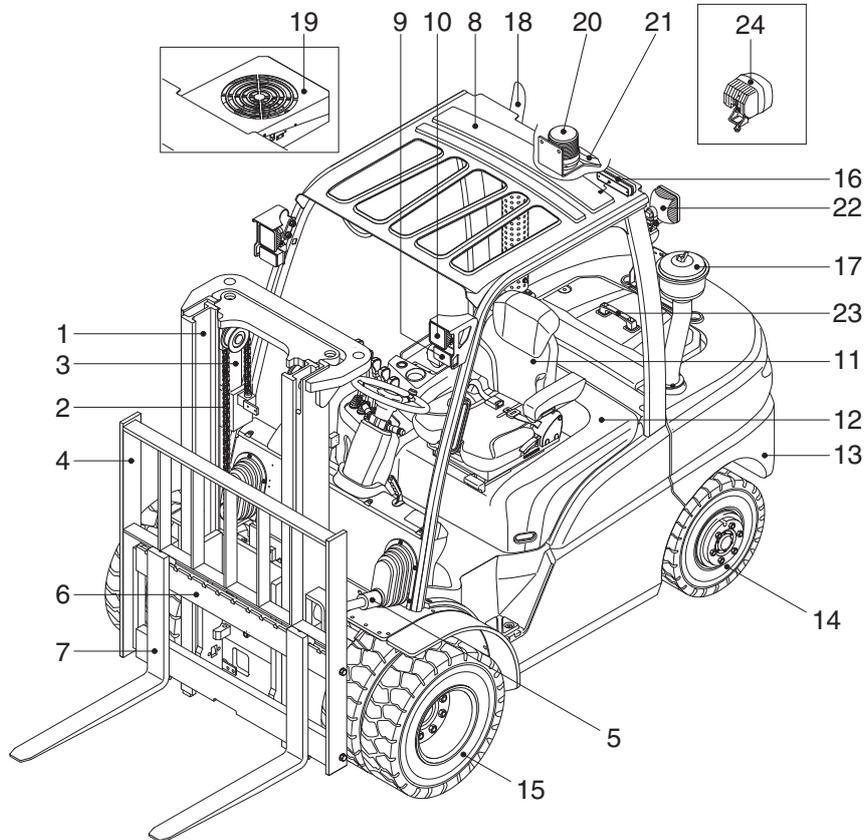


3. KNOW YOUR TRUCK

1. GENERAL LOCATIONS

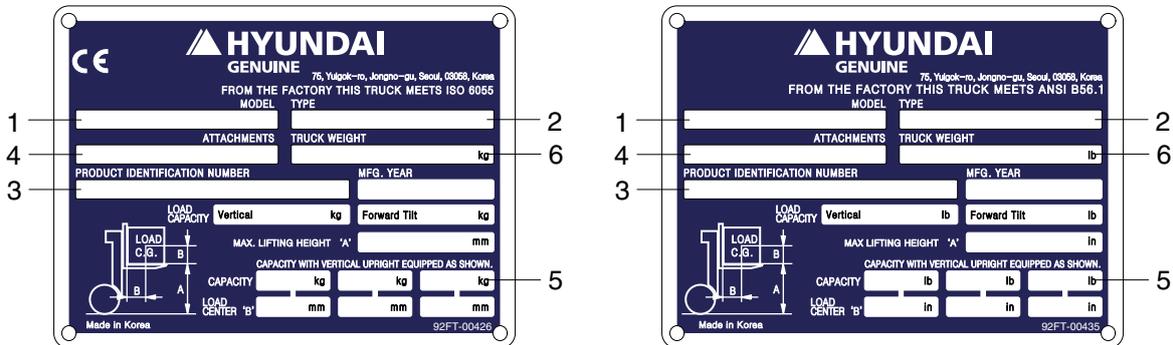


35D9FOM54

- | | | |
|------------------|--------------------------|--------------------------------|
| 1 Mast | 9 Turn signal lamp | 17 Precleaner |
| 2 Lift chain | 10 Head lamp | 18 Silencer |
| 3 Lift cylinder | 11 Operator's seat | 19 Air conditioner (opt) |
| 4 Backrest | 12 Bonnet | 20 Beacon lamp (opt) |
| 5 Tilt cylinder | 13 Counterweight | 21 Camera (opt) |
| 6 Lift bracket | 14 Rear wheel | 22 Rear work lamp (opt) |
| 7 Forks | 15 Front wheel | 23 Rear handle with horn (opt) |
| 8 Overhead guard | 16 Rear combination lamp | 24 Blue spot (opt) |

2. NAME PLATE AND SAFETY WARNING DECAL

1) NAME PLATE



(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.

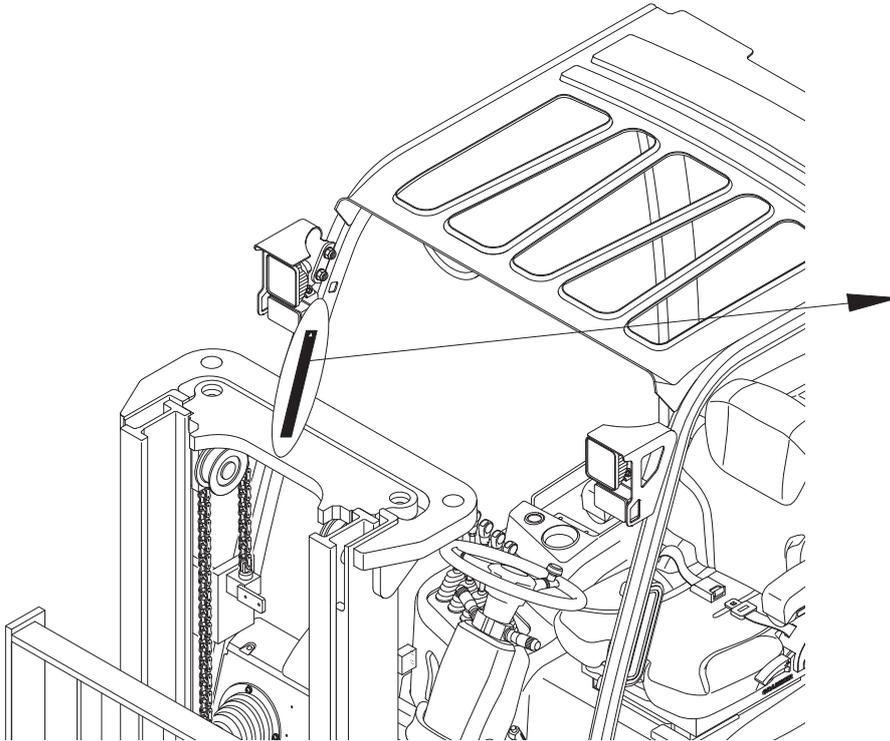
Do not exceed the maximum capacity specified.

(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



35D9OM59

⚠ 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 page 0-3 of this manual for the location of all decals.

⚠ Operator/Tip-over warning decal

This decal is located on the front right hand leg of the drivers overhead. 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 overhead guard 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.



35D9SOM09A

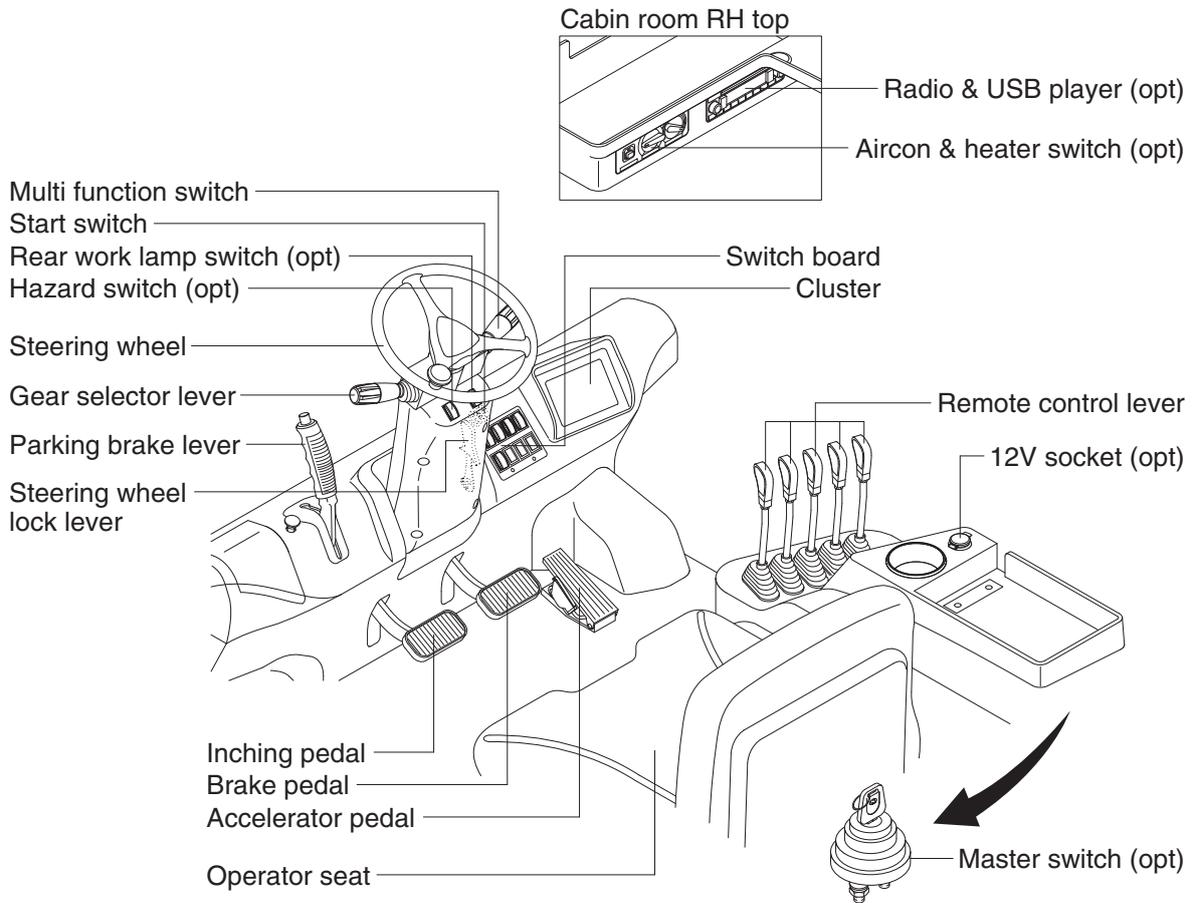
3. CAB DEVICES

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

2) ELECTRONIC MONITOR SYSTEM

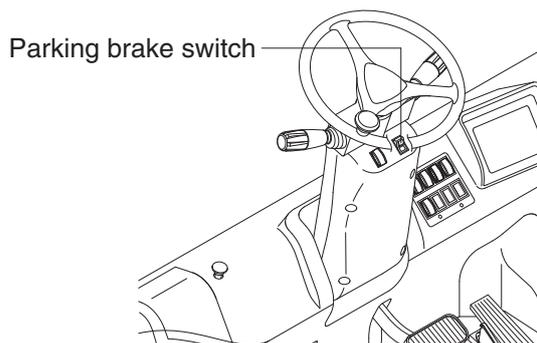
- (1) The centralized electronic monitor system allows the status and conditions of the truck to be monitored at a glance.
- (2) It is equipped with a safety warning system for early detection of truck malfunction.

• Parking brake lever type



35D9FCD01

• Parking brake switch type



35D9FCD01A

4. CLUSTER

1) STRUCTURE

Like following figure, cluster is consisted of LCD and buttons. LCD will indicate the operation and abnormal status of truck to the driver in order to use and maintenance.

Also, LCD allows to set and indicate the various modes, monitoring, and gadgets.

- ※ **The cluster 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 cluster provides a warning immediately check the problem, and perform the required action.**



35D9SCL001K

2) GAUGE

(1) Operation screen

Operating screen will be displayed if turn on the start switch.



35D9SCL002K

1 Speed meter

2 Fuel gauge

3 Coolant temperature gauge

4 Clock

(2) Speed meter

① Display the trip speed of truck.

② Speed unit is km/h or mile.

※ Speed unit can be set in the speed unit menu of display set up at page 3-37.



km/h

mile

35D9SCL003K

(3) Fuel gauge



35D9SCL004K

- ① Display the remains of fuel tank.
- ② If the gauge displays in the red zone, or warning lamp  will be lit up in red, please refuel.

(4) Coolant temperature gauge



35D9SCL005K

- ① Display the coolant temperature.
 - White zone : 40 ~ 120 °C (104~248 °F)
 - Red zone : Over 120 °C (248 °F)
 - Warning lamp on : Over 115 °C (239 °F)
- ② If the gauge displays in the red zone, or warning lamp  is on, please stop the engine and inspect the coolant system.

(5) Clock



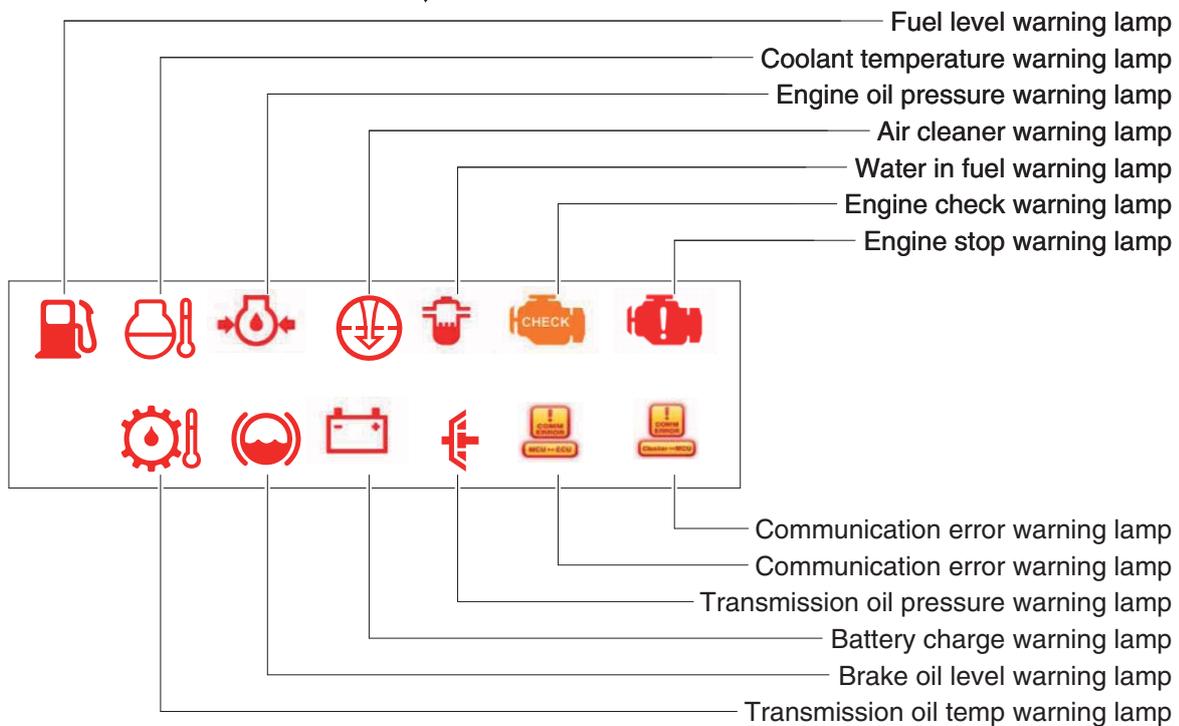
35D9SCL006K

- ① Display current time.
- ② You can enter current time at display Set Up > Time Set Up menu.

