CASE

OPERATOR'S MANUAL

COMPACT CRAWLER EXCAVATOR

CX27B
TIER 4

87722069 NA

Issued 01Jan 08

MidWestTech | Case CX27B Tier 4 Compact Crawler Excavator Operator's Manual | Public...

Order the manual at mid-west-tech.com >

MidWestTech | Case CX27B Tier 4 Compact Crawler Excavator Operator's Manual | Publication 87722069NA

OPERATOR PRECAUTIONS

PERSONNEL

- Be prepared for emergencies. Always have a first aid kit and a working fire extinguisher with you and know how to use each.
- Avoid loose fitting clothing, loose or uncovered long hair, jewelry and loose personal articles.
- Know and use the protective equipment that is to be worn when operating this machine. Hard hats, protective glasses, protective shoes, gloves, reflector type vests, respirators and ear protection are examples of the type of equipment that may be required.
- Certain protective equipment should be replaced and renewed upon age and wear. Old or damaged hard hats may not provide the same level of protection as a new hard hat. Faded and soiled vest are no longer as highly visible as new vests. See the manufacturer's recommendation.
- Do not rush. Walk, do not run.
- Know and use the hand signals required for particular jobs and know who has the responsibility for signaling.

GENERAL

- It is the responsibility of the operator to read and understand the Operator's Manual and other information provided and use the correct operating procedure. Machines should be operated only by qualified operators.
- DO NOT OPERATE this machine or perform maintenance work if you have not had appropriate training and read and fully understand the instructions and warnings in this manual.
- Wear the seat belt to maximize the protection capability of a ROPS (Roll Over Protective Structure) when the machine is so equipped.
- Inspect the ROPS and seat belt mounting bolts on a daily basis to ensure their integrity.
- Do not permit riders on the machine if there is no manufacturer's designated place for a rider.
- DO NOT use the bucket or attachment to lift persons or carry riders on the machine.
- Make sure that all protective guards, canopies, doors, etc. are in place and secure.
- Remove all loose object stored in the machine. Remove all objects which do not belong in or on the machine and its equipment.

MOUNTING AND DISMOUNTING PRECAUTIONS

- Use the hand holds and steps with at least three points of support when getting on and off the machine. Keep steps and platform clean. Face the machine when climbing up and down.
- Do not jump off the machine.
- Do not dismount while the machine is in motion.
- Foreign material or grease on the steps and hand rails can cause an accident. Keep the steps and hand rails clean.

STARTING AND STOPPING PRECAUTIONS

- Walk around the machine and warn all personnel who may be servicing the machine or are in the machine path prior to starting. Do not start until all personnel are clearly away from the machine. Sound the horn, if equipped, before starting.
- Walk around the machine's tool, attachment, or furthermost contact point to view operation danger area from the work site personnel view and angle.
- Check that the parking device is applied, place the transmission in neutral or park as specified by the manufacturer before starting the machine.
- Adjust, secure and latch the seat and fasten the seat belt before starting the machine.
- Start and operate the machine only from the operator's seat.
- Do not bypass the machine's neutral-start system. The neutral-start system must be repaired if it malfunctions.
- Use booster cables only in the recommended manner. Improper use can result in battery explosion or unexpected machine motion. Ventilate the battery area before using booster cables. Make sure that using booster cables will not interfere or harm electronic processing or computer devices.
- DO NOT OPERATE the engine in an enclosed area without adequate ventilation.
- Park the machine on level ground whenever possible and apply the parking brake. On grades, park the machine with the wheels or track securely blocked.
- Before leaving the operator's station, lower the equipment to the ground, shut off the engine and place the function cancellation lever into the locked or up position.
- Remove the starter key or disconnect switch when leaving the machine parked or unattended.

Order the manual at mid-west-tech.com >

MidWestTech | Case CX27B Tier 4 Compact Crawler Excavator Operator's Manual | Publication 87722069NA

