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MCi AutoKicker Operations Manual
For the Horner XE104 Controller
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Quick Startup Instructions

Note: this section is what you would normally do as a power up routine. The further pages are generally reserved for trouble shooting or technical service, but are included for reference.

1. Power on the Controller

Controller shown in the ON position. Notice the testing and passed display flash through.

2. Press F6 for “Ready to Sample”

Press the F6 button to go to the Choose Mode Screen

3. Press F1 for “Choose Mode”

Press the "F1" button, as long as it has been setup for PC (default). See note>>>>>.

NOTE: If modifications have been made, and the unit is to operate with a PC, then you must choose a Mode that has been setup for PC Use. The PC will send the proper command to change to the mode that matches the grain, according to the Grain Setup in the PC program.

4. Press F1 for “Start”

Press the F1 button to place the unit in the ready mode

5. Ready for the PC command........

Now go to the PC and perform the rest of the steps to start sampling........
Controller OFF/ON Screens

Note: the following pages will not show the full image of the controller. Please notice the highlighted buttons and functions.

Controller shown in the OFF position. Turn the switch to the ON position to begin.

Controller shown in the ON position. Notice the testing and passed display flash through.
Scale Alarm

This screen will appear if there is a problem with the gram scale on startup.

Press the F6 button to retry scale functionality.

If the Scale has a problem communicating, or if the power cord is unplugged, this screen will appear. Check the communication cable and power cord to insure they are connected properly. Also, if factory settings have been restored on the scale, it will need to be set correctly. Contact Mid-Continent Industries, Inc.

Main Startup Screen

Press the F1 button to run the shaker unit through a "dry run". Once complete, it will return back to this screen.

Press the F6 button to go to the Choose Mode Screen.

Press the F2 button to see the scale readout or test Inputs/Outputs.

Press One of the 3 buttons for the function.

F1- Pre-start Mach. Runs ONLY the Shaker Unit for a set period of time, and dumps all hoppers. Beneficial for sieve changes or partial samples.

F2- Test Screen Allows for testing I/O as well as a Scale Test

F6- Ready to Sample. This is for normal sampling operations. The next screen will be Choose Mode.
**Prestart Screen**

*F1 button has been pressed from the Main Start Screen.*
This screen appears, and will stay until the prestart process is either complete or interrupted. Once completed, it will return automatically to the Main Start Screen.

The MC1 kicker is being run in the prestart mode. Please wait as it cycles through.

Press the F7 button to stop and go back to the ‘Main Startup’ Screen immediately, or just wait until it is finished.

**Test Screen**

*F2 button has been pressed from the ‘Main Startup’ Screen*

Press the F1 button to test the operation of the gram scale.

Select Test

F1 - Test Scale
F3 - Test I/O

Press the F3 button to check the I/O operation. This test is normally used for mechanical troubleshooting purposes only.

Press the F7 button to return to the ‘Main Startup’ Screen.
Scale Readout Screen

F1 button has been pressed from the ‘Select Test’ Screen

Press the F2 button to Zero the gram scale

Press the F7 button to return to the ‘Main Startup’ Screen

Press this arrow button to monitor PC communication (if used). Normally for trouble-shooting purpose only.

!!!!!!!!!!!!!!WARNING!!!!!!!!!!!!!!

The following section is to allow for testing of the various mechanical parts of the system. This section is for authorized or factory trained personnel only!! If you are not sure of what you are doing, then press the F7 button to back out of this menu. Great CARE and safety should be taken into consideration when performing the following tests, due to the possibility of the various mechanical operations starting with a button press. ANY AND ALL personnel not directly involved with these tests should stand clear, and a safe form of communication should be required if more than one person is involved. Performing these tests will let you know if the items in the INPUT/OUTPUT list below are functioning properly.
**Test I/O Screen**

- **F3 button has been pressed from the 'Select Test' Screen**
- Small Up/Down buttons move through I/O's, then press the ENT button to accept the selection.
- Press the F7 button to return to the 'Main Startup' Screen.
- Press the F1 button for I/O ON.
- Press the F2 button for I/O OFF.
- Press the F7 button to accept the selection. Now use the F1/On F2/Off functions.

---

**Diagram:**

- **CONTROLLER BOX**
  - Terminal Board
    - Q3 Inlet Hopper
    - Q4 Aspiration
    - Q5 Overs
    - Q6 SB
    - Q7 FM
    - Q8 Clean
    - Q9 Thrups
    - Q10 Protein Diverter
    - Q11 B. Diverter
    - Q12 Ready to Sample
    - Q13 Conveyor Timer
    - Q14 VAC. Pump
    - Q15 Kicker
    - Q16 Sampler

- **VALVE BOX**
  - Barrier Term. Strip
    - 0 Inlet Hopper (also M.T. Inlet)
    - 1 ASP
    - 2 OVERS
    - 3 SB
    - 4 FM
    - 5 CLEAN
    - 6 THRUPS
    - 7 PROTEIN DIVERTER
    - 8 B. DIVERTER
    - 9 Filler Sensor
    - 10 Ready to Sample
    - 11 Conveyor Timer
    - 12 Fill Sensor
    - 13 VAC. Pump
    - 14 Kicker
    - +12 VDC
    - -12 VDC
    - Pump Motor
    - Kicker Motor
    - 120 Vac NEU
    - 120 Vac Line
    - Conv. 120 Vac Line

---

- **Notes:**
  - +12 VDC is used as "common" throughout the system on 12VDC devices.
  - +12 VDC is used in Switching Devices ON or OFF.
  - -12 VDC is used in Switching Devices ON or OFF.
  - 120 VAC line for Conversions.
  - 120 VAC Motor Control.

---

*All other devices are wired to -12VDC, in Valve Box, with +12VDC from Controller Terminal.*

---

*Updated for 12VDC Text: 3-25-10 SDW*
Choose Mode Screen

If you are finished with testing, then you would press the F6 button from the main MCi AutoKicker screen, and it would bring you here. In normal operation, once you have powered on the unit, you would press the F6 button to start with, then choose one of the buttons here, then F1 for Start, which would bring you to ‘Waiting on PC’, and that would be the end. That is Four steps: Power On, press F6, Press a Mode, then press F1 to Start and be ready for the command from the PC.

Mode Start Screen

Press the F1 button to begin sampling. If the PC Mode = YES has been selected, 'Waiting on PC' is displayed. See below for more.
Waiting on PC Screen

Normally, this screen is displayed at the end of the regular startup process.

