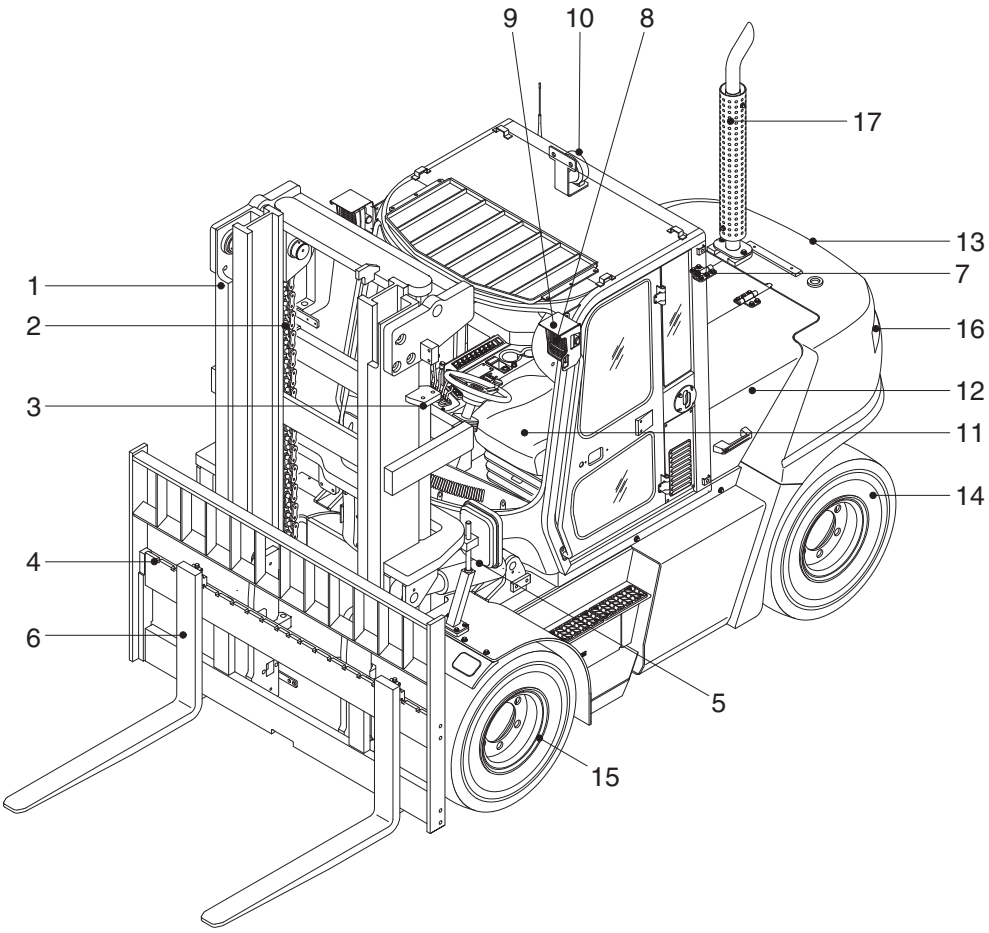
1. GENERAL LOCATIONS

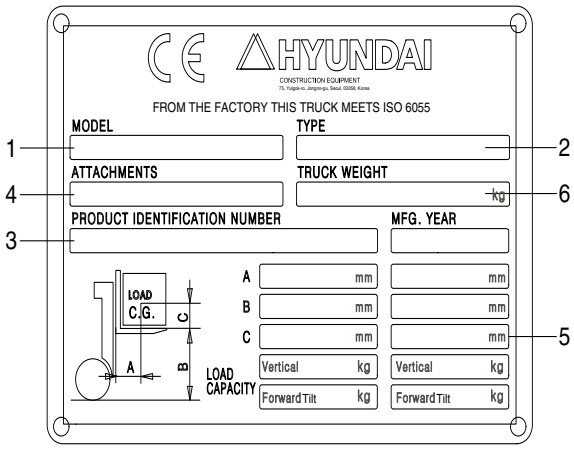


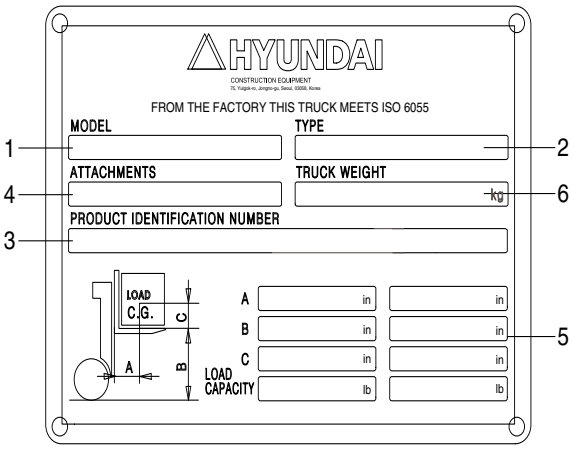
80D9OM54

1	Mast	7	Cabin	13	Counterweight
2	Lift chain	8	Turn signal lamp	14	Rear wheel
3	Lift cylinder	9	Head lamp	15	Front wheel
4	Carriage & backrest	10	Rear work lamp	16	Rear combination lamp
5	Tilt cylinder	11	Operator's seat	17	Silencer
6	Forks	12	Bonnet		

2. DATA/SAFETY PLATE AND DECAL

1) TRUCK DATA AND CAPACITY PLATE





80D9OM56

(1) Truck model number or registered name

(2) Truck type

The type is indicated a type of the truck such as diesel, LPG or battery.

(3) Truck serial number

An identification number assigned to this particular truck and should be used when requesting information or ordering service parts for this truck from your authorized HYUNDAI dealer. The serial number is also stamped on the frame.

(4) Attachment description (If any installed)

The user must see that the truck is marked to identify the attachment (s), including the weight of the truck/attachment combination and truck capacity with the attachment.

(5) Capacity rating, load center, and lifting height data

Shows the maximum load capacity of this truck with relation to load centers and fork heights (See diagram on plate). Personal injury and damage to the truck can occur if these capacities are exceeded.

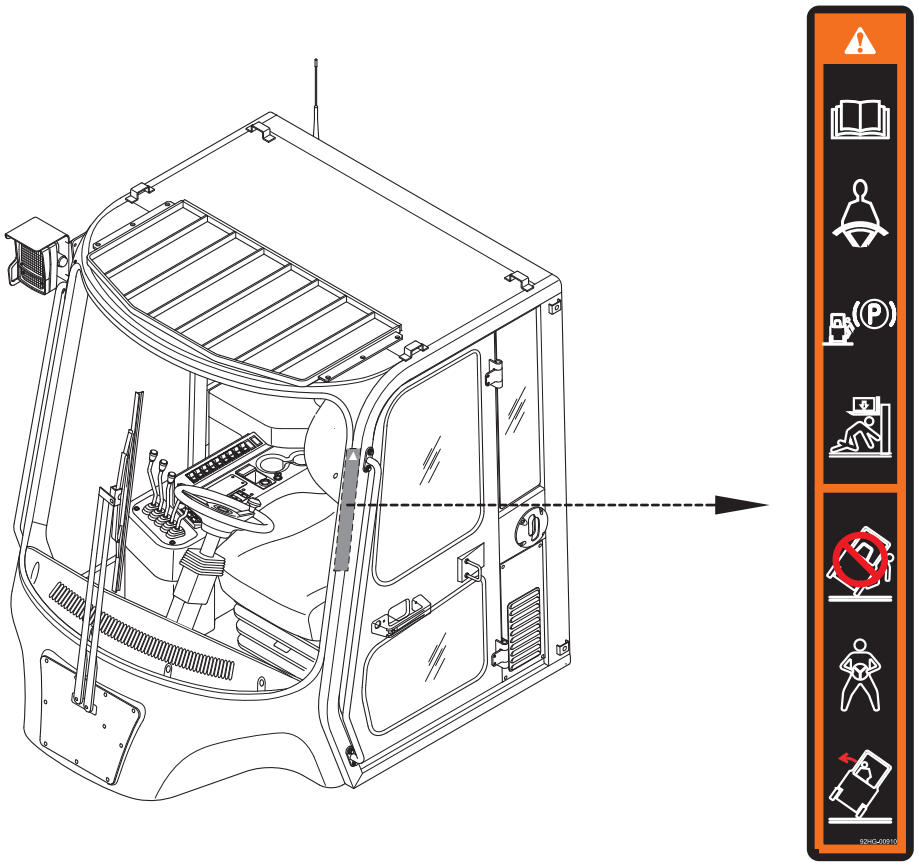
Do not exceed the maximum capacity specified.

(6) Truck weight

The approximate weight of the truck without a load on the forks. This weight plus the weight of the load must be considered when operating on elevators, elevated floors, etc. to be sure they are safe.

⚠ Before modifications that affect the stability of safety systems are made written approval from HYUNDAI. Contact your authorized HYUNDAI dealer for a new nameplate showing the revised capacity.

2) OPERATOR SAFETY WARNING DECAL



80D9OM59

⚠ Safety and warning decals are placed in conspicuous locations on the truck to remind you of essential procedures or to prevent you from making an error that could damage the truck or possibly cause personal injury. You should know, understand, and follow these instructions. Safety and warning decals. Should be replaced immediately if missing or defaced (Damaged or illegible). Refer to the page 0-6 for the location of all decals.

⚠ Operator/Tip-over warning decal

This decal is located on cabin's upper-right side frame. Its purpose is to remind the operator that staying in the seat provides the best chance of avoiding injury in the event of a truck-tipping or driving off a dock mishap.

Lift trucks can be tipped over if operated improperly. Experience with lift truck accidents has shown that the driver cannot react quickly enough to jump clear of the truck and cabin as the truck tips. To protect operators from severe injury or death in the event of a tip over, it is best to be held securely in the seat. So, please, always buckle up when driving your lift truck.

