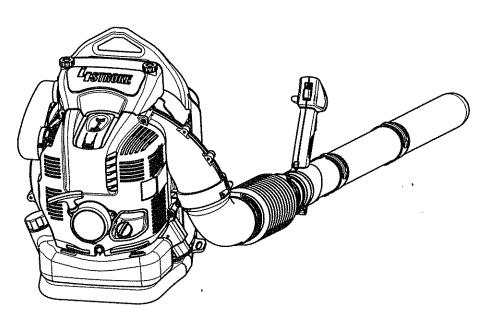
Robin

BLOWER SOPLADOR

FL-H7500





INSTRUCTION MANUAL

Read this instruction manual carefully before putting the Blower into operation and strictly observe the safety regulations! Preserve instruction manual carefully!



INSTRUCCIONES DE MANEJO

Lea bien este manual antes de poner el soplador en funcionamiento, y observe estrictamente las medidas de seguridad. Conserve este manual de instrucciones. Thank you very much for selecting the ROBIN blower. We are pleased to be able to offer you the ROBIN blower, which is the result of a long development program and many years of knowledge and experience.

The blower models FL-H7500 combines the advantages of state-of-the-art technology with ergonomic design. They are of lightweight, handy, compact and represent professional equipment for a great variety of applications.

Please read, understand and follow this booklet, which refers in detail to the various points that will demonstrate its outstanding performance. This will assist you to safety obtain the best possible results from your ROBIN Blower.



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SYMBOLS

It is very important to understand the following symbols when reading this instructions manual.



WARNING/DANGER



Fuel (Gasoline)



Read, Understand and Follow Instruction Manual



Engine-manual Start



Forbidden



Emergency Stop



No Smoking



First Aid



No Open Flame



Recycling



Protective Gloves must be Worn



ON/START



Keep the Area of Operation Clear of All Persons and Pets



OFF/STOP



Wear Eye and Ear Protection



Severing of fingers or hand, impeller blade



. Hot surfaces - Burns to fingers or hands

SAFETY INSTRUCTIONS

General Instructions

- To ensure correct and safe operation, the user must read, understand and follow this instruction manual to assure familiarity with the handling of the blower (1). Users insufficiently informed will risk danger to themselves as well as others due to improper handling.
- It is recommended only to loan the blower to people who have proven to be experienced with blowers.
- Always hand over the instruction manual.
- First-time users should ask the dealer for basic instructions to familiarize oneself with the handling of a blower.
- Children and young persons aged under 18 years must not be allowed to operate the blower. Persons over the age of 16 years may however use the tool for the purpose of being trained only while under the direct supervision of a qualified trainer.
- · Use blowers with the utmost care and attention.
- Operate the blower only if you are in good physical condition.
- Perform all work conscientiously and carefully. The user has to accept responsibility for others.
- Never use the blower while under the influence of alcohol or drugs (2).
- . Do not use the unit when you are tired.
- · Save these instructions for future referral.

Personal Protective Equipment

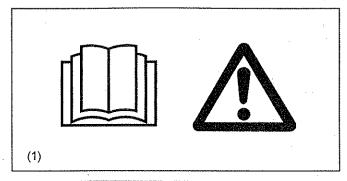
- The clothing worn should be functional and appropriate, i. e. It should be tight fitting but not cause a hindrance. Do not wear jewelry, clothing or long hair which could be drawn into the air intake.
- In order to avoid head-, eye-, hand- or foot injuries as well as to protect your hearing the following protective equipment and protective clothing must be used during operation of the blower.

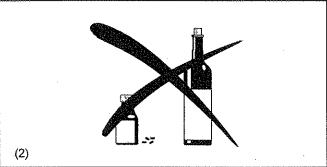
Pay particular attention to the following regulations

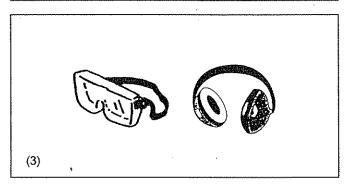
- Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose-fitting jackets, flared or cuffed pants, scarves, unconfined long hair or anything that could be drawn into the air intake.
 Wear overalls or long pants to protect your legs.
 Do not wear shorts. (4)
- Blower noise may damage your hearing. Wear sound barriers (ear plugs or ear mufflers) to protect your hearing. Continual and regular users should have their hearing checked regularly. (3)
- Use of gloves when working with the blower is recommended.
 Good footing is most important. Wear sturdy shoes with non-slip soles.
 (4)
- Proper eye protection is a must. Even though the discharge is directed away from the operator, ricochets and bounce-backs can occur during blower operation. (3)
- Never operate a blower unless wearing goggles or properly fitted safety glasses with adequate top and side protection which comply with ANSI Z 87. 1 (or your applicable national standard).

Starting up the blower

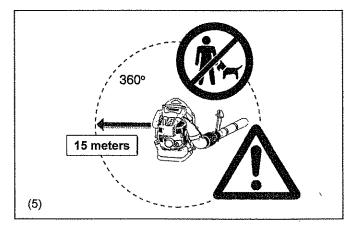
- Please make sure that there are no children or other people within a working range of 15 meters (5), also pay attention to any animals in the working vicinity. Never use the blower in urban areas.
- Before operating, always check that the blower is safe for operation:
 Check the security of the throttle lever. The throttle lever should be checked for smooth and easy action. Check for proper functioning of the "throttle lever lock. Check for clean and dry handles and test the function of the I-O switch. Keep handles free of oil and fuel.











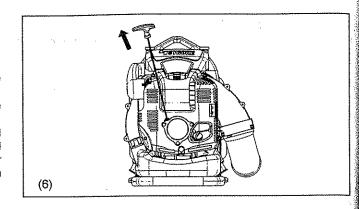
Start the Blower only in accordance with the instructions.

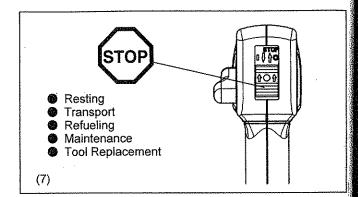
Do not use any other methods for starting the engine (6)!

- Use the blower and the tools supplied only for applications specified.
- Start the blower engine only after the entire tool has been assembled.
 Operation of the tool is permitted only after all the appropriate accessories are attached.
- The engine is to be switched off immediately if there are any engine problems.
- When working with the blower, always wrap your fingers tightly around the handle, keeping the control handle cradled between your thumb and forefinger. Keep your hand in this position to have your machine under control at all times. Make sure your control handle is in good condition and free of moisture, pitch, oil or grease.

Always ensure a safe, well-balanced footing.

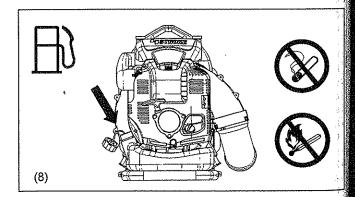
- Operate the blower in such a manner as to avoid inhalation of the exhaust gases. Never run the engine in enclosed rooms (risk of suffocation and gas poisoning). Carbon monoxide is an odorless gas. Always ensure there is adequate ventilation.
- Switch off the engine when resting and when leaving the blower unattended. Place it in a safe location prevent danger to others, setting fire to combustible materials, or damage to the machine.
- Never lay the hot blower onto dry grass or onto any combustible materials.
- All protective parts and guards supplied with the machine must be used during operation.
- Never operate the engine with a faulty exhaust muffler.
- Shut off the engine during transport (7).
- Position the blower safely during car or truck transportation to avoid fuel leakage.
- When transporting the blower, ensure that the fuel tank is completely empty.

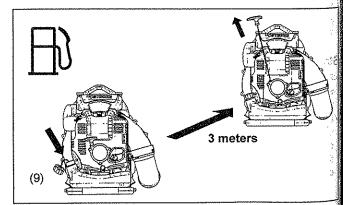




Refueling

- Shut off the engine during refueling (7), keep well away from open flame (8) and do not smoke.
- Avoid skin contact with petroleum products. Do not inhale fuel vapor.
 Always wear protective gloves during refueling. Change and clean protective clothing at regular intervals.
- Take care not to spill either fuel or oil in order to prevent soil contamination (environmental protection). Clean the blower immediately after fuel has been spilt. Allow wet cloths to dry before disposing in properly, covered container to prevent spontaneous combustion.
- Avoid any fuel contact with your clothing. Change your clothing immediately if fuel has been spilled on it (fire hazard).
- Inspect the fuel cap at regular intervals making sure that it stays securely fastened.
- Carefully tighten the locking screw of the fuel tank. Change locations to start the engine (at least 3 meters away from the place of refueling) (9).
- Never refuel in closed rooms. Fuel vapors accumulate at ground level (risk of explosions)
- Only transport and store fuel in approved containers. Make sure stored fuel is not accessible to children.
- Do not attempt to refuel a hot or a running engine.





Method of operation

- Use the blower only in good light and visibility. During cold seasons beware of slippery or wet areas, ice and snow (risk of slipping).
 Always ensure a safe footing.
- Never work on unstable surfaces or sleep terrain.
- To reduce the risk of personal injury, do not direct air blast towards bystanders, since the high pressure of the air flow could injure eyes and could blow small objects at great speed.
- Never insert any foreign object into the air intake of the machine or into the nozzle of the blower. It will damage the fan wheel and may cause serious injury to the operator or bystanders as a result of the object or broken parts being thrown out at high speed.
- Pay attention to the direction of the wind, i.e., do not work against the wind
- To reduce the risk of stumbling and loss of control, do not walk backward while operating the machine.
- Always shut off the engine before cleaning or servicing the unit or replacing parts.

Maintenance instructions

- Be kind to the environment. Operate the blower with as little noise and pollution as possible. In particular check the correct adjustment of the carburetor.
- Clean the blower at regular intervals and check that all screws and nuts are securely tightened.
- Never service or store the blower in the vicinity of open flames, sparks, etc. (11).
- Always store the blower in a well-ventilated locked room and with an emptied fuel tank.

Observe and follow all relevant accident prevention instructions issued by the trade associations and by insurance companies. Do not perform any modifications to the blower as this will risk your safety.

The performance of maintenance or repair work by the user is limited to those activities as described in this instruction manual. All other work is to be done by Authorize d Service Agents.

Use only genuine spare parts and accessories supplied by ROBIN.

Use of non-approved accessories and tools means increased risk of accidents and injuries. ROBIN will not accept any liability for accidents or damage caused by the use of any non-approved attachment or accessories.

First Aid

In case of accident make sure that a well-stocked first-aid kit is available in the vicinity of the operations. Immediately replace any item taken from the first aid kit.

When asking for help, please give the following information:

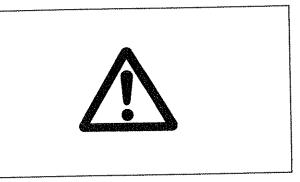
- Place of accident
- What happened
- Number of injured persons
- Extent of injuries
- Your name

Packaging

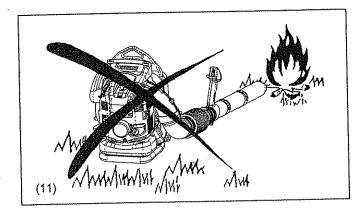
The ROBIN blower is delivered in a protective cardboard box to prevent shipping damage. Cardboard is a basic raw material and is therefore consequently reusable or suitable for recycling (waste paper recycling).

