

Installation Manual

Model 7674552C

***55 gallon Automatic Preservative Applicator
For Grady TwinPak Balers***



HarvestTM**Tec**

EST. 1976

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Introduction

Read this manual carefully to ensure correct steps are done to attach the applicator to the baler. This applicator is designed to apply Harvest Tec buffered propionic acid. Use of alternative products may cause complications and voids warranty. Complications may include inaccurate readings from the flow meter and damage to system components.

The applicator can be installed on many square balers with the proper model number and installation kit. Before installing the unit on the baler, make sure you have the proper installation kit (See the chart below). Contact your local authorized dealer for specifications if you are unsure about your installation kit.

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

Model Kit Reference

Baler Make	Baler Model	Model Number	Installation Kit	Tank Size
AGCO	7105, 7110, 7115, 7120, 1835, 1837, 1837, 1841	744	4416C	55 Gallon
Case IH	8500 Series	744	4416C	55 Gallon
Case IH	SBX 520, 521	745	4409C	25 Gallon
Case IH	SBX 530, 540, 550, SB531, SB541, SB551	745	4415C	25 Gallon
Case IH	SBX 530, 540, 550, SB531, SB541, SB551	751	4415C	55 Gallon
Challenger	SB 34, 36, 44	744	4416C	55 Gallon
Freeman	270, 370	750	4506C	55 Gallon
Grady TwinPak	SB2XR	767	4552C	55 Gallon
Hesston	4550, 4570, 4590, 4600, 4655	744	4416C	55 Gallon
Hesston	4690N, 4690S	750	4502C	55 Gallon
John Deere	328, 336, 338, 346, 347, 348	745	4410C	25 Gallon
Massey Ferguson	1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1842S (Top Mount)	744	4416C	55 Gallon
Massey Ferguson	1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842 (Side Mount)	744	4417C	55 Gallon
Massey Ferguson	1842S (Side Mount)	744	4418C	55 Gallon
Massey Ferguson	1843N, 1843S	750	4502C	55 Gallon
Massey Ferguson	1844N, 1844S	750	4485C	55 Gallon
New Holland	200, 300 Series, 565 & BC5050	745	4409C	25 Gallon
New Holland	570, 575, 580, BC5060, BC5070, BC5080	745	4415C	25 Gallon
New Holland	570, 575, 580, BC5060, BC5070, BC5080	751	4415C	55 Gallon
New Holland	585, BB900	750	4507C	55 Gallon
New Idea	7205, 7210, 7215	744	4416C	55 Gallon
Welger	AP630, AP730, AP830	745	4412C	25 Gallon

Tools Needed

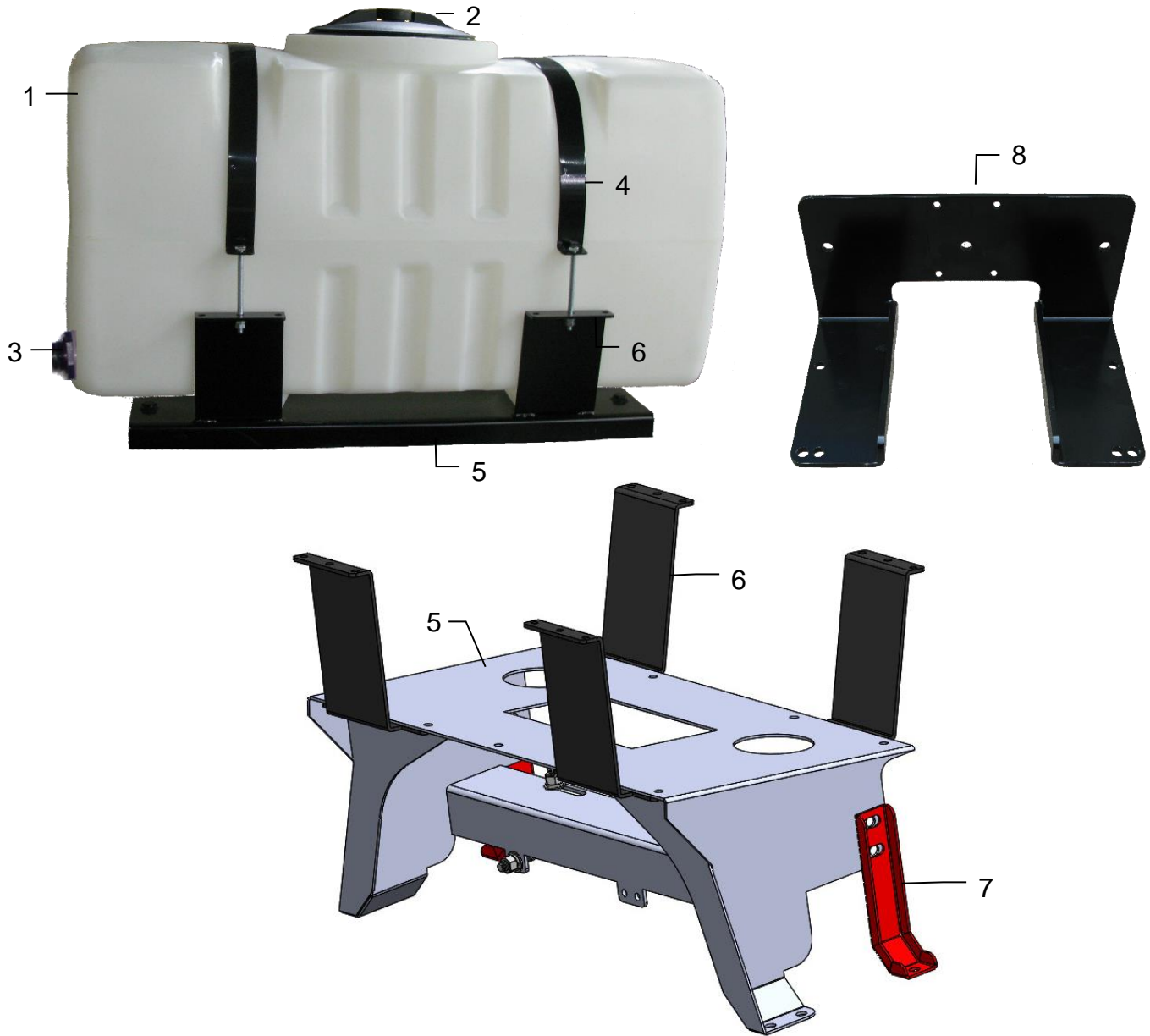
Standard wrench and socket set
Hose cutter
Metal drilling and cutting tools
Straight edge

Standard screwdriver set
Crescent wrench
Tape measure
1-1/2" hole saw (4415B only)

Side cutter
Hammer
Center punch

Parts Breakdown - Model 767, 467 Base Kits

Tank Saddle Kit 030-0467-TK



<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	Tank	005-9203SQ	1	5	Tank Base Assembly	001-4703XTP	1
2	Tank Lid	005-9022H	1	6	Strap Bracket	001-4703CD	4
3	Tank Fitting	005-9100	2	7	Tank Base Foot	001-4703XTG	2
4	Tank Strap	001-4402C	2	8	Pump Plate Bracket	001-4647MT	1

Replacement Tank (1-3)
Tank Saddle Kit (1-7)
 Pump Plate Mount Kit (8)

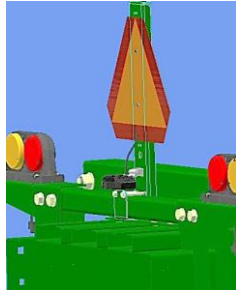
030-9203SQ
030-0467-TK
 PMP-4647MT

Tank Saddle Kit (030-0467-TK)

Installation – Tank Brackets

Locate the square tube between the marker lights. Remove the existing bracketry that holds the SMV sign, light, and camera mounts.

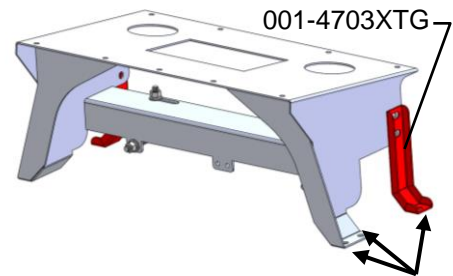
Install the Tank Base Assembly Bracket (001-4703XTP) on the rear of the baler so the formed angle on the bottom of the bracket sits on the square tube between the marker lights.



Center the tank base bracket on the bale chamber and secure the formed angle to the square tube using the two supplied $\frac{1}{2}$ -13 4x4" L-bolts. Secure the bolts on each end with a $\frac{1}{2}$ " flat washer, lock washer, and nut.

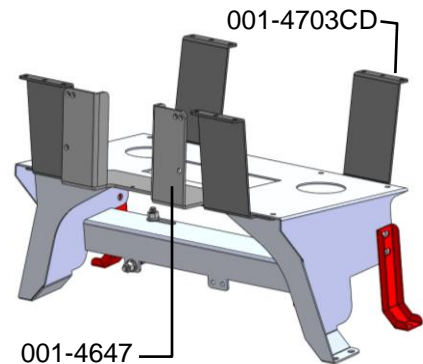


Once the tank base is secured to the bale chamber, bolt the front tank bracket gusset feet (001-4703XTG) to each side of the tank base using 2x $\frac{1}{2}$ -13 x 1-1/4" bolts, 4x flat washers, 2x $\frac{1}{2}$ " lock washer, and 2x $\frac{1}{2}$ -13 nut per side.



Mark the location of the hole in the bottom of the tank bracket gusset foot and the two hole locations in the rear tank bracket foot on each side, drill 6x 9/16" hole. Secure the tank frame assembly to the top of the baler chamber by inserting $\frac{1}{2}$ -13 x 1-1/2" button head bolt from the inside of the chamber and securing with $\frac{1}{2}$ " lock washer and $\frac{1}{2}$ " nut (x6). Tighten all hardware.

Position the four bolt-on strap arms (001-4703CD) so they mount to the bottom side of the top tank frame face. From the top, insert 3/8-16 x 1-1/4" hex bolt, and install 3/8" lock washer, and 3/8-16 nut on the bottom side (2x per strap arm).



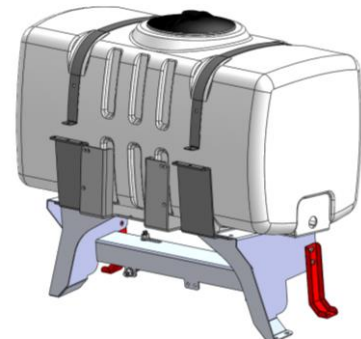
Pump Plate Mounting Bracket (PMP-4647MT)

Position the pump plate mounting bracket (001-4647) on top of the tank frame. Insert 3/8-16 x 1-1/4" hex bolt from the top side, install 3/8" lock washer and 3/8-16 nut on the bottom side (x2). Tighten all hardware.

