



Electronic Acremeter Great Plains Drills

Used with:

- Most Great Plains Drills*

General Information

These instructions explain how to install and use an Electronic Acremeter.

These instructions apply to an installation of:

Kit	Product Description
891-419C	DATATRAC ACRE METER

Consult your Great Plains dealer for specific ordering information. The meter is factory programmed for specific revolutions and units, and provides accurate and easy-to-use readings only on a drill with matching operating characteristics.

The meter is supplied with a decal indicating the factory configuration. Placing it on a drill for which it was not programmed will produce unsatisfactory results.

Each acremeter upgrades one drill.

Tools Required (if not installed)

- basic hand tools



Figure 1
DataTrac Electronic Acre Meter

34937

* The electronic acremeter is compatible with all drills having a main or transfer drive shaft with at least one 1/2-20 tapped hole in either end of the shaft on any section of the drill. The shaft must be *before* any Drive Type, gearbox, lower, range, transmission or upper variable sprockets, and have only fixed sprockets and chains between the drive wheel and the shaft.

Operations

Factory Installed

The DataTrac acremeter is factory installed on new units. The meter is supplied with a decal located on its side indicating the number of programmed wheel revolutions.

Reading the Display

The numbers automatically orient to read upright.

The acremeter always shows “REV” ① on the face of the display. The meter is programmed to count **acres** if the drill is for domestic use and is programmed for **hectares** if the drill is for export use.

Normal Operating Sequence

Refer to Figure 2

To display the number of revolutions per acre or hectare programmed into the meter simply cover the round bump on the face of the unit (light sensor) ② with the palm of your hand and leave it there for at least $\frac{1}{2}$ second before removing it. A screen that shows “rEV ###” will be displayed. The ### is the number of revolutions that is programmed into the unit.

1. The acremeter may count rotations during drill calibration (and if so, can be useful for calibration).
2. Record the acremeter reading at the start of planting (and after calibration). The large “123456” format display is the grand total area planted since meter installation.

Note: On 3P500/3P500V, 3P605NT, 605NT, 3P606NT and 606NT drills intended for measurements in hectares, it is necessary to multiply the “REV” display number times 10 to get the true hectare reading.

3. Lower drill and plant. The acremeter counts shaft rotations, calculates acres or hectares, and adds to the running grand total.
4. When raised for turns, obstructions and transport, the drill’s ground drive wheel, contact wheel or clutch disengages the drive shaft, and the meter counts no additional (non-planting) rotations.
5. At the completion of planting, record the final reading of the grand total.
6. Subtract the reading at Step 2 from the reading at Step 5 for the total planted in the present session.

Dormant Display

If the display is totally blank and never displays anything, the battery may be dead. Expected life is 5 to 10 years. The battery is not user-replaceable.

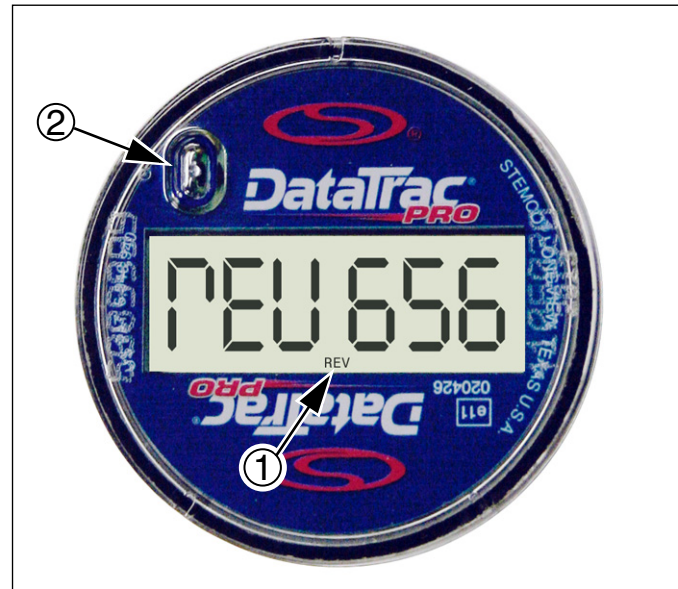


Figure 2
Check Program

34938



Figure 3
Typical Area Display

34939

Pre-Assembly Preparation and Installation

Prepare Drill

Refer to Figure 4

1. The work may be performed with the drill raised or lowered. If lowered, the wrench may not be needed, as the drive shaft cannot rotate.

Identify the location for mounting the meter.

2. If the drill does not presently have a shaft-mounted acrometer, look for a drive shaft ① with a $\frac{1}{2}$ -20 tapped hole. This is usually the main drive shaft.

Consult your Parts Manual for the factory location of the acrometer for your drill model.

3. If more than one $\frac{1}{2}$ -20 tapped shaft end is available, choose one on the side of the drill customarily approached for other tasks during operations.

Note: The meter counts (up) rotations in either direction. It may be installed on the left or right end of any suitable drive shaft.

Inspect Meter

4. Check that the revolutions configuration is correct for your drill, see page 2.
5. Check that the units are suitable for your customary operations.

Note: If the meter fails to display anything, displays dashes (-----) or is not programmed for your drill, do not install it. It MUST be programmed before it is installed. Contact your Great Plains dealer.

Mount Meter

6. Screw the new meter into the shaft hole. Hand-tighten only. Torque to no more than 15 foot-pounds (20N-m).

Note: If a nut and washer are supplied with the new meter, these are not used.

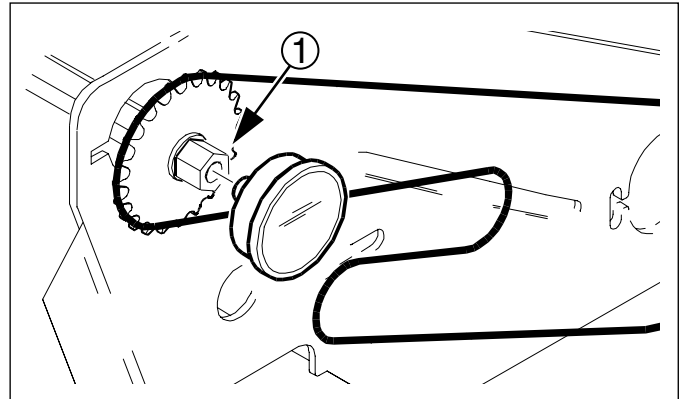


Figure 4
Shaft and Meter

27000

Accuracy Considerations

Many factors can affect the accuracy of your electronic acremeter:

- **Tire Size and Tire Pressure**
The meter configuration was programmed for the tire type and size originally provided with the drill, and inflated to factory specifications.
- **Seeding Overlap**
The area reported by the meter will be higher than the actual field area if passes overlap.
- **Soil Conditions**
The meter configuration was programmed for nominal tire slippage. Extreme conditions, wet or muddy conditions, min-till/no-till conditions and some native grass conditions may change wheel slippage, resulting in slightly inaccurate area tallies.

Display

Liquid Crystal Displays (LCDs) do not function optimally in extremely cold conditions (conditions colder than you are likely to be planting in). If the display is blank, hard to read, or sluggish, and the weather is near freezing, the LCD is likely responding to the temperature.

The battery, rotational sensor and computer electronics are still operating, however, and read-out will be possible once the meter warms up. Do not use direct application of hot air, fluids or metal to warm up the meter, or you may damage it.

Great Plains Manufacturing, Inc.

Corporate Office P.O. Box 5060
Salina, Kansas 67402-5060 USA