

BILT HARD

Gas Powered Earth Auger Instruction Manual

SKU:TDA-0651



Using tips:
Video on Youtube



WARNING:

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Save these instructions in a safe place and on hand so that they can be read when required. Keep these instructions to assist in future servicing.

Thank you for ordering our product. If you have any issue, please email it and your order ID to inquiry@bilthardusa.com or call (888) 680-2849

IMPORTANT SAFEGUARDS

For your own safety, always follow these basic precautions when using this appliance.

1. Read the user Manual carefully for operating instructions. Read all instructions in this manual before use.
2. DO NOT use this product for anything other than its intended purpose.
3. DO NOT use attachments other than those available from the manufacturer.
4. DO NOT alter this product in any manner; doing so is dangerous and will void all warranties.
5. DO NOT allow children or adults weighing under 100 lbs. to operate this unit.
6. DO NOT allow your body, loose clothing, drawstrings, scarves, hats or other materials to touch the power head, or auger (drill) unit at any time.
7. DO NOT operate under the influence of drugs or alcohol.
8. DO NOT continue to use this product in the event of mechanical or electrical failure.
9. The blades are very sharp. Use extreme caution when drilling a hole or replacing the blades. Put the blade guard on after each use.
10. This product produces considerable cutting force that is felt by the operator.
Make sure your feet are firmly planted and the handles are firmly held while operating this product.
11. During operation, the auger unit could possibly stop. Be prepared at any time to release the buttons.
12. Check cutting blades and auger shaft screws before and after each use to make sure they are tight.
13. The battery must be removed before any repairs.
14. When drilling the holes, do not push down on the unit. If auger begins to drill slowly, blades may need to be sharpened or replaced.
15. When drilling, do not push down too hard. It may bring great load to the unit and the overload protector will work to stop the unit.
16. In case of getting stuck during the drilling, it may hit big rocks or roots. Do not continue drilling. Take out rocks or roots, or drill in another place.
17. DO NOT discard the battery into trash can. Discard the battery according to your local, state, federal or country's regulations.

Mounting handle bars & drill

Fig.L

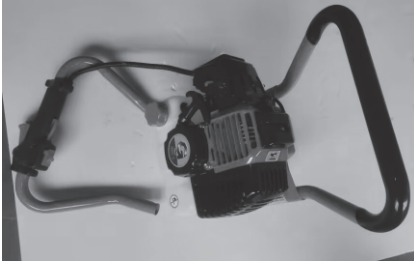


Fig.N



Fig.M

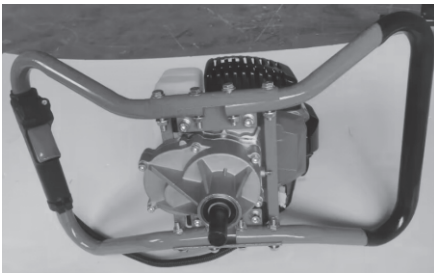


Fig.O



Fig.P

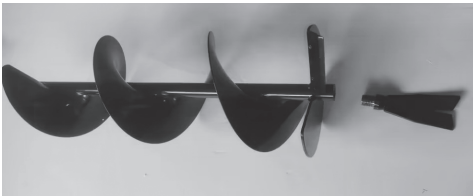


Fig.Q



■ Install the bar holder (I-1) and operation handle (i-7) as shown in Fig.L.

■ Tighten the bar holder (I-1) and operation handle (i-7) with screws and nuts as shown in Fig.M.

■ To mount the drill (Fig. M) turn the aggregate upside down, Put the drill to the drill adapter that you can plug the shear pin through the holes(Fig.N).

■ Insert the shear pin through the drill and drill adapter and secure the shear pin with the split pin(Fig. O).

■ Install the fishtail shaped small part (Fig.P) and the other end of the drill bit along the thread and tighten it on the drill bit (Fig.Q) .

