

OPERATOR'S MANUAL ECHO POWER BLOWER PB-200



CAUTION

Read Rules for Safe Operation and Instructions Carefully

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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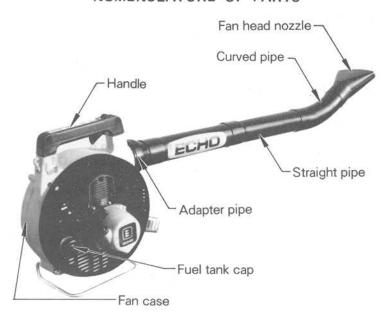
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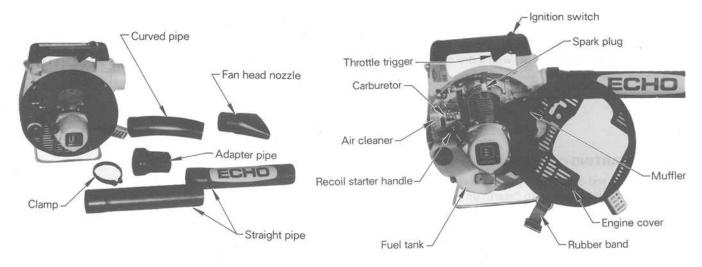
TECHNICAL DATA

Dimension	LxWxH	cm (in.)	20.8 × 28.2 × 35.5 (8.2 × 11.1 × 14.0)
Weight		kg (lbs)	4.4 (9.7)
Engine	Type Displacement Carburetor Ignition Spark plug Starter	cc (cu.in.)	Air cooled 2 cycle single cylinder 21.2 (1.29) Walbro diaphragm type WA Flywheel magneto: contact breaker point system NGK BM-6A or CHAMPION CJ-8 Recoil starter
Fuel	Mixing ratio Tank capacity litre (FL.OZ.US)		Mixture of regular gasoline and air cooled two stroke engine oil. (32:1 Ratio or 50:1 Ratio with special oil approved by ECHO 0.4 (13.5)
Blower	Air speed (Max.) Air volume (Max.)	m/sec (MPH) m ³ /min (Cu.ft./min)	60 (135) 8 (280)

^{*} Technical data subject to change without notice.

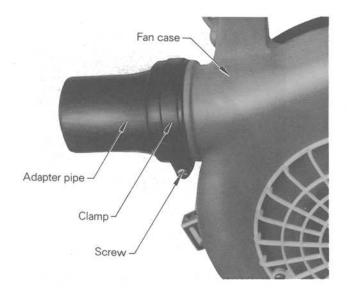
NOMENCLATURE OF PARTS





ASSEMBLING

- Assemble adapter pipe to the blower (Fan case) and tighten clamp as shown.
- Assemble both straight pipes to adapter pipe.
- Assemble curved pipe and fan head nozzle to the straight pipe
- Rotate the curved pipe to a convenient angle for operation.



OPERATION

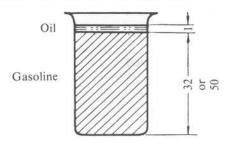
CHECK UP OF NUTS AND OTHER HARDWARES

• Check up 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.

(32:1)



- 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)

32:1 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 took seems filler as any

Fuel mix chart

(50 : 1)

0	After	refuel	to	tank,	secure	filler	cap	and
	wipe a	all spille	ed f	uel wit	h a drv	cloth		

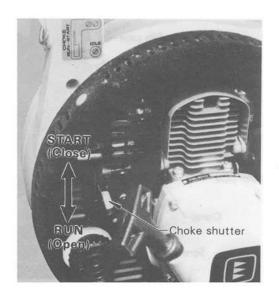
US		METRIC		US		METRIC	
GAS	OIL	GAS	OIL	GAL	OIL	GAS	OIL
GAL	FL OZ.	LITERS	CC	GAL.	FL.OZ.	LITERS	СС
1	4.0	4	125	1	2.6	4	80
2	8.0	8	250	2	5.1	8	160
5	20.0	20	625	5	12.8	20	400

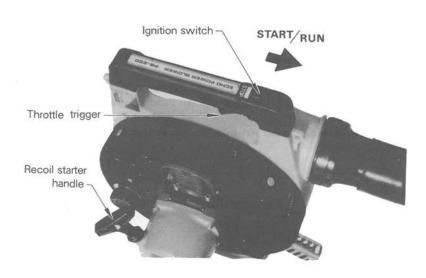
STARTING COLD ENGINE

- Stand engine upright on a level surface.
- Ignition switch to "start/run" position.
- Turn choke shutter to START (close) position. (Towards the flexible pipe)
- Open throttle trigger to a fast idle. (Squeeze it slightly)
- Pull recoil starter until engine fires.
- Turn choke shutter to full RUN (open) position, and if necessary, start engine again and allow to warm up before using.

