Installation Manual

Model 447CT
55 gallon Preservative Applicators

HARVEST TEC

Equipment and Products for Quality Hay.™

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Harvest Tec 447CT Installation Table of Contents

Introduction

Thank you for purchasing a Harvest Tec Model 447CT Hay Preservative 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 propionic acid. The model 447C Kit includes the following parts: Tank, Frame, Pumps, Hose, Baler Mounted Processor, Touchscreen Display, Moisture Sensors, Spray shield assembly and Miscellaneous Hardware. If you are unsure about your kit, please contact your local dealer for specifications. For your convenience we have included a parts break down for the applicator.

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

Tools Needed

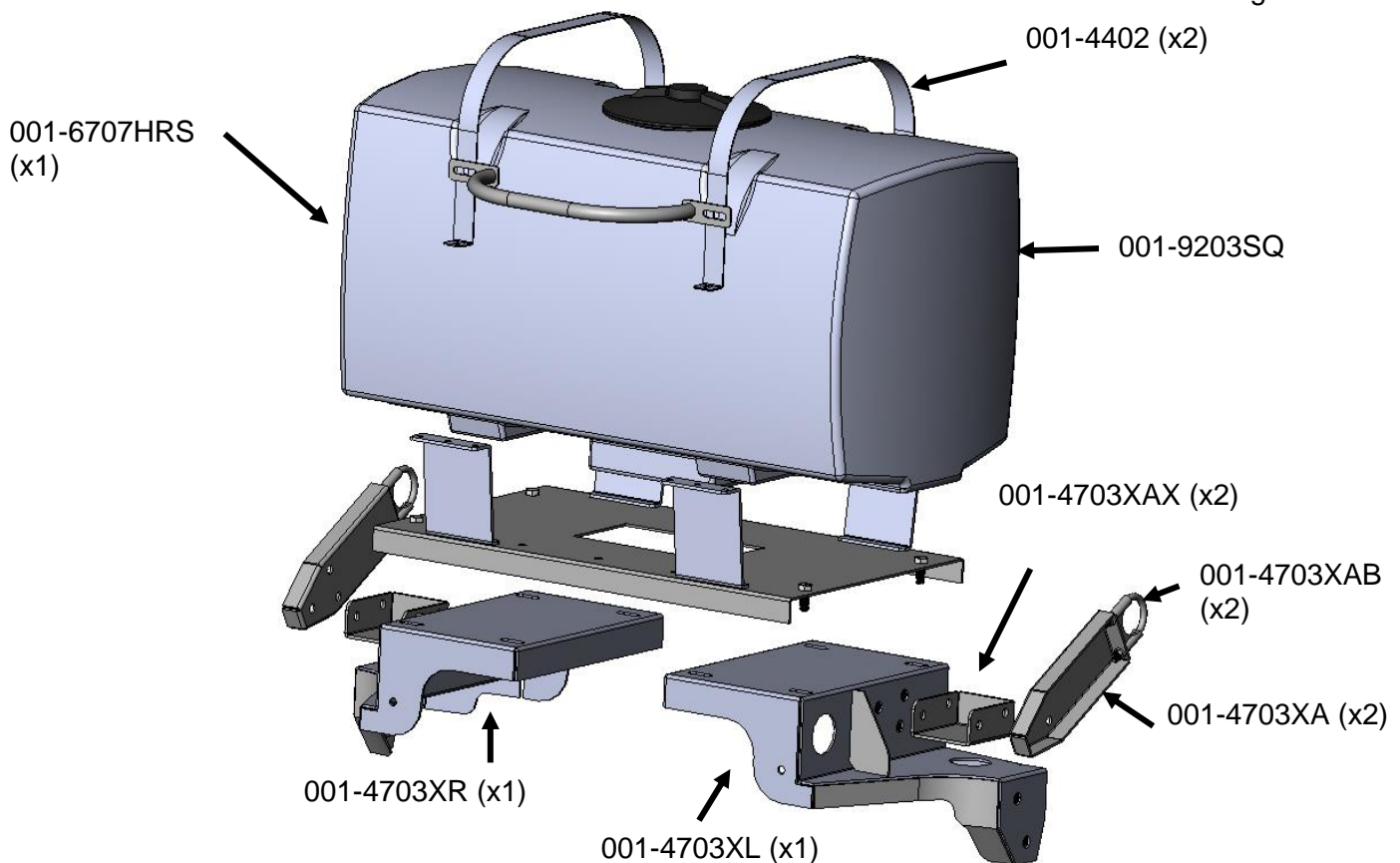|	
Standard wrench set	Side cutter
Standard screw driver or 5/16" nut driver	Hose cutter
SAE sock set	Hammer
Drill bit set	Crescent wrench
Center punch	Level
Metric wrench set	

Installation of Applicator
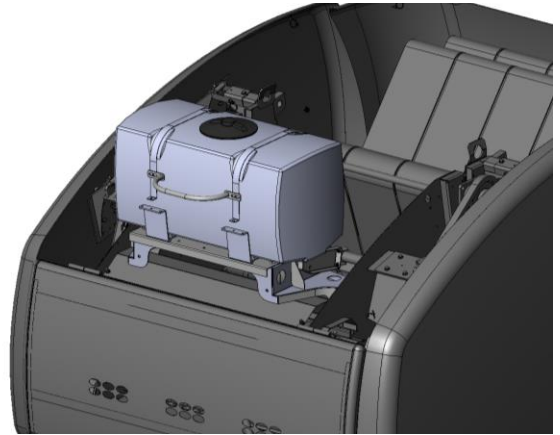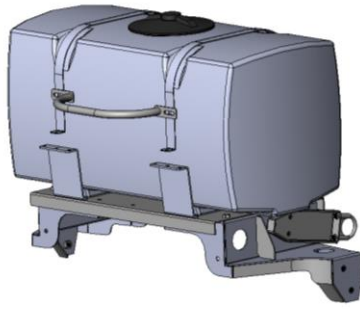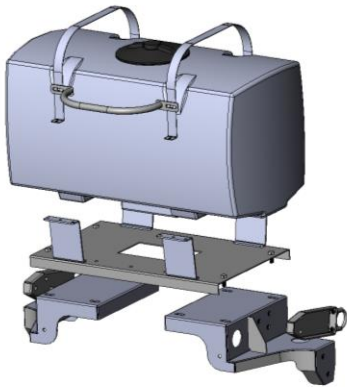
Tank and Saddle Installation

1. Locate the left saddle leg, 001-4703XL, and mount to left side sheet of baler using two 1/2"x 1-1/2" hex bolts, 1/2" lock washers, and 1/2" flat washers. Do not fully tighten.
2. Locate the right saddle leg, 001-4703XR, and mount to right side sheet of baler using two 1/2"x 1-1/2" hex bolts, 1/2" lock washers, and 1/2" flat washers. Do not fully tighten.
3. ***Roll Belt 460 / 560 and RB465 Installation only!*** Locate the two anchor extension brackets, 001-4703XAX, and attach one extension bracket to the outside of each leg with two 1/2"x 1-1/2" hex bolts, 1/2" lock washers, and 1/2" flat washers.
4. Locate the anchor bracket, 001-4703XA, and attach to the side of the extension bracket, 001-4703XAX for 4 X 6 balers (or 001-4703XR and 001-4703XL for other balers) using two 1/2"x 1-1/2" hex bolts, 1/2" flat washers, 1/2" lock washers, and 1/2" hex nuts. Do not fully tighten. Note that 001-4703XA should be positioned so it is angled toward the round pipe that runs across the width of the baler behind the legs. Repeat procedure for the opposite side.
5. Locate the u-bolts, 001-4703XAB, and attach the 001-4703XA brackets to the round pipe running across the baler. Tighten the u-bolts evenly. ***Due to minimal clearance between the anchor bracket and the side sheet, use a deep socket and long extension on a ratchet to tighten u-bolts.***
6. With the u-bolts, 001-4703XAB, securely tightened around the round pipe, tighten the bolts connecting the anchor brackets, 001-4703XA, to the saddle legs, 001-4703XL & 001-4703XR.
7. Tighten the hardware attaching the saddle legs, 001-4703XL & 001-4703XR, to side sheets of the baler.
8. Install the tank assembly (tanks, straps, handrail, and saddle pan) on the legs. Secure the saddle pan, 001-4703X, to the saddle legs with 1/2" flat washer, 1/2" lock washer, and 1/2" hex nut from the bottom side in four locations. Tighten hardware.

*****001-4703XAX (x2) are <u>ONLY</u> used on 4x6 models***
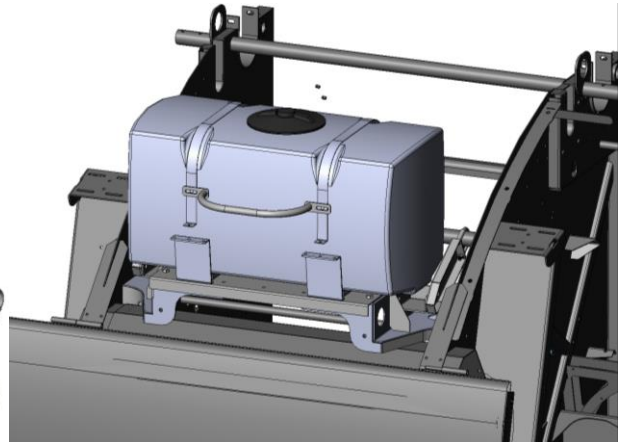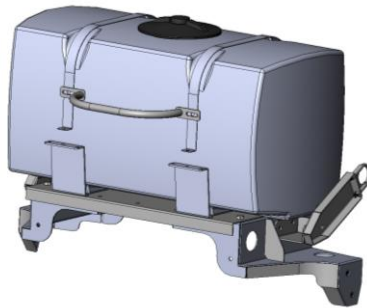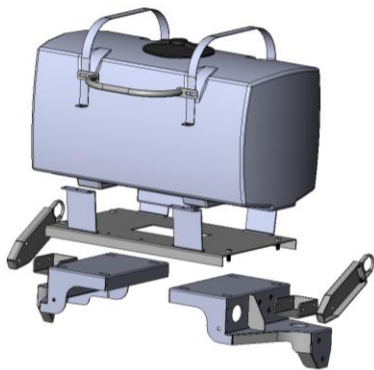
Figure 1

001-4402 (x2)

001-6707HRS (x1)

001-9203SQ

001-4703XAX (x2)

001-4703XAB (x2)

001-4703XA (x2)

001-4703XR (x1)

001-4703XL (x1)

