

Installation Manual

Model 666 464 & 465 Update Kit to 696 Applicator



*Equipment and Products
for Quality Hay.™*

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

Harvest Tec Model 666 Installation Table of Contents

	<u>PAGE</u>
Introduction	3
System Requirements	3
Tools Needed	3
Installation of Applicator	4-10
Removing 464 Components	4
Control Box and Main Wiring Harness	4
Pump Plate and Signal Conditioner	4
Removing 465 Components	4
Control Box and Main Wiring Harness	4
Pump Plate and Baler Mounted Processor	4
Installing the 666 Components	4
Installation of Pump Wire	4
Installation of Pump Controller 464 Controls	4
Installation of Pump Controller 465 Controls	4
Installation of the Dual Channel Processor	5
Installation of the End of Bale Sensor	6-7
Installation of Bale Sensor Installation Diagram	8-16
Plumbing	17
Tip Outputs	17
Installation of Star Wheels and Bale Rate Harness	17
Main Wiring Harness and Power Cord Connection	18
Optional ISOBUS plug to the tractor	18
Installation of iPad Integration Control	19
iPad Integration Control	19
Bluetooth Receiver Lights	19
Wiring Diagram	20
Pin Outs	21-23
Parts Breakdown	24-26
Control and Harnesses	23
Optional iPad Mini Mounting Kit	24
Optional iPad Display Kit	25
Warranty Statement	27

Introduction

The Harvest Tec Model 666 Automatic Upgrade Kit is designed to update the old 464 or 465 Automatic Preservative Applicator Systems giving you all of the advanced features of the newest Harvest Tec 600 Series: the 665 controller in the 696 Automatic Preservative Applicator System. This 666 upgrade kit will convert your 464 or 465 automatic systems to the fully functional 696 Preservative Applicator System and is designed to apply Harvest Tec buffered propionic acid.

This 696 applicator system has been designed to be operated through an Apple iPad (not included) using the Hay App. As well as the option to plug directly into most tractors that have an ISOBUS Monitor. The 696 Applicator System offers these advantages by operating through an Apple iPad:

1. Large bright, clear, colorful display
2. More durable and can be read in bright sunlight
3. Can be used for multiple other uses than just the applicator display
4. Option to tie-into the tractor ISOBUS system

The 696 Hay Preservative Applicator System is designed to apply buffered propionic acid to the forage crop as it is baled and will adjust the rate of application based on moisture and tonnage of the crop being harvested. The model 696 base kit includes: tank, frame, pumps, hose, and the Dual Channel Processor (DCP). This manual will take you through the steps for installing the applicator. If you are unsure about installing the system after consulting this manual, contact your local authorized dealership for additional assistance. If you are in need of parts for the system please see the parts breakdown in the back of this manual and contact your local authorized dealer to order the parts. This applicator is designed to apply Harvest Tec buffered propionic acid.

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

***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

If choosing to operate the unit though the ISOBUS monitor, pn 006-6670A will need to be ordered through your local equipment dealer. 2018 Krone balers (and beyond) Serial Number 976909 will need pn 006-6650VAK.

Attention:

2010 Krone HDP balers and newer Krone part number 20 073 194 0 must be ordered to mount the star wheels.

Tools Needed

- Standard wrench set
- Standard socket set
- Standard screw driver or 5/16" nut driver
- Side cutter
- Hose cutter
- Crescent wrench
- Hammer
- Metal drilling and cutting tools
- Center Punch

Installation of Applicator

Removing 464 Components

Control Box and Main Wiring Harness

- The 464 control box will need to be removed from the cab of the tractor including the mounting bracket.
- The existing power harness will need to be removed and replaced with the new model power/communication harness supplied in the kit. Route the new harness from the battery to the hitch on the tractor.
- The existing bale rate sensors and moisture harness attached to the star wheels will need to be removed and disconnected from the signal conditioner.
- The main wiring harness will need to be removed from the cab. Remove the cable on the baler up to the signal conditioner. If crop eyes are attached disconnect from main harness.

Pump Plate and Signal Conditioner

- Remove the wires that are attached to the signal conditioner.
- Remove the hoses attached to the pumps taking care to mark the hoses for their respective pumps. Number the hoses according to the pumps 1, 2 and 3 with pump 1 being closest to the filter bowl and pump 3 being farthest away from the filter bowl.
- Remove the pump plate assembly by removing the 3/8" bolts, locks and nuts.
- Remove the signal conditioner from the pump plate by removing the screws on all four corners.
- Do not reinstall the pump plate at this time.

Removing 465 Components

Control Box and Main Wiring Harness

- The 465 touch screen monitor will need to be removed from the cab.
- The existing power cable will need to be removed and replaced with the one supplied in the kit. Route the new cable from the battery to the drawbar on the tractor.
- The existing bale rate sensors and moisture harness attached to the start wheels will need to be removed and disconnected from the baler mounted processor.
- The communication harness will need to be removed from the cab and from the baler. Remove the harness on the baler up to the baler mounted processor. If crop eyes are attached disconnect from baler mounted processor.

Pump Plate and Baler Mounted Processor (BMP)

- Remove the wires that are attached to the BMP.
- Remove the BMP from the pump plate.
- The new Pump Controller will be installed in place of the BMP. An additional hole may need to be drilled for the pump controller location pin. See the template at the back of the manual for instructions.

Installing 666 Components

Installation of Pump Wire for 464 Controls Only

1. Remove existing amp plug and wires, which connect to pumps.
2. Locate wire harness number 006-4660Z
3. The six pigtail wire will need to be connected to the pumps in the following order: pump1 (closest to the filter bowl) orange, pump 2 (middle pump) green wires, pump 3 (farthest away from the filter bowl) yellow wires.
4. The amp connection on this harness will attach to the pump controller.

Installation of Pump Controller 464 Controls Only

The pump plate removed earlier will need to be modified to fit the pump controller. Use the supplied diagram found at the end of the manual to drill the holes for the pump controller and filter bowl. Attach the flow meter and pump wires to their respective amp plugs.

Installation of Pump Controller 465 Controls Only

Insert the Pump Controller at the same location of the removed Baler Mounted Processor. Attach the flow meter and pump wires to their respective amp plugs.

Installation of Dual Channel Processor (DCP)

Follow the instructions below to mount the Dual Channel Processor (DCP) onto your specific baler model and type. The locations shown are the right twine box (looking at the back of the baler). Mark and drill the four 3/8" (10mm) holes and install DCP with two 5/16" x 1" bolts, two 5/16" x 1-1/4" bolts, locks, fender washers and hex nuts. If your baler is not listed below mount the DCP on the back of the twine box on the right side. Mount the DCP cover over the top of the tip and secure with the hardware using the 5/16" x 1-1/4" bolts on the top with the DCP shield.

John Deere L330 / L340 Baler DCP location on the back of the right twine box will vary slightly depending on placement of safety decals from factory. Do not cover safety decals. Mount DCP on the back of right hand twine box using Figure 2 as a reference. DCP location is recommended 5" (12.5cm) from inside edge and 5" (12.5cm) from top of twine box.

