Operation Manual

Model 602

Microwave Moisture Bale Chute System



P.O. Box 63

2821 Harvey Street Hudson, WI 54016
800-635-7468 www.harvesttec.com

DECLARATION OF INCORPORATION



MANUFACTURER: Harvest Tec LLC.

2821 Harvey St. P.O. Box 63

Hudson, WI 54016, U.S.A.

REPRESENTATIVE ESTABLISHED IN COMMUNITY: Profitable Farming Company

Middle Barlington, Roborough Winkleigh, Devon, EX19 8AG ENGLAND

The person above certifies and declares that:

VIRTUAL MACHINE: Equipment mounted on a farm press and for the application of innoculants onto

forage crops.

MODEL: 602-OPR-17-Imp&Metric

BRAND: Harvest Tec

PATENT NUMBER: US 9,854,743 B2:

This application preservatives for hay Harvest Tec system meets the Directive 2006/42/EC of the European Parliment and the Council of 17 May 2006 and other applicable European Directives including Directive 2004/108/EC on the Electromagnetic compatability.

The application of preservatives for hay Harvest Tec system will be turned on after being installed on a farm press has been declard in conformity with the Machinery Directive.

Person in the community authorized to provide information on the partly completed machinery and making this statement:

Richard Snell, President, Profitable Farming Company
Signed on May 21, 2011: Middle Barlington, Roborough
Winkleigh, Devon, EX19 8AG
ENGLAND

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Introduction

Thank you for purchasing this 601, 700 or 701 Microwave Moisture Sensor Kit. The Microwave Moisture Sensor Kit is designed to operator through the baler's ISOBUS system and/or an Apple iPad (not included) using the Hay App.

This manual will take you through the steps of the operation of the moisture sensor. Please read this manual carefully to learn how to operate the equipment correctly. Failure to do this can result in personal injury or equipment malfunction. If you are unsure about operating the system after consulting this manual, contact your local authorized dealership for additional assistance or look for the contact information on the back cover of this manual. If you are in need of parts for the system please view the Parts Breakdowns in the back of this manual and contact your local authorized dealer to order the parts.

Refer to your moisture only system or complete preservative applicator operation instructions for the complete operation of the system.

System Requirements

CNH Balers



The Baler Control Module (BCM) must have Version 4.2.0.0 or higher.



*Requirement to run iPad option are iOS8 or greater operating system, plus the Hay App.

AGCO Balers



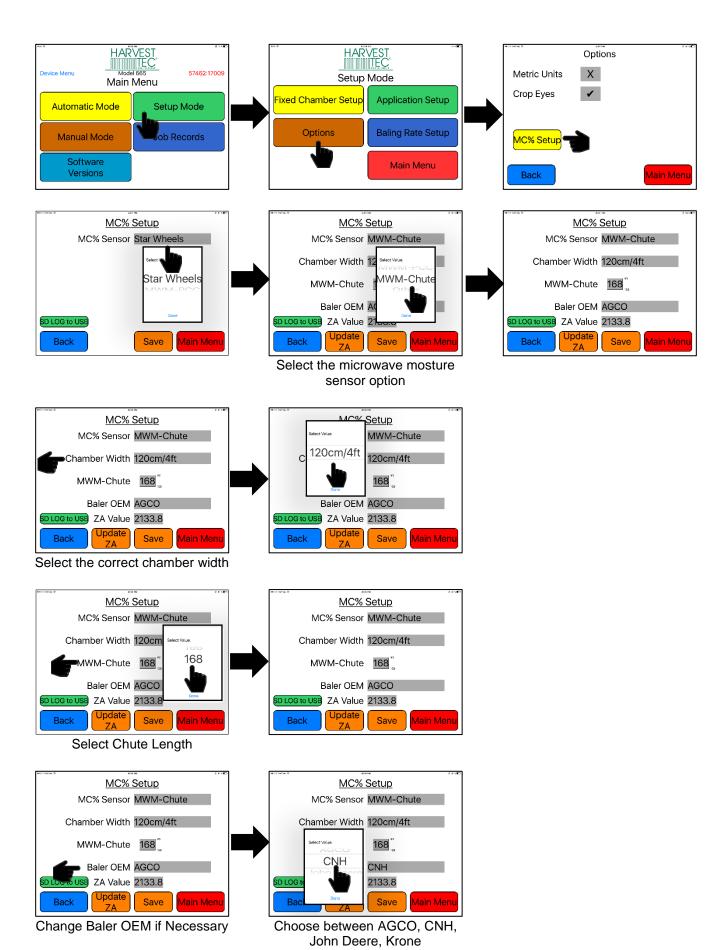
The Baler Processor must have Version 3.3 or higher. C1000 must have version 3.0.1 or higher



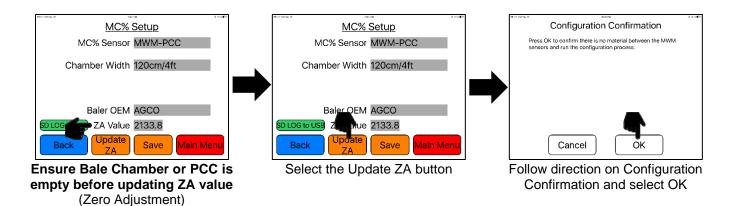
*Requirement to run iPad option are iOS8 or greater operating system, plus the Hay App.

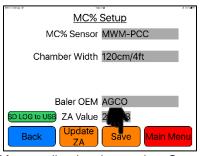
**When new software is update to version 57464 (or newer) the amount of time to update the system may take up to 3 hours depending on the amount of bale information saved on the DCP. This will clear the prior information, restores default settings and turns on the Pump Module. **

Be sure to save any information on the applicator you may need before updating software



Moisture Sensor Setup (continued)





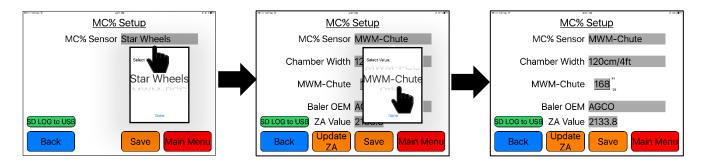
After reading is taken, select Save

| ZA RANGE (Zero Adjustment) | |
|-----------------------------|-------------|
| Same for Chute or PCC Setup | |
| AGCO 2200 - 3000 | |
| CNH 2200 - 3000 | |
| John Deere 2200 - 3000 | |
| Krone | 2200 - 3000 |
| Other 2200 - 3000 | |

If the reading is within range no adjusts need to be made *Ensure Bale Chamber or PCC is empty before updating ZA Value* **This range is for both 3' and 4' (1M & 1.2M) wide balers**

Operation Instructions

Selecting Moisture Sensor - MWM Chute



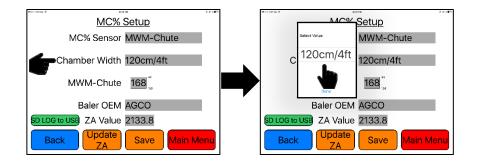
- 1. To change the moisture sensing system between the Star Wheels, MWM-PCC, MWM-Chute and other system select the grey area next to the Moisture Sensor (MC%).
- 2. A scrolling menu will appear. Select the desired moisture system to use and select Done.

Note: Due to the location of the microwave moisture sensor unit mounted on the back of the bale chute (701MWM). **If connected to a complete automatic applicator system, the applicator will not function in Automatic Mode.** The Star Wheel moisture system must be used to apply preservative in Automatic Mode.

If connected to a complete automatic applicator system a PAC error message will appear when selecting MWM-Chute as well. To shut off the PAC error select:

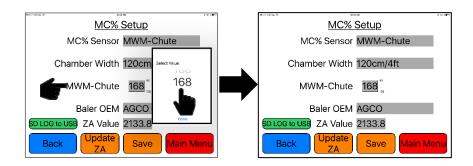
Main Menu → Setup Mode → Application Setup → Pump Module. Turn the Pump Module off.

Chamber Width Setup - MWM Chute (continued)



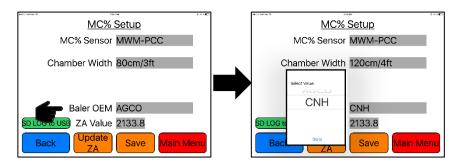
- 1. To change the MWM-Chute width and select the grey area.
- 2. A scrolling menu will appear. Select the correct value to use and select Done.

MWM-Chute Offset - Distance from knotter to MWM Chute Sensor



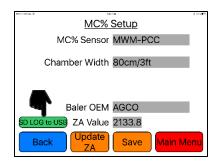
- To change the MWM-Chute offset select the grey area.
 *Measure Distance from the center on knotter to the center of the MWM system.
- 2. A scrolling menu will appear. Select the correct value to use and select Done.

Selecting Baler OEM - MWM-Chute



- 1. To change the Baler OEM, select the grey area.
- 2. A scrolling menu will appear. Select the correct Baler OEM by scrolling between AGCO, CNH, John Deere, Krone and Other.
- 3. After choosing the correct Baler OEM select Done.
- Select SAVE to save all changes
- 5. Select SAVE to save all changes

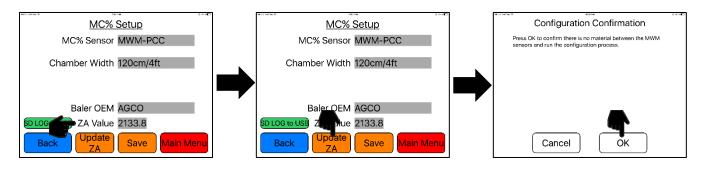
SD LOG to USB

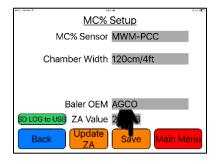


The SD LOG to USB function is used to transfer information recorded to the SD card on the applicators Dual Channel Processor (DCP) to a USB. The function is intended for troubleshooting purposes with Harvest Tec.

 Insert a blank USB drive into the USB port on the DCP and select the SD LOG to USB button as shown above. When the SD LOG to USB button is selected the date will be transferred. The indicator light on the USB drive will flash while data is being transferred. The amount of time it takes to transfer the data is related to the number of bales on the DCP. The light will go out when complete.

ZA Value - MWM-PCC and MWM-Chute



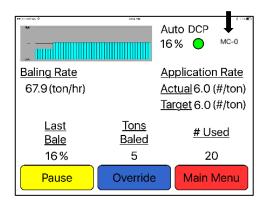


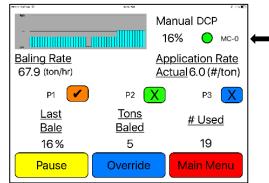
- *Zero Adjustment is needed to calibrate the MWM sensors on the baler. You may need to repeat this process from time to time to verify the sensors are reading correctly.
- *Ensure Bale Chamber or PCC is empty before updating ZA Value*
- 1. To set the ZA Value, select the grey area. This value is used to determine the alignment of the microwave moisture sensors. Use the chart below to determine if there are any alignment adjustments needed.
- 2. Follow the direction on the Configuration Confirmation page and select OK when ready to take reading.

| ZA RANGE (Zero Adjustment) | | |
|-----------------------------|--|--|
| Same for Chute or PCC Setup | | |
| AGCO 2200 - 3000 | | |
| 2200 - 3000 | | |
| John Deere 2200 - 3000 | | |
| Krone 2200 - 3000 | | |
| Other 2200 - 3000 | | |
| | | |

- *This range is for both 3' and 4' (1M&1.2M) wide baler.
- 3. After the ZA reading has been taken, if it is within the ZA Value Range, select Save.
- 4. If the ZA Value is not within the recommended range. The microwave moisture sensors will need to be adjusted to have a more accurate alignment straight across from each other on the baler.

