material before reversing itself to its uppermost position where the power unit will shut down. The compactor is now ready for its next load.
5. Load more material. When the loading area is full or when you have no more material, close the loading door and operate the compactor as in step 4 above.
6. Continue to load and cycle the compactor. Each time a cycle is completed, more and more material gets compressed into the compaction container. At some point, you will put in a load, cycle the compactor, and the platen will descend and then shut down without reversing to its uppermost position. This is your signal that it is time to empty the compaction container. (You will not harm the compactor by loading more material, but you will reach a point where no more material can be pushed into the container.)

NOTE: Before removing a compaction container for emptying, use the controls to move the platen to its uppermost position.

7. Once the compaction container has been emptied, you are ready to re-insert the container and continue from step 1 above.

Your compactor will be equipped with some or all of the following controls. Note the function of the controls that apply to your compactor so that you can obtain the best safety and performance possible.

Red, mushroom-headed "STOP" button. Depressing this button will immediately shut the compactor down, in any mode, and in any cycle. NOTE: When this button is pressed, it remains pressed. Twist to release it. The compactor cannot be restarted until the "STOP" button is released. If the compactor will not run, ensure that the "STOP" button is released before calling for service! Pressing this button also enables the "EMERGENCY RAM CONTROL" to function.

Optional Security Keypad. When the compactor is equipped with a digital keypad, the compactor controls will not function until the operator enters the correct 4-digit code (enter the 4 digits and then press *). When an acceptable code has been entered, the green LED light will indicate the compactor is ready for operation. It will remain ready for only a limited preset amount of time for security reasons. (See instructions below for using the keypad to set acceptable codes.)

Lighted "START" button. If the keypad's green LED indicator is lit, then pressing and releasing the "START" button will cause the compactor to start and complete one cycle all the way down and back up again, shutting off in its uppermost position. The light in the "START" button functions as a "Container Full Indicator." The compactor platen meets more and more resistance at the end of its downward stroke as more and more material is stuffed into the container. When the platen reaches its maximum pressure and cannot press any more material into the container, the compactor will shut down with the platen all the way down and this indicator will light as a signal that it is time to empty the container (raise the platen before removing the container for emptying).

(Controls, continued)

Emergency Ram Control. Your compactor is provided with a switch for the purpose of moving the compaction platen up or down manually. Since the "Emergency Ram Control" is intended for use in an emergency, it will not operate unless the "STOP" button is pressed and left in its "in" position. It will also not operate unless the green LED indicator on the keypad is lit, indicating that the controls are enabled. To move the platen down, use the "DOWN" function of the switch. To move the platen up, use the "UP" function of the switch. Twisting and releasing the "STOP" button disables this "Emergency Ram Control."

Loading gate safety interlock switch. Your compactor is provided with a switch providing immediate shutdown of the compactor when the loading gate is opened. The compactor will not operate with the gate open except with the "STOP" button pressed in and using the "Emergency Ram Control" as described above. In addition, if the compactor is running, it will immediately stop and shut down if the gate is opened. NOTE: If the compactor runs and does not immediately shut down when the gate is opened, or if it will start and run when the gate is open, DISABLE THE COMPACTOR IMMEDIATELY as instructed on page 2.6. Call for service to diagnose and repair the problem. Note that the switch or its mounting may be of a tamper-resistant design. Tampering will likely ruin it AND MAY DISABLE YOUR COMPACTOR and/or VOID YOUR WARRANTY. Damage to the compactor or faulty operation due to tampering with switches is NOT covered by the warranty.

Oil Pressure Gauge (optional). Your compactor may be equipped with an oil pressure gauge. Its purpose is to give a reading on the progress of filling the container. The compactor is designed to shut off as hydraulic pressure reaches approximately 1600 PSI, when the indicator will light to signal it is time to empty the container. Only experience with your specific material will teach you how much packing capacity is left and at what pressure emptying is required.

(Controls, continued)

Changing Keypad Codes. The keypad is shipped from Summit with a Master Code and a User Code. The User Code is 1948. Anyone possessing the Master Code can change both the Master Code and the User Code. The Master Code is available to the owner of the compactor from Summit Equipment, Inc., telephone (208) 773-3885; ask for Scott MacDonald.



