

# **OPERATOR'S MANUAL**

MODEL #100535 27 IN. 2-STAGE SNOWBLOWER



**REGISTER YOUR PRODUCT ONLINE** 

at championpowerequipment.com











or visit championpowerequipment.com

**READ AND SAVE THIS MANUAL.** This manual contains important safety precautions which should be read and understood before operating the product. Failure to do so could result in serious injury. This manual should remain with the product.

Specifications, descriptions and illustrations in this manual are as accurate as known at the time of publication, but are subject to change without notice.



# **TABLE OF CONTENTS**

Introduction	3
Safety Definitions	3
Important Safety Instructions	4
Fuel Safety	
Training	
Preparation For Use	
Operation	
Clearing a Clogged Discharge Chute	
Maintenance and Storage	
Safety Labels	
Safety Symbols	
Operation Symbols	
Quickstart Label Symbols.	
Controls and Features	
Snowblower	
Engine	12
Assembly	14
Unpacking	14
Handle	14
Add Engine Oil	15
Add Fuel	16
Operation	17
Before Operation	
Check the Engine	
Starting the Engine	
Stopping the Engine	18
Operation at High Altitude	18
Control Levers	19
Adjusting the Snow Discharge Direction and Height	20
Clearing a Clogged Discharge Chute	20
Adjusting the Snow Shoes	
Power Turn Steering Technology	
After Use	21

Maintenance 21
Engine Maintenance
Lubrication
Long-Term Storage 22
Transporting
Specifications 23
Snowblower Specifications
Engine Specifications 23
Oil Specifications 23
Fuel Specifications 23
Troubleshooting 24

# INTRODUCTION

Congratulations on your purchase of a Champion Power Equipment (CPE) product. CPE designs, builds, and supports all of our products to strict specifications and guidelines. With proper product knowledge, safe use, and regular maintenance, this product should bring years of satisfying service.

Every effort has been made to ensure the accuracy and completeness of the information in this manual at the time of publication, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Since CPE highly values how our products are designed, manufactured, operated and are serviced, and also highly value your safety and the safety of others, we would like you to take the time to review this product manual and other product materials thoroughly and be fully aware and knowledgeable of the assembly, operation, dangers and maintenance of the product before use. Fully familiarize yourself, and make sure others who plan on operating the product fully familiarize themselves too, with the proper safety and operation procedures before each use. Please always exercise common sense and always err on the side of caution when operating the product to ensure no accident, property damage, or injury occurs. We want you to continue to use and be satisfied with your CPE product for years to come.

When contacting CPE about parts and/or service, you will need to supply the complete model and serial numbers of your product. Transcribe the information found on your product's nameplate label to the table below

# CPE TECHNICAL SUPPORT TEAM 1-877-338-0999 MODEL NUMBER 100535 SERIAL NUMBER DATE OF PURCHASE PURCHASE LOCATION

# **SAFETY DEFINITIONS**

The purpose of 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.

# **A** DANGER

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

## **A WARNING**

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

# **A** CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

# NOTICE

NOTICE indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

# **IMPORTANT SAFETY INSTRUCTIONS**

## **A WARNING**

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

# **A** DANGER

Engine exhaust contains carbon monoxide, a colorless, odorless, poison gas. Breathing carbon monoxide will cause nausea, dizziness, fainting or death. If you start to feel dizzy or weak, get to fresh air immediately.

Operate product outdoors only in a well ventilated area.

DO NOT operate the product inside any building, including garages or sheds.

DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings.

# **A** DANGER

Using an engine indoors **CAN KILL YOU IN MINUTES**. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell.

**NEVER** use inside a home or garage, **EVEN IF** doors and windows are open.

**ONLY** use **OUTSIDE** and far away from windows, doors, and vents.



Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions.

# **A** DANGER

Rotating parts can entangle hands, feet, hair, clothing and/or accessories. Traumatic amputation or severe laceration can result.

Keep hands and feet away from rotating parts.

Tie up long hair and remove jewelry.

Operate equipment with guards in place.

DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

# **A** WARNING

Sparks can result in fire or electrical shock.

# When servicing the engine:

Disconnect the spark plug wire and place it where it cannot contact the plug.

DO NOT check for spark with the plug removed.

Use only approved spark plug testers.

# **A WARNING**

Running engines produce heat. Severe burns can occur on contact. Combustible material can catch fire on contact.

DO NOT touch hot surfaces.

Avoid contact with hot exhaust gases.

Allow equipment to cool before touching.

# **Fuel Safety**

# **A** DANGER

GASOLINE AND GASOLINE VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause severe burns or death.

# Gasoline and gasoline vapors:

- Gasoline is highly flammable and explosive.
- Gasoline can cause a fire or explosion if ignited.
- Gasoline is a liquid fuel but it's vapors can ignite.
- Gasoline is a skin irritant and needs to be cleaned up immediately if spilled on skin or clothes.
- Gasoline has a distinctive odor, this will help detect potential leaks quickly.
- Gasoline expands or contracts with ambient temperatures.
   Never fill the gasoline tank to full capacity, as gasoline needs room to expand when temperatures rise.
- In the case of any petroleum gasoline fire, flames should never be extinguished unless the fuel supply valve can be turned OFF. By not doing so, if a fire is extinguished and the supply of fuel is not turned OFF, an explosion hazard could be created.

# When adding or removing gasoline:

- D0 N0T light or smoke cigarettes.
- Turn the snowblower off and let cool for a minimum of two minutes before removing the gasoline cap. Loosen gasoline cap to relieve pressure from the gasoline tank.