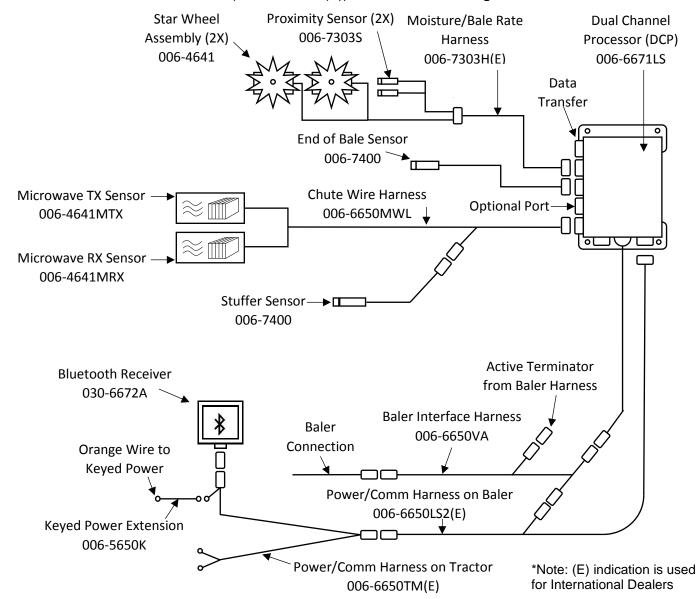
Operation Screens – Identify Moisture Settings





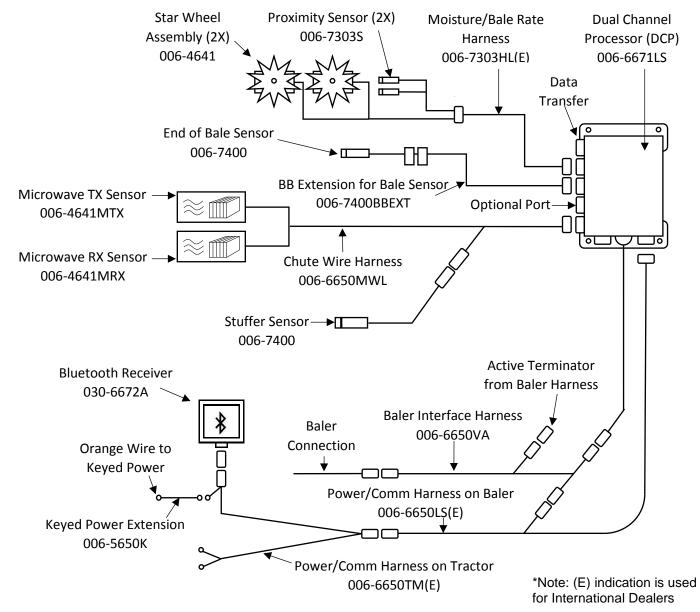
The sensor type selected is indicated in the upper right corner of the run screen (above) on both Automatic and Manual Mode. MC-0 indicates starwheels, MC-1 indicates MWM Pre-Compression Chamber, MC-2 indicates MWM Bale Chamber System, MWM-3 indicates other.

- 1. Locate the tractor power/communication harness (006-6650TM(E)).
- 2. At the back of the tractor run the power leads to the battery.
- 3. Connect the red power wire with the 50 amp fuse to the positive side (12 volt) of the battery.
- a. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty.
- b. This unit will not function on positive ground tractors.
- 4. Connect the black ground wire to frame of tractor or negative side of (12 volt) battery.
- 5. Connect the Bluetooth Receiver (030-6672A) to the Communication Harness (006-6650TM(E)). Place in a safe location in the cab. Behind the seat for example.
- 6. Connect the orange Keyed Power wire (006-5650K) to a keyed power source.
- 7. Connect the end to the Communication Harness (006-6650TM(E)) to the Bluetooth Receiver.
- 8. Connect the orange keyed power wire (006-5650K) to a keyed power source on the tractor.
- 9. Connect the Chute Wire Harness (006-6650MWL) into the Pump Controller port on the DCP.
- 10. Connect Microwave Sensors (006-4641MTX & 006-4641MRX) to the Chute Wire Harness.
- 11. Connect the Stuffer Sensor (006-7400) to the Chute Wire Harness.
- 12. When running a steamer, connect the Power / Comm extension harness (006-6650FMX) to the baler mounted Power / Comm Harness (006-6650LS2(E)) an additional 25' length from the tractor to the baler.

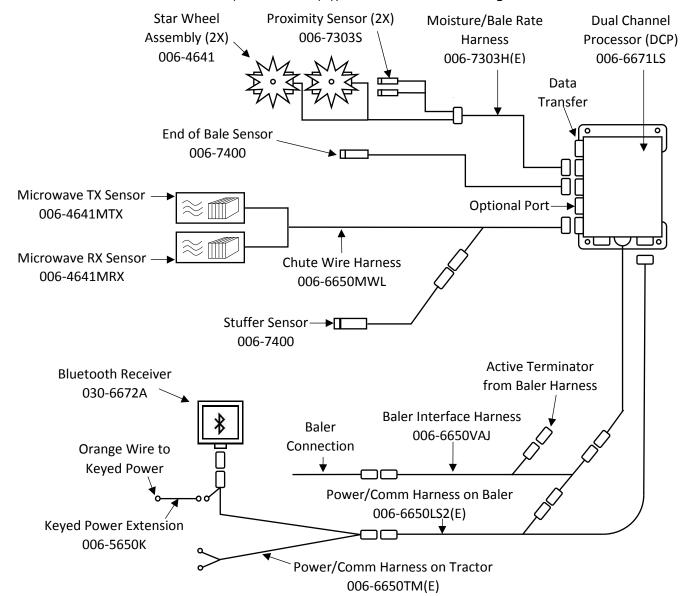


AGCO 2100 Series Balers Pre 2012 need the AGCO Integration Harness (006-6650VAX)

- 1. Locate the tractor power/communication harness (006-6650TM(E)).
- 2. At the back of the tractor run the power leads to the battery.
- 3. Connect the red power wire with the 50 amp fuse to the positive side (12 volt) of the battery.
- a. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty.
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- 6. Connect the orange Keyed Power wire (006-5650K) to a keyed power source.
- 7. Connect the end to the Communication Harness (006-6650TM(E)) to the Bluetooth Receiver.
- 8. Connect the orange keyed power wire (006-5650K) to a keyed power source on the tractor.
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- 11. Connect the Stuffer Sensor (006-7400) to the Chute Wire Harness.
- 12. When running a steamer, connect the Power / Comm extension harness (006-6650FMX) to the baler mounted Power / Comm Harness (006-6650LS(E)) for an additional 25' length from the tractor to the baler.

