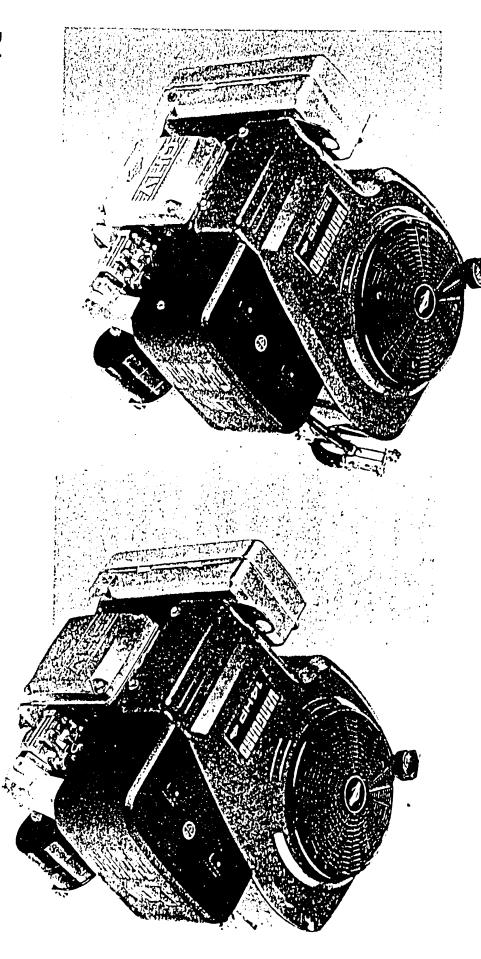


Operating and Maintenance Instructions for Model Series 260700 & 261700



Briggs & Stratton Corporation Milwaukee, Wisconsin 53201

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 Moving Parts Fire **Explosion** additiblita Hot Surface Toxic Fumes **Kickback**

ENGINE SELECTION



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.



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.



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



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.



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.

[10] 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.



When working on the engine or equipment, remove spark plug wire from spark plug. For electric start, remove negative wire from battery.



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

ENGINE OPERATION







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.





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.

Before Starting

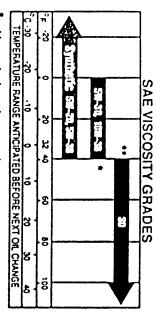
READ THE OPERATING INSTRUCTIONS OF THE EQUIPMENT THIS ENGINE POWERS

NOTE: Engine is shipped WITHOUT oil.

4-CYCLE OIL RECOMMENDATIONS

Change and Add Oil According to Chart below. We recommend the use of a high quality detergent oil classified "For Service SE, SF, SG," such as Briggs & Stratton 30 weight oil, part no. 100005. Detergent oils keep the engine cleaner and retard the formation of gum and varnish deposits. No special additives should be used with recommended oils.

NOTE: 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.

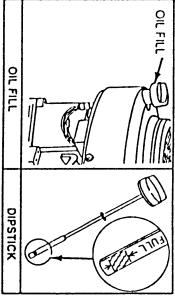
TO FILL CRANKCASE WITH OIL:

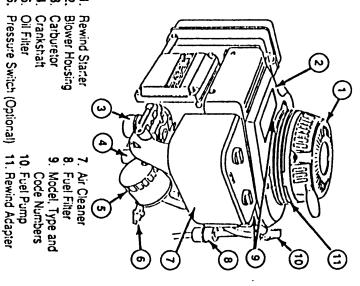
Place engine level. Clean area around oil fill. Remove dipstick. POUR OIL SLOWLY. Fill to FULL mark on dipstick. DO NOT OVER-FILL.

NOTE: After starting engine, stop after 30 seconds. Check oil level. Add if necessary. Without filter, oil capacity is approximately 2 quarts (64 ounces or 1.9 liters). With oil filter, oil capacity is approximately 2-1/4 quarts (72 ounces or 2.1 liters).

TO CHECK OIL LEVEL:

Place engine level. Remove dipstick and wipe oil from it with clean cloth. Screw dipstick into tube until cap bottoms on tube. Remove and check oil level. Dipstick must be firmly screwed into tube when engine is running.





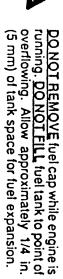


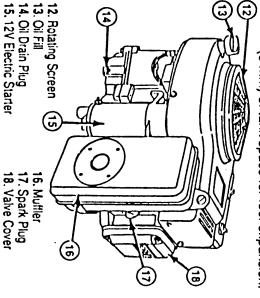
FUEL RECOMMENDATIONS

This engine will operate satisfactorily on any gasoline intended for automotive use. A minimum of 85 octane is recommended. DO NOT MIX OIL WITH GASOLINE.

