

LT70HD Accuset2

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

ACCUSET2

rev. A.00 - C.01

Safety is our #1 concern!

October 2007

Form #1521

FOR LT70HD, NON-REMOTE AND NON-SUPER



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

California

Proposition 65 Warning



WARNING: Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always start and operate the engine in a well-ventilated area.
If in an enclosed area, vent the exhaust to the outside.
Do not modify or tamper with the exhaust system.
Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov.



WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to www.P65Warnings.ca.gov/wood.

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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: woodmizer.com/patents

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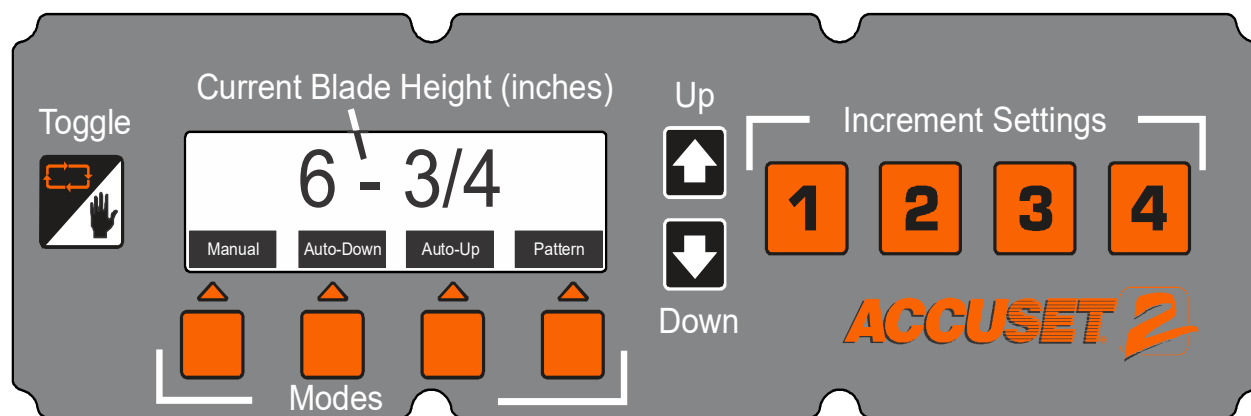
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SECTION 1 ACCUSET 2 OPERATION

1.1 Accuset Control Setup

1. For AC models, press and hold the toggle button when first turning the key switch on. The display will read “Overwrite Parameters with Defaults?” Push “Yes” to change the set-tings for operation with AC mills.
2. Turn the key switch to the accessory (3) position.

The Accuset control starts in Manual Mode by default. See the figure below for identification of the control buttons and display.



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FIG. 1-1

UP/DOWN ADJUSTMENT BUTTONS

The Up or Down arrow buttons scroll to various settings. Press and hold the Up or Down button to automatically increase setting scroll speed will.

In Manual Mode, the up and down arrow buttons have special functions. Enter configuration menus by pressing the Up button; pressing the Down button moves the saw head to the nearest nominal inch (or centimeter).

TOGGLE BUTTON

- Use the Toggle button to exit configuration menus and return to the main menu.
- Press and hold the Toggle button during startup to reset the Accuset programming to factory default settings.
- Press the Toggle button in Manual Mode to place Accuset in Reference Mode.

Contrast Adjustment

At startup, press and hold the Up or Down button to adjust the splash screen display contrast as desired.

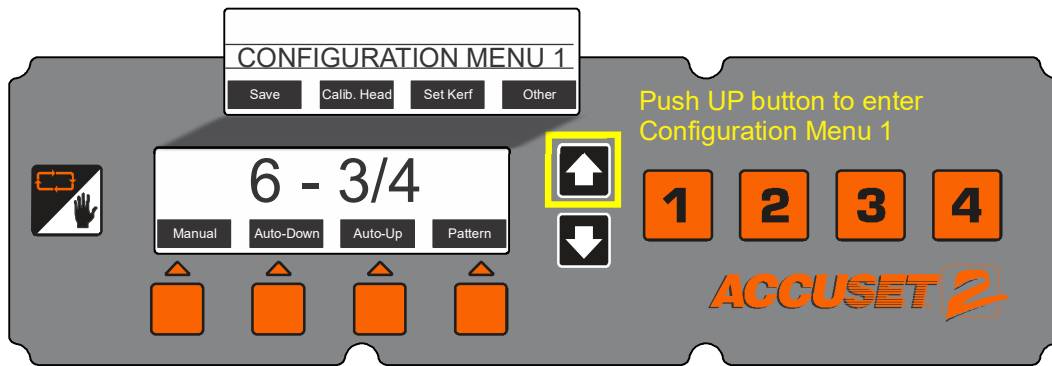
Startup Configuration

Accuset controls on new sawmills are configured at the factory.

NOTICE Newly installed or replaced controls, must be configured before operating the Accuset. Follow the procedures below *in the order they are listed*.

Configuration Menu 1

1. Press the Up button while in Manual Mode to enter Configuration Menu 1.



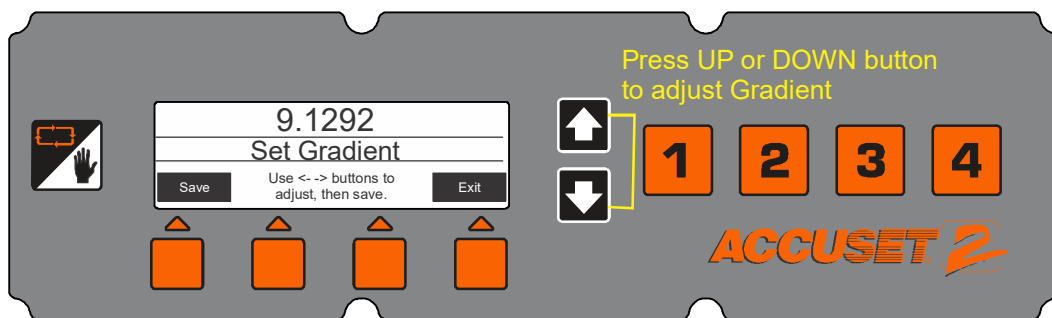
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FIG. 1-2

ADJUST THE 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.

2. Press the button labeled "Calib. Head."
3. Press the button labeled "Adjust Gradient."



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FIG. 1-3

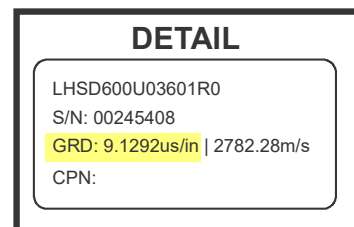
4. Press the Up or Down button until the Gradient Setting is the same as the sensor gradient shown on the sensor label (use the number labeled "us/in").
5. Press the Save button.

To return to the previously stored Gradient Setting **without saving** the new setting, press Exit and turn the key switch to the off (0) position.

CALIBRATE BLADE HEIGHT

The Accuset control should indicate the actual position of the blade above the bed rails.

