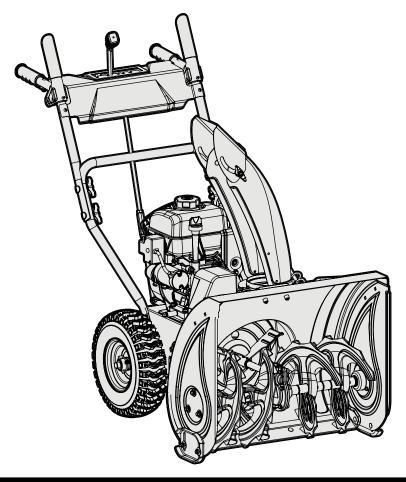


# **MODEL SB24E**

# **ELECTRIC START** 2-STAGE SNOW BLOWER

**Instruction Manual** 



**EPA III CERTIFIED** 

# **NEED HELP? CONTACT US!**

Have product questions? Need technical support? Please feel free to contact us:



1-800-232-1195 (M-F 8AM-5PM CST)



**TECHSUPPORT@WENPRODUCTS.COM** 

**IMPORTANT:** Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged. trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for its intended purpose, you will enjoy years of safe, reliable service.

# **CONTENTS**

WELGUME	<u>3</u>
Specifications	
Introduction	
SAFETY	5
Safety Information	
Snow Blower Safety Warnings	6
Electrical Information	9
BEFORE OPERATING	9
Unpacking & Transportation	
Know Your Snow Blower	
Assembly & Adjustments	12
Snow Blower Preparation	15
OPERATION & MAINTENANCE	18
Starting Your Snow Blower	
Operation	20
Adjustments	22
Maintenance	23
Troubleshooting Guide	29
Exploded View & Parts List	31
Warranty Statement	43

# To purchase accessories for your tool, visit **WENPRODUCTS.COM**

Magnetic Oil Dipstick (Model No. 55201), 100-Foot Extension Cord (Model No. PC1123), 50-Foot Extension Cord (Model No. PC5124), High-Altitude Kit (Part No. SB24E-HA).

# **SPECIFICATIONS**

# **SNOW BLOWER**

Model Number	SB24E
Stages	2-Stage
Maximum Clearing Width	24 inches
Maximum Clearing Height	21 inches
Tire Size	13 x 4.10 - 6
Recommended Tire Pressure	20 - 24 PSI (137.9 - 165 kPa)
Wheel Valve Type	Schrader
Speeds	4 Forward, 2 Reverse
Chute Range of Motion	190 degrees
Weight	172 lbs
Product Dimensions	52.5 x 25.65 x 43.9 inches

# **ENGINE**

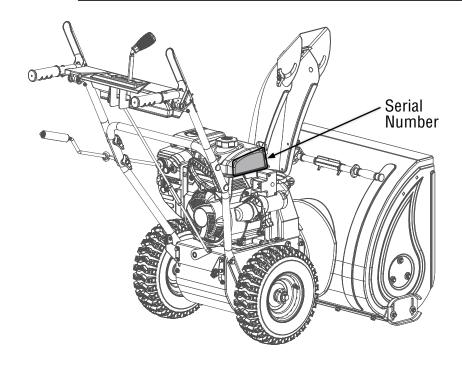
Engine Type	4-Stroke, OHV, Single-Cylinder with forced-air cooling system
Engine Displacement	212cc
Fuel Tank Capacity	0.58 gallons (2.19 L)
Oil Capacity	20.3 fl. oz (0.6 L)
Runtime	up to 2.75 hours
Lubrication System	Splash Lubrication
Spark Plug Type	Torch F7RTC (NGK BPR7ES)
Spark Plug Gap	0.7 - 0.8 mm (0.028 - 0.031 inches)
Spark Plug Torque	18.5 – 22 ft-lb (25 – 30 Nm), or $\frac{1}{2}$ – $\frac{3}{4}$ turn after gasket contacts spark plug hole
Electric Start	120VAC, 11A, Onboard Receptacle

# INTRODUCTION

Thanks for purchasing the WEN snow blower. Refer to the illustration below for the location of the serial number on the side of the gas tank. Record the snow blower information in the spaces provided below. If assistance for information or service is required, please contact customer service by calling **1-800-232-1195**, M-F 8-5 CST; you will be asked to provide the following snow blower information when calling.

#### **Snow Blower Model Number: SB24E**

Date of Purchase: _	
Purchased From:_	
Serial Number:	



#### SERVICE RECORD

Record the service dates of your snow blower in the chart below. Please perform maintenance checks and operations according to this manual. Refer to "Maintenance" on page 23.

Service Record	Date	Date	Date	Date	Date	Date
Change Oil						
Change Spark Plug						
Drain Fuel Tank						
Check Tires						
Clean Spark Arrestor						

**TO MAXIMIZE THE LIFESPAN OF YOUR SNOW BLOWER:** We recommend running your snow blower at least once a month for 20 to 30 minutes. Start the snow blower according to the instructions and plug a small load in to make sure the outlet is producing electricity.

# SAFETY INFORMATION

**WARNING:** Before operating the snow blower, make sure to read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire or serious injury.

#### SAFETY INTRODUCTION

Safety is a combination of common sense, staying alert, and knowing how your tool works. This manual contains important information regarding the snow blower's potential safety concerns, as well as preparation, operation, and maintenance instructions. Before operating this snow blower, be sure to read and observe all warnings and instructions both on the snow blower labels and in this instruction manual. Failure to follow all instructions listed below may result in personal injury.

**NOTE:** The following safety information is not meant to cover all possible conditions and situations that may occur. WEN reserves the right to change this product and specifications at any time without prior notice.

At WEN, we are continuously improving our products. If you find that your tool does not exactly match this manual, please visit **wenproducts.com** for the most up-to-date manual or contact customer service at **1-800-232-1195**, M-F 8-5 CST.

Keep this manual available to all users during the entire life of the tool and review it frequently to maximize safety for both yourself and others.

#### SAVE THESE SAFETY INSTRUCTIONS.

#### SAFETY SYMBOLS

The purpose of following safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

**DANGER:** indicates a hazard, which, if not avoided, will result in death or serious injury.

**WARNING:** indicates a hazard, which, if not avoided, could result in death or serious injury.

**CAUTION:** indicates a hazard, which, if not avoided, might result in minor or moderate injury.

**CAUTION:** when used without the alert symbol, indicates a situation that could result in damage to the machine.

### **NOTICE REGARDING EMISSIONS**

Engines that are certified to comply with U.S. EPA emission regulations for SORE (Small Off Road Equipment), are certified to operate on regular unleaded gasoline, and may include the following emission control systems: (EM) Engine Modifications and (TWC) Three-Way Catalyst (if so equipped).

#### QUESTIONS? PROBLEMS?

In order to answer questions and solve problems in the most efficient and speedy manner, contact customer service at **1-800-232-1195**, M-F 8-5 CST or email **techsupport@wenproducts.com**.

# **SNOW BLOWER SAFETY WARNINGS**

# **DANGER: CARBON MONOXIDE**

Using a snow blower indoors **CAN KILL YOU IN MINUTES**. Snow blower exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the snow blower exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.

**NEVER** use a snow blower inside homes, garages, crawl spaces, or other partially enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air. ONLY use a snow blower outside and far away from windows, doors, and vents. These openings can pull in snow blower exhaust.

Even if you use a snow blower correctly, CO may leak into the home. **ALWAYS** use a battery-powered or battery-backup CO alarm in the home. If you start to feel sick, dizzy, or weak after the snow blower has been running, move to fresh air **RIGHT AWAY**. See a doctor. You may have carbon monoxide poisoning.

**WARNING: RISK OF EXPLOSION. HIGHLY FLAMMABLE:** This snow blower may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death, if ignited. A nearby open flame can lead to explosion even if not directly in contact with gasoline.

- Do not operate near open flame, heat, or any other ignition source. Do not smoke near the snow blower.
- Always operate on a firm, level surface.
- Always turn snow blower off before refueling. Allow the snow blower to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion. Always check for spilled fuel before operating.
- If fuel spills, move the snow blower at least 30 feet away from the spill and wipe clean any spilled fuel before starting the engine.
- Empty fuel tank before storing or transporting the snow blower.

CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals and produces exhaust known to the State of California to cause cancer, birth defects and other reproductive harm.

# **SNOW BLOWER SAFETY WARNINGS**

**WARNING!** Do not let comfort or familiarity with the product replace strict adherence to product safety rules. Failure to follow the safety instructions may result in serious personal injury.

#### OPERATING ENVIRONMENT

- 1. Using a snow blower indoors can kill you in minutes. Only use a snow blower outside and far away from windows, doors and vents.
- 2. Do not smoke near the snow blower.
- 3. Do not operate near open flame, heat, or flammable materials. This snow blower may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to an explosion even if it isn't directly in contact with gasoline.
- 4. Thoroughly inspect the area where the snow blower is to be used. Remove all doormats, newspapers, sleds, boards, wires, extension cords, or any other foreign objects. Such objects pose a tripping hazard, or could be thrown by the auger.
- 5. Maintain distance between the snow blower and bystanders. Keep at least 75 feet away from bystanders, pets, children, etc. Stop the machine if anyone enters this area.
- 6. Thrown objects can cause serious personal injury. Plan your snowblowing pattern to avoid discharge of material towards roads, bystanders, windows, walls, cars, etc.
- 7. Exercise caution to avoid slipping or falling, especially when operating in reverse. Wear appropriate footwear.
- 8. Wear appropriate clothing for the weather conditions. Wear ANSI Z87.1-approved eye protection, with side shields, at all times. Do not wear jewelry, long scarves, or loose clothing these can become entangled in moving parts. Wear hearing protection.

#### **TRAINING**

- 1. **Read, understand, and follow all instructions** on your snow blower's labels, as well as those contained in this manual, before attempting to assemble, operate, maintain, or otherwise use your machine. Keep this manual in a safe place and refer to it regularly. Ensure all users of the machine are properly trained.
- 2. Familiarize yourself with all controls and their proper operation. Know how to stop the machine and disengage the controls quickly.
- 3. Do not allow children under 14 years old, or any non-qualified person, to operate the machine. All operators must be properly trained in the safe use of this machine and follow all instructions on the machine and in this manual. Children 14 years or older should be supervised by a trained adult.

#### SNOW BLOWER PREPARATION

- 1. Do not overfill fuel tank, as gasoline may expand during operation. Do not fill to the very top of the tank. Leave room for gasoline expansion. Always check for spilled fuel before operating.
- 2. If any part of the snow blower is broken, damaged, or defective, make sure it is repaired or replaced before operation. Service should only be performed by a qualified technician.
- 3. **Never modify the snow blower in any way.** Modifying or using the machine for any other purpose for which it is not designed may result in serious injuries, machine damage and voiding of the warranty.
- 4. If using the electric start function, ensure the extension cord is rated for outdoor use. Use only a grounded three-wire extension cord and receptacle. A GFCI outlet is recommended to maximize safety.

Snow blower safety warnings continue on the next page.

# **SNOW BLOWER SAFETY WARNINGS**

**WARNING!** Do not operate the power tool until you have read and understood the following instructions and the warning labels.

- 5. If using the electric start function, ensure the extension cord is of the proper gauge. Refer to the extension cord chart on p. 9 for the recommended gauge and length of extension cord.
- 6. Disengage all control levers before starting the engine.
- 7. Do not make any adjustments to the machine while the engine is running.
- Let the machine warm up for 1 2 minutes before starting to clear snow.

#### SNOW BLOWER OPERATION

- 1. Only use the snow blower for its intended purposes. Modifying or using the snow blower for operations for which it was not designed may cause hazards and personal injury.
- 2. **Do not touch hot parts**. This snow blower produces heat when running. Temperatures near exhaust can exceed 150°F (65°C). Allow snow blower to cool down after use before touching engine or areas of the snow blower that become hot during use.
- 3. **Snow blowers vibrate in normal use.** During and after the use of the snow blower, inspect the snow blower for damage resulting from vibration.
- 4. Always turn snow blower off before refueling. Allow snow blower to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- 5. Remove the engine key from the engine when the engine is not running. Store it in a safe place out of the reach of children.
- 6. Empty fuel tank before storing or transporting the snow blower. Do not store snow blower or gasoline near furnaces, water heaters, or any other appliances that produce heat or have automatic ignitions. Store the snow blower and fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

- 7. Do not operate the machine under the influence of alcohol, drugs, or other substances that could cause lack of awareness.
- 8. Always wash hands after handling machine.
- 9. **Never direct discharge at anyone**, even if you think it will be really funny.
- 10. Never put hands, feet, or other beloved body parts near rotating parts, inside the auger housing, or into the chute assembly, even if the engine is not running. Use the included clean-out tool to clear out clogs.
- 11. **Do not modify or bypass any safety devices.** Keep them in good working order.
- 12. Exercise extra caution when operating on, or crossing, gravel or crushed-rock surfaces. Adjust the skid plates and scraper bar appropriately when gravel or crushed-rock surfaces are involved.
- 13. Do not operate on steep slopes (exceeding 15° inclination).
- 14. **Do not overload the machine.** Let it work at the pace for which it was designed.
- 15. Disengage the auger lever when transporting the product, or not clearing snow.
- 16. **Operate only in good-visibility conditions.** Keep sure footing and a firm grip on the handles. Walk never run.

