Operation Manual

Model 600J

Moisture Sensor Kit for John Deere Large Square Balers

HARVEST TEC
Equipment and Products for Quality Hay.™

P.O. Box 63 • 2821 Harvey Street • Hudson, WI 54016
800-635-7468 • www.harvesttec.com

600J-16-OPR-BLE
6/22

(intentionally blank)

Harvest Tec Model 600J Operations Table of Contents

	PAGE
Introduction	**4**
System Requirements	**4**
Safety	**4**
Safety Decals	**4**
Connecting Power and Communication Harness	**5**
Operation of the ISOBUS Monitor	**5**
Screen Menus	**6-13**
Operating Instructions	7
Automatic Mode	8
Manual Mode	9
Diagnostics	10
Setup Mode	11-12
Job Records	13
Setting Up Bale Parameters for Initial Use	**14**
Operating Instructions for Additional Screens	**15-17**
Diagnostics	15
Job Records	16-17
iPad Integration Control	**18**
iPad Integration Control Light Signals	18
Bluetooth Receiver Lights	18
Maintenance	**19**
Dielectric grease connections	19
Battery connections	18
Winter Storage	**19**
Status Alerts	**19**
Wiring Diagram	**20**
Pin Outs	**21-23**
Common Questions	**24**
Troubleshooting	**25**
Parts Breakdown	**26-29**
Control boxes and wiring harnesses	26
Star wheel sensors	27
Optional iPad Mini Mounting Kit	28
Optional iPad Display Kit	29
Notes	**30**
Warranty Statement	**31**

Introduction

Thank you for purchasing a Harvest Tec Model 600J Moisture Monitoring System. This 600J system has been designed to plug directly into the baler's ISOBUS and/or an Apple iPad (not included) display. The 600J Moisture Monitoring System offers these advantages:

1. Operation coordinated with baler operation
2. Less cab clutter providing better visibility
3. Ease of use with all information on one monitor
4. Records kept together
5. System is ready for future updates

The 600J Moisture Monitoring kit includes the following parts: Dual Channel Processor (DCP), Moisture Sensors, Harnesses and Miscellaneous Hardware. For your convenience a parts breakdown for the 600J Moisture Monitoring System is included in the back of this manual. Your local dealer can assist you answering any questions and ordering parts.

Right and Left sides are determined by facing in the direction of forward travel.

System Requirements

***Made for iPad® (3rd through Pro 2nd generation), running the current iOS operating system or one version previous required for iPad option**

*iPad is a trademark of Apple Inc., registered in the U.S. and other countries.

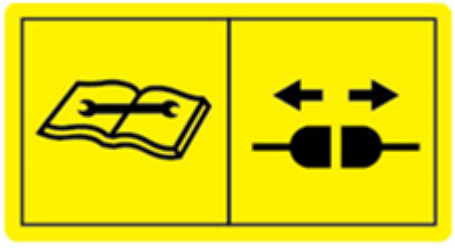
****600 Series Applicators with serial number before DCP27000 will require the DCP to be sent to Harvest Tec for a required update in order to use the iPad Integration Module (030-6672C).**

*Hay App version must be **at least 2.5.18 (or higher)** to operate with the iPad Integration Module

Safety

Carefully read all the safety signs in this manual and on the applicator before use. Keep signs clean and visible. Replace missing or damaged safety signs. Replacement signs are available from your local authorized dealer. See your installation manual under the replacement parts section for the correct part numbers.
Keep your applicator in proper working condition. Unauthorized modifications to the applicator may impair the function and/or safety of the machine.

Safety Decals



Number 1
Disconnect power before servicing.
Part no. DCL-8003

Number 2
Read and understand the operator's manual before using or working around the equipment.
Part no. DCL-8000

Connecting Power and Communication Harness

The harnesses are located at the front of the baler near the hitch and at the back of the tractor near the drawbar. See arrow below. Make sure all connection wires are free between the hitch of the baler and the back of the tractor, especially when tractor is turning away.

WARNING: Stop tractor engine and shift to park or neutral, set brakes and remove key before leaving the tractor.

Operation of the ISOBUS Monitor

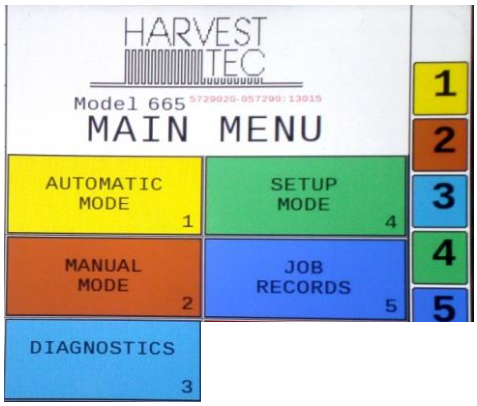
The ISOBUS Monitor selections are made utilizing a combination of soft keys, number menus, or a scroll wheel on the upper right side of the actual monitor to make selections depending on which ISOBUS Monitor you have.

At any time after the initial Start Up/Power On the **Uploading Data** status bar should begin to fill. Please refer to your ISOBUS Monitor manual to verify how this upload is displayed.

Once the upload has completed the operator can toggle between the tractor display and the Harvest Tec functions by pushing the **Next Implement** key. This key may have circling arrows or arrows forming a triangle.

Description of Screens and Menus for ISOBUS Monitor

This 600J system will allow you to set your bale size, weight, single bale formation time, and view moisture levels. The moisture information can be viewed in manual or automatic mode.



Main Menu for the Hay Preservative

Listed below are the Main Menu Options.

Automatic Mode (1) This operating mode automatically adjusts preservative application as you bale. The following items are displayed in the mode while baling: Moisture, Baling Rate, Application Rate (actual and target), Last Bale Average Moisture, Tons Baled, and Pounds of Product Used.

Manual Mode (2) This operating mode allows the three different pumps to be turned on at a fixed rate as you bale. The following items are displayed in the mode while baling: Moisture, Baling Rate, Application Rate (actual only), Last Bale Average Moisture, Tons Baled, and Pounds of Product Used. This mode can also be used to prime the pumps.

Diagnostics (3) Allows operator to set the date and time. The installed software versions can also be viewed.

Setup Mode (4) This mode allows the operator to customize the applicators settings for their baler and baling needs. This mode allows changes to be made to the following areas: Application Rate, Baling Rate, Language, US or Metric units, and turn on/off the optional Hay Indicators.

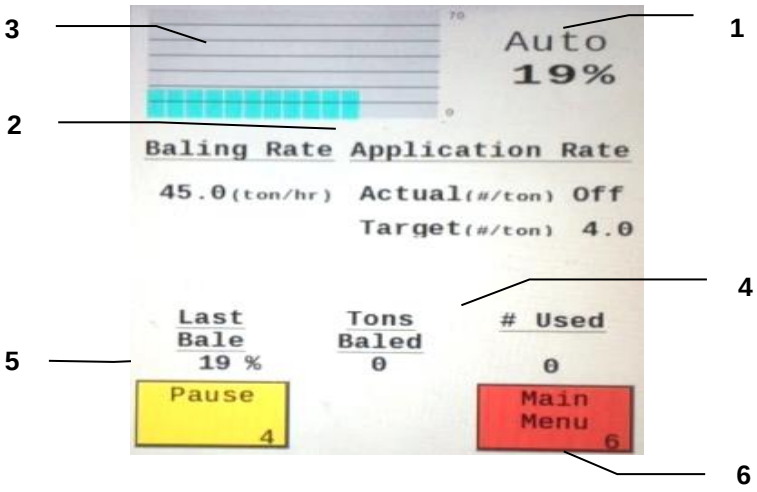
Job Records (5) Keeps track of up to 300 plus jobs with total product used, average moisture content, highest moisture content, tons baled, date of baling, and total number of bales made. Individual bales are also able to be viewed and the records can also be downloaded to a USB drive in this mode.

Operating Instructions

Automatic Mode will be used in the field to read both hay moisture content sensed by the star wheels and the operator's preset parameters to determine baling rate and tons per hour.

Automatic Mode (or Manual Mode)

After pushing the **AUTOMATIC MODE** key in the **MAIN MENU** screen, the following screen should appear:

