

Installation Manual

Model 4674552

*55 gallon Preservative Applicator
For Grady TwinPak Balers*



HarvestTec®
EST. 1976

Table of Contents

	<u>Page</u>
Introduction, Model Reference, & Tools Needed	3
Tank Mounting	4-7
Tank Saddle Kit Breakdown	4
Installation	5
SMV, Light & Camera Bracket	5
Pump and Gauge Bracket	6
Drain Fill Kit and Tank Plumbing	7
Parts Bags and Hosing	7
Spray Shield Assembly	8
Hose Manifold Assembly	9
Plumbing and Hose Routing	9
Control Box	10
Optional Crop Eye Forage Indicators	11
Crop Eye Breakdown	11
Warranty Statement	12

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.

Electronic 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 (Electronic Applicator Systems)

Baler Make	Baler Model	Model Number	Installation Kit	Tank Size
AGCO	7105, 7110, 7115, 7120, 1835, 1837, 1837, 1841	434	4416	55 Gallon
Case IH	8500 Series	434	4416	55 Gallon
Case IH	SBX 520, 521	441	4409	25 Gallon
Case IH	SBX 530, 540, 550, SB531, SB541, SB551	441	4415	25 Gallon
Case IH	SBX 530, 540, 550, SB531, SB541, SB551	440	4415	55 Gallon
Challenger	SB 34, 36, 44	434	4416	55 Gallon
Freeman	270, 370	448	4506	55 Gallon
Grady TwinPak	SB2XR	467	4552	55 Gallon
Hesston	4550, 4570, 4590, 4600, 4655	434	4416	55 Gallon
Hesston	4690N, 4690S	448	4502	55 Gallon
John Deere	328, 336, 338, 346, 347, 348	441	4410	25 Gallon
Marcrest	210 Baler	467	4553	55 Gallon
Massey Ferguson	1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1842S (Top Mount)	434	4416	55 Gallon
Massey Ferguson	1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842 (Side Mount)	434	4417	55 Gallon
Massey Ferguson	1842S (Side Mount)	434	4418	55 Gallon
Massey Ferguson	1843N, 1843S	448	4502	55 Gallon
Massey Ferguson	1844N, 1844S	448	4485	55 Gallon
New Holland	200, 300 Series, 565 & BC5050	441	4409	25 Gallon
New Holland	570, 575, 580, BC5060, BC5070, BC5080	441	4415	25 Gallon
New Holland	570, 575, 580, BC5060, BC5070, BC5080	440	4415	55 Gallon
New Holland	585, BB900	448	4507	55 Gallon
New Idea	7205, 7210, 7215	434	4416	55 Gallon
Welger	AP630, AP730, AP830	441	4412	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 (4415 only)

