

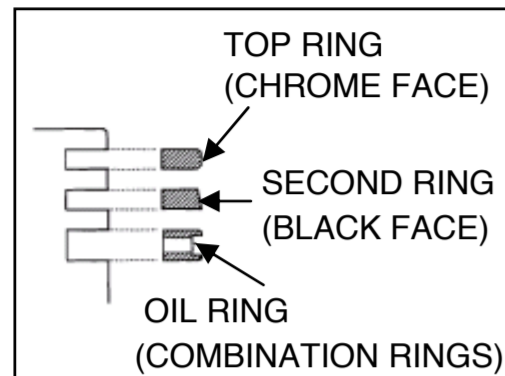


GCV135 • GCV160 • GCV190 • GSV190 Engine Assembly

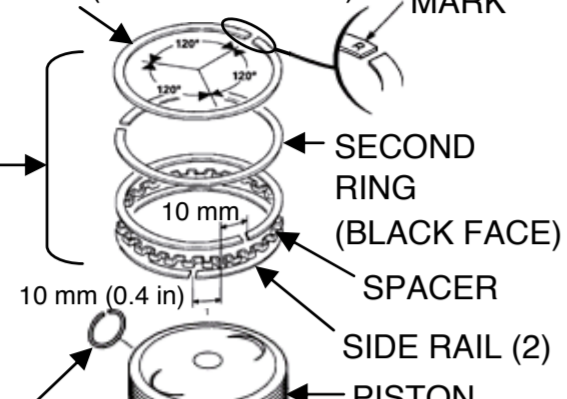
HONDA

PISTON

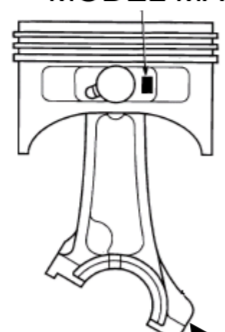
PISTON RINGS



TOP RING (CHROME FACE) MARK



MODEL MARK

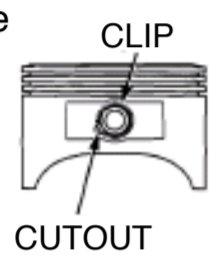


CONNECTING ROD WITH THE LONG END

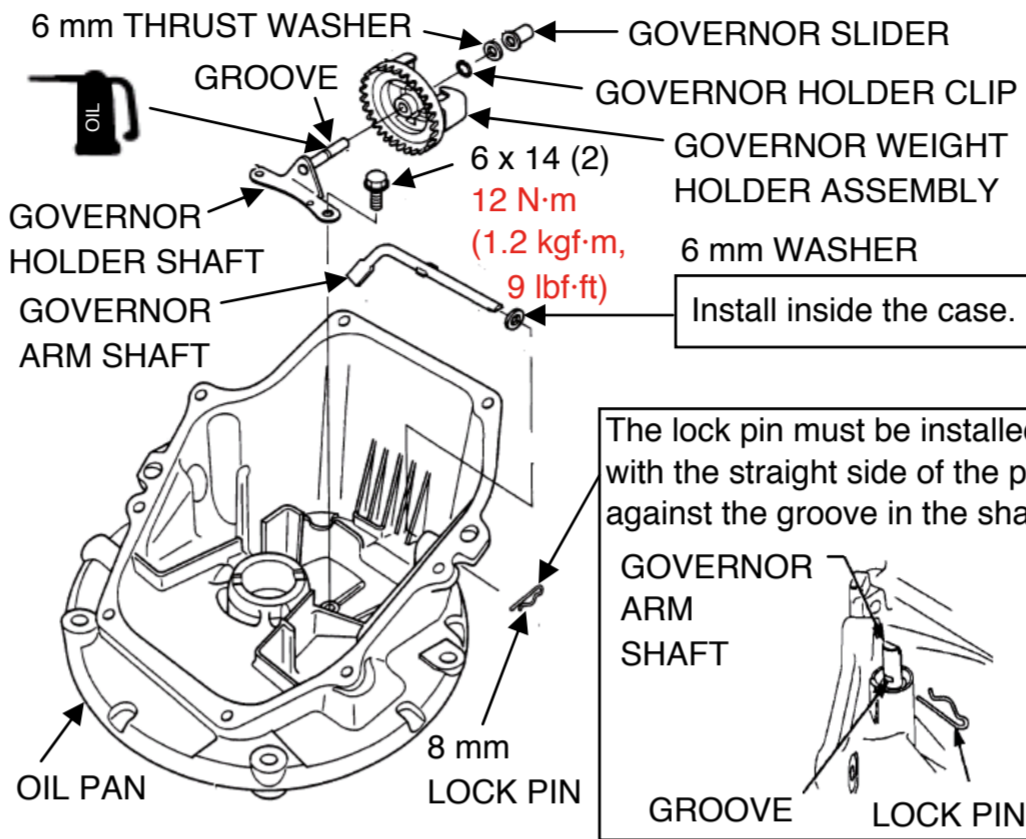
NOTICE: Take care not to break the piston ring when installing the piston assembly in the cylinder.

