

Installation Manual

Model 434, 440, 441, 442 & 448 25 & 55 Gallon Preservative Applicator



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DECLARATION OF INCORPORATION



MANUFACTURER:

Harvest Tec Inc.
2821 Harvey St.
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Hudson, WI 54016, U.S.A.

REPRESENTATIVE ESTABLISHED IN COMMUNITY: Profitable Farming Company
Middle Barlington, Roborough
Winkleigh, Devon, EX19 8AG
ENGLAND

The person above certifies and declares that:

VIRTUAL MACHINE: Equipment mounted on a farm press and for the application of inoculants onto forage crops.

MODEL: 434-440-441-442-448-18-INST Imp&Metric

BRAND: Harvest Tec

SERIAL NUMBER:

This application preservatives for hay Harvest Tec system meets the Directive 2006/42/EC of the European Parliament and the Council of 17 May 2006 and other applicable European Directives including Directive 2004/108/EC on the Electromagnetic compatibility.

The application of preservatives for hay Harvest Tec system will be turned on after being installed on a farm press has been declared in conformity with the Machinery Directive.

Person in the community authorized to provide information on the partly completed machinery and making this statement:

Richard Snell, President, Profitable Farming Company

Signed on May 21, 2011: Middle Barlington, Roborough
Winkleigh, Devon, EX19 8AG

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Model Reference

Baler Make	Baler Model	Model Number	Installation Kit	Tank Size
Case IH	SBX530 - SBX550 & SB531 – SB551 square balers	440	4415-SO	55 gallon
Case IH	Four foot RBX & RB round balers	442	442-SO	25 gallon
Case IH	Five foot RBX & RB round balers	442	442-SO	55 gallon
Case IH	SBX 520 square baler	441	4409	25 gallon
Case IH	SBX530 - SBX550 & SB531 – SB551 square balers	441	4415	25 gallon
Case IH	All inline balers	441	4485	55 gallon
Case IH	2002 and older round balers	441	4484	25 gallon
Challenger	RB34 – RB56	441	4484	25 gallon
Challenger	RB 46 & 56	448	4508	55 gallon
Challenger	453, 463 & 563	448	4524	55 gallon
Freeman	330, 370, 380 & 385	448	4506	55 gallon
John Deere	All square balers	441	4410	25 gallon
John Deere	582 & 854	448	4503	55 gallon
John Deere	5, 6 & 7 series	441	4483	25 gallon
John Deere	5, 6 & 7 series	448	4504	55 gallon
John Deere	8 & 9 series	441	4516	25 gallon
John Deere	8 & 9 series	448	4517	55 gallon
John Deere	410-510 & 430-530 round balers	441	4484	25 gallon
Krone	All Krone round balers	441	4484	25 gallon
Kubota	BV4160, BV4180, BV5160	441	4481	25 gallon
New Holland	4 foot BR round balers	442	442-SO	25 gallon
New Holland	5 foot BR round balers	442	442-SO	55 gallon
New Holland	570 - 580 & BC5060-BC5080 square balers	440	4415-SO	55 gallon
New Holland	200 & 300 series, 565 square balers	441	4409	25 gallon
New Holland	570 - 580 & BC5060-BC5080 square balers	441	4415	25 gallon
New Holland	640-688 round balers	441	4486	25 gallon
New Holland	630-638 round balers	441	4484	25 gallon
New Holland	BB 900 & 585	448	4507	55 gallon
Massey Ferguson	All inline two tie balers	434	4416	55 gallon
Massey Ferguson	All inline three tie balers	448	4502	55 gallon
Massey Ferguson	800-900 series round balers & 5446-5556 & 2646-2766	448	4508	55 gallon
Massey Ferguson	2846-2856A	448	4524	55 gallon
McHale	V660 & F540 - F560 round balers	448	4526	55 gallon
Vermeer	640 & 605 M & Super M	448	4505	55 gallon
Vermeer	Rebel series	441	4484	25 gallon
Other	Small square balers	441	4409	25 gallon
Other	Round balers	441	4484	25 gallon

Introduction

Congratulations on and thank you for purchasing a Harvest Tec Model 434, 440,441,442 & 448 applicator. Please read this manual carefully to ensure correct steps are followed to attach the applicator to the baler. This applicator is designed to apply Harvest Tec buffered acid. The model 434, 440, 441, 442 & 448 base kit includes the following parts: tank, frame, pump, gauge, hose, electronic control box, and miscellaneous hardware. The applicator can be installed on most balers with the proper installation kit (not included.) Before installing the unit on the baler, make sure you have the proper installation kit. (See Model reference) If you are unsure about your installation kit, contact your local dealer for specifications. This applicator is crop eye compatible (Nov. 2003 and newer.) For your convenience we have included a parts break down in the back of this manual.

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

Tools Needed

SAE wrench set	Side cutter	SAE socket set
Standard screw driver	Hose cutter	Drill bit set
Crescent wrench	Hammer	Center punch
1-1/2" hole saw (4415 install only)	Measuring tape	Metric socket set

Installation of Applicator

1. Installation of Mounting Brackets and Tank

Model 434

Tank legs will be mounted to the back side of the baler behind knotters and before the bale tensioner (figure1).

Using figure 2 as a reference, mark the two holes on each side of bale chamber that need to be drilled. Line up saddle leg on each side to verify holes before drilling, show in figure 3. Drill all four holes to 1/2" (13mm).

Bolt legs to baler with 1/2" x 1 3/4" Allen button head bolts, flat washer, Lock washer, and nuts.

*Note: bolt head is on inside of bale chamber. Level top of leg before completely tightening bolts, figure 4.

Bale Thrower - Additional Bracket

When baler is equipped with a bale thrower, bracket (001-4703QC) will need to be used. First secure the kicker so it will not rotate when you remove the front pin on the hydraulic cylinder. Remove pin, Install tank leg over mount. Reinstall pin. Use part 001-4703QC which is a spacer that will go between the leg and side of the baler to take up the space the throwers front hydraulic mount adds.



Figure 1

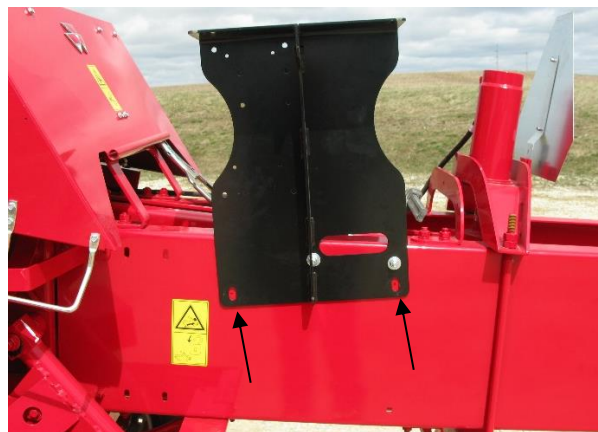


Figure 2

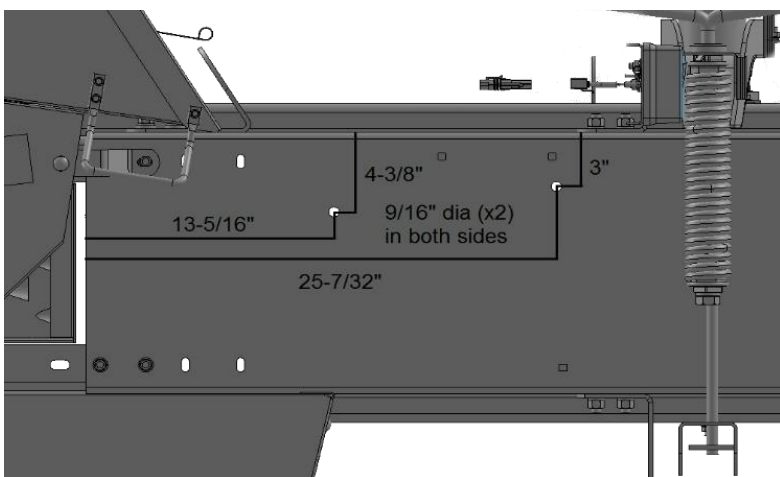


Figure 3



Figure 4

Model 434 (continued)

Saddle & Tank

Mount tank saddle (001-4703X) onto tank legs as shown in figure 5. Bolts are pre-installed on saddle, secure with 1/2" locks, washers, and nuts.



Figure 5

Model 440

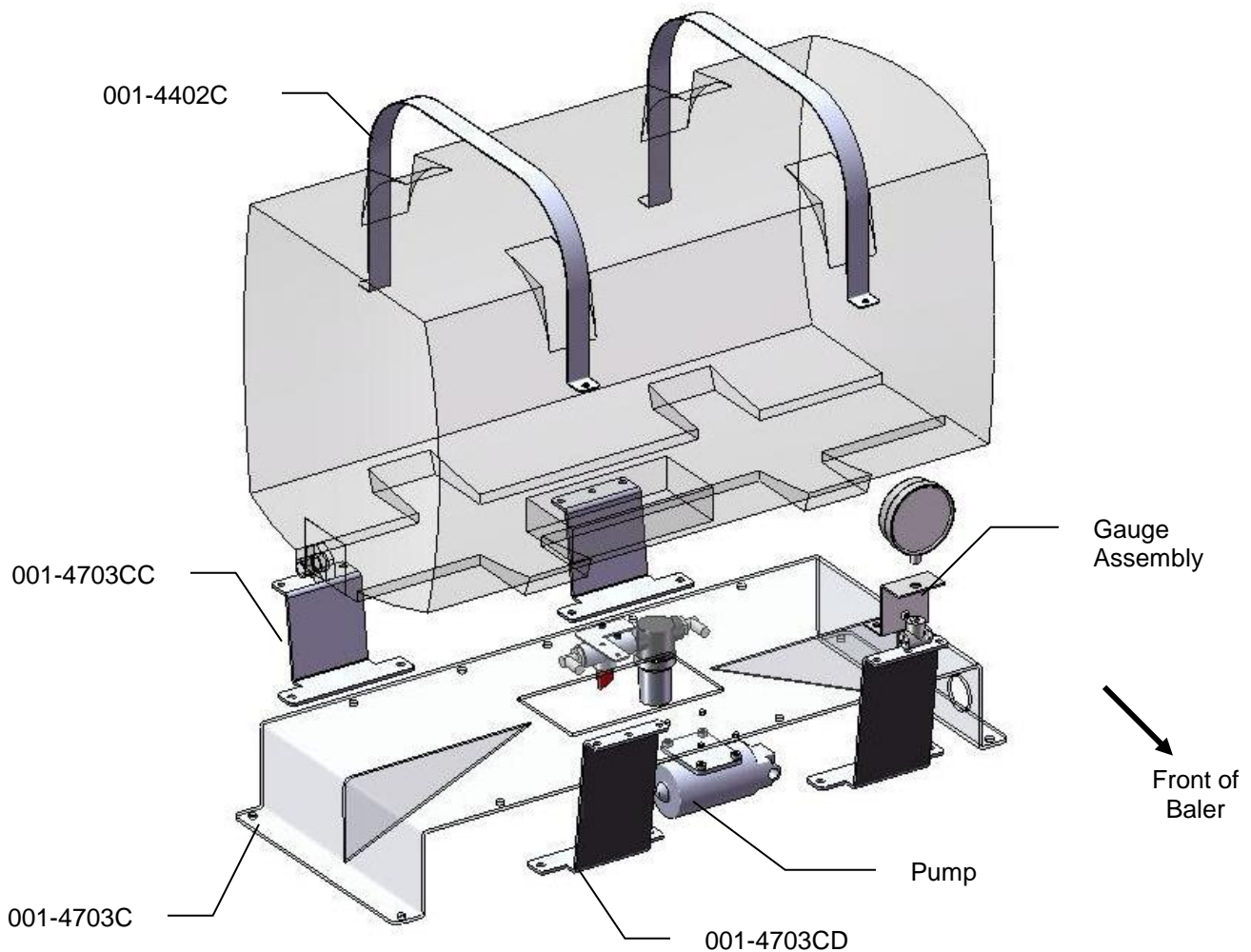
Locate parts bag 12. Locate the saddle (001-4703C) and the four strap bases. Mount the two long strap bases (001-4703CD) to the front of the saddle and the two short (001-4703CC) to the back using $3/8"$ x $1-1/4"$ bolts, locks, and nuts. NOTE: The front side will have four pre-drilled holes to attach the pump. Make sure the bolts point down to prevent damage to the tank.

Locate the filter holder (001-4703CH) and mount to the tank using $1/4"$ x $1"$ bolts, locks, and nuts.

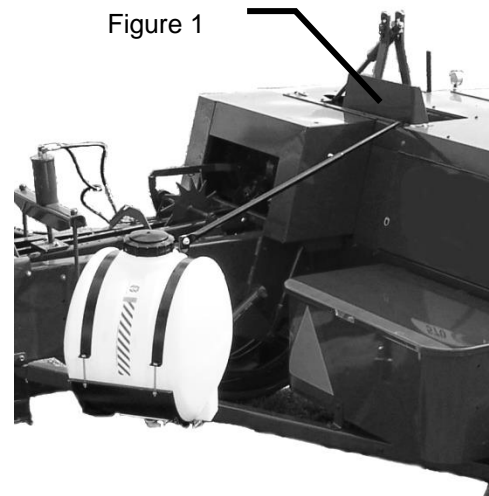
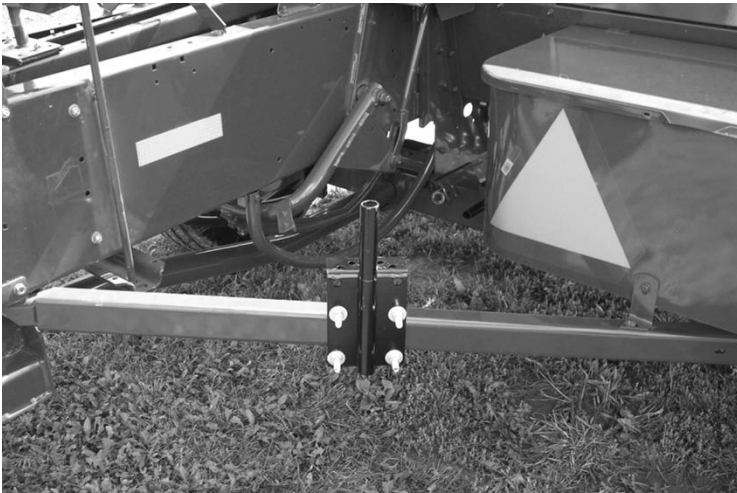
Mount the gauge on the front right strap. The bracket will be held with one $1"$ x $3/8"$ bolt, lock and nut on the right side. The bolt going through the strap will hold the left side of the bracket.

Install the tank fitting into the bottom of the tank (003-EL3412) and mount the tank on top of the saddle and between the strap bases. When facing the front of the tank, make sure the side tank fitting is on the left.

Locate the two straps (001-4402C). Position the straps over the top of the tank and secure with four $5/16"$ x $2-1/2"$ bolts and eight nuts. All of the strap bolts need to have double nuts. Mount the door strap on a back strap base using the $1/4"$ x $1-1/2"$ bolt, flats and lock nut.



Model 441



Install Kits 4409, 4410, and 4415

Mount the unit on the diagonal frame behind the twine box, as pictured using the base clamp (001-4406) and U-bolts (001-4406A). Locate the top reach rod (Figure 1) in a position opposing the overhanging tank. Bolt one end to the top stub pipe on the tank saddle and the other end to a secure location on the baler. **NOTE: REACH RODS MAY HAVE TO BE BENT ON THE TAB TO ALIGN PROPERLY.**

Install Kit 4483, 4516 & 4546

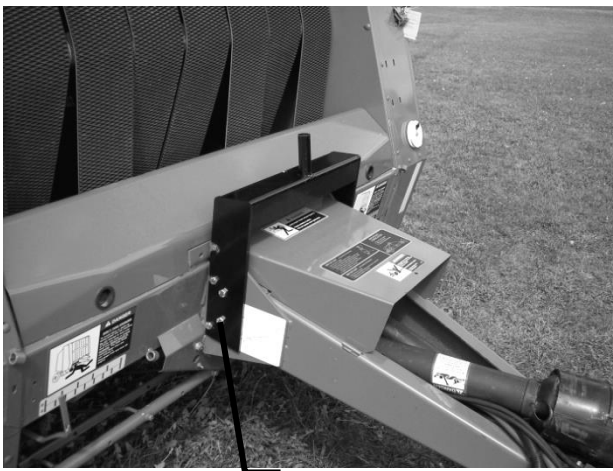
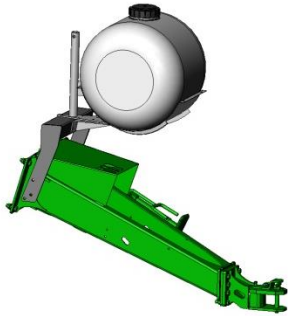


Figure 1

The base bracket straddles the baler's tongue resting up against the tongue's intersection with the baler's cross frame (for 8 Series and older). The bracket is bolted to the baler using three bolts on each side holding the tongue to the cross frame. Replace each of these bolts with the longer bolts provided (for 9 Series only two bolts per side are used). The tank mounting bracket may flex when tightening down bolts because some hitches are welded at different angles. Install the tank on top of the stub pipe; the tank saddle will be secured with the 1/2" x 1-1/2" inch hardware. The bottom support plate will attach to the bottom of the saddle and to the front of the mounting bracket. Tighten down and secure all hardware.

Install Kit 4483, 4516 & 4546 (continued)



Install kit 4481

Using the one pre-drilled holes next to the baler jack on top of the baler tongue, mount one side support leg (001-4704MAK). Drill second hole to align with support leg hole. Both holes will need to be drilled out to have a 9/16" diameter. Secure with 1/2" x 1 1/2" bolts, (pre-drilled holes will need to be drilled out to have a 9/16" diameter). Repeat process on opposite side of baler tongue as shown in figure 1. After side supports are secured, mount top tank support (001-4704MK) as show in figure 2 using three 1/2" x 1 1/2" bolts per side. Mount tank saddle (001-4401) using three 1/2" x 1 1/2" bolts onto top support as show in figure 3.

*Note: Installing pump plate mounting bracket (001-4646C) as shown in figure 3 onto the front of the top tank support (001-4704MK) prior to installation of tank saddle will make pump manifold install easier. Refer to pump manifold installation instructions for details.

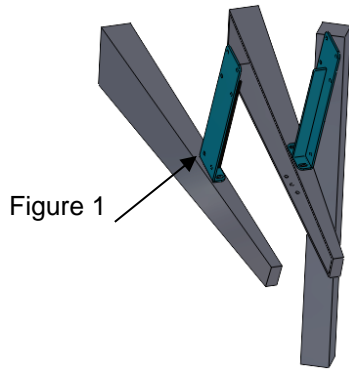


Figure 1

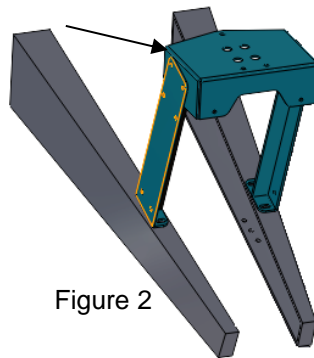
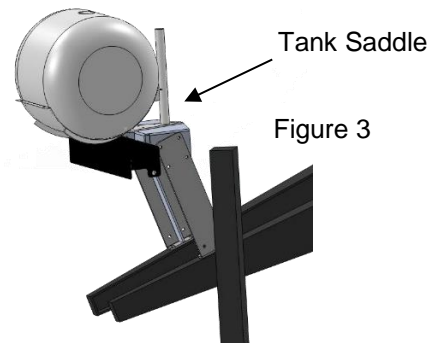


Figure 2



Tank Saddle

Figure 3

Install kit 4482C

Locate the tank mounting legs (001-4704MAK) the top support bracket (001-4704MRF) the front mount plate (001-4703VZ) and assemble as show in figure 4. Assemble the parts together as shown using the supplied bolts. Point the assembled bracket with the 001-4703VZ toward the baler. Move the tank legs toward the baler until the width of the tongue matches the width of the legs (shown in figure 5). Ensure the assembly is positioned upright, drill the holes and secure. Attach the tank saddle to the assembly as shown in figure 3. Secure the tank to the saddle by using the two supplied tank straps.

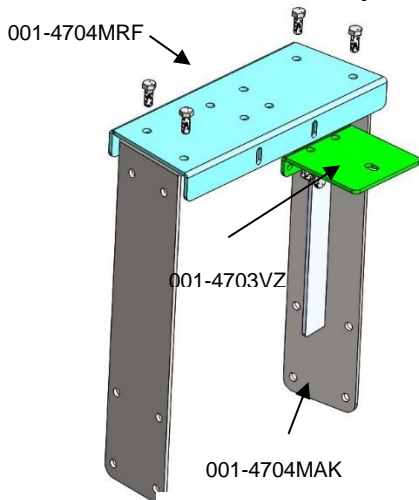


Figure 4

*Reversed View

Figure 5

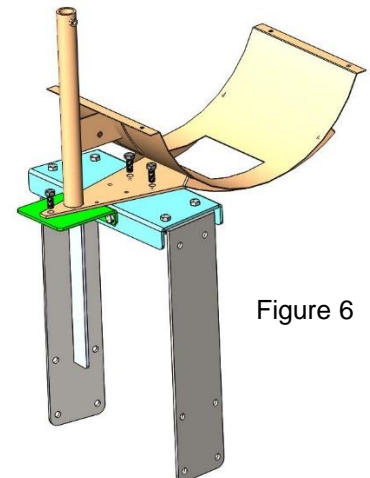


Figure 6

Model 441 (continued)

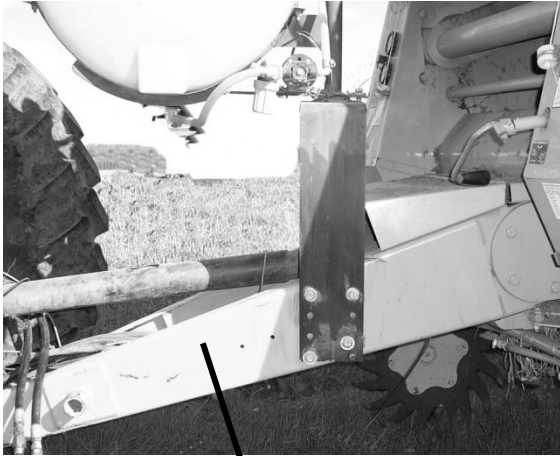
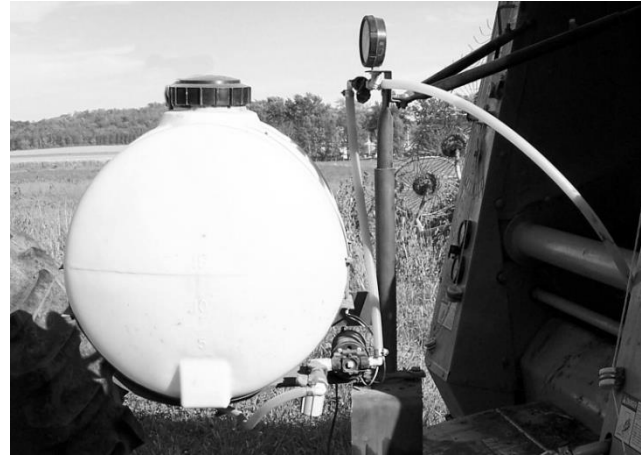


Figure 1



Install Kit 4484

Locate the base bracket (Figure 1 on the baler's tongue or cross frame. Care must be taken to make sure the applicator will be clear of the balers moving parts and the rear wheels of the tractor. Line up the bracket with any existing holes, drill new if necessary. The bracket will be secured with four 1/2" bolts. Mount the tank on top of the stub pipe. Secure with the 1/2" x 1-1/2" inch bolt and hardware.



Figure 2



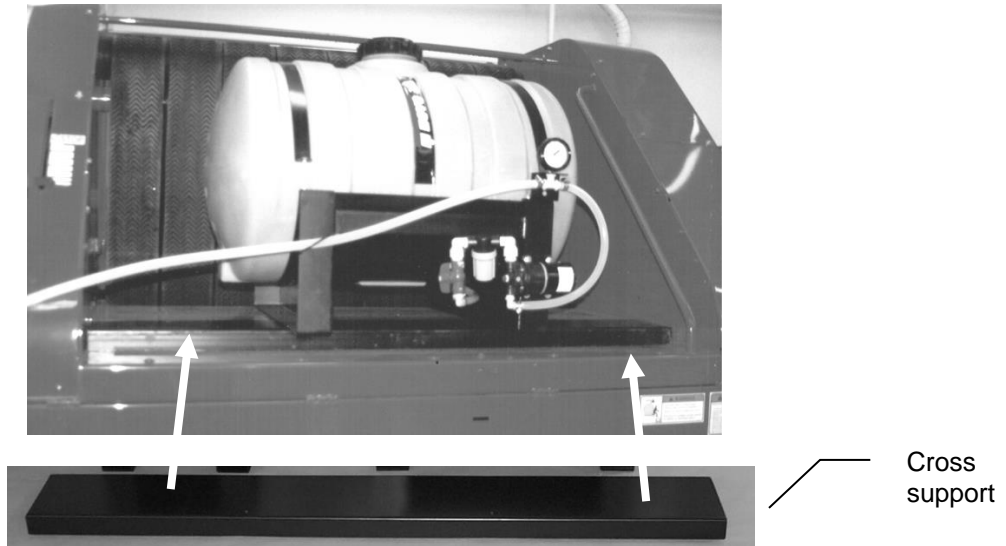
Install Kit 4486

Locate the mounting bracket (Figure 2) on the front of the baler's tongue where it joins the hitch acceptor. Use the 5/8" bolts included to join the two parts of the baler. Orient the bracket so the two holes on top of the bracket will face away from the baler this will allow the applicator to face rearward. Install the tank on top of the mounting bracket using two 1/2" x 1-1/2" bolts and hardware. The tank will face towards the baler when installation is complete.

Model 442

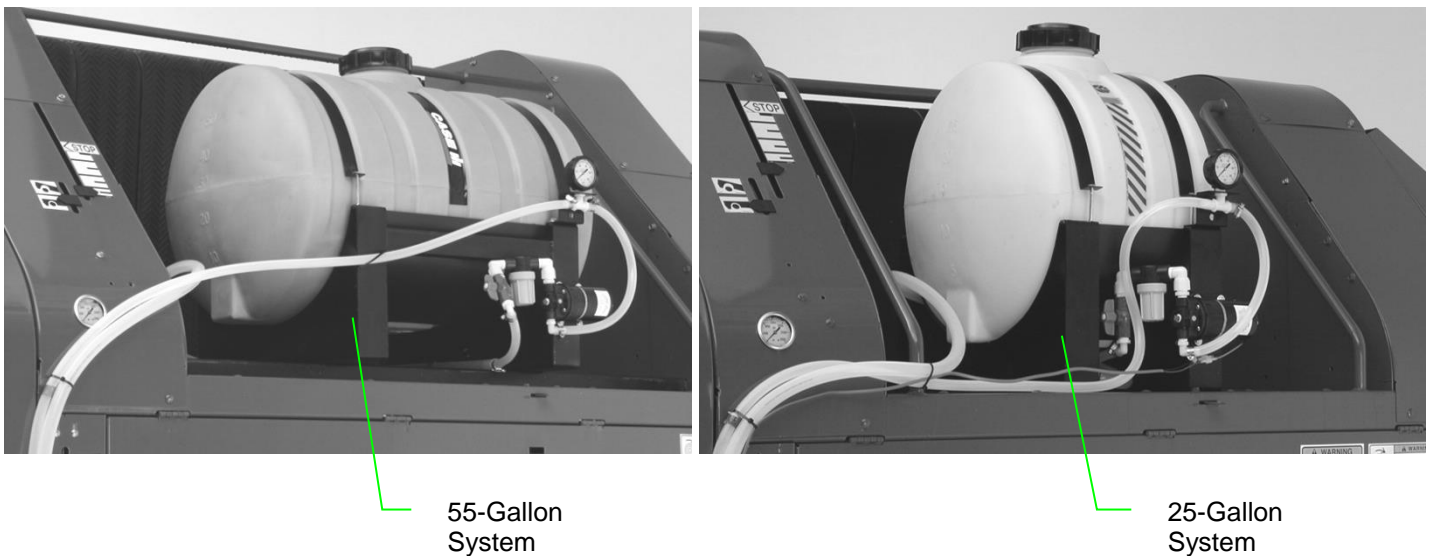
55 Gallon Models Only (200L)

Locate parts bag 14. Locate the cross support on the front shelf of the baler as 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" (14mm) hole on each side sheet to hold the cross piece in place with two 1/2" x 1-1/4" bolts and secure with lock washers and fender washers provided.



For 25 and 55 Gallon (100L&200L) Models

Locate parts bag 13. 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 (100L) models, line up the front tank legs with the front corner of the baler's shelf. Mark and drill all base holes with a 9/16" (14mm) drill. Use the 1/2" x 1 1/4" bolts, lock washers, fender washers, and nuts provided to secure the frame.



Model 448

Install Kit 4502

Locate parts bag 7. Attach legs part #001-4703B to the tank saddle with 3/8" x 1" bolts, flat and lock washers. The legs will attach on top of the bale chamber in front of the hydraulic compression area. (Figure 1) You will need to drill four 1/2" (13mm) holes on top of the chamber to mount the tank and frame. Clamp legs on top of the bale chamber, mark the holes and drill. The 1/2" x 1-3/4" inch allen head carriage bolts will be inserted through the bale chamber along with flat washers so that the carriage head will be inside of the chamber. Secure the Allen head carriage bolts with 1/2" nuts, flat and lock washers.

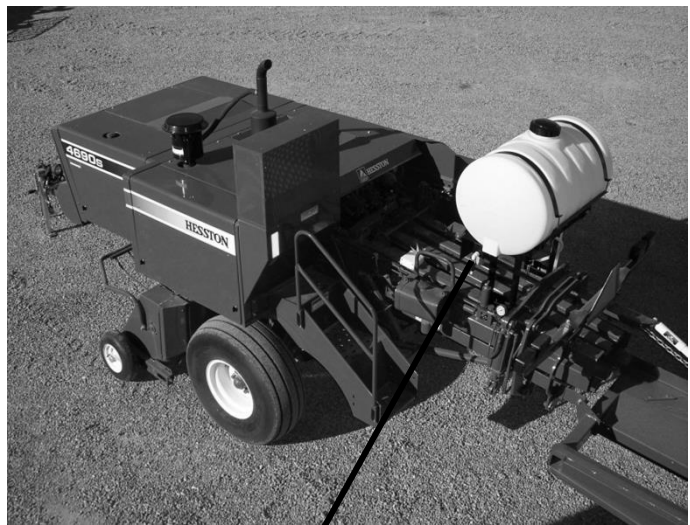
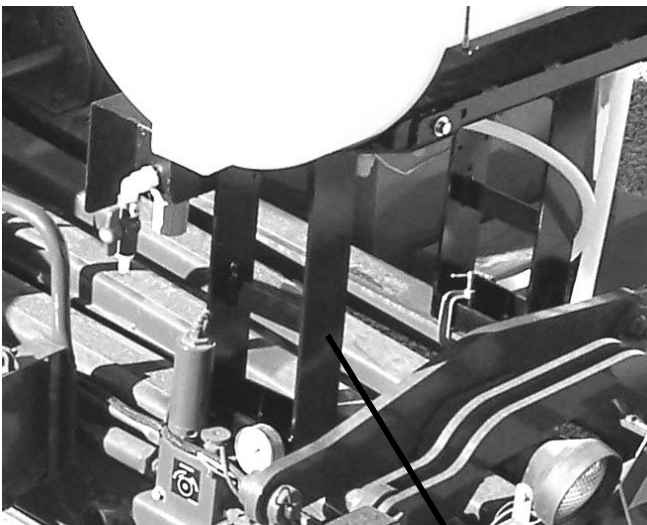
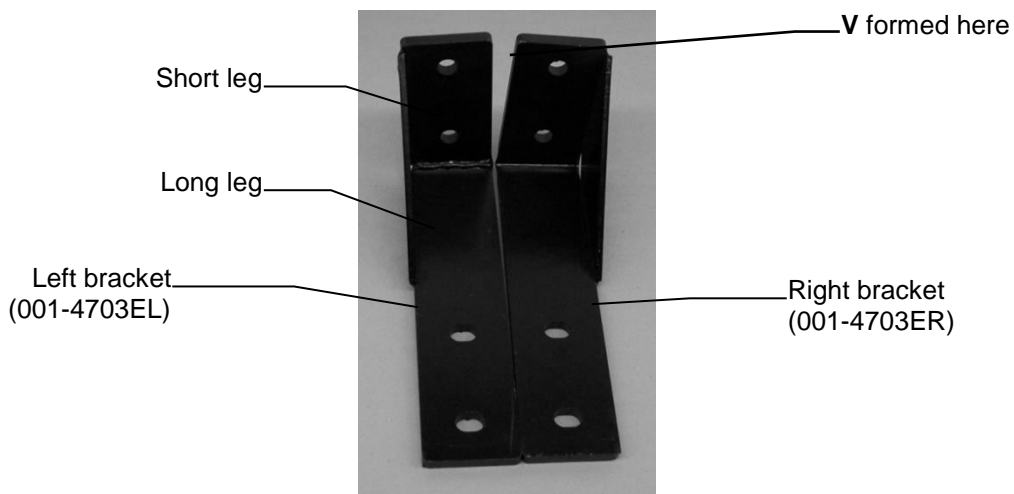


Figure 1

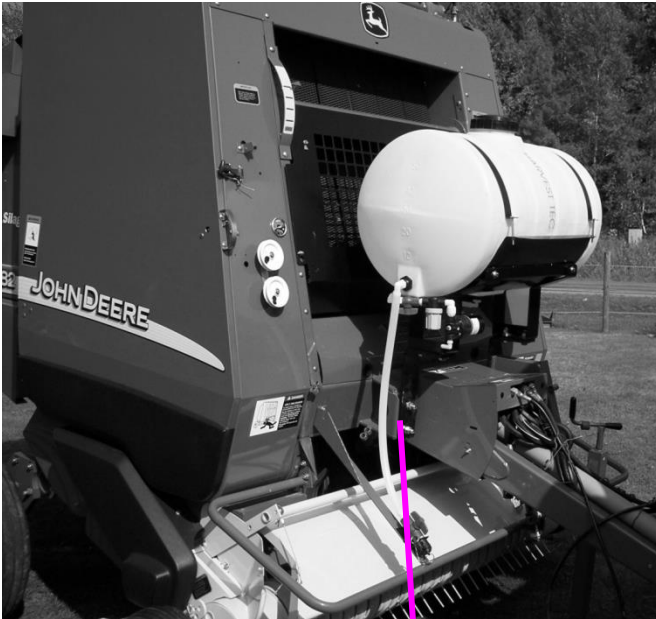
Install Kit 4503 for John Deere 582

Locate parts bag 7. 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 lying 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.

