

# MOUNTING AND DISMOUNTING HEAVY EQUIPMENT

## WHAT'S AT STAKE?

The proper procedure for mounting and dismounting heavy equipment will vary, depending on the machine.

Each year in the construction industry, lost-time injuries occur to drivers, operators and mechanics working with construction equipment. Approximately 1/4 to 1/3 of these injuries are from getting on or getting off the machine.

Regardless of the type of equipment, mounting and dismounting should always be a top priority.

## WHAT'S THE DANGER?

### ENVIRONMENTAL FACTORS

Be especially mindful when mounting or dismounting equipment, specifically:

- Very early in the morning – dew can form on access steps.
- On wet/rainy or snowy/icy days when access steps can be slick.

### MOUNTING/DISMOUNTING: GENERAL DANGERS

#### Musculoskeletal Injuries

- Jumping down from large equipment is a common practice. Injuries result in sprains, strains, torn muscles, lower back, knee, ankle and neck.
- Entering or exiting an excavator can be a hazard/danger if not done properly. Slips and falls are common causes of injury.

## HOW TO PROTECT YOURSELF

### WHAT TO DO

**To reduce the risk of injuries follow these rules:**

- When using a new piece of machinery, become familiar with the proper mounting and dismounting procedures.

- When a person jumps from a height of more than 30 centimetres, the force that goes through the body is about 14 times the person's body weight. In other words, a 75 kg man who jumps out of a tractor or any other high surface is exerting more than 1,000 kilograms of force on his body. This causes injury to bones, tendons and cartilage. And if you're doing this multiple times every working day, the damage to the body can be extensive.
- When dismounting and mounting, maintain three-point contact. This means having contact with the construction equipment by either one foot and two hands or one hand and two feet. The smaller the triangle you form with your body, the more stable you are.
- Always face the vehicle, both when mounting and dismounting.
- Look at the surface below before stepping and make sure it is even to prevent ankle and knee injuries.
- Never mount or dismount moving equipment.
- Do not mount or dismount with anything, including tools, in your hands. Not only does it throw the body off-balance, it also reduces your chance of recovering your balance if you do slip. Use a drop rope to raise and lower supplies, tools and equipment instead.
- Handholds and footholds are on the equipment for a reason – use them.
- Wear the appropriate clothing. Loose or torn clothing can get caught on equipment when you are jumping down instead of climbing down. In slippery conditions, wear proper footwear to prevent slipping hazards.
- Proper vehicle maintenance also contributes to the safe mounting and dismounting of equipment. Make sure that running boards, treads, steps, footholds and platforms are kept clear. Hazards like ice, snow and grease could cause slips, trips and falls.

## THOUGHT PROVOKING QUESTIONS

- Do you practice 3 points of contact when entering or exiting your machine?
- Do you keep your footwear clean and free of mud?
- Do you remind others to be safe when you witness a coworker doing an unsafe act?

## FINAL TAKEAWAYS

- **Good housekeeping** is very important to machinery and equipment, especially in regard to the access route for mounting and dismounting. Operators should keep the cabs and access areas clean and tidy.
- **Do Not Rush – Be Deliberative** Take the time needed to properly enter and exit the equipment.
- **Broken or missing handholds and footholds** are repaired or replaced immediately.
- **Worn or slippery surfaces** of the access route should be replaced with skid-resistant surfaces.
- **Add steps, non-slip surfaces, and hand holds where necessary.** This is especially true for large equipment such as a crane or dedicated drill rig.
- **Do not forget fall protection** – either a handrail system or personal fall protection in the form of full body harness and retractable lanyard for each employee at height.
- **Train crews** on the safe way of climbing in to a machine and safely dismounting.
- **Install warning decals or signs** in the cab or on the door of trucks and heavy equipment reminding workers to use 3-point contact AND it displays a commitment to safety.

## FINAL WORD

“Look before your leap” This age old truism just scratches the surface when it comes to mounting/dismounting equipment. Basic common safe work practices associated with

mounting/dismounting can help and assist you to be aware of the hazards and reduce risk of injury.

QUIZ

1. If you are young and in good physical shape and condition, it is acceptable to jump down from the cab of your tuck or equipment.

- True
- False

2. When an employee is introduced to using new equipment, he or she must become familiar with the proper mounting/dismounting procedures.

- True
- False

3. Musculoskeletal injuries can be caused to those drivers and operators who have the practice of jumping from their equipment.

- True
- False

4. The 3 points of contact when entering or exiting your machine is more of a guide and not a rule of safe mounting/dismounting procedures.

- True
- False

WHAT WOULD YOU DO?

You are the foreman of a crew of mostly younger men who work as maintenance personnel for super sized trucks. He knows the rules that mandates no jumping off or from the cabs of the trucks. You have reminded him of that rule. He replies that he is the son of the general manager and does not have to listen to me. You are nearing retirement and need your job for full pension. Do you just let this go by and wait your time and see what happens?

What would you do?

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**BEFORE THE TALK - TIPS**

Before the Meeting Preparation Tips

- Pass around the attendance sheets.

Be prepared to discuss:

- Safe work practices and polices pertaining to Mounting/Dismounting Heavy Equipment protocols and programs industry - wide and at your location.
- Proper reporting procedures relating to accidents, injuries, illnesses, fatalities, near misses / close calls including hazards and concerns at your location.

Other:

- Provide examples and follow with a Q and A about employees who did not follow accepted company policies or plans with respect to mounting/dismounting procedures, and, as a result safety hazards and concerns were created.
- Since the last safety meeting, have the participants seen or observed any safety hazards/concerns with respect to mounting/dismounting procedures.
- Invite to the safety meeting, an employee who was injured in mounting/dismounting practices on the jobsite to tell his narrative, and, follow up with a general discussion with all involved.

**AFTER THE TALK- CHECKLIST**

**PROVIDED FOLLOW-UP TO WORKERS THAT DID**

**POORLY ON THE QUIZ**

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

**OBSERVED WORKERS**

TASK(S): \_\_\_\_\_

DATE: \_\_\_\_\_

**REFRESHER TRAINING**

TOPIC(S): \_\_\_\_\_

DATE: \_\_\_\_\_

**OTHER (DESCRIBE):** \_\_\_\_\_

MEETING DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

**NOTES**

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**ANSWERS:**

- 1. False
- 2. True
- 3. True
- 4. False

**ATTENDANCE**


**INSTRUCTOR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SAFETY TALK:** \_\_\_\_\_