Fixturlaser Laser Kit

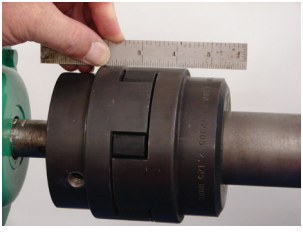
QUICK TIPS

VIBRALIGN

PRE-ALIGNMENT

1. Rough Alignment

- Vertical: Place scale or straightedge on highest hub and raise or lower the movable shaft to within 20 mils (0.020”) of the stationary hub.
- Horizontal: Place scale or straightedge on hub nearest to you and adjust the movable shaft to within 20 mils (0.020”) of the stationary hub.

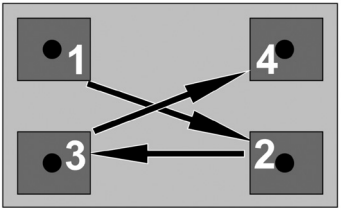


2. Correct Obvious Soft Foot

Loosen all the bolts and find any obviously loose shim packs. Add shims as needed to make a snug fit.

3. Follow Tightening Sequence

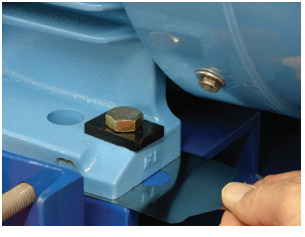
Follow the same sequence throughout the alignment process, and tighten in 3 passes: snug first, 50% on second pass, completely tight on the third pass. (View sequence on next page)



Bolt Tightening Sequence

4. Make a Final Soft Foot Correction

Loosen one bolt at a time and check for soft foot with a 2 mil (0.002") shim or feeler gauge. Correct any foot with 2 mils or more of soft foot, then tighten the bolt before proceeding to the next foot.



Set Up

1. Mount the 'S' sensor on the stationary shaft or coupling hub and hand tighten the nut. Turn the sensor on by pressing the power button.

2. Mount the 'M' sensor on the movable shaft or coupling hub and hand tighten the nut. Use the tightening tool and tighten further. Turn the sensor on by pressing the power button.

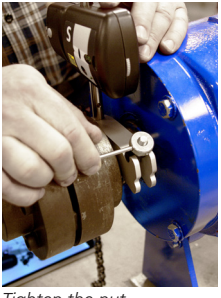
Start the Laser Kit App

1. Ensure Bluetooth is enabled on your device.

2. Click on the Fixturlaser Laser Kit App on your phone or tablet.

3. The app will search for the sensors and connect via Bluetooth. This will take between 5 to 15 seconds.

4. The laser will turn on.



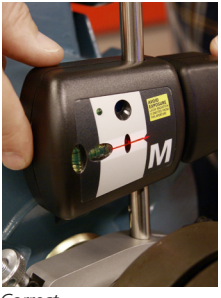
Tighten the nut

Press the power button

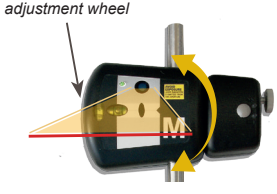
Aim the Lasers

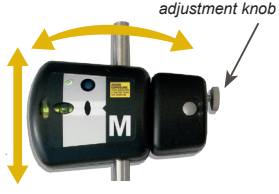
1. Loosen the adjustment knob of the sensor and slide the sensors up and down until the line laser beams hit the middle of the opposite sensor.
2. Fine tune the line laser beam with adjustment wheel on the opposite side of the sensor.
3. Be precise so that the beam hits the window as accurately as possible.
4. Note that the sensors will be at different elevations.

