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 of 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.