TKSA 60 / 80 Display Units



- Power on / off (hold for two seconds to turn off) Battery status indicator (2)
- (3) Wireless communications status with measuring units
- (4)Navigate display screens and select highlighted item
- (5) Cancel (C) button - delete last character typed
- (6)Battery charging LED indicator
- Alpha/numeric data entry keypad

TKSA 60 / 80 Measuring Units



- (1)Lasers
- CCD sensors and sensor grids
- Pitch adjustment knob



- (1) Measuring unit on the stationary machine
- (2) Measuring unit on the movable machine
- 3 Movable machine

The above clock positions (9, 12, and 3 o'clock) are the most common for alignment measurements: however, measurements can be taken from any clock position. Also, while it is strongly recommended to take measurements that are 90 degrees apart, the TKSA 60 / 80 Alignment Tools will accept a minimum rotation angle of 30 degrees from the previous measurement position.

The Display Unit - Home Screen



When first powered on, the Display Unit displays its Home screen.

lcon Description

Display unit's battery status

- 2 Wireless communication status with measuring units
- mm Length units of measurement
- Initiate a Quick Alignment
 - Initiate a Quick Soft Foot job



- Open a previously stored alignment job
- Export reports to a USB memory stick for transfer to PC

Modify system settings

Two Alignment Method Options

The TKSA 60 / 80 Alignment Tools provide two methods for performing alignment inspections:

Uuick Alignment

The Quick Alignment feature is designed to allow you to guickly perform an alignment inspection on a motor / pump machine train.

Full Alignment Job

Full alignment jobs require more setup at the beginning of the alignment job and provide a more structured alignment job process. Also, you can specify alignment inspections on machine trains other than motor / pump machine trains, including machine trains consisting of more than two machines.

To Modify System Settings:

From either the Home screen or the right panel menu, select the Settings icon to display the main Settings screen. Then specify Display Unit settings, Measuring Unit settings, Units of Measurement settings, and Date and Time settings.

Standard Alignment Job Process

Set up the job - Set up the two alignment measuring units; input machinery dimension information, and alignment targets and tolerances.

Perform as-found inspections - Perform initial measurements for the alignment inspection and for other selected inspections. **View results** – View as-found inspection results and determine whether corrections are required for each inspection.

Make corrections - If corrections are required, make corrections for each inspection requiring correction.

Perform a final as-corrected alignment inspection - After all corrections are made, re-inspect machine alignment to verify accuracy and record as-corrected job results.

Save the Job - Save the job for historical reference and for use with future alignment jobs.

To Perform an Alignment Inspection:

1 - Turn off power to the drive machine.

2 - Attach and adjust the v-brackets and measuring units as described in the user manual. Laser lines should hit the centre of the other unit's white sensor grid.

3 - Power on the measuring units and display unit.

4 – I or From the Home screen, select to perform either a Quick Alignment job or a Full Alignment job.

5 – For Quick Alignment, enter machine dimensions. For Full Alignment, follow screen prompts to enter machine setup and inspection selection, then enter machine dimensions.



6 – For Quick Alignment, enter alignment tolerances (targets are assumed as 0,0). For Full Alignment, targets and tolerances are previously entered during machine setup.



Provides access to a tolerance table based on machine RPM.

7 - Record three as-found alignment measurements.

Measurements can be taken at any "clock" position, for example:

Reading 1 at 9 o'clock

Reading 2 at 12 o'clock

Reading 3 at 3 o'clock

The sequence of the three measurements should be 9-12-3 or 3-12-9, so that the shafts are always rotated in the same direction between measurements.



1 Indicates a previously recorded measurement

2 Select to record current measurement

8 – View measurement results and specify if corrections are



- Vertical alignment results
- 2 Horizontal alignment results
- 3 Coupling position icons
- 4 Correction / no correction icons

9 – Use live displays to perform required corrections. For vertical alignment corrections, place the measuring units in the 12 o'clock position, for horizontal alignment corrections, place the measuring units in either the 3 o'clock or 9 o'clock position. Arrowhead direction indicates direction of movement, arrowhead color indicates alignment results compared to specified tolerances.



10 - After all alignment values are within tolerances, progress to measurement screens for any remaining inspections that require correction.

11 - After performing corrections and recording as-corrected measurements for any additional inspections, progress to the alignment Measurement screen, where you measure and record the final as-corrected alignment.

12 - After reviewing the as-corrected alignment results, press the right panel's Next Screen icon to progress to the Save Job screen.

For more information on the above alignment process, and for information on features and operations not included in this Quick Reference Guide, reference your TKSA 60 / 80 Alignment Tools User Manual. SKF offers machinery shims - find them on www.skf.com/alignment.





SKF TKSA 60 / TKSA 80 Shaft Alignment Tools

Quick Reference Guide

This Quick Reference Guide is not a substitute for the product user manual. It is important that you read the product user manual to gain a thorough understanding of all product features, operations, and safety instructions.

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