3) WARNING LAMPS



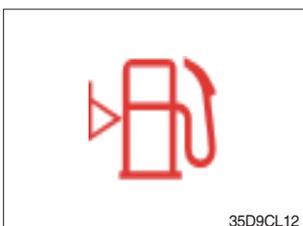
Warning lamps



35D9FCL007

※ Warning and pilot lamp will display only items that were set as ON, and all warning and pilot except fuel level warning and coolant temperature warning will be displayed in order from the left of screen. And directional pilot lamp will display at the center.

(1) Fuel level warning lamp



- ① Warning lamp will be displayed if fuel level is low.
- ② Please refuel immediately if the lamp is on.

(2) Coolant temperature warning lamp



- ① Coolant temperature warning will be lit up when temperature is over 115 °C (239 °C).
- ② If the warning lamp is on continuously, please inspect the coolant system.

(3) Engine oil pressure warning lamp



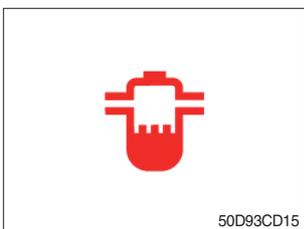
- ① This warning lamp will be lit up when engine oil pressure is low.
- ② Stop the engine immediately if the warning lamp is lit up.
- ③ Please check the engine oil.

(4) Air cleaner warning lamp



- ① This warning lamp is lit when air cleaner filter is clogged up.
- ② Please clean up or replace the filter.

(5) Water in fuel pilot lamp



- ① Light up when water in fuel.
- ② Stop the engine and please drain the water of the water separator.

(6) Engine check warning lamp



- ① If the lamp lights ON, check the engine.
- ② Check the failure code of cluster.

(7) Engine stop warning lamp



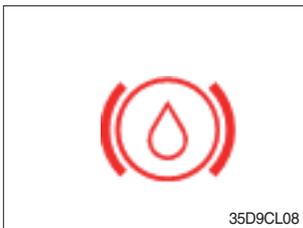
- ① If the lamp lights ON, stop the engine immediately and check the engine.
- ※ Please contact your Hyundai service center or local dealer.

(8) TM oil temperature warning lamp



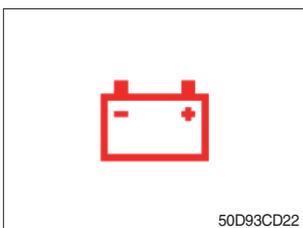
- ① Transmission oil temperature warning is consisted of two indications.
 - 110 °C (230 °F) or higher : Amber is light up
 - 120 °C (248 °F) or higher : Red is flashing
- ② When this lamp light up during operation, stop the engine and check the truck.

(9) Brake oil level warning lamp



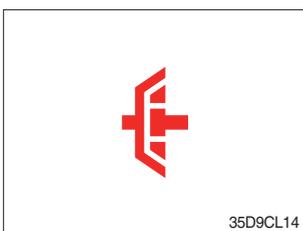
- ① Warning lamp will be displayed if brake oil is low of reservoir tank.
- ② Please refill immediately if the lamp is on.

(11) Battery charge warning lamp



- ① This warning lamp is lit when battery charging voltage is low.
- ② Please inspect the battery charging circuit if the warning lamp is lit.

(12) T/M oil pressure warning lamp



- ① Warning lamp will be displayed if transmission oil pressure is not enough.
- ② The lamp also will be displayed while inching operation.
- ③ Please check the transmission when the lamp is displayed without inching operation.

(13) Communication error warning lamp



- ① This warning lamp will be lit up if the communication between MCU and ECU is fail.
- ② Please check the communication line if the warning lamp is lit up.

(14) Communication error warning lamp

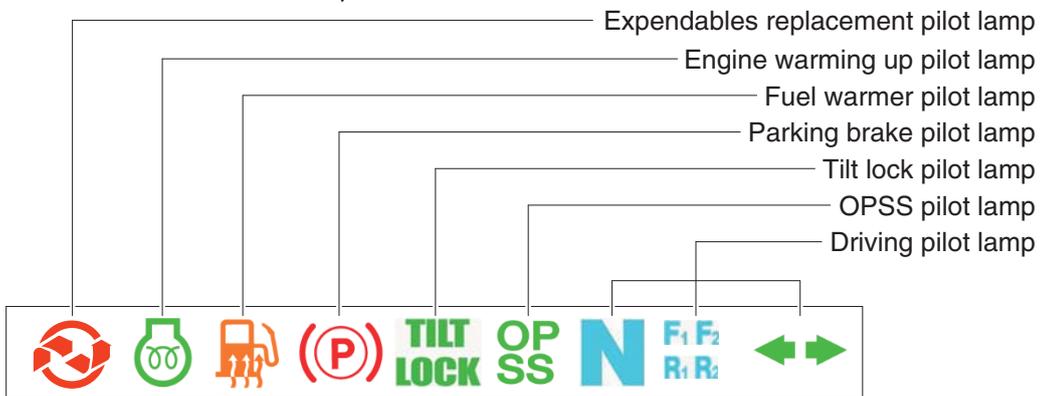


- ① This warning lamp will be lit up if the communication between MCU and cluster is fail.
- ② Please check the communication line if the warning lamp is lit up.

4) PILOT LAMPS



Pilot lamps



35D9FCL008

※ Warning and pilot lamps will display only items that were set as ON, and all warning and pilot except turning pilot lamp and driving pilot lamp will be displayed in order from the left of screen.

(1) Engine warm-up pilot lamp



- ① The truck senses the engine coolant temperature and warms-up engine when needed. (coolant temperature < 0 °C).
- ② When it is happening, the indicator lamp is ON.

(2) Fuel warmer lamp



- ① Light up when operation the fuel warmer switch.

(3) Expendables replacement pilot lamp



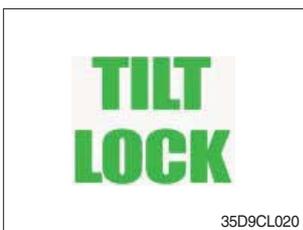
- ① Light up if expendables which must be replaced are exist.
- ② The pilot lamp will light up only 3 minutes since start switch ON, and then light OFF.
- ③ Please check the expendables management list in maintenance menu.

(4) Parking brake pilot lamp



- ① Light up when parking brake is ON.

(5) Tilt lock pilot lamp



- ① The Indicator lamp will be lit up if the tilt lock switch (optional) is entered.
- ② Tilt action will be limited if this Indicator lamp is lit up and the mast is located at 90 degrees.

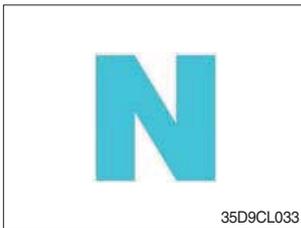
(6) OPSS pilot lamp



- ① Light up if driver leave seat during operation.
 - ② Truck driving and/or mast control will be blocked if lamp is lit up.
- ※ Please refer to page 0-9 for details.

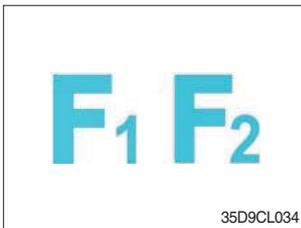
(7) Driving pilot lamp

① Neutral



- a. This pilot lamp will be lit up when direction lever is located in neutral.

② Forward



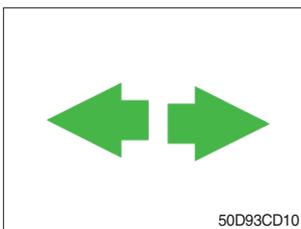
- a. This pilot lamp is displayed if the forward gear is selected.
- b. First gear will be displayed as **F₁** , and second gear will be displayed as **F₂** .

③ Reverse



- a. This pilot lamp is displayed if the reverse gear is selected.
- b. First gear will be displayed as **R₁** , and second gear will be displayed as **R₂** .

④ Right or left turning pilot lamp



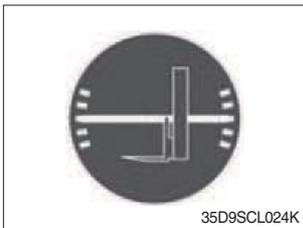
- a. This pilot lamp will flash if turns on the right or left turn signal.

5) INFORMATION DISPLAY



35D9SCL023K

(1) Mast front/rear tilt (option)



- ① Display the real time tilt of mast.

(2) Vehicle front/rear tilt



- ① Display the front/rear tilt of vehicle in real time.
 - Stop : Tilt angle is higher than 2.3° then the red warning symbol.
 - Driving : Tilt angle is higher than 10.2° then the red warning symbol.

(3) Vehicle left/right tilt



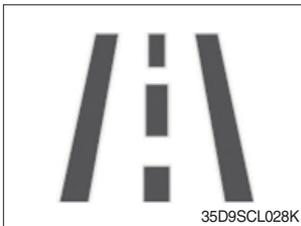
- ① Display the left/right tilt of vehicle in real time.
 - Stop : Tilt angle is higher than 3.4° then the red warning symbol.
 - Driving : Tilt angle is higher than 20.8° then the red warning symbol.

(4) Load weight (option)



- ① Display the load weight.
- ② Screen will display blurry if the weight sensor has not been mounted.

(5) Total trip distance



- ① Display total trip distance of the truck..
- ② Unit of distance is kilometer.

(6) Operation time



- ① Display the used time of the truck..
- ② Icon will be changed as follow if starts ignition.



35D9SCL030K

(7) Explanation of warning lamp and pilot lamp



Explanation of selected warning lamp or pilot lamp
Selected icon

35D9ACL031

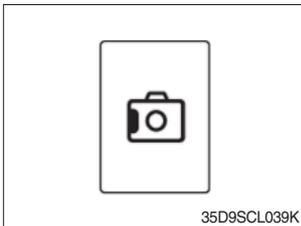
- ① Explanation will be displayed if press the arrow (refer to page 3-17) while warning lamp or pilot lamp is on.
- ② Explanation for warning lamp or pilot lamp that are shown on the screen will be displayed if press the arrow continuously.

6) BUTTONS



35D9SCL038K

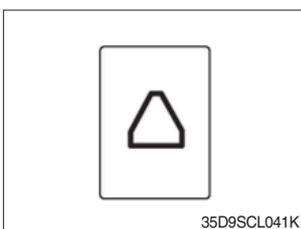
(1) Camera



- ① This switch displays rear camera images. (if the camera is mounted)

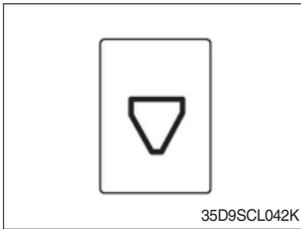


(2) UP/Left



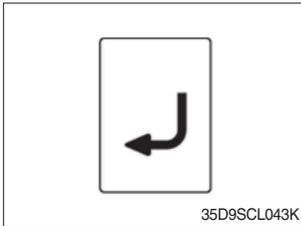
- ① This switch is used to move upward or leftward in menu or increase the value.

(3) Down/Right



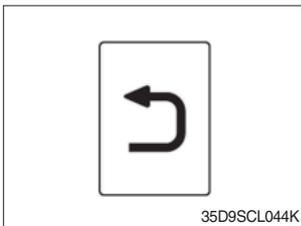
① This switch is used to move downward or rightward in menu or decrease the value.

(4) Select



① This switch is used to enter into the menu or to select.

(5) Cancel (ESC)



① This switch is used to cancel or move to upper menu.



35D9SCL045

7) MAIN MENU



35D9SCL046

A menu consists of main menu and sub-menu.

(1) Structure

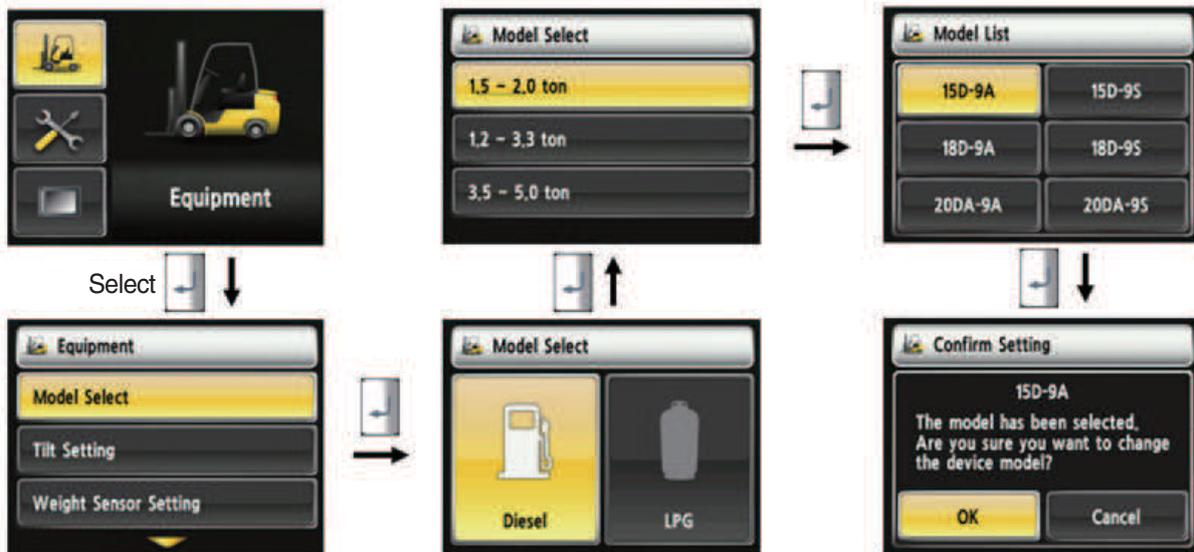
No	Main menu	Sub menu	Explanation
1		<ul style="list-style-type: none"> Model select Vehicle tilt Initialize Weight sensor setup Ignition control setup Camera setup Auto-shift speed setup DCSR speed setup Vehicle max speed limit MCU Cluster information 	<ul style="list-style-type: none"> Diesel, LPG Vehicle tilt Initialize Enter the cylinder cross section area , Adjust load weight, Weight display setup Ignition control, Change password Interoperate with reverse gear 1st gear-> Switching speed to 2nd gear, 2nd gear -> Switching speed to 1st gear DCSR On, Block driving speed, Restore driving speed Maximum speed limitation MCU/Cluster Information
2		<ul style="list-style-type: none"> Failure History Expendables management I/O Information 	<ul style="list-style-type: none"> Current engine failure, Engine failure history Change oil and filter replacement cycle Analog Input, Digital input/output
3		<ul style="list-style-type: none"> LCD Brightness Time Setup Unit Setup Language Setting A/S Contact ESL password Maintenance management 	<ul style="list-style-type: none"> Automatic, Manual Clock Speed, Weight, Temperature, Pressure, Date type Korean, English Change A/S contact E/G starting password contact Maintenance parts management

(2) Model select (a required setting)

- ※ This is a required setting. Some functions may not be worked properly if you do not select the model.
- How to check the Model Select (Check under the start switch ON status)



35D9KCL070



· How to select the model

1. Device setup > Model select
 2. Please select the fuel type.
 3. Please select the vehicle weight level.
 4. Please select the exact model name.
 5. Selection will be cancelled if press the cancel button or ESC switch.
 6. Check the phrases would be disappeared in the main screen.
- ※ To use full function of vehicle, exact model must be selected.



