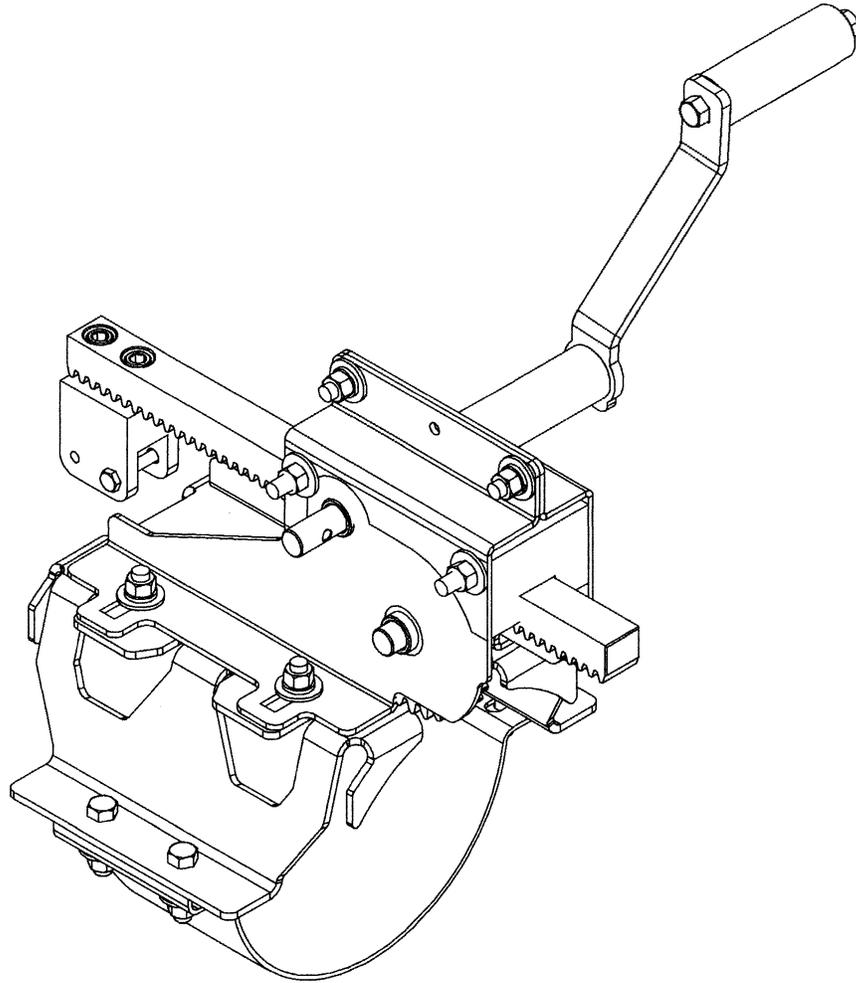


# INSTRUCTIONS

## SHIVERS SLIDE GATE OPENER FOR HORIZONTAL UNLOAD SYSTEMS

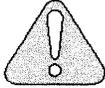


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# INTRODUCTION

Your Shivers Winch style Slide Gate Opener is designed to work with most Shivers Horizontal Unloaders, between the outside of the Bin Wall and the Drive head. It will operate the Slide Gate in the center of the bin by itself, or along with the Intermediate well(s) at the same time.

