



BRICKING SOLUTIONS
A DIVISION OF **BROKK**®

ASSEMBLY INSTRUCTIONS HYDRAULIC CONVEYOR





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Please note the following changes. Since the initial Set-up manual was written, some engineering improvements have been made to your conveyor. These changes will not alter the recommended methods set forth in this manual for set up and operation of your conveyor, but some appearances will be different.



Drive and Tail Sections are now an easier to handle 5 feet (1.5 M) long instead of 10 feet (3 M)



New angle brackets for the adjustable legs make set up easier and create a more stable conveyor table.



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CHAPTER 1: SETTING UP THE CONVEYOR FRAME

- STEP 1:** Determine the length of the conveyor that you will be setting up. Round up to the nearest 10 feet.
- STEP 2:** Determine the number of rolls of belt that you will need: 1 roll for each 10 feet of conveyor. Haul half of the belt rolls to the area where the Tail Section end of the conveyor will be set up and stack them out of the way.
- STEP 3:** Haul the Tail Section and 2 pre-drilled, square steel legs, each with a locking pin, to the end point of where you want your conveyor set up. (Figure 1) Place Tail Section on the ground or floor, approximately where it will end up.



FIGURE 1

- STEP 4:** Haul in and line up on the ground or floor as many Extension Sections as are required to form a line behind the Tail Section that, including the Tail Section, is 10 feet less than the total length you are building. (Figure 2) The last 10 feet will be the Drive Section. Be sure to place 2 steel legs, each with a locking pin, along side each section.



FIGURE 2

STEP 5: Using at least 4 persons or a fork truck, set the drive section in place:

- Slip 4 steel legs into the 4 aluminum brackets and lock each into place using the locking pins. **(Tip: pin holes in legs align only one way - Turn leg to achieve alignment)**
- Adjust for height, level, and uneven ground by raising or lowering on the 4 legs.
- Align Drive Section parallel to the route the conveyor will travel and be sure it is in a safe and convenient place. (Figure 3, 4, & 5)



FIGURE 4



FIGURE 3



FIGURE 5

Once the Extension sections are added to the Drive Section it is very difficult and unsafe to move it - PLAN AHEAD!

STEP 6: Hang the first Extension Section on to the slip tubes of the Drive Section using the Cantilever Method. (Figure 6, & 7)



FIGURE 6



FIGURE 7

STEP 7: Slide steel legs into the leg brackets on the front end of the Extension Section. Level and align it with the Drive section. (Figure 8)

(Tip: pin holes in legs align only one way - Turn leg to achieve alignment)

STEP 8: Attach the remaining Extension Sections to each other, up the line you have laid out. Cantilever into place and set on the slip tubes of the previous section, followed by level / align using the adjustable steel legs as outlined in steps 6 and 7. (Figure 9, 10 & 11)



FIGURE 8



FIGURE 9, 10 & 11



STEP 9: Attach the Tail Section to the last Extension Section (Figure 12)



FIGURE 13



FIGURE 12

STEP 10: Adjust the level and alignment of the tail section by installing the steel legs in the leg brackets, securing with the locking pins (Figure 13) The Frame is now complete. Sight down the frame and adjust height to level and align Conveyor if necessary.

CHAPTER 2: LOADING THE BELT ONTO THE FRAME

STEP 11: Load lower loop of belt first. Load belt simultaneously from the drive end and the tail end. Rubber side down, thread the first section of belt under the drive (tail) pulley and over the large idler roller just in front of the pulley. (Figure 14 & 15)

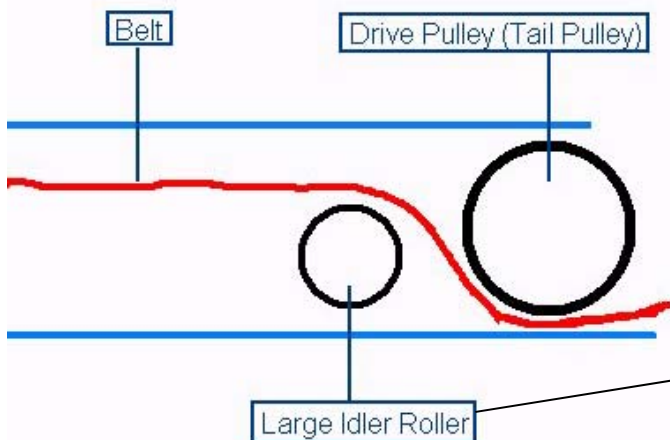


FIGURE 14 & 15

STEP 12: Load Belt sections sequentially, from the front and rear, rubber side down, pulling towards the middle as new sections are added. (Figure 16 & 17)



