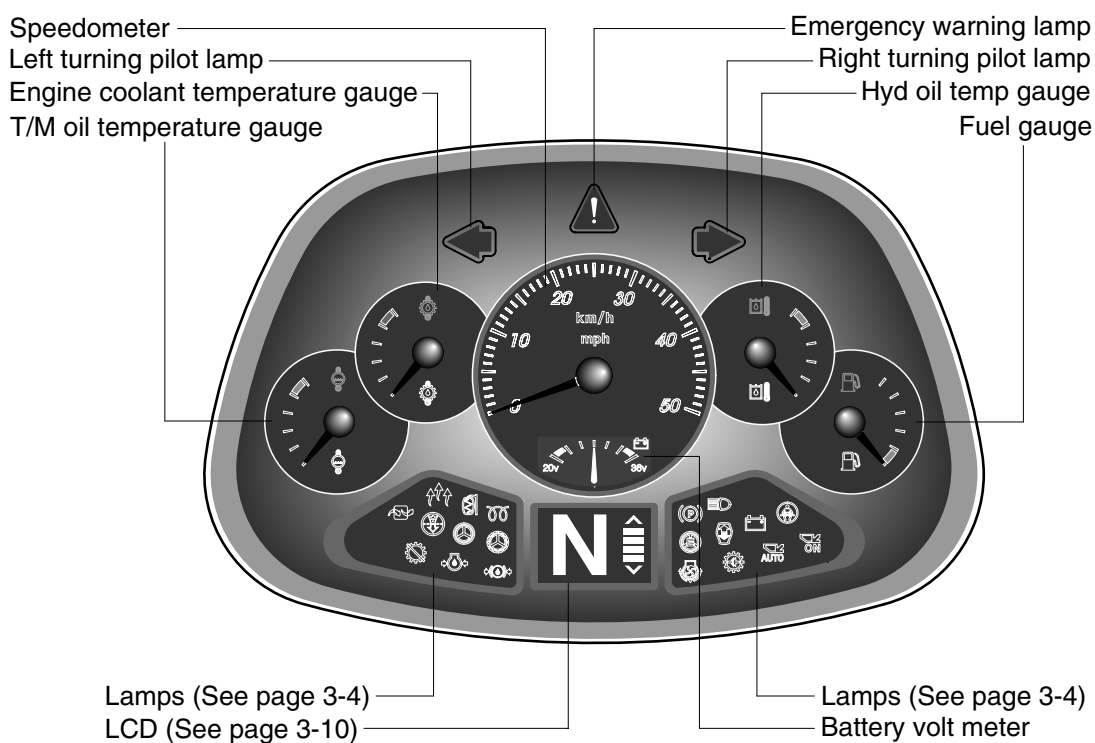


2. CLUSTER

1) STRUCTURE

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

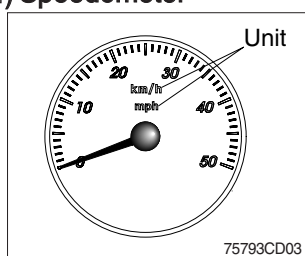
- Gauges : Indicate operating status of the machine.
 - Warning lamps : Indicate abnormality of the machine.
 - Pilot lamps : Indicate operating status of the machine.
 - LCD : Indicates selected the driving speed and direction.
- ※ The cluster installed on this machine does not entirely guarantee the condition of the machine. Daily inspection should be performed according to chapter 6, MAINTENANCE.
- ※ When the cluster provides a warning immediately check the problem, and perform the required action.



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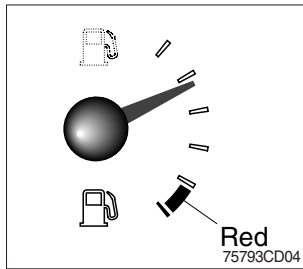
2) GAUGE


(1) Speedometer



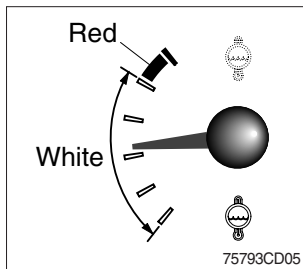
- ① The speedometer displays the speed of machine in mph and km/h.
- ※ The unit (km/h or mph) can be set by the display set up menu of the monitor and selected unit is displayed. Refer to page 3-23.


