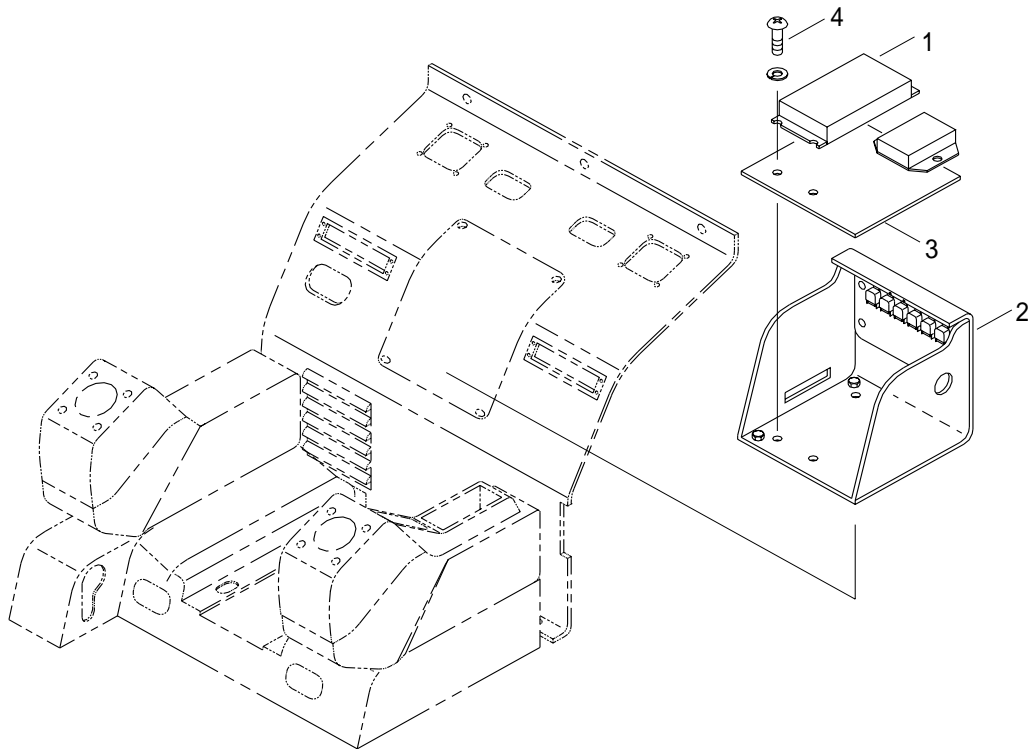


## GROUP 4 ENGINE CONTROL SYSTEM

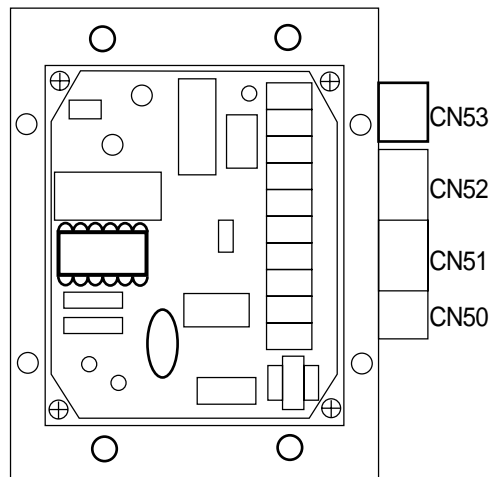
### 1. CPU CONTROLLER MOUNTING



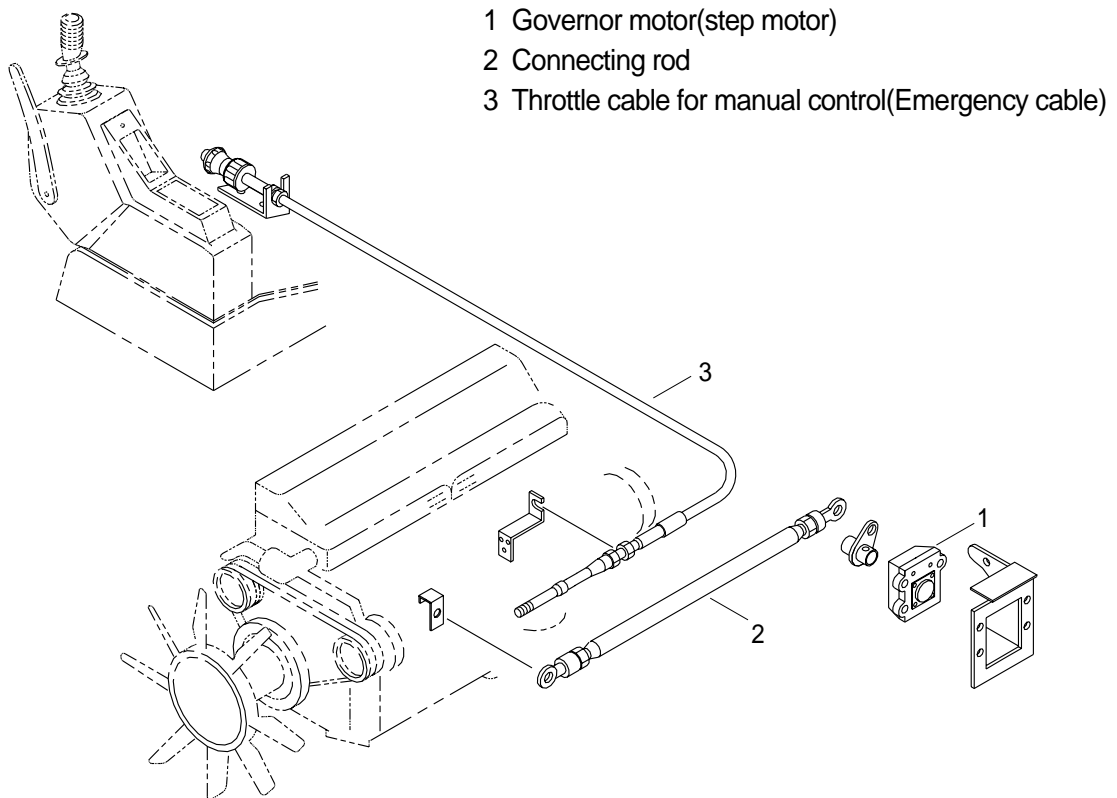
- 1 CPU controller                      2 Controller mounting bracket                      3 Rubber  
4 Bolt

### 2. CPU CONTROLLER ASSEMBLY

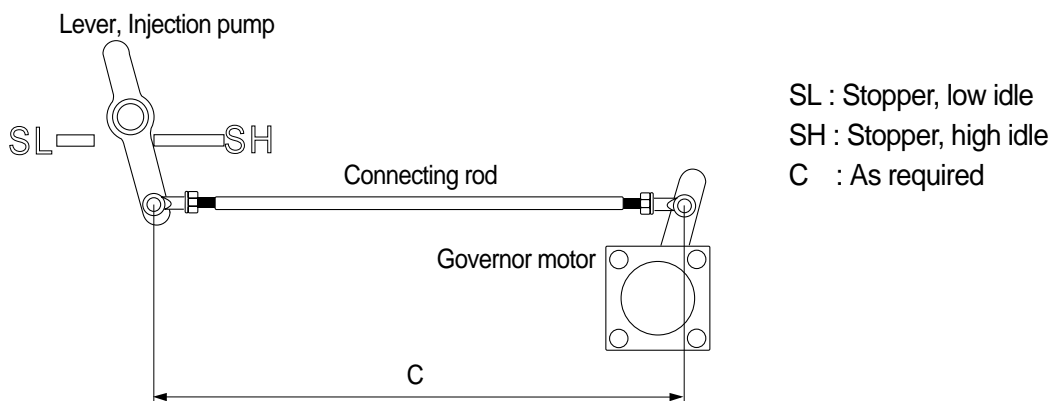
- 1) Remove four pieces of bolt(4) of controller mounting bracket.
- 2) Pull out bracket(2).
- 3) Disconnect 4 connectors from CPU controller.
- 4) Remove 4 pieces of screw and cover of CPU controller
- 5) Inspection : Check PCB(Printed Circuit Board)
  - (1) If any damage is found, replace CPU controller assembly.
  - (2) If not, but CAPO system does not work then replace "A" only.(A : EPROM)
    - ※ Removal : Insert small screwdriver or knife to bottom of EPROM and lift up carefully.
    - ※ Assembly : Assemble EPROM to mach with semicircle mark.