TECHNICAL DETAILS

Engine type	2-stroke
Displacement	52 cc
Engine power	1.5 kW /7500 rpm
Starter	hand pull
Fuel tank capacity	40.58 fl.oz
Mixing ratio gasoline:oil	25:1
Drill length	29.9 inch
Drill diameters	7.87 inch
Reduction gear ratio	34:1
weight (without drill)	18.74 lbs

Technical changes excepted.

IMPORTANT SAFETY INFORMATION

This is the safety alert symbol. It is used to alert you to potential personal injury hazards.

Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE is used to address practices not related to personal injury.

CAUTION without the safety alert symbol, is used to address practices not related to personal injury.

WARNING! Read all instructions. Failure to follow all instructions listed below may result in fire, serious injury and/or DEAT DEATH.

The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SET UP PRECAUTIONS

1. Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. Do not store fuel or other flammable materials nearby.
2. Have multiple ABC class fire extinguishers nearby.
3. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
4. Wear ANSI-approved safety goggles, heavy-duty work gloves, and dust mask/respirator during set up.
5. Use only oil and fuel recommended in the "Specifications" section of this manual.

OPERATING PRECAUTIONS

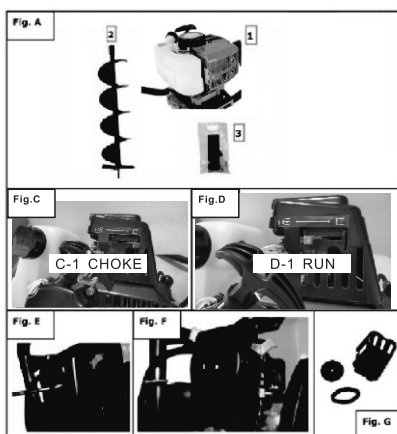
1. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell. Never use inside a home or garage, even if doors and windows are open.
2. Do not lock trigger on. Always use with both hands on handles.
3. Buried utility lines may be unmarked; contact utility companies before drilling. Striking utility lines may cause severe personal injury or death.
4. To prevent severe personal injury or dismemberment from rotating bit: Stand on flat, level, solid surface and brace against torque during use. Keep hands and feet away from auger bit and hole when engine is running.
5. Disconnect and insulate spark plug wire before maintenance and/or changing bits.
6. Never disable safety switches or components.
7. Do not carry between holes with engine running.
8. Carry by handle only; not by bit.
9. Gasoline fumes are explosive. Never smoke or refill with engine running.
10. Keep bystanders away during use.
11. Keep children away from the equipment, especially while it is operating.
12. IMPORTANT! Your Warranty is voided if:
 - a. You do not operate the Auger Drill with the proper 25:1 fuel mix in its fuel tank. Do not run the Engine with an improper fuel mix, low or no fuel mix. Running the engine with an improper fuel mix, low or no fuel mix, will permanently damage the unit.
 - b. You do not operate the Auger Drill with the proper amount of SAE 80W-90 gear oil in its Gearbox. Do not run the Auger Drill with low or no gear oil. Running the Auger Drill with low or no gear oil will permanently damage the unit.
13. Do not leave the equipment unattended when it is running. Turn off the equipment (and remove safety keys, if available) before leaving the work area.
14. Wear ANSI-approved safety goggles, heavy duty work gloves, and steel-toed heavy-duty work boots during setup and use.
15. Maintain a firm grip on the Auger Drill with both hands and be aware of the strong start-up torque of the tool.
16. Keep your thumb near the Kill Switch in the event the Auger Drill must be turned off immediately.
17. Do not use the Auger Drill if the Auger is dull, bent, or damaged.
18. Drill with the Engine running at full speed. Fully squeeze the Speed Control Lever to maintain a steady drilling speed.
19. Keep the Auger clean and undamaged.
20. Keep all guards and safety devices in proper working order and properly adjusted.
21. Before starting the Engine, make sure the Auger is not contacting any object.
22. When shutting off the Engine, make sure the Auger has stopped before setting the tool down.
23. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to a heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near the engine's magneto or recoil starter. Engine should be off during distributor adjustment.

