RATCHET STRAPS

MANUAL NO. 13942

SKU:JFTDS00003

MANDATORY SAFETY WARNINGS & LEGAL STATEMENTS (READ BEFORE USE)

⚠ DANGER

Failure to follow these instructions may result in severe injury, death, cargo loss, or traffic accidents.

⚠ WARNING

A tensioned strap that breaks will produce a deadly whiplash effect. Keep all personnel clear during operation and inspection.

1. Load Limits & Safety Factor – MOST IMPORTANT! Read Carefully

The Working Load Limit (WLL) is printed on the product label. This number is the maximum cargo weight that you must NEVER exceed in actual use. It is the legal red line and the ONLY basis for safe use.

Breaking Strength is the physical ultimate force at which a brand-new strap breaks under laboratory conditions. This product is designed with a Breaking Strength of 3 times the WLL. This 3:1 safety factor is an industry-standard margin to compensate for

strength loss caused by abrasion, aging, UV exposure, and shock loads during actual service.

WARNING: Under NO circumstances shall the Breaking Strength value be used as the basis for loading weight! If you load based on Breaking Strength, even slight wear or a sudden brake will erase the safety margin and cause immediate failure.

Simple Formula:

Maximum Load Weight ≤ WLL (Label Value) – This is the ONLY correct standard

Maximum Load Weight ≠ Breaking Strength (3× WLL) – This is a FATAL mistake!

2. Anchor Point Strength

The vehicle anchor point must have a strength at least 2 times the WLL of this tie-down strap. Weak anchors will compromise securement. The flat plate hooks are designed to attach securely to flat anchor points such as trailer side rails, rub rails, and flatbed edges.

3. Edge Protection – FMCSA Mandatory Requirement

Where the webbing contacts sharp corners, rough surfaces, or

friction points of cargo or vehicle structure, edge protectors/corner pads MUST be used. Sharp edges can cut the webbing at loads far below the WLL.

4. Pre-Use Inspection – Mandatory Before Each Use

DO NOT USE if any of the following defects exist:

Cuts, abrasions (>25% of width), burns, chemical corrosion, knots, broken stitching;

Rust, deformation, or cracks on metal parts, including flat plate hooks and ratchet mechanism;

Missing, stuck, or non-returning ratchet springs.

Pay special attention to the flat plate hooks – inspect for any bending, cracking, or deformation that could affect their wide contact surface and load distribution.

5. Prohibited Actions

DO NOT use for lifting/hoisting – This product is for cargo securement ONLY.

DO NOT apply shock loads – Never jerk or use vehicle inertia to tighten. Shock loads can multiply forces several times over, causing failure.

DO NOT tie knots – Knots reduce webbing strength by over 50%.

DO NOT modify or repair – Never sew webbing, weld, or hammer the ratchet mechanism.

DO NOT use flat plate hooks on round or undersized anchor points where the hook cannot fully seat – this may cause point loading and reduce holding capacity.

6. In-Transit Monitoring

Must check tension within the first 15 km (10 miles) of transit and periodically thereafter. Vibration causes loosening. Re-tighten if slack is observed.

7. Environment & Storage

Operating temperature range: -40°F to +175°F (-40°C to +80°C). Do not use outside this range.

Store away from direct sunlight, moisture, and solvents. UV rays degrade nylon/polyester strength.

8. Labeling & Product Information

The product label must remain legible and contain WLL, Breaking Strength, material, and lot number. If damaged or illegible, do not use and contact the manufacturer for replacement.

9. Regulatory Applicability & User Responsibility

The operating instructions in this manual are intended to assist users in meeting the basic requirements of the U.S. FMCSA Cargo Securement Regulations (49 CFR 393.104). Users are solely responsible for ensuring:

(1) Vehicle anchor points have a strength of at least 2× the Working Load Limit (WLL) marked on this strap;

(2) All sharp edges are protected with edge protectors;

(3) Actual load weight does not exceed the WLL printed on the product label;

(4) Flat plate hooks are properly seated onto flat, sturdy anchor surfaces for maximum contact and holding strength.

The manufacturer assumes no liability for any loss or injury resulting from overloading, insufficient anchor strength, failure to use edge protection, improper anchor selection for flat plate hooks, or improper operation.

OPERATION

Before operation: Ensure you have read and understood all safety warnings and legal statements above, especially Section 1 (Load Limits).

Step 1: Route the Strap Around the Cargo & Attach to Anchors

Fully unwind the webbing. Route the fixed end (short hook) around the bottom or load-bearing surface of the cargo, ensuring the webbing lies flat and untwisted.

Attaching Double Flat Plate Hooks: Position the flat plate hooks onto sturdy, flat anchor points such as flatbed trailer side rails, rub rails, or D-rings. Ensure the entire flat hook surface makes full contact with the anchor point – the wide, flat design distributes pressure evenly and prevents damage to anchor points. Do not use on round bars or undersized anchor points where the hook cannot fully seat. Pre-install edge protectors on any sharp corners.

