

## Salt Traxx Operation

Turn unit on if it is not already on. If the unit has not been calibrated it will display "CALIBRATE ME" (See Setup). The Start/Stop button is functional and spreading may be performed but not recorded. After the unit has been calibrated Customer number 0 will be displayed and the unit may be operated.

## **Operation without a Flash Drive**

A flash drive is not required for operation. Only customer 00 (no customer) is available. Material used will be displayed, but not recorded. Press the Down button to clear the material used.

## **Operation with a Flash Drive**

The flash drive may be inserted when the Salt Traxx unit is either in Standby or On. The flash drive should only be removed while the Salt Traxx unit is in Standby.

Insert the USB flash drive provided that contains a SNOWEX directory with a correctly formatted "sales orders.txt" file. (See "Initializing a Flash Drive for Use with Salt Traxx" below.) The Salt Traxx unit will create a "work orders.txt" file if it does not exist on the flash drive or append to an existing "work orders.txt" file.

NOTE: Salt Traxx appends new work to the "work orders.txt" file on the flash drive. To start a new "work orders.txt" file the old file must be renamed or deleted from the flash drive. (It is suggested that a copy be made before deleting the work order file.)

Press the Up or Down buttons to select a customer. Press and hold the Up or Down button to engage Auto-Repeat and rapidly scroll through the list of customers. The line number and the customer identifier are displayed. Line number 00 may be used if there is no entry corresponding to the desired customer. It will still be recorded on the flash drive.

Press the Start/Stop button to start recording data. Time and materials used will be accumulated. The spreader must be stopped before another customer may be selected. When Start/Stop is pressed after changing customers a new data record is opened and a start time is recorded. It will remain open until a new customer is selected or 30 minutes with the spreader stopped have elapsed. The stop time is updated each time the spreader is stopped as long as the record is open.



Whenever the customer is changed the time and material data for the prior customer is saved and the data record for the prior customer is closed. If there is no spreading activity for 30 minutes the record is automatically closed. Putting the Salt Traxx unit in Standby will close the current data record and prepare the flash drive for removal.

Press the On/Standby button to place the unit in standby before removing the USB flash drive.

NOTE: Care must be taken so that the time and material information is written to the flash drive before it is removed. The Salt Traxx unit makes an effort to keep the information on the flash drive up to date, but unexpected removal of the flash drive may result in lost or corrupted data. The data record for the current customer is automatically saved every 5 minutes if there has been any change to the data.

## Setup

Setup is entered by pressing the Setup button while not currently spreading.

Press the Up or Down buttons to select an action. Press the Setup button to perform the action. The actions appearing in the Setup menu are:

Next Material (Only available after the unit has been calibrated) Clock Calibrate Exit

#### **Material Selection**

Different rock salt sizes or mixes may flow and pack into the spreader auger at different rates. The Salt Traxx unit must be calibrated for the material(s) you use. It can store calibration settings for three different materials.

The Material action is used to select a calibration value for the material in the hopper. There are three settings (1, 2, 3) to choose from. Only those settings which have been calibrated will appear (see Setup, Calibration Process).

The current setting will have the cursor positioned under the setting. Use the Up or Down keys to move the cursor and choose a setting. Use the Setup key to activate the setting and exit Material Selection.



## **Clock Setting**

Choose the Clock action to enter clock set mode.

Press the Up or Down buttons to adjust the highlighted Date/Time field. Press and hold the Up or Down button to engage Auto-Repeat to rapidly change the highlighted value. Press the Setup button to move to the next field. If a field is skipped or needs further changes the Setup button may be pressed repeatedly until the desired field is highlighted.

After the time and date have been adjusted press the Setup button until Exit or Save is highlighted. Exit will discard the changes. Save will keep the changes. Press either the Up or Down button to save or exit.

#### Calibrating the Salt Traxx unit

Choose the Calibrate action to enter calibration mode.

Press the Up or Down button to select the desired calibration table (1, 2, 3) or Exit.

Press the Setup button to start the calibration process for the highlighted table or Exit.

#### **Calibration Process**

Loosen spinner lock bolt and remove spinner shaft from transmission.

Truck must be running and vibrator on during calibration.

If something goes wrong during calibration or you wish to discard the calibration press the On / Standby button prior to selecting "DONE". The calibration process will stop and the results will be discarded.

Initially, "SPEED 10 NEXT" will be displayed.

Set the V-MAXX control unit "Material Flow Rate" to minimum (10) and switch the V-MAXX on and run until auger is fully charged. Place calibration container under chute. Press the Start/Stop button on the Salt Traxx unit. Run the spreader until the correct amount of material has been dispensed. The V-Maxx control may be turned on and off multiple times to fill container evenly. **The container must be filled 3 times** for a total of 3 cubic feet. Each time the Salt Traxx is stopped a RAW value will be displayed. This value is related to the number of revolutions the auger in the spreader has made. The final RAW value can be compared to the typical value for the spreader model being calibrated.



