TROUBLESHOOTING

INLINE FEEDERS

Rubber Foot Mounting Style (RM Series)
Sizes - 7” AND 11”

PROBLEM: UNIT STOPS OPERATING

CHECK:

- Power supply
- Controller for change in dial setting
- Control fuse failure
- Coil for short in wiring
- Coil for loose connections
- Transition points for interference
- Attachments to track not original from factory
- Spring bolts loose
- Counter weight loosened or removed
- Coil Gap Alteration

PROBLEM: FEED RATE OF PARTS SLOWS DOWN

CHECK:

- Dirt build-up on track
- Clearance of confinement on parts
- Track attachment bolts loose
- Dial setting lower than instruction sheet specifies
- Incoming voltage change
- Counterweight loose or improperly adjusted
- Spring bolts loose
- Counterweight bolts loose, allowing slippage
- Cracked or broken spring
- Cracked counterweight spring
- Rubber feet damaged or loose

Service Engineering Inc.

TUNING CHECKOUT PROCEDURE

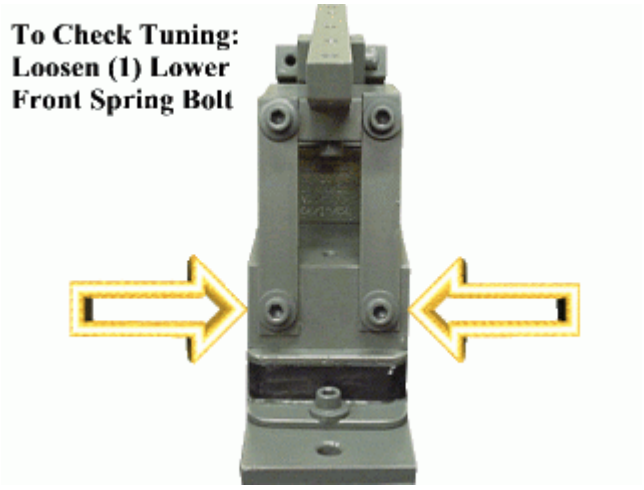
The mounting of a track section to a vibratory inline drive is predetermined by the factory. The ratio of front to rear overhang is essential to the efficiency of the system.

As with any vibratory drive system, alterations or attachments of foreign items to the track will cause a change in the operation.

The unit is to be secured to a solid 1" thick minimum , 1 1/2" thick preferred, CRS top table. It is even more advantageous to check the unit in actual position on the equipment support structure if possible.

Check to insure that all bolts and screws are tight before proceeding with the Tuning Checkout Procedure.

Turn power on, adjust the control to obtain parts motion, and loosen ONE lower front spring bolt (*see picture below*).



Observe the part reaction

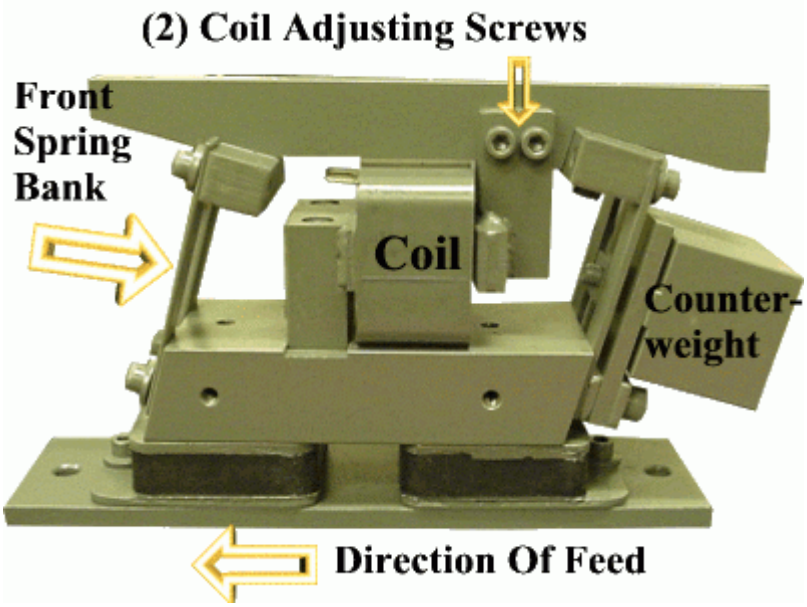
If the parts motion increases, the unit is **overtuned.**

If the parts motion slows down, the unit is **undertuned.**

TUNING CHECKOUT PROCEDURE (*cont'd*)

This checking procedure will apply to **ALL** non-rectified and rectified drive units.

If it is necessary to retune the unit, use only the front springs. The rear springs are matched and should only be replaced as a pair and are to be the same thickness.



ADJUSTING THE INLINE FOR AN UNDERTUNED CONDITION

To adjust for an **undertuned** unit, the thickness of the springs must be increased.

Exchange a thin spring for a thicker one or add one spring.

Recheck Tuning.

Repeat, if necessary, to attain the desired rate of parts motion.

ADJUSTING THE INLINE FOR AN OVERTUNED CONDITION

To adjust the **overtuned** unit, remove spring and replace it with one of lesser thickness.

