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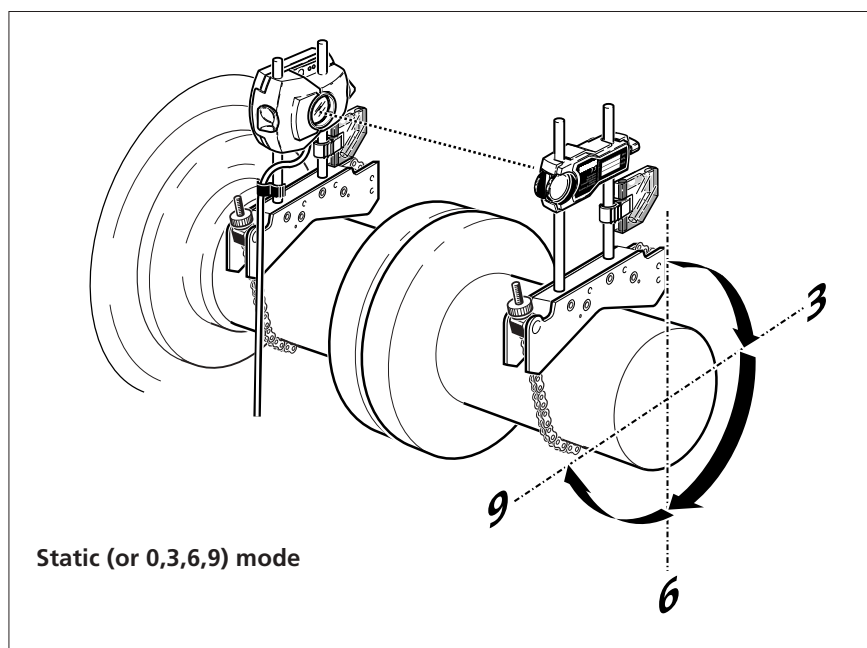
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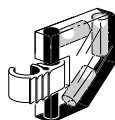
OPTALIGN® PLUS

Static (0369) measurement mode



Operating Instructions

4-12 and 4-13



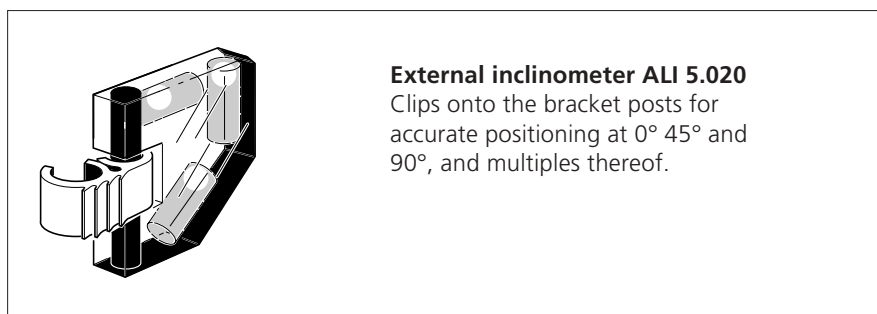
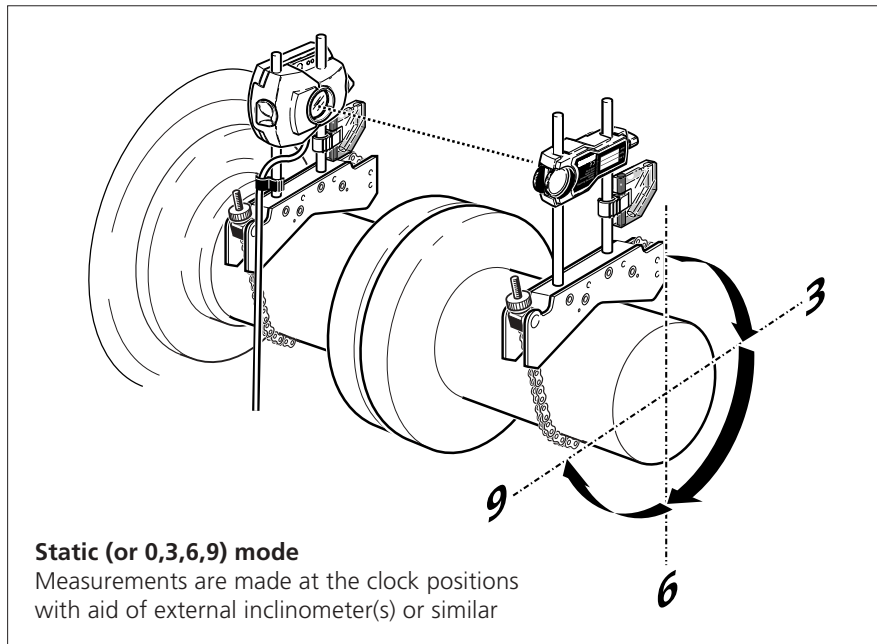
Static (0369) measurement mode

This mode is ideal for:

- comparison with dial gauges and with the original OPTALIGN
- uncoupled shafts
- non-rotatable shafts - see page 4-14.
- '4-feet' machines that are mounted vertically.
- using the 10:30 position for the MOVE function (page 3-30).
- using the MOVE function to monitor vertical (shimming) correction (page 3-29).

In static mode individual measurements are made at the eight 45° clock positions, using external inclinometer(s) or protractor to set the angles. The OPTALIGN PLUS internal electronic inclinometer is NOT active in this mode.

For uncoupled shafts both halves must be turned separately.



Static procedure

1. Mount components, enter dimensions etc.

(pages 3-8 to 3-17.)

2. Turn shaft, select measurement angle

Turn the shaft to any of the eight available positions (i.e. 0:00, 1:30, 3:00, 4:30, 6:00, 7:30, 9:00 or 10:30 o'clock position) for measurement. Position shaft as accurately as possible using an external inclinometer or a spirit level or a protractor.

