Installation Manual

Model 491BB

115 Gallon Preservative Applicator For New Holland BigBaler and Case IH LB 4 Metric

HARVEST TEC
Equipment and Products for Quality Hay.™

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

491BB-14-INST-M
9/16

(Intentionally blank)

Harvest Tec Model 491 Installation Table of Contents

	Page number
Introduction	**4**
Installation Kit Reference Chart	**4**
Tools Needed	**4**
Installation of Applicator	**5-11**
1. Removal of tank straps and tank	5
2. Installation of saddle legs and saddle	6
3. Installation of pump and handrail	7
4. Installation of the spray shield	8-9
For standard and packer cut balers	8
For roto-cutter balers	9
5. Installation of gauge and hose	10
6. Installation of drain fill line	10
7. Installation of controls	11
Parts Breakdowns	**12-14**
Tank, Saddle, & Saddle Legs	12
Control Box, Wiring Harnesses, Gauge, and Pump Assembly	13
Installation Kits: Baler Specific	14
4532, 4533 & 4534	14
4535 & 4536	15
Notes	16-18
Warranty statement	19

Introduction

Thank you and Congratulations on purchasing a Harvest Tec Model 491 Applicator. Please 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. The model 491 base kit includes the following parts: Tank, Frame, Pump, Hose, and Miscellaneous Hardware. The applicator is designed for New Holland BB 330-340 & Case IH LB 334-434 balers. Before installing the unit on the baler, make sure you have the proper installation kit. (See the chart below.) If you are unsure about your installation kit, contact your local authorized dealer for specifications. For your convenience we have included a parts break down for the model 491 applicator.

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

Installation Kit Reference Chart

BALER MAKE	MODEL	INSTALL KIT
Case IH	LB 234 2 x 3 standard	030-4532
	LB 334 3 x 3 standard packer	030-4533
	LB 334 3 x 3 roto cut	030-4535
	LB 434 4 x 3 standard packer	030-4534
	LB 434 4 x 3 roto cut	030-4536
New Holland	BB 230 2 x 3 standard	030-4532
	BB 330 3 x 3 standard packer	030-4533
	BB 330 3 x 3 roto cut	030-4535
	BB 340 3 x 4 standard packer	030-4534
	BB 340 3 x 4 roto cut	030-4536

Tools Needed:

- Standard wrench set
- Electric drill and bits
- Side cutter
- Crescent wrench
- Standard screwdriver
- Standard nut driver set
- Standard socket set
- Hammer
- Metal cutting tools
- Hose cutter
- Center punch

