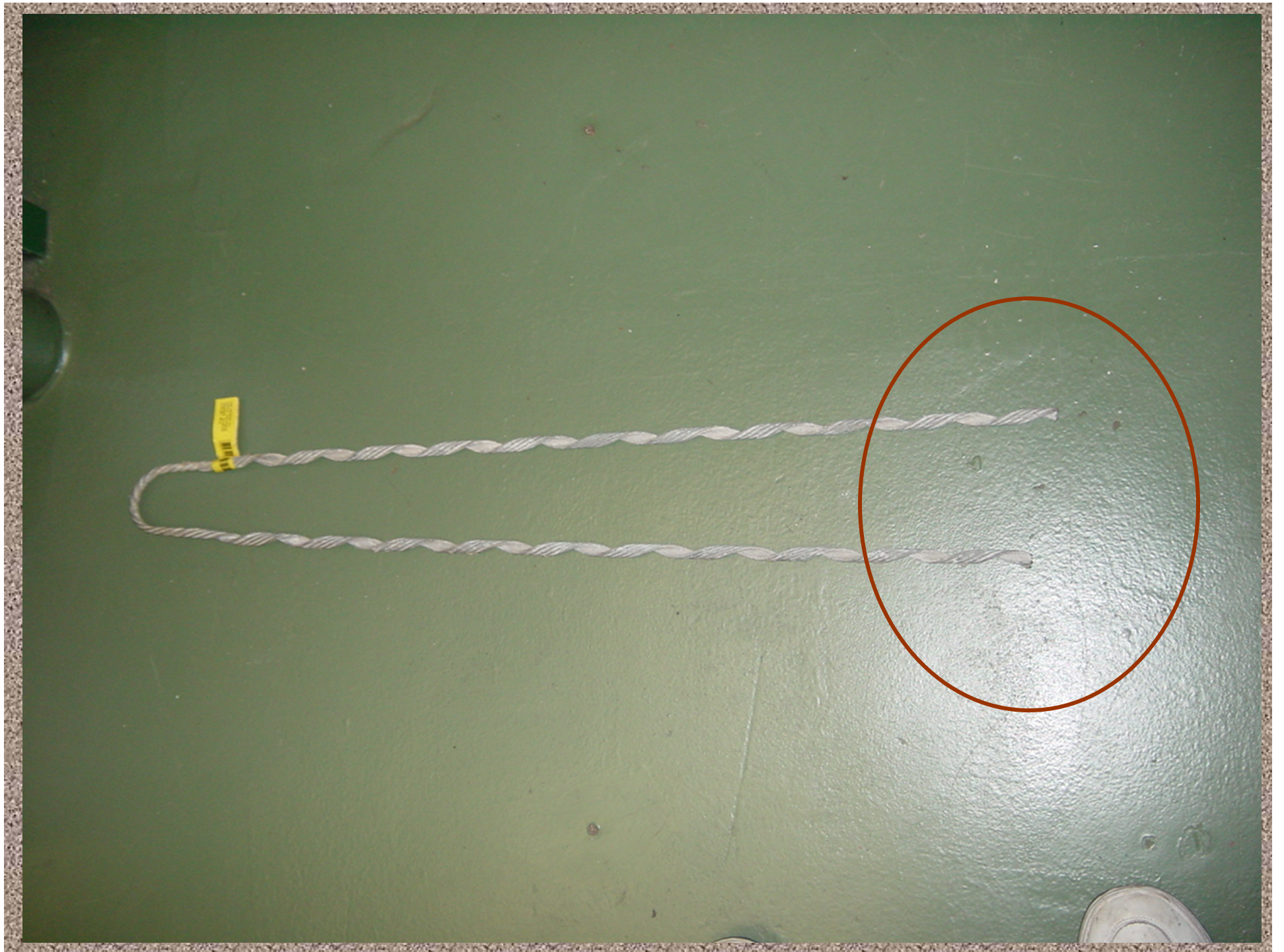


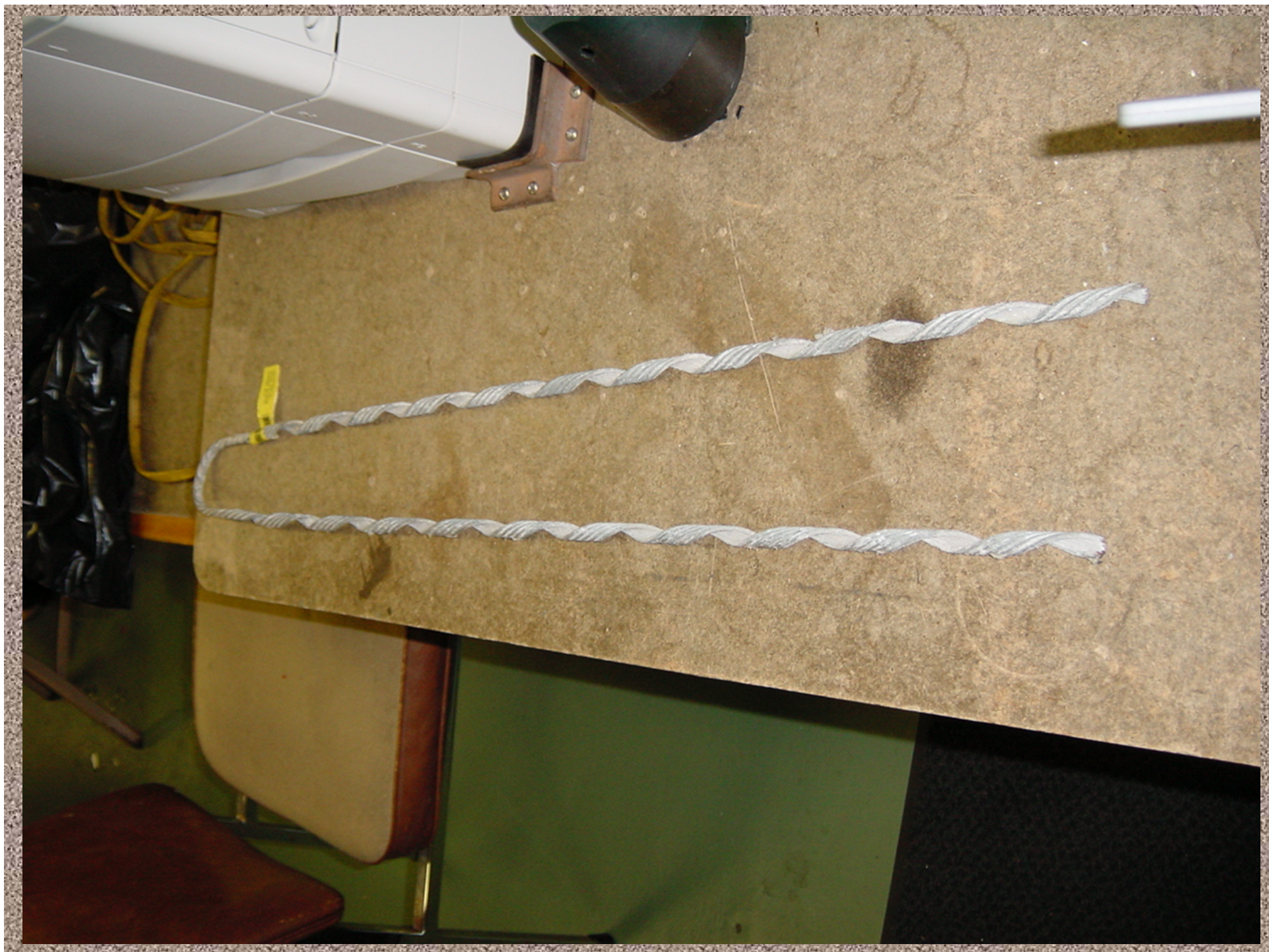
Tips and Tricks for PMI "finger grips" on EM cable

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Note: Mention of Brands or Companies does not imply endorsement by RVTEC, UNOLS or Oregon State University, provided for information purposes only

UNOLS .322" wire is Left Hand Lay = LHL

The grip works by friction between grip wires and armor wires. Grip wires are laid the SAME direction as the outer armor.

Using the wrong (opposite) lay grip will result in failure at a much lower tension - the grip will slip instead.

