Installation Manual

MODEL 547 & 549

25 & 55 Gallon Automatic Preservative Applicators



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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. The model 547 or 549 base kit includes the following parts: Tank, Frame, Pumps, Hose, Baler Mounted Processor, Touchscreen Display, Moisture Sensors, and Miscellaneous Hardware. The applicator can be installed on many round balers with the proper installation kit. 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 547 or 549 applicator.

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

Model Reference Chart

Baler make	Baler Model	Model	Installation kit	Tank size
Case IH	All RBX & RB series four feet	547	447-SO	25 gallon
	wide			
Case IH	All RBX & RB series five feet	547	447-SO	55 gallon
	wide			
New Holland	All BR balers four feet wide	547	447-SO	25 gallon
New Holland	All BR balers five feet wide	547	447-SO	55 gallon
AGCO	5446 – 5556 & 2646 - 2766	549	4508B	55 gallon
AGCO	2846-2856A	549	4524B	55 gallon
Challenger	RB 46 - 56	549	4508B	55 gallon
Challenger	RB453 - RB563A	549	4524B	55 gallon
Hesston	800 and 900 series round	549	4508B	55 gallon
	balers			
John Deere	582 & 854 round balers	549	4503B	55 gallon
John Deere	5, 6, and 7 series round	549	4504B	55 gallon
	balers			
John Deere	8 & 9 series round balers	549	4517B	55 gallon
Massey Ferguson	2646 – 2766	549	4508B	55 gallon
Massey Ferguson	2846-2856A	549	4524B	55 gallon
Vermeer	604M and 605M round balers	549	4505B	55 gallon

Attention: For all New Holland BR and Case IH RB-RBX balers--If you have models without the net wrap option or with the Bale Slice option please contact Harvest Tec for additional parts.

Tools Needed

Standard wrench set
Side cutter
Hammer
Standard socket set
Hose cutter
Standard screw driver set
Crescent wrench
Center punch

Installation of applicator

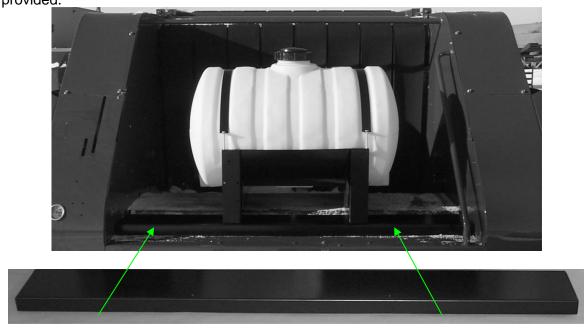
1. Installation of tank & saddle

Place tank (005-9203) onto saddle (001-4703). Make sure side tank fitting is placed to the baler's left side when looking at it from the front. Attach straps (001-4402) to saddle using 5/16" x 4" bolts. Make sure to double nut all four bolts.

Model 547

For 55 gallon model only

Locate parts bag 14. Locate the cross support (001-4445B) on the front shelf of the balers pictured below. It will butt up against the step-up on the shelf and line up flush with its upper surface. Mark and drill a 9/16" hole on each side sheet to hold the cross piece in place with two 1/2" x 1-1/4" bolts, fender, and lock washers provided.

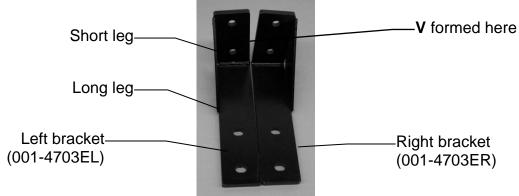


Locate parts bag 15. Locate the tank and frame on the shelf. Center it from side to side. On 55-gallon models, the tank positioning going from front to back is set by lining up the front base holes with the holes in the cross support. On 25-gallon models, line up the front tank legs with the front of the baler's shelf. Mark and drill all base holes with a 9/16" drill. Use the 1/2" x 1-1/4" bolts, lock washers, fender washers, and nuts provided to secure the frame.



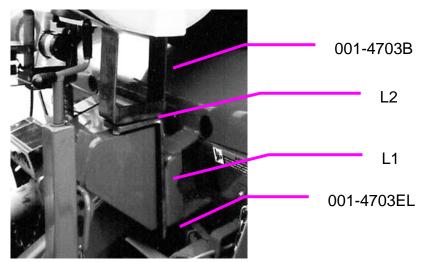
Install kit 4503B on John Deere 582 Balers

The mounting brackets are L-shaped. There is a right and left bracket enclosed in the applicator. This can be determined by setting the right and left bracket next to each other with the longer legs laying flat toward you and the shorter legs pointing up. The short leg of the bracket will either touch each other or angle away from each other. Place the brackets so they angle away from each other and form a **V** (see below). The bracket on the left is the left bracket and the bracket to the right is the right bracket.



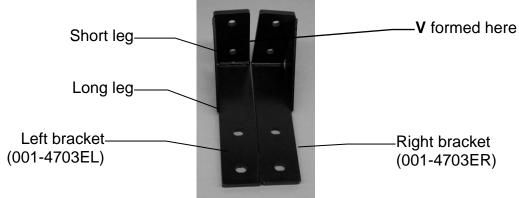
Before installing the brackets, the baler tongue must be supported by some means other than the jack (ex. hooked to a tractor). Looking at the baler from the front, the right bracket bolts to the left side of the hitch using two M16 x 55mm bolts, washers, lock washers, and nuts (labeled **L1** below). Short leg of brackets will point toward the front of the hitch. Next remove the two bolts holding the jack assembly to a baler (labeled **L2** below). Insert the right L-bracket between the jack assembly and baler. Bolt together with two M16 x 70mm bolts. Attach the tank legs (001-4703B) to the tank saddle with 3/8" x 1" bolts, locks, and flat washers. Attach the saddle legs to the mounting bracket with 1/2" X 1 1/2" bolts, locks, nuts and flat washers.



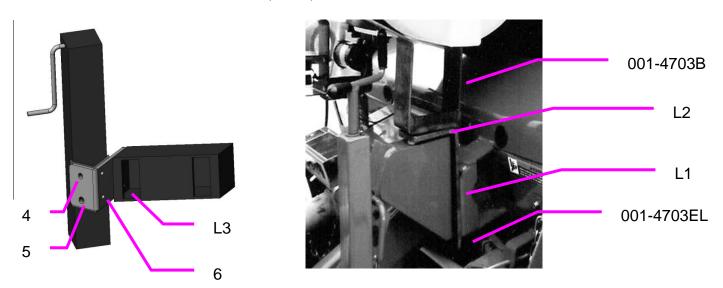


Install kit 4503B on John Deere 854 Balers

The mounting brackets are L-shaped. There is a right and left bracket enclosed in the applicator. This can be determined by setting the right and left bracket next to each other with the longer legs laying flat toward you and the shorter legs pointing up. The short leg of the bracket will either touch each other or angle away from each other. Place the brackets so they angle away from each other and form a **V** (see below). The bracket on the left is the left bracket and the bracket to the right is the right bracket.



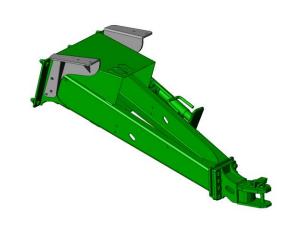
Before installing the brackets, the baler tongue must be supported by some means other than the jack (ex. hooked to a tractor). Looking at the baler from the front, the right bracket bolts to the left side of the hitch using two M16 x 55mm bolts, washers, lock washers, and nuts (labeled **L1** below). Short leg of brackets will point toward the front of the hitch. Next remove the two bolts holding the jack assembly to a baler (labeled **L2** below). Remove the jack from the mounting bracket and install jack extension (001-4703EXT) as shown below (3). Use the supplied hardware to mount the jack to the extension (hole 4 M16x2mm)(hole 5 M20x2.5mm)(hole 6 M12 x 1.75mm), and use the factory jack hardware and mounting plates to mount the extension to the baler. Insert the right L-bracket between the jack assembly and baler. Bolt together with two M16 x 70mm bolts. Attach the tank legs (001-4703B) to the tank saddle with 3/8" x 1" bolts, locks, and flat washers. Attach with ½" X 1 1/2" bolts, locks, nuts and flat washers.



Install kit 4504B & 4517B

Attach legs part #001-4703B to the tank saddle with 3/8" x 1" bolts, lock and flat washers. The L-shaped brackets part #001-4703DL and #001-4703DR will attach to the baler with M12 x 45 mm bolts. Three bolts will be used per side on 8 Series balers and two bolts per side with the 9 Series balers. When both sides have been attached place the legs on top of the bracket. The legs will attach to the brackets with 1/2" x 1-1/2" bolts, nuts, flat, and lock washers. Install both sides of legs before tightening down any of the bolts.



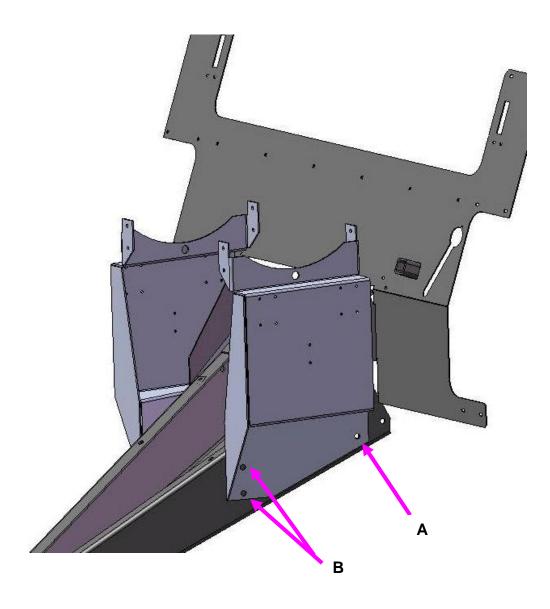






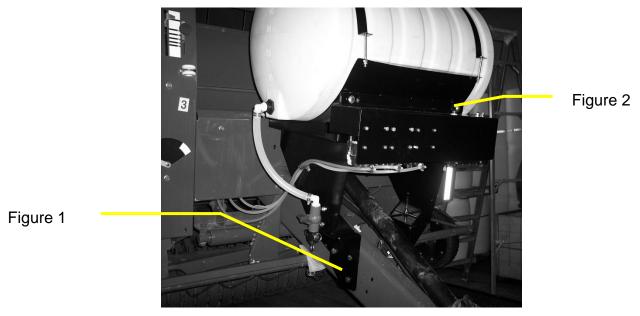
Installation kit 4505B

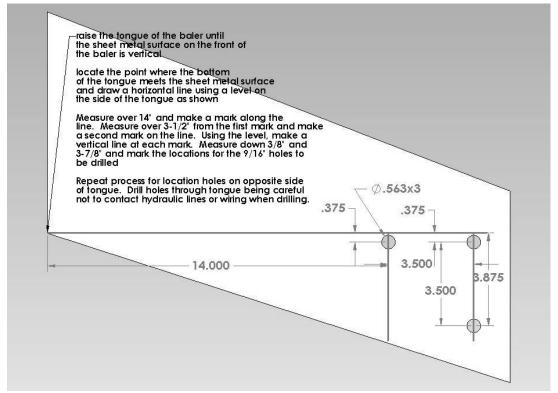
Locate legs part #001-4703FL and part #001-4703FR. These legs will attach to the tongue of the baler using the one existing hole per side as shown in figure A. Loosely attach the legs to figure A and mark the two holes that will need to be drilled (figure B) with a 9/16" bit. Attach legs loosely using the two existing bolts and lock nuts and four 1/2" x 1-1/4" bolt, nuts, locks and flat washers. Install tank and saddle assembly. Tighten all leg hardware after the tank has been installed.



