

# Earthquake<sup>®</sup>

## **OPERATING & PARTS MANUAL**

### ***9800B 2-Person Earth Auger Powerhead***



OM9800B  
Rev. 5/3/06  
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## THANK YOU . . .

for purchasing an Earthquake Earth Auger Powerhead from Ardisam, Inc. We guarantee that this powerhead conforms to applicable North American safety standards, and have worked to ensure that it meets high standards for usability and durability. With proper care, your powerhead/auger will provide many years of service. Please take the time to read this manual carefully to learn how to correctly operate and maintain your powerhead/auger. Congratulations on your investment in quality.

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## MODEL IDENTIFICATION

Your earth auger powerhead has a model/serial number decal located on the side of the engine near the muffler. Engine serial number is located on the top plate of the muffler guard. Write these numbers and the model number in the space provided. You will need these numbers if you order parts.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Engine Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Place of Purchase \_\_\_\_\_

## One Year Limited Warranty

The Ardisam, Inc., Manufacturing Company warrants this Earthquake® Earth Auger Powerhead to be free from defects in material or workmanship. Conditions of this warranty include:

### What is covered under warranty:

For the first year from the date of purchase, Ardisam will furnish 100% parts and labor to correct any defect caused by faulty material or workmanship. All repairs made under warranty must have prior approval from Ardisam, Inc. Items subject to normal wear and tear, due to the nature of their function are not covered under this warranty. Any unit used in a commercial application is covered for a period of 90 days after purchase.

### What is not covered under warranty:

This warranty applies only to products which have not been repaired or altered outside our factory. It covers only defects resulting from normal use, and does not cover defects arising from misuse, alteration, negligence, or accident. This warranty applies only to the original purchaser, and is not transferrable.

### How to obtain service:

Call 800-345-6007 for service assistance, or return the product to us at the address below with transportation charges prepaid.

*This warranty supersedes all other warranties either expressed or implied and all other obligations or liabilities on our part. Ardisam, Inc., does not assume, and does not authorize any other person to assume for us, any liability in connection with the sale of our products. This guarantee is void unless the warranty card is properly filled out and returned to Ardisam, Inc., Cumberland, Wisconsin, within two weeks of the purchase date.*



Earthquake,  
A Division of Ardisam, Inc.  
1690 Elm Street; P.O. Box 666  
Cumberland, Wisconsin 54829  
800-345-6007 · Fax (715) 822-2223  
Email: info@ardisam.com

## CALIFORNIA PROPOSITION 65 WARNING

**Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.**

## OWNER'S RESPONSIBILITY

Accurate assembly and safe and effective use of the earth auger unit is the owner's responsibility.

1. Read and follow all safety instructions.
2. Carefully follow all assembly instructions.
3. Maintain the earth auger unit according to directions and schedule included.
4. Ensure that anyone who uses the earth auger unit is familiar with all controls and safety precautions.

## CAUTIONS AND IMPORTANT NOTES

Two symbols which draw attention to information of special interest appear throughout this manual. These comments range in importance from helpful hints to warnings about risk of personal injury. Please take the time to read and understand them.



### CAUTION

Indicates a situation which may cause personal injury or damage to the earth auger unit or property.



Provides helpful information for proper assembly, operation, or maintenance of your earth auger unit.

## IMPORTANT SAFETY PRECAUTIONS

**Please read this section carefully.** Operate earth auger unit according to safety instructions and recommendations outlined here and inserted throughout the text. Make sure anyone who uses the earth auger unit has read the instructions and is familiar with the controls.



This symbol points out important safety instructions which if not followed could endanger your personal safety. Read and follow all instructions in this manual and any others provided with this equipment.

1. The earth blade is very sharp. Use extreme caution when drilling a hole or replacing the blade.
2. Do not carry the earth auger unit between holes with the engine running.
3. The auger should not rotate when the engine is idling. If it does rotate when engine is idling, contact Ardisam, Inc. for instructions.
4. Always keep hands and feet clear of rotating auger.
5. Do not wear loose clothing while operating the earth auger unit.
6. Do not allow children to operate this earth auger unit. Do not operate the earth auger unit without proper instruction.
7. Do not operate any power equipment under the influence of alcohol or drugs.

