Installation/Operation Manual

Model 77E

Economy Microwave Moisture Bale Chute System

HarvestTec

EST. 1976

77E Operation Manual Table of Contents

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Introduction

Thank you for purchasing this 77E Microwave Moisture Sensor Kit. The Microwave Moisture Sensor Kit is designed to operate through the baler's ISOBUS system and/or an Android tablet or Apple iPad (tablet not included), using the Precision Baling App.

This manual will take you through the steps to install and operate the moisture sensor. Please read this manual carefully to learn how to operate the equipment correctly. Failure to do so 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.

Tools Needed:

Standard wrench set
Electric drill and bits
Side cutter
Standard nut driver set
Standard socket set

System Requirements for integration into baler display

CNH Balers

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

AGCO Balers

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

John Deere 330/340 Balers

The Baler must have Software Version 2.0.7 or higher
GreenStar 4th Generation Arm Command Display must have version 8.10.2393-23

System Requirements for tablet display

***Requirement to run iPad option are 3rd Generation iPad (2012) with current operating system, plus the Precision Bale App.**

***Requirement to run Android option are with Google Play 5 or greater operating system, plus the Precision Bale App.**
Not compatible with Kindle Fire tablet.

Microwave Moisture Installation – Brackets/Sensors

Locate the mounting holes on the back of both the left and right side of the bale chute (Figure 1 & 2).

Mount the rear microwave moisture mounting brackets 001-2601 (figure 3) on the holes using two 3/8” x 3 1/2" hex bolts, nuts and lock washers located in parts bag. **NOTE** - Some baler models may require bracket modification. Ensure no chains or other moving parts may interfere with mounting of microwave sensors. If baler is equipped with chute, carefully raise, and lower it to make sure it does not interfere with microwave sensors.

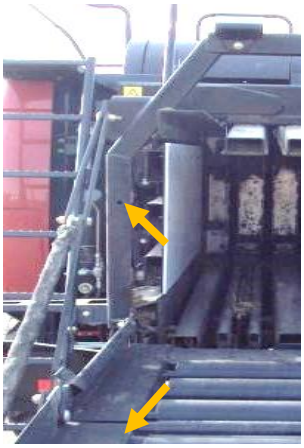


Figure 1

Figure 2

Figure 3

Attach the microwave moisture sensors to each mounting bracket. Sensor 006-4641MTX will be mounted on the left side of the bale chute (figure 4). Sensor 006-4641MRX will be mounted on the right side (figure 5). Mount the sensors with the wire connection port toward the baler.

Figure 4

Figure 5

Locate the MWM wiring harness (006-7640MWL) in the kit. Start by locating the connector with the white heat shrink label marked RX. Connect this connector to the sensor mounted on the right-side chute (006-4641MRX).

Route the MWM harness (006-7640MWL) to the front of the baler using zip ties. If baler is equipped with Staheli West steam a 25’ extension harness is available from Harvest Tec (006-7640FMX).

Microwave Moisture Installation – Metering Wheel Sensor

Attach the 001-4648SS Meter Wheel bracket to the top chamber door steel tube with the proximity sensor pointing toward the spoke of the meter wheel. Proximity sensor 006-7401 should be positioned approximately ¼" from the spikes of the metering wheel as each spike movement triggers individual microwave readings. *Note – additional modification may be required to properly mount the proximity sensor depending on baler model and design of metering wheel.*
Route the 006-7401 proximity harness to the main microwave harness (006-7640MWL) and connect to the triangular Deutsch plug

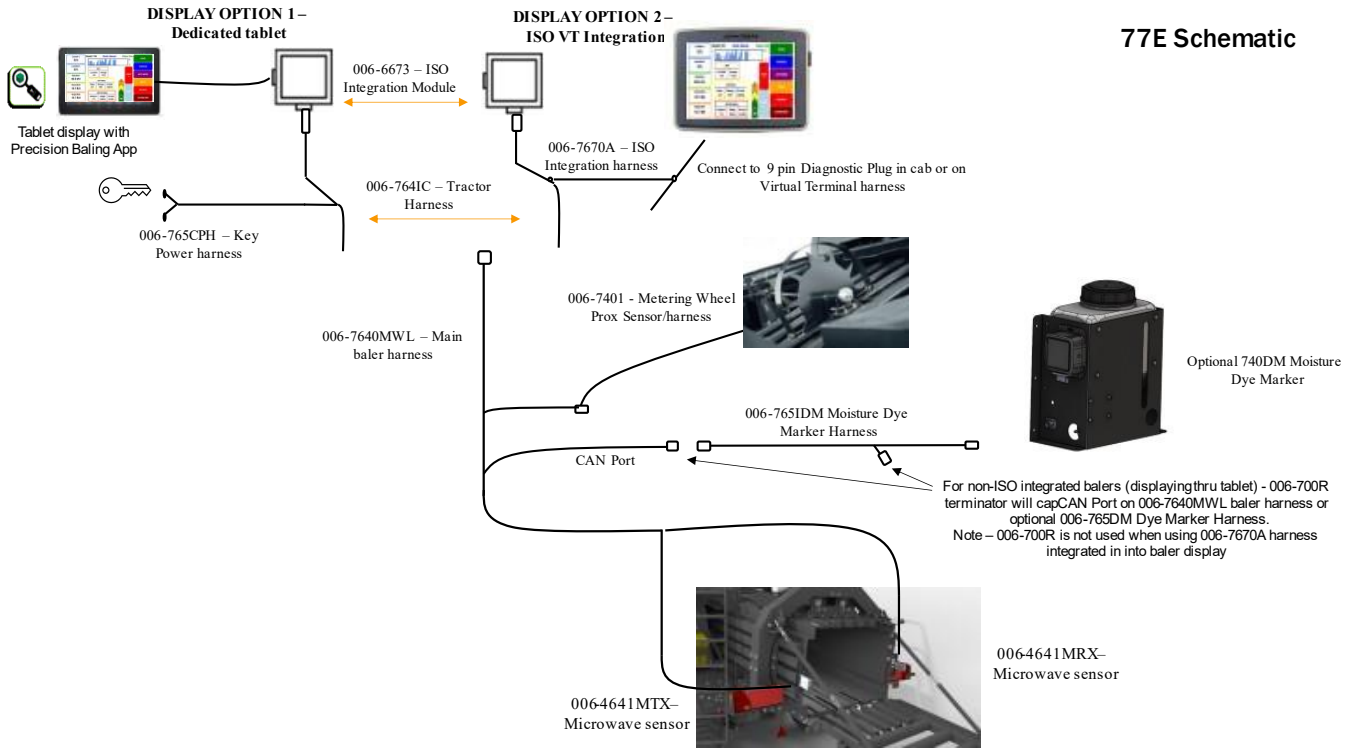
See wiring Diagram for attaching tractor power harness 006-764IC to battery power. 2 display options of microwave moisture:

1. Readings integrated into baler virtual terminal for AGCO 21/2200 series, Krone balers with CCi1200 monitor, CASE 334, 434, 434HD models, New Holland Big Baler series model, and John Deere 330/340 with use of baler integration harness (006-7670A) to the in cab diagnostic port.
    - Note – 006-700R terminator is NOT installed
2. Readings displayed thru operator tablet and Precision Bale App with use of 006-765CPH key power harness
    - Note – 006-700R terminator is installed

Microwave Moisture Installation – Optional 740DM Moisture Dye Marker

Reference 740DM Manual for installation/operation. Position nozzles behind microwave sensors. Route 006-765IDM harness from 006-2472DM Dye Marker Controller to rectangular plug on 006-7640MWL baler moisture harness. Secure with zip ties.

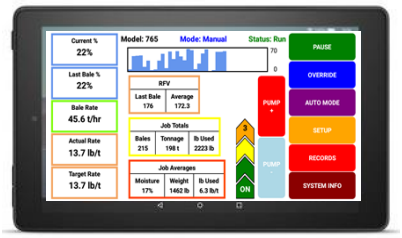
Wiring Diagram – 77E



Display Options

Optional Tablet Display

Precision Baling App



The iOS or Android Tablet displays offer the ability to communicate with the 77E microwave moisture system via hard-wired connection to the ISO Communication Module (ICM) with use of the free Precision Baling App.

The Tablet Display offers easy integration by connecting a charging cable to the USB port on the ICM module (USB port closest to LED light). Once, connected the system will display upon opening the app and powering up the 77E moisture sensor. Tablets can be used in addition to integrated baler VT display.

***Made for iPad® (3rd generation minimum) or Android Tablet (Does not work with Amazon Fire). Required to be running the most current operating system or one version previous.**

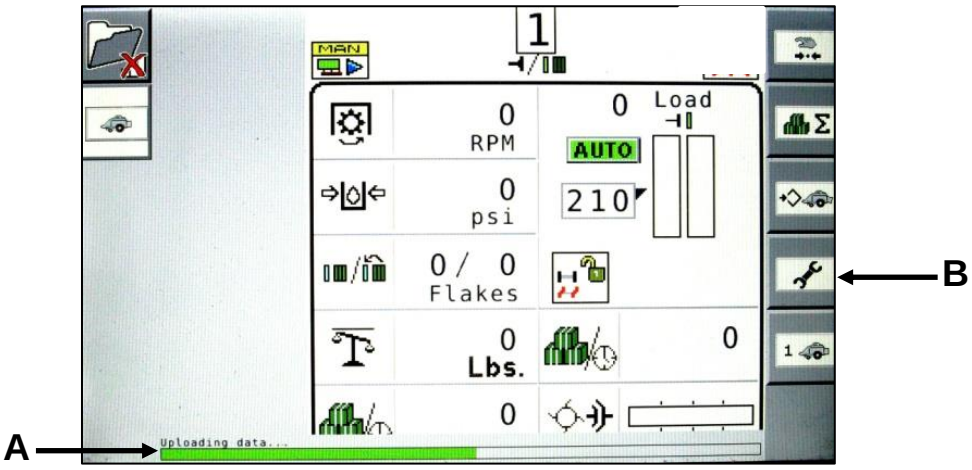
*iPad is a trademark of Apple Inc., registered in the U.S. and other countries.

