



# OPERATION AND SAFETY MANUAL CX TRACK TRENCHER



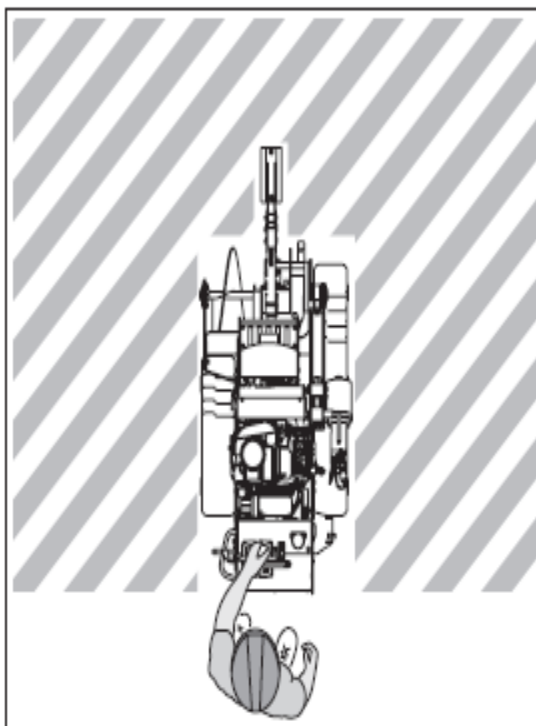
SCAN FOR COMPLETE MANUAL  
(MOBILE DEVICE WITH QUICK RESPONSE CODE APPLICATION REQUIRED)



## Operating Area



**IMPORTANT:** Top view of machine is shown.

Operator should stand only in the location shown.



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## Guidelines

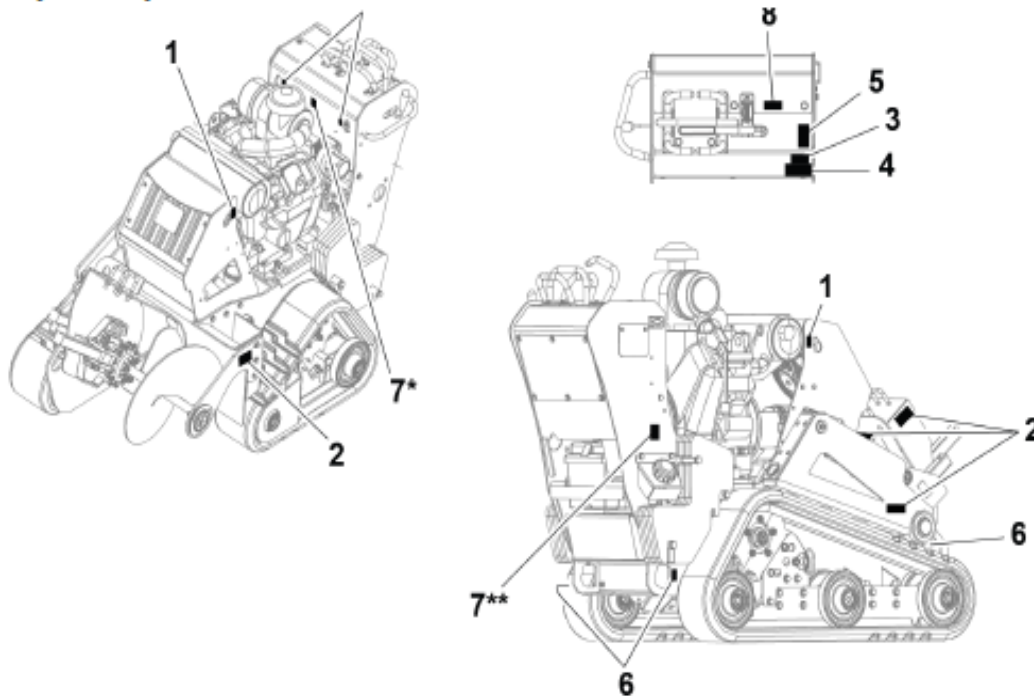


**WARNING** Misuse of machine can cause death or serious injury. Read and understand operator's manual and all other safety instructions before use. Know how to use all controls.