FIGURE 16



FIGURE 17

STEP 12A: Secure additional belt sections as they are fed into the conveyor frame using the plastic-coated pins and belt lacing hinges (Figure 18)

VERIFY THAT ALL BELT SECTIONS ARE ABOVE THE IDLER ROLLERS AND LOWER CROSS TIES

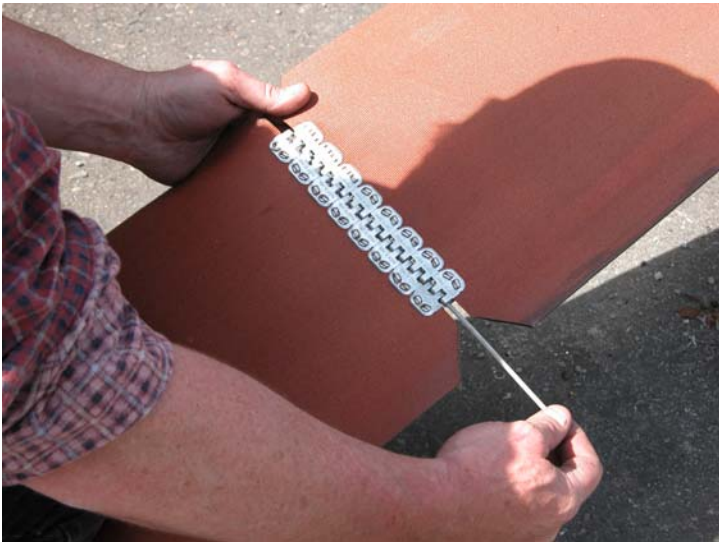


FIGURE 18



FIGURE 19 & 20

STEP 13: When enough belt has been pulled through the lower frame to meet in the middle, Secure the 2 meeting sections using a lacing pin. (Figure 19 & 20)



STEP 14: Unroll the remaining belt sections on top of the conveyor, connecting them using the plastic coated lacing pins. (Figure 21, 22 & 23)



FIGURE 21

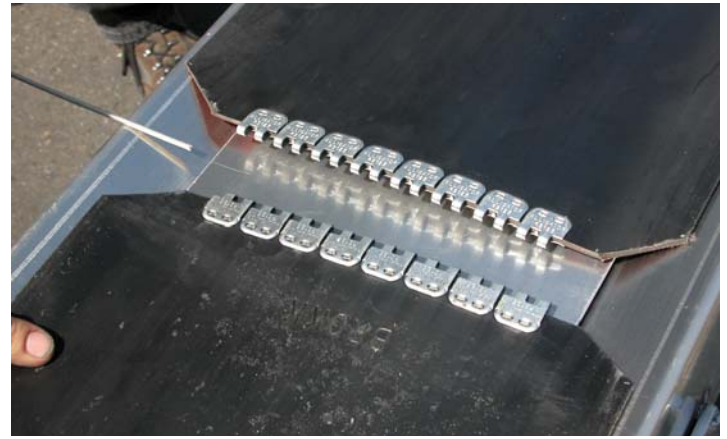


FIGURE 22 & 23



STEP 15: Flip the lower belt section over the tail pulley and connect it to the belt on top at the tail end using a lacing pin.

STEP 16: Connect the lower belt section to the belt on top at the Drive end using a lacing pin. If it is difficult to maneuver the belt into position, use the belt tension adjustment system to draw the drive pulley towards the tail to make the final connection easy. (Figure 24)



FIGURE 24

STEP 16: Double check all lace pins along the now complete loop of belt. Use the tension adjustment screw to make the belt “snug”.

Note: The tension may need to be adjusted during operation. If the drive pulley is slipping on the belt, adjust the tension higher. (Turn bolt clockwise) If the belt won't move or seems to “catch”, lower the tension (Turn bolt counter-clockwise)

CHAPTER 3: HOOKING UP THE HYDRAULIC SYSTEM

PLACE POWER PACK ON A SAFE, LEVEL SURFACE, WITHIN 20 FEET OF THE DRIVE UNIT, OUT OF THE WAY OF ALL FOOT AND MACHINE TRAFFIC TO REDUCE DANGER OF DAMAGE TO HOSES. USE ROPE OR BUNGEE TO SECURE IT IF THERE IS ANY DANGER IT MAY FALL OVER.