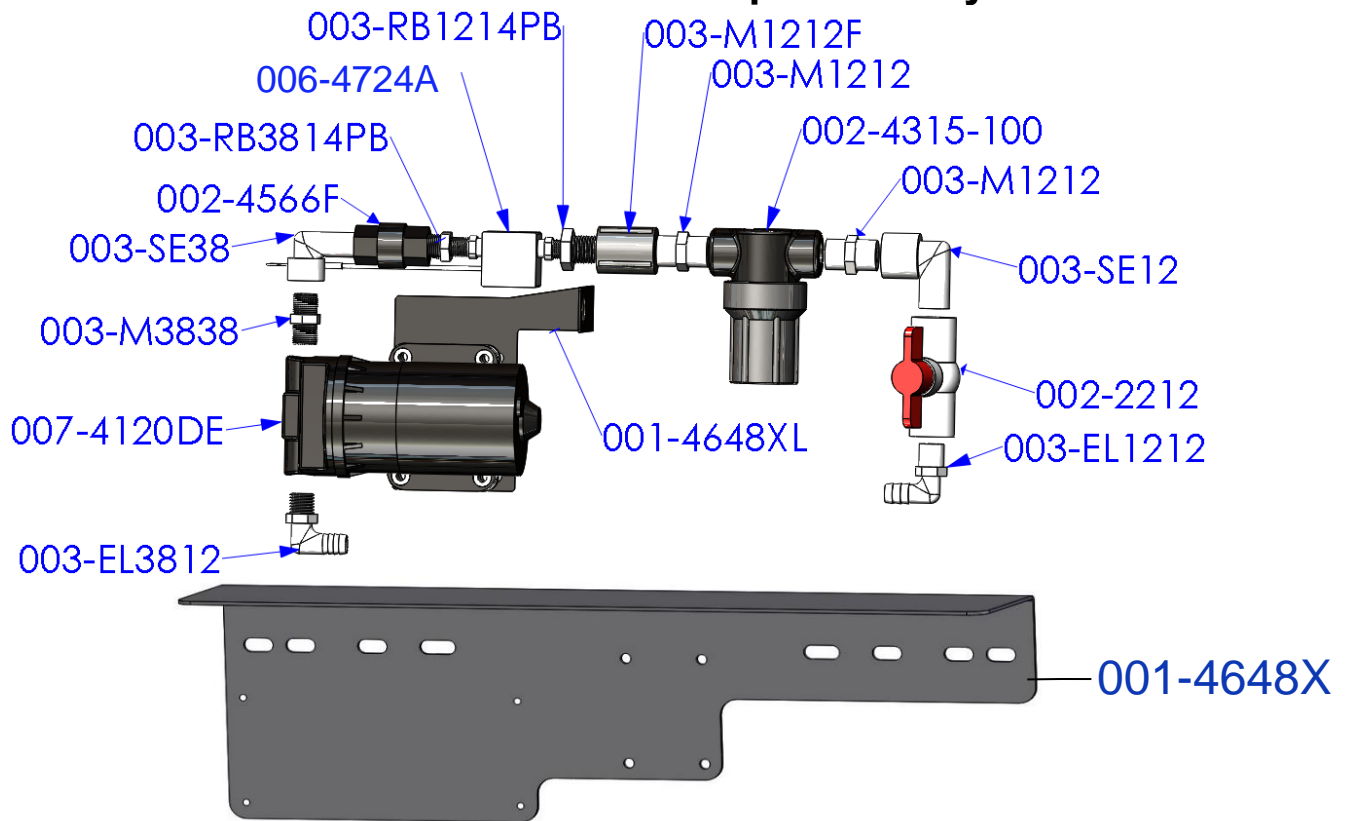
Tank Installation

Center the tank on top of the tank frame with the side tank fitting towards the right-hand side of the baler. Using the two supplied tank straps (001-4402), securely mount the tank to the frame by inserting 5/16-18 x 3-1/2" hex bolts through the straps into the strap arms and securing with 5/16-18 nuts (x4). Evenly tighten the strap bolts until tight. Double nut each bolt with an additional 5/16-18 nut (x4).

Install the $\frac{1}{2}$ " elbow, 003-EL3412, into the bottom tank fitting of the tank and tighten, orientating towards right-hand side of baler. Install the $\frac{3}{4}$ " elbow, 003-EL3434, into the side tank fitting on the tank, and orientate towards the rear of the baler.



Parts Breakdown for Pump Assembly



<u>Part#</u>	<u>Description</u>	<u>Qty</u>	<u>Part#</u>	<u>Description</u>	<u>Qty</u>
003-EL3812	3/8"MPT X 1/2"HB Elbow	1	003-M1212	1/2" Union	2
007-4120DE	700/300 Series Pump	1	002-4315-100	1/2" Line Strainer-100 Mesh	1
003-M3838	3/8" x 3/8" Union	1	003-SE12	1/2" Street Elbow	1
003-SE38	3/8" Street Elbow	1	002-2212	1/2" Ball Valve	1
002-4566F	3/8" Check Valve	1	003-EL1212	1/2"MPT x 1/2"HB	1
003-RB3814PB	RB 3/8" x 1/4" Reducer	1	001-4648XL	300 Pump Support	1
006-4724A	Flow Meter-Deutsch Plug	1	001-4648X	Pump Plate Mount	1
003-RB1214PB	RB 1/2" x 1/4" Reducer	1	003-A1212*	1/2" MPTx1/2"HB(Not Pictured)	1
003-M1212F	1/2" Coupler	1	003-A3812*	3/8" MPTx1/2"HB(Not Pictured)	1

*Note: Due to alternative baler designs, elbow 003-EL3812 can be replaced by straight fitting 003-A3812. Elbow 003-EL1212 can also be replaced by straight fitting 003-A1212. Both straight fittings are included.

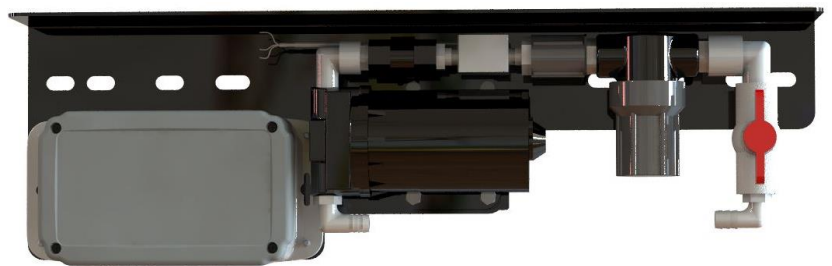
Filter Bowl Replacement Parts

002-4315F	Filter Bowl
002-4315D	Filter Bowl Gasket
002-4315A	Replacement Screen-100 Mesh
002-4315B	Replacement Screen- 80 Mesh

Pump Plate Mounting – PMP-4647MT

001-4647	Pump Plate Mount
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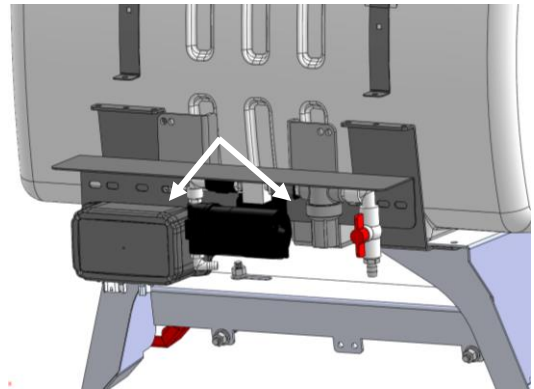
Completed Assembly – PMP-7636P



Pump Plate Assembly (PMP-7636P)

Installation

Install the Pump Plate Assembly (PMP-7636P) to front side of Mounting Bracket (PMP-4647MT) using the lower set of holes in the bracket, aligning the slots in pump plate shield (001-4648X) with the 7/16" holes in the mounting bracket (001-4547). Center the pump plate assembly and secure using 2x 3/8-16 x 1" bolt, 3/8" flat washer, 3/8" lock washer, and 3/8-16 nut.



Control Box

Mounting to Pump Plate

Locate the 700 series IPM Control box (006-7671SS) from the controls package box. Mount the IPM Control to the pump plate shield (001-4648X) by using hardware included in the controls package box. The IPM Control box will mount on the pump plate. Pump plate assembly attaches to pump plate mounting bracket with hardware supplied within the pump plate box. Triangle Flow Meter plug attaches to plug on bottom of IPM. Moisture Sensor harness also attaches to bottom of IPM module.

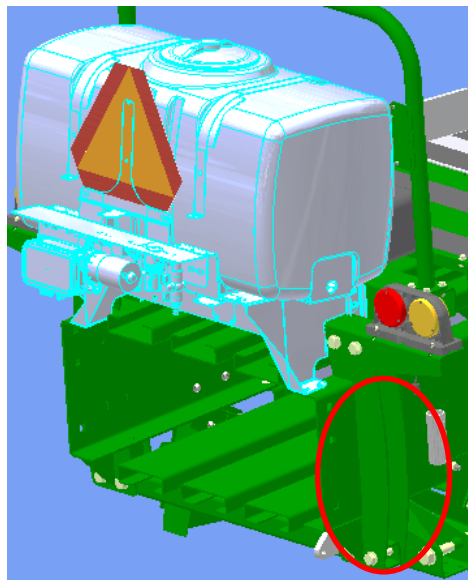


Drain Fill Kit and Tank Plumbing

Installation - Drain Fill Kit (030-0493DFK)

Locate and secure the drain/fill bracket and valve assembly (Parts Bag 1) to the side of the baler in an area where it will be accessible and not interfere with the operation of the baler (circled). Route the 3/4" hose from the elbow at the rear of the tank to the fitting at the top of the drain/fill assembly, secure with hose clamps on each end.

Attach the 1/2" hose from the elbow at the bottom of the tank to the inlet of the ball valve on the pump plate assembly, securing with hose clamps on each end. Secure both hoses so they will not interfere with moving parts, avoiding points where the hose may pinch or rub.