**CAUTION:** Misuse of this snow blower can damage it or shorten its lifespan.

**NOTE**: This manual cannot possibly cover all situations that could occur. Always use common sense and good judgment when operating the machine.

# **ELECTRICAL INFORMATION**

#### **GUIDELINES AND RECOMMENDATIONS FOR EXTENSION CORDS**

When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to be used according to cord length and ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord. **NOTE**: "Amperage" below refers to the current that the starter motor draws.

AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
AWIFERAGE	25 ft.	50 ft.	100 ft.	150 ft.
11A	16 gauge	16 gauge	14 gauge	12 gauge

- 1. **Examine extension cord before use.** Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- 2. **Do not abuse extension cord.** Do not pull on cord to disconnect from receptacle; always disconnect by pulling on plug. Disconnect the extension cord from the receptacle before disconnecting the product from the extension cord. Protect your extension cords from sharp objects, excessive heat and damp/wet areas.
- 3. **Use a separate electrical circuit for your tool.** This circuit must not be less than a 12-gauge wire and should be protected with a 15A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

**TIP:** WEN offers 12-gauge, outdoor-rated, grounded three-wire extension cords in 50-foot and 100-foot lengths (Model No's. PC1123 & PC5124), available for purchase at **wenproducts.com**.

# **UNPACKING & TRANSPORTATION**

**WARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Failure to follow the safety instructions may result in serious personal injury.

#### UNPACKING

With the help of a friend or trustworthy foe, carefully remove the snow blower from the packaging and place it on a sturdy, flat surface. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list on the next page to make sure you have all of the parts and accessories. If any part is missing or broken, please contact our customer service at **1-800-232-1195** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

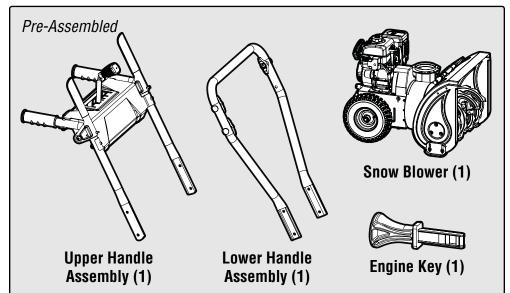
#### **TRANSPORTING**

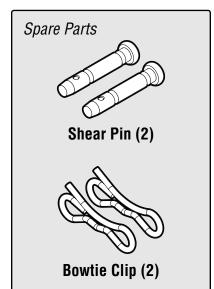
To prevent fuel spillage when transporting, be sure to perform the following steps:

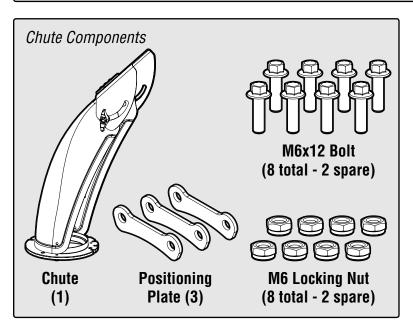
- 1. Tighten the fuel cap and turn the fuel valve to the OFF position.
- 2. Remove the engine key and store it in a safe place.
- 3. Drain the fuel tank if possible. Refer to "Draining The Fuel Tank" on page 27.
- 4. Keep the snow blower upright. Never place the snow blower on its side or upside down doing so could damage the internal components of the engine and make it difficult to start.

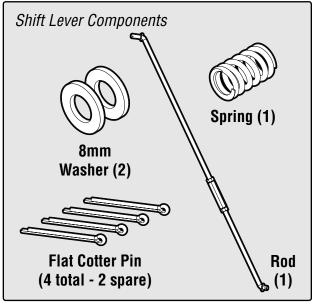
# **UNPACKING & TRANSPORTATION**

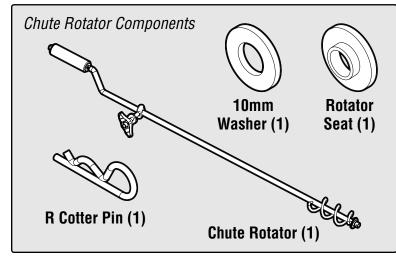
#### **PACKING LIST**

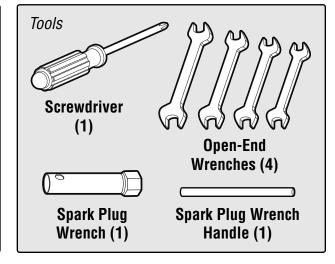








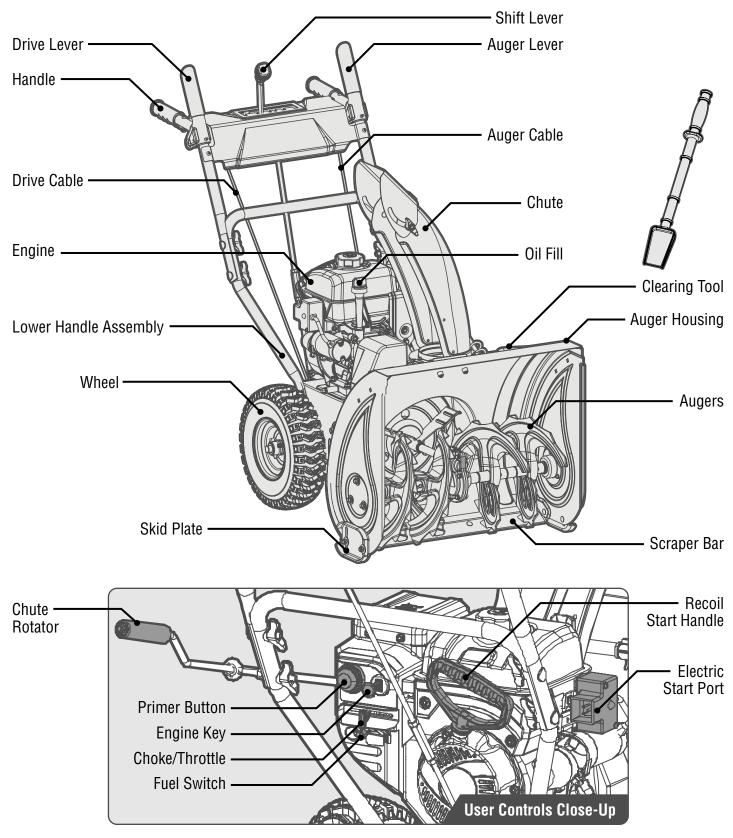




# KNOW YOUR SNOW BLOWER

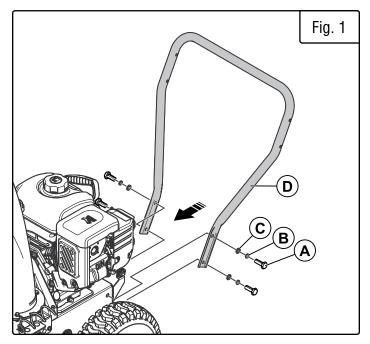
#### TOOL PURPOSE

Snow blowers allow you to clear snow quickly and efficiently. Refer to the following diagrams to become familiarized with all the parts and controls of your snow blower. The components will be referred to later in the manual for assembly and operation instructions.



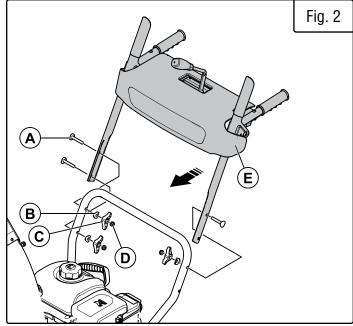
# **ASSEMBLY & ADJUSTMENTS**

**MARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your tool. Failure to follow the safety instructions may result in serious personal injury.



### **INSTALLING THE LOWER HANDLE (FIG. 1)**

- 1. Remove the four M8x25 hex-head bolts (A), lock washers (B), and flat washers (C) from the machine casing.
- 2. Align the four holes on the lower handle (D) with the holes on the machine casing.
- 3. Use the bolts and washers to secure the lower handle to the casing.



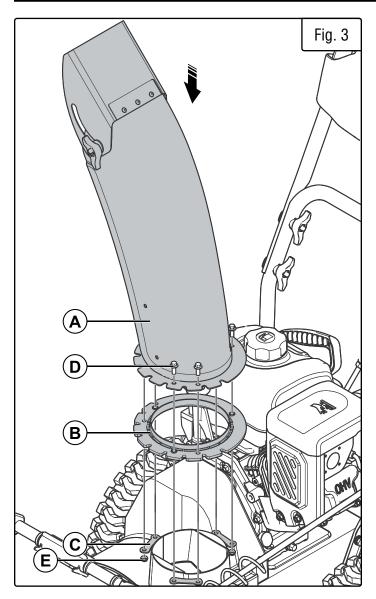
### **INSTALLING THE UPPER HANDLE (FIG. 2)**

To install the upper handle onto the lower handle, you will need to used the pre-installed knobs on the lower handle.

- 1. Remove the three M8x50 bolts (A), bent washers (B), and knobs (C), and nuts (D) from the lower handle assembly.
- 2. Use the bolts, bent washers, knobs, and nuts to secure the upper handle assembly (E) to the lower handle assembly, as shown.

**NOTE:** Ensure that two knobs are installed on the left side, and one on the right side (upper hole), as shown.

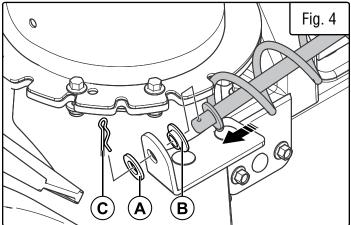
# **ASSEMBLY & ADJUSTMENTS**

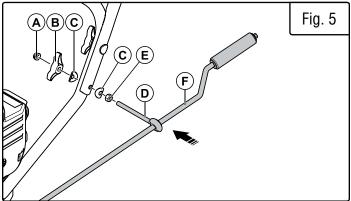


# **INSTALLING THE CHUTE (FIG. 3)**

- 1. Place the chute assembly (A) onto the rotator ring (B) on the impellar housing.
- 2. Use the three positioning plates (C), six M6x12 bolts (D), and six M6 locking nuts (E) to secure the chute assembly to the rotator ring (B).

**NOTE:** Do not over-tighten the lock nuts, or the chute will not be able to rotate. Rotate the chute assembly by hand; if you find that the chute is difficult to rotate, slightly loosen the lock nuts. Make adjustments as necessary until the chute rotates freely, but does not wobble, on the housing. It should be securely mounted.





# INSTALLING THE CHUTE ROTATOR HANDLE ASSEMBLY (FIG. 4 & FIG. 5)

1. Assemble the front end of the chute rotator as shown in **Fig. 4**, using the 10mm washers (A/B) and cotter pin (C). Bend back the ends of the cotter pin to secure it.

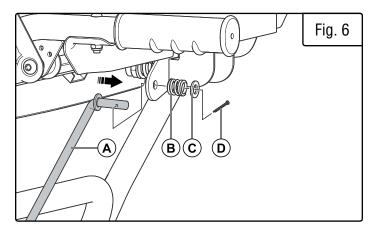
**NOTE:** Ensure that the spiral vanes on the chute rotator handle assembly rest in the notches on the side of the chute base.

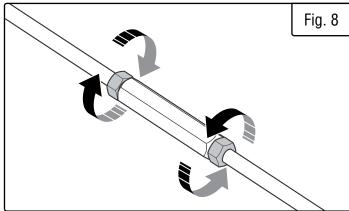
2. Assemble the rear end of the chute rotator (F) as shown in **Fig. 5**, using the bolt (A), knob (B), bent washers (C), eye bolt (D), and nut (E).

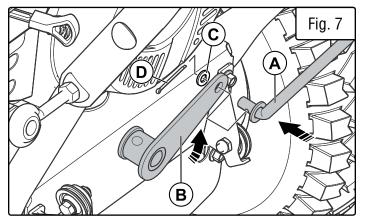
**NOTE:** Adjust the nut on the eye bolt, if necessary, to make it easier to assemble.

3. Check that rotating the chute rotator handle causes the chute to rotate. Adjust mounting nuts if necessary, see "INSTALLING THE CHUTE (Fig. 3)" on page 13.

