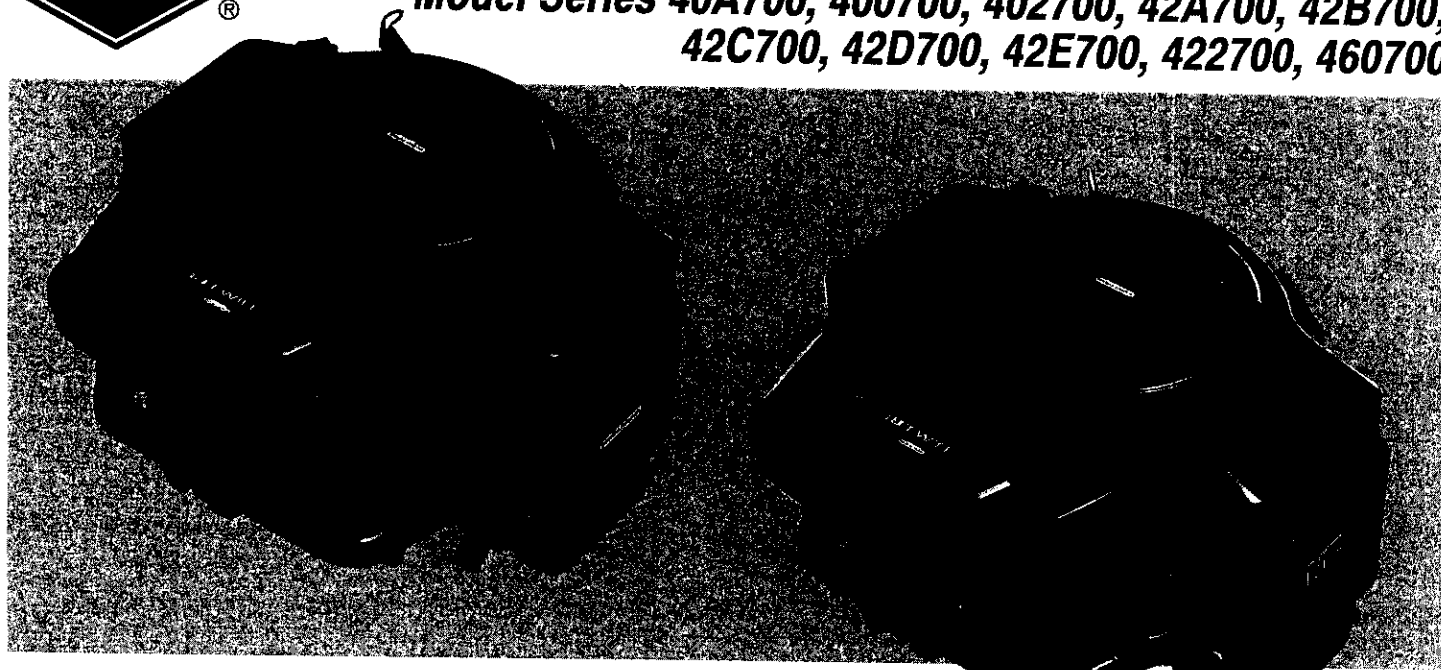




 Before starting this engine, read and understand this *Operator/Owner Manual*.



Operator/Owner Manual
Model Series 40A700, 400700, 402700, 42A700, 42B700,
42C700, 42D700, 42E700, 422700, 460700



For future reference, write your *engine* Model/Type/Code here. See page 8 for location of your *engine* Model/Type/Code.

Model	Type	Code
<input type="text"/>	<input type="text"/>	<input type="text"/>

Table of Contents

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IMPORTANT SAFETY INFORMATION AND INSTRUCTIONS FOR ENGINE SELECTION ENGINE INSTALLATION ENGINE OPERATION

In the USA and Canada,
our 24 hour hotline is:

18002333723

Briggs & Stratton Corporation
Milwaukee, Wisconsin 53201

www.briggsandstratton.com

Keep these instructions for future reference.




Before installing and operating this engine read and observe all warnings, cautions and instructions on both sides of this sheet, on the engine, and in the operating & maintenance instructions.

NOTE: This sheet of instructions and safety information is not meant to cover all possible conditions and situations that may occur. Read entire Operating & Maintenance Instructions for this engine AND the instructions for the equipment this engine powers. Failure to follow instructions and safety information could result in serious injury or death.

The safety alert symbol () is used to identify safety information about hazards that can result in personal injury.

A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

 **DANGER** indicates a hazard which, if not avoided, will result in death or serious injury.

 **WARNING** indicates a hazard which, if not avoided, could result in death or serious injury.

 **CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.

CAUTION, when used **without** the alert symbol, indicates a situation that **could result in damage to the engine.**

HAZARD SYMBOLS AND MEANINGS



Fire



Explosion



Moving Parts



Toxic Fumes



Hot Surface



Shock



Kickback

(OVER)

FORM MS-6445-01/03

ENGINE SELECTION

 WARNING

Failure to select the correct engine could result in fire or explosion.

- Some engines are unique and designed for specific applications or types of equipment. If this engine will be used to build new equipment, contact Briggs & Stratton to ensure that the engine is appropriate for the intended use.
Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Replacement engines should be the same model as the original engine, or be the Briggs & Stratton designated replacement engine. Refer to the Operation & Maintenance Instructions for engine identification information.
Note: For all Go-karts use only a model 136200 series engine, which offers improved safety and performance.
- Do not use Briggs & Stratton engines on 3-wheel All-Terrain Vehicles (ATVs), motor bikes, air craft products, or vehicles intended for use in competitive events. Briggs & Stratton does not approve of or authorize such uses.

ENGINE INSTALLATION

- [1] Do not attempt to install this engine if you do not have the appropriate tools and knowledge of small engine installation procedures. Use only Briggs & Stratton parts. Contact your Authorized Service Dealer for assistance.
- [2] Do not modify the engine in any way without Briggs & Stratton factory approval. Any such modification is at the owner's sole risk.
- [3] If the exhaust system on the old engine was supplied by the equipment manufacturer, you must transfer the exhaust system and related components (original muffler and related pipes, brackets, clamps, and shields) to the new engine. All components must be in good condition.
- [4]

 WARNING	Install muffler (and muffler deflector if used) so outlet points away from operator, fuel tank, and equipment, and so muffler heat will not damage or deform engine and components.
	
- [5]

 WARNING	Ensure all fuel lines and fittings are properly assembled and do not leak. Replacement parts must be the same model as the original.
	
- [6]

 WARNING	Ensure all wiring, including safety switches and engine shut-off components are completely installed and functioning properly.
	