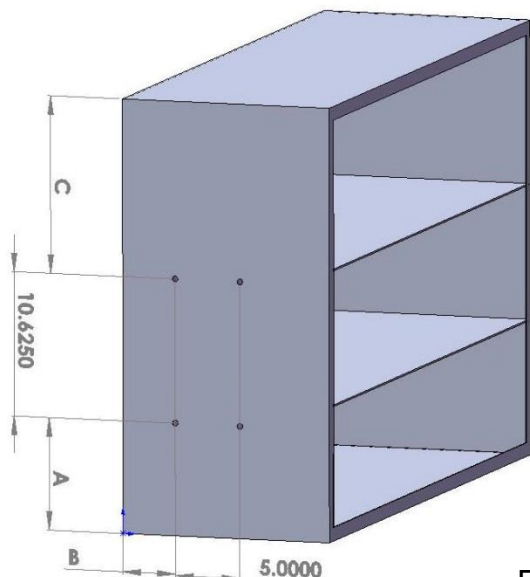


Figure 1



Figure 2

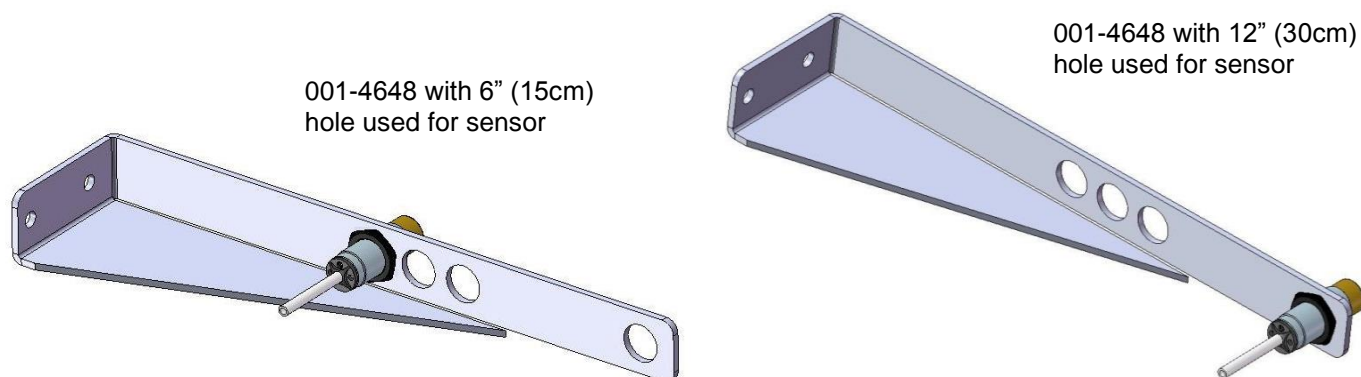
Baler Type	Model	Fig.	A	B	C	Baler Type	Model	Fig.	A	B	C
Case IH	LBX 331-431	1	4" (10cm)	2" (51mm)	N/A	Hesston	4750 – 4755	1	16" (40cm)	2" (51mm)	N/A
Case IH	LBX 332–432 & LB 333-433	1	N/A"	2" (51mm)	2" (51mm)	Hesston	4760	1	2" (51mm)	2" (51mm)	N/A
Challenger	LB 33	1	2" (51mm)	2" (51mm)	N/A	Hesston	4790	1	4" (10cm)	2.5" (64mm)	N/A
Challenger	LB34	1	4" (10cm)	2.5" (64mm)	N/A	Hesston	4800 – 4910	1	16" (40cm)	2" (51mm)	N/A
Challenger	LB44	1	16" (40cm)	2" (51mm)	N/A	John Deere	100	1	18" (45cm)	6.5" (16cm)	N/A
Claas	2100	1	4" (10cm)	2" (51mm)	N/A	Krone	890 – 12130	1	3" (70mm)	4" (10cm)	N/A
Claas	3300	1	4" (10cm)	2" (51mm)	N/A	Massey Ferguson	2050	1	2" (51mm)	2" (51mm)	N/A
						New Holland	590 – BB940	1	4" (10cm)	2" (51mm)	N/A
Kuhn, Vicon Taarup	all	1	4" (10cm)	4" (10cm)	N/A	New Holland	BB940A – 960A & BB9060 – BB9080	1	N/A	2" (51mm)	2" (51mm)

Installation of End of Bale Sensor

The end of bale sensor determines the position of the needles on the baler. When the needles cycle the sensor communicates this information to the Dual Channel Processor (DCP). This information is used for job records and will be used by the optional Bale Identification System. Follow these steps below to mount the sensor.

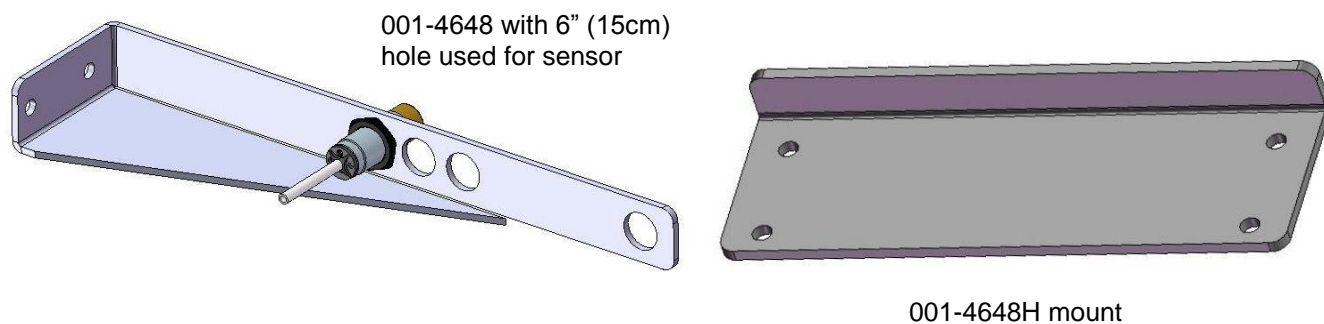
All AGCO Hesston 4760 – 4790 and equivalents, Case IH LBX 331 – LB 433, Class 2100, John Deere 100, New Holland 590 – BB 9080

End of bale sensor bracket (001-4648) will be used. Cutoff excess metal not used during installation.



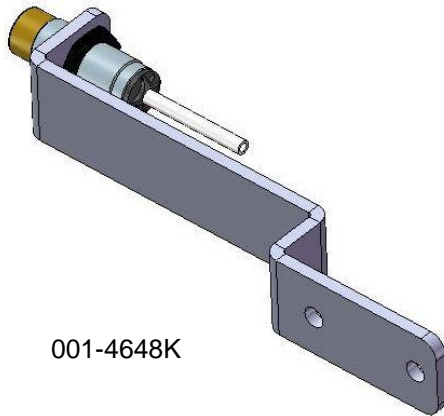
All Hesston 4750 – 4755 & 4900 – 4910

End of bale sensor bracket (001-4648) and Hesston end of bale mount (001-4648H) will be used. The Hesston end of bale mount will be found in the installation kit box. Cutoff excess metal not used during installation.

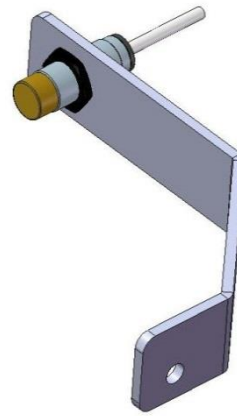


All Krone 890 – 12130

Krone end of bale sensor bracket (001-4648K or 001-4648K2) be used. The Krone end of bale mount will be found in the installation kit box. The 001-4648K will be used with balers 890 – 1290. The 001-4648K2 will be used with the 12130 baler.



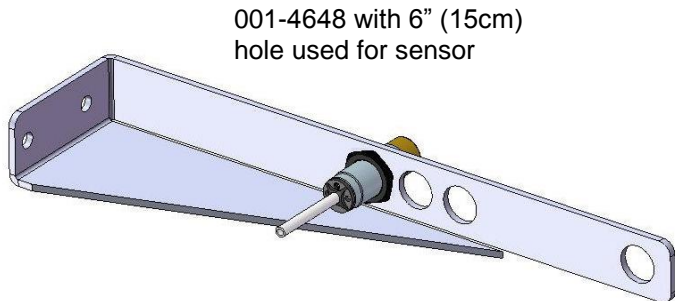
001-4648K



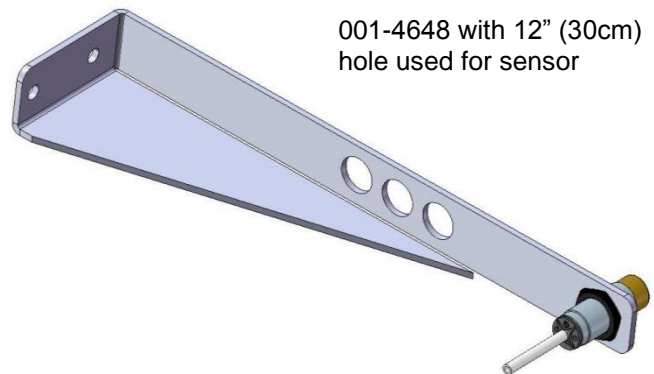
001-4648K2

All Kuhn, Vicon and Taarup Balers

End of bale sensor bracket (001-4648) will be used. Cutoff excess metal not used during installation.



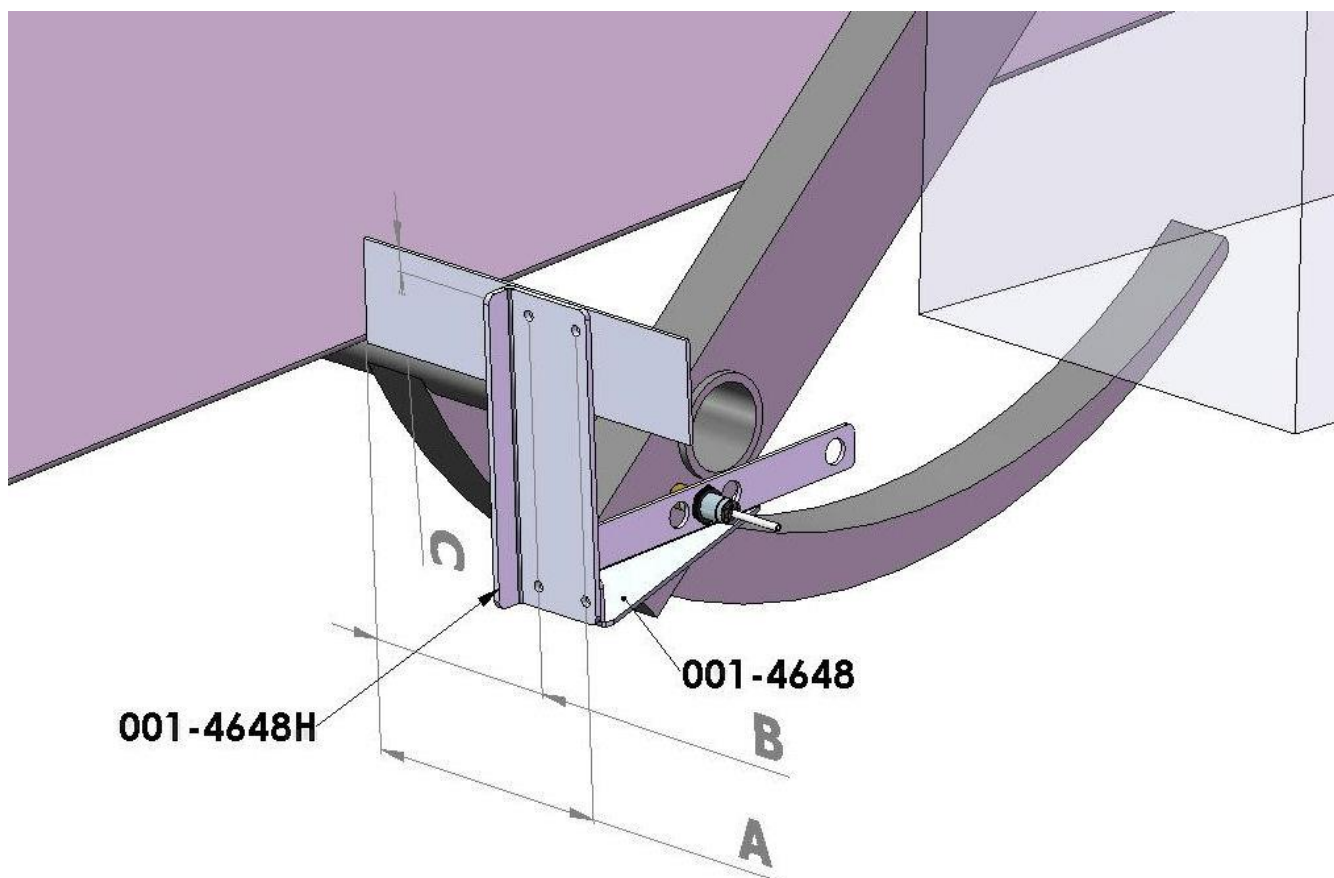
001-4648 with 6" (15cm)
hole used for sensor



