

Sentry 4.0 Installation

Start by taking the multi-box and place it on the inside of the right hand exterior panel (Image 1). From the harness (SPL10256), there is a cord labeled display. Take this cable and route it from the multi-box through the hole in the firewall panel (Image 2).

Image 1



Image 2



Under the right hand control arm in the cab, remove the cover for the electrical cabinet (Image 1) and pull the display cable through the firewall. The power cord (SPL10255) plugs into a Deutsch connector on SPL10256. Remove one of the access plugs located under the ignition switch, and route the screen cable and power cable through the access hole (Image 2).

Image 1



Image 2



Plug the supplied power cord into the outlet above the electrical cabinet (Image 1). **Note that only one of the outlets is keyed power, the other is constant power.** Once you have everything plugged in go ahead and install the electrical cabinet cover, routing the cord through as shown (Image 2). The display cable can be routed along the rail mount. The display (SPL10253) is mounted to the rail with (SPL10288).



Sentry 4.0 Harness Layout

The Sentry 4.0 comes standard for monitoring the kernel processor bearing temperatures but also has the following capabilities.

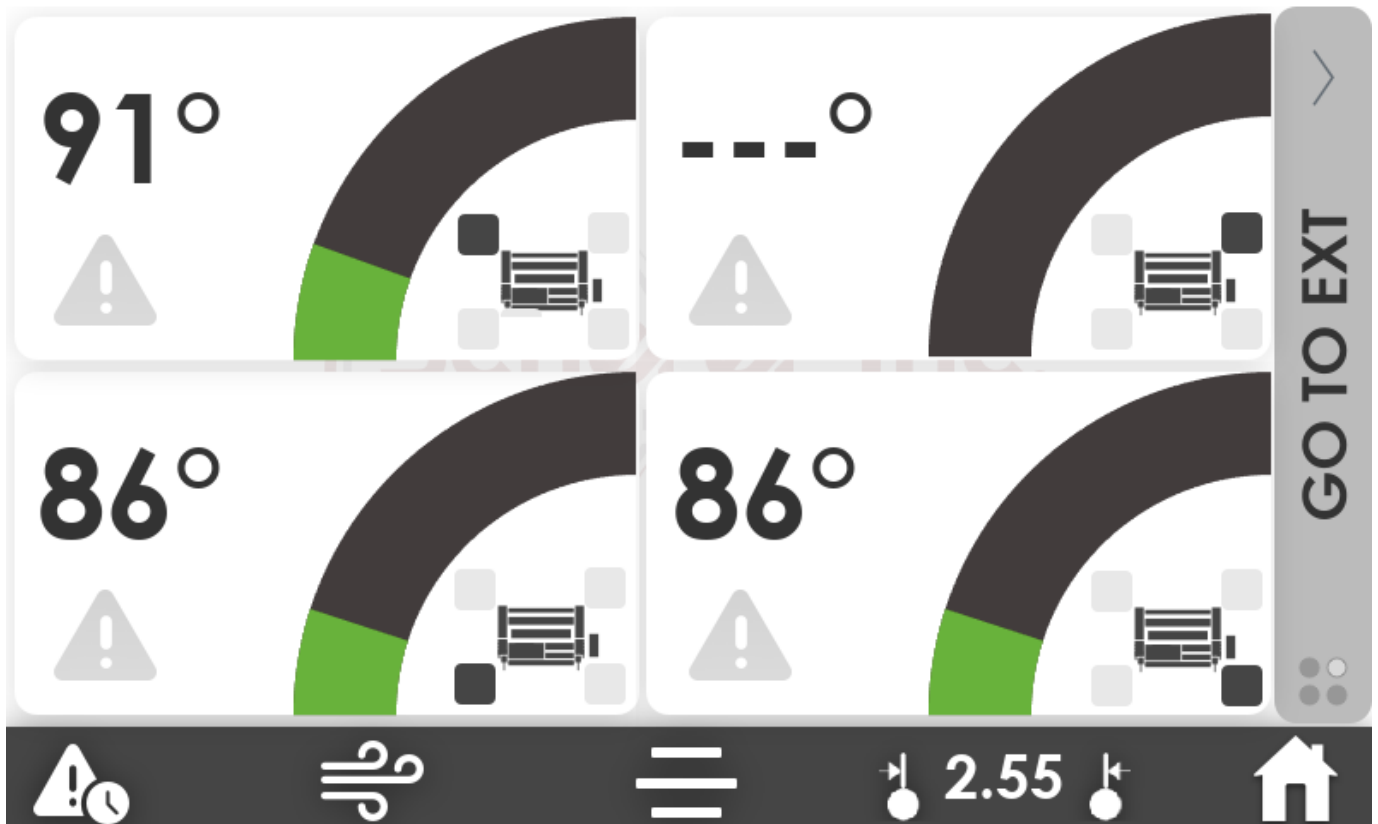
- Remote adjustment from the cab
- Temperature monitoring of the cutter & accelerator bearings
- Adjustable air dryer settings

The Sentry 4.0 harness comes ready to have any of the additional features hooked up. To add on any of the features, an operator must buy the needed cable and go into the system settings to activate the desired feature. The Sentry 4.0 harness has labeled break outs for all the features offered. The corresponding cables for these features are the following.