# **ASSEMBLY & ADJUSTMENTS**



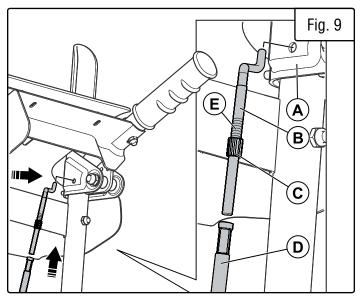




# INSTALLING THE DRIVE CONTROL ROD (FIG. 6, FIG. 7 & FIG. 8)

- 1. Refer to **Fig. 6** for this step. Install the long end of the drive control rod (A) into the hole on the shift lever. Secure it using the spring (B), flat washer (C), and cotter pin (D). Bend back the ends of the cotter pin to secure it.
- 2. Refer to **Fig. 7** for this step. Pull up the transmission connector plate (B) and install the short end of the drive control rod (A) into the hole on the connector plate. Secure it using the flat washer (C) and cotter pin (D). Bend back the ends of the cotter pin to secure it.

**NOTE:** If necessary, the drive control rod's length can be adjusted. The length has been set at the factory and should not require further adjustment; however, if you find it is absolutely necessary, loosen the hex nuts, adjust the bottle screw appropriately, and then tighten the hex nuts, see **Fig. 9**. For proper speed control, the bottle screw should be adjusted back to its original position (marked on the threads).



# **INSTALLING THE CABLES (FIG. 9)**

See page 11 for the proper location of the cables.

- 1. Remove the two cable screw bolts (B) from the cables (D).
- 2. Attach the cable screw bolts to the holes on the insides of the left and right handles (A).
- 3. Attach the cable bottle screw (D) to the cable screw bolts (B).

**NOTE**: Do not twist the cables themselves. Hold the cable itself steady while turning the cable bottle screw to attach it to the cable screw bolt.

- 4. Adjust the position of the brass locking nuts (C) until they are aligned with the mark on the cable screw bolt threads (E).
- 5. Adjust the position of the cable bottle screws until they are flush against the brass locking nuts.

# SNOW BLOWER PREPARATION

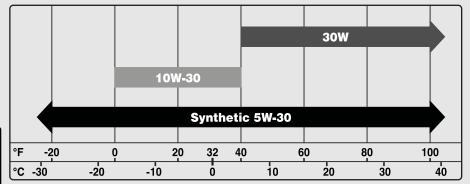
The following section describes the necessary steps to prepare the snow blower for use. If you are unsure about how to perform any of the steps please call **1-800-232-1195** (M-F 8-5 CST) for customer service. Failure to perform these steps properly can damage the snow blower or shorten its life.

### STEP 1 - ADD/CHECK OIL (FIG. 10 & FIG. 11)

The user must add the proper amount of oil before operating the snow blower for the first time. The oil capacity of the engine crankcase is **20.3 fl. oz.** (0.6 L).

**ENGINE OIL RECOMMENDATIONS -** Select good quality detergent oil bearing the American Petroleum Institute (API) service classifications SJ, SL, or SM (synthetic oils may be used). Select the SAE viscosity grade of oil that matches the expected operating temperature. For general use (above 40° F), we recommend using 30W engine oil.

- 30W Engine Oil Temperatures above 40°F.
- 10W-30 Engine Oil
   Temperatures between 0°F 40°F.
- Synthetic 5W-30 Engine Oil All temperature ranges.



#### TO ADD OIL:

1. Place the snow blower on a level surface. Make sure the engine is OFF before adding or checking oil.

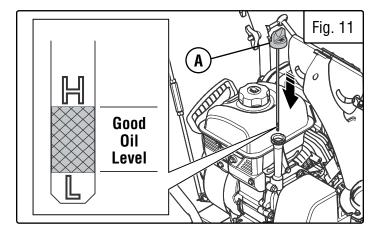
2. Unscrew the oil dipstick (A) from the engine.

**CAUTION!** Keep the snow blower level. Tilting the snow blower to assist in filling will cause oil to flow into the wrong areas of the engine and cause damage.

3. Using an oil funnel or appropriate dispenser, slowly add oil into the oil fill, being careful not to overfill the unit. Use the dipstick to check the oil level as you fill the tank. The oil should reach the section between the upper (H) and lower (L) level. Reinstall the oil dipstick and firmly tighten it. Wipe clean any spilled oil.

# **TO CHECK OIL LEVEL** (before every subsequent start):

- 1. Place the snow blower on a level surface. Make sure the engine is OFF before adding or checking oil.
- 2. Remove and wipe the dipstick (A) with a clean rag.
- 3. Insert the dipstick into the oil fill without screwing it in. Remove the dipstick to check the oil mark.
- 4. If the oil mark does not reach the section between the upper (H) and lower (L) mark on the dipstick, slowly add oil until the oil mark reaches this section.



**CAUTION!** For subsequent operation, the oil level should be checked before each use, or after every 8 hours of operation. Follow the instructions on the next page to check the oil level.

**TIP:** Your WEN snow blower is compatible with the **WEN 55201** Magnetic Oil Dipstick (not included), available for purchase at **wenproducts.com**. The dipstick's industrial-strength magnetic tip will collect metal shavings from your snow blower's oil tank to help preserve the engine and extend your snow blower's lifespan.

# SNOW BLOWER PREPARATION

### STEP 2 - ADD/CHECK FUEL (FIG. 12)

**WARNING: RISK OF EXPLOSION. HIGHLY FLAMMABLE:** This snow blower may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death, if ignited. A nearby open flame can lead to explosion even if not directly in contact with gasoline.

- Do not operate near open flame, heat, or any other ignition source. Do not smoke near the snow blower.
- Always operate on a firm, level surface.
- Always turn the snow blower off before refueling. Allow the snow blower to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill fuel tank. Gasoline may expand during operation. Do not fill to the top of the tank. Allow for expansion. Always check for spilled fuel before operating.
- If fuel spills, move the snow blower at least 30 feet away from the spill and wipe clean any spilled fuel before starting the engine.
- Empty fuel tank before storing or transporting the snow blower.

**ONLY** use fresh (within 30 days from purchase), lead-free gasoline with a **minimum of 87 octane rating**. The snow blower performs best with ethanol-free gasoline. **DO NOT** use gasoline with over 10% ethanol.

The capacity of the fuel tank is **0.58 gallons**. Do not mix oil with gasoline.

#### TO ADD GASOLINE:

- 1. Place the snow blower on a level surface. Make sure the engine is OFF before adding or checking the fuel.
- 2. Unscrew the fuel cap (A) and set it aside. The fuel cap may be tight and hard to unscrew.
- 3. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. Reinstall fuel cap and wipe clean any spilled gasoline with a dry cloth.

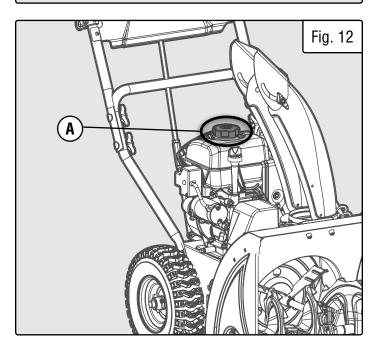
**NOTE:** Do not fill the fuel tank to the very top. If you do so, gasoline will expand and spill during use, even with the fuel cap in place.

#### **TO CHECK GAS LEVEL** (before every subsequent start):

- 1. Before starting the snow blower, check to see if there is sufficient fuel inside the tank.
- 2. If the tank is empty or low, add gasoline to the gas tank. See above section. "To Add Gasoline".

#### **IMPORTANT:**

- Avoid getting dirt or water into the fuel tank.
- Keep gasoline away from sparks, open flames, pilot lights, heat, and other sources of ignition.
- Gasoline can age in the tank and make starting difficult. Never store the snow blower for more than 2 months with fuel in the tank.
- Never use an oil/gasoline mixture.
- · Never use old gasoline.



# SNOW BLOWER PREPARATION

# STEP 3 - ADJUST THE CHUTE & DEFLECTOR PLATE (FIG. 13 & FIG. 14)

The direction in which snow is ejected is controlled by the chute rotator handle (D). Turn the chute rotator handle to adjust the position of the chute (C).

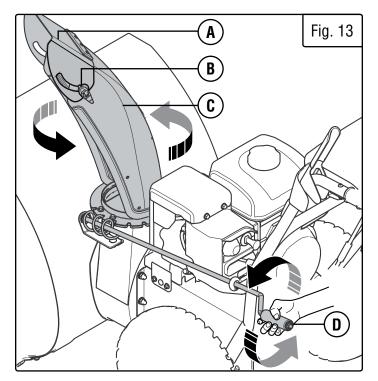
The angle at which snow is ejected (and therefore how far it is ejected) is controlled by the chute deflector plate (A). Loosen the two knobs (B) on the side of the deflector plate and adjust the plate's position. Tighten the knobs.

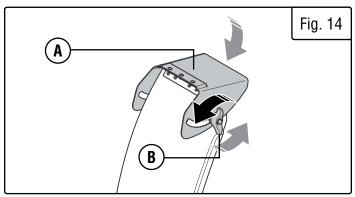
# HIGH ALTITUDE OPERATION ABOVE 3000 FEET

The fuel system on this snow blower may be affected by operation at high altitudes. Proper operation can be ensured by installing an altitude kit at altitudes higher than 3000 feet above sea level. At elevations above 8000 feet, the engine may experience a decrease in performance, even with the proper altitude kit. Operating this snow blower without said kit may increase the engine's emissions and decrease both fuel economy and performance.

You can order the kit at **wenproducts.com** by searching part **SB24E-HA**. This kit should be installed by a qualified mechanic. Refer to the instructions included with your altitude kit for more information about installation.

WARNING! To prevent serious injury from fire, follow the kit installation procedures in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before proceeding. Do not smoke near the snow blower. Warranty will be void if adjustments are not made for high altitude use.





**CAUTION!** UNINSTALL the high altitude kit when operating at altitudes below 3000 feet. Engines with the high-altitude kit installed operated at lower altitudes could cause severe engine damage and affect emissions compliance.

After completing the above preparation, the snow blower is ready to be started.

# STARTING YOUR SNOW BLOWER

Before starting the snow blower, make sure you have read and performed the steps in the "Snow Blower Preparation" section of this manual, pages 15-17. If you are unsure about how to perform any of the steps in this manual please call 1-800-232-1195 (M-F 8-5 CST) for customer service.

#### ✓!\ DANGER: CARBON MONOXIDE

Using a snow blower indoors **CAN KILL YOU IN MINUTES**. Snow blower exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell. If you can smell the snow blower exhaust, you are breathing CO. But even if you cannot smell the exhaust, you could be breathing CO.

**NEVER** use a snow blower inside homes, garages, crawl spaces, or other partially enclosed areas. Deadly levels of carbon monoxide can build up in these areas. Using a fan or opening windows and doors does NOT supply enough fresh air. ONLY use a snow blower outside and far away from windows, doors, and vents. These openings can pull in snow blower exhaust.

Even if you use a snow blower correctly, CO may leak into the home. **ALWAYS** use a battery-powered or batterybackup CO alarm in the home. If you start to feel sick, dizzy, or weak after the snow blower has been running, move to fresh air **RIGHT AWAY**. See a doctor. You may have carbon monoxide poisoning.

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

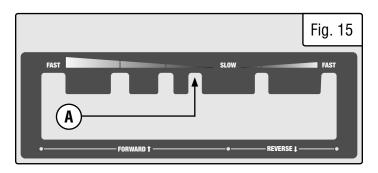
WARNING: Do not operate snow blower near open flame or flammable materials This snow blower may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death if ignited. A nearby open flame can lead to explosion even if it isn't directly in contact with gasoline. Do not smoke near the snow blower.

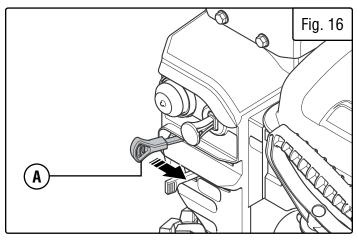
#### BEFORE STARTING YOUR SNOW BLOWER

- 1. Verify that the snow blower is outside on a level surface with at least 2 feet of clearance on all sides.
- 2. Check that there is a sufficient level of oil in the crankcase. Add oil if necessary, see "Step 1 - Add/Check Oil (Fig. 10 & Fig. 11)" on page 15.
- 3. Check that there is a sufficient level of gasoline in the fuel tank. Add fuel if necessary, see "Step 2 - Add/Check" Fuel (Fig. 12)" on page 16.
- 4. Check that the chute and deflector plate are pointing in the desired direction. Adjust the chute and deflector if necessary, see "Step 3 - Adjust The Chute & Deflector Plate (Fig. 13 & Fig. 14)" on page 17.

