# **Operation Manual**

700 Series Large Square Baler Models

100, 110, 115 Gallon Preservative Applicators



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<sup>\*</sup> For up to date install kit models visit www.harvesttec.com \*

#### Introduction

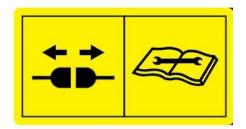
Read this manual carefully to ensure correct steps are done to operate the applicator. This applicator is designed to apply Harvest Tec buffered propionic acid. Use of alternative products may cause complications. Including inaccurate readings from the flow meter and damage to all parts. Resulting in the warranty being void. The applicator can be installed on many large square balers with the proper installation kit.

## Safety

Carefully read all the safety signs in this manual and on the applicator before use. Keep signs clean and in good working order. Replace missing or damaged safety signs. Replacement signs are available from your local authorized dealer. See your installation manual or under the replacement parts section for the correct part numbers.

Keep your applicator in proper working condition. Unauthorized modifications to the applicator may impair the function and/or safety of the machine. Carefully read and understand all the baler safety signs before installing or servicing the baler. Always use the supplied safety equipment on the baler to service the applicator.

## **Safety Signs Definitions**



Number 1 Spraying hazard. Disconnect power before servicing the applicator Part no. DCL-8003



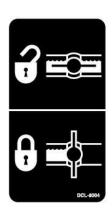
Number 2 Falling hazard. Do not step in this area. Part no. DCL-8002



Number 3
Use caution when working around chemicals. Wear all protective equipment according to the label of the product.
Part no. DCL-8001



Number 4
Read and understand the operator's manual before using or working around the equipment.
Part no. DCL-8000



Number 5 Open (unlocked) and closed (locked) position of the ball valve. Part no. DCL-8004

## **Preparing the Applicator for Operation**

After the Applicator has been installed on the baler, follow the below steps to prepare for operating the applicator both safely and correctly.

## Filling the tank through the Drain / Fill kit

Read the label of the product being filled into the tank to determine what individual protective measures need to be taken. Locate the Drain/Fill line on the baler. Open the cam-couplers (A) and remove the protective plug (B). Insert the male coupler (found on transfer pump) into the female cam and close the cams (A).

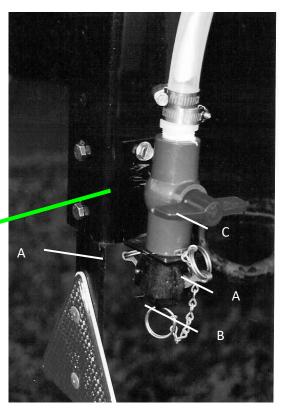
To open the ball valve (C) turn the handle so it is vertical. After the ball valve has been turned ON switch the pump to the ON position. Monitor the level on the tank visually and shut off the pump before over filling. Once the pump is turned OFF, close the ball valve, and remove the male coupler.

The handle of the ball valve (C) will be horizontal when closed. Reinstall the protective plug and close the cams. The Harvest Tec model 9212 transfer pump is recommended for this process.

Water is recommended for first time and annual start up procedures.



Drain/Fill line on the baler



Enlarged view of the drain/fill line valve and cam-coupler assembly.

## **Filling Tank Through Tank Lid Opening**

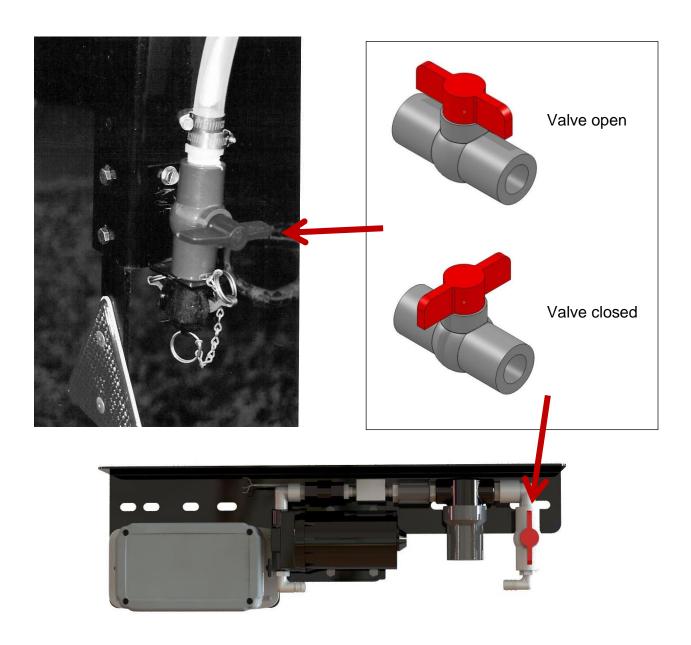
Read the label of the product being filled into the tank to determine what individual protective measures need to be taken. Clean the tank lid area and unscrew the lid. Transfer product from the container into the tank.

Water is recommended for first time and annual start up procedures.

## **Operation of Main Ball Valve**

The ball valve should always be closed when the applicator is not being used. The valve should also be closed when any service work is being done to the baller or applicator.

The valve is located next to the pump and by the applicator tank. The arrow below points at the valve.



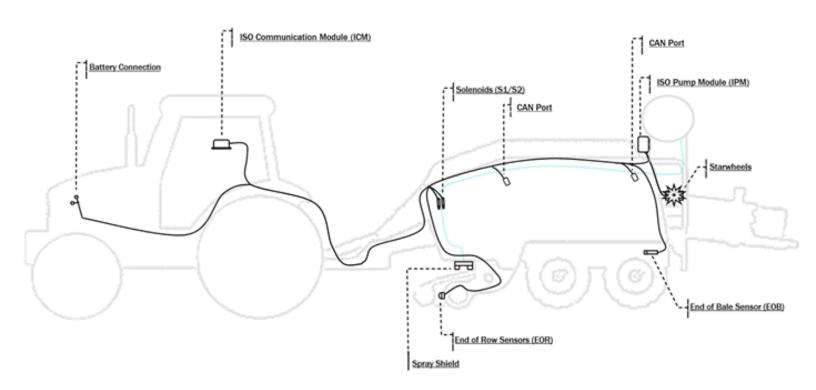
## Wiring Details - 700 Series

1. Connect the power harness (006-765IC) to the tractor 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! CONTACT HARVEST TEC BEFORE MODIFICATIONS.
  - \*The unit will draw more amps than convenience outlets can handle. Any modifications of the power harness will void systems warranty\*
- 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 on the tractor (006-765IC) will run from the tractor battery to the hitch. The power harness on the baler (006-765B2) will connect to the tractor power harness (006-765IC) at the hitch.
- 3. Connect the red keyed power wire (006-765CPH) to a keyed power source on the tractor. Connect the black keyed power wire to ground.
  - The keyed power wire must connect to a keyed source or the unit will not power up correctly.
- 4. Attached the ISO Communication Module (006-6673) to the tractor power harness (006-765IC).
- 5. Attach the End of Bale (EOB) connection on baler harness (006-765B2) to the EOB Sensor (006-7401).
- 6. Attach the Solenoids (V1 & V2) connections on baler harness (006-765B2) to the solenoids (002-2203F).
- 7. Attach the Flowmeter (006-4724A) to ISO Pump Module connection on pump plate assembly.
- 8. Attach the rubber molded connector on pump plate to the Pump (007-4120DE).
- 9. Attach star wheel (030-4642 U/UE) connection to ISO Pump Module on pump plate assembly.
- 10. Optional tablet / iPad attaches to the ISO Communication Module through a data transfer communication/power cable ending in a USB-A port connection. Use of adapters is not supported.

## Wiring Overview - 700 Series



## **Display Options**

## **Optional Baler VT Integration**







The 700 series offers the option for integration to the Baler VT. This allows the operator to monitor both real time baler settings and Harvest Tec system parameters on one screen to ensure the most precise application to every bale.

The 700 series offers easy integration to the baler VT by connecting to the additional CAN plug on the 006-765B2 harness. Once connected, the Harvest Tec system will display with power up of the baler and applicator system.

Follow SCREEN MENUS section to set and operate the applicator system.

## **Optional Harvest Tec Display**



The 700 series Harvest Tec Display will allow users to see real time baling parameters to ensure the most precise application to every bale. This is done by utilizing the improved touch technology to select objects, enter data, and swipe through operational screens.

The Harvest Tec Display offers easy integration by connecting to the additional CAN plug on the 006-765IC harness. Once connected the Harvest Tec display will power up with applicator system.

Follow SCREEN MENUS section to set and operate the applicator system.

NOTE: HARVEST TEC DISPLAY CAN NOT BE USED WHEN SYSTEM IS ATTACHED TO BALER ISOBUS

## **Optional Tablet Display**



The iOS or Android Tablet displays offer the ability to communicate with the 700 series applicator system via hard-wired connection to the ISO Communication Module (ICM). Through the free Precision Baling App, the operator can set real time baling parameters to ensure the most precise application to every bale. This provides a multi-use option while utilizing the improved app to select objects, enter data, and easily switch through operational screens. The Tablet Display offers easy integration by connecting a charging cable to the additional USB port on the ICM module. Once connected, the Harvest Tec applicator will display upon opening the app and powering up the applicator system. Tablets can be used in addition to integrated baler VT display.

#### \*Made for iPad®

Required to be running the most current operating system or one version previous.

\*iPad is a trademark of Apple Inc., registered in the U.S. and other countries.

## **Operation of Tablets**

## Turn On/Off Tablet using the Sleep/Wake button

#### **iPad**

Turn iPad ON: Hold down the Sleep/Wake button until Apple logo appears. iPad will take a moment to load.

You can lock iPad and put it to sleep when you are not using it.

Locking iPad puts the display to sleep, saves the battery, and prevents anything from happening if you touch the screen.

Sleep/Wake Button

<u>Turn iPad OFF</u>: Hold down the Sleep/Wake button for a few seconds until the slider appears onscreen, then drag the slider to the right.

#### **Android**

Turn Tablet ON: Hold down the Sleep/Wake button until logo appears. Tablet will take a moment to load.

You can lock tablet and put it to sleep when you are not using it. Locking the android tablet puts the display to sleep, saves the battery, and prevents anything from happening if you touch the screen.



<u>Turn Tablet OFF</u>: Hold down the Sleep/Wake button for a few seconds until the onscreen appears, then drag the slider to the right.

\*Amazon Fire Tablet Does Not Work for Applicator\*

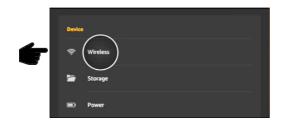
## **Downloading Harvest Tec Precision Baling App**

1. If tablet does not have Wi-Fi turned ON, select the Settings tab then select the Wi-Fi tab (below).

#### **iPad**



#### **Android**





2. Connect Wi-Fi by clicking on network, should show 'connected' when done

- 4. Select an available network when detected.
- 5. Select app store icon (below) and open. \*You will need a Wi-Fi connection available to download app\*







Download the Precision Baling App in the app stores by searching for 'Harvest Tec' in the search bar:

\*The advertisements displayed on the screens will change.\*





The app will have the icon as shown:



#### **ISO Communication Module**

With Precision Baling App installed, connect the tablet to the ICM Module to the properly marked USB port.

\*Recommended to use a quality USB-A communication cable to connect ICM to iPad/Android Tablet- adapters are not supported\*

**ISO Communication Module (ICM)** 

Solid or Blinking Green Light – Module is powered and ready to operate.



## Shutting Down the Precision Baling App iPad

1. To shut down the Precision Baling App double click the home button. This will show the open apps that are running on your iPad.

\*Note: By pressing the home button one time to return to the home screen, the Precision Baling App **does not** shut down. The system will, however, stop applying preservative after 10 seconds.



1. Slide the app you want to shut down toward the top of the iPad, until the app is no longer visible.





## **Android**

1. To shut down the Precision Baling App click the recent button. This will show the open apps that are running on your tablet.

\*Note: By pressing the home button to return to the home screen, the Precision Baling App **does not** shut down. The system will, however, stop applying preservative after 10 seconds.



2. Slide the app you want to shut down toward the right of the tablet screen or click on the 'x', until the app is no longer visible.



Pressing the Home Button on the tablet, WILL NOT stop application of the Harvest Tec System

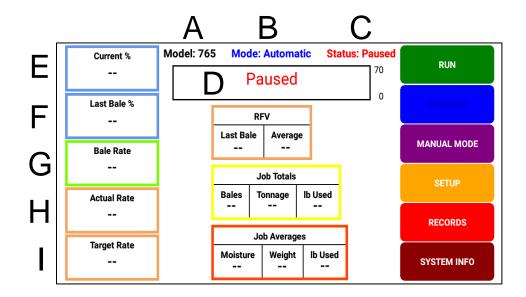
## **Operating the Harvest Tec 700 Series Applicator**

The 700 series display is broken down into four main categories:

Top: Status Messages

Bottom Center: Current Job Summary Information

Left Side: Real Time InformationRight Side: Operational Keys



## **Status Message Descriptions**

A) Model: Indicates what model system.

B) Mode: Confirms which mode has been selected.

C) Status: Confirms if system is running or paused. Note: Upon startup the system is PAUSED.

**D) Histogram:** Moisture graph of the last 90 seconds or shows if system is paused.

#### **Real Time Information Boxes**

E) Current %: This displays instantaneous moisture reading of hay coming into baler.

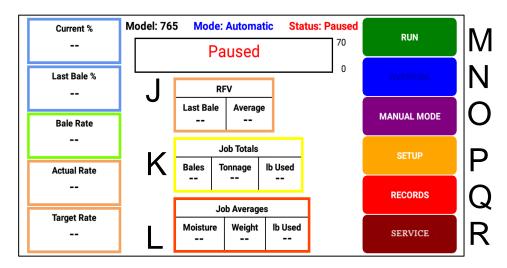
F) Last Bale %: This displays average of all moisture readings taken from last bale made

**G)** Bale Rate: This displays the tons per hour going through baler. Based on weight and time to make a bale.

H) Actual Rate: Actual amount of preservative being applied.

I) Target Rate: Rate of preservative that the system is set to apply.

## **Operating the Harvest Tec 700 Series Applicator (continued)**



## **Current Job Summary Boxes**

#### J) RFV

- Last Bale: Displays the RFV reading for the last bale made.
- **Average:** Displays the average of all RFV readings for the current job.

#### K) Job Totals

- Bales: Displays the total number of bales made for the current job.
- Tonnage: Displays total tonnage baled in job. Based on number of bales made multiplied by weight.
- Lbs. Used: Displays the total amount of preservative applied for job.

## L) Job Averages

- Moisture: Displays average moisture of all bales made in job.
- Weight: Displays the average weight of all bales in job.
- Lbs. Used: Displays average amount of preservative applied to each bale in job.

