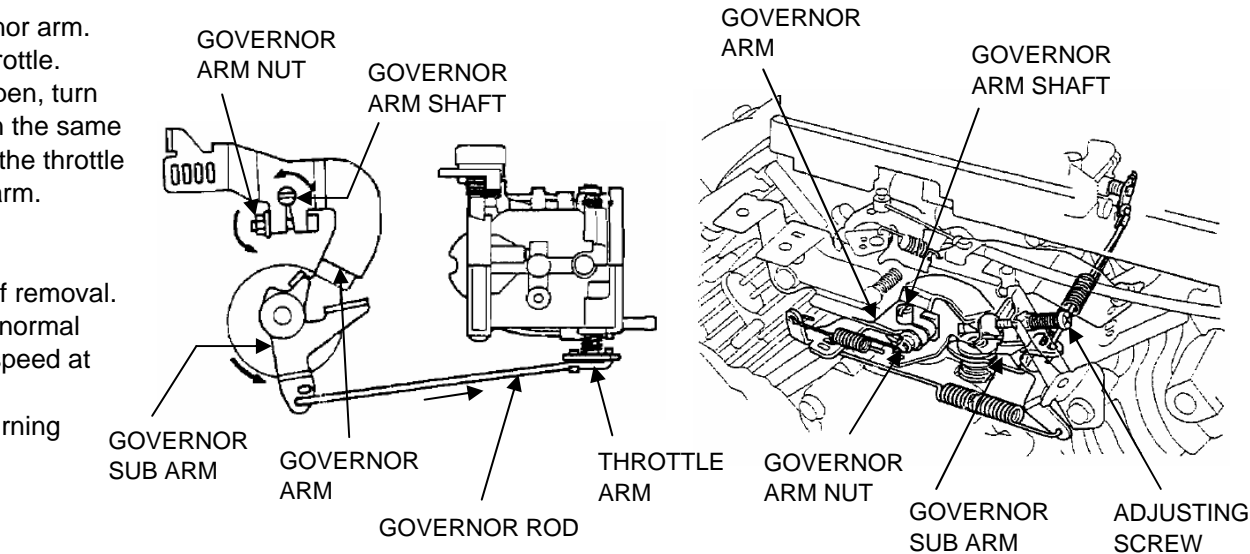
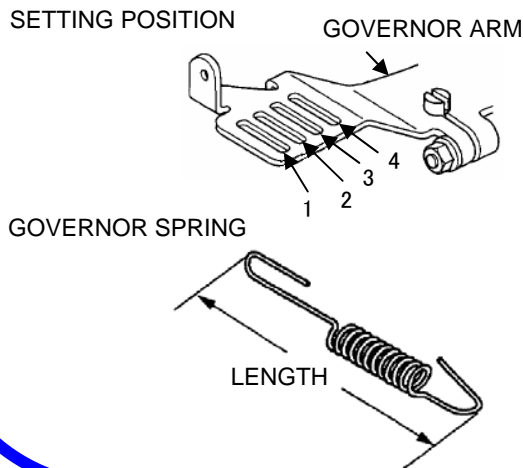




**GOVERNOR (AUTO THROTTLE EQUIPPED TYPE)**

- ①. Remove the air cleaner.
- ②. Loosen the governor arm nut on the governor arm.
- ③. Move the governor arm to fully open the throttle.
- ④. Holding the carburetor throttle valve fully open, turn the governor arm shaft as far as it will go in the same direction the governor arm moved to open the throttle taking care not to move the governor sub arm. Tighten the governor arm nut securely.  
TORQUE: **11 N·m (1.1 kgf·m, 8 lbf·ft)**
- ⑤. Install the air cleaner in the reverse order of removal.
- ⑥. Start the engine and allow it to warm up to normal operating temperature. Check the engine speed at no load with the auto throttle OFF.
- ⑦. Adjust the engine speed, if necessary by turning the adjusting screw in or out.



