YARDWORKS®

5.5 HP 2 Stage Snow Thrower

SKU #270-3250 Owner's Manual





DO NOT RETURN TO STORE

Questions? Problems? Please call our customer help line:

(888) 315-3080 M-F 8-5 CT

IMPORTANT: PLEASE READ THIS ENTIRE MANUAL BEFORE USING THIS SNOW THROWER.

Thank you for purchasing a Yardworks[®] snow thrower. This manual provides information regarding the setup, operation, and maintenance of this product. We have made every effort to ensure the accuracy of the information in this manual. The manufacturer reserves the right to change this product at any time without prior notice.

Please keep this manual available to all users during the entire life of the snow thrower.

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GENERAL SAFETY PROCEDURES

Please familiarize yourself with the following safety symbols and words:

The safety alert symbol **A** is used with one of the safety words (**DANGER, CAUTION**, or **WARNING**) to alert you to hazards. Please pay attention to these hazard notices both in this manual and on the snow thrower.

DANGER: Indicates a hazard that will result in serious injury or death if instructions are not followed.

WARNING: Indicates a strong possibility of causing serious injury or death if instructions are not followed.

CAUTION: Indicates a possibility of personal injury or equipment damage if instructions are not followed.

If you have any questions regarding the hazard and safety notices listed in this manual or on the product, please call (888) 315-3080 M-F 8-5CT before using the snow thrower.

▲ DANGER: This snow thrower produces poisonous carbon monoxide gas when running. This gas is both odorless and colorless. Even if you do not see or smell gas, carbon monoxide may still be present. Breathing this poison can lead to headaches, dizziness, drowsiness, and eventually death.

• Use outdoors ONLY in non-confined areas.

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

A WARNING: This snow thrower may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to explosion even if not directly in contact with gas.

- Do not operate near open flame.
- Do not smoke near snow thrower.
- Always turn snow thrower off before refueling. Allow snow thrower to cool for at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Do not overfill gas tank. Gas may expand during operation. Do not fill to the top of the tank.
- Always check for spilled gas before operating.
- Empty gasoline tank before storing or transporting the snow thrower.
- Before transporting, turn fuel valve to off and disconnect spark plug.

A WARNING: Foreign objects entering the auger or impeller can create clogs, jams, projectiles, and other dangerous conditions.

- Do not use in the path of wires, doormats, snow toys, or other foreign objects.
- If the snow thrower intakes a foreign object, stop the engine, wait for the auger and impeller to stop rotating, and inspect the snow thrower for damage.
- Turn off the engine and make sure that all moving parts have stopped before clearing any clogs or jams.
- If the snow thrower makes any abnormal sounds or vibrations, stop the engine and inspect the snow thrower.
- Use extreme caution when operating on or near dirt or gravel roads.

▲ WARNING: The auger and impeller rotate at fast speeds that can cause damage or even amputation of body parts. Even if you do not see the auger or impeller rotating, they may start at any time if the engine is running.

- Always turn off the engine before attempting to clear any clogs or jams.
- Keep hands and feet away from rotating parts while the engine is running.
- Do not wear loose fitting clothing that can become entangled in rotating parts.

A WARNING: This snow thrower is intended for use in conditions that are cold, slippery, and otherwise naturally hazardous. Take precautions when operating machinery in these conditions.

- Always wear warm clothing and shoes intended for slippery surfaces.
- Always operate in daylight with good visibility.
- Never run with snow thrower and be alert to all surrounding people and traffic.
- Do not operate the snow thrower on steep inclines.
- Disengage the drive mechanism to neutral before starting the engine.
- Always hold on to the handles while operating. Never leave the snow thrower while the engine is running.

▲ WARNING: This snow thrower produces heat when running. Temperatures near exhaust can exceed 150° F (65° C).

- Do not touch hot surfaces. Pay attention to warning labels on the snow thrower denoting hot parts of the machine.
- Even in cold conditions, allow the snow thrower to cool several minutes after use before touching engine or areas that heat during use.

CAUTION: Misuse of this snow thrower can damage it or shorten its life.

- Use the snow thrower only for its intended purposes.
- After starting the engine, allow it to adjust to outdoor temperatures before clearing snow.
- Do not attempt to clear snow at too fast a rate, as this may overload the snow thrower.
- Use only Yardworks[®] approved attachments or replacement parts with this snow thrower.
- Never make adjustments to the snow thrower while the engine is running.

A WARNING: In addition to the above warnings please note the following precautions that should be followed when operating this or ANY machine.

- Read all manuals and warning labels before using a machine.
- Never operate a machine with any guard or cover removed.
- Remove all adjusting keys and wrenches before use.
- Do not allow children or uninstructed persons to operate.
- Use the right tool. Do not force the tool or attachment to do a job for which it was not designed.
- Do not wear loose clothing, neckties, or jewelry that can get caught in moving parts. Wear a protective hair covering to contain long hair. Do not wear open-toed shoes.
- Do not overreach. Keep proper footing and balance at all times.
- Always wear safety glasses when operating.
- Always store machines in a clean dry area free from grease and oil. Never use petroleum based products or any solvents to clean a tool.
- Allow motor to come up to full speed before operating.

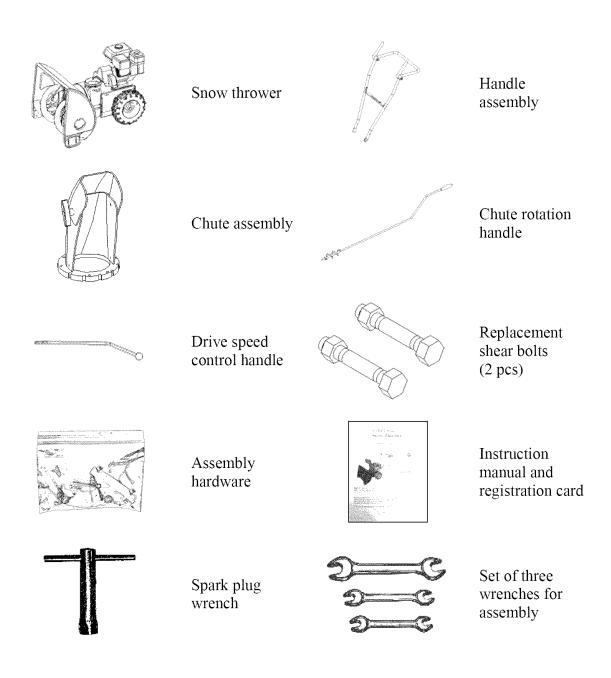
In addition to the above safety notices, please familiarize yourself with the safety and hazard markings on the snow thrower.

PACKAGE CONTENTS

Your snow thrower comes with the items listed below. Please check to see that all of the following items are included with your snow thrower.

