

# **DC Accuset 2**

## **Safety, Operation, Maintenance & Parts Manual**

---

**ASET2 for LT70 Series Sawmills rev. A.00**

---



**Safety is our #1 concern!** Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

*Form #1520*

# Table of Contents

# Section-Page

<b>SECTION 1</b>	<b>SETUP &amp; OPERATION</b>	<b>1-1</b>
1.1	Control Setup.....1-1	
	<i>Contrast Adjustment..... 1-2</i>	
	<i>Startup Configuration..... 1-2</i>	
	<i>Other Settings..... 1-5</i>	
	<i>Restore Factory Defaults..... 1-9</i>	
1.2	Mode Selection.....1-10	
1.3	Using Auto-Down Mode.....1-12	
1.4	Using Auto-Up Mode.....1-14	
1.5	Using Pattern Mode.....1-15	
1.6	Using Reference Mode.....1-17	
<b>SECTION 2</b>	<b>ACCUSET 2 TROUBLESHOOTING</b>	<b>2-1</b>
2.1	Control Lights.....2-1	
2.2	Error Messages (DC Only).....2-3	
<b>SECTION 3</b>	<b>PARTS LIST</b>	<b>3-1</b>
3.1	Sensor Assembly.....3-1	
3.2	Control Assembly (DC).....3-1	
3.3	Control Assembly (AC).....3-3	
3.4	Cover Assembly.....3-1	
<b>SECTION 4</b>	<b>ELECTRICAL WIRING DIAGRAMS, D42</b>	<b>4-1</b>

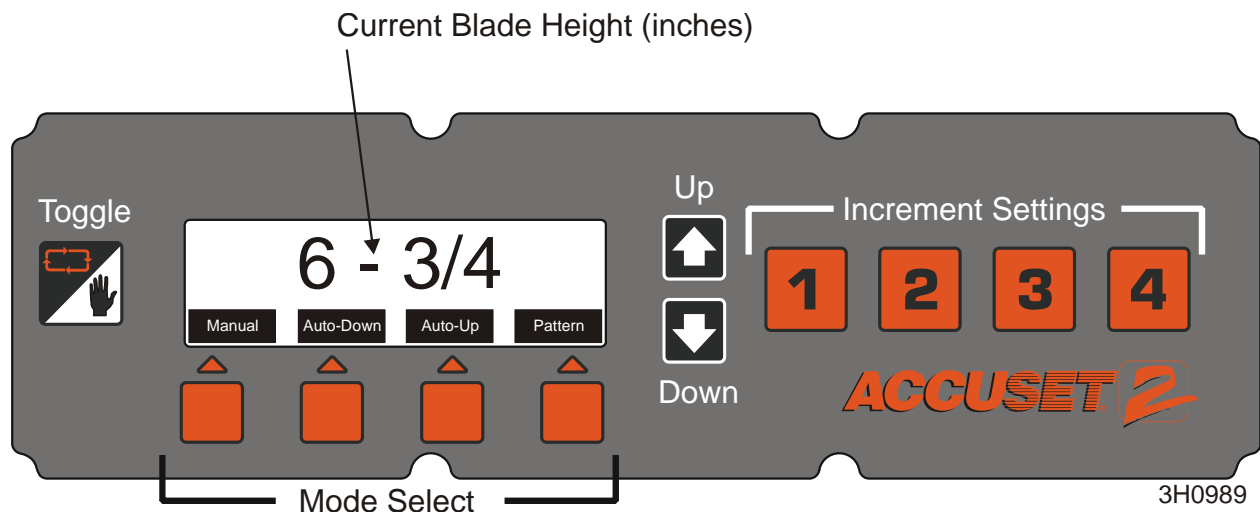
## SECTION 1 SETUP & OPERATION

### 1.1 Control Setup



The Accuset 2 is programmed for operation with DC sawmills by default. If your sawmill is an **AC** model, press and hold the toggle button when first turning the key switch on. The display will read “Overwrite Parameters with Defaults?”. Push the button labeled “Yes” to change the settings for operation with AC mills.

**See Figure 1-1.** Turn the key switch to the accessory (#3) position on DC mills or (#1) position on AC mills. The Accuset control starts in Manual Mode by default. See the figure below for identification of the control buttons and display.



**FIG. 1-1**

**About using the Up/Down Adjustment Buttons:** To make adjustments to a setting, 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.

# 1 Setup & Operation

## Control Setup

### 1.1.1 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.

### 1.1.2 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*.

**See Figure 1-2.** To enter Configuration Menu 1, push the Up button while in Manual Mode.

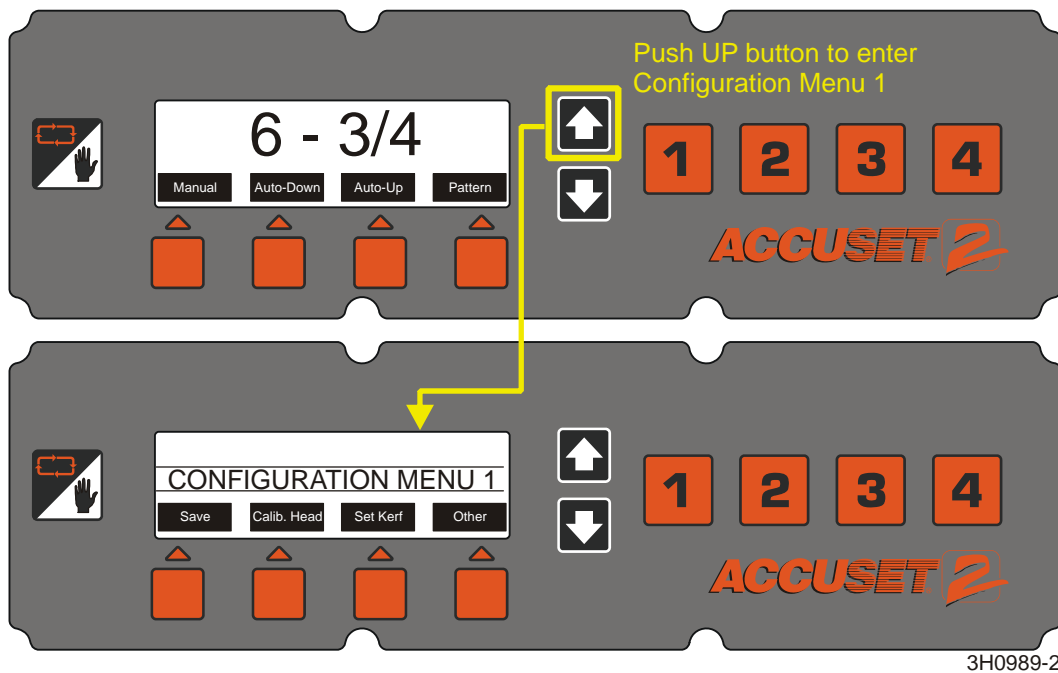
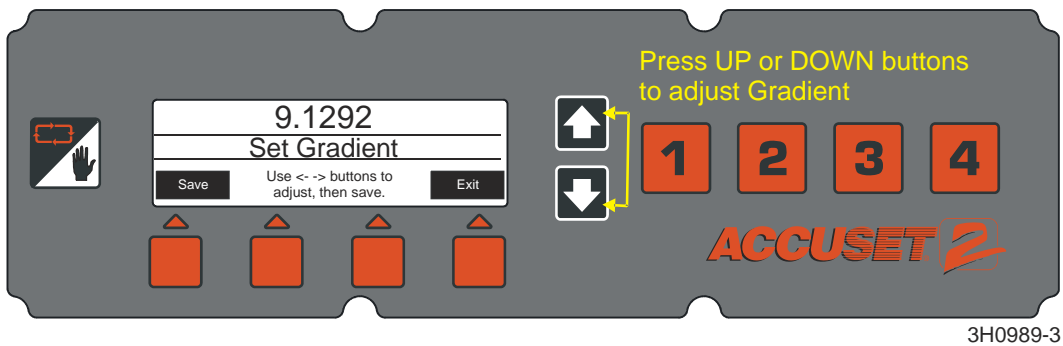


