

2

OPTIONAL ACCESSORIES

EXHAUST HOSE KIT
P/N 400448. 5' (127mm) x 10' (3.05m). *For blowing debris out of hard-to-reach areas, around buildings and shrubbery .*

GUST ADJUSTER KIT P/N 400615. *Increases blowing distance and blowing control.*

CREVICE CLEANER KIT P/N 400620. *Cleans out cracks and crevices.*

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*Thank You for Selecting
The Powerful QUIET BLOW® BLOWER*

Operator Owner's Manual

For Models:
QB501CE

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Specifications

UNIT SIZE: OVERALL LENGTH: 51.75"(1.31m) OVERALL WIDTH 28.5" (0.72m) OVERALL HEIGHT 39" (0.99m)

IN THE INTEREST OF SAFETY



BEFORE STARTING ENGINE, READ AND UNDERSTAND THE "ENTIRE OPERATOR'S MANUAL & ENGINE MANUAL."

THIS SYMBOL MEANS WARNING OR CAUTION. DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE MAY OCCUR UNLESS INSTRUCTIONS ARE FOLLOWED CAREFULLY.



WARNING: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING: DO NOT

1. **DO NOT** run engine in an enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.
2. **DO NOT** place hands or feet near moving or rotating parts.
3. **DO NOT** store, spill or use gasoline near an open flame, or devices such as a stove, furnace, or water heater which use a pilot light or devices which can create a spark.
4. **DO NOT** refuel indoors where area is not well ventilated. Outdoor refueling is recommended.
5. **DO NOT** fill fuel tank while engine is running. Allow engine to cool for 2 minutes before refueling. Store fuel in approved safety containers.
6. **DO NOT** remove fuel tank cap while engine is running.
7. **DO NOT** operate engine when smell of gasoline is present or other explosive conditions exist.
8. **DO NOT** operate engine if gasoline is spilled. Move machine away from the spill and avoid creating any ignition until the gasoline has evaporated.
9. **DO NOT** transport unit with fuel in tank.
10. **DO NOT** smoke when filling fuel tank.
11. **DO NOT** choke carburetor to stop engine. Whenever possible, gradually reduce engine speed before stopping.
12. **DO NOT** run engine at excessive speeds. This may result in injury & /or damage to unit.

13. **DO NOT** tamper with governor springs, governor links or other parts which may change the governed engine speed.

14. **DO NOT** tamper with the engine speed selected by the engine manufacturer.

15. **DO NOT** check for spark with spark plug or spark plug wire removed. Use an approved tester.

16. **DO NOT** crank engine with spark plug removed. If engine is flooded, place throttle in "FAST" position and crank until engine starts.

17. **DO NOT** strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation. Use proper tools to service engine.

18. **DO NOT** operate engine without a muffler. Inspect periodically and replace, if necessary. If engine is equipped with muffler deflector, inspect periodically and replace, if necessary, with correct deflector.

19. **DO NOT** operate engine with an accumulation of grass, leaves, dirt or other combustible material in the muffler area.

20. **DO NOT** use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on the muffler. The arrester must be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

21. **DO NOT** touch hot muffler, cylinder, or fins because contact may cause burns.

22. **DO NOT** run engine without air cleaner or air cleaner cover.

23. **DO NOT** operate during excessive vibration!

24. **DO NOT** leave machine unattended while in operation.

25. **DO NOT** park machine on a steep grade or slope.

WARNING: DO



1. **ALWAYS DO** remove the wire from the spark plug when servicing the engine or equipment TO PREVENT ACCIDENTAL STARTING.

2. **DO** keep cylinder fins and governor parts free of grass and other debris which can affect engine speed.

3. **DO** pull starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.

4. **DO** examine muffler periodically to be sure it is functioning effectively. A worn or leaking muffler should be repaired or replaced as necessary.

5. **DO** use fresh gasoline. Stale fuel can gum carburetor and cause leakage.

6. **DO** check fuel lines and fittings frequently for cracks or leaks. Replace if necessary.

7. **Follow** engine manufacturer operating and maintenance instructions.

8. **Inspect** machine and work area before starting unit.

