Owner's Manual

Model 850

Bale Identification System

HARVEST TEC
Equipment and Products for Quality Hay.™

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850-15
6/22

Harvest Tec 850 Table of Contents

Introduction

Congratulations on purchasing a Harvest Tec Model 850 bale identification system. This system will allow you to write all the information recorded on the 600 series controls on to the bale tags. This system will fit most large square balers. The system includes: Tagger, mounting hardware, baler mounted antenna, and all necessary cables. If something goes wrong, bring this manual into the dealership so they can order the correct parts for you.

ATTENTION: For 2010 and new Krone HDP balers part number 20 073 190 0 will need to be ordered from Krone.

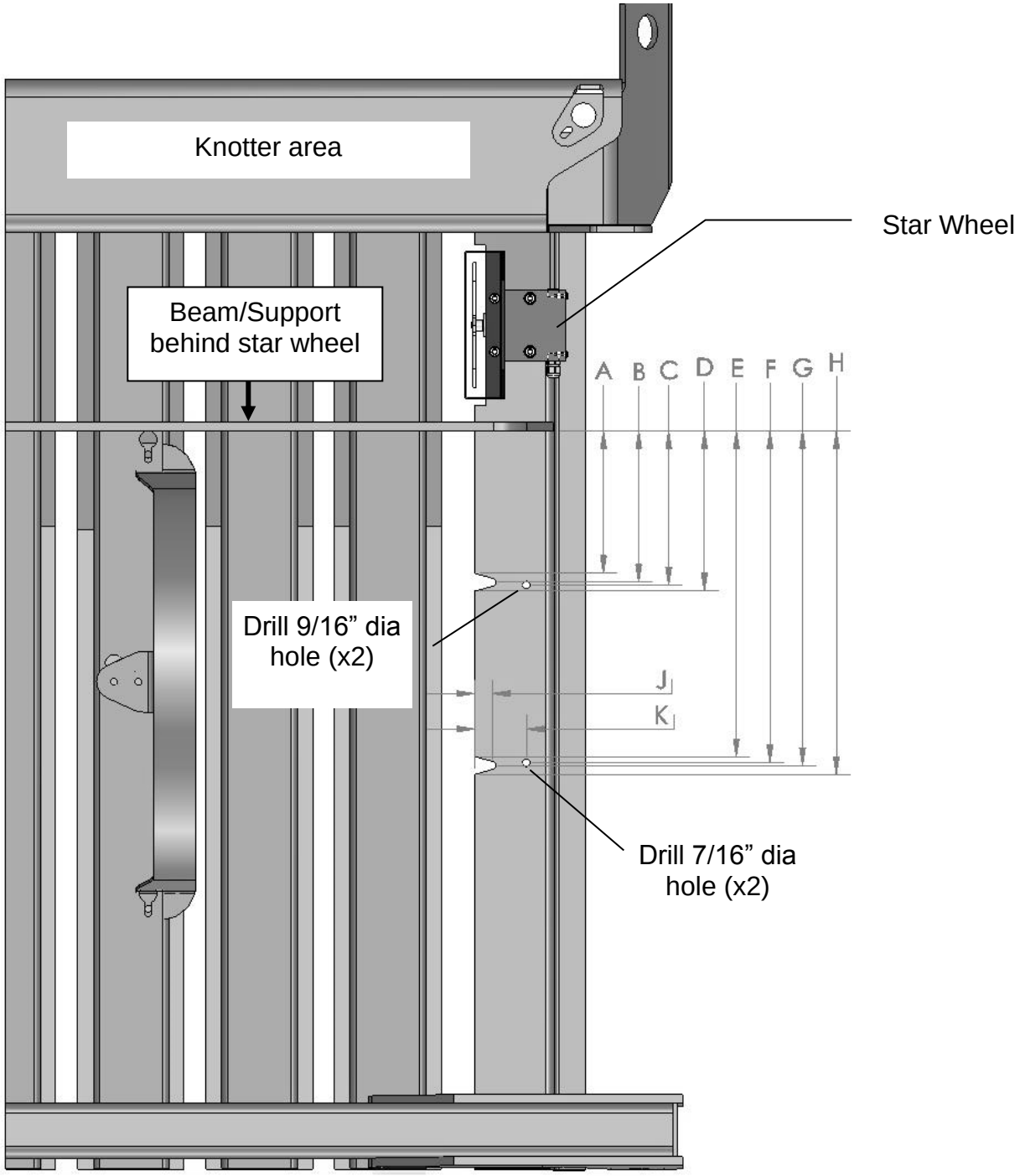
Tools Needed:

- Standard wrench set
- Standard socket set
- Standard screw driver or 5/16” nut driver
- Hammer
- Metal drilling and cutting tools
- Center punch
- Tape measure
- Straight edge

Installation of Tagger

Installation of Mounting Bracket

Use the diagram below and the table on the following page to locate the holes and notches that will need to be made on the bale chamber for the mounting bracket (001-8517) and support brackets (001-8530) quantity 2 to be attached to.



Mounting Bracket Table

Model no.	A	B	C	D	E	F	G	H	J	K
H) Hesston A) AGCO C) Challenger MF) Massey Ferguson NH) New Holland CIH) CaseIH	**Top of Front Notch (inch/** *mm*)	**Center of 9/16" (15mm) hole (inch/** *mm*)	**Center of 7/16" (11mm) hole (inch/** *mm*)	**Bottom of Front Notch (inch/** *mm*)	**Top of Back Notch (inch/** *mm*)	**Center of 9/16" (15mm) hole (inch/** *mm*)	**Center of 7/16" (11mm) hole (inch/***mm*)	**Bottom of Back Notch (inch/***mm*)	**Inside Edge of Chamber to 9/16" (15mm) hole (inch/***mm*)	**Inside Edge of Chamber to 7/16" (11mm) hole (inch/***mm*)
(H) 4755	**10 1/2** *266.7*	**11 13/16** *300*	**12** *304.8*	**13 1/8** *333.4*	**20 13/16** *528.6*	**22 1/8** *562.0*	**22** *558.8*	**23 7/16** *595.3*	**1 13/16** *46.0*	**3 5/16** *84.1*
(H) 4760 (C) LB33	**15 1/2** *393.7*	**16 13/16** *427.0*	**17** *431.8*	**18 1/8** *460.4*	**25 13/16** *655.6*	**27 1/8** *689.0*	**27** *685.8*	**28 7/16** *722.3*	**1 13/16** *46.0*	**3 5/16** *84.1*
(H) 4790 (MF) 187 (C) LB34	**15 1/4** *387.4*	**15 9/16** *395.3*	**15 3/4** *400.1*	**16 7/8** *428.6*	**24 9/16** *623.9*	**25 7/8** *657.2*	**25 3/4** *654.1*	**27 3/16** *690.6*	**5/8** *15.9*	**2 1/8** *54.0*
(H) 4910 (MF) 190 (C) LB44	**8 1/2** *215.9*	**9 3/16** *233.4*	**9** *228.6*	**9 7/8** *250.8*	**18 3/16** *462.0*	**19 1/8** *485.8*	**19** *482.6*	**19 9/16** *496.9*	**1 7/8** *47.6*	**3 3/8** *85.7*
(MF) 2150 (A) 7433 (C) LB33B	**8 3/4** *222.3*	**10 1/16** *255.6*	**10 1/4** *260.4*	**11 3/8** *288.9*	**19 1/16** *484.2*	**20 3/8** *517.5*	**20 1/4** *514.4*	**21 11/16** *550.9*	**2 1/8** *54.0*	**3 5/8** *92.1*
(MF)2170 (MF) 2190 (A) 7434 (A) 7444 (C) LB34B (C) LB44B	**8 3/4** *222.3*	**10 1/16** *255.6*	**10 1/4** *260.4*	**11 3/8** *288.9*	**19 1/16** *484.2*	**20 3/8** *517.5*	**20 1/4** *514.4*	**21 11/16** *550.9*	**1 1/8** *28.6*	**2 5/8** *66.7*

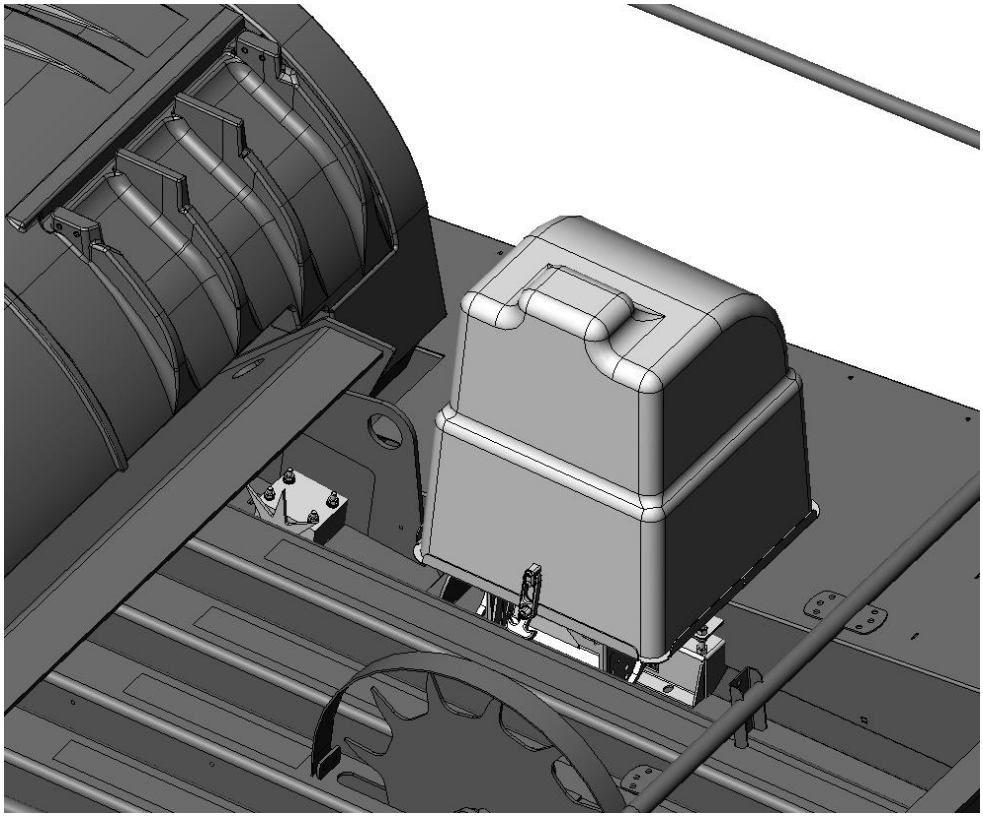
Mounting Bracket Table (continued)

Model no.	A	B	C	D	E	F	G	H	J	K
(NH) BB940 (NH) BB940A (NH) BB9060 (NH) BB960A (NH) BB9080 (CIH) LBX331 (CIH)LBX332 (CIH) LB333 (CIH) LBX432 (CIH) LB433	3 1/4 *82.6*	4 9/16 *115.9*	4 3/4 *120.7*	5 7/8 *149.2*	13 9/16 *344.5*	14 7/8 *377.8*	14 3/4 *374.7*	16 3/16 *411.2*	1 13/16 *46.0*	3 5/16 *84.1*
(NH) BB 230,330,340 (CIH) LB 234,334,434	See Supplement A, Pages 7-9									
(NH) BB960 (CIH) LBX431	3 1/4 *82.6*	4 9/16 *115.9*	4 3/4 *120.7*	5 73/93 *146.9*	13 9/16 *344.5*	14 7/8 *377.8*	14 3/4 *374.7*	16 3/16 *411.2*	1 15/16 *49.2*	3 7/16 *87.3*
Kuhn 890 **A**	3 1/2 *88.9*	4 13/16 *122.2*	5 *127.0*	6 1/8 *155.6*	13 13/16 *350.8*	15 1/8 *384.2*	15 *381.0*	16 7/16 *417.5*	1/2 *12.7*	2 *50.8*
Kuhn 1290	3 1/2 *88.9*	4 13/16 *122.2*	5 *127.0*	6 1/8 *155.6*	13 13/16 *350.8*	15 1/8 *384.2*	15 *381.0*	16 7/16 *417.5*	1 5/16 *33.3*	2 13/16 *71.4*
Krone 890, 1270, 1290, 12130 **B**	3 *76.2*	4 9/16 *115.9*	4 1/2 *114.3*	5 5/8 *142.9*	13 5/16 *338.1*	14 5/8 *371.5*	14 1/2 *368.3*	15 15/16 *404.8*	1 3/8 *34.9*	2 7/8 *73.0*
Krone 1290 HDP Pre-SN 79200 **C**	11 1/2 292.1	12 13/16 325.4	13 330.2	14 1/8 358.8	21 13/16 554.0	23 1/8 587.4	23 584.2	24 7/16 620.7	1 1/8 28.6	2 9/16 65.1
Krone 1290HDP SN 79200-	*OBTAIN KIT # FROM YOUR KRONE DEALER. THIS KIT IS REQUIRED FOR INSTALLATION OF THE TAGGER ON 1290HDP BALERS AFTER SN 79200*									
(A)	Dimension is from the inside edge of the vertical flange. The vertical flange on the top of the chamber will need to be removed the length of the tagger mounting bracket prior to installation of the tagger. Material may also need to be removed from the flange on the bottom of the top compression door, the length of the tagger mounting bracket, for tagger/compression door clearance.									
(B)	Dimensions are taken from the point where the choke is welded to the top angle of the channel.									
(C)	Dimensions are taken from the front edge of the top angle that forms the choke.									