FIG. 1-2

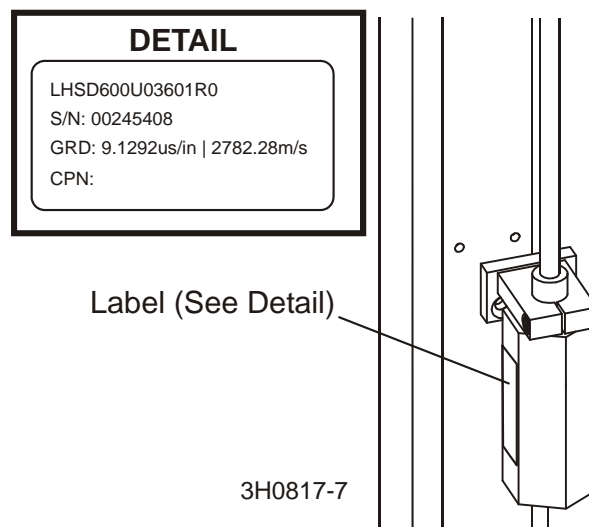
- Adjust Gradient.** If the Accuset is factory-installed, the Gradient Setting is already set to match the gradient of the transducer sensor (labeled "GRD" on the sensor). If the Accuset has been installed in the field, the transducer replaced or the Accuset control has been reset to Factory Settings,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

See **Figure 1-3**. To enter Configuration Menu 1, push the Up button while in Manual Mode. Push the button labeled "Calibrate Head", then the "Adjust Gradient" button to display the menu below.



**FIG. 1-3**

See **Figure 1-4**. 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"). Push the Save button to store the new Gradient Setting. If you don't want to save the new setting and want to return to the previously stored Gradient Setting, push Exit and turn the key switch to the off (#0) position.



**FIG. 1-4**

# 1

## Setup & Operation

### *Control Setup*

---

- **Press At 12 Inches (or 305mm in metric mode).** The Accuset control should indicate the actual position of the blade above the bed rails. To check this setting, move the saw carriage so the blade is positioned above a bed rail. Raise the saw head until the blade is positioned 12" (305mm) by actual measurement from the bed rail. Measure from the top of the bed rail to the bottom of a down-set tooth of the blade. While in Manual Mode, push the Up button to enter the Configuration Menu. Choose Calibrate Head and press the button labeled "Press at 12 inches" (or "Press at 305mm"). The display will change to "Head Calibrated". Push the Save Settings button to store the new 12-inches setting and exit the Configuration Menu.
- **After recalibrating the Accuset control,** check and adjust the inch scale on the saw head to match the value displayed on the control. Adjust the bottom saw head stop bolt all the way down. 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.

### 1.1.3 Other Settings

**Set 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 kerf is set to '0' and you have programmed increments of 1 1/8", the resulting boards will be about 1 1/16" thick because Accuset did not factor the thickness of the blade. If you enter an accurate kerf value, the resulting boards will be 1 1/8". Whether or not to use the kerf setting is dependant on your sawing practices and application.

**See Figure 1-5.** While in Manual Mode, push the Up button to enter the Configuration Menu. Press the "Set Kerf" button to display the menu below.

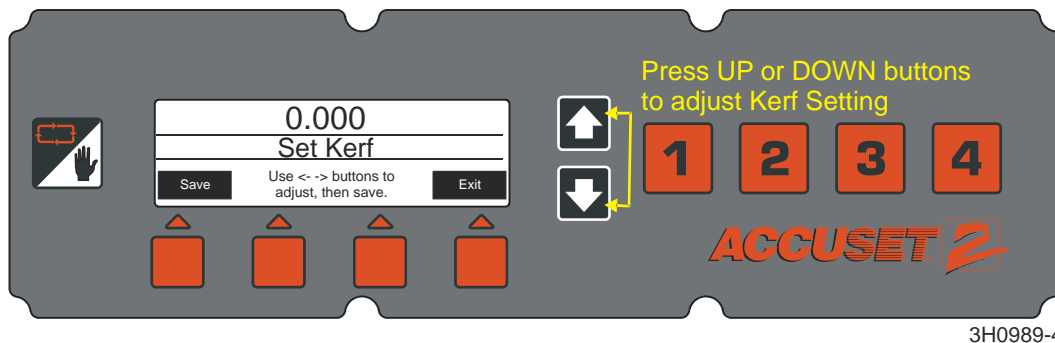


FIG. 1-5

**See Table 1-1.** Recommended kerf settings for various blades are provided below. These kerf setting values assume the teeth of the blade are set per factory specifications. If you prefer, a nominal kerf value of .125 (3 mm) can be entered and should be accurate enough for most applications.

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)

TABLE 1-1

Push the Set Kerf button and use the Up and Down buttons to adjust the kerf setting. Pushing the Up and Down buttons simultaneously will scroll the kerf faster. Push the Save button to store the new Kerf Setting. If you don't use the Kerf Setting, be sure to include the thickness of the blade in your increment settings as described in [Section 1.2 Mode Selection](#).

# 1 Setup & Operation

## Control Setup

See **Figure 1-6**. You can change other settings 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.

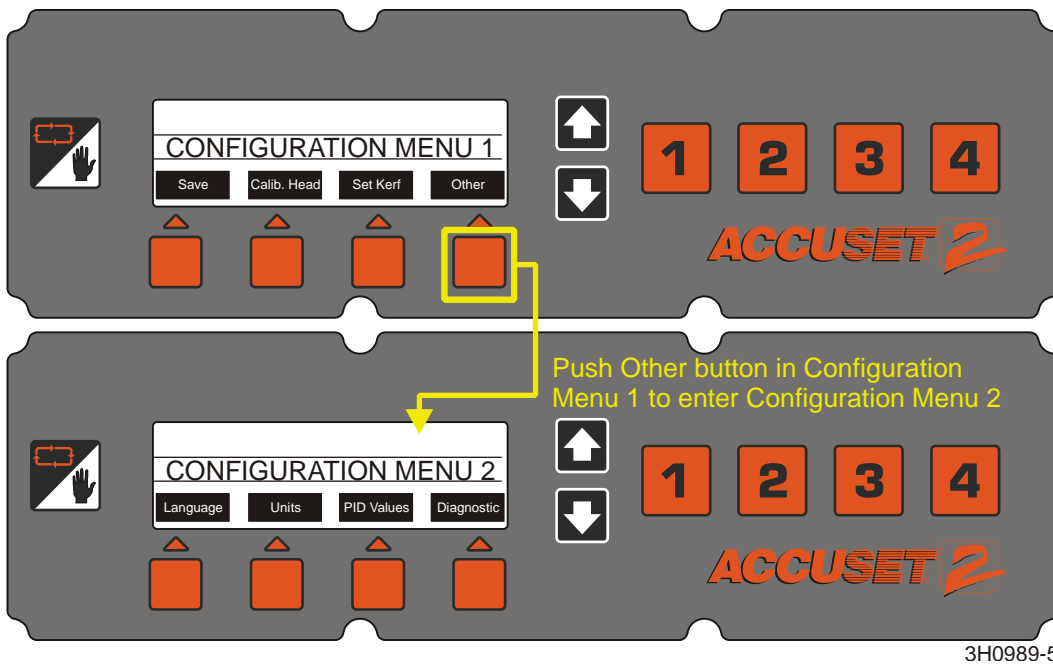
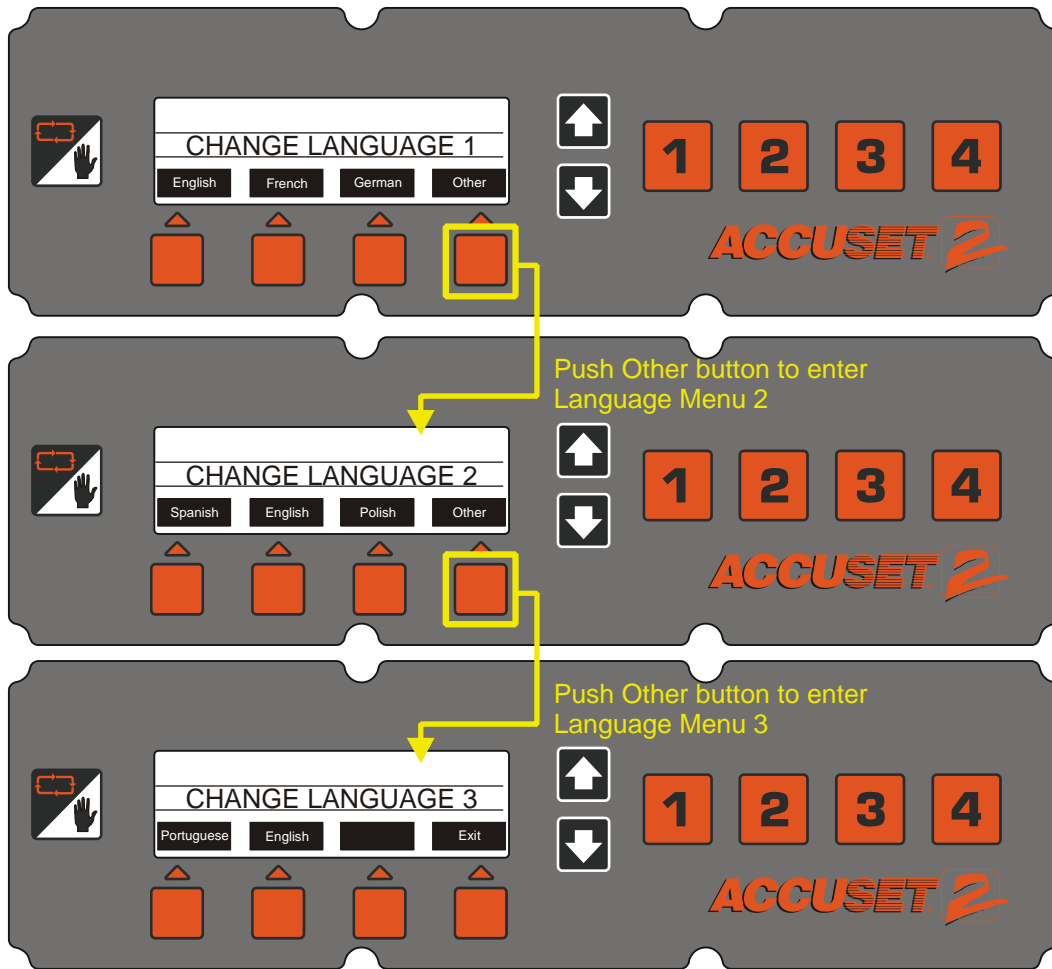