(2) Fuel gauge



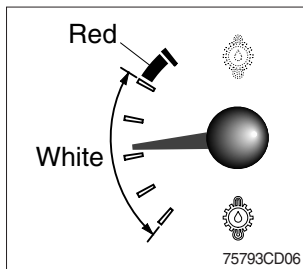
- ① This gauge indicates the amount of fuel in the fuel tank.
 - ② Fill the fuel when the indicator moves red range or  lamp blinks in red, refuel as soon as possible to avoid running out of fuel.
- ※ If the gauge indicates below red range even though the machine is on the normal condition, check the electric device as that can be caused by the poor connection of electricity or sensor.


(3) Engine coolant temperature gauge



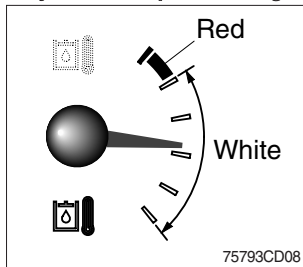
- ① This gauge indicates the temperature of coolant.
 - White range : 40~104°C (104~219°F)
 - Red range : Above 104°C (219°F)
- ② If the indicator is in the red range or  lamp blinks in red, turn OFF the engine and check the radiator and engine.


(4) Transmission oil temperature gauge



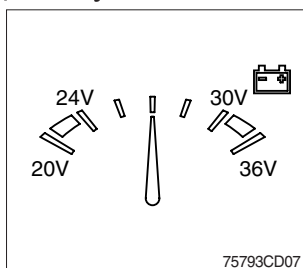
- ① This gauge indicates the temperature of transmission oil.
 - White range : 40~107°C (104~225°F)
 - Red range : Above 107°C (225°F)
- ② If the indicator is in the red range or  lamp blinks in red, it means the transmission is overheated. Be careful that the indicator does not move into the red range.

(5) Hyd oil temperature gauge



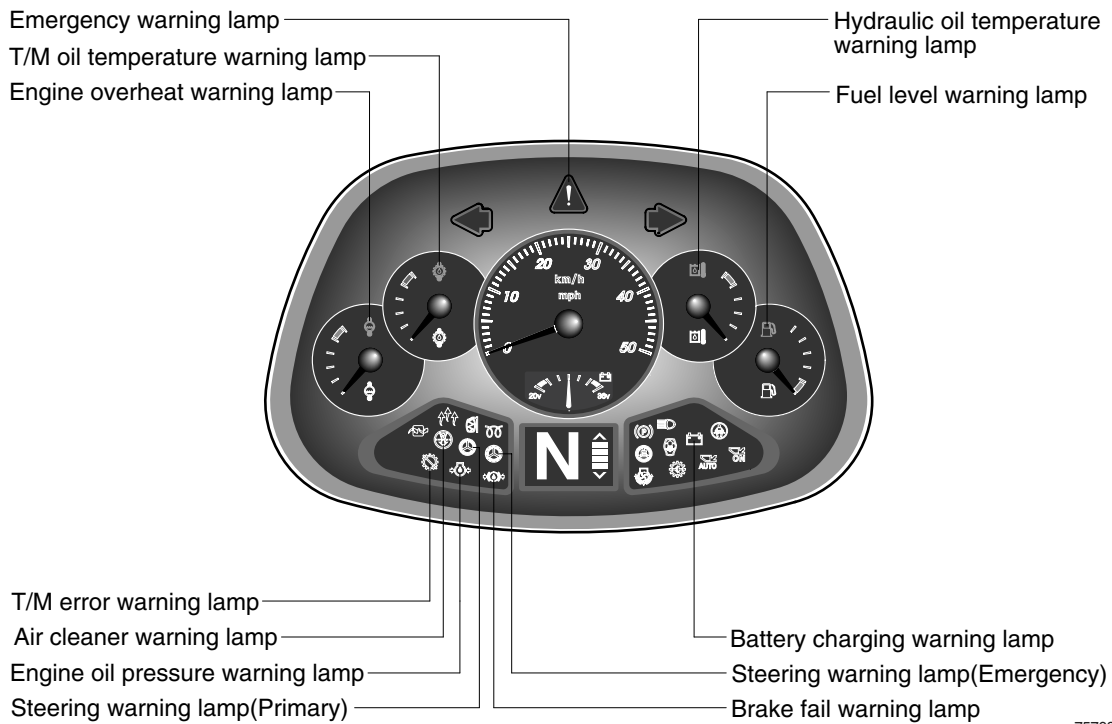
- ① This gauge indicates the temperature of hydraulic oil.
 - White range : 40~105°C (104~221°F)
 - Red range : Above 105°C (221°F)
- ② If the indicator is in the red range or  lamp blinks in red, reduce the load on the system.
- ③ If the gauge stays in the red range, stop the machine and check the cause of the problem.