Baler Display Integration – AGCO 21/2200 series balers

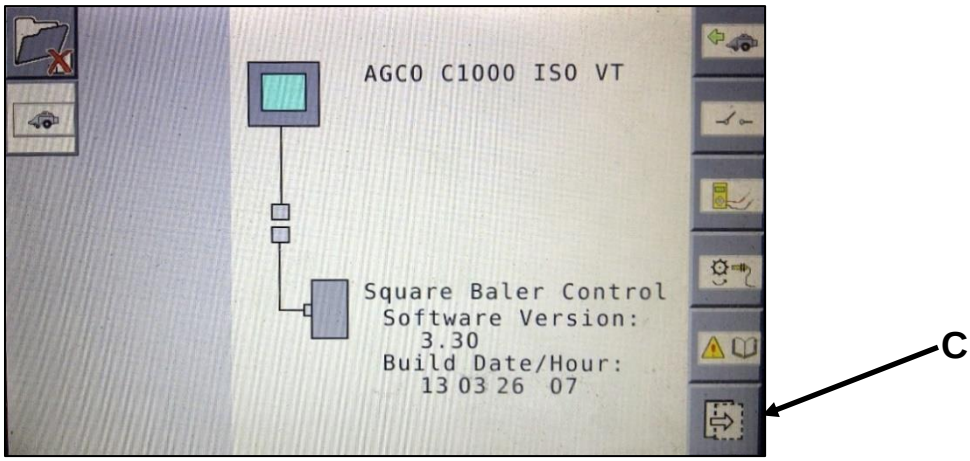
The ISOBUS Monitor utilizes a combination of soft keys, number menus, and the scroll wheel on the upper right side of the actual monitor to make selections. Selections are made by scrolling the Thumb Wheel and pressing in once the selection is highlighted. All buttons are labeled and color coded.

Baler Monitor Setup

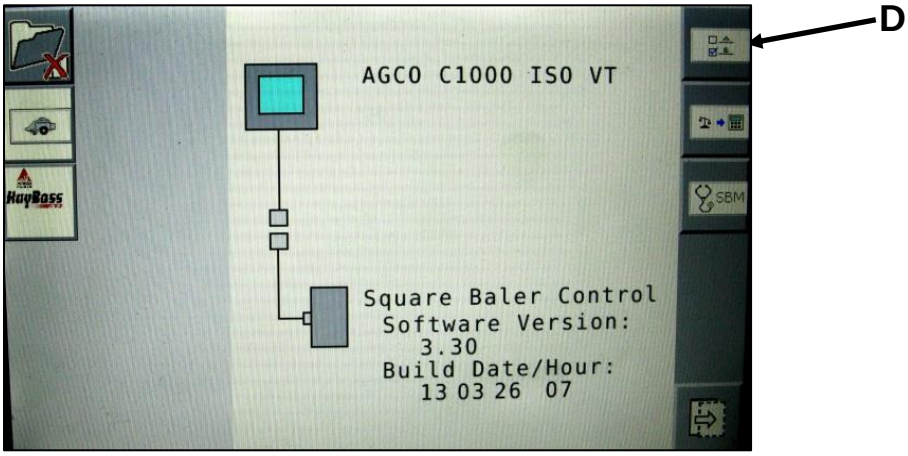
At any time after the initial Start Up/Power On the green “uploading data status bar (arrow A) may begin to fill. However, due to software version changes a status does not appear on all monitors. To begin setup of the 77E Microwave System select the fourth icon down on the right screen menu-the wrench icon (arrow B).



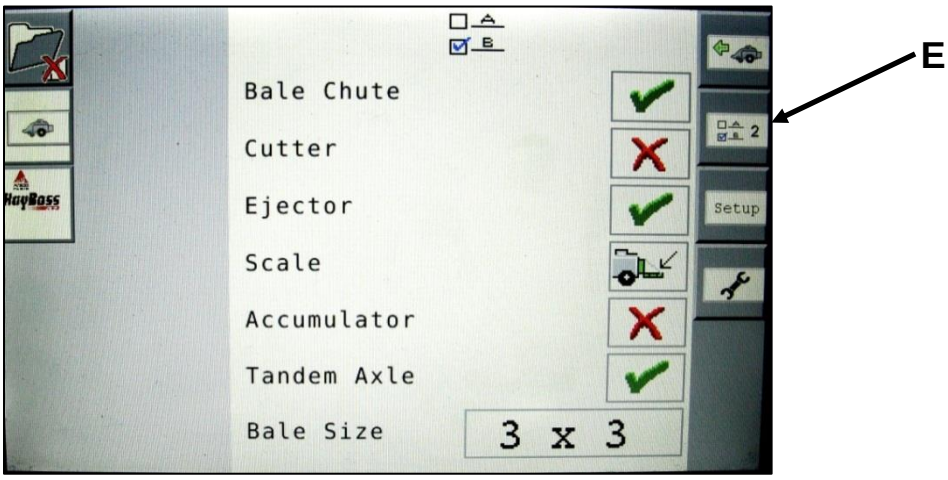
The service screen displayed below will appear. Here you can see the Version of Software for your baler which should be 3.30 or higher to enable working with the 77E. Select the icon (arrow C) located at the bottom of the right selection menu to move to the next options menu.



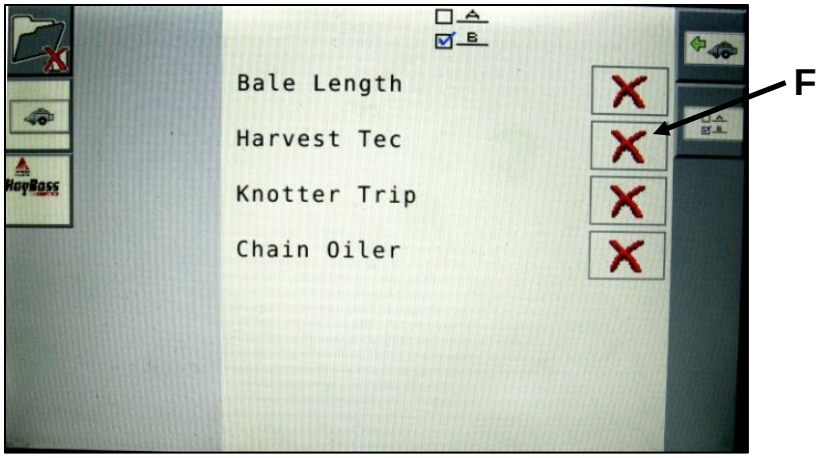
Then select the ‘A B’ icon (arrow D) on the right side, this should be the top button.



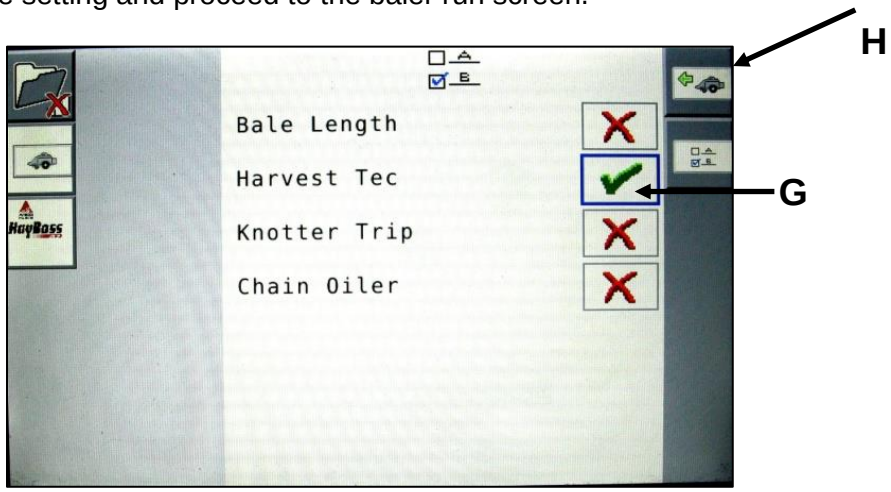
Then select the ‘A B 2’ icon (arrow E) on the right side to enter the next baler options screen.



Use the thumb wheel to scroll and select the Harvest Tec Option (arrow F). Press the scroll wheel to open the drop-down menu.

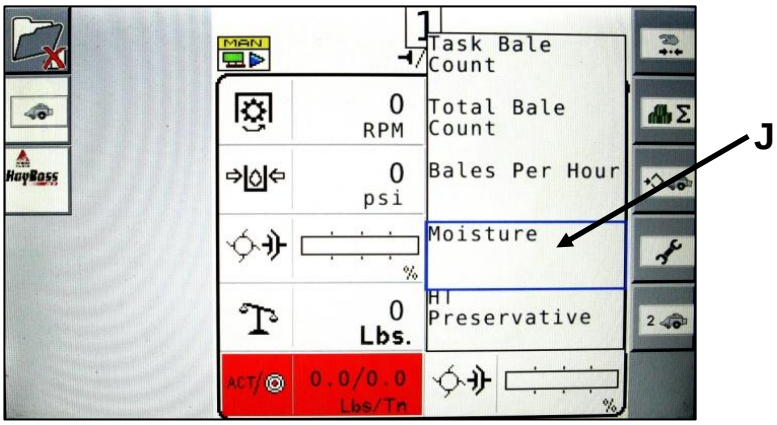


Select the green check mark to turn the Harvest Tec option ON (arrow G). Then select the Baler Run Screen button (arrow H) to save the setting and proceed to the baler run screen.



Use the scroll wheel to select a container option on the baler run screen. Harvest Tec information can be displayed in any container on the baler run screen. Press the scroll wheel to open the drop-down menu and scroll to select the option and press the scroll wheel to select it.

This will place the “Instantaneous” and “Last Bale” moisture values in this position on the screen.

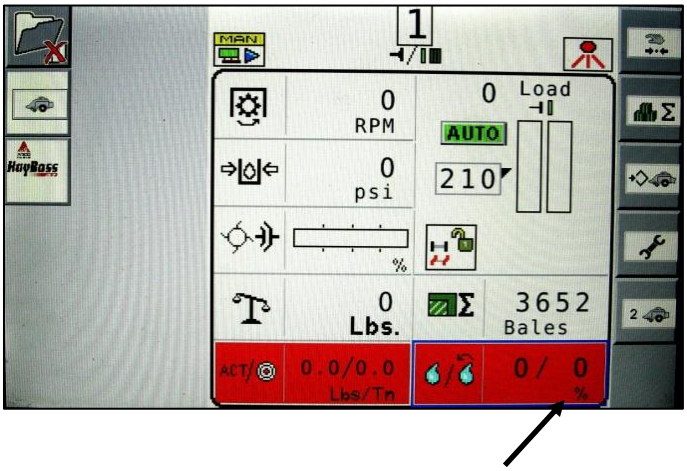


Once the and moisture option is selected, the containers should show with a red background.

The moisture information is denoted by a rain droplet for instantaneous and a rain drop with a back arrow above for the last bale average moisture. These values are separated by a slash.