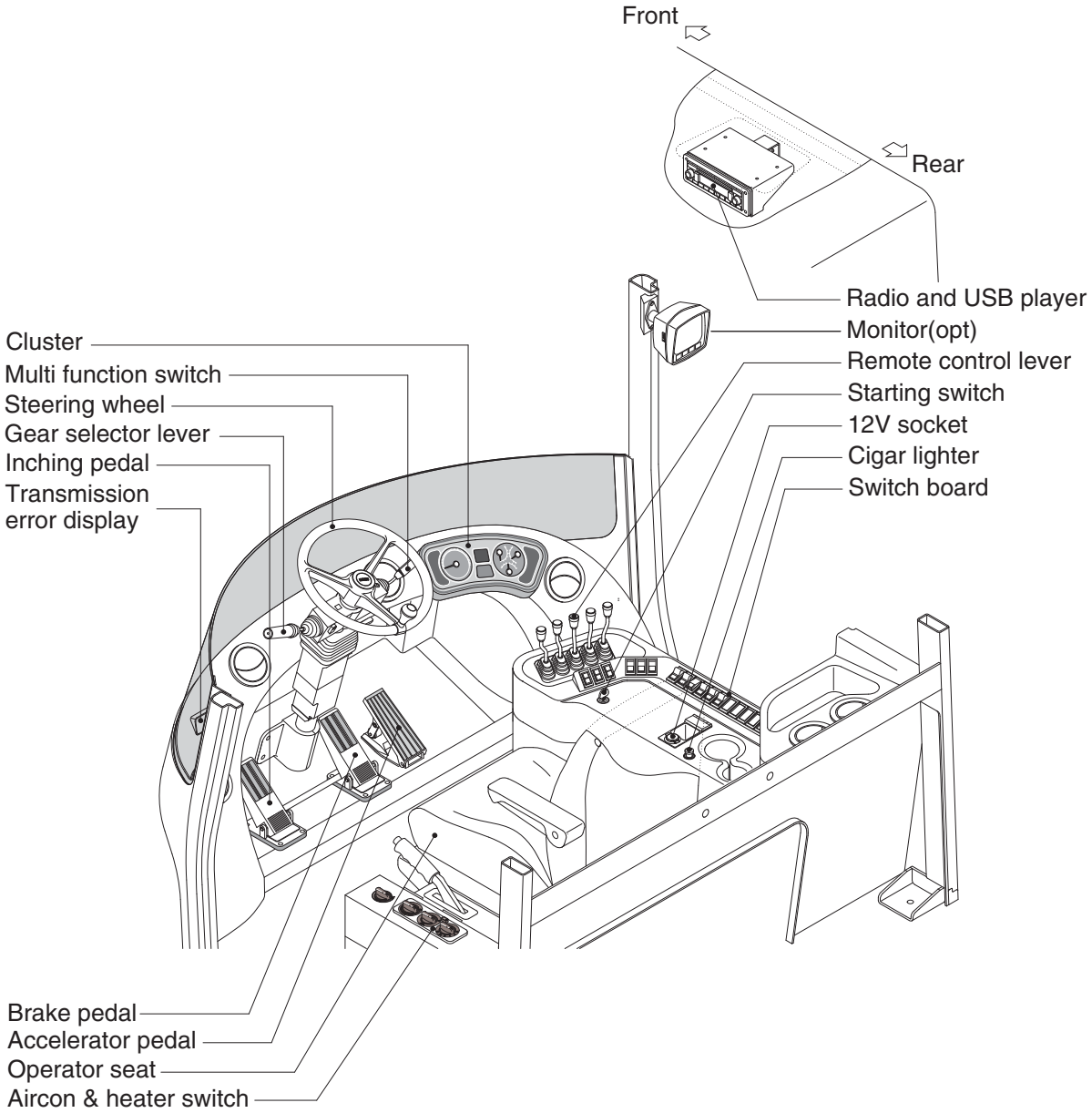
3. CAB DEVICES

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 truck to be monitored at a glance.

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



80D9CD01

4. CLUSTER

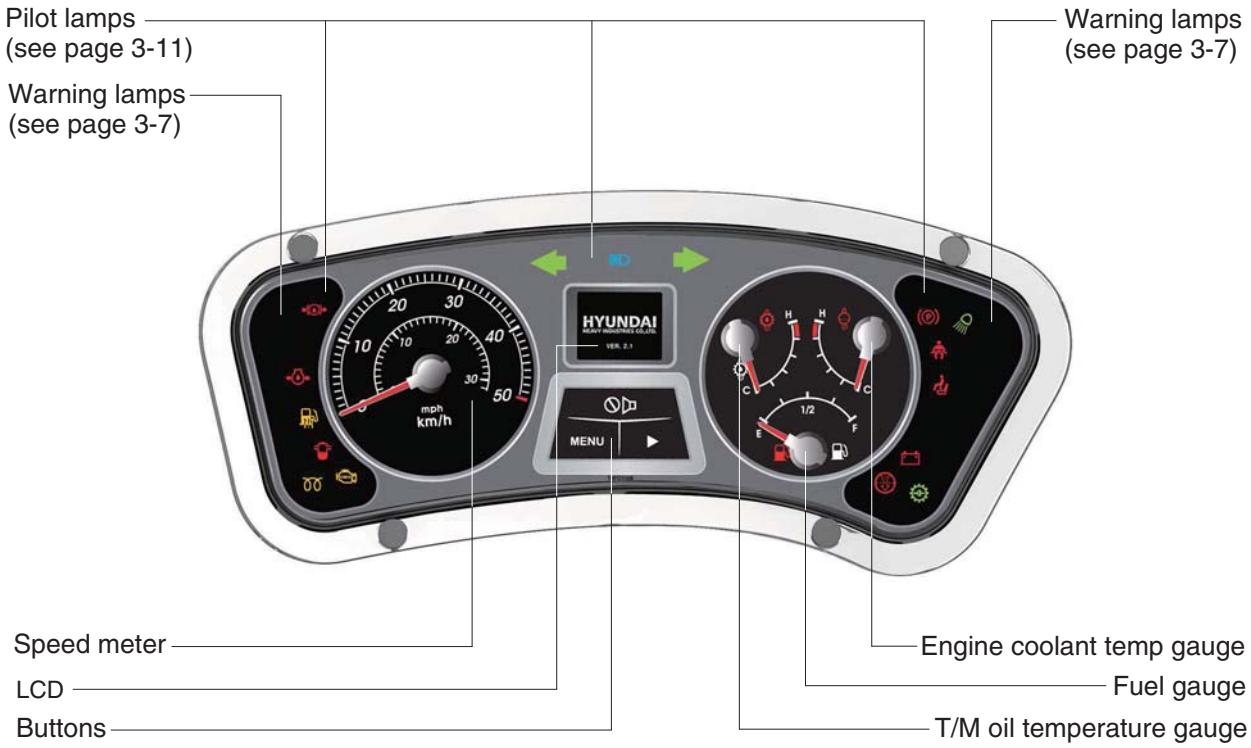
1) STRUCTURE

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

- Gauges : Indicate operating status of the truck.
- Warning lamp : Indicate abnormality of the truck.
- Pilot lamp : Indicate operating status of the truck.
- LCD : Select or display the truck model, error code and engine speed etc.

※ **The monitor installed on this truck does not entirely guarantee the condition of the truck. Daily inspection should be performed according to chapter 7. PLANNED MAINTENANCE AND LUBRICATION.**

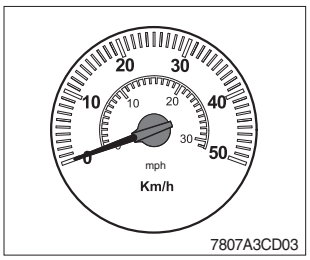
※ **When the monitor provides a warning immediately check the problem, and perform the required action.**



80D9CD02

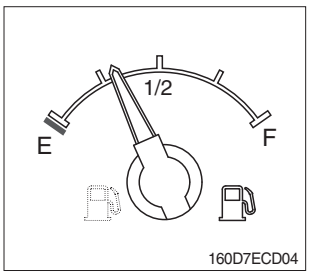
2) GAUGE

(1) Speed meter



① The speedmeter displays the speed of truck in mph and km/h.

(2) Fuel gauge

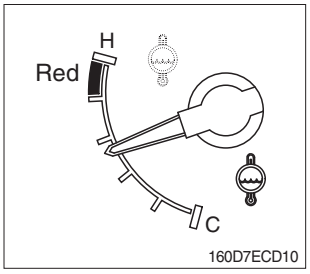


① This gauge indicates the amount of fuel in the fuel tank.

② Fill the fuel when the indicator moves E point, refuel as soon as possible to avoid running out of fuel.

※ **If the gauge indicates below E point even though the truck 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

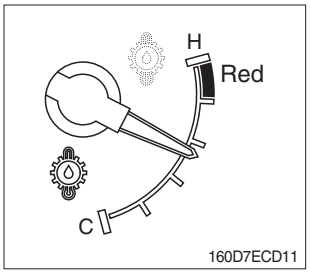


① This indicates the temperature of coolant.
· Red range : Above 104˚C (219˚F)

② Keep idling engine at low speed until the indicator is in the operating range.

③ If the indicator is in the red range, turn OFF the engine, check the radiator and engine.

(4) Transmission oil temperature gauge

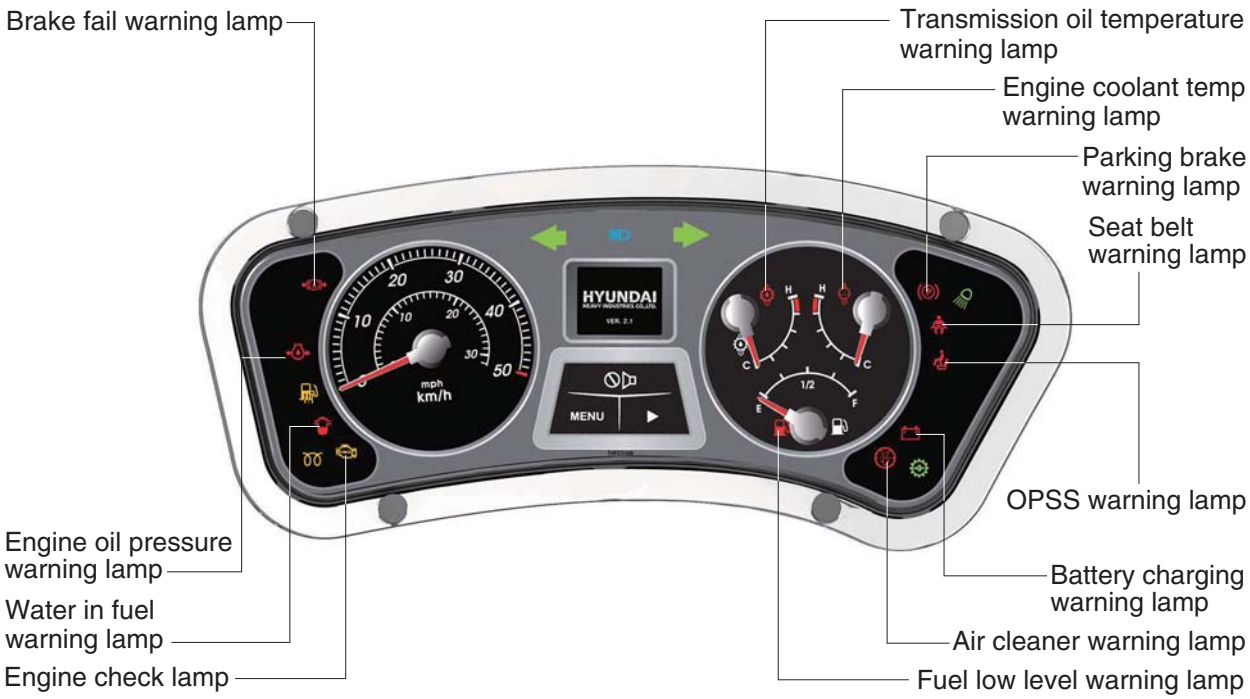


① This range indicates the temperature of transmission oil.
· Red range : Above 107˚C (225˚F)

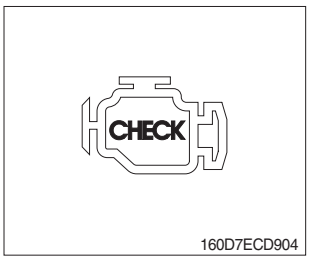
② Keep idling engine at low speed until the indicator is in the operating range.

③ If the indicator is in the red range, it means the transmission is overheated. Be careful that the indicator does not move into the red range.

3) WARNING LAMPS

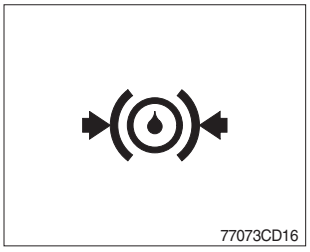


(1) Engine check lamp



① This lamp light ON during a nonfatal engine system error. The engine can still be run, but the fault should be corrected as soon as possible.

(2) Brake fail warning lamp

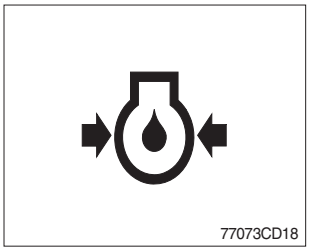


① The lamp lights ON when the oil pressure of service brake drops below the normal range.

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

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

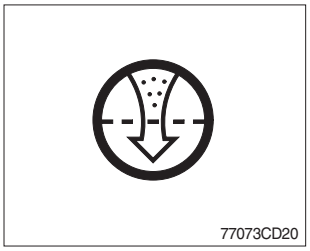
(3) Engine oil pressure warning lamp



① This lamp comes ON for a while after starting the engine because of the low oil pressure.

② If the lamp comes ON during engine operation, shut OFF engine immediately. Check oil level.

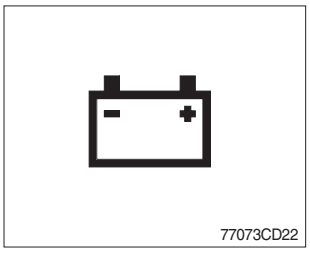
(4) Air cleaner warning lamp



① This lamp operates by the vacuum caused inside when the filter of air cleaner is clogged.

② Check the filter and clean or replace it when the lamp is ON.

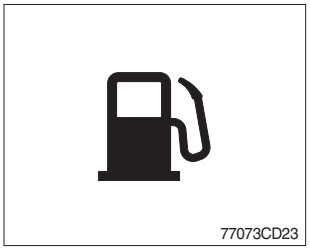
(5) Battery charging warning lamp



① This lamp is ON after key switch is turned ON.

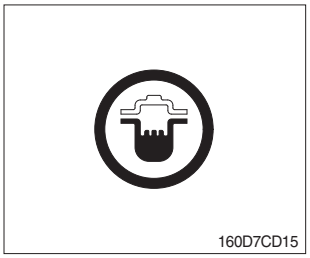
② Check the battery charging circuit when this lamp comes ON during engine operation.

(6) Fuel low level warning lamp



① Fill the fuel immediately when the lamp is turned ON.

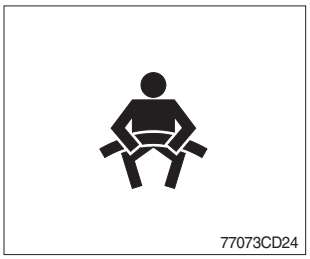
(7) Water in fuel warning lamp



① This lamp lights up when the water separators full of water or malfunctioning.

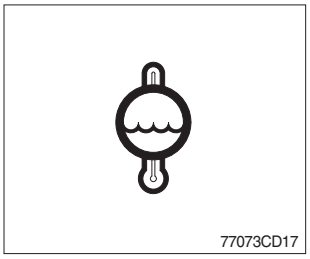
※ **When this lamp lights up, stop the truck and spill water out of the separator.**

(8) Seat belt warning lamp



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

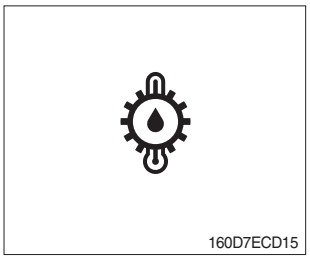
(9) Engine coolant temperature warning lamp



① This lamp is turned ON when the temperature of cooling water is over the normal temperature(104°C, 219°F).

② Check the cooling system when the lamp is ON.

(10) Transmission oil temperature warning lamp

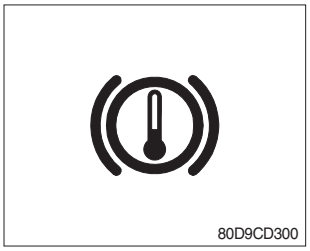


① This lamp informs the operator that transmission oil is above the specified temperature.

- Lamp ON : Abnormal
- Lamp OFF : Normal

※ **When this lamp lights up during operation, stop the engine and check the machine.**

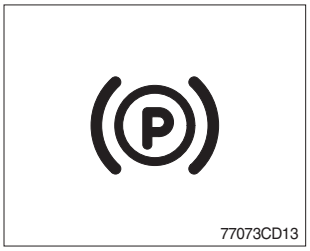
(11) Brake cooling warning lamp



① This lamp is turned ON when the brake oil temperature is too low.

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

(12) Parking brake warning lamp



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

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

(13) OPSS warning lamp (option)

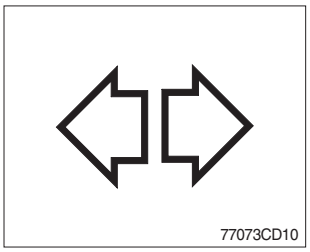
① This signal lamp lights ON when the operator leaves the seat.

② Powered travel movement of the truck shall be possible only if the operator is in the normal operating position. Transmission will automatically shift to neutral upon the exiting of the operator.

③ The forward/reverse lever must be cycled through neutral with the operator in the normal operating position to regain powered direction control.

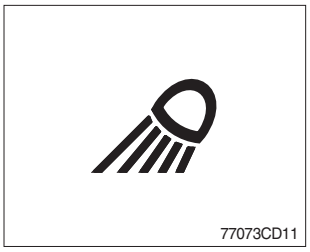
4) PILOT LAMPS

(1) Direction pilot lamp



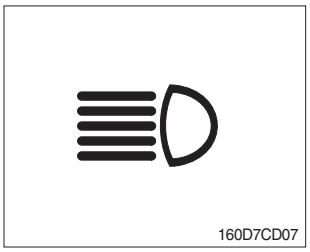
① This lamp flashes when the signal indicator lever is moved.

(2) Work lamp pilot lamp (rear)



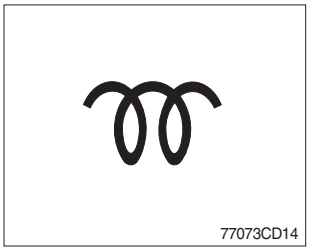
① This lamp lights ON when rear work lamp switch is pressed.

(3) Head light pilot lamp



① This lamp comes ON when the main light switch is operated to 2nd step.

(4) Preheater pilot lamp

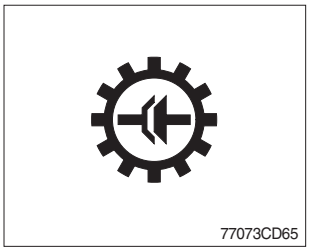


① This lamp lights ON when start switch is turned clockwise to the ON position. Light will turn off after approximately 15~45 seconds, depending on engine coolant temperature, indicating that preheating is completed.

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

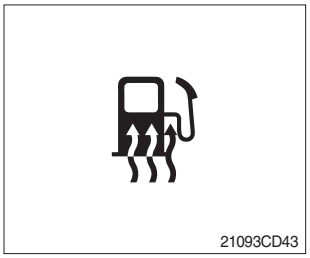
※ **Refer to page 5-12.**

(5) Inching pilot lamp



① When the inching switch is pressed, the lamp lights ON.

(6) Fuel heater pilot lamp

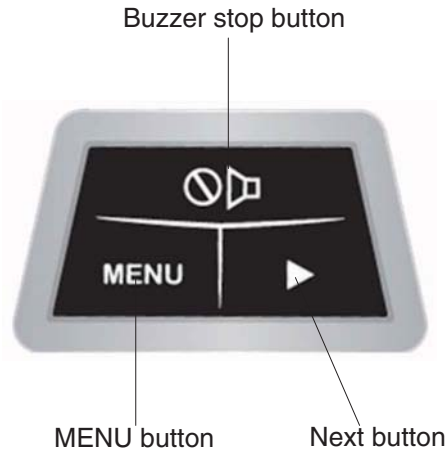


① This lamp is turned ON when the coolant temperature is below 10°C (50°F) or the hydraulic oil temperature 20°C (68°F).

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

4) CLUSTER BUTTON

Each button has the following function.



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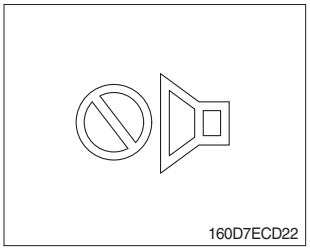
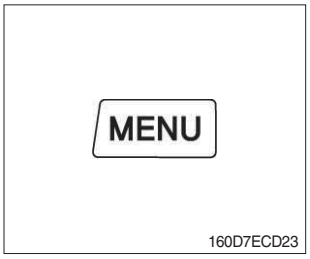
(1) Buzzer stop button



① This button is used to stop the buzzer sound.

② If another alarm condition occurs after this button has been pressed, the alarm buzzer will re-sound.

(2) Menu button

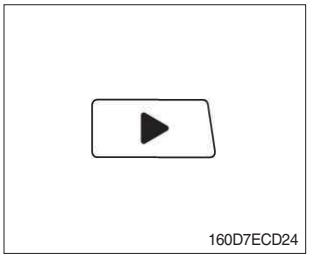


① To select engine error display mode, press this button.

② To return to standby mode, press this button.

③ To set model on the model select mode, press this button.

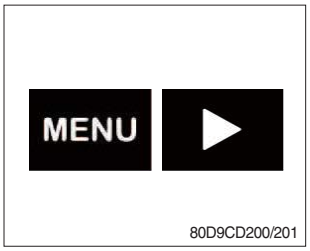
(3) Next button



① To display next page on the engine error display mode where engine error of 4 or more are occurred, press this button

② To change another model on model select mode, press this button.

