



Application

Perfect alignment of machinery shafts is crucial to prevent premature bearing failure, shaft fatigue, sealing problems and vibrations. It further reduces the risk of over-heating and excessive energy consumption. The SKF shaft alignment tool TMEA 1P/2.5 offers an easy and accurate way of adjusting two units of rotating machinery so that the shafts of the units are in a straight line.

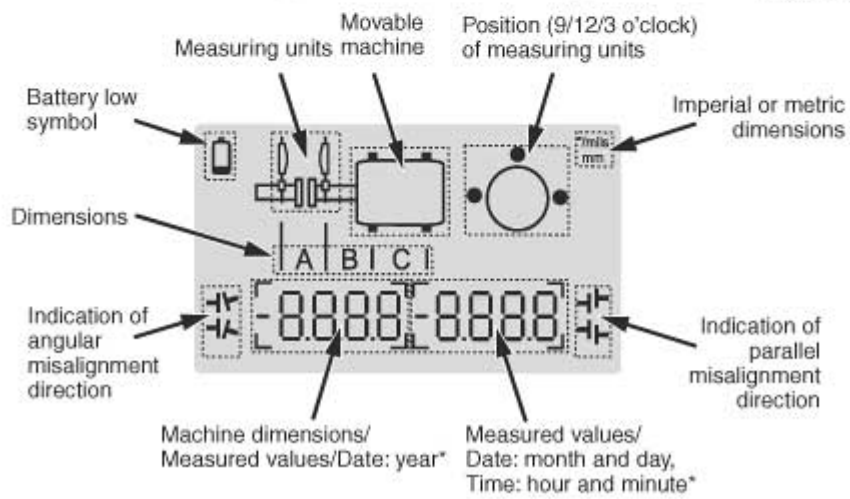
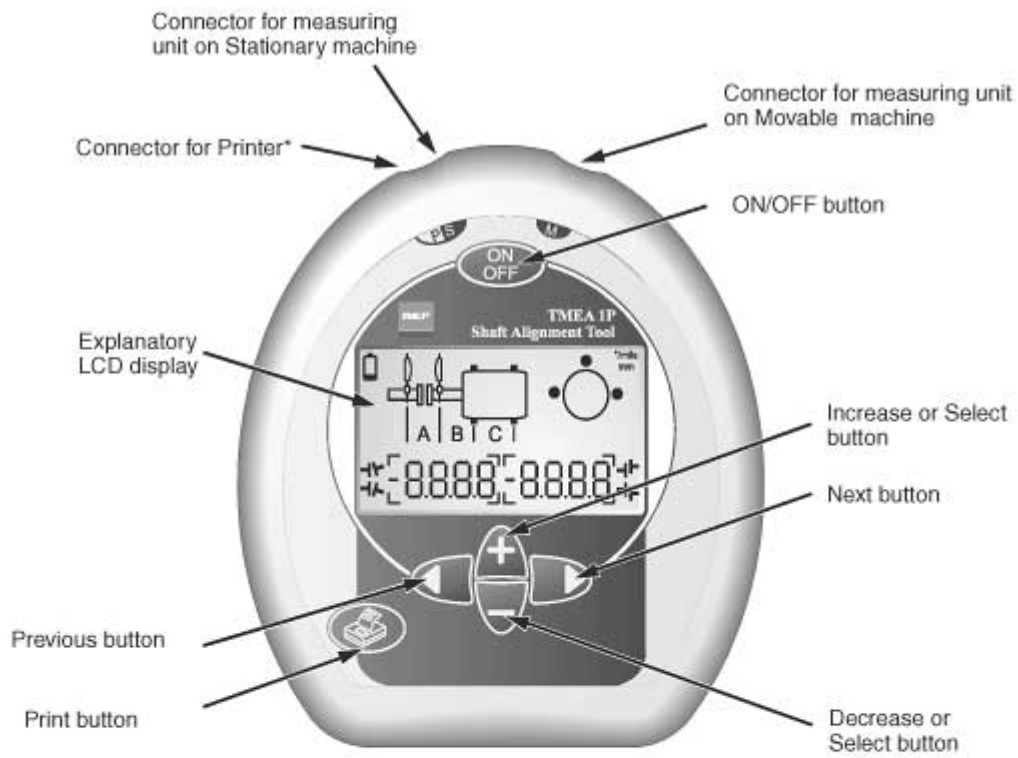
Description

