

Lessons Learned-Potential Energy

Sequence of Events:

A technician was troubleshooting a fan/motor issue in a 30 Ton RTU. He de-energized the unit. The fan came to a stop. As he was looking at the motor inside the fan section, he placed his hand on the lower section of the belt (see pictures below). The pulley and belt started to move. It caught his left hand and pinched it between the belt and the pulley. He was able to rotate the pulley back and remove his hand. What caused the fan to move? There could have been a pressure change in the building. Even though the pulley and belt were moving slow, once it catches your hand, it's trapped. He was wearing a cut level 2 glove. This may have helped to keep the pulley from cutting all the way through his finger. It can also be noted that the grip of the glove may have added to his hand getting caught.

Results:

A painful injury. Stitches were required on his left pinky finger. Fortunately, no tendon damage. His other 3 fingers had been crushed, so some bruising. This could have been an amputation.

Root Cause(s):

Being prepared for potential energy.

I am sure we have all seen a fan that is off, move. Gust of wind, the opening or closing of doors, the amount of equipment running, all these are some of the things that could cause a fan to move.

Recommendations:

All because you de-energize and LOTO a unit, this does not mean all is good. Prepare for potential energy. If you need to put a body part in a pinch point, block it or secure it so it can't move. There are many ways to do this. You also can avoid the hazard. Never place your hands in an area that can move. Our technician still can't believe that this snuck up on him. He wanted us to share this to spare everyone else the pain.

Respectfully,



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