PISTON PIN CLIP (2)

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

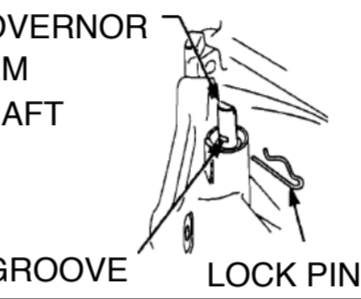


CRANKCASE COVER/GOVERNOR

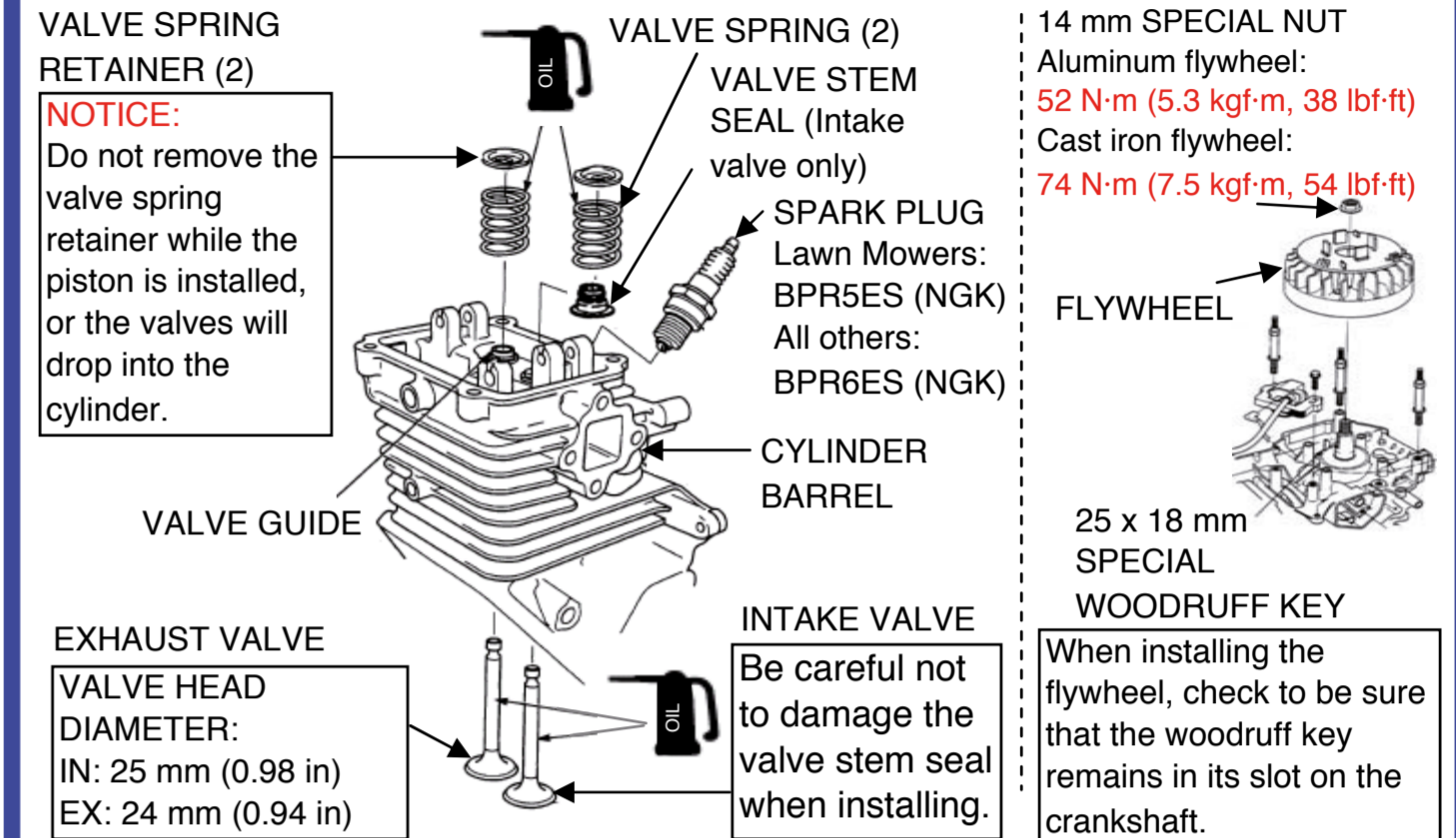


12 N·m (1.2 kgf-m, 9 lbf-ft)

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