If the F3 button is pressed from the “Chosen Mode” screen, you will need to enter 4455 (F4,F4,F5,F5) for the password to get into ‘Setup’.

Password Entry Screen

Press the F7 button to return to the ‘Chosen Mode’ Screen

Press the F7 button to return to the ‘Chosen Mode’ Screen

Press the F5 button to enable entering of the password, then ENT again once the password is keyed in. Admin or Service personnel only.

Press the ENT button after entering the correct password.
Setup Screen

This section is for authorized personnel only!! If you do not know what you are doing, then press the F7 button IMMEDIATELY!! Changing these settings may result in improper operation of the MCi AutoKicker as a whole. If you are unsure of what to do, Ask someone!!

Press the F1 button for changing operational timer settings. See Section 5.1

Press the F6 button for changing the installed gram scale type. See Section 5.4

Press the F7 button to return, or to back up one screen.

Press the F4 button to select whether a PC is used. See Section 5.3

Press the F5 button to change the Order of Operation type for the mode selected. See Section 5.2

The password has been entered correctly.

Section 5.1

Timer Selection Screen

This section is for authorized personnel only!! If you do not know what you are doing, then press the F8 button IMMEDIATELY!! Changing these settings may result in improper operation of the MCi AutoKicker as a whole. If you are unsure of what to do, Ask someone!!

The list following the diagram below describes the various settings and operations. Great care should be taken in adjusting these settings. Default factory installed values are listed.

Press this arrow button to go to the previous item.

The F1 button has been pressed from the Setup Screen

Press the F3 button after entering numbers to accept the entry.

Press the F8 button to return to the Setup Screen

Press this arrow button to go to the next item.

Press the Enter button to enable entering of numbers in the timer field.
The Timers settings listed below may be modified, but can distinctly affect the behavior of the MCi AutoKicker as a whole. Some of the settings are listed as “or”, and are set according to the facility requirements. They are shown in the table below primarily as a reference.

**Setting explanations:**

- **All times are in seconds**
- How long to sample?: How long to operate an external sampling system
- Fill Sensor override: If there is a “Ready to Sample” input, but not enough grain, go ahead and do a cycle after the timer runs out
- Screen Cleaning Time: Once the weigh scale stabilizes, run the shaker for these many seconds, then stop
- Fill Hopper Time: How long to keep the main inlet hopper open to allow for all grain to enter where needed, including a moisture tester (if installed)
- Gate(s) 1 – 6 Open Time: How long to keep the sample separation hopper open to allow the material to pass
- Next sample delay: How many seconds to wait before starting another sample cycle.
- When to Sample: One of 3 selections. Automatically after dumping the Fill hopper (After Fill Hpr), Automatically after a completed sample (After Sample), or Manually after each sample by button press or PC command (Manual Start)
- Protein Analyzer: One of 3 selections: Send a command to operate a protein analyzer on a unit with a bottom diverter (PA- Yes with B-Div), Send the command without bottom diverter (PA- Yes w/o B-Div), or do not send a command at all (PA- NO)

<table>
<thead>
<tr>
<th>Item Selection</th>
<th>Mode 1</th>
<th>Mode 2</th>
<th>Mode 3</th>
<th>Mode 4</th>
<th>Mode 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long to sample?</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fill Sensor Override</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Screen Cleaning Time</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Fill Hopper Open</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Gate 1 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gate 2 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gate 3 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gate 4 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gate 5 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gate 6 Open Time</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Next sample delay</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>When to Sample</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
</tr>
<tr>
<td>Protein Analyzer</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
<td>One of 3</td>
</tr>
</tbody>
</table>

**Order Setup Screen**

1. Press the ENT button to enable changing of the Order.
2. Use these Up/Down arrows to change the Order, then press the ENT button, then F3
3. Press the F3 button after changing the Order to accept the entry.

*F5 button has been pressed from the Setup Screen*

Press the F8 button to return to the Setup Screen
Section 5.2 cont

The Order and PC settings listed below may be modified, but can distinctly affect the behavior of the MCi AutoKicker as a whole. Some of the settings are listed as “or”, and are set according to the facility requirements. They are shown in the table below primarily as a reference.

Setting explanations:

Order 1: Dumps all sample fractional hoppers (Gates 1-5) together on the weigh scale, then dumps the sample out (Gate 6). Order 1 is normally used with all grains that do not require a clean grain test weight. It is usually selected to be matched with Mode 1. It only sends one command to the moisture tester to get moisture, temperature, and test weight, whereas Orders 2 and 3 send out two commands to operate the moisture tester. See below.

Order 2: Dumps each fractional hopper into the weigh scale, then dumps each fraction out. Order 2 is normally used with all grains that DO require a clean grain test weight. It is usually selected to be matched with Mode 2, and is normally used if the desired process is to not put any fractions together. Order 2 is useful for divisional capture of each fraction. Order 2 MUST have a bottom diverter and clean grain conveyor as part of the installed system, takes the longest amount of time to process a sample, and is rarely used. It also sends out two commands to operate the moisture tester, one to get the moisture and temperature, one to get the clean test weight.

Order 3: Dumps the broken grain into the weigh hopper with the clean grain, then dumps that out through a bottom diverter and into the clean grain conveyor to be elevated to the moisture tester and optional protein analyzer. The remainder of the sample fractions are then dumped and weighed individually, then dumped out together through the other side of the bottom diverter, away from the clean grain conveyor. Order 3 MUST have a bottom diverter and clean grain conveyor as part of the installed system. Order 3 also sends out 2 commands to operate the moisture tester, one to get the moisture and temperature and one to get the dockage/fm free test weight. Orders 2 and 3 can also be configured to use the optional protein analyzer (PA- Yes with B-Div)

Order 4: Similar to Order 1, only there are two Gates, 3 and 4 that do nothing. As with Order 1, all sample fractional hoppers (Gates 1, 2 and 5) dump and weigh individually on the weigh scale, then dumped out together as one (Gate 6). Order 4 is normally used for coarse grains that do not need as many fractional weights, such as Corn, and do not require a clean grain test weight. It is usually selected to be matched with Mode 1. Normally used with Corn or Sorghum Ethanol production. It only sends one command to the moisture tester to get moisture, temperature, and test weight, and can be configured for the optional protein analyzer (PA- Yes w/o B-Div).

