

# MILLING MACHINE CONVEYOR BELT ADJUSTMENT

ROADTEC MILLING MACHINES UTILIZE A TWO-STAGE CONVEYOR SYSTEM TO DELIVER MATERIAL FROM THE CUTTER HOUSING TO THE DUMP TRUCK. THESE CONVEYORS, CALLED THE PRIMARY AND SECONDARY, ARE COMPRISED OF A BELT AND A SERIES OF ROLLERS. THE BELT TENSION IS PRE-ADJUSTED AT THE FACTORY TO ENSURE PROPER FUNCTIONALITIY. HOWEVER, OVER TIME AND USAGE THESE BELTS MAY RUN OUT OF ADJUSTMENT. A BELT THAT IS CONTINUALLY RUN OUT OF ADJUSTMENT WILL NOT FUNCTION PROPERLY AND WILL NOT HAVE A LONG LIFE. THE FOLLOWING PROCEDURE IS WRITTEN TO GUIDE IN THE PROPER METHOD OF CHECKING AND ADJUSTING CONVEYOR BELT TENSION.

## CHECKING CONVEYOR BELT TRACKING

TO ASCERTAIN AS TO WETHER THERE IS A PROBLEM WITH THE CONVEYOR BELT NOT TRACKING PROPERLY IT WILL NEED TO BE CHECKED. THE CONVEYOR WILL NEED TO BE OBSERVED WHILE IN OPERATION. KEEPING SAFETY IN MIND, HAVE AN OPERATOR ENGAGE THE CONVEYORS. ANOTHER PERSON VIEWS HOW WELL THEY OPERATE **FROM A SAFE DISTANCE**. WHILE WATCHING, ONE SHOULD OBSERVE HOW THE BELT TRACKS ACROSS THE HEAD SHAFT, TAIL SHAFT AND ROLLERS.

**!!!WARNING!!! NEVER ATTEMPT TO COME IN PHYSICAL CONTACT WITH A CONVEYOR BELT THAT IS ENGAGED**



**FIGURE NO. 1**

A BELT THAT IS TRACKING CORRECTLY WILL RUN EVENLY ACROSS THE CENTER OF BOTH THE HEAD SHAFT AND TAIL SHAFT.THERE SHOULD BE AN EQUAL AMOUNT OF GAP ON EITHER SIDE OF THE BELT. A BELT THAT IS NOT TRACKING PROPERLY WILL RUN TO THE LEFT OR RIGHT OF DEAD CENTER. THUSLY, CAUSING THE BELT TO RUB AGAINST THE INSIDE WALL OF THE CONVEYOR FRAME. WHEN THIS HAPPENS, IT IS USUALLY VERY NOTICABLE BY THE STRONG ODOR THAT THE BURNING RUBBER PRODUCES.

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## PRELIMINARY SAFETY PRECAUTIONS

BEFORE ADJUSTING THE TENSION ON A CONVEYOR BELT, THERE ARE A FEW PRELIMINARY STEPS THAT SHOULD BE TAKEN IN ORDER TO ENSURE SAFETY AND ACCESSIBILITY.

- 1) START UP MACHINE AND LOWER THE SECONDARY CONVEYOR INTO AN ACCESSIBLE POSITION.
- 2) PERFORM PROCEDURE FOR CHECKING CONVEYOR BELT TRACKING TO DETERMINE WHICH DIRECTION THE CONVEYOR IS PULLING.
- 3) DISENGAGE THE CONVEYORS AND SHUT DOWN THE ENGINE.

## ADJUSTING CONVEYOR BELT TENSION

IF THE CONVEYOR BELT IS TRACKING TO EITHER THE LEFT OR THE RIGHT SIDE OF THE CONVEYOR HEAD SHAFT OR TAIL SHAFT THEN THE OPPOSITE END WILL NEED TO BE LOOSENED IN ORDER TO OFFSET THE PULL (FIGURE NO 2).