001-4648 with 12" (30cm)
hole used for sensor

End of Bale Sensor Installation Diagram

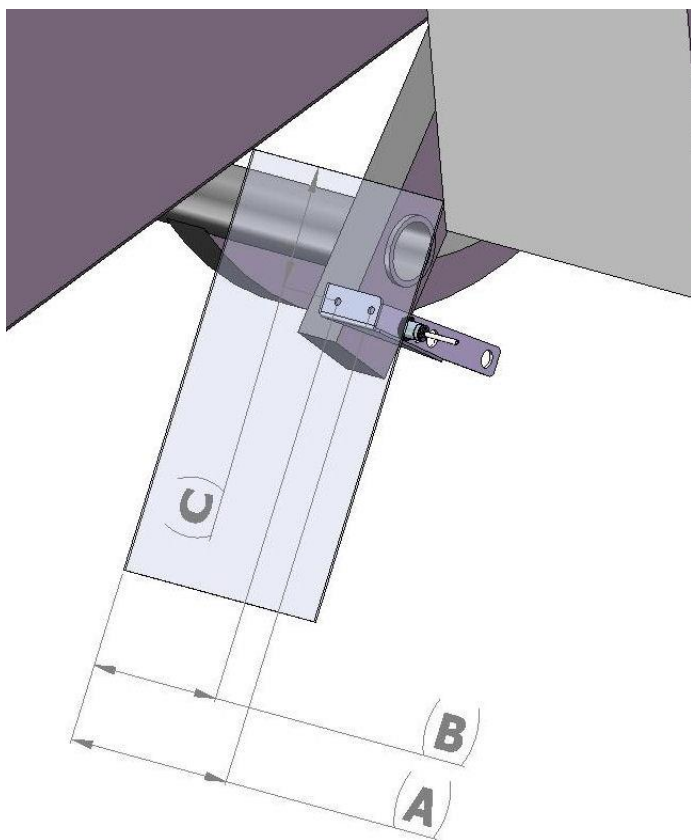
Hesston 4750-4755 & 4900 – 4910



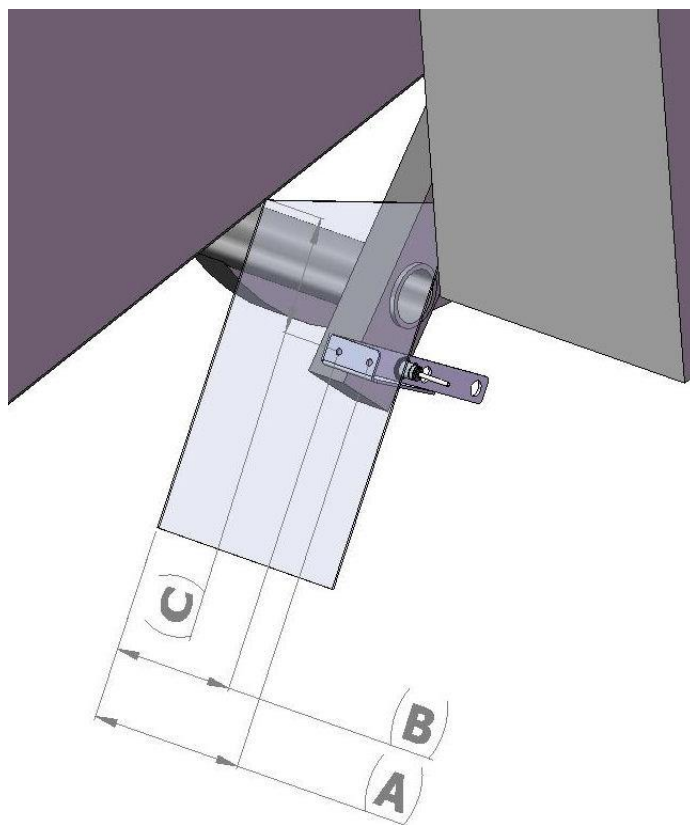
Sensor hole location	A	B	C
7" (18cm)	7-7/8" (20cm)	9-5/8" (25cm)	5/8" (16mm)

Attach the Hesston end of bale mount (001-4648H) as shown. Attach the end of bale sensor bracket (001-4648) to the Hesston end of bale mount (001-4648H) using two 1/4" x 1" bolts, locks & flat washers and hex nuts. Align the brackets and mark the two 3/8" (10mm) holes to be drilled. Attach the brackets to the baler using two 5/16" x 1 self-tapping screws, and flange nuts. Mount the sensor in the 7" (18cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Cut off excess metal past the sensor. Run the sensor cable up to the Precision Information Processor and secure to the baler.

Hesston 4760 & 4790



Hesston 4760

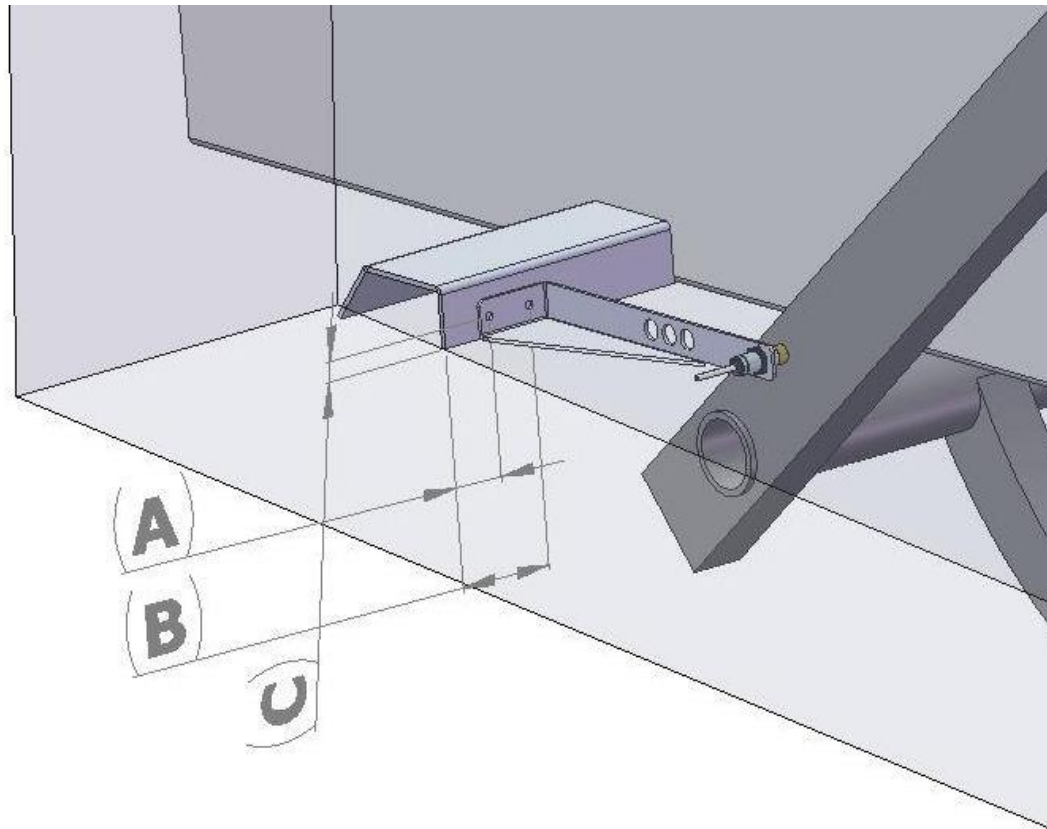


Hesston 4790

Baler	Sensor hole location	A	B	C
4760	6"	6-5/8"	4-7/8"	4"
4790	6"	4-5/8"	2-7/8"	3"

Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in the 6" (15cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Cut off excess metal past the sensor. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

