

# ROUTINE OPERATION

## INTRODUCTION

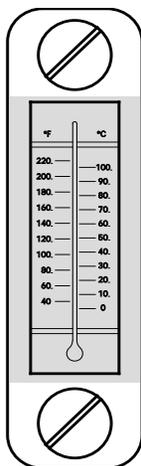
These are the guidelines and instructions for normal day-to-day crusher operation for a CEMCO electric drive Turbo impact crusher.

## ELECTRIC DRIVE PRE START INSPECTION



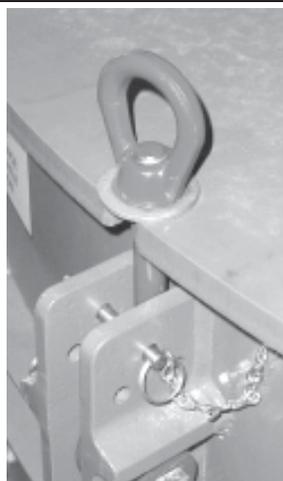
Failure to follow these pre-start inspection guidelines could result in personal injury or crusher damage.

1. Check the oil tank level/temperature gauge. It is simply a glass bulb with a thermometer inside. The bulb should be full of oil.



*Full tank level*

2. Check the drive belt tension. It should be tight with no more than 3/4 inch (19 mm) deflection between belt centers.
3. Check the drive belt condition. The belts should not have any nicks, tears or frayed areas.
4. Check the castings for wear to be sure none of them have exceeded their maximum wear condition.
5. Check the lid camlocks to be sure they are seated in the lid slot and secure.
6. Check the lid lift ram cylinder. It should be under enough pressure to keep the lid lift linkage from vibrating. If not, close the pump pressure relief screw and give the pump a few strokes. Not required on nylon bushed lids.



*Tight camlock*

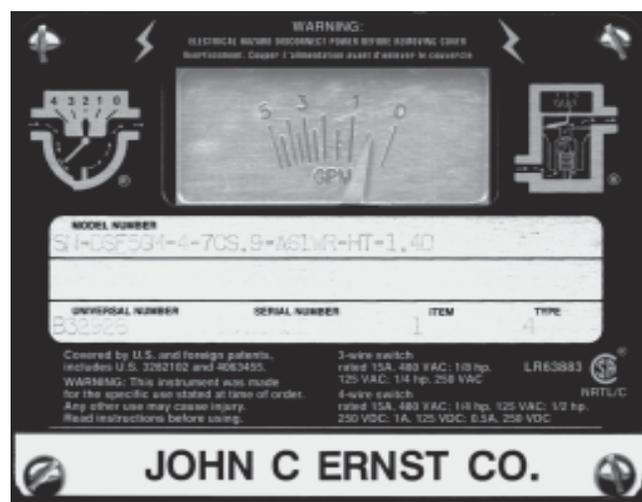


*Loose camlock*

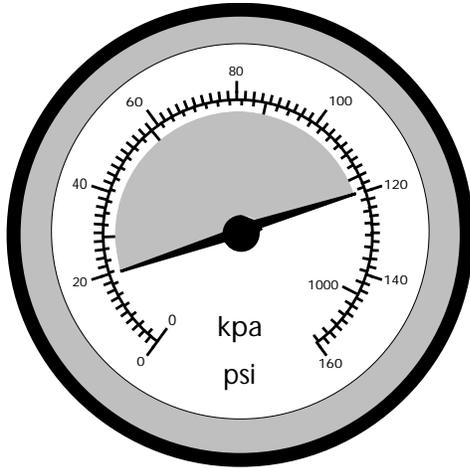
7. Check the electric motor vent screens. They should be clear to provide maximum air flow.
8. Account for all personnel. Everyone should be a safe distance from the crusher. Sound an all clear start up signal.
9. A single stage manual pump is used for lid lifting.
10. An electric lid pump is optional.

## ELECTRIC DRIVE START UP

1. Start the oil pump motor and let it run for 2-3 minutes. The oil pressure gauge should read 20 psi or greater. It may read full scale immediately at startup. The flow meter should indicate positive flow.



*Full positive pedestal oil flow*



Normal pedestal oil pressure is generally between 20 and 120 psi, but can sometimes exceed that.

2. Turn on the main power to the crusher.
3. Introduce feed material. Do not exceed the feed material size and feed rate listed in the CRUSHER SPECIFICATIONS section.
4. Check for crusher vibration at start up and periodically during operation.

## DURING CRUSHER OPERATION

While the crusher is operating, closely monitor the gauges. This is especially important just after starting up and during the first 100 hours of break-in operation. Observe the following:

1. The oil pressure commonly remains between 20 and 120 psi, but can exceed that.
2. **The flow meter should continue to indicate full positive oil flow.**
3. The oil temperature should not exceed 194°F (90C).
4. Observe the crusher for signs of vibration. This most likely indicates an unbalanced rotor.

## ELECTRIC DRIVE SHUT DOWN

1. Stop the feed and wait for the crusher to finish crushing.
2. Shut off the main power switch.
3. When rotor rotation ceases, 5 to 6 minutes, shut off the oil pump motor.