4x5 Baler Expanded

4x6 Baler Expanded

5x5 Baler Expanded
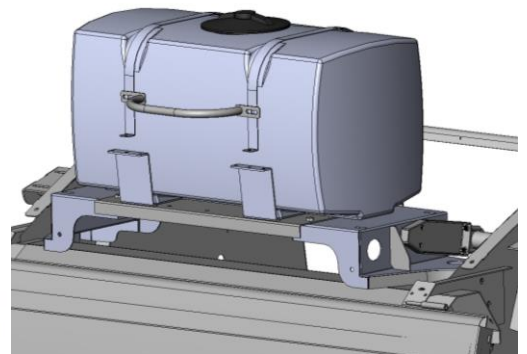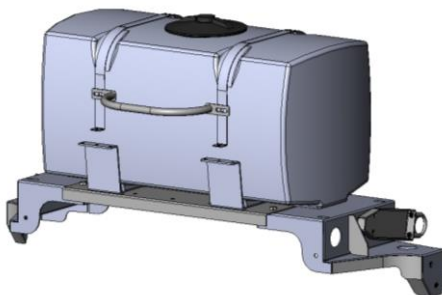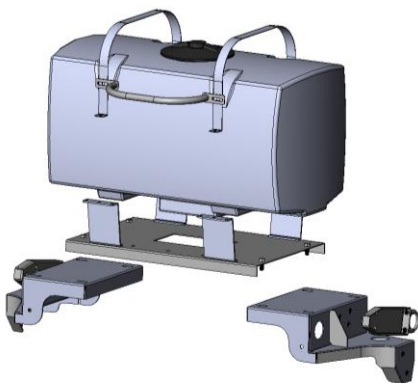
5x6 Baler Expanded
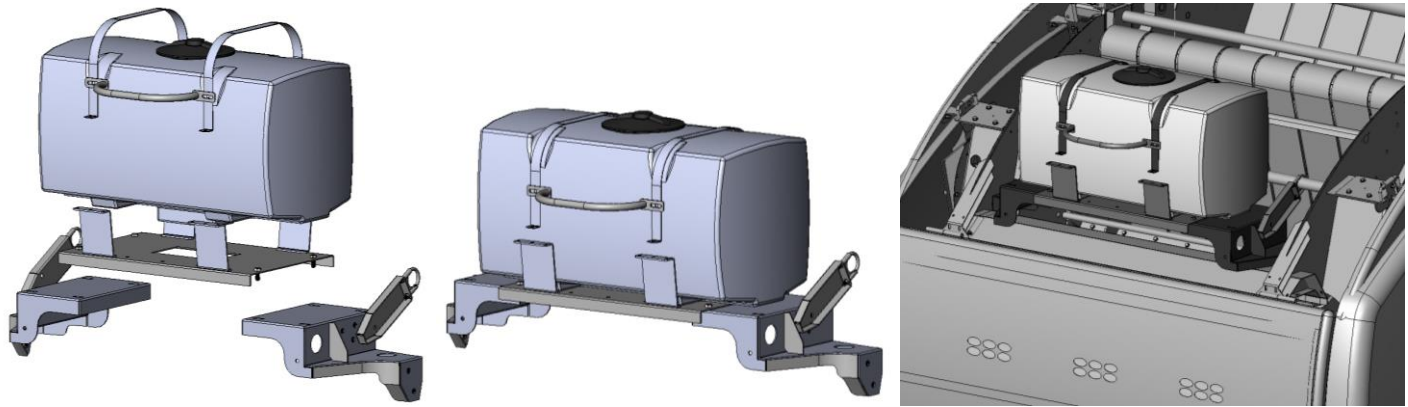
Installation of Pump Manifold

Mounting Front Pump Plate Support

Figure 2

001-4646C Pump Mounting Plate Holes

4x6 and 5x6 Baler Mounting Holes

001-4703XE

4x5 and 5x5 Baler Mounting Holes
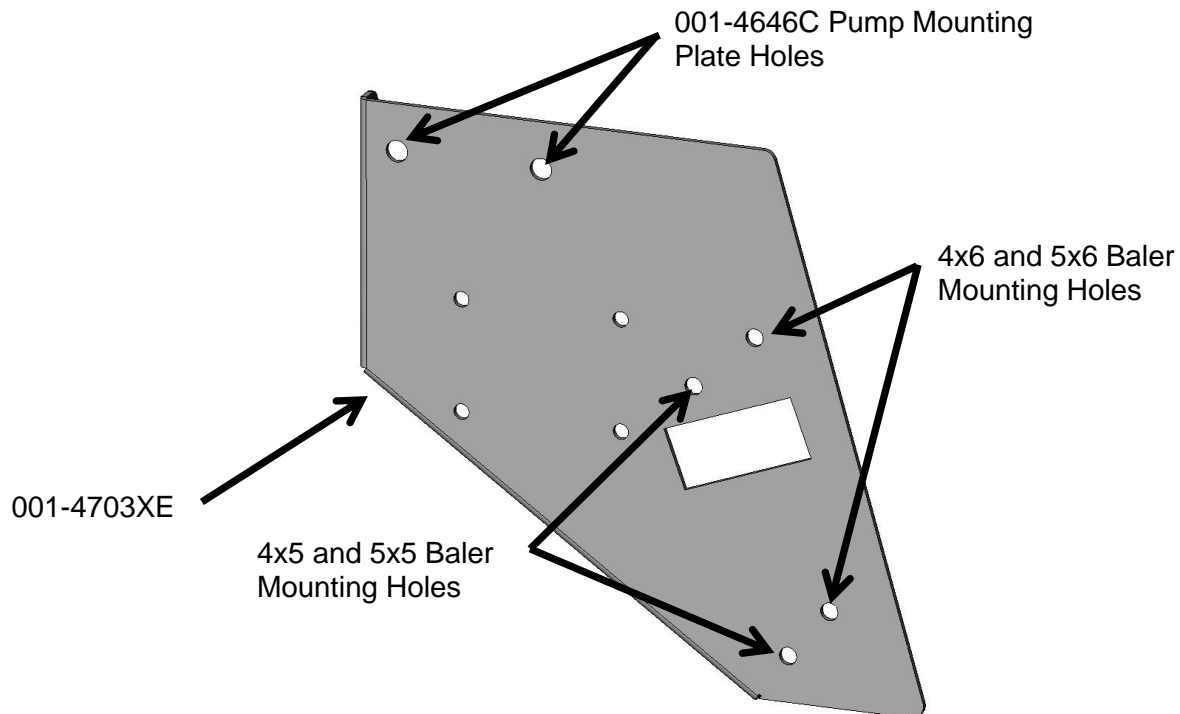
a. Open right side door of baler.

b. Locate mounting holes for your size baler in bracket (001-4703XE). Mount bracket to pre-stamped square holes on diagonal support structure of baler. Note pictures on following pages will help in locating the pre-stamped holes on your baler. Secure with two M8 x 25mm carriage bolts and flanged nuts.

c. Disconnect pump mounting bracket (001-4646C) from pump plate by removing four 3/8" x 3/8" flange bolts. Attach right top corner of pump mounting bracket to bracket (001-4703XE) with two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts. Note: top of brackets should be flush.

Mounting Rear Pump Plate Support

Mounting bracket (001-4703XF) will be used to mount the pump mounting bracket to the door support bracket. However each size baler uses a different set of holes in the rear mounting bracket (001-4703XR). Follow the guidance provided below as well as the additional instructions on the next few pages for mounting your baler.

001-4703XF

Figure 3

Baler	Pump Plate	Door Bracket
4x5	1 & 2	D & E
5x5	1 & 2	C & E
4x6	3 & 4	A & B
5x6	3 & 4	A & E
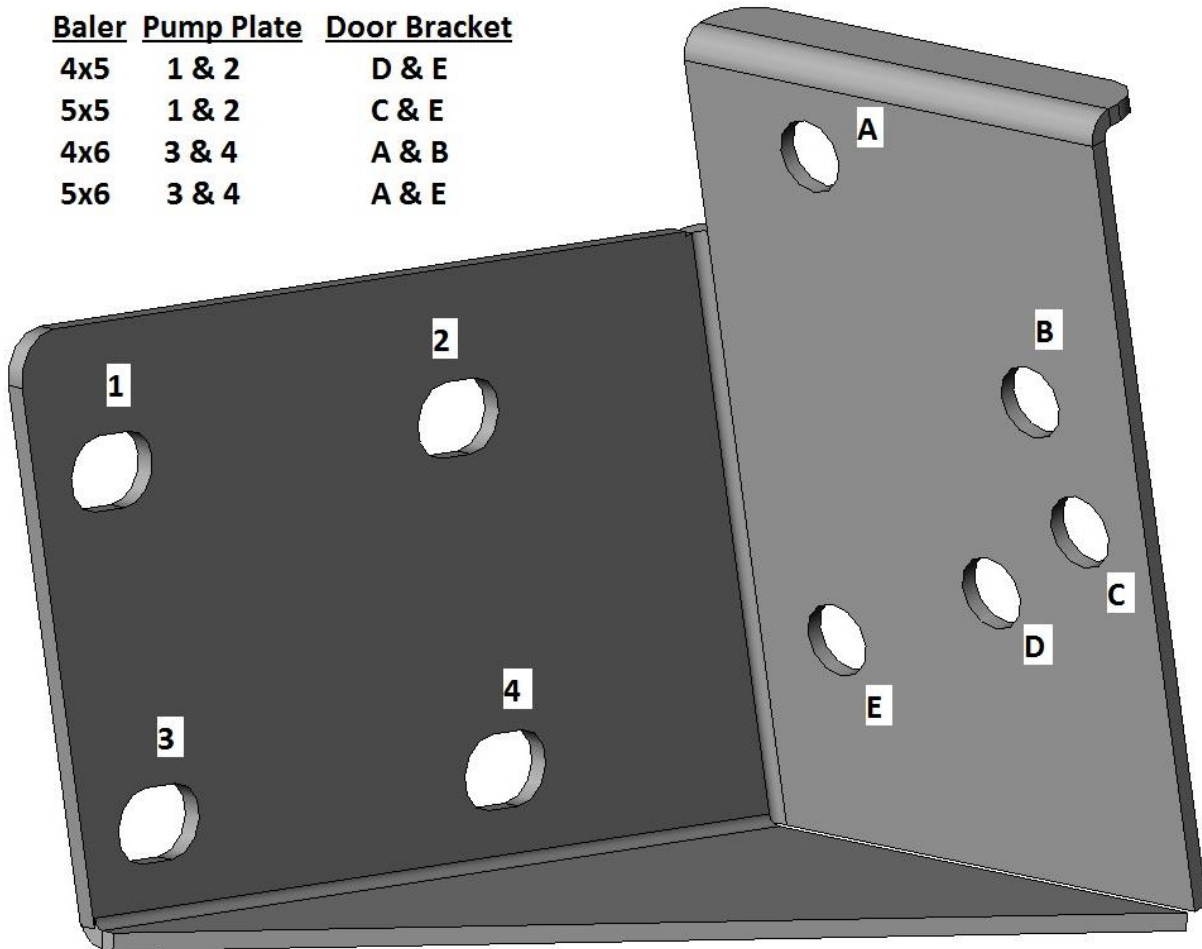
Mounting Rear Pump Plate Support for 4 X 5 Baler

1. Locate the baler door support bracket. This will be to the left of the Mounting Plate (001-4646C).
2. Use two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts to secure Pump Plate Bracket (001-4703XF) to back side of Pump Mounting Bracket (001-4646C). Use holes **1 and 2** as designated in Figure 4 on the Pump Plate Bracket (001-4703XF). Slide the Pump Plate Bracket (001-4703XF) so it touches the door support bracket.
3. Place a level on top of the Mounting Plate (001-4646C) to make sure it is level. Using the Pump Plate Bracket (001-4703XF) as a guide mark holes (**D and E)** on the door support bracket. Remove brackets (001-4703XF and 001-4646C) for drilling. Center punch holes and drill with a 7/16" drill bit.
4. Once holes are drilled secure (001-4703XF) to door support bracket with two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts.
5. Attach pump mounting bracket back onto brackets (001-4703XF and 001-4703XE) with 3/8" hardware.
6. Attach pump plate with pumps onto Mounting Plate (001-4646C) bracket with 3/8" x 3/4" flange bolts removed earlier.
7. **Install pump controller (006-5672) in pump plate using 5/16" flat washers, lock washers, nuts.**

The Pump Controller and pump heads must be pointing down. Failure to mount the pump plate assembly in this specified direction will void all warranty of the Pump Controller and pumps.

Figure 4

Figure 5

Figure 6

4x5 Baler Use Holes D & E

Mounting Rear Pump Plate Support for the 4 x 6 Baler

1. Locate the baler door support bracket. This will be to the left of the Mounting Plate (001-4646C).
2. Use two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts to secure Pump Plate Bracket (001-4703XF) to back side of Pump Mounting Bracket (001-4646C). Use holes **3 and 4** as designated in Figure 7 on the Pump Plate Bracket (001-4703XF). Slide the Pump Plate Bracket (001-4703XF) so it touches the door support bracket.
3. Place a level on top of the Mounting Plate (001-4646C) to make sure it is level. Using the Pump Plate Bracket (001-4703XF) as a guide mark holes (**A and B)** on the door support bracket. Remove brackets (001-4703XF and 001-4646C) for drilling. Center punch holes and drill with a 7/16" drill bit.
4. Once holes are drilled secure (001-4703XF) to door support bracket with two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts.
5. Attach pump mounting bracket back onto brackets (001-4703XF and 001-4703XE) with 3/8" hardware.
6. Attach pump plate with pumps onto Mounting Plate (001-4646C) bracket with 3/8" x 3/4" flange bolts removed earlier.
7. Install Pump Controller (006-5672) in pump plate using 15/16" flat washers, lock washers, nuts.

