Form No. SJ-TJ600E-880E

### **OPERATOR'S MANUAL**

# **IMPORTANT!**Safety Instructions

A Division of Snow Joe, LLC

# All Operators Must Read These Instructions Before Use

Always follow these safety guidelines. Failure to do so may result in serious bodily injury or death.

### **General Safety WARNINGS!**

"When using the electric tiller, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:"

Warning: When servicing use only identical replacement.

Polarized Appliance Connections - To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way. Before using the tiller, take the time to familiarize yourself with the controls, especially how to stop the tiller in an emergency. Only allow responsible individuals who have a thorough understanding of these instructions to operate the tiller. Never allow children to operate the tiller. Retain this manual for future reference and reread it at the start of each tilling session.

⚠ This symbol indicates important safety instructions. Failure to observe and follow these instructions may result in personal injury or property damage. Read and follow all instructions in this manual before attempting to operate this machine.

### **TRAINING**

- Read, understand and follow all instructions on the tiller and in the manual (s) before attempting to assemble and operate. Save this manual for reference and ordering replacement parts.
- 2. Never allow children under 16 years old to operate this machine. Children 16 years old and over should be trained and supervised by an adult who understands the operation of the tiller.
- 3. Never allow an untrained individual to operate the tiller.
- **4.** Understand the function of all the controls and their proper operation. Know how to stop the machine and disengage them quickly.

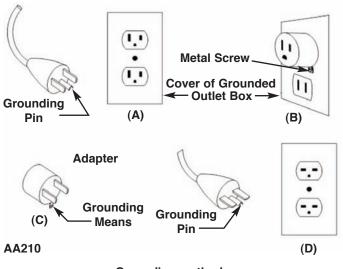
- **5.** Always plan your tilling pattern to avoid discharge of material toward people, pets and property. Thrown objects can cause serious personal injury.
- 6. Keep people, pets and property at least 25 feet from the tiller while it is in operation. Stop the tiller if people or pets enter the discharge area.
- Always observe the surface conditions in order to avoid slipping, falling and unexpected objects.

### **PREPARATION**

- 1. Always inspect the area where the tiller is to be used. Remove all objects (e.g.: stones, sticks, wires and foreign objects) that could be thrown by the tines or cause the operator to trip.
- 2. Thrown objects can cause serious injury to the eyes and exposed body. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair.
- Always operate wearing adequate garments. Do not wear jewelry or other loose clothing, which could become entangled in moving parts. Wear footwear that provides sure footing.
- 4. Observe any noise-prevention regulations and laws.
- Inspect the tiller for worn, missing or damaged parts and safety labels. See maintenance section for detailed instructions.

### **ELECTRICAL SAFETY**

- Always use a grounded three-wire extension cord and receptacle that is made of rubber and intended for outdoor use.
- 2. Keep the extension cord away from the moving tines and hot motor housing.
- 3. Avoid contact with metal objects.



**Grounding methods** 

SAVE THESE INSTRUCTIONS

#### **GENERAL OPERATION**

- Do not operate the machine while under the influence of alcohol or drugs.
- Keep all safety devices in place and working. Do not operate with missing or damaged components.
- 3. Ensure the controls (Start/Stop) function properly before tilling.
- **4.** Hold onto the tiller with both hands during operation. Ensure the grips are dry.
- **5.** Contact with the rotating parts can amputate hands and feet. Do not put hands or feet near rotating parts.
- **6.** Plan your tilling pattern to avoid discharge towards people or property (e.g.: windows, cars etc.). Do not direct discharge at children, bystanders and pets or allow anyone in front of the machine.
- Only operate the tiller when there is good visibility or light and dry conditions. Always watch your footing and keep a firm hold on the grips. Walk don't run!
- **8.** Do not operate the tiller on slippery surfaces. Check your footing as you operate the tiller.
- Exercise caution when changing direction and operating on slopes. Always keep feet and legs a safe distance away from the machine. Look for hidden obstacles or hazards.
- **10. Do not** overload machine capacity by attempting to till to deeply or in ground that presents excessive resistance.
- 11. Stop the tiller and disconnect the electric cord before you leave the operating position (behind the handles) to make any adjustments or inspections. Wait until the tines have come to a complete stop.
- **12.** If the tiller should start to vibrate abnormally, stop the machine and inspect thoroughly for damage.
- **13.** Turn the machine OFF and disconnect the electrical power when moving to a new work area. Allow the tines to complete stop rotating before moving the tiller.
- **14.** Always use care and good judgment when you have a situation that is not covered in this manual. If unsure, always contact the distributors where you bought the tiller or the nearest service location before proceeding.
- **15.** Avoid Dangerous Environment Don't use appliances in damp or wet locations.
- 16. Don't Use In Rain.
- Keep Children Away All visitors should be kept at a distance from work area.
- 18. Dress Properly Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and substantial footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- **19.** Use Safety Glasses Always use face or dust mask if operation is dusty.

