

Symptom	Probable Cause	Corrective Action
Soft Select Malfunctions	Control Panel Issues	• Enter calibration mode • Is there a count value displayed in the distance window? If No replace control panel. If yes- continue to next step. -----
	Mechanical Issues	• Press and hold the softer button, release. Press and hold the firmer button to detect carriage movement in both directions. If the carriage cannot go full range from -220 and consistently stops in the same place, check for mechanical binding. Inspect the under pan for damage or areas that cause mechanical binding. Also inspect the carriage track in the side frame for binding. If the carriage cannot move to its full range and back in the time limit, check for mechanical binding. • If the carriage <u>is not</u> moving and the motor is turning, check the set screws holding the drive shaft to the motor shaft. -----
	Incorrect/ Missing Count Values	• Threaded shaft turns when commanded but the pulse count does not display/ or does not change. Physically check the hex cam located at the front of the shaft and on the motor shaft. Hex cam should be firmly attached. If hex cam slides freely super gluing it back onto the shaft can repair it. • Hex cam moves but counter does not register. Ensure that the micro switch is properly adjusted and the switch is being made when the hex cam points press against the roller. • Disconnect the cable at J4 and check for continuity on cable. Cable should have continuity if the switch roller is in a flat area of hex cam. If no continuity- replace cable. If good continuity, place cable back on J4 and continue • While in calibration mode place the multi-meter leads on J4 and check for 5 Volts. If no 5 Volts- replace board. -----
	Defective Motor/ Start Capacitor	• If command and count data/voltage are present and Led 1 indicates AC voltage is good but soft select motor does not respond. Set probes on TP 8 and TP3, press soft command (with soft select limit switch not activated) result should be 120 VAC. Set probes on TP8 and TP2 and press firm command (with soft select limit switch not activated) result should be 120 VAC. If no 120 VAC on either test point- replace soft select board. If voltage is correct- continue to next step. • In calibration mode, place red lead on the larger red wire and post on the start capacitor of the soft select system and the black lead on the common black lead, press firm- the result should be 120 VDC. Next place the white lead on the larger white wire and post on the start capacitor of the soft select system and the black lead on the common black lead; press soft- the result should be 120 VDC. If voltage is correct- replace the motor. If voltage is incorrect- replace the start capacitor.