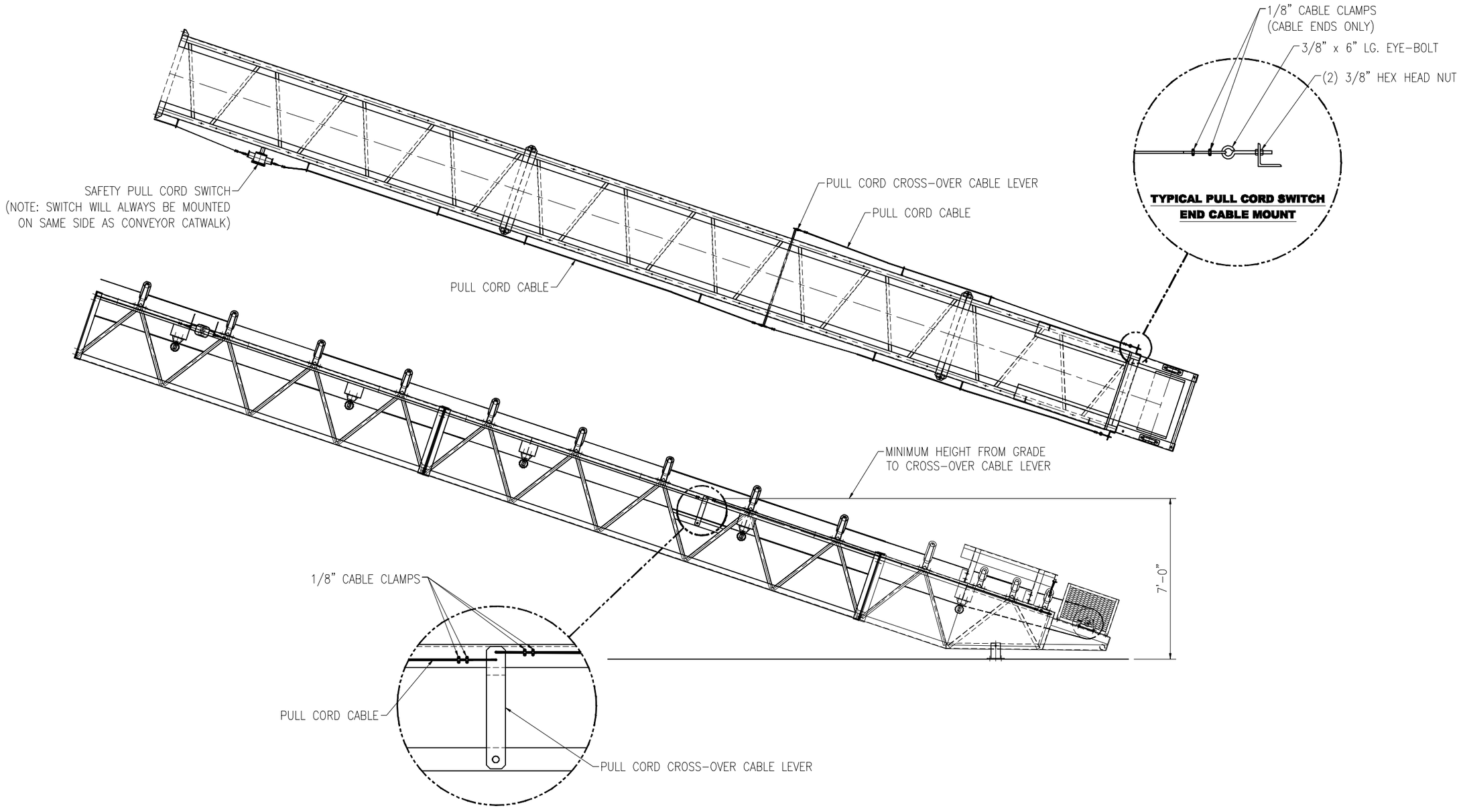

NEXT ASSY.	ECO NO.	DATE	APPR.	NO.	REVISION
				5	
				4	
				3	
				2	
				1	

SCALE 3/16"=1'-0"
DATE 3/8/02
DRAWN KMW | CHECKED
WEIGHT | CHECKED

TITLE
CROSS-OVER LEVER ASSEMBLY
CUSTOMER
SAFETY PULL CORD
LOCATION
CHARGING CONVEYORS

JOB NO.

ITEM CODE **CV**

COPY

CON-E-CO
An Oshkosh Truck Corporation Company
DO NOT SCALE DRAWING
concrete equipment company
237 N. 13th St. Blair, NE 68008
phone:402-426-4811
website:con-e-co.com

PART NO.

SIZE B | REV. | OBS.

DWG.NO 0825-M1

CON-E-CO®

An Oshkosh Corporation Company

A325 BOLT TIGHTENING SPECIFICATION

TURN OF NUT TIGHTENING

When the turn of the nut method is used to provide the bolt tension specified in subsection 5(a), there shall first be enough bolts brought to a snug tight condition to insure that the parts of the joint are brought into good contact with each other. Snug tight is defined as the tightness attained by a few impacts of an impact wrench or the full effort of a man using an ordinary spud wrench. Following this initial operation, bolts shall be placed in any remaining holes in the connection and brought to snug tightness. All bolts in the connection shall then be tightened additionally by the applicable amount of nut rotation specified in table 4, with tightening progressing systematically from the most rigid part of the joint to its free edges. During this operation there shall be no rotation of the part not turned by the wrench.

