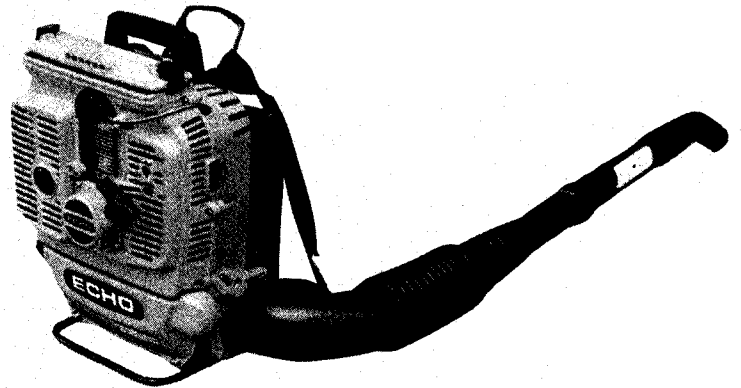


ECHO[®]



OPERATOR'S MANUAL

ECHO POWER BLOWER PB-4500

CAUTION

Read Rules for Safe Operation
and Instructions Carefully



898 560-0426 0

IMPORTANT

RULES FOR SAFE OPERATION

1. Handle gasoline with care. It is highly inflammable.
 - Refuel before starting work.
 - Do not smoke while handling fuel.
 - Do not refuel a hot engine.
 - Avoid spilling fuel or oil. Always wipe unit dry before using.
 - Move at least 3meters (10 feet) away from the fueling point before starting engine.
 - Always store gasoline in approved container.
2. Do not operate in unventilated area.
3. Do not allow bystanders in work area.
4. Do not point the blower pipe in the direction of people.
5. Always wear safety glasses.
6. Always wear ear protectors wherever possible.
7. Avoid wearing loose clothing or loose scarf.
8. Always use a face filter mask to avoid breathing dust.
9. Do not block blower pipe in order to avoid engine damage due to over revolution.

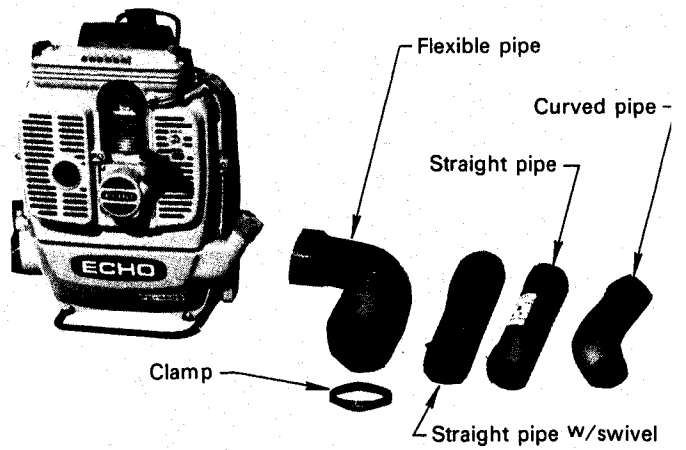
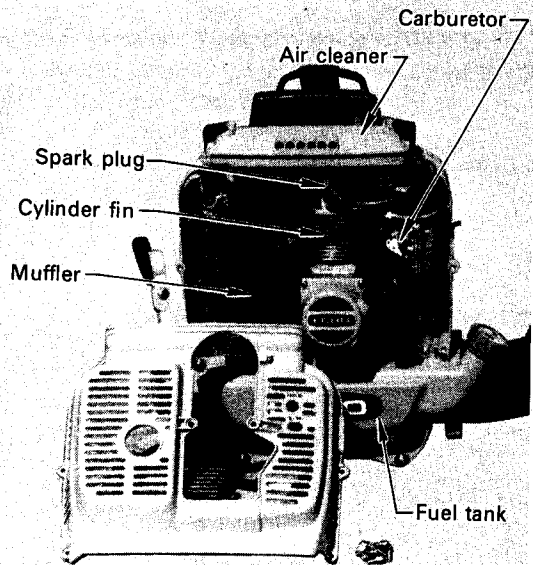
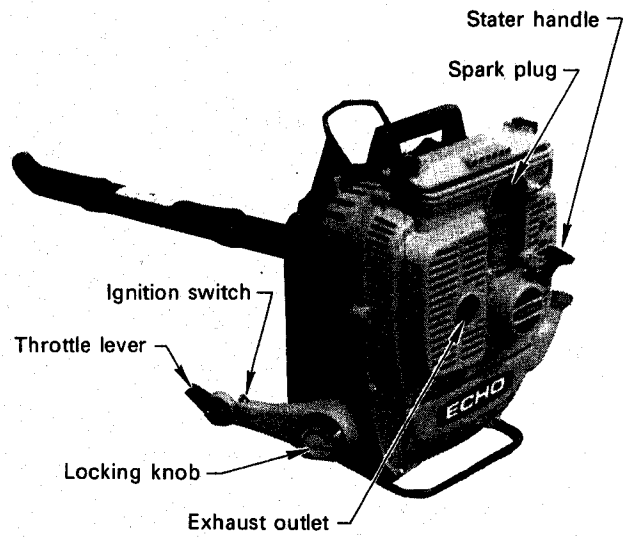
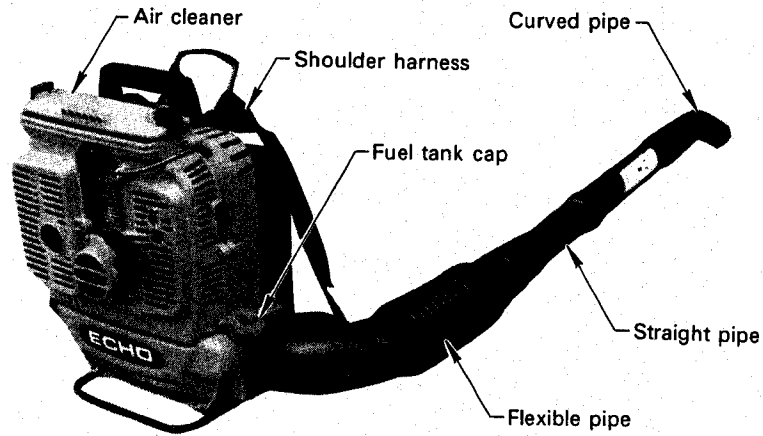
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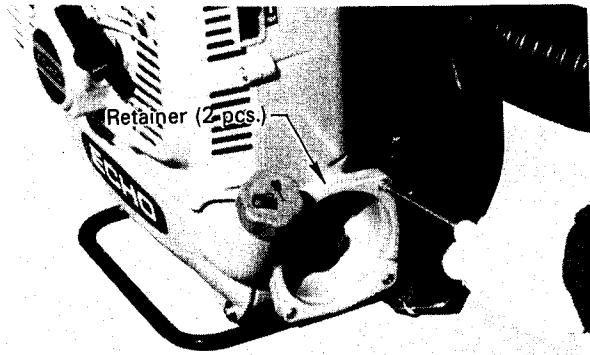
TECHNICAL DATA