Use clean, fresh, lead-free gasoline. We recommend the use of Briggs & Stratton Gasoline Additive.part.no. 5041. Purchase fuel in quantity that can be used within 30 days. This will assure fuel freshness and volatility tailored to the season. Leaded gasoline may be used if lead-free is not available. Use of lead-free gasoline results in fewer combustion deposits and longer valve life.

NOTE: We DO NOT recommend the use of gasoline which contains alcohol, such as gasohol. However, if gasoline with alcohol is used, it MUST NOT contain more than 10 percent Ethanol and MUST be removed from the engine during storage. DO NOT use gasoline containing Methanol. See STORAGE INSTRUCTIONS.



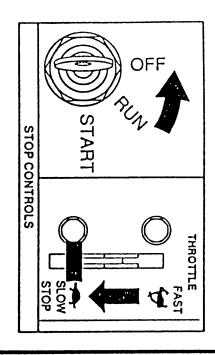


Stopping

TO STOP ENGINE:



Move equipment control to "SLOW" and then "STOP" position or engine control to "OFF" position. Turn key to "OFF" position, if so equipped. Do not choke carburetor to stop engine. Backfire or engine damage may result if choke is used to stop engine.





Always remove key from switch when leaving equipment unattended or when equipment is not in use.

NOTE: When engine is transported, close fuel shutoff valve, if engine is so equipped, to prevent fuel leakage.

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ENGINE AND EQUIPMENT CONTROLS A CAUTION: The manufacturer of the equipment of the equipmen



CAUTION: The manufacturer of the equipment on which this engine is installed specifies the Top No-Load RPM at which this engine will be operated. DO NOT EXCEED this RPM.

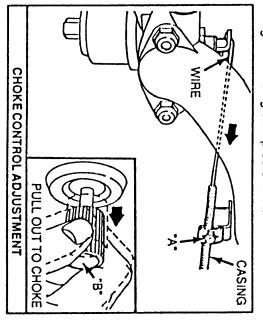


TO CHECK CHOKE CONTROL:

Move equipment choke control to "CHOKE" position. Carburetor choke should be closed.

TO ADJUST CHOKE CONTROL:

Loosen casing clamp screw "A." Move equipment choke control to "CHOKE" position. Move casing and wire in direction of arrow to end of travel. Retighten casing clamp screw "A."



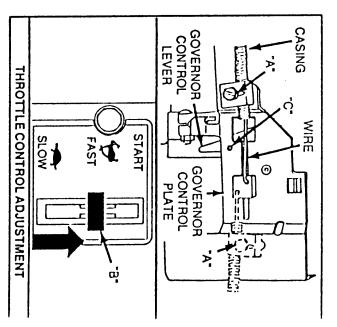
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Move through control lever "B" to "EAS

Move throttle control lever "B" to "FAS" position. Hole in governor lever should in up with hole "C" in governor control plan

TO ADJUST THROTTLE CONTROL:

Loosen casing clamp screw "A." Move throttle co trol lever "B" to "FAST" position. Move casing, wi and governor control rack until hole in governor co trol lever lines up with hole "C" in governor control lever lines up with screw "A."



Maintenance



STARTING when servicing engine or from spark plug. Disconnect negative wire equipment, always remove spark plug wire CAUTION: TO PREVENT ACCIDENTAL volt starting system. from battery terminal, if equipped with 12



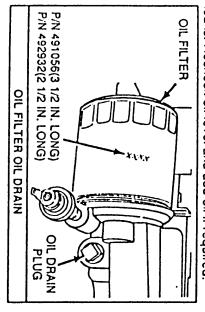
Check after each 8 hours of operation or daily. BE SURE OIL LEVEL IS MAIN-TAINED. CHECK OIL LEVEL REGULARLY:

CHANGE OIL AS RECOMMENDED (Pg. 3):

Remove dipstick and refill with new oil of correct ent air temperatures. Remove oil drain plug and drain oil while engine is warm. Replace drain plug whichever occurs first. Change oil every 25 hours if grade and weight. Replace dipstick. engine is operated under heavy load or at high ambi-Change oil after first 8 hours of operation. Thereaf ter every 50 hours of operation or every season ter, under normal operating conditions change oil af-

CHANGE OIL FILTER:

clean engine 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 oil stalling new filter, lightly oil filter gasket with fresh, or every season, whichever occurs first. Before in-Replace oil filter after every 100 hours of operation leaks. Recheck oil level and add oil if required.