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Part No. 400988

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SOUND

SOUND TESTS

Sound tests conducted were in accordance with 79/113/EEC and were performed on 05/31/95 under the conditions listed:

GENERAL CONDITION: Cloudy

TEMPERATURE: 64° F (17.7° C)

WIND SPEED: 8 MPH (12.8 kmh)

WIND DIRECTION: East

HUMIDITY: 81%

3 L_{pA}
91

OPERATOR BAROMETRIC PRESSURE: 30.05" Hg (763mm Hg)

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VIBRATION

VIBRATION LEVELS 2.2g

Vibration levels at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment. Tests were performed on 05/12/94 under the conditions listed:

GENERAL CONDITION: Cloudy

TEMPERATURE: 64° F (17.7° C)

WIND SPEED: 8 MPH (12.8 kmh)

WIND DIRECTION: East

HUMIDITY: 81%

BAROMETRIC PRESSURE: 30.05" Hg (763mm Hg)

GENERAL SAFETY

For your safety and the safety of others, these directions should be followed:



Do not operate this machine without first reading owner's manual and engine manufacturer's manual.



Use of Ear Protection is recommended while operating this machine.



Use of Eye and breathing protection is recommended when using this machine, especially in dry and dusty conditions.

- DO NOT place hands or feet inside air intake opening, near exhaust outlet or near any moving parts.
- DO NOT start engine without deflector attached to exhaust outlet.

- DO NOT direct exhaust outlet toward any bystanders.
- DO NOT operate this equipment without first inspecting work area.
- DO NOT operate this equipment during excessive vibration.
- DO NOT start engine without housing front plate attached.
- DO NOT operate this machine on slopes greater than 20%.
- DO NOT blow any hot or burning debris, or any toxic or explosive material.
- DO NOT allow children to operate this equipment.

ASSEMBLY



Read all safety and operating instructions before assembling or starting this unit.



PUT OIL IN ENGINE BEFORE STARTING

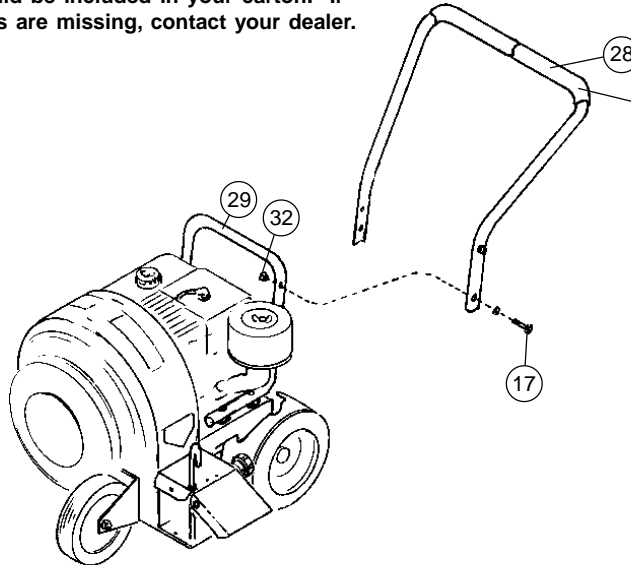
Your Billy Goat is shipped from the factory in one carton, completely assembled except for the upper handle assembly.

1. Install upper handle (Item 28), to preassembled lower handle (item 29), using two screws (Item 17), and two nut locks, (Item 32). Securely tighten all fasteners.
2. Connect spark plug wire.

NOTE: Front wheel bracket (Item 27), can be inverted to provide a 0.5" (12.7 mm) height adjustment.

PACKING CHECKLIST

These items should be included in your carton. If any of these parts are missing, contact your dealer.



Boxing Checklist

Check

Handle Upper Assembly
400957

Per Model

Check

Literature Assy
400565B

Literature Assy

Per Model

Check

Briggs & Stratton 5 HP
P/N MS9249
Multi-Language

Engine Manual

12 LITERATURE ASSY P/N 400565B

	Literature Checklist
Owner's Manual	<input type="checkbox"/> Check Owner's Manual 400988
Literature QB Accessories	<input type="checkbox"/> Check Literature QB Accessories 400908
Warranty Card	<input type="checkbox"/> Check Warranty Card 400972
EU Declaration of Conformity	<input type="checkbox"/> Check EU Declaration of Conformity 400989
EU Distributor List	<input type="checkbox"/> Check EU Distributor List 900774

13 CONTROLS

Throttle Control- (On Engine)

Set lever to choke position when starting a cold engine

Set lever to desired engine speed. Move lever completely to the left to stop engine

14 INSTRUCTION LABELS

These labels should be included on your Blower. If any of these labels are damaged, replace them before putting this equipment into operation. Item and part numbers are given to help in ordering replacement labels.

