

**Our associates will ensure the tool works properly before you leave the store. If you experience issues with the tool while completing your project, simply bring it back to the Tool Rental Center to get a replacement. If you purchase Damage Protection at the time of your rental, you are not responsible for repair costs for tools that break due to normal use.**



THE  
**BARRETO**  
MODEL E916/918  
Y-SERIES HYDRAULIC REAR TINE TILLER  
OWNER'S/OPERATOR'S MANUAL

CONGRATULATIONS!

You are now the proud renter of the BARRETO Model 916/918 Y-Series tiller. Please take a moment of your time to look over the following information. Familiarize yourself with the tiller, its characteristics, and method of operation. Pay particular attention to the safety and operating instructions.

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# SPECIFICATIONS

**MODEL NUMBER****916/918****DIMENSIONS**

Weight

460 lbs. (208.65kg)

Height

36" (0.91m)

Length

66" (1.68m)

Width

20.75" (527.05mm)

**ENGINE**

Engine Options

Honda GX270

**FUEL**

Gasoline

**POWER:** hp (kW) at 3600 RPM

8.5 hp (6.34 kW)

**FUEL CAPACITY**

0.95 U.S. gallons (3.6 liters)

**ENGINE OIL CAPACITY**

0.63 quart (.60 liters)

**HOUR METER**

Standard

**HYDRAULIC SYSTEM**Reservoir Capacity  
(liters)7.2 U.S. gallons (27.25  
liters)**OPERATIONS**

Ground Speed, Low Speed

50 FPM (15.24 m/min)

Ground Speed, High Speed

200 FPM (60.96 m/min)

## 916/918 TILLER TROUBLE SHOOTING GUIDE

CAUTION: ALWAYS USE EXTREME CARE WHEN TROUBLE SHOOTING OR MAKING ADJUSTMENTS ON THE TILLER. STAY CLEAR OF TINES WHEN ENGINE IS RUNNING. ALWAYS SHUT THE ENGINE OFF BEFORE DISASSEMBLING ANY COMPONENT.

<b><u>A. ENTIRE HYDRAULIC SYSTEM DOES NOT OPERATE AND THE ENGINE IS NOT UNDER LOAD.</u></b>		
1. Broken or improperly adjusted clutch (actuator) cable.		If broken, replace. Remove slack then adjust for 7/16" to 1/2" movement at actuator lever pin.
2. Low hydraulic oil in tank.		Fill to center of sight glass.
3. Hydraulic pump-to-engine coupler has slipped.		Check for wear and replace both coupler halves and rubber spider as needed.
<b><u>B. TINES FAIL TO ROTATE BUT WHEELS DRIVE.</u></b>		
1. Clutch cable stretched or needs adjustment		Remove cable slack then adjust for 7/16" to 1/2" movement at actuator lever pin.
2. Tine motor worn.		Rebuild or replace motor. New motors are available from Barreto Manufacturing, Inc.
<b><u>C. WHEELS FAIL TO TURN BUT TINES ROTATE</u></b>		
1. Wheel axle keys have been sheared or removed.		Replace keys.
<b><u>D. ENGINE LUGS DOWN OR DIES AND WHEELS AND TINES DO NOT TURN.</u></b>		
1. Rocks or other obstruction blocking tines.		Shut OFF engine and remove obstruction.
2. Tine shaft bound with wire, vines, or grass.		Shut OFF engine and remove debris, especially at the ends.
3. Tilling depth too great for soil conditions.		Shut OFF engine and lower depth bar to raise the tines, decreasing tilling depth.

## TROUBLE SHOOTING GUIDE (continued)

4. Outboard tine shaft bearings binding.		Lubricate or replace bearings as needed.
5. Engine improperly tuned or maintained.		See engine manual and correct as needed.
6. Low oil alert causes engine to shut down.		This may occur if tilling on hills, (not advised). Level the tiller and check engine oil level. Fill if required. Oil alert should reset. See engine manual.
7. Engine losing power due to wear.		See engine manual.
<b><u>E. OIL LEAKS IN HYDRAULIC SYSTEM</u></b>		
1. Fittings are loose.		Tighten as required.
2. Worn or broken hoses.		Replace as necessary.
3. Oil around tine motor shaft.		Inspect tine motor for leaking shaft seal. Rebuild or replace motor. New motors are available from Barreto Manufacturing, Inc.
<b><u>F. EXCESSIVE FOAMING OF HYDRAULIC OIL FROM VENT HOSE</u></b>		
1. Improper oil used.		Verify that hydraulic oil used has anti-foaming additives. *
2. Pump sucking air.		Inspect and tighten fittings on intake side of pump.
3. Hydraulic pump is faulty.		Rebuild or replace pump. New pumps are available from Barreto Manufacturing, Inc.
* Recommended oil is CHEVRON 1000 or equivalent hydraulic oil with anti-foaming and anti-wear additives. Hydraulic oil should have an ISO/AW rating of 68.		

