

Report Date: 20 Mar 2014

**Summary Report for Individual Task
551-88H-2522
Direct Application of Wire Rope Clips Needed for Lashing Cargo
Status: Approved**

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

Condition: Assigned as a senior crane operator in an operational environment at a terminal or aboard a cargo vessel, during day or night, in normal weather conditions, given a completed risk assessment, an operation order/plan, safety briefing, safety equipment, wire rope, wire rope clips, crescent wrench, slide caliper, TM 3-34.86 and TC 4-13.17. This task should not be trained in MOPP 4.

Standard: Direct the application of wire rope clips needed for lashing cargo without injury to personnel or damage to equipment.

Special Condition: None

Safety Level: Low

MOPP: Never

Task Statements

Cue: You are assigned as a Senior Crane Operator tasked with directing the proper application of wire rope clips needed for lashing cargo.

DANGER Adhere to all DANGER statements listed in the equipment technical operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

WARNING Adhere to all WARNING statements listed in the equipment technical operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

CAUTION Adhere to all CAUTION statements listed in the equipment technical operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

Remarks: None

Notes: None

Performance Steps

1. Measure the diameter of the wire rope using a slide caliper (see Figure 3-136).

2. Compute the number of wire clips needed.

Note: Use the following formula: Number of clips = $3D + 1$, where D = diameter of wire rope. Add one clip if the wire rope has an independent wire rope core. If the result ends in a fraction, round off to the next higher whole number.

Example: $3 \times 5/8 + 1 = 15/8 + 8/8 = 23/8 = 2 \text{ } 7/8 = 3$ clips.

3. Direct personnel to apply the clips, spacing them about six rope diameters apart (see Figure 3-137).

4. Direct personnel to tighten clips as follows:

a. Apply tension to the clips farthest from the eye.

b. Tighten the clips in order, working toward the eye or thimble.

