



How To

Service Documents from APPI

Document: #HT000073

Document Title: Setting the Vibra-Drive Potentiometers

Product(s): T-1000

Procedure:

The Vibra-Drive has three potentiometers that control the speed at which the bowl vibrates; **Maximum Output**, **Minimum Output**, and **Soft-Start**. These potentiometers are set at the factory but may require adjustment over time. A small flat-head screw-driver should be used for these setting changes once the electrical panel has been removed. Power must be disconnected to remove the cover, but you may need to adjust the pots with the power on. A special key is required to turn on power to the module, while the cover is removed.

***CAUTION:** These settings should be performed by qualified maintenance personnel since power may need to be applied when making setting adjustments. Screw-driver must be long enough to extend outside of the electrical panel. Additionally, the screwdriver handle should be produced from non-conductive materials and no contact should be made with any metal portion of the screw-driver.*

***NOTE:** Adjusting the Pots will cause vibration changes, so touch screen settings will also need to be changed. All recipes will need to be recalled and for each "job", settings will need to be changed and saved.*

***NOTE:** POT adjustments are conditional to the type of product and the fullness in the bowl. First, make POT Adjustments while the bowl is empty. Once the settings are satisfactory, fill the bowl to an average fullness with the product that will be used and adjust the POTs accordingly.*

POT 3 (furthest left pot): MAXIMUM OUTPUT: Set Maximum Output first. This pot is set to control the maximum level of vibration when the main control dial is turned up all the way. The Pulse Setting is set at the factory to either 60 or 120 pulse setting (Pulses per Min) depending on the voltage of the machine.



How To

Service Documents from APPI

Steps:

1. Turn the POT counterclockwise to turn the minimum to zero.
2. Using the Touch Screen, access the “**Settings Screen**” and set “**Bowl Fast Speed**” to 99 (maximum speed).
3. Turn the POT slowly clockwise, until the desired maximum speed is reached. The maximum speed should be set to a value which causes the bowl not to over-vibrate. Over-vibrating bowls will be excessively loud and may cause damage to the bowl drive.
4. Once Maximum Output is set, adjust the Fast and Slow bowl speed, on the Settings Screen of the touch screen to the proper settings to achieve proper counts or weights.
5. Save the Settings to a Recipe.

POT 2 (middle pot): MINIMUM OUTPUT: Set Minimum Output second. To adjust the Minimum Output, set bowl speed to the lowest setting on the touch screen and adjust POT 2 to just below the slowest setting that allows for the feed rate to still maintain accuracy.

Steps:

1. Turn the POT counterclockwise to turn the maximum to zero.
2. Using the Touch Screen, access the Settings Screen and set Bowl Fast Speed to 40 (minimum speed).
3. Turn the POT slowly clockwise, until the desired minimum speed is reached. The minimum speed should be set to a value which causes parts to feed from the bowl evenly and continuously.
4. Once Minimum Output is set, adjust the Fast and Slow bowl speed, on the “**Settings Screen**” of the touch screen to the proper settings to achieve proper counts or weights.
5. Save the Settings to a Recipe.



How To

Service Documents from APPI

POT 1 (furthest right pot): SOFT-START: Bowl vibration may be ramped up instead of voltage being applied fully when starting the bowl. Set Soft-Start after Min and Max Outputs have been adjusted.

Steps:

1. Turn the POT clockwise until it cannot turn anymore. This will set the Soft-Start to the longest ramp-up of six seconds.
2. Using the Touch Screen, access the Settings Screen and set Bowl Fast Speed to 75.
3. Turn the Soft-Start POT counter-clockwise gradually, until the desired start-up speed is acquired.
4. Save the Settings to a Recipe.
5. Turn Power Off, remove the special key, and replace the module cover.

NOTE: *To adjust Soft Start, turn POT 1 clockwise for the gentlest start, this will be about a six second ramp up to full output. For a more abrupt start, turn counter-clockwise.*

CAUTION: *It is hazardous to the machine if the ramp up voltage is incorrectly adjusted. If the bowl over-vibrates when initially started, the bowl drive may be damaged, which may cause armature / coil failure.*



How To

Service Documents from APPI