1. Move the saw carriage 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.



Label (See Detail)

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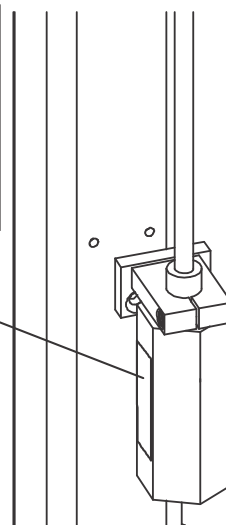


FIG. 1-4

NOTE: Measure from the top of the bed rail to the **bottom of a down-set tooth** of the blade.

3. While in Manual Mode, press the Up button to enter the Configuration Menu.

4. Choose Calibrate Head and press the button labeled "Press at 12 inches" (or "Press at 305mm").

The display will change to "Head Calibrated."

5. Press the Save Settings button.

6. Exit the Configuration Menu.

ADJUST THE INCH SCALE

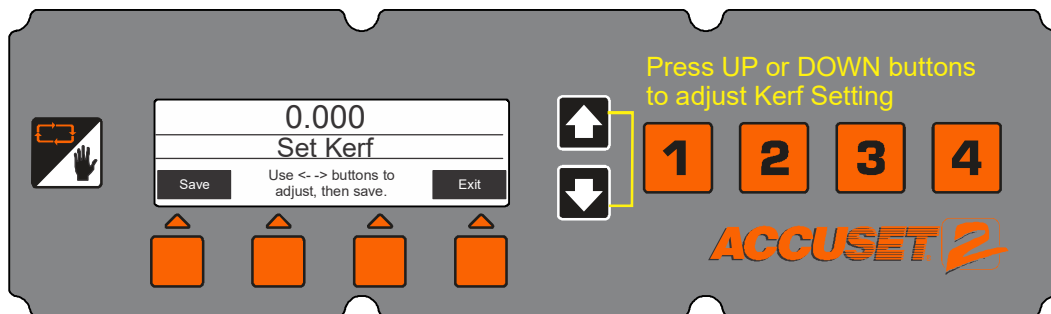
7. Check and adjust the inch scale on the saw head to match the value displayed on the control.
8. Adjust the bottom saw head stop bolt all the way down.
9. Move the saw head down until Accuset displays 3/4" and adjust the bottom saw head stop bolt up until it just touches the saw head.

SET KERF

The Kerf setting is **optional**. The default kerf setting is '0'. Use Set Kerf to automatically factor the blade thickness into the increment setting. Set Kerf automatically adjusts the height to saw boards that are the actual thickness of the programmed increment.

EXAMPLE: If kerf is set to '0' and increments of 1 1/8" are programmed, the resulting boards may be about 1 1/16" thick because Accuset did not factor the thickness of the blade. If an accurate kerf value is entered, the resulting boards will be 1 1/8".

1. In Manual Mode, press the Up button to enter the Configuration Menu.
2. Press the "Set Kerf" button to display the menu below.



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FIG. 1-5

Recommended kerf settings for various factory-set blades are provided in Table 1-1. If preferred, a nominal kerf value of 0.125" (3 mm) can be entered and should be accurate enough for most applications.

3. Press the Set Kerf button and use the Up and Down buttons to adjust the kerf value.

TIP: Pressing the Up and Down buttons simultaneously will scroll the kerf faster.

4. Press the Save button.

NOTE: If the Kerf Setting is not used, include the thickness of the blade in the increment settings as described in Section 4.5 Accuset Mode Selection.

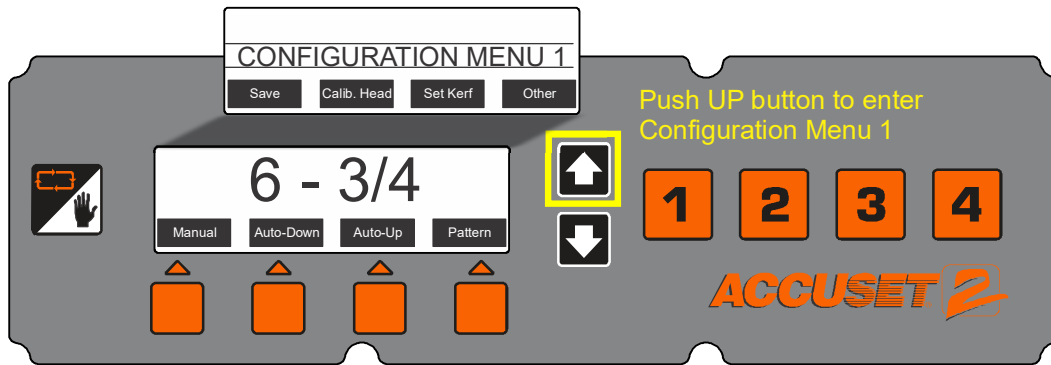
Configuration Menu 2

Settings for language, units of measure, and PID (Proportional - Integral - Differential) values are located in Configuration Menu 2.

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

1. Press the Up button while in Manual Mode to display Configuration Menu 1.
2. Press Other to display Configuration Menu 2.



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FIG. 1-6

LANGUAGE

1. Press the Language button.
2. Choose the desired language.

If the desired language does not appear in Change Language menu, press Other to scroll to the next Change Language menu.

3. Press the Save (or language equivalent) button.
4. To return to the previously stored Language setting, press Exit and turn the key switch to the off (0) position.

English	Spanish
French	Polish
German	Portuguese

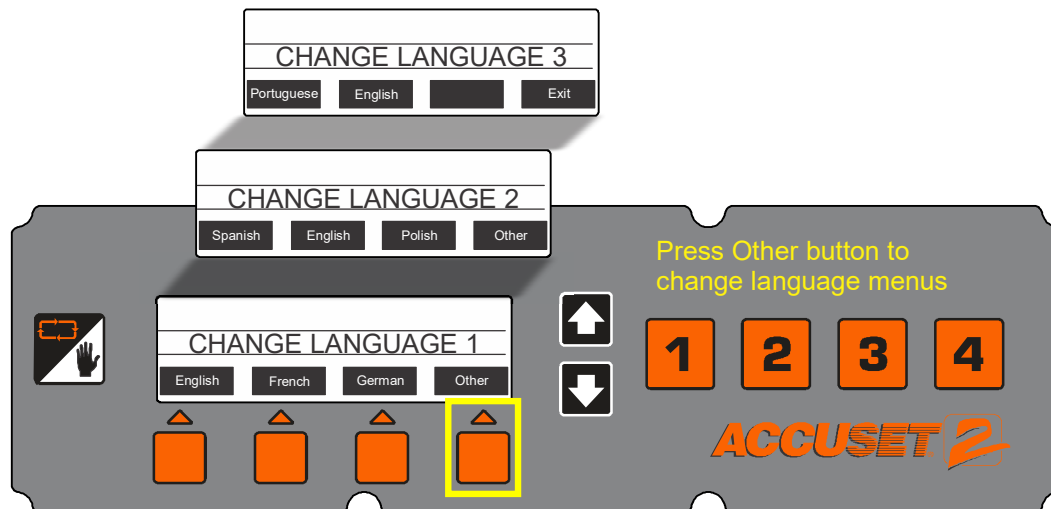
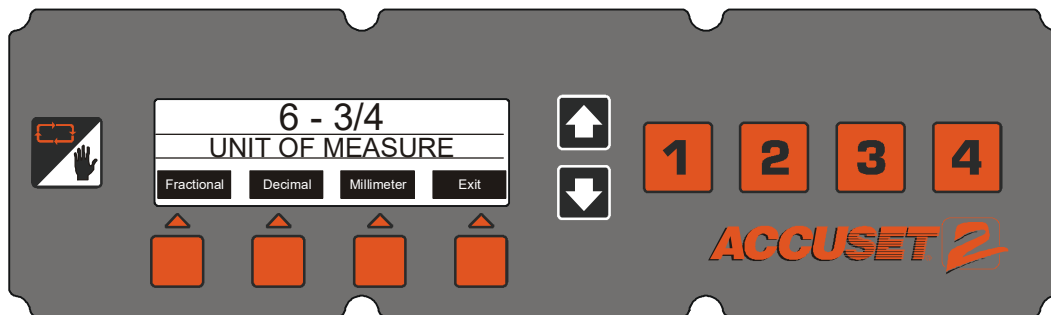


