SKF TKBA 40

SKF TKBA 40 Red Laser V-Belt Pulley and Belt Alignment Tool

Model: TKBA 40

Introduction

The SKF TKBA 40 is a precision laser tool designed for accurate alignment of V-belt pulleys. This instrument ensures optimal performance and extended lifespan of belts and pulleys by detecting and correcting misalignment issues. Its user-friendly design, featuring a laser emitting unit and a receiver unit, allows for quick and efficient setup and operation.
The three-dimensional target area on the receiver unit provides clear indications of horizontal, vertical, parallel, or combined misalignments, simplifying the adjustment process.

What's in the Box

The SKF TKBA 40 kit includes the following components:

- Transmitter unit
- Receiver unit
- AAA batteries (2)
- V-guides

Image: The SKF TKBA 40 kit, neatly organized within its durable blue carrying case, showcasing the transmitter unit, receiver unit, batteries, and V-guides.

Key Features

- **Powerful Magnets:** Allow for fast and easy attachment to pulleys.
- **Three-Dimensional Target Area:** Simplifies the alignment process by clearly indicating misalignment type.
- **Simultaneous Adjustment:** Facilitates the adjustment of both tension and alignment.
- **V-Guides:** Ensure compatibility and accurate alignment for a wide range of V-belt pulleys.
- **Extended Operating Distance:** A maximum operating distance of 20 feet (6 meters) accommodates various applications.

Setup and Operation

1. Initial Setup

1. **Install Batteries:** Insert the two AAA batteries into the designated compartment of both the transmitter and

receiver units.

2. **Attach V-Guides:** Ensure the V-guides are securely attached to both units. These guides help the units sit correctly in the pulley grooves.
3. **Mount Units:** Using the powerful magnets, attach the transmitter unit to one pulley and the receiver unit to the other pulley. Ensure they are placed in the V-grooves of the pulleys.

