

# Arch Environmental Equipment, Inc.

## **SIMPLICITY IMPACT SYSTEM**

### **INSTALLATION INSTRUCTIONS**

THE INSTALLATION OF THE SIMPLICITY IMPACT SYSTEM IS VERY SIMPLE.  
IT REQUIRES ONLY A FEW TOOLS AND LITTLE TIME.

THE TOOLS & RESOURCES REQUIRED ARE:

- |                             |                        |
|-----------------------------|------------------------|
| 1. TAPE MEASURE             | 5. LIFTING HOIST       |
| 2. LEVEL                    | 6. TWO LABORERS        |
| 3. CUTTING TORCH (POSSIBLY) | 7. ADJUSTABLE WRENCHES |
| 4. MOUNTING BOLTS           |                        |

***SHUT DOWN AND LOCKOUT CONVEYOR BEFORE  
PERFORMING ANY MAINTENANCE***

#### **STEP 1**

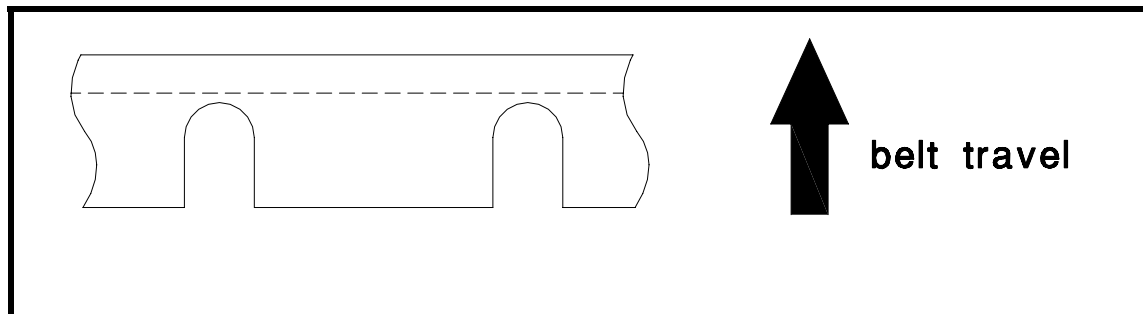
Confirm the length of the Simplicity Impact Bars provided. Ensure the length of the bars will provide the correct length of support for the area where the system will be installed. Remove the existing impact idlers from the conveyor structure. A torch may be needed if the existing bolts are seized in place.

If needed use an appropriate sized lifting hoist to raise the belt off of the idlers for ease of removal.

Inspect the structure for damage or misalignment and make any adjustments required. Inspect the bottom surface of the belt for damage or embedded objects. Repair any damage as needed to prevent premature wear or damage to the impact bars.

#### **STEP 2**

Determine the spacing of the Simplicity Impact Stands and ensure mounting holes are present in the structure. If not, mark and cut mounting holes as required. Now, mount the Simplicity Impact Stands to the structure. Ensure the open ends of the slots are facing the opposite direction of belt travel.



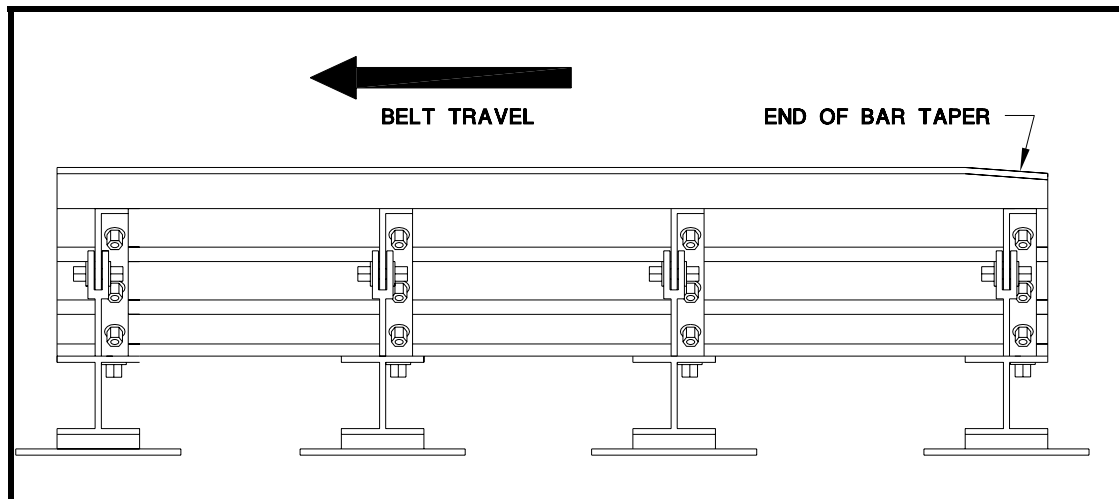
It is critical that the stands are aligned with the conveyor system; any misalignment will cause belt training problems.