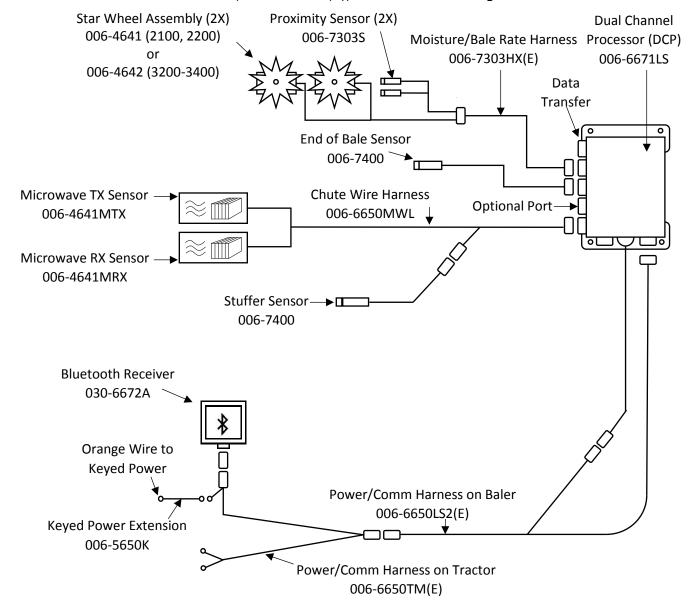


- 1. Locate the tractor power/communication harness (006-6650TM(E)).
- 2. At the back of the tractor run the power leads to the battery.
- 3. Connect the red power wire with the 50 amp fuse to the positive side (12 volt) of the battery.
 - **a.** The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. IF MODIFICATIONS ARE REQUIRED CONTACT HARVEST TEC FIRST!
 - b. This unit will not function on positive ground tractors.
- 4. Connect the black ground wire to frame of tractor or negative side of (12 volt) battery.
- 5. Connect the Bluetooth Receiver (030-6672A) to the Communication Harness (006-6650TM(E)). Place in a safe location in the cab. Behind the seat for example.
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- 12. When running a steamer, connect the Power / Comm extension harness (006-6650FMX) to the baler mounted Power / Comm Harness (006-6650LS(E)) for an additional 25' length from the tractor to the baler.



*Note: (E) indication is used for International Dealers

- 1. Locate the tractor power/communication harness (006-6650TM(E)).
- 2. At the back of the tractor run the power leads to the battery.
- 3. Connect the red power wire with the 50 amp fuse to the positive side (12 volt) of the battery.
- <u>^</u>!\
- a. The power harness must be connected to the battery! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty.
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- 11. Connect the Stuffer Sensor (006-7400) to the Chute Wire Harness.
- 12. When running a steamer, connect the Power / Comm extension harness (006-6650FMX) to the baler mounted Power / Comm Harness (006-6650LS2(E)) an additional 25' length from the tractor to the baler.



1. Can microwave sensors function with 500 series PIP?

No, microwave sensors are only compatible w/ 600 Series controls w/ software version dcp46227 or later.

2. Can microwave sensors function through a Harvest Tec Touch Screen Display?

No, microwave sensors require an ISOBUS Interface (VT) or iPad system to set the microwave settings.

3. What terminal is required to operate microwave sensor?

Microwave sensors are compatible with VT & iPads.

4. What moisture range will sensors detect?

Pre-Compression Chamber microwave sensors have a moisture range of 6-60% moisture. The Bale Chute chamber sensors have a range of 6-40%.

Auto DCP

16%

<u>Tons</u>

Baled

5

Override

Application Rate

Actual 6.0 (#/ton)

Target 6.0 (#/ton)

Used

20

Main Menu

Baling Rate

67.9 (ton/hr)

<u>Last</u>

<u>Bale</u> 16%

Pause

5. How do I know if I'm displaying microwave or star wheel moisture? The sensor type selected is indicated in the upper right corner of the run screen (right). MC-0 indicates starwheels, MC-1 indicates MWM Pre-Compression Chamber, MC-2 indicates MWM Bale Chamber System, MWM-3 indicates other.

6. What crops are the microwave sensors designed for?

The Microwave sensors are designed and calibrated for Alfalfa.

7. Is there a calibration to the microwave sensors for different crops?

No, there is no adjustments needed.

8. Do the sensors emit harmful waves?

Nο

9. How often should a Zero Adjust (ZA) be performed?

A zero adjust should be performed on initial installation. It is also recommended during a zero adjust calibration at the beginning of each season.

10. When reading moisture with microwave sensors why can I not select Automatic mode?

MWM Pre-Compression sensors can be used in both Auto and Manual mode.

MWM Bale Chute sensors can only be used in Manual Mode due to the lag time between the application tops and the sensors.

11. Where does the green terminating resistor plug in to microwave sensors?

The green resistor (006-5650Z) is not used. Store the resistor for potential updates and changes you may make to the system in the future.

12. Where do I position 840 moisture dye marker spray tip when operating microwave sensors when using a MWM Chute system and in a MWM Pre-Compression system?

Dye marking tips should be located behind (toward rear end of chute) MWM Chute sensors, with the tips angled toward the rear at a 45 degree angle. Alternative mounting would locate the dye marking tips above the bale w/ the brackets mounted off the top cross beam.

When using a Pre-Compression system mount the tips as close to the front of the bale chamber as possible, either on the side if there is clearance or on the top of the bale.

13. What do the lights on the 030-6672B indicate?

Red Light – The Bluetooth receiver has power. Green Light – When the proper active connection is selected in the Hay App menu, the green light will indicate connection with the iPad.

