



TSB101810

TECHNICAL SERVICE BULLETIN

Subject: Fine Tuning Magnum Counter Speed/Distance Calibration

The harvester is equipped with a remote RUN/HOLD system that is controlled by the selector valve lever that operates the rear conveyor. When the lever is OFF, the counter will be in the HOLD mode; when the lever is ON, the counter is in RUN mode. The counter is also equipped with a RUN/HOLD button that toggles between HOLD and RUN modes. The RUN/HOLD button on the counter overrides the remote RUN/HOLD function in all cases. Therefore, if the counter remains in HOLD with the rear conveyor selector valve turned on, push the RUN/HOLD button on the counter to exit HOLD mode. When in the HOLD mode, the word HOLD is shown on the display and the counter will stop accumulating roll distance, number of pieces and load count information. When the word HOLD is absent the counter is in RUN mode.

This procedure is designed to verify and fine tune the speed/distance calibration of the system. Perform each step as precisely as possible to ensure the best results. Note that a hard-packed surface such as a road will result in a different distance reading than actual field conditions.

CALC-AN-ACRE AND MAGNUM I

1. Set up a measured course with a clearly marked beginning and end.

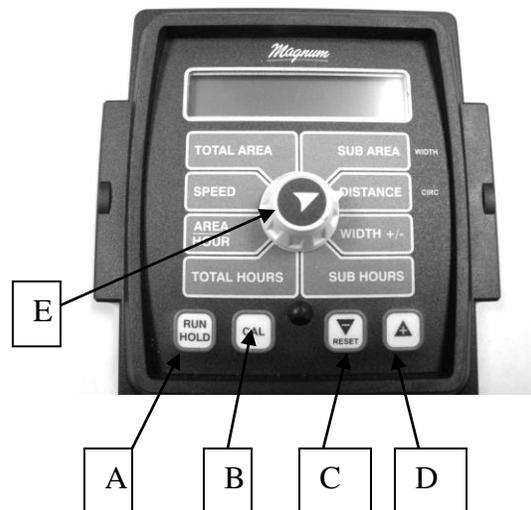


Figure 1—View showing early Magnum counter.

- A. RUN/HOLD button
- B. CAL button
- C. RESET and minus (-) button
- D. Plus (+) button
- E. Rotary switch

2. Power up the counter. Place the counter in HOLD by pushing the RUN/HOLD button (**Figure 1**) or place the selector valve that controls the rear conveyor in the OFF position. The display will read HOLD.
3. Turn the rotary switch to the DISTANCE position and note the display reading. If the reading is not

zero, press and hold the reset button until the distance value resets to zero.

4. Identify a suitable point on the tractor or harvester to use as a reference when passing the beginning and ending markers on the measured course. The tractor platform step or the center of the rear wheel will work well.

5. Begin driving the tractor forward well ahead of the beginning marker. Maintain a consistent tractor speed.

6. Place the counter in the RUN mode at the exact time the reference point (Step 4) passes the beginning field marker. The counter should start counting upon exiting the RUN/HOLD mode.

7. Drive through the measured course at a consistent speed. Place the counter in HOLD as the reference point passes the ending field marker.

8. Stop the tractor in a safe area.

9. Make sure the rotary switch is still pointing toward DISTANCE. Next, push and hold the CAL button for approximately three seconds. When in CAL mode, the red LED on the face of the counter will glow.

10. The display will alternate between the circumference value and the distance measured in three-second intervals.

When the display shows *CAL* and *HOLD* and *1234*, the counter is showing the circumference value (CIRC). When only *HOLD* and *1234* are shown the counter is showing the distance value. Verify that the distance indicated is the same as the actual distance traveled (within 2 percent). If not, use the + or - buttons to match the distance reading to the actual distance traveled. When the values match, as close as possible, press the CAL button to exit the calibration mode and the circumference factor is now set. Repeat the procedure to verify the correct CIRC factor is correct. Record

the number so it can simply be re-entered if necessary.

Magnum II

1. Lay out a measured course with beginning and end markers.

2. Place the counter in the HOLD mode. Either push the rear conveyor selector valve in the OFF position or push the RUN/HOLD button on the counter. See **Figure 2**.

Figure 2.



Figure 2—RUN/HOLD button on Magnum II counter.

3. Turn the rotary switch to the TOTAL DISTANCE position (**Figure 4**). Press and hold the reset button (DEC) for approximately one second.

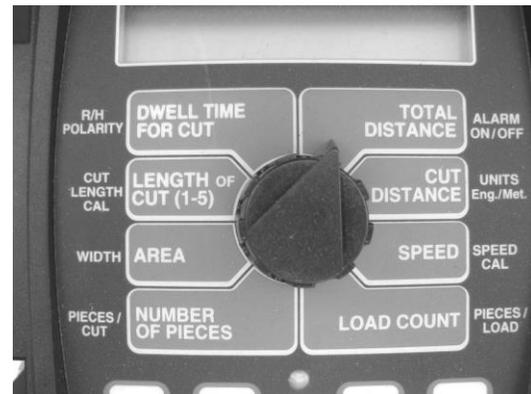


Figure 4—Rotary switch in the TOTAL DISTANCE position.

4. Identify a suitable point on the tractor or harvester to use as a reference when passing the beginning and ending markers on the measured course. The tractor platform step or the center of the rear wheel will work well.
5. Begin driving the tractor forward well ahead of the beginning marker. Maintain a consistent tractor speed.
6. Place the counter in the RUN mode at the exact time the reference point (Step 4) passes the beginning field marker. The counter should start counting upon exiting the RUN/HOLD mode.
7. Drive through the measured course at a consistent speed. Place the counter in HOLD mode as the reference point passes the ending field marker.
8. Stop the tractor in a safe area.
9. Press and hold the CAL button for approximately one second. The display should read CAL HOLD,
10. Next, turn the rotary switch to SPEED CAL (Figure 5). The current calibration factor will be displayed.

11. Press and release the CAL button and the total distance traveled will be displayed. Pushing and releasing the CAL button will toggle between the total distance and calibration values. The CAL icon will be on solid when displaying the calibration value and it will flash with displaying the total distance value.
12. When reading the total distance value, use the plus (+) or minus (-) keys as required to match the total distance value with the actual distance traveled. When the values match, the calibration factor automatically set at the correct value.
13. Press and release the CAL button to toggle to the calibration factor and record this number for future reference.
14. Press and hold the CAL button to exit calibration mode.
15. Repeat this procedure to ensure an accurate result.

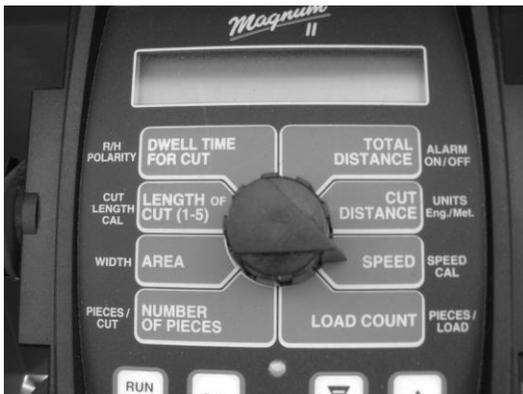


Figure 5—Rotary switch in SPEED CAL position.