# **Remote Accuset2**

Safety, Operation, Maintenance & Parts Manual

006012* Field Install 2006+	rev. A.00 - C.01
025019 Transducer 2006+	rev. C.01
053052 Control Assy	rev. C.01

### Safety is our #1 concern!

October 2007

Form #1519

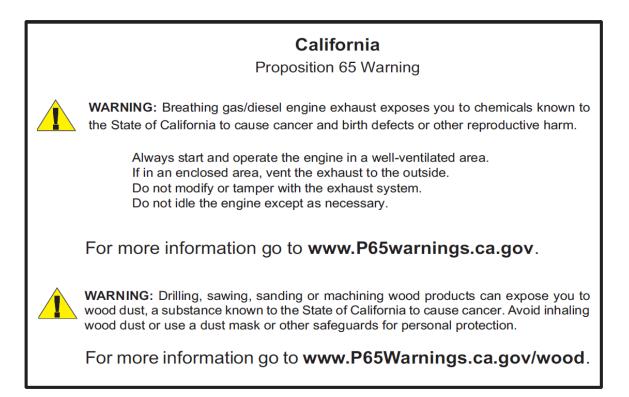
Used with: LT40HDxxx-RA LT40HDSxxx-RA LT50HDxxx-RA LX450HDxxx-RA

rev. K2.02- K7.04 rev. J9.02 - K4.02 rev. A2.01 - A6.01 rev.A1.02 - A1.07

Became standard equipment on LT40 Super at rev K3.03 and LT50 at rev A5.03



WARNING! Read and understand this manual before using this machine.



#### Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: <u>woodmizer.com/patents</u>

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## SECTION 2 ACCUSET SETUP AND OPERATION

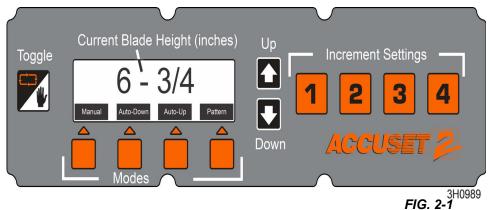
### 2.1 Control Setup

The Accuset control starts in Manual Mode by default. See FIG. 2-1 for identification of the control buttons and display.

Power on the mill to the accessory mode (#3 position on the key-switch).

#### Up/Down Adjustment Buttons:

Push the Up or Down arrow buttons to scroll to the desired setting. As you push **and hold** the up or down buttons, the setting scrolling speed will automatically increase.



**In Manual Mode**: The up and down arrow buttons have special functions. You can enter configuration menus by pushing the Up button. Pushing the Down button moves the saw head to the nearest nominal inch (or centimeter).

**About the Toggle button:** Use the Toggle button to exit configuration menus and return to the main menu. Pressing and holding the Toggle button *during startup* will reset the Accuset programming to factory default settings. Pressing the Toggle button *in Manual Mode* will place Accuset in Reference Mode.

#### **Contrast Adjustment**

When the Accuset is first powered on, the Accuset 2 splash screen is displayed for a few seconds. Push and hold the Up or Down button to adjust the display contrast as desired for your lighting conditions.

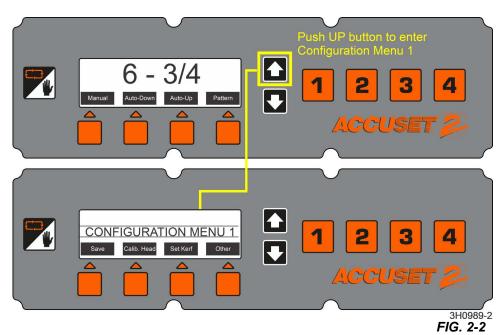
#### Startup Configuration

Accuset controls on new sawmills are configured at the factory. If you have installed or replaced the control, be sure to configure the control before operating the Accuset.

Follow the procedures below in the order they are listed.

To enter Configuration Menu 1, push the Up button while in Manual Mode.

**NOTE:** If the Accuset is factory-installed, the Gradient Setting is already set to match the gradient of the transducer sensor (labeled "GRD" on the sensor). If the Accuset has been installed in the field, the transducer replaced or the Accuset control has been reset to Factory Settings, the Gradient Setting should be adjusted.



UP or DOWN button



### Gradient Adjustment

- **1.** Enter the Configuration Menu 1.
- 2. Push the button labeled "Calibrate Head", (FIG. 2-2) then the "Set Gradient" button to display the menu
- 3. Push the Up or Down buttons until the Gradient Setting is the same as the sensor gradient shown on the sensor label (use the number labeled "us/in").
- 4. Push the Save button to store the new Gradient Setting.

To return to the previously stored Gradient Setting, push Exit and turn the key switch to the off (#0) position.

#### Calibrate Head

**Press At 12 Inches (or 305mm in metric mode).** The Accuset control should indicate the actual position of the blade above the bed rails.

- 1. Check this setting by moving the saw head so the blade is positioned above a bed rail.
- 2. Raise the saw head until the blade is positioned 12" (305mm) by actual measurement from the bed rail.
- **3.** Measure from the top of the bed rail to the bottom of a down-set tooth of the blade.
- **4.** While in Manual Mode, push the Up button to enter the Configuration Menu.
- 5. Choose Calibrate Head and press the button labeled "Press at 12 inches" (or "Press at 305mm").

The display will change to "Head Calibrated".

6. Push the Save Settings button to store the new 12-inches setting and exit the Configuration Menu.

#### After recalibrating the Accuset control,

- 1. Check and adjust the inch scale on the saw head to match the value displayed on the control.
- 2. Adjust the bottom saw head stop bolt all the way down.
- **3.** Move the saw head down until Accuset displays 3/4" and adjust the bottom saw head stop bolt up until it just touches the saw head.

9.1292

<u>Set Gradient</u>

Use <- -> buttons to adjust, then save.