<table>
<thead>
<tr>
<th>Item Selection</th>
<th>Mode 1</th>
<th>Mode 2</th>
<th>Mode 3</th>
<th>Mode 4</th>
<th>Mode 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
<td>1 or 4</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Section 5.3

PC Communication Screen

1. Press the ENT button to enable changing of the setting.
2. Use these Up/Down arrows to change the setting, then press the ENT button, then F3
3. Press the F3 button after changing the selection to accept the change

F4 button has been pressed from the Setup Screen

Press the F8 button to return to the Setup Screen
### Section 5.3 cont

<table>
<thead>
<tr>
<th>Item Selection</th>
<th>Mode 1</th>
<th>Mode 2</th>
<th>Mode 3</th>
<th>Mode 4</th>
<th>Mode 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.C. Configuration</td>
<td>PC is Used</td>
<td>PC is Used</td>
<td>PC is Used</td>
<td>PC is Used</td>
<td>PC is Used</td>
</tr>
</tbody>
</table>

**Note:** The PC configuration is default to “PC is Used” on ALL Modes. If the setting is changed to “No PC Used”, then the unit will start without the PC by pressing the ‘F1 – Start’ button from the Chosen Mode screen, but the Moisture Tester or Protein Analyzer will not operate. These devices require the use of the PC for their remote commands. They can be operated with their buttons, but the PC program should be exited while doing this.

### Section 5.4

**Scale Type Selection Screen**

![Scale Type Selection Screen](image)

Press the F8 button to return to the Setup Screen

**THIS SHOULD ONLY BE MODIFIED BY AN AUTHORIZED SERVICE PERSON!!!! CHANGING THIS WILL CAUSE THE MACHINE TO MALFUNCTION!!!! PRESS THE F8 BUTTON TO RETURN TO THE SETUP SCREEN IMMEDIATELY!!!!!!!!!!!!!
**Machine in Operation Screen**

Once the machine has started to process a sample, this screen is displayed, and the indicated line will change according to the current process. This is useful for confirmation and change of a running process.

**Weight Monitoring Screen**

You can monitor the weight capture by pressing the F8 button during a sample process. This is useful for confirmation of the weighing processes. The screen may switch back to the “Machine in operation” screen from time to time, or by pressing the F8 button again. Pressing the F6 button will cause the system to stop after the current sample process.
GATE IDENTIFICATION CHART FOR THE MCI AUTO KICKER

LOC. 0 INLET HOPPER

LOC. 7 TOP DIVERTER

GATE 1 ASP

GATE 2 OVERS

GATE 6 THRU

GATE 5 CLEAN

GATE 3 SB OR BC OR SPLITS

GATE 4 FM

GATE 5 CLEAN GRAIN

LOC. 8 BOTTOM DIVERTER

THE ABOVE CHART IS HELPFUL TO UNDERSTAND THE GATE LABELING IN THE PROGRAM AND THE I/O LOCATION CHART. THE IDENTIFICATION LABELS ARE FOR EACH SEPARATING SCREEN LOCATION. ACTUALLY THE CLEAN GRAIN IS BEING HELD IN THE SCALE HOPPER. SOME MACHINES HAVE DIVERTERS AT BOTH TOP AND BOTTOM, DEPENDING ON THAT PARTICULAR INSTALLATION.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aspirator Fan 4 Inch</td>
<td>41-5142</td>
</tr>
<tr>
<td>2</td>
<td>Drive Motor ½ HP/120 Volt</td>
<td>41-5135</td>
</tr>
<tr>
<td>3</td>
<td>Drive Belt/Motor</td>
<td>41-5275</td>
</tr>
<tr>
<td>4</td>
<td>Drive Belt/Scalp</td>
<td>41-5270</td>
</tr>
<tr>
<td>5a</td>
<td>Shaker Mount Bearing (2 required)</td>
<td>41-5240</td>
</tr>
<tr>
<td>5b</td>
<td>Pitman Bearing (2 required)</td>
<td>41-5245</td>
</tr>
<tr>
<td>5c</td>
<td>Pitman Crank Assm</td>
<td>41-4805</td>
</tr>
<tr>
<td>5d</td>
<td>Pitman Drive Bar UHMW (3/4” thick)</td>
<td>41-4809AK</td>
</tr>
<tr>
<td>5e</td>
<td>Pitman Drive Shaft</td>
<td>41-4804</td>
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<tr>
<td>6</td>
<td>Scalp Drive Bearing (2 required)</td>
<td>41-5240</td>
</tr>
<tr>
<td>6a</td>
<td>Scalp Drive Shaft</td>
<td>41-4815</td>
</tr>
<tr>
<td>7</td>
<td>Cam Roller</td>
<td>41-5235</td>
</tr>
<tr>
<td>8</td>
<td>Idler/Drive Belt</td>
<td>41-5340</td>
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<td>9</td>
<td>Shaker Pivot Arm (UHMW)</td>
<td>41-4820</td>
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<td>10</td>
<td>Scalp Pivot Arm (UHMW)</td>
<td>41-4819</td>
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<td>11</td>
<td>Feeder Adjusting Knob</td>
<td>41-5145</td>
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<td>12</td>
<td>Air Damper Assy. 4-Screen</td>
<td>41-4032A</td>
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<td>13</td>
<td>Pulley/Scalp Shaft Driven</td>
<td>41-5255</td>
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<tr>
<td>14</td>
<td>Pulley/Scalp Lower Drive</td>
<td>41-5250</td>
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<tr>
<td>15</td>
<td>Pulley/Shaker Lower Shaft Driven</td>
<td>41-5260</td>
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<td>16</td>
<td>Pulley/Drive Motor</td>
<td>41-5265</td>
</tr>
<tr>
<td>18</td>
<td>Door &amp; Screen Clamp</td>
<td>50-7295</td>
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<tr>
<td>19</td>
<td>Scalp Cam and Shaft Assembly</td>
<td>41-5335</td>
</tr>
<tr>
<td>203</td>
<td>Vacuum Pump/ New Style</td>
<td>50-7105</td>
</tr>
<tr>
<td>204</td>
<td>Motor Vacuum Pump 1/2HP, 120 Volt (old style)</td>
<td>50-7155</td>
</tr>
<tr>
<td>205</td>
<td>Digital Weighing Scale</td>
<td>50-7300</td>
</tr>
<tr>
<td>206</td>
<td>Vacuum Cyl. 1 1/16&quot; Dia. (7 used, includes fittings)</td>
<td>50-7230</td>
</tr>
<tr>
<td>207</td>
<td>1 1/16 Cylinder Clevis &amp; Pin</td>
<td>50-7245</td>
</tr>
<tr>
<td>208</td>
<td>Clevis Pin Keeper</td>
<td>50-7246</td>
</tr>
<tr>
<td>209</td>
<td>Vacuum Fitting - Elbow</td>
<td>50-7185</td>
</tr>
<tr>
<td>209A</td>
<td>Vacuum Fitting - Straight</td>
<td>50-7190</td>
</tr>
<tr>
<td>215</td>
<td>Power Supply for Aspirator Fan</td>
<td>50-7126</td>
</tr>
<tr>
<td>220</td>
<td>Vacuum Pump Drive Coupler (old style)</td>
<td>50-7133</td>
</tr>
<tr>
<td>300</td>
<td>Balls/Cleaning (72 required)</td>
<td>41-5195</td>
</tr>
</tbody>
</table>
## MCi KICKER/AUTOKICKER FOUR SCREEN CHART
SCREEN SIZES, LOCATION, FEED, AND AIR SETTING(S) – REAR DAMPER