Dimension	L x W x H	cm (in.)	35.2 x 42.6 x 46.6 (13.9 x 16.8 x 18.4)
Weight		kg (lbs)	9 (19.8)
Engine	Type Displacement Carburetor Ignition Spark plug Starter	cc (cu.in.)	Air cooled 2 cycle single cylinder 43.9 (2.68) Walbro diaphragm type WA Flywheel magneto: CDI (Capacitor Discharge Ignition) System NGK BPM-7A or CHAMPION CJ-6Y Recoil starter
Fuel	Mixing ratio Tank capacity	litre (FL.OZ.US)	Mixture of regular gasoline and air cooled two stroke engine oil. (25:1 Ratio or 32:1 Ratio with special oil approved by ECHO) 1.5 (50.7)
Blower	Air speed (Max.) Air volume (Max.)	m/sec (MPH) m ³ /min (Cu.ft./min)	80 (180) 11 (388)

* Technical data subject to change without notice.

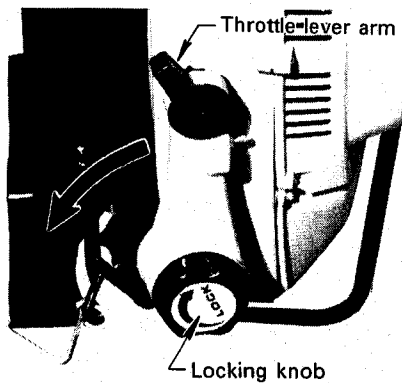
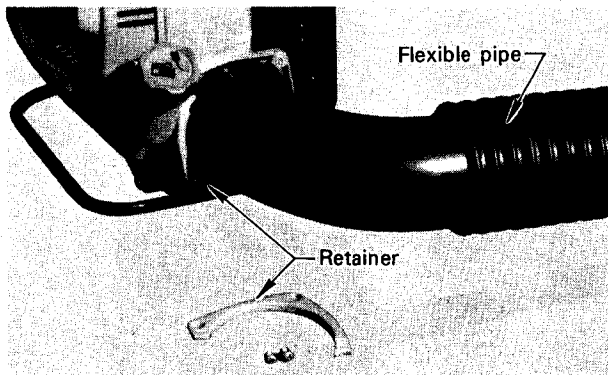