Exit

Sav

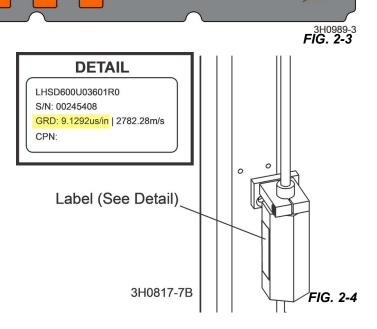
#### Setting the Kerf

The Kerf setting is optional. The default kerf setting is '0'.

You can use the kerf setting to automatically factor the blade thickness into the increment setting. Factoring the kerf into the program will allow you to saw boards that are the actual thickness of the programmed increment.

For example, if you are using an 1/16" blade with the kerf is set to '0' and you have programmed increments of 1 1/8", the resulting boards will be approximately 1-1/16". The blade thickness is not factored in the calculations.

If you enter an accurate kerf value of 1/16, the resulting boards will be 1 1/8". Whether or not to use the kerf setting is dependent on the sawing practices and application.

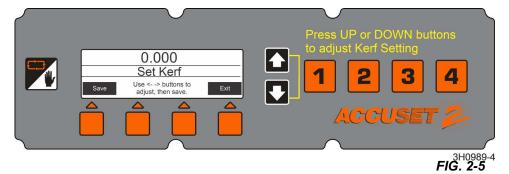




- 1. While in Manual Mode, push the Up button to enter the Configuration Menu.
- 2. Press the "Set Kerf" button to display the menu in FIG. 2-5..

Recommended kerf settings for various blades are provided below. These kerf setting values **assume the teeth** of the blade are set per factory specifications.

A nominal kerf value of 0.125" (3 mm) can be entered and should be accurate enough for most applications.



- **3.** Push the Set Kerf button and use the Up and Down buttons to adjust the kerf setting.
- 4. Push the Save button to store the new Kerf Setting.
- 5. If no Kerf Setting is used, be sure to include the thickness of the blade in your increment settings.

### Language, Units, PID Values, and Diagnostic

Other settings can be changed for the Accuset including the language used on the display, the unit of measure, and PID values. These settings are found in Configuration Menu 2.

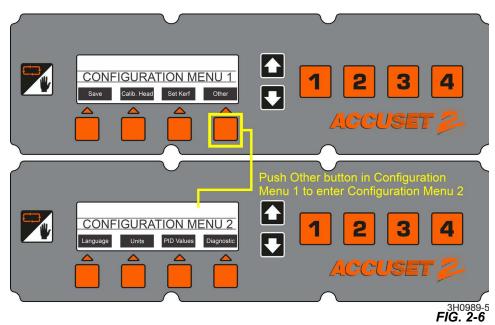
To display Configuration Menu 2, push the Up button while in Manual Mode to display Configuration Menu 1. Select Other to display Configuration Menu 2.

#### LANGUAGE

- 1. Push the Language button and choose the desired language.
- 2. Push the Save (or language equivalent) button to permanently store the new Language setting.

Blade Thickness	Blade Style	Kerf Setting
.042	10S	0.084 (2.2 mm)
.045	9S	0.090 (2.3 mm)
	10S	0.095 (2.5 mm)
.055	10S	0.111 (2.9 mm)
		·





To return to the previously stored 3. Language setting, push Exit and turn the key switch to the off (#0) position.

#### UNITS

This setting determines unit of measure to use for your Blade Height and Increment Settings.

The default value is Fractional Inches (1/32"). You can change the Unit Of Measure to Decimal Inches (.0313") or Millimeters (1 mm).

Push the Save button to store the new Unit Of Measure setting.

To return to the previously stored Unit Of Measure, push Exit and turn the key switch to the off (#0) position.

# Other button to enter uage Menu 2 sh Othe **CHANGE LANGUAGE 2** English Push Other button to enter ∟anguage Menu 3 **CHANGE LANGUAGE 3**

6 - 3/4

UNIT OF MEASURE

Millimeter

Exit

Decima

CHANGE LANGUAGE

French

English

3H0989-7

4

3H0989-6

FIG. 2-8



CUS

3

COUSET

ACCUSET

2(2)

4

#### PID: (PROPORTIONAL - INTEGRAL -DIFFERENTIAL) VALUES

These settings are used by a technician to diagnose and fine-tune the Accuset control for various environmental factors. These settings are made at the factory and should not normally need adjusting by the operator.

> The factory default PID value settings are shown below.

Value	Factory Default LT40 Super	Alternate for Standard Mills	Alternate for LT50
Up Ticks	1	1	3
Up Distance	7500	1500	14000
Up Minimum	50	80	46
Down Ticks	1	1	2
Down Distance	5000	2600	0
Down Minimum	50	60	40

**TABLE 2-2** 

After making the desired PID Value adjustments, push the Save button and go to the desired Accuset mode. Test how the changes affect Accuset performance. If the new settings cause undesirable results, reset Accuset to the factory defaults.





#### DIAGNOSTIC

This menu provides diagnostic information regarding voltage, current and software revisions. This information is used for troubleshooting by a qualified Wood-Mizer service representative.

### **Restore Factory Defaults**

To return all Accuset settings the their factory default values, press and hold the Toggle button and turn the key switch on.

The Accuset settings are now returned to their factory default values, including:

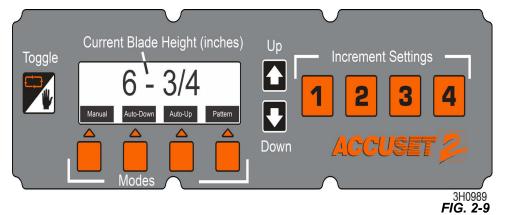
- Calibration settings. <u>See Section</u> to recalibrate the Accuset control.
- PID values. See above for setting values.

### 2.2 Mode Selection

Accuset modes are selected by pressing the proper Mode Select button (Auto-Down, Auto-Up or Pattern) located under the display window.

**Manual Mode** - This mode uses the up/down function of the sawmill as you normally would without the Accuset option. The Current Blade Height will continue to be displayed by the Accuset control.

