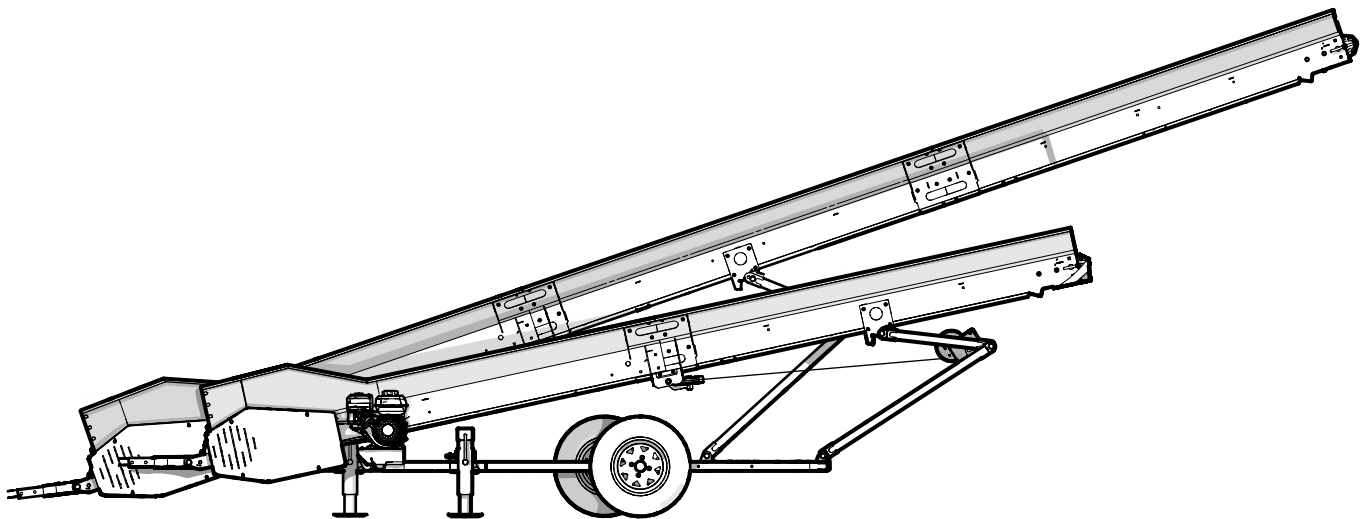


OPERATOR'S MANUAL

CT16B – Up to S/N CT16B7

CT24B – Up to S/N CT24B11

CT16B / CT24B TRAILER FIREWOOD CONVEYOR



1. Foreword

1.1 Introduction

Congratulations on choosing a **Wallenstein CT-B Series Trailer Firewood Conveyor!**

This manual covers Wallenstein trailer conveyor models CT16B and CT24B. These high-quality machines are designed and manufactured to meet the needs of a proficient timber or woodlot industry.

Wallenstein CT16B and CT24B conveyors are built to compliment the Wallenstein wood processors and splitters. These 16 ft (4.9 m) and 24 ft (7.3 m) belt-drive conveyors feature tension-adjustable, heavy-duty 662 chain powered by a HONDA™ GX120 engine.

Wallenstein conveyors provide fast and efficient means of moving and stockpiling large quantities of split wood. Wheels can be rotated 90 degrees to reposition as the split stack pile builds up.

Safe, efficient and trouble free operation of this Wallenstein product requires that anyone using or maintaining the machine reads and understands the Safety, Operation, Maintenance information contained within the Operator's Manual.

Units of measurement in Wallenstein Equipment technical manuals are written as:
US Customary (SI metric).

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Wallenstein dealer or the Distributor if you need assistance, information or additional copies of the manuals.

Wallenstein Equipment Inc. • © 2019

WARNING!

Do not attempt to start or operate the machine without thoroughly reviewing this manual for safe and proper operation.

Always keep this manual with the machine.

W034



www.wallensteinequipment.com

Table of Contents

1. Foreword	2	6. Transporting	30
1.1 Introduction	2	7. Storage	31
1.2 Delivery Inspection Report.....	4	7.1 Placing Conveyor in Storage	31
1.3 Serial Number Location.....	5	7.2 Removing from Storage	31
1.4 Warranty.....	6	8. Service and Maintenance	32
2. Safety	8	8.1 Fluids and Lubricants	32
2.1 Safety Alert Symbol.....	8	8.2 Maintenance Schedule	32
2.3 Why is SAFETY important?	9	8.3 Grease Points	33
2.4 Safety Rules.....	9	8.4 Chain Tension, Adjust.....	33
2.5 Safety Training	10	8.5 Drive Belt, Adjust / Replace	34
2.6 Operating Safety	10	8.6 Hand Winch.....	34
2.7 Equipment Safety Guidelines.....	11	9. Troubleshooting	35
3. Safety Signs	14	10. Specifications	36
3.1 Safety Sign Locations	14	10.1 Conveyor Specifications	36
3.2 Safety Sign Explanations	15	10.2 Bolt Torque.....	37
3.3 Replacing Damaged Safety Signs	16	10.3 Wheel Lug Torque	38
3.4 Sign-Off Form.....	17	11. Alphabetical Index	39
4. Familiarization	18		
4.1 To the New Operator.....	18		
4.2 Training	18		
4.3 Job Site Familiarization	18		
4.4 Equipment Condition.....	18		
4.5 Operator Orientation	18		
4.7 Engine Controls	20		
4.8 E-Stop Button.....	21		
4.9 Conveyor Angle Indicator.....	22		
5. Operating Instructions	23		
5.1 Pre-Operation Checklist.....	23		
5.2 Hitch Lock Pin	23		
5.3 Height Adjustment.....	24		
5.4 Pre-start Checks	25		
5.5 Starting the Engine	26		
5.6 Stopping Procedure	27		
5.7 Stopping in an Emergency.....	28		
5.8 Rotate Wheels.....	28		
5.9 Break-in Period	28		
5.10 Conveyor Axle Position.....	29		

1.2 Delivery Inspection Report

WALLENSTEIN Product Model name

To activate warranty, register your product online at
<http://www.wallensteinequipment.com>

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer

Contact Name

Dealer

(_____) _____
Phone Number

Serial Number

_____/_____/_____
Delivery Date (dd/mm/yy)

I have thoroughly instructed the buyer on the equipment care, adjustments, safe operation and applicable warranty policy and reviewed the manuals.

Dealer Representative

_____/_____/_____
Date (dd/mm/yy)

The product manuals have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Owner

_____/_____/_____
Date (dd/mm/yy)

✓	Pre-delivery Inspection
Inspect for damage from shipping. Immediately contact the shipping company if damage is found.	
Conveyor	
	Engine Starts and Runs
	Fasteners Tight
	Conveyor Drive Lubricated
	Pivot Tongue Moves Freely
	Review Operating and Safety Instructions
Safety Checks	
	All Safety Decals Installed
	Guards / Shields Installed and Secured
	Check Crank Jack Function
	Check Tire Pressure
	Check Wheel Nut Torque
	Review Operating and Safety Instructions

1.3 Serial Number Location

Always provide the model and serial number of your Wallenstein product when ordering parts or requesting service or other information. This information is found on the serial number plate shown in the illustration below.

Record product information in the spaces provided below for future reference.

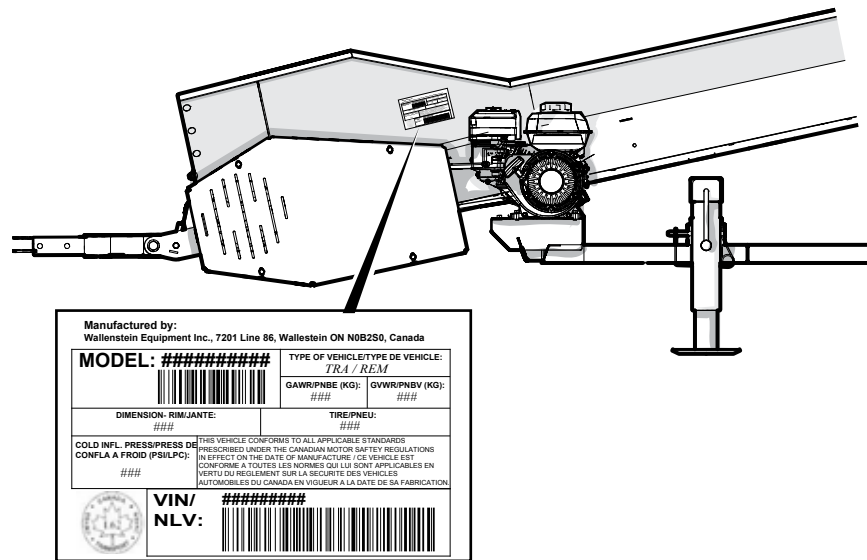


Fig. 1 – Serial Number Plate Location

Record Product Information Here	
Model:	
Serial Number:	

1.4 Warranty



LIMITED WARRANTY

Wallenstein products are warranted to be free of defects in materials and workmanship under normal use and service, for a period of

Five Years for Consumer Use

Two Years for Commercial/Rental Use

from the date of purchase, when operated and maintained in accordance with the operating and maintenance instructions supplied with the unit. Warranty is limited to the repair of the product and/or replacement of parts.

This warranty is extended only to the original purchaser and is not transferable.

Repairs must be done by an authorized dealer. Products will be returned to the dealer at the customer's expense. Include the original purchase receipt with any claim.

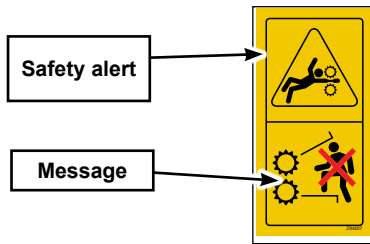
This warranty does not cover the following:

- 1) Normal maintenance or adjustments
- 2) Normal replacement of wearable and service parts
- 3) Consequential damage, indirect damage, or loss of profits
- 4) Damages resulting from:
 - Misuse, negligence, accident, theft or fire
 - Use of improper or insufficient fuel, fluids or lubricants
 - Use of parts or aftermarket accessories other than genuine Wallenstein parts
 - Modifications, alteration, tampering or improper repair performed by parties other than an authorized dealer
 - Any device or accessories installed by parties other than an authorized dealer
- 5) Engines. Engines are covered by the manufacturer of the engine for the warranty period they specify. For the details of your engine warranty, see your engine owner's manual. Information about engine warranty and service is also available in the FAQ section at www.wallensteinequipment.com

1.5 Decal Information

When getting familiar with the Wallenstein product, notice that there are numerous decals located on the machine. There are different types of decals for safety, information, and product identification. The following section explains what they are for and how to read them.

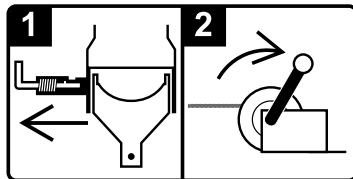
Safety Decals are pictorial with a yellow background and generally two panel. The top panel shows the safety alert (the potential hazard) and the bottom panel shows the message (how to avoid the hazard).



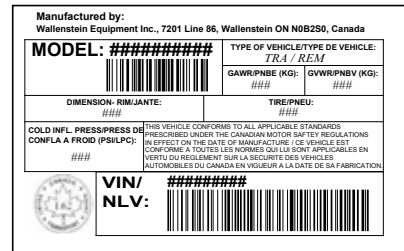
Safety Notice Decals are pictorial with a blue background and generally rectangular with single or multiple symbols. This decal informs what Personal Protective Equipment is required for safe operation.



Informative Decals are generally pictorial with a white background and can vary in the number of panels. This type of decal explains how a control works.



Product Decals indicate machine model and serial number, and other important information.



Maintenance Decals have a green background and can vary to the number of panels. This decal shows a type maintenance required and frequency interval.



See the section on safety signs for safety decal definitions. For a complete illustration of decals and decal locations, download the parts manual for your model product at www.wallensteinequipment.com.

2. Safety

2.1 Safety Alert Symbol

This Safety Alert Symbol means:

ATTENTION! BE ALERT!
YOUR SAFETY IS INVOLVED!

The **Safety Alert Symbol** identifies important safety messages on the Wallenstein conveyor and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.



2.2 Signal Words

The signal words **DANGER**, **WARNING** and **CAUTION** determine the seriousness level of the warning messages in this manual. The appropriate signal word for each message in this manual has been selected using the following guidelines:

DANGER –

Indicates an imminently hazardous situation that, if not avoided, **will** result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.


