

CHANGE SUMMARY

TQ10 & TQ10SD Servo Drive User Guide

Revision A

October 1997

The following is a summary of the primary technical changes to this document since the previous version was released. This document, p/n 88-015115-02 A, supersedes 88-015115-01 E.

DIP switch Functionality (pages 8-11)

Change – The DIP switches controlling foldback have been redefined, and there are now three (vs. two) DIP switches on the bottom of the product. Please check the back-cover drawings and update your internal documentation as necessary. The changes are outlined below and are explained in more detail in the applicable sections.

Foldback Functionality (pages 57-58)

Change – The threshold for the foldback timer is now selectable, and the setting to disable foldback has changed. Foldback will now respond, under typical conditions, to AC currents such as are created when a position loop is driven into instability. Previously, foldback had been insensitive to AC currents.

Motor Pole Compensation Range (pages 10-11)

Change – The range has been increased by the addition of a third DIP switch on the bottom of the product. This allows improved current-loop performance with a wider range of motor electrical pole frequencies, including all Parker Neometric 70mm and some of the 92mm motors. If the new switch, SW3-3 is placed in the OFF (up) position, settings are backward-compatible with earlier product.

Reset Input Functionality (page 28)

Change – Asserting the RESET input will now reset controller, as well as drive faults. This is accomplished by cycling +5 volt power to the controller. The effect of asserting the RESET input is identical with cycling power, except that power to the encoder and hall sensors is not interrupted by RESET.

Enable Input Low-State Threshold (page 24)

Change – Threshold has been increased by approximately one volt for improved noise immunity in applications where this signal originates at some distance from the drive.

Example in Tuning Procedure (pages 38-40)

Change – The example in the *TQ10 Tuning Procedure* has been changed.

Revised Peak Current for SM Motors (page 43)

Change – Maximum allowable peak current for several Compumotor SM Series motors is now lower. New peak current values are *three times* the rated continuous current. Previously, peak current values were *five times* the rated continuous current. The new peak currents are listed in *Motor Specifications – Compumotor SM Series Servo Motors*, which is in *Chapter 3—Specifications*.

Compumotor NeoMetric Series Motors Added (pages 44-45)

Addition – Specifications, speed/torque curves, and dimensions for three new Compumotor NeoMetric Series motors have been added to this User Guide.

Speed/Torque Curves Revised for SM Motors (pages 46-47)

Change – The speed/torque curves for Compumotor SM Series motors have been redrawn. The new curves show the peak torque that will be produced from the revised peak current (discussed in the paragraph above).

New Back Cover Illustration

Change – The illustration on the back cover of this User Guide has been updated to incorporate the changes listed in this change summary.