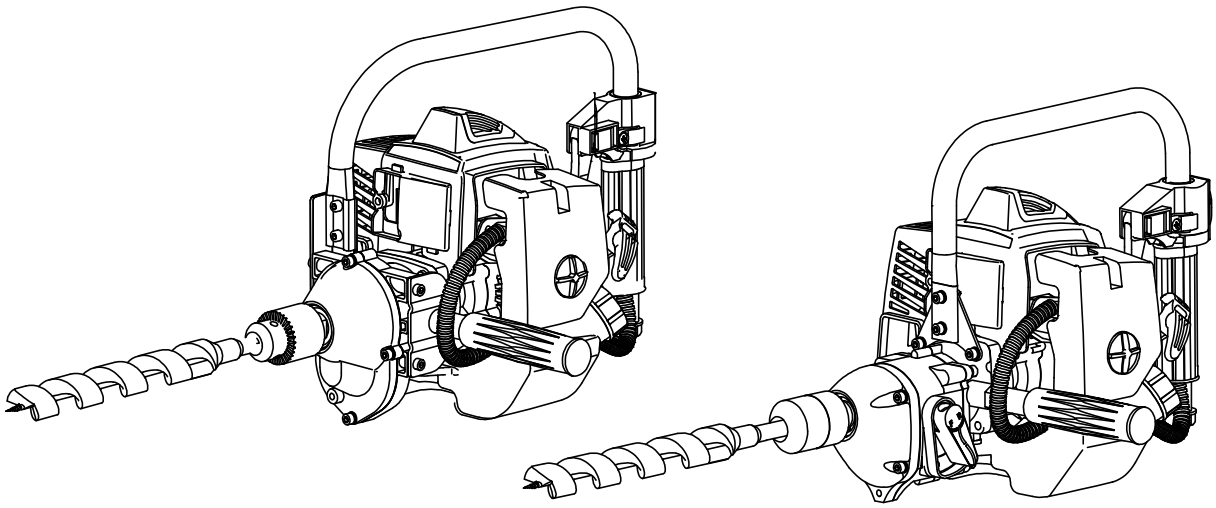
OWNER/OPERATOR MANUAL

PETROL DRILL

PRO-TED260RS



Original Instructions

CAUTION:

-Read all precautions and instructions in this manual before using this product. Keep this manual for future reference.

-Product may vary slightly from picture.

CONTENTS

⚠ SAFETY FIRST

Instructions contained in warnings within this manual marked with a ⚠ symbol concern critical points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail

WARNINGS IN THE MANUAL

⚠ WARNING

This mark indicates instructions which must be followed in order to prevent accidents which could lead to serious bodily injury or death.

NOTE

This mark indicates hints or directions useful in the use of the product

INTRODUCTION

Thank you for your purchasing the portable drill of our Company. The present manual explains how to handle the portable drill well. Before using it, please read this operator's manual carefully, operate the machine correctly and engage in your task safely.
By the way, due to changes of specifications, all details of your machine may not agree with this manual. Please understand accordingly.
The machine is only intended to be used to drill tree stiletto.

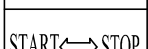
----------TECHNICAL DATA----------

MODEL			PRO-TED260RS
Main unit	Remote type	Automatic centrifugal clutch; gear;	
	Maximum speed of gear shaft /engine speed (min^{-1})	1000/10060	500/10060
	Idle speed(min^{-1})	2700±200	
	Equivalent vibration level(m/s^2) (in accordance with EN ISO 22867) Uncertainty of vibration measurement K=1.5m/s^2	8.5	
	Sound pressure values[dB(A)] (in accordance with EN ISO 22868) Uncertainty of noise measurement 3dB(A)	110	
	Reduction ratio	10.6:1	19.58:1 Forward
			20.38:1 Retreat
	Weight when dry(kg)	5.5	5.2
Engine	Name of engine	7DS260-28.1	
	Type	Air-cooled; 2 cycle; vertical piston valve; gasoline engine	
	Displacement(mL)	25.4	
	Maximum output(kW/min^{-1})	0.7/7500	
	Carburetor	Diaphragm-type	
	Ignition	Non-contact electronic ignition	
	Method of starting	Recoil type	
	Fuel used	Gasoline mixed with lubricating oil (ratio of 30:1)	
	Fuel tank capacity(L)	0.65	
	Dry weight(kg)	2.7	
Standard drill(mm)		13×290, 28×330	
Standard chuck		1.5-13mm 1/2-20 UNF	2-13mm 1/2-20 UNF

Technical data subject to changed without notice.

SYMBOL

Some of the following symbols may be used on this tool. Please study them and understand their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
	Choke lever	choke (close) , run (open) 
	Ignition switch	
	Fuel	Use unleaded petrol intended for motor vehicle use with an octane rarting of 91([R+M]/2) or higher.
		Use 2-stroke oil for air cooled engines.
		Mix the fuel mix thoroughly and also each time before refuelling.
		To reduce the risk of injury or damage, avoid contact with any hot surface.
		A harzard from fire/flammable materials.

SAFETY RULES & PRECAUTIONS

IN ORDER TO ENSURE PROPER AND SAFE OPERATION OF YOUR PORTABLE GAS DRILL

- Read this Owner/Operator Manual carefully. Besure you understand how to operate this unit properly before you use it. Failure to do so could result in serious injury.

- Be sure to keep this manual handy so that you may refer to it later whenever any questions arise. Also note that you are requested to contact the dealer from whom you purchased the product for assistance in the event that you have any questions which cannot be answered herein.
- Always be sure to include this manual when selling, lending, or otherwise transferring the ownership of this product.

- This product has been designed for use in drilling, and it should never be used for any other purpose since doing so could result in unforeseen accidents and injuries occurring.
- You should never use this portable gas drill when under the influence of alcohol, when suffering from exhaustion or lack of sleep, when suffering from drowsiness as a result of having taken cold medicine, or at any other time when a possibility exists that your judgment might be impaired or that you might not be able to operate the portable gas drill properly and in a safe manner. Also be sure never to allow children or anyone unable to fully understand the directions given in this manual to use this portable gas rill.

SAFETY RULES & PRECAUTIONS

- Avoid running the engine indoors. The exhaust gases contain harmful carbon monoxide.

- This product has been designed for use in drilling, and it should never be used for any other purpose since doing so could result in unforeseen accidents and injuries occurring.

- Never use your portable gas drill under circumstances like those described below:

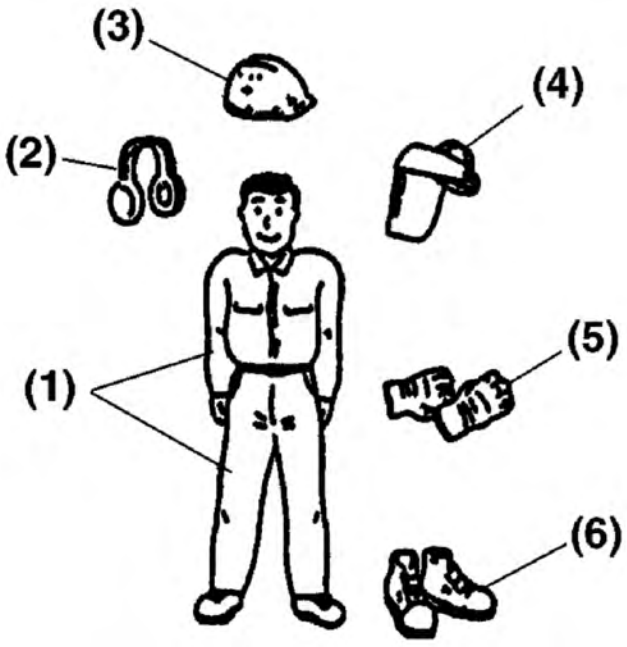
1. When the ground is slippery or when other conditions exist which might make it not possible to maintain a steady posture while using the portable gas drill.
2. At night, at times of heavy fog, or at any other times when your field of vision might be limited and it would be difficult to gain a clear view of the area where the portable gas drill is to be used to ensure safety.
3. During rain storms, during lightning storms, at times of strong or gale-force winds, or at any other times when weather conditions might make it unsafe to use this product.

- When using this product for the first time, before beginning actual work, take the portable gas drill to a wide, clear, open space, turn on the power, and practice handling the portable gas drill until you are sure that you will be able to handle in it properly in actual operation

- Lack of sleep, tiredness, or physical exhaustion results in lower attention spans, and this in turn leads to accidents and injury. When planning your work schedule, allow plenty of time to perform the work of cutting and allow plenty of time for rest. Limit the amount of time over which the portable gas drill is to be used continuously to somewhere around 30~40 minutes per session, and take 10~20 minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

WORK GEAR AND CLOTHING

- When using your portable gas drill, always be sure to wear strong, durable, work clothing; shirts should be long-sleeved shirts and pants should be full-length pants reaching down to the ankles.
- Always be sure to wear and helmet and face protector when using your portable gas drill.
- When using your portable gas drill, always be sure to wear thick work gloves to protect your hands and non-slip-sole work boots to prevent you from slipping. Never use your portable gas drill when wearing pants with loose cuffs, when wearing sandals, or when barefoot.
- When using your portable gas drill for an extended period of time, you should wear ear protectors to protect yourself from loss of hearing from overexposure to high levels of sound.



(1) Work clothing **(2) Ear protectors**
(3) Helmet **(4) Face protector**
(5) Work gloves **(6) Work boots**

SAFETY RULES & PRECAUTIONS

WARNINGS CONSIDERING HANDLING OF FUEL

- The engine of the portable petrol drill is designed to run on a mixed fuel which contains highly flammable petrol. This fuel is highly flammable and you should never store cans of fuel or refill the tank of the portable petrol drill in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or any other source of heat or fire which might ignite the fuel.

- Smoking while operating the portable petrol drill or refilling its fuel tank is extremely dangerous. Always be sure to keep lit cigarettes away from the portable gas drill at all times.
- When refilling the tank always turn off the engine first and take a careful look around to make sure that there are no sparks or open flames anywhere nearby before refueling.
- If any fuel spillage occurs during refueling, always be sure to use a dry rag to wipe any fuel which has been spilled onto the portable gas drill before turning the engine back on again.
  After refueling, screw the fuel cap back tightly onto the fuel tank and then carry the portable gas drill to a spot 10feet (3m) or more away from where it was refueled before turning on the engine.

THINGS TO CHECK BEFORE USING YOUR PORTABLE PETROL DRILL

- Before beginning work, look around carefully to get a feel for the shape of the land, and whether or not there are any obstacles which might get in the way while working, and remove any obstacles which can be cleared away before beginning work.
- The area within a perimeter of 50feet (15m) of the person using the portable gas drill should be considered a hazardous area into which no one should enter while the portable gas drill is in use, and when necessary yellow warning rope, warning signs, or some other form of warnings should be placed around the perimeter of the area. When work is to be performed simultaneously by two or more persons, care should also be taken to constantly look around or otherwise check for the presence and locations of other people using portable gas drill within the work area so as to maintain a distance between each person sufficient to ensure safety.

SAFETY RULES & PRECAUTIONS

- Before beginning work, each component of the portable gas drill should be checked to make sure that it is in proper working order and to make sure that there are no loose screws or bolts, fuel leaks, ruptures, dents, or any other problems which might interfere with safe operation. Be especially careful at this time to check that there is nothing wrong with the drills or with the joints by which the drills are attached to the portable gas drill.

THINGS TO CHECK BEFORE STARTING UP THE ENGINE

- Take a careful look around to make sure that no obstacles exist within a perimeter of 15feet (5m)or less around the portable gas drill before starting the engine.
- The portable gas drill is equipped with a centrifugal clutch mechanism which causes the drills to begin to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, hold it firmly in place so as to ensure that nor the throttle may not come into contact with any obstacles when the engine starts up.
- Never place the throttle into the high speed position when starting the engine.
- After starting up the engine, check to make sure that the drills stop rotating when the throttle is moved fully back to its original position. If the drills continue to rotate even after the throttle has been moved fully back, turn off the engine and take the unit to your authorized Red Max servicing dealer for repair.

AVOID NOISE PROBLEM

NOTE

Check and follow the local regulations as to sound level and hours of operations for portable gas drill.

In general, operate portable gas drill between 8a.m.and 5p.m.on week days and 9a.m.to 5p.m.weekends. Avoid using portable gas drill late at night and/or early in the morning.

SAFETY RULES & PRECAUTIONS

THINGS TO BE CAREFUL ABOUT WHEN USING YOUR PORTABLE GAS DRILL

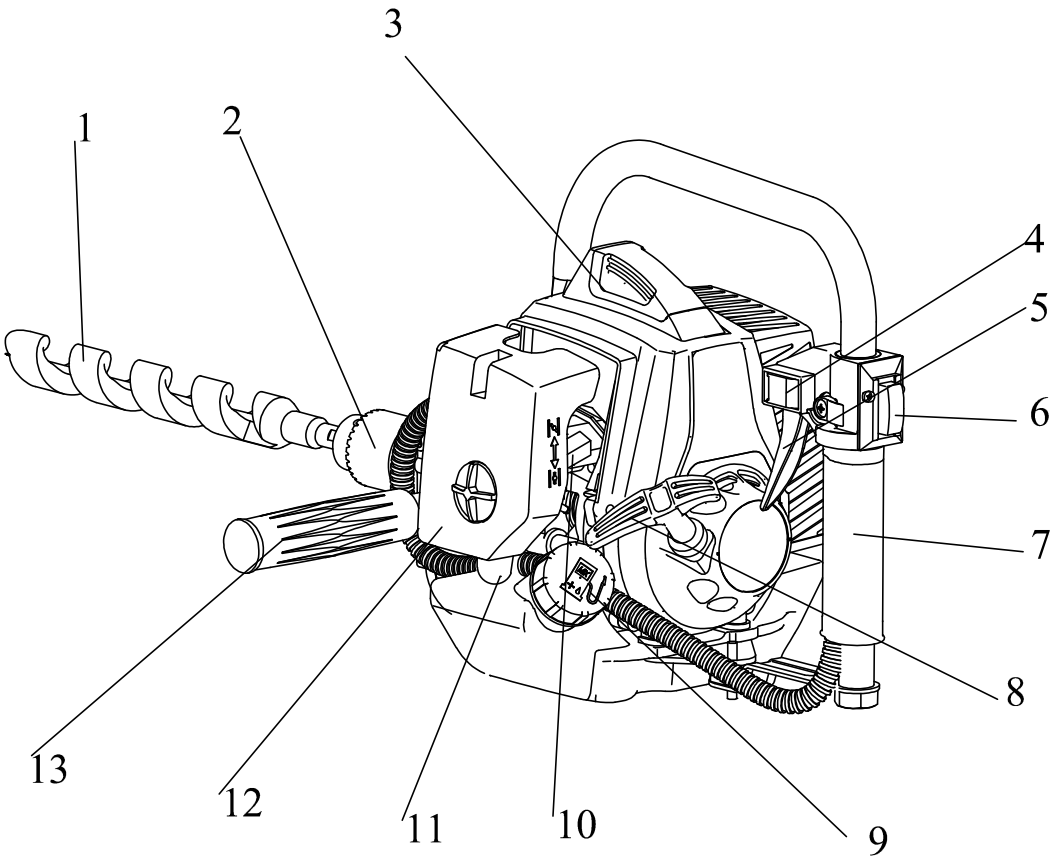
- When using your portable gas drill, grip the handles of the portable gas drill firmly with both hands, place your feet slightly apart (slightly further apart than the width of your shoulders) so that your weight is distributed evenly across both legs, and always be sure to maintain a steady, even posture while working.
- Maintain the speed of the engine at the level required to perform drilling work, and never raise the speed of the engine above the level necessary.
- Always be sure never to allow other persons to come within the work area while drilling.
- Be especially careful not to slip if it is raining or if rain has just stopped, as the ground is likely to be slippery at such times.
- If the grass or other object gets caught in the drill during operation, always be sure to turn off the engine before removing the object.
- Guard against hazardous situations at all times. Warn adults to keep pets and children away from the area. Establish a safe method for gaining your attention during operation. Be careful if you are approached.
- If someone calls out or otherwise interrupts you while working, always be sure to turn off the engine before turning around.
- Keep operation area clear of all persons, particularly small children and pets.
- Never touch the spark plug or plug cord while the engine is in operation. Doing so may result in being subjected to an electrical shock.
- Never touch the muffler, spark plug, or other metallic parts of the engine while the engine is in operation or immediately after shutting down the engine. These metallic parts reach high temperatures during operation and doing so could result in serious burns.

- When you finish drilling in one location and wish to continue work in another spot, turn off the engine before carrying it to the new location.
  Never transport the portable gas drill over rough roads over long distances without first removing all fuel from the fuel tank, as doing so might cause fuel to leak from the tank as a result of shocks absorbed during transport.

NOTES ON CARE AND MAINTENANCE OF YOUR PORTABLE Petrol DRILL

- In order to maintain your portable gas drill in proper working order, perform the maintenance and checking operations described in this manual at regular intervals. In the event that any parts must be replaced or any maintenance or repair work not described in this manual must be performed, please contact a representative from the store nearest HUASHENG authorized servicing dealer for assistance.
- Under no circumstances should you ever take apart the portable gas drill or alter it in any way. Doing so might result in the portable gas drill becoming damaged during operation or the portable gas drill becoming unable to operate properly.
- Always be sure to turn off the engine before performing any maintenance or checking procedures.
- When removing, or reattaching the drills, be sure to wear thick, sturdy gloves and use only proper tools and equipment to prevent injury.
- When replacing drills or any other parts or when replacing the oil or any lubricants, always be sure to use only HUASHENG products or products which have been certified by HUASHENG for use with the portable gas drill.
- Do not use any accessory or attachment other than those bearing the HUASHENG mark and recommended for the unit.

DESCRIPTION



TOOL LIST	
TOOL	SPEC.
Socket Spanner	19
Hex Key	3/4/5
Spanner	8X10
Spanner	14X17

SAFETY MANUAL included with unit.
Read before operating and keep for future reference to learn proper,safe operating techniques.

DESCRIPTION

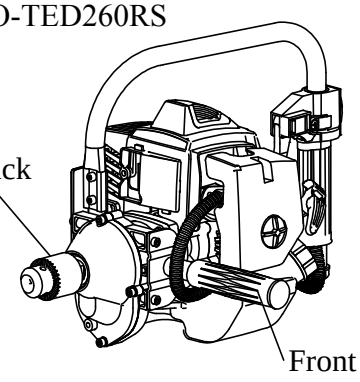
NO	NAME	NO	NAME
1	Drill	8	Starter grip
2	Chuck	9	Fuel cap
3	Spark blug	10	Choke lever
4	Throttle lock	11	Priming pump
5	Throttle lever	12	Air cleaner
6	Ignition swich	13	Front grip
7	Rear grip		

WARNING CAUTION

Before using the product, Please Confirm the local laws and regulations no limit to this kind of product or the product can meet the requirements of local laws and regulations

ASSEMBLY

PRO-TED260RS



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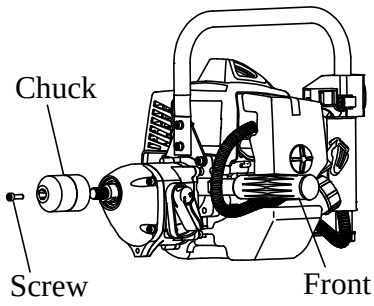
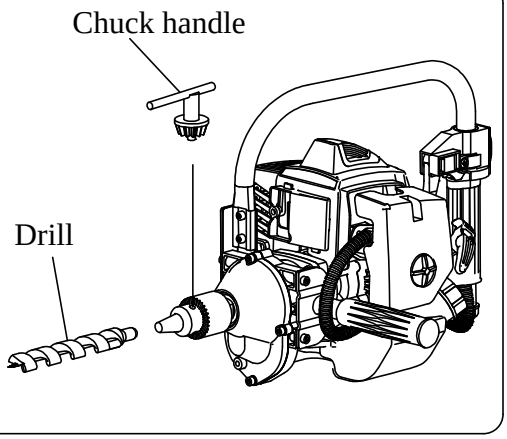


1.Assemble the front grip witch is with the unit to the gear case.

2.Screw the chuck unit into the drive shaft (and screw a Socket Head Screw in the model PRO-TED260RS



3.Insert the drill bit to be used after opening the chuck by the chuck handle and tighten the chuck by the handle.

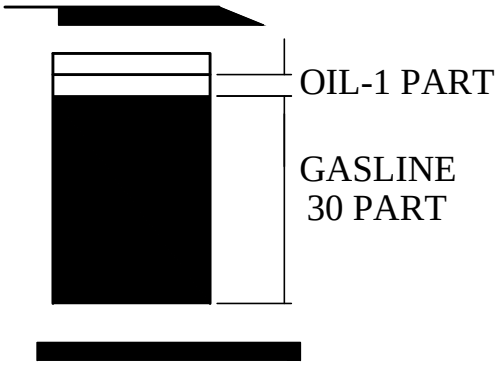
- The chuck can be tightened by hand without the chuck handle in the model PRO-TED260RS

FUEL OIL MIXTURE

WARNING

- Never fill the fuel tank to the very top.
- Never add fuel to the tank in a closed non-ventilated area.
- Do not add fuel to this unit close to an open fire or sparks.
- Be sure to wipe off spilled fuel before attempting to start engine.
- Do not attempt to refuel a hot engine.

Fuel used for this model is a mixture of unlead gasoline and approved engine lubricant. When mixing gasoline with two-cycle engine oil, use only gasoline which contains NO ETHANOL or METHANOL(Types of Alcohol) Use Branded 91 octane or higher unlead gasoline known to be of good quality. This will help to avoid possible damage to engine fuel lines and other engine parts.



MIXTURE RATIO IS 30:1

GASLINE-30 PART OIL-1 PART

Fuel mixture at the rate other than 30:1 may cause damage to the engine,Ensure mixture ratio is correct.

FUEL

The engine uses two-stroke fuel, a mixture of gasoline and 2-stroke lubricant 30:1

GASOLINE

Use branded 91 octane or higher unlead gasoline known to be of good quality.

STORING FUEL

Store fuel only in a clean,safe,aprroved container. Check and follow local ordinances on type and location of storage container.

IMPORTANT

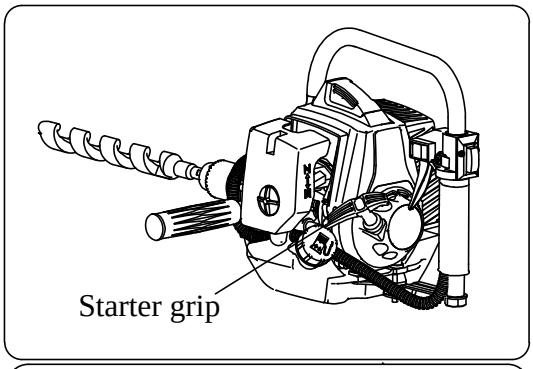
Two-stroke fuel may separate.Shake fuel container thoroughly before each use. Stored fuel ages. Do not mix more fuel than you expect to use within a month.

FUEL AND OIL MIXTURE

Inspect fuel tank making sure that it is clean and fill with fresh fuel. Use a mixture of 30:1.

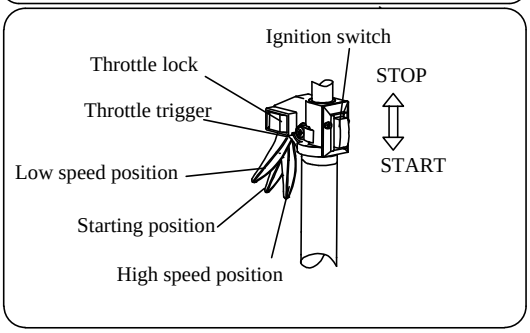
OPERATIONS

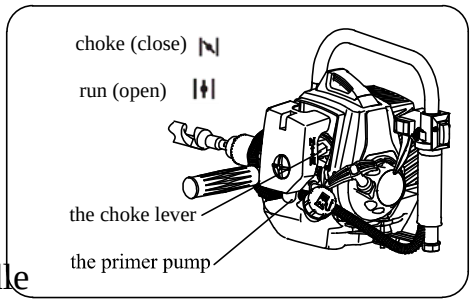
ENGINE STARTING AND STOPPING PROCEDURES

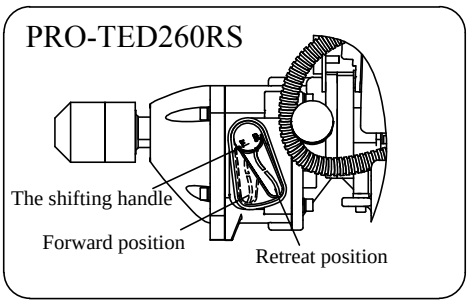


STARTING COLD ENGINE

1.Move the ignition switch to "START".
2.Give a gentle push on the primer pump repeatedly (7-10times) until fuel comes into the primer pump.
3.Pull the chock lever up to close choke
4.Move the throttle trigger and keep it in position with the throttle lock .
5.Pull starter handle until engine false fires.
6.Push choke lever inwards(excessive cranking with choke lever will cause flooding of engine making it difficult to start.)
7.Pull starter handle until engine starts.
8.When the engine is started, disconnect the starter by turning the choke lever to "RUN " .
9.Disengage the throttle lock (if present) pressing the throttle trigger briefly.
10.Allow engine to warm up for a few minutes before using.
11.For the model PRO-TED260RS turn the shifting handle to the Forward position (F)then pressing the throttle trigger to drive the drill forward.And the Retreat position(R) to drive the drill back out.







STARTING WARM ENGINE

The choke lever to the "RUN"

- If fuel tank was not run dry, pull starter one to three times and engine should start.
- If fuel tank was run dry, after refilling repeat steps 1-2-7 .

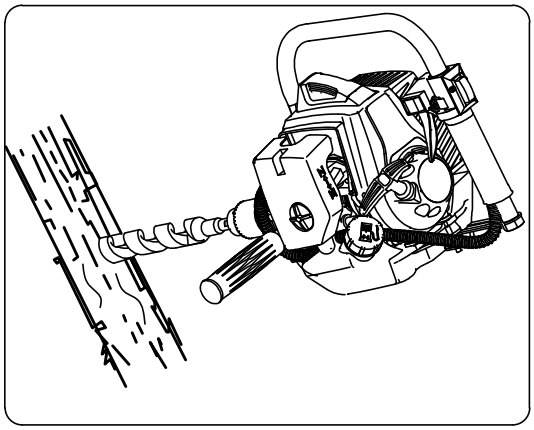
STOPPING THE ENGINE

- Release the throttle trigger and allow the engine to run idle for a few seconds.
- Move switch to STOP position.

If the starter rope is pulled repeatedly with the choke on, it may flood the engine and make starting difficult.
If you have flooded the engine, remove the spark plug and gently pull the handle on the starter rope to eliminate any excess fuel; then dry the spark plug electrodes and replace it on the engine.

OPERATIONS

BORING OPERATION



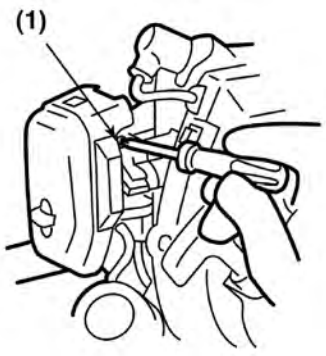
- Keep the engine running at full throttle during operation.
- Keep the drill going straight. Tilted boring can cause the drill to bend.
- Avoid touching the spark plug lead during operation.

WARNING ⚠ DANGER

DO NOT USE THE DRILL
FOR DRILLING STONE AND METAL.

