



Simple Set

Safety, Operation, Maintenance & Parts Manual

SSW, SSW-R

rev. A.00 - A.03



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

February 2010

Form #1611

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SECTION 1 SETUP & OPERATION

1.1 Initial Setup

See Figure 1-1. Turn the sawmill control key switch to the ON (#1) position. Simple Set will start up in manual mode. As the control powers up, the software revision is displayed. This information can be helpful should you require service.

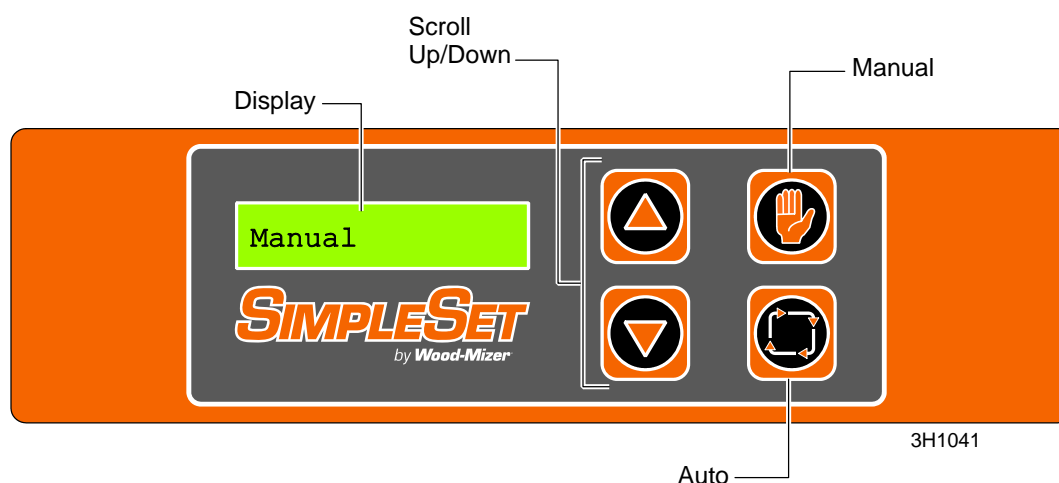




FIG. 1-1

In manual mode, press the Up  arrow to enter the setup menus.



Set Speed: Available values are 1 - 5. The default value is 5. Lowering the Set Speed will assist in achieving the desired blade height setting in situations where the up/down chains or mast pads are too loose.

Use the Up  and Down  buttons to scroll to the desired Set Speed setting.

Press the Auto  button to scroll to the Units menu or the Manual  button to exit.

Units: Simple Set can display units in inches (default) or millimeters.



Push the Up or Down buttons to scroll to the desired unit setting.

Press the Auto  button to scroll to the Language menu or the Manual  button to exit.


1 Setup & Operation


Operation



Language: To date, the only available language is English.



Press the Auto  button to scroll back to the Set Speed menu or the Manual  button to exit.

1.2 Operation

 **Manual:** With Simple Set in manual mode, operate the sawmill up/down system as normal with the sawmill control drum switch. The display will show a 'D' when the drum switch is pushed down and a 'U' when pushed up.

 **Auto:** With Simple Set in auto mode, the saw head will move down the increment displayed when the sawmill control drum switch is activated in the down position. The saw head will move up as normal when the drum switch is activated in the up position. Two sets of values can be stored in the control.

Push the Auto  button to display the Set1 value. Push  Auto again to toggle to the Set2 value.

While either Set1 or Set2 value is displayed, use the Up  and Down  buttons to adjust the value in 1/16" (or 1mm) increments.

Bump the up/down drum switch down to move the blade to the next increment. Holding the drum switch up or down will bypass Simple Set and move the saw head until the drum switch is released.

If the saw head is raised before the next cut, pushing the drum switch down will return the saw head to the original position plus the increment value.

Push the Manual  button to exit auto mode.

Turn the sawmill control key switch to the OFF (#0) position to power off Simple Set.

1.3 Troubleshooting

1.3.1 Error Messages

See Table 1-1. A description of Simple Set error messages is provided below.

Error	Description
E02 Sensor	This message is displayed if Simple Set cannot detect the encoder sensor magnet when entering auto mode. Check that the gear box extension is aligned with the sensor. Push any button on the Simple Set control to exit to manual mode.
E03 Sensor	This message is displayed if Simple Set cannot detect a signal from the encoder sensor when entering auto mode. Check the encoder sensor cable connections. push any button on the Simple Set control to exit to manual mode.

1.3.2 Diagnostic Lights

See Figure 1-2. LED indicator lights are provided on the encoder sensor housing and the display circuit board and H-bridge module inside the Simple Set control box. Observing the LED lights during operation can help identify problems with the sensor, drum switches or Simple Set control.