Supplement A

850 Bale ID System – Supplemental Installation Instructions

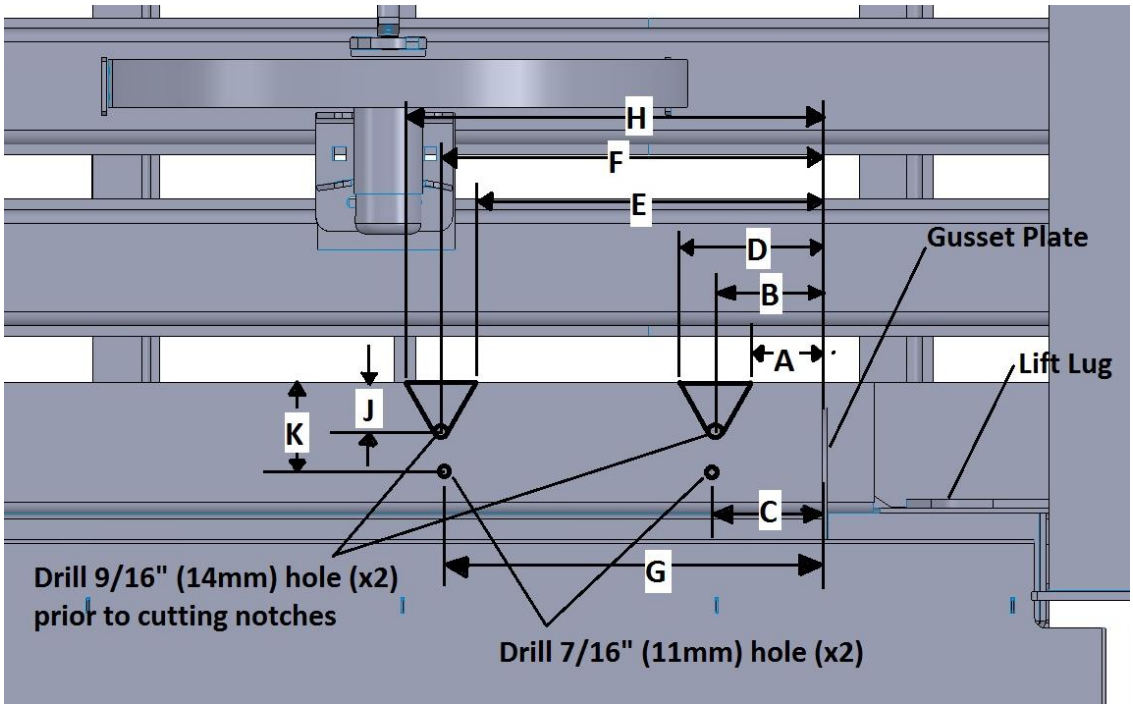
NEW HOLLAND BALER MODELS BB230/330/340 and
CASE IH BALER MODELS LB234/334/434



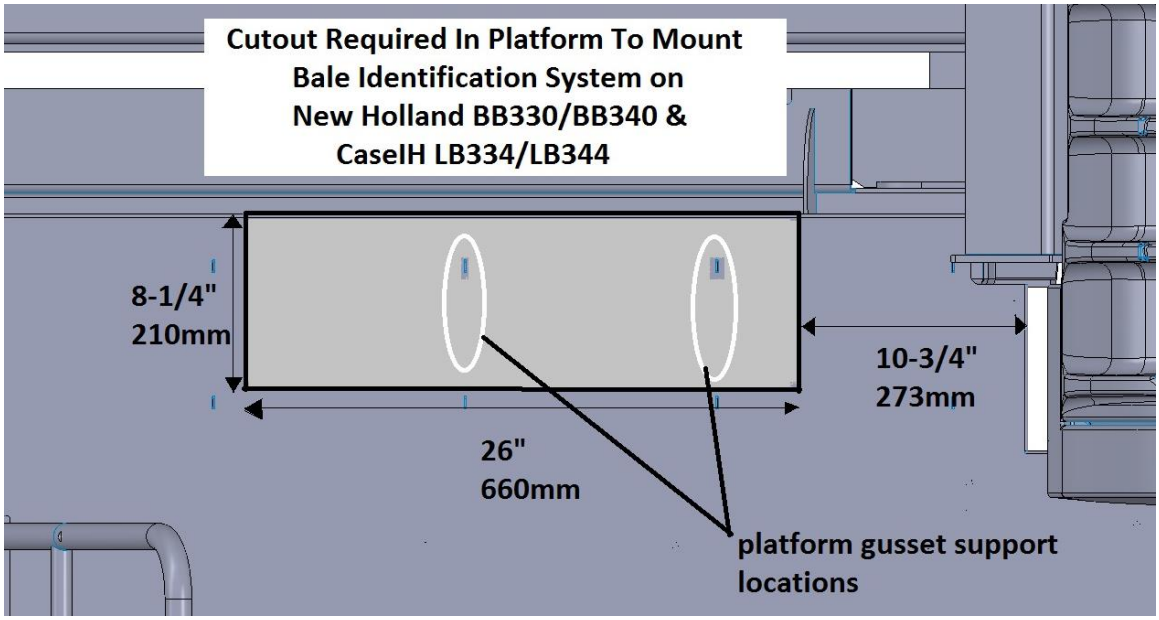
Installation of Mounting Bracket

A	B	C	D	E	F	G	H	J	K
Top of Front Notch (inch/ *mm*)	Center of 9/16" (15mm) hole (inch/ *mm*)	Center of 7/16" (11mm) hole (inch/ *mm*)	Bottom of Front Notch (inch/ *mm*)	Top of Back Notch (inch/ *mm*)	Center of 9/16" (14mm) hole (inch/ *mm*)	Center of 7/16" (11mm) hole (inch/ *mm*)	Bottom of Back Notch (inch/ *mm*)	Inside Edge of Chamber to 9/16" (14mm) hole (inch/ *mm*)	Inside Edge of Chamber to 7/16" (11mm) hole (inch/ *mm*)
2-11/16"	**4"**	**4-1/8"**	**5-5/16"**	**12-15/16"**	**14-1/4"**	**14-1/8"**	**15-9/16"**	**1-13/16"**	**3-5/16"**
68mm	*102mm*	*108mm*	*135mm*	*329mm*	*362mm*	*359mm*	*395mm*	*46mm*	*84mm*

Installation of Mounting Bracket



Removal of Platform Material



A section of the right platform needs to be cut and removed to provide clearance for the Model 850 Bale Identification system. Start by measuring and marking out the area that needs to be removed, as indicated in the picture above. Note that there are also two support gussets underneath the section of the platform that is being removed. These gussets need to be cut vertically and removed. Once all cuts have been made, the platform material is removed, and the gussets have be trimmed vertically, deburr all cut edges.

Installation of Wiring Harness

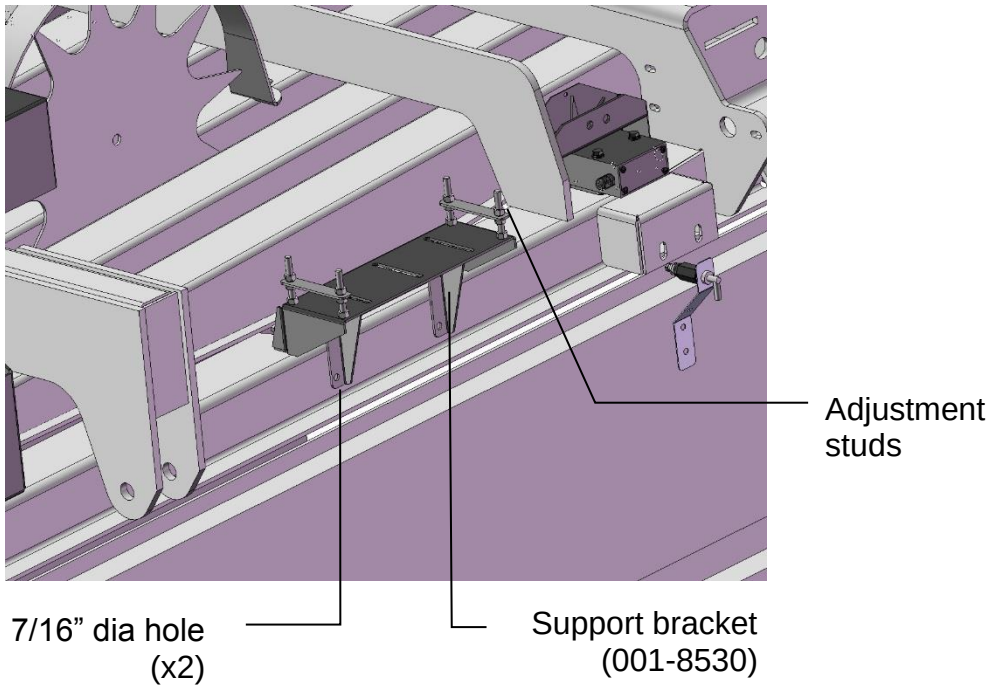
If the Tagger is being installed on a baler that has a Harvest Tec Preservative System, connect the tagger control harness (006-5650F) supplied with the kit between the pump controller (006-5672) and the tagger control (006-5673). Install the terminating resistor (006-5650Z) on the second tagger controller port.
If the tagger is being installed on a baler that does not have a Harvest Tec Preservative System installed, have your dealer contact Harvest Tec to exchange the tagger control harness supplied with the tagger kit, 006-5650F, for a longer harness* ***(006-5650F4M). *The longer harness will connect between the Dual Channel Processor (DCP) and the Tagger Control.*

------ *End Supplement A* **------**

Mounting Bracket Installation

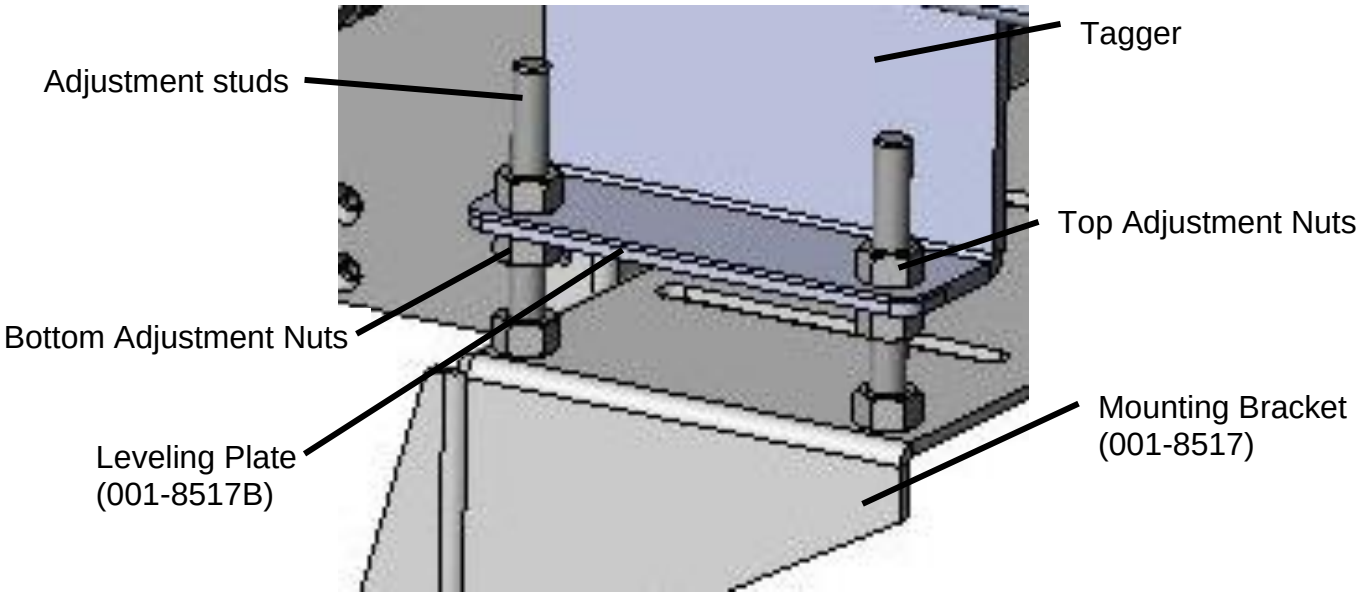
Mark all drill and cutting areas on top of the chamber using the above table. Drill the two 7/16” holes on top of the chamber. Drill the two 9/16” holes on top of the chamber. Use a metal cutting tool to cut the notch from the 9/16” hole to the marked location on top of the bale chamber.

Remove the top set of adjustment nuts from the studs and remove the mounting bracket (001-8517) from the tagger. Note that the adjustment nuts are bottomed out on the adjustment studs for shipping. Attach the mounting plate (001-8517) to the top of the baler using the 3/8” x 1 1/4" allen-head bolts and flange nuts. Loosely attach the two support brackets (001-8530) to the mounting plate using four 3/8” x 1” bolts, locks, flats, and nuts. Slide the support brackets to the baler and mark the center of the hole. Tighten the support brackets to the mounting bracket. Drill two 7/16” holes and mount the support brackets to the baler using two 3/8” x 1 1/4" allen-head bolts and flange nuts.

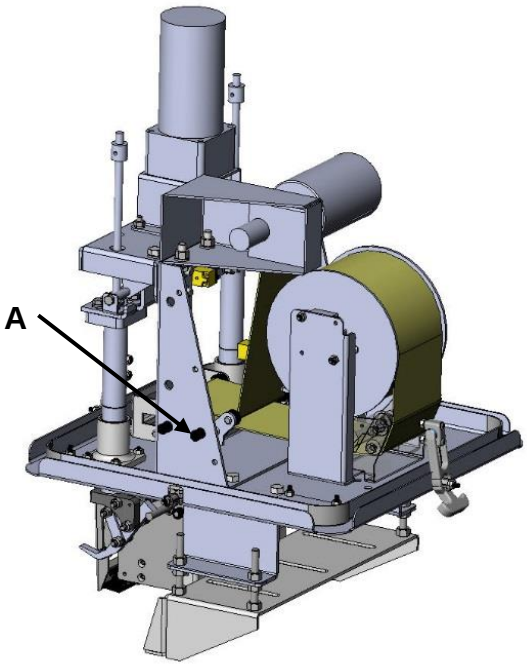


Once the bracket has been mounted to the baler, make sure that leveling plate (001-8517B) is on top of the adjustment studs on both sides. Place the tagger on the mounting bracket. Install the top four 3/8” flanged adjustment nuts onto the adjustment studs. Do not tighten yet. Adjust the bottom adjustment nuts upward until there is a 1” gap between the top of the mounting bracket (001-8517) and the bottom of the leveling bracket (001-8517B). Once the gap is 1” on each corner, secure the tagger to the mounting bracket using four 3/8” flange nuts.