- **20.** Use Right Appliance Do not use appliance for any job except that for which it is intended.
- 21. Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the gardening appliance. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
  - **Exception:** This warning does not apply to a battery-operated appliance.
- 22. Warning To reduce the risk of electric shock, use only with an extension cord intended for outdoor use, such as an extension cord of cord type SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A. or SJTOW-A.
- 23. Extension Cord Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating.
- **24.** Avoid Unintentional Starting Don't carry plugged-in appliance with finger on switch. Be sure switch is off when plugging in.
- 25. Don't Abuse Cord Never carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
  Exception: This statement does not apply to a cordless battery-operated gardening appliance.
- **26.** Don't grasp the exposed cutting blades or cutting edges when picking up or holding the appliance. (For grass shears and similar appliances only.)
- Don't Force Appliance It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- **28.** Don't Overreach Keep proper footing and balance at all times.
- **29.** Stay Alert Watch what you are doing. Use common sense. Do not operate appliance when you are tired.
- 30. Disconnect Appliance Disconnect the appliance from the power supply when not in use, before servicing, when changing accessories such as blades, and the like. Exception: This warning does not apply to a batteryoperated appliance.
- 31. Store Idle Appliances Indoors When not in use, appliances should be stored indoors in dry, and high or locked-up place out of reach of children.
- 32. Maintain Appliance With Care Keep cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect appliance cord periodically, and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.

33. Check Damaged Parts – Before further use of the appliance, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in this manual.

### **WORK STOPPAGE**

- Always turn the tiller OFF and disconnect the electrical power when there is a work stoppage or changing work areas. Never leave the machine running when unattended.
- The tines will continue to rotate for a short period after turning the tiller OFF. Wait until the tines have completely stopped before lifting the machine or conducting inspection and maintenance.
- 3. The motor housing remains hot for a short period after the machine is turned OFF. Allow the motor housing to cool off before touching or storing near combustible material.

### MAINTENANCE AND STORAGE

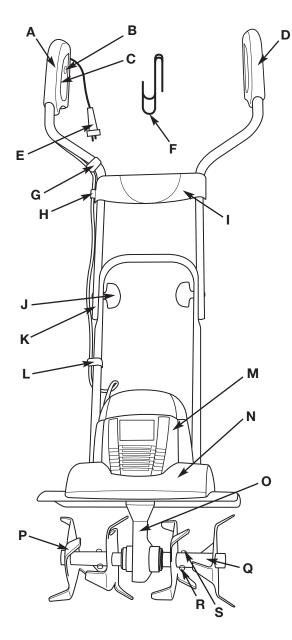
- 1. Maintain or replace safety and instruction labels.
- 2. Disengage all controls, stop the engine and wait until the tines come to a complete stop before cleaning, repairing or inspecting the tiller.
- **3.** Regularly check the following:
  - a. Accumulation of debris around the tines could cause a poor performance or damage to the motor. Inspect and clean before every use.
  - **b.** Safety devices are operating properly. Do not tamper with or adjust safety devices.
  - **c.** Bolts and screws for proper tightness. Visually inspect machine for any damage and the tiller is in safe working condition.
  - d. Always replace damaged parts with original equipment manufacturer's (OEM) parts only. Replacement parts that do not meet the original equipment specifications may lead to improper performance and compromise safety.