FIG. 1-6



**Language.** You can choose the language used for the Accuset display. Push the Language button and choose the desired language. Push the Save (or language equivalent) button to permanently store the new Language setting. To return to the previously stored Language setting, push Exit and turn the key switch to the off (#0) position.



3H0989-7

FIG. 1-6

# 1 Setup & Operation

## Control Setup

**Units.** This setting allows you to choose what 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.

See Figure 1-7.

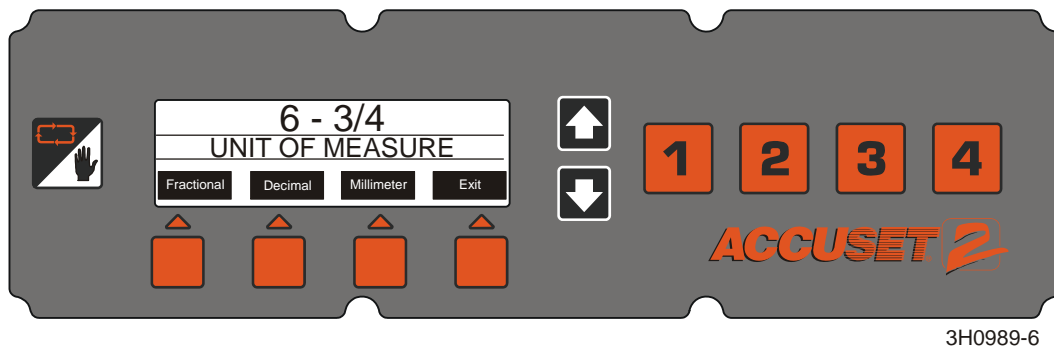


FIG. 1-7

**PID (Proportional - Integral - Differential) Values.** These settings allow 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.

See Table 1-2. The factory default PID value settings are shown below. Alternate settings are provided for use with most standard sawmills.

Value	Factory Default	Alternate for Standard Mills
Up Ticks	5	5
Up Distance	17500	20000
Up Minimum	1	2
Down Ticks	5	5
Down Distance	17500	20000
Down Minimum	1	2

TABLE 1-2

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 ([See Section 1.1.4](#)).

**Diagnostic.** This menu provides diagnostic information regarding voltage, current and software revisions. This information can be useful for troubleshooting by a qualified Wood-Mizer service representative.

#### **1.1.4 Restore Factory Defaults**

To return all Accuset settings to 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:

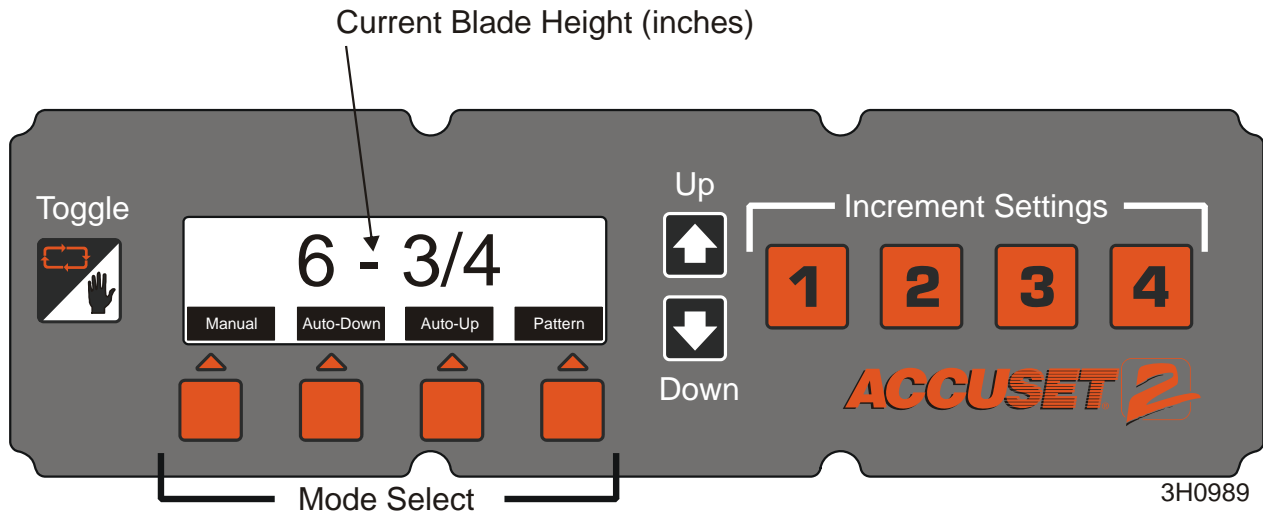
- Calibration settings. [See Section 1.1.2](#) to recalibrate the Accuset control.
- PID values. [See Section 1.1.3](#) for setting values.

# 1 Setup & Operaton

## Mode Selection

### 1.2 Mode Selection

See **Figure 1-8**. To select an Accuset mode, press the desired Mode Select button (Auto-Down, Auto-Up or Pattern) located under the display. Press the Manual Mode Select button to return the control to Manual Mode.



**FIG. 1-8**

**Manual Mode** - This mode allows you to use 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 allows you to choose an increment to move 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. You can store sixteen different increment levels using the four numbered Increment Settings buttons. Each button stores four adjustable increment 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 allows you to choose an increment to move 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 primarily used to raise the saw head in large increments when preparing to cut a new log or log that has been turned. This allows the operator to raise 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.

