Battery Operated Acre Counter
User Manual

SOFTWARE VERSION 6.0

5/8/14

The battery operated acre counter operates in one of two modes. In sleep mode, the display is blank, and the counter is accumulating acres. Sleep mode will be entered if a button is not pressed for 20 seconds. In entry mode, the display is on, and the operator can enter values. To get into entry mode, press the ***(STAR)** button. If you continue to press the ***(STAR)** button, the acre counter will cycle through the functions that it can perform. The LEDs above the display indicate which function is selected. The available functions are:

Field Acres, Total Acres, Pulses per 400 ft, Width, Password and Low Battery

Field Acres:

Press the ***(STAR)** button until the "**FIELD**" LED is lit. The digits indicate the acres covered since the field acre counter was cleared.

To clear the field acre count, press the **UP** and **DOWN** buttons for two seconds. If a password has been entered, you will not be able to clear the total acre count. Field acres will count in tenths of an acre up to 9999.9 acres. It will then count in whole acres to 99,999.

Total Acres:

Press the ***(STAR)** button until the "**TOTAL**" LED is lit. The digits indicate the acres covered since the total acre counter was cleared. To clear the total acre count, press and hold the **UP** and **DOWN** buttons for two seconds. If a password has been entered, you will not be able to clear the total acre count. Total acres will count from .1 to 9999.9 acres. It will then count in whole acres to 99,999.

Pulses per 400 feet:

Press the **FUNC** button until the "**PULSES**" LED is lit. The number in the display indicates how many pulses are generated for every 400 feet driven.

There are two methods to enter the pulses per 400 feet:

1. If you know the number, select it using the **UP** and **DOWN** buttons. When you press the ***(STAR)** button, the Acre Counter will accept the number in the display as the new pulses per 400 feet.

2. If you do not know the pulses per mile, press and hold the **UP** and **DOWN** buttons until the "0" appears in the display. The "**PULSES**" LED will blink. The acre counter is now counting shaft rotations. Enter the cab and drive 400 feet. Press the **FUNC** button to wake up the acre counter. The "**PULSES**" LED will light and the LCD will show the pulse count. The number displayed is the pulses per 400 feet.

If a password is set, you will not be able to adjust the pulses per mile.

Width:

Press the ***(STAR)** button until the "**WIDTH**" LED is lit. The number displayed is the length of your implement in feet.

To adjust the width, press the **UP** and **DOWN** buttons. If a password has been entered, you will not be able to adjust the width.

The length can be adjusted from .1 to 99.9 feet, in tenths of a foot.

Password:

The password function allows you to protect the total acre count, pulses per 400 feet, and width settings with a password. This stops anyone from accidentally changing those settings. When the acre counter is shipped, the password is disabled. You can modify the pulses per 400 feet and implement width at any time.

Press the ***(STAR)** button until the "**PASS**" LED is lit. The digits will display the word "**Ent**" or "**dIS**".

If the display shows "**dIS**":

      The password is disabled. The total acre count, pulses/400 ft, width, and password settings can be adjusted using the **UP** and **DOWN** buttons. The password can also be changed using the **UP** and **DOWN** buttons.

If the display shows "**Ent**":

You must enter your password using the **UP** and **DOWN** buttons. When your password is displayed, press the ***(STAR)** button to test the password. If the password is correct, you will be able to change the acre counter settings. The password will be viewable until the acre counter powers down. When the acre counter is powered up again, you will have to re-enter the password to change settings.

If the password is not correct, you will not be able to change the acre counter settings. When the "**PASS**" function is selected again, "**Ent**" will appear in the display.

Changing the password:

Select a new password using the **UP** and **DOWN** buttons. Press the **FUNC** button until the word "**SEt**" appears in the display. Release the **FUNC** button. The number in the display is your new pass code. Make sure you write it down! Press and hold the **FUNC** button until the word "**dIS**" appears in the display.

If the password is forgotten, it can be disabled by removing the batteries. The password is intended for rental units. It is recommended that a seal be affixed to the rear plate of the acre counter to determine if the settings have been tampered with.

Metric Units Area Accumulation

The meter can be set to accumulate area in US or Metric Units by pressing and holding all 3 switch buttons for 5 seconds. The units will toggle every 5 seconds or until the switches are released. The current units can be checked by pressing all 3 buttons and releasing them before 5 seconds time passes. US units are indicated by a scrolling "U", metric units by a scrolling "E". All defaults are reset when the units are changed. The meter does not convert acres to hectares. It resets the accumulation to 0. The password is reset to none when switching between modes.

Battery Replacement

The battery operated acre counter uses 3 AA batteries. The batteries should last between 5 and 10 years. The acre counter will last much longer than that. Eventually, you will have to replace the batteries. The "**BATT**" LED will light when the batteries require replacement. Remove the acre counter from the implement and undo the 4 screws on the back of the case. This will separate the housing from the rear plate. Replace the batteries with 3 high quality AA alkaline batteries.

