

# INSTALLATION MANUAL

***Model 500A1***

***Moisture Sensor Kit for Large Square Balers***




**DECLARATION OF APPLICATION OF ESSENTIAL REQUIREMENTS OF THE DIRECTIVE 2006/42/ EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 17, MAY, 2006 AND OTHER RELEVANT EU DIRECTIVES:** The Harvest Tec Hay Moisture Sensor Kit conforms with the Directive and other relevant EU directives.

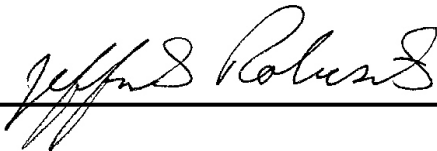
**SERVICE DUTY OF THE PARTIALLY COMPLETED MACHINE:** The Harvest Tec Hay Moisture Sensor Kit will only be put into service after installed on a hay baler that has been declared to conform with the Directive.

Noise from the Harvest Tec Moisture Sensor Kit does not exceed 70 dB (A).

**Manufacturers Name Plate**

<p><b>Harvest Tec LLC.</b>          Manufactured at and correspondence to:          2821 Harvey Street Hudson, WI 54016          USA</p>	
<p><b>Model</b></p>	
<p><b>Build Date</b></p>	
<p><b>Serial No.</b></p>	

**PERSON AUTHORIZED TO PROVIDE INFORMATION ON THE MACHINE AND WHO MAKES THIS DECLARATION:**

  
 \_\_\_\_\_

**Jeffery S. Roberts, President, Harvest Tec, LLC.**

Signed in Hudson, WI, USA on May 21, 2011

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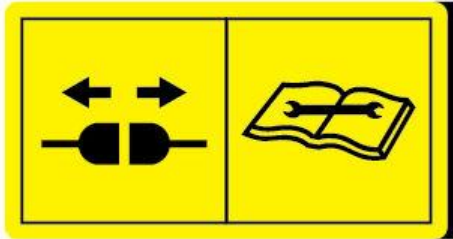
## Safety

Carefully read all safety signs in this manual and on the moisture sensor kit before use. Keep signs clean and clear of obstruction to view. 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 moisture sensor kit in proper working condition. Unauthorized modifications to the moisture sensor kit may impair the function and/or safety of the machine.

Carefully read and understand all safety signs before installing or servicing.

## Safety Signs



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

# **INSTALLATION OF 500A1 MOISTURE SENSOR KIT**

## **Introduction**

Thank you for purchasing a 500A1 Moisture Sensor Kit and congratulations. The 500A1 Moisture Sensor Kit is designed to work with any AGCO 2150-2190 or Challenger LB33B-LB44B large square balers model year 2008 and newer. If you do not have the AGCO Bale Chute Scale option, you will need the parts listed below:

AGCO part number:

700733748 Square Baler Module (SBM)

700733750 Wire Harness (only needed on 2008-2011 Balers)

The Square Baler Module (SBM) and the Square Baler Controller (SBC) must run on Version 3.0 or higher. Please consult the Baler Operations Manual for more information.

For instructions on the operation of the 500A1 Moisture Sensor Kit please refer to the 500A1 Operations Manual.

