

AccuSet

Safety, Operation, Maintenance & Parts Manual

SW for AC '98+ mills

rev. 1.0



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

Form #911

Table of Contents

Section-Page

SECTION 1	INSTALLATION	1-1
1.2	Pre-Installation	1-2
1.3	Sawmill Control Box Pre-Installation	1-3
1.4	Encoder Installation.....	1-11
1.5	Control & Cover Installation	1-12
SECTION 2	OPERATION	2-1
2.1	Programming Menus	2-2
2.2	Operation	2-8

SECTION 1 INSTALLATION

1.1 Required Tools and Steps

Required Tools Include:

- Medium Flat Blade Screwdriver
- Medium Phillips Screwdriver
- Stubby or Right Angle Phillips Screwdriver
- 7/16" Socket Ratchet with 3" Extension
- 1/2" Wrench or Socket Ratchet
- 1/8" Allen Wrench
- 5/16" Nut Driver
- 1/2" Nut Driver (for Super Mills)
- 3/8" Nut Driver
- Wire Cutters (preferably Diagonal)

Recommended (But Not Required) Tools Include:

- Torque Wrench (with capability to measure up to 85 in-lbs)

Required Installation Steps Include:

- Sawmill Control Box Pre-Installation
- Wiring Installation
- Encoder Installation

1 Installation

Pre-Installation

1.2 Pre-Installation

IMPORTANT! Make sure the mill is properly set up before performing setworks installation and/or operation.



WARNING! Failure to put front outrigger down before moving cutting head from the rest position (rear of the mill) may result in serious injury.

1. Return the saw carriage to the front of the mill.
2. Raise the cutting head to the 22 inch mark on the blade height scale.
3. Turn the sawmill control box key to the OFF (#0) position.



WARNING! Before performing any service to the sawmill control box panel, turn the key to the OFF position, disconnect the negative battery lead, and remove all rings, watches, etc.... Failure to do so may cause serious injury and machine damage.

1.3 Sawmill Control Box Pre-Installation

See Figure 1-1.

1. Unbolt and remove the front panel from the control box. Leave all wires connected.
2. Unbolt and remove the top hinged cover from the control box. Set aside.

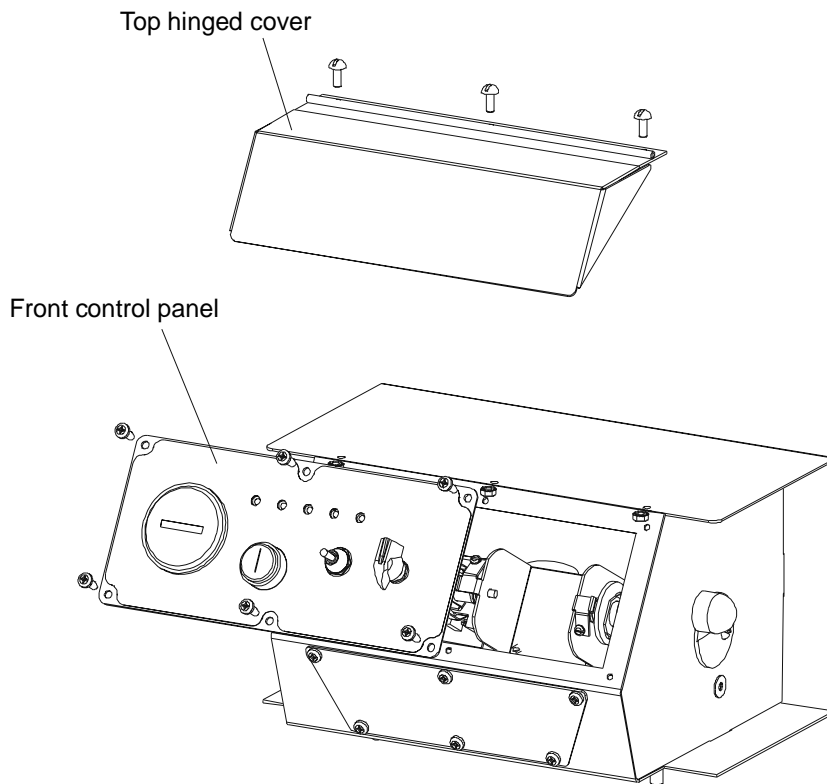


FIG. 1-1

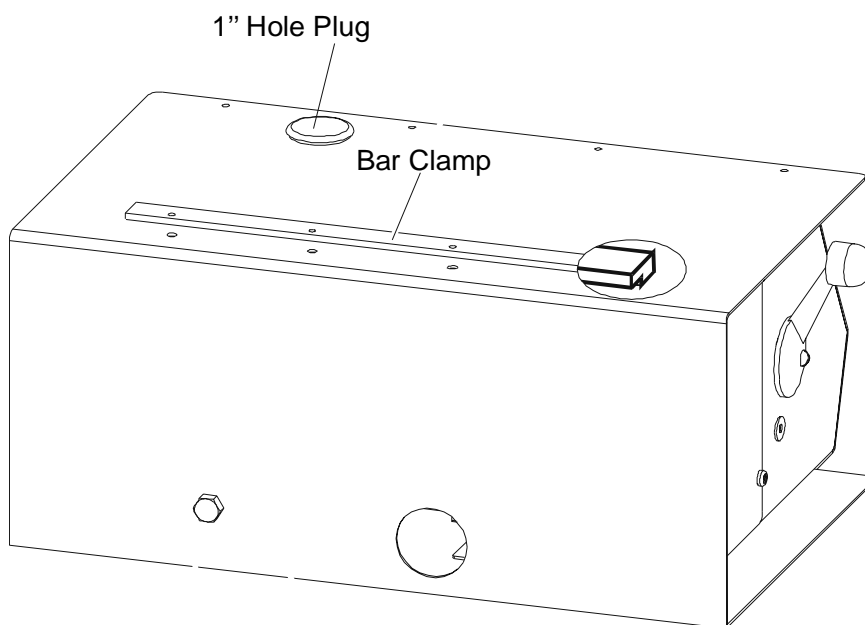
3. Install the provided L-shaped bar clamp to the top of the control box. Position the bracket as shown. Use the four provided #10 flat washers and 10-24 x 1/2" screws to loosely secure in place from the bottom (do not tighten).