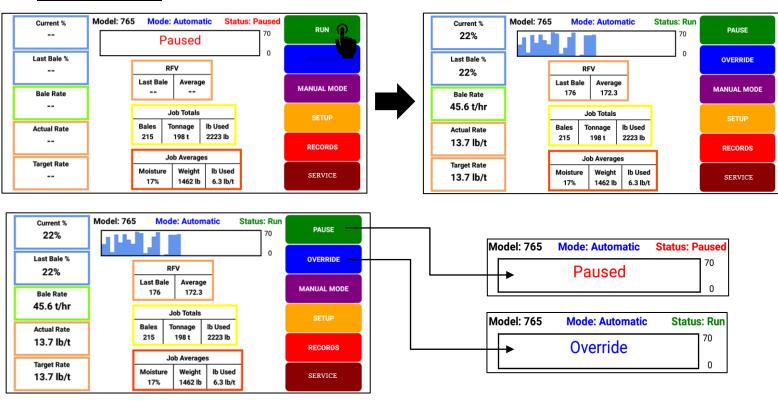
## **Operational Keys**

- M) Run / Pause: Toggles between run mode to apply and pause mode to stop applying.
- **N)** Override: Only displays when in run mode while the applicator is applying preservative. Once in override, the applicator will apply at full rate.
- O) Manual Mode / Auto Mode: Toggles between auto mode and manual mode preservative application.
  - Auto Mode: Self-adjusts preservative based on user input values, moisture, and baling rate.
  - Manual Mode: Allows the ability to manually adjust pump rate based on five fixed rates.
- **P) Setup:** Allows for user inputs for values regarding moisture, baling rate, application rate, and relative feed value (RFV) if equipped.
- **Q) Records:** Access to view current job, view job list, view a selected job, create a new job, or reopen and add to existing job.
- R) Service: Displays software versions, sensor assignment, annual start-up pump test

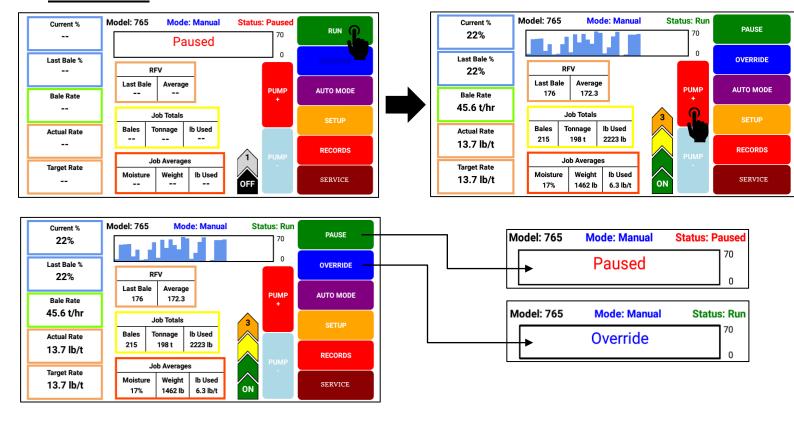
## **Screen Menus**

Use the screen shots below to navigate through the operation screens.

## **Automatic Mode**

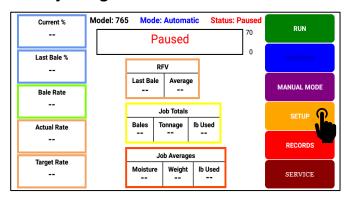


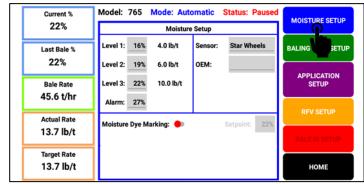
## **Manual Mode**



## **Setup Mode**

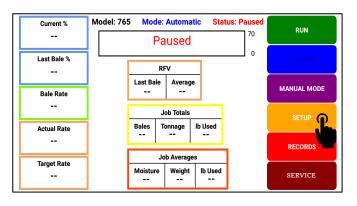
## **Adjusting Moisture Levels**

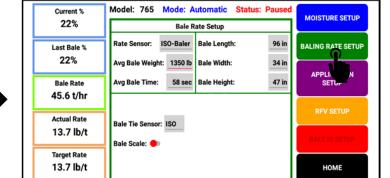




Select and change input boxes / sliders as needed

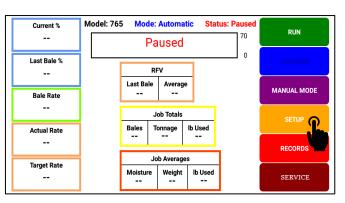
## **Adjusting Baling Rate**

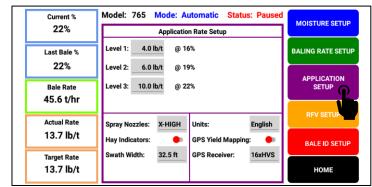




Select and change input boxes / sliders as needed

## **Adjusting Application Rate**

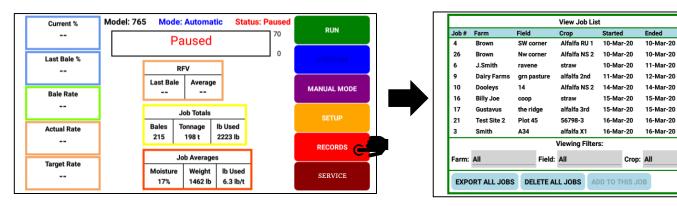




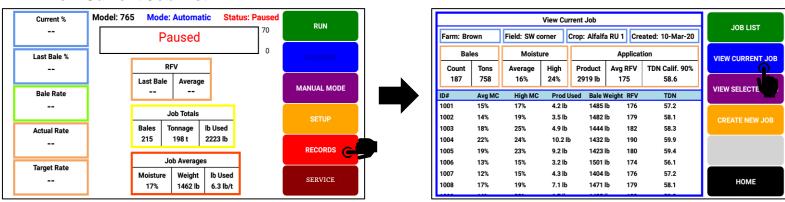
Select and change input boxes / sliders as needed

## **Job Records**

#### **View Job List**



#### **View Current Job List**



JOB LIST

VIEW CURRENT JU

VIEW SELECTED JOB

HOME

Bales

187

174

87

320

92

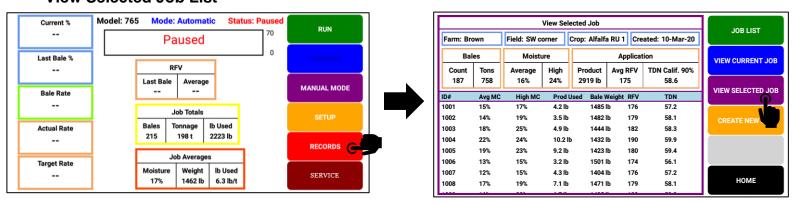
114

72

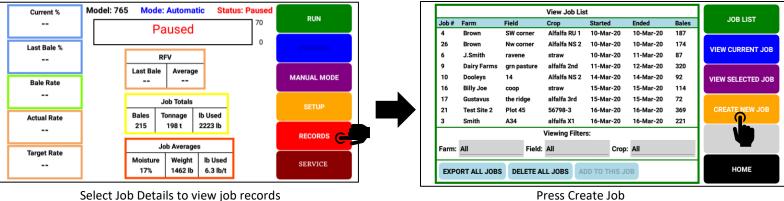
369

221

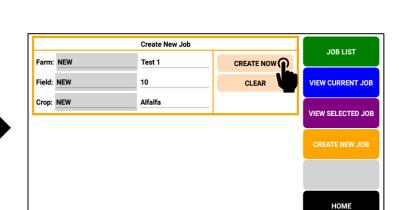
#### **View Selected Job List**

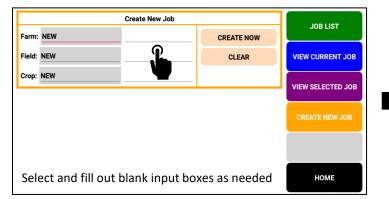


## **Create a New Job**

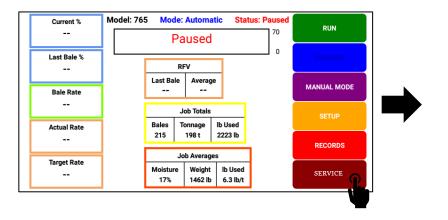


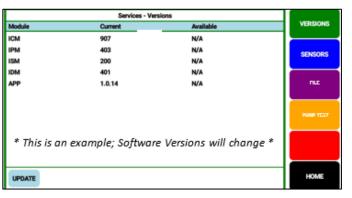
Select Job Details to view job records





## **Software Versions**





## First Time and Annual Startup Instructions

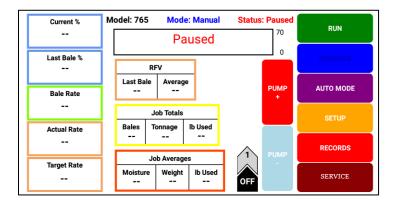
#### THE UNIT MUST BE CHECKED OUT BEFORE FIELD OPERATION!

## **Check and Prime the Pumps**

- 1. Put 10 gal (5L) of water or preservative in tank and turn main ball valve on.
- 2. Inspect for any leaks or drips currently. If any are found tighten or replace area or fitting.
- 3. Turn system on.
- 4. Press the SETUP key, then press BALING RATE SETUP key. Make the following adjustments:
  - Change Rate Sensor to Manual
  - Change Average Bale Weight to 1500
  - Change Average Bale Time to 60 seconds

Press the home key to return to run screen once changes have all been made.

5. Press the MANUAL MODE key and the screen shown below will appear.



- 6. Turn the pump on (Level 1). To turn the pump on, press the red PUMP+ key. This will add a chevron indicating level 1, turning the pump on.
- 7. Verify the pump output is set on level 1.
- 8. Move the pump output settings to 2, 3, 4, and 5. With the baling rate set at 45 tons/hr, the application rate actual reading should be:

Testing Liquid	Tips	Level 1 #/Ton (L)	Level 2 #/Ton (L)	Level 3 #/Ton (L)	Level 4 #/Ton (L)	Level 5 #/Ton (L)
Water	High	1.7-2.3 (0.7-1.0)	3.7-5.2 (1.5-2.2)	6.6-9.4 (2.8-4.0)	8.0-11.6 (3.4-5.0)	10.2-15.8 (4.3-6.8)
Preservative	High	1.4-2.1 (0.6-0.9)	3.3-4.7 (1.4-2.0)	6.4-7.8 (2.7-3.4)	9.5-10.9 (4.0-4.7)	13.1-14.5 (5.6-6.2)

Dot color	Tip	Hose color	Position on 765B2 wire
White Dot	8004 or 11004	White	Sol 1
Blue Dot	8008 or 11008	Blue tracer	Sol 2

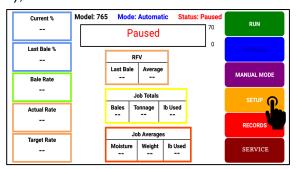
- 9. This process will also be used to prime the pump whenever needed.
- 10. While running pump check for a good spray pattern out of the respective tips and verify that no parts of the system are leaking.
- 11. While doing these tests the Volume (Lbs. Used) in Job Totals/Averages on the screen will be increasing, this verifies that the flow meter is functioning.
- 12. When test is completed, change settings back to original.

## **Setting Up System for Initial Use**

When setting up your system for initial use, you will need to setup three main categories: These consist of Moisture Setup, Baling Rate Setup, and Application Setup. The setup screens can be adjusted during operation of the system and will accept new values after any key is pressed. Be sure to reference the barrel or tote of preservative during setup to know what is needed for different moisture levels. Also, the average weight of bale should be known.

## **Moisture Setup**

This screen allows for the adjustment of three moisture set points. As well as gives the option to set what moisture system is being used and additional features such as OEM, Moisture Dye Marking (optional), etc.





## **Adjusting Moisture Set Points**

- Push the SETUP key on the main run screen, as shown in top left picture.
- On the Setup Mode screen press the MOISTURE SETUP key. Once selected the MOISTURE SETUP screen will be shown. (Top Right Picture)
- Press any of the grey number values to the right of level 1, 2, and 3 to adjust their figures. Remember level 1 must be lower than level 2, and level 2 must be lower than level 3. Press OK when value has been selected. Harvest Tec products recommend set points of 16, 19, and 22 % MC levels. These are preset from the factory. Press Home to return.
- To set the alarm, press the grey number value and set the level at which you want the alarm to activate. To turn the alarm off, set level above 70.

## **Adjusting Moisture Sensors**

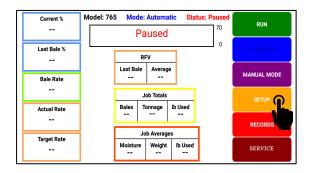
 Select between standard star wheels or optional microwave sensors if equipped. Reference 770MWM and 771MWM manuals for operating these upgrade features.

## **Moisture Dye Marking (Optional Equipment)**

- Turn on and off the moisture dye marker.
- Set the moisture level for moisture dye marker to spray at.

## **Baling Rate Setup**

This screen allows for adjustment in the following: Type of baling rate sensor being used, average bale weight, average bale time, bale length, bale width, bale height, bale tie sensor, bale scale.





- Push the SETUP key on the main run screen, as shown in top left picture.
- On the setup mode screen press the BALING RATE SETUP key.

#### **Rate Sensor**

Option to select between Manual, Automatic, ISOBUS.

- **Manual** uses average bale weight and time to determine tons/hour.
- Automatic uses average bale weight or scale weight (if equipped) and star wheel encoder to determine tons/hour.
- ISOBUS uses the average bale weight or scale weight (if equipped) and balers electronic bale length signal (if equipped) to determine tons/hour. Verify that baler has sensor system before selecting. Note: If using Optional Harvest Tec Display, the following can not be used from baler ISOBUS communication: Scale Weight, Electronic Bale Length, and Bale Tie Sensor

## **Average Bale Weight**

Set the weight of bale if baler is not equipped with scale.

#### **Average Bale Time**

Set the time between knotter cycles.

#### Average Bale Length, Width, and Height

Set the length, width, and height of the bale in the chamber.

#### - Bale Tie Sensor

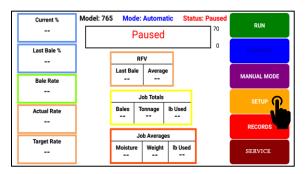
 Option to use either Harvest Tec sensor or the baler's tie sensor if equipped (AGCO and CNH balers only)

## - Bale Scale

 Turn on or off the baler scale if equipped. Currently this system only takes signals from, CNH and AGCO balers that are equipped with scales.

## **Application Rate Setup**

This screen allows for adjustment of preservative usage: Spray nozzles being used, hay indicator (optional), swath width (optional) needed to use GPS, units (English or Metric), GPS yield mapping (optional), and GPS receiver model (optional).





#### **Adjusting Application Set Points**

- Push the SETUP key on the main run screen, as shown in top left picture.
- On the Setup Mode screen press the APPLICATION SETUP key. Once selected the APPLICATION SETUP screen will be shown as seen in top right picture.
- To change rate of chemical application, press any of the grey number values to the right of level 1, 2, or 3. Remember level 1 must be lower than level 2, and level 2 must be lower than level 3. Press OK when value has been selected. Harvest Tec products recommend rates of 4, 6, and 10 lbs./ton (2,3,8 L/MT). These rates are preset from the factory. Press HOME to return to main screen.

IT IS THE OPERATORS RESPONSIBILITY TO FOLLOW THE RECOMMENDATIONS OF THE PRESERVATIVE. ONLY THE OPERATOR CAN APPLY THE PROPER RATE.

## **Adjusting Spray Nozzles**

One spray nozzle selection for all Large Square Baling applications.

#### **Turn ON/OFF Hay Indicators**

 Turn sliders on for Hay Indicators if system is equipped, otherwise leave off. Mount at baler pickup and automatically pause applicator upon crop flow discontinuing. Kit number: 030-474C.

#### **Adjusting Swath Width**

Input average swath width in the field.

## **Change Units**

Adjust the unit between metric and standard units.

#### **Turn ON/OFF GPS**

Turn on or off GPS if equipped with Harvest Tec GPS module. Optional Kit number: 030-780GPS.

#### **Selecting GPS Receiver**

Select style of GPS device equipped on baler.

#### RFV Setup -

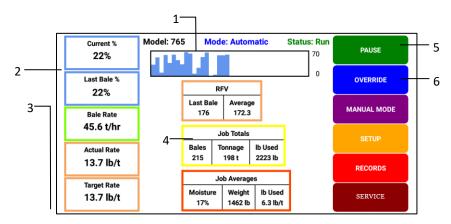
Optional upgrade – reference 745RFV Dye Marker Manual for details on this Bale ID feature.

## **Operation Instructions**

Automatic mode will automatically apply product based on hay moisture content sensed by the moisture sensors and the operator's presets. See SETTING UP SYSTEM FOR INITIAL USE to change any settings.

#### **Automatic Mode**

After pushing the AUTOMATIC MODE key in the Main Menu screen, the following screen will appear:



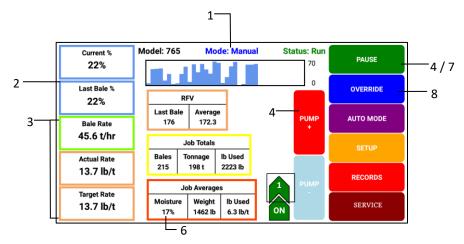
- 1. The graph shows the moisture trend from the past 90 seconds in 3 second intervals.
- 2. The moisture content is shown in the upper left corner.
- 3. Baling Rate and Application Rate are shown on the middle left of the screen. The operator sets the target application rate and baling rate in the setup mode; it is common the actual rate will fluctuate above and below the target rate.
- 4. Job Totals and Job Averages will show at the bottom center of the screen. These numbers will only reset once a new job record is created. NOTE: Initial start-up requires pressing the CREATE NEW JOB key in the RECORDS screen for volume used accumulation to be recorded. This only needs to be done once on initial start-up of system and not every time. (See JOB RECORDS screen)
- 5. To pause the unit while in operation select the PAUSE key, select RUN key to resume operation.
- 6. Push the OVERRIDE key to turn the pump for full output of the system. Use this mode when going through a short area of wet crop. Select NORMAL key to resume operation.

#### **Manual Mode**

After pushing the MANUAL MODE key on the main run screen, the following screen will appear:

When pump is ON, manual mode will apply preservative to the hay at a fixed rate regardless.

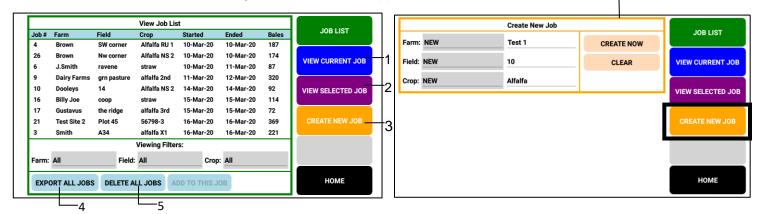
When pump is ON, manual mode will apply preservative to the hay at a fixed rate regardless of the moisture or tonnage.



- 1. This graph shows the moisture trend from the last 90 seconds in 3 second intervals.
- 2. The moisture content is shown in the upper left-hand corner.
- 3. Baling rate and Application rate are shown in the bottom left of the screen.
- 4. To turn the pump on, press the RUN key. Every time PUMP+ is pressed this adds a chevron. In Manual Mode (regardless of moisture, baling rate or bale weight) the outputs are fixed rates.
- 5. Press PUMP+ key from level 1  $\rightarrow$  5 to increase the amount of preservative being applied.
- 6. Job Totals and Job Averages will show at the bottom center of screen. These numbers will reset once a new job record is created NOTE: Initial start-up requires pressing the CREATE NEW JOB key in the RECORDS screen for volume used accumulation to be recorded. This only needs to be done once on initial start-up of system and not every time. (See JOB RECORDS instructions)
- 7. To pause the unit during operation, select the PAUSE key, select RUN key to resume operation.
- 8. Push the OVERRIDE key to turn on the pump for full output of the system. Use this mode when going through a short area of wet crop. Select NORMAL key to resume operation.

#### Job Records

This screen allows for adding, editing, and continuation of all job records. After pushing the RECORDS key on the main run screen, the following screen on left will appear:



#### **View Current Job (1)**

This will display current real time job information.

#### View Selected Job (2)

Allows the user to select any job in JOB LIST and view, edit, or continue to add to the selection.

### **Create New Job (3)**

- Select the CREATE NEW JOB key to generate a new job record.
- Enter desired farm, field, and crop name and press CREATE NOW.
- The job details screen will appear with name of the job shown under the Job List. Information shown on this screen will include Job Number, Field Name, Crop, Date, and Total Bales.
- Every time the CREATE NEW JOB key is pressed the accumulated pounds on auto and manual modes will be reset to zero.
- To return the operating screen, press the HOME key. NOTE: Initial start-up requires pressing the CREATE NEW JOB key in the Records. This only needs to be done once on initial start-up of system and not every time the system is started for operation.

#### Export Job (4)

 Insert USB drive to ICM Port located in tractor cab. Select the job(s) wished to export, once selected, press EXPORT key.

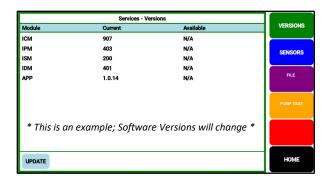
#### Delete Job (5)

Select the job(s) wished to delete, once selected, press the DELETE key.



## **Service**

After pushing the Service key on the main run screen, the following will appear:

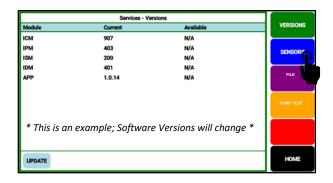


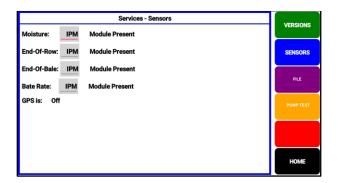
This will show the current version of software being used on the 700 series applicator system.

Note: Any software updates that are available will be shown at: harvesttec.com/product-updates/

## **Sensors**

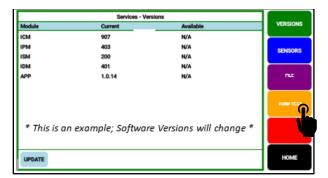
Within the Service menu, select SENSORS key to select sensor setup:





## **Pump Test**

Within the Service menu, select PUMP TEST key. Once in Pump Test screen, select TEST:









Make sure baler is in an area where spray from the applicator will not cause any unwanted mess. The test will run for one minute and 40 seconds, spraying up to two gallons of fluid. Readings will update every 3 seconds and the last reading will be the completed value. Each level will run for 20 seconds.

Use range tables below to compare Pump Test values:

P	reservativ	е		Water	
	MIN	MAX		MIN	MAX
L1	65	95	L1	80	100
L2	150	210	L2	170	230
L3	290	350	L3	300	420
L4	430	490	L4	360	520
L5	590	650	L5	460	710

## **Maintenance**

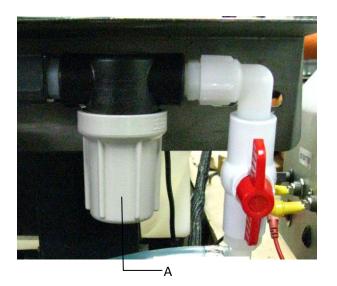
If you are unsure how to perform any of the maintenance steps have your local authorized dealer perform the tasks.

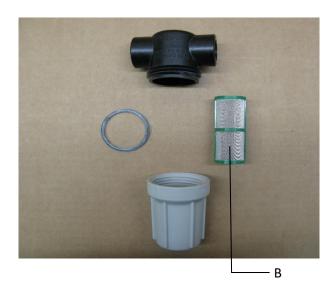
#### **Maintenance Schedule**

	Daily	10 hrs.	400 hrs.	Weekly	Monthly	Season
Diagnostics	Χ					X
Filter bowl cleaning		Χ				X
Tips & tip screen cleaning		Χ				X
Tank lid cleaning		Χ				X
Dielectric grease connections					Χ	X
Rebuild pump			X			
Battery connections				Χ		X
Solenoid Valves			X			
Visually inspect hoses				X		Х

**Filter bowl cleaning:** The filter bowl is in front of the applicators tank and is connected to the ball valve. Before cleaning the filter bowl all personal protective equipment must be worn (Face shield or goggles, chemically resistant apron, boots, and gloves).

Verify that the ball valve located next to the pump is turned off. Locate the filter bowl on the side of the pump manifold (A). Unscrew the bottom section of the filter bowl and remove the strainer (B). Clean off any debris and soak in warm water with a mild soap if necessary. Once the screen is clean reinstall by following the directions in reverse.





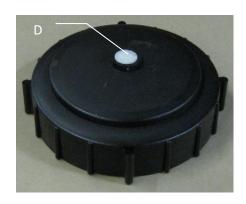
**Tips & tip screen cleaning:** Before cleaning the tips and screens all personal protective equipment must be worn (Face shield or goggles, chemically resistant apron, boots, and gloves).

Verify that the ball valve located next to the pump is turned off. Disconnect spray shield from hangers if possible or remove tips in place. Remove the tip, and screen if equipped. Some models may require a wrench to remove. Clean off any debris and soak tip and screen in warm water with a mild soap if necessary. Once the tips and screens are cleaned reinstall by following the directions in reverse.

**Tank lid cleaning:** Before cleaning the tank lid all personal protective equipment must be worn (Face shield or goggles, chemically resistant apron, boots, and gloves).

The tank lid is located on the top of the tank. Unscrew the tank lid and bring down ground level. Use compressed air clean out the tank screen breather plug (D). Check cap gasket for cracks or tears- replace if necessary. Reinstall tank lid after cleaning and inspection.

**Dielectric grease connections:** Disconnect all applicator harnesses connections. Clean and repack connections with dielectric grease.



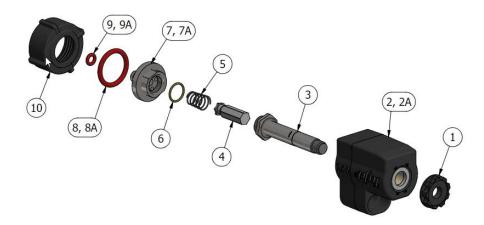
**Rebuild pump:** If Manual mode shows that the pump is running lower than normal, a pump rebuild may be necessary. To do this rebuild the pump must be removed from the pump manifold. The pump rebuild kit is part number 007-4581.

Verify that the ball valve is turned off. Before working around the pumps all personal protective equipment must be worn (Face shield or goggles, chemically resistant apron, boots, and gloves). Remove pump from manifold. Follow rebuild instructions supplied with pump rebuild kit. Reinstall after rebuild is complete.

**Battery connections:** Follow the batteries safety warnings and clean the battery connections. If the connections cannot be cleaned, replace harness.

**Solenoid Valves:** Before servicing the solenoid(s), all personal protective equipment must be worn (Face shield or goggles, chemically resistant apron, boots, and gloves), inlet side of solenoid could be under pressure Clean the solenoid valve body (004-1207VF).

Verify the ball valve is turned off before service the solenoid. Replace the solenoid if needed (002-2203F). Replacement Pulsing Solenoid EPDM O-Ring kit available (002-2203FG).



To clean solenoid valves:

The Center Section can be removed from Housing #2 by loosening #1 from #3. Once removed, use wrenches on components #3 and #7 and gently turn to loosen and separate. Soak parts #3-10 in warm soapy water, clean with a soft bristle brush, rinse with clean water to remove buildup before reassembly.

#### **Miscellaneous Maintenance:**

- 1. Depending on the product being used, the system may need to be flushed with water at a regular interval (consult with manufacturer of the chemical.) If Harvest Tec product is being used, flushing is not necessary.
- 2. Although the pump can run dry, extended operation of a dry pump will increase wear. Watch the preservative level in the tank.
- 3. If you are using bacterial inoculants, flush your system daily after every use.
- 4. DO NOT PRESSURE WASH CONTROL BOXES, PLUG CONNECTIONS OR MOISTURE SENSORS.

**Winter Storage:** If system is used with the Harvest Tec buffered propionic acid, the system does not need to be drained as long as the tank, tank cap, and system components are in good condition and free of cracks or leaks. Turning off the tank supply line, removing the filter bowl and running the pump for a short duration is sufficient to purge the preservative from the intake lines. Disconnect hose from solenoid, remove spray tips and drain all lines on the outlet side. Store any collected preservative in a sealed container or return to tank. Reinstall filer bowl, solenoid hose and spray tips after draining.

If other products are used, then follow this procedure:

- 1. Thoroughly flush the system with water.
- 2. Remove the filter bowl and run dry until the water has cleared out of the intake side.
- 3. Drain all lines on the outlet side.
- 4. Never use oils or alcohol based anti-freeze in the system.
- 5. For spring start-up, if the pump is frozen, turn off the power immediately to avoid burning the motor or damaging the circuit board. The pump head can be disassembled and freed or rebuilt in most cases.
- 6. Disconnect power from the IPM module.
- 7. Remove display from tractor and store in a warm, dry place

## **Common Questions**

## 1. How do I turn the system on/off?

To turn the system ON, turn tractor key on to power up.

To turn the system OFF, turn off tractor key.

If operating via Tablet, see SHUTTING DOWN THE PRECISION BALING APP for more details.

#### 2. How to get in the LBS/TON, MC%, and TONS/HR screens?

Press the SETUP key. Select MOISTURE SETUP to change moisture level settings, select APPLICATION SETUP to change your application settings, select BALING RATE SETUP to change tons/hour settings. . See SETTING UP SYSTEM FOR INITIAL USE for a detailed explanation of this process.

## 3. The unit is stuck in the Application Setup screen.

In the Application Rate screen, level 1 must be less than level 2, and level 2 must be less than level 3. For example, if level 1 is set at 16, level 2 must be set at 17 or higher, and level 3 must be set higher than level 2.

#### 4. How does OVERRIDE work?

Override turns on the pump and opens the solenoid for full output. The pump and solenoid will remain at full output until the operator turns the pump off by pressing the NORMAL key again.

## 5. The flow meter reading is more or less than the programmed level set in the box.

Some variation in flow meter readings compared to the programmed set point is normal due to factory tolerances on the pump motor as well as varying tractor voltages inputted to the control box. The flow meter reading is an accurate measure of how much product is being applied. The set points then will need to be adjusted if you want to attain a different flow meter reading.

## 6. The moisture content displays "LO" or "HI" all the time.

When the moisture content display does not change frequently while baling, there is likely a faulty star wheel connection. Check all star wheel wires and connectors to see if there is a continuity or grounding problem.