The Pump Controller and pump heads must be pointing down. Failure to mount the pump plate assembly in this specified direction will void all warranty of the Pump Controller and pumps.
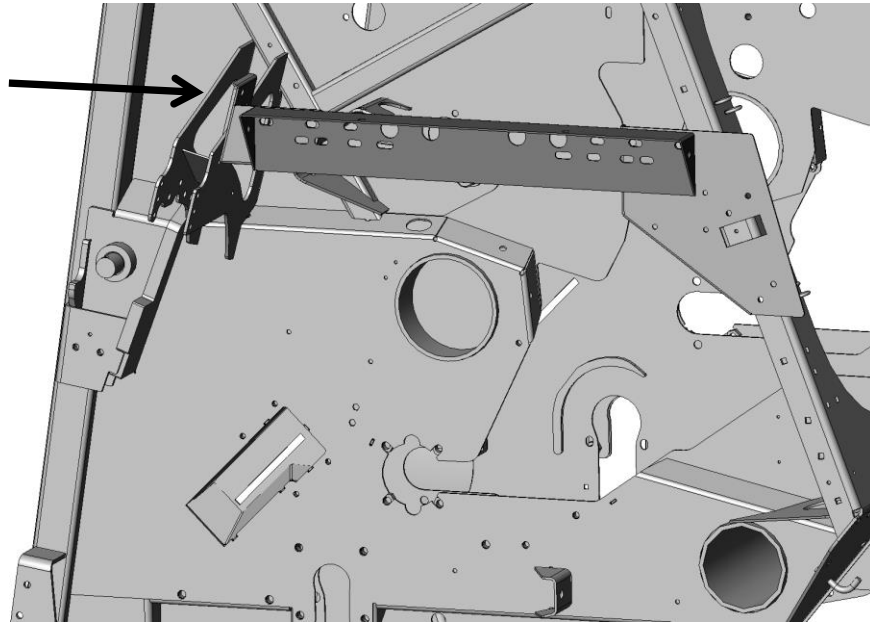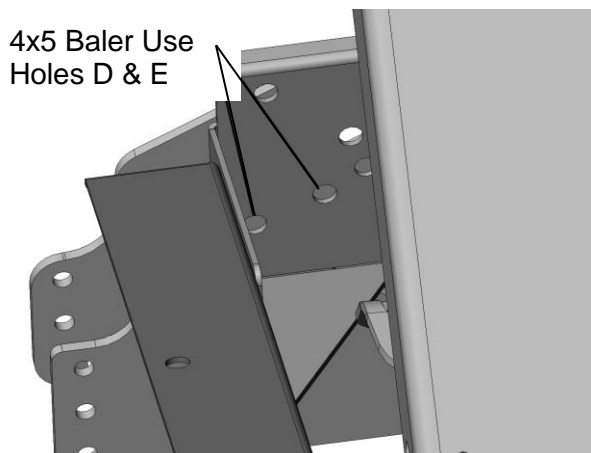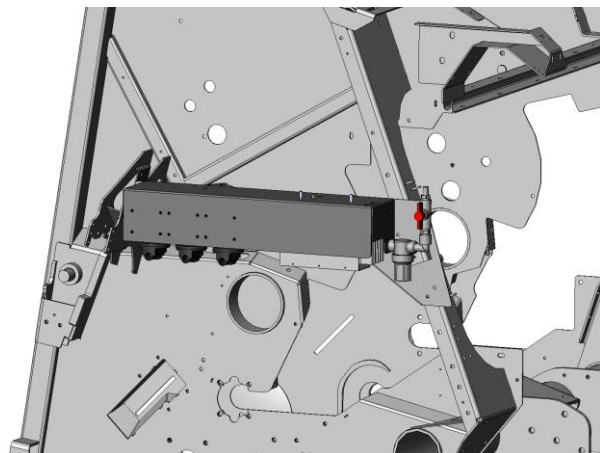

Figure 7

Figure 8

Figure 9

4x6 Baler – Use Holes A & B

Mounting Rear Pump Plate Support for the 5 x 5 Baler

1. Locate the baler door support bracket. This will be to the left of the Mounting Plate (001-4646C).
2. Use two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts to secure Pump Plate Bracket (001-4703XF) to back side of Pump Mounting Bracket (001-4646C). Use holes **1 and 2** as designated in Figure 10 on the Pump Plate Bracket (001-4703XF). Slide the Pump Plate Bracket (001-4703XF) so it touches the door support bracket.
3. Place a level on top of the Mounting Plate (001-4646C) to make sure it is level. Using the Pump Plate Bracket (001-4703XF) as a guide mark holes (**C and E)** on the door support bracket. Remove brackets (001-4703XF and 001-4646C) for drilling. Center punch holes and drill with a 7/16" drill bit.
4. Once holes are drilled secure (001-4703XF) to door support bracket with two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts.
5. Attach pump mounting bracket back onto brackets (001-4703XF and 001-4703XE) with 3/8" hardware.
6. Attach pump plate with pumps onto Mounting Plate (001-4646C) bracket with 3/8" x 3/4" flange bolts removed earlier.
7. Install Pump Controller (006-5672) in pump plate using 5/16" flat washers, lock washers, nuts.

The Pump Controller and pump heads must be pointing down. Failure to mount the pump plate assembly in this specified direction will void all warranty of the Pump Controller and pumps.
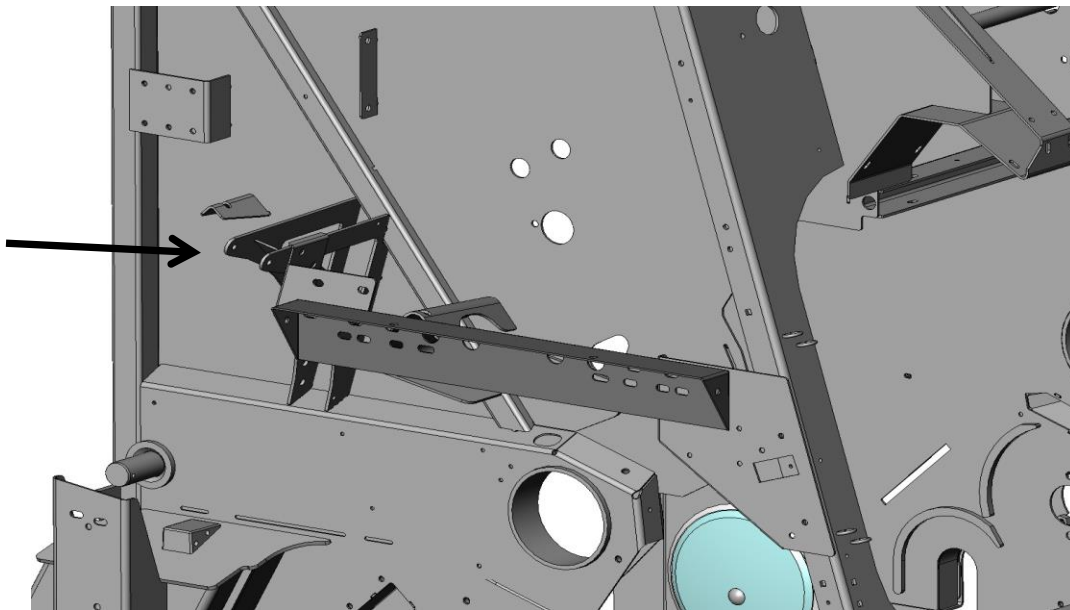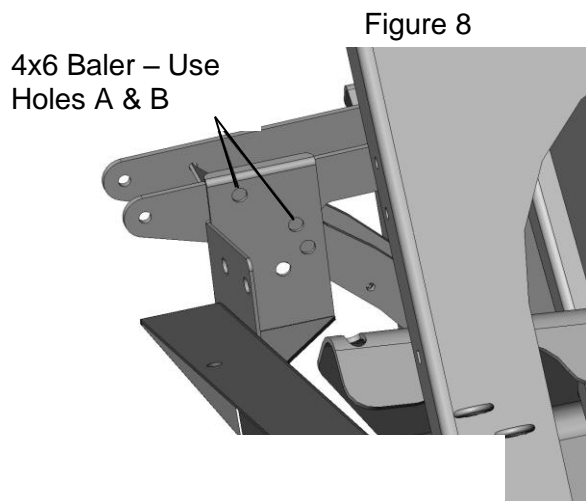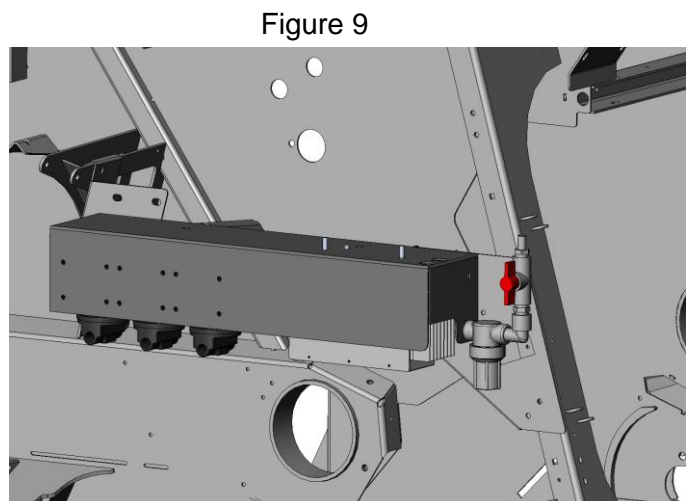

Figure 10

Figure 11

5x5 Baler – Use Holes C & E

Figure 12
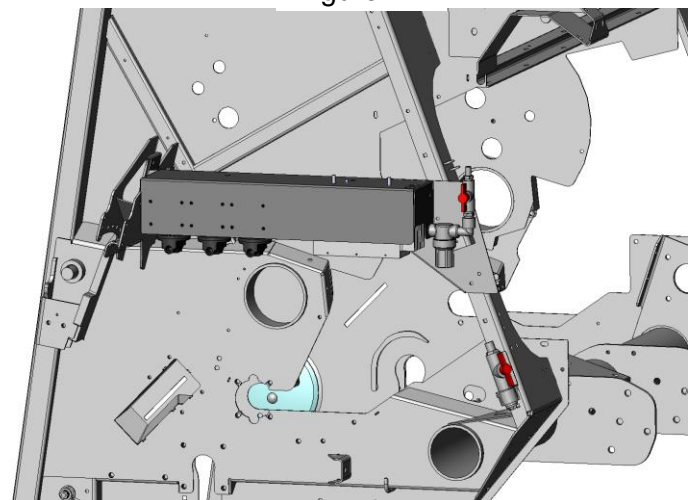
Mounting Rear Pump Plate Support for the 5 x 6 Baler

1. Locate the baler door support bracket. This will be to the left of the Mounting Plate (001-4646C).
2. Use two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts to secure Pump Plate Bracket (001-4703XF) to back side of Pump Mounting Bracket (001-4646C). Use holes **3 and 4** as designated in Figure 13 on the Pump Plate Bracket (001-4703XF). Slide the Pump Plate Bracket (001-4703XF) so it touches the door support bracket.
3. Place a level on top of the Mounting Plate (001-4646C) to make sure it is level. Using the Pump Plate Bracket (001-4703XF) as a guide mark holes (**A and E)** on the door support bracket. Remove brackets (001-4703XF and 001-4646C) for drilling. Center punch holes and drill with a 7/16" drill bit.
4. Once holes are drilled secure (001-4703XF) to door support bracket with two 3/8" x 3/4" hex bolts, flat washers, lock washers, and nuts.
5. Attach pump mounting bracket back onto brackets (001-4703XF and 001-4703XE) with 3/8" hardware.
6. Attach pump plate with pumps onto Mounting Plate (001-4646C) bracket with 3/8" x 3/4" flange bolts removed earlier.
7. Install Pump Controller (006-5672) into pump plate using 5/16" flat washers, lock washers, nuts.