## LUBRICATION INSTRUCTIONS

- The grease zerk on both ends of the tine shaft flange bearing should be greased after every 4 to 8 hours of use.
- Grease zerks on the wheel hubs should be greased once a week or so, depending upon use.

## OPERATING INSTRUCTIONS

1. READ SAFETY INSTRUCTIONS BEFORE OPERATING!
2. Be sure engine oil and hydraulic oil are at proper levels before starting the tiller.
3. STUDY AND UNDERSTAND CONTROLS BEFORE BEGINNING OPERATION!
4. NEVER RUN THE MACHINE IN REVERSE WHILE TINES ARE ROTATING!
5. Always move the tine control lever to "OFF" before reversing wheels.
6. The TINE DRIVE lever should be set at "OFF" when moving the tiller from place to place while not tilling.
7. CLUTCH (ACTUATOR) LEVER: (At left handle grip) Activates the wheel drive and tine rotation controls when squeezed. When released, all motion stops.
8. WHEEL DRIVE LEVER: The wheel speed is variable both in forward and reverse. Moving the WHEEL DRIVE lever to the right causes the tiller to go forward; moving to the left to back up. The farther the control lever is moved away from center, the faster the tiller will travel. When the lever is centered, the wheels are locked in a neutral or park position.
9. HIGH/LOW WHEEL SPEED LEVER: This allows the operator to increase the wheel speed by directing the tine pump output to the wheel drive motor. Use this setting for transport to and from a job site. Note that the Tine motor will be disabled in the HIGH setting and tilling cannot happen in this setting.
10. TINE DRIVE LEVER: The tines operate at a constant speed. The TINE DRIVE lever must be moved all the way over to either the forward "ON" position or "REV" position when tilling. If an object becomes lodged in the tines, put the WHEEL DRIVE lever in neutral and change direction of the tines to dislodge it.
11. OPERATE TILLER ON LEVEL GROUND ONLY!
12. TILLING OPERATION: In most soil and sod conditions, the depth bar can be set with the pin in the third hole from the top. When starting to till, move the TINE DRIVE lever to the ON (forward) or REV position. Tines will dig in either the forward or reverse rotating direction. Squeeze the CLUTCH LEVER completely to engage the tines. Move the WHEEL DRIVE lever to the right until the desired wheel speed is reached. Under most conditions, at least two passes must be made. For deeper tillage, move the depth bar up one hole at a time.

## SAFETY INSTRUCTIONS

1. READ SAFETY AND OPERATING INSTRUCTIONS BEFORE OPERATING!
2. DO NOT LEAVE TILLER UNATTENDED WITH ENGINE RUNNING.
3. Always park on level surface, never on an incline.
4. USE EXTREME CAUTION IF TRANSPORTING TILLER DOWN ANY INCLINE, ESPECIALLY IF USING RAMPS OFF A PICK-UP TRUCK.
5. The SAFETY CLUTCH (ACTUATOR) lever on the left handlebar is for operator protection. **DO NOT TAPE DOWN OR OTHERWISE BY-PASS THIS SAFETY FEATURE!**
6. Objects may become airborne while operating tiller. Wear safety goggles, hard hat, protective footwear and hearing protection while operating or observing!
7. Rotating tines can cause serious injury. **KEEP HANDS AND FEET CLEAR!**
8. **KEEP TINE COVER CLOSED** and **MACHINE LEVEL** while tines are operating.
9. Buried cables or gas lines can cause serious injury or death. Contact local agencies for location.
10. Fuel exhaust and fuel fumes can cause illness or death. Operate outdoors and avoid breathing exhaust and fumes.
11. Fuel-fumes can catch fire or explode. Do not smoke or operate near flames or sparks.
12. Hydraulic oil is under extreme pressure and can get under skin and burn or poison. Check for leaks with cardboard.
13. Muffler and engine get hot enough to cause serious burns. Do not touch until cool.




# SAFETY INSTRUCTIONS OVERVIEW


READ SAFETY AND OPERATING INSTRUCTIONS BEFORE OPERATING!

USE COMMON SENSE AND PLENTY OF IT!

The CLUTCH LEVER on the left handlebar is for the operator's protection. All motion stops when the lever is released. **DO NOT TAPE THE CLUTCH LEVER UP or otherwise by-pass this safety feature!**


Call before you dig. If you do not call, you may cause an accident; suffer injuries or death; cause interruption of services; damage the environment; and/or incur project delays. Expect to be held liable for any damages caused, if you fail to call.

 **DANGER:** Buried electric cables or gas lines can cause serious injury or death if struck with tines. Always determine location of utilities before tilling.


 **WARNING:** Fiber optic cables convey laser light that can injure your eyesight.

STAY CLEAR of moving parts on the tiller.