- Dryer - SPL10260
- Right Accelerator - SPL10230
- Left Accelerator - SPL10231
- Right/Left Cutter - SPL10232
- Remote Adjust - SPL10259



Sentry 4.0 Operation



The main page for the Sentry 4.0 can be seen above. The quadrants represent the bearing temperatures on the kernel processor.

Top Left - Front left bearing

Top Right - Front right bearing

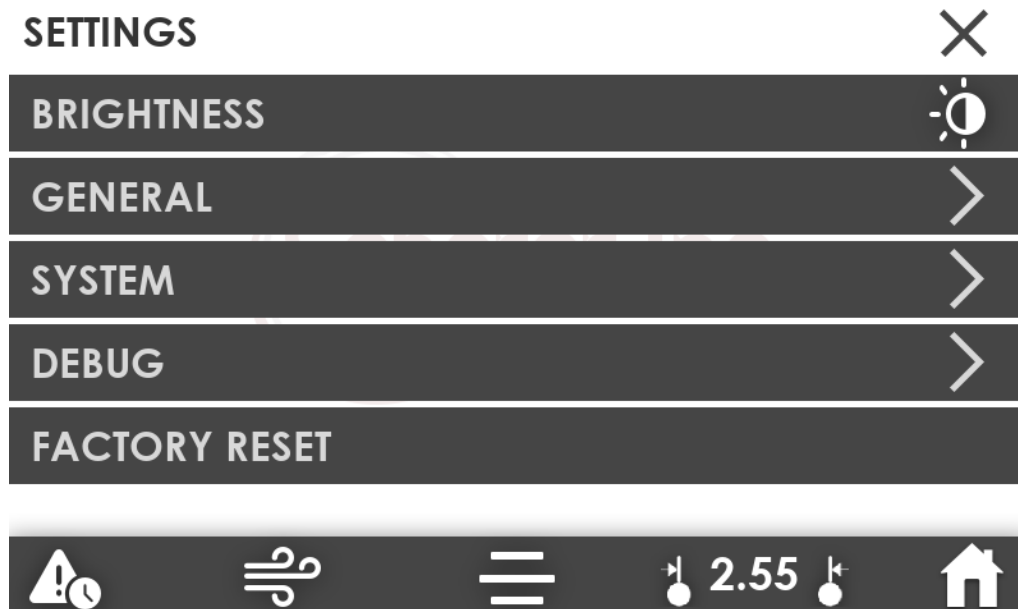
Bottom Left - Rear left bearing

Bottom Right - Rear right bearing

The icons on the bottom of the main page from left to right represent the following: bearing alarms, air dryer, general, remote adjust, and home page. The side bar that reads GO TO EXT, will take the operator to the page that shows the extended sentry bearing temperatures.

If a sensor is **DISCONNECTED OR DAMAGED** the quadrant will be grey and not show a temperature reading like the top right quadrant above.

Sentry 4.0 Settings Page

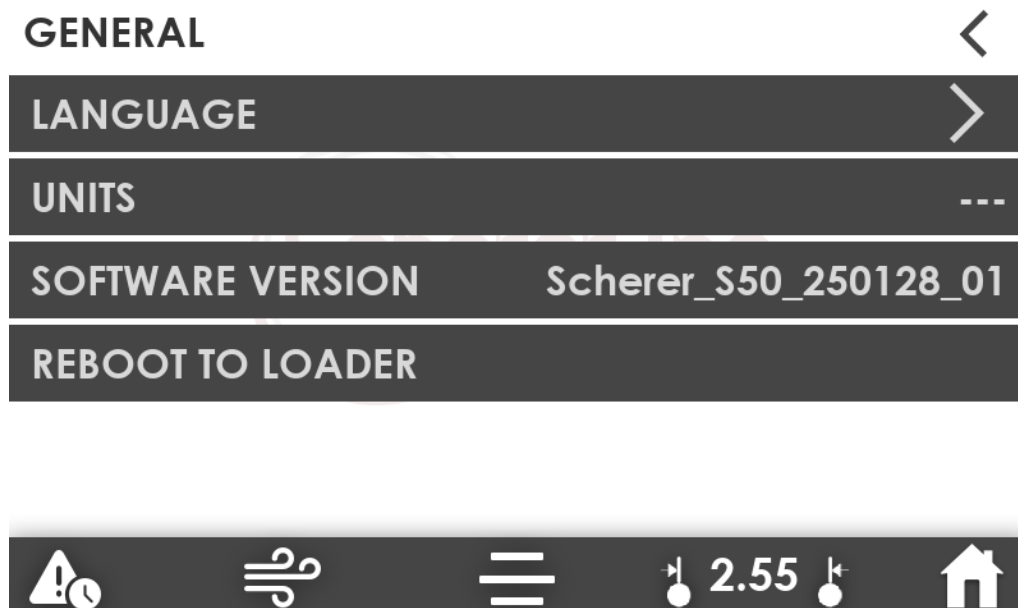


Brightness - Adjust brightness.

