OPERATING INSTRUCTIONS

Adjustment and Repair Instructions • Parts List

Sears Gasoline Engines

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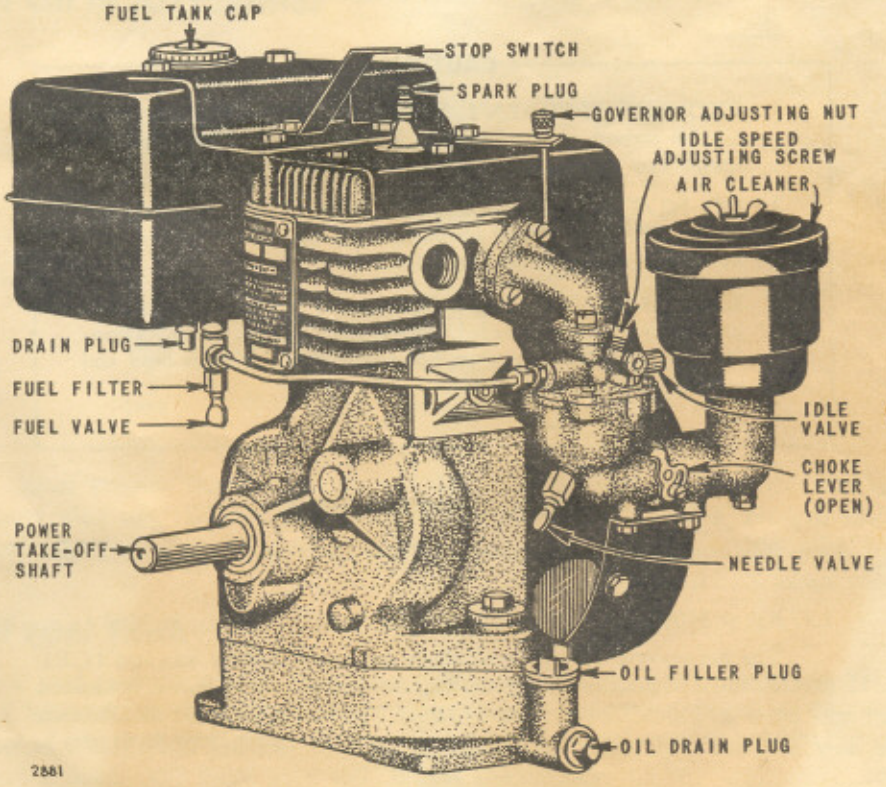
Your Sears Gasoline Engine carries one of the model numbers listed below. It will be found on a plate on the blower housing. Always mention this model number when communicating with us regarding your Sears Gasoline Engine or when ordering parts.

MODEL NUMBERS

500.107025	500.107850	500.108023
500.107065	500.107858	500.108040
500.107120	500.108022	500.108041
500.107130		500.108042



SEARS, ROEBUCK AND CO.

IMPORTANT!

Read these instructions carefully before operating this Engine for the first time.

Guessing how to run it may cause you unnecessary inconvenience, aggravation, or failure to receive the fine service that is built into it.

There is a right way to operate this Engine. This book tells you how.

Each Engine is carefully tested and adjusted at the factory before packing for shipment, and if correctly operated will perform beyond your expectations.

DO NOT START THIS ENGINE UNTIL YOU HAVE READ CAREFULLY THE INSTRUCTIONS ON PREPARING THE ENGINE, PAGE 3.

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For Maintenance Adjustments, see pages 6 to 9.

If you have difficulty in operating your engine and you need outside help to correct it, contact our nearest store or mail-order house.

CAUTION!

1. PROVIDE EFFICIENT VENTILATION. Exhaust gases contain carbon monoxide which is odorless and a deadly poison. Proper care must be taken to provide efficient ventilation.
2. DO NOT FILL GASOLINE TANK WHILE ENGINE IS RUNNING. Avoid spilling gasoline on a hot engine — this may cause an explosion and serious injury.
3. KEEP ENGINE CLEAN. This engine is air-cooled. If cooling system becomes clogged, serious damage may result. Therefore, keep the blower screen, fins on flywheel, cylinder head and block free from grass or dirt.

GENERAL INFORMATION

This engine is a single cylinder, L-Head air-cooled type; bore 2¼" and stroke 2". It is rated at:

1.87 h.p. at 2600 r.p.m. 2.27 h.p. at 3100 r.p.m. 2.50 h.p. at 3600 r.p.m.

The horsepower ratings listed above are established by standard I.C.E.I. procedures. For practical operation, the horsepower loading should not exceed 85 per cent of these ratings. Engine power will decrease 3½ per cent for each 1,000 feet above sea level, and 1 per cent for each 10 degrees above 60 degrees F.

PREPARATION OF ENGINE BEFORE STARTING

Fill Crankcase With Oil

Remove the oil filler plug. Use a screwdriver or bar. Place the engine level. Fill the crankcase to the top of the filler pipe. Replace the plug. Screw it down tight.

For temperatures 32° and above use "Allstate" (S.A.E. No. 20) oil or equal.

For temperatures below 32° use "Allstate" (S.A.E. No. 10W) oil or equal.

For temperatures below 0° add 1% of kerosene to the S.A.E. No. 10W oil for each degree below 0° but do not add more than 30%.

Put Oil In Air Cleaner

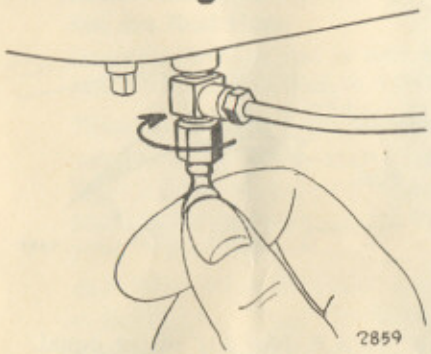
Air cleaner protects engine from grit and dirt. Use the same oil as in the crankcase. Remove wing nut. Lift out filter element. Pour in oil to "oil level" mark at end of arrows. Replace element and wing nut. Be sure gaskets are in place. See inset.

Fill Fuel Tank

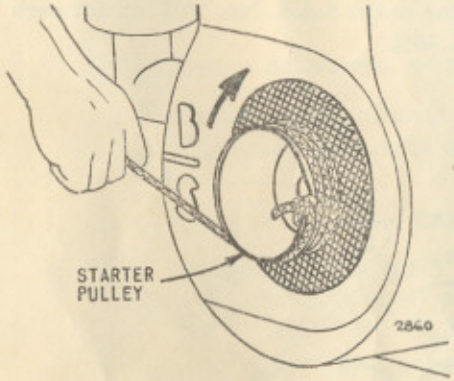
Use a good grade of regular, clean, fresh gasoline. NEVER USE GASOLINE THAT HAS BEEN STANDING IN A CAN FOR SEVERAL MONTHS as gum may form under such conditions and may clog the carburetor, fuel tank, etc. See that vent hole in cap is open. DO NOT MIX OIL WITH GASOLINE.

USING THE ENGINE

To Start Engine



1. *Open Fuel Valve*



2. *Close the Choke*

Move lever in direction of arrow.

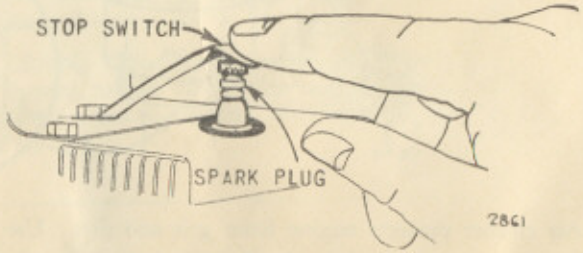
3. *Place the Knot In Slot*

Wind the starter rope around the pulley in direction shown by arrow. Pull the rope with a quick full arm stroke. Repeat if necessary with choke opened slightly. When engine starts open choke gradually.

RETRIEVABLE STARTER. Pull fast on rope and return slowly. Keep firm hold on starter grip until fully returned.

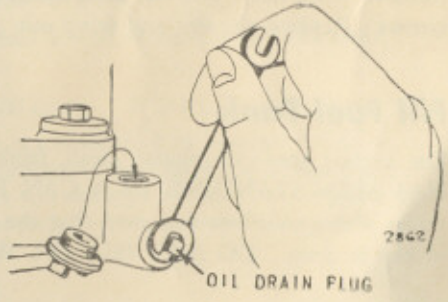
To Stop Engine

Press the stop switch against the end of spark plug until engine stops. To stop engines fitted with ignition shielding — press red stop switch on blower case.



Change Oil (Crankcase)

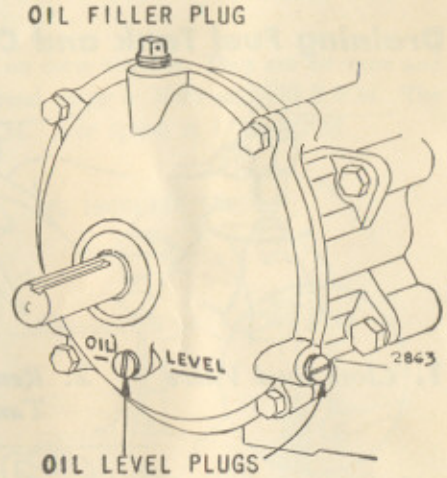
Change oil after 5 hours of operation. Remove the oil drain plug. Drain oil. Replace drain plug. Remove oil filler cap and refill with new oil. Replace oil filler cap. Add oil regularly after each 5 hours of operation. Thereafter change oil every 25 hours of operation.



USING THE ENGINE

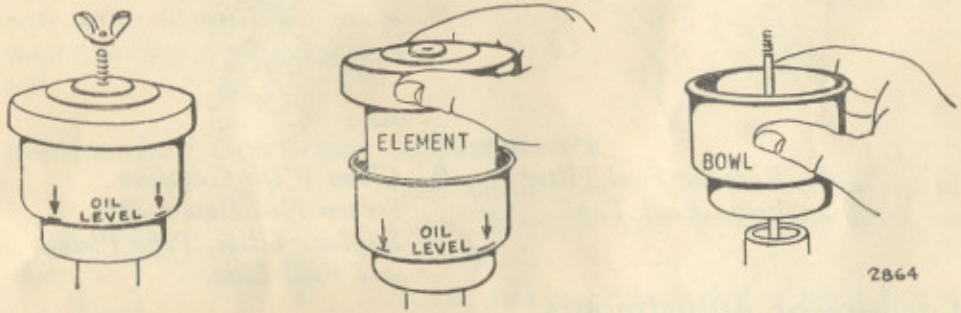
Check Oil (Gear Reduction)

6-TO-1 GEAR REDUCTION MODELS. Remove one of the oil plugs in lower half of gear cover every 100 hours of operation to check the oil level. To refill, pour oil (same grade as used in crankcase) into oil filler hole until oil runs out of lower hole. Replace both oil plugs.



Change Oil (Air Cleaner)

Check the air cleaner frequently (every hour under extremely dusty conditions). Clean and refill at least every 25 hours.



1. *Remove Wing Nut* **2.** *Lift Out Element* **3.** *Lift Off Bowl*

4. Pour out old oil. Wash the filter element in gasoline. Clean bowl, wipe dry. Replace bowl. Pour in oil to "oil level" mark shown. Replace filter element and wing nut. Be sure gaskets are in place.

STORAGE INSTRUCTIONS

Engines stored any length of time should be completely drained of fuel to prevent gum deposits forming on essential parts such as the carburetor, fuel filter, fuel lines, and tank.

Such deposits may affect the operation of the engine when again used. Therefore, it is important that the following instructions be adhered to before storing the engine:

a. Remove fuel tank drain plug. Open fuel valve. Drain tank completely.

b. Operate engine until it stops from exhaustion of fuel to clean gasoline out of carburetor.

c. While engine is still warm, drain and clean the oil sump. Refill with fresh oil.

d. Replace fuel tank drain plug.

e. Leave fuel valve open.

f. Remove spark plug, pour one ounce of S. A. E. No. 20 oil into cylinder and crank slowly to spread oil. Replace spark plug.

g. Clean dirt and chaff from cylinder and cylinder head fins, blower housing, etc.