WARNING –

Indicates a potentially hazardous situation that, if not avoided, **could** result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION –

Indicates a potentially hazardous situation that, if not avoided, **may** result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT – To avoid confusing equipment protection with personal safety messages, a signal word **IMPORTANT** indicates a situation that if not avoided, could result in damage to the machine.

 **NOTE:** *(plus text) – indicates an additional explanation for an element of information.*

2.3 Why is SAFETY important?

Three Big Reasons:

- Accidents can disable and kill
- Accidents can cause financial hardship
- Accidents can be avoided

YOU are responsible for the SAFE operation and maintenance of your Wallenstein trailer conveyor. **YOU** must ensure that you and anyone else who is going to use, maintain or work around the conveyor be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual provides good safety practices that should be followed while using this machine.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** using this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented.

Do not risk injury or death by ignoring good safety practices.

2.4 Safety Rules



- **DO** give operating instructions to operators or employees before allowing them to operate the machine.
- **DO** always wear appropriate Personal Protective Equipment (PPE). This equipment includes but is not limited to the following:
 - A hard hat
 - Heavy gloves
 - Hearing protection
 - Protective shoes with slip resistant soles
 - Protective glasses, goggles or face shield



- **DO** read and understand ALL Safety and Operating instructions in the manual and follow them. Most accidents can be avoided. The most important safety device on this equipment is a SAFE operator.
- **DO** read and understand all safety signs located on the machine before using, maintaining, adjusting or cleaning.
- **DO** inspect and secure all guards before starting.
- **DO** place the machine in a Safe Condition before performing any service, maintenance work, storage preparation, or hooking up.

Placing the machine in a Safe Condition involves performing the following:

SAFE CONDITION
<ol style="list-style-type: none"> 1. Empty the conveyor. 2. Shut off the engine. Disconnect spark plug leads. Disconnect negative (-) battery cable from battery. 3. Lower the conveyor fully until it is resting on the stops.

- **DO** have a first-aid kit available for use should the need arise. 
- **DO** have a fire extinguisher available for use should the need arise and know how to use it. 
- **DO** check the machine is clear of debris prior to starting the engine.
- **DO** review safety related items annually with all personnel who will be operating or performing maintenance.
- **DO** think SAFETY! Work SAFELY!
- **DO NOT** touch hot engine parts, muffler cover, hoses, engine body, or engine oil during operation and after the engine has been shut off. Contact may cause burns.
- **DO NOT** expect a person who does not understand operation and safety instructions to use the machine. Untrained operators are not qualified and can create risks of serious injury or death. It is the machine owner's responsibility to make sure every operator is fully trained.

- **DO NOT** modify the equipment in any way. Unauthorized modification may impair function or safety, could affect the life of the equipment, and can void warranty.
- **DO NOT** allow riders during transport.
- **DO NOT** risk injury or death by ignoring good safety practices.

- Wear hearing protection on a full-time basis. Prolonged exposure to loud noise may cause permanent hearing loss!



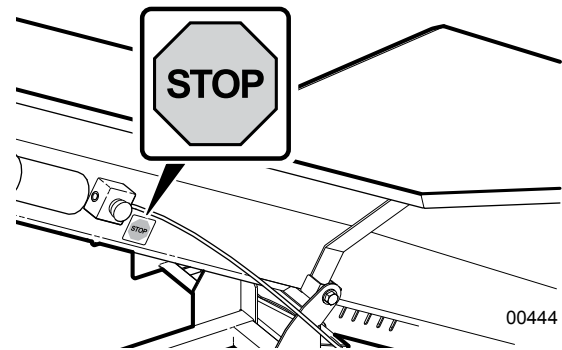
- Noise over 85 dB on a long-term basis can cause severe hearing loss.
- Noise over 90 dB adjacent to the Operator over a long-term basis may cause permanent, total hearing loss.

2.5 Safety Training

- Safety is a primary concern in the design and manufacture of Wallenstein products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act.
- The best safety feature is an informed, careful operator—we ask you to be that kind of an operator. It is the operator's responsibility to read, understand and follow ALL safety and operation instructions in the manual. Accidents can be avoided.
- **Do not allow anyone to use this machine until they have read this manual. Operator's must have a thorough understanding of the safety precautions and of how the machine works.** Review the safety instructions with all users annually.



- Make note of the location of the E-Stop Button on the right-hand side of the conveyor.
 - **PUSH TO APPLY.**
 - Perform a daily check to make sure the conveyor does not operate with it pushed in.



2.6 Operating Safety

It is important that you read and pay attention to the safety signs on the machine. Clean or replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others.

All machines with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes potential hazards and follows reasonable safety practices.

- Train all operators to be familiar with equipment's operation. The operator should be a responsible, properly trained and physically able person familiar with machinery. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.

- Keep bystanders at a safe distance at least 20 ft (6 m) away from the conveyor.
- Determine a proper conveyor location ahead of time:
 - Ground should be firm and level.
 - Area must be clear of stones, branches or hidden obstacles that might cause a tripping, hooking or snagging hazard.
 - There must be no overhead hazards such as branches, cables, electrical wires and so on.
 - Stack split wood on level ground. Make sure split wood pile does not interfere with conveyor operation, wheel rotation.

- Operate in daylight or good artificial light only.
- Make sure machine is properly stationed, adjusted and in good operating condition.
- Store fuel well away from the material pile.
- Perform the **Pre-operation Checklist** procedure before starting work (see page 23).
- Position machines so prevailing winds blow engine exhaust fumes away from operator's station.
- Do not operate on hillsides or when working area is cluttered, wet, muddy or icy to prevent slipping and tripping. Keep working area clean and free of debris.
- Make sure all guards, deflectors and shields are installed before starting and operating the machine.
- Operate the machine only when physically fit and not under the influence of alcohol, drugs or medicines that can cause drowsiness.
- Avoid loose fitting clothing, loose or uncovered long hair, jewelry and loose personal articles. These can get caught in moving parts.
- Do not allow anyone within the work or danger zone during operation.
- Never walk under the conveyor. Split wood falling from the conveyor can cause serious injuries. Failure of the hoisting winch could cause the conveyor to lower unexpectedly.
- Do not climb on the conveyor. If maintenance or other work is required, avoid the risk of falling off by lowering it.

- Never stand along side the winch cable or guide the cable with your hands.
- Never operate the conveyor winch with slippery, wet, or oily hands. Always maintain a firm grip on the winch handle. Do not attempt to stop a winch by grabbing the handle while in motion.
- Always maintain a minimum of three complete wraps of cable on the drum.
- Listen for a loud clicking sound from the ratchet when lifting the load. If a loud clicking sound is not heard, do not use. Replace winch immediately!
- Operate the winch by hand only. If the winch cannot be cranked using one hand, it is potentially overloaded.
- Periodically check winch mounting hardware for proper torque and tighten if necessary. Always replace bent, broken, or worn parts before using winch.

2.7 Equipment Safety Guidelines

- Replace any safety sign or instruction sign that is not readable or is missing. Location of such safety signs is indicated in this manual.
- **Never allow young children to work with this equipment. Do not allow persons to use this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.** Review the safety instructions with all users annually.
- Never exceed the limitations of the machine. If its ability to do the job, or to do it safely is in question—**STOP!**
- Always inspect the winch cable and its attachment before each use to make sure they are not damaged. Never use worn, kinked, or frayed cable. If the cable or attachment break, the cable can whip violently, causing serious bodily injury or death.

2.7.1 Maintenance Safety

Always place the machine in a safe service position before performing any service or maintenance work, storage preparation, or hooking / unhooking. See *Safe Condition on page 9*.

Follow good shop practices:

- Have at least two workers present when performing maintenance on this equipment. Never work alone in case an emergency should arise.
- Keep service area clean and dry.



- Never operate the engine in a closed building. Make sure there is plenty of ventilation. Exhaust fumes can cause asphyxiation.
- Never work under unsupported equipment.
- Use only genuine OEM replacement parts. The manufacturer is not responsible for injuries or damage caused by the use of non-approved parts or accessories.
- Make sure all safety shields and devices are re-installed after a maintenance or service procedure is finished.
- Do not use gasoline or diesel fuel when cleaning any parts. Use a regular cleanser.

- Use proper tools that are in good condition. Make sure the procedure is understood before performing any service work.

2.7.2 Storage Safety

1. Store the unit in an area away from human activity.
2. Do not allow children to play on or around the stored machine.
3. Consult the engine owner's manual for storage information on the engine.

2.7.3 Transport Safety

- Comply with provincial / state laws governing safety and transporting of machinery on public roads.
- Do not exceed a safe travel speed. Slow down for rough terrain and cornering.
- Do not transport or move the conveyor with the engine running.
- Make sure the conveyor is hitched positively to the towing vehicle and a retainer is used through the hitch mechanism.
- Inspect wheel rims for dents or damage. Check wheel lug torque. Refer to table at the back of this manual.
- Inspect tires for cuts or damage. Check tire pressure and adjust if required. Refer to specification on the tire sidewall.
- Make sure the crank jack is raised and secured with the lynch pin.
- Check fuel and hydraulic tank caps are on tight to prevent spills while transporting.
- Clean off all debris from the machine.
- Never allow riders on the machine.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, and so on.
- Watch for traffic when near or crossing roadways.
- Perform a final circle check before transporting.

2.7.4 Refuelling Safety

- Fuel is highly flammable. Handle with care.
- Stop the engine and allow it to cool for five minutes before refuelling. Clean up spilled fuel before restarting engine.

- Do not refuel the machine while smoking or when near open flame or sparks.



- Fill fuel tank outdoors.
- Prevent fires by clearing accumulated wood debris.
- Do not overfill the fuel tank. Fill until the fuel level is visible 1/2" (12 mm) below the filler neck to leave room for expansion.
- If fuel is spilled, wipe it away carefully and wait until it has dried before starting the engine.
- After refueling, make sure that the fuel cap is on securely to prevent spillage.

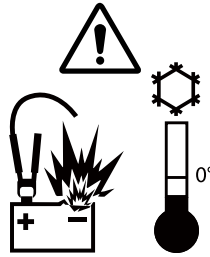
2.7.5 Tire Safety

- Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.
- Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
- Have a qualified tire dealer or repair service perform required tire maintenance.
- When replacing worn tires, make sure they meet the original tire specifications.

2.7.6 Battery Safety

- Wear gloves and safety glasses or face shield when working on or near batteries.
- Use a battery carrier to lift the battery or place hands at opposite corners to avoid spilling acid through the vents.
- Avoid contact with battery electrolyte:
 - **External Contact:** Flush immediately with water.
 - **Eye Contact:** Flush with water for 15 minutes. Get prompt medical attention. Clean up any spilled electrolyte immediately.
- Avoid contact with battery posts, terminals and related accessories. They contain lead and lead compounds, chemicals known to cause harm. Wash hands immediately after handling.
- Keep all sparks and flames away from batteries. Gases given off by electrolyte is explosive.
- To avoid injury from spark or short circuit, disconnect battery ground cable before servicing any part of the electrical system.

- Frozen batteries can explode and result in death or serious injury. Do not jump start or charge a frozen battery. Let battery thaw before charging.



2.7.7 Gas Engine Safety

- **DO NOT** run engine in an enclosed area. Exhaust gases contain carbon monoxide, which is an odorless and deadly gas.
- **DO NOT** place hands or feet near moving or rotating parts.
- **DO NOT** choke carburetor to stop engine. Whenever possible, gradually reduce engine speed before stopping.
- **DO NOT** tamper with governor springs, governor links or other parts which may increase the governed speed. Engine speed is selected by the original equipment manufacturer.
- **DO NOT** check for spark with spark plug or spark plug wire removed.
- **DO NOT** crank engine with spark plug removed. If engine is flooded, crank until engine starts.
- **DO NOT** strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation. Use proper tools to service engine.
- **DO NOT** operate engine without a muffler or heat shield. Inspect periodically and replace if damaged.
- **DO NOT** operate engine with an accumulation of grass, leaves, dirt or other combustible materials in the muffler area.
- **DO NOT** use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on the muffler. The arrester must be maintained in effective working order by the operator. In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal land.
- **DO NOT** touch hot muffler, cylinder or fins. Contact may cause burns.
- **DO NOT** run engine with air cleaner or air cleaner cover removed. Engine damage can result.

Be sure to:

- Remove the wire from the spark plug when servicing the engine or equipment to prevent accidental starting.
- Keep cylinder fins and governor parts free of grass and other debris which can affect engine speed.
- Examine muffler periodically to be sure it is functioning effectively. A worn or leaking muffler should be repaired or replaced as necessary.
- Use fresh gasoline. Old fuel can gum carburetor and cause poor performance.
- Check fuel lines and fittings frequently for cracks or leaks. Replace if necessary.