General - Sub page with other selections.

System - Sub page with other selections.

Debug - Can be used to trouble shoot.



Language - Multiple languages to select from.

Units - Can choose between metric or imperial.

Software Version - This is not a selection but shows the systems software version

Reboot To Loader - This feature is utilized when updating the system with new software

System Settings

SYSTEM



TEMP PROFILE

OIL

DATA LOG



EXPORT ALARM TIMES

EXTENDED SENTRY ALARMS



SENTRY 4.0 OPTIONS



Temp Profile - Can change the system between oil & grease bearings.

Data Log - This will record the temperatures of the bearings.

Export Alarm Times - A user can export the alarms times to a USB drive.

Extended Sentry Alarms - A user has the ability to set there own alarm setpoints.

Sentry 4.0 Options - This option allows a user to decide what additional features they want active.

Sentry 4.0 Options

From the system settings menu an operator can select sentry 4.0 options and activate the features they have hooked up.

Extended Sentry - Monitors bearing temperatures for cutter & accelerator bearings.

Air Dryer - Removes moisture from the machines air system.

Remote Adjust - Give the user the ability to adjust the rolls from the cab.

Options not active

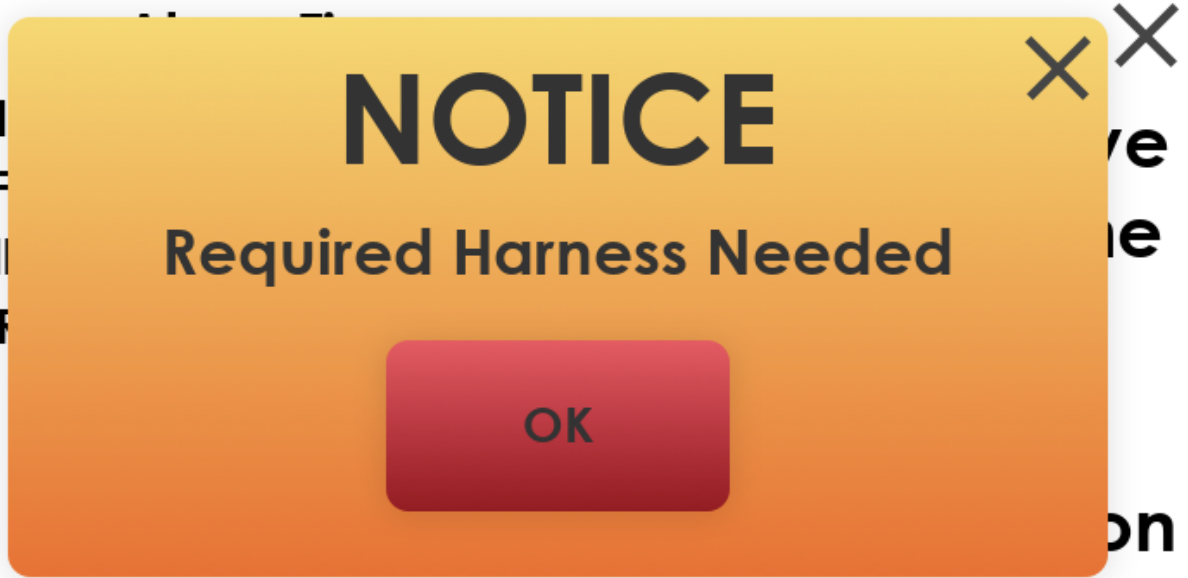


Options active



Sentry 4.0 Options

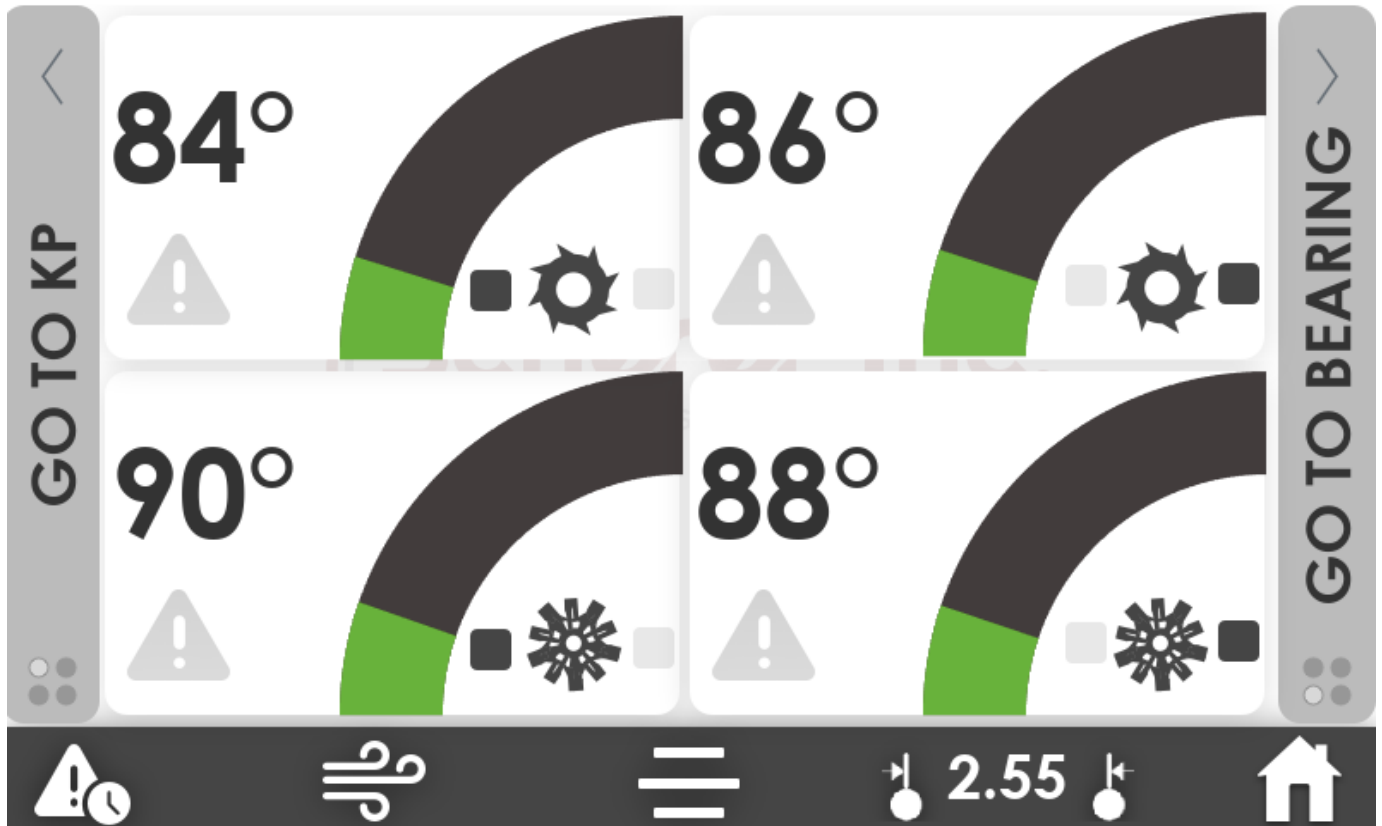
If one of the three Sentry 4.0 options icon is selected but is not activated on the Sentry 4.0 options page the following pop up will occur. This is indicating that the required components for the add on features are needed & the feature needs to be activated.



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Extended Sentry



The extended sentry offers a user the ability to monitor the temperature of the cutter head and accelerator bearings. The quadrants above represent the following.