- Only fill or drain gasoline outdoors in a well-ventilated area.
- D0 N0T pump gasoline directly into the snowblower at the gas station. Always use an approved fuel container to transfer the gasoline to the snowblower.
- D0 N0T overfill the gasoline tank. Keep fuel level at least ½ inch below bottom of filler neck to provide space for fuel expansion.
- Never remove gas cap or add fuel while the engine is hot or running.
- When gasoline spills, wipe the fuel off the engine and equipment. Move the snowblower from fuel spill area to another area.
- Wait 5 minutes before starting the engine.
- Always keep gasoline away from sparks, open flames, pilot lights, heat and other sources of ignition.

# When starting the engine:

- D0 N0T attempt to start a damaged snowblower.
- Always make certain that the gasoline cap, air filter, spark plug, fuel lines and exhaust system are properly secured, connected and in place.
- Always allow spilled gasoline to evaporate fully before attempting to start the engine.
- Make certain that the snowblower is resting firmly on level ground.

# When operating the snowblower:

- DO NOT tip the snowblower during operation.
- DO NOT tip the snowblower or allow fuel or oil to spill.

# When transporting or servicing the snowblower:

- Make certain that the fuel valve is in the OFF position and the gasoline tank is empty.
- Disconnect the spark plug wire.

#### When storing the snowblower:

- Store away from sparks, open flames, pilot lights, heat and other sources of ignition.
- Do not store the snowblower or gasoline near furnaces, water heaters, or any other appliances that produce heat or have automatic ignitions.

# **A WARNING**

Never use a gasoline container, gasoline tank, or any other fuel item that is broken, cut, torn or damaged.

# **Training**

- Read the Operator's Manual completely before attempting to use the snowblower. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the engine and disengage the controls quickly.
- 2. Never allow children under 16 years old to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- Thrown objects can cause serious injury. Keep the area of operation clear of all persons, particularly small children, and pets. Plan your snow discharge pattern to prevent throwing material toward cars, structures, roads and people.
- 4. Exercise caution to avoid slipping or falling, especially when operating in reverse.
- Be aware that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- 6. Never use the snowblower under the influence of alcohol or medication, or if you are tired or ill.

# **Preparation For Use**

- Be thoroughly familiar with the controls and the proper use of the equipment. Understand and know how to stop the engine and disengage the controls quickly.
- Thoroughly inspect the area where the equipment is to be used and remove all doormats, sleds, boards, wires, and other foreign objects.
- 3. Disengage all clutch handles before starting the motor.
- Do not operate the equipment without wearing adequate winter garments. Wear footwear which will improve footing on slippery surfaces.
- Adjust the auger housing height to clear gravel or crushed rock surface.
- Never attempt to make any adjustments while the engine is running (except where specifically recommended in the manual).
- 7. Let engine and machine adjust to outdoor temperatures before starting to clear snow.
- 8. The operation of any powered machine can result in foreign objects being thrown into the eyes. Always wear eye protection with side shields marked to comply with ANSI Z87.1 during operation, or while performing an adjustment or repair.
- 9. Inspect the auger and impeller before starting to ensure that there is no ice build up.

# **Operation**

- 1. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- In the event of striking a foreign object, stop the engine, remove the spark plug, thoroughly inspect the snowblower for any damage, and repair the damage before restarting and operating the snowblower.
- If the snowblower should start to vibrate abnormally, stop
  the engine and check immediately for the cause. Vibration is
  generally a warning of trouble. Vibration typically indicates a
  mechanical problem has occurred.
- Always stop the engine whenever you leave the operating position, before unclogging the auger housing or discharge guide, and when making any repairs, adjustments, or inspections.
- Before cleaning, inspecting or repairing any parts of the snowblower, always ensure the auger has stopped moving. Disconnect the spark plug wire and keep it away from the plug to prevent accidental starting.
- 7. Before leaving the machine unattended, disengage all control levers, stop the engine and remove the safety key.
- 8. Do not run the engine indoors. Exhaust fumes are dangerous and can kill you.
- Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Never attempt to clear steep slopes.
- Never operate the snowblower without proper guards, plates or other safety protective devices in place.
- Never operate the snowblower near glass enclosures, automobiles, window wells, etc., without proper adjustment of the snow discharge angle. Keep children and pets away.
- 12. Do not overload the machine capacity by attempting to clear snow at too fast a rate.
- 13. Never operate the machine at high transport speeds on slippery surfaces. Use care when reversing.
- Never direct discharge at bystanders or allow anyone in front of the unit.
- 15. Disengage power to the impeller when snowblower is transported or not in use.
- 16. Use only attachments and accessories approved by the manufacturer of snowblower (such as wheel weights, counterweights, cabs, etc.).
- 17. Never operate the snowblower without good visibility or light. Always be sure of your footing, and keep a firm hold on the handles. Walk; never run.

- 18. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition prior to operation.
- 19. Replace worn or damaged parts for safety; Use only genuine replacement parts and accessories.
- 20. This snowblower is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge of mechanical equipment.
- 21. Be careful while working on the machine or clearing a blockage in the auger or impeller to ensure that fingers and hands do not become crushed or cut.
- 22. Do not touch hot engine components like the muffler, muffler guard or engine block during operation of the snowblower as they will cause burns.
- 23. Should the unit stop discharging snow for any reason, release the controls to stop the auger and the engine before inspecting for any lodged items or damaged parts in the auger housing.

# **Clearing a Clogged Discharge Chute**

# **A** DANGER

DO NOT use your hands to clean out the discharge chute.

## To clear the chute:

- 1. SHUT THE ENGINE OFF!
- Wait 10 seconds to be sure the auger blades have stopped rotating.
- Always use the provided clean-out tool to clear out the discharge chute.