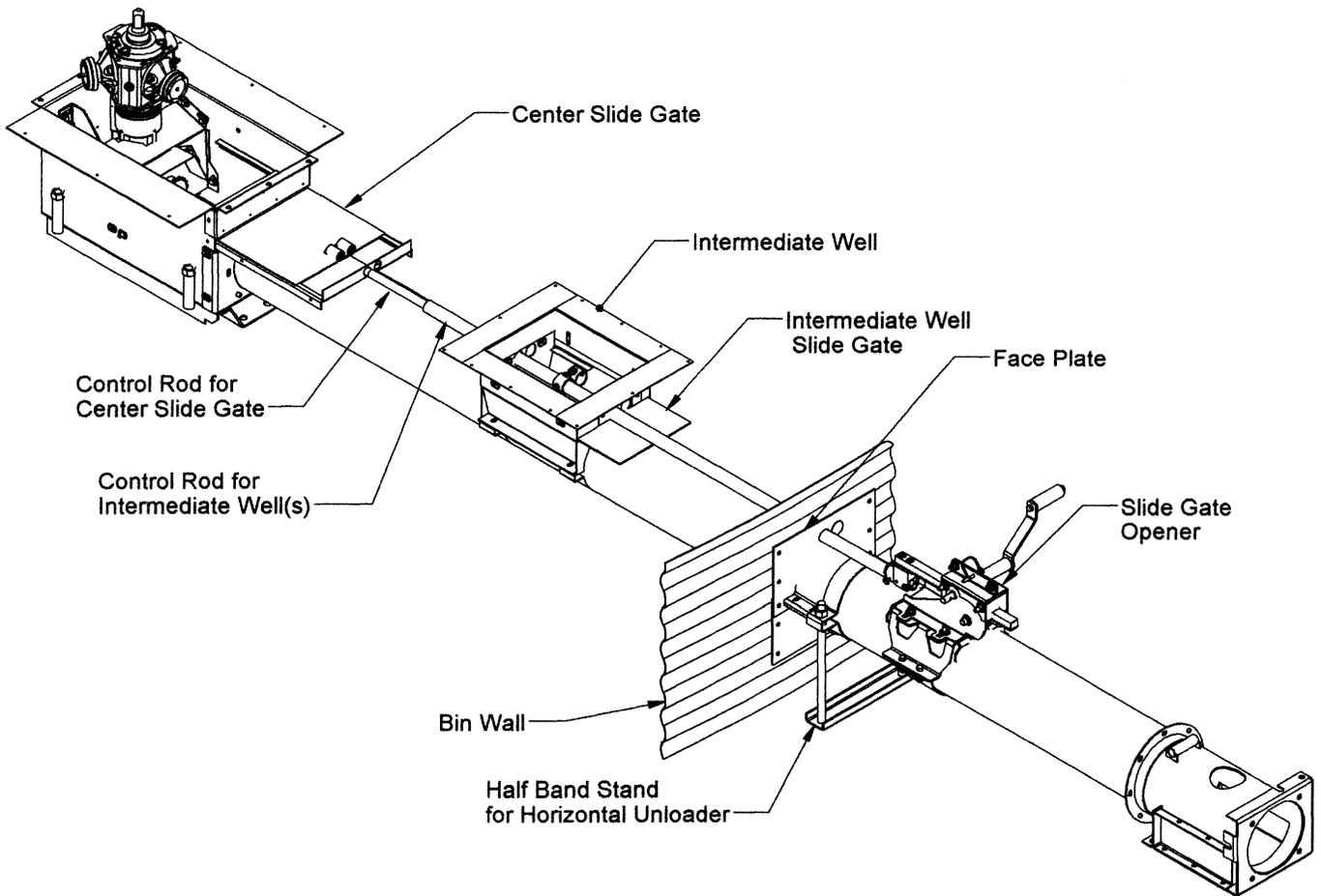


## Before installation:

It will be necessary to make adjustments during the installation from inside the bin, make sure all power to the Horizontal Unloader is disconnected and locked off.

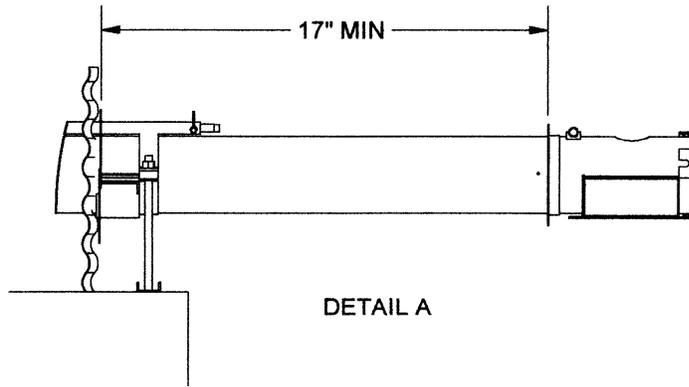
These instructions are written with the assumption the Horizontal Unloader, the Gearbox Basket w/Slide gate, and any/all Intermediate Well(s), are installed in the bin. The Opener can be installed at the time of setting up a new system, or it may be put on a system using our earlier Slide Gate Opener.

There will be references to the Control Rods (not included in this kit) that are related to the opener's operation.