FIG. 1-7

UNITS

1. Press the Units button from Configuration Menu 2.
2. Press the corresponding Unit Of Measure button desired:
 - Fractional Inches (**default**)
 - Decimal Inches
 - Millimeters
3. Press the Save button.

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



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FIG. 1-8

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.

1. Press the Units button from Configuration Menu 2.

The factory default PID value settings are shown below. Alternate settings are provided for LT70HD electric model sawmills. See Table 1-2.

2. Press the Save button after making the desired PID Value adjustments.
3. Go to the desired Accuset mode.
4. Test the performance of th new settings.

If the new settings cause undesirable results, reset Accuset to the factory defaults.

Value	Factory Default	Alternate for LT70 Electric
Up Ticks	1	1
Up Distance	7500	17000
Up Minimum	50	2
Down Ticks	1	5
Down Distance	5000	17000
Down Minimum	50	2

TABLE 1-2

NOTE: 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.

Restore Factory Defaults

1. If on, turn the key switch to Off (0).
2. Turn the key switch On (1) while pressing and holding the Toggle button.

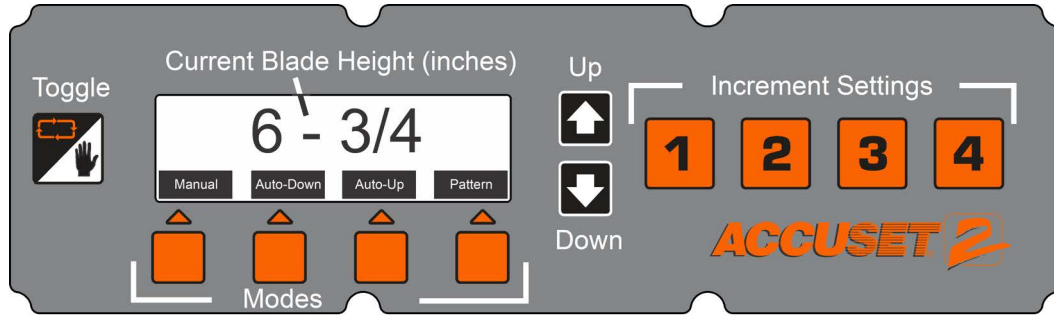
All Accuset settings are returned to their factory default values, including:

- Calibration settings. [See Startup Configuration](#) to recalibrate the Accuset control.
- PID values. [See PID \(Proportional - Integral - Differential\) Values](#) for setting values.

1.2 Accuset Mode Selection

Press the desired Mode Select button (Auto-Down, Auto-Up or Pattern) located in the display.

Press the Manual Mode Select button to return the control to Manual Mode.



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FIG. 1-9

Manual Mode - Uses the up/down function of the sawmill as you would without the Accuset option.

The Current Blade Height will continue to be displayed by the Accuset control.

Auto-Down Mode - Sets an increment to move the blade *down*.

The Accuset will automatically move the saw head down and stop at the next increment when you press the drum switch down. You can store sixteen different increment levels -- each button stores four adjustable increment settings. Press button #1 once for setting #1. Press button #1 a second time for setting #5, etc...

Auto-Up Mode - Sets an increment to move the blade *up*.

The Accuset will automatically move the saw head up and stop at the next increment when you press the drum switch up. Auto-Up mode is 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 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.

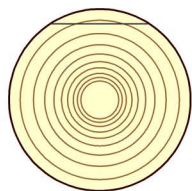
Pattern Mode - This mode *references the bed surface* and programs up to six different increments calculated up from the bed.

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.

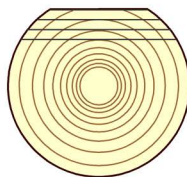
Reference Mode - This mode programs up to four pre-set locations along the saw head travel.

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").

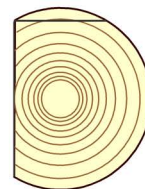
1.3 Using Accuset Auto-Down Mode



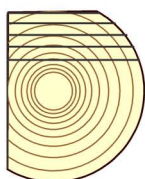
In Manual Mode, position blade for trim cut. Switch to Auto-Down and make trim cut.



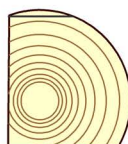
Cut first face as desired in Auto-Down Mode then turn log.



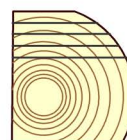
Switch to Manual Mode and position blade for trim cut. Switch to Auto-Down and make trim cut.



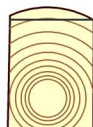
Cut second face as desired in Auto-Down Mode then turn log.



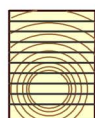
Switch to Manual Mode and position blade for trim cut. Switch to Auto-Down and make trim cut.



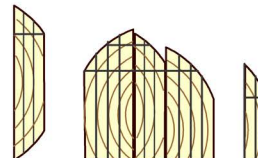
Cut third face as desired in Auto-Down Mode then turn log.



Switch to Manual Mode and position blade for trim cut. Switch to Auto-Down and make trim cut.



Cut final face as desired in Auto-Down Mode.



Switch to Manual Mode and edge flitches.

3H0822 **FIG. 1-10**

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

1. Press the Auto-Down button under the display. The first Increment Setting is displayed by default.
2. Choose the desired increment setting by pressing the appropriate Increment Setting button.

To change an Increment Setting, select the desired setting number and press the Up or Down buttons until the desired Increment Setting is obtained. Pressing the Up and Down buttons simultaneously will scroll the settings faster.

NOTE: Remember to include blade kerf in the setting (i.e. If finished boards are 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 4.6](#)).

When changing an 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.

3. Save the new increment setting by pressing the Manual Mode then pressing the Up button.

The Configuration Menu will be displayed.