<table>
<thead>
<tr>
<th>SCREEN LOCATION</th>
<th>SCALP</th>
<th>SECOND</th>
<th>THIRD</th>
<th>FOURTH</th>
<th>FEED</th>
<th>AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>JGS</td>
<td>Blank NH</td>
<td>4 x 1/2</td>
<td>5 RD</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>*7</td>
<td>12 RD</td>
<td>5 RD NH</td>
<td>10 TRI</td>
<td>4 x 1/2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley (Feed)</td>
<td>9 x 3/4</td>
<td>6 RD NH</td>
<td>4.5 x 1/2</td>
<td>10 TRI</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>*1</td>
<td>9 TRI NH</td>
<td>5 x 3/4</td>
<td>6 RD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn</td>
<td>32 RD</td>
<td>Blank NH</td>
<td>12 RD</td>
<td>8 RD</td>
<td>3 1/2</td>
<td>1</td>
</tr>
<tr>
<td>*2</td>
<td>36 RD</td>
<td>14 RD</td>
<td>Blank or 6 RD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soybeans</td>
<td>24 RD</td>
<td>8 RD NH</td>
<td>10 x 3/4</td>
<td>12 RD</td>
<td>3 1/2</td>
<td>1</td>
</tr>
<tr>
<td>*6</td>
<td>26 RD</td>
<td>8 or 9 x 3/4</td>
<td>10 or 11 RD, Blank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn/Soy Combo</td>
<td>32 RD</td>
<td>8 RD NH</td>
<td>24 RD</td>
<td>12 RD</td>
<td>3 1/2</td>
<td>1</td>
</tr>
<tr>
<td>* for Splits separation</td>
<td>10 or 9 x 3/4</td>
<td>10 or 11 RD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorghum</td>
<td>12 RD</td>
<td>Blank NH</td>
<td>4 x 1/2</td>
<td>5 RD</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>*5</td>
<td>9 x 3/4</td>
<td>5 RD NH</td>
<td>10 TRI</td>
<td>2.5 RD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td>9 x 3/4</td>
<td>5 RD NH</td>
<td>4 x 1/2</td>
<td>10 TRI</td>
<td>2 1/2</td>
<td>6</td>
</tr>
<tr>
<td>*4</td>
<td>10 x 3/4</td>
<td>8 TRI NH</td>
<td>5 RD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millet</td>
<td>12 RD</td>
<td>Blank NH</td>
<td>9 RD</td>
<td>.067 RD</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>*3</td>
<td>6 x 3/4</td>
<td>10 TRI NH</td>
<td>4 x 1/2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flower “O”</td>
<td>18 RD</td>
<td>Blank NH</td>
<td>12 RD</td>
<td>8 RD</td>
<td>2 1/2</td>
<td>6</td>
</tr>
<tr>
<td>*8</td>
<td></td>
<td>5 x 3/4</td>
<td>10 TRI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flower “C”</td>
<td>24 RD</td>
<td>12 RD NH</td>
<td>22 RD</td>
<td>20 RD</td>
<td>3 1/2</td>
<td>6</td>
</tr>
<tr>
<td>*9</td>
<td>28 RD</td>
<td>14 RD NH</td>
<td>20 RD</td>
<td>18 RD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canola</td>
<td>#000 Riddle</td>
<td>Blank NH</td>
<td>.064 x 3/8</td>
<td>3/64 x 3/8</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Flax</td>
<td>#000 Riddle</td>
<td>Blank NH</td>
<td>.064 x 3/8</td>
<td>4.5 RD</td>
<td>1 1/2</td>
<td>6</td>
</tr>
<tr>
<td>*</td>
<td>JGS</td>
<td>5 RD NH</td>
<td>4 x 1/2 (.0625)</td>
<td>5 RD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safflower</td>
<td>15 RD</td>
<td>Blank NH</td>
<td>6 x 3/4</td>
<td>10 TRI</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**MCi Auto Kicker for Fuel Grains**

| Corn            | 32 RD  | 12 RD  | Blank | Any | 3 1/2 | 1   |
| Soybeans        | 24 RD  | 8 RD NH | 10 x 3/4 | Blank | 3 1/2 | 1   |
| Sorghum         | 12 RD  | 5 RD NH | 4 x 1/2 | Blank | 2    | 5   |
| Corn/Sorg Combo | 12 RD  | 5 RD NH | Blank | Any | 3     | 4   |

*Optional screen sizes are on the second row below the grain name. Optional 3rd & 4th screens can be placed in SECOND slot, if handle is removed, to obtain desired results. NH stands for NO HANDLE.*

* The AIR setting is only a guide. Depending on the test weight of the grain, it may need to be opened more or less.

* To increase the air takeout, CLOSE the damper more.

**NOTICE:** Recommendation for screens used in the MCi KICKER are based upon extensive lab work and verification of users. The suggested screens allow the fastest and most accurate method to achieve the fairest results. According to FGIS, almost any method may be used by “commercial” grain handlers to achieve Results Comparable to Official Standards. MCi AUTOKICKER screen selections may not be the same as the MCi KICKER, due to its inability of hand picking.

