



GP160H • GP200H Engine Assembly Information

HONDA

PISTON

PISTON RING

REASSEMBLY:

To install the oil ring, install the spacer first, and then install the side rails.

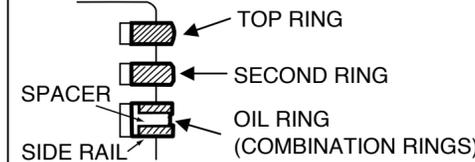
Be sure that the top ring and second ring are not interchanged.

Install the top ring and second ring on the piston with the maker mark side facing up.

Check that the piston rings rotate smoothly after installing them.

Space the piston ring end gaps 120° apart, and do not align the ring end gaps with the piston pin bore.

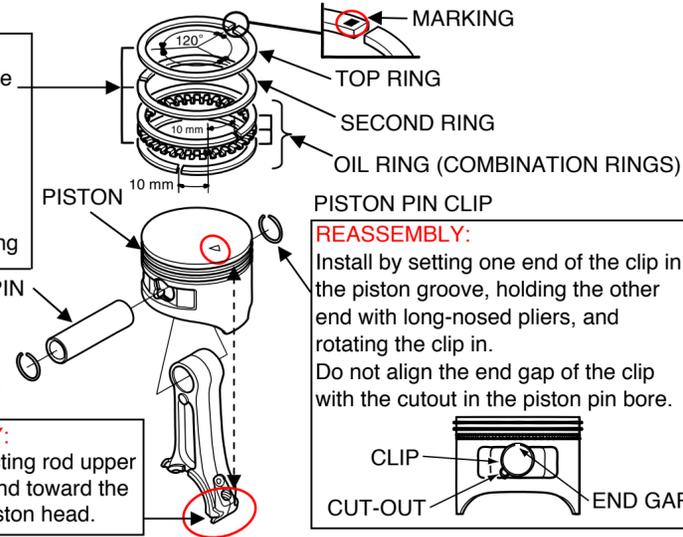
Space the oil ring side rail end gaps at least 10 mm (0.4 in) apart.



CONNECTING ROD

REASSEMBLY:

Set the connecting rod upper with the long end toward the mark on the piston head.

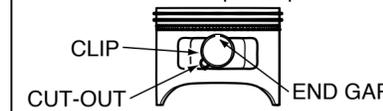


PISTON PIN CLIP

REASSEMBLY:

Install by setting one end of the clip in the piston groove, holding the other end with long-nosed pliers, and rotating the clip in.

Do not align the end gap of the clip with the cutout in the piston pin bore.



CYLINDER HEAD/VALVES

VALVE SPRING RETAINER

DISASSEMBLY:

Push down and slide the retainer to the side, so the valve stem slips through the hole at the side of the retainer.

REASSEMBLY:

The exhaust valve retainer has a larger center recess than the intake valve retainer so it can accept the valve rotator.

NOTICE:

Do not remove the valve spring retainers while the cylinder head is installed, or the valves will drop into the cylinder.

EXHAUST VALVE

REASSEMBLY:

Before installation, remove carbon deposits and inspect the valve.

Do not interchange with the intake valve.

VALVE HEAD DIAMETER

GX120: IN: 22 mm (0.87 in)

EX: 19 mm (0.75 in)

GX160: IN: 25 mm (0.98 in)

EX: 24 mm (0.94 in)

VALVE ROTATOR (Exhaust valve only)

NOTICE:

If the valve rotator is not installed, the exhaust valve may drop into the cylinder when starting the engine.

ROCKER ARM

PIVOT LOCK NUT (2)

10 N·m (1.0 kgf·m, 7 lbf·ft)

ROCKER ARM (2)

REASSEMBLY:

Before installing, check for wear on the surfaces which contact the pivot bolt, the push rod, and the rocker arm pivot.

INTAKE VALVE

REASSEMBLY:

Do not interchange with the exhaust valve.

Valve head diameter: Intake: 25 mm (0.98 in) Exhaust: 24 mm (0.94 in)

Be careful not to damage the valve stem seal when installing.

CYLINDER HEAD

VALVE GUIDE (2)

VALVE SPRING (2)

ROCKER ARM PIVOT (2)

ROCKER ARM PIVOT BOLT (2)

24 N·m (2.4 kgf·m, 17 lbf·ft)

ROCKER ARM PIVOT NUT (2)

10 N·m (1.0 kgf·m, 7 lbf·ft)

ROCKER ARM (2)

10 N·m (1.0 kgf·m, 7 lbf·ft)

CRANKCASE COVER/CRANKSHAFT/PISTON

PISTON

REASSEMBLY:

Install with the triangle mark toward the pushrod hole.

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VALVE LIFTER

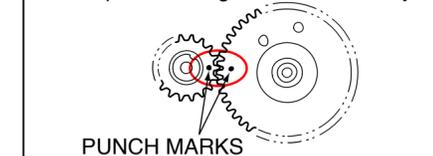
REASSEMBLY:

Install the lifters immediately before installing the camshaft.

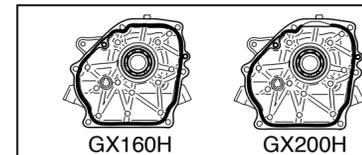
CAMSHAFT

REASSEMBLY:

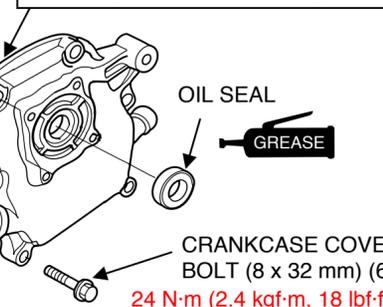
With the crankshaft in place, align the timing punch mark on the cam gear with the punch mark on the crankshaft gear. Before installing, inspect for worn and weakened springs and check that the decompressor weight moves smoothly.



CRANKCASE COVER



Apply a liquid sealant (ThreeBond 1216E or equivalent) as shown. Install the cover within 3 minutes after application. Pouring the engine oil is performed after 30 minutes have elapsed from assembling.



24 N·m (2.4 kgf·m, 18 lbf·ft)

OIL SEAL

Apply grease to the oil seal.

GREASE

Apply grease to the oil seal.

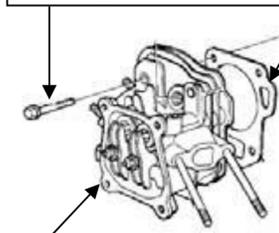
CYLINDER HEAD

CYLINDER HEAD BOLT 8 x 60 (4)

24 N·m (2.4 kgf·m, 17 lbf·ft)

REMOVAL/INSTALLATION:

Loosen and tighten the bolts in a crisscross pattern in 2-3 steps.



REMOVAL/INSTALLATION:

Before installation, remove any carbon deposits from the combustion chamber and inspect the valve seats.

Measure the cylinder compression after reassembly.

GOVERNOR

GOVERNOR WEIGHT

REASSEMBLY: Be sure to install the governor weight before installing the crankshaft.

CLIP

REASSEMBLY:

Insert firmly into the shaft groove.

10 mm NUT

GOVERNOR SLIDER

REASSEMBLY: Be sure to install the governor slider before installing the crankshaft.

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