ASSEMBLING



FLEXIBLE PIPE AND BLOWING PIPES

- Remove both retainers from the outlet of fan casing.
- Set the flexible pipe (elbow part) to the outlet of fan casing and fix the pipe using both retainers. (Four screws)
- Assemble straight pipe (with swivel) and flexible pipe. Tighten clamp at top end of the flexible pipe.
- Connect both straight pipes and curved pipe.
- Rotate the curved pipe in a convenient angle for effective blowing operation.
- Shoulder harness is adjustable to fit any operator. Adjust the length of strap for easier operation.



THROTTLE LEVER ARM

- Turn the throttle lever arm forward as shown.
- Tighten the arm locking knob by turning clockwise.



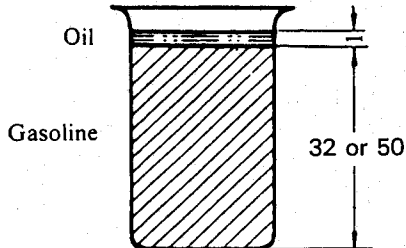
OPERATION

CHECK UP OF NUTS AND OTHER HARDWARES

- Check for loose nuts, bolts and screws before using the unit every day.

FUEL

- Fuel used for this model is a mixture of regular grade gasoline and ECHO brand motor oil or an aircooled two stroke engine oil of a reputable brand name.



- Mixture ratio is Gasoline 32 parts: Oil 1 part.

— Fuel mixture at a ratio other than 32 : 1 may cause malfunction of the engine.

(NOTE)

50 : 1 Ratio is applicable with special oil approved by ECHO.

- Pour 1/2 gasoline into safe container, add oil and mix thoroughly.
- Now add the remainder of gasoline and mix again.
- Do not use motor oil other than that recommended above.
- Do not mix directly in engine fuel tank.

- After refuel to tank, secure filler cap and wipe all spilled fuel with a dry cloth.

Fuel mix chart

(32 : 1)				(50 : 1)			
US		METRIC		US		METRIC	
GAS	OIL	GAS	OIL	GAL	OIL	GAS	OIL
GAL.	FL. OZ.	LITERS	CC	GAL.	FL. OZ.	LITERS	CC
1	4.0	4	125	1	2.6	4	80
2	8.0	8	250	2	5.1	8	160
5	20.0	20	625	5	12.8	20	400

STARTING COLD ENGINE

- Stand engine upright on a level surface.
- Ignition switch to STAR/RUN position.
- Turn choke lever to COLD START (close) position. (Pull upward)
- Open throttle lever to a fast idle.
- Pull recoil starter until engine fires.
- Turn choke lever to full RUN (open) position (Push down), and if necessary, start engine again and allow to warm up before using.

Normal Use

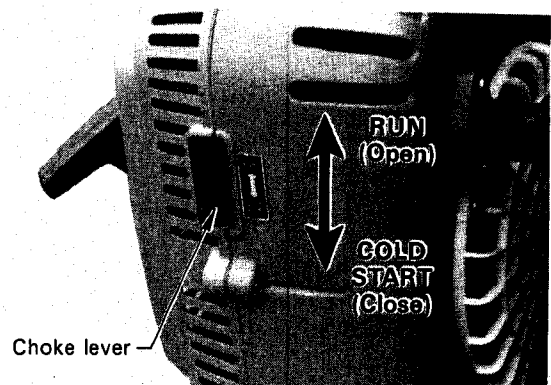
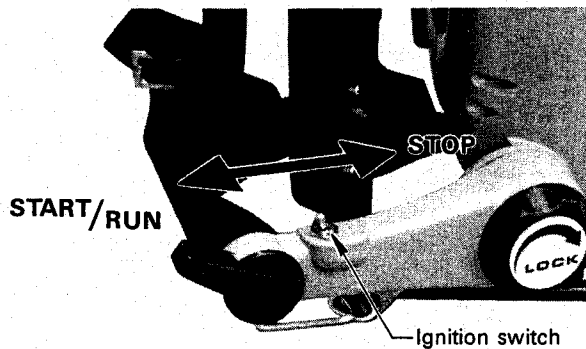
Leaded Fuel, Regular Grade

Alternate or Emergency Use

Unleaded Fuels—Min. Octane 87 $\left(\frac{M+R}{2}\right)$
Do not Use Gasohol

(Caution)

Recoil starter: Use short pulls—only 1/2–2/3 of the starter rope for starting.



