



TragenFlex

INSTRUCTION MANUAL FOR MODEL TAC

TRAY ACCUMULATOR CONVEYOR SYSTEM



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OPERATING INSTRUCTION MANUAL FOR MODEL TAC TRAY ACCUMULATOR CONVEYOR SYSTEM

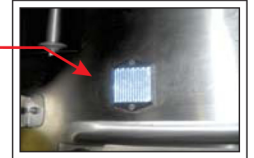
1. GENERAL DESCRIPTION

The Tray Accumulator Conveyor system forms an integral part of the soiled dish table. It is designed to accumulate soiled trays from the cafeteria to the dish room for scrapping and sorting. Do not attempt to convey any kitchen equipment such as pots and pans, overloading will seriously damage this unit.

1.1. OPERATION

1.1.1. START UP PROCEDURE

1. Make sure that all the carriers are sitting correctly on the ladders.
2. Make sure nothing is in the way of the photo sensor.
3. Turn the MAIN DISCONNECT switch to the ON position
4. Then push the green 'START' button & set your desired speed. Running the conveyor at higher speed may not provide adequate time for loading or unloading.
5. If tray accumulator doesn't start even after pushing the start button, check for any improperly loaded tray at tray drop. Insert the tray properly to start the TAC.



1.1.2. SHUT DOWN PROCEDURE

1. Reduce speed of conveyor to zero.
2. Press the red stop button and then turn off the main disconnect switch.
3. Clean photo sensor reflector with a soft damp cloth. If the reflector is dirty or scratched it may not operate properly.
4. Carriers & ladders are removable and should be removed for washing when needed.
5. Spray down carriers & ladders to clean. Do not spray upward where the chain drive is.



2. MAINTENANCE

2.1. MAINTENANCE SCHEDULE

The following maintenance schedule is recommended for the trouble free operation of the Tray Accumulator System.

2.1.1. DAILY

1. Hose down the conveyor and conveyor beds to remove foreign material. Never direct the hose to the main control panel or the auxiliary controls or up into the chain area.
2. Clean up and replace all basket strainers.



2.1.2 MONTHLY

1. Remove all tray carriers and ladders and wash them
2. Check to make sure that none of the tray carriers or ladders are damaged or missing. If additional parts are required please contact TragenFlex with part and model number.
3. Inspect the photocell to make sure that it is clean and centered. A misaligned photocell will not detect the trays.



2.1.3. SEMI-ANNUALLY

1. Inspect the chain for slack and remove if necessary (see section 2.2).
2. Lubricate the chain & flange bearings that are located on either end of the conveyor.
3. Inspect the sprockets, shaft and bushings for wear. Please replace the worn parts.

2.2. CHAIN TAKE UP

The TragenFlex Tray Accumulator Conveyor utilizes only one chain, which is known as the drive chain. This chain is located at the top of the tray accumulator unit. Generally this chain never needs any replacement in its service life. However it is required to remove accumulated stretch in the chain time to time, for the smooth operation of the equipment. This can be accomplished either by extending the frame (Recommended for small adjustments) or by removing one of the chain links (Recommended for larger adjustments).

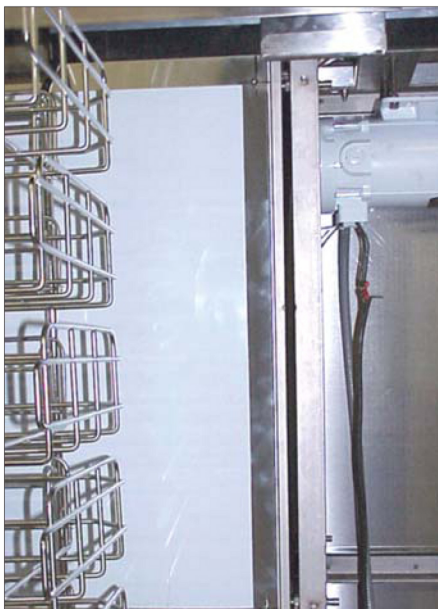
2.2.1. CHAIN TAKE UP FRAME

The chain take-up of the tray accumulator system involves extending the frame of the unit. This should be preformed if small adjustment is needed (0-3 inches).



Disconnect the main power to the conveyor and turn off main circuit breaker.