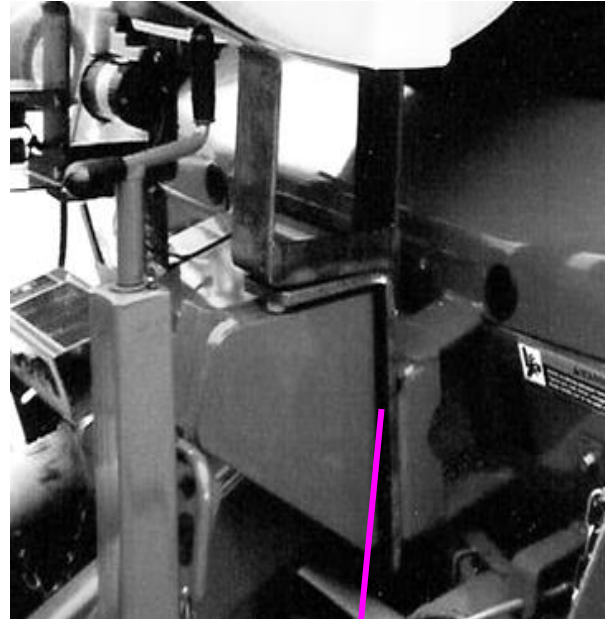


Install Kit 4503 for John Deere 582 (continued)

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 left bracket bolts to the right 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, nuts, and flat washers. Attach the saddle legs to the mounting bracket with 1/2" X 1 1/2" bolts, locks, nuts, and flat washers.



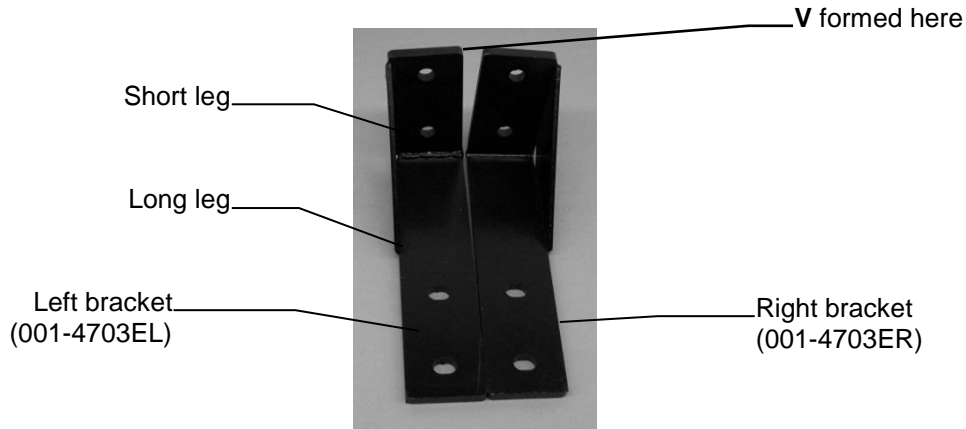
L1
001-4703ER



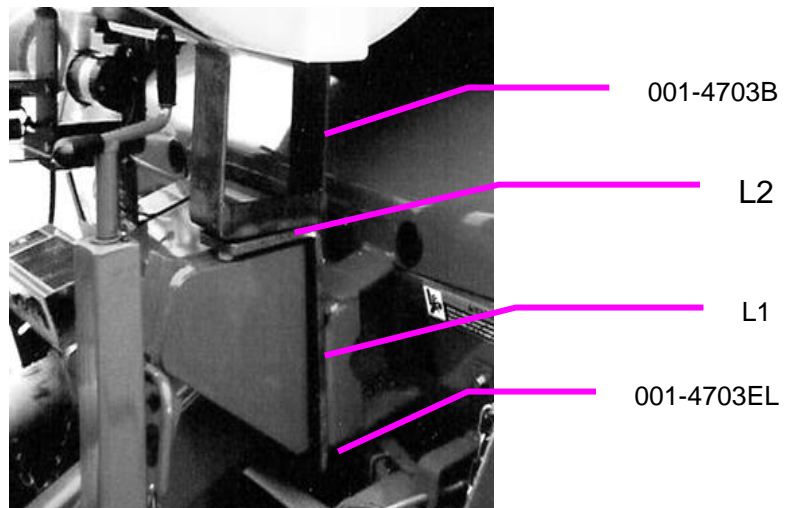
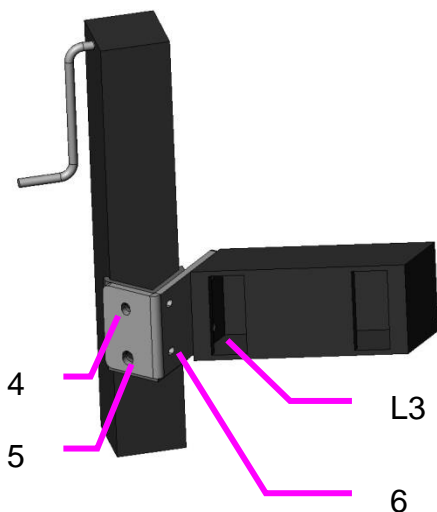
L2
001-4703EL

Install Kit 4503 for John Deere 854

Locate parts bag 7. 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 lying 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.



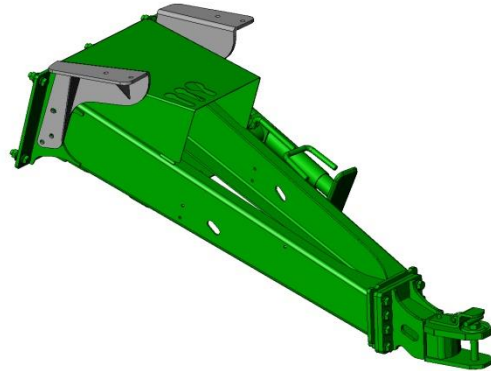
Before installing the brackets, the baler tongue must be supported by some means other than the jack (ex. hooked to a tractor). Looking at the baler from the front, the right bracket bolts to the left side of the hitch using two M16 x 55mm bolts, washers, lock washers, and nuts (labeled **L1** below). 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 the with 1/2" X 1 1/2" bolts, locks, nuts and flat washers.



Model 448

Install Kit 4504, 4517, 4547

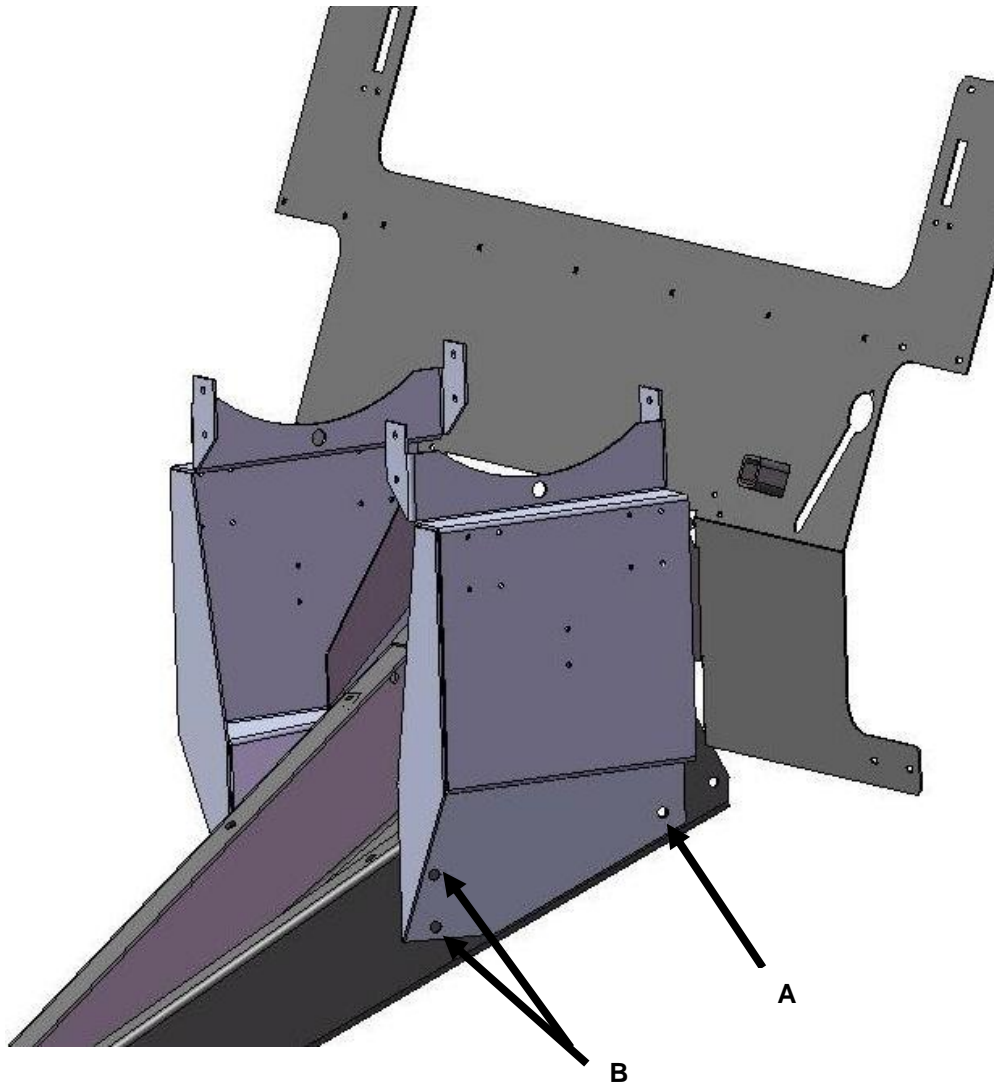
Attach legs part #001-4703B to the tank saddle with 3/8" x 1" bolts, lock and flat washers. The L-shaped brackets part 001-4703DL and 001-4703DR will attach to the baler with M12 x 45 mm bolts. Three bolts will be used per side on 8 Series balers and two bolts per side with the 9 Series balers. When 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.



Model 448

Install Kit 4505

Locate parts bag 7. 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 as in 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.



Model 448

Install Kit 4506

Locate parts bag 7. Attach legs part #001-4703B to the tank saddle with 3/8" x 1" bolts, flat and lock washers. The legs will attach on top of the bale chamber in front of the hydraulic compression area. (Figure 1) You will need to drill four 1/2" (13mm) holes on top of the chamber to mount the tank and frame. Clamp legs on top of the bale chamber, mark the holes and drill. The 1/2" x 1-3/4" inch Allen head carriage bolts will be inserted through the bale chamber along with flat washers so that the carriage head will be inside of the chamber. Secure the Allen head carriage bolts with 1/2" nuts, flat and lock washers.

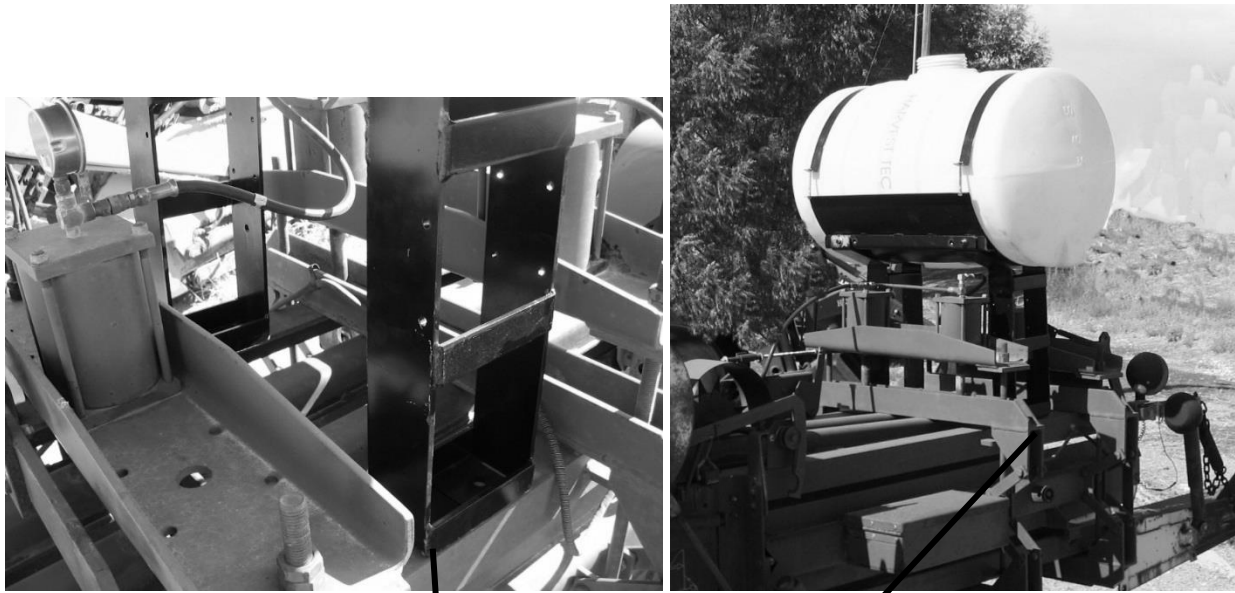


Figure 1

Install Kit 4507

Locate parts bag 7. Attach legs part #001-4703B to the tank saddle with 3/8" x 1" bolts, flat and lock washers. The legs will attach on top of the bale chamber in front of the hydraulic compression area. (Figure 1) You will need to drill four 1/2" (13mm) inch holes on top of the chamber to mount the tank and frame. Clamp legs on top of the bale chamber, mark the holes and drill. The 1/2" x 1-3/4" inch Allen head carriage bolts will be inserted through the bale chamber along with flat washers so that the carriage head will be inside of the chamber. Secure the Allen head carriage bolts with 1/2" nuts, flat and lock washers.

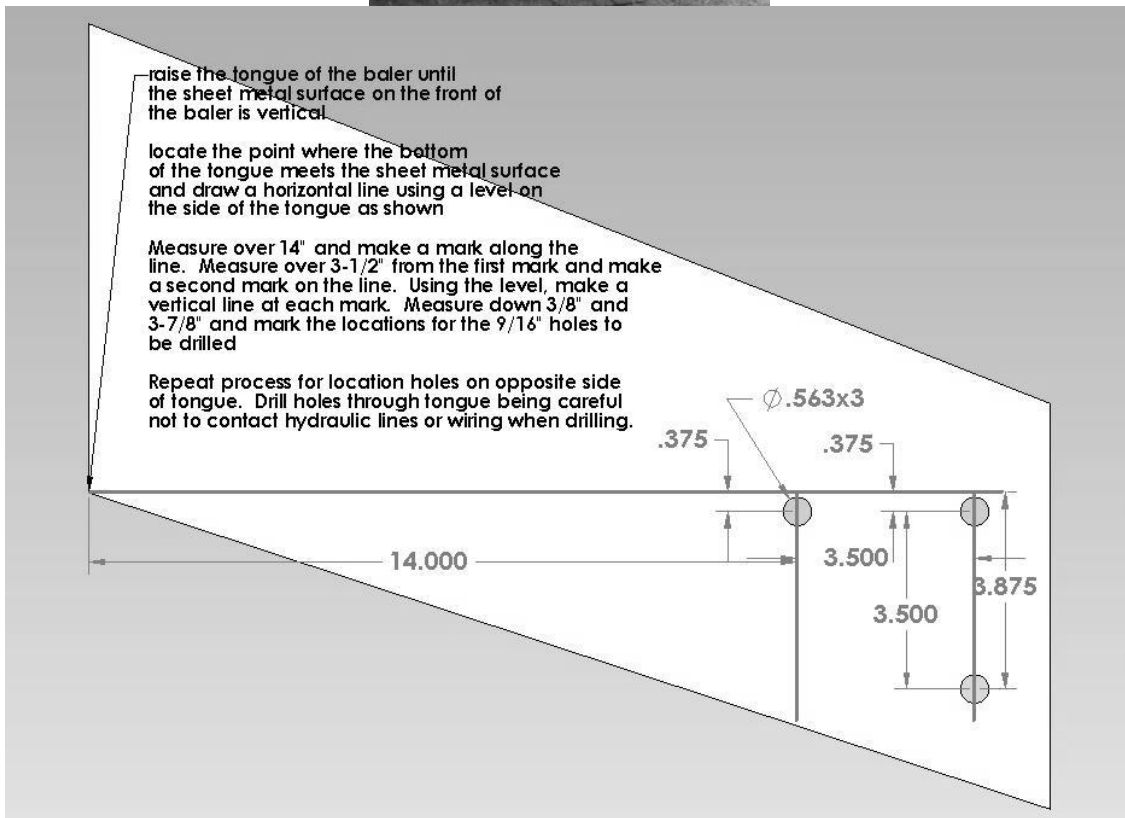


Figure 1

Model 448

Install Kit 4508

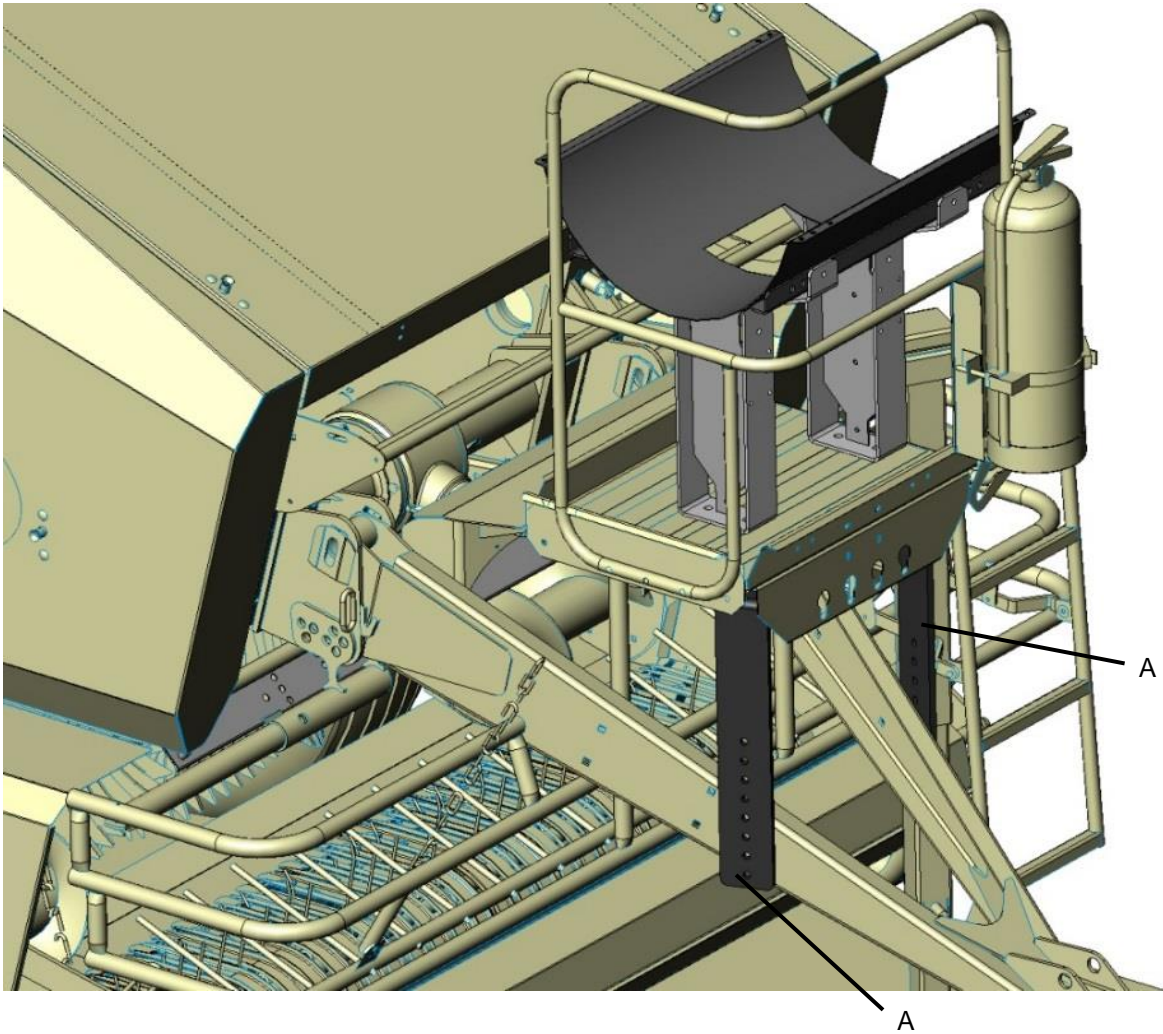
Locate parts bag 7. Locate legs part #001-4703K and part #001-4703L. Use the diagram below to locate the placement of the holes you need to drill. You will need to drill three 1/2" holes per side of tongue. After drilling the holes you will need to loosely attach the legs to the tongue with 1/2" X 2" 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 down bolts attaching saddle to legs.



Model 448

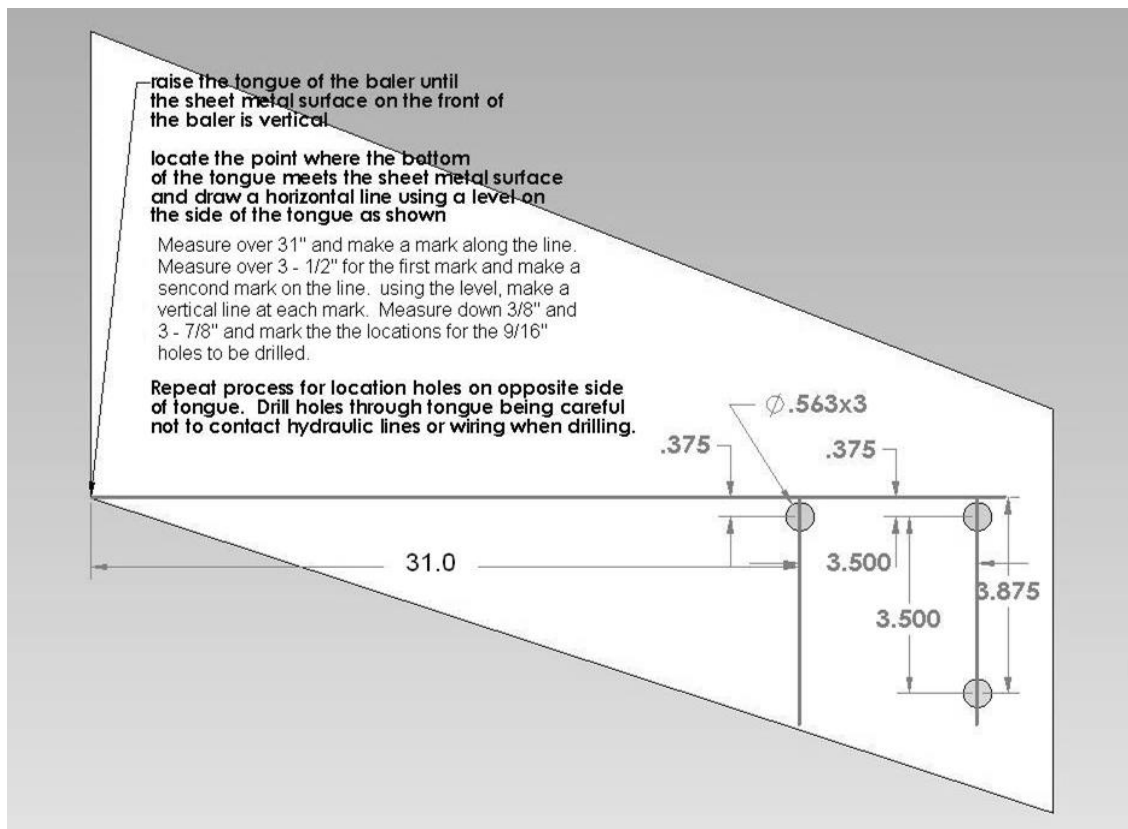
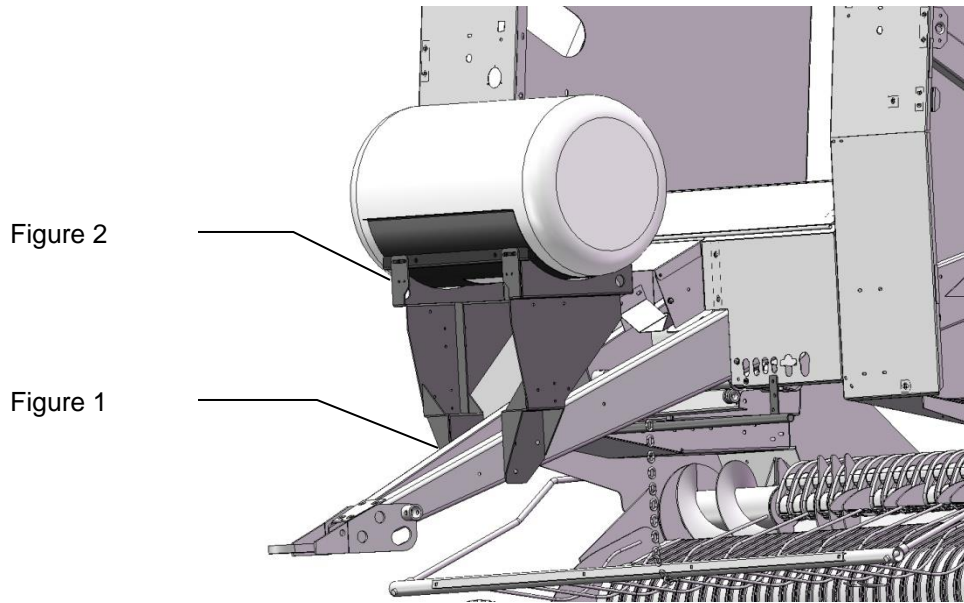
Install Kit 4523

Mount the saddle and legs on the baler as shown in the picture below. Push the tank as far forward as possible and mark the four 1/2" (13mm) holes that will need to be drilled. Locate the two support legs (001-4704JR & 001-4704JL) shown below (A). Align the support legs below the tank legs and attach through the baler platform using four 1/2" x 1-1/2" bolts, locks, flats and nuts. Mark and drill four 1/2" (13mm) holes where the support legs (A) meet the baler hitch. Attach the legs to the baler frame using four 1/2" x 1-1/2" bolts, locks, flats and nuts. Tighten all hardware.



Install Kit 4524

Locate parts bag 7. 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" (13mm) 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 448

Install Kit 4526

Locate parts bag 7. Locate the mounting bracket (001-4704MA). Mount the bracket on the baler hitch and move towards the baler until the mounting bracket contacts both sides of the baler hitch. Mark and drill four 13 mm holes and attach the mounting bracket using four 1/2" x 1-1/2" bolts, locks, flats, and nuts. Tighten hardware.

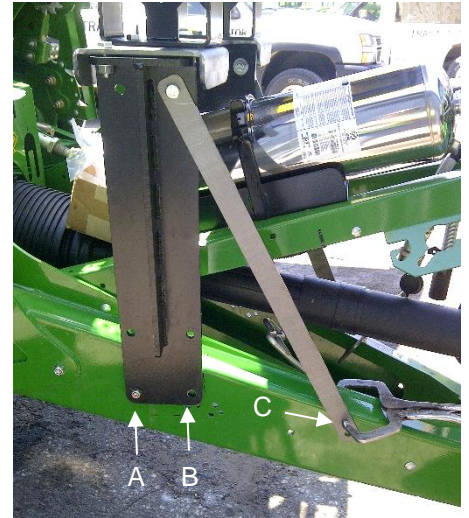
Mount the legs and saddle to the top of the mounting bracket (001-4704MA). Use four 1/2" x 1-1/2" bolts, locks, flats, and nuts. Tighten hardware.



Tank Mounting – 4538 Kit

*Illustrated Installation on next page

The tank mounting uses 1 existing bolt on each side of the tongue. Locate the net wrap cap bracket on the inside of the right side of the tongue. Remove the bracket. Drill out the front hole to 9/16" (14mm) diameter (A). Reinstall net wrap cap bracket with one existing bolt/nut in the back mounting hole. Place the rear, bottom hole on tank support, 001-4704MA, on the newly drilled hole. Use supplied hardware, 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut to secure tank support. Ensure the bracket is vertical, then mark and drill the front, bottom hole for the tank support (B). Secure with same hardware. Use tank support brace, 001-4704MDJ, to secure the tank support to a 3rd point further forward on tongue (C). Mark and drill 9/16" (14mm) diameter hole. Secure top and bottom of brace with 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut.



Locate existing hole on left side of tongue, opposite of the existing hole used on the right side of the tongue. Drill hole out to 9/16" (14mm) diameter as done on previous side. Place the rear, bottom hole of tank support, 001-4704MA, over newly drilled hole and secure with 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut. Ensure the bracket is vertical, then mark and drill front hole of support, secure with 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut. Use tank support brace, 001-4704MDJ, to secure the tank support to a 3rd point further forward on tongue (C). Mark and drill 9/16" (14mm) diameter hole. Secure top and bottom of brace with 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut.



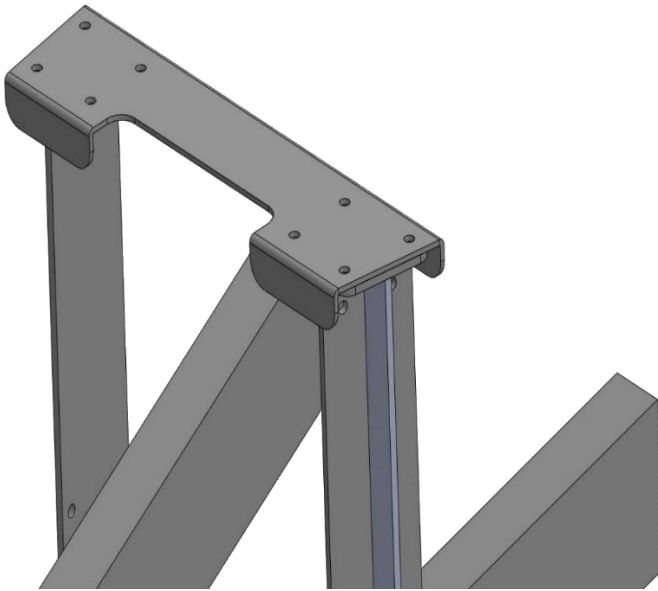
With the two tank supports, 001-4704MA, mounted to each side of tongue, install the cross member support, 001-4704MEJ, on the top of both 001-4704MA supports. The outer most holes on the cross member should line up with the tank supports. Use 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut to secure bracket. Install both tank legs, 001-4703B, to the remaining four holes on the cross member using 1/2" x 1-1/4" hex bolt, washer, lock washer, and nut. Only snug bolts at this time.

Place tank and saddle assembly on top of the leg supports. The two inner most holes on the saddle should line up with the leg supports. Start the hardware that connects the legs to the saddle, 3/8" x 1" hex bolt, lock washer, and flat washer. Once all four bolts are started, tighten the bolts that secure the leg supports, 001-4703B, to the cross member, 001-4704MEJ. With the legs tightened to cross member, then you can tighten the legs to the saddle.