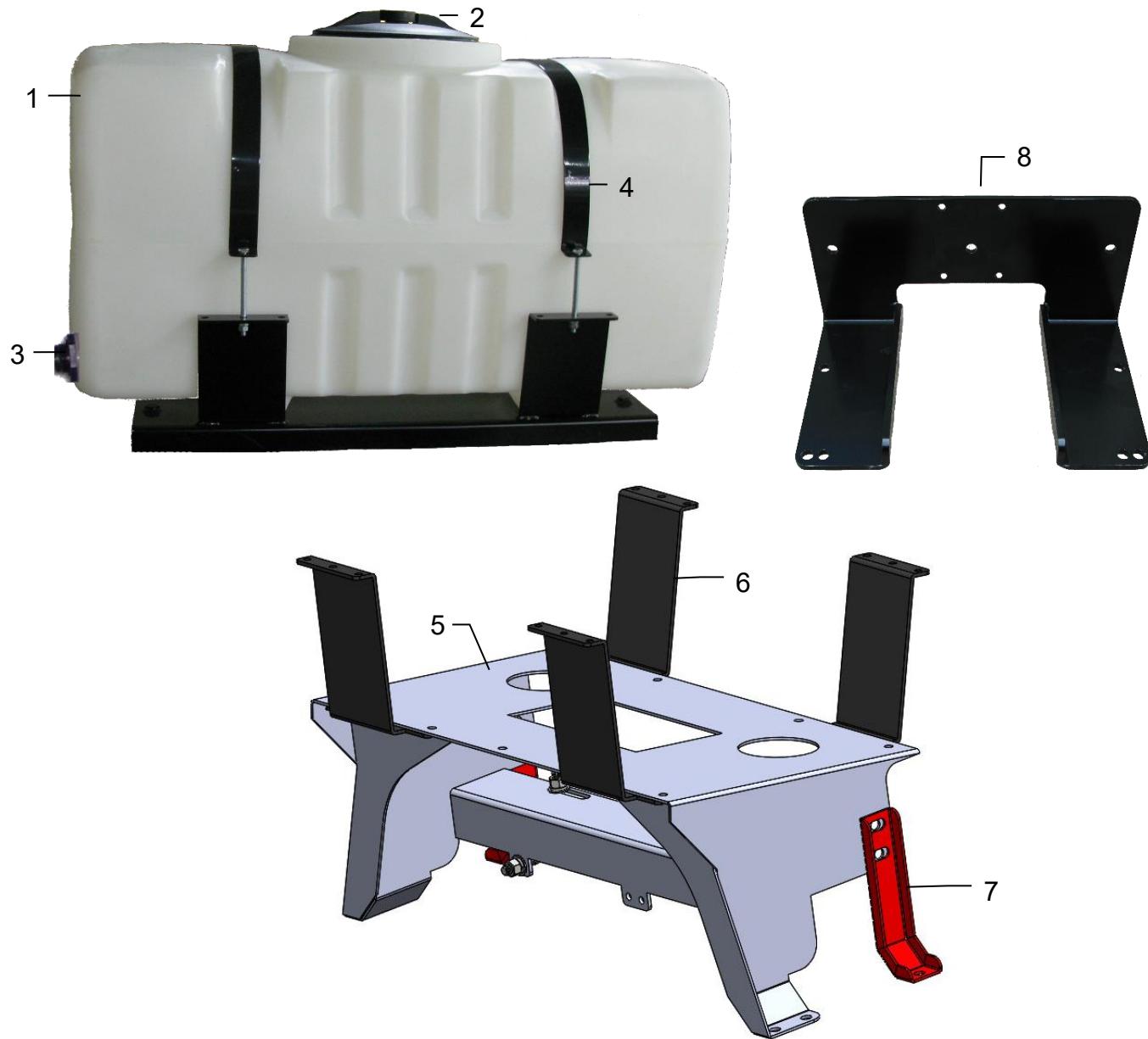
Side cutter

Hammer

Center punch

Parts Breakdown - Model 767, 467 Base Kits

Tank Saddle Kit 030-0467-TK



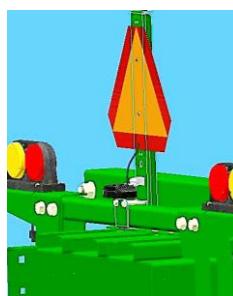
<u>Ref#</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref#</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Tank	005-9203SQ	1	8	Pump Plate Bracket-Auto	001-4647MT	1
2	Tank Lid	005-9022H	1	NP	Pump Mount-Electronic	001-4647E	1
3	Tank Fitting	005-9100	2	NP	SMV Bracket	001-4647E	1
4	Tank Strap	001-4402C	2	NP	Camera/Light Bracket	001-4703XTL	1
5	Tank Base	001-4703XTP	1	NP	Handrail Shim	001-4703XTH	2
6	Strap Bracket	001-4703CD	4	Replacement Tank (1-3)		030-9203SQ	
7	Tank Base Foot	001-4703XTG	2	Tank Saddle Kit (1-7)		030-0467-TK	
				Auto Pump Plate Mount Kit (8)		PMP-4647MT	

Tank Saddle Kit (030-0467-TK)

Installation – Tank Assembly

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

Remove factory handrail and set aside. Factory wiring will need to be pulled from the handrail pipe- be sure not to pinch or damage wire while installing the tank assembly.