Troubleshooting

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|---|--|
| Moisture reading errors (high or low) | Wire disconnected or bad connection between star wheels and DCP | 1. Reconnect wire. |
| | 2. Low power supply to DCP | 2. Check voltage at box. (Min of 12 volts required.) See Diagnostics section of manual. |
| | 3. Dry hay lower than 8% moisture or wet hay over 75%. | 3. Pre-Compression System reads 6-60% moisture. The Bale Chute system read 6-40% moisture. |
| | 4. Ground contact with one or both star wheels and baler mounted processor. | 4. Reconnect. |
| | 5. Short in wire between star wheels and DCP. | 5. Replace wire. |
| | 6. Check hay with hand tester to verify. | 6. Contact Harvest Tec if conditions persist. |
| Moisture readings erratic. | Test bales with hand tester to verify that DCP has more variation than hand tester. | |
| | 2. Check all wiring connections for corrosion or poor contact. | 2. Apply dielectric grease to all connections. |
| | 3. Check power supply at tractor.Voltage should be constant between12 and 14 volts. | Install voltage surge protection on tractors alternator. |
| Terminal reads under or over power. | Verify with multi-meter actual voltage. Voltage range should be between 12-14 volts. | 1. Clean connections and make sure applicator is hooked to battery. See Diagnostics section of manual. |
| Bale rate displays zero. | Bale rate sensors are reversed. Short in cable. Damaged sensor. Sensor too far from starwheel. | Switch the sensors next to the star wheel. Replace cable. Replace sensor. Adjust gap between prox sensor and star wheel so it is 1/8-1/4" away. |
| MWM moisture reads low all the time | 1.Stuffer sensor out of adjustment | Verify stuffer sensor is not damage and is sensing the stuffer moving each time |
| Bluetooth Receiver lights will not illuminate | Bluetooth receiver not connected Harness disconnected Low power | Check connections and voltage. Minimum 12.5V needed. |
| | Red Light – The Bluetooth receiver has Green Light – When the proper active menu, the green light will indicate conr | connection is selected in the Hay App |

Power/Comm Harness 006-6650TM(E) at Hitch

| Pin 1 | Red | +12V Power to BLE |
|-------|-----|-------------------|
| Pin 2 | Red | +12V Power to DCP |

Pin 3 Orange Keyed Power

Pin 4 Gray Shield

Pin 5 Green HT Can Low Pin 6 Yellow HT Can Hi Pin 7 Orange Can1 Hi

Pin 8 Black Ground from BLE Pin 9 Black Ground from DCP

Pin 10 Blue Can1 Low

Power/Comm Harness 006-6650LS(E) or LS2(E) at Hitch

Pin 1 Red +12V Power to BLE Pin 2 Red +12V Power to DCP

Pin 3 Orange Keyed Power

Pin 4 Gray Shield

Pin 5 Green HT Can Low Pin 6 Yellow HT Can Hi Pin 7 Orange Can1 Hi

Pin 8 Black Ground from BLE Pin 9 Black Ground from DCP

Pin 10 Blue Can1 Low

Bluetooth Receiver on Harness 006-6650TM(E)

Pin 1 Red +12V Power from DCP
Pin 2 Black Ground from BLE
Pin 3 Yellow HT Can Low
Pin 4 Gray Shield

Pin 5 Green HT Can Hi Pin 6 Orange Can1 Hi Pin 7 Blue Can1 Low

006-6650VA to DCP Whip

Pin 1 Red Can Power
Pin 2 Black Can Ground
Pin 3 Yellow HT Can Hi
Pin 4 Gray Shield
Pin 5 Green HT Can Low
Pin 6 Orange Can1 Hi
Pin 7 Blue Can1 Low

006-6650VA Harness to Baler Plug

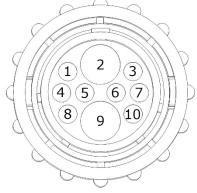
Pin A N/A

Pin B Red TBC Power

Pin C N/A

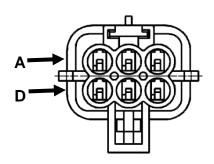
Pin D Gray TBC Ground
Pin E Orange Can1 Hi
Pin F Blue Can1 Low











Pin Outs (continued)

006-6650VA to 006-6650LS(E) or LS2(E)

| Pin 1 | Red | Can Power |
|-------|--------|------------|
| Pin 2 | Black | Can Ground |
| Pin 3 | Yellow | HT Can Hi |
| Pin 4 | Gray | Shield |
| Din 5 | Green | HT Can Low |

Pin 6 N/A Pin 7 N/A

Main Power Connector on Dual Channel Processor (DCP)

| Pin 1 | Red | +12V Power from tractor |
|-------|--------|-------------------------|
| Pin 2 | Black | Ground from tractor |
| Pin 3 | Orange | Keyed power |



| Pin 1 | Blue | +12V Power |
|-------|--------|---------------------|
| Pin 2 | Orange | Ground |
| Pin 3 | Black | Signal for sensor 1 |
| Pin 4 | White | Signal for sensor 2 |
| | | = |

Pin 5 N/A Pin 6 N/A Pin 7 N/A

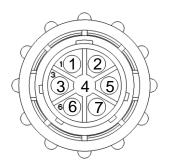
Pin 8 Violet Star wheel input 1 Pin 9 Brown Star wheel input 2

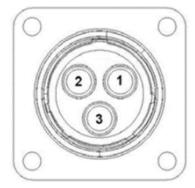
End of Bale Sensor on DCP

| Pin 1 | Brown | Sensor Power |
|-------|-------|---------------|
| Pin 2 | Blue | Sensor Ground |

