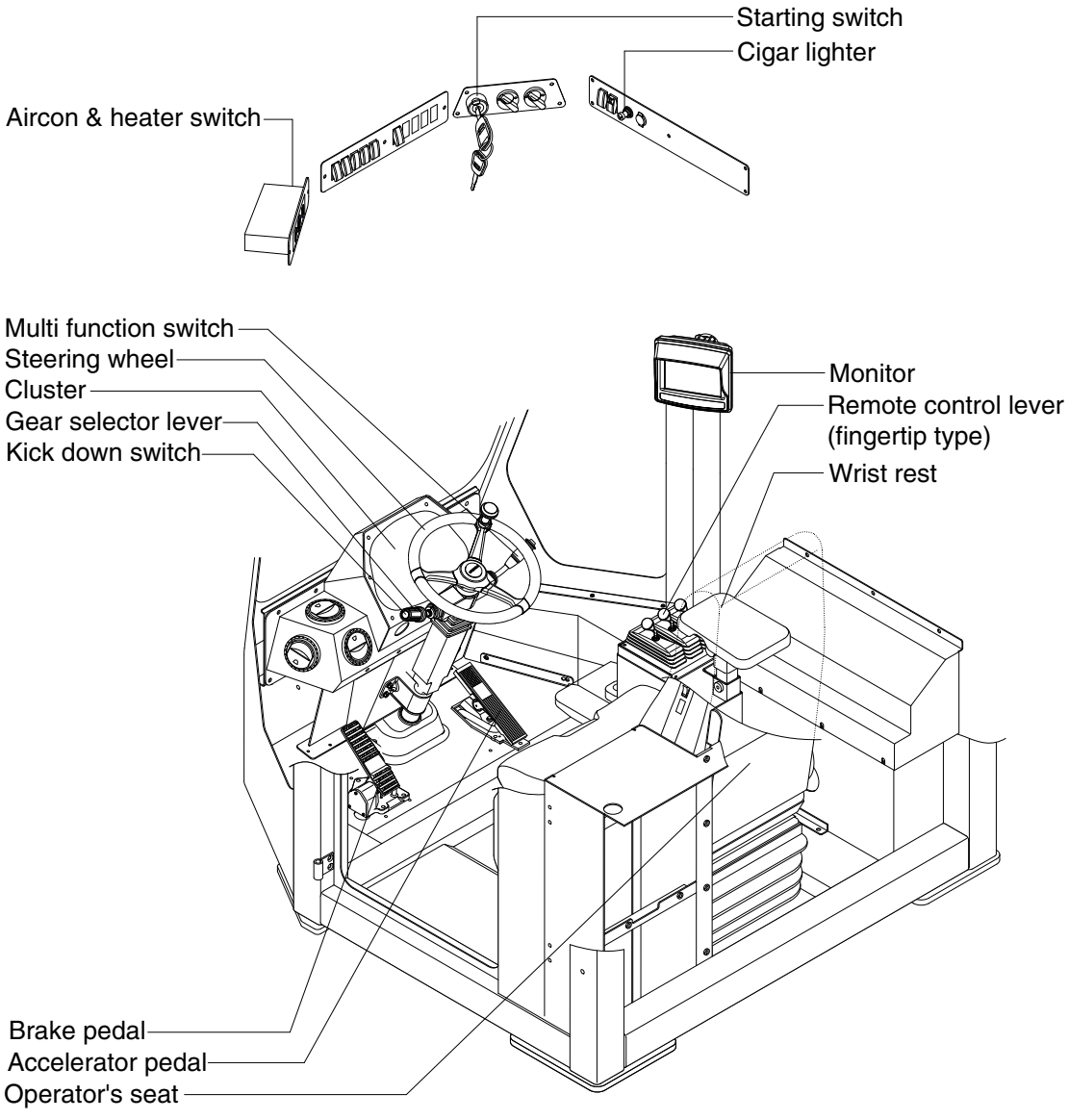
1. CAB DEVICES

1) The ergonomically designed console box and suspension type seat provide the operator with comfort.

2) ELECTRONIC MONITOR SYSTEM

(1) The centralized electronic monitor system allows the status and conditions of the machine to be monitored at a glance.

(2) It is equipped with a safety warning system for early detection of machine malfunction.



7809SU3CD01A

2. CLUSTER

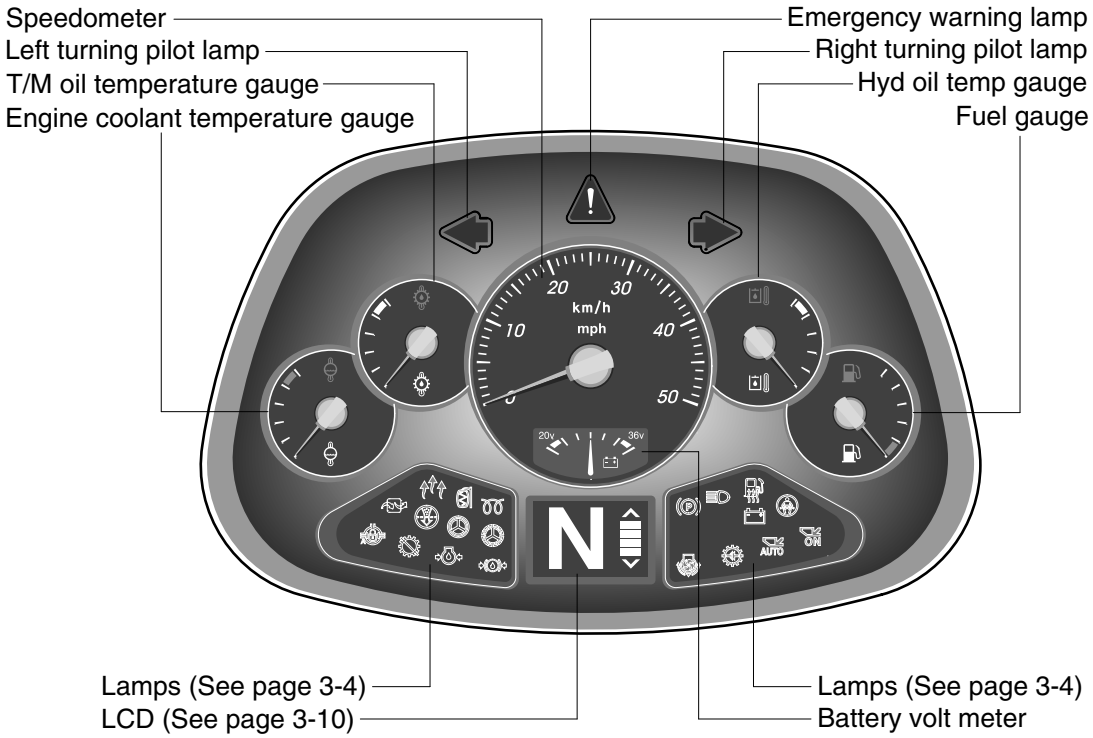
1) STRUCTURE

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.

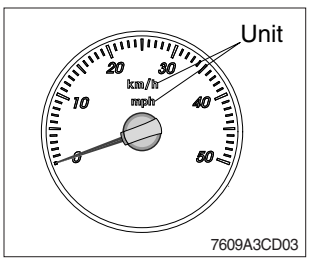
※ When the cluster provides a warning immediately check the problem, and perform the required action.



7809S3CD02A

2) GAUGE

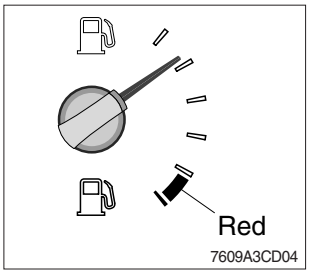
(1) Speedometer



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

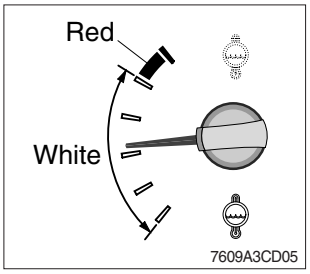


① This gauge indicates the amount of fuel in the fuel tank.

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.

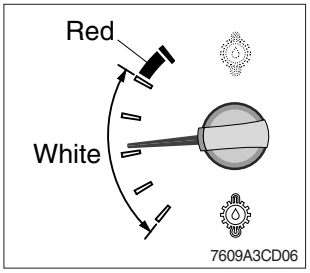
(3) Engine coolant temperature gauge



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.

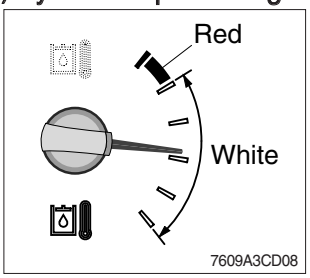
(4) Transmission oil temperature gauge



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

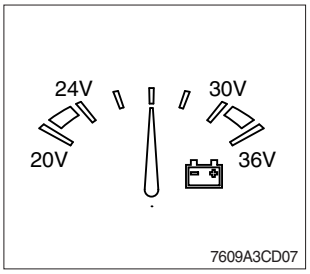


① This gauge indicates the temperature of hydraulic oil.
- White range : 40~105˚C (104~221˚F)
- Red range : Above 105˚C (221˚F)

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.

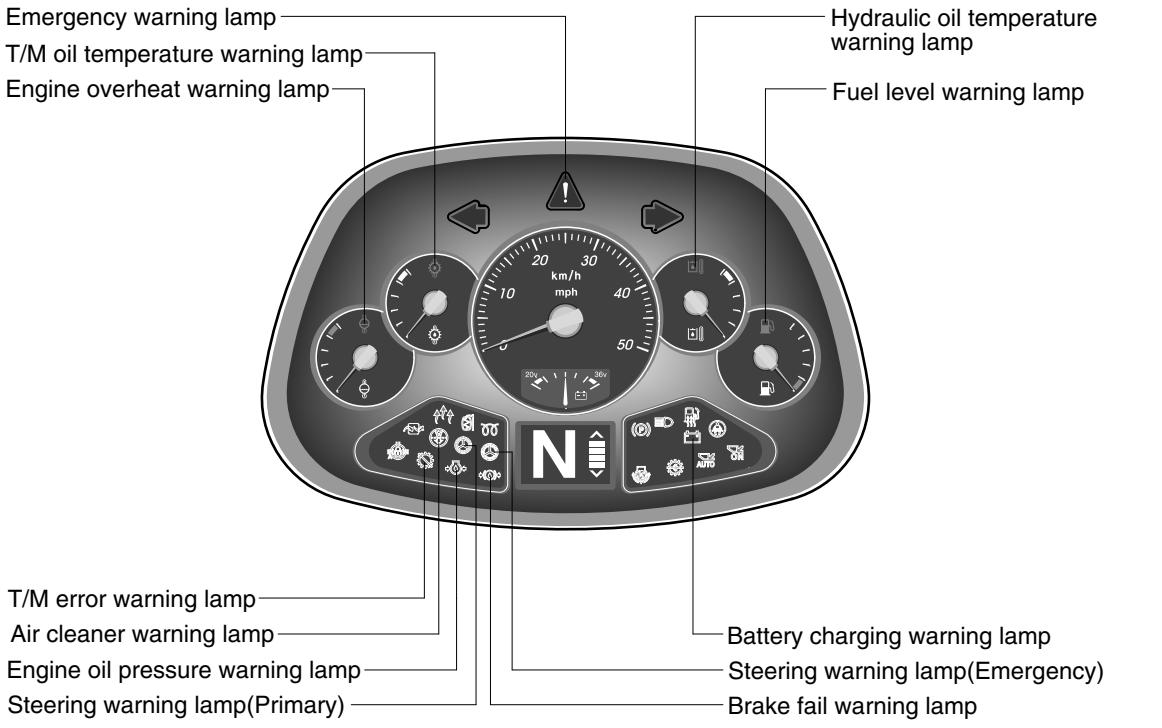
(6) Battery volt meter



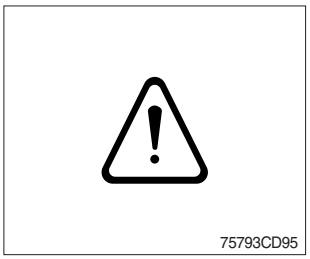
① This gauge indicates the voltage in the charging system when the engine is running.