The Pump Controller and pump heads must be pointing down. Failure to mount the pump plate assembly in this specified direction will void all warranty of the Pump Controller and pumps.
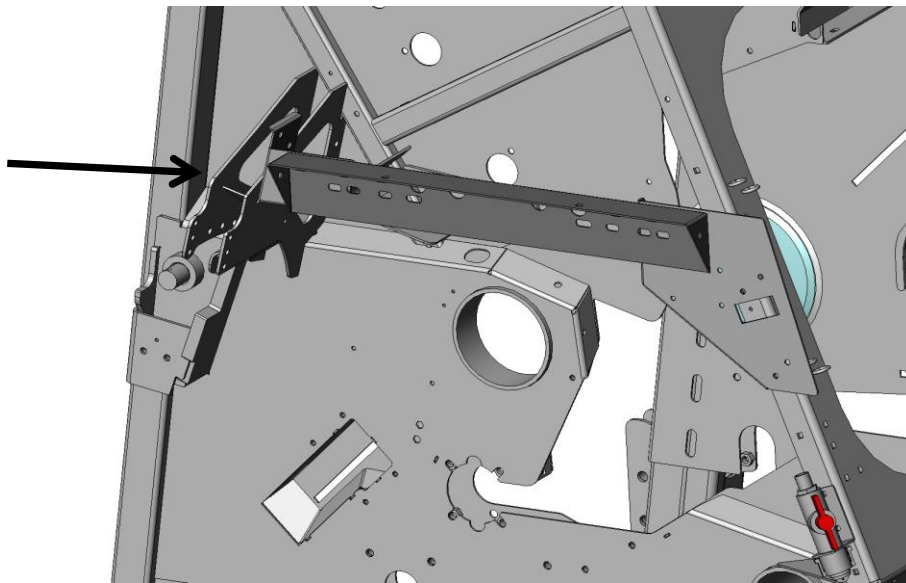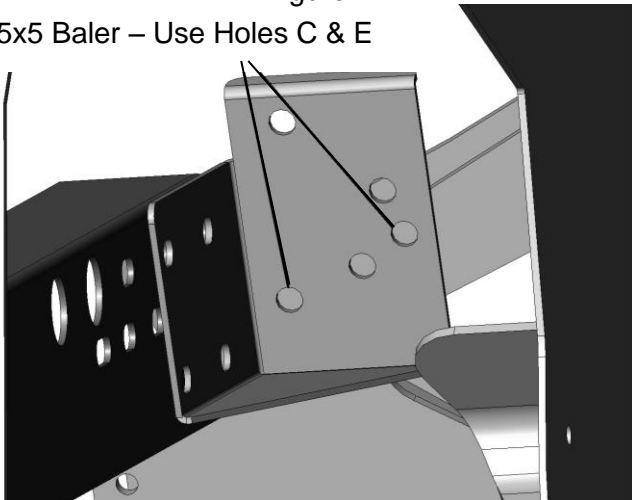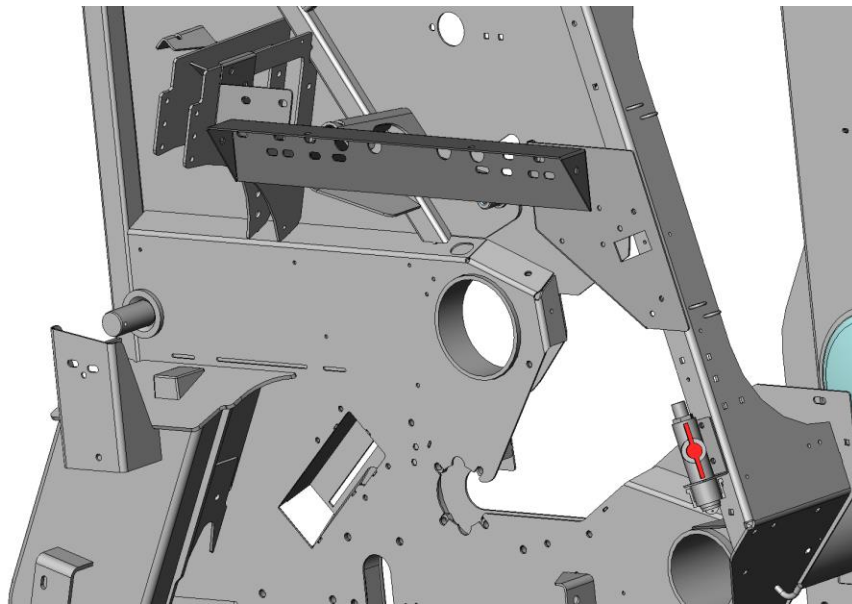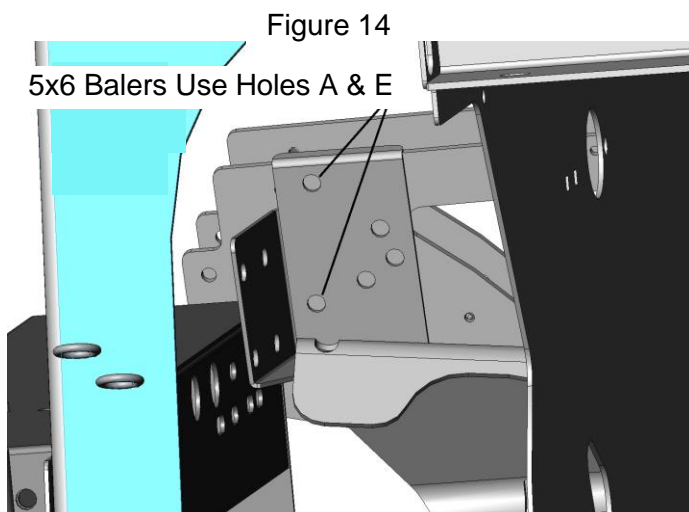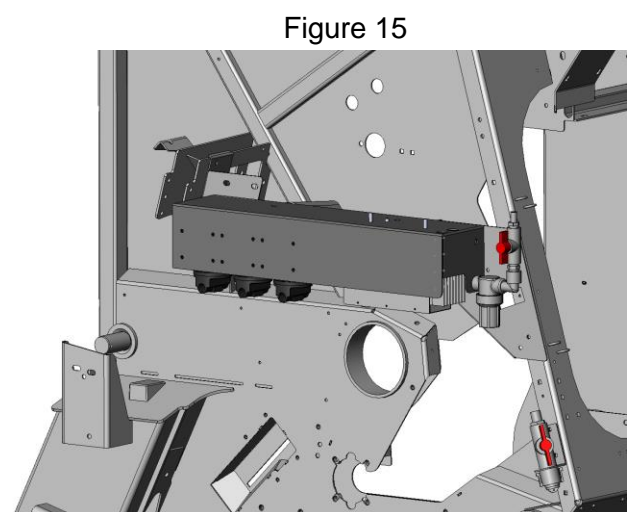

Figure 13

Figure 14

5x6 Balers Use Holes A & E

Figure 15

Installation of Moisture Sensor Pads and Disks

1. Open rear tail gate of baler and lock in the up position. Refer to baler manual to lock door open.
2. Remove bale shaping discs on each side of chamber by grinding welds. Once removed grind any remaining welds so sides of bale chamber are smooth.
3. Place plastic isolator (006-4641FX) in the same spot that the shaping disc had been. There should be a hole in the baler that matches up with the hole in the plastic isolator. If not, use the isolator as a template and mark the hole. Center punch the hole and drill it to 3/4" (Note: before drilling make sure you are not drilling into sensitive equipment on the outside of the baler). Drill through the complete square tube. About two inches. Repeat for other side of the baler.
4. Insert plastic bushing (006-4641G) from the outside of baler. Make sure it is flush with the outside of the baler frame. Go to the inside of the baler and mark amount that protrudes into the chamber. Remove and cut off excess material. Repeat for other side.
5. Using 4" carriage bolt slide the parts on in following order: metal disc (001-4641HX), plastic isolator (006-4641FX) and shortened plastic bushing (006-4641G).
6. Insert disc assembly into 3/8" hole from inside of bale chamber. Secure to outside of baler by attaching to the protruding carriage bolt in the following order: small isolator (006-4641), 1/2" D shaped washer, 1/2" lock washer, 1/2" jam nut. Tighten down and repeat for the other side. Make sure no part of the bolt or hardware makes contact with the frame of baler-no metal to metal.
7. Route moisture harness (006-4640GX) from processor down to the carriage bolt on each side. Make sure it does not come in contact with any moving parts. Secure with cable ties.
8. Attach moisture cable to moisture carriage bolt by placing items in the following order: 1/2" D shaped washer, Ring terminal of moisture harness (006-4640GX), second 1/2" D washer, 1/2" lock washer, 1/2" Jam Nut. Tighten down and repeat for other side. Make sure none of the hardware comes in contact with the frame of the baler.
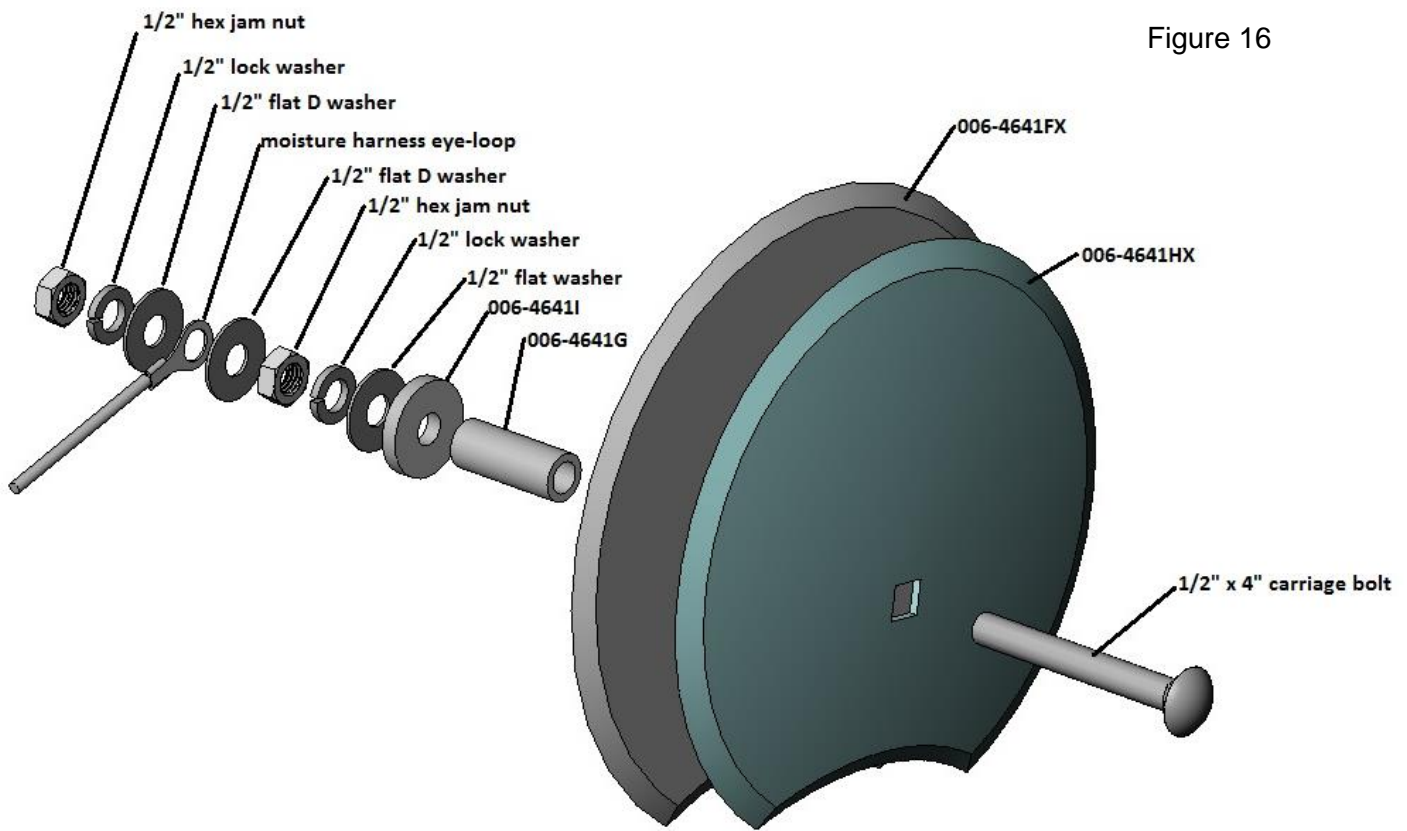
Figure 16

