

HC-960 PROGRAMMING INSTRUCTIONS

Step #1 Getting To Program Mode

Getting into program mode is accomplished by energizing the system while holding down the "S" button down until the "L" begins to flash on the LCD.

Step #2 Enter Low RPM (L = Low)

This setting programs the low speed in which the chipper should stop. The HC-960 can be programmed to stop by either RPM or if used in variable speed mode by a percentage of normal operating RPM. Setting the RPM is accomplished by holding the up or down arrow buttons until the desired RPM is displayed. Setting "L" by percentage of normal RPM is accomplished by holding the lower arrow button down until the LCD displays 0. The numbers past this point is percentage of normal RPM. A "P" on the left side of the display indicates that you are in percentage mode.

Step #3 Enter normal operating RPM (n = normal)

This setting programs the normal operating RPM. Push the arrow buttons until desired RPM is displayed. To save normal operating RPM value, push the "S" button one time. A programmed setting of zero RPM in combination with a percentage setting of steps 2 and 5 will activate the variable speed mode option. Example: While the chipper is running push the "S" button at the desired operating RPM. If customer requires a faster RPM the customer can increase the engine speed and push "S" button again to quickly reprogram the controller to the new RPM. Note: When "n" is set to zero RPM the HC-960 will reset itself every time the controller is de-energized (turned off).

Chipper will not engage again until the "S" button is pushed again. The variable speed mode is idea for noise sensitive environments and will allow the chipper to operate efficiently at lower speeds.

Step #4 Enter high RPM (h= high)

This setting allows the user the ability to enter an over speed shutdown for chipper feeder. When this section is programmed to 0 the over speed is deactivated. Setting over speed is accomplished by pushing the arrow buttons until desired RPM or percentage is displayed. To save programmed value push the "S" button one time. Note "h" must be a number greater than normal operating or set to 0 to deactivate.

Step #5 Enter return RPM (rEt = return)

The rEt setting used only in automatic variable speed RPM mode when parameter #3 normal operating RPM is set to zero. Enter the percentage of operating RPM in which the feeder should engage. Note: rEt (return) has priority over normal operating RPM. If the automatic variable speed mode is not used program this parameter to zero or the same RPM as normal operating RPM.

Step #6 Enter number of poles (IPU = Number Of Poles)

Enter number of poles required for PNP proximity switch pick-up and push the "S" button one time to save value. The best location for the proximity pick-up is on the cutting assembly, however the pick-up can also be placed on engines flywheel bolts etc. At this point you have completed programming procedure and the HC-960 is ready for testing.

Wire Connections At Plug

PIN NUMBER	DESCRIPTION	WIRE AWG	WIRE COLOR
Pin #1	Battery +	14 AWG	Brown
Pin #2	Battery Ground	14 AWG	Blue
Pin #3	Out-Put Control + (Maximum 6 Amp)	16 AWG	White/Red
Pin #4	Out-Put Control - (Maximum 6 Amp)	16 AWG	Blue
Pin #5	Proximity Switch Pick-up (Indicator +)	Jacketed Cable	Brown
Pin #6	Proximity Switch Pick-up (Impulse)	Jacketed Cable	Black
Pin #7	Proximity Pick-up (Indicator -)	Jacketed Cable	Blue

The HC-960 is equipped with two hourmeters (1) total hours indicated on the LCD by "th" and (2) daily hourmeter indicated by "day". Total hours are recorded in hours while daily hours are recorded in hours and minutes.

To reset the daily hourmeter on the HC-960:

- (1) Make sure the chipper is NOT turning
- (2) Energize the HC-960 controller
- (3) Push the "S" button and hold down until 00:00 appears on the LCD