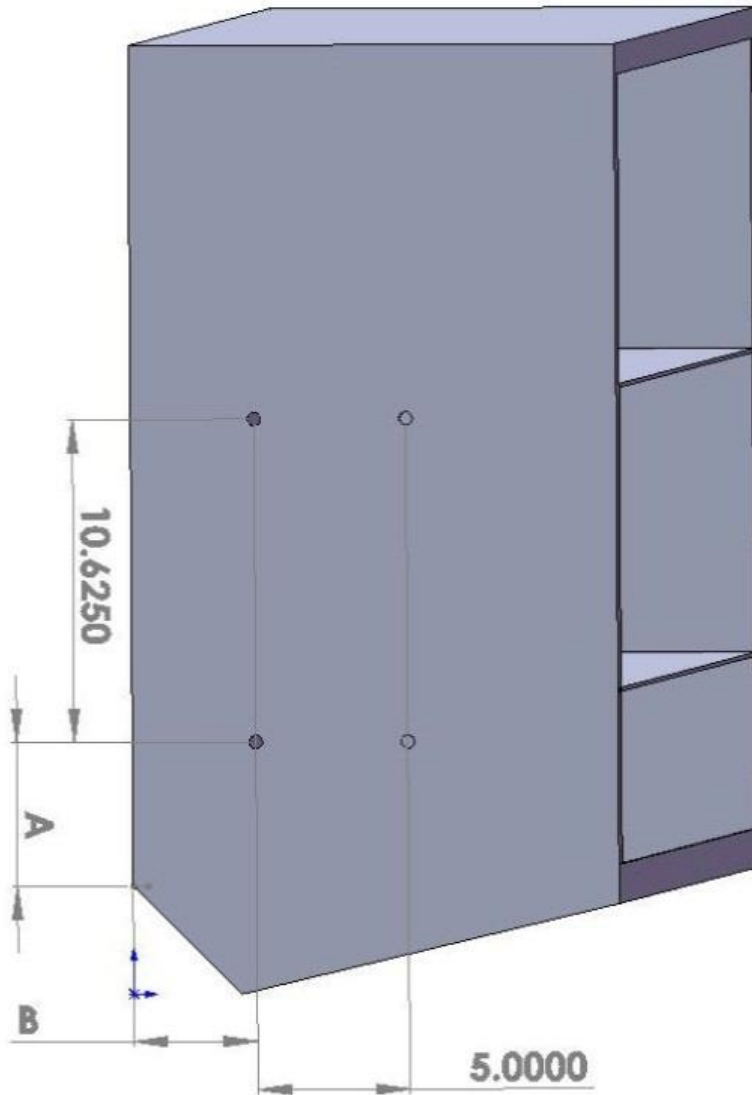
## **Tools Needed**

Standard wrench set  
Electric drill and bits  
Side cutter  
Standard screwdriver  
Standard nut driver set  
Standard socket set  
Hammer  
Center punch

## Mounting the 500A1 Moisture Sensor Kit

### Mounting the Precision Information Processor (PIP)

Locate the Precision Information Processor (006-5671LS2), four 5/16" x 1" hex bolts, flats, locks and nuts. Mark, and drill four 3/8" (9.525 mm) holes following the template shown below. The whip wire extension on the PIP should be facing down when attached to the baler. Mount the PIP cover (001-5650X) over the PIP and secure the hardware.



A = 12"  
(304.80mm)  
B = 3" or  
(76.200mm)