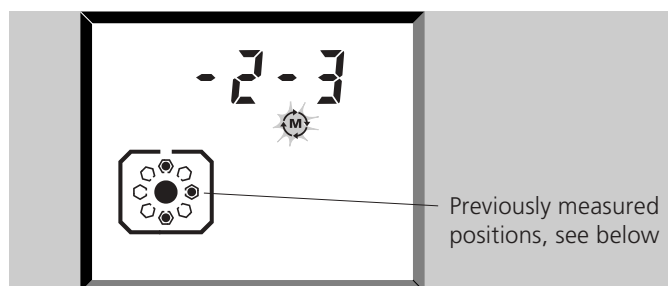
Uncoupled shafts: Set the positions of both shafts as accurately as possible, using the same method on both sides.

3. Press , then center laser beam

(pages 3-18 to 3-21).

4. Take measurement

The first measurement is taken when you press the number key of the clock position (e.g. '0' for 0:00, '3' for 3:00 etc.; the ENT key is not needed here). The display shows 'tStX' (X= 1,2,3...), then 'Pt. 1' when the first measurement point is recorded, followed by the laser coordinates. The end view of the machine is shown, with the current measurement position clearly marked by a black bolt.




Subsequent measurements in 45° positions may be entered, for example, by pressing the following keys:

    for 1:30.

5. Repeat for each clock position

Proceed to the next position. Any position may be used as desired.

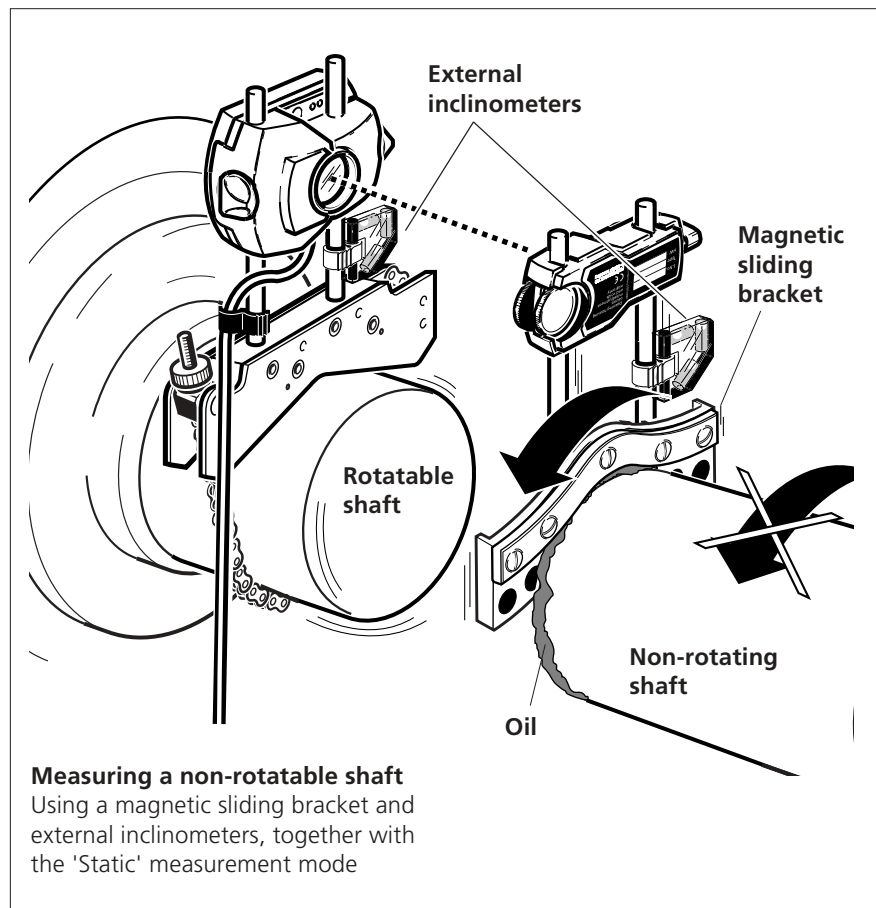
- A minimum of 3 positions is required for results.
- Any position may be remeasured.
- END or OFF? page 4-27; Cable tangled? page 3-23.

Press the  key when finished.

Measuring a non-rotatable shaft

To measure a non-rotatable shaft:

- Use a magnetic sliding bracket, ALI 2.230 (described opposite) mounted on the coupling face on the non-rotatable side. The face and edge must be ferrous, surface-finished, clean & lightly oiled.
- Use Multipoint mode and refer to [Technote No.33](#).
- External inclinometers or similar are used to set the measurement positions of the transducer AND reflector.



Both shafts non-rotatable!

Yes, you can do this too, with two sliding brackets, but accuracy achieved is very dependent on the quality of the coupling faces. The transducer should mount on the face with the better finish. This should be seen only as a method of last resort!

Non-rotational measurement procedure:

1. Prepare non-rotating coupling face

The face and edge must be ferrous (steel), and surface-finished, with a large contact area over which the bracket magnets can slide. Clean and lightly oil the surface.

2. Mount sliding bracket & reflector on non-rotating side

The transducer mounts on the rotating side as usual (pages 3-8 to 3-12). Fit cable & switch on.

3. Prepare to measure

Enter dimensions, press the 'M' key and zero the beam coordinates (see pages 3-15 to 3-21).

4. Turn shafts/brackets

See page 4-13, step 3 for details. Set the positions as accurately as possible with external inclinometer a spirit level or protractor, using the same method on both sides.

5. Repeat for each clock position

Watch out for 'END' or 'OFF' - see page 4-27.
Then view the results in the usual way (page 3-24).