BASIC TROUBLE SHOOTING

6

PROBLEM

POSSIBLE SOLUTIONS

Motor does not run

Your compactor may be equipped with safety interlocks on its door. Make sure they are closed and secured. Read this manual to ensure you are using controls properly. (Could the "STOP" button be pressed?) Ensure that power of the correct voltage is getting to the compactor. If the compactor won't run at installation, note that it was run at the factory, so the motor has been proven. Check circuit breakers or fuses, overload reset on the motor starter, loose relays or wires in the electrical boxes.

Motor runs, but the compactor doesn't

Check motor rotation. If the motor runs backward, so does the pump. If you confirm the motor is running, and the pump is turning, motor rotation is probably backward. If motor rotation is incorrect, competent service personnel should disable the compactor as on page 2.6, open the electrical panel, and (for 3-phase power) switch any two of the three incoming power connections (marked "L1", "L2", and "L3"), or (for single-phase power) switch the two incoming power connections (marked "L1" and "L2"). Reconnect power and confirm operation.

Compactor runs momentarily, shuts down; starter overloads must be reset.

Confirm that incoming voltage is correct. Loss of phase of incoming 3-phase power. Confirm correct thermal overload elements. Hydraulic pump failure. Serious fluid viscosity problems.

Chattering sound when starting

Confirm correct voltage. Component failure in control box.

PROBLEM

POSSIBLE SOLUTIONS

Compactor runs slow or sluggish

Confirm correct fluid type and level. Confirm
Confirm correct voltage. Check for hydraulic leaks.
Pump or cylinder or hydraulic flow problems; call for
competent service.

Hydraulic oil level is always low.

Inspect for leaks around hoses, fittings,
cylinder, or cylinder packing glands.

Some cycles or modes will not work right.

Inspect limit switches to confirm arms are not
bent or fouled by material. If this does not
cure the problem, call for competent service.

Material accumulates excessively atop ram.

Is waste material not bagged, or are bags
breaking to allow loose material to get atop
the compaction platen as it ascends?

Compactor does not shut down when "STOP" button or safety-switched door is activated.

DISABLE THE COMPACTOR IMMEDIATELY! as
set forth on page 2.6. Call service to repair
door switch or other control circuitry. **Never**
operate the compactor when any of its
safety features is not working.

As the platen moves, there is squealing

Check for material wedged between the
platen shoes and the case. See if noise is from air
in the hydraulic system. If fluid is correct, air will
eventually purge out of the system.

Compactor shuts down in bottom position but the container is not full.

Make sure the container is not full. Also be
sure there is no solid object jamming the ram
from traveling fully downward. Check the
operation of the bottom limit switch. Make
sure the "STOP" button is not depressed.

Basic Warranty Provisions

7

or “Things You Should Be Careful About”

Summit's Limited Warranty is intended to protect the original purchaser of equipment manufactured by Summit Equipment, Inc. from defects in materials and workmanship, and covers parts and labor for twelve (12) months within the terms and conditions of the Warranty (see the Warranty for details).

The Warranty is not meant to cover everything that could possibly go wrong in the first 12 months. When Warranty Claim Forms are submitted to Summit, claims for items that are not meant to be covered will be denied. Please read and understand the Warranty so that you do not assume that anything that goes wrong during the first year is automatically covered. It may or may not be covered; check the Warranty.

Here is a list of some of the items you need to be especially aware of so that you do not cause damage not covered by the Warranty, or void the Warranty.

