


BRIGGS & STRATTON Engine Model Numbers: 117432, 185432.

Maintenance (see figs. 7 8 9)

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

 To prevent accidental starting, remove spark plug wire ① and ground it and disconnect battery at negative terminal, if engine has electric starting system, before servicing.

Oil service (see fig. 7)

Check oil level regularly.

Be sure correct oil level is maintained. Check every 8 hours or daily, before starting engine. See oil filling procedure under **Oil Recommendations**.

Change oil.

Change oil after first 5 hours of operation. Change oil while engine is warm. Refill with new oil of recommended SAE viscosity grade. (see fig. 2)

Air cleaner service (see fig. 8)

Replace pre-cleaner ②, and/or cartridge ③ if very dirty or damaged. (see fig. C)

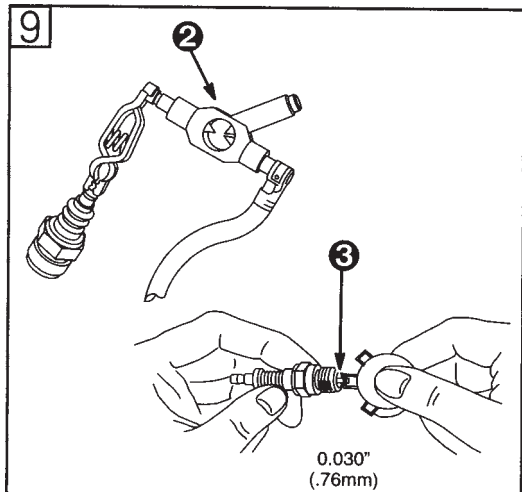
1. Loosen screws. Remove cover and air cleaner assembly from base.
2. Remove cartridge (retainer ④, if equipped) and pre-cleaner.

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.

To service cartridge, clean by tapping gently on a flat surface. Do not use petroleum solvents, e.g., kerosene, which will cause cartridge to deteriorate. Do not use pressurized air, which can damage cartridge. Do not oil cartridge.

3. Reinstall pre-cleaner on retainer, if equipped.
4. Install pre-cleaner in cover with mesh side toward cartridge. Install cartridge in cover or on base.
5. Seat cover and air cleaner assembly squarely onto base (tabs ⑤ into slots ⑥, if equipped).
6. Tighten cover screws securely.

Check valve clearance:
intake is .05 mm and exhaust .10 mm.



Maintenance Cont'd

Spark plug service (see figs. 9)

Replace spark plug every 100 hours or every season, whichever occurs first. Use only Briggs & Stratton Spark Tester ② to check for spark. Spark tester and spark plug wrench are available from any Authorized Briggs & Stratton Service Dealer.

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

Spark plug gap ③ should be .76 mm or 0.030 in.

Keep engine clean

Periodically remove chaff and debris build-up from engine. Do not spray engine with water to clean because water could contaminate fuel. Clean with a brush or compressed air.

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



Accumulation of debris around muffler could cause a fire. Daily or more often, before running engine, clean muffler area

If muffler is equipped with spark arrester screen remove spark arrester screen for cleaning and inspection every 50 hours or every season. Replace if damaged.



Clean fuel filter screen Drain fuel tank or close fuel shut-off valve before cleaning filter. Clean cooling system. Chaff or debris may clog engine's air cooling system, especially after prolonged operation. Internal cooling fins and surfaces may require cleaning to prevent overheating and engine damage. Remove blower housing and clean as shown.

Maintenance Schedule

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

First 5 Hours

- Change oil

Every 8 hours or daily

- Check oil level
- Clean around muffler, springs and linkages

Every 25 hours or every season

- Change oil if operating under heavy load or high ambient temperature
- Service air cleaner pre-cleaner*