Install kit 4508B

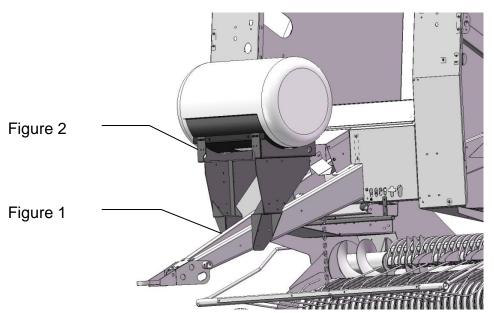
Locate legs part #001-4703K and part #001-4703L. Use the diagram below to locate the placement of the holes you will need to drill. You will need to drill three 1/2" holes per side of tongue. After drilling the holes you will need to loosely attach the legs to the tongue with 1/2" X 2" bolts with locks, nuts, and flat washers. (Figure 1) Attach the saddle (001-4703) and tank assembly on top of the legs using 3/8" x 1" bolts and lock washers. (Figure 2) Do not tighten down 3/8" bolts all the way. Once saddle is attached to legs tighten down bolts and nuts attaching the legs to the tongue. Now tighten bolts attaching saddle to legs.

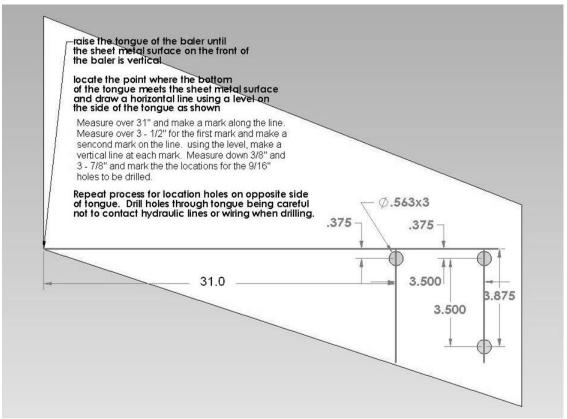




Model 4524B

Locate legs part #001-4703K and part #001-4703L. Use the diagram below to locate the placement of the holes you will need to drill. You will need to drill three 1/2" holes per side of tongue. After drilling the holes you will need to loosely attach the legs to the tongue with 1/2" X 2" bolts with locks, nuts, and flat washers. (Figure 1) Attach the saddle (001-4703) and tank assembly on top of the legs using 3/8" x 1" bolts and lock washers. (Figure 2) Do not tighten down 3/8" bolts all the way. Once saddle is attached to legs tighten down bolts and nuts attaching the legs to the tongue. Now tighten bolts attaching saddle to legs.





2. Installation of pump manifold

Model 547

For 55 gallon models



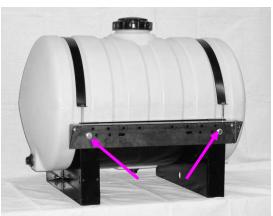


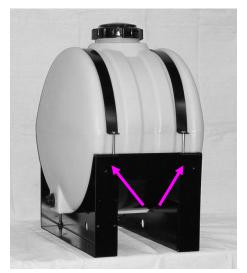
Figure 1 Figure 2



Figure 3

- 1. Locate mounting weld nuts on saddle as shown in Figure 1.
- 2. Connect the pump plate mounting bracket (001-4646C) to the saddle as shown in Figure 2 using two 3/8" x 1" bolts, locks, and flat washers.
- 3. Attach the pump plate holder (001-4646D) to pump plate mounting bracket (001-4646C) using four 3/8" x 3/4" flange head bolts. Figure 3.
- 4. Install the Pump Controller (006-5672) into the pump plate holder. Secure with two flats, locks, and nuts.

For 25 gallon models



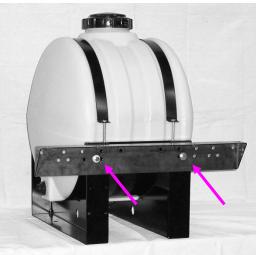


Figure 1

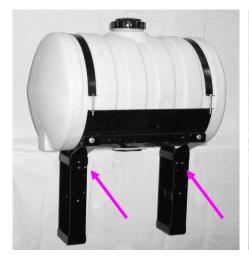
Figure 2



Figure 3

- 1. Locate mounting weld nuts on saddle as shown in Figure 1.
- 2. Connect the pump plate mounting bracket (001-4646C) to the saddle as shown in Figure 2, using two 3/8" x 1" bolts, nuts, locks, and flat washers.
- 3. Attach the pump plate holder (001-4646D) to pump plate mounting bracket (001-4646C) using four 3/8" x 3/4" flange head bolts. Figure 3.
- 4. Install the Pump Controller (006-5672) into the pump plate holder. Secure with two flats, locks, and nuts.

Install kits 4503B, 4504B & 4517B



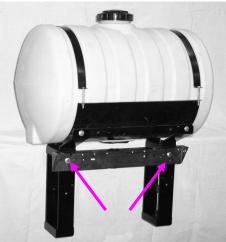


Figure 1

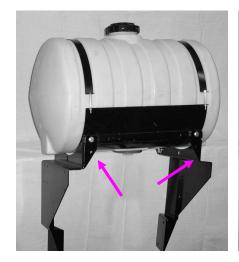
Figure 2



Figure 3

- 1. Locate the two mounting holes as shown in Figure 1.
- 2. Connect the pump plate mounting bracket (001-4646C) to the saddle as shown in Figure 2 using two 3/8" x 1-1/4" bolts, nuts, locks, and flat washers.
- 3. Attach the pump plate holder (001-4646D) to pump plate mounting bracket (001-4646C) using four 3/8' x 3/4" flange head bolts. Figure 3.
- 4. Install the Pump Controller (006-5672) into the pump plate holder. Secure with two flats, locks, and nuts.

Install kits 4505B, 4508B & 4524B



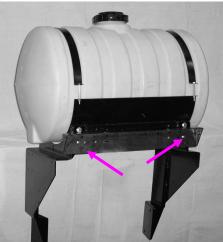


Figure 1

Figure 2



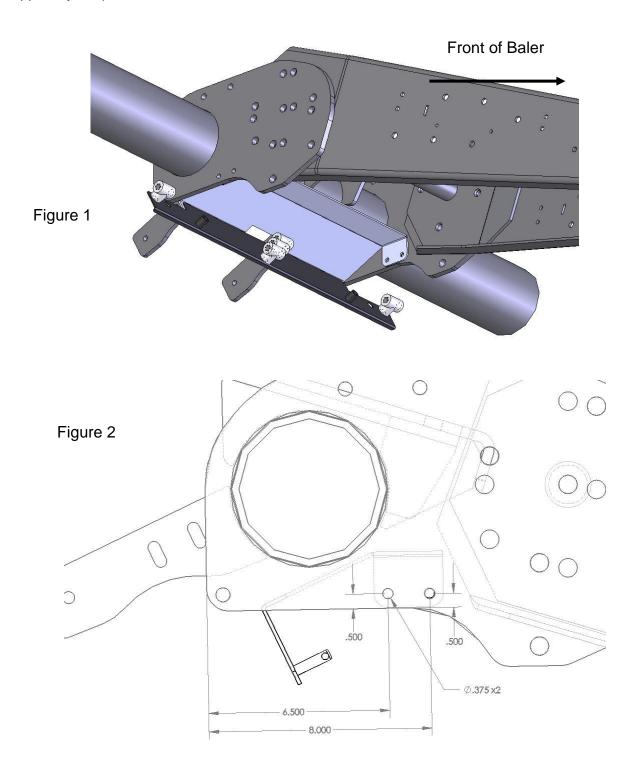
Figure 3

- 1. Locate the two mounting holes as shown in Figure 1.
- 2. Connect the pump plate mounting bracket (001-4646C to the saddle as shown in Figure 2 using two 3/8" x 1-1/4" bolts, nuts, locks, and flat washers.
- 3. Attach the pump plate holder (001-4646D) to pump plate mounting bracket (001-4646C) using four 3/8" x 3/4" flange head bolts. Figure 3.
- 4. Install the Pump Controller (006-5672) into the pump plate holder. Secure with two flats, locks, and nuts.

3. Installation of spray shield assembly

Install kit 447-SO

Locate parts bag 10. Locate the spray shield (001-4810B) and the spray shield holder (001-4810BRH). The assembly will mount as shown in figure 1. The location shown in figure 1 is directly above the baler pickup. Four 3/8" holes will need to be drilled to mount the shield holder to the baler (Figure 2). Mount the spray shield holder using four 5/16" x 1-1/2" bolts, locks, flats, and nuts. Attach the shield to the holder using the two supplied lynch pins.