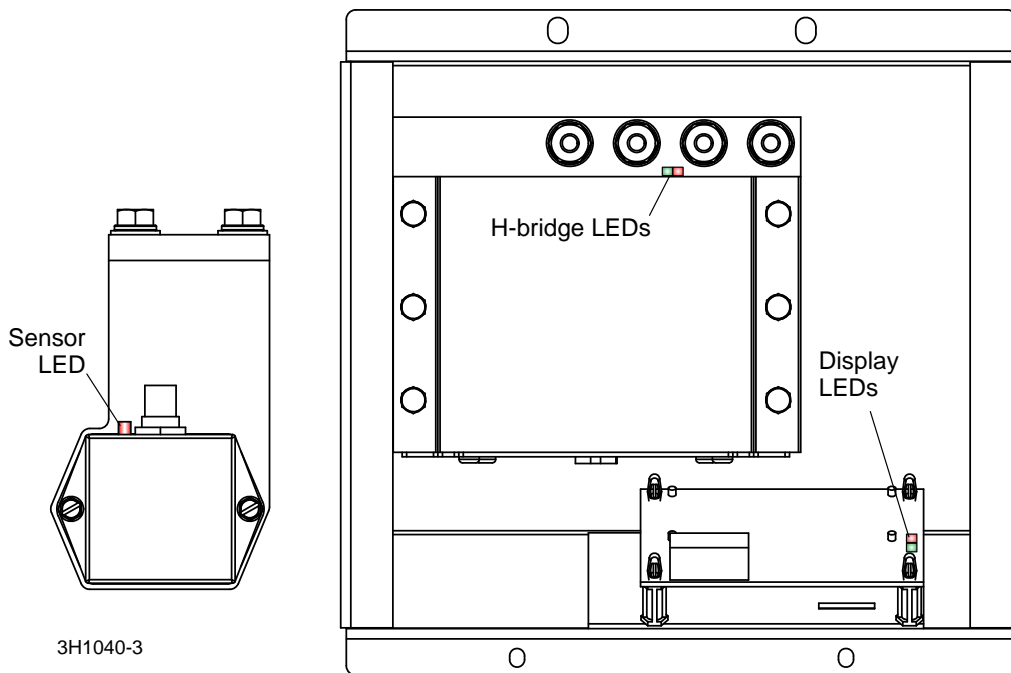


FIG. 1-2

During normal operation:

- As the up/down gearbox shaft spins to move the saw head up or down, the sensor LED will illuminate and brighten. After each complete revolution of the shaft, the LED will turn off then illuminate and brighten.
- In manual mode, both control box LEDs will illuminate red when the drum switch is activated in the down direction and green when the up/down drum switch is activated in the up direction. Both LEDs will turn off when the drum switch is released.
- In auto mode, both control box LEDs operate the same (green) in the up direction as in manual mode. When the drum switch is bumped in the down direction, both LEDs will illuminate red and then the display LED will immediately turn off. When the blade reaches the increment value set by the Simple Set control, the LED on the H-bridge will turn off. If the drum switch is held down or the saw head coasts past the increment, the H-bridge LED will illuminate green indicating the blade will move up to return to the increment value. When the blade reaches the increment value, the H-bridge LED will turn off.

1.3.3 Simple Set Up/Down Gear Settings Adjustment

1. Make sure the power to the control box is on.
2. Press the UP arrow and Manual buttons simultaneously on the Simple Set control panel to display the Speed setting.

See Figure 1-3.

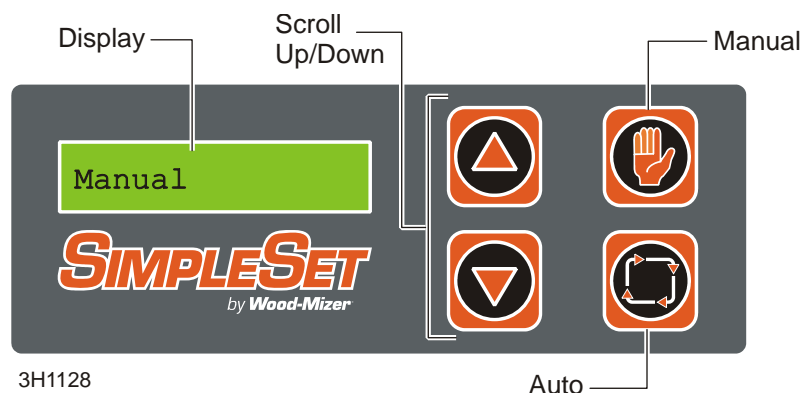


FIG. 1-3

3. Press the Auto button several times until "Gear: 0.xxxx" appears.
4. Use the Up/Down arrow buttons to set the value of the Gear Setting as shown in the table below.

Models	Revision	Gear Setting	InvGear Setting
LT40 (Default)	All	0.0938 (Default)	No (Default)
LT35/LT35HD	A1.00 - A1.02	0.2250	Yes
LT35/LT35HD	A2.00 - A2.01	0.3492	Yes
LT35/LT35HD	A3.00+	0.1170	Yes

5. Press the Auto button to display "InvGear: xx".
6. Use the Up/Down arrow buttons to set the InvGear setting to the required value as shown in the table above.
7. Press the Manual button to return to the main menu.

1.3.4 Simple Set PID Settings

1. Make sure the power to the control box is on.
2. Press the UP arrow and Manual buttons simultaneously on the Simple Set control panel to display the Speed setting.

See Figure 1-5.

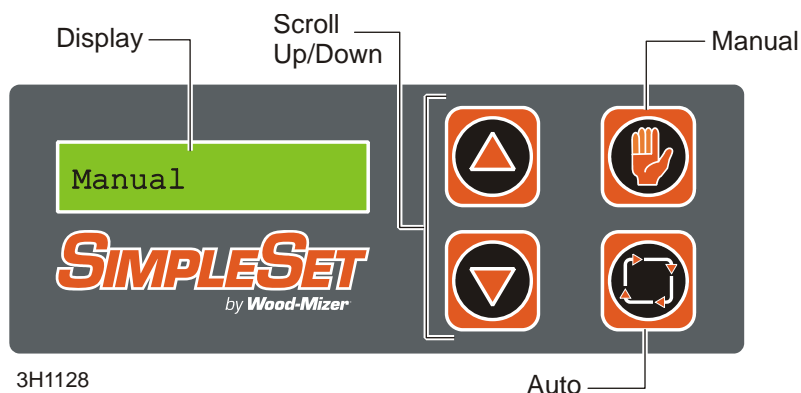
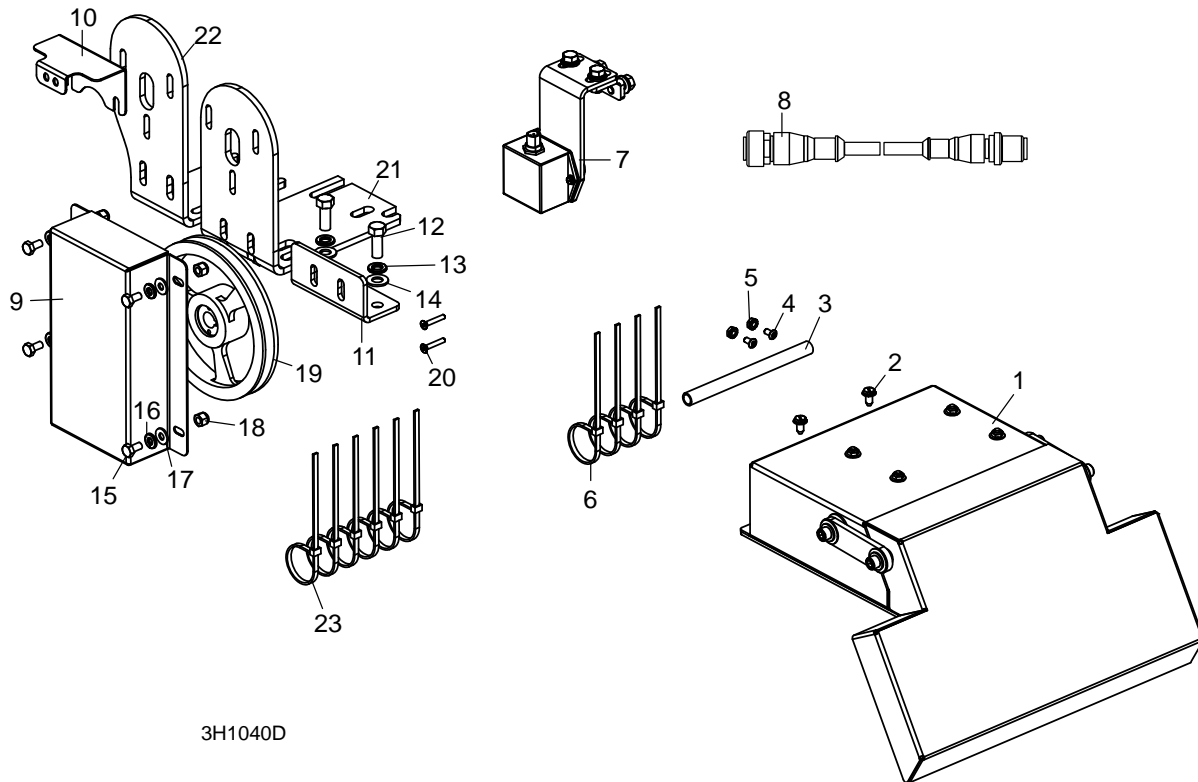


FIG. 1-5

3. Press the Auto button several times until PGain, DGain and IGain settings appear. Use the Up/Down arrow buttons to set the settings to the required values. **IMPORTANT!** The PID settings are factory-set and they should not be changed. If necessary, set the PID settings to the following values: PGain 1.0, DGain 0.0 and IGain 0.0.
4. Press the Manual button to return to the main menu.

SECTION 2 REPLACEMENT PARTS

2.1 Simple Set Kit, Complete (Standard)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	KIT, FACTORY-INSTALLED SIMPLE SET (STANDARD)	SSW	1	
	KIT, FIELD-INSTALLED SIMPLE SET (STANDARD)	SSW-R	1	
1	Simple Set Control (See Section 2.4)			
2	Screw, 1/4-20 x 1/2" Slotted Hex Head	F05015-1	2	
3	Tubing, 1/2" Neoprene	R02348	.5 ft.	
4	Screw, #10-24 x 3/8" Button Socket Head Stainless	F05004-218	2	
5	Nut, #10-24 Self-Locking Hex	F05010-14	2	
6	Tie Wrap, 3/16" x 6" UV Black	F05089-3	4	
7	Simple Set Encoder (See Section 2.3)			
8	Cable, Simple Set Sensor	053380	1	
9	Cover, Simple Set Enclosure	006862	1	
10	Bracket, Sensor Cable (SSW Only)	007067 ¹	1	
11	Bracket, Simple Set Mount (SSW-S Only)	007416	1	
12	Bolt, 3/8-16 x 1" Hex Head	F05007-7	2	
13	Washer, 3/8" Split Lock	F05011-4	2	