Place the pre-assembled tank assembly 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 assembly on the bale chamber.

Mark the location of the hole in the bottom of the tank bracket gusset foot (001-4703XTG) 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 1/2-13 x 1-1/2" button head bolt from the inside of the chamber and securing with 1/2" lock washer and 1/2" nut (x6). Tighten all hardware.

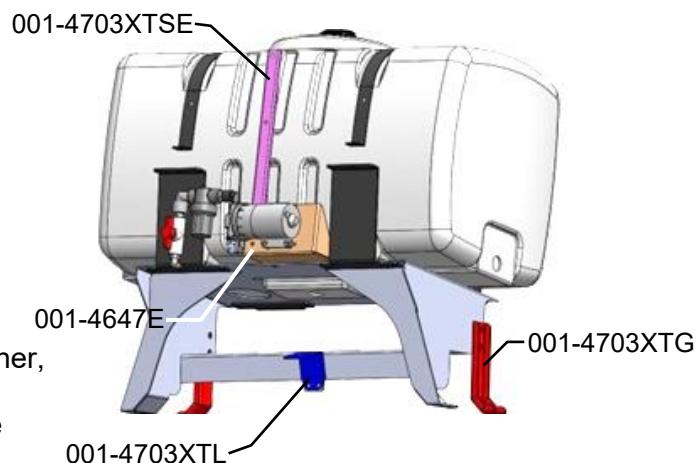


SMV Bracket, Light & Camera Bracket (001-4703XTSE and 001-4703XTL)

Reinstall the factory SMV sign to the SMV bracket (001-4703XTSE) using the factory hardware.

Attach the SMV bracket to the inside face of pump mount bracket with two 1/4-20 x 1" bolts, locks & nuts.

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 factory wiring so it will not be damaged by moving parts, and secure with cable ties.



Handrail Shims (001-4703XTH)

Reinstall the factory handrail to the original mounted location using supplied shims (001-4703XTH) and hardware. Place one shim under each side of the handrail prior to inserting hardware, tipping the handrail towards the front of the baler. Use of shims allows necessary clearance for the top of the tank assembly.

Mounting the Pump and Gauge Bracket (001-4717)

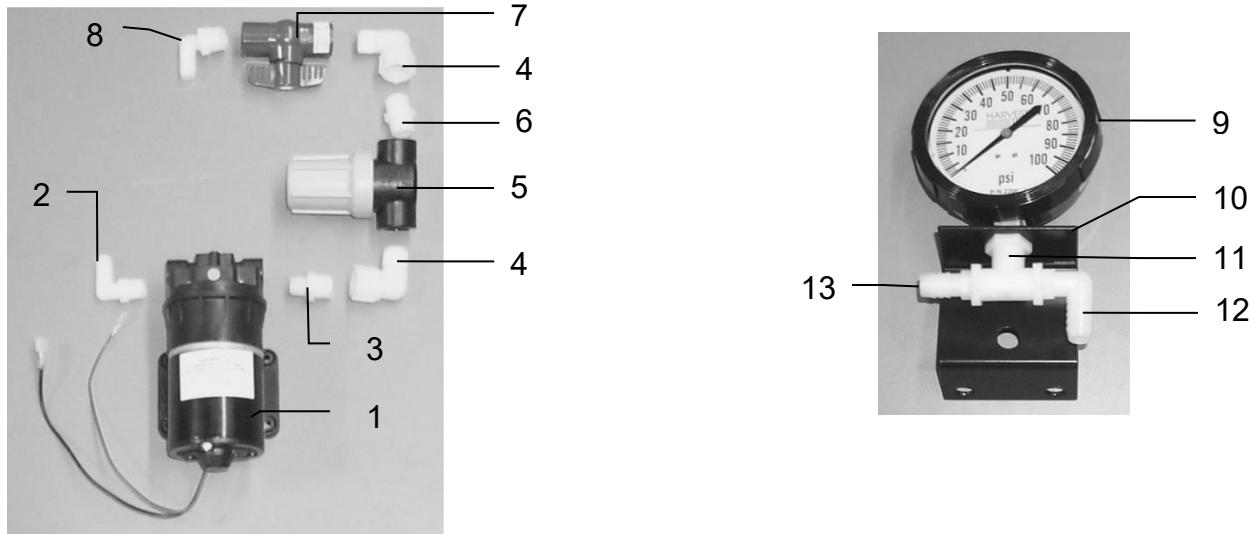
Install the $\frac{1}{2}$ " elbow, 003-EL3412, into the bottom tank fitting of the tank and tighten, orientating towards right-hand side of baler. Install the $\frac{3}{4}$ " elbow, 003-EL3434, into the side tank fitting on the tank, and orientate towards the rear of the baler.