24. Use only accessories that are commended by Harbor Freight Tools for your model.
Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
25. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Gasoline-powered engines may ignite the dust or fumes.
26. Stay alert, watch what you are doing and use common sense when operating this piece of equipment. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
27. Do not overreach. Keep proper footing and balance at all times. This enables better control of the equipment in unexpected situations.
28. Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
29. Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.
30. Do not cover the engine or equipment during operation.
31. Keep the equipment, engine, and surrounding area clean at all times.
32. Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.
33. Do not operate the equipment with known leaks in the engine's fuel system.
34. When spills of fuel or oil occur, they must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a bottom-ventilated, covered, metal container.
35. Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. If damaged, have the equipment serviced before using. Many accidents are caused by poorly maintained equipment.
36. Use the correct equipment for the application. Do not modify the equipment and do not use the equipment for a purpose for which it is not intended.

Included in delivery

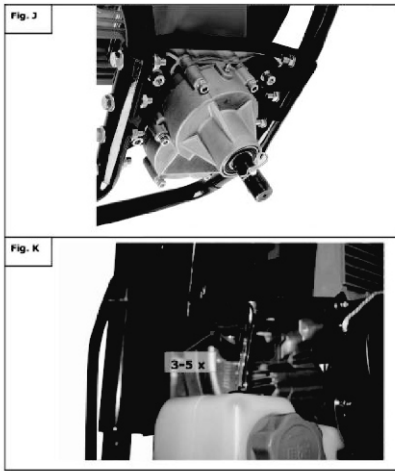
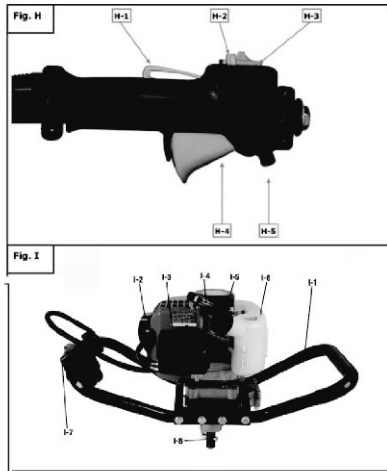
Unpack the package and check the machine for any transport damage and for completeness of delivery.

Fig.A	
1	Engine
2	Driller bit
3	Tool kit



Components (Fig. I)

I-1	Bar holder
I-2	Spark plug cap
I-3	Air filter
I-4	Recoil starter
I-5	Fuel tank cap
I-6	Fuel tank
I-7	Operating handle
I-8	Drill adapter



H-1, Security Lever. The throttle can only be used when it is pressed down.

H-2, Locking Lever. Block the throttle lever.

H-5, Adjustment Knob. Turn it to make the throttle lever cannot be pushed entirely in.

SAFETY INSTRUCTIONS

Our earth auger shall be used only for drilling holes into light/moderate soil at moderate and non-slippery terrain for works like fencing, planting and forestation.

We can not be held responsible for there was per- formed manipulation or adjustments to the machine.

1. Do not operate the machine at insufficient lighting conditions.

Do not operate the machine indoors.

Do not operate the machine when you are tired, when your concentration is impaired, and/ or under the influence of drugs, medication or alcohol.

2. Always be focused when working, take care to maintain a safe posture at every time.

Do not use the auger on a slope steeper than 15°.

Use the anti-rotation bar(optional) when working to prevent stalling torque.

Do not work on slippery ground. The operation of the machine on icy or snowy ground is forbidden! Slipping/stumbling/falling down is a frequent cause of severe injuries.

3. The machine shall be used only by trained persons.

Non authorized persons, especially children, shall be kept away from the work area.

4. Do not wear loose clothing, long hair openly or loose jewellery like necklaces etc. when operating the machine. They might be caught by rotating parts and cause serious injuries.

5. Use proper safety clothing and devices when operating the machine (safety gloves, safety goggles, ear protectors, safety shoes...)

6. Ensure yourself that there are neither water or gas pipes nor electric lines installed under ground in the working area.

Ensure yourself that there are no loose objects lying around in the working area

Eliminate high grass, bushes etc. from the immediate working area. They might be wind up by the rotating drill and block it.