Auto-Down Mode - This mode references the current blade height and increments the blade down. The Accuset will automatically move the saw head down and stop at the next increment when you push the drum switch down. Each of the four Increment Setting buttons stores four adjustable increment settings for a total of 16 actings. Bush button #1 act



total of 16 settings. Push button #1 once for setting #1. Push button #1 a second time for setting #5, etc...

**Auto-Up Mode** - This mode *references the current blade height* and increments the blade *up*. The Accuset will automatically move the saw head up and stop at the next increment when you push the drum switch up. Auto-Up mode is often used to raise the saw head in large increments when preparing to cut a new log or log that has been turned. This raises the saw head without having to hold the drum switch up, freeing the operator to perform other functions while the saw head is being raised. The Increment Settings buttons work in the same manner as described in Auto-Down Mode.

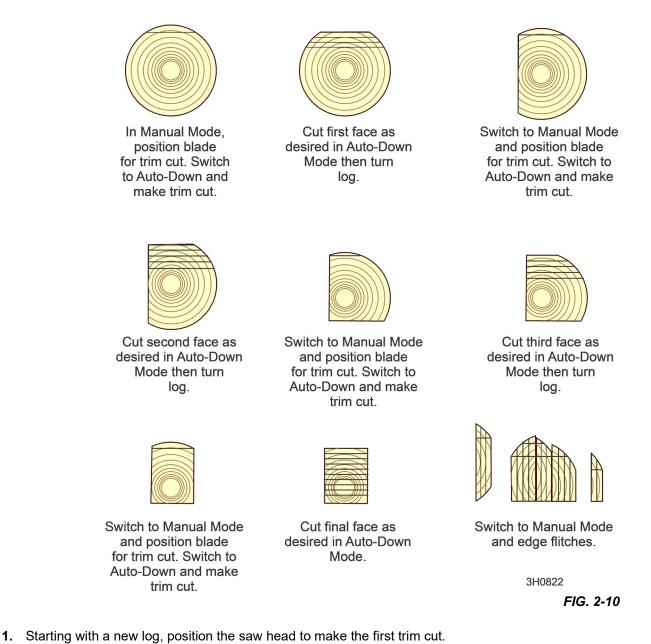
**NOTE:** The sixteen increment settings apply to both Auto-Down AND Auto-Up modes. If you change a setting in Auto-Down mode, it will also change when you are in Auto-Up mode.

**Pattern Mode** - This mode *references the bed surface* and allows you to program up to six different increments calculated up from the bed. The sixth (top) increment repeats itself up to the upper limit of the saw head travel. The bottom increment indicates the size of the remaining cant when the pattern is complete.

**Reference Mode** - This mode allows the operator to program up to four pre-set locations along the saw head travel. The factory default settings are at the bottom (1"), the location where the saw head is calibrated (12"), a location midway between the calibration and the top (24"), and the top (31").



## 2.3 Using Auto-Down Mode



2. Push the Auto-Down button under the display.

The first Increment Setting is displayed by default.

- 3. Choose the desired increment setting by pushing the appropriate Increment Setting button.
  - **a.** Select the desired setting number and push the Up or Down buttons until the desired Increment Setting is obtained.
  - **b.** Include blade kerf in your setting.

The amount of kerf will depend on the thickness and tooth set of the blade you are using. The Accuset can be programmed with an automatic kerf setting if desired (<u>See Setting the Kerf</u>).

When increment value is changed, it is only temporarily stored. If the control is turned off, the settings will return to the factory defaults unless the new values are saved.



Save the increment settings.

- **a.** Push the Manual Mode then push the Up button. The Configuration Menu will be displayed.
- **b.** Choose Save to enter the Save Settings menu.
- c. Push Save.

**Example:** Push Auto-down button. To store 1 1/2" increment to the #1 increment setting, push button #1. Push the Up or Down arrow button to raise or lower the increment on the screen to the desired setting (1 1/2). Push the Manual button, then the Up arrow to display the Configuration menu. Now push the Save button to enter the Save Settings menu. Push the Save Settings button. Multiple buttons can be programmed and saved all at one time.

- 4. Push the Auto-Down button to return to Auto-Down Mode if necessary.
- 5. Make the trim cut, raise the saw head and return the carriage to the front of the log.
- 6. Push the up/down drum switch down and release.

The saw head will automatically bypass the setting where the first cut was made and stop at the next setting determined by the increment you have chosen.

- 7. Make a cut, raise the saw head and return the carriage for the next cut.
- 8. Push the up/down drum switch down and release.

The saw head will stop at the setting for the next cut.

- 9. Repeat this procedure down this face of the log as desired.
- **10.** Turn the log as you normally would and push the Manual Mode button to place the Accuset in Manual Mode.
- **11.** Position the saw head for the trim cut and push the Auto-Down button to return to Auto-Down Mode. Make the trim cut, raise the saw head and return for the next cut.
- **12.** Use the same procedure as described above to cut each side of the log until done.

**NOTE:** Anytime a trim cut is necessary, the Manual button can be pressed to enter Manual Mode. Position the saw head for the trim cut and push the Auto-Down button to return to Auto-Down Mode. Accuset will reference the new blade position and stop at the next setting determined by the increment you have chosen.

### 2.4 Using Auto-Up Mode

Auto-Up Mode works exactly the same as Auto-Down explained above except it controls the saw head movement in the up direction.

### 2.5 Using Pattern Mode

- 1. Starting with a new log, position the saw head at the front end of the log.
- 2. Push the Pattern button under the display. Pattern Setting #1 is the factory default.
- **3.** Choose the desired pattern setting (1 16) by pushing the appropriate Increment Setting button.

In Pattern mode, a list of six increments referenced from the bed rail is shown on the display. The bottom increment represents the distance from the bed rail for the last cut. Each increment in the list can be adjusted as desired. The top increment repeats as necessary depending on how high you raise the saw head.

