



PEDESTRIAN DUMPER

INSTRUCTION MANUAL



HINTS FOR SAFE OPERATION

- DO Study engine manual before operating your power barrow
- DO Check all nuts, bolts & wheel studs daily
- DO Be safety conscious & dress appropriately when operating your power barrow
Always wear substantial footwear and a hard hat in relevant areas.
- DO Exercise extreme caution with the controls when working on steep or slippery
Surfaces, especially, when people are in the vicinity of operation.
- DO Ensure that all safety guards are in place when operating the power barrow
- DO Disengage drive by releasing clutch lever before operating gear change lever.

ATTENTION

- DO Handle fuel with extreme caution, Wipe off spilled petrol before starting the engine
- DO Keep the engine free of any accumulation of dirt, grease, oil or other flammable material
- DO Allow the engine to cool before storing in a confined space.

BE SAFE: Follow Instructions At All Times

- DO NOT Allow anyone lacking in age or experience to operate your power barrow
- DO NOT Carry "passengers" on your power barrow
- DO NOT Start work without exercising appropriate safety precautions.
- DO NOT Use other than recommended lubricants or fuels.

ATTENTION

- DO NOT Refuel your engine when hot or in the vicinity of any naked flame or burning cigarette
etc.
- DO NOT Run the petrol engine in a confined area.
- DO NOT Run engine with air filter clogged or restricted
- DO NOT Allow debris or any flammable or foreign matter to build up near the exhaust
- DO NOT Store the power barrow in a location where fuel fumes may accumulate or reach a
spark or open flame
- DO NOT Pressure wash directly onto engine electronics

BE SAFE: EXERCISE COMMON SENSE AT ALL TIMES

OPERATION INSTRUCTIONS

Getting Started

1. Fill tank with unleaded 4 stroke petrol
2. Set the machine on firm level ground and check fuel & oil levels
3. To start the engine set the choke by pushing the throttle lever fully forward, 2 or 3 pulls and the engine will start
4. Move the throttle lever,(No 4), backward slightly to disengage the choke and set the engine speed to fast, Allow the engine to warm.

To Move Forward

1. Select require speed with gear change lever,(6). Hold down the Deadmans / Break handle.
Gently engage clutch lever,(9).
2. Control engine speed with throttle(4)

To Reverse

- Stop the power barrow , Move gear change lever(6) to position R(reverse), check behind for obstacles, and then gently engage clutch(9).

Stop

- Release the clutch lever, Dis-engage the Deadmans / Break handle, Reduce engine speed with throttle lever.

To Empty Skip

1. Stop the machine and disengage the skip release lever(10)
2. Jerk both handles upwards, the skip will pivot forward and dump the load with gravity force.

To Reset Skip

- Pull back the skip and engage the locking catch which holds the skip closed.

NOTE Check that the locking catch has engaged before moving off.

MAINTENANCE

For Engine Maintenance, Please see your engine manual.

Routine checks of your power barrow will ensure trouble free operation with less 'down' time.

| Component | Daily | Weekly |
|------------------------|---|--------|
| Retaining Catch Spring | √ | |
| Belt Tension | √ | |
| Brake Adjust ent | | √ |
| Tyre Pressure | | √ |
| Transmission Brake | | √ |
| All Nuts/Bolts | | √ |
| Control Cables | √ | |
| Air Cleaner | | √ |
| Engine Oil Check | | √ |
| Engine Oil | SAE 20W 50 | |
| Oil Change | After first 5hrs, thereafter every 50 hrs | |

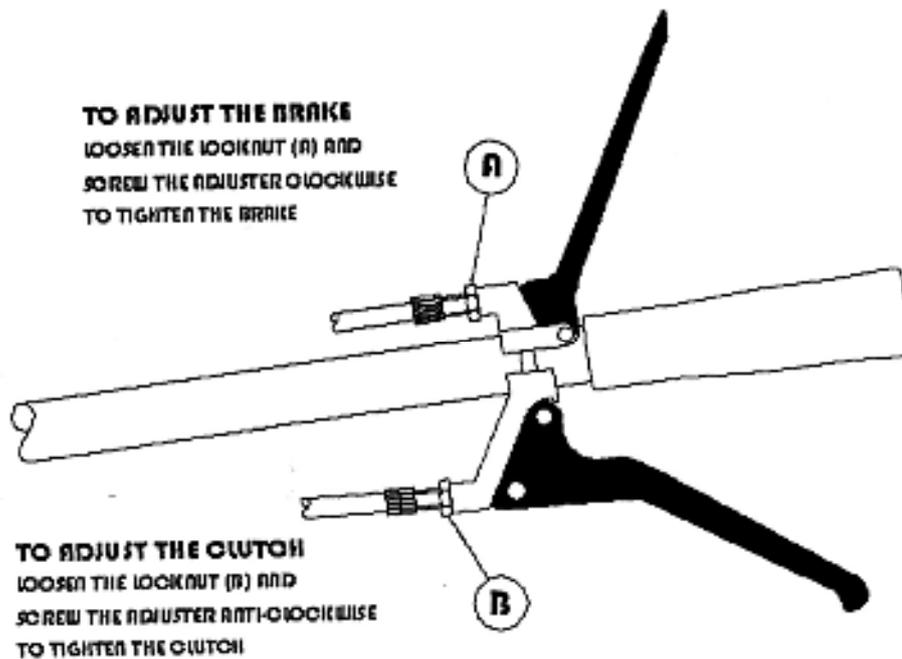
Remember- A daily check takes only minutes but could save you hours, Be Proud - look after your power barrow