35D9SCL07



35D9KCL071

(3) Initialize vehicle tilt (a requid setting)

· How to check the "Initialize Vehicle Tilt" (Check under the start switch ON status)

1) Vehicle that has not applied the mast angle sensor



2) Vehicle that has applied the mast angle sensor



35D9KCL072



35D9SCL048

· Initialize vehicle tilt

1. The tilt sensor has already been initialized when deliver the vehicle from factory.
2. Initialize vehicle tilt if the tilt sensor figure or vehicle tilt is not horizontal in the flatland.
Vehicle set up > Initialize vehicle tilt
3. You must set tilt in the flatland since this is a horizontal set up.
4. If tilt sensor for mast is mounted (optional), locates the mast vertically.
5. Mast maximum angle depends on the vehicle.

· **Check functions**

(1) Check the real time operation by changing angles of vehicle tilt and mast tilt,

(2) Auto-leveling (option)

- ① Tilt mast inward or outward.
- ② Start tilting mast toward its vertical position, pushing the auto tilt leveling switch.
- ③ Check if the mast stops traveling when it becomes vertical to ground.

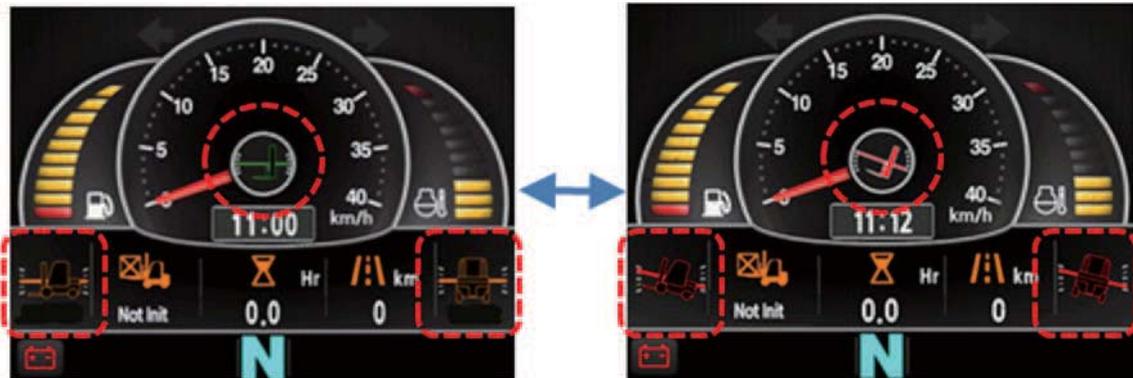
(3) Front/Rear Tilt Warning (red)

- ① Stop : $\pm 2.3^\circ$ (1.5 tons~5.0 tons)
- ② Driving : $\pm 10.2^\circ$ (1.5 tons~5.0 tons)

(4) Left/Right Tilt Warning (red)

- ① Stop : $\pm 3.4^\circ$ (1.5 tons~5.0 tons)
- ② Driving

Vehicle Weight	Warning Angles (Red)
1.5 tons~2.0 tons	$\pm 20.3^\circ$
2.2 tons~3.3 tons	$\pm 20.8^\circ$
3.5 tons~4.5 tons	$\pm 24.2^\circ$
5.0 tons	$\pm 28.0^\circ$



35D9KCL073

(4) Weight sensor set up (optional)

- How to check the "Weight Sensor Setting" (Check under the start switch ON status)

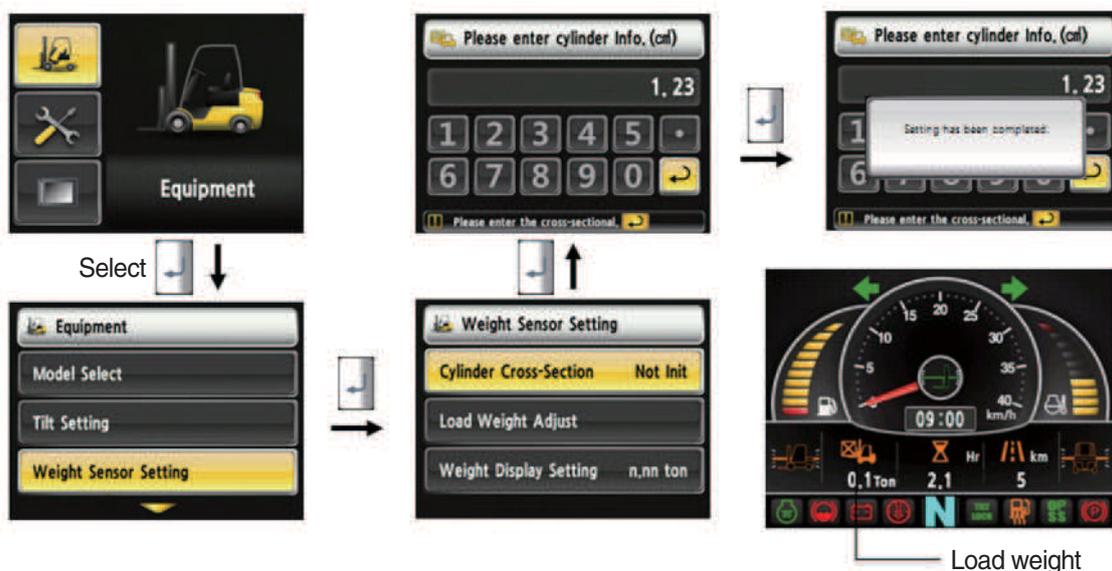
1) Vehicle that has not applied the weight sensor



2) Vehicle that has applied the weight sensor (not set)



35D9KCL074

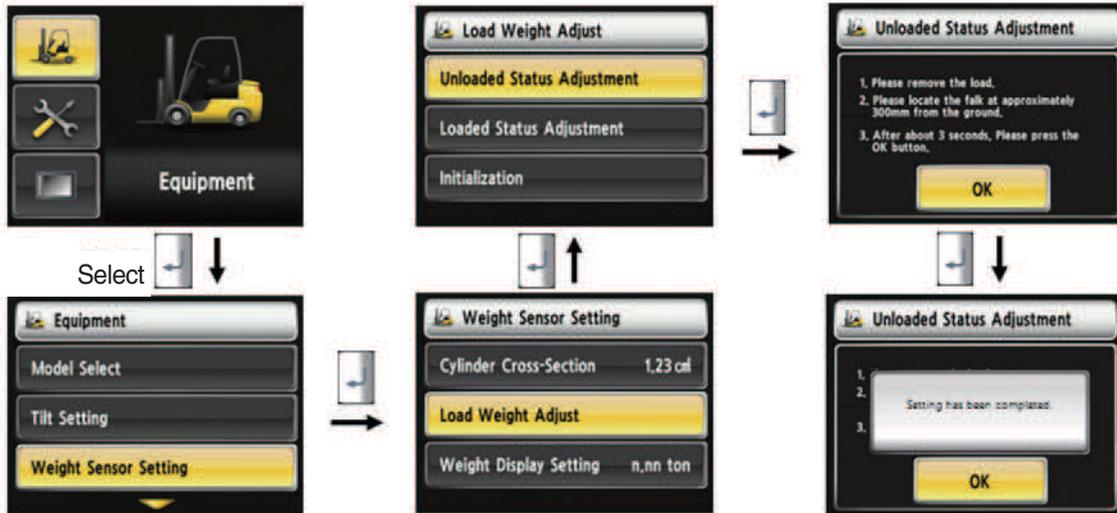


Load weight

35D9SCL049

· How to set weight sensor

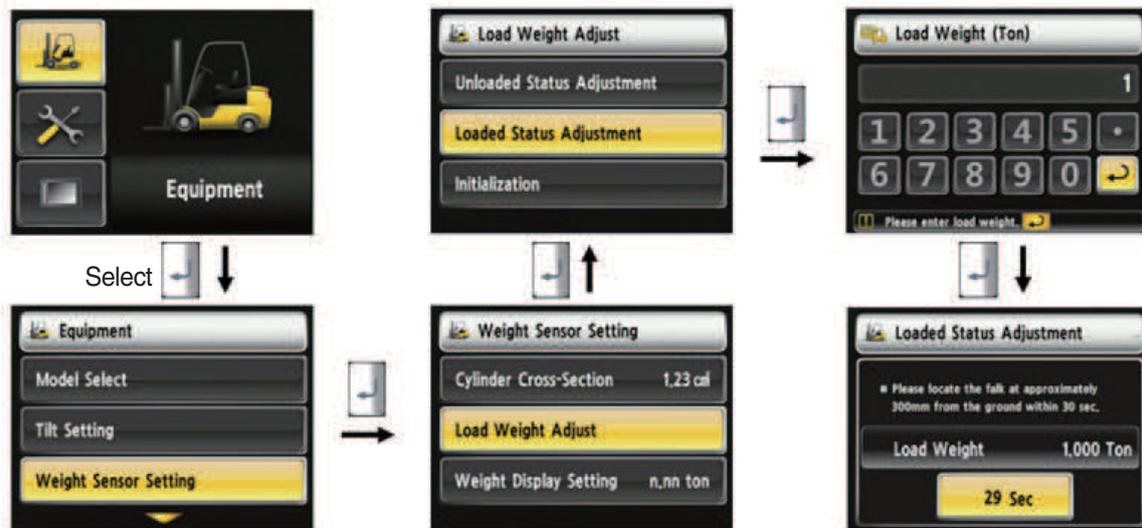
1. The weight sensor has already been set when deliver the vehicle from factory.
2. Device setup > Weight sensor setup
3. There are three ways to setup. (unload, load, initialization)
4. A cylinder cross sectional area value will be displayed in initial screen, please enter the cross sectional area using \triangle ∇ shift and \rightarrow select button if there are changes.
5. Please finish setup using \rightarrow enter button when input is done.



35D9SCL050

· **How to set weight sensor (unload)**

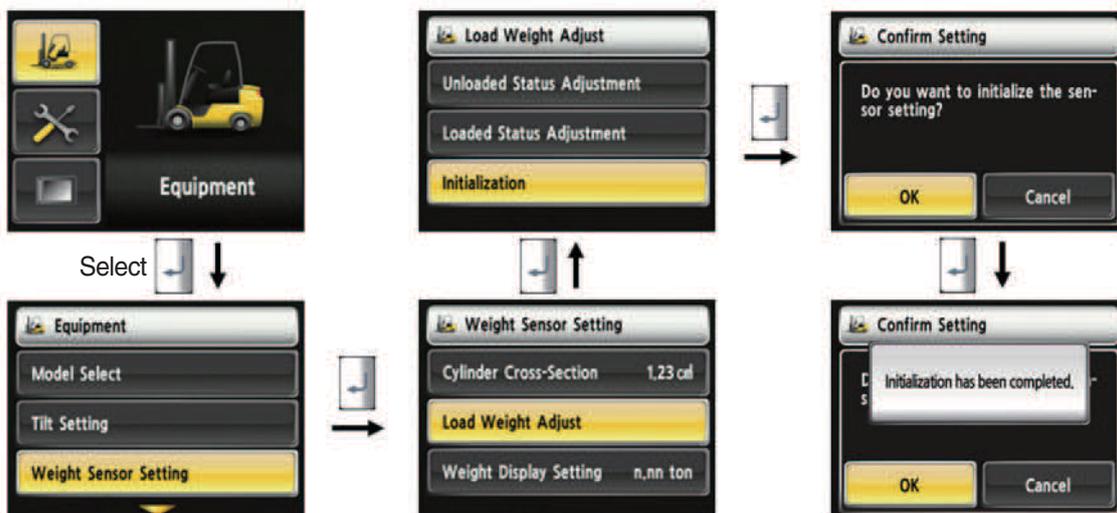
1. Device setup > Weight sensor setup
2. The way to adjust the no-load weight is as follow
3. First, please select the no-load adjust.
4. Wait 3 seconds after lifting no-load fork approximately 30 cm from the ground level, then press OK button.



