

GROUND FORCE

WORLDWIDE

WORLD'S FINEST MINE SUPPORT EQUIPMENT

CAB GUIDE

ROCK SPREADER OPERATION

Keep this guide in the chassis cab at all times.

For more information, refer to the Operation & Maintenance Manual.

Ground Force Worldwide

6001 E. Seltice Way
Post Falls, Idaho 83854
1 (208) 664-9291

info@gfworldwide.com | www.gfworldwide.com

VERSION 2.2

© Copyright 2018, by Ground Force Worldwide. All rights reserved. No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Ground Force Worldwide as governed by the United States and International Copyright Laws.

ROCK SPREADER CONTROLS

The Ground Force Rock Spreader features a control system with cab controls to regulate and adjust material distribution for high performance and maximum efficiency.

All cab controls are located within easy reach for the convenience and safety of the operator.*

This cab guide features basic operating instructions for the Ground Force Rock Spreader. For more extensive instructions, refer to the **Operations & Maintenance Manual**.

1. Rock Spreader Control System display
2. Rock Spreader Control System controller
3. Keypads

**Cab configuration and layout may vary depending on chassis model.*



1: PRE-SHIFT INSPECTION

- ▶ **Inspect the working area. Eliminate all safety hazards, including ignition sources.**
- ▶ **Inspect the equipment for leaks. Repair as necessary.**
- ▶ **Inspect the hydraulic system. Tighten loose fittings and secure hoses.**
- ▶ **Inspect the electrical system. Tighten connections and secure loose harnesses.**
- ▶ **Inspect body mounts. Ensure they are tight and do not show damage.**
- ▶ **Inspect the body pins. Verify the retaining bolt(s) are in place and properly tightened.**
- ▶ **Inspect pump mounts, set screws and guards. Tighten if necessary.**
- ▶ **Inspect the hydraulic system tank. The oil level should be visible in the lower sight glass at minimum.**
- ▶ **Test all hydraulic controls for proper function.**
- ▶ **Verify all safety equipment is present and functional.**
- ▶ **Perform all other pre-operation inspections as required by the chassis manufacturer and local procedures.**

NOTICE

Refer to the Maintenance section of the Operation & Maintenance and the Parts & Schematics manuals for more information, specifications and drawings.

2: ROCK SPREADER CONTROL SYSTEM

All hydraulic functions on the rock spreader are controlled remotely from the cab. The in-cab controls consist of a LED display, two 8-button keypads and the controller (a five-button keypad with center knob).



3: DISPLAY

The main display screen shows currently active functions: the main hydraulic system, spinners, chute gates, vibrators and work lights.

The gauges indicate spinner speeds and chute gate position. The center image provides a key to controller functions.

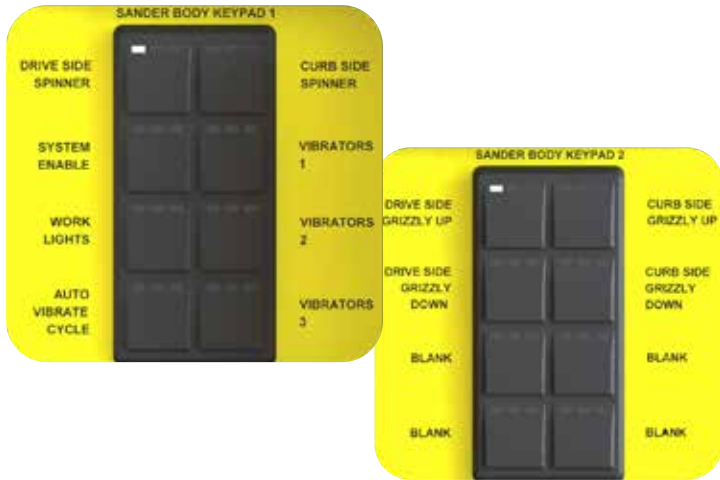
The display will automatically power on with the chassis ignition.



