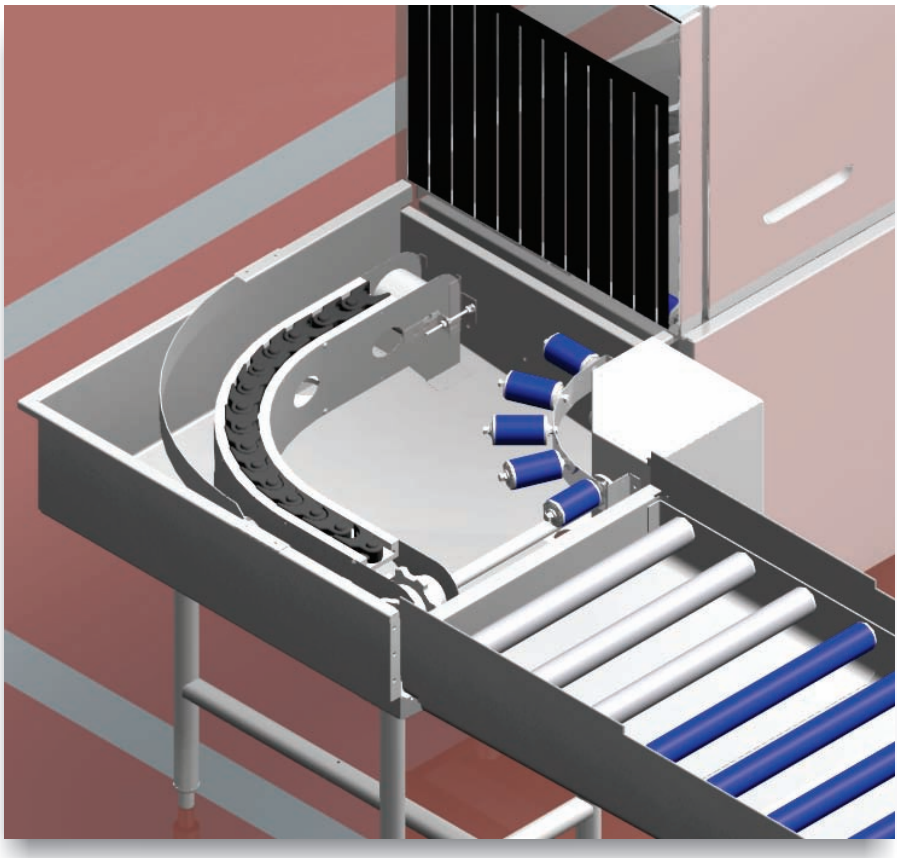
Installation, Maintenance and Operating Instruction

“TITE-TURN UNLOADER”

90 and 180 Degree Turns



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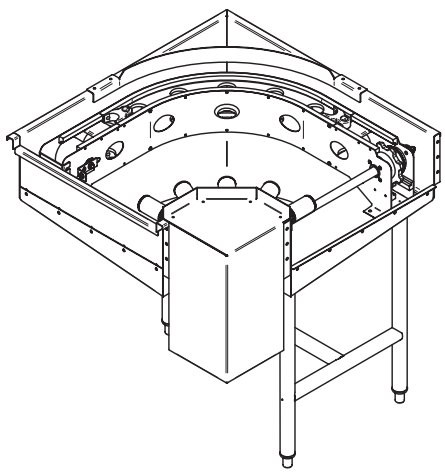
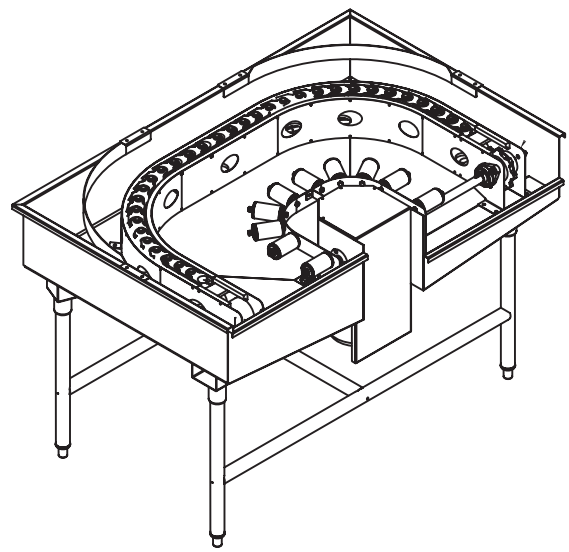