VALVES/FLYWHEEL

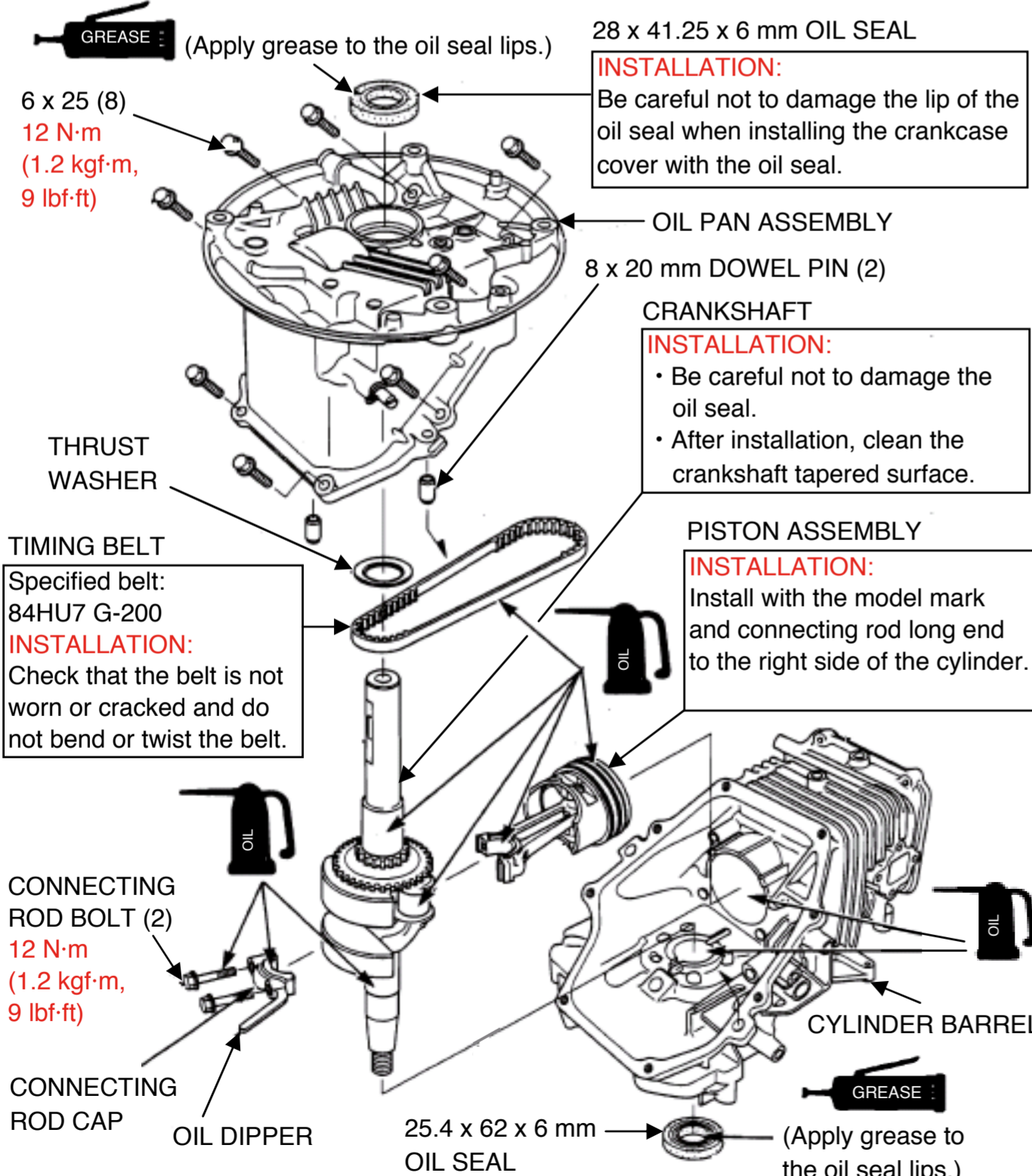


NOTICE: Do not remove the valve spring retainer while the piston is installed, or the valves will drop into the cylinder.

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