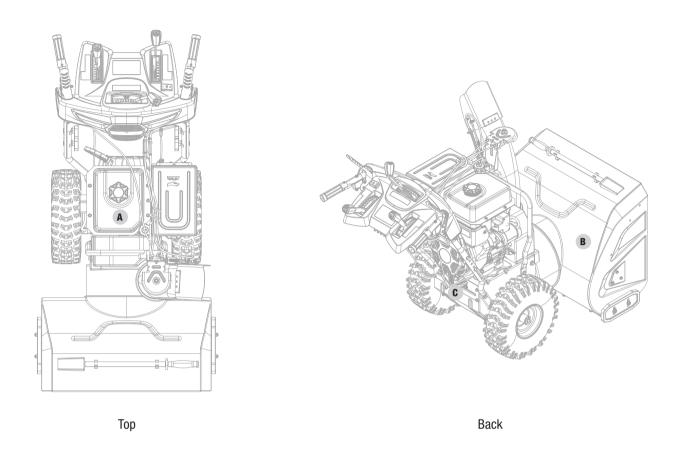
# **Maintenance and Storage**

- 1. Check shear bolts, engine mounted bolts, etc., at frequent intervals for proper tightness to ensure the equipment is in safe, working condition.
- Never store the machine with gasoline in the fuel tank inside a building where automatic ignition sources are present such as hot water heaters, space heaters, clothes dryers or any open flame sources.
- 3. Run the snowblower for one minute to clear out packed snow and ice to prevent freeze-up prior to storage.
- 4. Always allow the engine to cool before storing in any enclosure.
- 5. Always refer to Operator's Manual for important details when the snowblower is to be stored for extended periods of time.
- 6. Maintain or replace safety and instructions labels, as necessary.

# **Safety Labels**

These labels warn you of potential hazards that can cause serious injury. Read them carefully.

If a label comes off or becomes hard to read, contact Technical Support Team for possible replacement.





# **Safety Symbols**

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

SYMBOL	MEANING
	<b>Read Operator's Manual.</b> To reduce the risk of injury, user must read and understand operator's manual before using this product.
	<b>Eye and Ear Protection.</b> Always wear safety goggles or safety glasses with side shields, and as necessary a full face-shield as well as full ear protection when operating this product. Always wear eye protection with side shields marked to comply with ANSI Z87.1.
	Safety Alert. This machine was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating fingers, hands, toes and feet and throwing foreign objects. Failure to observe the safety instructions could result in serious injury or death.
<u>A</u>	<b>Electric Shock.</b> Failure to use in dry conditions and to observe safe practices can result in electric shock. Improper connections to a building can allow current to backfeed into utility lines, creating an electrocution hazard. A transfer switch must be used when connecting to a building.
	<b>Fire/Explosion.</b> Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
	<b>Toxic Fumes.</b> The engine exhaust from this product contains chemicals known to cause cancer, birth defects and other reproductive harm.
	<b>Risk of Asphyxiation.</b> This engine emits carbon monoxide, an odorless, colorless poison gas. Breathing carbon monoxide can cause nausea, fainting or death. Use only in a well-ventilated area.
<b>**</b>	Thrown Objects. This machine may pick up and throw objects which can cause serious personal injury.
	Always Use Chute Tool. Never use your hands to clear a clogged chute assembly. Shut OFF engine and remain behind handles until all moving parts have stopped before unclogging.

SYMBOL	MEANING
	Hot Surface. To reduce the risk of injury or damage, avoid contact with any hot surface.
	Open Flame Alert. Fuel and its vapors are extremely flammable and explosive. Keep fuel away from smoking, open flames, sparks, pilot lights, heat, and other ignition sources.
	Rotating Auger. DANGER: Avoid injury from rotating auger - keep feet away.
	<b>Rotating Blades.</b> Never put your hand in the chute. Contact with rotating parts can amputate fingers and hands.

# **Operation Symbols**

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

SYMBO	L	MEANING
$\equiv$	<b>↓</b> <del></del> <u> </u>	Choke / Run
<b>★</b>	<b>+</b>	Throttle: Full Speed / Low Speed
		Self-Drive Control Handle
<b>●</b>		Activate Self-Drive/Auger
		Stop Self-Drive/Auger
4		Auger Operation
1	<b>→</b>	Forward/Reserve Drive

SYMBOL	MEANING
	Discharge Direction
<b>3</b> ®	Insert Engine Key
Ø®\$	Remove Engine Key
3-5×	Cold Prime
ⓐ ❸	Warm Prime
	Fuel Valve: OFF / ON

# **Quickstart Label Symbols**

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.



# **Starting the Engine**

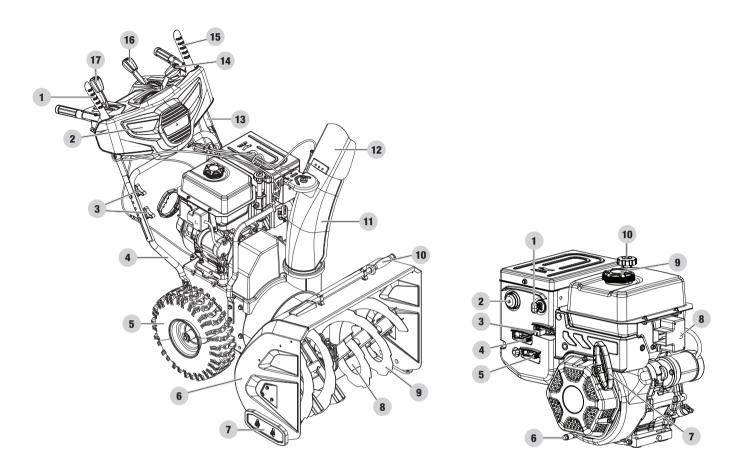
- 1. Turn fuel valve "ON" position.
- 2. Move choke lever to "CHOKE" position.
- 3. Move the throttle lever to "FULL" speed to start the engine.
- 4. Make sure the engine safety key is inserted into the key hole.
- 5. Priming the Engine
  - 5a. To start the COLD engine: Prime 3-5 times.
  - 5b. To start a WARM engine: DO NOT prime.
- 6. Pull the recoil started to start the engine.
- 7. Move the choke lever to "RUN" position.