Installation of Moisture Sensor Pads and Disks (continued)

OSR (over-shot)
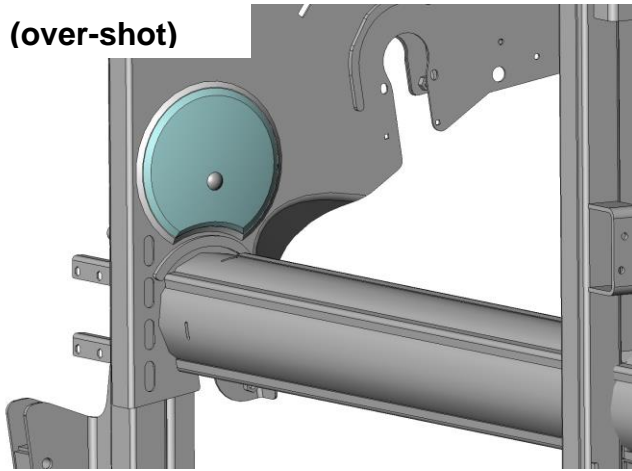
Figure 17

USR (under-shot rotor)
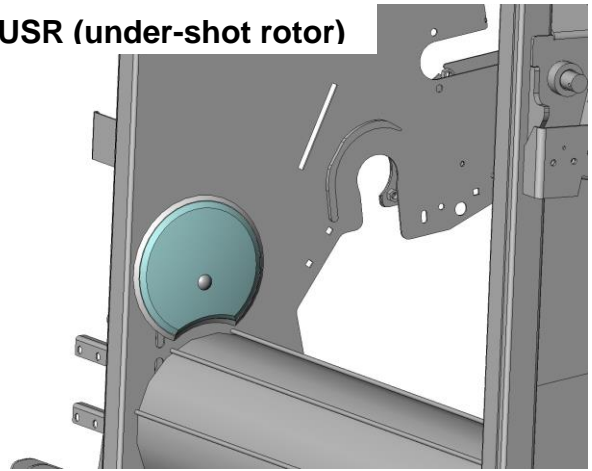
Figure 18

Installation of Drain / Fill Kit

Locate parts bag 1. Thread 3/4" elbow fitting (003-EL3434) into end of tank. Run 3/4" hose from the elbow down the frame to the bottom of the baler. Locate the two holes on the baler's angled support bracket that line up with the holes in the valve bracket and attach using two 5/16" x1" self-tapping screws and secure with two 5/16" flange nuts. Connect valve assembly to other end of hose. Place hose clamps on both ends. Install supplied safety decals (DCL-8001 & DCL-8005) next to the ball valve assembly.

*Secure hose to frame using cable locks**.**

Figure 19

Location for attaching the drain fill bracket
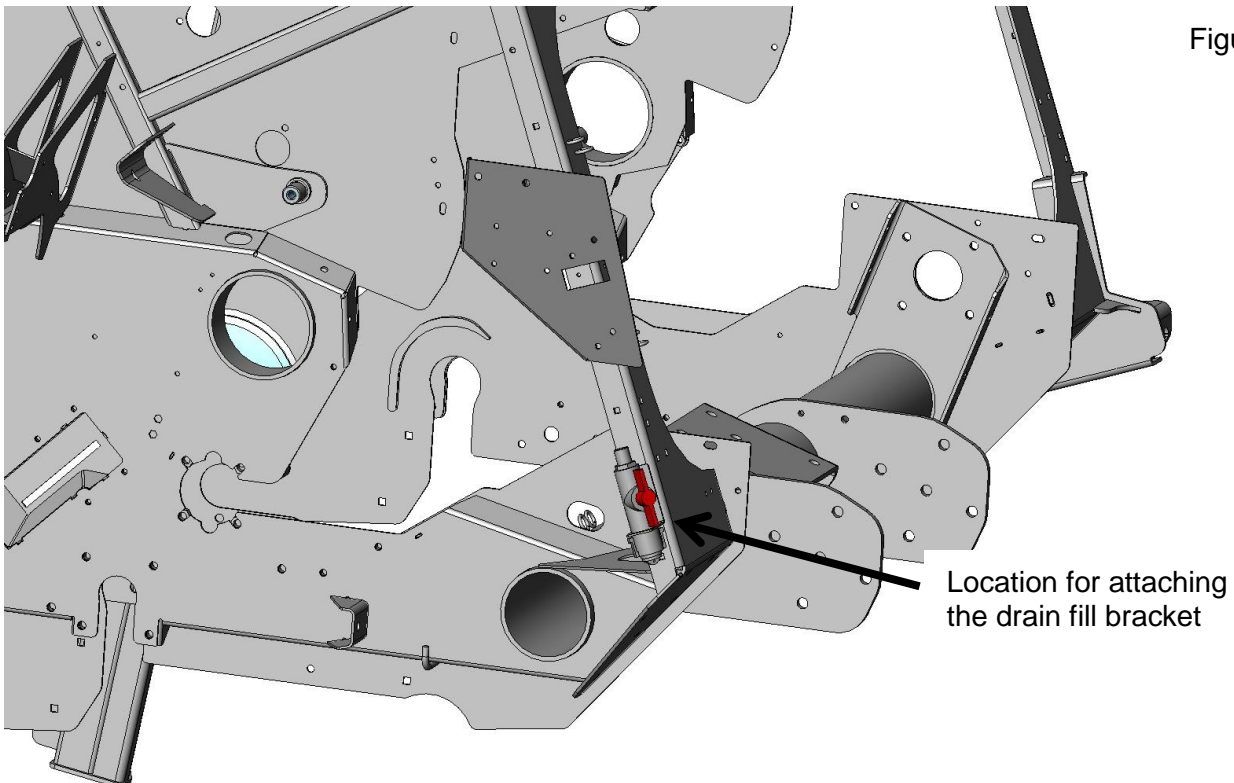
Installation of the Spray Nozzles

a. Locate nozzle block hanger assemblies with tips pre-installed.
b. The assembly with the check valves will be mounted to the left hitch support plate when standing next to the PTO just in front and under the large round cross support tube. Use 1/2" x 1 1/4" Bolt, flat washer, lock washer, and nut to secure to baler. Repeat for assembly on the other side.
c. Loosen Philip screw on nozzle block and turn them slightly in toward each other.
d. Measure distance between hose barb fittings and cut one each of the three colors of hose to that length. Attach them to the nozzle assemblies with the same color and secure them with hose clamps.
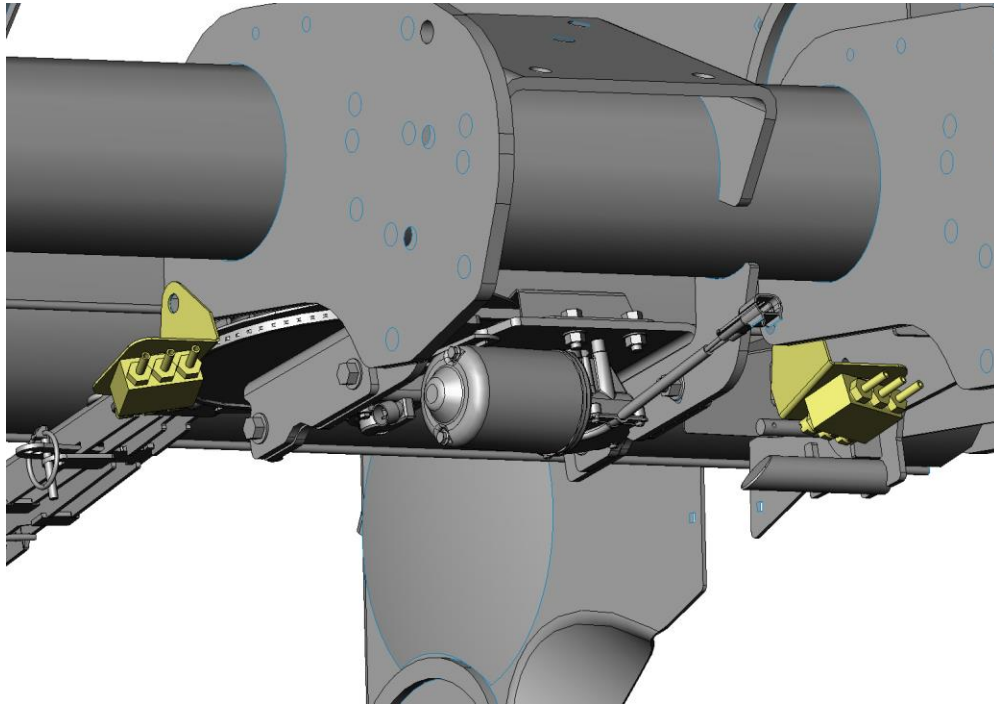
Figure 20

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

Installation of Plumbing

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

b. Discharge
The three – 1/4" hose assembly will be used to attach the pumps to the spray blocks. The pump order starts with the pump closest to the filter bowl numbering 1,2, and 3 Pump one will attach using the clear hose, pump two will use the green striped hose and pump three will use the blue striped hose. Attach each hose to the check valve of the same color coming from the spray blocks.

c. High and Low Output Tips
Your baler comes with two sets of tips: a low set and a high set.
-The low set will cover outputs of 32 to 440 lbs/hr. Install the following tips for low output:
      Clear hose to silver tips
      Green striped hose to pink tips
      Blue striped hose to brown tip.
-The high set will cover outputs of 84 to 632 lbs/hr. Install the following tips for high output:
      Clear hose to pink tips.
      Green striped hose to brown tips.
      Blue striped hose to red tips.

Installation of Controls

Installation of Bluetooth Receiver

Locate a safe location in the cab of the tractor to place the Bluetooth Receiver (030-4672A). Recommended location is as close to the iPad being used as possible.

Connect communication wire (006-4660N) to the bottom of the receiver.

Optional Touch Screen Display

Use suction cup mount (001-2012SCM) to position the monitor in the cab. Make sure the glass is clean before installing the suction cup mount. If an open cabbed tractor is used, use the supplied #10 screws for installation on the fender. If unit is mounted on fender it will need to be removed at night and stored in a clean, dry area. Use the Ram mount (001-2012H) swivel-positioning nut to tighten the entire assembly. Adjust it so that you can view the entire screen and be able to use the touch screen without interfering with other tractor functions.

Connect communication wire (006-4660N) to the bottom of the terminal.

Wiring Diagram

1. Connect the power harness (006-4640A) to the battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative

   ⚠️
   a. **The power harness must be connected to the battery!** The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty. **CONTACT HARVEST TEC BEFORE MODIFICATIONS.**
   b. **This unit will not function on positive ground tractors.**
   c. **If the unit loses power while operating it will not keep track of accumulated pounds of product used.**

2. The power harness (006-4640A) will run from the tractor battery to the hitch. The power harness (006-4660R) will connect to the tractor power harness (006-4640A) at the hitch. Run the Communication harness (006-4660N) from the cab to the hitch. This wire will connect to the Communication harness (006-4660S). These wires will run together to the Baler Mounted Processor (006-4671RB).

3. Connect Communication harness (006-4660N) to Bluetooth Receiver (030-4672A) mounted in cab.
   a. Mount Bluetooth Receiver (030-4672A) in safe location as close to iPad as possible in cab.