Remove the side panels on the drive end of the machine on both sides.



Locate the chain take-up bolts at the top and bottom on ether side.



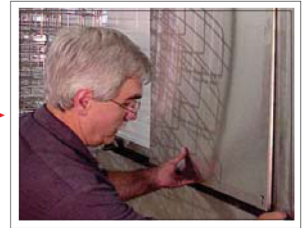
Adjust all the bolts by turning equally on either side at the each end in order to keep the chain centered and keep the frame aligned.

Before replacing the panels run the system to make sure that the operation is smooth and chain take-up is adequate. Extreme care to be taken during the test run of the equipment with exposed chain to avoid any accident.

Stop the accumulator and replace all the panels

2.2.2. CHAIN TAKE UP CHAIN-LINK

1. Disconnect the main power to the conveyor and turn off main circuit breaker.
2. Remove the hood panel, curved end panel and both side panels on the drive and the tail end of the machine.
3. Reset the frame take-up bolts (see section 2.2.1) in proper position, which allow the small adjustment in future.
4. Disconnect the chain at the location of the chain link.
5. Please note that there is a certain distance required to be maintained between the 'J' Hooks that are connected to the chain. Hence never remove more than one chain link between the 'J' Hooks.
6. Reconnect chain links and then run the unit.
7. Make any fine adjustments if necessary.
8. Once adjustments have been made, replace the side covers.



2.3. ELECTRICAL SYSTEM

The electrical system control unit contains all the electrical components required for operation of the conveyor control. There may be auxiliary start-stop stations in addition to the main control panel. Check the schematics for details. The main control panel is NOT waterproof. Under no circumstances shall the control panel be hosed down with water.

Note: Most Tray Accumulators feature photo sensor with reflector, If trays are improperly loaded, or sensor/ reflectors is damaged unit may not run.

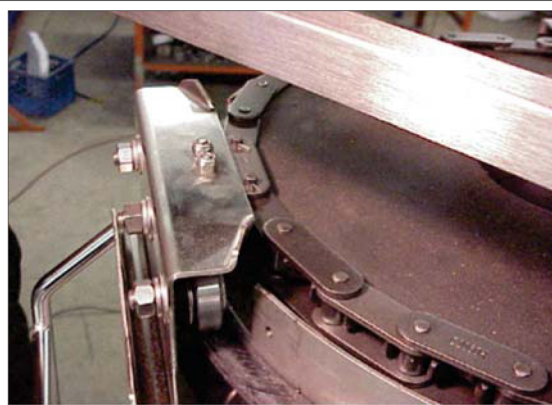
2.4. REPLACING SPROCKETS

At the time of replacing the sprockets, check if the shaft and bushings are required to be replaced. Please follow the steps when replacing the sprockets.



Disconnect the main power to the conveyor and turn off main circuit breaker.

Remove the hood panel, curved end panel and both side panels on the drive or tail end of the machine depending upon the sprocket location



Disconnect the chain at the location of the chain link. Remove the chain out of the sprocket that needs a replacement.

Remove the old sprocket. At this point inspect the shaft and flange bearings for wear and replace if necessary. Insert a new sprocket. Assemble and connect the chain. Adjust the chain take-up if necessary



Before replacing the panels run the system to make sure that the operation is smooth and chain take-up is adequate. Extreme care to be taken during the test run with exposed chain

Stop the accumulator and replace all the panels

2.5. REPLACING GEARBOX MOTOR

Before replacing the Gearbox Motor, inspect the electrical connections and condition of the brushes to make sure that motor is defective. For a spare motor, please contact TragenFlex with the details such as model number and make.

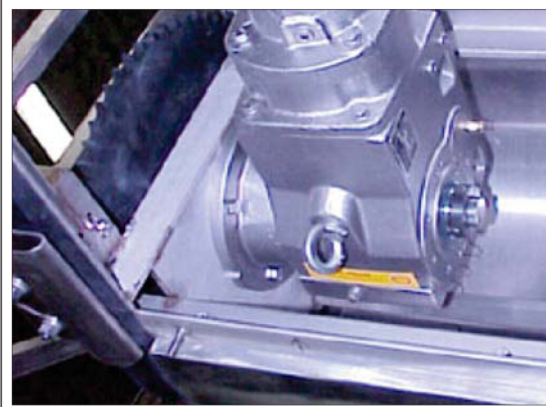
Note:Please remember that a licensed electrician should perform the service. Follow the steps given below to replace.