Step 2: Thread the Strap (Insert Webbing into Ratchet Axle)

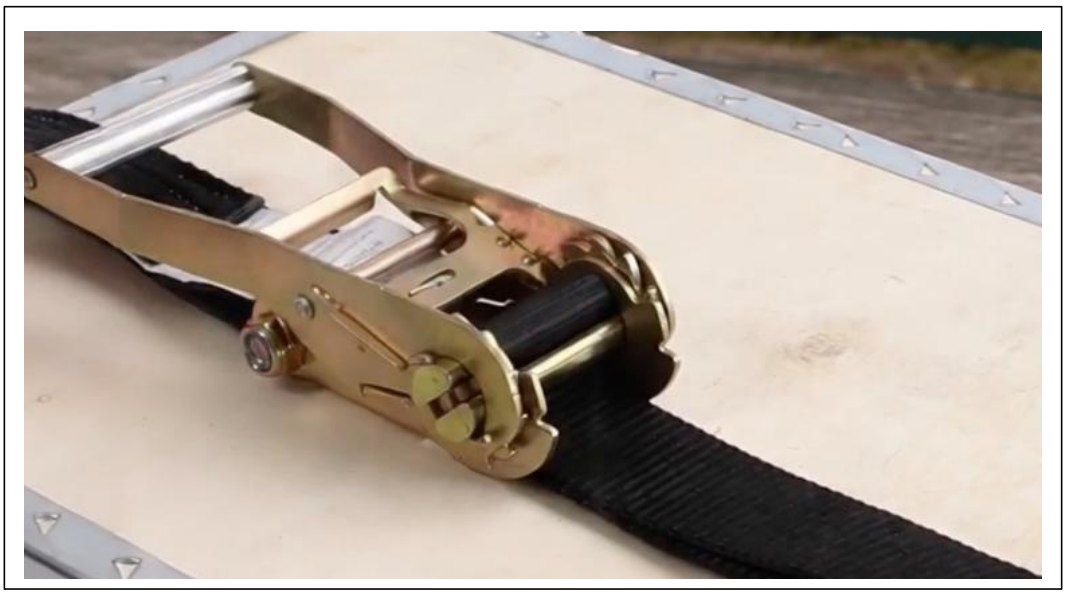
Ensure the handle is in the fully open (release) position (handle level with base). Take the free end (long strap), pass it underneath the center rotating shaft, then up through the center slot, and pull out the other side. Leave about 30 cm (12 inches) tail. Keep webbing flat and untwisted.

Step 3: Swing Handle Back and Forth (Initial Take-up)

Stabilize the base with one hand. With the other, swing the handle back and forth in small arcs (≈30°). The axle rotates and winds the webbing. Continue until the webbing just contacts the cargo and all visible slack is removed, without heavy tension.

Step 4: Push Down Handle to Lock (Final Tensioning)

Continue swinging with larger arcs until desired tension is reached. Judgment: Webbing is taut, produces a "twang" when plucked; cargo firm and immovable. Ensure flat plate hooks remain fully seated on the anchor surface during tensioning – the wide hook design helps maintain stable positioning. DO NOT exceed WLL. Finally, press the handle firmly down until parallel (flush) with the base – you will hear a "click" locking sound.



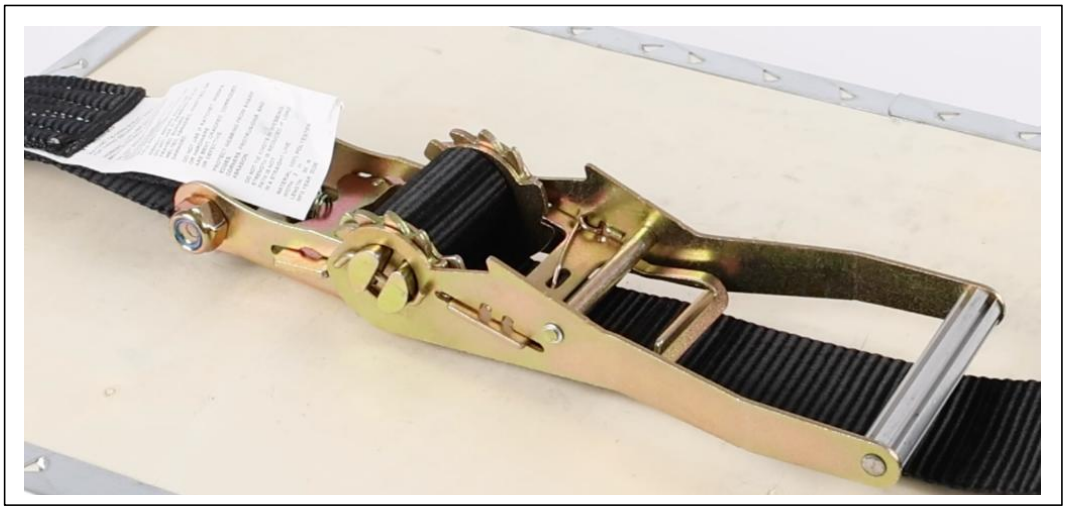
Step 5: Release the Strap (Unloading)

Critical: Ensure cargo will not tip upon sudden release.

(1) Lift handle upwards to ≈90° to disengage;

(2) Continue folding handle back to fully open (horizontal) (pawl disengages);

(3) Directly pull the free-end webbing outward – if stuck, gently wiggle handle to assist.



Step 6: Disassembly and Coiling

After fully extracting the webbing, remove flat plate hooks from anchors. Straighten and coil into loops (do not tie knots). Store in a dry, dark bag. If contaminated with oil or mud, clean and air-dry before storage.

Lot Number Location:

The lot number is affixed to the label on the product packaging box. Please record or keep the packaging box for future reference before disposal.

This manual is for operational guidance only. For specific regulatory requirements, please refer to the latest FMCSA regulations. Contact the manufacturer for any questions.

Contact

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