90 Degree Tite Turns



180 Degree Tite Turns

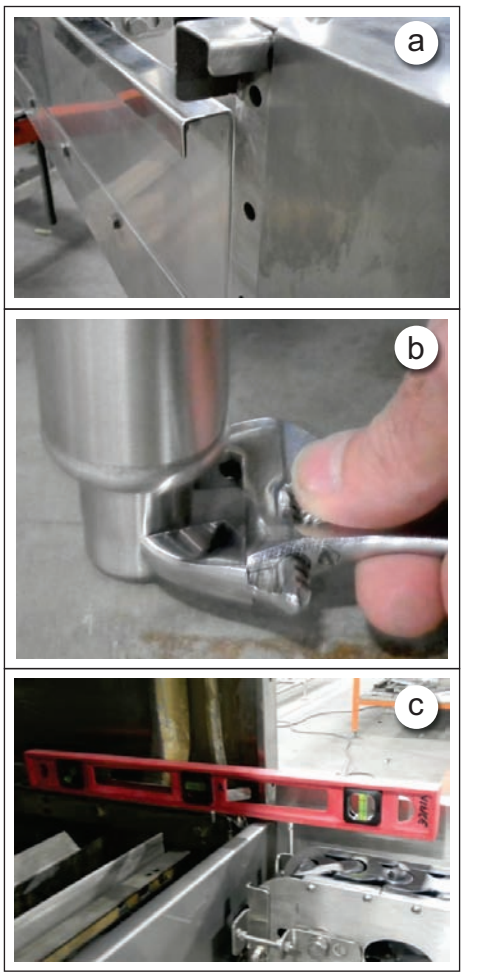
1. **General:** Read all the information in this manual carefully, as it contains important instructions regarding the correct, effective and safe use of this product. Keep this manual in a safe place so that it can be referenced when needed. The Aerowerks Tite Turn Conveyor is typically connected to the unload end of a dishwasher rack machine. It will transport 20" x 20" dish racks from the dishwasher and convey them 90 degrees in a 34" foot print to a clean roller table. The Tite Turn has it own drive system and requires a power supply.

2. **Unpacking:** The Tite Turn Conveyor is shipped on a skid with the legs attached to the conveyor. Remove all packing material and place on the floor. Check for any shipping damage, if any is noted, call Aerowerks customer care immediately.

3. **Installation:**
   a) Move the Tite Turn conveyor to the unload end of the dishwasher and hook the "J" lip over the dishwasher end wall. The panel with the "J" lip is adjustable up and down and must be tightened after is set.

   b) Next is to level the conveyor and adjust the height by turning the adjustable bullet feet up or down. The Knuckle belt must be level with the dish rack guide rail in the dishwasher. If it is too high or lower dish racks will not transfer properly. This unit must operate with an Aerowerks clean roller table.