# **Stopping the Engine**

- 1. Turn fuel valve "OFF" position.
- 2. Remove the engine key.

# **CONTROLS AND FEATURES**

Read this operator's manual before operating your snowblower. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.



# **Snowblower**

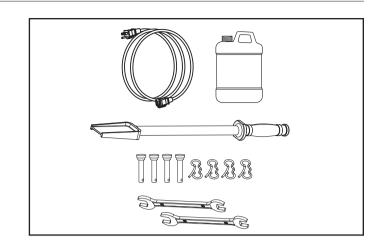
- 1. Auger Control Handle
- 2. Lights
- 3. Handle Locking Knobs
- 4. Lower Handle
- 5. Wheels
- 6. Auger Housing
- 7. Skid Shoes
- 8. Shave Plate
- 9. Auger
- **Engine**
- 1. Key (safety lock out)
- 2. Primer Bulb
- 3. Throttle Lever
- 4. Choke Lever
- 5. Fuel Valve (On/Off)

- 10. Clean Out Tool
- 11. Discharge Chute
- 12. Discharge Chute Deflector
- 13. Upper Handle
- 14. Discharge Chute Rotation Lever
- 15. Self-Drive Control Lever
- 16. Discharge Chute Deflector Lever
- 17. Speed Control Lever
- 6. Oil Drain Plug
- 7. Recoil Starter Grip
- 8. Electric Start Button
- 9. Fuel Cap
- 10. Oil Fill and Level Check Cap

# **Parts Included**

# **Accessories**

6 ft. (1.8 m) Electric Start Power Cord							1
Engine Oil	37.2	2 fl.	0Z.	(1	100	m	I
Chute Clearing Tool							1
B Clip and Sheer Pins (spare parts)							4
Tools							
13mm × 16mm Double Open End Wrench							2



# **Assembly Parts**

Part	Part Qty.	Hardware Needed	Hardware Qty.	Hardware Reference	Tool Needed
		M10 Hexagon Lock Nut	1		16mm Wrench
Discharge Chute	1	Large Washer	1		N/A
		Support Rod	1		N/A
Lower Handle	4	M8×16 Self-tapping Bolt	4		13mm Wrench
Lower Handle 1		Cord Clamp (preassembled)	1		N/A
		M8×50 Half Round Bolt	4		
Upper Handle	1	Curved washer	4		
		Rotating knob	4		N/A
		Cable Tie	3		

100535 - 27 IN. 2-STAGE SNOWBLOWER ASSEMBLY

# **ASSEMBLY**

Your snowblower requires some assembly. This unit ships from our factory with oil. It must be properly serviced with fuel and oil before operation.

If you have any questions regarding the assembly of your snowblower, call our Technical Support Team at 1-877-338-0999. Please have your serial number and model number available.

# **Unpacking**

- 1. Set the shipping carton on a solid, flat surface.
- Remove everything from the carton except the snowblower base — including upper and lower handles, connecting levers, chute, hardware, etc. Make sure all the assembly parts are included before you start.
- 3. Lift the top half of the box off and the base should be clear to start assembly.
- 4. Cut down the bottom carton to allow a flat surface area to install the assembly parts without scratching parts or cutting tires. Alternatively, with team lift help, lift the base of the snowblower out of the carton and place it on a flattened carton to start assembly.

# Handle

1. Attach the lower handle (1-1) onto the unit body with 4 self-tapping bolts (1-2) using included tool or your own 13mm wrench (Fig. 1).

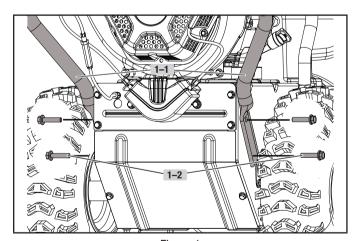


Figure 1

 Connect the upper and lower handle with bolts (2-1), washers (2-2) and locking knobs (2-3) (Fig. 2). The top handle can adjust to 4 positions. You can come back later and adjust to a more comfortable height.

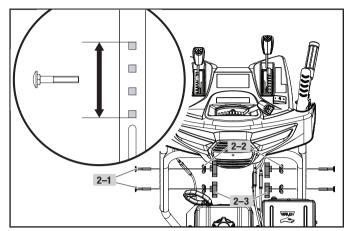


Figure 2

3. Remove the chute pivot assembly (3-1) from the bubble wrap and attach to the bracket on the chute (3-2). Align the round and square connector on the underside of the chute pivot assembly to the bracket. The square connector snaps in place. Then, place the entire chute (3-3) over the two posts (3-4) aligning the chute with the base (3-5). The chute will just rest on the base and rotate at this point (Fig. 3).

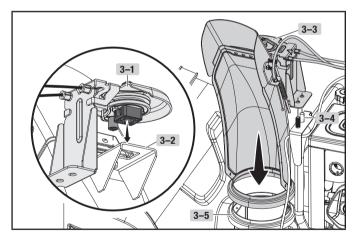


Figure 3

4. Put the snow discharge chute cable wire form on the snow discharge support using the washer (4-1) and nut (4-2). Securely tighten the assembly (Fig. 4) using included tool or your own 16mm wrench. This will be the guide that channels all the cables over the engine from the chute area.

