

BASIC CHAIN CONVEYOR MAINTENANCE

IAOM Central, Wheat State and
Texoma Districts' Summer Conference

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"Where Customer Service is always FIRST"

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ALWAYS REMEMBER SAFETY FIRST



ANOTHER SAFETY ITEM

NEVER WALK ON CHAIN CONVEYOR COVERS


Several thin, parallel white lines are drawn diagonally across the bottom right corner of the slide, extending from the bottom edge towards the right edge.

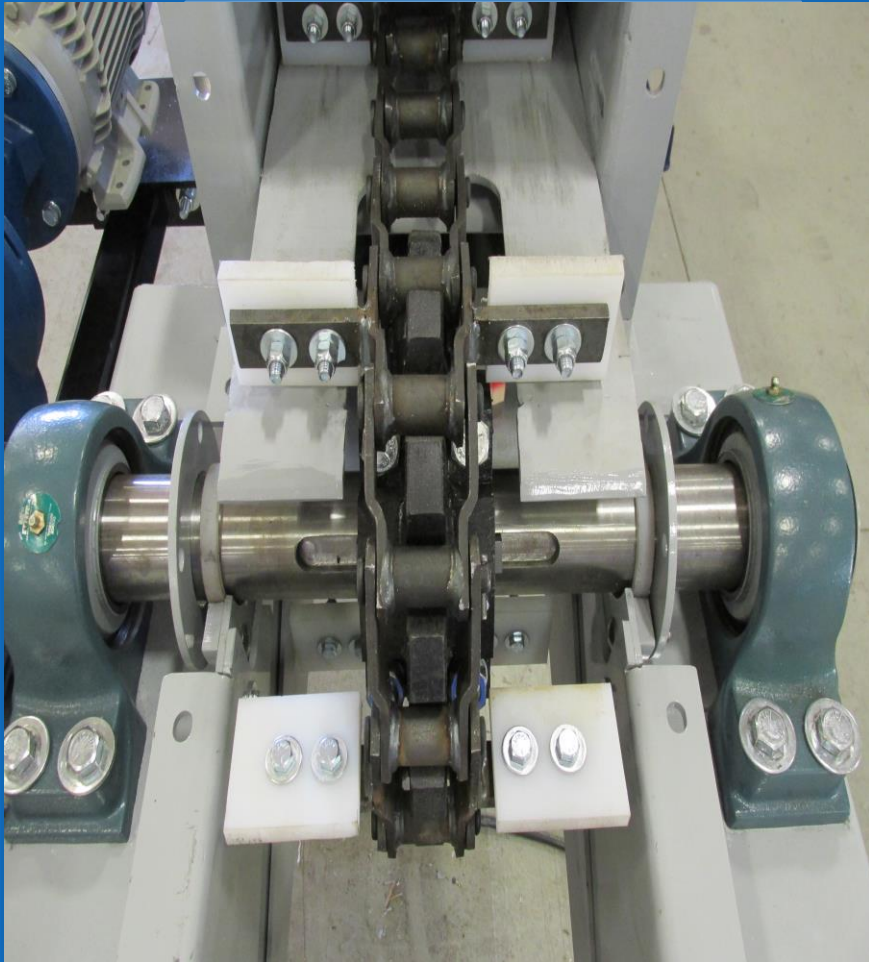
INITIAL INSPECTION

LISTEN TO THE CONVEYOR WHILE IN OPERATION. WALK THE ENTIRE LENGTH OF THE CONVEYOR WHILE IN OPERATION. PLACE YOUR HAND ON THE CONVEYOR WHILE WALKING AND FEEL FOR ANY VIBRATIONS OR ABNORMAL MOVEMENT.



WHAT ARE YOU LISTENING/LOOKING FOR?

- IS THERE ANY BANGING, THUMPING, OR KNOCKING
 - ARE THERE ANY NOISES NOTICEABLE AT ANY CONNECTION POINTS
 - ARE THERE ANY NOTICEABLE SQUEALING NOISES
 - ARE THE RETURN RAILS AND WEAR BARS IN GOOD CONDITION
 - ARE THERE ANY WEAR SPOTS/HOLES IN LINERS OR HOUSING VISIBLE
 - IS THERE ANY NOTICEABLE CORROSION ON THE CONVEYOR
 - ARE THE COVERS ALL SEALED AND SECURE
 - IS THE PRODUCT FEEDING INTO THE CONVEYOR AS IT SHOULD
 - IS THE CONVEYOR DISCHARGING FROM THE CONVEYOR AS IT SHOULD
- 
- Decorative white lines consisting of several parallel diagonal strokes in the bottom right corner of the slide.