3. Safety Signs

3.1 Safety Sign Locations

The location of all safety signs is shown in the illustrations that follow. Each is explained on the following pages.

Practicing good safety means becoming familiar with safety signs and warnings, and being aware of the situations that require alertness.

Think SAFETY! Work SAFELY!

IMPORTANT! If safety signs have been damaged, removed, become illegible or parts replaced without safety signs, new signs must be applied.

New safety signs are available from your authorized dealer.

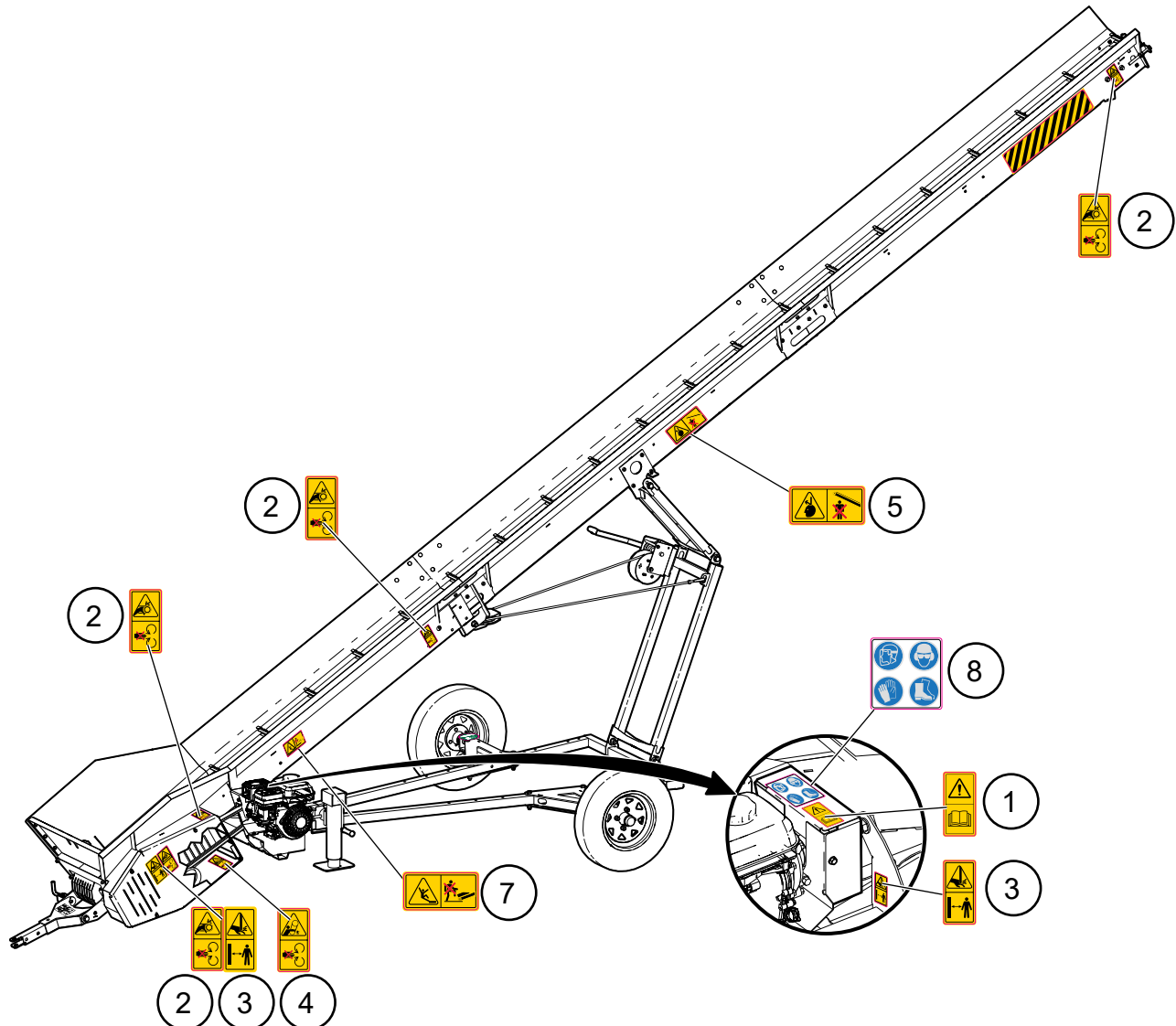


Fig. 2–Safety Decals

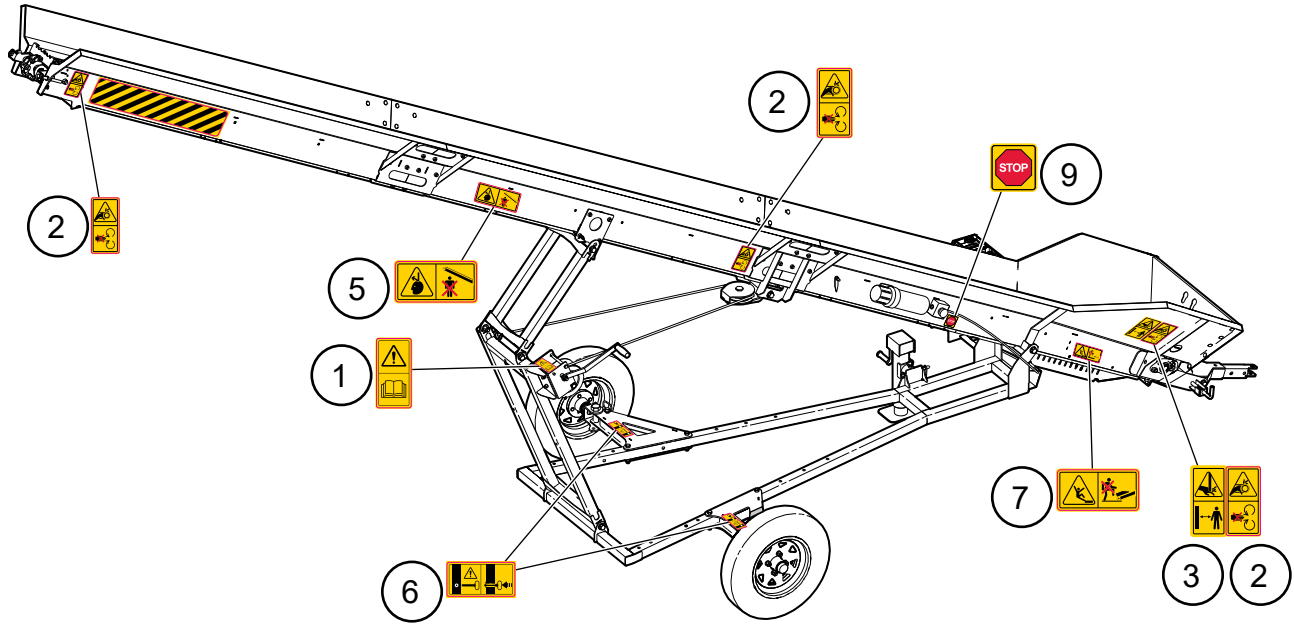
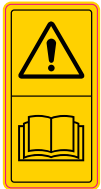


Fig. 3–Safety Decals

3.2 Safety Sign Explanations

1. Warning!



Refer to the operator's manual. Understand ALL operating instructions in the manual and understand ALL safety signs located on the machine.

The most important safety device on this equipment is an informed operator.

2. Warning!



Risk of hands being pinched or caught in drive chain resulting in serious injury.

Keeps hands clear of this area.

3. Warning!



Risk of hands being crushed in this area.

Keep hands clear of all moving parts.

4. Warning!



Risk of serious injury or death if hands or limbs are caught in rotating parts.

Do not operate machine without shields in place. If shield is removed, replace it before operating machine.

5. Warning!



Risk of being injured from falling objects.

Do not walk under the conveyor.

6. Warning!



Risk of machine moving unexpectedly when support pin is removed. Personal injury could result.

Keep pin installed and secured with pin keeper.

7. Warning!



Risk of being injured from falling off conveyor.

Do not climb on the conveyor.

8. Safety Notice



Always wear appropriate Personal Protective Equipment when using this machine. For example:

- A hard hat
- Heavy gloves
- Hearing protection
- Protective shoes with slip resistant soles
- Protective glasses, goggles or face shield

9. E-Stop Button



Stops the conveyor engine in an emergency.

PUSH TO APPLY.

Perform a daily check to make sure the conveyor does not operate with it pushed in.

3.3 Replacing Damaged Safety Signs

1. Keep safety signs clean and legible at all times.
2. Replace safety signs that are missing or have become illegible.
3. Parts that were replaced with a safety decal on them must also have the safety sign replaced.
4. Replacement safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.

3.3.1 How to Install Safety Signs

Ambient temperature must be above 50 °F (10 °C) to install decals.

1. Clean and dry the installation area.
2. Determine exact position before removing the backing paper.
3. Peel back the corner of the backing paper.
4. Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
5. Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
6. Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

3.4 Sign-Off Form

Wallenstein Equipment Inc. follows the general safety standards specified by the International Organization for Standardization (ISO).

Anyone who is going to use or service this conveyor must read and clearly understand ALL Safety, Usage and Maintenance information presented in this manual. Do not use or allow anyone else to use this machine until such information has been reviewed. Review this information annually before the season start-up.

Make these periodic reviews of safety and operation a standard practice for all equipment. An untrained operator is unqualified to use this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

Safety

Sign-off Form		
Date	Owner	Employee

4. Familiarization

IMPORTANT! Before starting work with the conveyor, become familiar with the location and function of all controls.

IMPORTANT! Make sure all operators understand how to put the machine in Safe Condition before working with or performing any maintenance on this machine.

Placing the machine in a Safe Condition involves performing the following:

SAFE CONDITION

1. Empty the conveyor.
2. Shut off the engine. Disconnect spark plug leads. Disconnect negative (-) battery cable from battery.
3. Lower the conveyor fully until it is resting on the stops.

4.1 To the New Operator

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business.

By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the work site. Untrained operators are not qualified to use the machine.

4.2 Training

Each operator must be trained in the proper set-up and operating procedures prior to being allowed to operate the machine.

4.3 Job Site Familiarization

It is the responsibility of the operator to be thoroughly familiar with the work site prior to starting. Prevent the chance or possibility of problems or accidents by not being in the situation to start with.

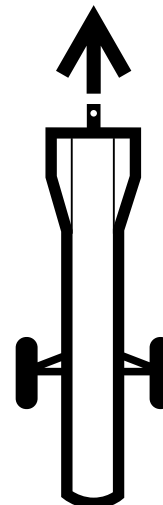
- Locate conveyor on solid, level ground.
- Position the machine so prevailing winds blow engine exhaust fumes away from operator's station.