- STEP 17:** Inspect all hoses and electric lines for damage before hooking them up. Check fluid levels in the hydraulic reservoir. Replenish with SHELL brand TELLUS T Oil 46 or equivalent.
- STEP 18:** Position Emergency Stop Switches at the Drive and Tail Sections where they will be easily accessed by the operators at both ends. Use caution to string the Stop Switch Cord safely from the Power Pack along the length of the Conveyor to the Tail Section (Figure 25 & 26) **Note: if used, the Emergency Stop Switches must be pulled back into the neutral position before re-starting the conveyor.**

If there is a change in the operator position during the course of the job, change the location of the Emergency Stop Switches accordingly.



FIGURE 25



FIGURE 26

- STEP 19:** Uncoil the amount of hose needed to connect the supply and return hoses to the appropriate fittings on the Drive Section - They only fit one way. (Figure 27 & 28)



FIGURE 27

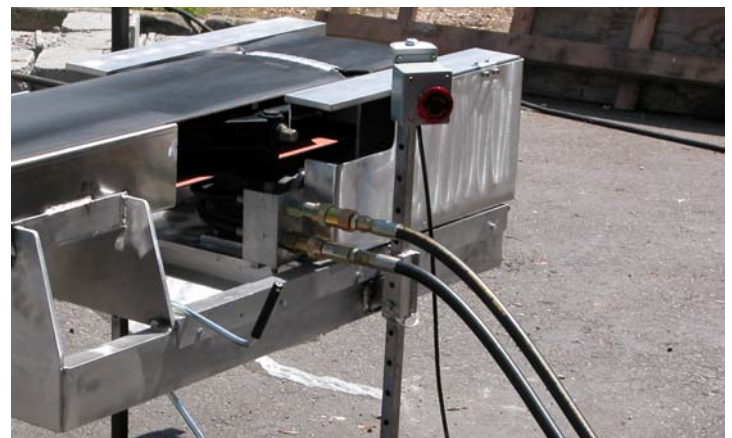
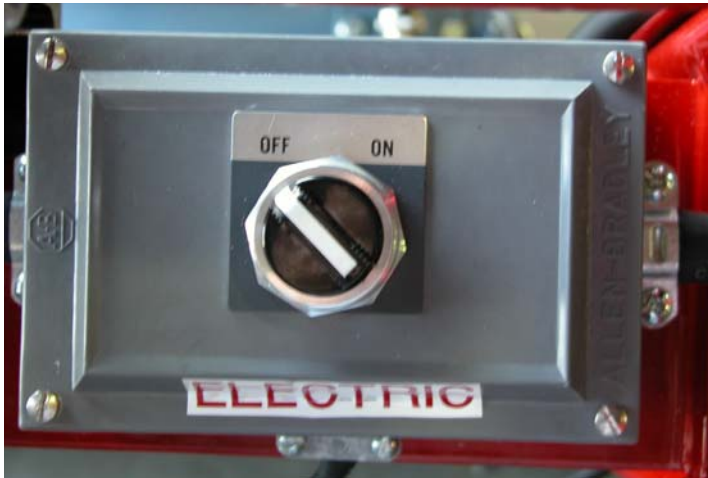


FIGURE 28

STEP 20: Check to make sure power switch is OFF and DRIVE switch is in the STOP position (Figure 29 & 30)



Power Supply Note: 4 wires

- GREEN = GROUND
- RED = 190 OR 380 LEG
- WHITE = 190 OR 380 LEG
- BLACK = 190 LEG

REVERSE POLARITY USING THE RED OR WHITE WIRES ONLY

FIGURE 29 & 30

STEP 21: Plug the electric supply cord into an appropriate electric supply outlet. (380v 3 phase - 50 Hz)