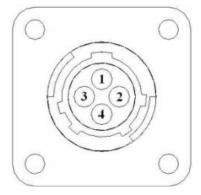
Pin 3 N/A

Pin 4 Black Signal from Sensor



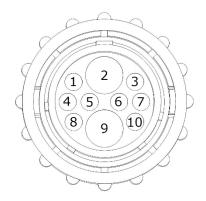






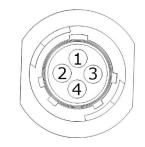
Microwave Moisture Harness 006-6650MW or 006-6650MWL

| Pin 1 | Red | Power |
|--------|--------|-----------|
| Pin 2 | N/A | Not Used |
| Pin 3 | N/A | Not Used |
| Pin 4 | Yellow | Can H In |
| Pin 5 | Green | Can L In |
| Pin 6 | Orange | Can H Out |
| Pin 7 | Blue | Can L Out |
| Pin 8 | Black | Ground |
| Pin 9 | N/A | Not Used |
| Pin 10 | N/A | Not Used |



Microwave Moisture Harness 006-6650MW or 006-6650MWL

| Pin 1 | Red | Power |
|-------|-------|----------|
| Pin 2 | Black | Ground |
| Pin 3 | N/A | Not Used |
| Pin 4 | Brown | Signal |

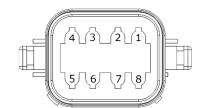


Microwave Moisture Harness 006-6650MW or 006-6650MWL (RX)

| Pin 1 | Black | Ground |
|-------|---------|--------|
| Pin 2 | Red | Power |
| Pin 3 | Yellow | Can H |
| Pin 4 | Green | Can L |
| Din E | Divagad | |

Pin 5 Plugged Pin 6 Plugged

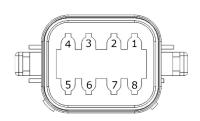
Pin 7 Brown Signal Pin 8 Black Ground



Microwave Moisture Chamber Harness 006-6650MW or 006-6650MWL (TX)

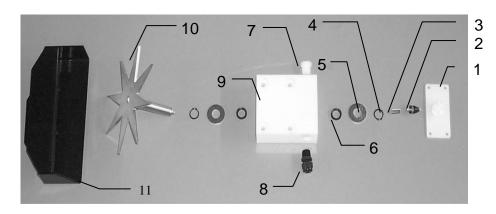
| IVIICIO | <u>vave ivioistur</u> | <u>e Cnambe</u> |
|---------|-----------------------|-----------------|
| Pin 1 | Black | Ground |
| Pin 2 | Red | Power |
| Pin 3 | Yellow | Can H |
| Pin 4 | Green | Can L |
| Din 5 | Dluggod | |

Pin 5 Plugged Pin 6 Plugged Pin 7 Plugged Pin 8 Plugged

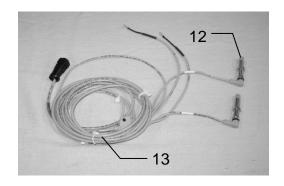


Parts Breakdown

Star Wheel Moisture Sensor and Bale Rate Sensors



| Ref | Description | Part Number | Qty | Ref | <u>Description</u> | Part Number | Qty |
|-----|----------------------|-------------|-----|------|---------------------------|-------------|-----|
| 1 | Block cover | 006-4641B | 2 | 9 | Star wheel block | 006-4641A | 2 |
| 2 | Electronic swivel | 006-4642A | 2 | 10 | Star wheel sensor | 030-4641C | 2 |
| 3 | Swivel insert | w/ Ref # 10 | 2 | 11 | Twine guard-left | 001-4645 | 1 |
| 4 | Snap ring (per side) | 006-4641K | 2 | | Twine guard-right (prox) | 001-4644 | 1 |
| 5 | Washer (per side) | w/006-4641K | 2 | | And with bale rate sensor | | |
| 6 | Dust seal (per side) | w/006-4641K | 2 | | holes in it | | |
| 7 | Plug fitting | 003-F38 | 2 | 1-10 | Star wheel assembly | 030-4641 | 2 |
| 8 | Wiring grommet | 008-0821A | 2 | | • | | |



| Ref | Description | Part Number | Qty |
|-----|--------------------------------|---------------|------------|
| 12 | Bale rate sensor | 006-7303S | 2 |
| 13 | Moisture and bale rate harness | 006-7303HL(E) | 1 |

602 Control and Harnesses



| Ref | Description | Part Number | Qty |
|-----|---|----------------|-----|
| 1 | Dust Plugs | 006-5651PLUGS | 1 |
| 2 | End of Bale Sensor 600 Series | 006-7400 | 1 |
| 3a | Hesston 4755, 4910 EOB Mount | 001-4648H | 1 |
| 3b | EOB Bracket CLAAS 3300 | 001-4648C | 1 |
| 3c | Krone EOB Bracket | 001-4648K | 1 |
| 3d | EOB BKT Krone 12130 | 001-4648K2 | 1 |
| 3e | End of Bale Sensor Bracket | 001-4948 | 1 |
| 4 | DCP Shield Cover | 001-5650X | 1 |
| 5 | DCP Main Control LS 600 AUTO | 006-6671LS | 1 |
| 6 | Terminating Connector w/ Green Cap | 006-5650Z | 1 |
| 7 | DCP Baler Harness 30' | 006-6650LS2(E) | 1 |
| 8 | DCP Tractor Harness | 006-6650TM(E) | 1 |
| 9 | Optional ISOBUS Tractor Plug (not included) | 006-6670A | 1 |
| 10 | Key Switch Wire | 006-5650K | 1 |
| 11 | Bluetooth Receiver | 030-6672A | 1 |