The first and last stand should be mounted within 4"-6" of the end of the impact bars. Ensure your stand spacing is correct. At this point the center height needs to be verified. The top of the beam on the impact stand should be approximately 3 ¼" to 3 ½" below the top of the center roll on the existing idlers. This will provide the appropriate clearance of approximately ¼" or more from the top of the bar to the bottom of the belt when installation is complete.

Once all dimensions are confirmed, complete the mounting of stands to the structure.

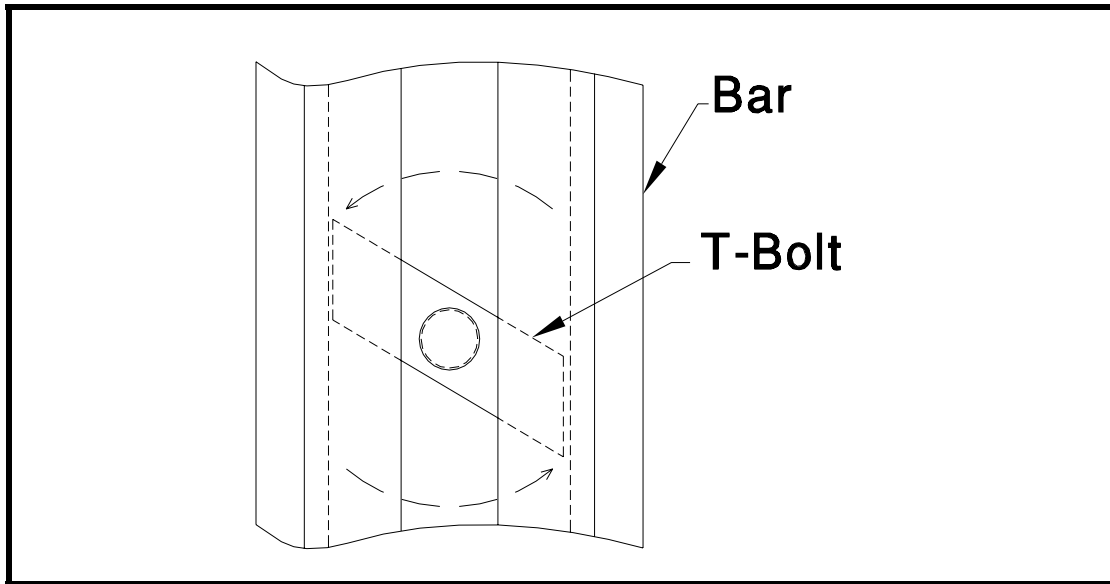
### **STEP 3**

Mount the impact bars onto the stands with the tapered end of the bar pointing opposite from the direction of travel. The 72" long impact bars are tapered on both ends so they can not be installed incorrectly.



### **STEP 4**

Install the T-bolts in the bars. Ensure the T-bolts are fully rotated in the slot of the channel within the impact bar before attempting to tighten the nut. Also verify the stud of the bolt is fully engaged into the slot on the impact stand. When tightening the nut on the bolts a torque rating of 85 or 90 foot pounds is recommended. Once again, ensure the T-bolts are fully rotated into the slot on the bars.



**STEP 5**

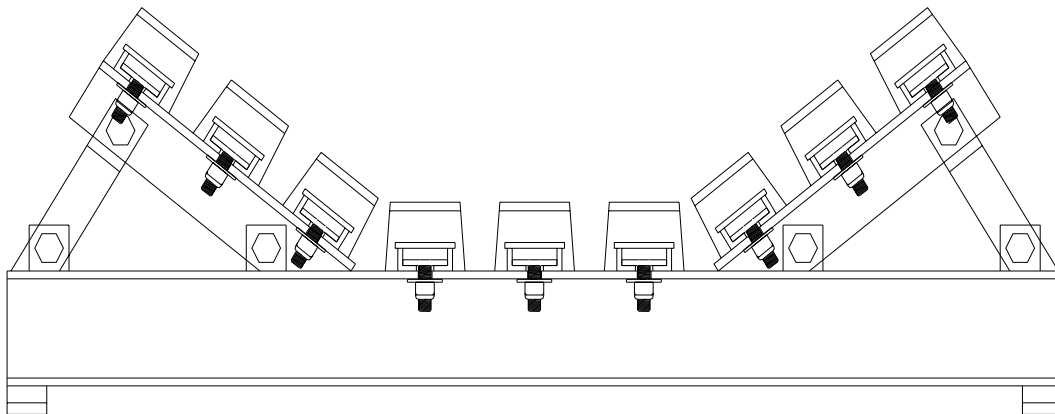
Remove and secure all hoists and rigging along with any tools used during the installation process.

**STEP 6**

Test run the conveyor and observe the belt for misalignment or other issues. Be sure to again, Lock Out the conveyor before making any further adjustments. Check all fasteners and ensure they are tight and secure.

The Simplicity Impact System should be inspected again after eight hours of operation. Once again, check all fasteners to verify they are tight and secure.

It is highly recommended that the inspection of your Simplicity Impact System be included into your routine maintenance schedule. Failure to inspect and replace the impact bars in a timely manner can result in belt damage.



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