## REGISTRATION FORM

**Complete and return.** Your powerhead has a model/serial number decal located on the muffler side of the engine. Record this number and the model number in the space provided on page 2 of this manual. You will need these numbers if you order parts. Fill out and mail the registration card located in your parts packet. Warranty is valid only if your completed registration card is received by Ardisam, Inc., at time of purchase.

## SPARK PLUG INSTALLATION

If your powerhead does not have the spark plug already installed for you. You will have to install it following the instructions given below.

1. Locate the spark plug in the parts packet.
2. With powerhead laying on side labeled "**THIS SIDE UP WHEN NOT IN USE,**" place spark plug in spark plug hole. For replacement use Champion RC-12YC only.

**NOTE: A resistor spark plug must be used for replacement.**

3. Turn by hand until snug.
4. Use a wrench or socket to tighten to 180 inch-pounds of torque. **DO NOT OVERTIGHTEN.**

## OPERATION

### CAUTION

**Please do not start your earth auger unit until you have read the Engine Manual that came with your engine, and the section in this manual titled Safety. If you have read these, follow the steps below to start your earth auger unit. Always perform pre-start checklist before starting the engine.**

1. Read engine manual and follow instructions for fuel type, starting, etc.
2. The clutch will transfer maximum power after about two hours of normal operation. During this break-in period clutch slippage may occur. The clutch should be kept free of oil or other moisture for efficient operation. Each powerhead is tested at the factory, but is not operated for the full break-in period.
3. The earth auger unit should be operated no more than 20 degrees in any direction during continuous use and limited to 30 degrees intermittently. Recommended for adequate lubrication and fuel delivery.

### CAUTION

**It is recommended that the earth auger unit not be tilted at more than a 30 degree angle from the upright position. Failure to do so can cause fuel and/or oil leakage.**

4. When digging in heavy soil, pump the earth auger unit with an up and down motion in the hole for every one foot of depth.
5. Never run engine indoors. Exhaust fumes are deadly.
6. Do not use an earth auger in ice.

## PRE-START CHECKLIST

1. Read and understand the engine manual and operator's manual that came with your unit.
2. Fill oil sump or check oil level. Check oil level often during engine break-in.
3. Fill fuel tank. Use unleaded, regular gasoline.



**NEVER MIX OIL WITH GASOLINE.**



**Never add gas when engine is running or hot from operation. Never fill the tank indoors. Do not smoke when filling fuel tank.**



**Never fill fuel tank completely. Fill tank to 1/2" below bottom of filler neck to provide space for fuel expansion. Wipe any fuel spillage from engine and equipment before starting engine.**

4. Be sure spark plug wire is attached to spark plug.

## STARTING AND STOPPING



**Do not hold throttle lever wide open while starting. Loss of control of powerhead/auger could result.**



**Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas.**



**Keep hands, feet, hair and loose clothing away from any moving parts on engine and equipment.**



**Temperature of muffler and near by areas may exceed 150° F. Avoid these areas.**

### To Start Engine:

1. Open fuel shut-off valve.
2. Flip the on/off switch to **on** position.
3. Move choke lever to the **choke** position.

**NOTE: Do not use the choke to restart a warm engine after a short shut down.**

4. Grasp starter handle and pull rope out, slowly, until it pulls slightly harder. Let rope rewind slowly. Then pull rope with a rapid full arm stroke. Let rope return to starter slowly.
5. When engine fires or starts running, gradually move the choke lever back to the **run** position.

### To Stop Engine:

1. Flip the on/off switch to the **off** position.
2. Close fuel shut-off valve.



**Before storing unit, disconnect spark plug wire from spark plug and attach it to retaining post.**



**Never store engine with fuel in tank indoors or in enclosed, poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light.**



## CAUTION

To prevent accidental starting:  
Engine must be turned off and cool, and spark plug wire must be removed from spark plug before checking and adjusting engine or equipment.