### 3. ENGINE GOVERNOR MOTOR AND EMERGENCY CABLE MOUNTING



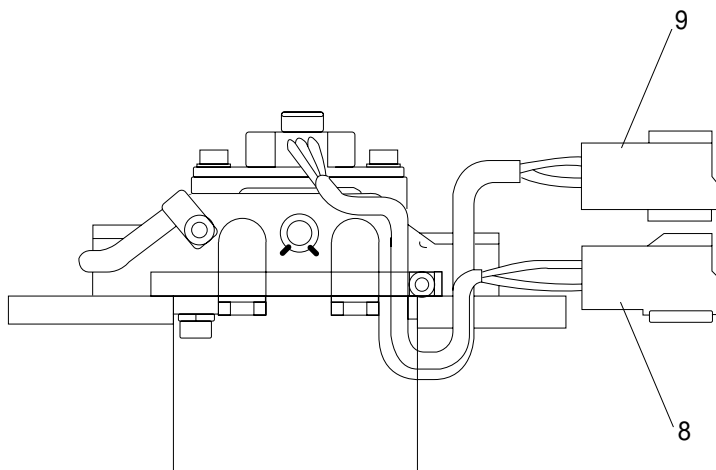
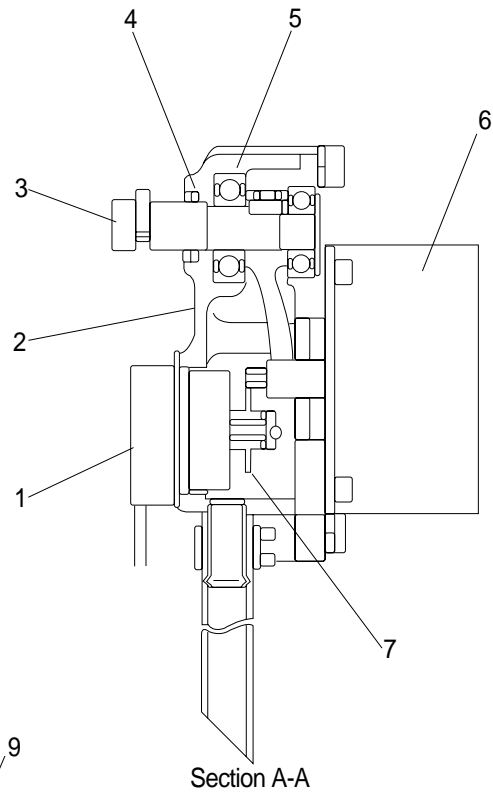
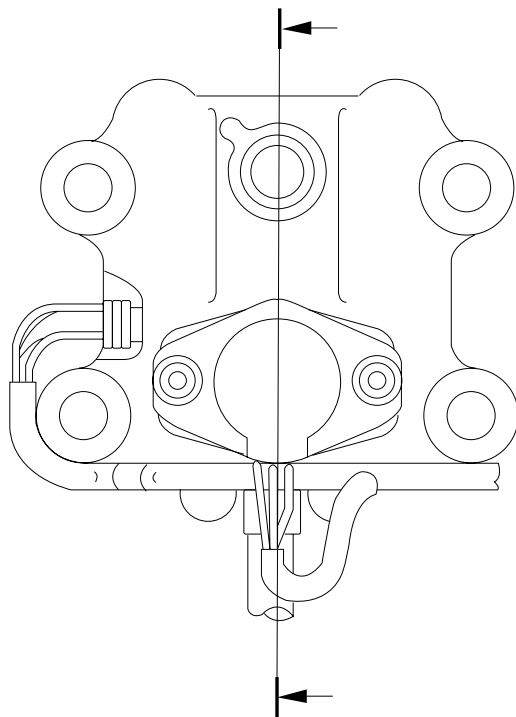
#### 1) ENGINE THROTTLE LEVER



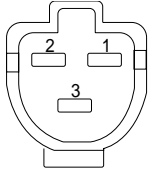
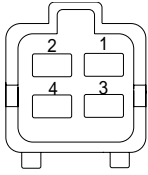
#### 2) EMERGENCY CABLE (push-pull cable)

It controls engine speed by connecting onto the lever of the injection pump when the malfunction of the CPU controller or the governor motor happen.

