



LAYCOCK
MOTOR
WINDING
TOOLS

LAYCOCK SYSTEMS, INC.

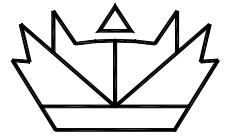
1601 N. 43rd Street

Tampa, FL 33605-5937

Phone: 813-248-3555, Fax: 813-242-0514

E-Mail: sales@laycocksystems.com

Website: www.laycocksystems.com



CROWN
MOTOR
REPAIR
TOOLS

INSTRUCTIONS FOR HEAVY DUTY COIL WINDING MACHINE CROWN MODELS 2001, 2002, 2003, 2004, 2005, 2006 & 2007

The Crown Heavy Duty Coil Winding Machine is a self-contained, power drive, variable speed unit, designed for rapid production of all types of coils. It is designed for use with all Crown Coil Winding Heads, and other similar winding forms.

Driven by a 1/2HP, 1750RPM Motor, and variable speed transmission, the output speed range may be varied from 40 to 400RPM. A maximum rated torque of 77 ft-pounds is developed at high speed and approximately 770 ft-pounds at the slow speed. **CAUTION: DO NOT EXCEED RATED LOADS.**

INSTALLATION:

1. Connect to the proper power source as specified on the nametag located under the power input box on rear of unit.
2. The Machine should be set up allowing clearance for the swing on the winding heads and access to the motor compartment for maintenance.
3. **DANGER:** It is important that the Machine be **SECURELY BOLTED TO A FIRM FOUNDATION**. Unless the unit is securely bolted, objectionable vibration will occur and the Machine may **PULL OVER** when heavy loads are applied. **Do not operate machine without side panels installed with all mounting screws.**
4. The wire guide hand steady rest Bar, for use in guiding the wire to be wound on the Crown Coil Winding Heads, is held in position by a clamp arrangement and two square head cap screws that protrude from the hole in the upper right hand corner of the stand. It must be adjusted from its position in shipment so that the end-most portion is parallel to the Coil Winding Machine face plate shaft. Install the guide bar extension(s) (2 each supplied), when required.

CAUTION:

Before using Machine, fill gear housing with three (3) quarts SAE #30, non-detergent oil. To fill, remove plug from top of gear housing. Replace plug before operating the Unit.

ALL ADJUSTMENTS HAVE BEEN MADE AT THE FACTORY.

OPERATION:

1. To start machine, the ON button must be depressed.
2. Turn the gear shift control on the front of the gear case to "SLOW". (It may be necessary to rock the face plate slightly when engaging the transmission). The gearshift control **MUST NOT BE SHIFTED WHILE THE DRIVE SHAFT IS TURNING**.
The speed adjust crank on the front of the machine will allow adjusting variable speed ranges. Gearshift in FAST range is 110-400RPM and gearshift in SLOW range is 40-110RPM. Clockwise rotation of crank increases speed, counterclockwise rotation reduces speed. **TURN ONLY WHILE MOTOR IS RUNNING.**
3. Check the clutch and brake action in both the "FAST" and "SLOW" positions to see that they operate satisfactorily.
4. Counter counts up. To reset counter to zero, turn the wing nut on the right side of the counter counterclockwise until all zeros appear.
5. When all checks have been completed and the machine appears to be operating satisfactorily, it is ready for use and the desired winding head can be mounted on the face plate. Be certain the winding head is securely fastened to the face plate.

MAINTENANCE:

TO REPLACE BELT

- A. Disconnect power to machine.
- B. Remove belt guard.
- C. Remove left side panel.
- D. Replace Belt - Dayton No. 4L-500 or equivalent (1/2" x 50"). (Crown #807121).
- E. Replace belt guard and left side panel. When replacing panels, start all screws before tightening, to properly align holes.

DANGER: ALWAYS REPLACE SIDE PANELS BEFORE USING MACHINE TO PREVENT HOUSING COLLAPSE AND ELIMINATE EXCESSIVE VIBRATION.

TO REPLACE THE CLUTCH AND BRAKE

-CLUTCH ADJUSTMENT:

NOTE: Adjust brakes prior to adjusting Clutch, as this affects the yoke travel. (Disregard if brakes are working satisfactorily).

- A. Disconnect power.
- B. Remove belt Guard.
- C. Remove gear case cover (Clutch is located on left side of the main drive). Use caution so as not to damage the Gasket.
- D. Place gear shift Control in High speed position.
- E. Rotate belt drive until the locking screw (Allen head) is exposed, loosen locking screw.
- F. Turn the knurled nut clockwise until finger tight. Back off the knurled nut until belt drive turns free (approximately .020" - .050" clearance). Foot Pedal should not bottom when depressed.
- G. Tighten locking screw.
- H. Replace gear case cover and belt Guard.
- I. Reconnect power and test at High and Low speeds.
- J. Repeat if required.

-BRAKE ADJUSTMENT:

- A. Disconnect power.
- B. Remove cotter pin at arm on rear of gear box.
- C. Remove pin.
- D. Release locking nut (9/16" wrench) on fork.
- E. Turn fork counterclockwise one or two turns.
- F. Reconnect fork to arm with pin.
- G. Connect power and test at High and Low speeds.
- H. Repeat as required until brakes operate satisfactorily.
- I. Replace cotter pin.

LUBRICATION:

GEAR CASE

Before draining and flushing gear Case, be sure to provide a gutter or other suitable drainage path. Drain and flush gear Case after every 1500 hours of operation. Use ONLY SAE #30, non-detergent oil. Three (3) quarts of oil are required to fill the Case.