Installation of Applicator

1. Removal of tank straps and tank

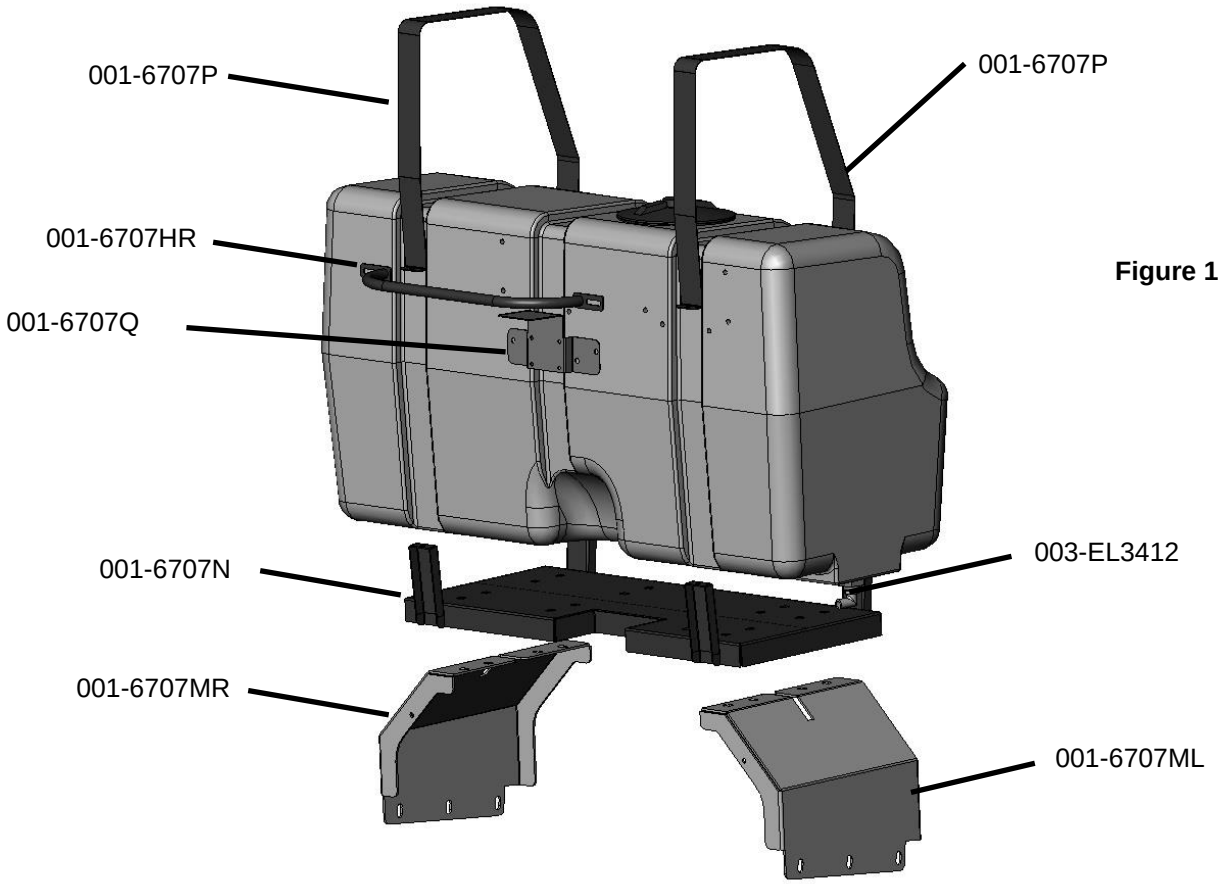


Figure 1

1. Remove the two tank straps (001-6707P) by removing all eight 3/8” hex nuts. Figure 1
2. Lift the tank (005-9218) away from the saddle (001-6707N) and place the tank on a smooth flat surface.
3. Install the pump supply elbow (003-EL3412) on the bottom of the tank. Figure 1
4. Install the drain/fill elbow (003-EL3434) on the side of the tank below the sight gauge.

2. Installation of saddle legs and saddle

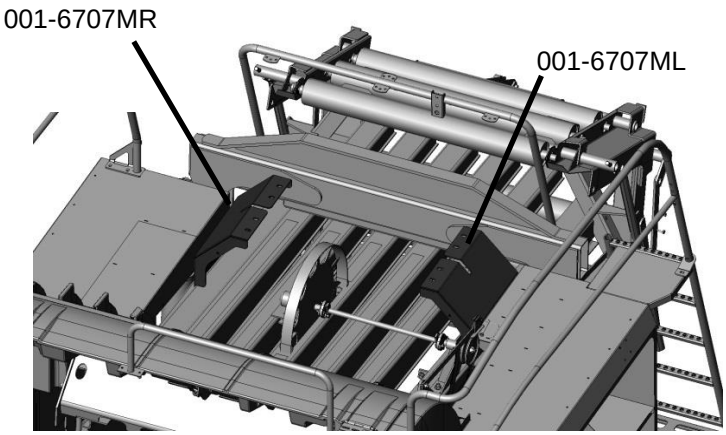


Figure 2

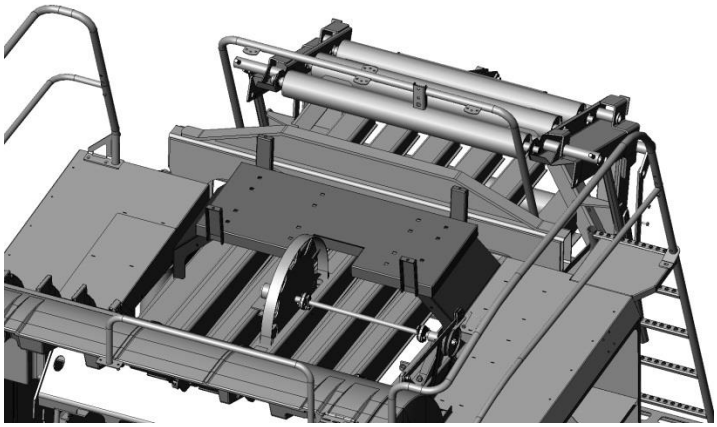


Figure 3

1. Locate parts bag 5.
2. Install the two saddle legs (001-6707MR & 001-6707ML) on to the top of the baler chute as shown. Figure 2
3. Secure the two legs with six (three per side) 1/2” x 1-3/4” carriage bolts, flats washers, locks washers, and hex nuts. The six holes will be already punched out of the baler frame and will line up with the saddle legs. Make sure the bolt head is in the chamber.
    a. *LB 234 and BB 230 balers will need to have leg extensions (001-6707MX) mounted on top of saddle legs (001-6707MR & 001-6707ML) before mounting the tank saddle.*
4. Install the tank saddle (001-6707N) on top of the saddle legs. Figure 3
5. Secure the tank saddle to the saddle legs using eight (four per side) 1/2" x 1-3/4” carriage bolts, flat washers, lock washers, and hex nuts. Use the outside set of holes for four foot wide (1.2M) balers and the inside set of holes for three foot (1M) wide balers. Figure 3
6. Make sure the carriage bolt heads are on top of the saddle and the bolt points towards the bale chamber.
7. Install the tank and secure with the straps and hardware removed from before. The tank straps will need to be secured with a double nut.