Install the pre-assembled pump and filter bowl assembly to front side of Pump Mount Bracket (001-4647E). Center the pump on mounting plate and secure using supplied hardware.

Mount the Gauge Bracket (001-4717) in a location where it will be visible to the operator while inside the tractor cab. Recommended location is the top right side of the baler's front shield (within the circled area of example picture shown right).



Filter Bowl, Pump and Gauge Breakdown



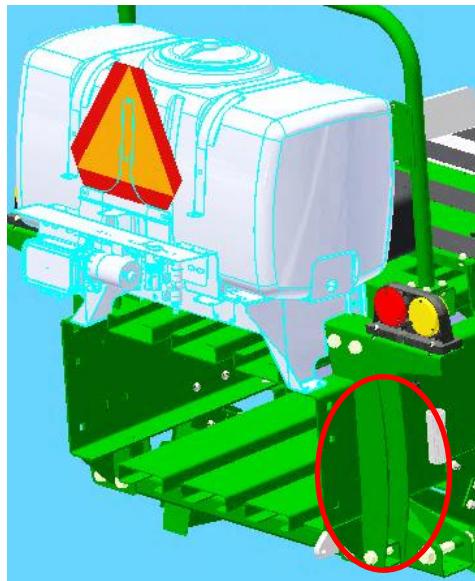
Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Pump	007-4120S	1	9	Gauge	002-2208Z	1
2	Elbow	003-EL3812	1	10	Gauge Bracket	0001-4714	1
3	Reducing Nipple	003-M1238	1	11	Tee	004-TT14	1
4	Street Elbow	003-SE12	2	12	Elbow Fitting	003-EL1412	1
5	Filter Bowl	002-4315-80	1	13	Straight Fitting	003-A1412	1
NP	Replace Screen	002-4315B	1				
NP	Replace Gasket	002-4315D	1				
6	Nipple	003-M1212	1				
7	Ball Valve	002-2212	1				
8	Elbow	003-EL1212	1				
NP	Elbow	003-EL3412	1				

Drain Fill Kit and Tank Plumbing

Installation - Drain Fill Kit (030-0493DFK)

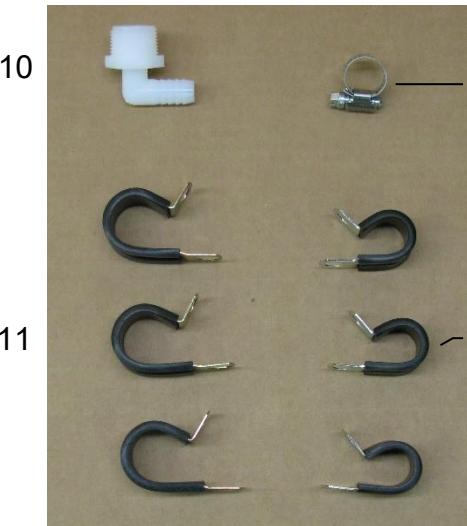
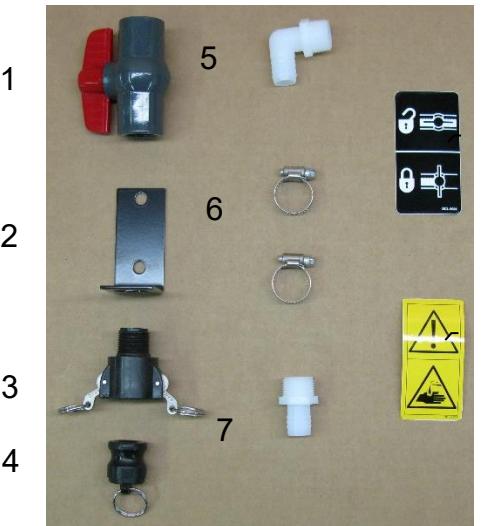
Locate and secure the drain/fill bracket and valve assembly (Parts Bag 1) to the side of the baler in an area where it will be accessible and not interfere with the operation of the baler (circled). Route the $\frac{3}{4}$ " hose from the elbow at the rear of the tank to the fitting at the top of the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