- [7] Set engine speed to equipment manufacturer's specification. Refer to equipment manufacturer's manual. Do not tamper with governor springs, or other parts that will increase engine speed above specification.

- [8]



 WARNING	All engine parts, including fuel cap, spark plug, muffler, air cleaner, and covers and guards for drive components (gears, belts, shafts, couplings, etc.) must be in place before attempting to start engine.
	
- [9]



 WARNING	If engine is installed on walk behind lawn mower, all mower components, including cutting blade, must be correctly installed before attempting to start engine.
	
- [10]



 WARNING	When working on the engine or equipment, remove spark plug wire from spark plug. For electric start, remove negative wire from battery.
	
- [11]

 WARNING	Do not check for spark with spark plug removed. Use Briggs & Stratton spark tester #19368.
	


ENGINE OPERATION

	 WARNING
When adding fuel:	
Turn engine off and let engine cool at least 2 minutes before removing gas cap. Fill fuel tank outdoors or in well-ventilated area. Fill tank to about 1 inch below lowest portion of neck to allow for fuel expansion. Keep gasoline away from sparks, open flames, pilot lights, heat, and other ignition sources.	

	 WARNING
When starting engine:	
Remove all external equipment/engine loads. Wait until spilled fuel is evaporated. Start engine outdoors. Pull cord slowly until resistance is felt, then pull rapidly. If engine floods, set choke to OPEN/RUN, place throttle in FAST and crank until engine starts.	

	 WARNING
When operating equipment:	
Do not tip engine or equipment at angle which causes gasoline to spill. Run engine outdoors. Do not run in enclosed area, even if doors or windows are open. Do not choke carburetor to stop engine.	

In the Interest of Safety

 This safety alert symbol indicates that this message involves personal safety. Words danger, warning and caution indicate degree of hazard. Death, personal injury and/or property damage may occur unless instructions are followed carefully.



You are not ready to operate this engine if you have not read and understood the following safety items. Read this entire owner's manual and the operating instructions of the equipment this engine powers.

The Briggs & Stratton engine you bought with your equipment is made of the finest material in a state-of-the-art manufacturing facility. Please understand that Briggs & Stratton sells engines to original equipment manufacturers. It also sells to others in the distribution chain who may sell to the ultimate consumer, an equipment manufacturer, another distributor or a dealer. As a result, Briggs & Stratton does not necessarily know the application on which the engine will be placed. For that reason, you should carefully read and understand the operating instructions of the equipment on which your engine is placed before you operate it.

You should also understand that there are equipment applications for which Briggs & Stratton does not approve the use of its engines. Briggs & Stratton engines are not to be used on vehicles with less than 4 wheels. They include motor bikes, aircraft products and All Terrain Vehicles. Moreover, Briggs & Stratton does not approve of its engines being used in competitive events. **FOR THAT REASON, BRIGGS & STRATTON ENGINES ARE NOT AUTHORIZED FOR ANY OF THESE APPLICATIONS.** Failure to follow this warning could result in death, serious injury (including paralysis) or property damage.



WARNING

DO NOT run engine in an enclosed area. (Exhaust gases contain carbon monoxide, an odorless and deadly poison.)

- DO NOT place hands or feet near moving or rotating parts.
- DO NOT store, spill, or use gasoline near an open flame, nor near an appliance like a stove, furnace, or water heater that uses a pilot light or can create a spark.
- DO NOT refuel indoors or in an unventilated area.
- DO NOT remove fuel tank cap nor fill fuel tank while engine is hot or running. (Allow engine to cool 2 minutes before refueling.)
- DO NOT operate engine if gasoline is spilled or when smell of gasoline is present or other explosive conditions exist. (Move equipment away from spill and avoid any ignition until gasoline has evaporated.)
- DO NOT transport engine with fuel in tank or with fuel shut-off valve open.
- DO NOT choke carburetor to stop engine, especially in an enclosed vehicle. (Whenever possible, gradually reduce engine speed before stopping.)
- DO NOT tamper with governor springs, links or other parts to increase engine speed. (Run engine at speed set for equipment manufacturer.)

- DO NOT check for spark with spark plug removed. (Use an approved tester.)
- DO NOT crank engine with spark plug removed. (If engine is flooded, place throttle in FAST and crank until engine starts.)
- DO NOT strike flywheel with a hammer or hard object as this may cause flywheel to shatter in operation. (Use correct tools to service engine.)
- DO NOT operate engine without a muffler. (Inspect periodically and replace if worn or leaking. If engine is equipped with muffler deflector, inspect periodically and, if necessary, replace with correct deflector.)
- DO NOT operate engine with an accumulation of grass, leaves or other combustible material in muffler area.
- DO NOT use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on muffler. Spark arrester must be maintained in effective working order by owner and/or 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.
- DO NOT touch hot muffler, cylinder, or fins which can cause burns.
- DO NOT start engine with air cleaner or air cleaner cover removed (or cover over carburetor air intake, if Sno/Gard engine).



WARNING

✓ PREVENT ACCIDENTAL STARTING by removing spark plug wire when servicing engine or equipment. Disconnect negative

- wire from battery terminal if equipped with electric starting system.
- ✓ KEEP cylinder fins and governor parts free of dirt, grass and other debris which can affect engine speed.
- ✓ PULL starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.
- ✓ USE fresh gasoline. Stale fuel can gum carburetor and cause leakage.
- ✓ CHECK fuel lines and fittings frequently for cracks or leaks. Replace if

- necessary.
- ✓ Use only Genuine Briggs & Stratton Parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the engine.

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

International Symbols



Safety Alert



Read Owner's Manual

| ○ On Off



Stop



Fuel Shutoff



Fuel



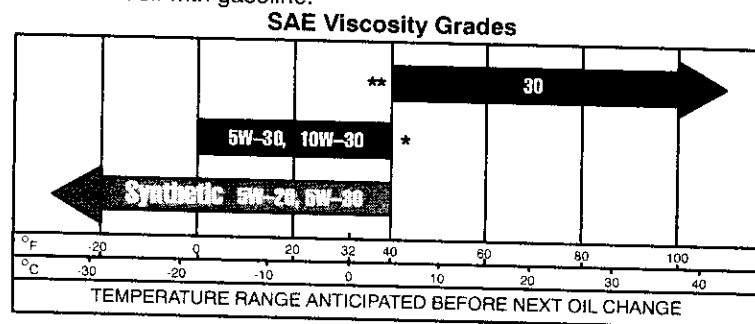
Choke

Oil & Fuel Recommendations

OIL

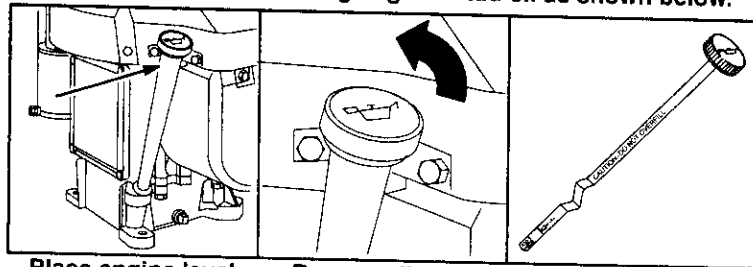
Note: Engine is shipped from Briggs & Stratton without oil. **Before starting engine, check oil level as shown below.**