## MAINTENANCE AND STORAGE SAFETY

1. Always allow muffler to cool before filling fuel tank.
2. When storing for over one (1) month, use gas stabilizer in fuel.
3. Do not fill gas tank indoors or when engine is running or is hot.
4. The gear case has four (4) oz. of grease installed at the factory. It is recommended that once a year the gear case be split and the grease level checked. Add grease only if level of grease is below top of the gears. **DO NOT OVERFILL.**
5. For cold weather operation, store the unit in a cool environment. Transferring the unit from a warm to a cold place can cause the build up of harmful condensation.

## ENGINE MAINTENANCE



## CAUTION

Do not operate auger before reading the engine manual provided in the parts packet.



**Engine can overheat and become damaged if debris blocks the cooling fins or recoil housing.**

Refer to the engine manual included in your parts packet for information on engine maintenance. Your engine manual provides detailed information and a maintenance schedule for performing the following tasks:

1. Check oil level every five (5) operating hours and before each use.
2. Change oil after first two (2) operating hours and every 25 operating hours thereafter, more often if operated in extremely dusty or dirty conditions. Change oil while engine is still warm from recent running.
3. Frequently remove dirt and debris from cooling fins, air intake screen, levers and linkage. This will help ensure adequate cooling and correct engine speed.
4. Check air cleaner.



**Never run engine without complete air cleaner installed on engine.**

5. Check spark plug yearly or every 100 operating hours.
6. Check engine and auger often for loose nuts and bolts.

## STORAGE

### CAUTION

Do not store earth auger unit with fuel in tank indoors or in enclosed, poorly ventilated areas, where fuel fumes may reach an open flame, spark, pilot light or an ignited object. Drain fuel outdoors away from any ignition sources. Use only approved fuel containers.

### CAUTION

**FOR LONG TERM STORAGE:** Close fuel shut-off valve and store earth auger unit in an upright position. Failure to do so can cause oil leakage over a prolonged period.

Follow the steps below to prepare your earth auger unit for storage. Read your engine manual for detailed instructions on preparing the engine for storage.

1. Run with gas stabilizer in fuel. Screen in carburetor will glaze shut if gas stabilizer is not used before storage.
2. Drain the fuel system. Run the engine until it stops.
3. Change oil.
4. Remove spark plug, pour one (1) ounce of clean engine oil into spark plug hole. Cover hole with a rag. Pull starter handle slowly several times to distribute oil. Install spark plug. **Do not connect spark plug wire.**
5. Clean entire earth auger unit.
6. Store your earth auger unit in a clean, dry building that is inaccessible to children.

## SERVICE INFORMATION



**IN CASE OF A SERVICE PROBLEM, DO NOT SEND EARTH AUGER UNIT BACK TO RETAILER. CONTACT ARDISAM, INC. AT 800-345-6007.**

*At Ardisam, we build quality and durability into the design of our products; but no amount of careful design by us, and careful maintenance by you, can guarantee a repair-free life for your earth auger unit. Most repairs will be minor, and easily fixed by following the suggestions in the troubleshooting guide in this section. The guide will help you pinpoint the causes of common problems and identify remedies.*

*For more complicated repairs, you may want to rely on your retailer or an authorized mechanic (contact your retailer for a list of authorized mechanics in your area). A parts catalog is included in this section.*

*We will always be glad to answer any questions you have, or help you find suitable assistance. To order parts or inquire about warranty, call or write us at the address found in the next column under the section ordering repair parts.*



## ORDERING REPAIR PARTS

Parts can be obtained from the store where your earth auger powerhead was purchased or direct from the factory. To order from the factory, call or write to:

**Ardisam, Inc.  
1690 Elm Street; P.O. Box 666  
Cumberland, Wisconsin 54829  
800-345-6007 · Fax (715) 822-2223  
Email: [info@ardisam.com](mailto:info@ardisam.com)**

Please include the following information with your order:

1. Part numbers
2. Part description
3. Quantity
4. Model number and serial number

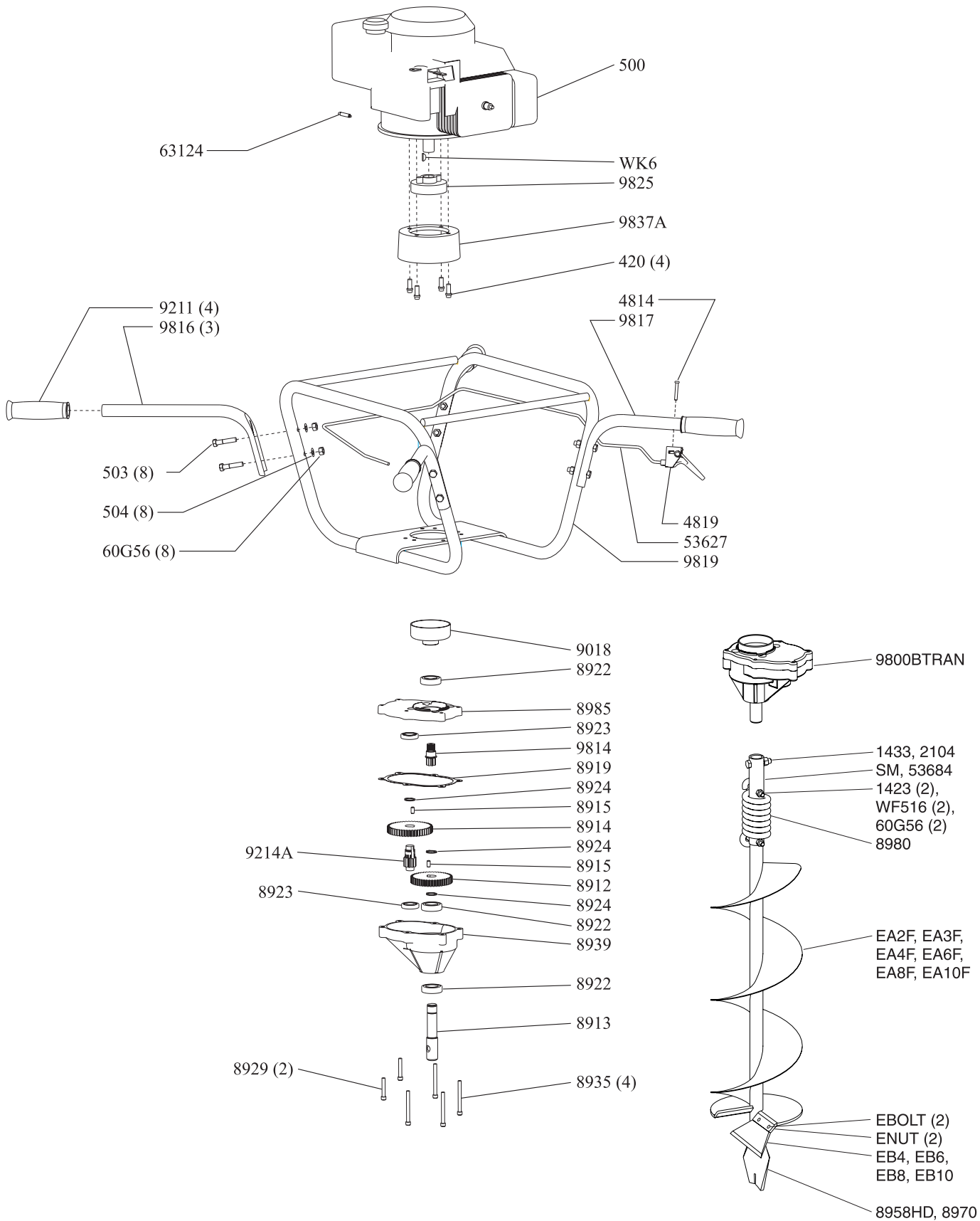


## TROUBLESHOOTING

**⚠ CAUTION**

**Practice safety at all times. Engine must be turned off and allowed to cool, and spark plug wire must be disconnected before attempting any maintenance or repair.**