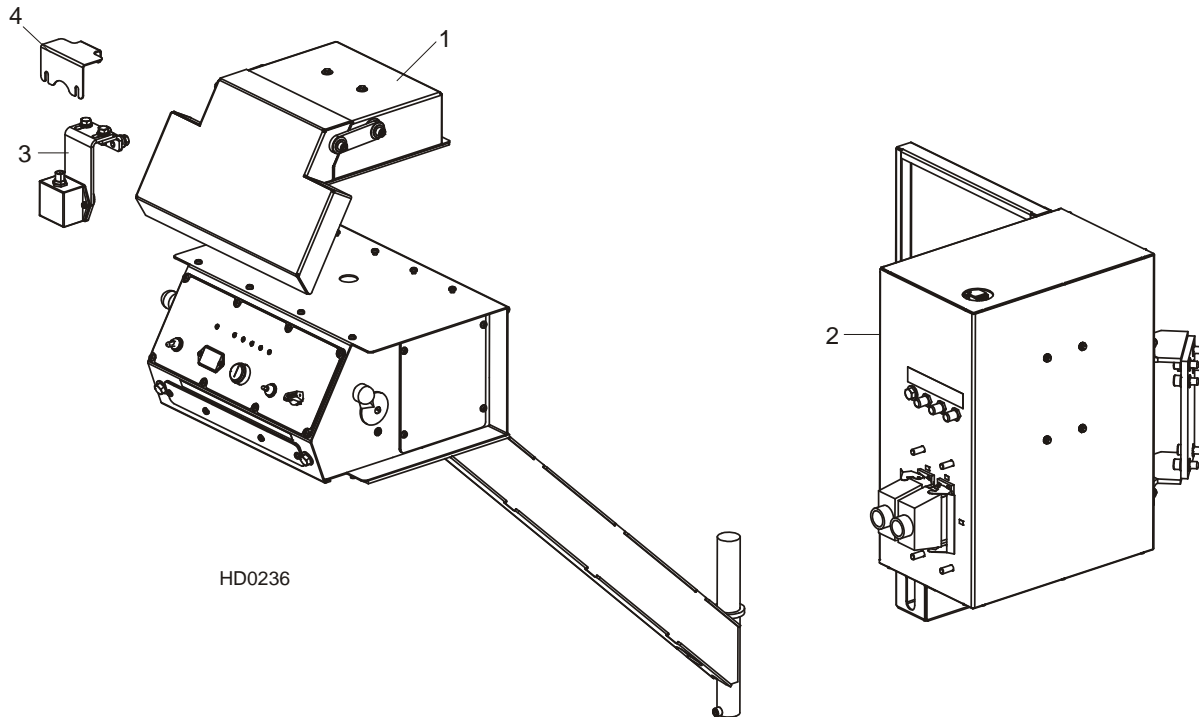
2 Replacement Parts

Simple Set Kit, Complete (Standard)

14	Washer, 3/8" SAE Flat	F05011-3	2	
SSW-R Field Installed Kit Only (Includes parts above plus):				
15	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	4	
16	Washer, 1/4" Split Lock	F05011-14	4	
17	Washer, 1/4" SAE Flat	F05011-11	4	
18	Nut, 1/4-20 Hex Nylon Lock	F05010-69	4	
19	Sheave, Modified AK64 x 5/8"	006874	1	
20	Screw, #8-32 x 1" Flat Socket Head	F05004-252	2	
21	Bracket, Up/Down Motor Mount (Grove)	014073	1	
22	Bracket, Up/Down Motor Mount (IPTS)	014529	1	
23	Tie Wrap, 3/16" x 6" UV Black	F05089-3	6	
	Instruction Sheet, Simple Set Retrofit	SSW-1600	1	
	Manual, Simple Set Option	M1610	1	

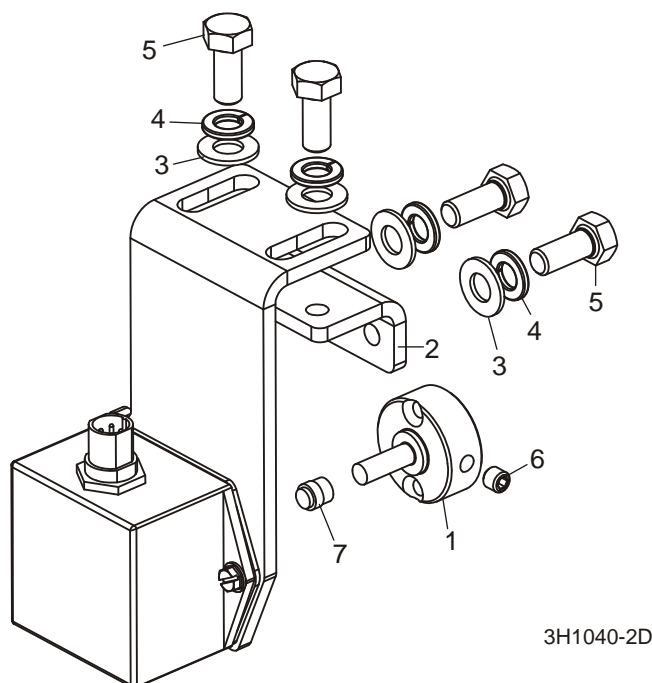
¹ Added to secure sensor cable away from moving up/down pulley (Rev. A.01).