Install kit 4503B

The top cross bar above the full-shielded wind guard provides a mounting point for the short nozzle pipes. (Figure 1) The lip on the full-shielded wind guard will need to be notched behind Figure 1 for the 45 degree elbow to mount above. Space the nozzles by the chart below:

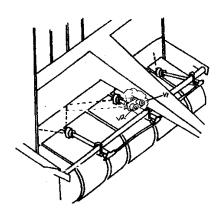


PICK-UP HEAD	LEFT SIDE	CENTER	RIGHT SIDE
WIDTH	(Use plugged fitting)	(Use 2-way fitting)	(Use 2-way fitting)
48"	12" from left	Center	12" from right
60"	14" from left	Center	14" from right
72"	15" from left	Center	15" from right

Install kit 4504B & 4505B

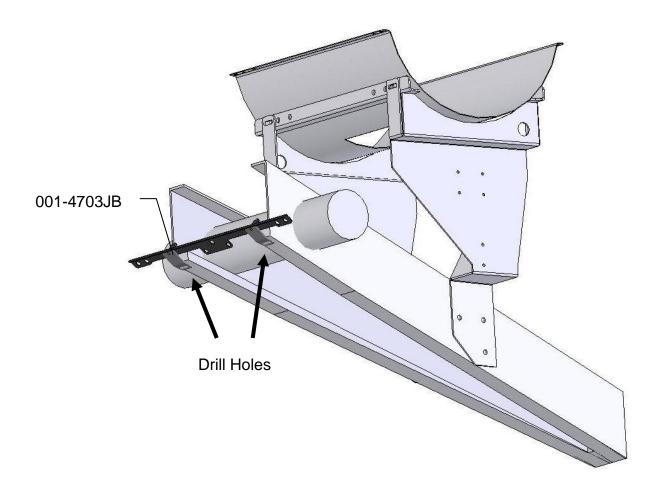
The cross bar on the wind guard above the pick-up head provides a mounting point for the nozzle pipes. Space the nozzles by the chart below:

Aim the nozzle pipes up so that the tips spray in a generally horizontal direction. The tips should be pointed toward the starter rolls of the baler. The tips should be located so they will be somewhere between 14" and 18" form the normal path of hay.



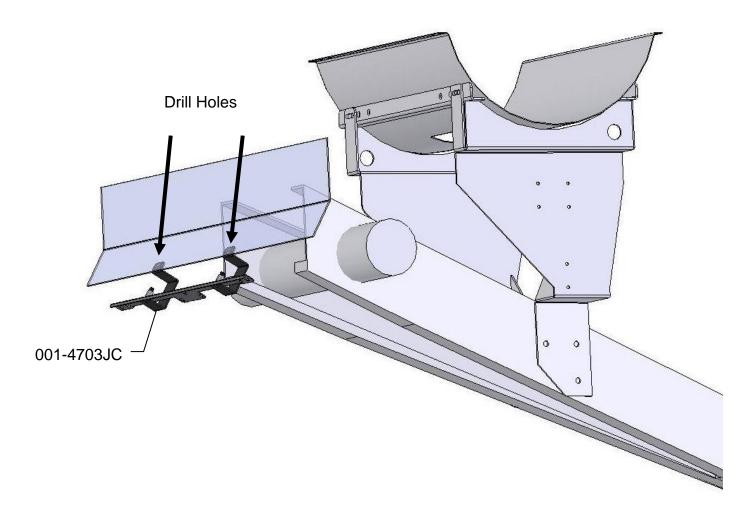
Install kit 4508B

Locate the spray shield assembly (030-4508B). Fit shield with tips facing down onto the baler as shown below with the shield hangers (001-4703JB). Mark both sides of the shield (only mark one hole per side) and drill a 3/8" hole to allow the shield to be bolted to the baler using 3/8" x 1-1/2" bolts, locks, nuts, and flat washers. Remove the spray shield from the mounting brackets to install. Attach hoses to shield before installing on bracket. (See installation of plumbing)



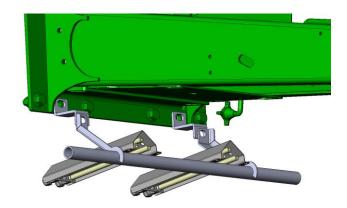
Install kit 4508B

Locate the spray shield assembly (030-4508B). Fit shield with tips facing down onto the baler as shown below with the shield hangers (001-4703JC). The shield hangers will be positioned on the sheet metal between the balers tongue and belts. The shield hangers should be positioned so that the bottom of the sheet metal is aligned with the bottom of the bend below the mounting holes and on the tongue side of the sheet metal. Mark both sides of the shield hangers (two holes per side) and drill four 3/8" holes to allow the shield to be bolted to the baler using 3/8" x 1-1/2" bolts, locks, nuts, and flat washers. Remove the spray shield from the mounting bracket to install. Attach hoses to shield before installing on bracket. (See installation of plumbing)



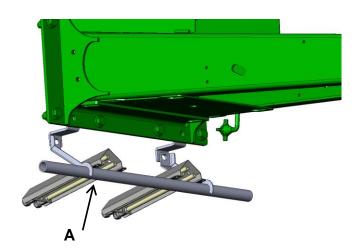
Install kit 4517B

Twine and Net Balers



Locate the four flange head bolts where the baler hitch bolts to the bottom side of the baler frame. Remove the two outside bolts. Attach the spacers (001-4703NS) to the **hitch side** of the baler frame. Use original hardware to secure. Attach the nozzle holder (001-4703R) to the spacers with the supplied M16 x 40mm flange bolts and nuts. Attach the nozzle mount (001-4714J) to the nozzle holder (001-4703R) with 5/16" U bolts, locks, and nuts. The Nozzle mount should be about 6 inches apart for 4 foot wide balers and 9 inches apart for 5 foot wide balers. Do not fully tighten. Lift the roller baffle and position the end of the nozzle holder bracket so the tips are just above the roller baffle (if equipped) when it is lifted to its highest point. Tighten all hardware and attach the hoses.

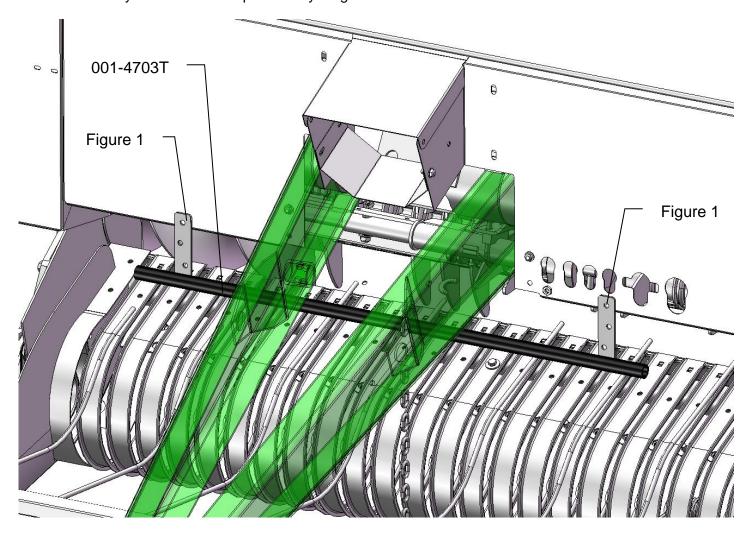
Net Only Baler



Locate the four flange head bolts where the baler hitch bolts to the bottom side of the baler frame. Remove the two bolts. Attach the spacers (001-4703NS) to the **chamber side** of the baler frame. Use original hardware to secure. Attach the nozzle holder (001-4703R) to the spacers with the supplied M16 x 40mm flange bolts and nuts. Attach the nozzle mount (001-4714J) to the nozzle holder (001-4703R) with 5/16" U bolts, locks and nuts. The nozzle mount should be about 9 inches apart with bracket **A** as close to the V-shaped stop as possible. Do not fully tighten. Lift the roller baffle (if equipped) and position the end of the nozzle holder bracket so the tips are just above the baffle when it is lifted to its highest point. Tighten all hardware and attach the hoses.

Install kit 4524B

Locate the spray nozzle holder (001-4703T). Situate the holder, centered on the baler sheet metal and mark one hole per side. (Figure 1) Drill two 5/16" holes and attach the holder using two 3/8 x 1" bolts, locks, flats, and nuts. Install the nozzle tube (001-4714A) with three tips in the center. The two remaining nozzle tubes, will mount one inch in from each end. Do not fully tighten. Position the nozzle tubes so that the tips will be 14 – 18 inches away from the normal path of hay. Tighten the nozzle tubes to the nozzle holder.



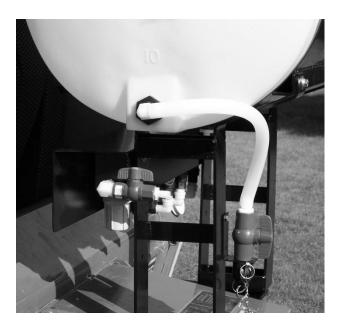
4. Installation of drain/fill line

Model 547 & 549

Thread 3/4" elbow fitting (#003-EL3434) into end of tank. Run 3/4" hose from the elbow down the frame to the bottom of the baler or to the saddle leg. Drill 1/4" holes to accept the valve holder bracket and use 5/16" x 1" self-tapping screws and two 5/16" flange nuts. Connect valve assembly to other end of hose. Place hose clamps on both ends.

*Secure hose to frame using cable locks.





5. Installation of plumbing

A. Intake

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

B. Discharge

The three -1/4" hose assembly will be used to attach the pumps to the spray nozzles. The pump order is, from closest to the filter bowl, 1,2, and 3. Pump 1 will attach to the three main nozzles. Pump 2 will use the green hose and Pump 3 will use the blue hose to attach to the auxiliary nozzles.

C. High and Low Output Tips

Your baler comes with two sets of tips: a low set and a high set.

-The low set will cover outputs of 32 to 440 lbs/hr or approximately 8-27 tons/hour.

Install the following tips for low output:

Clear hose to silver tips on all three connected nozzles.

Green hose to green tip.

Blue hose to red tip.

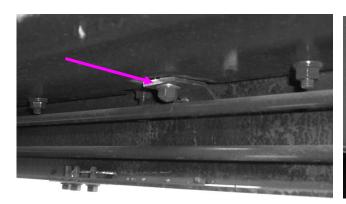
-The high set will cover outputs of 84 to 632 lbs/hr or approximately 21-40 tons/hour. Install the following tips for high output:

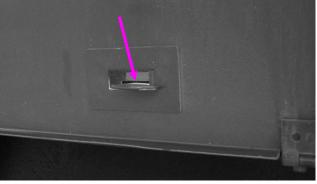
Clear hose to white outside tips and orange middle tip.

Green hose to blue tip.

Blue hose to gray tip.

6. Installation of latch extension (model 547 only)





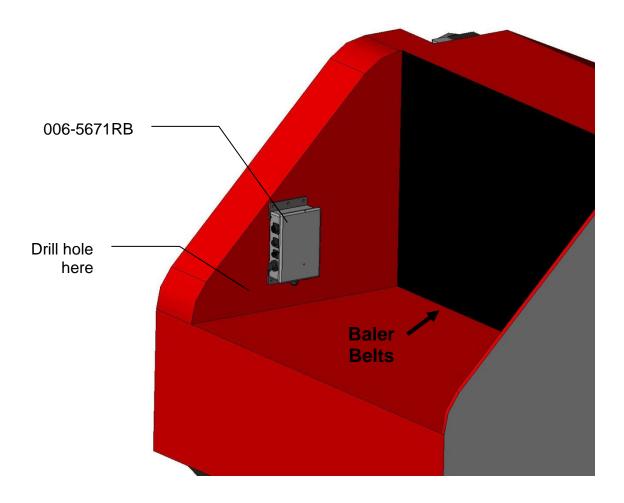
Remove the nut and spring on the existing latch. Replace with the extended latch. Retighten nut and attach the spring. The latch may need to be bent to fit through the doors opening.