3. Installation of pump and hand rail

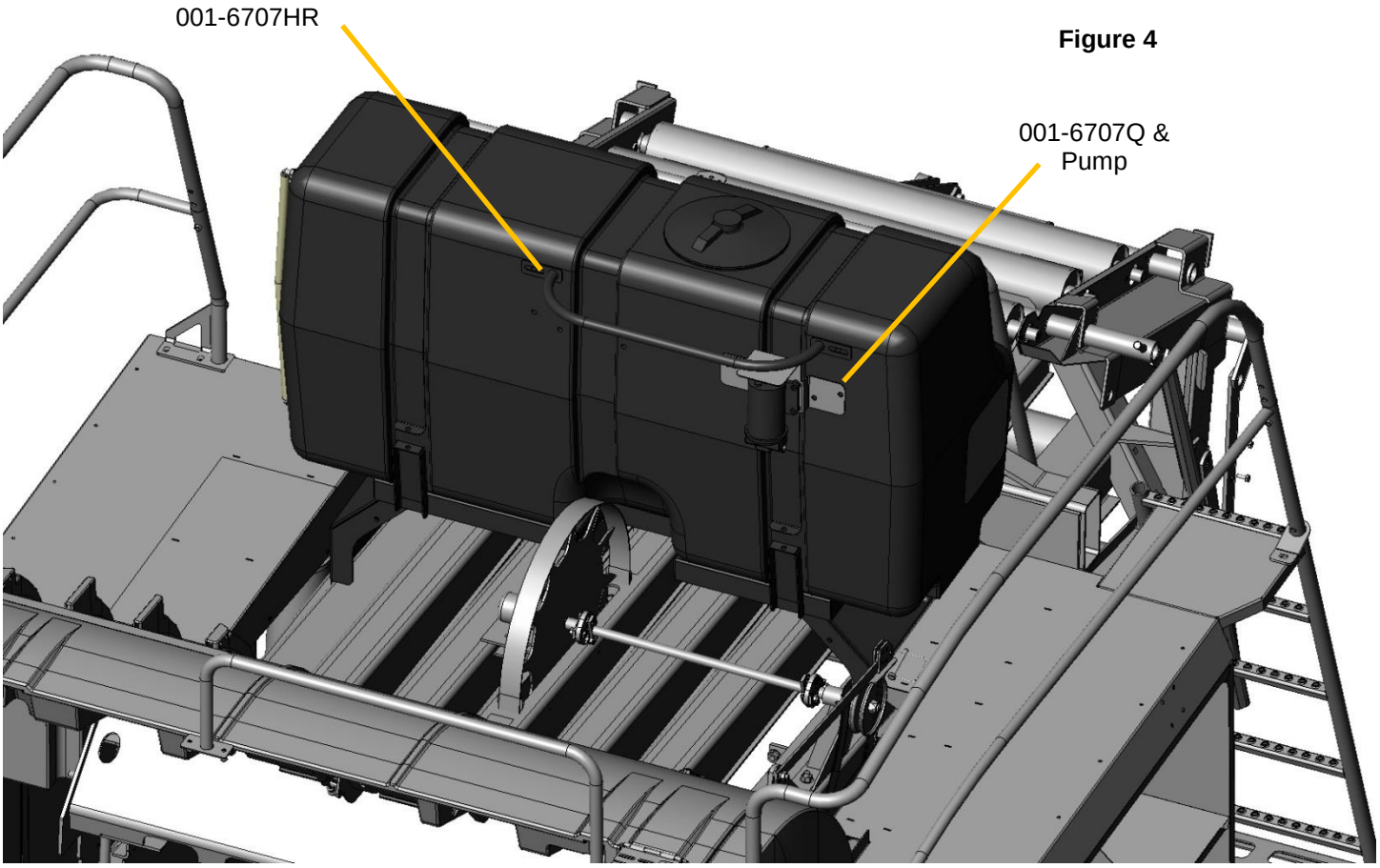


Figure 4

1. Locate parts bag 5.
2. Install the handrail (001-6707HR) above the pump manifold using two 3/8” x 3/4" flange bolts. Figure 4
3. Install the pump bracket to the tank using four 3/8” x 3/4” flange bolts.
4. Locate the 1/2" (13mm) hose and connect the filter bowl assembly to the tank fitting using the supplied two hose clamps. Connect the 1/2” hose to the pump using either the supplied elbow (003-EL1212) or straight fitting (003-A1212). Figure 4

4. Installation of the Spray Shield Assembly

Installation Kits 4532, 4533 (for 3 ft wide) & 4534 (for 4 ft wide) for Standard and Packer Balers