602A Control and Harnesses

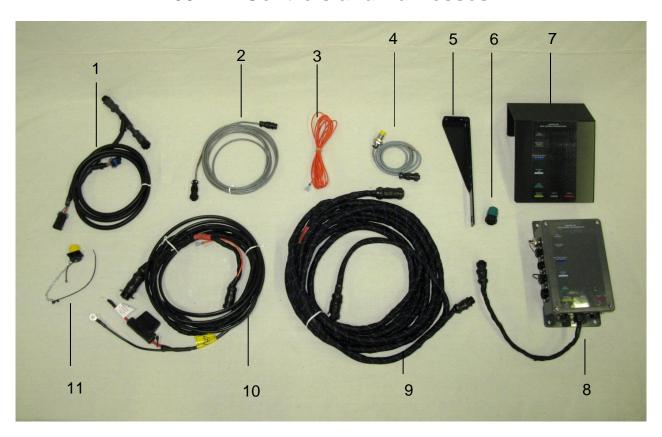


| Ref | <u>Description</u> | Part Number | Qty |
|-----|-----------------------------------|----------------|-----|
| 1 | DCP Baler Interface Harness | 006-6650VA | 1 |
| 2 | Key Switch Wire | 006-5650K | 1 |
| 3 | End Of Bale Sensor | 006-7400 | 1 |
| 4 | Terminating Connector w green cap | 006-5650Z | 1 |
| 5 | End of Bale Sensor Bracket | 001-4648 | 1 |
| 6 | DCP Shield/Cover | 001-5650X | 1 |
| 7 | DCP Main Control LS 600 AUTO | 006-6671LS | 1 |
| 8 | DCP Baler Harness 30 FT | 006-6650LS2(E) | 1 |
| 9 | DCP Tractor Harness | 006-6650TM(E) | 1 |
| 10 | Dust Plugs | 006-5651PLUGS | 1 |
| | Bluetooth Receiver | 030-6672A | 1 |

AGCO 2100 Series Balers Pre 2012 need 006-6650VAX



602BB Controls and Harnesses



| Ref | <u>Description</u> | Part Number | Qty |
|-----|--|---------------|-----|
| 1 | DCP Baler ISO/VT Harness | 006-6650VA | 1 |
| 2 | EOB Extension for CNH BB Series | 006-7400BBEXT | 1 |
| 3 | Key Switch Wire | 006-5650K | 1 |
| 4 | End of Bale Sensor 600 Series | 006-7400 | 1 |
| 5 | End of Bale Sensor Bracket | 001-4648 | 1 |
| 6 | Terminating Connector 600 Series w/green cap | 006-5650Z | 1 |
| 7 | DCP Shield/Cover | 001-5650X | 1 |
| 8 | DCP Main Control LS 600 AUTO | 006-6671LS | 1 |
| 9 | DCP Baler Harness 15 FT | 006-6650LS(E) | 1 |
| 10 | DCP Tractor Harness | 006-6650TM(E) | 1 |
| 11 | Dust Plugs | 006-5651PLUGS | 1 |
| 12 | Bluetooth Receiver | 030-6672A | 1 |



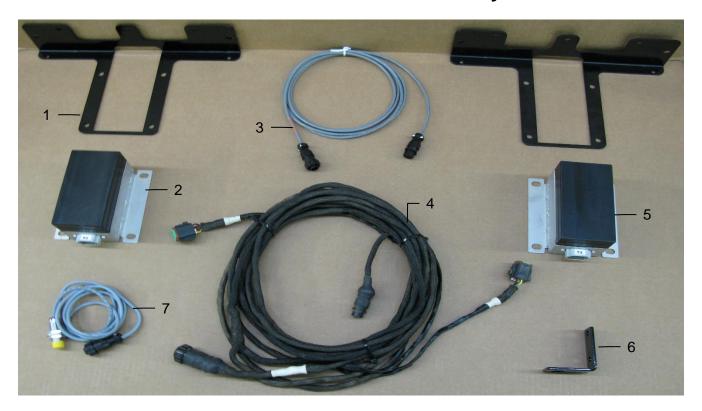
602J Control and Harnesses



| Ref | Description | Part Number | Qty |
|-----|-----------------------------------|----------------|-----|
| 1 | Dust Plugs | 006-5651PLUGS | 1 |
| 2 | End of Bale Sensor 600 Series | 006-7400 | 1 |
| 3 | End of Bale Sensor Bracket | 001-4648J | 1 |
| 4 | DCP Shield Cover | 001-5650X | 1 |
| 5 | DCP Main Control LS 600 AUTO | 006-6671LS | 1 |
| 6 | Terminating Connector (Green Cap) | 006-5650Z | 1 |
| 7 | DCP Baler Harness 30 Ft | 006-6650LS2(E) | 1 |
| 8 | DCP Tractor Harness | 006-6650TM(E) | 1 |
| 9 | Key Switch Wire | 006-5650K | 1 |
| 10 | Bluetooth Receiver | 030-6672A | 1 |
| NP | Baler Integration Harness | 006-6650VAJ | 1 |



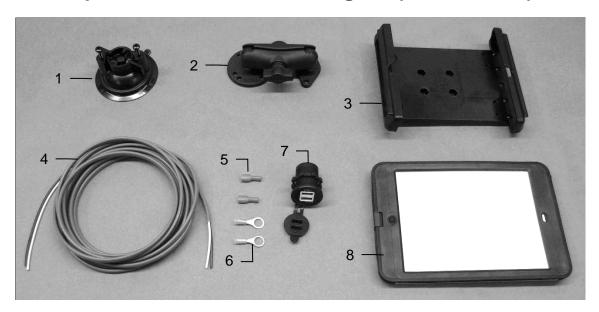
Microwave Moisture Bale Chute System



| Ref | <u>Description</u> | Part # | Qty |
|-----|---------------------------------------|-------------|-----|
| 1 | MWM Rear Mounting Bracket | 001-2601 | 2 |
| 2 | Microwave TX Sensor | 006-4641MTX | 1 |
| 3 | End of Bale Extension Harness (20') | 006-7400MXT | 1 |
| 4 | MWM Pre-Compression Harness | 006-6650MWL | 1 |
| 5 | Microwave RX Sensor | 006-4641MRX | 1 |
| 6 | End of Bale Bracket (Stuffer Bracket) | 001-4648SS | 1 |
| 7 | End of Bale Sensor (Stuffer Sensor) | 006-7400 | 1 |
| NP | Power / Comm Extension Harness (25') | 006-6650FMX | 1 |

Complete Assembly 030-0701MWM (Ref 1-7)