2.2 Simple Set Kit, Complete (Standard Remote)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SIMPLE SET OPERATOR CONTROL (See Section 2.5)			
2	SIMPLE SET REMOTE POWER BOX (See Section 2.6)			
	INSTALLATION KIT, REMOTE SIMPLE SET	SSW-R-1	1	
3	Simple Set Encoder (See Section 2.3)			
4	Plate, Simple Set Cable	007067	1	
	MANUAL, SIMPLE SET OPTION	M1610	1	

2.3 Sensor Assembly

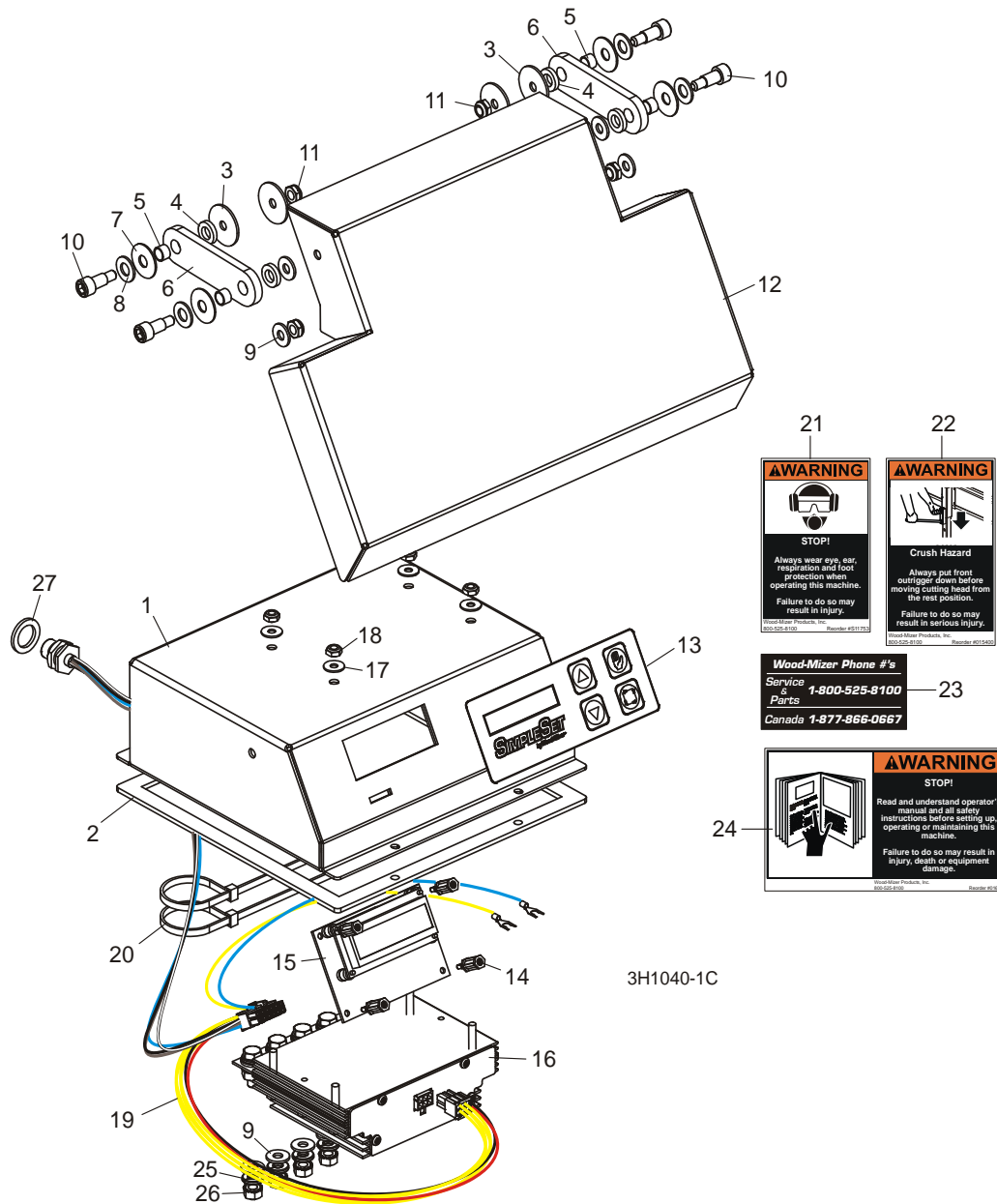


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	SENSOR ASSEMBLY, SIMPLE SET	053369 ¹	1	
1	Extension, Simple Set Gearbox Shaft	057852	1	
2	Bracket, Simple Set Sensor Mount	057872	1	
3	Washer, 5/16" SAE Flat	F05011-17	4	
4	Washer, 5/16" Split Lock	F05011-13	4	
5	Bolt, 5/16-18 x 3/4" Hex Head	F05006-5	4	
6	Screw, 1/4-20 x 1/4" Cup Point Socket Set	F05005-131 ²	1	
7	Magnet Assembly, Simple Set Encoder w/Hub	065890	1	

¹ Sensor Assembly 053369 revised 4/11. Mounting parts and extension shaft removed from kit and other components made available only as complete kit.

² Screw moved from SSW-R to Sensor Assembly 5/09.