## 7. Should the battery connections be removed before jump starting or charging a battery?

Yes, anytime the tractor will have voltage going up rapidly the connections should be removed.

# **Troubleshooting**

Problem	Possible cause(s)	Solution(s)		
	No voltage to IPM.	Check for short, low voltage, and		
Pump will not run	1. No voltage to IPM.	replace fuse if necessary.		
	2. Pump locked up.	Clean or rebuild pump if motor ok		
	3. Damaged wire.	3. Repair damaged wire.		
	4. Damaged solenoid	4. Replace / Clean		
	Air leak in intake.	Tighten fittings on intake side.     Replace filter bowl O-ring.		
	2. Clogged intake.	2. Clean.		
Pump runs but will not prime	Restricted outlet.	Check and clean tips.		
	Check valve stuck closed.	4. Clean or repair check valve.		
	5. Dirt inside pump.	5. Replace pump check valve.		
Pump does not develop	Air leaks or clogs on inlet.	Tighten or clean filter bowl		
enough output.	2. Pump worn or dirty.	2. Rebuild pump.		
	Wire disconnected or bad connection between star wheels and IPM.	Reconnect wire.		
	2. Low power supply to IPM	2. Check voltage at box for min of 12V		
Moisture reading errors (reading high or low)	Baleage not forming full top of bale allowing star wheels to not properly contact bale.	Adjust flake to contact star wheel sensors.		
	4. Short in star wheel harness.	4. Replace wire.		
Moisture reading erratic	Check all wiring connections for corrosion or poor contact.	Apply dielectric grease to all connections.		
	Check power supply at tractor. Voltage should be 12V-14V	Replace battery harness.     Install voltage surge protection on tractors alternator.		
	Voltage supplied to flow meter is less than 11 volts.	Check for a min of 11 volts supplied at IPM module.		
Product is less than actual product used.	2. Wiring short in signal to IPM.	2. Inspect wire and replace if necessary.		
	3. Using product other than Harvest Tec	Catch and weigh product for output.		
	High voltage supplied to the meter.	Check voltage at IPM. Max of 18V.		
Product shown is 10% different than actual product used.	2. Air leak in intake.	Look for air bubbles in line.     Replace line or other defective area that is allowing air into the system.		
	3. Using product other than Harvest Tec	Catch and weigh product for output.		
System leaks product out of tips after shutting down.	Dirty or defective solenoid	1. Clean or Replace.		
System does not pause at the end of a row.	Short in harness     Damaged sensor     Sensor misalignment	<ol> <li>Replace harness</li> <li>Replace sensor</li> <li>Align sensors – see 474C manual</li> </ol>		
Solenoid will not pulse	Dirty or plugged solenoid     Damaged wire from control     Wire disconnected	Clean or Replace     Repair     Reattach		
ISO Communication Module	ICM Module receiver not connected     Harness disconnected     Low power	Check connections and voltage.     Minimum of 12.5 volts required.		
light will not illuminate	Green Light – When the ISO Communication Module is properly connected, the green light will indicate connection.			

## **Error Messages**

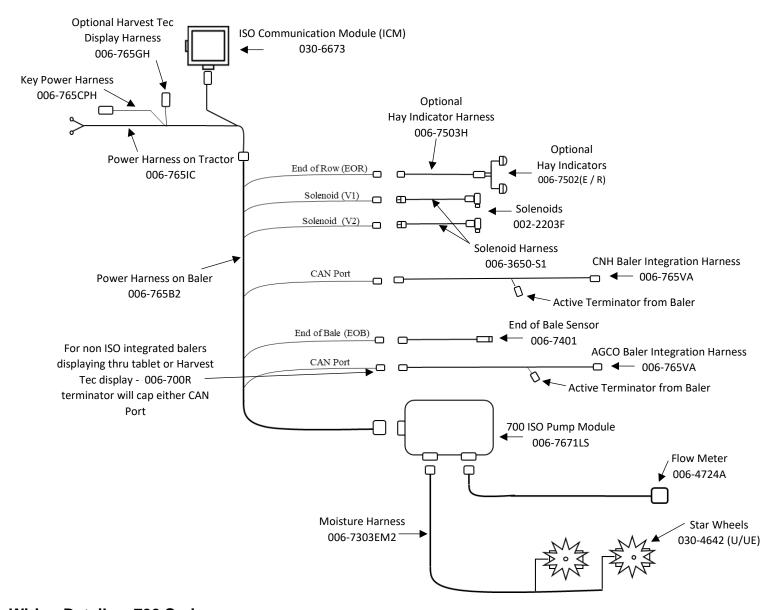
<u>Message</u>	Troubleshooting	
Baling Rate shows "ERROR"	- The star wheel with the encoder is installed incorrectly so it is spinning the wrong direction. Ensure star wheel is installed according to arrow diagram on the back.	
"Auto Mode Disabled"	- Microwave chute moisture sensors have been selected. Ensure they are off and star wheels are used as main moisture reading for the system.	
For other issues refer to Install Manual or contact Harvest Tec		

# **Tablet Troubleshooting**

<u>iPad Symptom</u>	<u>Troubleshooting</u>		
	- Turn tablet off and on. Press and hold the Sleep/Wake button for a few seconds until powered completely off. Press and hold the Sleep/Wake button to turn on again.		
Tablet will not turn on	- Battery may be drained. Plug tablet into computer or AC adapter and see if anything happens. The tablet will recognize it has been connected to a power source and charge its battery. If it will no longer charge, the battery must be swapped with a replacement battery.		
Tablet touchscreen is slow or does not respond	- Screen may be dirty. Clean screen. Unplug everything, turn off tablet and with soft, lint-free, slightly damp cloth gently wipe screen. DO NOT use window cleaner and paper towels.  - If screen protector sheet installed, try removing it.		
Tablet is not charging or is slow to charge	- To charge tablet, you can try either connecting to a power outlet or connecting to a USB 2.0 port on a computer.		
How can I unlock my tablet if I forgot the passcode	- If cannot remember passcode, will need to restore device using the computer with which was last synced. This allows for ability to reset your passcode and resync the data from the device (or restore from a backup).		
How do I send in my tablet for service?	- Refer to tablet owner's manual.  DO NOT SEND TABLET TO HARVEST TEC		
For other issues refer to iPad Owner's Manual or contact Apple Directly			

\*Harvest Tec Does Not Service Tablets\*

## Wiring Diagram - 700 Series



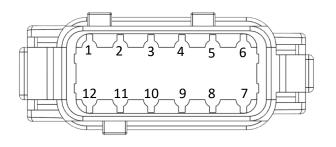
## Wiring Details - 700 Series

- 1. Power harness (006-765IC) must connect to the tractor battery (12 volt) using the red wire with fuse to the positive side and the black wire to the negative.
- 2. The power harness on the tractor (006-765IC) runs from the tractor battery to the hitch. The power harness on the baler (006-765B2) connects to the tractor power harness (006-765IC) at the hitch.
- 3. Keyed power wire (006-765CPH) must connect to a keyed power source on the tractor. Red keyed power wire connects to power and the black keyed power wire connects to a ground.
- 4. (ICM) ISO Communication Module (006-6673) connects to the tractor power harness (006-765IC) inside the tractor cab.
- 5. Optional tablet/iPad attaches to the ICM by a data transfer/power cable ending in a USB-A port connection appropriate for the tablet/iPad. Use of adapters is not supported.
- 6. End of Bale sensor (006-7401) connects to (EOB) plug on baler harness (006-765B2).
- 7. Match Solenoids (V1 & V2) connections on baler harness (006-765B2) to the solenoids (002-2203F).
- 8. Flowmeter (006-4724A) connects to ISO Pump Module connection on pump plate assembly.
- 9. Rubber molded connector on pump plate connects directly to the Pump (007-4120DE).
- 10. Star wheels (030-4642 U/UE) connect to ISO Pump Module connection on pump plate assembly.

## **Pin Outs**

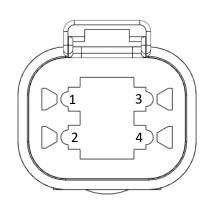
# Integrated Control Module (ICM) on Tractor Harness 006-765IC (Deutsch Plug Number: DTM06-12SA)

	-	
Pin 1	Red	+12V from ECU
Pin 2	Purple	Signal Wire
Pin 3	Red/White	+12V CAN X
Pin 4	Black/White	Ground CAN X
Pin 5	Orange	CAN X Hi
Pin 6	Blue	CAN X Lo
Pin 7	Green	ISO CAN Lo
Pin 8	Yellow	ISO CAN Hi
Pin 9	White	<b>GPS Expansion 1</b>
Pin 10	Gray	GPS Expansion 2
Pin 11	Brown	GPS Expansion 3
Pin 12	Black	Ground from ECU



# <u>ISOBUS Plug on Tractor Harness 006-765IC</u> (Deutsch Plug Number: DT04-4P)

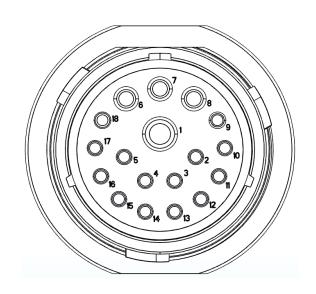
Pin 1	Red	+12V from ECU
Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Black	Ground from ECU



# <u>Power / Communication Tractor Harness 006-765IC at Hitch</u> (Deutsch Plug Number: HDP24-24-18PN)

Pin 1 Not Used

Pin 2	Yellow	ISO CAN Hi
Pin 3	Green	ISO CAN Lo
Pin 4	Red	+12V Power to ECU
Pin 5	Black	Ground to ECU
Pin 6	Red	+12V From Battery
Pin 7	Not Used	
Pin 8	Black	<b>Ground From Battery</b>
Pin 9	Not Used	
Pin 10	Purple	Signal Wire
Pin 11	Red/White	+12V CAN X
Pin 12	Black/White	Ground CAN X
Pin 13	Orange	CAN X Hi
Pin 14	Blue	CAN X Lo
Pin 15	White	GPS Expansion 1
Pin 16	Gray	GPS Expansion 2
Pin 17	Brown	GPS Expansion 3
Pin 18	Not Used	

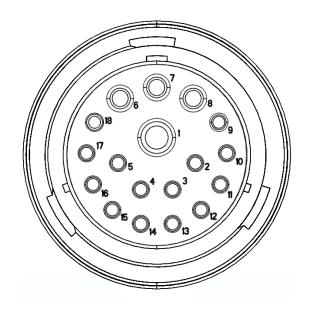


#### Pin Outs (continued)

#### Power / Communication Baler Harness 006-765B2 at Hitch

(Deutsch Plug Number: HDP26-24-18SN)

Pin 1 Not Used Pin 2 Yellow ISO CAN Hi Pin 3 Green ISO CAN Lo +12V Power to ECU Pin 4 Red Pin 5 Black Ground to ECU +12V From Battery Pin 6 Red Pin 7 Not Used Pin 8 Black **Ground From Battery** Pin 9 Not Used Pin 10 Orange/White +12V Power to EOR Pin 11 Not Used **Pin 12** Not Used Pin 13 Not Used Not Used Pin 14 Pin 15 Not Used Not Used Pin 16 Not Used **Pin 17** 



## Power / Communication Baler Harness 006-765B2 at IPM Module

(Deutsch Plug Number: HDP24-24-18SN)

Not Used

Pin 18

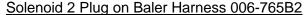
Pin 1 Not Used Pin 2 Yellow ISO CAN Hi Pin 3 Green ISO CAN Lo Pin 4 Red +12V Power to ECU Ground to ECU Pin 5 Black Pin 6 Red +12V From Battery Pin 7 Not Used Pin 8 Black **Ground From Battery** Pin 9 Not Used Pin 10 Orange/White +12V Power to EOR Pin 11 Orange/Black Ground to EOR Pin 12 Purple/Green **EOR Signal** Pin 13 Blue/White **EOB Signal** +12V Power to Solenoid 1 Grav/Red Pin 14 Pin 15 White/Black Ground to Solenoid 1 Pin 16 Orange/Red +12V Power to Solenoid 2 **Pin 17** White/Black Ground to Solenoid 2 Not Used Pin 18

\*IPM Module Whip Plug- Pin # 5 Not Used

#### Solenoid 1 Plug on Baler Harness 006-765B2

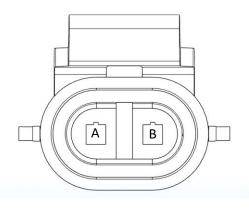
(Deutsch Plug Number: APTIV 12052641)

Pin B Gray/Red +12V to Solenoid 1
Pin A White/Black Ground to Solenoid 1



(Deutsch Plug Number: APTIV 12052641)

Pin B Orange/Red +12V to Solenoid 2
Pin A White/Black Ground to Solenoid 2

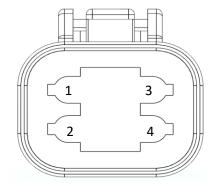


#### Pin Outs (continued)

#### CAN / IDM on Baler Harness 006-765B2

(Deutsch Plug Number: DT06-4S)

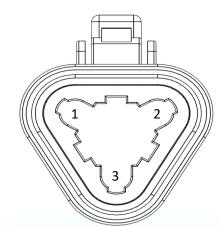
Red +12V to ECU Pin 1 Pin 2 Yellow ISO CAN Hi ISO CAN Lo Pin 3 Green Pin 4 Black Ground to ECU



#### End of Bale Sensor Plug on Baler Harness 006-765B2

(Deutsch Plug Number: DT06-3S)

+12V to End of Bale Sensors Pin 1 Orange/White Pin 2 Orange/Black Ground to End of Bale Sensors Pin 3 Blue/White Signal



## End of Row Sensors Plug on Baler Harness 006-765B2

(Deutsch Plug Number: DT06-3S)

Pin 1 Orange/White +12V to End of Bale Sensors Pin 2 Orange/Black Ground to End of Bale Sensors

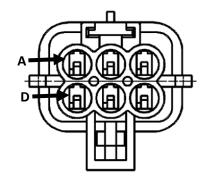
Pin 3 Blue/White Signal

## Integration Harness Plug on Baler Harness 006-765VA (Plug: APTIV 12052848)

Pin A Not Used **TBC** Power Pin B Red

Pin C Not Used

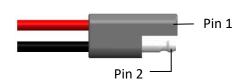
**TBC Ground** Pin D Gray Pin E Orange CAN Hi Pin F Blue CAN Lo



#### Pump Connection on 700 Controller Harness

(16 AWG Two-Wire Plug)

Pin 1 Red Power to Pump Pin 2 Black Ground to Pump



Please visit our website <a href="www.harvesttec.com">www.harvesttec.com</a> and see our selection guide to determine the appropriate applicator kit number for replacement spray shield and tank mounting components.

Applicator installation kits are specific to your baler model.