Wheel - Maintain pressure in all wheels at 30psi

To remove rear wheel, tap off black cap, lever off inner silver cap with screwdriver

Tyre Pressure

| | |
|--------------|-------|
| Front wheel | 30psi |
| Middle wheel | 30psi |
| Rear wheel | 30psi |



NOTE Always check the brake adjust ent after tightening the drive belt

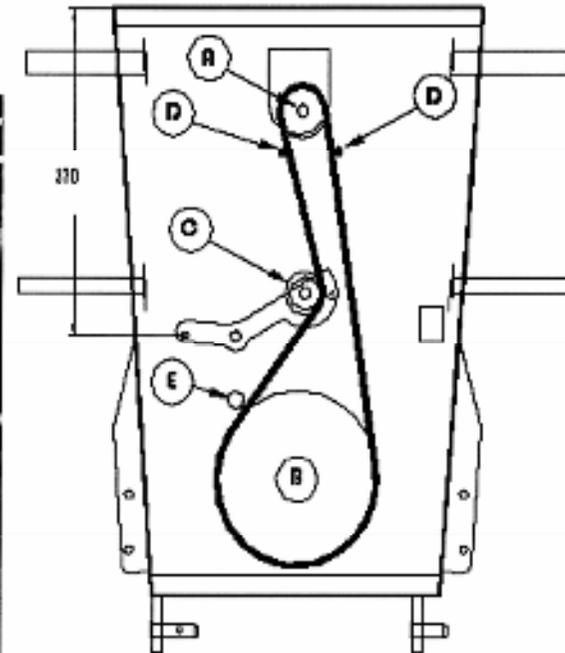
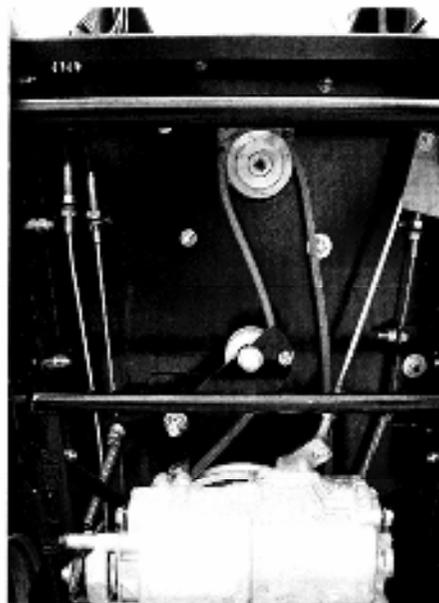
Belt Fitting

Remove only the inspection plate located on the rear of the chassis(photo 1)

- 1) Loosen the M12 Nut on the guide bolt(E)
- 2) Make sure the belt goes around transmission (B) pulley first.
- 3) Then put the entire belt to the right hand side of the clutch /jockey pulley(C), which pushes at the back of the left hand side of the belt(flat side)
- 4) Make sure the belt is located between both of the threaded bolts(D) push the belt onto the engine pulley(A)
- 5) Re-tighten the M12 nut on the guide bolt(E)

Import note - The belt goes between the long threaded bolts(D) which beneath / through the inspection plate

Photo 1



Power Barrow Parts List

| Part No. | Quantity | Description | Part No. | Quantity | Description |
|----------|----------|-----------------------------|-----------|----------|----------------------------|
| PB02 | 1 | Grip(forward/reverse lever) | PB05041 | | Wheel Hub |
| PB03 | 2 | Grip(handlebar) | PB0502001 | | Forward/Reverse Lever |
| PB14 | 1 | Engine | PB0505003 | | Handle Bar Cowling |
| PB18 | 2 | Clutch /skip cable spring | PB0502004 | | Skip Catch |
| PB21 | 1 | Transaxle | PB0502005 | | 6cu ft skip |
| PB24 | 2 | Front Wheel Complete(10") | PB0502006 | | Main plate |
| PB30 | 2 | Rear wheel complete(8") | PB0502007 | | Bottom plate |
| PB31 | 1 | Lynch Pin | PB0502008 | | Power drive bracket |
| PB32 | 2 | 25mm Starlock | PB0502009 | | Left/right torque stays |
| PB35 | 1 | Decal set | PB0502012 | | Clutch reinforcement plate |
| PB45 | 2 | Power drive wheel (4") | PB0502013 | | Forward / reverse tic rod |
| PB54 | 1 | Gear change grommit | PB0502014 | | Skip catch lever |
| PB80 | 2 | Front wheel plastic cap | PB0502015 | | Clutch lever |
| PB83 | 2 | 19mm starlock | PB0502016 | | Brake lever |
| PB87 | 1 | Throttle lever c/w cable | PB0502017 | | Brake/clutch /skip cable |
| PB04001 | 1 | Drive pulley | PB0502018 | | Drive belt |
| PB04002 | 1 | Engine pulley | PB0502019 | | Belt guide tube |
| PB04003 | 1 | Clutch pulley | PB0502021 | | Clutch pulley bracket |
| | | | PB05023 | | Shifter plate |