35D9KCL051

· **How to set weight sensor (load)**

1. Device Setup > Weight Sensor Setup
2. The way to adjust the load weight is as follow
3. First, please select the load adjust.
4. Please enter load weight.
- ※ **Must be prepared to lift up by locating the load on the fork before enter the weight.**
5. Please locate the loaded fork approximately 30 cm from the ground level.
- ※ **MCU recognizes the weight automatically by detecting the pressure change.**
- ※ **Must be performed only the load lift task within 30 seconds.**
- ※ **Accurate weight value is not recognized if other pressure changes that are occurred besides salvage work.**
- ※ **Re-perform the "Load/No-Load Adjustment" if the measurement malfunction is occurred.**
6. If set is completed, the screen will be switched automatically.
7. Please proceed the operation within 30 seconds.
8. Operating will be cancelled automatically if the time is elapsed longer than 30 seconds

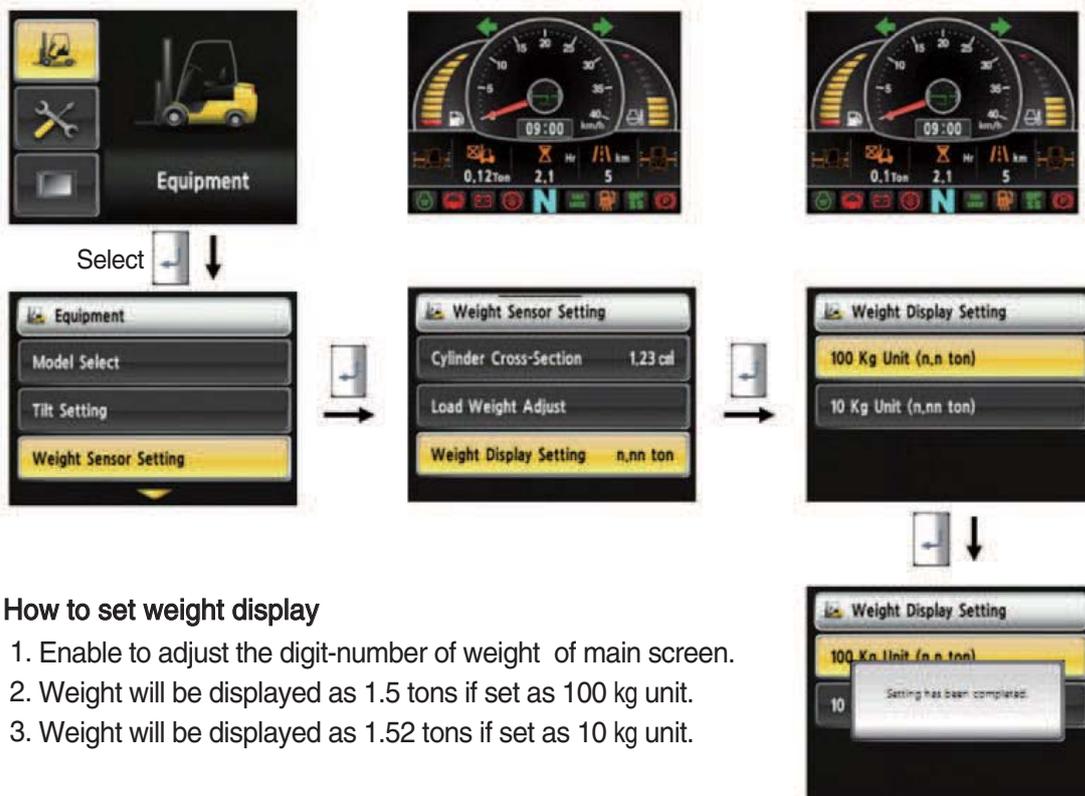


35D9KCL052

· **How to set weight sensor (initialization)**

Initialize the all values of "No-Load Adjustment" and "Load Adjustment" that were entered previously (Cylinder cross-sectional area is not initialized.)

(5) Weight setup

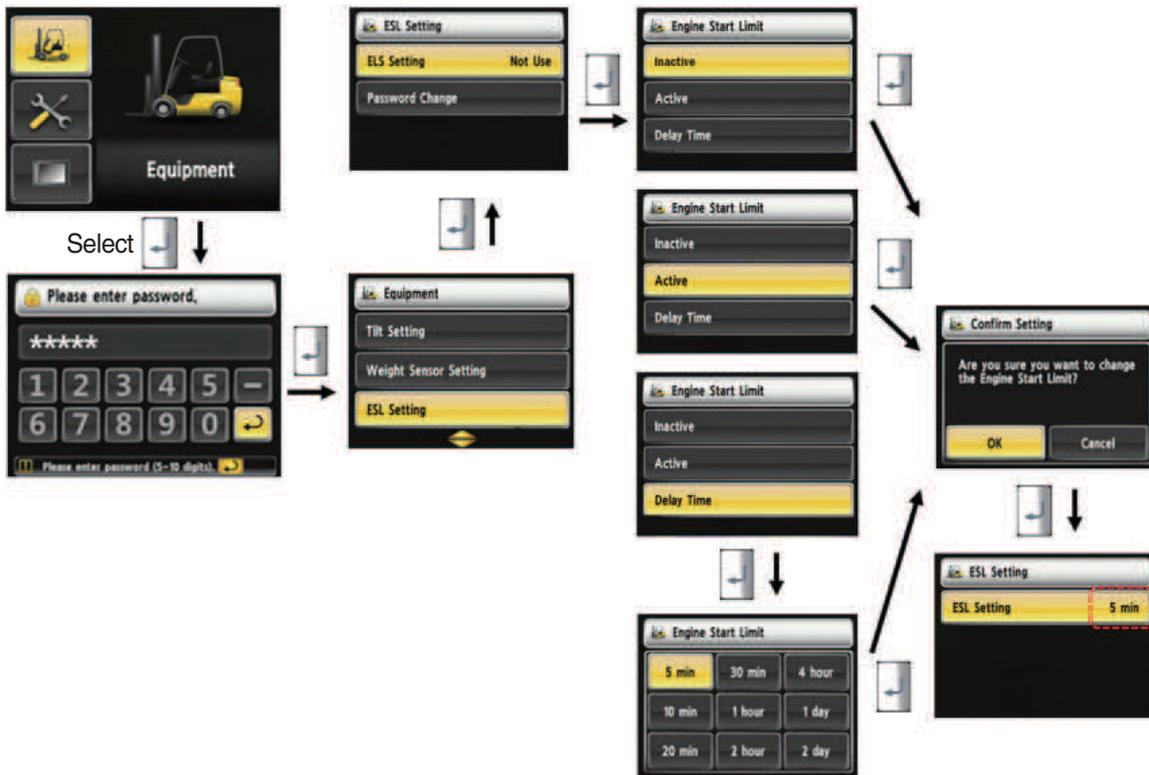


How to set weight display

1. Enable to adjust the digit-number of weight of main screen.
2. Weight will be displayed as 1.5 tons if set as 100 kg unit.
3. Weight will be displayed as 1.52 tons if set as 10 kg unit.

35D9SCL053

(6) Startup Control Setting (Standard) : Default is "Not Use"



35D9KCL054

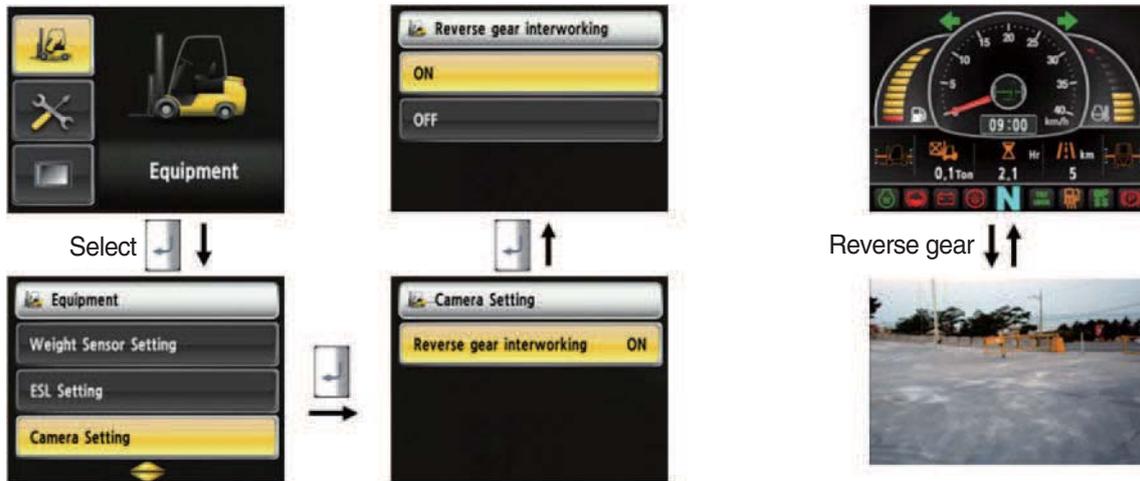
How to set ESL setting

1. Device Setup > ESL setting
 2. Password request screen will be displayed if you select the menu. Default password is "00000".
 3. Password length must be 5~10 digits.
 4. Next step is allowed only if password is authenticated.
 5. Check functions
 - ① Set the mode as active and start switch OFF.
 - ② Upon start switch ON, the password screen pops up and starting is prohibited until the right password has been offered.
(But, driver still can start the vehicle if starts within 10 seconds from start switch OFF)
 - ③ Set the mode as 5 min of delay time and start switch OFF.
 - ④ check if vehicle can start within 5 min and start switch OFF.
 - ⑤ check if vehicle requests password after 5 min.
- ※ **Start switch ON screen (When startup control mode is ON)**



35D9KCL075

(7) Camera setup

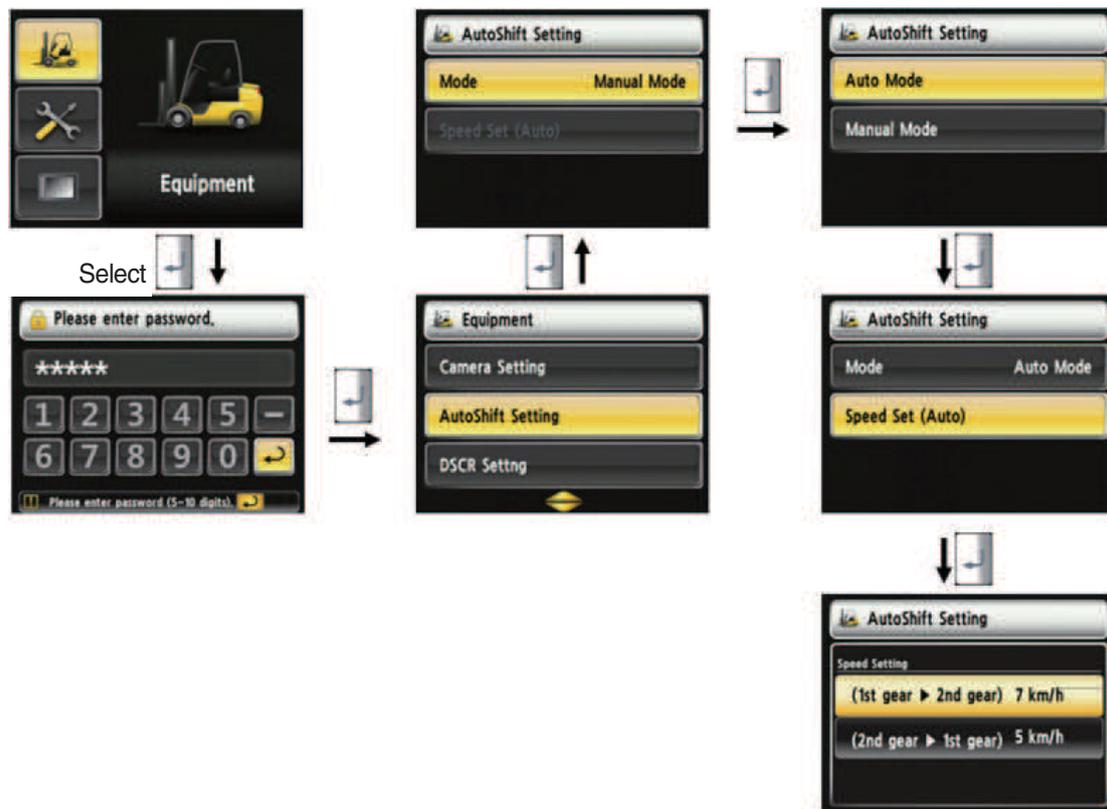


35D9SCL056

· How to set camera

1. Device setup > Camera setup
2. After set the reverse gear interoperation as ON, the screen will be changed from main screen to camera mode if put gear into reverse, and if the gear is changed, screen will be back to the main screen.

(8) Auto-shift setup (standard)



How to set auto-shift

35D9KCL057

1. Device Setup > Auto-Shift setup
2. User password is required in order to set this function.
3. In automatic mode, the gear is switched automatically by vehicle speed.
4. Enable to set the gear switching speed.
5. Applied 3.5 tons ~ 5.0 tons T/M 2nd gear.

Check functions

1. Select the "Auto Mode"

- ① During forward or reverse driving, a gear will be shifted automatically in accordance with gear speed.
- ② Not interworking with gear select switch (1st gear / 2nd gear) of gear selector.

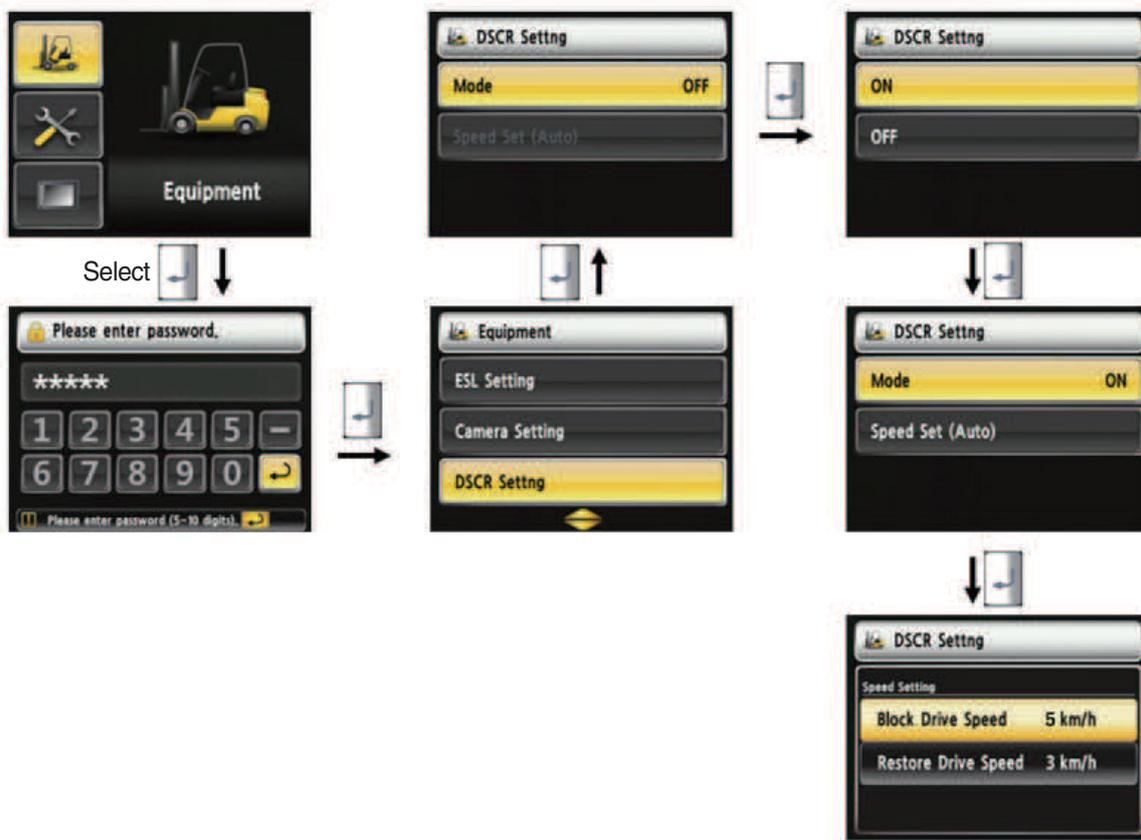


35D9KCL076

2. Select the "Manual Mode"

In accordance with gear select switch (1st gear / 2nd gear) of gear selector, T/M gear is shifted.