Every 50 hours or every season

- Change oil
- Clean and inspect spark arrester, if equipped
- Clean fuel filter

Every 100 hours or every season

- Service air cleaner cartridge*
- Replace spark plug
- Clean cooling system*

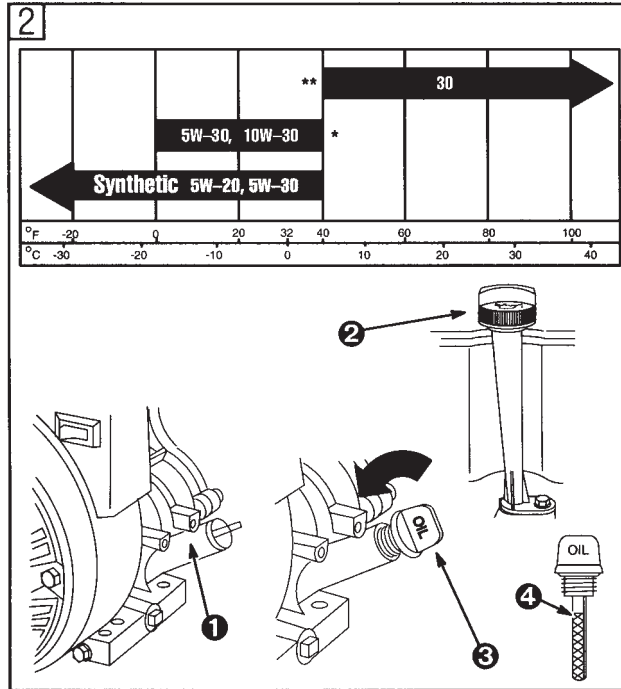
Every season

- Check valve clearance

* Clean more often under dusty conditions, or when airborne debris or chaff is present.

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This information has been extracted out of the Briggs engine operators manual Form No. MS-3594-7/98. For additional information see the complete Briggs Manual.



Oil Recommendations (see fig. [2])

Engine shipped from Briggs & Stratton without oil. Before starting engine, fill with oil. Do not over-fill.

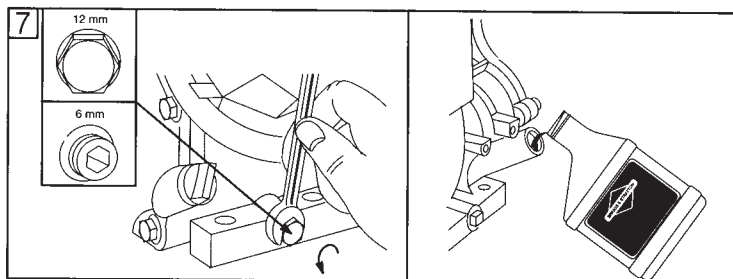
Use a high quality detergent oil classified "For Service SE, SF, SG," such as Briggs & Stratton "warranty certified" SAE 30 oil (see fig. [A]). Use no special additives with recommended oils. Do not mix oil with gasoline.

* Air cooled engines run hotter than automotive engines. Using 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 (approximate capacities)

Model Series	Liters	Quarts	Ounces
85400	0.6	5/8	20
115400 & 117400	0.7	3/4	24
138400	0.9	1	30
185400	1.2	1-1/4	41
235400 & 245400	1.5	1-5/8	51



Place engine level and clean around oil fill ①.

Remove dipstick and wipe with clean cloth. Insert dipstick in oil fill – tighten down if high oil fill ②, but do not tighten down if low oil fill ③ – remove dipstick to check oil level. Oil should be at FULL mark ④.

If oil is required, add slowly. Do not over-fill. Tighten dipstick firmly before starting engine.

Fuel Recommendations

Use clean, fresh, lead-free gasoline with a minimum of 85 octane. Leaded gasoline may be used if it is commercially available and if unleaded is unavailable. Purchase fuel in quantity that can be used within 30 days. See **Storage**.

In U.S.A. leaded gasoline may not be used. Some fuels, called oxygenated or reformulated gasolines, are gasolines blended with alcohols or ethers. Excessive amounts of these blends can damage the fuel system or cause performance problems. If any undesirable operating symptoms occur, use gasoline with a lower percentage of alcohol or ether.

Do not use gasoline which contains Methanol. Do not mix oil with gasoline.

For engine protection, we recommend using Briggs & Stratton Gasoline Additive (see fig. [B]) available from an Authorized Briggs & Stratton Service Dealer.

Check fuel level.

Clean around fuel fill before removing cap to refuel. Allow space in the fuel tank for fuel expansion.

⚠ Allow engine to cool 2 minutes before refueling.