Follow these guidelines before operating any jobsite equipment:

- Complete proper training.
- Read and understand operator's manual before using equipment.
- Wear personal protective equipment. See "Prepare Operator" in "Prepare" chapter.
- Mark proposed path with white paint and have underground utilities located before working. In the US or Canada, call 811 (US) or 888-258-0808 (US and Canada). Also contact any local utilities that do not participate in the One-Call service. In countries that do not have a One-Call service, contact all local utility companies to have underground utilities located.
- Classify jobsite based on its hazards and use correct tools and machinery, safety equipment, and work methods for jobsite.
- Mark jobsite clearly and keep spectators away.
- Review jobsite hazards, safety and emergency procedures, and individual responsibilities with all personnel before work begins. Safety videos are available from your Ditch Witch® dealer or at [www.ditchwitch.com/safe](http://www.ditchwitch.com/safe). Safety Data Sheets (SDS) are available at [www.ditchwitch.com/support](http://www.ditchwitch.com/support).
- Fully inspect equipment before operating. Repair or replace any worn or damaged parts. Replace missing or damaged safety shields and safety alert signs. Contact your Ditch Witch dealer for assistance.
- Follow instructions on all safety alert signs on machine.
- Use equipment carefully per the instructions in this manual. Stop operation and investigate anything that does not look or feel right.
- Do not operate machine where flammable gas may be present.
- Only operate equipment in well ventilated areas.
- Always tie down equipment and properly stow accessories, even if traveling short distances.
- Contact your Ditch Witch dealer if you have any questions about operation, maintenance, or equipment use.
- Complete the equipment checklist located at [www.ditchwitch.com/safe](http://www.ditchwitch.com/safe).

**C16x/C24x/C30x**



Decal\_C30x\_C24x\_C16x.png

1



Lift point. See Transport chapter for more information.

2



**⚠ DANGER** Moving digging teeth. Contact will cause death or serious injury. Stay at least 6' (2m) away.

3



**⚠ WARNING** Underground utilities. Contact can cause death or serious injury. Locate and verify underground utilities before digging or drilling.

4



**⚠ WARNING** Misuse of machine can cause death or serious injury. Read and understand operator's manual and all other safety instructions before use. Know how to use all controls.

5



**CAUTION** High noise levels. Exposure can cause hearing loss. Wear hearing protection.

6



Tiedown location. See Transport chapter for more information.

7



**WARNING** Gasoline. Fire or explosion can cause death or serious injury. Keep heat, flames, sparks and other ignition sources away.

\* C16x, \*\* C24x, C30x



## Prepare Jobsite



**WARNING**

Underground utilities. Contact can cause death or serious injury. Locate and verify underground utilities before digging or drilling.

To help avoid injury:

- Expose lines by careful hand digging or soft excavation before operating equipment. Use appropriate equipment and procedures for exposing utility lines.
- Classify jobsite and follow precautions based on classification.
- Follow local regulations for digging near utilities.

A successful job begins before working. The first step in planning is reviewing information already available about the job and jobsite.

### Review Job Plan

Review blueprints or other plans. Check for information about existing or planned structures, elevations, or proposed work that may be taking place at the same time.

### Select Start and End Points

Select one end to use as a starting point. Consider the following when selecting a starting point:

#### Slope

Equipment should be parked on a level site. Consider how slope will affect setup and operation. Assess the risks on each slope to determine if factors affecting risks create an unsafe condition for working. See “Slope Guidelines” on page 44.

#### Space

Check that starting and ending points allow enough space for working.

#### Comfort

Consider shade, wind, fumes, and other site features.





## Prepare Operator



**WARNING**

Jobsite hazards. Exposure can cause death or serious injury. Use correct equipment and work methods. Use and maintain appropriate safety equipment.

To help avoid injury:

- Wear personal protective equipment including hard hat, safety eye wear, foot protection, hearing protection, and gloves (except when near rotating equipment).
- Remove jewelry.
- Wear close-fitting, high visibility clothing.
- Have other personal protective equipment, such as insulated boots and gloves, breathing protection, and face shield, etc. available for use depending on jobsite hazards or requirements.

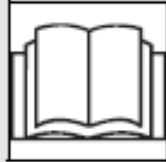
Follow these guidelines before operating any jobsite equipment:

- Complete proper training and read operator's manual before using equipment.
- Plan for emergency services. Have the telephone numbers for local emergency and medical facilities on hand. Check that you will have access to a telephone.
- Review jobsite hazards, safety and emergency procedures, and individual responsibilities with all personnel before work begins. Safety videos are available from your Ditch Witch® dealer or at [www.ditchwitch.com/safe](http://www.ditchwitch.com/safe). Safety Data Sheets (SDS) are available at [www.ditchwitch.com/support](http://www.ditchwitch.com/support).
- Use equipment carefully. Stop operation and investigate anything that does not look or feel right.



