



## Chain Loop System - Ground Control Kit Ground Control Kit for Discharge Gates

Determine the best location for each ground control kit. Note that each kit comes with 100' of cable, which should be adequate for individual bin installations.

The cable idler pulley bracket is usually mounted at the top of the bin wall, just under the roof eave, in-line with the control wheel on the discharge gate. The ground control wheel mounting bracket should be mounted to the bin wall directly under the idler pulley bracket at a convenient operating height. It is important to keep the cable in-line with the control wheels on both the discharge gate and at the ground to avoid having the cable "walk off" the either wheel.

The ground control wheel can be mounted to the same bin as the discharge gate or to an adjacent bin. See examples 1 and 2 in [Figure 1](#).

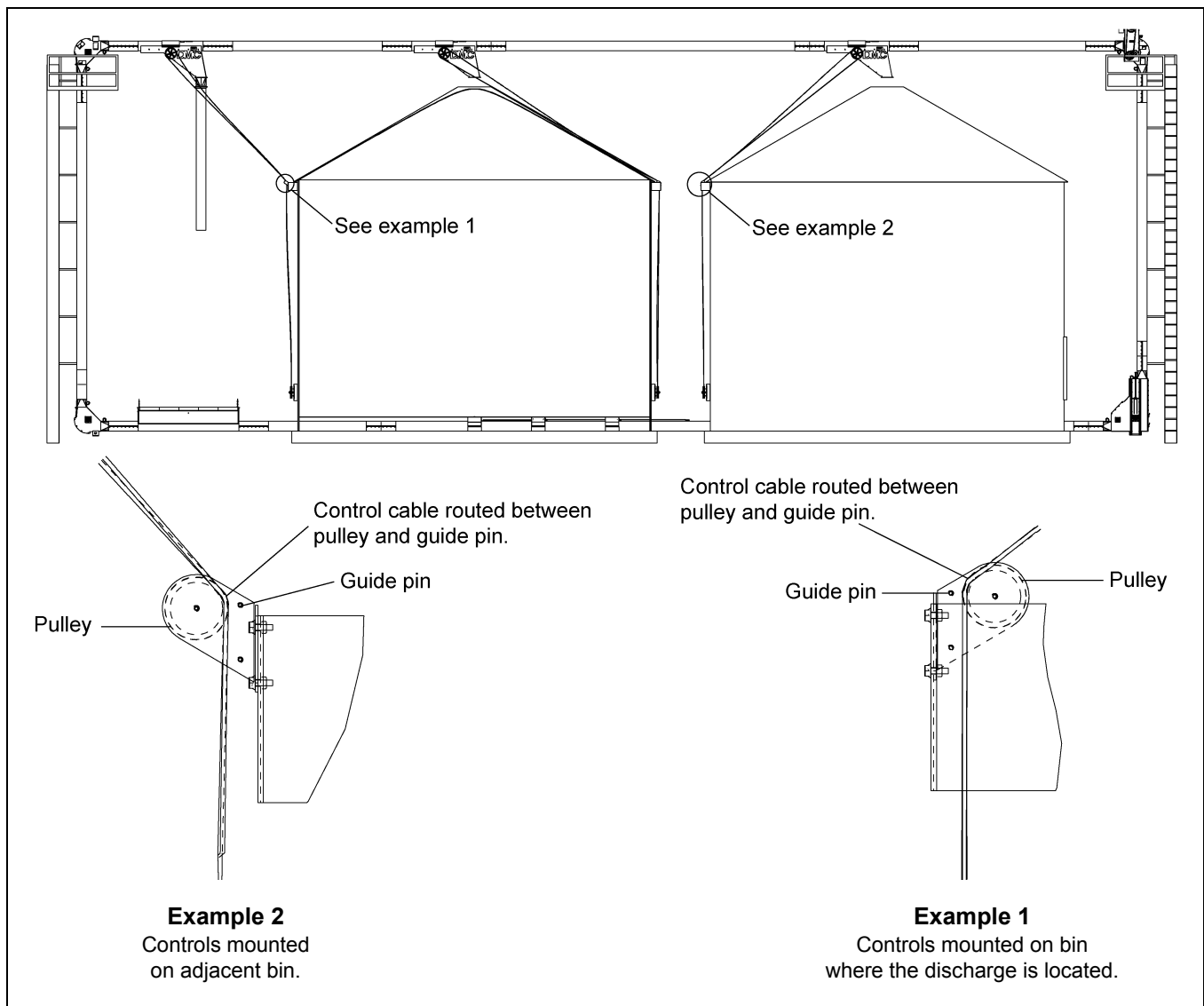


Figure 1

Date: 12-14-12

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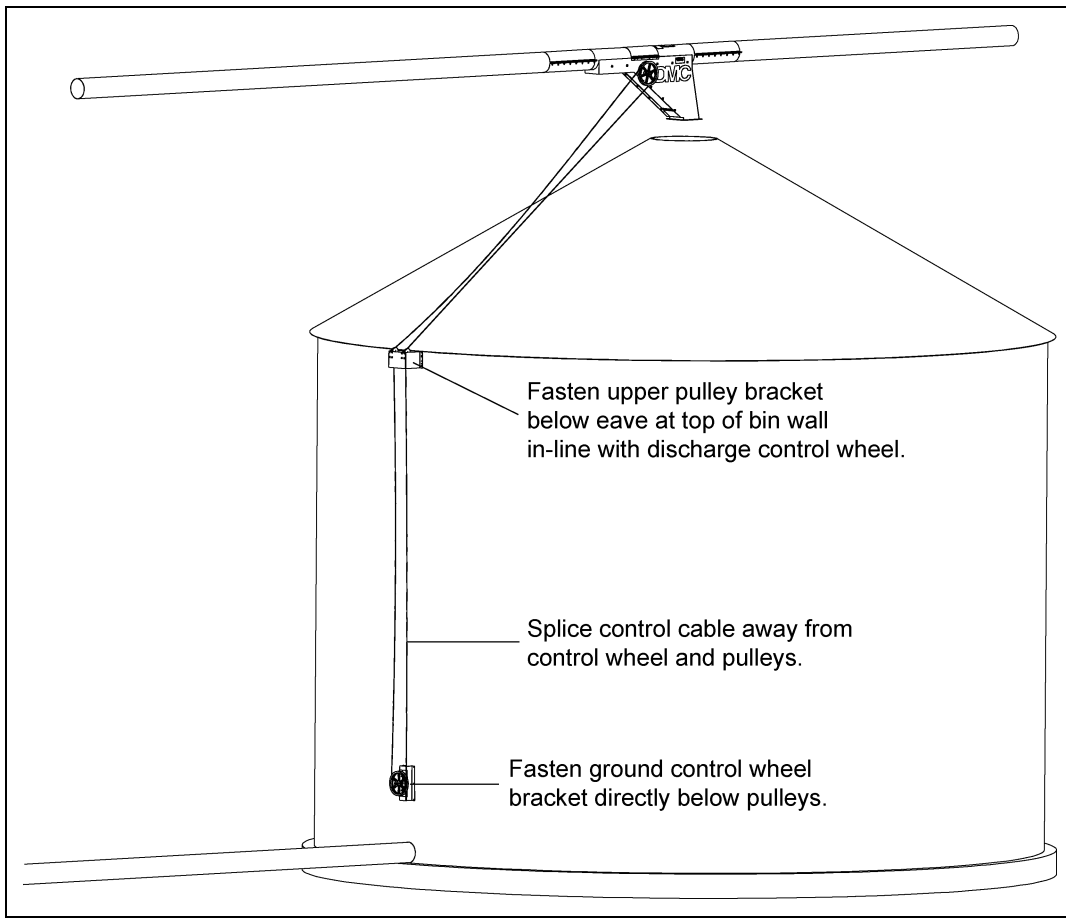
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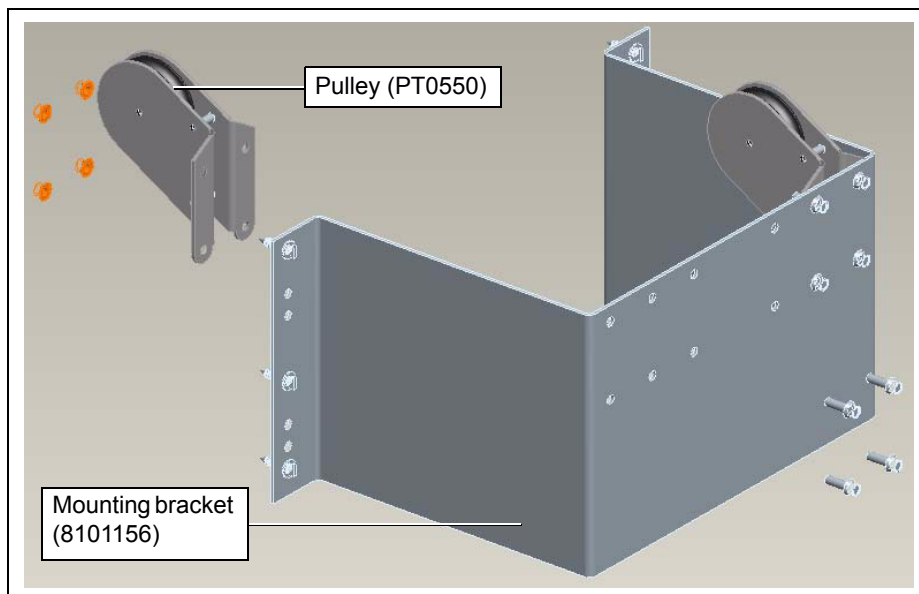
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# Discharge Gate Ground Control Kit