(6) Battery volt meter



- ① This gauge indicates the voltage in the charging system when the engine is running.
- ② If the indicator is below 24V, it means that the electricity is being discharged. If the indicator is above 30V, an unusually high voltage may damage the alternator. Check the charging system in both cases.

3) WARNING LAMPS



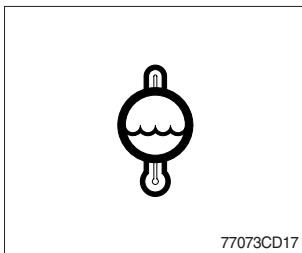
75793CD09

(1) Emergency warning lamp



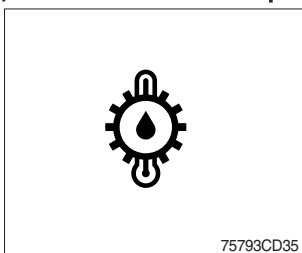
- ① This warning lamp blinks and the buzzer sounds when communication error occur between monitor and MCU.
- ② When this warning lamp blinks, machine must be checked and service immediately.

(2) Engine overheat warning lamp



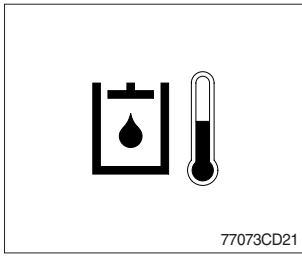
- ① This lamp is turned ON when the temperature of coolant is over the normal temperature (104°C, 219°F).
- ② Check the cooling system when the lamp is ON.

(3) Transmission oil temperature warning lamp



- ① This lamp informs the operator that transmission oil is above the specified temperature.
- ② When this lamp lights up during operation, stop the engine and check the machine.

(4) Hydraulic oil temperature warning lamp



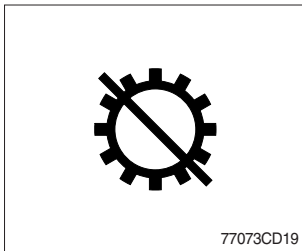
- ① This warning lamp operates and the buzzer sounds when the temperature of hydraulic oil is over 105°C (221°F).
- ② Check the hydraulic oil level when the lamp is turned ON.
- ③ Check for debris between oil cooler and radiator.

(5) Fuel level warning lamp



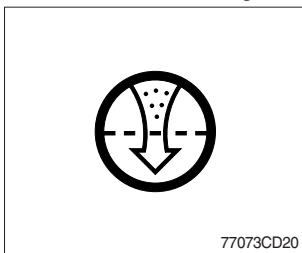
- ① This warning lamp lights ON when the fuel level is low. Refuel the machine as soon as possible.

(6) Transmission error warning lamp



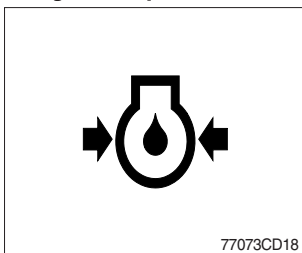
- ① This lamp lights ON and the LCD display show the error codes when an error occurs in the transmission.
 - ② Immediately pull the machine to a convenient stop. Stop the engine. Investigate the cause.
- ※ **Consult a HYUNDAI dealer to investigate the cause.**
 - ※ **Do not operate until the cause has been corrected.**

(7) Air cleaner warning lamp



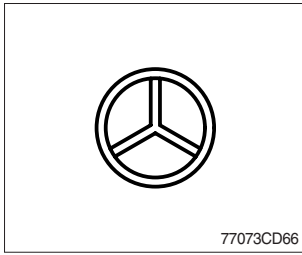
- ① This lamp lights ON when the filter of air cleaner is clogged.
- ② Check the filter and clean or replace it when the lamp is ON.

(8) Engine oil pressure warning lamp



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

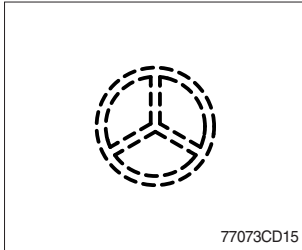
(9) Steering warning lamp



① Primary

This lamp indicates that the primary steering has failed. When the indicator comes on and the action alarm sounds, steer the machine immediately to a convenient location and stop the machine. Stop the engine and investigate the cause.

※ **Do not operate the machine until the cause has been corrected.**



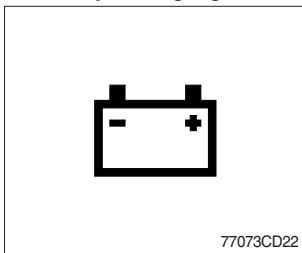
② Emergency

This lamp indicates the emergency steering system is active.

※ **Immediately pull the machine to a convenient stop and stop the engine.**

※ **The emergency steering system can be manually tested. Refer to page 3-28.**

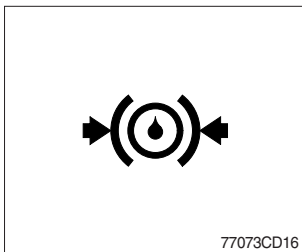
(10) Battery charging warning lamp



① This lamp is ON when key ON, it is turned OFF after starting the engine.

② Check the battery charging circuit when this lamp comes ON, during engine operation.

(11) Brake fail warning lamp

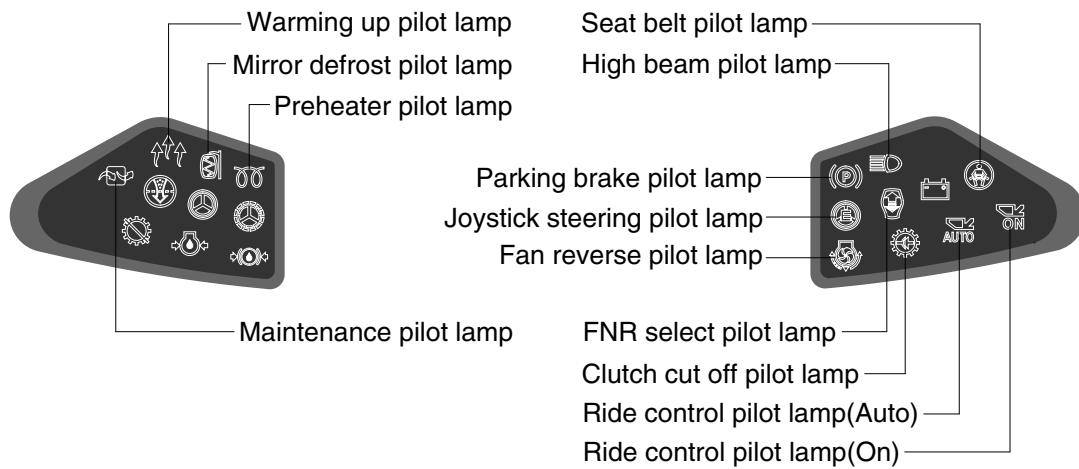


① The lamp lights ON when the oil pressure of service brake drops below the normal range.

② When the lamp is ON, stop the engine and check for its cause.

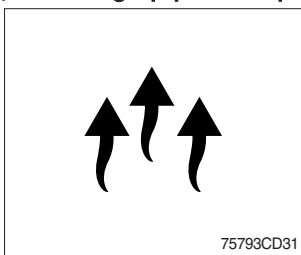
※ **Do not operate until any problems are corrected.**

4) PILOT LAMPS



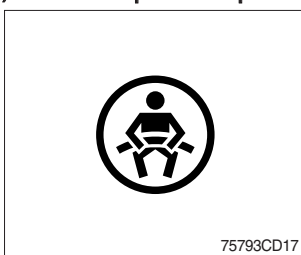
75793CD10

(1) Warming up pilot lamp



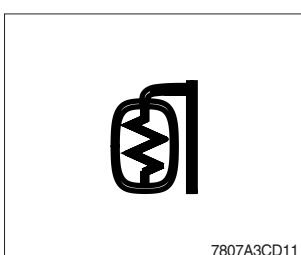
- ① This lamp is turned ON when the coolant temperature is below 30°C (86°F).
- ② The automatic warming up is cancelled when the engine coolant temperature is above 30°C, or when 10 minutes have passed since starting the engine.

(2) Seat belt pilot lamp



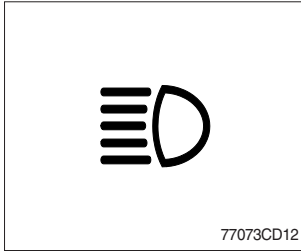
- ① This lamp lights ON for the first five seconds after starting the engine.

(3) Mirror defrost pilot lamp



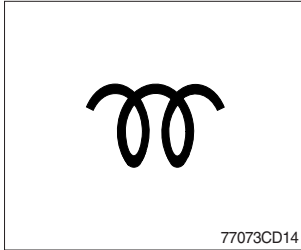
- ① This lamp comes ON when mirror defrost switch is pressed.

(4) High beam pilot lamp



- ① This lamp works when the illuminating direction is upward.
- ② This lamp comes ON when the dimmer switch is operated, e.g., when passing another vehicle.

(5) Preheat pilot lamp



- ① This lamp lights ON when start switch is turned clockwise to the ON position. Light will turn off after approximately 5~45 seconds, depending on engine temperature, indicating that preheating is completed.

- ② When the lamp goes out the operator should start cranking the engine.

※ Refer to page 4-5.

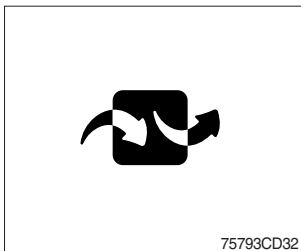
(6) Parking brake pilot lamp



- ① When the parking brake is actuated, the lamp lights ON.

※ Check the lamp is OFF before driving.

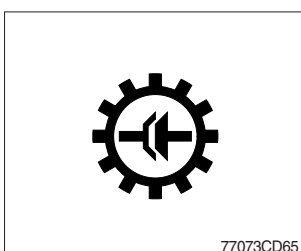
(7) Maintenance pilot lamp



- ① This lamp will be ON when the consuming parts are needed to change or replace. It means that the change or replacement interval of the consuming parts remains below 30 hours.

- ② Check the message in maintenance information of the monitor menu. Also, this lamp lights ON for 3 minutes when the start switch is ON position.

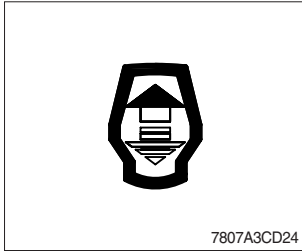
(8) Clutch cut off pilot lamp



- ① This lamp lights ON when the clutch cut off mode switch is positioned L, M, H.

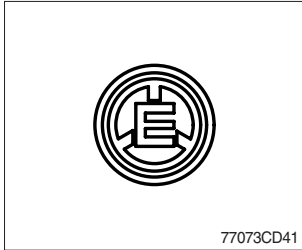
※ Refer to page 3-29.

(9) FNR select pilot lamp (option)



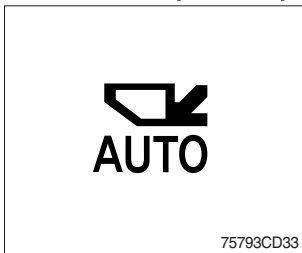
- ① The lamp comes ON when FNR select button on the optional FNR remote control lever is pressed.
- ※ Refer to page 3-33.

(10) Joystick steering pilot lamp (option)

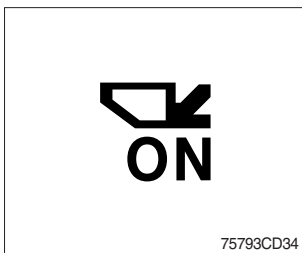


- ① This lamp lights ON when joystick steering is activated. It is then possible to steer the machine and select gears from the armrest to the left of the operator's seat.
- ※ Refer to page 3-35.

(11) Ride control pilot lamp (option)



- ① **Auto ride control**
This lamp lights ON when push in the bottom of the ride control switch (auto position).
- ※ Refer to page 3-28.



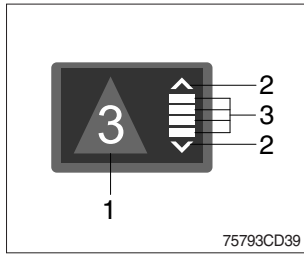
- ② **Manual ride control**
This lamp lights ON when push in the top of the ride control switch (manual position)
- ※ Refer to page 3-28.

(12) Fan reverse pilot lamp



- ① This lamp lights ON when the fan control switch is pressed.
- ※ Refer to page 3-27.

5) LCD



(1) The LCD can be used with the gear selector.
It indicates speed and driving direction.

No	Symbol	Meaning	Remark
1	△·▽·□	Actual gear display	Forward, reverse, neutral
	1, 2, 3, 4		Actual gear
	P		Parking brake mode active
2	▲, ▼	Forward, reverse	Automatic mode
3	■	Gear range display	Automatic mode