HSM-WI7 STANDUN BODYMAKER HIGH SPEED LOGIC MODULE KEYPAD QUICK REFERENCE

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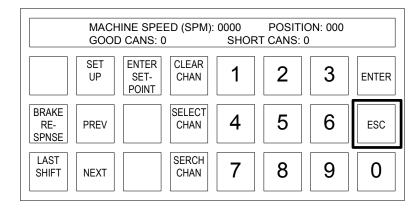
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CONVENTIONS USED IN THIS MANUAL

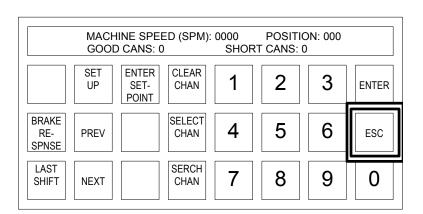
This manual is provided as a quick reference for entering parameters through the HSM-WI7 keypad. For complete details on the parameters that can be set through the HSM-WI7 keypad or for additional information on the HSM-WI7 in general, refer to the HSM-WI7 User's Manual.

The following conventions are used through-out this manual.

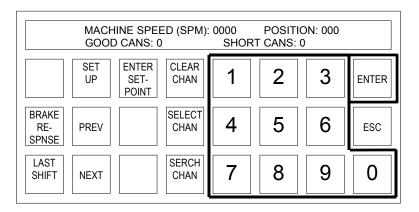
1) This indicates to depress that key one time.



2) This indicates to press that key two or more times as directed.



3) Indicates to enter a numeric value on the numeric keypad. Enter the desired number by depressing the corresponding numeric keys and then press the "ENTER" key to enter the number. If keypad entry error is made while a number is being entered, simply press the "ESC" key. The number will revert back to the original value at which time the correct number can be re-entered.

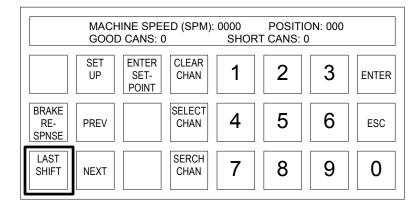


SECTION 1 VIEWING LAST SHIFT COUNTS

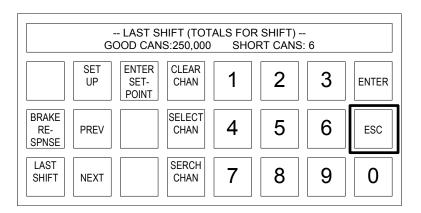
The Last Shift data menu displays the "Total Good Can" count and the "Total Short Can" fault count. This data is the totals for the last shift. Note that the current shift counts are displayed as part of the main menu.

To display the Last Shift counts, perform the following:

1) with the main menu displayed, press the "LAST SHIFT" key.



2) The total good can count and short can fault count for the last shift will be displayed. Press the "ESC" key to return back to the main menu when finished viewing the counts.

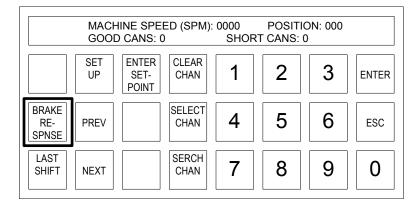


SECTION 2 DISPLAY BRAKE RESPONSE

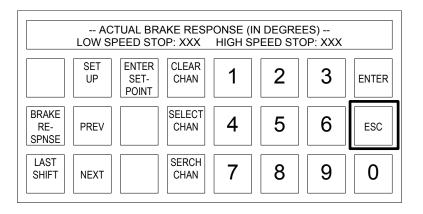
The brake response screen displays the brake response for both the low speed and high speed stops. The response is the number of degrees it takes the press to stop from when the clutch is de-activated for a BDC stop to the position that the machine comes to rest.

To display the brake response, perform the following:

1) With the main menu displayed, press the "BRAKE RESPNSE" key.



2) Both the low and the high speed brake response from the last respective stops are displayed. When finished viewing the responses, press the "ESC" key to return back to the main menu.