4: KEYPADS

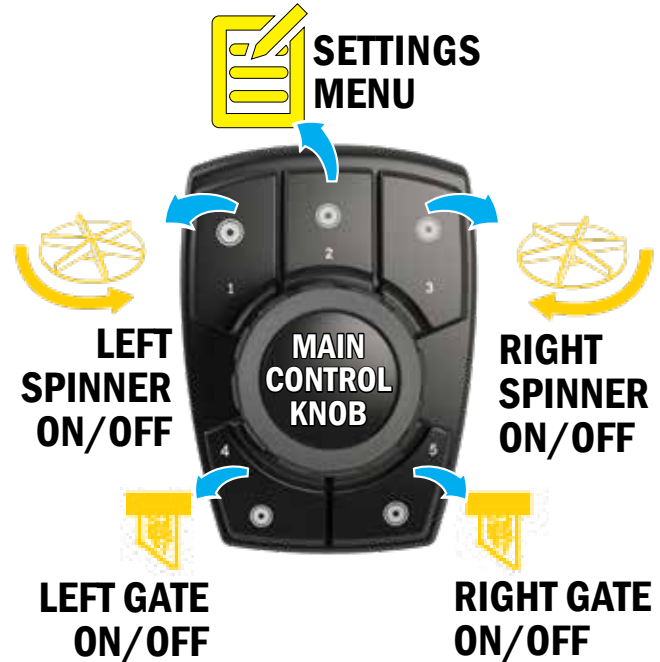
There are 2 keypads mounted near the display. These will have a label with each button's function.

Each button has 3 lights. The light on the right indicates the keypad has power. The light in the center indicates that button's function is active. The light on the left will flash once when the button is pressed.



5: CONTROLLER

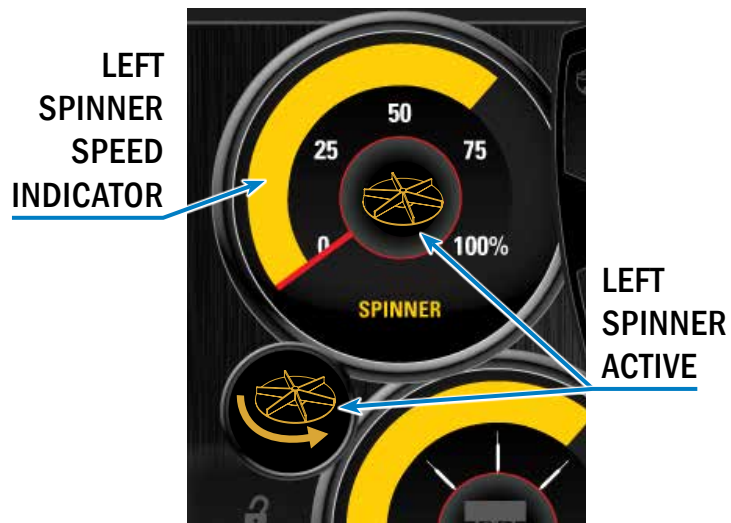
The controller has 5 buttons and a center knob.



6: SPINNER CONTROL

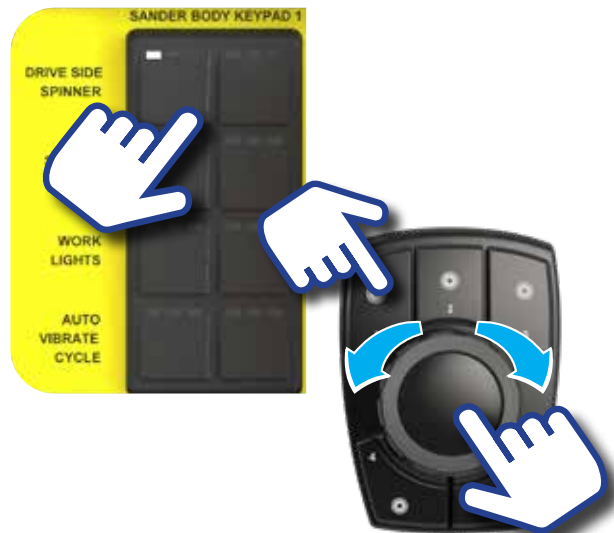
Spinner assemblies distribute material under and to the sides of the rock spreader.