Mounting Bracket Installation (continued)

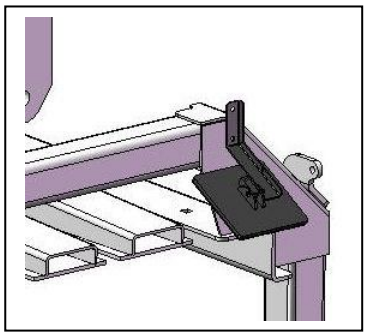


Depending upon crop moisture, crop type, and bale density, it is necessary to make further adjustments to the vertical height of the tagger so the tagger feet will travel the proper depth into the bale to pick up the twine. With all of the tagger components (mounting bracket, tagger, tagger control, and wiring) installed, press the manual cycle button (A) once to lower the tagger twine feet to their lowest position. Both tagger feet should come to a stop in the latched position under the twine. If the feet do not come to a latched position and stop, but stop and then raise back up, it is likely that the height is too low and the tagger is being overloaded. If the feet do not get under the twine, the tagger height needs to be reduced. The twine should be aligned with the notch on the top side of the tagger foot. When properly adjusted, the top of the tagger foot where the notch is should be approximately 1/4” below the twine, providing the twine is tight on top of the bale. If the gap between tagger foot and twine is greater than 1/4”, use the adjustment nuts on the studs to raise the height of the tagger. If the gap between the twine and the top of the tagger foot is less than 1/4”, the adjustment nuts need to be used to lower the tagger height. The lowest point of the foot should, generally, always be just below the top of the bale chamber. During operation, the tagger feet should travel no more than 1/4” beneath the twine.



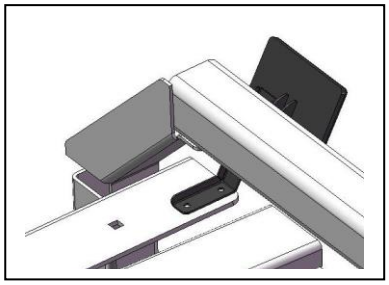
Installation Antenna Bracket and Antenna

Figure 1



Antenna angle in mount

Figure 2



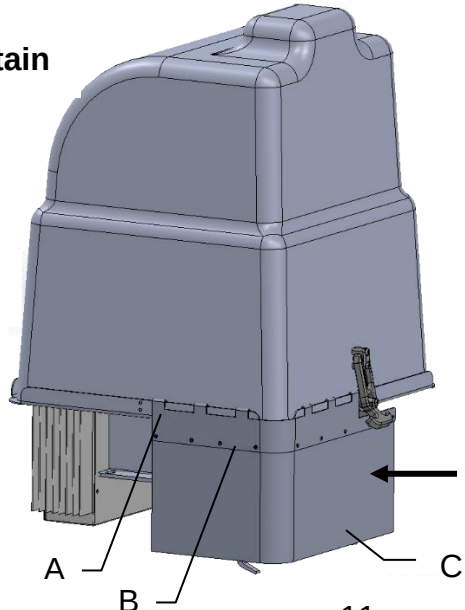
Antenna angle out mount

Locate the antenna (006-8601) and antenna mount (001-8550). Attach the antenna mount to the antenna as shown above using the plastic block and a 1 1/4" x 10 bolt and nylon lock nut. Use the pre-applied tape to help secure the antenna mount to the antenna. **When mounting the antenna the cable coming out must be pointing down.**

Mount the antenna using one of the two methods shown above on the back right side of the chamber. To mount on the angle in use two 1/4" x 1 1/4" self-tapping screws. For the angle out mount use two 1/4" x 1 1/4" button head cap bolts, lock washers, and nuts. Ensure the bale or top compression door will not contact the antenna, as well as the antenna will not interfere with folding of the chute. Recommended angling antenna in towards the baler (Figure 1) when possible.

Route the 10’ antenna cable (006-8601A) towards the tagger and secure to the baler.

Installation of Dust Curtain



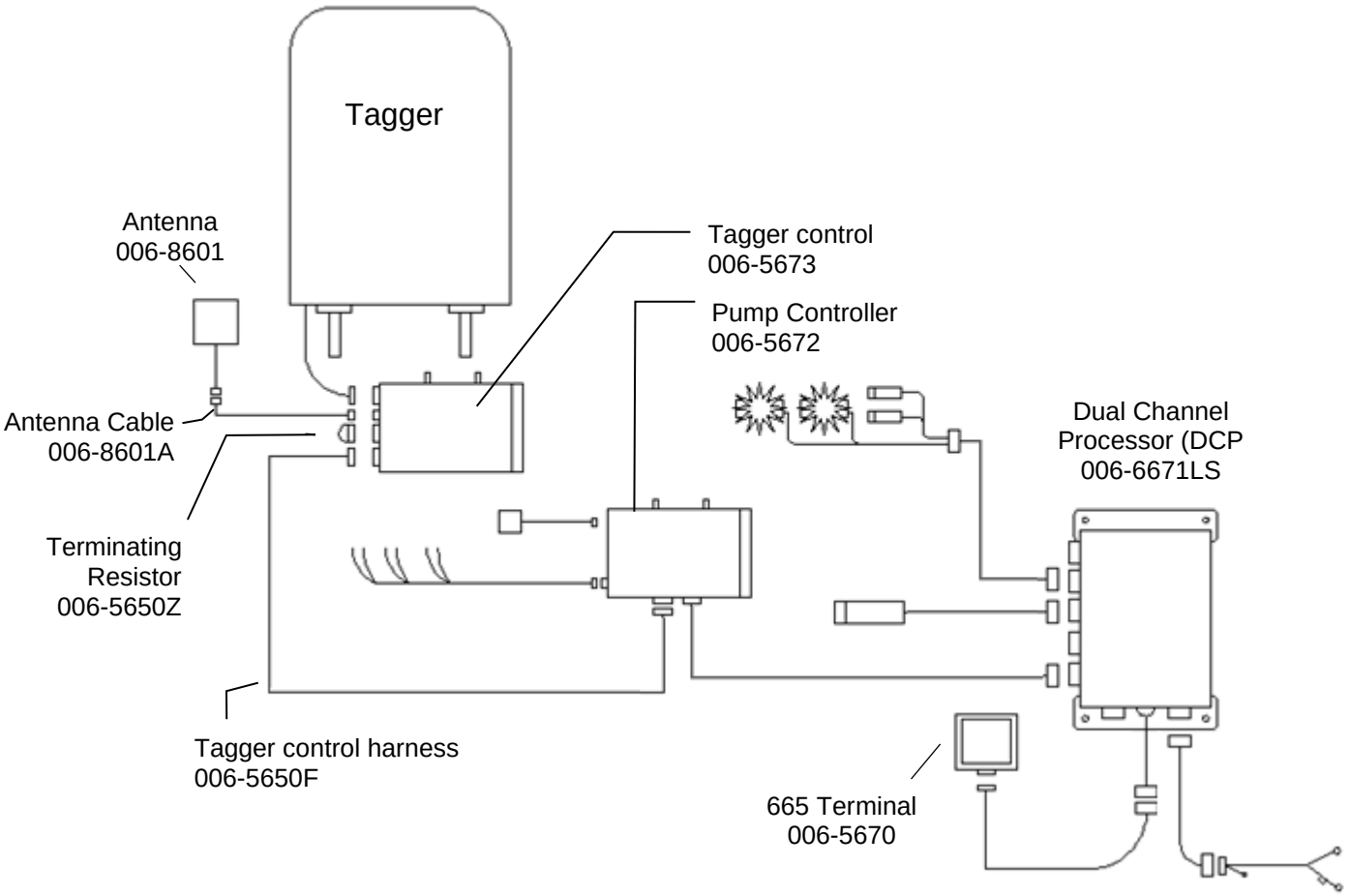
1. Connect dust curtain attachment bracket (A, 001-8540A) to tagger base plate.

2. Connect curtain mounting rod to curtain attachment bracket (B, 001-8540B).

3. Install dust curtain onto curtain mounting rod (C, 001-8540C).

Installation of Wiring Harness and Tagger Control

1. Remove the tagger plastic enclosure. Install the tagger control (006-5673) on the bottom and back side of the tagger. The top bolt studs and keyed pin will insert through the bottom of the tagger. Secure with two 5/16” lock washers and nuts.
2. Connect the pig tail from the tagger to tagger control. Place a loop in the wire before installing.
3. Connect the antenna cable (006-8601A) to the tagger control.
4. Connect the tagger control harness (006-5650F) from the Dual Channel Processor (DCP) if using a moisture only system. A terminating resistor (006-5650Z) will need to be removed on the DCP for installation of this cable.
    a. If using a full auto applicator connect the control harness (006-5650F) from the Pump Controller (006-5672) to the tagger control. A terminating resistor (006-5650Z) will need to be removed on the Pump Controller for installation of this cable.
5. Connect the terminating resistor (006-5650Z) removed from the DCP or Pump controller to the tagger control.



Installation of Roll of Tags

1. Remove the old label backing from the wind roll **(L)** by cutting the loose backing off the wind roll.

2. Remove the old label core by removing the roll holder assembly from the roll holders, and slide the plastic roll support off of the shaft.

3. Clear any dust or chaff from the inside of the tagger, using compressed air.

4. **2010 models*- Install the new label roll **(A)** onto the shaft and reinstall the plastic roll support. Place the roll holder assembly back in the holder slots and secure with lynch pins. Ensure that the label backing is coming off the roll in the direction indicated by the arrows on the diagram.
   ***Note that the first 3 feet of the label roll do not have tags)*

5. Route the label backing behind the short roll **(B)** and then under the idler roll **(C).**
   Route the label backing from under idler roll **(C)** between the spring tension roll (**C2**) and the bottom roller (**C3**) to the gap between the label sensor **(D)** and the reflector bracket support above the sensor **(E).** ***Ensure that the label backing is positioned between the label sensor and the reflector. ***For easier feeding, rotate the tension roll arm to relieve pressure exerted by the spring tension roll on the label backing.*

6. Route the label backing over the top of roll **(F)** and roll **(G).** Insert the label backing down through the slot between rolls **(G)** and **(I).** A brush is used to seal the slot that the webbing passes through. Route the webbing down through the slot at the end of the brush.

7. Feed the label backing down from the slot behind the angled back peel plate (painted red) **(H)** and around the bottom of the peel plate. The label webbing should come out between the stainless steel peel plate and the black ramp.

8. Route the webbing back up between the front size of the stainless steel peel plate and the aluminum guide roll (H1)

9. Insert the label backing up through the second slot and around idler roll **(I)** and over the top of idler roll **(J)** as indicated in the diagram.

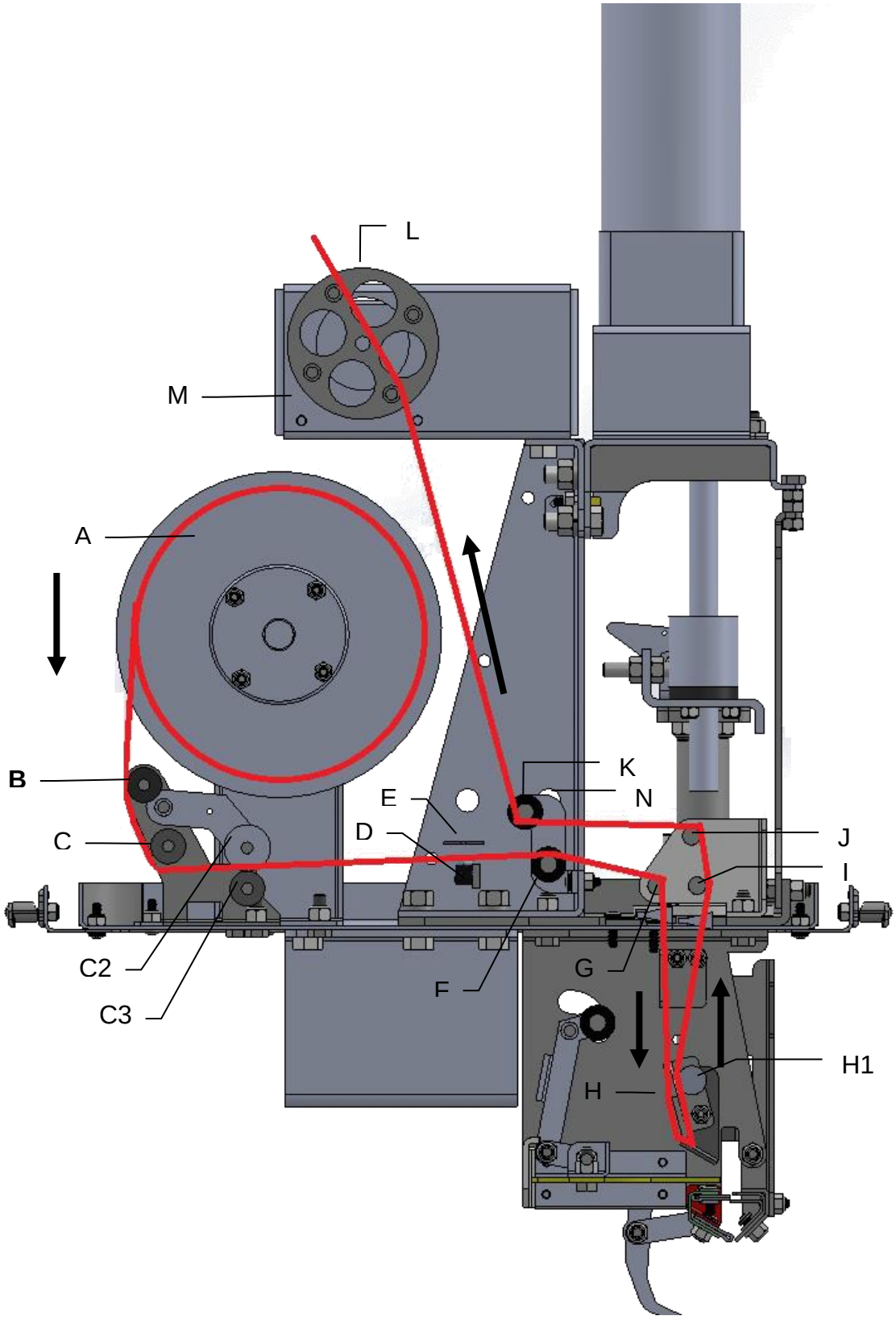
10. Once the label backing is positioned to go around the top of roll **(J),** route it under roll **(K)** and then up to the wind roll **(L).**

11. Route the label backing through the wind roll **(L)** and pull the label backing through the wind roll so there is approximately 8” of excess label backing **(M)** hanging out past the slot.