If assistance is needed, please email us at

info@harvesttec.com

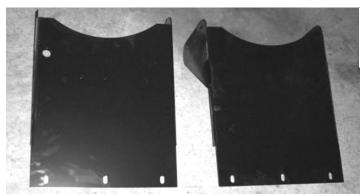
or call us at 1-800-635-7468

## **Parts Breakdown**

### 100 Gallon - Tank, Saddle, & Legs

#### Vermeer, Claas, and Krone Balers





Vermeer, Claas and Krone Balers Saddle Legs

Part#: 001-6706V

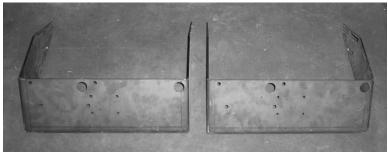
\*If the applicator is being mounted on a **Krone 870 HDP** baler, two leg adapter brackets will be needed for proper tank leg installation (below). Part number 001-6707KV.



Claas 3300 Saddle Legs Part #: 001-6706C

#### 110 Gallon - Tank, Saddle, & Legs





AGCO, Hesston, Massey, & Challenger Saddle Legs
Part#: 001-6707C



New Holland BB940A, BB960A, Case IH LBX 332, LBX 432 Series Saddle Legs (2010 and older, 4ft wide balers)

Left Leg part# 001-6707BL Right Leg part # 001-6767BR

Not Pictured **Vicon Leg Spacers**: Part#: 001-6707BS (x2)



New Holland BB940A, BB960A, Case IH LBX 332, LBX 432 Series Saddle Legs (2011 and newer, 4ft wide balers)

Left Leg part # 001-6707DL

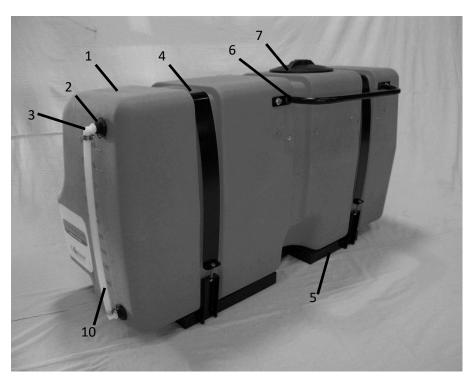
Right Leg part# 001-6707DR

(110 Gal. Tank Legs Continued)



Krone Balers
Part#: 001-6707KA

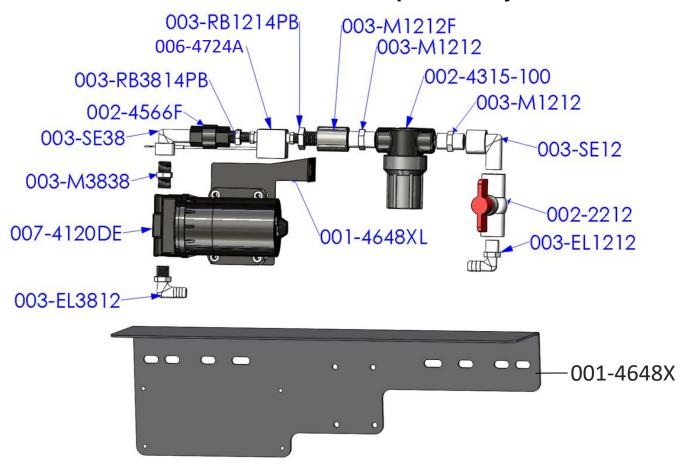
# 115 Gallon - Tank, Saddle & Legs





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

## **Parts Breakdown for Pump Assembly**



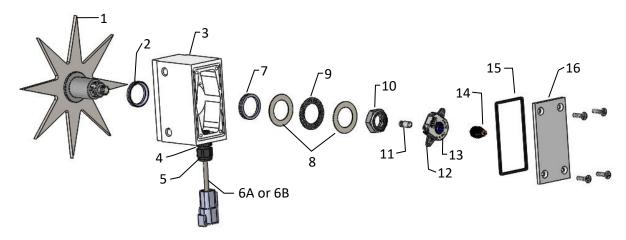
Part#	<b>Description</b>	Qty	Part#	<b>Description</b>	Qty
003-EL3812	3/8" MPT X 1/2"HB Elbow	1	003-M1212	1/2" Union	2
007-4120DE	300 Series Pump	1	002-4315-100	1/2" Line Strainer-100 Mesh	1
003-M3838	3/8" x 3/8" Union	1	003-SE12	1/2" Street Elbow	1
003-SE38	3/8" Street Elbow	1	002-2212	1/2" Ball Valve	1
002-4566F	3/8" Check Valve	1	003-EL1212	1/2"MPT x 1/2"HB	1
003-RB3814PB	RB 3/8" x 1/4" Reducer	1	001-4648XL	300 Pump Support	1
006-4724A	Flow Meter – Block Style	1	001-4648X	Pump Plate Mount	1
003-RB1214PB	RB 1/2" x 1/4" Reducer	1	003-A1212	Not Pictured	1
003-M1212F	1/2" Coupler	1	003-A3812	Not Pictured	1

## **Completed Assembly**



\*Note: Due to alternative baler designs, elbow 003-EL3812 can be replaced by straight fitting 003-A3812. As well as elbow 003-EL1212 can be replaced by straight fitting 003-A1212. Both straight fittings are included.

## **Star Wheel Sensors**

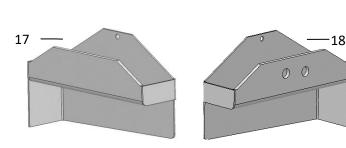


Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Star Wheel	006-4642US	1	10	Star Wheel Nut	006-4642U	1
2	Dust Seal Gasket	006-4642UG	1	11	Swivel Insert	006-4642B	1
3	Star Wheel Block (Avail. in 2024 Style Only)	006-4642UB	1	12	Encoder Mount	006-4512P	1
4	3/8" Wire Grommet	008-0821A	1	13	Encoder	006-4512E	1
5	3/8" Grommet Nut	008-0821B	1	14	Electric Swivel	006-4642A	1
6A	Encoder Harness Plug (6 Pin)	006-7307EM	1	15	Star Wheel Block Gasket (Fits Pre-2024 Block Style)	006-4642UG	1
6B	Moisture Harness Plug (2 Pin)	006-7307M	1	15	Star Wheel Block Gasket (Fits 2024 and Newer Blocks)	006-4642UG2	1
7	Spacer (only used in some of the pre-2024 blocks)	006-4642UBS	1	16	Block Cover (Fits Pre-2024 Block Style)	006-4642UC	1
8	Thrust Bearing Washer	006-4642K	2	16	Block Cover (Fits 2024 and Newer Block Style)	006-4642UC2	1
9	Thrust Bearing	006-4642TB	1	Com	plete Assembly w/Encoder	030-4642UE	i.

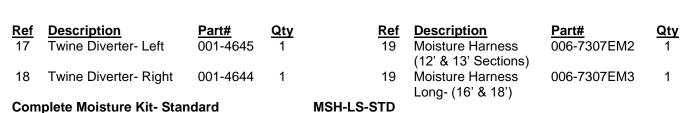
## **Twine Diverters and Moisture Harness**

**Complete Assembly No Encoder** 

030-4642U



**Complete Moisture Kit-Long** 



**MSH-LS-EXT** 

<sup>\*</sup>Complete Moisture Kit includes one of each star wheel, both twine diverters and one Moisture Harness

# **Control Box and Wiring Harnesses**



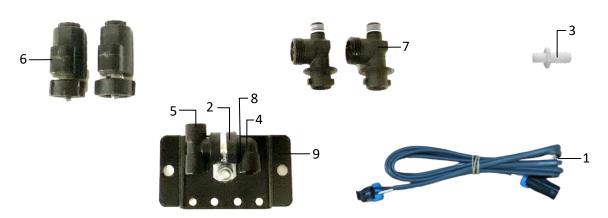
Ref	<u>Description</u>	Part#	<b>Qty</b>	<u>Ref</u>	<u>Description</u>	Part#	<b>Qty</b>
1	Power Lead Baler 35'	006-765B2	1	NP	Baler Integration Harness	006-765VA	1
2	Power Lead tractor	006-765IC	1	NP	Baler Integration Extension (Pre 2012 Agco Balers only)	006-6650VAX	1
3	Key Switch Wire	006-765CPH	1	NP	120 Ohm Resistor (For use as non-ISO integrated units)	006-700R	1
4	ISO Pump Module (IPM)	006-7671LS	1	NP	Dust Plug Kit	006-765DP	1
5	ISO Communication Module (ICM)	006-6673	1	NP	USB-C Communication Cable (Optional use for tablet connection)	006-6672USBC	1

# **End of Bale Sensor**



Ref	<u>Description</u>	Part #	Qty
1	End of Bale Sensor	006-7401	1
2	End of Bale Ext.	006-7401EXT	1

## 700 Solenoid Package for Large Square Balers



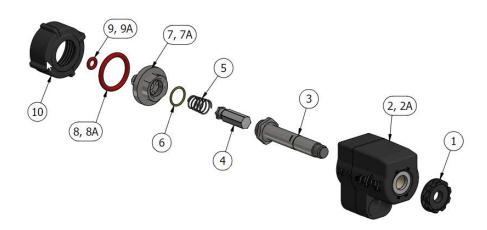
Ref	<u>Description</u>	Part #	Qty	<u>Ref</u>	<b>Description</b>	Part #	Qty
<u>1</u>	Solenoid Harness (5')	006-3650-S1	2	<u>6</u>	<u>Solenoid</u>	002-2203F	2
2	Hose Clamp #6	003-9003	1	7	Solenoid Valve Body	004-1207VF	2
3	1/4" x 1/2" Straight Fitting	003-A1412	1	8	1/4" Nipple	003-M14	1
4	1/4" Elbow	003-SE14F	1	9	Solenoid Holder	001-4648DSH	1
5	1/4" Tee Fitting	003-TT14SQ	1	NP	O-Ring Kit (Replacement)	002-2203FG	2

Complete Assembly SOL-3SP-LS

#### **Expanded View of Pulsing Solenoid (002-2203F)**

Replacement Pulsing Solenoid O-Ring Kit available (002-2203FG)

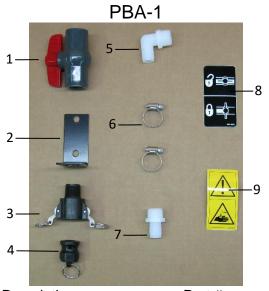
(Includes EPDM O-Rings 6, 8, 9 shown below)



#### To clean solenoid valves:

The Center Section can be removed from Housing #2 by loosening #1 from #3. Once removed, use wrenches on components #3 and #7 and gently turn to loosen and separate. Soak parts #3-10 in warm soapy water, clean with a soft bristle brush, rinse with clean water to remove buildup before reassembly.

## **Parts Bags**



	PBF	P-16	
10	-	<u></u>	—12
11	C	3	—13
⊃of	Description	Dort #	_ 

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

Ref Description Part # <u>Qty</u> Valve Decal DCL-8004 1 9 Hazard Decal DCL-8001 1 3/4" x 1/2" Elbow 10 003-EL3412 1 3/4" Jiffy Clip 008-9010 3 11 #6 Hose Clamp 12 003-9003 1 Small Jiffy Clip 3 13 008-9009

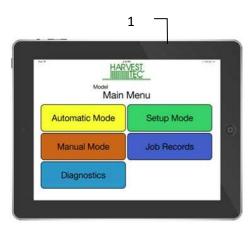
Complete Drain Fill Kit 030-0493DFK (Includes 3/4" tubing below)

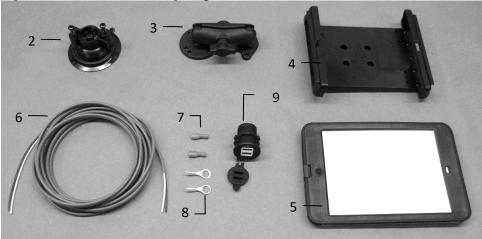
## **Hoses**



Ref	Description	Part#	Qty
1	1/2" Hose	002-9001	30'
2	(Tank to Solenoid) 1/4" Hose	002-9016	5'
NP	(Solenoid to Tips) 3/4" Hose (Drain/Fill Line)	002-9002	10'

## **Optional iPad Display Kit**





<u>Ref</u>	<u>Description</u>	Part #	Qty		
1	iPad Mini 4 (Refurbished)	006-4670IP	1	Complete iPad Mini Kit	030-4670DK
2	Suction Cup Mount	001-2012SCM	1	(Includes 1-5 and Cor	mm. Cable)
3	Ram Mount	001-2012H	1	`	,
4	Spring Load Cradle	001-2012SLC	1	Mounting Kit Only	030-2014MK
5	iPad Mini 4 Case	001-2012C4	1	(Includes all parts <u>exc</u>	cept iPad Mini 4)
NP	Lightning Comm. Cable	006-6672USBC	1	,	,
6	Power Harness	006-4723P	1		
NP	4 amp Fuse	Hardware	1		
7	Female Spade Connector	Hardware	2		
8	Eye Loop Connector	Hardware	2		
9	iPad Mini Charger 12V	001-2012P	1		

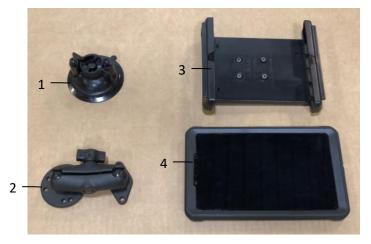
#### 12V Power Harness Installation Instructions (included with Mounting Kit Only)

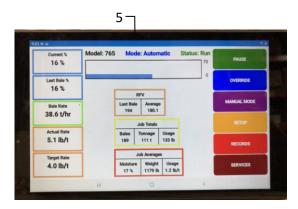
- 1. Identify 12V power source for wires to connect.
- 2. Eye loops installed on harness if wiring directly to the battery is desired.
- 3. Test for key power source if preferred to have power to the USB shut off with the key.
- 4. Once power source is identified, cut wires to desired length if needed for key power connection.
- 5. Harness comes with quick connectors the white and black wires.
- 6. Remove the round locking plastic nut from USB plug before connecting the wires. Black (+) White (-).
- 7. The wires will then be hooked to the designated terminals on the bottom of the USB plug
- 8. Drill a 1 1/8" hole in the preferred mounting location. Be sure to clean any sharp edges after drilling.
- 9. Feed the wires through the mounting hole.
- 10. 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.
- 11. Connect the wires to the identified power source if easier to do so before tightening the plug into place.
- 12. Tighten plug using either the round plastic nut or mounting plate and two screws, both options supplied.
- 13. 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.

<sup>\*</sup>iPad mini is a trademark of Apple Inc., registered in the U.S. and other countries

# **Optional Android Display Kit (030-1670DK)**





Ref	<b>Description</b>	Part #	Qty
1	Suction Cup Mount	001-2012SCM	1
2	Ram Mount	001-2012H	1
3	Spring Load Cradle	001-2012SLC	1
4	Android Case	001-2012A1	1
5	Android Tablet	006-1670AT	1

#### **Installation Instructions**

- 1. Assemble Cradle (001-2012SLC)
- 2. Attach round base from ram mount to cradle
- 3. Attach trapezoid end of ram mount to suction mount
- 4. Clean glass or metal surface that unit will be attaching to.
- 5. Add a small amount of water to suction cups rubber surface and attach to surface
- 6. Turn lock on suction cup mount to secure.
- 7. Place tablet in cradle and hook USB cable that came with system into it.
- 8. Use a quality communication cable ending with a USB-A connection to connect tablet to (006-765ICM) control module plug into the USB port showing a tablet.