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



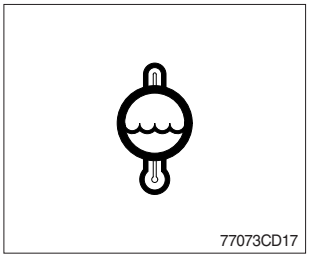
(1) Emergency warning lamp



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.

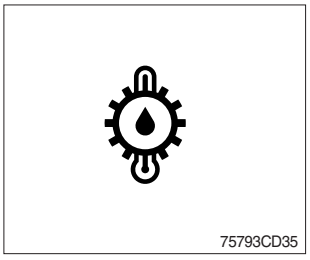
(2) Engine overheat warning lamp



① This lamp is turned ON when the temperature of coolant is over the normal temperature (106˚C, 223˚F).

② Check the cooling system when the lamp is ON.

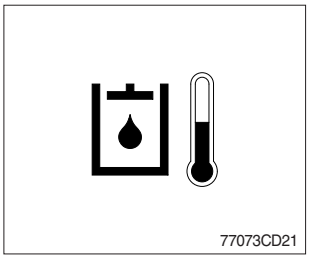
(3) Transmission oil temperature warning lamp



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

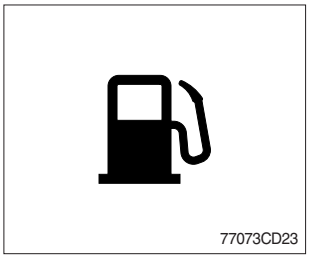


① This warning lamp operates and the buzzer sounds when the temperature of hydraulic oil is over 105˚C (221˚F).

② Check the hydraulic oil level when the lamp is turned ON.

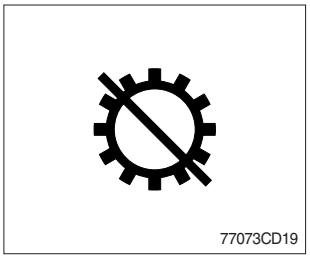
③ Check for debris between oil cooler and radiator.

(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

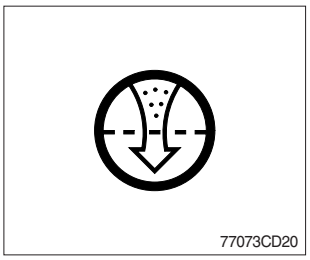


① This lamp lights ON and the LCD display show the error codes when an error occurs in the transmission.

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.

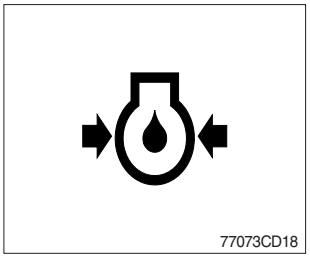
(7) Air cleaner warning lamp



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.

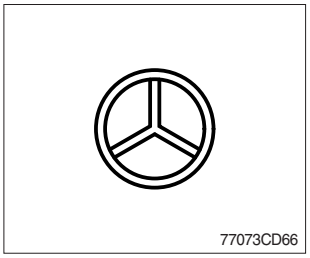
(8) Engine oil pressure warning lamp



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.

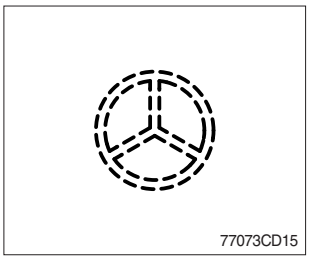
(9) Steering warning lamp



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.**



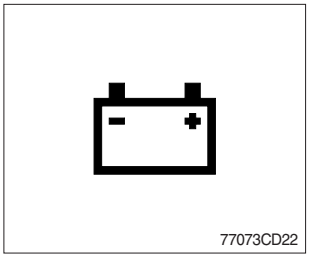
② **Emergency**

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.**

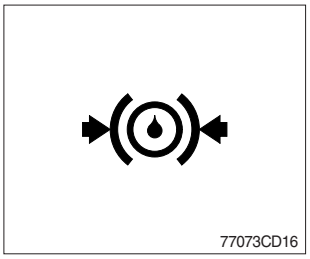
(10) Battery charging warning lamp



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

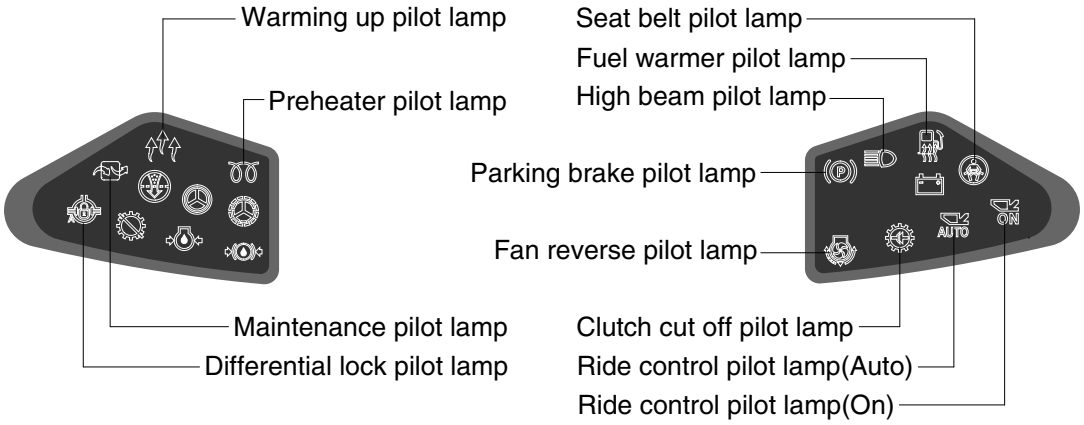


① The lamp lights ON when the oil pressure of service brake drops below the normal range.

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

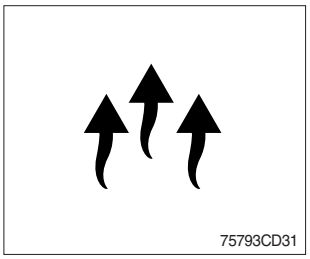
※ **Do not operate until any problems are corrected.**

4) PILOT LAMPS



7809SU3CD10

(1) Warming up pilot lamp



75793CD31

① This lamp is turned ON when the coolant temperature is below 30˚C (86˚F).

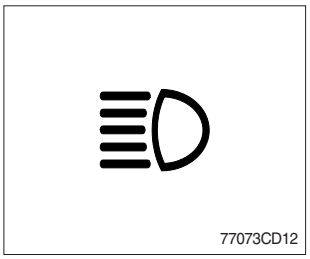
② The automatic warming up is cancelled when the engine coolant temperature is above 30˚C, or when 10 minutes have passed since starting the engine.

(2) Seat belt pilot lamp

75793CD17

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

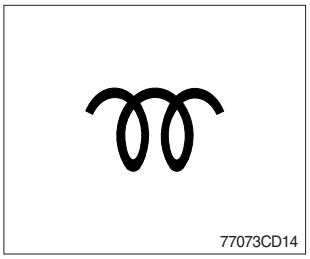
(3) High beam pilot lamp



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.

(4) Preheat pilot lamp

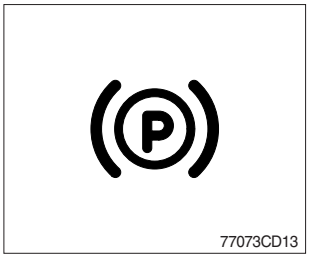


① This lamp lights ON when start switch is turned clockwise to the ON position. Light will turn off after approximately 5~45 seconds, depending on engine temperature, indicating that preheating is completed.

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

※ **Refer to page 4-5.**

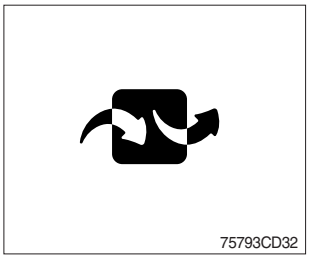
(5) Parking brake pilot lamp



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

※ **Check the lamp is OFF before driving.**

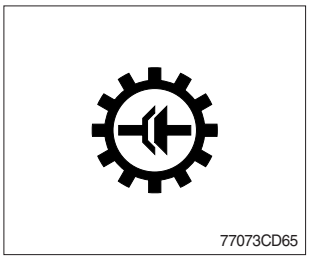
(6) Maintenance pilot lamp



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.

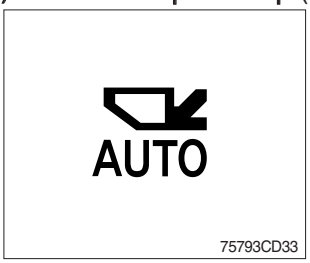
(7) Clutch cut off pilot lamp



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

※ **Refer to page 3-28.**

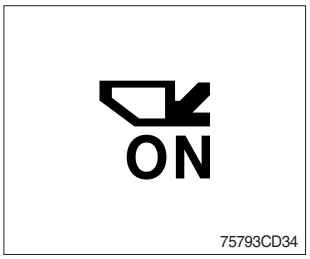
(8) Ride control pilot lamp (option)



① Auto ride control

This lamp lights ON when push in the bottom of the ride control switch (auto position).

※ **Refer to page 3-27.**

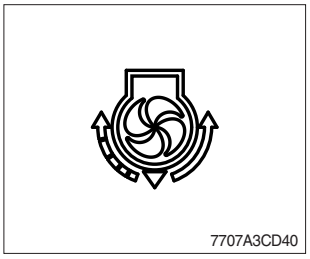


② Manual ride control

This lamp lights ON when push in the top of the ride control switch (manual position)

※ **Refer to page 3-27.**

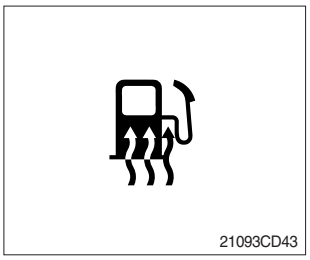
(9) Fan reverse pilot lamp



① This lamp lights ON when the fan control switch is pressed.

※ **Refer to page 3-27.**

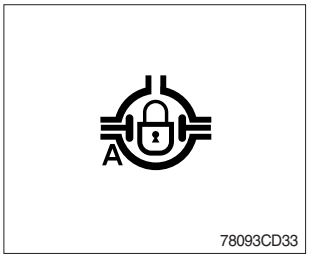
(10) Fuel warmer pilot lamp



① This lamp is turned ON when the coolant temperature is below 10˚C (50˚F) or the hydraulic oil temperature 20˚C (68˚F).

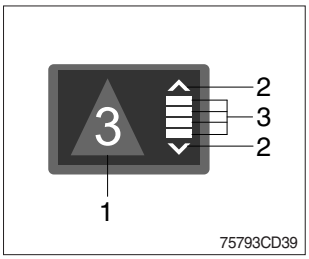
② The automatic fuel warming is cancelled when the engine coolant temperature is above 60˚C and the hydraulic oil temperature is above 45˚C since the start switch was ON position.

(11) Differential lock pilot lamp



① This lamp lights ON when the differential lock function is operating.

5) LCD

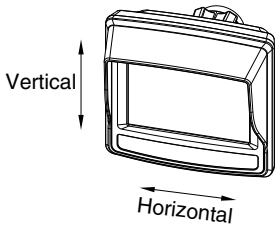


(1) The LCD can be used with the gear selector.
It indicates speed and driving direction.

No	Symbol	Meaning	Remark
1	△, ▽, □	Actual gear display	Forward, reverse, neutral
	1, 2, 3, 4		Actual gear
	P		Parking brake mode active
2	^ , v	Forward, reverse	Automatic mode
3	≡	Gear range display	Automatic mode

3. MONITOR

· The monitor is adjustable.
- Vertical : 14˚
- Horizontal : 30˚



76093CD23

1) BUTTONS

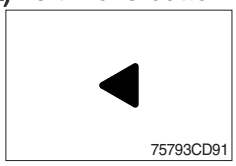
(1) Menu button

75793CD90

① Main display to main menu, main menu to main display.