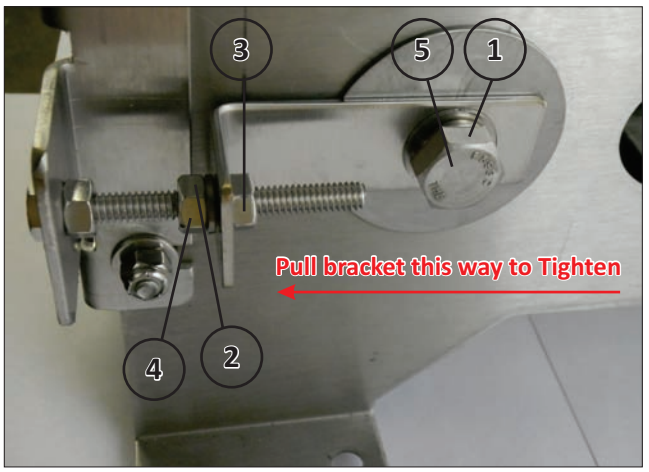
   c) The connection between the clean table and the Tite Turn is also a "J" lip and is mounted the same way. When leveling the clean table, the rollers must be level with the Knuckle belt. When everything is in place and leveled, the unit should be locked together by either tack welding together or use a couple of stainless steel sheet metal. The screws or tack welds should be at the front and back side of the dishwasher and each side where the clean table connects to the Tite Turn.



4. **Electrical:** Please refer to the electrical diagram in the control panel before any electrical work is performed. Check the control panel data plate for correct incoming power to be supplied and proceed to connect. Next connect the control cable and table limit switch to the dishwasher. **Please Note:** Section 14 has a detailed electrical procedure.

5. **Plumbing:** There is one $1\,^{1}/_{2}$" drain that needs to be connected. All gaps should be silicone sealed where Tite Turn connects to the dishwasher and clean table.

6. **Take-up:** The Knuckle belt take up should be adjusted regularly. This is done by loosening the lock nuts on the take up. Turn the two bolts to pull the idler drum out to tighten the belt. Then tighten the lock nuts. **Before starting for the first time check the belt tension.**

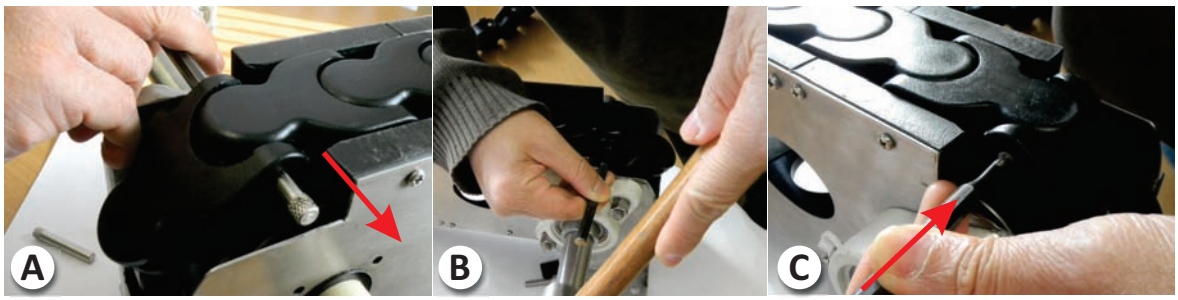


1. Loosen both Nuts
2. Loosen Nut
3. Tighten Nut
4. Tighten both Nuts
5. Tighten both Sides

7. **Starting / Stopping Instructions:** Turn the main disconnect to the on position on the gray panel under the Tite Turn. Now the dishwasher control panel will operate the Tite Turn. When the dishwasher runs so will the Tite Turn and when the dishwasher stops, the Tite Turn will also stop. During the wash cycle when dish racks are being cleaned and loaded onto the Tite Turn which proceeds to the roller table, a table limit switch will shut everything down when there is no more room for a dish racks. Once the table limit switch area has been cleared, the system will automatically start to operate again.

8. **Removing the Belt:** If the conveyor belt jumps out of the track, this can easily be fixed. First loosen the belt take up (Section:6) then with a punch, drive the pin out of the knuckle and this will separate the belt. Now free the belt and feed it back into the guide. You can now drive the pin back into the Knuckle. You must now tighten the belt using the take up and lock it in place.

Note: Pin is knurled on one end, always drive knurled end out first. Keep in mind the direction the knuckle belt is moving, the knurled will be on the left side (Figure A) drive it out from the right side as shown in (Figure C).



9. **Maintenance:** The PVC roller bearings must be lubricated with aerosol spray food grade grease on monthly bases. The flange bearings must be greased using food grade and a grease gun on monthly bases. Finally the gear reducer must have the oil changed annually.