Press the Setup button to move to the Next stage of Calibration. "SPEED 50 DONE" will be displayed.

Set the V-MAXX "Material Flow Rate" to half way (knob pointing straight up, halfway in between the "+" and "-"symbols). After the spreader hard start sequence has ended adjust the "Material Flow Rate" to exactly 50. Run the spreader until the correct amount of material has been dispensed (3 cubic feet), starting and stopping as needed. Again, the final RAW value can be compared to typical for the spreader model.

Press the Setup button to select DONE and complete the calibration process. If this is the first calibration then this calibration will become the active Material Selection. (See Setup, Material Selection.)

If a final RAW value is outside the calibration range of the Salt Traxx then "OUT OF RANGE" will be displayed and the calibration process stopped. Press the Setup button to acknowledge the message and return to normal operation. If "OUT OF RANGE" occurs a void may have occurred during calibration, your material may not flow the same as the recommended materials, or the wrong amount may have been dispensed. Contact your dealer or the factory for further assistance.

## Managing the output files

Use Microsoft Excel to open the "Invoice.xlt" template provided on the supplied flash drive. Depending on the security settings for Excel the template will: 1) automatically attempt to import the "work orders.txt" file, 2) Ask permission to import the file or, 3) wait for the user to manually import the file. In all cases direct Excel to the location of the "work orders.txt" file on the flash drive. The template will format the data and compute the elapsed hours and minutes used in each work order. The data may then be saved as a regular Excel workbook and manipulated like any other workbook. E.G. sorting by Customer ID or Line number to bring all stops at the same customer together in the file or export of the data. Sheet 2 of the workbook contains the raw data.

The columns in the template are:

- 1) Line numbers of the sales orders file containing the customer information. Line 0 means no customer was selected while the spreading took place.
- 2) Job start date and time,
- 3) Job stop date and time,
- 4) Elapsed time computed by Excel from 2 and 3 above,
- 5) Material used (in cubic feet),
- 6) Customer ID copied from the sales orders file,
- 7) Any other columns copied from the sales order files.



NOTE: Salt Traxx appends new work to the "work orders.txt" file on the flash drive. To start a new "work orders.txt" file the old file must be renamed or deleted from the flash drive. (It is suggested that a copy be made before deleting the work order file.)

#### Setting up the Sales Orders file

The "sales orders.txt" file can be easily created with Microsoft Excel. The file must be saved as tab delimited text (**TEXT** (**tab delimited**) in the Excel program, "save as" dialog).

The Salt Traxx unit will only use the first 99 rows in this file.

The first column is the Customer ID or abbreviation and is required. The first eight characters from this column are displayed by the Salt Traxx unit. All other columns are optional. Up to 252 columns may be used.

The second column is typically the full customer name and the third column is typically the customer address. Additional columns may be used as desired. Suggested uses are phone numbers, contact names, driving directions, and special instructions.

The "sales orders.txt" file may also be created with a text editor. Each column is separated by a TAB and each customer entry is ended by the ENTER key.

#### Format of the Work Orders file

The work orders.txt file is created in TAB delimited format and may be imported by Microsoft Excel or similar programs.

The format of the file is in columns:

- 1) Line number of the corresponding line in the sales orders.txt file or 00 if no line selected,
- 2) Job start date and time,
- 3) Job stop date and time,
- 4) Material used (in cubic feet),
- 5) A copy of all columns from the corresponding line of the sales orders.txt file.

#### Initializing a Flash Drive for Use with Salt Traxx

Two things must be done to prepare a flash drive for use with Salt Traxx. They may be done by using Windows Explore to perform the file operations.

- 1) Create a folder named, "SNOWEX" in the root directory of the flash drive.
- 2) Copy your "sales orders.txt" file to the "SNOWEX" folder on the flash drive.

NOTE: If there is more than one partition on the flash drive Salt Traxx will only use the first partition on the flash drive.



### Updating the Salt Traxx Software

Install the programming software on to a Windows PC. (See the installation instructions that came with the update software.)

Plug the programming cable in to a USB port on the PC. (Note: this is a special cable that has a USB type-A connector on both ends.)

Press and hold the "Hidden" button on the Salt Traxx unit. (It is located at the lower right side in the same line as the rest of the buttons, below the red operation light.) Plug in the programming cable while holding the "Hidden" button. If the sequence has been done correctly the display will remain dark and the PC will make its USB attach sound. (If the Salt Traxx display lights, then the "Hidden" button was not pressed. Pull out the programming cable and try again, pressing in a slightly different location or pressing harder while attaching the programming cable.) Release the button once the PC has recognized a USB device has been added.

Install the USB driver for updating the Salt Traxx if requested by Windows. (See the installation instructions that came with the update software. Run the software update program.



# FILL LEVEL OF CALIBRATION CONTAINER