Attach the $\frac{1}{2}$ " 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.



Drain Fill Line, Parts Bag Packages and Hosing

PBA-1 PBP-16



Ref	Description	Part #	Qty
1	3/4" Ball Valve	002-2200	1
2	Valve Holder	001-6702H	1
3	Female Coupler	002-2204A	1
4	Male Shut-Off Plug	002-2205G	1
5	3/4" x 3/4" Elbow	003-EL3434	1
6	#10 Hose Clamp	003-9004	2
7	3/4" x 3/4" Straight Fitting	003-A3434	1

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

030-0493DFK

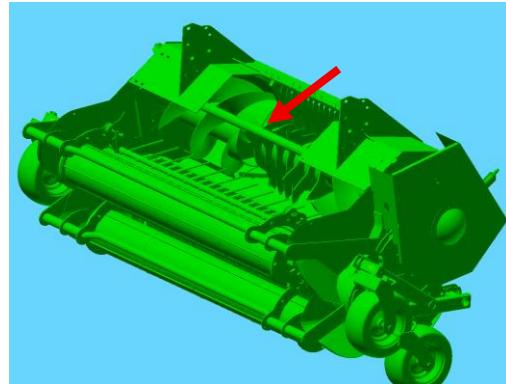
Hoses			
NP	1/2" EVA Tubing (Pump to Tips)	002-9001	25 ft
NP	3/4" EVA Tubing (Drain/Fill Line)	002-9002	10 ft

Installation Kit (030-4552)

Spray Sheild Assembly - Installation

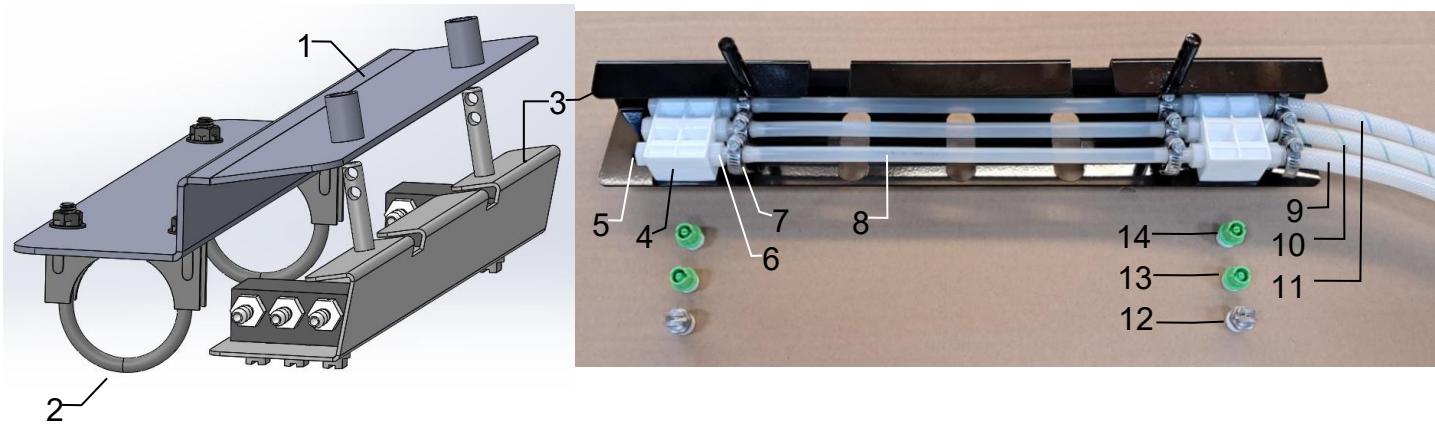
Locate the round tube connecting the two sides above the rotor.