10. **Clean up procedure:** The equipment must be kept clean; this reduces the risk of dirt being transfer onto clean products and into the moving parts of the conveyor. With the main disconnect off, use hot soapy water and wash all areas of the conveyor. With fresh hot clean water rinse conveyor. Before restarting ensure all clothes and cleaning equipment has been removed.

11. **Warranty & Service Procedure:** For all concerns or problems please contact Aeroweks Inc. Customer Support Staff at 1-888-774-1616 Ext. 147 or email: customercare@aero-werks.com. Regular office hours are 8:00 am to 4:30 pm EST. When contacting Aerowerks for warranty or service please have the conveyors serial number available along with what the problem is and the cause of the problem if known.

12. **Warranty Period:** Aerowerks Inc. warrants all its products to the original purchaser against defects in material and workmanship. The warrant applies to normal use and regular service for a period of one year after date of installation.

13. **Warranty Coverage:** Aerowerks Inc. is obligated under this warranty to replace or repair any defects on the equipment. All service performed under this warranty will be provided by an Aerowerks Tech or approved agent during regular business hours. All parts covered under warranty will be shipped to the customer via groud transportation. Any claims due to conveyor jams as a result of irregular preventative maintenance, improper use, improper installation by others, power surges, or misuse /abuse of equipment will not be covered.

Others Applications: The Aerowerks Inc. Tite Turn Conveyor can also be connected the load end of a Dishwasher rack machine to load soil dish racks 90 degrees from the soil break down table in a 34” foot print.

14. Electrical Manual

About: This manual will cover the Aerowerks tite turn table and will assist the user to integrate it with a Hobart system.

Motor & Specifications

Voltages:	208V
Current:	15A
Phases:	3ø
Fuses:	4A
OL Setting:	1.25A

Supplier:	Kel-tech
Model:	AL1444C
HP:	1/4
RPM:	1700
FLA:	1.12-0.65
COS:	0.70
HZ:	60

Installation:
As stated in the specifications this system is designed to be connected to a 208V/ 15A/3ø power supply. On the picture below is an arrow pointing towards the disconnect where the electrical connection should be made. As well it is important to note that the motor contactor will trip when the motor reaches a current in excess of 1.25A; also it is protected by 4A CC fuses.

The Aerowerks tite turn table is designed to be integrated with a dishwasher system that will control its activation. It is activated by receiving 120V potential across Terminal 1 and Terminal 2 (Refer to Figure 1). To achieve this result the electrician must wire our Terminal 1 and 2 parallel with the Hobart CLPS conveyor contactor (located in the Hobart dishwasher panel).

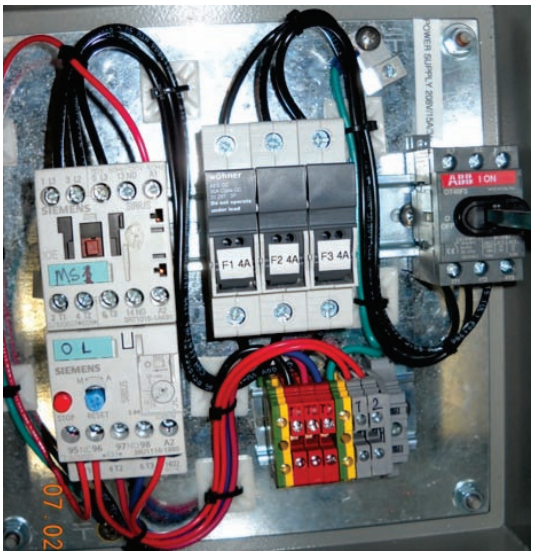


Figure 1

The picture below shows you the control panel that is fully labeled for ease of installation. The Terminal a and 2 is pointed at with the black arrow and will be where the technician makes the connection in parallel with the Hobart CLPS conveyor contactor (located in the Hobart dishwashing panel).