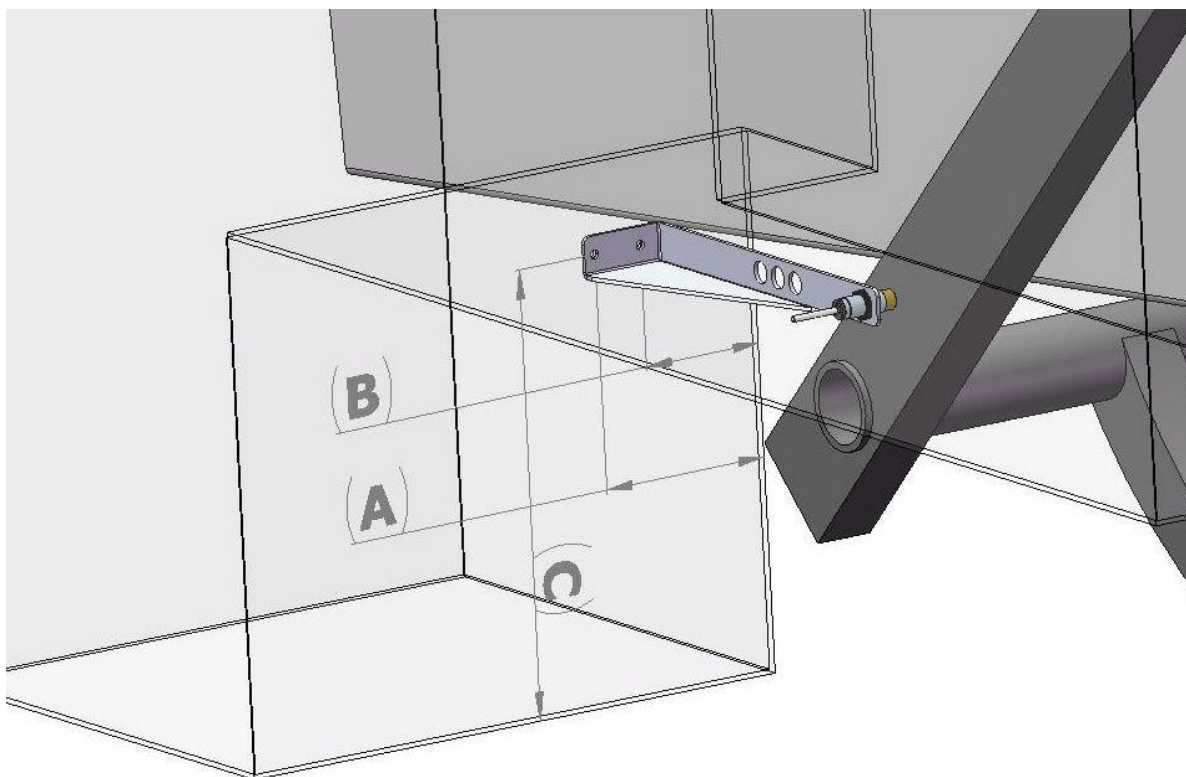
New Holland 590 – BB960, BB9060 – BB9080 & Case IH LBX 331-431, LB 333 -433



Sensor hole location	A	B	C
12" (30cm)	2-7/8"	4-3/8"	5/8"
	(76mm)	(12cm)	(16mm)

Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in the 12" (30cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

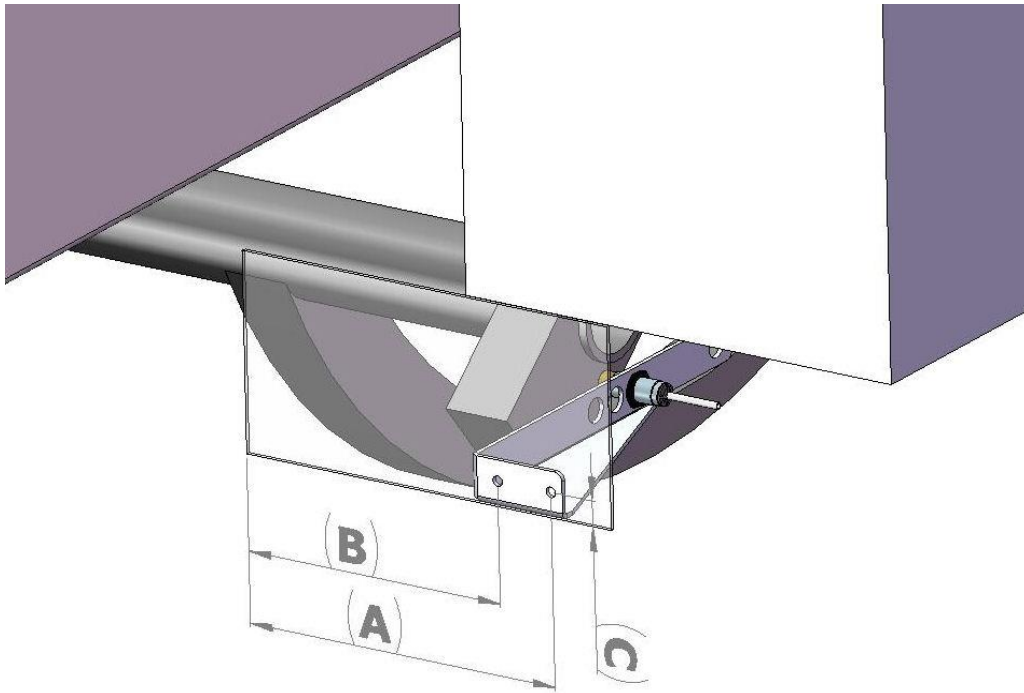
New Holland BB940A- BB960A & Case IH LBX 332 – 432



Sensor hole location	A	B	C
12" (30cm)	6-1/8" (15cm)	4-3/8" (12cm)	15" (38cm)

Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in the 12" (30cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

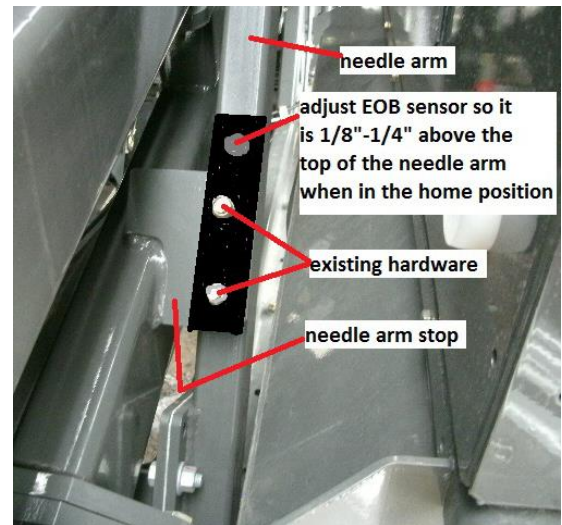
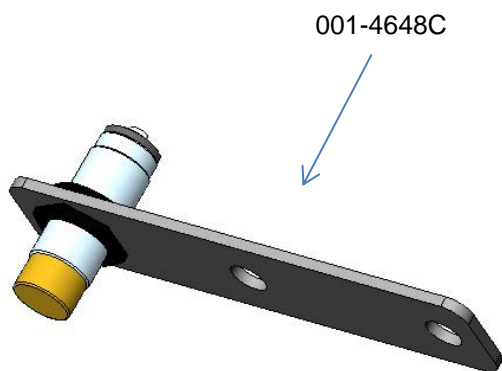
Claas 2100



Sensor hole location	A	B	C
8" (20cm)	5-3/4" (13cm)	4" (10cm)	5/8" (16mm)

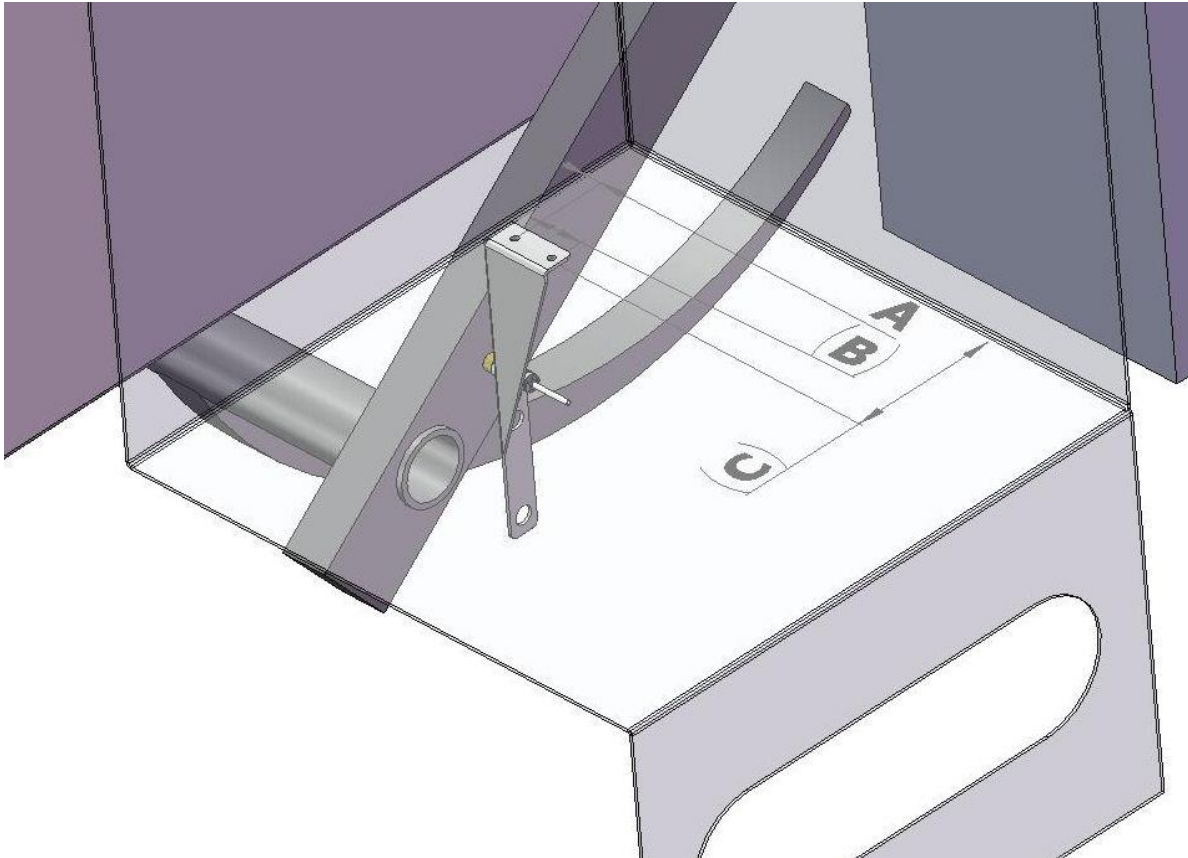
Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" (10mm) holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in the 8" (20cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Cut off excess metal past the sensor. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

Claas 3200-3400



The end of bale (EOB) sensor mounts in the EOB bracket (001-4648C) as shown in the picture. The EOB bracket is mounted to the top side of the needle arm stop using the existing hardware that secures the bumper to the stop.