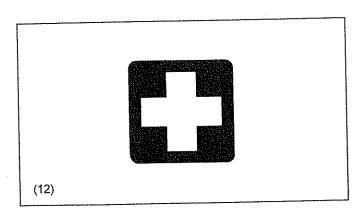






(10)



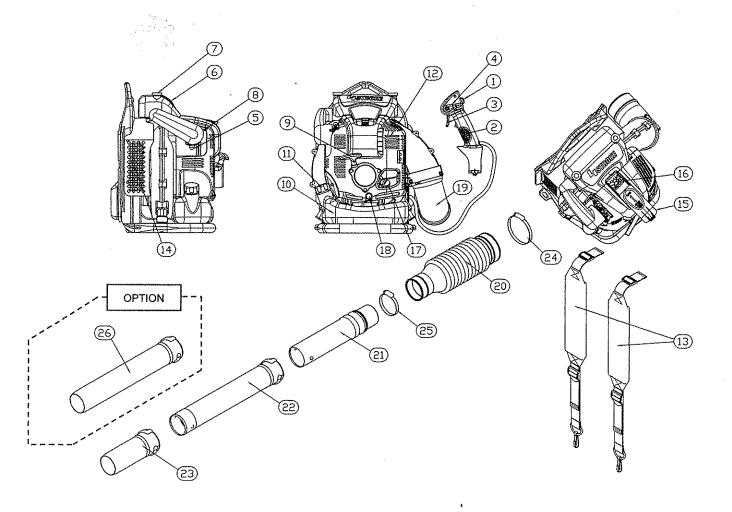


TECHNICAL DATA

Model		FL-H7500
Mass (without blower pipe)	(kg)	10.2(22.4lbs)
Dimension (without blower pipe L x W x H)	(mm)	350 × 430 × 495 (13.7×16.9×19.5 in)
Max. engine speed	(min ⁻¹)	7,200
Idling speed	(min ⁻¹)	2,800
Engine displacement	(mL)	75.6 (4.61 cu,in)
Fuel		Automobile gasoline
Fuel tank capacity	(L)	1.9 (64.2 fl.oz)
Engine oil		SAE 10W-30 oil of API Classification, Class SF or higher (4-stroke engine for automobile)
Engine oil volume	(L)	0.22 (7.4 fl.oz)
Carburetor (Diaphragm-carburetor)		WALBRO WYK
Ignition system		Solid state ignition
Spark plug		NGK CMR6A
Electrode gap	(mm)	0.7 - 0.8 (0.028 – 0.031 in)
Noise Level (50Feet per ANSI B175-2-2000)	(dB(A))	74

Notes:

- Use the oil and spark plug specified by ROBIN.
 This specification is subject to change without prior notice.



DESIGNATION OF PARTS	DESIGNATION OF PARTS	DESIGNATION OF PARTS	DESIGNATION OF PARTS
1. Stop switch	8. Choke Lever	15. Plug Cover	22. Blower Pipe
2. Control Handle	9. Starter Handle	16. Spark Plug	23. Blower Nozzie L=200
3. Trigger Lever	10. Fuel Tank	17. Oil Cap	24. Hose Band φ 100
4. Cruise Control Lever	11. Fuel Tank Cap	18. Oil Drain Bolt	25. Hose Band φ 76
5. Primer Pump	12. Muffler	19. Elbow	26. Blower Nozzle L=450
6. Element Cover	13. Shoulder Strap	20. Flexible Pipe	
7. Knob Bolt	14. Air Inlet Net	21. Swivel Pipe	

ASSEMBLY INSTRUCTIONS

ASSEMBLY OF BLOWER PIPES

CAUTION: Before performing any work on the blower, always stop the

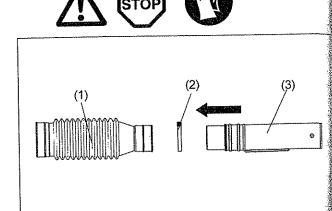
engine and pull the spark plug connectors off the spark

plug.

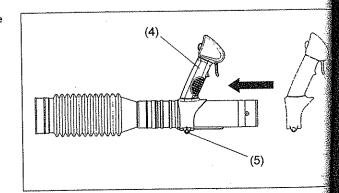
Always wear protective gloves!

CAUTION: Start the blower only after having assembled it completely.

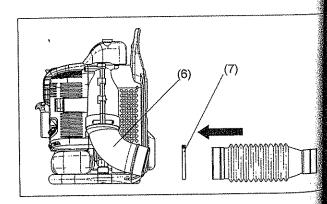
1. Assemble straight pipe with swivel (3) into flexible pipe (1) and tighten hose band ϕ 76 (2).



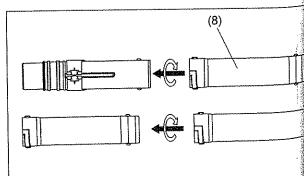
2. Install control handle (4) onto straight pipe with swivel and tighten the clamp screw (5).



3. Assemble flexible pipe to elbow (6) on blower and tighten hose band ϕ 100 (7).



4. Assemble straight pipe (8) to straight pipe with swivel, turning straight pipe clockwise to lock it into place.



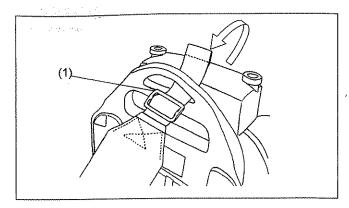
5. Make sure all clamps are tight.

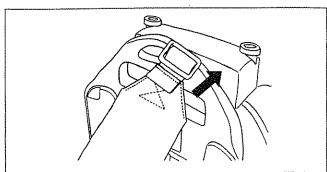
ATTACHING THE SHOULDER STRAP

Attachment Procedure

Attaching the shoulder strap to the blower.

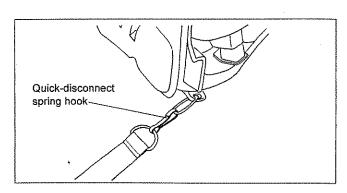
- Loop the end of the strap through the lower part of the hanger as shown in the figure at right. The side of the strap that has the folded tip should be facing outwards. Then, bring the end of the strap back over the hanger and thread the remaining length of the strap through the buckle (1). Tighten the buckle (1) by pushing it towards the hanger in the direction of the arrow shown in the drawing while pulling on the strap in the opposite direction.
- After attaching the strap, tighten the buckle to the hanger. Tug strongly at the strap to make sure that the strap is secure and will not come undone.





- Attach the hook at the bottom of the shoulder strap to the ring on the frame.
- · Verify that the strap is not twisted.

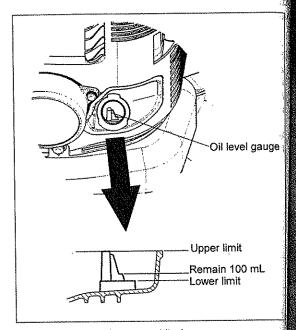
Caution: Please make sure that strap is attached with the folded tip facing outwards. If the strap is used with the outside of the strap facing in, there is the risk that the strap may come loose causing the operator to drop the blower.



BEFORE STARTING THE ENGINE

1. Checking and Refilling Engine Oil

- Follow the procedure below when the engine oil is cold i.e. the blower has not been running.
- Inspection: Set the blower down on a level surface and remove the oil cap. Verify
 that the oil level is within the upper and lower limit marks on the oil
 level gauge. If the oil is not up to the 100mL level, fill up with new oil.
- Adding Oil: Set the blower down on a level surface and remove the oil cap. Fill the oil up to the upper limit of the oil level gauge.
- On average, engine oil normally needs to be added after every 20 hours of operation. This interval for every change in oil corresponds to refueling the blower approximately 10-15 times.
- Please change the oil whenever it becomes dirty or significantly changes color. (Refer to p. 15 for the oil change procedure and frequency.)



Recommended oil: ROBIN genuine oil or SAE10W-30 oil of API type SF grade or better (4 stroke motor oil for automobiles)
Oil capacity: Approximately 0.22 L (220 ml)

CAUTION

- If the blower is not stored in an upright position, the oil may flow from the level gauge into the engine and give a false reading when
 checking the oil level. This may result in inadvertently overfilling whenever adding engine oil. Always store in an upright position.
- If the upper oil level limit is exceeded, this can result in the oil becoming dirty and white smoke from burning excess oil.

Check Point #1: Concerning the oil cap when adding oil

- Wipe off dirt and grime around the opening before removing the oil cap.
- Remove the oil cap and place it on a clean surface so that it does not accumulate any sand, dirt, or other foreign bodies. These may
 stick to the cap and adulterate the engine oil if proper care is not taken. Dirty oil containing sand, dirt, or foreign bodies may cause
 excessive wear on the engine due to improper lubrication and result in a breakdown.

Check Point #2: If oil is spilled when adding oil

Oil spillage on the outside on the blower may result in the engine oil becoming dirty or adulterated. Therefore, please wipe off any oil
spillage before starting the engine.

2. Fuel supply

Δv

WARNING

- When supplying the fuel, be sure to observe the following instructions to prevent ignition or fire:
 - Fuel supply must be made in a place free of fire. Never bring the fire (smoking, etc.) near to the place of fuel supply.
 - Stop the engine and allow the engine to cool down before fuel supply.
 - Open the fuel tank cap full of fuel slowly. The fuel may sprout out under internal pressure.
 - Take care not to spill the fuel. Any spilled fuel must be wiped clean.
 - Carry out fuel supply in a well-ventilated place.
- · Handle the fuel with care.
 - Fuel sticking to the skin or entering an eye may cause allergies or irritation. When any physical abnormality is detected, consult the medical specialist immediately.

STORAGE PERIOD OF FUEL

Fuel should be used up within a period of 4 weeks, even if it is kept in a special container in a well-ventilated shade. If a special container is not used or if the container is not covered, fuel may deteriorate in one day.

Storage of machine and refill tank

- · Keep the machine and tank at a cool place free from direct sunshine.
- Never keep the fuel in the cabin or trunk.

FUEL

The engine is a four-stroke engine. Be sure to use an automobile gasoline (regular gasoline or premium gasoline).

Points for Fuel

- Never use a gasoline mixture which contains engine oil. Otherwise, it will cause excessive carbon accumulation or mechanical troubles.
- Use of deteriorated oil will cause irregular startup.

When refueling the fuel, be sure to stop the engine and confirm that the engine cools down.

REFUELING METHOD

- Loosen the tank cap a little so that there will be no difference in atmospheric pressure.
- Detach the tank cap, and refuel, discharging air by tilting the fuel tank so that the refuel port will be oriented upward. (Never refill fuel full to the oil refill port.)
- · After refueling, securely tighten the tank cap.
- . If there is any flaw or damage on the tank cap, replace it.
- The tank cap is consumable, and therefore should be renewed every two to three years.