Incorrect



Correct



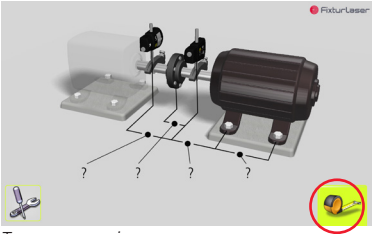


Enter Dimensions

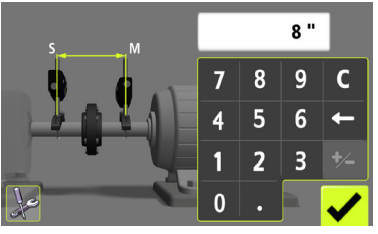
1. Press the yellow tape measure icon to open the keypad.

2. Measure the indicated dimension to the nearest 1/8" using the keypad.

3. Continue and enter all dimensions.

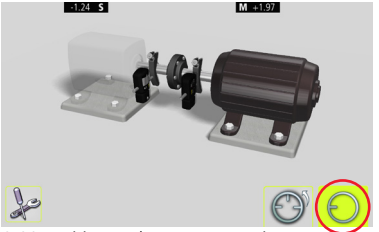


Tape measure icon

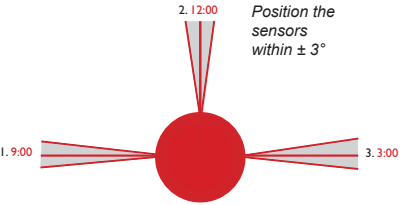


Measure Misalignment

1. Press the measurement mode icon. Rotate the sensors to the 9:00 position and press the measurement icon.



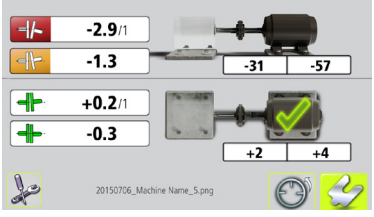
9:00 position and measurement icon



2. Rotate the sensors to the 12:00 position. Press the measurement icon again to take the second measurement. (View the 12:00 position on next page)

12:00 position

3. Rotate the sensors to 3:00, measure. The results will be displayed on screen.



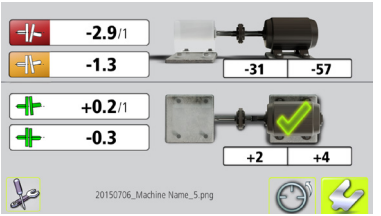
Evaluating the Results

1. Vertical results are displayed at the top of the screen, horizontal results at the bottom.

2. Green coupling icons indicate values that are in tolerance.

3. Orange values are within 2x tolerance.

4. Red values are more the 2x the tolerance level.



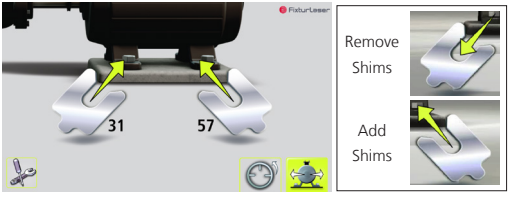
Using the Verti-Zontal™ Process

First Correct the Vertical Misalignment

1. Press the shim icon in the bottom right corner of the screen.

2. Loosen all the bolts on the movable machine.

3. Follow screen instructions for removing or inserting shims.



Do not re-tighten the bolts.

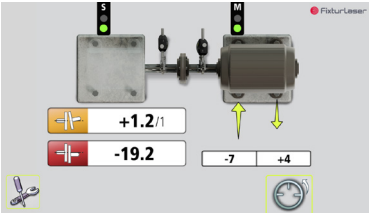
Next Correct the Horizontal Misalignment

1. First press the 'live reading' icon in the bottom right corner of the screen.

2. To ensure the live readings are for the horizontal direction make sure the sensors are at either 3:00 or 9:00.

3. Make the largest adjustment first. The arrows indicate the direction of adjustment. (View screen on the next page)

CORRECTION



4. Continue to adjust the movable machine, watching the live readings, until both the angle and offset are within tolerance.
5. Tighten the bolts using the tightening sequence established in Pre-Alignment.
6. Some machines move laterally when tightening the bolts. Make sure that the displayed values remain in tolerance as you tighten the bolts.

