BILT HARD

MINI TRENCHER

Operator's Manual



FOR YOUR SAFETY

Your new Mini Trencher will more than satisfy your expectations. It has been manufactured under stringent quality standards to meed superior performance criteria. You will find it easy and safe to operate, and with proper care, it will give you many years of dependable service.

Prepare to experience the durability to take on any job with the ease, portability, and convenience of your new Mini Trencher!

Ultimate Performance, Unbeatable Value, Reliable Support—That's Bilt Hard Mini Trencher!

- \checkmark Backed by decades of proven manufacturing expertise
- **√** Enhanced design features come standard
- √ Engineered for the best user experience
- **√** Quality metal parts are used instead of plastic
- √ A robust warranty supports all products
- Budget-friendly prices make it practical

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Carefully read through this entire operator's manual before using your new unit.Pay attention to all cautions and warnings.

ENGINE MANUAL

The Engine Manufacturer is responsible for all enginerelated issues with regards to performance, power rating, specifications, warranty and service. Please refer to the Engine Manufacturer's owner/operator's manual, packed separately with your unit, for more information.

EMISSION CONTROL SYSTEM

This equipment and or its engine may include exhaust and evaporative emission control system components required to meet U.S. Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB) regulations. Tampering with emission controls and components by unauthorized personnel may result in severe fines or penalties. Emission controls and components can only be adjusted by an authorized engine manufacturer's service center.

ENVIRONMENTAL



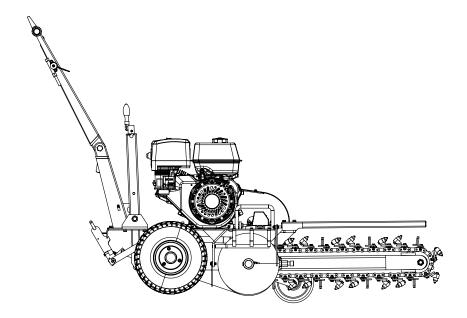
Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be resorted, taken to the local recycling center and disposed of in an environmentally safe way.

MODEL AND SERIAL NUMBERS

Record the model and serial number as well as date and place of purchase for future reference. Have this information available when ordering parts or optional accessories and when making technical or warranty inquiries.

DISCLAIMER

Mini Trencher reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustration may not be applicable to your unit.



SYMBOLS

The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.



Read these instructions for use carefully.



Wear eye protection.

Wear hearing protection.



Wear protective gloves.



Wear safety footwear.



Keep your hands and feet distance from the tracks



Rotating shaft cancause severe injury. Keep arms, legs, hair and loose clothing away



Thrown Objects.



Do not operate the utility machine in the rain.



No smoking, No sparks, No flames.



Be sure the engine's switch is off before transporting the machine or performing any maintenance.



Keep bystanders away.



Moving Digging Teeth will kill you or cut off arm or leg. Stay Away!

SPECIFICATIONS

Model Number	TDT-1001
Engine	Ducar DH420/B&S XR2100
Engine Type	Single Cylinder, 4 Stroke, Air-Cooled, OHV
Start	recoil/E-start; 12V 20Ah Lead-acid battery
Displacement	420 cc
Net Power	15 HP/13.5HP
Chain Length	79 inch
Chain Speed(Max)	1804ft/min
Belt	2pcs V-belt
Belts Material	Rubber
Clutch	centrifugal clutch
Carbide Tip	27pcs carbide alloy tips
Scraper	9 pcs
Wheelbase	29 inch
Tire	15 x 6-6 Tubeless Tire
Max.Trench Depth	23.6inch
Max.Trench Width	3.9inch
Overall Length	80 inch
Overall Height	54 inch
Overall Width	36 inch
Weight	401 lbs
Packing Size	45*30*34 inch
Gross Weight	450 lbs

SAFETY

GENERAL SAFETY RULES

UNDERSTAND YOUR MACHINE

Read and understand the operator's manual and labels affixed to the machine. Learn its application and limitations as well as the specific potential hazards peculiar to it.

Be thoroughly familiar with the controls and their proper operation. Know how to stop the machine and disengage the controls quickly.

Make sure to read and understand all the instructions and safety precautions as outlined in the Engine Manufacturer's Manual. packed separately with your unit. Do not attempt to operate the machine until you fully understand how to properly operate and maintain the Engine and how to avoid accidental injuries and/or property damage.

WORK AREA

Never start or run the machine inside a closed area. The exhaust fumes are dangerous. containing carbon monoxide, an odorless and deadly gas. Operate this unit only in a well ventilated outdoor area.

Never operate the machine without good visibility or light.

PERSONAL SAFETY

Do not operate the machine while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

Dress properly. Wear heavy long pants, boots and gloves. Do not wear loose clothing. short pants, and jewelry of any kind. Secure long hair so it is above shoulder level. Keep your hair.clothing and gloves away from moving parts. Loose clothes. jewelry or long hair can be caught in moving parts.

Use safety equipment. Always wear eye protection. Safety equipment such as a dust mask, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Check your machine before starting it.Keep guards in place and in working order.Make sure all nuts bolts,etc. are securely tightened.

Never operate the machine when it is in need of repair or is in poor mechanical condition. Replace damaged, missing or failed parts before using it. Check for fuel leaks. Keep the machine in safe working condition.

Never remove or tamper with safety device. Check their proper operation regularly.

Do not use the machine if the engine's switch does not turn it on or off. Any gasoline powered machine that can not be controlled with the engine switch is dangerous and must be replaced.

Form a habit of checking to see that keys and adjusting wrenches are removed from machine area before starting it. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.

Stay alert, watch what you are doing and use common sense when operating the machine.

Do not overreach. Do not operate the machine while barefoot or when wearing sandals or similar light weight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces. Keep proper footing and balance at all times. This enables better control go the machine in unexpected situations.

Avoid accidental starting. Be sure the engine is off before transporting the machine or performing any maintenance or service on the unit. Transporting or performing maintenance or service on a machine with engine on invites accidents.

FUEL SAFETY

Fuel is highly flammable, and its vapors can explode if ignited. Take precautions when using to reduce the chance of serious personal injury.

When refilling or draining the fuel tank, use an approved fuel storage container while in a clean, well-ventilated outdoor area. While adding fuel or operating the unit, do not smoke, and stay away from sparks, open flames, or other sources of ignition near the area of operation. Never fill the fuel tank.

Keep grounded conductive objects. such as tools, away from exposed. live electrical parts and connections to avoid sparking or arcing. These events could ignite fumes or vapors.

Always stop the engine and allow it ti cool before filling the fuel tank. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot. Do not operate the machine with known leaks is the fuel system.

Loose the fuel tank cap slowly to relieve any pressure in the tank.

Never over fill fuel tank. Fill tank to no more than 12.5 mm(1/2") below the bottom of the filler neck to provide space for expansion as the heat of the engine can cause fuel to expand,

Replace all fuel tank and container caps securely and wipe up spilled fuel, Never operate the unit without the fuel cap securely in place.

Avoid creating a source of ignition for spilled fuel. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.

Store fuel in containers specifically designed and approved for this purpose.

Store fuel in a cool. well-ventilated area, safely away from sparks, open flames or other sources of ignition.

Never store fuel or machine with fuel in the tank inside a building where fumes may reach a spark, open flame, or other sources of ignition, such as a water heater, furnace, clothes dryer and the like, Allow the engine to cool before storing in any enclosure.

MACHINE USE AND CARE

Position the machine in such a way that it can not move during maintenance, cleaning, adjustment, assembly of accessories or spare parts, as well as under storage,

Do not force the machine. Use the correct machine for your application, The correct machine will do the job better and safer at the rate for which it was designed.

Do not change the engine governor settings or over-speed the engine. The governor controls the maximum safe operating speed of the engine.

Do not run the engine at a high speed when you are not working.

Do not put hands or feet near rotating parts.

Avoid contact with hot fuel. oil. exhaust fumes and hot surfaces. Do not touch the engine or muffler. These parts get extremely hot from operation. They remain hot for a short time after you turn off the unit, Allow the engine to cool before doing maintenance or making adjustments.

If the machine should start to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire, and check for the cause, Unusual noise or vibration is generally warning of trouble.

Use only attachments and accessories approved by the manufacturer. Failure to do so can result in personal injury.

Maintain the machine. Check for misalignment or binding of moving parts. breakage of parts and any other condition that may affect the machine's operation. If damaged. have the machine repaired before use. Many accidents are caused by poorly maintained equipment.

Keep the engine and muffler free of grass, leaves, excessive grease or carbon build up to reduce the chance of a fire hazard.

Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use.

Observe proper disposal laws and regulations for gas.oil etc,to protect the environment.

Store idle machine out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate it. Machine is dangerous in the hands of untrained users.

SERVICE

Before cleaning, repair, inspecting, or adjusting, shut off the engine and make certain all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.

Have your machine serviced by qualified repair personnel using only identical replacement parts This will that the safety of the machine maintained.

PROPOSE



This machine is designed solely to dig trench and must not be used for any other purpose. It should only be used by trained operators who are familiar with the content of this manual. It is potentially hazardous to fit or use any parts other than your dealer parts. We disclaim all liability for the consequences of such use, which in addition voids the machine warranty

Before using the Trencher:

Operators must be fully trained before using this machine.

User Manual is read and understood.

Blades are in good condition and secure. All blades are sharpened or replaced in sets.

All fasteners are checked for tightness.

When using the Trencher:

Maintain strict discipline at all times and service machine at specified periods.

During working, people should stand in the middle of the two handles, and keep a certain space from engaged wheel, so that avoid injuries of foot touching engaged wheel during walking.

Keep body parts, foreign objects and clothing clear of rotating auger and digging chain.

Coming into contact with buried utilities while digging can cause severe injuries or DEATH.

Contact appropriate utility representatives to determine if/where electrical cables, gas lines, water lines, etc. are buried BEFORE operation.

DO NOT operate the machine while under the influence of alcohol or drugs.

Only use the machine in daylight or illuminance above 500lux. Never operate the dumper after dark.



Protecting Yourself and Those around You

This is a high-powered machine, with moving parts operating with high energy. You must operate the machine safely. Unsafe operation can create a number of hazards for you, as well as anyone else in the nearby area. Always take the following precautions when using this machine:

Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.

Always wear protective goggles or safety glasses with side shields while using the Trencher to protect your eyes from possible thrown debris.

Avoid wearing loose clothing or jewelry, which can catch on moving parts.

Wear shoes with non-slip treads when using your Trencher. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.

Wear earplug when using your trencher to avoid noise.

Keep bystanders at least 50 feet (15m) away from your work area at all times. Stop the engine when another person or pet approaches.



Safety for Children and Pets

Tragic accidents can occur if the operator is not alert to the presence of children and pets. Children are often attracted to the machine and the digging activity. Never assume that children will remain where you last saw them. Always follow these precautions:

Keep children and pets at least 50 feet(15m) from the working area and ensure they are under the watchful care of a responsible adult.

Be alert and turn the machine off if children or pets enter the work area.

Never allow children to operate the Trencher.



Safety with Gasoline - Powered Machines

Gasoline is a highly flammable liquid. Gasoline also gives off flammable vapor that can be easily ignited and cause a fire or explosion. Never overlook the hazards of gasoline. Always follow these precautions:

Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and a deadly poisonous gas.

Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat and open flame, and out of the reach of children.

Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.

Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Reinstall the fuel tank cap and fuel container cap securely.

If you spill gasoline, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.

Allow the engine to cool completely before storing in any enclosure. Never store a machine that has gasoline in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer or furnace.

Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.

Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. If required, see your authorized dealer for engine governor adjustments.

Keep combustible substances away from the engine when it is hot.

Never cover the machine while the muffler is still hot.

Do not operate the engine with the air cleaner or the carburetor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flarnmable solutions to clean the air filter.

The muffler and engine become very hot and can cause a severe burn; do not touch.



Operating this Trencher safely is necessary to prevent or minimize the risk of death or serious injury. Unsafe operation can create a number of hazards for you. Always take the following precautions when operating:

Your Trencher is a powerful tool, not a plaything. Exercise extreme caution at all times. The machine is designed to dig trench. Do not use it for any other purpose.

Know how to stop the Trencher quickly.

Exercise caution to avoid slipping or falling.

See manufacturer's instructions for proper operation and installation of accessories.

Never use the machine without ensuring that all guards and shields are in place.

Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the Trencher. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will invalid your warranty.

If the machine start to make an unusual noise or vibrate, shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for engine to cool down, then inspect for damage. Vibration is generally a warning of trouble. Check damaged parts and clean, repair and/or replace as necessary.

Never tamper with safety devices. Check their proper operation regularly.

Before performing any maintenance or inspection procedure, shut down the engine, disconnect the spark plug wire keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for machine to cool down.

Never allow people who are unfamiliar with these instructions to use the Trencher. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.

Never overload or attempt to dig trenches beyond the manufacturer's recommendation. It could result in personal injury or damage to the machine.

While using, don't hurry or take things for granted. When in doubt about the equipment or your surroundings stop the machine and take time to look things over.

Never operate the machine when under the influence of alcohol, drugs, or medication.

Use the machine only in daylight.

Stay alert for hidden hazards or traffic.

Keep all nuts and bolts tight and keep the equipment in good operating condition.

A NOTE TO ALL USERS

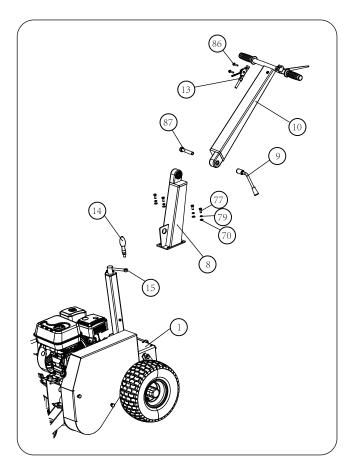
List of warnings and cautions cannot be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate this TRENCHER in a safe manner. Contact the dealers for assistance in your area.

ASSEMBLY

Following the assembly directions below, you will assemble the machine in a few minutes.

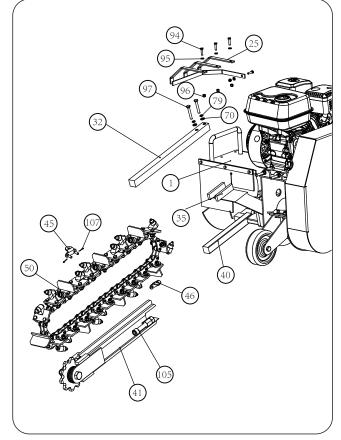
HANDLE ASSEMBLY

- a) Attach the lower part of the handle (14) to the rotation handle (15)
- b) Install the lower handle (8) to the main frame(1), secure the connection with the flat washer(70) and hex bolts(77)(79).
- c) Install the upper handle(10) to the lower handle(8) with spring washer 8(87),then connect angle arm(9) with the spring washer 8(87).
- d) Install the throttle switch (13) to upper handle(10) with hex bolt(86).



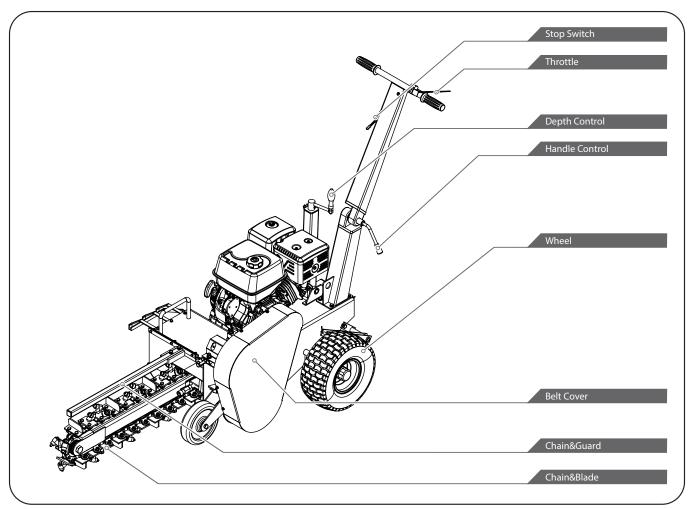
CHAIN ASSEMBLY

- a) Connect the chain adaptor(41) to the chain axle plate(40)
- b) Lock the chain (50) on the adapter (41) to cirle with chain lock1(45) chain lock2(46) and split cotter(107),
- c) Tighten the chain by tightening the bolt (105).
- d) Connect the chain cover(32) with connection arm plate(35) with flat washer8(70),spring washer8(79) and hex bolt(97).
- e) Install the shield(25) on the main frame(1) with hex bolt(94),flat washer6 (95) and lock nut (96).



KNOW YOUR MACHINE

FEATURES AND CONTROLS



It is your responsibility as the operator of this piece of equipment to know what specific requirements, precautions and work hazards exist. You must read and understand all of the information contained in the user manual.

The trencher is a small, operator propelled, chain-type trencher designed for the installation of lines that require a narrow shallow trench. It has more than enough power to trench through the toughest soils, however, because of its small size, low horse power and trench capacity, it is limited in what it is capable of doing. The job site, soil conditions, job specifications and operator experience may dictate that a different tool or method be used to do the job.

The digging chain has a tendency to pull the trencher in the opposite direction you want to dig. For this reason, be sure that the digging teeth are not in contact with the ground or other objects while starting the engine and that the wheel lock device engages before lowering the digging bar into the ground. Be sure that you have a firm grip on the machine and are ready to control it when the digging bar comes in contact with the ground.

The trencher has a tendency to "hop" or "buck" under certain conditions. This can be the result of certain soil conditions or buried objects that the trencher cannot cut through or lift to the surface. The trencher must be stopped and the object removed, or restarts the trencyjc.

OPERATING THE TRENCHER

OPERATING THE TRENCHER

It may be helpful to better familiarize your self with the features of your Trencher before beginning the steps outlined in this chapter.



Read and understand all instructions, safety precautions, and/or warning slitted in "PART I: General Safety Rules" before operating the TRENCHER. If any doubt or question arises about the correct or safe method of performing anything found in this manual, please contact the dealers in your area.

Before loading and operating the Trencher, always wear protective gear, including safety goggles, hearing protection, tight-fitting gloves without draw strings or loose cuffs, and steel-toed shoes.

STARTING

Be sure the depth control is in the "O" depth position and move both stop switches to the "ON" position. Always stand to the rear of the trencher, away from the side delivery auger and digging chain while starting the engine. Always start the trencher at the job site and allow it to warm up. While the machine is running, check that all controls are working properly before using.

START THE ENGINE FOLLOWING THE PROCEDURES:

Make sure the fuel shut-off valve is in the "ON" position.

Move the choke control lever to the "CHOKE" position (should only be needed if the engine is cold).

Move the throttle control lever to the "FAST" position.

Recoil Start: Turn the Ignition Switch to the "On" position. Push the handle of flame out switch and grasp the recoil starter handle and slowly pull until you feel resistance. Let the cord retract a little bit then pull the cord rapidly to start the engine. One or two pulls usually starts the engine.

Electric Start: Turn and hold the Key in the start position until Engine starts then let the key return to run position.

Move the choke control lever (if used for cold engine) slowly back to the "RUN" position when the engine is running well.

If the Trencher has not been running (cold engine), warm up the engine by running the engine at half throttle for 3 to 4 minutes, then advance the engine throttle control to the maximum speed.

TRENCHING

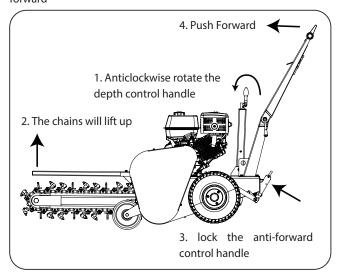
Be sure the digging chain is not turning when the engine is at an idle. Be sure the engine is off or at an idle before moving the trencher at the job site.

NOTE: All depths are approximate. Actual depth may vary depending upon soil conditions and trencher blade wear.

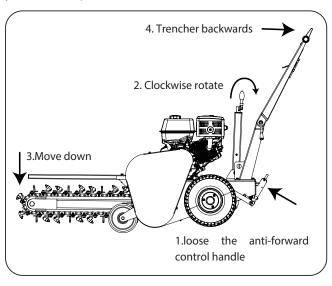
Also, soil conditions and operator experience will dictate actual trenching action and speed

A GENERAL DESCRIPTION ON HOW TO TRENCH:

Anticlockwise rotate the depth control handle and lift the chains, lock the anti forward control handle, then the trencher can be push forward



Push forward the trencher to the work site, loose the anti-forward control handle, then the trencher can only move backwards. Clockwise rotate the depth control handle and descend the chains to your desired depth.



Notes:

Lock: When we put the anti-forward control handle in the slot, the anti-forward controller lift up, don't touch the wheel gear, we can push forward.

Loose: When we pull back the ant-forward control handle, it will automatically loose the anti-forward controller down on the wheel gear, the trencher can't move forward and can only move backwards

STOPPING

There are two stop switches on the trencher; one on the handle bar and one on the engine. Refer to the engine manual for the switch location on your trencher. The operator can turn the trencher off at any time by switching either stop switch to the "OFF" position. Both switches must be "ON" before the engine can start.

STOPPING THE ENGINE FOLLOWING THE PROCEDURES:

Switching stop switch on handle.

Move the Throttle Lever to IDLE.

Recoil Start: Turn the Ignition Switch to the OFF position.

Electric Start: Turn the Key to the OFF position

WHEN BLOCKED

If the Chain stops moving while digging trenches, the engine should be stopped, take out the muds or anything which stuck the chain, then restart the engine, and start digging again.

OPERATOR SAFETY

All the rack and pinion should be greased before every use.

Always wear the proper clothing and protective gear. Eye and ear protection, hard hat, boots, gloves and dust masks are that may be required.

Keep hair, fingers, and all other body parts away from openings and moving parts. Always wear, long pants, boots, and gloves. Secure hair so it is above shoulder length.

Do not operate trencher indoors. Outdoor use only.

Do not operate trencher when tired, ill, or under the influence of alcohol, drugs, or medication.

Always assume the digging location contains underground utilities. Contact appropriate utility company to determine where electrical cables, gas lines, water lines, etc. are buried before operation.

Always use extreme caution while operating tool. Be sure of your footing and physical capabilities.

TOOLS SAFETY

Inspect entire trencher before each use. Replace damaged or worn parts.

Check for fuel leaks and make sure all fasteners are in place and securely fastened.

Replace digging blades that are severely worn. Be sure the digging chain and engine is not moving.

FUEL SAFETY

Refuel outdoors and where no sparks and flames.

Store fuel in a container approved for gasoline.

Do not smoke or allow smoking near fuel or the trencher or while using the trencher.

Clean up all fuel spills before starting engine.

Move at least 10 feet away from fueling site before starting engine.

Stop engine before removing fuel cap

DIGGING SAFETY

Be sure that the area is clear of potential hazards, such as pipes, rocks or other materials that could possibly entangle itself around the digging chain or cause unstable footing before using the trencher.

Keep others bystanders and helpers outside a 15 foot hazard zone from the trencher. Hold the trencher handle firmly with both hands.

Keep all your body and clothing away from the digging chain, auger and other moving parts.

Inspect the digging site. Soil, job specifications and operator experience may dictate that a different trencher or method be used to

MAINTAINING YOUR TRENCHER

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's user manual for maintenance procedures.

MAINTENANCE SAFETY

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool.

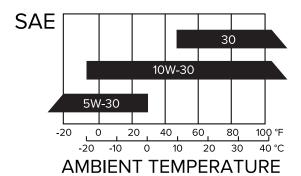
Disconnect the spark plug wire, keeping it away from the spark plug. Disconnect the Battery Terminals (Electric start only).

Stop engine before removing fuel cap.

Use only genuine replacement parts of the engine manufacturer.

LUBRICATION

Recommended engine oil 4-stroke gasoline engine oil SF under API service classification or SAE10W-30(equivalent to SG class).



REGULAR MAINTENANCE CHECKLIST					
Procedure	Before Each Use	Every 3 Hours	Every 25 Hours	Every 100 Hours	
Check engine oil level	•				
Check general equipment condition	_				
Check wedge for sharpness	•				
Grease surface of slide rail	•				
Check belts	•				
Grease rack and pinion		_			
Check tire pressure			•		
Clean engine exterior and cooling			_		
Change Engine Oil	First time 5hours		_		
Replace air filter			•		
Replace spark plug				•	

TRANSPORTING AND STORING

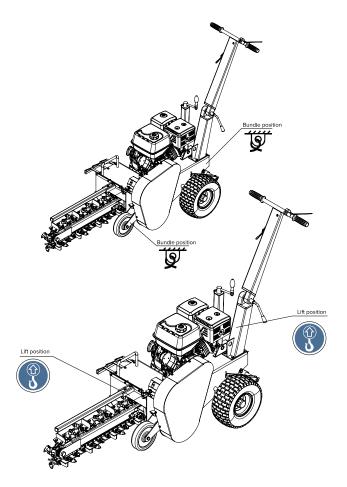
TRANSPORTING

The mini trencher is designed to be transported via a van or small trailer. The machine is equipped with grab bars that are to be used for both lifting the machine, and strapping it down. This machine weighs approximately 415lb and should only be lifted using correct apparatus.

When the mini trencher is packaged in the plywood case, we can carry machine by forklift.

Without package, we can lift the machine at the point of lift label shown.

Tie the machine at the point of tying label when transport for long distance to keep the machine stable.



Note: There are legal road requirements for transiting mini machines. It is the owner's responsibility to be aware of these laws and to adhere to them.

STORING

When you finished using the mini trencher and it has cooled, you must

Cool engine before storage.

Clean the dumper.

Inspect for worn or damaged parts.

Choose covered storage location.

Prevent accidental starting.

Plan on exercising the engine at least monthly unless the dumper is prepared for long term storage.

Always shut off the fuel valve and engine.

Always allow the engine to cool.

Store trencher and fuel where fuel vapors cannot reach sources of combustion like, water heaters, electric motors, switches, furnaces, etc.

Always secure this trencher with tie downs or similar restraints when transporting.

The trencher shall be stored in a manner that prevents it from falling, rolling or tipping over.

TROUBLESHOOTING AND PARTS LIST

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact the dealers in your area.



Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.

SYMPTOM	POSSIBLE CAUSE
The engine won't start. (Please refer to the engine user manual for engine-specific procedures.)	Is the ignition switch in the "ON" position? Is the fuel shut-off valve on? Are you using fresh, clean gas? If the gas is old, change it. Use a fuel stabilizer if you keep gas longer than 30 days. Is the spark plug clean? If the spark plug is dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it.
The engine lacks power or is not running smoothly. (Please refer to the engine user manual for engine-specific procedures.)	Check that the Throttle Lever is in the "Run" position. Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual. Is the spark plug clean? If it's fouled or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull your recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it. Are you using fresh, clean unleaded gasoline? If it's old, change it. Use a fuel stabilizer if you keep gasoline longer than 30 days. Does your engine have the right amount of clean oil? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual. Check the oil level and adjust as needed.
Engine smokes. (Please refer to the engine user manual for engine-specific procedures.)	Check the oil level and adjust as needed. Check the air filter and clean or replace if needed. You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information. Clean the cooling fins if they're dirty.



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