

VibrAlign Laser Alignment Tips

Detector Field Check

Please bear in mind that this is not a calibration procedure, nor a check of the calibration. A true calibration check requires the use of special fixtures, traceable standards, and precise positioning/movement of the TD units. This field check is a quick and convenient way to simply check the performance of the detectors.

To perform a field check of the FixturLaser Shaft system:

1. Set up the magnetic bases (as for a straightness measurement). Or, mount the shaft bracket on a piece of pipe.
2. Mount the TDS and TDM on the rods, and position the TD units about 3 inches apart.
3. Turn on the system
4. Go into the shaft alignment program (program 1); enter a value for dimension A.
5. Go into the Tools menu and ensure that the Clock method is selected, then return to the alignment screen
6. With the detector covers closed, aim the lasers so that they hit the center of the opposing targets
7. Open the detector targets
8. Touch the 9:00 icon to zero the detectors, wait about 2 seconds then press the 3:00 icon, wait about 2 seconds then press the 12:00 icon
9. Place a shim of known thickness under the magnet of the TDM



(or directly under the TDM if using the shaft brackets)

10. Read the TDM value on the Display Unit (disregard the TDS value). This value should closely match the thickness of the shim that was used.
11. Carefully remove the shim from under the TDM. If the values do not return to zero it might be necessary to re-zero the unit (repeat step 8).
12. Steps 8 – 10 should be repeated for a 5 mil shim, 10 mil shim, and 15 mil shim.
13. Now repeat steps 8 – 12 for the TDS.