STARTING WARM ENGINE

- Ignition switch to "start/run" position.
- Pull starter handle until engine fires.
 - Do not use the choke.

STOPPING ENGINE

- Lower throttle lever and allow engine to cool at an idle for a few minutes.
- Ignition switch to "stop" position.

(Note) When engine does not stop, shift choke knob to close position.

Check and repair switch before starting engine again.

OPERATING BLOWER

- Allow the engine to warm up at a fast idle for a few minutes.
- ECHO PB-4500 can be run at any speed between an idle of
- ECHO PB-4500 can be run at any speed between an idle of 2300–2700 RPM and maximum load speed of 6800 RPM. The velocity of the air stream can therefore readily be controlled from a gentle breeze to a high speed blast moving at approximately 180 MPH (80m/sec) which will move debris ranging from garden leaves to bottles and be accumulated in sports stadiums.
 - Use a low speed to blow dry leaves from a lawn or flower bed.
 - Use a medium to high speed to clean grass and leaves from walks, patios and drives.
 - Use a high speed to move gravel, dirt, snow, bottles or cans from a driveway, street, parking lot, or stadium.

(Caution)

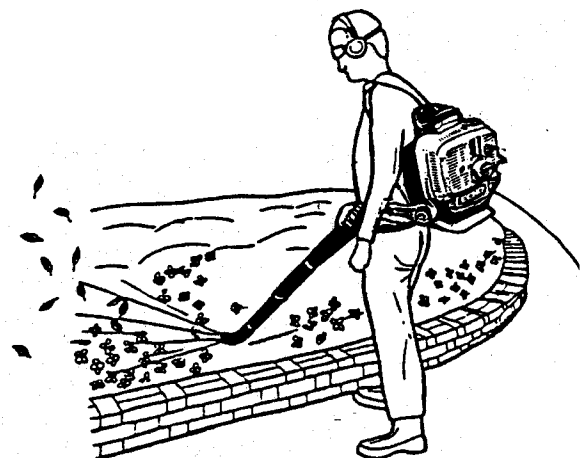
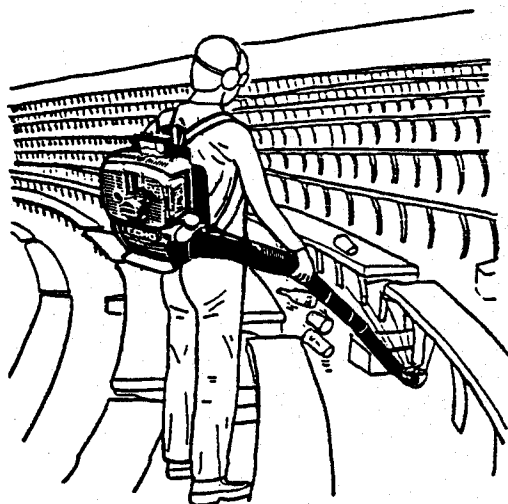
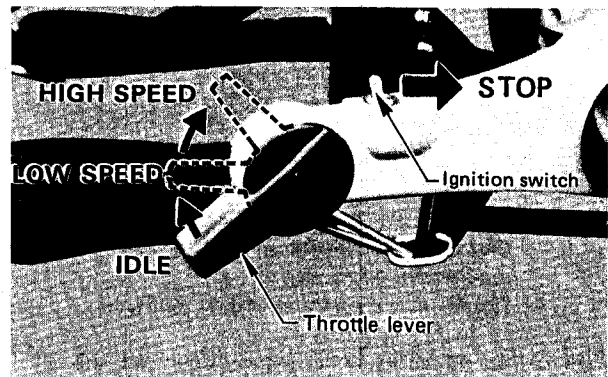
Do not point the blower pipe in the direction of people or pets.

Always wear safety glasses and use a face filter mask.

Read carefully "Rules for safe operation" on page 1.