1. Starting

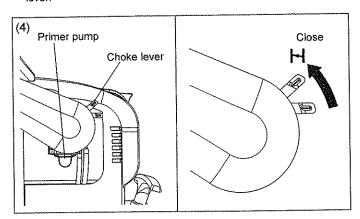


WARNING

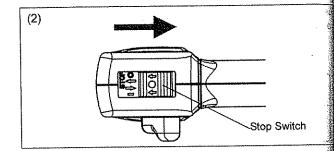
- Never attempt engine start in a place where the fuel has been supplied. When starting the engine, keep a distance of at least 3 m.
- Otherwise, it will may cause ignition or fire.
- Exhaust gas from the engine has toxic consequences. Do not operate the engine in a poorly-ventilated place, such as in a tunnel, building, etc.
 - Operating the engine in the poorly-ventilated place may cause poisoning by exhaust gas.
- In case of detection of any abnormality in sound, odor, vibration after start, stop the engine immediately and carry out inspection.
 - If the engine is operated without attending such abnormality, an accident may occur.
- Confirm that the engine stops when the stop switch is set to "O" position.

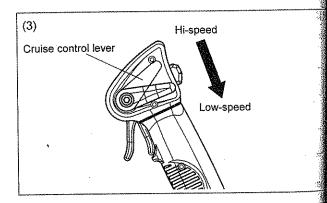
1) When the engine is cold, or when the fuel it refueled

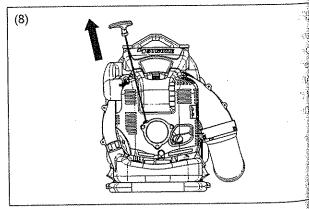
- (1) Set this machine on a flat space.
- (2) Set the stop switch to "I" position.
- (3) Verify that the cruise control lever is in the low-speed position.
- (4) Continue to push the primer pump until fuel enters into the primer pump.
 - In general, fuel enters into the carburetor by 7 to 10 pushes.
 - If the primer pump is pushed excessively, an excess of gasoline returns to the fuel tank.
- (5) Lifting the choke lever of the air cleaner right side, close the choke lever

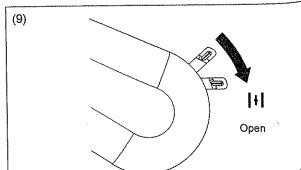


- (6) Hold the element cover with a left hand to prevent the engine from moving, settle down to take the stable position.
- (7) Pull out slowly the starter handle till a certain resistance is felt. Return the starter handle backward once from this position, then pull it out with force.
 - · Never pull the rope to the full.
 - Once the start knob is pulled, never release your hand immediately.
 Hold the start knob until it returns to its original point.
- (8) When the engine starts, open the choke lever.
 - Open the choke lever progressively while checking the engine operation. Be sure to open the choke lever to the full in the end.
- In cold or when the engine is cooled down, never open the choke lever suddenly. Otherwise, the engine may stop.
- (9) Continue warm-up operation for 2 to 3 minutes.
- (10) Rotation of the engine speed stabilizes and when from low speed making at high-speed rotation, if reaches the point where it accelerates smoothly, it is completion of warming-up.









NOTE: NOTE:

- The engine may be damaged if the choke lever is moved further beyond the "CLOSE" position.
- If the engine stops with an explosion sound or if the engine started, but stopped before operation of the choke lever, return this lever to the "OPEN" position and pull the starter handle several times to start the engine again.
- If the operator keeps pulling the starter handle several times with the choke lever left in the "CLOSE" position, the engine may be difficult
 to start because of over-suction of the fuel.
- In case of over-suction of the fuel, remove the spark plug and pull the handle several times rapidly to discharge any excess fuel. Dry the spark plug electrode.
- When the throttle valve does not return to a position in contact with the idling adjusting screw even if the throttle lever is set to the low speed, correct the control cable catching state to ensure proper return of the valve.

2) When the engine is warm

- (1) Place the engine on a flat ground.
- (2) Press the primary pump several times.

Control of the English

- (3) Confirm that the choke lever is open.
- (4) Hold the element cover with a left hand to prevent the engine from moving, settle down to take the stable position.
- (5) Pull out slowly the starter handle till a certain resistance is felt. Return the starter handle backward once from this position, then pull it out with force.
- (6) When the engine is difficult to start, open the throttle valve by about 1/3.

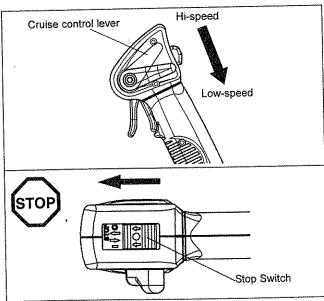
2. Stopping

1) When the cruise control lever is a Low-speed position.

Release the trigger lever to reduce the engine speed, and set the stop switch to the "O" position.

2) When the cruise control lever is except a Low-speed position.

Set the cruise control lever to the Low-speed position, reduce the engine speed, and set the stop switch to the "O" position.



ADJUSTMENT OF IDLING





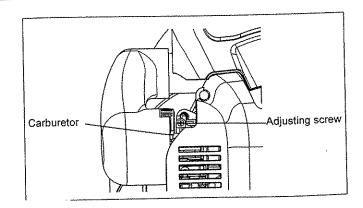
DANGER

The carburetor is the adjustment being completed at the time of factory shipment. Please do not adjust other than idling adjusting. When adjustment becomes necessary, please consult your dealership or an authorized service agent.

Checkup of low-speed rotation

Set the low-speed rotation to 2800min⁻¹.

- If it is necessary to change the rotation speed, regulate the adjusting screw, with Phillips screwdriver.
- Turn the adjusting screw to the right, and the engine rotation will increase. Turn the adjusting screw to the left, and the engine rotation will drop.



OPERATION METHOD

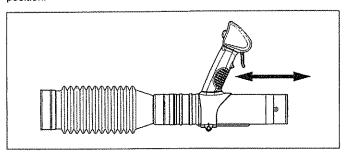
1. Adjusting Shoulder strap

Adjust the shoulder strap to a length that is comfortable to work while carrying the blower.

Adjust as shown in the figure.

2. Adjusting the control lever

Move the control handle along the swivel pipe to the most comfortable position.



To tighten straps To loosen straps

3. Blower operation

While operating the blower, adjust the throttle bar so that the wind force is appropriate for the work location and conditions.

Low speed: Dried leaves and grass High speed: Gravel and dirt

The cruise control level allows the operator to maintain a constant engine RPM without operating the trigger lever.

Lifting the cruise control lever increases engine RPM. Lowering the cruise control lever decreases RPM.

Adjusting engine RPM when the cruise control lever is being used:

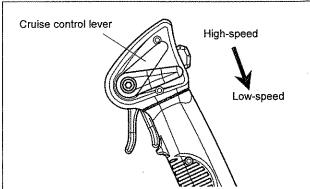
When increasing RPM:

- Pull the trigger lever to increase engine RPM. Engine RPM returns to its original setting when the trigger lever is released.
- Increasing the RPM in this manner also increases the cruise control setting. The cruise control lever lifts simultaneously as the trigger lever is pulled, and the new cruise control setting will be maintained at the higher RPM.

When reducing engine RPM:

· Lower the cruise control lever to the low-speed position.





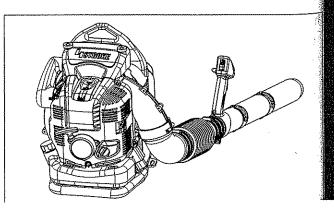
TRANSPORTING AND STORING THE BLOWER

Please maintain the blower in an upright position whenever transporting or storing. (Refer to Figure at right.)

Transporting or storing in a position that is not upright may cause oil to spill inside the blower engine. This may result in oil leaks and white smoke from burning oil, and the air cleaner may become dirty with oil.



· When transporting the blower, be sure to stop the engine.



INSPECTION AND MAINTENANCE





DANGER

- Before inspection and maintenance, stop the engine and allow it to cool. Remove also the spark plug and plug cap.
 - If inspection or maintenance is attempted immediately after engine stop or with the plug cap left attached, the operator may suffer burn
 or an accident due to careless startup.
- After inspection and maintenance, be sure to confirm that all parts are assembled. Then, proceed to operation.

1. Replacement of engine oil

Deteriorated engine oil will shorten the life of the sliding and rotating parts to a great extent. Be sure to check the period and quantity of replacement.



DANGER

- In general, the engine main unit and engine oil still remain hot just after the engine is stopped. In replacement of oil, confirm that the
 engine main unit and engine oil are sufficiently cooled down. Otherwise, there may remain a risk of scald. In addition just after of the
 engine stopping because oil does not finish to return in the oil case, becomes cause of the oil inserting too much.
- If the oil filled above the limit, it may be contaminated or may catch fire with white smoke.

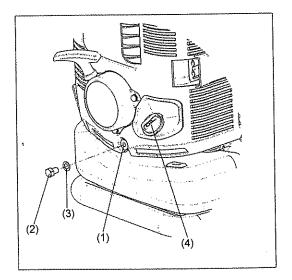
Interval of replacement: Initially, every 20 operating hours, and subsequently every 50 operating hours

Recommended oil: SAE10W-30 oil of API Classification SF Class or higher (4-stroke engine oil for automobile)

Oil Change Procedure

Please follow these steps when changing the oil:

- (1) Set the blower down on a level surface.
- (2) Place a waste oil container under the drainage hole (1) to catch the oil as it drains out. The container should have a capacity of at least 220 ml to be able to catch all of the oil.
- (3) Loosen the oil drain bolt (2) to let the oil drain out. Be careful not to allow oil to get on the fuel tank or other parts.
 - Caution: Be careful not to lose the gasket (aluminum washer) (3). Place the oil drain bolt (2) in a location where it will not accumulate dirt
- (4) Remove the oil cap (4). (Removing the oil cap (4) allows the oil to drain easily.)
 - Caution: Be sure to set the oil cap (4) down in a location where it will not accumulate dirt.
- (5) As the level of the oil being drained decreases, tilt the blower over on to the side with the drain so that the oil will completely drain out.
- (6) After the oil has completely drained out, tighten the oil drain bolt (2) securely. If the bolt is not tightly fastened, this may result in an oil leak.
 - Caution: Do not forget to put the gasket (aluminum washer) (3) back on when reattaching the drain plug.
- (7) Adding oil during the oil change procedure is performed in the same manner as the separately explained procedure for adding oil whenever the level is insufficient. Always add oil by filling from the opening under the oil cap.
 - (Specified oil level: Approximately 220 ml)
- (8) After filling with oil, tighten the oil cap (4) securely to prevent oil leaks.



Points in replacement of engine oil

- Never discard replaced engine oil in garbage, earth or sewage ditch. Disposal of oil is regulated by law. In disposal, always follow the relevant laws and regulations. For any points remaining unknown, contact Authorized Service Agent.
- Oil will deteriorate even when it is kept unused. Perform inspection and replacement at regular intervals (replace with new oil every 6 months).