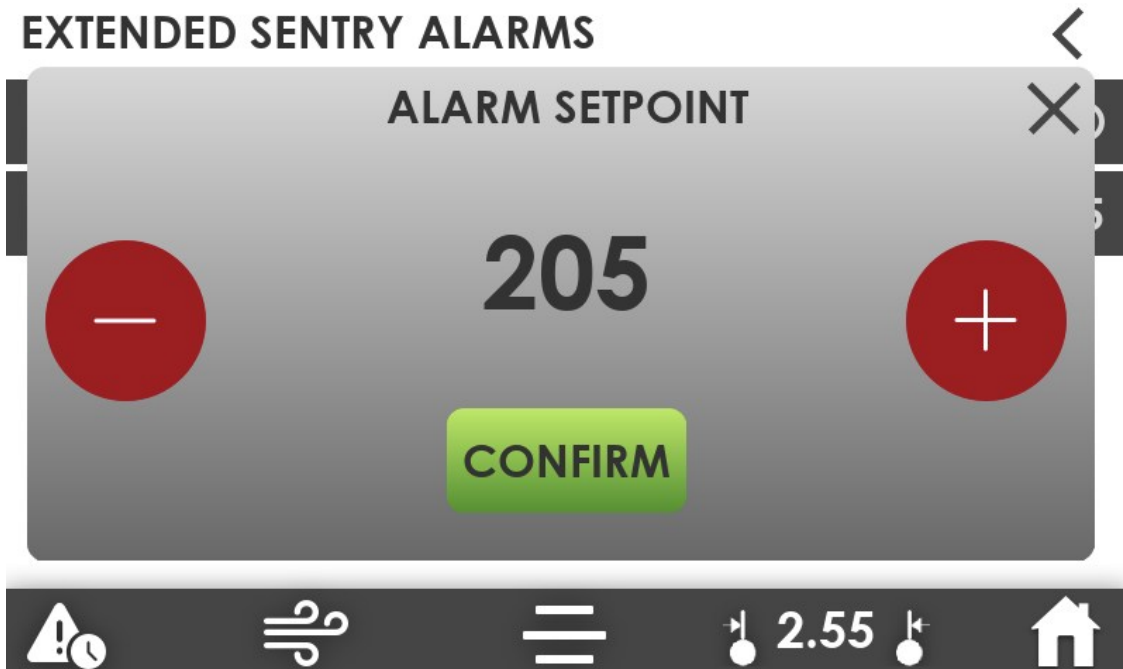
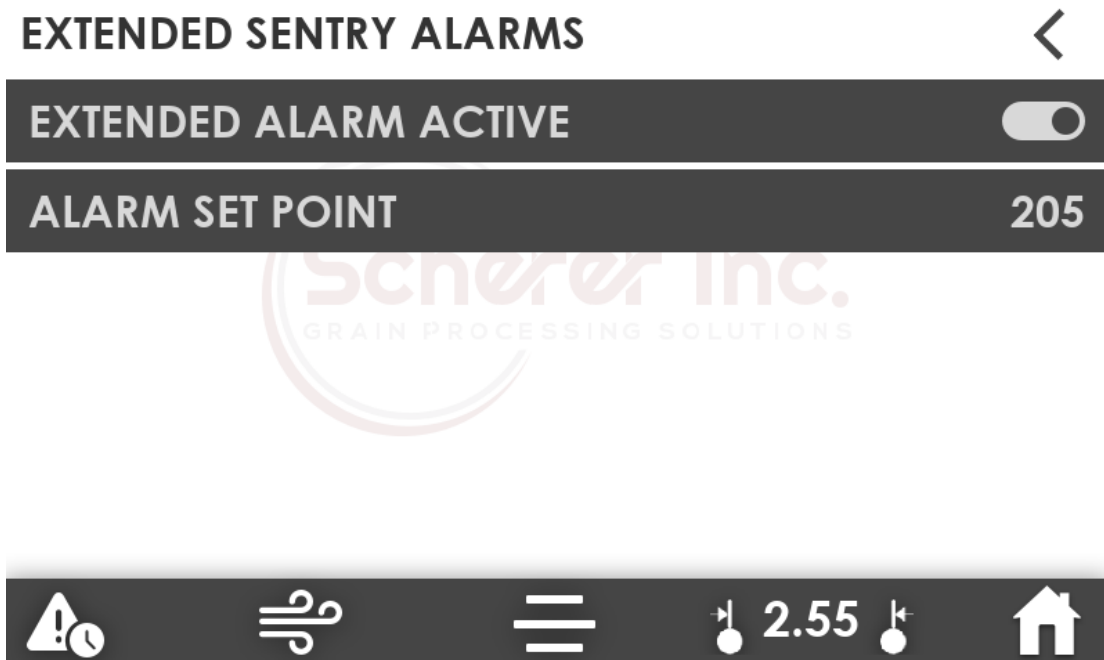
Top left - Left cutter head bearing