Problem	Possible cause	Remedy/Action
Engine will not start	<ol style="list-style-type: none"> <li>1. Power switch off</li> <li>2. Spark plug wire disconnected</li> </ol>	<ol style="list-style-type: none"> <li>1. Flip switch to on position</li> <li>2. Connect spark plug wire to spark plug</li> </ol>
Engine runs rough, floods during operation	<ol style="list-style-type: none"> <li>1. Dirty air cleaner</li> <li>2. Carburetor out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace air cleaner</li> <li>2. Take to authorized Briggs &amp; Stratton service center</li> </ol>
Engine is hard to start	<ol style="list-style-type: none"> <li>1. Stale fuel</li> <li>2. Spark plug wire loose</li> <li>3. Dirty carburetor</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain old fuel and replace with fresh. Use gas stabilizer at end of season</li> <li>2. Make sure spark wire is securely attached to spark plug</li> <li>3. Clean carburetor, use gas stabilizer, new gas can</li> </ol>
Engine misses or lacks power	<ol style="list-style-type: none"> <li>1. Clogged fuel tank</li> <li>2. Clogged air cleaner</li> <li>3. Improper carburetor adjustment</li> <li>4. Spark plug dirty, improper gap, or wrong type</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove and clean</li> <li>2. Clean or replace</li> <li>3. Take to authorized Briggs &amp; Stratton service center</li> <li>4. Replace spark plug and adjust gap</li> </ol>
Auger turns at idle	<ol style="list-style-type: none"> <li>1. Idle speed too high</li> <li>2. Broken clutch spring</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust idle speed lower</li> <li>2. Replace both springs</li> </ol>
Auger turns, but has no power	<ol style="list-style-type: none"> <li>1. Carburetor out of adjustment</li> <li>2. Broken transmission</li> <li>3. Worn clutch shoes</li> <li>4. Worn engine lower seal</li> </ol>	<ol style="list-style-type: none"> <li>1. Take to authorized Briggs &amp; Stratton service center</li> <li>2. Return to factory</li> <li>3. Replace clutch shoes and springs</li> <li>4. Take to authorized Briggs &amp; Stratton service center</li> </ol>
Auger cuts slowly	<ol style="list-style-type: none"> <li>1. Damaged point</li> </ol>	<ol style="list-style-type: none"> <li>1. Buy a new fishtail point</li> </ol>
Engine runs, then quits	<ol style="list-style-type: none"> <li>1. Screen in carburetor plugged</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean screen, use gas stabilizer, clean gas can</li> </ol>