1 Installation

Sawmill Control Box Pre-Installation

See Figure 1-2.

4. Remove the plug from the 1" diameter hole in the top of the control box. Install the provided 1" grommet to the hole.



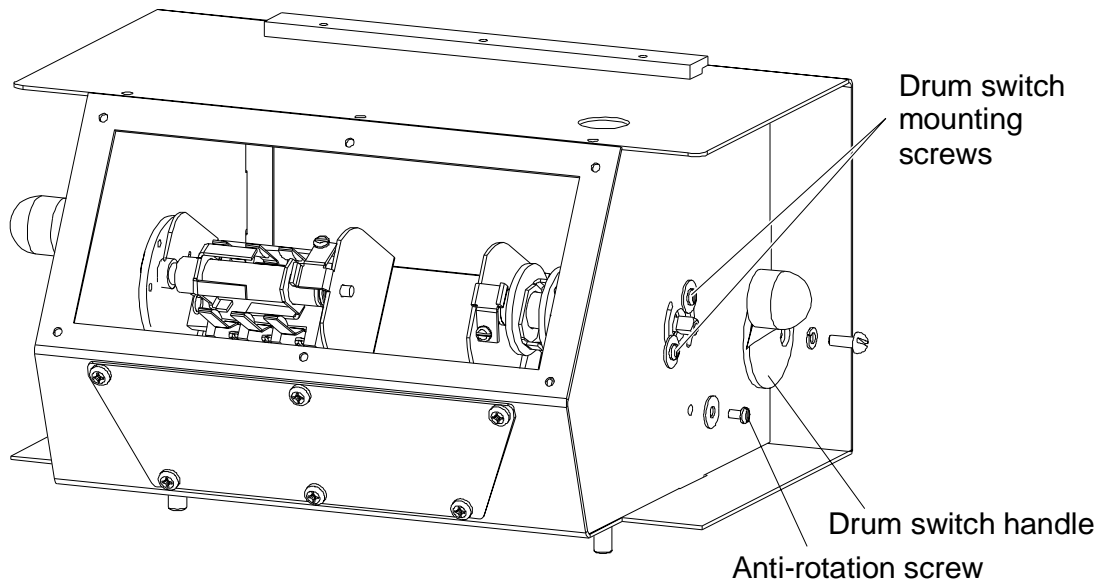
3H0372AC

FIG. 1-2

5. Remove the anti-rotation screw from the right side of the control box.

See Figure 1-3.

6. Unbolt and remove the up/down drum switch handle from the right side of the control box. Loosen the two screws securing the up/down drum switch to the control box.



3H0334

FIG. 1-3

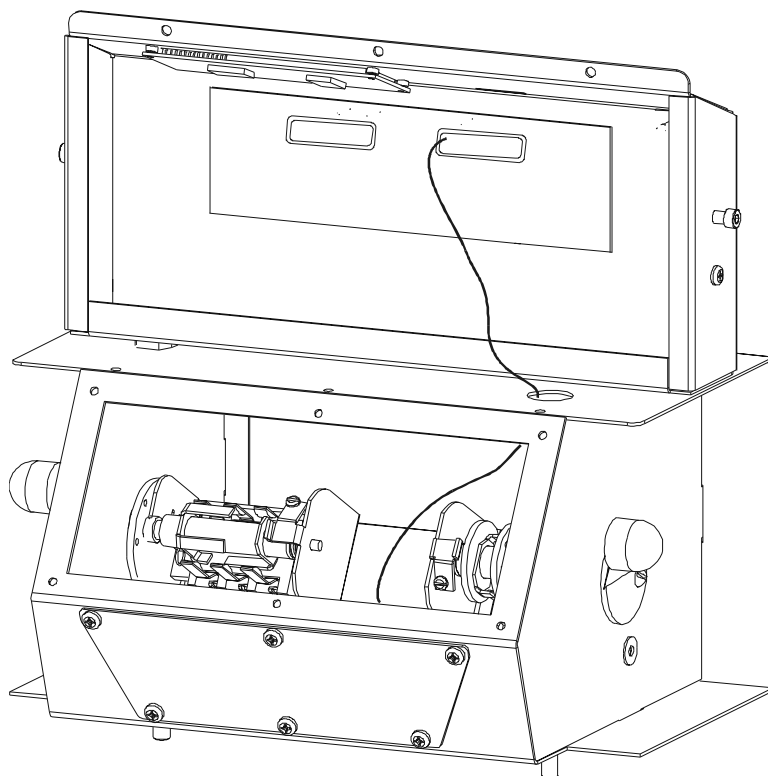
7. Disconnect the existing harness wires from terminal #1 and #4 on the up/down drum switch.

1 Installation

Sawmill Control Box Pre-Installation

8. Temporarily place the provided Networks control panel on top of the control box.

See Figure 1-4.