^{**}Refer to Tip Output under APPLICATION RATE of the control unit to calibrate system.

7. Installation of Precision Information Processor (PIP)

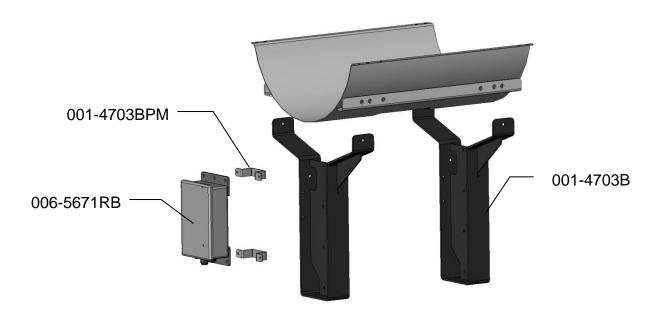
Model 547

Mount the PIP (006-5671RB) to the right side sheet metal as shown below. Mark and drill four 3/8" holes to mount the PIP. Check before drilling to ensure nothing will be damaged on the opposite side of the PIP. On the bottom right of the PIP a 1-1/2" hole will need to be drilled and insert the supplied grommet. Insert the supplied grommet into the 1-1/2" hole. The 1-1/2" hole will allow all the wires and harnesses to be attached to the PIP. Cover with PIP Shield 001-5650X.



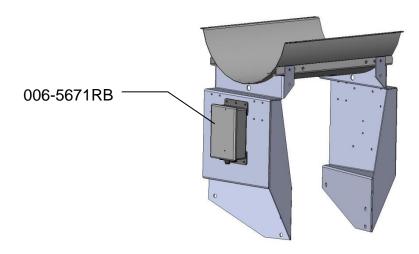
Install kits 4503B, 4504B, & 4517B

The PIP (006-5671RB) will mount on the right saddle leg. Install the two PIP mounts (001-4703BPM) to the leg using two 5/16" x 1" bolts, locks, and nuts. Install the PIP to the mounts using four 5/16" x 1" bolts, locks, flats and nuts. Install the PIP with the power plug facing down. Cover with PIP Shield 001-5650X.



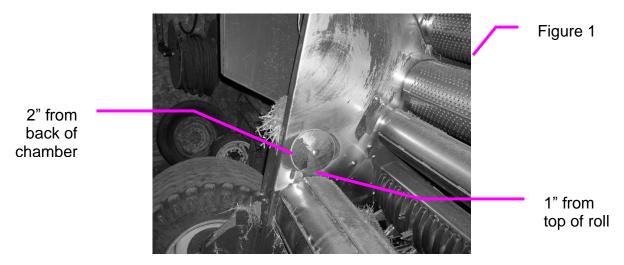
Install kits 4505B, 4508B & 4524B

The PIP (006-5671RB) will mount on the right saddle leg. Install the PIP on the four pre-drilled holes on the leg. Attach the PIP using four 5/16" x 1" bolts, locks, flats, and nuts. Install the PIP with the power plug facing down. Cover with PIP Shield 001-5650X.

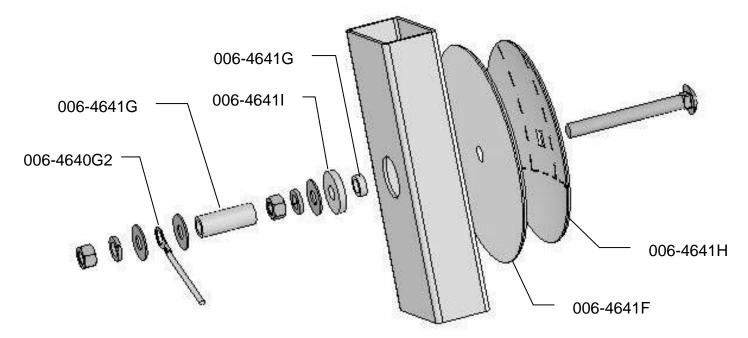


8. Installation of moisture sensing pads

Model 547 for four foot wide balers

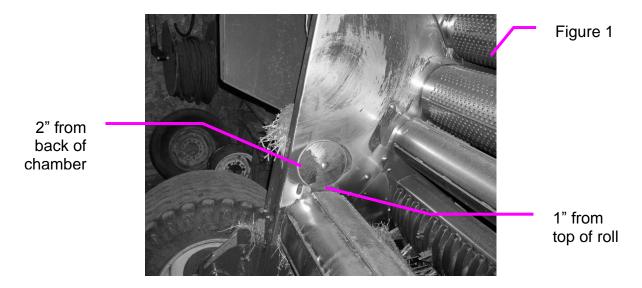


- 1. If your baler is equipped with bale shaping pads, remove disc and use existing hole that will need to be drilled out to 3/4 to install new moisture sensing discs.
- 2. If your baler is not equipped with bale shaping pads you will need to drill a hole in the chamber directly behind and above the starting roll. (Figure 1)
- 3. The mounting hole will be 3/4" in diameter. Use a plastic pad (006-4641F) and place it into the baler to use as a template. The bottom edge of the pad will be placed 1" up from starting roll and 2" from the back of the bale chamber. (Figure 1)

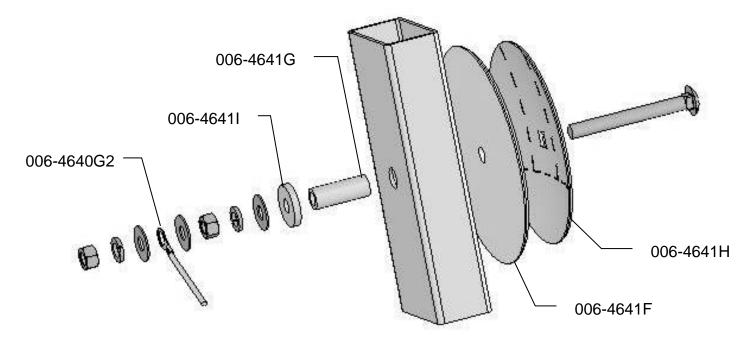


- 4. Locate the 006-4641G. The piece will need to be cut down to size. Use the already machined line in the bushing to cut off the small piece shown above.
- 5. Depending on the baler the bolt may need to be trimmed for proper fit.
- 6. Tighten all of the hardware to 50 ft/lbs.
- 7. Make sure that the plastic pad is protecting all metal surfaces of the disc from touching baler.
- 8. Run the moisture wire harness (006-4640G2) from pump plate area to each disc securing with cable ties.
- 9. Apply silicone over nuts and washers.

Model 547 for five foot wide balers

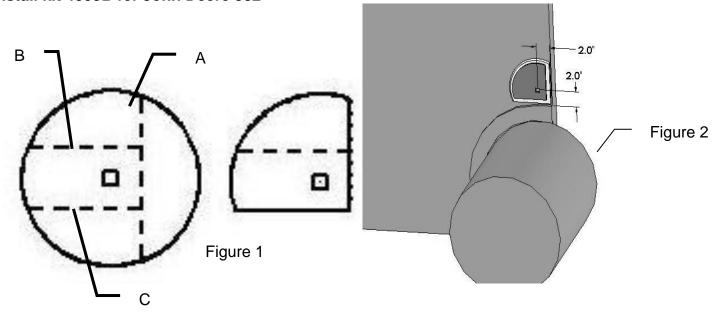


- 1. If your baler is equipped with bale shaping pads, remove disc and use existing hole that will need to be drilled out to 3/4" to install new moisture sensing discs. If the discs are welded, the welds will need to ground off for disc removal.
- 2. If your baler is not equipped with bale shaping pads you will need to drill a hole in the chamber directly behind and above the starting roll. (Figure 1)
- 3. The mounting hole will be 3/4" in diameter. Use a plastic pad (006-4641F) and place it into the baler to use as a template. The bottom edge of the pad will be placed 1" up from starting roll and 2" from the back of the bale chamber. (Figure 1)

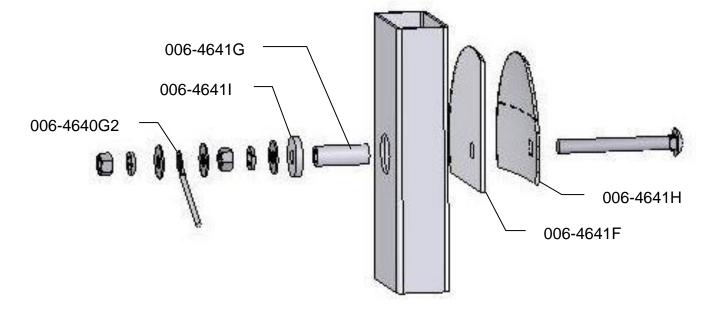


- 4. Depending on the baler the bolt may need to be trimmed for proper fit.
- 5. Tighten all of the hardware to 50 ft/lbs.
- 6. Make sure that the plastic pad is protecting all metal surfaces of the disc from touching baler.
- 7. Run the moisture wire harness (006-4640G2) from pump plate area to each disc securing with cable ties.
- 8. Apply silicone over nuts and washers.

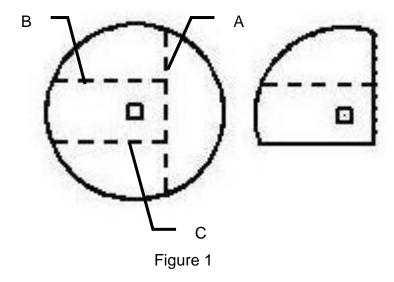
Install kit 4503B for John Deere 582



- 1. The moisture discs (006-4641H) will both need to be cut on line A. (Figure 1) One disc will need to be cut on line B and one disc on line C.
- 2. The plastic pad (006-4641F) will also need to be cut 1/4" longer than the back of the disc.
- 3. Bevel all sides of the cut discs to allow the smooth travel of crop over them.
- 4. The mounting hole will be 3/4" in diameter. The disc will need to be placed on the baler to line up the location of 2" up from bottom and 2" from the back of the chamber to the center of the bolt. (Figure 2)



- 4. Make sure that plastic pad is protecting all metal surfaces of disc from touching baler.
- 5. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 6. On some balers the bolt may need to be trimmed for proper fit.
- 7. Tighten all hardware to 50 ft/lbs.
- 8. Apply silicone over nuts and washers.