4. Choose Save to enter the Save Settings menu, then press Save.

Example: To store 1 1/2" increment to the #7 increment setting, press Increment Selection button #3 twice to display setting #7 (default value for setting #7 is 7"). Press the Down button to adjust the setting to 1 1/2". While pressing the Down button, press the Up button to scroll faster. As the setting approaches 1 1/2", release both buttons. Press the Down button to fine tune the setting to exactly 1 1/2". Press the Manual Mode button. Press the Up button to display the Configuration Menu. Choose Save to enter the Save Settings menu, then press Save. Increment setting #7 is now 1 1/2".

5. Press the Auto-Down button to return to Auto-Down Mode if necessary.
6. Make the trim cut.
7. Raise the saw head and return the carriage to the front of the log.
8. Press 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 chosen.

9. Make a cut, raise the saw head and return the carriage for the next cut.
10. Press the up/down drum switch down and release.

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

11. Repeat this procedure down this face of the log as desired.
12. Turn the log and press the Manual Mode button to place the Accuset in Manual Mode.
13. Position the saw head for the trim cut and press the Auto-Down button to return to Auto-Down Mode.
14. Make the trim cut.
15. Raise the saw head and return for the next cut.
16. Use the same procedure as described above to cut each side of the log until done.

NOTE: Anytime a trim cut is necessary, press the Manual button to enter Manual Mode. Position the saw head for the trim cut and press 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 chosen.

1.4 Using Accuset 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 Accuset Pattern Mode

1. Position the saw head at the front end of the log.
2. Press the Pattern button under the display.

Pattern Setting #1 is the factory default.

3. Choose the desired pattern setting (1 - 16) by pressing the appropriate Increment Setting button.

In Pattern mode, six increments **referenced from the bed rail** are shown on the display, although the log may take more than 6 cuts -- the value for the top cut will be repeated until the increment for the top is reached.

The sixth (top) increment repeats itself up to the upper limit of the saw head travel.

The last (bottom) increment represents the distance from the bed rail for the last cut.

Each increment in the list can be adjusted as desired.

BLADE LOCATION SYMBOLS

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.

Blade Positions	Symbols
Top 4 + increment settings	>
5th increment setting	+
Last increment setting	-

- When the blade is above the top setting a ^ symbol appears next to the top increment to indicate saw head is in the repeating top increment.
- After lowering the blade and reaching the second-to-last increment, a + symbol will appear to indicate the next setting is near.
- When the blade reaches the increment setting, a - symbol will appear next to that setting.

To change any of the six pattern increments, press the +/- Drop button (below the pattern increment list) to scroll to the desired increment.

The increment that is active is highlighted.

Scrolling to each increment, the previous increment setting will automatically be copied to the remaining increments below.

Press the Up or Down buttons until the desired increment is obtained.

Remember to include blade kerf in the setting (i.e. If 1" is the desired thickness of the finished boards, 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 installed.

The Accuset can be programmed with an automatic kerf setting if desired ([See Section 4.6](#)).

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

After the bottom increment setting is adjusted as desired, press the Manual Mode button then press 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,

- 1). Press Increment Selection button #4 once to display pattern setting #4 (the factory default value for pattern setting #4 is 1 3/4").
- 2). Press the +/- Drop button to enter pattern edit mode. The top pattern increment is now highlighted.
- 3). Press the Down button to adjust the setting to 1 1/8".
- 4). While pressing the Down button, press the Up button to scroll faster.
- 5). As 1 1/8" approaches, release both buttons.
- 6). Press the Down button to fine tune the setting to exactly 1 1/8".
- 7). Press the +/- Drop button again to move the next pattern increment.
- 8). The setting will automatically be copied from the previous setting to 1 1/8" for all the remaining increments below.
- 9). Exit pattern edit mode by pressing the Manual button.
- 10). Save the new pattern setting by pressing the Up arrow button to enter Configuration Menu #1.
- 11). Press the Save button to enter the Save Settings menu, then press the Save button.
- 12). Press the Pattern button to return to Pattern Mode and press Increment Selection button #4.
- 13). All of the pattern settings should now be 1 1/8".

4. Press the Manual Mode button and raise the saw head so the blade is positioned near the top of the log.
5. Press the Pattern button to return to Pattern Mode.
6. Press the up/down drum switch down and release.

The saw head will automatically stop at the first setting determined by the top pattern increment.

7. Make a cut, raise the saw head and return the carriage for the next cut.
8. Press 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 and press the Manual Mode button to place the Accuset in Manual Mode.
11. Raise the saw head so the blade is positioned near the top of the log.
12. Press the Pattern button to return to Pattern Mode.
13. Make the cut, raise the saw head and return for the next cut.
14. Use the same procedure as described above to cut each side of the log until done.

1.6 Using Accuset Reference Mode

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

1. Press one of the four Increment Setting buttons to select a reference.

Factory defaults for buttons 1 through 4 are 1", 12", 24" and 31".

2. Press 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 the drum switch is pressed up, Accuset will return to Manual Mode. Likewise, if the saw head is below the reference position and the drum switch is pressed down, Accuset returns to Manual Mode.

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

CHANGE THE STORED SETTING

1. Move the saw head to the desired position.
2. Press the Toggle button to enter Reference Mode.
3. Press the button desired to store the setting and then press "Store Here".
4. Press the Toggle button to return to Manual Mode.

The setting can also be changed by selecting one of the four Increment Setting buttons and changing the setting by using the Up and Down arrow buttons. Press 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 press 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 2 ACCUSET 2 TROUBLESHOOTING

2.1 Control Lights

Gas/Diesel (DC) Only: 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 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.

Diagnostic lights are provided on the motor control module. When the saw head is in neutral (not moving up, down, forward or in reverse), the Status light is green.

Up/Down lights: 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.

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.