**Figure 2**

1. Assemble the idler pulleys to the mounting bracket on the inside surface if the cable is going to a discharge gate on the same bin. Assemble them on the outside if the cable is going to an adjacent bin. Attach the idler pulley bracket to the bin wall just under the eave to ensure that the cable will clear the bin roof. (See Figure 3.)



**Figure 3**

## Discharge Gate Ground Control Kit

2. Attach the ground control wheel bracket to the bin wall directly below the idler bracket. Assemble the wheel mounting bracket loosely to the wall bracket and slide it up as far as possible. (See Figure 4.)

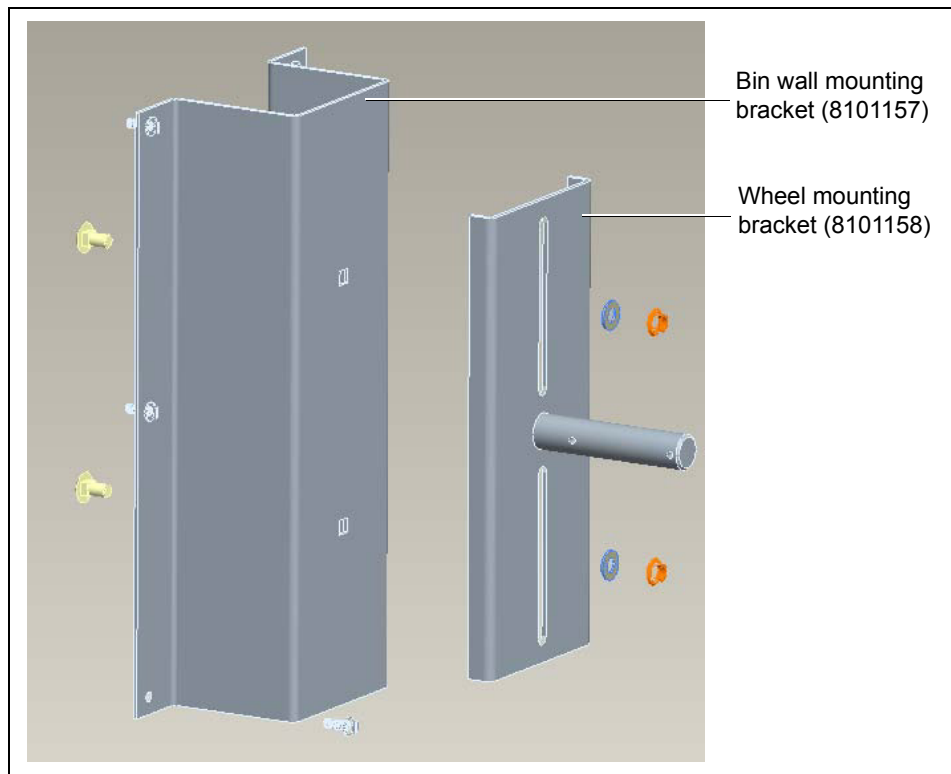


Figure 4

3. Assemble the control wheel to the shaft and secure with cotter pins. (See Figure 5.)

**NOTE:** It is recommended to use anti seize on the shaft.

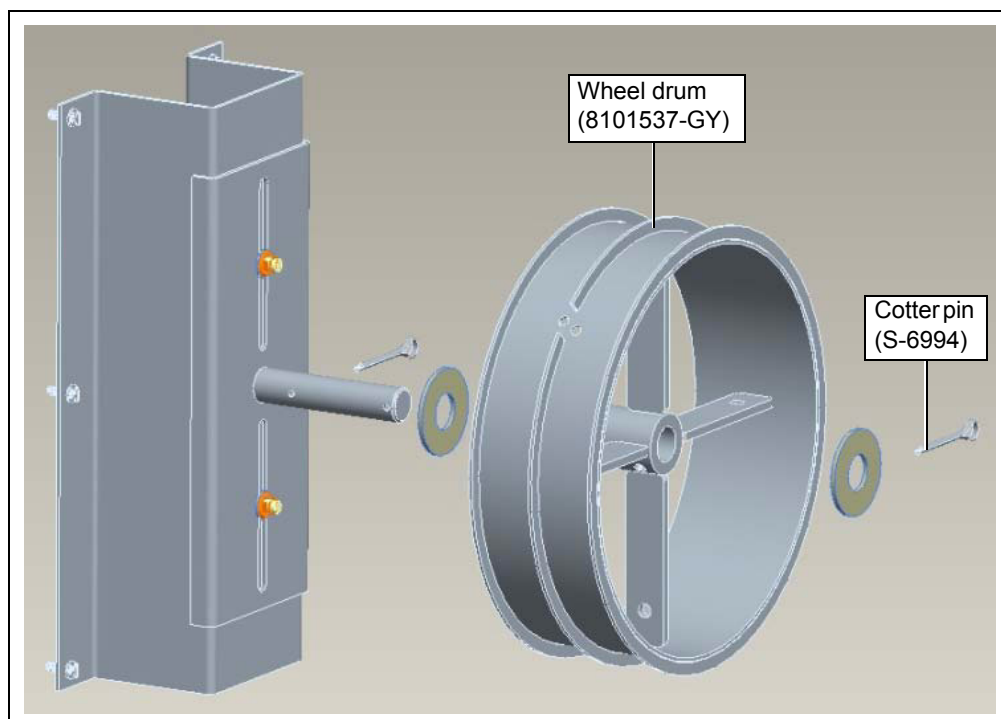
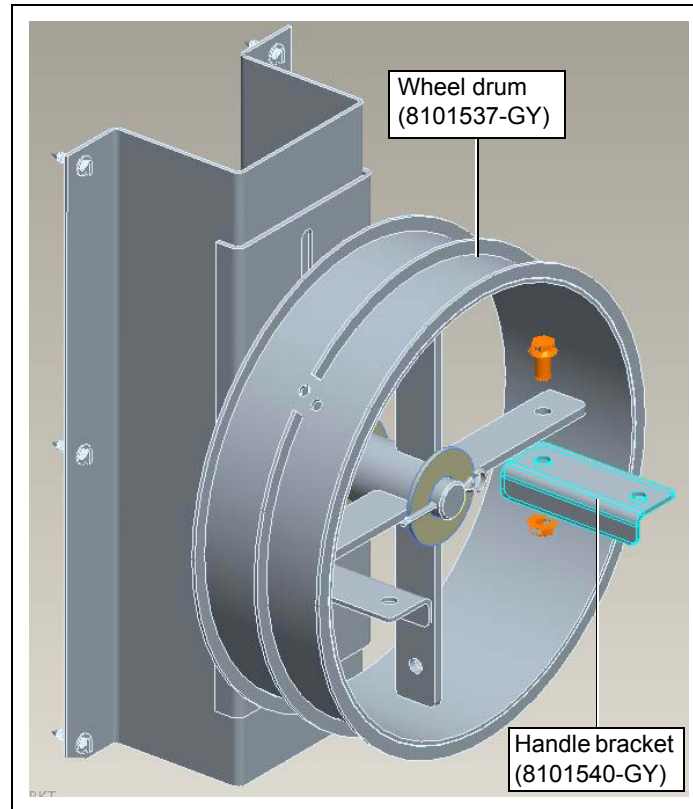