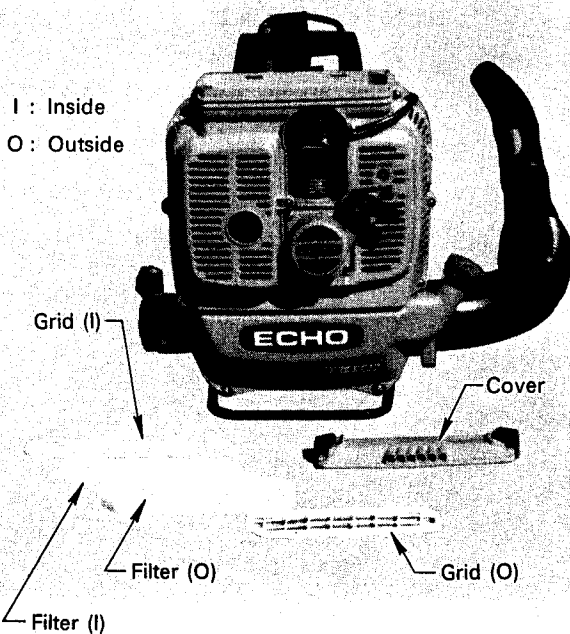
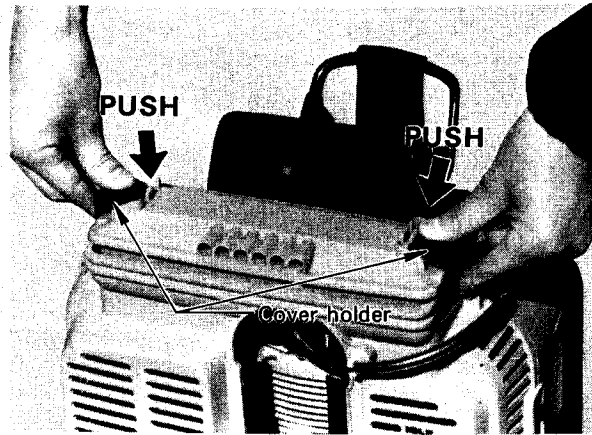


HOLD THE MACHINE FIRMLY



MAINTENANCE AND CARE

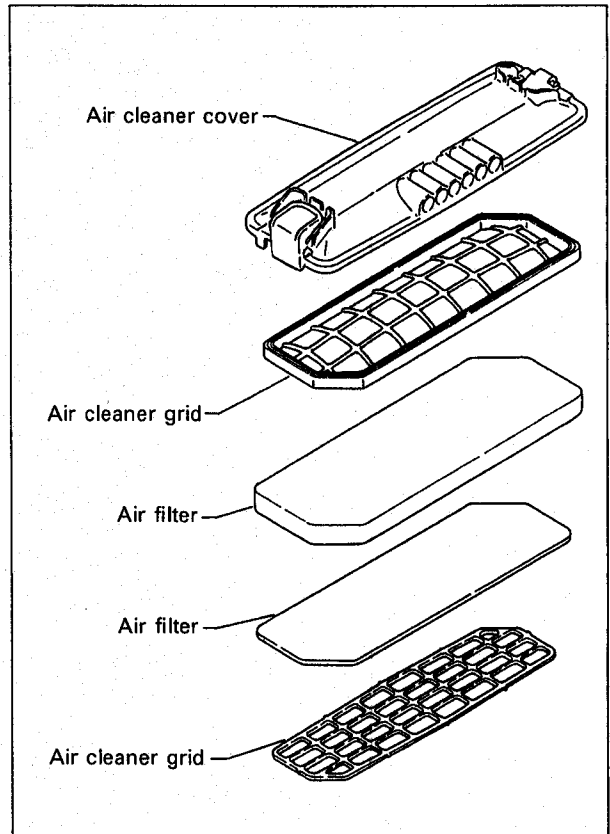
AIR FILTER



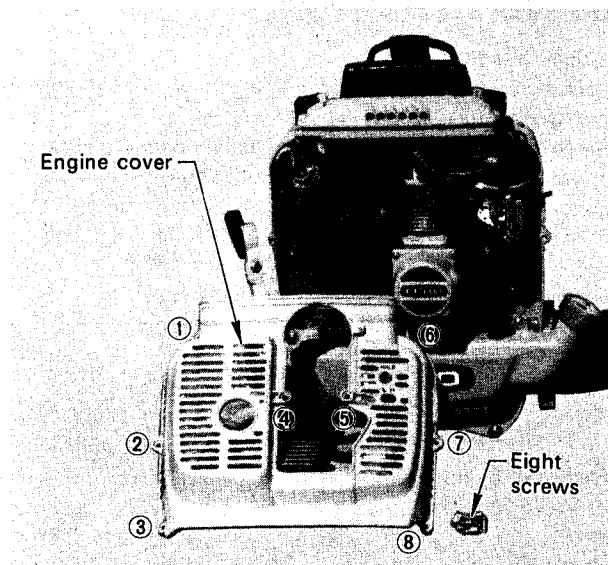
ALWAYS KEEP CLEAN THE MACHINE

- Clean daily in use.
- Take out air cleaner cover (Push both cover holder) and pull out grids and air filters.
- Brush off dust lightly or wash it in suitable cleaning fluid.
- When you wash it in gasoline, dry completely before put it back in place.