When installing the flywheel, check to be sure that the woodruff key remains in its slot on the crankshaft.

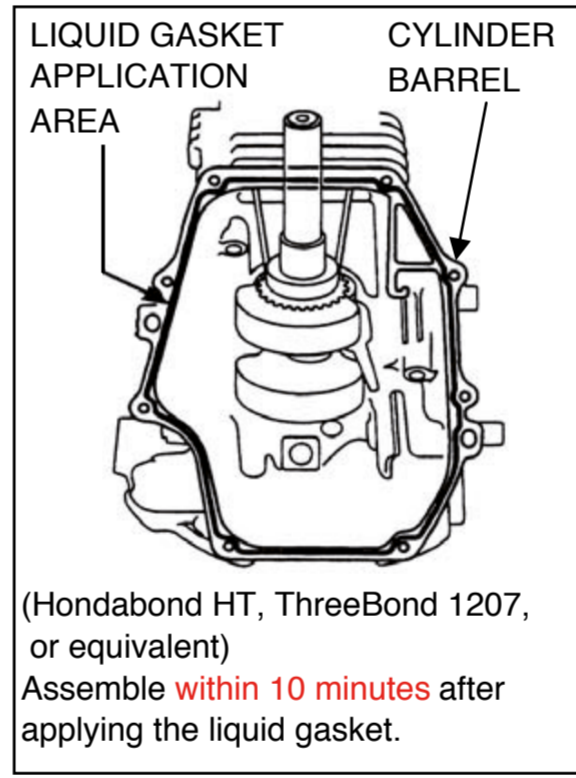
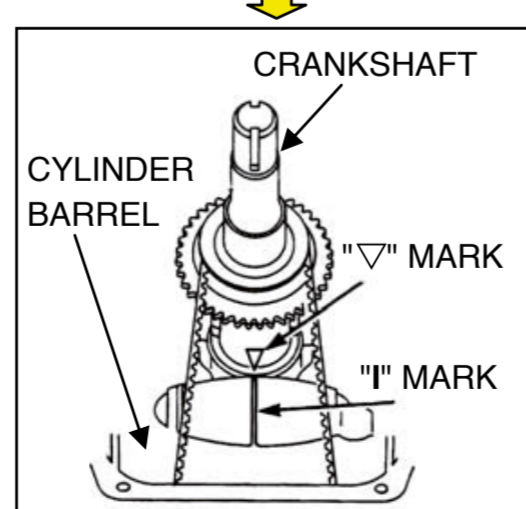
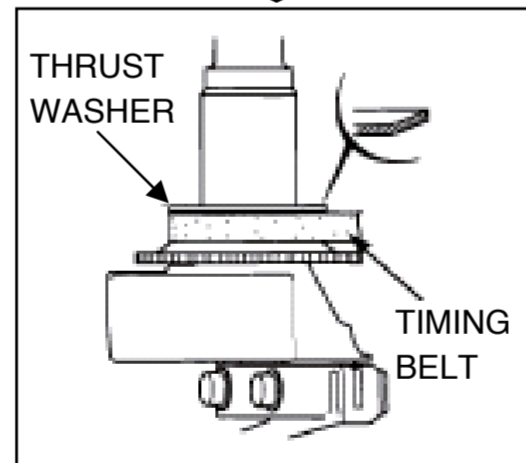
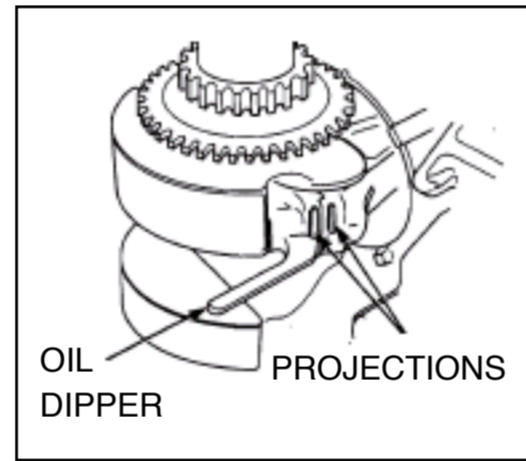
OIL PAN/CRANKSHAFT/CYLINDER BARREL



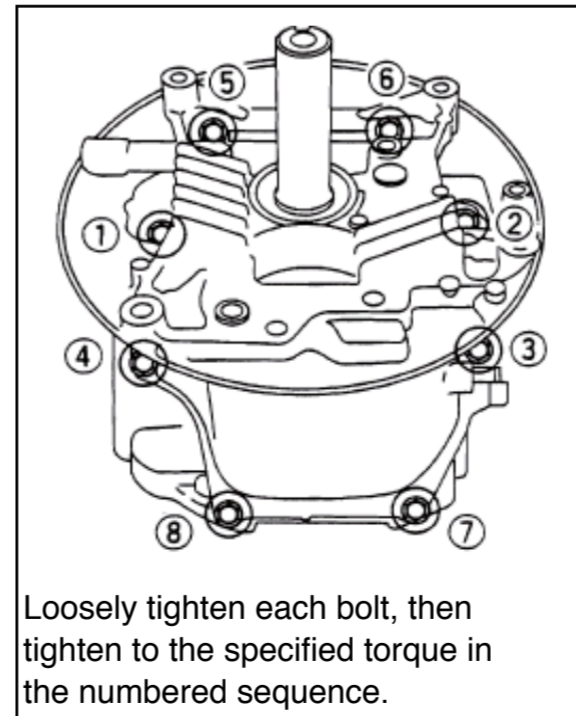
INSTALLATION: Be careful not to damage the lip of the oil seal when installing the crankcase cover with the oil seal.

INSTALLATION: Be careful not to damage the oil seal. After installation, clean the crankshaft tapered surface.

INSTALLATION: Install with the model mark and connecting rod long end to the right side of the cylinder.