Top right - Right cutter head bearing

Bottom left - Left accelerator bearing

Bottom right - Right accelerator bearing

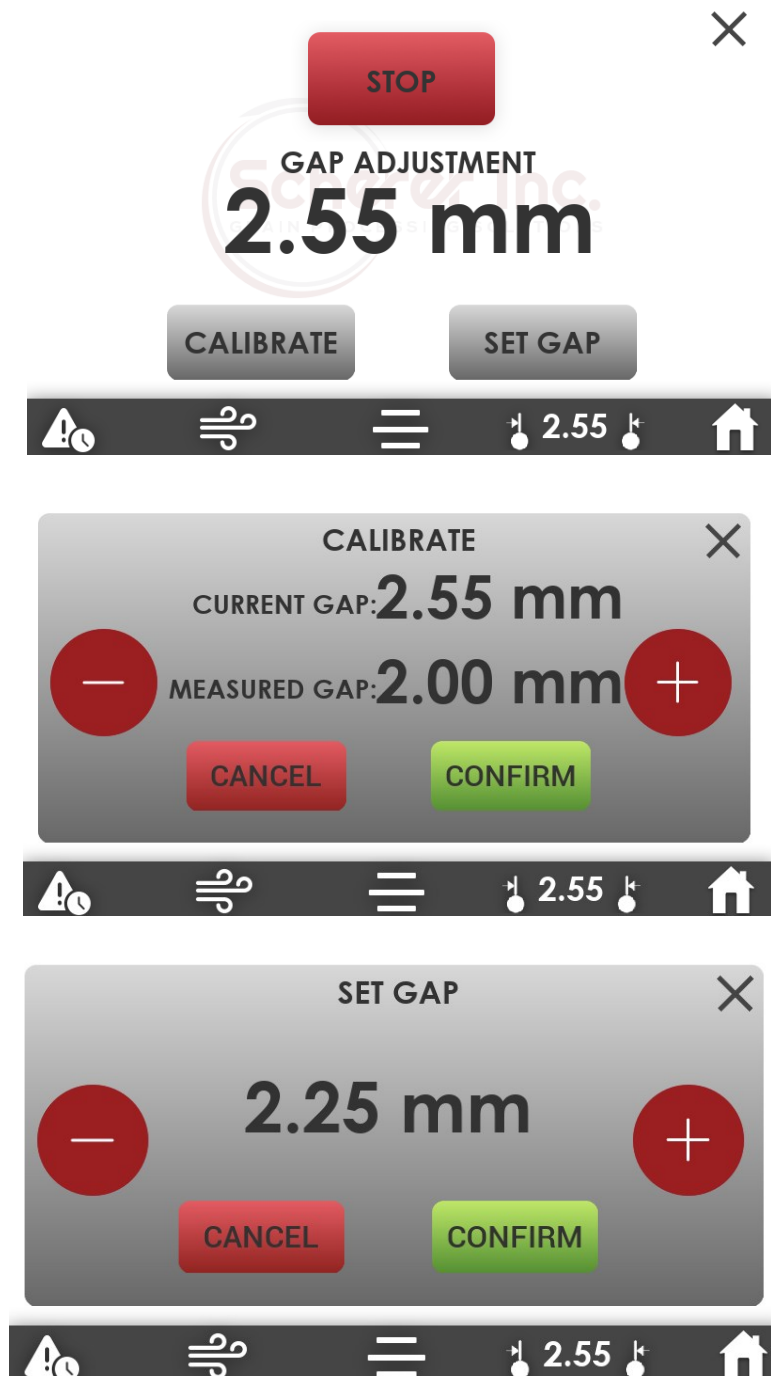
Extended Sentry Alarms



On the extended sentry alarms page a user has the ability to activate or deactivate the alarm for the extended sentry bearings. The extended sentry alarm set point will come set at 205 °F. The user has the ability to change the alarm set point . **SCHERER INC IS NOT RESPONSIBLE FOR AN ACCELERATOR OR CUTTER HEAD BEARING FAILURE.**

Remote Adjustment

The Sentry 4.0 has the capability of adjusting the roll gap from the cab of the machine. When first using the remote adjust feature, changing rolls, or paralleling the rolls a user must recalibrate the system. The main menu page for the remote adjust has a calibration selection. This will take the operator to the calibration page where the measured gap can be entered. **The calibration page is password protected. Please contact your dealer for the calibration password.** After calibrating the system the roll gap can be adjusted by selecting the "SET GAP" button. This will prompt a screen where the user can increase or decrease the roll gap in .25mm increments.



Air Dryer

With the Sentry 4.0 a user can adjust the On/Off cycle of the air dryer by simply increase or decreasing each of the values. The air dryer does not have a confirmation notification when the On/Off value is changed. Once the value is changed the timing is automatically updated. A countdown will appear next to the On/Off icon showing which cycle is active.

AIR DRYER TIMER



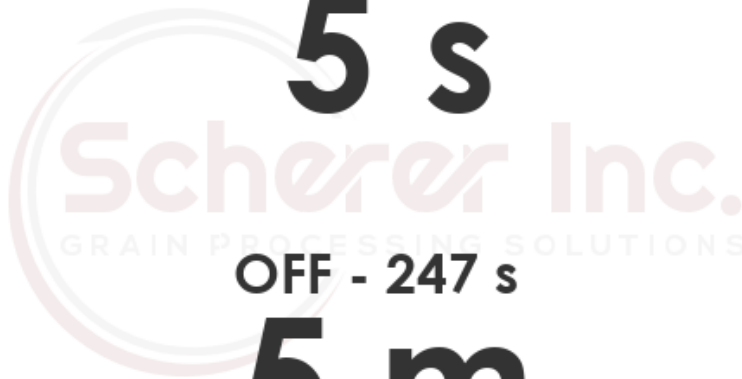
ON

5 s



OFF - 247 s

5 m



Bearing Alarms

Similar to the Sentry 2.0, the Sentry 4.0 has set alarms for the kernel processors bearings. Oil lubricated kernel processors have different set alarms than grease kernel processors. It is important to make sure your Sentry 4.0 system is set to the correct lubrication.