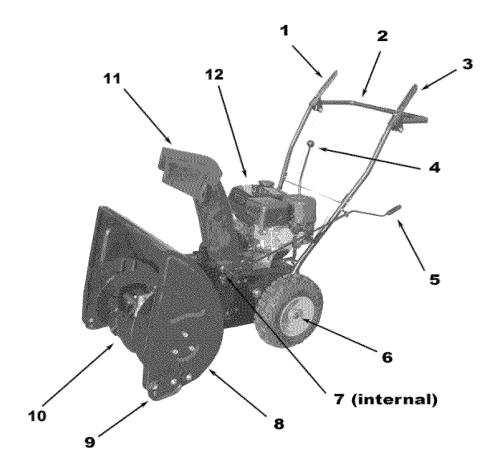
If you are missing components DO NOT RETURN TO STORE, please call (888) 315-3080 M-F 8-5 CT for customer service.

ITEM LIST



SNOW THROWER COMPONENTS

Please familiarize yourself with the locations and functions of the various components and controls of the snow thrower.



(1) **Drive Control-** Drives the snow thrower at the pre-selected speed and direction when depressed.

(2) Handle- Hold the snow thrower here when using.(3) Auger Control- Rotates the auger when depressed.

(4) Drive Speed Control- Sets the speed and direction of the snow thrower.

(5) Chute Rotation Handle- Use to adjust throwing direction of snow exhausted from the chute.

(6) Wheel Traction Drive Lock- Pin that locks the wheel into the automatic drive system.

(7) **Impeller-** Spinning mechanism that works to propel snow out the chute.

(8) Auger Shield- A shroud that covers the auger. This is the intake point for the snow.

(9) Adjustable Skid Shoes- Control the height of the auger and auger shield from the ground.

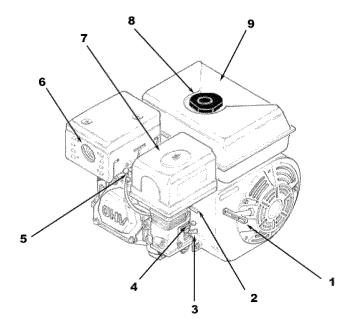
(10) Auger- Spinning mechanism that intakes snow into the snow thrower.

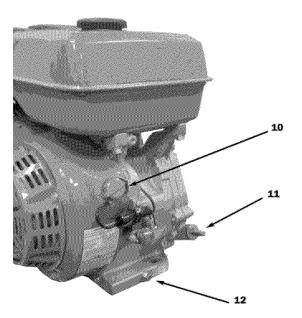
(11) Chute- Exit shaft of shoveled snow.

(12) Engine- Provides power to the snow thrower (see engine components on next page).

ENGINE COMPONENTS

Please familiarize yourself with the locations and functions of the various components and controls of the engine portion of the snow thrower.





(1) Recoil Starter Handle- Pull-cord for starting engine.

(2) Throttle Lever- Use to control engine speed. This should be set to the highest speed when using the snow thrower.

(3) Fuel Valve Lever- Controls flow of fuel into the engine.

(4) Choke Lever- Adjusts the amount of air let into the engine.

(5) Spark plug- Provides proper engine ignition.

(6) Exhaust- Outlet for air from engine combustion.(7) Air cleaner- a removable, cleanable element that limits the amount of dirt pulled into the engine.

(8) Fuel Cap- Access to the fuel tank for adding fuel.

(9) Fuel Tank- Stores gas used to run engine.

(10) On/Off Switch- Used to start/stop engine.

(11) Oil Fill and Dipstick- Location for checking and filling engine oil.

(12) Oil Drain Plug- Location for draining engine oil.

ASSEMBLY

In order to best protect the snow thrower while in the package, this product comes with some components disassembled. Please complete the following assembly steps before proceeding to use the snow thrower. For ease of assembly, we recommend attaching the components in the order listed in this manual.

If after reading this section, you are unsure about how to perform any of the steps please call (888) 315-3080 M-F 8-5 CT for customer service

Chute Assembly

To attach the chute to the snow thrower:

- 1. Mount the chute to the snow output port on the snow thrower as shown in figure 1.
- 2. Place one of the brackets underneath the chute with the raised groove of the bracket facing up (see figure 1a). Line up the holes in the bracket with the holes at the base of the chute.
- 3. Attach the bracket to the chute using two bolts and two nuts as shown in figure 1b..
- 4. Repeat steps 2 and 3 for the remaining two brackets.

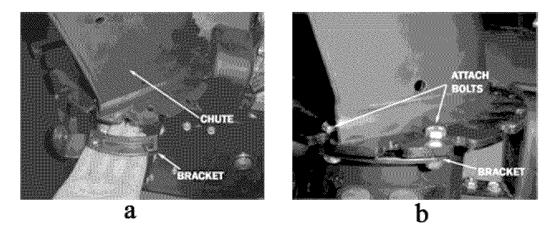


Figure 1- Chute Assembly

Handle Assembly

Attach the handle to the snow thrower body using the two handle brackets and four bolts as shown in figure 2. Each side of the handle will require one bracket and two bolts. The upper hole with bracket on each side requires a long bolt. The lower hole requires a short bolt with washer.

NOTE: For easiest assembly, we recommend not attaching the lower bolt of each handle bracket until after assembling the chute rotation handle, auger and drive handle cables, and drive speed control lever.

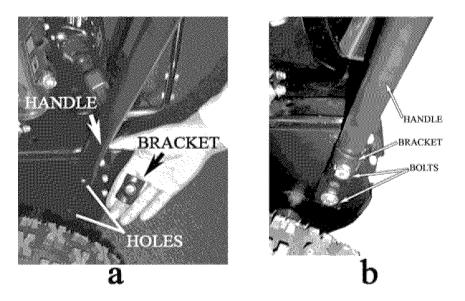


Figure 2- Handle Assembly

Attaching Drive Speed Control Lever

To attach the drive speed control lever, slide it through the drive speed selection hole in the handle and attach it at the base of the snow thrower using two bolts and two nuts as shown in figure 3. Do not worry about the position of the handle in the drive speed selection hole. It will naturally be correct.

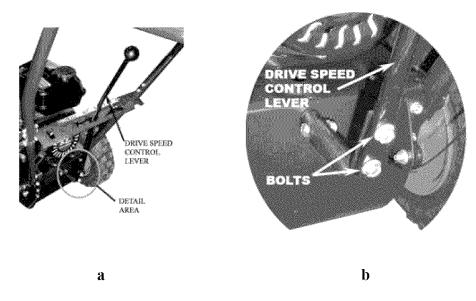


Figure 3- Drive Speed Control Lever Attachment

Chute Rotation Handle

To attach the chute rotation handle:

- 1. Remove the handle grip from the handle by removing the screw at the end (see figure 4).
- 2. Slide the end of the chute rotation handle, with the grip removed, through the eye hole on the snow thrower handle as shown in figure 4 a.
- 3. Slide the other end of the chute rotation handle through the hole near the base of the chute. Line the spiral of the handle up with the grooves in the base of the chute (see figure 4b).
- 4. Insert the fastener pin through the end of the chute rotation handle near the chute. Bend the ends of the pin to hold the pin in place.
- 5. Reattach the grip to the chute rotation handle.

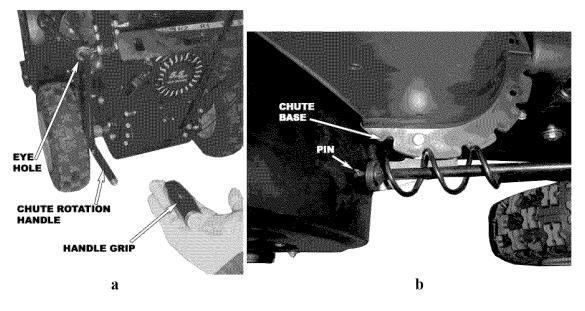


Figure 4- Chute Rotation Handle Assembly

Drive Control and Auger Control Cable Assembly

The cables that control the drive and auger are already attached to the snow thrower. To connect them to their respective handles:

- 1. Attach the cable hooks to the holes on the inner portion of the drive control and auger control handles as shown in figure 5a. The hook should dangle freely from the handles.
- 2. Connect the drive control and auger control cables to the cable hooks using the attached turnbuckles (see figure 5b). Rotate the turnbuckles to tighten. The cables should be just barely taut when the drive and auger control handles are in the raised position.

NOTE: When attaching the cables, be sure they are properly threaded through the main handle. The auger control cable should fit through the hole next to the speed selector. The drive control cable should fit in the handle groove on the other side of the speed selector.

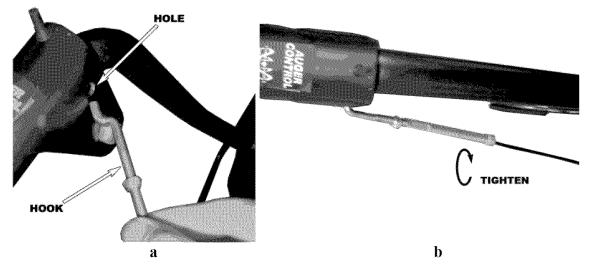


Figure 5- Cable attachment

PREPARING THE SNOW THROWER FOR USE

The following section describes steps you must follow to prepare the snow thrower for use. If after reading this section, you are unsure about how to perform any of the steps please call (888) 315-3080 M-F 8-5 CT for customer service. Failure to perform these steps properly can damage the snow thrower or shorten its life.

Visually Inspect the Snow Thrower

Before using the snow thrower for the first time, be sure that the machine is properly assembled (see the "Assembly" section of this manual). Check that all parts are properly attached and free from damage. If you are unsure about the assembly or condition of any of the snow thrower parts, call the customer help line for service.

Before each use of the snow thrower, check the snow thrower for damaged or missing components. If parts are damaged or missing, do not attempt to use the machine. Instead, call our customer help line.

Check Tire Inflation

Before each use of the snow thrower, check the tire pressure. The pressure of the two tires should be equal and in the range of 20-24 PSI for each tire to ensure the best performance.

The pressure can be checked using an ordinary tire pressure gauge. Fill the tires using a portable air compressor or other compressed air source. NOTE: Do not over-inflate the tires. For more detail about how to check the tire pressure and fill the tires, see the Maintenance section of this manual.

Add/ Check Oil

If this is your first time using this snow thrower:

The snow thrower requires engine oil to operate properly. The snow thrower, when new from the package, contains *no* oil in the engine crankcase. To add oil to your snow thrower for the first time, follow these steps:

- 1. Make sure the snow thrower is fully assembled and on a level surface.
- 2. Unscrew the oil filler cap from the engine crankcase as shown in figure 6.
- 3. Using a funnel, add approximately 21 fluid oz. of motor oil. Use a regular car motor oil that performs well in cold conditions. The temperature conditions and recommended oil grade will vary by geographic area.
- 4. Wipe the dipstick attached to the oil filler cap with a clean dry cloth. Now replace the cap.

- 5. Remove the oil filler cap again and inspect the attached dipstick. Oil should now be visible on the stick. If oil is not visible on the stick, you may need to add more oil and repeat steps 4 and 5.
- 6. Replace the oil filler cap and screw tightly.

NOTE: Even if you have previously measured 21 ounces of oil, some spillage is common when adding oil to the crankcase. Always ensure that the engine has sufficient oil by checking the dipstick. See Figure 6 for proper oil level.

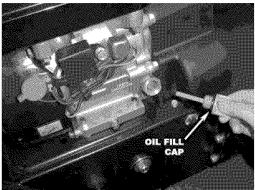


Figure 5- Removing oil filler cap

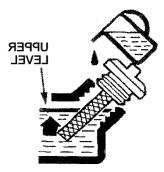


Figure 6- Proper oil level

If this is not your first time using the snow thrower:

Before each use, you should check the oil level in the snow thrower:

- 1. Unscrew the oil filler cap and wipe the dipstick with a clean dry cloth. Now replace the cap.
- 2. Remove the oil filler cap again and inspect the attached dipstick. Oil should now be visible on the stick. If oil is not visible on the stick, you may need to add more oil and repeat these steps to check the proper oil level.
- 3. Once you have ensured the engine oil level is correct, replace the oil filler cap and screw tightly.

Add/ Check Gasoline

A WARNING: Gasoline and gas fumes are highly flammable.

- Do not fill tank near an open flame.
- Do not overfill. Always check for fuel spills.

To ensure that the snow thrower runs smoothly, use only FRESH, UNLEADED GAS WITH AN OCTANE RATING OF 87 OR HIGHER. To add gasoline:

- 1. Make sure the snow thrower is turned off and situated on a level surface.
- 2. Unscrew gas cap and set aside (NOTE: the gas cap may be tight and hard to unscrew).
- 3. Slowly add unleaded gasoline to the fuel tank. The snow thrower fuel tank when new from the package is empty. The capacity of the fuel tank is 0.95 Gallons. BE CAREFUL NOT TO OVERFILL. Do not fill the gas tank to the very top.
- 4. Replace fuel cap and wipe up any spilled gasoline with a dry cloth.

IMPORTANT:

- Never use an oil/gasoline mixture.
- Never use old gas.
- Avoid getting dirt or water in the fuel tank.
- Gas can age in the tank and make it hard to start up the snow thrower in the future. Never store the snow thrower for extended periods of time with fuel in the tank.

Adjust Skid Shoes

Adjustment of the skid shoes governs the height above the ground at which the auger shield operates.

For clearing snow from concrete, asphalt, and other smooth surfaces, it is best to set the auger shield so that the bottom of the shield scrapes the ground.

For clearing snow from gravel, dirt, and other rough surfaces, it is best to set the auger shield slightly above the ground to avoid dirt and gravel from entering the auger.

The optimal height of the shield will vary depending on the type of surface being cleared. Surfaces with larger gravel or stones would require a more raised auger shield.

To adjust the skid shoes:

- 1. Make sure the snow thrower is on a solid, smooth, and level surface.
- 2. Place a spacer board on the ground underneath the auger shield between the skid shoes. The thickness of the board should be the same as the height above the ground you wish to raise the auger shield to. The skid shoes should not touch the board (see figure 7).
- 3. Using a wrench, loosen the four nuts located on the skid shoes (2 nuts on each skid shoe) and allow the skid shoes to slide to the ground.
- 4. Re-tighten the nuts on the skid shoes and wheel the snow thrower off of the spacer board

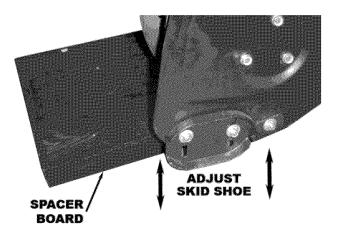


Figure 7- Adjusting Skid Shoes

OPERATION

Before starting the snow thrower, make sure you have read and performed the steps in the "Preparing the Snow Thrower for Use" section of this manual. If you are unsure about how to perform any of the steps in this manual please call (888) 315-3080 M-F 8-5 CT for customer service.

Starting the Snow Thrower

To start up the snow thrower, perform the following steps:

- 1. Turn the engine fuel valve lever to the "on" position (see figure 8).
- 2. Move the choke lever to the closed position as shown in figure 7 (NOTE: If you have just been using the snow thrower and the engine is still warm, keep the choke in the "open" position).
- 3. Move the engine throttle lever to the fast position (see figure 8).
- 4. Move the engine switch to the "on" position as shown in figure 9.

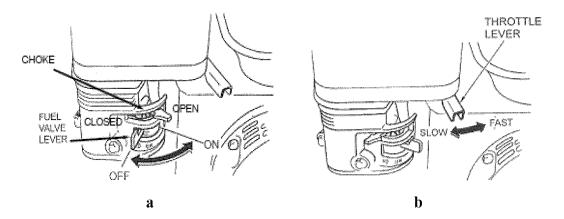


Figure 8 Engine lever positions

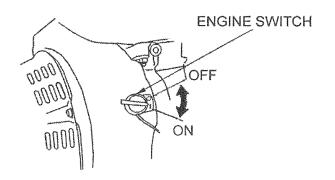


Figure 9- Engine switch positions

- 5. Pull on the recoil starter handle slowly until a slight resistance is felt (see figure 10) then pull quickly to start the engine. Return cord gently into the machine. Never allow the cord to snap back.
- 6. If engine fails to start, repeat step 5. NOTE: After repeated attempts to start the engine, please consult the troubleshooting guide before attempting again. If problems persist please call (888) 315-3080 M-F 8-5 CT.
- 7. Once the engine has started and run for about a minute, move the choke lever about half way towards the "open" position. Wait another 30 seconds and then move the choke lever all the way to the "open" position.

NOTE: Allow the snow thrower to run outdoors for several minutes before attempting to use the machine.

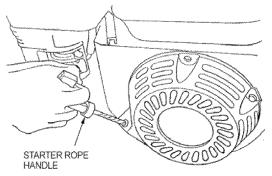


Figure 10- Pulling the recoil starter handle

Using the Snow Thrower

Once the snow thrower has been running outside for several minutes, it is now ready for use. To use the snow thrower:

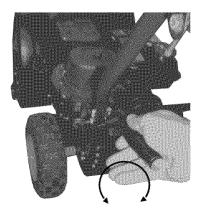
- 1. Make sure the path in front of the snow thrower is free from people, animals, objects, and all other obstructions except for snow.
- 2. Adjust the chute outlet to the desired direction. Turn the chute rotation handle clockwise or counter-clockwise until the desired position is reached (see figure 11).

IMPORTANT: Never direct the chute outlet toward people or animals. While snow may seem harmless, it can contain rocks or other debris that can cause serious injury when projected through the chute.

- 3. Move the drive speed control lever to the desired speed. There are seven speedsfive forward speeds and two reverse speeds. 1 is the slowest forward speed and 5 is the fastest forward speed. R1 is the slowest reverse speed and R2 is the fastest reverse speed (see figure 12). NOTE: There is no neutral drive setting.
- 4. Press down on the auger control handle. The auger should start spinning.
- 5. Press down on the drive control handle. The machine should start moving in the direction and speed selected with the drive speed control lever.
- 6. When you have finished clearing the immediate snow path, release the auger control handle and the drive control handle.

You can adjust the drive speed and direction using the drive speed control lever. Be sure to release both the auger control handle and the drive control handle before adjusting the drive speed control lever.

As you use the snow thrower, you may want to adjust the chute outlet direction. Be sure to release both the auger control handle and the drive control handle before adjusting the chute outlet direction.



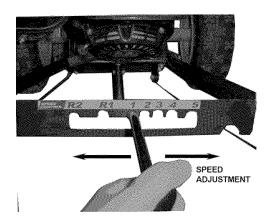


Figure 11- Adjusting Chute Outlet Direction

Figure 12- Adjusting Drive Speed and Direction

CHUTE DEFLECTOR

The angle of the chute deflector controls the throwing distance of the snow leaving the chute. Raising the angle will increase the throwing distance. Lowering the angle will decrease the throwing distance (see figure 13).

To adjust the chute deflector:

- 1. Make sure the engine is stopped and the auger and impeller have come to a full stop.
- 2. Loosen the knobs on the chute deflector as shown in figure 13 and adjust the chute deflector to the desired angle.
- 3. Re-tighten the knobs on the chute deflector. Do not over-tighten.

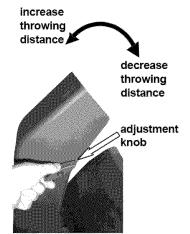


Figure 13- Adjusting the chute deflector

STOPPING THE SNOW THROWER

When you are finished using the snow thrower, perform the following steps to shut it down:

- 1. Move the snow thrower away from any snow piles.
- 2. Run the auger and impeller for 30 seconds to clear any remaining snow inside the snow thrower.
- 3. Set the engine switch to the "off" position. This will stop the motor.
- 4. Move the fuel valve lever to the "off" position.
- 5. Dust snow off of all snow thrower surfaces.

A WARNING: Allow the snow thrower to cool for several minutes before touching areas that become hot during use.

CAUTION: Allowing gas to sit in the snow thrower fuel tank for long periods of time without use can make it difficult to start the snow thrower in the future. Never store snow thrower for extended periods of time with fuel in the tank.

STORAGE / TRANSPORT PROCEDURES

A CAUTION: Never place any type of storage cover on the snow thrower while it is still hot.

When transporting or storing your snow thrower for extended periods of time:

- Empty the gas tank (see "Emptying the Gas Tank" in the "Maintenance" section).
- Disconnect the spark plug.
- Do not obstruct any ventilation openings.
- Keep the snow thrower in a cool dry area.

MAINTENANCE / CARE

Proper routine maintenance of the snow thrower will help prolong its life. Please perform maintenance checks and operations according the schedule in figure 14.

