

- INSTALLATION -- MAINTENANCE -- PARTS MANUAL -



MODEL "22ACDE / 251ACDE" AIR OPERATED ZERO PRESSURE CHAIN DRIVEN PALLET ACCUMULATOR ASSEMBLY AND OPERATING INSTRUCTIONS

RECEIVING INSTRUCTIONS

- 1) Prior to uncrating the equipment, check the number of crates, boxes, skids, etc. received against the freight bill to insure that all items shipped are on the job site.
- Check to see that none of the equipment was damaged in transit. If damages occurred, note damages on freight bill and immediately contact the motor carrier and file claim for the damages.
- 3) Transport conveyors on their skids as near the installation site as possible.

INSTALLATION INSTRUCTIONS – MECHANICAL

 Remove conveyor sections from their skids and place on floor in proper sequence based on the match mark identification on the conveyor sections and direction of product flow. (See Figure "0" for clarification). If fork lift is used make sure forks or fork extensions are long enough to support both side rails of conveyor.



- Beginning with the first section in match mark sequence, and while raised using fork lift, bolt a support at each end, leaving a space for the second bed section on pivot plate. Remember to set stands at proper elevation while section is raised. (See Figure "1" for support positions). Finger tighten bolts only and place into position.
- 3) Remove the next intermediate sections (from skid, using fork lift) in the match mark sequence and add one stand to far end, bolting on 1/2 of pivot plate. Place in correct position and attach end without stand to previous section. Repeat this procedure until complete conveyor is assembled.



- Do not wrench tighten bolts until unit is assembled, aligned, and lagged to the floor.
- 5) Align Conveyor To align conveyor, tie a chalk line to the exact center of the conveying surface at each end of the conveyor and pull it tight. Take each section of the conveyor starting at one end and align the frames so that the chalk line is in the exact center of each section of the conveyor.

6) Remove front guard from each conveyor section to expose zone to zone RC60 drive chain. (See Figure "2"). Check sprocket alignment with straight edge prior to installing drive chain. Install RC60 chains from section to section on double sprockets and fasten with connecting link. Make sure chain rides over UHMW wear bar as shown in Figure "2".



- 7) RC60 zone to zone drive chains have been properly tensioned at factory. If chain should need adjustment, the UHMW plastic wear bar may be raised by loosening its bolts and sliding it up in the vertical slot. DO NOT OVER TIGHTEN CHAINS. TIGHT CHAINS CAN CAUSE PREMATURE WEAR OF DRIVE COMPONENTS OR DAMAGE TO OTHER PARTS.
- 8) Make air line and electrical connections at conveyor joints (See Figure "3").





- Replace chain guards after chains are installed and ensure chains have been checked for proper tension.
- 10) Install shaft mount reducer/motor per Figure "4".



- 11) Install lag bolts (not furnished) through holes in support feet.
- 12) Wrench tighten all bolts and recheck alignment.

INSTALLATION INSTRUCTIONS – ELECTRICAL

- Connect power to the electric motor in accordance with the name plate on the electric motor. Electrical controls for starting and stopping the conveyor are not supplied as part of the conveyor equipment. Contact a qualified electrician to recommend and install suitable electrical controls for this function.
- Zone #1 (discharge zone) is equipped with cable with open wire leads (supplied as part of conveyor) to control load release. The logic to control this switch is not supplied as a standard part of the conveyor. (See Figure "5")
- 3) Connect 110V to power supply.



SAFETY INFORMATION

 After completion of conveyor installation and BEFORE operation, personnel operating the conveyor must be properly trained in its use. It is recommended these employees be walked through the proper sequence of starting and stopping the motor drive, shown where hazardous areas exist along the length of the conveyor (identified by safety labels attached to the conveyor frame and drive guards) and correct loading and unloading methods. Make sure safety labels are legible and that personnel understand their meaning.

- 2) Conveyor should **NEVER** be operated with any of the safety guards removed as physical harm could come to the user. All pinch points of the conveyor are guarded and also identified by safety labels attached in the guarded pinch point area. Instruct users to turn the conveyor off and notify the proper personnel should a guard be missing and the conveyor is running.
- 3) Only qualified maintenance personnel should perform work on the conveyor. Should the unit require maintenance, disconnect conveyor motor drive from power source before attempting to adjust or repair conveyor. If guards were removed to perform the maintenance task, they must be replaced before attempting to operate conveyor. If guards are damaged and become unusable they must be replaced. Locate the conveyor's serial number plate, which is mounted near the motor drive, and contact your ACSI distributor for a replacement. He will need the serial number of the conveyor to secure the correct guard.

SEQUENCE OF OPERATION

LOADING THE CONVEYOR (See Figure 6)

- Model "22ACDE" is loaded at infeed end of conveyor. The first load travels to Zone #1, blocking Photo Eye "A". A zone release cable is provided to control the zone for accumulation or transportation. (See Drawing FAD-128 for wiring connections.)
- 2) Second load travels into Zone #2, blocks Photo eye "B," and comes to rest.
- The Model "22ACDE" will continue to accumulate at "zero pressure" until conveyor is fully loaded.





UNLOADING THE CONVEYOR

- Switch zone release cable to transport mode. When load in Zone #1 has cleared PE "A," load in Zone #2 will advance. When load in Zone #2 has cleared PE "B," load in Zone #3 will advance. All loads will continue to advance in this fashion as long as empty zones exist down stream.
- An optional feature to batch release all loads at once is available. See Drawing FAD-128 for wiring connections.
- NOTE: The above sequence of operation covers the standard operating procedures of the "22ACDE." For other options that are available for special applications or requirements contact factory.

PREVENTATIVE MAINTENANCE

(See Lubrication and Maintenance Check List for more details.)

- DRIVE CHAINS Every 500 hours Wipe off grease with solvent and apply clean SAE 20 motor oil. Check tension on main drive chain (1/4" - 2% (of sprocket centers) movement midway between sprockets). Use straight edge and check sprocket alignment.
- ELECTRIC MOTOR Every 1000 hours Remove grease plugs (if supplied on motor) and grease motor bearings sparingly with ball bearing grease.
- SPEED REDUCER Every 750 hours Remove filler and drain plugs. Flush and refill with lubricant suggested by reducer manufacturer.
- TREAD ROLLERS Every 500 Hours Make sure all rollers turn freely. Replace any that are dented, warped, binding, etc.
- 5) FLANGE MOUNTED BEARINGS (PULLEYS) Every 1000 hours - Grease pulley bearings through grease fittings using grease gun. CAUTION: Do not over grease.
- ENTIRE CONVEYOR Daily, weekly. Look for any abnormal action of conveyor, oil leaks, unusual noises, etc. Repair at once.

– PARTS LIST – 22ACDE / 251ACDE





NOTES: