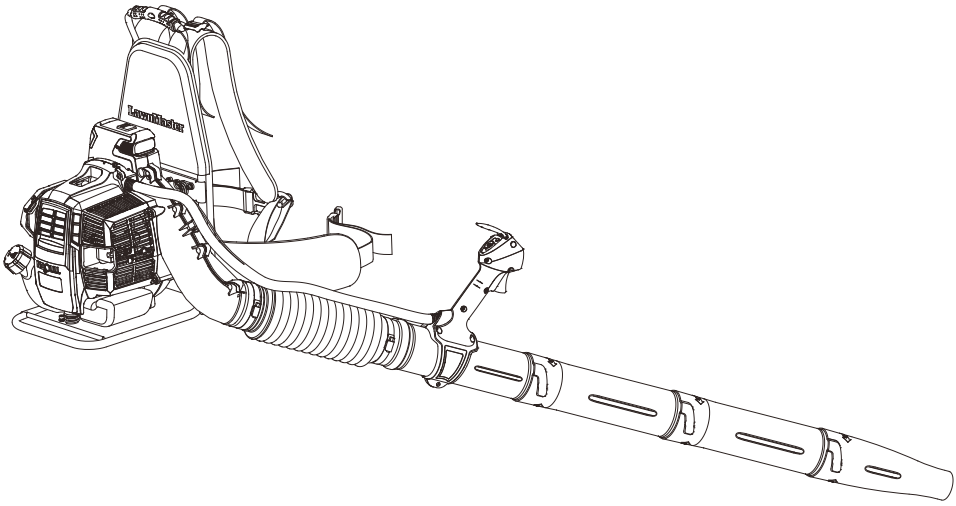
LawnMaster®

Operator's Manual / Manual del usuario

EN p. 2 **31cc 2-Cycle Backpack Blower NPTBL31AB**

ES p. 41 **31cc Soplador de Mochila de 2 Tiempos NPTBL31AB**

Save this manual for future reference
Conserve este manual para referencia futura



NOTICE:
Only use unleaded gasoline containing up to 10% ethanol. Do not use E15 or E85 fuel in this blower. It will violate the federal law, damage the blower and void your warranty.
AVISO:
Utilice solo gasolina sin plomo que contenga un máximo de 10 % de etanol. No reposte este soplador con gasolina E15 o E85. Es una violación de la ley Federal, dañará el soplador y anulará su garantía.

⚠ Read all safety rules and instructions carefully before operating this tool.
Distributed By: Suzhou Cleva Electric Appliance Co., Ltd.
NO.8 Ting Rong Street 215122 Suzhou - China

⚠ Lea con cuidado todas las reglas e instrucciones de seguridad antes de utilizar esta herramienta.
Distribuido por: Suzhou Cleva Electric Appliance Co., Ltd.
NO.8 Ting Rong Street 215122 Suzhou - China

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SPECIFICATIONS

31cc-2 CYCLE BACKPACK BLOWER

Engine Size	2-Stroke / Full Crank
Engine Displacement	31 cc
Power / Speed	0.85 kW / 7500 RPM
Idle Speed	3000 RPM
Max Torque / Speed	0.9 Nm / 6000 RPM
Fuel Tank Capacity	950 ml
Fuel / Oil Ratio	40 : 1
Max Air Speed	175 MPH
Max Air Volume	470 CFM
Net Weight	18.5 lbs. (8.4 kg)
Battery Model Number	07LB2001-S
Battery Type	7.2 VDC Lithium-Ion, 2.0 Ah
Charger Model Number	YLS0042-T084045
Charger Input	100-240V ~ 50/60Hz 0.3A Max
Charger Output	8.4 V⎓ 450 mA
Charging Period (Battery Fully Discharged)	4-6 Hours

IMPORTANT SAFETY RULES

⚠ WARNING

READ ALL INSTRUCTIONS AND SAVE THESE INSTRUCTIONS.

Read the Operator's Manual and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.

- Do not allow children or persons unfamiliar with the product and these instructions to use the blower.
- Use the blower only for clearing or removing leaves, grass, lawn clippings, paper, dust, and other debris off the ground.
- Clear the work area of large and dangerous objects before each use. Remove all objects such as rocks, broken glass, nails, wire, or string, which can be thrown or become entangled in the blower.
- To reduce the risk of hearing loss associated with sound levels, hearing protection is required.
- To reduce the risk of injury associated with thrown objects, always wear eye protection. Eye protection should meet the requirements of ANSI Z87.1.
- To reduce the risk of injury associated with the inhalation of dust, use a face filter mask in dusty conditions.
- Do not operate this blower when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Always wear heavy, long pants, boots, gloves, and a long-sleeve shirt. To reduce the risk of injury associated with objects being drawn into rotating parts, do not wear loose clothing, scarves, jewelry, etc. Secure hair so it is above shoulder level.
- Inspect the blower before each use. Replace damaged parts. Check for fuel leaks. Make sure all visible fasteners are in place and secure. Make sure attachments are properly installed and securely fastened. Be sure accessories are properly attached and in the position recommended by the manufacturer.
- Hold the handle in right hand with thumb and fingers encircling the handle to operate and control the blower.
- Keep firm footing and balance. Do not overreach. Keep all parts of your body away from hot surfaces.
- Never start or run the blower inside a closed room or building; breathing exhaust fumes can cause serious personal injury or death.
- Mix and pour fuel outdoors where there are no sparks or flames. Slowly remove the fuel cap only after stopping the engine and letting it cool completely. Do not smoke while fueling or mixing fuel. Wipe spilled fuel from the blower. Move at least 10 ft. (3 m) away from the fueling source and site before starting the engine. Always store gasoline in a container approved for flammable liquids.
- Clear the area of children, bystanders, and pets. At a minimum, keep all children, bystanders, and pets outside a 50 ft. (15 m) radius; outside the 50 ft.(15 m) zone, there is still a risk of injury from thrown objects. Bystanders should be encouraged to wear eye protection. If you are approached, stop the engine.
- Maintain stable footing on a solid surface at all times when using the blower in order to have better control of the blower. Do not use the blower whilst on a ladder, roof, tree or other unstable support. Working from ladders or high places could result in severe injury.
- Before transporting the blower in a vehicle, allow the engine to cool completely and empty the fuel tank. Always secure the blower to avoid movement during transportation.

IMPORTANT SAFETY RULES

- Empty the fuel tank and clean the blower before long-term storage. Empty the fuel tank following the city or neighborhood regulations on disposal of fuel.
- Store the blower in an area that children and unapproved persons cannot access.
- To reduce the risk of injury associated with contacting rotating parts, stop the engine before installing or removing attachments. Do not operate without tubes in place. Always disconnect the spark plug before performing maintenance or accessing movable parts.
- Operate the blower only at reasonable hours, not early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances.
- To reduce sound levels, limit the number of pieces of equipment used at any one time.
- To keep sound levels down, operate blowers at the lowest possible engine speed to do the job.
- Use rakes and brooms to loosen debris that may be packed down, before blowing.
- In dusty conditions, slightly dampen surfaces when water is available.
- Conserve water by using blowers instead of hoses for many lawn and garden applications, including areas such as gutters, screens, patios, grills, porches, and gardens.
- Avoid blowing debris towards people, pets, open windows, or cars.
- Use the full blower nozzle extension when blowing.
- Clear and dispose of debris in trash bins or bags after using blowers and other equipment. Do not allow debris to settle on the street where it can wash down a drain.
- Make sure that the blower is in good condition before operation; check the muffler, air intake and air filter in particular.
- Do not touch the engine or the muffler when the engine is on and avoid contact after it has been used; wait until the surfaces cool down. Contact with hot surfaces could result in serious burns.
- Do not operate the blower in poor lighting.
- Do not place any objects inside the blower tubes. Make sure the tubes are clear before using.
- Never use the blower near fires, fireplaces, fire pits, hot ashes, outdoor cooking grills, etc., which may cause the fire to spread.
- Never place the blower on any surface, except a hard, clean surface when the engine is running. Gravel, sand, and other debris can be picked up by the air inlet and thrown at the operator or bystanders, causing possible serious injuries.
- Before fueling or storing the blower, stop the engine and allow it to cool completely.
- Only use replacement parts or accessories provided or listed in this Operator's Manual.
- This blower is not intended for extended use. Extended periods of operation can cause circulatory problems in the user's hands due to the vibration caused by the tool. Take regular breaks from operating the tool.
- Always take your blower to an authorized service center for repair. Service performed by inexperienced or unqualified persons may damage the blower, create unsafe conditions, increase the risk of personal injury, and/or void your warranty.
- The harness must always be worn when working with the blower, with both straps around the shoulders and secured at the chest. In case of emergency, release yourself from the blower by opening the chest belt and let the blower fall backwards.

IMPORTANT SAFETY RULES

BATTERY PACK

- The battery pack is only compatible with the YLS0042-T084045 charger.
- Charge the battery only with the charger specified by the manufacturer and listed in this manual. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Do not place battery powered tools or their batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Do not open or mutilate the battery pack. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Do not dispose of battery packs in fire. They will explode or leak and cause injury. Liquid ejected from the battery may cause irritation or burns.
- Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery pack can propel debris and chemicals. If exposed, flush with water immediately.
- Under extreme usage or temperature conditions, battery pack leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.
- When the battery pack is not in use, keep it away from other metal objects like: paper clips, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery pack terminals together may cause sparks, burns, or a fire.
- Do not expose a battery pack to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause an explosion.
- Do not modify or attempt to repair the battery pack (as applicable) except as indicated in the instructions for use and care.
- Follow all charging instructions and do not charge the battery pack outside the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.

BATTERY CHARGER

- This charger is only compatible with a 07LB2001-S lithium-ion battery.
- To reduce the risk of injury, charge only the specified lithium-ion rechargeable batteries. Other types of batteries may burst, causing personal injury or damage.
- Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- Keep the cord and charger away from heat to prevent damage to housing or internal parts.
- Do not operate charger with a damaged cord or plug, which could cause shorting and electric shock. If damaged, immediately discontinue use. Replace the charger with an identical model as listed in this manual.
- Do not use a charger that has been dropped or received a sharp blow.
- Do not disassemble charger. Take it to a qualified service center to be checked or replaced. Incorrect reassembly may result in a risk of electric shock or fire.
- Do not abuse the charger cord. Never use the cord for carrying, pulling or unplugging.

IMPORTANT SAFETY RULES

- Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock. If the charger cord is damaged, replace the charger with an identical model as listed in this manual.
- A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Charge the battery at the normal charging temperature between 40°F (4°C) and 100°F (38°C).

FCC COMPLIANCE

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - This device may not cause harmful interference, and
  - This device must accept any interference received, including interference that may cause undesired operation.

  NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
- This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that of the receiver.
  - Consult the dealer or an experienced radio/ TV technician for help.

⚠ WARNING

The engine exhaust from this product can expose you to chemicals including carbon monoxide, which is known to the State of California to cause cancer, birth defects or other reproductive harm. To reduce the risk of serious or fatal injury/illness, never run the machine indoors or in poorly ventilated locations. For more information, go to www.P65Warnings.ca.gov.

SAVE THESE INSTRUCTIONS

Refer to them frequently and use them to instruct others who may use this tool. If you loan someone this tool, loan them these instructions also.

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 operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency(cycles per second)
W	Watt	Power
hrs	Hours	Time
$\mathbf{n_0}$	No Load Speed	Rational speed, at no load
/min	Per Minute	Revolution, strokes, surface speed, orbits etc, per minute
~	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
	Lithium-Ion Battery Recycling	Designates that this tool is in compliance with Lithium-Ion battery recycling program requirements.
	Safety Alert	Indicates a potential personal injury hazard.
	Read The Operator's Manual	You must read the operating instructions carefully.
	Eye and Hearing Protection	Always wear eye protection with side shields marked to comply with ANSI Z87.1 along with hearing protection when operating this equipment.
	Gasoline and Lubricant	Use unleaded gasoline intended for motor vehicle use with an octane rating of 87 [(R + M) / 2] or higher. This product is powered by a 2-cycle engine and requires pre-mixing gasoline and 2-cycle lubricant.
	Hot Surface	Taking care to avoid coming into contact with a hot surface.
	Warning; Flammable Material	Taking care to avoid causing a fire by igniting flammable material.
START	Start	Press the start button.
	Close	Close the choke.

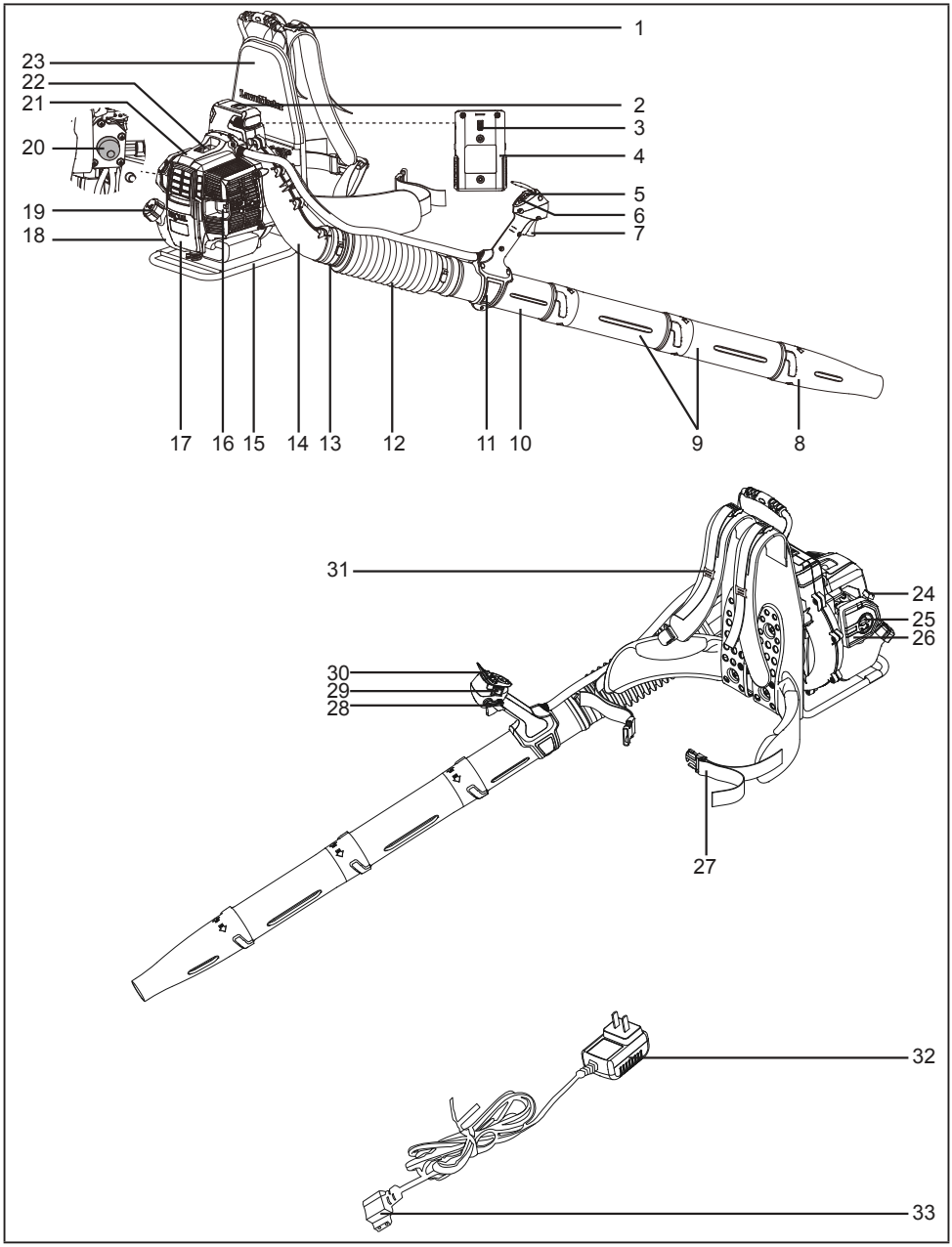
SYMBOLS

SYMBOL	NAME	DESIGNATION/EXPLANATION
	Open	Open the choke.
	Sound Level	50ft. (15m) bystander sound level of the unit.
	Keep Away From Water	Do not dispose of battery packs in rivers or immerse in water.
	Keep Away From Fire	Do not dispose of battery packs in fire. They will explode or leak and cause injury.
	Heat Alert	Do not expose battery packs to heat in excess of 140°F (60°C).
	Recycle Symbol	This product uses lithium-ion batteries. Local, state, or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	**DANGER**	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	**WARNING**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	**CAUTION**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	NOTICE	(Without Safety Alert Symbol) Indicates a situation that may result in property damage

KNOW YOUR BLOWER



KNOW YOUR BLOWER

The safe use of this product requires an understanding of the information on the product and in this Operator's Manual, as well as knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

Components

1. Shoulder Straps
2. Battery Release Button
3. Charging Port
4. Battery Pack
5. Battery Indicator
6. Start Button
7. Throttle Lever
8. Blower Nozzle
9. Front Blower Tube
10. Rear Blower Tube
11. Handle
12. Flexible Hose
13. Hose Clamp
14. Elbow Tube
15. Black Frame
16. Muffler with Spark Arrestor
17. Rear Engine Housing
18. Fuel Tank
19. Fuel Tank Cap
20. Primer Bulb
21. Engine Housing
22. Spark Plug Cap
23. Backpack Harness
24. Choke Lever
25. Air Filter Knob
26. Air Filter Cover
27. Waist Strap
28. Cruise Control Lever
29. Stop Switch
30. Start Button Cover
31. Chest Strap
32. Charger
33. Charging Connector

ASSEMBLY

This product requires assembly.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please return the product from place of purchase and exchange for a new one or call the service center.

PACKING LIST

(1) Blower
(2) Front Blower Tube
(1) Rear Blower Tube
(1) Blower Nozzle
(1) Flexible Hose
(2) Hose Clamps
(1) Operator's Manual
(1) 7.2V Lithium-Ion 2.0 Ah Battery Pack
(1) Battery Charger
(1) Spanner
(1) Socket Wrench

⚠ WARNING

If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

⚠ WARNING

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

⚠ WARNING

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the product when assembling parts.

ASSEMBLY

ASSEMBLING THE BLOWER TUBES *(See Figs. 1-8)*

- Loosen the hose clamps with supplied socket wrench and place the hose clamps onto the outer slot of the flexible hose (Fig. 1).

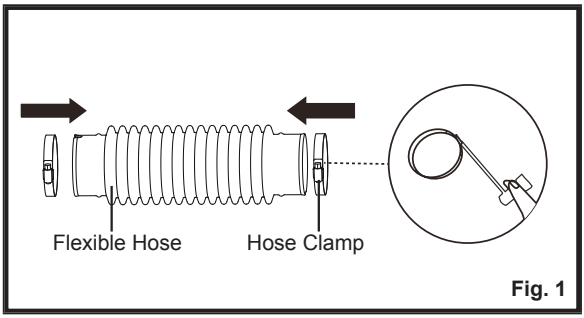


Fig. 1

- Attach the flexible hose to elbow tube and tighten the screw with supplied socket wrench (Fig. 2 & 3).

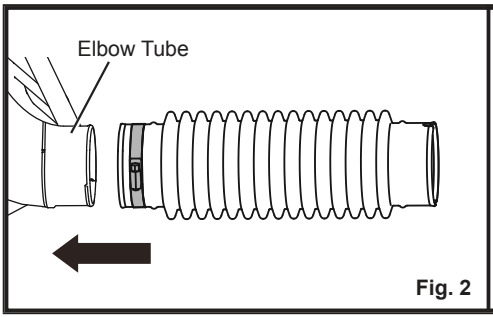
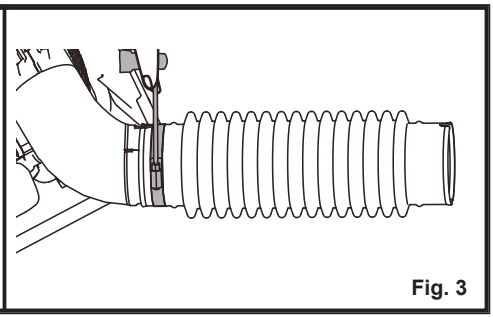


Fig. 2


Fig. 3

- Loosen the handle with supplied socket wrench and place the handle onto the rear blower tube. Then tighten the screw with supplied socket wrench (Fig. 4 & 5).

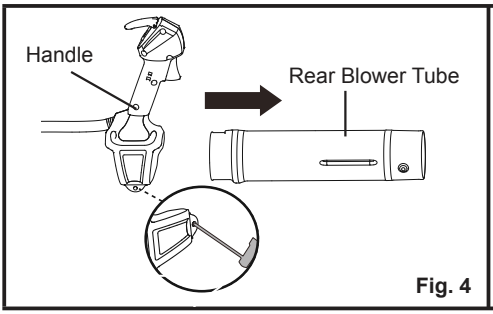
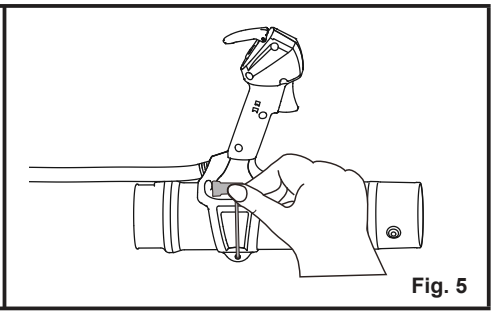


Fig. 4


Fig. 5

ASSEMBLY

- Assemble rear blower tube to the flexible hose on blower and tighten the screw with supplied socket wrench (Fig. 6 & 7).

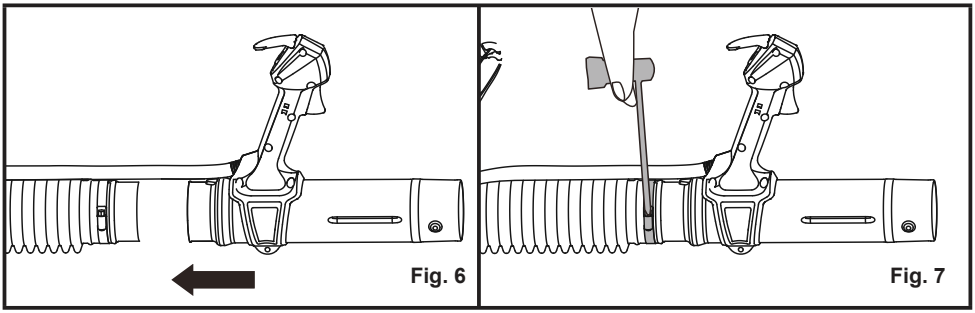


Fig. 6 Fig. 7

- Insert the widest end of the front blower tube into the front opening on the rear blower tube. Align the indexing tabs with correct sized index channels; once achieved, turn clockwise to lock into place. Then insert the blower nozzle into the front blower tube. Align the indexing tabs with correct sized index channels; once achieved, turn clockwise to lock into place (Fig. 8).
  NOTE: This product comes with 2 front blower tubes. Front blower tube is optional. Depending on stature, the operator may or may not use front blower tube or both front blower tubes. The blower nozzle is optional. Assemble it when high air speed is required.

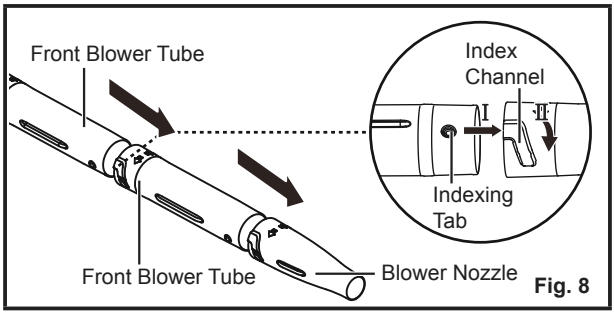


Fig. 8

INSTALLING AND REMOVING THE BATTERY PACK *(See Figs. 9-10)*

To install the battery pack:

- Align the battery pack with the battery slot.
- Insert the battery pack into the battery slot until the battery pack secures into place. Make sure the battery inserted in the correct direction (Fig. 9).
- Do not use force when inserting the battery pack. It should slide into position and "click".

To remove the battery pack:

- Locate the battery release button, press and hold the button up (Fig. 10).
- Slide the battery pack off the battery slot.

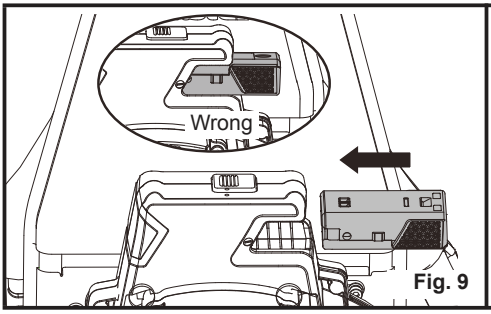


Fig. 9

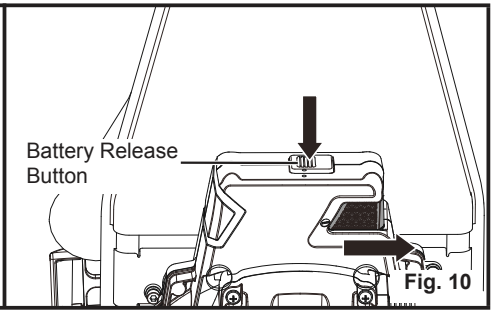


Fig. 10

ADJUSTING SHOULDER STRAPS ON HARNESS *(See Figs. 11-12)*

Straps should be adjusted to a comfortable position before starting the blower.

To adjust tubing around harness:

- The blower should be in operating position before adjusting the shoulder straps. Put one arm through the strap and onto shoulder, pulling the blower onto back. Put the other arm through the other strap.
- Grasp the lower adjustment strap and tighten (pull down on strap) until the backpack rests comfortably against the lower back.
- Grasp the upper adjustment straps and tighten (pull down on strap) until the backpack fits comfortably on the shoulders (Fig. 11).
- Once the blower feels comfortable, secure the chest strap (Fig. 12).

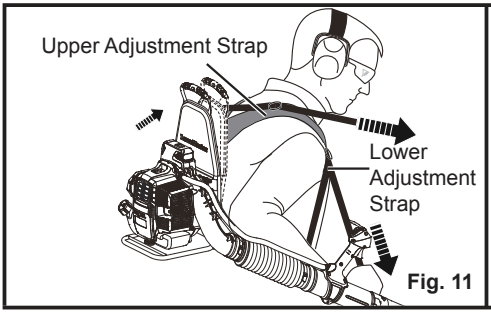


Fig. 11

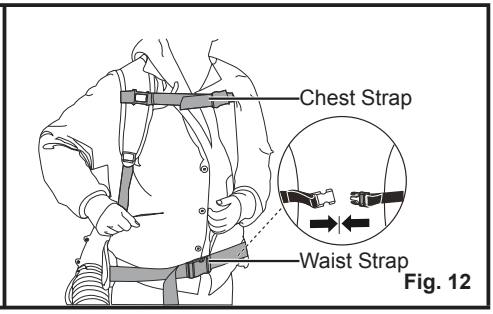


Fig. 12

BATTERY PACK AND CHARGER

BATTERY CHARGING

- Use only with 8.4V LawnMaster® YLS0042-T084045 battery charger. The battery charger supplied is specifically designed for the lithium-ion battery used in this tool.
- Check the power voltage! Battery chargers operate on 100-240V AC.
- Charge the battery between 40°F (4°C) and 100°F (38°C) to ensure an optimum battery service life.
- Protect the battery from heat, from continuous exposure to sun, and keep away from radiation or other heat sources. Do not leave the battery in the tool in direct sunlight over long periods.
- The battery is supplied uncharged. Fully charge the battery before using the tool for the first time. The lithium-ion battery can be charged at any time without reducing its service life. Interrupting the charging procedure does not affect the battery.

CHARGER LEDS

- If the battery is not connected to the charger, a continuous green LED light indicates that the plug is plugged into an outlet socket and the battery charger is ready for operation.
- Charging: a continuous red LED on the charger indicates that the battery is charging normally.
- Charged: a continuous green LED on the charger indicates that the battery is ready for use.

INDICATOR LIGHTS	STATUS
Green, continuous	Fully charged / Connected to power supply (Standby)
Red, continuous	Charging

- After continuous or repeated charging cycles without interruption, the charger may warm up. This is normal and does not indicate a technical defect of the battery charger.

CHARGING THE BATTERY PACK *(See Figs. 13-14)*

⚠ WARNING

If any part of the charger is missing or damaged, do not operate it! Replace the charger with a new one. Failure to heed this warning could result in possible serious injury. Check the voltage! The voltage must comply with the information on the rating label.

- Insert the charging connector into the charging port on the battery (Fig. 13).
- Connect the charger to the power supply.
- Allow sufficient charging time (see Specifications), and then disconnect the charger from the power supply.
- Remove the charging connector from the charging port (Fig. 14).

NOTE: It is normal for the battery pack and the charger to become warm (but not hot) during the charging process. If the battery does not charge properly, check to make sure the electrical outlet is operational. Always charge the battery before storage!

BATTERY PACK AND CHARGER

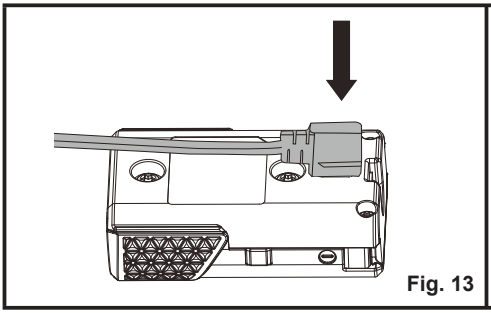


Fig. 13

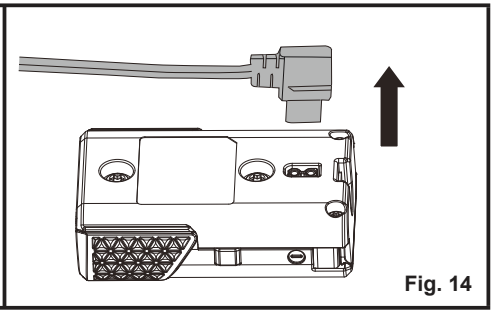


Fig. 14

OPERATION

⚠ WARNING

Do not allow familiarity with products to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

⚠ WARNING

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

⚠ WARNING

Do not use any attachments or accessories not recommended by the manufacturer or retailer of this product. The use of attachments or accessories not recommended can result in serious personal injury. Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced.

HANDLING THE FUEL

⚠ DANGER

The fuel is VERY flammable. Use extreme care when mixing, storing or handling, or serious personal injury may result.

- **Mix and store in a container approved for storing fuel.**
- **DO NOT smoke when handling or close to fuel.**
- **DO NOT allow flames or sparks near the fuel.**
- **Maintain the pressure in the fuel tank; always loosen the fuel tank cap slowly allowing the pressure to equalize. NEVER refuel a blower when the engine is HOT or RUNNING!**
- **DO NOT fill fuel tanks indoors. ALWAYS fill fuel tanks outdoors over bare ground.**
- **DO NOT overfill the fuel tank and clean up spills immediately.**
- **Securely tighten the fuel tank cap and close the fuel container after refueling.**
- **Check for fuel leakages. If a fuel leakage is present, remove the battery and do not use the blower until the leakage is repaired.**
- **Move at least 10ft. (3m) from refueling location before starting the engine.**

FUEL MIXTURE *(See Fig. 15)*

- This blower is powered by a 2-cycle engine; the operator is required to use premixed gasoline and 2-cycle lubricant. Prepare a mixture of unleaded gasoline and 2-cycle engine lubricant in a clean container approved for storing gasoline. Only prepare quantities that can be used up within a few days. DO NOT prepare quantities that will need to be stored for more than 30 days.

Recommended Fuel

This engine is certified to operate on unleaded gasoline intended for automotive use.
U.S. EPA regulations make it illegal to use gasoline containing higher than 10% ethanol content in outdoor power equipment like your LawnMaster® power equipment and doing so can void your LawnMaster® Limited Warranty.
If the proper precautions are taken, however, gasoline containing a 10% quantity of ethanol can safely be used in your LawnMaster® products.
Much of the gasoline sold throughout the United States contains ethanol. The maximum ethanol content allowed by law for use in outdoor power equipment is limited to 10% (E10). Most small power equipment engines are designed to use no more than a 10% ethanol gasoline blend.
If you are not sure of the ethanol content in the gasoline you are purchasing, ask the retailer. If they are unsure, purchase your fuel from another retailer that offers gasoline with no more than 10% ethanol.
NOTE: We recommend you use a high-quality synthetic 2-cycle lubricant in this product.
Recommended specification: JASO-FC or above. Mix at 3.2 oz. per gallon (US).
Do not use automotive lubricant or 2-cycle outboard lubricant.

Gasoline to Lubricant Mix - 40 : 1 Ratio		
	**GASOLINE**	**LUBRICANT**
	1.0 gal. (US) (3.8 liter)	3.2 oz. (95 ml)
	2.5 gal. (US) (9.5 liter)	8.0 oz. (236 ml)

Mixing Tips

- Always start by filling an approved fuel container with half of the required amount of gasoline.
- Then add the entire amount of 2-cycle lubricant. Close the container and shake to mix the lubricant with the gasoline.
- Add the remaining amount of gasoline, close the fuel container, and shake again.
- Ensure that the fuel is well mixed by shaking the container before filling the fuel tank (Fig. 15).

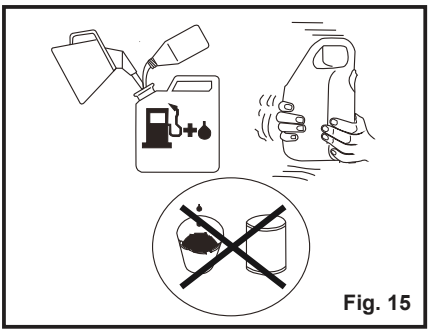


Fig. 15

OPERATION

FILLING THE FUEL TANK *(See Fig. 16)*

NOTICE: Before each use, ALWAYS shake the fuel container thoroughly to ensure that the fuel is mixed completely.

- Place the tool on a flat, level surface, outdoors.
- Clean the area around the fuel tank and cap to prevent any contamination.
- Loosen the fuel tank cap by turning it counter clockwise and remove (Fig. 16)

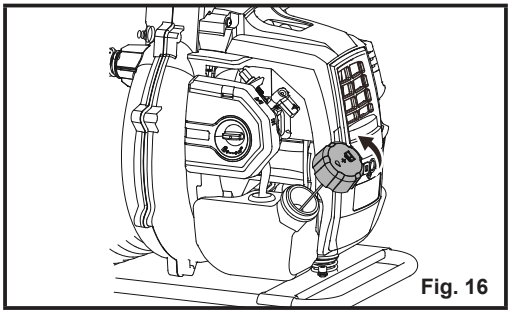


Fig. 16

- Carefully pour the fuel into the fuel tank, avoiding any spillage. Clean and check the gasket before replacing the cap onto the fuel tank.
- DO NOT leave the fuel tank unsealed while it contains fuel. Replace the cap immediately after filling and inspecting the tank. Check that the cap is sealed tightly and wipe clean any spillage that may have occurred.

  NOTICE: It is normal for smoke to be emitted from a new engine after first use.

⚠ WARNING

The operation of this tool requires gasoline, an extremely flammable liquid. Always turn off the engine and allow it to cool completely before fueling. Never remove the fuel tank cap or add the fuel to the tool while it is running or the engine is still hot. Make sure to fuel the tool outdoors on a flat, level surface. After fueling, immediately replace the fuel tank cap and tighten it securely. DO NOT fill the fuel tank on the work site; fueling must occur at least 10 ft. from where the operator intends to start the engine. Keep the tool away from smoke, open flames and sparks! Failure to follow these instructions could result in an explosion, fire and cause serious personal injury.

STARTING AND STOPPING THE BLOWER *(See Figs. 17-21)*

For cold start:

- Make sure that the battery pack is securely in place.
- Place the blower on a level surface, outdoors.
- Press the primer bulb 5 times (Fig. 17).

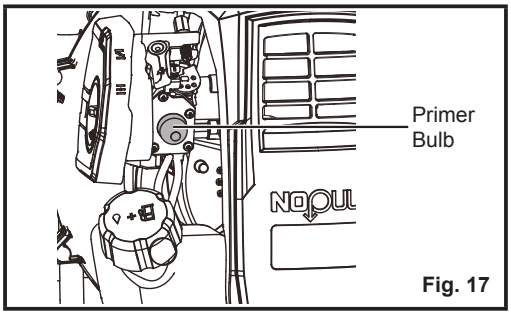
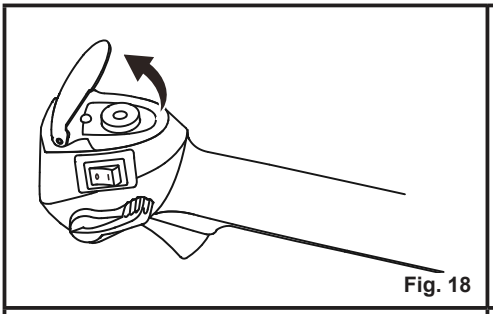


Fig. 17

- Place the blower on your back, with the shoulder straps on and chest strap secured.
- Lift the start button cover and press the start button until the engine starts. Then immediately engage the throttle lever to start the blower (Fig. 18 - 20).


Fig. 18

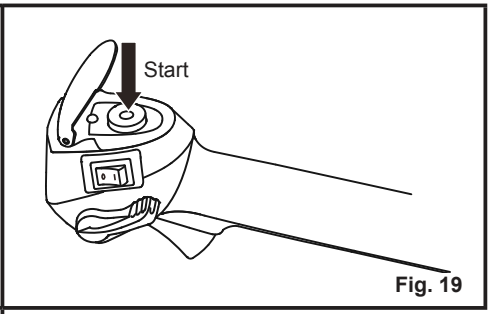
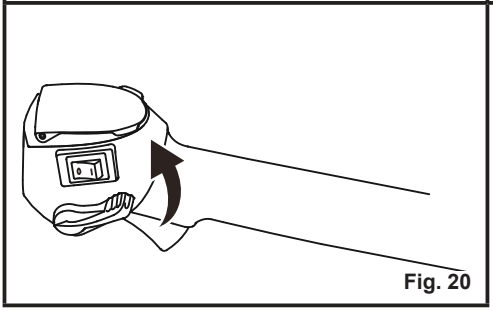


Fig. 19


Fig. 20

NOTE: If the engine does not start, repeat step 5 until the engine starts.

- If the blower fails to start, check the Troubleshooting section in the manual.
  NOTE: After the engine starts and runs, release the throttle lever and allow the blower to warm up at idle for several minutes.

For warm start:

- Make sure that the battery pack is securely in place.

OPERATION

- Place the blower on a level surface, outdoors.
- Press the primer bulb 5 times.
- Place the blower on your back, with the shoulder straps on and chest strap secured.
- Lift the start button cover and press the start button until the engine starts. Then immediately press the throttle lever to start the blower.

To stop the blower: Press the STOP switch to the stop position “O” until the blower stops (Fig. 21).

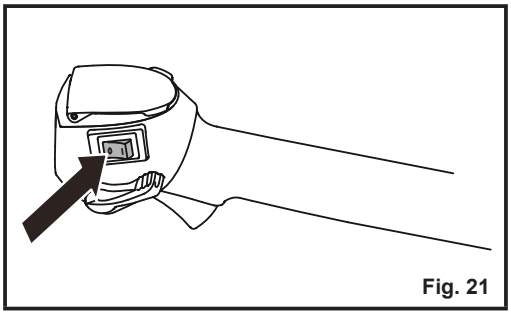


Fig. 21

AUTO-CHOKE FEATURE

This blower has an automatic choke. Press the start button until the engine starts and the choke lever will automatically close. Then immediately engage the throttle lever to start the blower and the choke lever will automatically open.

BATTERY INDICATOR *(See Fig. 22)*

A battery indicator is located above the start button, and can be used to indicate the battery status (Fig. 22).

When pushing the start button to start the engine, a green light indicates a fully charged battery; a red light indicates the battery needs to be charged.

NOTE: To ensure proper start, it is recommended to charge the battery pack once the battery indicator shows a red light.

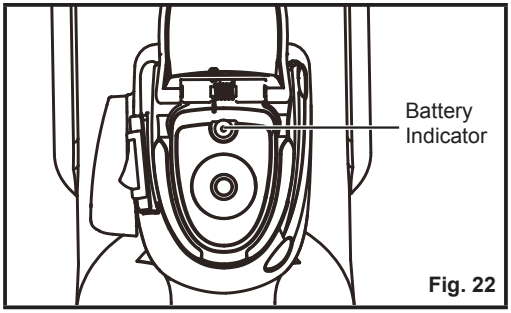


Fig. 22

CRUISE CONTROL LEVER *(See Fig. 23)*

The cruise control lever can be used to operate the blower without holding the throttle lever.

- To engage, operate the throttle lever toward the suitable speed position for blowing (I), and press down the cruise control lever (II) (Fig. 23).
- To release, lift the cruise control lever up.

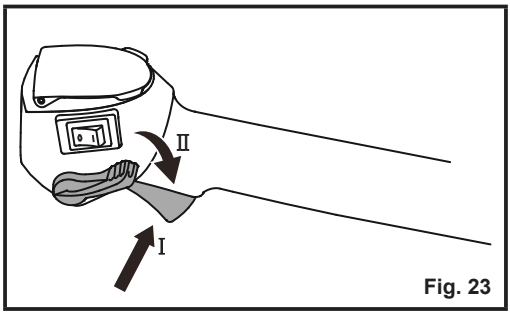


Fig. 23

USING THE BLOWER NOZZLE *(See Fig. 24)*

Use the blower nozzle when high air speed is required (Fig. 24).

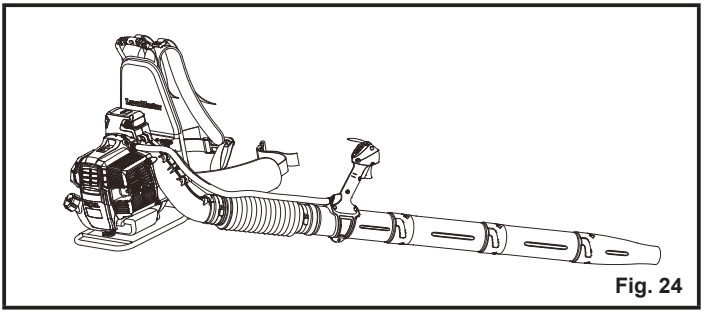


Fig. 24

USING THE BLOWER *(See Fig. 25)*

⚠ WARNING

The engine housing can become hot during operation. Do not touch or place any part of your body or clothing on the engine housing, vents surrounding the muffler, or exhaust port when starting, operating, or transporting the blower. Stop and allow the engine to cool down for at least 15 minutes prior to storing the blower and do not allow blower to contact combustible materials when storing. Contact with the engine housing, muffler vents, or exhaust gases could result in serious burns and/or ignite combustible materials.

- Slip arm through shoulder strap and onto the shoulder, then repeat for the other shoulder. Adjust the straps to a comfortable position. Refer to Adjusting Shoulder Straps on Harness section on page 15 in this manual. The blower should be operated on the operator's right side as shown.
- Start the blower. Refer to Starting and Stopping the Blower section on page 20 in this manual.
- Hold the handle firmly with right hand. Make sure the air stream can work close to the ground (Fig. 25).
- Blow debris or grass clippings off of driveways, sidewalks, patios, etc.
- Gather grass clippings, or leaves into piles. Blow debris from corners, around joints, and between bricks.
- To keep from scattering debris, blow around the outer edges of a debris pile. Do not blow directly into the center of a pile.
- Watch out for children, pets, open windows, or freshly washed cars, and blow debris safely away.
- Press the STOP switch to the stop position "O" until the blower stops.
  NOTE: Your LawnMaster® blower is designed to blow and clean hard surfaces; such as patios, driveways, decks, garages, and sidewalks.

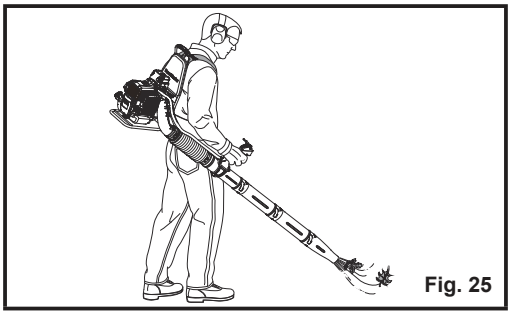


Fig. 25

TRANSPORTING THE BLOWER *(See Fig. 26)*

When transporting the backpack blower, secure the chest strap around rear blower tube to prevent the blower tubes from scraping against the ground causing damage to the unit. (Fig 26.).

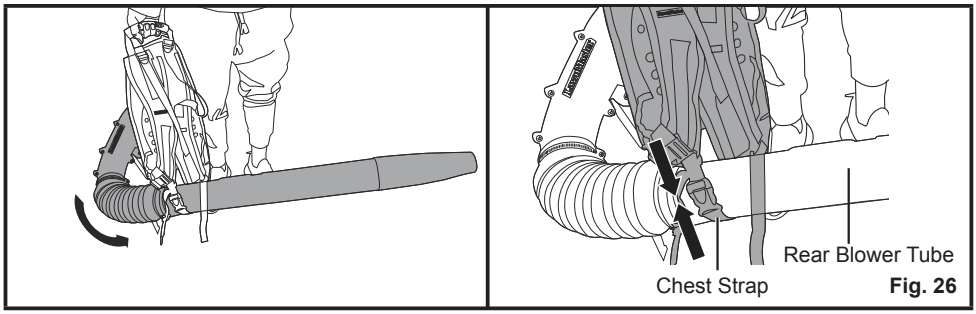


Fig. 26

MAINTENANCE

Normal maintenance, replacement or repair of emission control devices and systems may be performed by an authorized service center or qualified individual that uses identical parts. Warranty repairs must be performed by an authorized service center; please contact your service dealer for assistance or Customer Service (Toll Free Number 866-384-8432).

⚠ WARNING

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

⚠ WARNING

Before inspecting, cleaning, or servicing the machine, shut off the engine, wait for all moving parts to stop, and remove the battery pack. Wait until the surfaces cool down. Failure to follow these instructions can result in serious personal injury or property damage.

NOTICE: Occasionally inspect the tool for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Do not operate this tool if parts are damaged or missing. Secure all fasteners and caps prior to using the tool. Please contact your service dealer for assistance or Customer Service (Toll Free Number 866-384-8432).

