



GP160H • GP200H Engine Assembly Information

HONDA

PISTON

PISTON RING

REASSEMBLY:

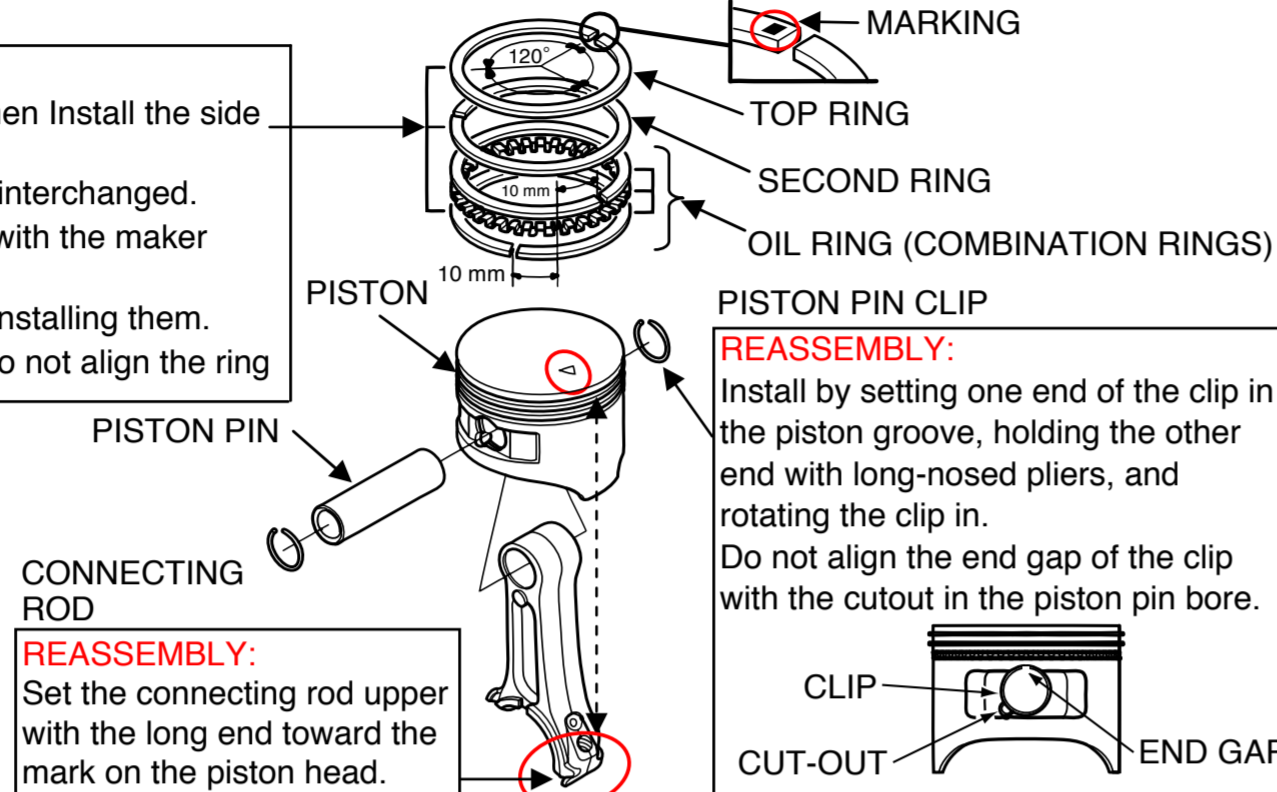
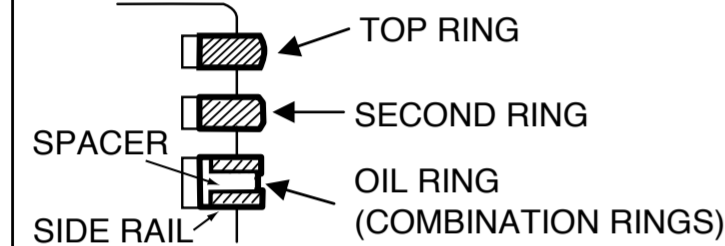
To install the oil ring, install the spacer first, and then install the side rails.

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:

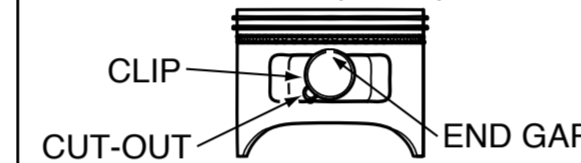
Set the connecting rod upper with the long end toward the mark on the piston head.

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.

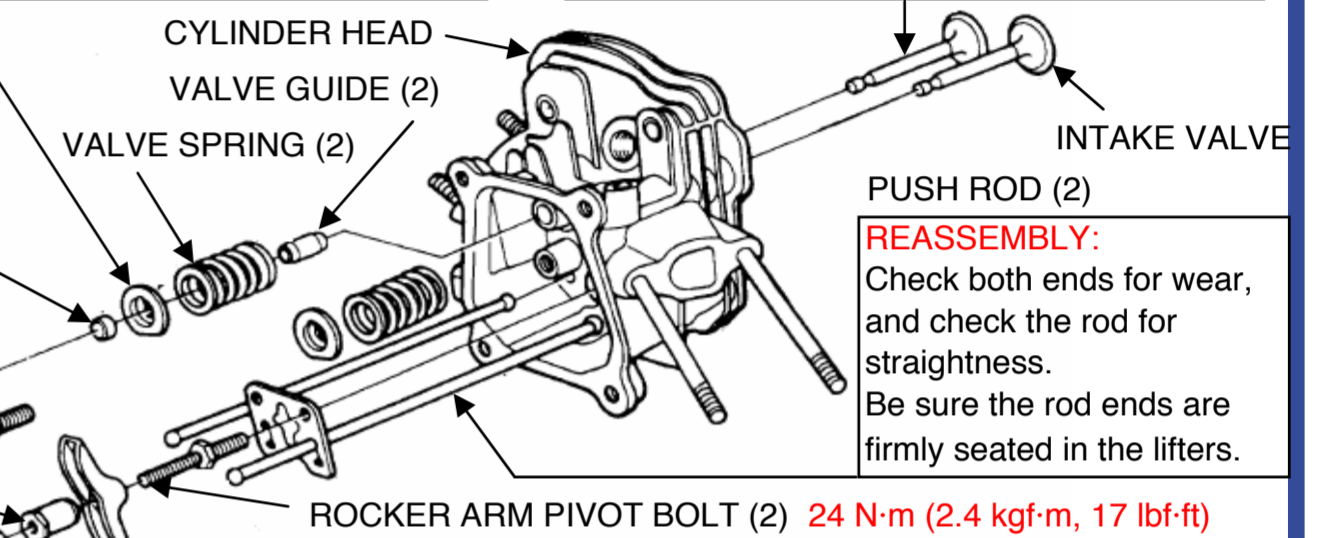
INTAKE VALVE

REASSEMBLY:

Do not interchange with the exhaust valve.

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

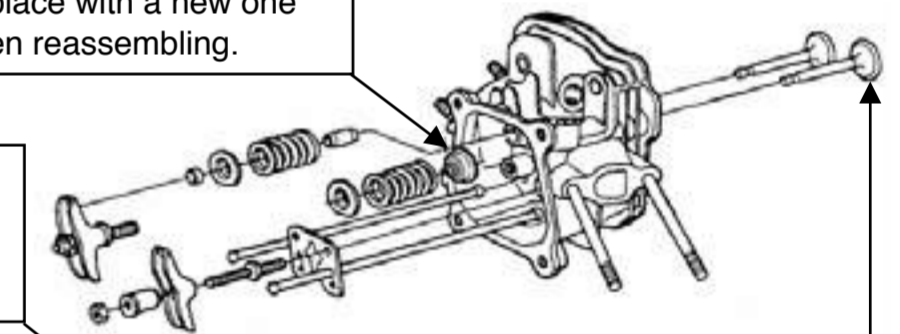
Be careful not to damage the valve stem seal when installing.



GX200: Refer to the above for information not shown below.

VALVE STEM SEAL (Intake valve only)

Replace with a new one when reassembling.



CRANKCASE COVER/CRANKSHAFT/PISTON

PISTON

REASSEMBLY:

Install with the triangle mark toward the pushrod hole.

TRIANGLE MARK
PUSH ROD HOLE

VALVE LIFTER

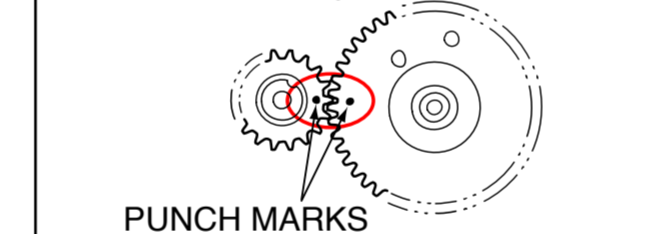
REASSEMBLY:

Install the lifters immediately before installing the camshaft.

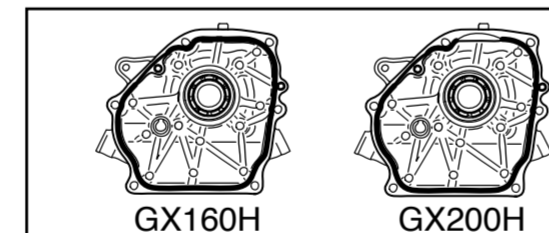
CAMSHAFT

REASSEMBLY:

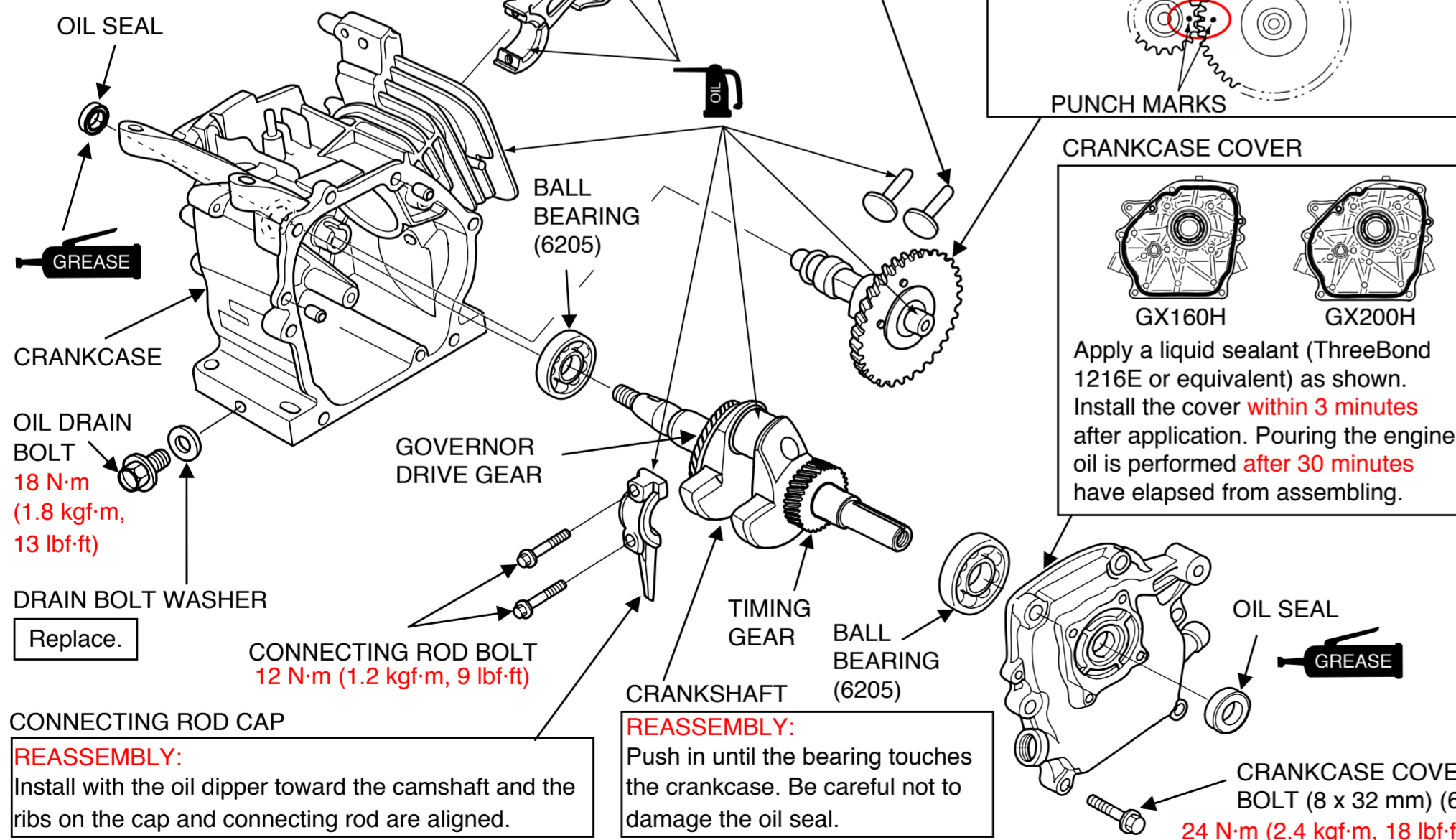
With the crankshaft in place, align the timing punch mark on the cam gear with the punch mark on the crankshaft gear. Before installing, inspect for worn and weakened springs and check that the decompressor weight moves smoothly.