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.

4552 Spray Shield Assembly



Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Spray Shield Holder	001-4435T	1	9	1/4" Braided Hose	002-9016	6
2	U-Bolts	001-4714UBX	2	10	1/4" Braided Hose-Green	002-9016G	6
3	Spray Shield	001-4435NSX	1	11	1/4" Braided Hose-Blue	002-9016B	6
NP	Lynch Pin	008-4576	2	12	Low Tips*	004-T800050-SS	2
4	Spray Block Manifold	001-4435NSB	2	13	Medium Tips*	004-T8001-PT	2
5	1/4" Hex Plug	003-F14	3	14	High Tips*	004-T8002-PT	2
6	1/4"x1/4" Straight HB	003-A1414	9	NP	Hose Manifold Assembly	030-4720	1
7	Mini Hose Clamp	003-9002	12				
8	1/4" EVA Tubing	002-9006	3				

*Tip colors subject to change

Complete Assembly

030-4552

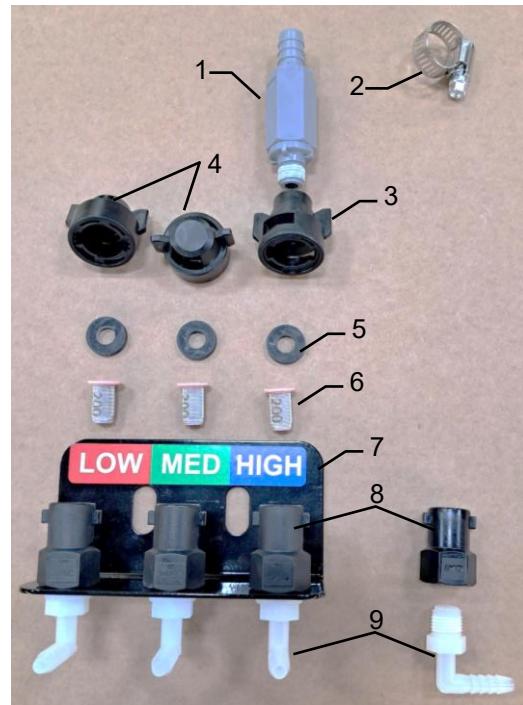
Hose Manifold Assembly (030-4720)

Mounting- Mount the hose manifold on the front of the baler in the area of the spray shield. Make sure the bracket placement will not interfere with any baler operations.

Connect spray shield lines to appropriate hose barb elbow, using hose clamps supplied with the spray shield assembly:

White / Clear line connects to 'LOW'
 Green Striped line connects to 'MED'
 Blue Striped line connects to 'HIGH'