Figure 5

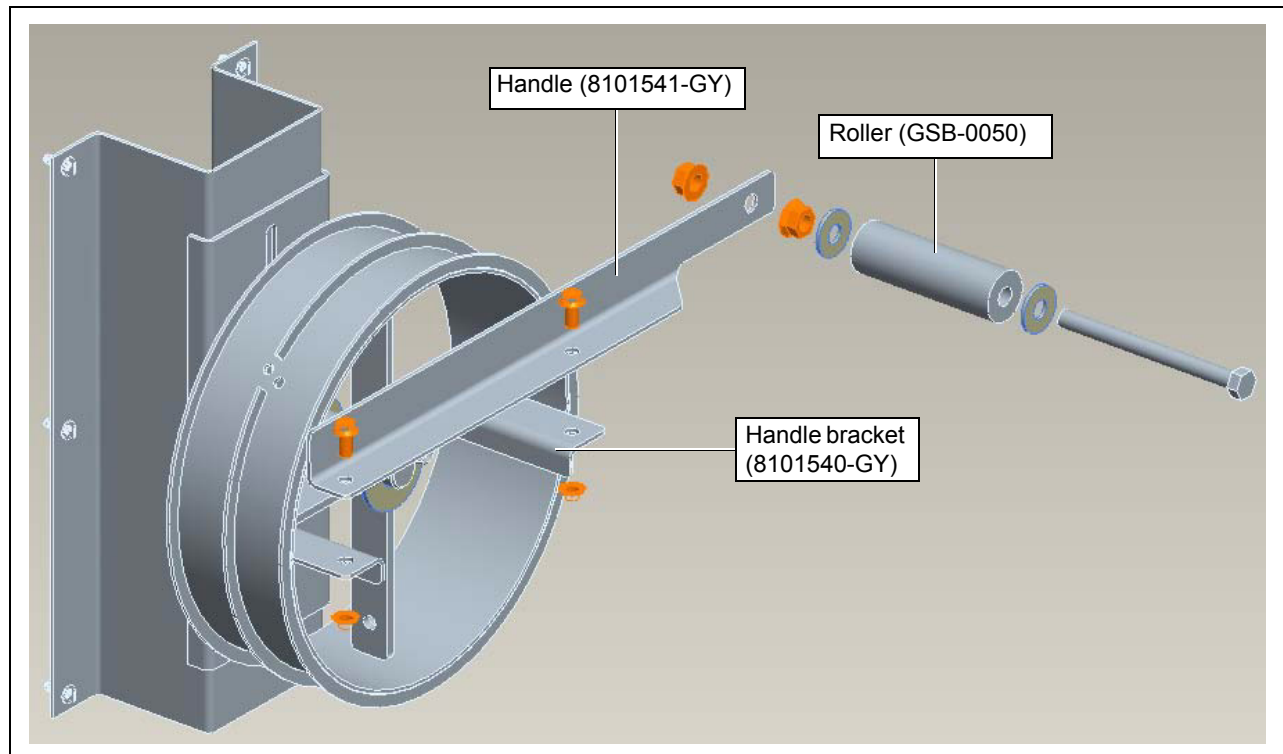
## Discharge Gate Ground Control Kit

4. Assemble the handle brackets to the bottom side of the control wheel spokes. (See Figure 6.)



**Figure 6**

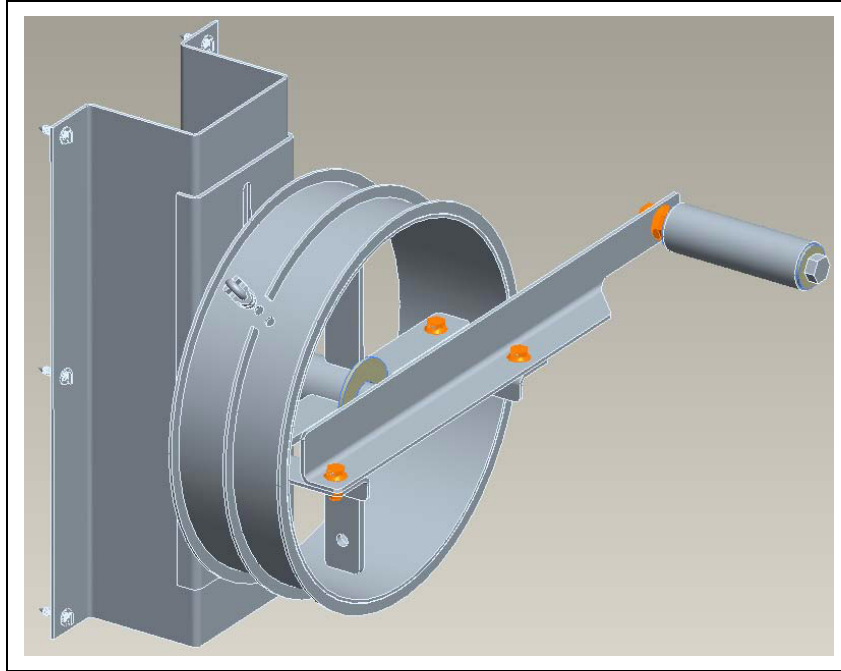
5. Attach the handle to the handle mount brackets. Assemble the roller to the handle. (See Figure 7.)



**Figure 7**

6. Completely open the discharge gate and wrap the cable six (6) times counterclockwise around the outside section (closest to you) of the discharge gate control wheel starting outside and working towards the middle. Use cable clamp to secure the cable to the control wheel. Cross the cable to the inside section of the discharge gate control wheel and wrap the cable two (2) times starting at the middle and working towards the outside. (See Figure 8.)

**NOTE:** *The cable should never be wrapped on top of itself.*



**Figure 8**

7. Make sure the discharge gate is still completely open.
8. Route the cable back through the idler pulleys and down to the ground control wheel.
9. Wrap the cable two (2) times counterclockwise around the outside section of the discharge gate control wheel starting outside and working towards the middle. Use cable clamp to secure the cable to the control wheel. Cross the cable to the inside section of the discharge gate control wheel and wrap the cable six (6) times starting at the middle and working towards the outside.