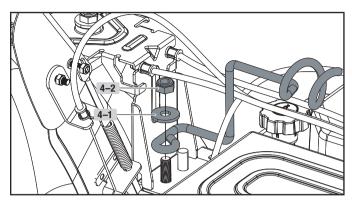


Figure 4

5. Route the cables through the support rod wire form (5-1) and cord clamp (5-2) on the lower handle. Additional cable ties are included to neaten up the cables. Keep loose before first use and adjust. When comfortable all the cabling is in proper position, tighten up the cable ties (Fig. 5).

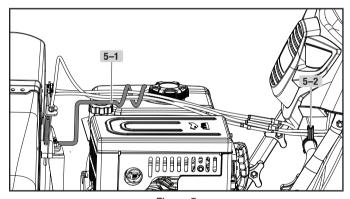


Figure 5

# **Add Engine Oil**

# **A WARNING**

DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Damage to the snowblower as a result of failing to follow these instructions will void your warranty.

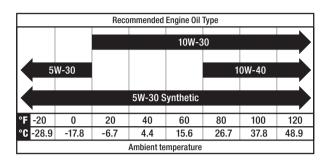
# NOTICE

The snowblower rotor has a sealed, pre-lubricated ball bearing that requires no additional lubrication for the life of the bearing.

# NOTICE

The recommended oil type for typical use is **0W-30** automotive oil.

If running snowblower in extreme temperatures, refer to the following chart for recommended engine oil type.



- 1. Place the snowblower on a flat, level surface.
- 2. Remove the oil cap/dipstick (6-1) and wipe it clean (Fig. 6A).

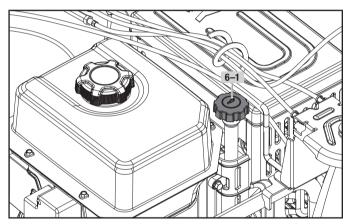


Figure 6A

3. Insert the oil cap/dipstick into the oil filler neck but do not screw it in, then remove it to check the oil level (Fig. 6B).

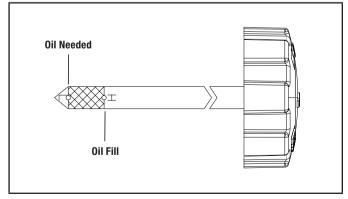


Figure 6B

- If the oil level is near or below the lower limit mark on the dipstick, remove the oil cap/dipstick, and fill with the recommended oil to the upper limit mark. Do not overfill (Fig. 6B).
- 5. Reinstall the oil cap/dipstick.

# NOTICE

When using the dipstick to check oil level, DO NOT screw in the dipstick while checking.

# **NOTICE**

Check oil level often during the initial 20 hour engine run period. Refer to the *Maintenance* section for recommended service intervals.

# NOTICE

Synthetic oil may be used after the first oil change. Using synthetic oil does not decrease the recommended oil change interval. Full synthetic 5W-30 oil will aid in starting in cold ambient < 41° F (5° C) temperatures.

# **A** CAUTION

This engine is equipped with a low oil shut-off and will stop when the oil level in the crankcase falls below the threshold level.

# **Add Fuel**

DO NOT mix oil with gasoline (Fig. 7).

1. Remove the fuel tank cap.

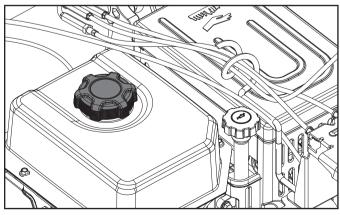


Figure 7

2. Add fuel to the bottom of the fuel level limit in the neck of the fuel tank. Do not overfill. Wipe up spilled fuel before starting the snowblower. Fuel tank capacity: 1.5 gal. (5.8 L) (Fig. 8).

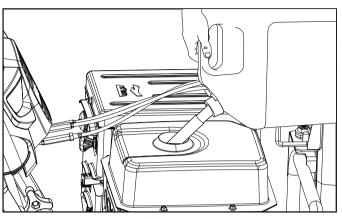


Figure 8

# **A** CAUTION

Use unleaded gasoline with a minimum octane rating of 87 and an ethanol content of 10% or less by volume.

DO NOT light cigarettes or smoke when filling the tank.

DO NOT mix oil and gasoline.

DO NOT overfill the tank. Fill tank to approximately ¼ in. (6.4 mm) below the top of the tank to allow for gasoline expansion.

DO NOT pump gasoline directly into the snowblower at the pump. Use an approved fuel container to transfer the gasoline to the snowblower.

DO NOT fill tank indoors.

DO NOT fill tank when the engine is running or hot.

#### **A** WARNING

Pouring gasoline too fast through the fuel screen may result in gasoline splashing over the snowblower and operator while filling.

# NOTICE

The snowblower engine works well with 10% or less ethanol blend gasoline. When using ethanol-gasoline blends there are some issues worth noting:

- Ethanol-gasoline blends can absorb more water than gasoline alone.
- These blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor. The compromised gasoline can be drawn into the carburetor and cause damage to the engine and/or potential hazards.
- If a fuel stabilizer is used, confirm that it is formulated to work with ethanol-gasoline blends.
- Any damages or hazards caused by using improper gasoline, improperly stored gasoline, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

It is advisable to always shut off the gasoline supply and run the engine to starvation after each use. See Storage instructions for extended non-use.

# **OPERATION**

# **A WARNING**

Never use the snowblower without first reading and understanding the operating instructions, warnings and instruction labels located on the machine.