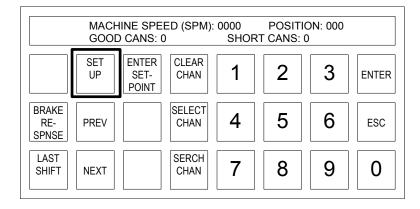


SECTION 3 ENABLE BRAKE WEAR COMPENSATION

The brake wear compensation feature is used to stop the press at BDC regardless of the actual braking response of the clutch/brake. Enabling the brake wear compensation consists of enabling the feature and setting both the high speed and low speed desired stopping positions (the angular position that the main crank is at when the machine stops).

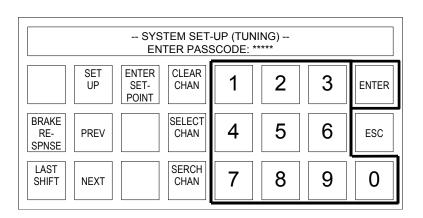
To enable the brake wear compensation perform the following:

 With the main menu displayed, press the "SET-UP" key.

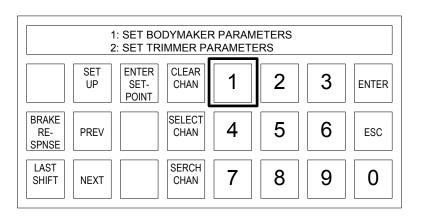


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.

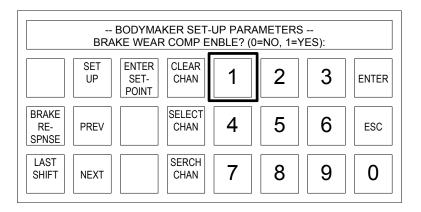


3) Press the "1" key to enter the "Set bodymaker Parameters" menu.

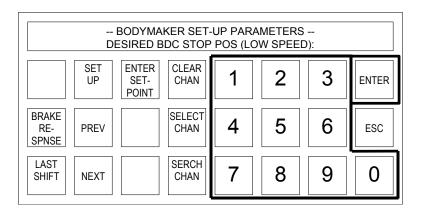


SECTION 3 ENABLE BRAKE WEAR COMPENSATION

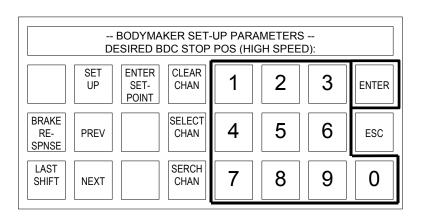
4) At the "Brake Wear Comp Enable?" prompt, press the "1" (YES) key if the brake wear compensation is to be enabled. If the brake wear compensation is to be disabled, press the "0" (NO) key instead and skip steps (5) and (6) following.



5) On the numeric keypad, enter the desired low speed stopping position in degrees and press "ENTER".

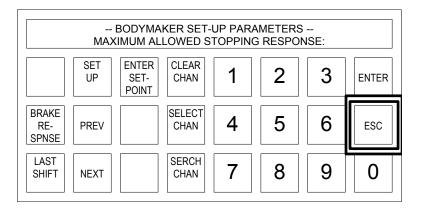


6) On the numeric keypad, enter the desired high speed BDC stopping position in degrees and press "ENTER".



SECTION 3 ENABLE BRAKE WEAR COMPENSATION

7) The Brake wear compensation is now enabled. Press the "ESC" key to return to the primary set-up menu. Press the "ESC" key again to return to the main menu.

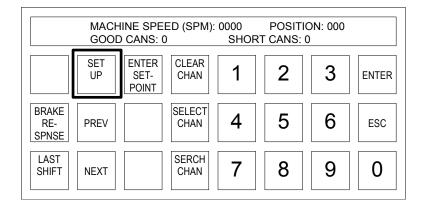


SECTION 4 SET MAXIMUM ALLOWED STOPPING RESPONSE

The "Maximum Allowed Stopping Response" defines what the maximum allowed brake response is before the "Brake Response Too Long" alarm is generated. If the actual brake response, when a BDC stop is performed, is longer than this value, the alarm is generated. If the actual response is less than this value, the alarm is not generated.

