## **Installation Tips**

An SRE Bulletin on Making Your Installations Easier!

This application note explains how to use Battery Draw Down to enable the SE325/175 to run when used with an over voltage battery.

# 1. What is Battery Draw Down used for?

The SE325/175 & PC325/175 operate on a battery nominal range of 24-48V. If the battery voltage is greater than  $55V^1$  the controller will NOT operate. Since some batteries may be charged to greater than 55V, SRE has developed a procedure to drain the surface charge from these batteries and enable the controller to.

The procedure developed is normally turned off since it causes the steering pump to be turned on in response to an over voltage condition.

This procedure is only relevant to 48V systems.

The procedure only effects the startup. If the battery voltage rises to a value greater than 55V after startup, the controller will be disabled, until the key is turned off and on again.

# 2. Tool Requirements to use the Procedure

The procedure requires the following three elements:

a) - A SE325/175<sup>2</sup> purchased after Nov 1, 1994.

b) - A ProBit able to enable the procedure  $(PB100 V 2.20 \text{ or } PB200 V 1.20)^3$ .

c) - The steering pump contactor hooked up to the SE325/175.

## 3. Setting up Battery Draw Down with the ProBit

The menu series used to adjust the battery draw down feature is Customize/ Setup/ Battery/ HiBat Response. To use the feature simply turn it on.

#### 4. What it Does

The procedure uses the steering pump as a load to draw the surface charge off of the battery.

If an over voltage condition is detected on startup the steering pump contactor will be turned on until the voltage falls below ~53V. The steering pump contactor will then be opened. The controller must then be turned off and on again before it will continue.

That's all there is to it! If you have any questions, call SRE at 1-800-461-9338.

<u>Revision History:</u> 94-11-21 RTA -- Original Version.

<sup>&</sup>lt;sup>1</sup> Over-charging the battery seriously affects its life.

 $<sup>^2</sup>$  There is no procedure for Pump Controller only systems.

<sup>&</sup>lt;sup>3</sup> The ProBit version (and model) is displayed on the startup screen. The ProBit may be upgraded from an older version to the most current version for a standard fee.