#### STARTING THE SNOW BLOWER

- 1. Release the lever (right side). Put the shift lever in the low, forward position (Fig. 15 - A).
- 2. Push the fuel switch (Fig. 16 A) to the **ON** position.





# STARTING YOUR SNOW BLOWER

#### STARTING THE SNOW BLOWER - CONTINUED

- 3. Push the choke lever (Fig. 17 A) to the **CLOSED/START** position.
- 4. Insert the engine key (Fig. 18 A) fully into the key slot (**RUN** position).
- 5. Push the primer bulb (Fig. 19 A) **3 times**. This helps the engine start more easily in lower temperatures.
- 6. Follow step A for electric start, or B for recoil start.

#### A. For electric start:

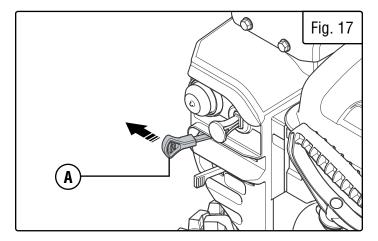
- i. Connect an extension cord to the electric start port (Fig. 20 A) above the starter motor. See "Electrical Information" on page 9 for extension cord guidelines.
- ii. Press and hold the start button on the electric start box for 5 seconds (Fig. 20 B).
- iii. If the engine does not start, wait 5 10 seconds, then try again. Check that the adjustments in steps 1 5 have been performed properly.

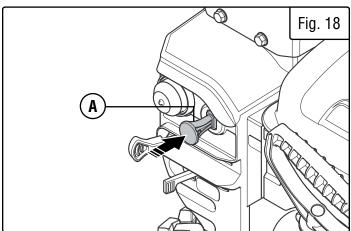
**CAUTION!** Do not try to start the engine more than 10 times. If after 10 times the engine does not start, wait 40 minutes before trying again. If problems persist, consult the troubleshooting guide on p. 29. If the steps in the guide do not resolve the problem, call customer service at 1-800-232-1195, M - F, 8 - 5 CST.

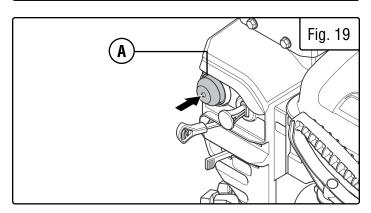
- iv. Once the engine has started, slowly return the choke lever all the way to the **OPEN/RUN** position.
- v. Disconnect the extension cord from the wall receptacle, then from the electric start box.

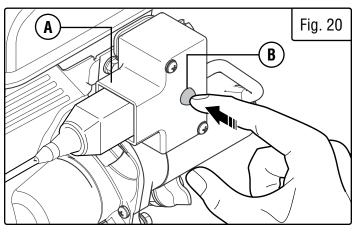
#### B. For **recoil start**:

- i. Pull on the recoil starter handle (see page 11 for loaction) slowly until a slight resistance is felt, then pull quickly to start the engine. Return cord gently into the recoil starter. Never allow the cord to snap back. If engine fails to start, repeat this step.
- i. Once the engine has started, slowly return the choke lever all the way to the **OPEN/RUN** position.
- 7. Allow the engine to run for 30 60 seconds before beginning to clear snow.









### **OPERATION**

WARNING! Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your tool. Failure to follow the safety instructions may result in serious personal injury.

#### CONTROLS

- 1. Squeeze the auger lever (Fig. 21 A) to spin the auger and throw snow. To adjust the position of the chute and chute deflector plate, see "Step 3 Adjust The Chute & Deflector Plate (Fig. 13 & Fig. 14)" on page 17.
- 2. The direction and speed of the snow blower's motion is controlled by the shift lever (Fig. 22 A). There are four speed settings in **forward** (towards the left) and two in **reverse** (towards the right).
- 3. Squeeze the drive lever (Fig. 23 A) to allow the wheels to spin and move the snow blower.

**CAUTION!** Always disengage the drive engagement handle before changing speeds! Failure to perform this step could lead to clutch or transmission damage and will void the warranty.

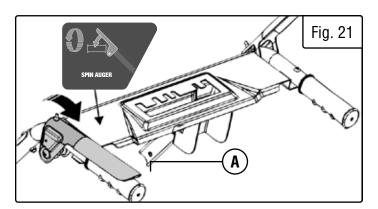
#### TURNING THE SNOW BLOWER OFF

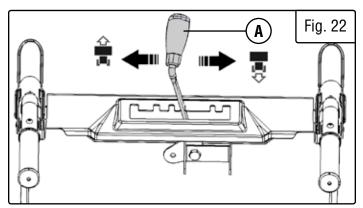
- 1. Release the auger and drive levers.
- 2. Put the shift lever in the **low**, **forward** position (Fig. 24 A).
- 3. Run the auger for 30 60 seconds to clear out any remaining snow inside the auger housing or chute, then release the auger lever.
- 4. Turn the fuel lever to **OFF**. This burns the fuel out of the carburetor and prolongs engine life.

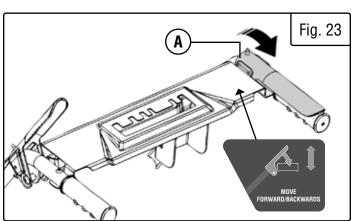
**NOTE**: To shut down the engine immediately, pull the engine key out.

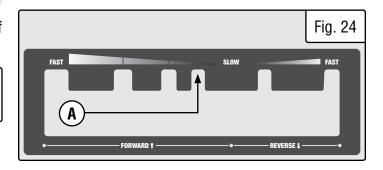
5. Remove the engine key. Store it in a safe place out of the reach of children.

**TIP:** turn the chute through its full range of motion a couple of times to prevent ice buildup.









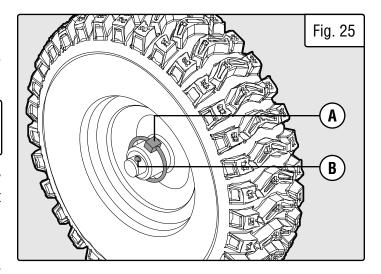
# **OPERATION**

### ADJUSTING WHEELS FOR TURNS (FIG. 25)

Your snow blower is capable of making tight turns when snow blowing. To do this, adjust the click pins as instructed below.

**TIP:** It is best to perform these steps in the comfort of your garage, before you've gone out into the cold.

- 1. Plan your snow blowing route. If you will be mostly turning to the left, perform the steps below on the left wheel; if you will mostly be turning to the right, perform the steps on the right wheel.
- 2. Locate the click pin (A) on the axle. Flip the pin's circular handle up and remove the click pin from the axle.
- 3. Insert the click pin into the outermost hole (B) on the axle and flip the circular handle down. This disengages the wheel from the axle and allows the wheel to rotate independently, making turning much easier.
- 4. To re-engage a wheel with the axle, align the hole on the hub with the hole on the axle. Insert the click pin through the hub and the axle. Flip the circular handle down. The wheel and axle are now re-engaged and will rotate together.



**WARNING!** NEVER run the snow blower without installing the click pin into the outermost hole of the axle. Ensure that both click pins are present and adjusted appropriately.

**CAUTION!** Use extra care when engaging the drive system. If a wheel is disengaged, it will rotate independently of the axle, and the snow blower will tend to pull toward that side when the drive system is engaged (since it is only driving the other wheel).

#### TIPS FOR EFFECTIVE SNOW BLOWING

- Always run the engine at full throttle.
- Adjust the drive speed to the situation at hand. Let the machine do the work.
- It is easier and more efficient to remove snow immediately after it falls.
- Throw snow downwind whenever possible.
- Don't use the snow blower early in the morning, if possible. You know how your neighbor Greg is about noise.
- On flat surfaces (such as concrete, asphalt, etc.), adjust the skid plates so that the bottom of the scraper bar runs along the ground. See "Adjusting The Skid Plates (Fig. 26)" on page 22.
- On uneven surfaces (such as gravel, crushed rock, etc.) raise the scraper bar slightly above the top of the gravel surface. Ensure that gravel and stones do not enter the auger housing, as they could cause injuries if they are ejected.

**NOTE:** the auger blades are mounted to their shaft with shear pins that are designed to break if a foreign object enters the auger housing. This is to prevent machine damage and operator or bystander injury. For information on replacing the shear pins, see "Replacing Shear Pins (Fig. 27)" on page 24.

- Clear clogs immediately, see "Clearing Clogs" on page 22.
- If the auger or drive do not engage when the handle is squeezed, release it immediately and turn the engine OFF.

### **OPERATION**

#### **CLEARING CLOGS**

A clearing tool is included with your snow blower and can be mounted in the clasp on the auger housing for easy access.

- 1. Turn the engine OFF and wait for all moving parts (wheels, impeller, auger blades, etc.) to stop moving.
- 2. Use the clearing tool to clear the clog.
- 3. Replace the clearing tool in the clasp on the auger housing.

**WARNING!** NEVER use your hands to clear a clog! Only use the clearing tool.

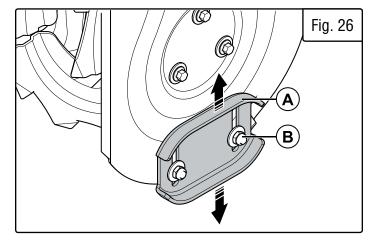
4. Run the auger for a few seconds to clear out any remaining snow or ice.

### **ADJUSTMENTS**

#### **ADJUSTING THE SKID PLATES (FIG. 26)**

The skid plate setting controls how far above the ground the scraper bar operates. When operating on concrete, asphalt, or other smooth surfaces, adjust the skid plate so that the bottom of the scraper bar rides along the ground. When operating on gravel, dirt, crushed rock, or other uneven surfaces, adjust the skid plate so that the bottom of the scraper bar rides just above the ground, to prevent debris from entering the auger. Surfaces with larger, coarser debris (e.g. larger pieces of gravel) require a more-raised scraper bar. **NOTE:** The skid plates are pre-adjusted for smooth surfaces from the factory.

- 1. Make sure the snow blower is on a smooth, level surface.
- 2. Place a spacer board on the ground underneath the scraper bar, between the skid plates (A). The thickness of the board should be the same as the height you want to raise the scraper bar to. The skid plates should not touch the board.
- 3. Use a wrench to loosen the 2 nuts (B) on each skid plate. Let each skid plate slide down until it is flat against the ground.
- 4. Tighten the nuts and remove the spacer board.
- 5. Ensure the skid plates are adjusted to the same height on each side this will prevent uneven wear.



#### ADJUSTING THE ENGINE SPEED

For maximum efficacy while snow blowing, we recommend running the engine at (or near) maximum throttle. However, if for some reason you need to lower the engine speed, follow the instructions below.

- 1. The choke lever is a combination choke/throttle lever. To decrease engine speed, move the choke lever to the right (past OPEN/RUN). To increase engine speed, move it back toward OPEN/RUN.
- 2. The engine speed is at maximum when the choke lever is set to OPEN/RUN.

#### RECOMMENDED MAINTENANCE SCHEDULE

Proper routine maintenance of the now blower will help prolong the life of the machine. Please perform maintenance checks and operations according to the maintenance schedule below, Table 1. If there are any questions about the maintenance procedures listed in this manual, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

**WARNING!** Make sure the engine is OFF, the key is removed, all moving parts have stopped, and the snow blower has cooled down before performing any maintenance. Failure to comply may cause serious injury.

Maintenan	nmended ice Schedule Blower)	Every 8 Hours or Daily	Every 25 Hours	Every 3 Months or 50 Hours	Every 6 Months or 100 Hours	Before Stor- age	As Necessary
	Inspect	Х					
Tires	Check/Adjust Pressure	Х	Х			Х	
Impeller &	Inspect	Х					
Auger	Clear						Х
Shear Pins	Replace						Х
Scraper Bar	Replace						Х
Skid Plates	Replace						Х
Drive & Auger	Inspect	Х					
Cables	Adjust Tension						Х
Body	Clear Snow/Ice	Х				Х	
Duine Delte	Inspect		Х				
Drive Belts	Replace				Х		
Auger Gears	Lubricate			Х			
Friction Disc	Replace				Х		
Maintenan	nmended ce Schedule gine)	Every 8 Hours or Daily	Every 25 Hours	Every 3 Months or 50 Hours	Every 6 Months or 100 Hours	Before Stor- age	As Necessary
Engine Oil	Check Level	Х					
Eligille Uli	Replace		Χ*				Х
Spark Plug	Check/Clean/ Regap				Х		
Carburetor	Drain	Х					Х
Fuel	Check Level	Х					
ruei	Drain					Х	Х

<sup>\*</sup> Clean/change more often under harsh conditions or operating under heavy load.