12. While keeping tension on the excess label backing, press and hold the button located in position **(N)** to manually turn the wind motor on. Hold the button until the excess label backing has been taken up by the wind roll.

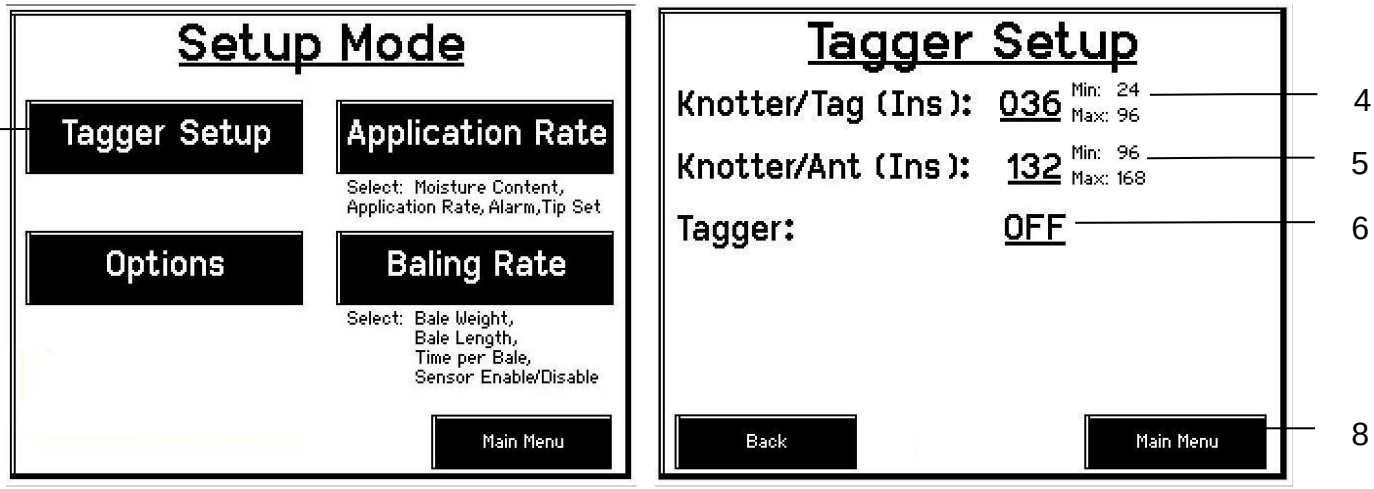
A diagram of the installation of a roll of tags can also be found inside the tagger cover.

Diagram of Label Roll Installation



First Time and Annual Startup Instructions

1. Install a roll of tags using the directions in step 4. A diagram can also be found on the inside cover of the tagger.



2. From the main screen press the Setup Mode key.
3. Press the Tagger Setup key.
4. Press the underlined area next to Knotter/Tag (Ins): This number is determined by measuring the distance between the farthest tagger foot from the knotter to the center of the knotter in inches. Take this number and add 12". Press the number into the key pad and press enter. See chart below for recommended settings.
5. Press the underlined area next to Knotter/Ant (Ins): This number is determined by measuring the distance between the antenna mounted on the back of the baler to the center of knotters.
6. Press the underlined area next to Tagger: This will cycle between turning the tagger on and off. This must be on for the tagger to operate in the field.
7. **The bale rate sensors must be turned on for the tagger to operate. See your 500, 565, 566 or 596, 600, or 696 manual for instructions.**
8. Press the Main Menu key when done.

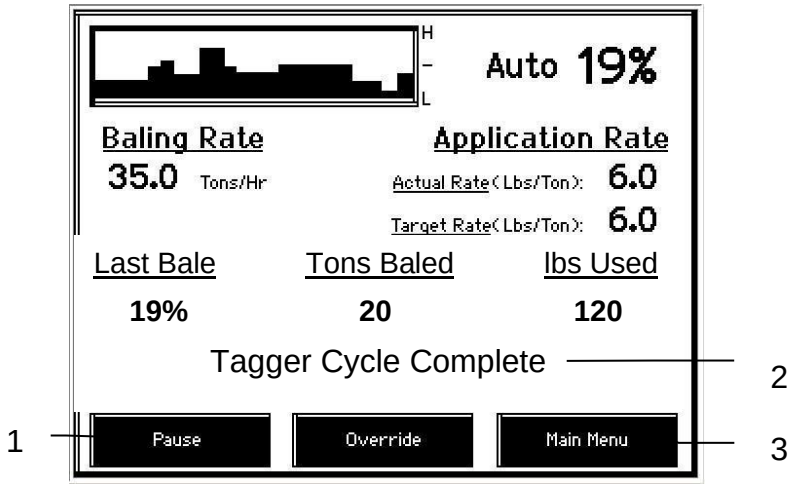
Baler	Knotter / Tagger Distance	Knotter / Antenna Distance
New Holland		
BB 9060 / 9080	56-58"	168"
BB 230 / 330 / 340	54-56"	168"
CaseIH		
LB 333 / 433	56-58"	168"
LB 234 / 334 / 434	54-56"	168"
AGCO, Massey Ferguson, Challenger		
2150 / 2170 / 2190	64-66"	168"
2453 / 3434 / 7444	64-66"	168"
2250 / 2270 / 2290	64-66"	168"
LB 33B / 34B / 44B	64-66"	168"

Operating Instructions

Auto mode will automatically apply product based on both hay moisture content sensed by the star wheels and the operator's presets. Manual mode will apply preservative to the hay at a fixed rate regardless of the moisture content. Both modes can be used to tag bales.

Automatic Mode or Manual

After pushing the AUTOMATIC MODE OR MANUAL MODE key in the Main Menu screen, the following screen should appear:



1. Push the PAUSE key to pause the unit while in operation. The tagger will not apply any tags when the unit is paused.
2. The highlighted oval area will show all of the tagger information.
   - Tagger cycle complete: This message will appear after every tagging cycle and is accompanied by three short audible beeps from the monitor. The monitor will give an audible beep twice when the next tagging cycle starts.
   - Tagger did not write tag: This message is announced by four audible beeps from the monitor. This error code means that no tag was applied to the bale, or a possible antenna problem. See trouble shooting.
   - Tagger cycle timeout: This message is announced by four audible beeps from the monitor. This message indicates a problem with the tagger that needs to be addressed. See trouble shooting.
   - Tagger arm down overload: This message is announced by four audible beeps from the monitor. This message indicates a problem with the tagger drive motor that needs to be addressed. See trouble shooting.
   - Label motor failed This message is announced by four audible beeps from the monitor. This message indicates a problem with the label routing or label motor. See trouble shooting.
   - Tag write failed: This message is announced by four audible beeps from the monitor. This message indicates that a tag was not written correctly. See trouble shooting.
   - Antenna not found: This message appears when the antenna is disconnected or has cable connection problems. See trouble shooting.
3. Press the Main Menu key when done.

Common Questions

1. **How do I turn the system on/off?**
   To turn the system on go into the Setup Mode screen, Tagger setup, and press underlined on/off key.

2. **How do I load tags?**
   See the section in this manual titled Loading Tags.

3. **How many tags are on a roll?**
   850 tags per roll

4. **How do I feed tags through the machine?**
   Remove the tagger enclosure and find the push button labeled manual label feed. Press and hold the button to continue to feed tags.

5. **Can I manually cycle the tagger?**
   To manually cycle the tagger, remove the tagger enclosure and find the push button labeled manually cycle. Every time the button is *pressed and released*, the tagger will go through one step of the tagger cycle. *Pressing and holding* the manual cycle button will cause the tagger to do one complete cycle.
   ****When doing diagnostics, the tagger must be cycled through the entire cycle and return to its HOME position before it will tag again automatically.**

6. **How do I check the number of tags left?**
   Each tag has a number in the opposite corner of the lot number. This 1-3 digit number indicates how many tags are remaining on the roll.

7. **How does the tagger cycle button work?**
   Every time the button is pressed the tagger will go through a four part cycle. The first button push will lower the tagger twine feet to the bottom position, second will bring the feet up to the normal position for a label feed, third will feed a label and the forth will bring the tagger feet to home position. Press and hold the button to start and finish a cycle without stopping.

8. **How do I read the information on the tag?**
   Only a Harvest Tec Bale Scanner or Portal can read and record the information on the tags.

9. **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.

10. **How do I store the tags?**
    The tags should be stored at or around 72-77 degrees Fahrenheit and at 40% relative humidity. At these ideal conditions the tags will have roughly a two year storage life.

Maintenance

1. Clean chaff and leaf build up off the baler and around the tagger every 40-50 bales. Clean chaff and leaf build up out of tagger closure flaps every 100 bales. Use a piece of twine and sift through the flaps in an up and down fashion.
2. Inspect tagger feet and all linkages for proper alignment daily.
3. Clean cylinder lift arms by wiping with towel or cloth every 50 hours.

Maintenance Schedule	**Daily**	**50 hrs**	**Weekly**	**50 bales**	**100 bales**
Clean cylinder lift arms and linkage		**X**	**X**		
Clean chaff and leaf buildup	**X**			**X**	**X**
Clean tagger flaps	**X**			**X**	**X**
Clean dust and chaff from inside the tagger			**X**		
Check tightness of hardware on adjustable mounting bracket			**X**		

Troubleshooting Checks

Tagger Cycle Timeout (warning message on monitor)

Possible Cause

1. Damaged proximity sensor inside the tagger that senses position of the lift mechanism
2. Bottom proximity sensor inside the tagger is out of adjustment
3. Bad connection or blown fuse to the screw motor
4. Feet stalled at the bottom of their stroke
5. Feet stalled in the label feed position

Solution

1. Open tagger enclosure and visually check all proximity sensors for damage. An orange light when metal is in front of the sensor indicates correct operation. Run a manual cycle to verify that the tagger cycles through all of the steps.
2. Check the distance relationship between the end of the sensing bolt and the position sensors for the lift rack. The gap between the end of the bolt and the sensor face should be **1/16-1/8".** Adjust and verify by running a manual cycle.
3. Check all electrical connections for the screw motor. Check the coupler that connects the screw motor to the acme shaft. Make sure the coupler is not spinning freely. Verify that it is working by running a manual cycle.
4. Run a manual cycle to see the distance the feet travel below the twine. Adjust the height on each side to raise the tagger so the feet pass within ¼" below the twine. Use the nuts on the adjustment studs to do this.
5. Run a manual cycle. Verify that the twine can freely be raised through the brush gap.

Tagger Arm Down Overload (warning message on monitor)

Possible Cause

1. Drive motor overloads when contacting the top of the bale to pick up the twine
2. Drive motor overloads when pulling the twine up to apply the label
3. Bottom proximity sensor inside tagger out of adjustment or damaged
4. Interference between components –not allowing proper function

Solution

1. Use adjustment studs between the baler mounting bracket and the tagger to raise the tagger so the feet don't travel too deep into the bale. Adjust and verify by running a manual cycle.
2. Excess twine tension causes the tagger to not be able to lift the twine up fully. Verify that the 1st knot of the bale is 4" past the rear tagger foot when an automatic cycle occurs. Adjust the knotter to tagger distance in the tagger setup screen and verify by running a manual cycle. Also verify that the baling rate sensors of the system are functioning correctly.
3. Adjust bottom proximity sensor position and gap. Verify by running a manual cycle
4. Visually inspect the components for damage. Run a manual cycle and watch for interference or indication components are damaged. Replace as needed.

Label Motor Failed (warning message on monitor)

Possible Cause

1. Tagger out of tags
2. Tags routed incorrectly
3. Label motor connection or fuse bad
4. Label backing stuck in spring tensioner

Solution

1. Remove enclosure and verify, replace if needed
2. Verify correct routing of tags with decal on inside of enclosure or diagram in the manual
3. Check connections and inline fuse. Press manual label feed button to verify. Make sure there are no labels that have become dislodged and are sticking the rollers inside enclosure.
4. Press manual label feed button to verify. Lift spring tensioner to release tension on the label backing. Clear jammed tags.

Tagger Did Not Write Tag (warning message on monitor)

Possible Cause

1. Tag not applied to bale
2. Bad alignment, orientation, or positioning of the antenna
3. Tag build up on peel/trash plate area
4. Trash plate not operating properly, or excess chaff build up

Solution

1. Check flaps and trash plate for any chaff or foreign material. Remove tagger enclosure and verify tags and label backing are not obstructed in any way. Manually cycle tagger and check for problems.
2. Check antenna position. Antenna should be installed as indicated in manual.
3. Clear all tags out of the area and cycle manually to verify operation
4. Manually cycle and verify the yellow trash plate is functioning. Look for interference between the trash plate and bracket. Replace lift feet and rod if worn excessively.

Tag Write Failed (warning message on monitor)

Possible Cause

1. Tag writing cycle interrupted. This could be caused by turning the Harvest Tec system off or by placing the system in Main Menu.
2. Tag moved out of range during writing cycle

Solution

1. Check antenna and antenna cabling for loose connections
2. Verify correct orientation of antenna mounting

Tagger Antenna Not Found (warning message on monitor)

Possible Cause

1. Damaged cable or antenna, bad connection

Solution

1. Check cable for cuts, breaks, or pinches and check all connection on the cable
2. Inspect the antenna, replace if needed

Tags Building Up

Possible Cause

1. Flaps packed with foreign material
2. Knotter/Tag distance incorrect
3. Lift feet are not properly releasing the twine upon completion of a cycle

Solution

1. Clean flap with compressed air, leaf blower, or brush. Run a length of twine up and down between the brushes to clean out any left over foreign material. Verify the feet release twine at the end cycle.
2. Check value inputted into monitor during setup and adjust. If the Knotter/Tag distance is set so the tagger picks the twine up near the 2nd knot, it is possible that there is too much tension applied by the twine to allow tagger to release the twine. Excess tension will only affect the lift foot nearest to knotters.
3. Manually cycle the unit through an entire cycle and watch to see if both feet release the twine at the same time. If not, manually release the feet by using a screw driver to press the back side of the latch down. The feet should release. If they do not, give the top of a lift rod a tap downward with a soft hammer. Once the feet are released, apply a lubricant to the bottom of the lift foot shaft, as well as where the shaft comes out the top of the lift rack, and manually raise the shaft up and down by pulling up on the top of the shaft where the top collar is located. Verify shafts are not bent. Replace if bent.