# **Safety Symbols**

The following table depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbol	Description
	READ THE OPERATOR'S MANUAL(S) Read, understand and follow all instructions in the manual(s) before attempting to assemble and operate.
	WARNING! Keep out of rain and away from wet areas.
<u> </u>	DANGER! Rotating objects may spin off and cause personal injury. Keep people away from hazard area.
	WARNING! Always turn the machine OFF and disconnect the electrical power before conducting inspection, cleaning and maintenance.
<u></u>	DANGER! Keep electrical extension cable away from tines.
<u>^</u>	WARNING! Rotating parts may cause serious injury. Allow the tines to completely stop before moving the machine, inspection, cleaning and maintenance.
<u></u>	SAFETY ALERT
	DOUBLE INSULATION

# **Know Your Electric Tiller/Cultivator**



Front View Figure 1

### **Part List Legends**

- A. Right-hand Grip
- B. Safety Button
- C. Power Switch
- D. Left-hand Grip
- E. Power Cable
- F. Belt Clip
- G. Cable Clip
- H. Cable Guide
- I. Plastic Cross-plate
- J. Wing-nuts and bolts
- K. Lower Frame
- L. Cable Clip
- M. Vent
- N. Motor Housing
- O. Gearbox
- P. Driveshaft
- Q. Tines
- R. Hex Bolt
- S. Self-locking Nut

# **Technical Data**

- **1.** Power 6.5 Amp
- 2. Main voltage 120 V
- 3. Main frequency 60 Hz
- 4. Working width 14.17 inch/360 mm

- 5. Max working depth 7 inch/180 mm
- 6. Blades 4
- 7. Nominal rotation rate Approx 230 rpm
- 8. Weight 17 lbs/7.85 kg

# **Assembly**



# **CAUTION**



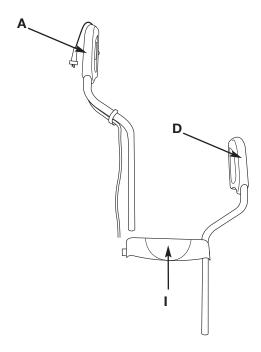
Inspect wiring, which, if damaged during shipping,may cause serious bodily injury during equipment use. If any damage is seen or suspected, do not assemble. Instead, contact Snow Joe Customer Service for assistance. Handle with care during assembly so that electrical wiring does not become damaged.

**Note:** Reference to right or left side of the tiller is determined from behind the unit in the operating position. The "Operator's position" is defined as standing directly behind the tiller.

Follow these steps to assemble:

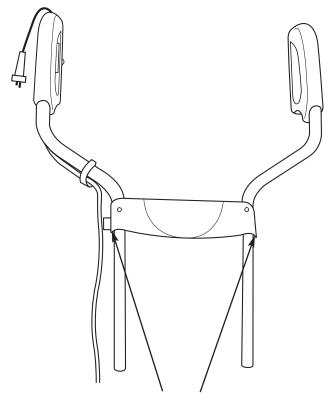
- 1. Remove tiller from the carton.
- Slide the Right-hand Grip (A) and Left-hand Grip (D) into the Plastic Cross Plate (I). Secure the Plastic Cross Plate to the Left and Right-hand Grips with the included screws. (See Fig 2-1, 2-2, 2-3)

**Note:** Use a phillips-head screwdriver. Aligning the holes may be difficult. We recommend fastening one hand grip at a time to the Plastic Cross Plate.



**Front View** 

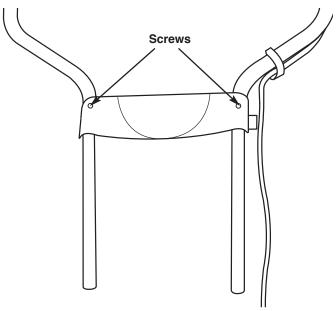
Figure 2-1



Align the bottom of beam with the white line on the side of upper handle before tightening 2 screws.