2. Cleaning of air cleaner

M

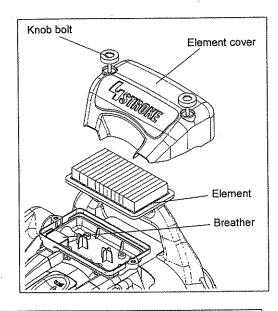
WARNING: INFLAMMABLES STRICTLY PROHIBITED

Interval of Cleaning and Inspection: Daily (every 10 operating hours)

- (1) Loosen the knob bolt.
- (2) Remove the air cleaner cover.
- (3) Take out the element and remove any dirt with the brush.

Note: The element is a dry type and should not get wet. Never wash with

- (4) Replace the element with a new one if it is damaged or very dirty.
 - Part No. 6676500201: ELEMENT AIR CLEANER
- (5) Wipe off any oil that has come in to contact with the breather with a rag or cloth.
- (6) Install the element in the cleaner case.
- (7) Attach the air cleaner cover and tighten the knob bolt.





DANGER

- Clean the element several times a day, if excessive dust adheres to it.
- If operation continues with the element remaining not cleared of oil, oil in the air cleaner may fall outside, resulting in oil contamination.

3. Checking the spark plug



CAUTION

- When removing the spark plug, clean the spark plug and cylinder head first, so that no dirt, sand, etc will enter the cylinder.
- You must remove the spark plug after the engine has cooled down in order to avoid damaging the threaded hole in the cylinder.
- The spark plug must be installed properly into the threaded hole. If installed at an angle, the threaded hole in the cylinder will get damaged.

(1) Opening/closing the plug cover

To open the plug cover, press on the seam of the plug cover projection and slide in the direction of the "OPEN" indication as shown in the figure at right.

When closing the cover, slide the cover in the "CLOSE" direction till the click under the plug cover projection rides over the engine cover. Finally, push in the projection.

(2) Removing the spark plug

Use an attached box wrench to remove or install the spark plug.

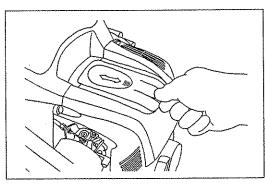
(3) Checking the spark plug

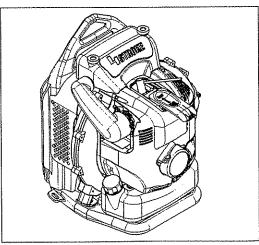
The clearance between two electrodes of spark plug (see the figure left) is 0.7 to 0.8 mm. Adjust to the correct clearance when it is too wide or too narrow.

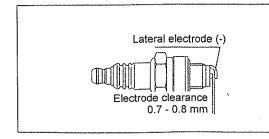
Clean thoroughly or replace the spark plug if it has accumulated carbon or contaminated.

(4) Replacing the spark plug

For replacement, use NGK-CMR6A.







4. Cleaning the fuel filter

- Clogged fuel filter may cause difficulty of start-up or failure of engine speed increase.
- Check the fuel filter regularly as follows:
- (1) Remove the fuel tank cap, drain the fuel to empty the tank. Check the tank inside for any foreign materials. If any, wipe clean such materials.
- (2) Pull out the fuel filter with wire through the oil filling port.
- (3) If the fuel filter surface is contaminated, clean it with gasoline. Foul gasoline must be disposed of according to the method specified by each local authority. Excessively foul filter must be replaced.
- (4) Reset the fuel filter in the fuel tank and tighten firmly the fuel tank cap. For replacement, contact your dealership or an authorized service agent.

5. Inspection of bolts, nuts and screws

- · Retighten loose bolts, nuts, etc.
- · Check for fuel and oil leakage.
- Replace damaged parts with new ones for safety operation.

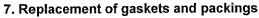
6. Cleaning of parts

- · Keep the engine always clean.
- Keep the cylinder fins free of dust or dirt. Dust or dirt adhering to the fins will cause seizure.
- Blowing air is taken in from the air inlet net. When airflow has dropped down during operation, stop engine and inspect the air inlet net for blocking by obstacles.
- Note that failure to remove any such obstacles may result in the engine becoming overheated and damaged.

WARNING:



Never use the blower without the net of the blower. Before each use, check that the net is attached in place and is free from any damage.



In reassembling after the engine is dismounted, be sure to replace the gaskets and packings with new ones.

Any maintenance of adjustment work that is not included and described in this manual is only to be performed by Authorized Service Agents.

STORAGE

A

WARNING

- When draining the fuel, be sure to stop the engine and confirm that the engine cools down.
 - Just after stopping the engine, it may still hot with possibility of burns, inflammability and fire.

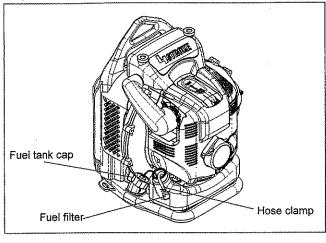


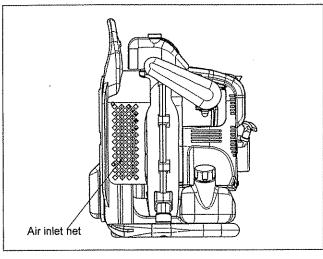
DANGER

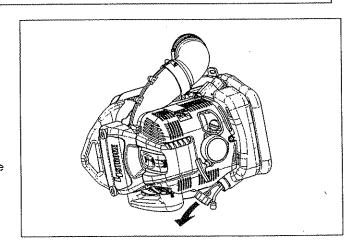
 When the machine is kept out of operation for a long time, drain up all fuel from the fuel tank and carburetor, and keep it at a dry and clean place.

Drain up fuel from the fuel tank and carburetor according to the following procedure:

- Remove the fuel tank cap, and drain fuel completely.
 If there is any foreign matter remaining in the fuel tank, remove it completely.
- (2) Pull out the fuel filter from the refill port using a wire.
- (3) Push the primer pump until fuel is drained from there, and drain fuel coming into the fuel tank.
- (4) Reset the filter to the fuel tank, and securely tighten the fuel tank cap.
- (5) Then, continue to operate the engine until it stops.
- (6) Remove the spark plug, and drip several drops of engine oil through the spark plug hole.
- (7) Gently pull the starter handle so that engine oil will spread over the engine, and attach the spark plug.
- (8) During storage, please keep the machine upright.
- (9) Keep the drained fuel in a special container in a well-ventilated shade.







Fault location

Fault	System	Observation	Cause
Engine not starting or with difficulty	Ignition system	Ignition spark O.K.	Fault in fuel supply or compression system, mechanical defect
		No ignition spark	STOP-switch operated, wiring fault or short circuit, spark plug or connector defective, ignition module faulty
	Fuel supply	Fuel tank filled	Incorrect choke position, carburetor defective, fuel supply line bent or blocked, fuel dirty.
	Compression No compression when pulled over Cylinder bottom cylinder or pisto plug		Cylinder bottom gasket defective, crankshaft seals damaged, cylinder or piston rings defective or improper sealing of spark plug
	Mechanical fault	Starter not engaging	Broken starter spring, broken parts inside of the engine
Warm start problems		Tank filled ignition spark existing	Carburetor contaminated, have it cleaned
Engine starts but dies	Fuel supply	Tank filled	Incorrect idling adjustment, carburetor contaminated
Ligino diano dal alda			Fuel tank vent defective, fuel supply line interrupted, cable or STOP-switch faulty
Insufficient performance	Several systems may simultaneously be affected	Engine idling poor	Air filter contaminated, carburetor contaminated, muffler clogged, exhaust duct in the cylinder clogged

Operating time		Before operation.	After lubrication	Daily (10h)	30h	50h	200h	Shutdown/ rest	Corres-po nding P
Item	Inspect/clean	0							10
Engine oil	Replace					01			15
Tightening parts (bolt, nut)	Inspect	0							17
	Clean/inspect	0							
Fuel tank	Drain fuel							0,3	17
Throttle lever	Check function		0						
Stop switch	Check function		0						12
Low-speed rotation	Inspect/adjust			0					13
Air cleaner	Clean			0					16
Ignition plug	Inspect			Ö					16
Cooling air duct	Clean/inspect			0					17
	Inspect			0					17
Fuel pipe	Replace		-				⊚*²		
Fuel filter	Clean/replace					0			17
Clearance between air intake valve and air discharge valve	Adjust						⊚*²		
Oil tube	Inspect						© ^{*2}		
Engine overhaul							©*2		
Carburetor	Drain fuel	 						0,3	17

^{*1} Perform initial replacement after 20h operation.

^{*2} For the 200 operating hour inspection, request Authorized Service Agent or a machine shop.

^{*3} After emptying the fuel tank, continue to run the engine and drain fuel in the carburetor.

ROUBLESHOOTING

fore making a request for repairs, check a trouble for yourself. If any abnormality is found, control your machine according to the description of this inual. Never tamper or dismount any part contrary to the description. For repairs, contact Authorized Service Agent or local dealership.

State of abnormality	Probable cause (malfunction)	Remedy	
	Failure to operate primer pump	Push 7 to 10 times.	
	Low pulling speed of starter rope	Pull strongly.	
	Lack of fuel	Feed fuel.	
	Clogged fuel filter	Clean	
	Broken fuel tube	Straighten fuel tube	
	Deteriorated fuel	Deteriorated fuel makes starting more difficult. Replace with new one. (Recommended replacement: 1 month)	
	Excessive suction of fuel	Set throttle lever from medium speed to high speed, and pull starter handle until engine starts.	
ngine does not start		If engine will not start still, remove spark plug, make electrode dry, and reassemble them as they originally are. Then, start as specified.	
	Detached plug cap	Attach securely	
	Contaminated spark plug	Clean	
	Abnormal clearance of spark plug	Adjust clearance	
	Other abnormality of spark plug	Replace	
	Abnormal carburetor	Make request for inspection and maintenance.	
	Starter rope cannot be pulled	Make request for inspection and maintenance	
	Abnormal drive system	Make request for inspection and maintenance	
	Insufficient warm-up	Perform warm-up operation	
•	Choke lever is set to "CLOSE" although engine is warmed up	Set to "OPEN"	
	Clogged fuel filter	Clean	
ngine stops soon	Contaminated or clogged air cleaner	Clean	
ngine speed does not increase	Abnormal carburetor	Make request for inspection and maintenance	
•	Abnormal drive system	Make request for inspection and maintenance	
	Detached throttle wire	Attach securely	
ngine does not stop.	Detached connector	Attach securely	
<u> </u>	Abnormal electric system	Make request for inspection and maintenance.	
Run engine at idling, and set choke lever to CLOSE.	,		

hen the engine does not start after warm-up operation:

here is no abnormality found for the check items, open the throttle by about 1/3 and start the engine.

EMISSION COMPLIANCE PERIOD

For handheld engines: The Emissions Compliance Period referred to on the Emissions Compliance label indicates the number of operating hours for which the engine has been shown to meet Federal emission requirements.

Category C=50 hours, B=125 hours, and A=300 hours.

Air Index and durability period information

The Air Index Information hang-tag for this engine is provided in accordance with the California emission regulations.

The graphical representation of the Air Index on the hang-tag shows the emissions performance of this engine, and can be used to compare the emissions performance with other available engines.

The lower the Air Index, the less pollution.

