



Inspecting Gear

Climbing Rope

Your rope should be lightly inspected before each climb, as you flake it out feeling for any soft or flat spots.

- Visually inspect, looking for frayed areas the sheath or an exposed core. If you can see the core at all (the white inner strands underneath the colored sheath), it is time to retire your rope.
- Look for discoloration or sun fading.
- Do a tactile inspection: Slowly flake the rope end to end, looking for any soft or flat spots. This will most commonly be found in the 20 feet closest to the ends of the rope, as these are high wear and tear areas.
- If you feel a flat or soft spot, you need to test for a coreshot. Create a small bight in the rope (fold it into the shape of a little alien head) where the weakness is, and see if you can touch both sides of the rope together without any gap in between. If you can, the rope is coreshot.
- If the rope is coreshot, do not use the rope and let the gear secretaries know.



Harness

Just like climbing ropes, harnesses should be inspected before each climb, looking for obvious fraying.



- Check for any fraying or tears along all of the webbing straps, waist belt, and leg loops. If you pull on a fray and it starts to unravel, the harness needs to be retired.
 - Inspect the belay loop for wear and tear. Some belay loops have brightly colored warning threads that will show through to alert you when the outer threads have been damaged—but most harnesses do not have this feature.
- Closely check each stitch point for fraying or loose ends.
 - Look for discoloration or sun-fading.

- Check the metal buckles for cracks or burs, which may cause damage to the harness fabric.
- Ensure that each gear loop is intact.
- If any critical point of the harness has excessive wear—belay loops, tie-in points, buckles, and waist belt—do not use the harness and let the gear secretaries know.

Webbing, Slings, and Cord

You also need to regularly inspect all fabric parts of equipment that means quickdraws and cam dogbones, personal anchors, and all other webbing, slings, and cord.

- Inspect for any fraying, tears, or abrasions.
- Feel for stiffness. Old slings that have long been exposed to the elements may become stiff. Stiffness means a lack of dynamic action, which could cause a sling to break when shock loaded.
- Check the sewn part of slings for fraying or abrasion.
- Check cord for torn sheath material, an exposed core, and coreshots.
- Look for discoloration or sun fading.



Carabiners

Carabiners are among the most ubiquitous pieces of gear for climbers and undergo constant wear so it is important to check them regularly and not just the ‘fabric’ based gear.



- Do a visual inspection ensuring that there are no cracks, burs, or corrosion in the metal. If you find any of these in your inspection, the carabiner needs to be retired.
- Check the areas within the carabiner that hold the rope, as these are the most high traffic zones and will inevitably groove out over time. A slight groove is not necessarily a cause for concern, but once grooves become deep or have sharp edges, retire the carabiner.
- Look for any loose or missing rivets on the carabiner.
- Make sure that the gate opens and closes fully and quickly. Oftentimes sand and other debris can work its way into the gate’s hinge and prevent smooth action. If this is the case, let the gear secs know.
- Make sure that if there is a locking mechanism it is fully functional.

Belay Devices

To ensure the safety of you and your partner, inspect your belay device. You will be looking for much of the same issues as you would in a carabiner.

- Check for any cracks, excessive wear, metal burs, or grooves where the rope contacts the device. If you find any of these, retire the piece.
- If there are any mechanical parts to your belay device, like the camming mechanism on a Grigri, make sure the action is smooth and works properly.
- If there are any plastic components such as the lever on a Grigri, check closely for any cracks.
- Like a carabiner, the rope can wear grooves into belay devices over time. There are too many belay device options on the market to list all guidelines here, so check with the manufacturer, but if you notice it becoming more difficult to brake the rope or the edges become sharp, retire the device.



Cams and Nuts

When placing your own protection, you want to make sure that the gear itself is solid. Regular inspection and maintenance of cams and stoppers will ensure that they are safe and reliable.



- Check cams and nuts for any cracks, excessive wear, corrosion, or burs. Retire the piece if any of these are present.
- Make sure the action on your cams is smooth and fully retracts and snaps back into place. If any of the cam lobes stay open, it will be difficult and dangerous to place. If cam lobes are sticking, let the gears secs know
- Check all trigger wires for frays or broken wires.
- Look for any loose or missing rivets on a cam.
- Inspect the stem for bends or cracks.
- Check to make sure that nuts are not deformed or dilapidated, as this could make them difficult and dangerous to place.
- Inspect the wires on stoppers for bends or frayed metal

Information taken from: <https://www.climbing.com/skills/how-to-inspect-your-climbing-gear-and-when-to-retire-it/>