Take especially care, if the ground contains many stones or roots. An unattended stalling of the drill might easily cause an accident

To reduce the risk of stalling, always drill holes in 2-3 working steps. After each drilling sequence, pull out the drill and let get it rid of the ground material

7. Refueling

No open light, fire, sparks or smoking allowed in the surrounding of 10m.

Do not refuel when the engine is running and/or engine parts are still hot.

Refuel only outdoors or in well ventilated areas.

Cleanse spilled gasoline immediately.

OPERATION INSTRUCTIONS

IMPORTANT: The first 10 hours of operation the machine shall not be operated but only at medium engine speed. Do not operate the engine at max. speed right from the start, as the engine itself as well as the gearing components need a running-in time. The engine itself reaches its max. capacity after the first 10 hours of operation. Non-compliance with this instruction reduces your engine lifespan substantially. To reduce the max. possible engine speed, turn the adjustment knob (h-5), so that the throttle lever(h-4) cannot be pushed entirely in.

1. Refueling

The machine is run by a gasoline-oil mixture. You need for the 2-stroke engine a fuel mixture of 25: 1 .

Ensure yourself that no particles get into the fuel tank when refueling. Use a filter. We strongly recommend the usage of HQ premixed fuels especially recommended for 2-stroke motors. Many of them keep their consistency even after long periods of storage. If you prefer to mix your own fuel please use HQ Synthetic Oil for 2-stroke engines.

Synthetic oil reduces accumulation of soot on the spark plug, cylinder, engine cock and exhaust pipe. This increases the degree of lubrication and prolongs the engines lifespan.

Note: Shake fuel tank prior to every usage! During storage oil descends slowly in the fuel tank. If you start the engine under this condition, it has barely any lubrication which would lead to severe engine damage.

2. Cold starting

- Toggle the choke lever upwards fully, to keep the choker to the position "CHOKE"(C-1). Put the switch (H-3) into position START.
- Press the fuel primer bulb 8 times (Fig. k).
- Pull the starter 3 times.
- Toggle the choker lever downwards fully to keep the choke to the position "RUN"(D-1).
- Pull the starter until engine starting.
- Let the engine run in idle speed for 2-3 Minutes.

3. Warm starting

- Put the switch (h-3) into position START.
- Toggle the choker lever downwards fully to keep the choke to the position "RUN"(D-1).
- Pull the starter until engine starting.

Shut the machine off by releasing the throttle lever and put the switch (h-3) into STOP position.

MAINTENANCE

ATTENTION - DANGER!

No cleaning, upkeep, checks or maintenance when machine is running

Be safe: Shut off the machine, let it cool down, disconnect spark plug cap from spark Plug.

The machine does not require intense maintenance. However, to ensure a long lifespan, we strongly recommend following the upkeep and maintenance plan.

1. Upkeep and maintenance plan

Loose or lost screws, nuts, bolts	Regularly prior to each operation
Damage of any part of the machine	Regularly prior to each operation
Machine cleaning	Regularly after operation
Clean spark plug	Every 25 working hours
Grease gearbox	Every 25 working hours
Clean air filter	Every 20-30 working hours

2. Cleaning

Clean the machine from soil, dirt, grass etc. Clean the machine housing with a wet cloth and a mild cleaning solution.

IMPORTANT

The usage of solvents, aggressive chemicals or scouring agents damages the machine solution.

3. Clean the spark plug

Take off the spark plug cap (I-2). Loosen and remove the spark plug. Clean it with a small brush from soot debris. The contact distance shall account approx. 0, 5mm or credit card thickness.

4. Grease the gear box

Product is shipped with gear oil and the new gear oil is added after 25 hours of operation. Grease every 25 operation hours the gearing of the earth auger with a grease gun. Please add an appropriate amount SAE 80W-90 according to the usage (Capacity:100g) .You will find the lubrication nipple (Fig.J) on the side of the gearbox.

5. Clean the air filter

A clogged air filter reduces the engines power output drastically and causes engine dis-function.

Furthermore it reduces the engines lifespan!

Loosen with a hex-key the screw fixing the air filter cover (Fig. E).