5. Check the lashing for tightness.

6. Ensure the correction of any deficiencies.

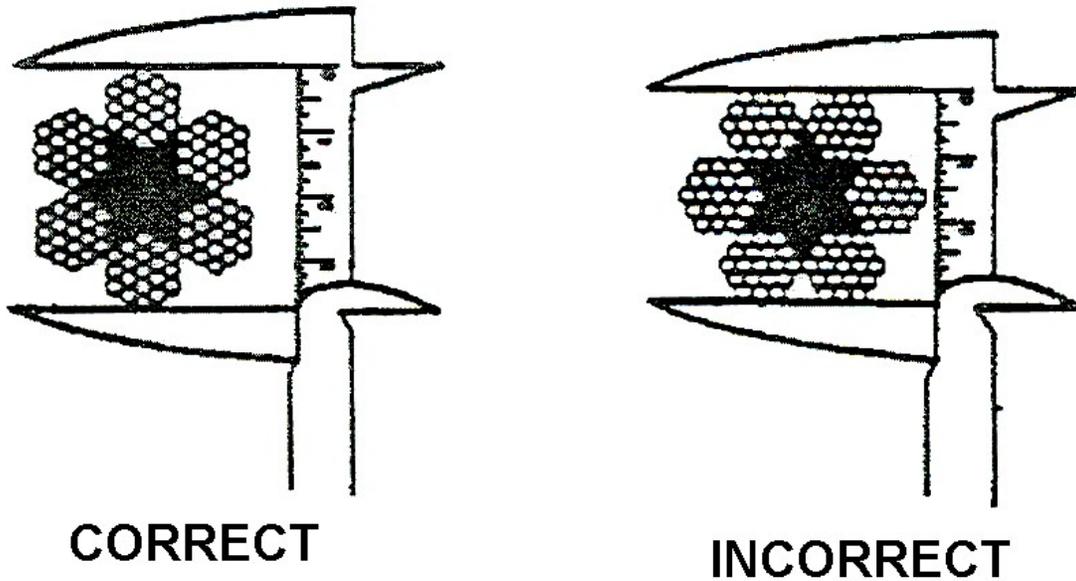


Figure 3-136
Using a Slider Caliper

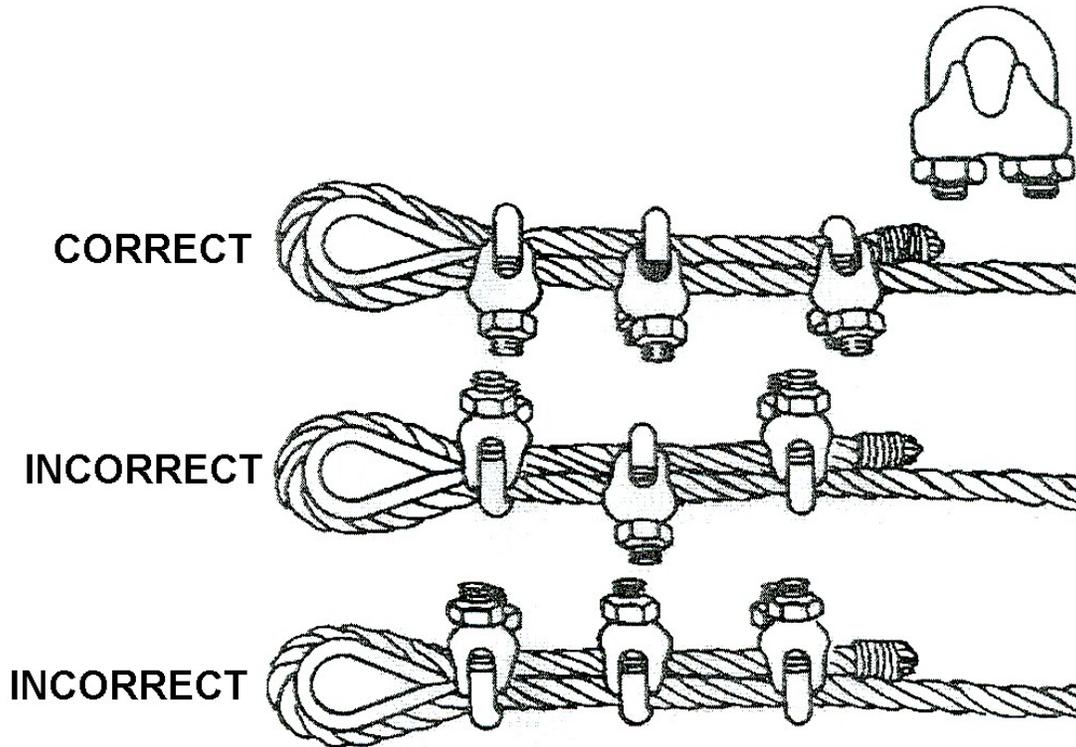


Figure 3-137
Applying and Spacing Clips

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all performance steps are passed (P). Score the Soldier NO-GO if any performance step is failed (F). If the Soldier fails any step, show what was done wrong and how to do it correctly.

Evaluation Preparation: Ensure that all materials required to perform the task are available. Tell the Soldier that he/she will be evaluated on directing the application of wire rope clips needed for lashing cargo.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Measured the diameter of the wire rope using a slide caliper.			
2. Computed the number of wire clips needed.			
3. Directed personnel to apply the clips, spacing them about six rope diameters apart.			
4. Directed personnel to tighten clips.			
5. Checked the lashing for tightness.			
6. Ensured the correction of any deficiencies.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	TC 4-13.17	Cargo Specialist's Handbook	Yes	No
	TM 3-34.86	Rigging Techniques, Procedures, and Applications {MCRP 3-17.7j}	Yes	No

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste.

Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take. Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained:

- Hazardous materials program.
- Hazardous waste program.
- Hazardous communications program.
- Pollution prevention and hazardous waste minimization recycling program.
- Spill prevention and response plan program.

Safety: In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

All Soldiers and leaders must maintain a proactive posture towards safety in day-to-day operations. The need for total commitment to safety should be evident to commanders, senior Soldiers, and their subordinates. The importance of safety is intensified for personnel lashing cargo. Safety awareness is most effective at three levels: command, leader, and individual. Observe all Warnings and Cautions. and remain aware of the following:

- Hearing protection requirements
- Danger of lashing materials/equipment

All operations will be performed to protect and preserve Army personnel and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful workplaces, procedures, and equipment. Observe all safety and/or environment precautions regarding electricity, cable, and lines. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, the Clean Air Act (CAA) and the CAA amendments, and the OSHA Hazard Communication standard.

Accidents are an unacceptable impediment to Army missions, readiness, morale, and resources. Decision makers at every level will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property affiliated with this task.

- (a) Take personal responsibility.
- (b) Practice safe operations.
- (c) Recognize unsafe acts and conditions.
- (d) Take action to prevent accidents.
- (e) Report unsafe acts and conditions.
- (f) Work as a team.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks :

Task Number	Title	Proponent	Status
551-88H-4508	Monitor Marine Terminal Operations	551 - Transportation (Individual)	Analysis

Supported Collective Tasks :

Task Number	Title	Proponent	Status
55-2-1508	Conduct Vessel Operations	55 - Transportation (Collective)	Approved

ICTL Data :

ICTL Title	Personnel Type	MOS Data
MOS 88H - CARGO SPECIALIST SL2	Enlisted	MOS: 88H, Skill Level: SL2, Duty Pos: ABW