

Air Gap Adjustment for MS-3 Vibrator:

The Air Gap of a MS-3 is the spacing that exists between the face of the armature and the face of the core assembly. Proper adjustment of this space is extremely important for good feeder operation.

If the Air Gap is adjusted so the armature and core are too close, the faces of items will make contact during feeder operation. This is called “striking”. A striking condition will cause severe mechanical damage (broken spring cracked trough or base, cracked armature or core). If the Air Gap is adjusted so the armature and core are too far apart, the feeder current may climb to a dangerous level. A high current condition will result in coil burn-out, failure of control components or reduced material feed.

The Air Gap is properly set at the factory, therefore readjustment should rarely be required. However, if high voltage is applied to the feeder or if the air gap has been removed due to the improper handling during shipment or installation, an adjustment may be in order.

Adjustment Procedure for MS-3 Vibrator:

1. The conveyor must be running empty and the control knob set at maximum feed.
2. Locate Air Gap adjusting cap screw (item #16) at the front of the feeder base.
3. Adjust cap screw as follows:

If armature and core are “striking”, rotate cap screw in a CLOCKWISE direction to INCREASE the Air Gap spacing. If feeder lacks power at 100% control setting, or draws excessive current, rotate cap screw in a counterclockwise direction to DECREASE the Air Gap spacing. The limit of movements being slashed just before an armature and core “strike” under full load condition.