



Electronic Acremeter Great Plains Drills

Used with:

- Most Great Plains Drills*

General Information

These instructions explain how to install and use an Electronic Acremeter. This acremeter has replaced the mechanical acremeters previously supplied, and provides more precise tallying of acres planted.

These instructions apply to an installation of:

Kit	Product Description
See Below	ELECTRONIC ACREMETER

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

- basic hand tools



Figure 1
Electronic Acremeter

27378

* 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.

Pre-Assembly Preparation

Prepare Drill

Refer to Figure 2

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 acremeter, 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 acremeter 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.

Note: It is not necessary to pick a location visible from the tractor, as the meter display is blanked when the drill is planting.

Remove Old Meter

4. Restrain the drive shaft. If the drill is raised, use a wrench.
5. Unscrew the old meter ② by rotating the housing by hand. If the meter is too difficult to unscrew by hand, use an oil filter wrench for leverage.

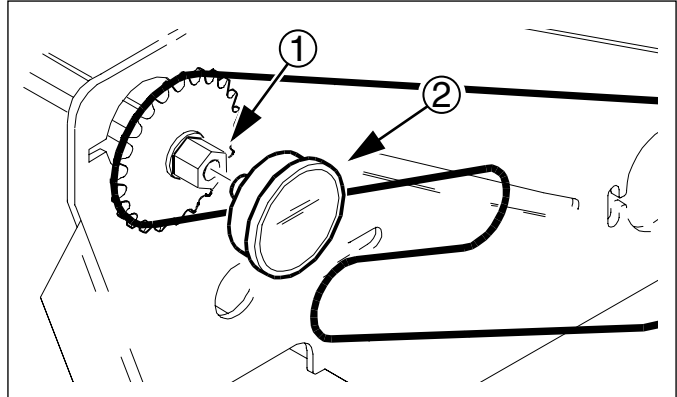


Figure 2
Shaft and Old Meter

27000

Install New Meter

Inspect Meter

Refer to Figure 3

6. Check that the revolutions configuration ① is correct for your drill.
7. Check that the units ② are suitable for your customary operations.

Note: If the meter fails to display anything, or is not programmed for your drill, do not install it. Contact your Great Plains dealer.

Mount Meter

8. Screw the new meter into the shaft hole. Hand-tighten only.

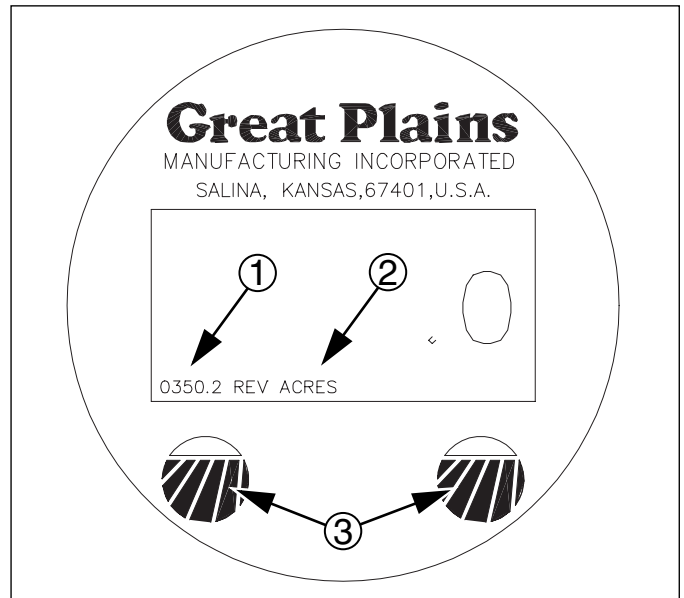


Figure 3
Meter Display

27380

Operations

Normal Operating Sequence

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 "12345.6" format display is the grand total area planted since meter installation. If the display is blank, see "**Dormant Display**".
3. Lower drill and plant. Acremeter counts shaft rotations, calculates acres or hectares, and adds to the running grand total.
4. During planting (drill lowered and moving forward), the display blanks (goes dormant), but area tally continues.
5. 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.
6. Whenever shaft rotation stops, the LCD display activates after 30 to 60 seconds, and remains visible for 30 to 45 minutes.
7. At the completion of planting, record the final reading of the grand total. If the display goes dormant before you can read it, see "**Dormant Display**".
8. Subtract the reading at Step 2 from the reading at Step 7 for the total planted in the present session.

Dormant Display

Refer to Figure 3

To conserve power, the LCD display blanks itself most of the time. If you need to read the display after it has "timed out" and gone dormant, gently tap or wave a magnet at either of the Great Plains logo spots ③ on the lower region of the display. Be careful not to scratch the window.

Great Plains provides a magnet for the acremeter, it is in the shipping box for the acremeter.

If you are using your own magnet and it does not "wake up" the acremeter display, try a stronger magnet.

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