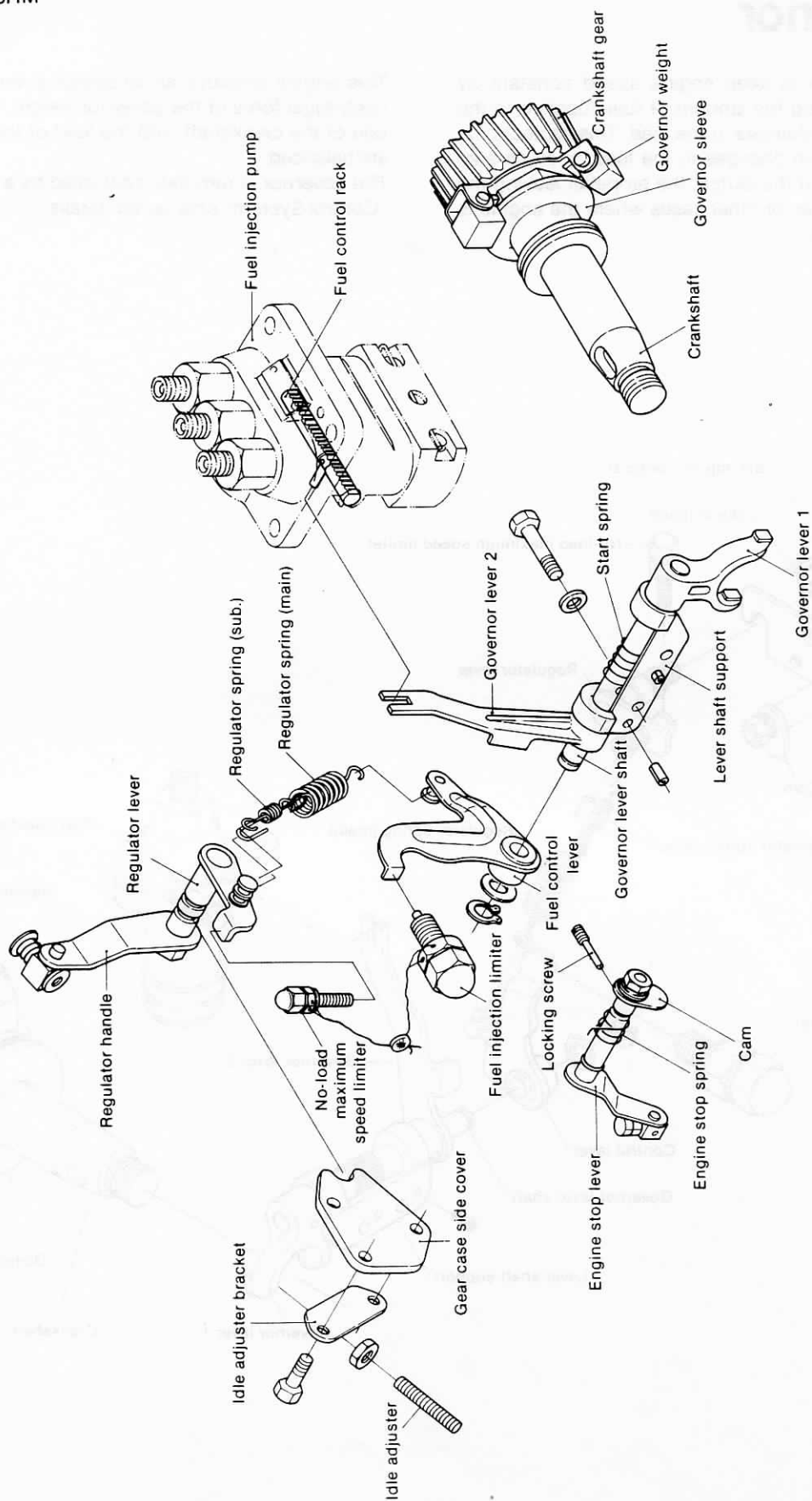
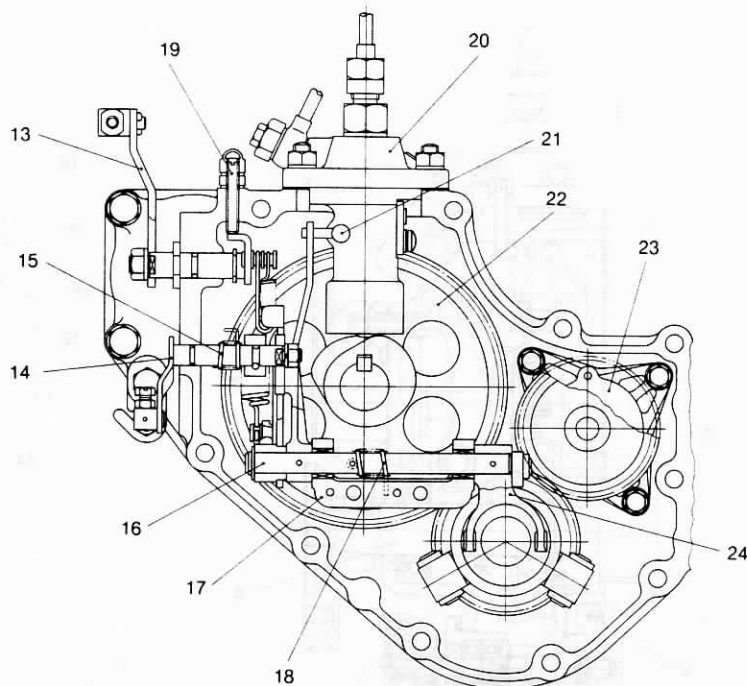