POWER BARROW

By
 Nantong Ant Machinery Co.,Ltd
 No.280 fuyuan road,
 Qidong economic development zone,
 Jiangsu province 226200, china



Product Name: Power Barrow

Application: The Power Barrow is a 4WD powered wheelbarrow with a range of attachments, it is designed for a single walk behind operator.

| Hazards | Risk Assessment | | | |
|-------------------------|-----------------|------------|-------------|-----------------|
| | Probability | Exposure | Consequence | Risk Level |
| Moving parts | Unusual | Occasional | Serious | Mod/Acceptable |
| Pinch points | Unusual | Occasional | First aid | Mod/acceptable |
| Movement of unit's load | Unusual | Occasional | Serious | Mod/substantial |
| stability | Unusual | Occasional | Serious | Mod/substantial |
| Hot parts | Unusual | Occasional | First aid | Mod/acceptable |
| Fire /explosion | Possible | Occasional | casualty | Mod/ acceptable |
| Electricity | unlikely | Occasional | First aid | Acceptable |
| Noise | likely | Occasional | serious | Mod/high |
| Failure to stop | unusual | Occasional | casualty | Mod/substantial |

Risk assessment on power barrow

| | |
|-------------------------------------|---|
| Control Measures | <ul style="list-style-type: none"> ● Robust general protected steel construction ● Operator has good visibility and mobility ● Good stability with low centre of gravity ● Clear & prominent safety decals ● Adequate guards covering moving parts ● Hand grips give good control and reduce vibration ● Easy access for maintenance ● Operator's manual details safe operation & service requirements ● Hearing protection should be used by the operator for prolonged periods in the day or when used in confined areas ● Adequated ventilation is required to avoid side effects from the exhaust fumes ● Releasing the operator controls stops propulsion and applies brake causing the unit to stop ● Ergonomic operator controls ● Engine well protected by steel cowling ● Spark resistant plastic fuel tank with fuel tap ● Hot parts such as the exhaust are protected by the engine cowling ● Ensure that the operating area is free from hazards before commencing work and alert workers in the vicinity to it's operation ● Loaded unit is well balanced for transport for transport and tipping functions ● Operator's manual details safe operation |
| Residual risk of plant with control | <ul style="list-style-type: none"> ● Moderate/acceptable |
| Safety comments | <ul style="list-style-type: none"> ● The NSCA RISK score calculator have been used. |

Risk Assessment on power barrow

Power barrow **WARRANTY**

Date of purchase :

Serial Number:

Dealer /Distributor name:

6 calendar months from date of sale for consumers.

Under the following conditions:

- Routine maintenance undertaken in accordance with owner's manual.
- Returned defective parts are approved by NANTONG ANT MACHINERY
- Machine is not abused or operated with known faults or lack of maintenance
- Repairs are approved by NANTONG ANT MACHINERY

AT AN AGREED JOB RATE

Only defective parts are covered & not wearable components which necessitate replacement through normal wear & tear, i.e. Puncture, chipped paint, dented hopper etc. NANTONG ANT MACHINERY will not held liable for any consequential losses.

PERSONAL CUSTOMER GUARANTEE STATEMENT

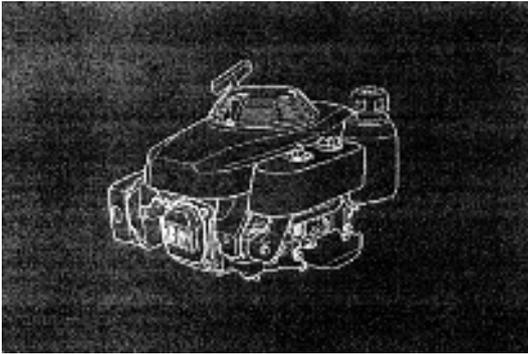
If there is any component or components, manufactured by NANTONG ANT MACHINERY which are found to be defective within 6 months from the date of purchase, Nantong Ant Machinery undertake to replace the faulty component/s free of charge,(provided they are notified immediately upon date of failure).

The following are not covered by this guarantee:

1. Engines - which are guaranteed by their respective manufacturers
2. A machine which has been subject to operation in excess of recommended capacities, misuse, negligence or accident, or has been altered or modified in a manner which has not been authorized by NANTONG ANT MACHINERY.
3. Wear parts, e.g. Belts, cables etc.
4. Transportation charges - to and from the warranty repair site.

Nantong Ant Machinery operates a policy of continual development and reserves the right to alter product specification without giving prior notice.

5.5HP Gasoline Engine



Owner's manual

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Thank you for purchasing this machine.
This manual covers the operation and maintenance of your engine
All information in this publication is based on the latest product information available at the time of printing.

Nantong Ant Machinery Co., Ltd Reserves the right to make changes at any time without notice and without incurring any obligation.

No part of this publication may be reproduced without written permission.

This manual should be considered a permanent part of the engine and should remain with it if it is resold.

Pay special attention to statements preceded by the following words:

Warning Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION: indicates that equipment or property damage can result if instructions are not followed.

NOTE: Gives helpful information.

If a problem should arise, or if you have any questions about your engine, consult an authorized dealer.