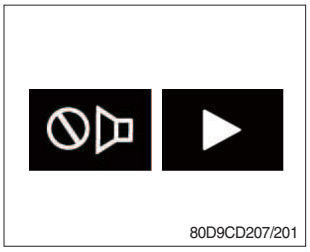
(4) Menu and next buttons



※ These buttons are used to select the model select mode.

※ The initial model is selected at the factory, so don't change the different model.

(5) Buzzer and next buttons



※ These buttons are used to display odometer for dash nine of 5~8 ton trucks.

Display	Description
	① In case of 5~8 ton D-9 model, displays like this image.
	② If you want display Odometer, push + until Odometer select mode is displayed.
 	③ To display the Odometer, push .
 	④ When you choose the Odometer, displays like this image during 8 seconds, and then rpm is display.

5) LCD

LCD has the functions to display start mode, standby mode, engine error display etc.

NO	Name and display	Description
1	Start mode 	- Displays initialization state with HYUNDAI logo and program version.
2	Standby mode   	- Displays on the idle state. - Displays engine speed, odometer and hourmeter. - Odometer is ON, ODO is activated. - Hourmeter is ON, is activated.
3	Engine error display   	- On engine error display mode, displays like this image. - In case of under 4 engine errors. (Left screen) - In case of over 4 engine errors. (Right screen) - To display next page in case of over 4 errors on engine error display mode, press ▶. (Left screen)

NO	Name and display	Description
4	Middle D-9 DEF    	- In case of 5 ~ 8 ton D-9 model, displays like this image. - See page 3-15.

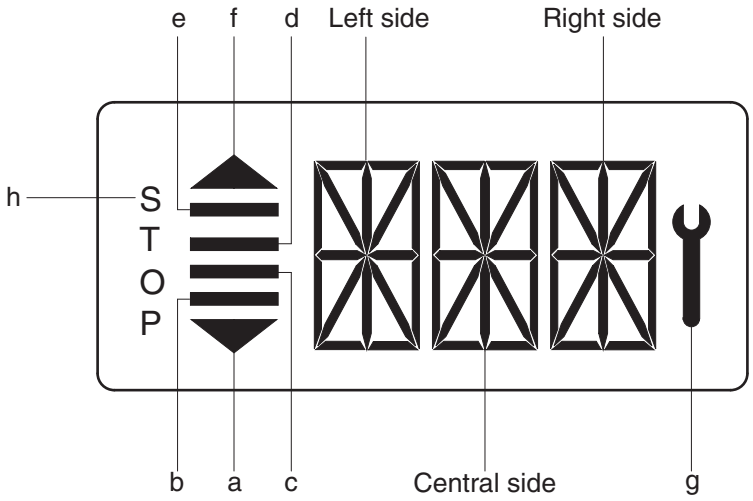
5.TRANSMISSION MESSAGE INDICATOR

1) TRANSMISSION ERROR DISPLAY (ZF Transmission)

(1) Function

The display can be used with the gear selector (DW-3). It indicates speed and driving direction as well as the activated kickdown.

When driving in the automatic mode, a bar indicator gives additionally also information about the selected driving range; The automatic range is symbolized by arrows above and below the bar indicator. In case of possible errors in the system, a wrench appears on the display, combined with indication of the error number. Also sporadically occurring errors can be indicated.



7803A3CD33

1	Bars	a, f	Automatic range (up and down shifting)
		b, c, d,	Preselected gear
2	Left side		For the moment still without function
3	Central and Right side		On the two alphanumeric 16-segment display, the electric control unit issues the actual state of gear and driving direction. Besides, a two digit error code will be indicated via these two segment
4	Spanner	g	Electronic control unit recognized an error, is flashing
5	Letters STOP	h	Immediate stop is required (At the moment not activated)

※ **If it happens error codes, consult with Hyundai service center to repair the fault.**

(2) Display during operation

Symbol	Meaning	Remarks
F, N, R 1, 2, 3	Actual gear and direction Central side shows actual gear Right side shows actual direction	
NN (Central and right side)	Not neutral, waiting for neutral after power up or a severe fault	To engage a gear, first move shift selector to neutral position and again to F to R position
1 bar	Manual mode lst gear	
2 bar	Manual mode 2nd gear	
3 bar	Manual mode 3nd gear	
4 bars and 2 arrows	Automatic mode	a, f
Arrows (a, f) flashing	Kick down mode active	
	Transmission neutral	Cold start phase
Bars flashing	Downshift mode active	
Spanner flashing	At least on fault active	Select neutral to get fault code displayed
WT	Warning torque converter temperature	Changes between actual gear/direction while driving, in neutral only displayed if no fault is detected (spanner)
WS	Warning sump temperature	Changes between actual gear/direction while driving, in neutral only displayed if no fault is detected (spanner)
WE	Warning high engine speed	Changes between actual gear/direction while driving, in neutral only displayed if no fault is detected (spanner)
PN	Direction F or R selected while parking brake engaged	Transmission in neutral until parking brake is released. ※ Machine starts to move after release of parking brake.
F or R flashing	Direction F or R selected while turbine speed is to high	※ Gear will engage when turbine speed drops
EE flashing (central and right side)	No communication with display	

(3) Definition of the error codes

① Introduction

The error codes consists of two hexadecimal numbers.

The first number shows the type of signal, the second number shows signal and the type of the error.

② Description of error codes

First No.	Meaning of number
1 hex	Digital input signals
2 hex	Analog input signals
3 hex	Speed signals
4 hex	Speed signals
7 hex	Analog current output signals
8 hex	Analog current output signals
9 hex	Digital output signals
A hex	Digital output signals
B hex	Clutch errors
D hex	Power supply
E hex	High speed signals
F hex	General errors

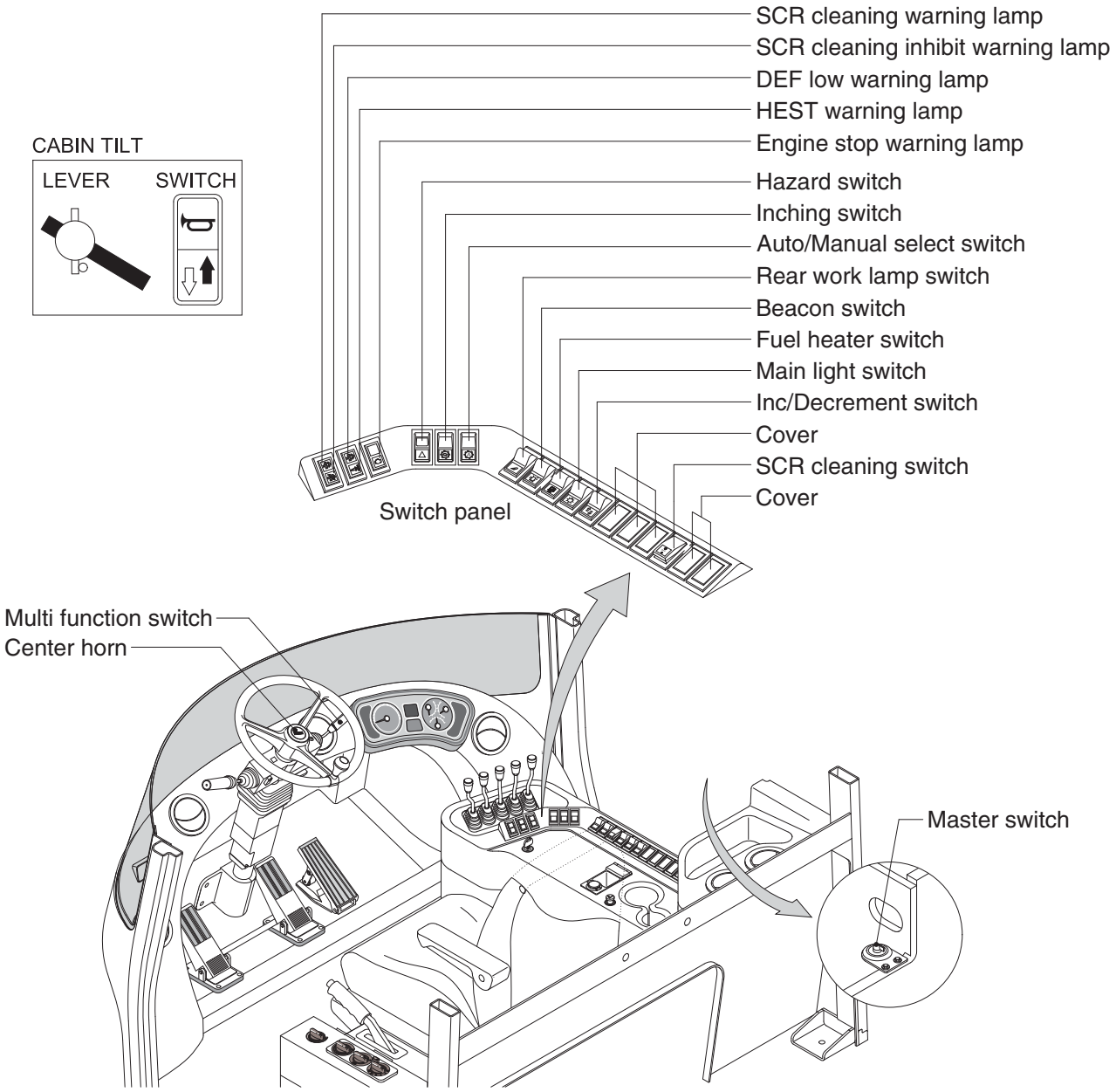
③ List of error codes

Number	Meaning of error code
11 hex	Logical error at gear range signal
12 hex	Logical error at direction select signal
21 hex	Short circuit to battery voltage at clutch cutoff input
22 hex	Short circuit to ground or open circuit at clutch cutoff input
25 hex	Short circuit to battery voltage or open circuit at temperature sensor input
26 hex	Short circuit to ground at temperature sensor input
31 hex	Short circuit to battery voltage at engine speed input
32 hex	Short circuit to ground or open circuit at engine speed input
33 hex	Logical error at engine speed input
34 hex	Short circuit to battery voltage at turbine speed input
35 hex	Short circuit to ground or open circuit at turbine speed input
36 hex	Logical error at turbine speed input
37 hex	Short circuit to battery voltage at internal speed input
38 hex	Short circuit to ground or open circuit at internal speed input
39 hex	Logical error at internal speed input