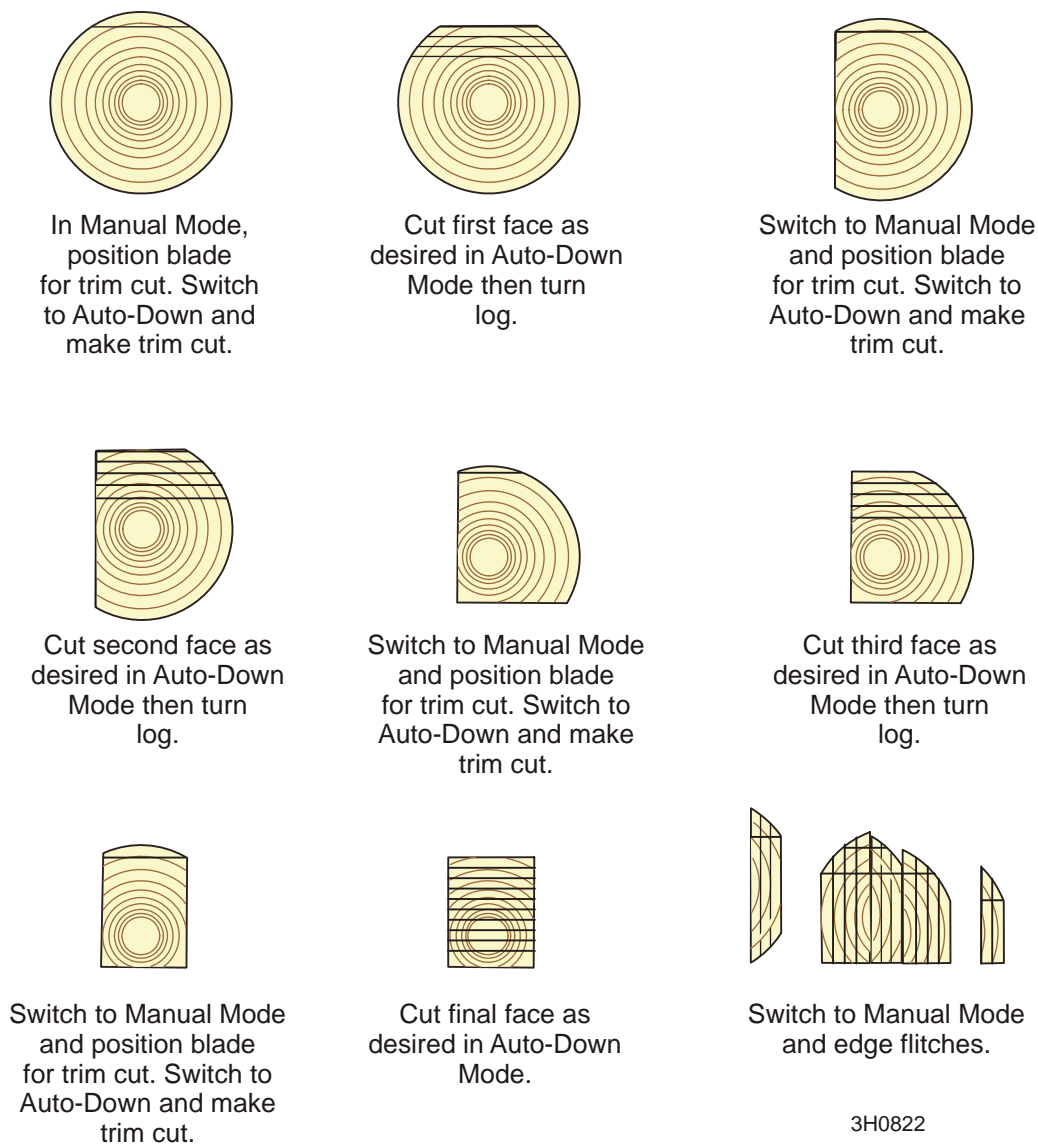
**NOTE:** The sixteen increment settings apply to Auto-Down AND Auto-Up modes. If you change a setting in Auto-Down mode, it will also change when you are in Auto-Up mode.

**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").

### 1.3 Using Auto-Down Mode

See Figure 1-9.



3H0822

**FIG. 1-9**

Starting with a new log, position the saw head to make the first trim cut.

Push the Auto-Down button under the display. The first Increment Setting is displayed by default. Choose the desired increment setting by pushing the appropriate Increment Setting button.

To change an Increment Setting, select the desired setting number and push the Up or Down buttons until the desired Increment Setting is obtained. Pushing the Up and Down buttons simultaneously will scroll the settings faster. Remember to 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 you are using. The Accuset can be programmed with an automatic kerf setting if desired ([See Section 1.1.3](#)).

When you change and increment value, 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. To save the new increment setting, push the Manual Mode then push the Up button. The Configuration Menu will be displayed. Choose Save to enter the Save Settings menu, then push Save.

**Example:** To store 1 1/2" increment to the #7 increment setting, push Increment Selection button #3 twice to display setting #7 (default value for setting #7 is 7"). Push the Down button to adjust the setting to 1 1/2". While pushing the Down button, push the Up button to scroll faster. When you get close to 1 1/2", release both buttons. Push the Down button to fine tune the setting to exactly 1 1/2". Push the Manual Mode button. Push the Up button to display the Configuration Menu. Choose Save to enter the Save Settings menu, then push Save. Increment setting #7 is now 1 1/2" until you change the setting to something else.

Push the Auto-Down button to return to Auto-Down Mode if necessary. Make the trim cut, raise the saw head and return the carriage to the front of the log.

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.

Make a cut, raise the saw head and return the carriage for the next cut. 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.

Turn the log as you normally would and push the Manual Mode button to place the Accuset in Manual Mode.

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. Use the same procedure as described above to cut each side of the log until done.

**NOTE:** Anytime a trim cut is necessary, you can push the Manual button 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.

## **1.4 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.



## 1.5 Using Pattern Mode

Starting with a new log, position the saw head at the front end of the log.

Push the Pattern button under the display. Pattern Setting #1 is the factory default. Choose the desired pattern setting (1 - 16) by pushing the appropriate Increment Setting button.

In Pattern mode, a list of six increments is shown on the display. These increments are referenced from the bed rail. 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 you raise or lower the saw head, 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 you lower the blade and reach the last top increment, a + symbol will appear to indicate you are close to the next setting. When the blade reaches the increment setting, a - symbol will appear next to that setting.

To change any of the six pattern increments, push the +/- Drop button (below the pattern increment list) to scroll to the desired increment. The increment that is active is highlighted. As you scroll to each increment, the previous increment setting will automatically be copied to the remaining increments below. Push the Up or Down buttons until the desired increment is obtained. Remember to 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 you are using. The Accuset can be programmed with an automatic kerf setting if desired ([See Section 1.1.3](#)).

Push the +/- Drop button to move to the next pattern increment and adjust as desired. 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. 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. Press the Save button to

# 1

## Setup & Operaton

### *Using Pattern Mode*

---

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".

Push the Manual Mode button and raise the saw head so the blade is positioned near the top of the log. Push the Pattern button to return to Pattern Mode.

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.

Make a cut, raise the saw head and return the carriage for the next cut. 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.

Turn the log as you normally would and push the Manual Mode button to place the Accuset in Manual Mode.

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. Make the cut, raise the saw head and return for the next cut. Use the same procedure as described above to cut each side of the log until done.

## 1.6 Using Reference Mode

While in Manual Mode, push the Toggle button to enter Reference Mode.

Push one of the four Increment Setting buttons to select a reference. 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. If the saw head is already above the position and you push the drum switch up, Accuset will return to Manual Mode. Likewise, if the saw head is below the reference position and you push the drum switch down, Accuset returns to Manual Mode.