If you have questions about any of the maintenance procedures listed in this manual, please call (888) 315-3080 M-F 8-5CT.

CAUTION: Never perform maintenance operations while the snow thrower is running.

| Mechanism | Function | Frequency |
|--------------|-----------------|----------------------------------|
| Auger and | | |
| Impeller | Clear jams | As necessary |
| Tires | check pressure | Before each use |
| Engine Oil | check level | Before each use |
| | replace | Every 50 hours or as needed |
| Air Filter | check | Every 10 hours |
| | clean | Every 50 hours or as needed |
| Spark Plug | check/ clean | Every 100 hours |
| Gas Tank | check gas level | Before each use |
| | Empty | Before storing for extended time |
| Drive and | | |
| Auger Cables | Adjust tension | As necessary |
| Shear Pins | Replace | When broken |

Recommended Maintenance Schedule

Figure 14- Recommended maintenance schedule

Cleaning the Snow Thrower

TIMELINE: When dirty.

To clean the snow thrower, use a damp cloth and mild detergent on the surfaces only. Never get soap or water inside the working mechanisms of the snow thrower.

NOTE: Do not clean with water when the snow thrower is cold from being outdoors as it may cause water to freeze onto the machine and damage it.

Clearing Auger or Impeller Jams

▲ WARNING: The auger and impeller rotate at fast speeds that can cause damage or even amputation to body parts. Even if you do not see the auger or impeller rotating, they may start at any time if the engine is running.

- Always turn off the engine before attempting to clear any clogs or jams.
- Keep hands and feet away from rotating parts while the engine is running.
- Do not wear loose fitting clothing that can become entangled in rotating parts.

To clear a jam in the auger or impeller:

- 1. Turn off the snow thrower engine
- 2. Wait until the auger and compeller have come to a full stop.
- 3. Clear any visible jams using a long stick or broom handle. DO NOT try to clear jams with your hands or feet.
- 4. If the jam is too difficult to clear, do not force it out. Call the customer service line at (888) 315-3080.

Checking Tire Pressure

TIMELINE: Before each use for best performance.

To get the best performance from your snow thrower, the pressure in the tires should be equal and in the range of 20 to 24 PSI. To check the tire pressure, unscrew the inflation nozzle cap and attach an ordinary tire pressure gauge as shown in figure 15. If needed, inflate using an air compressor or other compressed air source. DO NOT OVER-INFLATE.

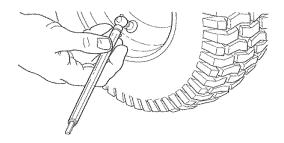


Figure 15- Checking tire pressure

Checking/ Adding Oil

TIMELINE: Before each use, you should check the oil level in the snow thrower:

- 1. Unscrew the oil filler cap and wipe the dipstick with a clean dry cloth (figure 16). Now replace the cap.
- 2. Remove the oil filler cap again and inspect the attached dipstick. Oil should now be visible on the stick. If oil is not visible on the stick, you may need to add more oil and repeat these steps to check the proper oil level. Use a regular car motor oil

that performs well in cold conditions. The temperature conditions and recommended oil grade will vary by geographic area.

3. Once you have ensured the engine oil level is correct, replace the oil filler cap and screw tightly.

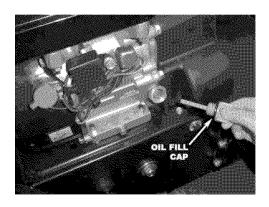


Figure 16- Removing oil filler cap



Figure 17- Proper oil level

Replacing the Oil

TIMELINE: You should drain and replace the oil in the crankcase every 50 hours or when dirty.

To drain the oil from the crankcase:

- 1. Place a bucket near the engine to catch oil as it drains.
- 2. Using a wrench, unscrew the oil drain plug. The oil drain plug is located just below and to the left of the oil filler cap as shown in figure 18. Allow all the oil to drain from the crankcase.
- 3. Replace the oil drain plug and tighten with the hex wrench.

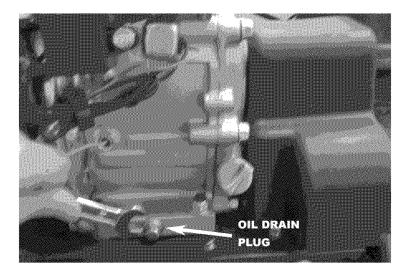


Figure 18- Draining the oil

After you have drained the dirty oil, refill the crankcase with fresh auto motor oil. To fill the crankcase, perform the steps listed in the "Checking/ Adding Oil" portion of this MAINTENANCE section.

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

Air Filter Maintenance

TIMELINE: Clean the air filter every 50 hours or more often in dirty environments.

To clean the air filter:

- 1. Unscrew the wing nut from the top of the air filter and remove the plastic case (see figure 19).
- 2. Unscrew the wing nut that holds the metal air filter bracket to the machine. Remove the metal bracket with sponge attached.
- 3. Slide the sponge element off of the metal bracket. Wash the sponge element in household detergent and warm water. Allow to dry.
- 4. Soak the dry element in engine oil. Squeeze out any excess oil.
- 5. Tap the metal bracket, with paper air filter inside, against a hard surface to knock out any dirt.
- 6. Slide the sponge element back onto the metal bracket.
- 7. Replace the metal bracket and secure with the inner wing nut. Then replace the plastic cover and secure with the outer wing nut.



Figure 19- Removing the air filter

Spark Plug Maintenance

TIMELINE: Every 100 hours or as needed.

The spark plug is important for proper engine operation. A good spark plug should be intact, free of deposits, and properly gapped. To inspect your spark plug:

- 1. Pull on the spark plug cap to remove it.
- 2. Unscrew the spark plug from the engine using the spark plug wrench included with this product (see figure 20).
- 3. Visually inspect the spark plug. If it is cracked or chipped, discard and replace with a new spark plug. Measure the plug gap with a gauge (see figure 21). The gap should be 0.7-0.8mm (0.028-0.031in).
- 4. If you are re-using the spark plug, use a wire brush to clean any dirt from around the spark plug base and then re-gap the spark plug.
- 5. Screw the spark plug back into its place on the engine using the spark plug wrench. Replace the spark plug cap.

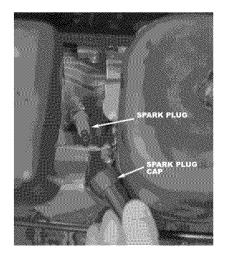


Figure 20- Removing the spark plug

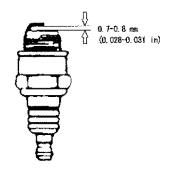


Figure 21- Measuring the spark plug gap

Emptying the Gas Tank

TIMELINE: Before storing the snow thrower for extended periods of time.

To drain the snow thrower engine of gas:

- 1. Make sure the engine is turned off.
- 2. Place a gas safe container under the carburetor (see the "Snow Thrower Parts Diagram" to reference this part).
- 3. Move the fuel valve lever to the "on" position.
- 4. Unscrew the outward facing bolt from the bottom of the carburetor (see figure 22). Gas should start to empty from this point.
- 5. Catch the emptying gas in the gas safe container until all the gas has drained.
- 6. Turn the fuel valve to the "off" position.