Change and add oil according to chart below. Do not over-fill. Use a high quality detergent oil classified "For Service SC, SD, SE, SF, SG," such as Briggs & Stratton "warranty certified" SAE 30 oil, part no. 100005. Use no special additives with recommended oils. Do not mix oil with gasoline.



- * Air cooled engines run hotter than automotive engines. Use of multi-viscosity oils (10W-30, etc.) above 40° F (4° C) will result in high oil consumption and possible engine damage. Check oil level more frequently if using these types of oils.
- ** SAE 30 oil, if used below 40° F (4° C), will result in hard starting and possible engine bore damage due to inadequate lubrication.

Check oil level before starting engine. Add oil as shown below.



Place engine level
Clean around oil fill

Remove dipstick
Wipe with clean cloth

Tighten dipstick
Remove and check

FUEL

This engine will operate satisfactorily using any automobile gasoline. Use clean, fresh, lead-free gasoline with a minimum of 77 octane. (Leaded gasoline may be used if it is commercially available, and if lead-free is not available.) Purchase fuel in quantity that can be used within 30 days. See **STORAGE INSTRUCTIONS**, page 9.

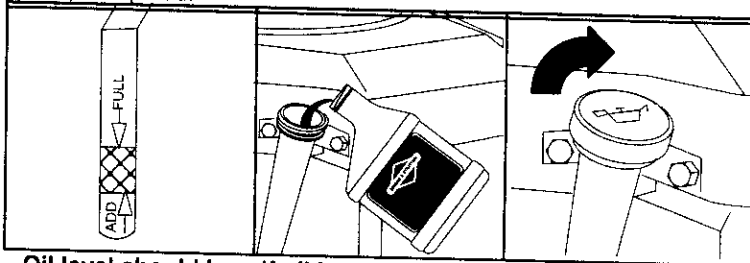
Do not mix oil with gasoline.

Note: We do not recommend using gasoline which contains alcohol, such as gasohol. If gasoline with alcohol is used, it must contain less than 10% Ethanol and must be removed from engine during storage. Do not use gasoline which contains Methanol.

Fuel level

Do not over-fill. Allow space in fuel tank for fuel expansion.

Oil capacity is about 1-1/2 quarts (48 ounces or 1.4 liters) if engine is not equipped with oil filter.
 Oil capacity is about 1-3/4 quarts (56 ounces or 1.7 liters) if engine is equipped with oil filter.
Note: Oil capacity will be greater if engine is equipped with optional remote oil filter.
 Start and run engine at idle for 30 seconds. Shut engine off. Wait 30 seconds and check oil level. Add oil to bring level to **Full** mark on dipstick, if required.

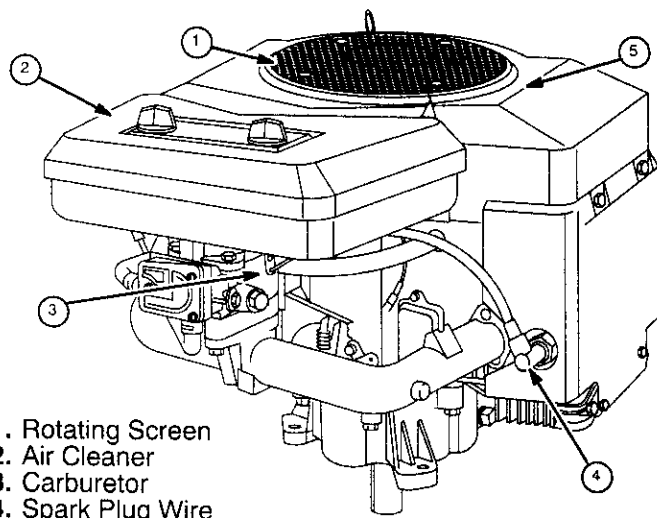


Oil level should be
at FULL mark

If oil is required, add
slowly - recheck

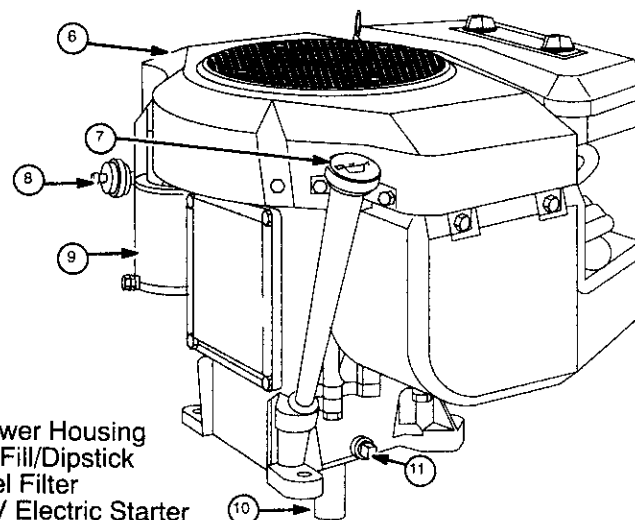
Tighten dipstick
firmly before starting

Before Starting



1. Rotating Screen
2. Air Cleaner
3. Carburetor
4. Spark Plug Wire
5. Engine Model

Model	Type	Code
xxxxx	xxxx xx	xxxxxxxx



6. Blower Housing
7. Oil Fill/Dipstick
8. Fuel Filter
9. 12V Electric Starter
10. Crankshaft
11. Oil Drain Plug

Tips to obtain best starting results

Start lawn mower on hard surface or over previously cut grass.
Start, store and fuel lawn mower in level position.



Do not use a pressurized starting fluid. Starting fluid is flammable. Severe engine damage or fire may occur.

Slightly richer fuel mixture usually improves cold starting (below 40° F).
See **CARBURETOR ADJUSTMENTS**, page 5.

