

TECHNICAL REFERENCE · PRINT & KEEP

# Threaded Stem Casters Loosening: The Permanent Fix

One-page quick reference · Full engineering guide + live tools at the QR codes below

**Quick answer.** Threaded stem casters loosen from five root causes: vibration, wrong jam-nut torque, a stem too short for full thread engagement, missing thread-locker, and an oversize or worn mounting hole. Diagnose the root cause first, then apply correct nut and jam-nut torque with the right thread-locker. If the hole is bored oversize, switch stem style or repair the mount.

## Why threaded stem casters loosen in the first place

Root cause	Frequency we see	Fix difficulty
No jam nut or wrong torque	40%	Easy
No thread-locker	25%	Easy
Stem too short for application	15%	Replace caster
Oversize / worn mounting hole	12%	Drill and sleeve
Wrong thread pitch (metric vs SAE)	8%	Replace caster

## Fix #1: Correct torque on nut and jam nut

Stem size	Main nut torque	Jam nut torque
3/8"-16 UNC	25-30 ft-lb	20 ft-lb
1/2"-13 UNC	40-50 ft-lb	30 ft-lb
5/8"-11 UNC	75-90 ft-lb	60 ft-lb
10mm-1.5	25-30 ft-lb	20 ft-lb
12mm-1.75	40-50 ft-lb	30 ft-lb



### SCAN · THIS GUIDE

Reopen the full guide and interactive tools on your phone. Always current.



### SCAN · ALL 18 FREE TOOLS

Load & derating calculators, push and ramp force, bolt pattern identifier, wheel material selector, failure diagnosis tool, AGV sizing + more.

### WHY ENGINEERS USE CASTERHQ

Free application engineering review  
Same-day RFQ response & shipping  
Albion · Hamilton · Colson · P&H in stock  
Ships from Mansfield, TX

**844-439-4335**