

2. CLUSTER

1) MONITOR PANEL

The monitor panel consists of gauges and lamps 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(Amber).

※ 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.

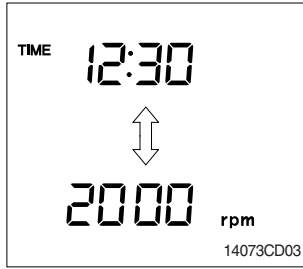
※ When the monitor provides a warning immediately check the problem, and perform the required action.



11073CD02

※ The warning lamp lights ON and the buzzer sounds when the machine has a problem. In this case, press the buzzer stop switch and buzzer stop, but the warning lamp lights until the problem is cleared.

(1) Monitoring display



- ① This displays the current time and machine information such as engine rpm, coolant/hydraulic oil temperature, hydraulic oil pressure and also error codes.


※ Refer to the page 4-11 for details.

(2) Fuel gauge

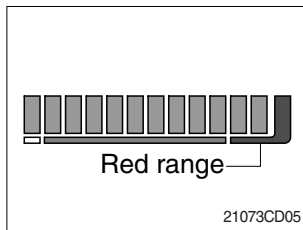


- ① This gauge indicates the amount of fuel in the fuel tank.

- ② Fill the fuel when the white range or warning lamp  blinks.

※ If the gauge illuminates the white range or warning lamp  blinks 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) Hydraulic oil temperature gauge



- ① This indicates the temperature of coolant.

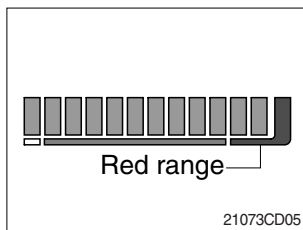
- White range : Below 30°C(86°F)
- Green range : 30-105 °C(86-221°F)
- Red range : Above 105°C(221°F)

- ② The green range illuminates when operating.

- ③ Keep idling engine at low speed until the green range illuminates before operation of machine.

- ④ When the red range illuminates, reduce the load on the system. If the gauge stays in the red range, stop the machine and check the cause of the problem.

(4) Engine coolant temperature gauge



- ① This indicates the temperature of coolant.

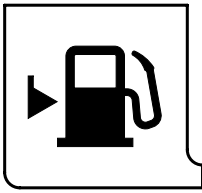
- White range : Below 30°C(86°F)
- Green range : 30-105 °C(86-221°F)
- Red range : Above 105°C(221°F)

- ② The green range illuminates when operating.

- ③ Keep idling engine at low speed until the green range illuminates before operation of machine.

- ④ When the red range illuminates, turn OFF the engine, check the radiator and engine.

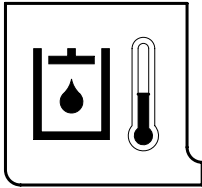
(5) Fuel low level warning lamp



21073CD04A

- ① This lamp blinks and the buzzer sounds when the level of fuel is below 28 l (7.4U.S. gal).
- ② Fill the fuel immediately when the lamp blinks.

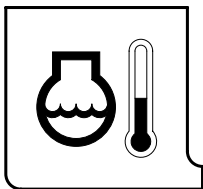
(6) Hydraulic oil temperature warning lamp



21073CD05A

- ① This warning lamp operates and the buzzer sounds when the temperature of hydraulic oil is over 105 °C (221 °F) .
- ② Check the hydraulic oil level when the lamp blinks.
- ③ Check for debris between oil cooler and radiator.

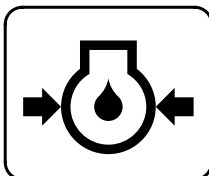
(7) Overheat warning lamp



21073CD06A

- ① This lamp blinks and the buzzer sounds when the temperature of coolant is over the normal temperature 110°C (230°F) .
- ② Check the cooling system when the lamp blinks.

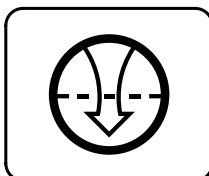
(8) Engine oil pressure warning lamp



21073CD07

- ① This lamp blinks and the buzzer sounds after starting the engine because of the low oil pressure.
- ② If the lamp blinks during engine operation, shut OFF engine immediately. Check oil level.

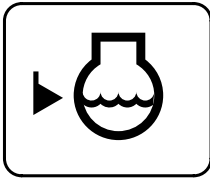
(9) Air cleaner warning lamp



21073CD08

- ① This lamp blinks and the buzzer sounds when the filter of air cleaner is clogged.
- ② Check the filter and clean or replace it.