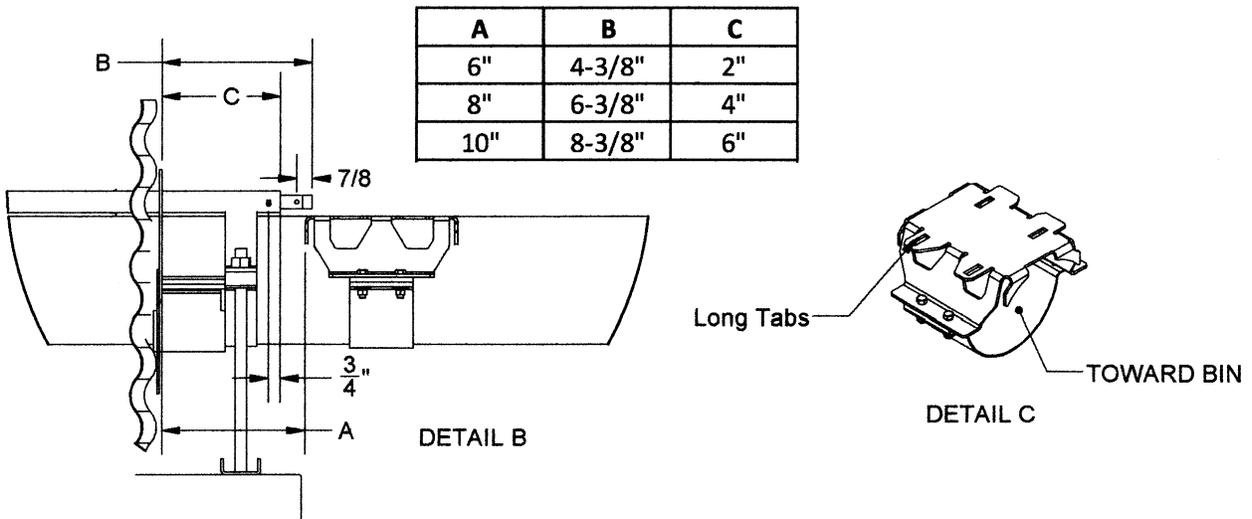
Note: This unit is designed to work where there is a minimum of 17" between the bin wall and the flange of the Horizontal Unloader. (See DETAIL A) It can be installed on units having less than 17", but its' 12-inches of stroke would be reduced. In those cases, you may be able to operate with the reduced opening, or set up the unit to operate with a second pin hole in the control rod (pipe).

The Opener was designed to work with our new 1/2" Pipe Control Rods, but will also work on our earlier 3/8" Pipe Control Rods.



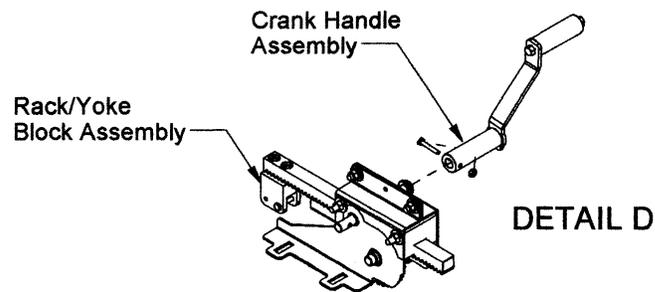
**Installation**

1. Make sure the control rods are installed properly and the slide Gates are all completely shut inside the bin.
2. Cut the small Control Rod at (B)" from the outside surface of the Face Plate.
3. Working around the Small Control Rod, cut off the large Control Rod at (C) from the outside surface of the Face Plate. (See DETAIL B)
4. Drill a 17/64" hole through both sides of the small Control Rod, 7/8" from the end, keep it centered as closely as possible.
5. Drill a second 17/64" hole through both sides of both pipes, 3/4" from the end of the large Control Rod. Keep it centered as closely as possible through both pipes.



6. Place the Mounting Bracket atop the Horizontal Unloader at 6"MIN (A) from the Face Plate, with the long tabs pointing to the right as shown. (DETAIL C) Use a level to position the Bracket on the Tube. Using the 4" wide galvanized halfband, fasten the mounting bracket firmly to the Housing Tube.