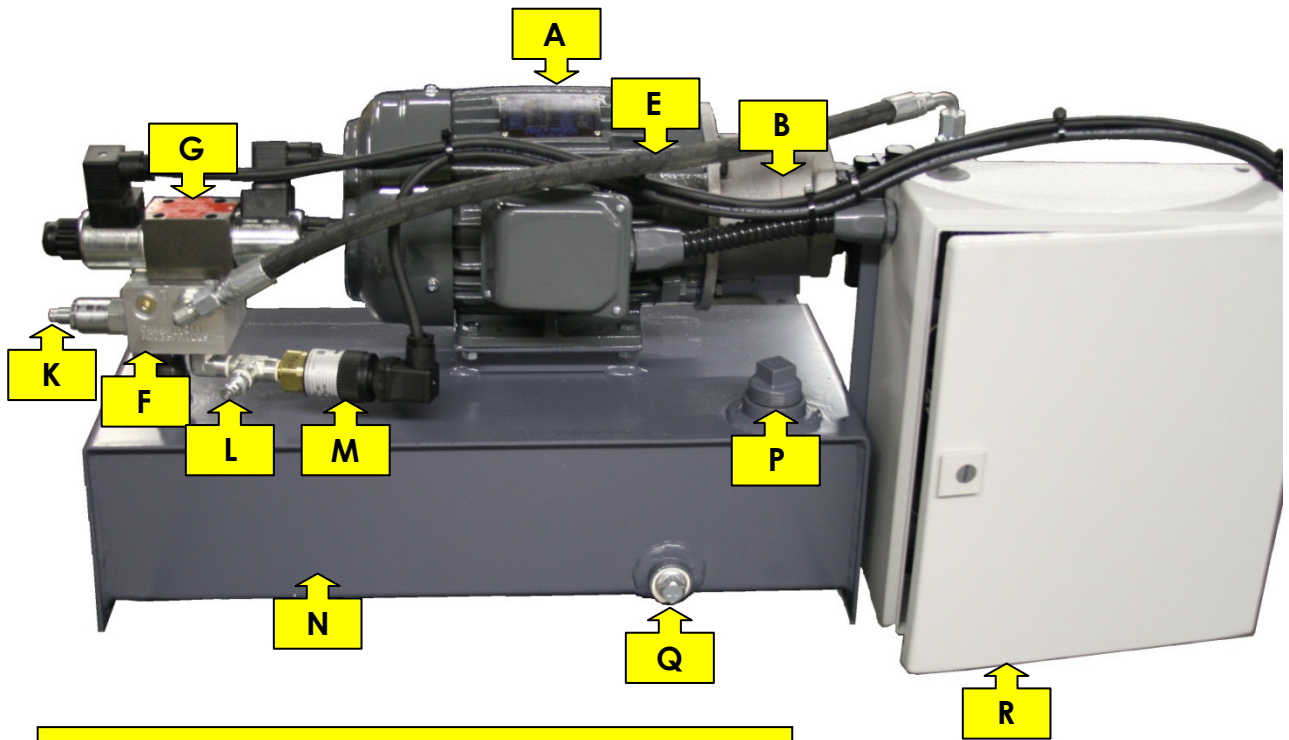
1. **DO NOT** neglect routine maintenance as recommended in this manual. Warranty coverage may not be extended to equipment that has not had its regular recommended maintenance performed and documented.

2. ***DO NOT*** modify the equipment without advance written consent from Summit Equipment, Inc. Modification includes structural changes, changing computer logic, moving electric eyes or limit switches, changing settings, or other modifications to the equipment or its power unit or controls.