Number	Meaning of error code
3A hex	Short circuit to battery voltage or open circuit at output speed input
3B hex	Short circuit to ground or open circuit at output speed input
3C hex	Logical error at output speed input
71 hex	Short circuit to battery voltage at clutch KC
72 hex	Short circuit to ground at clutch KC
73 hex	Open circuit at clutch KC
74 hex	Short circuit to battery voltage at clutch KD
75 hex	Short circuit to ground at clutch KD
76 hex	Open circuit at clutch KD
77 hex	Short circuit to battery voltage at clutch KE
78 hex	Short circuit to ground at clutch KE
79 hex	Open circuit at clutch KE
84 hex	Short circuit to battery voltage at clutch KV
85 hex	Short circuit to ground at clutch KV
86 hex	Open circuit at clutch KV
87 hex	Short circuit to battery voltage at clutch KR
88 hex	Short circuit to ground at clutch KR
89 hex	Open circuit at clutch KR
91 hex	Short circuit to ground at relay reverse warning alarm
92 hex	Short circuit to battery voltage at relay reverse warning alarm
93 hex	Open circuit at relay reverse warning alarm
94 hex	Short circuit to ground at relay starter interlock
95 hex	Short circuit to battery voltage at relay starter interlock
96 hex	Open circuit at relay starter interlock
97 hex	Short circuit to ground at park brake solenoid
98 hex	Short circuit to battery voltage at park brake solenoid
99 hex	Open circuit at park brake solenoid
B1 hex	Slippage at clutch KC
B2 hex	Slippage at clutch KD
B3 hex	Slippage at clutch KE
B5 hex	Slippage at clutch KV
B6 hex	Slippage at clutch KR

Number	Meaning of error code
D1 hex	Short circuit to battery voltage at power supply for sensors
D2 hex	Short circuit to ground at power supply for sensors
D3 hex	Low voltage at battery
D4 hex	High voltage at battery
D5 hex	Error at valve power supply 1
D6 hex	Error at valve power supply 2
E5 hex	Communication failure on devicenet
F1 hex	General EEPROM fault
F2 hex	Configuration lost
F3 hex	Application error

6. SWITCHES & LAMPS



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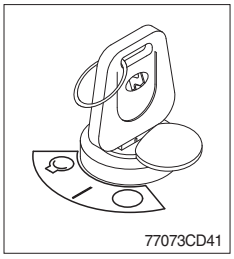
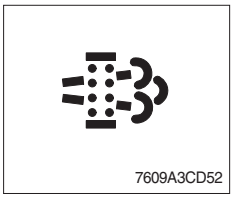
1) START SWITCH



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

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

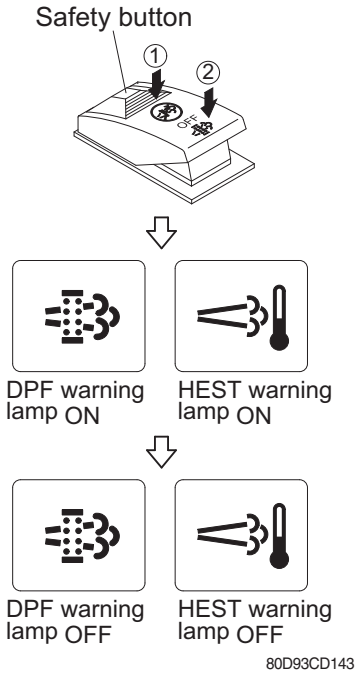
2) SCR (Selective Catalytic Reduction) CLEANING WARNING LAMP



① This lamp lights ON when the SCR cleaning is needed and lamp flashes when manual SCR cleaning is activeted as table below.

Condition	Warning lamp				Remark
	SCR cleaning lamp	DEF Low Lamp	Engine Check Lamp	Engine Stop Lamp	
SCR needs to be cleaned	On	-	-	-	1. Change to a more challenging duty cycle. 2. Perform manual SCR cleaning.
SCR needs to be cleaned immediately	On	-	On	-	Manual SCR cleaning is required.
Stationary SCR cleaning status	Flash	-	-	-	-
DEF level initial warning	-	On	-	-	DEF level 10% Engine error code 3497
DEF level critical warning	-	Flash	-	-	DEF level 5% Engine error code 3498
DEF level initial warning	-	Flash	On	-	DEF level 2.5% Engine error code 1673, 25% derate
DEF level secondary derate warning	-	Flash	On	-	DEF level 0% Engine error code 3547,3714 50% derate, 30 min.
DEF level final derate warning	-	Flash	On	On	Engine error code 3712 Contact Hyundai service center or dealer.

※ Manual SCR cleaning method



※ Manual SCR cleaning applies if the machine is in a fireproof area and there is no plan to turn off the machine during the SCR cleaning.

① Stop and park the machine.

② Pull the safety button and push the switch to position ② to initiate the manual SCR cleaning.

※ Refer to the page 3-26 for the switch operation.

※ The engine speed may increase during SCR cleaning and it will take approximately 20~60 minutes depending on condition.

③ The SCR cleaning lamp flash and HEST warning lamp will light on during the manual SCR cleaning function is operating.

④ The SCR cleaning and/or HEST warning lamp will light OFF when the SCR cleaning function is completed.

3) SCR CLEANING INHIBIT WARNING LAMP

① This warning lamp indicates, when illuminated, the SCR cleaning switch is pushed inhibit position, therefore automatic and manual SCR cleaning can not occur.

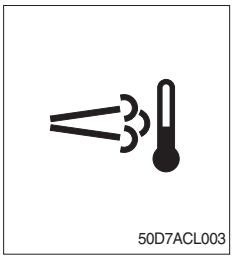
4) DEF (Diesel Exhaust Fluid) LOW WARNING LAMP

① This warning lamp indicates, when illuminated or flashing, that the diesel exhaust fluid level is low.

※ **Add the diesel exhaust fluid into DEF tank.**

※ **Refer to the page 3-23 for detail.**

5) HEST (High exhaust system temperature) WARNING LAMP



① This warning lamp indicates, when illuminated, that exhaust temperatures are high due to SCR cleaning.

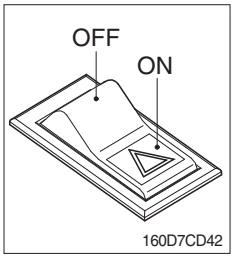
② The lamp will also illuminate during a manual SCR cleaning.

③ When this lamp is illuminated, be sure the exhaust pipe outlet is not directed at any surface or material that can melt, burn, or explode.

⚠ **When this lamp is illuminated, the exhaust gas temperature could reach 800℃ [1500℉], which is hot enough to ignite or melt common materials, and to burn people.**

※ **The lamp does not signify the need for any kind of equipment or engine service; It merely alerts the equipment operator to high exhaust temperatures. It will be common for the lamp to illuminate on and off during normal equipment operation as the engine completes regeneration.**

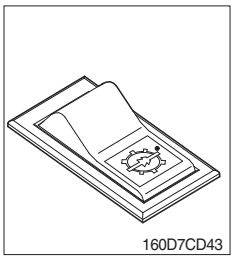
6) HAZARD SWITCH (OPTION)



(1) Use for parking, or loading truck.

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

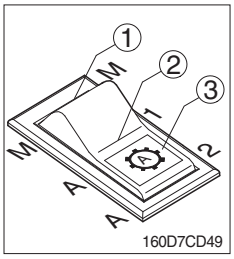
7) INCHING SWITCH



(1) If this switch is pressed, inching operation is applied to inching pedal.

(2) Also, inching lamp on the cluster is illuminated.

8) AUTO/MANUAL CHANGEOVER SWITCH



(1) Manual mode (①)

Press the top of the switch for the manual mode of the autoshift function. The operator selects the desired speed and the desired direction in the manual mode with the gear selector lever.

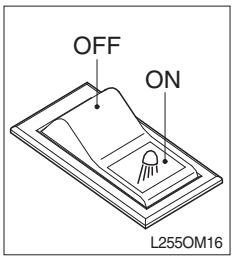
(2) Automatic 1st mode (②)

Place the switch in the middle position for the autoshift function changing from 1st to 3rd gear shift mode.

(3) Automatic 2nd mode (③)

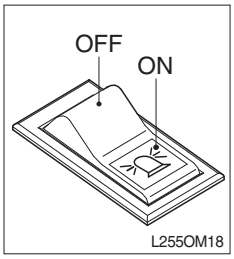
Press the bottom of the switch fully for the autoshift function changing from 2nd to 3rd gear shift mode.

9) WORK LAMP SWITCH



(1) This switch is used to operate the work lamps.
Press this switch to turn on work lamps.

10) BEACON SWITCH (OPTION)



(1) This switch turn ON the strobe light.

11) SCR (Selective Catalytic Reduction) SWITCH

(1) This switch is used to select the cleaning function of the SCR.

(2) Inhibit position (①)

① The inhibit position disallows any automatic or manual SCR cleaning.

② This may be used by operator to prevent SCR cleaning when the machine is operating in a hazardous environment is concerned about high temperature.

③ It is strongly recommended that the this position is only activated when high temperatures may cause a hazardous condition.

(3) OFF position

This position will initate a automatic SCR cleaning when needed.

(4) Manual SCR cleaning position (②)

① This position will only initate a manual SCR cleaning and the SCR cleaning lamp is illuminated.

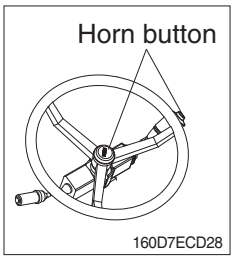
② HEST lamp will be illuminated during the entire SCR cleaning.

※ **Refer to the page 3-24 for details.**

※ **This switch can be move to the manual SCR cleaning position (②) only when the safety button is pulled to backward.**

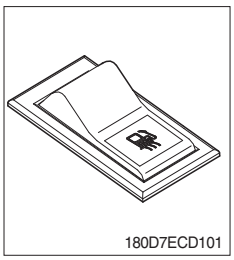
※ **Also, this switch return to the OFF position when released the manual SCR cleaning position (②).**

12) HORN BUTTON



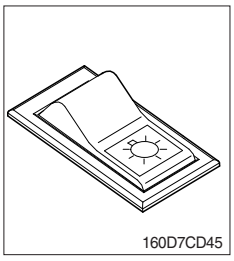
(1) If you press the button on the top of the multifunction switch and the center of the steering wheel, the horn will sound.

13) FUEL HEATER SWITCH



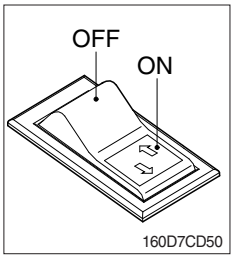
(1) This switch is used for the fuel heater of the pre-heater assy.

14) MAIN LIGHT SWITCH



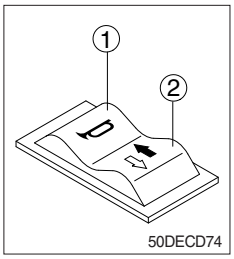
(1) This switch is used to operate the head light by one steps.
① First step : Tail lamp comes ON.
② Second step : Head lamp comes ON.

15) INC/DECREMENT SWITCH



(1) When engine running, the low rpm of engine increase or decrease by 25 rpm by operating this switch.
(2) Engine low rpm returns to normal value when engine restarted.

