2. CLUSTER

1) MONITOR PANEL

The gauges panel consists of gauges and monitors as shown below, to warn the operator in case of abnormal machine operation or conditions for the appropriate operation and inspection.

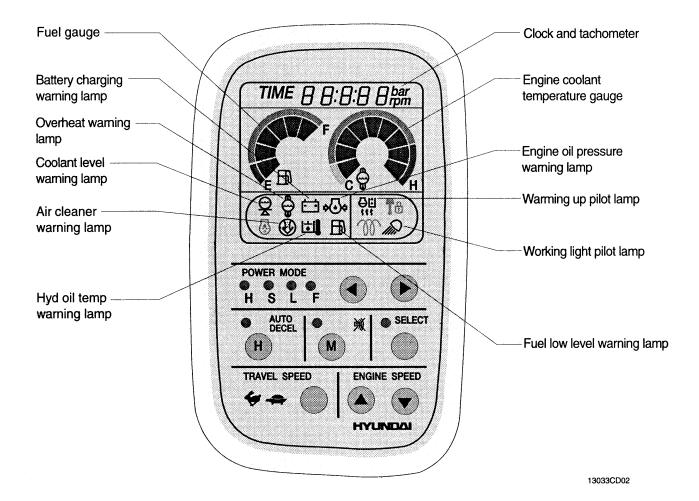
• Gauges : Indicate operating status of the machine.

· Warning lamp: Indicate abnormality of the machine (Red).

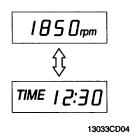
• Pilot lamp : Indicate operating status of the machine(Green).

* The monitor installed on this machine does not entirely guarantee the condition of the machine.

Daily inspection should be performed according to chapter 6, Maintenance.

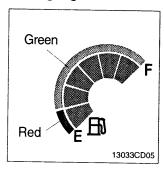


(1) Tachometer and clock



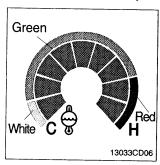
- ① Tachometer displays the number of engine revolutions.
- ② It displays the current time by electric digital timer(LCD).
- * Refer to the select switch of the switch panel for the selection and adjustment.
- (3) It can be selected as tachometer or clock by select switch.

(2) Fuel gauge



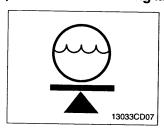
- $\ensuremath{\textcircled{1}}$ This gauge indicates the amount of fuel in the fuel tank.
- ② Fill the fuel when the red range illuminates.
- ③ The gauge indicates continuously the current fuel amount even after turn OFF the starting switch. This does not mean that the gauge is out of order.
- * If the gauge illuminates the red range even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.

(3) Engine coolant temperature gauge



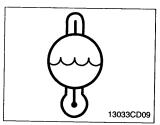
- ① This indicates the temperature of coolant.
 - White range: 40-60°C(104-140°F)
 Green range: 60-105°C(140-221°F)
 Red range: 105°C(221°F) above
- ② The green range illuminates when operating.
- ③ Keep idling engine at low speed until the green range illuminates, before operation of machine.
- When the red range illuminates, turn OFF the engine, check the radiator and engine.

(4) Coolant level warning lamp



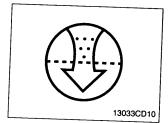
- ① This lamp is turned ON when the coolant is below LOW in the reservoir tank of radiator.
- ② Check the reservoir tank when the lamp is ON.

(5) Overheat warning lamp



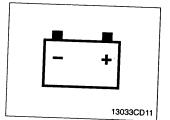
- ① This lamp is turned ON when the temperature of coolant is over the normal temperature(110°C, 230°F).
- ② Check the cooling system when the lamp is ON.

(6) Air cleaner warning lamp



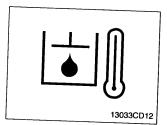
- ① This lamp is operated by the vacuum caused inside when the filter of air cleaner is clogged which supply air to the engine.
- ② Check the filter and clean or replace it when the lamp operates.

(7) Battery charging warning lamp



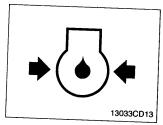
- ① This lamp is ON when the starting switch is ON, it is turned OFF after starting the engine.
- ② Check the battery charging circuit when this lamp comes ON, during engine operation.

(8) Hydraulic oil overheat warning lamp



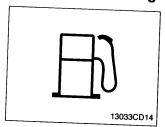
- ① This warning lamp operates and the buzzer sounds when the temperature of hydraulic oil is over 100°C(212°F).
- ② Check the hydraulic oil level when the lamp is turned ON.
- ③ Check for debris between oil cooler and radiator.