- 7. Replace the bolt on the carburetor.
- 8. Store the emptied gasoline in a suitable place.

A CAUTION: Do not store fuel from one season to another.

▲ CAUTION: Never pour gasoline down a drain or in a gutter. Call your local authorities to dispose of gas properly.

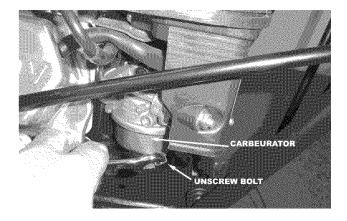


Figure 22- Draining gas from the carburetor

Adjusting Drive and Auger Cables

TIMELINE: As needed.

Over time, the tension in the cables that lead to the drive control and auger control handles may loosen. Ideally, the cables should be just barely taught when the handles are in the released position. To tighten the handle cables, use a wrench or pliers and gently rotate the metal turnbuckle at the top of the cable until the desired tension is achieved (see figure 23).



Figure 23- Adjusting drive and auger cable tension

Replacing Shear Pins

▲ WARNING: The auger and impeller rotate at fast speeds that can cause damage or even amputation to body parts. Even if you do not see the auger or impeller rotating, they may start at any time if the engine is running.

- Always turn off the engine before attempting to clear any clogs or jams.
- Keep hands and feet away from rotating parts while the engine is running. Do not wear loose fitting clothing that can become entangled in rotating parts.

TIMELINE: When Broken

The snow thrower contains two shear pins, one on each end of the auger shaft as shown in figure 24. A clog or jam in the auger may cause one or both of the shear pins to break. This is a safety mechanism to protect the rest of the snow thrower from overload and damage. The snow thrower comes with two replacement shear pins. To order more shear pins, please call our customer service line.

To replace a shear pin:

- 1. Turn off the engine and wait for all moving parts to come to a complete stop.
- 2. Remove any remnants of the broken shear pin. You may need to unscrew the nut from the broken shear pin.
- 3. Place a new shear pin through the hole in the auger shaft and tighten using the shear pin nut.

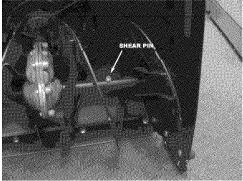


Figure 24- Replacing the shear pin

SPECIFICATIONS

Snow Thrower

| Clearing Width | 22 Inches |
|-------------------|---|
| Throwing Distance | Max. 50 feet |
| Chute Rotation | 180 degrees |
| Wheel | Pneumatic, tubeless, size 4.10-6 N.H.S. |
| Drive Speeds | Forward: 0.9, 1.2, 1.5, 1.8, 2.5 MPH Reverse: 0.9, 1.2 MPH |
| Dimensions | L= 35.5" W= 24.5" \[H= 31.5" |
| Dry Mass | 158 Lbs |

Engine

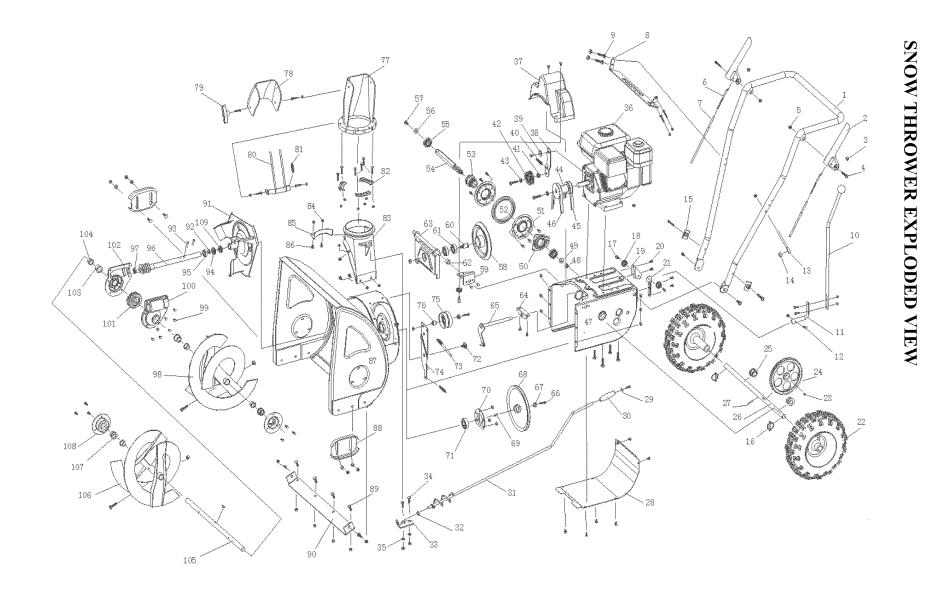
| Engine Type | 4-Stroke OHV Single Cylinder |
|------------------------|------------------------------|
| Ignition System | Non-Contact Transistor |
| Fuel Tank Capacity | 0.95 Gallons |
| Crankcase oil capacity | 21.1 Fluid Ounces |

TROUBLESHOOTING

IMPORTANT: If trouble persists please call our customer help line at **(888) 315-3080** M-F 8-5.

| Problem | Cause | Solution |
|--------------------------------------|---|---|
| Engine will not start or runs poorly | Engine switch is set to "off". | Set engine switch to "on". |
| | Fuel valve lever is set to "closed". | Move the fuel valve lever to "open" position. |
| | Choke is open. | Close the choke. |
| | Engine is out of gas. | Add gas. |
| | Engine is filled with contaminated or old | |
| | gas | Change the gas in the engine. |
| | Spark plug is dirty. | Clean spark plug. |
| | Spark plug is broken. | Replace spark plug. |
| | Snow thrower is not on level surface. | Move snow thrower to a level surface to prevent low oil shutdown from triggering. |
| | Oil is low | Add or replace oil. |