Refer to following illustration

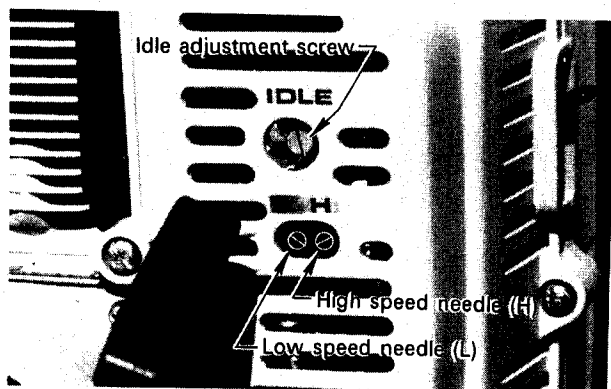


REMOVING ENGINE COVER



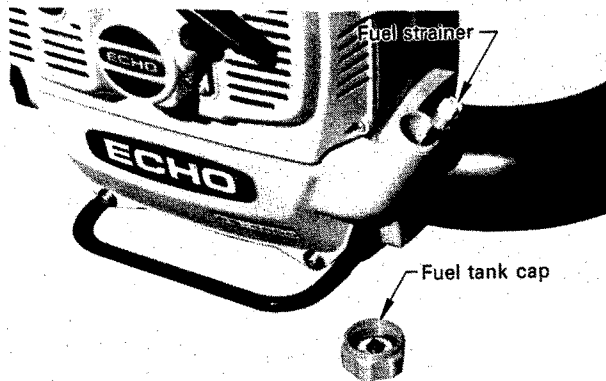
- To clean inside of the engine cover, remove eight screws* and take out the cover.
- * indicated eight points in photo.

CARBURETOR



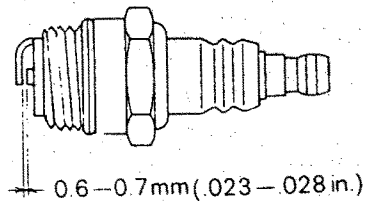
- Do not adjust carburetor unless necessary.
- To adjust carburetor, proceed as follows:
 - Low speed needle: $1 \pm 1/4$
 - High speed needle: $1 \pm 1/4$
 - Turn the corresponding needle clockwise until lightly seated and return the screw by the number of turns indicated above.
- Idle adjustment: (2300–2700 rpm)
Adjust idle speed to a smooth and consistent minimum.
- If you have trouble with carburetor, see your distributor/ dealer.

FUEL STRAINER



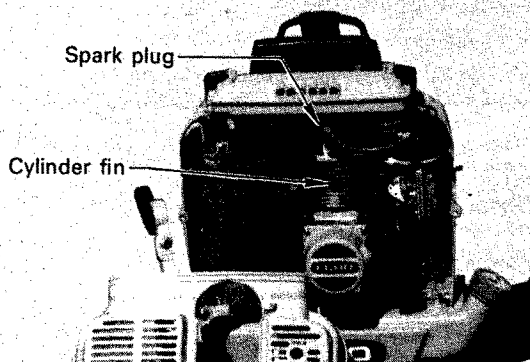
- Check periodically.
 - Do not allow dust to enter into fuel tank.
 - Clogged strainer will cause difficulty in starting engine or abnormalities in engine performances.
 - Always keep clean inside of the fuel tank.

SPARK PLUG



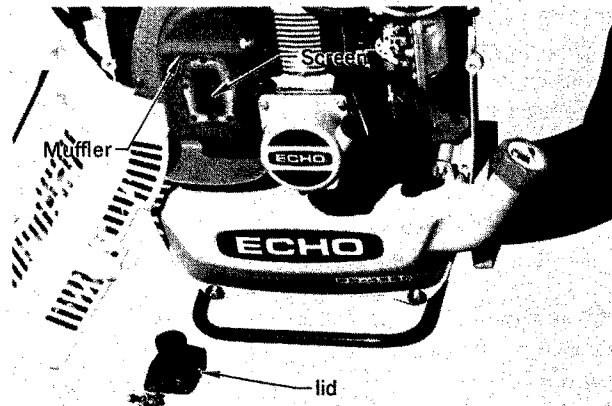
- Check periodically.
 - The standard spark gap is 0.6–0.7 mm (0.023–0.028 in.).
 - Correct spark gap if it is wider or narrower than the standard gap.
 - When it is deposited with carbon or stained, clean it before fitting to engine.
- Fastening torque = 145–155 kg.cm (125–135 in.lb).
(Caution) Do not over tighten plug.