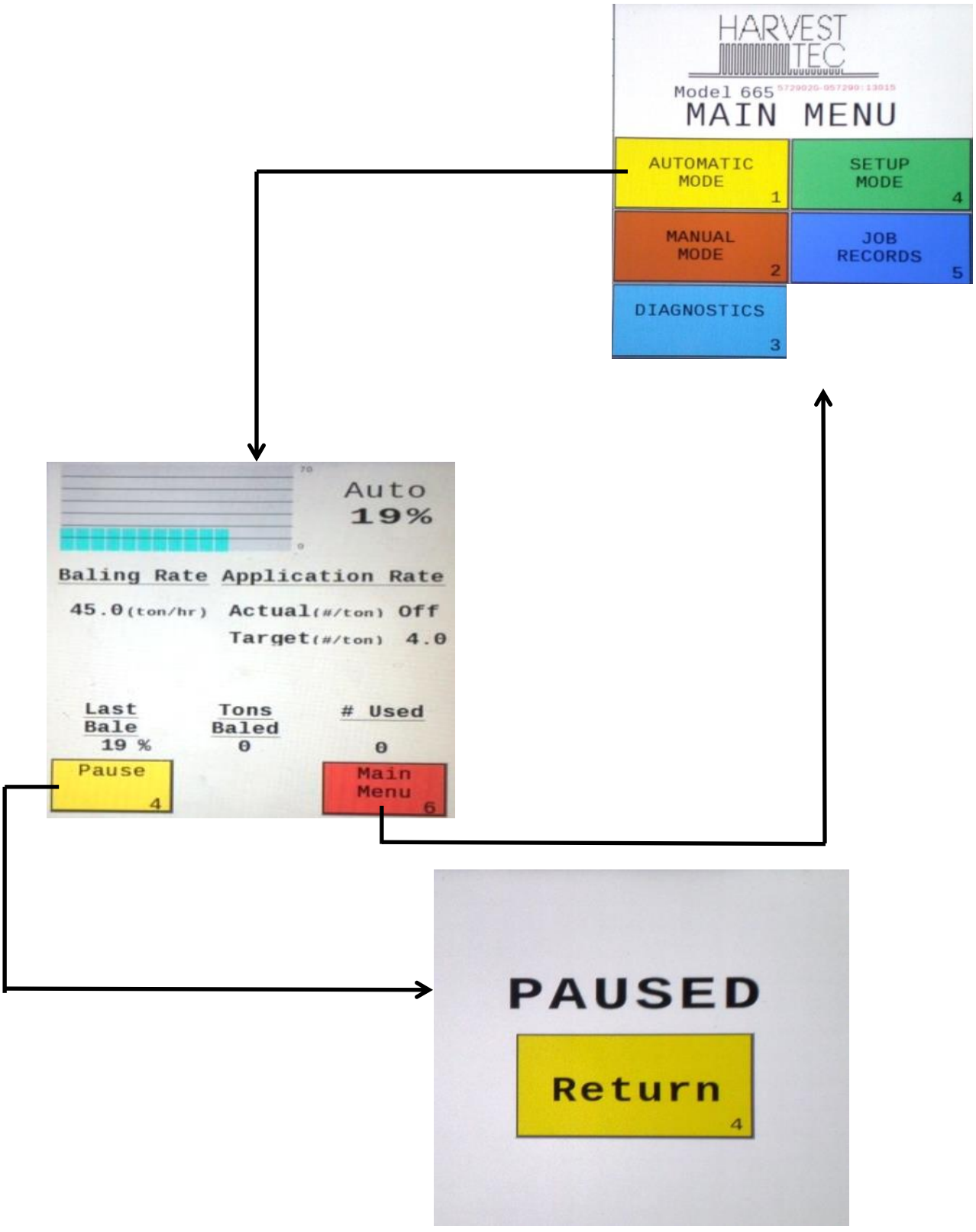


1. The moisture content is shown in the upper right hand corner (1)
2. **Baling Rate and Application Rate** (2) are shown in the middle. The application rate will always be zero. The target rate will show a number when the moisture of the hay exceeds the initial set point of 16%. The Baling Rate is calculated in the **SETUP MODE**.
3. The **Graph** (3) shows the moisture trend from the past 90 seconds in 3 second intervals.
4. The totals on the bottom of the screen show the total **Tons Baled** and **# Used** (4) (pounds of product used) for the current job. These numbers will reset to zero when a new Job Record is started. If operating with Bale Rate Sensors OFF total Tons Baled will be zero.
5. **Last Bale** (5) shows the average moisture content for the last bale.
6. Press the **MAIN MENU** (6) key to return to the opening screen.

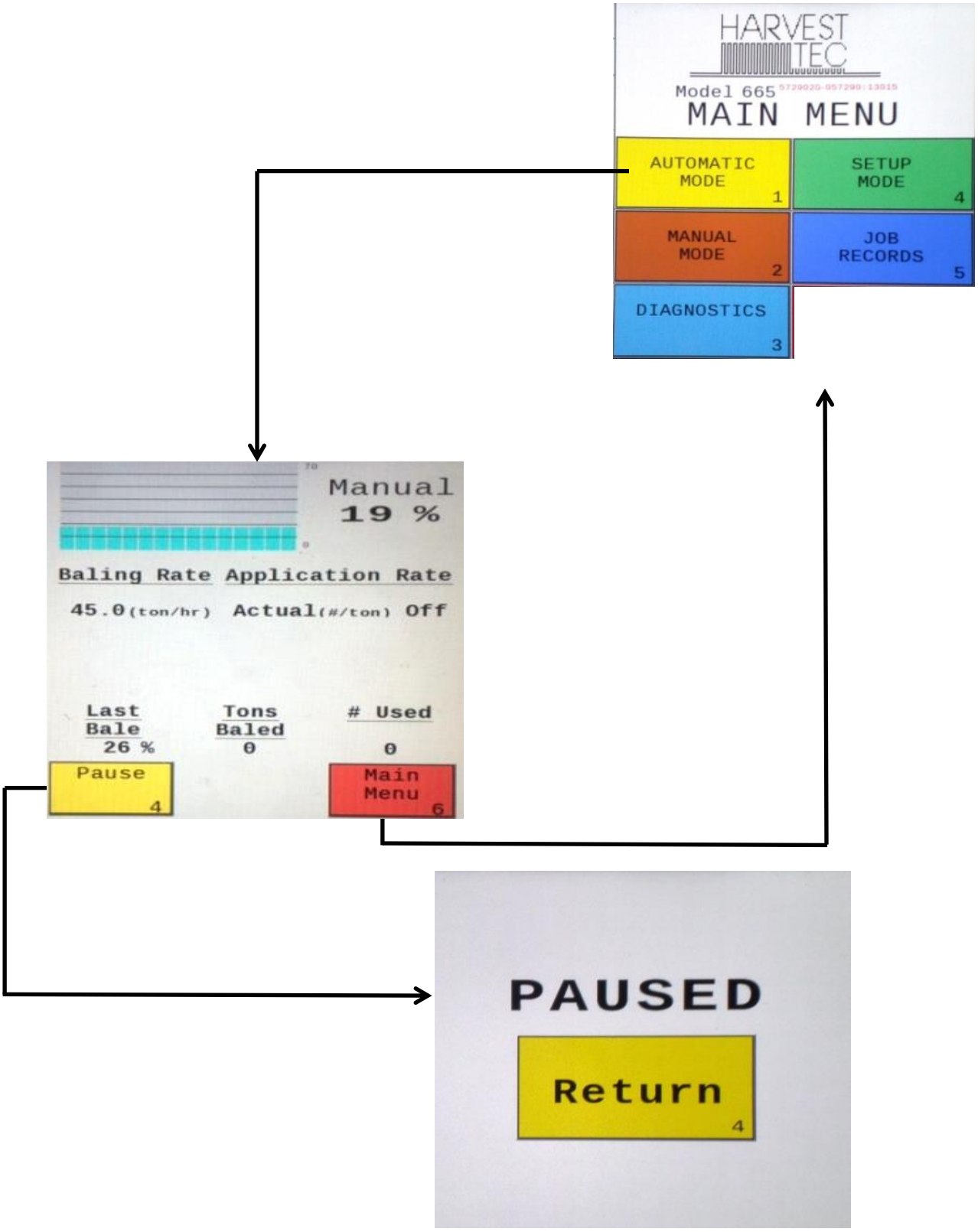
Screen Menus

Use the below listed screen menus to navigate through all of the operation screens. Navigation through the screens is accomplished by using the touch screen of the controller and pressing.

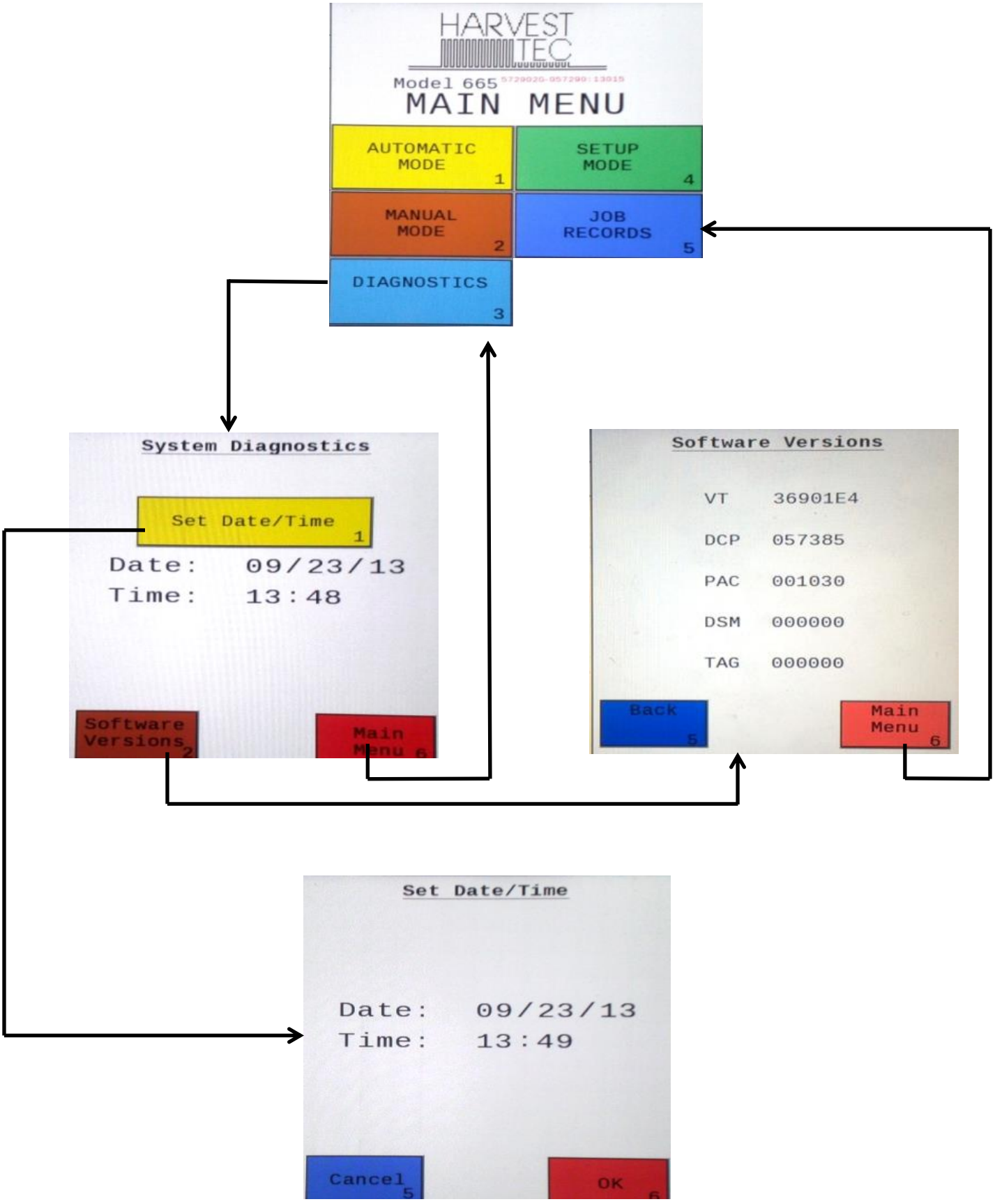
Automatic Mode:



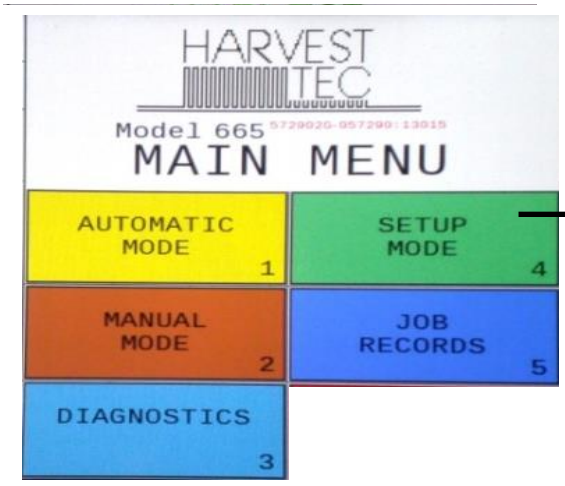
Manual Mode:

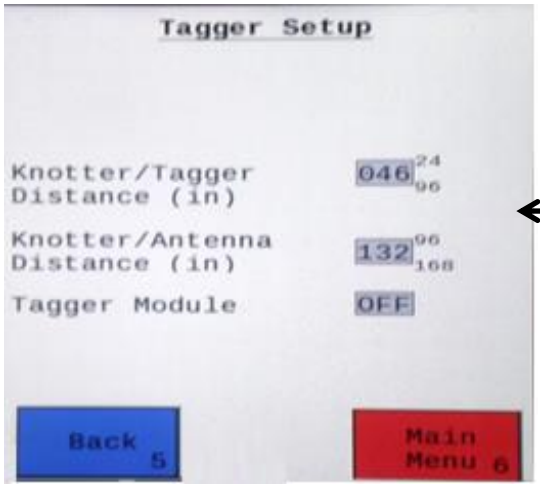

HARVEST TEC
Model 665
MAIN MENU
AUTOMATIC MODE 1
SETUP MODE 4
MANUAL MODE 2
JOB RECORDS 5
DIAGNOSTICS 3
Manual
19 %
Baling Rate
45.0(ton/hr)
Application Rate
Actual(#/ton)
Off
Last Bale
26 %
Tons Baled
0
Used
0
Pause 4
Main Menu 6
PAUSED
Return 4

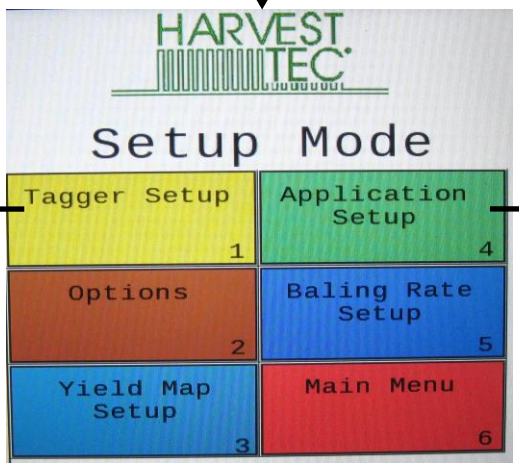
Diagnostics:

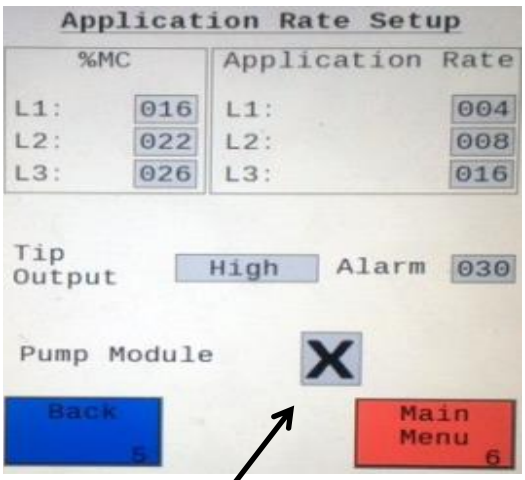


Setup Mode:



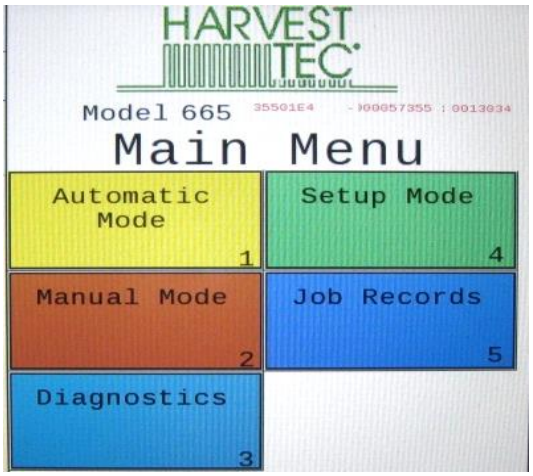


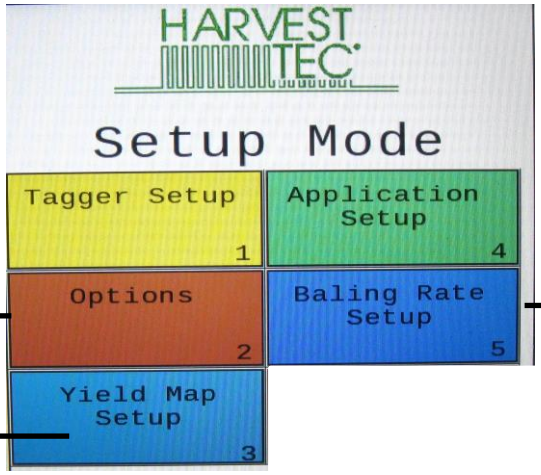


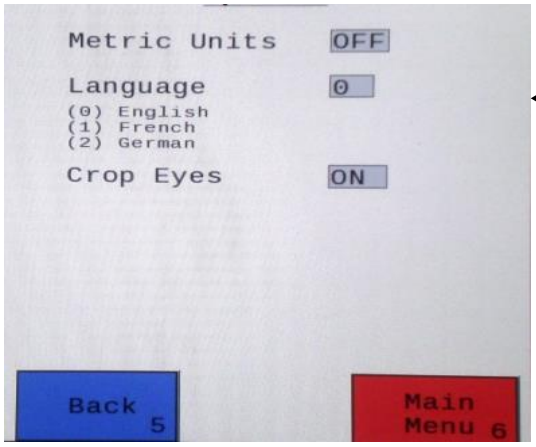


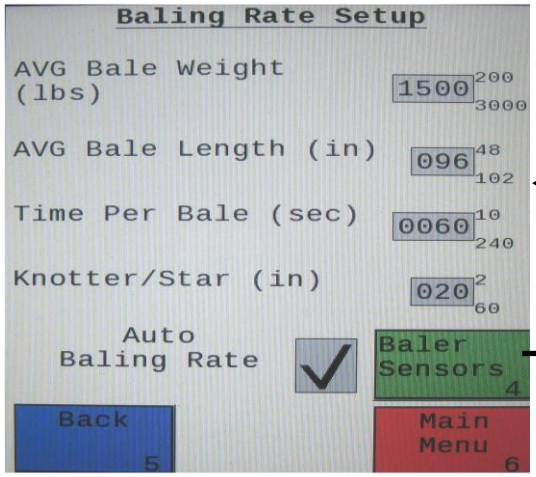
*Make sure the Pump Module is shut off

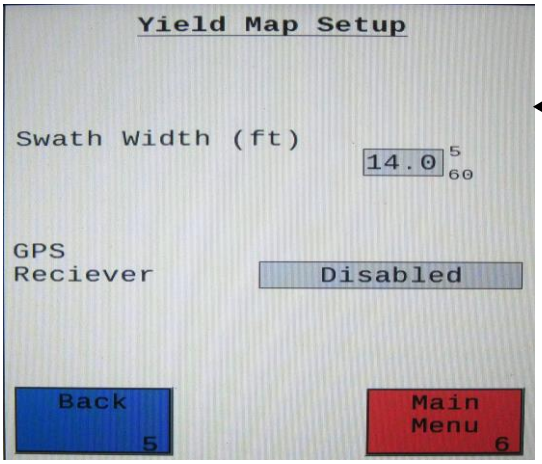
Setup Mode (continued):