4.4 Equipment Condition

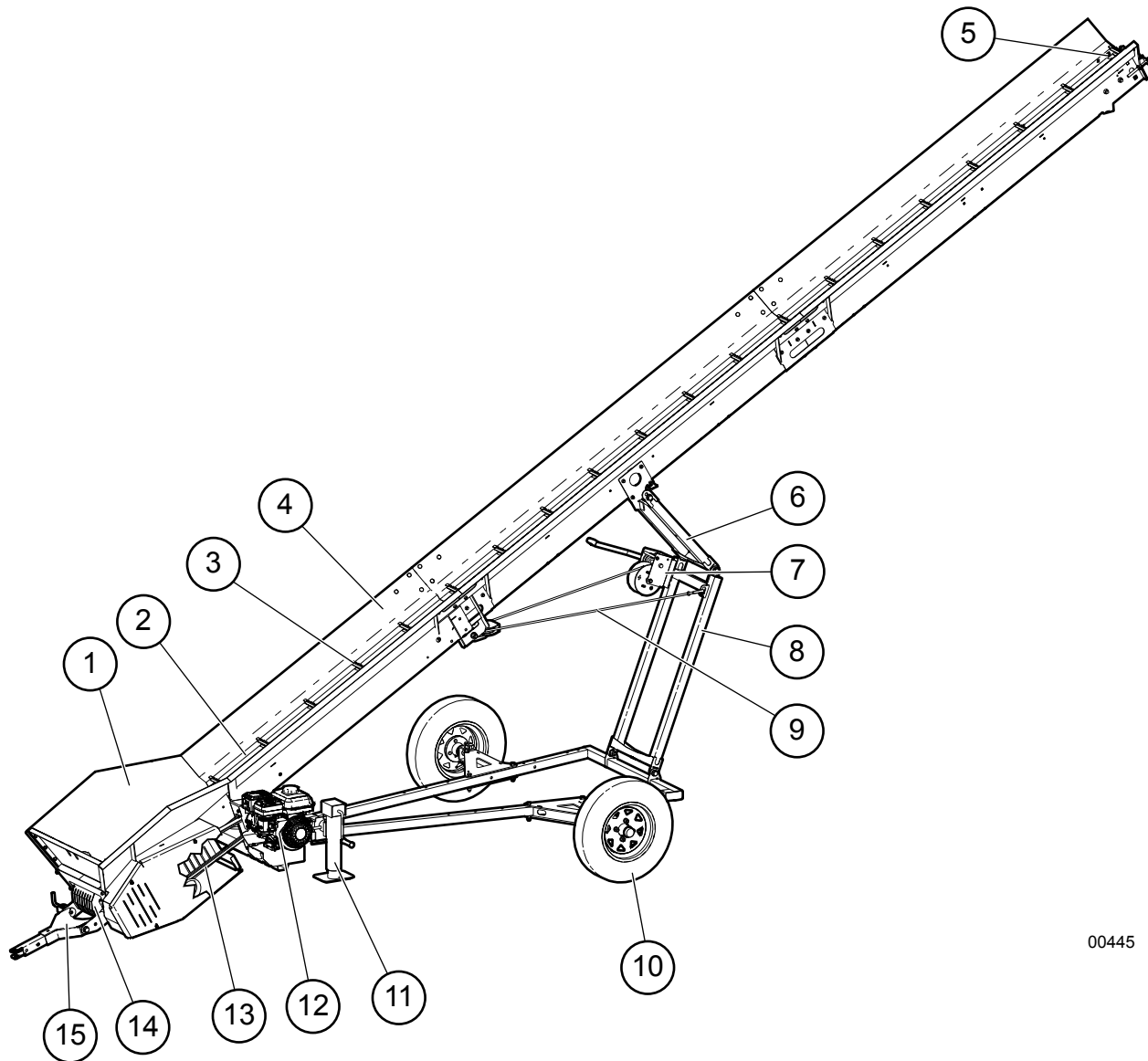
1. Check the general condition of the conveyor. Ensure that all nuts and bolts are secure and that a moveable parts are secured and in their proper place.
2. Always inspect the wire rope as it is pulled out of the winch. Do not use the machine if the rope is cut, frayed, worn or knotted. Any problem can result in early failure and create an unsafe operating condition. Replace damaged rope before resuming work.

4.5 Operator Orientation

IMPORTANT! The directions mentioned throughout this manual for left-hand, right-hand, backward and forward, are determined when facing the direction of forward travel.



4.6 Components



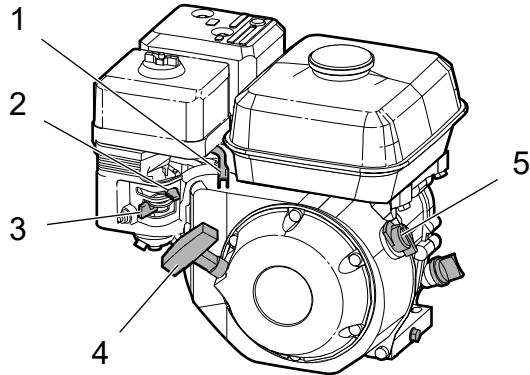
00445

Fig. 4–CT16B / CT24B Conveyor Components

- | | | |
|--------------------|-------------------------|---------------------------------|
| 1. Conveyor Hopper | 6. Folding Frame, Upper | 11. Crank Jack |
| 2. Conveyor Chain | 7. Hand Winch | 12. Honda GX120 Gasoline Engine |
| 3. Chain Cleats | 8. Folding Frame, Lower | 13. Drive Belt |
| 4. Conveyor Trough | 9. Winch Cable | 14. Drive Sprocket |
| 5. Idler Pulley | 10. Wheels | 15. Hitch |

4.7 Engine Controls

Refer to the engine manual that came with this product for further explanation on engine controls. The engine manual is found in the manual tube on the side of the conveyor.



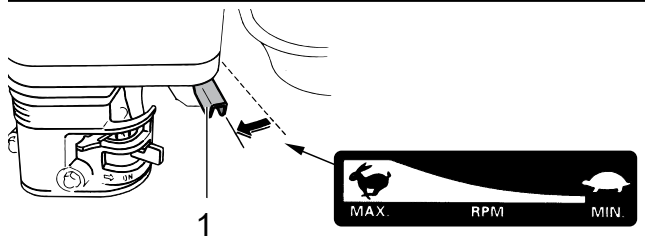
00189

Fig. 5--Engine Controls

1. Throttle Lever
2. Choke Lever
3. Fuel Valve Lever
4. Recoil Starter Rope
5. Ignition Switch

1. Throttle Lever

This lever controls the engine speed. Move the lever side to side to increase or decrease engine rpm. Always operate the engine with the throttle lever in the MAX position.



00191

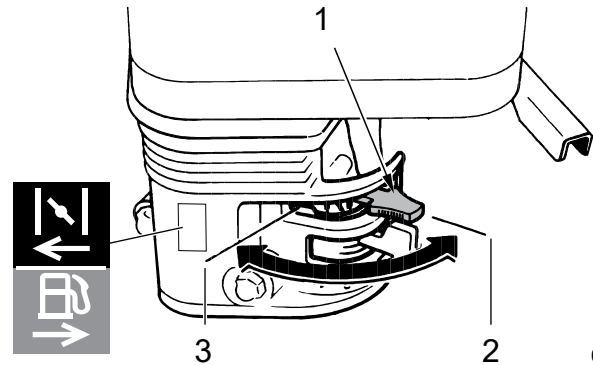
Fig. 6--Throttle Lever Positions

1. Throttle Lever

2. Choke Lever

The choke lever opens and closes the choke valve in the carburetor.

- Place the choke lever in the CLOSED position (3) when starting a cold engine.
- Move the choke lever to the OPEN position (2) after the engine starts. When restarting a warm engine, leave the lever in the OPEN position.



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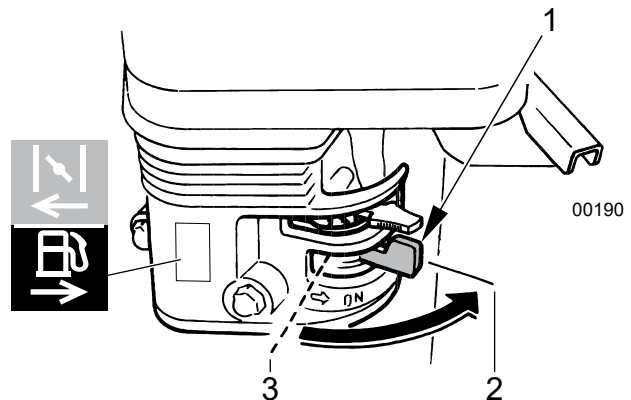
Fig. 7--Choke Lever

1. Choke Lever
2. Choke Open Position
3. Choke Closed Position

3. Fuel Shut-off Valve

The engine is equipped with a valve between the fuel tank and the carburetor.

- Slide the fuel valve lever toward the block (2) to turn fuel ON, and away (3) to turn OFF.
- Turn the fuel OFF when not in use or when transporting.



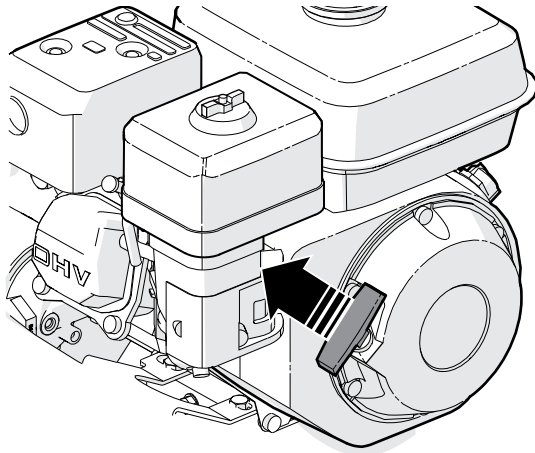
00190

Fig. 8--Fuel Valve Lever

1. Fuel Shut-off Valve Lever
2. ON Position
3. OFF Position

4. Recoil Starter Rope

Pull the starter grip out lightly until resistance is felt, then pull briskly in the direction of the arrow as shown below. Return the starter grip gently.



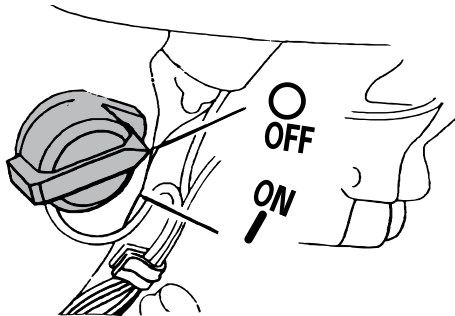
00447

Fig. 9—Recoil Starter

5. Ignition Switch

This rotary switch controls the ignition system.

- The engine operates in the ON position. Before starting the engine, turn the switch to ON.
- Turn it counter-clockwise to OFF to stop the engine.



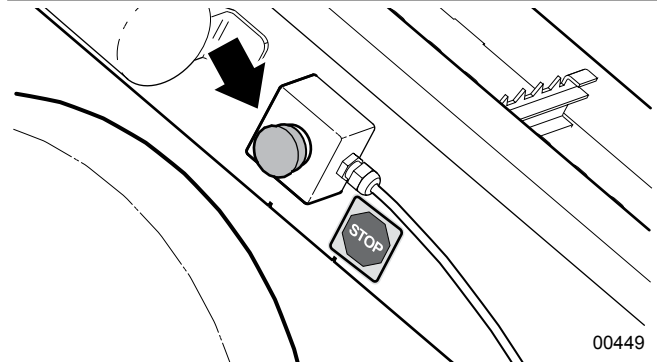
00187

Fig. 10—Ignition Switch

4.8 E-Stop Button

The emergency stop button is located on the right-hand side of the conveyor. The switch is yellow with a bright red actuator button.

- Press to shut down the conveyor engine in an emergency situation. Twist-turn to release.



00449

Fig. 11—Emergency Stop Button

- Test the switch periodically. The engine should not operate when the switch is pressed in.

4.9 Conveyor Angle Indicator

Some site conditions may require parking the conveyor on sloped ground.

Use the indicator on the right-hand side of the conveyor as a guide for a safe conveyor operating inclination.

When raising, always keep the indicator in white zone on the decal.

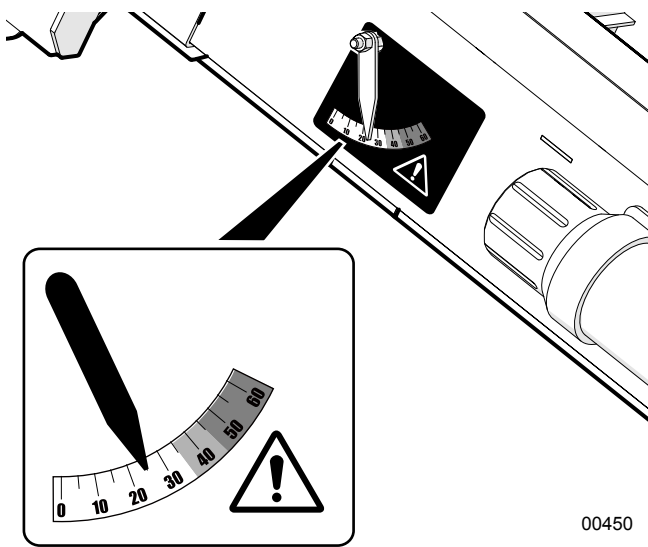


Fig. 12 – Conveyor Angle Indicator

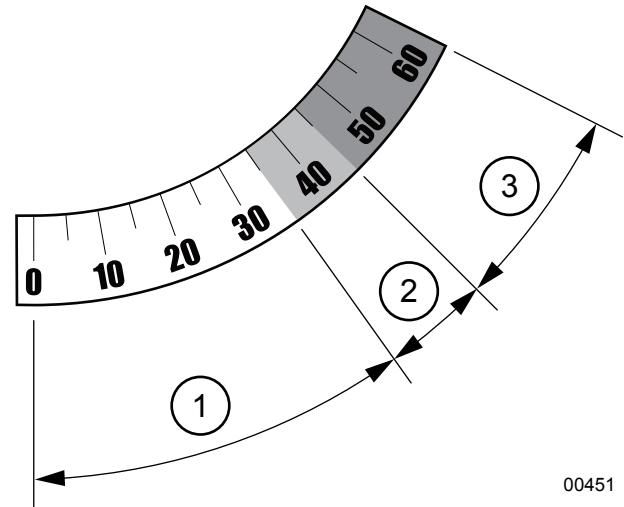


Fig. 13 – Indicator Zones

1. Safe Working Angle (white area)
2. Approaching Unsafe Angle (yellow area)
3. Unsafe Angle (red area)

- White indicates a normal, safe operating angle (0° – 35°).
- Yellow indicates the conveyor is approaching an unsafe angle (35° – 45°). Use caution.
- Red is an unsafe angle (45° – 55°). Lower the conveyor immediately.

