

Raw Selvage Denim Preservation Blueprint

The Physics of Indigo Surface Adhesion, Warp Tension, and Authentic Fade Chemistry

1. The Molecular Physics of Indigo Dyeing

Denim Construction Feature	Textile Physics & Chemistry	Why Agitated Washing Destroys It
Ring-Spun Warp Yarns	Indigo dye does not penetrate cotton core; it coats outer perimeter of white yarn.	Machine wash detergent strips surface dye uniformly, eliminating high-contrast natural honeycombs and whiskers.
Starch Sizing (Stiffness)	Raw cotton is heavily starched on vintage shuttle looms to hold shape.	Hot water dissolves starch instantly, causing premature fabric sag and loss of sharp crease memory.
Right-Hand Twill (3x1)	Diagonal weave contracts under agitation, causing rotational 'leg twist'.	Aggressive spin cycles twist side selvage seams forward across the kneecap.

2. The Cold Tub Soak & Odor Neutralization Protocol

Care Milestone	Execution Protocol	Fabric Outcome
First 6 Months of Wear	Zero water submersion. Hang in fresh air overnight; spot clean food spills with damp cloth.	Allows body heat and movement to set sharp accordion creases and wear patterns.
The 6-Month Tub Soak	Submerge inside-out in cold tub with 1 capful gentle wool wash and 1 cup white vinegar for 45 min.	Vinegar sets indigo; water removes abrasive body grit without mechanical fading.
Drying & Reshaping	Hang upside down by hem in shade; pull seams straight while wet. NEVER MACHINE DRY.	Prevents thermal cotton shrinkage and locks in natural silhouette.