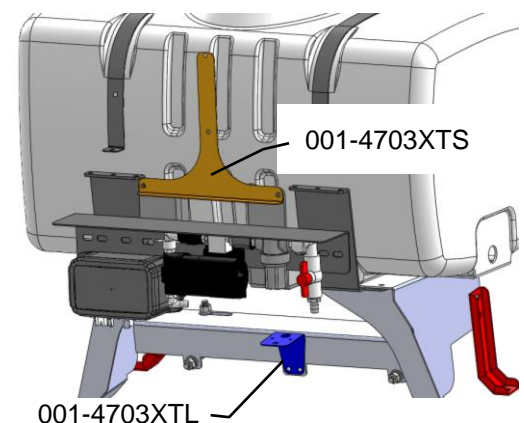


SMV Bracket, Light & Camera Bracket

Installation

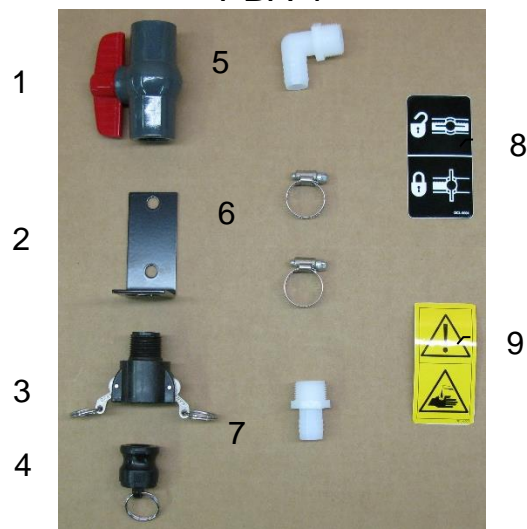
Reinstall the factory SMV sign to the SMV bracket (001-4703XTS) using the factory hardware. Attach the SMV bracket to the pump plate adapter using the top holes in the adapter. Secure with 3/8-16 x 1-1/4" hex bolt, 3/8" lock washer, and 3/8-16 nut (x2).

Install light & camera bracket (001-4703XTL) to the rear of the formed angle on the bottom of the tank bracket. Secure with 5/16-18 x 1" hex bolt, 5/16" lock washer, and 5/16" nut (x2). Install camera and light to bracket using factory hardware, route wiring so it will not be damaged by moving parts.

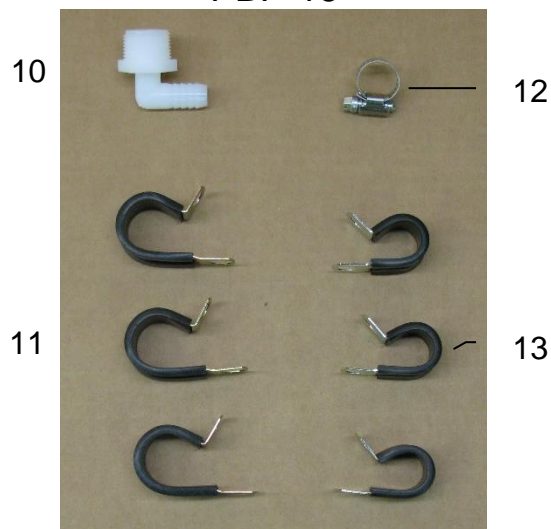


Parts Bag Packages and Hosing

PBA-1



PBP-16



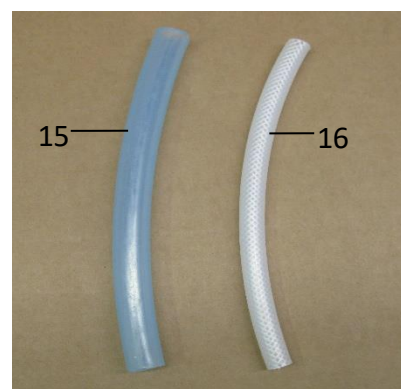
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	3/4" Ball Valve	002-2200	1	8	Valve Decal	DCL-8004	1
2	Valve Holder	001-6702H	1	9	Hazard Decal	DCL-8001	1
3	Female Coupler	002-2204A	1	10	3/4" x 1/2" Elbow	003-EL3412	1
4	Male Shut-Off Plug	002-2205G	1	11	3/4" Jiffy Clip	008-9010	3
5	3/4" x 3/4" Elbow	003-EL3434	1	12	#6 Hose Clamp	003-9003	1
6	#10 Hose Clamp	003-9004	2	13	Small Jiffy Clip	008-9009	3
7	3/4" x 3/4" Straight Fitting	003-A3434	1				

Complete Drain Fill Kit
(Includes 3/4" Hose Not Pictured)

030-0493DFK

Hosing

<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
15	1/2" Hose (Tank to Solenoid)	002-9001	15ft
16	1/4" Braided Hose (Solenoid to Tips)	002-9016	6ft
NP	3/4" Hose (Drain / Fill Line)	002-9002	10ft

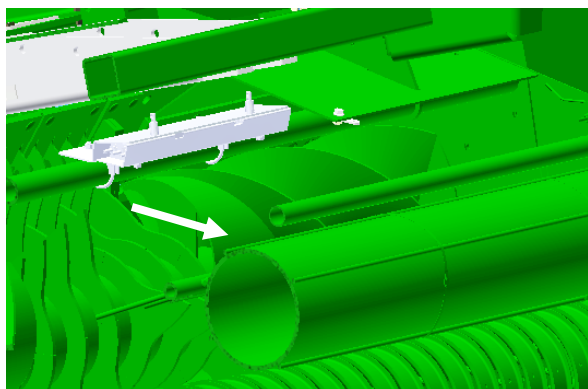
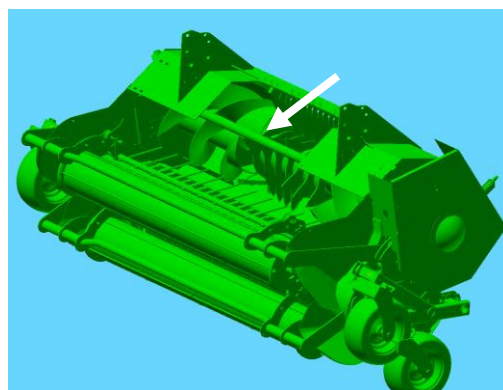


Spray Shield Assembly (030-4552C)

Installation

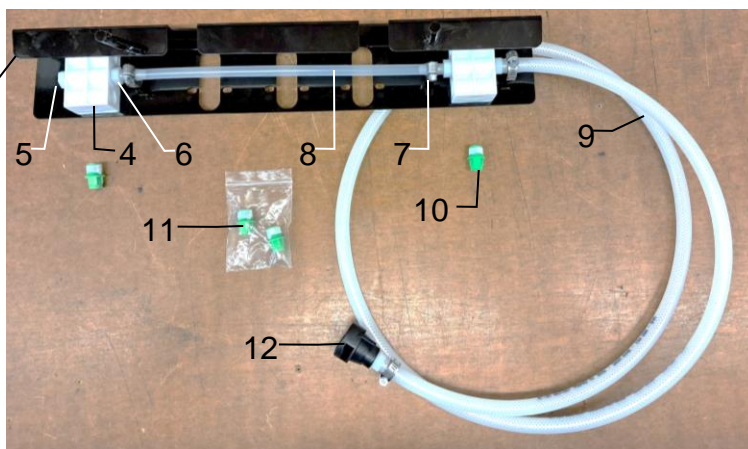
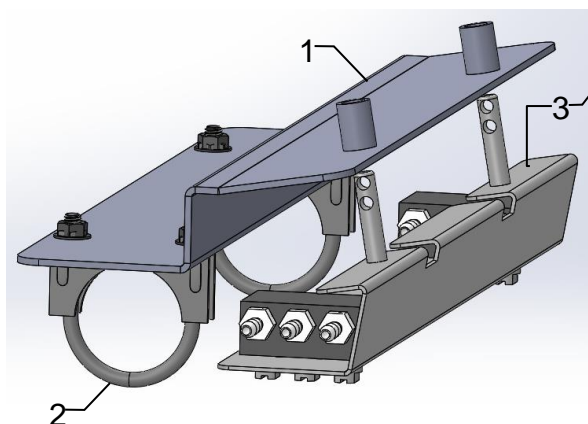
Locate the round tube connecting the two sides above the rotor.

Install Spray Shield Holder (001-4435T) to the front side of the round pipe with the two supplied U-bolts. Position the holder horizontal, facing the u-bolts, and attach so parallel with the ground. Note, flange with pipes welded on top (see arrow) should be towards the front of the baler. Secure the spray shield holder to the baler by tightening the hardware.



Install the spray shield assembly by aligning the pins with the tubes on the holder. Secure the spray shield in place using two lynch pins (008-4576). Route the hosing from the spray shield towards the RH side of the baler, position so the hoses will not be pinched or rubbed and avoiding interference with moving parts. Secure with cable ties as needed.

4552C Installation Kit



<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	Spray Shield Holder	001-4435T	1	8	1/4" Tubing	002-9006	1
2	U-Bolts	001-4714UBX	2	9	1/4" Braided Hose	002-9016	6
3	Spray Shield	001-4435NSX	1	10	High Tips	004-T8004-PT	2
4	Spray Block Manifold	001-4435NSB	2	11	Low Tips	004-T8001-PT	2
5	1/4" Hex Plug	003-F14	1	NP	Lynch Pin	008-4576	2
6	1/4"x1/4" Straight Fitting	003-A1414	4	12	Female Quick Connect	004-1207H	1
7	Mini Hose Clamp	003-9002	4	NP	Rubber Washer	004-1207W	1
*Tip colors subject to change							

Complete Installation Kit

030-4552C

Plumbing and Solenoid

A. Intake Line

Locate parts bag 16. Use the 003-EL3412 on the bottom of the tank to route 1/2" line (002-9001) to the fitting (003-A1212 or 003-EL1212) used on the ball valve attached to the pump plate. Attach hose clamps (003-9003) on both of the fittings.

B. Discharge Line

Route the 1/2" hose from the pump output toward the front of the baler to connect to the solenoid assembly (SOL-3SP-A).

C. Solenoid Assembly Installation

The Pulsing Solenoid is installed at the transition from the 1/2" hosing from the pump discharge line and the 1/4" line to supply the spray nozzles. Transition should be close to the spray tips in an accessible location. The best suited placement for this transition is a location where the solenoid can be placed in a horizontal position in-line with the hoses and clear of the pickup and any moving parts. This location is to be determined at the discretion of the installer. (See example). Be sure to provide ample hose length to allow for full range of motion of the pickup head- too short of hose may cause hosing to pull out or break connections when pickup head is lowered.

Attach straight fitting (003-A1412) into end of 1/2" hose from the pump and secure with hose clamp (003-9003). Thread connector (004-1207G) onto fitting and place rubber washer (004-1207W) into quick disconnect (004-1207H). Connect to inlet side to the solenoid valve body (004-1207VF). Attach quick disconnect from spray nozzles/shield to outlet side of solenoid valve body, with rubber washer inside the quick disconnect.