Label Do Not Fill While Engine Is Hot
Item 11 Part No.400268

Label Read Owner's Manual
Item No. 59 Part No. 890301

Label Danger Keep Hands and Feet Away
Item 41 Part No.400424

Label Danger Flying Material
Item No. 44 Part No. 810736

Label Ear Eye Breathing
Item No. 63 Part No. 890254

15 ENGINE LABELS

Briggs & Stratton

Read Owner's Manual Before Operating.
Lire le manuel d'utilisation avant la mise en route.
Vor Inbetriebnahme Bedienungs- und Wartungsanleitung lesen.
Favor leer las instrucciones de operaci3n antes de operar el motor.
Consultare il Manuale Uso e Manutenzione prima dell'utilizzo.
Läs Skötselinstruktionen Innan Start.

INTENDED USE: This machine is designed for cleaning outdoor surfaces, where the debris can be effectively blown into a consolidated area for convenient pickup and removal.

Do not operate if excessive vibration occurs. If excessive vibration occurs, shut engine off immediately and check for damaged or worn impeller, loose impeller bolt, loose impeller key, loose engine or lodged foreign objects. Note: See parts list for proper impeller bolt torque specifications. (See trouble shooting section on page 8).



Like all mechanical tools, reasonable care must be used when operating machine.

Inspect machine work area and machine before operating. Make sure that all operators of this equipment are trained in general machine use and safety.



PUT OIL IN ENGINE BEFORE STARTING

16.1

STARTING



ENGINE: See engine manufacturer's instructions for type and amount of oil and gasoline used.

Engine must be level when checking and filling oil and gasoline.

ENGINE SPEED: Controlled by throttle lever on the engine. Under normal conditions, operate at minimum throttle to accomplish your current cleaning task.

CHOKE: Operated with choke lever on face of engine .

THROTTLE: Move throttle control on face of engine to fast position. Pull starting rope to start engine.

IF YOUR UNIT FAILS TO START:

See Troubleshooting on page 8.

16.2

BLOWING OPERATION

Adjust diverter rod to side discharge for normal blowing or to forward discharge for blowing along walls, fences or hard-to-reach areas (see Fig. 1).

EXHAUST AIR DEFLECTOR ADJUSTMENT:

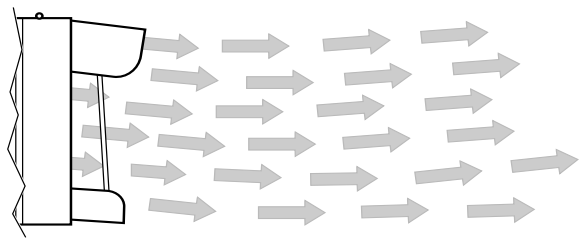


Fig. 2

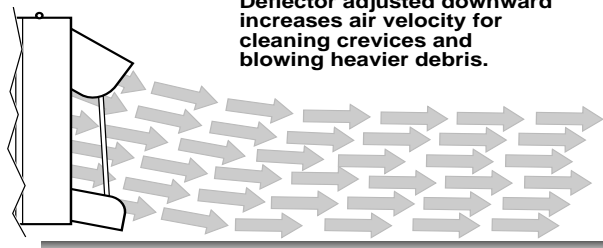


Fig. 3

Deflector adjusted downward increases air velocity for cleaning crevices and blowing heavier debris.

Optional Gust Adjuster gives operator remote deflector control increasing blowing control and distance (see Optional Accessories on page 1).

16.4

HANDLING & TRANSPORTING:

Using two people to lift machine is recommended. Lift holding the handle and frame. Secure in place during transport or when unattended.