Cold weather starting hints

1. Use the correct oil for the starting temperature expected.
2. De-clutch all possible external loads.
3. Set speed control at part throttle position.
4. A warm battery has much more starting capacity than a cold battery.
5. Do not use gasoline left over from summer. Use fresh winter grade gasoline which has higher volatility to improve starting.

Oil pressure switch (optional on engines with oil filter)

If engine is run low on oil, the pressure switch will either activate a warning device or stop the engine. (Read the operating instructions supplied by the equipment manufacturer to determine which way your engine is equipped.) Add oil to engine. Fill to **FULL** mark on dipstick.

In the USA and Canada, a 24 hour hot line, **1-800-233-3723**, has a menu of pre-recorded messages offering you engine maintenance information.

Starting & Stopping

START ENGINE

! ALWAYS KEEP HANDS AND FEET CLEAR OF MOWER BLADE OR OTHER ROTATING MACHINERY.

Fuel shut-off valve

Open fuel shut-off valve, if engine is so equipped.

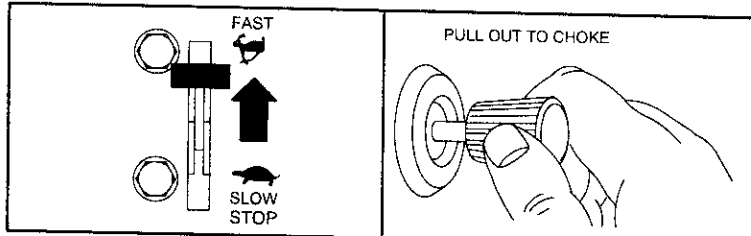
Throttle

Move throttle control to RUN or FAST position.

Choke

Move choke control to CHOKE or START position.

Note: Choke must fully close. If engine does not start, see *Adjustments*, page 5.



Typical throttle control

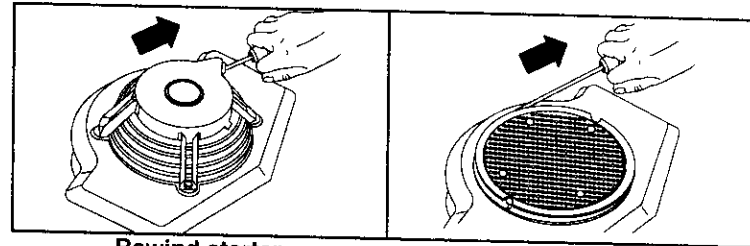
Typical choke control

Rewind starter

! Grasp rope handle as illustrated and pull slowly until resistance is felt. THEN PULL CORD RAPIDLY TO OVERCOME COMPRESSION, PREVENT KICKBACK AND START ENGINE. Repeat if necessary with choke off and throttle control in FAST position. When engine starts, operate in FAST position.

Rope starter

! Wind starter rope around pulley in direction shown by arrow. Pull rope handle slowly until resistance is felt, then pull with a quick full arm stroke to prevent kickback. Repeat if necessary with choke opened slightly. When engine starts, open choke gradually. When using rope starter to crank engine, use caution so knotted end of rope does not strike persons standing nearby.



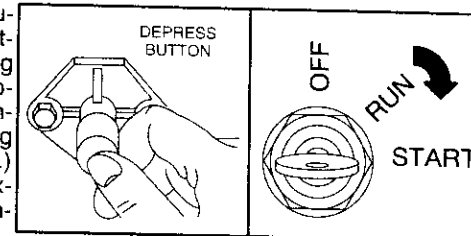
Rewind starter

Rope starter

Electric starter (optional)

Turn key to START. Repeat if necessary with throttle control in FAST position. When engine starts, operate in FAST position.

Note: If equipment manufacturer has supplied battery, charge it before trying to start engine, as equipment manufacturer recommends. Use short starting cycles (15 secs. per min.) to prolong starter life. Extended cranking can damage starter motor.

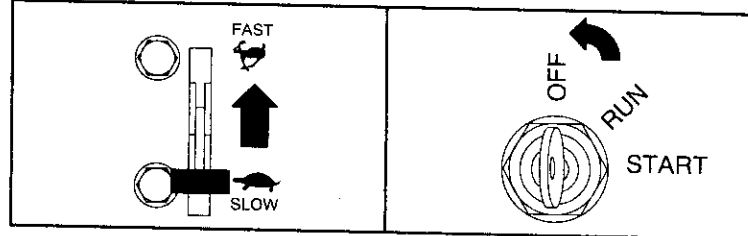


Typical starter switches

STOP ENGINE

Do not move choke control to CHOKE position to stop engine. Backfire or engine damage may occur. Move throttle control to SLOW position, then to STOP, or turn key to OFF, if so equipped. Always remove key from switch when equipment is not in use or left unattended.

! Close fuel shut-off valve, when transporting engine, to prevent fuel leakage.



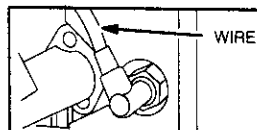
Typical stop switches

Adjustments

CONTROL ADJUSTMENTS



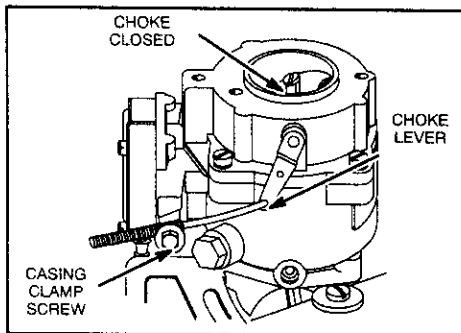
TO PREVENT ACCIDENTAL STARTING



Remove spark plug wires and disconnect battery at negative terminal, when adjusting controls.

To adjust choke control:

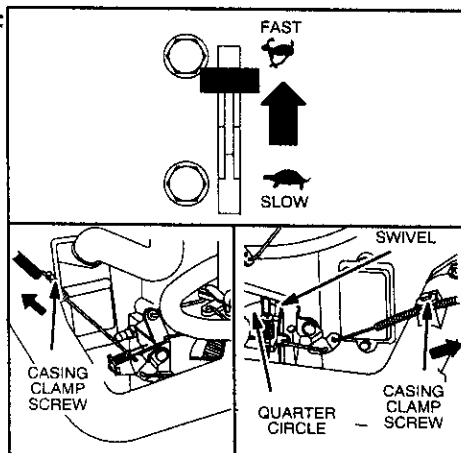
Remove air cleaner. Move choke control to CHOKE or START position. Carburetor choke should be completely closed. If not, loosen casing clamp screw. Then move casing, wire and engine choke lever until choke is completely closed. Tighten casing clamp screw. Replace air cleaner.