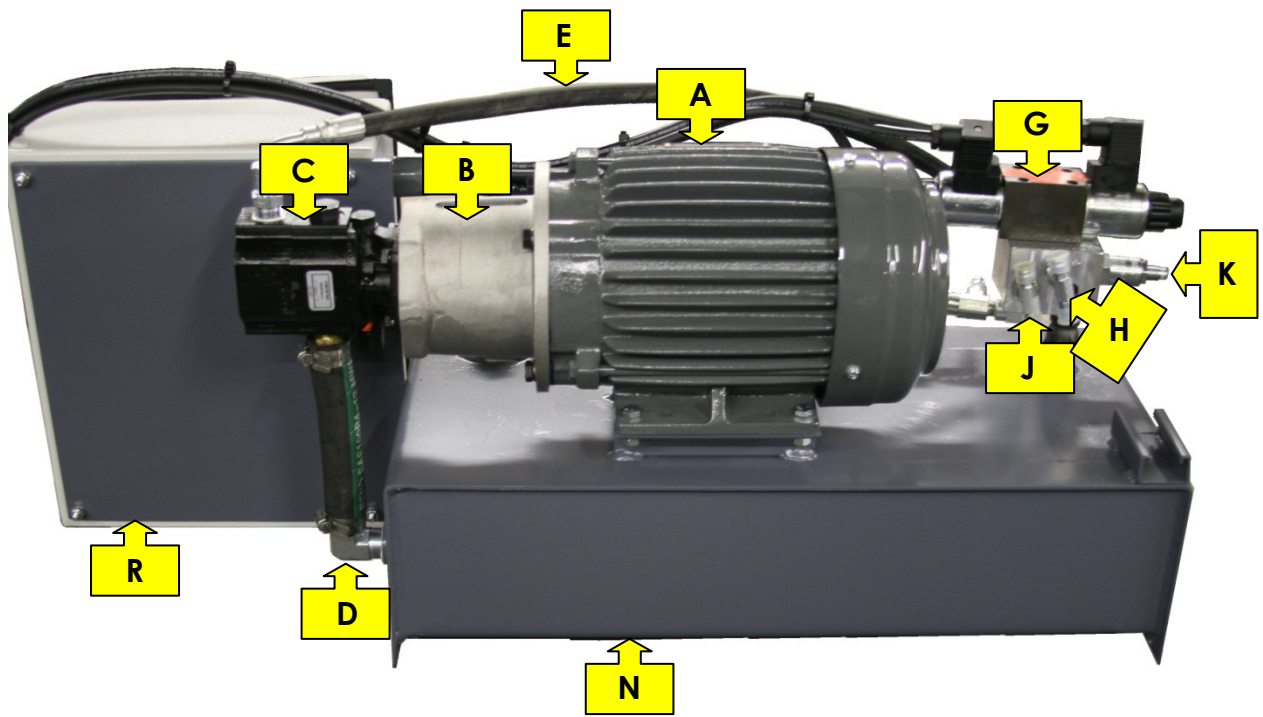
3. ***DO NOT*** manually override any of the automatic control sequences of the equipment unless you know exactly what you are doing. Damage caused by making a mistake while manually overriding the equipment's automatic controls is not covered by the Warranty.

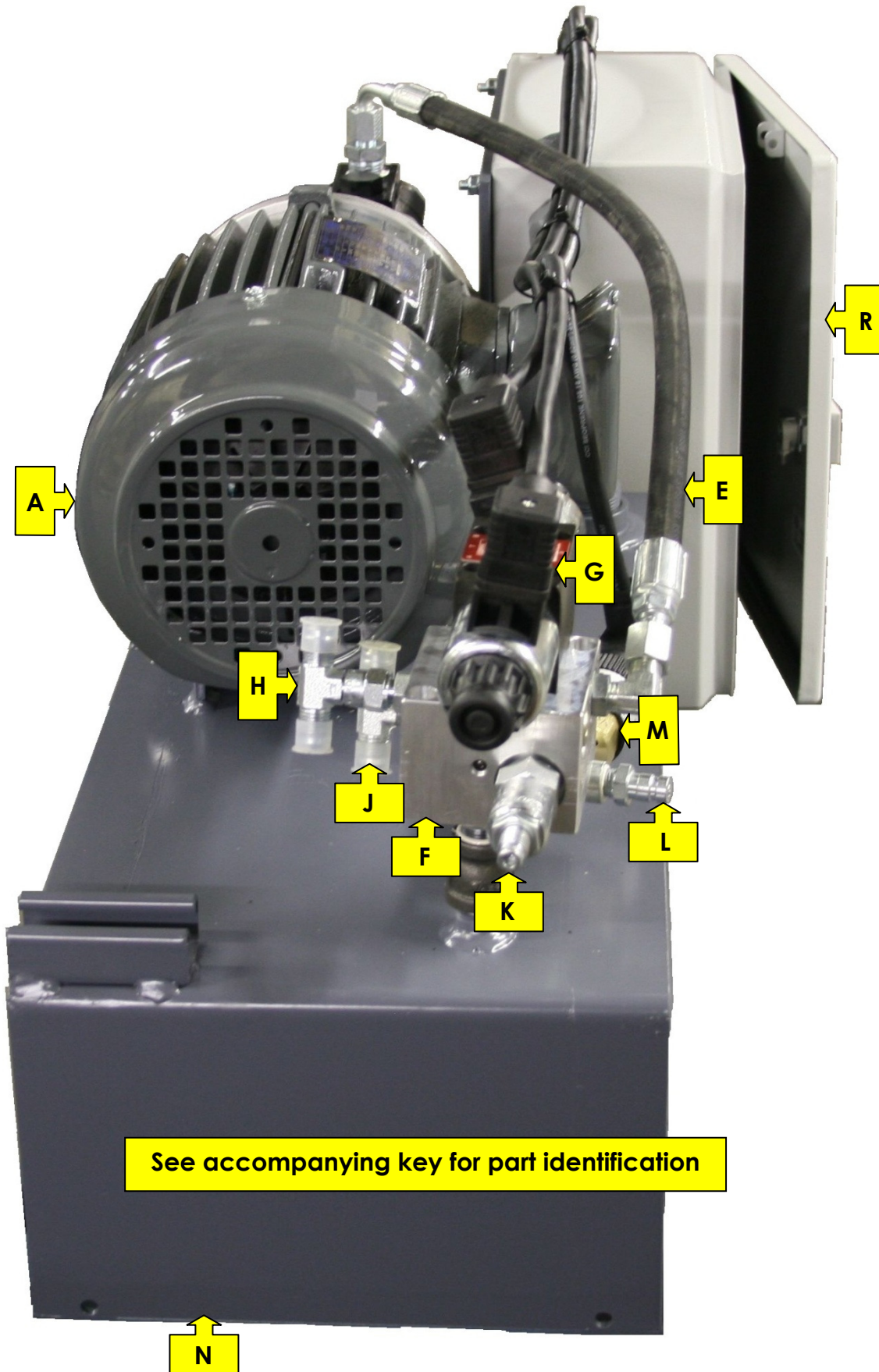
4. ***DO NOT*** weld on the equipment without removing the fuses or switching off the circuit breakers on the output side of the control transformer. Doing so may damage the controls or other components and would not be covered by the Warranty.