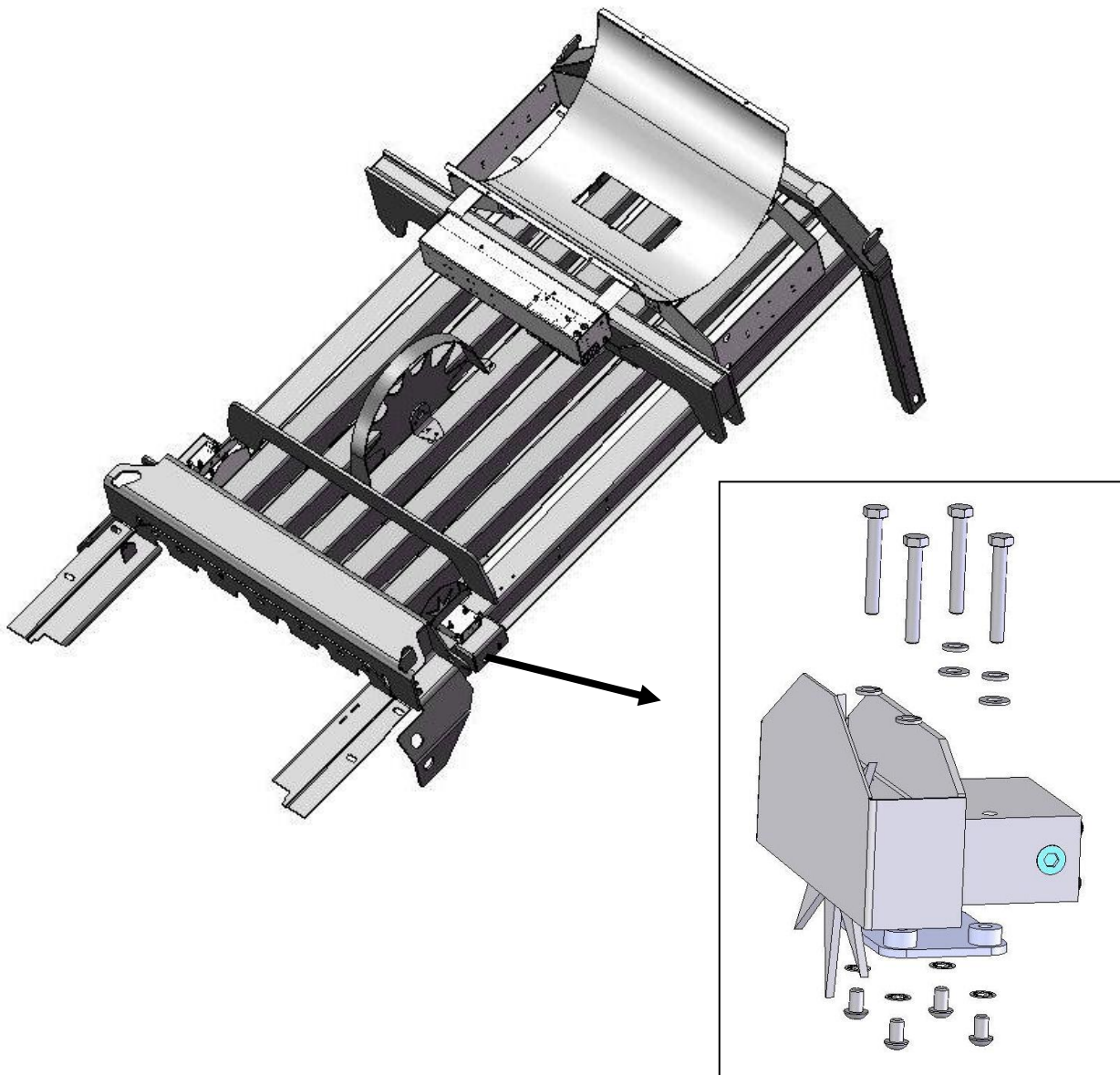
10.62 inches =  
270mm

5.00 inches =  
127mm

## Installation of the Star Wheels

The star wheel block has a plug on one side and a wire grommet on the other side. If there is interference or problems with the star wheel wires on one side of the block, exchange the wire grommet with the plug so the wire can exit the block on the opposite side. Mount the twine guards using the two inner holes on the star wheel block.

The star wheels are to be mounted on top of the baler just behind the knotters and under the walkway on both sides. The notch and holes for the star wheels are pre-cut. Place the spacer plate (001-6707E) over the pre-cut holes. Attach with 5/16" x 1/2" Allen head bolts and internal star washers from inside the bale chamber. Center the star wheels over the top of the spacer plate, place the twine diverters on top of the star wheel and attach with 5/16" x 2-1/4" hex bolt and lock washers. For remaining two holes of each star wheel attach with 5/16" x 2-1/4" hex bolt, lock washer, and one 5/16" thick flat washer per bolt. Verify the star wheels align with bale chamber before tightening all hardware. **(The twine guard with the two additional holes should be placed on the right side of the baler looking from the rear).**



## Wiring the Kit

### Connecting to the Baler Harness



Locate the communication harness (006-5650J) and locate the connection point shown below on the baler. The connection point is shown to the right by the arrow. This location is at the back of the baler behind the right fender. Remove the cap and connect the communication harness (006-5650J). Route the harness over the fender and up the twine box towards the PIP on the back right twine box. Secure loose wires with cable ties.