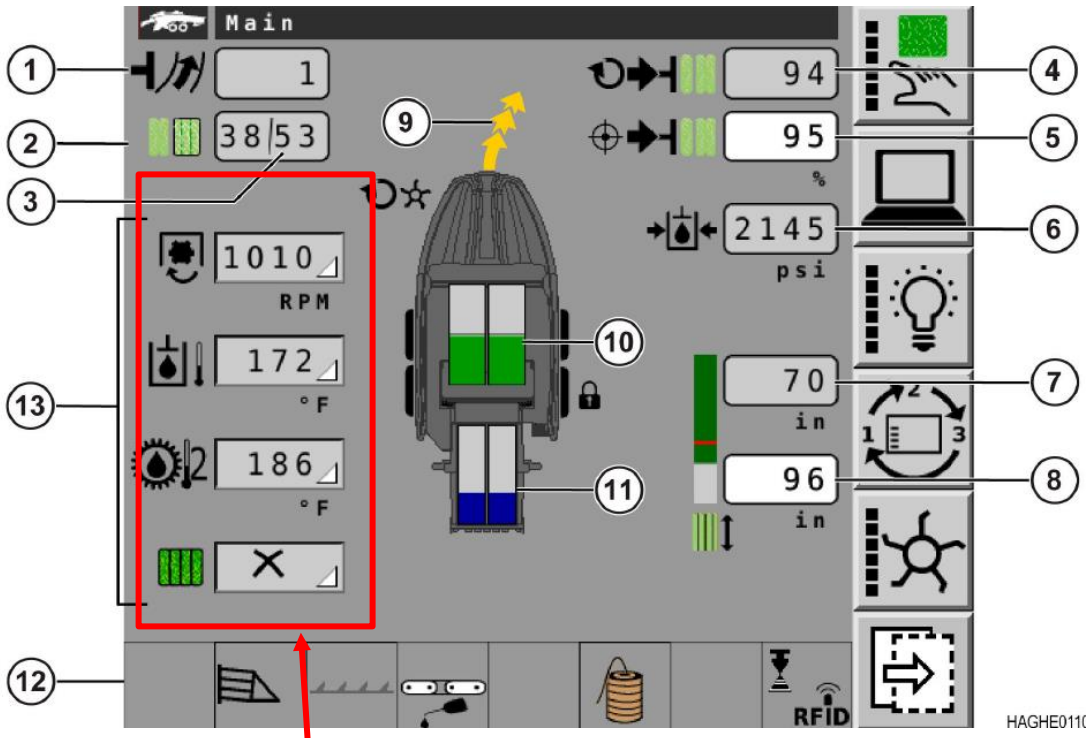
****NOTE:** When the preservative sprayer icon is RED, the preservative system is not in a run mode (Auto or Manual). When the system is in a run mode, the icon will be GREEN. The HT Preservative and Moisture containers will have RED background when the system is not in a run mode.

The background for the moisture container will be WHITE, matching the rest of the baler run screen when the system is in Auto or Manual mode.



HT Moisture Container

Baler Display Integration – 2370UHD Baler Only



These four containers can be configured by the operator. In the selectable list are the items for your system. They are Current moisture and average moisture. When moisture is above your alarm setpoint it will show the moisture value with a red background.

Background turns red when system is on main work screen. The icon will blink when the system is paused.

Current Moisture

Average Moisture

Moisture System On. The icon will flash when the system is paused

Moisture System Off

Selecting the 77E Microwave Sensor

The soft keys down the left side of the monitor correlate with choosing connected implements or files. Depending on your specific situation this could show your tractor, camera, baler, or the 77E System, among others. To enter the 77E menu screens, select the soft key next to the 77E icon (Arrow L). Once the 77E option has been selected, the Main Menu screen will show as seen below.

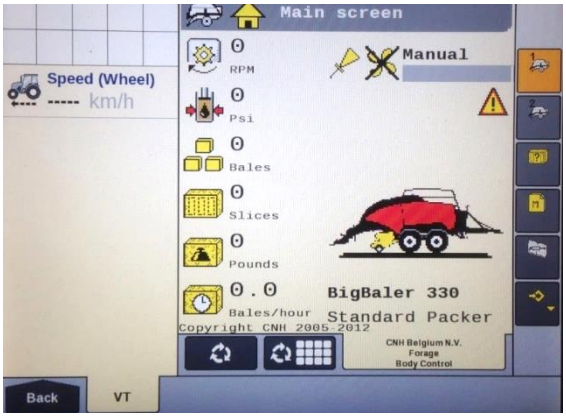
The numbered and colored soft keys on the right side (1-6) correlate to the selection options on the screen. For example, Manual Mode is PURPLE, this correlates to the PURPLE number “3” soft key option on the right side (Arrow M). So, to enter Manual Mode, the scroll wheel can be used to select the button or the soft key next to the PURPLE number “3” option can be pressed. To return to the baler work screen select the baler icon (arrow O).

The cycle button (Arrow P) can be used to toggle between connected implements. This is located at the bottom of the monitor next to the Home and Esc buttons.

Baler Display Integration – Case LB334/434 & New Holland Big Baler Series

The ISOBUS Monitor utilizes touch screen options to make selections. Selections are made by finding the desired selection and pressing the touch screen icon. All buttons are labeled and color coded.

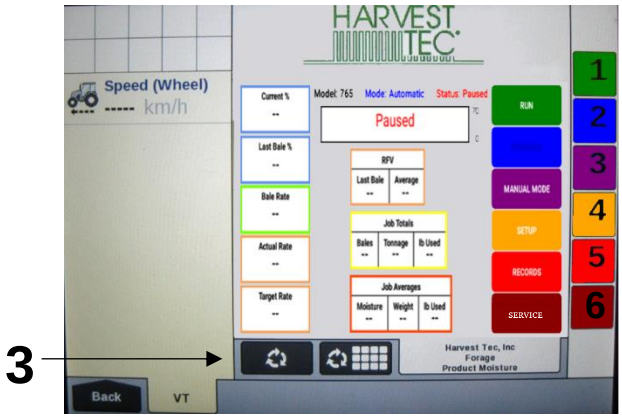
When the 77E Microwave is connected thru the baler and powered on the first time it is necessary to load the object pools to the Virtual Terminal (VT).



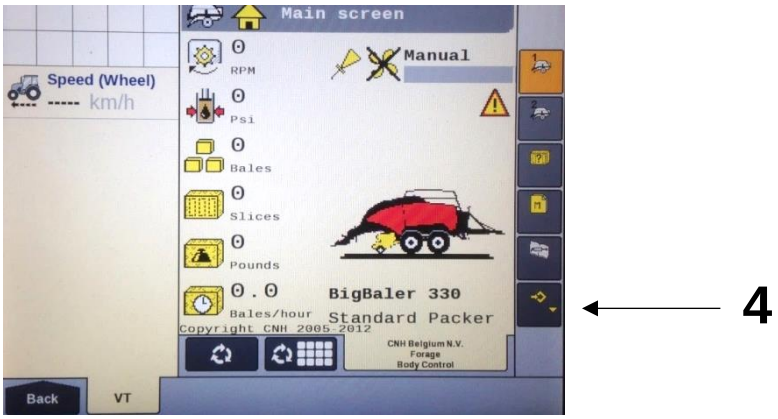
Icon (1) indicates that the object pools are in the process of loading and saving to the VT. Note that if the language selection of the VT is changed, the corresponding object pool must be reloaded to the VT. The object pool loading process takes approximately two minutes to complete.

Once the object pools have been loaded and Icon (1) disappears from the upper left corner of the display, press the NEXT IMPLEMENT button (2) and verify that the 77E object pools appear on the Virtual Terminal.

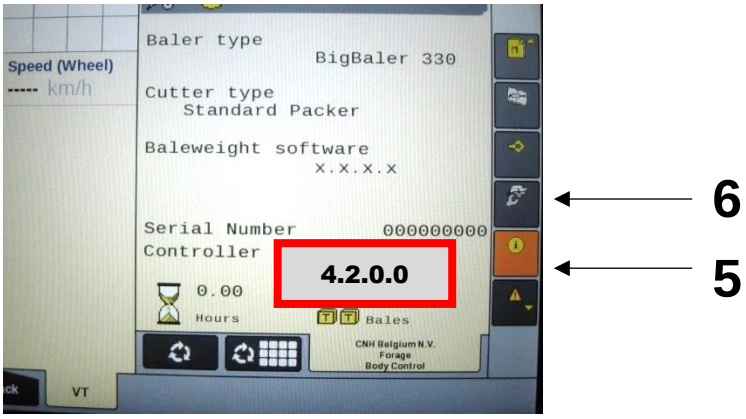
After verifying that the 77E object pool is loaded and the operating screens are displayed on the VT, press the NEXT IMPLEMENT button (3) to return to the baler work screen page.



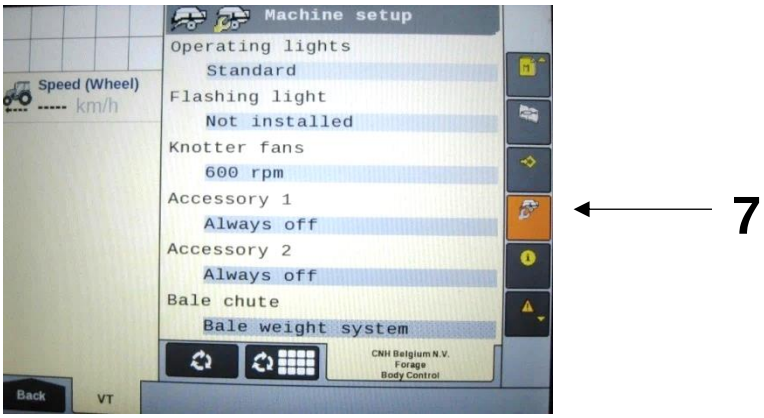
Press the bottom button of the Menu Bar with the down arrow in corner (4) on the side of the screen to continue down the Menu Bar below the USER SETTING icon.



Scroll through the Menu bar until the INFORMATION icon (5) is visible. Press the INFORMATION button so the Information page appears. Verify that the controller software loaded to the baler is version 4.2.0.0 or higher. If not, contact the dealer to update firmware in Baler Control Module (BCM). If the controller software displays version 4.2.0.0 or higher proceed to configuring the baler for the 77E system by pressing the MACHINE SETUP button (6).