# **Before Operation**

- Check the General Condition.
- Look around and underneath the engine for signs of oil or gasoline leaks.
- Remove any excessive dirt or debris, especially around the muffler and recoil starter.
- Look for signs of damage.
- Check that all shields and covers are in place, and all nuts, bolts, and screws are tightened.

# **Check the Engine**

- There is no fuel or oil in the engine. Fill with fuel and add 0W-30 prior to first use.
- 2. Check the fuel level (see Add Fuel under Assembly section).
- 3. Check the oil level (see *Add Engine Oil* under *Assembly* section).

# **A WARNING**

Always check the engine oil level before operation. Using the snowblower without oil can seriously damage the engine and void your warranty. The machine must stand on level ground when checking.

Engine key and throttle lever plastic piece need to be attached before first use. These parts may be attached to the recoil starter grip. Please remove the key and throttle lever from the recoil starter grip and attach/install properly.

# **A WARNING**

Always wear eye protection with side shields marked to comply with ANSI Z87.1. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.

# **Starting the Engine**

- Make sure the engine key (safety lock out) is inserted into the key hole.
- 2. To start a warm engine: (Fig. 9).
  - 2a. Move the fuel valve lever to the ON position.
  - 2b. Move the choke lever to the RUN position.
  - 2c. Move the throttle lever to full speed.
  - 2d. Do not prime.

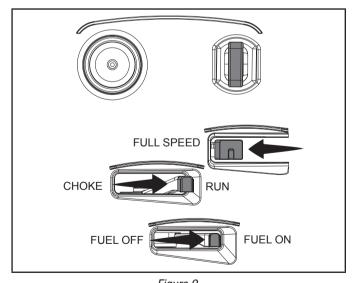


Figure 9

- 3. To start a cold engine: (Fig. 10).
  - 3a. Move the fuel valve lever to the ON position.
  - 3b. Move the choke lever to the CHOKE position.
  - 3c. Move the throttle lever to full speed.
  - 3d. Prime 3-5 times.

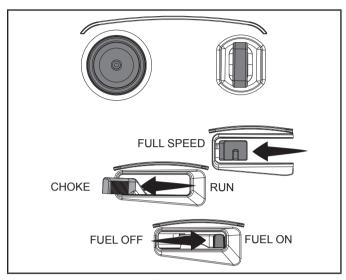


Figure 10

4. Stand back and to the right of the unit, pull the starter grip lightly until you feel resistance then pull briskly. Return the starter grip gently (Fig. 11).

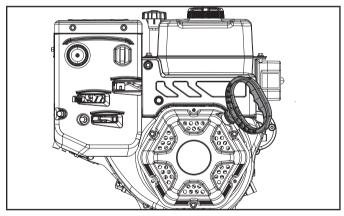


Figure 11

5. Alternatively. for electric start, plug in the supplied electrical cord into the starter. Press the electric start button and make sure that the mains supply voltage is 120 V~ 60 Hz (Fig. 12).

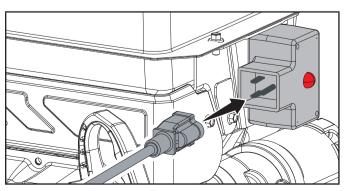


Figure 12

6. To start a cold engine: When the engine starts, move the choke to RUN position.

# **Stopping the Engine**

To stop the engine in an emergency situation or during normal operation, simply remove the engine key.

# **Operation at High Altitude**

The density of air at high altitudes is lower than at sea level. Engine power is reduced as the air mass and air-fuel ratio decrease. Engine power and snowblower output will be reduced approximately 3½% for every 1000 ft. of elevation above sea level. At high altitudes increased exhaust emissions can also result due to the increased enrichment of the air fuel ratio. Other high altitude issues can include hard starting, increased fuel consumption and spark plug fouling.

To alleviate high altitude issues other than the natural power loss, CPE can provide a high altitude carburetor main jet. The alternative main jet and installation instructions can be obtained by contacting our Technical Support Team. Installation instructions are also available in the Technical Bulletin area of the CPE website.

The part number and recommended altitude range for the application of the high altitude carburetor main jet is listed in the following table.

In order to select the correct high altitude main jet it is necessary to identify the carburetor model. For this purpose, a code is stamped on the side of the carburetor. Select the correct high altitude jet part number corresponding to the carburetor code found on your particular carburetor.

Carb. Code	High Alt. Jet Part Number	Altitude Range
16100-	16161-Z151510-0000	3000'-6000' (914-1828 m)
Z0S0210- 00A3	16161-Z151910-0000	6000'-8000' (1828-2438 m)

# **A WARNING**

Operation using the alternative main jet at elevations lower than the recommended minimum altitude can damage the engine. For operation at lower elevations, the originally supplied standard main jet must be used. Operating the engine with the wrong engine configuration at a given altitude may increase its emissions and decrease fuel efficiency and performance.

# **Control Levers**



# **Self-Drive Control Lever:**

Located on the left-side (from behind the snowblower). When
the snowblower has been put into gear, pushing this lever
towards the handle engages the wheels. Releasing the
self-drive control lever causes the machine to stop moving
(Fig. 13).

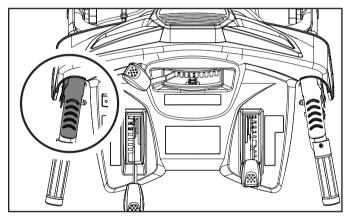


Figure 13

# **Speed Control Lever:**

1. Forward speeds range from slowest position 1 to fastest position 6. Reverse speeds range from slowest position R1 to fastest position R2 (Fig. 14).