**MINIMUM ORDER ..... \$10.00**

**POWERHEAD PARTS**

Part #	Description	Qty.
420	BOLT, C-BORE 5/16-24 X 3/4" .....	4
4814	BOLT, PHILLIPS TRUSS HD 10-24 X 1-1/4" .....	1
4819	TRIGGER ASSEMBLY, LONG THROW .....	1
500	GAS ENGINE BRIGGS & STRATTON 6.5 HP .....	1
503	BOLT, HEX HD 5/16-18 X 1-1/2" .....	8
504	LOCKWASHER, SPRING 5/16" .....	8
53627	CABLE, THROTTLE 43-1/2" .....	1
60G56	NUT, BI-WAY LOCK 5/16-18 .....	8
63124	SPRING, THROTTLE EXTENSION .....	1
8912	GEAR, 44T 3/4" HOLE .....	1
8913	SHAFT, OUTPUT 7/8" .....	1
8914	GEAR, 48T HARD .....	1
8915	DOWEL PIN, STEEL 1/4" X 1/2" .....	2
8919	GASKET, POWERHEAD TRANSMISSION .....	1
8922	BEARING, BALL R12 DOUBLE LIP .....	3
8923	BEARING, BALL R10 .....	2
8924	RING, SNAP EXTERNAL 3/4" .....	3
8929	BOLT, SHCS 1/4-20 X 1-1/2" .....	2
	(gear case bottom to gear case top)	
8935	BOLT, SHCS 1/4-20 X 2-1/2" .....	4
	(gear case to handlebar plate)	
8939	GEAR CASE, LOWER HALF .....	1
8985	GEAR CASE, UPPER HALF .....	1
9018	CLUTCH DRUM .....	1
9211	HANDLE GRIP, 7/8" ID FLANGELESS .....	4
9214A	GEAR, 10T CLUSTER PINION HT .....	1
9800BTRAN	TRANSMISSION ASSEMBLY 30:1 .....	1
9811	SWITCH, ON/OFF (Not Shown) .....	1
9814	GEAR, 7T PINION THREADED .....	1
9816	HANDLE, 2-HOLES .....	3
9817	HANDLE, 3-HOLES .....	1
9819	MAIN HANDLEBAR ASSEMBLY .....	1
9825	ROTOR, CENTRIFUGAL CLUTCH COMPLETE ..	1
9837A	MOUNT RING .....	1
WK6	WOODRUFF KEY #6 .....	1

**EARTH AUGER PARTS**

Part #	Description	Qty.
1423	BOLT-HHCS, 5/16-18 X 2", GRADE 5 .....	2
	(auger shock spring)	
1433	BOLT-HHCS, 3/8-16 X 1-1/2" .....	2
	(auger to powerhead)	
2104	NUT-HEX LOCKING, 3/8-16 .....	2
53684	SHOCK TOP 1-PC (used after 11/05) .....	1
	(used on 6" or larger earth auger)	
60G56	NUT-HEX 2-WAY REVERSIBLE LOCKNUT, 5/16-18	2
8958HD	FISHTAIL POINT .....	1
	(used on 4" or larger earth auger)	
8970	FISHTAIL POINT .....	1
	(used on 2" & 3" earth auger)	
8980	SHOCK SPRING .....	1
EA2F	EARTH AUGER, 2" W/FISHTAIL POINT .....	1
EA3F	EARTH AUGER, 3" W/FISHTAIL POINT .....	1
EA4F	EARTH AUGER, 4" W/FISHTAIL POINT .....	1
EA6F	EARTH AUGER, 6" W/FISHTAIL POINT .....	1
EA8F	EARTH AUGER, 8" W/FISHTAIL POINT .....	1
EA10F	EARTH AUGER, 10" W/FISHTAIL POINT .....	1
EB4	EARTH BLADE, 4" .....	1
	(includes EBOLT & ENUT)	
EB6	EARTH BLADE, 6" .....	1
	(includes EBOLT & ENUT)	
EB6HD	HEAVY DUTY EARTH BLADE, 6" .....	1
	(includes EBOLT & ENUT)	
EB8	EARTH BLADE, 8" .....	1
	(includes EBOLT & ENUT)	
EB8HD	HEAVY DUTY EARTH BLADE, 8" .....	1
	(includes EBOLT & ENUT)	
EB10	EARTH BLADE, 10" .....	1
	(includes EBOLT & ENUT)	
EB10HD	HEAVY DUTY EARTH BLADE, 10" .....	1
	(includes EBOLT & ENUT)	
EBOLT	BOLT-HEX, 1/4-28 X 5/8", GRADE 5 .....	2
	(earth blade to auger)	
ENUT	NUT-NYLOC, 1/4-28 .....	2
SM	SHOCK MECHANISM (used before 11/05) .....	1
	(used on 6" or larger earth auger)	
WF516	WASHER-FLAT, 5/16" .....	2