You should check the results of your machine with your local official testing station, then adjust the feed, screen sizes, and the air setting to obtain results comparable. Multiple machines in the same company should be checked with one another for consistent results across the local area. Mid-Continent Industries, Inc. will not be held liable for the results obtained from any grain grading process. Operators, installation locations, firmness of the floor it is placed on, etc., will affect results.

*1 Dockage is the total fractions of air, scalpings, and through 6 RD. FM is anything else left in the sample after process.

*2 BC is everything through the 12 RD & over an 8 or 6 RD

*3 Dockage is everything other than Millet.

*4 FM is through 5 RD and everything other than Oats.

*5 Only for competitor comparison, and should not be necessary.

*6 Splits can be checked with an 8, 9, or 10 x 3/4 slotted.

*6 10 x 3/4 is used the most. FM is everything through the 8 RD and everything other than Soybeans. NOTE: To match the 3-Screen Kicker, use a Blank where indicated.

*7 Dockage is the total fractions of air, scalpings, and through the 5 RD. SB is through the 4 x 1/2.

*8 5 RD will take out less.

*9 Confectionary Sunflowers can be sized as well as other grains.
FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN: WHEAT

**NOTE!: When screens are in the Optional array, then the bottom pan is Small and Broken Grain and the third pan is Dockage if it's contents is over 50% weed seed !!!!!!!!

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
The optional screens suggested are used by some operators. The options are shown in the locations suggested. Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114 PH. 316-283-9648
FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN: BARLEY

Fraction I.D.  SUGGESTED SCREEN SIZE  OPTIONAL SCREEN

Dockage  9 X 3/4  
Dockage  4.5 X 1/2  5 X 3/4
Dockage  10 TRI  9 TRI NH
Dockage  6 RD NH  6 RD
Dockage  THINS

Small and Broken grain

Dockage

Dockage is combined Scalloped, Aspirated, through 6 RD, and 10 TRI.
FM is everything other than Barley that remains in the processed sample.
Test Weight is determined on Dockage Free sample.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
The optional screens suggested are used by some operators.
The options are shown in the locations suggested.
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114  PH. 316-283-9648
FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN: CORN

- FM is all material Scalped, Aspirated, through 8 RD, and not Corn that remains in the processed sample.
- BC is what falls through the 12 RD and stays on top of the 8 RD.
- BCFM is BC and FM combined, including hand picked FM.
- Test Weight is determined on uncleaned sample.

<table>
<thead>
<tr>
<th>Fraction I.D.</th>
<th>Suggested Screen Size</th>
<th>Optional Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM</td>
<td>32 RD</td>
<td>36 RD</td>
</tr>
<tr>
<td>Blank NH</td>
<td>8 RD NH</td>
<td></td>
</tr>
<tr>
<td>12 RD</td>
<td>14 RD</td>
<td></td>
</tr>
<tr>
<td>8 RD</td>
<td>Blank</td>
<td>6 RD</td>
</tr>
</tbody>
</table>

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114  PH. 316-283-9648
FOUR SCREEN MCI KICKER
GRAIN POSSIBLE CORN AND BEANS

NOTE: NOT RECOMMENDED FOR USE IN THE MCI AUTOKICKER!!

Fraction I.D. | Suggested Screen Size | Optional Screen
--- | --- | ---
FM - Both Grains | 32 RD | 8 RD NH
FM - Both Grains | 24 RD | ---
CORN - Clean Corn SOYBEANS - Scalings | 12 RD | 11 RD
CORN - Clean Corn SOYBEANS - Clean Soybeans | --- | ---

CORN: = BC
SOYBEANS: = Material may include small beans, so DO NOT combine the entire pan amount with TOTAL FM.
Hand pick the FM from this pan, adding that FM to the top pan and scale for TOTAL FM.
This process is to reduce the amount of hand picking necessary for Soybeans.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS
The optional screens suggested are used by some operators.
The options are shown in the locations suggested.
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114 PH. 316-283-9648
# FOUR SCREEN MCI KICKER/AUTOKICKER

**Grain: Sorghum**

<table>
<thead>
<tr>
<th>Fraction I.D.</th>
<th>Suggested Screen Size</th>
<th>Optional Screen</th>
</tr>
</thead>
<tbody>
<tr>
<td>2FEED</td>
<td>12 RD</td>
<td>9 X 3/4</td>
</tr>
<tr>
<td>FM</td>
<td>Blank NH</td>
<td>5 RD NH</td>
</tr>
<tr>
<td>Clean Grain</td>
<td>4 X 1/2</td>
<td>10 TRI</td>
</tr>
<tr>
<td>Small and Broken Grain</td>
<td>5 RD</td>
<td>2.5 RD</td>
</tr>
</tbody>
</table>

Optional screens can be used to achieve desired results. The optional screens suggested are used by some operators. The options are shown in the locations suggested. Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.

---

**MID CONTINENT INDUSTRIES INC.**
**NEWTON KS. 67114 PH. 316-283-9648**
FOUR SCREEN MCI KICKER/AUTOKICKER

GRAIN   OIL   SUNFLOWER

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114  PH. 316-283-9648

AIR SETTING
6

Fraction I.D.                     SUGGESTED SCREEN SIZE | OPTIONAL SCREEN
2 1/2 FEED                        18 RD                      
Clean Grain                       Blank NH                    
Small and Broken Grain            12 RD                      5 X 3/4
FM                                8 RD                       10 TRI

Optional Screens can be used to achieve desired results.
The optional screens suggested are used by some operators. The options are shown in the locations suggested.
Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.
FOUR SCREEN MCI KICKER/AUTOKICKER

This is for Order 4 in the MCi AutoKicker, which DOES NOT dump the 2 bottom hoppers to decrease sample process time. The 8 RD is only to keep the sieve cleaning balls in place. This setup could also be used on a regular MCi Kicker if the 8 RD FM separation was not necessary.

**AIR SETTING 1**

**Fraction I.D.**
- 3 1/2 FEED

**SUGGESTED SCREEN SIZE**
- 32 RD
- 12 RD NH
- Blank
- 8 RD
- 36 RD
- 14 RD NH

**OPTIONAL SCREEN**

- FM is everything other than Corn.
- BCFM is material that falls through the 12 RD.
- Test Weight is determined on uncleaned sample.