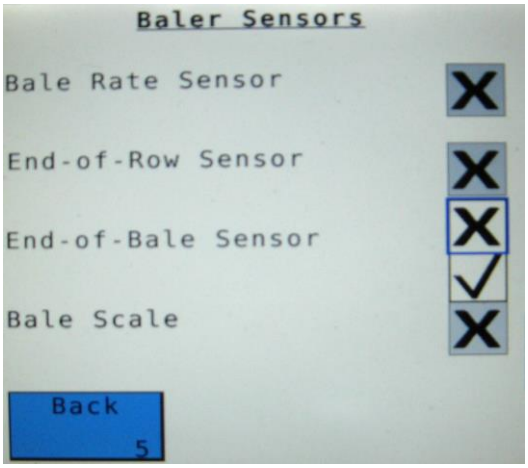






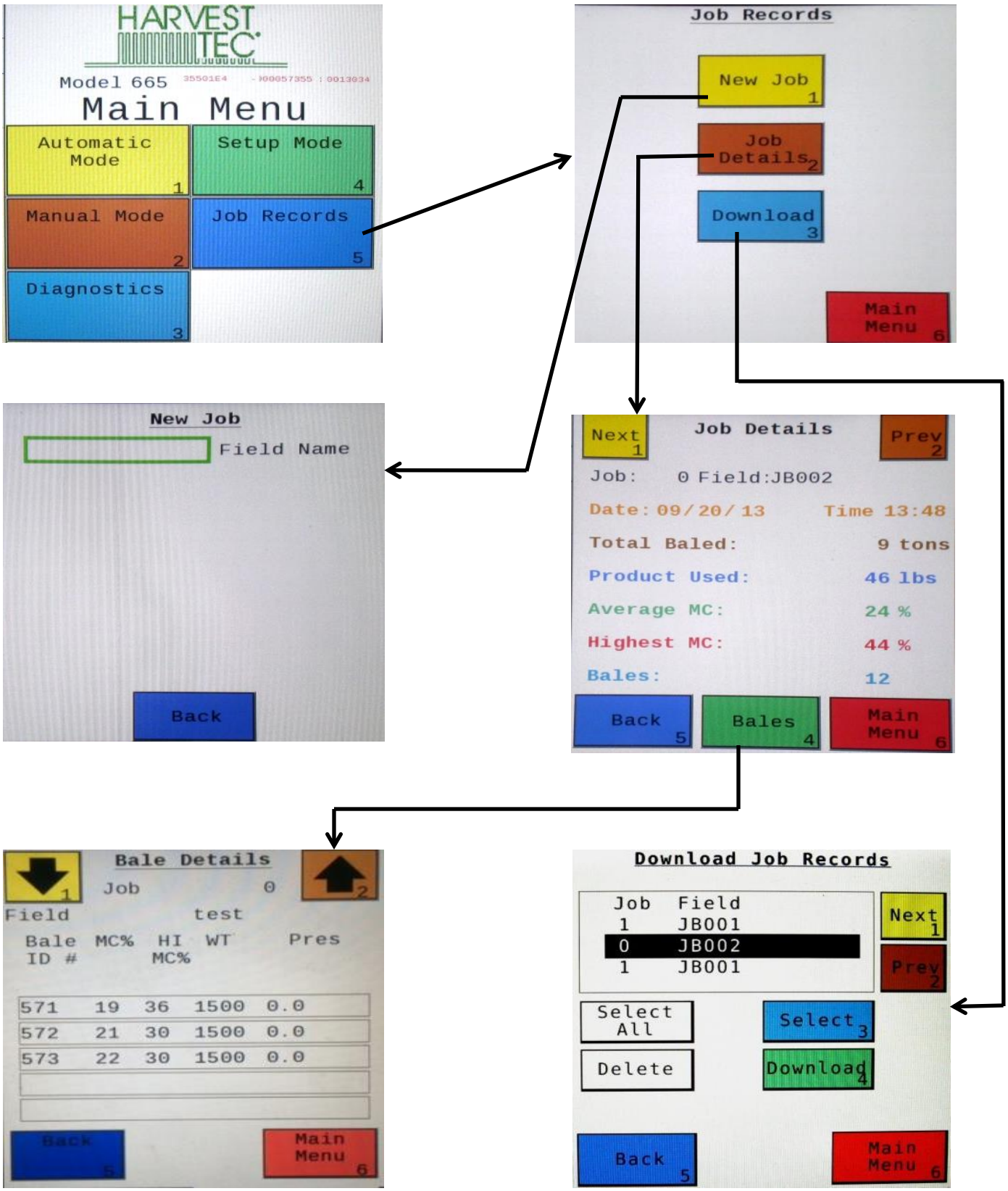






*Make sure all Sensors are shut off,
Turn on Bale Scale if equipped

Job Records:

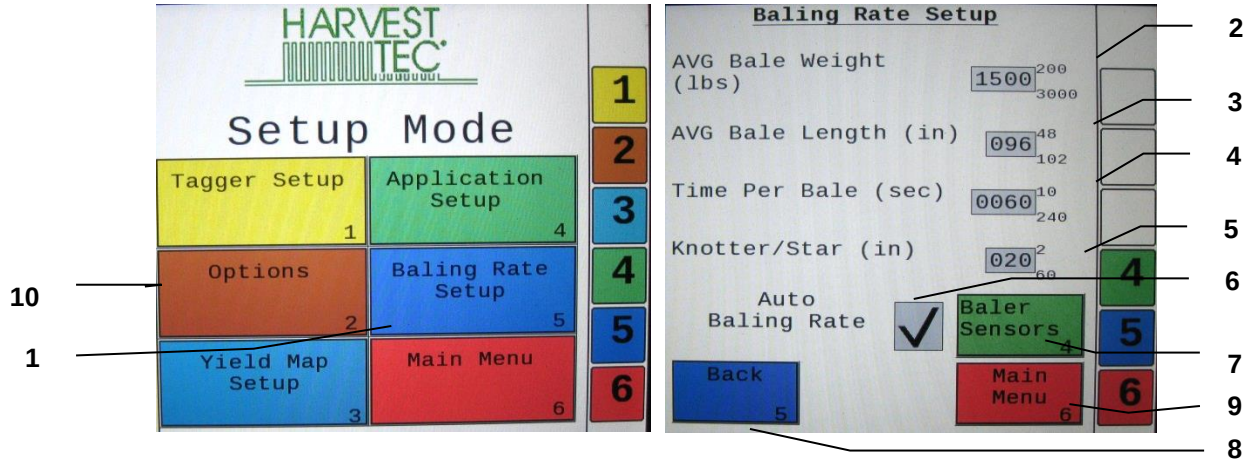

HARVEST TEC
Model 665
Main Menu
Automatic Mode 1
Setup Mode 4
Manual Mode 2
Job Records 5
Diagnostics 3
Job Records
New Job 1
Job Details 2
Download 3
Main Menu 6
New Job
Field Name
Back
Next 1
Job Details
Prev 2
Job: 0 Field:JB002
Date: 09/20/13 Time 13:48
Total Baled: 9 tons
Product Used: 46 lbs
Average MC: 24 %
Highest MC: 44 %
Bales: 12
Back 5
Bales 4
Main Menu 6
Bale Details
Job 0
Field test
Bale ID # MC% HI MC% WT Pres
571 19 36 1500 0.0
572 21 30 1500 0.0
573 22 30 1500 0.0
Back 5
Main Menu 6
Download Job Records
Job Field
1 JB001
0 JB002
1 JB001
Next 1
Prev 2
Select All
Select 3
Delete
Download 4
Back 5
Main Menu 6

Setting Up Bale Parameters for Initial Use

In the SETUP MODE you will set your initial baling rate.

Baling Rate Setup

After pushing the **SETUP MODE** key in the **MAIN MENU** screen, the top screen should appear:

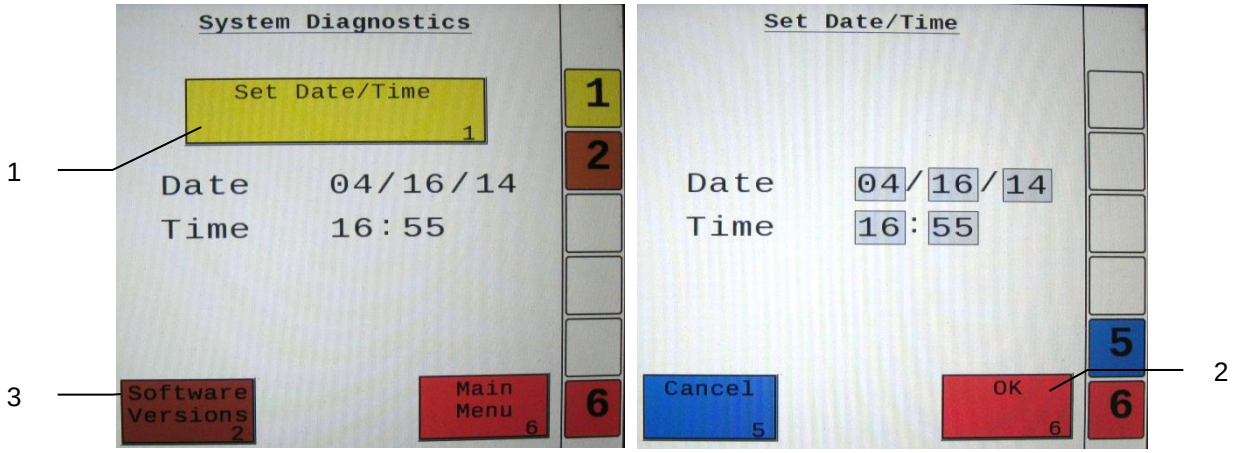


1. On this screen the operator will Select the **BALING RATE SETUP** (1) key.
2. Select the number to the right of **AVG Bale Weight (Lbs)** (2) : to adjust the weight of your bales. The key pad shown will display. Select any number combination in this screen within the min/max limits. The information will remain until it is changed again.
3. Select the number to the right of **AVG Bale Length (In)** (3): to adjust the length of your bales. Select any number combination in this screen within the min/max limits. The information will remain until it is changed again.
4. Select the number to the right of **Time Per Bale (Sec)** (4): to adjust the time it takes to make a bale. Select any number combination in this screen within the min/max limits. The information will remain until it is changed again.
5. Select the number to the right of **Knotter/Star** (5) to adjust the distance between the knotter and star wheel. To determine the distance, measure between the center of the starwheel and the center of the knotter. This is important so the job record correlates to the bale being made.
6. When the **AUTO Bale Rate** (6) sensors are **ON** the applicator will calculate your tons per hour automatically. When the **AUTO Bale Rate** (6) sensors are **OFF** a constant tons per hour (your inputed bale weight and time) will be used. Operating the unit with the AUTO Bale Rate sensors OFF will cause total tons per hour in Job Records to be left blank. Select the underlined word to toggle between ON or OFF. **First Time and Annual Setup is checking with AUTO Bale Rate sensors OFF.**
7. Selecting the **Baler Select** (7) will allow you to use the baler sensors if your baler is equiped with them from the factory. The baler sensors will come OFF as a default. If you choose to use the baler sensors be sure your baler is equipped with that option. For example, if you do not have an electronic bale length kit, turn the sensor to OFF. The baler End of Row sensors are triggered once the PTO speed goes below 600RPM. The End of Bale sensor is triggered by the tie cycle alarm. The Bale Scale sensor is for the baler equiped with a Chute Scale. **Note: Baling on rough terrain or hills can cause the scale to give an inaccurate reading. Turn Bale Scale option OFF in the Bale Rate Screen and use AVG Bale Weight (2) reading as weight of bale.**
8. Next select the **Back** (8) key found on the bottom left hand of the screen to return to the **SETUP MODE** screen, or select the **MAIN MENU** (9) key on the bottom right hand of the screen to return to the opening screen.
9. Select the **OPTIONS** (10) key to adjust the system between metric and standard units. The **Crop Eyes** can also be turned **ON** or **OFF** in the **OPTIONS** screen. Select the ON/OFF next to Crop Eyes to change this setting. **Note**: If you change languages youmay need to reset the system from the MAIN MENU screen.

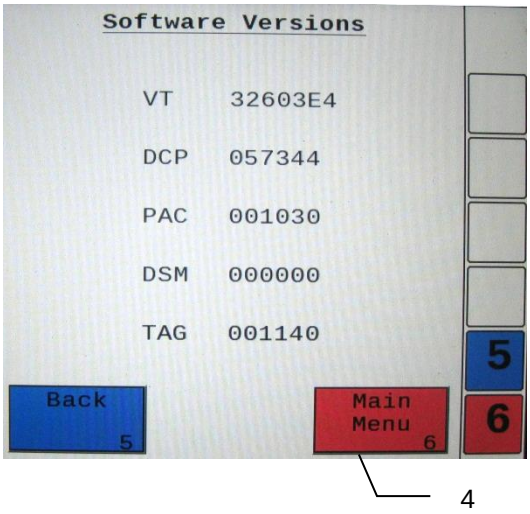
Operating Instructions for Additional Screens

Diagnostics

After pressing the **DIAGNOSTICS** key in the **MAIN MENU** screen, the screen on the left should appear:



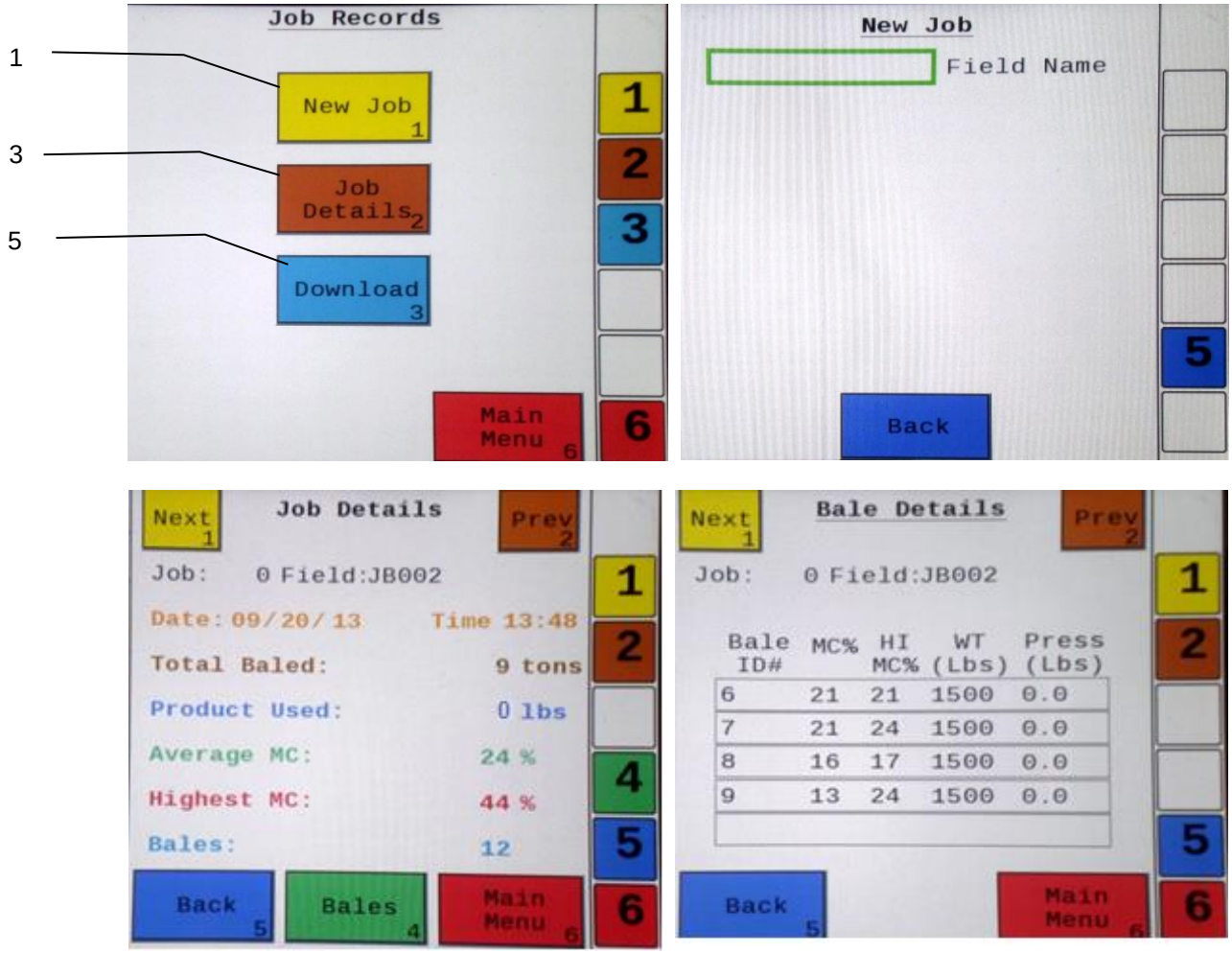
1. To set date and time select the **Set Date/Time** (1) key. In the next screen enter the date (month, day, year format) followed by the time. When done select the **OK** (2) key. NOTE: The clock uses military (or 24 hour) time.
2. Select the **Software Versions** (3) key to check all software versions of modules attached to the Dual Channel Processor (DCP).



3. Press the **MAIN MENU** (4) key to return to the opening screen.

Job Records

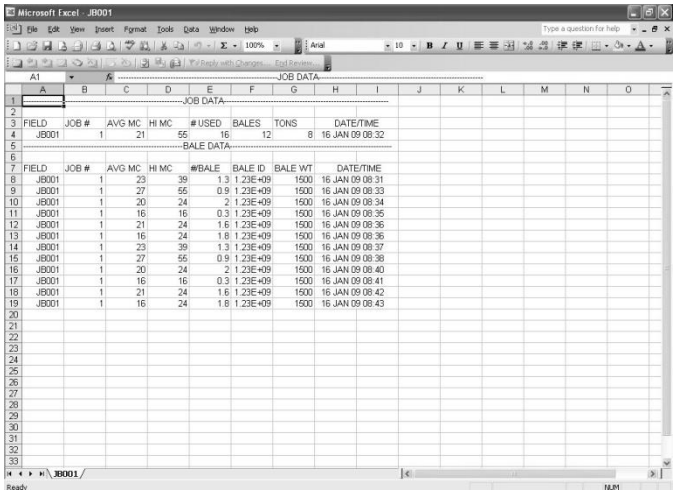
After pushing the **JOB RECORDS** key in the **MAIN MENU** screen, the upper left screen below should appear:

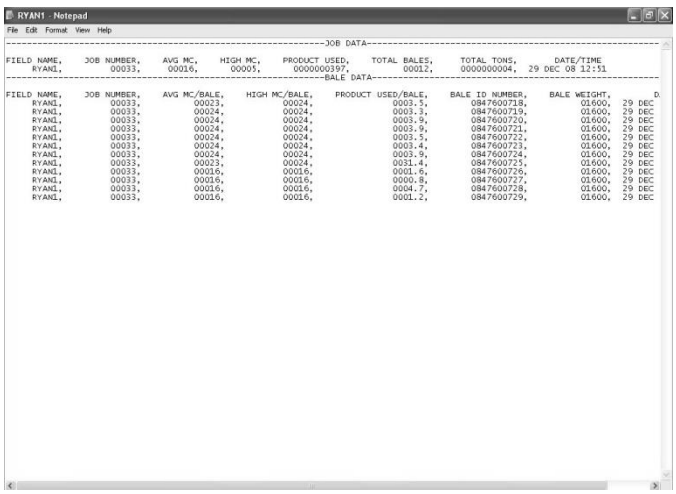


1. Selecting **New Job** will save all the previous bale records and open the **Field Name** screen.
2. Use the key pad in the Field Name screen to enter up to an eight character field name. Use the asterisk key to move on to the next letter or number if they are identical. Use the pound sign as a space between the characters. When you have completed the field name press enter.
3. Pressing **Job Details** will open the Job Details screen. Use the **Next** and **Prev** icons to view the different jobs. Job: 0 will always be your current and open job record. Press **Back** to go to the **Job** Records screen or **Main Menu** for the main screen.
4. Selecting **Bales** at the center bottom of the screen will open a **Bale Details** screen. This screen lets you look at the individual bale records for the first five bales made. Use the **Next** and **Prev** icons to scroll through five bales at a time. Select **Back** to go to the **Job Details** screen or **Main Menu** for the main screen.

Continued on the next page

Job Records (continued)



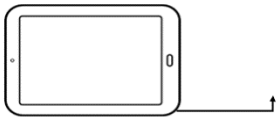


1. Selecting the **Download** key will open the Download Job Records screen. This screen lets you select jobs to download onto a USB drive. To download insert a USB drive into the port on the Dual Channel Processor. Select the job(s) you would like to download using the Next and Prev icons to highlight the job(s). Once the desired jobs are selected press the **Download** key. Press the **Download** key again to confirm. When the USB drive light goes off all the jobs selected will be saved. The jobs can then be opened on any computer with Excel or Notepad. To delete jobs highlight, select them and press **Delete** followed by pressing **Delete** again for confirmation. Press Back to go to the Job Records screen or Main Menu for the main screen.
2. Pressing the Select key will select or unselect the highlighted job.
3. Pressing the Select All key will select all jobs, except for the current job (0). To unselect press Back.
4. The job record in Excel will show as on the left above. 3The Bale ID column will need to be adjusted for proper viewing.
5. The job record in Notepad will show as on the right above. You will need to scroll right to see all the information.

iPad Integration Control Module

030-6672C

To operate the applicator, connect the iPad cord to the iPad Integration Control in the port indicated by:



iPad Integration Control Light Signals

Green Slow Blink – Power supplied to the applicator system and the unit is going through its startup process. This will take approximately 25-35 seconds.

Green Double Blink – Indicating the iPad module recognizes the iPad but the app is not open or connected.

Green Solid Light – Module is connected to the app and is ready to operate.

*Recommended to use the USB cable included with the applicator kit (006-6672USBC)

Bluetooth Receiver Lights

Pre-2020 applcaitors equipped with Bluetooth receivers (030-6672B) are now equipped with lights to indicate both power and Hay App connection on the Apple iPad. Clean light regularly

Blinking Lights – System is waiting for the processor to connect, which could take up to 35 seconds.

Red Light – The Bluetooth receiver has power

Green Light – The Bluetooth receiver is connected to the Hay App.

****600 Series Applicators with serial number before DCP27000 will require the DCP to be sent to Harvest Tec for a required update in order to use the iPad Integration Module (030-6672C).**

Hay App version must be **at least 2.5.18 (or higher)** to operate with the iPad Integration Module

***Made for Apple iPad badge**
Use of the Made for Apple iPad badge means that an accessory has been designed to connect specifically to the Apple product(s) identified in the badge and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with an Apple product may affect wireless performance.

Maintenance

Dielectric Grease Connections: Disconnect all harnesses on the applicator, clean the connections, and repack with dielectric grease.

Battery Connections: Follow the batteries safety warnings and clean the battery connections. If the connections cannot be cleaned, replace harness.

Winter Storage

Disconnect power from the Dual channel Processor (DCP).

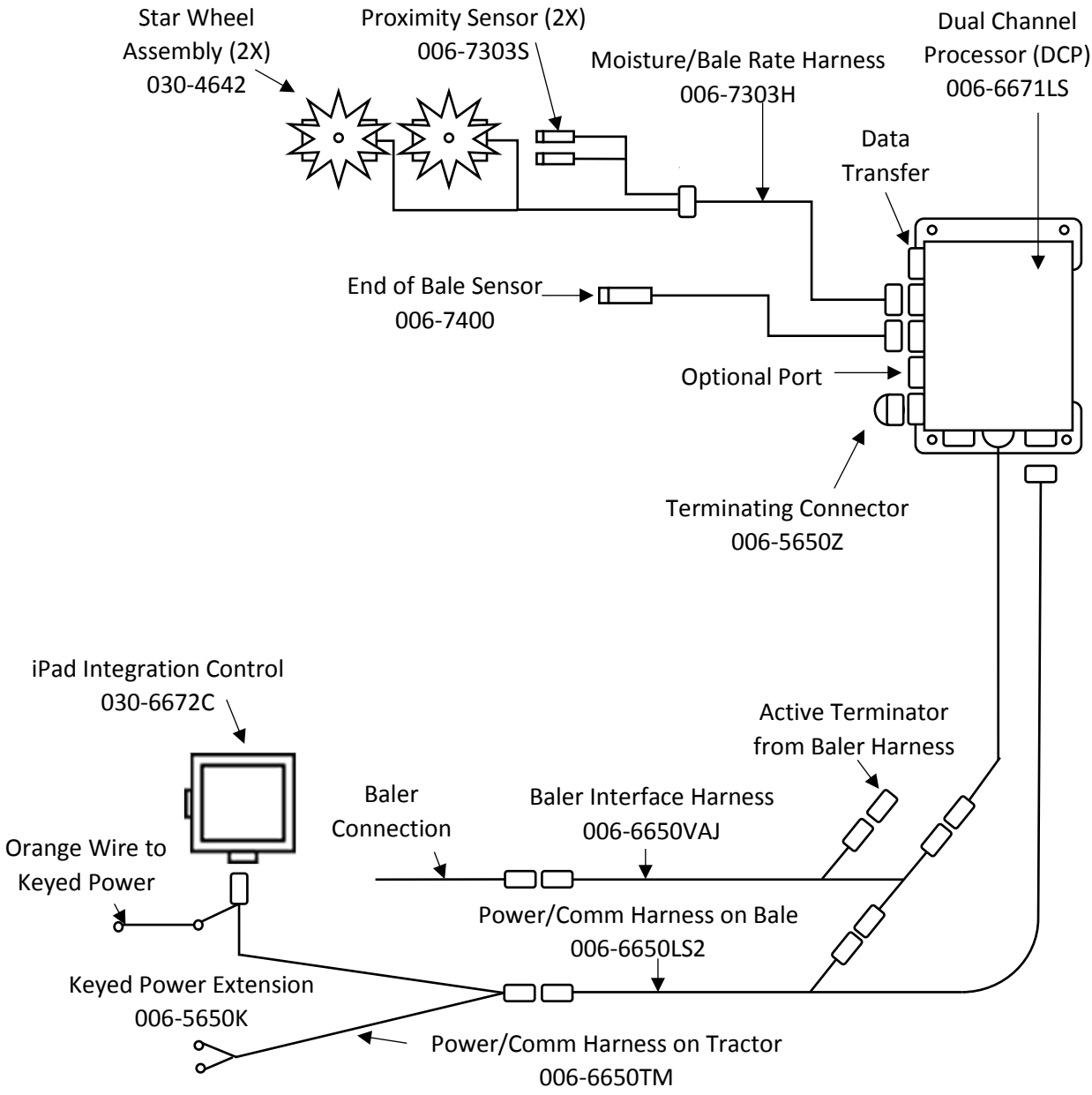
Status Alerts

Two Status Alerts will appear on the Auto and Manual mode screens when the Job Records are approaching, or full of records.

Status Alert "**Bale Records: Less than 1K remaining**". The system is now approaching the maximum amount of records that can be saved. When this code appears, download and delete jobs in the Job Records menu. Follow the instructions in Job Records to accomplish this. Status Alert "**Bale Records failed – Memory Full**". The system will no longer accept any new data until jobs in the Job Records menu are downloaded and deleted. Follow the instructions in Job Records to accomplish this.

John Deere L330 / L340 Balers Harness/Wiring Installation for using ISOBUS Display

A. The Baler Power/Communication Harness (006-6650LS2) will attach to the open port of the Tractor Harness (006-6650TM) and run back to the Dual Channel Processor (DCP 006-6671LS).
B. Connect the large plug of the Baler Power/Communication Harness (006-6650LS2) to the bottom (shorter side) of the DCP.
C. Attach the Baler Interface Harness (006-6650VAJ) in between the short whip cable hardwired to the DCP and the main Power/Communication Harness. Make sure Active Terminator removed from the baler processor is attached to the Baler Interface Harness (006-6650VAJ).
D. Connect the iPad Integration Control (030-6672C) to Communication Harness (006-6650TM).
E. Install the Terminating Connector (006-5650Z) to the port labeled Modular Port on the Pump Controller (006-5672).
F. Attach moisture and bale rate harness (006-7303H) to the DCP (006-6671LS).
G. Connect Keyed Power Extension harness (006-5650K) to a keyed power source.
H. Note: the Optional Port and the Data Transfer Port are not used in this application.