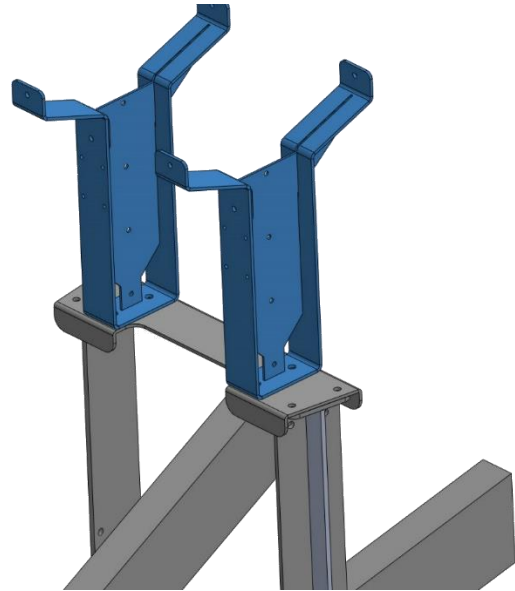


Tank Mounting (continued)

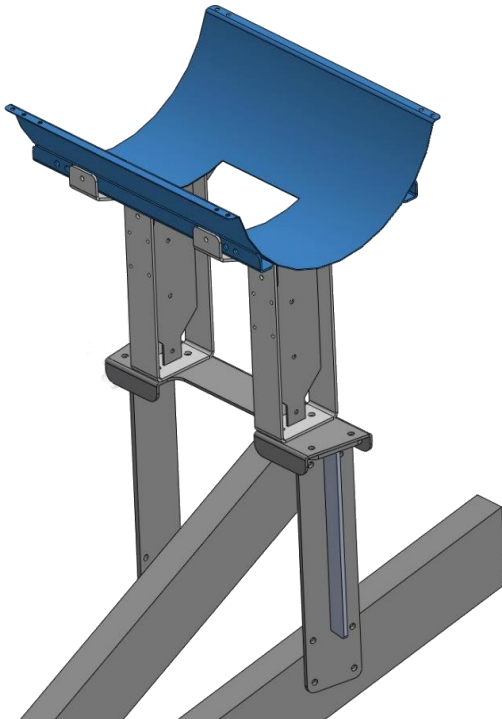
Illustrated Installation – 4538C Kit



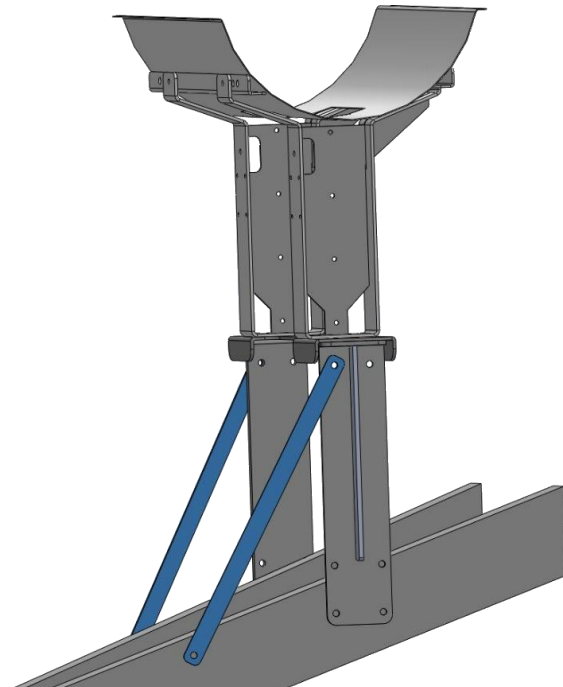
Step 1



Step 2



Step 3



Step 4

2. Installation of Drain Fill Line (Models 434, 440, 442 & 448)

Model 434

Using parts bag 1, locate the pre-drilled hole at the front of the bale chamber (figure 1). Secure valve assembly to baler using 5/16" x 3/4" carriage bolts (figure 2). Thread 3/4" elbow fitting into tank, cut hose to correct length and connect to valve assembly. Secure with hose clamps on both ends (figure 3).

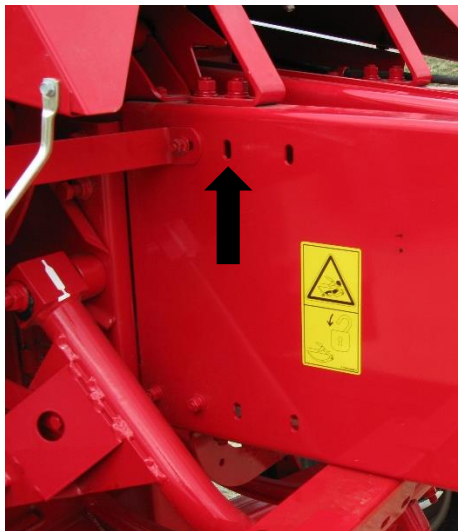


Figure 1



Figure 2



Figure 3

Model 440

Locate parts bag 1. Install the straight fitting (003-A3434) or elbow fitting (003-EL3434) into the side fitting in the tank (Figure B). Drill two 5/16" holes using the valve holder (001-6702H) as a template on the right side of the baler above the tire. Mount the valve holder with two 5/16" x 1" self-tapping bolts and flange nuts. Attach the 3/4" cam coupler to the 3/4" ball valve through the valve holder. Insert the straight fitting (003-A3434) into the ball valve. Cut the 3/4" hose to length secure on both sides using hose clamps. Install supplied safety decals (DCL-8001 & DCL-8005) next to the ball valve assembly.

Model 442 & 448

Locate parts bag 1. Thread 3/4" elbow fitting into end of tank. (003-EL3434) Run 3/4" hose from the elbow down the frame to the bottom of the baler. Drill 1/4" holes to accept the valve holder bracket and use 5/16" x 1" self-tapping screws and flange nuts. Connect valve assembly to other end of hose. Place hose clamps on both ends. Secure hose to frame using zip ties. Install supplied safety decals (DCL-8001 & DCL-8005) next to the ball valve assembly.



3. Installation of Gauge, Reach Rods and Hose Manifold.

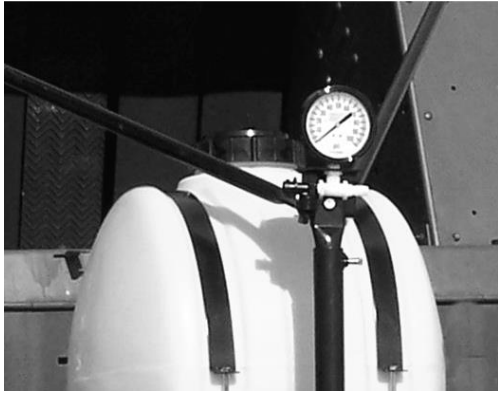


Figure 1

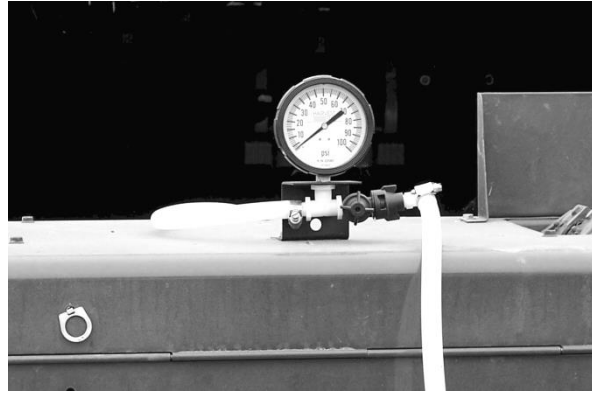
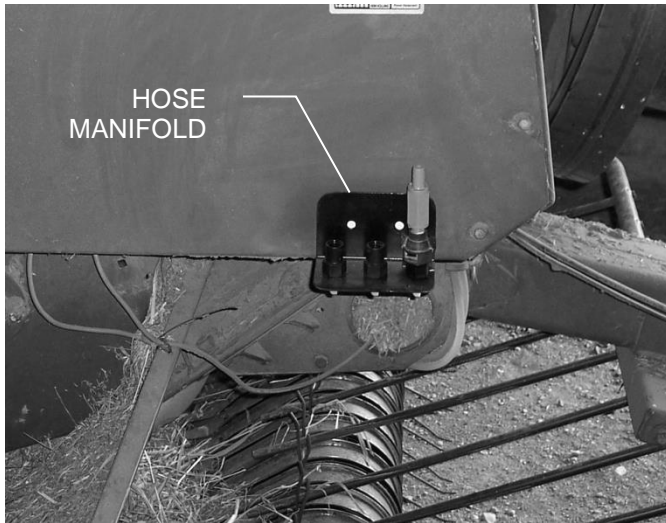
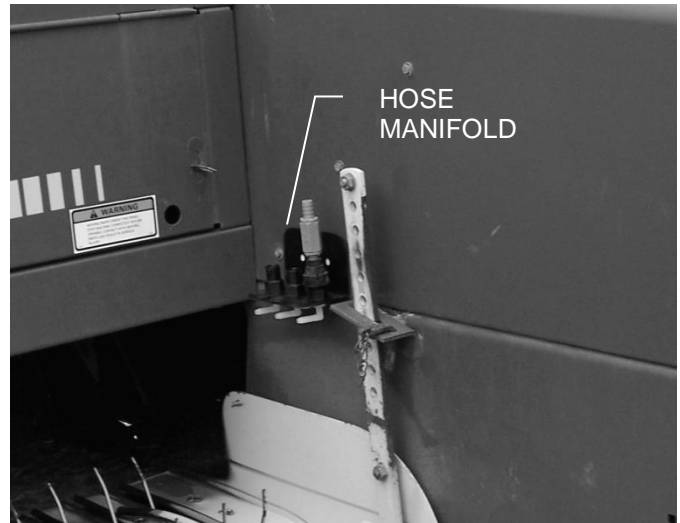


Figure 2

On round balers (Figure 1) locate the pressure gauge and pressure gauge holder in a position so that it is easily viewed from the seat of the tractor. The gauge holder can be used as a joiner for the two top reach rods as pictured here. Connect the reach rods behind the tank at an angle that will properly support the tank and saddle from any movement. **NOTE: REACH RODS MAY HAVE TO BE BENT ON THE TAB TO ALIGN PROPERLY.** On square balers (Figure 2), the gauge is normally best viewed if it is located on the top sheet metal above the pickup head. The gauge is also supplied with an elbow in the parts bag. Use if necessary (small square only). Mount the hose manifold on the front of the baler in the area of the spray shield. Make sure the bracket will not interfere with any baler operations. The hose manifold is included with all small square kits except those using install 4415 & 4415-SO.



AGCO & Case IH inline balers

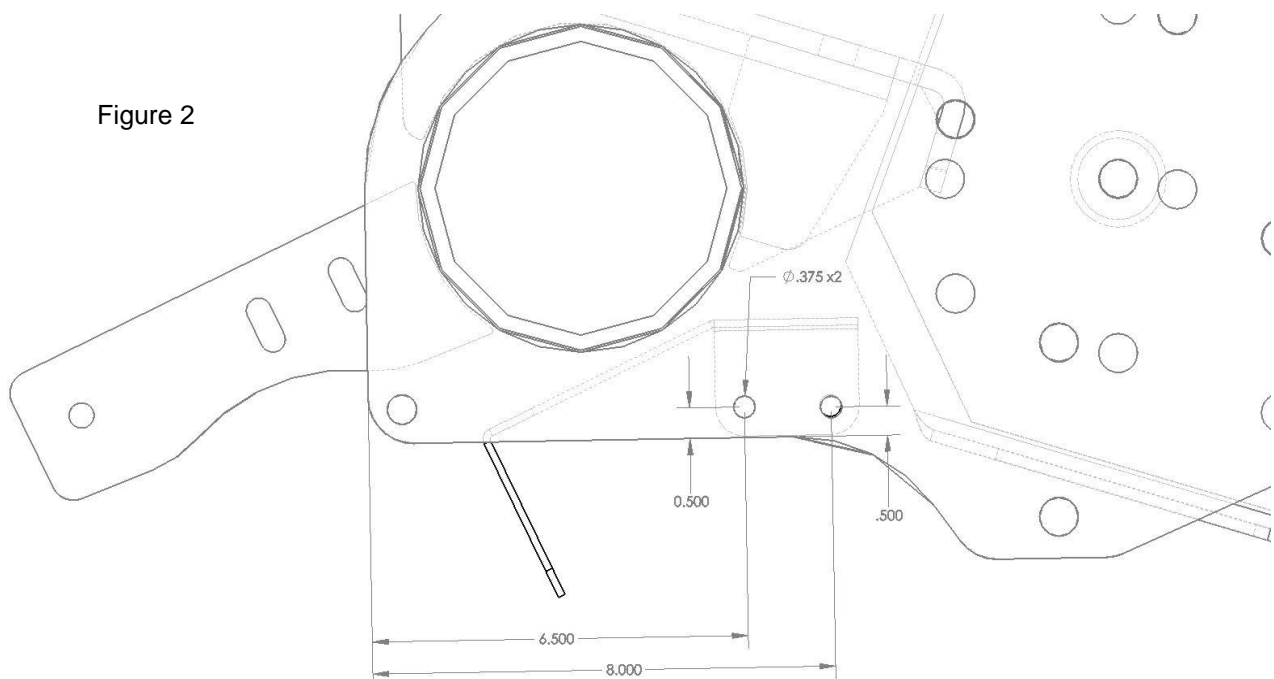
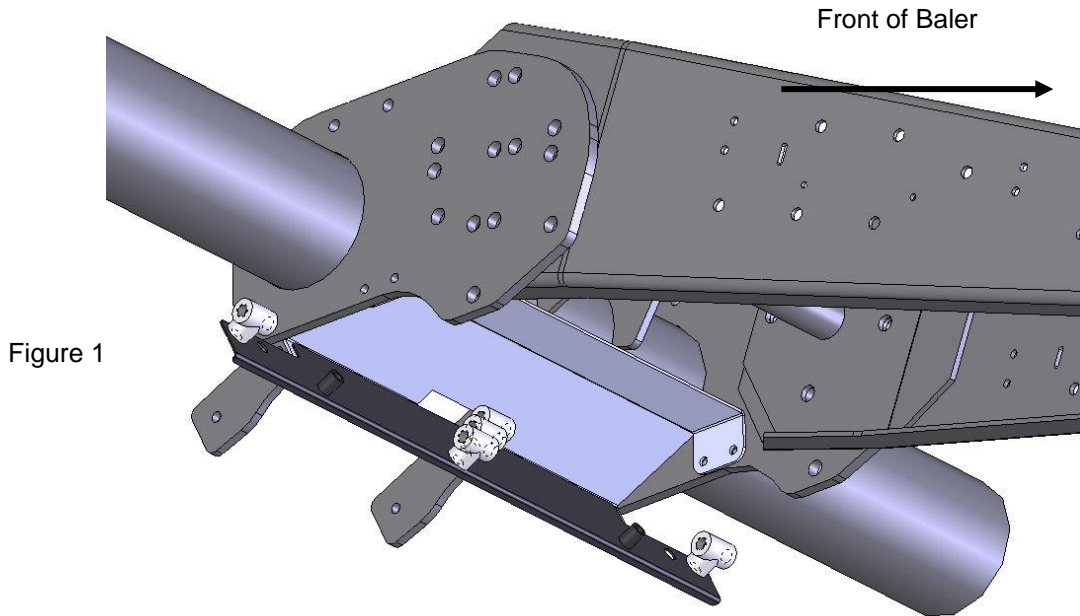


New Holland & Case IH SBX
With 4409 install kit

4. Placement of Spray Nozzle Assembly

Install Kit 442-SO

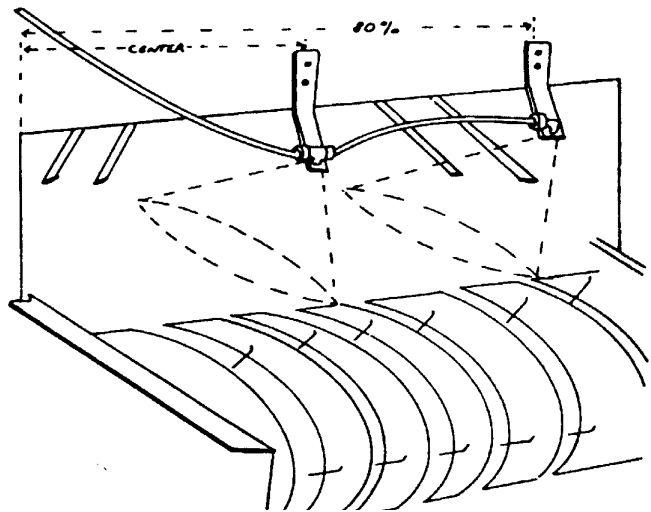
Locate the spray shield (001-4810B) and the spray shield holder (001-4810BRH). The assembly will mount as shown in figure 1. The location shown in figure 1 is directly above the balers pickup. Four 3/8" (10mm) holes will need to be drilled to mount the shield holder to the baler (Figure 2). Mount the 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.



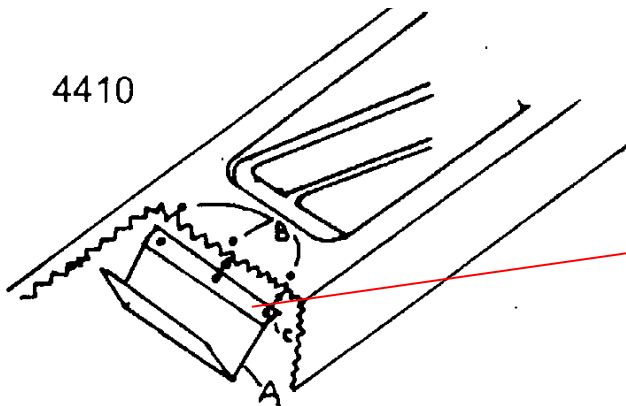
Install Kit 4409

Conventional Baler with Gathering Forks.

1. Mount the left hand nozzle so that it is approximately 80% across the width of the pick-up head. Example: if the head is 60" wide, locate the nozzle 48" from the right side of the head (60"x80".)
2. Mount the right hand nozzle so that it is approximately centered on the pickup head.
3. Bend the nozzle bar in so that the tip is pointed in toward the bottom of the gathering chamber and about 16" above the sheet metal base of the chamber. Twist the nozzle so the tip is tilted 45 degrees from horizontal.



4. Three 1/4" lines will need to be run from the hose manifold to the nozzle straps. Use the color-coded stickers to attach the correct hose to the correct tips, and couplers. Secure the lines to the bracket and spray shield using the supplied hose clamps.



Install Kit 4410

Bolt the nozzle holder (A) up under the baler's hood. Remove 3 bolts (B) on the baler and replace with hardware in kit to fasten lip (C) securely in place. Three 1/4" lines will need to be run from the hose manifold to the spray shield. Use the color-coded stickers to attach the correct hose to the correct tips, and couplers. Secure the lines to the bracket and spray shield using the supplied hose clamps.

Install Kit 4415 & 4415-SO

Locate the hay guard directly above the bale chamber. This install can be done with the hay guard in the baler, but it is recommended to remove. Consult your dealer for procedure.

Installation of Spray Shield

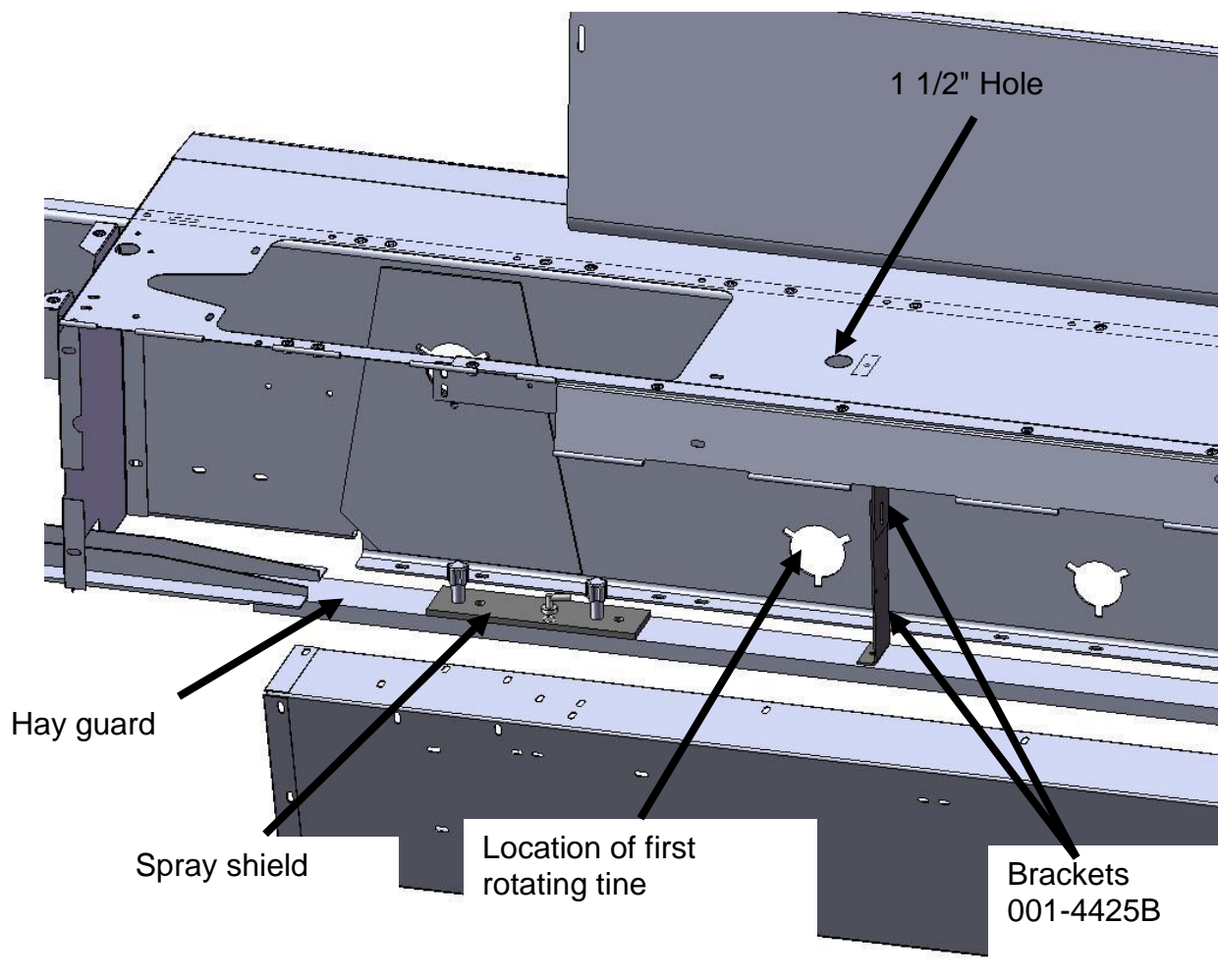
1. Mark a point 9-1/4" from the knife on the hay guard and draw a squared line across the width.
2. Remove hay guard from baler if possible. Mark the top and bottom of the hay guard for the correct re-installation.
3. Back out plastic drill guide until it is flush with the bottom of the spray shield. Line up the spray shield on the hay guard with the KNIFE sticker against the line just marked.
4. Center and clamp the spray shield firmly in place.
5. Using a 1/2" drill bit, mark the location of the two 1/2" (13mm) holes to create a center mark. **DO NOT DRILL THROUGH STEEL.**
6. Remove spray shield. On the holes just marked, use a 1/4" drill bit and drill through both pieces of steel as square as possible.
7. Insert two 1/4" x 2" button head cap screws through holes in the bottom of the hay guard. The head of the screw will need to be down (in the chamber). Secure with nylon lock nut on top side.
8. Replace spray shield and secure with the hold-down knobs.
9. Drill out the single hole with the drill guide installed with a 1/4" drill bit. Drill through both pieces of steel.
10. Remove the spray shield and using a 1-1/2" hole saw, drill out the hole through the TOP STEEL ONLY.
11. Drill out the bottom hole with a 9/16" bit. Be careful to not oblong the holes. De-bur any metal filings left around the hole on both sides of the hay guard. Use touch-up paint on bare surfaces if available.
12. Remove plastic drill guide from the shield and thread in the elbow completely into the spray shield.
13. Install the tip strainer followed by the appropriate tip for the application. Tighten nut to secure the strainer and tip.
14. Back the threaded fitting out as far as possible. Place the shield on the hay guard and secure by pressing down. Secure the spray shield with the hold-down knobs.
15. Thread the elbow down until it touches the bottom metal and align as needed for routing the hose. NOTE: Tip should protrude slightly out of the bottom of the hay guard with no space between the tip and the hole.
16. Re-install hay guard onto the baler.

Installation of Hose and Support Bracket

1. If the hay guard was removed for shield installation reinstall at this time.
2. Mark a point 6" from the first rotating tine on the center of the hay guard. Center punch this mark and drill a 1/4" (7mm) hole through both top and bottom of the hay guard.
3. Bolt the bottom bracket (001-4425B) using 1/4" x 2" button head cap screw. Secure with a 1/4" flange nut. The head will need to be down (in the chamber).
4. Loosely install the remaining bracket (001-4425B) to the bottom bracket attaching in the middle. Level the two pieces and extend the top bracket until it reaches the top of the baler. Secure with a 1/4" flange bolt and nut.
5. Mark and drill the top hole with a 1/4" bit. Secure with a 1/4" flange bolt and nut.

Install Kit 4415 & 4415-SO (continued)

6. Route the hose from the pump down the cross member the tank is mounted on towards the right side tire. The hose will go up the right side of the baler towards to the top and center of the baler towards the hole that will be made in the next step.
7. Cut a 1 1/2" (38mm) hole in the top of the baler for the hose to route through. Install the grommet once the hole is complete.
8. Attach the hose, to the elbow, securing with the hose clamp.
9. Secure the hose on the end of the spray shield with one jiffy clips (008-9010) and a 1/4" x 1/2" round head screw.
10. Install the hose from the shield under the hay tine, to the bracket, and out the top.
11. Secure the hose to the bracket with two jiffy clips (008-9010) and 1/4" flange bolts and nuts. **Keep the hose in the center of the bracket.**
12. Run the hose through the top of the baler and down towards the tank. Use the supplied jiffy clips (008-9010) to secure hose in route to the pump.
13. Connect the hose to the pump. See plumbing section.



View from behind the twine box with the inspection door open. On most large round balers 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:

Install Kit 4416

On baler tongue above center of the baler (figure 1), install spray shield holders (001-4424B) on both sides of tongue using pre-drilled holes (figure 2). Securing each with one 3/8" bolt. Do not tighten bolts. Place the spray shield (001-4424A2) on the shield holders using two 3/8" bolts and washers. Spray shield should spray toward back of pickup, between augers, in area before crop enters baler (figure 3). When angle of tips is correct, tighten shield holder bolts. Route hose to hose manifold.



Figure 1



Figure 2

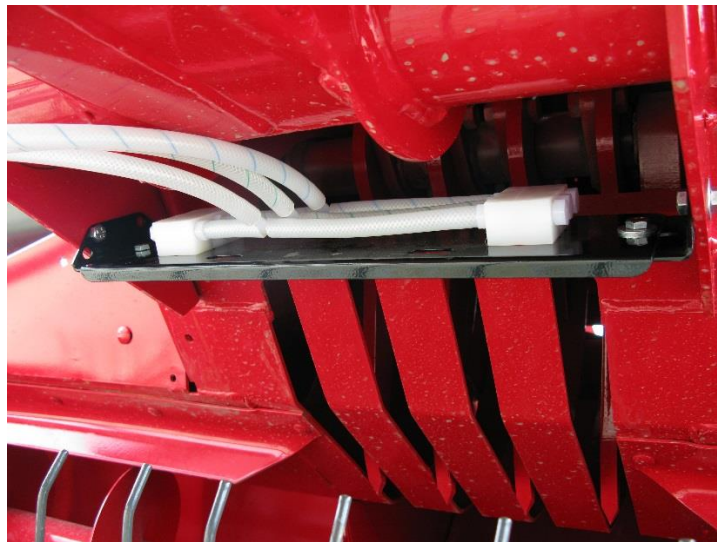


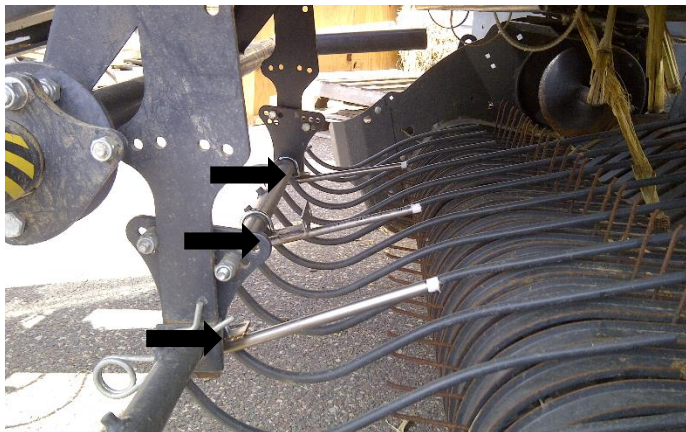
Figure 3

Install kits 4481*, 4482, 4483, 4484, 4485, 4486

***Note:** Use the information below for 4481B kit when baler is not equipped with roller wind guard. If your baler does have a roller wind guard, refer to bottom of page instructions.

The cross bar on the wind guard above the pick-up head provides a mounting point for the nozzle tubes. Mount the center nozzle tube (001-4714A) on the nozzle pipe using the supplied U bolts (001-4714UBS) in the center of the wind guard. The two remaining nozzle tubes (001-4714), will mount 20" (50cm) away from center nozzle tube on both sides. Do not fully tighten.

Position the nozzle tubes up so that the tips spray in a generally horizontal direction. Also point the tips toward the starter rolls of the baler. The tips should be located so that they will be between 14" and 18" (35 to 45 cm) from the normal path of hay. Make sure the tubes do not interfere with the tying system.



Install kit 4481 - When baler is equipped with *Roller Wind Guard*

Locate the spray nozzle tube holder (001-4703TP) shown in figure 1. Situate the holder on the baler tongue, using the bottom pre-drilled hole to line up with the top hole on the pipe holder bracket (001-4703TH), shown in figure 2 and 3. Mark the location on the second hole down on the pipe holder bracket and drill a 5/16" (8mm) hole on both sides of the baler tongue. Attach the holder using two 3/8" x 1" bolts, locks, flats, and nuts. Install the center nozzle tube (001-4714A) on the nozzle tube (001-4703TP) using the supplied U bolts (001-4714UBS). The two remaining nozzle tubes, will mount 1" in from each end of the nozzle tube holder. Do not fully tighten. Position the nozzle tubes so that the tips will be 14"-18" away from the normal path of hay.



Figure 1



Figure 2



Figure 3

Install Kit 4502

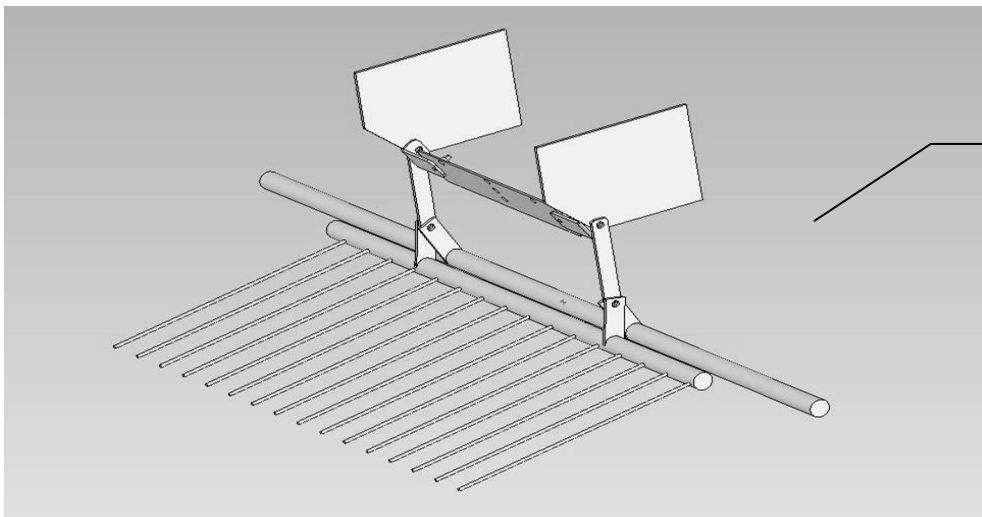


Figure 1

The shield for your baler will mount in the throat of the baler as shown above. Remove nut and bolt on both sides of baler (Figure 1). Install shield holders (001-47031) with 1/2" x 2" bolts, nuts, locks and flat washers. Do not tighten these bolts until the shield is properly aimed. Aim the shield at bottom of the pickup head at point where stuffer fingers connect with hay (between the two augers) and make sure bushing is not removed. Once the shield is in place the nuts may be tightened down.