OPTIONAL SCREENS CAN BE USED TO ACHIEVE DESIRED RESULTS.
The optional screens suggested are used by some operators. The options are shown in the locations suggested. Depending on the crop, AIR SETTING and FEED setting may need adjusting to achieve desired results.

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114 PH. 316-283-9648
**FOUR SCREEN MCI AUTOKICKER ONLY**

GRAIN: SORGHUM & CORN COMBO – FUEL

---

**NOTE:** THIS AUTOKICKER CONFIGURATION IS USED FOR FUEL GRAINS. REFER TO THE STANDARD KICKER CHART FOR THAT DIAGRAM.

---

**AIR SETTING**

<table>
<thead>
<tr>
<th>Fraction I.D.</th>
<th>Suggested Screen Size</th>
<th>Optional or Autokicker Suggested Screen Size for Fuel Grains</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 FEED</td>
<td>12 RD</td>
<td>Corn Clean - Sorghum FM</td>
</tr>
<tr>
<td></td>
<td>5 RD NH</td>
<td>FM - Both Grains</td>
</tr>
<tr>
<td></td>
<td>Blank</td>
<td>Blank</td>
</tr>
<tr>
<td></td>
<td>4 X 1/2</td>
<td>* Blank - Corn FM - Sorghum Clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* Blank - Corn FM - Sorghum BK</td>
</tr>
</tbody>
</table>

**Optional Screens can be used to achieve desired results**

The optional screens suggested are used by some operators. The options are shown in the locations suggested. Depending on the crop, AIR SETTING and/or FEED setting may need adjusting to achieve desired results.

---

MID CONTINENT INDUSTRIES INC.
NEWTON KS. 67114   PH. 316-283-9648
MCI AUTO KICKER

*** LIMITED WARRANTY ***

Mid-Continent Industries, Inc., hereafter known as MCI, does warrant to the original purchaser, the MCI Auto Kicker, against defective materials and workmanship, from the date of delivery, the following components and chassis.

**Two Year Coverage**
Frame: All Parts and Labor
All Electrical Wiring and Switches: Labor Only

NOTE: Motor(s), Fan, Computers, Electronic Equipment, are specifically covered under their manufacturers’ warranty, which are available upon request.

MCI will, at its option, repair or replace the defective part(s). All warranty claims MUST be made directly to MCI, and any warranty parts must be returned to MCI for credit.

MCI will NOT be held liable for any field modifications not expressly furnished and authorized by the engineering department of MCI. Any unauthorized modifications immediately render this warranty null and void.

MCI will not be held liable for any consequential damages, nor for commercial consequential damages resulting from any breach of this warranty or any other warranty. All of which are expressly disclaimed by this warranty for any delays in performance due to causes that are beyond direct control of the manufacturer.

MCI neither assumes nor authorizes any person to create nor assume for MCI, any obligation(s) or liability(ies) in connection with MCI products, nor to undertake any responsibilities beyond those set forth in this instrument.

This warranty disclaims any liability whatsoever due to: loss of time, use of the product, anticipated profits, increased expenses or loss of operations by reason of plant shutdowns, inconveniences or any other matter(s) not specified in this warranty.

These warranties are in lieu of any other warranties, expressed or implied, including the extent that any such limitation will be limited by any state or federal law, then such portions of the limitation will be deemed null and void.

Any dispute arising out of and concerning this warranty, will be governed by the laws of the State of Kansas and venue will reside in the State of Kansas.
MCi AUTO KICKER

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QUERY SUBLOT AVERAGE IN UTILITIES ......................................................................... PAGE 10
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USING CLEAN UP BOL & LOT TABLES IN UTILITIES ................................................... PAGE 18
HELPFUL HINTS TO OPERATE WINDOWS PROGRAM FOR THE MCI AUTO KICKER

THIS IS THE MOUSE POINTER. CLICKING ON THE SYMBOLS, ACTIVATES THE COMMAND. THE LEFT BUTTON IS ONE CLICK, THE RIGHT BUTTON IS DOUBLE CLICK.

CLICKING ON THIS SYMBOL WILL NORMALLY CLOSE A CHART OR PROGRAM. YOU NEED NOT USE THIS TO OPERATE THE MCI PROGRAM.

CLICKING ON THE UP ARROW HEAD WILL INCREASE THE SIZE OF THE DISPLAY ON THE SCREEN. THE "DOWN" ARROW HEAD WILL DECREASE THE SIZE OF THE DISPLAY. IT IS NOT A GOOD IDEA TO USE THESE ICONS.

CLICKING ON THE UP ARROW WILL ALLOW A SCROLL 'UP', CLICKING ON THE DOWN ARROW WILL ALLOW A SCROLL 'DOWN', ONE LINE AT A TIME. FOR RAPID SCROLL, PLACE ARROW CURSOR ON THE BLANK SQUARE, HOLDING DOWN THE MOUSE BUTTON, AND DRAG THE SQUARE DOWN (OR UP) UNTIL THE DESIRED INFORMATION IS SHOWN ON THE SCREEN. (PAGE DOWN OR PAGE UP ON THE KEYBOARD WILL DO THE SAME THING.)

YOU MAY MOVE A DISPLAY WINDOW BY PLACING THE CURSOR ON THE BLUE BAR, HOLDING DOWN THE MOUSE BUTTON, AND PLACING THE DISPLAY IN THE DESIRED POSITION.

IN MANY CASES, YOU MAY PRESS [ENTER] ON THE KEYBOARD TO ACTIVATE A COMMAND AS WELL AS CLICKING ON 'OK' WITH YOUR MOUSE.
EXPLANATION OF THE MAIN DATA SCREEN

Grain Name.
Load Order No.
Sublot No.
Sample Number

DATE TIME AND SUBLOT WILL BE SHOWN WHEN THE SAMPLE IS COMPLETED.

SAMPLE INFORMATION WILL APPEAR IN THE ABOVE BLOCKS AS PERCENTAGE NUMBERS. THE SMALL BLOCK WILL INDICATE IF A FRACTION OF THE SAMPLE IS OUT OF TOLERANCE ** OR OUT OF RANGE ***.

THE AVERAGING AVERAGE OF ALL SAMPLE FRACTION IN A SUBLOT WILL APPEAR IN THE SPACES BELOW.

** Out of Tolerance
*** Out of Range

PAGE 3
**NOTE:**

Move mouse pointer to the desired graph chart for viewing. The chart will appear. You may choose any four charts to be displayed at a time.

Move the chart to desired positions on the screen by placing the mouse pointer on the blue bar and holding the mouse button while moving to the desired location.

To close the graph, click on the minus box and then choose "Close".

Graphs are no longer part of the MCI Program.
YOU HAVE CLICKED ON THE 'UTILITIES' ICON. USING THE UTILITIES ICON

YOU MAY CLICK ON ANY OF THE ICON WINDOWS YOU WANT. THE OPERATION OF THESE ARE EXPLAINED IN THE FOLLOWING PAGES.

TO SEE COMM SETUP OR GRAIN SETUP

YOU MUST CLICK ON Log In

YOU MUST KNOW THE PASSWORD. TYPE IT IN AND CLICK ON OK

Avg.  Graphs  Utilities  Print  Load Order  Exit MCI

* - Out of Tolerance
** - Out of Range
MCI Auto Kicker
Samples To Print Setup

Enter the Number of Samples You Want to Collect Before They are Printed

5

You must have "YES" on "STANDARD REPORTS" IN COMM SETUP TO BE ABLE TO
PRINT. IF YOU DO NOT WANT TO PRINT ON A REGULAR BASIS, YOU EITHER SET THIS
NUMBER VERY LARGE OR CLICK "NO" AT "STANDARD REPORTS" IN COMM SETUP.

Type in number of samples to be run before the system automatically
prints the results. This number is between 1 and 999.
Now click on "OK."
You have clicked on **Print Report Query By Time (Utilities)**

**Main Data Screen**

**Grain Name.**

**Load Order No.**

**Sublot No.**

**MCI Auto Kicker**

**Sample Number**

**Date/Time**

**Beginning Date & Time**

*Type in the beginning time and date for the sample information you want to print. Example: 2:30 PM 12/12/94. If you do not use AM/PM you may use military time. The clock on GC or press enter.*

**Thru's**

**FM**

**Clean Grain**

**Total Bunch**

**Avg.**

*Out of Tolerance**

| * | * | * | * | * | * | * | * | * | * |

**Graphs**

**Utilities**

**Print**

**Load Order**

**Avg.**

**Exit MCI**

**PAGE 7**
YOU HAVE CLICKED ON (UTILITIES) COMM SETUP  PASSWORD REQUIRED

File  Edit  Window  Help

Main Data Screen

COM PORT SETTINGS

Auto Kicker\Comm Setup

DO NOT CHANGE ANY COMM PORT SETTINGS UNLESS YOU KNOW EXACTLY WHAT YOU ARE DOING

Comm Port to Host  Baud Rate  Parity  Data Bits  Stop Bits  Eason  Moisture Tester  Protein Analyzer

- COM1
- COM2
- COM3
- COM4
- None

Click on "Yes" to activate the program so your printer will respond to your printing commands.

Standard Reports
- Yes
- No

These are factory settings. Do not attempt to change without consulting Mid Continent Industries!!!!!!!

If you want to send data to another computer, you must activate a comm port that is not being used by the Eason, Moisture Tester, or Protein Analyzer.

TCP/IP has been added for the Protein Analyzer.

If you click on "Yes", it will print each sample in a log format after results come in.

Log to Print
- Yes
- No

PAGE 8
YOU HAVE CLICKED ON DELETE OLD RECORDS (UTILITIES)

Grain Name.
Load Order No.
Sublot No.

MCI Auto Kicker

Delete Old Records

Enter Date Of Last Record To Keep

Last Date To Keep

OK  Cancel

Delete query will modify data. Continue anyway?

OK  Cancel

STEP 3

THIS COMMAND WILL PERMANENTLY DELETE ALL RECORDS UP TO THE DATE YOU ENTERED.

THIS OPERATION SHOULD BE DONE AFTER A WEEK OR TWO, TO KEEP THE COMPUTER HARD DRIVE FROM FILLING UP.

Graphs  Utilities  Print  Load Order Avg.  Exit MCI

PAGE 9
Sublot Average

Load Order No. [Enter]
Sublot [Enter]
Grain Name [Enter]


When finished, Click this OK button to close the window.

Calculate

When a current Load Order and Sublot Number have been selected, Click on this Calculate button to see the average for this Sublot.

NOTE: The proper headings will appear for this row of fields when you Click on the Calculate button.
You have clicked on **Query Load Order Averages (Utilities)**

**Load Order Average**

Click on the Drop Down list and select or type a current Load Order Number.

**Load Order No.**

**Calculate**

When a current Load Order has been selected, click on this Calculate button to see the average for this Load Order.

**Grain Name**

**OK**

When finished, click this OK button to close the window.

NOTE: The proper headings will appear for this row of fields, and for the Grain Name, when you click on the Calculate button.

**Test Weight** **Moisture** **Temperature** **Protein** **Oil** **Starch**

**NOTE:** The icon from the main screen is the same as 'Query Load Order Averages' in Utilities. The purpose of this icon is to allow you to view the load order average from the main screen.
YOU HAVE CLICKED ON (UTILITIES) DELETE A SUBLOT

MCI Auto Kicker
Delete Sublots

This function allows you to temporarily delete one or a group of sublots to affect a load order average. Closing down the program will permanently delete the records.

Select the parameters for the transactions to delete.

Grain Name:  
Bill Of Lading:  
Lot Number:  

[OK]  [Cancel]

Click on grain name arrow. Then click on the appropriate tab to delete entries to fill blank boxes. Then click on "OK."
YOU HAVE CLICKED ON (UTILITIES) RESTORE A SUBLOT

MCI Auto Kicker
Restore Sublots

This function is used to restore deleted sublots if you have not exited MCI or shut down the computer.

Select the parameters for the transactions to restore.

Grain Name: 

Bill Of Lading: 

Lot Number: 

[OK] [Cancel]

Click on "Grain Name" area, then click on the appropriate text to delete or type in text. Repeat with other boxes. Then click on "OK".

PAGE 13
The Grain Setup has been modified to allow for more Protein Analyzer fields, a premium identifier for Protein and Automatic incrementing of the Lot.

**Auto Kicker/Grain Setup**

You may press [Enter] or move cursor to each box to input information.

**Grain Name to edit:**

**Grain Name:** [TYPE NEW GRAIN NAME]

**Lot Name:** [TYPE DIFFERENT HEADING]

**BOL Name:** [TYPE DIFFERENT HEADING]

These are what you normally call "ship #", "vessel", "load order", etc., and for BOL name things like "sublot", "truck", "bin #".