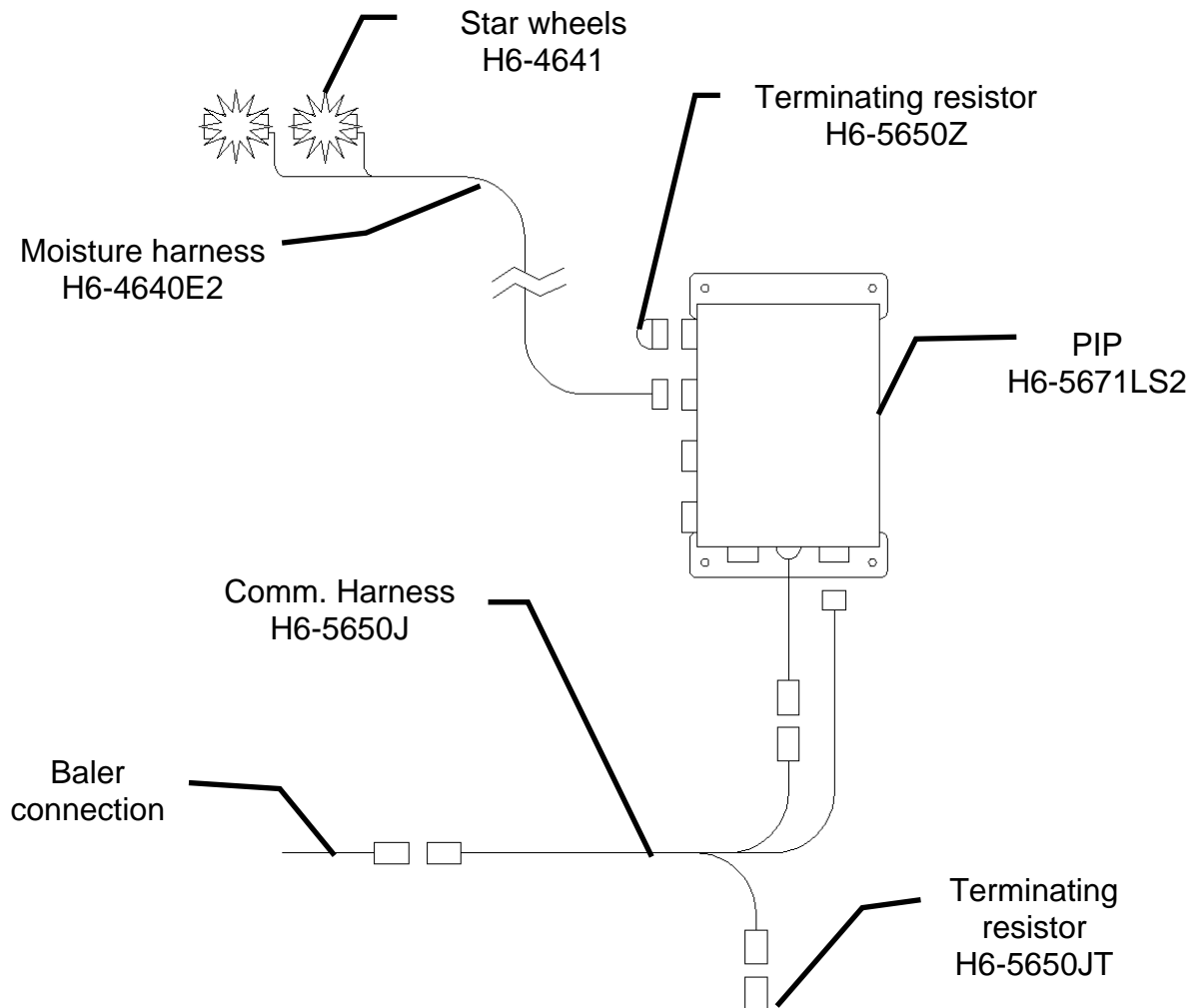
### Connecting the Star Wheels to the PIP



Locate the moisture harness (006-4640E2). Remove the four pan head screws on each star wheel and loosen the grommet. Insert the eye loop of the wire into the star wheel block and install on the end of the swivel. Leave a loop in the wire to allow the star wheel cover space to be reinstalled. Tighten the swivel nut, followed by the grommet, and finally install and tighten the four screws. The picture to the right shows the star wheel block open with the wire looped and attached to the swivel. Once both wheels are complete route the harness towards the PIP on the back right twine box. Secure loose wires with cable ties.