Tag Not Sticking Around Twine (uneven folding of tag)

Possible Cause

1. Foreign material built up on peel plate or stem deflecting tag.
2. Label sensor out of adjustment. Tags are either fed out too far, or not far enough.
3. Pivot bracket spring failure.

Solution

1. Check area for build up or stems. Clean as needed.
2. Adjust label sensor bracket fore or aft to adjust positioning of the tag in respect to the edge of the peel plate. Generally, it is possible to tell by looking at the tag as it is applied on the bale which direction the label sensor is out of adjustment. If the tag, as positioned on the completed bale has a longer leg towards the center of the bale, it usually means that the tag is being fed out too far. If the longer leg is towards the outside of the bale, it usually means that the tag is not being fed out far enough.
   Begin the process of adjusting the label sensor bracket by first running a manual cycle. Press the button once to go down and pick up the twine, once to raise the twine into position, and then once to feed a tag out. Note the position of the tag when it is fed out under the twine. The last 1/16" of the tag should remain attached to the label backing when the tag is fed out.

   <u>If the tag detaches completely from the backing</u>, it is feeding out too far and the bracket needs to be adjusted and moved back towards the label tensioner. Feeding the tag out too far can result in uneven folding and closing. This can be accomplished by loosening the screws and sliding the bracket back.

   <u>If the tag does not come completely detached</u>, check the positioning by pressing down on the center of the tag directly below the twine with your index finger. Push the tag down until it is firmly on top of the yellow trash plate. If the tag does not detach from the backing, or pulls additional label backing, the tag is not being fed out far enough for proper application. Adjust the label sensor bracket forward so that when pushing down manually on the tag with a finger, it releases from the backing. Conclude the manual cycle by pressing the button again and complete the cycle and release the twine. Run another manual cycle and verify that the label sensor is positioned properly.

3. Verify spring on brush bracket is not faulty. Manually pull the top of bracket towards the center of the baler, so as to tighten the brush gap. Release the top of bracket and verify it springs back.

Two Tags Applied To One Bale

Possible Cause

1. Foreign material build up on peel plate or stem deflecting tag
2. Improper routing of label through the label sensor. Sensor does not detect the label inlay when it feeds.

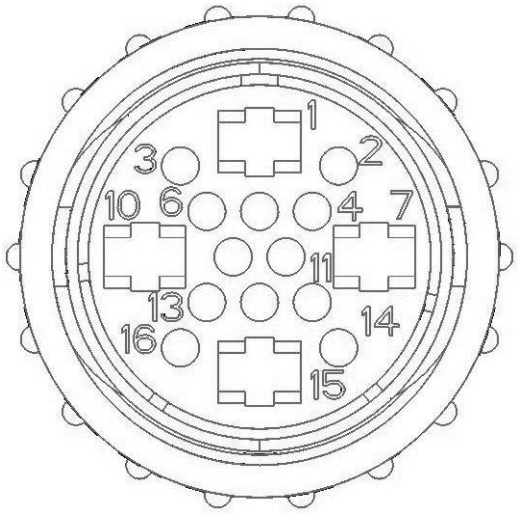
Solution

1. Check area for build up or stems
2. Verify the routing of the label between the bottom of the label sensor and the label sensor guide. Routing the label over the top of the sensor will result in multiple tags being fed until the tagging system times out.

Pin Outs

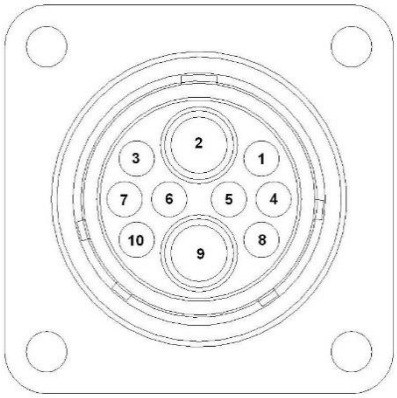
Main connector on tagger

Pin 1	14 ga red	12 V pos. to screw motor
Pin 2	16 ga red	12 V pos. to label motor
Pin 3	16 ga black	12 V ground to label motor
Pin 4	16 ga brown	12 V pos. to all sensors
Pin 5	16 ga blue	12 V ground to all sensors
Pin 6	16 ga orange	Signal from label sensor
Pin 7	14 ga black	12 V ground to screw motor
Pin 8	16 ga yellow	Signal from middle sensor
Pin 9	16 ga violet	Signal from bottom sensor
Pin 10	Not used	
Pin 11	16 ga gray	Signal from top sensor
Pin 12	16 ga white	Manual cycle signal
Pin 13	16 ga red/black	12 V pos. button power
Pin 14	16 ga white/blue	Manual label feed signal
Pin 15	Not used	
Pin 16	Not used	



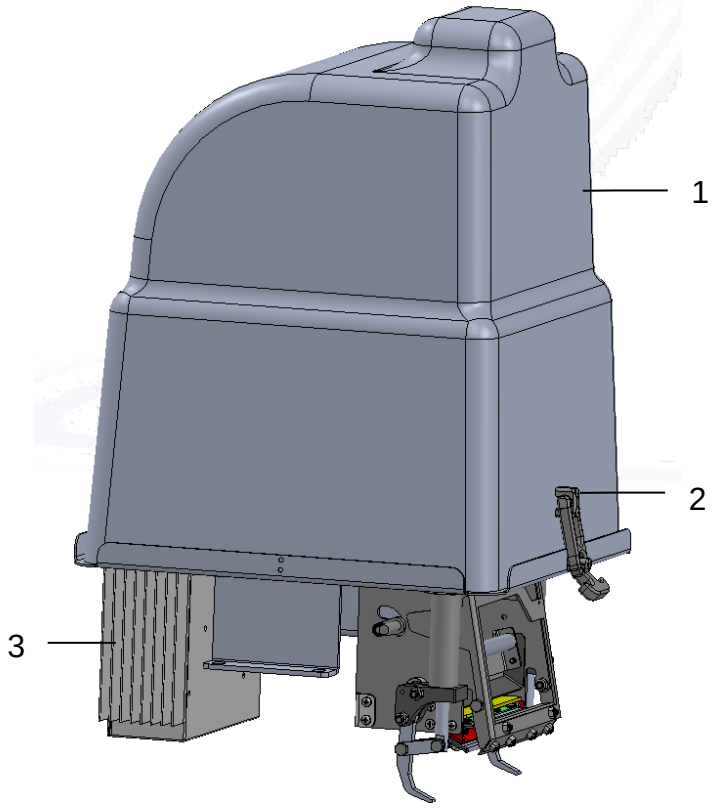
Communication harness on DCP and Tagger Controller

Pin 1	Red	Can 12 volt
Pin 2	Red 8 ga	Battery 12 volt
Pin 3	Gray	Shield
Pin 4	Grren	Can channel OH in
Pin 5	Yellow	Can channel OL in
Pin 6	Blue	Can channel OH out
Pin 7	Orange	Can channel OL out
Pin 8	Black	Can ground
Pin 9	Black 8 ga	Battery ground
Pin 10	Not used	

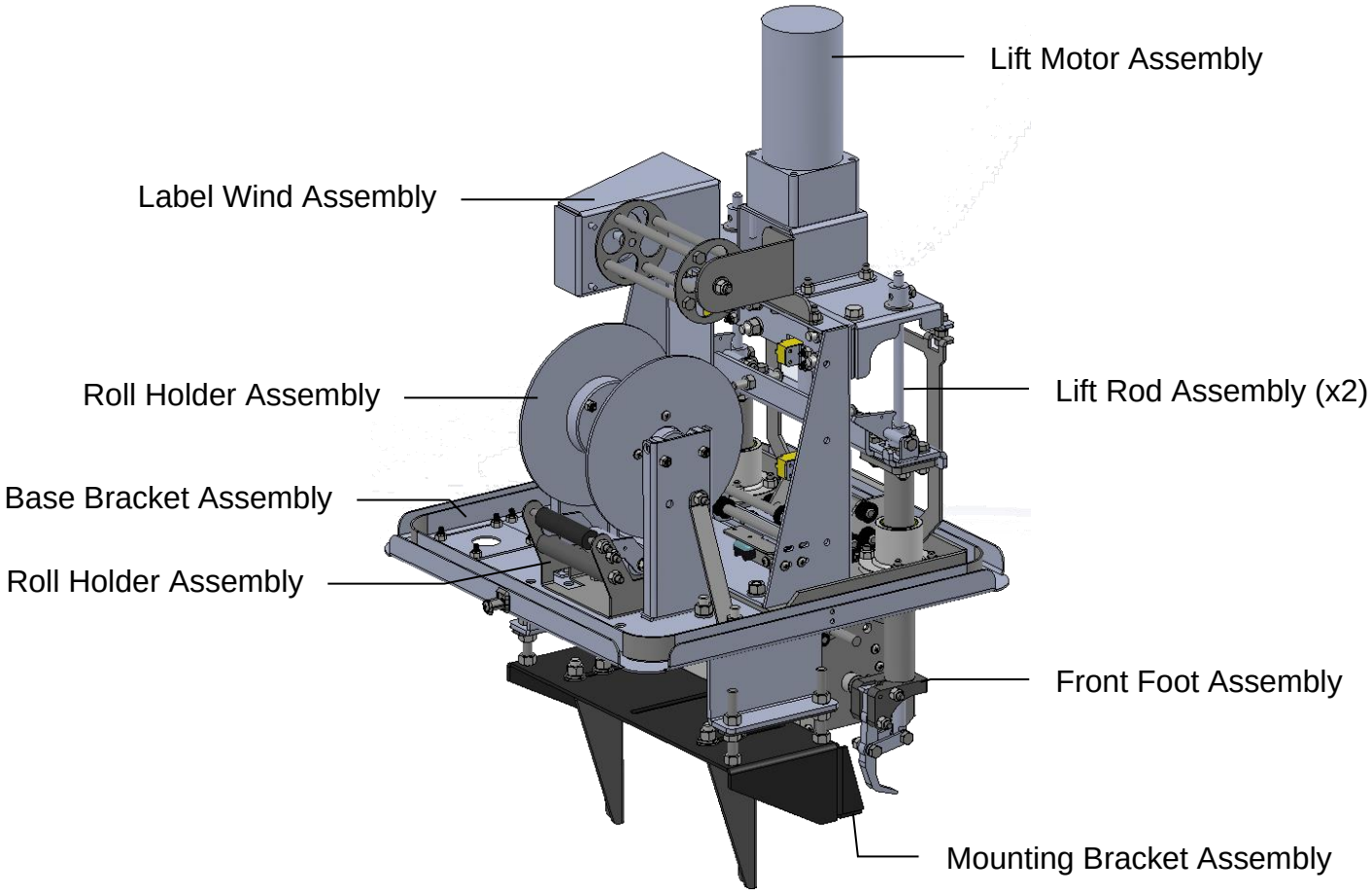


2016 Parts Breakdown

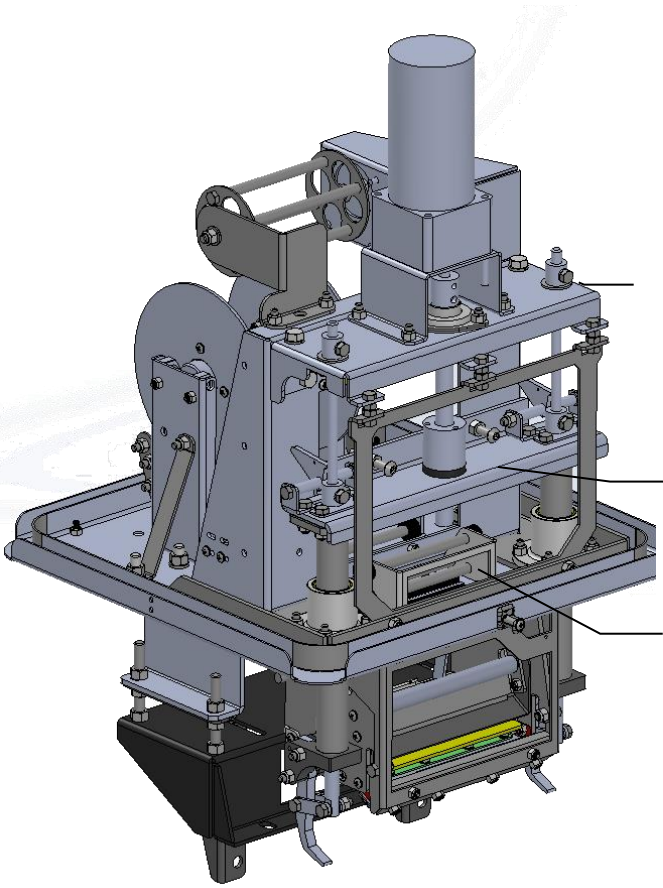
Tagger Assembly

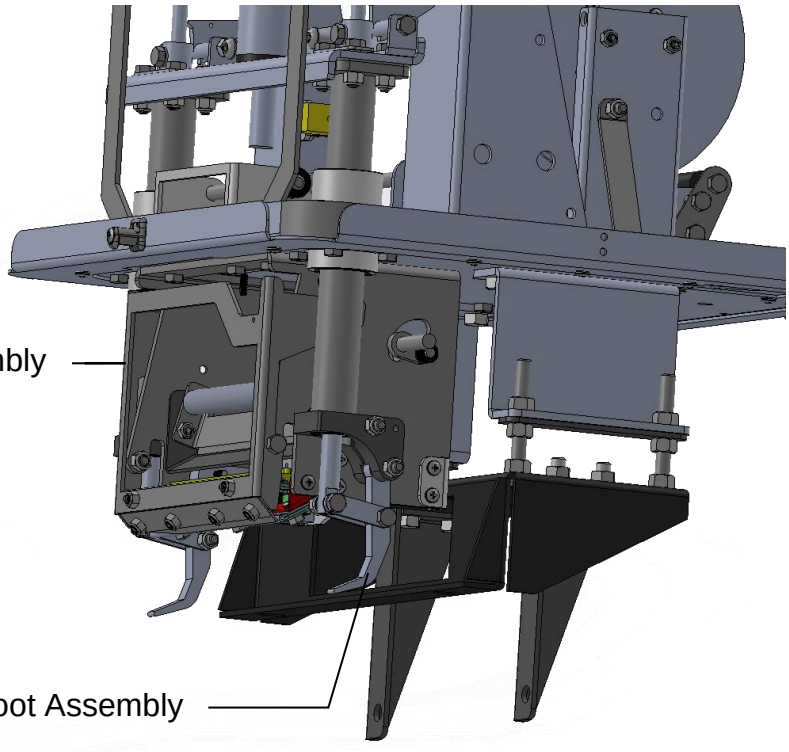


Ref	Description	Part#	Qty
1	Tagger Enclosure	001-8540	1
2	Enclosure Latch	001-8500EL	2
3	Tagger Control	006-5673	1