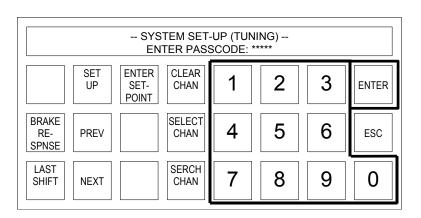
To set the "Maximum Allowed Stopping Response", perform the following:

 With the main menu displayed, press the "SET-UP" key.

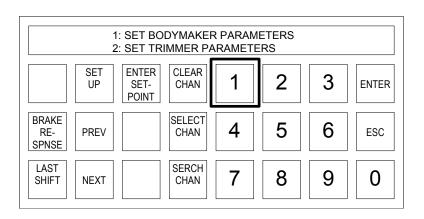


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.

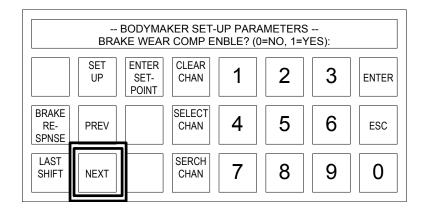


3) Press the "1" key to enter the "Set Bodymaker Parameters" menu.

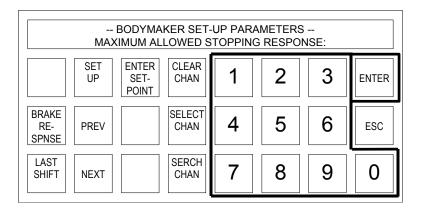


SECTION 4 SET MAXIMUM ALLOWED STOPPING RESPONSE

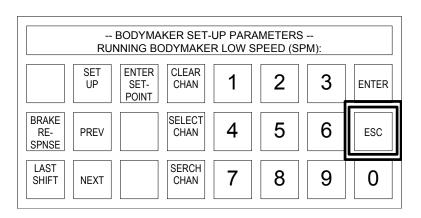
4) Press the "NEXT" key until the "Maximum Allowed Stopping Response" prompt is displayed.



5) On the numeric keypad, enter the desired maximum allowed stopping response in degrees and press "ENTER".



6) The maximum allowed stopping response is now set. Press the "ESC" key to return to the primary set-up menu. Press the "ESC" key again to return to the main menu.

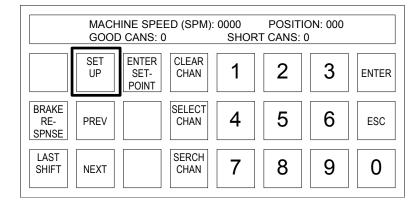


SECTION 5 SET BODYMAKER RUNNING LOW AND HIGH SPEEDS

The "Bodymaker Running Low and High" speeds are the actual speeds that the body maker will run at when the respective speed is selected. Note that the values entered are not used as speed references to make the body maker actually run at the respective speed but are instead simply references to switch between the BDC high and low timing, etc.

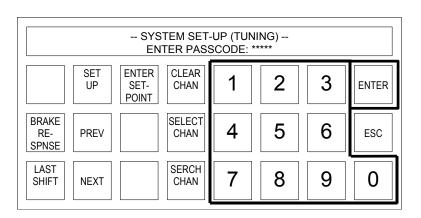
To set the bodymaker high and low speed references, perform the following:

1) With the main menu displayed, press the "SET-UP" key.

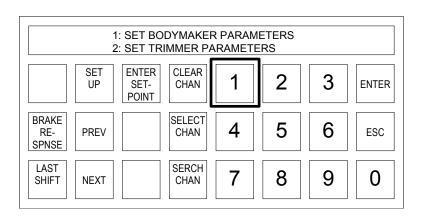


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.

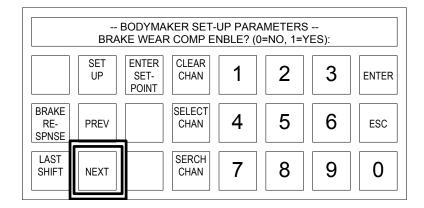


3) Press the "1" key to enter the "Set Bodymaker Parameters" menu.