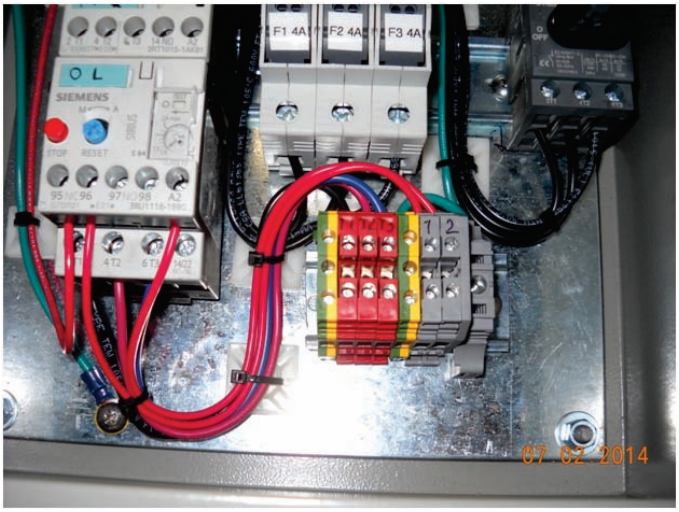
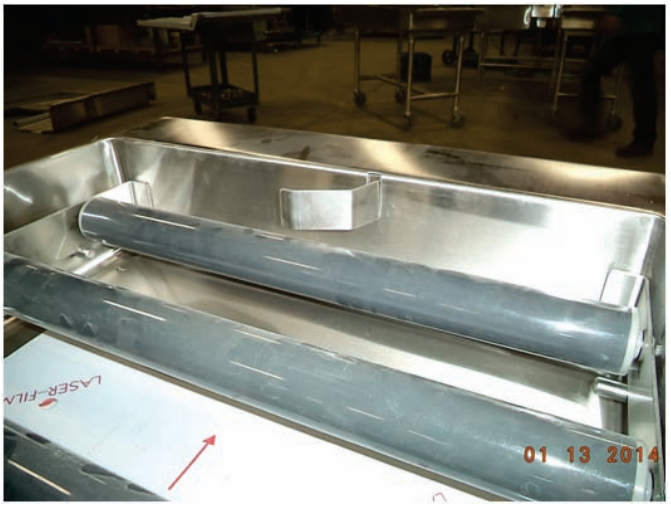