SERVICE AIR CLEANER

DUAL ELEMENT:

hours or weekly, whichever occurs first. Remove and service foam pre-cleaner every 25

season, whichever occurs first. Service paper cartridge every 100 hours or every

conditions. NOTE: Service air cleaner more often under dusty

Remove knobs and cover

To service pre-cleaner:

- 'n Remove pre-cleaner from carridge
- waler. Wash pre-cleaner in liquid detergent and

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- Squeeze pre-cleaner dry in a clean cloth
- all EXCESS oil. absorbent cloth and squeeze to remove Saturate it in engine oil, Wrap it in clean,
- Φ Install pre-cleaner on cartridge

To service cartridge:

- ρ Clean did from around cadridge
- Q cleaner base. Remove knobs and carridge from air
- ဂ္ဂ Clean by tapping gently on flat surface.
- sudsing detergent and warm water solu-tion. Rinse thoroughly with water from tridge dry thoroughly before using mesh side until water runs clear. Let car-If very dirty, replace or wash in a non-

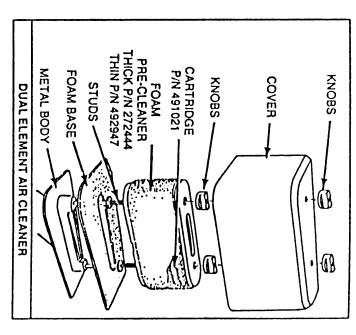


tridge. They may cause deterioration of the cartridge. DO NOT OIL CARTRIDGE. DO NOT USE PRESSURIZED AIR TO kerosene, are not to be used to clean car-CLEAN OR DRY CARTRIDGE CAUTION: Petroleum solvents, such as

- 'n Carefully clean off foam and metal bases
- Reinstall foam base on metal base and car tridge on foam base. Tighten knobs securely.

ω

- 4 Reinstall pre-cleaner on cartridge
- ပ္ပ Reinstall air cleaner cover and lighten knobs se curely.



NOTE: A thick pre-cleaner (part no. 272444) is required for engine equipped with heavy duty air cleaner.

Maintenance Schedule

More frequent service may be required. Follow the hourly or calendar intervals, whichever occur first.

| | | | | A | |
|--------|------------------------------|------------------------|-----------------------|---------------------------|--|
| • | : | • | | | Check Valve Clearance |
| • | | | • | | Replace In-Line Fuel Filter |
| | • | | • | | Replace Spark Plug |
| | Note 2 | | | | Clean Cooling System |
| | sa Ni | • | | | Inspect Spark Arrester (Optional Accessory) |
| | Note 2 | | | | Service Air Cleaner Cartridge |
| · | | | • Note 2 | | Service Air Cleaner Pre-Cleaner |
| | · | | • Note 2 | | Clean Rewind Starter Rotating Screen |
| | | | | Note 2 | Clean Rewind Starter Guard or Electric Starter Rotating Screen |
| | • | | •, | | Change Oil Filter |
| | | • Note 1 | | | Change Oil ◆ |
| | · | | | • | Check Oil Level |
| Yearly | 100 Hours or Every Season | 50 Hours or Monthly | 25 Hours or Weekly | Every 8 Hours or Daily | MAINTENANCE OPERATION |

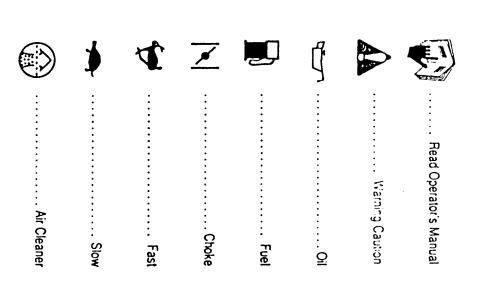
Note 1: Change oil after first 8 hours, then after every 50 hours or every season.

Change oil every 25 hours when operating under heavy load or in high ambient temperatures.

Note 2: Clean more often under dusty conditions or when airborne debris is present.

READY TO SERVE YOU AND ARE COMMITTED TO QUALITY SERVICE. **BRIGGS & STRATTON AUTHORIZED SERVICE CENTERS ARE**

Symbols ווונפו וומנוטוומו



NOTE: See Back Cover for Statement of Limited Warranty.

If warranty service is needed, contact your nearest Authorized Briggs & Stratton Service Center. For prompt attention, your Center will need to know the engine model, type and code numbers, the trouble experienced and the total number of hours the engine was run.

BRIGGS & STRATTON WARRANTY COVERS ONLY DEFECTIVE MATERIAL and/or WORKMANSHIP.

Briggs & Stratton Corporation welcomes the opportunity to make justified warranty repairs by any of its Authorized Service Centers. In most instances, the requests for warranty repair are handled in a quick and routine manner. However, some requests for warranty are received which appear not justified. In these cases, though engine owners may not be aware of it, the premature failure of their engine was caused by abuse or neglect, or the equipment on which it was mounted, rather than the engine.