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.



CONNECTING ROD CAP
REASSEMBLY: Install with the oil dipper toward the camshaft and the ribs on the cap and connecting rod are aligned.

CRANKSHAFT
REASSEMBLY: Push in until the bearing touches the crankcase. Be careful not to damage the oil seal.

CRANKCASE COVER BOLT (8 x 32 mm) (6)
24 N·m (2.4 kgf·m, 18 lbf·ft)

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.

GASKET

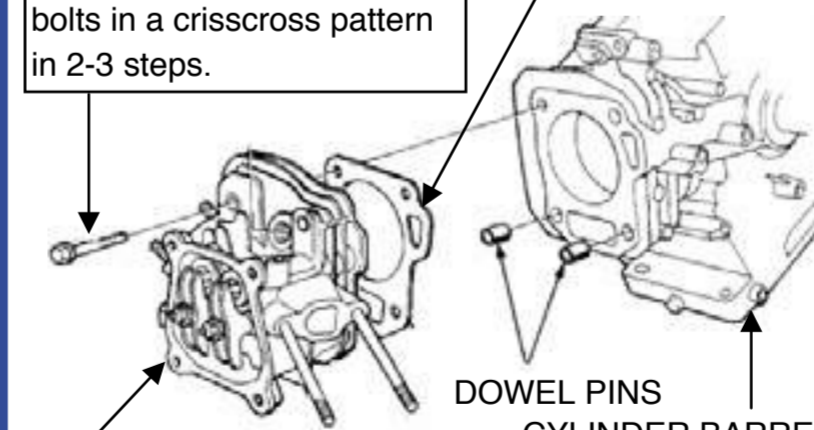
Do not reuse.

CYLINDER HEAD

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.

GOVERNOR SLIDER

REASSEMBLY: Install inside the case.

CLIP

REASSEMBLY: Insert firmly into the shaft groove.

10 mm NUT

Yellow (To engine switch)

O-RING

REASSEMBLY: Install firmly in the groove.

OIL LEVEL SWITCH

6 x 12 (2)

GOVERNOR ARM SHAFT

REASSEMBLY: The lock pin must be installed with the straight side of the pin against the groove in the shaft.