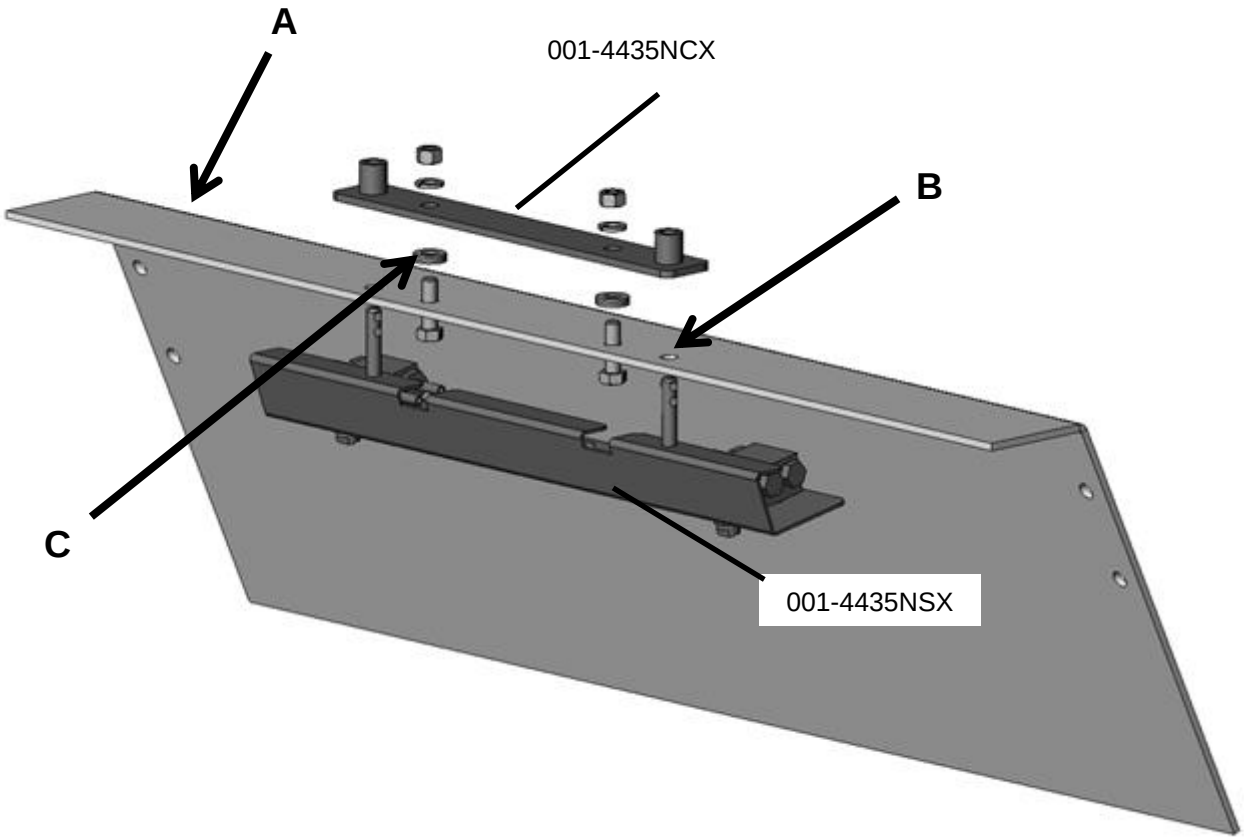


Figure 15

1. Locate the flat steel directly above the stuffer forks. Figure 15, Point A
2. Align the spray shield holder (001-4435NCX) to the center of the flat steel.
3. Using the shield holder (001-4435NCX) as a template clamp the holder to the baler, mark the four holes and drill them to 7/16" diameter (figure 15 point B).
4. Attach the shield holder (001-4435NCX) to the baler through the two center holes using the two 3/8" x 1-1/4" hex bolts, six flat washers, two lock washers, and two hex nuts. **Six** washers (three per side) may need to go between the baler and the spray shield holder (figure 15 point C).
5. Install the spray shield (001-4435NSX) to the holder and secure by using two lynch pins. Remove washers if necessary (Point C), but allow for a tight fit.

Installation Kits 4532, 4535 (for 3 ft wide) & 4536 (for 4 ft wide) for Roto-Cut Balers

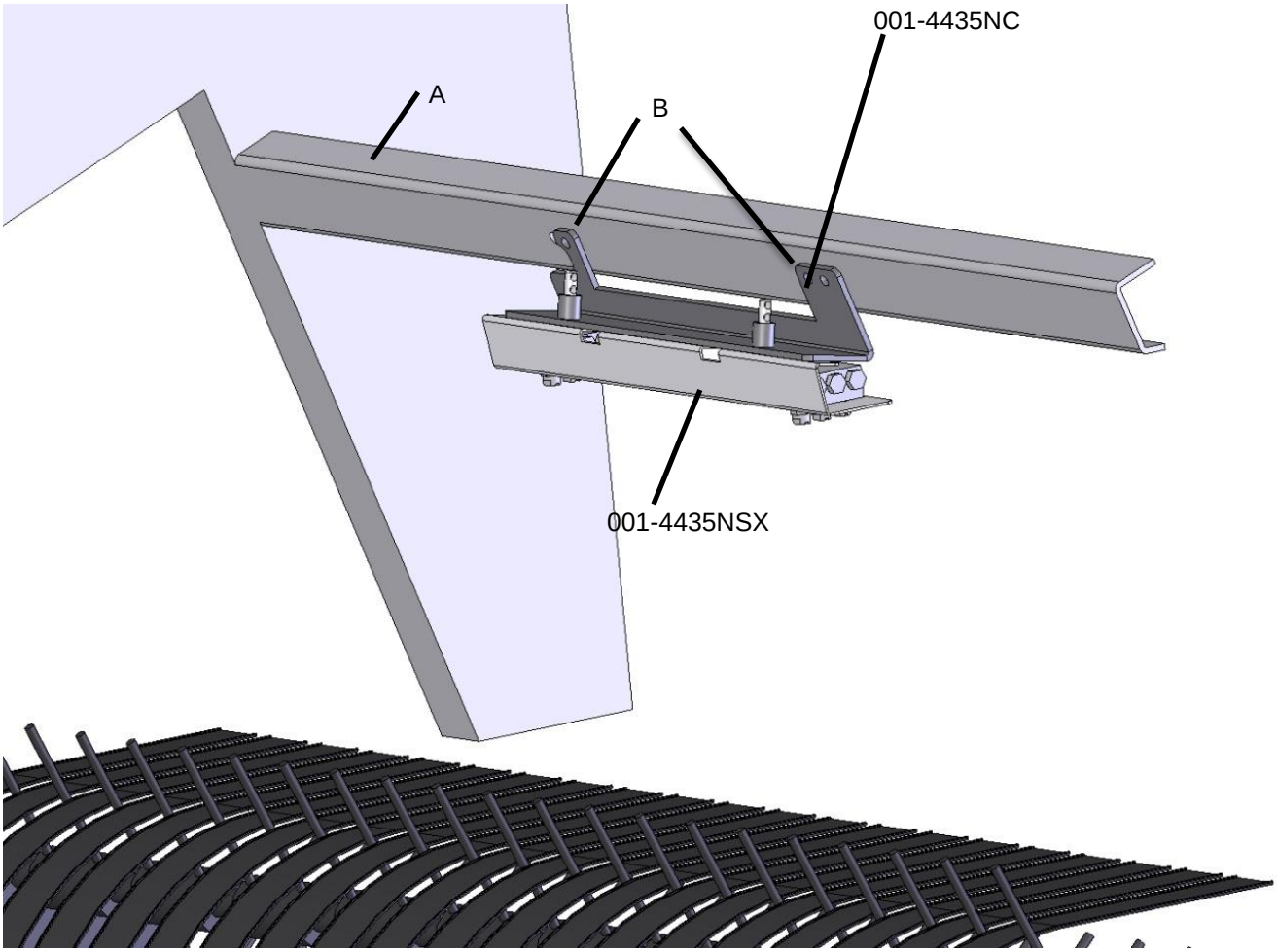


Figure 16

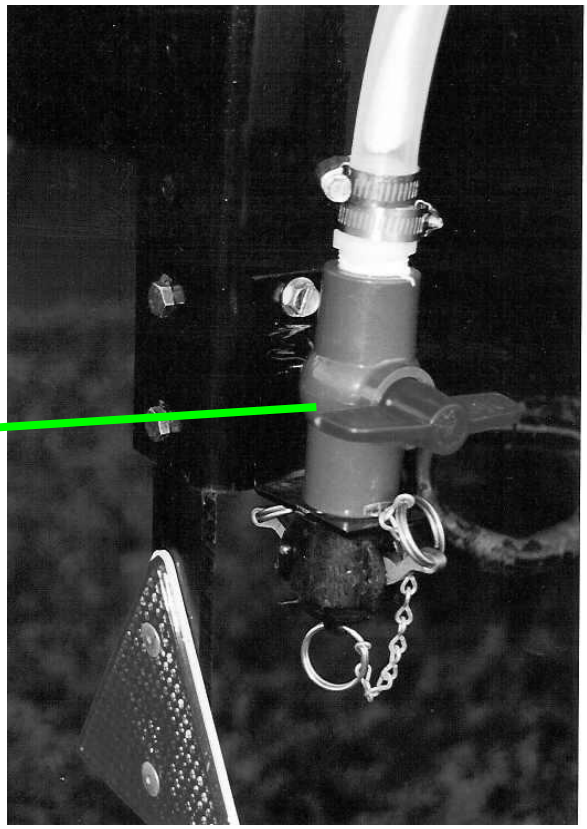
1. Locate the baler cross member directly above the rotor (figure 16 point A).
2. Locate the four pre-drilled holes on the cross member (figure 16 point B).
3. Install the spray shield holder (001-4435NC) to baler using three 5/16” x 1” bolts, lock washers, and hex nuts.
4. Install the spray shield (001-4435NSX) to the the shield holder (001-4435NC) and secure with supplied lynch pins.

5. Installation of gauge and hose

1. Locate parts bag 13.
2. Place the gauge on the upper right corner of the baler, a place that is visible form the seat of the tractor.
3. Next, run the hose from the pump outlet to the hose fitting on the gauge. Then cut the hose to length. Place hose clamps on hose ends.
4. Connect the quick connection from your parts bag to the other end of the gauge.
5. Run hose from that fitting to the spray shield. Then cut the hose to length.

6. Installation of the drain fill line

1. Locate parts bag 1.
2. Thread 3/4” elbow fitting into end of tank.
3. Run hose from the elbow down the frame to the bottom of the baler.
4. Drill 1/4” (7mm) holes to accept the valve holder bracket and use 5/16” x 1” self-tapping screws.
5. Connect valve assembly to other end of hose. Place hose clamps on both ends.
6. Secure hose to frame using cable locks.