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean, dry cloths to remove dirt, dust, oil, grease, etc.

Keep all safety devices, air vents, and the motor housing free of dirt and dust.

Regularly clean the ventilation slot in your blower using a soft brush or dry cloth.

Regularly clean the cutting line and spool using a soft brush or dry cloth.

Regularly remove grass and dirt from the underside of the guard using a blunt scraper.

MAINTENANCE

⚠ WARNING

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating lubricants, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which could result in serious personal injury.

BATTERY MAINTENANCE

- Store the battery pack fully charged.
- Charge the battery pack whenever there is a noticeable reduction in the blowing performance. Do not allow the battery pack to become completely discharged.
- Once the battery pack is fully charged, remove the battery from the charger and disconnect the charger from the outlet.
- Do not store the battery pack on the tool or on the charger.
- Charge the battery at a temperature between 40°F (4°C) and 100°F (38°C). If the battery pack is hot, allow it to cool down before charging.

Storing the battery for 30 days or longer:

If the lithium-ion battery is being stored for 30 days or longer, store the battery pack in a location where the temperature does not exceed 80°F (26°C) and is free of moisture.

- Store the battery pack in a 30%-50% charged condition.
- Fully charge the battery back every six months.
- The exterior part of the battery pack may be cleaned with a cloth or soft non-metallic brush.

CHARGER MAINTENANCE

- Keep the charger clean and clear of debris. Do not allow foreign material into the recessed cavity or on the contacts. Wipe with a dry cloth. Do not use solvents, water, or place in wet conditions.
- Always unplug the charger when the battery pack is not installed on the charger.
- Keep the charger stored at normal room temperature. Do not store it in excessive heat. Do not use in direct sunlight.
- Disconnect the charger from the AC power outlet when not in use and once the battery has reached a full charge.

CLEANING THE EXHAUST PORT, MUFFLER AND SPARK ARRESTOR

NOTICE:

The spark arrestor on this product has not been evaluated by the USDA Forest Service and cannot be used on U.S. forest lands. In addition, product users must comply with Federal, State, and local fire prevention regulations. Check with appropriate authorities. Contact Customer Service or your authorized service center to purchase a replacement spark arrestor.

If the blower appears less efficient or powerful, it may be due to the build-up of carbon deposits around the exhaust port and muffler. This may occur depending on the type of fuel used, the type and amount

of lubricant used, or the operating conditions. In order to restore performance, take the blower to an authorized service center or qualified individual to remove the blockage.
The spark arrestor must be cleaned or replaced every 50 hours or yearly to ensure proper performance of your product. Spark arrestors may be in different locations depending on the model purchased. Please contact your nearest service dealer for the location of the spark arrestor for your model.

CLEANING THE AIR FILTER *(See Figs. 27-30)*

Keep the air filter clean for proper performance and long life.

- Rotate the air filter knob counter clockwise and gently pull off the air filter cover (Fig. 27).
- Remove the air filter from the air filter cover (Fig. 28).

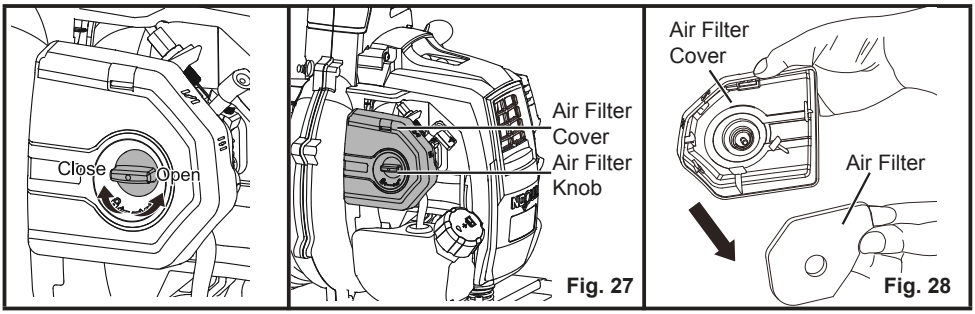


Fig. 27 Fig. 28

NOTE: Inspect the filter for damage and replace with a new filter if necessary.

- Clean the air filter with warm soapy water and rinse. Air dry the air filter.
- Place the air filter back, ensuring that it properly seated onto the air filter cover. Installing the filter correctly will decrease the chances of engine wear caused by dirt entering the engine (Fig. 29).
- Replace the air filter cover ensuring the air filter is completely covered (Fig. 30).
- Turn the air filter knob clockwise to secure the air filter cover.

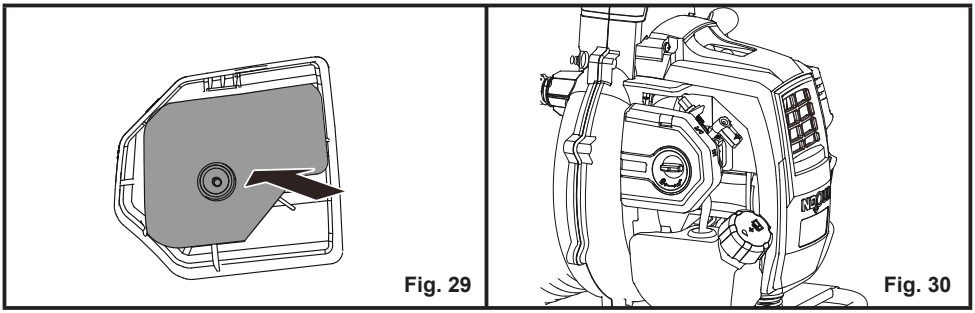


Fig. 29 Fig. 30

MAINTENANCE

FUEL TANK CAP, TANK AND LINES

⚠ DANGER

Fuel is EXTREMELY flammable. Be very cautious and use care when mixing storing or handling. Failure to follow this instruction may lead to serious personal injury.

⚠ WARNING

Check for fuel leaks. Do not use the blower in the presence of a leak as it is a fire hazard. Loose or damaged tank caps, or leaking tanks must be replaced immediately. Failure to follow this instruction may lead to serious personal injury.

Use a clean cloth to remove loose dirt from around the fuel tank cap and empty the fuel tank. The fuel tank cap contains a check valve. If the performance improves when the fuel tank cap is loosened, the check valve may be faulty. Replace the fuel tank cap if required.

A clogged fuel filter will cause poor engine performance. Replace the fuel filter if required as it is a non-serviceable part. Please contact your nearest service center for replacing this fuel filter.

SPARK PLUG REPLACEMENT *(See Figs. 31-34)*

The spark plug for this engine may be replaced using an identical or equivalent spark plug as provided with the tool. The spark plug gap should be set at 0.026 in. (0.65 mm). Replace annually with a recommended or equivalent replacement part.

- Remove the spark plug cap. Fully cover the spark plug using the provided socket wrench. Rotate the spanner counter clockwise to remove the spark plug (Fig. 31 & 32).
- Check the spark plug for fouling, worn and rounded center electrode. Clean the plug or replace with a new one. DO NOT use a blowing tool to clean as the movement of dirt may damage the engine.
- Adjust spark plug gap by bending outer electrode (Fig. 33).
- Reinstall the cleaned or new spark plug by turning it clockwise into place (Fig. 34).

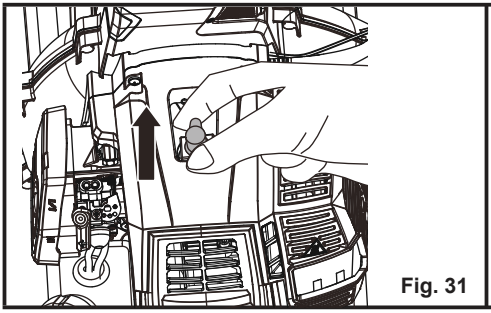


Fig. 31

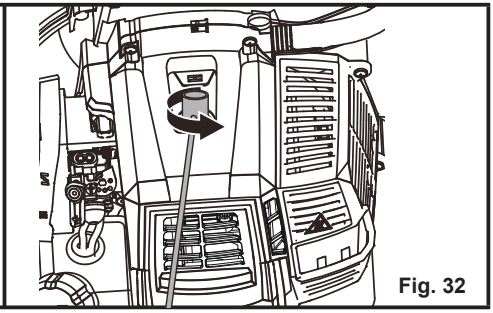


Fig. 32

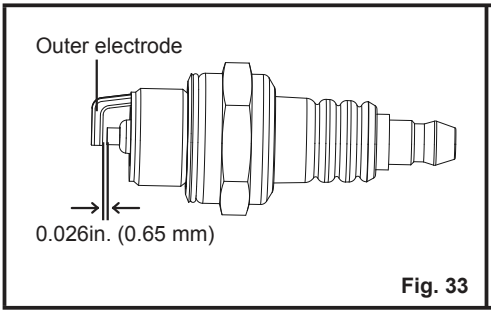
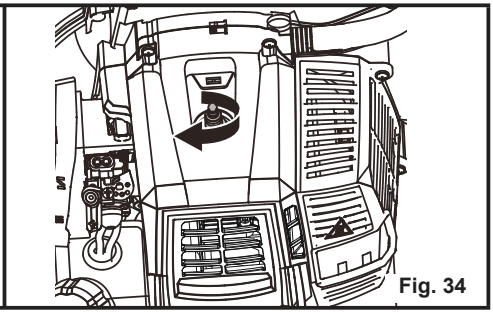


Fig. 33


Fig. 34

- Reinstall the spark plug cap into place.
  NOTICE: Be careful not to cross-thread the spark plug. Cross-threading will seriously damage the product.