CABLE-GRIP™ TERMINATION

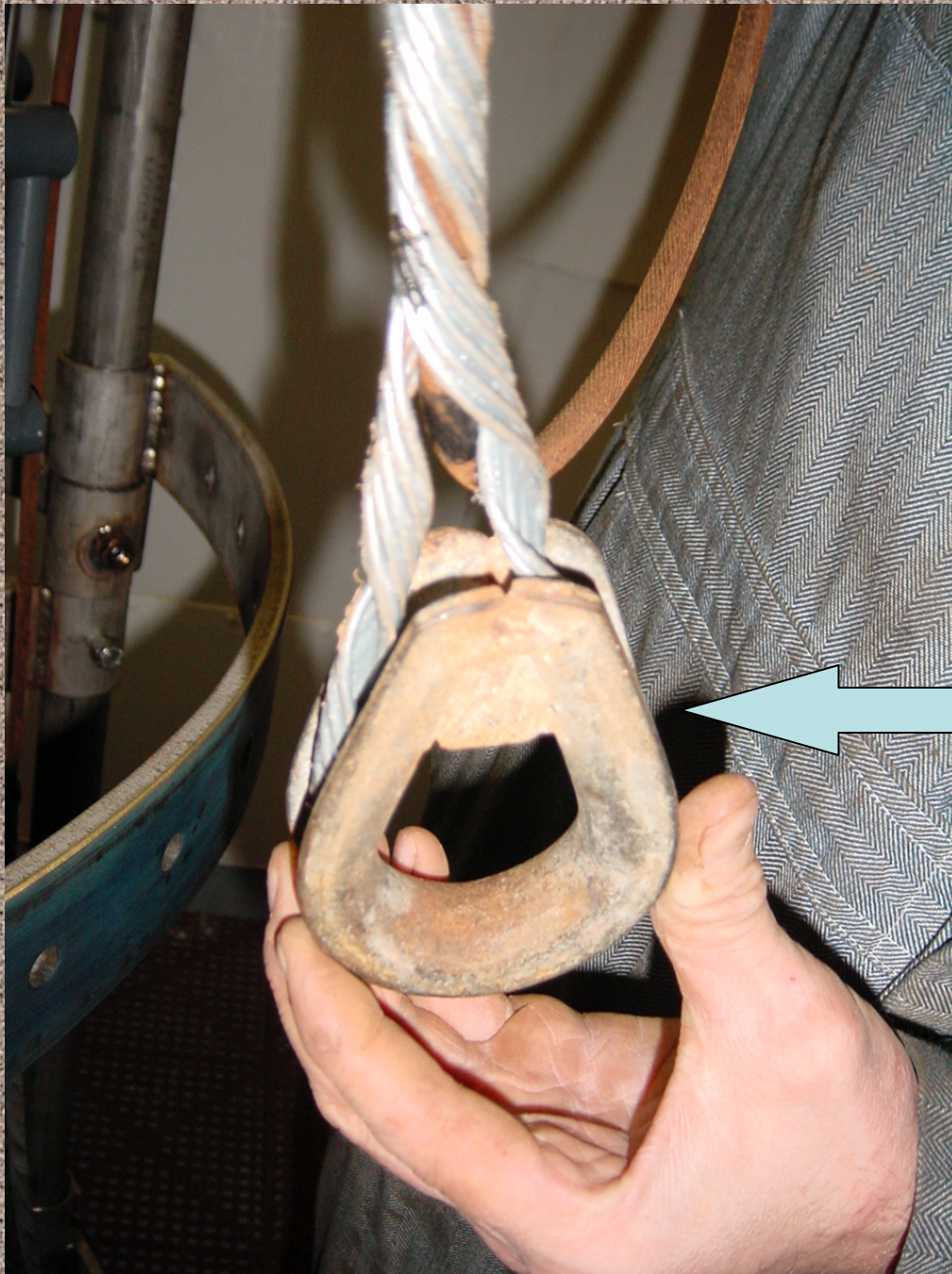
