Replacing PPCH and PPCH-G Valve Driver Board

P/N 401875

Instruction Sheet

INTRODUCTION

In August, 2006 the PPCH and PPCH-G valve driver board p/n 401875 was revised to replace the mechanical relays on it with a solid state circuit. The mechanical relays have been found to occasionally not switch when they should, causing misoperation of the valve. PPCHs with serial number lower than 238 and PPCH-G lower than 245 are likely to have been delivered with the old board.

The difference between the old board and revised board is easily identified by the part number imprinted on the board (which is the bare board part number). The old board is p/n 123630; the revised board is p/n 123630 Rev. B.

It is recommended that the old board be replaced with the revised board for all PPCH and PPCH-G pressure controller/calibrators in the field.

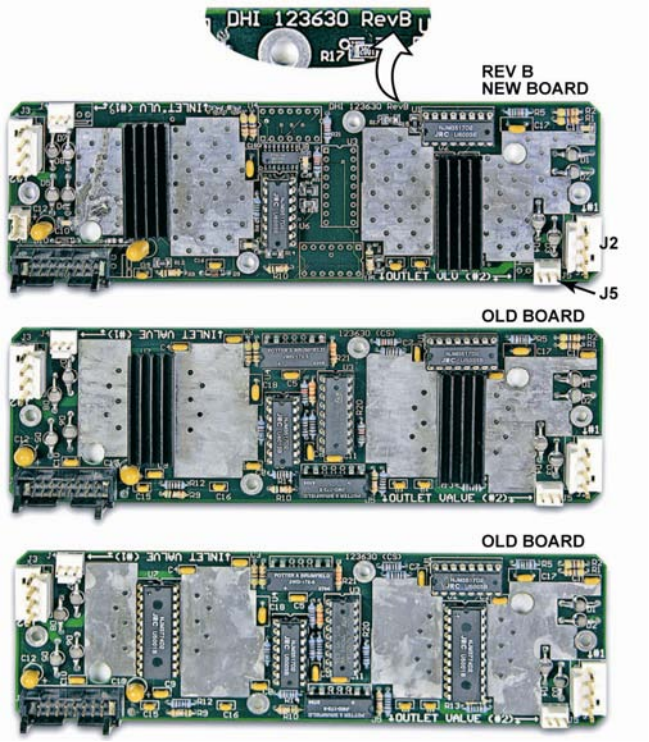

Figure 1. Valve driver board

To replace the valve driver board, proceed as follows:

❶ Turn unit off and remove power. Disconnect rear panel pressure connections.

❷ Access the PPCH or PPCH-G mechanical module by opening the fasteners on the rear panel and sliding out the module (see Section 5.9 of the PPCH Operation and Maintenance Manual).

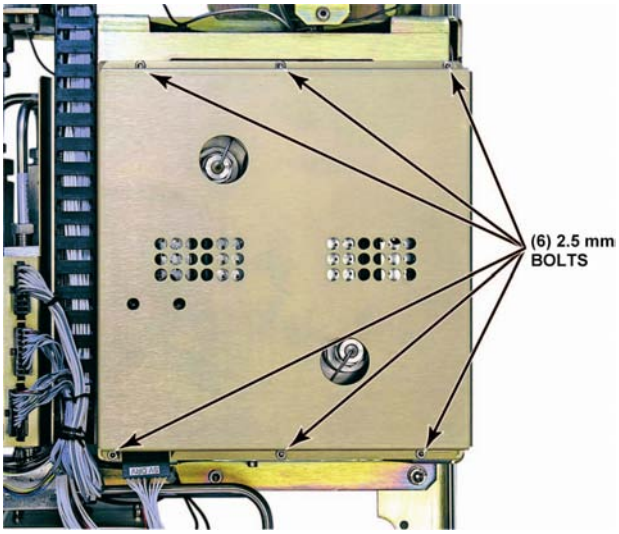

Figure 2. Control valve module cover plate

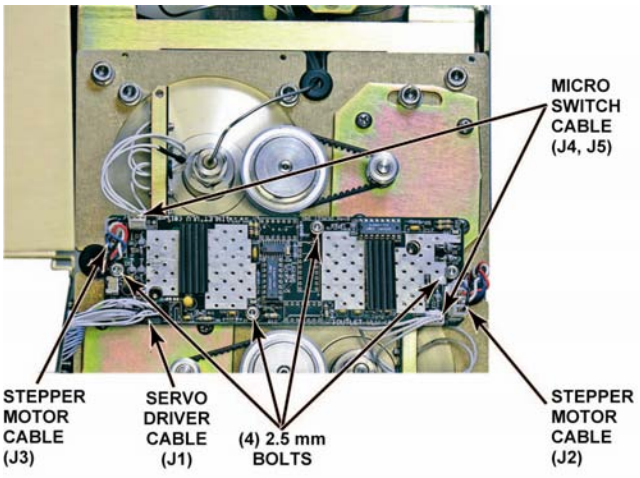

Figure 3. Valve driver board installed

❸ Remove the (6) 2.5 mm socket head bolts that hold the control valve cover plate.

❹ Lift off the cover plate carefully and disconnect the servo driver cable from the valve driver board.

❺ Disconnect the stepper motor and micro switch connections from the valve driver board.

❻ Remove the four 2.5mm sockethead cap bolts that hold the valve driver board to the chassis and remove the board. Note the orientation of the board.

❼ To install the new board, follow step ❶ to ❻ in reverse order.

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