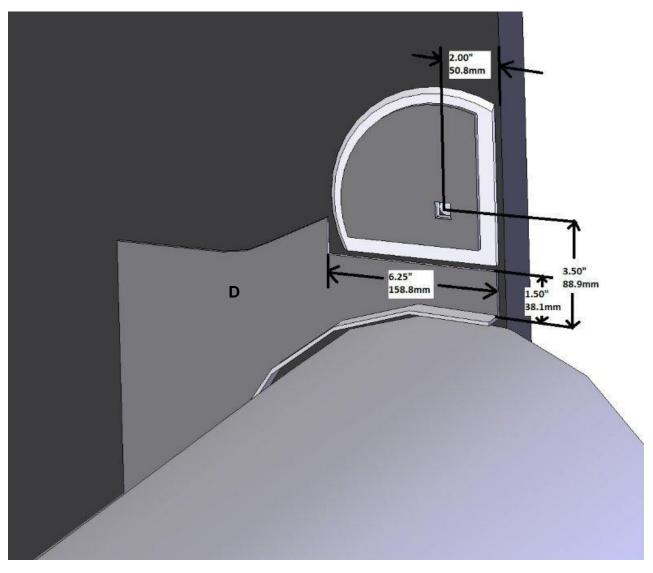
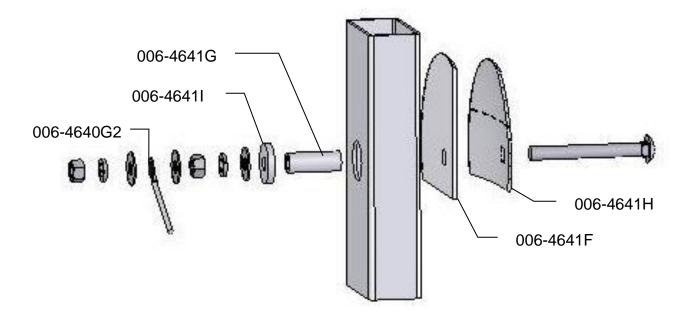


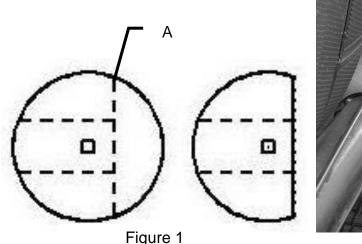
Figure 2

- 1. The moisture discs (006-4641H) will both need to be cut on line A. (Figure 1) One disc will need to be cut on line B and one disc on line C.
- 2. The plastic pad (006-4641F) will also need to be cut 1/4" longer than the back of the disc.
- 3. Bevel all sides of the cut discs to allow the smooth travel of crop over them.
- 4. Remove the shield directly above the starter roll shown as figure D on both sides of the baler. Cut the 6.25" notch out using the supplied measurements. Reinstall both sides.
- 5. The mounting hole will be 3/4" in diameter. The disc will need to be placed on the baler to line up the location of 3.5" up from bottom and 2" from the back of the chamber to the center of the bolt. (Figure 2)



- 6. Make sure that plastic pad is protecting all metal surfaces of disc from touching baler.
- 7. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 8. On some balers the bolt may need to be trimmed for proper fit.
- 9. Tighten all hardware to 50 ft/lbs.
- 10. Apply silicone over nuts and washers



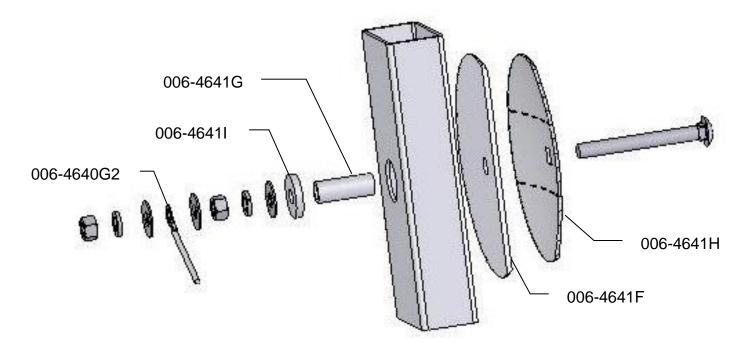




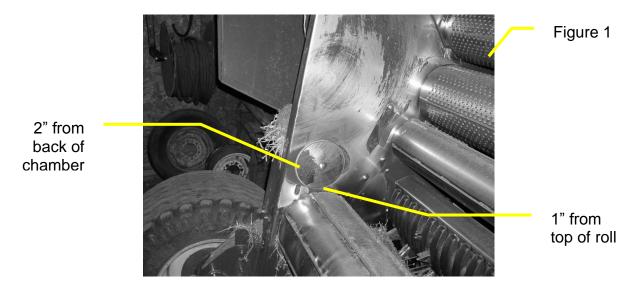
1/4" in from back of baler

1" from Bottom

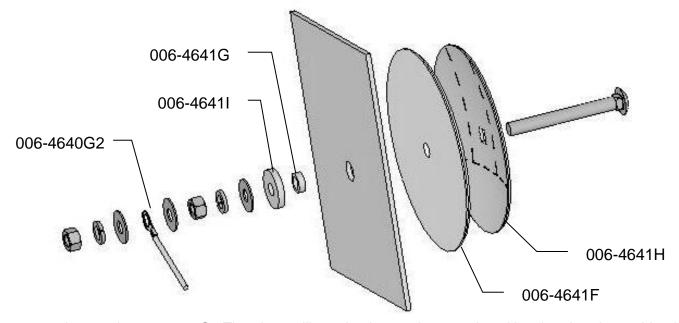
- 1. Both moisture discs (006-4641H) will need to be cut along the serrated line (A) shown on Figure 2. Only cut on the line shown on Figure 1, do not cut the other line.
- 2. The plastic pad (006-4641F) will also need to be cut 1/4" longer than the back of the disc.
- 3. Bevel all sides of the cut discs to allow the smooth travel of crop over them.
- 4. Using the cut disc as a pattern, mark and drill a 3/4" hole in the side of the bale chamber. The disc will need to be placed on the baler 1" up from the bottom and 1/4" in from the back of the chamber. (Figure 2)



- 5. Make sure that plastic pad is protecting all metal surfaces of disc from touching baler.
- 6. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 7. On some balers the bolt may need to be trimmed for proper fit.
- 8. Tighten all hardware to 50 ft/lbs.
- 9. Apply silicone over nuts and washers.



- 1. If your baler is equipped with bale shaping pads, remove disc and use existing hole (may need to be drilled larger, 3/4") to install new moisture sensing discs.
- 2. If your baler is not equipped with bale shaping pads you will need to drill a hole in the chamber directly behind and above the starting roll. (Figure 1)
- 3. The mounting hole will be 3/4" in diameter. Use a plastic pad (006-4641F) and place it into the baler to use as a template. The bottom edge of the pad will be placed 1" up from starting roll and 2" from the back of the bale chamber. (Figure 1)



- 4. Locate the 006-4641G. The piece will need to be cut down to size. Use the already machined line in the bushing to cut off the small piece shown above.
- 5. Depending on the baler the bolt may need to be trimmed for proper fit.
- 6. Tighten all of the hardware to 50 ft/lbs.
- 7. Make sure that the plastic pad is protecting all metal surfaces of the disc from touching baler.
- 8. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 9. Apply silicone over nuts and washers.

Install kit 4508B

- 1. If your baler is equipped with bale shaping pads, (745 Hesston) remove disc and use existing hole (may need to be drilled larger) to install new moisture sensing discs.
- 2. If your baler is not equipped with bale shaping pads (800 and 900 series Hesston) you will need to drill a hole in the chamber directly behind and above the starting roll. (Figure 1)
- 3. You will need to remove the main chain assembly on 800 and 900 series balers to install the pad on the right side of baler (when facing front of baler). (Figure 2)

4. The hole size is 3/4" diameter. Before drilling the hole make sure hole is accessible from opposite side of chamber to tighten down mounting hardware and to install moisture harness. (Figure 3)

of chamber to tighter down mounting hardware and to install moisture harness.

Figure 1

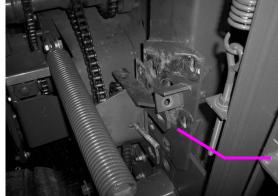


Figure 2

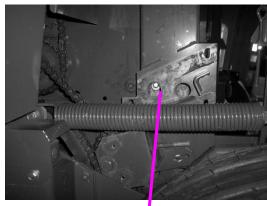


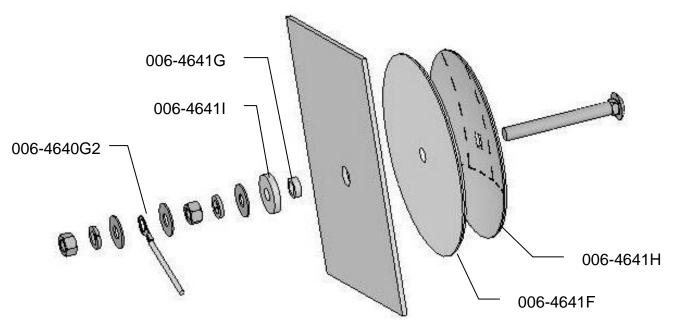
Figure 3



Figure 4

CONTINUED ON NEXT PAGE

Install kit 4508B continued



- 5. Locate the 006-4641G. The piece will need to be cut down to size. Use the already machined line in the bushing to cut off the small piece shown above.
- 6. Depending on the baler the bolt may need to be trimmed for proper fit.
- 7. Tighten all of the hardware to 50 ft/lbs.
- 8. Make sure that the plastic pad is protecting all metal surfaces of the disc from touching baler. (Figure 4)
- 9. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 10. Apply silicone over nuts and washers.

