

## FAQ Note

### Unstable Display Value on Model 1250

**Problem:** The displayed value flickers, wanders, or jumps while the synchro transmitter is not moving. The displayed value is suddenly off by an amount that is equal to the programmed Counts Per Turn (OP 3) value, or some multiple of that value.

**Explanation:** There are two possible causes of this problem:

1) Model 1250's made before June 2001 do not have a "Loss of Synchro Signal" alarm feature. If the signal from the synchro transmitter is lost, due to a loss of AC power to the synchro, or from a failure of the transmitter itself, the 1250's display value will exhibit these symptoms. Model 1250's made after June 2001 will display an "FA 25" error code if the synchro signal is lost.

2) Harmonic noise on the power line can cause some 1250's to think that the synchro is moving when it is not. In some cases it can cause the 1250 to think that a full rotation of the synchro has occurred. This is due to the way the 1250 measures the synchro's stator voltages and calculates its angular position. Model 1250's made between June of 2001 and March of 2004 had a software bug that exacerbates this problem. Model 1250's made before June of 2001 did not exhibit this phenomenon. Model 1250's made after March 2004 have software with the bug fixed and do not exhibit the problem.

**Troubleshooting:** First, determine the age of the 1250. This can be done by scrolling the 1250's firmware revision message. To do this, turn off power to the 1250, press and hold the SELECT / ENTER button while turning power on. The firmware revision will be scrolled across the display.

If the revision is 1250ab-015-01 or lower, then explanation #1 is the likely cause. Check for stable, significant voltage readings measured between the 1250 terminals A-C and B-C. These voltages should be in the 10 to 80 VAC range. If the voltages measured are less than 1 volt AC then there is no signal coming from the synchro transmitter. Verify AC power to the synchro transmitter. If there is power to the synchro but no signal coming out of the synchro, then the synchro is probably defective. If the voltages measured at terminals A-C and B-C are correct, there is likely a defect in the 1250. Call INCON Tech Service (800-984-6266) and ask for an RMA to return the unit for repair.

If the revision is between 1.0 and 1.40 then explanation #2 above is the likely cause. Call INCON Tech Service (800-984-6266) and ask to have a firmware update for this 1250.

If the revision is 1250b r1.50 or higher, and no "FA-25" error message is being displayed, there is likely a defect in the 1250. Call INCON Tech Service (800-984-6266) and ask for an RMA to return the unit for repair.