② AEB cancel button in AEB setting.

(2) Left move button



75793CD91

① Move in menu (left, up).

(3) Camera / ESC button

75793CD92

① Enter rear camera mode in main display.

② Cancel button except in main display (move previous menu).

(4) Right move / Buzzer stop button

75793CD93

① Move in menu (right, down).

② Buzzer stop.

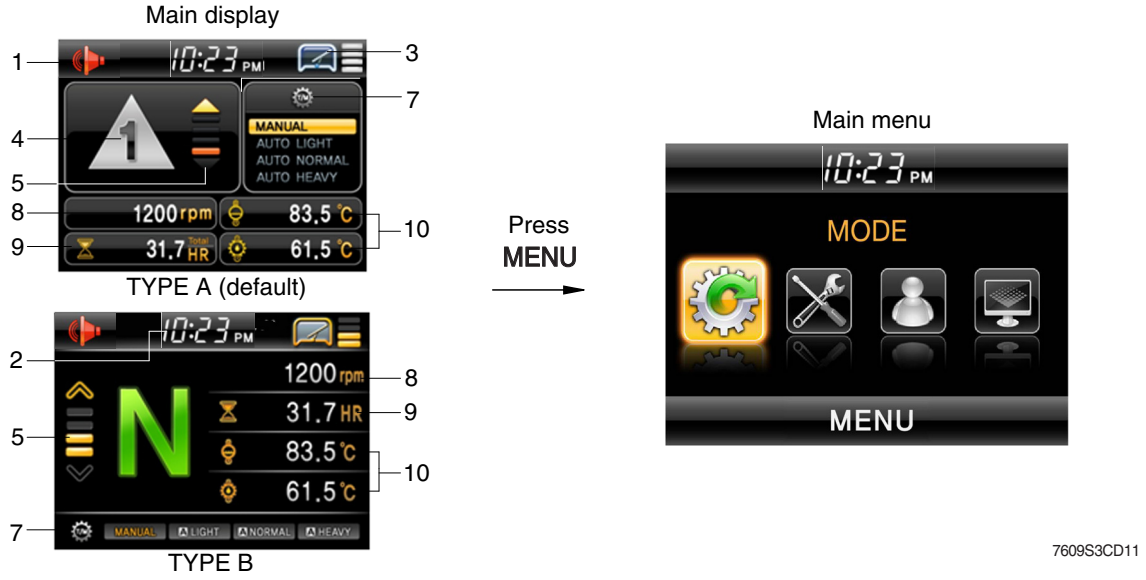
(5) Enter button

75793CD94

① Select menu (enter).

② AEB cancel button in AEB setting.

2) MAIN MENU



1	Buzzer	4	Actual gear	8	Engine rpm
2	Clock	5	Select gear	9	Hour meter, odometer
3	Wiper speed	7	Transmission mode	10	Monitoring

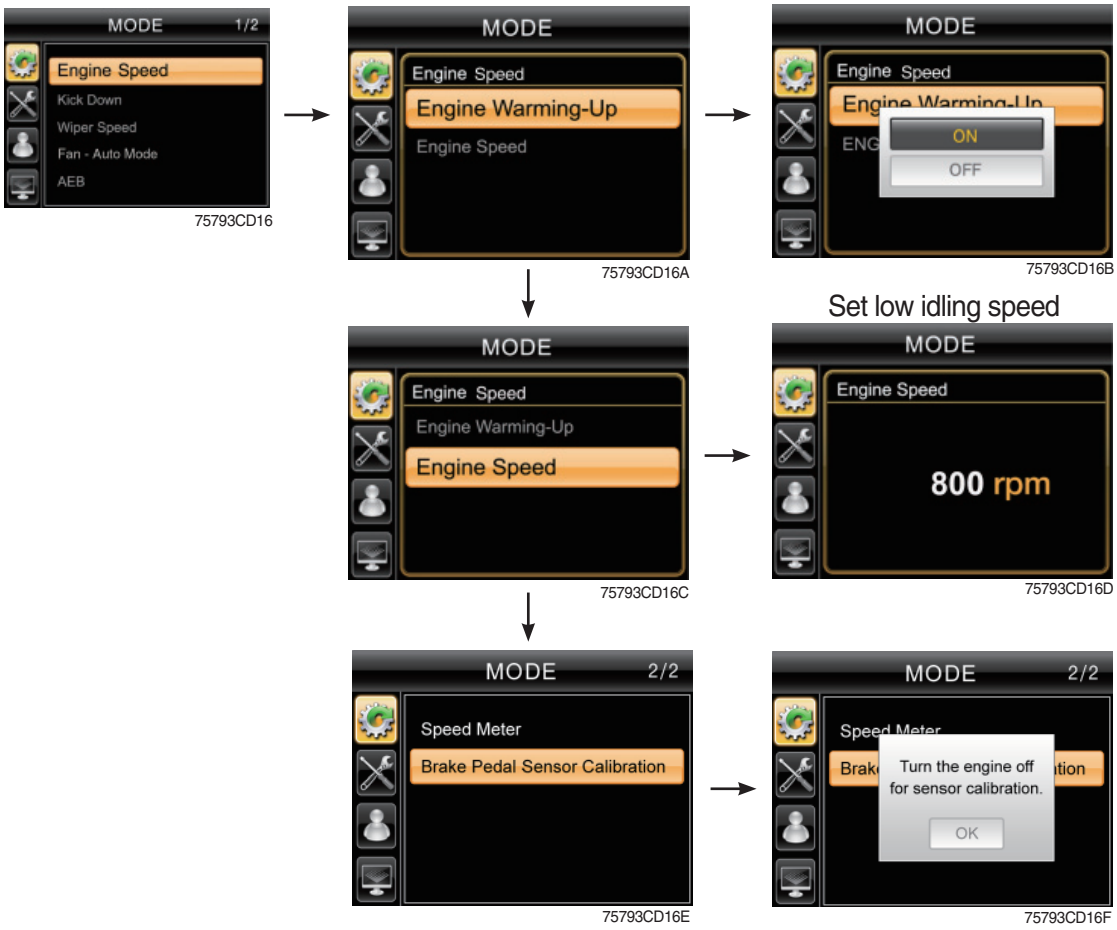
※ **Display type can be changed by operator. See page 3-23.**

(1) Structure

No	Main menu	Sub menu	Description
1	 MODE 75793CD12	Engine speed Brake pedal sensor cal Kick down Wiper speed Fan-auto mode AEB Speed meter	Engine warming up, Engine speed Brake pedal sensor calibration Mode 1 (down/up), Mode 2 (down only) 4 steps Interval and time setting AEB setting Pulse setting
2	 MONITORING 75793CD13	Fault code Machine monitoring Monitoring history	Active, Logged fault (Machine, ECU, TCU) Hyd temp, Battery, Coolant temp T/M oil temp Hour meter, ODO meter
3	 MANAGEMENT 75793CD14	Machine security Maintenance Machine information Service contact Service menu	ESL system setting, Change password Replacement, Change interval (oils and filters) Version, Status Service contact Software download
4	 DISPLAY SET UP 75793CD13	Clock Display Unit Rear camera Language	Clock Brightness setting (Manual/Automatic) Type display (A or B type) Temp (˚F/˚C), Distance (km/mile), Pressure (bar, Mpa, kgf/m², psi) Reverse mode, Active camera, Display order 12 languages

(2) Mode

① Engine speed



· **Brake pedal sensor calibration**

- Turn the engine OFF and turn the starting switch ON position.
- Press OK button, then calibration will be started.
- When display " IP ⇧ " on main display, press slowly the brake pedal completely.
- Release the brake pedal when display " IP ⇩ " on main display.
- For cancel, press MENU button.

※ When the brake pedal or sensor is replaced, **brake pedal sensor calibration must be performed.**

② Kick down

75793CD17 75793CD17A

- Mode 1 (down/up) : Press kick down button once, shift down and press button again, shift up.
- Mode 2 (down only) : Press kick down button every time, shift to lower gear respectively.

※ **Refer to page 3-30.**

③ Wiper speed

75793CD18 75793CD18A

- Setting wipe speed 1 to 4.

④ Fan-auto mode

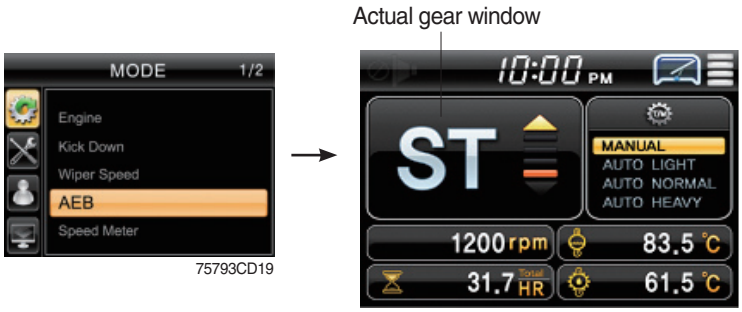
75793CD110 75793CD111 75793CD112

- Select reverse interval or reverse time.
- Set reverse interval (30~300 min) or reverse time (30~300 sec).

※ Default : Interval (60 min), time (120 sec)

※ Refer to page 3-27, fan control switch.

⑤ AEB



75793CD19

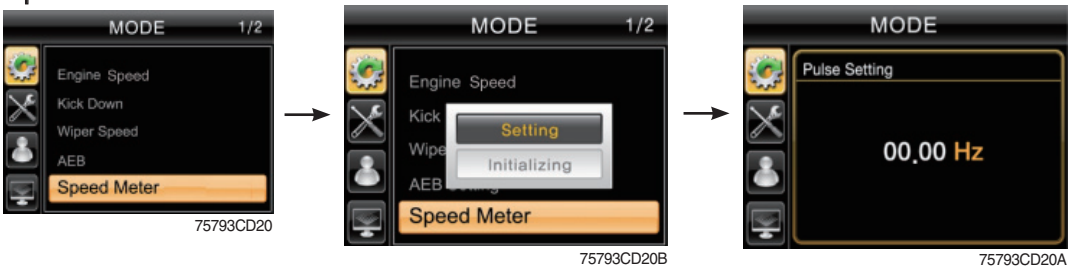
7609S3CD19A

- AEB mode controls the disk clearance of the transmission, automatically.
- To start AEB setting, press ↵ and hold for 3 seconds.
- To cancel AEB setting, press **MENU** ,▣/**ESC** or ↵.
- If "OK" in actual gear window, press **MENU** , ▣/**ESC** or ↵ to complete AEB setting.
- **Display during AEB mode**

Symbol	Meaning
ST	Start AEB
K1~K4, KV, KR	Calibrating clutch K1~K4, KV or KR respectively
OK*	Calibration for all clutches finished
Spanner and Kx*	Kx couldn't be calibrated, AEB finished
△E	Engine speed too low - Raise engine speed
▽E	Engine speed too high - Lower engine speed
△T	Transmission oil temperature too low - Heat up transmission
▽T	Transmission oil temperature too high - Cool down transmission
FO*	Output speed not zero
FN*	Shift lever not in neutral position
FP*	Parking brake not applied

* : Transmission stays in neutral, you have to restart the TCU (ignition off/on).