7. Installation of the Controls

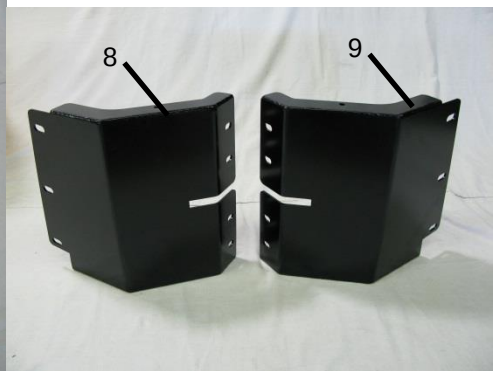
Route the wire to the starter solenoid on all 12v tractors. Connect the green lead marked **+** to the hot terminal on the starter. Connect the black lead to a good ground. **Do not reverse the leads.** Be sure to use a voltmeter to verify that you do have 12 volts running to the box.

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.

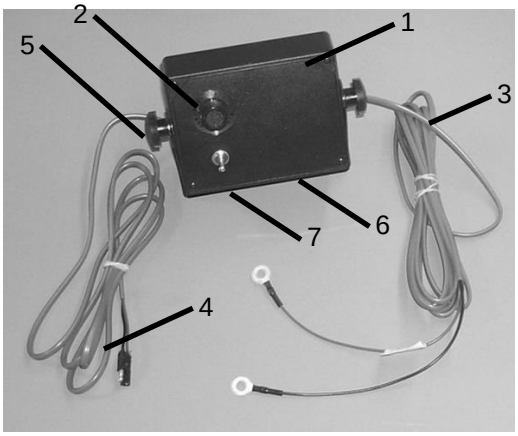
Parts Breakdown

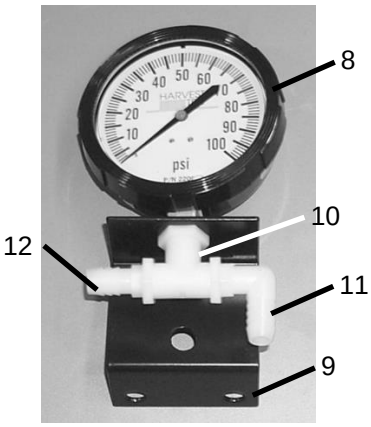
Tank, Saddle & Saddle Legs



Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Tank	005-9218	1	9	Right saddle leg	001-6707MR	1
2	1/2" tank fitting	005-9104	2	10	1/2" hose	002-9001	2
3	Elbow	003-EL1212	2	NP	Elbow	003-EL3434	1
4	Tank straps	001-6707P	2	NP	Elbow	003-EL3412	1
5	Tank saddle	001-6707N	1	NP	Tank lid strainer	005-9022HBS	1
6	Handrail	001-6707HR	1	NP	3/4" tank fitting	005-9100	2
7	Tank lid	005-9022H	1	NP	Pump Mount	001-6707Q	1
8	Left saddle leg	001-6707ML	1				

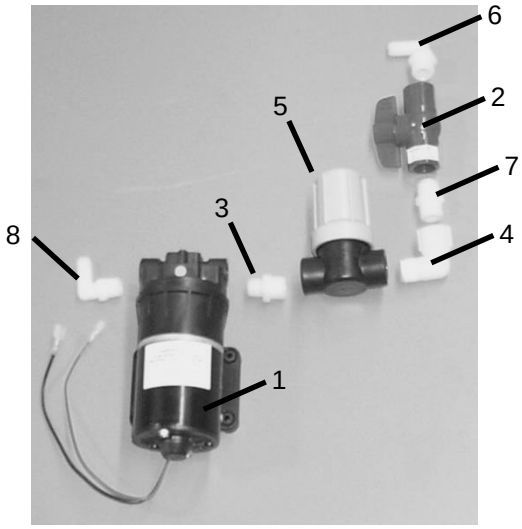
Control Box and Wiring Harnesses, Gauge, and Pump Assembly

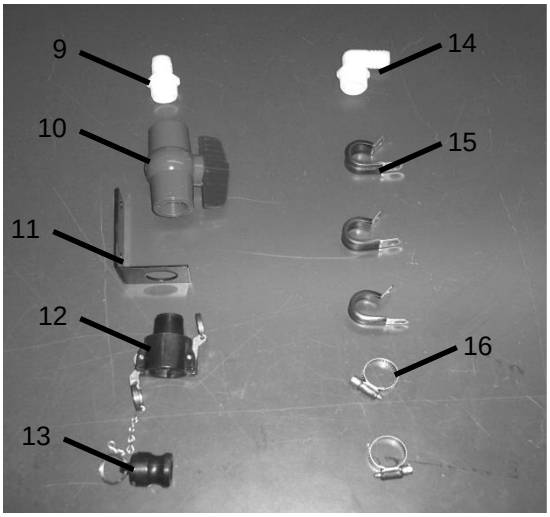




Ref	Description	Part#	Qty
1	Control box	030-0457	1
2	Speed control	006-2022	1
3	Power cord	006-4580C	1
4	Pump lead	006-4583	1
5	Knobs	008-0923	2
6	U-Bracket	001-2012E	1
7	Hay indicator plug	006-7500Z	1

Ref	Description	Part#	Qty
8	Gauge	002-2208Z	1
9	Gauge holder	001-4717	1
10	Tee fitting	003-TT14	1
11	Elbow fitting	003-EL1412	1
12	Straight fitting	003-A1412	1