3H0339AC

FIG. 1-4

9. Route the existing harness wires through the 1" grommet in the top of the control box.
10. Connect the wire labeled UP to terminal #1.
11. Connect the wire labeled DOWN to terminal #4.

See Figure 1-5.

12. Connect the wire labeled BAT to the breaker stud.
13. Connect the wire labeled GND to the ground stud in the control box.
14. Disconnect the wire previously connected to terminal #2 of the up/down switch, and connect it to the breaker stud.

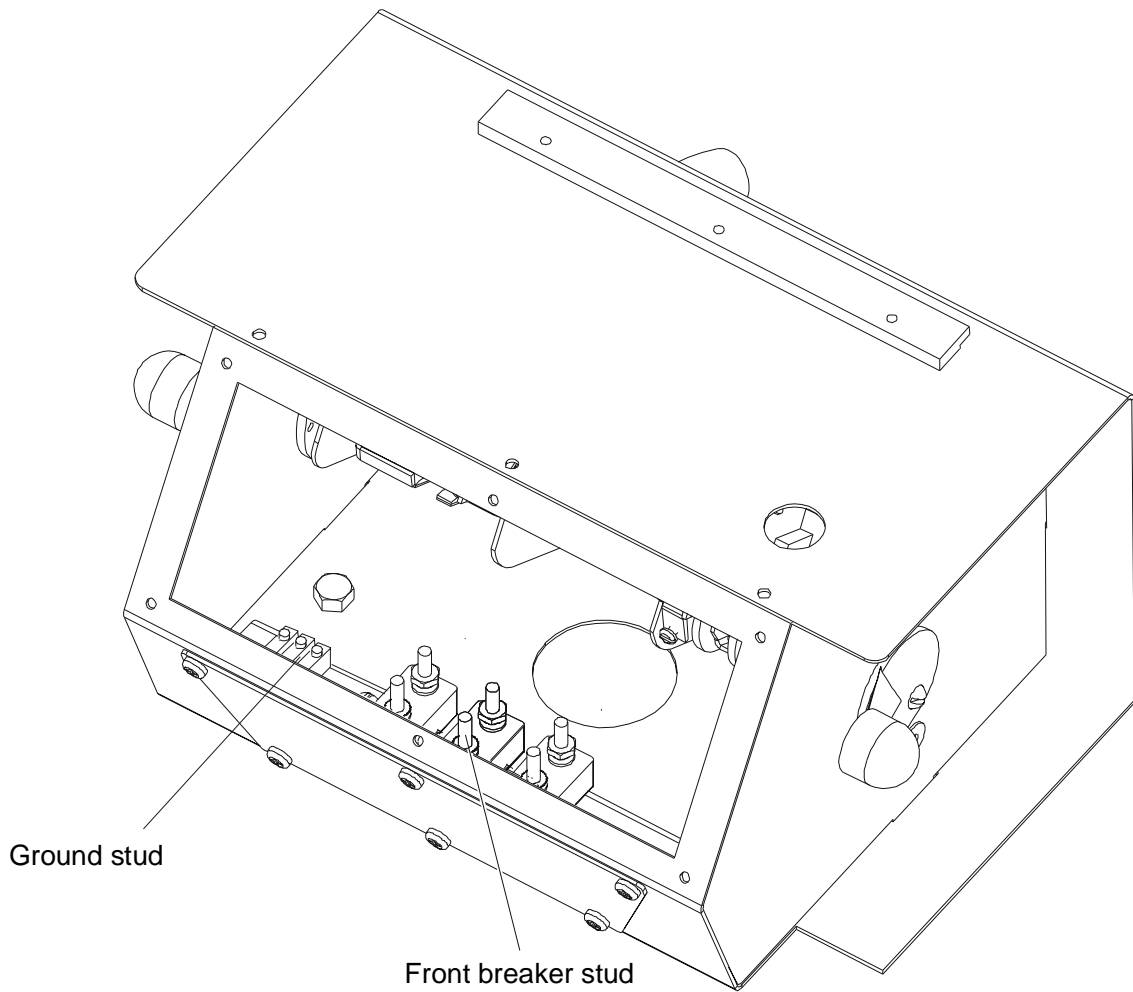


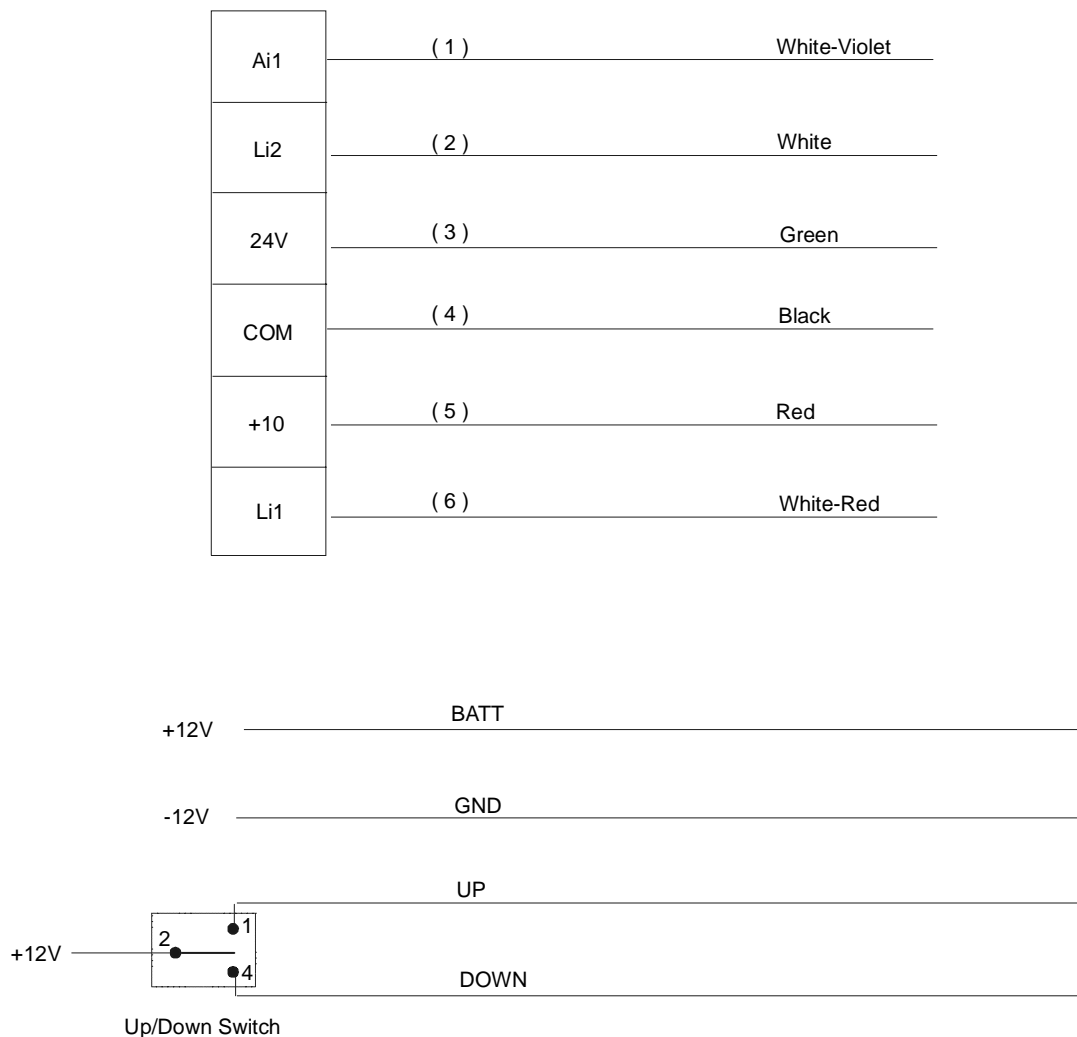
FIG. 1-5

1 Installation

Sawmill Control Box Pre-Installation

15. The leaving six wires of the Networks, connect to the existing shielded wire inside the control box using wire clamps, as shown on the diagram below (the numbers in the brackets show the wire number in the shielded wire).

See Figure 1-6.



