

# Shaft Alignment in "One Shot"

## VIBRALIGN LASER ALIGNMENT TIPS

Are you making repeated alignment corrections before you satisfy shaft alignment tolerances? You should be able to satisfy tolerances in one or two tries! Follow these simple steps to reduce the number of tries:

### Prepare

P-1. Perform the five absolutely essential pre-alignment steps! Never skip these steps.

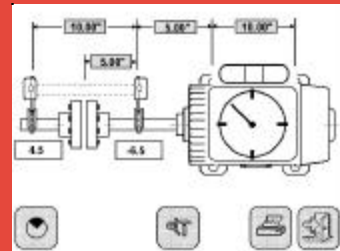
P-2. Configure the shaft alignment program for tri-point method.

#### ABSOLUTELY ESSENTIAL PREALIGNMENT STEPS

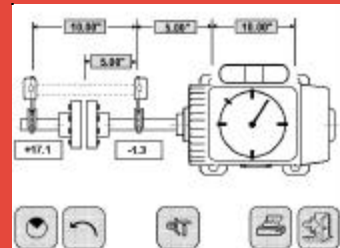
1. Check Run Out
2. Perform a Rough Alignment
3. Correct "Obvious" Soft Foot
4. Torque the Bolts in a Known Sequence
5. Correct Final Soft Foot

### Measure

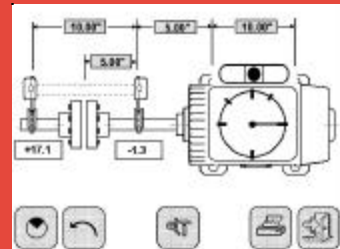
M-1. Take the first tri-point measurement with the TD's at any clock position. You do not need to level them.



M-2. Rotate the TD's at least 30 degrees and take the second tri-point measurement. You do not need to level them.





M-3. Take the third tri-point measurement with the TD's at 3:00. Level them. *Using the 3:00 position is convenient, but is not required.*





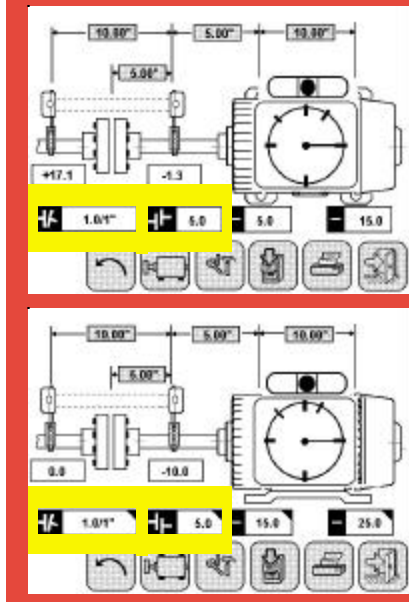
**VibrAlign**

## Evaluate

E-1. The horizontal results are displayed. Compare the angular  and offset  values to the tolerances.

RPM	Angular Misalignment mils/inch		Offset Misalignment mils	
	Excellent	Acceptable	Excellent	Acceptable
3600	0.3/1"	0.5/1"	1.0	2.0
1800	0.5/1"	0.7/1"	2.0	4.0
1200	0.7/1"	1.0/1"	4.0	6.0
900	1.0/1"	1.5/1"	6.0	6.0

E-2. Touch the two footed icon to display vertical results. Compare the angular  and offset  values to the tolerances.



## Correct

C-1. If the tolerances are NOT satisfied, make a shim adjustment. The vertical foot values are used to make shim adjustments.

- Positive foot values mean the movable element is high, so you will remove shims.
- Negative foot values mean the movable element is low, so you will add shims.

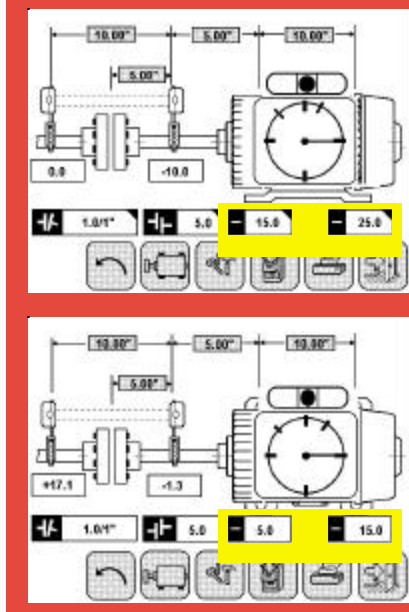
*After the shim adjustment, leave the bolts loose.*

C-2. Touch the four footed icon to view the horizontal results.

C-3. Make horizontal adjustments. Use the foot values to guide you.


- Positive foot values mean the movable element is away, so you move it toward you.
- Negative foot values mean the movable element is towards, move it away from you.

*After the horizontal adjustment, re-torque the bolts.*



## Re-measure and Document

M-1. Touch  to and confirm the request to re-measure.

 Go back to Step M-1. Re-measure and re-evaluate. If tolerances are satisfied, save the data. The job is done.