As the saw head is raised or lowered, symbols in the pattern increment list indicate where the blade is located in reference to the pattern. When the blade is above the top setting a ^ symbol appears next to the top increment to indicate you are in the repeating top increment. After the blade is lowered and the last top increment is reached, a + symbol will appear to indicate the next setting is close. When the blade reaches the increment setting, a - symbol will appear next to that setting.

4. Change any of the six pattern increments by pushing the +/- Drop button (below the pattern increment list) to scroll to the desired increment.
The increment that is active is highlighted

The increment that is active is highlighted.



- 5. The previous increment setting will automatically be copied to the remaining increments as you scroll down.
- Push the Up or Down buttons until the desired increment is obtained. 6.
- 7. Include blade kerf in your setting (i.e. If you want the finished boards to be 1" thick, set the increment to 1 1/8" to allow for typical blade kerf). The amount of kerf will depend on the thickness and tooth set of the blade being used. The Accuset can be programmed with an automatic kerf setting if desired See Section: Setting the Kerf.
- 8. Push the +/- Drop button to move to the next pattern increment and adjust as desired.
- **9.** After the bottom increment setting is adjusted as desired, push the Manual Mode button then push the Up button. The Configuration Menu will be displayed.
- **10.** Choose Save to enter the Save Settings menu, then select Save.

**Example:** To edit the pattern increment settings for the #4 pattern setting, push Increment Selection button #4 once to display pattern setting #4 (the factory default value for pattern setting #4 is 1 3/4").

- Push the +/- Drop button to enter pattern edit mode. The top pattern increment is now highlighted. Push the Down button to adjust the setting to 1 1/8". While pushing the Down button, push the Up button to scroll faster. When you get close to 1 1/8", release both buttons. Push the Down button to fine tune the setting to exactly 1 1/8". Push the +/- Drop button again to move the next pattern increment. The setting will automatically be copied from the previous setting to 1 1/8" for all the remaining increments below. Exit pattern edit mode by pushing the Manual button. Save the new pattern setting by pushing the Up arrow button to enter Configuration Menu #1

- button to enter Configuration Menu #1.
- Press the Save button to enter the Save Settings menu, then push the Save button.
- Push the Pattern button to return to Pattern Mode and push Increment Selection button #4. All of the pattern settings should now be 1 1/8".
- **11.** Push the Manual Mode button and raise the saw head so the blade is positioned near the top of the log.
- **12.** Push the Pattern button to return to Pattern Mode.
- **13.** Push the up/down drum switch down and release. The saw head will automatically stop at the first setting determined by the top pattern increment.
- **14.** Make a cut, raise the saw head and return the carriage for the next cut.
- **15.** Push the up/down drum switch down and release. The saw head will stop at the setting for the next cut. Repeat this procedure down this face of the log as desired.
- **16.** Turn the log as you normally would and push the Manual Mode button to place the Accuset in Manual Mode.
- 17. Raise the saw head so the blade is positioned near the top of the log and push the Pattern button to return to Pattern Mode.
- 18. Make the cut, raise the saw head and return for the next cut.
- **19.** Use the same procedure as described above to cut each side of the log until done.

#### 2.6 Using Reference Mode

- 1. While in Manual Mode, push the Toggle button to enter Reference Mode.
- Push one of the four Increment Setting buttons to select a reference. 2. Factory defaults for buttons 1 through 4 are 1", 12", 24" and 31".
- Push the up/down drum switch in the appropriate direction to start the saw head toward the reference position. 3.

**NOTE:** If the saw head is already above the position and the drum switch is pushed up, Accuset will return to Manual Mode. If the saw head is below the reference position and the drum switch is pushed down, Accuset returns to Manual Mode.

When the saw head reaches the target reference position, Accuset will return to Manual Mode.

- 4. To change the stored setting for any of the four buttons, move the saw head to the desired position.
- 5. Press the Toggle button to enter Reference Mode.



- 6. Push preferred button to store the setting and push "Store Here".
- 7. Push the Toggle button to return to Manual Mode.

Setting can be changed by selecting one of the four Increment Setting buttons and changing the setting by using the Up and Down arrow buttons.

8. Push the "Store Here" button to store the new setting.

**NOTE:** The new reference setting is only stored in temporary memory and will return to the default value when the Accuset is powered off and back on. To permanently store the new setting, enter Configuration Menu #1 and push the "Save", then the "Save" button from the Save Settings menu. Accuset will now keep the new setting until it is readjusted or the Accuset is reset to factory defaults.

# SECTION 3 ACCUSET 2 TROUBLESHOOTING

### 3.1 Control Lights (2009+)

LT40HD Remote	Rev. K5.00+
LT40HD Super Remote	Rev. K3.00+
LT50HD Remote	Rev. A5.00+

Lights are provided on the control front panel and the motor control assembly (located in the remote power box) to help diagnose power feed or up/down problems should they occur.

Two indicator lights are provided on the back of Drum Switch Indicator the front control panel. If power is supplied to the control panel, the red power indicator light will be 0 0 0 illuminated. 0 The drum switch indicator illuminates when the up/down drum switch is engaged. The light will illuminate green with the drum switch in the **up** position and **red** with the drum switch in the **down** position. 0 0 0 0 **Power Indicator** FIG. 3-1 (Rev. B.00+) Diagnostic Diagnostic lights Lights Up - Grn ( )Dn - Red are provided on Switch Motor Switch the motor con-Input Output Input trol module. Saw Head Wood-Mizer Saw Head 0 Forward - Red Neutral Neutral When the saw Reverse - Grr Status 0 head is in neu-Grn - Ready Motor Red - Error tral (not moving Output up, down, for-Up - Grn Dn - Red ward or in Up - Grn Switch Switch Motor reverse), the Dn - Red Input Input Output Switch Motor Status light is Saw Head Saw Head 00 Forward - Red Input Output Wood-Mizer Forward Up green. Reverse - Grr Wood-Mizer Status 0 Motor Up/Down Grn - Ready Status Output Red - Error lights: When Grn - Ready the up/down Red - Error Error Switch drum switch is Input moved to the up Up - Grn position, the Dn - Red Forward - Red Switch Motor Reverse - Grn switch and Saw Head Saw Head  $\bigcirc \bigcirc \bigcirc \bigcirc$  $\mathbf{O}$ Input Output  $\bigcirc$  $\bigcirc$ motor lights are Down Reverse Motor Wood-Mizer green. With the Output up/down drum Status SM0342-2 switch in the Grn - Ready Red - Error down position, the switch and FIG. 3-2 motor lights are

**Feed lights:** When the feed drum switch is moved to the forward position, the switch and motor lights are red. With the feed drum switch in the reverse position, the switch and motor lights are green.