Attach Solenoid Harness to Solenoid and route harness to connect with main baler harness at only one of the plugs marked 'SOL1'. Unused alternate "Sol1" port should be capped. Secure harness to baler with cable ties away from any moving parts and pinch points.



D. Solenoid Maintenance

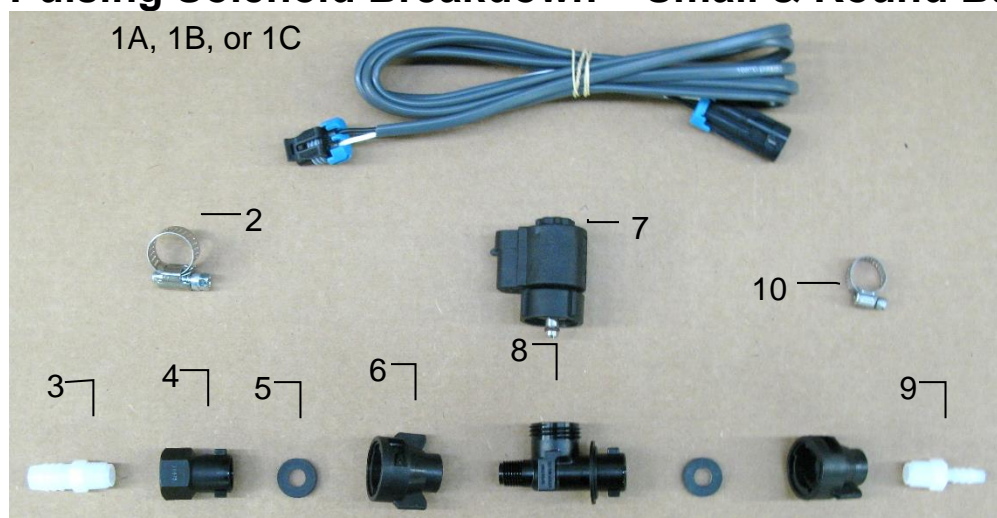
Check before use for any cracks or leaks in fittings- replace as necessary. The center section of valve body may need to be cleaned if solenoid does not pulsate when power is supplied by applicator. See breakdown for cleaning instructions. Components are compatible with Harvest Tec Buffered Propionic Preservative and use of other products may cause an increased need for service or replacement.

E. High and Low Output Tips

Your baler comes with the High (Standard) tip set installed.

- Low tip set is recommended for use with low baling rates or light baling conditions.
- High (Standard) set will cover most field baling conditions

700 Pulsing Solenoid Breakdown – Small & Round Balers



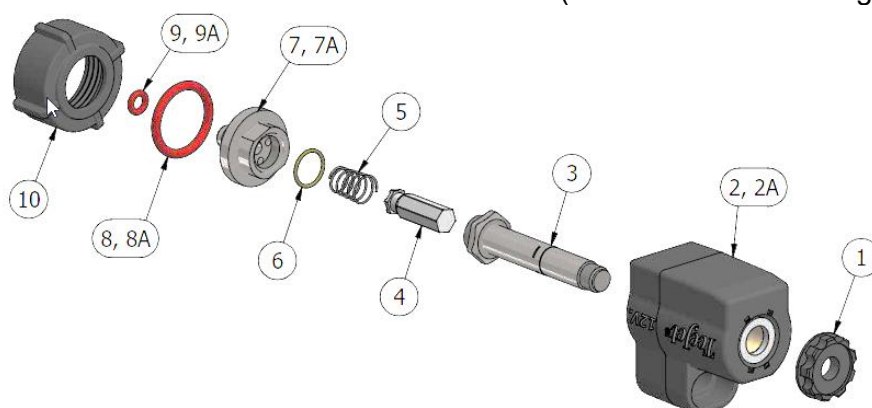
Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1A	Solenoid Harness (5')	006-3650-S1		6	1/4" Female Disconnect	004-1207H	2
1B	Solenoid Harness (10')	006-3650-S2		7	Solenoid	002-2203F	1
1C	Solenoid Harness (15')	006-3650-S3		8	Solenoid Valve Body	004-1207VF	1
2	#6 Hose Clamp	003-9003	1	9	1/4" x 1/4" Straight Fitting	003-A1414	1
3	1/4"x1/2" Straight Fitting	003-A1412	1	10	Mini Hose Clamp	003-9002	1
4	1/4" Female Connector	004-1207G	1				
5	Rubber Washer	004-1207W	2				

Solenoid Packages

Complete Assembly Pkg. A	SOL-3SP-A
Complete Assembly Pkg. B	SOL-3SP-B
Complete Assembly Pkg. C	SOL-3SP-C

Expanded View of Pulsing Solenoid (002-2203F)

Replacement Pulsing Solenoid O-Ring Kit available (002-2203FG)
(Includes EPDM O-Rings 6, 8, 9 shown below)



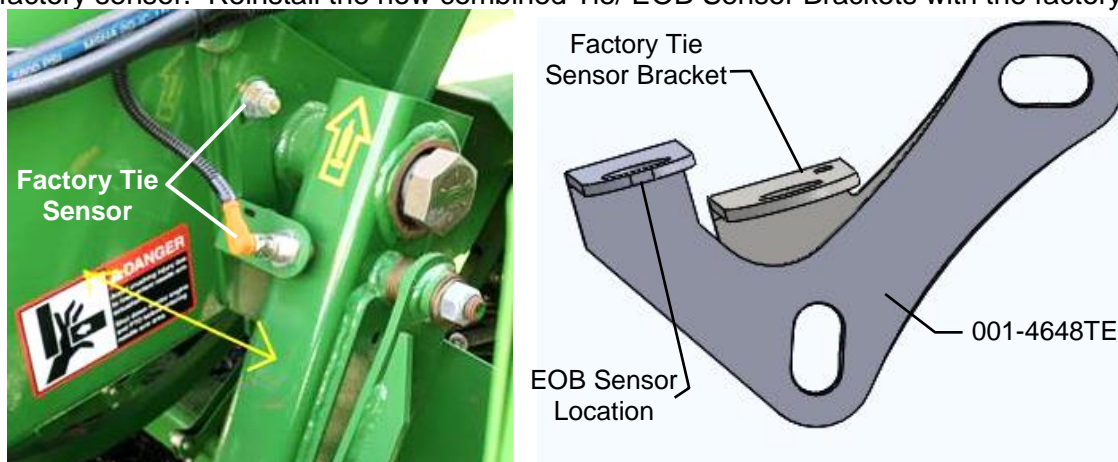
To Clean Solenoid Valves:

The Center Section can be removed from Housing #2 by loosening #1 from #3. Once removed, use wrenches on components #3 and #7 and gently turn to loosen and separate. Soak parts #3-10 in warm soapy water, clean with a soft bristle brush, rinse with clean water to remove buildup before reassembly.

End of Bale (EOB) Bracket and Sensor

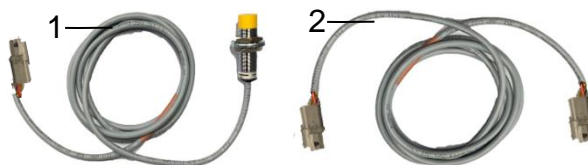
Installation – 767 Applicator

Locate the End of Bale bracket (001-4648TE) from the kit and install EOB Sensor (006-7401) centered in the EOB bracket. Locate the factory tie sensor on the RH side of the baler. Remove the nuts that secure the factory tie sensor bracket to the frame and install the EOB bracket using the factory bolts on the outside of the factory sensor. Reinstall the now combined Tie/ EOB Sensor Brackets with the factory nuts and tighten.



Adjust the EOB Sensor (006-7401) in the bracket until the yellow end of the sensor is offset $\frac{3}{16}$ " to $\frac{1}{4}$ " from the back side of the needle arm. Tighten the two jam nuts on the sensor. Route the sensor wiring along the existing wire harness towards the main baler harness, connect to the plug marked 'EOB'. Secure with cable ties as needed.

End of Bale (Flake/Stroke) Sensor



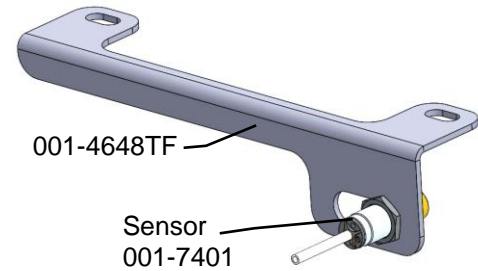
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	End of Bale Sensor	006-7401	2
2	End of Bale Ext.	006-7401EXT	2

Flake/Stroke Count Sensor and Bracket (001-4648TF)

Installation

Locate the upper haydog on the RH side of the bale chamber and the two factory bolts holding flat steel below the plunger roller. Remove factory nuts and place the Flake Count Bracket (001-4648TF) on the underside of the flange. Resecure bracket and plunger roller plate with the factory bolts and nuts.

Install Sensor (001-7401) into the bracket and adjusted placement of the yellow sensor cap within 3/16" of the front of the haydog. When the retracted from the bale chamber at the rear, the front of the haydog will rotate away from the sensor. The sensor will then register the absence of metal each time the haydog retracts. Tighten both jam nuts on the sensor to secure the sensor in position in the adjustable slot.



Route the wiring along the frame to connect to the harness main baler harness plug marked 'Stroke Counter.' Securing with cable ties as needed.



Star Wheel Moisture Sensor Kit (MSH-7SS-A)

Installation

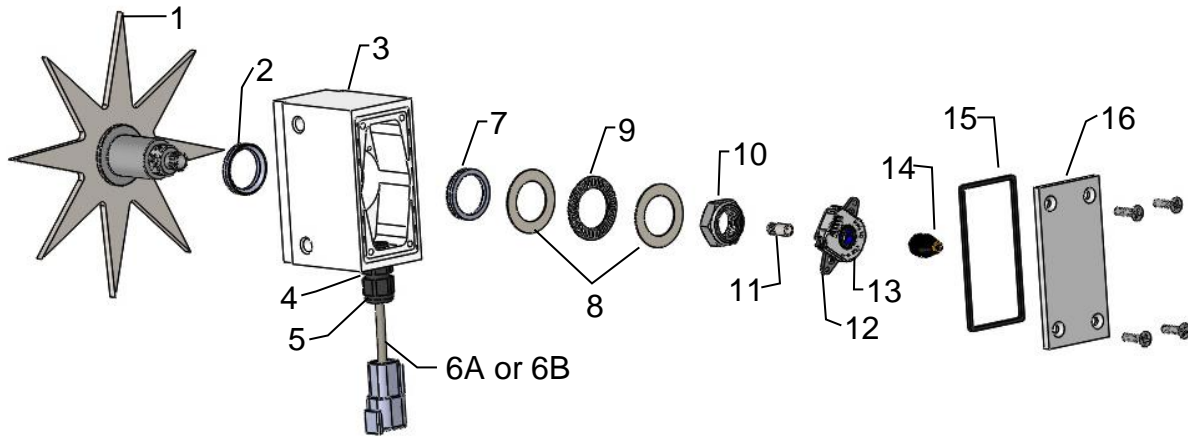
Locate the factory star wheel mounting holes and cutouts at the front of the chamber on each side of the baler. Mount Star Wheel with the 2-pin connector (030-4642U), to the LH side of the bale chamber as shown (right). Secure the block to the chamber by using two of the supplied 5/16-18x3" BHCS inserted from inside the bale chamber, securing with 2x 5/16" lock washer and 2x 5/16-18 nut.