Note: Remove the hang-tag before operating the engine.

The Emissions Durability Period referred to on the hang-tag indicates the number of operating hours for which the engine has been shown to meet the California emission requirements.

Descriptive term	Applicable to Emissions Durability Period
Moderate	50hours (0-80 cc, inclusive)
Intermediate	125hours (0-80 cc, inclusive)
Extended	300hours (0-80 cc, inclusive)

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and FUJI ROBIN INDUSTRIES LTD. are pleased to explain the emissions control system's warranty on your 2007 and later small off-road engine. In California, new equipment that use small off-engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. FUJI ROBIN INDUSTRIES LTD. must warrant the emissions control system on your small off-road engine for the period listed below provided there has been no abuse, neglect or improper maintenance of your equipment.

Your emissions control system may include parts such as: carburetors or fuel injection system, ignition system, catalytic converters, fuel tanks, valves, filters, clamps, connectors, and other associated components. Also, included may be hoses, belts, connectors, sensors, and other emission-related assemblies.

Where a warrantable condition exists, FUJI ROBIN INDUSTRIES LTD. will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emissions control system is warranted for two years. If any emissions-related part on your equipment is defective, the part will be repaired or replaced by FUJI ROBIN INDUSTRIES LTD.

OWNER'S WARRANTY RESPONSIBILITIES:

- As the small off-road engine owner, you are responsible for performance of the required maintenance listed in your owner's manual. FUJI ROBIN INDUSTRIES LTD. recommends that you retain all receipts covering maintenance on your small off-road engine, but FUJI ROBIN INDUSTRIES LTD. cannot deny warranty solely for the lack of receipts or your failure to ensure the performance of all scheduled maintenance.
- As the small off-road engine owner, you should however be aware that FUJI ROBIN INDUSTRIES LTD. may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your small off-road engine to a FUJI ROBIN service dealer as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have a question regarding your warranty coverage, you should contact FUJI ROBIN service dealer nearest you.

DEFECTS WARRANTY REQUIREMENTS:

- (a) The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser.
- (b) General Emissions Warranty Coverage. FUJI ROBIN INDUSTRIES LTD. must warrant to the ultimate purchaser and each subsequent owner that the engine or equipment is:
 - (1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board; and
 - (2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.
- (c) The warranty on emissions-related parts will be interpreted as follows:
 - (1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the warranty period defined in Subsection (b)(2). If any such part fails during the period of warranty coverage, it must be repaired or replaced by the manufacturer according to

Subsection (4) below. Any such part repaired or replaced under the warranty must

be warranted for the remaining warranty period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions required by subsection (d) must be warranted for the warranty period defined in Subsection (b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by subsection (d) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by the engine manufacturer according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

4) Repair or replacement of any warranted part under the warranty must be performed at

no charge to the owner at a warranty station.

(5) Notwithstanding the provisions of Subsection (4) above, warranty services or repairs must be provided at all manufacturer distribution centers that are franchised to service the subject engines.

6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is

performed at a warranty station.

(7) The manufacturer is liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

(8) Throughout the emissions warranty period defined in Subsection (b)(2), the manufacturer must maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

(9) Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not

reduce the warranty obligations of the manufacturer.

(10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts will be grounds for disallowing a warranty claim. The manufacturer will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

(11) The manufacturer issuing the warranty shall provide any documents that describe that manufacturer's warranty procedures or policies within five working days of request by

the Air Resources Board.

- (d) Emission Warranty Parts List.
 - (1) Fuel Metering System
 - (i) Carburetor and internal parts
 - (ii) Air cleaner plate (including choke system)
 - (iii) Air cleaner cover
 - (iv) Air cleaner element
 - (v) Fuel Filter
 - (vi) Fuel Tank.
 - (2) Air Induction System
 - (i) Air filter.
 - (3) Ignition System
 - (i) Spark Plugs.
 - (ii) Magneto or electronic ignition system.

- (iii) Spark advance/retard system.
- (4) Miscellaneous Items Used in Above Systems
 - (i) Hoses, Sealing gaskets, belts, connectors, and assemblies.

FUJI ROBIN INDUSTRIES LTD. will furnish with each new engine written instructions for the maintenance and use of the engine by the owner.

(e) MAINTENANCE STATEMENTS

It is your responsibility to have all scheduled inspection and maintenance services performed at the times recommended in the 2007 and later Owner's Manual and to retain proof that inspection and maintenance services are performed at the times when recommended. FUJI ROBIN INDUSTRIES LTD. will not deny a warranty claim solely because you have no record of maintenance; however, FUJI ROBIN INDUSTRIES LTD. may deny a warranty claim if your failure to perform required maintenance resulted in the failure of warranted part. The proof, which you maintain, should be given to each subsequent owner of the engine. You are responsible for performing the scheduled maintenance described below based on the procedures specified in the 2007 and later Owner's Manual. The scheduled maintenance below is based on the normal engine-operating schedule.

PROCEDURE

1) Clean engine and check bolts and nuts. Retighten if necessary.

Check and refill engine oil (4stroke engine only)

3) Change engine oil (4stroke engine only)

 Check clogging of cooling air passage and cylinder fins. Remove and clean if necessary.

5) Clean air cleaner.

6) Check spark plug. Clean and adjust if necessary.

Check muffler exhaust outlet(or port).
 Clean if necessary.

8) Check fuel filter. If clogged, replace with new one.

 Adjust valve clearance, if applicable (4stroke engine only).

10) Replace fuel lines.

11) Clean and inspect the complete engine.
Replace any damaged or worn out parts.

12) Replace packings and gaskets with new ones.

INTERVAL

:Every 8 hours(daily)

:Every 8 hours(refill daily up to upper limit)

:Initial 20 hours and every 50 hours afterward

:Every 8 hours (daily)

:Every 8 hours (daily)

:Every 8 hours (daily)

:Every 50 hours (monthly)

:Every 50 hours (monthly)

:Every 200 hours (yearly)

:Every 200 hours (yearly)

:Every 200 hours

:Every reassembling

FUJI ROBIN service dealer

, 00	I I CODII COLLICO CICALICI	
	OEM/importer name	Phone NO.
-	(and address)	
1)	Carswell Import & Marketing	(910)767-7700
	Associate, Inc.	
	Winston-Salem NC 27115	
2)	Hoffco	(800)999-8161
/	358 NW F Street, Richmond	
	IN 47374	
3)	Paulan Weed Eater	(800)238-9333
3/	5020 Flourmoy - Lucas Rd,	
	Shreveport LA 71129	(040)242 2261
4)	Lowdes Engineering Co, Inc.	(912)242-3361
	125 Blanchard Street,	
	Valdosta, Georgia. U.S.A.	
	31601	
5)	Robin America, Inc.	(630) 350-8200
"	940 Lively Blvd., Wood Dale, II	,
	60191	
1	00 13 1	

FEDERAL EMISSION COMPONENT DEFECT WARRANTY

EMISSION COMPONENT DEFECT WARRANTY COVERAGE - This emission warranty is applicable in all States, except the State of California

FUJI ROBIN INDUSTRIES LTD. and Carswell Import & Marketing Associates, Inc., Winston-Salem, North Carolina, (herein "CARSWELL") warrant to the initial retail purchaser and each subsequent owner, that this utility equipment engine (herein "engine") was designed, built, and equipped to conform at the time of initial sale to all applicable regulations of the U.S. Environmental Protection Agency (EPA), and that the engine is free of defects in materials and workmanship which would cause this engine to fail to conform with EPA regulations during its warranty period.

For the components listed under PARTS COVERED, the dealer or service center authorized by CARSWELL will, at no cost to you, make the necessary diagnosis, repair, or replacement necessary to ensure that the engine complies with applicable U.S. EPA regulations.

EMISSION COMPONENT DEFECT WARRANTY PERIOD

The warranty period for this engine begins on the date of sale to the initial purchaser and continues for a period of 2 years.

PARTS COVERED

Listed below are the parts covered by the Emission Component Defect Warranty. Some of the parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement point for that part.

- 1) Fuel Metering System
 - (i) Carburetor and internal parts
 - (ii) Fuel filter, if applicable
 - (iii) Throttle stopper, if applicable
 - (iv) Choke System, if applicable
- 2) Air Induction System
 - (i) Air cleaner plate
 - (ii) Air cleaner case
 - (iii) Air cleaner element
- 3) Ignition System
 - (i) Spark plug
 - (ii) Flywheel Magneto
 - (iii) Ignition Coil
- 4) Miscellaneous Items Used in Above Systems
 - (i) Fuel hoses clamps and sealing gaskets

OBTAINING WARRANTY SERVICE

To obtain warranty service, take your engine to the nearest Authorized CARSWELL, distributor or dealer. Bring your sales receipts indicating date of purchase for this engine. The dealer or service center authorized by CARSWELL will perform the necessary repairs or adjustments within a reasonable amount of time and furnish you with a copy of the repair order. All parts and accessories replaced under this warranty become the property of CARSWELL

WHAT IS NOT COVERED

- * Conditions resulting from tampering, misuse, improper adjustment (unless they were made by the dealer or service center authorized by CARSWELL during a warranty repair), alteration, accident to recommended fuel and oil, or not performing required maintenance services.
- * The replacement parts used for required maintenance services.
- * Consequential damages such as loss of time, inconvenience, loss of use of the engine of equipment, etc.
- * Diagnosis and inspection charges that do not result in warranty-eligible service being performed.
- * Any non-authorized replacement part, or malfunction of authorized parts due to use of non-authorized parts.

OWNER'S WARRANTY RESPONSIBILITIES

As the engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual, CARSWELL recommends that you retain all receipts covering maintenance on your engine, but CARSWELL can not deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the engine owner, you should however be aware that the CARSWELL may deny your warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your engine to the nearest dealer or service center authorized by CARSWELL when a problem exists.

If you have any questions regarding your warranty rights and responsibilities, you should contact the CARSWELL Warranty service department at 910-767-7700 (toll free from GA, NC, SC, TN & VA 1-800-929-1948) for the information.

THINGS YOU SHOULD KNOW ABOUT THE EMISSION CONTROL SYSTEM WARRANTY

MAINTENANCE AND REPAIRS

You are responsible for the proper use and maintenance of the engine. You should keep all receipts and maintenance records covering the performance of regular maintenance in the event questions arise. These receipts and maintenance records should be transferred to each subsequent owner of the engine. CARSWELL reserves the rights to deny warranty coverage if the engine has not been properly maintained.