The display screen will indicate the active spinner, and its speed as a percentage.



Warning strobe lights on each corner of the Rock Spreader body will flash for 5 seconds before the spinner begins to rotate.

1. Engage the spinner using the keypad.
2. Select the spinner using the controller button.
3. Adjust the spinner speed using the control knob.
 - a. Rotate clockwise to increase spinner speed.
 - b. Rotate counter-clockwise to decrease speed.
4. Press the center button to accept speed settings.



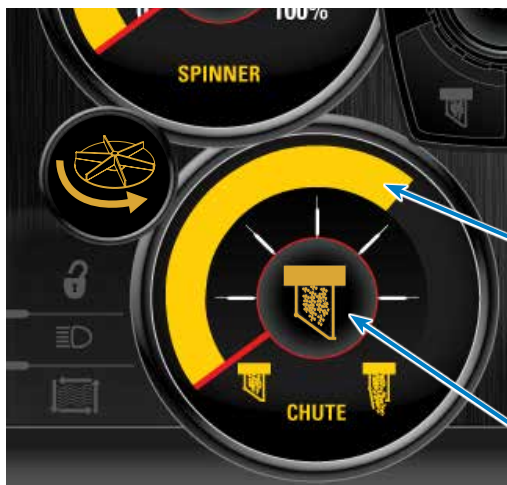
7: FEED GATE CONTROL

The feed gate controls the flow of material through the chute to the casting wheel.

The display screen will indicate which feed gate is active, and how far it is open.

NOTICE

Activate the spinner before opening the feed gate. This will help prevent material buildup on the casting wheels.



LEFT FEED GATE
FLOW RATE

LEFT FEED
GATE ACTIVE

1. Turn on the spinner.
2. Use the controller to select the right or left feed gate.
3. Rotate the center knob to increase or decrease the flow of material.
 - a. Rotate clockwise to open the feed gate.
 - b. Rotate counter-clockwise to close the feed gate.

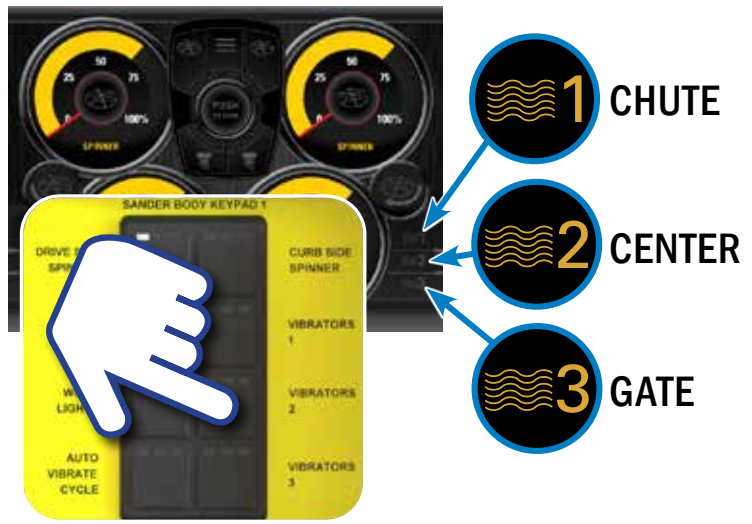


8: VIBRATOR CONTROL

Vibrator controls are located on the keypad. Vibrators operate in pairs.

Press a button on the keypad to engage the desired vibrator pair. The vibrator will activate for 5 seconds.

The display will indicate which vibrator is active.



9: VIBRATOR AUTO CYCLE

The Auto Vibrate Cycle engages each vibrator sequentially for five seconds each. The auto function will stop after four cycles.