4. Connect Flow Meter (006-4725A) to the Baler Mounted Processor.

5. Connect Pump Harness (006-4660Z) to the Baler Mounted Processor.

6. If you have the optional Hay Indicator, connect it to the Baler Mounted Processor.

7. Attach moisture cable (006-4640GX) to Baler Mounted Processor.

8. Install Baler Mounted Processor in pump plate using 5/16" lock, nut and flat washers.

NOTE: The plugs on the Baler Mounted Processor must face down. Failure to mount correctly will void systems warranty.
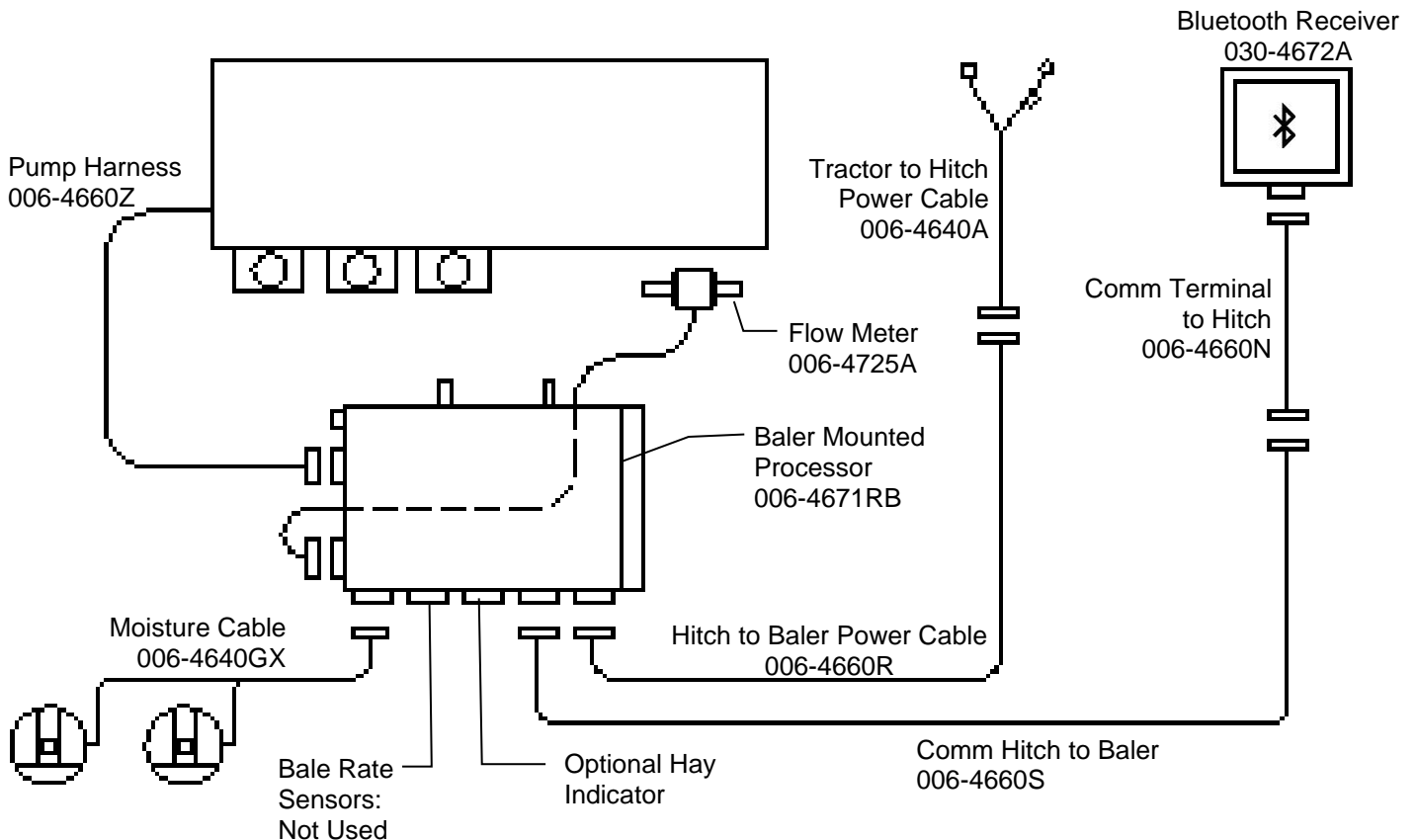
*If using the optional Touch Screen Display (006-4670) it will replace Bluetooth Receiver location.

Pin Outs

A. Main power connector mounted on battery
Pin 1   Red   + 12 V input from tractor supply
Pin 2   Black   Ground from tractor supply
Pin 3   Not used
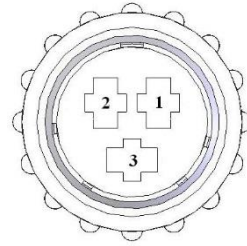
B. Main power connector mounted on BMP
Pin 1   Red   + 12 V input from tractor supply
Pin 2   Black   Ground from tractor supply
Pin 3   Not used
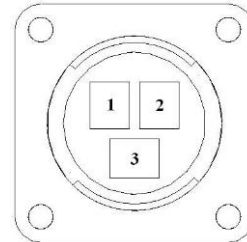
C. Pump connection colors
Pin 1   Black with orange markings   Pump 1 ground
Pin 2   Black with green markings   Pump 2 ground
Pin 3   Black with yellow markings   Pump 3 ground
Pin 4   Not used
Pin 5   Orange with black markings   Pump 1 positive
Pin 6   Green with black markings   Pump 2 positive
Pin 7   Yellow with black markings   Pump 3 positive
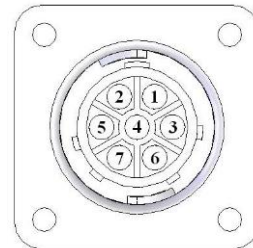
D. Flow meter connection on BMP
Pin 1   White   5 - 12 V (+) supply
Pin 2   Green   Ground
Pin 3   Brown   Signal
Pin 4   Black   Shield
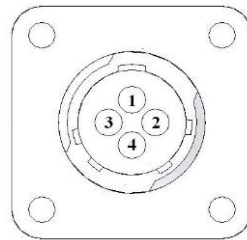
E. Connector for Hay Indicator option on BMP
*Note: Hay indicators are an option that will turn the system on and off
automatically as hay enters the pickup of the baler*.
Pin 1   Red   +12V
Pin 2   Black   Ground
Pin 3   White   Signal wire
Pin 4   Not used
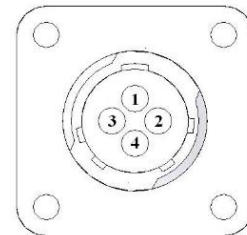
G. Star wheel connector mounted on BMP

Pin 1	Brown	Star wheel input 1
Pin 2	Blue	Star wheel input 2
Pin 3	Brown	Diagnostic 1
Pin 4	Blue	Diagnostic 2
Pin 5	Silver	Shield
Pin 6	Silver	Shield
Pin 7	Not used	
Pin 8	Not used	
Pin 9	Not used	

H. Communication harness Bluetooth receiver or display to hitch

Pin 1	Red	Power to display
Pin 2	Black	Ground to display
Pin 3	Blue	Comm channel OH
Pin 4	Orange	Comm channel OL
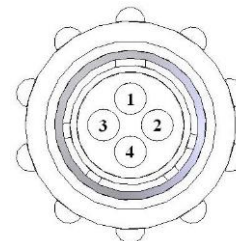
I. Communication harness hitch to baler mounted processor

Pin 1	Red	Power to display
Pin 2	Black	Ground to display
Pin 3	Blue	Comm channel OH
Pin 4	Orange	Comm channel OL
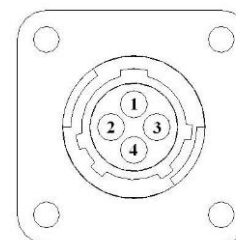
Parts Breakdown for the Tank and Saddle
Harvest Tec Model 447CT Base Kit
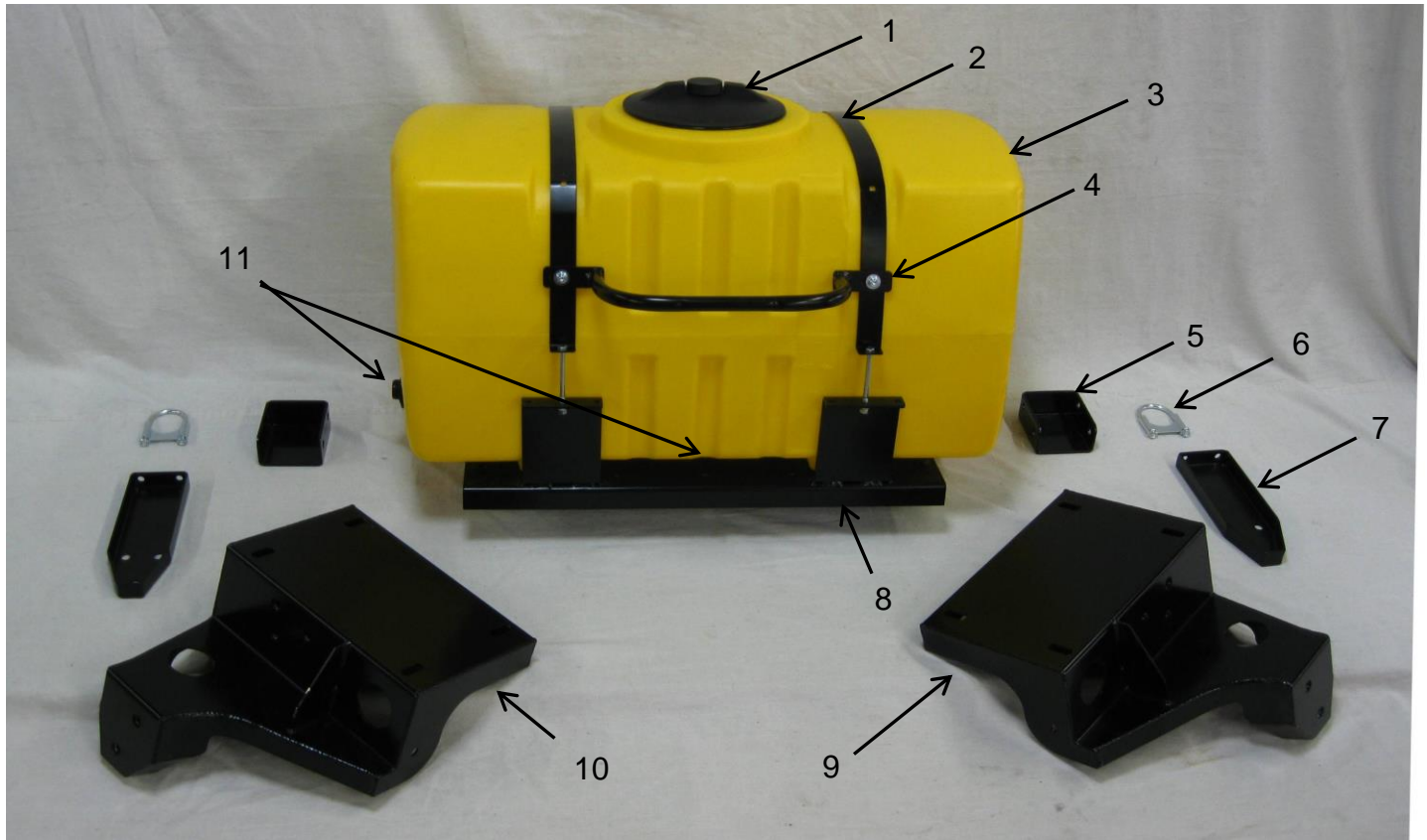
Ref	Description	Part #	Qty	Ref	Description	Part #	Qty
1	55 Gallon tank lid	005-9022H	1	7	Anchor Bracket	001-4703XA	2
2	Strap	001-4402	2	8	Saddle	001-4703X	1
3	Tank	005-9203SQ	1	9	Left Leg	001-4703XL	1
4	Handle	001-6707HRS	1	10	Right Leg	001-4703XR	1
5	Anchor Bracket Ext	001-4703XAX	2	11	Tank fitting	005-9100	2
6	U Clamp	001-4703XAB	2				

Tank Kit Assembly   030-0447C-TK
(Includes Ref# 1-11)

Parts Breakdown for Drain / Fill Kit
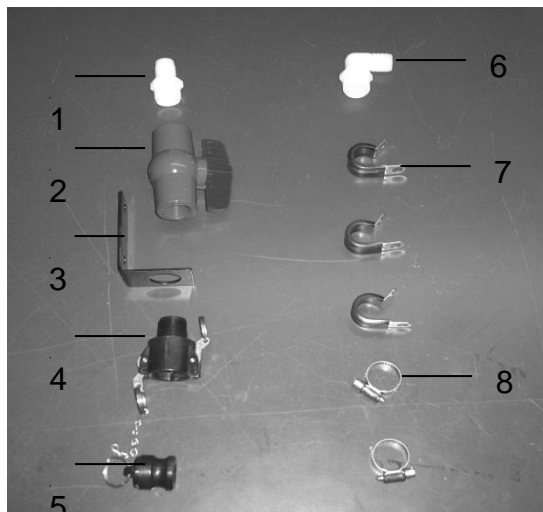
Ref	Description	Part #	Qty
1	Straight Fitting	003-A3434	1
2	Ball valve	002-2200	1
3	Valve Holder	001-6702H	1
4	Female Coupler	002-2204A	1
5	Male Coupler	002-2205G	1
6	Elbow	003-EL3434	1
7	Jiffy Clip	008-9010	3
8	Hose Clamps	003-9004	2
NP	3/4" Hose	002-9002	8ft

Parts Breakdown for Pump Manifold
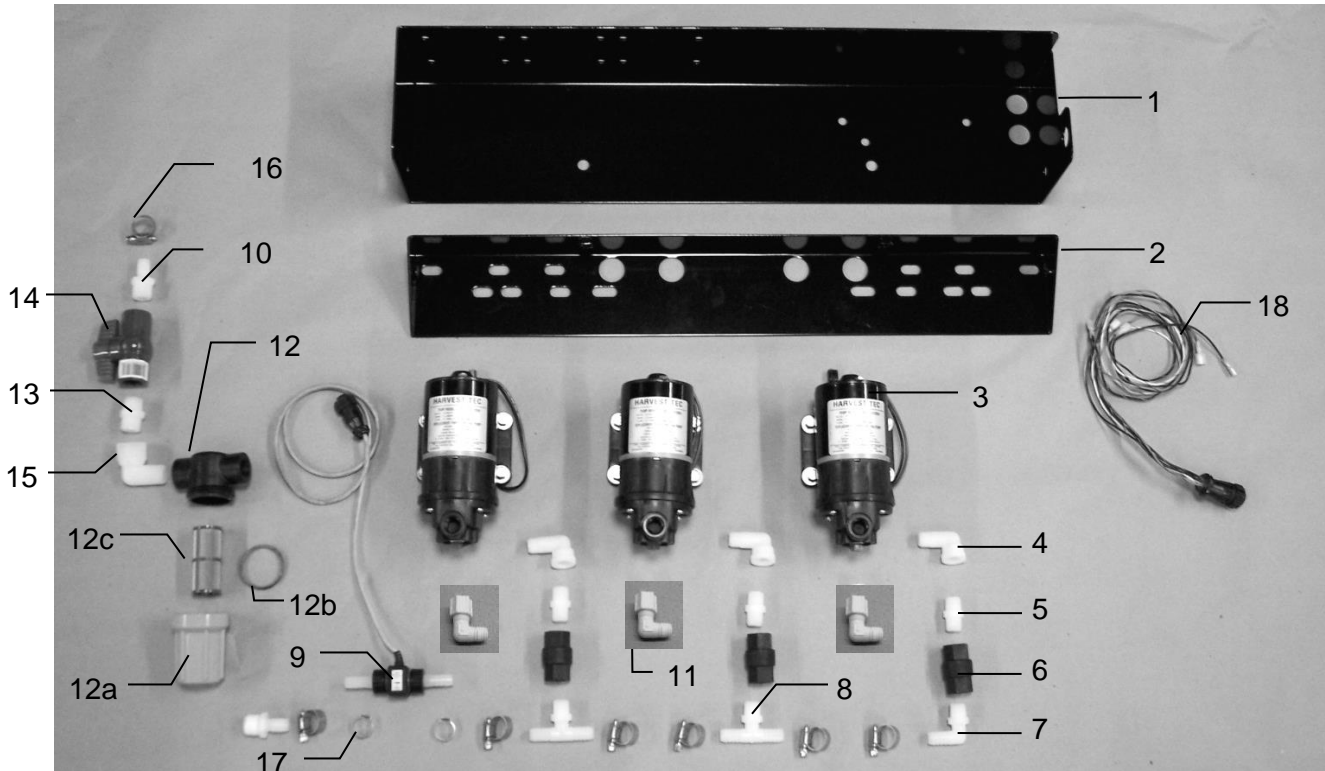
Ref#	Description	Part#	Qty
1	Pump plate	001-4646D	1
2	Mounting Bracket	001-4646C	1
3	Pump	007-4120H	3
4	Street elbow fitting	003-SE38	3
5	Nipple fitting	003-M3838	3
6	Check valve	002-4566F	3
7	Elbow fitting	003-EL3812	1
8	Tee fitting	003-T3812HB	2
9	Flow meter assembly	006-4725A	1
10	Straight fitting	003-A1212	2
11	Elbow fitting	003-JEL1238	3
12	Filter bowl assembly	002-4315-100	1
12a	Filter bowl only	002-4315F	1
12b	Filter bowl gasket	002-4315D	1
12c	Filter bowl screen	002-4315A	1
13	Nipple fitting	003-M1212	2
14	Ball valve	002-2212	1
15	Street elbow fitting	003-SE12	1
16	Hose clamp	003-9003	7
17	Hose clamp (Flow Meter)	003-9005	2
18	Pump Cable	006-4660Z	1
NP	Union	003-M1212F	1
NP	Elbow	003-EL1212	1
NP	Pump rebuild kit (1 per pump)	007-4581	1

Parts Breakdown for Moisture Sensor Discs
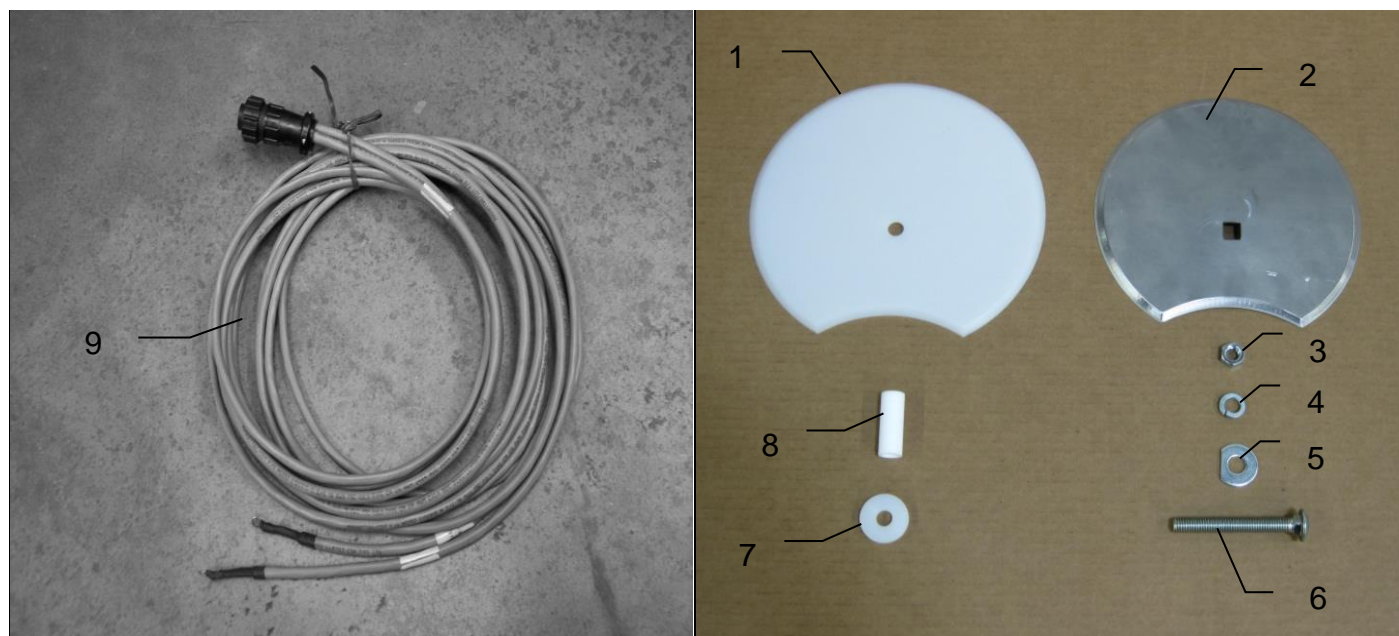
Ref	Description	Part #	Qty
1	CNH RB Moisture Isolator	006-4641FX	2
2	CNH RB Moisture Disk	006-4641HX	2
3	1/2" JAM Nut	Misc Hardware	4
4	1/2" Lock	Misc Hardware	4
5	1/2" D Washer	Misc Hardware	6
6	1/2"x 4" Bolt	Misc Hardware	2
7	Sensor Bushing	006-4641G	2
8	Sensor Isolator	006-4641I	2
9	Moisture Cable	006-4640GX	1
	Moisture Disc Assembly	030-4643C (Includes Ref # 1-8)	

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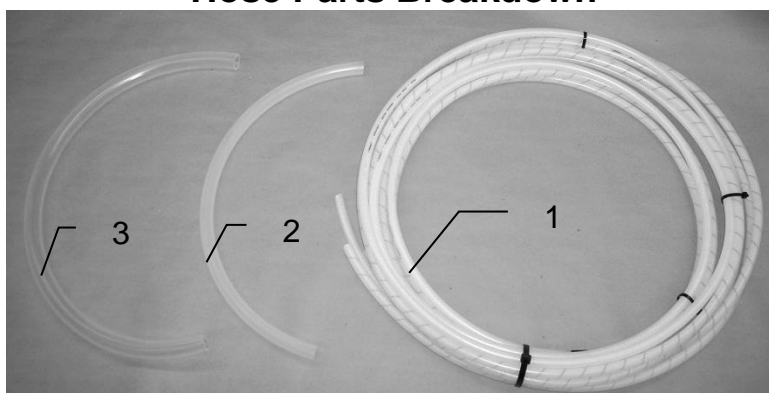
Ref	Description	Part #	Qty
1	Triple Weld (pumps to tips)	002-9016	15ft
		002-9016B	15ft
		002-9016G	15ft
	Hose assembly	030-9016RB	1
2	1/2" Hose (tank to filter)	002-9001	6ft
3	3/4" Hose Drain Fill Line	002-9002	10ft