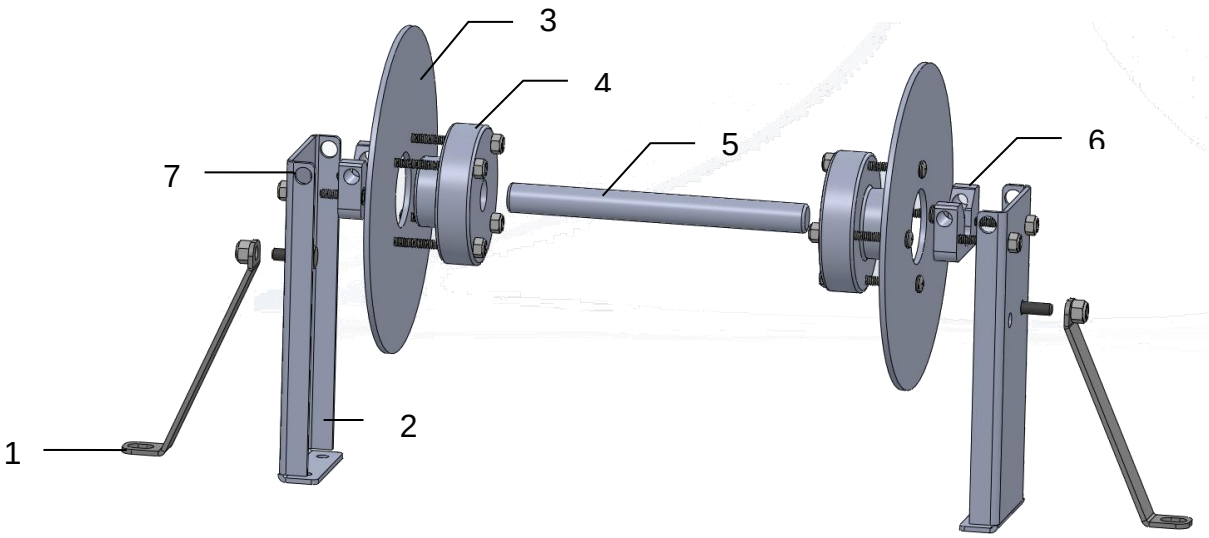


Tagger Assembly
(continued)



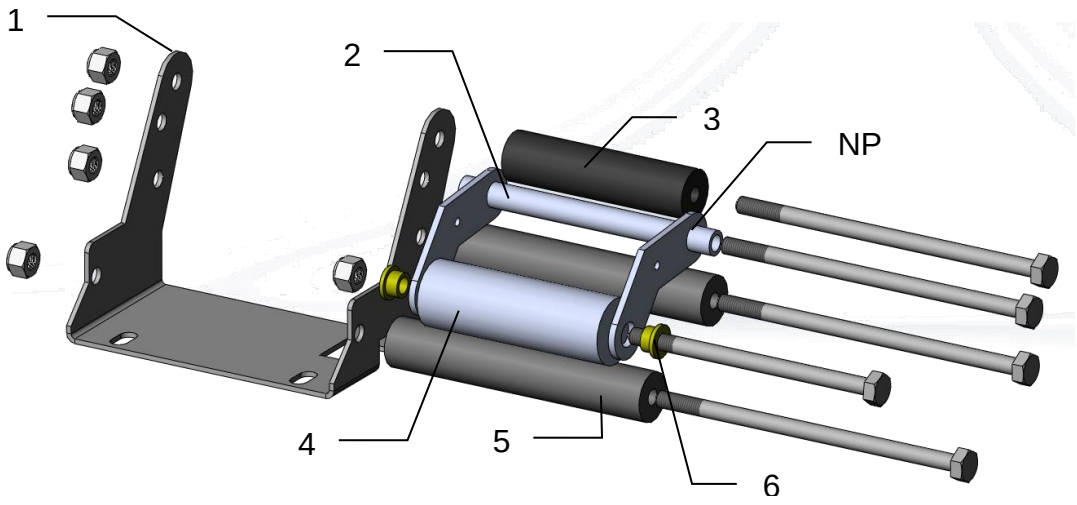


Roll Holder Assembly



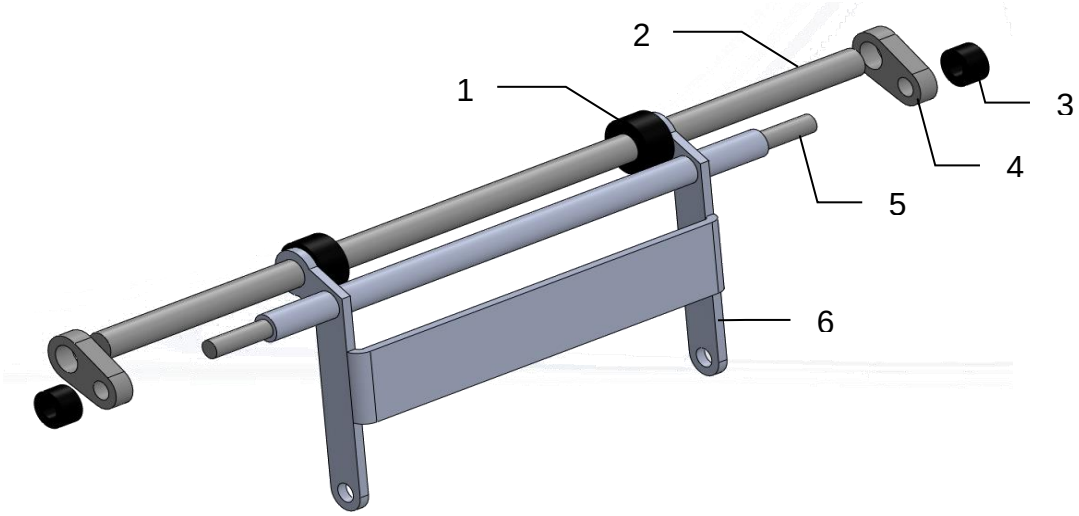
Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Tag Roll Support	001-8534D	2	4	Label Roll Holder	001-8542A	2
2	Roll Support Bracket	001-8534B	2	5	Label Roll Shaft	001-8534E	1
3	Label Roll Retainer	001-8542	2	6	Roll Support	001-8534C	2
				7	5/16” Lynch Pin	001-8534F	2

Roll Tension Assembly



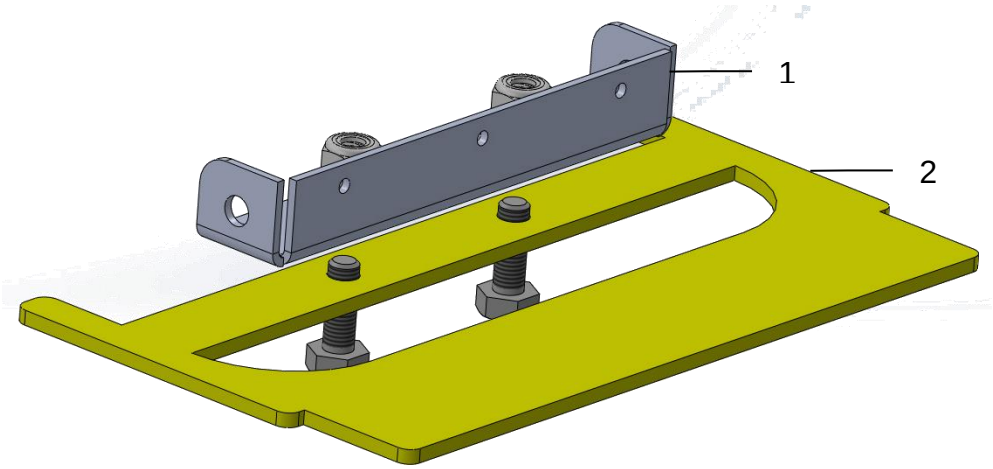
Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Tension Roll Bracket	001-8525	1	4	LG Tension Toll	001-8523B	1
2	Spring Tension Arm	001-8525B	1	5	Long 3/4 Idler Roll	001-8523D	2
3	Short 3/4 Idler Roll	001-8523E	1	6	Bronze Bushing	001-8523C	2
				NP	Torsion Spring Roller	001-8555B	2

Slide Pivot Assembly



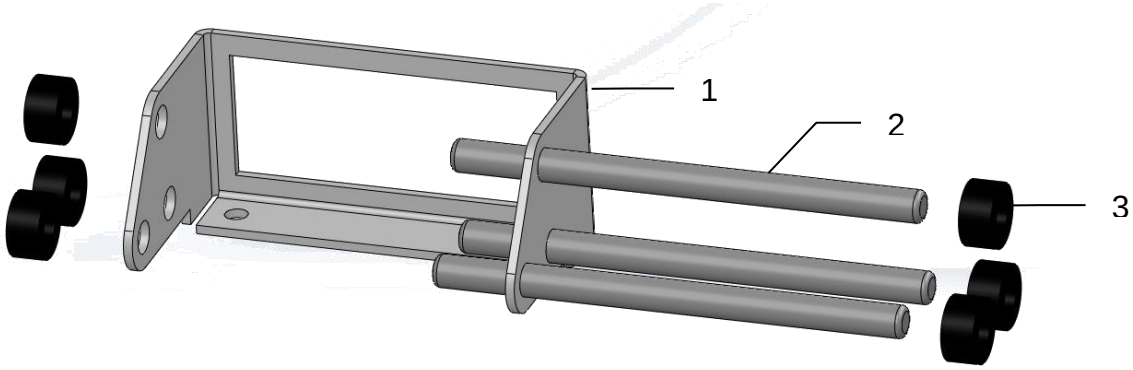
Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	3/8” Locking Collar	001-8519B	2	4	Shaft Aligner	001-8510T	2
2	Slide Plate Rod	001-8510R	1	5	Slide Plate Shaft	001-8510S	1
3	1/4" Locking Collar	001-8510SB	2	6	Slide tube Linkage	001-8510L	1

Slide Plate Assembly



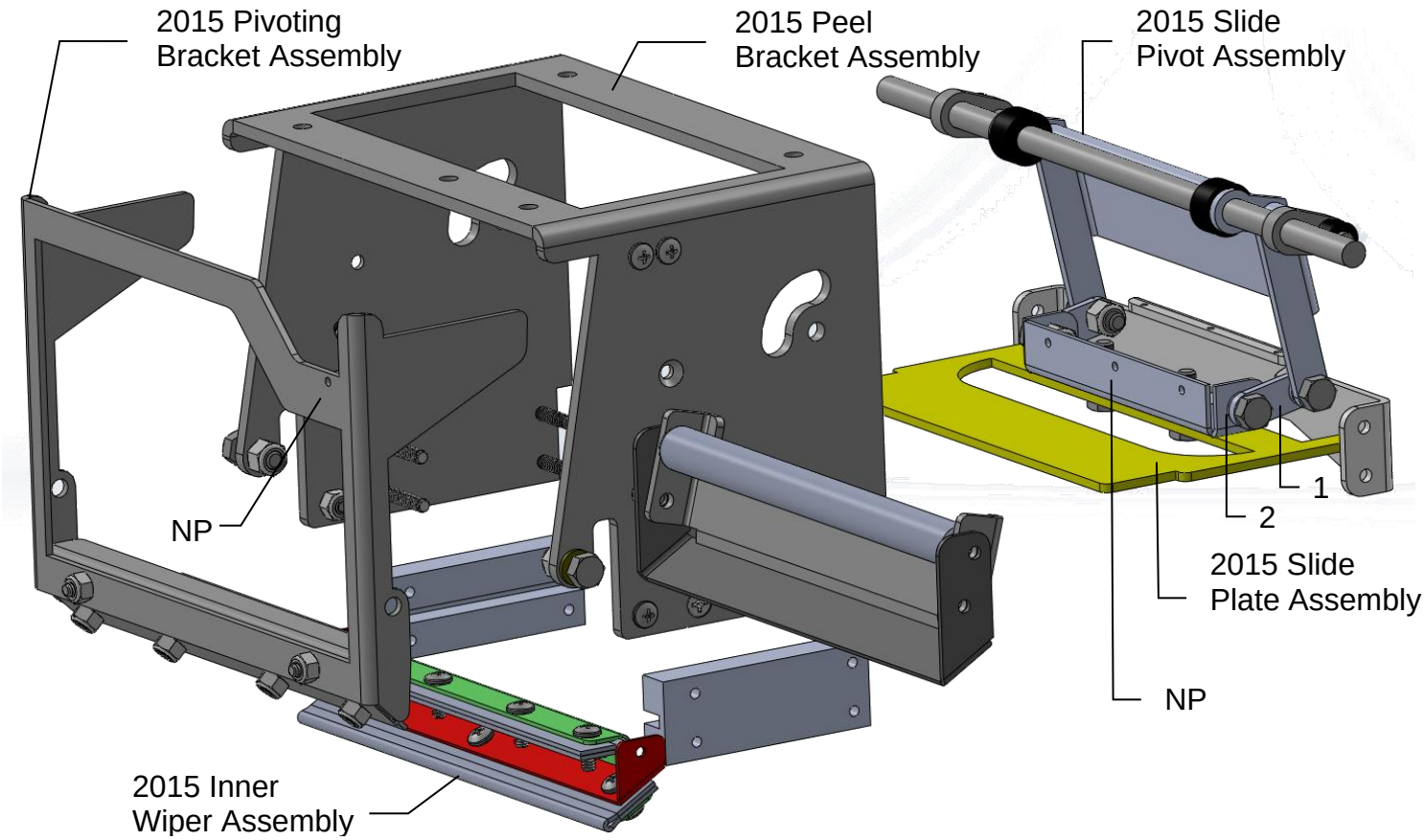
Ref	Description	Part#	Qty
1	Trash Plate Bracket	001-8510F	1
2	Trash Plate	001-8510E	1