CHAPTER 4: START & TEST THE CONVEYOR

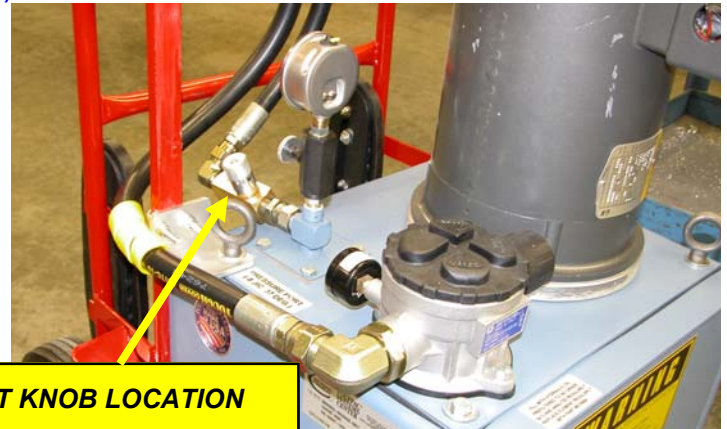
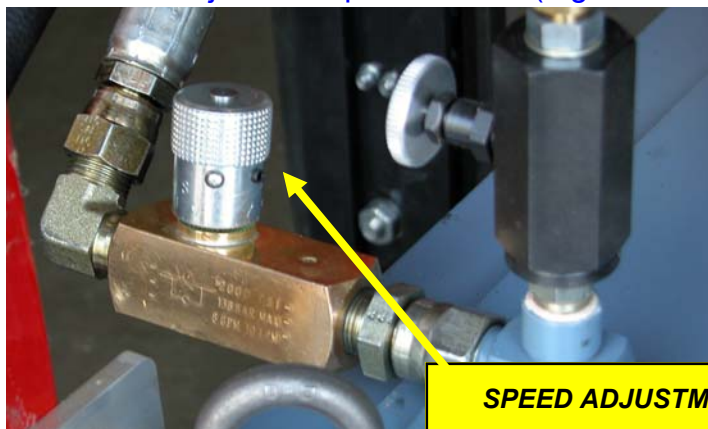
**BEFORE TURNING THE ELECTRIC MOTOR ON:
SOUND AN "ALL CLEAR" AND BE SURE THAT NO MATERIALS OR PARTS ARE ON THE BELT AND NO ONE IS TOUCHING THE CONVEYOR FRAME OR BELT**

STEP 22: Turn power to the electric motor to "ON" (Figure 29)

STEP 23: Engage belt in "FORWARD" (FOR.) or "REVERSE" (REV.) direction (Figure 30)

STOP BELT COMPLETELY BEFORE CHANGING DRIVE DIRECTION

STEP 24: Adjust belt speed to slow (Figure 31 & 32)



SPEED ADJUSTMENT KNOB LOCATION

FIGURE 31 & 32

BELT TENSION AND TRACKING MUST BE ADJUSTED BEFORE USE AND PERIODICALLY DURING OPERATION

STEP 25: With belt moving slowly, adjust the tension using the tension adjustment screw (Figure 33) As load is added to moving conveyor belt adjust tension so that:

- belt does not bind, (loosen tension - turn screw counter-clockwise), and
- so that belt does not slip on the drive pulley (tighten tension - turn screw clockwise)