## **Optional Harvest Tec Display Kit (030-7670DK)**



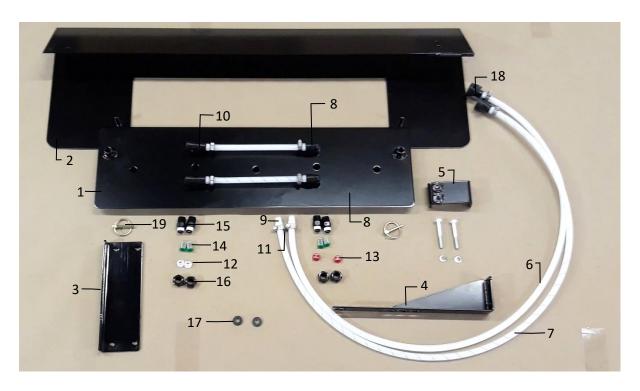


Ref	<u>Description</u>	Part #	Qty
1	Suction Cup Mount	001-2012SCM	1
2	Ram Mount	001-2012H	1
3	Harvest Tec Display	006-765GVT	1
4	Display Harness	006-765GH	1
5	Mounting Plate	001-700GH	1

#### **Installation Instructions**

- 1. Identify 006-765GH harness connection to 006-765IC tractor harness.
- 2. Connect harness to the Harvest Tec Display before tightening into place.
- 3. Tighten the mounting and display. Streamline harness, as necessary.
- 4. Once connected, power cycle system and ensure display is working properly.

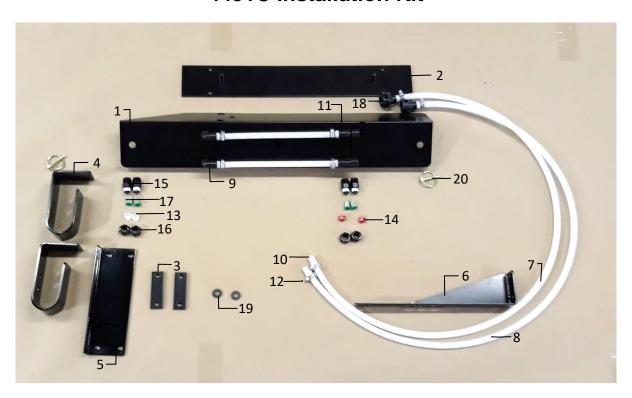
# NOTE: CANNOT OPERATE WITH BOTH HARVEST TEC DISPLAY AND BALER VT CONNECTED AT THE SAME TIME.



Ref	Description	Part #	Qty	Ref	<b>Description</b>	Part #	<u>Qty</u>
1	Spray Shield	001-4421B	1	11	Mini Hose Clamp	003-9002	8
2	Shield Mounting Bracket	001-4421	1	12	1/4" Tip	004-XR11008VK	2
3	Hesston End of Bale Bracket	001-4648H	1	13	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	14	Tip Strainer-100 Mesh	004-1203-100	4
5	Backing Plate	001-4421A	1	15	Nozzle Body	004-4722	4
6	1/4" Braided Hose	002-9016	5	16	Nozzle Cap	004-4723	4
7	1/4" Braided Hose–Blue	002-9016B	5	17	Rubber Washer	004-1207W	2
8	1/4" Elbow Fitting	003-SE14F	2	18	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	19	3/16" Lynch Pin	008-4576	2
10	1/4" Tee Fitting	003- TT14SQ	2		-		

Complete Installation Kit (Ref. 1-19)

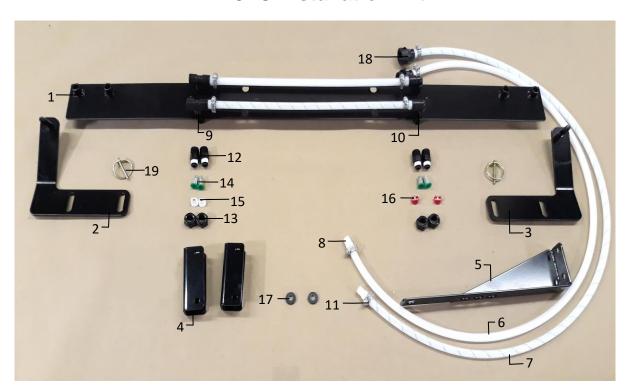
030-4490C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4422	1	11	1/4" Tee Fitting	003-TT14SQ	2
2	Shield Mounting Bracket	001-4422B	1	12	Mini Hose Clamp	003-9002	8
3	Backing Plate	001-4422A	2	13	1/4" Tip	004-XR11008VK	2
4	Ladder Holder	001-6707H	2	14	1/4" Tip	004-XR11004VK	2
5	Hesston End of Bale Bracket	001-4648H	1	15	Nozzle Body	004-4722	4
6	End of Bale Bracket	001-4648	1	16	Nozzle Cap	004-4723	4
7	1/4" Braided Hose	002-9016	5	17	Tip Strainer-100 Mesh	004-1203-100	4
8	1/4" Braided Hose - Blue	002-9016B	5	18	Female Quick Connect	004-1207H	2
9	1/4" Elbow Fitting	003-SE14F	2	19	Rubber Washer	004-1207W	2
10	1/4" x 1/4" Straight Fitting	003-A1414	8	20	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-20)

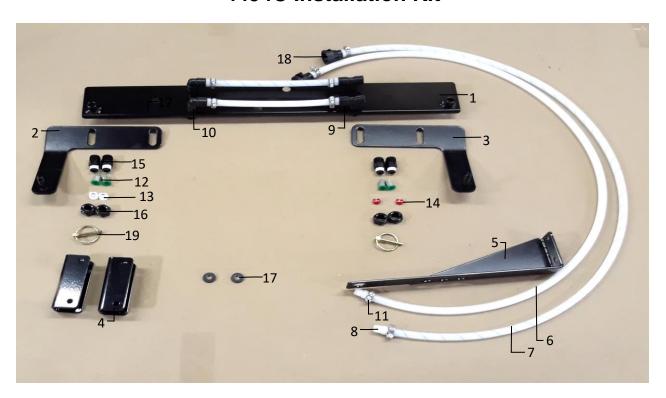
030-4491C



Ref	<u>Description</u>	Part #	<b>Qty</b>	Ref	<b>Description</b>	Part #	<b>Qty</b>
1	Spray Shield	001-4811A	1	11	Mini Hose Clamp	003-9002	8
2	LH Shield Holder	001-4436DL	1	12	Nylon Nozzle Body	004-4722	4
3	RH Shield Holder	001-4436DR	1	13	Nylon Nozzle Cap	004-4723	4
4	Spray Shield Spacer	001-4436S	2	14	Tip Strainer	004-1203-100	4
5	End of Bale Bracket	001-4648	1	15	1/4" Tip	004-XR11008VK	2
6	1/4" Braided Hose	002-9016	5.5	16	1/4" Tip	004-XR11004VK	2
7	1/4" Braided Hose – Blue	002-9016B	5.5	17	Rubber Washer	004-1207W	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	18	Female Quick Connect	004-1207H	2
9	1/4" Tee Fitting	003-TT14SQ	2	19	3/16" Lynch Pin	008-4576	2
10	1/4" Elbow Fitting	003-SE14F	2				

Complete Installation Kit (Ref. 1-19)

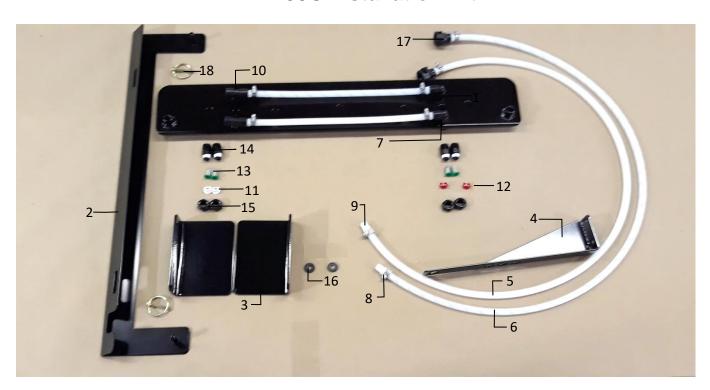
030-4492C



Ref	<b>Description</b>	Part #	Qty	Ref	<b>Description</b>	Part #	Qty
1	Spray Shield	001-4810	1	11	Mini Hose Clamp	003-9002	8
2	LH Shield Holder	001-4436DL	1	12	Tip Strainer-100 Mesh	004-1203-100	4
3	RH Shield Holder	001-4436DR	1	13	1/4" Tip	004-XR11008VK	2
4	Spray Shield Spacer	001-4436S	2	14	1/4" Tip	004-XR11004VK	2
5	End of Bale Bracket	001-4648	1	15	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose	002-9016	5	16	Nylon Nozzle Cap	004-4723	4
7	1/4" Braided Hose – Blue	002-9016B	5	17	Rubber Washer	004-1207W	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	18	Female Quick Connect	004-1207H	2
9	1/4" Tee Fitting	003-TT14SQ	2	19	3/16" Lynch Pin	008-4576	2
10	1/4" Elbow Fitting	003-SE14F	2				

Complete Installation Kit (Ref. 1-19)

030-4494C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4431	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	Spray Shield Holder	001-4431B	1	11	1/4" Tip	004-XR11008VK	2
3	Wind Guard Stops	001-4431D	2	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose–Blue	002-9016B	5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

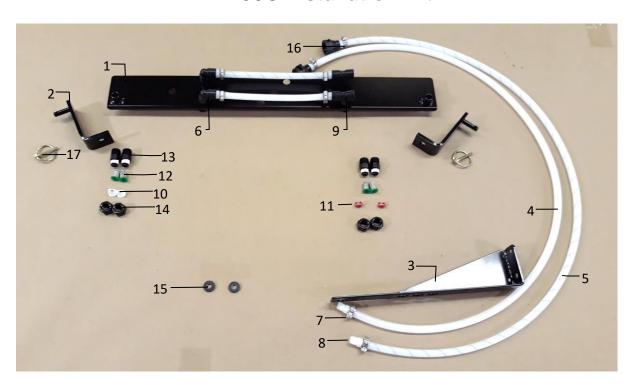
030-4495C



Ref	<b>Description</b>	Part #	Qty	Ref	<b>Description</b>	Part #	Qty
1	Spray Shield	001-4435ES	1	10	1/4" Tip	004-XR11008VK	2
2	Spray Shield Holder	001-4435E	2	11	1/4" Tip	004-XR11004VK	2
3	End of Bale Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5.5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2				

Complete Installation Kit (Ref. 1-17)

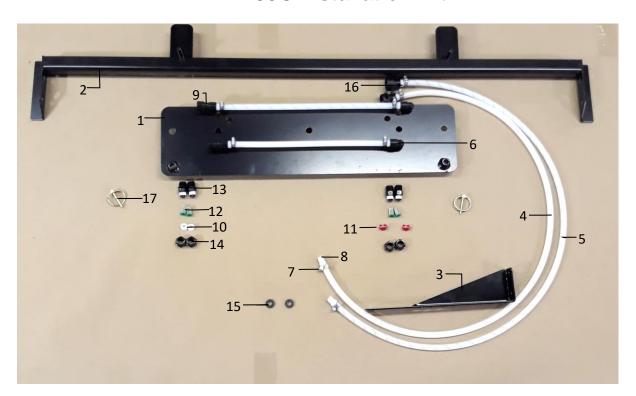
030-4497C



Ref	<b>Description</b>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4810	1	10	1/4" Tip	004-XR11008VK	2
2	Spray Shield Holder	001-4810A	2	11	1/4" Tip	004-XR11004VK	2
3	End of Bale Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose - Blue	002-9016B	5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2				

Complete Installation Kit (Ref. 1-17)

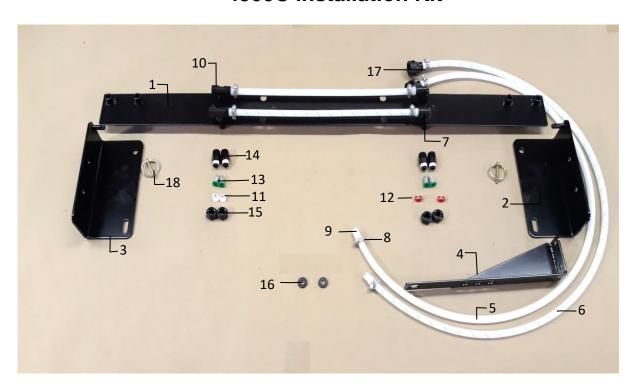
030-4498C



Ref	<u>Description</u>	Part #	Qty	Ref	Description	Part #	Qty
1	Spray Shield	001-4439A	1	10	1/4" Tip	004-XR11008VK	2
2	Spray Shield Holder	001-4440	1	11	1/4" Tip	004-XR11004VK	2
3	End of Bale Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose - Blue	002-9016B	5.5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2				

Complete Installation Kit (Ref. 1-17)

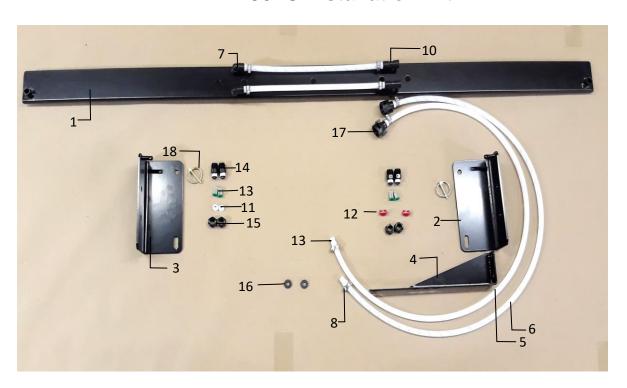
030-4499B



Ref	<b>Description</b>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<b>Qty</b>
1	Spray Shield	001-4811A	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	RH Mount Bracket	001-4436CR	1	11	1/4" Tip	004-XR11008VK	2
3	LH Mount Bracket	001-4436CL	1	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5.5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose - Blue	002-9016B	5.5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	6	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	6	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

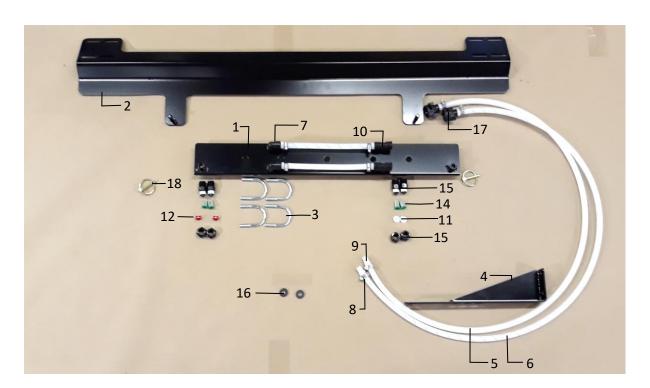
030-4500C



<u>Ref</u>	Description	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4436CS	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	RH Mount Bracket	001-4436CR	1	11	1/4" Tip	004-XR11008VK	2
3	LH Mount Bracket	001-4436CL	1	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	4	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose – Blue	002-9016B	4	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