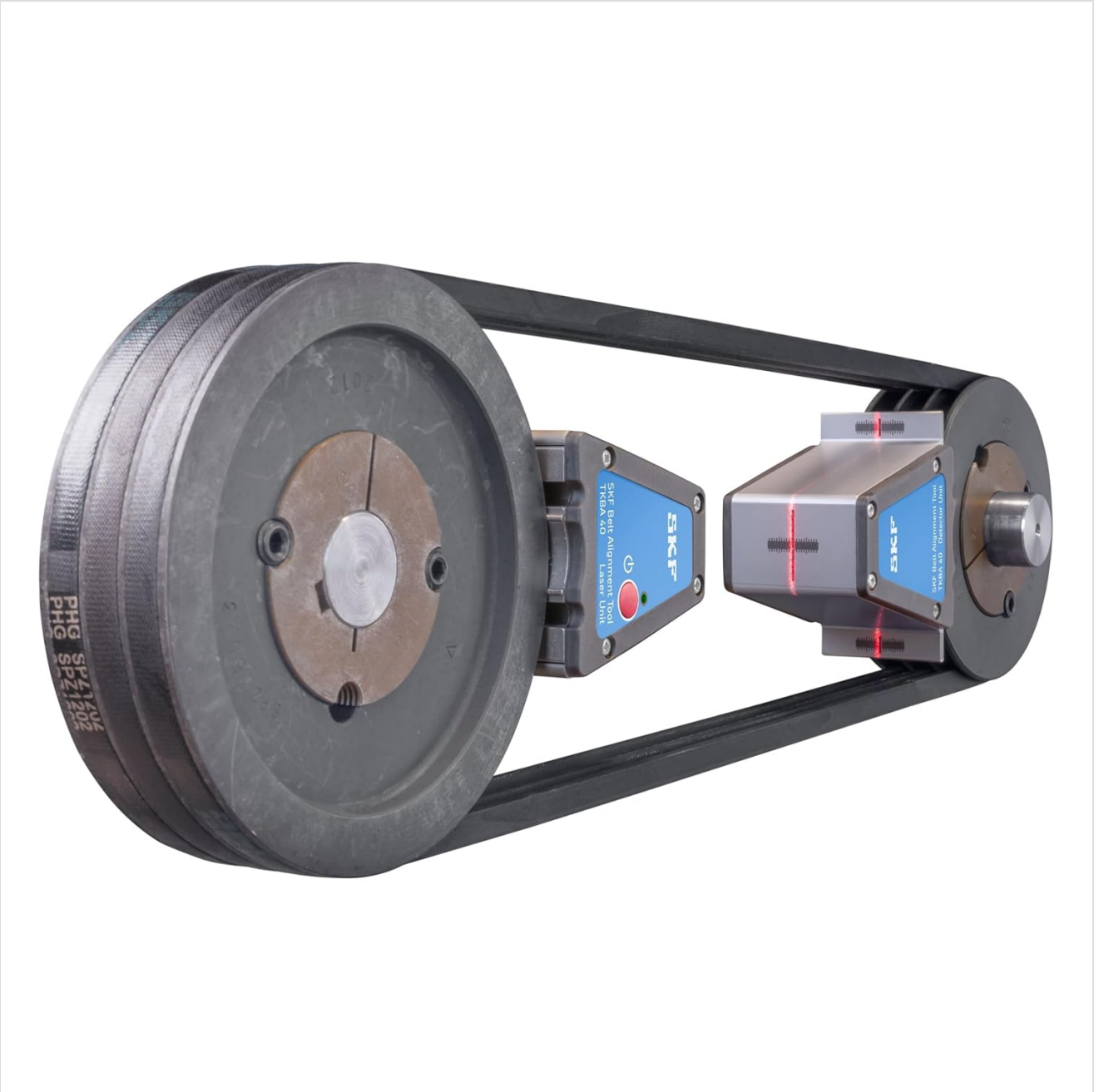


Image: The SKF TKBA 40 laser alignment tool correctly mounted on two V-belt pulleys, demonstrating the laser beam projecting from the transmitter to the receiver for alignment.

2. Alignment Process

1. **Activate Laser:** Turn on the laser on the transmitter unit. A red laser line will project towards the receiver unit.
2. **Observe Target Area:** On the receiver unit, observe the position of the laser line within the three-dimensional target area.
3. **Identify Misalignment:**
    - If the laser line is off-center horizontally, it indicates angular misalignment.
    - If the laser line is off-center vertically, it indicates parallel misalignment.
    - If the laser line is not within the central target, it indicates a combination of misalignments.

4. **Adjust Pulleys:** Adjust the position of the pulleys until the laser line falls precisely within the central target area on the receiver unit. This indicates proper alignment.
5. **Verify Alignment:** Once adjustments are made, re-check the laser position to confirm accurate alignment.