Choke control adjustment

To adjust throttle control:

Remove air cleaner. Move throttle control to FAST position. Swivel should be against side of quarter circle. If not, loosen casing clamp screw. Move casing and wire in direction shown until swivel is against side of quarter circle. Tighten casing clamp screw. Replace air cleaner.



Throttle control adjustment

CARBURETOR ADJUSTMENTS



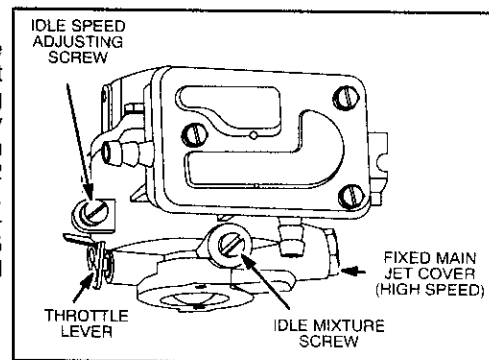
The manufacturer of equipment on which this engine is installed specifies top speed at which engine will be operated. DO NOT EXCEED this speed.

Differences in fuel, temperature, altitude or load may require minor carburetor adjustment. Air cleaner and air cleaner cover must be assembled to carburetor before starting engine.

TWIN CYLINDER CARBURETOR ADJUSTMENT IS UNIQUE. ADJUST CARBURETOR FUEL MIXTURE IN ORDER STATED AS FOLLOWS.

Initial adjustment

Gently turn idle mixture screw clockwise until it just closes (turning screw in too far may damage it). Next open idle mixture screw 1-1/2 turns counterclockwise. Start and warm up engine (approximately 5 minutes) prior to final adjustment.



Carburetor adjustments

Final adjustment

Place throttle control in IDLE or SLOW position. Rotate carburetor throttle lever against idle speed screw and hold. Adjust idle speed screw to obtain 1200 to 1400 RPM. While still holding carburetor throttle lever against idle speed screw, turn idle mixture screw slowly clockwise (lean mixture) until speed just starts to slow, and then slowly counterclockwise (rich mixture) until speed just starts to slow again. Now turn idle mixture screw to midpoint between rich and lean. Finally readjust idle speed to 900 to 1200 RPM. Release carburetor throttle lever. Move throttle control to FAST position. Engine should accelerate smoothly. If it does not, readjust idle mixture screw approximately 1/8 turn counterclockwise (rich).

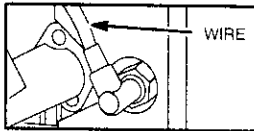
In the USA and Canada, a 24 hour hot line, 1-800-233-3723, has a menu of pre-recorded messages offering you engine maintenance information.

Maintenance

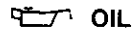
See **Maintenance Schedule**, page 8. Follow the hourly or calendar intervals, whichever occur first. Note that more frequent service is required when operating in adverse conditions.



TO PREVENT ACCIDENTAL STARTING



Remove spark plug wires and disconnect battery at negative terminal, when servicing engine or equipment.



OIL

Check oil level regularly.

Be sure correct oil level is maintained. Check every 5 hours or daily, before starting engine. See **Check oil level** on page 2.

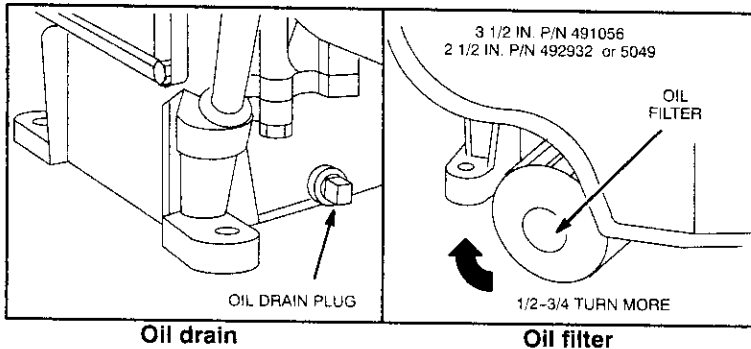
Change oil (Follow **Maintenance Schedule**.)

Change oil after first 5 hours of operation. Remove drain plug and drain oil while engine is warm. Replace drain plug. Remove dipstick and refill with new oil of recommended grade (see chart on page 2). Start and run engine at idle for 30 seconds. Stop engine. Wait 30 seconds and re-check oil level. If required, add oil to bring level to **FULL** mark on dipstick.

Note: If engine is not equipped with oil filter, change oil every 25 hours. If engine is equipped with oil filter, change oil every 50 hours. Change oil more often if engine is operated under heavy load or high ambient temperatures.

Change oil filter (Follow **Maintenance Schedule**.)

Replace oil filter after every 100 hours of operation. Remove used oil filter. Before installing new filter, lightly oil filter gasket with fresh, clean oil. Screw filter on by hand until gasket contacts oil filter adapter. Tighten 1/2 to 3/4 turn more. Start and run engine at idle to check for leaks. Stop engine. Re-check oil level. Add oil if required.



Oil drain

Oil filter

Oil Pressure

Normal warm operating oil pressure for a pressure lube engine (engine with oil filter) is 10 to 50 psi at normal operating temperature. If pressure drops below normal range, stop engine and check oil level with dipstick. If oil level is low, add oil to bring level to **FULL** mark on dipstick. Restart engine and check oil pressure. If pressure is normal, operation may continue. If oil level is between **ADD** and **FULL** mark on dipstick, **DO NOT RESTART ENGINE**. Contact a Briggs & Stratton Service Dealer. **DO NOT OPERATE ENGINE UNTIL OIL PRESSURE IS CORRECTED.**

Note: Optional oil pressure gauge is supplied by manufacturer of equipment.



AIR CLEANER

Depending on engine Type Number, this engine may not have a pre-cleaner.

Note: Service according to **Maintenance Schedule**.

1. Remove knobs and cover.
2. Carefully slide pre-cleaner off cartridge.

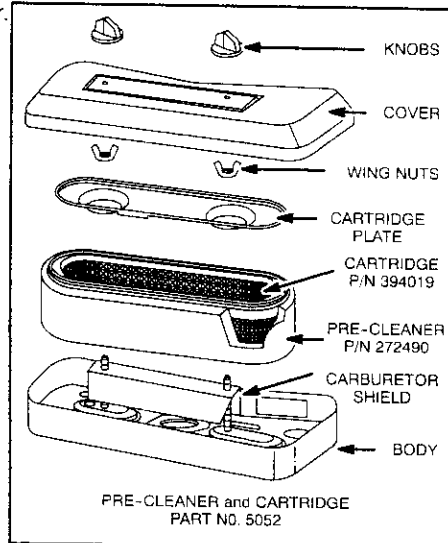
To service pre-cleaner, wash in liquid detergent and water. Squeeze dry in a clean cloth. Saturate in engine oil. Squeeze in clean, absorbent cloth to remove all **EXCESS** oil. Replace if very dirty or damaged.