## Start

**EMERGENCY SHUTDOWN:** Release all controls and stop engine.



**⚠ WARNING**

Misuse of machine can cause death or serious injury. Read and understand operator's manual and all other safety instructions before use. Know how to use all controls.

To help avoid injury:

- Allow hydraulic fluid time to warm before operating in cold weather. Cold hydraulic fluid can lengthen ground drive stopping time.
- For starting in extreme temperatures, contact your Ditch Witch® dealer.

**NOTICE:** If engine turns but does not start within 5 seconds, allow starter to cool. Wait at least one minute and try again.

1. Ensure all controls are in neutral.
  2. If necessary, close choke valve.
  3. Insert key and activate accessories using ignition switch.
  4. If starting machine in normal conditions,
    1. Start engine and run at low throttle under light load for at least three minutes before applying heavier load.
    2. Gradually open choke valve after engine warms.
- If starting machine in cold weather:
1. Start engine.
  2. Warm engine and hydraulic fluid by gradually increasing engine speed for up to 30 minutes.
  3. After warmup, carefully operate all hydraulic controls at low throttle until controls operate as described in controls chapter.
  4. Gradually open choke valve after engine warms.

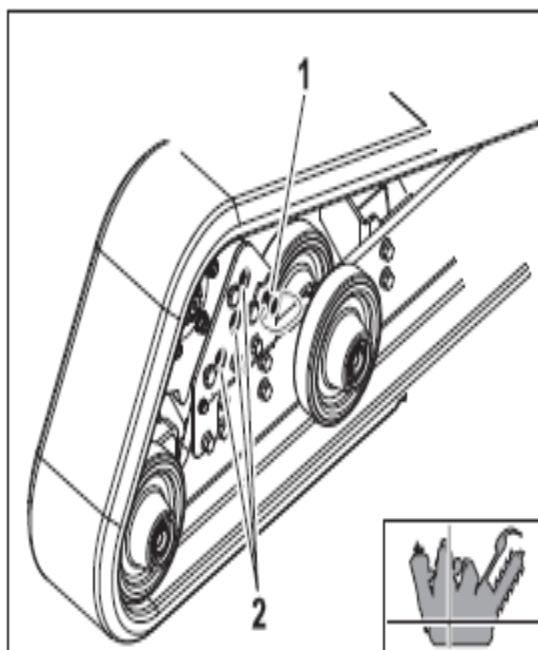


## Operate

**NOTICE:**

- Drive carefully in congested areas. Know machine's clearance and turning radius.
- Survey field of vision when operating machine.

1. Remove parking pin from parking position (2) and insert it in drive position (1).
2. Raise digging boom.
3. Set throttle to 3/4 open.
4. Move machine in direction of preferred travel.



147mm/5.81 in

## Slope Guidelines

**⚠ WARNING**

Tipover. Crushing can cause death or serious injury. Follow procedure in operator's manual. Drive cautiously.

To help avoid injury:

- Operate at slow speed when on rough terrain.
- Avoid driving across slopes.
- Never jerk control levers. Use a steady, even motion.
- Always operate from the uphill side of the machine.
- Always drive with attachment low to the ground.
- If tipover occurs, shut engine off if possible.

Operating safely on a slope depends upon many factors including:

- distribution of machine weight (can change due to configuration)
- even or rough ground conditions
- potential for ground giving way causing unplanned tilt forward, backward or sideways
- nearness of ditches, ruts, stumps or other obstructions and sudden changes in slope
- speed
- turning
- operator skill

These varying factors make it impractical to specify a maximum safe operating angle in this manual. It is therefore important for the operator to be aware of these conditions and adjust operation accordingly. Maximum engine angle is an absolute limits which must never be exceeded. This maximum is stated below since it is a design limit. These design limits usually exceed the operating limits and must never be used alone to establish safe operating angle for variable conditions.

Maximum engine lubrication angle: 20°

## Load

**⚠ WARNING**

Horizontal movement. Crushing can cause death or serious injury. Read and understand operator's manual and all safety instructions before use.

**⚠ CAUTION**

Tipover. Crushing can cause injury. When loading/unloading, run at low throttle. Keep boom low.