AC0025

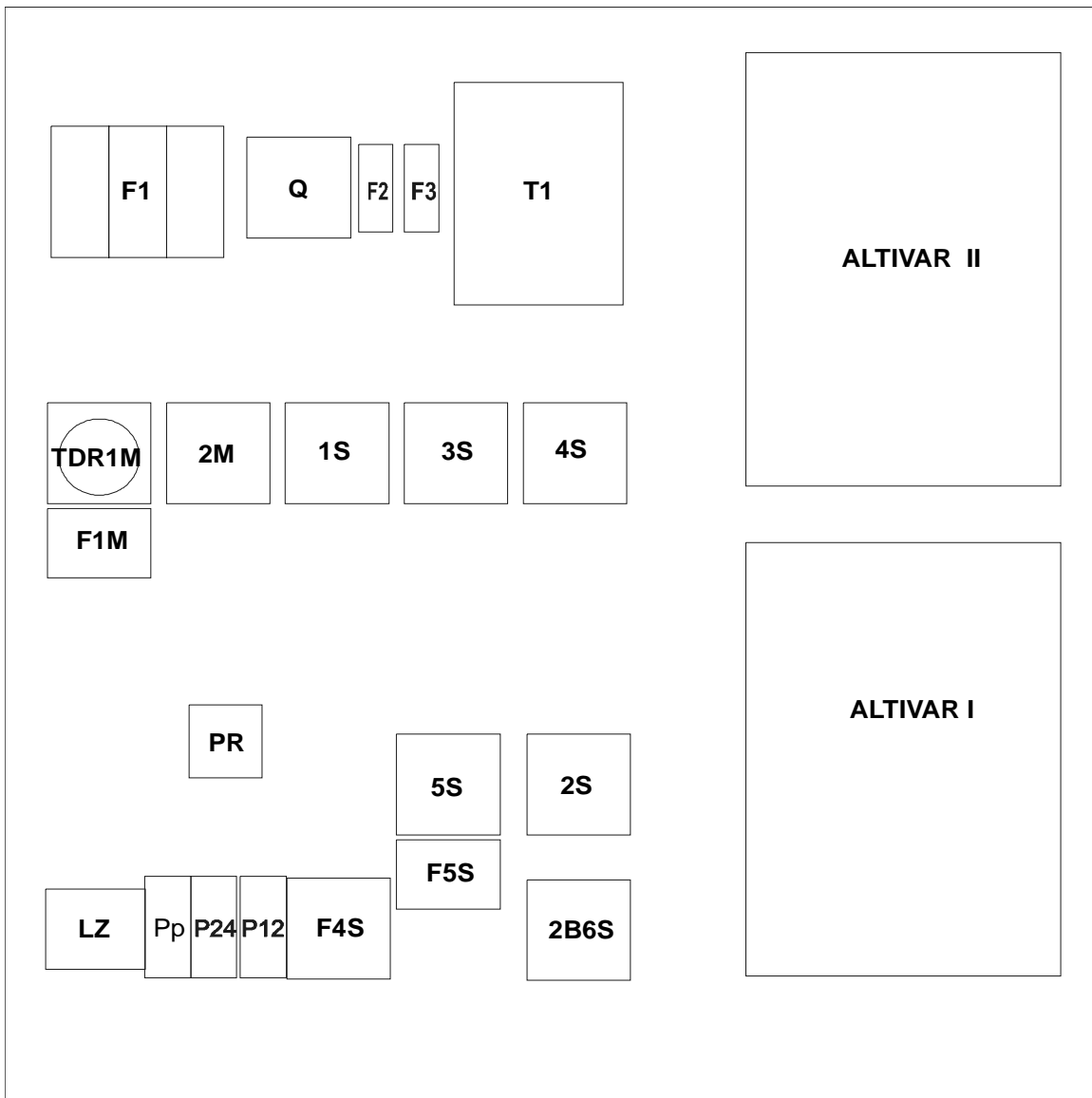
FIG. 1-6

The wire connections inside the sawmill control box are done. Prepare the right connection inside the electric box.

To get the connections, follow these steps:

1. Install the electronic rotation speed controller ALTIVAR II to the place as shown below.

See Figure 1-7.



AC0024

FIG. 1-7

1 Installation

Sawmill Control Box Pre-Installation

2. Connect the shielded wire to the ALTIVAR (**see figure 1-7**).
3. Connect the terminals L1, L2, L3 of the controller to the terminals T1, T2, T3 of the 2S switch. (**See the figure below**).
4. Disconnect wires labeled T1, T2, T3, previously connected to the 4S switch and connect them to the terminals U V W of the ALTIVAR.

See Figure 1-8.

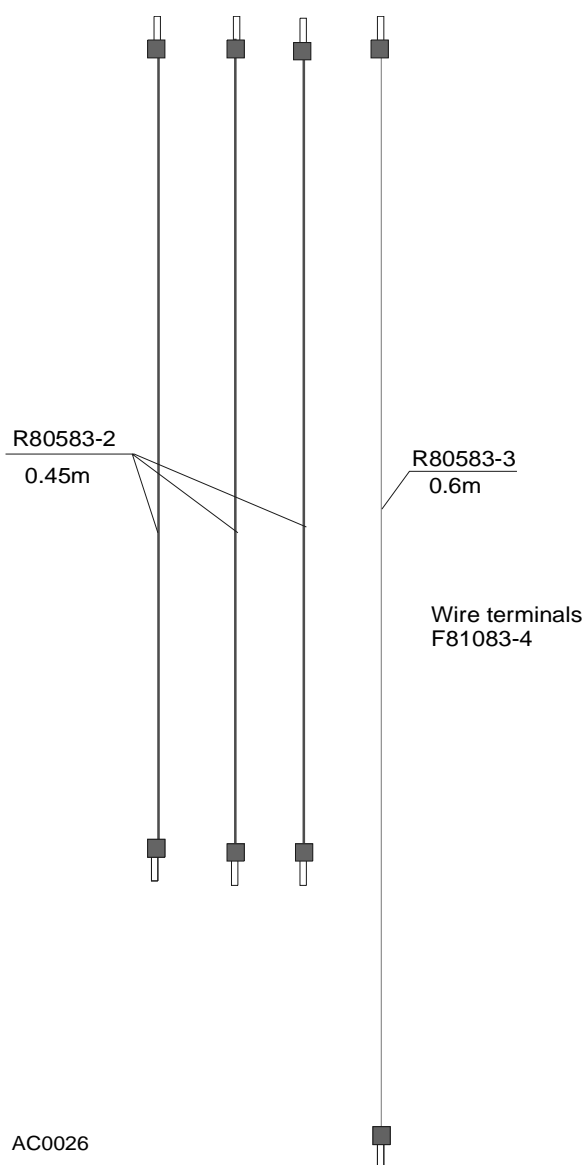


FIG. 1-8

1.4 Encoder Installation

1. The encoder is mounted on the mast using the provided brackets.

See Figure 1-9.