Warning
The engine is designed to give safe and dependable service if operated according to instructions, read and understand the owner's manual before operating the engine, failure to do so could result in personal injury or equipment damage.

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- TROUBLESHOOTING.....
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1 SAFETY INSTRUCTIONS

WARNING

To ensure safe operation



● This engine is designed to give safe and dependable service if operated according to instructions, read and understand the owner's manual before operating the engine. Failure to do so could result in personal injury or equipment damage.

- Always make a pre-operation inspection (page 4) before you start the engine, you may prevent an accident or equipment damage.
- To prevent fire hazards and to provide adequate ventilation, keep the engine at least 1 meter(3 feet) away from buildings and other equipment during operation, do not place flammable objects close to the engine.
- Children and pets must be kept away from the area of operation due to a possibility of burns from hot engine components or injury from any equipment the engine may be used to operate.
- Know how to stop the engine quickly and understand the operation of all controls, never permit anyone to operate the engine without proper instructions.
- Do not place flammable objects such as gasoline, matches etc. close to the engine while it is running.
- Refuel in a well-ventilated area with the engine stopped, gasoline is highly flammable and explosive under certain conditions.
- Do not overfill the fuel tank, there should be no fuel in the filler neck.

Make sure that the filler cap is closed securely.

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Safety Instructions

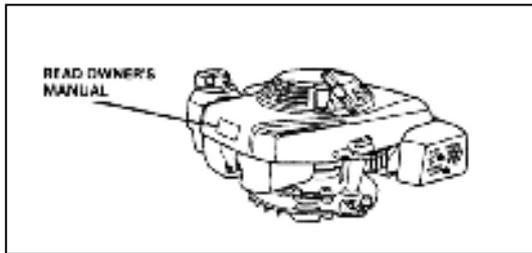
WARNING

To ensure safe operation-

- If any fuel is spilled, clean it up completely and allow petroleum vapors to dissipate before starting the engine.
- Do not smoke or allow flames or sparks where the engine is refueled or where gasoline is stored.
- Exhaust gas contains poisonous carbon monoxide, avoid inhalation of exhaust gases, never run the engine in a closed garage or confined area.
- Place the engine on a stable surface. Do not tilt the engine more than 20° from horizontal. Operating at excessive angles may result in fuel spillage.
- Do not place anything on the engine, as it may create a fire hazard.
- A spark arrester is available as an optional part for this engine. It is illegal in some areas to operate an engine without a spark arrester, check local laws and regulations before operating.
- The muffler becomes very hot during operation and remains hot for a while after stopping the engine, be careful not to touch the muffler while it is hot. To avoid severe burns or fire hazards, let the engine cool before transporting it or storing indoors.

SAFETY LABEL LOCATION

This label warns you of potential hazards that can cause serious injury, read it carefully. If the label comes off or becomes hard to read, contact local dealer for replacement.



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3. PRE-OPERATION CHECK

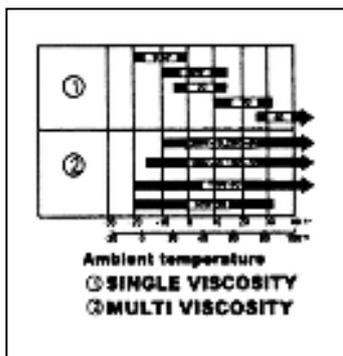
1. Engine oil level

CAUTION:

- Running the engine with insufficient oil can cause engine damage.
- Be sure to check the engine on a level surface with the engine stopped

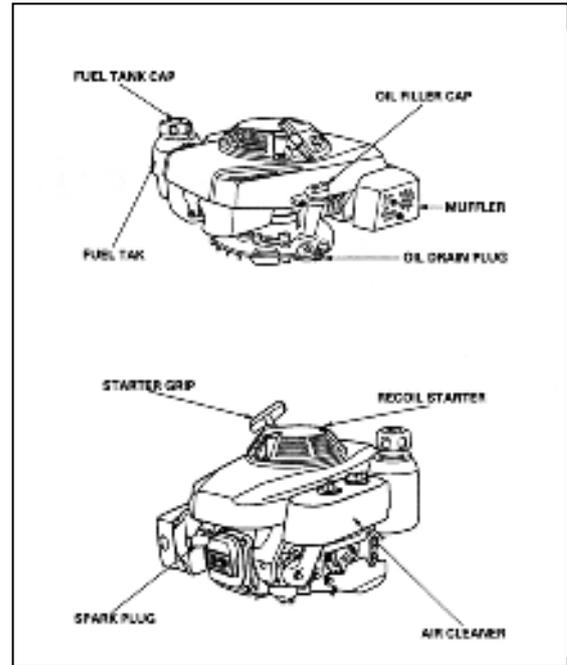
1. Remove the oil filler cap and wipe the dipstick clean
2. Insert the dipstick into the oil filler neck, but do not screw it in
3. If the level is low, add the recommended oil to the upper limit on the dipstick.

Use 4-stroke, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. Automobile manufacturer's requirements for service classification SG, SF. Motor oils classified SG, SF will show this designation on the container. SAE 10W-30 is a recommended for general, all temperature use, if single viscosity oil is used, select the appropriate viscosity for the average temperature in your area.