⑥ Speed meter



75793CD20

75793CD20B

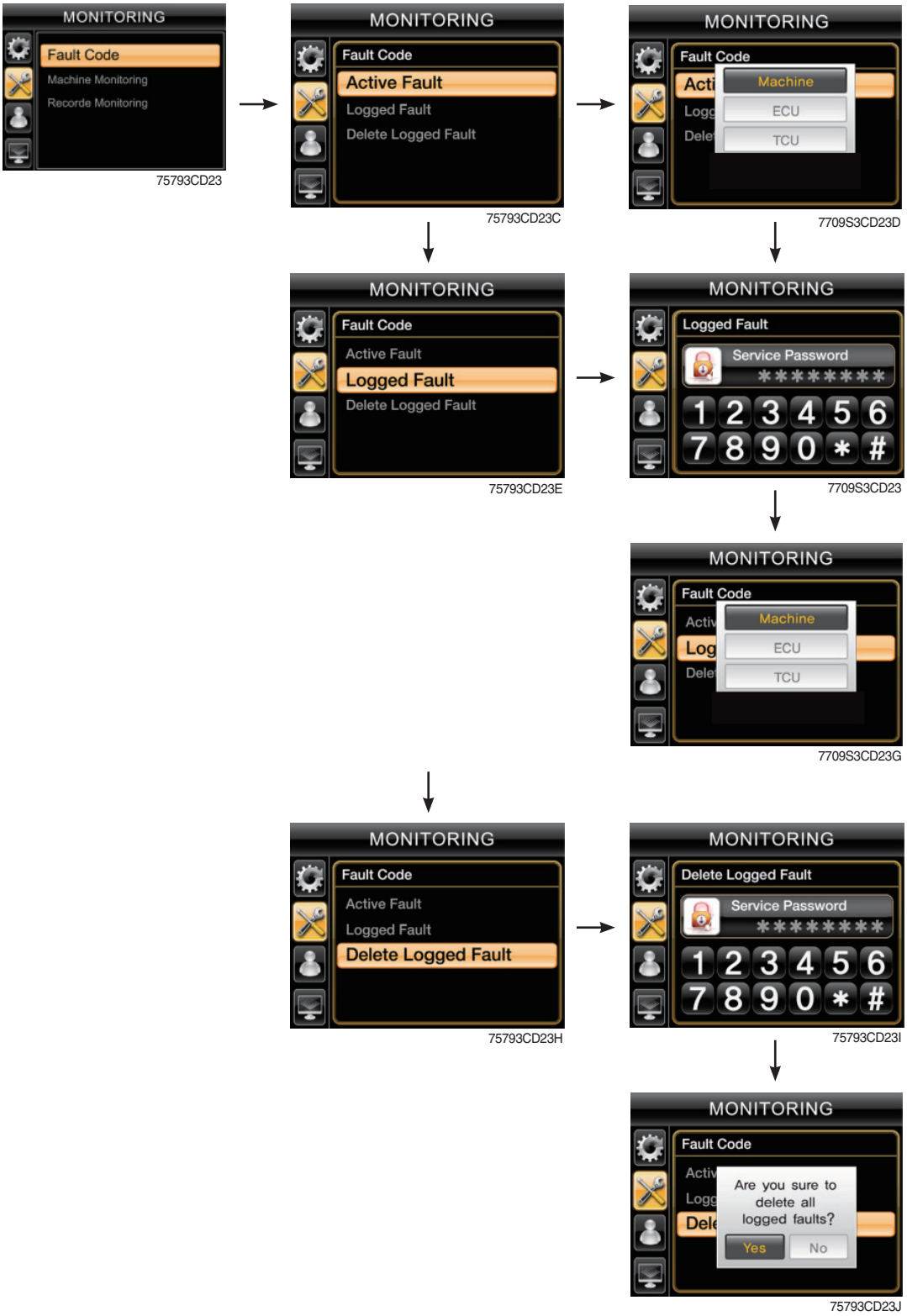
75793CD20A

- Press ↵ and hold for 3 seconds.
- To change the pulse value, press◀ or ▶/🔇 .
- To change the position, press↵ .

※ Only for the serviceperson.

(3) Monitoring

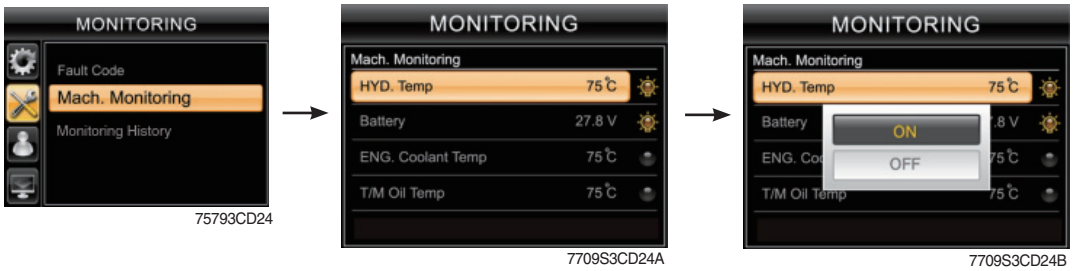
① Fault code



· Monitor the fault code of the Machine / ECU / TCU.

※ **Not define will be indicated in case of that there's no fault.**

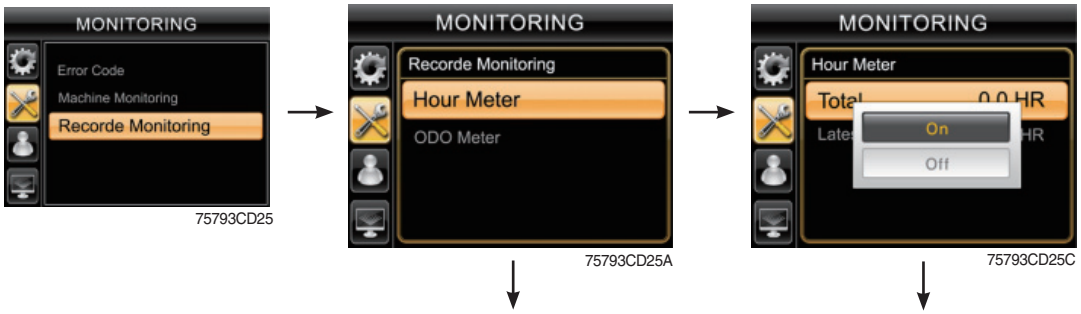
② Machine monitoring



75793CD24 7709S3CD24A 7709S3CD24B

- Monitor the status of the machine.
- To check the item in main display, choose it and press ↵ .
- The right icon shows ON/OFF status.

③ Record monitoring



75793CD25 75793CD25A 75793CD25C

75793CD25D

- **Hour meter**
  - **Total** : total hour meter
    To show the item in the main display, select "ON" and press ↵ (this item could not reset).
  - **Latest** : the latest hour meter after reset.
    To show the item in the main display, select "ON" and press ↵.
    To reset the latest hour meter, select "initializing" and press ↵.

75793CD25F 75793CD25H

75793CD25J

- **ODO meter**
  - **Total** : total ODO meter
    To show the item in the main display, select "ON" and press ↵ (this item could not reset).
  - **Latest** : the latest ODO meter after reset.
    To show the item in the main display, select "ON" and press ↵.
    To reset the latest odometer, select "initializing" and press ↵.

(4) Management

① Machine security

75793CD26 75793CD26A 75793CD26B 75793CD26C 75793CD26D

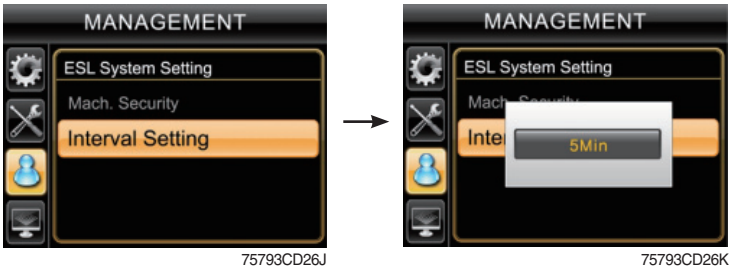
· **ESL system setting**

- ESL : Engine Starting Limit
- ESL mode is designed to be a theft deterrent or will prevent the unauthorized operation of the machine.
- If the ESL mode was selected Enable, the password will be required when the start switch is turned ON.
- Disable : Not used ESL function
  Enable : The password is required whenever the operator start engine.
  Interval mode : The password is required when the operator start engine first. But the operator can restart the engine within the interval time without inputting the password.
  The interval time can be set maximum 2 days.

※ **Default password : 00000***

· Interval setting

- If set interval setting to 5 minutes, ESL system is activated after 5 minutes.
  Therefore, the password does not need to restart engine within 5 minutes.



75793CD26J 75793CD26K

· **Change password**

- Input 5 to 10 digits and press *.

75793CD26G

75793CD26H

Enter the current password.

75793CD26L

Enter the new password.

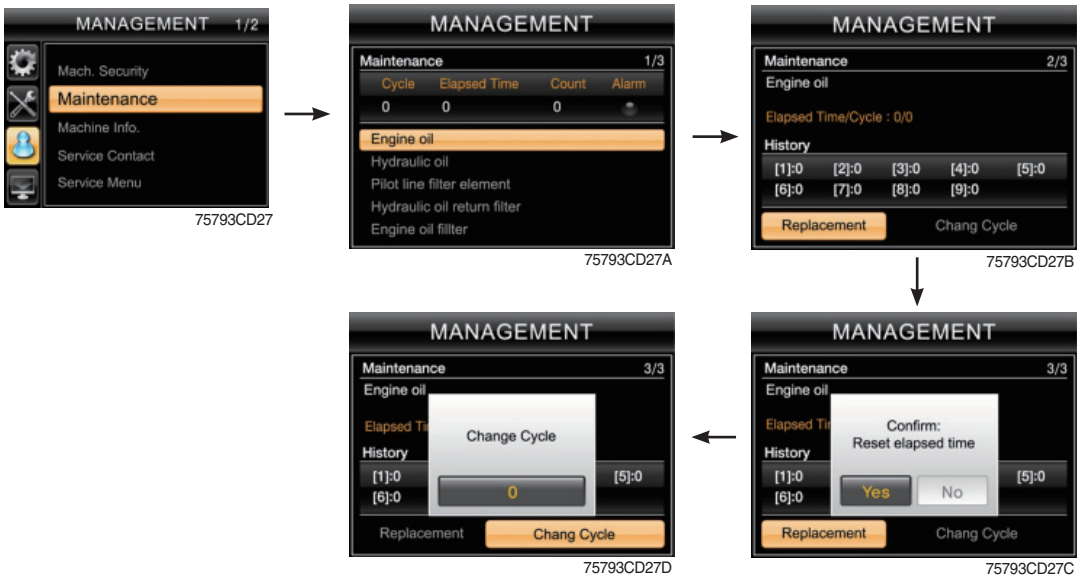
75793CD26M

Enter the new password again.

75793CD26N

The new password is stored in the MCU.

② Maintenance



- Alarm (☼) : Warning
  Replacement : The elapsed time will be reset to zero.
  Change cycle : The change or replace cycle can be changed in the unit of 50 hours.
- To change cycle, press ◀ or ▶/🔇.
- **Change or replace interval**

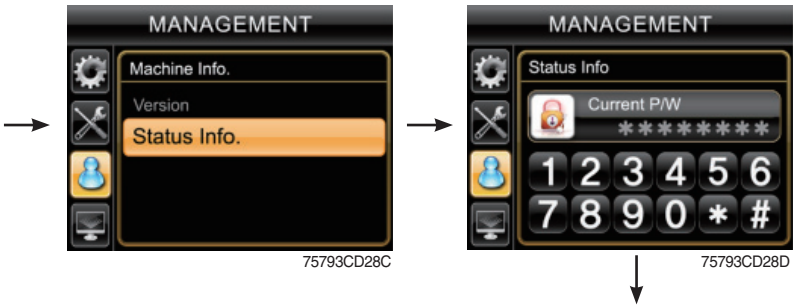
No	Item	Interval
1	Engine oil	250
2	Hydraulic oil	★1 2000 ★2 5000
3	Pilot line filter element	250
4	Hydraulic oil return filter	250
5	Engine oil filter	250
6	Fuel filter element	500
7	Fuel pre-filter	500
8	Coolant filter	500
9	Hydraulic tank air breather	250
10	Radiator coolant	2000
11	Transmission oil and filter	1000
12	Axle oil (front and rear)	1500

★1 : Conventional hydraulic oil

★2 : Hyundai genuine long life hydraulic oil

③ Machine information

75793CD28 75793CD28A 7809S3CD28B

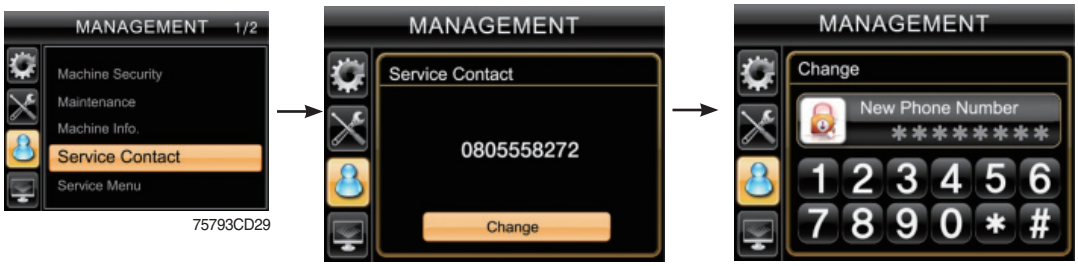


75793CD28C 75793CD28D

75793CD28E

- **Version**
  - Software versions of MCU, cluster and monitor can be checked.
- **Status info**
  - The machine status can be checked.

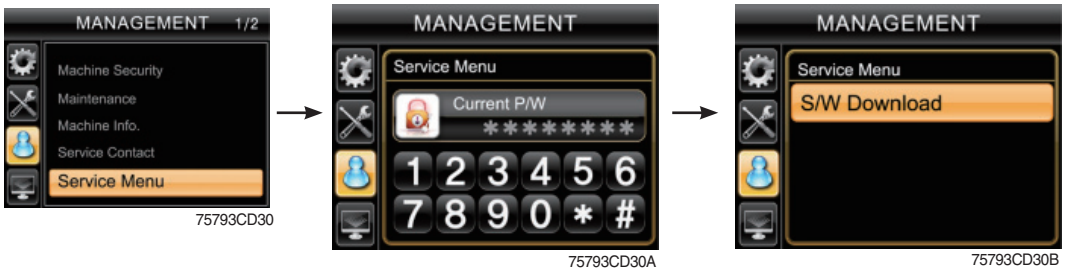
④ Service contact



75793CD29 75793CD29A 75793CD29B

- The phone number of the service man can be checked and changed.

⑤ Service menu

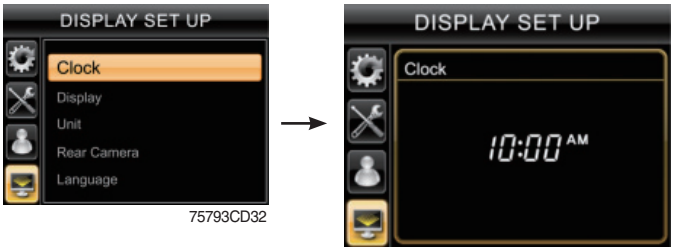


75793CD30 75793CD30A 75793CD30B

- The software of monitor can be downloaded.

(5) DISPLAY SET UP

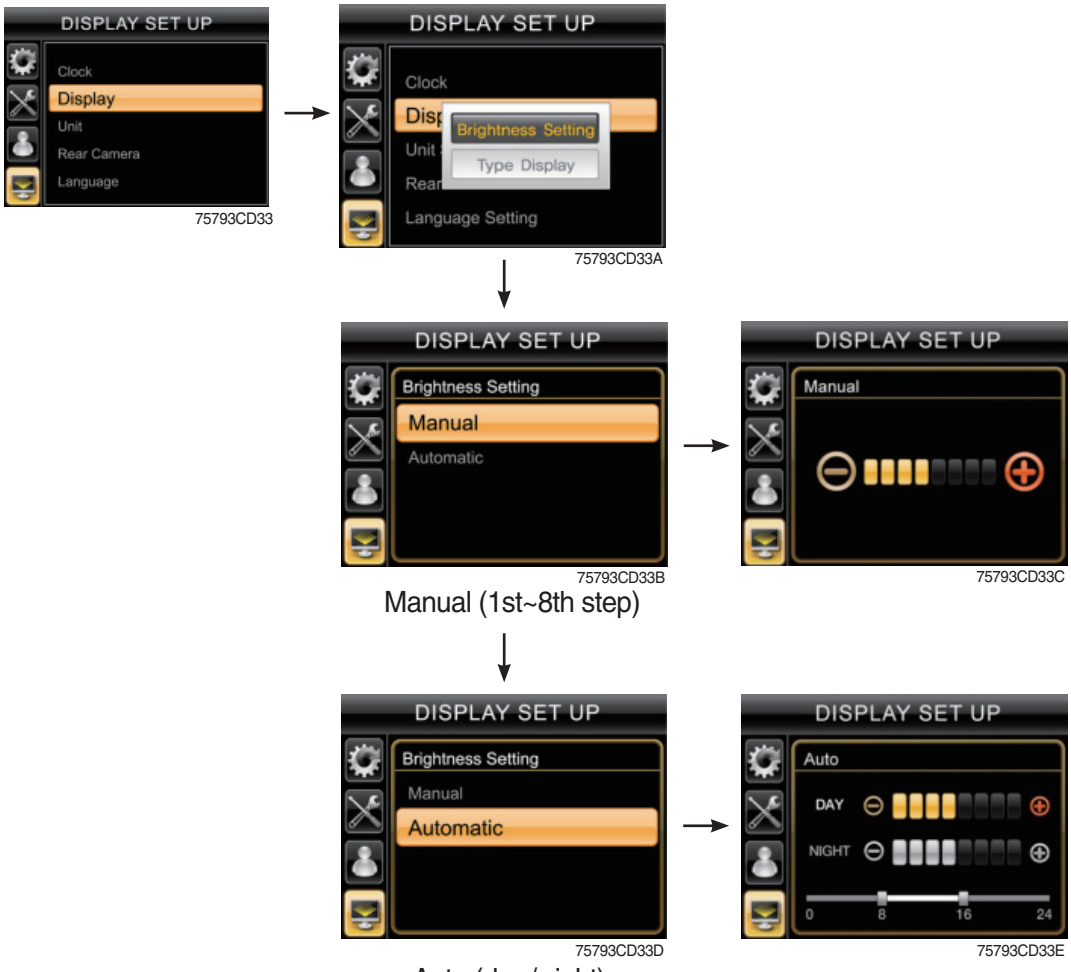
① Clock



- To set time, press ◀ or ▶/🔇 .
- To move position, press ↵ .

② Display

- **Brightness setting**



Auto (day/night)

※ If "Automatic" is chosen, brightness for day and night can be differently set up. Also by using the bar in lower side, users can define which time interval belongs to day and night. (in bar figure, gray area represents night time while white shows day time)

· Display type

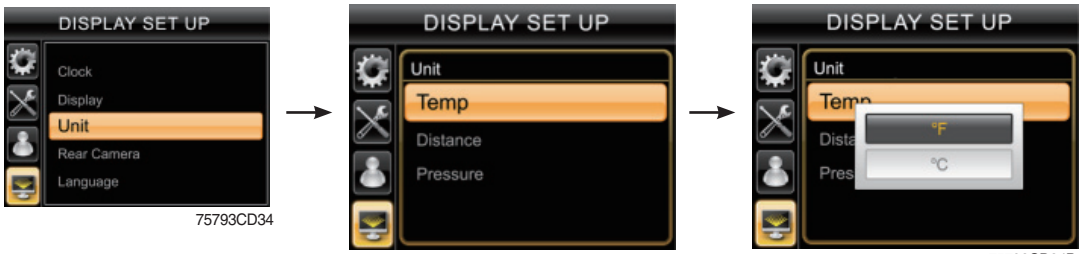
75793CD33F 75793CD33G 7609S3CD40

A type

7609S3CD33

B type

③ Unit



75793CD34 75793CD34A 75793CD34B

· Temperature : ˚C ↔ ˚F
· Distance : km ↔ mile
· Pressure : bar ↔ Mpa ↔ kgf/m^2 ↔ psi

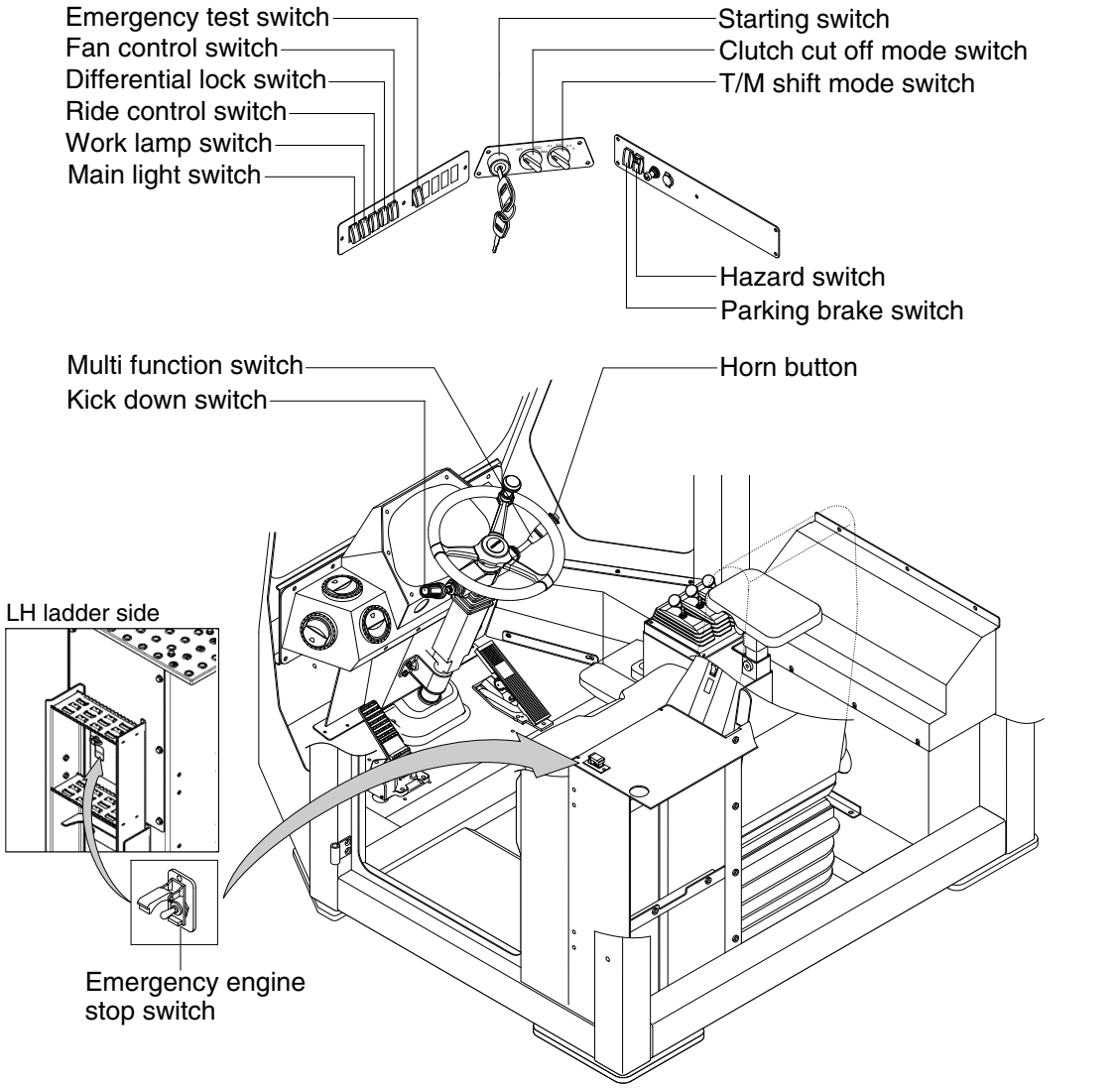
④ Rear camera

- **Reverse mode**
  - If transmission engages the reverse gear (R1~R3), the camera mode is displayed automatically in main display.
- **Active camera**
  - Three cameras can be installed on the machine.
  - The display order can be set by this menu.
- If the camera was not equipped, this menu is not useful.
- In main display, if the ▶▣/ESC button is pushed, the first ordered display camera will be viewed.

⑤ Language

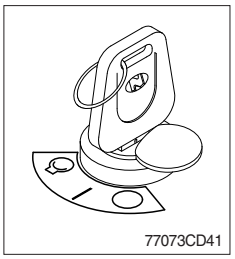
- User can select preferable language and all display are changed the selected language.
- In the main menu, if the three buttons (◀ + ▶/☼ + ↵) are pushed at the same time, the language selection display will be viewed.

4. SWITCHES



7809SU3CD29

1) STARTING SWITCH



77073CD41

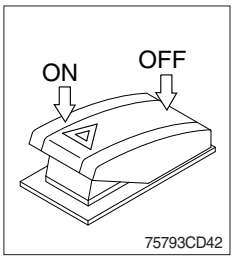
(1) There are three positions, OFF, ON and START.

- ◯ (OFF) : None of electrical circuits activate.
- | (ON) : All the systems of machine operate.
- (START) : Use when starting the engine.
  Release key immediately after starting.

※ **If you turn ON the starting switch in cold weather, the fuel warmer is automatically operated to heat the fuel by sensing the coolant temperature. Start the engine in 1~2 minutes after turning ON the starting switch.**
More time may take according to ambient temperature.

※ **Key must be in the ON position with engine running maintain electrical and hydraulic function and prevent serious machine damage.**

2) HAZARD SWITCH



(1) Use for parking, or loading the machine.

(2) Both turn signal lights will flash simultaneously.

※ **If the switch is left ON for a long time, the battery may be discharged.**

3) PARKING BRAKE SWITCH

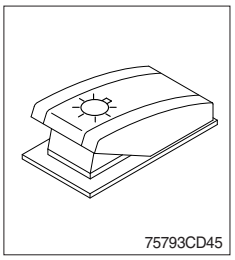
(1) When the switch is pressed to ON position, the parking brake will start to operate and the cluster warning lamp will comes ON.

(2) Press the release position in order to disengage the parking brake.

※ **When operating the gear selector lever, be sure to release the parking brake. If the machine is operated with the parking brake engaged, the brake will overheat and may cause the brake system to go out of order.**

※ **This switch can be set to ON or Release position only when the safety button is pulled to the unlock position.**

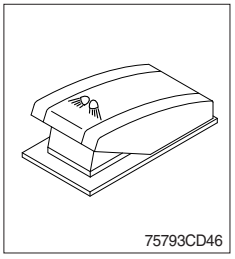
4) MAIN LIGHT SWITCH



(1) This switch use to operates the clearance lamp and head light by two step.

- **First step** : Clearance lamp and cluster illumination lamp comes ON. Also, all indicator lamp of switches come ON.
- **Second step** : Head light comes ON.

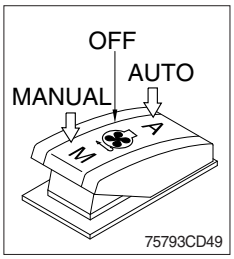
5) WORK LAMP SWITCH



(1) This switch use to operates the front and rear work lamps by two step.

- **First step** : Front work lamp located on the cab comes ON.
- **Second step** : Rear work lamp located on the cowl comes ON.

6) FAN CONTROL SWITCH



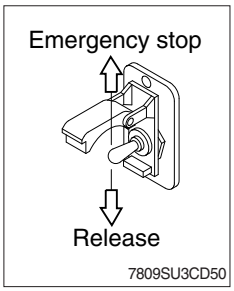
(1) This switch use to control the cooling fan.

(2) This switch has three positions.

- **AUTO** : The fan automatically work in reverse according to set up interval and time.
  ※ **Refer to page 3-14.**
- **OFF** : Only forward rotation is possible.
- **MANUAL** : The fan rotates reverse only while pressing this position. If release the switch, return to the OFF position.

(3) On pressing the switch, the indicator lamp is turned ON.

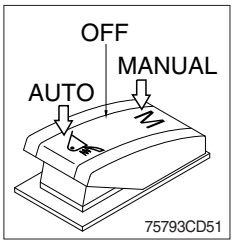
7) EMERGENCY ENGINE STOP SWITCH



(1) This switch is used to emergency stop the engine.

※ **Be sure to keep the emergency switch on the release position when restart the engine.**

8) RIDE CONTROL SWITCH (option)



(1) AUTO

Press in the bottom of the ride control switch in order to turn on the automatic ride control. The automatic ride control automatically turns on when the travel speed exceeds a preset speed of approximately 7 km/h. The automatic ride control automatically shuts off during low speed travel (below 7 km/h).

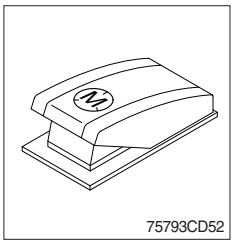
(2) MANUAL

Press in the top of the ride control switch in order to turn on the system for ride control regardless speed. The ride control will smooth the ride of the machine during travel.

(3) OFF

Press the ride control switch to the middle position in order to turn off the system for the ride control.

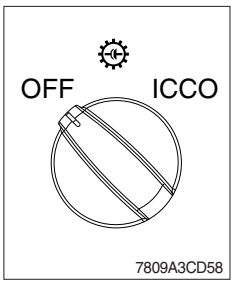
9) EMERGENCY TEST SWITCH (option)



(1) The emergency steering system can be manually tested. Push the switch in order to determine if the emergency steering and the emergency steering lamp are functional.

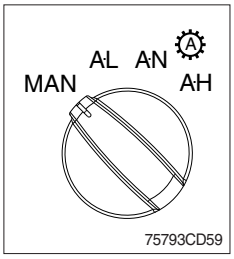
(2) When the switch is pressed, the emergency steering pump motor will run. The emergency steering lamp will light. If the emergency steering lamp does not light, do not operate the machine.

10) CLUTCH CUT OFF MODE SWITCH



- OFF position : The clutch cut off function is disable.
- ICCO position : It will cut off the clutch when brake operation.

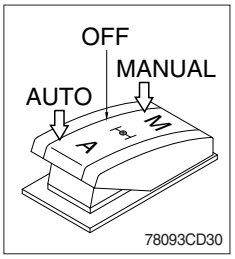
11) TRANSMISSION SHIFT MODE SWITCH



(1) Four modes are available for operator's preference and job condition.

- MAN (Manual) : Machine is operated by selected gear on lever.
- AL (Auto Light) : Automatic shifting point is fast for long-distance transportation and fuel efficiency.
- AN (Auto Normal) : Automatic shifting point is normal without automatic kick-down to 1st gear for general digging and loading operation.
- AH (Auto Heavy) : Automatic shifting point is normal with automatic kick-down to 1st gear for more powerful operation.

12) DIFFERENTIAL LOCK SWITCH (option)



(1) This switch is used to apply differential lock.
The differential lock gives equal power to both front wheels and is used in conditions when traction is poor.

(2) Manual mode

Press the top of the switch for the manual mode of the differential lock function. You press the switch, the differential lock will engage immediately and differential lock pilot lamp lights ON.
Manual mode is temporarily engaged as long as the operator pushes the switch. When the switch is released, differential lock function is disengaged and switch returns to OFF position.

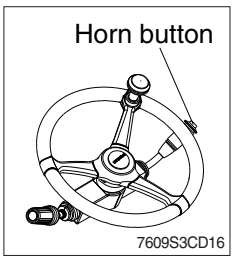
(3) Auto mode

Press the bottom of the switch for auto mode of the differential lock function.
If you press the switch, the axle differential lock will automatically engage when the differential function is used.

※ **While the axle differential lock function is operating, the differential lock pilot lamp lights ON.**

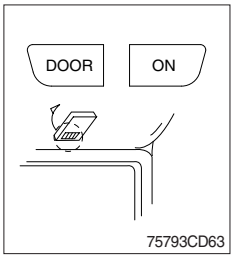
※ **Refer to page 3-9.**

13) HORN BUTTON



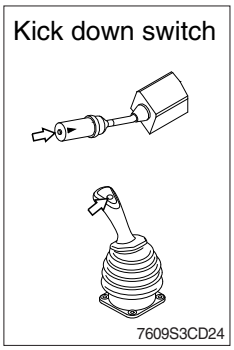
(1) If you press the button on the top of the multifunction switch, the horn will sound.

14) CAB LAMP SWITCH



(1) This switch turns ON the cab room lamp.
① This switch is used to turn the lamp ON or OFF.

15) KICK DOWN SWITCH



(1) Manual mode

It is effective 2nd speed to 1st speed only and recover to 2nd speed quickly when push the switch one more time.

(2) Automatic mode

① **Mode 1** (down/up)

It shifts down quickly from current gear to one step lower speed by pushing the switch and recover to current speed quickly when push the switch one more time.

② **Mode 2** (down)

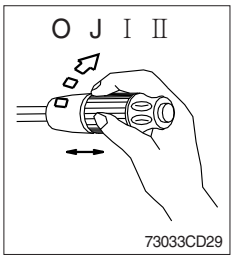
It shifts down from current gear to one step lower speed when push the switch every time.

The kick down function is released in only 1st speed.

※ **Refer to page 3-14 for the kick down setting.**

※ **The normal autoshift function continues after the kick down switch is released.**

16) MULTI FUNCTION SWITCH



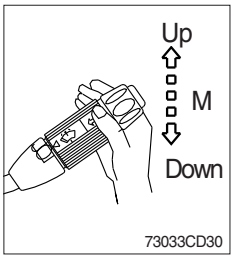
(1) Front wiper and washer switch

① When the switch is in **J** position, the wiper moves intermittently.

② When placed in Ⅰ or Ⅱ position, the wiper moves continuously.

③ If you push the grip of the lever, washer liquid will be sprayed and the wiper will be activated 2-3 times.

※ **Check the quantity of washer liquid in the tank. If the level of the washer liquid is LOW, add the washer liquid (in cold, winter days) or water. The capacity of the tank is 1 liter.**



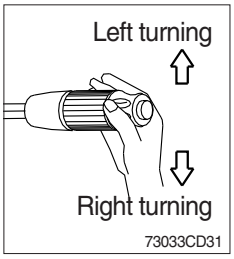
(2) Dimmer switch

① This switch is used to turn the head lights direction.

② Switch positions

- Up : To flash for passing
- Middle : Head lights low beam ON
- Down : Head lights high beam ON

③ If you release the switch when it's in up position, the switch will return to middle.

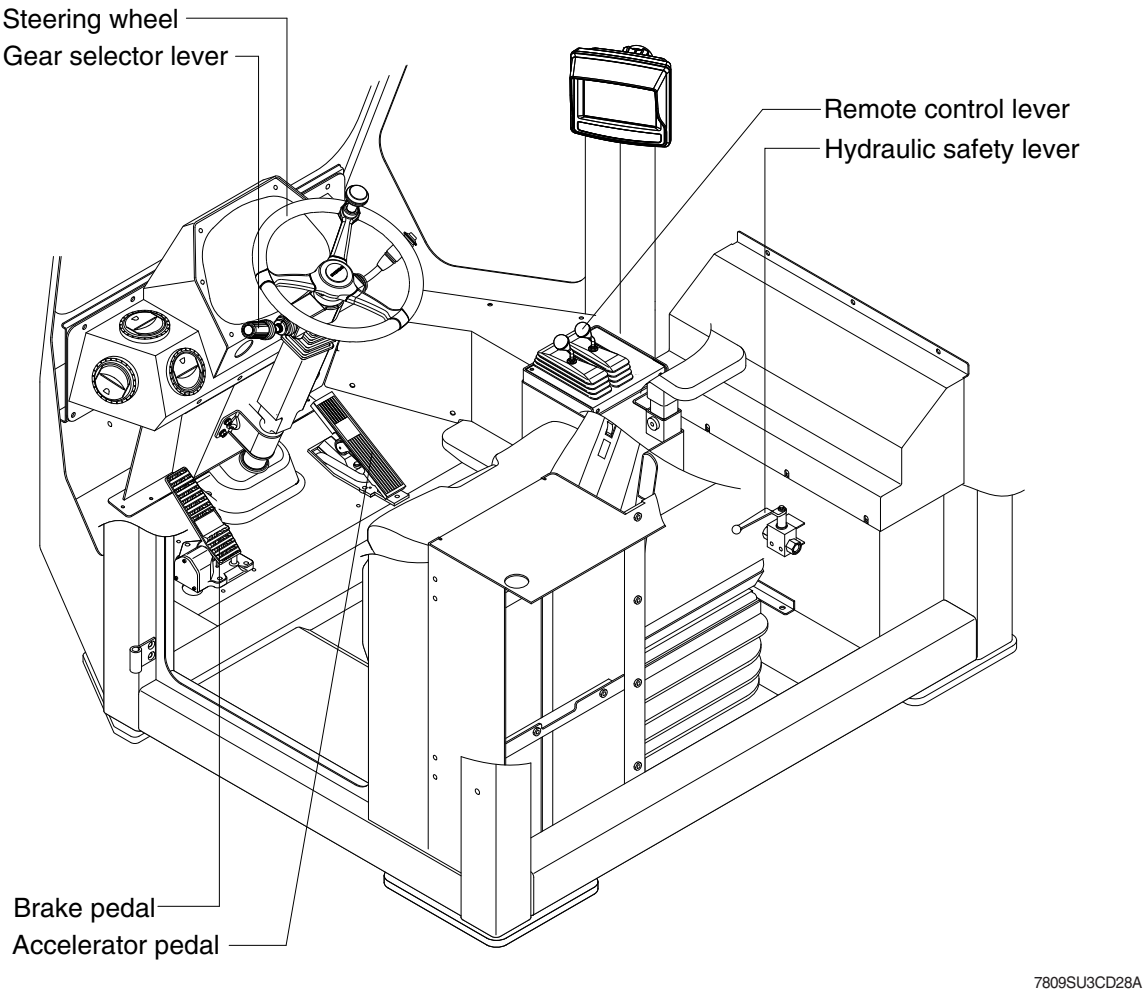


(3) Turning switch

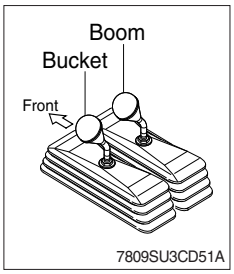
① This switch is used to warn or signal the turning direction of the machine to other vehicles or equipment.

② Push the lever up for turning left, pull the lever down for turning right.

5. CONTROL DEVICE



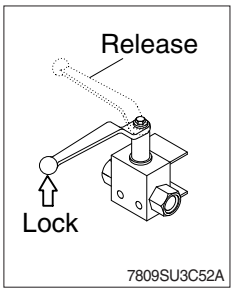
1) REMOTE CONTROL LEVER (fingertip type)



(1) These joystick are used to control the boom and the bucket.

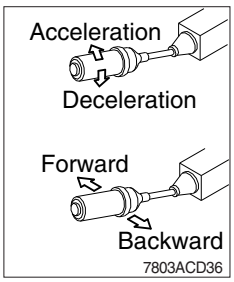
(2) Refer to operation of working device in chapter 4 at page 4-9.

2) HYDRAULIC SAFETY LEVER



(1) When the lever is turned to Lock position, the hydraulic pilot line will be cut off, so the work equipment will not operated.

3) GEAR SELECTOR LEVER

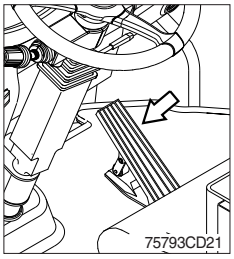


(1) This lever is used for gear selection, forward 4 stages and reverse 3 stages.

(2) If you push the gear selector lever, the machine moves forward, but if pull the gear selector lever, the machine moves backward.

(3) If you turn the gear selector lever forward, the machine increases the speed, but if you turn the gear selector lever backward, the machine reduces the speed.

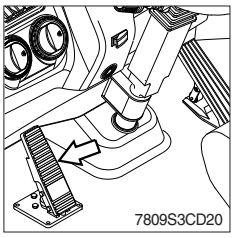
4) ACCELERATOR PEDAL



(1) This pedal controls the engine speed. The engine speed will increase in proportion to the degree of force applied to this pedal.

(2) Unless this pedal is pressed, the machine will run at low idling.

5) BRAKE PEDAL (service brake + clutch cut off function)



(1) If the pedal is pushed down, this will generate braking force and bring the machine to a stop.

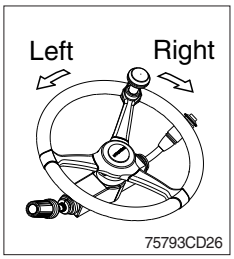
(2) If the power train operation is to be cut off, set the clutch cut off mode switch to ON (L, M, H) and press the pedal.

⚠ Even if the brake is applied while clutch cut off mode switch is OFF, power train will not cut off.

※ Do not operate the machine with foot the brake pedal unnecessarily, or bring premature wear of brake disc.

(3) Clutch cut off function : Refer to page 3-28.

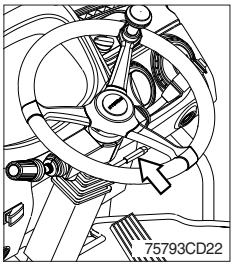
6) STEERING WHEEL

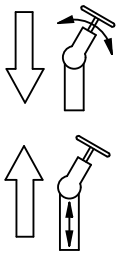


(1) Two multi-motion cylinders in the center of the machine will operate the steering function.

(2) If the steering wheel is turned to left, the machine will move to the left and turn it to the right, the machine will move to the right.

7) STEERING WHEEL LEVER





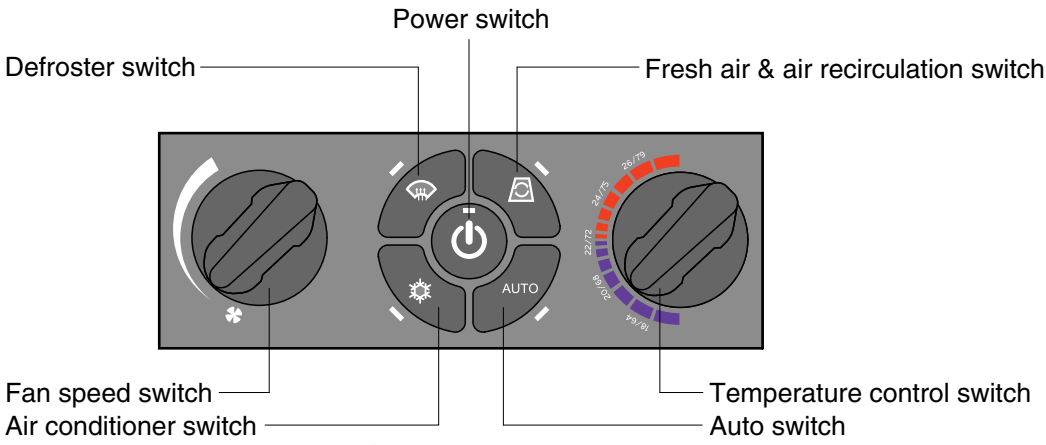
(1) By pulling down the lever, the wheel is adjustable to tilt.
· Tilting : 40˚

(2) By pulling up the lever, the wheel is adjustable to telescope.
· Telescoping : 80 mm

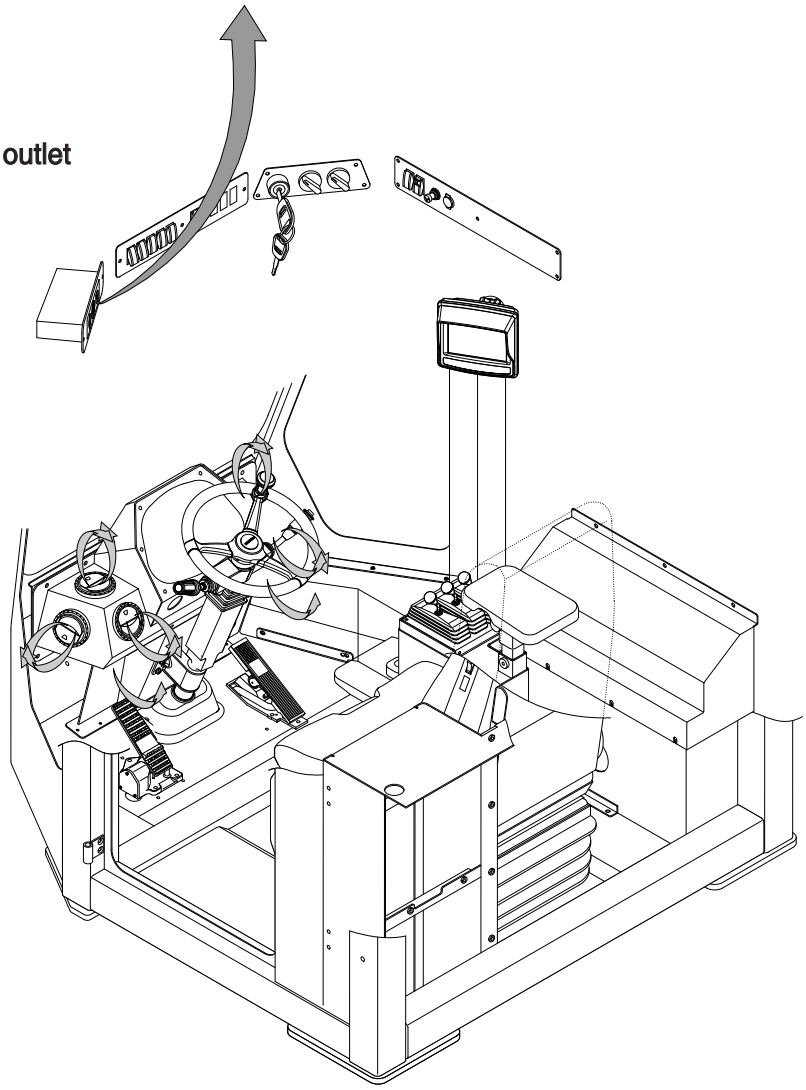
6. AIR CONDITIONER AND HEATER

■ FULL AUTO AIR CONDITIONER AND HEATER

Full auto air conditioner and heater system automatically keeps the optimum condition in accordance with operator's temperature configuration sensing ambient and cabin inside temperature.

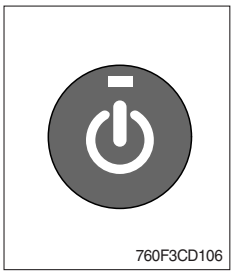


· Location of air outlet



7809SU3CD37A

1) POWER SWITCH



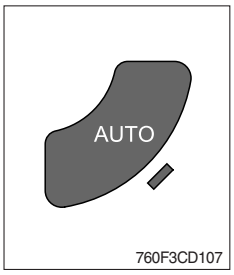
(1) This switch makes the system ON or OFF.
Just before the power OFF, set values are stored.

(2) Default setting values

Function	Air conditioner	In/outlet	Temperature
Value	OFF	Inlet	Previous sw OFF

※ **The green pilot lamp is turned ON.**

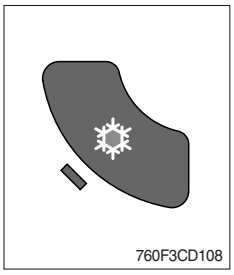
2) AUTO SWITCH



(1) This switch sets the air conditioner and heater system to automatic temperature control.
Auto air conditioner and heater system automatically keeps the optimum condition in accordance with operator's temperature configuration sensing ambient and cabin inside temperature.

※ **The green pilot lamp is turned ON.**

3) AIR CONDITIONER SWITCH (compressor switch)



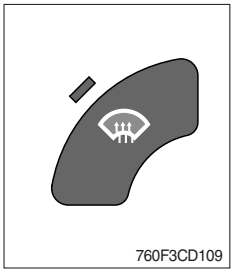
(1) This switch turns the compressor for the air conditioning.