Install Kit 4503, 4504 & 4505

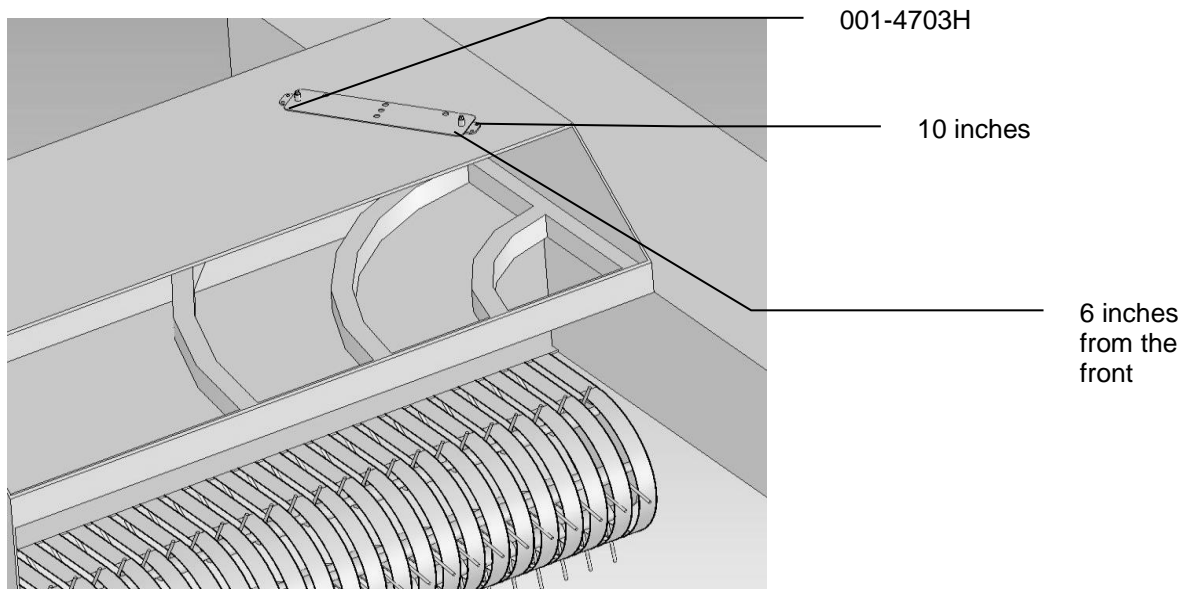
The top cross bar above the full-shielded wind guard provides a mounting point for the short nozzle pipes. (Figure 2). The nozzles will point towards the baler, and a notch may need to be cut on the lip of the full-shielded wind guard for clearance of the elbow. Space the nozzles by the chart below:

PICK-UP HEAD WIDTH	LEFT SIDE (Use plugged fitting)	CENTER (Use 2-way fitting)	RIGHT SIDE (Use 2-way fitting)
48" (121cm)	12" from left (30cm)	Center	12" from right (30cm)
60" (152cm)	14" from left (35cm)	Center	14" from right (35cm)
72" (180cm)	15" from left (38cm)	Center	15" from right (38cm)



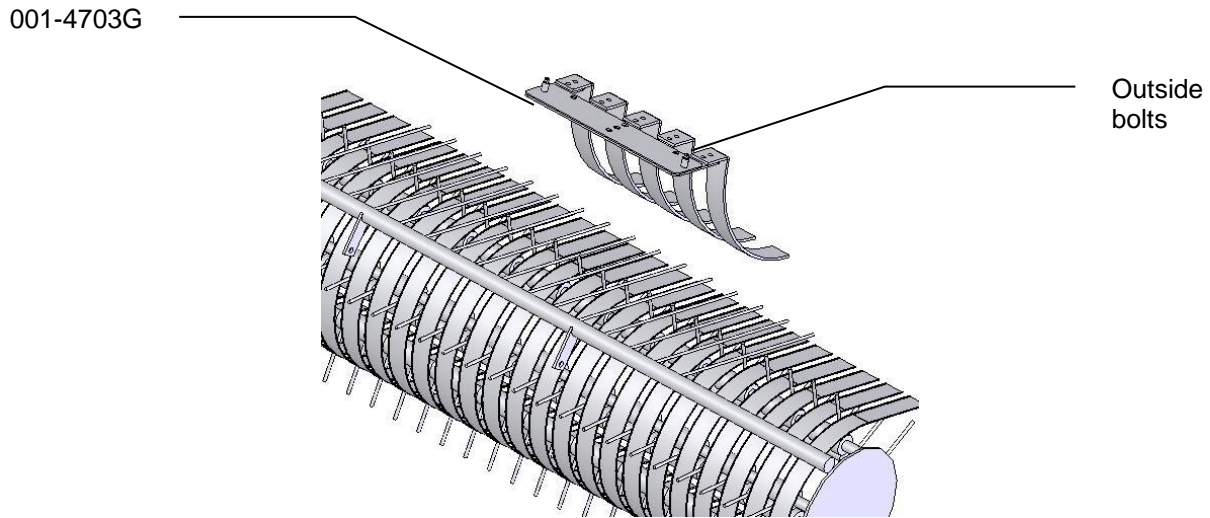
Figure 2

Install Kit 4506



The shield for your baler will mount on top of the sheet metal directly above the pickup head shown in the picture above. Mount shield holder (001-4703H) on top of metal 6 inches from the front of the baler and 10 inches from the side of the baler. Attach this holder with 1/4" x 1-1/4" self-tapping bolts. Place shield of top of holder and rotate the shield to a 45-degree angle. Mark the location of the next holder's position and install. Six holes will need to be drilled below the tips using a 3/4" (16mm) hole saw or bit.

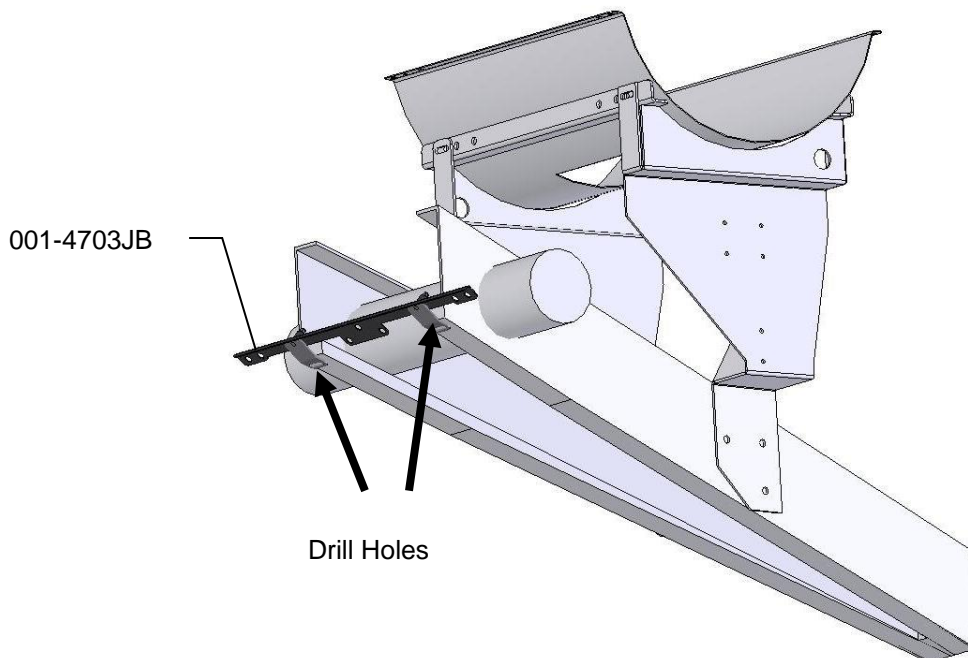
Install Kit 4507



The shield for your baler will mount on the wrap guard as shown in the picture above. Remove the two outside bolts on each side of the wrapper guard. Place bracket 001-4703G so pins are facing up and bolt through with 3/8" x 1 1/2" into bracket 001-4703G, through wrap guard, and into threaded holes on baler frame that the bolts were removed from.

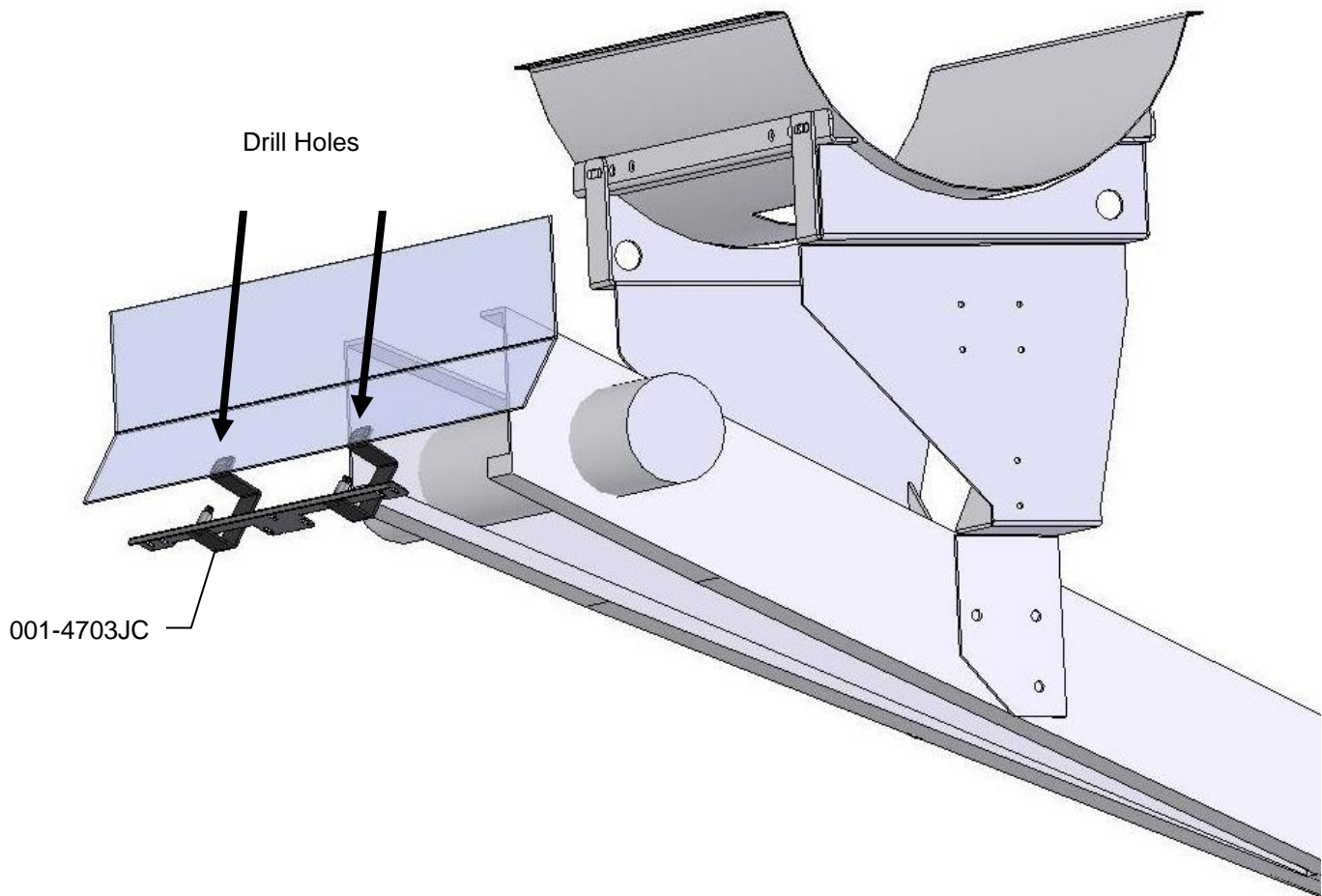
Install Kit 4508

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" (10mm) 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)



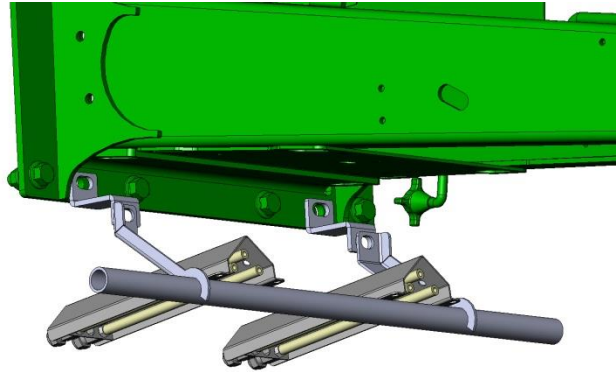
Install Kit 4508 (continued)

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 baler's 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" (10mm) 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)



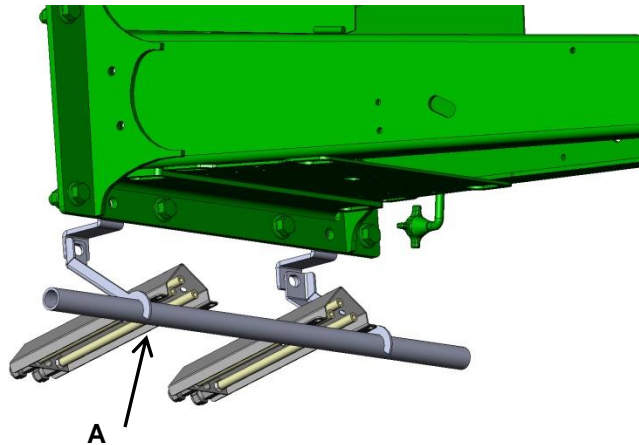
Install Kit 4516 and 4517

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" apart for 5 foot wide balers (1.5M). 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.

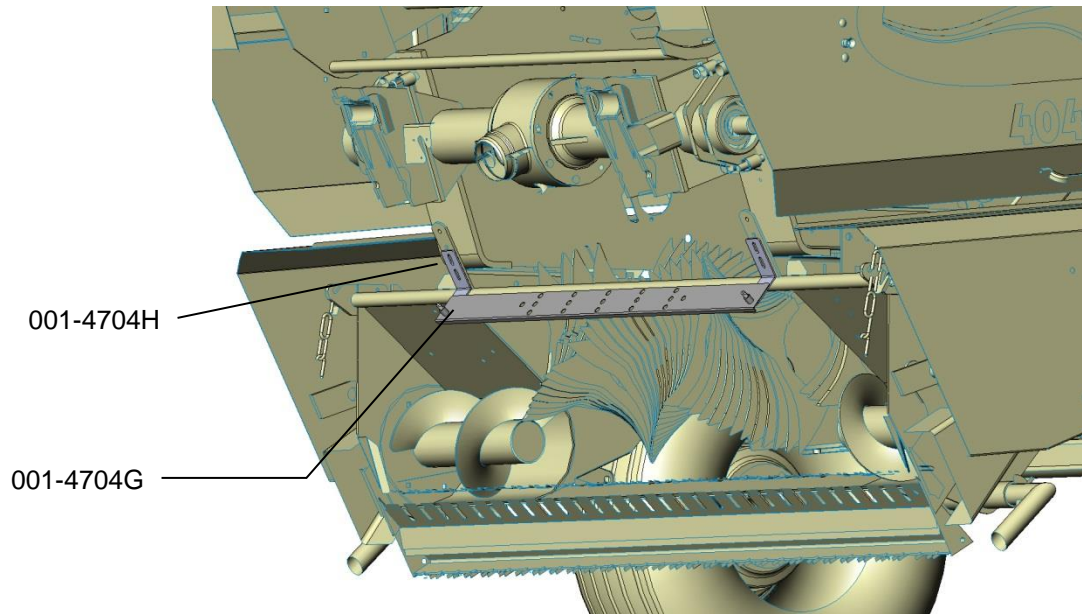
Net Only Baler



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" 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.

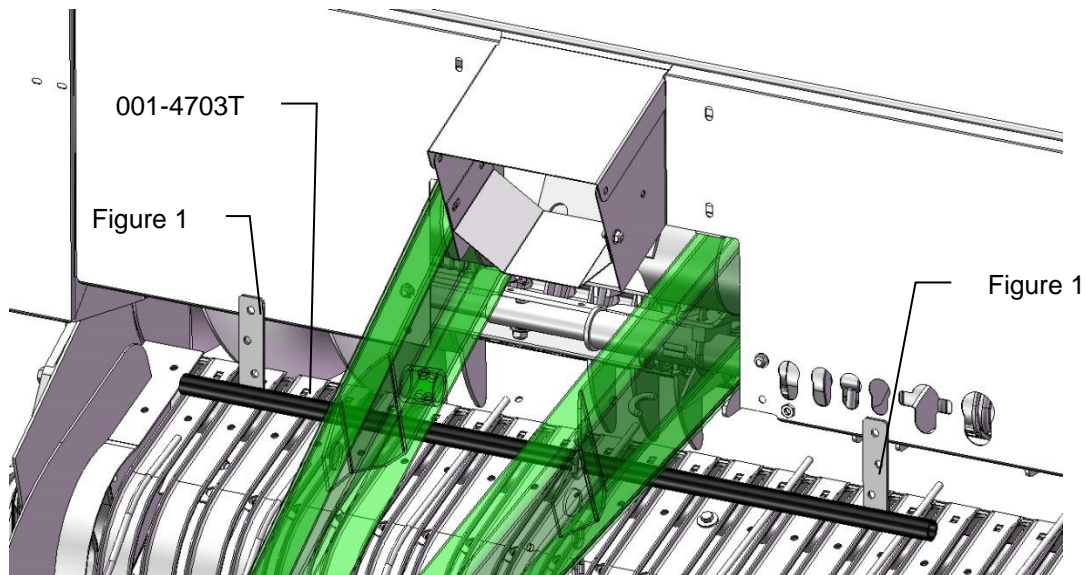
Install Kit 4523 & 4526

Locate the spray shield 001-4704G and spray shield hangers 001-4704H (4523 install) or 001-4704MC (4526 install). Mount the spray shield above the pickup reel and directly in front of the rotor on the baler. Use the two existing holes to mount the shield using four 3/8" x 1-1/2" bolts, locks, flats, and nuts. Tighten all hardware.



Install Kit 4524

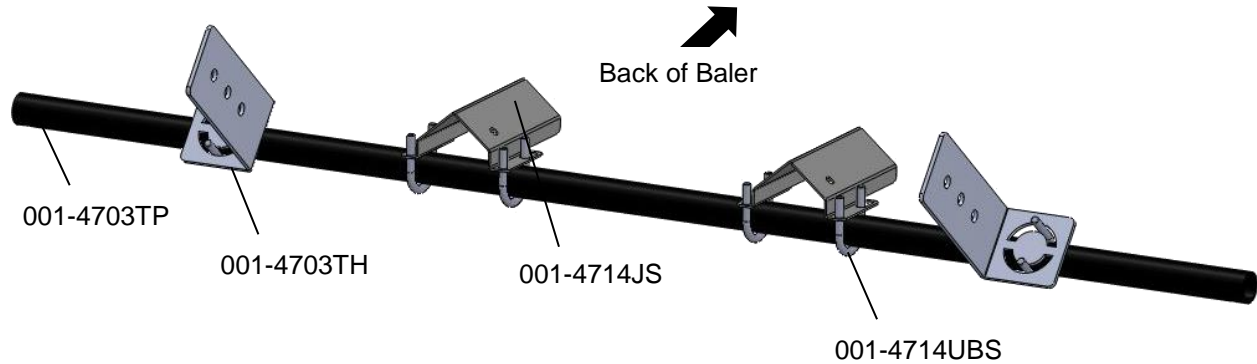
Locate the spray nozzle holder (001-4703T). Situate the holder, centered on the baler sheet metal and mark one hole per side. (Figure 1) Drill two 5/16" (8mm) holes and attach the holder using two 3/8 x 1" bolts, locks, flats, and nuts. Install one nozzle tube in the center. The two remaining nozzle 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" (35-45cm) away from the normal path of hay. Tighten the nozzle tubes to the nozzle holder.



Install Kit 4538

Assemble Spray Bar

Attach the nozzle tube pipe (001-4703TP) to the pipe mounting brackets (001-4703TH) with the supplied U Bolts. Do not tighten U-bolts, to allow mounting brackets to move. Attach the nozzle mounts (001-4714JS) to the nozzle tube pipe with U-bolts and secure. The nozzle mounts should be about 6" (12.5cm) apart for 4' (11cm) wide balers and 9" (23cm) apart for 5' (12.5cm) wide balers.



Attach Spray Bar Assembly

Position mounting brackets (001-4703TH) on the baler tongue above the pick-up as shown in figure 1 at roughly a 45 degree angle. If your baler is equipped with a roller wind guard, the angle may need to be slightly adjusted to allow clearance and proper coverage of the preservative being applied to the incoming crop. When the exact mounting position has been determined on both sides of the tongue, drill two 3/8" (10mm) holes and secure mounting brackets using four 3/8" x 1 1/4" bolts and hardware in parts bag 7. Ensure that the nozzle mounts (001-4714JS) are pointed toward the back of the baler. Figure 2 shows a side view of the mounting bracket and the nozzle pipe from the left side of the baler.

*Ensure pickup raises and lowers without damaging spray bar assembly.



Figure 1



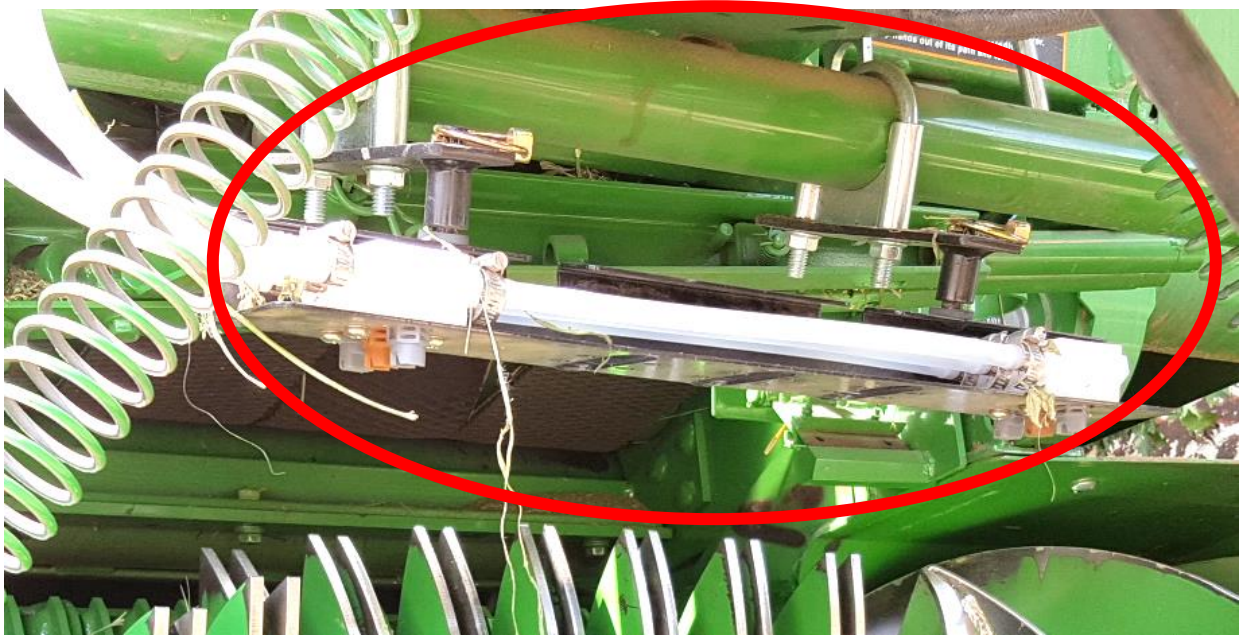
Figure 2

Install Kit 4546 & 4547

Locate the spray shield (001-4435NSX) and the shield holder (001-4435NCX2). Position the assembly over the center of the pickup and secure the shield holder to the cross bar support as shown on right using the two 2" Ubolts (001-4714UBX) include with the kit.

Attach the spray shield to the shield holder as shown below by using the two lynch pins provided (008-4576).

Position the spray shield so the preservative will be spraying in front of the rotating precutter. Test with water to adjust as needed.



5. Installation of Plumbing

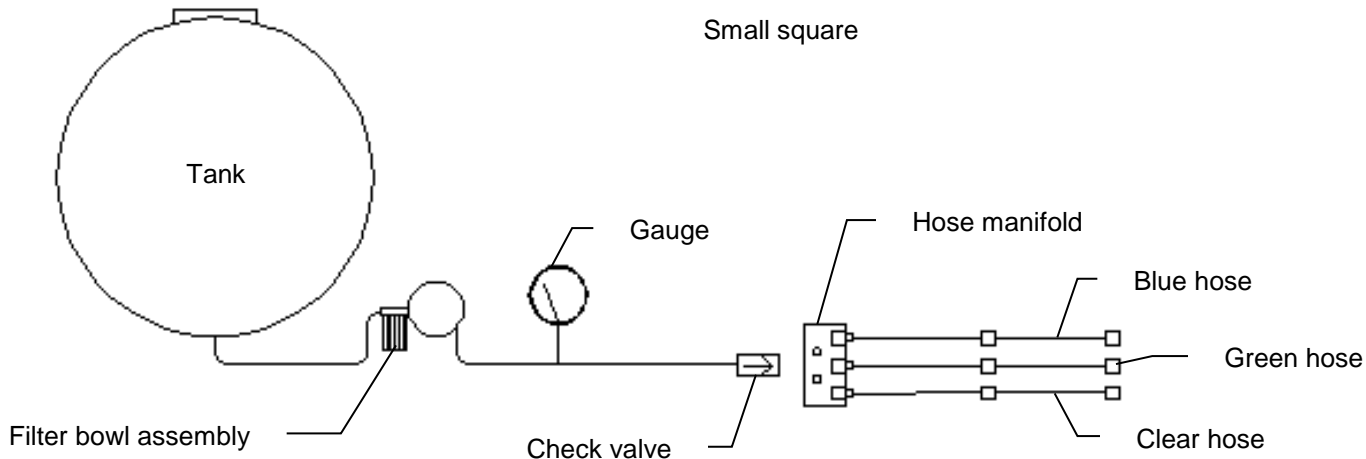
Model 434, 441, 442 & 448

A. 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.

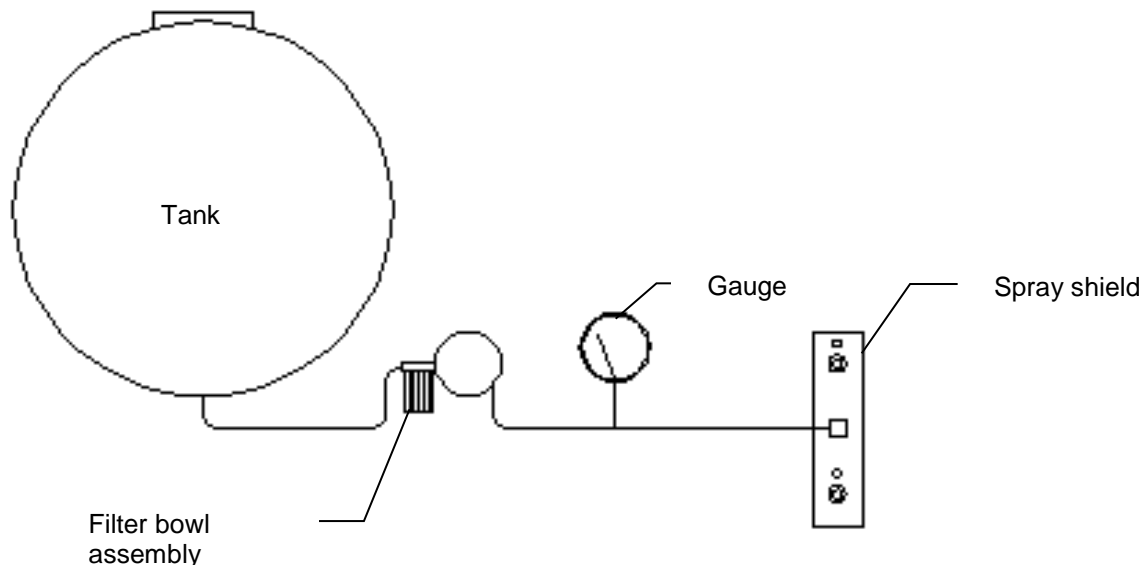
B. Outlet small square with 4409, 4410, 4416 4485, 4502, 4506 & 4507 install

Run hose from the pump outlet to the gauge. 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) to the hose manifold. Use the supplied caps (004-1207F) to cover the remaining female disconnects (004-1207G).



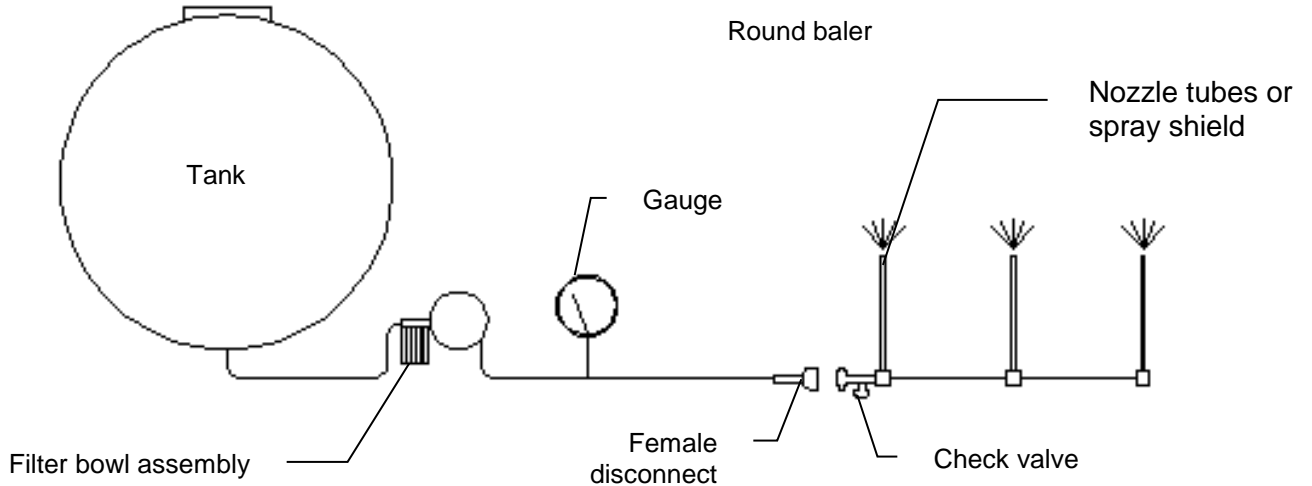
C. Outlet small square with 4415 install

Run hose from the pump outlet to the gauge. 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 spray shield.



Installation of Plumbing (continued)

- D. Outlet round baler with 442-SO, 4481, 4484, 4486, 4503, 4505, 4508, 4516, 4517, 4524 & 4526**
Run hose from the pump outlet to the gauge. 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 first nozzle tube with the check valve. Cut the hose to length and attach the female disconnect and straight fitting. Attach these to the check valve using one washer.



Model 434

Mount the pump on right leg in the pre-drilled holes as shown below. Mount the pump with the intake facing down and wrap the cords underneath the pump to prevent damage or stress to them.



Model 440

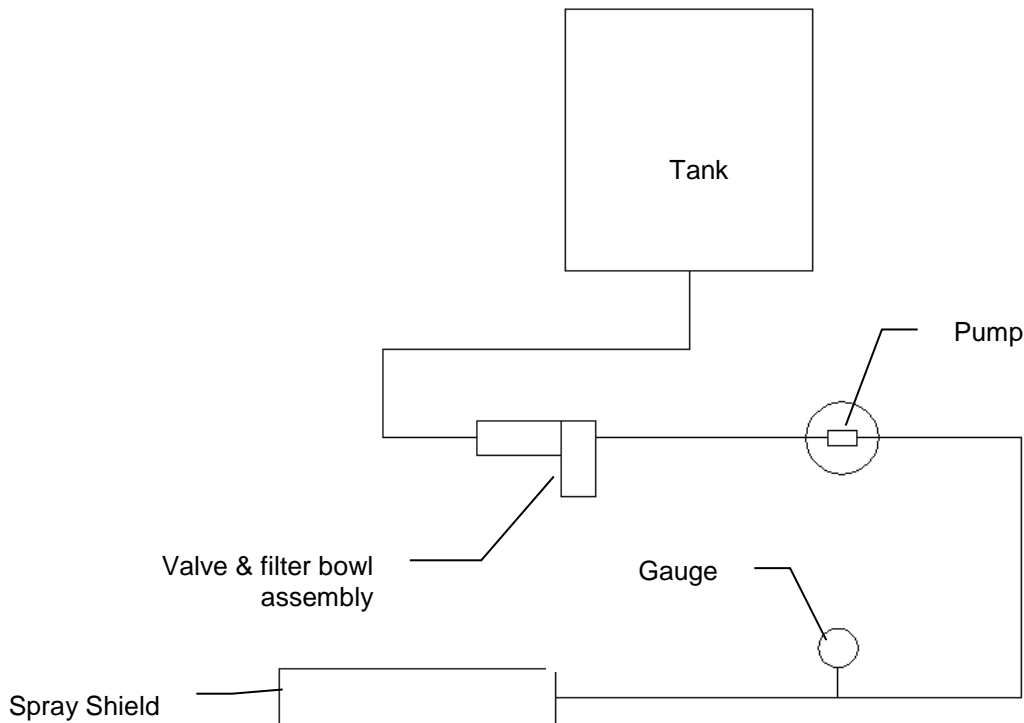
Install Kit 4415-SO

A. Intake

Screw the 003-EL3412 (3/4" to 1/2" elbow) into the bottom of the tank. Run the hose to the ball valve elbow and secure with hose clamps on both sides. Run the hose from the elbow on the filter bowl assembly to the straight fitting on intake side of the pump. Secure the hose on both sides with hose clamps.

B. Outlet

Run hose from the pump outlet to the gauge and secure the hose on both sides with hose clamps. 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 spray shield.



6. Installation of Controls

Locate parts bag 13.

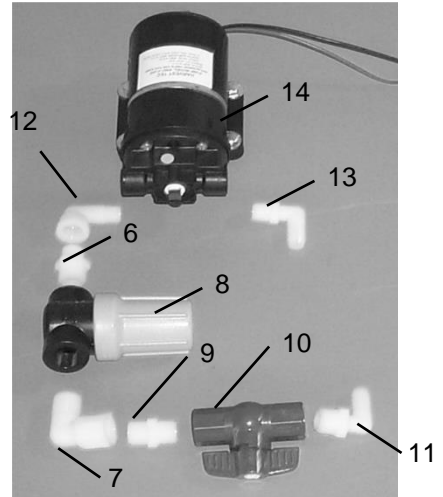
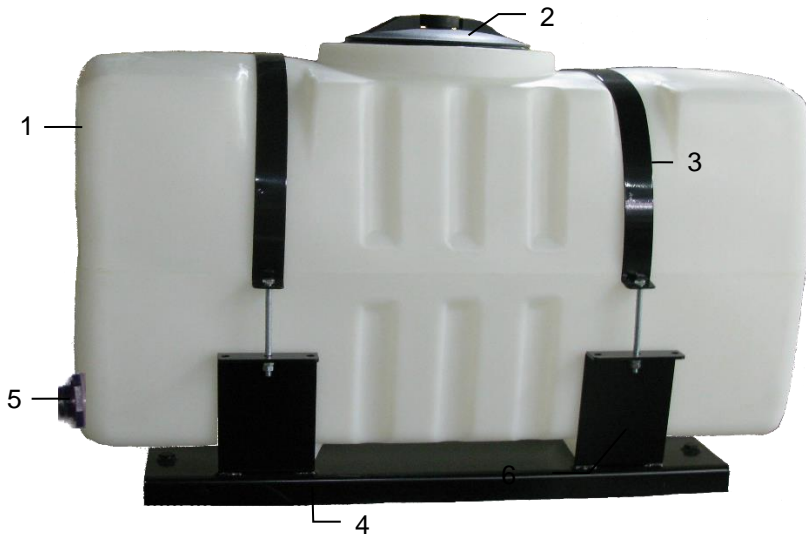
Route the wire to the starter solenoid on all 12v tractors. Connect the green lead marked + to the hot terminal on the starter. Connect the black lead to a good ground. **Do not reverse the leads.** Be sure to use a voltmeter to verify that you do have 12 volts running to the box.

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.