Take off the cover and remove the filter (Fig. F).

Clean the air filter (Fig G) with water. Wring it out strongly. Let it dry. Drip some drops of oil onto the filter. Mount the filter back and mount on the cover again.

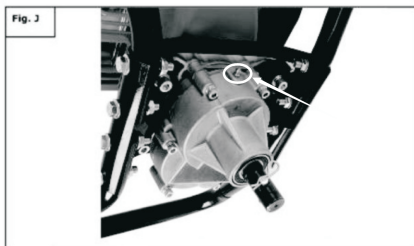
6. Disposal

DO NOT dispose your earth auger in the residual waste! Contact your local authorities for information about best available disposal possibilities in your area. Drain fuel from the fuel tank completely before disposing the earth auger. Disaggregate the auger into its components before disposing its components.

7. Storage

When you store the machine longer than 30 days:

- Drain fuel from fuel tank
- Remove the spark plug, pour into the cylinder some drops of motor oil. Now pull the starter cable out slowly so that the engine revolves several times in order to distribute the oil in the whole combustion chamber
- Clean the spark plug as described in 1.6.3 and mount it back.
- Cover the machine with a cloth sheet and store it at a dry place.



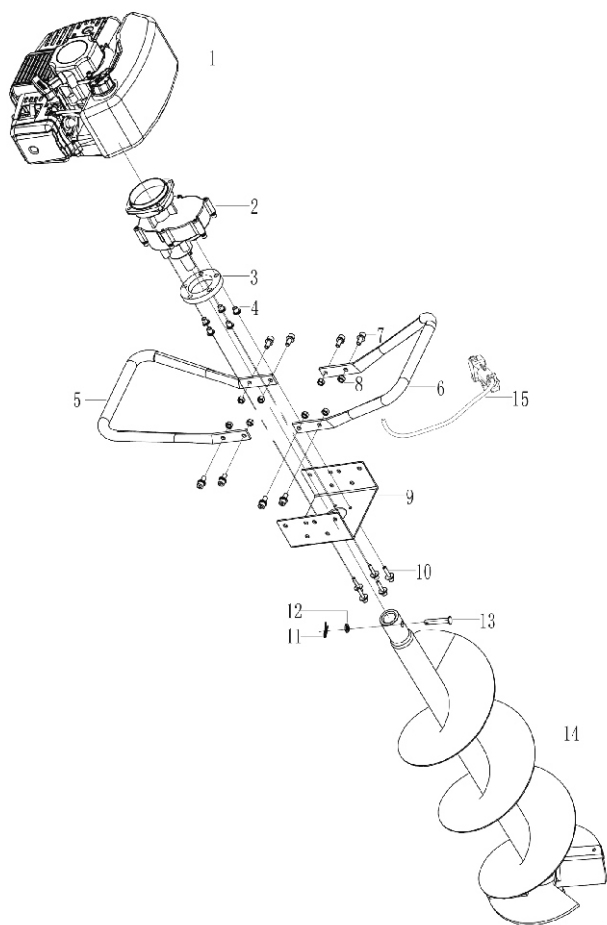


Fig.P: EARTH DRILLER EXPLODER PICTURE AND PARTS LIST

No.	DESCRIPTION	QTY
1	ENGINE ASSY	1
2	GEARBOX ASSY	1
3	ANTI-DAMPING SEAT	1
4	BOLT COVER	5
5	LEFT HANDLE	1
6	RIGHT HANDLE	1
7	M8*20 BOLT	1
8	M8*1.25 NUT	8
9	FRAME	1
10	M6*30 SCREW	5
11	SPLIT PIN ϕ 2.5*25	1
12	ϕ 8.3* ϕ 16*1.5FLAT GASKET	1
13	ϕ 8*45 PIN	1
14	DRILL BIT	1
15	Throttle switch assembly	1

LIMITED 90 DAY WARRANTY

BILT HARD makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase.

This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance.

We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you.

This warranty is expressly in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness. To take advantage of this warranty, the product or part must be returned to us. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.