Model	Type	Carburetor setting mark	Governor spring				Control
			Color	Length	Setting position	Max. speed (rpm)	
GX610K1	With auto throttle	BG21N [A]	Silver gray	101 mm	2	<b>3,750 ± 150 rpm</b>	Auto
		BG21P [A]	Silver gray	101 mm	2	<b>3,850 ± 150 rpm</b>	Auto
GX620K1	With auto throttle	BG22N[A]	Black	75 mm	1	<b>3,850 ± 150 rpm</b>	Remote
		BG22N[A]	Silver gray	101 mm	2	<b>3,850 ± 150 rpm</b>	Auto
		BG22P [A]	Black	99 mm	1	<b>3,150 ± 150 rpm</b>	Auto

**VALVE CLEARANCE**

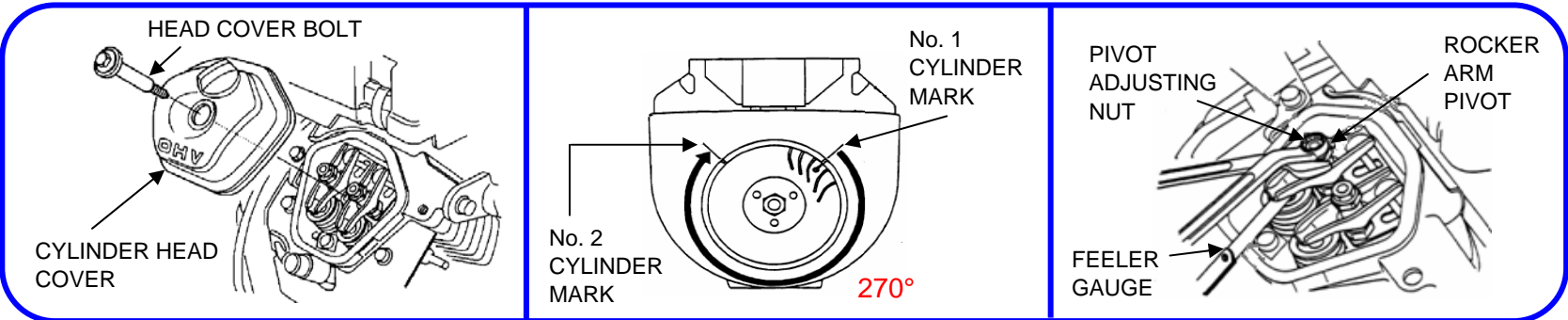
Valve clearance inspection and adjustment must be performed with the engine cold.

**INSPECTION:**

- ①. Remove the head cover bolt and the cylinder head cover.
- ②. Remove the recoil starter or screen.
- ③. Rotate the flywheel until the "T" mark on the cooling fan aligns with the "T" mark on the right side of the fan cover. (This alignment point is the top dead center of the No. 1 cylinder.) Be sure that the No. 1 cylinder is at top dead center of its compression stroke.
- ④. Check intake and exhaust valve clearance for the No. 1 cylinder by inserting a feeler gauge between the valve stem and the valve rocker arm.
- ⑤. Rotate the crankshaft 270° to put the No. 2 cylinder at top dead center of its compression stroke, and then check intake and exhaust valve clearance for that cylinder. VALVE CLEARANCE (cold): **0.15 ± 0.02 mm (IN), 0.20 ± 0.02 mm (EX)**

**ADJUSTMENT:**

- ①. With the cylinder at top dead center of its compression stroke, loosen the pivot adjusting nut, and turn the rocker arm pivot to obtain the specified intake and exhaust valve clearance.
- ②. Hold the rocker arm pivot using a wrench, and tighten the pivot adjusting nut. TORQUE: **9 N·m (0.9 kgf·m, 6.5lbf·ft)**
- ③. Recheck valve clearance after tightening the adjusting nut.



**IGNITION COIL AIR GAP**

Adjustment is required only when the ignition coil or the flywheel has been removed.

- ①. Loosen the ignition coil bolts.
- ②. Insert a long thickness gauge between the ignition coil and the flywheel. Both gaps should be adjusted simultaneously.
- ③. Push the ignition coil firmly toward the flywheel and tighten the bolts.  
SPECIFIED CLEARANCE: **0.4 ± 0.2 mm (0.016 ± 0.008 in)**  
· Avoid the flywheel magnet when adjusting the ignition coil air gap.

