

JULY 2021 CCDC SAFETY MESSAGE

RATCHET STRAPS (TIE-DOWN STRAPS)

Ratchet straps, also called **tie-down straps**, are incredibly helpful when transporting cargo in a vehicle. The ratchets allow users to ensure the straps are taut and the items tied down securely to a roof rack, truck bed or elsewhere. Correctly following heavy-duty ratchet strap instructions can make it easy to secure large items. These instructions are courtesy of Home Depot. There are videos to help with these steps.

Please be very careful with fingers near and in the ratchet.

RATCHET STRAPS 101

- Ratchet straps are usually made of polyester webbing, which has a low stretch rate and is abrasion resistant.
- In addition to the ratchet housing, tie-down straps usually include hooks, rings or other [connectors](#) for different attachment needs, such as hooking to a built-in attachment point in the bed of a truck or cargo carrier. Select a ratchet strap and its accessories based on its intended use.
- Different sizes and types of tie-down straps have specific break strengths and working load limits, so be sure to match the appropriate strap to the cargo or gear. If the item is too heavy and exceeds the load limit, the strap may fail. Some of the most common ratchet straps are the 2-inch size.
- Inspect straps before use, especially ones with older polyester. Replace straps that appear torn, frayed, have mildew on them or show too much wear and tear.
- Tip: If the strap has not been used in a long time, a light spray of penetrating oil can ensure the parts move more smoothly.

SETTING UP A RATCHET STRAP

- Check the ratchet strap instructions for the unit, if possible, as some straps have different configurations.
- Loosely place the strap around the cargo. Confirm that the strap is not twisted.
- Open the ratchet to access the take-up spool (or axle). You may need to open the ratchet by pressing the release lever, or release catch, which is usually a small handle near the top of the ratchet.
- Feed one end of the strap into the ratchet housing's lower slot, called a mandrel, leading into the take-up spool.
- Pull the strap through the mandrel until taut, leaving only a few inches of slack. The ratchet will fully tighten the strap.

HOW TO TIGHTEN A RATCHET STRAP

- Attach the strap hooks to the vehicle's attachment points.
- Check to make sure the strap is flat and securely placed around the cargo, so it does not shift during transport.
- Move the ratchet lever up and down in a pumping motion until it reaches the right tension. The ratchet turns the spool, which draws the strap more tightly. Do not over-tighten.
- Lock the ratchet in its closed position.
- When securing items to roof racks, consider tying down the loose ends of straps so they do not flap while in transit.
- Tip: While in transit, be sure to stop and check the straps periodically to make sure the cargo has not shifted, especially after crossing speed bumps or uneven terrain.

HOW TO LOOSEN A RATCHET STRAP

- Pull and hold the release lever or release tab when you are ready to remove the strap and unload the cargo.
- Open the ratchet fully so it lays flat, releasing the pressure on the strap.
- Pull the strap free.
- Close and lock the ratchet buckle while not in use.
- Tip: Store ratchet straps in a dry place out of direct sunlight, as moisture and ultraviolet light can weaken the strap over time.

THINK SMART, BE AWARE, BE FLEXIBLE, BE EDUATED (SAFE**)**