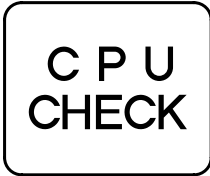
(10) Coolant level warning lamp



21073CD09

- ① This lamp blinks and the buzzer sounds when the coolant is below LOW in the reservoir tank of radiator.
- ② Check the reservoir tank when the lamp blinks.

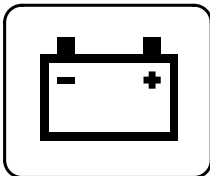
(11) CPU controller check warning lamp



21073CD10

- ① Communication problem between CPU controller and cluster makes the lamp blinks and the buzzer sounds.
- ② Check if any fuse for CPU burnt off.
- ③ If not check the communication line between them.

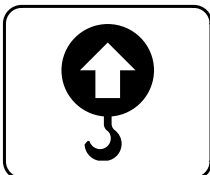
(12) Battery charging warning lamp



21073CD13

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

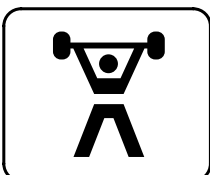
(13) Overload warning lamp



21073CD15

- ① When the machine is overload, the overload warning lamp blinks during the overload switch is ON.

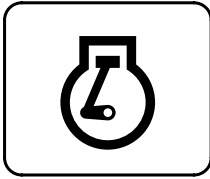
(14) Power max pilot lamp



21073CD11

- ① The lamp will be ON when pushing power max switch on the LH RCV lever.

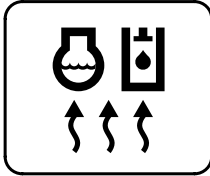
(15) Decel pilot lamp



21073CD17

- ① Operating auto decel or one touch decel makes the lamp ON.
- ② The lamp will be ON when pushing one touch decel switch on the LH RCV lever.

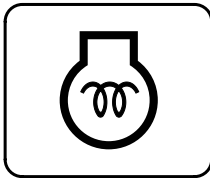
(16) Warming up pilot lamp



21073CD18

- 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.