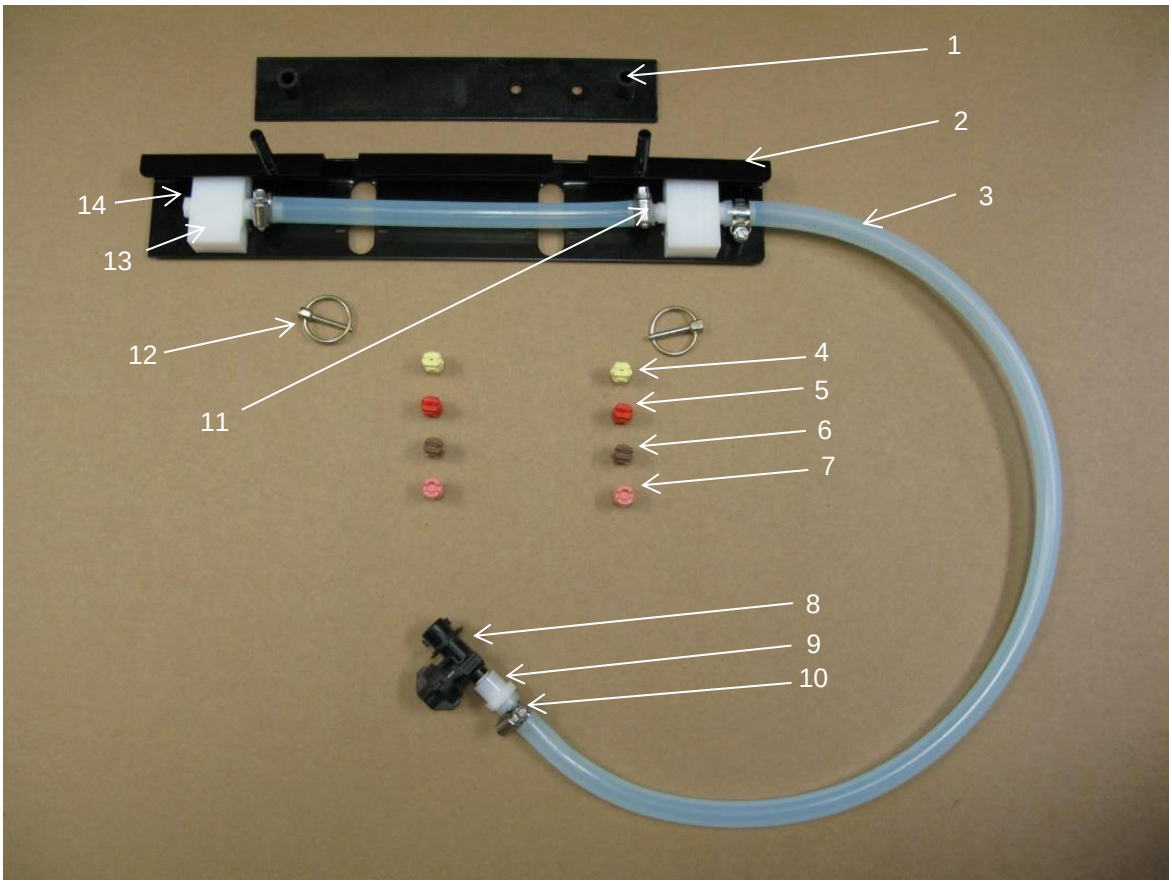




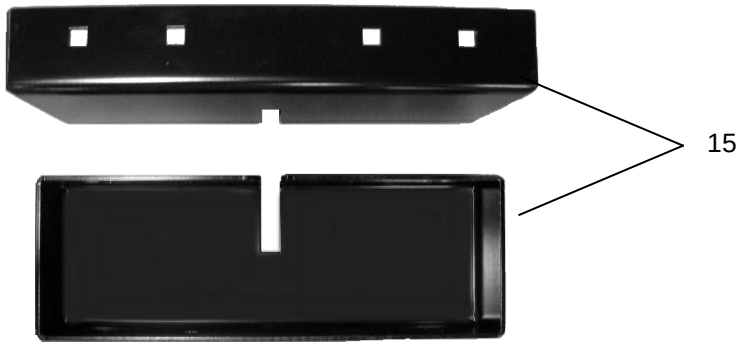
Ref	Description	Part#	Qty
1	Pump	007-4120S	1
2	Ball valve	002-2212	1
3	Reducing nipple	006-M1238	1
4	Street elbow	003-SE12	1
5	Filter bowl	002-4315	1
6	Elbow	003-EL1212	1
7	Nipple	003-M1212	1
8	Elbow	003-EL3812	1
NP	Straight fitting	003-A1212	1

Ref	Description	Part#	Qty
9	Straight fitting	003-A3434	1
10	Ball valve	002-2200	1
11	Valve holder	001-6702H	1
12	Female coupler	002-2204A	1
13	Male coupler	002-2205G	1
14	Elbow	003-EL3434	1
15	Jiffy clip	008-9010	3
16	Hose clamp	002-9004	2