(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.

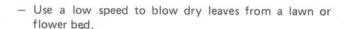
STOPPING ENGINE

- Release throttle trigger 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 shutter 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-200 can be run at any speed between an idle of 2300–2700 RPM and maximum load speed of 7500 RPM. The velocity of the air stream can therefore readily be controlled from a gentle breeze to a high speed blast moving at approximately 103 MPH (46 m/sec) which will move debris ranging from garden leaves to bottles and can accumulated in sports stadiums.



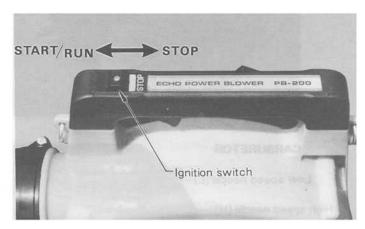
- Use a medium to high speed to clean grass and leaves from walks, patios and drives.
- Use a high speed to move gravel, dirt, snow, bottles or cans from a driveway, street, parking lot, or stadium.

(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.







MAINTENANCE AND CARE

REMOVING ENGINE COVER



CARBURETOR

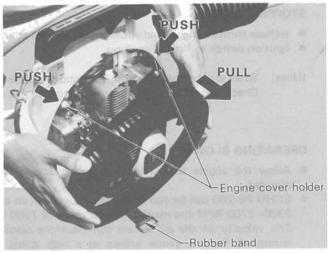
Low speed needle (L)

High speed needle (H)

Idle adjust needle

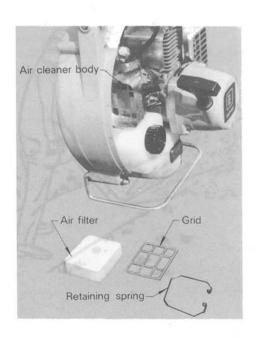
(Remove engine cover to clean air filter, spark plug and muffler.)

- Unfasten rubber band at bottom of machine.
- Pull out engine cover, pushing two holders as shown.



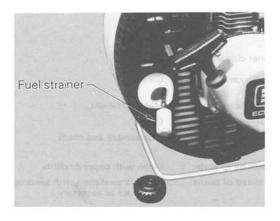
- Do not adjust carburetor unless necessary.
- To adjust carburetor, proceed as follows:
 - Low speed needle: 7/8 1-3/8
 - − High speed needle: 7/8 − 1-3/8
 - Turn the corresponding needle clockwise until lightly seated and return the screw by the number of turns indicated above.
- Idle adjustment: (2300-2700 rpm)
 - Adjust idle speed to a smooth and consistent minimum.
- If you have trouble with carburetor, see your distributor/ dealer.

AIR FILTER



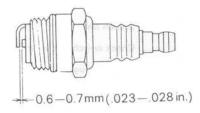
- · Clean every day.
 - Take out retaining spring and pull up grid and air filter to clean.
 - Brush off dust lightly or wash it in gasoline.
 - When you wash it in gasoline, dry completely before put it back in place

FUEL STRAINER

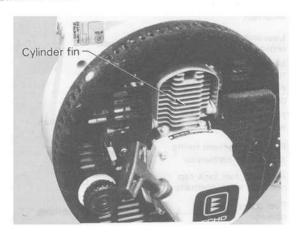


- · Check periodically.
 - Do not allow dust to enter into fuel tank.
 - Clogged strainer will cause difficulty in starting engine or abnormalities in engine performances.
 - Pick up fuel strainer carefully through fuel inlet port with a piece of steel wire or the like.
 - When strainer is dirty, wash it in gasoline.