It you differ with the decision of your Service Center, investigation will be made to determine the applicability of warranty. Ask the Service Center to submit all supporting facts to his Distributor for review. If the Distributor decides that your claim is justified, you will be fully reimbursed for those items accepted as defective. In any event, all decisions regarding warranty applicability will be made in the sole discretion of Briggs and Stratton. To avoid misunderstanding which might occur between engine owners and Authorized Briggs & Stratton Service Centers, we list below some of the causes of engine failure that Briggs & Stratton warranty does not cover for repair or replacement.

NORMAL WEAR: Engines, like all mechanical devices, need periodic parts service and replacement to perform well. Warranty will not cover repair when normal use has exhausted the life of a part or an engine.

IMPROPER MAINTENANCE: Remember that the service life of an engine depends upon the conditions under which it operates and the care if 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.

WARRANTY DOES NOT APPLY FOR SOME ADJUSTMENTS OR IF ABUSE OR NEGLECT CAUSES ENGINE DAMAGE: SUCH AS

 Bent or broken crankshatts that could be caused by striking a solid object with the cutter blade of a rotary mower;

- Sticking valves or clogged carburetors, fuel pipes or other damage caused by using contaminated or stale fuel (Use clean, fresh gasoline – <u>lead-free</u> if available.);
- 3. 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 5 hours of operation. Refill when necessary and change at recommended intervals.) (2 cycle engines: use correct mixture of gasoline and BIA/NMMA centified oil.);
- Parts damaged by overspeeding or overheating caused by did, grass or debris plugging the cooling fins and clogging the flywheel area, or caused by operating the engine in a confined area without sufficient ventilation (Clean fins on the cylinder, cylinder head and flywheel at recommended intervals.);
- Damage or wear to parts caused by dirt which entered the engine because of improper air cleaner maintenance or re-assembly (At recommended intervals, clean and re-oil the oil-foam® element or the foam pre-cleaner and/or clean or replace the cartridge.);
- Damage or wear to parts caused by grit which entered the engine from spark plugs cleaned on an abrasive blast cleaning machine;
- . Tune-up or adjustment needed by an engine but not caused by defective material nor workmanship (Follow the "Operating and Maintenance Instructions" when making any minor adjustments.);
- Parts broken by excessive vibration caused by loose engine mounting, loose cutter blades unbalanced blades or impellers improperly attaching equipment to engine crankshaft, overspeeding or abuse in operation;
- Repair or adjustment of associated parts or assemblies such as clutches, transmissions, remote controls, etc., which are not of Briggs & Stratton manufacture;
- 10. PARTS THAT ARE NOT ORIGINAL BRIGGS & STRATTON PARTS OR PARTS THAT ARE NOT APPROVED BY BRIGGS & STRATTON.

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

| BRIGGS & STRATI | TON ENGINES ARE | MADE UNDER ONE | OR MORE OF TH | E FOLLOWING PAT | TENTS: DESIGN D-24 | 7,177 (OTHER PAT | ENTS PENDING) |
|-----------------|-----------------|----------------------------------|---------------|-----------------|--------------------|------------------|---------------|
| 4.971.219 | 4.745.895 | 4.453.507 | 4,233,043 | 4,048,788 | 3,991,152 | 3,901,199 | 3,828,212 |
| 4.971.001 | 4.720.638 | 4.430.984 | 4,205,737 | 4,048,787 | 3,981 | 3,888,450 | 3.827,307 |
| 4.939.916 | 4.719.682 | 4.414.993 | 4,189,040 | 4,037,389 | 3,971 | .885 | 3.823,700 |
| 4.915.068 | 4.694.792 | 4.414.934 | 4,188,930 | 4,031,872 | 3,970 | 882 | 3,818,586 |
| 4.909.218 | 4,684,917 | 4,372,433 | 4,181,206 | 4,023,550 | 3,968,8 | 875 | 3.796,277 |
| 4,895,119 | 4,633,556 | 4,355,253 | 4,178,894 | 4,014,302 | 3,961,7 | 874 | 3,796,075 |
| 4,889,006 | 4,630,498 | 06 4,630,498 4,353,335 4,168,808 | 4,168,808 |)8 4,014,195 | 3,958,906 | 3,863,614 | 3,796,027 |
| 4,875,448 | 4,622,935 | 4,345,885 | 4,168,288 | 4,013,105 | 3,955 | 857 | 3,782,139 |
| 4,823,752 | 4,522,080 | 4,306,522 | 4,090,345 | 4,011,533 | <u>3</u> | 841 | 3,782,084 |
| 4,819,593 | 4,520,288 | 4,270,509 | 4,068,636 | 4,006,616 | 3,916 | 3,831,268 | 3,678,366 |
| 4.817.577 | 4,512,499 | 4,233,534 | 4.055.898 | 4,003,190 | | | |