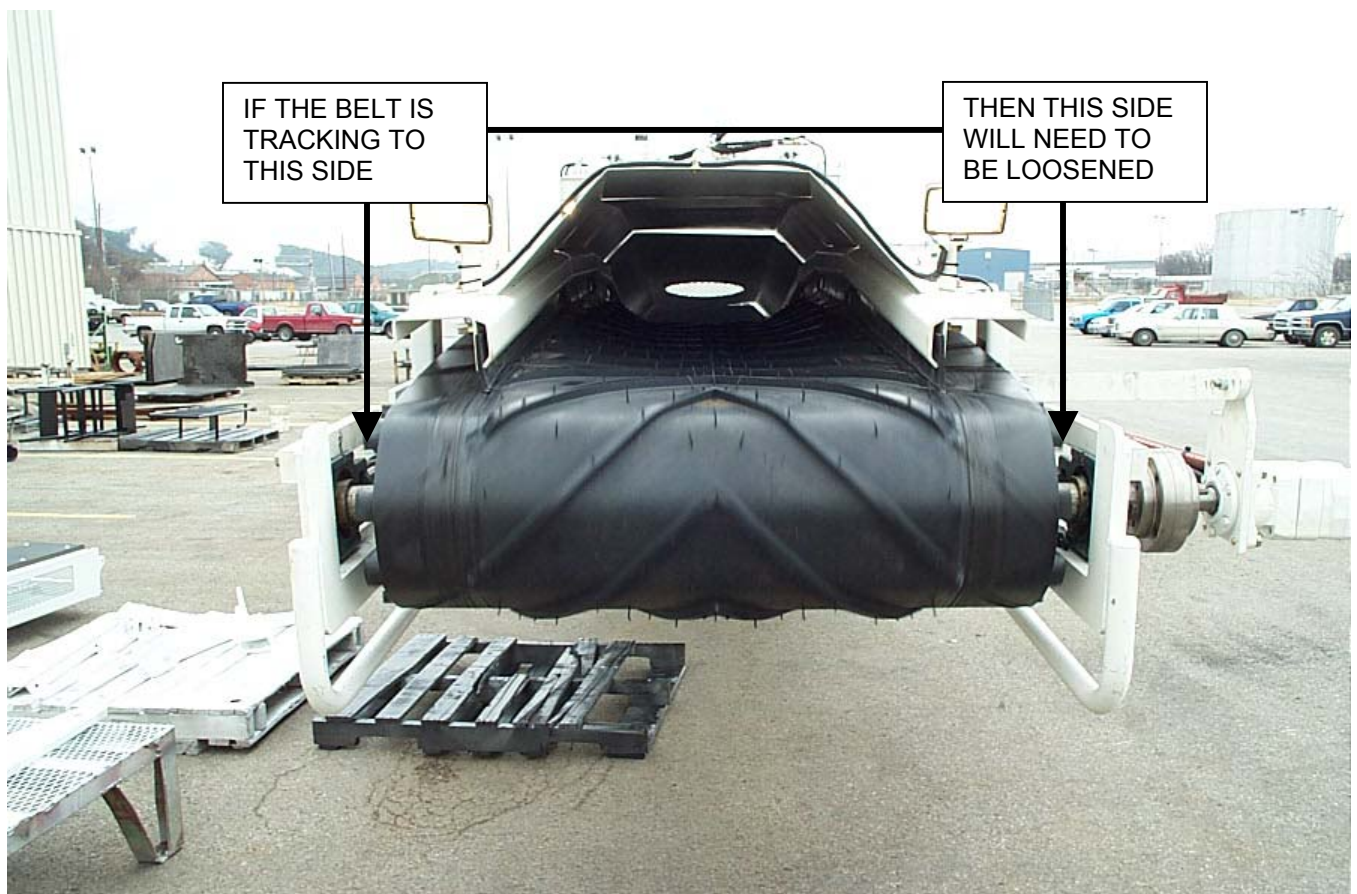


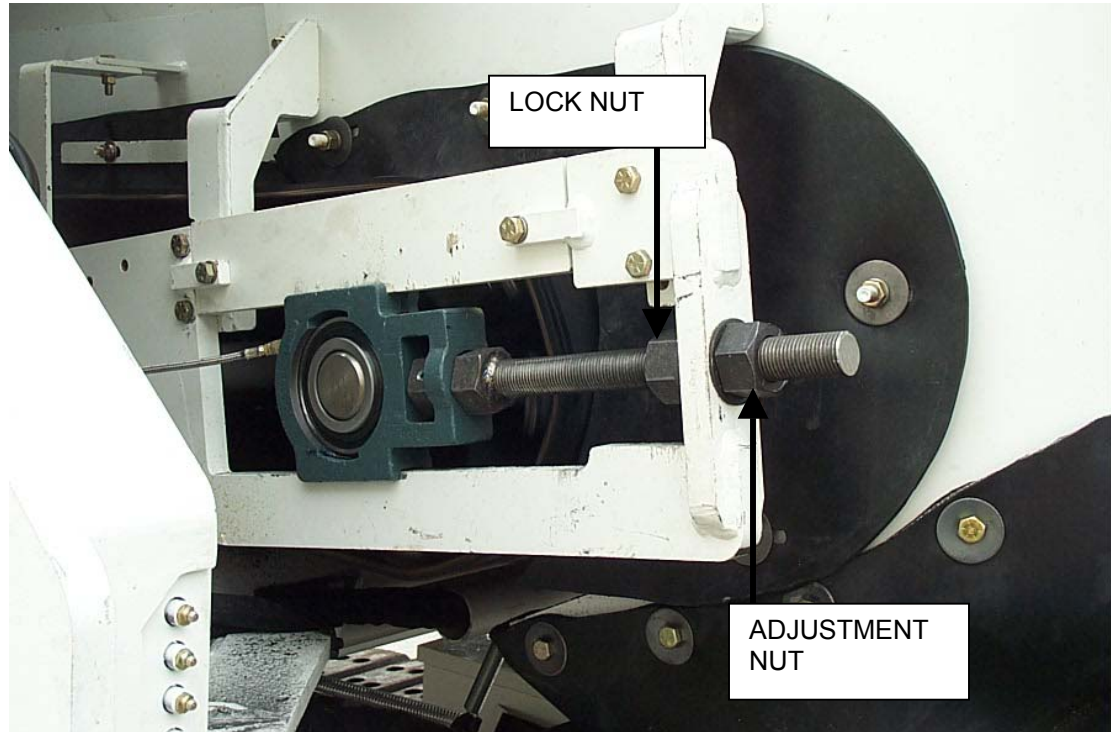
FIGURE NO. 2

# MILLING MACHINE CONVEYOR BELT ADJUSTMENT

## HEAD SHAFT ADJUSTMENT

TO ADJUST THE HEAD SHAFT TENSION ON A CONVEYOR THE FOLLOWING STEPS WILL NEED TO BE TAKEN.

- 1) LOOSEN THE LOCKNUT ON THE MOUNTING BRACKET. (FIGURE NO 3)



**FIGURE NO 3**

- 2) SLIGHTLY TURN THE ADJUSTMENT NUT AS TO MARGINALLY LOOSEN THE TENSION ON THAT SIDE OF THE BELT (KEEP IN MIND THAT YOU ARE LOOSENING THAT SIDE OF THE HEAD SHAFT SO THAT THE BELT WILL DRAW OVER TO THAT SIDE OF THE CONVEYOR WHEN IT IS ENGAGED).

- 3) TIGHTEN THE LOCK NUT

- 4) WITH ALL PERSONNEL CLEAR, START THE MACHINE AND ENGAGE THE CONVEYOR.

- 5) OBSERVE HOW THE CONVEYOR BELT IS TRACKING ACROSS THE HEAD SHAFT TO SEE IF ADDITIONAL ADJUSTMENT IS REQUIRED.

- 6) THIS PROCESS MAY HAVE TO BE REPEATED SEVERAL TIMES IN ORDER FOR THE BELT TO REACH A DEAD CENTER TRACKING POSITION.