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

To change the stored setting for any of the four buttons, move the saw head to the desired position. Press the Toggle button to enter Reference Mode. Push the button you wish to store the setting and then push "Store Here". Push the Toggle button to return to Manual Mode.

You can also change a setting by selecting one of the four Increment Setting buttons and changing the setting by using the Up and Down arrow buttons. Push the "Store Here" button to store the new setting.

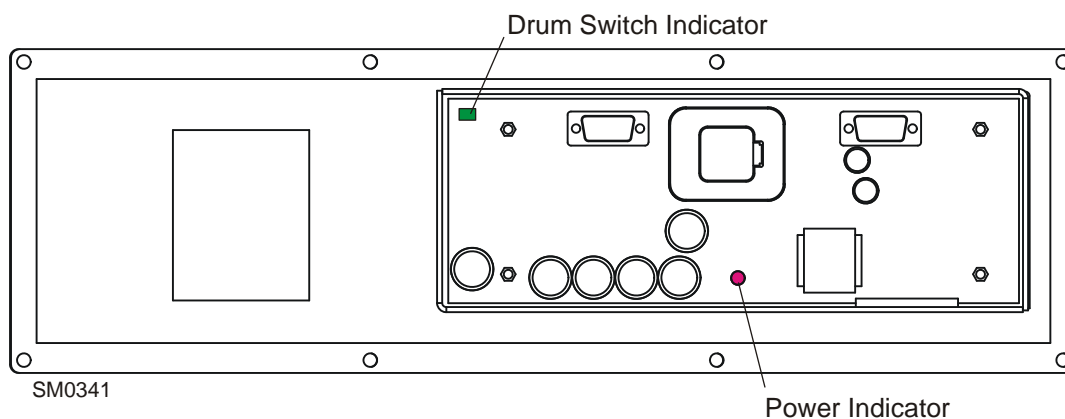
**NOTE:** The new reference setting is only stored in temporary memory and will return to the default value when the Accuset is powered off and back on. To permanently store the new setting, enter Configuration Menu #1 and push the "Save", then the "Save" button from the Save Settings menu. Accuset will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

## SECTION 2 ACCUSET 2 TROUBLESHOOTING

### 2.1 Control Lights

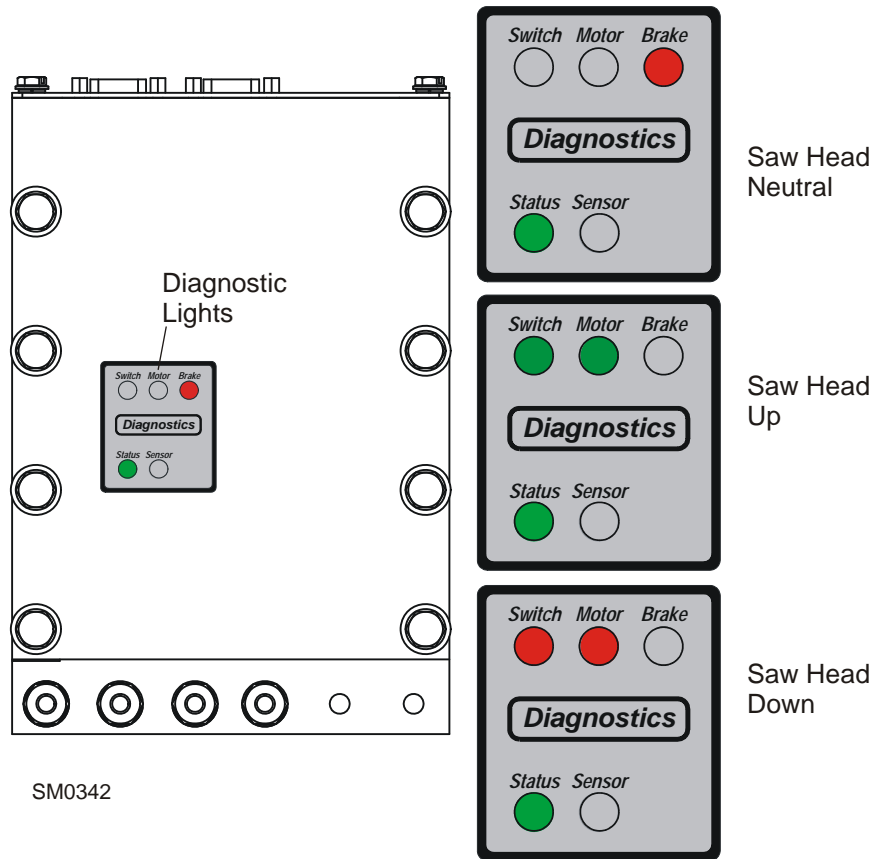
Lights are provided on the control front panel and the motor control assembly (located in the remote power box) to help diagnose problems should they occur.

**See Figure 2-1.** 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 direction.



**FIG. 2-1**

**See Figure 2-2. DC Only:** 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.



**FIG. 2-2**

## 2.2 Error Messages (DC Only)

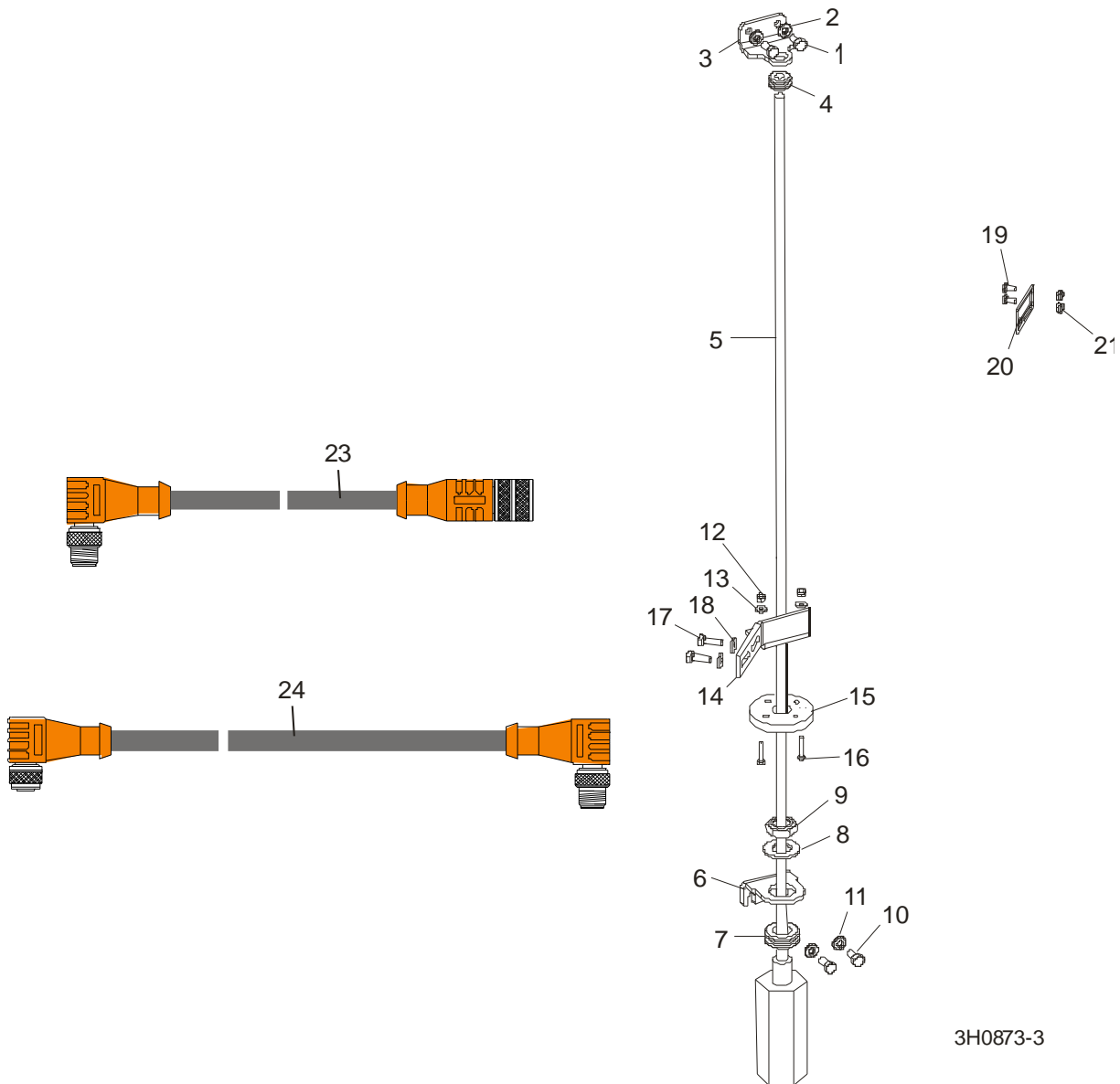
See **Table 2-3**. Possible causes for display error messages are provided below.