Locate the Encoder Star Wheel that has a 6-pin connector (030-4642UE) and mount it to the RH side of the bale chamber. This star must rotate clockwise as bales move through the bale chamber -see rotation decal on star wheel block. Secure the block to the chamber by using two of the supplied 5/16-18x3" BHCS inserted from inside the bale chamber, secure with 2x 5/16" lock washer and 2x 5/16-18 nut.



Ensure both star wheel blocks are mounted square to the bale chamber to prevent side loading of the assemblies. Connect moisture harness ends to the matching plugs on the star wheels (6-pin and 2-pin plugs). Route moisture harness towards pump plate and connect directly to the Iso Pump Module (IPM).

Star Wheel Sensors- 700 Series



<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	Star Wheel	006-4642US	1	10	Star Wheel Nut	006-4642U	1
2	Dust Seal Gasket	006-4642UG	1	11	Swivel Insert	006-4642B	1
3	Star Wheel Block (Avail. in 2024 Style Only)	006-4642UB	1	12	Encoder Mount	006-4512P	1
4	3/8" Wire Grommet	008-0821A	1	13	Encoder	006-4512E	1
5	3/8" Grommet Nut	008-0821B	1	14	Electric Swivel	006-4642A	1
6A	Encoder Harness Plug (6 Pin)	006-7307EM	1	15	Star Wheel Block Gasket (Fits Pre-2024 Block Style)	006-4642UG	1
6B	Moisture Harness Plug (2 Pin)	006-7307M	1	15	Star Wheel Block Gasket (Fits 2024 and Newer Blocks)	006-4642UG2	1
7	Spacer (only used in some of the pre-2024 blocks)	006-4642UBS	1	16	Block Cover (Fits Pre-2024 Block Style)	006-4642UC	1
8	Thrust Bearing Washer	006-4642TA	2	16	Block Cover (Fits 2024 and Newer Block Style)	006-4642UC2	1
9	Thrust Bearing	006-4642TB	1				
					Bearing Rebuild Kit (parts 2, 7-10)	006-4642UK	
					Complete Assembly w/Encoder	030-4642UE	
					Complete Assembly No Encoder	030-4642U	

Moisture Harness & Complete Moisture Sensor Kits



<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
14A	Moisture Harness (744, 745, 750, 767 Kits)	006-7307EM2	1
14B	Moisture Harness (751 Kit) Long Harness	006-7307EM3	1
NP	Star Wheel Spacer Plate	001-6707ES	2

Complete Moisture Sensor Kit

Star Wheel Moisture Pkg A	MSH-7SSA
Star Wheel Moisture Pkg B	MSH-7SSB

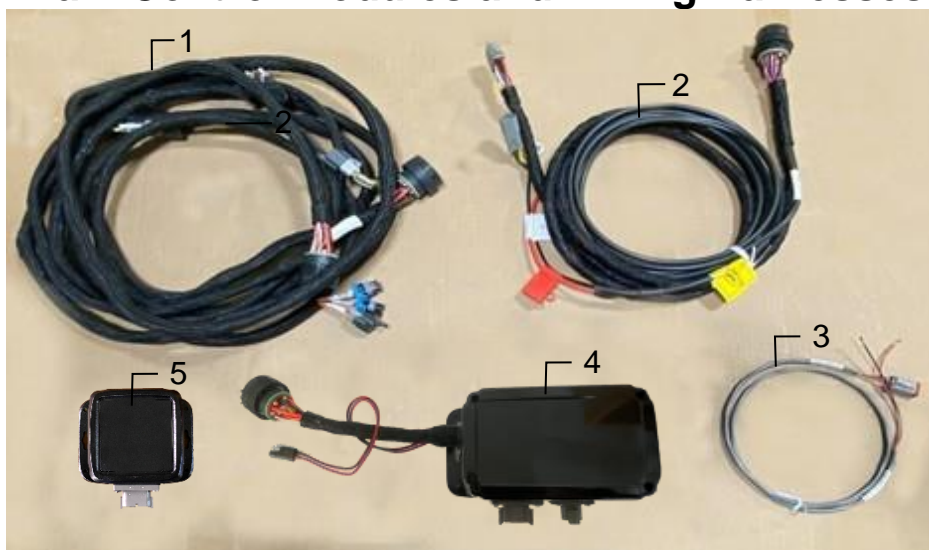
*Complete Moisture Kits include the following: Encoder Star Wheel, Non-Encoder Star Wheel, Star Wheel Spacer Plates (Qty 2), Star Wheel Mounting Hardware and Moisture Harness (either 006-7307EM2 or 006-7307EM3)

Main Wire Harness and Connections

Route harness (006-762B) along the left hand side of the baler. Keep harnesses away from moving parts and hydraulic hoses. Secure with existing cable clamps or use cable ties. Once all connections are made on the harness, connect to the IPM module and secure all harness wires.



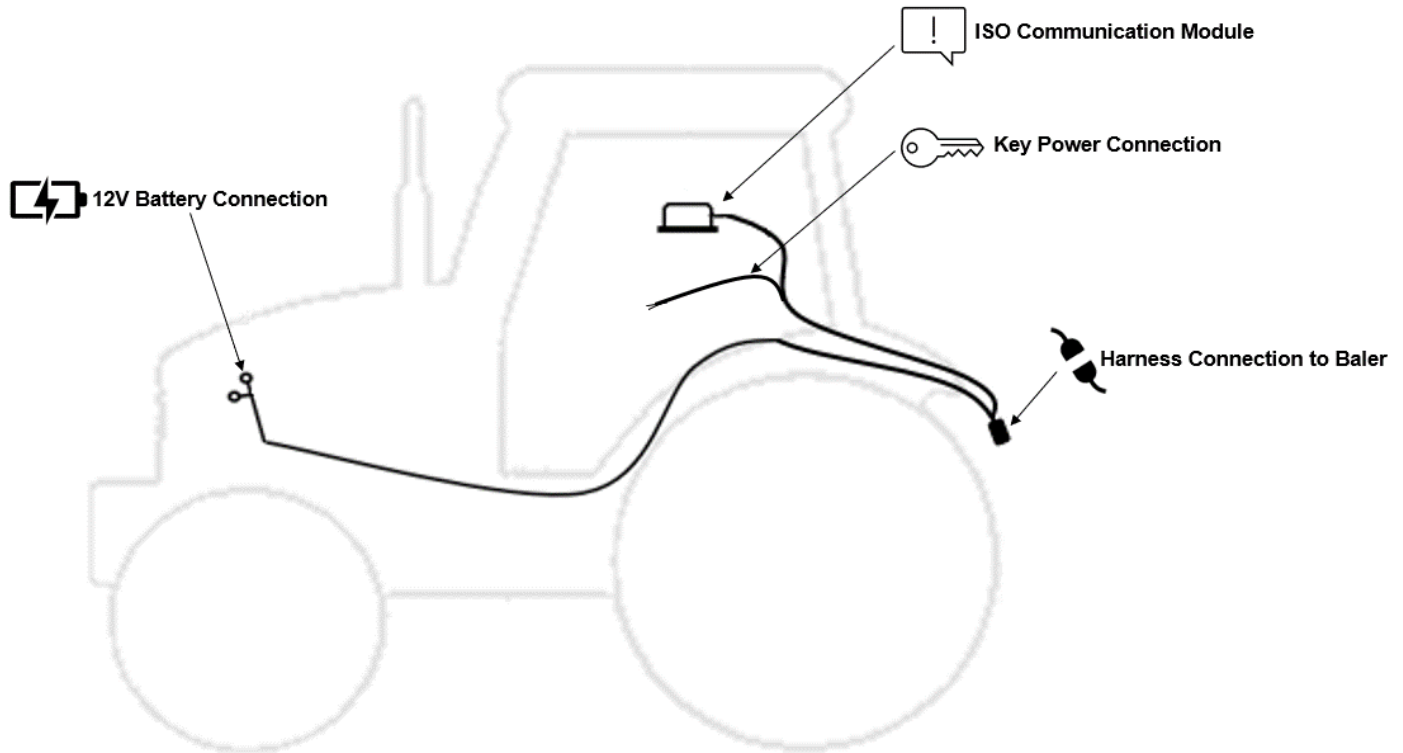
Main Control Modules and Wiring Harnesses



<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	Power Lead Baler 20'	006-762B	1	NP	120 Ohn Resistor	006-700R*	1
2	Power Lead Tractor	006-765IC	1	NP	Dust Plug Kit	006-765DP	1
3	Key Switch Wire	006-765CPH	1	NP	Optional Lightning to USB-A Communication Cable	006-6672USBC	1
4	ISO Pump Module	006-7671SS	1	NP	Optional USB-C to USB-A Communication Cable	006-6672USBX	1
5	ISO Comm. Module	006-6673	1				

*006-700R installation on 006-762B harness is required at all times when operating the small square 700 series applicator

Tractor Setup



The general tractor setup of the 700 Series applicator can be seen above. The main harness of interest is the tractor power/communication harness (006-7651C). This harness will connect at the tractor battery, to the ISO Communication Module (ICM) mounted in the cab, a keyed power connection point, and connect at the hitch area to the baler power/communication harness (006-765B). View below to see highlighted installation instruction:



12V Battery Connection

The 12V battery connection must be at the tractor battery. Connection to alternative locations such as an accessory port can cause problems with applicator system.

MUST BE CONNECTED DIRECT TO TRACTOR BATTERY TERMINALS



ISO Communication Module

The ISO communication module is to be mounted inside the cab. Other mounting locations can lead to issues with weathering and operation. Once installed and the system is powered, a green light will turn on with the ICM module.



Key Power Connection

Ensure a solid keyed connection is found inside the cab and wired into. Poor keyed power connection can result in applicator system issues.