2.4 Simple Set Control (Standard)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
CONTROL ASSEMBLY, SIMPLE SET		006847	1	
1	Box Weldment, Simple Set Control	006845	1	
2	Gasket, Simple Set Control Box	006863	1	
3	Washer, 1/4" Fender	F05011-12	4	
4	Washer, 5/16" Nylon Flat	F05011-92	4	

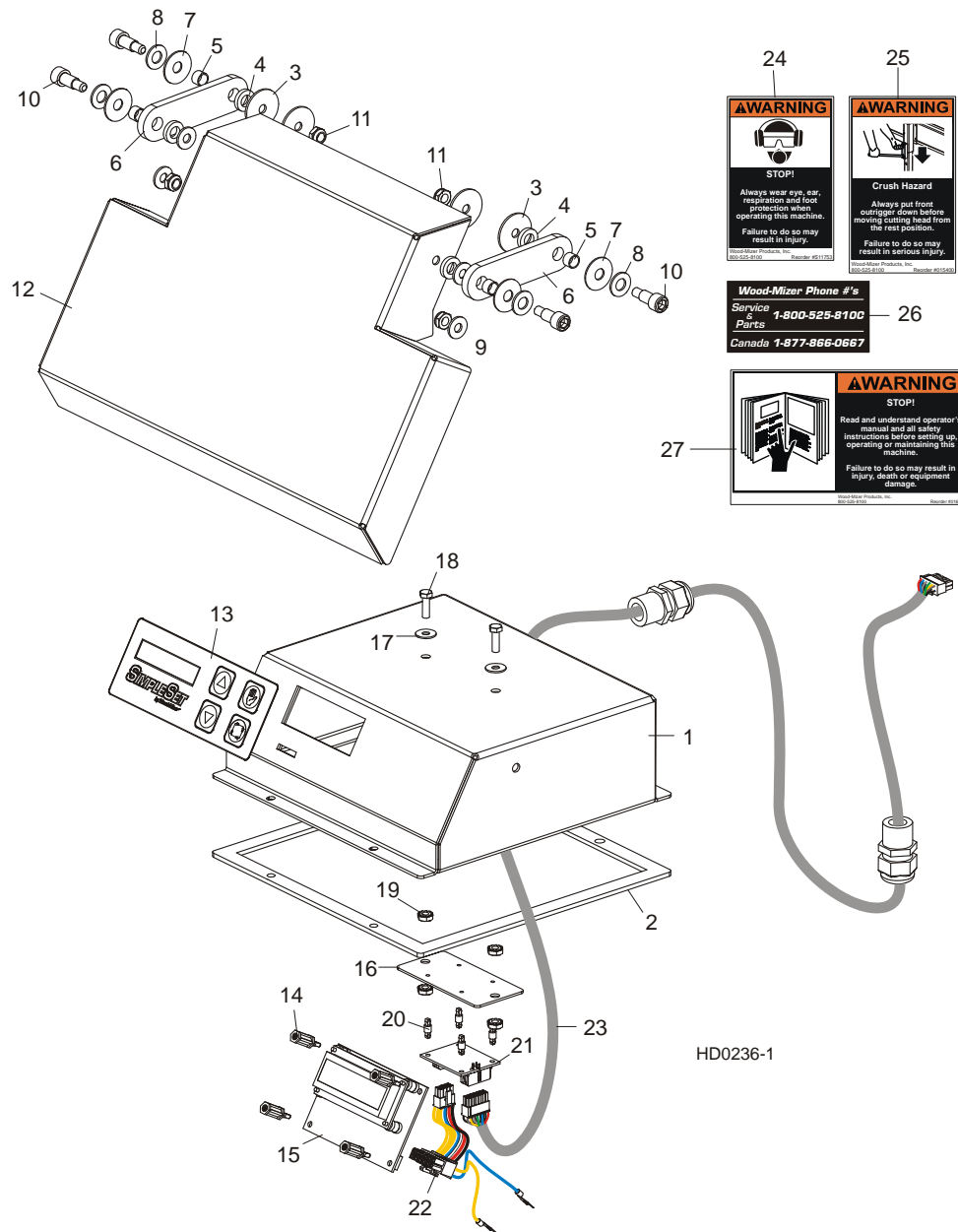
2 Replacement Parts

Simple Set Control (Standard)

5	Bushing, 5/16" ID x 3/8" OD x 1/4" Bronze	016655	4	
6	Plate, Simple Set Control Cover Link	006872	2	
7	Washer, 5/16" Belleville	F05011-93	4	
8	Washer, 5/16" SAE Flat	F05011-17	4	
9	Washer, 1/4" SAE Flat	F05011-11	8	
10	Bolt, 5/16" x 1/2" Shoulder 1/4-20 Thread Stainless	F05006-69	4	
11	Nut, 1/4-20 Hex Half Nylon Lock	F05010-156	4	
12	Cover, Simple Set Control	006846	1	
13	Membrane, Simple Set Control Switch	053347	1	
14	Standoff, 5/8" Threaded PCB	053385	4	
15	PCB Assembly, Simple Set Control	053377	1	
16	H-Bridge Assembly, Simple Set	053373	1	
17	Washer, #10 SAE Flat	F05011-18	4	
18	Nut, #10-24 Hex Nylon Lock	F05010-160	4	
19	Harness Assembly, Simple Set Control	053379	1	
20	Tie Wrap, 3/16" x 6" UV Black	F05089-3	2	
21	Decal, Eye/Ear Protection Warning	S11753	1	
22	Decal, Front Outrigger Warning	015400	1	
23	Decal, 800 Number	S12117	1	
24	Decal, Read Manual Warning	016402	1	
25	Washer, 1/4" Split Lock	F05011-14	4	
26	Nut, 1/4-20 Self-Locking Hex	F05010-9	4	
27	Washer, 5/8" x 15/16" x .094 Nylon	F05011-19 ¹	1	

¹ Added to better secure harness plug (Rev. A.03).