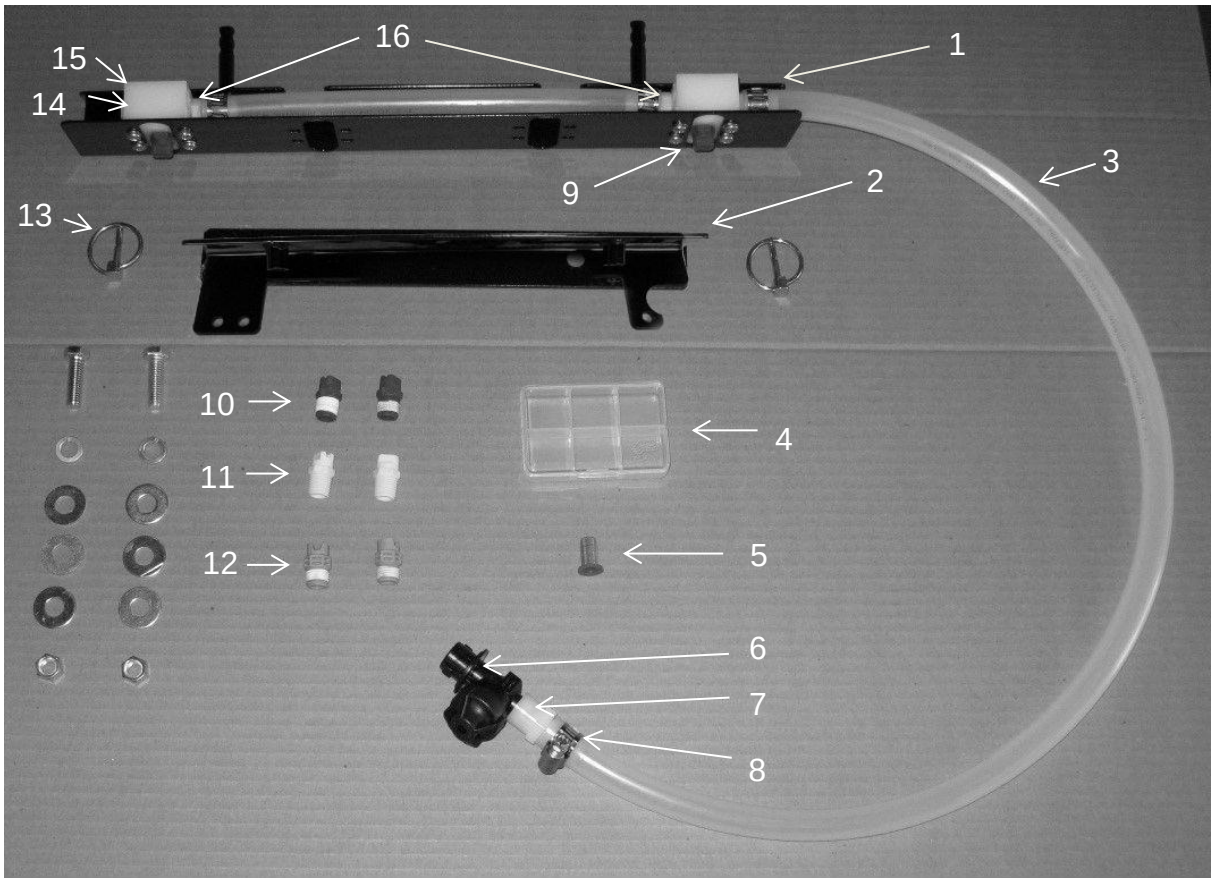
Harvest Tec Model 4532, 4533 and 4534 Installation Kit
(4534 pictured)
(4533 has shorter EVA tube between Manifold Blocks)



Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Holder	001-4435NCX	1	11	Fitting	003-A1412	3
2	Shield	001-4435NSX	1	12	Lynch Pin	008-4576	2
3	Hose-1/2”	002-9001	4 ft	13	Manifold Block	001-4435NSB	2
4	Tip-Yellow	004-T8005-PT	2	14	Fitting	003-F14	1
5	Tip-Red	004-T8003-PT	2	15	Leg Ext-Short Chamber	001-6707MX	2
6	Tip-Brown	004-T80015-PT	2		(Included in 4532B Kits Only)		
7	Tip-Pink	004-T8001-PT	2				
8	Check Valve	004-1207V	1	NP	Strainer	004-1203-100	1
9	Fitting	003-A1412F	1				
10	Hose Clamp	003-9003	4				



Harvest Tec Model 4535 and 4536 Installation Kit
(4536 pictured)
(4535 has shorter EVA tube between Manifold Blocks)



Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Shield	001-4435NSX	1	11	Tip-Yellow	004-T8005-PT	2
2	Holder	001-4435NC	1	12	Tip-Pink	004-T8001-PT	2
3	Hose – 1/2"	002-9001	4 ft	13	Lynch Pin	006-4576	2
4	Plano Box	008-9001	1	14	Fitting	003-F14	1
5	Strainer	004-1203-100	1	15	Manifold Block	001-4435NSB	2
6	Check Valve	004-1207V	2	16	Fitting	003-A1412	3
7	Fitting	003-A1412F	1				
8	Hose Clamp	003-9003	4				
9	Tip-Red	004-T8003-PT	2				
10	Tip-Brown	004-T80015-PT	2				

***Purchase common hardware locally**

NOTES:

NOTES:

NOTES:

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. 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 01/13

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