5. Operating Instructions

5.1 Pre-Operation Checklist

Before operating the conveyor, review this checklist.

Pre-operation Checklist	✓
Make sure conveyor chain and drive belt are clear for start up. Check for entangled material.	
Park conveyor on stable, level ground. Block or chock wheels so it cannot roll in either direction.	
Check conveyor bearings are greased as per the schedule outlined in the Maintenance Section.	
Make sure that all covers, guards and shields are in place, secured and functioning as designed.	
Check all fasteners and tighten as required. Make sure equipment is working as designed and in good repair.	
If conveyor is off-loading into a truck or trailer, plan access for this equipment.	
Check that personal protection equipment including hard hat, safety glasses, safety shoes, safety vest, hearing protection and gloves are being used and in good repair.	
Check that all loose fitting clothing or jewelry is not worn and loose long hair is tied back.	

5.2 Hitch Lock Pin

- Unlock the hitch before raising the conveyor.
- Release the pin to lock the hitch before transporting the conveyor.

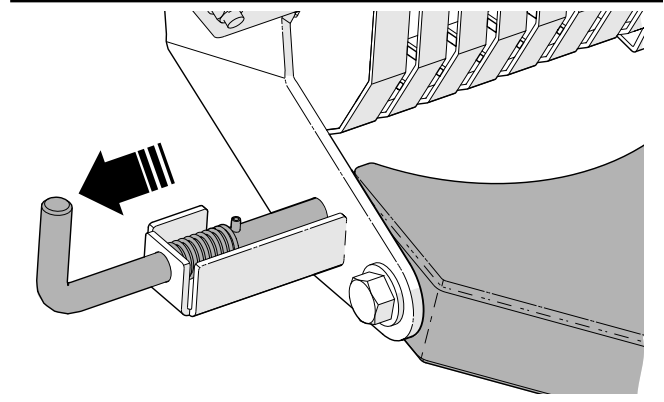
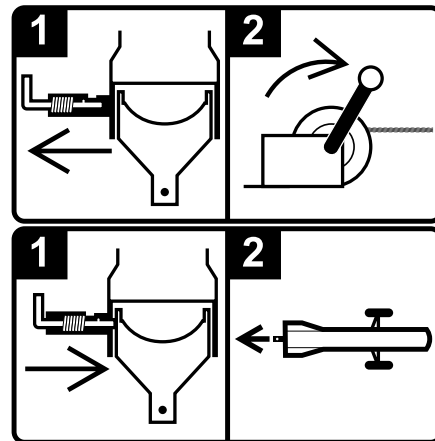


Fig. 14–Hitch Lock Pin



5.3 Height Adjustment

Change the conveyor angle using the hand winch. There are stops provided on the conveyor frame, however do not raise the conveyor higher than the safe zone on the conveyor angle indicator. See *page 22*.

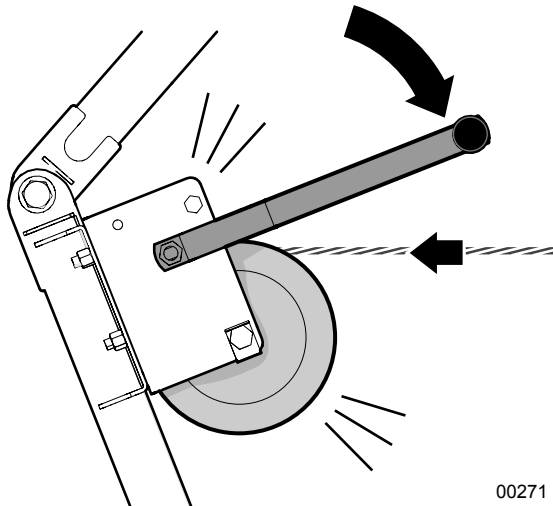
! WARNING!

Do not use the hand winch if the wire rope (cable) is worn, kinked or frayed. It could break collapsing the conveyor and whip violently causing serious injury or death. Replace wire rope if damage is apparent.

W046

To Raise the Conveyor Angle

- Turn winch handle clockwise. A loud clicking sound is heard while raising.



00271

Fig. 15–Raise Conveyor

IMPORTANT! Winch requires 45 lb (200 N) of handle force. Excessive force in turning winch handle may indicate overload.

To Lower the Conveyor Angle

- Turn the winch handle counter-clockwise. No clicking sound is heard because the brake system is activated.

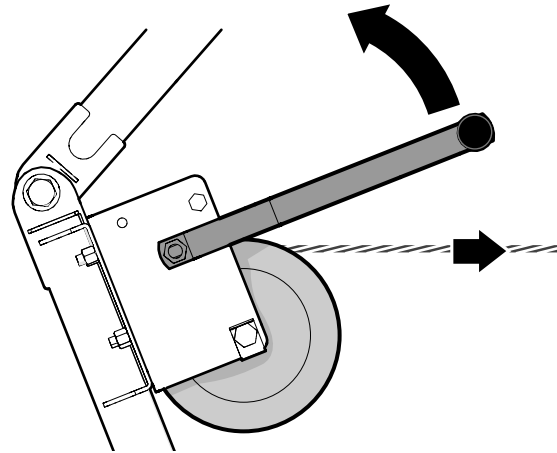


Fig. 16–Lowering Conveyor

5.4 Pre-start Checks

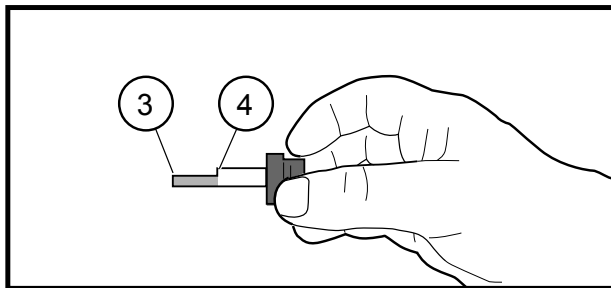
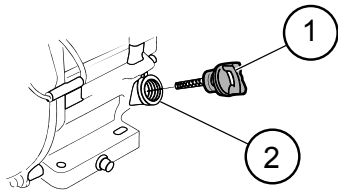
5.4.1 Engine Oil Level Check

Check engine oil level daily.

Check with the machine parked on level ground and the engine stopped.

IMPORTANT! Running the engine with a low oil level can cause engine damage that is not covered by warranty.

1. Remove the oil level dipstick and wipe it clean.
2. Fully insert the oil level dipstick, then remove it to check the oil level. **The proper level is when the oil is visible at the full (upper) mark on the dipstick.**
3. If the oil level is low, add oil until the level is at the full mark.
SAE 10W-30 is recommended for general use.
4. Reinstall the oil level dipstick.



00454

Fig. 17–Engine Oil Level check

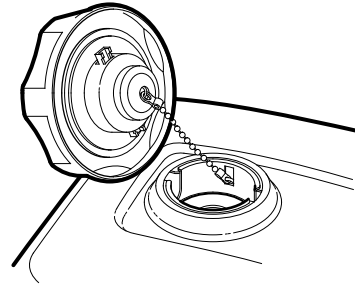
1. Oil Level Dipstick
2. Oil Filler
3. Low Level
4. Full Level

5.4.2 Fuel Level Check

Check the fuel level daily.

Starting with a full tank helps to eliminate or reduce operating interruptions for refueling.

The fuel tank is located on the engine. Avoid running the tank dry.



00198

Fig. 18–Fuel Filler Cap

5.4.3 Refueling

Fuel tank capacity: 0.53 US gal (2 L).

WARNING!



Fuel vapors can explode causing injury or death. Do not smoke while refueling. Keep sparks, flames, and hot components away.

W027

Refuel in a well-ventilated area with the engine stopped. If the engine has been running, allow it to cool first. Never refuel the engine inside a building where gasoline fumes can come in contact with flames or sparks.

For fuel specification, see *Fluids and Lubricants* on page 32. Refer to the engine manual for additional information on fuels.

1. Clean the area around fuel tank cap. Fill the tank to 1/2" (12 mm) below bottom of filler neck to provide space for any fuel expansion. Do not overfill.
2. Install fuel fill cap securely and wipe up any spilled fuel.


5.4.4 Engine Air Cleaner

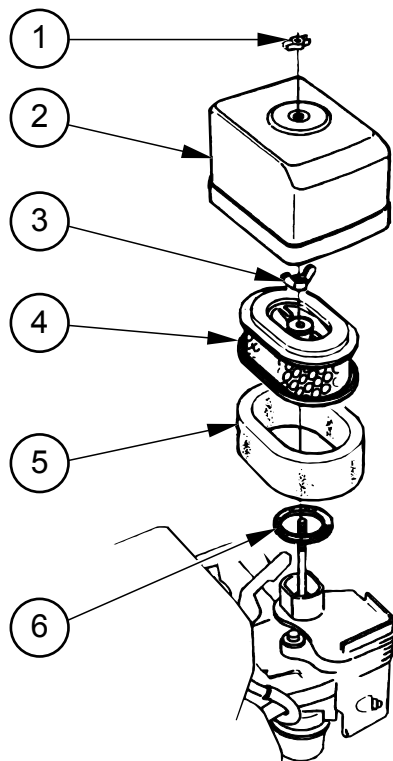
A dirty air filter can restrict air flow to the carburetor, reducing engine performance. If the engine is operated in very dusty areas, clean the air filter more often than specified.

IMPORTANT! Operating the engine without an air filter, or with a damaged air filter, can allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by Warranty.

Inspection

- Remove the air cleaner cover.
- Remove the foam filter element from the paper filter element.
- Clean or replace dirty filter elements. Always replace damaged filter elements.

 **NOTE:** Refer to the engine manual for further information on servicing the air cleaner.



00455

Fig. 19–Engine Air Cleaner

1. Wing Nut
2. Air Cleaner Cover
3. Wing Nut
4. Paper Filter Element
5. Foam Filter Element
6. Gasket

5.5 Starting the Engine

 **CAUTION!**

Before starting engine, review the operating and maintenance instructions in the engine manual.

W019

 **CAUTION!**



Hearing loss hazard. Prolonged exposure to loud noise may cause permanent hearing loss. Use suitable protection while operating the machine.

W016

Make sure the conveyor is set up to work and otherwise ready to run.

1. Slide the fuel valve lever toward the block (2) to turn fuel ON.

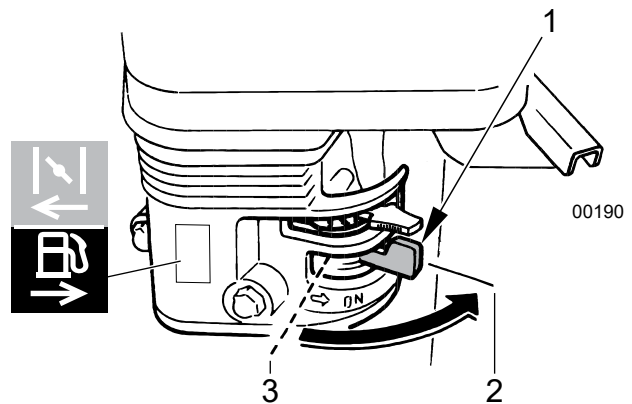


Fig. 20–Fuel Valve Lever

1. Fuel Shut-off Valve Lever
2. ON Position
3. OFF Position

2. If the engine is cold, close the choke (push choke lever to the left). To start a warm engine, leave the choke open (lever pushed to the right).