The TMEA 1P/2.5 consists of two measuring units and a display unit. The measuring units are fitted with brackets for attachment to the shafts and can be fixed using chains. Both measuring units emit laser, which is projected on the position sensor detector of the other unit. The measuring units are also equipped with spirit levels, which allows easy positioning in the 9, 12 and 3 o'clock positions. The display unit is operated using just 6 buttons, including the on/off button and provides clear "real-time" of measured values during the alignment process. The display unit is equipped with a printer port, which facilitates the connection of an optional thermal printer for documenting alignment activities. After measuring shaft misalignment, alignment is easily performed by adjusting the moveable machine(s).

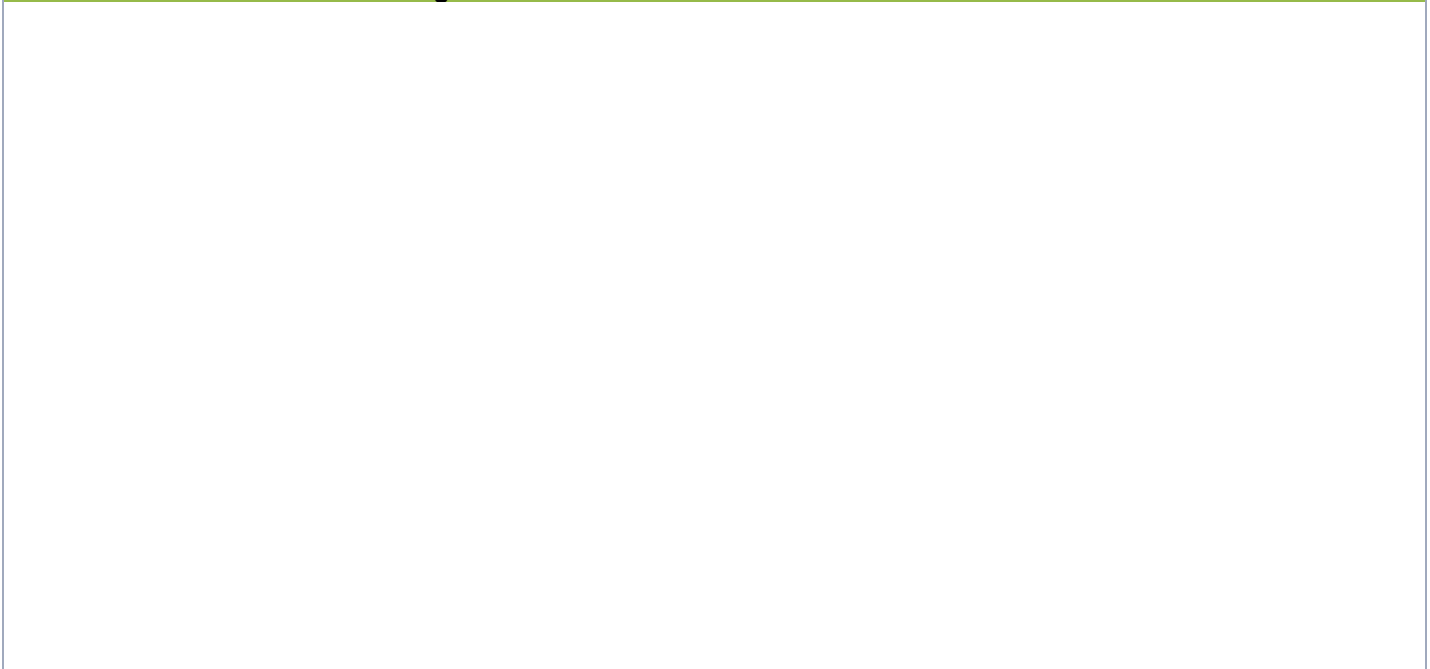


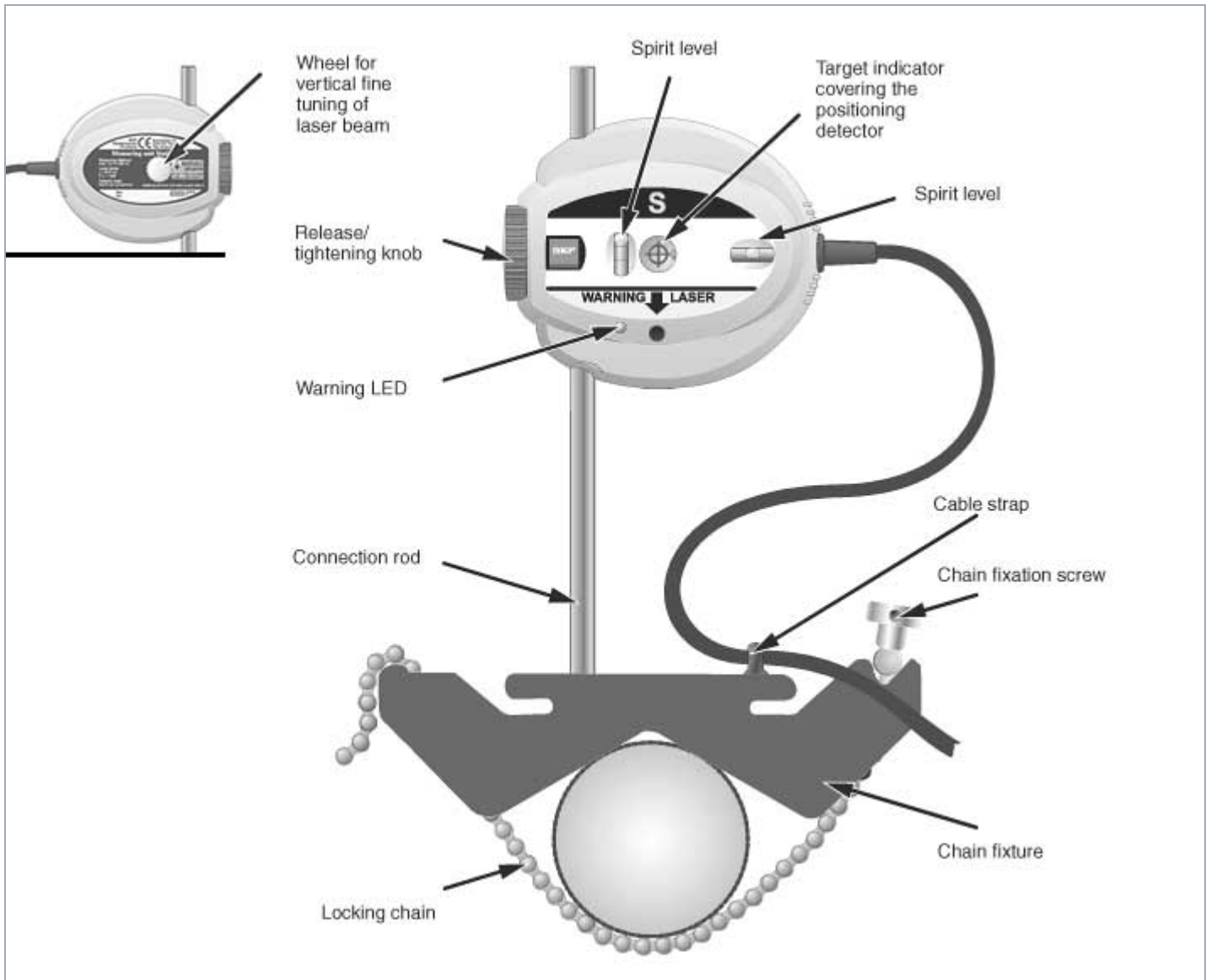
Display unit





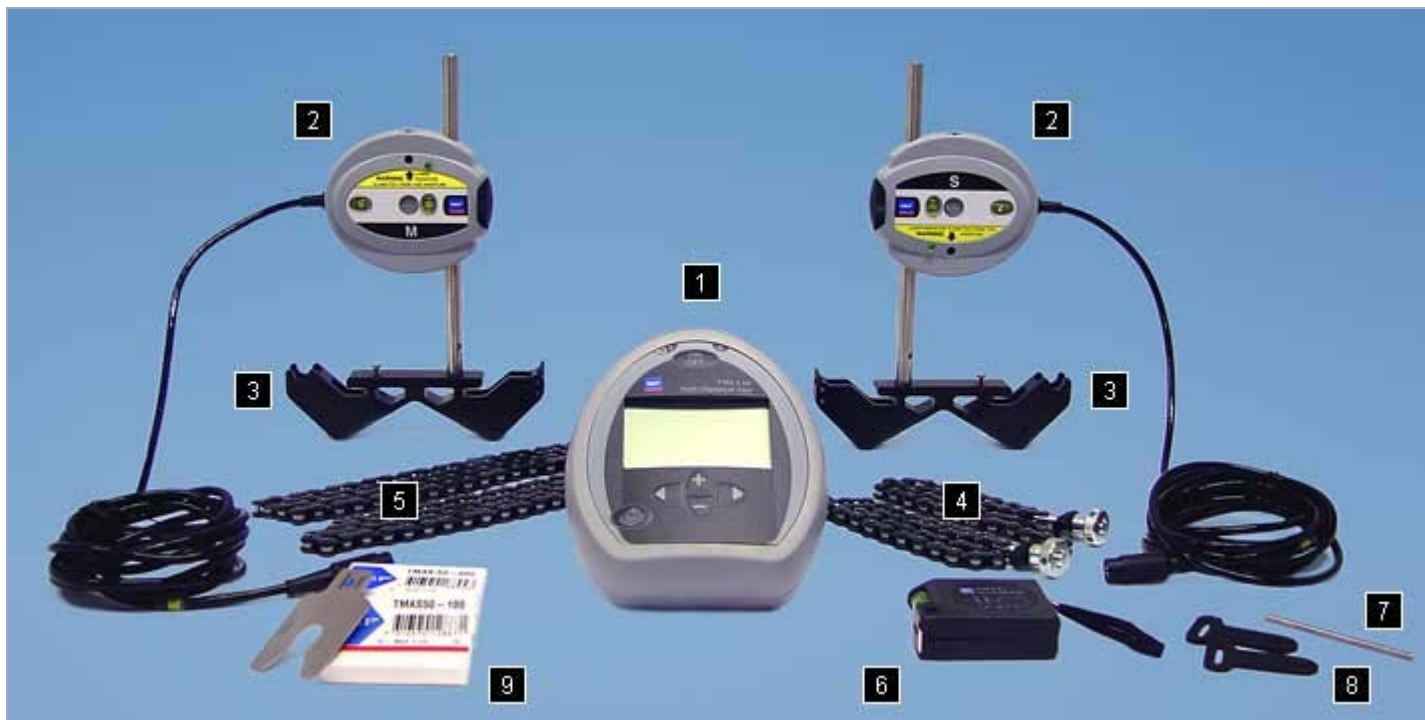
Mechanical fixture with measuring unit





Tool components

- | | | | |
|---|--------------------------------------|---|--|
| 1 | Display unit | 7 | Tightening tool |
| 2 | 2 measuring units with spirit levels | 8 | Cable straps for both measuring units |
| 3 | 2 mechanical shaft fixtures | 9 | 5 sets of shims |
| 4 | 2 locking chains | | Instructions for use |
| 5 | 2 extension chains | | Carrying case |
| 6 | Measuring tape | | Set of alignment reports |
| | | | (click here to download MS Word template) |