2.5 Simple Set Control (Standard Remote Operator)



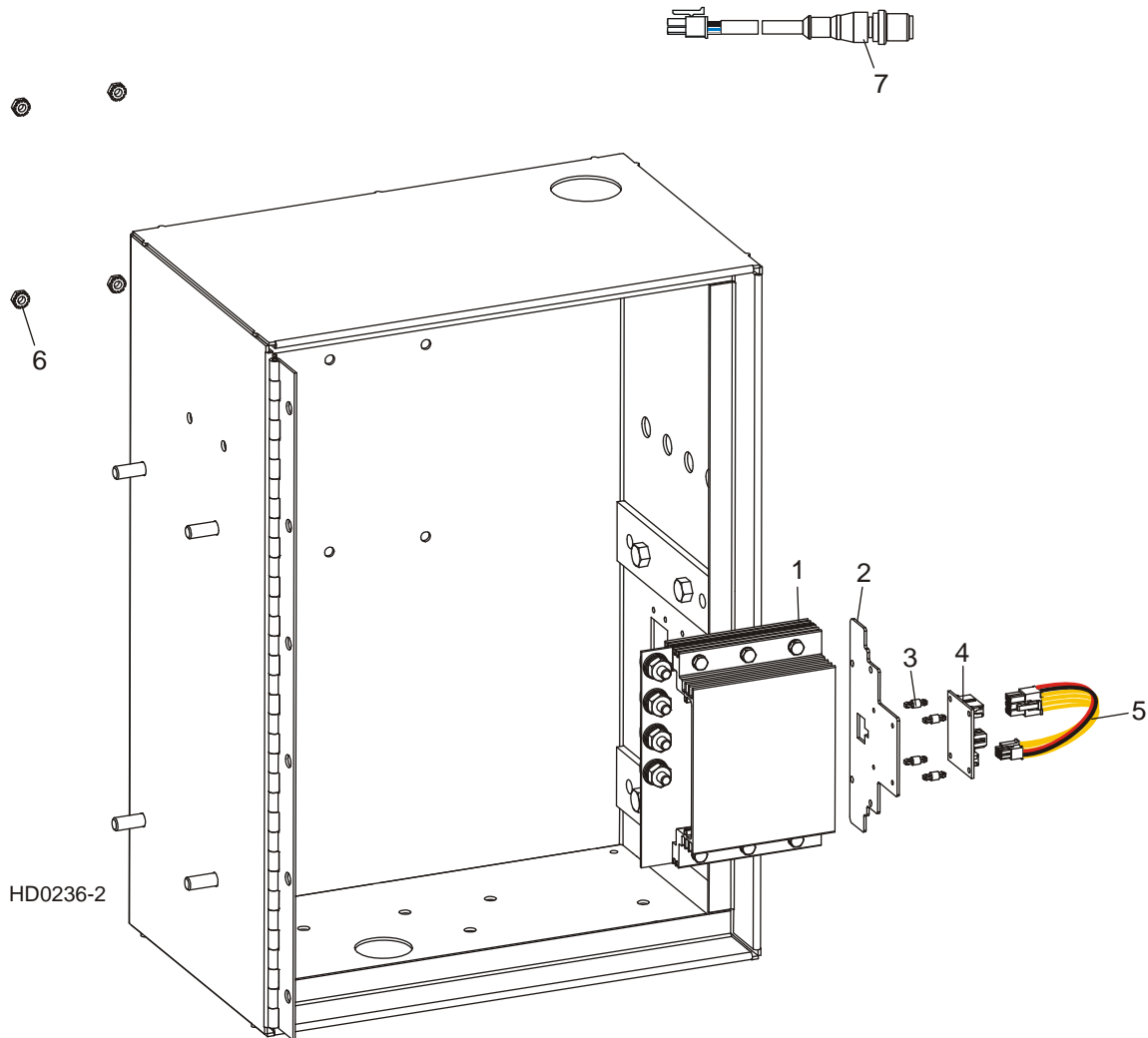
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTROL ASSEMBLY, SIMPLE SET (REMOTE)	053680	1	
1	Box Weldment, Simple Set Control (Remote)	007812	1	
2	Gasket, Simple Set Control Box	006863	1	
3	Washer, 1/4" Fender	F05011-12	4	
4	Washer, 5/16" Nylon Flat	F05011-92	4	

2 Replacement Parts

Simple Set Control (Standard Remote Operator)

5	Bushing, 5/16" ID x 3/8" OD x 1/4" Bronze	016655	4	
6	Plate, Accuset Control Cover Link	016704	2	
7	Washer, 5/16" Belleville	F05011-93	4	
8	Washer, 5/16" SAE Flat	F05011-17	4	
9	Washer, 1/4" SAE Flat	F05011-11	20	
10	Bolt, 5/16" x 1/2" Shoulder 1/4-20 Thread Stainless	F05006-69	4	
11	Nut, 1/4-20 Hex Half Nylon Lock	F05010-156	8	
12	Cover, Accuset Control	016703	1	
13	Membrane, Simple Set Control Switch	053347	1	
14	Standoff, 5/8" Threaded PCB	053385	4	
15	PCB Assembly, Simple Set Control	053377	1	
16	Plate, Remote SimpleSet PCB Mount	007814	1	
17	Washer, #10 SAE Flat	F05011-18	2	
18	Screw, #10-24 x 5/8" Unslotted Indent Hex Head Machine	F05004-18	2	
19	Nut, #10-24 Self-Locking Hex	F05010-14	4	
20	Standoff, .100" Male-Male Quick-Fit	053654	4	
21	PCB Assembly, Remote SimpleSet Driver	053631	1	
22	Harness Assembly, Remote SimpleSet Control	053634	1	
23	Cable Assembly, Remote SimpleSet Interface	053629	1	
24	Decal, Eye/Ear Protection Warning	S11753	1	
25	Decal, Front Outrigger Warning	015400	1	
26	Decal, 800 Number	S12117	1	
27	Decal, Read Manual Warning	016402	1	