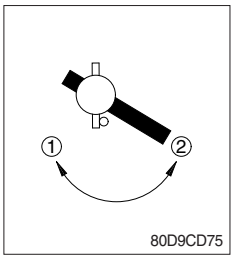
16) CABIN TILT SWITCH



(1) Horn ( )
By pressing position ①, the horn sounds and by releasing, the horn stops.
⚠ Sound the horn to warn near by personnel, before tilting the cabin.

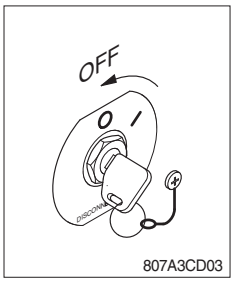
(2) Tilting of the cabin (,)
Press the cabin tilt switch (②) in order to tilt the cabin to right side or return to original location.
※ **Refer to page 7-15 for the tilting method of the cabin.**

17) HAND PUMP LEVER



(1) This lever is used when tilting the cabin.
(2) Turn the hand pump lever to clockwise direction (①), the cabin shall be tilted to right side by the cabin tilt switch.
(3) Turn the hand pump lever to counterclockwise direction (②), the cabin shall be returned to original location by the cabin tilt switch.

18) MASTER SWITCH

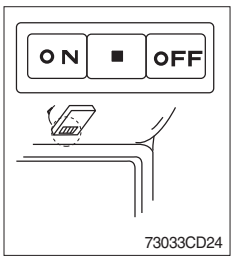


(1) This switch is used to shut off the entire electrical system.
When the machine is not operated for a long time, turn OFF the master switch for the safety purpose.

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

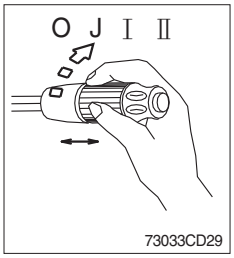
※ **Never turn the master switch to O (OFF) with the engine running. Engine and electrical system damage could result.**

19) CAB LAMP SWITCH



(1) This switch turns ON the cab room lamp.

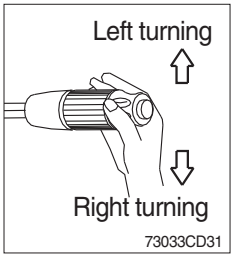
20) MULTI FUNCTION SWITCH



(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.

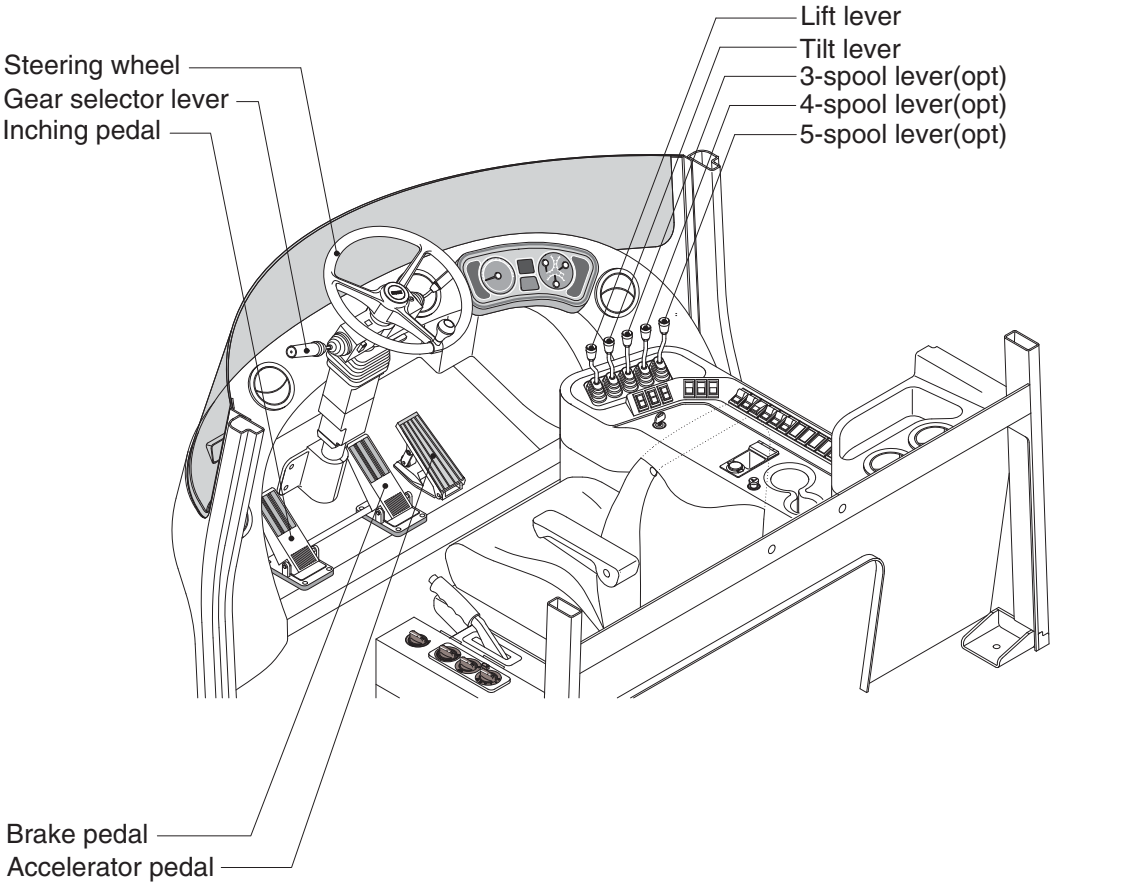
※ **Check the quantity of washer liquid in the tank. If the level of the washer liquid is LOW, add the washer liquid (In cold, winter days) or water. The capacity of the tank is 1 liter.**



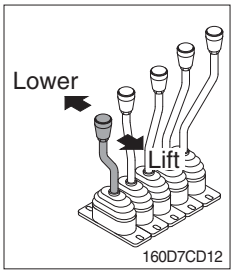
(2) Turning switch

① This switch is used to warn or signal the turning direction of the truck to other vehicles or equipment.
② Push the lever up for turning left, pull the lever down for turning right.

7. CONTROL DEVICE



1) LIFT LEVER



(1) LIFT

PULL the lever BACK to LIFT the forks.

(2) LOWER

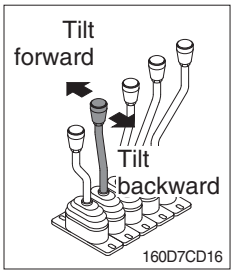
PUSH the lever FORWARD to LOWER the load.

(3) HOLDING

When the lever is released, the lifting or lowering action stops.

※ **Lifting speed is controlled by accelerator pedal.**
Lowering speed is controlled by lever only.

2) TILT LEVER



(1) TILT FORWARD

PUSH the lever FORWARD to tilt mast FORWARD.

(2) TILT BACKWARD

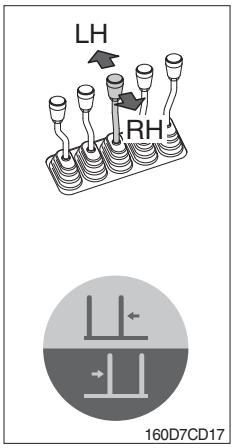
PULL the lever BACK to tilt mast BACKWARD.

(3) HOLDING

When the lever is released, tilting action stops.

※ **Forward and backward tilting speeds are controlled by tilt lever and accelerator pedal.**

3) LEVER FOR SIDE SHIFT



(1) LH MOVEMENT

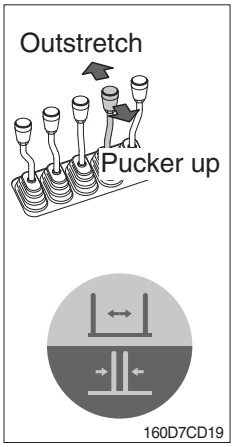
Push the lever forward to move the left hand for the side shift.

(2) RH MOVEMENT

Pull the lever backward to move the right hand for the side shift.

4) LEVER FOR SIDE SHIFT WITH FORK POSITIONER

(1) FORK POSITIONER (SYNCHRONIZER TYPE)



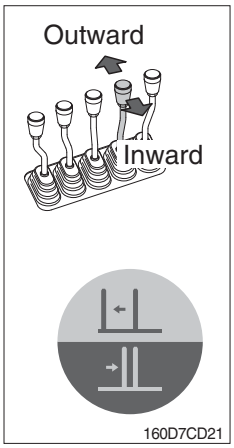
① OUTSTRETCH THE FORKS

Push the lever forward to outstretch simultaneously outward of the both forks.

② PUT THE FORKS TOGETHER IN THE CENTER

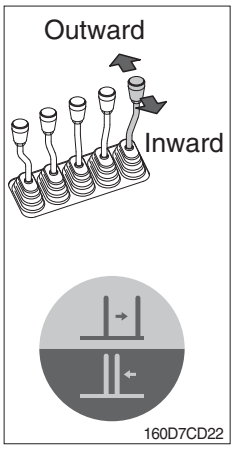
Pull the lever backward to put together in the center simultaneously inward of the both forks.

(2) FORK POSITIONER (INDEPENDENT TYPE)



① LH FORK MOVEMENT

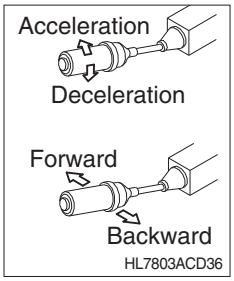
- Push the lever forward to move outward for the LH fork.
- Pull the lever backward to move inward for the LH fork.



② RH FORK MOVEMENT

- Push the lever forward to move outward for the RH fork.
- Pull the lever backward to move inward for the RH fork.

5) GEAR SELECTOR LEVER

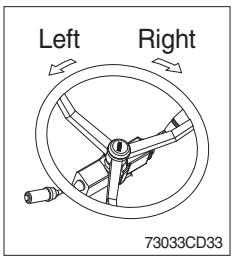


(1) This lever is used for gear selection, forward 3 stages and reverse 3 stages.

(2) If you push the gear selector lever, the truck moves forward, but pulling the gear selector lever, the truck moves backward.

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

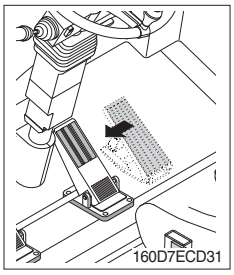
6) STEERING WHEEL



(1) A steering cylinder in the center of the steering axle will operate the steering function.

(2) Turning the steering wheel left, the truck moves to the left side and turning it right, the truck moves to the right side.

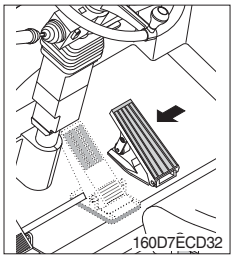
7) BRAKE PEDAL



(1) If the pedal is pushed, braking force is generated and bring the truck to a stop.