Table 1 - Recommended Maintenance Schedule

#### **IMPORTANT SNOW BLOWER MAINTENANCE TIPS:**

- Drain your carburetor after each use and before storage to prevent it from clogging.
- Do not store the snow blower with fuel inside the tank for more than 2 months the fuel will go bad.
- Run the snow blower for 20 to 30 minutes every month to maximize its lifespan.

**NOTE:** Failure to properly maintain the snow blower will void the warranty.

**WARNING!** Any attempt to repair or replace electrical parts on this tool may be hazardous. Servicing of the tool must be performed by a qualified technician. When servicing, use only identical WEN replacement parts. Use of other parts may be hazardous or induce product failure.

#### TIRE MAINTENANCE

Inspect the tires after each use for wear and tear. Keep the tires away from gasoline, oil, and other chemicals, in order to prevent degradation of the rubber. Avoid running over stumps, stones, ruts, glass, knives, sea urchins, porcupines, and other sharp objects that could damage the tires.

Maintain tire pressure. Recommended tire pressure is 20 - 24 PSI (137.9 – 165 kPa). Use a standard tire pressure gauge to check tire pressure. Keep tire pressure the same in each tire. Fill tires using a portable air compressor or other compressed air source. The tires are equipped with a Schrader valve.

**WARNING!** Over-inflating a tire could cause it to burst, causing severe injury. DO NOT INFLATE TIRE PAST 24 PSI.

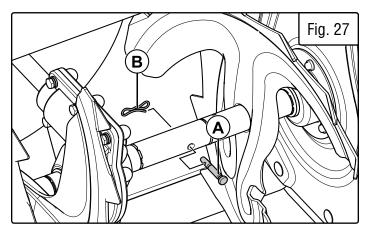
**CAUTION!** When storing your snow blower for the season, decrease tire pressure to 20 PSI. As spring arrives, the air in your tires will warm up and expand, raising the internal tire pressure. If the tire pressure is not lowered, they could burst.

**NOTE**: The tires are tubeless. If the air pressure is allowed to drop too low, the tire may come off the rim and need to be re-beaded.

#### **IMPELLER & AUGER MAINTENANCE**

Check the impeller and auger for snow, ice, and debris before and after use. Remove any snow, ice or debris before storing the snow blower, or starting it.

**CAUTION!** NEVER use an open flame (such as a lighter, blowtorch, or flamethrower) to melt snow or ice. Bring the snow blower to a heated area and let the snow or ice melt on its own, or use a hairdryer or heat gun.



### **REPLACING SHEAR PINS (FIG. 27)**

If a shear pin fails, it has done its job in protecting the product from damage. Replacement shear pins and bowtie clips can be ordered from **wenproducts.com** (Part No's. **SB24E-0208** and **SB24E-0209**, respectively). Shear pins and bowtie clips are not covered under the warranty.

To replace the the shear pins, stop the engine and wait for the auger blades to come to a complete stop. Install a new shear pin (A) and bowtie clip (B). Your snow blower comes with two spare shear pins and two spare bowtie clips.

#### SCRAPER BAR MAINTENANCE

Check the scraper bar (see page 11) for excess wear - if it has begun to exhibit signs of severe wear, it is time to replace it. Replacement scraper bars can be ordered from **wenproducts.com** (Part No. **SB24E-0329**). Scraper bars are a wear-out part and are not covered under the warranty.

To replace the scraper bar, remove the four nuts and bolts that secure the scraper bar to the auger housing. Install the new scraper bar and replace the nuts and bolts. Securely tighten the nuts.

### **ADJUSTING CABLE TENSION (FIG. 28)**

Over time, the auger and drive engagement cables may lengthen. To adjust cable tension, adjust the brass locking nut (C) and then adjust the cable bottle screw (D).

#### SNOW BLOWER BODY MAINTENANCE

Keep the body of the snow blower clean to prevent improper operation or machine damage from dirt & debris. Inspect all ventilation openings on the snow blower. These must be kept clean and unobstructed.

Wipe down the snow blower's housing with a damp cloth and mild detergent. Dry it with a towel.

**NOTE:** Do not clean the snow blower with water alone – it will freeze in low temperatures and cause machine damage. Do not allow soap or water into the inside of your snow blower.

#### **DRIVE BELT MAINTENANCE**

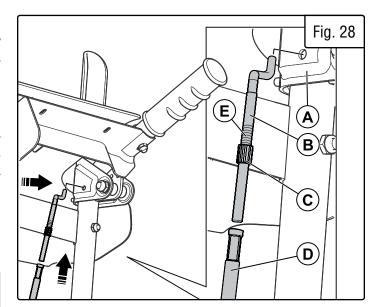
Periodically inspect the drive belts according to the Recommended Maintenance Schedule on page 23. Remove the two bolts (Fig. 29) that secure the belt cover to the impeller housing. Check the belts for wear and tear. If they are worn, frayed, stiff, or broken, they will need to be replaced.

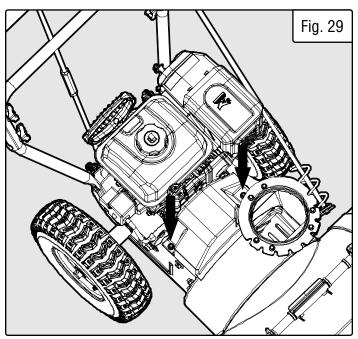
Replacement belts can be ordered at **wenproducts.com** (Part No's. **SB24E-0324** & **SB24E-0606**). Belts should be replaced by an authorized service center. Contact customer service at **1-800-232-1195**, M-F, 8-5 CST, or **techsupport@wenproducts.com** for the location of the authorized service center nearest you.

#### SKID PLATE MAINTENANCE

Check the skid plates for excess wear - if they have begun to exhibit signs of severe wear, it is time to replace them. Replacement skid plates can be ordered from **wenproducts.com** (Part No. **SB24E-0303**). Skid plates are a wear-out part and are not covered under the warranty.

To replace a skid plate, remove the two nuts and bolts that secure the skid plate to the auger housing. Install the new skid plate and replace the nuts and bolts. Securely tighten the nuts.





#### FRICTION DISC REPLACEMENT

After a long time (>100 hours), the friction disc may require replacement. The interval of replacement depends on how hard the machine was run, climate, etc. Replacement friction discs can be ordered at **wenproducts.com** (Part No. **SB24E-0508**). Friction discs should be replaced by an authorized service center. Contact customer service at **1-800-232-1195**, M - F, 8 - 5 CST, or **techsupport@wenproducts.com** for the location of the authorized service center nearest you.

#### AUGER GEARBOX LUBRICATION

Lubricate the gearbox according to the Recommended Maintenance Schedule on page 23. Use a grease gun to apply 1.25-2 oz (35-55 g) of extreme-pressure, NLGI grade 3, automotive bearing or chassis grease to the grease fitting on the auger gearbox (Fig. 30). The bearings on your snow blower are permanently lubricated and require no additional lubrication.

#### **CHECKING & CHANGING OIL**

Check the oil according to the Recommended Maintenance Schedule on page 23. The oil capacity of the engine is 20.3 fl. oz. (0.6 L). Add oil when the oil level is low. For the proper type and weight of oil refer to page 15. This is a critical step for proper engine starting. To check the oil level and/or add oil, see "Step 1 - Add/ Check Oil (Fig. 10 & Fig. 11)" on page 15.

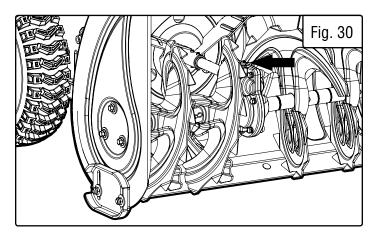
#### To change the oil:

- 1. Run the engine for a few minutes to warm the oil up. Warm oil flows more easily.
- 2. Prepare an approved oil-storage container underneath the oil drain bolt (Fig. 31). **NOTE:** to avoid spills from the carburetor bowl, drain the carburetor (refer to "Draining The Carburetor" on page 2227) before draining the oil.
- 3. Unscrew the oil drain bolt and allow oil to drain from the engine completely.
- 4. Reinstall the oil drain bolt and tighten it securely. Wipe clean any oil spillage.
- 5. To add new oil, see "Step 1 Add/Check Oil (Fig. 10 & Fig. 11)" on page 15.

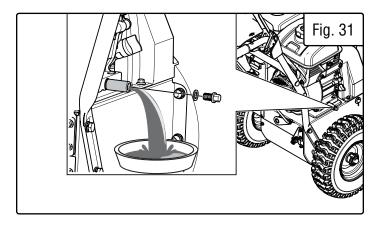
#### SPARK PLUG MAINTENANCE

Inspect and change the spark plug every 100 hours of operation (refer to the Recommended Maintenance Schedule on page 23). The spark plug is important for proper engine operation. Check the spark plug regularly to maintain proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped.

1. Gently pull on the spark plug boot (Fig. 32 - B) to remove it. Be careful not to tear insulation or wire.



**TIP:** Your WEN snow blower is compatible with the **WEN 55201 Magnetic Oil Dipstick** (not included), available for purchase at **wenproducts.com**. The dipstick's industrial-strength magnetic tip will collect metal shavings from your snow blower's oil tank to help preserve the engine and extend your snow blower's lifespan. Remove the oil plug & install the Magnetic Oil Dipstick.



**NOTE:** Never dispose of used engine oil in the trash or down a drain. Please call a local recycling center or auto garage to arrange proper oil disposal.

**CAUTION!** Never run the engine with low oil, or with no oil. Doing so will permanently damage the engine and void the warranty.

**CAUTION!** Let the muffler cool down completely before performing spark plug maintenance.

2. Use the included spark plug wrench and handle to unscrew the spark plug from the engine. Remove the spark plug from the engine.

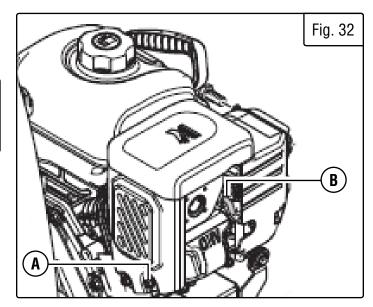
**TIP:** There is limited space for the wrench to turn. Use both rows of holes in the spark plug wrench to gain leverage to loosen the plug.

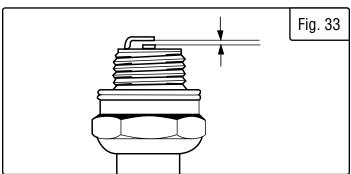
- 3. Visually inspect the spark plug. If it is cracked or chipped, or if the electrodes are worn or burned, discard it and replace with a new spark plug. We recommend replacing it with a Torch F7RTC/NGK BPR7ES spark plug. These can be purchased from **wenproducts.com** by searching part number **SB24E-2008**.
- 4. If re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base, then re-gap the spark plug.
- 5. Measure the plug gap with a spark plug gap gauge. The gap should be 0.7 to 0.8 mm (0.028-0.031 in). Carefully adjust the gap if necessary. See Fig. 33.
- 6. Screw the spark plug back into the spark plug hole using the spark plug wrench. Do not over-tighten spark plug. Recommended tightening of the spark plug is  $\frac{1}{2}$  to  $\frac{3}{4}$  of a turn after the spark plug gasket contacts the spark plug hole, or 18.5-22 ft-lb torque (25-30 Nm).
- 7. Reinstall the spark plug boot over the spark plug.

#### DRAINING THE CARBURETOR

Drain the carburetor after every use and before storing the snow blower (refer to the Recommended Maintenance Schedule on page 23). Draining the carburetor can help prevent build-up and blockages caused by stagnant fuel inside of the carburetor.

- 1. Prepare an approved gasoline-storage container under the carburetor to collect the drained fuel. Make sure the fuel valve is turned OFF.
- 2. The carburetor can be accessed from the left side of the snow blower, next to the cylinder head cover. To drain the carburetor, open up the carburetor drain screw (Fig. 32 A) with a Phillips-head screwdriver and drain out any gasoline that has built up inside.
- 3. Once the fuel has drained, close the drain screw.





**NOTE:** Make sure to drain your carburetor before storing the snow blower for long periods of time.

#### DRAINING THE FUEL TANK

Drain and clean the fuel tank each year, or before storing the snow blower for longer than two months.

- 1. Prepare an approved gasoline-storage container under the carburetor. Make sure the fuel valve is turned OFF
- Remove the carburetor drain screw. Set it aside.
- 3. Turn the fuel valve to ON and let the fuel tank drain completely This may take a while, depending on how much gasoline remains in the tank.
- 4. Once the fuel has drained, replace the drain screw and turn the fuel valve OFF.
- 5. Start and run the engine until the fuel runs out. Then, drain the carburetor.

