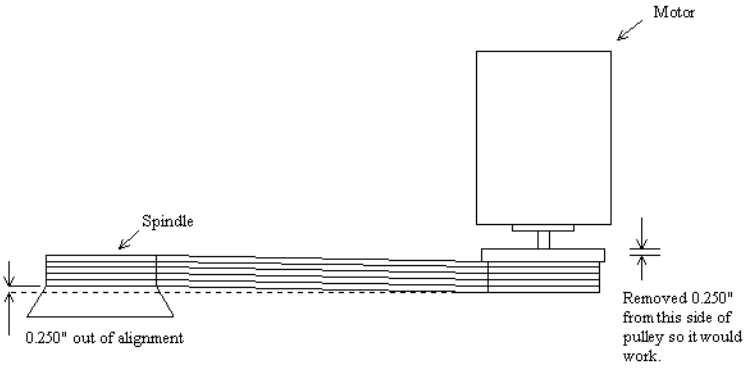
TB040 (Rev1) - Pulley Alignment

Overview

The purpose of this document is to describe the effects when a pulley on the motor does not line up with the pulley on the spindle or ball screw, etc....

Problem

This diagram shows the motor being mounted 0.250" lower than the spindle pulley. This will cause excessive noise and create heat build up on the spindle pulley and belt. The belt would surely become frayed and in time would eventually be destroyed. See the following diagram of a spindle motor and pulley setup.



Solution

Bring the motor pulley into alignment. One recommendation is removing the pulley from the motor and machining 0.250" from the backside of the pulley. You will also have to make a new retainer to hold the pulley on.

Pulleys on the motor and spindle that are of a poor quality cast and have numerous voids which also decrease belt life. Be sure the belt is the correct multi-groove type.

Document History

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