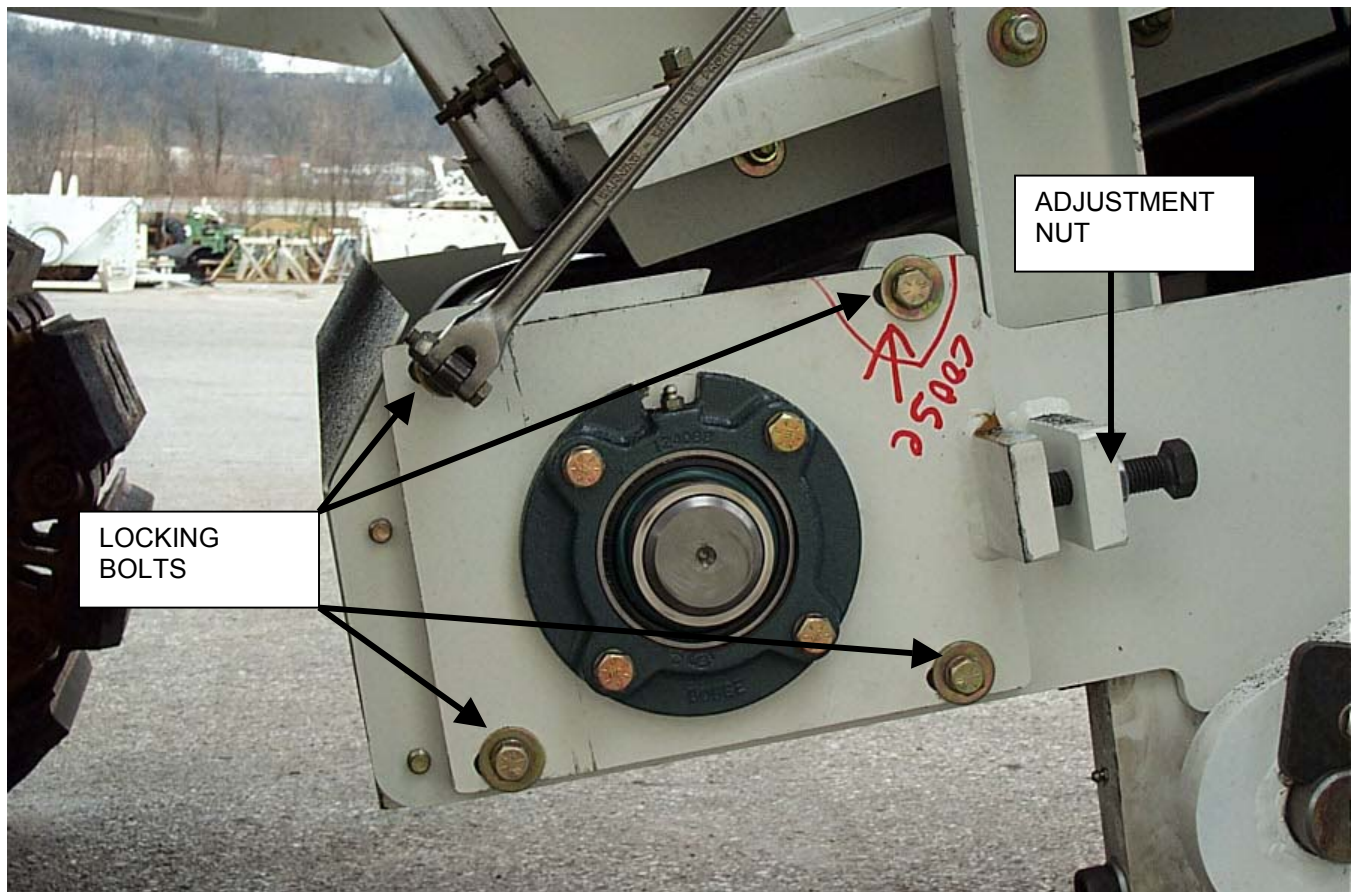
## TAIL SHAFT ADJUSTMENT

TO ADJUST THE TAIL SHAFT TENSION ON A CONVEYOR THE FOLLOWING STEPS WILL NEED TO BE TAKEN.

- 1) LOOSEN THE LOCK BOLTS ON THE MOUNTING BRACKET. (FIGURE NO 4)



## MILLING MACHINE CONVEYOR BELT ADJUSTMENT



**FIGURE NO. 4**

2) SLIGHTLY TURN THE ADJUSTMENT NUT AS TO MARGINALLY LOOSEN THE TENSION ON THAT SIDE OF THE BELT (KEEP IN MIND THAT YOU ARE LOOSENING THAT SIDE OF THE TAIL SHAFT SO THAT THE BELT WILL DRAW OVER TO THAT SIDE OF THE CONVEYOR WHEN IT IS ENGAGED).

3) TIGHTEN THE LOCK BOLTS

4) WITH ALL PERSONNEL CLEAR OF THE CONVEYORS, START THE MACHINE AND ENGAGE THE CONVEYOR.

5) OBSERVE HOW THE CONVEYOR BELT IS TRACKING ACROSS THE TAIL SHAFT TO SEE IF ADDITIONAL ADJUSTMENT IS REQUIRED.

6) THIS PROCESS MAY HAVE TO BE REPEATED SEVERAL TIMES IN ORDER FOR THE BELT TO REACH A DEAD CENTER TRACKING POSITION.