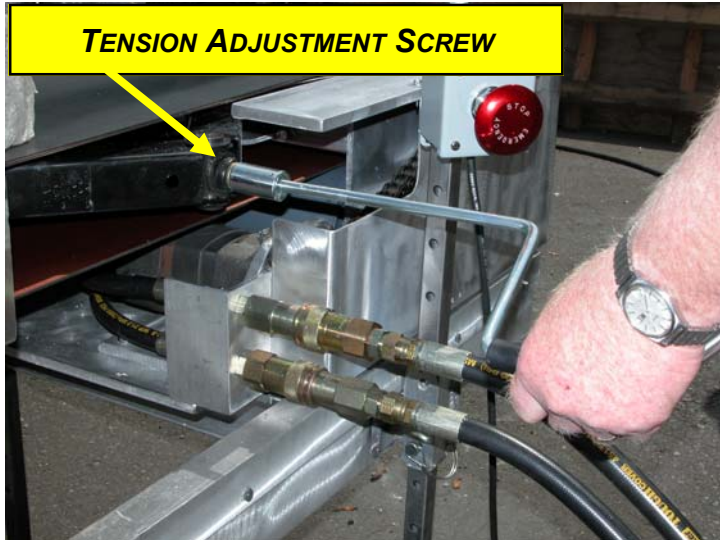


FIGURE 33

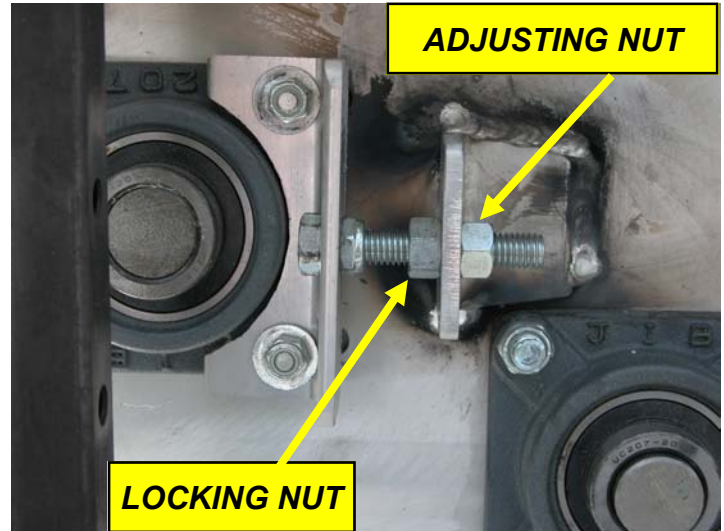


FIGURE 34

STEP 22: Adjust belt tracking to keep belt flowing in the center of the frame (Figure 34) Tracking should be adjusted at both ends of the conveyor, initially, prior to loading and again periodically while operating. Re-Adjust whenever Drive Direction is changed.

Loosen the LOCKING NUT, adjust with the ADJUSTMENT NUT and re-lock into place with the LOCKING NUT.



FIGURE 34-A

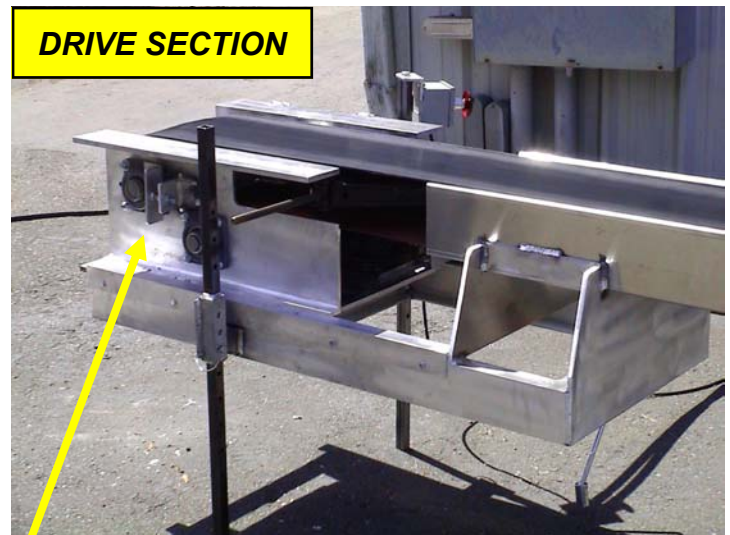


FIGURE 34-B

LOCATION OF TRACKING ADJUSTMENT NUTS

CHAPTER 5: TIPS AND NOTES

- *KEEP AN OPEN LINE OF COMMUNICATION BETWEEN OPERATORS AT EACH END TO AVOID INJURY*
- *NEVER ALLOW PERSONNEL TO RIDE THE CONVEYOR*
- *KEEP LONG HAIR AND LOOSE CLOTHING SECURE WHEN WORKING NEAR THE CONVEYOR*
- *AVOID PLACING WEIGHT DIRECTLY ON THE BELT LACING HINGES*
- *SPACE MATERIAL BEING MOVED ACCORDING TO WEIGHT - ALLOW GREATER SPACE BETWEEN HEAVIER OBJECTS*
- *ALWAYS STOP THE BELT BEFORE CHANGING DIRECTION*
- *BELT WILL STRECH - CHECK TENSION AND TRACKING OFTEN*
- *KEEP CONVEYOR AS STRAIGHT AS POSSIBLE, ALTHOUGH WORKING THROUGH A STEADY CHANGE IN ELEVATION IS ONE OF THE FEATURES*
- *KEEP THE AREA AROUND THE HYDRAULIC POWER PACK CLEAR TO ASSIST COOLING OF THE HYDRAULIC FLUID*
- *CHECK FLUID LEVEL BEFOR EACH USE AND CHECK FILTER BEFORE EVERY SHIFT*