NOTE: This unit is dust and splash resistant, under no circumstances should this unit be submerged in any conductive, corrosive, or flammable liquid.

Acre meter trouble shooting Guide

Problem:

Does not count pulses during calibration or does not count acres during operation.

1. Check the position of the magnet actuator and sensor against the set up instructions in this manual.
2. Verify that the magnet(s) have not come out of the actuator if it is a round, plastic type snap on actuator.
3. Place the Acre Meter display in "Calibrate" mode by pressing the *(star) key until the P-Word indictor is lit and then press the up/down arrow keys until the display shows 0 and the LED is blinking. Break the connection between the display and the sensor and short between pins A and B on the display harness connector. You should see the display increment +1 with each contact of the connector terminals.
4. If #3 works then wave a magnet in front of the sensor face with it re-connected to the display and see if the display increments up. If not, put an ohm meter or continuity tester on the contacts of the sensor harness and place a magnet in front of the sensor face. The sensor should show continuity or near 0 ohms resistance.
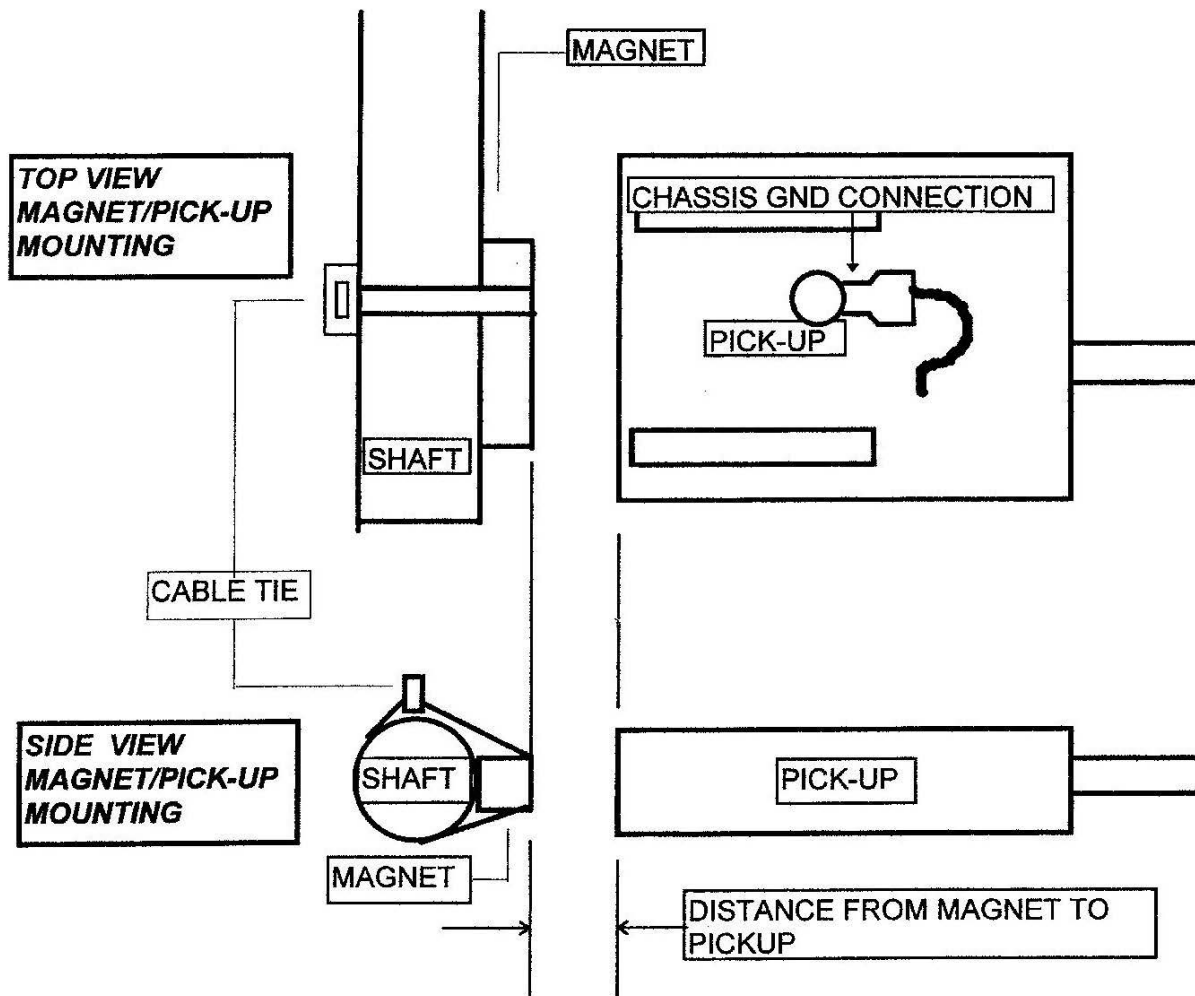
Note: The ground wire is for static discharge protection and has no effect on the ability of the sensor to function properly under normal conditions.

Problem:

Can not change the width or pulse count settings or clear the field and total acres.
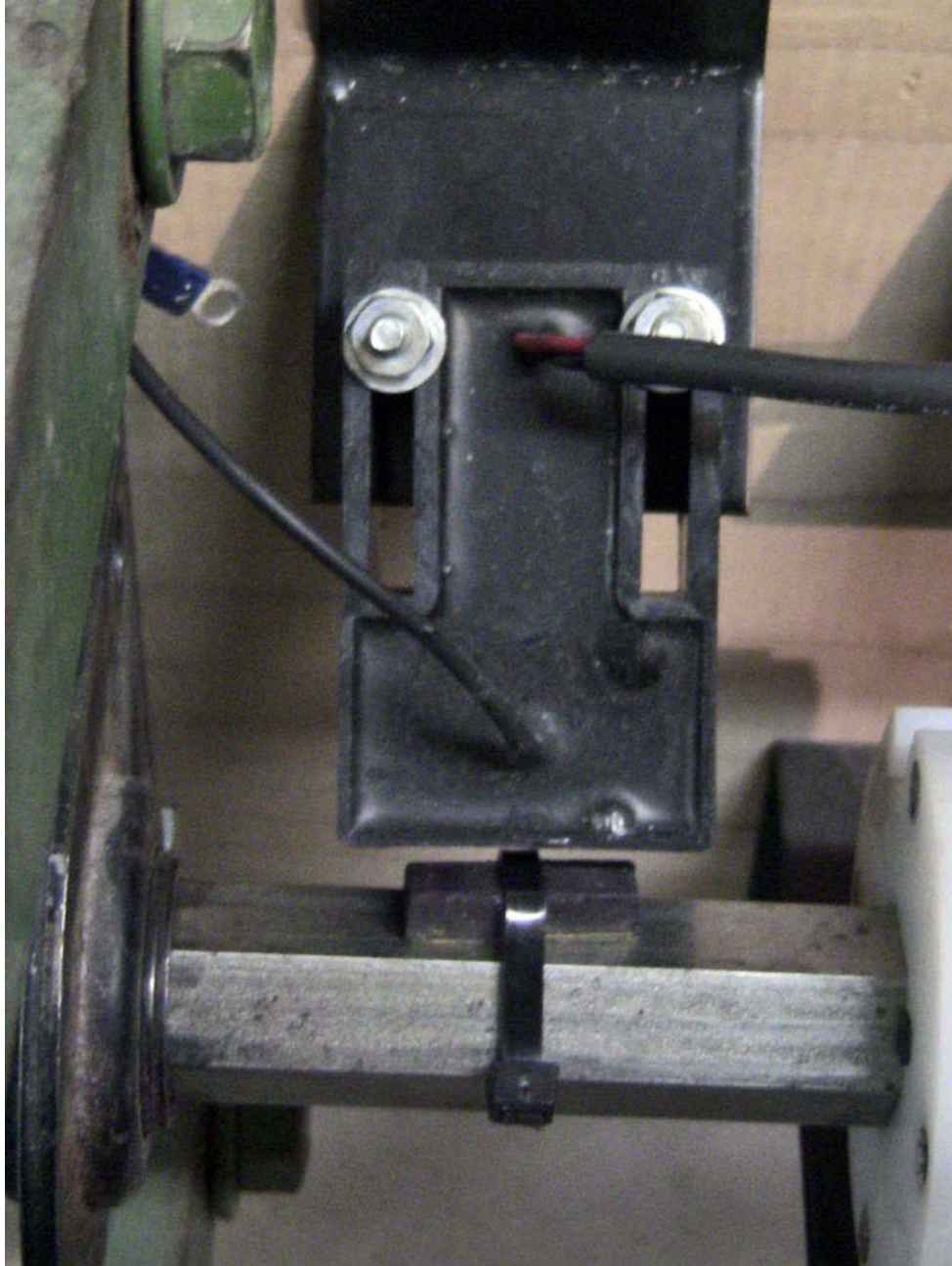
Check to see if a password needs to be entered by pressing the *(star) key until the P-Word indicator LED is lit. If "dIS" is displayed (password disabled) no password is set. If "Ent" is displayed a password must be entered to change the settings or the password must be disabled as instructed in the setup section of this manual.

Magnet/Pick-Up Mounting

MAGNET

TOP VIEW
MAGNET/PICK-UP
MOUNTING

CHASSIS GND CONNECTION

PICK-UP

SHAFT

CABLE TIE

SIDE VIEW
MAGNET/PICK-UP
MOUNTING

SHAFT

PICK-UP

MAGNET

DISTANCE FROM MAGNET TO PICKUP

Notes:

-Pick-up held in place with #6-32 hardware or equivalent (not included).
-Adhesive side of Magnet goes towards shaft.
-Magnet can be taped in place if required.
-Magnet/Pick-up distance must not exceed 0.125" (1/8").
-The chassis ground connector must be secured under the mounting screw for ESD protection.

Notes