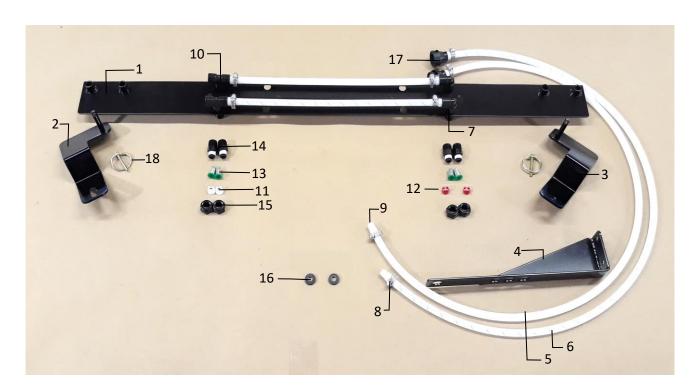
030-4501C



Ref	<b>Description</b>	Part #	Qty	Ref	<b>Description</b>	Part #	Qty
1	Spray Shield	001-4810	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	Spray Shield Holder	001-4440A	1	11	1/4" Tip	004-XR11008VK	2
3	U Bolt	001-4714UBS	4	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose – Blue	002-9016B	5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	6	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	6	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

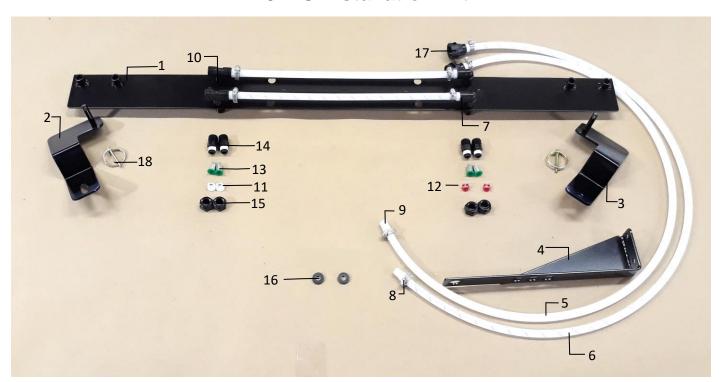
030-4509C



Ref	<u>Description</u>	Part #	Qty	Ref	<b>Description</b>	Part #	Qty
1	Spray Shield	001-4811A	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	RH Shield Bracket	001-4704B	1	11	1/4" Tip	004-XR11008VK	2
3	LH Shield Bracket	001-4704A	1	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5.5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose – Blue	002-9016B	5.5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

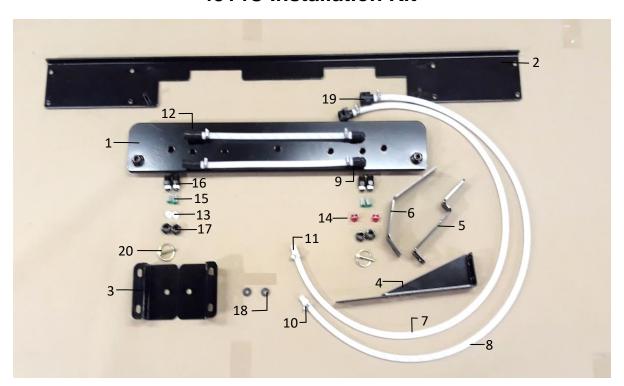
030-4510C



Ref	<b>Description</b>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4704C	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	RH Shield Bracket	001-4704B	1	11	1/4" Tip	004-XR11008VK	2
3	LH Shield Bracket	001-4704A	1	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5.5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose – Blue	002-9016B	5.5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

030-4511C

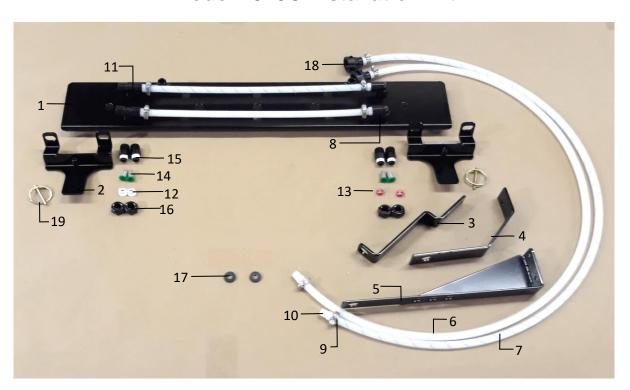


Ref	<b>Description</b>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4431B	1	11	1/4" x 1/4" Straight Fitting	003-A1414	8
2	Spray Shield Holder	001-4431KA	1	12	1/4" Tee Fitting	003-TT14SQ	2
3	Shield Mounting Bracket	001-4431KB	2	13	1/4" Tip	004-XR11008VK	2
4	End of Bale Bracket	001-4648	1	14	1/4" Tip	004-XR11004VK	2
5	End of Bale Bracket	001-4648K	1	15	Tip Strainer-100 Mesh	004-1203-100	4
6	End of Bale Bracket	001-4648K2	1	16	Nylon Nozzle Body	004-4722	4
7	1/4" Braided Hose	002-9016	5	17	Nylon Nozzle Cap	004-4723	4
8	1/4" Braided Hose – Blue	002-9016B	5	18	Rubber Washer	004-1207W	2
9	1/4" 90 Deg. Elbow	003-SE14F	2	19	Female Quick Connect	004-1207H	2
10	Mini Hose Clamp	003-9002	8	20	3/16" Lynch Pin	008-4576	2

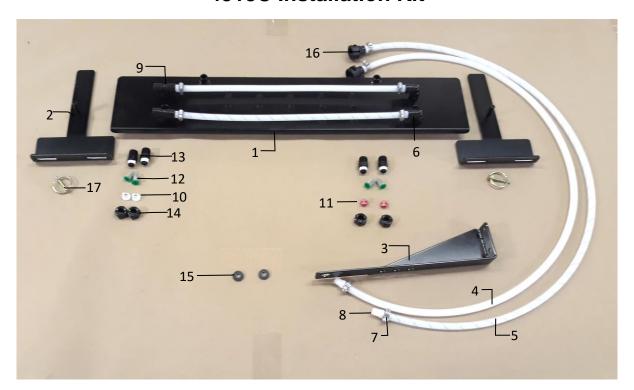
Complete Installation Kit (Ref. 1-20)

030-4514C

# **Model 4515C Installation Kit**



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435AS	1	11	1/4" Tee Fitting	003-TT14SQ	2
2	Spray Shield Holder	001-4435KS	2	12	1/4" Tip	004-XR11008VK	2
3	Krone End of Bale Bracket	001-4648K	1	13	1/4" Tip	004-XR11004VK	2
4	Krone End of Bale Bracket	001-4648K2	1	14	Tip Strainer-100 Mesh	004-1203-100	4
5	End of Bale Bracket	001-4648	1	15	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose	002-9016	5.5	16	Nylon Nozzle Cap	004-4723	4
7	1/4" Braided Hose–Blue	002-9016B	5.5	17	Rubber Washer	004-1207W	2
8	1/4" 90 Deg. Elbow	003-SE14F	2	18	Female Quick Connect	004-1207H	2
9	Mini Hose Clamp	003-9002	8	19	3/16" Lynch Pin	008-4576	2
10	1/4" x 1/4" Straight Fitting	003-A1414	8		•		

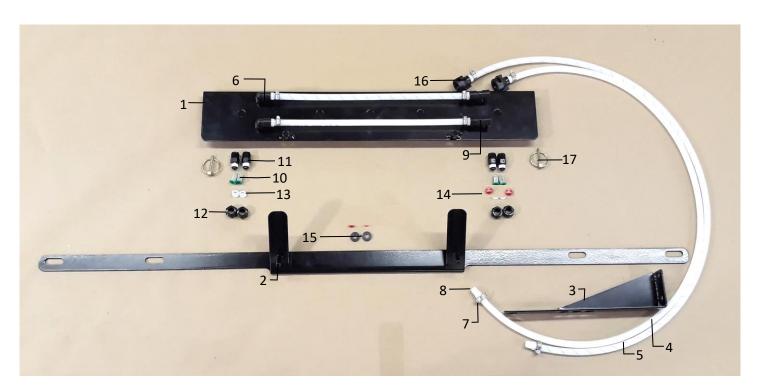


Ref	<u>Description</u>	Part #	<u>Qty</u>	<u>Ref</u>	<b>Description</b>	Part #	<u>Qty</u>
1	Spray Shield	001-4435ES	1	10	1/4" Tip	004-XR11008VK	2
2	Spray Shield Holder	001-4435H	2	11	1/4" Tip	004-XR11004VK	2
3	End of Bale Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5.5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2				

Complete Installation Kit (Ref. 1-17)

030-4518C

# **Model 4519C Installation Kit**

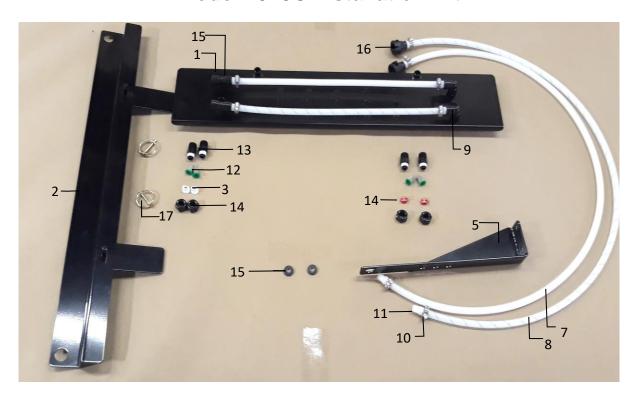


Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435AS	1	10	Tip Strainer-100 Mesh	004-1203-100	4
2	Spray Shield Holder	001-4435J	1	11	Nylon Nozzle Body	004-4722	4
3	End of Bale Bracket	001-4648	1	12	Nylon Nozzle Cap	004-4723	4
4	1/4" Braided Hose	002-9016	5.5	13	1/4" Tip	004-XR11008VK	2
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	1/4" Tip	004-XR11004VK	2
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2		•		

Complete Installation Kit (Ref. 1-17)

030-4519C

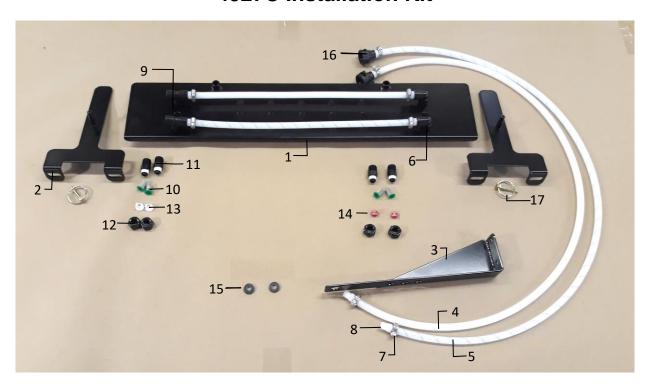
# **Model 4525C Installation Kit**



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4435ES	1	10	1/4" Tip	004-XR11008VK	2
2	Shield Mounting Bracket	001-4435EK	1	11	1/4" Tip	004-XR11004VK	2
3	EOB Sensor Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5.5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2		•		
	•						

Complete Installation Kit (Ref. 1-17)

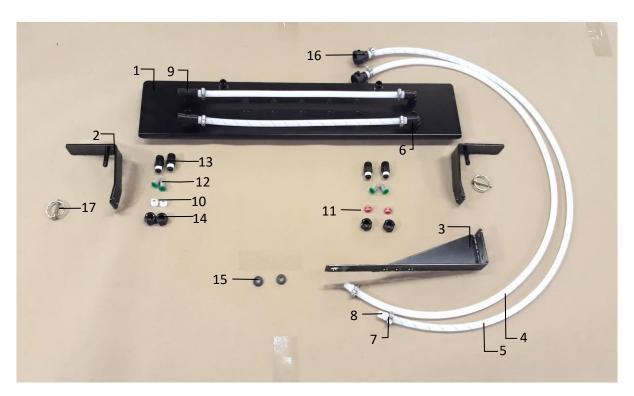
030-4525C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4435ES	1	10	Tip Strainer-100 Mesh	004-1203-100	4
2	Spray Shield Holder	001-4435HPC	2	11	Nylon Nozzle Body	004-4722	4
3	End of Bale Sensor Bracket	001-4648	1	12	Nylon Nozzle Cap	004-4723	4
4	1/4" Braided Hose	002-9016	5.5	13	1/4" Tip	004-XR11008VK	2
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	1/4" Tip	004-XR11004VK	2
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2				

Complete Installation Kit (Ref. 1-17)

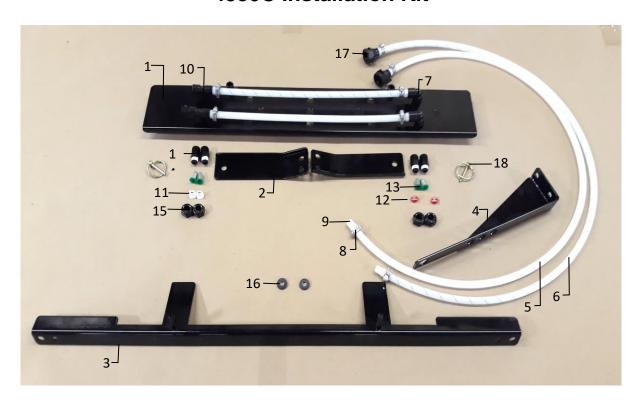
030-4527C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4435ES	1	10	1/4" Tip	004-XR11008VK	2
2	Shield Mounting Bracket	001-4435E	2	11	1/4" Tip	004-XR11004VK	2
3	End of Bale Bracket	001-4648	1	12	Tip Strainer-100 Mesh	004-1203-100	4
4	1/4" Braided Hose	002-9016	5.5	13	Nylon Nozzle Body	004-4722	4
5	1/4" Braided Hose–Blue	002-9016B	5.5	14	Nylon Nozzle Cap	004-4723	4
6	1/4" 90 Deg. Elbow	003-SE14F	2	15	Rubber Washer	004-1207W	2
7	Mini Hose Clamp	003-9002	8	16	Female Quick Connect	004-1207H	2
8	1/4" x 1/4" Straight Fitting	003-A1414	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" Tee Fitting	003-TT14SQ	2		•		

Complete Installation Kit (Ref. 1-17)

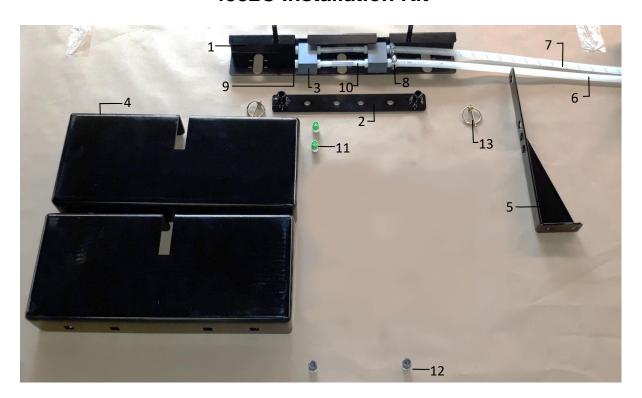
030-4529C



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4435AS	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	Spray Shield Bracket	001-4435XB	2	11	1/4" Tip	004-XR11008VK	2
3	Spray Shield Holder	001-4435XA	1	12	1/4" Tip	004-XR11004VK	2
4	End of Bale Bracket	001-4648	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5.5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose–Blue	002-9016B	5.5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	Female Quick Connect	004-1207H	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8	18	3/16" Lynch Pin	008-4576	2