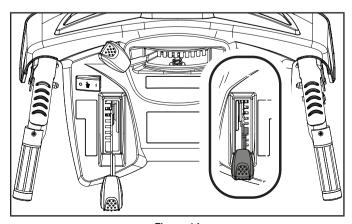
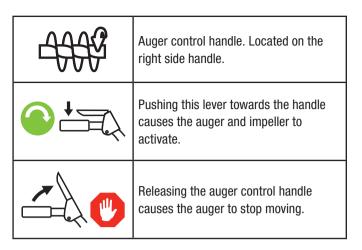


Figure 14



# **Auger Control Lever:**

Located on the right side (from behind the snowblower).
 Pushing this lever towards the handle causes the auger and impeller to activate. Releasing the auger control lever causes the auger to stop moving (Fig. 15).

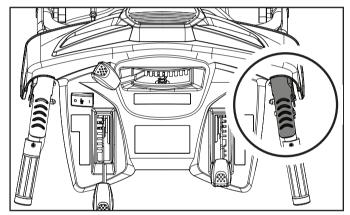


Figure 15

# **A WARNING**

Watch out for rotating auger. Keep hands, feet, hair and loose clothing away from any moving parts on the machine.

# Adjusting the Snow Discharge Direction and Height

# **Change discharge direction:**

Discharge chute rotation lever controls the chute either left or right (Fig. 16).

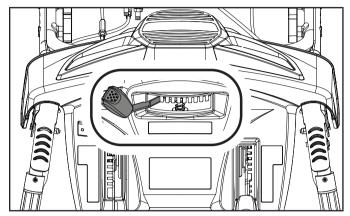


Figure 16

# Change discharge height:

Discharge chute deflector lever controls the deflector up or down (Fig. 17).

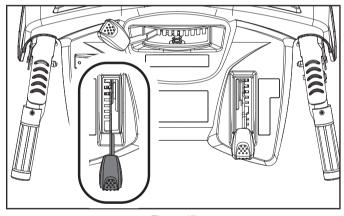


Figure 17

# **Clearing a Clogged Discharge Chute**

# **A** DANGER

DO NOT use your hands to clean out the discharge chute.

## To clear the chute:

- 1. SHUT THE ENGINE OFF!
- Wait 10 seconds to be sure the auger blades have stopped rotating.
- 3. Always use the provided clean-out tool to clear out the discharge chute.

# **Adjusting the Snow Shoes**

Set the height of the auger housing above the ground using the shoes.

Adjust the shoes to suit the ground conditions:

- On flat ground, e.g. asphalt, the shoes should be adjusted to about ½ in. (5 mm) (the distance from the auger to the ground).
- On uneven ground, e.g. gravel paths, the shoes should be adjusted to about 1½ in. (30 mm) (the distance from the auger to the ground).

# To adjust the shoes

- Loosen the nuts.
- 2. Move the shoes upward or downward to adjust height.
- 3. Tighten the nuts.

# **A WARNING**

Always adjust the shoes so that gravel and stones are not fed into the snowblower. There is a risk for personal injury if these are thrown out at high speed.

Ensure the shoes are adjusted the same on both sides.

# **A WARNING**

Do not at any time make any adjustment to machine without first stopping the engine and disconnecting the spark plug wire.

# **A WARNING**

Before changing height, stop engine and disconnect spark plug cable.

# **Power Turn Steering Technology**

Power Turn Steering Technology enables effortless power steering on your snowblower. Power Turn Steering Technology is able to sense the direction your trying to turn the snowblower and engages the drive system to assist turning in the desired direction.

#### **Clutch Lock Feature**

This snowblower offers a clutch lock feature that will enable the operator to keep the snowblower moving forward while you adjust the chute. To use the clutch lock system, follow the following steps.

 While both the drive and auger control levers are fully depressed, release the auger control lever while keeping the self-drive control lever fully depressed. The clutch lock feature will automatically keep the auger control lever engaged as long as the self-drive control lever is depressed.

- 2. This allows the operator to keep driving the snowblower while they now use their right hand to make any adjustments to the discharge chute needed to maximize operation.
- To disengage the clutch lock feature simply release the selfdrive control lever.

# **After Use**

- Check for loose or damaged parts. If required, change damaged parts.
- 2. Tighten loose screws and nuts.
- 3. Brush all the snow from the machine.
- 4. Move all the controls backwards and forwards a few times.
- 5. Disconnect the spark plug wire from the spark plug.

# **MAINTENANCE**

# **A WARNING**

Always disconnect the spark plug wire during times of inactivity, cleaning and maintenance. This will prevent any accidental start up that may cause damage or injury.

# **▲** WARNING

Never operate a damaged or defective snowblower

# **A** WARNING

Improper maintenance will void your warranty.

# NOTICE

For Emission control devices and systems, read and understand your responsibilities for service as stated in the Emission Control Warranty Statement of this manual.

# **Engine Maintenance**

# **Safety Precautions**

Make sure the engine is off before you begin any maintenance or repair. This will eliminate several potential hazards:

- Carbon monoxide poisoning from engine exhaust never run the machine indoors. The exhaust fumes contain carbon monoxide, a very toxic gas.
- Burns from hot parts let the engine cool for 30 minutes before touching hot parts.

 Injury from moving parts — read the instructions before you begin, and make sure you have the tools and skills required.

To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks and flames away from all fuel-related parts.

# **A WARNING**

Do not cover the machine while the engine and muffler are still hot.

# **Regular Service Periods**

Perform at every indicated month or operating hour interval, whichever comes first.