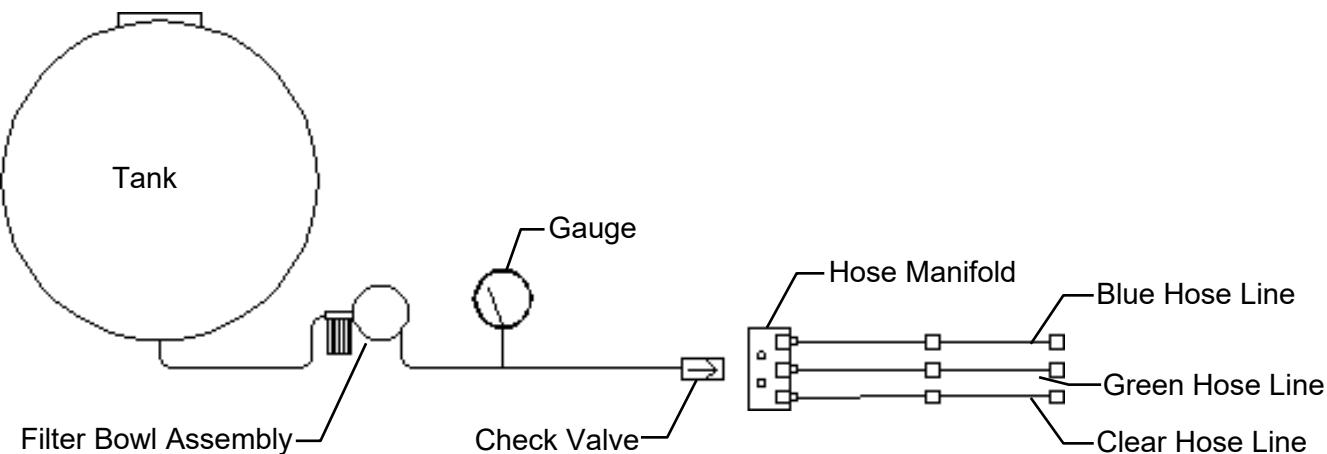
Ref	Description	Part#	Qty
1	Check Valve	002-4564X	1
2	Hose Clamp	003-9003	1
3	Female Quick Connect	004-1207H	1
4	Shutoff Cap	004-1207F	2
5	Washer	004-1207W	3
6	Tip Strainer	004-1203-200	3
7	Hose Manifold Bracket	001-4720	1
8	Quick Connect	004-1207G	3
9	Elbow	003-EL1414	3



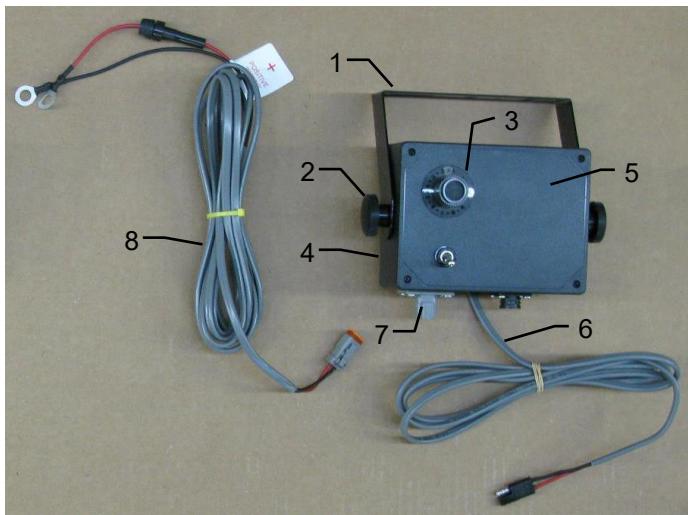
Installation of Plumbing – Hose Routing

Intake- Screw the 003-EL3412 (3/4" to 1/2" elbow) into the bottom of the tank. Second screw the 002-2212 (1/2" ball valve) with elbow into the filter assembly. Lastly, route the 002-9001(1/2" hose) from bottom of the tank to ball valve. Secure with hose clamps.

Outlet- Run 1/2" hose from the pump outlet to the gauge assembly. The gauge is assembled with two straight fittings; an elbow is supplied in the parts bag to be used if necessary. From the gauge the hose will need to be run to the hose manifold. Cut the hose to length and attach the check valve (002-4564X) and female coupler (004-1207H) of the hose manifold assembly parts bag. Use the supplied caps (004-1207F) to cover the remaining disconnects (004-1207G) when not connected to the pump supply line.



Model 457 Control Box



Ref	Description	Part #	Qty
1	U-Bracket Mount	001-2012E	1
2	Control Box Mount Knob	008-0923	2
3	Speed Dial Knob	006-2022A	1
<u>For Controls After Serial # 4550:</u>			
4	Control Box Enclosure	006-2015A	1
5	Control Box Cover	006-2015B	1
6	Pump Lead	006-4583	1
7	Box Plug	006-4580M	1
8	Power Lead	006-4581M	1
NP	Baler Pump Harness (26')	006-4574	1
NP	Baler Pump Harness (35')	006-4575	

Complete Replacement Control Box 030-0457

Installation of Control Box (030-0457)

Locate parts bag 13 for hardware to mount control box in a suitable location within the tractor cab.