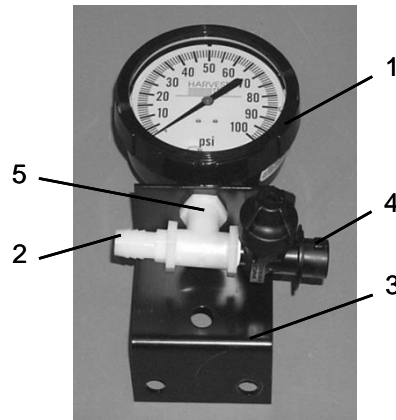
Caution: Do not run a pump or use an electronic control box directly off a battery charger. For stationary use, the applicator can be connected to a new battery and the battery connected to a charger

Parts Breakdowns for Base Kits

Model 434 Base Kit

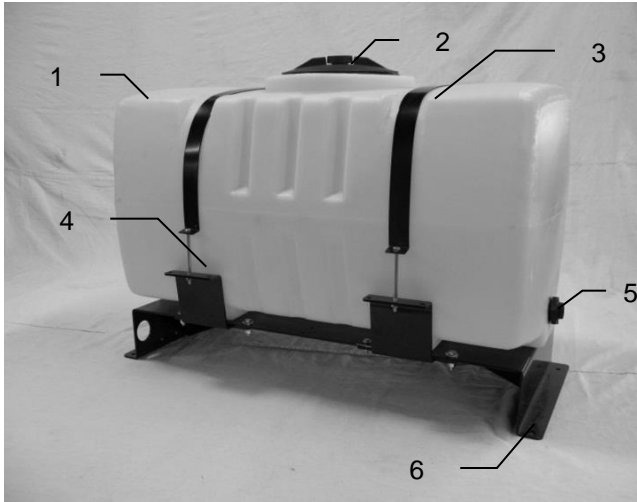


<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Tank	005-9203SQ	1	8	Filter bowl	002-4315-80	1
2	Tank lid	005-9022H	1	9	Nipple	003-M1212	1
3	Tank straps	001-4402	2	10	Ball valve	002-2212	1
4	Tank Saddle	001-4703X	1	11	Elbow	003-EL1212	1
5	Tank fitting	005-9100	2	12	Elbow	003-SE38	1
6	Nipple	003-M1238	1	13	Elbow	003-EL3812	1
7	Elbow	003-SE12	2	14	Pump	007-4120S	1

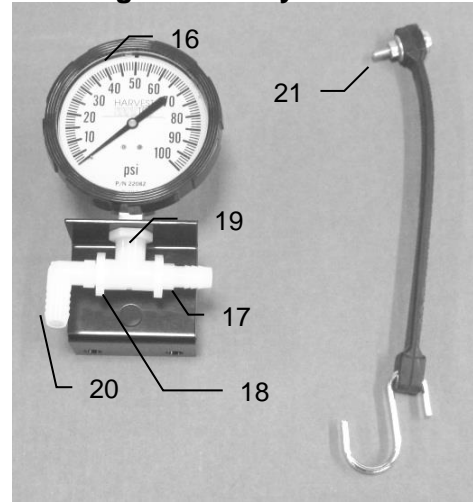


<u>Ref #</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref #</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Gauge	002-2208Z	1	4	Check Valve	004-1207V	1
2	Straight Fitting	003-A1212	1	5	Tee	004-TT14	1
3	Gauge Bracket	001-4714	1				

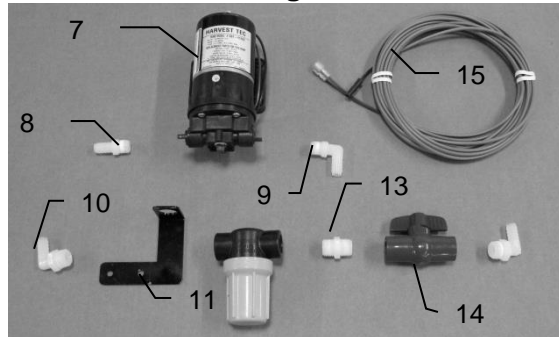
Model 440 Base Kit



Gauge Assembly for 440

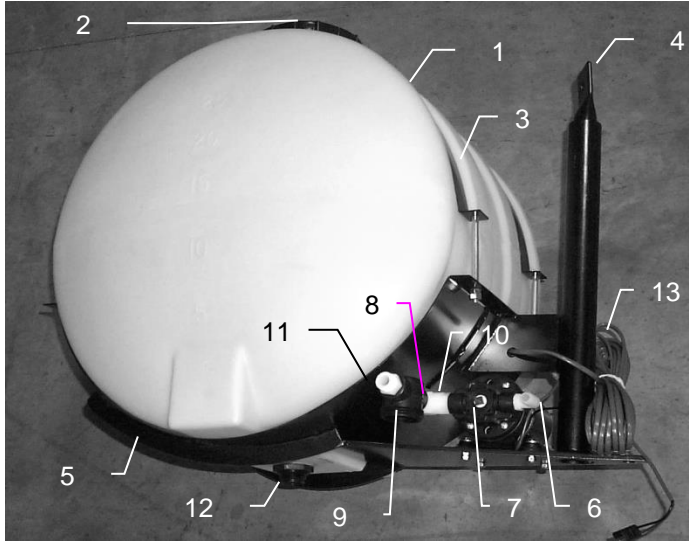


Parts Bag for 440

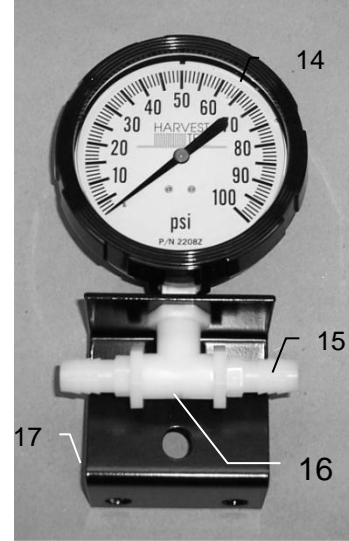


<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Tank	005-9203SQ	1	14	Ball valve	002-2212	1
2	Tank lid	005-9022G	1	15	Pump lead	006-4574	1
3	Tank straps	001-4402	2	16	Gauge	002-2208Z	1
4	Short strap base	001-4703CC	2	17	Straight fitting	003-A1412	2
NP	Long strap base	001-4703CD	2	18	Tee	003-TT14	1
5	Tank fitting	005-9100	2	19	Gauge bracket	001-4717	1
6	Tank saddle	001-4703C	1	20	Elbow	003-EL1412	1
7	Pump	007-4120S	1	21	Door latch	001-4703CL	1
8	Straight fitting	003-A3812	1	22	Pump lead	006-4583	1
9	Elbow	003-EL3812	1	NP	#6 Hose clamp	003-9003	7
10	Elbow	003-EL1212	2	NP	Screen-80 mesh	002-4315B	1
11	Filter bowl assembly	002-4315	1	NP	Filter bowl only	002-4315F	1
12	Filter holder	001-4703CH	1	NP	Filter bowl gasket	002-4315D	1
13	Nipple	003-M1212	1				
				NP	Not Pictured		

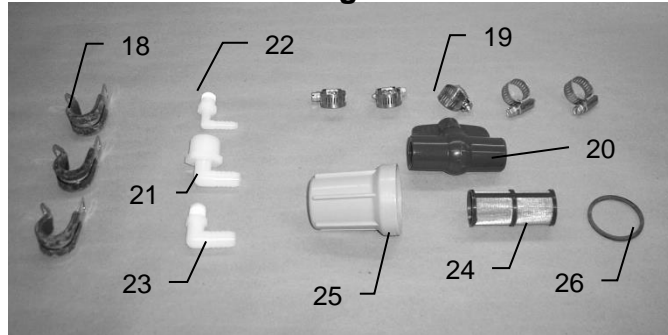
Model 441 Base Kit



Gauge Assembly for 441



Parts Bag for 441

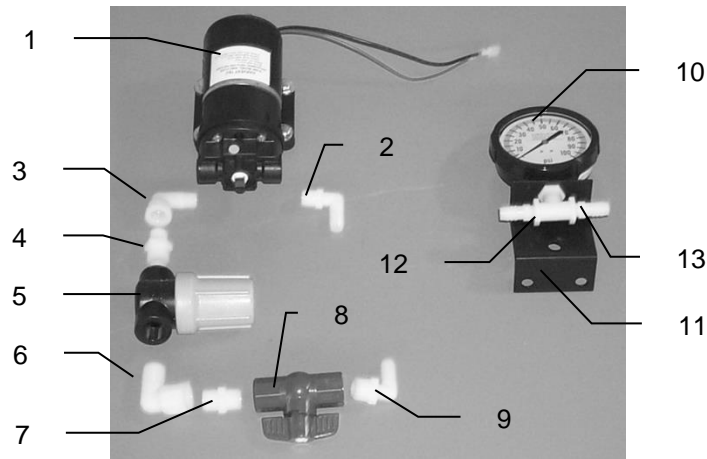


<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Tank-25 gallon	005-9022	1	14	Gauge	002-2208Z	1
2	Tank lid – 1999 or older	005-9022A	1	15	Straight fitting	003-A1412	2
	Tank lid – 2000 or newer	005-9022C					
3	Tank strap	001-4402	2	16	Tee	003-TT14	1
4	Stub pipe	001-4403	1	17	Gauge bracket	001-4717	1
5	Tank frame	001-4401	1	18	Jiffy clips	008-9010	3
6	Elbow	003-EL3812	1	19	#6 Hose clamp	003-9003	5
7	Pump	007-4120S	1	20	Ball valve-1/2"	002-2212	1
8	Elbow	003-SE12	1	21	Elbow	003-EL3412	1
9	Filter bowl assembly	002-4315	1	22	Elbow	003-EL1412	1
10	Nipple	003-M1238	1	23	Elbow	003-EL1212	1
11	Nipple	003-M1212	1	24	Screen-80 mesh	002-4315B	1
12	Tank fitting	005-9100	1	25	Filter bowl only	002-4315F	1
13	Pump lead	006-4574	1	26	Filter bowl gasket	002-4315D	1

Model 442 Base Kit

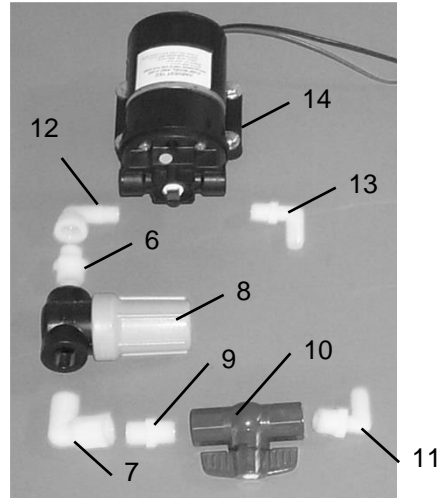
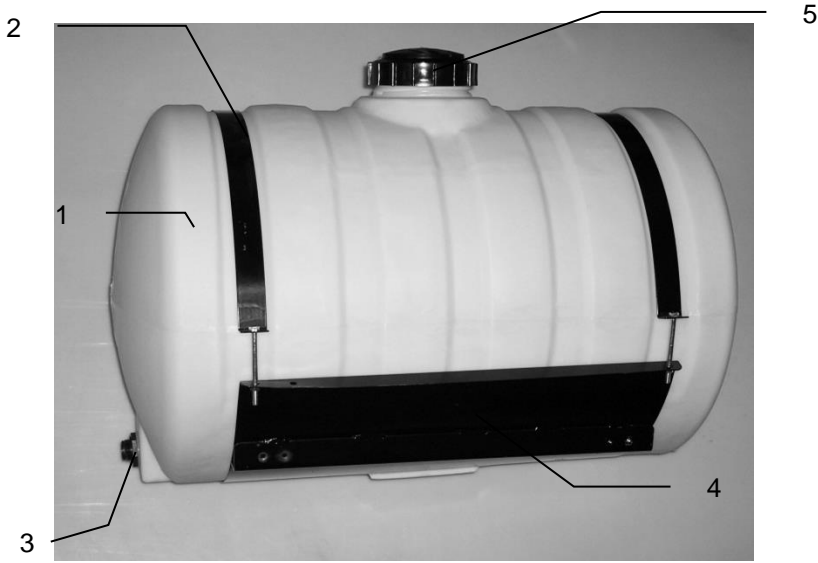


<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	25 gallon tank	005-9022	1
2	25 gallon saddle	001-4442	1
3	55 gallon tank	005-9203	1
4	55 gallon saddle	001-4445A	1
5	Tank strap	001-4402	2
6	Tank lid	005-9022C	1
7	Tank lid gasket	005-9022CG	1
8	Tank fitting	005-9100	1
9	Cross support (55 gallon only)	001-4445B	1

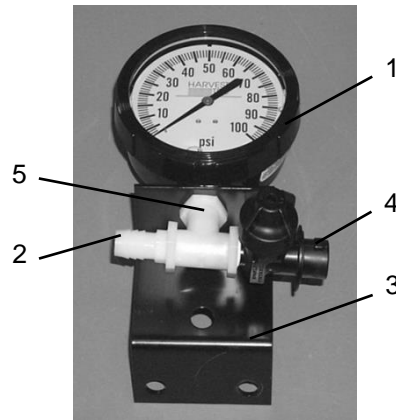


<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Pump	007-4120S	1	8	Ball valve	002-2212	1
2	Elbow fitting	003-EL3812	1	9	Elbow fitting	003-EL1212	1
3	Street elbow	003-SE38	1	10	Gauge	002-2208Z	1
4	Nipple fitting	003-M1238	1	11	Gauge bracket	001-4717	1
5	Filter bowl assembly	002-4315	1	12	Tee	003-TT14	1
6	Street elbow	003-SE12	1	13	Straight fitting	003-A1412	2
7	Nipple fitting	003-M1212	1				

Model 448 Base Kit



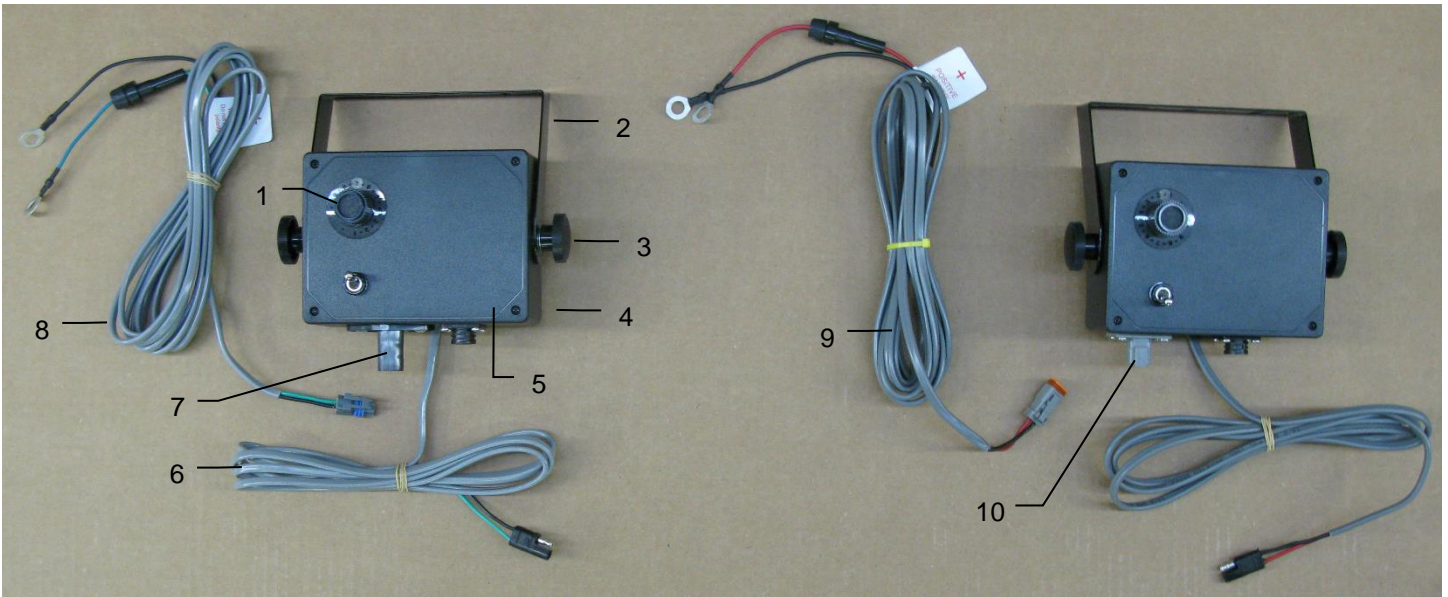
<u>Ref#</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref#</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Tank	005-9203	1	8	Filter bowl	002-4315-80	1
2	Straps	001-4402	2	9	Nipple	003-M1212	1
3	Tank fitting	005-9100	2	10	Ball valve	002-2212	1
4	Saddle	001-4703	1	11	Elbow	003-EL1212	1
5	Tank cap	005-9022C	1	12	Elbow	003-SE38	1
5	Tank gasket	005-9022CG	1	13	Elbow	003-EL3812	1
6	Nipple	003-M1238	1	14	Pump	007-4120S	1
7	Elbow	003-SE12	2				



<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	Gauge	002-2208Z	1	4	Check Valve	004-1207V	1
2	Straight Fitting	003-A1212	1	5	Tee	004-TT14	1
3	Gauge Bracket	001-4714	1				

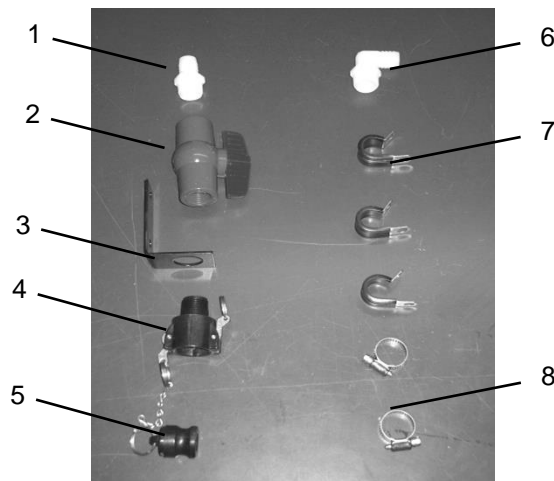
Parts Breakdown for Control Box and Drain Fill Kit

Model 457 Control Box



<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	Speed dial	006-2022A	1	8	Power lead	006-4580C	1
2	U-bracket	001-2012E	1		Pre-Serial # 4549		
3	Control box knob	008-0923	2				
4	Control box enclosure	006-2015A	1	9	Power lead	006-4580M	1
5	Control box cover	006-2015B	1		After Serial # 4550		
6	Pump lead	006-4583	1	10	Box Plug	006-4581M	1
7	Box Plug	006-4581			After Serial # 4550		
	Pre-Serial # 4549						

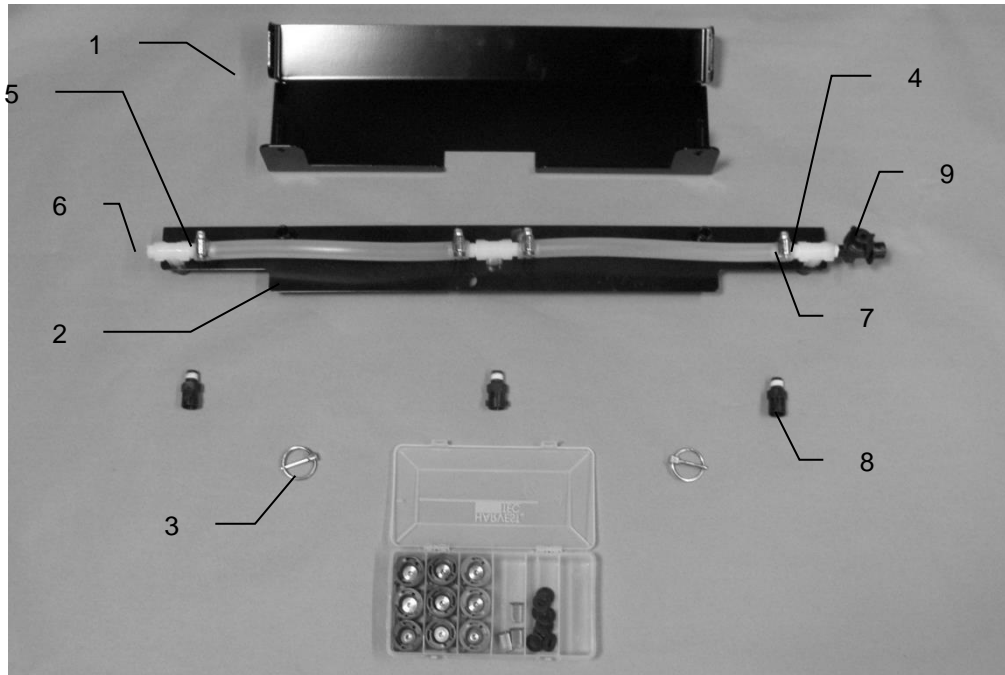
Parts Breakdown for Drain Fill (Models 434, 440, 442 & 448 only)



<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	Straight fitting	003-A3434	1	5	Male coupler	002-2205G	1
2	Ball valve	002-2200	1	6	Elbow	003-EL3434	1
3	Valve holder	001-6702H	1	7	Jiffy clip	008-9010	1
4	Female coupler	002-2204A	1	8	Hose clamp	002-9004	2

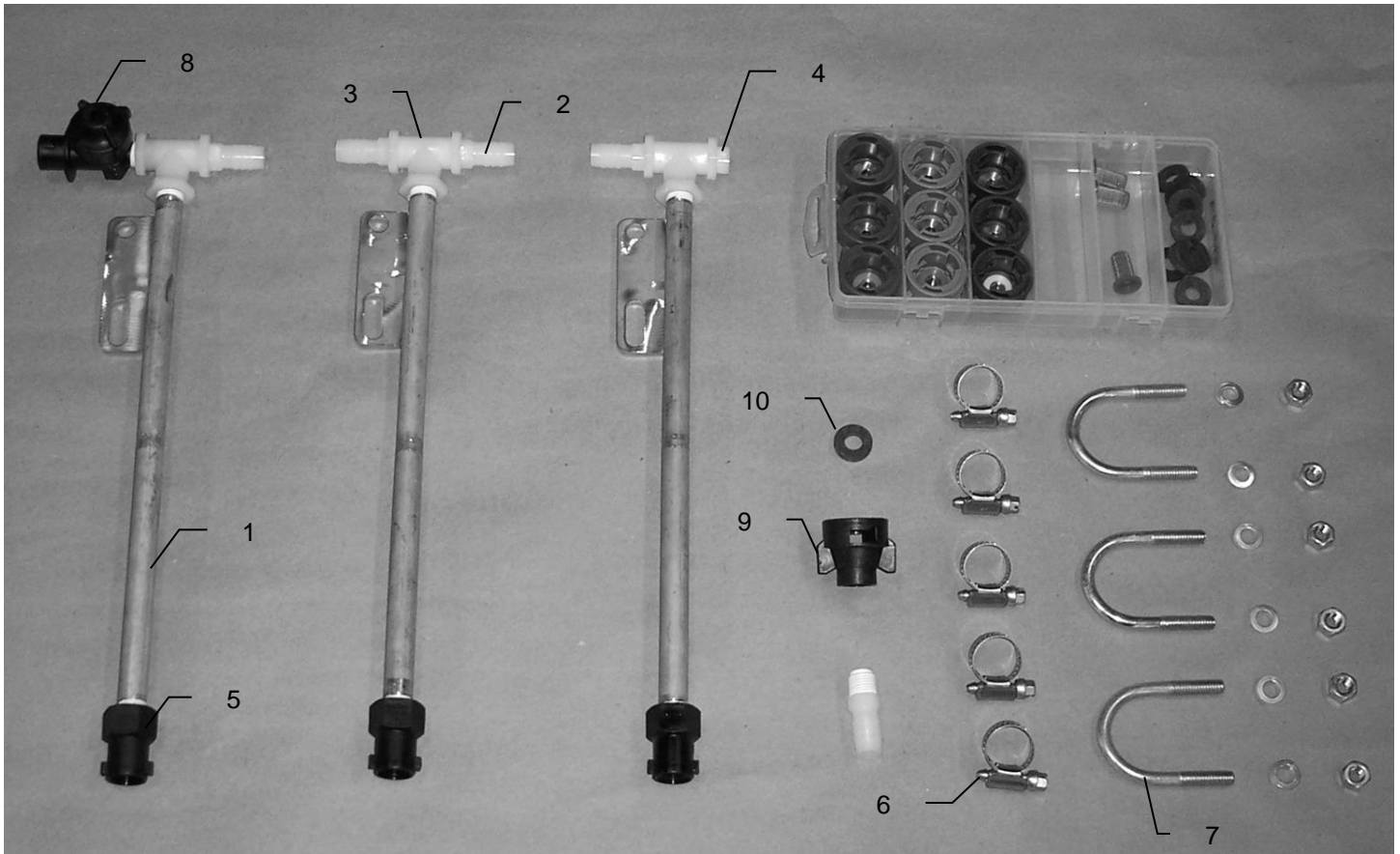
Parts Breakdowns for Model Specific Installation Kits

Model 442-SO Installation Kit



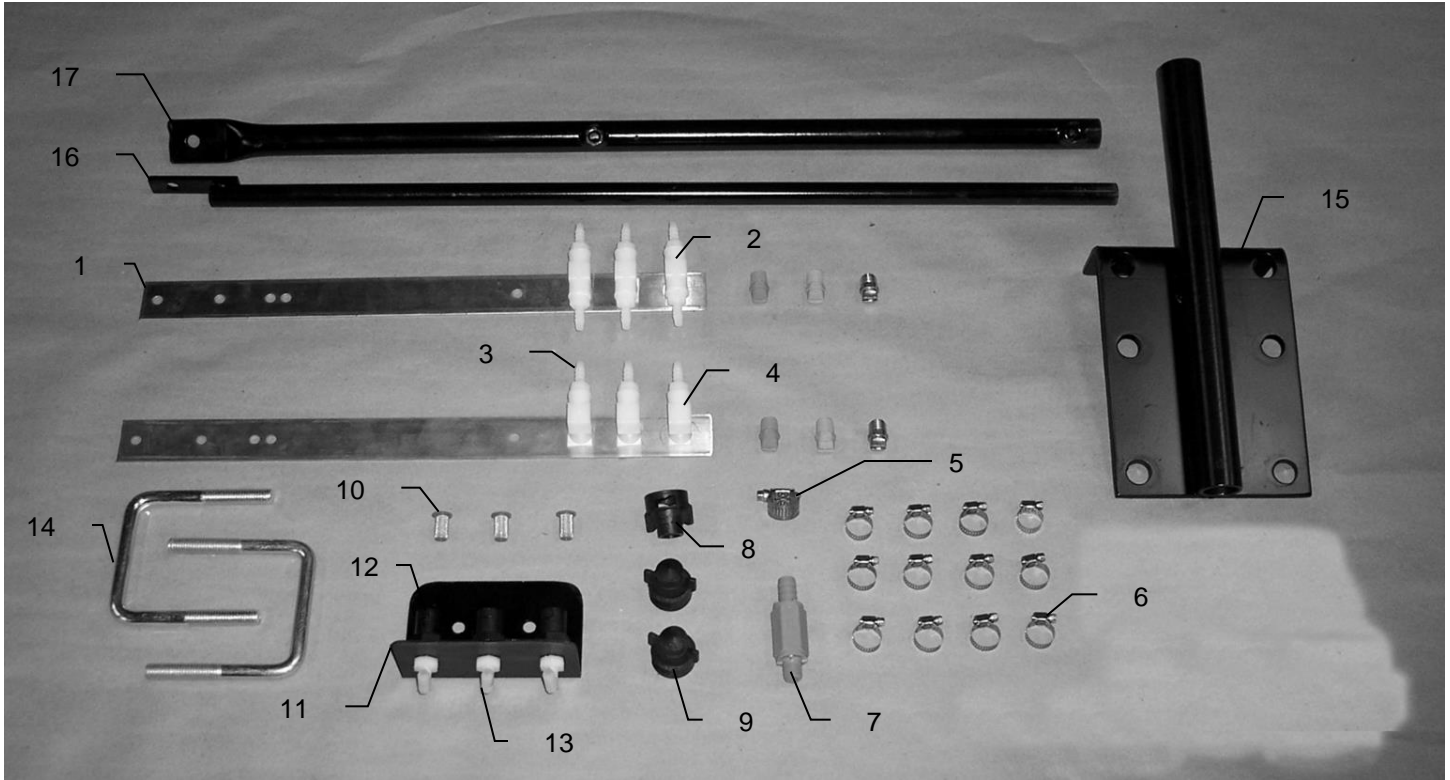
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
				Tip Kit complete	030-9002	1
1	Shield bracket	001-4810BRH	1	Tip Kit Includes:		
2	Spray shield	001-4810B	1	Plastic Box	008-9000	1
3	Lynch pin	008-4576	2	Red Cap	004-1207B	3
4	Tee	003-TT14	3	Outside Tip (Red Set)	004-650050-SS	2
5	Straight fitting	003-A1412	5	Inside Tip (Red Set)	004-XR11001VS	1
6	Plug	003-F14	1	Green Cap	004-1207A	3
7	Hose clamp	003-9003	5	Outside Tip (Green Set)	004-6501-SS	2
8	Male quick fitting	004-4710	3	Inside Tip (Green Set)	004-XR110015VS	1
9	Check valve	004-1207V	1	Blue Cap	004-1207C	3
				Outside Tip (Blue Set)	004-6502-SS	2
				Inside Tip (Blue Set)	004-XR11002VS	1
				Tip strainer	004-1203-100	3
				Washer	004-1207W	9

Model 4400C Installation Kit



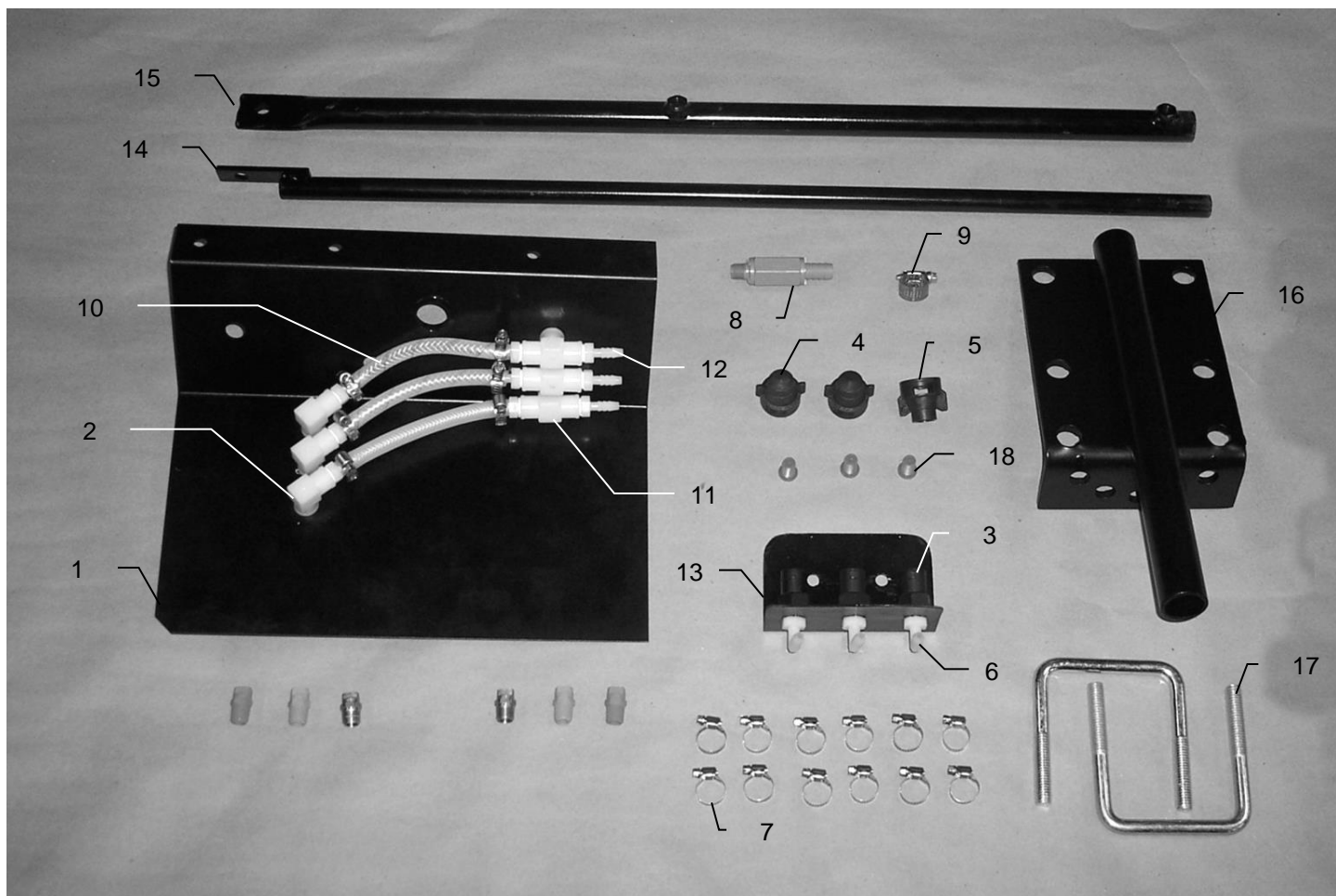
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Nozzle tube	001-4714	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Plug	003-F14	1	Red Cap	004-1207B	3
5	Nozzle Body	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	Hose clamp	003-9003	5	Inside Tip (Red Set)	004-XR11001VS	1
7	U-Bolt	001-4714UBS	3	Green Cap	004-1207A	3
8	Check valve	004-1207V	1	Outside Tip (Green Set)	004-6501-SS	2
9	Female disconnect	004-1207H	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Washer	004-1207W	1	Blue Cap	004-1207C	3
				Outside Tip (Blue Set)	004-6502-SS	2
				Inside Tip (Blue Set)	004-XR11002VS	1
				Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4409 Installation Kit