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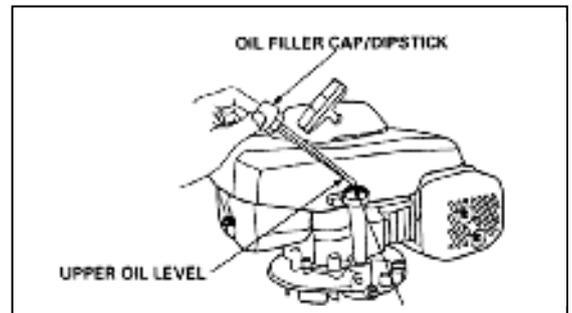
2. COMPONENT IDENTIFICATION



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CAUTION:

Using non-detergent oil or 2-stroke engine oil could shorten the engine's service life.

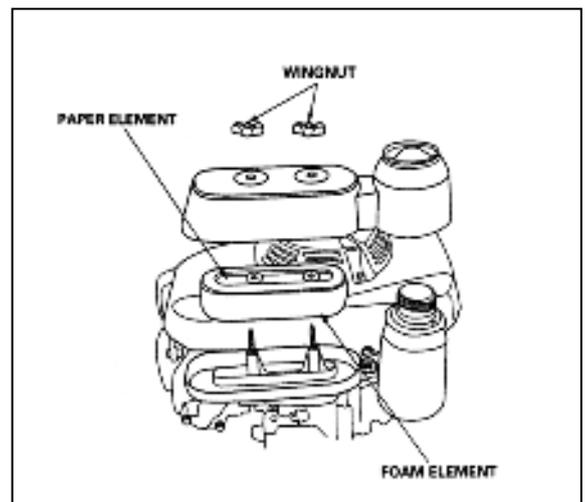


2. Air cleaner

CAUTION:

Never run the engine without the air cleaner, rapid engine wear will result.

Check cleaner for dirt or obstruction of elements (page 15)



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3. Fuel

Use automotive gasoline (unleaded or low leaded is preferred to minimize combustion chamber deposits).

Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped, do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck).

After refueling, make sure the tank cap is closed properly and securely.

- Be careful not to spill fuel when refueling, spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor.

KEEP OUT OF REACH OF CHILDREN.

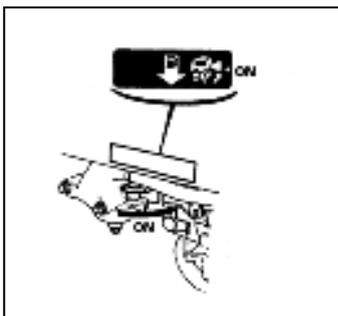
Fuel tank capacity up to "LEVEL" indicated on GASOLINE LEVEL GAUGE(1.7ℓ)



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4 STARTING THE ENGINE

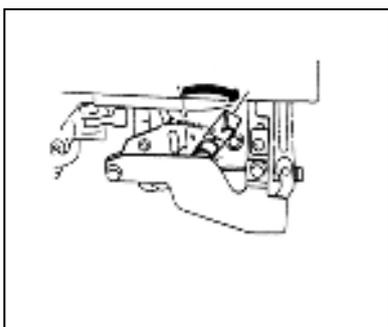
1. Turn the fuel valve to the ON position.



2. move the control lever to CHOKE position.

NOTE:

Do not use the choke if the engine is warm or the air temperature is high.



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GASOLINE CONTAINING ALCHOL

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by this manual. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol, do not use gasoline containing methanol(methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

NOTE:

● Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. We cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.

● Before buying fuel from an unfamiliar station, try to find out if the fuel contains alcohol, if it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a gasoline that you know does not contain alcohol.

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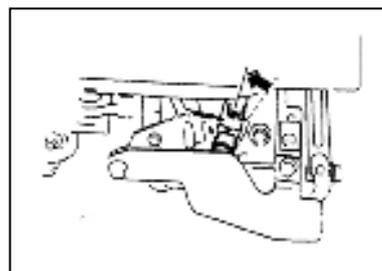
3. Pull the starter grip lightly until resistance is felt, then pull briskly.

CAUTION:

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to starter.



4. When engine warm up, move the control lever to FAST OR SLOW.



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● **High altitude operation**

At high altitude, the standard carburetor air-fuel mixture will be excessively rich, performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate the engine at altitudes higher than 1,830m(6,000 feet) above sea level, have local authorized dealer perform these carburetor modifications.

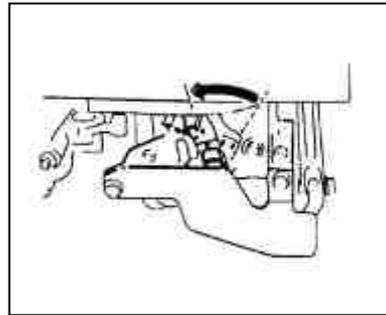
Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 305m(1,000 feet) increase in altitude. The affect of altitude on horsepower will be greater than this if no carburetor modification is made.

CAUTION:

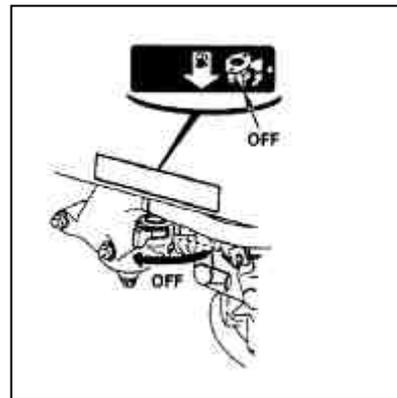
Operation of the engine at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

5. STOPPING THE ENGINE

1. move the control lever to STOP position.