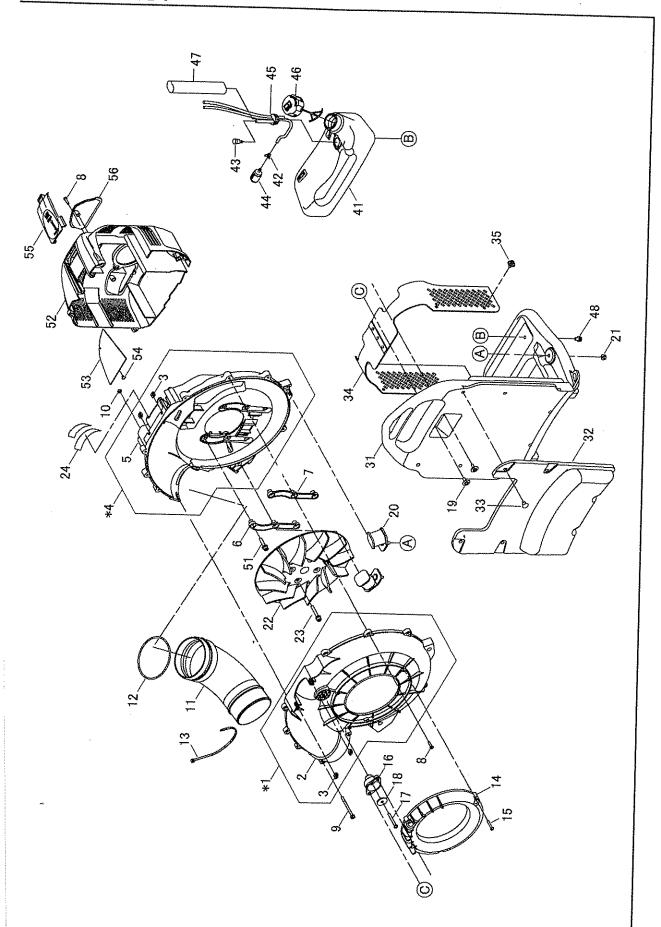
Warranty claims will not be denied, solely because of the lack of required maintenance or failure to keep maintenance records.

MAINTENANCE, REPLACEMENT OR REPAIR OF EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY REPAIR ESTABLISHMENT OR INDIVIDUAL; HOWEVER, WARRANTY REPAIRS MUST BE PERFORMED BY A DEALER OR SERVICE CENTER AUTHORIZED BY CARSWELL. THE USE OF PARTS THAT ARE NOT EQUIVALENT IN PERFORMANCE AND DURABILITY TO AUTHORIZED PARTS MAY IMPAIR THE EFFECTIVENESS OF THE EMISSION CONTROL SYSTEM AND MAY HAVE A BEARING ON THE OUTCOME OF A WARRANTY CLAIM.

If other than the parts authorized by CARSWELL are used for maintenance replacements or for the repair of components affecting emission control, you should assure yourself that such parts are warranted by their manufacturer to be equivalent to the parts authorized by CARSWELL in their performance and durability.

HOW TO MAKE A CLAIM

All repairs qualifying under this limited warranty must be performed by a dealer or service center authorized by CARSWELL. In the event that any emission-related part is found to be defective during the warranty period, you shall notify CARSWELL at 910-767-7700 (toll free from GA, NC, SC, TN & VA 1-800-929-1948) and you will be given the appropriate warranty service facilities where the repair can be performed.

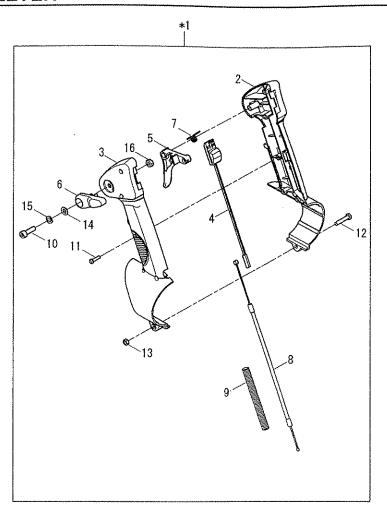


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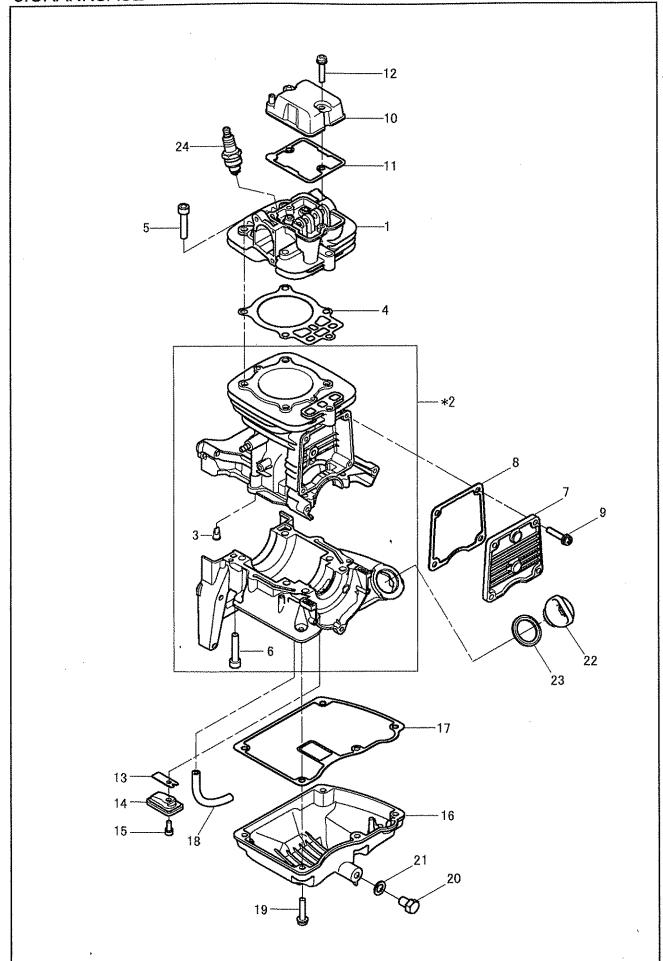
irve ones. **1 MACHINE BODY**

1.MA	CHINE	BODY			
1 3	Carswell Parts No.	PARTS NAME	Mfg.'s No.	Qty	DESCRIPTION
1	10489	CASE 1, VOLUTE ASSY	6671005001		INCL.2,3(2PIECES)
2	10614	CASE 1, VOLUTE	6671500001	1	GRAY
3		NUT,SQUARE	6671005010	4	
4	10616	CASE 2, VOLUTE ASSY	6671006001		INCL.3(2PIECES),5
5	10617	CASE 2, VOLUTE	6671500101	1	GRAY
6		BASE 1	6671500200-1	1	
$\frac{0}{7}$		BASE 2	6671500300-1	1	
8		TAPPING SCREW	0150059760	13	5×16
9	1	SCREW ASSY	0140059220	2	M5×65 W,SW
10	1		0170059950	2	M5
11		ELBOW	6671500400	1	
12		O RING	0240989990	1	
13		WIRE BAND	0563379990	1	
14		COVER,INLET COMPL	6671001000	1	
1		TAPPING SCREW	0150059730	3	5×25
15 16		DAMPER 1 COMPL	6671002000	1	
17	· · · · · · · · · · · · · · · · · · ·	SCREW,PAN HEAD	0043105400	1	M5×40
		WASHER	0200059910	1 1	M5
18	1	SCREW ASSY	0140059210	1 2	M5×16 W,SW
19		DAMPER 2 COMPL	6671003000		
20		FLANGE NUT	0023706000	3	M6
21			6671004000	1	
22		IMPELLER COMPL	0119069690	1 2	M6×40 W,SW
23	10632	SOCKET HEAD BOLT	0736289980		PL
24		LABEL, CAUTION	6672001000	-	
31		FRAME COMPL	6672500000	 	
32		CUSHION	6672500200	+ - 6	·]
33		RIVET,ROCK	6672002000		
34		GUARD COMPL	6672500300		1
35		RIVET,ROCK	6673005000	 	1
4		TANK, FUEL COMPL	0561059990	-	1
42		HOSE CLAMP	5316503300	 	1
4:	-	BREATHER			1
4		I FILTER	5806502900		1
4:		Z TUBE	0851339960		
40		CAP, FUEL TANK ASSY	5926017000		1 1
4		3 TUBE	0851159861	1	1 2 M6×12 W,SW
4		4 SCREW ASSY	0043706120		6 M6×30 W,SW
5	<u> </u>	5 SOCKET HEAD BOLT	0119069680	1	1 RED
5		6 COVER,ENGINE	6676500001		
5		7 GUARD, MUFFLER	6676500700		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1		8 TAPPING SCREW	0150049820		1 4×6
5		9 COVER,PLUG	6656500100		1
5	6 1064	9 GUARD,OIL	6676500100		
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2.CONTROL LEVER



	r <u>.</u>		<u> </u>		p*************************************
	Carswell				
NO.	Parts No.		Mfg.'s No.	Qty	DESCRIPTION
. 1		CONTROL LEVER ASSY	6675001001	1	INCL.2~16
2		CASE 1,LEVER COMPL	6675002000	1	
3		CASE 2,LEVER COMPL	6675003000	1	
4	10653	SWITCH COMPL	6675004000	1	
5	3426	LEVER 1,THROTTLE	6625500601	1	
6	3427	LEVER 2,THROTTLE	6625500701	1	
7	10654	TORSION SPRING	6625500901	1	
. 8	10655	CONTROL CABLE	0630139820	1	
9	10656	TUBE,CABLE	6675500001	1	
10	10657	SOCKET HEAD BOLT	6675001010	1	M6×20
11	10658	TAPPING SCREW	6675001020	5	4×16
12	10659	SCREW	6675001030	1	M5×25
13	10660	NUT	0170059950	1	M5
14	10661	WASHER	0031106000	1	M6
15	3433	WASHER	0032206000	1	M6
16	4209	NUT	0170069960	1	M6 U-NUT
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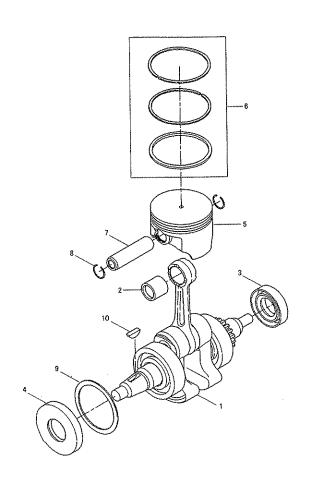


	RANKCA Carswell				
	Parts No.			١.,	
1		CYLINDER HEAD SET	Mfg.'s No.	Qty	DESCRIPTION
<u>.</u>		CYLINDER BLOCK SET	5971006000	1	NIOL A A
3		CHECK VALVE	5971007000	1	INCL.3,6
4		GASKET,CYLINDER HEAD	5921501800	2	
5	10665	SOCKET HEAD BOLT	5971500501	1	
6		SOCKET HEAD BOLT	0119069670	L	M6×35
7		COVER, CAMGEAR	0119069930 5971500600		M6×30
8	10668	GASKET, CAMGEAR COVER	5971500800	1	
9	9981	SCREW ASSY		1	MEdo M. OM
10		ROCKER COVER	0043605160	4	M5×16 W,SW
11		GASKET,ROCKER COVER	5971500700 5971500900	1	
12		SCREW ASSY	0043605300		MCCO M/ CM/
13		LEAD VALVE	5921501000	4	M5×30 W,SW
14		RETAINER PLATE			
15		SOCKET HEAD BOLT	5931501300-1 0119049980	1	M4440 0144
16		CASE,OIL	5976500000	<u> </u>	M4×10 SW
17		GASKET,OIL CASE	5976500000	<u> </u>	
18	10675	TURE	0851109960		-07.1.00
19		SCREW ASSY	0140059680		φ3×φ7×L80 M5×25 W,SW
20	10676		0016608120		M8×12
21		GASKET,ALUMINUM	0010008120		1V18×12
22		CAP,OIL	5926501500	1 1	·
23	***************************************	GASKET	0213229980		GRAY
24		PLUG,SPARK	0650109950		CMR6A
			0000100000		CIVIROA

