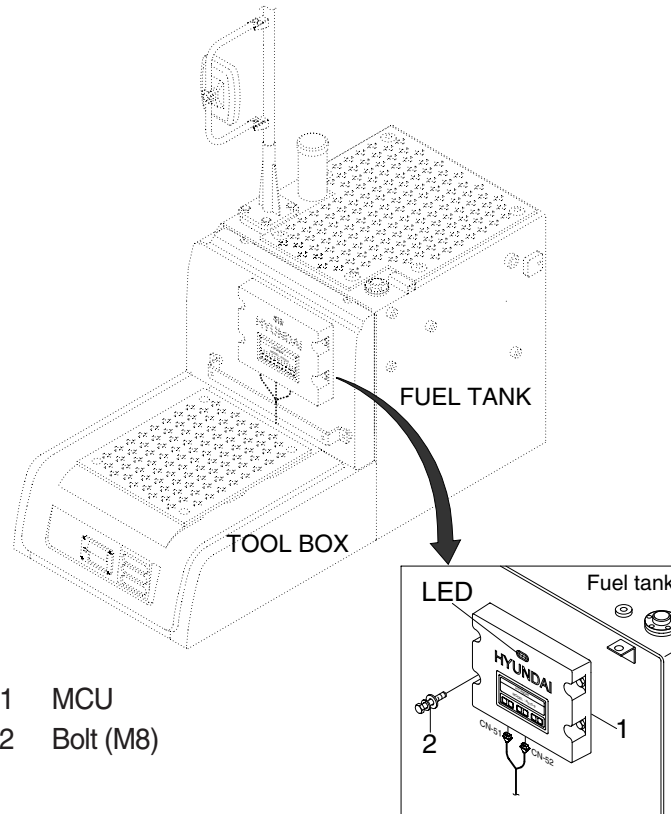


## GROUP 12 ENGINE CONTROL SYSTEM

### 1. MCU (Machine Control Unit)



- 1 MCU
- 2 Bolt (M8)

3009SH5MS13

### 2. MCU ASSEMBLY

- 1) To match the pump absorption torque with the engine torque, MCU varies EPPR valve output pressure, which control pump discharge amount whenever feedbacked engine speed drops under the reference rpm of each mode set.
- 2) Three LED lamps on the MCU display as below.

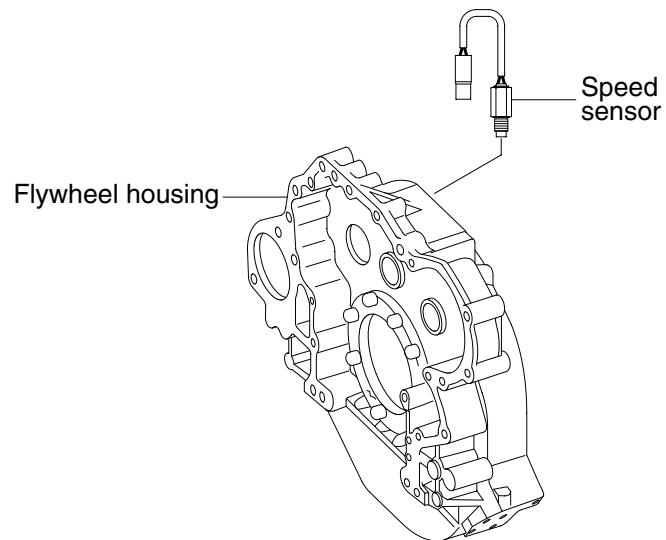
| LED lamp                 | Trouble                              | Service   |
|--------------------------|--------------------------------------|---|
| G is turned ON           | Normal                               | -   |
| G and R are turned ON    | Trouble on MCU                       | · Change the MCU  |
| G and Y are turned ON    | Trouble on serial communication line | · Check if serial communication lines between controller and cluster are disconnected         |
| Three LED are turned OFF | Trouble on MCU power                 | · Check if the input power wire (24 V, GND) of controller is disconnected<br>· Check the fuse |

G : green, R : red, Y : yellow



## 4. ENGINE SPEED SENSOR

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



21H75MS10

### 2) INSTALLATION

- (1) Clean contacting point of sensor.
- (2) Screw speed sensor into flywheel housing.

### 3) INSPECTION

- (1) Check resistance
  - SPEC :  $2.3 \pm 0.2 \Omega$
- (2) Tightening torque
  - $3.75 \pm 0.75 \text{ kgf} \cdot \text{m}$