### 3) ENGINE THROTTLE LEVER

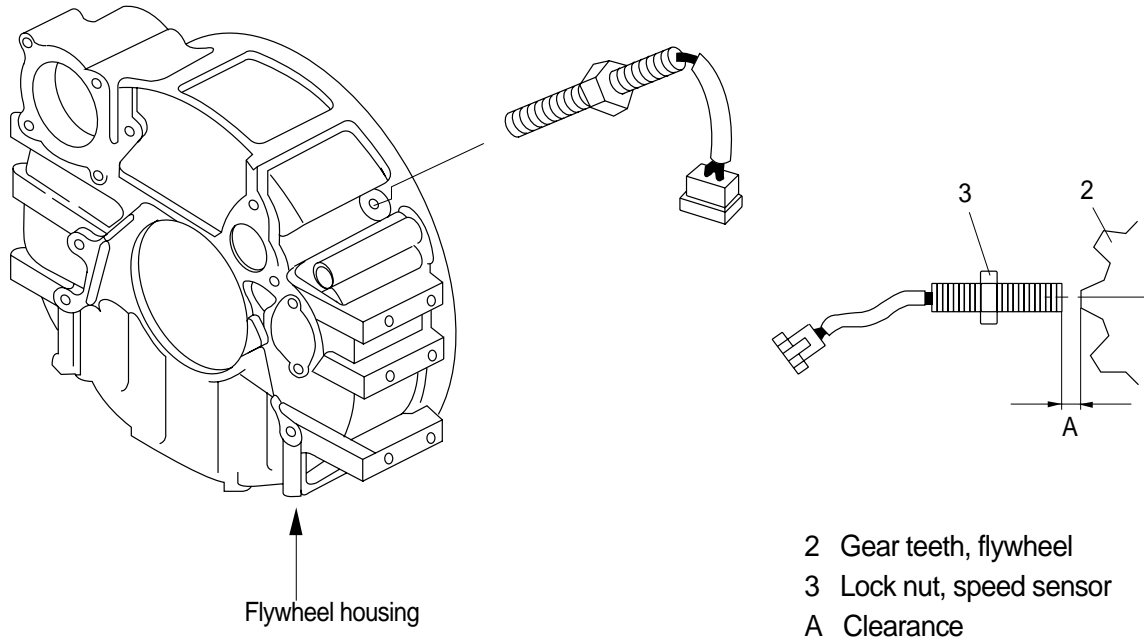


- 1 Potentiometer
- 2 Cover
- 3 Shaft for connecting rod
- 4 Dust seal
- 5 Bearing
- 6 Motor
- 7 Gear
- 8 Connector(3 P)
- 9 Connector(4 P)

Connector			
Type		3P, female	4P, female
Line Color	1	Red	Black
	2	White	Green
	3	Yellow	Red
	4	—	Yellow
Inspection of governor motor		<ul style="list-style-type: none"> <li>· Check resistance value between No. 1-2</li> <li>· Spec : 0.6 ~ 5kΩ</li> </ul>	<ul style="list-style-type: none"> <li>· Check resistance value between No. 1-2 and 3-4.</li> <li>· Spec : 5 ~ 6Ω</li> </ul>

## 4. ENGINE SPEED SENSOR

### 1) DETECT ACTUAL ENGINE RPM AND SEND SIGNAL TO TACHOMETER



### 2) INSTALLATION

- (1) Clean contacting point of sensor.
- (2) Loosen lock nut.
- (3) Screw in speed sensor to flywheel housing.
- (4) Turn it back 135° when it contact gear teeth.
- (5) Tight lock nut and connect wiring.