※ **Do not operate the truck with stepping on the brake pedal unnecessarily, or bring premature wear of brake disc.**

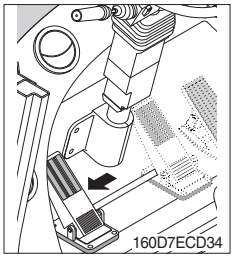
8) ACCELERATOR PEDAL



(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 truck will run at low idling.

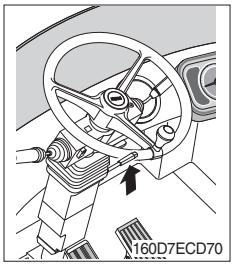
9) INCHING PEDAL

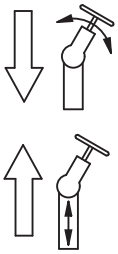


(1) Inching pedal is used for fine control of forward and reverse movement when lifting up or putting down loads.

※ **Do not put your foot on the inching pedal or brake pedal unless using it.**

10) STEERING WHEEL LEVER



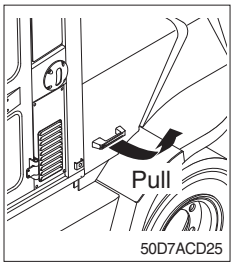


(1) By pulling down the lever, the wheel is adjustable to tilt.

(2) By pulling up the lever, the wheel is adjustable to telescope.

(3) Adjustable steering wheel
Accommodates various operator's conditions.
- Tilting abgle : 40˚
- Telescopic stroke : 80 mm

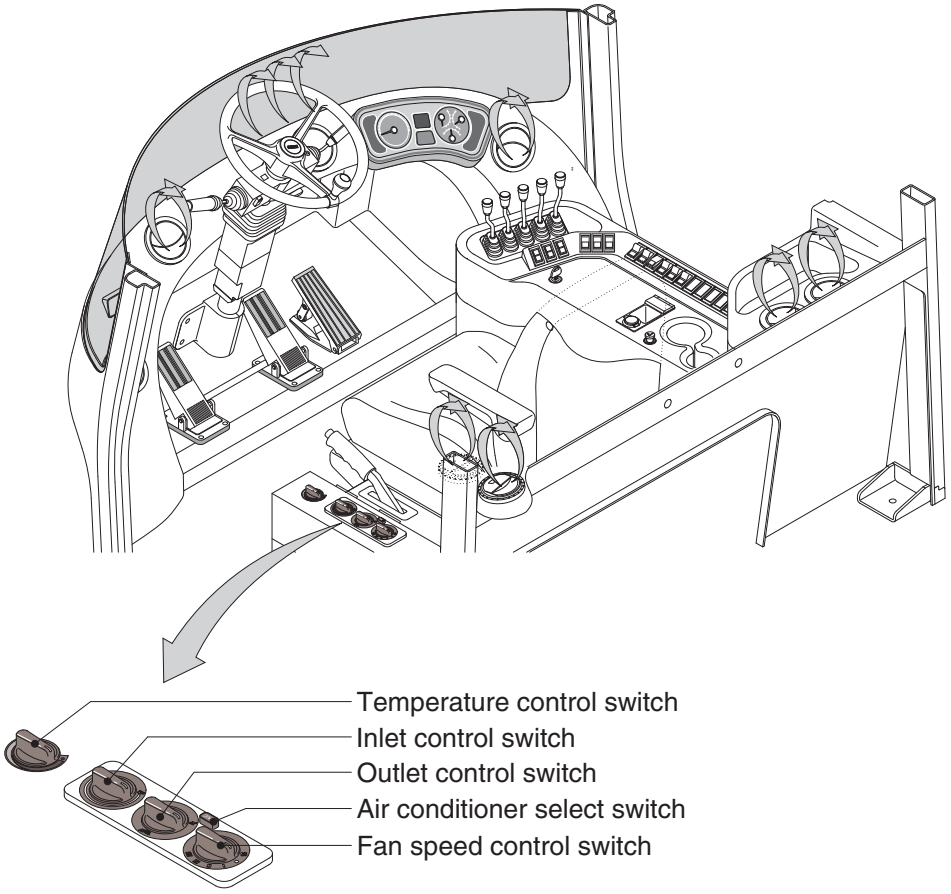
11) ENGINE HOOD



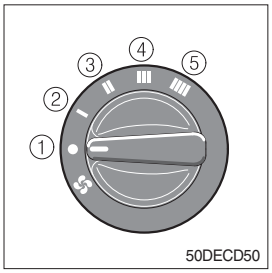
(1) Pull the handle attached on the bolt side of engine hood to open it.

8. AIR CONDITIONER AND HEATER

Air conditioner and heater are equipped for pleasant operation against outside temperature and defrost on window glass.



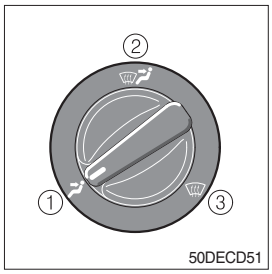
1) FAN SPEED CONTROL SWITCH



(1) It is possible to control the fan speed to four steps.

① OFF
② Fan speed 1
③ Fan speed 2
④ Fan speed 3
⑤ Fan speed 4

2) OUTLET CONTROL SWITCH



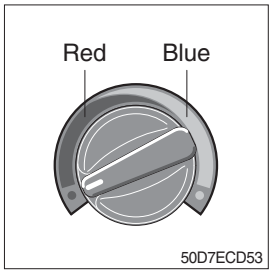
There are three steps of air flow.

① Front

② Front & defrost

③ Defrost

3) TEMPERATURE CONTROL SWITCH

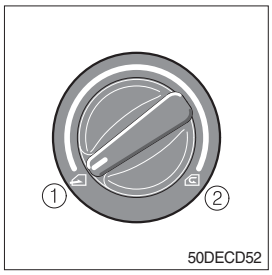


This switch regulates the temperature of air.

① Right side (blue zone) : Cool down air temperature

② Left side (red zone) : Heat up air temperature

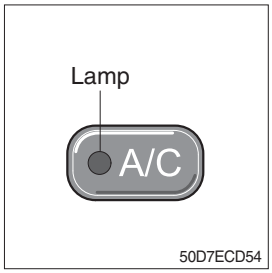
4) INLET CONTROL SWITCH



This switch regulates the inlet air.

- Position ① : Fresh air intake.
- Position ② : The air ciculates in the cab.

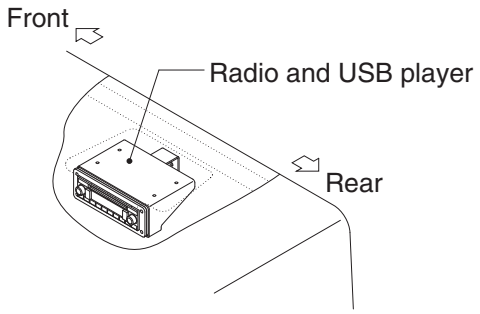
5) AIR CONDITIONER SELECT SWITCH

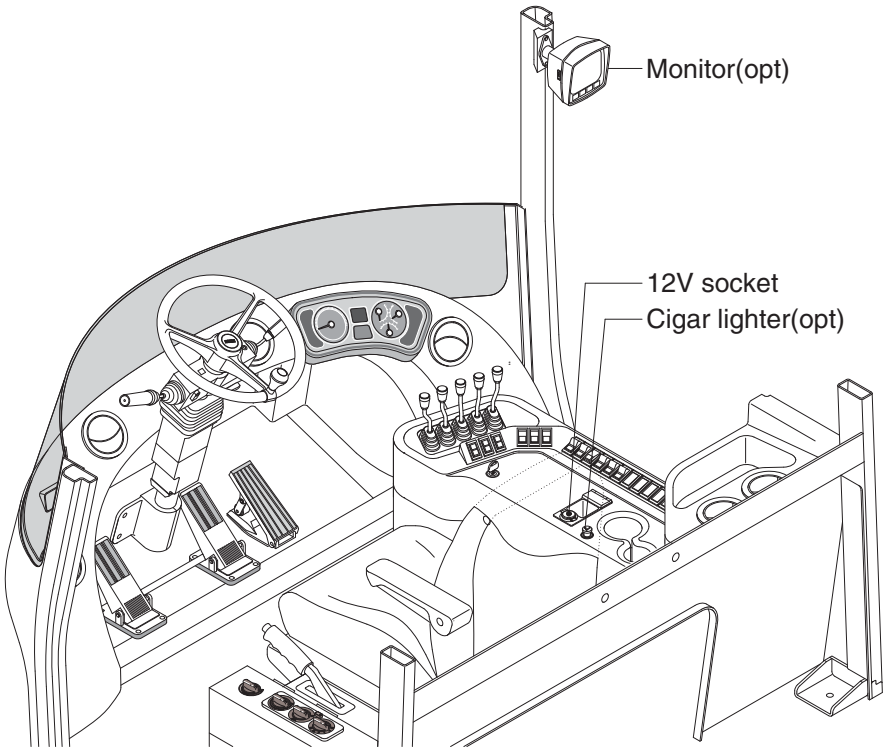


① This switch is used to operate or stop the air conditioner.

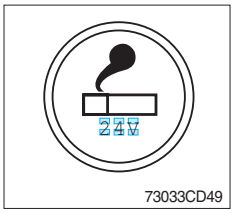
② When operating the air conditioner, the lamp is lighted up.

9. OTHERS





1) CIGAR LIGHTER

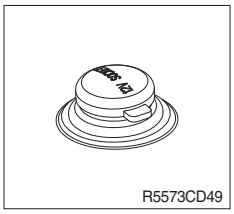


(1) This can be used when the engine starting switch is ON.

(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 24V, 100W.

2) 12V SOCKET



(1) Utilize the power of 12V as your need and do not exceed power of 12V, 120W.

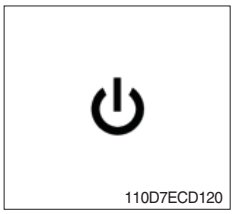
4) MONITOR (OPTION)

· Adjusting the angle

Upwards and downwards up to 7˚, total 14˚. Swivels left and right up to 15˚, total 30˚.

110D7ECD100E

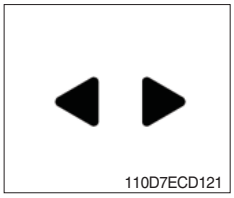
(1) Power button



① To turn the power off or on.

② To switch the monitor on or off, press and hold the power button for two second.

(2) Left / right selection button



① Select button allow you to select various monitor options and to input passwords.

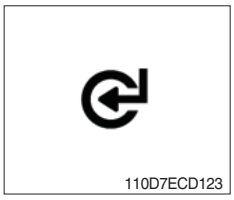
(3) Camera / ESC button

① To enter camera screen, press the Camera/ESC button at the menu selection screen.