16.5

STORAGE

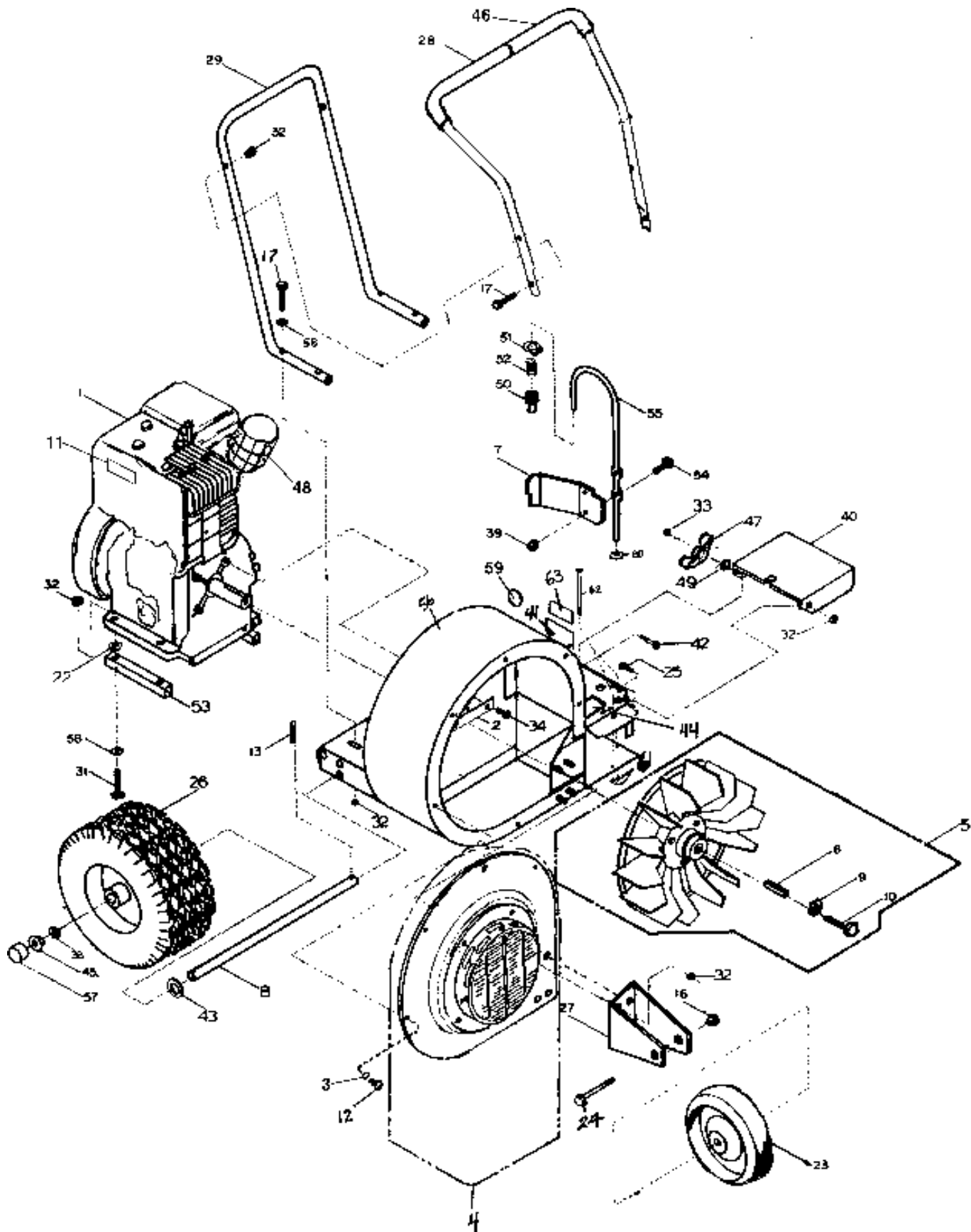


Never store engine indoors or in enclosed poorly ventilated areas with fuel in tank, where fuel fumes may reach an open flame, spark or pilot light, as on a furnace, water heater, clothes dryer or other gas appliance.

If engine is to be unused for 30 days or more, prepare as follows:

Remove all gasoline from carburetor and fuel tank to prevent gum deposits from forming on these parts and causing possible malfunction of engine. Drain fuel outdoors, into an approved container, away from open flame. Be sure engine is cool. Do not smoke. Run engine until fuel tank is empty and engine runs out of gasoline.

NOTE: Fuel stabilizer (such as Sta-Bil) is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow mix ratio found on stabilizer container. Run engine at least 10 min. after adding stabilizer to allow it to reach the carburetor.