7. The Crank Assembly will fit on either side of the unit. Choose the side most convenient for your operation, then, using a 1/4-20 x 1-1/2" L Hex head Capscrew and a 1/4-20 Center locking Nut fasten the crank handle assembly. (See DETAIL D)

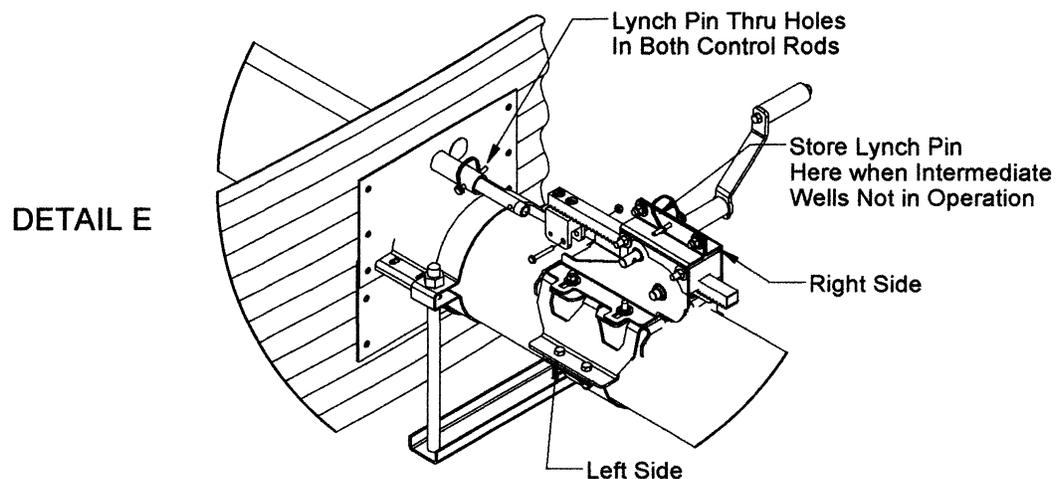


8. Install the Rack/Yoke Block Assembly into the Winch assembly as shown. Start the End of the Rack into the Winch Assembly as shown, then turn the Crank slowly until the Rack retracts 4-6 inches.

9. Set the pre-assembled Winch/Rack Assembly onto the Mounting Bracket and install the Carriage bolts from underneath the bracket. Note: If the Control Rods are centered on top of the Horizontal Unloaders' Tube, slide the Winch/Rack Assembly completely to the left and fasten it in place. If your Control Rods are offset to the right, slide the Winch/Rack Assembly completely to the right and fasten it down there.

10. Actuate the unit all the way back, (toward the Drive), to make sure there is proper clearance for the Rack, if not, it may be necessary to cut clearances to provide unobstructed operation. Be careful not to cut away sections that are supporting the drive or its motor.

11. Actuate the unit all the way forward to fasten it to the Control Rods.



12. Using the 1/4x2" Hex Bolt and 1/4" Center locking Nut, fasten the Small Control Rod into the Yoke Block as shown. (See DETAIL E)

Note: It should not be necessary to remove this bolt at any time, it should be able to stay in place

Note: The Intermediate Wells should always be shut when loading the bin or while drying grain.

(Intermediate Well Slide Gates should only be opened after the bin has been emptied down in the center as far as possible. This is to prevent excess grain against the opposite wall, stressing the bin). NEVER ENTER THE GRAIN BIN DURING UNLOADING