Disconnect the main power to the conveyor and turn off main circuit breaker.

Remove the hood panel, curved end panel and both side panels at the drive end of the machine

Remove the key between the drive shaft and the drive sprocket. Remove the drive sprocket and the gear motor



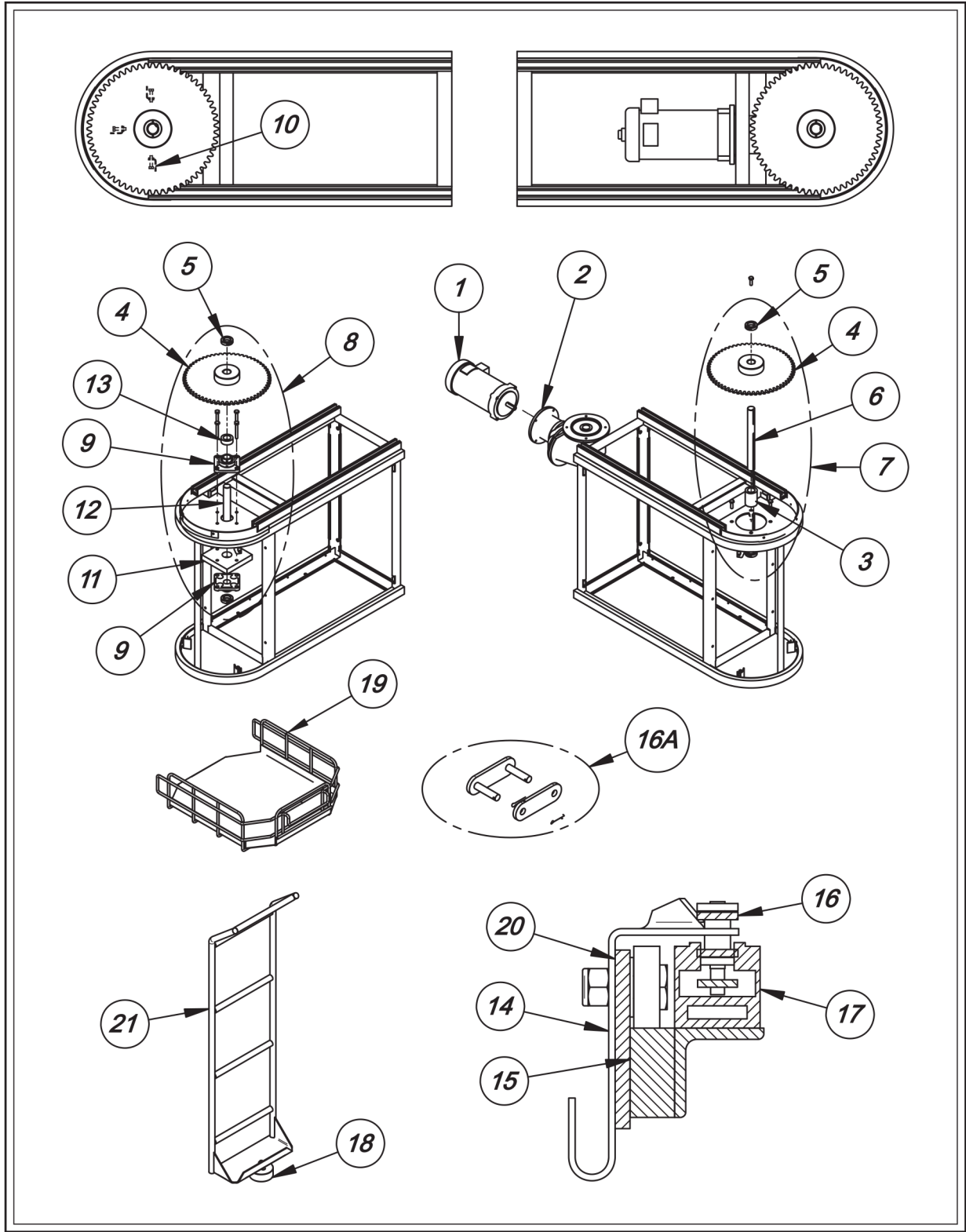
Replace the new motor and perform the necessary electrical connections. Turn on the power to check the direction of rotation.

