The location of the discharge controls and the routing of the control chains should have been determined before ordering the Chain Ground Control Kit. The discharge gate controls must be located in-line with the conveyor tube so the control chain will track properly on the control wheels.

The chain should be one continuous length having only one splice. Plan where the splice(s) in the chain will be located (the splice needs to be located so it cannot be pulled onto the sprocket wheel or through a roller).

Although a chain is furnished with the kit, it does not mean the length provided will be long enough for your application. If additional chain is needed and requires more than one splice, make sure to locate the additional splices in the same manner.

The upper wall bracket and the ground control wall plate were designed to be mounted directly to the grain bin wall. Use the existing hardware from the bin wall to attach the bracket and plate to the bin.

The lower chain mount can be mounted to the same bin that the discharge spout is attached to (Example 1 on Page 2), or the lower chain mount can be mounted to an adjacent bin (Example 2 on Page 2). Whichever method is used, both rollers need to either be mounted on the inside or on the outside of the wall bracket.

Locate the lower chain mount about 2’ to 3’ (61.0 cm to 61.4 cm) off the ground (or at a height that is easy and convenient in order to reach the chain above the lower chain mount).

Locate the upper wall bracket (with rollers) at the top of the bin wall so the control chain will clear the eave of the roof or other hanging structures.
Install Chain Ground Control Kit

1. Install spout control sprocket onto drop shaft as shown below. Install the bushing onto the shaft using the 1/4" sq. x 3" long key and tighten setscrews to secure bushing to shaft. Attach the sprocket to the busing using the bolts provided with the sprocket.

2. Attach the two rollers to the upper wall bracket using four (4) 3/8" x 1" bolts and nylon locknuts for each pulley (See Fig. 1 on Page 3).
   - If the controls are mounted on the same bin that the discharge spout is attached to, mount the pulleys on the inside of the wall bracket as shown in Example 1 above.
   - If the controls are mounted to an adjacent bin, mount the pulleys on the outside of the wall bracket as shown in Example 2 above.
Install Chain Ground Control Kit (con’t.)

3. Locate the wall bracket and rollers so they are in-line with the discharge spout control sprocket (this will allow the chain to track properly onto the spout control sprocket). Attach the wall bracket to the top of the bin wall in a position that allows the chain to clear the eave of the roof.

4. Attach each wall plate to the lower chain mount as shown in Fig. 2 below. Secure each bracket using two (2) 3/8" x 1" bolts, four (4) flat washers and two (2) nylon locknuts. Slide the chain mount up so the bolts are at the bottom of the chain mount slots, but at the top of the wall plate slots (See Fig. 2 below).

5. Determine the location of the lower chain mount and attach the wall plates to the bin wall (use the existing hardware from the bin to mount the wall plates). The bottom of the wall plates should be approximately 2’ to 3’ (61.0 cm to 91.4 cm) off the ground.
6. Route the control chain through one of the rollers on the wall bracket and up to the discharge spout control sprocket (make sure the chain is positioned between the roller and the guide bolt). **The chain can be clamped to the wall bracket to keep it from slipping through the bracket and roller while it is being routed up and around the control sprocket.**

- Leave a good portion of the chain hanging below the roller on the wall bracket. This will be the end of the chain that will be spliced. *[this location is only a reference, it does not mean the splice has to be at this location. Just keep in mind that the splice (splices if more than one chain is used) need to be far enough away so it cannot be pulled onto the control sprocket, through a roller, or around the lower chain mount]*.

7. Route the chain down and behind the remaining roller on the wall bracket and down to the lower chain mount (make sure the chain is engaged with the teeth on the sprocket). Keeping the chain fairly taut, route the end of the chain to the portion of chain left hanging below the wall bracket roller. Connect the two ends of chain together using one (1) 3/16” threaded chain coupler. **The lower chain mount has adjustment slots to tighten the chain after it has been installed. If you determine that the chain is still too long, even after this adjustment would be made, cut off the excess chain length and then connect the ends together with the threaded coupler.**

8. Loosen the bolts securing the lower chain mount to the wall plates. Slide the chain mount down to tighten the chain. Retighten the bolts securing the lower chain mount into place. **Note: 120’ (36.58 m) of chain is included with this kit. If more chain is required for your application, keep in mind that the splices cannot be pulled onto the control sprocket, through a roller, or around the lower chain mount. Determine splice locations accordingly.**

**Operation Notes:**
The controls should be clearly marked as to which spout they control to prevent accidently discharging grain into the wrong bin.

Controls should be marked to indicate when a spout is open or closed.
PARTS LIST

Chain Ground Control Wheel Kit
Model PA001609

Ref. No.  Part No.  Description
1       1042186  Lower Chain Mount
2       1011743  Bin Wall Plates
3       1042178  Upper Wall Bracket
4       1042174  Roller Assembly
5       1042193  Chain, 3/16" x 120' long
6       1042190  Coupler, Threaded Chain

Ref. No.  Part No.  Description
7       33060   Bolt, 3/8-16 x 1" G5 PLT
8       33024   Washer, 3/8" Flat PLT
9       33136   Nut, 3/8-16 Nylon Lock PLT
10      1042153  Chain Wheel Ay. (Sprocket)
11      1036838  Bushing, 1" SF QD
12      4046A1   Key, 1/4" sq. x 3" long