Parts Breakdown for Control Box and Wiring Harnesses
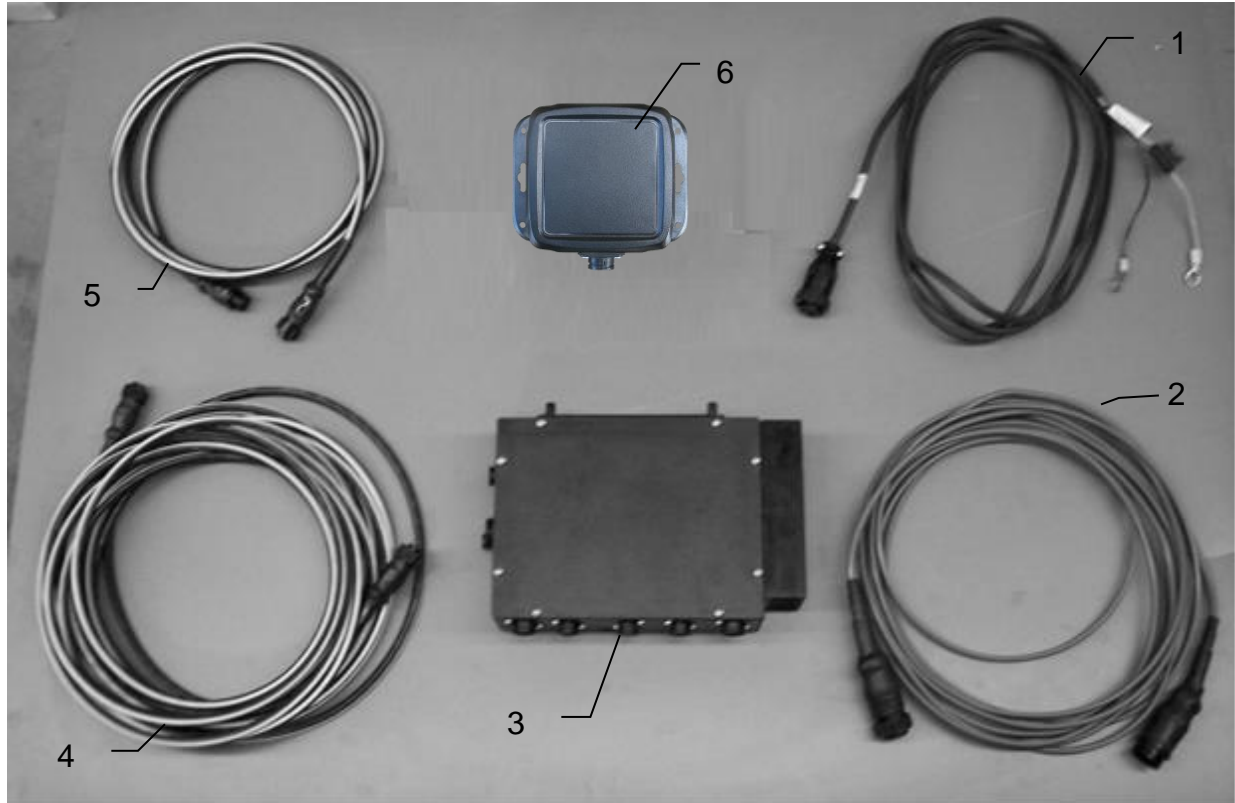
Ref	Description	Part #	Qty
1	Power lead tractor	006-4640A	1
2	Power lead baler	006-4660R	1
3	Baler mounted processor	006-4671RB	1
4	Communication harness (baler)	006-4660S	1
5	Communication harness (tractor)	006-4660N	1
6	400 Series Bluetooth Receiver	030-4672A	1
NP	Optional Touch Screen Display	006-4670	

Optional iPad Mini Mounting Kit
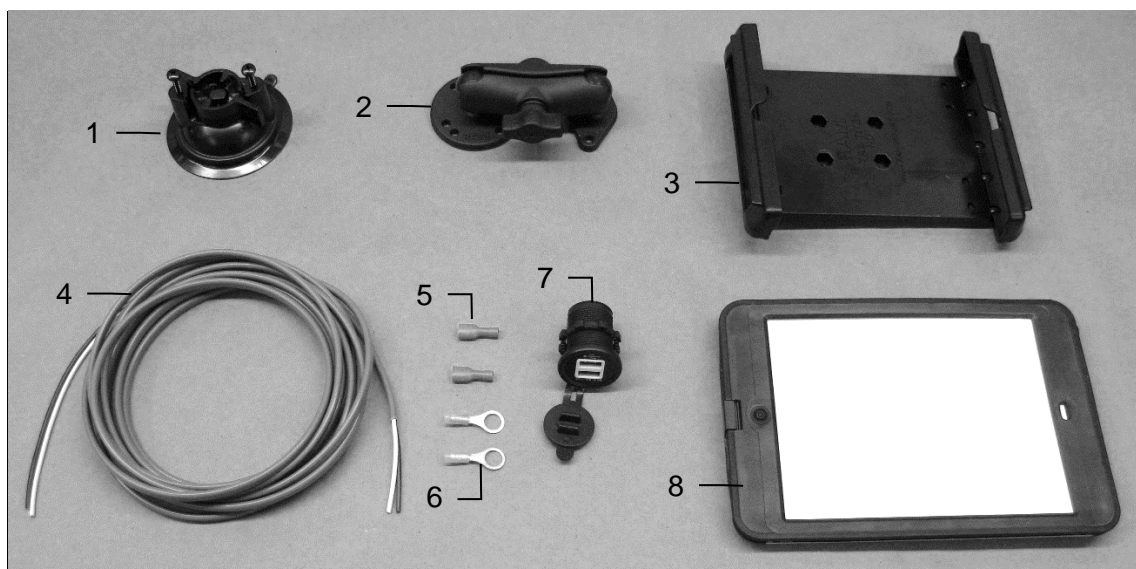
Ref	Description	Part #	Qty
1	Suction cup mount	001-2012SCM	1
2	Ram mount	001-2012H	1
3	iPad Mini spring load cradle (Mini 1,2,3)	001-2012SLC	1
4	16 gauge power wire	Hardware	1
5	Female spade connector	Hardware	2
6	Eye loop connector	Hardware	2
7	iPad Mini Charger 12V	001-2012P	1
8	iPad Mini 2 case	001-2012C2	1
NP	4 amp fuse	Hardware	1
	Mounting Kit Assembly	030-2012MK (Includes All Parts)	

Installation Instructions

1. Identify 12V power source for wires to connect.
    a. Eye loops included if wiring directly to the battery is desired.
    b. Test for key power source if preferred to have power to the USB shut off with the key.
2. Once power source is identified, cut wires to desired length.
3. Crimp the two supplied quick connectors onto each the white and black wire.
4. Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
5. The wires will then be hooked to the designated terminals on the bottom of the USB plug
6. Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
7. Feed the wires through the mounting hole.
8. If using the round plastic nut to secure plug in place, slide the nut back over the wiring before connecting the wires to powered source.
9. Connect the wires to the identified power source if easier to do so before tightening the plug into place.
10. Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
11. Once connected, hook a USB charging cord into the plug and connect a mobile device/tablet to ensure the plug is operating as you wish (key power working properly if necessary).

NOTE: This plug is not designed to charge two iPads. System damage could occur if this is attempted. System will charge a mobile phone and iPad simultaneously without problem.

Parts Breakdown for Harvest Tec Model 447CT Installation Kit
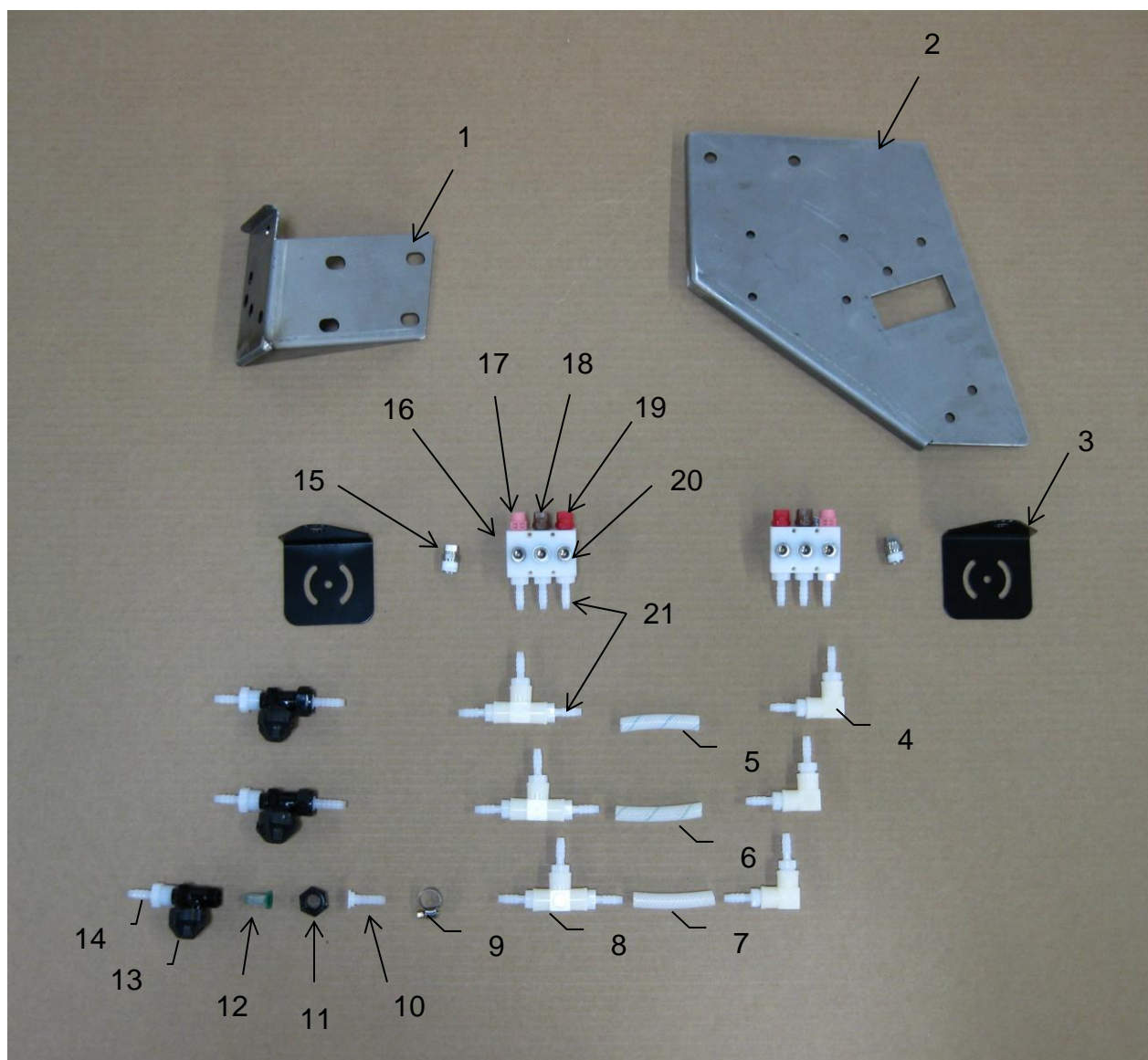
Ref	Description	Part #	Qty	Ref	Description	Part#	Qty
1	Pump Plate Bracket	001-4703XF	1	15	Tip –Stainless	004-T800067-SS	2
2	Pump/Valve Mount	001-4703XE	1	16	Spray Shield Manifold	001-4435NSB	2
3	Spray Block Holder	001-4703XD	2	17	Tip –pink	004-T8001-PT	2
4	Elbow	003-SE14F	3	18	Tip –brown	004-T80015-PT	2
5	Hose-clear	002-9016	6 ft	19	Tip –red	004-T8003-PT	2
6	Hose-green striped	002-9016G	6 ft	20	Plug Allen SS	003-F14A	6
7	Hose-blue striped	002-9016B	6 ft	21	Fitting	003-A1414	21
8	Tee	003-TT14SQ	3				
9	Hose Clamp	003-9002	27		Shield Only Assembly	030-0447C-SO	
10	Fitting	003-A1414VB	3			(Includes Ref # 3-21)	
11	Nozzle cap	004-4723	3				
12	Tip Strainer	004-1203-100	3				
13	Check Valve	004-1207VB	3				
14	Fitting	003-A1414F	3				

Selecting Tips-Reference Guide

The applicator is sent from the factory with High output tips installed. The tips used are determined by how many tons per hour you are baling. You can see this on either the automatic or manual screen.

1 – 7 Tons of hay per hour
- Too low a level for the system to apply at. Increase baling speed or rake more hay together. System will show over application when baling at these tonnages.

8 – 27 Tons of hay per hour (32 – 440 lbs of hay preservative per hour)
- Use low output tips

    o For most 4 ft balers

        ▪ Pump 1 = Qty 2   004-T800067-SS   80 degrees   Silver

        ▪ Pump 2 = Qty 2   004-T8001-PT   80   Pink

        ▪ Pump 3 = Qty 2   004-T80015-PT   80   Brown

21 – 40 Tons of hay per hour (84 – 632 lbs or hay preservative per hour)
- Use high output tips

    o For most 5 ft balers

        ▪ Pump 1 = Qty 2   004-T8001-PT   80 degrees   Pink

        ▪ Pump 2 = Qty 2   004-T80015-PT   80   Brown

        ▪ Pump 3 = Qty 2   004-T8003-PT   80   Red

Harvest Tec, LLC. Warranty and Liability Agreement.

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

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

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

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

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

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

Note: The warranty registration card supplied with the installation manual must be filled out and returned to the manufacturer within fifteen days of purchase. Without record of receipt of warranty registration at the manufacturer, the warranty is not valid.

Revised 6/22

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