Press any vibrator control switch to stop the Auto function at any time.

Press the Auto button to begin the automatic cycle.



10: GRIZZLY CONTROL*

The rock spreader may be equipped with grizzly screens to screen the material while filling. On most bodies, these grizzlies will tilt for material removal and hopper access.

A button on the keypad controls the tilt. With the hydraulic system engaged, press and hold the desired grizzly control to move the grizzly in the desired direction.

Raise the grizzlies to clear them of any material that might be caught in the screen, and for access to the inside of the hopper.

Lower the grizzly screen to begin spreading material.

Use the chassis hoist system to tilt the body to clear loose material from a flat grizzly.

NOTICE

The grizzlies must be fully lowered for all rock spreader operations.



* Optional feature.

11: LOADING MATERIAL

The Ground Force rock spreader will accept up to 3" minus material. Use clean, dry 2" minus material for optimum performance and reliability.



◀ **RECOMMENDED MATERIAL SIZE**

NOTICE

Load only screened, dry material into the bin.

Verify that the feed gates are shut prior to loading.

The grizzlies (if equipped) must be in their fully lowered positions during material loading.

Once filling is complete, engage the hydraulic system and raise the grizzlies to dislodge any loose material. Return the grizzlies to their fully lowered position before moving the machine.

⚠ CAUTION

- Material may fall outside the bin while filling. Be sure that all personnel are clear of the area around the machine during filling.
- Do not overfill the machine. Material should be loaded to the top of the side walls.
- Remove snow and ice from the outer layer of the pile before loading material into the truck.
- Non-corrosive ice melt can be mixed with the material to help prevent material from freezing during operation. When using an ice melt mixture, do not leave the material in the truck when the truck is idle.

12: MATERIAL DELIVERY

1. Ensure the spinner switches are **off**.
2. Press the **SYSTEM HYDRAULICS** button. A light will indicate when the system is active.
3. Start a spinner by pushing its button on the keypad. The warning strobe lights will flash for five seconds before the spinner motor begins to rotate.
4. Set the spinner speed initially in the middle of the range - approximately 50%.
5. After the spinner is rotating, use the controller to select the corresponding feed gate. Rotate the knob clockwise to open the gate.
6. Adjust the feed gate position and spinner speed to establish the optimum material delivery rate and coverage.

NOTICE

Do not stop the spinner motor with the feed gates open. Excessive material will build up on the casting wheel.

13: END OPERATIONS

After completing Rock Spreader operations, prepare the machine so it will be ready for the next shift.

1. Close the feed gate(s).
2. Leave the spinner(s) rotating to clear the casting wheels from all material.
3. When the casting wheels are clear, stop the spinners.
4. Empty the bin of all material.
5. Disengage the system hydraulics.

NOTICE

Always disengage the hydraulic system by pushing the **SYSTEM HYDRAULICS** button. The indicator light will turn off when the system is no longer active. Failure to do so will damage the hydraulic pump due to overheating.

CAUTION

Be sure to comply with all local regulations, procedures and guidelines at the while performing this procedure.

14: WORK LIGHTS

If the Rock Spreader is equipped with work lights, use the keypad buttons to turn them on and off. Keypad buttons are labeled by function.



15: STABILITY

When operating any machine on grade, the following criteria must be considered: machine configuration and model, maintenance condition, operating speed, conditions of the terrain, fluid levels, and tire inflation pressures. The skill and judgment of the operator are of primary importance.

Operating restrictions Grade

Maximum working grade: 20%

Maximum side grade: 10%

GROUND FORCE MANUFACTURING, LLC

6001 E. Seltice Way

Post Falls, ID 83854 USA

Phone: +1 (208) 664-9291

Fax: +1 (208) 664-9475

Parts & Product Support E-mail: PPSR@gfworldwide.com

Service Department E-mail: Service@gfworldwide.com

General E-mail: info@gfworldwide.com

Web: www.gfworldwide.com