② To return to the menu selection screen, press the Camera/ESC button on the camera screen.

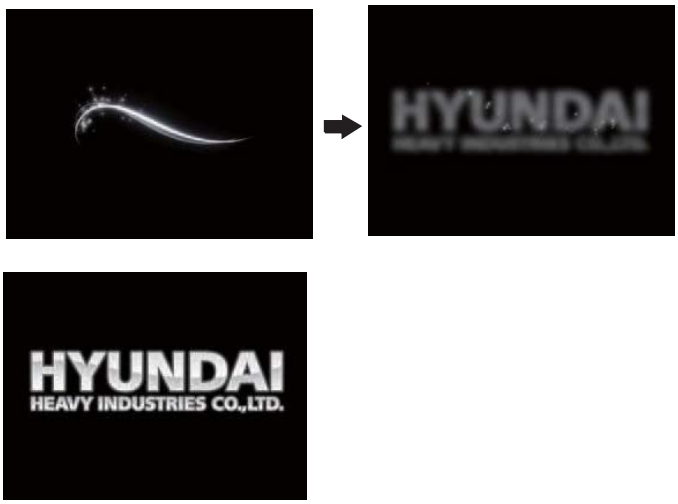
③ To cancel menu selection or escape from the menu, press the Camera/ESC button.

(4) Enter button



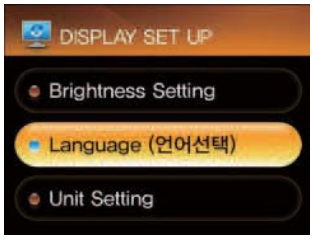
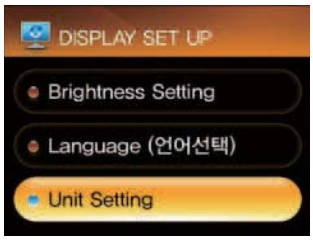
① To choose the option, press the enter button.

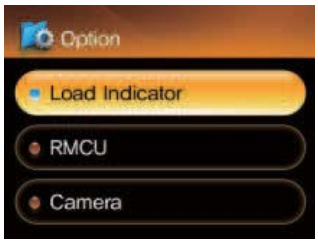
(5) LCD

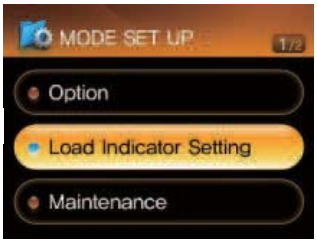
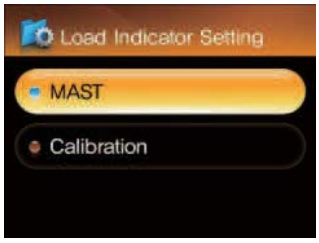
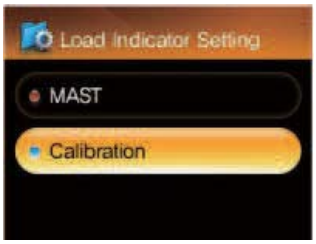
No	Name	Description
1	Starting animation 	
2	Main screen Load indicator OFF  Load indicator ON 	
3	Camera selection 	To enter camera screen, press the ↵ or ▣/ESC button. To return to menu selection screen, press ▣/ESC button. If you turn "Reverse Mode" on, camera view be shown at reverse or neutral gear. - Reverse : camera 1 - Neutral : camera 2

No	Name	Description
4	**ESL (Engine Starting Limit) screen** 	The function to switch 'Engine Starting Limit' on , off and to set the period of engine starting limit. After input passwords, you must input '＊'. Change will take effect after you restart this monitor.

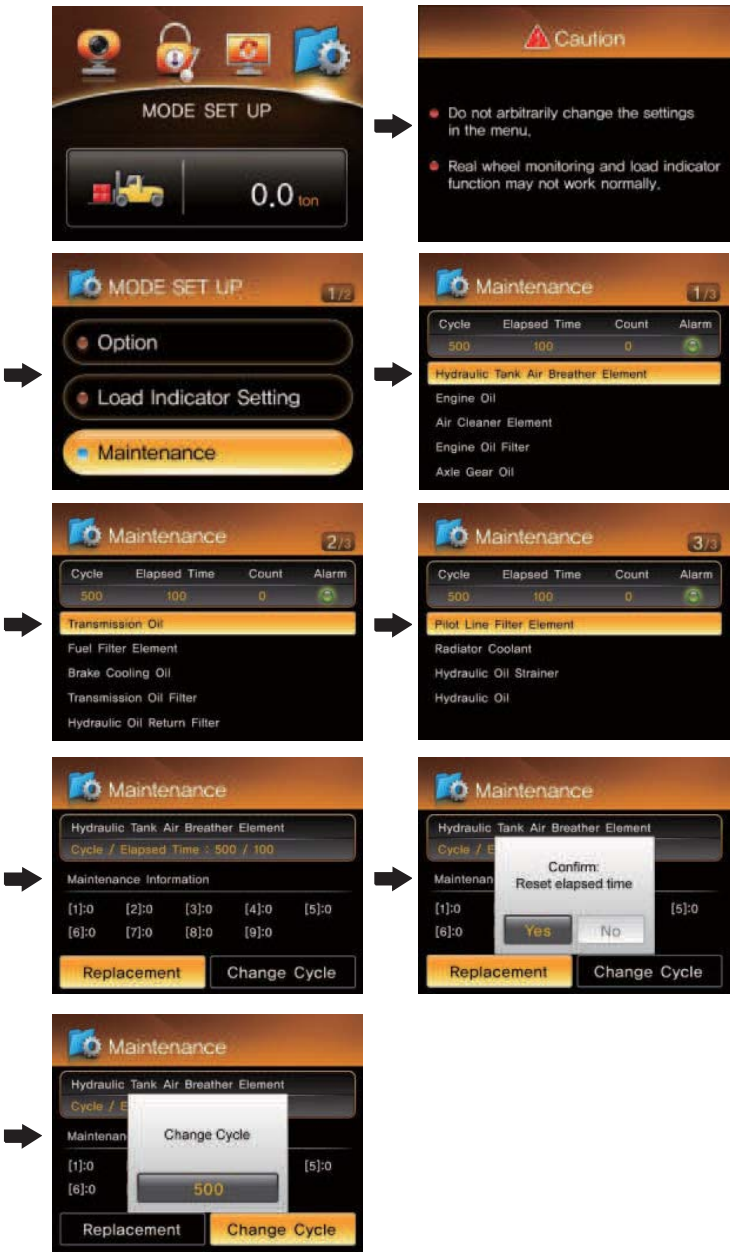
No	Name	Description
5	**Changing password** 	The password must be 5~10 digits long. After input password, you must input ✻ . ※ Default password : '0000000000'(digit '0', 10 times)

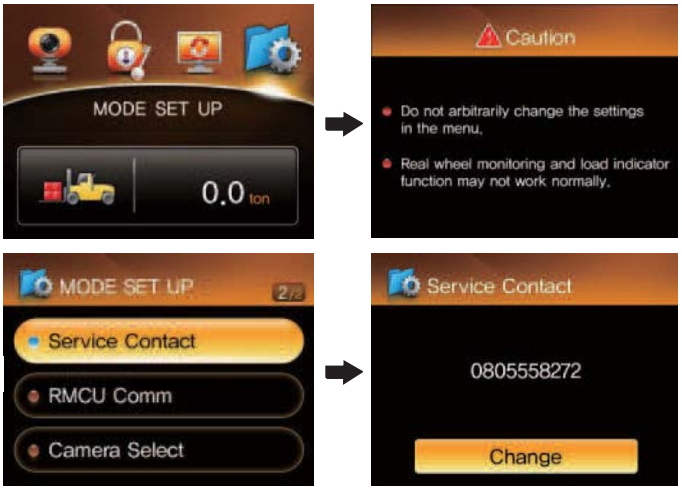
No	Name	Description
6	**Display set up screen**   	**1) LCD brightness** To adjust to display brightness, press ◀ or ▶ to decrease or increase.
	 	**2) Language selection** Set a Korean or English.
	 	**3) Unit setting** Set a unit load indicator.

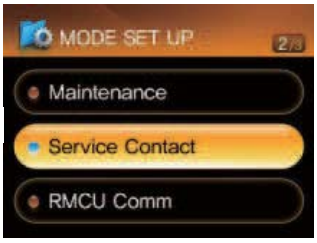
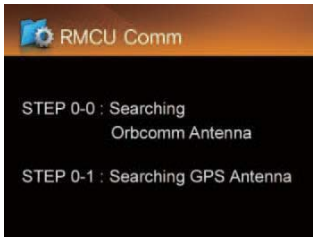
No	Name	Description
7	Mode set up screen      	1) Option (1) Load indicator Display the conditions for load indicator. Applied to the main screen, check the page 3-53. When you choose 'Load Indicator ON', you can pick ON/OFF of over weight buzzer. If you choose 'Over weight buzzer OFF', buzzer doesn't sound. When you choose 'Load Indicator OFF', in case of over weight, buzzer does sound.
	 	(2) RMCU Display the conditions for RMCU Conditions for RMCU : Maintenance, Service Contact, RMCU Comm
	 	(3) Camera Display the conditions for 'Camera'

No	Name	Description
7	Mode set up screen     	3) Load indicator setting (1) MAST Select Equipment model selection varies depending on the mast.
	  	(2) Calibration Correct a fork-lift load indicator After input passwords, you must input *. ※ Define password is : "00008282" ① Tare In the unloaded from the around waiting 8 seconds after lift 30 cm Tare ON

No	Name	Description
7	**Mode set up screen**  	② **Weight correction** Input a password Loaded enter the weight. (Input ton) In the loaded from the around waiting 5 seconds after lift 30 cm Weight correction ON

No	Name	Description
7	Mode set up screen  	4) Maintenance Change the replacement cycle of expandable supplies. Using ◀ ▶ button for changing the replacement cycle.

No	Name	Description
7	**Mode set up screen** 	**5) Service Contact** Check and change of contact information for customer service.

No	Name	Description
7	Mode set up screen            	6) RMCU communication When successfully opened RMCU communication, except for the RMCU communication.

No	Name	Description
7	Mode set up screen  	7) Camera select (1) Gear linkage mode If you turn “Reverse mode” on, camera view be shown at reverse or neutral gear on main. - Reverse : camera 1 - Neutral : camera 2
	 	(2) Operation CAM set Set the number of operation camera.
	 	(3) Camera mirror Choose the camera mirror (Up / Down or Left / Right) by the location of the cameras. [Key-operating method] To set the camera mirror, press ◀ or ▶ to move the position and press ⏎ to select whether to mirror. To save the options or exit of this page, press **ESC** button.

No	Name	Description
8	Ending animation