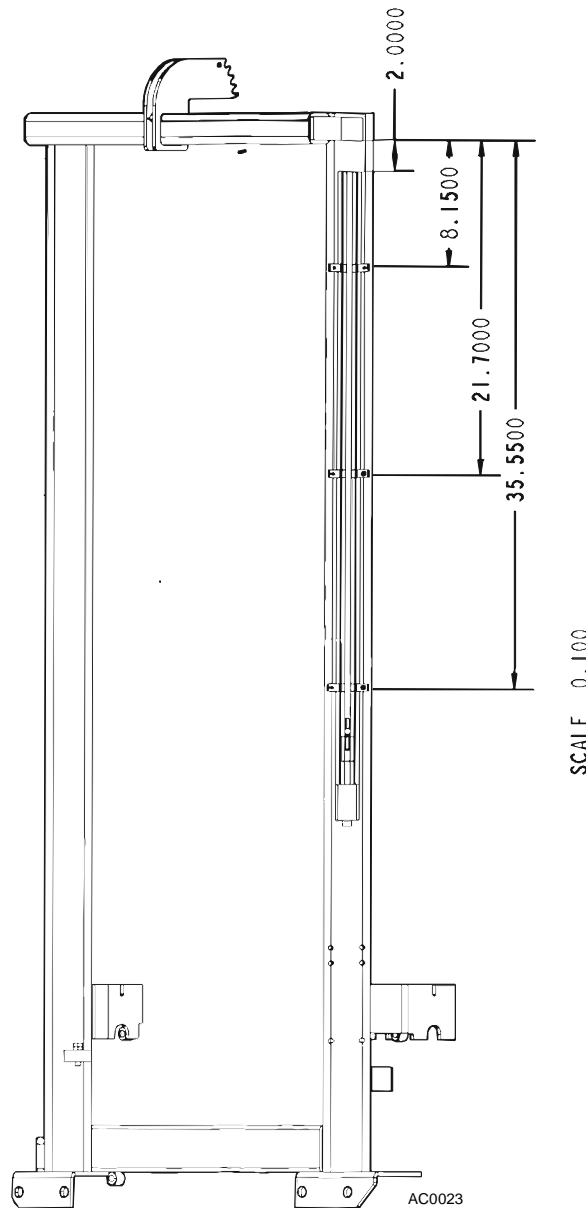


FIG. 1-9

2. Unbolt and remove the lower drive belt guard underneath the engine.

1.5 Control & Cover Installation

1. Install the Setworks control panel to the top of the sawmill control box.

Insert the Setworks control panel under the L-shaped bar clamp and slide forward into place. The four holes in the front of the Setworks control panel should align with the three holes in the top of the sawmill control box. Tighten the bar clamp mounting screws to secure the back of the Setworks control panel to the sawmill control box. Use the four existing #10-24 x 3/8" self-tapping screws (removed when original cover was removed) to secure the front of the Setworks control panel to the sawmill control box.

See Figure 1-10.

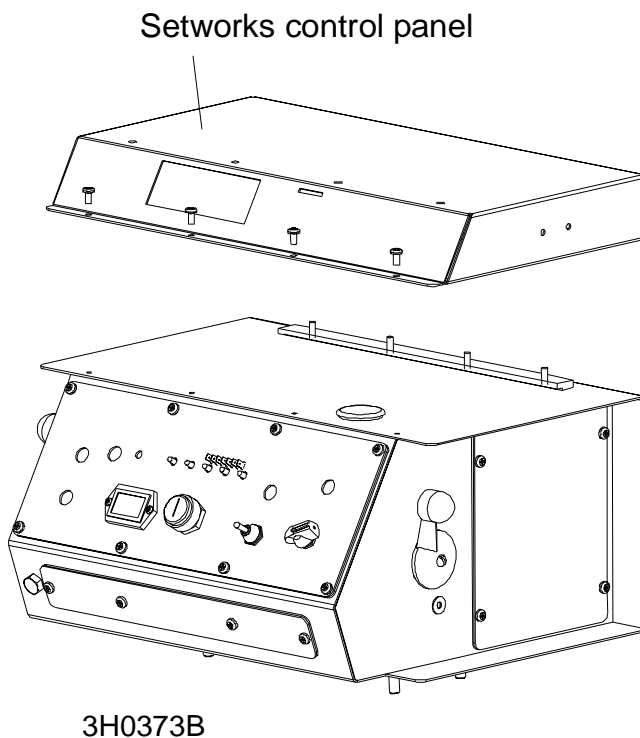


FIG. 1-10

2. Reinstall the front control panel to the sawmill control box.

SECTION 2 OPERATION

IMPORTANT! Read and understand the entire Operation section before using your Networks!

Simple Networks is a sawmill option which automatically lowers the cutting head by one of 4 pre-programmed “sets”. These sets can be easily modified and saved. Each set includes information for board thickness and kerf allowance.

See **Figure 2-1**. The graphic below shows the Networks control panel.

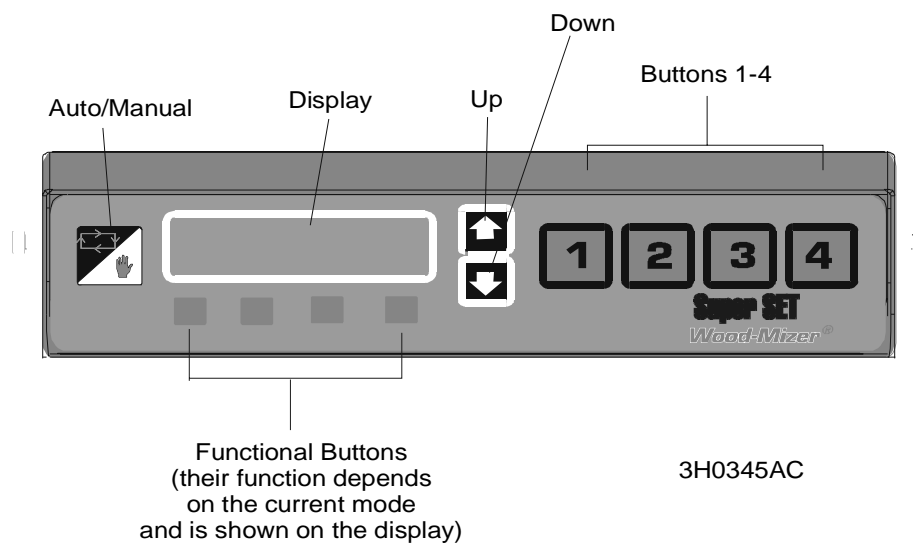


FIG. 2-1

2.1 Programming Menus



WARNING! In neither mode should the PATTERN button be used. It could result in total detuning of the Setworks and disabling its proper functioning.

Manual Mode

The “Manual mode” will appear in the display window after turning the key switch to position 2 or 1 after starting the main motor. The first line figure indicates the current position of the head, in the second line there is the operation-time meter and in the third line there are functions of buttons (located under the display) in a particular Setworks mode.