2. Turn the fuel valve to the OFF position.



6. MAINTENANCE

WARNING

- Shut off the engine before performing any maintenance.
- To prevent accidental start-up, turn OFF the engine switch key and disconnect the spark plug caps.
- The engine should be serviced by an authorized dealer unless the owner has proper tools and service data and feels he is mechanically qualified.

CAUTION :

Use matched genuine parts or their equivalent, the use of replacement parts which are not of equivalent quality may damage the engine.

Periodic inspection and adjustment of the engine is essential if high level performance is to be maintained. Regular maintenance to be performed are described on the table below.

Maintenance Schedule

| REGULAR SERVICE PERIOD | | Each use | Every month or 20 hrs. | Every 3 month or 50hrs. | Every 6 month or 100hrs | Every year or 300 hrs. |
|---|-------------|------------------|------------------------|-------------------------|-------------------------|------------------------|
| Performed at every indicated month or operating hour interval, whichever comes first. | | | | | | |
| ITEM | | | | | | |
| Engine oil | Check | O | | | | |
| | Change | | O | | O | |
| Air cleaner | Check | O | | | | |
| | Clean | | | O(1) | | |
| Spark plug | check-clean | | | | O | |
| Spark arrester clean (optional part) | | | | | O | |
| Valve clearance check-clean | | | | | | O(2) |
| Fuel tank and strainer clean | | | | | | O(2) |
| Fuel line check (replace if necessary) | | Every 2 years(2) | | | | |

NOTE:

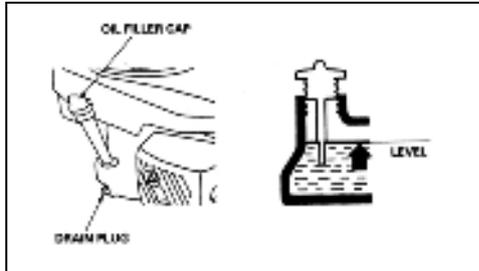
- (1): Service more frequently when used in dusty areas.
- (2): These items should be serviced by an authorized dealer, unless the owner has the proper tools and is mechanically proficient, see the shop manual.

1. Oil change

Drain the while the engine is still warm to assure rapid and complete draining.

1. Remove the oil filler cap and drain plug to drain the oil.
2. install the drain plug and tighten it securely.
3. Refill with the recommended oil (see page 4) and check the oil level.
4. Install the oil filler cap.

ENGINE OIL CAPACITY:
0.65ℓ(0.69 US qt,0.57 Imp qt)



CAUTION:

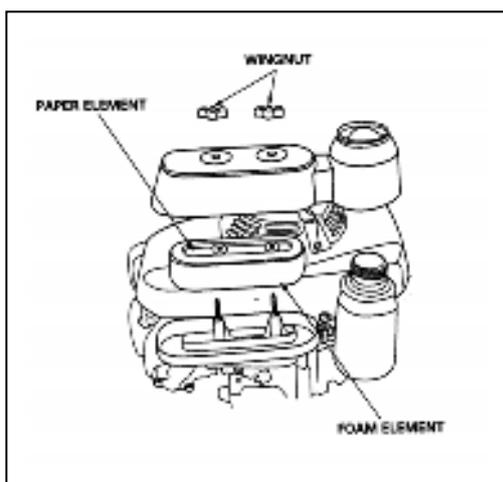
Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

NOTE:

Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

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3.Paper element: Tap the element lightly several times on a hard surface to remove excess dirt, or blow compressed air though the filter from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers, Replace the paper element if it is excessively dirty.



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2.Air cleaner service

A dirty air cleaner will restrict air flow to the carburetor, To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the engine in extremely dusty areas.

WARNING

Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

CAUTION:

Never run the engine without the air cleaner. Rapid engine wear will result.

1. Remove the wing bolts and the air cleaner cover. Remove the elements and separate them. Carefully check both elements for holes or tears and replace if damaged.
2. Foam element: Wash the element in a solution of household detergent and warm water, then rinse thoroughly, or wash in nonflammable or high flash point solvent. Allow the element to dry thoroughly.

Soak the element in clean engine oil and squeeze out the excess oil. The engine will smoke during initial start-up if too much oil is left in the foam.

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3. Clean fuel strainer

WARNING

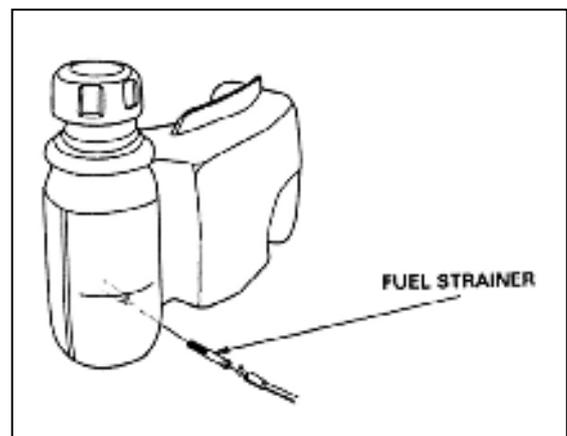
Gasoline is extremely flammable and is explosive under certain conditions.