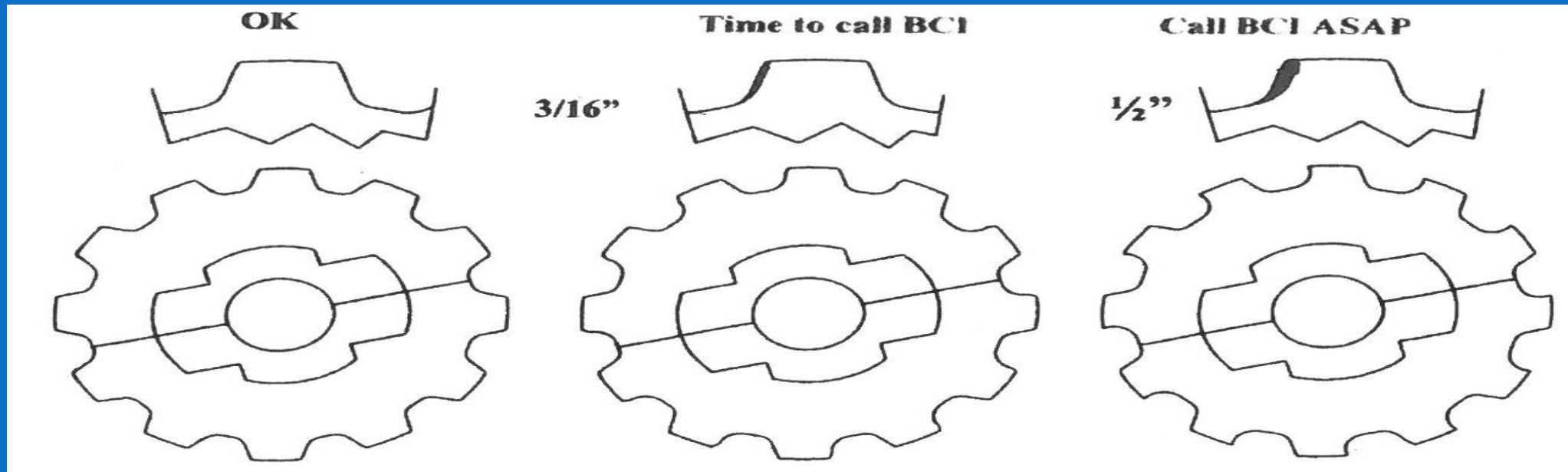
CHAIN TENSION

CHECK THE CONVEYOR CHAIN TENSION
BY OBSERVING THE HEAD SPROCKET
AREA WHILE THE CONVEYOR IS IN
OPERATION

CONVEYOR HEAD, SPROCKET AND HEAD SHAFT

A HOOK IN THE FACE OF A SPROCKET TOOTH PROFILE IS A NORMAL CONDITION THAT OCCURS OVER TIME DUE TO CHAIN BARREL WEAR ON THE TOOTH FACE.

- LESS THAN $\frac{1}{8}$ " GOOD
- $\frac{1}{8}$ " TO $\frac{3}{8}$ " HOOK FAIR
- OVER $\frac{3}{8}$ " HOOK POOR



CONVEYOR HEAD, SPROCKET AND HEAD SHAFT (CONT.)

- IS HEAD SHAFT PERPENDICULAR TO THE CONVEYOR HOUSING
- IS THE HEAD SPROCKET TIGHT ON THE HEAD SHAFT
- ANY VISIBLE UNUSUAL CONDITIONS
- ARE RELIEF DOOR AND/OR PLUG SWITCH OPERATIONAL

CONVEYOR TAIL, SPROCKET AND HEAD SHAFT

- SAME AS HEAD EXCEPT:
- IS THE CHAIN TAKE UP FREE TO MOVE
- HOW MUCH CHAIN TAKE UP IS LEFT
- IS THE TAIL SHAFT SPEED MONITOR OPERATING CORRECTLY