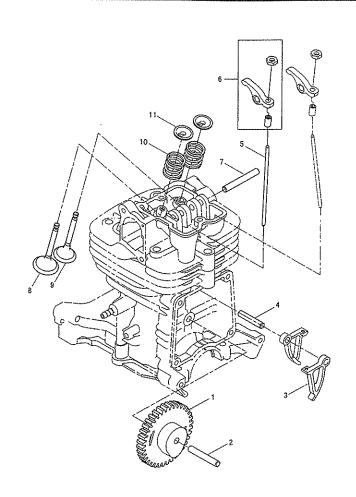
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REF.	Carswell				DECODIDITION
NO.	Parts No.	PARTS NAME	Mfg.'s No.	Qty	DESCRIPTION
1		CRANKSHAFT ASSY	5972001001	1	
2	10680	NEEDLE ROLLER BEARING	0610129940	1 1	
3	10681	OIL SEAL(S)	0440179910	1	
4	10682	OIL SEAL(L)	0440209890	1 1	
5	10683	PISTON ,	5972500001	1	
6		PISTON RING SET	5972003000	1	
7	10685	PIN,PISTON	5802500701	1	
8		CLIP	0565119990	2	
9			5972500800	1	
10		WOODRUFF KEY	0323049950	1	
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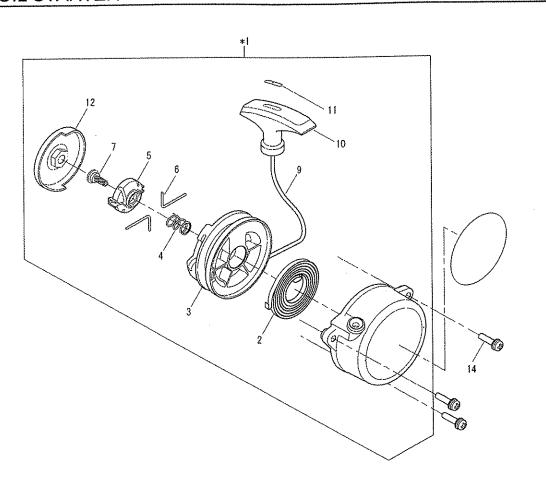


F.	Carswell				
),	Parts No.		Mfg.'s No.	` Qty	DESCRIPTION
1		CAMGEAR ASSY	5973002001	1	
2		SHAFT (φ5-31.8)	5933500100	1	CAMGEAR
2 3 4		CAM LIFTER	5973500600	2	
4		SHAFT (φ5-25.8)	5973500700	1	CAM LIFTER
5 6	10691	PUSH ROD	5973500800	2	
6	10692	ROCKER ARM ASSY	5973004000	2	
7		SHAFT (φ5-37.8)	5973500500	1	ROCKER ARM
8 9		VALVE,INTAKE	5973500100	1	
9	10695	VALVE,EXHAUST	5973500200	1	
Ō	10696	SPRING, VALVE	5973500301	2	
1	10697	RETAINER, SPRING	5973500400	2	
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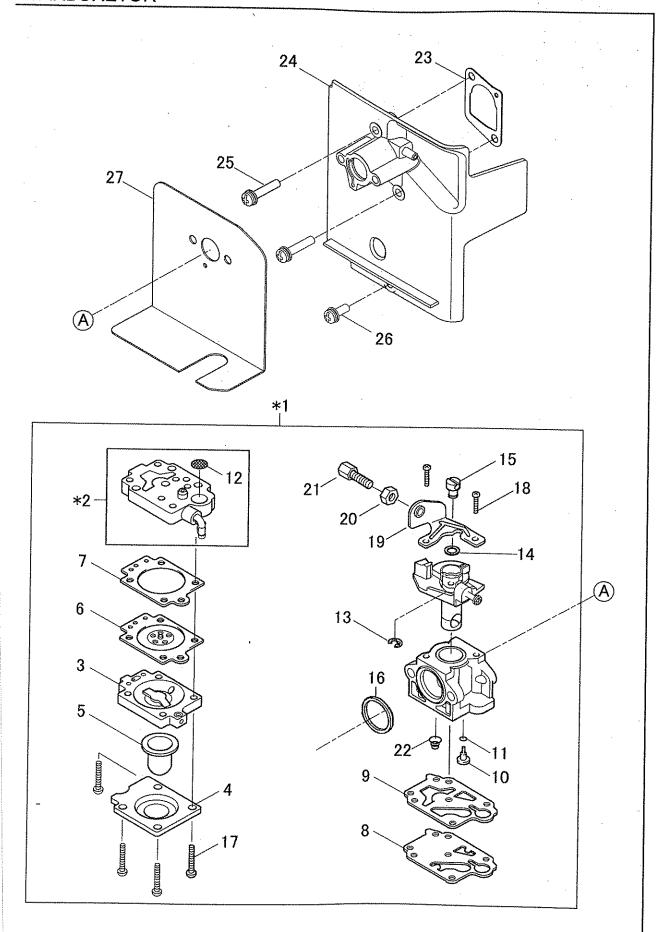
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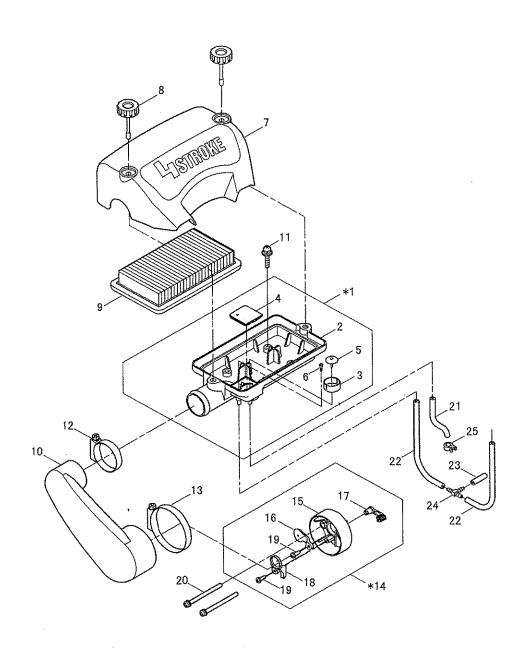
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NO.	Parts No.	PARTS NAME	Mfg.'s No.	Qty	DESCRIPTION
1		STARTER REWIND	5975001000	1	INCL.2~12
2	10699	SPIRAL SPRING	5255040030	1	
3	10700	REEL	5975002020	1	
4	10701	FRICTION SPRING	5975002030	1	
5	10702	COLLAR	5975002040	1	
6	10703	SWING ARM	5975002050	2	
7	9942	SET SCREW	5195002060	1	
9	10704	STARTER ROPE	5975002110	1	
10	10705	STARTER KNOB	5315001020	1	
11	3824	ROPE STOPPER	5315001030	1	
12	10708	PULLEY	5975500000	1	
14	10184	SCREW ASSY	0140059360	3	M5×20 W,SW
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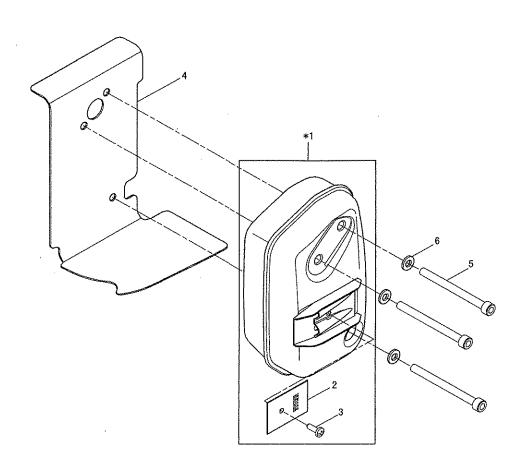
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	RBURE	IOR			
	Carswell Parts No.	PARTS NAME	Mfg.'s No.	Qty	DESCRIPTION
1	10709	CARBURETOR	5976001000	1	INCL.*2~22
2	10710	BODY ASSEMBLY, PUMP	5976001010	1	INCL.12
3	10110	BODY ASSEMBLY, AIR PURGE	5236046140	1	
	6700	COVER, PRIMER PUMP	5236046050	1	
4		PUMP, PRIMER	5246001150	1	
5	0504	DIAPHRAGM ASSY,METERING	5926008010	1	
6	31/1	DIAPHRAGIVI ASST, WILL I LINING	5236046040	1	<u> </u>
		GASKET,METERING DIAPHRAGM	5426001040	1	<u> </u>
8		DIAPHRAGM,PUMP	5926002040	1	
9	<u> </u>	GASKET,PUMP	5976001020	·	#60
10				1	
11		O RING	5246001010		<u> </u>
12	6508	SCREEN,INLET	5016004010	1 1	<u></u>
13	6511	RING, SPRING RETAINING	5316005120	1	
14	6796	WASHER	5426005030	1	
15	1	SWIVEL	5236018040	1 1	
16		RING,PACKING	5236018020	1	
17		SCREW	5236046010	1 4	
18	1	SCREW	5246001240	1 2	
		BRACKET, CABLE	5236052020	1	
19	1	DRACKET, CADLE	5316005450	1	1
20	1	NUT,CABLE ADJ	5216008010		
21		SCREW,CABLE ADJ	5926002020		
22	- I	SPRING	5973501100		
23	3 10713	GASKET,INSULATOR			1
24		INSULATOR COMPL	5973009000		
25	1268	SCREW	0140059680		2 M5×25 W,SW UPPER
26		SCREW	0140059610		1 M5×14 W,SW LOWER
27	7 10715	GASKET,CARBURETOR	5973501200		1
 					