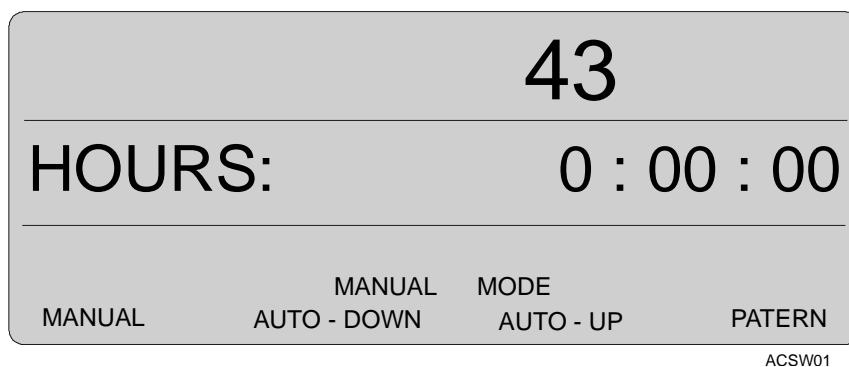
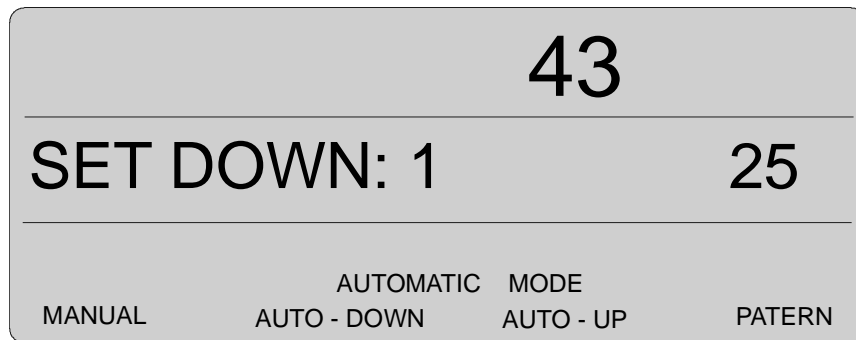


FIG. 2-1

Automatic Mode

The “Automatic mode” will appear on the display after switching the Setworks to the Automatic mode by pressing the display’s left-side button. The figures in the display window indicate from the top:

- the current position of the head
- the current board thickness dimension. You may choose one of the four pre-programmed sets by pressing the corresponding button (1 through 4). To change the setting, use the UP and DOWN buttons.



ACSW02

FIG. 2-2



WARNING! In neither mode should the PATTERN button be used. It could result in total detuning of the Setworks and disabling its proper functioning.

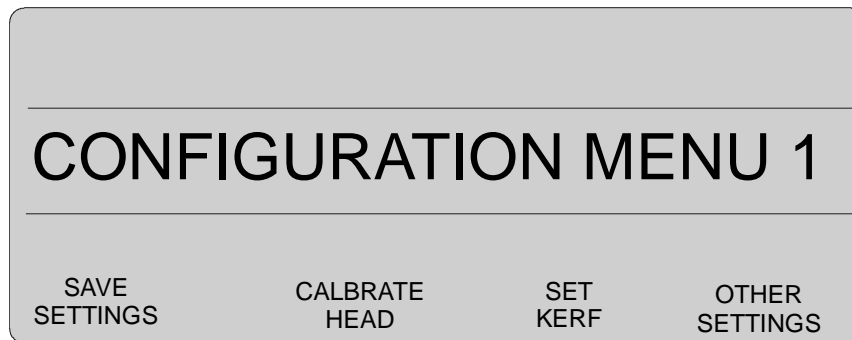
Networks Configuration

To perform the Networks configuration, after turning the power supply on press the UP button placed on the right side of the display. You will access the 1st level Calibration menu (see the graphic below). This menu includes:

1. Save settings
2. Calibrate head
3. Set kerf
4. Other settings - access to the 2nd level menu.

To start each setting, press the button located under the corresponding caption in the display window.

Only the OTHER SETTINGS button is used in the 1st level menu.



ACSW03

FIG. 2-3

After pressing the OTHER SETTINGS button you will move to the 2nd level Calibration menu in which you can set the following parameters (from the left):

1. Language version
2. Unit of measure
3. Calibration.

The fourth button (ANALOG LIMITS) is not used.

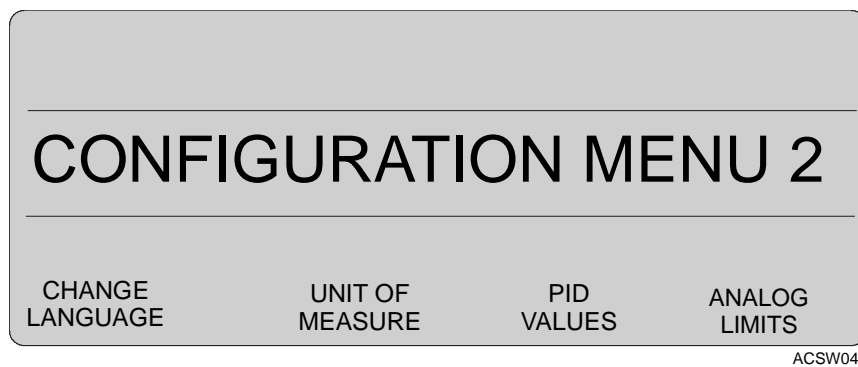


FIG. 2-4

After pressing the PID VALUES (calibration) button the Networks display looks as follows:

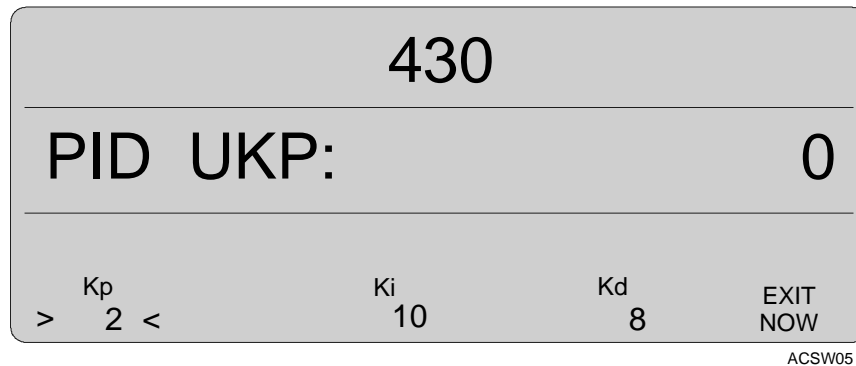


FIG. 2-5

To modify a parameter, press the button under it. The > < signs will appear then. To change the value of the parameter, use the UP and DOWN buttons.

Each parameter value is factory pre-set and should be as follows:

- Kp- 3
- Ki- 10
- Kd- 8.

After adjusting the parameters press the EXIT NOW button. On the display the following indications will appear:



FIG. 2-6

To exit the Calibration menu without saving the modified parameters, press the EXIT CONFIG button. To save the parameters and return to the main menu, press the SAVE NOW button.

Networks Resetting

You reset Networks to delete all the previously set parameters.

To reset, turn the power on simultaneously pressing the Auto/Manual toggle switch and a function button (the first on the left).

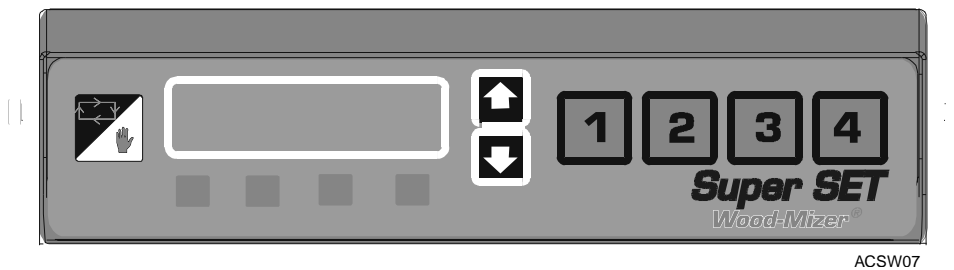


FIG. 2-7

Setting the Display Contrast

To increase contrast of the LCD display, turn the key switch to the left (i.e. turn the controlling on) simultaneously pressing the DOWN button. Hold the button until you reach the desired contrast. Should the contrast be too strong press immediately the UP button and hold it until you reach the desired setting. To decrease the contrast, follow the same procedure. In case of failure repeat the procedure. The settings are automatically saved.

2.2 Operation



WARNING! Be sure the power feed switch is in the neutral position before turning the key switch to the (#1) or (#2) position. This prevents accidental carriage movement which may cause serious injury or death.

1. Turn the sawmill control panel key to the ON (#2) or (#1) position and turn the motor on. Setworks will start up in the manual (disabled) mode.
2. Use the up/down switch on the sawmill control panel to raise or lower the cutting head to the desired height.
3. Select a “set” by pressing 1, 2, 3, or 4. The board thickness dimension will show in the window. **NOTE:** Setworks will automatically switch to the Automatic mode when 1, 2, 3 or is pressed.
4. **To move the cutting head down to the next cutting position** (board thickness plus kerf allowance), move the up/down switch on the control panel to the down position and release. The cutting head will continue to move until the next cutting position is reached.

To move the cutting head down several cutting positions at once, hold the up/down switch in the down position until the cutting head reaches the approximate desired location, then release. The cutting head will continue to move until the next cutting position is reached.



IMPORTANT! To move the cutting head to a random position (as is often necessary after turning a log, etc), temporarily place Setworks in Manual Mode. See Section 2.2. Lower the head and make the first cut, then return Setworks to Automatic Mode by selecting a “set”.

To raise the cutting head, move the up/down switch to the up position, hold until the cutting head reaches the desired height, then release. **NOTE:** Upward movement of the cutting head **will not** affect the set program. To return to the next cutting position, push the up/down switch to the down position and release.

See Figure 2-8.

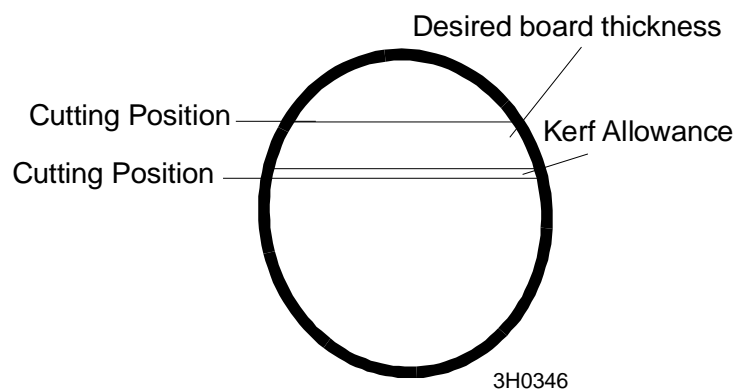


FIG. 2-8