**Front View** 

Figure 2-2



**Back View** 

Figure 2-3

**3.** Push the power cable into the Cable Guide located on the Plastic Cross Plate (See Fig. 3).

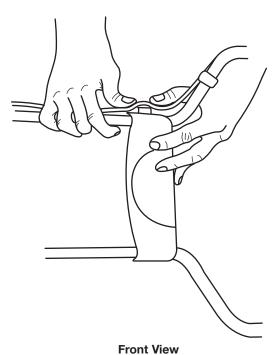
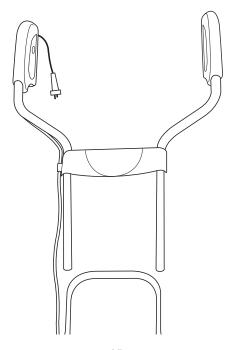


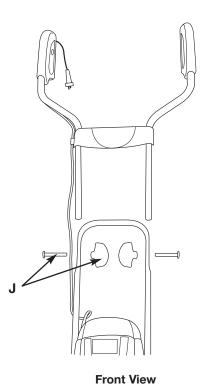
Figure 3

**4.** Position the assembled upper frame onto the motor housing aligning the holes (See Fig. 4).



Front View Figure 4

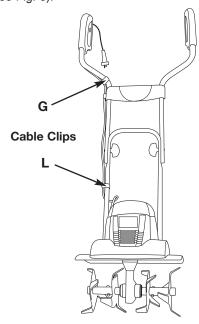
5. Insert the Wing-nuts and bolts (J) and tighten (See Fig. 5).



Front view

Figure 5

**6.** Secure the power cable to the unit body by using the Cable Clips (G, L). Use one clip above the Plastic Cross Plate and the second below the Plastic Cross Plate (See Fig. 6).



Front View Figure 6

# **Operation**

**Note:** Before using this machine, make sure that the power source you will use complies with the specifications detailed in this manual.

This machine is intended for breaking up and tilling coarse soil for the purpose of mixing in fertilizer, peat and compost in domestic areas. Any use other than that specifically named in this manual may lead to damage to the tool and represents a serious injury hazard for the operator.

The operator or user of the tool is responsible for any damage or injury caused to other persons or property. Adults should only operate the machine. Children and persons unfamiliar with the manual must not be allowed to use the tool. Do not use the tool in rain or damp surroundings. The manufacturer shall not be held liable for damage arising from improper use or incorrect operation of the Tiller.

# $\triangle$

### **WARNING**



Carelessness, mishandling or error on the part of the operator may result in bodily injury (e.g.: amputation, projectile impact), or death. The tiller must be operated according to the warnings and guidelines in this manual.

### Securing the Extension Cord

 For safe and efficient use of your electric tiller, use only an UL-rated extension cord recommended for outdoor use. Refer to the Extension Cord Chart that follows.



### WARNING



# Electric shock may cause SEVERE INJURY or DEATH. Heed these warnings:

- Do not allow any part of tiller to make contact with water while powered on. If the appliance becomes wet while turned off, wipe dry before starting.
- Use only a UL-rated extension cord for outdoor, allweather use. Do not use an extension cord over 150 feet (46 meters).
- Do not touch the appliance or its plug with wet hands or while standing in water. Wearing rubber boots offers some protection.

### **EXTENSION CORD CHART**

Cord length is:	100 ft. (30 m)	150 ft. (46m)
Wire gauge is	16	14

# $\triangle$

# **WARNING**



Damaged electrical cords present risk of fire, electrical shock, and serious bodily injury. Before operating the electric tiller, carefully examine the electrical cord. If the cord is damaged, do not use the electric tiller. Replace or repair the damaged cord immediately. If you need assistance, contact an authorized Sun Joe dealer.

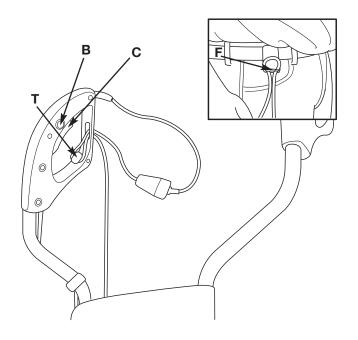


Figure 7

- B. Safety Button
- F. Belt Clip
- C. Power Switch
- T. Cable Tension Relief
- 1. To ease tension on the cable and cord, loop the extension cord onto the cable tension relief (T) (See Fig. 7).
- 2. Plug the extension cord into the plug.
- 3. Plug the extension cord into the power outlet.
- **4.** Hang the extension cord onto the Belt Clip (F) (See Fig. 7) and fasten to your trousers.