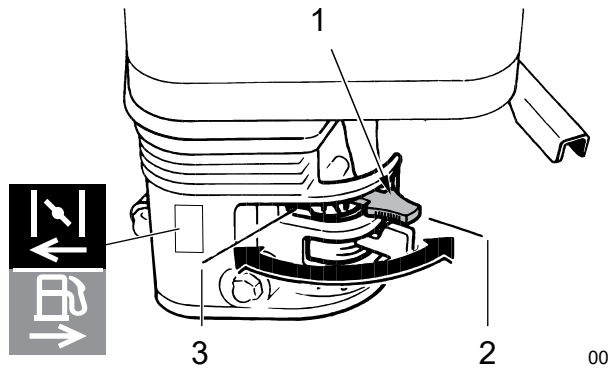


Fig. 21 – Choke Lever

1. Choke Lever
2. Choke OPEN
3. Choke CLOSED

3. Move the throttle lever away from the MIN. position, about 1/3 of the way toward the MAX position.

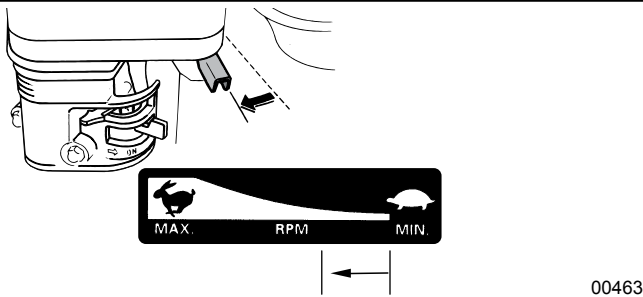


Fig. 22 – 1/3 Throttle

4. Turn the engine ignition switch ON.

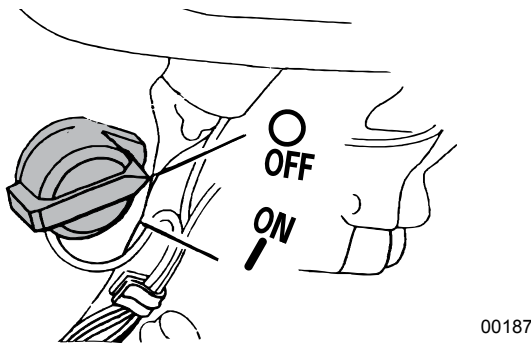


Fig. 23 – Ignition Switch

5. Pull the starter grip out lightly until resistance is felt, then pull briskly in the direction of the arrow as shown below. Return the starter grip gently.

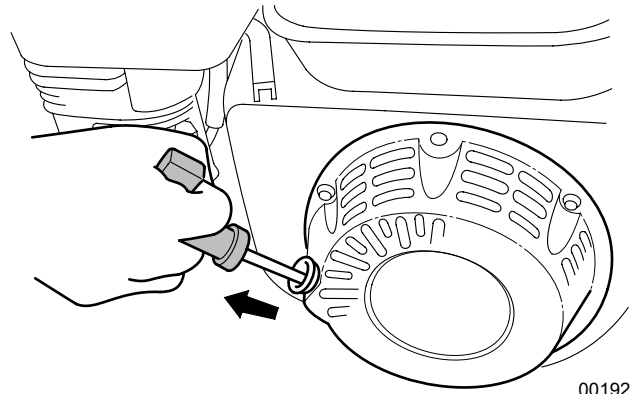


Fig. 24 – Recoil Starter

IMPORTANT! Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

6. Leave the engine operating at low throttle for a few minutes to allow it to warm up. Gradually push the choke control lever open (to the left) as the engine warms.

IMPORTANT! Engine should be warmed up before putting to work.

7. Once the engine is warmed, increase throttle as required. Adjust engine speed to preferred conveyor off-load speed.

5.6 Stopping Procedure

1. Stop loading material onto the conveyor.
2. Decrease engine speed to **MIN.**
3. Turn the ignition switch OFF.

5.7 Stopping in an Emergency

In an emergency

- Press the E-stop Button on the right-hand side of the conveyor frame.

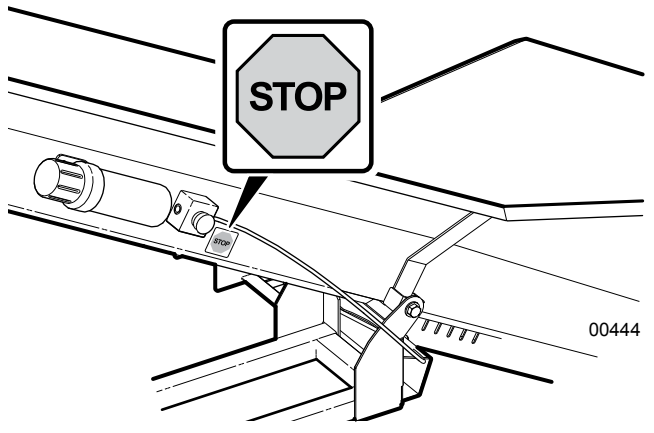
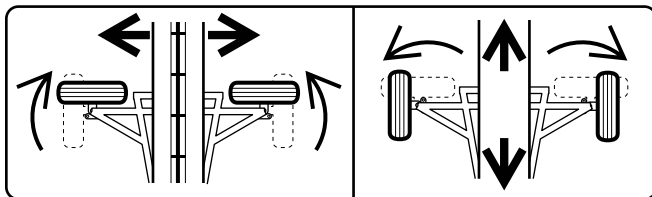


Fig. 25–E-stop button

- Correct fault situation before restarting engine and resuming work.

5.8 Rotate Wheels

Move the conveyor sideways when the split wood stack height is up to the conveyor or approaching the wheels. Unpin and rotate the wheels to swing the conveyor.



- Remove lynch pin, then pull the pin and rotate the wheel. Reinsert pin and lynch pin.
- Push the conveyor to the new position.
- Chock or block the wheels.

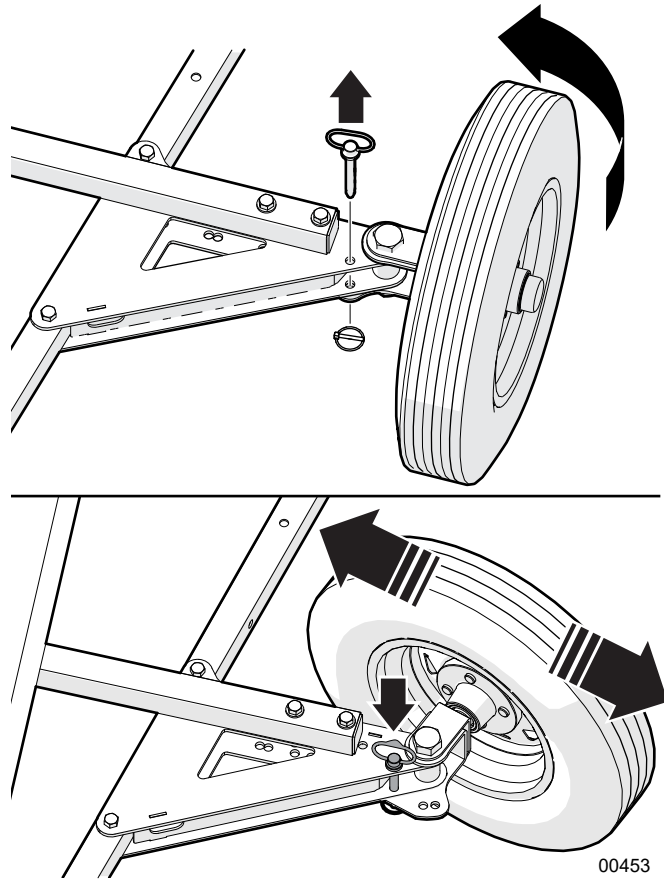


Fig. 26–Rotating the Conveyor Wheels

5.9 Break-in Period

Although there are no operational restrictions on the conveyor when used for the first time, it is recommended that the following items be checked:

After 1–5 hours of operation:

1. Check all nuts, bolts and other fasteners. Tighten to their specified torque.
2. Check engine fuel, oil fluid levels. Top up as required.
3. Check for entangled material. Remove all entangled material before resuming work.

After 20 hours of operation:

4. Repeat steps 1 through 3 listed above.
5. Adjust conveyor chain tension. See *page 33*.
6. Change engine oil after initial 20 hours of operation or first month.

After 50 hours of operation

7. Adjust conveyor chain tension. See *page 33*.

8. Check condition of hand winch and wire rope.
Replace wire rope if kinked, worn or has broken strands.


5.10 Conveyor Axle Position

Tongue weight varies depending on conveyor length.

Axle Location on Wheel Base Frame

The axle is positioned and bolted to the conveyor frame based on the measurements in the following table. Measure from the front of the wheel base frame to the center of the axle (measurement 'X').

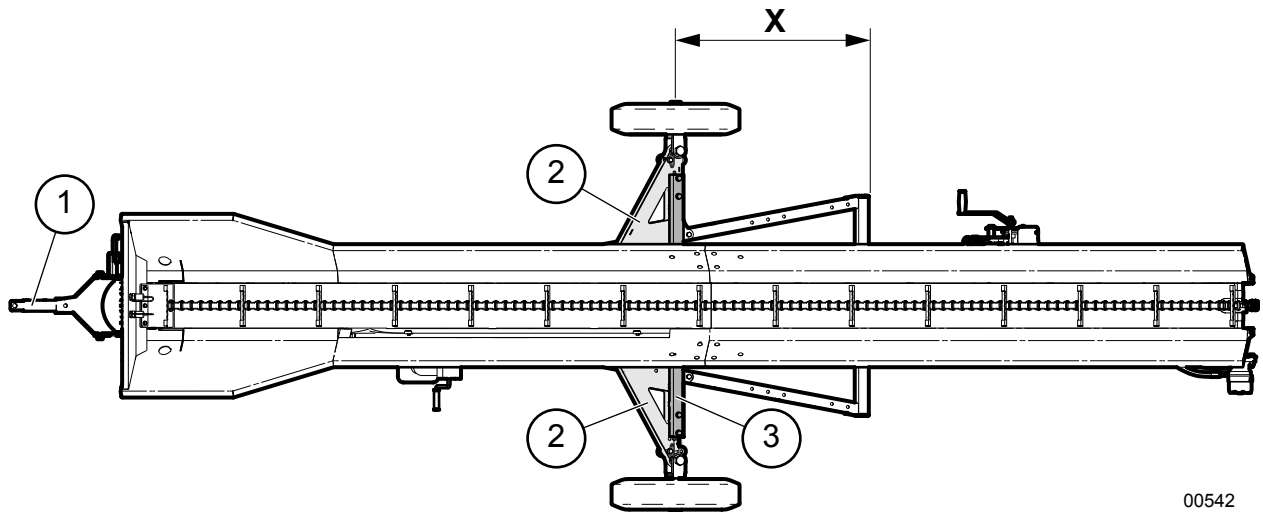
Conveyor Model	Measurement 'X'
CT16B	41-½" (105.4 cm)
CT24B	23-½" (60 cm)

 **NOTE:** CT model shown in the illustration. CT-B model set-up is the same.

Tongue Weight, Adjusting

Tongue weight can be further adjusted for towing vehicle capability or preference using the additional holes provided in the conveyor wheel base frame.

IMPORTANT! If repositioning axles, always make sure spanner bar is installed and all fasteners are properly torque-tightened.



00542

Fig. 27 – Axle Position on Wheel Base Frame

1. Conveyor Tongue
2. Axles
3. Spanner Bar

6. Transporting

- Make sure no material is left on the conveyor. Clean off all debris so nothing can fall off when towing.
- Turn the fuel valve on the engine OFF when not in use or when transporting.

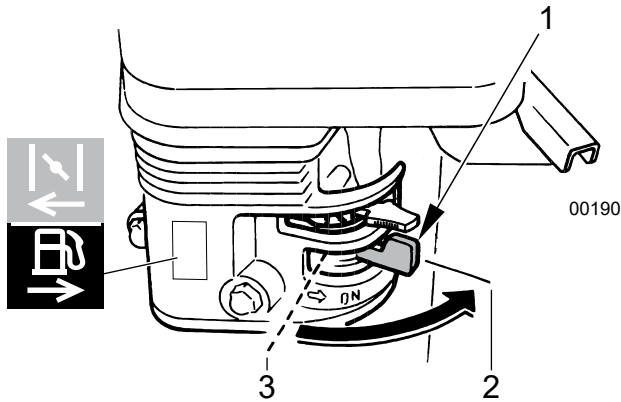


Fig. 28 – Fuel Valve Lever

1. Fuel Shut-off Valve Lever
2. ON Position
3. OFF Position

- If tongue weight requires adjusting, see *page 24*.
- Use safety chains while traveling.
- Use safety flags as required to properly mark conveyor while traveling on roadways.
- Rotate the crank jack to vertical and secure with the lynch pin. Raise the conveyor up to connect to the tow vehicle.

