

SPROCKET INSTALLATION GUIDE

1. Pre-Installation

- ☐ Verify sprocket type matches belt type
- ☐ Count sprockets — minimum 2 per shaft, more for wide belts
- ☐ Check shaft diameter matches sprocket bore
- ☐ Inspect shaft for wear or damage
- ☐ Clean shaft surface and keyway

2. Sprocket Spacing

BELT WIDTH	NUMBER OF SPROCKETS	SPACING
Up to 150mm	2	At 1/4 and 3/4 width positions
150 — 300mm	2 — 3	Evenly spaced, max 150mm apart
300 — 600mm	3 — 4	Evenly spaced, max 150mm apart
600 — 1200mm	4 — 6	Evenly spaced, max 200mm apart
1200mm+	6+	Evenly spaced, max 200mm apart

3. Installation Procedure

- Slide first sprocket onto shaft — position per spacing plan
- Install key in keyway (if keyed shaft)
- Tighten set screws — torque per specification
- Install remaining sprockets — align teeth using straightedge
- All sprocket teeth must align across shaft width within 1mm
- Install opposite shaft sprockets using same alignment
- Verify both shafts are parallel — measure distance at both ends
- Install belt and verify sprocket engagement across full width



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4. Alignment Verification

CHECK	TOLERANCE	METHOD
Sprocket face alignment	$\pm 1\text{mm}$ across width	Straightedge on sprocket faces
Shaft parallelism	$\pm 0.5\text{mm}$	Measure distance between shafts at both ends
Sprocket tooth timing	Teeth aligned ± 1 tooth	Visual — all teeth at same angular position
Shaft level	$\pm 0.5\text{mm}$	Spirit level or precision measurement

5. Post-Installation

- ☐ Rotate shaft by hand — check for smooth sprocket engagement
- ☐ Install belt — verify all sprockets engage properly
- ☐ Run unloaded 10 minutes — listen for unusual noise
- ☐ Check belt tracking — should run centered
- ☐ Re-torque set screws after 24 hours of operation
- ☐ Check alignment again after belt is tensioned

SPROCKET SUPPLY

Uniking Canada supplies sprockets for all wire belt types.