Wear safety goggles and a hard hat while operating or observing!

 **WARNING:** The tines may throw stones and debris.

Wearing adequate hearing protection while operating or observing is recommended.

 **WARNING:** Exposure to loud noise is cumulative and may permanently damage your hearing.

Wear safety boots and gloves. Wear close-fitting clothing. Contain long hair. Do not wear jewelry. Wear reflective clothing if working near traffic.



## Machinery Directive Declaration

DECLARED DUAL-NUMBER NOISE EMISSION VALUES in accordance with ISO 4871	
	Normal Operation
Measured A-weighted sound power level, $L_{WA}$ (ref. 1pW) in decibels	106
Uncertainty, $K_{WA}$ , in decibels	3
Measured A-weighted sound pressure level, $L_{pA}$ (ref. 20 $\mu$ Pa) at the operator's position in decibels	87
Uncertainty, $K_{pA}$ , in decibels	4
Values determined according to noise test code given in Directive 2000/14/EC Annex III B54 (Trencher) / BS EN ISO 4254-1 Annex B (Tiller) using the basic standard ISO 3744: 1994	
NOTE 1 - The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.	

Values listed above are rounded to the nearest decibel according to ISO 4871

## SAFETY INSTRUCTIONS OVERVIEW (continued)

Only operate outdoors and avoid breathing engine exhaust and fumes.



**WARNING:** Engine exhaust contains carbon monoxide gas that is toxic. Breathing it can cause unconsciousness and death.

Adequate lighting is required, daylight or artificial, for safe operation of the tiller.

Allow adequate side and overhead clearances between tiller and buildings, fences, and trees.



**WARNING:** Contact with the tines while in operation will cause serious injury or even death.

Keep away from tires to avoid getting crushed.



**WARNING:** Getting run over by the tiller will cause injury.

Always leave tiller parked on a level surface.



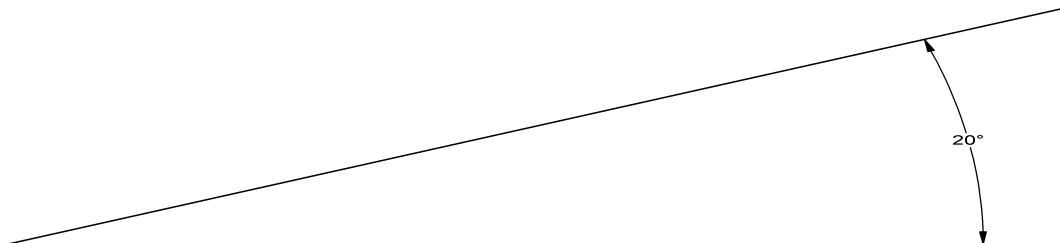
**WARNING:** Do not park on incline. Move the tiller to a level surface. Do not leave tiller unattended with the engine running.

Avoid inclines if at all possible.



**WARNING:** Navigating on any incline increases the danger of the tiller losing traction or rolling over, especially if the surface is wet. If you lose control get out of the way immediately to avoid personal injury. Navigation on inclines should be especially slow and turns very gradual.

A 20° maximum incline is allowed. Honda engines have an Oil Alert system that will automatically stop the engine if tipped more than 20°.



Do not operate tiller near any source of flammable dust or vapors.



**WARNING:** Sparks from the engine exhaust can cause an explosion or fire in a flammable or explosive atmosphere. Fuel fumes can catch fire or explode.

Do not operate tiller near flames or sparks.



**WARNING:** Fuel fumes can catch fire or explode.

Shut off engine and allow it to cool before refueling.



**WARNING:** Fuel fumes can catch fire or explode. Do not smoke when refueling. Do not refuel near a source of flames or sparks.

Do not touch the engine, muffler, or any of the hydraulic components until cool.



**WARNING:** Muffler and engine get hot enough to cause serious burns. For the safety of yourself and others, allow enough time for the engine, muffler, and the hydraulic fluid to cool

completely before performing any cleaning or maintenance.

## SAFETY INSTRUCTIONS OVERVIEW (continued)

Avoid contact with hydraulic fluid.



**WARNING:** When machine is operating, hydraulic fluid is under extreme pressure and can get under skin and burn or poison.

Keep others away. If the job site is near a road or pedestrian path, warn and divert both motorized traffic and pedestrians. As appropriate, use traffic flag personnel, signs, cones, and lighting devices to insure safety.

Never allow anybody to ride on the tiller.

Never lift the tiller over any person at any time.



**WARNING:** If tiller should fall it would crush anybody under it.

We recommend having a fire extinguisher suitable for petrol fires in the operating area.

Attachments can change the center of mass and machine operations. Use only Barreto attachments.