Webbing Guide Assembly



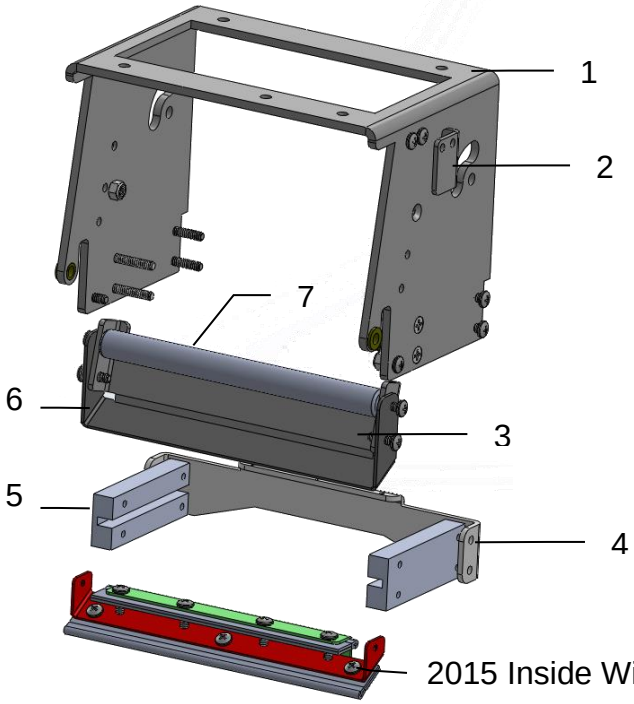
Ref	Description	Part#	Qty
1	Roller Bracket	001-8518	1
2	Label Idler Roll	001-8519	3
3	3/8” Locking Collar	001-8519B	6

Peel Bracket Full Assembly



Ref	Description	Part#	Qty
1	Trash Plate Linkage	001-8510G	2
2	Throat Washer	008-8500BT	4
NP	Slide Plate Spring	001-8555C	2

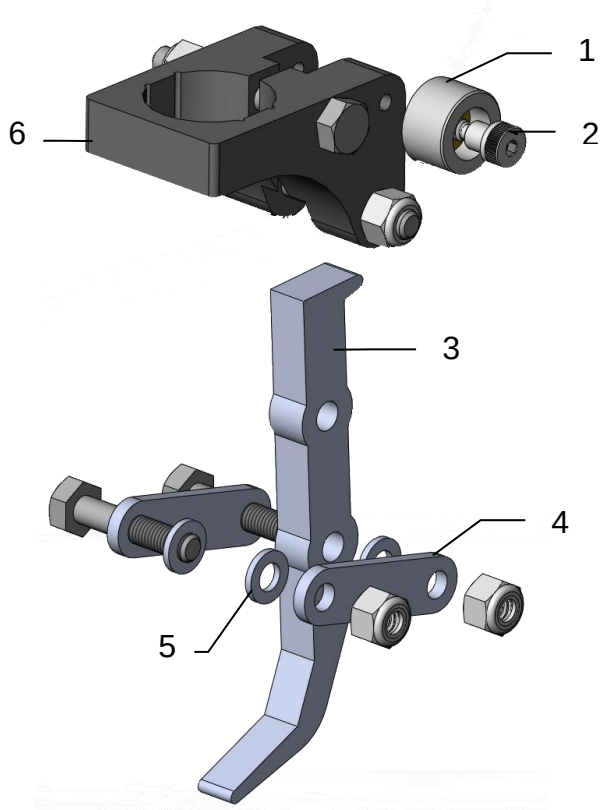
Peel Bracket Assembly



2015 Inside Wiper Assembly

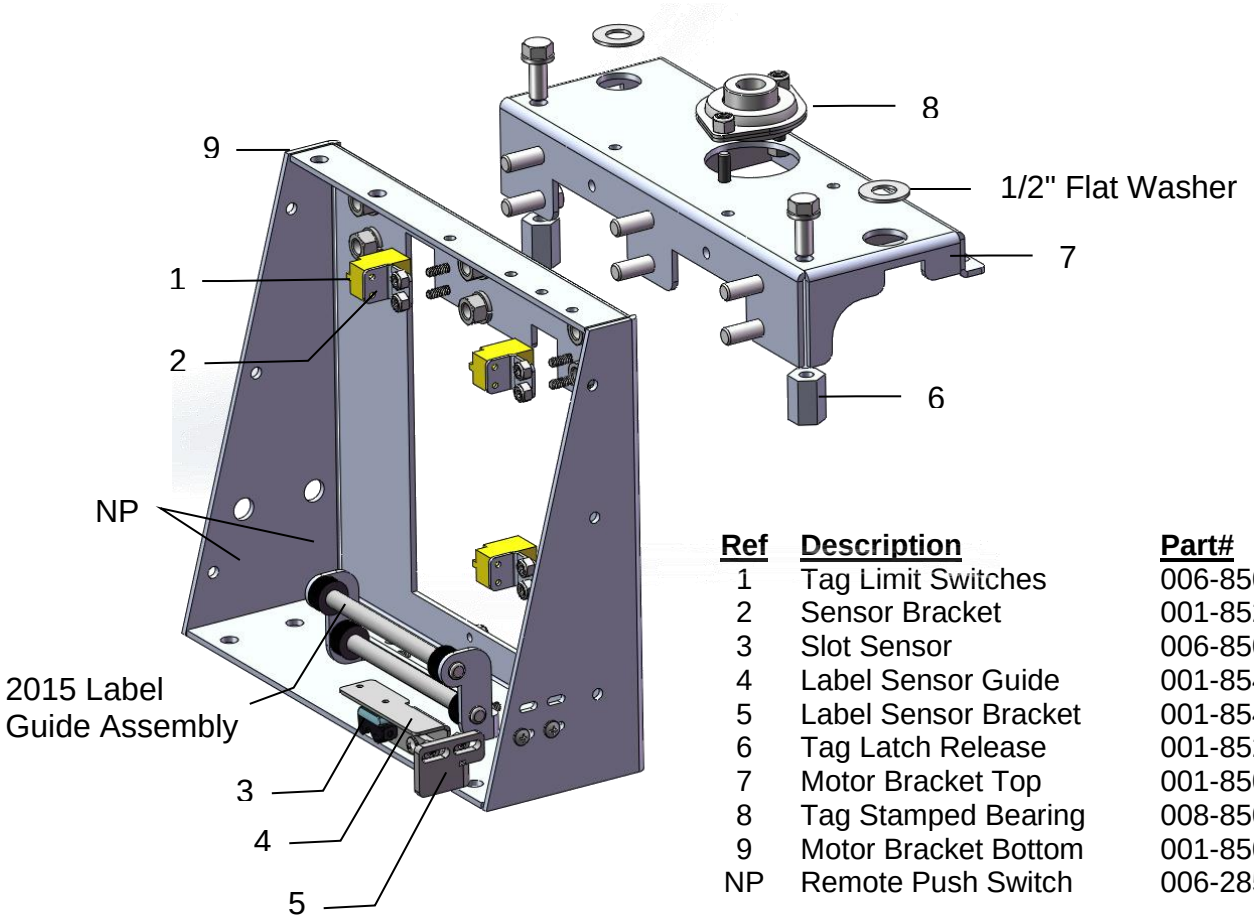
Ref	Description	Part#	Qty
1	Peel Plate Bracket	001-8510A	1
2	Spring Bracket	001-8510P	1
3	Peel Plate	001-8512	1
4	Trash Plate Slate	001-8510H	1
5	Bottom Slide Bracket	001-8510B	2
6	Top Slide Bracket	001-8510C	1
7	Peel Plate Roller	001-8510DA	1

Front and Rear Foot Assembly



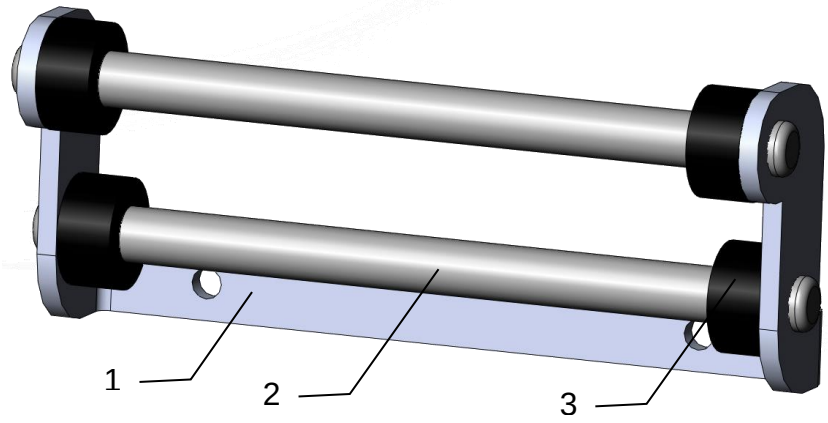
Ref	Description	Part#	Qty
1	Roller Assembly	001-8508A	2
2	#10-14 1/4" x 1/4" SHCS	----	2
3	Tagger Lift Foot	001-8502A	2
4	Tagger Lift Foot Linkage	001-8503	4
5	Thrust Washer	008-8500BT	8
6	Lift Foot Clamp	001-8508	2

Motor Bracket Assembly



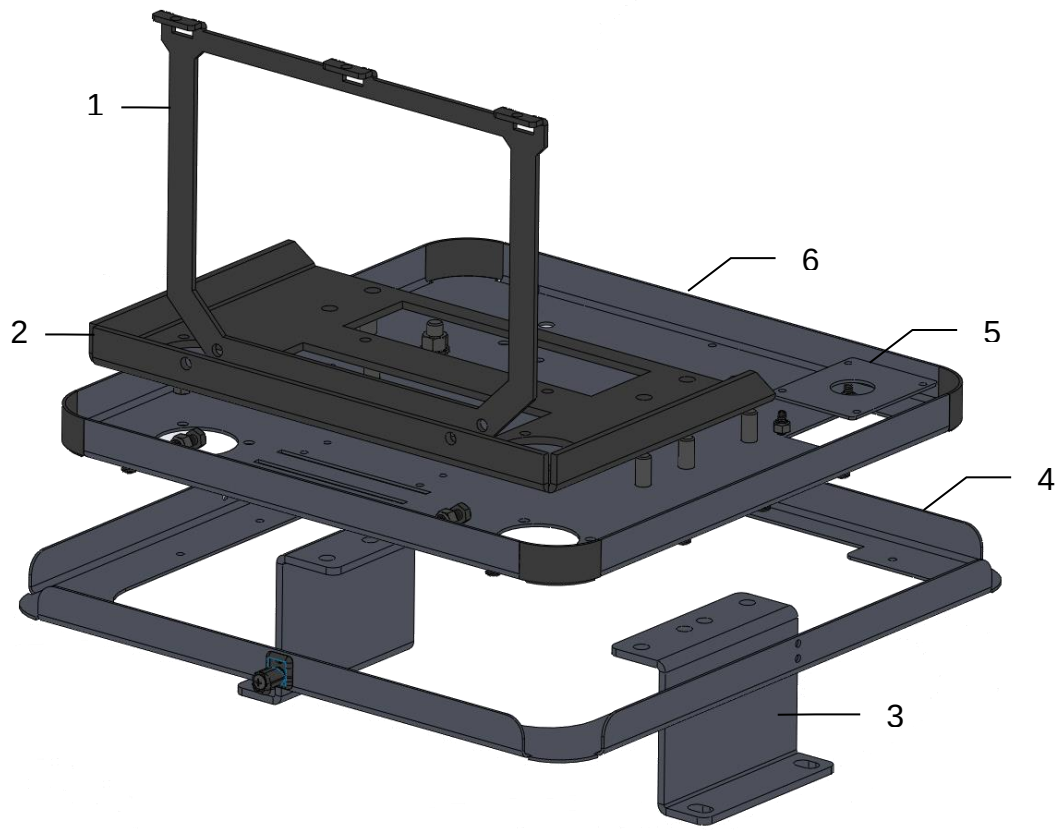
Ref	Description	Part#	Qty
1	Tag Limit Switches	006-8500LS	3
2	Sensor Bracket	001-8527B	3
3	Slot Sensor	006-8500SS	1
4	Label Sensor Guide	001-8544B	1
5	Label Sensor Bracket	001-8544A	1
6	Tag Latch Release	001-8520	2
7	Motor Bracket Top	001-8509B	1
8	Tag Stamped Bearing	008-8500SB	1
9	Motor Bracket Bottom	001-8509A	1
NP	Remote Push Switch	006-2850	2