If the direction is okay replace the drive sprocket and the key

Assemble the chain and adjust the motor take-up replace covers, and then test run the conveyor

PROBLEM- MECHANICAL	PROBABLE CAUSE	SOLUTION
Trays seem to whip around corners	<p>Tray holders or ladders are not properly mounted.</p> <p>Speed of the conveyor is too high.</p>	<p>Make sure that all tray holders and ladders are properly mounted.</p> <p>Reduce the conveyor speed</p>
Conveyor has stopped abruptly or does not run when start button is pushed.	Some trays might have missed the photocell and stuck between the conveyor and the wall.	Stop the conveyor immediately, shut down power using main disconnects at control panel and inspect conveyor for any jam ups.
Start button pushed but system does not work	<p>Photocell detector is sensing an object and not allowing system to run.</p> <p>Speed knob on the main control panel is set at zero.</p> <p>Building power supply is not on.</p> <p>Main power breaker is not on.</p> <p>Main control panel fuses have blown.</p>	<p>Check to make sure that all trays are clear from photocell detector.</p> <p>Check the speed knob on the main control panel to make sure that speed is not set at zero.</p> <p>Make sure the building power supply is on.</p> <p>Verify if the main power breaker is on.</p> <p>Replace the blown fuses. If they blow again check the chain track to make sure that nothing is seizing up the chain causing the fuses to blow. If the problem still persists, please refer to the electrical schematics to resolve the problem.</p>

Note: If you continue to experience problems please notify TragenFlex ASAP.



TAC - TRAY ACCUMLATOR PARTS LIST

DWG REF #	PART NO.	DESCRIPTION
TAC 1	8701106	DC Drive Motor
TAC 1A		AC Drive Motor
TAC 2	8202505	Gear Reducer
TAC 3	0020147	Choke Spacer
TAC 4	8103300	Sprocket
TAC 5	8447700	Shaft Collar
TAC 6	0020145	Drive Shaft, 1 3/16"
TAC 7	0020140	Drive End Sprocket Assembly
TAC 8	0020150	Tail End Sprocket Assembly
TAC 9	810220	Flange Bearing with Hardware
TAC 10	0020520	Coupling Unit
TAC 11	0020541	Mounting Plate
TAC 12	0020543	Tail Shaft, 1 3/16"
TAC 13	0020542	Tail End Spacer
TAC 15	0025102	Rail Guide with Hardware
TAC 16	8117400	Double Pitch Chain
TAC 17	0025002	Aluminum Chain Guide Rail
TAC 21	0022160	Carrier Frame 3 Tier
TAC 21A	0022110	Carrier Frame 4 Tier
TAC 21B	0022150	Carrier Frame 5 Tier
TAC 22	8711201	Photo Sensor
TAC 23	8711204	Photo Sensor Reflector

4. WARRANTY FOR TRAY ACCUMULATOR CONVEYOR

4.1. WARRANTY PERIOD

TragenFlex warrants its products to the original purchaser against the defects in material and workmanship, under normal use and service for a period of one year after the date of installation.

4.2. WARRANTY COVERAGE

The obligation of TragenFlex under this warranty is to repair or replace any defects in the equipment. All the services covered under the warranty will be provided by TragenFlex during the regular working hours. All claims against this warranty must be made in writing. Equipment must be serviced either by technicians of TragenFlex or agents authorized by TragenFlex. All warranty parts will be shipped to the client via ground transportation. The following items are not covered under this warranty:

Normal wears on parts including sprockets, shafts, bushings, rail guides & rollers

Conveyer jams due to the improper insertion of the trays in the carrier basket, equipment damage due to the power surge or overload trips. TragenFlex is not liable for any faulty installation, damage, mechanical and electrical failure caused by unauthorized alteration, misuse or abuse of the equipment.

4.3. GENERAL

Liability or obligation in connection with the products of TragenFlex other than those covered in this warranty by any other person's assumption is not authorized by TragenFlex. This warranty is limited to the United States and Canada.



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