Optional iPad Mini Mounting Kit (030-2014MK)



| Ref | <u>Description</u> | Part # | Qty |
|-----|---|------------------------------------|-----|
| 1 | Suction cup mount | 001-2012SCM | 1 |
| 2 | Ram mount | 001-2012H | 1 |
| 3 | iPad Mini spring load cradle (Mini 1,2,3) | 001-2012SLC | 1 |
| 4 | 16 gauge power wire | 006-4723P | 1 |
| 5 | Female spade connector | Hardware | 2 |
| 6 | Eye loop connector | Hardware | 2 |
| 7 | iPad Mini Charger 12V | 001-2012P | 1 |
| 8 | iPad Mini 4 case | 001-2012C4 | 1 |
| NP | 4 amp fuse | Hardware | 1 |
| | Mounting Kit Assembly | 030-2014MK (Includes All Parts) | |

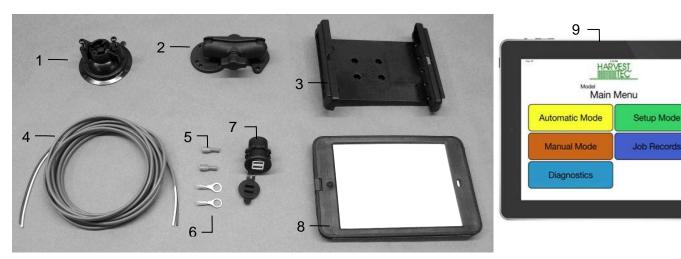
Installation Instructions

- 1. Identify 12V power source for wires to connect.
 - a. Eye loops included if wiring directly to the battery is desired.
 - b. Test for key power source if preferred to have power to the USB shut off with the key.
- 2. Once power source is identified, cut wires to desired length.
- 3. Crimp the two supplied quick connectors onto each the white and black wire.
- 4. Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- 5. The wires will then be hooked to the designated terminals on the bottom of the USB plug
- 6. Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- 7. Feed the wires through the mounting hole.
- 8. If using the round plastic nut to secure plug in place, slide the nut back over the wiring before connecting the wires to powered source.
- 9. Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- 10. Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- 11. Once connected, hook a USB charging cord into the plug and connect a mobile device/tablet to ensure the plug is operating as you wish (key power working properly if necessary).

NOTE: This plug is not designed to charge two iPads. System damage could occur if this is attempted. System will charge a mobile phone and iPad simultaneously without problem.

Optional iPad Display Kit (030-4670DK)

Job Records



| Ref | Description | Part # | Qty | Ref | Description | Part # | Qty |
|-----|--|-------------|-----|-----|-----------------------|------------------------------|-----|
| 1 | Suction cup mount | 001-2012SCM | 1 | 7 | iPad Mini Charger 12V | 001-2012P | 1 |
| 2 | Ram mount | 001-2012H | 1 | 8 | iPad Mini 4 case | 001-2012C4 | 1 |
| 3 | iPad Mini spring load cradle (Mini 4) | 001-2012SLC | 1 | 9 | iPad Mini 4 | 006-4670IP | 1 |
| 4 | 16 gauge power wire | 006-4723P | 1 | NP | 4 amp fuse | Hardware | 1 |
| 5 | Female spade connector | Hardware | 2 | | • | | |
| 6 | Eye loop connector | Hardware | 2 | Mou | nting Kit Assembly | 030-4670D (Includes All F | |

Installation Instructions

- 1. Identify 12V power source for wires to connect.
 - a. Eye loops included if wiring directly to the battery is desired.
 - b. Test for key power source if preferred to have power to the USB shut off with the key.
- 2. Once power source is identified, cut wires to desired length.
- 3. Crimp the two supplied quick connectors onto the white and black wire.
- 4. Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- 5. The wires will then be hooked to the designated terminals on the bottom of the USB plug
- 6. Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- 7. Feed the wires through the mounting hole.
- 8. If using the round plastic nut to secure plug in place, slide the nut back over the wiring before connecting the wires to powered source.
- 9. Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- 10. Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- 11. Once connected, hook a USB charging cord into the plug and connect a mobile device/tablet to ensure the plug is operating as you wish (key power working properly if necessary).

NOTE: This plug is not designed to charge two iPads. System damage could occur if this is attempted. System will charge a mobile phone and iPad simultaneously without problem.

Harvest Tec LLC. Warranty and Liability Agreement

Harvest Tec, LLC. will repair or replace components that are found to be defective within 12 months from the date of manufacture. Under no circumstances does this warranty cover any components which in the opinion of Harvest Tec, LLC .have been subjected to negligent use, misuse, alteration, accident, or if repairs have been made with parts other than those manufactured and obtainable from Harvest Tec, LLC.

Our obligation under this warranty is limited to repairing or replacing free of charge to the original purchaser any part that in our judgment shows evidence of defective or improper workmanship, provided the part is returned to Harvest Tec, LLC. within 30 days of the failure. If it is determined that a non-Harvest Tec branded hay preservative has been used inside the Harvest Tec applicator system where the failure occurred, then Harvest Tec reserves the right to deny the warranty request at their discretion. Parts must be returned through the selling dealer and distributor, transportation charges prepaid.

This warranty shall not be interpreted to render Harvest Tec, LLC. liable for injury or damages of any kind, direct, consequential, or contingent, to persons or property. Furthermore, this warranty does not extend to loss of crop, losses caused by delays or any expense prospective profits or for any other reason. Harvest Tec, LLC. shall not be liable for any recovery greater in amount than the cost or repair of defects in workmanship.

There are no warranties, either expressed or implied, of merchantability or fitness for particular purpose intended or fitness for any other reason.

This warranty cannot guarantee that existing conditions beyond the control of Harvest Tec, LLC. will not affect our ability to obtain materials or manufacture necessary replacement parts.

Harvest Tec, LLC. reserves the right to make design changes, improve design, or change specifications, at any time without any contingent obligation to purchasers of machines and parts previously sold.

Revised 4/17

HARVEST TEC, LLC. P.O. BOX 63 2821 HARVEY STREET HUDSON, WI 54016

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Email: info@harvesttec.com