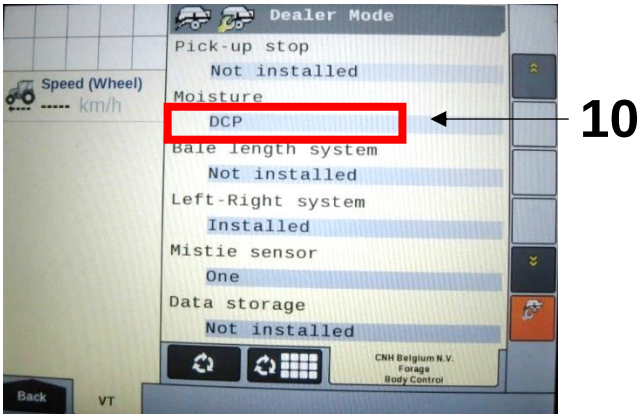
Once the MACHINE SETUP icon has been selected, the Machine Setup page will appear, and the icon will be backlit in orange. Press the MACHINE SETUP icon (7) again to go to the second page of the Machine Setup.



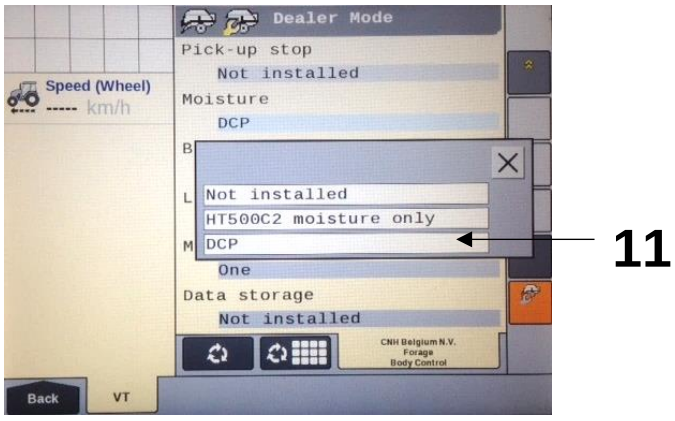
The second page of the Machine setup is identified by the three gray buttons in the Menu Bar. Press and hold the third gray button (8) for 10 seconds or until the display switches to displaying Dealer Mode.

Once Dealer Mode has been entered, select the down arrow in the Menu Bar (9) to scroll to the second Dealer Mode Screen where ‘Moisture’ is a selection.

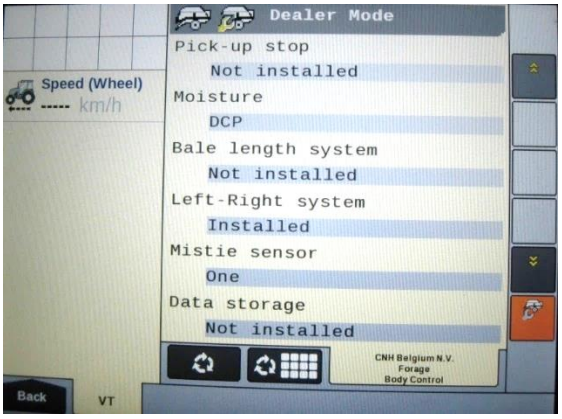
Once you have reached the second Dealer Mode screen, select the area under ‘Moisture ‘(10). Note that the box below ‘Moisture’ will likely be the default “NOT INSTALLED”.



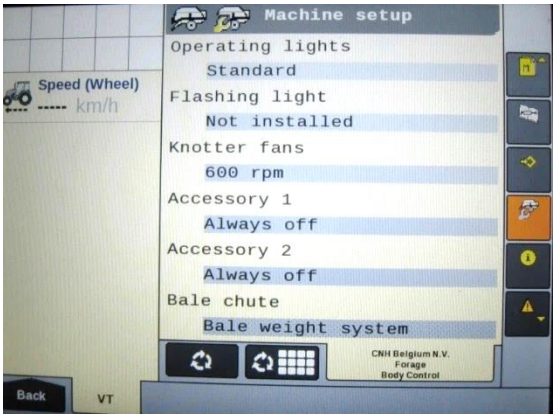
Select the proper configuration setting from the pop-up menu (11), based on the configuration of your 77E system. This configuration setting allows the baler to properly display the information it is receiving from the 77E system on the baler working screen. Select “DCP.”



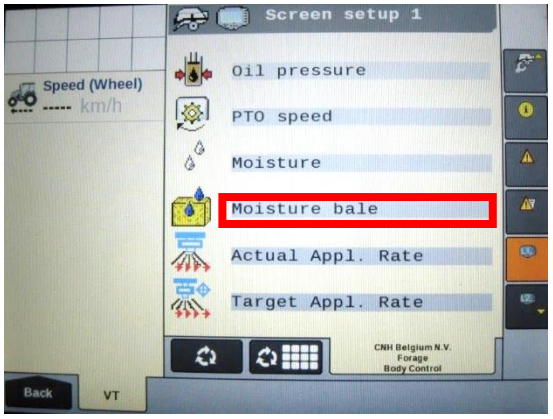
Once the configuration has been set press the MACHINE SETUP icon (12) to return to the Machine Setup Screen and the Menu Bar.



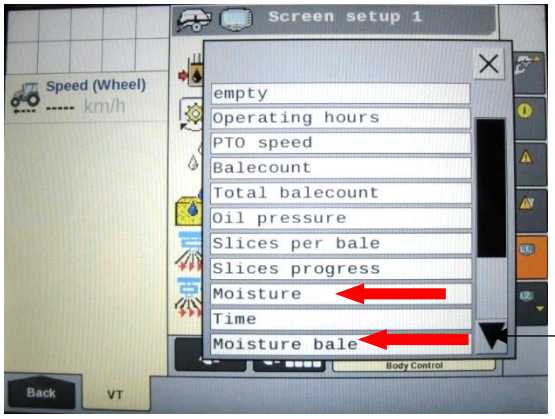
Press the arrow down button at the bottom of the Menu Bar (13) to scroll down thru the Menu Bar until you reach the SCREEN SETUP pages.



Select the icon for SCREEN SETUP 1 (14) so the Screen Setup 1 screen appears. Select how you would like to have the screen configured to show a combination of baler and 77E system information by selecting the boxes. When you select one of the boxes, a pop-up screen will appear that shows the selections available.

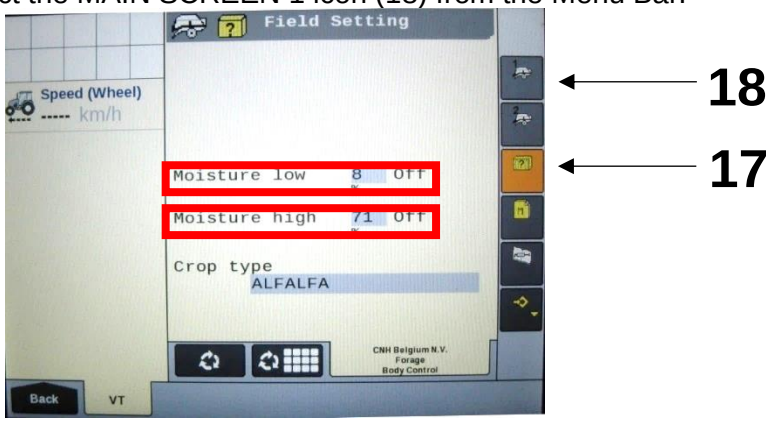


Selections related to the 77E system include “Moisture” and “Moisture Bale” and are highlighted by arrows above and in the next picture. Scroll to additional options in the popup window by pressing the down arrow on the side of the popup window (15).



Once the Screen Setup pages have been configured, scroll back up to the top of the Menu Bar by pressing the top button in the Menu Bar with the up arrow (16).

Select the FIELD SETTING icon (17) and adjust the Moisture Alarm Settings in the Field Setting Screen. Note that the low moisture alarm must be set lower than the high moisture alarm. The moisture alarms can be turned off by setting the low setting <9% and the high setting >70%. When the alarms are turned off, they will say OFF next to the values. Select the MAIN SCREEN 1 icon (18) from the Menu Bar.

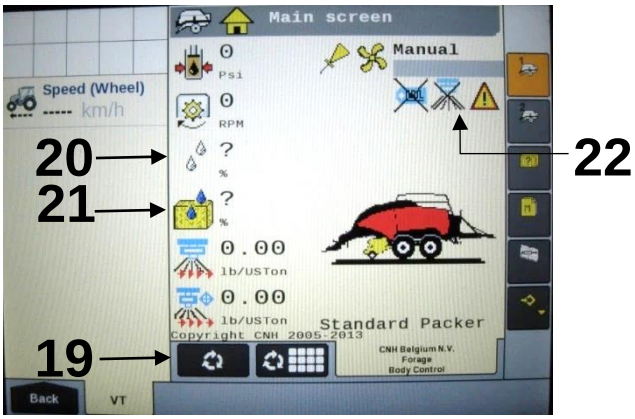


Verify that your MAIN SCREEN 1 and MAIN SCREEN 2 are configured as you would like them displaying the information you would like visible during operation. During operation, information for the 77E system that you have chosen to display will be displayed on the Baler Work Screen.

Cycle back and forth between the Baler Work Screen and the 77E System Work Screen by pressing the NEXT IMPLEMENT button (19) during operation.

Harvest Tec Icons signified by arrows 19-25 are as follows**:**

(19) Next Implement Button
(20) Moisture Content %
(21) Last Bale Average Moisture Content %
(22) IPM Status Icon



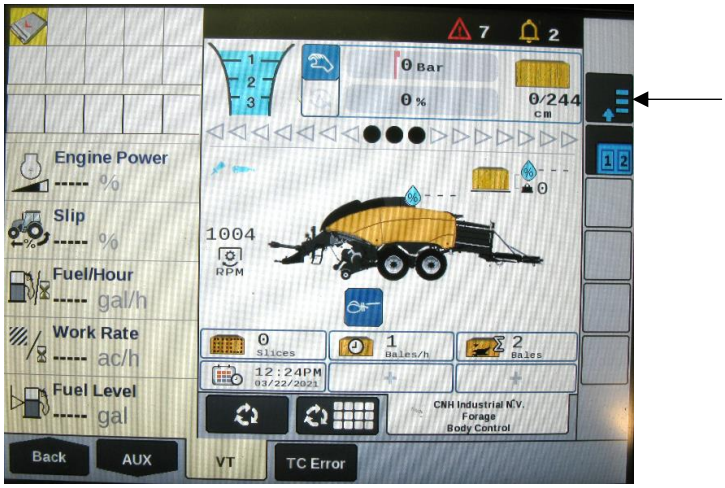
The status icon (22) indicates the system is connected to the baler. An “X” over the status icon indicates the system is:

A) Not in an application mode
B) Paused through
    a. Manual Pause
    b. Baler End of Row (EOR) Pause (PTO speed < 600 rpm)

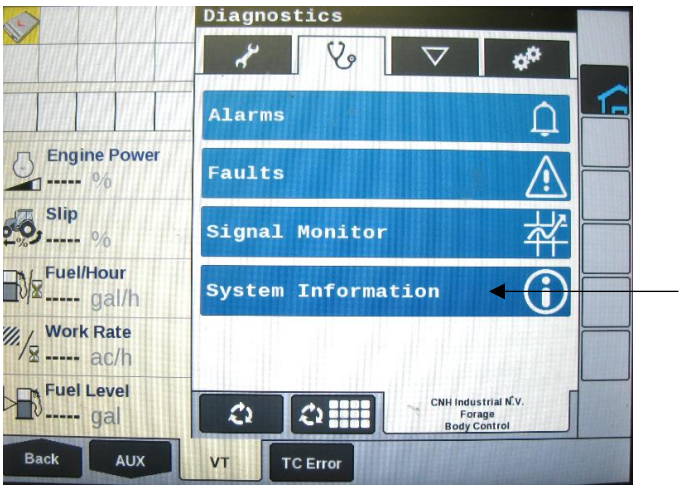
Baler Display Integration – Case LB436HD & New Holland Big Baler 340/1290HD

Follow the steps below to setup the integration of the 77E System into the Pro 1200 Series Monitor.