18 **PARTS DRAWING**

QB501CE



Item No.	19 PARTS LIST	Description	QB501CE		Part No.	QTY	Part No.	QTY	Part No.	QTY	Part No.	QTY
			Part No.	QTY								
1		ENGINE - 5 HP BRIGGS & STRATTON	400220	1								
2		LOCK CLIP	400218	1								
3		WASHER SPRING LOCK 1/4 MED.	*8177010	7								
4		PLATE FRONT W.A. & GRILL	400960B	1								
5		IMPELLER ASS'Y	400421	1								
6		KEY SQUARE 1/4 X 2 1/4	*9201123	1								
7		DIVERTER PLATE	400334	1								
8		AXLE	400571	1								
9		WASHER LOCK 3/8 TWISTED TOOTH)	400502	1								
10		SCREW CAP 3/8-24 x 1" HEX. HD GR. 8 (TORQUE 50 FT LBS)(68N-m)	900154	1								
11		LABEL DO NOT FILL WHEN ENGINE IS HOT	400268	1								
12		SHEET METAL SCREW 1/4 AB x 3/4 LG	*8122082	7								
13		COTTER PIN , 1/8 x 1	*8197031	2								
14												
15												
16		NUT LOCK 1/2 -13	*610323	1								
17		SCREW CAP 5/16-18 x 1-1/2	*8041030	6								
18												
19												
20												
21												
22		WASHER FLAT CUT 3/8	*8171004	4								
23		WHEEL FRONT 5"	400249	1								
24		SCREW CAP. (FRONT AXLE) 5/16-18 x 2 -1/2"	*8041100	1								
25		SCREW CAP 5/16-18 x 3/4	*8041026	1								
26		WHEEL, REAR	400295	2								
27		BRACKET (FRONT WHEEL) 5"	400974	1								
28		HANDLE UPPER ASS'Y (incl. item 46)	400957A	1								
29		HANDLE LOWER	400950	1								
30												
31		SCREW CAP 5/16 -18 x 2-3/4	*8041035	4								
32		NUT LOCK , 5/16-18 HEX	*8160002	15								
33		NUT LOCK 5/16-18 THIN HT	*8161041	1								
34		SCREW CAP 5/16 -24 NF x 3/4	*8042026	2								
35												
36												
37												
38		WASHER (0.765 1.0 x 1.25 OD x 0.06)	850238	2								
39		NUT LOCK 10-24	*8164005	2								
40		DEFLECTOR	400333	1								
41		LABEL DANGER HANDS & FEET	400424	1								
42		BOLT CARRIAGE 5/16 -18 x 1-3/4	*8024043	1								
43		WASHER - FLAT 3/4 S.A.E. (3/16 x 1-1/2 x 1/8)	*8172015	2								
44		LABEL DANGER FLYING MATERIAL	810736	1								
45		WASHER 3/4 - HUB CAP	850237	2								
46		GRIP	400570	2								
47		KNOB 5/16-18	890108	1								
48		GUARD MUFFLER (COMES W/ ITEM 1)	400990	1								
49		WASHER LOCK 5/16 EXT, TOOTH	*8181008	1								
50		SPACER	400330	1								
51		GRIP RING	400340	1								
52		SPRING COMPRESSION	400332	1								
53		SPACER	400296	2								
54		SCREW MACH. 10 -24 x 5/8 HEX W. F.	*8059135	2								
55		ROD DIVERTER	400335	1								
56		FRAME ASS'Y (INCLUDES 41, 44, 63)	400576	1								
57		HUB CAP	900486	2								
58		WASHER FLAT CUT 5/16 (3/8 ID x 7/8 OD x1/16)	*8171003	10								
59		LABEL READ OWNER'S MANUAL	890301	1								
60		WASHER -SAE 3/8 (13/32 x 13/16 x 3/32)	*8172009	1								
61		NUT LOCK WASHER FACE 1/4 - 20	900455	2								
62		SCREW CAP 1/4 - 20 x 5 1/2 LG	*8041021	2								
63		LABEL EAR EYE BREATHING	890254	1								

* Notes standard hardware that may be purchased locally.

17 MAINTENANCE



Use only a qualified mechanic for any adjustments, disassembly or any kind of repair .