CYLINDER FINS

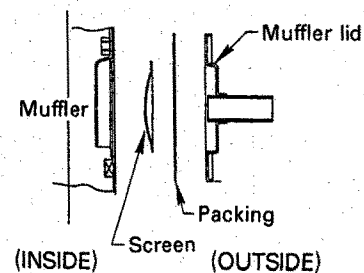


- Check periodically.
 - Clogged fins result in poor engine cooling.
 - Clean passage of air between cylinder fins to let cooling air pass easily.

MUFFLER AND EXHAUST PORT



- Carbon deposits in cylinder exhaust port and muffler will cause drop of engine output and sparking from muffler.
 - Muffler can be removed by taking off muffler cover.
 - Be careful not to scratch cylinder or piston when cleaning cylinder exhaust port.
- When screen removed, install as follows.



TROUBLE SHOOTING

Poor performance of the engine and/or blowing mechanism can normally be prevented by carefully following instructions.

Poor performances can easily be corrected even by a beginner.

When the engine does not function properly check the following three (3) points first.

- Is engine compression adequate?
- Is fuel system in good condition and is enough fuel being supplied?
- Is electrical system in good condition and is spark plug operating normally?

When there is serious trouble with the unit, do not try to repair it yourself but have your distributor or dealer do it for you. For detailed **TROUBLE SHOOTING** refer to tables 1 and 2. Locate the problem on the following charts and repair as necessary.