Optional tool components

Printer cable
 Thermal paper roll
 Printer adapter



Technical data

Denotation	1 mil = 1 thousandths of an inch
Measuring units	
Housing material	ABS plastic
Type of laser	Diode laser
Laser wave length	670 - 675 nm
Laser class	2
Maximum laser power	1 mW
Maximum distance between measuring units	2.5 meter (8 ft)
Type of detectors	Single-axis PSD, 10 x 10 mm (0.4 x 0.4 in)
Cable length	3 m (10 ft)
Dimensions	118 x 101 x 30 mm (4.6 x 4.0 x 1.2 in)
Weight	315 gram (11 oz)
Display unit	
Housing material	ABS plastic
Display type	LCD 55 x 77 mm (2.1 x 3.0 in)
Battery type	3 x 1,5V LR14 Alkaline
Operating time	24 hours continuous operating
Displayed resolution	0,01 mm (0.1 mil with "inch" setting)
Dimensions	160 x 140 x 51 mm (6.3 x 5.5 x 2.0 in)
Weight	0,5 kg (1.1 lb)
Shims	
Size	50 x 50 mm (2.0 x 2.0 in)
Thickness	0,05 - 0,10 - 0,25 - 0,50 - 1,00 mm
Slot width	13 mm
Complete system	
Shaft diameter range	30 - 500 mm (1.2 - 20 in)
Accuracy of system	Better than 2%

Temperature range	0 - 40 °C (32 - 104 °F) without printer
Operating humidity	< 90 % without printer
Carrying case dimensions	534 x 427 x 157 mm (21.0 x 16.8 x 6.2 in)
Total weight (incl. case)	7,9 kg (17.4 lb)
Calibration certificate	valid for two years
Warranty	12 months
Printer	Optional
Printer unit (optional)	
Printing system	Thermal dot matrix
Paper feed	Friction
DIP switches position	1 2 3 4 5 6 7 8 OFF = 0, ON = 1 0 1 0 0 1 1 0 0
Power	rechargeable battery - 12 V max.
Operation time	60 minutes continuous operation with fully charged battery
Adapter for charging the battery	
Continental European adapter	DC 12 V to 15 V - 400 mA (min.)
North American adapter	DC 12V - 500 mA
UK, Australian adapter	DC 12 V - 1,25 A with detachable primary plugs for UK and Australia
Length of connection cable	1,5 m (59 in)
Paper type	Standard thermal printer roll, 20 m x 112 mm, diameter 41,5 mm (65 ft x 4.4 in, diameter 1.6 in)
Operating temperature	5 - 35 °C (41 - 95 °F)
Operating humidity	20 - 70%
Dimensions	165 x 135 x 50 mm (6.5 x 5.3 x 2.0 in)
Weight	670 gr with 20 m paper roll (1.5 lb with a 65 feet paper roll)

Replacement parts and accessories

Designation	Description
TMEA P1	Thermal printer complete with Continental European adaptor and connection cable
TMEA 1P-1/2.5	Display unit
TMEA 1P-2	Carrying case
TMEA C1	Locking chains set (500 mm / 19.6 in) + tightening tool
TMEA C2	Extension chain set (1020 mm / 40.1 in)
TMEA F2	1 chain fixture, complete
TMEA F6	2 thin chain fixtures, complete set
TMEA F7	Set of 3 pairs of connection rods; short: 150 mm (5.9 in), standard: 220 mm (8.6 in) and long: 320 mm (12.5 in)
TMEA M12/2.5	Set of measuring units; Moveable and Stationary
TMEA MF	1 magnetic fixture
TMEA P1-10	UK / Australian mains adaptor (for the printer)
TMEA R1	3 spare rolls of thermal paper for the printer
TMAS 340	Kit of 340 pre-cut machinery shims
TMAS 360	Kit of 360 pre-cut machinery shims
TMAS 510	Kit of 510 pre-cut machinery shims
TMAS 720	Kit of 720 pre-cut machinery shims