Do not smoke or allow flames or sparks in the area.

Remove the fuel strainer from the fuel tank and fuel line.

Clean the fuel strainer,(Remove dirt which has accumulated on the mesh and check that the mesh is not broken anywhere.)

Reinstall the fuel strainer and fuel line.



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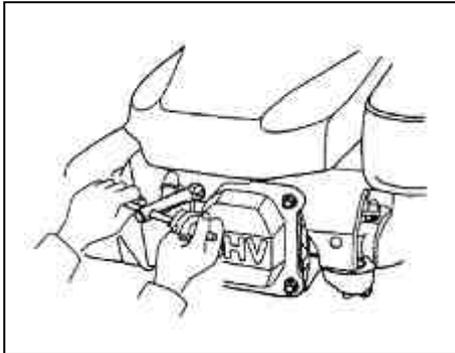
4. Spark plug service
 Recommended spark plug:
 BPR5ES
 W16EPR-U

CAUTION:
Never use a spark plug of incorrect heat range.

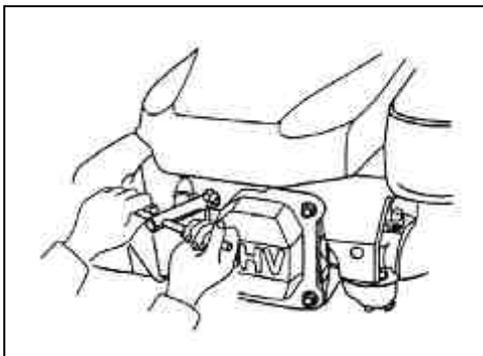
To ensure proper engine operation the spark plug must be properly gapped and free of deposits.

1. Remove the spark plug cap and use a spark plug wrench to remove the plug.

WARNING
 If the engine has been running, the muffler will be very hot. Be careful not to touch the muffler.



4. Check that the spark plug washer is in good condition and thread the spark plug in by hand to prevent cross-threading.
5. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

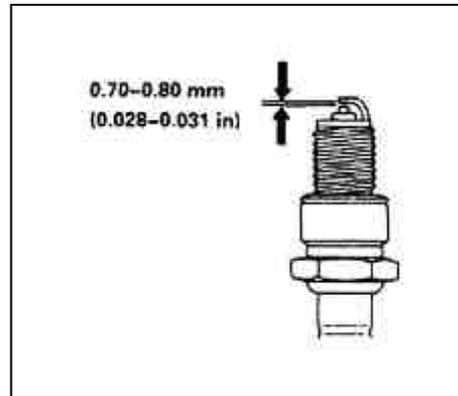


NOTE:
 When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer. When reinstalling a used spark plug, tighten 1/8-1/4 turn after the spark plug seats to compress the washer.

CAUTION:
 The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and may damage the engine.

2. Visually inspect the spark plug. Discard the spark plug if there is apparent wear, or if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
3. Measure the plug gap with a feeler gauge. Correct as necessary by bending the side electrode.
 The gap should be:

0.70-0.80 mm (0.028-0.031 in)



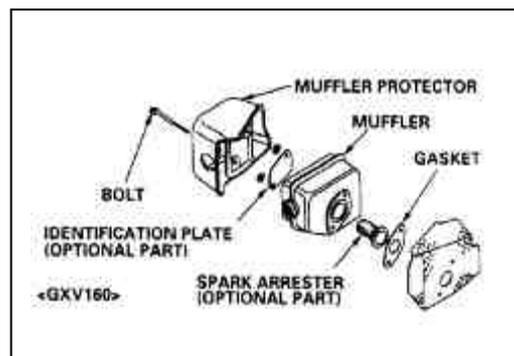
5. Spark arrester maintenance (optional part)

WARNING
If the engine has been running, the muffler will be very hot, allow it to cool before proceeding.

CAUTION:
The spark arrester must be serviced every 100 hours to maintain its efficiency.

1. Loosen the two 6 mm nuts and remove the muffler protector, identification plate, muffler and gasket.
2. Remove the spark arrester from the muffler. (taking care not to damage the wire mesh)

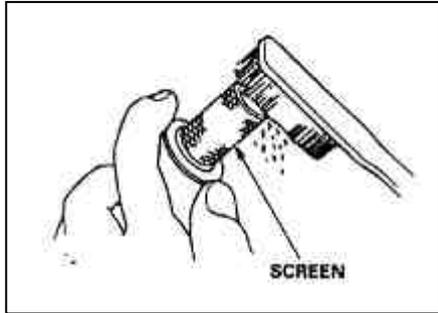
NOTE:
 Check for carbon deposits around the exhaust port and the spark arrester, and clean if necessary.



3. Use a brush to remove carbon deposits from the spark arrester screen.

CAUTION:

Be careful not to damage the spark arrester screen.



NOTE:

The spark arrester must be free of breaks and holes. Replace if necessary.