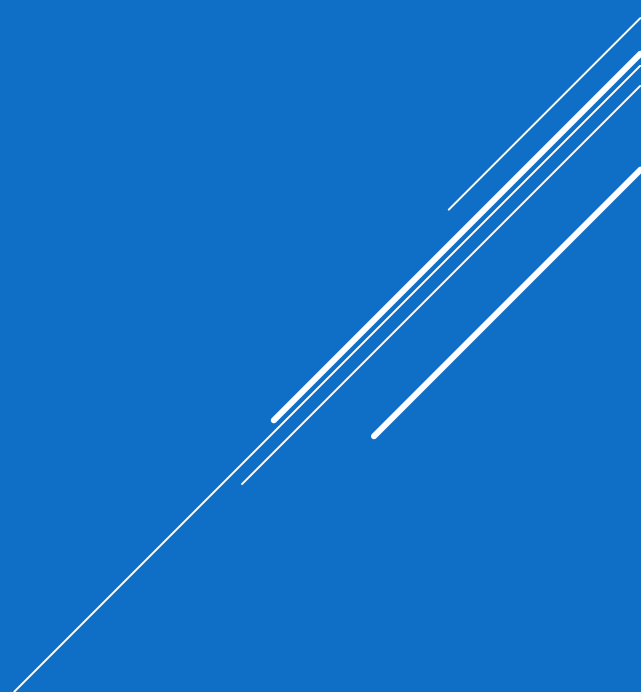


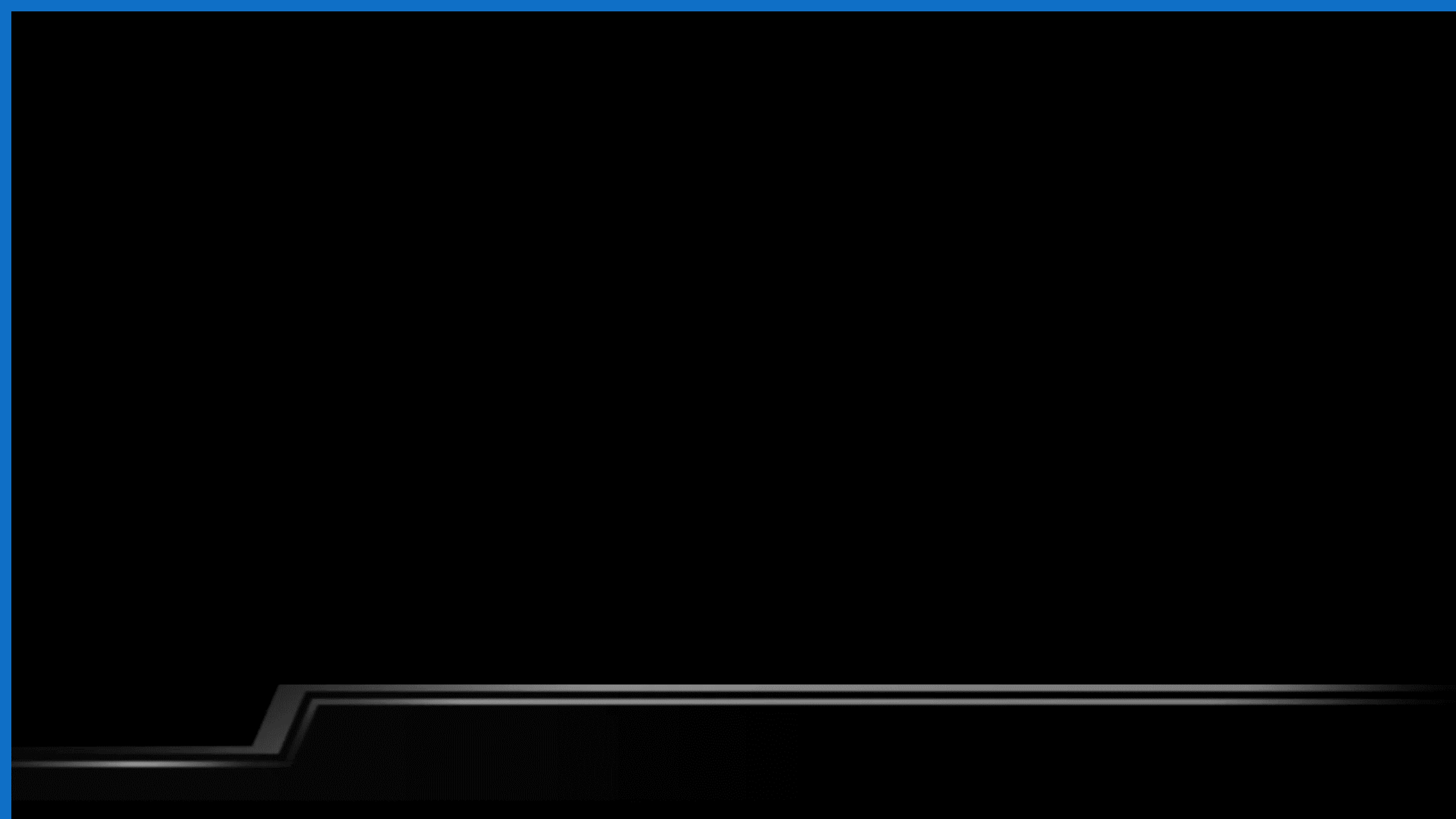
CHECKING CHAIN FLIGHTS, PINS AND BARRELS

- ARE ANY FLIGHTS BENT OR DAMAGED
- HAS THE CAUSE OF THE DAMAGE BEEN DETERMINED AND CORRECTED
- MEASURE A 5' OR 10' SECTION OF CHAIN (IF CHAIN HAS STRETCHED 5% OR MORE, IT NEEDS REPLACING)
- DO THE CHAIN BARRELS SHOW EXCESSIVE WEAR, CUTS, GROOVES OR FLAT SPOTS
- DOES THE CHAIN SHOW ANY SIGN OF CORROSION

REPLACING CHAIN OR TAKING OUT LINKS

- TYPICALLY DONE BY USING SLEDGE HAMMERS WHICH CAN BE DANGEROUS
- THERE IS AN ALTERNATIVE





CHECK CONVEYOR DRIVE UNIT

- ARE THE REDUCER AND SLIDE BASE BOLTS TIGHT AND THE DRIVE UNIT SHAFT SQUARE WITH THE CONVEYOR DRIVE SHAFT
- IS THE REDUCER TEMPERATURE HOT TO THE TOUCH
- IS THE MOTOR TEMPERATURE HOT TO THE TOUCH
- IS THE REDUCER OIL LEVEL CORRECT
- ARE THE GUARDS IN GOOD OPERATING CONDITION
- IS THE MOTOR RUNNING QUIETLY
- ARE THE BELTS AND SHEAVES IN GOOD CONDITION

QUESTIONS