Route the wire to the starter solenoid on all 12v tractors. Connect the green lead marked + to the hot terminal on the starter. Connect the black lead to a good ground. **Do not reverse the leads.** Be sure to use a voltmeter to verify that you do have 12 volts running to the box.

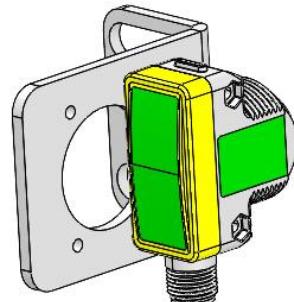
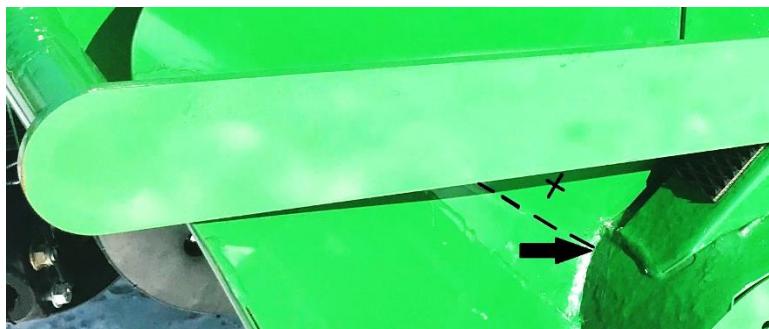
Note: For tractors with 24v starters, connect the power leads to the tractor's right hand battery. Do not connect the leads to the starter. Connect the lead marked + to the positive battery terminal and the lead marked- to the negative on the battery. Wiring connections to the battery normally results in corrosion; terminal coating is recommended.

Caution: Do not run a pump or use an electronic control box directly off a battery charger. For stationary use, the applicator can be connected to a new battery and the battery connected to a charger

Optional Crop Eye Forage Indicators

Installation

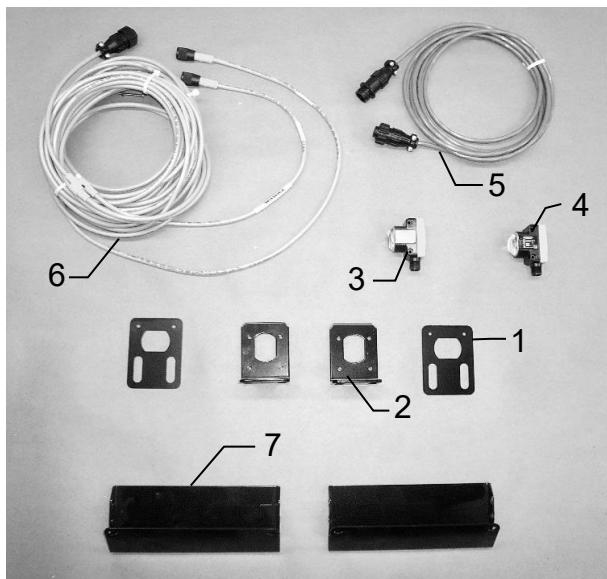
The pickup head resembles the pickup head of the JD HC2 Round Baler. Remove the sensors & brackets from the pickup head to raise the pickup head all the way up. Mark with pencil the location of that square cornered sheet metal that is fixed against the pivoting head when fully raised. Next lower the 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. Assembly 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 474A Parts Breakdown



Ref#	Description	Part #	Qty
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	Extension Wire- Amp Plug	006-7500A	1
6	Hay Indicator Harness -Amp Plug	006-7502H	1
7	Hay Diverter (used with NH and Case IH SBX only)	001-5105F	2
NP	Hay Indicator Retaining Nut (Replacement, included with crop eye)	006-7502N	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. 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.

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