ADJUSTMENT OF IDLING SPEED

- The engine idling speed is preadjusted at the factory so that the engine keeps running without moving the drill when releasing the throttle lever to the idling position. However, due to changes in engine conditions, it may be necessary to adjust the idling.
- To increase idling, screw idle adjustment screw in, until preferred speed is obtained. To decrease idling, unscrew idle adjustment screw until preferred speed is obtained.



(1) Idle adjustment screw

MAINTENANCE &CARE

WARNING⚠CAUTION

Use only original manufacturer's replacement parts, accessories and attachments. Failure to do so can cause possible injury, poor performance and may void your warranty.

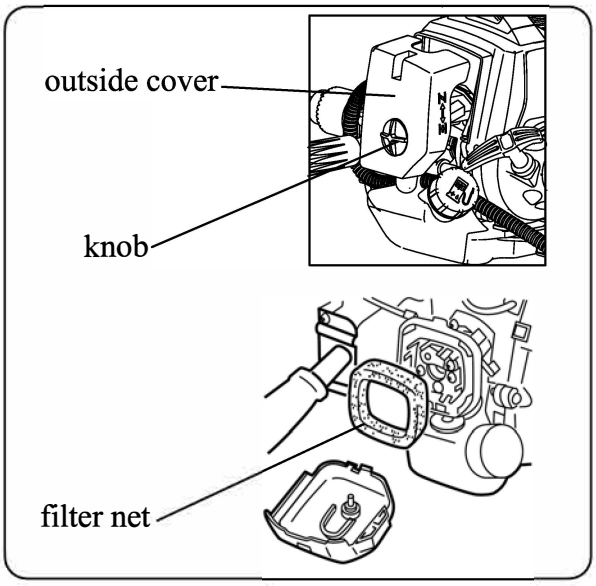
- The cutting attachment must not rotate in idle mode.If this requirement is not satisfied,the cluth has to be adjusted or the machine needs an urgent maintenance by a qualified technician.
- You may make adjustments and repairs described here.For other repairs,have the trimmer serviced by an authorized service agent.
- Consequences of improper maintenance may include excess carbon deposits resulting in loss of performance and discharge of black oily residue dripping from the muffler.
- Make sure all guards,straps,deflectors and handles are properly and securely attached to avoid the risk of personal injury.

EXHAUST PORT AND SILENCER

- Depending on the type of fuel used,the type and amount of oil used,and/or your operating conditions,the exhaust port and silencer may become blocked with carbon deposits.If you notice a power loss with your petrolpowered tool.a qualified service technician will need to remove these deposits to restore performance.

Air filter

- Accumulated dust in the air filter will reduce engine efficiency. Increase fuel consumption and allow abrasive particles to pass into the engine. Remove the air filter as often as necessary to maintain in a clean condition.
- Light surface dust can readily be removed by tapping the filter. Heavy deposits should be washed out in suitable solvent.
- Remove filter cover by loosening air filter cover knob.



ADJUSTING CARBURETOR

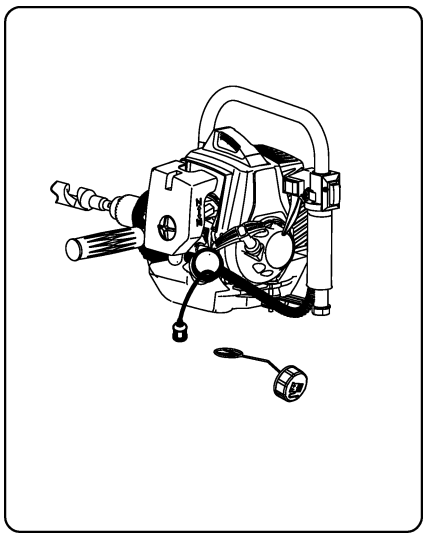
NOTE

Do not adjust carburetor unless necessary. If you have trouble with the carburetor, see your dealer. Improper adjustment may cause engine damage and void warranty.

MAINTENANCE &CARE

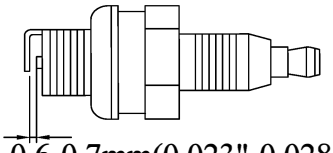
Fuel filter

- Fuel tank is fitted with a filter. Filter is situated at the free end of fuel pipe and can be picked out through fuel port with a piece of hooked wire or the like.
- Check the fuel filter periodically. Do not allow dust to enter into fuel tank.Clogged filter will cause difficulty in starting engine or abnormalities in engine performance.
- When filter is dirty, replace the filter.
- When the inside of the fuel tank is dirty, it can be cleaned by rinsing the tank out with gasoline.



Spark plug

- Do not attempt to remove the plug from a hot engine in order to avoid possible damage to the threads.