Figure 2

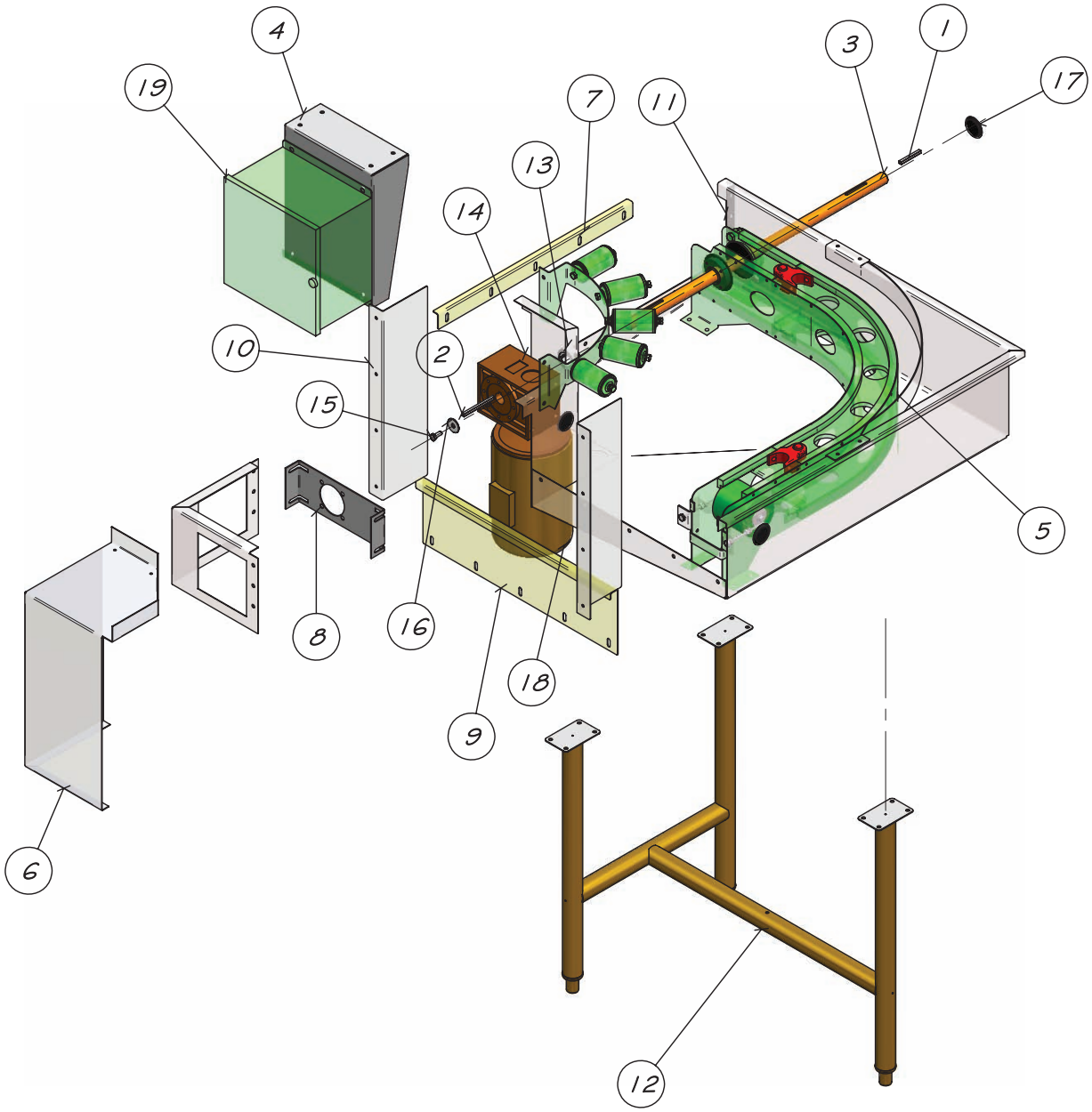
15. Clean Table Accumulation Switch

Our pre-wired accumulation switch is located end of clean table and technician should complete the connection to TLS-C and TLS-NO terminals in Hobart control panel.



Please refer to the electrical diagram before any work is performed to ensure the accuracy of the information contained in this manual.

16. Part List (Continued)



Item Number	Document Number	Title	Quantity
1	0281032	KEYSTOCK 5/16" x 2 1/4" LG	1
2	0281033	KEYSTOCK 5/16" x 3 1/2" LG	1
3	0282136C	DRIVE SHAFT (1"DIA)	1
4	0282232	CONTROL BOX BRACKET	1
5	0283270MF	KNUCKLE BELT GUIDE (90, CCW) ASSY	1
6	028331 0D	DRIP PAN (TABED CHAIN 90)	1
7	028331 1A	CONNECTING ANGLE	1
8	0283315C	GEARBOX BRACKET	1
9	0283317	CONNECTING ADAPT	1
10	0283328	WASHER GUARD	2
11	0283329	FLANGE	1
12	0283330	UNDERSTRUCTURE	1
13	8117709	COLLAR 1" ID SPLIT WITH SET SCREW	1
14	8202531	KELTEC K50 REDUCER (60:1, 1" BORE, 56C)	1
15	8300222	HEX HEAD BOLT - 5/16-18 - 3/4"	1
16	8302207	# 1-1/4 KEYSTOCK RETAIN WASHER	1
17	8302381	PUSH IN FLEXIBLE ROUND PLASTIC PLUG	3
18	8701120	AC MOTOR (Keltech, 1/4HP, 208V, PH3, 56C,)	1
19	8712110	NEMA BOX S101006	1