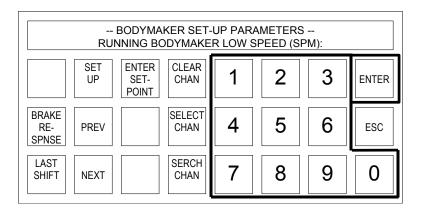


SECTION 5 SET BODYMAKER RUNNING LOW AND HIGH SPEEDS

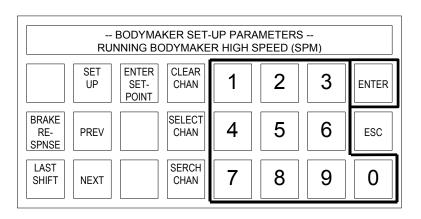
4) Press the "NEXT" key until the "Running Bodymaker Low Speed" prompt is displayed.



5) On the numeric keypad, enter the actual speed in strokes per minutes that the bodymaker will run at when it s in low speed and press "ENTER".

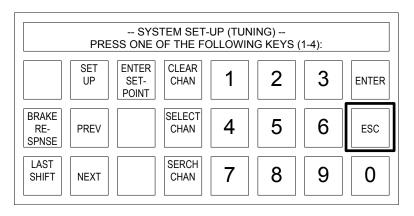


6) On the numeric keypad, enter the actual speed in strokes per minute that the bodymaker will run at when it is in high speed and press "ENTER".



SECTION 5 SET BODYMAKER RUNNING LOW AND HIGH SPEEDS

7) The bodymaker running low and high speeds are now set. Note that when the high speed value is entered, the primary set-up menu is returned to. From here press the "ESC" key to return back to the main menu.

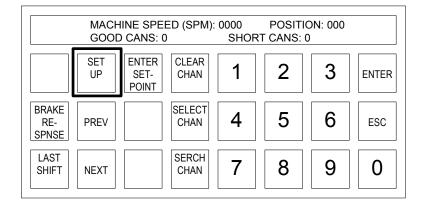


SECTION 6 SET TRIMMER SPEED REFERENCES

The trimmer speed references are used to actually control the speed of the trimmer via the 0-10 volt analog output of the HSM-WI7 module. The references include the maximum speed (speed at which the output is at the full 10 volts), the minimum (idle) speed (speed trimmer runs at with body maker stopped), and the trimmer high speed offset (speed added to bodymaker speed when trimmer infeed high sensor is covered).

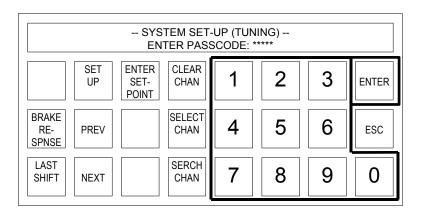
To set the trimmer speed references, perform the following:

 With the main menu displayed, press the "SET-UP" key.

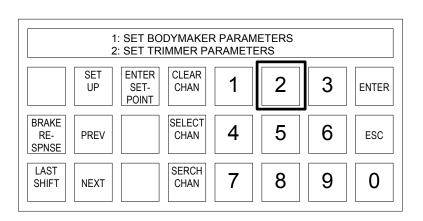


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.



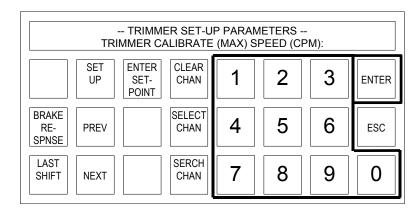
3) Press the "2" key to enter the "Set Trimmer Parameters" menu.



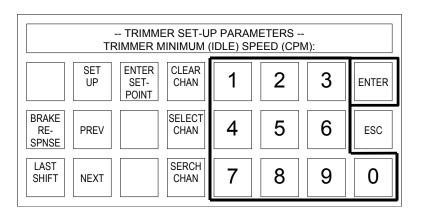
SECTION 6 SET TRIMMER SPEED REFERENCES

4) On the numeric keypad, enter the desired trimmer calibrate (maximum) speed in cans per minute and press "ENTER".

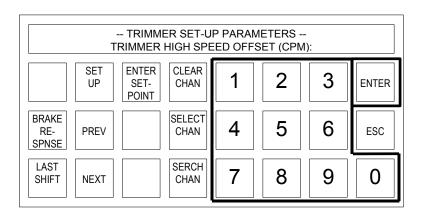
This is the speed that the analog output will be at 10 volts.



5) On the numeric keypad, enter the desired trimmer minimum (idle) speed in cans per minute and press "ENTER".

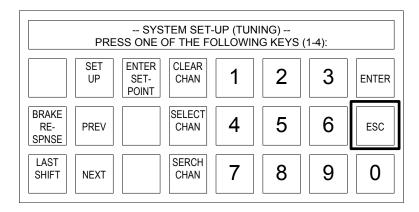


6) On the numeric keypad, enter the desired trimmer high speed offset in cans per minute and press "ENTER". This is the speed added to the bodymaker speed when the trimmer infeed high sensor is covered.



SECTION 6 SET TRIMMER SPEED REFERENCES

7) the trimmer speed references are now set. Note that when the trimmer high speed offset is entered, the primary set-up menu is returned to. From here press the "ESC" key to return to the main menu

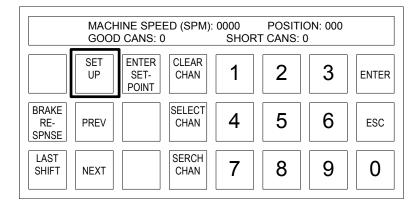


SECTION 7 ZERO MACHINE (SET RESOLVER OFFSET)

Back Dead Center (BDC) is defined as the zero position of the machine. Since the HSM-WI7 uses a resolver for machine timing instead of an encoder, the zero of the machine can be set electronically instead of having to move the shaft of the resolver as would have to be done on an encoder.

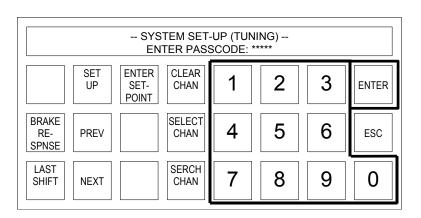
To zero the resolver, position the machine at Back Dead Center and perform the following:

 With the main menu displayed, press the "SET-UP" key.

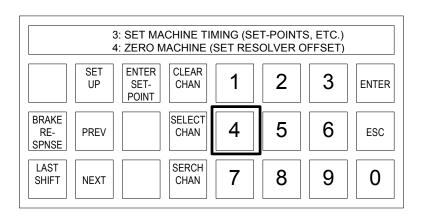


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.

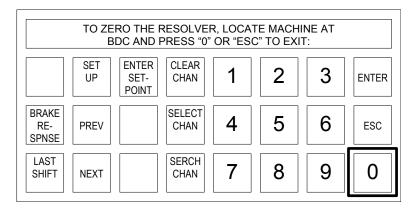


3) Press the "4" key to enter the "Zero Machine" menu.

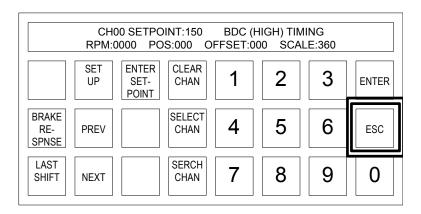


SECTION 7 ZERO MACHINE (SET RESOLVER OFFSET)

4) +Press the "0" key to zero the resolver. The HSM-WI7 will calculate the offset required to make the current position "000" and display this number in the "Offset" field.



5) The resolver is now zeroed. Press the "ESC" key to exit the timing channel setpoints menu. Press the "ESC" key again to exit back to the main menu.

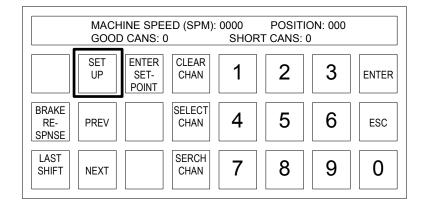


The timing channels of the HSM-WI7 are defined as follows:

CH00: BDC (High) timing
CH01: BDC (Low) timing
CH02: Short Can Check timing
CH03: Sensor Check timing
CH04: Cupfeed timing
CH05: Air Strip (Low) timing
CH06: Air Strip (High) timing
CH07: PLC timing

To adjust any of the above timing channels, perform the following:

1) With the main menu displayed, press the "SET-UP" key.

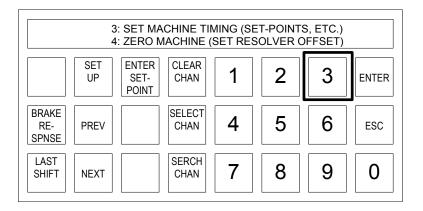


2) Enter the 5 digit passcode on the numeric keypad and press "ENTER".

Note: The passcode is set by the user as desired. Refer to the HSM-WI7 User's manual for details on setting the passcode.

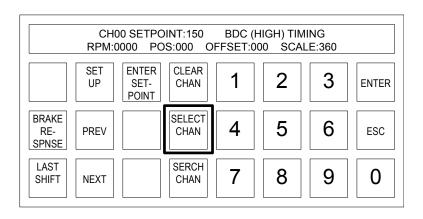
SYSTEM SET-UP (TUNING) ENTER PASSCODE: *****									
	SET UP	ENTER SET- POINT	CLEAR CHAN	1	2	3	ENTER		
BRAKE RE- SPNSE	PREV		SELECT CHAN	4	5	6	ESC		
LAST SHIFT	NEXT		SERCH CHAN	7	8	9	0		

3) Press the "3" key to enter the "Set Machine Timing" menu.



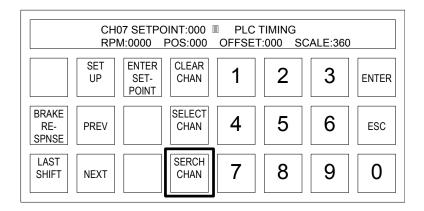
4) Press the "SELECT CHAN" key and enter the channel number to be adjusted on the numeric keypad and then press "ENTER".

Note: The "NEXT" and "PREV" keys can also be used to advance to the next channel or retard to the previous channel. The following examples will use channel 07 as the selected channel.



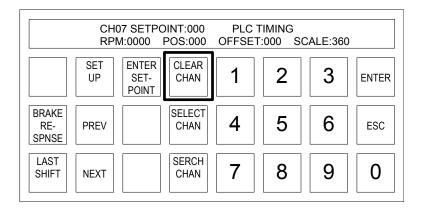
5) To view the location of the existing setpoint, press the "SEARCH CHAN" key repeatedly. The location the set-point turns "ON" will be displayed with the "state" indicator solid. Locations where the set-point turns "off" will be displayed with the "state" indicator "off".

Write down the "ON" and "off" set-point locations for later use.

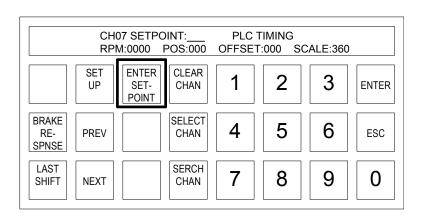


To adjust the set-point, perform the following:

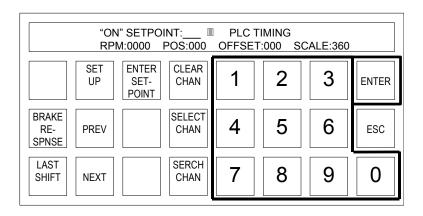
6) Press the "CLEAR CHAN" key to clear the existing set-point.



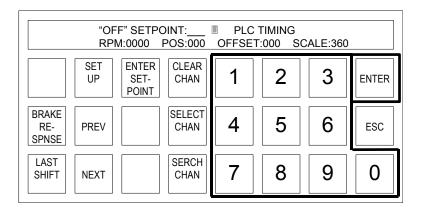
7) Press the "ENTER SET-POINT" key.



8) On the numeric keypad, enter the position, in degrees, where the set-point should go "ON" and press "ENTER"



9) On the numeric keypad, enter the position, in degrees, where the set-point should go "off" and press "ENTER"



10) The timing channel has now been adjusted. Press the "ESC" key to return back to the primary set-up menu. Press the "ESC" again to return back to the main menu.