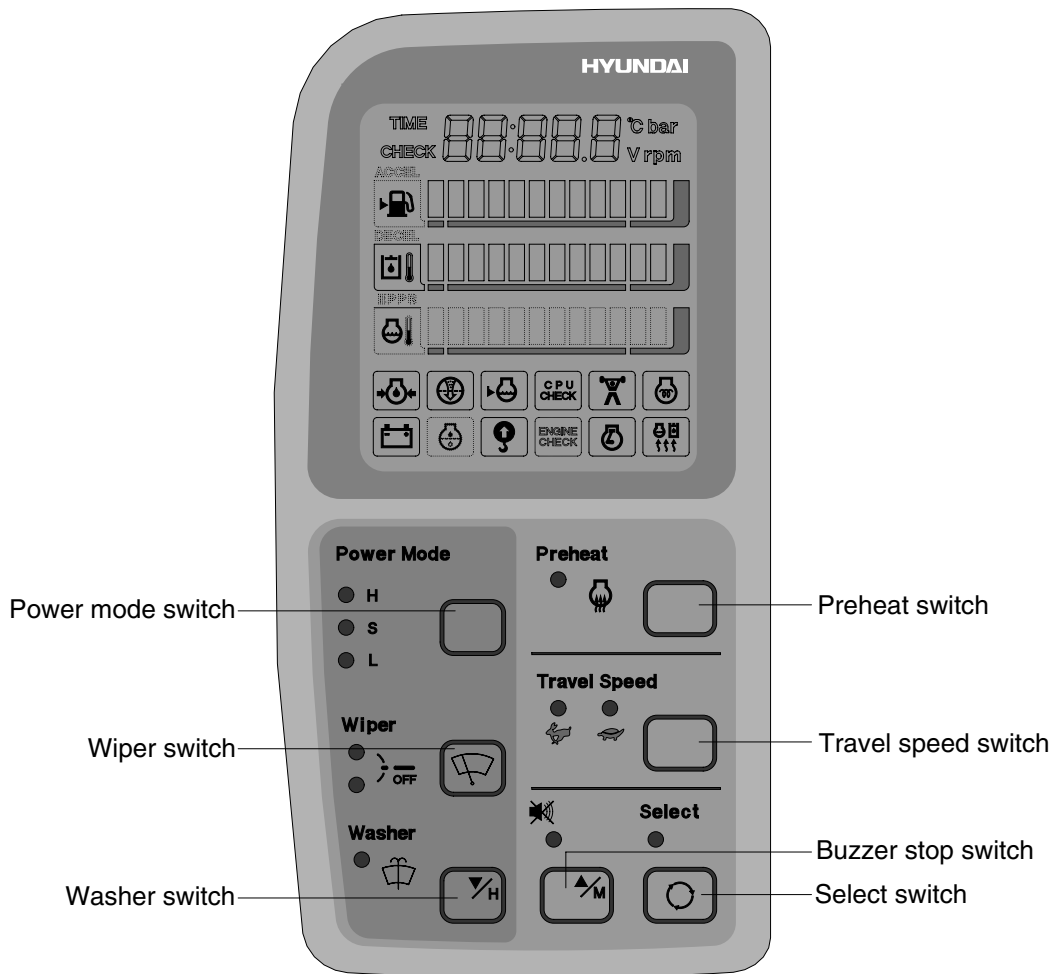
(17) Preheat pilot lamp



21073CD12

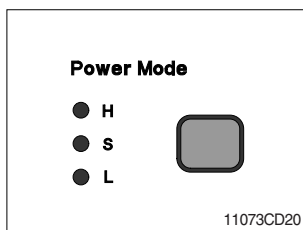
- ① Turning the start key switch ON position starts preheating in cold weather.
- ② Start the engine as this lamp is OFF.

2) SWITCH PANEL



11073CD19

(1) Power mode switch

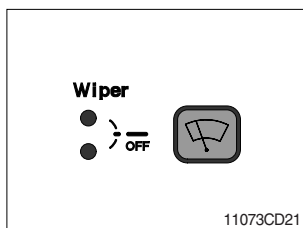


① This switch is to select the machine power mode, which shifts from high power work to standard power work and light power work in a row by pressing the switch.

- H : This is used for high power work
- S : This is used for standard power work
- L : This is used for light power work

※ Refer to the page 4-7 for details.

(2) Wiper mode switch



① This switch is used to operate wiper.

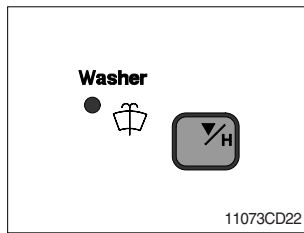
- Press the switch once to operate wiper.
- Press the switch once more to intermittently operate wiper low speed.
- Press the switch once more to turn off wiper.

※ Wiper motor doesn't operate with front sliding door open.

※ If wiper does not operate with the switch in the ON position, turn the switch off immediately. Check the cause.

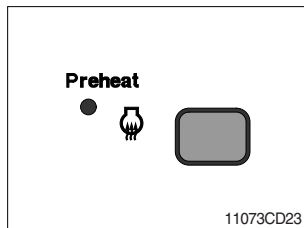
If the switch remains ON, it can result in motor failure.

(3) Washer switch



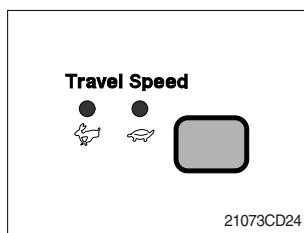
- ① The washer liquid is sprayed and the wiper is operated only while pressing this switch.
- ② The indicator lamp is turned ON when operating this switch.

(4) Preheat switch



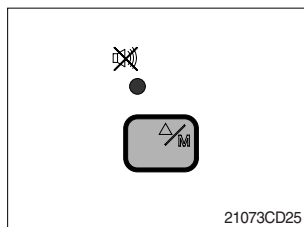
- ① This switch is used for starting the engine in cold weather. If pressed, grid heater is activated to get easier engine starting.
※ **Never hold the push button switch in for more than 30 seconds, as this can damage the grid heater.**
- ② The indicator lamp is turned ON when operating this switch.

(5) Travel speed control switch



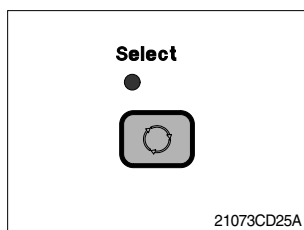
- ① This switch is to control the travel speed which is changed to high speed(Rabbit mark) by pressing the switch and low speed(Turtle mark) by pressing it again.



(6) Buzzer stop switch



- ① When the starting switch is turned ON first, normally the alarm buzzer sounds for 2 seconds during lamp check operation.
- ② The red lamp lights ON and the buzzer sounds when the machine has a problem.
In this case, press this switch and buzzer stops, but the red lamp lights until the problem is cleared.

(7) Select switch



- ① This switch is used to select the monitor display function.
※ **Refer to the page 4-11 for details.**
- ② If the switch is pressed for 3 seconds in time display mode, it moves to time adjusting function, and you can adjust the time as below.
 - Hour by auto decel()switch
 - Minute by buzzer stop() switch.
- ③ After time set, the switch is pressed, it returns to clock display.