3. Remove wing nuts and cartridge plate. Carefully remove cartridge to prevent debris from entering carburetor.

To service cartridge, clean by tapping gently on a flat surface. Do not oil cartridge. Replace if very dirty or damaged.

Note: Do not use petroleum solvents, e.g., kerosene, nor pressurized air to clean cartridge. They can damage the cartridge.

4. Reinstall cartridge and cartridge plate. Tighten wing nuts securely.
5. Reassemble pre-cleaner on cartridge.
6. Replace cover and tighten knobs securely.



Dual element air cleaner

PRE-CLEANER and CARTRIDGE
PART NO. 5052

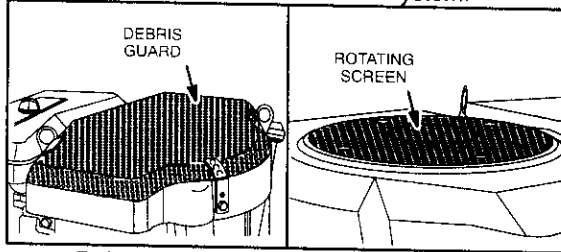
Maintenance

See **Maintenance Schedule**, page 8. Follow the hourly or calendar intervals, whichever occur first. Note that more frequent service is required when operating in adverse conditions.

KEEP ENGINE AND PARTS CLEAN

Remove dirt and debris with a cloth or brush. Do not clean with a forceful spray of water because water could contaminate fuel system.

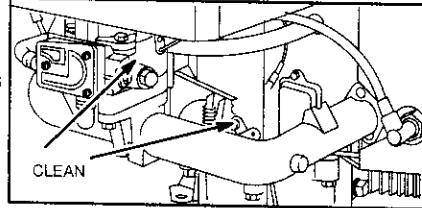
Remove grass, chaff and dirt from debris guard or rotating screen daily or more often if needed to prevent engine damage caused by overheating.



Debris guard

Rotating screen

To assure smooth operation, keep governor linkage, springs and controls free of debris.

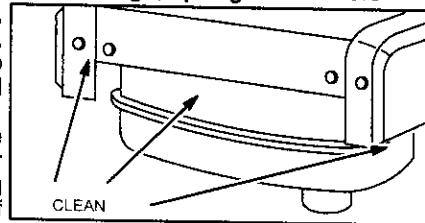


Linkage, springs & controls



Daily or more often, before running engine, clean muffler area to remove all grass and combustible debris.

If engine muffler(s) is/are equipped with spark arrester screens, remove for cleaning and inspection. Replace if damaged or plugged.

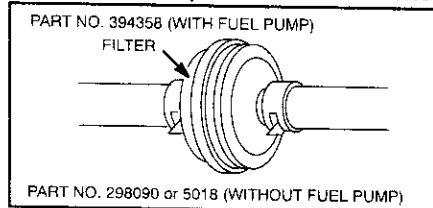


Muffler area/Spark arrester screens

Replace in-line fuel filter. See any Authorized Briggs & Stratton Dealer for correct replacement.

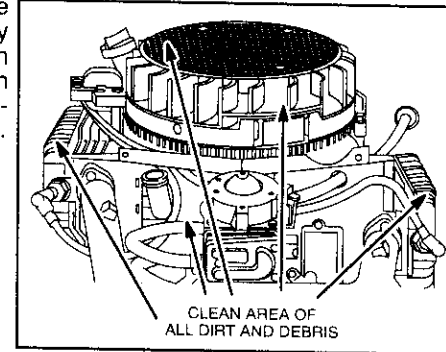


Drain fuel tank or close fuel shut-off valve before replacing fuel filter.



Fuel filter

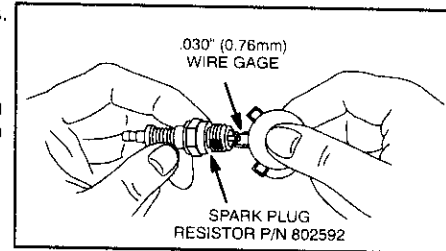
Grass or chaff may clog the air cooling system, especially after prolonged operation cutting tall, dry grass. Clean area shown to prevent overheating and engine damage.



Air cooling system

Replace or clean spark plugs.

Use only Briggs & Stratton Spark Tester, P.N. 19368, to check for spark.



Spark plug

Note: In some areas, local law requires using resistor spark plug to suppress ignition signals. If this engine was originally equipped with resistor spark plug, use same type for replacement.

Remove combustion deposits

Remove cylinder heads and cylinder head shields every 100-300 hours of operation. Scrape and wire brush combustion deposits from cylinders, cylinder heads, tops of pistons and around valves. Use a soft brush to remove deposits. Reassemble with new gaskets, cylinder heads and cylinder head shields. Turn screws down finger tight, with the three longer screws, if so equipped, around exhaust valve. Torque cylinder head screws in a staggered sequence to 165 in.-lbs. (18.65 Nm).

In the USA and Canada, a 24 hour hot line, 1-800-233-3723, has a menu of pre-recorded messages offering you engine maintenance information.

Maintenance Schedule

Follow the hourly or calendar intervals, whichever occur first.
More frequent service is required when operating in adverse conditions noted below.

Maintenance Operation	Every 5 Hours or Daily	25 Hours or Every Season	50 Hours or Every Season	100 Hours or Every Season	100-300 Hours
Check Oil Level	●				
Change Oil ♦ (Engine without Oil Filter)		● Note 1			
Change Oil ♦ (Engine with Oil Filter)			● Note 1		
Change Oil Filter ♦				● Note 1	
Service Air Cleaner Pre-Cleaner (Optional)		● Note 2			
Service Air Cleaner Cartridge without Pre-Cleaner		● Note 2			
Service Air Cleaner Cartridge with Pre-Cleaner				● Note 2	
Clean Cooling System				● Note 2	
Inspect Spark Arrester (Optional Accessory)			●		
Replace or Clean Spark Plugs & Replace In-Line Fuel Filter				●	
Clean Combustion Chamber Deposits					●