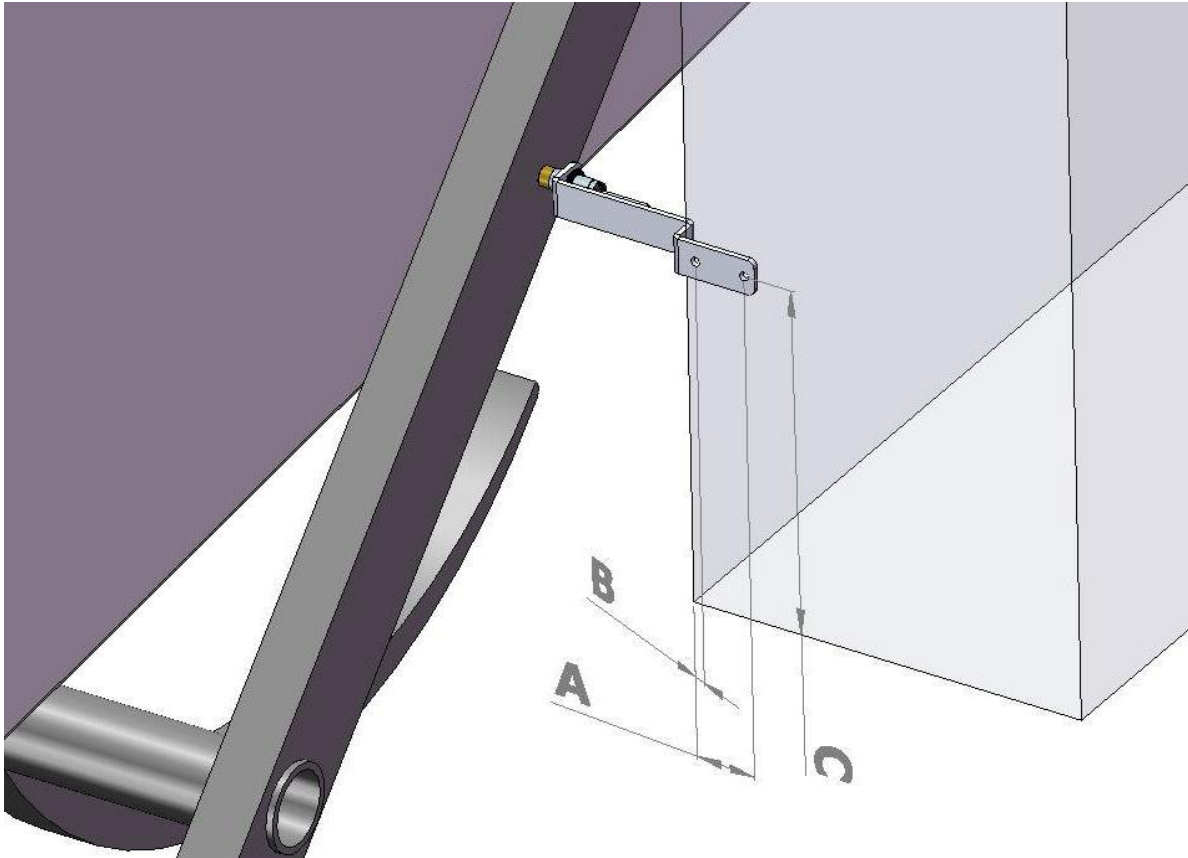
John Deere 100



Sensor hole location	A	B	C
6" (15cm)	2-5/8" (70mm)	7/8" (22mm)	7" (18cm)

Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" (10mm) holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in the 6" (15cm) hole location, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Cut off excess metal past the sensor. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

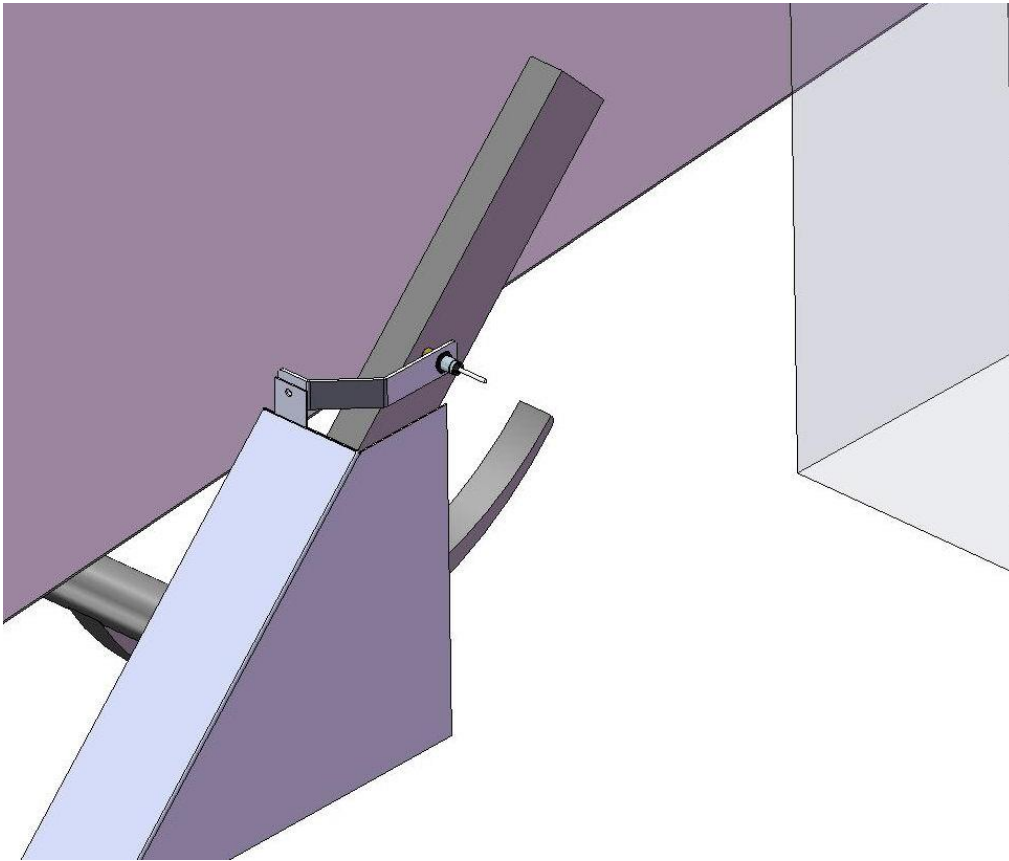
Krone 890 – 1290



Sensor hole location	A	B	C
N/A	2-1/4" (65mm)	1/2" (13mm)	8" (20cm)

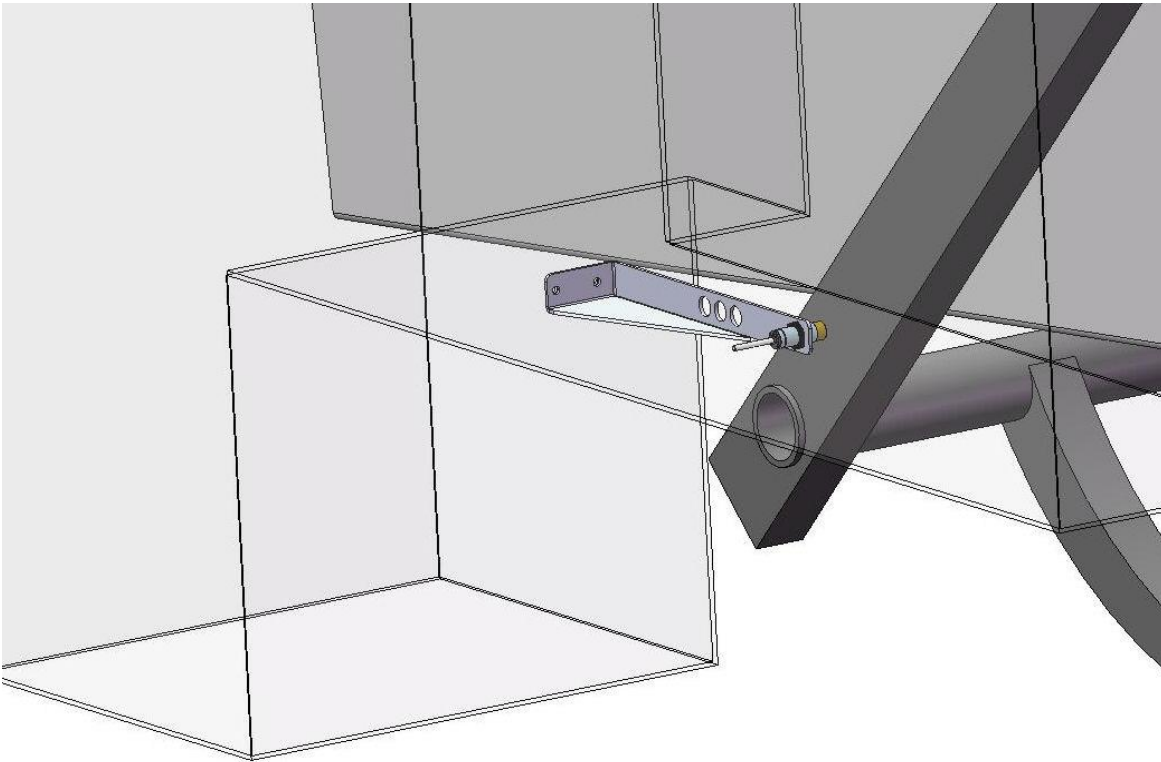
Mount the Krone end of bale sensor bracket (001-4648K) as shown. The Krone mounting bracket can be found in the installation kit box. Mark and drill two 3/8" (10mm) holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor at the end of the bracket, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

