



FL175
**Operation and
maintenance
instruction manual**

604.00.511

Reprinted

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason **MOST ACCIDENTS CAN BE PREVENTED** by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment there are conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

A careful operator is the best insurance against an accident.
The complete observance of one simple rule would prevent many thousand serious injuries each year.
That rule is:

Never attempt to clean, oil or adjust a machine while it is in motion.

WARNING

On machines having hydraulically, mechanically, and/or cable controlled equipment (such as shovels, loaders, dozers, scrapers, etc.) be certain the equipment is lowered to the ground before servicing, adjusting and/or repairing. If it is necessary to have the hydraulically, mechanically, and/or cable controlled equipment partially or fully raised to gain access to certain items, be sure the equipment is suitably supported by means other than the hydraulic lift cylinders, cable and/or mechanical devices used for controlling the equipment.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

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FL 175

crawler loader

Operation and Maintenance Instruction

Print No. 604.00.511



WARNING

CAREFULLY READ THIS MANUAL BEFORE STARTING, OPERATING, MAINTAINING FUELING OR
SERVICING THIS MACHINE



This symbol is your safety alert sign. It means ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED.



Read and heed every safety instruction indicated by the key words WARNING and DANGER.



The safety signs mounted on the machine which are colour-coded yellow, with black borders and letters, are WARNINGS; those red with white borders and letters indicate points of DANGER.

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SAFETY RULES

GENERAL

Study the Operation and Maintenance Instruction Manual before starting, maintaining, fueling, or servicing machine. Read and heed all machine-mounted safety signs before starting, operating, maintaining, fueling, or servicing machine.

Machine-mounted safety signs have been color coded yellow with black borders and lettering for **warning** and red with white borders and lettering for **danger** points.

Do not allow unauthorized personnel to service or maintain this machine.

Do not wear rings, wrist watches, jewelry, loose or hanging apparel, such as ties, torn clothing, scarves, unbuttoned, or unzipped jackets that can catch on moving parts. Wear proper safety equipment as authorized for the job. Examples: hard hats, safety shoes, heavy gloves, ear protectors, safety glasses or goggles, reflector vests, or respirators, depending on job conditions. Consult your employer for specific safety equipment requirements.

Keep operator's compartment, stepping points, grab rails and handles clean and free from foreign objects, oil, grease, mud or snow accumulation to minimize the danger of slipping or stumbling. Clean mud or grease from shoes before attempting to mount or operate machine.

Do not jump on or off machine. Keep two hands and one foot, or two feet and one hand, in contact with steps and grab rails and handles at all times.

Do not use controls or hoses as handholds when climbing on or off machine. Hoses and controls are movable and do not provide a solid support. Controls also may be moved inadvertently causing accidental machine or equipment movement.

Never attempt to operate the machine or its tools from any other position than seated in the operator's seat. Keep head, body, limbs, hand and feet inside operator's compartment at all times to reduce exposure to hazards outside the operator's compartment.

Be careful of slippery conditions on stepping points, hand rails, and on the ground.

Always wear non-slip safety boots or shoes.

Get off machine only when it is fully stopped. Always check height, width and weight restrictions in the working area, and be sure the machine will not exceed these limitations.

Be sure the exact locations of gas lines, utility lines, sewers, overhead and buried power lines and other obstructions or hazards are known. Such locations should be precisely marked by the proper authorities to reduce the risk of accidents. Obtain shutdown or relocation of any such facilities before starting work, if necessary. Know the working range of the machine.

Provide clearance for rear superstructure swing by barricading area to discourage entry.

Never exceed the lifting capacity of the machine. Stay

within the lifting limits shown on the load charts provided with the machines.

START UP

Do not start or operate an unsafe machine. Walk completely around machine before mounting. Before working the machine, be sure that any unsafe condition has been satisfactorily remedied. Check that steering and attachment controls are in hold (neutral) position and, also, that safety lever is released before moving. Advise the proper maintenance authority of any malfunction part or system. Be sure all protective guards or panels are in place, and all safety devices provided are in place and in good operating condition.

Before starting machine, check, adjust and lock the operator's seat for maximum comfort and control of the machine. Be sure all people in the area are clear of the unit before moving the machine or its attachments. Sound horn.

Obey flagman, safety signals and signs.

Due to the presence of flammable fluid, never check or fill fuel tanks, storage batteries, or use starter fluid near lighted smoking materials or open flame or sparks.

Starting fluid is flammable. Follow the recommendations as outlined in the Operation and Maintenance Instruction Manual and as marked on the containers. Store containers in cool, well ventilated place secure from unauthorized personnel. **Do not puncture or burn containers.** Follow the recommendations of the manufacturer for storage and disposal.

Never use starter fluid near lighted smoking materials or open flame or sparks due to the presence of flammable fluid.

Make sure nobody is near the work area of the excavator before starting the machine, or before swinging or moving in any direction.

Adjust all mirrors for visibility towards the rear of the machine.