(9) DCSR Setup (standard)



35D9KCL058

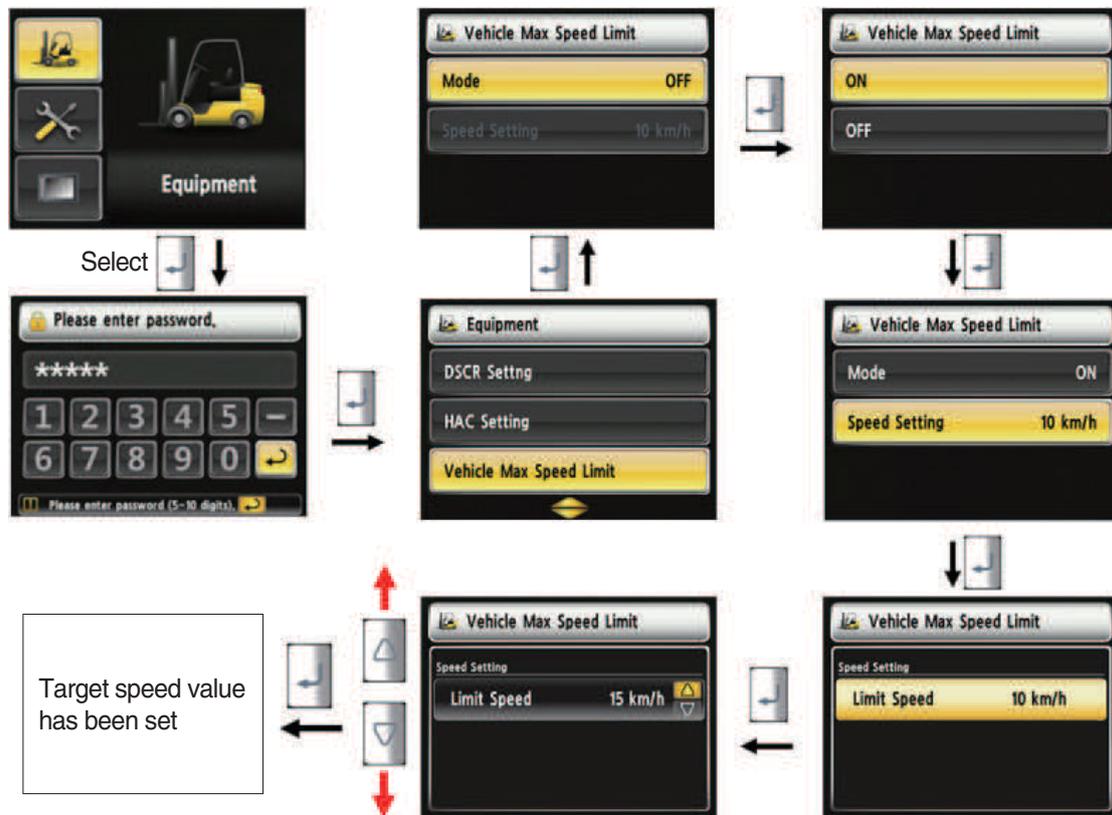
How to set DCSR

1. Device setup > DCSR setup
2. User password is required in order to set this function.
3. Set the mode ON. Below is how this feature functions.
4. If you are driving at over the block drive speed and then change gear from forward to reverse (or reverse to forward), the gear stays as neutral until the vehicle reaches the restore drive speed.
5. The car changes direction and starts to travel.

※ **DCSR : Direction change shock relief**

※ **Restore drive speed cannot be set over the block drive speed.**

(10) Vehicle max speed limit

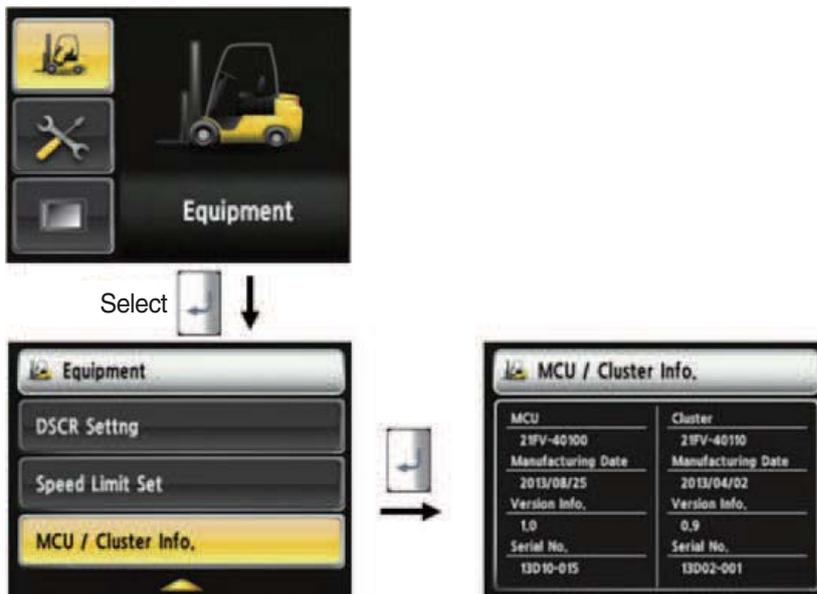


22D9CL059

· How to set vehicle max speed limit

1. Equipment > Vehicle max speed limit.
2. User password is required in order to set this function.
3. The default setting is off with the speed of 10 km/h.
4. The speed setting range is 8~20 km/h
5. The vehicle reaches smoothly to the target speed.

(11) MCU/Cluster information

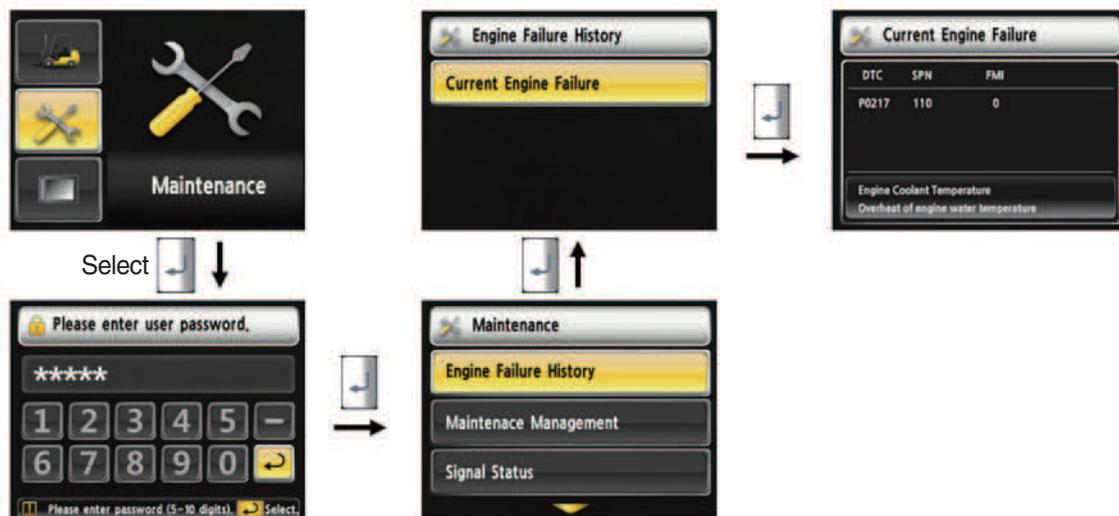


35D9SCL060

· MCU / Cluster information

1. Device Setup > MCU/Cluster information
2. MCU, manufactured date and version of cluster, and serial number will be displayed.

(12) Engine Failure History



35D9KCL078

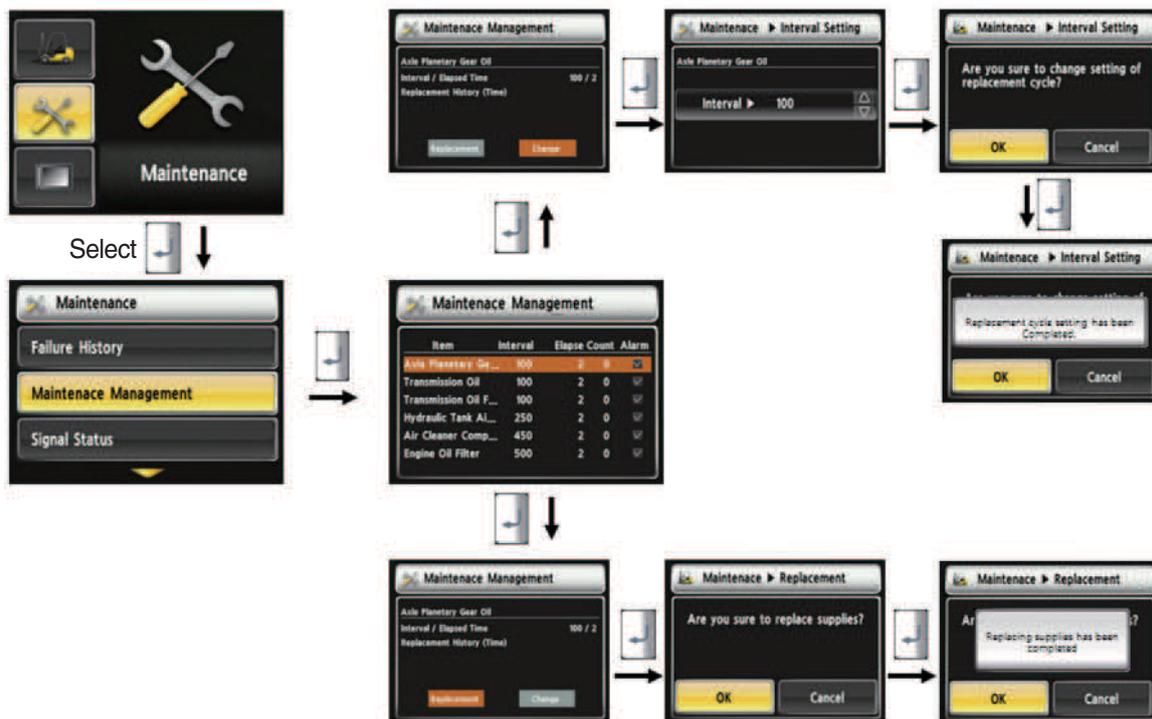
· Engine failure history

1. Device Setup > Engine failure history
2. Device that has an error code among the engine.

(13) Expendables replacement management



35D9KCL079

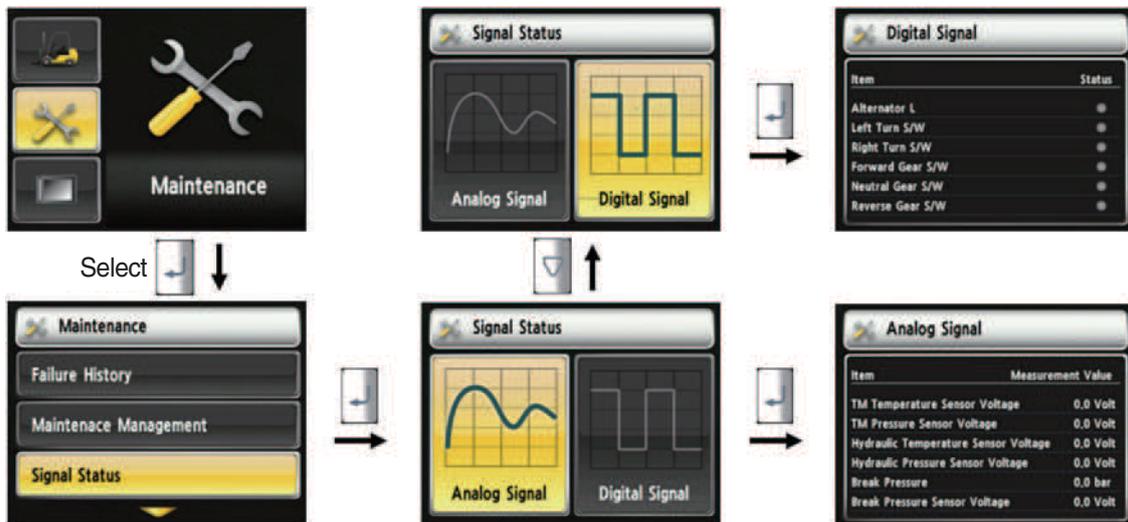


35D9SCL061

How to replace expendables

1. Device setup > Expendables management
2. If the expendables replacement cycle has been passed, alarm will be displayed as ON
3. Press the "Expendables replacement" if replaced the expendables.
4. Information about recent replacement (max. 9) will be displayed.
5. If you want to change the cycle, please press the "Change cycle" button.

(14) I/O Information

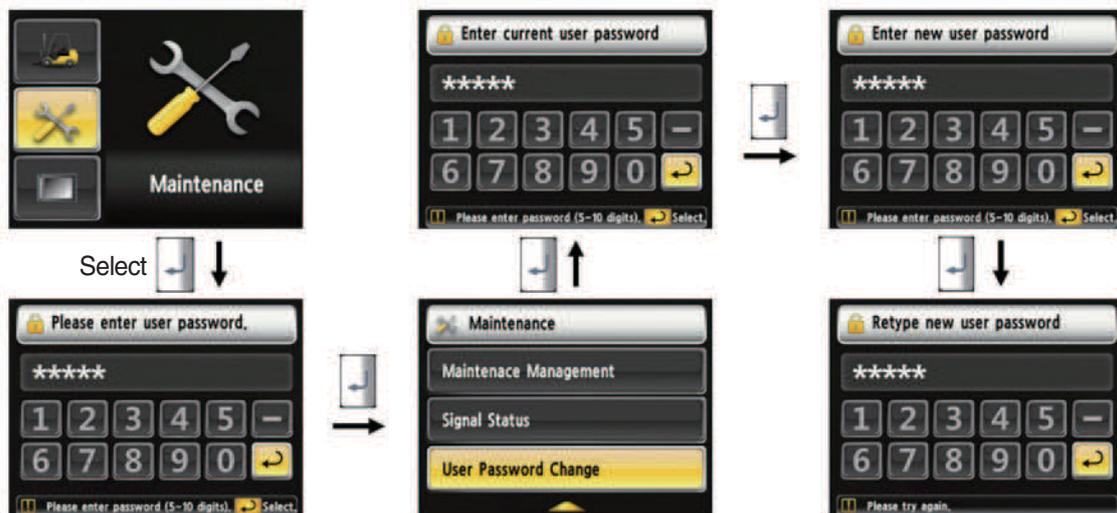


35D9SCL062

· How to set I/O information

1. Maintenance > I/O information
2. I/O information can be classified as two signals. Analog signal can see the numeric data. Digital signal can indicate only ON/OFF.
3. User can change the cycle.