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

**TABLE 2-3**

## SECTION 3 PARTS LIST

### 3.1 Sensor Assembly



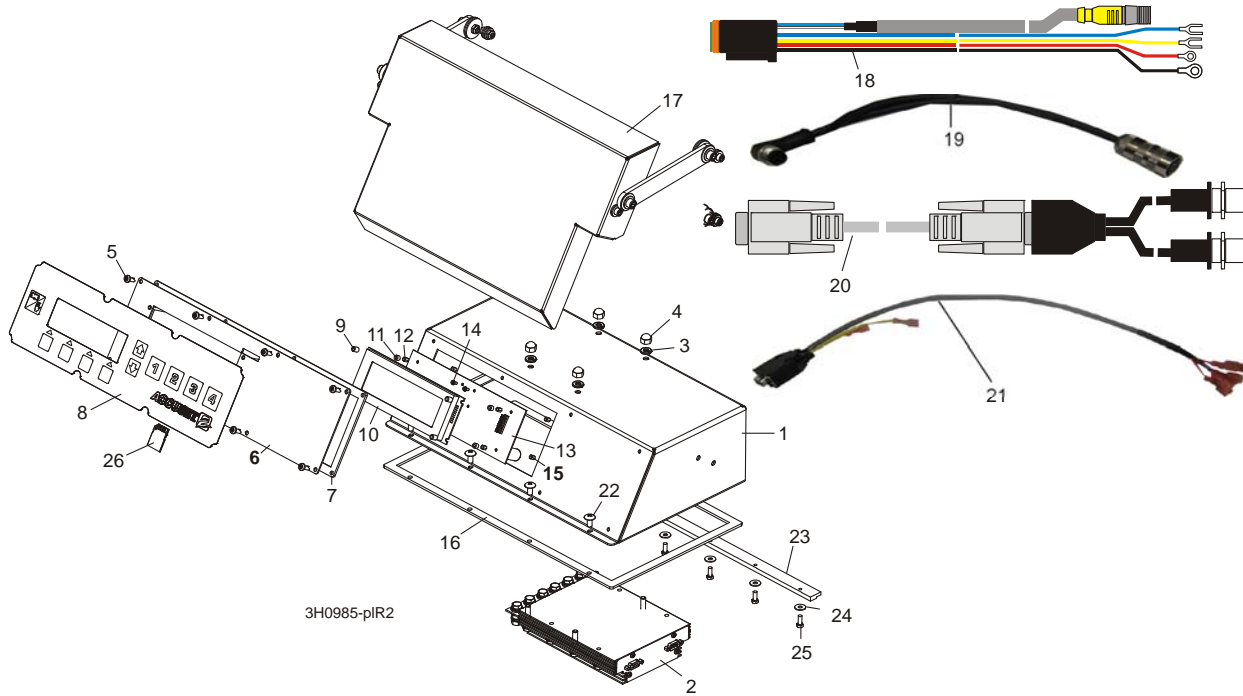
3H0873-3

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BOLT, M6X20-8.8 HEX HEAD FULL THREAD ZINC	F81001-2	2	
2	WASHER, 6.4 ZINC FLAT	F81053-1	2	
3	BRACKET, UPPER SENSOR MOUNT	035560	1	

4	<b>GROMMET, 3/8" ID RUBBER</b>	025248	1	
5	Sensor Assembly, 36" Transducer w/Adaptor	024875	1	
	Sensor, Balluff Transducer Style Z	038659	1	
	Magnet, Balluff Transducer	038658	1	
	Capacitor Assembly, iKuF Diode Filter	051260	1	
	Instruction Sheet, Transducer Retro	024875-1226	1	
6	<b>BRACKET, LOWER SENSOR MOUNT</b>	035544	1	
7	<b>GROMMET, 3/4" ID RUBBER</b>	025247	1	
8	<b>WASHER, 3/4" ID NYLON</b>	025250	1	
9	<b>NUT, 3/4-16 NYLON LOCK</b>	F05010-171	1	
10	<b>BOLT, M6X20-8.8 HEX HEAD FULL THREAD ZINC</b>	F81001-2	2	
11	<b>WASHER, 6.4 ZINC FLAT</b>	F81053-1	2	
12	<b>NUT, M4-B HEX NYLON ZINC LOCK</b>	F81029-1	2	
13	<b>WASHER, 4.3 ZINC FLAT</b>	F81051-2	2	
14	<b>BRACKET, SENSOR MAGNET MOUNTING</b>	513757-1	1	
15	<b>MAGNET, 3/4" ID FLOATING</b>	024876	1	
16	<b>SCREW, M4X25 8.8 HEX SOCKET HEAD CAP ZINC</b>	F81011-3	2	
17	<b>WASHER, 5.3 ZINC FLAT</b>	F81052-1	4	
18	<b>BOLT, 1/4-20 X 3/4" FULL THREAD HEX HEAD</b>	F05005-1	2	
	<b>CABLE ASSEMBLY, 5-FOOT TRANSDUCER INTERFACE</b>	052920	1	
19	<b>SCREW, #10-24 X 3/8" SLOTTED PAN HEAD</b>	F81011-6	2	
20	<b>POINTER, BLADE HEIGHT SCALE</b>	094821	1	
21	NUT, M4-B Fe/Zn5	F81029-1	2	
22	WASHER 4,3 Fe/Zn5	F81051-2	4	
	<b>CABLE KIT, ACCUSET 2 TRANSDUCER REPLACEMENT</b>	006029	1	
23	Cable Assembly, Accuset 2 Transducer	052920	1	◆
	Wire Tie, 5/16" x 15" UV Black	F05089-5	3	
	<b>CABLE KIT, ACCUSET 2 COMM REPLACEMENT</b>	006041	1	
24	Cable Assembly, 53-Foot Communication	052921	1	◆
	Wire Tie, 3/16" x 6" UV Black	F05089-3	25	



### 3.2 Control Assembly (DC)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	<b>BOX WELDMENT, ACCUSET 2 CONTROL</b>	099619-1	1
2	<b>CONTROL ASSEMBLY, ACCUSET 2 MOTOR</b>	057821LS-FR	1
3	<b>WASHER, A2 EPDM D=6,7X16 W/SEAL</b>	F81053-12	4
4	<b>NUT, 1/4-20 STAINLESS ACORN</b>	F05010-204	4
5	<b>SCREW, #10-24 X 1/2" PHILLIPS HEAD</b>	F05015-17	8
	<b>PANEL ASSEMBLY, ACCUSET 2 FRONT</b>	069649	1
6	Panel Weldment, AccuSet 2 Front Module	055929	1
7	Gasket, Accuset Front Panel	024870	1
8	Switch, Accuset 2 Membrane	052874	1
9	Spacer, 1/4" OD x 5/16" Long Nylon	069650	4
10	Display, Accuset 2 Front Panel	052900	1
11	Spacer, 1/8" ID x 1/4" OD x 3/16" Long	024864	4
12	Spacer, 1/4" Hex Tapped	024863	4
13	PCB Assembly, Accuset 2 Control	069662	1
14	Screw, #4-20 x 1/4" T10 Self-Tapping	F05005-183	4
15	Spacer, 1/4" Hex Tapped	024863	4
16	<b>GASKET, ACCUSET CONTROL BOX</b>	015980	1
17	<b>COVER PARTS (See Section 3.4)</b>		
18	<b>HARNESS ASSEMBLY, ACCUSET 2 LT40/70 HMI</b>	053036	1
19	<b>CABLE ASSY, TRANSDUCER M12</b>	052920	1
20	<b>CABLE ASSEMBLY, DUAL M12 TO D-SUB</b>	053696	1
21	<b>CABLE ASSEMBLY, DUAL AXIS MOTOR CONTROL</b>	053355	1