ADJUSTING THE THROTTLE *(See Figs. 35-36)*

Run the blower at full throttle. If there is a gap between throttle turntable and throttle limit plate, the throttle cable should be adjusted (Fig. 35).

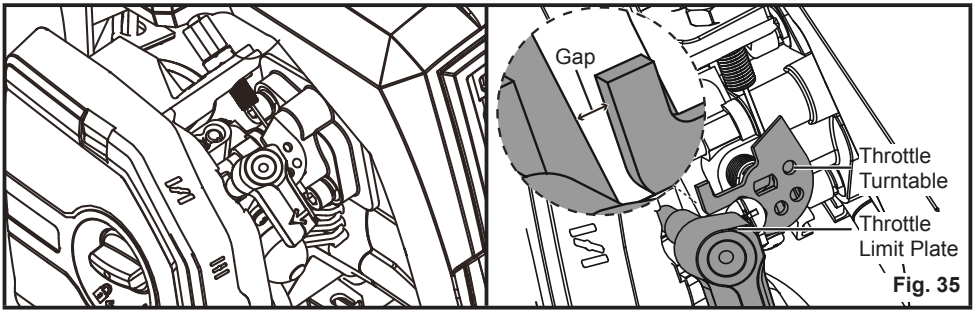


Fig. 35

- Rotate the air filter knob counter clockwise and gently pull off the air filter cover.
- Loosen the nut by turning it counter clockwise with the supplied spanner and pull the throttle cable counter clockwise, then tighten the nut by turning it clockwise with the supplied spanner (Fig. 36).
- Press down the throttle lever to the end. Inspect to ensure there is no gap between the throttle turntable and the throttle limit plate. If there is still a gap, repeat step 2.
- Turn the air filter knob clockwise to secure the air filter cover.

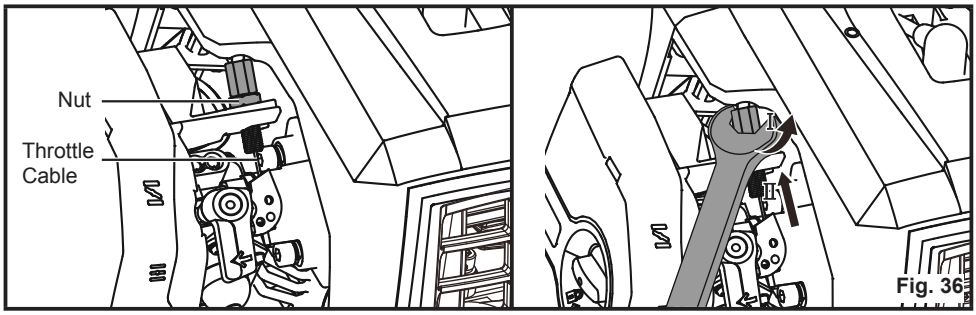


Fig. 36

STORAGE

Clean the blower of any debris and store indoors in a dry, well-ventilated area that is inaccessible to children. Keep away from corrosive agents such as garden chemicals and de-icing salts.
Abide by all ISO and local regulations for the safe storage and handling of gasoline.

Storing for 30 days or longer:

Drain all the fuel from the tank into a container approved for storing gasoline. Press the primer bulb 3 - 4 times to remove the remaining fuel from the carburetor. Run the engine until it stops.

HIGH ALTITUDE ENGINE OPERATION

Initially your engine is configured for operation below 2000 ft. altitude. If the blower is being used above 2000 ft. altitude, the engine must be re-configured accordingly. Operating the engine with the wrong engine configuration at a given altitude may increase its emissions, drop fuel efficiency, reduce performance and cause irreparable damage. Engines configured for high altitude operation will need to be reconfigured for use in standard altitude conditions. Your authorized service center should ensure that your engine is properly configured for your location.

MAINTENANCE

THIS PRODUCT WAS MANUFACTURED WITH A CATALYST MUFFLER

Congratulations! You have made an investment toward protecting the environment. In order to maintain this product's original emission level, please refer to the maintenance section below.

MAINTENANCE SCHEDULE					
Maintenance Part		**Inspect For Damage Before Each Use**	**Clean Every 5 Hours**	**Replace Every 25 Hours or Yearly**	**Replace Every 50 Hours**
*** CATALYTIC MUFFLER ASSEMBLY**					Y
SPARK SCREEN					Y
*** AIR FILTER ASSEMBLY** Includes: Air Filter			Y		
*** CARBURETOR ASSEMBLY** Includes: Gaskets		Y			
*** FUEL TANK ASSEMBLY** Includes:	Fuel Lines & Fuel Tank Cap	Y			
	Fuel Filter			Y	
*** IGNITION ASSEMBLY** Includes: Spark Plug				Y	

*** NOTICE: THE USE OF EMISSION CONTROL COMPONENTS OTHER THAN THOSE DESIGNED FOR THIS UNIT IS A VIOLATION OF FEDERAL LAW.**

ENVIRONMENTALLY SAFE BATTERY DISPOSAL

The following toxic and corrosive materials are in the batteries used in this battery pack:
Lithium-ion, a toxic material.

⚠ WARNING

All toxic materials must be disposed of in a specified manner to prevent contamination of the environment. Before disposing of damaged or worn out lithium-ion battery packs, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions.

⚠ WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Dispose of it and replace with a new battery pack.
DO NOT ATTEMPT TO REPAIR IT!

To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the battery terminals with heavy-duty adhesive tape.
- DO NOT attempt to remove or destroy any of the battery pack components.
- DO NOT attempt to open the battery pack.
- If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
- DO NOT place these batteries in your regular household trash.
- DO NOT incinerate.
- DO NOT place batteries where they will become part of any waste landfill or municipal solid waste stream.
- Take batteries to a certified recycling or disposal center.

TROUBLESHOOTING

If your blower does not appear to operate properly, follow the instructions below. If this does not solve the problem, please contact your local repair agent.

⚠ WARNING

Before proceeding, shut off the engine, wait for all moving parts to stop, and remove the battery pack. Wait until the surfaces cool down. Failure to follow these instructions can result in serious personal injury or property damage.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The engine does not start.	The battery is not secure.	Insert the battery correctly. Ensure the battery is fully charged.
	No spark.	Clean or replace the spark plug. Reset the spark plug gap. Refer to the Spark Plug Replacement section in this manual.
	No fuel.	Check that there is sufficient fuel in the fuel tank. Push the primer bulb until the bulb is full of fuel. If the bulb does not fill, the primary fuel delivery system is blocked. Contact an authorized service dealer. If the primer bulb fills, the engine may be flooded, proceed to the next item.
	The engine is flooded.	Remove the spark plug referring to the Spark Plug Replacement section in this manual. Press the start button 5 to 10 times. Place the blower to the side for 30 minutes with the spark plug removed. After 30 minutes, replace the spark plug referring to the Spark Plug Replacement section. Then re-start the engine. If the engine still does not start, contact an authorized service dealer.
	The air filter is blocked.	Clean the air filter. Refer to Cleaning the Air Filter section in this manual.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The engine does not reach full speed and emits excessive smoke.	Incorrect lubricant/fuel mixture.	Empty tank. Use fresh fuel and the correct 2-cycle lubricant mix (40:1).
	The air filter is dirty.	Clean the air filter. Refer to Cleaning the Air Filter section in this manual.
	The spark plug is worn out.	Clean or replace the spark plug. Reset the spark plug gap. Refer to the Spark Plug Replacement section in this manual.
	The engine overheats.	Allow the engine to run at idle for 5 minutes. Then stop the blower and allow it to cool for about 20 minutes.
	The spark arrestor screen is dirty.	Contact an authorized service dealer.
The engine starts, runs, and accelerates but will not idle.	The idle speed screw on carburetor needs adjustment.	Contact an authorized service dealer.

LawnMaster® WARRANTY



LawnMaster® No-Pull™ LIMITED WARRANTY

We take pride in producing a high quality, durable product. This LawnMaster® product carries a limited three (3) year warranty against defects in workmanship and materials from date of purchase under normal household use. This product carries a ninety (90) day warranty from the date of purchase when used for commercial or rental purposes. **Batteries and chargers carry a two-year warranty against defects in workmanship and materials from date of purchase.** Batteries must be charged in accordance with the Operator's Manual directions and regulations in order to be valid. Warranty does not apply to defects due to alterations, direct or indirect abuse, negligence, misuse, accidents, repairs, and lack of maintenance. Please keep your receipt/packing list as proof of purchase. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state. For product service contact your authorized dealer or call Customer Service at 866-384-8432.