**CAUTION!** Store the emptied gasoline in a suitable place. Never store fuel for more than 2 months.

#### TRANSPORTATION & STORAGE

For transportation information, see "Transporting" on page 9.

**WARNING!** Avoid direct sunlight inside a vehicle. If the snow blower is left in an enclosed vehicle for many hours, the high temperature could cause the fuel to vaporize and result in a possible explosion.

Shut off the snow blower and allow the unit to cool to room temperature before storing it. NEVER place any type of storage cover on the snow blower while it is still hot. Do not obstruct any ventilation openings.

Follow the procedures below for properly storing your snow blower. We highly recommend running your snow blower once a month for 20 to 30 minutes, to ensure it is ready when you need it.

#### For Short Periods (30 to 60 Days):

- Drain the carburetor. Refer to "Draining The Carburetor" on page 27.
- Add fuel stabilizer: Follow the suggested portions and instructions of your preferred stabilizer. Run the engine for 15 to 20 minutes, allowing the fuel stabilizer to mix with the gasoline and circulate through the carburetor, and then top off with fuel. Filling the fuel tank full reduces the amount of air in the tank and helps fight deterioration of fuel.

#### For Extended Periods (Over 60 Days):

- Drain the fuel tank and carburetor. Refer to "Draining The Fuel Tank" and "Draining The Carburetor" on page 27.
- Never store snow blower with fuel in the tank for more than two months.
- Change the engine oil. Refer to "Checking & Changing Oil" on page 26.

**WARNING!** Store the snow blower upright in a cool and dry location, away from sources of heat, open flames, sparks or pilot lights.

#### PRODUCT DISPOSAL

Do not dispose of used snow blower or parts with your household waste. This product contains electrical or electronic components that should be recycled. Please take this product to your local recycling facility for responsible disposal to minimize its environmental impact.

Do not dispose of used oil or fuel in the trash or down a drain. Please contact your local recycling center or auto garage to arrange proper oil/fuel disposal.



Please recycle the packaging and electronic components where facilities exist.

# TROUBLESHOOTING GUIDE

**WARNING!** Stop using the tool immediately if any of the following problems occur. Repairs and replacements should only be performed by an authorized technician. For any questions, please contact our customer service at (800) 232-1195, M-F 8-5 CST or email us at **techsupport@wenproducts.com**.

PROBLEM	POSSIBLE CAUSE	SOLUTION	
	1. Choke improperly adjusted.	1. Adjust choke.	
	2. Fuel line blocked.	2. Clean fuel line.	
Engine idles roughly or runs roughly.	3. Engine is filled with contaminated or old fuel.	3. Drain fuel tank and carburetor. Replace with fresh gasoline (87 octane, 10% ethanol maximum).	
	4. Bad carburetor.	4. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
Excessive vibration.	Loose/damaged augers or loose part.	Tighten all fasteners. Check that auger shear pins are intact. Replace shear pins if needed.	
Excessive vibration.	2. Engine adjustment problem.	2. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
	1. Wheel V-belt is worn, is slipping, or is off the pulley.	1. Check V-belt. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
Loss of drive traction, or slowing of drive speed.	2. Wheel(s) deflated.	2. Check wheel pressure. Adjust if necessary.	
oronnig or anno opcour	3. Worn friction disc.	3. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
	Chute deflector or chute is clogged.	1. Shut off engine and clear clog.	
Loss of snow discharge, or	2. Auger is blocked.	2. Shut off engine and clear blockage.	
slowing of snow discharge.	3. Broken shear pin.	3. Replace shear pin.	
	4. Worn friction disc.	4. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
Chute difficult to move.	Snow or ice is blocking chute rotation.	1. Clear snow or ice.	
	2. Mounting nuts too tight.	2. Loosen mounting nuts.	
	1. Uneven tire pressure.	Check tire pressure on both sides and adjust tire pressure until they are equal.	
Product turns to one side or leans to one side.	Tire lock pin disengaged from wheel axle on one side.	Ensure both tire lock pins go through the tires and the wheel axle.	
	3. Uneven skid plate adjustment.	3. Adjust skid plates height.	

Troubleshooting guide continues on the next page.

# TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION	
	1. Engine key not inserted.	1. Insert engine key fully.	
	2. Not enough gasoline in tank.	2. Fill tank.	
	3. Fuel valve is OFF.	3. Turn fuel valve to ON.	
	4. Choke is set to OPEN / RUN (cold engine).	4. Set choke to CLOSED / START.	
	5. Choke is set to CLOSED / START (warm engine).	5. Set choke to OPEN / RUN.	
	6. Primer bulb was not pushed.	6. Push primer bulb.	
	7. Engine is flooded.	7. Wait 5 minutes. DO NOT prime engine. Restart engine with choke in CLOSED / START position.	
	8. Engine is filled with contaminated or old fuel.	8. Drain fuel tank and carburetor. Replace with fresh gasoline (87 octane, 10% ethanol maximum).	
Engine will not start.	9. Carburetor is air-locked.	9. Turn fuel valve to OFF. Remove bolt from bottom of carburetor. Remove carburetor bowl and allow float to reset. Replace bowl and re-install bolt.	
	10. Spark plug boot disconnected.	10. Connect spark plug boot to spark plug.	
	11. Spark plug dirty or broken.	11. Examine spark plug. Clean or replace as needed.	
	12. Electric start: power cord not connected.	12. Connect power cord.	
	13. Electric start: no line voltage.	13. Check line voltage at power source.	
	14. Electric start: power cord gauge too low or power cord too long.	14. Refer to chart on p. 9 for recommended power cord length and gauge.	
	15. Faulty ignition coil.	15. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
	16. Electric start: faulty starter motor or control box.	16. Contact customer service at 1-800-232-1195 M – F 8 – 5 CST for assistance.	
	1. Too much snow being blown.	Decrease forward speed. Blow a narrower path through the snow.	
	2. Fuel tank cap covered in snow or ice.	2. Clean fuel tank cap.	
Decreased power.	3. Muffler dirty or clogged.	Shut off engine and wait for it to cool down. Clean muffler.	
	4. Improper cable length.	4. Adjust cable length or replace cable.	
	5. Carburetor air intake is blocked.	5. Check and clear carburetor.	

**NOTE:** Replacement parts can be purchased from wenproducts.com, or by calling our customer service at (800) 232-1195, M-F 8-5 CST. Parts and accessories that wear down over the course of normal use are not covered by the two-year warranty.

# **ENGINE PARTS LIST**

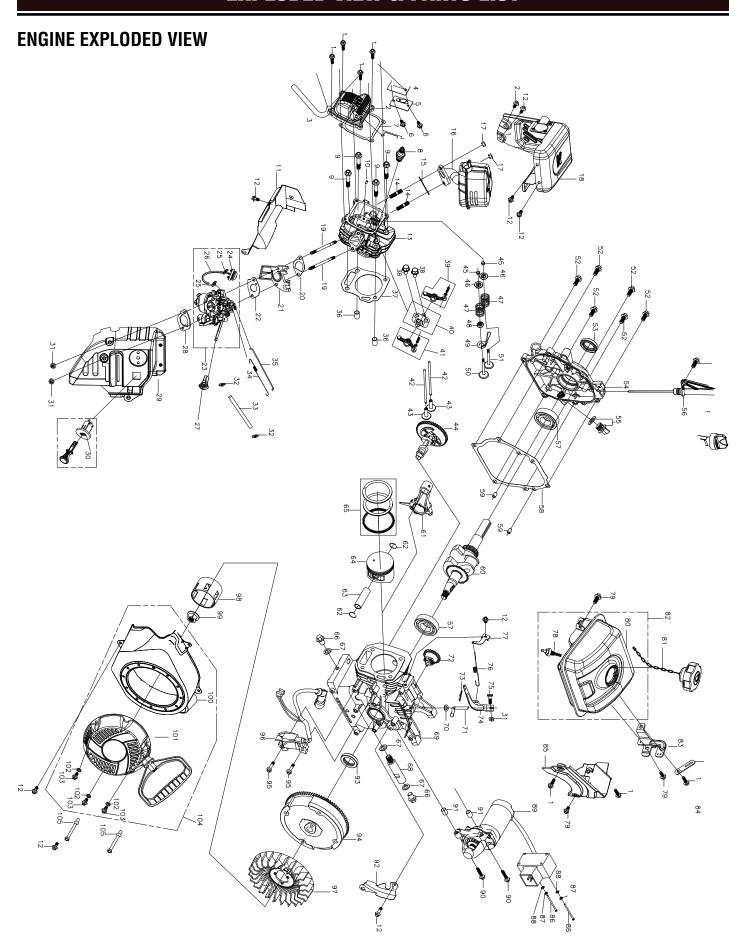
No.	Part No.	Description	Qty.
1	SB24E-2001	Flange Bolt, M6x20	8
2	SB24E-2002	Cylinder Head Cover	1
3	SB24E-2003	Breather Tube	1
4	SB24E-2004	Gasket, Breather Valve	1
5	SB24E-2005	Breather Valve	1
6	SB24E-2006	Hex Bolt, M5x8	2
7	SB24E-2007	Gasket, Cylinder Head Cover	1
8	SB24E-2008	Spark Plug (Torch F7RTC/ NGK BPR7ES)	1
9	SB24E-2009	Flange Bolt, M8x60	4
10	SB24E-2010	Pin, 4mm x 8mm	1
11	SB24E-2011	Shroud	1
12	SB24E-2012	Flange Bolt, M6x12	8
13	SB24E-2013	Cylinder Head	1
14	SB24E-2014	Stud Bolt, M8x34	2
15	SB24E-2015	Gasket, Muffler	1
16	SB24E-2016	Muffler	1
17	SB24E-2017	Flange Nut, M8	2
18	SB24E-2018	Muffler Cover	1
19	SB24E-2019	Stud Bolt, M6x96	2
20	SB24E-2020	Gasket, Insulator	1
21	SB24E-2021	Insulator	1
22	SB24E-2022	Gasket, Carburetor	1
23	SB24E-2023	Carburetor Assembly	1
24	SB24E-2024	Primer Bulb	1
25	SB24E-2025	Tube Clip, 6.5mm	2
26	SB24E-2026	Primer Hose	1
27	SB24E-2027	Choke Lever	1
28	SB24E-2028	Gasket, Carburetor Cover	1
29	SB24E-2029	Air Filter	1
30	SB24E-2030	Engine Switch Assembly	1
31	SB24E-2031	Flange Nut, M6	3

No.	Part No.	Description	Qty.
32	SB24E-2032	Tube Clip, 8.5mm	2
33	SB24E-2033	Fuel Tube	1
34	SB24E-2034	Governor Rod Spring	1
35	SB24E-2035	Governor Rod	1
36	SB24E-2036	Dowel Pin, 10mm x 16mm	2
37	SB24E-2037	Gasket, Cylinder Head	1
38	SB24E-2038	Flange Bolt, M8x32	2
39	SB24E-2039	Rocker Arm Assembly, Exhaust	1
40	SB24E-2040	Rocker Arm Mount	1
41	SB24E-2041	Rocker Arm Assembly, Intake	1
42	SB24E-2042	Push Rod	2
43	SB24E-2043	Valve Lifter	2
44	SB24E-2044	Camshaft Assembly	1
45	SB24E-2045	Valve Adjustment Nut	2
46	SB24E-2046	Valve Spring Retainer	2
47	SB24E-2047	Valve Spring	2
48	SB24E-2048	Valve Stem Seal	1
49	SB24E-2049	Guide Plate	1
50	SB24E-2050	Intake Valve	1
51	SB24E-2051	Exhaust Valve	1
52	SB24E-2052	Flange Bolt, M8x32	6
53	SB24E-2053	Oil Seal	1
54	SB24E-2054	Crankcase Cover	1
55	SB24E-2055	Oil Cap Assembly	1
56	SB24E-2056	Oil Dipstick Assembly	1
57	SB24E-2057	Ball Bearing, 6205	2
58	SB24E-2058	Gasket, Crankcase Cover	1
59	SB24E-2059	Dowel Pin, 8mm x 12mm	2
60	SB24E-2060	Crankshaft Assembly	1
61	SB24E-2061	Connecting Rod Assembly	1
62	SB24E-2062	Piston Pin Clip	2