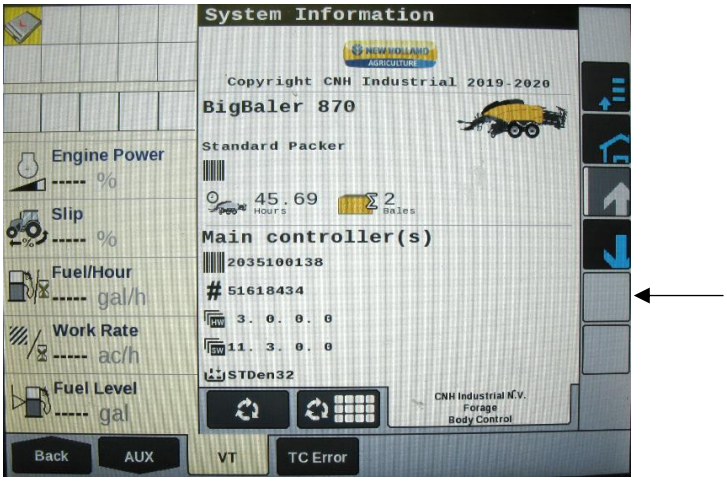
1. Select the baler Setup tab in the top right corner of the baler run screen.



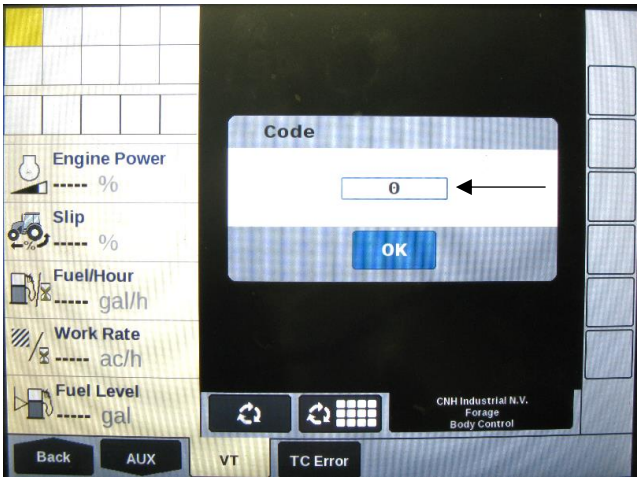
2. Open the Diagnostics tab by pressing the (stethoscope icon) and select the System Information tab.

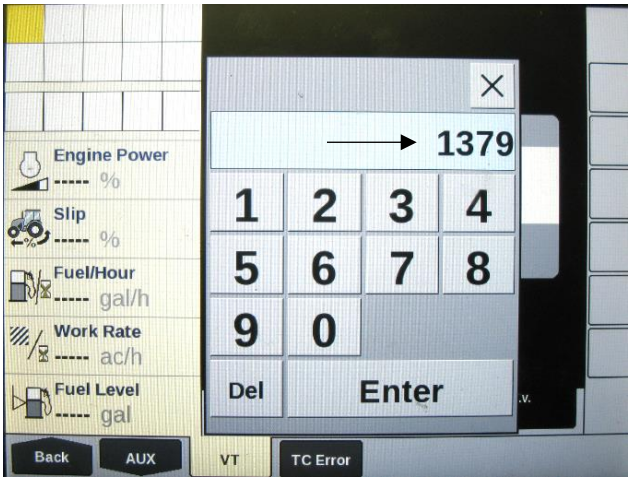


3. On the System Information page press and hold the first blank square box under the down arrow on the right side of the screen for 10 Seconds.



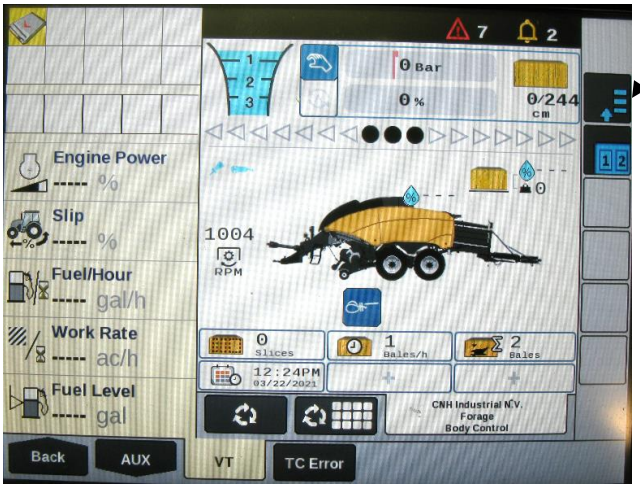
4. After 10 seconds the first screen below will appear prompting you for a code. Press the ‘0’ and enter the Code 1379 when the numbers appear.

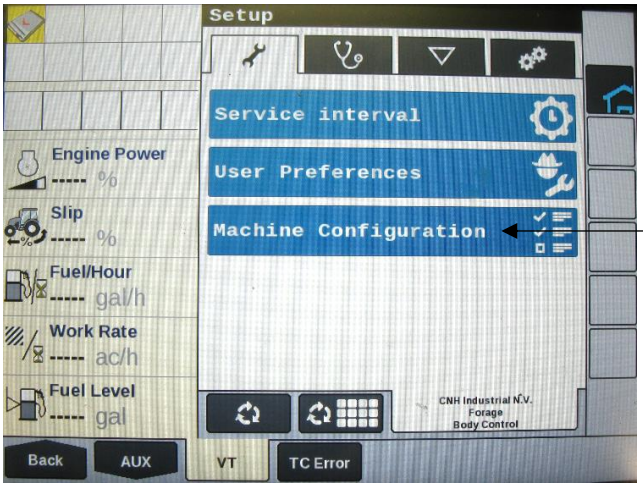




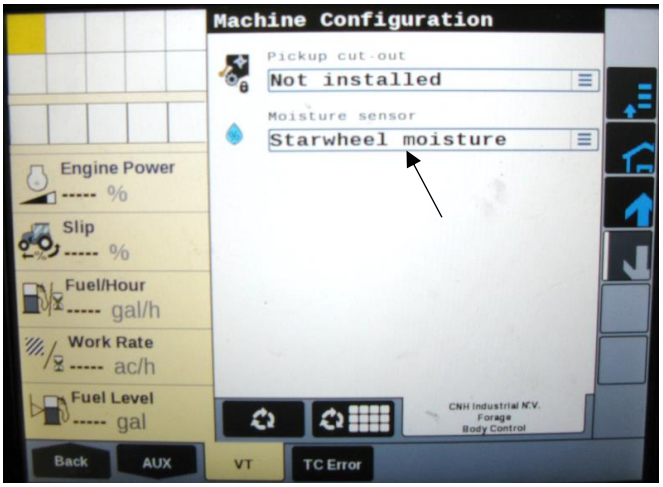
The screen below will appear alerting you ‘Dealer Mode Activated’. Press OK and go back to the balers home screen.

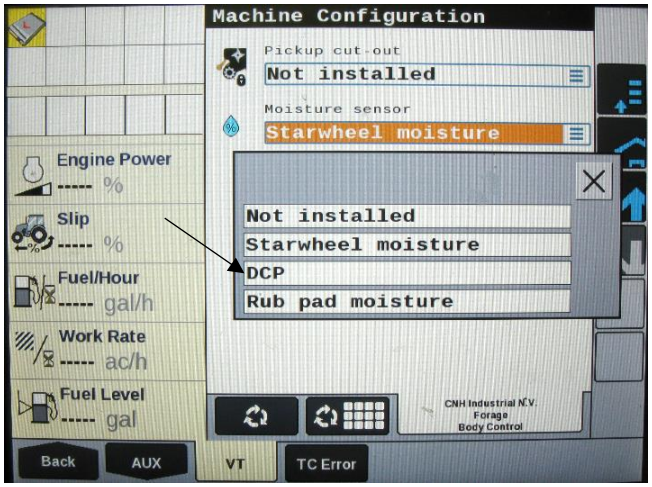
5. Select the baler Setup tab in the top right corner of the baler run screen. Then press Machine Configuration from the baler setup page (wrench icon at top).



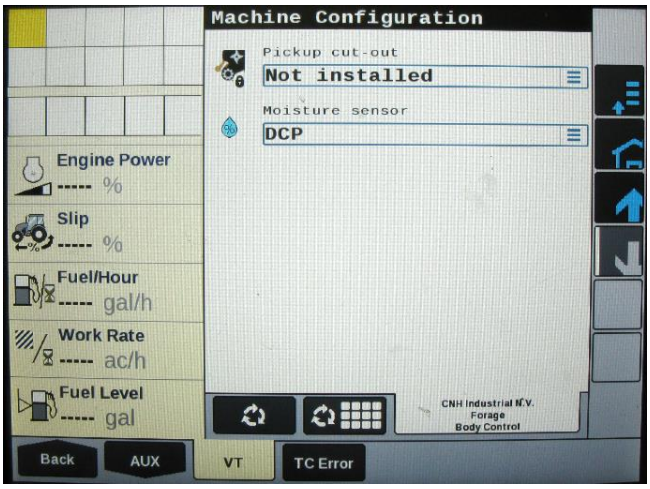


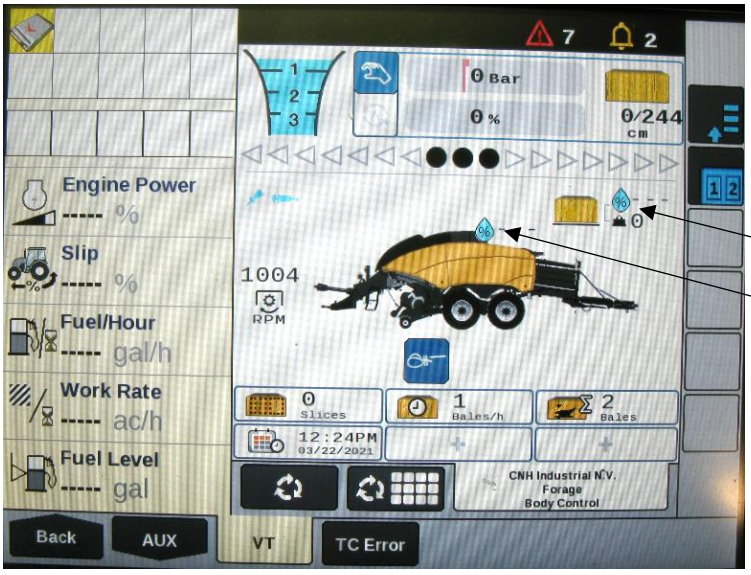
6. Select the Moisture Sensor line on the Machine Configuration screen. On the next screen that appears select DCP (or Starwheel Expansion) from the drop down





The moisture sensor selection will now read DCP (or Starwheel Expansion) on the Machine Configuration page.