5. ***DO NOT*** install the equipment in a way that will allow voltage spikes or surges to reach its controls (from lightning, for example). Doing so may result in damage to the controls or other components and would not be covered by the Warranty.



See accompanying key for part identification





See accompanying key for part identification

Power Unit Part Identification Key For models S-V2, S-V2L, S-V2R

- A Electric motor: (1.5 hp, 1800 RPM, 145T frame, foot-mount, C-face flange – see note 1 below)
- B C-face adapter, enclosing motor coupler half, pump coupler half, spider
- C Hydraulic pump: (4.5 GPM dual-stage gear)
- D Pump suction line and fittings
- E Pressure line from pump to manifold
- F Hydraulic manifold: DO3 subplate (such as Daman ADO3SPRVC6S)
- G Directional valve: DO3 3-position, 4-way, tandem center, 115V controls (such as Argos-Hytos RPE3-O63C11/12060E5T1)
- H “B” port tee fitting for hydraulic lines to cylinders for retraction (platen down)
- J “A” port tee fitting for hydraulic lines to cylinders for extension (platen up)
- K Hydraulic relief valve: C-10-2 common cavity, (P) in the nose, adjustable 0-3500 PSI (such as RV5-10-S-0-35)
- L Gauge port quick disconnect (FD90 style, Aeroquip male)
- M Pressure switch: Barksdale 96201-BB2-T2-Z17 (factory set at 1900 PSI)
- N Hydraulic reservoir (manufactured by Summit Equipment, Inc., 5 gallon capacity)
- P Hydraulic reservoir shipping plug: remove at installation and replace with threaded breather provided (1¼" MNPT with dipstick)
- Q Hydraulic reservoir drain plug, magnetic
- R Electrical enclosure (controls designed and manufactured by Summit Equipment, Inc. and certified to UL508A & C22.2 No.14; tampering may jeopardize certification)

NOTE 1: If supply voltage is 208VAC 60Hz. 3Ø, FLA = 6.6A
If supply voltage is 208VAC 60Hz. 1Ø, FLA = 11A
For use on other voltages, consult competent electrician