Install kit 4524B

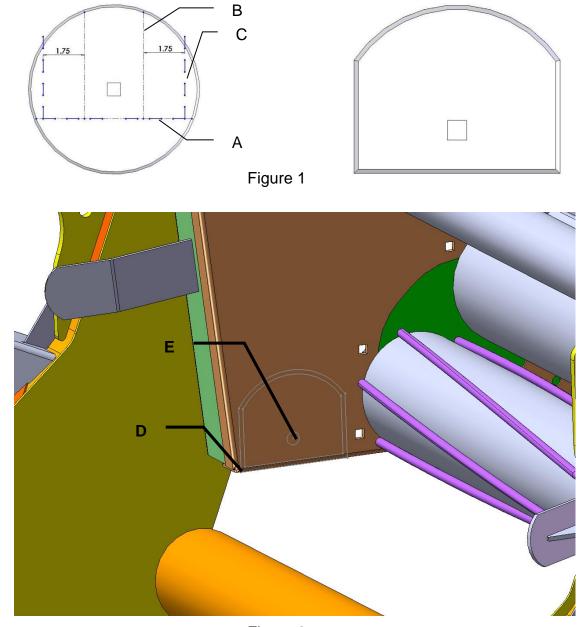
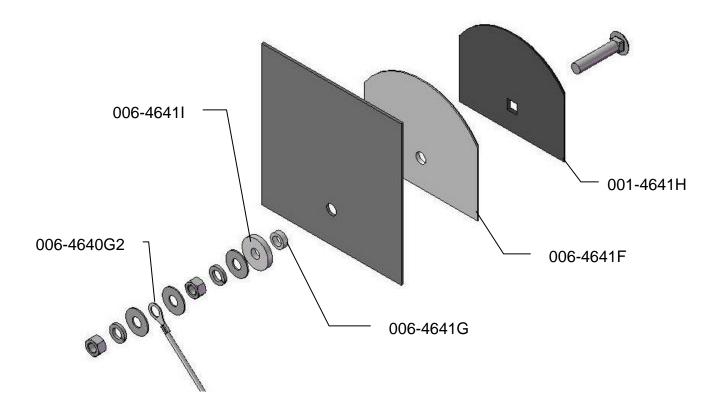


Figure 2

- 1. Both moisture discs (006-4641H) will need to be cut along the serrated line (A) shown on Figure 1. Measure from the laser etched line (B) 1.75 inches on both side. Mark and cut the disc. A completed disc in shown to the right.
- 2. The plastic pad (006-4641F) will also need to be cut 1/4" larger than the steel disc.
- 3. Bevel all sides of the cut discs to allow the smooth travel of crop over them.
- 4. Mark a line 1 1/2" up and 3 1/2" over from point D. Drill a 3/4" hole at the point (E). Repeat for the opposite side.

CONTINUED ON NEXT PAGE

Install kit 4524B continued



- 5. Locate the 006-4641G. The piece will need to be cut down to size. Use the already machined line in the bushing to cut off the small piece shown above.
- 6. Depending on the baler the bolt may need to be trimmed for proper fit.
- 7. Tighten all of the hardware to 50 ft/lbs.
- 8. Make sure that the plastic pad is protecting all metal surfaces of the disc from touching baler.
- 9. Run the moisture wire harness (006-4640G2) from the PIP to each disc securing with cable ties.
- 10. Apply silicone over nuts and washers.

9. Installation of bale rate timer sensor

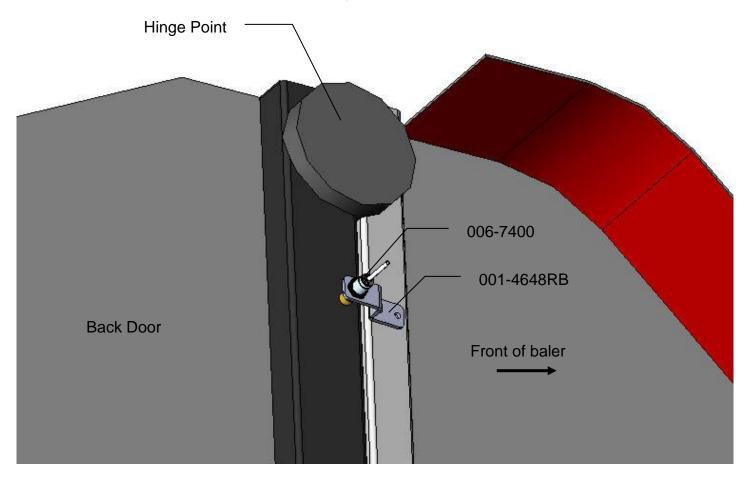
The bale rate timer sensor is used to determine when the baler door is open. With this information the system is able to change the tons/hour automatically (see Operating Instructions, Automatic Mode) and also record information per bale (see Job Records).

Locate the sensor (006-7400) and the sensor bracket (001-4648RB). On the right side of the baler find a location 1-6 inches down from the hinge to mount the bracket. Check for clearance with hydraulic cylinders before mounting the bracket. The bracket should be mounted to the front side of the hinge point, with the sensor aligned over the back door.

Mark and drill two 1/4" holes and install the bracket using two 5/16" x 1-1/4" self-tapping bolts.

Install the sensor into the bracket and leave 1/4" of clearance between the end of the sensor and the door.

The harness will need to be routed towards the PIP. Secure with cable ties and take care to avoid pinch points. The harness extension (006-7400EXT) may need to be used.



View of the right side of baler

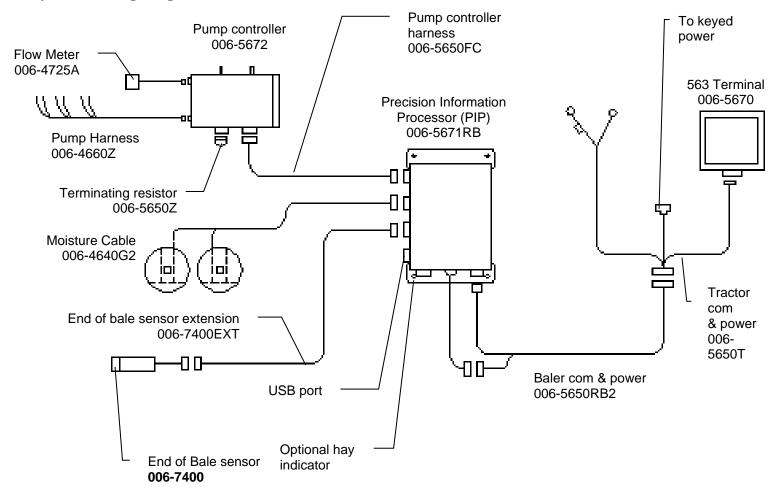
10. Power cable and main wiring harness installation

- 1. Locate the power harness.
- 2. Connect the power harness (006-5650T) to the 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! The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. CONTACT HARVEST TEC IF MODIFICATION IS REQUIRED!
- 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.
- 3. Connect the tractor communication & power harness (006-5650T) amp connector to the bottom of the 563 terminal and connect the keyed power harness to a keyed power source.
- 4. Connect the baler power and communication harness (006-5650RB) to the power port on the PIP and to the display port on the PIP.
- 5. Connect Flow Meter (006-4725A) and pump harness (006-4660Z) to the Pump Controller.
- 6. Connect Pump Harness (006-4660Z) the Baler Mounted Processor.
- 7. Install one terminating resistor to the pump controller (006-5650Z).
- 8. If you have the optional Hay Indicator, connect it to the PIP.
- 9. Attach moisture cable (006-4640G2) to the PIP.
- 10. Install Pump Controller in pump plate using 5/16" lock, nut, and flat washers.

System wiring diagram



Installation of the control

Use the supplied suction cup mount to position the monitor in the cab. Make sure the glass is clean before installing the suction cup mount. If a non-cabbed tractor is used, use the supplied #10 screws for installation on the fender. If unit is mounted on fender it will need to be removed at night and stored in a clean, dry area. Use the Ram mount swivel-positioning nut to tighten the entire assembly. Adjust it so that you can view the entire screen and be able to use the touch screen without interfering with other tractor functions.

WIRING DIAGRAMS

A. Communication and power harness

Pin 1 Red Can 12 volt
Pin 2 Red Battery 12 volt
Pin 3 Orange Keyed power

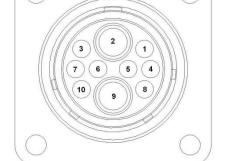
Pin 4 Not Used

Pin 5 Yellow Comm channel OL Pin 6 Green Comm channel OH

Pin 7 Not used

Pin 8 Black Can ground Pin 9 Black Battery ground

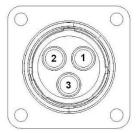
Pin 10 Not used



B. Main power connector mounted on PIP

Pin 1 Red + 12 V input from tractor supply Pin 2 Black Ground from tractor supply

Pin 3 Orange Keyed power

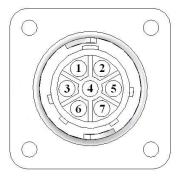


C. Pump connection colors

Pin 1	Black with orange markings	Pump 1 ground
Pin 2	Black with green markings	Pump 2 ground
Pin 3	Black with yellow markings	Pump 3 ground

Pin 4 Not used

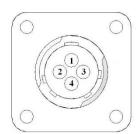
Pin 5 Orange with black markings Pump 1 positive
Pin 6 Green with black markings Pump 2 positive
Pin 7 Yellow with black markings Pump 3 positive



D. Flow meter connection on Pump Controller

Pin 1 White 5 - 12 V (+) supply

Pin 2 Green Ground
Pin 3 Brown Signal
Pin 4 Black Shield

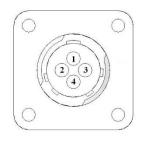


E. Connector for Hay Indicator option on PIP

Note: Hay indicators are an option that will turn the system on and off automatically as hay enters the pickup of the baler.

Pin 1 Red +12V
Pin 2 Black Ground
Pin 3 White Signal wire

Pin 4 Not used

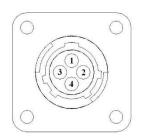


F. End of bale sensor on PIP

Pin1 Brown Sensor power Pin2 Blue Sensor ground

Pin3 Not used

Pin4 Black Signal from sensor



G. Moisture and Bale rate sensor connector on PIP

Pin 1 Not used Pin 2 Not used Pin 3 Not used Pin 4 Not used Pin 5 Silver Shield Pin 6 Silver Shield Pin 7 Not used Pin 8 Violet Moisture input 1 Pin 9 **Brown** Moisture input 2

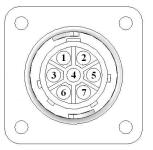


H. Display communication harness on PIP

Power to display Pin 1 Orange Ground to display Pin 2 Blue Pin 3 Green Comm channel OH Pin 4 Not used

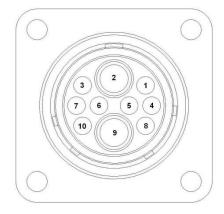
Pin 5 Yellow Comm channel OL

Pin 6 Not used Pin 7 Not used

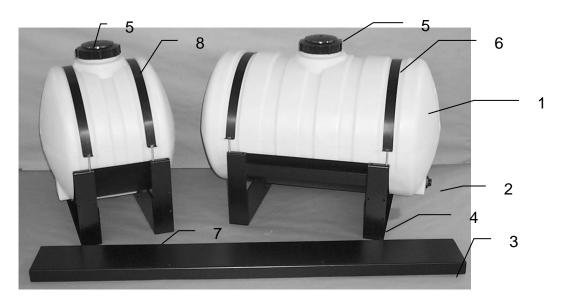


I. Communication harness on PIP and Pump Controller

Pin 1 Can 12 volt Red Pin 2 Red Battery 12 volt Pin 3 Grey Shield Pin 4 Green Comm channel OH Pin 5 Yellow Comm channel OL Pin 6 Comm channel IH Blue Pin 7 Orange Comm channel IL Pin 8 Black Can ground Pin 9 Black Battery ground Pin 10 Not used