Table 1

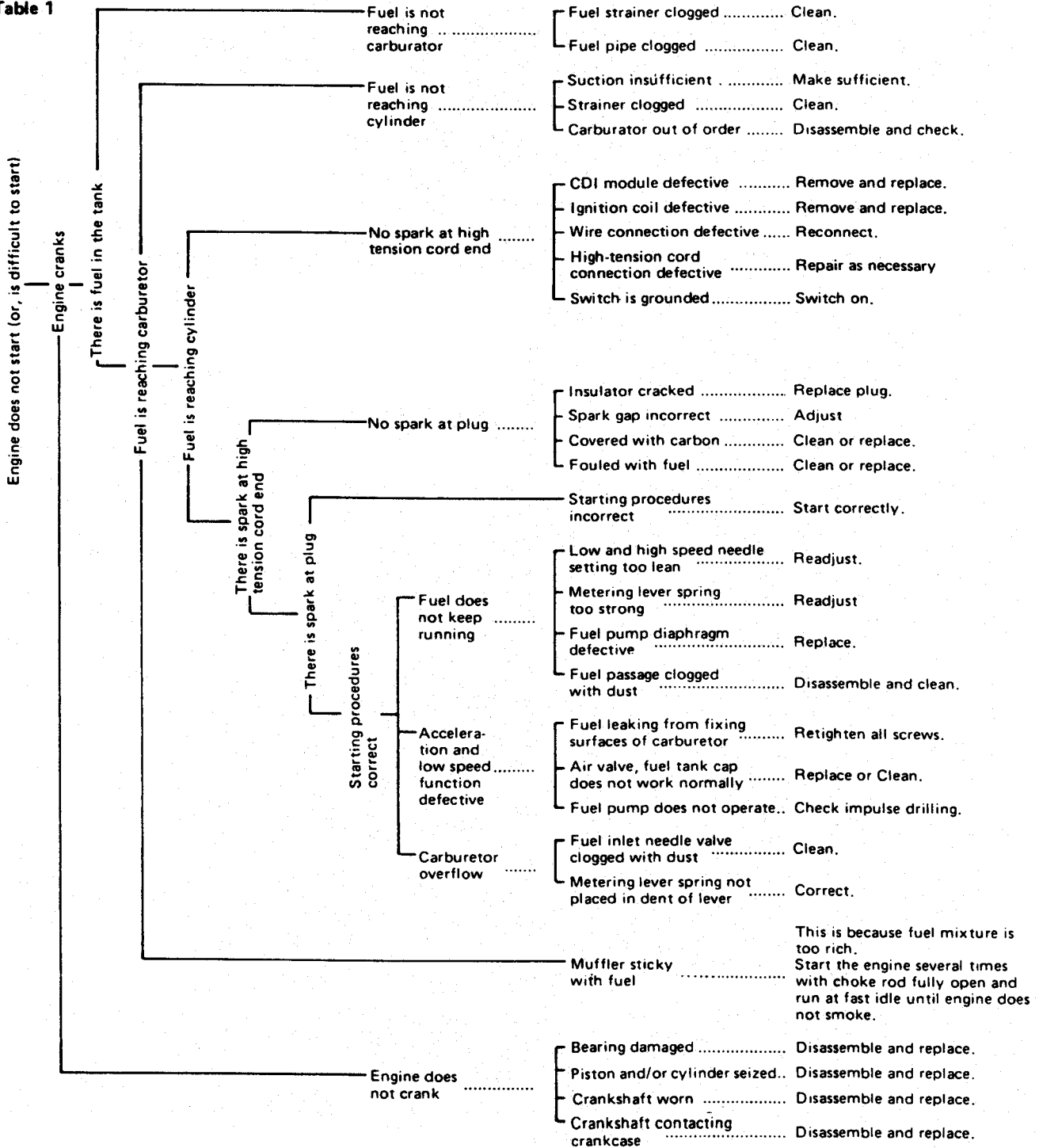
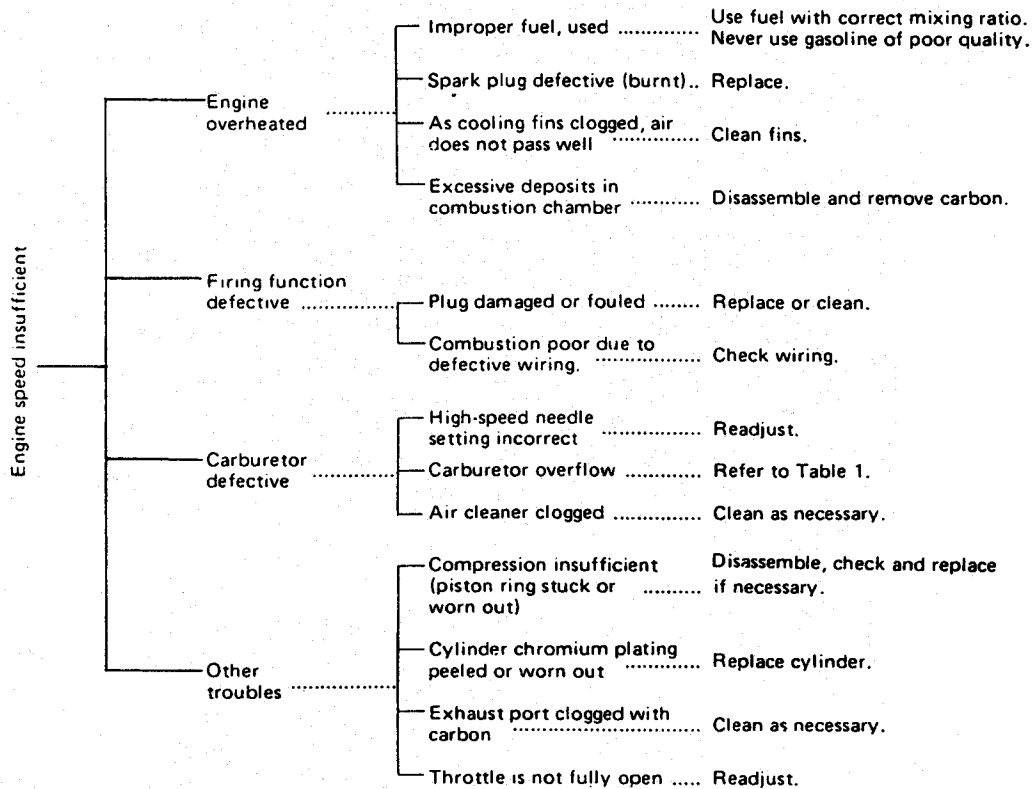


Table 2



STORAGE AFTER USE

- Inspect and adjust every part of the unit.
 - Completely clean every part, and repair, if necessary.
 - Apply thin coating of clean oil on metal parts to prevent rust.
 - Remove flexible and other pipes from the unit.
- Drain fuel tank, pull starter handle slowly a few times to drain fuel from carburetor.
- Pour a little amount of clean motor oil into spark plug hole of cylinder, pull starter handle and then manually crank engine until the TOP DEAD CENTER.
- Store in a dry area, free from dust.

OPTIONAL DEVICE: PBAM-300

For your pest control jobs, misting attachment is available as optional device.

Please require to your ECHO dealer as PBAM-300.

Chemical tank, Hose and Misting nozzle etc. are contained in the Kit.

You can easily set these parts for misting blower by removing the cover (with grip) on the unit.