Krone 12130



Mount the Krone end of bale sensor bracket (001-4648K2) as shown. The Krone mounting bracket can be found in the installation kit box. Directly behind the twine box on the right side of the baler remove the bolt and nut that secures the fiberglass baler shield to the baler. Mount the sensor bracket using the 3/8 x 1 bolt, lock and nut. Mount the sensor at the end of the bracket, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

All Kuhn, Vicon and Taarup Balers



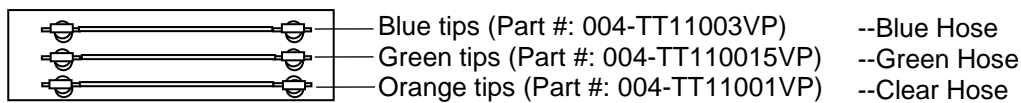
Mount the end of bale sensor bracket (001-4648) as shown. Mark and drill two 3/8" holes and attach the bracket using two 5/16" x 1" self-tapping screws, and 5/16" flange nuts. Mount the sensor in a hole location centered over the needle arm, keep the sensor 1/4" (7mm) from the needle and tighten both nuts. Run the sensor cable up to the Dual Channel Processor (DCP) and secure to the baler.

Plumbing

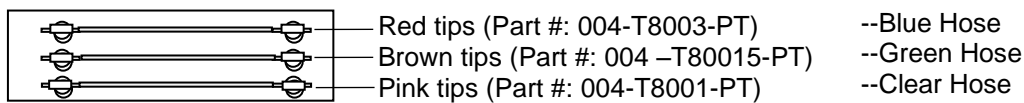
- A. Locate the three 1/4" hoses colored clear, blue, and green. The pumps will need to be connected to specific tips so the pump numbers are as follows: Pump 1 is closest to the filter bowl, pump 2 is in the middle, and pump 3 is the outside pump.
- B. Slide the jaco nut over the end the hose and insert the hose into the jaco fitting and tighten the jaco nut. Because all nozzles on the spray shield are different, the operator will need to install pump 1 to the orange tips using the clear hose, pump 2 to the green tips using the green hose and pump 3 to the blue tips using the blue hose.
- C. **KEEP HOSE AWAY FROM: MOVING PARTS, SHARP METAL, AND HYDRAULIC LINES. WORKING TEMPERATURE FOR THE HOSE IS 140 °F AND UNDER.**
- D. Tie the hose down at secure locations on the baler using the enclosed tie straps and cable clamps.

Tip Outputs

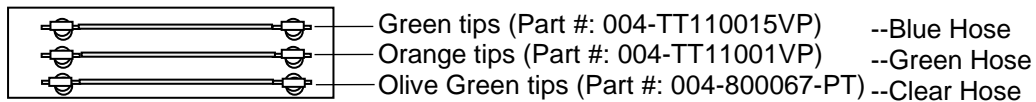
High Output Tips for Rates Requiring 84-632 lbs/hr (38-287 L/hr). (Approximately 21-63 tons/hr)



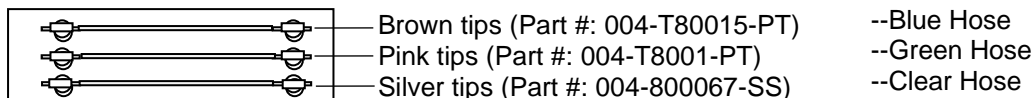
Install Kits 4537B, 4540B, 4541B



Low Output Tips for Rates Requiring 44-400 lbs/hr (19-200 L/hr). (Approximately 11-40 tons/hr)



Install Kits 4537B, 4540B, 4541B

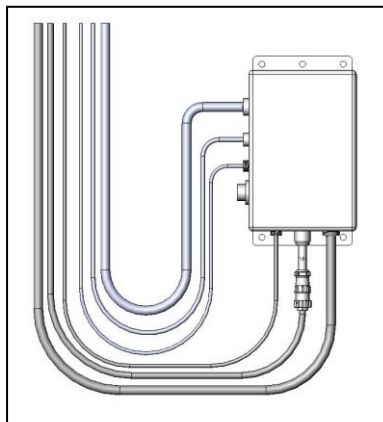


Installation of star wheel and bale rate harness

Remove the cover from the star wheel block and use a 1/4" nut driver to remove the nut from the electronic swivel. Next, run the star wheel sensor wire through the black grommet and place the eye terminal on the star wheel sensor. Tighten the eye loop with the nut on the sensor and put the star wheel cover back on the base. Tighten the grommet to form a tight seal around the wire. The bale rate sensors will be factory installed on the right side twine guard in the correct position. The sensor with the longer sensor wire should say "FRONT" which indicates it should be placed in the front sensor hole. The sensor wire with the shorter wire should say "BACK." The tip of the sensor should be placed no more than 1/4" (7mm) away from the star wheel teeth and no less than 1/8" (3mm) from the star wheel teeth. Each sensor will have an LED light located on the sensor by the diverter. Once the unit is powered up spin the wheel and make sure that both led lights turn on and off. If they don't turn on and off, adjustments may need to be made. Once the star wheel connection is complete, run the harness along the baler frame to the Dual Channel Processor (DCP). See wiring installation on the following page. The Dual Channel Processor is located on the back of the right twine box.

Main wiring harness and power cord connection to baler harness terminator connection.

Route cords 006-6650LS2 along this path or similar inside of the baler. Keep cords away from moving parts and hydraulic hoses. Secure with existing cable clamps or use cable ties. When all connections are made to DCP secure wires.

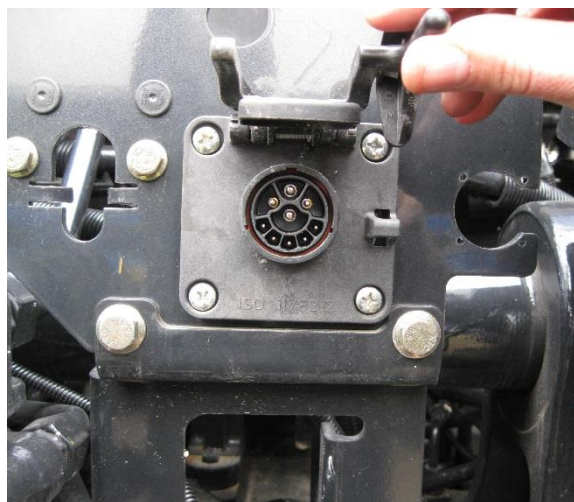


Connecting the optional ISOBUS plug to the tractor

Attach the optional ISOBUS connector (006-6670A) to the end of the communication harness (006-6650TM).

Connect the orange wires and attach the plug to the tractor's ISOBUS port.

Then connect the ISOBUS connector to the ISOBUS plug on the tractor.

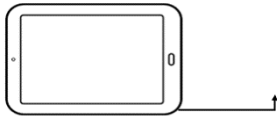


Installation of iPad Integration Control

Locate a safe location in the cab of the tractor to place the iPad Integration Control (030-6672C). Recommended location is securely fastened out of the operators way in a location that is close enough to reach with the iPad cord.

Connect the Power / Communication harness (006-6650TM(E)) to the bottom of the receiver.

To operate the applicator, plug the iPad cord into the communication 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 applicators 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