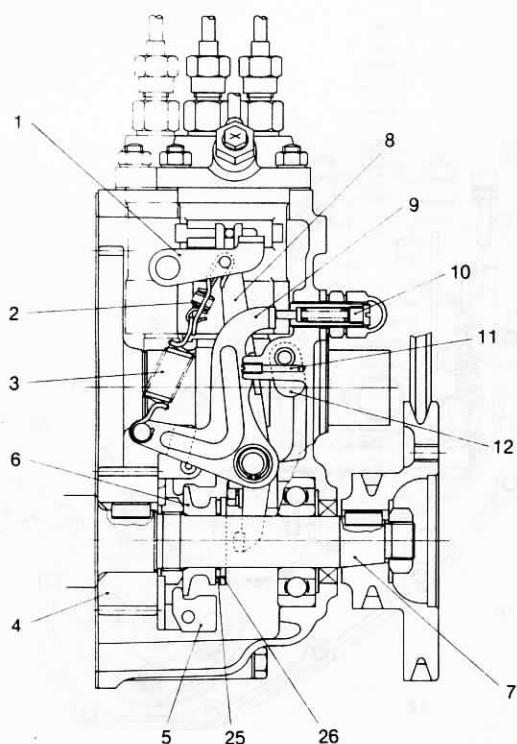