**ACCESSORIES**

EXT6	DEPTH EXTENSION, 6"
EXT12	DEPTH EXTENSION, 12"
EXT18	DEPTH EXTENSION, 18"

# Earthquake<sup>®</sup>

Earthquake, A Division of Ardisam, Inc.  
1690 Elm Street; P.O. Box 666  
Cumberland, Wisconsin 54829  
800-345-6007 · Fax (715) 822-2223  
Email: [info@ardisam.com](mailto:info@ardisam.com)



# Earthquake<sup>®</sup>

## **2-Person Power Earth Auger 9800H Technical Manual** *(Insert to OM9800B)*



*Shown with optional  
14" tree potting auger*



**ARDISAM, INC.**

1690 Elm Street; P.O. Box 666  
Cumberland, Wisconsin 54829  
Phone (715) 822-2415 Fax (715) 822-4180

**1-800-345-6007**

[www.ardisam.com](http://www.ardisam.com)

TM9800H

Revision11/10/05

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# EARTHQUAKE MODEL 9800H

MINIMUM ORDER .....\$10.00

PART #	DESCRIPTION	QTY.
60G56	NUT-LOC, 5/16-18 BI-WAY ZN .....	12
60G70	TOGGLE SWITCH, ON-OFF .....	1
105	NUT, 10-32 HEX NYLOC .....	1
420	BOLT, 5/16-24 X 3/4" C-BORE .....	4
503	BOLT, 5/16-18 X 1-1/2" HH .....	8
504	LOCKWASHER, 5/16" SPRING .....	7
1423	BOLT, 5/16-18 X 2" HHCS GR5 ZN .....	3
8906WC	SCREW, 10-32 X 1-1/4" PHILLIPS PAN HD ZN .....	1
8912	GEAR, 44T 3/4" HOLE .....	1
8913	SHAFT, OUTPUT 7/8" .....	1
8914	GEAR, 48T HARD .....	1
8915	DOWEL PIN, STEEL 1/4" X 1/2" .....	2

8919	GASKET, POWERHEAD TRANSMISSION .....	1
8922	BEARING, BALL R12 DOUBLE LIP .....	3
8923	BEARING, BALL R10 .....	2
8924	RING, SNAP EXTERNAL 3/4" .....	3
8929	BOLT, 1/4-20 X 1-1/2" SHCS .....	2
8935	BOLT, 1/4-20 X 2-1/2" SHCS .....	4
8939	GEAR CASE, LOWER HALF W/BEARINGS .....	1
8985	GEAR CASE, UPPER HALF W/BEARINGS .....	1
9016	CLUTCH DRUM, 3" THREADED .....	1
9211	HANDLE GRIP, 7/8" ID FLANGELESS .....	4
9214A	GEAR, 10T CLUSTER PINION HT .....	1
9805A	CABLE ASSY, THROTTLE CONTROL .....	1
9814	GEAR, 7T PINION THREADED .....	1
9816	HANDLE .....	3
9817	HANDLE W/THROTTLE HOLE .....	1
9819	HANDLEBAR FRAME WELDMENT .....	1
9822	BEARING, BALL R14-2RS .....	1
9825	ROTOR, CENTRIFUGAL CLUTCH ASSEMBLY ...	1
9832	SPRING, THROTTLE CONTROL .....	1
9837A	MOUNT RING .....	1
9840	PLATE ADAPTER, MOUNT RING .....	1
9841	BRACKET, THROTTLE CABLE CLAMP .....	1
48300	BOLT, 5/16-18 X 2-1/4" HHCS GR5 ZN .....	1
53596A	CLAMP, CABLE YELLOW ZINC .....	1
53664	TAB, THROTTLE .....	1
GCV160	ENGINE, 5.5 HP HONDA VERT SHAFT .....	1
IB5810	BOLT, 5MM X 0.8 X 10MM HH ZN .....	1
IN58	NUT, 5MM X 0.8 NYLOC .....	1
WK6	WOODRUFF KEY #6 .....	1