(9) Engine oil pressure warning lamp



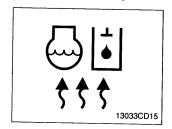
- ① This lamp is turned OFF after starting the engine because of pressure.
- ② If lamp comes ON during engine operation, shut OFF engine immediately. Check oil level.

(10) Fuel low level warning lamp



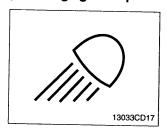
- ① This lamp is turned ON when the level of fuel is below 40 $\it l$ (10.6U.S. gal).
- ② Fill the fuel when the lamp comes ON.

(11) Warming up lamp



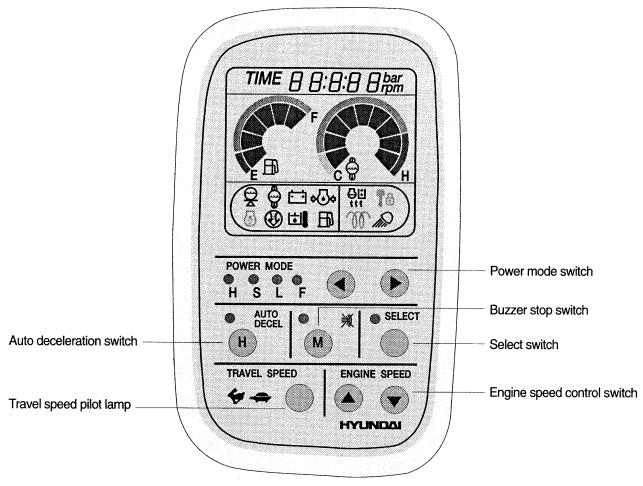
- ① This lamp is turned ON when the coolant temperature is below 30°C(86°F).
- ② The automatic warming up is cancelled when the engine coolant temperature is above 30°C, or when 10 minutes have passed since starting.

(12) Working light lamp



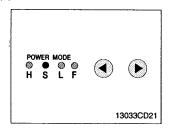
① When the work light switch is turned ON, the working light mounted on boom is ON and indicator lamp comes ON.

2) SWITCH PANEL



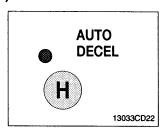
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(1) Power mode switch



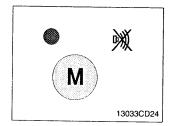
- ① The lamp of selected mode is turned ON by pressing the right switch(,), when selecting the mode to use.
 - · H: This is used for heavy-duty work.
 - · S : This is used for ordinary work.
 - · L : This is used for light-duty work.
 - F : This is used for light-duty work, especially for finishing work.

(2) Auto deceleration switch



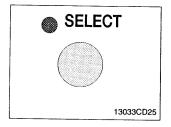
- ① This switch is used to actuate the auto deceleration function so the engine speed is lowered automatically when all control levers and pedals are at neutral position to save the fuel.
 - · Light ON : System is operated.
 - Light OFF: System is cancelled so that the engine speed increased to previous setting value.

(3) Alarm buzzer stop switch



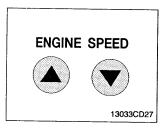
- ① When the starting switch is turned ON first, normally the alarm buzzer sounds for 3 seconds.
- ② The red lamp lights ON and the buzzer sounds when the machine has a problem. In this case, if the switch is pressed, the buzzer will be stopped. Be sure to check machine for problems.
- ③ Wait until the lamp is turned OFF, if the red lamp lights ON after the buzzer stopped.
 If not, stop engine and check the system which the lamp is ON.

(4) Select switch



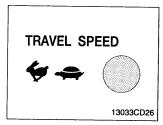
- ① This switch is used to select the monitor display function.
- * Refer to the 4-10 page for details.
- ② The switch is pressed for 3 seconds, it is selected time adjusting function, as below.
 - · Hour by auto decal switch
 - · Minute by buzzer stop switch
- ③ After time set, the switch is pressed, it is returned clock.

(5) Engine speed control switch



① This switch is to control the engine speed which increases the engine speed by pressing 🏲 switch and decreases the engine speed by pressing 🔻 switch.

(6) Travel speed pilot lamp



- ① This lamp indicates the travel speed.
- ② Rabbit mark is turned ON when the machine travels fast and turtle mark is turned ON when the machine travels slowly by RH multi function switch.