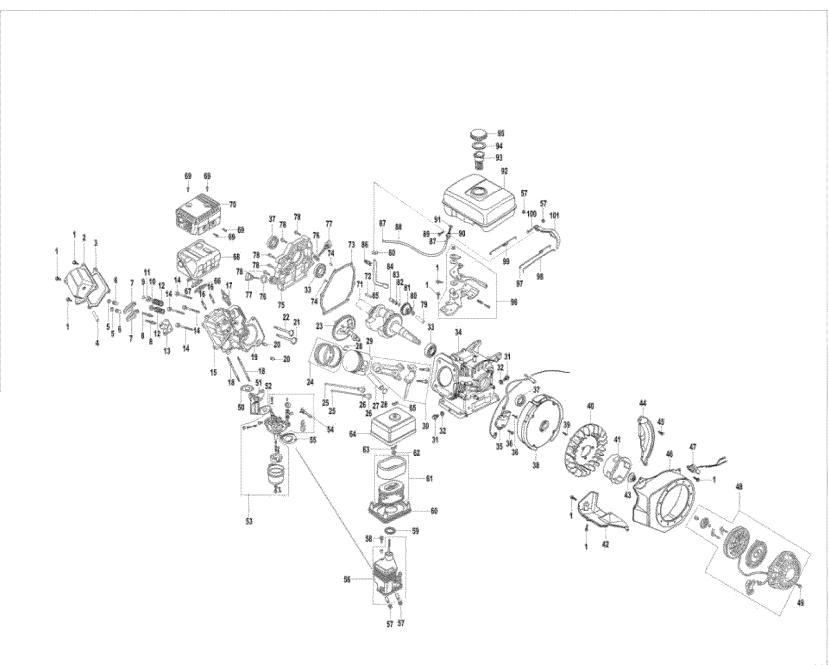
| Auger or impeller | Auger drive handle | |
|---------------------|------------------------|--|
| does not rotate | | Depress auger drive handle |
| | Auger drive handle | |
| | - | Adjust tension in cable |
| | Foreign substance | |
| | clogging auger or | |
| | impeller | Turn off machine and unclog auger or impeller |
| | Shear pin broken | Replace shear pin. |
| | Belt broken or loose | Call customer service |
| Snow is not thrown | | |
| or not thrown very | Impeller or chute is | |
| far | clogged | Turn off engine and unclog. |
| | Chute deflector is | |
| | set too low | Adjust chute deflector angle. |
| Snow thrower will | | |
| not drive or drives | Drive handle is not | |
| poorly | depressed | Depress drive handle |
| | Drive handle cable is | |
| | loose | Adjust cable tension |
| | Speed is not | Engage the speed selector handle to one of the seven |
| | properly engaged | speeds. |
| | Tire inflation is poor | Inflate tires. |
| | Tire pins are not | |
| | engaged | Check the pins that hold the wheels to the drive axle. |



SNOW THROWER PARTS LIST

| Part # | Part Description | Quantity |
|--------|--|----------|
| 1 | Handle assembly | Iset |
| 2 | Auger and drive control handles | 2 |
| | Rubber cap | 2 |
| 3 | M8x50 Hex screws | 4 |
| 4 | M8 hex nuts | |
| 5 | Turnbuckle | 35 |
| 7 | Cable | 2 |
| | Speed control frame | |
| 8 | M6x35 Hex screw | 1 |
| 9 | | 5 |
| 10 | Drive Speed Control Lever Steel bracket | 1 |
| | | |
| 12 | M6x30 Hex screws | 1 |
| 13 | Eye bolt | 1 |
| 14 | rubber ring | 1 |
| 15 | washer | 2 |
| 16 | spring-pin | 2 |
| 17 | Hex screws | 3 |
| 18 | Chain Wheel | 3 |
| 19 | pulley mounting plate-1 | 1 |
| 20 | M6x10 Hex screws | 23 |
| 21 | pulley mounting plate-3 | 1 |
| 22 | Pneumatic Tire | 2 |
| 23 | key | 2 |
| 24 | Large Gear | 1 |
| 25 | end cap bushing | 2 |
| 26 | driving shaft | 1 |
| 27 | pin | 1 |
| 28 | transmission case cover | 1 |
| 29 | 6mm flat washer | 27 |
| 30 | Chute rotation handle grip | 1 |
| 31 | rocker | 1 |
| 32 | Poly-ring | 1 |
| 33 | Steel Mounting Plate | 1 |
| 34 | M8x20 square neck screws | 4 |
| 35 | washer | 2 |
| 36 | engine | 1 |
| 37 | Wheel Cover | 1 |
| 38 | Small tension bracket | 1 |
| 39 | spacer | 1 |
| 40 | Spring 5 | 1 |
| 41 | bushing-2 | 1 |
| 42 | small tensioning wheel w/ bearing | 1 set |
| 43 | Spacer | 2 |
| 44 | Main pulley | 1 |
| 45 | V-Belt | 1 |
| 46 | V-Belt | 1 |
| 47 | Transmission case | 1 |
| 48 | M10 Hex nuts | 2 |
| 49 | 10 mm Flat washer | 1 |
| 50 | Gear-Wheel Cover with bearing | 2 sets |
| 51 | Gear-Wheel Washer | 2 |
| 52 | rubber ring | 2 |
| 53 | Gear-Wheel | - 1 |
| 54 | Hex Gear-shaft | 1 |
| 55 | deep groove bearing | 2 |
| ar w | * Garren | - |

| Part # | Part Description | Quantity |
|--------|--|----------|
| 56 | 8 mm Flat washer | 3 |
| 57 | M8 x 20 Hex screws | 1 |
| 58 | Transmission pulley | 1 |
| 59 | pulley mounting plate | 1 |
| 60 | transmission pulley shaft | 1 |
| 61 | Deep Groove Bearing | 2 |
| 62 | spacer/bushing | 1 |
| 63 | pulley bracket | lset |
| 64 | angle plate | 1 |
| 65 | shift arm | l set |
| 66 | M8x40 Hex screws | 1 |
| | Spacer | |
| 67 | Large Pulley | 1 |
| | | |
| 69 | flat key | 1 |
| 70 | round cover | 1 |
| 71 | spherical bearing | 1 |
| 72 | Hex screws | 1 |
| 73 74 | Spring 1 | 1 |
| | mounting plate | |
| 75 | Large tension wheel assy. With bearing | 1 set |
| 76 | Spacer | 1 |
| 77 | Chute | 1 |
| 78 | Chute deflector | 1 |
| 79 | Chute deflector knob | 1 |
| 80 | safety bar assy. | 1 set |
| 81 | spring-3 | 1 |
| 82 | Chute Mounting Washer | 3 |
| 83 | Plastic Cover | 1 |
| 84 | M6 Hex nut | 26 |
| 85 | C-shaped plate | 1 |
| 86 | M6x15 square-necked screw | 5 |
| 87 | Auger Shield | l set |
| 88 | Skid Shoe | 2 |
| 89 | M8x25 square neck screws | 10 |
| 90 | Long blade | 1 |
| 91 | Fan Assembly | 1 set |
| 92 | Washer | 1 |
| 93 | Pin | 2 |
| 94 | Thrust Bearing | 1 |
| 95 | Deep Groove Bearing | 1 |
| 96 | Drive Worm | 1 |
| 97 | Bearing | 1 |
| 98 | Right Auger | 1 |
| 99 | M6x20 Hex screws | 10 |
| | Upper Worm Case | |
| 100 | | 1 |
| 101 | Worm Gear | 1 |
| 102 | Lower worm case | 1 |
| 103 | output shaft bushing | 1 |
| 104 | Drive Shaft Bushing | 4 |
| 105 | driving shaft | 1 |
| 106 | Left Auger | 1 |
| 107 | Shaft Bushing | 1 |
| 108 | Bearing end cup | 2 |
| 109 | Seal | 1 |
| 110 | shear bolts | 2 sets |