Complete Installation Kit (Ref. 1-18)

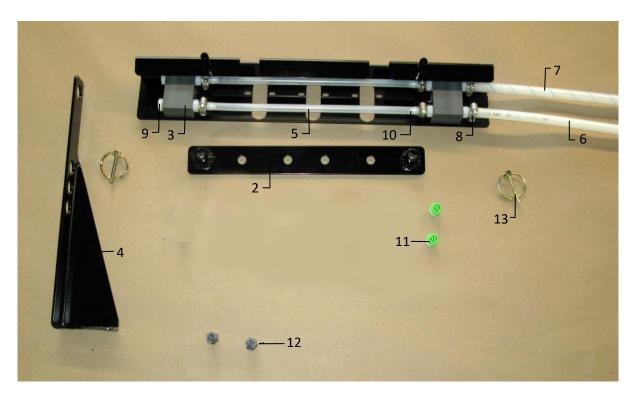
030-4530C



<u>Ref</u>	<b>Description</b>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	4
2	Spray Shield Holder	001-4435NCX	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	Tank Leg Extension	001-6707MX	2	11	1/4" NPT Tip	004-T8008-PT	2
5	End of Bale Bracket	001-4648	1	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	004-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Quick Connect	004-1207H	2

Complete Installation Kit (Ref. 1-13)

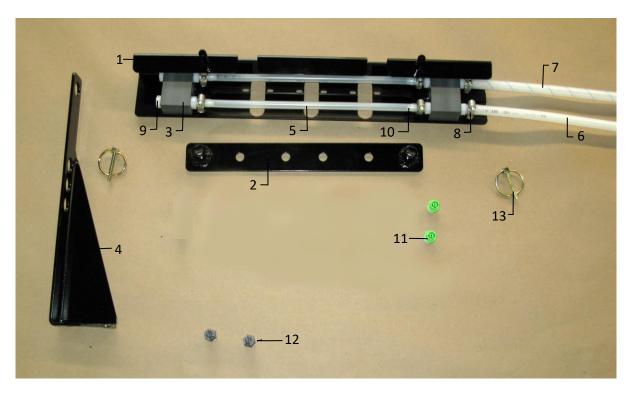
030-4532C



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<b>Qty</b>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	8
2	Spray Shield Holder	001-4435NCX	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Quick Connect	004-1207H	2

Complete Installation Kit (Ref. 1-13)

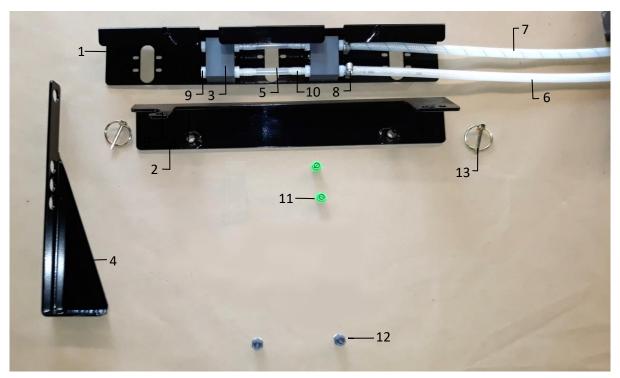
030-4533C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	8
2	Spray Shield Holder	001-4435NCX	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose-Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Disconnect	004-1207H	2

Complete Installation Kit (Ref. 1-13)

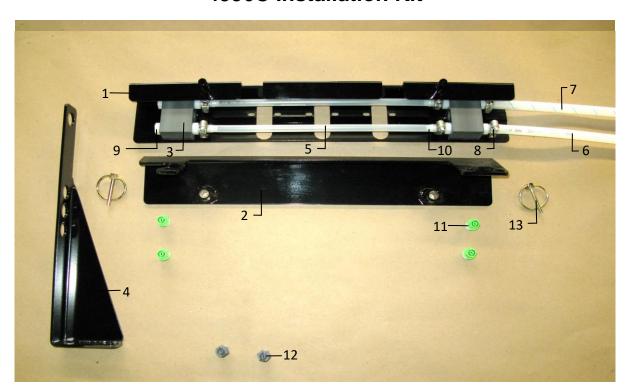
030-4534C



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	4
2	Spray Shield Holder	001-4435NC	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Quick Disconnect	004-1207W	2

Complete Installation Kit (Ref. 1-13)

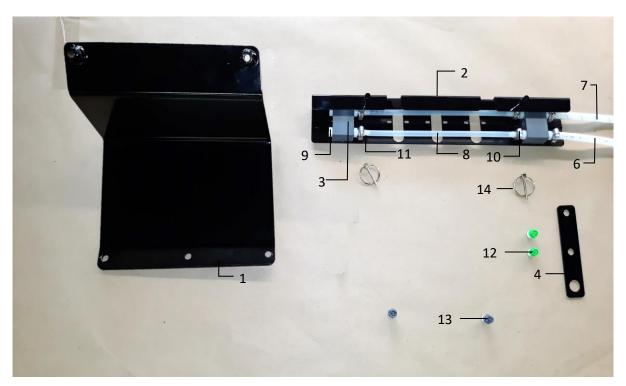
030-4535C



Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	8
2	Spray Shield Holder	001-4435NC	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Quick Connect	004-1207H	2
_	1/4" Braided Hose	002-9016	4	13 NP	3/16" Lynch Pin Rubber Washer	008-4576 004-1207W	

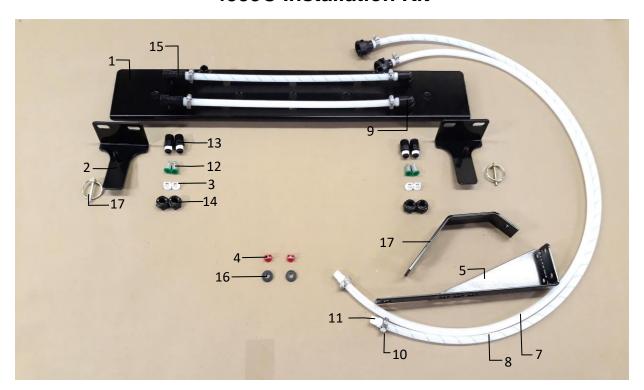
Complete Installation Kit (Ref. 1-13)

030-4536C



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shied Holder	001-4435L	2	9	1/4" Hex Plug	003-F14	2
2	Spray Shield	001-4435NSX	1	10	Mini Hose Clamp	003-9002	4
3	Spray Shield Block	001-4435NSB	2	11	1/4" x 1/4" Straight Fitting	003-A1414	8
4	Claas End of Bale Bracket	001-4648C	1	12	1/4" NPT Tip	004-T8008-PT	2
6	1/4" Braided Hose	002-9016	4	13	1/4" NPT Tip	004-T8004-PT	2
7	1/4" Braided Hose - Blue	002-9016B	4	14	3/16" Lynch Pin	008-4576	2
8	1/4" EVA Tubing	002-9006	3	NP	Rubber Washer	004-1207W	2
	-			NP	Female Quick Connect	004-1207H	2

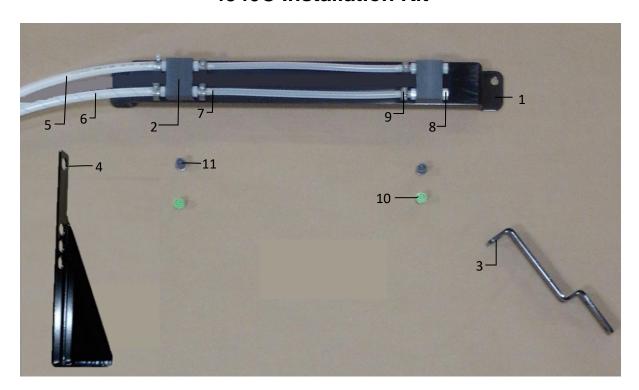
Complete Installation Kit 030-4537C (Ref. 1-14)



Ref	<u>Description</u>	Part #	Qty	Ref	Description	Part #	Qty
1	Spray Shield	001-4435AS	1	10	1/4" Tee Fitting	003-TT14SQ	2
2	Shield Mounting Bracket	001-4435KX	2	11	1/4" Tip	004-XR11008VK	2
3	End of Bale Bracket	001-4648	1	12	1/4" Tip	004-XR11004VK	2
4	Krone End of Bale Bracket	001-4648K2	1	13	Tip Strainer-100 Mesh	004-1203-100	4
5	1/4" Braided Hose	002-9016	5.5	14	Nylon Nozzle Body	004-4722	4
6	1/4" Braided Hose–Blue	002-9016B	5.5	15	Nylon Nozzle Cap	004-4723	4
7	1/4" 90 Deg. Elbow	003-SE14F	2	16	Rubber Washer	004-1207W	2
8	Mini Hose Clamp	003-9002	8	17	3/16" Lynch Pin	008-4576	2
9	1/4" x 1/4" Straight Fitting	003-A1414	8		•		

Complete Installation Kit (Ref. 1-17)

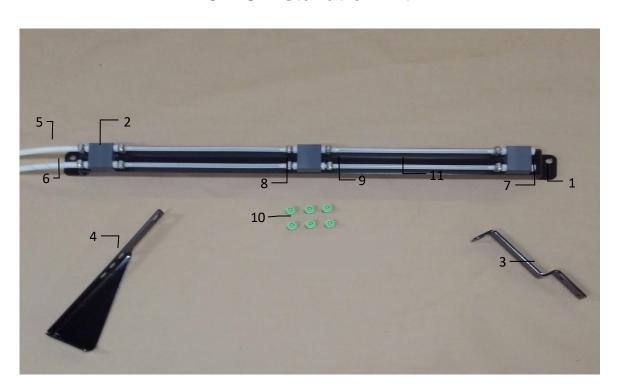
030-4539C



Ref	<u>Description</u>	Part #	<b>Qty</b>	Ref	<u>Description</u>	Part #	Qty
1	Spray Shield	001-4435NSX	1	7	1/4" x 1/4" Straight Fitting	003-A1414	8
2	Spray Shield Block	001-4435NSB	2	8	1/4" Hex Plug	003-F14	2
3	End of Bale Bracket	001-4648	1	9	Mini Hose Clamp	003-9002	4
4	Krone End of Bale Bracket	001-4648K	1	10	1/4" NPT Tip	004-T8008-PT	2
5	1/4" Braided Hose	002-9016	4	11	1/4" NPT Tip	004-T8004-PT	2
NP	Rubber Washer	004-1207W	2	NP	Female Quick Connect	004-1207H	2

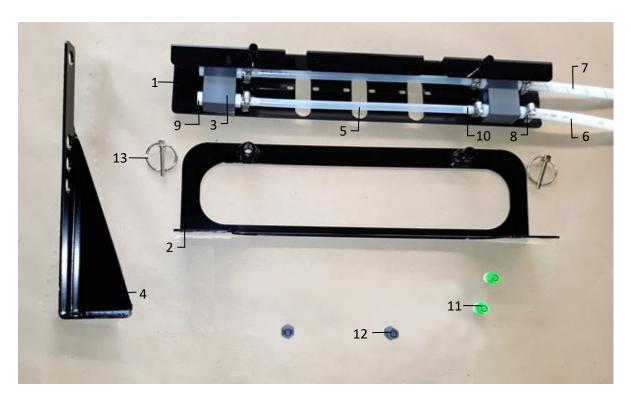
Complete Installation Kit (Ref. 1-11)

030-4540C



Ref	<u>Description</u>	Part #	<u>Qty</u>	Ref	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	12
2	Spray Shield Block	001-4435NSB	3	9	1/4" x 1/4" Straight Fitting	003-A1414	12
3	End of Bale Bracket	001-4648	1	10	1/4" NPT Tip	004-T8003-PT	3
4	Krone End of Bale Bracket	001-4648K	1	11	1/4" EVA Tubing	002-9006	4
5	1/4" Braided Hose	002-9016	4	NP	Rubber Washer	004-1207W	2
6	1/4" Braided Hose - Blue	002-9016B	4	NP	Female Quick Connect	004-1207H	2
7	1/4" Hex Plug	003-F14	2	NP	1/4" NPT Tip	004-T8005-PT	3

Complete Installation Kit 030-4541C (Ref. 1-11)

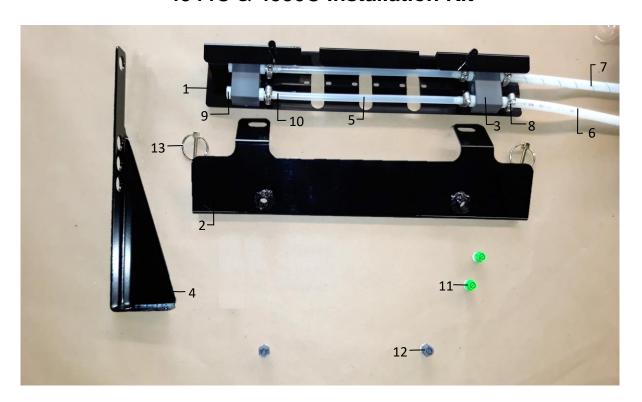


Ref	<u>Description</u>	Part #	Qty	Ref	<u>Description</u>	Part #	<b>Qty</b>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	8
2	Spray Shield Holder	001-4435NAX	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Rubber Washer	004-1207W	2
				NP	Female Quick Connect	004-1207H	2

Complete Installation Kit (Ref. 1-13)

030-4542C

# 4544C & 4550C Installation Kit



Ref	<u>Description</u>	Part #	<u>Qty</u>	<u>Ref</u>	<u>Description</u>	Part #	<u>Qty</u>
1	Spray Shield	001-4435NSX	1	8	Mini Hose Clamp	003-9002	8
2	Spray Shield Holder	001-4435U	1	9	1/4" Hex Plug	003-F14	2
3	Spray Manifold Block	001-4435NSB	2	10	1/4" x 1/4" Straight Fitting	003-A1414	8
4	End of Bale Bracket	001-4648	1	11	1/4" NPT Tip	004-T8008-PT	2
5	1/4" EVA Tubing	002-9006	2	12	1/4" NPT Tip	004-T8004-PT	2
6	1/4" Braided Hose	002-9016	4	13	3/16" Lynch Pin	008-4576	2
7	1/4" Braided Hose–Blue	002-9016B	4	NP	Female Quick Connect	004-1207H	2
				NP	Rubber Washer	004-1207W	2
*Tip color subject to change							
					mplete Installation Kit f. 1-13)	030-4544C 030-4550C	

#### Harvest Tec LLC. Warranty and Liability Agreement

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

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

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

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

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

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

Revised 5/22

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

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