Recheck tuning.

Repeat, if necessary, to attain the desired rate of parts motion.

ADDITIONAL NOTES ON TUNING INLINES

When adding a spring (if there is more than one spring at a location) use flat washer (#10 size) between the springs at top and bottom.

When the tuning adjustments are near completion, it will be necessary to adjust the counterweight. **(**See **COUNTERWEIGHT ADJUSTMENT** Instructions**).**

Re-check the Coil Gap after the Tuning Procedure is complete.

COUNTERWEIGHT ADJUSTMENT

The counterweight is necessary to allow as near a uniform feeding of the parts as possible throughout the track length.

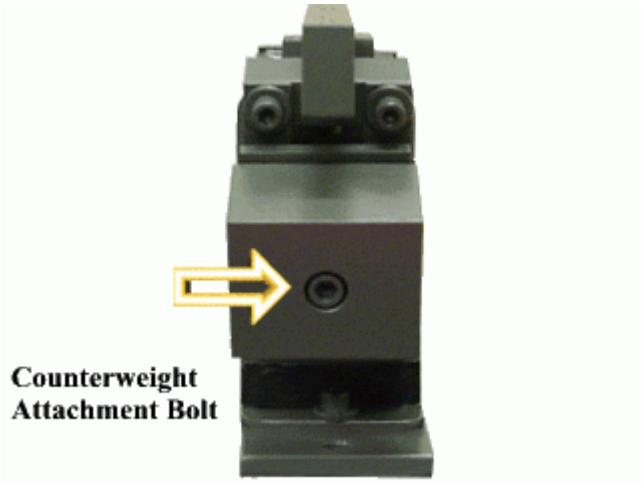
Moving the counterweight up will change the vibration at the infeed end of the track. The parts motion should increase.

If the parts motion is not sufficient at the discharge end of the track, the counterweight can be moved down to attain a more uniform parts motion.

The counterweight should be moved in 1/64” to 1/32” increments only and marked prior to any movement so you have a reference point.

The attachment bolt should be securely tightened after each move of the counterweight.

After the parts motion is determined satisfactory, final tuning check can be completed.



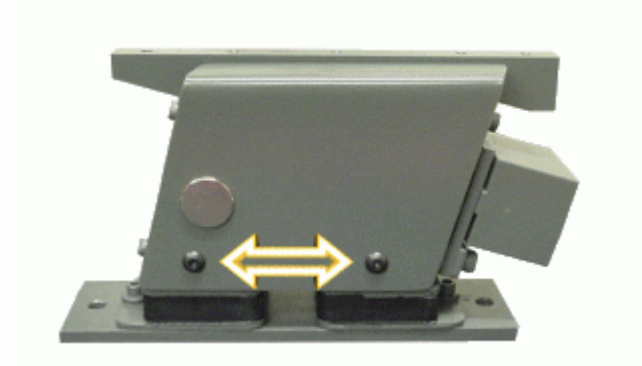
ADJUSTING THE COIL AIR GAP

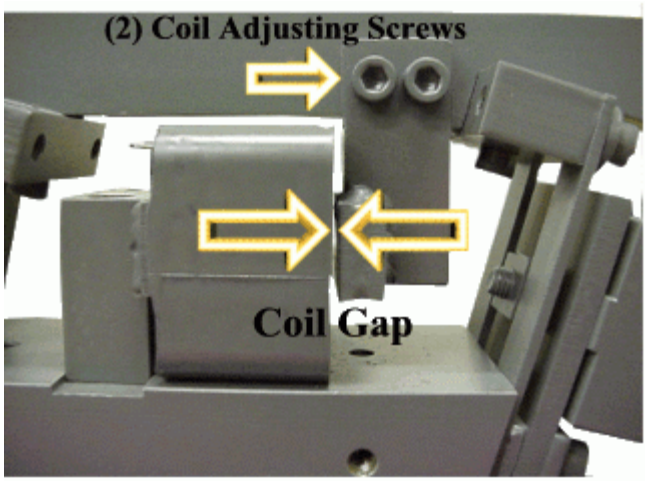
Turn off power to the unit.

The armature assembly is attached to the drive bar (track mounting bar).

To gain access to the socket head cap screws holding the armature to the drive bar, it will be necessary to remove a cover. On the 7” and 11” model the right-hand cover is to be removed.

NOTE: The description of right vs. left hand is determined by looking into the front of the inline (parts coming at you).





NOTE: This inline drive unit may be equipped with a coil containing a **thermal overload protection** device (identified by the letter "T" following the catalog number on the coil ID plate). If the coil becomes too hot, due to an 'out-of-adjustment' condition, it will shut down, and remain in this state until an optimum operating temperature is achieved.

COIL GAP CHART

7 INCH	.020
11 INCH	.020

ADDITIONAL NOTES

The clearance of confinement blades are preset during the final construction of the equipment.

Do not attach to or alter the track. Consult the project manager at Service Engineering.

Operate the drive at the minimum speed to maintain the rate.

The inline drive is not designed to move a part beyond the track end more than one part dimension.