Harness Connection to Baler

The tractor harness connects at the hitch to baler power/communication harness (006-765B). This will allow the system components to communicate with one another. Ensure connections are debris and corrosion free.

Display Options

Optional Harvest Tec Display



The 700 series Harvest Tec Display will allow you to set your real time baling parameters to ensure the most precise application to every bale. This is done by utilizing the improved touch technology to select objects, enter data, and swipe through operational screens.

The Harvest Tec Display offers easy integration by connecting to the additional CAN plug on the 006-765IC harness. Once, connected the Harvest Tec display will power up with applicator system.

Note: The Harvest Tec Display must be used as a standalone display, the baler cannot run both integrated and on the Harvest Tec Display. Must be one or the other. Removal of the 006-765VA or integration harness is required when equipped. 006-770R Terminator must be placed on only one CAN/IDM port on the baler harness.

Optional Tablet Display



The iOS or Android Tablet displays offer the ability to communicate with the 700 series applicator system via hard-wired connection to the ISO Communication Module (ICM). Recommended to use a quality communication cable to connect with the IIC- adapters are not supported. Through the free Precision Baling App, the operator can set real time baling parameters to ensure the most precise application to every bale.

This provides a multi-use option while utilizing the improved app to select objects, enter data, and easily switch through operational screens. The Tablet Display offers easy integration by connecting a charging cable to the USB port on the ICM module. Once connected the Harvest Tec applicator will display upon opening the app and powering up the applicator system. Tablets can be used in addition to integrated baler VT display.

Required to be running a current supported iOS operating system.

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

Optional Harvest Tec Display Kit (030-7670DK)



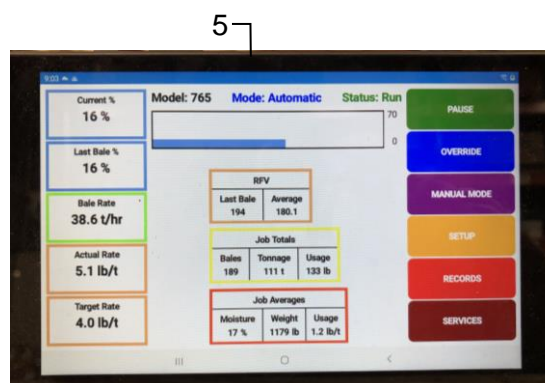
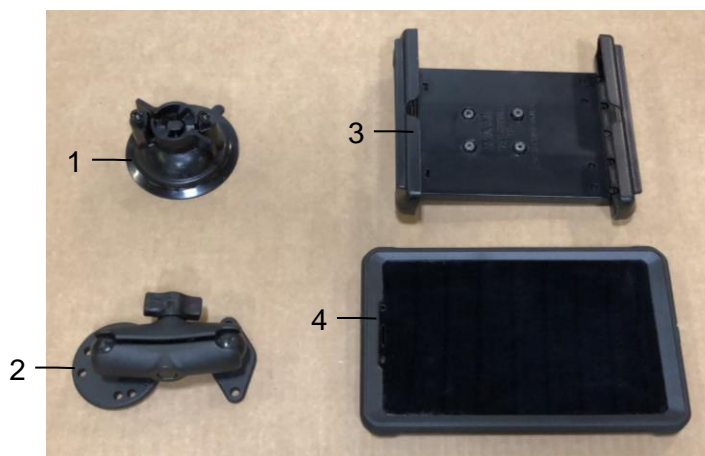
Installation Instructions

Ref	Description	Part #	Qty
1	Suction Cup Mount	001-2012SCM	1
2	Ram Mount	001-2012H	1
3	Harvest Tec Display	006-765GVT	1
4	Display Harness	006-765GH	1
5	Mounting Plate	001-700GH	1
NP	700 Series Resistor	006-700R	1

1. Connect 006-765GH harness connection to 006-765IC tractor harness key power plug.
2. Connect 006-765GH harness to the Harvest Tec VT Display before tightening mount in place.
3. Tighten the mounting and display. Streamline harness as necessary.
4. Once connected, power cycle the system and ensure display is working properly.

NOTE: CANNOT OPERATE APPLICATOR SYSTEM WITH HARVEST TEC DISPLAY AND BALER ISO INTEGRATION or TABLET/ iPad AT THE SAME TIME.

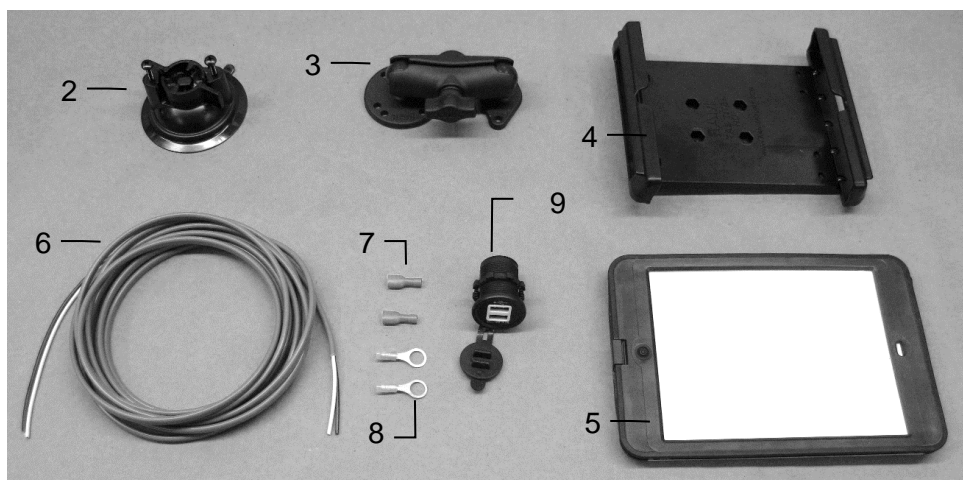
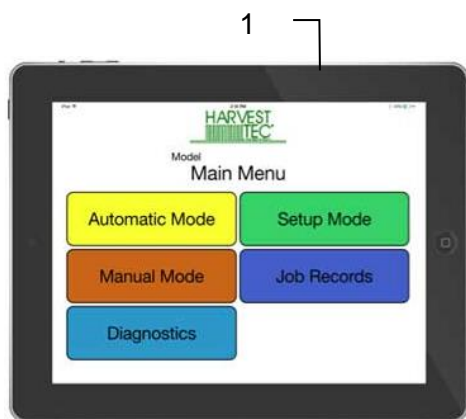
Optional Android Display Kit (030-1670DK)



Ref	Description	Part #	Qty
1	Suction Cup Mount	001-2012SCM	1
2	Ram Mount	001-2012H	1
3	Spring Load Cradle	001-2012SLC	1
4	Android Case	001-2012A1	1
5	Android Tablet	006-1670AT	1
NP	USB-C to USB-A Cable	006-6672USBX	1

Note: Use a quality communication cable ending with a USB-A connection to connect tablet to (006-765ICM) control module - plug into the USB port showing a tablet.

Optional iPad Display Kit (030-4670DK)



Ref	Description	Part #	Qty		
1	iPad Mini 4 (Refurbished)	006-4670IP	1	Complete iPad Mini Kit	030-4670DK
2	Suction Cup Mount	001-2012SCM	1	(Includes 1-5 and Comm. Cable)	
3	Ram Mount	001-2012H	1		
4	Spring Load Cradle	001-2012SLC	1	Mounting Kit Only	030-2014MK
5	iPad Mini 4 Case	001-2012C4	1	(Includes all parts <u>except</u> iPad Mini 4)	
NP	Lightning Comm. Cable	006-6672USBC	1		
6	Power Harness	006-4723P	1		
NP	4 amp Fuse	Hardware	1		
7	Female Spade Connector	Hardware	2		
8	Eye Loop Connector	Hardware	2		
9	iPad Mini Charger 12V	001-2012P	1		

12V Power Harness Installation Instructions (included with Mounting Kit Only)

1. Identify 12V power source for wires to connect.
2. Eye loops installed on harness if wiring directly to the battery is desired.
3. Test for key power source if preferred to have power to the USB shut off with the key.
4. Once power source is identified, cut wires to desired length if needed for key power connection.
5. Harness comes with quick connectors the white and black wires.
6. Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
7. The wires will then be hooked to the designated terminals on the bottom of the USB plug
8. Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
9. Feed the wires through the mounting hole.
10. 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.
11. Connect the wires to the identified power source if easier to do so before tightening the plug into place.
12. Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
13. 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 ISO Display Adapter (006-7670A)
For use with a dedicated ISO display

The 700 Series Applicator has the option to tie into compatible dedicated ISO monitors by utilizing the diagnostic port. When connected, the Harvest Tec System will populate as its own object pool within the ISO display. When this object pool is selected, the ISO monitor will then function as a dedicated monitor for the Harvest Tec System.

**The Harvest Tec System will function as a stand-alone system with the 006-7670A adapter.
System will not integrate with the ISO system software using this adapter.**

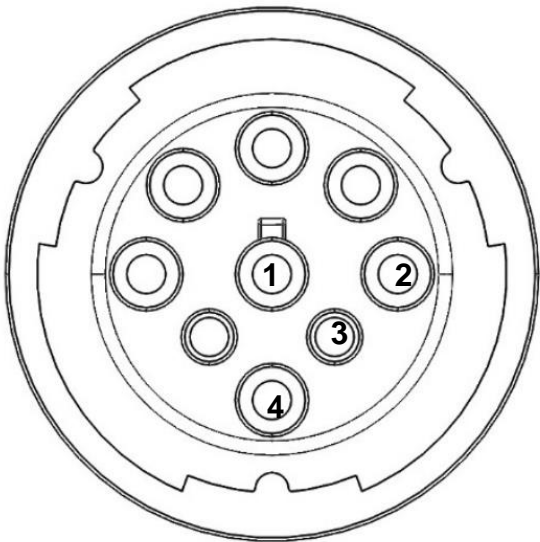
Any tablet connected to the ICM module must be disconnected from the ICM before the Harvest Tec program screen will activate within the ISO display.

To connect adapter 006-7670A, unplug the 4-pin 006-765CPH Key Power Plug connection from the 006-765IC Tractor Harness and replace with the plug from the 006-7670A Adapter. Connect the round plug end of the 006-7670A Adapter to the Tractor ISO Display Diagnostic port.

