

TKBA 11

SKF Belt Alignment Tool

Precision tool allowing pulley and chain drive alignment

Belt-driven machinery is used in many industries and applications – including HVAC equipment, milling machines, compressors and camshafts.

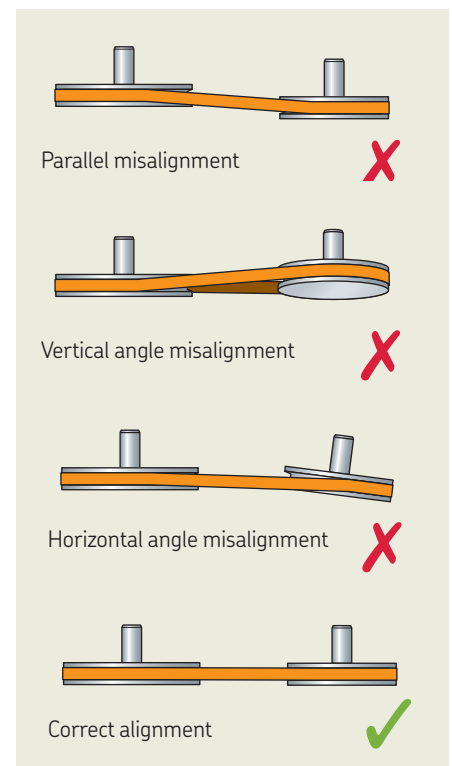
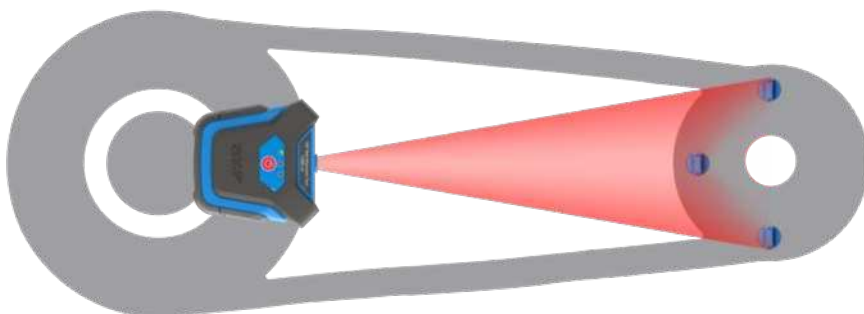
Aligning belt drives and chain drives accurately helps to reduce wear on belts, pulleys, chains and sprockets. As well as extending belt and pulley life, precise alignment also reduces machine vibration. Typical benefits of this include improved machine performance, a reduction in unscheduled downtime and lower energy costs.

SKF's TKBA 11 Belt alignment tool is part of a series of tools offering a simple way to do this. It accurately aligns pulleys and sprockets and corrects for various types of misalignment.

The tool has two components; a laser-emitting unit and three passive targets. Each is attached quickly and easily – using a powerful magnet – to the inside or outside face of a belt pulley or chain sprocket. The TKBA 11 can be applied to most machines that use V belts, banded belts and ribbed belts – as well as those with chain sprockets.

A laser line is projected from the emitting unit to the passive targets - which are mounted on the opposite pulley. The tool then corrects for vertical angle, horizontal angle and parallel misalignment – including combinations of all three.

The TKBA 11 uses a red laser diode and can be used for distances up to 3 m (10 ft). A sturdy housing, made from ABS and 2K polymers and an aluminium base helps ensure assembly stability and accuracy during alignment. It runs on 3 x AAA batteries for 32 hours of continuous operation. All components of the TKBA 11 – a single red laser emitter, three passive targets and three AAA batteries – are supplied in a sturdy carrying case.



Accurate alignment of pulleys and sprockets

Belt drives are found in a variety of applications, including HVAC, pump installations, paper mills, flour mills, lathe machine, milling machines and conveyors. Sprocket drives are often used in agricultural machinery, compressors and engine camshafts.

TKBA Belt alignment tools are commonly used in power plants, recycling facilities, chemical plants and food & beverage production.

Key benefits of the TKBA 11 include:

- One laser emitter with three passive targets
- Uses a red laser diode and can be used for distances up to 3 m (10 ft).
- Fast, easy attachment
- Simplified alignment process
- Simultaneous adjustment of tension and alignment
- Applicable to most machines using V belts, banded belts, ribbed belts – as well as chain sprockets



Technical data			
Designation	TKBA 11		
Emitter unit		Operating requirements	
Type of laser	Red laser diode	Operating temperature	0 to 40 °C (32 to 104 °F)
Laser	1 × Built-in class 2 laser, <1 mW, 635 nm	Storage temperature	-20 to 60 °C (-4 to 140 °F)
Laser line length	2.4 m at 2 m (7.9 ft at 6.6 ft)	Relative humidity	10 to 90% RH non-condensing
Measurement accuracy angular	Better than 0.02° at 2 m (6.6 ft)	IP rating	IP 40
Measurement accuracy offset	Better than 0.5 mm (1/50" in.)	Dimensions	
Measurement distance	50 mm to 3 m (2 in to 10 ft)	Emitter unit	98 × 97 × 52 mm (3.86 × 3.82 × 2.05 in.)
Control	Laser ON/OFF	Receiver units	40 × 25mm (1.57 × 0.98 in.)
Housing material	ABS + 2K and Aluminium base powder coat finish	Carrying case	260 × 85 × 180 mm (10.2 × 3.3 × 7.1 in.)
Receiver units (Passive targets)		Weight	
Housing material	ABS	Emitter unit	250 gr (0.55 lb) with batteries
Fixtures		Receiver units (3 pcs)	35 gr (0.08 lb)
Mounting	Magnetic, side mounted	Total (incl. case)	0.84 kg (1.85 lb)
Battery	3 × AAA Alkaline type IEC LR03	Case contents	1 × TKBA 11 emitter unit
Operation time	32h (continuous operation)		3 × TKBA-TARGET passive targets
			3 × AAA batteries
			1 × Printed Instructions for use

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Scan (or click) the code for the SKF Belt Alignment Tools comparison table