**NOTE:** *The cable should never be wrapped on top of itself.*

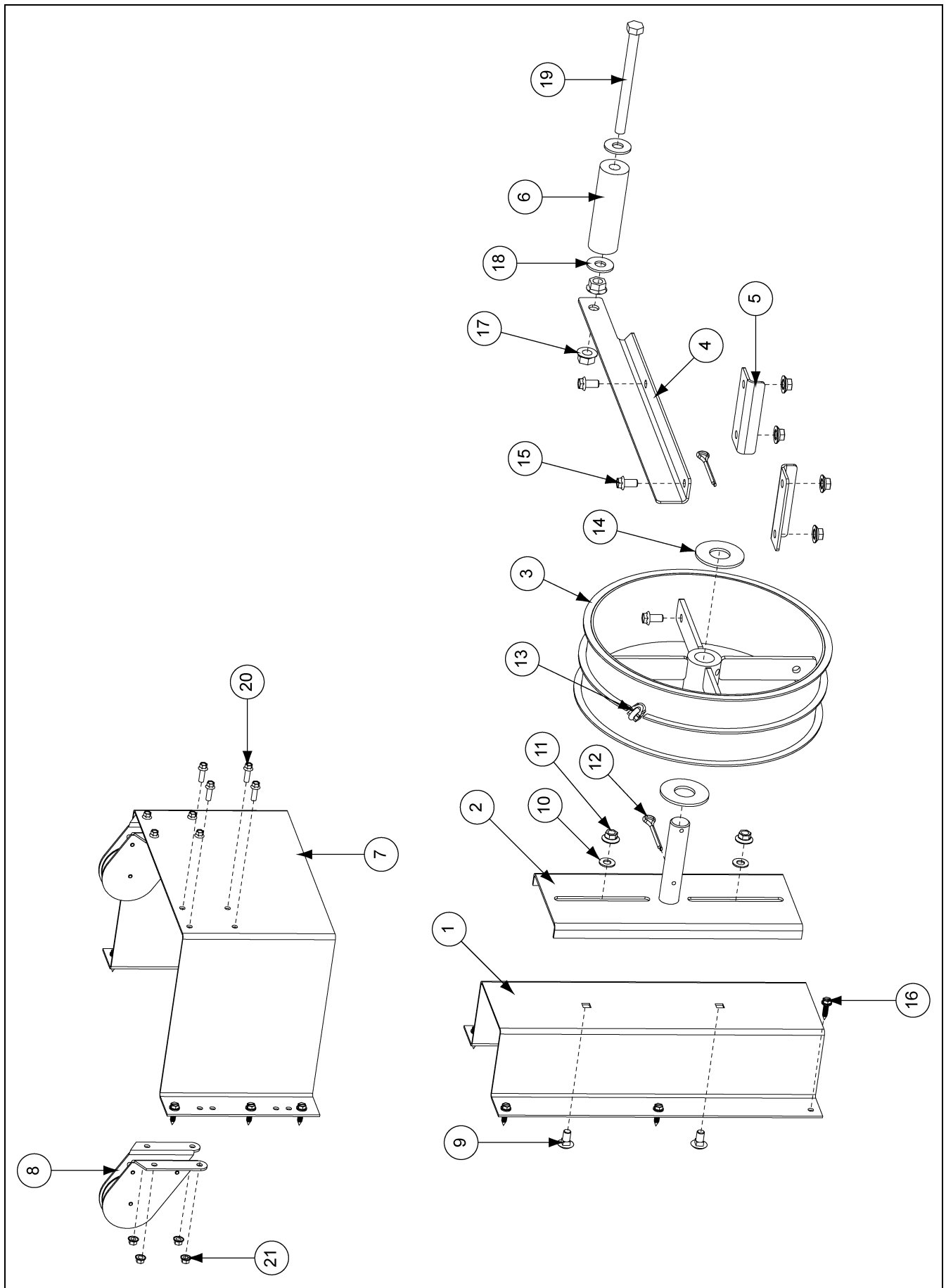
10. Splice the ends of the cable with two (2) cable clamps. With the gate completely open, the splice should be at least 10' away from the pulleys and control wheels.
11. Slide the ground wheel bracket down to take up any slack in the cable and tighten in place.
12. Check the installation by turning the ground wheel clockwise to fully close the discharge gate and counterclockwise to fully open the gate without any restrictions from the cable splice or the clamps on the control wheels.

## Operation of Control Kit

Each control system should be marked to identify which discharge gate is being controlled.

Each control system should be marked after installation to clearly identify whether the discharge gate is open or closed.

# Discharge Gate Ground Control Kit



## Discharge Gate Ground Control Kit

Ref #	Part #	Description	Qty per Assembly