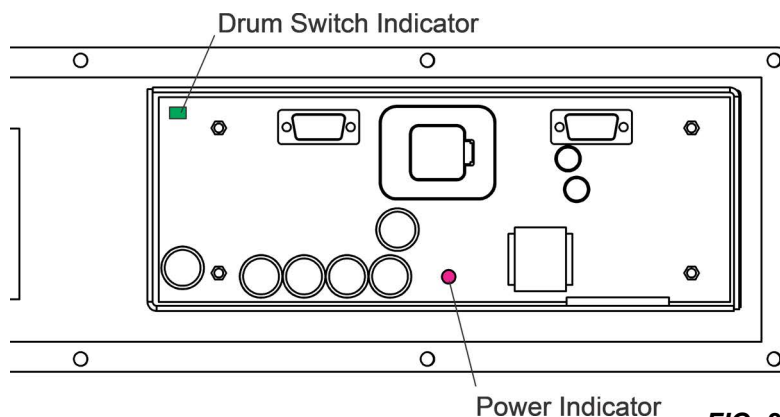


FIG. 2-1

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

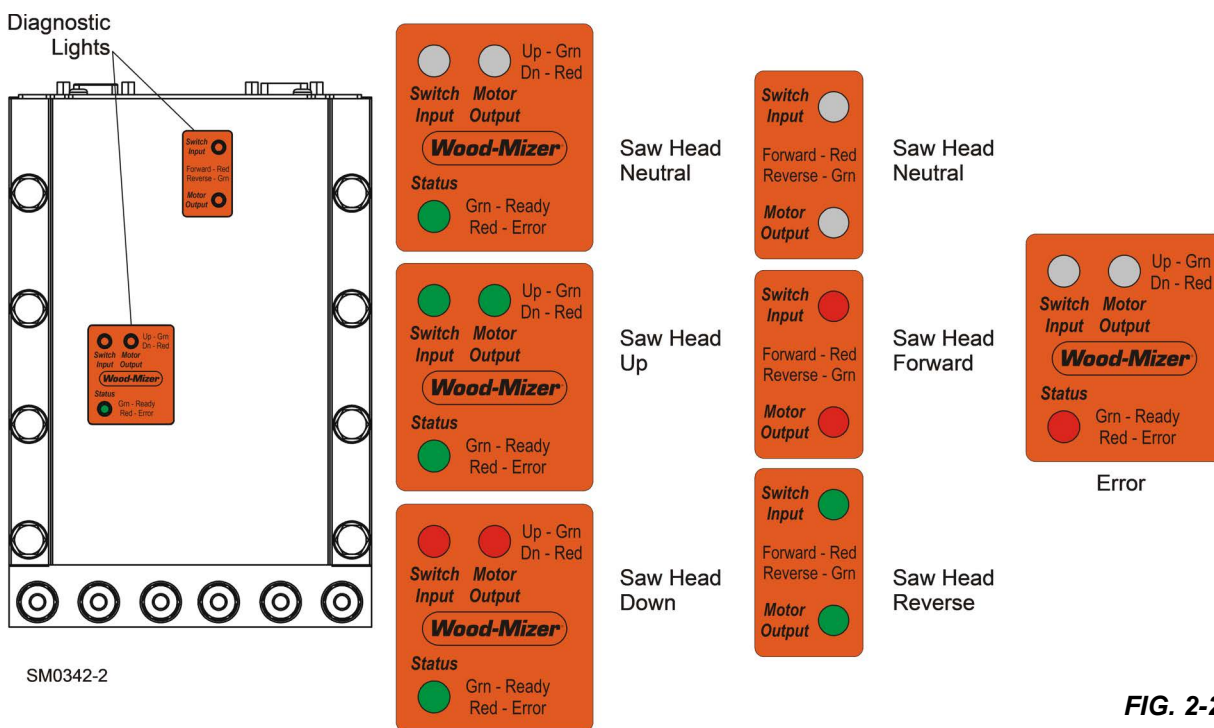


FIG. 2-2

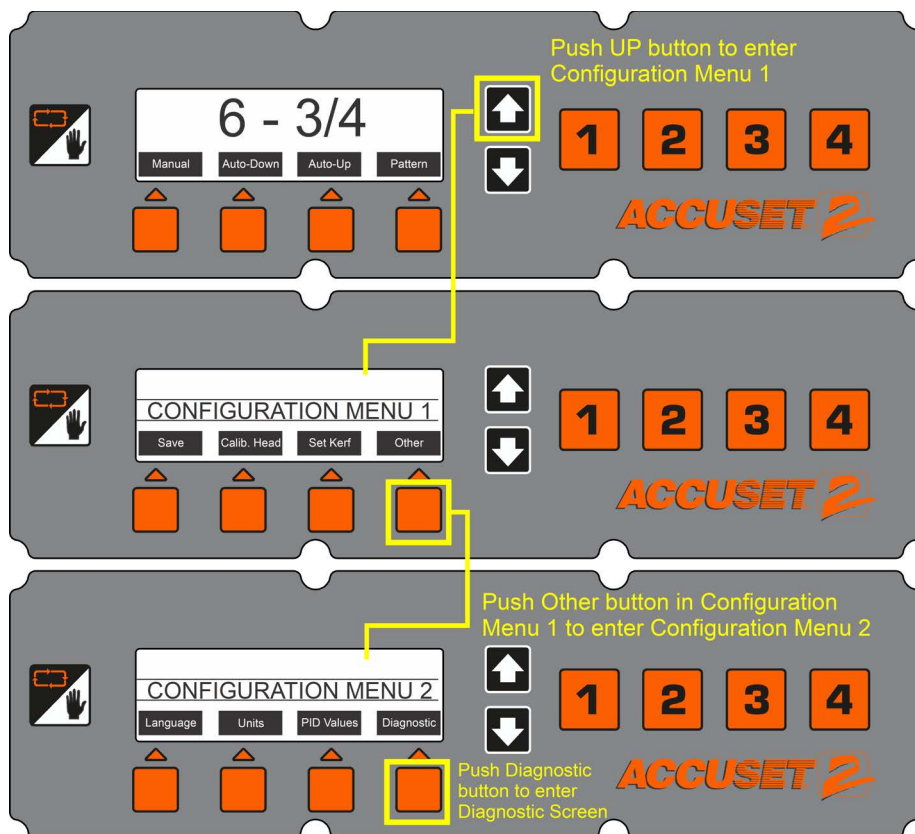
2.2 Error Messages (Gas/Diesel (DC) Only).

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 movement or defective up/down assist cylinder
	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 OR CABLE	Tripped Up/Down circuit breaker
	Defective or loose H-bridge communication (splitter) cable

2.3 Diagnostic Screen

The diagnostic screen can be used to help diagnose battery, up/down 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.



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FIG. 2-3

2 Accuset 2 Troubleshooting

Diagnostic Screen

The Diagnostic Screen is shown in FIG. 2-4.

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

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

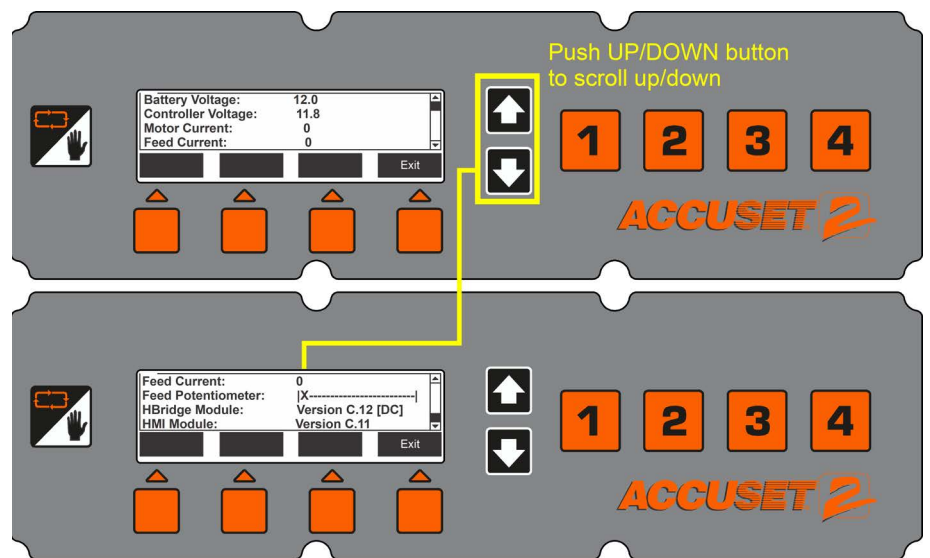
Motor Current. Amperage of the up/down motor.

