

RESTORING DAMAGED LEATHER TACK

Field Guide to Treating Stiff, Moldy, or Water-Damaged Gear

Restoring leather that has turned as stiff as a board, sprouted green fuzz, or taken an accidental swim requires a targeted approach. Bringing damaged leather back to life without ruining the fiber structure comes down to specific techniques for each type of damage.

1. TACKLING MOLD AND MILDEW

- **Kill the Spores:** Mix equal parts rubbing alcohol (isopropyl) and water. Lightly dampen a cloth with the mixture and wipe away all visible mold. The alcohol kills active spores without oversaturating the hide.
- **Avoid Bleach or Vinegar:** Never use bleach (it destroys leather fibers) or heavy vinegar solutions (which can alter the pH too drastically).
- **Sanitize Tools:** Wash all sponges and brushes in hot water and soap before using them on other tack to prevent transferring spores.
- **Sunlight Treatment:** Let the tack sit in indirect sunlight for 20–30 minutes to help kill off remaining spores, but avoid leaving it out long enough to bake or dry the leather out.

2. RESTORING STIFF, DRIED-OUT LEATHER

- **Flex & Work the Fibers:** Before applying heavy oils, gently flex the straps back and forth with your hands to open up the grain and loosen dry fibers.
- **Use Pure Neatsfoot or Deep Conditioners:** 100% pure Neatsfoot oil or specialized deep-restorative leather balms (containing tallow or beeswax) work best here.
- **Apply Light, Multiple Coats:** Don't drown the leather in one heavy coat—that degrades the stitching and leaves a greasy finish. Warm the oil slightly in warm water, then rub light coats onto both the grain (top) and flesh (underside) sides. Let it absorb for several hours before applying the next coat.
- **Warmth Helps:** Applying oil in a warm room helps the pores open up and draw the conditioner deep into the core of the strap.

3. FIXING WATER-DAMAGED OR HARDENED LEATHER

- **Never Apply Direct Heat:** If tack gets soaked, keep it away from space heaters, hair dryers, or direct hot sun. Rapid drying causes the collagen fibers to shrink permanently, making the leather brittle and prone to cracking.
- **Slow Drying Process:** Pat off excess water with a towel and let it air-dry slowly at room temperature.
- **Condition While Slightly Damp:** The best time to oil water-damaged leather is when it is 80–90% dry (feels cool to the touch, but no longer wet). Applying conditioner at this stage traps remaining moisture and replaces lost oils as the rest of the water evaporates.

SAFETY WARNING: WHEN TO RETIRE TACK

No amount of oil can repair **cracked grain** or **dry rot**.

Safety Check: Bend the leather sharply backwards over high-stress areas (billets, stirrup leathers, cheek pieces, and near buckle folds). If you see deep cracks opening up in the grain or hear fibers snapping, **the tack is no longer safe to ride in**. Retire those pieces to avoid hardware failure under tension.