

# PCM745 LIFT MOTOR PCK792 LIFT MOTOR PULLEY KIT INSTALLATION INSTRUCTIONS

WARNING: When working on the lift assembly of any dental chair in the full upright position, <u>always brace or prop the chair to prevent any downward motion that could result in personal injury.</u>

- Actuate chair into full upright position. See WARNING above!
   Note: If the Motor is not working, remove the two Screws from the Base/Lift Assembly that holds the Ball Shaft Anchor in place. Then lift the upper section and support it in place with a brace.
- Disconnect power to chair.
- 3) Remove attaching Screws and Rubber Bellows to expose the Lift Motor Assembly.
- Prop or brace chair to prevent downward motion. Remove attaching Screws and drop Bellows Cover.
- 5) Note the wire colors between the connectors for future splicing. Unplug the Motor.
- 6) Note position and then remove the (4) Screws and Spacers(s) between the Motor and the Motor Mount. Save for reassembly.
- 7) Slide the Belt off the large pulley and the small pulley. Remove the Lift Motor. *If replacing the Pulley, proceed to Step #8.* 
  - If not replacing the Pulley, proceed to Step #9, and see box below.
- If replacing the Pulley, remove the old Pulley, and install the new Pulley at this time.
- 9) Install the new Motor by sliding the Belt over the small pulley and then the large pulley.
- 10) Replace the Spacer(s) from Step #6 between the Motor Mount and the Motor, then tighten the four (4) Screws. Refer to the instructions for proper Belt tensioning on the reverse side of this page.
- 11) Reconnect this Motor to Wire Harness by cutting away both the Motor connector and the Wiring Harness connector. Using the three (3) Pig Tail Connectors, connect the proper wires by stripping 1/4" of insulation, twisting the correct wires together, inserting them into and then crimping the Pig Tail Connector.
- 12) If the Ball Shaft Anchor was removed to raise the chair, unscrew the shaft out of the Ball Nut and secure the anchor to the base.
- 13) Ensuring safety, remove the support brace installed in Step #1.
- 14) Reconnect power to chair.
- 15) Check operation of chair.
- 16) Reattach the Rubber Bellows.
  - For Planned Maintenance or if the chair begins to drift downwards, order the RPI Brake Repair Kit (RPI Part #PCK742).
  - The Lift Motor Pullev Kit (RPI Part #PCK792) is also available.



## PCM745 LIFT MOTOR BELT TENSION ADJUSTMENT

WARNING: Loosening of the drive belt will allow the lift assembly to collapse unless it is propped up and secured.

Depending on the Serial number of the Pelton & Crane Chairman chair that you are working on, there are three different ways to adjust the lift motor drive belt:

#### Serial No. 1001-1198

Normal belt tension is achieved when you have a belt deflection of 3/32nds to 1/8th of an inch with normal finger pressure applied. Adjust the belt tension by adding or removing shims between the motor mount and the lift motor.

### Serial No. 1199-10165

Normal belt tension is achieved when you have a belt deflection of 3/32nds to 1/8th of an inch with normal finger pressure applied. To change the belt tension, loosen the two motor mounting screws on the same side as the adjustment screw. Tightening the adjustment screw will increase belt tension. Loosening the adjustment screw will decrease belt tension. After adjusting the belt tension, tighten the motor mounting screw closest to the motor first and then tighten the mounting screw closest to the belt.

#### Serial No. 10166 and above

The belt tension for this series of chairs is measured a bit differently. Proper belt tension is approximately 1/32nd to 1/16th of an inch when measuring the slack between opposing unsupported belt lengths between pulleys. There is a worm screw clamp that is used to adjust belt tension. Proper belt tension should be measured when approximately 1-1/4" of the clamp is beyond the adjusting screw. When tightened, the clamp adjustment screw should be located approximately 1/2" off center of the lift motor.

- For Planned Maintenance or if the chair begins to drift downwards, order the RPI Brake Repair Kit (RPI Part #PCK742).
- The Lift Motor Pulley Kit (RPI Part #PCK792) is also available.

PCM745INS REV A 06/08

Reverse side of PCM745INS REV A 06/08