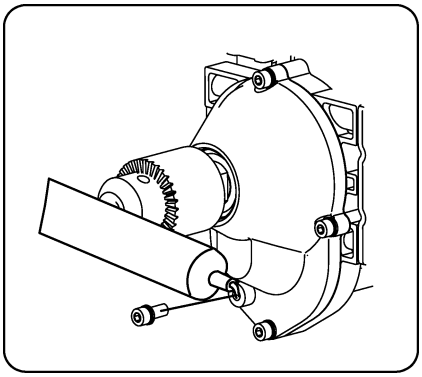
- Clean or replace the plug if fouled with heavy oily deposits.
- Replace the plug if the center electrode is worn rounded at the end.
- Spark gap 0.6-0.7mm (.023".028")
- Fastening torque =14-15Nm(125-135in.lb)

Gear case

After working (40-50) hours,fill with the right quantity of grease.

Rmove the screw and put in the lithium-based grease . turning the shaft manually until grease emerges,then refit the screw.

- Put in the lithium-based grease through the filling cup in the model PRO-TED260RS



TRANSPORT & STORAGE

TRANSPORT, HANDLING

- The engine should be turned off when the unit is moved between work areas.
- After the engine has stopped ,the muffler is still hot. never touch hot Parts such as the muffler.
- Confirm that the fuel has not leaked from the tank.
- Allow the engine to cool;empty the fuel tank and secure the unit from moving before transporting in a vehicle.

WARNING⚠DANGER

Please empty the fuel tank before transporting,to avoiding the engine leaked.
For avoiding the drill attachment damaged thedrill and people, please removed the drill attachment ,and at the same time, resile the drill as factory state ,and then casting all parts into the package. Before transporting,all parts should be packed and validated safe.

EXTENDED STORAGE

- Inspect, clean and repair unit if necessary.
- Remove all fuel from tank.
- Start engine-This will consume all fuel in fuel line and carburetor.
- Remove spark plug and pour one tea spoon of clean motor oil into spark plug hole of cylinder-replace spark plug.
- Store in clean, dry, dust free area.

WARNING⚠DANGER

Do not store in a closed area where fuel vapors can reach an open flame from hot water heaters, heaters, furnaces, etc. Store in a locked, well ventilated area only.

TROUBLE SHOOTING GUIDE

1.FAILURE TO START

symptom				probable cause	remedy
cylinder compress pressure normal	spark plug spark normal	fuel system abnormality		these is no fuel in tank fuel filter obstructed	add fuel in tank clean fuel filter
		fuel system normal	fuel	fuel is too dirty there is water in fuel there is too much fuel in cylinder mixture ratio is improper	replace fuel replace fuel take down spark plug and dry it mixture proration
	fuel system normal	high voltage wire spark normal	spark plug	spark plug fouled with oily deposits spark plug insulation damage spark gap is too large or small	clean the oily deposits replace spark plug adjust spark gap 0.6-0.7mm
		high voltage wire spark abnormality		high voltage wire breach or break off coil looseness	replace or tighten tighten
fuel system normal	ignition system normal	compression pressure is inadequate		piston ring attrite piston ring is broken piston ring cementation spark plug looseness conjoint surface of the cylinder and crank cass leak	replace a new replace eliminate tighten eliminate
		compression normal		high voltage wire and spark plug contact poor stop switch failure or short circuit	tighten the spark plug cap repair or replace

TROUBLE SHOOTING GUIDE

2.LOW OUTPUT

symptom	probable cause	remedy
flameout when speedup	fuel filter obstruct, fall short of fuel	clean fuel filter clean fuel road adjust carburetor
the smoke is thin, carburetor spout backward	muffler fouled with oily deposits	clean the oily deposits
compress press is inadequate	piston piston ring cylinder attrite	replace piston piston ring
engine leak	conjoint surface of the cylinder and crank cass leak	repair
the end of two crank shaft leak	the seal is bad	replace seal
	engine overheats burning room fouled with oily deposits	avoid use it for long time high speed and heavy load clean the oily deposits

3.ENGINE RUNNING UNSTABLE

symptom	probable cause	remedy
there are knock sound in engine	piston piston ring cylinder attrite piston pin piston attrite bearing of crank shaft attrite	replace piston piston ring replace piston pin piston replace bearing
there are metal knock sound	engine overheats burning room fouled with oily deposits gasoline branded is unfit	avoid use it for long time high speed and heavy load clean the oily deposits replace with required branded octane
engine ignition break off	there is water in fuel spark gap is wrong coil gap is wrong	instead fuel adjust spark gap 0.6-0.7mm adjust coil gap 0.3-0.4mm

4.THE ENGINE SUDDENLY STOPPED

probable cause	remedy
fuel has been used up spark plug fouled with oily deposits and short circuit high voltage wire fall off	add fuel clean the oily deposits connect

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