OPERATING PRECAUTIONS

- Check brakes, steering and other machine control devices in accordance with the manufacturer's instructions prior to starting operation. Observe all gauges or warning instruments for proper operation. Operate all controls to insure proper operation. If any malfunctions are found, remove the starter key or disconnect switch key. Place a DO NOT OPERATE tag on the machine until the malfunction is corrected.
- If a failure that causes loss of control such as steering, service brakes or engine occurs, stop the machine motion as quickly as possible, remove the starter key or disconnect switch key. Place a DO NOT OPERATE tag on the machine and keep it securely parked until the malfunction is corrected or the machine can be safely towed.
- Understand the machine limitations and keep the machine under control.
- Operate and drive the machine with care and at speed compatible with conditions. Use extra caution when operating over rough ground, on slopes, and when turning.
- Note and avoid all hazards and obstructions such as ditches, underground lines, trees, cliffs, overhead electrical wires or areas where there is danger of a slide.
- Carry loads in recommended positions for maximum stability.
- Never lift loads in excess of capacity.
- Use the recommended machine ballast and counterweighting.
- Know and understand the job site traffic flow patterns and obey signalmen, road signs and flagmen.
- Know and understand that job site conditions may change on an hourly basis. Hills of dirt, debris or obstructions may grow and change from the time you began the day. It is your responsibility to monitor the changes and keep the machine, tools and attachments, etc. a safe distance.
- Watch for bystanders and never allow anyone to be under or to reach through the machine and its equipment while operating.
- Select a gear that will prevent excessive speed when going downhill. Do not coast downhill.
- When roading a machine, know and use the signaling devices required on the machine. Provide an escort for roading where required.
- On machines with independently operated wheel brakes, lock the brake pedals together when roading to provide equalized brake application.
- Use the recommended transport devices when roading the machine.
- Use the approved drawbar and / or attachment point when using the machine for towing. If a cable or chain is used, keep people away from the tow line.
- Before you operate at night, check that all lamps illuminate.
- If your machine has a cab make sure that all windows are clean and that the windshield wipers and washers work correctly.
- Engine exhaust fumes can cause death. If you operate this machine in an enclosed area, make sure there is ventilation to replace the exhaust fumes with fresh air.
- Check all controls in a clear area and make sure the machine is operating correctly.
- Dust, fog, smoke, etc., can decrease your vision and cause an accident. Stop the machine or decrease the speed until you can see.
- Contact with high voltage power lines, underground cables, etc., can cause serious injury or death from electrocution.
- Before you drive or operate in an area with high voltage lines, cables, or a power station, tell the power or utility company what you are going to do. You MUST HAVE THE POWER DISCONNECTED OR KEEP A SAFE WORKING DISTANCE from the lines, cables, or power station. Keep all parts of the machine a safe distance away from the power source. You must also know any federal, state/provincial, or local safety codes or regulations that apply to the job site.
- If a part of the machine touches high voltage power:
  1. Warn other workers NOT TO TOUCH THE MACHINE and to stay away from the machine.
  2. If you can break contact, reverse the operation that caused contact with the high voltage power, and move the machine away from the danger area. If you cannot break contact stay in the machine until the utility company de-energizes the line and tells you that the power is off.
- If you have extreme conditions, such as a fire, etc., and you are forced to leave the machine, do not step off the machine. Jump as far from the machine as possible with your feet together and do not touch the ground with your hands.

Order the manual at mid-west-tech.com >

MidWestTech | Case CX27B Tier 4 Compact Crawler Excavator Operator's Manual | Publication 87722069NA

- DO NOT OPERATE the machine if you do not feel well. This can be dangerous for you and for the people around you.
- You must make a judgment if weather, road, or earth conditions will permit safe operation on a hill, ramp, or rough ground.
- Stay away from hazardous areas such as ditches, overhangs, etc. Walk around the work area before you start and look for hazards.
- Be alert and always know the location of all workers in your area. Keep all other persons completely away from your machine. Injury or death can result if you do not follow these instructions.
- Develop fluid and smooth operating techniques and maintain the surface condition where the machine travels in order to control vibration transfer to the operator.

MAINTENANCE PRECAUTIONS

- Do not attempt repairs unless trained. Refer to manuals and experienced repair personnel for help.



DC040086 Figure 4

- Before beginning any inspection or maintenance procedures, secure a "DO NOT OPERATE" tag to the operator's console to inform the operator that the machine will be inoperable for inspection and maintenance. This tag will prevent accidental starting of the machine.
- Wear protective glasses and other required safety equipment when servicing or repairing the machine.
- Wear gloves to protect hands when handling cable.
- Disconnect the battery before working on the electrical system. Know the consequences of disconnecting any electronic or computer devices.
- Avoid lubrication or mechanical adjustments with the machine in motion or the engine operating. If the engine must be in operation to make certain adjustments, place the transmission in neutral, apply the parking brake, place the equipment in a safe position, securely block the tracks and use extreme caution.
- Securely block the machine or any component that may fall before working on the machine or component. If possible, use a back up or secondary blocking device, also.
- To prevent unexpected movement, securely block working elements when repairing or changing working tool parts such as cutting edges.
- Never make repairs on pressurized components, fluid, gas or mechanical until the pressure has been relieved according to the manufacturer's instructions.
- Use extreme caution when removing radiator caps, drain plugs, grease fittings or pressure taps. Park the machine and let it cool down before opening a pressurized tank.
- Release all pressure before working on systems which have an accumulator. Use a piece of cardboard, newspaper, or wood to check for pressurized leaks to prevent fluid penetrating the skin. Pressurize accumulators with the proper gas according to manufacturer's recommendations.
- When absolutely necessary to tow the machine, do not exceed the recommended towing speed. Be sure the towing machine has sufficient braking capacity to stop the towed load. If the towed machine cannot be braked, a tow bar must be used or two towing machines must be used. - one in front pulling and one in the rear to act as a brake. Avoid towing over long distances.
- Observe proper maintenance procedures.
- Whenever servicing or replacing hardened pins, etc., use a brass drift or other suitable material between the hammer and pin. Alternate: Use a brass hammer, drift or suitable material on the pin, etc.
- Keep the brakes and steering systems in good operating condition.
- Replace all missing, illegible or damaged safety signs. Keep all safety signs clean.

Order the manual at mid-west-tech.com >