### GEN 1 - CONTROLLER CALIBRATION

<table>
<thead>
<tr>
<th>Row Spacing</th>
<th>Standard Rate</th>
<th>High Output Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Inch Row Spacing</td>
<td>375 lb/acre</td>
<td>375 lb/acre</td>
</tr>
<tr>
<td>22 Inch Row Spacing</td>
<td>341 lb/acre</td>
<td>341 lb/acre</td>
</tr>
<tr>
<td>30 Inch Row Spacing</td>
<td>250 lb/acre</td>
<td>250 lb/acre</td>
</tr>
<tr>
<td>34 Inch Row Spacing</td>
<td>220 lb/acre</td>
<td>220 lb/acre</td>
</tr>
<tr>
<td>36 Inch Row Spacing</td>
<td>208 lb/acre</td>
<td>208 lb/acre</td>
</tr>
<tr>
<td>38 Inch Row Spacing</td>
<td>197 lb/acre</td>
<td>197 lb/acre</td>
</tr>
<tr>
<td>40 Inch Row Spacing</td>
<td>187 lb/acre</td>
<td>187 lb/acre</td>
</tr>
</tbody>
</table>

### Standard Meter 2 Inch Hose | High Output Meter 2½ Inch Hose

<table>
<thead>
<tr>
<th>Auger Shaft Speed (RPM)</th>
<th>60</th>
<th>31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Density (lb/cu-ft)</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Test Speed (MPH)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Displacement Per Row (cu-ft/rev)</td>
<td>0.0016</td>
<td>0.0032</td>
</tr>
</tbody>
</table>

### CALIBRATION INFORMATION - GEN 1

- **Flow Control Valve** = PWM Closed
- **12 Volt**
- **110 Hertz**

- **Meter Control Valve Cal # =** 1023 (See Controller manual for fine tuning)

- **Meter speed Sensor =**
  - Option 1- Raven 5 Volt 36 Pulse (External Mount)
  - Option 2 - Eaton 12 Volt 60 Pulse (In Hydraulic Motor)
  - Option 3 - Parker 12 Volt 30 Pulse (In Hydraulic Motor) *

- **Auger Drive =**
  - 14 tooth #40 drive sprocket (encoder)
  - 22 tooth #40 driven sprocket (auger)
  - 1.57 to 1 Ratio

- **Meter Speed Sensor Cal # =**
  - Option 1 Raven 36 x 1.57 = 56 (pulses per auger revolution)
  - Option 2 Eaton 60 x 1.57 = 94 (pulses per auger revolution)
  - Option 3 Parker 30 x 1.57 = 47 (pulses per auger revolution) *

- **Low limit/High limit =**
  - (Use default setting see controller manual for instructions)
  - Auger RPM Standard meter 10 – 130 MAX
  - Auger RPM High Output meter 10 -165 MAX

- **Tank Capacity =**
  - 6 Ton 187 cubic ft. or 150 bushels
  - 9 Ton 281 cubic ft. or 225 bushels

- **Displacement per Row =**
  - Standard Meter (2" hoses) 0.0016 Cubic Ft.
  - High Output Meter (2 ½" hoses) 0.0032 Cubic Ft.

- **CFR (cubic ft / Revolution) =**
  - Displacement per Row X Number of Rows = CFR

- **Adjust CFR =**
  - \[ \text{Actual Rate or Scale weight} \times \text{Current CFR} = \text{New CFR Cal#} \]

- **Spreader Constant =**
  - \[ \text{Spreader Constant} = \text{Meter Speed Sensor Cal#} \div \text{CFR} \]

- **Adjust Spreader Constant =**
  - \[ \text{Desired Rate} \div \text{Actual Rate} \times \text{Spreader Constant} = \text{New Spreader Constant} \]

* Serial number #21593, and all machines after #21643
Controllers with Automatic Calibration Functions:
The Montag applicators fan must be running at normal operating pressure when performing automatic calibration functions on a controller such as PWM limits or performing catch tests.

Typical Controller Calibration for 30 inch Rows:
Set your product density to 62, your application rate to 250 lbs. / acre, test speed at 5 MPH and run the controller in test mode. The auger shaft should turn 64 RPM for a standard machine and 32 RPM for a High Output machine. If it does not you can raise or lower your CFR # or Spreader Constant # to achieve the proper RPM.

Refer to www.montagmfg.com for harness info, pinouts, etc.