The current bale moisture content will now display above the baler next to the water droplet and the previous bale moisture will display next to the bale in above the are above the bale chute (below).

Previous Bale Moisture

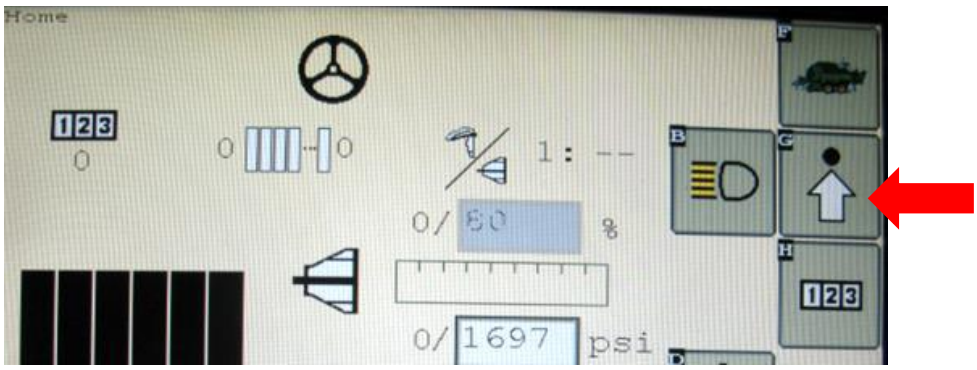
Current Bale Moisture

Baler Display Integration – John Deere 330/340

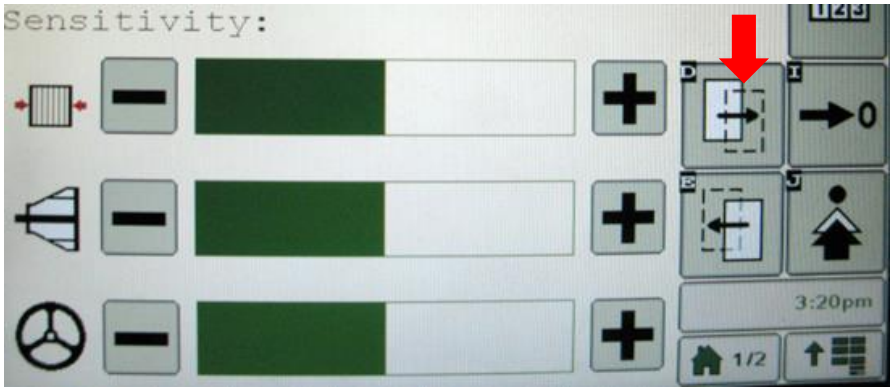
Follow the instructions below to finish setup of the Harvest Tec 77E system through the John Deere ISOBUS monitors.

2600 Series Monitors

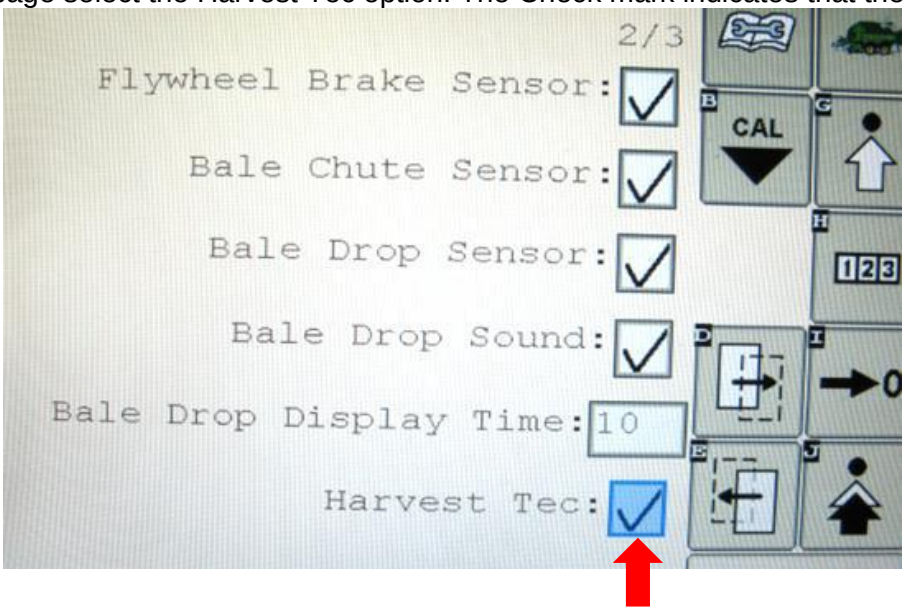
1. Starting from the Home Page select the Up Arrow with the dot on top.



2. On the Machine Setup page that will appear, select soft key D (Page Right)

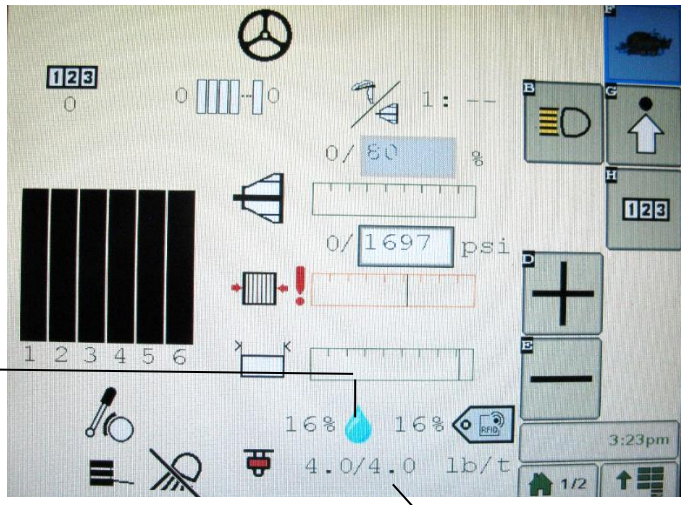


3. On the next page select the Harvest Tec option. The Check mark indicates that the system is now on.



2600 Series Monitor Baler run Screen Details

Harvest Tec information will display on the bottom of screen in the center



Baler Display Integration – John Deere 330/340

GreenStar 4th Generation Arm Command Display

Display software version **8.10.2393-23 or later,** is required on the display to ensure compatibility. Earlier versions are not all compatible. This information can be found by selecting “Menu” in the lower right-hand corner of the display, select the third tab down labeled “System”, press “Software Manager”, then the “Version Information” tab and the software versions will be displayed (Figure 1).

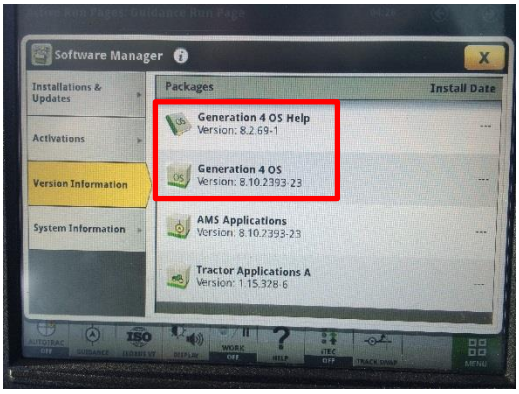


Figure 1

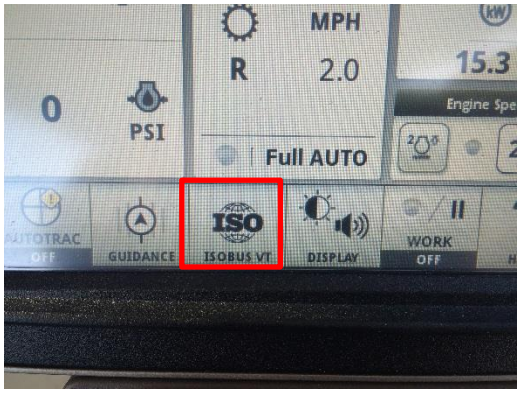


Figure 2

Once you have made sure the software version is at or above the recommended version, return to the tractor run screen. When on the run screen, there will be an ISO button (Figure 2) on the bottom toolbar. Pressing this will bring you into the “Connected ISOBUS Implements” page (Figure 3). If Harvest Tec 77E is powered up correctly and active on the ISOBUS, the icon labeled “Forage, Harvest Tec, Inc.” will display. If the files are still loading you will see a loading status (Figure 4).

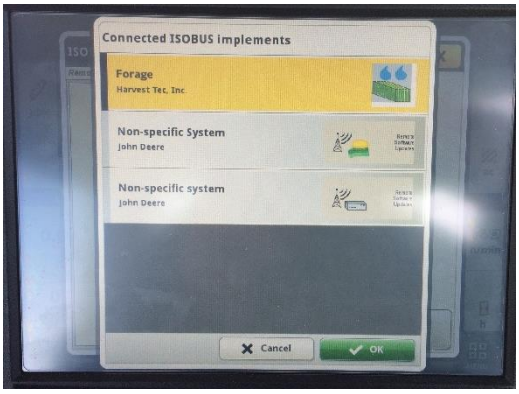


Figure 3

Figure 4

Once the files are loaded onto the display, you will receive a warning (Figure 5) to inform the operator that another device has been added onto the ISOBUS. This can be accepted and then selecting the Harvest Tec device in the ISOBUS menu will bring up the Harvest Tec system.