(2) 2GM, 3GM(D), 3HM



1-1.2 2GM (3GM(D), 3HM)



- 1 Regulator lever
- 2 Regulator spring (sub.)
- 3 Regulator spring (main)
- 4 Crankshaft gear
- 5 Governor weight
- 6 Governor sleeve
- 7 Crankshaft
- 8 Governor lever 2
- 9 Fuel control lever
- 10 Fuel injection limiter

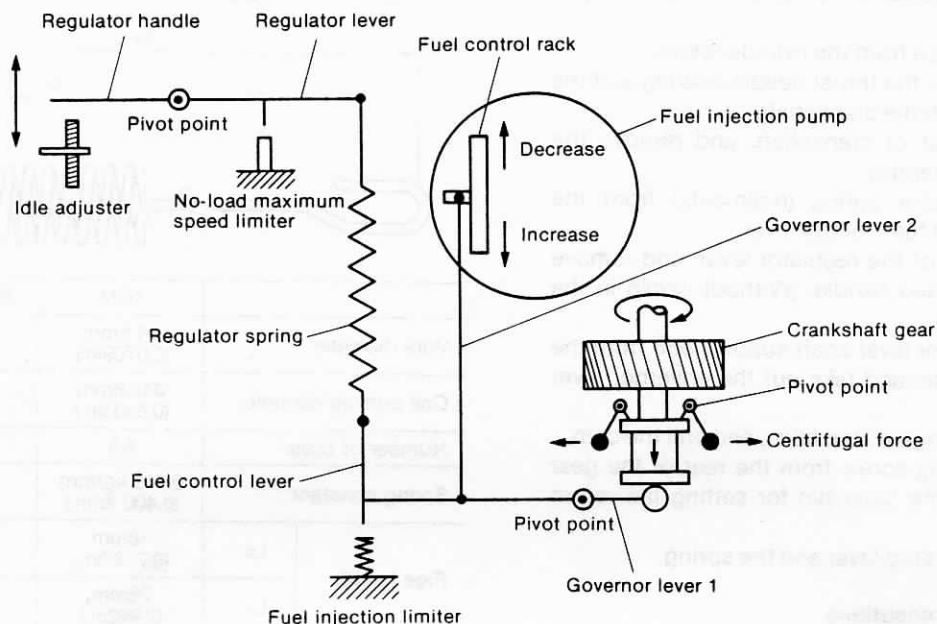
- 11 Locking screw
- 12 Engine stop cam
- 13 Regulator handle
- 14 Engine stop lever
- 15 Engine stop spring
- 16 Governor lever shaft
- 17 Governor lever shaft support
- 18 Start spring
- 19 No-load maximum speed limiter
- 20 Fuel injection pump

- 21 Fuel control rack
- 22 Camshaft gear
- 23 Lubricating oil pump
- 24 Governor lever 1
- 25 Thrust needle bearing
- 26 Thrust collar

1-2 Operation

The position of the two governor weights (open and closed) is regulated by the speed of the engine. The centrifugal force of the governor weights pivots around the governor weight pin and is changed to axial force that acts on the sleeve. This force is transmitted to governor lever 2 through governor lever 1, and lever 1 shifts the fuel control rack to increase or decrease the fuel supply. The governor lever is

stabilized at the point at which the force produced by the governor weight is balanced with the load of the regulator spring connecting the regulator lever and fuel control lever. When the speed is reduced by application of a load, the force of the regulator spring pushes the governor sleeve in the "fuel increase" direction, stabilizing the engine speed by changing the position of the regulator lever.



1-3 Performance

		1GM, 2GM, 3GM(D)	3HM
No-load maximum speed		3750 ⁺⁵⁰ ₀ rpm	3600 ±25 rpm
No-load minimum speed		850 ±25 rpm	
Instant speed regulation	di	10% or less	
Stabilization time	ts	10 sec. or less	
Stabilized speed regulation	ds	5% or less	
Fluctuation of rotation		40 rpm or less	

$$\text{Instant speed regulation } di = \left| \frac{ni - nr}{nr} \right| \times 100$$

$$\text{Stabilized speed regulation } ds = \left| \frac{ns - nr}{nr} \right| \times 100$$

ni: Instant maximum (minimum) speed:

The maximum or minimum engine speed which is momentarily reached immediately after the load has been suddenly changed from the rated load to another load or from an arbitrary load to the rated load.

ns: Stabilized speed:

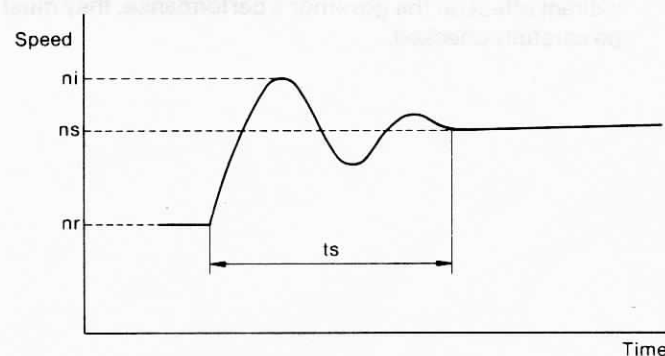
The speed which is set according to the lapse of time after the load has been changed from a rated load to another load or from an arbitrary load to the rated load.

nr: Rated speed

ts: Stabilization time:

The time it takes for engine to return to the set speed after a change.

(When load is suddenly changed from rated load to low load)



ni: Instant maximum speed (rpm)
ns: Stabilized speed (rpm)
nr: Rated speed (rpm)
ts: Stabilization time (sec.)