

## SCREW GATE CARABINERS.

*Chris Curtis.*

### To fully tighten or back off screw gate carabiners?

Do you always tighten up the barrel on your screw gate locking carabiners and then back them off a quarter of a turn?

In this article I want to look at where this rule or myth came from and if it's really needed?

Most modern carabiners are designed to have the screw lock fully tighten (Photo 1) and not bight onto the nose, while older designed carabiners (Photo 2) not so much. This is really easy to check on all your carabiners. Just tighten the screw lock and then squeeze the gate and see if it still moves. If it does move then it's safe to tighten the barrel. If it doesn't, then it's ok to back the barrel off a quarter of a turn.

If you have the type that does lock onto the nose and you find it difficult to unlock after use, simply reweight the carabiner and it should be enough the pull the nose away from the barrel enabling it to be unscrewed.

Aluminium carabiners flex/stretch during normal use. This is quite obvious if you watch a carabiner while someone else is ascending below. The amount of movement is very small, only about 1mm, but it's enough that it can enable this type of locking carabiner to not easily unlock.

### Safety tips for carabiners.

For screw gates, screw down, not up. Gravity will help ensure it doesn't unlock.

Do not overload any carabiner by more than 25% of its minimum breaking strain.

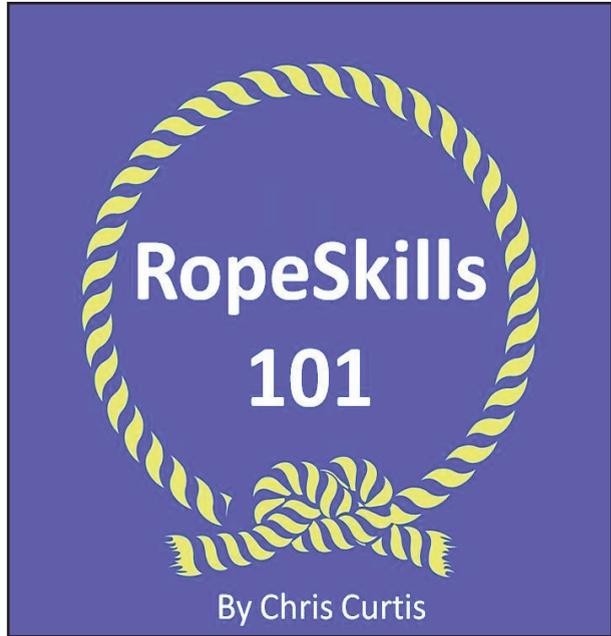
Keep them clean so the threads do not become sticky or grind.

Check them after each use for any damage and that they operate smoothly and correctly. This sounds obvious, but who actually does it?

### When to check all your gear.

I always check mine as soon as possible after use, not before! Being in rescue and never knowing when I will need my gear, I need to know that everything I need is ready to go at a moment's notice. Every rescue unit does this, from Ambulance, Fire and Police, they all restock, clean and check everything immediately after returning from a call out. It also allows time to repair or replace anything before your next outing.

JSSS



**Photo 1:** A modern screw gate carabiner. **Photo:** Megan Webster, 2018.



**Photo 2:** An old screw gate carabiner, as used in the 1960s. **Photo:** Ross Ellis.