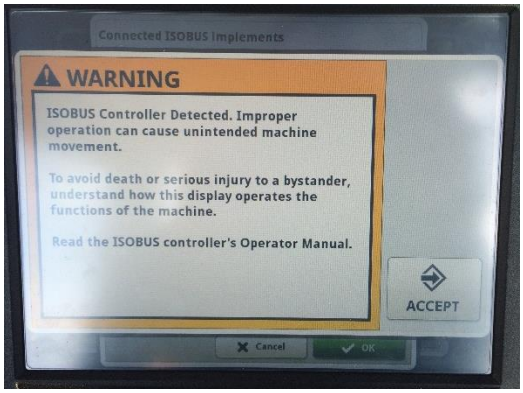


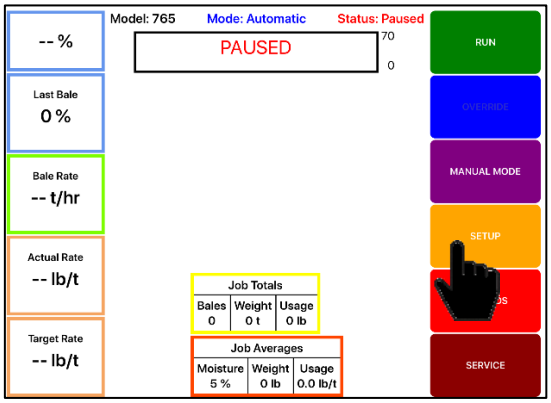
Figure 5

GreenStar 4th Generation Arm Command Display

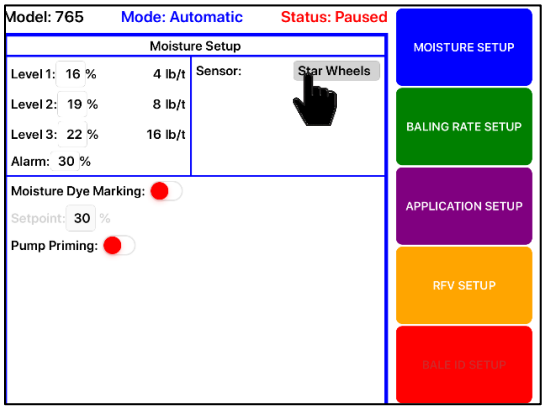
When the Harvest Tec system is connected you can also access the 77E by following these screens:

Moisture System Setup - Tablet with PRECISION BALE APP - MWM-Chute.

Note – Screen layouts may differ slightly if setup is performed thru Baler Virtual Terminal. When operating the Harvest Tec 77E System not all features are utilized within software



Press **SETUP**

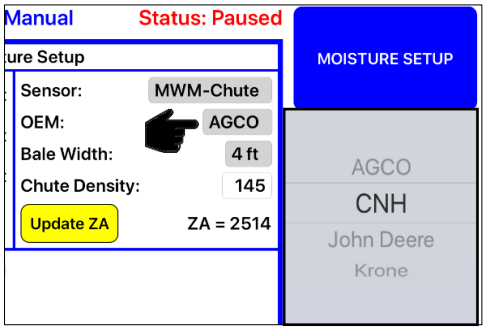


Press the **SENSOR** cell

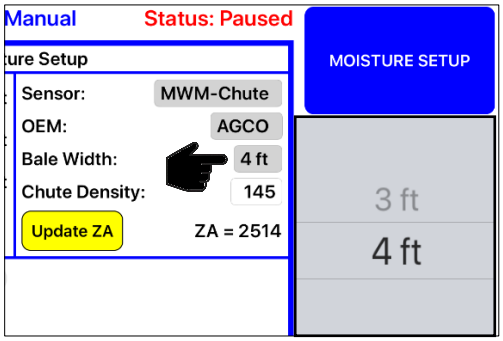
Selecting Baler OEM – MWM-Chute

1. To change the Baler OEM, select the gray cell to the right of **OEM**.

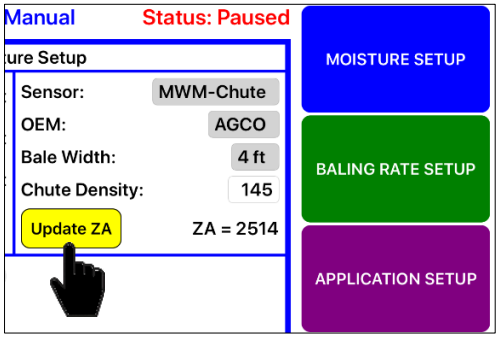
2. When the menu appears, select the correct Baler OEM by scrolling between AGCO, CNH, John Deere, and Krone.



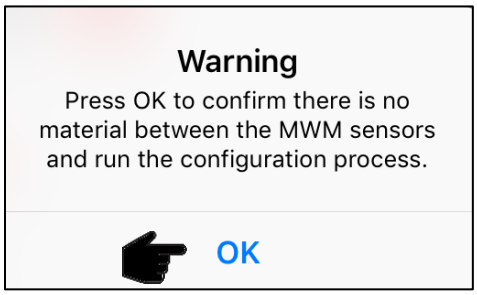
Set **OEM** to baler model: AGCO, CNH, JD, or Krone



Set **Bale Width** for baler type



Press **Update ZA**



Bale Chamber must be clear to run Zero Adjust, then press **OK**

ZA RANGE (Zero Adjustment) Same for Chute or PCC Setup	
All Balers	**1500-3500**

If the reading is within range no adjustments need to be made.

Readings slightly outside of this range do not indicate sensor issues-
Readings below 1000 (or Zero) indicate improper alignment, damaged or non-working sensors, or damaged or disconnected wire harness.

This range is for both 3' and 4' (1M & 1.2M) wide balers

Moisture System Setup – CHUTE DENSITY – MOISTURE OFFSETTING

Note: Chute Density setting may be changed after calibration is complete to compensate for various crop types and allow for minor moisture reading adjustments. Density is based on the dry weight of the bale. The default setting is 145kg/m^3. **Lower density settings will result in higher moisture readings.** Density adjustment range is currently 100-400kg/m^3.

Common Questions

1. **What terminal is required to operate microwave sensor?**
   Microwave sensors are compatible with select AGCO, Case, New Holland, and Krone baler Virtual Terminals & Apple/Android tablets with Precision Bale App.

2. **What moisture range will sensors detect?**
   The 77E Bale Chute chamber sensors have a range of 6-40%.

3. **What crops are the microwave sensors designed for?**
   The Microwave sensors are designed and calibrated for Alfalfa.

4. **Is there a calibration to the microwave sensors for different crops?**
   No, there is no adjustments needed. However, the density setting can be adjusted to offset the moisture reading should the operator observe moisture readings are above or below the actual bale moisture. The greater the density setting the lower the moisture reading. Decreasing the density setting will increase the moisture read out.

5. **Do the sensors emit harmful waves?**
   No

6. **How often should a Zero Adjust (ZA) be performed?**
   A zero adjust should be performed on initial installation. It is also recommended completing a zero adjust calibration at the beginning of each season.

7. **When reading moisture with 77E microwave sensors why can I <u>not</u> select Automatic mode?**
   MWM Bale Chute sensors can only be used in Manual Mode due to limited features of this moisture sensor. The 77E sensors use the same operating software found in the 700 series automatic applicator but are limited to sensing moisture in manual mode only.

8. **Where do I position optional 740DM moisture dye marker spray tip when operating microwave sensors when using a 77E MWM Chute 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.

9. **Should the light blink green or remain solid on the ICM module 030-6673?**
   Blinking Green Light – When properly connected to a Virtual terminal or tablet (with the Precision Bale App), the blinking green light will indicate good connection

Troubleshooting

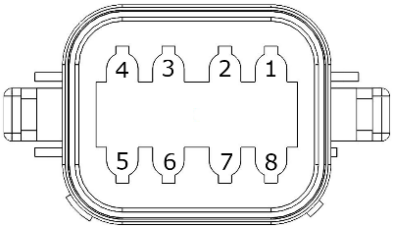
PROBLEM	POSSIBLE CAUSE	SOLUTION
Moisture reading errors (high or low)	1. Wire disconnected or bad connection between sensors and ICM in cab of tractor	1. Reconnect wire.
	2. Low power supply to ICM	2. Check voltage at ICM box. (Min of 12 volts required.)
	3. Dry hay lower than 7% moisture or wet hay over 40%.	3. The Bale Chute system read 6-40% moisture.
	4. Short in wire between Microwaves and ICM.	4. 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 77E 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.
Bale rate and application rate displays zero.		1. Model 77E moisture only kit does not provide a baling rate or actual rate of preservative
MWM moisture reads low all the time	1. Bale Rate sensor out of adjustment 2. MWM – Chute is not properly selected in setup menu	1. Verify Bale Rate sensor is not damaged and is sensing the metering wheel moving each time 2. Reference Moisture System setup section
ICM light will not illuminate	1. ICM receiver not connected 2. Harness disconnected Low power	1. Check connections and voltage. Minimum 12.5V needed. 2. Verify all pins in ICM are not damaged
Moisture displays as “error“ in Harvest Tec object pool within VT or tablet* Moisture displays as “89” on baler work screen	1. Damaged metering wheel proximity sensor 2. Faulty harness connection to microwave moisture sensors 3. No incoming crop	1. Verify proximity sensor functioning on metering wheel 2. Verify moisture sensors properly connected 3. Feed crop into baler
*if ICM does not see a reading from the microwave sensor within 5 min while in RUN, system will display “error” / ”89%” until new reading is sent		

Pin Outs

006-7640MWL – Microwave Baler Harness – Baler side hitch plug

(Deutsch Plug Number: DT06-08SA-CE10)

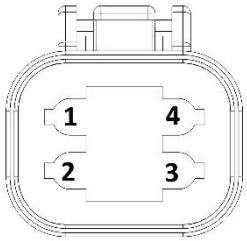
Pin 1	Red/White	CAN 12V+
Pin 2	Black/White	CAN GND
Pin 3	Orange	CAN High
Pin 4	Blue	CAN Low
Pin 5	Yellow	ISO CAN High
Pin 6	Green	ISO CAN Low
Pin 7	Red	ECU 12V+
Pin 8	Black	ECU Ground



006-7640MWL Moisture Dye Marker Plug on Baler Harness

(Deutsch Plug Number: DT06-4S)

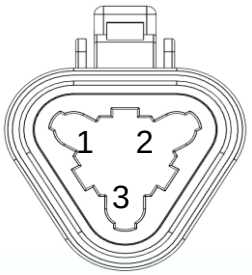
Pin 1	Red	ECU 12V+
Pin 2	Yellow	ISO CAN High
Pin 3	Green	ISO CAN Low
Pin 4	Black	ECU Ground



006-7640MWL Metering Wheel Sensor Plug on Baler Harness

(Deutsch Plug Number: DT06-3S)