### **Powering ON and OFF**

Note: Before starting the electric tiller do the following:

- · Ensure the tines are not touching any objects.
- · Hold the grips firmly with both hands.
- 1. Turn ON the machine by pressing the Safety Button (B) (See Fig. 7) and the squeezing Power Switch (C) (See Fig. 7). Release the Safety Button (B) (See Fig. 7).

**Note:** The tines will begin to rotate and dig themselves into the ground.

After completing the work release Power Switch (C) (See Fig. 7)to turn the machine OFF.

### **Operating the Electric Tiller**



### **WARNING**



Rotating tines may cause serious injury. The tines will continue to turn for a few seconds after the tool has been switched OFF. Do not touch the rotating tines.

Contact with hot components (i.e.: motor housing, gear box) on the machine may cause burns. Allow the machine to cool off before handling.

- 1. Walk the electric tiller through the soil at a normal pace and in as straight a line as possible.
- 2. Always till away from the electrical outlet. Ensure the extension cord is kept away from the work area.
- **3.** Do not try to till to deeply or force the electric tiller into soil that is extremely hard or resistant.

Note: Overloading the machine will cause it to shut down. If this occurs the machine will not operate until the motor has completely cooled down.

- **4.** Always maintain a firm grip on the electric tiller.
- **5.** Lift the electric tiller over hard surfaces. Do not lift or drag the electric tiller when the motor is running.

# Cleaning, Maintenance and Storage



## **WARNING**



Unexpected tines movement may cause personal injury. Before servicing, repairing or inspecting the tiller, turn the motor OFF and disconnect the extension cord. Wait for the tines to completely stop rotating before conducting inspection, cleaning or maintenance.



### **WARNING**



Contact with hot components (i.e.: motor housing, gear box) on the machine may cause burns. Allow the machine to cool off before handling.

#### Important!

- Wear protective gloves when cleaning or maintaining the machine.
- Do not use cleaning fluids or solvents or spray the machine down with water (especially water under pressure) when cleaning the machine.

After each use, follow these steps when cleaning the machine:

- Remove soil, dirt and foliage stuck in the tines, driveshaft, tool surface and vents with a brush or dry cloth.
- 2. Spray or rub biodegradable oil into the tines.
- 3. Clean soiled grips with a damp cloth.

Always inspect the machine for damaged and worn parts after each use. Check that safety features (labels, guards) are in place. Check that nuts, bolts and screws are tight.

### **Changing the Tines**

The machine is fitted with four tine wheels that can easily be changed in pairs. Both of the tine wheel pairs can be fitted on the left or right, as required. Always change both tine pairs at the same time to avoid imbalance and damage to the machine.

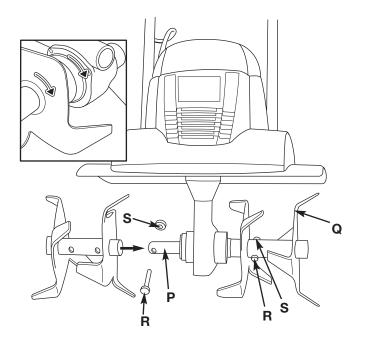


Figure 8

- P. Driveshaft
- S. Self-locking Nut

R. Hex Bolt

- Q. Tines
- 1. Place the electric tiller on the ground. The rating label should be facing upward.
- 2. Unscrew the hex bolt (R) (See Fig. 8) and the self-locking (S) (See Fig. 8).
- 3. Remove the tine wheels off the driveshaft (P) (See Fig. 8).
- 4. Clean the driveshaft (P) with biodegradable oil.
- 5. Place the new tines onto the driveshaft so that the holes on the axles line up with the holes on the driveshaft.

**Important!** The tines must be set in the correct turning direction. Check the arrows on the tines and gearbox point in the same direction.

**6.** Insert the hex bolt (R) through the holes and tighten on the self-locking nut (S).

### **Storage**

- Allow the motor to completely cool down before storing the Tiller.
- Keep the machine clean, dry and out of the reach of children.
- Do not cover the machine with a plastic bag. This may cause moisture build-up.
- 1. Unscrew the wing-nuts (J) and fold the fork grips down.
- 2. Check to ensure the Power Cable (E) is not pinched.
- 3. Hang the machine on the frame tubing.