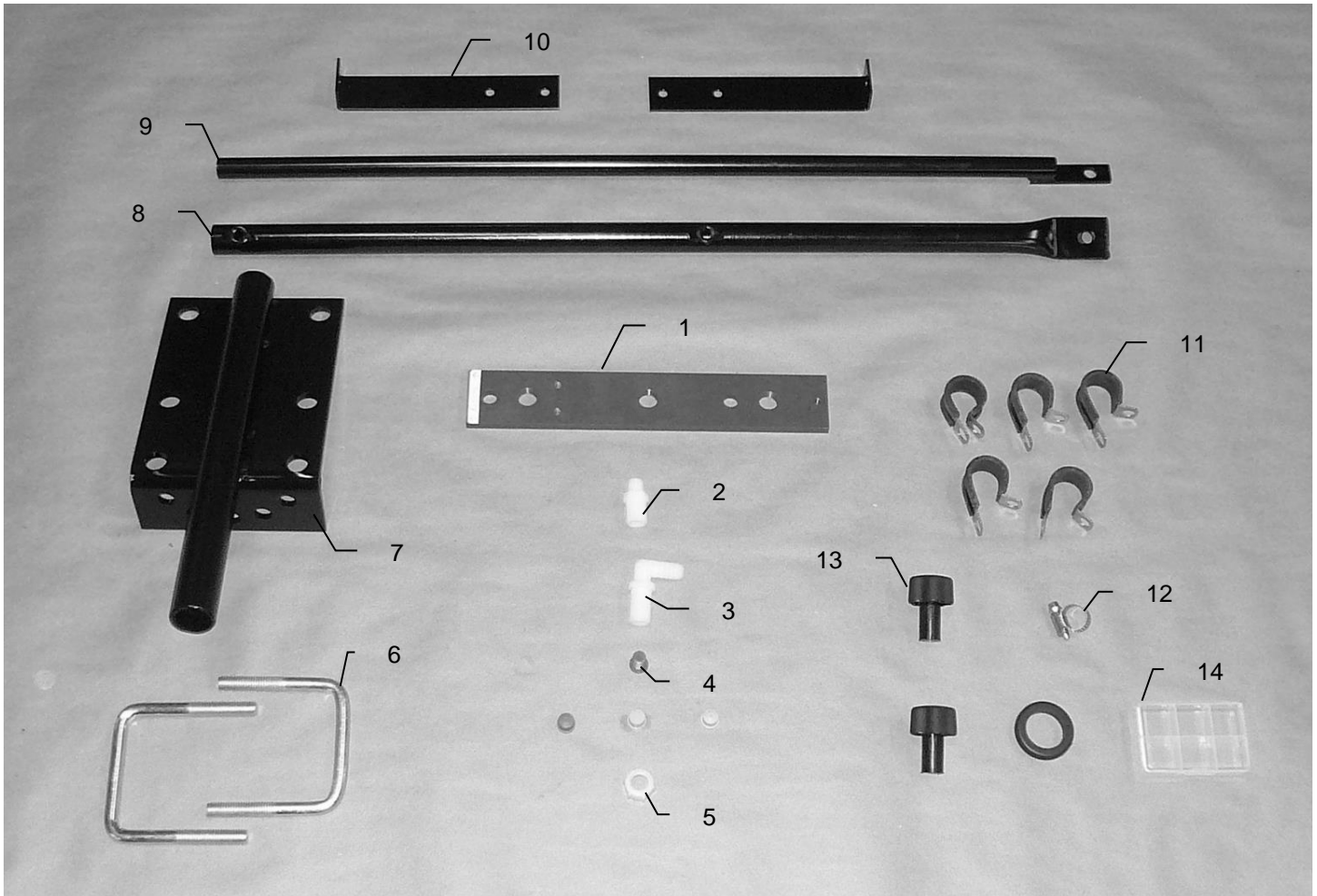
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Nozzle strap	001-4215	2	Tip – Silver	004-T650050-SS	2
2	Tee	003-TT14SQ	3	Tip – Pink	004-T6501-PT	2
3	Straight fitting	003-A1414	9	Tip – Red	004-T6502-PT	2
4	Elbow	003-SE14F	3	Washer	004-1207W	3
5	Hose clamp	003-9003	1	Hose	002-9016	9 ft.
6	Hose clamp	003-9002	12			
7	Check valve	002-4564X	1			
8	Female disconnect	004-1207H	1			
9	Shutoff cap	004-1207F	2			
10	Tip screen	004-1203-200	3			
11	Hose manifold	001-4720	1			
12	Female coupler	004-1207G	3			
13	Elbow	003-EL1414	3			
14	U bolt	001-4406A	2			
15	Mounting manifold	001-4406	1			
16	Inside reach rod	001-4405	1			
17	Outside reach rod	001-4404	1			

Model 4410 Installation Kit



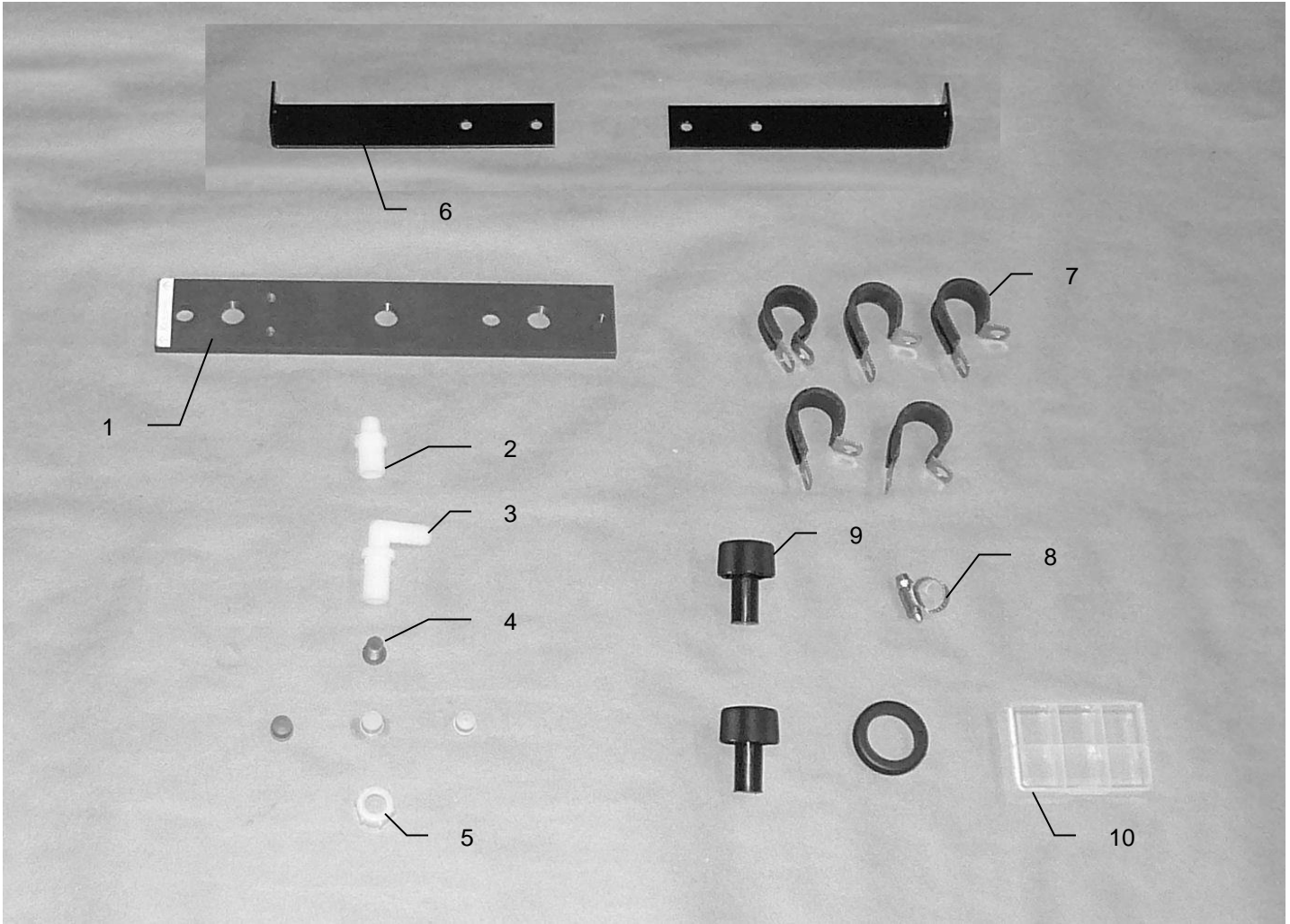
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Spray shield	001-4426	1	NP Tip – Silver	004-T650050-SS	2
2	Elbow	003-SE14F	3	NP Tip – Pink	004-T6501-PT	2
3	Female coupler	004-1207G	3	NP Tip – Red	004-T6502-PT	2
4	Shutoff cap	004-1207F	2	NP Washer	004-1207W	3
5	Female discount	004-1207H	1	NP	Not pictured	
6	Elbow	003-EL1414	3			
7	Hose clamp	003-9002	12			
8	Check valve	002-4564X	1			
9	Hose clamp	003-9003	1			
10	Hose	002-9016	9 ft.			
11	Tee	003-TT14SQ	3			
12	Straight fitting	003-A1414	9			
13	Hose manifold	001-4720	1			
14	Inside support rod	001-4405	1			
15	Outside support rod	001-4404	1			
16	Mounting bracket	001-4406	1			
17	U bolt	001-4406A	2			
18	Tip strainer	004-1203-200	3			

Model 4415 Installation Kit



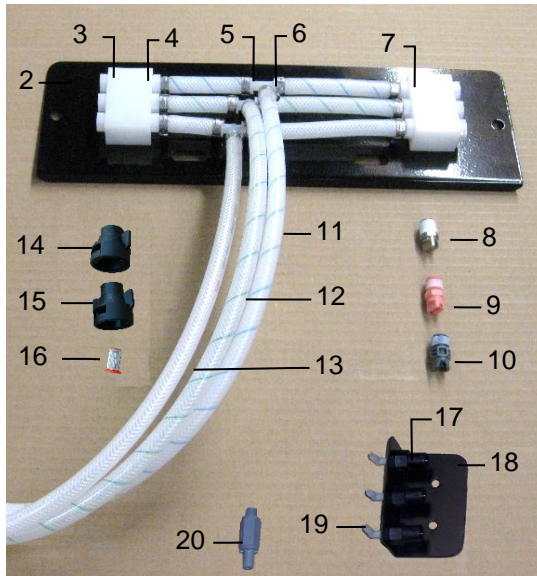
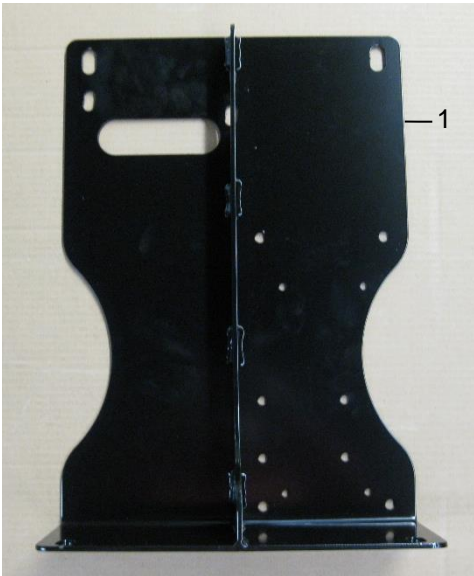
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Spray shield	001-4425C	1	Tip – Orange	004-TX-SS-6	1
2	Drill guide	003-M3814NB	1	Tip – Blue	004-TX-SS-12	1
3	Elbow	003-EL3812NB	1	Tip - Yellow	004-TX-SS-26	1
4	Tip strainer	004-4213-100	1			
5	Nozzle cap	003-BC12	1			
6	U bolt	001-4406A	2			
7	Mounting bracket	001-4406	1			
8	Outside support rod	001-4404	1			
9	Inside support rod	001-4405	1			
10	Bracket	001-4425B	2			
11	Jiffy clip	008-9010	5			
12	Hose clamp	003-9003	1			
13	Knob	008-0925	2			
14	Tip box	008-9001	1			

Model 4415-SO Installation Kit



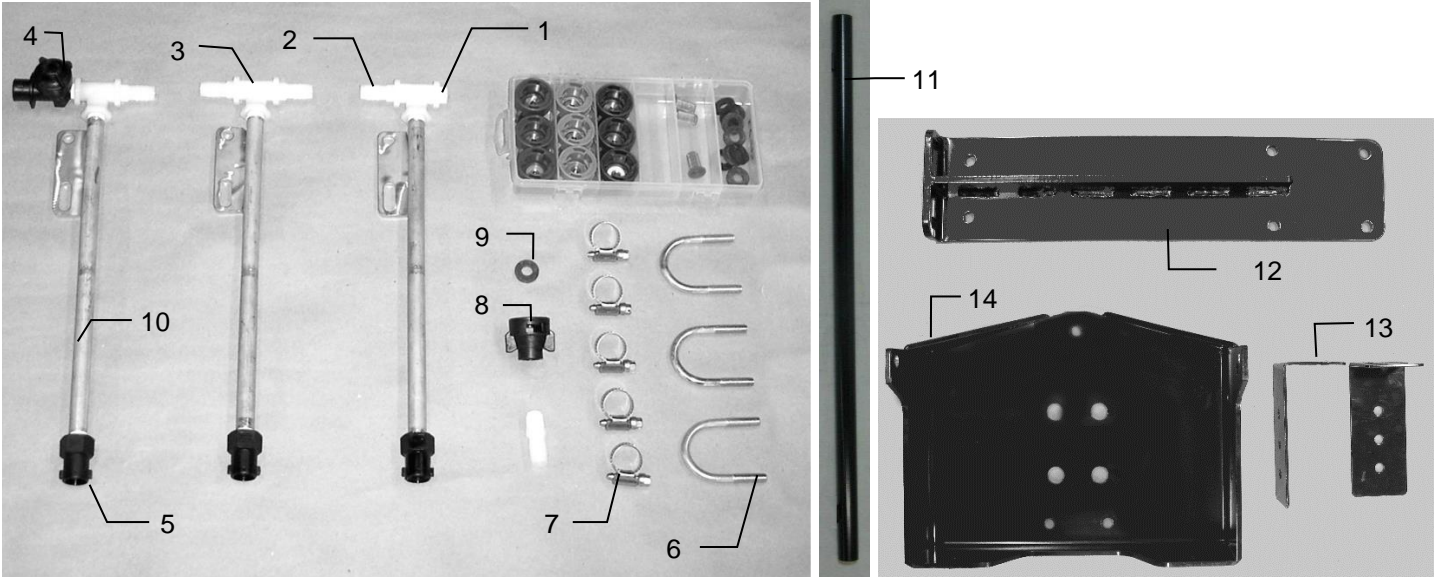
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1	Spray shield	001-4425C	1	Tip – Orange	004-TX-SS-6	1
2	Drill guide	003-M3814NB	1	Tip – Blue	004-TX-SS-12	1
3	Elbow	003-EL3812NB	1	Tip – Yellow	004-TX-SS-26	1
4	Tip strainer	004-4213-100	1			
5	Nozzle cap	003-BC12	1			
6	Bracket	001-4425B	2			
7	Jiffy clip	008-9010	5			
8	Hose clamp	003-9003	1			
9	Knob	008-0925	2			
10	Tip box	009-9001	1			

Model 4416 Installation Kit



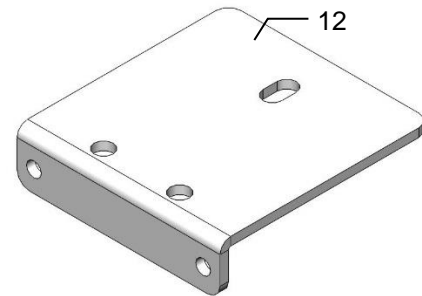
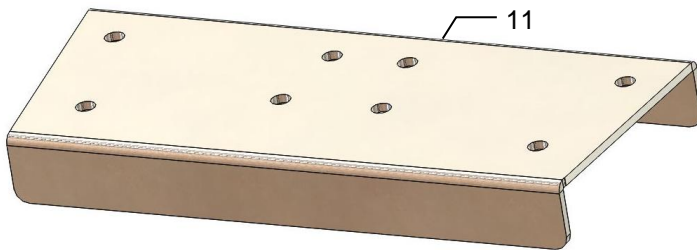
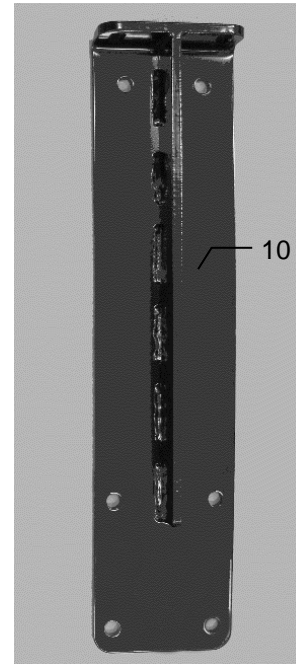
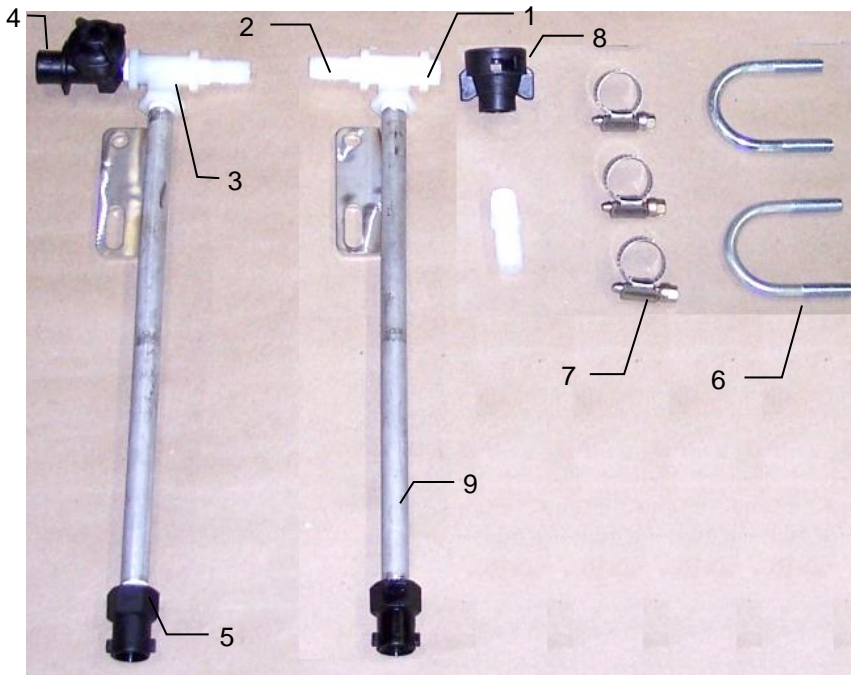
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1	Saddle Legs	001-4703Q	2	14	1/4" Female Disconnect	004-1207H	1
2	Spray Shield	001-4424A2	1	15	Shut off cap	004-1207F	2
3	Plug	003-F14	6	16	Tip Strainer (200 mesh)	004-1203-200	3
4	Manifold Block	001-4435NSB	2	17	Female coupler	004-1207G	3
5	1/2" O-tiker Clamp	003-9008	15	18	Hose bracket	001-4720	1
6	1/4" Tee	003-T1414	3	19	Elbow	003-EL1414	6
7	1/4" Straight fitting	003-A1414	3	20	Check valve	002-4564X	1
8	Stainless Tip (small)	004-T650050-SS	2	21	Kicker Bracket	001-4703QC	1
9	Pink Tip (med)	004-T6501-PT	2	NP	Spray Shield Holders	001-4424B	2
10	Orange Tip (large)	004-T6502-PT	2	NP	Mini Hose Clamp	003-9002	3
11	1/4" Hose (green)	002-9016G	4	NP	Hose Clamp #6	003-9003	1
12	1/4" Hose (blue)	002-9016B	4				
13	1/4" Hose (clear)	002-9016	4				

Model 4481 Installation Kit



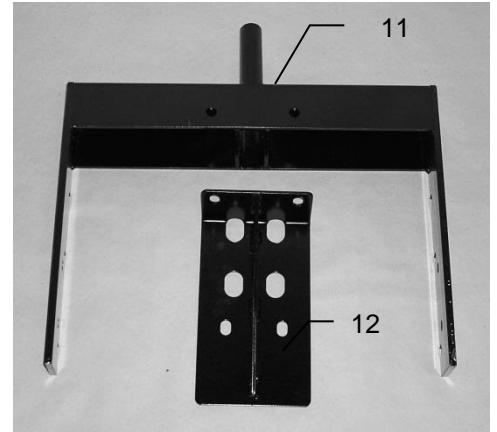
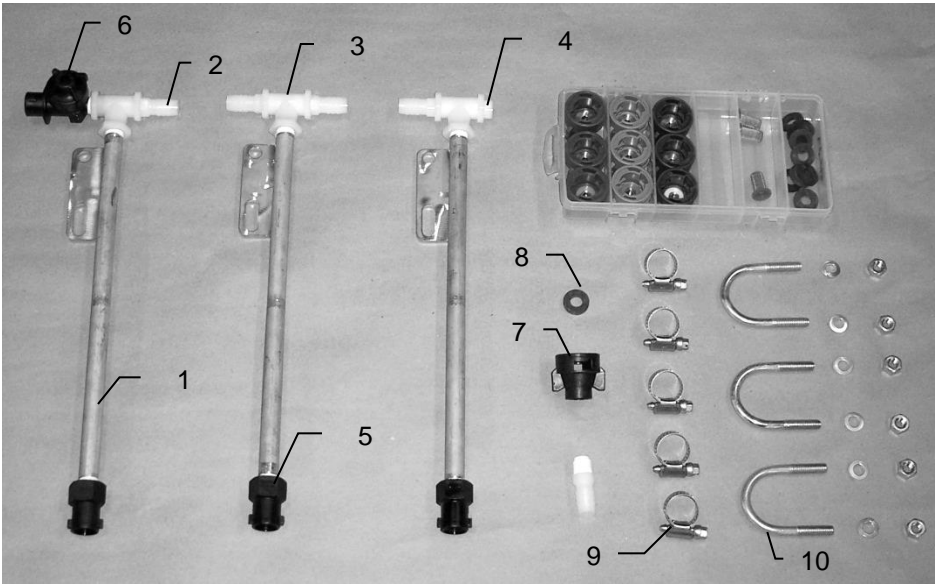
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Plug	003-F14	1	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Check valve	004-1207V	1	Red Cap	004-1207B	3
5	Female coupler	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	U bolt	001-4714UBS	3	Inside Tip (Red Set)	004-XR11001VS	1
7	Hose clamp	003-9002	5	Green Cap	004-1207A	3
8	Female disconnect	004-1207H	1	Outside Tip (Green Set)	004-6501-SS	2
9	Washer	004-1207W	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Nozzle tube	001-4714	3	Blue Cap	004-1207C	3
11	Nozzle holder	001-4703TP	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Top Support	001-4704MK	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Pipe Holder	001-4703TH	2	Washer	004-1207W	9
14	Side Support	001-4704MAK	2	Tip Strainer	004-1203-100	3

Model 4482 Installation Kit



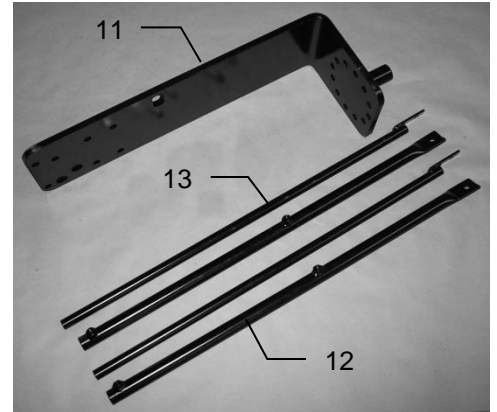
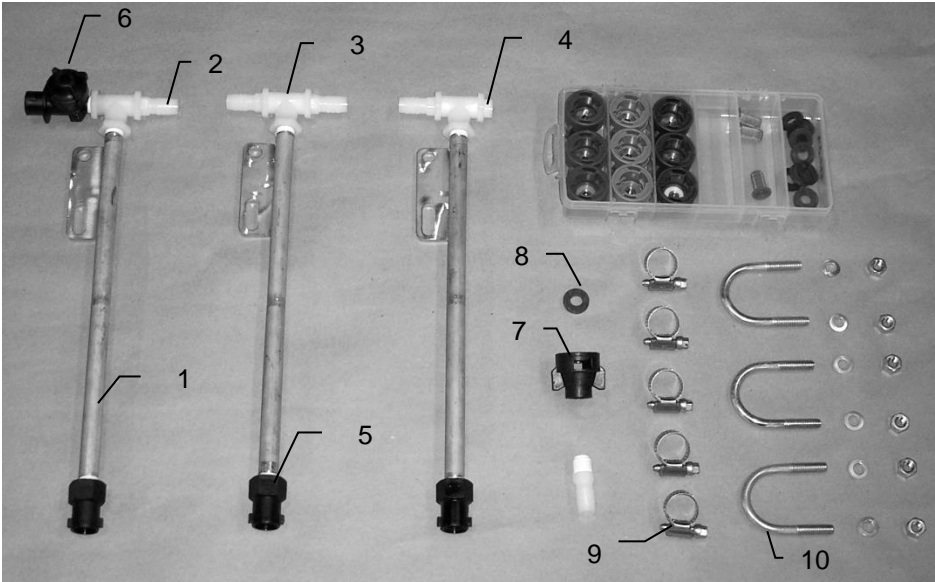
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1	Plug	003-F14	1	NP	Red Cap	004-1207B	2
2	Straight fitting	003-A1412	3		Tip - Orange	004-XR11001VS	2
3	Tee	003-TT14	2		Green Cap	004-1207A	2
4	Check valve	004-1207V	1		Tip - Blue	004-XR11003VS	2
5	Female coupler	004-1207G	2		Blue Cap	004-1207C	2
6	U bolt	001-4714UBS	2		Tip-Yellow	004-XR11002VS	2
7	Hose clamp	003-9003	3		Tip Strainer	004-1203-100	2
8	Female disconnect	004-1207H	1				
9	Nozzle tube	001-4714	2				
10	Side Support Leg	001-4704MAK	2				
11	Top Tank Support	001-4704MRF	1				
12	Front Mounting Plate	001-4703VZ	1				

Model 4483 Installation Kit



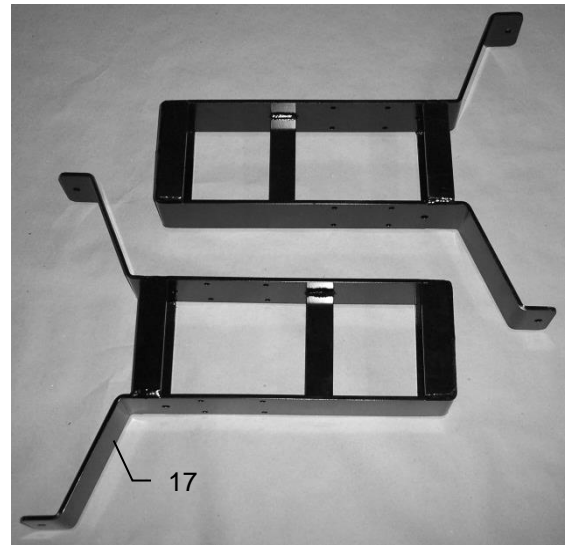
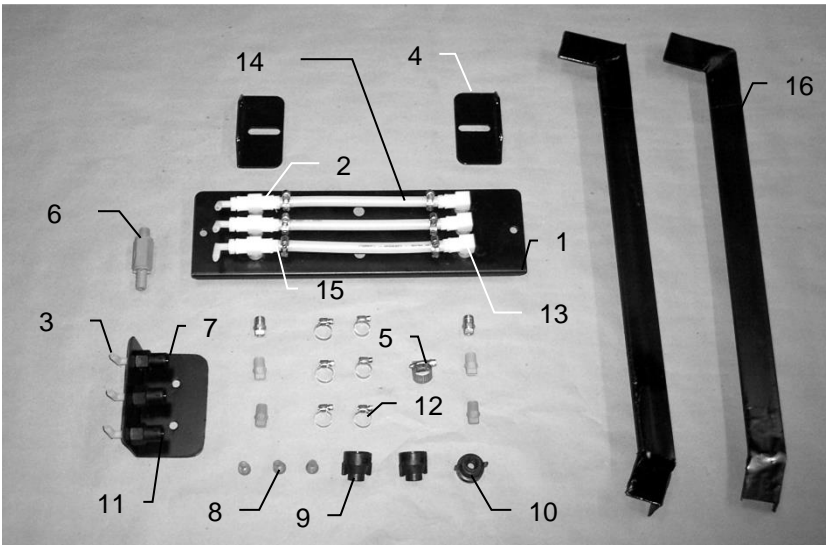
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Nozzle tube	001-4714	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Plug	003-F14	1	Red Cap	004-1207B	3
5	Nozzle Body	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	Check valve	004-1207V	1	Inside Tip (Red Set)	004-XR11001VS	1
7	Female disconnect	004-1207H	1	Green Cap	004-1207A	3
8	Washer	004-1207W	1	Outside Tip (Green Set)	004-6501-SS	2
9	Hose clamp	003-9003	5	Inside Tip (Green Set)	004-XR110015VS	1
10	U-Bolt	001-4714UBS	3	Blue Cap	004-1207C	3
11	Mounting brkt	001-4411	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Support bracket	001-4411A	1	Inside Tip (Blue Set)	004-XR11002VS	1
				Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4484 Installation Kit



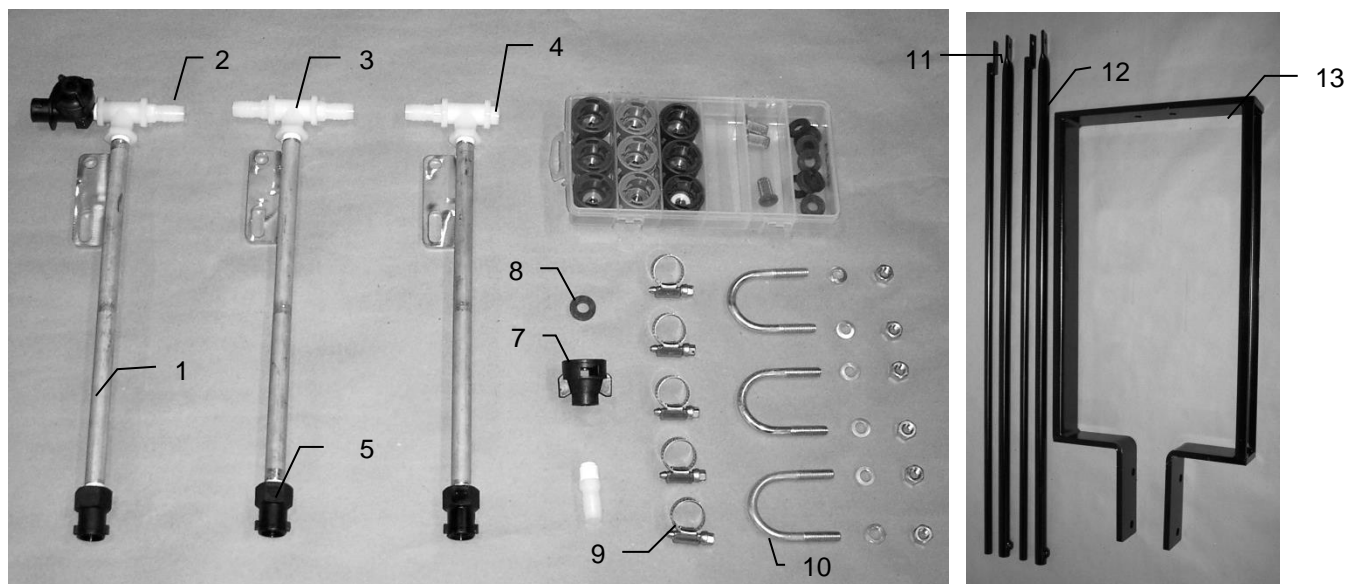
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1	Nozzle tube	001-4714	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Plug	003-F14	1	Red Cap	004-1207B	3
5	Nozzle Body	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	Check valve	004-1207V	1	Inside Tip (Red Set)	004-XR11001VS	1
7	Female disconnect	004-1207H	1	Green Cap	004-1207A	3
8	Washer	004-1207W	1	Outside Tip (Green Set)	004-6501-SS	2
9	Hose clamp	003-9003	5	Inside Tip (Green Set)	004-XR110015VS	1
10	U-Bolt	001-4714UBS	3	Blue Cap	004-1207C	3
11	Mounting bracket	001-4418	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Outside support rod	001-4404	2	Inside Tip (Blue Set)	004-XR11002VS	1
13	Inside support rod	001-4405	2	Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4485 Installation Kit