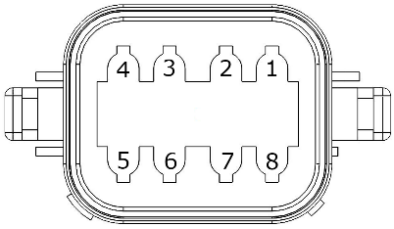
Pin 1	Red/White	+12V to End of Bale Sensors
Pin 2	Black/White	Ground to End of Bale Sensors
Pin 3	Brown	Signal



006-7640MWL (RX) Microwave Moisture Harness

(Deutsch Plug Number: DT06-08SA-CE10)

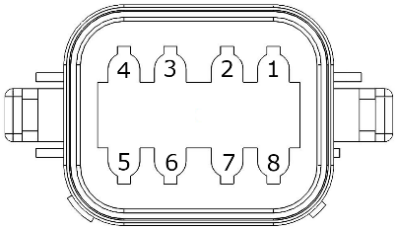
Pin 1	Black/White	Ground
Pin 2	Red/White	12V Power
Pin 3	Orange	CAN High
Pin 4	Blue	CAN Low
Pin 5	Plugged	
Pin 6	Plugged	
Pin 7	Brown	Signal
Pin 8	Black	Ground



006-7640MWL (TX) Microwave Moisture Harness

(Deutsch Plug Number: DT06-08SA-CE10)

Pin 1	Black/White	Ground
Pin 2	Red/White	12V Power
Pin 3	Orange	CAN High
Pin 4	Blue	CAN Low
Pin 5	Plugged	
Pin 6	Plugged	
Pin 7	Plugged	
Pin 8	Plugged	

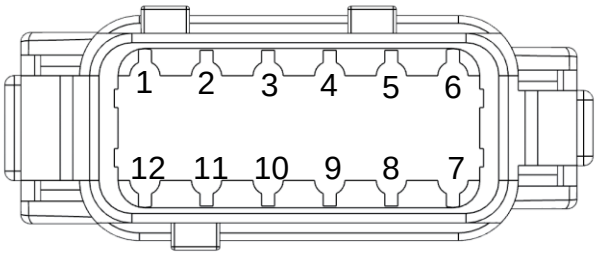


Pin Outs (continued)

006-764IC Integrated Control Module (ICM) on harness

(Deutsch Plug Number: DTM06-12SA)

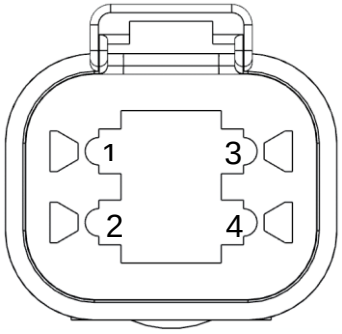
Pin 1	Red	+12V from ECU
Pin 2	-	Plugged
Pin 3	Red/White	+12V CAN X
Pin 4	Black/White	Ground CAN X
Pin 5	Orange	CAN X Hi
Pin 6	Blue	CAN X Lo
Pin 7	Green	ISO CAN Lo
Pin 8	Yellow	ISO CAN Hi
Pin 9	-	Plugged
Pin 10	-	Plugged
Pin 11	-	Plugged
Pin 12	Black	Ground from ECU



006-764IC - ISOBUS/Key Switch Connection

(Deutsch Plug Number: DT04-4P)

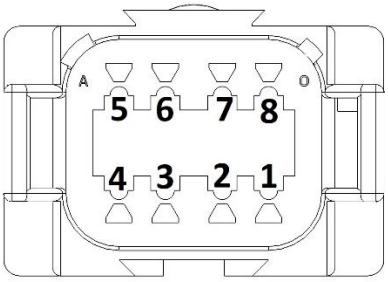
Pin 1	Red	ECU 12V+
Pin 2	Yellow	ISO CAN High
Pin 3	Green	ISO CAN Low
Pin 4	Black	Ground from ECU



006-764IC -77E Tractor Harness – Tractor side hitch plug

(Deutsch Plug Number: DT04-08PA)

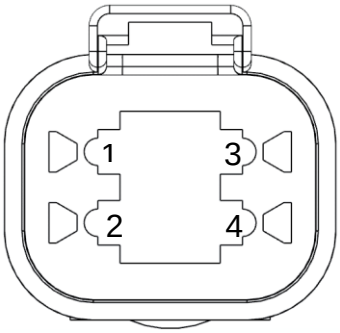
Pin 1	Red/White	+12V CAN X
Pin 2	Black/White	Ground CAN X
Pin 3	Orange	CAN X High
Pin 4	Blue	CAN X Low
Pin 5	Yellow	ISO CAN High
Pin 6	Green	ISO CAN Low
Pin 7	Red	+12V from ECU
Pin 8	Black	Ground from ECU



006-765CPH – Key Switch Wire

(Deutsch Plug Number: DT06-4S)

Pin 1	Red	+12V Key
Pin 2	-	
Pin 3	-	
Pin 4	Black	Ground from ECU

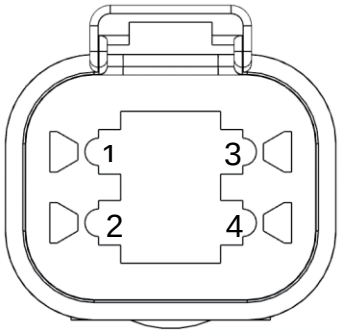


Pin Outs (continued)

006-7670A – Diagnostic Integration Wire

(Deutsch Plug Number: DT06-4S)

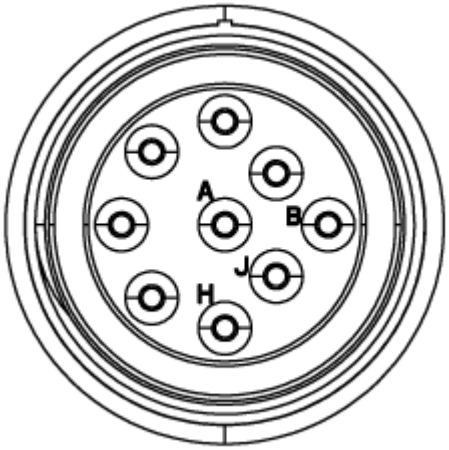
Pin 1	Red	ECU 12V+ (Switched)
Pin 2	Yellow	CAN High
Pin 3	Green	CAN Low
Pin 4	Black	Ground from ECU



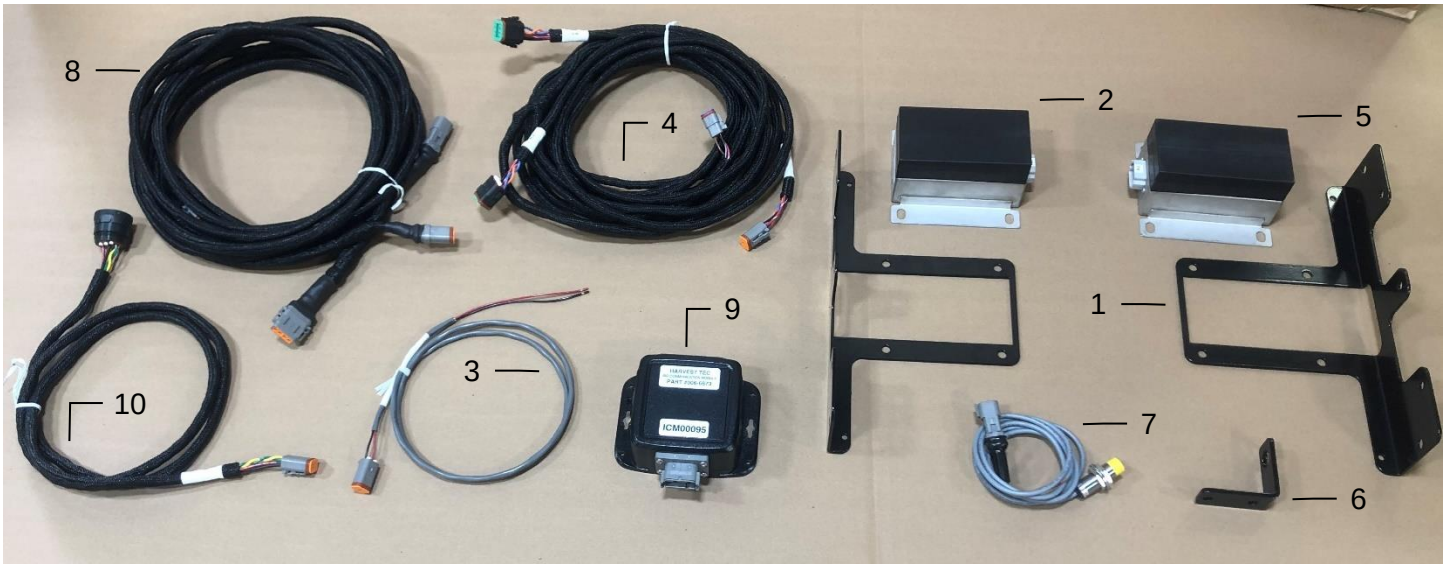
006-7670A – Diagnostic Integration Tractor Side

(Deutsch Plug Number: HD16-9-19395)

Pin A	Black	Ground from ECU
Pin B	-	
Pin C	-	
Pin D	-	
Pin E	Red	ECU 12V+ (Switched)
Pin F	-	
Pin G	-	
Pin H	Green	CAN Low
Pin J	Yellow	CAN High



Microwave Moisture Bale Chute System – 77E



Ref	Description	Part #	Qty
1	MWM Rear Mounting Bracket	001-2601	2
2	Microwave TX Sensor	006-4641MTX	1
3	KEY SWITCH PLUG	006-765CPH	1
4	77E MWM BALER HARNESS	006-7640MWL	1
5	Microwave RX Sensor	006-4641MRX	1
6	End of Bale Bracket (Meter Wheel Bracket)	001-4648SS	1
7	Proximity Sensor (Meter Wheel Sensor)	006-7401	1
8	77E MWM TRACTOR HARNESS	006-764IC	1
9	ICM (ISO COMMUNICATION MODULE)	006-6673	1
10	700 SERIES ISOBUS INTEGRATION, IN-CAB DIAGNOSTIC PORT	006-7670A	1
NP	700 SERIES 120 OHM EXTERNAL RESISTOR	006-700R	1
NP	Power / Comm Extension Harness (25')	006-7640FMX	1
	Complete Assbly (Ref 1-10 & 006-700R)	77E	

Harvest Tec Inc. Warranty and Liability Agreement

Harvest Tec, Inc. 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, Inc. 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, Inc.

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, Inc. 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, Inc. 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, Inc. 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, Inc. will not affect our ability to obtain materials or manufacture necessary replacement parts.

Harvest Tec, Inc. 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.

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