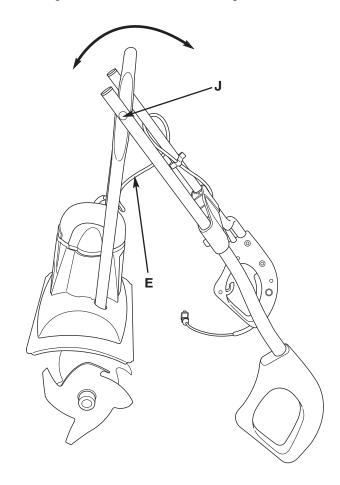


Figure 9

E. Power Cable

J. Wing-nuts and bolts

# **Service and Support**

If your Tiller Joe Electric Tiller/Cultivator requires service or maintenance, please call 1-866-SNOWJOE for assistance.

## **Model and Serial Numbers**

When contacting the company or reordering parts, you will need to provide the model and serial numbers of your product. These are found on the decal affixed to the housing or handle of your tiller. Copy these numbers into the space provided below.



# A Two-Year Full Warranty for residential use in the United States and Canada



### **General Conditions:**

Snow Joe, LLC warrants this product to the original purchaser for two years against defects in material or workmanship when used for normal residential purposes. Snow Joe, LLC will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations, and exclusions set forth herein. Such repair or parts replacement will be free from charge to the original purchaser except noted below.

The duration of the warranty applies only if the product is put to personal use around the household or residence. If the product is put to any business use, commercial or industrial, then the duration of this warranty is 90 days from the date of original purchase. If any product is rented or leased, the duration of the warranty is 90 days from the date of original purchase.

It is the owner's responsibility to perform correctly all maintenance, and minor adjustments explained in the owner's manual.

#### **Electric Products:**

To obtain a replacement electric powered unit or repair the existing electric powered unit, you must return the complete unit and postage prepaid to: Snow Joe Return Center, 86 Executive Avenue, Edison, NJ 08817.

### **Gasoline / Battery Products:**

#### Limitations

- Batteries are warranted only for the period of 12 months after the date of purchase on a prorated basis. Rechargeable batteries
  will be replaced free from charge during the first 90 days. After the initial 90 days, batteries will be replaced at prorated
  cost to the customer
- Idlers, cables, and electrical components are warranted to the original purchaser for use at household or residence for a period
  of two years

#### **Exclusions**

- Snow Joe brand engines are covered under this warranty. All other engines and engine accessories are covered only by the engine manufacturer's warranty and are not covered by this warranty
- Parts used that are not genuine Snow Joe parts are not covered by this warranty
- Damages resulting from misuse, alteration, improper assembly, improper adjustment, neglect, or accident which requires repair
  is not covered under this warranty
- Belts, augers, and tines are not covered under warranty belts, augers, and tines wear out and can be purchased at www.snowjoe.com or by calling 1-866-766-9563

Snow Joe, LLC may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating Snow Joe, LLC to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

This warranty is intended to cover product defects only. Snow Joe, LLC is not liable for indirect, incidental, or consequential damages in connection with the use of the Snow Joe Products covered by this warranty. This warranty does not cover any cost or expense incurred by the purchaser in providing substitute equipment or service during reasonable periods of malfunction or non-use of this product, while waiting for completion of repairs under this warranty. Some states do not allow exclusions of incidental or consequential damages, so the above exclusions may not apply in all states. This warranty may give you specific legal rights in your state.

If you wish to contact Snow Joe, please direct inquiries to the:

Customer Service Department Snow Joe Center 86 Executive Avenue Edison, NJ 08817

Customers who have purchased Snow Joe products exported from the United States and Canada should contact their Snow Joe Distributor (Dealer) to obtain information applicable for your country, province, or state. If for any reason, you are not satisfied with the distributor's service, or if you have difficulty obtaining warranty information, contact your Snow Joe seller. If in the event your efforts are unsatisfactory, please write to the Snow Joe Center at the above address.

If you have any questions about your product warranty, please call 1-866-SNOW-JOE or visit us online at www.snowjoe.com.