Oil Kernel Processor

Warning (Yellow) - 205

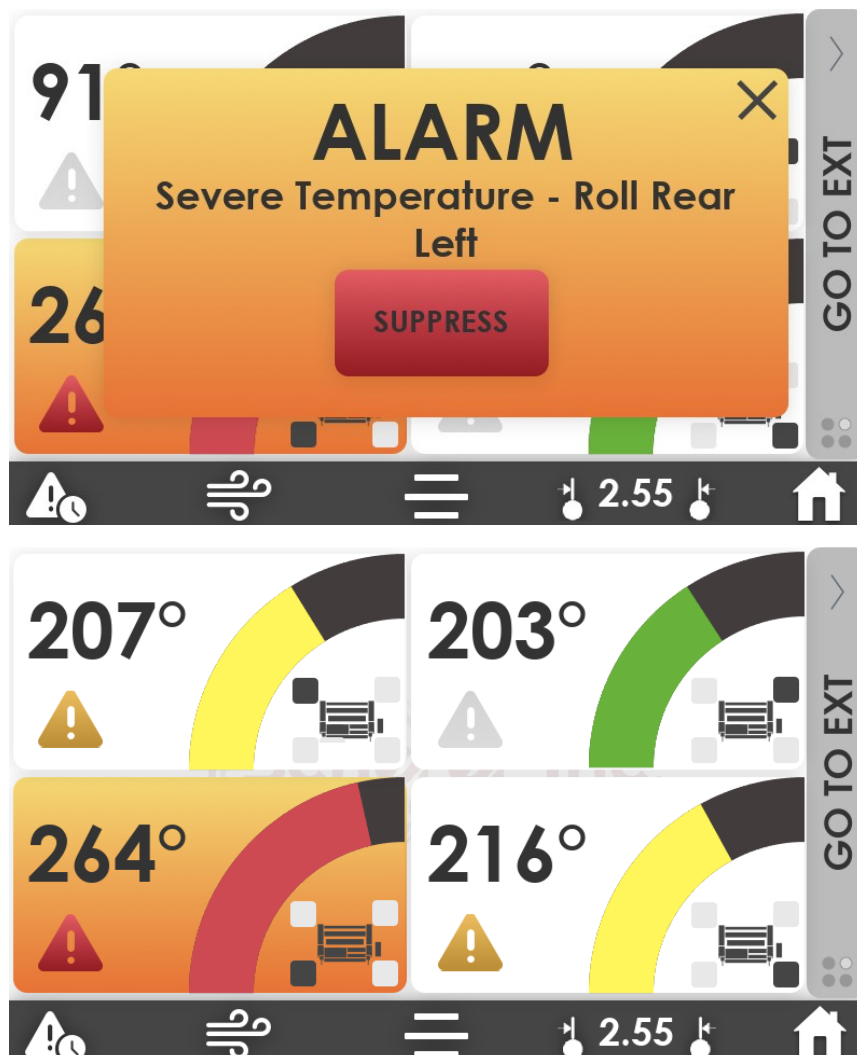
Alarm (Red) - 225

Grease Kernel Processor

Warning (Yellow) - 260


Alarm (Red) - 290

When the temperature threshold gets into the red an alarm will go off and a screen will appear giving the user the opportunity to suppress the alarm. The alarm suppression will only work for a few moments. If the bearing is continually ran in the severe temperature threshold, the alarm will continue to go off.






Bearing Alarm Times

Every time a bearing temperature goes into the set thresholds that time is recorded in the alarm times section. This feature can be accessed by selecting the alarm symbol in the bottom left corner on the main page.