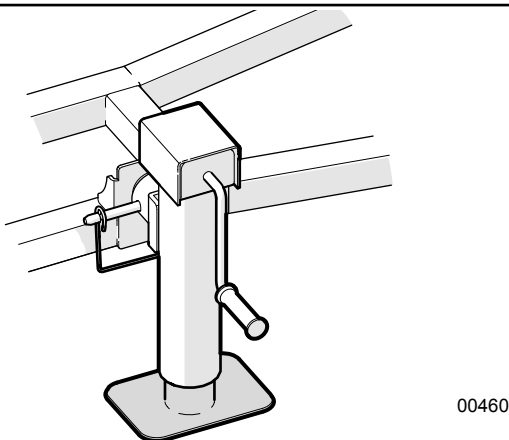


Fig. 29 – Crank Jack

- Lock the hitch before towing.

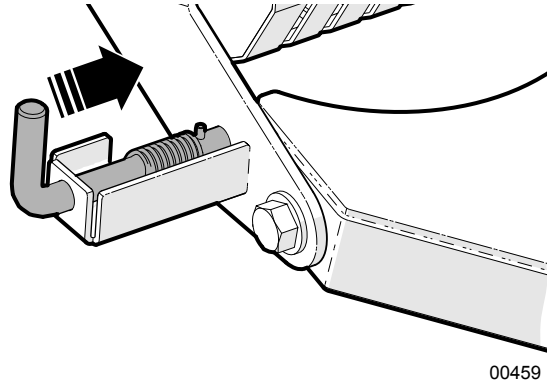
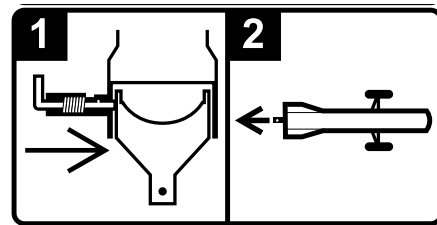


Fig. 30 – Hitch Lock Pin



- Fully lower the conveyor.
- Turn the winch handle counter-clockwise. No clicking sound is heard because the brake system is activated.

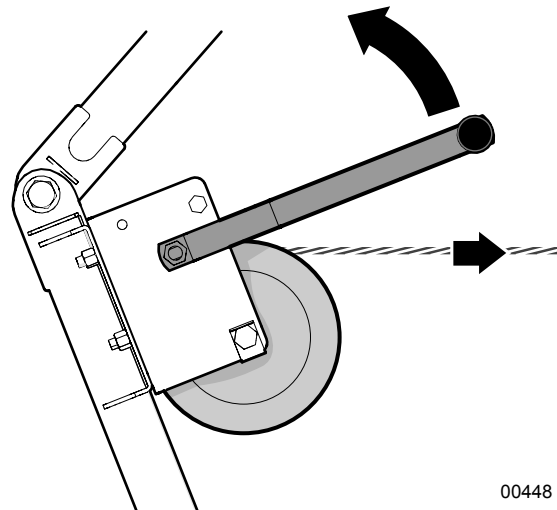


Fig. 31 – Lowering Conveyor

- If traveling over rough ground, install a tie down strap over the conveyor to the frame.

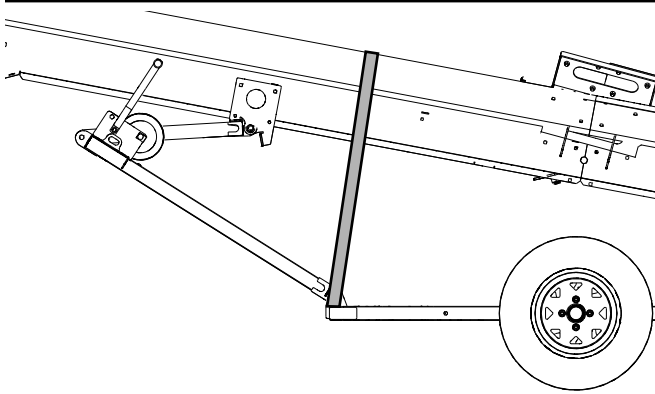


Fig. 32—Tie Down Strap

7. Storage

After the season's use or when the conveyor is not going to be used for a period of time, it should be thoroughly inspected and prepared before being put away.

Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of next season.

IMPORTANT! Refer to the engine manufacturer's manual for information specific to engine storage.

7.1 Placing Conveyor in Storage

1. Clean off all dirt, mud, and debris.
2. Turn fuel valve OFF on the engine.
3. Add fuel stabilizer to the fuel tank.
4. Grease conveyor drive bearings—one grease gun shot for each bearing. See *page 33*.
5. If parking the machine for longer periods (over 6 months), follow the engine manufacturers recommendations for that period.
6. If the conveyor is not stored inside a building, cover the engine with a waterproof tarp. Tie securely in place.
7. Select an area that is dry, level and free of debris to park the conveyor.
8. Store the conveyor away from human activity. Do not allow children to play on or around it.

7.2 Removing from Storage

1. Check air pressure in tires. See tire sidewall for rating.
2. Review and follow the Pre-operation Checklist. See *page 23*
3. Review safety and operation procedures. See *page 10*.

8. Service and Maintenance



WARNING!

Risk of serious personal injury. Stop engine before performing ANY service or maintenance procedure. Reinstall all covers and guards removed before putting machine back into service.

W033

IMPORTANT! Review Maintenance Safety on page 14 before servicing or repairing. Place the machine in a Safe Condition before performing any maintenance. See page 9.

Allow the engine to cool. Engine components and oil may be hot enough to cause injury.

IMPORTANT! Refer to the engine manufacturer's manual for engine maintenance and service information.

8.1 Fluids and Lubricants

1. Engine Oil

SAE 10W-30 motor oil is recommended for general use. Refer to the engine manufacturer's manual for maintenance and service information

2. Grease

Use an SAE multi-purpose high temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium-based grease.

3. Engine Fuel

This engine is certified to operate on unleaded gasoline with a pump octane rating of 86 or higher (a research octane rating of 91 or higher).

4. Storing Lubricants

Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

8.2 Maintenance Schedule

Perform maintenance procedures at time shown or hour interval, whichever comes first.

As Required

Remove any entangled material from conveyor

Check that all fasteners are tight.

Every 8 hours or Daily

Check fuel level See page 25

Check engine oil level. See page 25

Every 50 hours or Annually

Clean engine air filter See page 25

Grease conveyor drive bearings See page 33

Check conveyor chain tension See page 33

Every 100 hours or Annually

Change engine oil See engine manual

Check tire pressure See rating on tire sidewall

Change engine air filter See page 25

Clean machine. Remove debris and entangled material. —

Change fuel filter See engine manual

Check drive belt tension. See page 34

Check conveyor chain tension See page 33

Grease hand winch See page 34

8.3 Grease Points

Use a hand-held grease gun for all greasing. Pump one shot of grease slowly into each fitting.

- Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.
- If fittings do not take grease, remove and clean them thoroughly. Replace grease fittings as necessary.

Location	Grease Points – Every 50 hours of operation or annually
1	Driven shaft bearings–1 per side

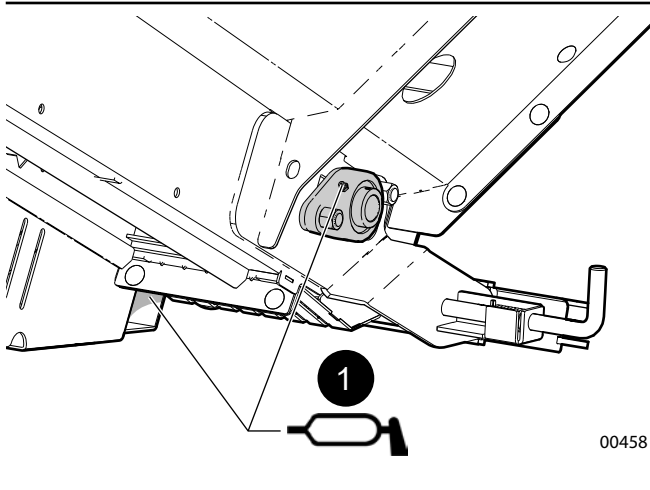


Fig. 33–Grease Points

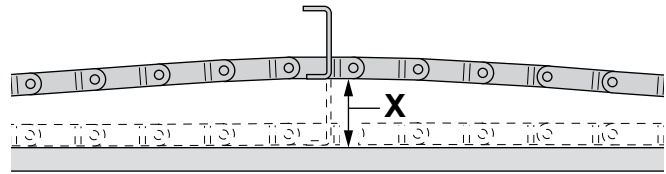
IMPORTANT! Do not over grease. Pumping more than one shot from a grease gun into the bearings can push the grease out of the seals. Doing that repeatedly can damage the seals. Grease is not kept in, and dirt and moisture are not kept out.

8.4 Chain Tension, Adjust

The conveyor chain can stretch a slight amount and can require occasional adjustment. Care must be taken the chain is not over adjusted, as this adds pretension into the chain and reduces chain life.

IMPORTANT! The main requirement of chain adjustment is to remove slack from the chain (take up the clearances in each link). It is easy to over tighten the chain, so great care is needed!

Measure conveyor chain slack from the topside, inside the conveyor trough. Pull the chain up at the middle and measure dimension X. Adjust accordingly.



Ideal Conveyor Chain Slack (X)	
16 ft (4.8 m) Conveyor	X = 4" (10 cm)
24 ft (7.3 m) Conveyor	X = 6" (15 cm)

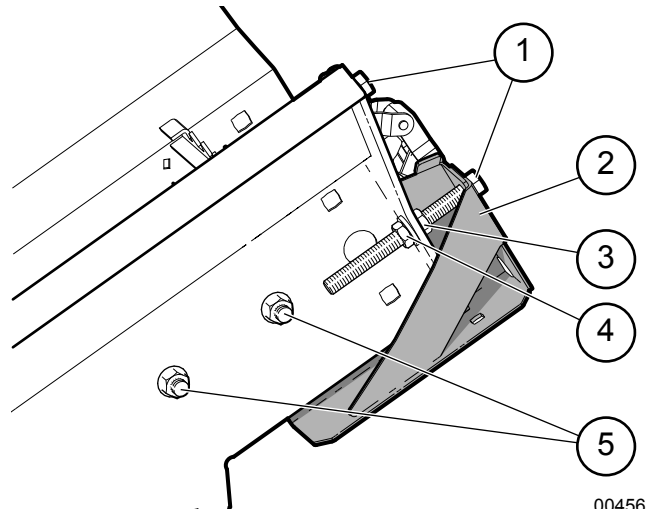


Fig. 34–Chain Tensioner

1. Hex Bolts
2. Tensioner Sled
3. Adjuster Nuts
4. Jam Nuts
5. Tensioner Sled Bolts

Lower the conveyor down so the chain tensioner can be adjusted while standing on the ground.

1. Loosen sled tensioner bolts (5) on both sides of the conveyor.
2. Back off the jam nuts (4) a slight amount.
3. Take the slack out of the chain by tightening (turning clockwise) adjuster nuts (3) equally. Refer to table above.
4. Tighten the jam nuts (4).
5. Tighten the sled bolts (5).

8.5 Drive Belt, Adjust / Replace

8.5.1 Adjust Drive Belt Tension

1. Remove drive belt shield.
2. Loosen idler pulley bolt (1).
3. Slide the idler pulley (2) up the chain tensioner rail to tighten the belt. Pry it upwards and snug the idler pulley bolt. Measure the deflection and adjust as required.
4. Tighten the idler pulley so that deflection at the top of the belt is 1/2"–3/4" (12 mm–19 mm).

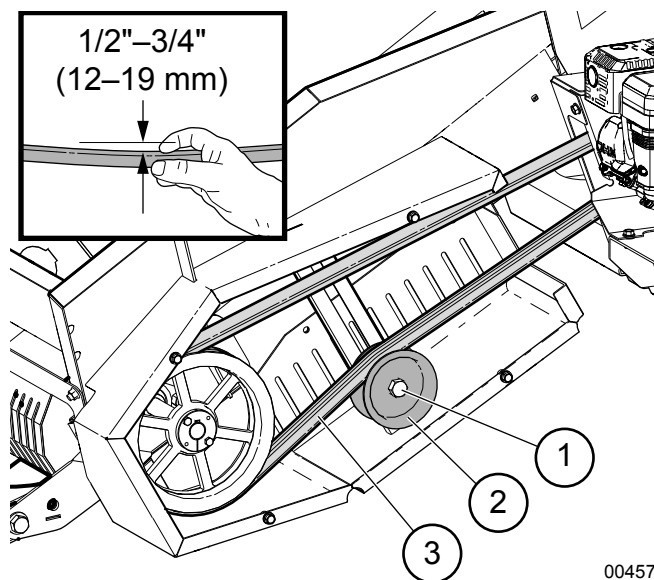


Fig. 35–Conveyor Drive Belt

1. Idler Pulley Bolt
2. Idler Pulley
3. Drivebelt

8.5.2 Replace Drive Belt

1. Perform the same steps above, loosening off the idler pulley altogether.
2. Pull the belt off of the driven pulley and the engine pulley.
3. Tension the new drive belt as indicated in the steps above.
4. Check belt tension again after 50 hours of use.