If an error occurs, the status light will turn red. A corresponding error message will be displayed to provide more detail about the problem.

### 3.2 Control Lights (Pre-2009)

LT40HD Remoteprior to Rev. K5.00 LT40HD Super Remoteprior to Rev. K3.00

red.



#### LT50HD Remoteprior to Rev. A5.00

Lights are provided on the control front panel and the motor control assembly (located in the remote power box) to help diagnose up/down problems should they occur.

Two indicator lights are provided on the back of the front control panel. If power is supplied to the control panel, the red power indicator light will be illuminated.

The drum switch indicator illuminates when the up/down drum switch is engaged.

The light will illuminate **green** with the drum switch in the **up** position and **red** with the drum switch in the **down** position.

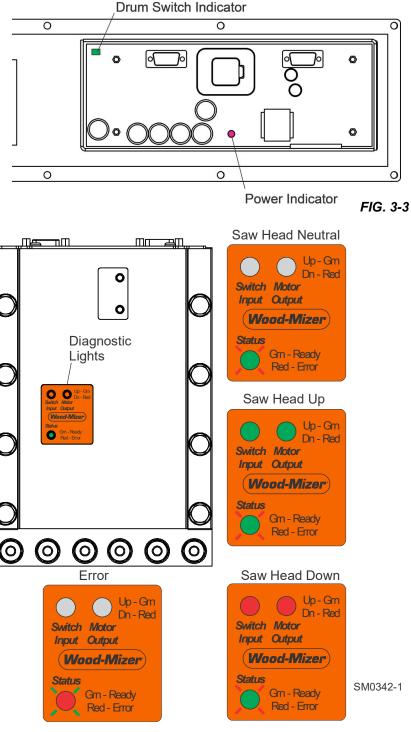
(**Rev. B.00+):** Diagnostic lights are provided on the motor control module.

When the saw head is in neutral (not moving up or down), the Status light is green, with a flash of red.

When the up/down drum switch is moved to the up position, the switch and motor lights are green.

With the up/down drum switch in the down position, the switch and motor lights are red.

If an error occurs, the status light will turn red, with a flash of green. A corresponding error message will be displayed to provide more detail about the problem.





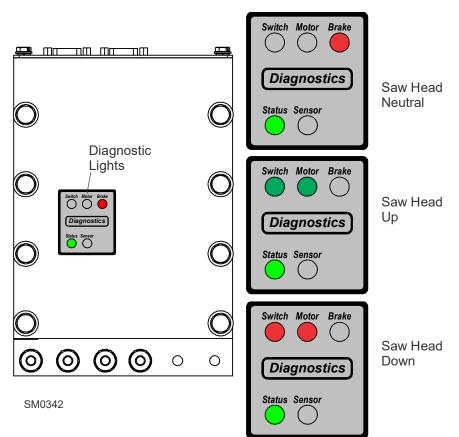
(Rev. A.00 - A.02): Diagnostic lights are provided on the motor control module.

When the saw head is in neutral (not moving up or down), the status light is green and the brake light is red.

When the up/down drum switch is moved to the up position, the brake light is off and the switch and motor lights are green.

With the up/down drum switch in the down position, the brake light is off and the switch and motor lights are red.

If an error occurs, the status or sensor light will turn red. A corresponding error message will be displayed to provide more detail about the problem.





### 3.3 Error Messages.

Error	Possible Cause(s)
CHECK TRANSUCER	Defective or loose transducer cable
	Defective transducer
MOTOR CURRENT	Excessive current draw on Up/Down motor caused by mechanical bind in saw head move- ment.
	Short in up/down motor wires
VOLTAGE ERROR	Low voltage at the H-bridge or HMI (front panel)
	Weak battery
	Over-charging alternator
	Loose connections
CHECK BREAKER	Tripped Up/Down circuit breaker
OR CABLE	Defective or loose H-bridge communication (splitter) cable

TABLE 3-0

### 3.4 Diagnostic Screen

The diagnostic screen can be used to help diagnose battery, up/down and power feed motors, and power feed potentiometer problems should they occur.

- 1. Push the Up button while in Manual Mode to display Configuration Menu 1.
- 2. Select Other to display Configuration Menu 2.
- **3.** Push the Diagnostic button to display the Diagnostic Screen.

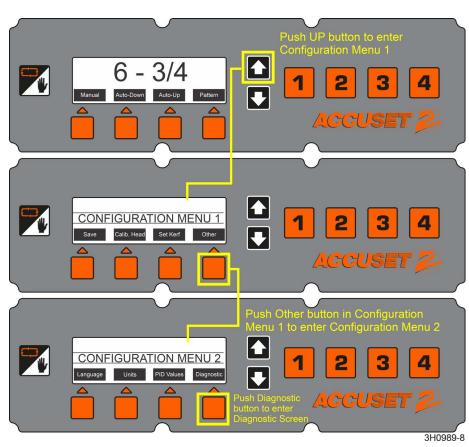


FIG. 3-4

# 3

The Diagnostic Screen is shown in FIG. 3-5.

**Battery Voltage.** This shows battery voltage as read by the H-Bridge.

**Controller Voltage.** This shows battery voltage as read by the front panel.

Motor Current. Amperage of the up/down motor.