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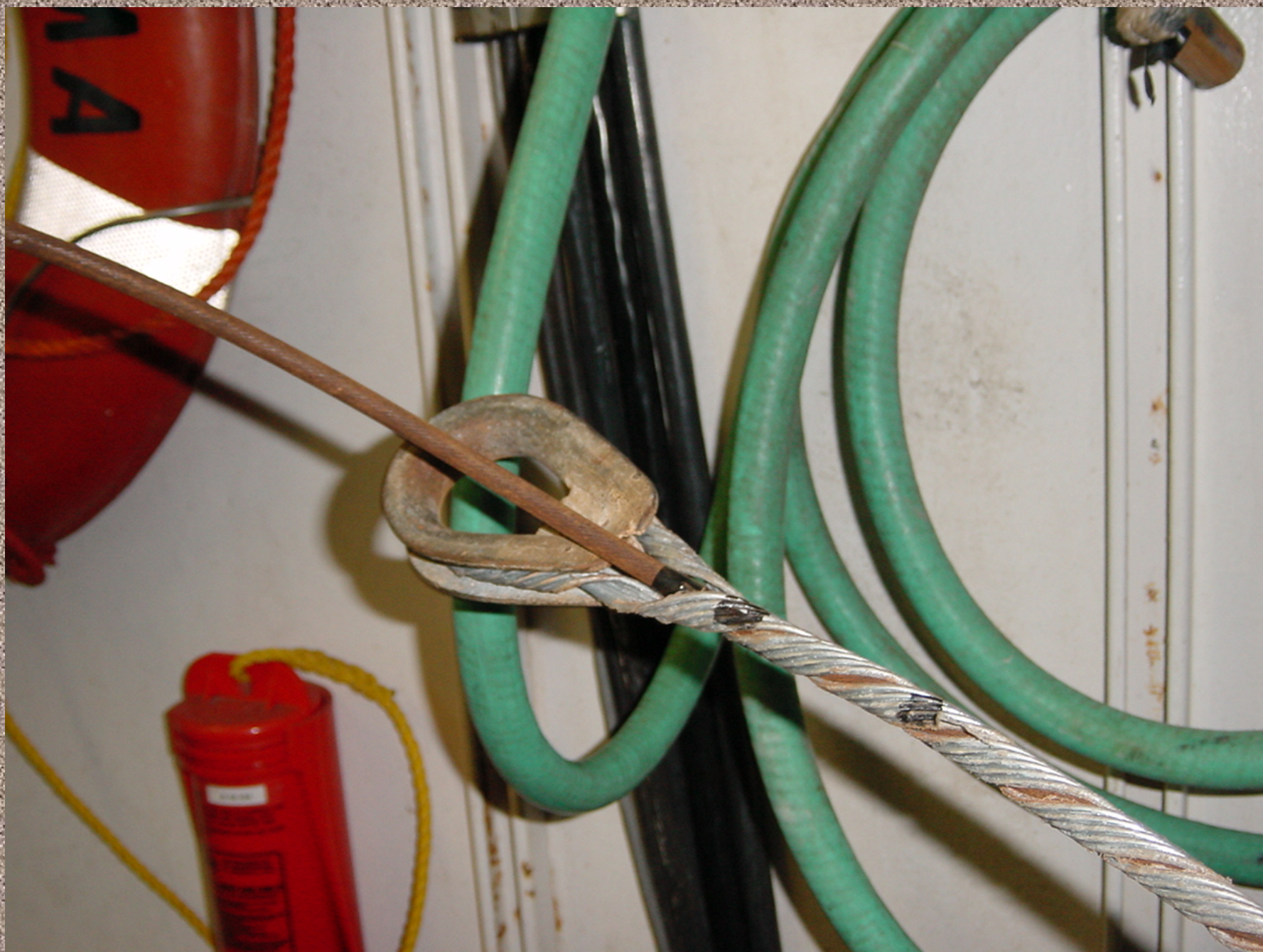
DIA: .313" - .327" OD