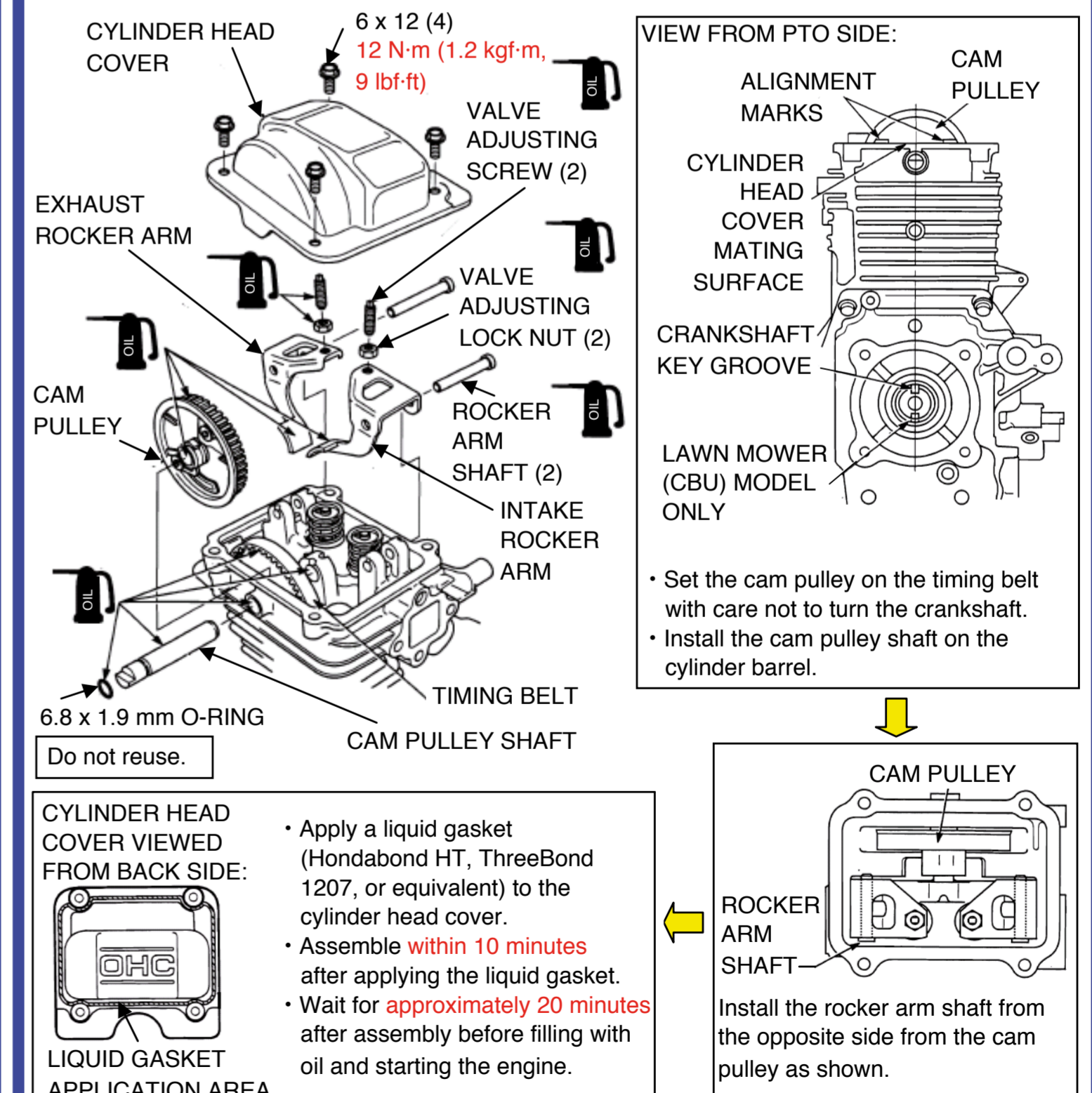


(Hondabond HT, ThreeBond 1207, or equivalent) Assemble **within 10 minutes** after applying the liquid gasket.



Loosely tighten each bolt, then tighten to the specified torque in the numbered sequence.

CAM PULLEY/ROCKER ARM/CYLINDER HEAD COVER



12 N·m (1.2 kgf-m, 9 lbf-ft)

Do not reuse.

CYLINDER HEAD COVER VIEWED FROM BACK SIDE:
• Apply a liquid gasket (Hondabond HT, ThreeBond 1207, or equivalent) to the cylinder head cover.
• Assemble **within 10 minutes** after applying the liquid gasket.
• Wait for **approximately 20 minutes** after assembly before filling with oil and starting the engine.

VIEW FROM PTO SIDE:
• Set the cam pulley on the timing belt with care not to turn the crankshaft.
• Install the cam pulley shaft on the cylinder barrel.

Install the rocker arm shaft from the opposite side from the cam pulley as shown.