1. If equipped, put backfill blade in stowed position. See "Backfill Blade" on page 73.
2. Remove parking pin from parking position.
3. Start engine.
4. Set to low throttle.
5. Raise boom clear of trailer, but keep it low.
6. Move machine to rear of trailer and align with ramps.

**IMPORTANT:** Boom should be facing ramps.

7. Drive forward slowly to move machine onto trailer until tiedown position is reached.

**NOTICE:** If loading onto tilt-bed trailer, be prepared for trailer to tilt. Load trencher as far to the front of trailer as possible.

8. Lower boom to trailer bed, if space allows.
9. Ensure all controls are in neutral position.
10. Shut off machine.
11. Insert parking pin in parking position.
12. Tie down machine.



## Unload



**CAUTION** Tipover. Crushing can cause injury. When loading/unloading, run at low throttle. Keep boom low.

1. Prepare trailer and ramps for unloading.
2. Remove tiedowns.
3. If equipped, open fuel shutoff valve.
4. Remove parking pin from parking position.
5. Start engine.
6. Set to low throttle.
7. Raise boom clear of trailer, but keep it low.
8. Slowly back machine down trailer or ramps.

**NOTICE:** If unloading from tilt-bed trailer, be prepared for trailer to tilt.

## Retrieve

Under normal conditions, machine should not be towed. If machine becomes disabled and retrieval is necessary:

- Tow for no more than 200yd (180m) at less than 1mph (1.6km/hr).
- Use towing chains appropriately rated for maximum towing force.
- Attach tow line to all available tiedown points facing towing vehicle.
- Steering will be difficult.

## Operate

**WARNING**

Thrown objects. Impact can cause death or serious injury. Stay away.

To help avoid injury:

- Keep everyone at least 6' (2m) from machine, attachments, and their range of movement.
- Know soil conditions and adjust digging speed accordingly.

1. Set throttle to half open.
2. Lower digging boom to just above ground.
3. Lift trench cleaner, if equipped.
4. Move digging chain control to dig position. DIGGING CHAIN WILL MOVE.

**DANGER**

Moving digging teeth. Contact will cause death or serious injury. Stay at least 6' (2m) away.

To help avoid injury:

- Allow 3' (914mm) between digging teeth and obstacle. Machine may jerk when digging starts.
- Keep everyone at least 6' (2m) from machine, attachments, and their range of movement.
- Stand back from console and hold controls loosely. Digging chain can catch on root or rock, forcing handlebar down suddenly.
- Trench cave-in or material caught in digging chain can result in contact with digging teeth.

5. If using trench cleaner, lower after moving forward about 1' (30cm).

**NOTICE:**

- Never start trench with trench cleaner in working position.
- Never back up with trench cleaner in working position.

6. Slowly lower digging boom to desired trench depth.

### Finish Job

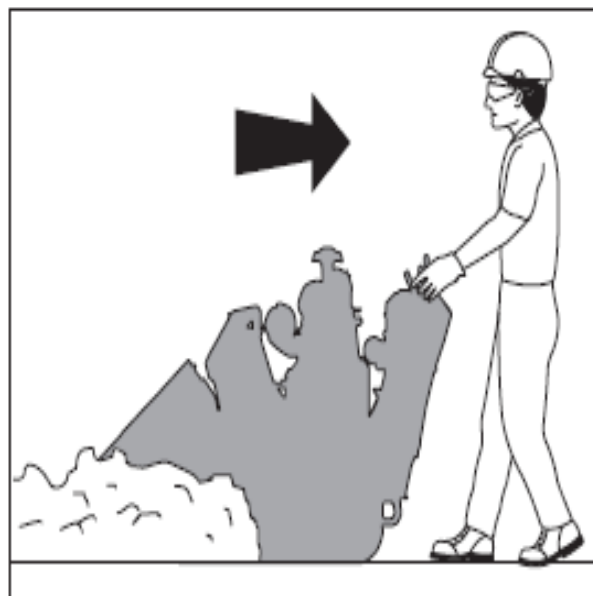
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7. Slowly move to desired speed.

**IMPORTANT:**

- Trenching movement is toward you.
- Always start trenching at low speed. Increase ground drive speed only as soil conditions permit.

8. Operate engine at full throttle when working.



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## Finish Job

1. When trench is complete, stop movement.
2. Set throttle to half open.
3. Raise boom.
4. Stop digging chain.
5. Raise trench cleaner, if equipped.
6. Install backfill blade and backfill, if desired.
7. Drive a short distance away from work site.
8. Shut off machine.