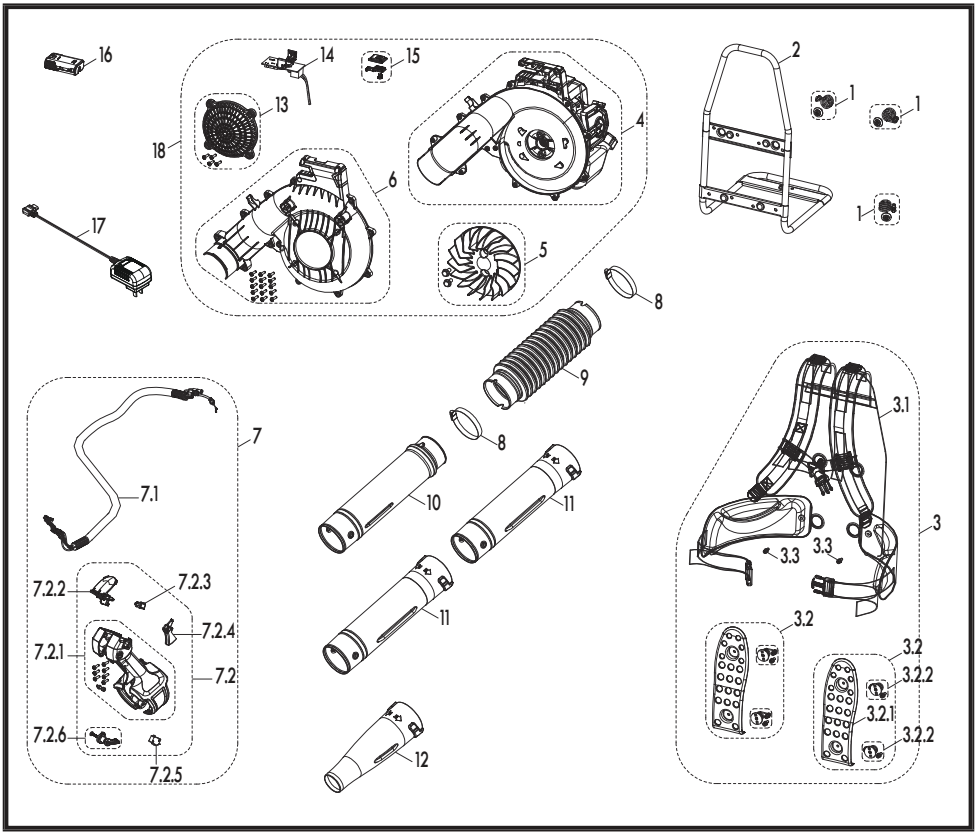
Items not covered by warranty :

1. Any part that has become inoperative due to alteration, misuse, commercial use, abuse, neglect, accident, or improper storage or maintenance.
2. The unit, if it has not been operated and/or maintained in accordance with the Operator's Manual.
3. The unit, if damage or engine failure is due to absence of 2-stroke oil, improper 2-stroke oil mix ratio, or use of 2-stroke oils not meeting standards specified in this manual.
4. The unit, if damage is caused by the use of gasoline containing more than 10% ethanol content (E10).
5. Normal wear, except as noted below.
6. Routine maintenance items such as lubricants, blade sharpening, etc.
7. Normal deterioration of the exterior finish due to use or exposure.
8. Parts that can wear out from normal use within the warranty period, such as the blades, collection bags, spools, spool covers, etc.

Transportation Charges : Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser’s responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by LawnMaster®.

THIS WARRANTY ONLY APPLIES TO ORIGINAL PURCHASER WITH PROOF OF PURCHASE. THIS WARRANTY IS VOID WITHOUT PROOF OF PURCHASE.

EXPLODED VIEW

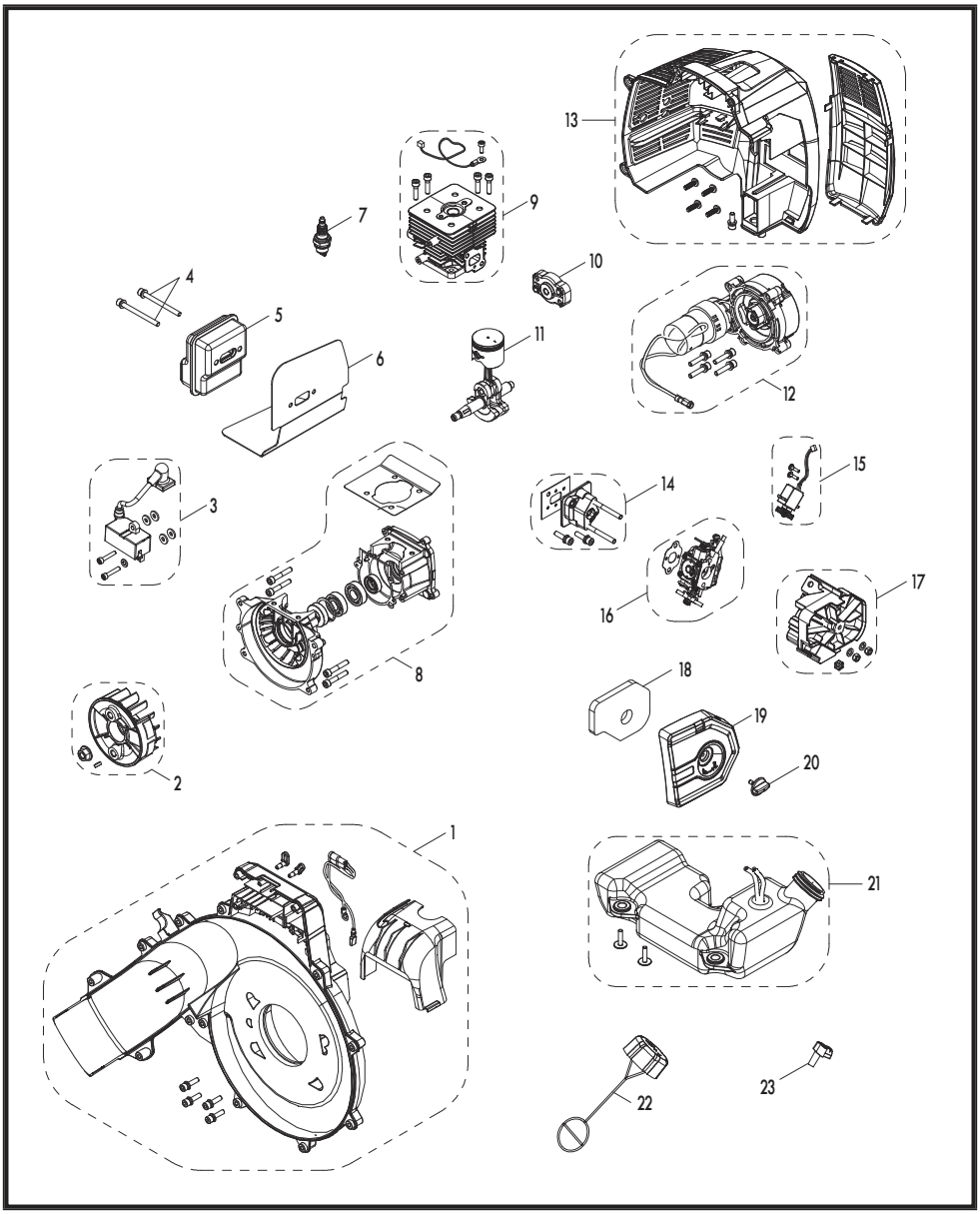


PARTS LIST

NPTBL31AB MANUAL PARTS LIST			
Key Number	**Part Number**	**Description**	**Quantity**
1		Spring Assembly	3
2		Frame	1
3	301002103	Backpack Harness Assembly	1
3.1	301002104	Backpack Harness	1
3.2	301002105	Lumbar Support Assembly	2
3.2.1	301002106	Ventilated Lumbar Pads	2
3.2.2	301002107	Spring Cushion Assembly	4
3.3		Fuel Tank Screw	2
4		Cleva 31cc 2-Cycle Engine	1
5		Impeller	1
6		Engine Housing Assembly	1
7		Handle Assembly	1
7.1		Internal Wire Assembly	1
7.2		Handle and Starter Set	1
7.2.1		Front Handle Assembly	1
7.2.2		Starter Set	1
7.2.3		Stop Switch	1
7.2.4	301002117	Throttle Lever	1
7.2.5		Microswitch	1
7.2.6	301002118	Cruise Control Lever	1
8	301002119	Hose Clamp	2
9		Flexible Hose	1
10	301002121	Rear Tube	1
11	301002122	Front Tube	2
12	301002123	Concentrator Nozzle	1
13		Air Inlet Cover	1
14		PCB Assembly	1
15	301001110	Battery Release Button	1
16	321001114	7.2V Lithium-Ion Battery	1
17	321001127	Charger	1
18		Engine Assembly	1

Replacement parts highlighted in grey are available for after sales purchase. Replacement of repair or internal parts should be done by a qualified service professional. Please contact your authorized service dealer or Customer Service at 866-384-8432.

Exploded View 31cc 2-Cycle Engine



Parts List 31cc 2-Cycle Engine

31CC 2-CYCLE ENGINE PART LIST			
Key Number	**Part Number**	**Description**	**Quantity**
1		Engine Housing Assembly	1
2		Flywheel	1
3		Ignition Coil Assembly	1
4		Screw	2
5	301002131	Muffler	1
6	301002132	Muffler Gasket	1
7	321001139	Spark Plug	1
8		Crankcase Assembly	2
9		Cylinder Assembly	1
10		Pawl Assembly	1
11		Crankshaft Piston Shank	1
12		Electric Starter Assembly	1
13	301002137	Engine Cover	1
14		Carburetor Mount Assembly	1
15		Steering Gear Assembly	1
16		Carburetor Assembly	1
17	301002141	Air Filter Base	1
18	301002142	Air Filter	1
19	301002143	Air Filter Cover	1
20	321001150	Rotary Knob	1
21		Fuel Tank Assembly	1
22	301001123	Fuel Cap Assembly	1
23	301002145	Choke Lever	1

Replacement parts highlighted in grey are available for after sales purchase. Replacement of repair or internal parts should be done by a qualified service professional. Please contact your authorized service dealer or Customer Service at 866-384-8432.