# EACH USE ☐ Check oil level EVERY MONTH OR 20 HOURS

LVLIII	MONTH ON 20 HOURS	

$\Box$	Change	0
--------	--------	---

# **EVERY 6 MONTHS OR 100 HOURS**

$\overline{}$	06	_ :
1 1	Change	n
$\overline{}$	Onlango	0

_			
l l	Check/clean	onork	nlin
l J	CHECK/Clean	SUALK	DILIC

$\Box$	Clean	snark	arreste
$\overline{}$	Oluali	Spain	arrosto

# **EVERY YEAR OR 150 HOURS**

$\overline{}$				
	Ren	lace	snark	nluc

	-	. 10 . 0.	9
Check/ad	djust	idle	speed*

- ☐ Check/adjust valve clearance\*
- ☐ Clean fuel tank and strainer\*

# **EVERY 2 YEARS (REPLACE IF NECESSARY)**

$\Box$	Check	fual	lina
$\cup$	UIIEUK	IUUI	IIIIE

# Lubrication

No parts inside the gearbox are to be lubricated. All bearings and bushings are permanently lubricated and require no maintenance. Lubricating these parts will only result in the grease getting on to the friction wheel and disc drive plate, which could damage the rubber clad friction wheel.

<sup>\*</sup>These items should be serviced by your servicing dealer unless you have the proper tools and are mechanically proficient. Refer to manual for service procedures.

# **LONG-TERM STORAGE**

Never store the machine with gasoline in the fuel tank in a confined area with poor ventilation. Gasoline fumes could reach open flames, sparks, cigarettes, etc.

To avoid the engine freezing and problems starting the engine, leave the engine running for 5-10 minutes after your work has been completed. This will ensure all moisture will disappear that would otherwise cause starting problems.

If the machine is to be stored for a longer period than 30 days, the following procedures are recommended.

- Mix fuel stabilizer with gasoline according to fuel stabilizer manufacturer's directions.
- 2. Start the engine and let it run until it stops due to lack of fuel.
- 3. Change the engine oil if it has not been done for 3 months.
- Remove the spark plug and empty a little engine oil (about 1 oz {30 mL}) in the hole. Crank the engine a couple of times. Replace the spark plug.
- 5. Clean the whole machine thoroughly.
- 6. Inspect the machine for damage, and repair if necessary.
- 7. Apply rust protection to the metal surfaces.
- 8. Store the machine indoors if possible.

# **Transporting**

If the engine has been running, allow it to cool for at least 15 minutes before loading the machine on the transport vehicle. A hot engine and exhaust system can burn you and can ignite some materials.

Keep the engine level when transporting to reduce the possibility of fuel leakage. Move the fuel valve lever to the OFF position.

# **SPECIFICATIONS**

# **Snowblower Specifications**

Model	100535
Speed Control (forward/reverse)	6/2
Auger Diameter	14 in. (36 cm)
Clearing Width	27 in. (69 cm)
Wheel Diameter	15 in. (38 cm)
Gross Weight	298 lb. (135 kg)
Net Weight	268 lb. (121.5 kg)
Length	56.3 in. (143 cm)
Width	29.1 in. (74 cm)
Height	42.9in. (109 cm)

# **Engine Specifications**

Model R30	0S
Displacement 301	CC
Type	ΗV

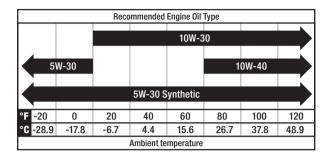
# NOTICE

A technical bulletin regarding valve adjustment procedures is available at www.championpowerequipment.com.

# **Oil Specifications**

DO NOT OVERFILL.

Type	0W-30
Capacity	oz. (1100 ml)



# NOTICE

Temperature will affect engine oil and engine performance. Change the type of engine oil used based on temperature shown in the "Recommended Engine Oil Type" table.

# **Fuel Specifications**

Use regular unleaded gasoline with a minimum octane rating of 87 and an ethanol content of less than 10% by volume. DO NOT USE E15 or E85. DO NOT OVERFILL.

# **TROUBLESHOOTING**

Problem	Cause	Solution
	Engine flooded.	Repeat start attempts with throttle choke OFF.
Engine fails to start.	Water in fuel.	Drain tank and refill with fresh fuel.
	Other.	Check carefully the start procedure according to this manual.
Engine starts hard or runs poorly.	Spark plug issues.	Replace the spark plug.
Eligilie starts flard of fulls poorly.	Fuel cap ventilation is blocked.	Clear the ventilation.
	Foreign material caught in system.	Clean.
Auger does not rotate.	Auger drive belt slipping.	Adjust the belt and wire.
Auger does not rotate.	Auger drive belt broken.	Replace the belt.
	Auger control cable is out of adjustment.	Adjust Auger Control Cable.
Augus do co not aton when the lover is	Auger drive belt is out of adjustment.	Adjust the belt.
Auger does not stop when the lever is released.	Auger drive guide is out of adjustment.	Adjust the guide.
Tolcasca.	Auger control cable is out of adjustment.	Adjust Auger Control Cable.
	Tire pressure not equal.	Adjust the tire pressure.
Snowblower veers to one side.	Wheel spring lock pin is inserted on one side.	Check the wheel locks.
Showblower veers to one side.	Shoes are mounted unevenly.	Adjust shoes.
	Scraper blade uneven.	Adjust scraper blade and shoes.
	Drive cable out of adjustment.	Adjust drive cable.
Snowblower does not drive.	Auger drive belt worn/broken.	Replace traction drive belt.
	Friction disc worn out.	Repair or replace friction disc.

# For further technical support:

Technical Support Team Mon-Fri 8:30 AM-5:00 PM (PST/PDT) Toll Free 1-877-338-0999 support@championpowerequipment.com