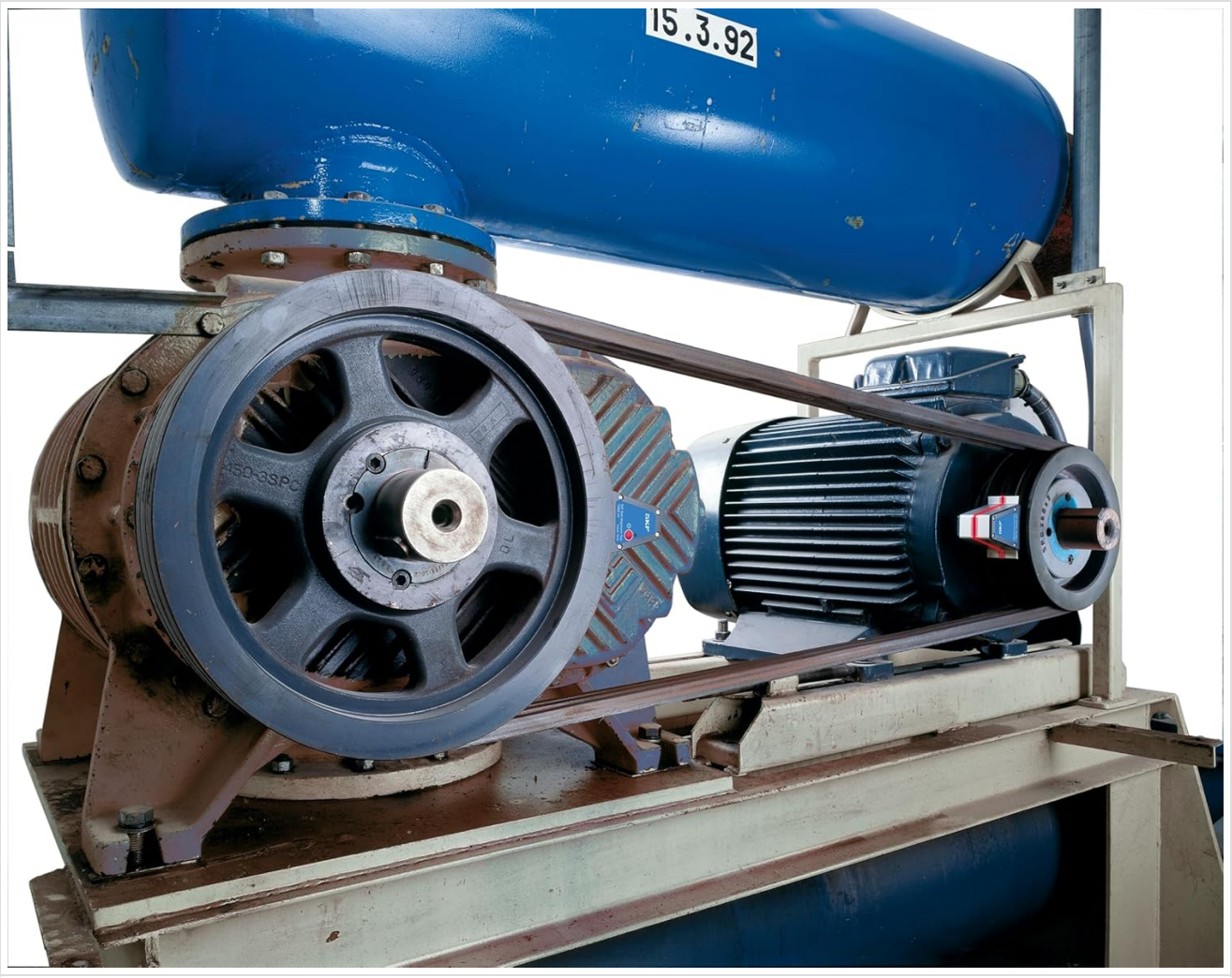


Image: The SKF TKBA 40 laser alignment tool being used on large industrial machinery, demonstrating its applicability in real-world operational environments for precise pulley alignment.

Maintenance

- **Cleaning:** Keep the laser lens and receiver target area clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- **Battery Replacement:** Replace batteries when the low battery indicator appears or when the laser intensity weakens.
- **Storage:** Store the unit in its original carrying case in a dry, cool environment to protect it from damage and environmental factors.
- **Inspection:** Periodically inspect the V-guides and magnetic bases for wear or damage.

Troubleshooting

Problem	Possible Cause	Solution
Laser does not turn on.	Dead or incorrectly inserted batteries.	Check battery orientation; replace batteries.

Problem	Possible Cause	Solution
Laser line is dim or flickering.	Low battery power.	Replace batteries.
Difficulty attaching units to pulleys.	Pulley surface is dirty or non-magnetic.	Clean pulley surface; ensure pulleys are made of magnetic material.
Inaccurate alignment readings.	Dirty laser lens or receiver target; units not seated properly.	Clean lens/target; re-seat units firmly in pulley grooves.

Specifications

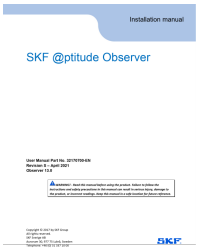
- **Product Dimensions:** 10.24 x 3.35 x 7.09 inches (260 x 85 x 180 mm)
- **Weight:** 2.65 Pounds (1.2 kg)
- **Operating Distance:** Up to 20 feet (6 meters)
- **Power Source:** 2 x AAA batteries
- **Laser Type:** Red diode laser
- **Manufacturer:** SKF

Warranty and Support

For information regarding warranty coverage and technical support for your SKF TKBA 40, please refer to the official SKF website or contact your local SKF distributor. Keep your purchase receipt for warranty claims.
SKF Official Website: www.skf.com

Related Documents - TKBA 40

	SKF TKBA 40 Belt Alignment Tool User Manual This user manual provides comprehensive instructions for operating the SKF TKBA 40 Belt Alignment Tool, detailing its technical specifications, application range, troubleshooting, and maintenance procedures.
	SKF TKSA 51 Shaft Alignment Tool - User Manual and Specifications Comprehensive user manual for the SKF TKSA 51 shaft alignment tool, detailing its features, technical specifications, setup, operation, and maintenance. Learn how to perform precise shaft alignments for industrial machinery.

	SKF Изделия для Технического Обслуживания и Смазочные Материалы Каталог SKF, посвященный изделиям и материалам для технического обслуживания подшипников. Охватывает монтаж, демонтаж, смазывание, выверку и мониторинг состояния для продления срока службы подшипников.
	SKF TKSA 71/PRO Shaft Alignment Tool The SKF TKSA 71/PRO is a high-end shaft alignment tool designed for professional use in harsh industrial environments. It features ultra-compact measuring units, intuitive software, and a comprehensive set of accessories for various alignment applications.
	SKF @ptitude Observer 13.0 Installation Manual Comprehensive installation guide for SKF @ptitude Observer 13.0 software, detailing system requirements, software and SQL Server Express installation, database setup, monitor service configuration, and network settings for condition monitoring.
	SKF Dynamic Motor Analyzer EXP4000 User Manual User manual for the SKF Dynamic Motor Analyzer EXP4000, detailing its features, intended use, software license agreement, and support information.