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.

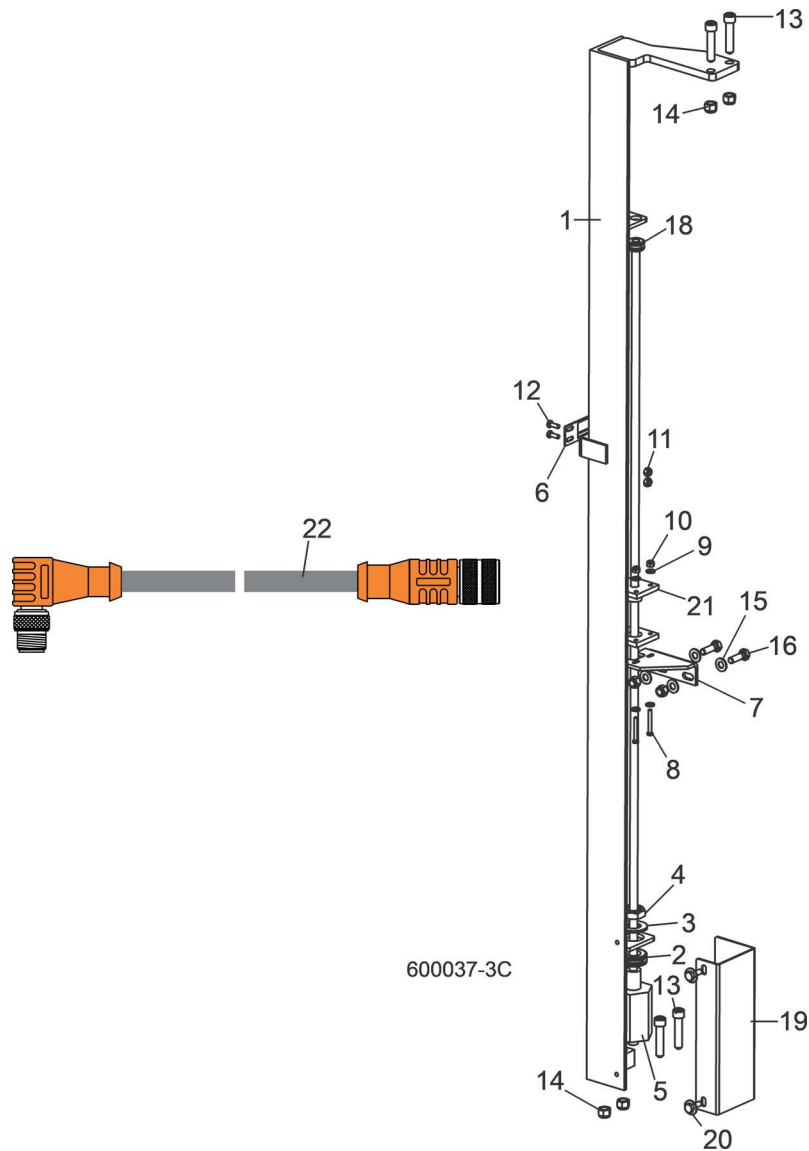
HMI Module. This is the HMI module software revision.



3H0989-9
FIG. 2-4

SECTION 3 REPLACEMENT PARTS

3.1 Accuset2 Sensor Assembly



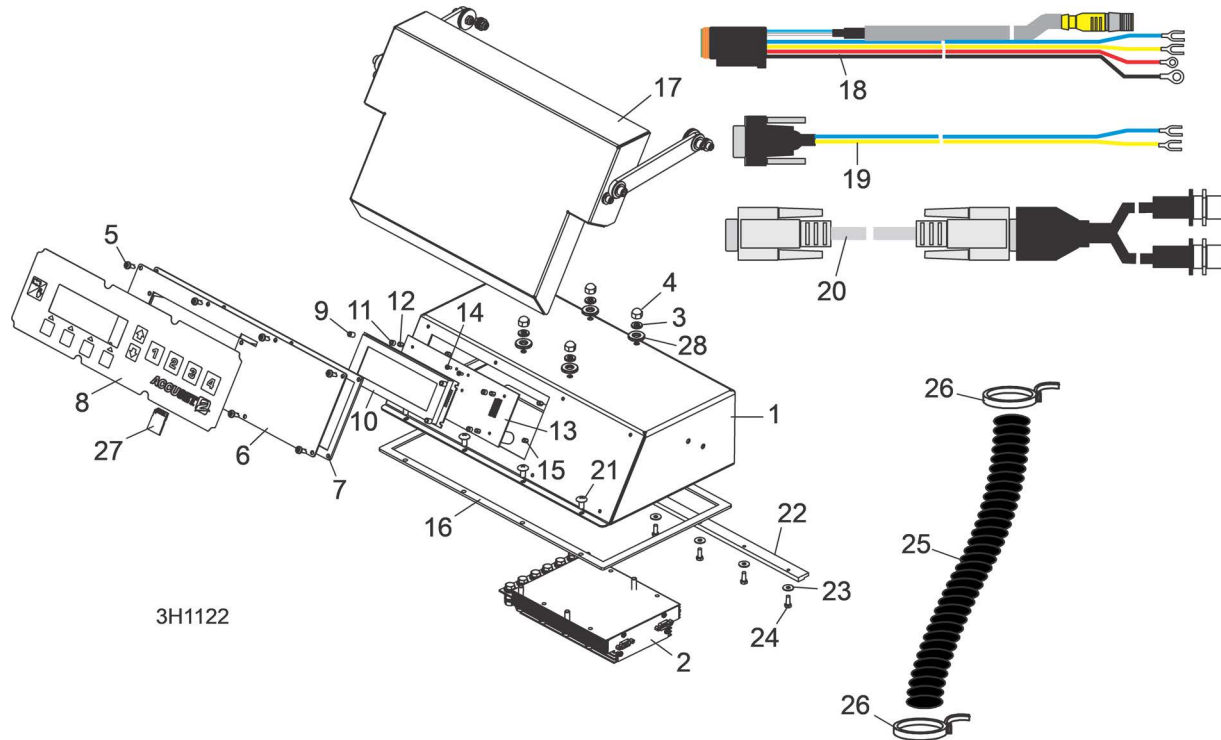
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	034242	TRANSDUCER ASSEMBLY, LT60/70 ACCUSET	Available in assemblies only.	1
1	034239	Mount Weldment, Transducer		1
2	025247	Grommet, 3/4" ID Rubber		1
3	025250	Washer, 3/4" ID Nylon		1
4	F05010-171	Nut, 3/4-16 Hex Nylon Lock Jam		1
5	038659	Sensor, Balluff Transducer Style Z		1
	038658	Magnet, Balluff Transducer		1
6	017778	Pointer, Scale Height		1
7	033940	Plate, Transducer Ring Mount		1
8	F05004-291	Screw, #8-32 x 1 1/4" Hex Head Stainless Steel		2
9	F05011-41	Washer, #8 SAE Flat		4

