



# National Grain and Feed Association

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## NGFA Safety Tips: Manlifts

...Committed to promoting safety and health in the workplace...

### Manlifts in Grain, Feed and Processing Facilities

Manlifts and special purpose personnel elevators are commonly found in grain handling facilities such as grain elevators, feed and flour mills, biofuel plants, and processing facilities.

### Testing and Maintenance

The American Society of Mechanical Engineers' Safety Code for Elevators and Escalators (ASME A17.1) requires that manlifts and special purpose personnel elevators be inspected at least annually by a qualified person. The standard also requires that a full load test be completed every five years. The load test checks the brakes and the governor. The governor sets the brakes should the car fall at a certain rate of speed. Never operate equipment with a faulty governor. Periodic inspections and maintenance are also required to keep manlifts operating safely and efficiently. Routine maintenance inspections should include the following (where applicable):

- Cables to ensure they are free of rust and broken wire strands.
- Car doors, landing doors, and floor limit switches for proper operation.
- Sheaves and cable clamps to ensure they are in good condition.
- The governor cable to ensure there are no kinks or frays.
- The electrical trail cord to ensure it is free of nicks, abrasions, and wear.
- Brakes and controls to ensure operation..
- Gear reducer oil to ensure that levels are adequate.
- Housekeeping to ensure that the car is free of debris and unnecessary materials and equipment.
- Lighting in the manlift shaft and the car.

### Safety Equipment and Devices

Many older manlifts and special purpose personnel elevators were built to the code at the time of installation and may not have some of the safety features commonly found in newer equipment. Manlift cars are commonly configured with bifold or collapsible doors to keep the operator from falling out of the car..



## NGFA Safety Program

- The NGFA is committed to promoting safety and health in the workplace and shares the Occupational Safety and Health Administration's (OSHA's) commitment to protecting employees.
- The NGFA's extensive efforts to enhance safety include unprecedented research and education efforts launched in the early 1980s that helped lead to a dramatic reduction in the number of fire and explosion incidents in commercial grain-handling facilities.
- Each year, NGFA jointly sponsors regional safety seminars with affiliated state and regional grain and feed associations. The one-day conferences focus on keeping grain handling employees safe.

The car's cage must be structurally sound and totally enclose the operator.

Limit switches are located at each entry door and at the top and bottom of the rails. Limit switches located at each entry door prevent the manlift from operating when the door is open. Limit switches located at the top and bottom of the manlift's rails turn the manlift off when the car reaches the top or bottom of the shaft.



Manlift cars are also equipped with operating controls that allow the operator to stop at individual floors manually or automatically. Some manlift cars are equipped with an emergency stop button that engages the brakes when the button is depressed.

### Safe Operation

Manlift accidents are often caused by faulty or damaged equipment or operator errors. To prevent injury, manlift operators should:

- Never disable the car's door, landing door, or other safety switches or controls.
- Never ride with the car door open or exceed the car's rated capacity
- Not use a manlift as a freight manlift. It is for personnel only.
- Immediately report safety or maintenance issues.
- Carry a secondary source of light, such as a flashlight or headlamp, and a secondary means of communication such as a two-way radio unless the manlift is equipped with a working phone or intercom system.
- Avoid using exterior manlifts if frost, snow, or ice are present on any part of the system.

### Emergency Procedures

In the event of a power failure, breakdown, or emergency it is important for employees to remain calm. Employees should remain in the car with the doors closed and call for help using a two-way radio or activate the alarm button control inside the car (if applicable). When waiting for help employees should never attempt to override the manlift, depress any operating controls, or try to climb out of the access door or top hatch unless directed by emergency services, such as the local fire department. Climbing out of the car can be life threatening. A simple reset is sometimes all that is needed to place the manlift back into operation.

More safety information at [www.ngfa.org](http://www.ngfa.org)

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