

HOW TO PROPERLY DON, ADJUST, AND INSPECT A FULL BODY HARNESS

FULL BODY HARNESS 101

DONNING THE HARNESS

1

**UNTANGLE AND VISUALLY CHECK HARNESS**

Grab the harness by the dorsal D-ring and follow the chest strap to untangle. Closely look over the harness webbing for abrasion, the hardware for excessive wear, and the impact indicators to ensure it hasn't been in a fall.

2

**DON THE HARNESS**

Put your arms through the shoulder straps, like a jacket. Don't secure the chest strap yet.

3

**ADJUST FROM THE BOTTOM UP**

The sub pelvic strap should rest just below your buttocks. Raise or lower this using torso adjusters, usually above the waist belt.

4

**CONNECT & ADJUST LEG STRAPS**

These should be snug, but not overly tight. You should be able to slide 2 or 3 fingers between your leg and the strap.

5

**CONNECT & ADJUST CHEST STRAP & WAIST BELT**

Waist belt should be snug, but not too tight or too loose. The chest strap should rest directly across your chest cavity. Not too high, not too low, but right in the sweet spot to keep you safe.

TYPES OF CONNECTORS

**TONGUE BUCKLES**  
Easy operation, cannot slip once in position.

**QUICK-CONNECT**  
Easiest operation, but can occasionally require readjustment.

**PASS-THRU/MATING**  
Cheapest options, hardest to use and adjust properly.

**INSPECTING THE HARNESS**

Visually inspect these key areas of the harness every time, prior to beginning work. If you find any of these problems, take the harness out of service.

**WEBBING**

Cuts, tears, excess abrasion, holes, discoloration, UV damage, heat damage, welding slag, chemical damage, hard spots

**STITCHING**

Damaged stitching, broken thread, pulls and loose stitches, missing sections

**D-RINGS, HARDWARE, & BUCKLES**

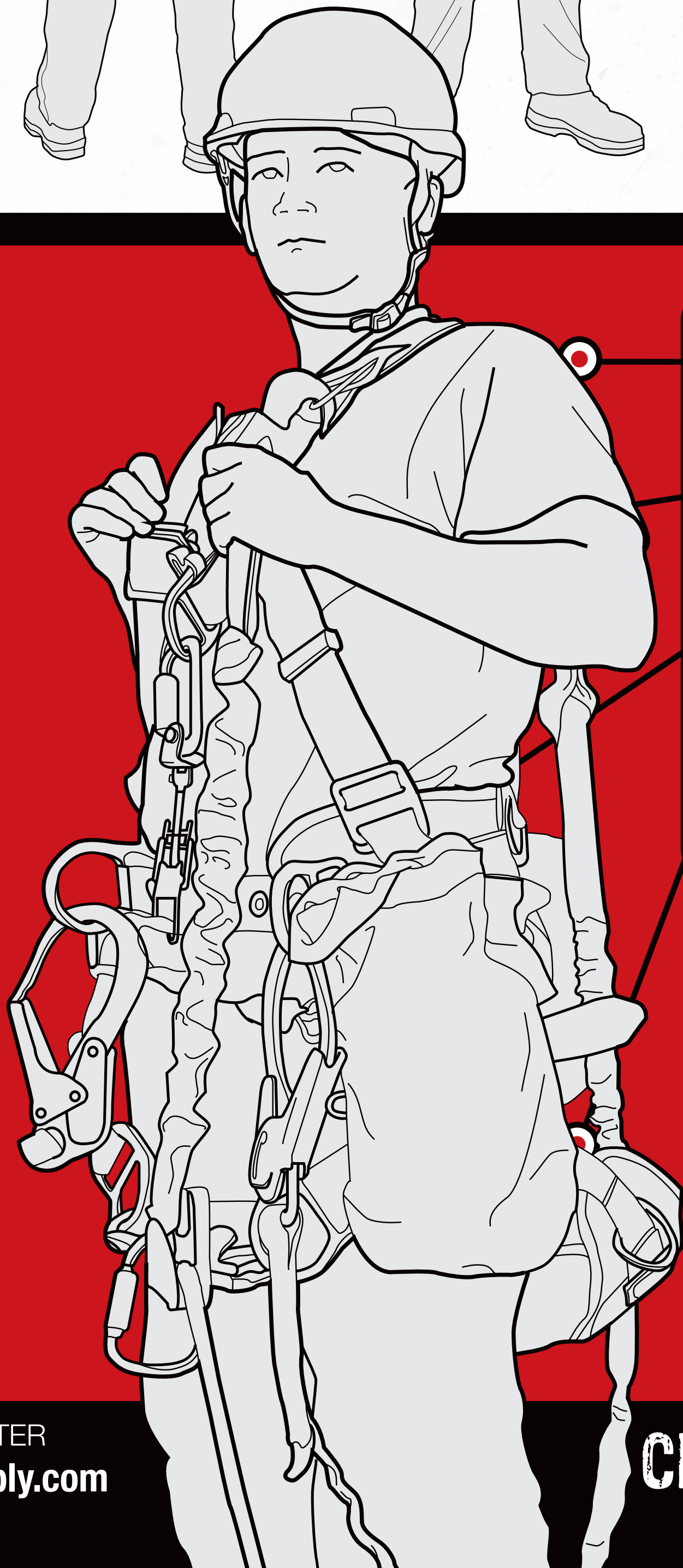
Deformity, corrosion and rust, major nicks and dings, excess wear, proper operation

**IMPACT INDICATORS**

Deployed impact indicators, broken D-ring plates, deformed grommets

**LABELS**

Manufacturer, date of manufacture, inspection log, model, series, warnings



**DORSAL CONNECTION**

This D-Ring is found on all ANSI harnesses. It's used for fall arrest and should be placed directly between the shoulder blades.

**CHEST STRAP**

Tower harnesses have another D-Ring here. It's the only other connection point which can be used for fall arrest, like on a cable climb system. Unlike the Dorsal D, fall distance must be limited to 2 feet or less.

**WORK POSITIONING**

Side D-rings are used for work positioning. Never fall arrest.

**SEAT SLING**

A seat is a common feature on tower harnesses, and if you're working in suspension, you'll be glad you have one. Look for features like additional tool loops or aluminum reinforcement. D-Rings can be connected using a spreader bar.

**ANSI Z359.11-2014 – Safety Requirements for Full Body Harnesses**  
Full Body Harnesses (FBH) are used for fall arrest, positioning, travel restraint, suspension and/or rescue applications for uses ranging from 130 to 310 lbs. FBHs which meet this standard are intended to be used in a system that limits maximum arrest forces to 1,800 lbs (8kN) or less. All FBHs shall permanently incorporate a dorsal attachment, load bearing sub-pelvic strap, shoulder straps which come together at the dorsal location, and fall arrest indicators. Straps shall be no less than 1-5/8", made of synthetic material, and shall have a breaking strength not less than 5,000 lbs. Frontal attachment shall be used as a ladder climbing connection with a maximum free fall distance of 2 feet, and a maximum arresting force of 900 lbs. Hip attachment and suspension seat elements shall be used solely for work positioning and travel restraint.

**OSHA 1910.66 App C & 1926.502 – Full Body Harness Regulations**  
Fall arrest systems shall limit max arresting force to 1,800 lbs, bring an employee to a complete stop and limit maximum deceleration distance to 3.5 ft., and shall have sufficient strength to withstand twice the potential impact energy of a free fall distance of six feet. The attachment point of the full body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head. Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials. Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again until inspected and determined by a competent person to be undamaged and suitable for reuse.