PARTS BREAKDOWN FOR THE TANK AND SADDLE Harvest Tec Model 547 Base Kit



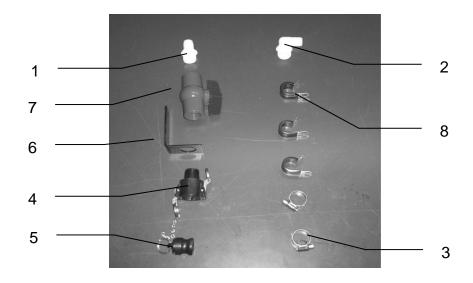
Ref #	Description	Part #	Qty	Ref #	Description	Part #	Qty
1	55 Gallon tank	005-9203	1	5	Tank lid	005-9022C	1
2	Tank fitting	005-9100	1		Tank lid gasket	005-9022CG	1
3	Cross support bracket	001-4445B	1	6	Tank strap	001-4402	1
4	55 Gallon saddle	001-4445A	1	7	25 Gallon saddle	001-4442	1
				8	25 Gallon tank	005-9022	1

Harvest Tec Model 549 Base Kit



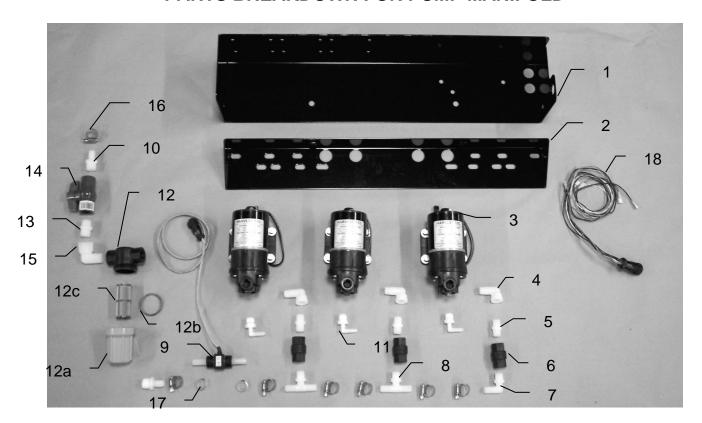
Ref#	Description	Part #	Qty
1	Tank	005-9023	1
2	Straps	001-4402	2
3	Tank Fitting	005-9100	2
4	Saddle	001-4703	1
5	Tank Cap	005-9022C	1
6	Tank Gasket	005-9022CG	1

Parts Breakdown for Drain Fill Kit



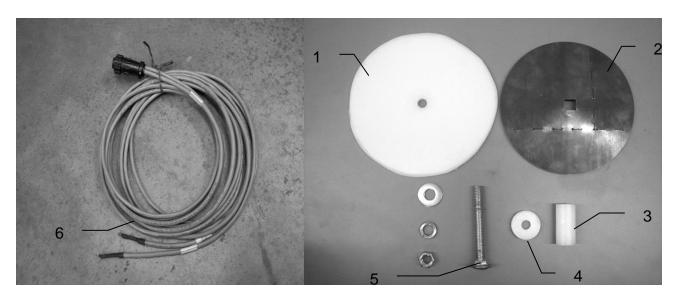
Ref#	Description	Part #	Qty	Ref #	Description	Part #	<u>Qty</u>
1	Straight Fitting	003-A3434	1	5	Male Coupler	002-2205G	1
2	Elbow	003-EL3434	1	6	Valve Holder	001-6702H	1
3	Hose Clamps	003-9004	2	7	Ball valve	002-2200	1
4	Female Coupler	002-2204A	1	8	Jiffy Clip	008-9010	3

PARTS BREAKDOWN FOR PUMP MANIFOLD

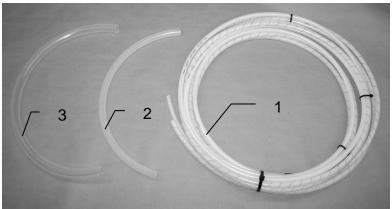


Ref#	Description	Part#	<u>Qty</u>
1	Pump plate	00 1-464 6D	1
2	Mounting Bracket	001-4646C	1
3	Pump	007-4120H	3
4	Street elbow fitting	003-SE38	3
5	Nipple fitting	003-M3838	3
6	Check valve	002-4566F	3
7	Elbow fitting	003-EL3812	1
8	Tee fitting	003-T3812HB	2
9	Flow meter assembly	006-4725A	1
10	Straight fitting	003-A1212	2
11	Elbow fitting	003-JEL1238	3
12	Filter bowl assembly	002-4315	1
12a	Filter bowl only	002-4315F	1
12b	Filter bowl gasket	002-4315D	1
12c	Filter bowl screen	002-4315B	1
13	Nipple fitting	003-M1212	1
14	Ball valve	002-2212	1
15	Street elbow fitting	003-SE12	1
16	Hose clamp	003-9003	7
17	Hose clamp (Flow Meter)	003-9005	2
18	Pump Cable	006-4660Z	1
NP	Pump rebuild kit	007-4581	1
	(1 per pump)		
NP	Elbow	003-EL1212	1
NP	Not Pictured		

MOISTURE PAD AND HOSES PARTS BREAKDOWN



Ref#	Description	Part #	Qty
1	Plastic Pad	006-4641F	2
2	Moisture Disc	006-4641H	2
3	Plastic Bushing	006-4641G	2
4	Plastic Isolator	006-46411	2
5	1/2X4 1/2" Carriage Bolt		2
6	Moisture Cable	006-4640G2	1
1-5	Moisture Pad Assembly	030-4643	2



Ref #	<u>Description</u>	Part #	Qty
1	Triple Weld (pumps to tips)	002-9016	15ft
		002-9016B	15ft
		002-9016G	15ft
	Hose assembly	030-9016RB	1
2	1/2 Hose (tank to filter)	002-9001	6ft
3	3/4 Hose Drain Fill Line	002-9002	10ft

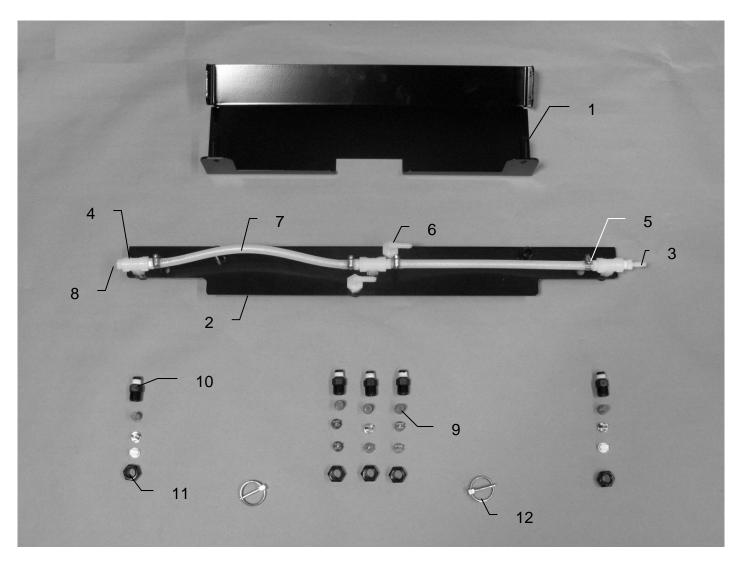
PARTS BREAKDOWN FOR CONTROL BOX AND WIRING HARNESSES



Ref	<u>Description</u>	Part#	Qty
1	Power & communication tractor	006-5650T	1
2	Pump controller harness	006-5650FC	1
3	Power & communication baler	006-5650RB2	1
4	Pump controller	006-5672	1
5	Precision Information Processor (PIP)	006-5671RB	1
6	Terminating resistor	006-5660Z	1
7	Ram mount	001-2012H	1
8	Display	006-5670	1
9	Bale rate timer	006-7400	1
10	Bale rate timer bracket	001-4648RB	1
11	Bale rate timer sensor extension	006-7400EXT	1
NP	Key switch wire	006-5650K	1
NP	Dust plug kit	006-5651PLUGS	1
NP	Suction cup mount	001-2012SCM	1
NP	Not pictured		

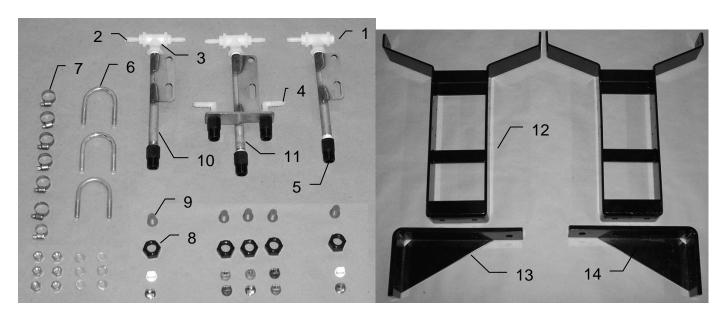
HARVEST TEC MODEL 547 INSTALLATION KIT FOR CASE IH AND NEW HOLLAND RB, RBX, AND BR ROUND BALERS

Harvest Tec Model 447-SO Installation Kit



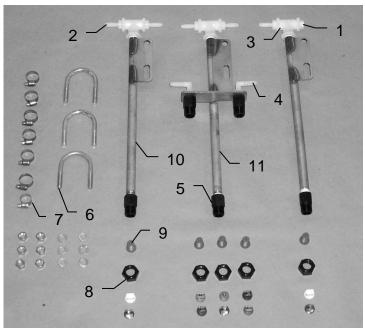
Ref	Description	Part #	Qty	Ref	Description	Part#	Qty
1	Shield bracket	001-4810BRH	1	NP	Tip – Low Output	004-650033-SS	3
2	Spray shield	001-4810B	1	NP	Tip – Low Output	004-XR110015VS	1
3	Straight fitting	003-A1414	5	NP	Tip – Low Output	004-XR11004VS	1
4	Tee	003-TT14	3	NP	Tip – High Output	004-650050-PT	2
5	Hose clamp	003-9002	7	NP	Tip – High Output	004-XR11001VS	1
6	Elbow	003-EL1414F	2	NP	Tip – High Output	004-XR11003VS	1
7	Hose	002-9016	3 ft	NP	Tip – High Output	004-XR11006VS	1
8	Plug	003-F14	1				
9	Tip strainer	004-4213-200	5	NP	Not Pictured		
10	Nozzle body	004-4722	5				
11	Nozzle cap	004-4723	5				
12	Lynch pin	008-4576	2				