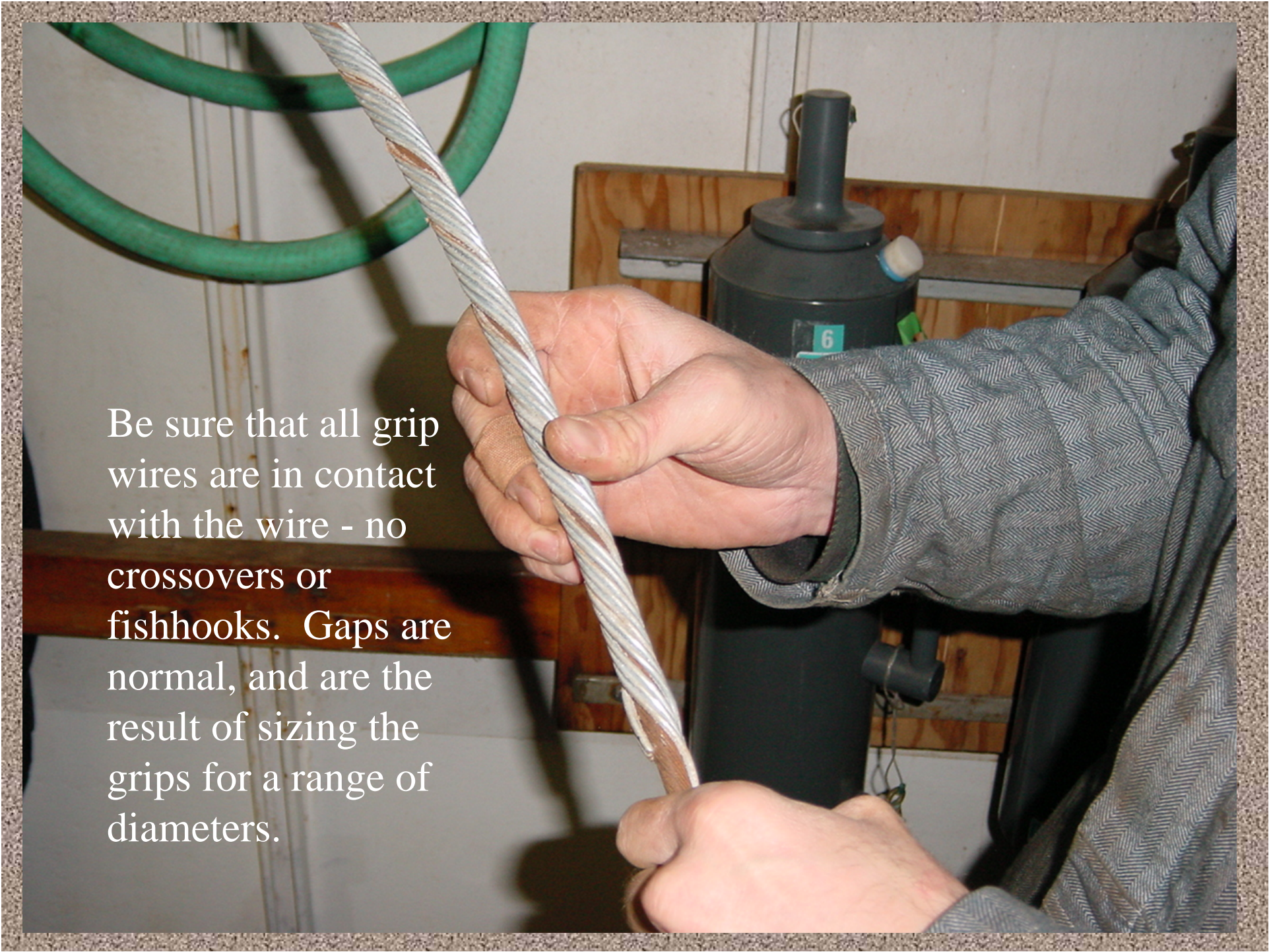
LAY: LHL

MADE IN U.S.A.



Thimble prevents
deformation of the grip
eye - extends the life of the
termination



A close-up photograph showing a person's hands holding a thick, twisted metal wire. The wire is being held against a green, flexible grip. The person is wearing a grey, patterned jacket. In the background, there is a mechanical device with a black cylindrical body and a wooden base. The device has a green label with the number '6' on it. The overall scene appears to be a workshop or a laboratory setting.

Be sure that all grip wires are in contact with the wire - no crossovers or fishhooks. Gaps are normal, and are the result of sizing the grips for a range of diameters.



At this point, the grip termination (with or without thimble) has about 90% of the strength of the cable.

The primary failure mode in this state is ‘unzipping’ from the eye end. We have observed that under high tension, the wire will flip out of the grip turn-by-turn, starting at the eye.



To increase termination strength, a 1/2" Crosby cable clamp can be used to secure the eye end of the grip. To prepare for this, wrap several layers of electrical tape at the base of the eye. This provides a base for the cable clamp to grab.

The Crosby clamp is placed over the tape, and tightened enough to stay in place, and prevent unzipping.

It can be pretty tight, since the cable core is well protected by the armor and the grip wires.

The tape keeps the clamp in place. If tape is **not** used, the clamp has a tendency to slip - metal on metal contact.

{You'll know there's too much tape when you can't get the U-bolt on.}





Once the clamp is tightened, the whole thing is wrapped in electrical tape to keep the nuts from coming off. Without this, they tend to work loose as the wire vibrates in use.





Finished termination
attached to CTD

It's a good idea to add
some tape at the upper end
of the grip to keep the
wires from working loose,
and to prevent hand
injuries. Bright tape is a
good two-block indicator
for winch operators.