* Thoroughly read the DSD 412 technical manual before applying power and familiarize yourself with the nomenclature. It is important to fully understand the PCDU (portable interface tool for the DSD 412) and the SCDU (permanent interface tool for the DSD 412) in order to effectively startup and setup this drive.

** Along with the DSD 412 manual you will also receive a parameter list, error code list and an explanation of the Speed Regulator and Current Regulator used in this drive. It is imperative that you read this information prior to startup.

*** All precautions normally taken prior to applying power should still be followed. The ripple filter must be connected properly (refer to the SWIFT-5000 Power Distribution schematic) before you can perform the Self Diagnostic Test and the Self Tune Test.

**** The GVI board is no longer used with a DSD-412 drive. The DAR-3E interfaces directly to the drive with a speed reference of 0-9 volts. When adjusting you will use 0.9 volts for 10% contract speed setting and 9.0 volts for full speed. There is a parameter in the DSD-412 that multiplies the DAR-3E output back to 10.0 volts because the drive uses 0-10 volts for its speed reference. This parameter is Function #82 and should be set to 1.111.

1. Check all parameters and make sure they agree with the actual conditions on the job site. Parameters will be preset by CEC, according to the engineering data sent to us. It is the responsibility of the installer to make sure all parameters are set correctly. If you have any questions contact Technical Support at CEC immediately.

**WARNING**

ARMATURE CURRENT IS CIRCULATED THROUGH THE ARMATURE CIRCUIT DURING THE PCU DIAGNOSTIC FUNCTION. THIS INCLUDES THE SELF TUNE FUNCTION AND THE SELF DIAGNOSTIC FUNCTION. THE PCDU FORCING MIDE (FRC) MUST NOT BE ACCESSED FOR ANY REASON.

2. **DIAGNOSTIC TEST** (refer to page 4-19 of the DSD-412 manual for more information).
   - Place the controller on INSPECTION
   - Preset parameter 78 and 79 to 500
   - Set the NVRAM switch to the off position
   - Enter 998 to access the Diagnostic Test and Follow the instructions shown on the PCDU. **Stop before pressing F3**