Pin Outs

Power/Comm Harness 006-6650TM at Hitch

Pin 1	Red	+12V Power to TSD
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 TSD
Pin 9	Black	Ground from DCP
Pin 10	Blue	Can1 Low

Power/Comm Harness 006-6650LS2 at Hitch

Pin 1	Red	+12V Power to TSD
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 TSD
Pin 9	Black	Ground from DCP
Pin 10	Blue	Can1 Low

iPad Integration Control / BLE on Harness 006-6650TM

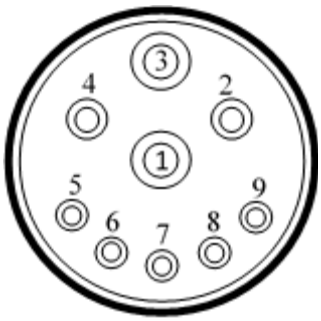
Pin 1	Red	+12V Power from DCP
Pin 2	Black	Ground from TSD
Pin 3	Yellow	HT Can Low
Pin 4	Gray	Shield
Pin 5	Green	HT Can Hi
Pin 6	Orange	Can1 Hi
Pin 7	Blue	Can1 Low

ISOBUS Plug Baler Side

Pin 1		N/A
Pin 2		N/A
Pin 3		120 OHM with Pin 5
Pin 4		N/A
Pin 5		120 OHM with Pin 3
Pin 6	Orange	Can1 Hi
Pin 7	Blue	Can1 Low

ISOBUS Plug Tractor Side

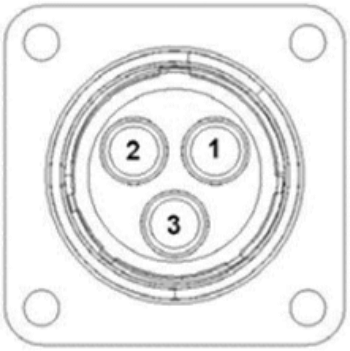
Pin 1		N/A
Pin 2		N/A
Pin 3		+12V Keyed Tractor Power
Pin 4		N/A
Pin 5		N/A
Pin 6		N/A
Pin 7		N/A
Pin 8	Orange	Can1 Hi
Pin 9	Blue	Can1 Low



Pin Outs (continued)

Main Power Connector on DCP

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

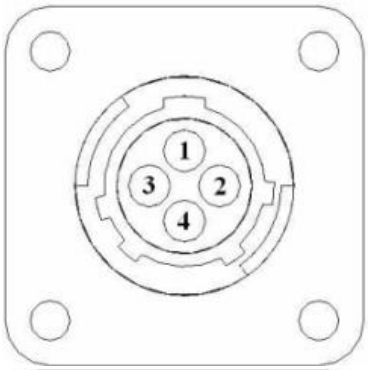


Star Wheel and Bale Rate Sensor connector on DCP

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

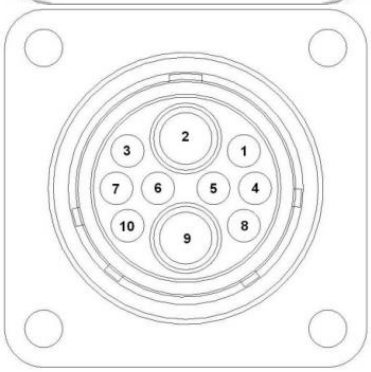
End of Bale sensor on DCP

Pin 1	Brown	Sensor Power
Pin 2	Blue	Sensor Ground
Pin 3	N/A	
Pin 4	Black	Signal from Sensor



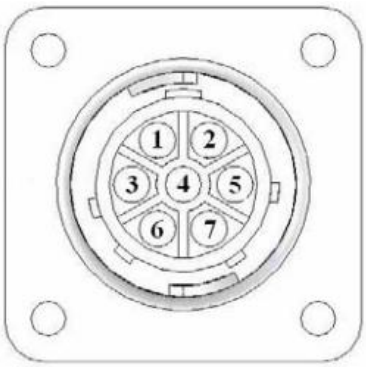
Pump Communication Plug on DCP

Pin 1	Red	+12V Can
Pin 2	Red	+12V Power
Pin 3	Gray	Shield
Pin 4	Green	Comm Channel OH
Pin 5	Yellow	Comm Channel OL
Pin 6	Blue	Comm Channel IH
Pin 7	Orange	Comm Channel IL
Pin 8	Black	Can Ground
Pin 9	Black	Power Ground
Pin 10	N/A	



Pump Connection Colors

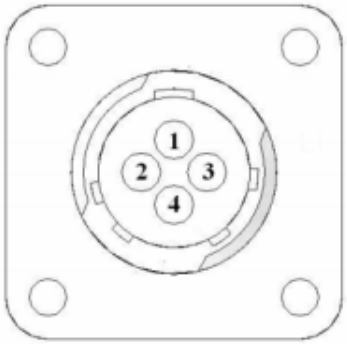
Pin 1	Black with Orange Stripe	Pump 1 Ground
Pin 2	Black with Green Stripe	Pump 2 Ground
Pin 3	Black with Yellow Stripe	Pump 3 Ground
Pin 4	N/A	
Pin 5	Orange with Black Stripe	Pump 1 Positive
Pin 6	Green with Black Stripe	Pump 2 Positive
Pin 7	Yellow with Black Stripe	Pump 3 Positive



Pin Outs (continued)

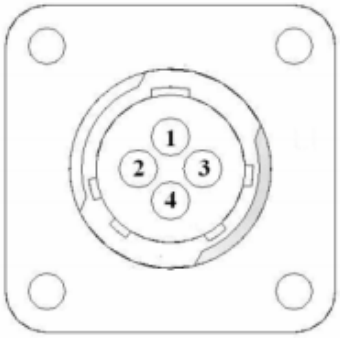
Flow Meter Connection on Pump Controller

Pin 1	White	5 - 12V (+) Supply
Pin 2	Green	Ground
Pin 3	Brown	Signal
Pin 4	Black	Shield



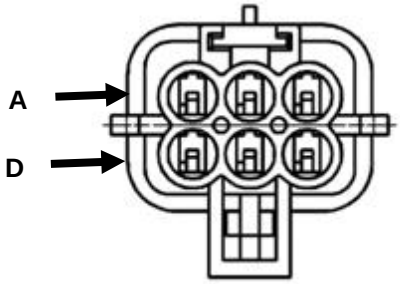
Connector for Crop Eyes on DCP

Pin 1	Red	+12V Power
Pin 2	Black	Ground
Pin 3	White	Signal
Pin 4	N/A	



006-6650VAJ 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



Common Questions

1. How do I turn the system on/off?
To turn the system ON open the Hay App, then select the active system for the baler you are using. Press the Wake Up tab if the system was put into Standby mode when last used. If not in Standby mode, select Automatic or Manual mode to begin.

To turn the system OFF click the Standby tab on the Main Menu screen. To close the app double click the home button on the iPad and swipe the app that you would like closed, toward the top of the screen until it is no longer visible. See SHUTTING DOWN THE HAY APP for more details.

2. How to get in the LBS/TON, MC%, and TONS/HR screens?
In the Main Menu press the SETUP MODE key. From this screen you can change your application rates and how much product is applied. See SETTING UP FOR INITIAL USE for a detailed explanation of this process.

4. The moisture content displays "LO" or "HI" all the time.
When the moisture content display does not change frequently while baling, there is likely a faulty star wheel connection. Initially check inside the white star wheel block, to see if the electronic swivel is in the star wheel shaft and that the star wheel shaft is not coming out of the block. Also, check all star wheel wires and connectors to see if there is a continuity of grounding problem.

5. Should the battery connections be removed before jump starting or charging a battery?
Yes. Anytime the tractor will have voltage going up rapidly the connections should be removed.

6. What is the expected battery life of the iPad when baling?
3.5 hours is the expected amount of time the battery when continuously baling. Shut off all other applications, wireless internet, and Wi-Fi signal to reduce the amount of programs iPad is running.
*It is recommended to use an accessory outlet charger when operating (not included with iPad).

7. What is the max distance for connection between the iPad and the Bluetooth Receiver?
The range for the connection will depend on the amount of equipment (tractor, baler, ect.) between the two devices. The max distance will range between 10' – 20'.

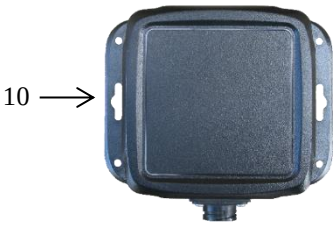
8. What do the lights on the 030-6672B indicate?
Pre-2020 applicators were equipped Bluetooth receivers (030-6672B) and are now equipped with lights to indicate both power and Hay App connection on the Apple iPad.Red Light – The Bluetooth receiver has power. Green Light – The Bluetooth receiver is connected to the Hay App.