 					
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8.AIR CLEANER

8.AIF	R CLEAN	NER			
REF.	Carswell				
NO.	Parts No.	PARTS NAME	Mfg.'s No.	Qty	
1	10716	CASE,AIR CLEANER ASSY	6676003001		INCL.2~6
2	10717	CASE,AIR CLEANER COMPL	6676001001	1	
3		PLATE, CHECK VALVE	6676500500	1	
4		PLATE, SEPARATOR	6676500600	1	
5	9915	CHECK VALVE	5316500701	1	
6	9916	CHECK VALVE(1)	5923502400	1	
7	10720	COVER,AIR CLEANER	6676002001	1	
8	10721	KNOB BOLT	6676501200	2	
9	10722	ELEMENT,AIR CLEANER	6676500201	1	
10		DUCT,AIR CLEANER	6676500400	1	
11		SCREW ASSY	0043605160	4	M5×16 W,SW
12	1	HOSE CLAMP	0561439990	1	φ43
13		HOSE CLAMP	0561679990	1	φ67
14		CASE,INTAKE ASSY	5973006000	1	INCL.15~19
15		CASE,INTAKE COMPL	5973007000	1	
16		PLATE, CHOKE	5973501700	1 1	
17		LEVER, CHOKE	5973501800	 	
		PLATE,INTAKE	5973501900	1	
18		TAPPING SCREW	5973006010	1	4×12
19		SCREW ASSY	0043605650		M5×65 W,SW
20		1	0851139920		φ3×φ7×L130
21	1	TUBE	0851199960		φ3×φ7×L190
22	J	TUBE	0851029930		φ3×φ7×L25
23		TUBE		 	Ψ3^Ψ1^L23
24		PIPE,JOINT	5973502200	 	
25	10736	HOSE CLAMP	0561079990	1 1	
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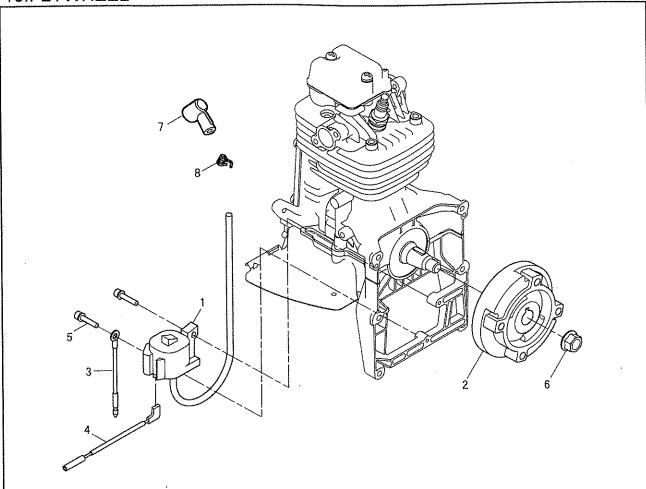


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<u>10.</u>	Parts No.	PARTS NAME	Mfg.'s No. →	Qty	DESCRIPTION
1		MUFFLER,EXHAUST	5973001001	1	INCL.2,3
2		SPARK ARRESTER	5973001010	1	
3		TAPPING SCREW	5973001020	1	
4		GASKET,MUFFLER	5973501301	1	
5		SOCKET HEAD BOLT	0119069650	3	M6×70
6	10742	WASHER	0200069890	3	
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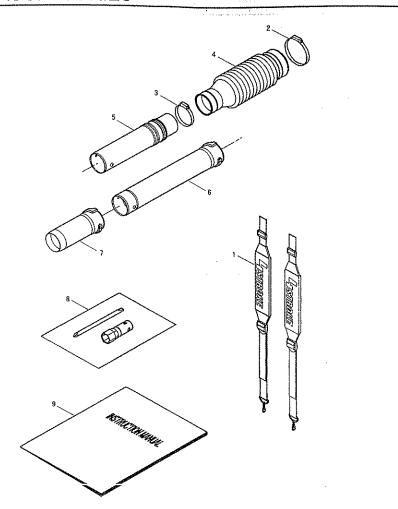
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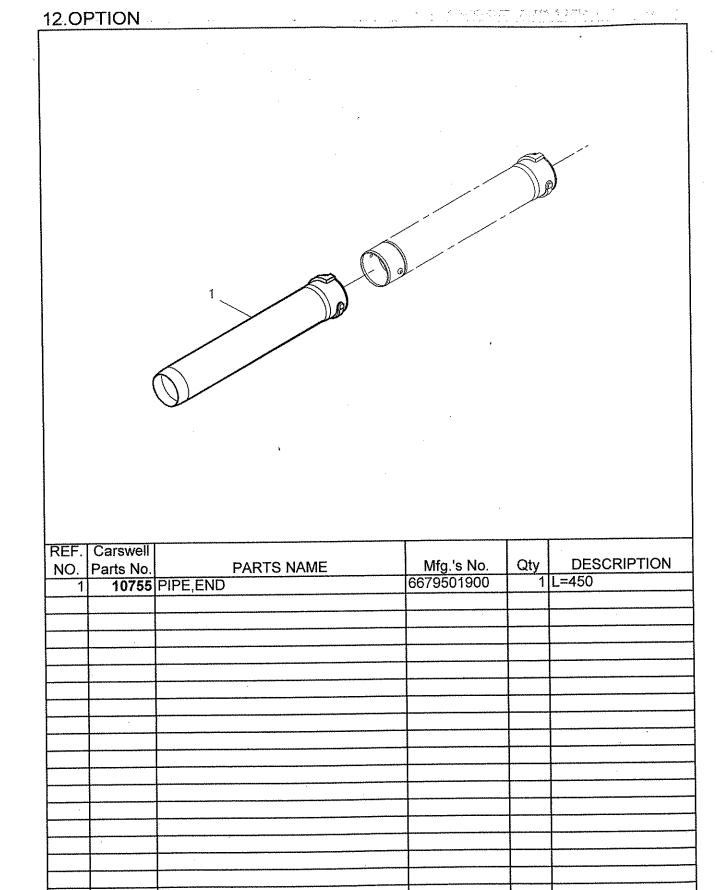
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NO.	Parts No.	PARTS NAME	Mfg.'s No.	Qty	DESCRIPTION
1	10743	COIL,IGNITION	5977001010	1 1	
2		FLYWHEEL COMPL	5977001020	1	
3	6907	WIRE	6165500201		L=90 MALE
4		WIRE 2	5927011000		L=100 FEMALE
5	10159	SOCKET HAED BOLT	0119049970	1	M4×20 W,SW
6	10745	FLANGE NUT	0023710000	1	M10
7	6169	SPRING,PLUG CAP	0654009931	1	
8		CAP,PLUG	5927500100	1	

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11.STANDARD ACCESSORIES



	Carswell				
NO.	Parts No.		Mfg.'s No.	Qty	DESCRIPTION
1		BAND COMPL	6679001000	2	
2		HOSE CLAMP	0561009990	1	φ100
3		HOSE CLAMP	0561769990	1	φ76
4		PIPE,FLEXIBLE	6679500000	1	
5		PIPE,SWIVEL COMPL	6679002000	1	
6		PIPE,STRAIGHT	6679501800	1	
7	, ,	PIPE,END	6679500201	1	L=200
8	10753		6909059000-2	1	
9	10754	INSTRUCTION MANUAL	6679501100	1	ROBIN CIMA
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ON SHE TO TO SHE TO TO SHE TO IMITED TWO YEAR WARRANTY ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE Carswell Import & Marketing Associates, Inc. (hereafter CIMA), sales ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE TWENTY-FOUR (24) MONTHS WARRANTY PERIOD OR NINETY (90) DAYS FOR BLOWERS USED FOR ANY INCOME PRODUCING PURPOSE. ACCORDINGLY, ANY SUCH IMPLIED WARRANTIES INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, ARE DISCLAIMED IN THEIR ENTIRETY AFTER THE EXPIRATION OF THE APPROPRIATE TWENTY-FOUR (24) MONTHS OR MINETY (20) DAYS WARPANTY DEPIOD agent for FujiRobin industries, Ltd. warrants each new Robin blower for twenty-four (24) months according to the following terms. This warranty extends to the original retail purchaser only and commences on the date of original retail purchase Any part of Robin blower supplied by CIMA and found in the reasonable OR NINETY (90) DAYS WARRANTY PERIOD. judgment of an Authorized Robin Service Center to be defective in material or workmanship will be repaired by an Authorized Robin Service Dealer without charge for parts and labor. The Robin blower including any defective part must be returned to an

Authorized Robin Service Dealer within the warranty period. The expense of delivering the Robin blower to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid for by the owner.

CIMA's responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Robin blower. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work should be performed by an Authorized Robin Service Dealer.

This warranty is limited to ninety (90) days from the date of original retail purchase for any Robin blower that is used for rental or commercial purposes, or any other income-producing purpose.

This warranty does not cover any Robin blower that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Robin Operator's Manual. The warranty does not apply to any damage to the Robin blower that is the result of improper maintenance or to any Robin blower or parts that have not been assembled or installed as specified in the Robin Operator's Manual. The warranty does not cover any Robin blower that has been altered or modified so as to adversely affect the product's operation, performance or durability or that has been altered or modified so as to change its intended use. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which are either incompatible with the Robin blower or adversely affect its operation, performance or durability.

Robin reserves the right to change or improve the design of any Robin blower without assuming any obligation to modify any blower previously manufactured.

CIMA'S OBLIGATION UNDER THIS WARRANTY, IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS, AND CIMA DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO

CIMA ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUEN-CIMA ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, EXPENSE FOR GASOLINE, EXPENSE OF RETURNING THE ROBIN BLOWER TO AUTHORIZED SERVICE DEALER AND EXPENSE OF DELIVERING IT BACK TO THE OWNER, MECHANIC'S TRAVEL TIME, TELEPHONE OR, TELEGRAM CHARGES, RENTAL OF A LIKE PRODUCT DURING THE TIME WARRANTY SERVICE IS BEING PERFORMED. TRAVEL, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF THE BLOWER, LOSS OF TIME, OR INCONVENIENCE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to Robin blower sold by CIMA in the United States. To validate this warranty original purchaser must complete the attached Warranty Registration Form and return it within ten (10) days of pur-

CARSWELL IMPORT AND MARKETING ASSOCIATES, INC WINSTON-SALEM, NORTH CAROLINA 27115

Fuji Robin Industries, Ltd. Numazu, Shizuoka, Japan



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WARRANTY SERVICE

Warranty service can be performed by an Authorized Robin Service Dealer regardless of whether the consumer purchased the Robin product originally from that dealer. However, we recommend you first contact the original dealer who sold you the product. Remember, it is your responsibility to deliver your Robin product along with proof of purchase to the dealer within the warranty period, and all work must be performed by an Authorized Robin Service Dealer.

Example of Parts and Service not covered by Warranty

Normal service requirements occurring during the warranty period such as carburetor or ignition adjustment.

Normal service over and above repair or replacement of defective

Repair or maintenance service due to normal wear, improper maintenance, misuse, neglect, negligence, accident, also alternations or modifications which adversely affect product's performance, durability, or change their intended use.

Repairs or maintenance made necessary due to use of parts or accessories which are not compatible with Robin products or adversely affect its operation, performance, or durability.

Products not operated or maintained in accordance with the instruction

Normal cleaning, lubrication, adjustments, or replacement of such items as spark plugs, filters, ignition points, etc.

Expense of delivering the product to an Authorized Service Dealer or of returning such products, or mechanics travel time, or cost of any rental of a like product during the period warranty service is being performed

Warranty applies only to original retail purchaser.

Owner's Obligation and Responsibility-

It is the responsibility of the owner to provide for normal maintenance service and replacement of service items and to maintain all components in proper adjustment. These are not considered defects in material or workmanship. Individual operation and application determine the need for normal maintenance service.

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Owner's Name								
Address								
	City	State	Zip					
Dealer's Name				···				
Address								
Addition	City	State	Zíp					
Date of Purcha	se			·				
Model No		Serial No						

This Registration From must be complated and returned within ten (10) days of purchase.