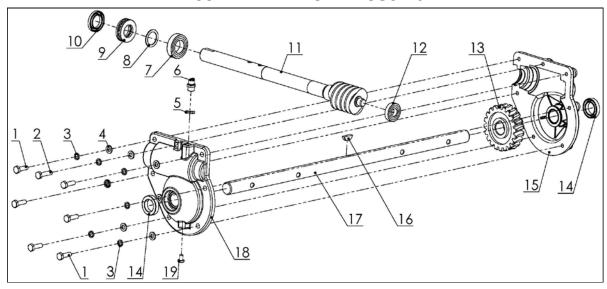
# **ENGINE PARTS LIST - CONTINUED**

No.	Part No.	Description	Qty.
63	SB24E-2063	Piston Pin	1
64	SB24E-2064	Piston	1
65	SB24E-2065	Piston Ring Set	1
66	SB24E-2066	Drain Bolt, M10x15	2
67	SB24E-2067	Flat Washer, 10mm	3
68	SB24E-2068	Drain Extension Tube	1
69	SB24E-2069	Crankcase	1
70	SB24E-2070	Flat Washer, 6mm	1
71	SB24E-2071	Governor Shaft	1
72	SB24E-2072	Governor Gear Assembly	1
73	SB24E-2073	Locking Pin	1
74	SB24E-2074	Governor Arm	1
75	SB24E-2075	T-Bolt, M6x20	1
76	SB24E-2076	Governor Arm Spring	1
77	SB24E-2077	Control Bracket Assembly	1
78	SB24E-2078	Fuel Tank Filter	1
79	SB24E-2079	Flange Bolt, M6x16	3
80	SB24E-2080	Fuel Tank	1
81	SB24E-2081	Fuel Tank Cap Assembly	1
82	SB24E-2082	Fuel Tank Assembly	1
83	SB24E-2083	Control Box Mounting Bracket	1
84	SB24E-2084	Clip	1
85	SB24E-2085	Engine Cover	1
86	SB24E-2086	Screw, M4x55	2
87	SB24E-2087	Spring Washer, 4mm	2
88	SB24E-2088	Flat Washer, 4mm	1
89	SB24E-2089	Starter Motor	1
90	SB24E-2090	Flange Bolt, M6x30	2
91	SB24E-2091	Dowel Pin, 8mm x 10mm	2
92	SB24E-2092	Shroud	1
93	SB24E-2093	Oil Seal	1
94	SB24E-2094	Flywheel	1
95	SB24E-2095	Flange Bolt, M6x22	2
96	SB24E-2096	Ignition Coil	1
97	SB24E-2097	Fan	1

No.	Part No.	Description	Qty.
98	SB24E-2098	Starter Pulley	1
99	SB24E-2099	Flange Nut, M14-1.5	1
100	SB24E-2100	Recoil Starter Housing	1
101	SB24E-2101	Recoil Starter	1
102	SB24E-2102	Flat Washer, 6mm	1
103	SB24E-2103	Flange Bolt, M6x8	1
104	SB24E-2104	Recoil Starter Subassembly	1
105	SB24E-2105	Double-Flange Bolt, M6x12	2

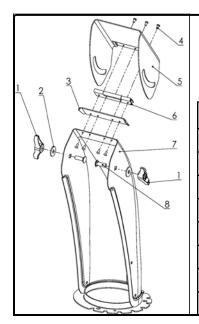


# **ASSEMBLY 1 - WORM HOUSING**



No.	Part No.	Description	Qty.
1-1	SB24E-0101	Bolt, M6x20	6
1-2	SB24E-0102	Bolt, M6x25	1
1-3	SB24E-0103	Spring Washer, 6mm	7
1-4	SB24E-0104	Flat Washer, 6mm	7
1-5	SB24E-0105	Washer, 10mm	1
1-6	SB24E-0106	Grease Fitting, M10-1.0	1
1-7	SB24E-0107	Ball Bearing, 61904-2Z	1
1-8	SB24E-0108	Flat Washer, 20mm	1
1-9	SB24E-0109	Bearing, 51104	1
1-10	SB24E-0110	Oil Seal	1

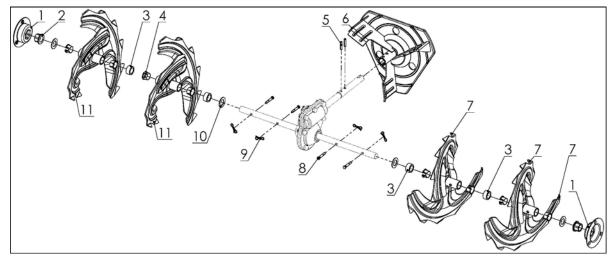
No.	Part No.	Description	Qty.
1-11	SB24E-0111	Worm Gearshaft	1
1-12	SB24E-0112	Ball Bearing, 16001-2Z	1
1-13	SB24E-0113	Worm Gear	1
1-14	SB24E-0114	Oil Seal	2
1-15	SB24E-0115	Left Housing	1
1-16	SB24E-0116	Woodruff Key	1
1-17	SB24E-0117	Auger Shaft	1
1-18	SB24E-0118	Right Housing	1
1-19	SB24E-0119	Bolt, M5x8	1



# **ASSEMBLY 2 - CHUTE**

No.	Part No.	Description	Qty.
2-1	SB24E-0711	Knob	2
2-2	SB24E-0302	Flat Washer, 8mm	2
2-3	SB24E-1203	Chute Hinge Gasket	1
2-4	SB24E-1204	Bolt, M4x12	7
2-5	SB24E-1205	Chute Deflector Plate	1
2-6	SB24E-1206	Hinge	1
2-7	SB24E-1207	Chute	1
2-8	SB24E-1208	Bolt, M8x25	2

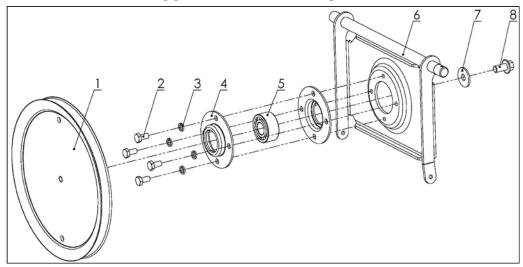




No.	Part No.	Description	Qty.
3-1	SB24E-0201	Shaft Cover	2
3-2	SB24E-0202	Shaft Bushing	2
3-3	SB24E-0203	Fixed Bushing	4
3-4	SB24E-0204	Adjustsble Bushing	8
3-5	SB24E-0205	Pin, 6mm x 35mm	2
3-6	SB24E-0206	Impeller	1

No.	Part No.	Description	Qty.
3-7	SB24E-0207	Left Auger	2
3-8	SB24E-0208	Shear Pin	4
3-9	SB24E-0209	Bowtie Clip	4
3-10	SB24E-0210	Flat Washer, 19.5mm	4
3-11	SB24E-0211	Right Auger	2

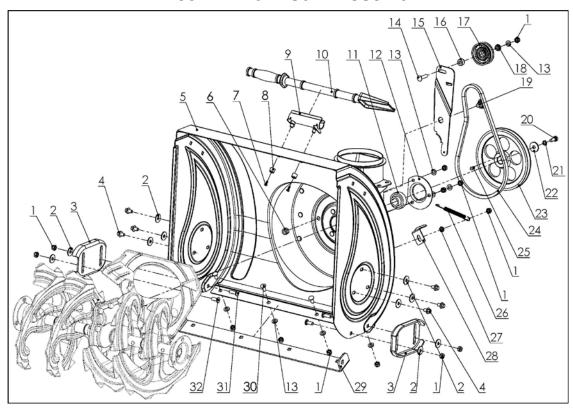
# **ASSEMBLY 4 - DRIVE PULLEY**



No.	Part No.	Description	Qty.
4-1	SB24E-0401	Driven Pulley	1
4-2	SB24E-0402	Bolt, M6x12	4
4-3	SB24E-0403	Spring Washer, 6mm	4
4-4	SB24E-0404	Driven Pulley Bearing Seat	2

No.	Part No.	Description	Qty.
4-5	SB24E-0405	Bearing, 3202-2RS	1
4-6	SB24E-0406	Driven Pulley Bracket	1
4-7	SB24E-0302	Flat Washer, 8mm	1
4-8	SB24E-0408	Bolt, M8x16	1

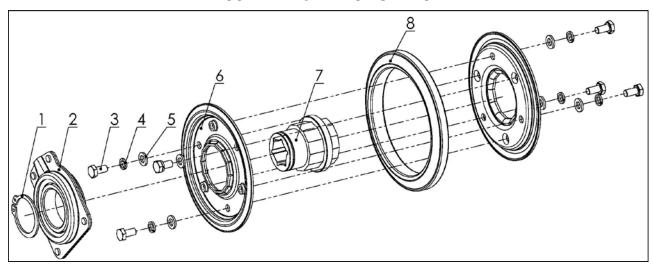
# **ASSEMBLY 5 - AUGER HOUSING**



No.	Part No.	Description	Qty.
5-1	SB24E-0301	Nut, M8	13
5-2	SB24E-0302	Flat Washer, 8mm	10
5-3	SB24E-0303	Skid	2
5-4	SB24E-0304	Bolt, M8x12	6
5-5	SB24E-0305	Auger Housing	1
5-6	SB24E-0306	Nut, M10	1
5-7	SB24E-0307	Self-Tapping Screw, ST4.2x12	2
5-8	SB24E-0308	Bushing	2
5-9	SB24E-0309	Shovel Bracket	1
5-10	SB24E-0310	Shovel	1
5-11	SB24E-0311	Radial-Insert Ball Bearing, UC204	1
5-12	SB24E-0312	Bearing Seat	1
5-13	SB24E-0313	Flat Washer, 8mm	4
5-14	SB24E-0314	Bolt, M8x35	1
5-15	SB24E-0315	Belt Tensioner Bracket	1
5-16	SB24E-0316	Long Tension Pulley Bushing	1

No.	Part No.	Description	Qty.
5-17	SB24E-0317	Belt Tension Pulley	1
5-18	SB24E-0318	Short Tension Pulley Bushing	1
5-19	SB24E-0319	Bolt, M10x14	1
5-20	SB24E-0320	Bolt, M8x20	1
5-21	SB24E-0321	Spring Washer, 8mm	1
5-22	SB24E-0322	Flat Washer, 8mm	1
5-23	SB24E-0323	Auger Pulley	1
5-24	SB24E-0324	Auger Belt (4LXA822E)	1
5-25	SB24E-0325	Key	1
5-26	SB24E-0326	Tension Pulley Spring	1
5-27	SB24E-0327	Nut, M8	1
5-28	SB24E-0328	Belt Tension Bracket	1
5-29	SB24E-0329	Scraper	1
5-30	SB24E-0330	Bolt, M8x16	4
5-31	SB24E-0331	Bolt, M8x25	2
5-32	SB24E-0332	Bolt, M8x20	2

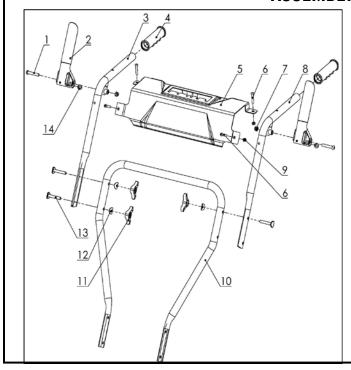
### **ASSEMBLY 6 - FRICTION DISK**



No.	Part No.	Description	Qty.
6-1	SB24E-0501	Circlip	1
6-2	SB24E-0502	Shifting Fork Cover	1
6-3	SB24E-0503	Bolt, M6x12	6
6-4	SB24E-0504	Spring Washer, 6mm	6

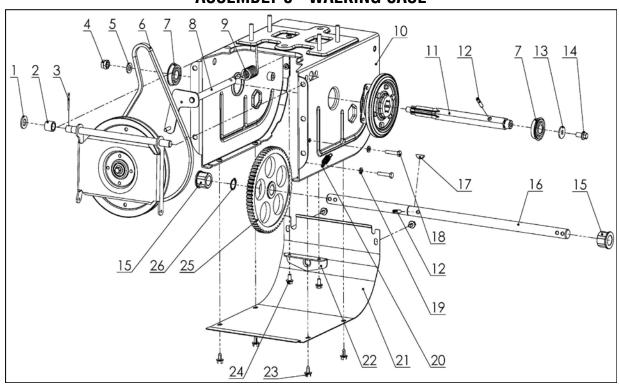
No.	Part No.	Description	Qty.
6-5	SB24E-0505	Flat Washer, 6mm	6
6-6	SB24E-0506	Friction Disc Plate	2
6-7	SB24E-0507	Friction Disc Shaft Sleeve	1
6-8	SB24E-0508	Friction Disc	1