Troubleshooting

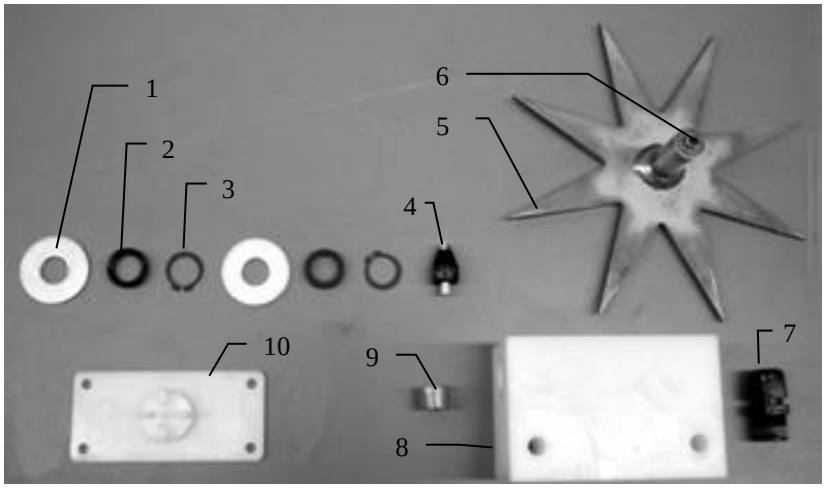
PROBLEM	POSSIBLE CAUSE	SOLUTION
Moisture reading errors (high or low)	1. Wire disconnected or bad connection between star wheels and DCP	1. Reconnect wire.
	2. Low power supply to DCP	2. Check voltage at box. (Min of 12 volts required.) See Diagnostics section of manual.
	3. Dry hay lower than 8% moisture or wet hay over 75%.	3. System reads 8-70% 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.	1. 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 between 12 and 14 volts.	3. Install voltage surge protection on tractors alternator.
Terminal reads under or over power.	1. 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.	1. Bale rate sensors are reversed. 2. Short in cable. 3. Damaged sensor. 4. Sensor too far from starwheel.	1. Switch the sensors next to the star wheel. 2. Replace cable. 3. Replace sensor. 4. Adjust gap between prox sensor and star wheel so it is 1/8-1/4” away.
Bluetooth Receiver lights will not illuminate	1. Bluetooth receiver not connected 2. Harness disconnected 3. Low power	1. Check connections and voltage. Minimum 12.5V needed.
	Blinking Lights – System is waiting for the processor to connect, which could take up to 35 seconds. *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.	

Parts Breakdown
600J Series Control and Harnesses
Dual Channel Processor (DCP)

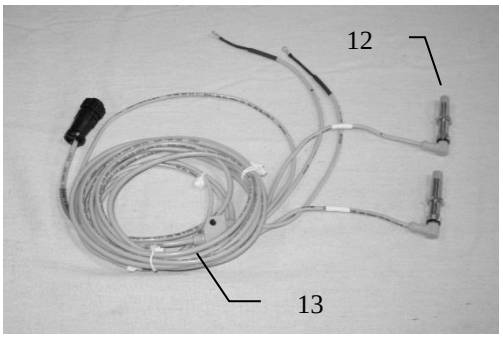
Ref	Description	Part Number	Qty
1	Dust Plugs	006-5651PLUGS	1
2	End of Bale Sensor 600 Series	006-7400	1
3	End of Bale Sensor Bracket	001-4648J	1
4	DCP Shield Cover	001-5650X	1
5	DCP Main Control LS 600 AUTO	006-6671LS	1
6	Terminating Connector (Green Cap)	006-5650Z	1
7	DCP Baler Harness 30 Ft	006-6650LS2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



Parts Breakdown for Star Wheel Moisture Sensors

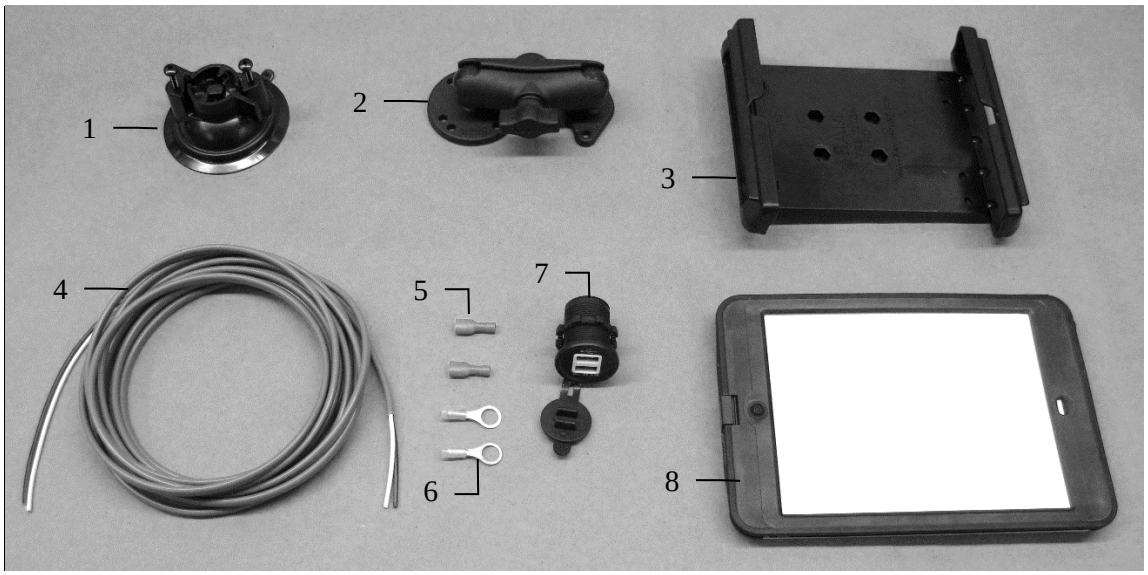


Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Washer (per side)	006-4642K	2	8	Star wheel block	006-4641D	2
2	Dust seal (per side)	w/006-4642K	1	9	Plug fitting	003-F38	2
3	Snap ring (per side)	w/006-4642K	2	10	Block Cover	006-4641B	2
4	Swivel	006-4642A	2	**1-10**	**Star wheel assembly**	**030-4642**	**2**
5	Star wheel	030-4641E	2	NP	Twine guard – right (prox)	001-4644H	1
6	Insert	w/ Ref # 5	2	NP	Twine guard - left	001-4645H	1
7	Wiring grommet	008-0821A	2				



Ref	Description	Part#	Qty
12	Bale rate sensor	006-7303S	2
13	Moisture and bale rate harness	006-7303H	1

Optional iPad Mini Mounting Kit (030-2014MK)



Ref	Description	Part #	Qty
1	Suction cup mount	001-2012SCM	1
2	Ram mount	001-2012H	1
3	iPad Mini® spring load cradle (Mini 4)	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)	

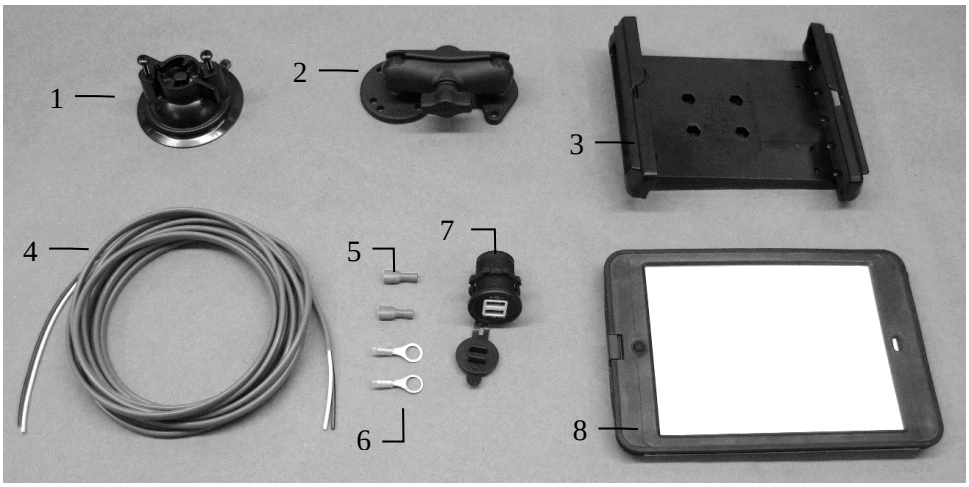
Installation Instructions

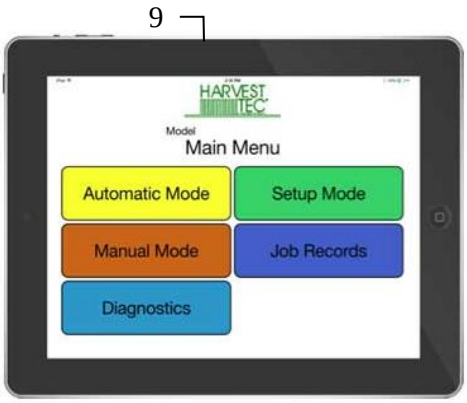
1. Identify 12V power source for wires to connect.
    a. Eye loops included if wiring directly to the battery is desired.
    b. Test for key power source if preferred to have power to the USB shut off with the key.
2. Once power source is identified, cut wires to desired length.
3. Crimp the two supplied 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.

*iPad mini is a trademark of Apple Inc., registered in the U.S. and other countries.

Optional iPad Display Kit (030-4670DK)





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	Mounting Kit Assembly		030-4670DK (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 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.

*iPad mini is a trademark of Apple Inc., registered in the U.S. and other countries.

Notes

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 6/22

HARVEST TEC, LLC.
P.O. BOX 63
2821 HARVEY STREET
HUDSON, WI 54016
PHONE: 715-386-9100
1-800-635-7468
FAX: 715-381-1792
Email: info@harvesttec.com