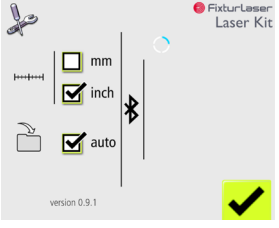
Re-Measure

1. Press the re-measure button. 

2. Re-measure to verify the results are within tolerance. If they are not, repeat the Verti-Zontal™ Correction Process (top of page 9).

Results/Save

1. Image results are saved automatically into your photos folder on your device only when the auto save box is selected in the settings menu.



Auto save box

ADDITIONAL RESOURCES

The Fixturlaser Laser Kit was designed to be used with the Fixturlaser Laser Kit App, available for download from iTunes and Google Play.

iTunes *Google Play*

- **Training**
  training.vibralign.com
- **The Alignment Blog**
  thealignmentblog.com
- **The Alignment Store & Resource Center**
  shaftalignment.net
- **Videos**
  youtube.com/vibralign

Fixturlaser Laser Kit VIBRALIGN

Fixturlaser Laser Kit Complete system:	
Weight including all standard parts:	2,75 kg (6,06 lbs)
Displayed resolution:	0,01 mm (0,1 mil with “inch” settings.)
Case:	
Dimension:	357 mm x 305 mm x 96 mm (14,1 in x 12 in x 3,8 in)
Sensors M5 1-0976/S5 1-0977	
Wireless communication:	Class I Bluetooth transceiver with multi-drop capability. BLE Bluetooth Low Energy (BT 4.0)
Operating time (Continuously measuring):	5 h
Weight:	156 g (5,5 oz)
Dimensions:	139 mm x 79 mm x 40 mm (5,5 in x 3,1 in x 1,6 in)
Environmental protection:	IP 20
Measurement distance:	70 mm - 850 mm (2,7 in - 2,8 ft)
Detector:	PSD (Single axis)
Detector area:	8,5 x 0,9 mm (0,3 x 0,04 in)
Measurement accuracy:	3% ± 0,01 mm
Inclinometer accuracy:	±2°
Shaft diameter:	Ø 30-150 mm (1,2 - 5,9 in)
Rods:	2 pcs 150 mm (5,9 in)
Laser safty:	

DECLARATION OF CONFORMITY
In accordance with the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, including amendments by the CE-marking Directive 93/68/EEC & EC directives RoHS 2011/65/EU.
Type of equipment: Alignment System
Brand name or trade mark: FIXTURLASER Laser Kit
Type designation(s)/Model no(s)
1-0976 FIXTURLASER M5
1-0977 FIXTURLASER S5

Manufacturer's name, address, telephone & fax no
ACOEM AB - Box 7 - SE-431 21 Mölndal - Sweden
Tel: +46 31 7062800 - Fax: +46 31 7062850

The following standards and/or technical specifications, which comply with good engineering practice in safety matters in force within the EEA, have been applied:
Standard/Test report/Technical construction file/Normative document
Emission: EN 61000-6-3:2007.
Immunity: EN 61000-6-2:2005, EN 61000-4-2, -3, -4, -5, -6, -11.
EN 61010-1:2010
ISO9001:2008 Ref. No/ Issued by: DNV Certification AB Certification No. 2009-SKM-AQ-2704/2009-SKM-AE-1419.
The laser is classified in accordance with the International Standard IEC-60825-1:2007,
USA FDA Standard 21 CFR, Ch 1, Part 1040.10 and 1040.11 except for deviations pursuant to laser notice No. 50, dated June 24, 2007.
Additional information
The product was CE-marked in 2014.
As manufacturer, we declare under our sole responsibility that the equipment follows the provisions of the Directives stated above.

Date and place of issue:
Mölndal 2015-04-09
Signature of authorized person

Hans Svensson, CEO

Fixturlaser Laser Kit

Version 1.0

VIBRALIGN

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