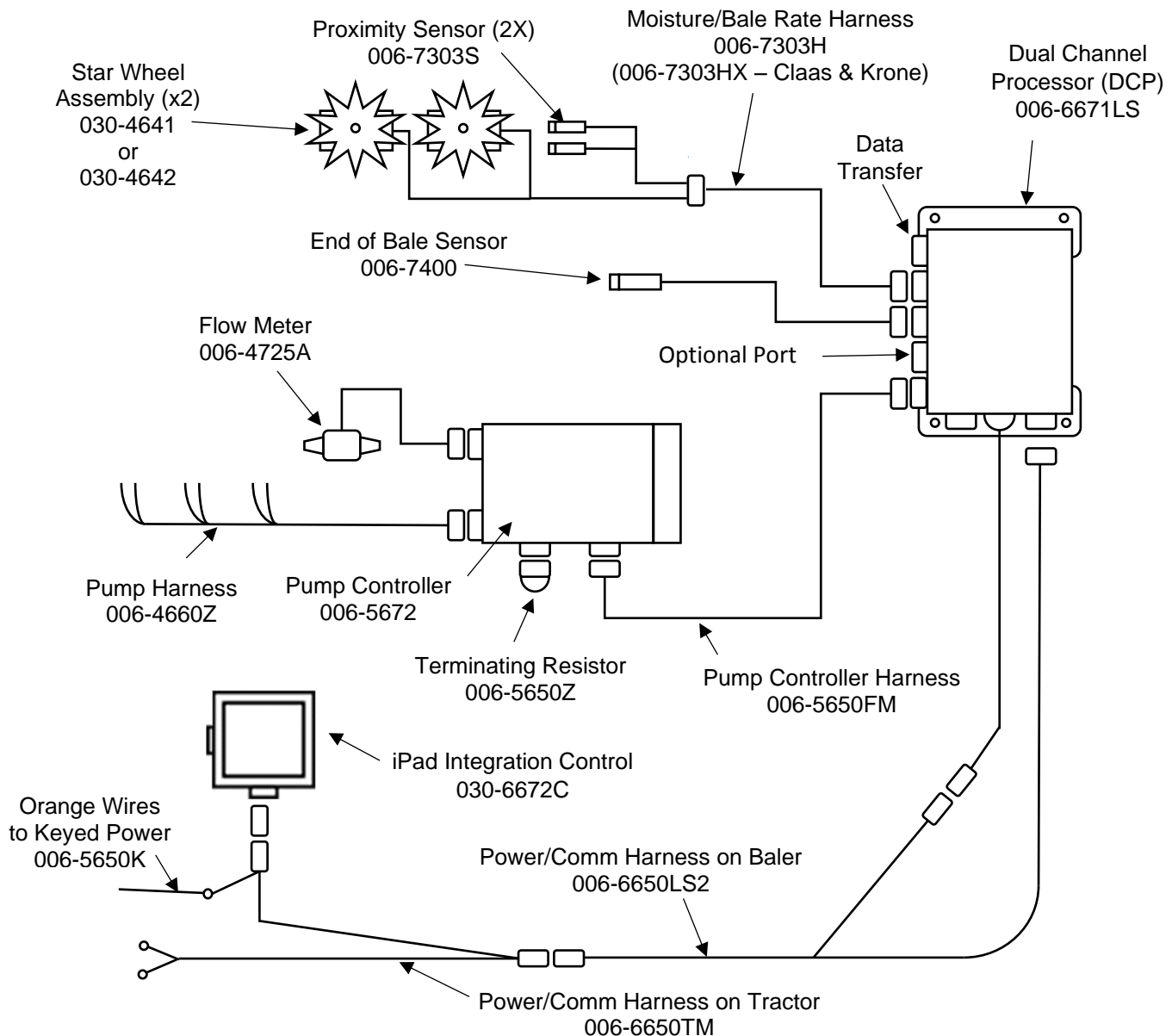
*Made for Apple iPad badge

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.

Wiring Diagram

1. 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** (006-6671LS). Connect the large plug of the Baler Power/Communication Harness (006-6650LS) to the bottom (shorter side) of the DCP.
2. Install green terminator (006-5650Z) to the port labeled **Modular Port** on the Pump Controller (006-5672).
3. Attach moisture and bale rate harness 006-7303H (Claas & Krone kits 006-7303HX) as well as the end of bale harness (006-7400) to the DCP (006-6671LS).
4. Attach the Pump Control Harness (006-5650FM) between the Pump Controller (006-5672) and the DCP (006-6671LS).
5. Connect the orange wires and attach the plug to the tractor's ISOBUS port.
6. If using the optional ISOBUS connector (006-6670A) connect the end to the Communication Harness (006-6650TM) in place of the iPad Integration Control (030-6672C) shown below.
7. Connect the orange keyed power wires (006-5650K) and attach the plug to the tractor's ISOBUS port.

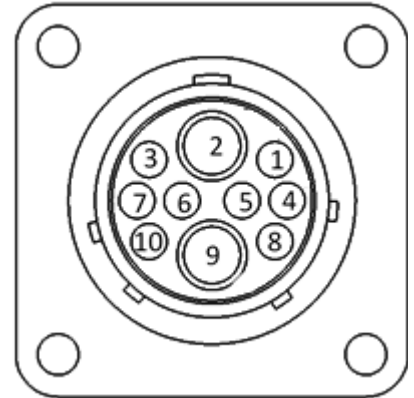


*Claas 3200-3400 balers will have star wheel assembly 030-4642 for mounting on side of bale chamber

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



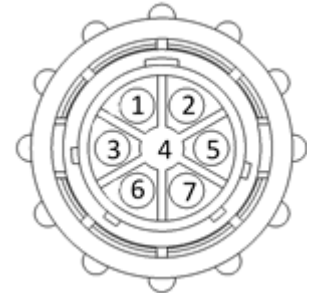
Power/Comm Harness 006-6650LS2 at Hitch

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



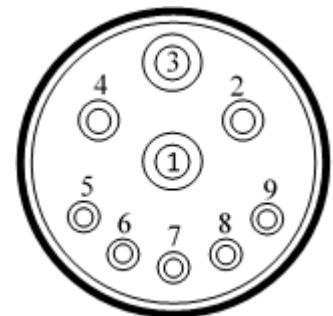
ISOBUS Plug Baler Side

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

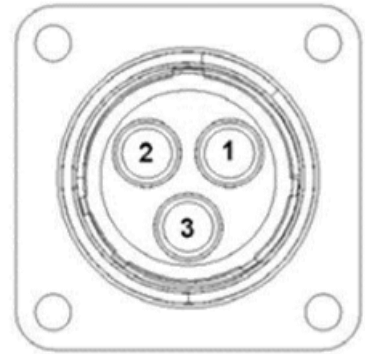
Pin 1	N/A
Pin 2	N/A
Pin 3	+12V Keyed Tractor Power
Pin 4	N/A
Pin 5	
Pin 6	N/A
Pin 7	N/A
Pin 8 Orange	Can1 Hi
Pin 9 Blue	Can1 Low



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



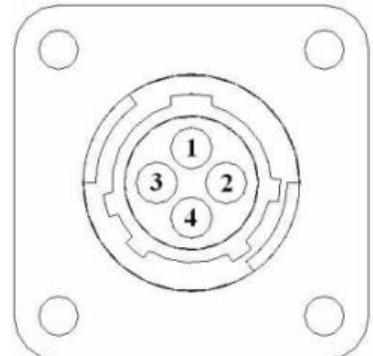
Star Wheel and Bale Rate Sensor connector on DCP

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



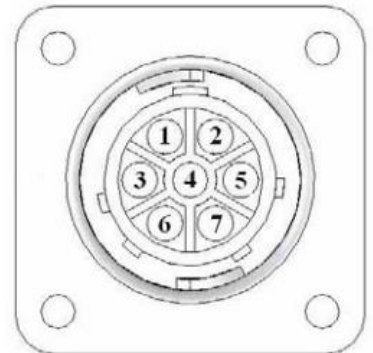
End of Bale sensor on DCP

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



Pump Connection Colors

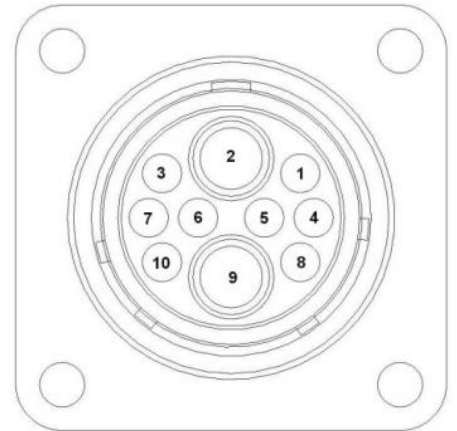
Pin 1	Black with Orange Stripe	Pump 1 Ground
Pin 2	Black with Green Stripe	Pump 2 Ground
Pin 3	Black with Yellow Stripe	Pump 3 Ground
Pin 4	N/A	
Pin 5	Orange with Black Stripe	Pump 1 Positive
Pin 6	Green with Black Stripe	Pump 2 Positive
Pin 7	Yellow with Black Stripe	Pump 3 Positive



Pin Outs (continued)

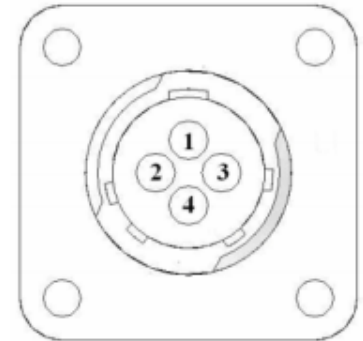
Pump Communication Plug on DCP

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	



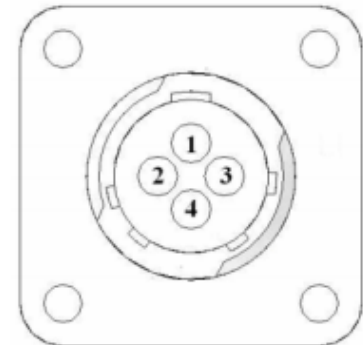
Flow Meter Connection on Pump Controller