Feed Current. Amperage of power feed motor.

**Feed Potentiometer.** This tests input signal of the power feed potentiometer. Turn the power feed potentiometer to check if it moves smoothly.

**HBridge Module.** This is the H-Bridge software revision.

**HMI Module.** This is the HMI module software revision.

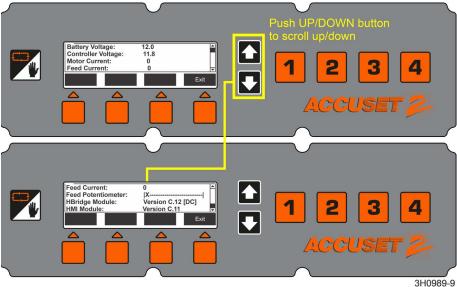
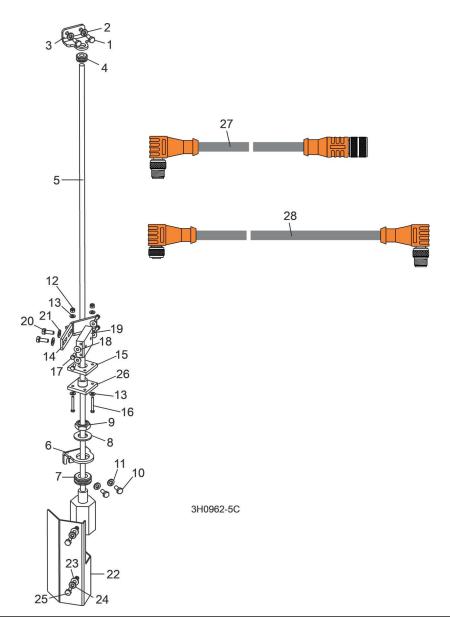


FIG. 3-5



# SECTION 3 REPLACEMENT PARTS

# 3.1 Sensor Assembly

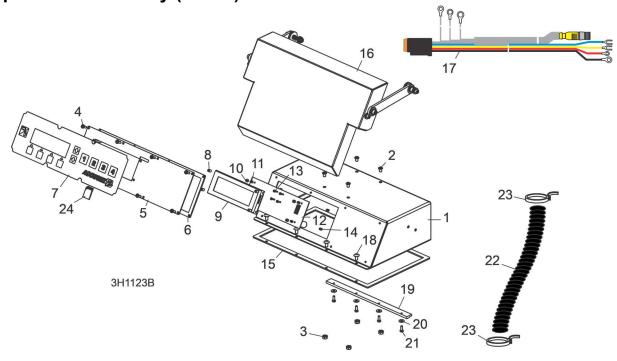


REF	PART #	DESCRIPTION	COMMENTS	QTY.
	025019	TRANSDUCER ASSEMBLY, ACCUSET	Available in assemblies only.	1
1	F05005-86	Screw, 1/4-20 x 5/8" Hex Head Bolt		2
2	F05011-14	Washer, 1/4" Split Lock		2
3	035560	Bracket, Upper Sensor Mount		1
4	025248	Grommet, 3/8" ID Rubber		1
	025246	Sensor Assembly, Accuset Transducer	Available in assemblies only.	1
5	038659	Sensor, Balluff Transducer Style Z		1
6	035544	Bracket, Lower Sensor Mount		1
7	025247	Grommet, 3/4" ID Rubber		1
8	025250	Washer, 3/4" ID Nylon		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
9	F05010-171	Nut, 3/4-16 Nylon Lock		1
10	F05005-86	Screw, 1/4-20 x 5/8" Hex Head Bolt		2
11	F05011-14	Washer, 1/4" Split Lock		2
12	F05010-169	Nut, #8-32 Hex Nylon Lock		2
13	F05011-41	Washer, #8 SAE Flat		4
14	035444	Bracket, Sensor Magnet Mounting		1
15	038658	Magnet, Balluff Transducer		1
16	F05004-291	Screw, #8-32 x 1 1/4" Hex Head Stainless Steel		2
17	F05004-27	Screw, #10-24 x 1/2" Hex Head		4
18	F05011-18	Washer, #10 SAE Flat		4
19	035440	Block, Sensor Magnet Mounting		1
20	F05005-1	Bolt, 1/4-20 x 3/4" Full Thread Hex Head		2
21	F05011-11	Washer, 1/4" SAE Flat		2
	F05089-8	Wire Tie, 3/16" x 10" Black UV		3
	003184	Cover Kit, Lower Accuset Sensor		1
22	038987	Cover Weldment, Lower Accuset Sensor		1
23	F05011-11	Washer, 1/4" SAE Flat		2
24	F05011-14	Washer, 1/4" Split Lock		2
25	F05005-15	Bolt, 1/4-20 x 1/2" Hex Head		2
	003184-1291	Instruction Sheet, Lower Accuset Sensor Cover Retrofit		1
26	071357	Bushing, Transducer Vibration Dampener		1
	006029	CABLE KIT, ACCUSET 2 TRANSDUCER REPLACEMENT		1
27	052920	Cable Assembly, Accuset 2 Transducer	Available in assemblies only.	1
	F05089-5	Wire Tie, 5/16" x 15" UV Black		3
	006036	CABLE KIT, ACCUSET 2 COMM REPLACEMENT		1
28	052922	Cable Assembly, 37-Foot Communication	Available in assemblies only.	1
	F05089-3	Wire Tie, 3/16" x 6" UV Black		25