(15) User password change

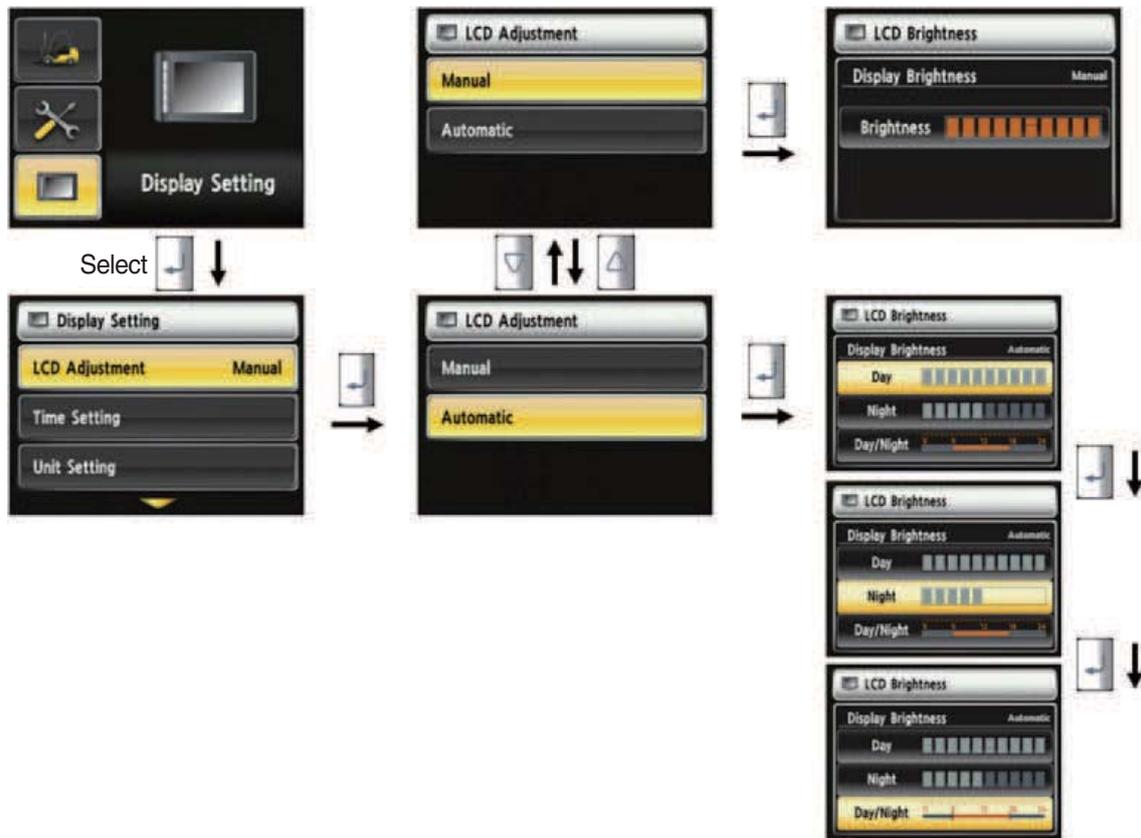


35D9KCL080

· How to change "User Password"

1. Device setup > User password set up
2. Change password
3. This function is to allow to change password from default password to user defined password.
4. Password length must be 5~10 digits.
5. Since, if you forget the password, you must request the A/S, do not forget the password.

(16) LCD brightness

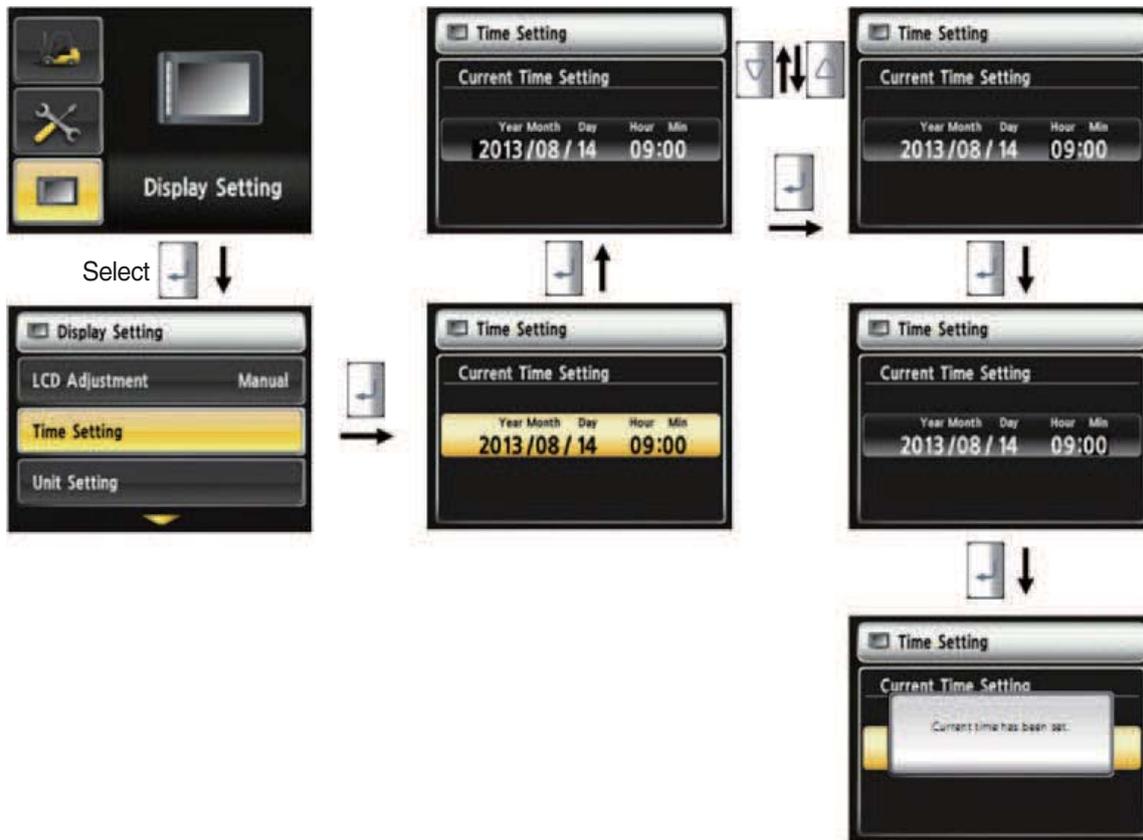


35D9SCL064

· How to set LCD brightness

1. Display > LCD brightness
2. LCD brightness has two options. Automatic mode and manual mode.
3. Manual mode always keeps the selected brightness.
4. Daytime brightness : 100%, Nighttime brightness : 50%, Daytime/Nighttime time zone : 06~18

(17) Time setup

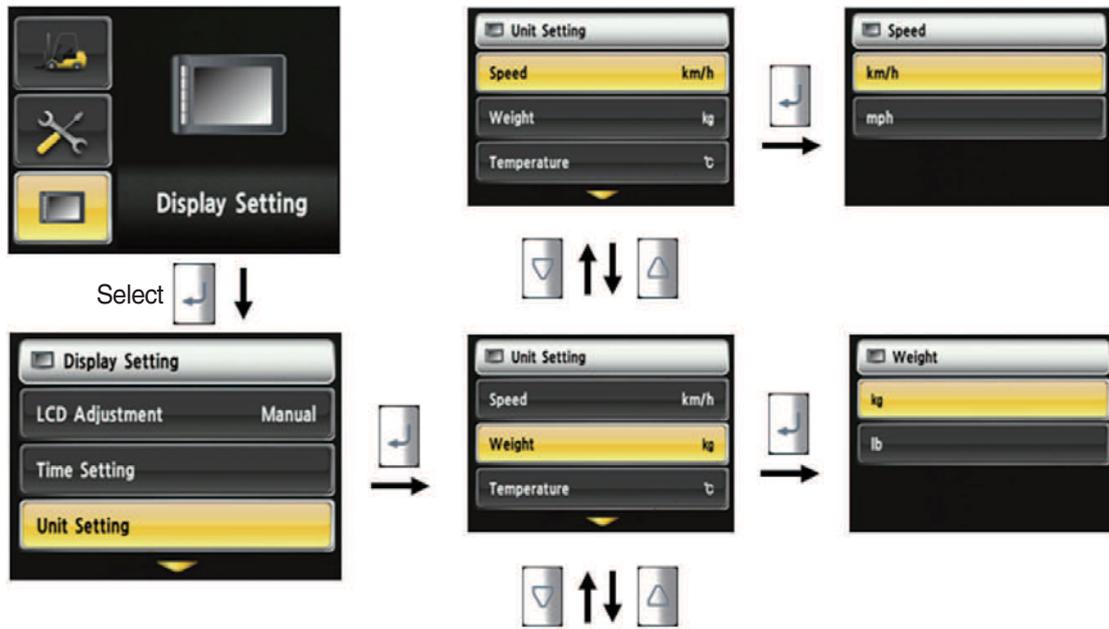


35D9SCL065

· How to set current time

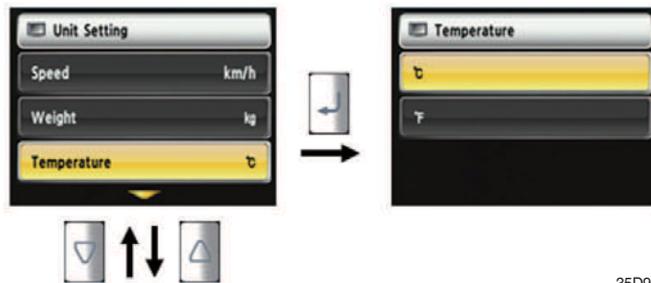
1. Display setup > Time setup
2. Enable to set the time that is displayed in main screen.
3. Set time in following order. (year > month > day > hour > minute)

(18) Unit setup

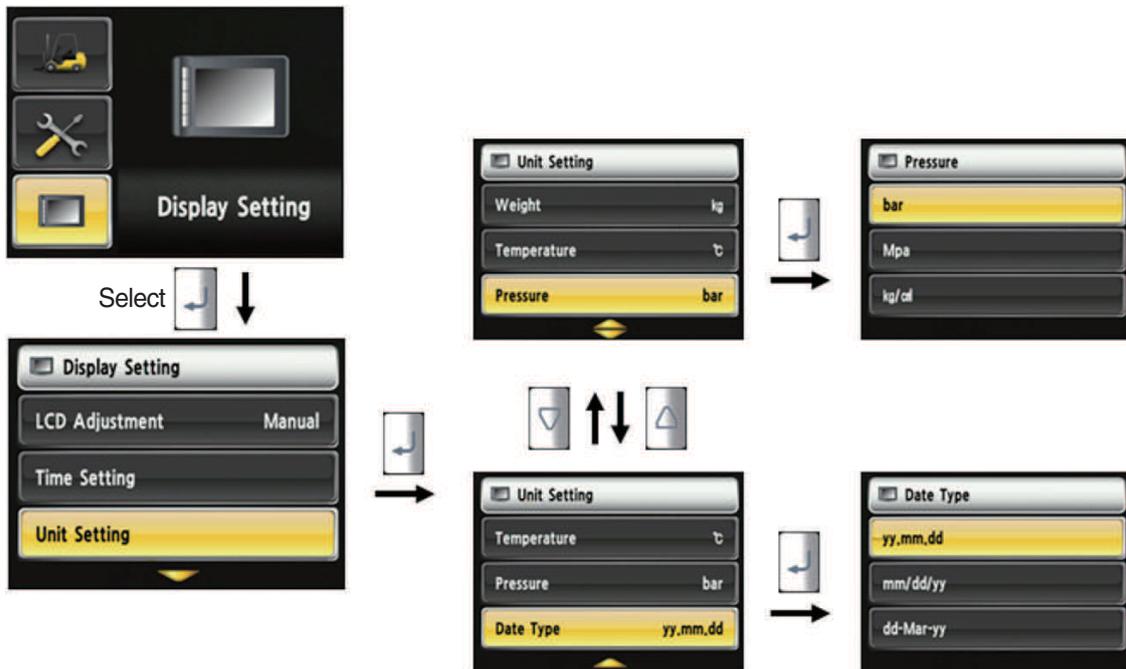


Unit setup

1. Display setup > Unit setup
2. Enable to set all unit values that displayed on screen.
3. It is displayed by calculating as setting unit.

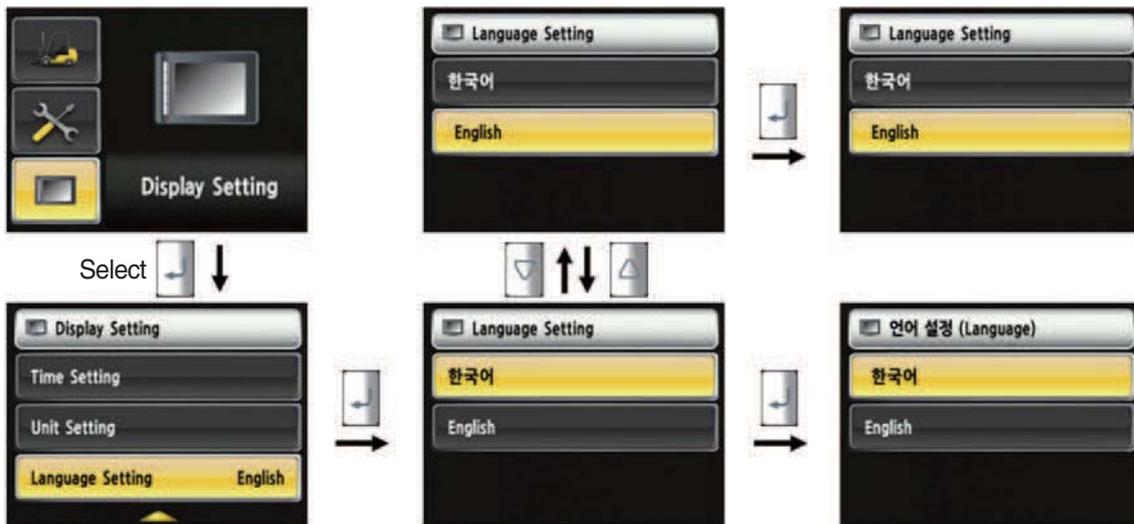


35D9SCL066



35D9SCL067

(19) Language setup



35D9SCL068

· How to set language

1. Display Setup > Language setup
2. Language setup changes the language that is displayed on the screen to language that user defined.
3. Currently, supported language is Korean and English.