REUSE

A490 bolts and galvanized A325 bolts shall not be reused. Other A325 bolts may be reused if approved by the engineer responsible.

Retightening previously tightened bolts which may have been loosened by the tightening of adjacent bolts shall not be considered as a reuse.

TABLE 4
NUT ROTATION * FROM SNUG TIGHT CONDITION

Both Faces Normal to Bolt Axis	Bolt Length (As measured from underside of head)	One Face Normal to Bolt Axis (No Bevel Washers)	Both Faces Sloped to Bolt Axis (No Bevel Washers)
1/3 Turn	Up to 4 Diameters	1/2 Turn	2/3 Turn
1/2 Turn	Over 4 Less Than 8	2/3 Turn	5/6 Turn
2/3 Turn	Over 8 Less Than 12	5/6 Turn	1 Turn

*Nut rotation is relative to bolt, regardless of the element (nut or bolt) being turned. For bolts installed by 1/2 turn and less, the tolerance should be plus or minus 30°; for bolts installed by 2/3 turn and more, the tolerance should be plus or minus 45°.

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Electrical Connections & Check-Out Of Motor Rotations - 230/460

When hooking up to 230/460V public power where one phase is higher voltage than the others (wild leg), this phase must be connected to the right hand pole of “C” phase of the electrical service panel. Normally this lug is painted red in the panel.

With all circuit breakers in the off-position, power can be turned on at the main discount. Turn breaker feeding three phase power to control transformer in service panel on. Check the secondary voltage out of the control transformer. THIS VOLTAGE MUST NOT EXCEED 120 VOLTS. This is the control voltage for all plant functions. Turn on 10 amp breaker finding control voltage to L1 terminal this will supply control power to batch control or manual station. Turn on keyswitch on batch control or manual station and verify that there is 120 volts on terminal X1 in plant service panel.

The motor rotation can be checked on the air compressor by a rotation arrow on the motor or sheave guard. With plant control power turned on, turn the air compressor breaker on and off to see if rotation is right. If rotation is correct, let compressor run until pressure switch shuts it off (approximately 150 PSI on gauge).

Rotation of the remainder of the three phases motor on the plant will need to be checked. For belt conveyors observe the direction of travel of the conveyor belt. For screw conveyor a directional arrow can be found on the screw housing on the discharge or inlet end. The blowers can be checked by taking off hose on air discharge line. Air will blow from exposed hose end. For all other components directional arrow should be location on the component.
IMPORTANT: Be sure to install earth ground to ground lug in service panel.

Water Connections

The connections to be made would be to simply attach the water supply piping to either the strainer that is attached to the water meter or to the water pump. Hose may be used to do this, however, when attaching hose directly to the pump it must be a wire wound suction type.

If pumping out of a storage tank without a head pressure, a foot or check valve must also be used.

GUIDELINES TO GROUNDING SAFEGUARDS
ON ELECTRICALLY POWERED EQUIPMENT

1. Each electric drive motor must have its frame electrically bonded to it controlling starter. This is to be by a conductor of equal size to the conductors feeding power to the motor. The bonding shall be by the junction box mounting bolt at the motor end, and by a starter mounting bolt at the starter end. The bonding must be by tight connection of clean metal to clean metal.
2. All electric motor starters on a unit (separate piece of equipment) must have their cases (enclosures) bonded to each other, and to the metal structure of the unit.
3. All individually mounted push button units (not mounted on the starter covers) must have their cases (enclosures) bonded to the starter enclosure or enclosures.
4. When electric drives are used on one or more portable units (separate pieces of equipment) in an installation, the metallic supporting structures of all units used in that installation must be bonded to each other by a bonding wire having a size rating of not less than #6AWG, and equal in size to the largest power supplying conductor. It is especially important to at portable units using no electric drive b bonded to electrically driven units.
5. The starter or ground of starters on each unit must have their cases (enclosures) bonded to the main power supply disconnect case (enclosure). This may be a grounding conductor or conductors in the power supply cable(s).
6. The main power disconnect case (enclosure) must be bonded to the ground approved by the power supply company when electrical energy is purchased, or to the generator common-ground when electric energy is being generated by one or more engine-generator sets.
7. Each generator of engine-generator installations must have its case (frame) bonded to the neutral connection of the generator power windings. This connection we refer to as the “common generator ground”.
8. The common generator ground(s) must, wherever possible, be connected to a driven or plate earth ground in accordance with Article 250, Section H, of the 1993 National Electric Code.
9. In addition to the earth ground at the common generator ground(s), there must also be at lease one earth ground of the driven rod type or plate type to which the metallic supporting structures of the units are bonded. When operating a ground of highly portable units, such as in a quarry installation, the portable unit or units nearest the moist earth (quarry face) and nearest the metallic mounted equipment (tract mounted shovel, etc.) shall have earth grounds.
10. When plugs and receptacles are used as a means of disconnecting power supplying or distributing lines, the plugs and receptacles shall have separate connections for the bonding wire(s). Wherever possible, these connections should be by separate pins rather than by the plug and receptacle cases.
11. Damaged electric power supply cables and damaged electric power distribution cables are hazardous. All exposed electric power supply conductors or exposed electric terminals must be guarded against accidental contact by operating personnel.
12. Manufacturers of equipment using electrical products cannot be responsible for owners and operators safety unless the above recommendations are followed.....**PLAY SAFE.....ELECTICAL CURRENTS CAN KILL!**