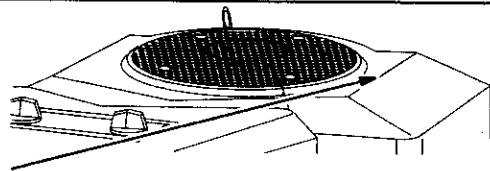
Briggs & Stratton Part Numbers of some Genuine Briggs & Stratton Parts:

Part	Briggs & Stratton Part No.
Air cleaner cartridge	394019
Air cleaner pre-cleaner	272490
Pre-cleaner and cartridge	5052
Resistor spark plug	802592
Spark plug elbow	66538
Spark plug wrench	89838 or 5023
Spark tester	19368
Oil	100005
Oil Filter (3-1/2 in. long)	491056
Oil Filter (2-1/4 in. long)	492932 or 5049
Fuel filter (with fuel pump)	394358
Fuel filter (without fuel pump)	298090 or 5018
Gas additive	5041
Gasket, Cylinder Head #1	271867
Gasket, Cylinder Head #2	271868

See any Authorized Briggs & Stratton Service Dealer. Insist on Genuine Briggs & Stratton parts! Non-original parts may not perform as well and may void your warranty.

To obtain a complete Parts List of Genuine Briggs & Stratton Parts for your engine, fill in both sides of this order form carefully. We cannot fill your order without the correct Engine Model/Type/Code. (Please allow 3 to 4 weeks for delivery.)

♦ Change oil after first 5 hours, then after every 50 hours or every season.
Note 1: Change oil every 25 hours when operating under heavy load or in high temperatures.
Note 2: Clean more often under dusty conditions or when airborne debris is present. Replace air cleaner parts, if very dirty.



Look here for engine Model/Type/Code. This assures fast service & correct parts.

Fill in both sides, clip and return to: 272112
Briggs & Stratton Corporation
P.O. Box 1144
Milwaukee, WI 53201-1144 U.S.A.

Name _____

Address _____

City _____ State _____ Zip _____ County _____

Your Engine Model _____ Type _____ Code _____

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Service & Storage

FOR SERVICE

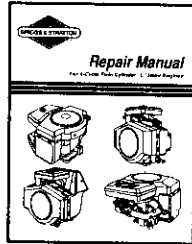
See an Authorized Briggs & Stratton Service Dealer. Each one carries a stock of Genuine Briggs & Stratton Parts and is equipped with special service tools. Trained mechanics assure expert repair service on all Briggs & Stratton engines. Only dealers advertising as "Authorized Briggs & Stratton" are required to meet Briggs & Stratton standards.



You may locate your nearest Authorized Briggs & Stratton Service Dealer in the "Yellow Pages™" directory under "Engines, Gasoline" or "Gasoline Engines," or "Lawn Mowers" or similar category. There are over 30,000 Authorized Service Dealers worldwide available to serve you.

Note: Walking fingers logo and "Yellow Pages" are registered trademarks in various jurisdictions.

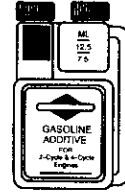
The illustrated shop manual shown here includes "Theories of Operation," common specifications and detailed information covering adjustment, tune-up and repair of Briggs & Stratton L-head, twin cylinder, 4 cycle engines. It is available from an Authorized Briggs & Stratton Service Dealer or you can order it from the factory. Write: Briggs & Stratton Corp. P. O. Box 1144, Milwaukee, WI 53201 Attention: Service Division.



Part No. 271172

STORAGE INSTRUCTIONS

Engines stored over 30 days need to be protected or drained of fuel to prevent gum from forming in fuel system or on essential carburetor parts.



1. For engine protection, we recommend use of Briggs & Stratton Gasoline Additive, Part No. 5041, available from any Authorized Briggs & Stratton Service Dealer. Mix Additive with fuel in fuel tank or storage container. Run engine for a short time to circulate Additive through carburetor. Engine and fuel can be stored up to 24 months.

Note: If Additive is not used or if engine is operating on gasoline containing alcohol, such as gasohol, remove all fuel from tank and run engine until it stops from lack of fuel.

2. While engine is still warm, drain oil from crankcase (see page 6). Refill with fresh oil of recommended grade (see chart on page 2).
3. Remove spark plug and pour about 1 oz (30 ml) of engine oil into cylinder. Replace spark plug and crank slowly to distribute oil.
4. Clean dirt and chaff from cylinder, cylinder head fins, blower housing, rotating screen and muffler areas (see page 7).
5. Store in a clean and dry area, but NOT near a stove, furnace or water heater which uses a pilot light or any device that can create a spark.

Please print clearly. This will be used as return mailing label.

Payment Method: Fill in both sides of this order form carefully

Check or money order enclosed payable to **Briggs & Stratton Corporation** in the amount of \$ _____ (U.S. Dollars, please)

Please charge my MasterCard VISA

CREDIT CARD NUMBER

SIGNATURE (REQUIRED FOR CREDIT CARD ORDERS)

EXPIRATION DATE

Parts List	\$2.00
Shipping & Handling	\$1.50
**Add State Sales Tax	_____
Total	_____

**AL 4%, CO 3%, CT 6%, FL 6%, GA 4%, KY 6%, MI 6%, MN 6%, MO 4.225%, OH 5%, TN 6%, TX 6.25%, WA 6.5%, WI 5%



Look for Briggs & Stratton logo stamped on part and/or package!

In the USA and Canada, a 24 hour hot line, 1-800-233-3723, has a menu of pre-recorded messages offering you engine maintenance information.

ABOUT YOUR ENGINE WARRANTY: (see back cover for statement of LIMITED WARRANTY.)

Briggs & Stratton welcomes warranty repair and apologizes to you for being inconvenienced. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but sometimes requests for warranty service may not be appropriate. For example, warranty would not apply if engine damage occurred because of misuse, lack of routine maintenance, shipping, handling, warehousing or improper installation. Similarly, warranty is void if the serial number of the engine has been removed or the engine has been altered or modified.

If a customer differs with the decision of the Service Dealer, an investigation will be made to determine whether the warranty applies. Ask the Service Dealer to submit all supporting facts to his Distributor or the Factory for review. If the Distributor or the Factory decides that the claim is justified, the customer will be fully reimbursed for those items that are defective. To avoid misunderstanding which might occur between the customer and the Dealer, listed below are some of the causes of engine failure that the warranty does not cover.

IMPROPER MAINTENANCE:

The life of an engine depends upon the conditions under which it operates, and the care it receives. Some applications, such as tillers, pumps and rotary mowers, are very often used in dusty or dirty conditions, which can cause what appears to be premature wear. Such wear, when caused by dirt, dust, spark plug cleaning grit, or other abrasive material that has entered the engine because of improper maintenance, is not covered by warranty.