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



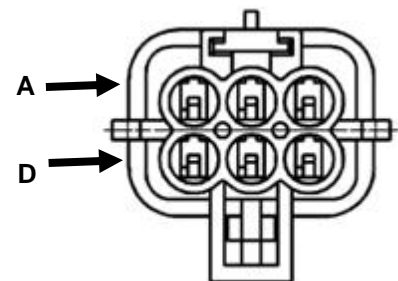
Connector for Crop Eyes on DCP

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

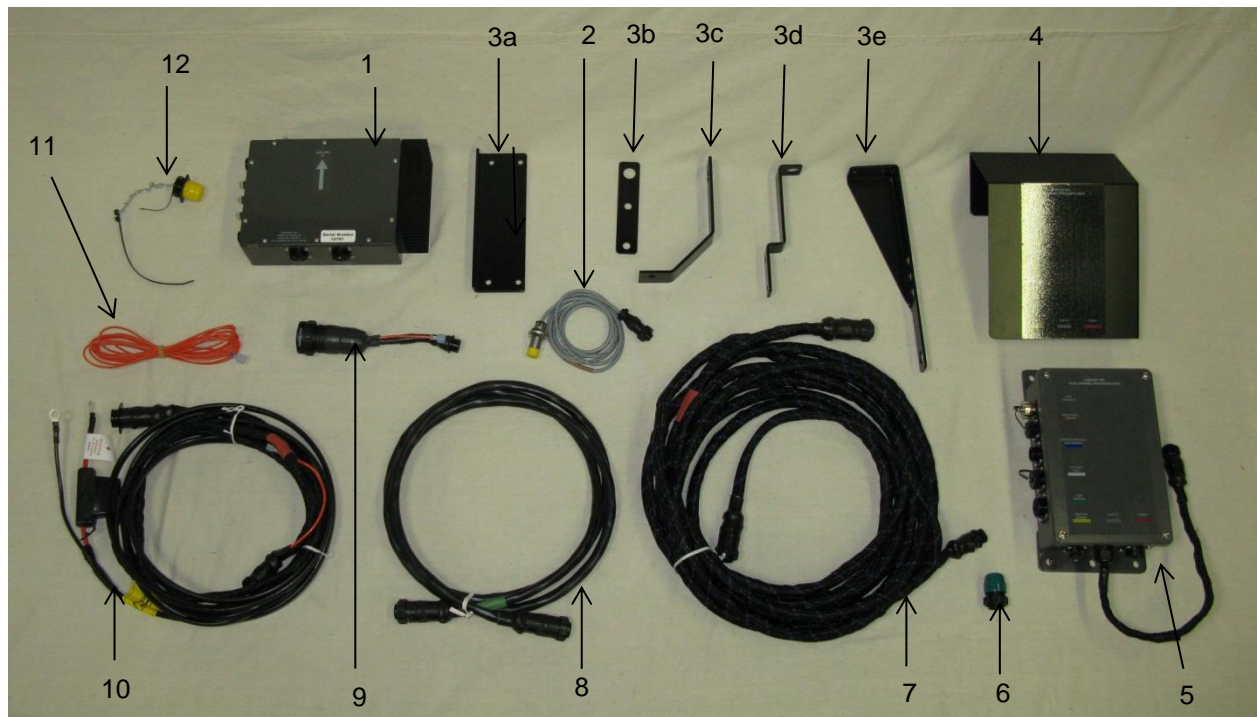


006-6650VAJ Harness to Baler Plug

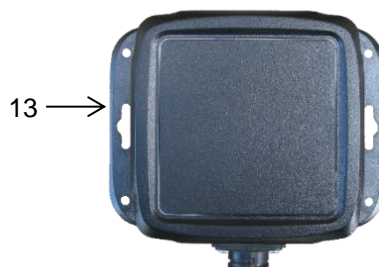
Pin A	N/A	
Pin B	Red	TBC Power
Pin C	N/A	
Pin D	Gray	TBC Ground
Pin E	Orange	Can1 Hi
Pin F	Blue	Can1 Low



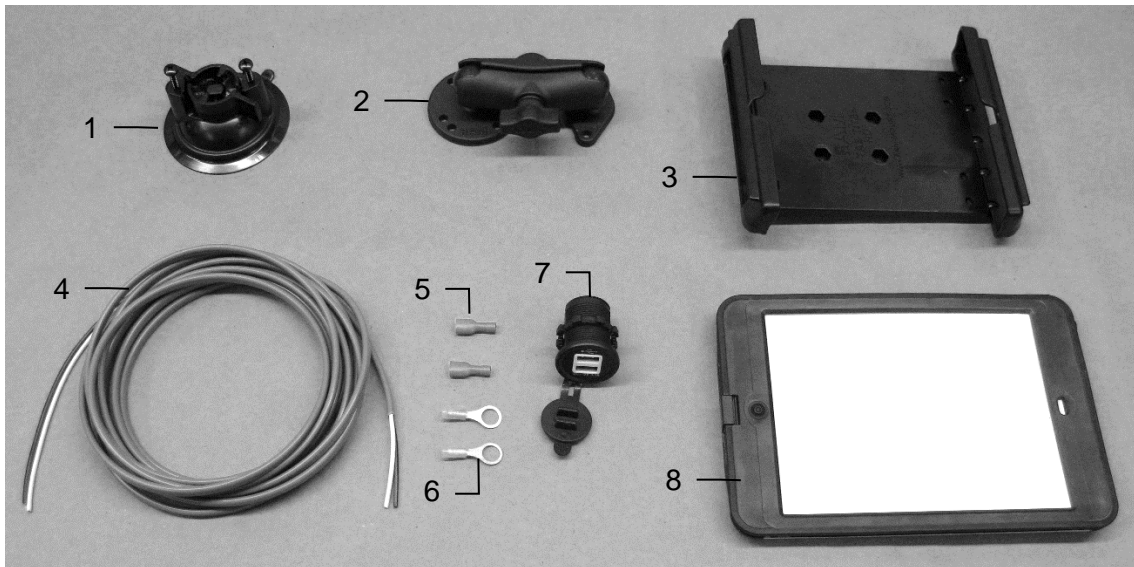
Parts Breakdown for 696 Series Control and Harnesses Dual Channel Processor (DCP)



<u>Ref</u>	<u>Description</u>	<u>Part Number</u>	<u>Qty</u>
1	Pump Controller	006-5672	1
2	End of Bale Sensor	006-7400	1
3a	Hesston 4755, 4910 EOB Mount	001-4648H	1
3b	EOB Bracket CLAAS 3300	001-4648C	1
3c	Krone EOB Bracket	001-4648K2	1
3d	EOB BKT Krone 12130	001-4648K	1
3e	End of Bale Sensor Bracket	001-4648	1
4	DCP Shield Cover	001-5650X	1
5	DCP Main Control LS 600 AUTO	006-6671LS	1
6	Terminating Connector w Green Cap	006-5650Z	1
7	DCP Baler Harness 30 Ft	006-6650LS2	1
8	Modular Power/Comm 10 Ft Harness	006-5650FM	1
9	Optional ISOBUS Tractor Plug (not included)	006-6670A	1
10	DCP Tractor Harness	006-6650TM	1
11	Key Switch Wire	006-5650K	1
12	Dust Plugs	006-5651PLUGS	1
13	iPad Integration Control	030-6672C	1
NP	USB Cord	006-6672USBC	1



Optional iPad Mini Mounting Kit (030-2014MK)



<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
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)

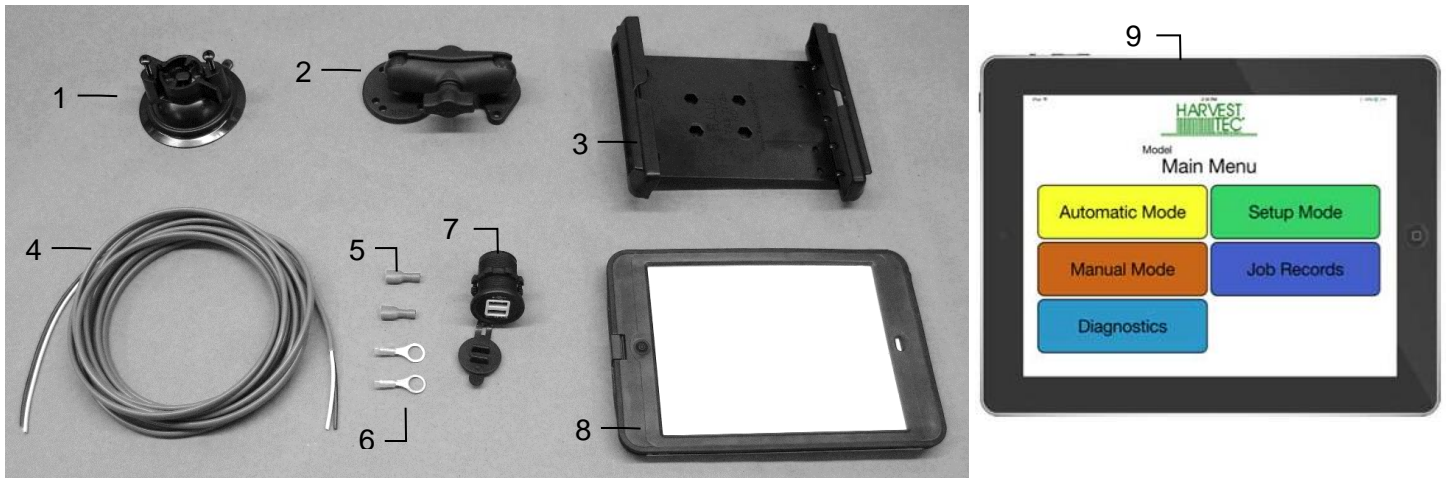
Installation Instructions

- Identify 12V power source for wires to connect.
 - Eye loops included if wiring directly to the battery is desired.
 - Test for key power source if preferred to have power to the USB shut off with the key.
- Once power source is identified, cut wires to desired length.
- Crimp the two supplied quick connectors onto each the white and black wire.
- Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- The wires will then be hooked to the designated terminals on the bottom of the USB plug
- Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- Feed the wires through the mounting hole.
- 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.
- Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- 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)



<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	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

- Identify 12V power source for wires to connect.
 - Eye loops included if wiring directly to the battery is desired.
 - Test for key power source if preferred to have power to the USB shut off with the key.
- Once power source is identified, cut wires to desired length.
- Crimp the two supplied quick connectors onto the white and black wire.
- Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- The wires will then be hooked to the designated terminals on the bottom of the USB plug
- Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- Feed the wires through the mounting hole.
- 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.
- Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- 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.

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.

Revised 4/17

HARVEST TEC, INC.
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