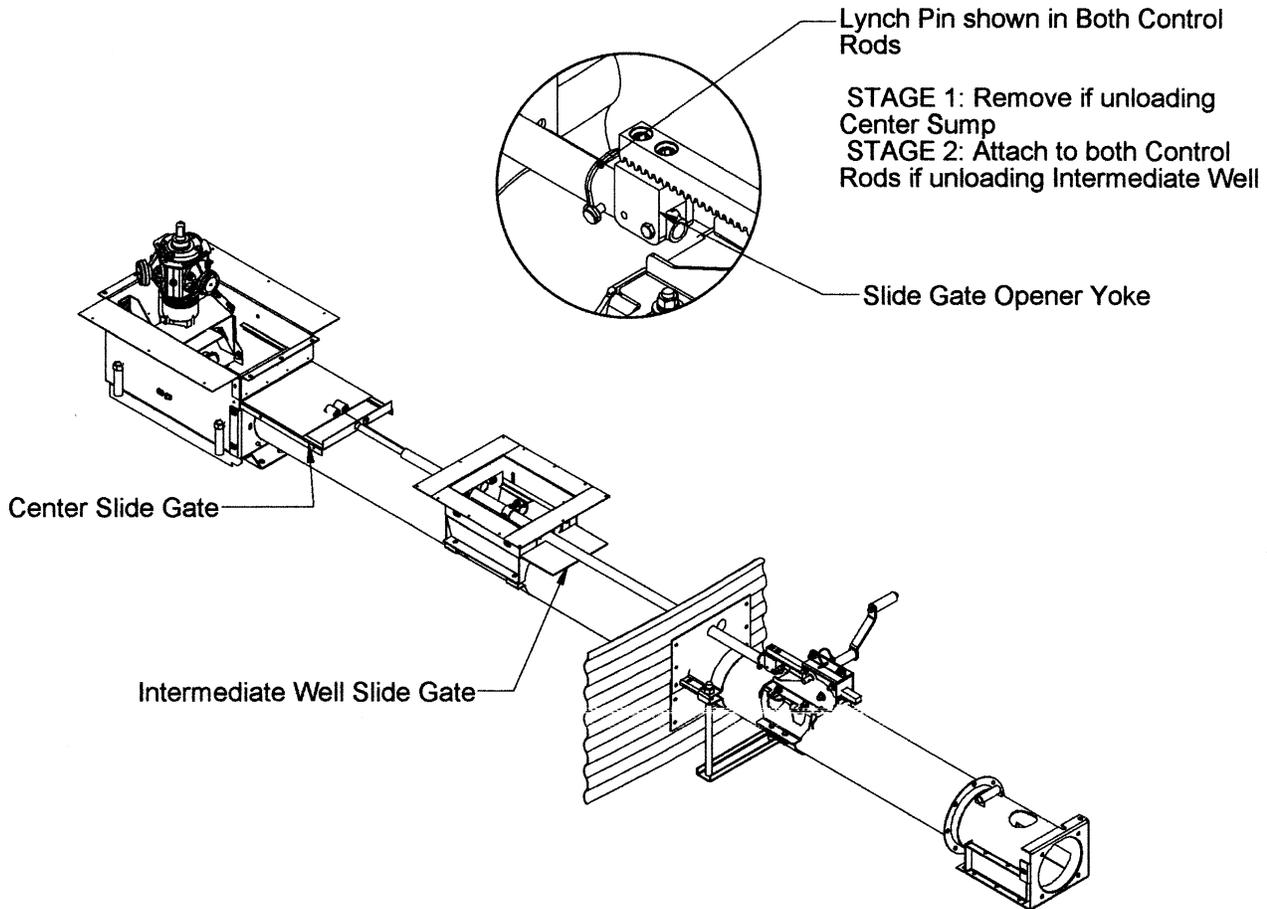
13. Check to make sure the Lynch Pin will go through both Control Rods and operate all the Slide Gates together.

14. Remove the Lynch Pin and insert it into the vacant hole in the Top Flange of the Winch/Rack Assembly for storage (see DETAIL E) until the next time the Intermediate Wells are needed.

(Note: The 1/4" Lynch Pin is to be used only when actuating the Center Slide Gate and the Intermediate Well Gate(s) together.)

**Operation:**

Unloading a Grain Bin with a Shivers Horizontal Unloader that has Intermediate Wells should be done in a 2-Stage process to avoid offset loading of the bin wall.



**STAGE-1 Center Unloading (Intermediate Wells stay closed)**

1. Check to make sure the Lynch Pin is NOT installed and that only the Small Control Rod will be pulled.
2. Drain Bin down as far as the Center Sump can go, (that is: Coned Out, ...and you may want to verify that it is by looking in the bin from the eave)

**STAGE-2 Intermediate Well Unloading**

1. Close the Center Slide Gate and, (using the Lynch Pin provided), pin the Intermediate Well Control Rod to the Center Control Rod.
2. Reopen the Slide Gates and unload what grain will flow into the Intermediate Wells.

Note: After pulling the Slide Gates out, the Lynch Pin should be removed (to prevent accidentally opening the Intermediate Wells at the same time as the Center Slide Gate). (See Page 3, Detail D for Lynch Pin Placement when not in use.)

Note: If set up as shown, the Intermediate Well Control Rod can be pushed back in without having to be pinned. (The Yoke will push it in). Also, the holes for the Lynch Pin should be lined up when the Yoke is in contact with the Intermediate Well Control Rod.