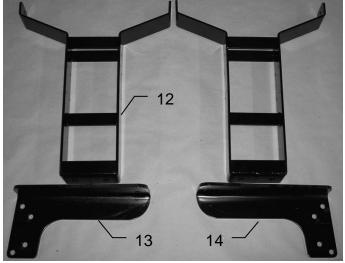
Harvest Tec Model 4503B Installation Kit



Ref	Description	Part#	Qty	Description	Part#	Qty
1	Plug	003-F14	1	Tip	004-650033-SS	3
2	Straight fitting	003-A1414	5	Tip	004-XR110015VS	1
3	Tee	003-TT14	3	Tip	004-XR11004VS	1
4	Elbow	003-EL1414	2	Tip	004-650050-PT	2
5	Nozzle body	004-4721	5	Tip	004-XR11001VS	1
6	U bolt	001-4714UBS	3	Tip	004-XR11003VS	1
7	Hose clamp	003-9002	7	Tip	004-XR11006VS	1
8	Nozzle cap	004-4723	5			
9	Tip strainer with check	004-4213-200	5			
10	Nozzle tube	001-4714P	2			
11	Nozzle tube auto	001-4714AP	1			
12	Saddle legs	001-4703B	2			
13	Left mtg bracket	001-4703EL	1			
14	Right mtg bracket	001-4703ER	1			
NP	PIP mount	001-4703BPM	2			
NP	45 degree elbow	003-SE4514	5			
NP	Jack extension	001-4703EXT	1			

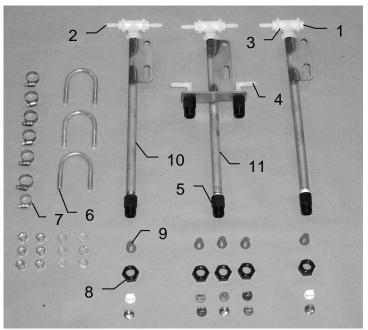
Harvest Tec Model 4504B Installation Kit

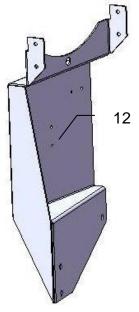


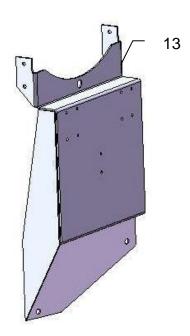


Ref	Description	Part#	<u>Qty</u>	Description	Part#	<u>Qty</u>
1	Plug	003-F14	1	Tip	004-650033-SS	3
2	Straight fitting	003-A1414	5	Tip	004-XR110015VS	1
3	Tee	003-TT14	3	Tip	004-XR11004VS	1
4	Elbow	003-EL1414	2	Tip	004-650050-PT	2
5	Nozzle body	004-4721	5	Tip	004-XR11001VS	1
6	U bolt	001-4714UBS	3	Tip	004-XR11003VS	1
7	Hose clamp	003-9002	7	Tip	004-XR11006VS	1
8	Nozzle cap	004-4723	5			
9	Tip strainer with check	004-4213-200	5			
10	Nozzle tube	001-4714	2			
11	Nozzle tube auto	001-4714A	1			
12	Saddle leg	001-4703B	2			
13	Left mtg bracket	001-4703DL	1			
14	Right mtg bracket	001-4703DR	1			
NP	PIP mount	001-4703BPM	2			

Harvest Tec Model 4505B Installation Kit

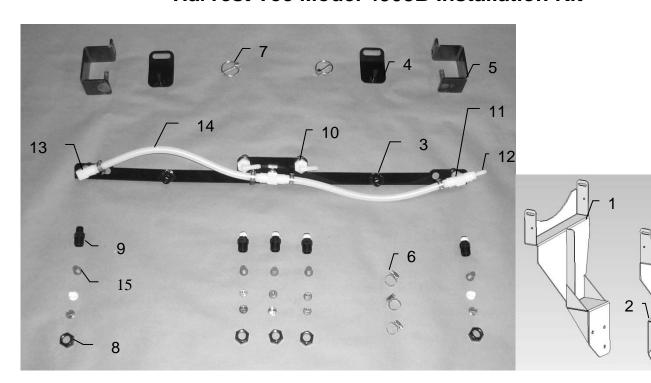






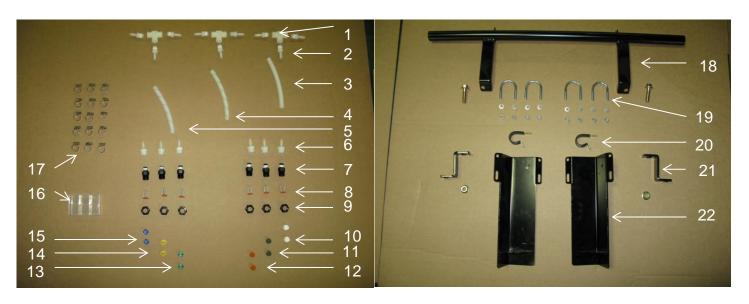
<u>Ref</u>	Description	Part#	Qty	Description	Part#	Qty
1	Plug	003-F14	1	Tip	004-650033-SS	3
2	Straight fitting	003-A1414	5	Tip	004-XR110015VS	1
3	Tee	003-TT14	3	Tip	004-XR11004VS	1
4	Elbow	003-EL1414	2	Tip	004-650050-PT	2
5	Nozzle body	004-4721	5	Tip	004-XR11001VS	1
6	U bolt	001-4714UBS	3	Tip	004-XR11003VS	1
7	Hose clamp	003-9002	7	Tip	004-XR11006VS	1
8	Nozzle cap	004-4723	5			
9	Tip strainer with check	004-4213-200	5			
10	Nozzle tube	001-4714	2			
11	Nozzle tube auto	001-4714A	1			
12	Left saddle leg	001-4703FL	1			
13	Right saddle leg	001-4703FR	1			

Harvest Tec Model 4508B Installation Kit



Ref	Description	Part#	<u>Qty</u>	Description	Part#	Qty
1	Left leg	001-4703L	1	Tip	004-650033-SS	3
2	Right leg	001-4703K	1	Tip	004-XR110015VS	1
3	Spray shield	001-4703GR	1	Tip	004-XR11004VS	1
4	Shield Holder	001-4703JB	2	Tip	004-650050-PT	2
5	Shield Holder	001-4703JC	2	Tip	004-XR11001VS	1
6	Hose clamp	003-9002	7	Tip	004-XR11003VS	1
7	Lynch pin	008-4576	2	Tip	004-XR11006VS	1
8	Nozzle Cap	004-4723	5			
9	Nozzle body	004-4722	5			
10	Elbow	003-EL1414F	2			
11	Tee	003-TT14SQ	2			
12	Straight fitting	003-A1414	5			
13	Elbow	003-SE14F	1			
14	Hose	002-9016	2			
15	Tip strainer	004-4213-200	5			

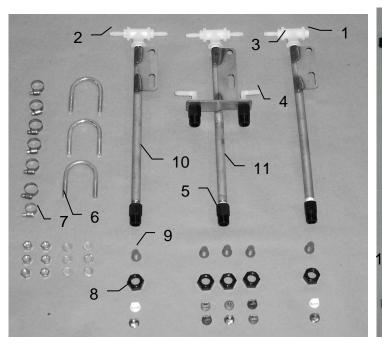
Harvest Tec model 4517B installation kit FOR JOHN DEERE 8 & 9 SERIES ROUND BALERS



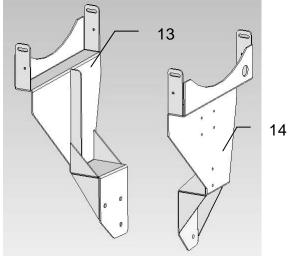
Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	Tee	003-TT14SQ	3	13	Tip-green	004-XR110015VS	2
2	Fitting	003-A1414	9	14	Tip-yellow	004-XR11002VS	2
3	Hose-White	002-9016	4 ft	15	Tip-blue	004-XR11003VS	2
4	Hose-Green Stripe	002-9016G	4 ft	16	Mini Plano Box	008-9001	1
5	Hose-Blue Stripe	002-9016B	4 ft	17	Hose Clamps	003-9002	15
6	Fitting	003-A1414F	6	18	Nozzle Holder	001-4703R	1
7	Fitting	003-4722	6	19	5/16" U Bolt	001-4714UBS	4
8	Strainer	004-4213-200	6	20	Jiffy Clips	008-9009	2
9	Fitting	004-4723	6	21	Spacer	001-4703NS	2
10	Tip-white	004-650050-PT	2	22	Nozzle Mount	001-4714J	2
11	Tip-olive	004-800067-PT	2	23	Saddle Leg	001-4703B	2
12	Tip-orange	004-XR11001VS	2	24	Right Mtg Bracket	001-4703DR	1
	. 5			25	Left Mtg Bracket	001-4703DL	1



Harvest Tec Model 4524B Installation Kit







Ref	Description	Part#	Qty
1	Plug	003- F 14	1
2	Straight fitting	003-A1414	5
3	Tee	003-TT14	3
4	Elbow	003-EL1414	2
5	Nozzle body	004-4721	5
6	U bolt	001-4714UBS	3
7	Hose clamp	003-9002	7
8	Nozzle cap	004-4723	5
9	Tip strainer with check	004-4213-200	5
10	Nozzle tube	001-4714	2
11	Nozzle tube auto	001-4714A	1
12	Nozzle holder	001-4703R	1
13	Left leg	001-4703L	1
14	Right leg	001-4703K	1

Description	Part#	Qty
Tip	004-650033-SS	3
Tip	004-XR110015VS	1
Tip	004-XR11004VS	1
Tip	004-650050-PT	2
Tip	004-XR11001VS	1
Tip	004-XR11003VS	1
Tip	004-XR11006VS	1

Harvest Tec, LLC. Warranty and Liability Agreement

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

Our obligation under this warranty is limited to repairing or replacing free of charge to the original purchaser any part that in our judgment shows evidence of defective or improper workmanship, provided the part is returned to Harvest Tec, LLC. within 30 days of the failure. Parts must be returned through the selling dealer and distributor, transportation charges prepaid.

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

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

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

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

Revised 5/22

HARVEST TEC, LLC. P.O. BOX 63 2821 HARVEY STREET HUDSON, WI 54016

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