Be sure the throttle setting is adequate for the contemplated operation.

If controls or other hydraulic systems feel spongy have the machine checked for air in the systems. Presence of air in these systems could cause improper control and result in an accident. See the Operation and Maintenance Instruction Manual for corrective procedures.

OPERATING

Do not run the engine of this machine in closed areas without proper ventilation to remove deadly exhaust gases which would otherwise concentrate in the ambient air.

Keep operator's compartment clear of loose objects. Do not use machine to carry loose objects by means other than attachments designed for such objects.

Do not carry riders.

Observe and know the mechanics of alternate exit routes. For your personal protection, do not attempt to climb on or off machine while machine is in motion.

Be sure exposed personnel in the area of operation are clear of the unit before moving the machine or its attachments. Sound horn. Obey flagman, safety signals and signs.

When backing, always look to where the machine is to be moved. Be alert to the position of exposed personnel. **Do not operate** if exposed personnel enter the immediate work area.

Maintain a safe distance from other machines. Provide sufficient clearance for ground and visibility conditions. Yield right-of-way to loaded machines.

Maintain clear vision of all areas of travel or work. Keep cab windows clean and repaired.

When pulling or towing through a cable or chain, do not start suddenly at full throttle. Take up slack carefully. Guard against kinking chains or cables. Inspect carefully for flaws before using. Do not pull through a kinked chain or cable due to the abnormal high stresses and possibility of failure of the kinked area. Always wear heavy gloves when handling chain or cable.

Be sure cables are anchored securely and the anchor point is strong enough to handle the expected load. Keep exposed personnel clear of anchor point and cable or chain. **Do not pull or tow unless operators compartments of machines involved are guarded against potential cable or chain backlash.**

Be alert to soft ground conditions close to newly constructed walls. The fill material and weight of machine may cause the wall to collapse under the machine.

In darkness, check area of operation carefully before moving in with machine. Use all lights provided. Do not move into areas of restricted visibility.

If engine has a tendency to stall for any reason under load or idle, report this for adjustment to a proper maintenance authority immediately. Do not continue to operate machine until condition has been corrected.

Be sure to periodically check all engine exhaust parts for leaks as exhaust gases are dangerous to the operator.

An operator must know the machine's capabilities. When working on slopes or near dropoffs be alert and avoid loose or soft conditions that could cause sudden tipping or loss of control.

Where noise exposure exceeds 90 dBA for 8 hours, wear authorized ear protective equipment per local and other national safety requirements that apply.

Do not operate machinery in a condition of extreme fatigue or illness. Be especially careful towards the end of the shift.

When demountable counterweights have been provided, do not work machine if they have been removed.

When operating machine know what clearances will be encountered; overhead doors, wires, pipes, aisles, road-

ways; also weight limitation of ground, floors, and ramps. Be aware of fog, smoke or dust elements that obscure visibility.

Always check work area for dangerous features. The following are examples of dangerous work areas: slopes, overhangs, timber, demolitions, fire, high walls, dropoffs, backfills, rough terrain, ditches, excavations, traffic, parking lots, crowded maintenance and closed areas. Use extreme care when in areas such these.

Avoid going over obstacles such as rough terrain, rocks, logs, curbs, ditches, ridges and railroad tracks whenever possible. When obstructions must be crossed, do so with extreme care and perpendicularly. Reduce speed. Ease up to the breakover point - pass the balance point slowly on the obstruction and ease down on the other side, using attachment as an aid if necessary.

Cross gullies or ditches at an angle (possibly using attachment as an aid) with reduced speed after insuring ground conditions will permit a safe traverse.

The grade of slope you should attempt will be limited by such factors as condition of the ground, load being handled, the type of machine, speed of machine and visibility. There is no substitute for good judgement when working on slopes.

Avoid operating equipment too close to an overhang or highwall either above or below the machine. Be on the lookout for caving edges, falling objects and slides. Beware of concealment by brush and undergrowth of these dangers.

Avoid brushpiles, logs or rocks. **Do not drive the machine onto brushpiles, logs, large rocks** or other surface irregularities that break traction with the ground especially when on slopes or near dropoffs.

Be alert to avoid changes in traction condition that could cause loss of control. Work the machine with extreme caution on ice or frozen ground conditions, on steep slopes or near dropoffs.

Operating in virgin rough terrain that includes previously mentioned hazards is called pioneering. Be sure you know how this is done. Danger from falling branches and upturning roots is acute in these areas.

Place the machine in relationship between the excavation and the dump area to swing to the left for discharge of material, for best visibility. **Never use the bucket or attachment as a man lift or allow riders on the machine.**

No machine should ever be used as a work platform or scaffolding. Other uses that depart from machine design intended purposes (such as pushing or towing rail wagons, trucks or other machines) should be avoided.

Always be aware of presence of people in the work site. Never swing or position bucket, load or attachment over ground crew or truck cab.

Before loading a truck be sure the driver is in a safe place.