3 Replacement Parts

Accuset2 Sensor Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
10	F05010-169	Nut, #8-32 Hex Nylon Lock		2
11	F05010-160	Nut, #10-24 Hex Nylon Lock		2
12	F05004-27	Screw, #10-24 x 1/2" Hex Head Stainless Steel		2
13	F05007-191	Bolt, 3/8-16 x 1 3/4" Socket Head Stainless Steel		4
14	F05010-10	Nut, 3/8-16 Hex Nylon Lock		4
15	F05011-17	Washer, 5/16" SAE Flat		2
16	F05006-1	Bolt, 5/16-18 x 1" Hex Head		2
17	F05010-58	Nut, 5/16-18 Hex Nylon Lock		2
18	025248	Grommet, 3/8" ID Rubber		1
	003185	Cover Kit, Lower Accuset Sensor		1
19	038985	Cover, LT70 Lower Accuset Sensor		1
20	F05005-134	Bolt, 1/4-20 x 3/4" Hex w/Conical Washer Head		2
	014548	Edging, 3/8" x 1/2" Black Rubber		.354 ft.
	003184-1291	Instruction Sheet, Lower Accuset Sensor Cover Retrofit		1
21	071357	Bushing, Transducer Vibration Dampener		1
	006029	CABLE KIT, ACCUSET 2 TRANSDUCER REPLACEMENT		1
22	052920	Cable Assembly, Accuset 2 Transducer	Available in assemblies only.	1
	F05089-5	Wire Tie, 5/16" x 15" UV Black		3

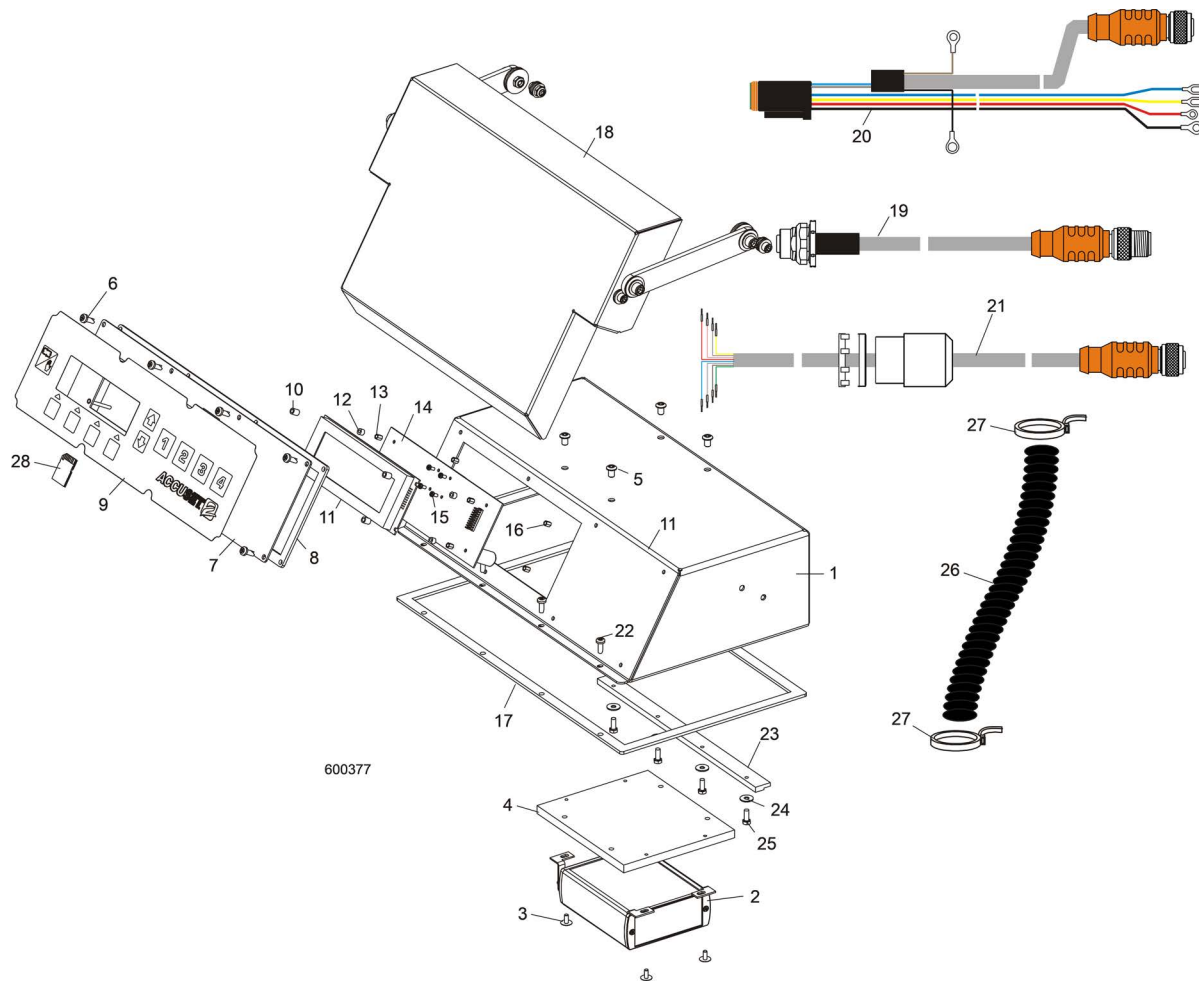
3.2 Accuset2 Control Assembly, Gas/Diesel (DC)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	053051	CONTROL ASSEMBLY, ACCUSET 2		1
1	003800	Box Weldment, Accuset 2 Control	Available in assemblies only.	1
2	057821LS-FR	Control Assembly, Accuset 2 Motor		1
	069556	PCB Assembly, Transient Voltage Suppression		1
3	F05011-14	Washer, 1/4" Split Lock		4
4	F05010-204	Nut, 1/4-20 Stainless Acorn		4
5	F05015-17	Screw, #10-24 x 1/2" Phillips Head		8
	069649	Panel Assembly, Accuset 2 Modular Front		1
6	055929	Panel Weldment, AccuSet 2 Front Module		1
7	024870	Gasket, Accuset Front Panel		1
8	052874	Switch, Accuset 2 Membrane		1
9	069650	Spacer, 1/4" OD x 5/16" Long Nylon		4
10	052900-1	Display, Accuset 2 Front Panel		1
11	024864	Spacer, 1/8" ID x 1/4" OD x 3/16" Long		4
12	024863	Spacer, 1/4" Hex Tapped		4
13	069662	PCB Assembly, Accuset 2 Replacement Control		1
14	F05005-183	Screw, #4-20 x 1/4" T10 Self-Tapping		4
15	024863	Spacer, 1/4" Hex Tapped		4
16	015980	Gasket, Accuset Control Box		1
17		Cover Parts	(See Section 3.4)	
18	053036	Harness Assembly, Accuset 2 LT40/70 HMI		1
19	053037	Cable Assembly, LT40/70 Bridge Bypass		1
20	053696	Cable Assembly, Dual M12 to D-Sub		1
21	F05015-17	SCREW, #10-24 X 1/2" PHILLIPS HEAD		4