SPARK PLUG



CYLINDER FINS



MUFFLER AND EXHAUST PORT

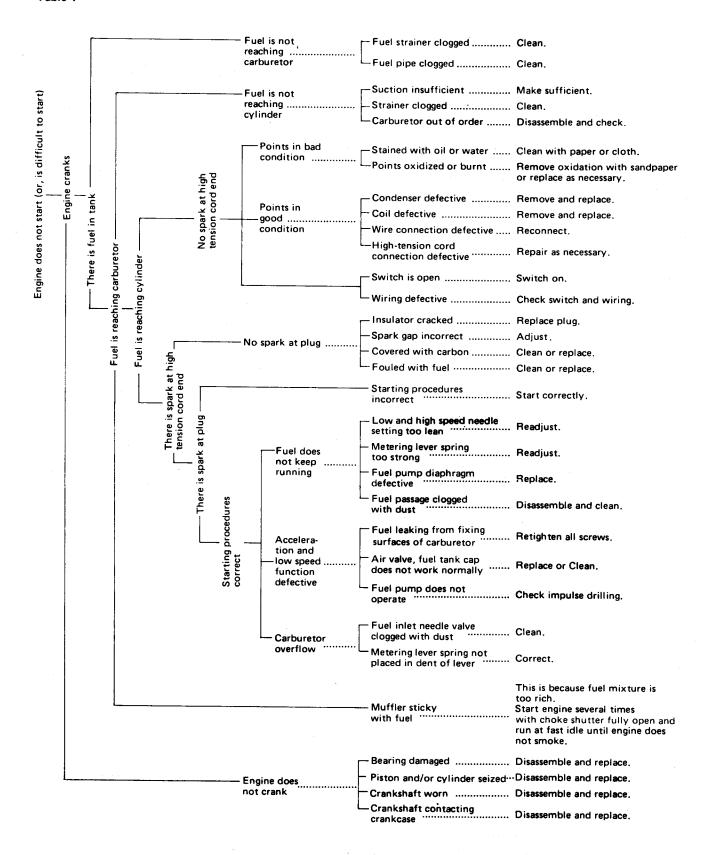
- Check periodically.
 - The standard spark gap is 0.6–0.7 mm (0.023– 0.028 in.).
 - Correct spark gap if it is wider or narrower than the standard gap.
 - When it is deposited with carbon or stained, clean it before fitting to engine.
- Fastening torque = 145-155 kg.cm (125-135 in.lb).
 (Caution) Do not over tighten plug.
- · Check periodically.
 - Clogged fins result in poor engine cooling.
 - Clean passage of air between cylinder fins to let cooling air pass easily.

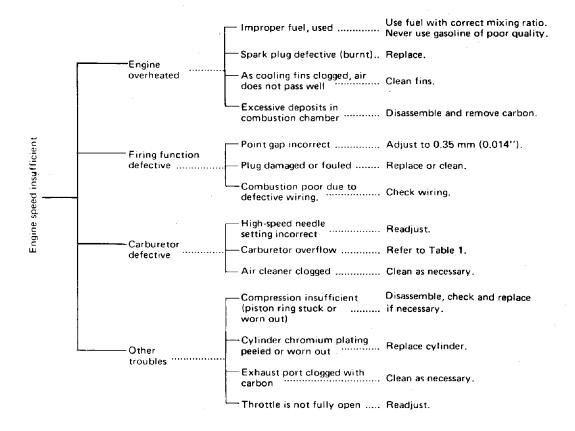
- Carbon deposit in cylinder exhaust port and muffler will cause drop of engine output and sparking from muffler.
 - Muffler can be removed by taking off muffler cover.
 - Be careful not to scratch cylinder or piston when cleaning cylinder exhaust port.

TROUBLE SHOOTING

- FAILURES such as difficulty in starting engine, irregularity in functions and abnormality in blowing performances
 can normally be prevented completely if a little attention is paid in advance.
- Such failures can be readily disposed of even by a beginner.
- When engine does not function properly, check following 3 points systematically in particular:
 - Whether compression of engine is adequate or not.
 - Whether fuel system is in good condition and fuel is supplied fluently, or not.
 - Whether electrical system is in good condition and spark plug sparks correctly, or not.
- When there is serious trouble with the unit, do not try to repair by yourself, but have your distributor or dealer do it for you.
- Details of TROUBLE SHOOTING refer to Table 1 and 2.
 - Refer to chart to locate the problem and repair as necessary.

Table 1





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.