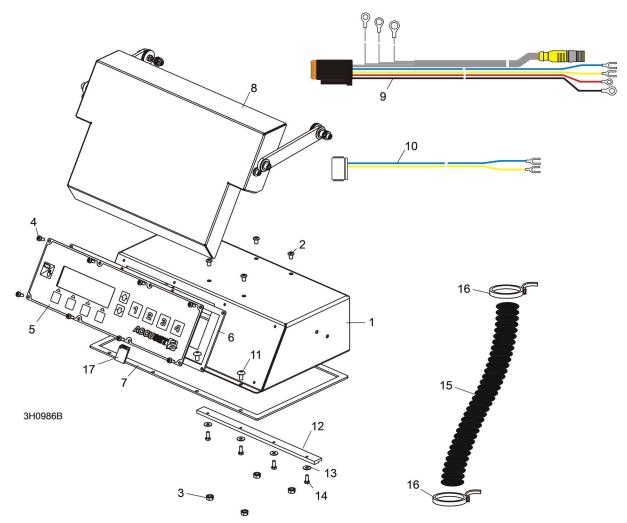
# 3.2 Operators Assembly (2006+)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	053052	CONTROL ASSEMBLY, ACCUSET 2 REMOTE		1
1	003800	Box Weldment, Accuset 2 Control	Available in assemblies only.	1
2	F05005-62	Screw, 1/4-20 x 3/8" Socket Button Head		4
3	F05010-9	Nut, 1/4-20 Self-Locking Hex		4
4	F05015-17	Screw, #10-24 x 1/2" Phillips Head		8
	069649	Panel Assembly, Accuset 2 Modular Front		1
5	055929	Panel Weldment, AccuSet 2 Front Mod- ule		1
6	024870	Gasket, Accuset Front Panel		1
7	052874	Switch, Accuset 2 Membrane		1
8	069650	Spacer, 1/4" OD x 5/16" Long Nylon		4
9	052900	Display, Accuset 2 Front Panel		1
10	024864	Spacer, 1/8" ID x 1/4" OD x 3/16" Long		4
11	024863	Spacer, 1/4" Hex Tapped		4
12	069662	PCB Assembly, Accuset 2 Replacement Control		1
13	F05005-183	Screw, #4-20 x 1/4" T10 Self-Tapping		4
14	024863	Spacer, 1/4" Hex Tapped		4
15	015980	Gasket, Accuset Control Box		1
16		Cover Parts	(See Section 3.6)	
17	052950	Harness Assembly, Accuset 2 LT40/70-R HMI		1
18	F05015-17	SCREW, #10-24 X 1/2" PHILLIPS HEAD		4
19	015296	BRACKET, ACCUSET HOLDOWN CLAMP		1
20	F05011-18	WASHER, #10 SAE FLAT		4
21	F05004-27	BOLT, #10-24 X 1/2" HEX HEAD		4
22	024323-62	CONDUIT, 5/8" SPLIT LOOM HIGH TEMP		8 in.
23	F05089-3	TIE WRAP, 3/16" X 6" BLACK UV		2
24	053225	CARD KIT, ACCUSET 2 SOFTWARE UPDATE		1

# 3.3 Operators Assembly (Pre-2006)

Accuset 2 Rev. A.00 - B.02



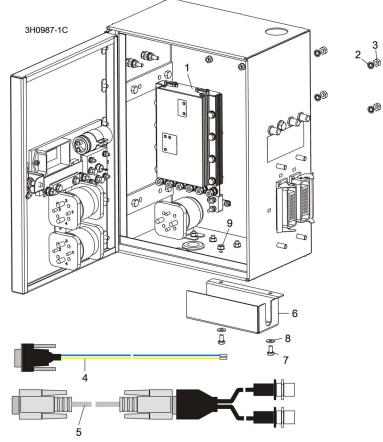
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	053052	CONTROL ASSEMBLY, ACCUSET 2 REMOTE		1
1	003800	Box Weldment, Accuset 2 Control	Available in assemblies only.	1
2	F05005-62	Screw, 1/4-20 x 3/8" Socket Button Head		4
3	F05010-9	Nut, 1/4-20 Self-Locking Hex		4
4	F05015-17	Screw, #10-24 x 1/2" Phillips Head		8
5	053018	Panel Assembly, Accuset 2 Front		1
6	024870	Gasket, Accuset Front Panel		1
7	015980	Gasket, Accuset Control Box		1
8		Cover Parts	(See Section 3.6)	
9	052950	Harness Assembly, Accuset 2 LT40/70-R HMI		1
10	053039	Cable Assembly, LT40/70-R HMI Bypass	Bypass Cable Assembly 053039 no longer required because remote sawmill har- ness includes wires that con- nect directly to the up/down drum switch (4/08). 053039 still available for retrofit applications only.	1



REF	PART #	DESCRIPTION	COMMENTS	QTY.
11	F05015-17	Screw, #10-24 x 1/2" Phillips Head		4
12	015296	Bracket, Accuset Holdown Clamp		1
13	F05011-18	Washer, #10 SAE Flat		4
14	F05004-27	Bolt, #10-24 x 1/2" Hex Head		4
15	024323-62	Conduit, 5/8" Split Loom High Temp		8 in.
16	F05089-3	Tie Wrap, 3/16" x 6" Black UV		2
17	053225	Card Kit, Accuset 2 Software Update		1

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# 3.4 Control Assembly (Standard Remote Box)