8.6 Hand Winch

IMPORTANT! Do not get oil or grease on the winch friction discs. The winch brake system cannot function properly if exposed to oil or grease.

- Apply a drop or two of SAE 30 engine oil to each bushing inside diameter and to the ratchet pawl pivot points.
- Maintain a thin layer of marine grease on the gear teeth and shaft threads.

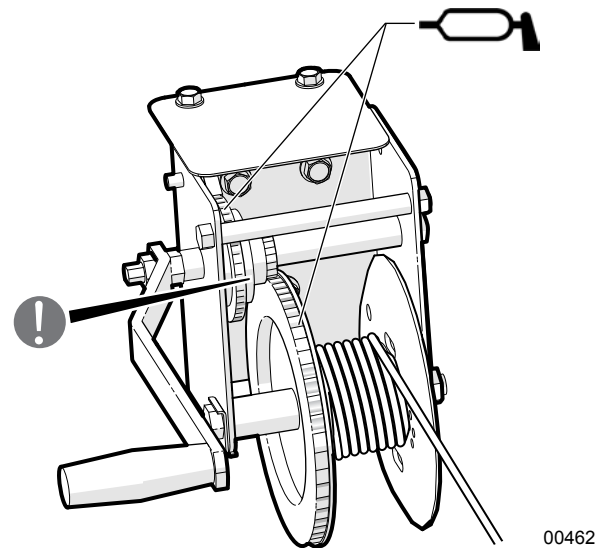


Fig. 36–Hand Winch

9. Troubleshooting

The following table lists some problems that may be encountered, with possible causes and suggested solutions.

If a problem is persists after reading through the Troubleshooting section, contact the local dealer, distributor or Wallenstein. Have the machine serial number ready.

Engine related issues


Refer to the Honda GX120 owner's manual found in the manual tube.

Problem	Cause	Solution
The chain is winding on the sprocket.	Too much slack in the chain	Adjust the chain length or distance between axle sprockets.
	Excessively worn sprocket. The chain and sprocket do not match.	Replace the chain and/or sprocket with the correct-sized part.
Unusual noises.	Excessive wear in the chain or sprocket.	Replace the chain or sprocket.
	Drive belts are loose or worn.	Tighten or replace.
Excessive wear at the inside of the chain's link plates or the teeth surfaces.	Improper centering of the sprocket.	Correct the centering of the drive and driven sprockets.
	The chain is being pushed to the side.	Remove the debris or reason the chain is being pressed to the side.
Chain does not move.	Chain is frozen to conveyor trough or trough is jammed with material.	Free up the chain. Clear jammed material.
	Drive or idler sprocket set screws have come loose, allowing sprocket to move from side to side and bind.	Tighten set screws or repair sprocket as required.
Drive belt slips when conveyor starts.	Drive belt too loose.	Increase belt tension.
	Belt replaced with incorrectly sized belt.	Install correctly sized belt. Refer to parts manual.
	Drive belt wet.	Dry off belt.
	Chain is frozen to conveyor trough or trough is jammed with material.	Free up the chain. Clear jammed material.
Drive belt slips while conveyor is operating.	Drive belt too loose.	Increase belt tension.
	Drive pulley has oil, grease or other debris on it.	Clean drive pulley.
	Improper loading on conveyor.	Increase engine speed so conveyor speed matches processor output.
Unusual drive belt wear.	Belt replaced with incorrectly sized belt.	Install correctly sized belt. Refer to parts manual.
	Drive belt too tight.	Adjust belt to proper tension.
Engine does not start.	Chain is frozen to conveyor trough or trough is jammed with material.	Chain is frozen to conveyor trough or trough is jammed with material.
	E-Stop button depressed.	Twist-turn to release.
	No fuel getting to carburetor.	Add fuel to fuel tank. Refer to engine manual if condition persists.

10. Specifications¹

10.1 Conveyor Specifications

Conveyor Model		CT16B	CT24B
Maximum Split Wood Pile Height		8.5' (2.6 m)	13.5' (4.1 m)
Trough	Length	16' (4.9 m)	24' (7.3 m)
	Width	8" (20 cm) at Bottom Flared out to 20" (51 cm) at Top	
	Depth	7" (18 cm)	
Power Source		HONDA™ GX120 Engine with Integral 6:1 Gearbox	
Chain	Type	662 Pintle Heavy Conveyor Chain	
	Drive	Engine Direct-drive, Bottom sprocket	
	Flight	2" (5 cm) High Serrated	
Dimensions (see note)	Raised (L x W x H)	180" x 70" x 119" (457 cm x 178 cm x 302 cm)	260" x 74" x 174" (660 cm x 188 cm x 442 cm)
	Lowered (L x W x H)	212" x 70" x 63" (538 cm x 178 cm x 160 cm)	307" x 74" x 83" (780 cm x 188 cm x 211 cm)
Hitch		Clevis Hitch (Optional 2" Ball Hitch)	
Tire Size		5.30-12 LRC	
Total Weight (estimated, dry)		880 lb (399 kg)	1040 lb (472 kg)
Wheels		90° Swivel, Adjustable Axle	

 **NOTE:** Maximum height shown. Width is variable with axle position (axle adjusts to modify tongue weight).

¹ Specifications current at time of publication and subject to change without notice.


10.2 Bolt Torque

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

IMPORTANT! If replacing hardware, use fasteners of the same grade.

IMPORTANT! Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

Imperial Bolt Torque Specifications						
Bolt Diameter	Torque Value					
	SAE Gr. 2		SAE Gr. 5		SAE Gr. 8	
	lbf•ft	N•m	lbf•ft	N•m	lbf•ft	N•m
1/4"	6	8	9	12	12	17
5/16"	10	13	19	25	27	36
3/8"	20	27	33	45	45	63
7/16"	30	41	53	72	75	100
1/2"	45	61	80	110	115	155
9/16"	60	95	115	155	165	220
5/8"	95	128	160	215	220	305
3/4"	165	225	290	390	400	540
7/8"	170	230	420	570	650	880
1"	225	345	630	850	970	1320



Metric Bolt Torque Specifications				
Bolt Diameter	Torque Value			
	Gr. 8.8		Gr. 10.9	
	lbf•ft	N•m	lbf•ft	N•m
M3	0.4	0.5	1.3	1.8
M4	2.2	3	3.3	4.5
M6	7	10	11	15
M8	18	25	26	35
M10	37	50	52	70
M12	66	90	92	125
M14	83	112	116	158
M16	166	225	229	310
M20	321	435	450	610
M30	1,103	1 495	1,550	2 100



10.3 Wheel Lug Torque

It is extremely important safety procedure to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches are the best method to assure the proper amount of torque is being applied to a fastener.

Wheel lugs should be torqued before first road use and after each wheel removal. Check and re torque after the first 10 miles (16 km), 25 miles (40 km), and again at 50 miles (80 km). Check periodically thereafter.



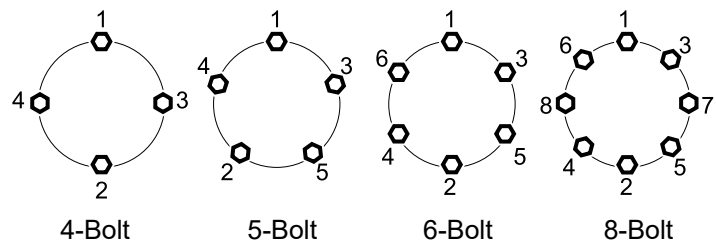
WARNING!

Wheel lug nuts must be installed and kept at the proper torque value to prevent loose wheels, broken studs, or possible separation of wheels from axle.

- Start all lug nuts onto the threads by hand.
- Tighten lug nuts in stages, following the pattern shown in the Wheel Lug Nut Torque table.

Wheel Lug Nut Torque				
Wheel Size	Units	1st Stage	2nd Stage	3rd Stage
8"	lbf•ft N•m	12–20 16–26	30–35 39–45.5	45–55 58.5–71.5
12"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
13"	lbf•ft N•m	20–25 26–32.5	35–40 45.5–52	50–60 65–78
14"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
15"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156
16"	lbf•ft N•m	20–25 26–32.5	50–60 65–78	90–120 117–156

Wheel Lug Torque Pattern



11. Alphabetical Index

A	
Air Cleaner Inspection	26
B	
Battery Safety	12
Bolt torque	37
Break-in Period	28
C	
Checking Bolt Torque	37
Choke Lever	20
Conveyor Angle Indicator	22
Conveyor Axle Position	29
Axle Location on Wheel Base Frame	29
Tongue Weight, Adjusting	29
Conveyor Chain Slack	33
Conveyor Chain Tension, Adjust	33
Conveyor Set-up	
Pre-Operation Checklist	23
D	
Delivery Inspection Report	4
Drive Belt, Adjust / Replace	34
Drive Belt, Replace	34
Drive Belt Tension, Adjust	34
E	
Engine	32
Engine Air Cleaner	25
Engine Controls	20
Choke Lever	20
Fuel Shut-off Valve	20
Ignition Switch	21
Recoil Starter	21
Throttle Lever	20
Engine Fuel	32
Engine Oil	32
Engine Oil Level Check	25
Engine related issues	35
Equipment Safety Guidelines	10, 11
E-Stop Button	10, 21
F	
Familiarization	18
Engine Controls	20
Equipment Condition	18
E-Stop Button	21
Job Site Familiarization	18
Operator Orientation	18
To the New Operator	18
Training	18
Fluids	32
Foreword	2
Fuel Level - Checking	25
Fuel Shut-off Valve	20
G	
Gas Motor Safety	13
Grease Points	33
Grease Type	32
H	
Height Adjustment	24
Hitch Lock Pin	23
How to Install Safety Signs	16
I	
Ignition Switch	21

Introduction	2
L	
Lowering Conveyor	24
Lubricants	32
M	
Machine Components	19
Machine Set-Up	
Height Adjustment	24
Hitch Lock Pin	23
Maintenance Decals	7
Maintenance Schedule	32
8 hours or Daily	32
50 hours or Annually	32
100 hours or Annually	32
Measure conveyor chain slack	33
Move the conveyor sideways	28
O	
Operating Instructions	23
Break-in Period	28
Conveyor Axle Position	29
Height Adjustment	24
Hitch Lock Pin	23
Pre-Operation Checklist	23
Rotate Wheels	28
Starting the Engine	26
Stopping in an Emergency	28
Stopping Procedure	27
Operating Safety	10
Operator Orientation	18
P	
Personal Protective Equipment (PPE)	9
Placing Conveyor in Storage	31
Pre-delivery Inspection	4
Pre-Operation Checklist	23
R	
Raising Conveyor	24
Refueling	25
Refuelling Safety	12
Replace Damaged Safety Signs	16
Rotate Conveyor Wheels	28
S	
Safe Condition	9, 18
Safety	8
Battery Safety	12
Equipment Safety Guidelines	10, 11
Gas Motor Safety	13
How to Install Safety Signs	16
Operating Safety	10
Personal Protective Equipment (PPE)	9
Refuelling Safety	12
Safety Alert Symbol	8
Safety Training	11
Signal Words	8
Storage Safety	12
Tire Safety	12
Transport Safety	12
Safety Alert Symbol	8
Safety Notice Labels	7
Safety Rules	9
Safety Sign Explanations	15
Safety Sign Locations	14
Safety Signs	14
Safety Sign Explanations	15
Safety Sign Locations	14
Safety Training	10, 11
Serial number	5

Service and Maintenance	32
Fluids and Lubricants	32
Grease Points	33
Hand Winch	34
Maintenance Schedule	32
Sign-off form	17
Specifications	36
Starter	21
Stopping in an Emergency	28
Stopping Procedure	27
Storage	31
Placing Conveyor in Storage	31
Storage Safety	12

T

Throttle Lever	20
Tongue Weight, Adjusting	29
Transporting	30
Fuel Shut-off Valve	30
Hitch Lock Pin	30
Troubleshooting Guide	35

W

Warranty	6
Wheel Lug Torque	38



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