# **ASSEMBLY 7 - HANDLE**



No.	Part No.	Description	Qty.
7-1	SB24E-0701	Bolt, M8x45	2
7-2	SB24E-0702	Clutch Lever	2
7-3	SB24E-0703	Right Handle	1
7-4	SB24E-0704	Grip	2
7-5	SB24E-0705B	Panel	1
7-6	SB24E-0706	Bolt, M6x35	4
7-7	SB24E-0707	Nut, M8	2
7-8	SB24E-0708	Left Handle	1
7-9	SB24E-0709	Nut, M6	4
7-10	SB24E-0710	Lower Handle	1
7-11	SB24E-0711	Knob	3
7-12	SB24E-0712	Bent Washer, 8mm	3
7-13	SB24E-0713	Lock Bolt, M8x50	3
7-14	SB24E-0714	Clutch Lever Gasket	2

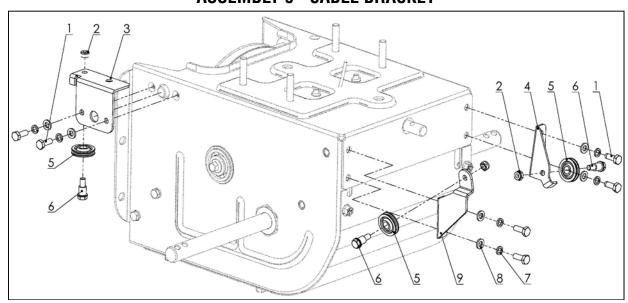
# **ASSEMBLY 8 - WALKING CASE**



No.	Part No.	Description	Qty.
8-1	SB24E-0601	Flat Washer, 13.5mm	1
8-2	SB24E-0602	Bushing	1
8-3	SB24E-0603	Pin	1
8-4	SB24E-0604	Nut, M10	1
8-5	SB24E-0605	Flat Washer, 10mm	1
8-6	SB24E-0606	Wheel Belt (3LXA809)	1
8-7	SB24E-0607	Ball Bearing, 6203-2RS	2
8-8	SB24E-0608	Shifting Fork	1
8-9	SB24E-0609	Shifting Fork Spring	1
8-10	SB24E-0610	Wheel Housing	1
8-11	SB24E-0611	Friction Disc Shaft	1
8-12	SB24E-0612	Pin	2
8-13	SB24E-0302	Flat Washer, 8mm	1

No.	Part No.	Description	Qty.
8-14	SB24E-0614	Bolt, M8x16	1
8-15	SB24E-0615	Shaft Bushing	2
8-16	SB24E-0616	Wheel Axle	1
8-17	SB24E-0617	Woodruff Key	1
8-18	SB24E-0618	Bolt, M6x30	2
8-19	SB24E-0619	Flat Washer, 6mm	2
8-20	SB24E-0620	Driven Pulley Spring	1
8-21	SB24E-0621	Wheel Housing Cover	1
8-22	SB24E-0622	Shifting Fork Bracket	1
8-23	SB24E-0623	Self-tapping Screw, M6x12	8
8-24	SB24E-0624	Bolt, M6x30	2
8-25	SB24E-0625	Driven Gear	1
8-26	SB24E-0626	Shaft Retainer Ring	1

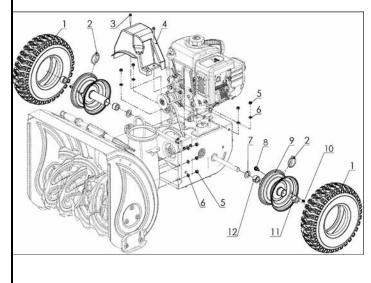




No.	Part No.	Description	Qty.
9-1	SB24E-0801	Bolt, M6x16	6
9-2	SB24E-0802	Nut, M6	3
9-3	SB24E-0803	Rear Auger Cable Bracket	1
9-4	SB24E-0804	Wheel Cable Bracket	1
9-5	SB24E-0805	Cable Pulley	3

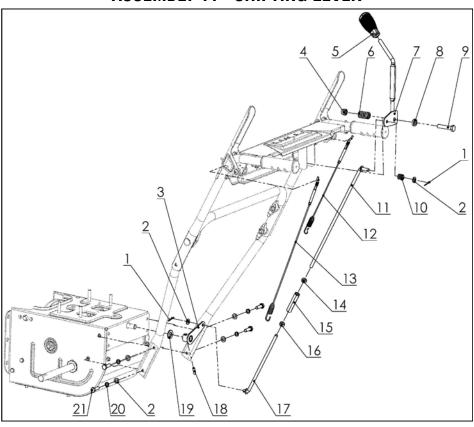
No.	Part No.	Description	Qty.
9-6	SB24E-0806	Cable Pulley Shaft, M6x10	3
9-7	SB24E-0807	Spring Washer, 6mm	6
9-8	SB24E-0808	Flat Washer, 6mm	7
9-9	SB24E-0809	Front Auger Cable Bracket	1

# **ASSEMBLY 10 - WHEELS**



No.	Part No.	Description	Qty.
10-1	SB24E-1101	Tire (13x4.10 - 6)	2
10-2	SB24E-1102	Wheel Pin	2
10-3	SB24E-1103	Bolt, M6x12	2
10-4	SB24E-1104	Belt Cover	1
10-5	SB24E-1105	Locking Nut, M8	7
10-6	SB24E-1106	Flat Washer, 8mm	10
10-7	SB24E-1107	Flat Washer, 19.5mm	2
10-8	SB24E-1108	Valve	2
10-9	SB24E-1109	Hub (13x4.1 - 6)	2
10-10	SB24E-1110	Valve Stem Cap	2
10-11	SB24E-1111	Axle Sleeve With Hole	2
10-12	SB24E-1112	Axle Sleeve Without Hole	2

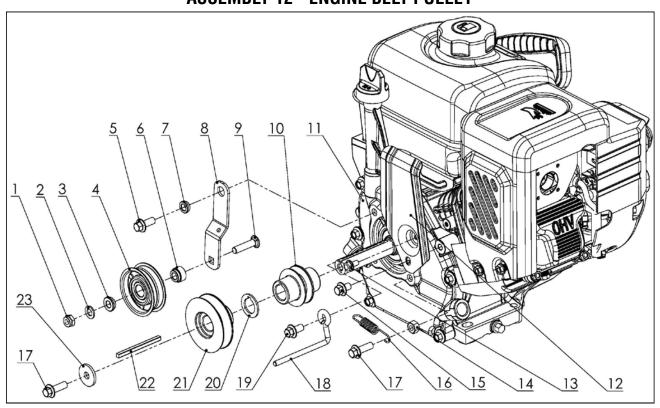
# **ASSEMBLY 11 - SHIFTING LEVER**



No.	Part No.	Description	Qty.
11-1	SB24E-0901	Cotter Pin	2
11-2	SB24E-0902	Flat Washer, 8mm	6
11-3	SB24E-0903	Connecting Arm	1
11-4	SB24E-0904	Nut, M10	1
11-5	SB24E-0905	Shifting Lever	1
11-6	SB24E-0906	Shifting Bracket Spring	1
11-7	SB24E-0907	Shifting Bracket	1
11-8	SB24E-0908	Bushing	1
11-9	SB24E-0909	Bolt, M10x50	1
11-10	SB24E-0910	Shifting Spring	1
11-11	SB24E-0911	Upper Shifter Rod	1

No.	Part No.	Description	Qty.
11-12	SB24E-0912	Wheel Clutch Cable	1
11-13	SB24E-0913	Auger Clutch Cable	1
11-14	SB24E-0914	Nut, M8	1
11-15	SB24E-0915	Shifter Rod Bottle Screw	1
11-16	SB24E-0916	Bolt, M8	1
11-17	SB24E-0917	Lower Shifter Rod	1
11-18	SB24E-0918	Pin	1
11-19	SB24E-0919	Flat Washer, 13.5mm	1
11-20	SB24E-0920	Spring Washer, 8mm	4
11-21	SB24E-0921	Bolt, M8x25	4

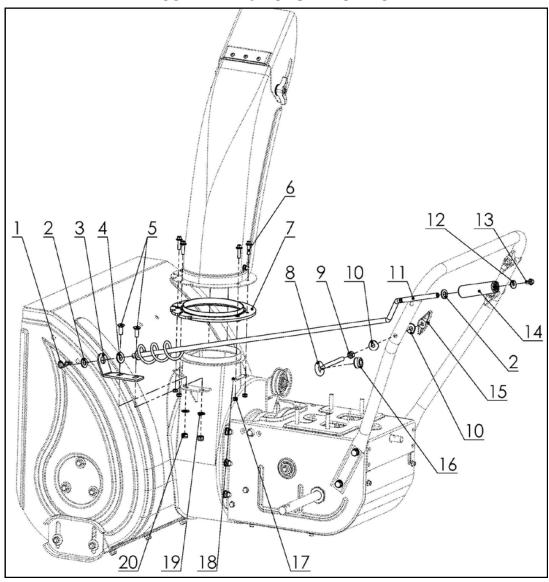
### **ASSEMBLY 12 - ENGINE BELT PULLEY**



No.	Part No.	Description	Qty.
12-1	SB24E-1001	Nut, M8	1
12-2	SB24E-1002	Flat Washer, 8mm	4
12-3	SB24E-1003	Tension Pulley Bushing	1
12-4	SB24E-1004	Tension Pulley	1
12-5	SB24E-1005	Bolt, M8x20	1
12-6	SB24E-1006	Tension Pulley Sleeve	1
12-7	SB24E-1007	Tension Pulley Bracket Bushing	1
12-8	SB24E-1008	Tension Pulley Bracket	1
12-9	SB24E-1009	Bolt, M8x35	1
12-10	SB24E-1010	Driving Pulley, Wheels	1
12-11	SB24E-1011	Engine Assembly	1

No.	Part No.	Description	Qty.
12-12	SB24E-1012	Shield	1
12-13	SB24E-1013	Bolt, M6x12	1
12-14	SB24E-1014	Nut, M8	1
12-15	SB24E-1015	Bolt, M8x12	1
12-16	SB24E-1016	Tension Pulley Spring	1
12-17	SB24E-1017	Bolt, M8x25	2
12-18	SB24E-1018	Belt Guide	1
12-19	SB24E-1019	Bolt, M8x16	1
12-20	SB24E-1020	Driving Pulley Washer	1
12-21	SB24E-1021	Driving Pulley, Auger	1
12-22	SB24E-1022	Key, 4.78x70mm	1
12-23	SB24E-1023	Flat Washer, 8mm	1

# **ASSEMBLY 13 - CHUTE ROTATOR**



No.	Part No.	Description	Qty.
13-1	SB24E-1301	R-clip	1
13-2	SB24E-1302	Flat Washer, 10mm	2
13-3	SB24E-1303	Rotator Handle Bracket	1
13-4	SB24E-1304	Rotator Handle Seat	1
13-5	SB24E-1305	Bolt, M8x20	2
13-6	SB24E-1306	Bolt, M6x22	6
13-7	SB24E-1307	Chute Base Plate	1
13-8	SB24E-1308	Rotator Handle Eye Bolt	1
13-9	SB24E-1309	Nut. M8	1
13-10	SB24E-1310	Bent Washer, 8mm	2

No.	Part No.	Description	Qty.
13-11	SB24E-1311	Rod	1
13-12	SB24E-1312	Flat Washer, M6	1
13-13	SB24E-1313	Bolt, M6x12	1
13-14	SB24E-1314	Rotator Handle Grip	1
13-15	SB24E-0711	Knob	1
13-16	SB24E-1316	Bushing	1
13-17	SB24E-1317	Nut, M6	6
13-18	SB24E-1318	Positioning Plate	3
13-19	SB24E-1319	Flat Washer, 8mm	12
13-20	SB24E-1320	Nut, M8	8

### WARRANTY

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

#### LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC ("Seller") warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship during personal use for a period of two (2) years from date of purchase or 500 hours of use; whichever comes first. Ninety days for all WEN products if the tool is used for professional or commercial use. Purchaser has 30 days from the date of purchase to report missing or damaged parts.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, improper storage, incorrect lubricants/fuels, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of Purchase must be a direct vendor of Great Lakes Technologies, LLC. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 with the following information to make arrangements: your shipping address, phone number, serial number, required part numbers, and proof of purchase. Damaged or defective parts and products may need to be sent to WEN before the replacements can be shipped out.

Upon the confirmation of a WEN representative, your product may qualify for repairs and service work. When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge for addresses within the contiguous United States.

THIS LIMITED WARRANTY DOES NOT APPLY TO ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME, INCLUDING FILTERS, SPARK PLUGS, VOLTAGE REGULATORS, BRUSHES, GASKETS, O-RINGS, WHEEL KITS, BATTERIES, RECOIL STARTERS, HIGH PRESSURE HOSES, SPRAY GUNS, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO ITEMS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE. FOR WARRANTY PARTS OR PRODUCTS REPAIRED UNDER WARRANTY SHIPPING TO ADDRESSES OUTSIDE OF THE CONTIGUOUS UNITED STATES, ADDITIONAL SHIPPING CHARGES MAY APPLY.