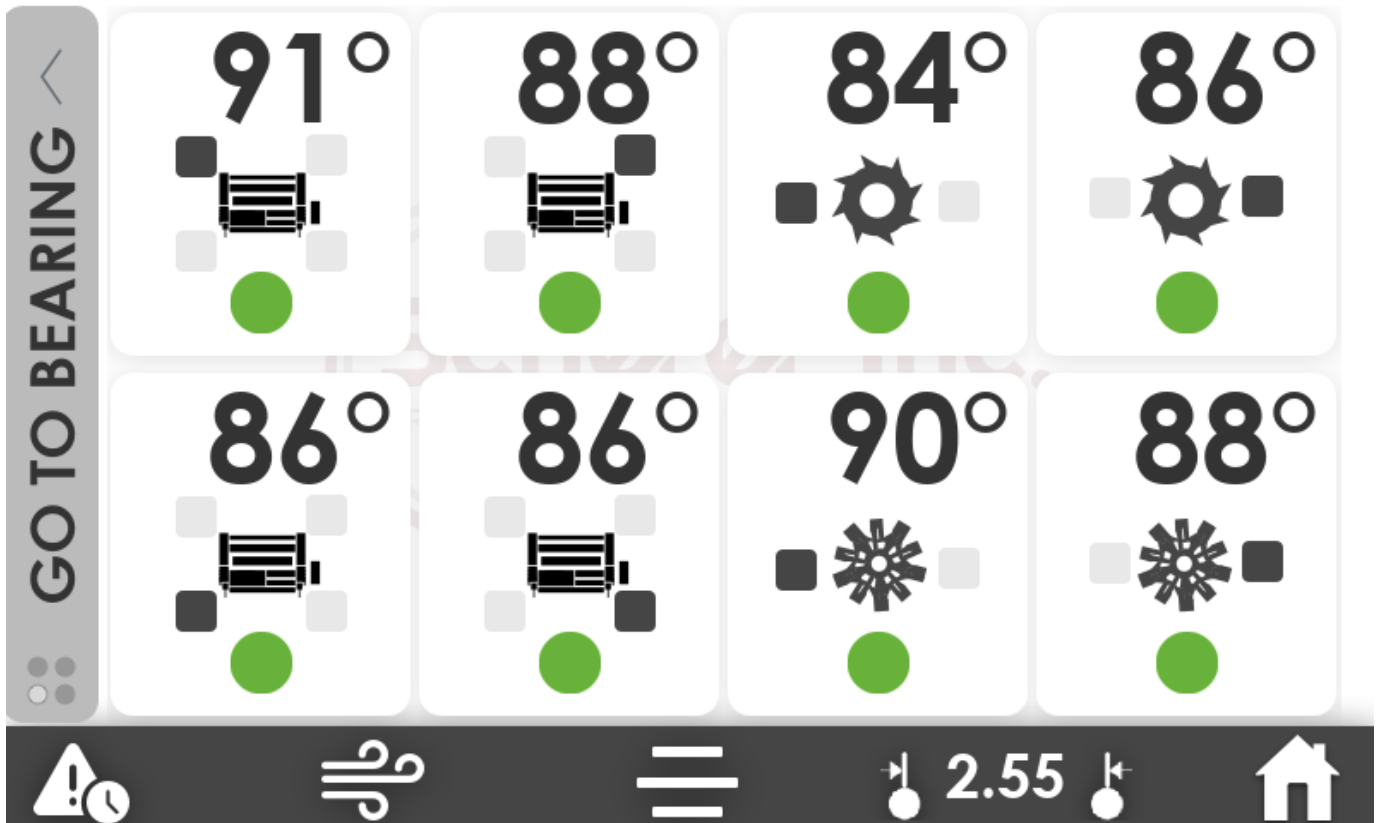


Alarm Times	
Roll Front Left: 00:02:32 --:--:--	Cumulative Alarm Time 00:05:23 Alarm Suppression 5
Roll Front Right: --:--:-- --:--:--	
Roll Rear Left: --:--:-- 00:05:23	
Roll Rear Right: 00:02:32 --:--:--	
Cutter Left: --:--:-- --:--:--	
Cutter Right: --:--:-- --:--:--	
Blower Left: --:--:-- --:--:--	
Blower Right: --:--:-- --:--:--	
Idle Pulley: --:--:-- --:--:--	

   2.55 

Temperature Screen

An operator has the option of viewing all four kernel processor bearing temperatures and all four extended sentry temperatures on the same screen. To do so select the grey side bar on the main page . This selection will need to be selected three times. The first selection will bring up the extended sentry alarms, second will bring up idle pulley, and the third will bring up the 8 temperature page.



Scherer Sentry 4.0 - ASM10629



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10237	BUTTON HEAD SCREW	4
2	BLT10238	BOLT	4
3	NUT10069	NUT	4
4	PM1006	MOUNTING ARM	1
5	PM21004.1	MAGNET	4
6	PM22010	PLUG CAP ASSEMBLY	1
7	SPL10253	OVS50 DISPLAY	1
8	SPL10254	SENTRY 4.0 CONTROL MODULE	1
9	SPL10255	POWER CABLE	1
10	SPL10256	SENTRY 4.0 HARNESS	1
11	SPL10278	BALL MOUNT	1
12	SPL10288	BALL MOUNT C-CLAMP	1
13	SPL10312	HARNESS JUMPER	1
14	SPL10313	ON/OFF SWITCH	1
15	SPL10327	SPACER	4
16	SPL10340	KP CABLE	1
17	SPL10350	KP CABLE CAP	1
18	WSH10015	LOCK WASHER	4
19	WSH10052	FLAT WASHER	4
20	WSH10053	LOCK WASHER	4