## TB046 (Rev1) - 230 VAC to 440 VAC

## Overview

This document describes converting an existing 230-vac unit to a 440-vac unit.

- The lube pump and spindle-cooling fan must be rated for 110vac.
- The Spindle motor and the flood pump motor must be rated for 440-vac.
- The main power cable and all other cables that will carry 440-vac must be rated for at least 440-vac.
- The main power fuses must be changed to the proper voltage and current ratings.

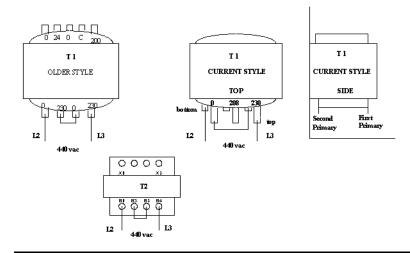
To change to 440-vac operation, first check that main power cord, spindle cable (or power to the inverter and spindle cable), and flood cable are type **SEOW** (600-vac) and not SJEOW (300-vac). If type SJEOW they must be changed.

Main fuses must be changed to a 500-vac fuse with a current rating of HALF the original 230-vac rating. Overload protectors for the flood and spindle (on a non inverter unit) must be set for the correct current load.

Primaries of transformers T1 and T2 must be reconfigured for 440-vac operation. On T1 this is accomplished by moving one leg of the incoming 440-vac to terminal 0vac on the first set of primaries and the other leg to terminal 230-vac of the second set of primaries, and then installing a jumper between terminal 230vac on the first set of primaries and terminal 0vac on the second set of primaries.

On T2 this is done moving any connections at terminal H2 to H4. Moving any connections at H3 to H1 and installing a jumper between H2 and H3.

## WARNING: Be sure to remove any original jumpers before reconfiguring transformers.



## **Document History**

Rev1 Created on 2000-08-11 by #337