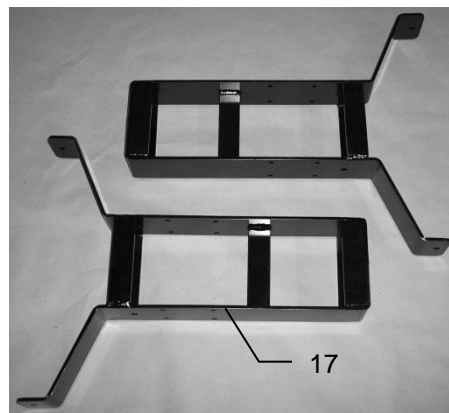
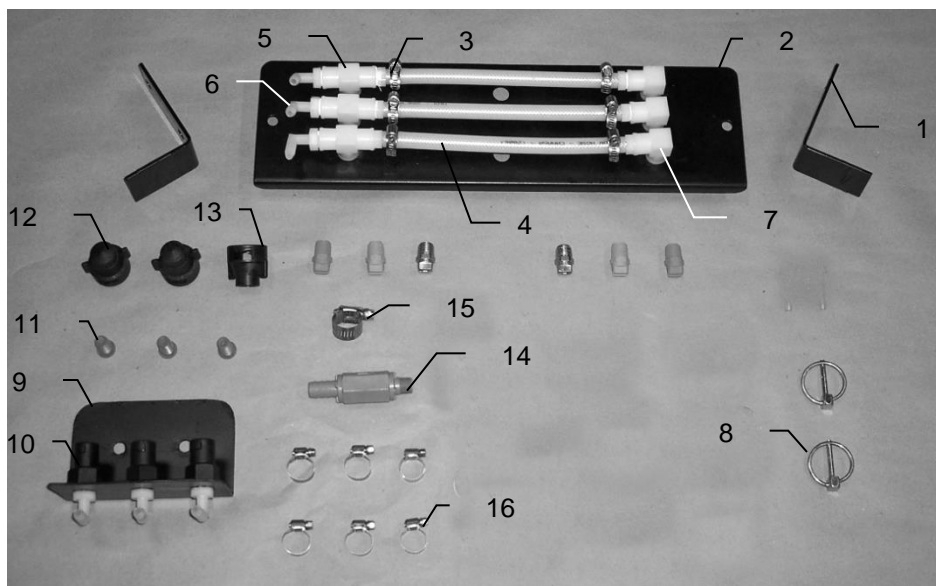
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1	Spray shield	001-4424A	1	NP	Tip – Silver	004-T650050-SS	2
2	Tee	003-TT14SQ	3	NP	Tip – Pink	004-T6501-PT	2
3	Elbow	003-EL1414	6	NP	Tip – Red	004-T6502-PT	2
4	Shield holder	001-4424B	2	NP	Washer	004-1207W	3
5	Hose clamp	003-9003	1	NP	Not pictured		
6	Check valve	002-4564X	1				
7	Hose bracket	001-4720	1				
8	Tip strainer	004-1203-200	3				
9	Shutoff cap	004-1207F	2				
10	Female discount	004-1207H	1				
11	Female coupler	004-1207G	3				
12	Hose clamp	003-9002	12				
13	Elbow	003-SE14F	3				
14	Hose	002-9016	9 ft				
15	Straight fitting	003-A1414	3				
16	Leg supports	001-4424C	2				
17	Saddle leg	001-4703B	2				

Model 4486 Installation Kit



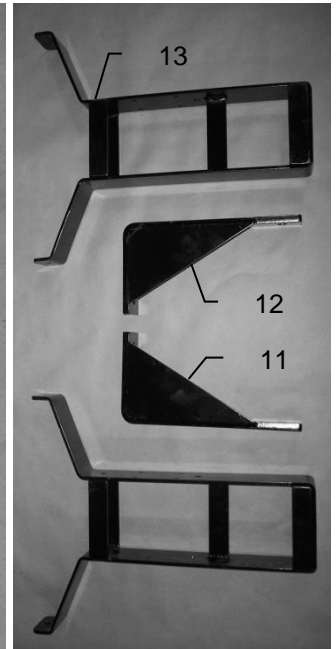
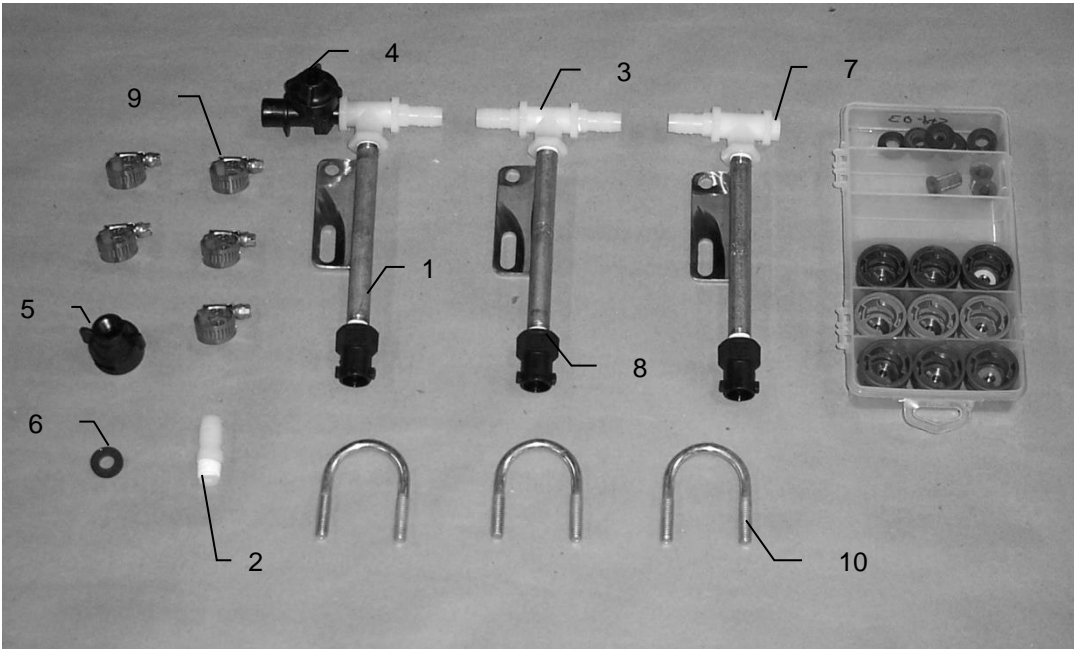
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1	Nozzle tube	001-4714	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Plug	003-F14	1	Red Cap	004-1207B	3
5	Nozzle Body	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	Check valve	004-1207V	1	Inside Tip (Red Set)	004-XR11001VS	1
7	Female disconnect	004-1207H	1	Green Cap	004-1207A	3
8	Washer	004-1207W	1	Outside Tip (Green Set)	004-6501-SS	2
9	Hose clamp	003-9003	5	Inside Tip (Green Set)	004-XR110015VS	1
10	U-Bolt	001-4714UBS	3	Blue Cap	004-1207C	3
11	Mounting bracket	001-4420	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Outside support rod	001-4404A	2	Inside Tip (Blue Set)	004-XR11002VS	1
13	Inside support rod	001-4405A	2	Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4502 Installation Kit



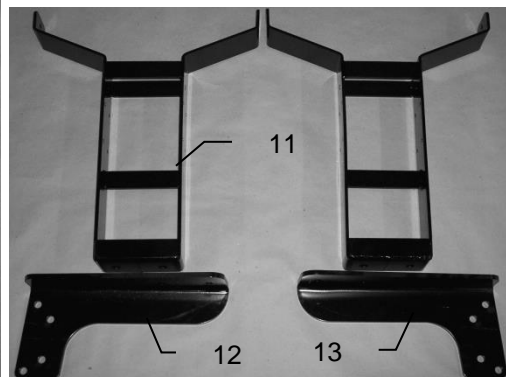
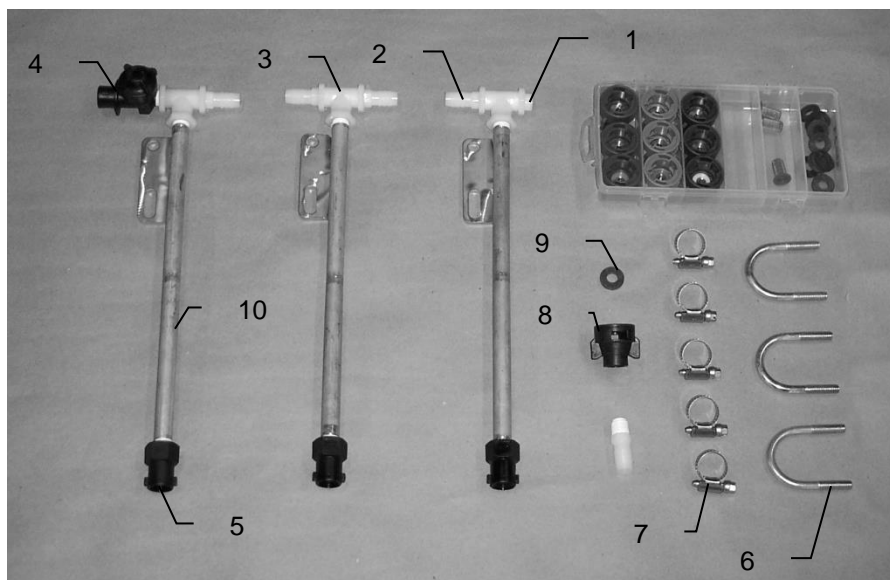
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1	Shield holder	001-4703I	2	NP	Tip – Silver	004-T650050-SS	2
2	Spray shield	001-4703G	1	NP	Tip – Pink	004-T6501-PT	2
3	Straight fitting	003-A1414	6	NP	Tip – Red	004-T6502-PT	2
4	Hose	002-9016	9 ft	NP	Washer	004-1207W	3
5	Tee	003-TT14SQ	3	NP	Not pictured		
6	Elbow	003-EL1414	6				
7	Elbow	003-SE14F	3				
8	Lynch pin	008-4576	2				
9	Hose bracket	001-4720	1				
10	Female coupler	004-1207G	3				
11	Tip strainer	004-1203-200	3				
12	Shutoff cap	004-1207F	2				
13	Female disconnect	004-1207H	1				
14	Check valve	002-4564X	1				
15	Hose clamp	002-9003	1				
16	Hose clamp	003-9002	12				
17	Saddle leg	001-4703B	2				

Model 4503 Installation Kit



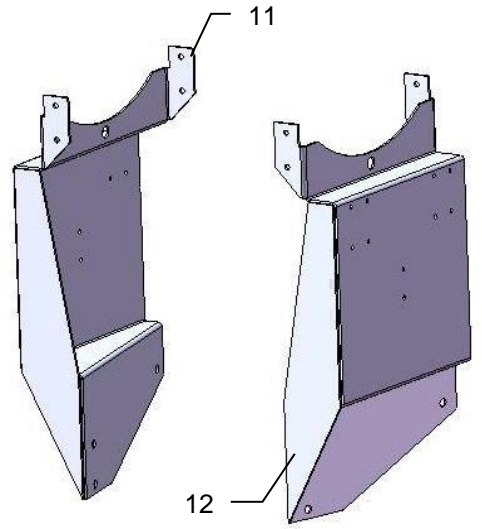
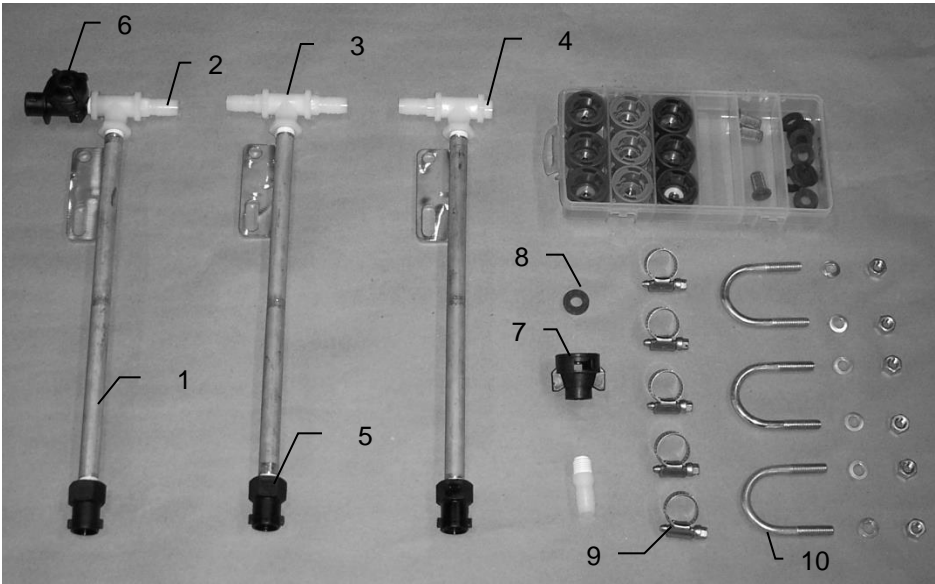
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Nozzle tube	001-4714P	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Check valve	004-1207V	1	Red Cap	004-1207B	3
5	Female disconnect	004-1207H	1	Outside Tip (Red Set)	004-650050-SS	2
6	Washer	004-1207W	1	Inside Tip (Red Set)	004-XR11001VS	1
7	Plug	003-F14	1	Green Cap	004-1207A	3
8	Nozzle Body	004-1207G	3	Outside Tip (Green Set)	004-6501-SS	2
9	Hose clamp	003-9003	5	Inside Tip (Green Set)	004-XR110015VS	1
10	U-Bolt	001-4714UBS	3	Blue Cap	004-1207C	3
11	Left mtg bracket	001-4703EL	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Right mtg bracket	001-4703ER	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Saddle leg	001-4703B	2	Washer	004-1207W	9
NP	45 degree elbows	003-SE4514	3	Tip Strainer	004-1203-100	3
NP	Jack extension	001-4703EXT	1			

Model 4504 Installation Kit



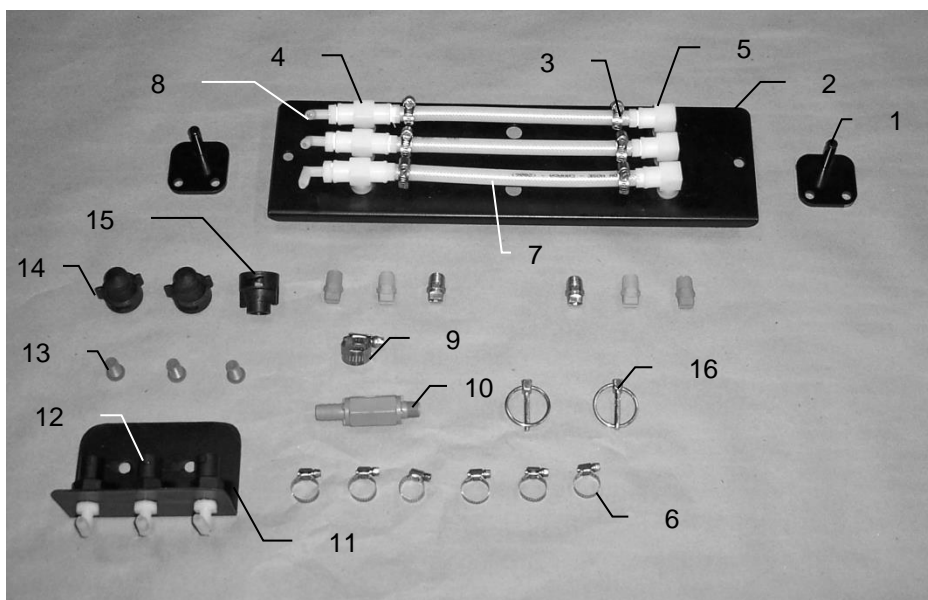
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1	Plug	003-F14	1	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Check valve	004-1207V	1	Red Cap	004-1207B	3
5	Female coupler	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	U bolt	001-4714UBS	3	Inside Tip (Red Set)	004-XR11001VS	1
7	Hose clamp	003-9002	5	Green Cap	004-1207A	3
8	Female disconnect	004-1207H	1	Outside Tip (Green Set)	004-6501-SS	2
9	Washer	004-1207W	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Nozzle tube	001-4714	3	Blue Cap	004-1207C	3
11	Saddle leg	001-4703B	2	Outside Tip (Blue Set)	004-6502-SS	2
12	Left mtg bracket	001-4703DL	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Right mtg bracket	001-4703DR	1	Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4505 Installation Kit



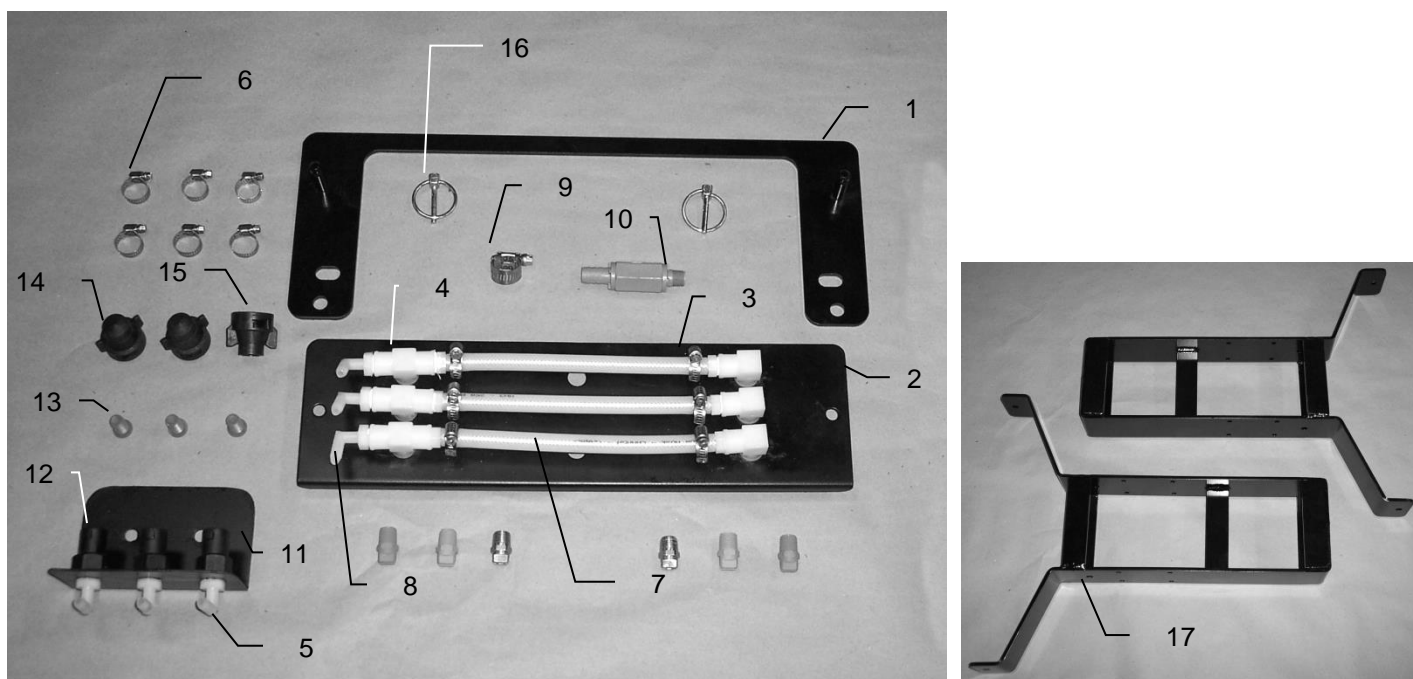
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Nozzle tube	001-4714	3	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Plug	003-F14	1	Red Cap	004-1207B	3
5	Nozzle Body	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	Check valve	004-1207V	1	Inside Tip (Red Set)	004-XR11001VS	1
7	Female disconnect	004-1207H	1	Green Cap	004-1207A	3
8	Washer	004-1207W	1	Outside Tip (Green Set)	004-6501-SS	2
9	Hose clamp	003-9003	5	Inside Tip (Green Set)	004-XR110015VS	1
10	U-Bolt	001-4714UBS	3	Blue Cap	004-1207C	3
11	Left Leg	001-4703FL	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Right Leg	001-4703FR	1	Inside Tip (Blue Set)	004-XR11002VS	1
				Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

Model 4506 Installation Kit



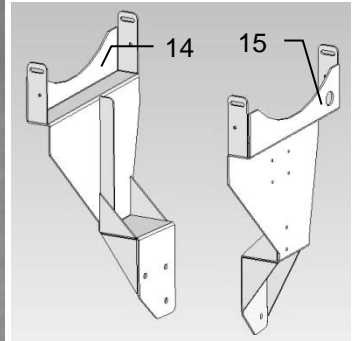
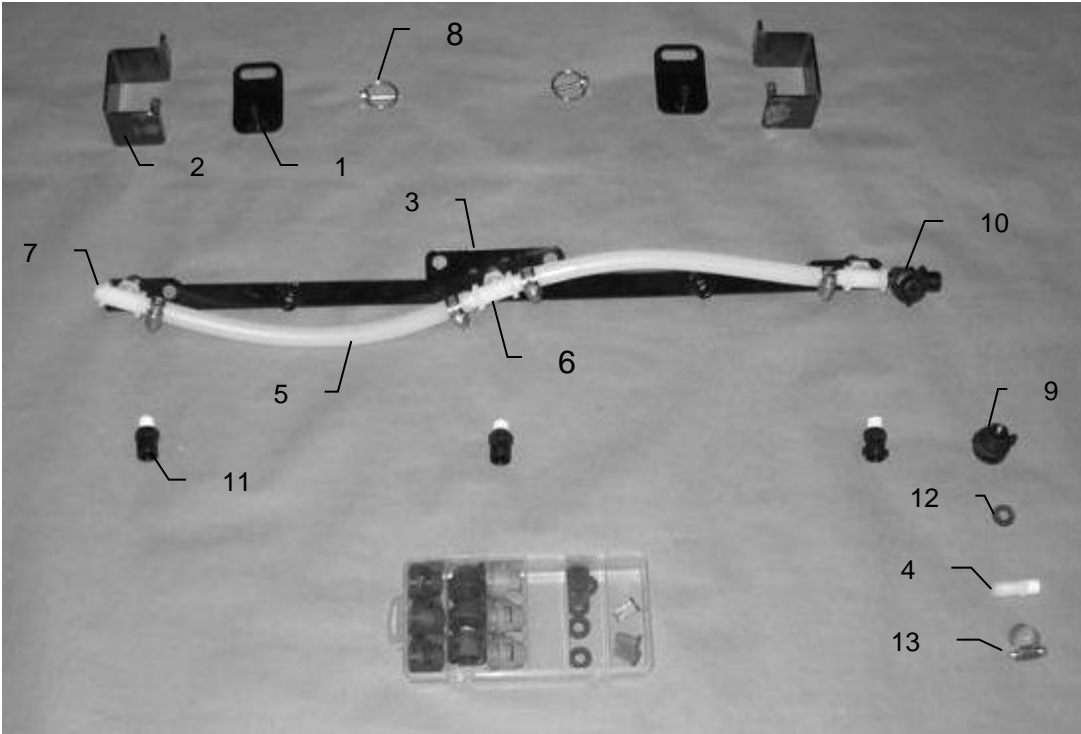
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1	Shield holder	001-4703H	2	NP	Tip – Silver	004-T650050-SS	2
2	Spray shield	001-4703G	1	NP	Tip – Pink	004-T6501-PT	2
3	Straight fitting	003-A1414	6	NP	Tip – Red	004-T6502-PT	2
4	Tee	003-TT14SQ	3	NP	Washer	004-1207W	3
5	Elbow	003-SE14F	3	NP	Not pictured		
6	Hose clamp	003-9002	12				
7	Hose	002-9016	6				
8	Elbow	003-EL1414	6				
9	Hose clamp	003-9003	1				
10	Check valve	002-4564X	1				
11	Hose bracket	001-4720	1				
12	Female coupler	004-1207G	3				
13	Tip strainer	004-1203-200	3				
14	Shutoff cap	004-1207F	2				
15	Female disconnect	004-1207H	1				
16	Lynch pin	008-4576	2				
17	Saddle leg	001-4703B	2				

Model 4507 Installation Kit



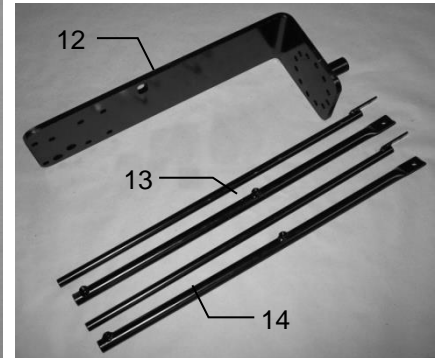
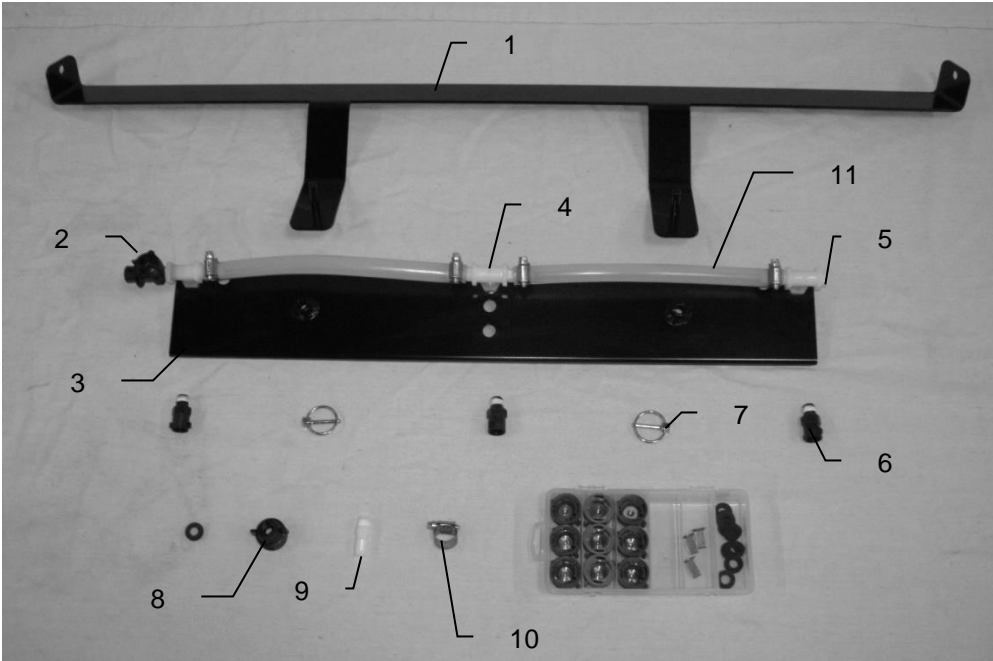
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Shield holder	001-4703J	1	NP	Tip – Silver	004-T650050-SS	2
2	Spray shield	001-4703G	1	NP	Tip – Pink	004-T6501-PT	2
3	Straight fitting	003-A1414	6	NP	Tip – Red	004-T6502-PT	2
4	Tee	003-TT14SQ	3	NP	Washer	004-1207W	3
5	Elbow	003-SE14F	3	NP	Not pictured		
6	Hose clamp	003-9002	12				
7	Hose	002-9016	9 ft				
8	Elbow	003-EL1414	6				
9	Hose clamp	003-9003	1				
10	Check valve	002-4564X	1				
11	Hose bracket	001-4720	1				
12	Female coupler	004-1207G	3				
13	Tip strainer	004-1203-200	3				
14	Shutoff cap	004-1207F	2				
15	Female disconnect	004-1207H	1				
16	Lynch pin	008-4576	2				
17	Saddle leg	001-4703B	2				

Model 4508 Installation Kit



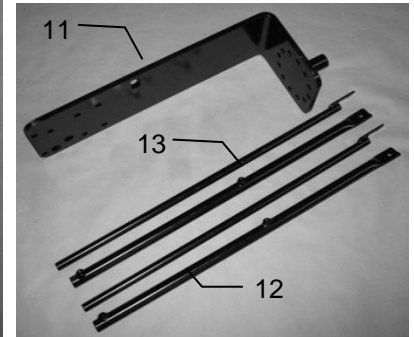
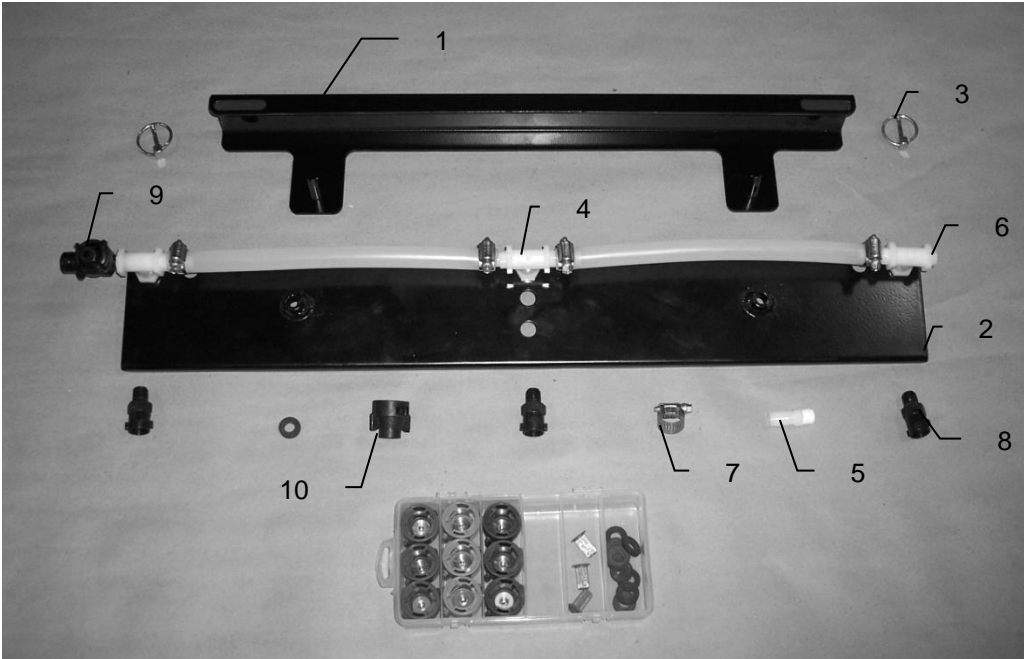
<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Shield holder	001-4703JB	2	Tip Kit (Complete)	030-9002	1
2	Shield holder	001-4703JC	2	Tip Kit Includes:		
3	Spray shield	001-4703GR	1	Plastic Box	008-9000	1
4	Straight fitting	003-A1412	5	Red Cap	004-1207B	3
5	Hose	002-9001	2	Outside Tip (Red Set)	004-650050-SS	2
6	Tee	003-TT14	3	Inside Tip (Red Set)	004-XR11001VS	1
7	Plug	003-F14	1	Green Cap	004-1207A	3
8	Lynch pin	008-4576	2	Outside Tip (Green Set)	004-6501-SS	2
9	Female disconnect	004-1207H	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Check valve	004-1207V	1	Blue Cap	004-1207C	3
11	Nozzle body	004-4710	3	Outside Tip (Blue Set)	004-6502-SS	2
12	Washer	004-1207W	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Hose clamp	003-9003	5	Washer	004-1207W	9
14	Right leg	001-4703K	1	Tip Strainer	004-1203-100	3
15	Left leg	001-4703L	1			

Model 4512 Installation Kit



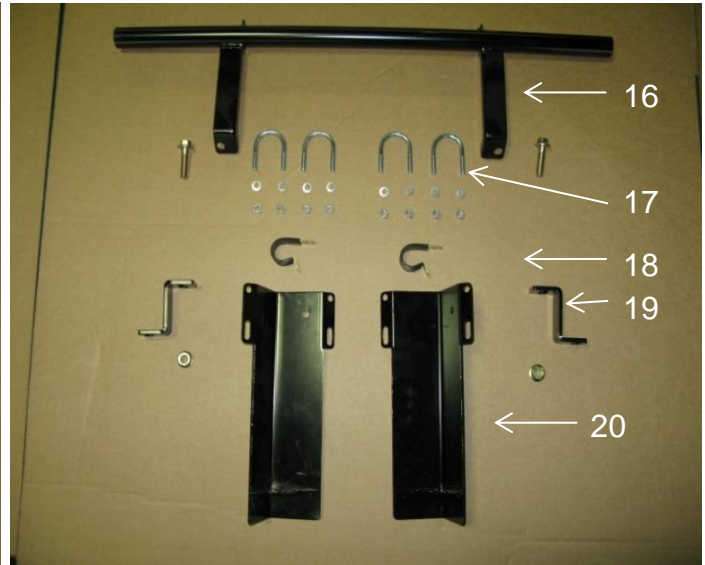
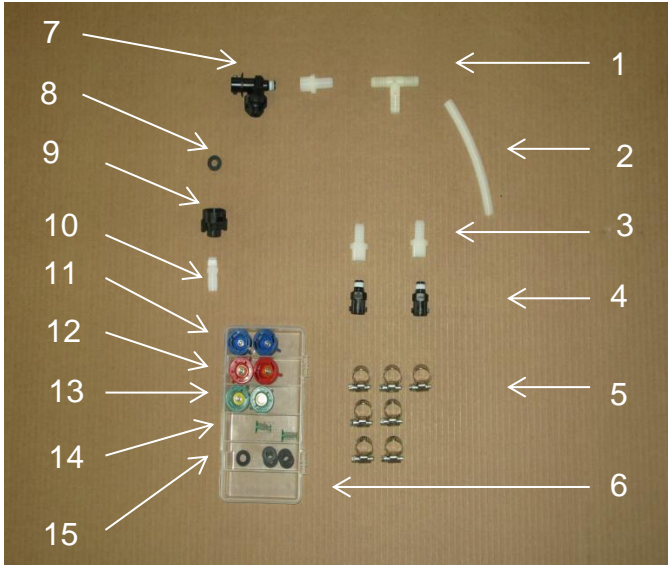
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1	Shield holder	001-4704E	1	Tip Kit (Complete)	030-9002	1
2	Check valve	004-1207V	1	Plastic Box	008-9000	1
3	Spray shield	001-4703GR	1	Red Cap	004-1207B	3
4	Tee	003-TT14	3	Outside Tip (Red Set)	004-650050-SS	2
5	Plug	003-F14	1	Inside Tip (Red Set)	004-XR11001VS	1
6	Nozzle body	004-4710	3	Green Cap	004-1207A	3
7	Lynch pin	008-4576	2	Outside Tip (Green Set)	004-6501-SS	2
8	Female disconnect	004-1207H	1	Inside Tip (Green Set)	004-XR110015VS	1
9	Straight fitting	003-A1412	5	Blue Cap	004-1207C	3
10	Hose clamp	003-9003	5	Outside Tip (Blue Set)	004-6502-SS	2
11	Hose	002-9001	2	Inside Tip (Blue Set)	004-XR11002VS	1
12	Mounting bracket	001-4418	1	Tip strainer	004-1203-100	3
13	Inside support rod	001-4405	2	Washer	004-1207W	9
14	Outside support rod	001-4404	2			

Model 4513 installation

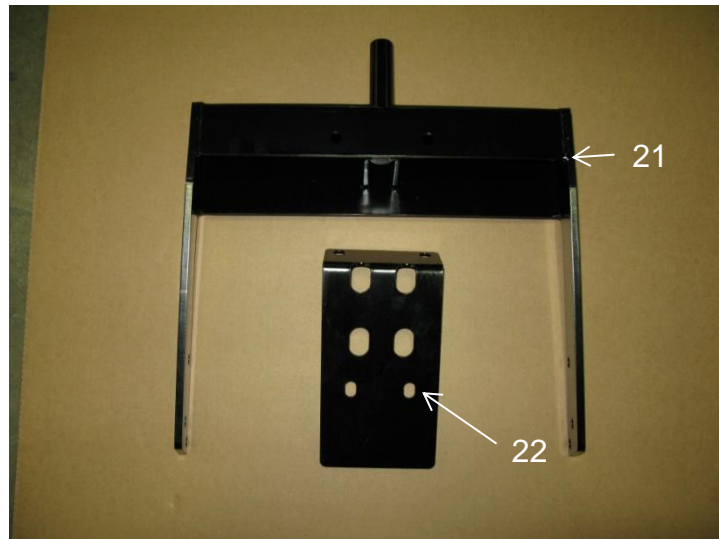


<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Shield bracket	001-4704D	1	Tip Kit (Complete)	030-9002	1
2	Spray shield	001-4703GR	1	Plastic Box	008-9000	1
3	Lynch pin	008-4576	2	Red Cap	004-1207B	3
4	Tee	003-TT14	3	Outside Tip (Red Set)	004-650050-SS	2
5	Straight fitting	003-A1412	5	Inside Tip (Red Set)	004-XR11001VS	1
6	Plug	003-F14	1	Green Cap	004-1207A	3
7	Hose clamp	003-9003	5	Outside Tip (Green Set)	004-6501-SS	2
8	Male quick fitting	004-4710	3	Inside Tip (Green Set)	004-XR110015VS	1
9	Check valve	004-1207V	1	Blue Cap	004-1207C	3
10	Female disconnect	004-1207H	1	Outside Tip (Blue Set)	004-6502-SS	2
11	Mounting bracket	001-4418	1	Inside Tip (Blue Set)	004-XR11002VS	1
12	Outside support rod	001-4404	2	Tip strainer	004-1203-100	3
13	Inside support rod	001-4405	2	Washer	004-1207W	9

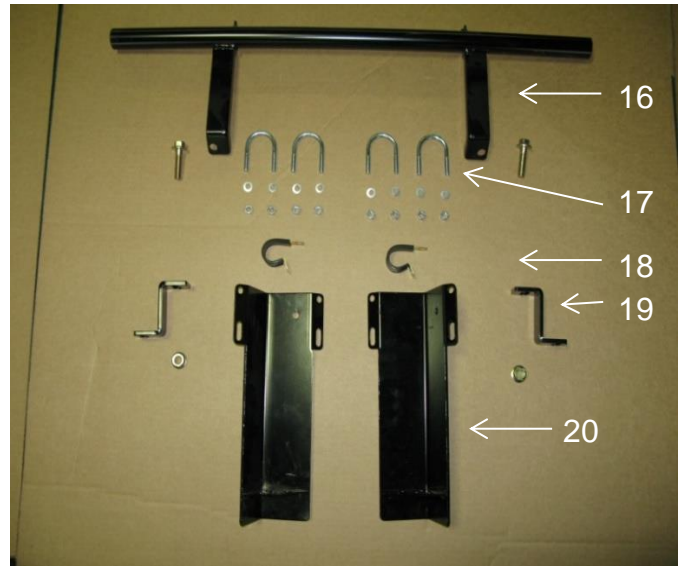
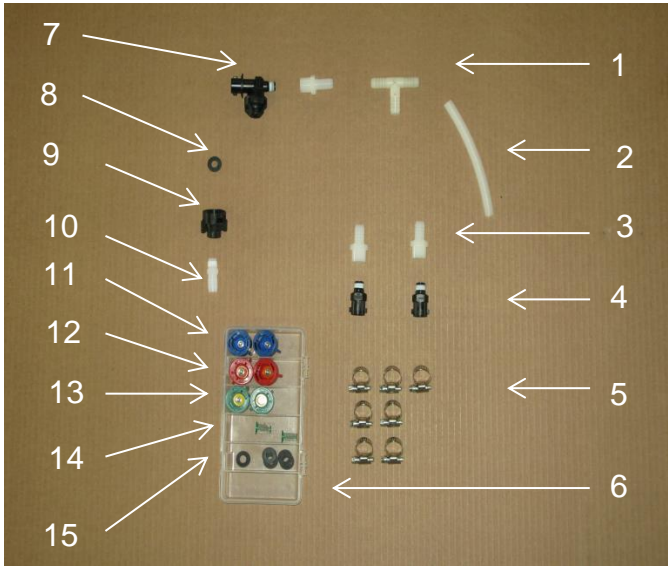
Model 4516 Installation Kit John Deere 8 & 9 Series Balers



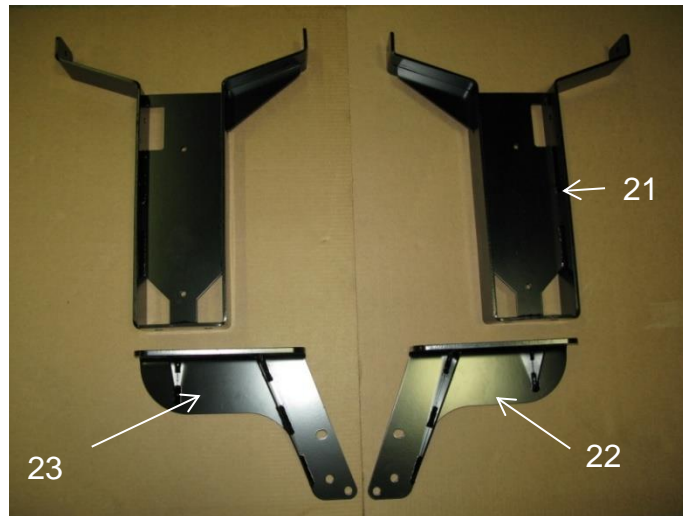
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1	Tee	003-T1212	1	14	Strainer	004-1203-100	2
2	Hose	002-9001	4 ft	15	Rubber Washer	004-1207W	6
3	Fitting	003-A1412F	3	16	Nozzle Holder	001-4703R	1
4	Fitting	004-4710	2	17	5/16" U-bolt	001-4714UBS	4
5	Hose Clamps	003-9003	7	18	Jiffy Clips	008-9009	2
6	PLANO BOX	008-9000	1	19	Spacer	001-4703NS	2
7	Check Valve	004-1207V	1	20	Nozzle Mount	001-4714J	2
8	Rubber Washer	004-1207W	6	21	Mounting Bracket	001-4411	1
9	Coupler	004-1207H	1	22	Support	001-4411A	1
10	Fitting	003-A1412	1				
11	Cap-blue	004-1207C	2	11a	TIP-Blue	004-XR11003VS	2
12	Cap-red	004-1207B	2	12a	TIP-Orange	004-XR11001VS	2
13	Cap-green	004-1207A	2	13a	TIP-Yellow	004-XR11002VS	2



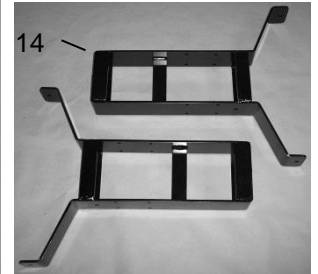
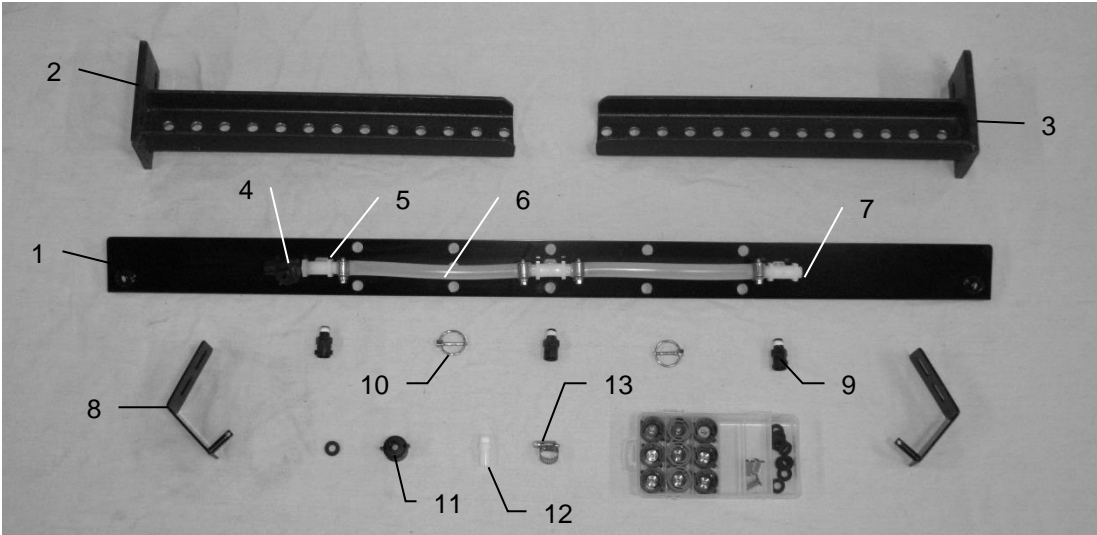
Model 4517 Installation Kit John Deere 8 & 9 Series Balers



<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	Tee	003-T1212	1	14	Strainer	004-1203-100	2
2	Hose	002-9001	4 ft	15	Rubber Washer	004-1207W	6
3	Fitting	003-A1412F	3	16	Nozzle Holder	001-4703R	1
4	Fitting	004-4710	2	17	5/16" U-bolt	001-4714UBS	4
5	Hose Clamps	003-9003	7	18	Jiffy Clips	008-9009	2
6	PLANO BOX	008-9000	1	19	Spacer	001-4703NS	2
7	Check Valve	004-1207V	1	20	Nozzle Mount	001-4714J	2
8	Rubber Washer	004-1207W	6	21	Saddle Leg	001-4703B	2
9	Coupler	004-1207H	1	22	Right Bracket	001-4703DR	1
10	Fitting	003-A1412	1	23	Left Bracket	001-4703DL	1
11	Cap-blue	004-1207C	2	11a	TIP-Blue	004-XR11003VS	2
12	Cap-red	004-1207B	2	12a	TIP-Orange	004-XR11001VS	2
13	Cap-green	004-1207A	2	13a	TIP-Yellow	004-XR11002VS	2

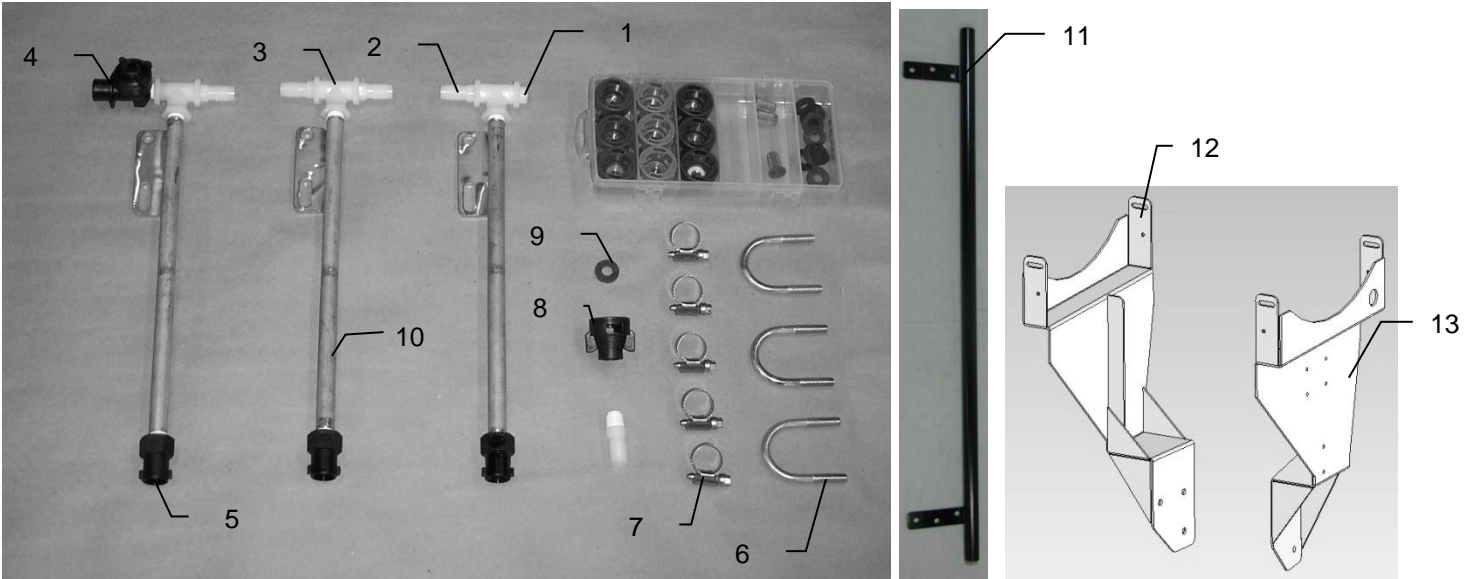


Model 4523 Installation Kit



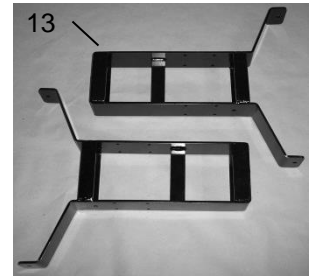
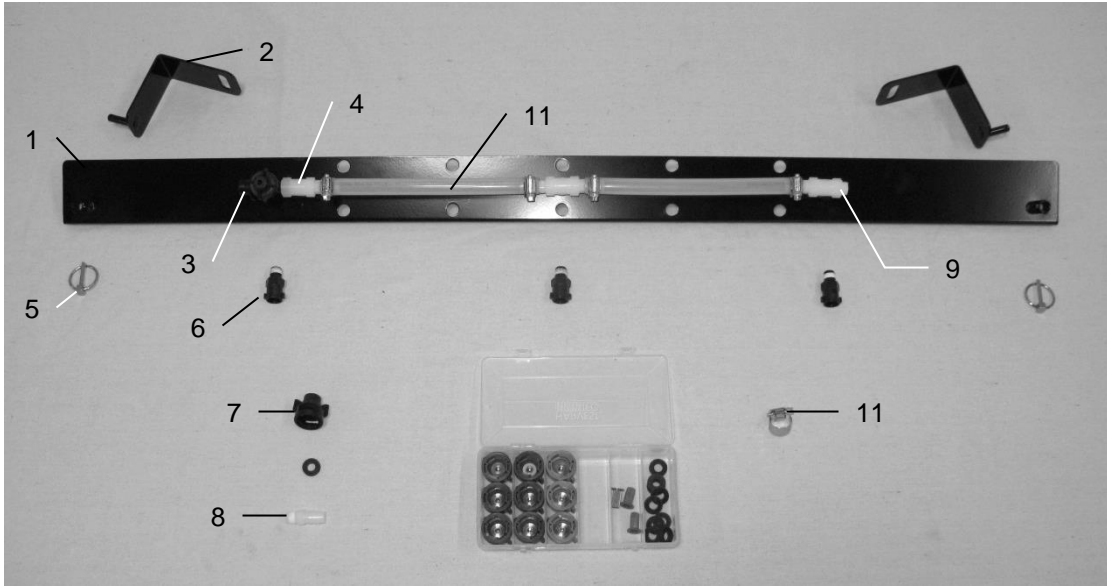
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Spray shield	001-4704G	1	Tip Kit (Complete)	030-9002	1
2	Support leg right	001-4704JR	1	Tip Kit Includes:		
3	Support leg left	001-4704JL	1	Plastic Box	008-9000	1
4	Check valve	004-1207V	1	Red Cap	004-1207B	3
5	Tee	003-TT14	3	Outside Tip (Red Set)	004-650050-SS	2
6	Hose	002-9001	2	Inside Tip (Red Set)	004-XR11001VS	1
7	Plug	003-F14	1	Green Cap	004-1207A	3
8	Shield hanger	001-4704H	2	Outside Tip (Green Set)	004-6501-SS	2
9	Nozzle body	004-4710	3	Inside Tip (Green Set)	004-XR110015VS	1
10	Lynch pin	008-4576	2	Blue Cap	004-1207C	3
11	Coupler	004-1207H	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Straight fitting	003-A1412	5	Inside Tip (Blue Set)	004-XR11002VS	1
13	Hose clamp	003-9003	5	Washer	004-1207W	9
14	Saddle legs	004-4703B	2	Tip Strainer	004-1203-100	3

Model 4524 Installation Kit

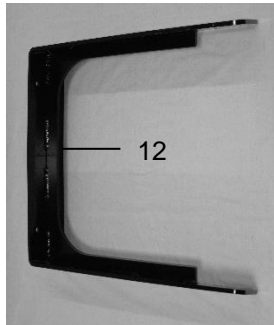


<u>Ref</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>	<u>Description</u>	<u>Part#</u>	<u>Qty</u>
1	Plug	003-F14	1	Tip Kit (Complete)	030-9002	1
2	Straight fitting	003-A1412	5	Tip Kit Includes:		
3	Tee	003-TT14	3	Plastic Box	008-9000	1
4	Check valve	004-1207V	1	Red Cap	004-1207B	3
5	Female coupler	004-1207G	3	Outside Tip (Red Set)	004-650050-SS	2
6	U bolt	001-4714UBS	3	Inside Tip (Red Set)	004-XR11001VS	1
7	Hose clamp	003-9002	5	Green Cap	004-1207A	3
8	Female disconnect	004-1207H	1	Outside Tip (Green Set)	004-6501-SS	2
9	Washer	004-1207W	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Nozzle tube	001-4714	3	Blue Cap	004-1207C	3
11	Nozzle holder	001-4703T	1	Outside Tip (Blue Set)	004-6502-SS	2
12	Right leg	001-4703K	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Left leg	001-4703L	1	Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

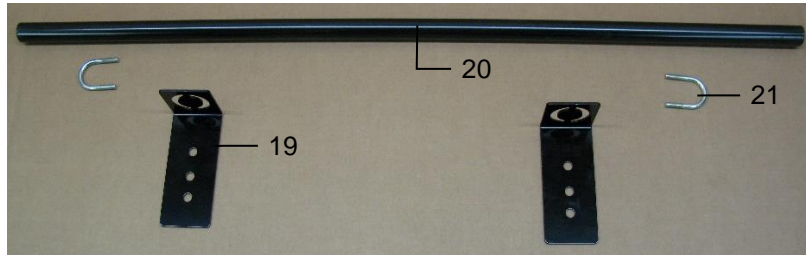
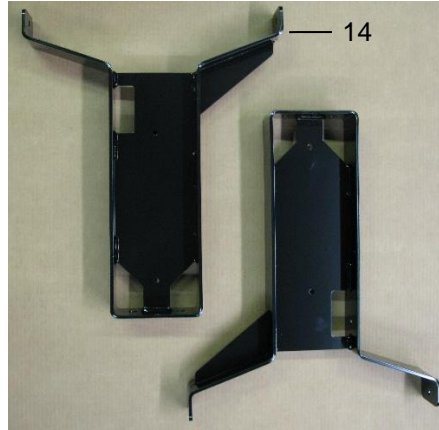
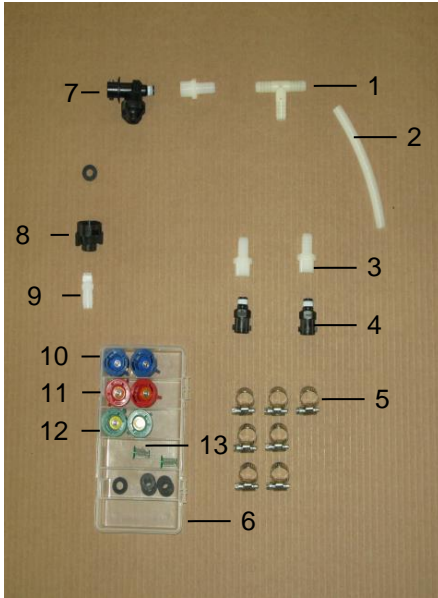
Model 4526 Installation Kit



<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Spray shield	001-4704G	1	Tip Kit (Complete)	030-9002	1
2	Shield hanger	001-4704MC	2	Tip Kit Includes:		
3	Check valve	004-1207V	1	Plastic Box	008-9000	1
4	Tee	003-TT14	3	Red Cap	004-1207B	3
5	Lynch pin	008-4576	2	Outside Tip (Red Set)	004-650050-SS	2
6	Nozzle body	004-4710	3	Inside Tip (Red Set)	004-XR11001VS	1
7	Coupler	004-1207H	1	Green Cap	004-1207A	3
8	Straight fitting	003-A1412	5	Outside Tip (Green Set)	004-6501-SS	2
9	Plug	003-F14	1	Inside Tip (Green Set)	004-XR110015VS	1
10	Hose clamp	003-9003	5	Blue Cap	004-1207C	3
11	Hose	002-9001	2	Outside Tip (Blue Set)	004-6502-SS	2
12	Mounting bracket	001-4704MA	1	Inside Tip (Blue Set)	004-XR11002VS	1
13	Saddle legs	001-4703B	2	Washer	004-1207W	9
				Tip Strainer	004-1203-100	3

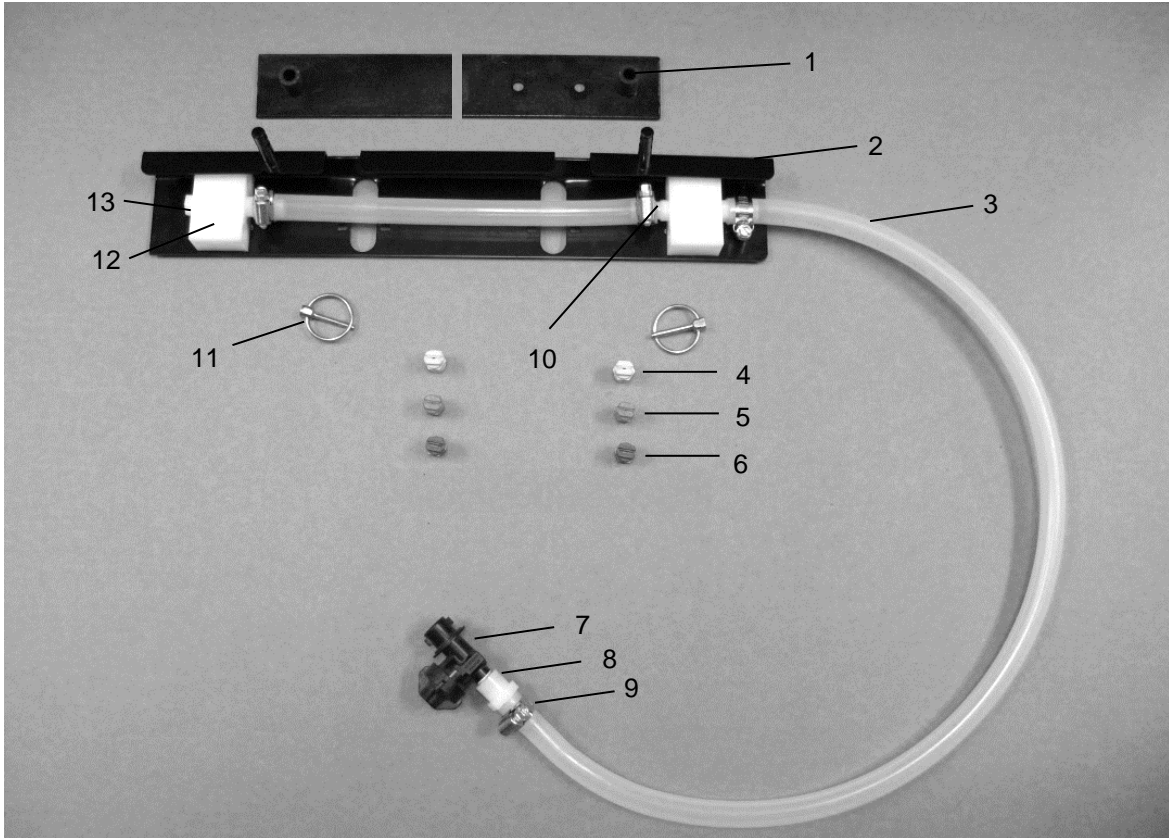


Model 4538 Installation Kit

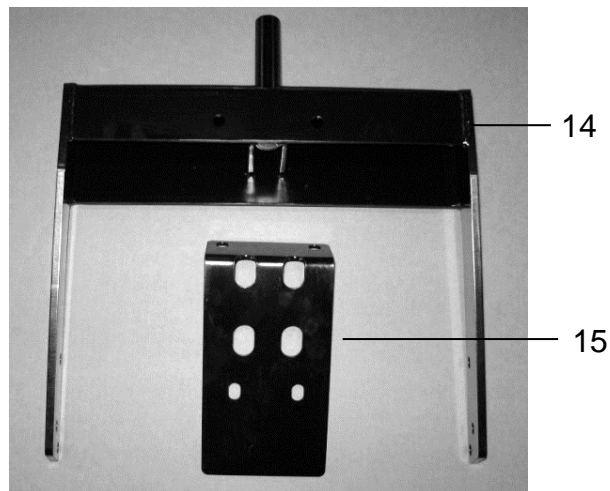


<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Tee	003-T1212	1	14	Tank Leg – Long	001-4703B	2
2	Hose	002-9001	2 ft	15	Nozzle Holder	001-4714JS	2
3	Fitting	003-A1412F	3	16	Side Support	001-4704MA	2
4	Fitting	004-4710	2	17	Brace Support	001-4704MDJ	2
5	Hose Clamps	003-9003	5	18	Top Support	001-4704MEJ	1
6	Plano Box	008-9000	1	19	Nozzle Mount	001-4703TP	2
7	Check Valve	004-1207V	1	20	Tube Holder	001-4703TH	1
8	Coupler	004-1207H	1	21	U-bolt	001-4714UBS	6
9	Fitting	003-A1412	1				
10	Cap-blue	004-1207C	2	NP	Oetiker Clamp	003-9005	4
11	Cap-red	004-1207B	2	NP	TIP-Blue	004-XR11003VS	2
12	Cap-green	004-1207A	2	NP	TIP-Orange	004-XR11001VS	2
13	Strainer	004-1203-100	2	NP	TIP-Yellow	004-XR11002VS	2

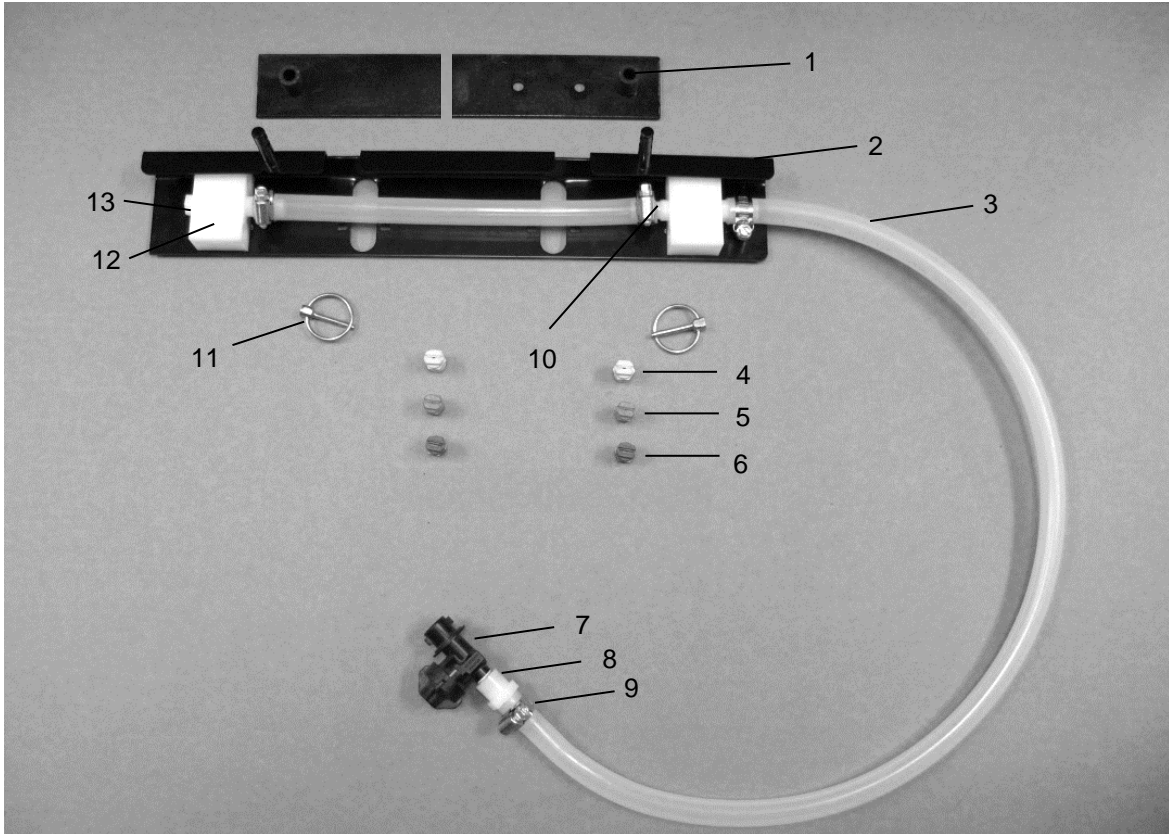
Model 4546 Installation Kit John Deere 0 Series Round Balers



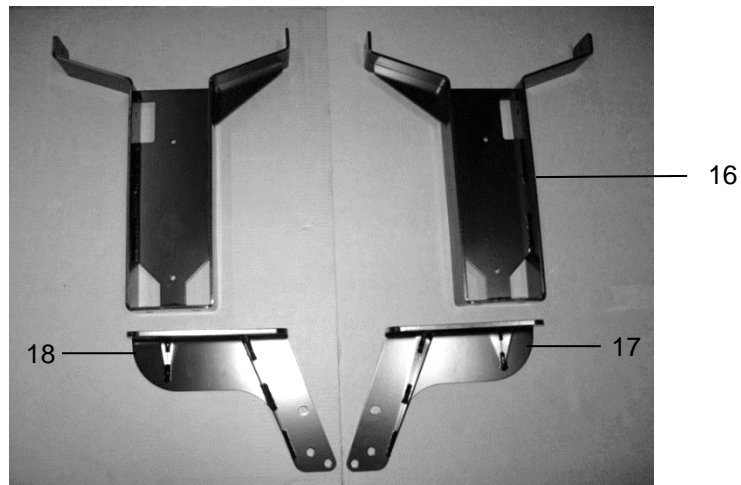
<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	<u>Part #</u>	<u>Qty</u>
1	Holder	001-4435NCX2	2	11	Lynch Pin	008-4576	2
2	Shield	001-4435NSX	1	12	Manifold Block	001-4435NSB	2
3	Hose-1/2"	002-9001	4 ft	13	Fitting	003-F14	1
4	Tip-Pink / Grey	004-T8001-PT	2	14	Mounting Bracket	001-4411	1
5	Tip-Orange / Grey	004-T8002-PT	2	15	Support	001-4411A	1
6	Tip-Red / Grey	004-T8003-PT	2	NP	Strainer	004-1203-100	1
7	Check Valve	004-1207V	1	NP	Clamping UBolt 2"	001-4714UBX	1
8	Fitting	003-A1412F	1	NP	Female 1/4" Disconnect	004-1207H	1
9	Hose Clamp	003-9003	4	NP	Mini Plano Box	008-9001	1
10	Fitting	003-A1412	4				



Model 4547 Installation Kit John Deere 0 Series Round Balers



<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	Holder	001-4435NCX2	2	12	Manifold Block	001-4435NSB	2
2	Shield	001-4435NSX	1	13	Fitting	003-F14	1
3	Hose-1/2"	002-9001	4 ft	14	Mounting Bracket	001-4411	1
4	Tip-Pink / Grey	004-T8001-PT	2	15	Support	001-4411A	1
5	Tip-Orange / Grey	004-T8002-PT	2	16	Saddle Leg	001-4703B	2
6	Tip-Red / Grey	004-T8003-PT	2	17	Right Bracket	001-4703DR	1
7	Check Valve	004-1207V	1	18	Left Bracket	001-4703DL	1
8	Fitting	003-A1412F	1	NP	Strainer	004-1203-100	1
9	Hose Clamp	003-9003	4	NP	Clamping UBolt 2"	001-4714UBX	2
10	Fitting	003-A1412	4	NP	Female 1/4" Disconnect	004-1207H	1
11	Lynch Pin	008-4576	2	NP	Mini Plano Box	008-9001	1



Notes

Notes

Harvest Tec Inc. Warranty and Liability Agreement

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

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

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

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

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

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

Revised 4/17

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