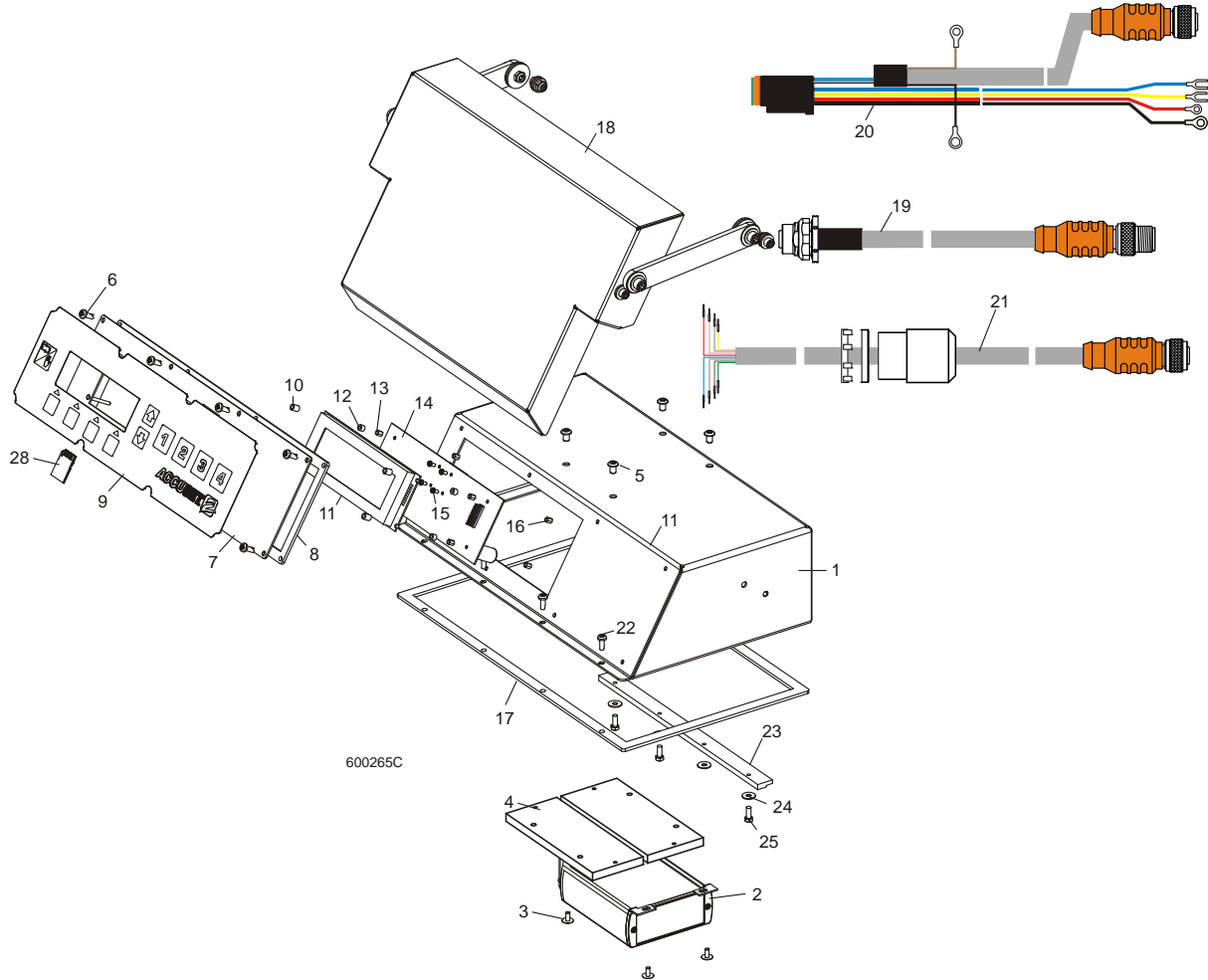
### **3** Replacement Parts

*Control Assembly (DC)*

---

22	SCREW, #10-24 X 3/8" PHILLIPS HEAD	F05005-17	4	
23	BRACKET, ACCUSET BOX HOLD-DOWN	088829	1	
24	WASHER, 5.3 ZINC FLAT	F81052-1	4	
25	BOLT, M5X12-5.8 HEX HEAD FULL THREAD ZINC	F81000-5	4	
26	CARD KIT, ACCUSET 2 SOFTWARE UPDATE	504254	1	

### 3.3 Control Assembly (AC)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	<b>CONTROL ASSEMBLY, ACCUSET 2 AC</b>	053053	1	
1	Box Weldment, Accuset 2 Control	003800	1	◆
2	Module, AC Drive Interface	052892	1	
3	Screw, M4x12 -5,8 Flanged Button Socket Head	F81011-43	4	
4	Bracket, AC Drive Module Mount	101197	2	
5	Screw, 1/4-20 x 3/8" Socket Button Head	F05005-62	4	
6	Screw, #10-24 x 1/2" Phillips Head	F05015-17	8	
	Panel Assembly, Accuset 2 Front	069649	1	
7	Panel Weldment, AccuSet 2 Front Module	055929	1	
8	Gasket, Accuset Front Panel	024870	1	
9	Switch, Accuset 2 Membrane	052874	1	
10	Spacer, 1/4" OD x 5/16" Long Nylon	069650	4	
11	Display, Accuset 2 Front Panel	052900	1	