## DETERMINE LOCATION OF UNDERGROUND UTILITIES

OSHA CFR 29 1926.651 requires that the estimated location of underground utilities be determined before beginning excavation or an underground drilling operation. When the actual excavation or bore approaches an estimated utility location, the exact location of the underground installation must be determined by a safe, acceptable and dependable method. If any utility cannot be precisely located, the appropriate utility company must shut it off.

Call before you dig. If you do not call, you may cause an accident; suffer injuries or death; cause interruption of services; damage the environment; and/or incur project delays. Expect to be held liable for any damages caused, if you fail to call.



**DANGER:** Buried electric cables or gas lines can cause serious injury or death if struck with tiller tines. Always determine location of utilities before tilling.



**WARNING:** Fiber optic cables convey laser light that can injure your eyesight.

**CALL 1-888-258-0808 TO LOCATE UTILITIES BEFORE TILLING (US. OR CANADA).** This free service will provide a “One-Call” number for the geographic area that you select. Before you start any digging project, be sure to call the local One-Call system in your area and any utility company that does not subscribe to the One-Call system. The One-Call representative will notify participating utility companies of your proposed digging activities. Utilities will then mark their underground facilities by using the following international marking codes:

Red	Electric
Yellow	Gas, oil, or petroleum
Orange	Communication, telephone, television
Blue	Potable water
Green/brown	Sewer
White	Proposed excavation
Pink	Surveying

For areas not represented by One-Call Systems International, contact the appropriate utility companies to locate and mark the underground installations. Do not rely on visual evidence of underground utilities such as manhole covers or electrical drop boxes...**CALL!**

# WORK SITE ASSESSMENT

Examine the work area for any conditions or obstructions that may inhibit tilling or create a safety hazard for the operator or others. Use the information in this manual combined with good judgment to identify any hazards to avoid.

In addition to calling to DETERMINE LOCATION OF UNDERGROUND UTILITIES (see previous section for details), the operator and/or job foreman should visually inspect the work site. Look for electrical drop boxes, notices of underground placements, manhole covers, recent trenching or tilling activity, any evidence of possible underground placements, banks, drop-offs, rocks, wire, uneven terrain, any existing holes and toxic ground conditions.



Only operate tiller outdoors and avoid breathing engine exhaust and fumes.  
**WARNING:** Engine exhaust contains carbon monoxide gas that is toxic. Breathing it can cause unconsciousness and death.



Do not operate tiller near any source of flammable dust or vapors.  
**WARNING:** Sparks from the engine exhaust can cause an explosion or fire in a flammable or explosive atmosphere. Fuel fumes can catch fire or explode.

Allow adequate side and overhead clearances between tiller and any objects such as buildings, fences, and trees.

Adequate lighting is required, daylight or artificial, for safe operation of the tiller.

Keep others away. If the job site is near a road or pedestrian path, warn and divert both motorized traffic and pedestrians. As appropriate, erect barriers, use traffic flag personnel, signs, cones, and lighting devices to insure safety.



**WARNING:** Someone could step into the tilled area by accident. Walking near the edge of the tilled area could cause loss of balance and possibly cause someone to fall into the rotating tines. Contact with the rotating tines while in operation will cause serious injury or even death.

**MACHINE FUNCTION CHECK:** If the operator releases the CLUTCH LEVER, the wheel drive and rotating tines should stop. This is intended for your safety and must be maintained in good functional condition. Contact your dealer or the factory if anything on the tiller does not function properly.

## CONTACT WITH UNDERGROUND UTILITIES

After LOCATING UNDERGROUND UTILITIES and performing the WORK SITE ASSESSMENT, accidental tine contact with a buried utility might still occur. If it does, stop tilling and call 911 for help.

If you cut a wire or cable, assume that you do not know what kind it is. It may be electrical or any one of several communication lines: telephone, television, or fiber optic. In any case, do not touch it or even look at the ends of it. Stop tilling and call 911 for help. Do not till any more until the appropriate utility company has assessed the situation, taken appropriate action, and informed you that is safe to proceed.

If you strike a pipe, it could be gas, oil, petroleum, water or sewer. In any case, stop tilling, shut off the engine, and evacuate the area immediately. **Call 911 for help.**

**Electrical wires or cables:** If you think that you may have severed electrical wires, stop tilling and call 911 for help. Keep yourself and other people away from the area.



**DANGER:** An electric shock could kill you. Assume that any severed wire or cable is HOT with voltage and do not touch it!

**Gas lines:** If you think that you may have struck a gas line, shut off the engine and evacuate the area immediately. Call 911 for help.



**DANGER:** A gas explosion could kill you. Sparks will likely occur from the tines scraping the metal pipe. If gas leaks out an explosion could easily occur.

**Fiber optic cables:** If you think that you may have severed a fiber optic cable, do not touch or even look at the ends of it.



**WARNING:** Fiber optic cables convey laser light that can injure your eyesight. Call 911 for help.