**Description:**

- **HI**
- **LO**
- **Range**
- **Skew**
- **Blank**

**Test Weight:**

**Percent Moisture:**

**Temperature:**

**Protein:**

Page Down or use Scroll Bar for More

Information on "HI", "LO", "Range", and "Skew" are on Pages 15 and 16.

**Eason Mode No.:**

**EUG-Blank Not OK:**

**Moisture Tester Calibration / Page:**

**Delete This Setup Record:**

**Add a New Grain Setup Record:**

**Last Lot Number and BOL of this grain:**

**Test Weight come from clean grain:**

**Click on "GRAIN NAME" arrow, then click on the appropriate grain to setup.**
Auto Kicker/Grain Setup

You may press [Enter] or move cursor to each box to input information.

**Grain Name to edit:**

<table>
<thead>
<tr>
<th>Grain Name:</th>
<th>Last Lot Number and BOL of this grain:</th>
<th>Test Weight come from clean grain:</th>
<th>Moisture Tester Calibration /page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description:**

- **Test Weight:**
  - HI: 60.5
  - LO: 59
  - Range: 0.5
  - Skew: 

**Eason Mode No.:**

- Type a value in "Range," the purpose of Range is to allow an overrun of the "HI" and "LO" parameters and will be indicated by "M" on the Main Screen and Printout. If the fraction goes out of "Range," this value will not be included in the average. When a fraction goes out of "Range," normally something bad has gone wrong. You may set the "Range" value as wide as you want so all fractions are figured in the average.

---

**Delete This Setup Record**

**Add a New Grain Setup Record**

---

<table>
<thead>
<tr>
<th>Utility Menu Screen</th>
<th>Apply Changes to Current Grain</th>
</tr>
</thead>
</table>

---

**File Edit Window Help**

---

**Main Data Screen**

---

**Grain Setup**

---

**Page 15**
Auto Kicker/Grain Setup

**Utility Menu Screen**

**Grain Name to edit:**

**Apply Changes to Current Grain**

*IF YOU ARE ONLY CHECKING GRAIN SETUP AND NO CHANGES ARE MADE YOU MAY CLICK ON "UTILITY MENU SCREEN" AND YOU WILL RETURN TO IT. NOW CLICK ON "CANCEL" TO RETURN TO THE "MC1 SCREEN"*

When you have finished adjusting the items in Grain Setup, you must click on "Apply Changes to Current Grain" box. This will update the grain listed in the Edit Box and return to "Utilities" Screen. Now click on "Cancel" to return to the "MC1 Screen."

**Description** | **Name** | **HI** | **Lo** | **Range** | **Skew**
--- | --- | --- | --- | --- | ---
Gate 1: | AIR | 60.5 | 59 | 0.5 | 1.246
Gate 2: | | | | | |
Gate 3: | | | | | |
Gate 4: | | | | | |
Gate 5: | | | | | |
Gate 6: | | | | | |

**Foreign Material Name**

**Skew** is a feature that allows you to match results of the MC1 Auto Kicker Grain Analyzer with your target results, whether they be your house or others. Skew is a multiplier that changes the actual results to the target values.

Type a value in "Skew" that will bring the results of each fraction in line with your target. This value is determined by dividing AK results into target results. If you want the Auto Kicker results to be lower, the skew number will be less than one (e.g., 0.65). If the results are to be higher, the number will be greater than one (e.g., 1.35). Type at least 3 decimal places.

The skew number must be the same on all fractions that are marked added to foreign material, normally you will not skew clean grain.

PAGE 16
## Auto Kicker/Grain Setup

### Utility Menu Screen

**Grain Name to edit:**

### Grain Setup

**Description** | **Name** | **HI** | **Lo** | **Range** | **Skew** | **Added to Foreign Material**
---|---|---|---|---|---|---
Gate 1: | AIR | | | | | |
Gate 2: | TYPE IN THE NAME OF THE FRACTIONS IN THESE BOXES. | | | | | |
Gate 3: | YOU WANT DISPLAYED. AIR SCALP, THRU SEV. PRESS, CLEAN TOTAL DOCKAGE, ETC. | | | | | |
Gate 4: | | | | | | |
Gate 5: | | | | | | |
Gate 6: | | | | | | |

**Foreign Material Name** | | | |

---

*Information on *HI*, *Lo*, *Range*, and *Skew* are on pages 15 and 16.*

---

*Click blocks for fractions to be added to total *FM* or dockage.*
YOU HAVE CLICKED ON (UTILITIES) CLEAN UP BOL AND LOT TABLES

**Grain Name**

**Load Order**

**Sublot No.**

**Set # of Samples to Print**  **Print Report Query by Time**  **Delete old Records**  **Query Sublot Averages**  

**Query Load Order Averages**  **Set Number of Next Sample**  **Delete a Sublot**  **Restore a Sublot**

**Clean Up BOL and Lot Tables**  **Log In**  **Comm Setup**  **Grain Setup**

BOL and Lot could be changed in the GRAIN SETUP to be something else.

YOU MAY CLICK ON CLEAN UP BOL and Lot Tables TO REMOVE ALL MISTyped KEY STROKES IN THE LOT AND BOL TABLES THAT DO NOT HAVE A NUMBER IN THE IDENTIFICATION BOX.

WHEN YOU CLICK ON THIS ICON, THE CLEAN UP IS AUTOMATIC AND WILL CLOSE UTILITY MENU.

* - Out of Tolerance  ** - Out of Range

**Graphs**  **Utilities**  **Print**  **Load Order Avg.**  **Exit MCI**

PAGE 18
WE HAVE ATTEMPTED TO EXPLAIN THE OPERATION SYSTEM OF THE MCI AUTO KICKER GRAIN ANALYZER IN THIS MANUAL. YOU WILL LEARN AND UNDERSTAND THE SYSTEM IS A SHORT TIME BY USING THIS MANUAL AND BY OPERATING THE SYSTEM.

IF YOU ENCOUNTER ANY PROBLEMS, OR HAVE ANY QUESTIONS ABOUT OPERATION OR PROCEDURES WITH THE MCI AUTO KICKER, PLEASE CALL 1-800-279-6812 BETWEEN THE HOURS OF 7am TO 5pm CST. MONDAY THRU FRIDAY.