REF	PART #	DESCRIPTION	COMMENTS	QTY.
22	015296	BRACKET, ACCUSET HOLDOWN CLAMP		1
23	F05011-18	WASHER, #10 SAE FLAT		4
24	F05004-27	BOLT, #10-24 X 1/2" HEX HEAD		4
25	024323-62	CONDUIT, 5/8" SPLIT LOOM HIGH TEMP		8 in.
26	F05089-3	TIE WRAP, 3/16" X 6" BLACK UV		2
27	053225	CARD KIT, ACCUSET 2 SOFTWARE UPDATE		1
28	F05011-95	WASHER, 1/4 18-8SS NEOPRENE BOND		4

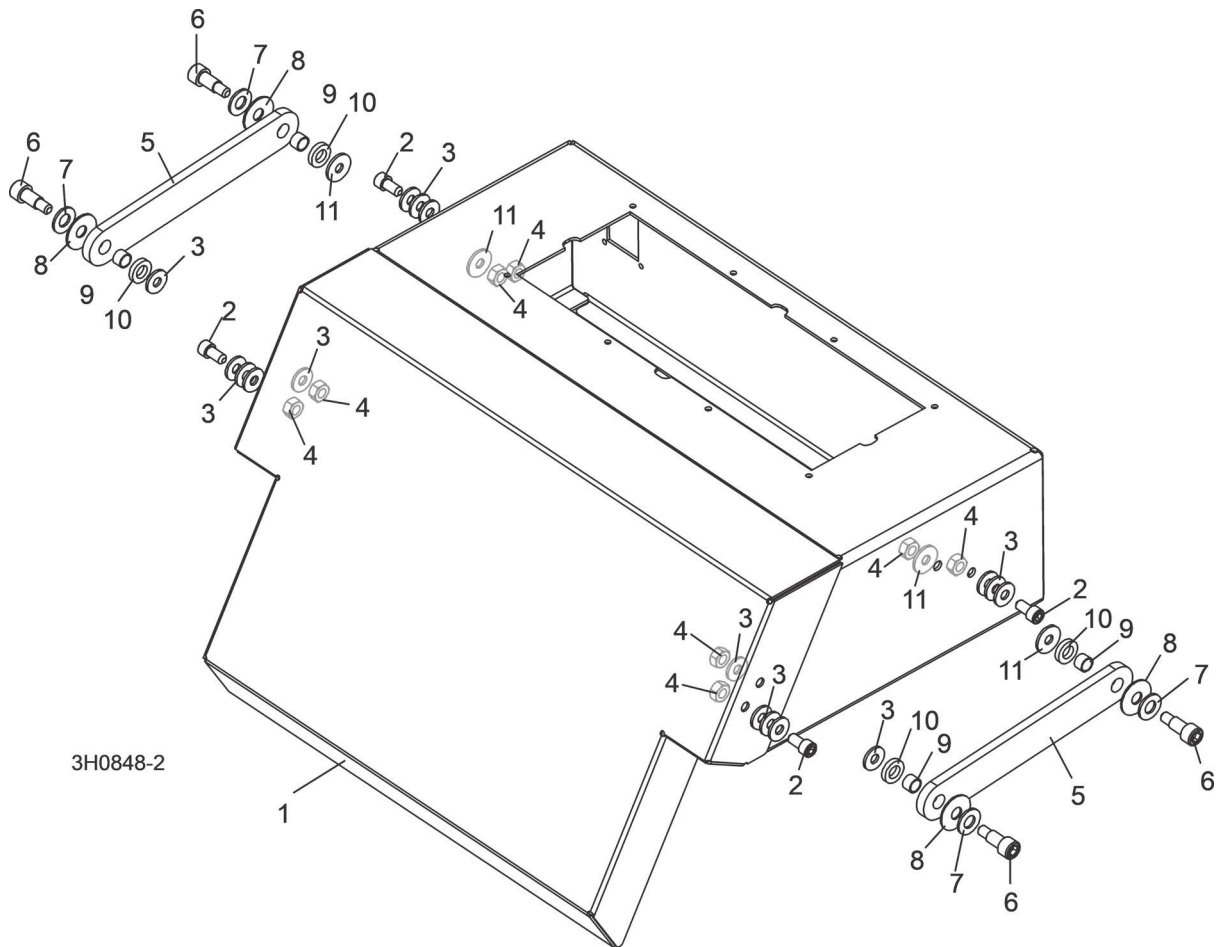
3.3 Accuset2 Control Assembly, Electrical (AC)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	053053	CONTROL ASSEMBLY, ACCUSET 2 AC		1
1	003800	Box Weldment, Accuset 2 Control	Available in assemblies only.	1
2	052892	Module, AC Drive Interface		1
3	F05005-186	Screw, #8-32 x 3/8" Flanged Button Socket Head		4
4	057810	Bracket, AC Drive Module Mount		1
5	F05005-62	Screw, 1/4-20 x 3/8" Socket Button Head		4
6	F05015-17	Screw, #10-24 x 1/2" Phillips Head		8
	069649	Panel Assembly, Accuset 2 Modular Front		1
7	055929	Panel Weldment, AccuSet 2 Front Module		1
8	024870	Gasket, Accuset Front Panel		1
9	052874	Switch, Accuset 2 Membrane		1
10	069650	Spacer, 1/4" OD x 5/16" Long Nylon		4
11	052900	Display, Accuset 2 Front Panel		1
12	024864	Spacer, 1/8" ID x 1/4" OD x 3/16" Long		4
13	024863	Spacer, 1/4" Hex Tapped		4
14	069662	PCB Assembly, Accuset 2 Replacement Control		1
15	F05005-183	Screw, #4-20 x 1/4" T10 Self-Tapping		4

REF	PART #	DESCRIPTION	COMMENTS	QTY.
16	024863	Spacer, 1/4" Hex Tapped		4
17	015980	Gasket, Accuset Control Box		1
18		Cover Parts		
19	053085	Cable Assembly, Intermediate Transducer		1
20	053156	Harness Assembly, Accuset 2 LT70 AC HMI		1
21	053192	CABLE ASSEMBLY, AC DRIVE INTERFACE		1
22	F05015-17	SCREW, #10-24 X 1/2" PHILLIPS HEAD		4
23	015296	BRACKET, ACCUSET HOLDOWN CLAMP		1
24	F05011-18	WASHER, #10 SAE FLAT		4
25	F05004-27	BOLT, #10-24 X 1/2" HEX HEAD		4
26	024323-62	CONDUIT, 5/8" SPLIT LOOM HIGH TEMP		8 in.
27	F05089-3	TIE WRAP, 3/16" X 6" BLACK UV		2
28	053225	CARD KIT, ACCUSET 2 SOFTWARE UPDATE		1

3.4 Accuset2 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		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