(2) In accordance with the temperature sensed by duct (evaporator) sensor, compressor turns ON or OFF automatically.

※ **Air conditioner operates to remove vapor and drains water through a drain hose. Water can be sprayed into the cab in case that the drain cock at the ending point of drain hose has a problem.**
In this case, exchange the drain cock.

※ **The green pilot lamp is turned ON.**

4) DEFROSTER SWITCH



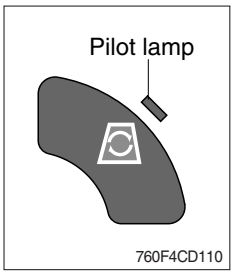
(1) Defroster and ventilation nozzles at window open and directed toward the windows.

(2) Default setting values

Function	Air conditioner	In/outlet	Blower
Value	ON	Outlet	Max for 15 minutes

※ **The green pilot lamp is turned ON.**

5) FRESH AIR/AIR RECIRCULATION SWITCH



(1) It is possible to change the air-inlet method.

① **Fresh air (pilot lamp OFF)**

Inhaling air from the outside.

※ **Check out the fresh air filter periodically to keep a good efficiency.**

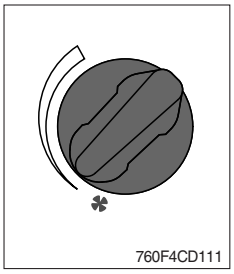
② **Air recirculation (pilot lamp ON)**

It recycles the heated or cooled air to increase the energy efficiency.

※ **Change air occasionally when using recirculation for a long time.**

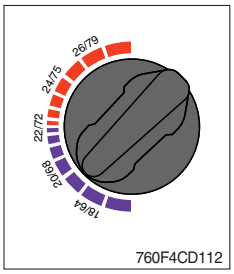
※ **Check out the recirculation filter periodically to keep a good efficiency.**

6) FAN SPEED KNOB



(1) This knob controls fan speed manually.
There are 9 steps to control fan speed.

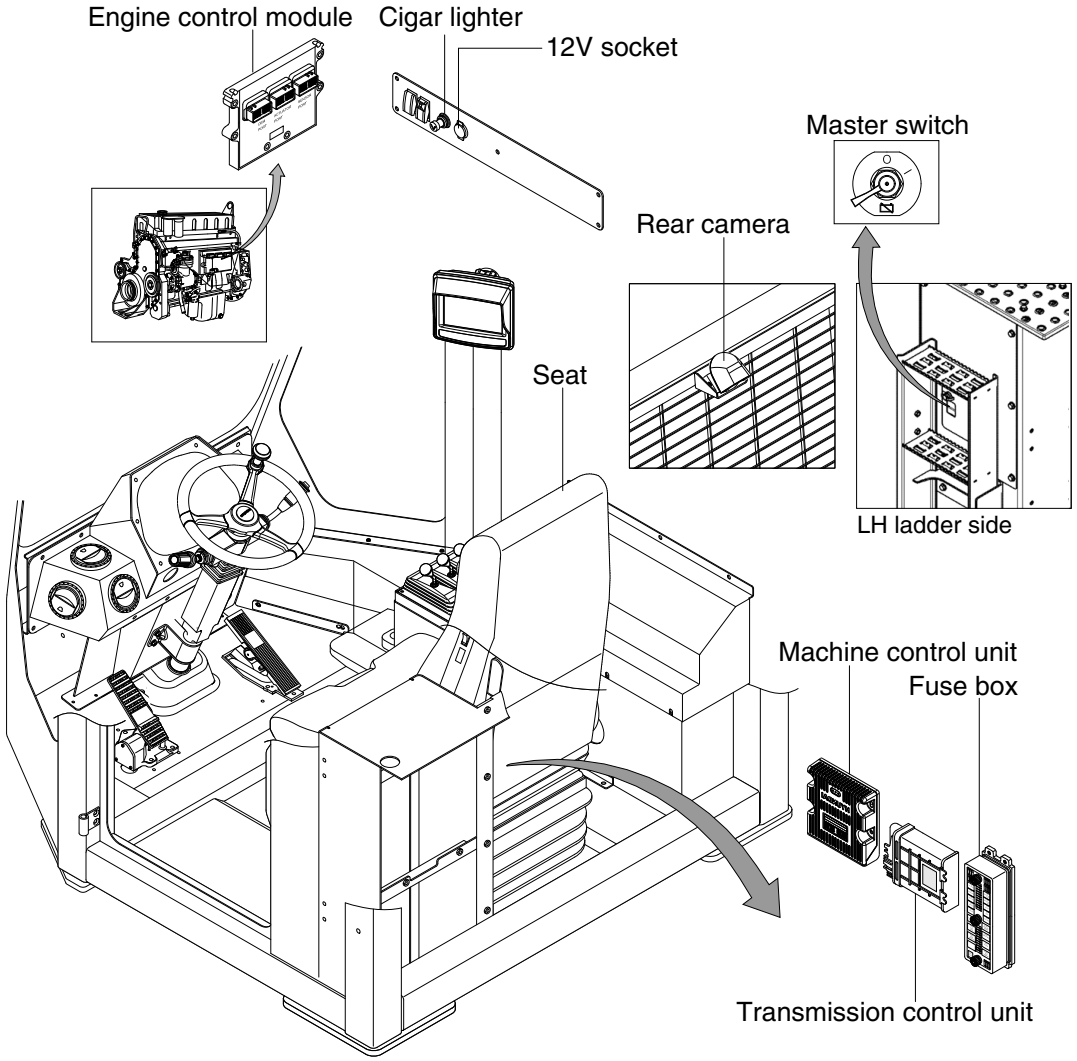
7) TEMPERATURE CONTROL KNOB



(1) This knob controls the position of the water valve when the air conditioner switch is ON or OFF.

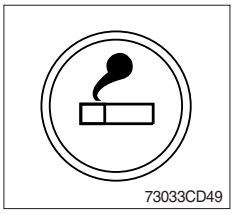
(2) When the AUTO switch is ON, the temperature control knob determines the desired cab temperature. The temperature range is 18˚C (64˚F) in the full cold position and 26˚C (79˚F) in the full hot position.

7. OTHERS



7809SU3CD38

1) CIGAR LIGHTER



73033CD49

(1) This can be used when the engine starting switch is ON.

(2) The lighter can be used when it springs out in a short while after being pressed down.

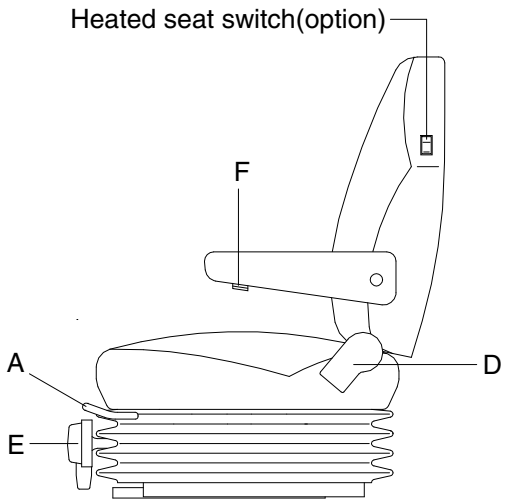
※ Service socket

Use cigar lighter socket when you need emergency power.

Do not use the lighter exceeding 24 V, 100 W.

2) SEAT

The seat is adjustable to fit the contours of the operator's body. It will reduce operator fatigue due to long work hours and enhance work efficiency.



75793CD102

(1) Forward/Backward adjustment

① Pull lever A to adjust seat forward or backward.

② The seat can be moved forward and backward over 210 mm (8 in) in 21 steps.

(2) Reclining adjustment

Pull lever D to adjust seat back rest.

(3) Arm rest adjustment

This can be adjusted by turning the handle F to right and left.

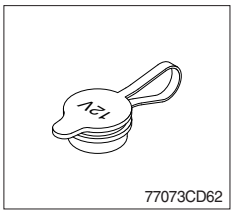
(4) Weight adjustment (E)

Adjusting handle to the operator's weight.

(5) Heated seat switch (option)

Press this switch in order to heat the seat.

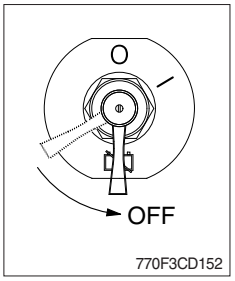
3) 12V SOCKET (option)



77073CD62

(1) Utilize the power of 12 V as your need and do not exceed power of 12 V, 30 W.

4) MASTER SWITCH



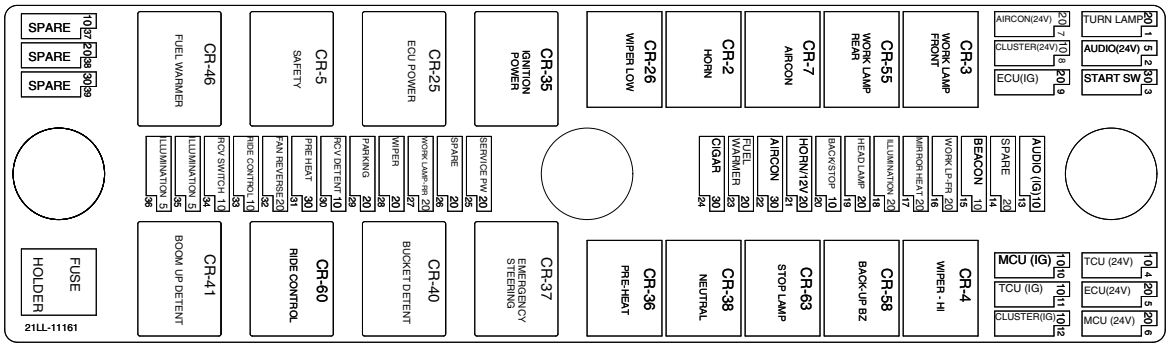
770F3CD152

(1) This switch is used to shut off the entire electrical system.

(2) I : The battery remains connected to the electrical system.
O : The battery is disconnected to the electrical system.

※ Never turn the master switch to O (OFF) with the engine running. Engine and electrical system damage could result.

5) FUSE BOX



7809SU3CD107

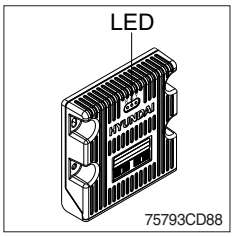
(1) The fuses protect the electrical parts and wiring from burning out.

(2) The fuse box cover indicates the capacity of each fuse and circuit it protects.

※ **Replace a fuse with another of the same capacity.**

⚠ **Before replacing a fuse, be sure to turn OFF the starting switch.**

6) MACHINE CONTROL UNIT (MCU)



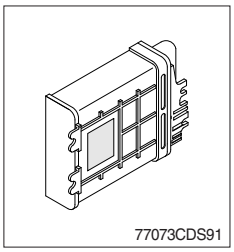
(1) It consists of electronic parts and controls all lamps and buzzers on cluster in accordance with signals transmitted from the switches, the MCU, TCU, the engine and the hydraulic pressure sensors.

(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 (24V, GND) of controller is disconnected · Check the fuse

G : green, R : red, Y : yellow

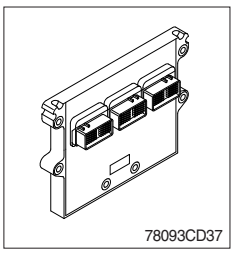
7) TRANSMISSION CONTROL UNIT (TCU)


77073CDS91

(1) The control unit is shifting the required speeds fully-automatically under consideration of the following criteria.

- Gear selector lever position
- Driving speed
- Load level

8) ENGINE CONTROL UNIT (ECU)


78093CD37

(1) The engine control unit (ECU) is the control center of the engine system.

9) REAR CAMERA (option)


75793CD89

(1) The rear camera is available as a option.

※ **Refer to page 3-24.**