(20) A/S Contact Setup

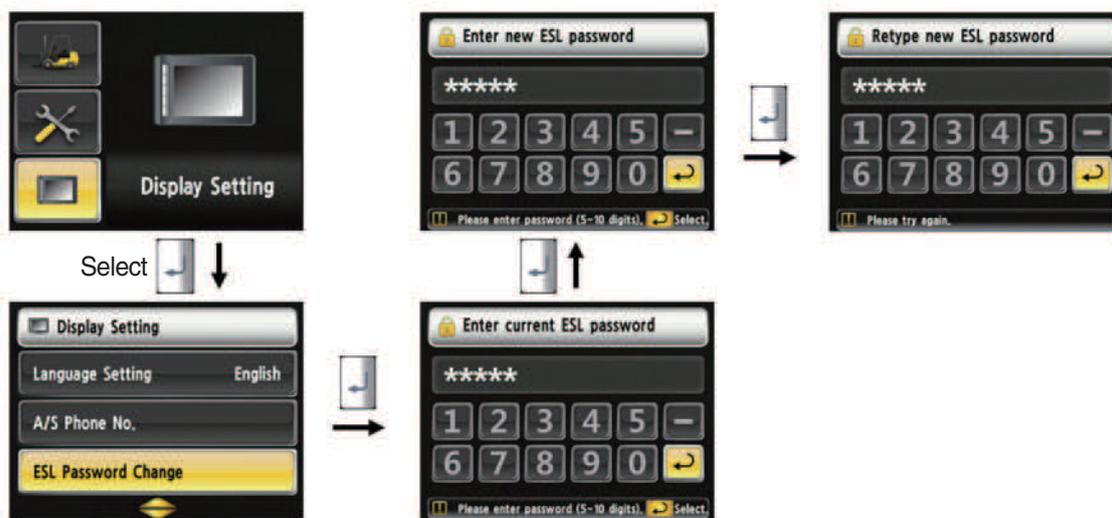


35D9SCL063

· How to set A/S contact

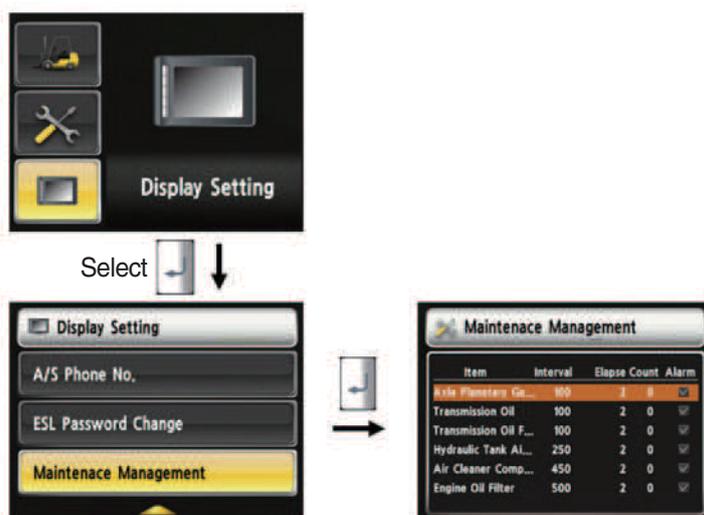
1. Maintenance > A/S Contact
2. User can change the A/S contact when deliver the vehicle from factory.
3. If user moves numeric number using arrow, and press the  select button, number will be displayed on the screen.
4. If user press the  enter key, the value will be set.
5. Contact will be displayed as the modified value.

(21) ESL password change



35D9KCL081

(22) Maintenance management



35D9KCL082

- ※ Only viewing is available in this menu
- ※ Other management options can be accessed from the Maintenance → Maintenance management menu

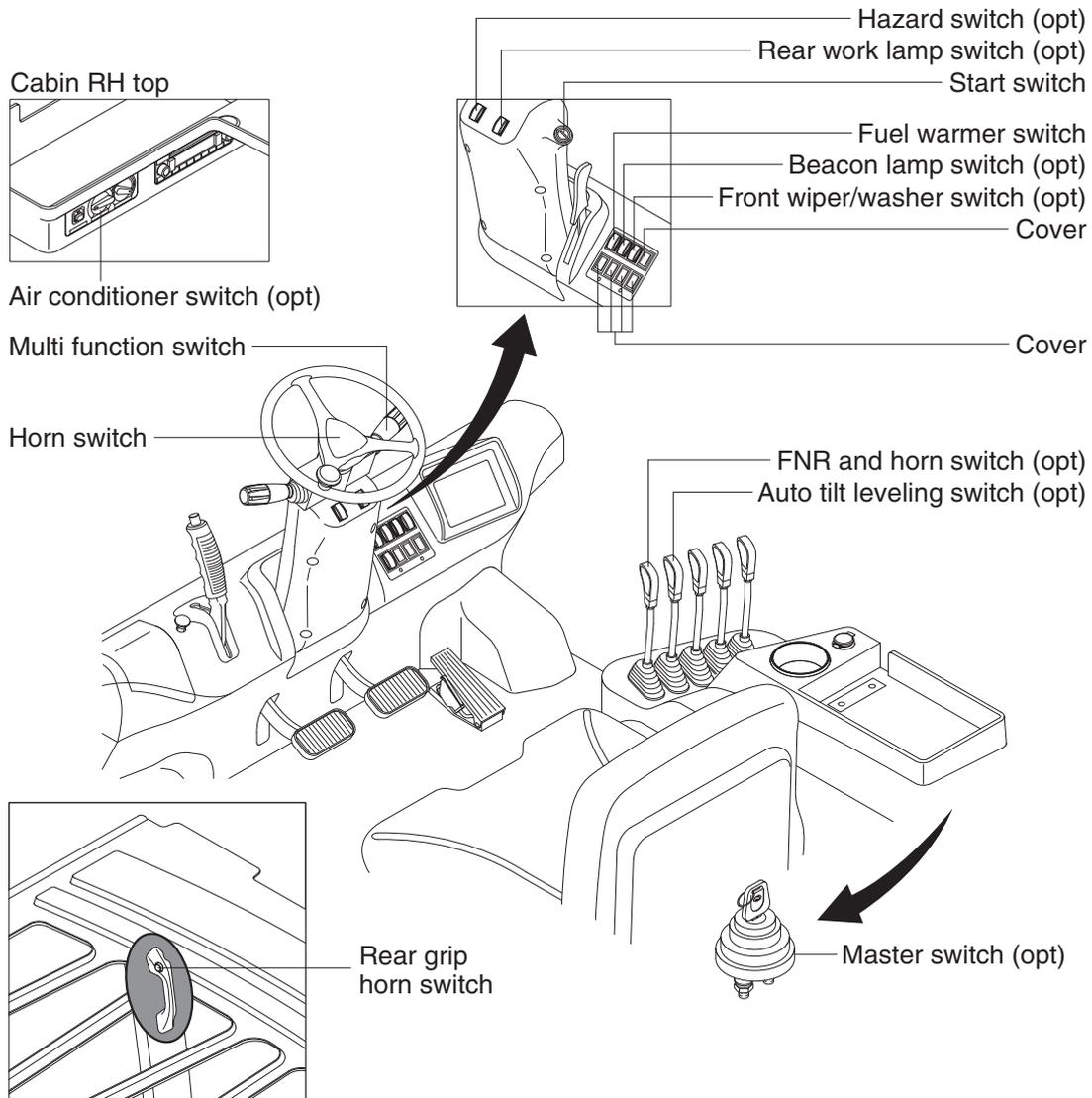
8) CAUSES AND CORRECTION OF CLUSTER WARNING LAMP

S/No.	Warning lamp types	Symbol	Warning and pilot lamp	Causes and correction
1	Engine oil pressure warning		Engine oil pressure warning lamp	Engine oil pressure is low. Please the engine oil refill.
2	Engine warm-up pilot		Engine warm-up pilot lamp	Warm-up will be started.
3	Air cleaner warning		Air cleaner warning lamp	Replace the filter.
4	Water in fuel warning		Water in fuel warning lamp	Please drain the water of water separator.
5	Engine check warning		Engine check warning lamp	Check the failure code of cluster.
6	Engine stop warning		Engine stop warning lamp	Check the failure code of cluster.
7	Fuel warmer pilot		Fuel warmer pilot lamp	warming up the fuel.
8	TM oil temperature warning		TM oil temperature warning lamp	TM oil is over temperature condition.
9	Parking brake pilot		Parking brake pilot lamp	Parking brake is operating.
10	Brake oil level warning		Brake oil level warning lamp	Brake oil level is low. Please refill the brake oil.
11	Battery charging warning		Battery charging warning lamp	Battery is not being charged. Please check alternator and wiring.
12	Tilt lock pilot		Tilt lock pilot lamp	Auto-leveling is the operational status.
13	OPSS pilot		OPSS pilot lamp	OPSS is working : Driving, Tilttig, Lifting locked and truck parked.
14	Fuel warning		Fuel warning lamp	Fuel level is low. Please refill the diesel oil.
15	Coolant temperature warning		Engine coolant temperature warning lamp	Engine coolant is over temperature condition.
16	T/M oil pressure warning		Clutch oil pressure warning lamp	Inching operation. Check T/M to find out pressure drop.
17	Expendables replacement pilot		Expendables replacement pilot lamp	Expendables replacement cycle has been passed.

S/No.	Warning lamp types	Symbol	Warning and pilot lamp	Causes and correction
18	Communication error warning		Communication error warning lamp	Communication with between MCU and ECU has been failed. Check communication line.
19	Communication error warning		Communication error warning lamp	Communication between CLUSTER and MCU has been failed. Check communication line.
20	LH Turn pilot		LH Turning pilot lamp	-
21	RH Turn pilot		RH Turning pilot lamp	-
22	Forward first gear		Forward first gear pilot lamp	-
23	Forward second gear		Forward second gear pilot lamp	-
24	Reverse first gear		Reverse first gear pilot lamp	-
25	Reverse second gear		Reverse second gear pilot lamp	-

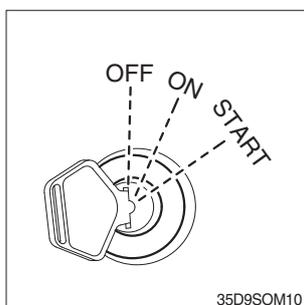
5. SWITCHS

· Parking brake lever type



35D9FCD02

1) START SWITCH



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

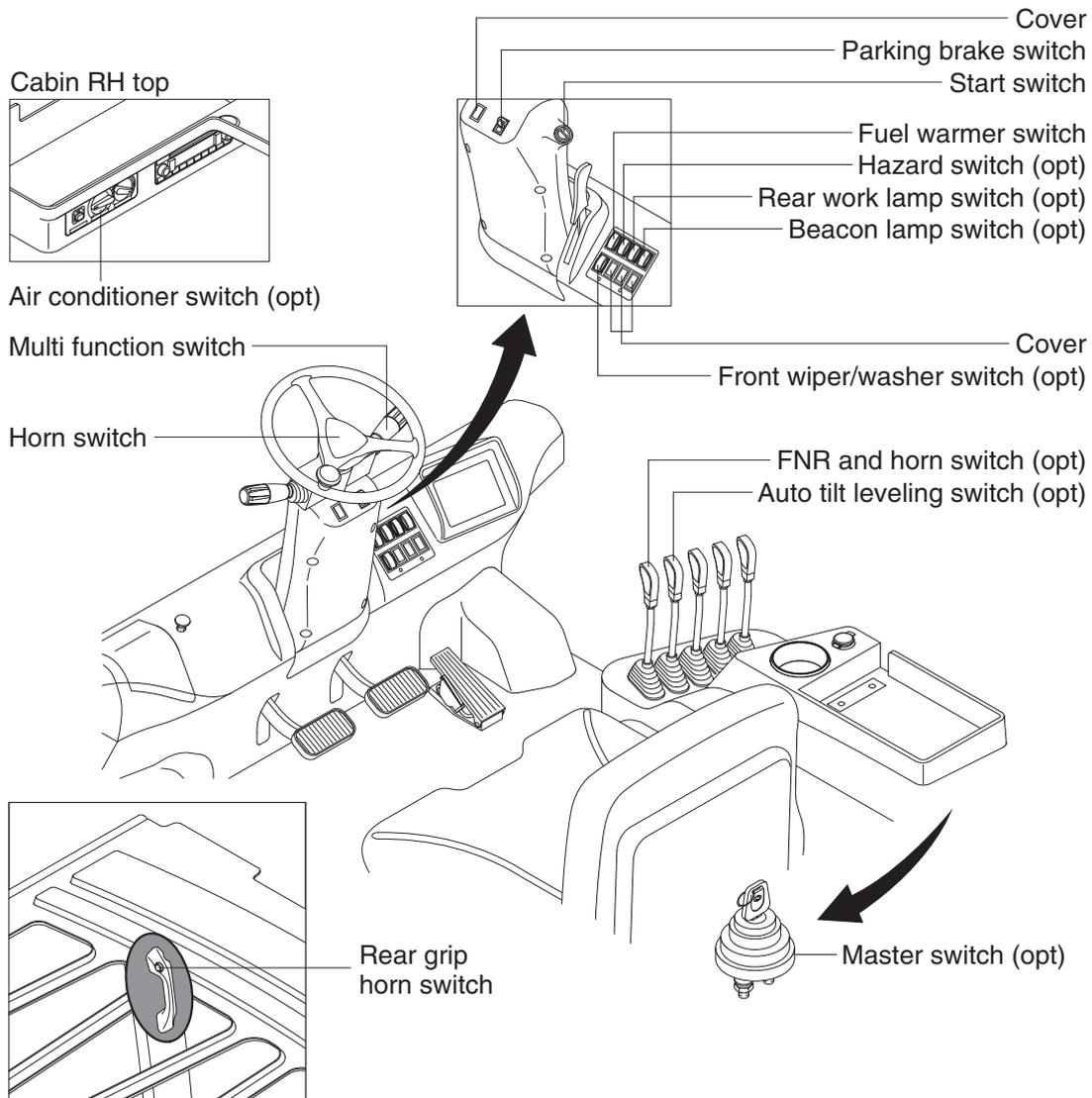
※ Before starting, set gear shift lever at NEUTRAL and pull parking brake lever to LOCK position.

- OFF : None of electrical circuits activates.
- ON : All electrical systems are ON.
- START : Use when starting the engine.

Release key immediately after starting.

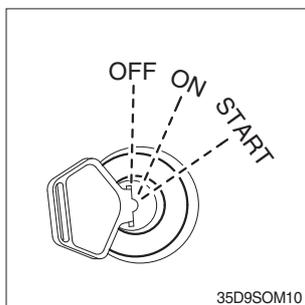
※ Key must be in the ON position with engine running to maintain electrical and hydraulic function and prevent serious truck damage.

• Parking brake switch type



35D9FCD02A

1) START SWITCH



35D9SOM10

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

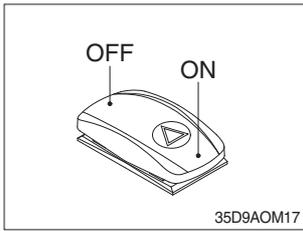
※ Before starting, set gear shift lever at NEUTRAL and press parking brake switch to LOCK position.