Scan the QR code to view a short video for the
7670A Adapter Harness for ISO Display:



For additional product and service information:
See our YouTube Channel <https://www.youtube.com/@harvesttec>

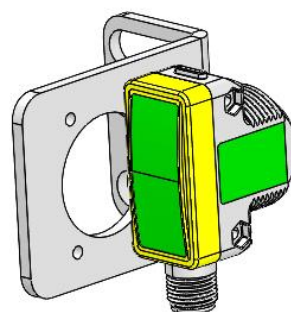
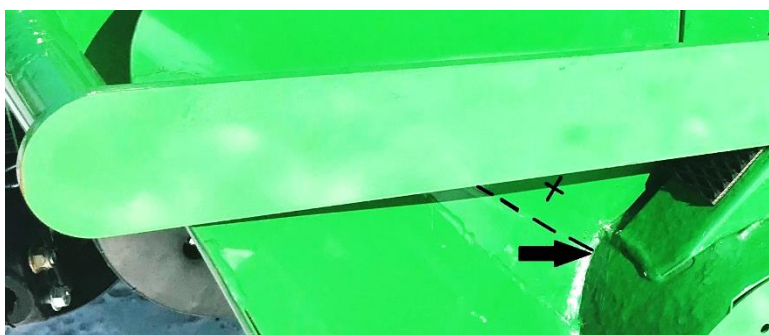
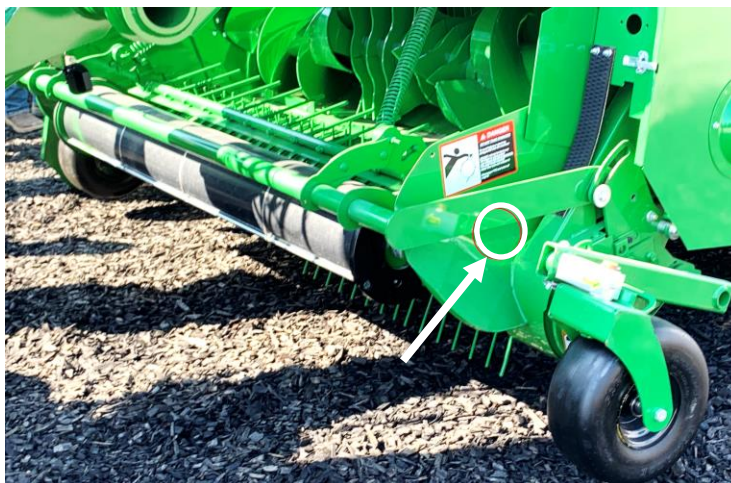


Pin 1	Black	Ground
Pin 2	Yellow	CAN High
Pin 3	Green	CAN Low
Pin 4	Red	12V+ Key Power

Optional Crop Eye Forage Indicators

Installation

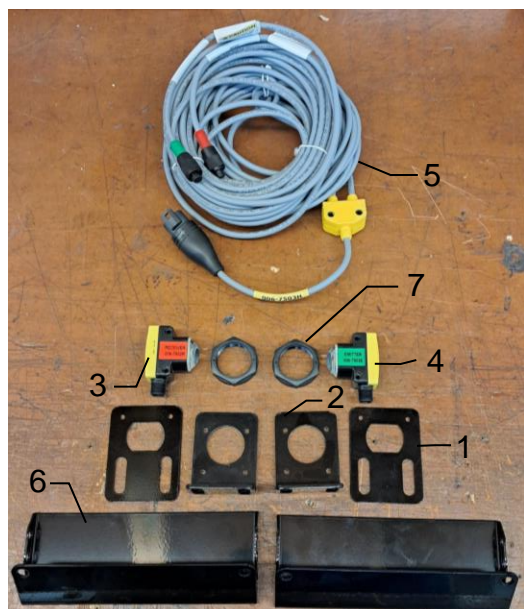
The pickup head resembles the pickup head of the JD HC2 Round Baler. Remove the sensors & brackets from the pickup head to raise the pickup head all the way up. Mark with pencil the location of that square cornered sheet metal that is fixed against the pivoting head when fully raised. Next lower the head down all the way and find a location on the flat sheet near where there's a bend in the flat sheet and the curvature of the pickup. Approximate installation area is circled on picture to the right.



Measure from the intersection along the bend line 1.5" and make a mark. Measure perpendicular to the bend line from the mark 1.25" and make another mark for the 1-1/4" hole. Cut a 1-1/4" hole with a hole saw. Assemble the sensor to the supplied bracket, 001-5105E, as shown below using supplied hardware. Note that the excess length of the bracket flange can be cut off for clearance.

Align the sensor concentric with the 1-1/4" hole, and the bottom of edge of the bracket parallel with the formed bend in the shield. Drill 2x 5/16" holes aligned with the center of the slots. Secure the brackets to the shield using the supplied hardware, assembly loosely until sensors have been aligned. Upon completion of alignment, tighten the hardware. Route sensor wiring downward and away from moving parts.

Harvest Tec 474C Parts Breakdown



<u>Ref#</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Trash Plate	001-5105S	2
2	Hay Indicator Bracket	001-5105E	2
3	Sensor -Receiver (Red)	006-7502R	1
4	Sensor -Emitter (Green)	006-7502E	1
5	Hay Indicator Harness- Deutsch Plug	006-7503H	1
6	Hay Diverter (used with NH and Case IH SBX only)	001-5105F	2
7	Hay Indicator Retaining Nut (Replacement, included with crop eye)	006-7502N	2

Wiring Diagram – 744, 745, 750, 751, 767 – Small Square Balers

1. Connect the power harness (006-7651C) to the tractor battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative.



A. The power harness must be connected to the battery!

CONTACT HARVEST TEC BEFORE MODIFICATIONS.

The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty

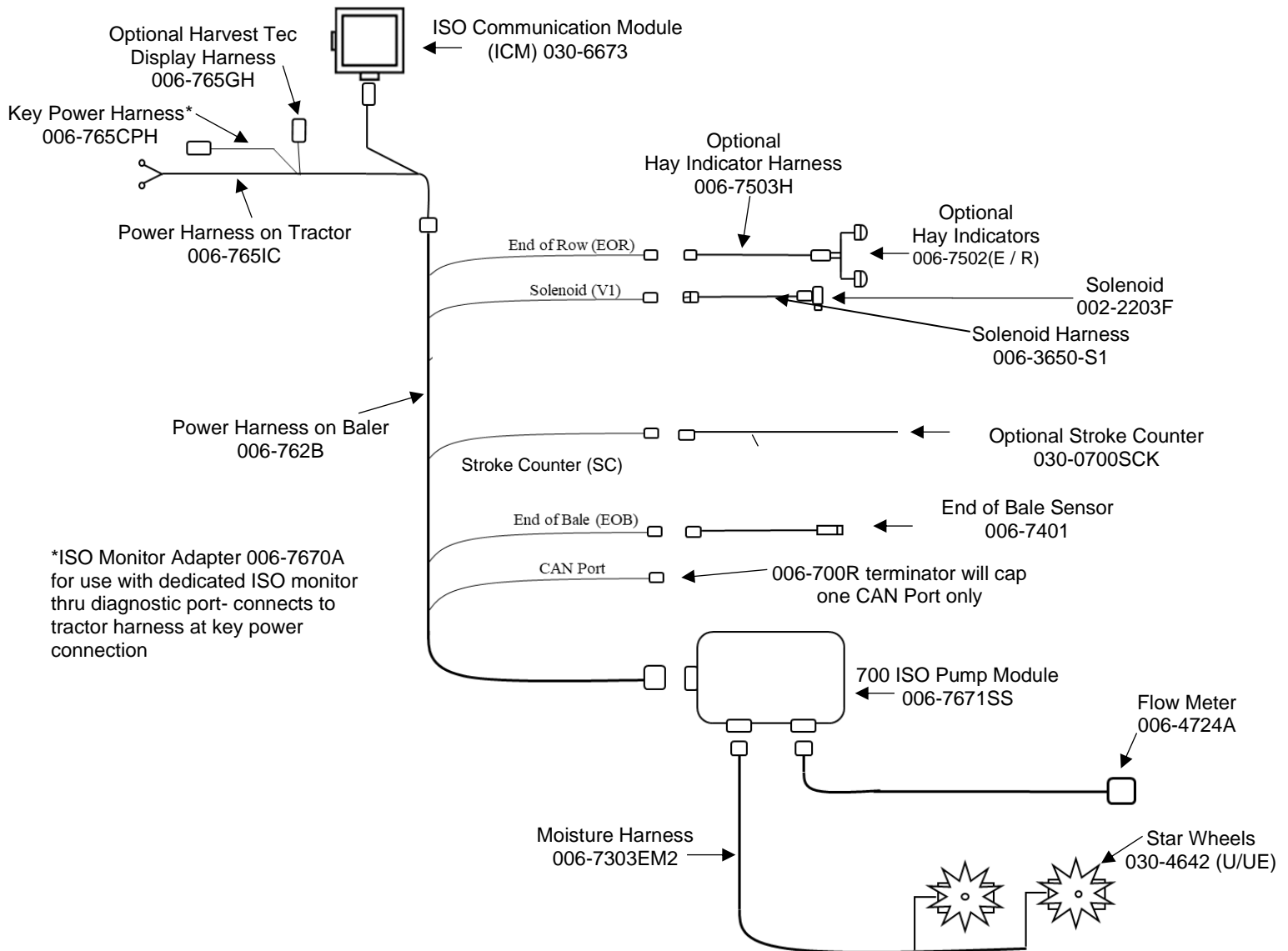
B. This unit will not function on positive ground tractors.

C. If the unit loses power while operating it will not keep track of accumulated pounds of product used.

2. The power harness on the tractor (006-7651C) will run from the tractor battery to the hitch. The power harness on the baler (006-762B) will connect to the tractor power harness (006-7651C) at the hitch.
3. Connect the keyed power wire (006-765CPH) to a keyed power source on the tractor.

The keyed power wire must connect to a keyed source or the unit will not power up correctly.