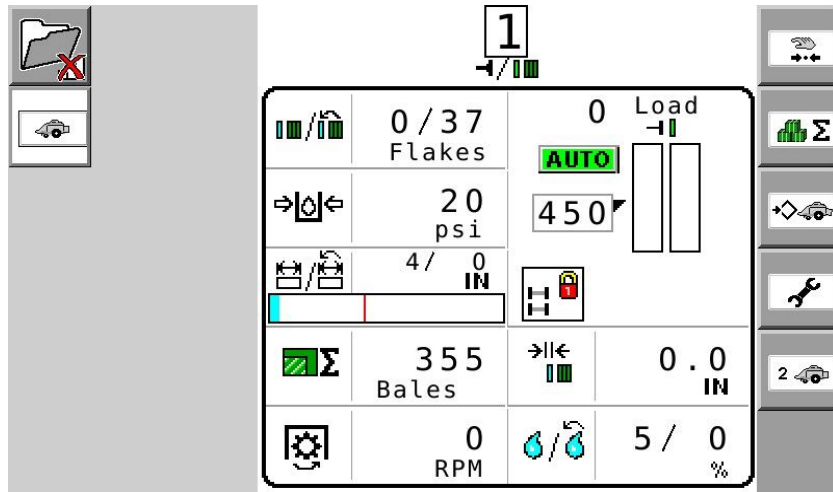
## Connecting the Harnesses to the PIP



1. Install the green capped terminating resistor (006-5650Z) to the Precision Information Processor (PIP).
2. Route the communication harness (006-5650J) from the baler to the PIP. Attach the harness to the whip harness coming off the base of the PIP. Secure harness from PIP to baler communication port.
3. Install the grey terminating resistor (006-565JT) on the open end of the communication harness (006-5650J) next to the PIP.
4. Install the moisture harness (006-4640E2) into the PIP at the port marked Moisture Sensor. Secure harness from PIP to star wheels.

## Power Up

Turn the tractor key on. The monitor should light up and display the home screen as pictured below.



Please refer to the 500A1 Moisture Sensor Kit Operations Manual and the baler operations manual to set baler monitor screens.

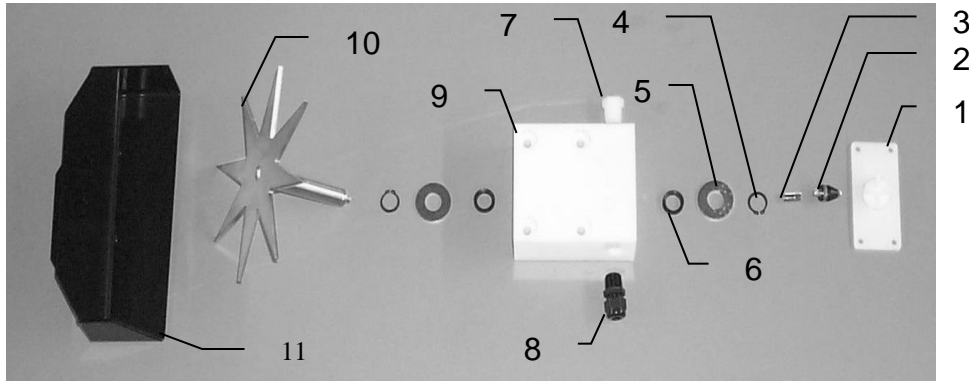
# PARTS BREAKDOWN

## Controls and Harnesses



<u>No.</u>	<u>Description</u>	<u>Part no.</u>	<u>Qty</u>	<u>No.</u>	<u>Description</u>	<u>Qty</u>
1	Star wheel spacer	001-6707E	2	11	5/16" nuts	22
2	Star wheels	006-4641	2	11	5/16" lock washers	14
3	Moisture harness	006-4640E2	1	11	5/16" flat washer	4
4	PIP cover	001-5650X	1	12	10/24 x 5/8" PHS	8
5	Precision Information Processor (PIP)	006-5671LS2	1	12	10/24 lock washers	8
6	Comm. harness	006-5650J	1	13	5/16" x 1/2" BHCS	8
7	Terminating resistor	006-5650JT	1	14	5/16" x 2-1/4" hex bolt	8
8	Wire clips	008-9018	9	15	5/16 x 1" hex bolt	4
9	Twine diverter	001-4645H	1	16	12" cable ties	5
10	Twine diverter	001-4644H	1			
NP	Terminating resistor	006-5650Z	1			

## Star Wheels Sensors



<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
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		Twine guard-left for Agco	001-4645H	1
6.	Dust seal (per side)	w/006-4641K	2		Twine guard-Right for Agco	001-4644H	1
7.	Plug fitting	003-F38	2	1-10	Star wheel assembly	030-4641	2
8.	Wiring grommet	008-0821A	2	12.	Spacer plate for Agco	001-6707E	2

## **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. 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 7/22

For questions regarding installation of hardware please contact:

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