THIS WARRANTY COVERS ENGINE RELATED DEFECTIVE MATERIAL AND/OR WORKMANSHIP ONLY, AND NOT REPLACEMENT OR REFUND OF THE EQUIPMENT TO WHICH THE ENGINE MAY BE MOUNTED. NOR DOES THE WARRANTY EXTEND TO REPAIRS REQUIRED BECAUSE OF:

1. PROBLEMS CAUSED BY PARTS THAT ARE NOT ORIGINAL BRIGGS & STRATTON PARTS.
2. Equipment controls or installations that prevent starting, cause unsatisfactory engine performance, or shorten engine life. (Contact equipment manufacturer.)
3. Leaking carburetors, clogged fuel pipes, sticking valves, or other damage, caused by using contaminated or stale fuel. (Use clean,

fresh, lead-free gasoline and Briggs & Stratton gasoline stabilizer, Part No. 5041.)

4. Parts which are scored or broken because an engine was operated with insufficient or contaminated lubricating oil, or an incorrect grade of lubricating oil (4 cycle engines: check oil level daily or after every 8 hours of operation. Refill when necessary and change at recommended intervals.) (2 cycle engines: use correct mixture of gasoline and BIA/NMMA certified oil.) Read "Owner's Manual."
5. Repair or adjustment of associated parts or assemblies such as clutches, transmissions, remote controls, etc., which are not manufactured by Briggs & Stratton.
6. Damage or wear to parts caused by dirt, which entered the engine because of improper air cleaner maintenance, re-assembly, or use of a nonoriginal air cleaner element or cartridge. (At recommended intervals, clean and re-oil the Oil-Foam® element or the foam pre-cleaner, and replace the cartridge.) Read "Owner's Manual."
7. Parts damaged by overspeeding, or overheating caused by grass, debris, or dirt, which plugs or clogs the cooling fins, or flywheel area, or damage caused by operating the engine in a confined area without sufficient ventilation. (Clean fins on the cylinder, cylinder head and flywheel at recommended intervals.) Read "Owner's Manual."
8. Engine or equipment parts broken by excessive vibration caused by a loose engine mounting, loose cutter blades, unbalanced blades or loose or unbalanced impellers, improper attachment of equipment to engine crankshaft, overspeeding or other abuse in operation.
9. A bent or broken crankshaft, caused by striking a solid object with the cutter blade of a rotary lawn mower, or excessive v-belt tightness.
10. Routine tune-up or adjustment of the engine.
11. Engine or engine component failure, i.e., combustion chamber, valves, valve seats, valve guides, or burned starter motor windings, caused by the use of alternate fuels such as, liquified petroleum, natural gas, altered gasolines, etc.

WARRANTY IS AVAILABLE ONLY THROUGH SERVICE DEALERS WHICH HAVE BEEN AUTHORIZED BY BRIGGS & STRATTON CORPORATION. YOUR NEAREST AUTHORIZED SERVICE DEALER IS LISTED IN THE "YELLOW PAGES" OF YOUR TELEPHONE DIRECTORY UNDER "ENGINES, GASOLINE" OR "GASOLINE ENGINES," "LAWN MOWERS," OR SIMILAR CATEGORY.

Briggs & Stratton Engines Are Made Under One Or More Of The Following Patents: Design D-247,177 (Other Patents Pending)							
5,320,795	5,243,878	5,150,674	5,040,503	4,977,879	4,694,792	4,355,253	DES. 309,458
5,271,363	5,197,425	5,105,331	5,016,588	4,971,219	4,520,288	4,270,509	DES. 309,457
5,269,713	5,197,422	5,086,890	4,996,956	4,895,119	4,453,507	4,233,534	DES. 308,872
5,265,700	5,191,864	5,040,644	4,995,357	4,819,593	4,430,984	4,168,288	DES. 308,871

In the USA and Canada, a 24 hour hot line, **1-800-233-3723**, has a menu of pre-recorded messages offering you engine maintenance information.

BRIGGS & STRATTON ENGINE OWNER WARRANTY POLICY

effective February 1, 1994

Replaces all undated Warranties and all Warranties
dated before February 1, 1994

LIMITED WARRANTY

"Briggs & Stratton Corporation will repair or replace, free of charge, any part, or parts of the engine that are defective in material or workmanship or both. Transportation charges on parts submitted for repair or replacement under this Warranty must be borne by purchaser. This warranty is effective for the time periods and subject to the conditions provided for in this policy. For warranty service contact your nearest Authorized Service Dealer as listed in the 'Yellow Pages'™ under 'Engines, Gasoline,' 'Gasoline Engines,' 'Lawn Mowers' or similar category. THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM PURCHASE, OR TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and 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."

Briggs & Stratton Corporation


F. P. Stratton, Jr.
Chairman and Chief Executive Officer

WARRANTY PERIOD

ENGINES	WITHIN U.S.A. AND CANADA		OUTSIDE U.S.A. AND CANADA	
	CONSUMER USE*	COMMERCIAL USE*	CONSUMER USE*	COMMERCIAL USE*
All Vanguard™ engines.	2 year - engine / Lifetime** - Magnetron® ignition			
All Diamond Plus®, Europa™, Industrial Plus™ and all I/C®.	2 year	1 year	2 year	1 year
Quantum® and Diamond Power®.	2 year	90 days	2 year †	90 days
All standard 2 through 18 HP engines installed on lawn mowers, riders, edgers, chippers, shredders, tillers, and all Sno/Gard engines.	2 year	90 days	1 year	90 days
All other standard 2 through 18 HP engines.	1 year	90 days	1 year	90 days

* For purposes of this warranty policy, "consumer use" means personal residential household use by the original retail consumer. "Commercial use" means all other uses, including use for commercial, income producing or rental purposes. Once an engine has experienced commercial use, it shall thereafter be considered as a commercial use engine for purposes of this warranty. **Engines used in competitive racing or on commercial or rental tracks are not warrantied.**

** Lifetime limited warranty of the Magnetron® ignition covers parts and labor for the first five (5) years from the date of purchase; thereafter only parts. "Lifetime" means lifetime of the engine in the hands of the original purchaser.

† One (1) year in Australia, New Zealand, Middle East and Africa.

**NO WARRANTY REGISTRATION CARD IS NECESSARY TO OBTAIN WARRANTY ON BRIGGS & STRATTON ENGINES.
YOU MUST SAVE THE PURCHASE RECEIPT. A PROOF OF PURCHASE DATE WILL BE REQUIRED TO OBTAIN WARRANTY.**