WARNING: TO AVOID PERSONAL INJURY, ALWAYS TURN MACHINE OFF, MAKE SURE ALL MOVING PARTS COME TO A COMPLETE STOP.



DISCONNECT SPARK PLUG WIRE BEFORE SERVICING UNIT.



ENGINE: See engine manufacturer operator's instructions.



RECONNECT SPARK PLUG WIRE AND GUARDS BEFORE STARTING ENGINE.

17.1

Maintenance Schedule Follow these hourly maintenance intervals.

Maintenance Operation	Every Use	Every 5 hrs. or (Daily)	Every 25 hrs.
Engine (See Engine Manual)			
Check for excessive vibration	●		
Inspect for loose parts		●	
Inspect for worn or damaged parts		●	
Lubricate wheels			●

17.2

IMPELLER REMOVAL

1. Wait for engine to cool and disconnect spark plug.
 2. Remove front wheel (item 23), and front wheel bracket (item 27).
 3. Remove housing front plate (item 4), by removing seven (7) screws (item 12), around outside of front plate.
 4. Remove impeller bolt and lock washer.
- NOTE: DO NOT PULL OR PRY ON IMPELLER BLADES.**
5. Pull on center hub backplate area only of impeller. If impeller slides off freely, proceed to (step 8).
 6. Place two crowbars between center hub backplate area of impeller and housing on opposite sides. Carefully pry impeller away from engine until it loosens. *Using a penetrating oil can help loosen a stuck impeller.*
 7. If the impeller does not loosen, obtain a 1" (25.4mm) longer bolt of the same diameter and thread type as the impeller bolt. Thread longer bolt by hand into the crankshaft until bolt bottoms. Using a suitable gear or wheel puller against the bolt head and the impeller back-plate (near the blades), remove impeller from shaft.
 8. Reinstall new impeller in reverse order of removal.
 9. Tighten impeller bolt. Torque impeller bolt (see parts list on page 7 for proper impeller bolt torque specifications).

TIRE AIR PRESSURE: Check at regular intervals and maintain.

Rear Tires only - 30 Psi. (21 kPa).

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TROUBLESHOOTING

Before Requesting Service Review These Suggestions

Problem	Possible Cause	Solution
Poor air performance	Air intake or exhaust clogged.	Clear clog.
Abnormal vibration.	Loose or out of balance impeller or loose engine.	Check impeller and replace if required. Check Engine.
Engine will not start.	Throttle in off position. Engine not in full choke position. Out of gasoline. Bad or old gasoline. Spark Plug wire disconnected. Dirty air cleaner.	Check throttle, choke position and gasoline. Connect spark plug wire. Clean or replace air cleaner. Or contact a qualified service person.
Engine is locked, will not pull over.	Engine problem.	Contact an engine servicing dealer for engine problems.

22.1

Engine Service and Warranty
Contact your nearest engine manufacturer's authorized servicing dealer.

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Serial Plate Record your machine model, serial number and date-of-purchase and where purchased

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1803 S. Jefferson
P.O. Box 308
Lee's Summit,
MO 64063 / USA
Tel (816) 524-9666
Fax (816) 524-6983

Model

Unit(Weight) lbs. kg

Serial No.

Engine Power kW rpm

Operator

Purchase Date _____ Purchased from _____

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WARRANTY PROCEDURE

Please fill in the WARRANTY CARD and send the upper part to Billy Goat. The WARRANTY terms are stated on the lower part which remains with the user. Whenever a Billy Goat Machine is faulty due to a defect in material and / or workmanship, the owner should make a warranty claim as follows:

The Machine should be taken to the dealer from whom it was purchased or to an authorized Billy Goat dealer.

The owner should present the remaining half of the Warranty Registration Card, or, if this is not available, the invoice or receipt.

The Warranty Claim will be filled in by the authorized Billy Goat Dealer, who will send it with the faulty part to Billy Goat headquarters.

The Quality / Service department at Billy Goat headquarters will study the claim and parts and will notify their conclusions.

The decision by the Quality / Service department at Billy Goat headquarters to approve or reject a Warranty claim is final and binding.

Note: To process a Warranty Claim, it is necessary to quote the Model & Serial number who are printed on the Billy Goat Serial Plate.



BILLY GOAT INDUSTRIES INC.
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