ENGINE PARTS LIST

| PART # | PART DESCRIPTION | QTY | | PART # | PART DESCRIPTION | QTY |
|--------|------------------------------|-----|---|--------|----------------------------|-----|
| 1 | FLANGE BOLT (M6*12) | 12 | | 52 | CARBURETOR PAPER GASKET | 1 |
| 2 | HEAD COVER COMP. | 1 | | 53 | CARBURETOR | 1 |
| 3 | HEAD COVER PACKING | 1 | | 54 | CHOKE LEVER COMP. | 1 |
| 4 | BREATHER TUBE | 1 | | 55 | CARBURETOR SPACER COMP. | 1 |
| 5 | PIVOT ADJUSTING NUT | 2 | | 56 | AIR CLEANER ELBOW COMP. | 1 |
| 6 | ROCKER ARM PIVOT | 2 |] | 57 | FLANGE NUT (M6) | 5 |
| 7 | ROCKER ARM | 2 |] | 58 | FLANGE BOLT (M6*20) | 1 |
| 8 | PIVOT BOLT (M8) | 2 |] | 59 | ELBOW GASKET | 1 |
| 9 | VALVE ROTATOR | 1 |] | 60 | SILENCER NOSE | 1 |
| 10 | IN.VALVE SPRING RETAINER | 1 | 1 | 61 | AIR FILTER ELEMENT | 1 |
| 11 | EX.VALVE SPRING RETAINER | 1 | 1 | 62 | AIR FILTER GROMMET | 1 |
| 12 | VALVE SPRING | 2 | | 63 | AIR FILTER BRACKET WINGNUT | 1 |
| 13 | PUSH ROD GUIDE PLATE | 1 | 1 | 64 | AIR FILTER COVER | 1 |
| 14 | FLANGE BOLT (M8*58) | 4 | 1 | 65 | AIR FILTER COVER WINGNUT | 1 |
| 15 | CYLINDER HEAD COMP. | 1 | 1 | 66 | MUFFLER GASKET | 1 |
| 16 | EXHAUST PIPE STUD BOLT | 2 | 1 | 67 | FLANGE NUT (M8) | 2 |
| 17 | SPARK PLUG (LD NGK) | 1 | | 68 | MUFFLER COMP. | 1 |
| 18 | CARBURETOR STUD BOLT | 2 | | 69 | TAPPING SCREW (M5*8) | 4 |
| 19 | CYLINDER HEAD GASKET | 1 | | 70 | MUFFLER OUTER PROTECTOR | 1 |
| 20 | DOWEL PIN (10*16) | 2 | | 71 | CRANKSHAFT COMP. | 1 |
| 21 | IN.VALVE | 1 | 1 | 72 | PLAIN KEY | 1 |
| 22 | EX.VALVE | 1 | 1 | 73 | CASE COVER PACKING | 1 |
| 23 | CAMSHAFT ASSY. | 1 | | 74 | DOWEL PIN (8*14) | 2 |
| 24 | PISTON RING SET | 1 | | 75 | CRANKCASE COVER ASSY. | 1 |
| 25 | PUSH ROD | 2 | | 76 | OIL FILLER CAP GASKET | 2 |
| 26 | VALVE LIFTER | 2 | | 77 | OIL FILLER CAP | 2 |
| 27 | PISTON PIN | 1 | | 78 | FLANGE BOLT (M8*28) | 6 |
| 28 | PISTON PIN CLIP (18mm) | 2 | | 79 | SLIDER SHAFT | 1 |
| 29 | PISTON | 1 | | 80 | PLAIN WASHER | 1 |
| 30 | CONNECTING ROD ASSY. | 1 | | 81 | GOVERNOR GEAR ASSY. | 1 |
| 31 | DRAIN PLUG BOLT | 2 | | 82 | GOVERNOR HOLDER CLIP | 1 |
| 32 | DRAIN PLUG WASHER (10.2mm) | 2 | | 83 | THRUST WASHER (6mm) | 1 |
| 33 | BALL BEARING (6205) | 2 | | 84 | GOVERNOR SLIDER | 1 |
| 34 | CRANK CASE | 1 | | 85 | ROCKER | 1 |
| 35 | IGNITION COIL ASSY. | 1 | | 86 | LOCK PIN (8mm) | 1 |
| 36 | FLANGE BOLT (M6*25) | 2 | | 87 | TUBE CLIP | 2 |
| 37 | OIL SEAL (25*41.25*6) | 2 | | 88 | FUEL TUBE | 1 |
| 38 | FLYWHEEL COMP. | 1 | 1 | 89 | FLANGE BOLT (M6*30) | 1 |
| 39 | SEMICIRCLE KEY | 1 | 1 | 90 | FUEL TANK JOINT | 1 |
| 40 | COOLING FAN | 1 | 1 | 91 | O-RING (14mm) | 1 |
| 41 | STARTER PULLEY | 1 | 1 | 92 | FUEL TANK COMP. | 1 |
| 42 | SHROUD | 1 | 1 | 93 | FUEL FILTER | 1 |
| 43 | FLYWHEEL NUT | 1 | 1 | 94 | FUEL FILTER CAP PACKING | 1 |
| 44 | FLYWHEEL SIDE PLATE | 1 | 1 | 95 | FUEL CAP | 1 |

| 45 | FLANGE BOLT (M6*16) | 1 |
|----|-----------------------------|---|
| 46 | FAN COVER COMP. | 1 |
| 47 | ENGINE STOP SWITCH ASSY. | 1 |
| 48 | RECOIL STARTER ASSY. | 1 |
| 49 | FLANGE BOLT (M6*8) | 3 |
| 50 | INTAKE PIPE GASKET | 1 |
| 51 | CARBURETOR INSULATING PLATE | 1 |

| 96 | CONTROL ASSY. | 1 |
|-----|------------------------|---|
| 97 | THROTTLE RETURN SPRING | 1 |
| 98 | GOVERNOR ROD | 1 |
| 99 | GOVERNOR SPRING | 1 |
| 100 | QUADRATE BOLT (M6) | 1 |
| 101 | CONTROL ARM | 1 |

LIMITED WARRANTY FOR YARDWORKS® SNOW THROWER

Remember to save your receipt and to accurately fill out and mail your product registration card. You must provide proof of purchase for all warranty work.

This Yardworks[®] snow thrower is warranted to be free from defects in materials and workmanship for a period of two (2) year from date of original purchase. If this snow thrower is used for Commercial or Rental purposes, it has a warranty period of 90 days from date of original purchase. Keep purchase receipt and mail in the product registration card for proof of purchase.

Yardworks[®] will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the two (2) year warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product.

To exercise the warranty, **DO NOT RETURN TO RETAILER**. Instead, call the toll free Customer Service number: (888) 315-3080 and you will be instructed on where to take the snow thrower for warranty service. Take the snow thrower and proof of purchase (your receipt) to the repair facility recommended by the Customer Service Representative.

The warranty does not extend to snow throwers damaged or affected by accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse.

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