Label Guide Assembly



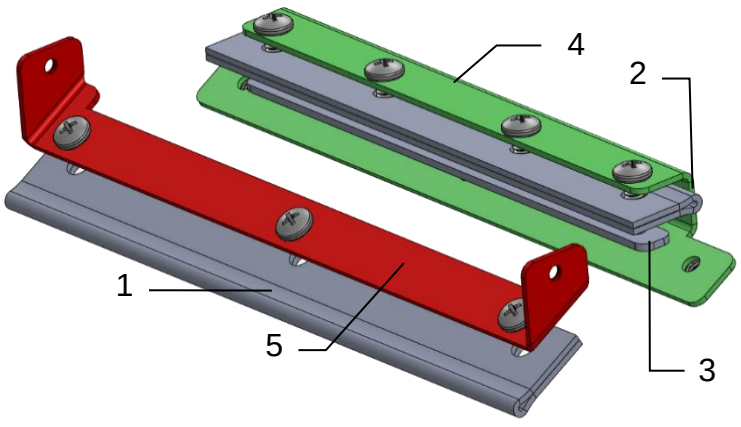
Ref	Description	Part#	Qty
1	Roller Holder	001-8522	1
2	Label Idler Roll	001-8519	2
3	3/8” Locking Collar	001-8519B	4

Base Bracket Assembly



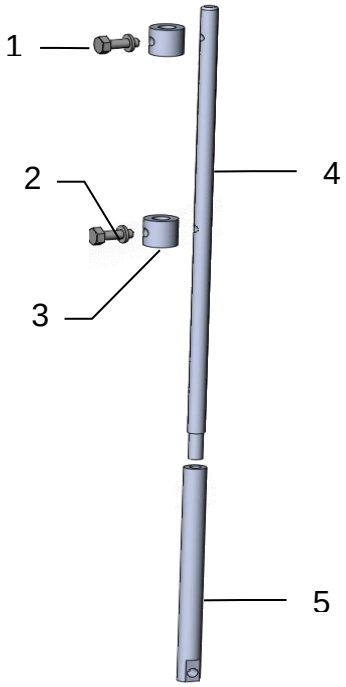
Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Vertical Support Bracket	001-8501E	1	6	Tagger Base Plate	001-8501	1
2	Base Reinforce Bracket	001-8501C	1	NP	Wire Harness	006-8500A	1
3	Bottom Mount Bracket	001-8516	2	NP	3/4” Comp.Grommet	008-0820A	1
4	Bottom Enclosure Ring	001-8501D	1	NP	3/4" Comp.Nut	008-0820B	1
5	Base Plate Wire Entry	001-8501A	1				

Inside Wiper Assembly



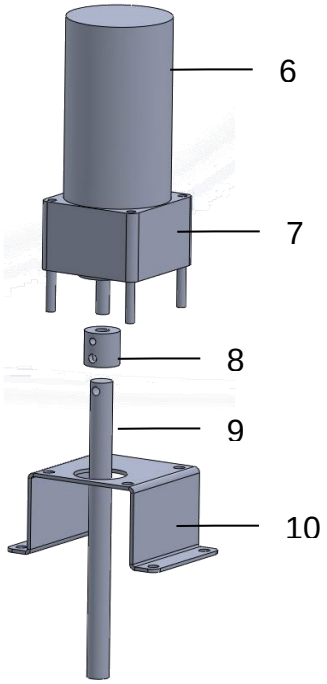
Ref	Description	Part#	Qty
1	Inside Bottom Bracket Wiper	001-8538KB	1
2	Inside Top Wiper	001-8538KG	1
3	Inside Wiper Bracket Plate	001-8538KF	1
4	Inside Wiper Support	001-8538KC	1
5	Inside Wiper Bracket	001-8538KE	1

Lift Rod Assembly



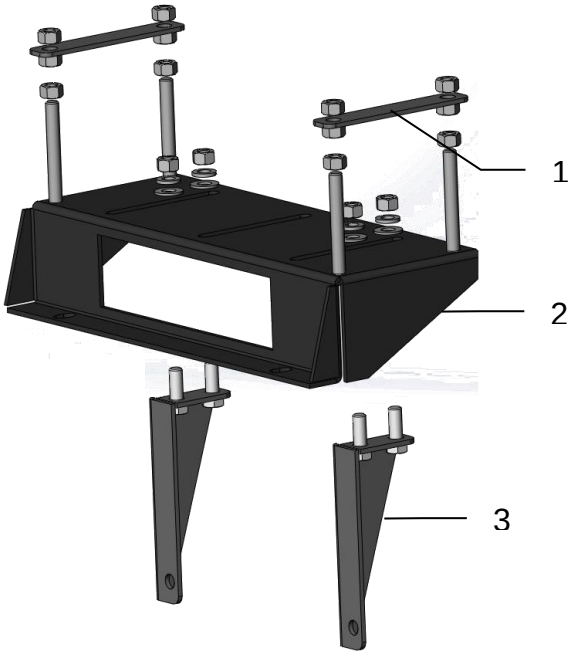
Ref	Description	Part#	Qty
1	1/4” – 20 x 3/4" Hx Bolt	Hardware	2
2	1/4" Lock Washer	Hardware	2
3	Lift Rod Strap	001-8514	2
4	Top Lift Rod	001-8511B	1
5	Bottom Lift Rod	001-8511A	1

Lift Motor Assembly



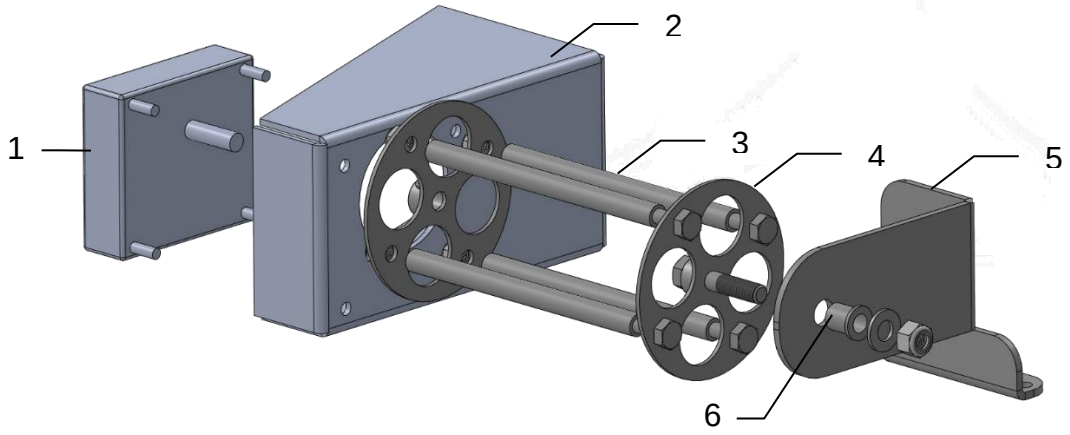
Ref	Description	Part#	Qty
6	12V Motor	007-8500LM	1
7	Gearhead	007-8500GH	1
8	Motor Coupler	001-8537	1
9	Acme Shaft	001-8539	1
10	Lift Motor Bracket	001-8505	1

Base Bracket Assembly



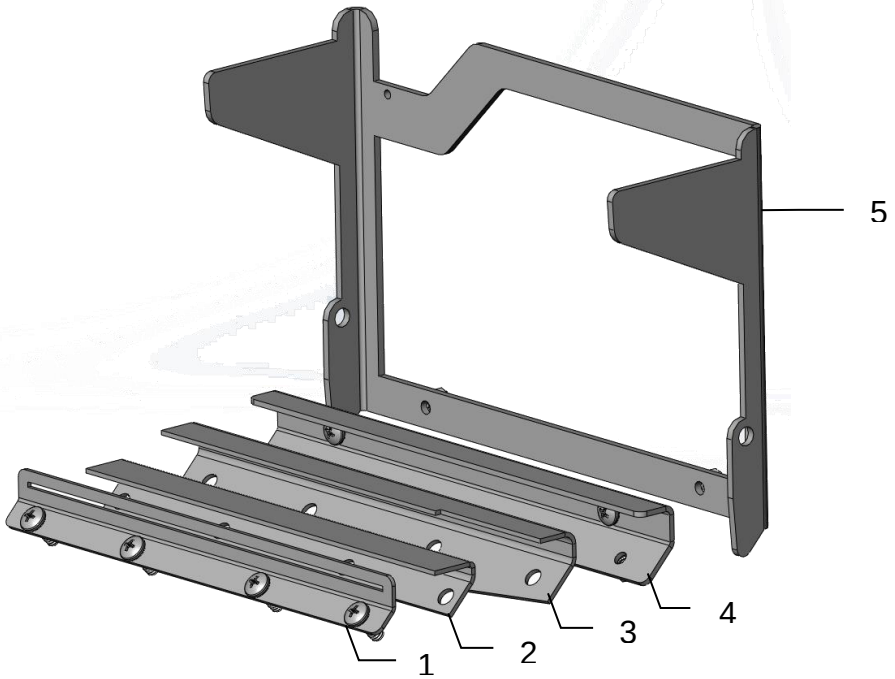
Ref	Description	Part#	Qty
1	Mounting Shim	001-8517B	2
2	Mounting Bracket	001-8517	1
3	Mounting Support	001-8530	2

Label Wind Assembly



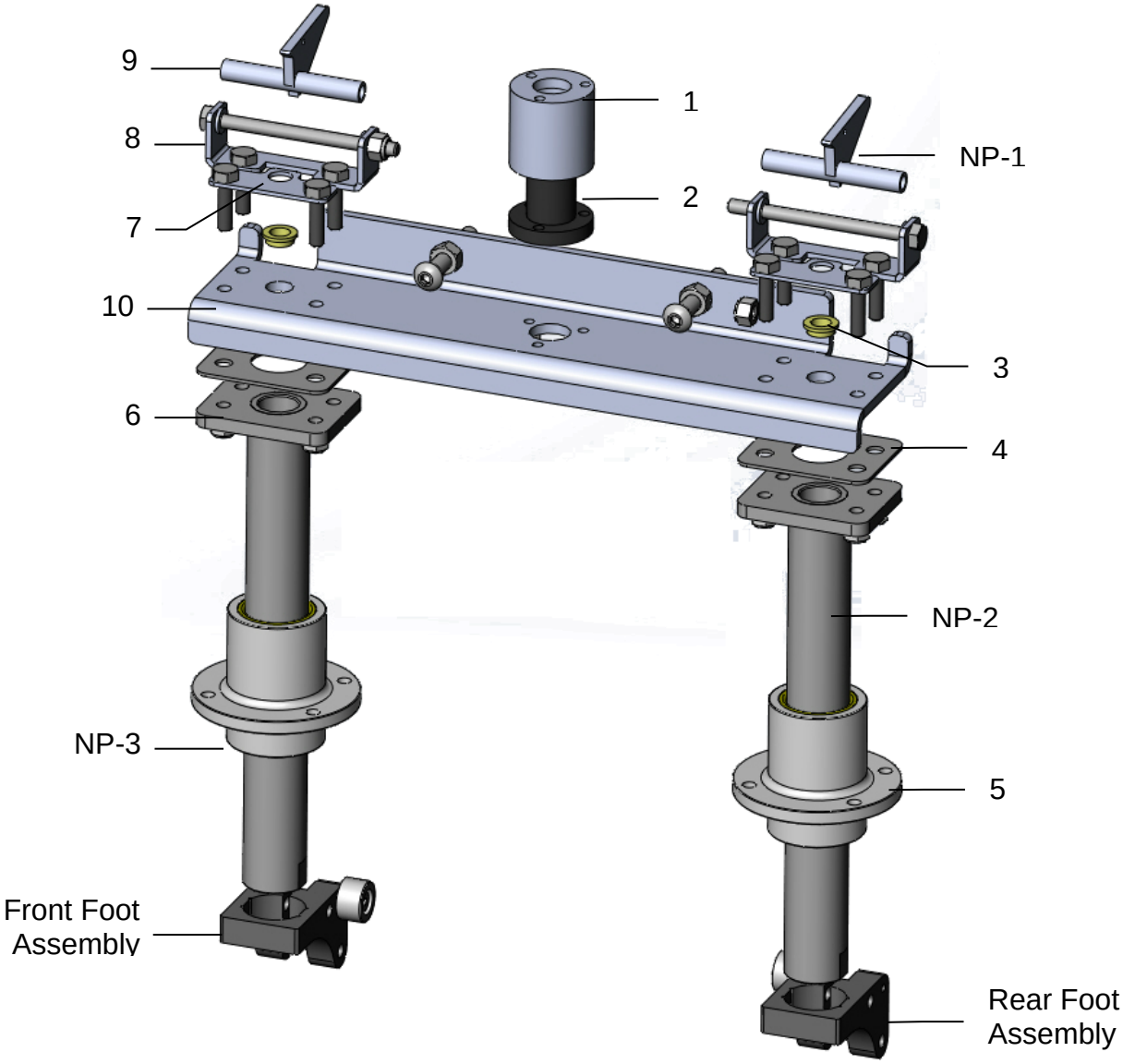
Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Wind Motor	007-8500WM	1	4	Wind Roll Disk	001-8528A	2
2	Label Motor Bracket	001-8534A	1	5	Wind Roll Bracket	001-8528C	1
3	Wind Roll Shaft	001-8528B	4	6	Roll Flange Bearing	001-8528D	1

Pivoting Bracket Assembly



Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Outside Wiper Support	001-8538KD	1	4	Flap Support Bracket	001-8533DB	1
2	Outside Middle Wiper	001-8538KH	1	5	Pivoting Bracket	001-8533DA	1
3	Outside Wiper Flap	001-8538KA	1				

Lift Rack Assembly



Ref	Description	Part#	Qty	Ref	Description	Part#	Qty
1	Acme Nut Bushing	001-8535	1	9	Latch	001-8515	2
2	Acme Nut	001-8551	1	10	Tag Lift Rack Bracket	001-8504	1
3	Lift Rod Bushing	001-8553	2	NP-1	Torsion Spring	001-8555B	2
4	Lift Rack Gasket	001-8507D	2	NP-2	Lift Rod Spring	001-8552	2
5	Lift Rack Support	001-8506	2	NP-3	Shaft Wiper	001-8506A	4
6	Lift Rack Tube	001-8507	2	NP-3	Cap for Shaft Wiper	001-8506B	4
7	Busing Retainer	001-8536	2	NP-3	Hose Clamp 1-3/4”	001-8506C	4
8	Latch Bracket	001-8513	2	NP	Not Pictured		

Notes

Notes

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.

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