

Subject: Replacing ServoPack in the field (w/MP940)

Product: Sigma II / MP940

Status: Released

Summary: This document describes replacing a defective Sigma II ServoPack (SGDH-xx) that is connected to an MP940.

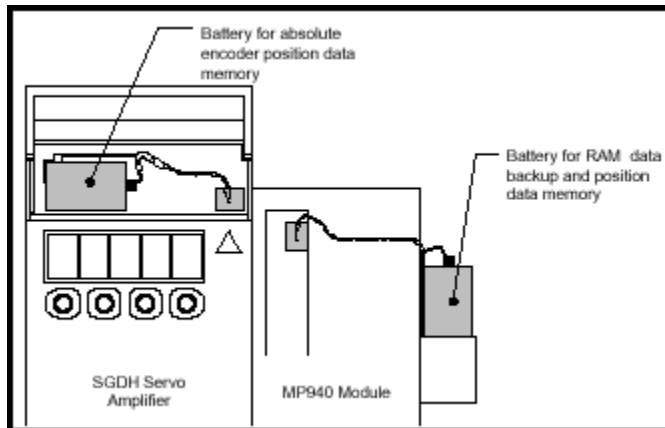
Requirements:

- SGDH with firmware version 14 or later.
- MP940 with firmware version A05 or later.
- MW or MW+ program was saved to flash memory.

Note: If absolute encoder is used, additional zero setting procedures may be necessary. (Should obtain from software developer or machine builder.)

Procedure:







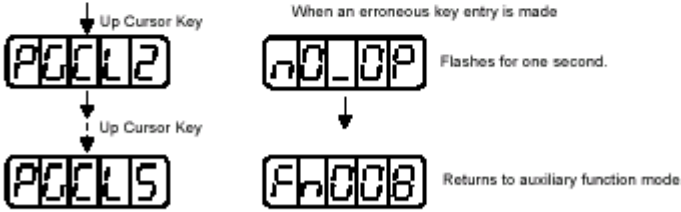

- A. Shutdown and lockout Main Disconnect.
- B. Set MP940 DIP Switches all off.
- C. Disconnect wiring from defective ServoPack and remove, detach MP940. (Be sure to save the metal reinforcement clips, if used)
- D. Install new ServoPack and connect wiring, attach MP940. (Be sure to reinstall the metal reinforcement clips, if used)
- E. Connect via switch, 24VDC to the MP940 & appropriate control power to the SGDH. Ensure that MP940 backup battery and Absolute encoder backup battery are installed and connected (if equipped). As shown below:



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- F. (If system does not include an absolute encoder skip to step J.) An A.81 alarm will appear on the SGD H ServoPack display panel. This is normal; the alarm indicates that the motor Encoder is disconnected. The absolute encoder must be reset by the procedure to follow:

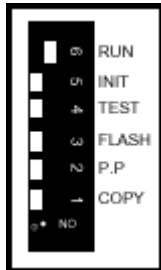
Setup Using the Built-in Panel Operator

1. Press the **MODE/SET** key to select the auxiliary function mode.

2. Press the **Up Arrow**  or **Down Arrow**  key to select the parameter Fn008.

3. Press the **DATA/SHIFT** key, holding it down for at least one second. The following display will appear.

4. Press the **Up Arrow**  key, holding it down until "PGCL5" is displayed. If an erroneous key entry is made, "nO_OP" will flash for one second and the display will return to the auxiliary function mode. In that case, go back to step 3 above and perform the operation again.

5. When "PGCL5" is displayed, press the **MODE/SET** key. The display will change as follows, and the absolute encoder's multi-turn data will be cleared


- G. Turn off 24VDC to MP940 & SGD H control power for approximately 5 seconds and then reapply.
- H. POT & NOT will alternately flash on the SGD H ServoPack display panel, if the over travel switches are not connected to the ServoPack. (If the switches are connected, the display will indicate bb) This is normal; this indicates that the positive and negative over travel switches are not connected. After the parameter transfer is completed in the steps below, the display will display bb, indicating the ServoPack is base-block.
- I. Turn off 24VDC to MP940 & SGD H control power.

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- J. Set MP940 DIP Switch #1 (COPY) to the on position.
- K. Turn on 24VDC to MP940 & SGDh control power.
- L. The SGDh ServoPack display should go blank and the RDY LED of the MP940 should blink for about 10 seconds. This is initializing the SGDh to the parameter set saved in the MP940 Flash.
- M. After transfer of parameters is complete, the SGDh display will turn on (and display as described in step H) and the MP940 RDY LED will be illuminated.
- N. Turn off 24VDC to MP940 & SGDh control power.
- O. Set MP940 DIP Switch #1 (COPY) to the off position and DIP Switch #6 (RUN) to the on position. DIP switches should be set as the diagram below depicts:



- P. Turn off 24VDC to MP940 & SGDh control power for approximately 5 seconds, and then switch back on. SGDh display will read "bb" and MP940 RDY & RUN LED's will be illuminated. MP940 program will begin normal execution.

Notes:
