HONDA Engine Model Numbers: GX270 & GX340

This information has been extracted out of the Honda engine operators manual No. 31ZH9613, 00X31-ZH9-6130. For additional information see the complete Honda Manual.

ENGINE OIL CHANGE

Drain the used oil while the engine is warm. Warm oil drains quickly and completely.

1. Place a suitable container below the engine to catch the used oil, then remove the filler cap/dipstick and the drain plug.

2. Allow the used oil to drain completely, then reinstall the drain plug, and tighten it securely.

3. Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash, pour it on the ground, or down a drain.

4. With the engine in a level position, fill to the outer edge of the oil filler hole with the recommended oil (see page 28).

Engine oil capacity: 1.16 US qt (1.1 l)

**NOTICE**

Running the engine with a low oil level can cause engine damage.

The Oil Alert system (applicable engine types) will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, fill to the upper limit, and check the oil level regularly.

5. Screw in the filler cap/dipstick securely.

ENGINE OIL LEVEL CHECK

Check the engine oil level with the engine stopped and in a level position.

1. Remove the filler cap/dipstick and wipe it clean.

2. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.

3. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil (see page 28).

4. Screw in the filler cap/dipstick securely.

**NOTICE**

Running the engine with a low oil level can cause engine damage.

The Oil Alert system (applicable engine types) will automatically stop the engine before the oil level falls below safe limits. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

**ENGINE OIL RECOMMENDATIONS**

Oil is a major factor affecting performance and service life. Use 4-stroke automotive detergent oil.

SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average ambient temperature in your area is within the recommended range.

Refueling

**FUEL TANK CAPACITIES**

GX270/GX270: 1.59 US gal (6.0 l)
GX340/GX390: 1.72 US gal (6.5 l)

With the engine stopped, remove the fuel tank cap and check the fuel level. Refill the tank if the fuel level is low.

**NOTICE**

Generators equipped with WINCO long run tanks have a fuel capacity of 4.5 US Gal. Refuel in a well-ventilated area before starting the engine. If the engine has been running, allow it to cool. Refuel carefully to avoid spilling fuel. Do not fill above the fuel strainer shoulder. After refueling, tighten the fuel tank cap securely.

Never refuel the engine inside a building where gasoline fumes may reach flames or sparks. Keep gasoline away from appliance pilot lights, barbecues, electric appliances, power tools, etc.

Spilled fuel is not only a fire hazard, it causes environmental damage. Wipe up spills immediately.

**FUEL RECOMMENDATIONS**

Use unleaded gasoline with a pump octane rating of 86 or higher. These engines are certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Occasionally you may hear a light “spark knock” or “pinging” (metallic rattling noise) while operating under heavy loads. This is no cause for concern.

If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized Honda servicing dealer.

**NOTICE**

Running the engine with persistent spark knock or pinging can cause engine damage.

Running the engine with persistent spark knock or pinging is misuse, and the Distributor’s Limited Warranty does not cover parts damaged by misuse.
HONDA Engine Model Numbers: GX270 & GX340

MAINTENANCE SCHEDULE

<table>
<thead>
<tr>
<th>ITEM</th>
<th>REGULAR SERVICE PERIOD (3)</th>
<th>Each use</th>
<th>First month or 20 Hrs.</th>
<th>Every 3 months or 50 Hrs.</th>
<th>Every 6 months or 100 Hrs.</th>
<th>Every year or 300 Hrs.</th>
<th>Refer to page</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Engine oil</td>
<td>Check level</td>
<td>○</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change</td>
<td>○</td>
<td>○</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission oil (applicable type)</td>
<td>Check level</td>
<td>○</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change</td>
<td>○</td>
<td>○</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Air filter</td>
<td>Check</td>
<td>○</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clean</td>
<td>○ (1)</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Sediment cup</td>
<td>Clean</td>
<td>○</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Spark plug</td>
<td>Clean-Readjust</td>
<td>○</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replace</td>
<td>○</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spark arrester (optional part)</td>
<td>Clean</td>
<td>○</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clean</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idler speed</td>
<td>Check-adjust</td>
<td>○ (2)</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valve clearance</td>
<td>Check-Readjust</td>
<td>○ (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel tank and strainer</td>
<td>Clean</td>
<td>○ (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel line</td>
<td>Check</td>
<td>Every 2 years (Replace if necessary) (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Emission-related items.
* Replace the paper air filter element only.
Standard dual-filter-element type: Every year or 300 hours.
Cyclone dual-filter-element type: Every 2 years or 600 hours.

(1) Service more frequently when used in dusty areas.

(2) These items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures.

(3) For commercial use, log hours of operation to determine proper maintenance intervals.

AIR CLEANER SERVICE

A dirty air filter will restrict air flow to the carburetor, reducing engine performance. If you operate the engine in very dusty areas, clean the air filter more often than specified in the MAINTENANCE SCHEDULE.

**Notice**

Operating the engine without an air filter, or with a damaged air filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered by the Distributor’s Limited Warranty.

Dual-Filter-Element Type

1. Remove the wing nut from the air cleaner cover, and remove the cover.
2. Remove the wing nut from the air filter, and remove the filter.
3. Remove the foam filter from the paper filter.
4. Inspect both air filter elements, and replace them if they are damaged. Always replace the paper air filter element at the scheduled interval (see page 23).
5. Clean the air filter elements if they are to be reused.

SEDIMENT CUP CLEANING

1. Move the fuel valve to the OFF position, then remove the fuel sediment cup and O-ring.
2. Wash the sediment cup and O-ring in nonflammable solvent, and dry them thoroughly.
3. Place the O-ring in the fuel valve, and install the sediment cup. Tighten the sediment cup securely.
4. Move the fuel valve to the ON position, and check for leaks. Replace the O-ring if there is any leakage.

SPARK PLUG SERVICE

Recommended spark plugs: BR6ES (NGK) W20EPR-U (DENSO)

**Notice**

Incorrect spark plugs can cause engine damage.

1. Disconnect the spark plug cap, and remove any dirt from around the spark plug area.
2. Remove the spark plug with a 13/16-inch spark plug wrench.
3. Inspect the spark plug. Replace it if the electrodes are worn, or if the insulator is cracked or chipped. Clean the spark plug with a wire brush if you are going to reuse it.
4. Measure the spark plug electrode gap with a suitable gauge. The gap should be 0.025—0.031 in (0.70—0.80 mm). Correct the gap, if necessary, by carefully bending the side electrode.
5. Install the spark plug carefully, by hand, to avoid cross-threading.
6. After the spark plug seats, tighten with a 13/16-inch spark plug wrench to compress the washer.
7. Attach the spark plug cap.

A loose spark plug can overheat and damage the engine. Overtightening the spark plug can damage the threads in the cylinder head.