2.6 Simple Set Control (Standard Remote Power Box)

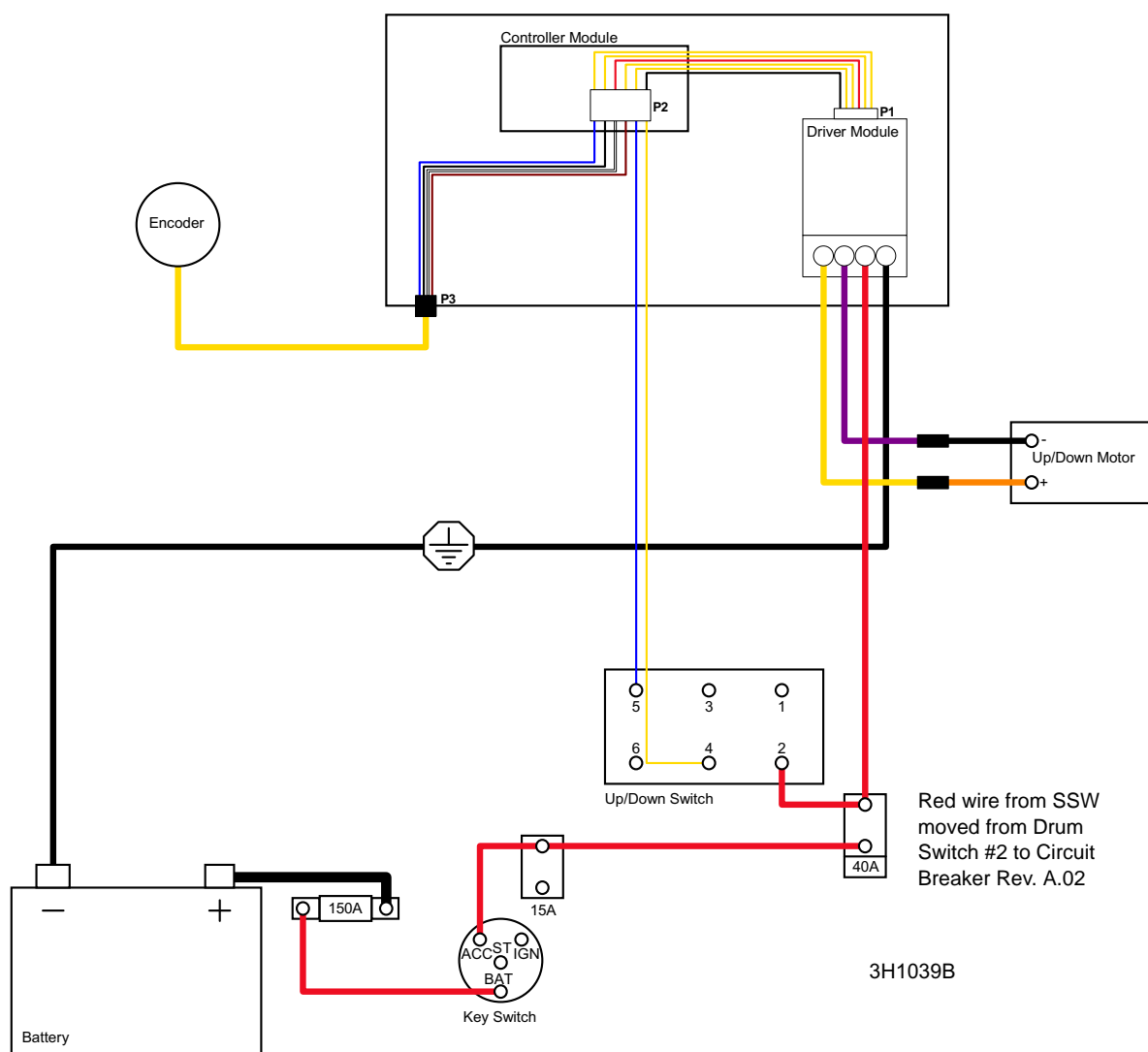


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	H-BRIDGE ASSEMBLY, REMOTE SIMPLESET	053681	1	
1	H-Bridge Assembly, SimpleSet	053373	1	
2	Plate, Remote SimpleSet Front	053633	1	
3	Standoff, .100\" Male-Male Quick-Fit	053654	4	
4	PCB Assembly, Remote SimpleSet Receiver	053630	1	
5	Harness Assembly, Remote SimpleSet Bridge	053633	1	
6	NUT, #10-24 SELF-LOCKING HEX	F05010-14	4	
7	CABLE ASSEMBLY, REMOTE SIMPLESET SENSOR	053632	1	

SECTION 3 ELECTRICAL INFORMATION

NOTE: SimpleSet wiring for remote sawmills is provided in the sawmill wiring diagrams.

3.1 Wiring Diagram (Standard)



NOTE: SimpleSet wiring for remote sawmills is provided in the sawmill wiring diagrams.

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