1	8101157	Ground Control Kit Bin Wall Mount Bracket	1
2	8101158	Ground Control Kit Wheel Weldment	1
3	8101537-GY	Ground Control: Wheel Drum Weld 1"	1
4	8101541-GY	Ground Control: Handle	1
5	8101540-GY	Ground Control: Handle Bracket	2
6	GSB-0050	Hand Roller 1-1/2" O.D.	1
7	8101156	Ground Control Kit Pulley Mount Bracket	1
8	PT0550	Pulley, Hot House	2
9	S-7391	Carriage Bolt 3/8"-16 x 3/4" ZN Grade 5	2
10	S-7409	Flat Washer 3/8" SAE ZN Grade 2	2
11	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	6
12	S-6994	Cotter Pin 3/16" x 2" ZN Grade 2	2
13	S-8762	Clamp, 3/16" Cable Zinc Plated	4
14	S-7835	Flat Washer 1" I.D. USS Washer Low Carbon	2
15	S-9067	Flange Bolt 3/8"-16 x 3/4" ZN Grade 5	4
16	S-8166	Screw, SMSAB 1/4" x 1" HWH ZN	12
17	S-8506	Flange Nut 1/2"-13 ZN	2
18	S-2121	Flat Washer 1/2"	2
19	S-8377	Bolt, HHCS 1/2"-13 x 6" ZN Grade 5	1
20	S-8680	Flange Bolt 1/4"-20 x 3/4" ZN Grade 5	8
21	S-7215	Flange Nut 1/4"-20 ZN	8
N/S	8109050	Cable 145' Roll 3/16" Diameter - 7 x 19	1