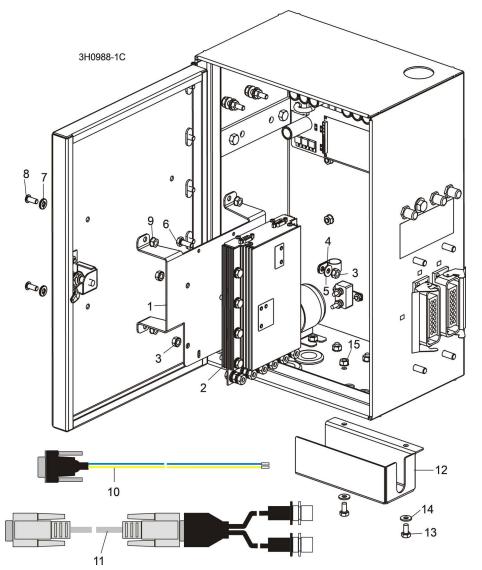
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	057821LS-FR	CONTROL ASSEMBLY, ACCUSET 2 MOTOR	Use Field Replacement Kit 057821LS-FR replaces assem- bly 057821LS supplied prior to 5/11. 057821LS-FR replaces 052974 (Rev. B.00).	1
	069556	PCB Assembly, Transient Voltage Suppres- sion		1
	053204	Suppressor Assembly, Dual 5KW Transient Voltage	Available in assemblies only. Added Rev. A.01 to protect H-Bridge module from voltage spikes due to loose battery/fuse connections. Use kit 053205 to retrofit previous revisions. Con- trol Assembly 052974 replaced per Rev. A.02.	1
2	F05011-69	Washer, 1/4" Heavy Duty Internal Star		4
3	F05010-129	Nut, 1/4-20 Heavy Duty Hex Jam		4
4	053214	Wire Assembly, Remote Bridge Bypass	Replaces Bypass Cable Assem- bly 053038. New wire assembly connects directly to harness connector assembly (4/08). 053038 still available for retrofit applications only.	1
5	053696	Cable Assembly, Dual M12 to D-Sub	Cable Assembly 053696 replaces Harness 052919 sup- plied prior to 3/10.	1
	006021	Guard Assembly, Lower Power BOx Wire		1
6	006014	Guard, Lower Power Box Wire		1
7	F05005-15	Bolt, 1/4-20 x 1/2" Hex Head		2



REF	PART #	DESCRIPTION	COMMENTS	QTY.
8	F05011-11	Washer, 1/4" SAE Flat		2
9	F05010-9	Nut, 1/4-20 Self-Locking Hex		2

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# 3.5 Control Assembly (Super Remote Box)

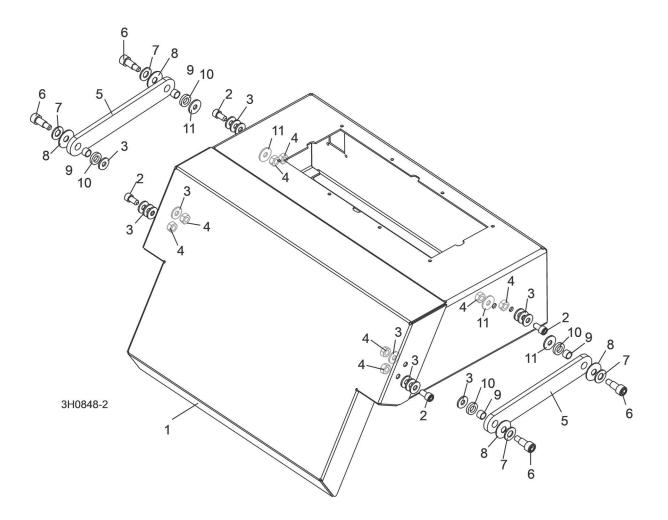


REF	PART #	DESCRIPTION	COMMENTS	QTY.
	053050	DRIVE ASSEMBLY, ACCUSET 2 W/BRACKET		1
1	056763	Plate, Control Board Mounting		1
2	057821LS-FR	Control Assembly, Accuset 2 Motor	Use Field Replacement Kit 057821LS-FR replaces assem- bly 057821LS supplied prior to 5/11. 057821LS-FR replaces 052974 (Rev. B.00).	1
	069556	PCB Assembly, Transient Voltage Sup- pression		1
	053204	Suppressor Assembly, Dual 5KW Transient Voltage	Available in assemblies only. Added Rev. A.01 to protect H-Bridge module from voltage spikes due to loose battery/fuse connections. Use kit 053205 to retrofit previous revisions. Con- trol Assembly 052974 replaced per Rev. A.02.	1
3	F05010-9	Nut, 1/4-20 Self-Locking Hex		5
4	010748	Clamp, 5/8" Coated EMT		1
5	F05011-11	Washer, 1/4" SAE Flat		1



REF	PART #	DESCRIPTION	COMMENTS	QTY.
6	F05005-1	Bolt, 1/4-20 x 3/4" Hex Head Full Thread		1
7	F05011-14	Washer, 1/4" Split Lock		4
8	F05005-128	Bolt, 1/4-20 x 5/8" Stainless Button Socket Head		4
9	F05010-9	Nut, 1/4-20 Self-Locking Hex		4
10	053214	Wire Assembly, Remote Bridge Bypass	Replaces Bypass Cable Assem- bly 053038. New wire assembly connects directly to harness connector assembly (4/08). 053038 still available for retrofit applications only.	1
11	053696	Cable Assembly, Dual M12 to D-Sub	Cable Asssembly 053696 replaces Harness 052919 sup- plied prior to 3/10 (cost reduc- tion).	1
	006021	Guard Assembly, Lower Power Box Wire		1
12	006014	Guard, Lower Power Box Wire		1
13	F05005-15	Bolt, 1/4-20 x 1/2" Hex Head		2
14	F05011-11	Washer, 1/4" SAE Flat		2
15	F05010-9	Nut, 1/4-20 Self-Locking Hex		2

# 3.6 Cover Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	016703	COVER, ACCUSET CONTROL		1
2	F05005-148	SCREW, 1/4-20 X 1/2" STAINLESS SOCKET HEAD	Stainless screw F05005-148 replaces F05005-39 originally supplied prior to Rev. A.03.	4
3	F05011-11	WASHER, 1/4" SAE FLAT		16
4	F05010-156	NUT, 1/4-20 HEX HALF NYLON LOCK		8
5	016704	ARM, ACCUSET COVER LINK		2
6	F05006-69	BOLT, 5/16" X 1/2" SHOULDER 1/4-20 THREAD		4
7	F05011-17	WASHER, 5/16" SAE FLAT		4
8	F05011-93	WASHER, 5/16" BELLEVILLE		4
9	016655	BUSHING, 5/16" ID X 3/8" OD X 1/4" LONG BRONZE		4
10	F05011-92	WASHER, 5/16" FLAT NYLON		4
11	F05011-12	WASHER, 1/4" FENDER		4