4. Attached the ISO Communication Module (006-6673) to the tractor power harness (006-7651C).
5. Attach the End of Bale (EOB) connection on baler harness (006-762B) to the EOB Sensor (006-7401).
6. Attach the Solenoid (SOL 1) connections on the baler harness (006-762B) and to the solenoids (002-2203F).
7. Attach the Flowmeter (006-4724A) to the Pump Module connection on pump plate assembly.
8. Attach the rubber molded connector on pump plate to the Pump (007-4120DE).
9. Attach star wheel (030-4642U/UE) connection to the pump module
10. Ensure 006-700R terminator is connected to CAN/IDM port on 006-762B harness

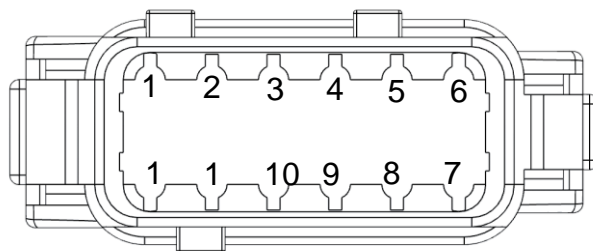


Pin Outs

Integrated Control Module (ICM) on Tractor Harness 006-765IC

(Deutsch Plug Number: DTM06-12SA)

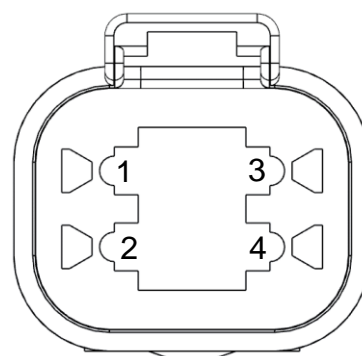
Pin 1	Red	+12V from ECU
Pin 2	Purple	Signal Wire
Pin 3	Red/White	+12V CAN X
Pin 4	Black/White	Ground CAN X
Pin 5	Orange	CAN X Hi
Pin 6	Blue	CAN X Lo
Pin 7	Green	ISO CAN Lo
Pin 8	Yellow	ISO CAN Hi
Pin 9	White	GPS Expansion 1
Pin 10	Gray	GPS Expansion 2
Pin 11	Brown	GPS Expansion 3
Pin 12	Black	Ground from ECU



ISOBUS Plug on Tractor Harness 006-765IC

(Deutsch Plug Number: DT04-4P)

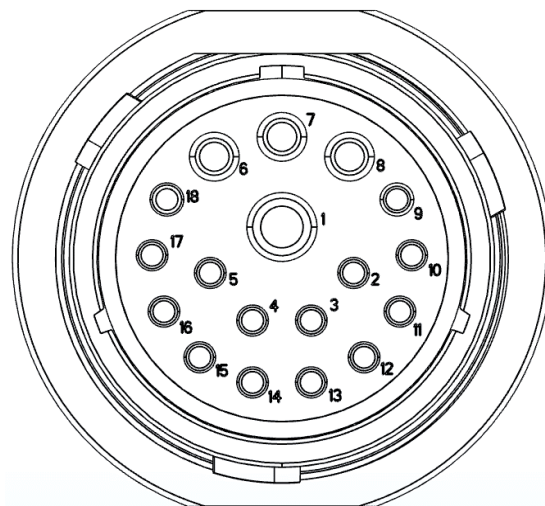
Pin 1	Red	+12V from ECU
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Black	Ground from ECU



Power / Communication Tractor Harness 006-765IC at Baler Hitch

(Deutsch Plug Number: HDP24-24-18PN)

Pin 1	Not Used	----
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Red	+12V Power to ECU
Pin 5	Black	Ground to ECU
Pin 6	Red	+12V From Battery
Pin 7	Not Used	----
Pin 8	Black	Ground From Battery
Pin 9	Not Used	----
Pin 10	Purple	Signal Wire
Pin 11	Red/White	+12V CAN X
Pin 12	Black/White	Ground CAN X
Pin 13	Orange	CAN X Hi
Pin 14	Blue	CAN X Lo
Pin 15	White	GPS Expansion 1
Pin 16	Gray	GPS Expansion 2
Pin 17	Brown	GPS Expansion 3
Pin 18	Not Used	----

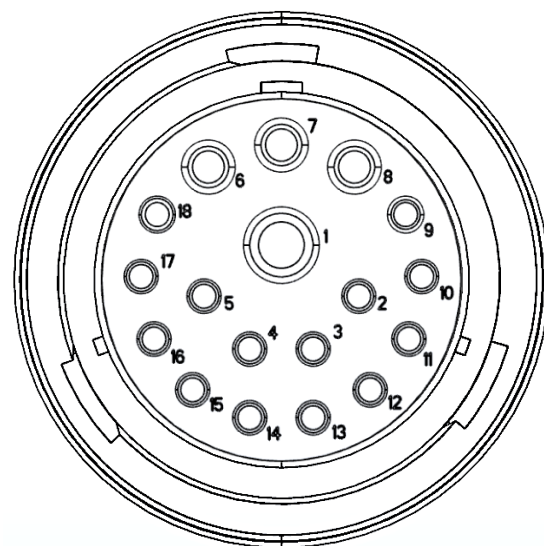


Pin Outs (continued)

Power / Communication Baler Harness 006-765B at Baler Hitch IPM

(Deutsch Plug Number: HDP26-24-18SN)

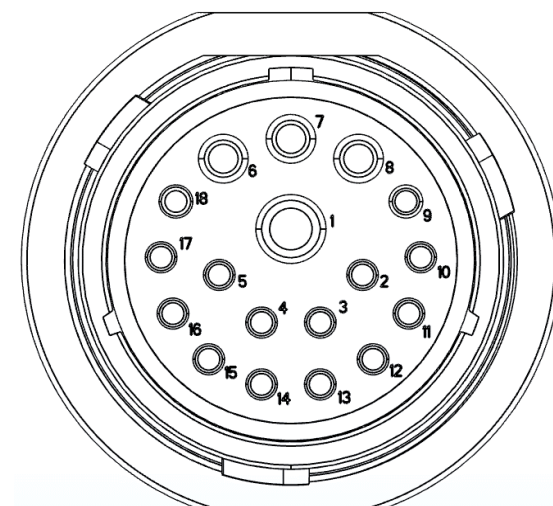
Pin 1	Not Used	----
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Red	+12V Power to ECU
Pin 5	Black	Ground to ECU
Pin 6	Red	+12V From Battery
Pin 7	Not Used	----
Pin 8	Black	Ground From Battery
Pin 9	Not Used	----
Pin 10	Orange/White	+12V Power to EOR
Pin 11	Not Used	----
Pin 12	Not Used	----
Pin 13	Not Used	----
Pin 14	Not Used	----
Pin 15	Not Used	----
Pin 16	Not Used	----
Pin 17	Not Used	----
Pin 18	Not Used	----



Power / Communication Baler Harness 006-765B at IPM Module

(Deutsch Plug Number: HDP24-24-18SN)

Pin 1	Not Used	----
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Red	+12V Power to ECU
Pin 5	Black	Ground to ECU
Pin 6	Red	+12V From Battery
Pin 7	Not Used	----
Pin 8	Black	Ground From Battery
Pin 9	Not Used	----
Pin 10	Orange/White	+12V Power to EOR
Pin 11	Orange/Black	Ground to EOR
Pin 12	Purple/Green	EOR Signal
Pin 13	Blue/White	EOB Signal
Pin 14	Gray/Red	+12V Power to Solenoid 1
Pin 15	White/Black	Ground to Solenoid 1
Pin 16	Orange/Red	+12V Power to Solenoid 2
Pin 17	White/Black	Ground to Solenoid 2
Pin 18	Not Used	----



*IPM Module Whip Plug- Pin # 5 Not Used

Solenoid 1 Plug on Baler Harness 006-765B

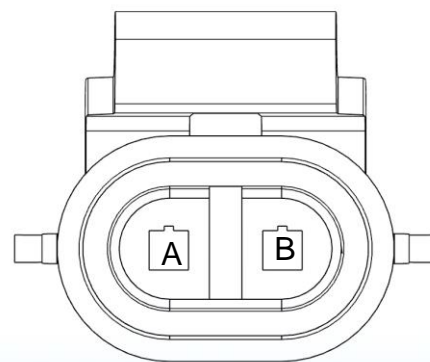
(Deutsch Plug Number: APTIV 12052641)

Pin B	Gray/Red	+12V to Solenoid 1
Pin A	White/Black	Ground to Solenoid 1

Solenoid 2 Plug on Baler Harness 006-765B

(Deutsch Plug Number: APTIV 12052641)

Pin B	Orange/Red	+12V to Solenoid 2
Pin A	White/Black	Ground to Solenoid 2

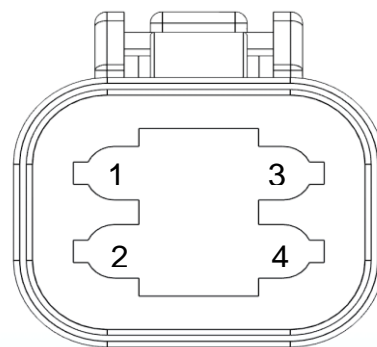


Pin Outs (continued)

CAN / IDM on Baler Harness 006-765B

(Deutsch Plug Number: DT06-4S)

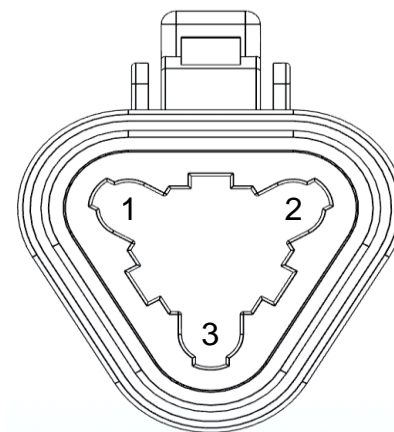
Pin 1	Red	+12V to Solenoid 2
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Black	Ground to Solenoid 2



End of Bale Sensor Plug on Baler Harness 006-765B

(Deutsch Plug Number: DT06-3S)

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



End of Row Sensors Plug on Baler Harness 006-765B

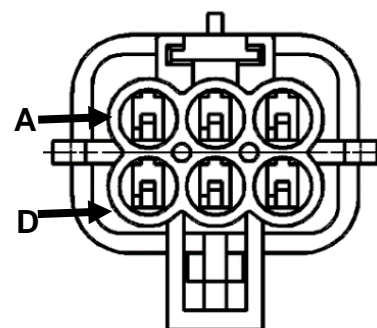
(Deutsch Plug Number: DT06-3S)

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

Integration Harness Plug on Baler Harness 006-765B

(Plug: APTIV 12052848)

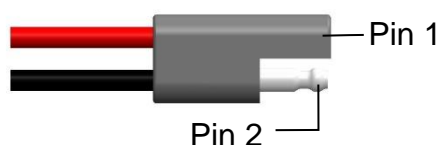
Pin A	Not Used	----
Pin B	Red	+12V Power
Pin C	Not Used	----
Pin D	Gray	Ground
Pin E	Orange	CAN Hi
Pin F	Blue	CAN Lo



Pump Connection on 700 Controller Harness

(16 AWG Two-Wire Plug)

Pin 1	Red	Power to Pump
Pin 2	Black	Ground to Pump



Harvest Tec LLC. Warranty and Liability Agreement

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

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

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

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

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

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

Revised 4/17

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