4. Install the arrester and the muffler in the reverse order of disassembly.

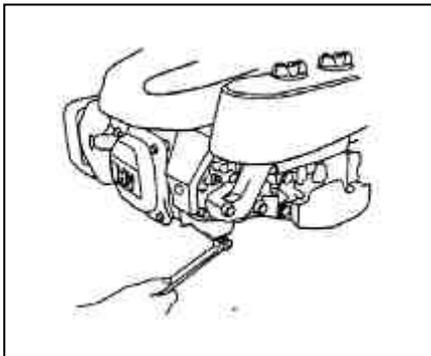
7 TRANSPORTING/STORAGE

WARNING

When transporting the engine turn the fuel valve OFF and keep the engine level to prevent fuel spillage. Fuel vapor or spilled fuel may ignite.

Before storing the unit for an extended period;

1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel tank and carburetor into a suitable gasoline container:
 - A. Remove the fuel tube and drain the fuel tank
 - B. Loosen the carburetor drain bolt to drain the carburetor.
 - C. Retighten the drain bolt, connect the fuel tube and turn the fuel valve OFF.



WARNING

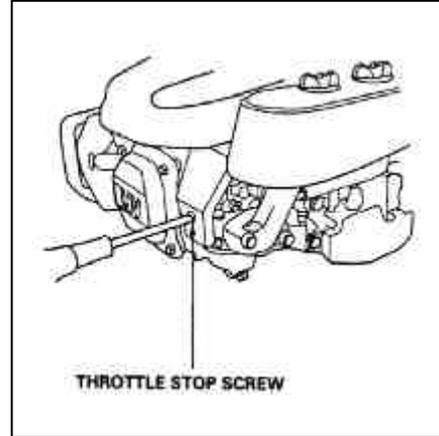
Gasoline is extremely flammable and is explosive under certain conditions.

Do not smoke or allow flames or sparks in the area.

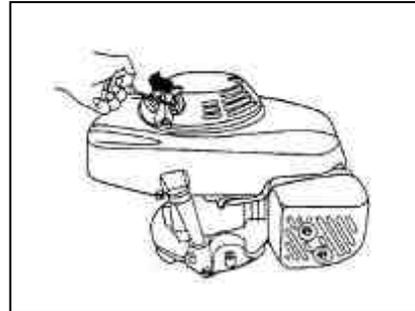
5. Carburetor idle speed adjustment

1. Start the engine and allow it to warm up to normal operating temperature.
2. With the engine idling, turn the throttle stop screw to obtain the standard idle speed.

Standard idle speed: $1,700 \pm 150$ rpm.



3. Change the engine oil (page 14).
4. Pull the starter rope until it becomes hard to pull. This closes the valves, and protects them from dust and corrosion.



5. Coat areas that may rust with a light film of oil. Cover the engine and store it on a level surface in a dry dust free area.

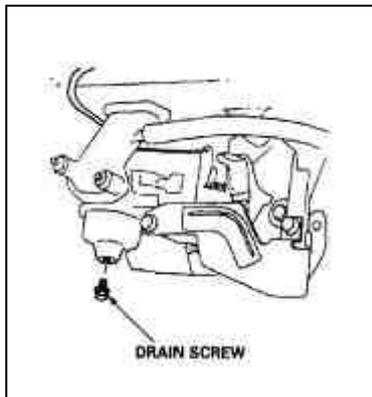
8 TROUBLESHOOTING

When the engine will not start:

1. Is the fuel valve ON?
2. Is there fuel in the fuel tank?
3. Is gasoline reaching the carburetor?
To check, loosen the drain screw (optional) with the fuel valve ON.

WARNING

If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. Spilled fuel or fuel vapor may ignite.



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4. Is there enough oil the crankcase?
5. Is the engine switch ON(CHOKE,SLOW,FAST)?
6. Is there a spark at spark plug?
 - a. Remove the spark plug cap. Clean any dirt from around the spark plug base. then remove the spark plug.
 - b. Install the spark plug in the plug cap.
 - c. Turn the engine switch ON.
 - d. Grounding the side electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap.
 - e. If there is no spark ,replace the plug.
If OK, reinstall the spark plug and try to start the engine again according to the instructions.
7. If the engine still does not start, take the engine to an authorized dealer.

Engine will not start, using electric starter:

1. Are the battery cables securely connected and free of corrosion?
2. Is the battery fully charged?

NOTE:

If the engine does not charge the battery. check the circuit breaker.

If the starter motor operates, but the engine will not start. follow the trouble shooting procedure described under recoil starter operation.

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9 TROUBLESHOOTING

| | |
|------------|------------------|
| Dimensions | |
| Length | 420mm(16.5 in) |
| Width | 365mm(14.4 in) |
| Height | 355mm(14.0 in) |
| Dry weight | 15.5kg(34.2 lbs) |

Engine

| | |
|--------------------|-----------------------------------|
| Engine type | 4-stroke,overhead valve,1cylinder |
| Displacement | 163cm ³ (9.9 cu-in) |
| Bore*stroke | 68.0*45.0mm(2.7*1.8 in) |
| Max output | 4.0kw/3,600rpm |
| Max .torque | 1.1kg-m(7.9ft-lb)/2,500rpm |
| Fuel consumption | 340g/psh(12.0 oz) |
| Cooling system | Forced air |
| Ignition system | Transistor magneto |
| PTO shaft rotation | Counterclockwise |

NOTE:

Specifications may vary according to the types and are subject to change without notice.

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