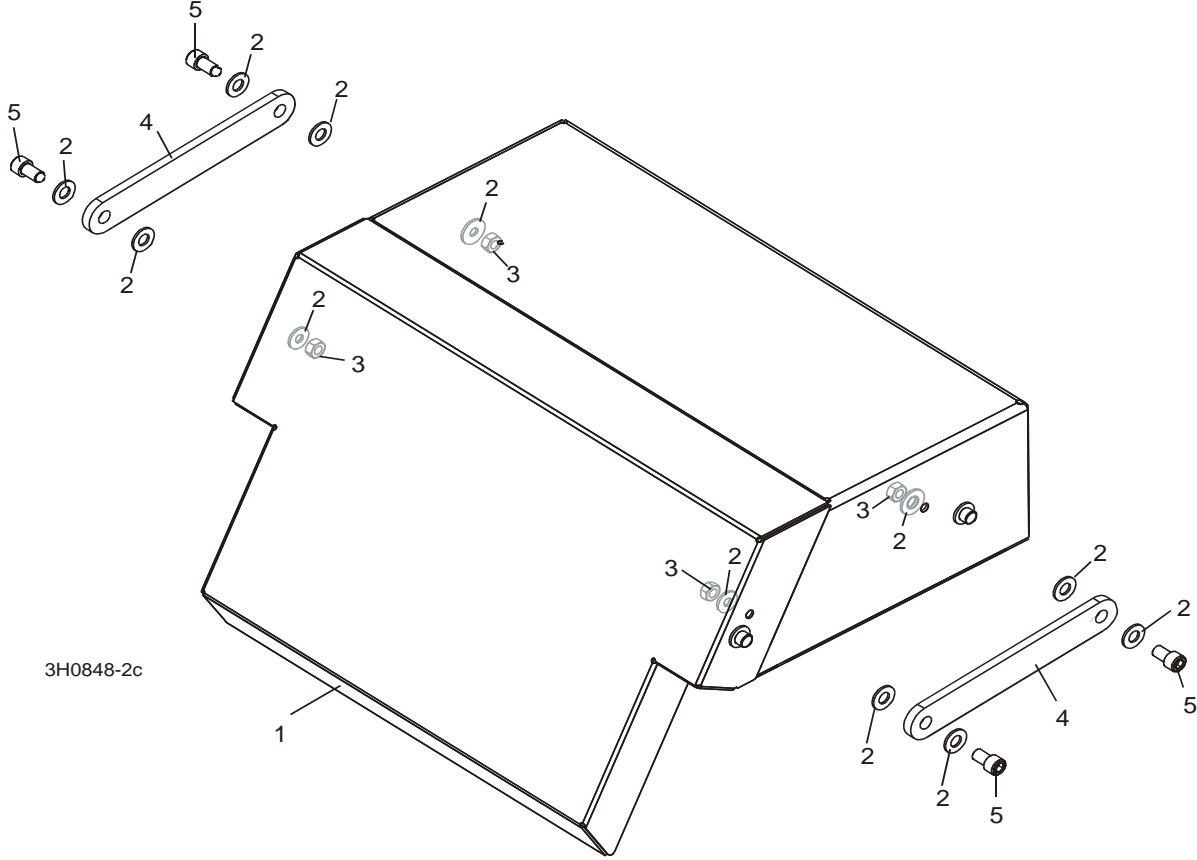
# 3

## Replacement Parts

### Control Assembly (AC)

12	Spacer, 1/8" ID x 1/4" OD x 3/16" Long	024864	4	
13	Spacer, 1/4" Hex Tapped	024863	4	
14	PCB Assembly, Accuset 2 Control	052873	1	
15	Screw, #4-20 x 1/4" T10 Self-Tapping	F05005-183	4	
16	Spacer, 1/4" Hex Tapped	024863	4	
17	Gasket, Accuset Control Box	015980	1	
18	Cover Parts ( <a href="#">See Section 3.4</a> )			
19	Cable Assembly, Intermediate Transducer	053085	1	
20	Harness Assembly, Accuset 2 LT70 AC HMI	053156	1	
21	<b>CABLE ASSEMBLY, AC DRIVE INTERFACE</b>	053192	1	
22	<b>SCREW, #10-24 X 1/2" PHILLIPS HEAD</b>	F05015-17	4	
23	<b>BRACKET, ACCUSET HOLDOWN CLAMP</b>	015296	1	
24	<b>WASHER, #10 SAE FLAT</b>	F05011-18	4	
25	<b>BOLT, #10-24 X 1/2" HEX HEAD</b>	F05004-27	4	
26	<b>CONDUIT, 5/8" SPLIT LOOM HIGH TEMP</b>	024323-62	8 in.	
27	<b>TIE WRAP, 3/16" X 6" BLACK UV</b>	F05089-3	2	
28	<b>CARD KIT, ACCUSET 2 SOFTWARE UPDATE</b>	504254	1	

3.4 Cover Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	COVER, ACCUSET CONTROL	088830-1	1
2	WASHER, 6.4 ZINC FLAT	F81053-1	12
3	NUT, M6-8-B HEX NYLON ZINC LOCK	F81031-2	4
4	BRACKET, ACCUSET BOX HOLD-DOWN	088831-1	2
5	BOLT, M6X20-8.8 HEX HEAD FULL THREAD ZINC	F81001-2	4

## **SECTION 4 ELECTRICAL WIRING DIAGRAMS, D42**

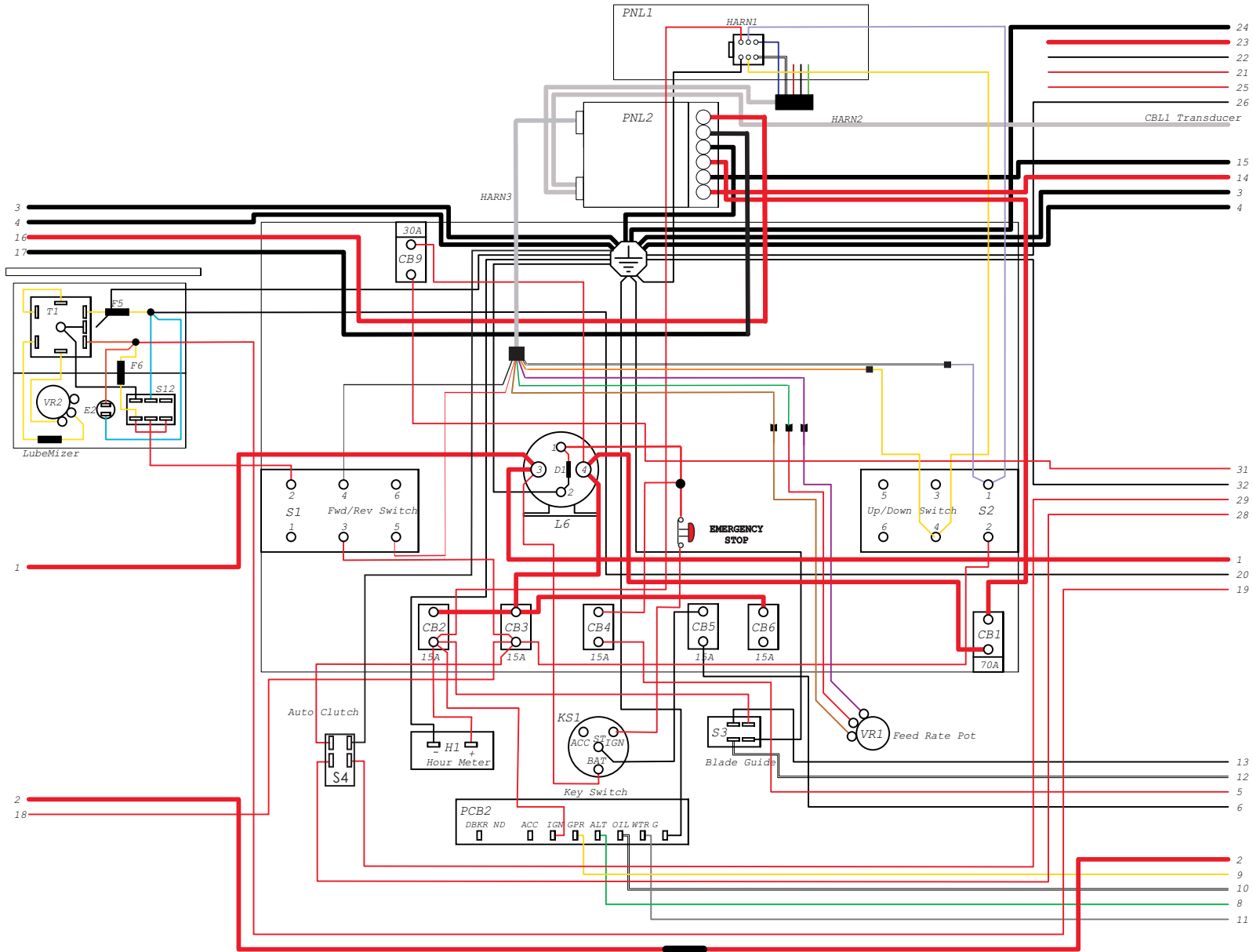


FIG. 4-1 D42 CONTROL BOX DIAGRAM.

# 4

## Electrical Information

---



# INDEX

---

## O

### operation

- auto-down mode [1-12](#)
- auto-up mode [1-14](#)
- control description [1-10](#)
- pattern mode [1-15](#)
- reference mode [1-17](#)

---

## R

### replacement parts

- control assembly [3-1](#)
- control assembly (AC) [3-3](#)
- cover assembly [3-1](#)
- sensor assembly [3-1](#)

---

## S

### sad [1-15](#)

### schematics

- wiring diagram [4-1](#)

### setup

- contrast adjustment [1-2](#)
- control setup [1-1](#)
- model configuration [1-2](#)
- other settings [1-5](#)
- restore defaults [1-9](#)
- startup configuration [1-2](#)

---

## T

### troubleshooting

- control lights [2-1](#)
- error messages [2-3](#)