- OFF : None of electrical circuits activates.
- ON : All electrical systems are ON.
- START : Use when starting the engine.

Release key immediately after starting.

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

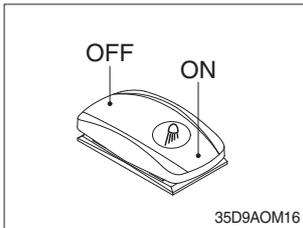
2) HAZARD LAMP SWITCH (option)



(1) Use when emergency situation or while loading operation.

※ **If the switch is left on for a long time while the engine does not run, the battery would be dead(discharged).**

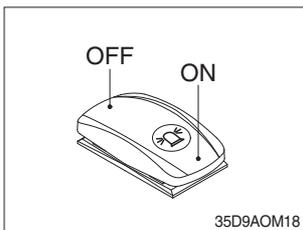
3) REAR WORK LAMP SWITCH (option)



(1) This switch is used to operate work lamps.

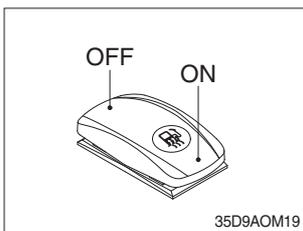
Press this switch to turn on work lamps.

4) BEACON LAMP SWITCH (option)



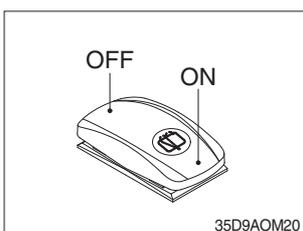
(1) This switch turn ON the rotary light.

5) FUEL WARMER SWITCH



(1) This switch is used to heat the fuel of pre-heater.

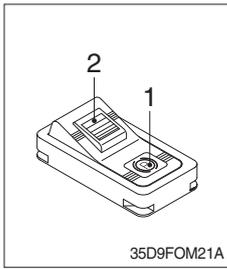
6) FRONT WIPER/WASHER SWITCH (option)



(1) This switch is used to operate the front wiper and washer by two steps.

- First step : The front wiper operates.
- Second step : The washer liquid is sprayed and the front wiper is operated only while pressing. If release the switch, return to the first step position.

7) PARKING BRAKE SWITCH (SWITCH TYPE)



(1) Position 1

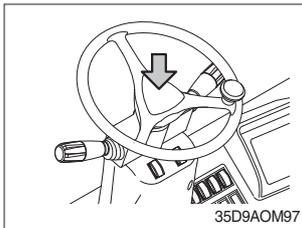
Parking brake is applied and front wheel is locked.

(2) Position 2

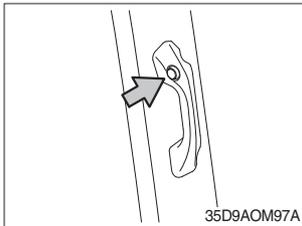
① Parking brake is released.

※ **Before moving the truck be sure the parking brake is released.**

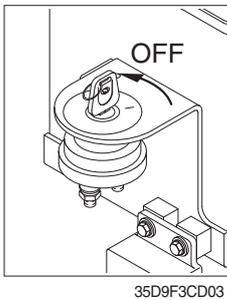
8) HORN SWITCH



(1) The horn sounds when the button is pressed.



9) MASTER SWITCH (option)



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

When the truck is not operated for a long time, turn OFF the master switch for the safety purpose.

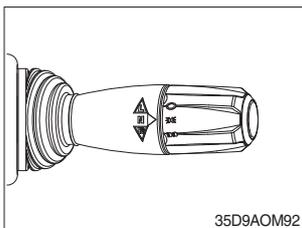
(2) I : The battery remains connected to the electrical system.

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.**

10) MULTI FUNCTION SWITCH

(1) Clearance lamp switch



① **Clearance lamp lights up**

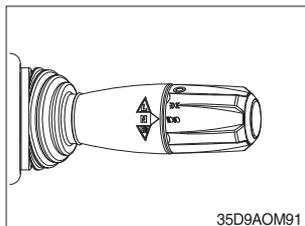
Twist the handle beneath steering wheel and make the notch align to ☸.

② **Clearance lamp goes out**

Twist the handle just opposite until the notch being aligned to ☉.

※ **When clearance lamp light up, then the clearance lamp and all panel lamps light up too.**

(2) Head lamp switch



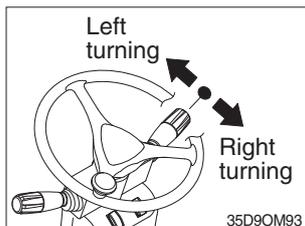
① Head lamp lights up

Twist the handle beneath steering wheel and make the notch align to .

② Head lamp goes out

Twist the handle just the opposite until the notch being aligned to .

(3) Turning signal switch

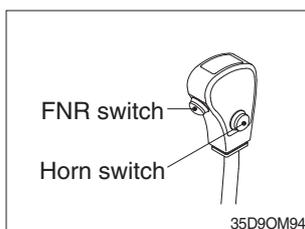


① This lever makes the turn signal lamp flash.

- Turning left : Push lever forward
- Turning right : Pull lever backward

※ **When the steering wheel is returned to straight, the turn signal is not cancelled. Return the lever to central position by hand.**

11) FNR AND HORN SWITCH (option)

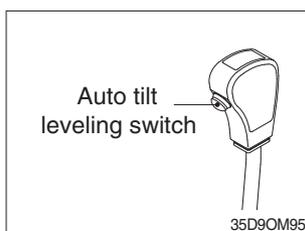


(1) FNR switch

(2) Horn switch

The horn sounds when the button is pressed.

12) AUTO TILT LEVELING SWITCH (option)



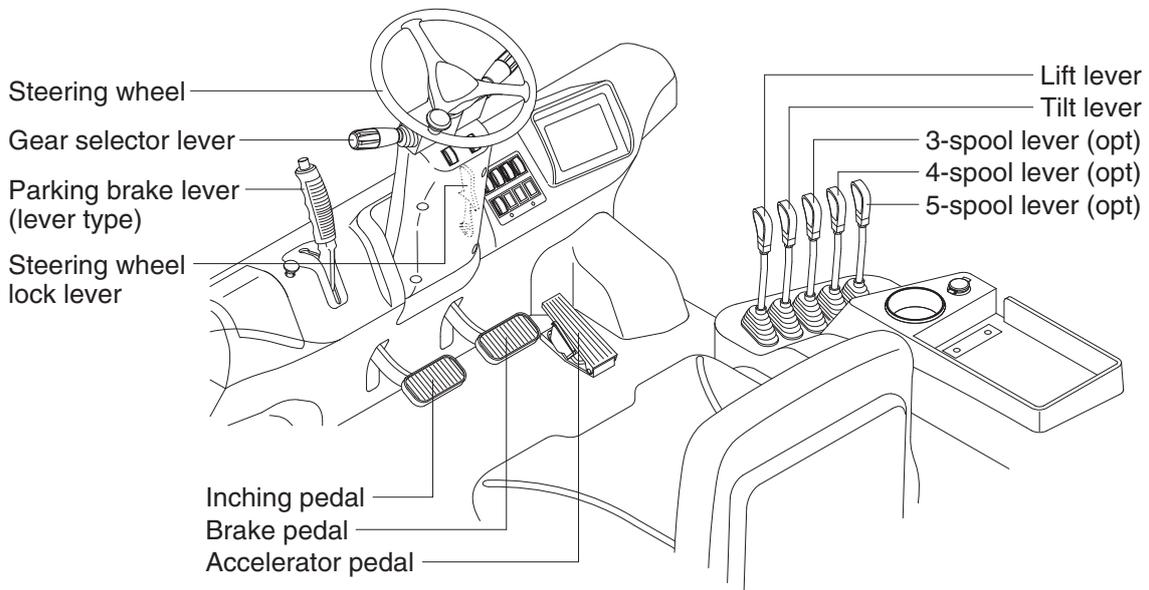
(1) When the lever is operated on pressing this auto tilt leveling switch, auto tilt leveling function activated.

(2) Auto tilt leveling function

This function is mast tilt angle adjust to zero (0) degree (refer to the truck position).

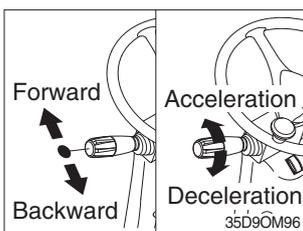
※ **This function have to be used at the engine low idle rpm and stop position. If this function is activated at the high idle rpm or during starts, do not guarantee the mast stop at upright vertical position.**

6. CONTROL DEVICE



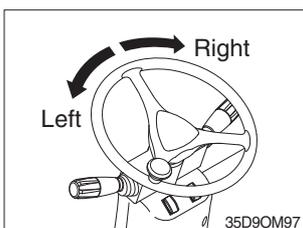
35D9FCD08

1) GEAR SELECTOR LEVER



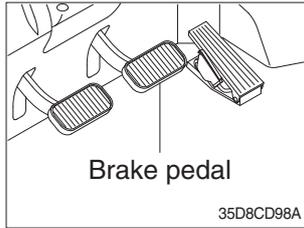
- (1) This lever is used for gear selection, forward 2 stages and reverse 2 stages.
- (2) If you push the gear selector lever, the truck moves forward, but pulling the gear selector lever, the truck moves backward.
- (3) If you turn the gear selector lever forward, the truck increases the speed, but if you turn the gear selector lever backward, the truck reduces the speed.

2) 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.

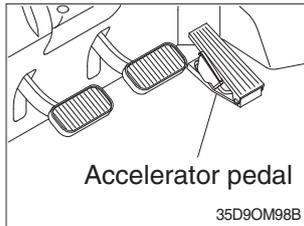
3) BRAKE PEDAL



(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.**

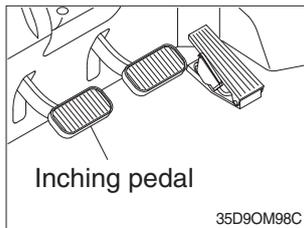
4) ACCELERATOR PEDAL



(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 truck will run at low idling.

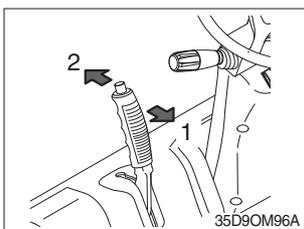
5) INCHING PEDAL



(1) The 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.**

6) PARKING BRAKE LEVER (lever type)



(1) **Position 1**

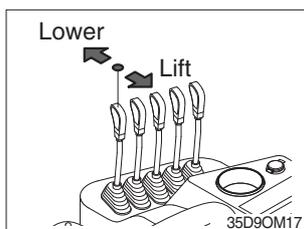
Parking brake is applied and front wheel is locked.

(2) **Position 2**

Parking brake is released.

※ **Before moving the truck be sure the parking brake is released.**

7) LIFT LEVER



(1) **Lift**

PULL the lever BACK to LIFT the load.

(2) **Lower**

PUSH the lever FORWARD to LOWER the load.

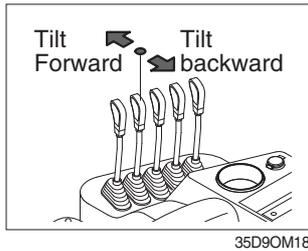
(3) **Holding**

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.

8) TILT LEVER



(1) Tilt forward

PUSH the lever FORWARD to tilt mast FORWARD.

(2) Tilt back

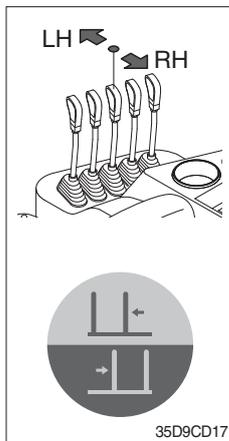
PULL the lever BACK to tilt mast BACKWARD.

(3) Holding

When the lever is released, tilting action stops.

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

9) LEVER FOR SIDE SHIFT



(1) LH movement

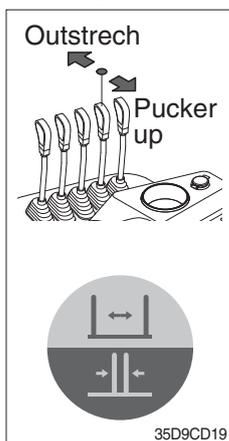
Push the lever forward to move the left hand for the side shift.

(2) RH movement

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

10) LEVER FOR SIDE SHIFT WITH FORK POSITIONER

(1) Fork positioner (synchronizer type)



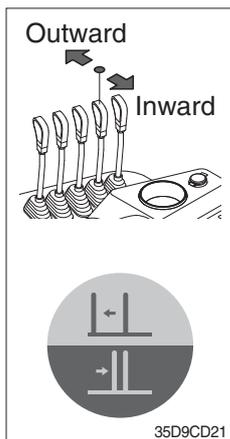
① Outstreach the forks

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

② Pucker up the forks

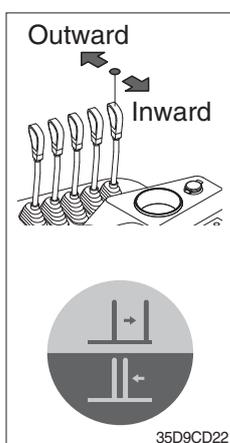
Pull the lever backward to pucker up simultaneously inward of the both forks.

(2) Fork positioner (independent type)



① LH fork movement

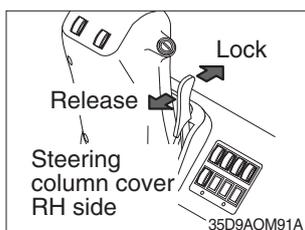
- Push the lever forward to move outward for the LH fork.
- Pull the lever backward to move inward for the LH fork.



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.

11) STEERING COLUMN ADJUST LEVER



(1) The angle of the steering column can be adjusted forward and backward to 13 degree.

- ① **Release** : Pull the lever backward.
- ② **Lock** : Release the lever.

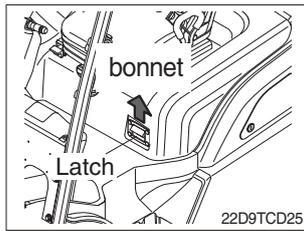
※ METHOD OF ADJUSTING STEERING COLUMN ANGLE

- (1) Pull the lock lever backward.
- (2) Move the steering column forward or backward to select the most suitable position.
- (3) Release the lever to lock the steering column in the desired position.

※ **After adjusting, try to move the steering column backward and forward to check that it is locked in the selected position.**

⚠ Always carry out the adjustment with the machine stopped. Never try to adjust the steering column when the machine is moving.

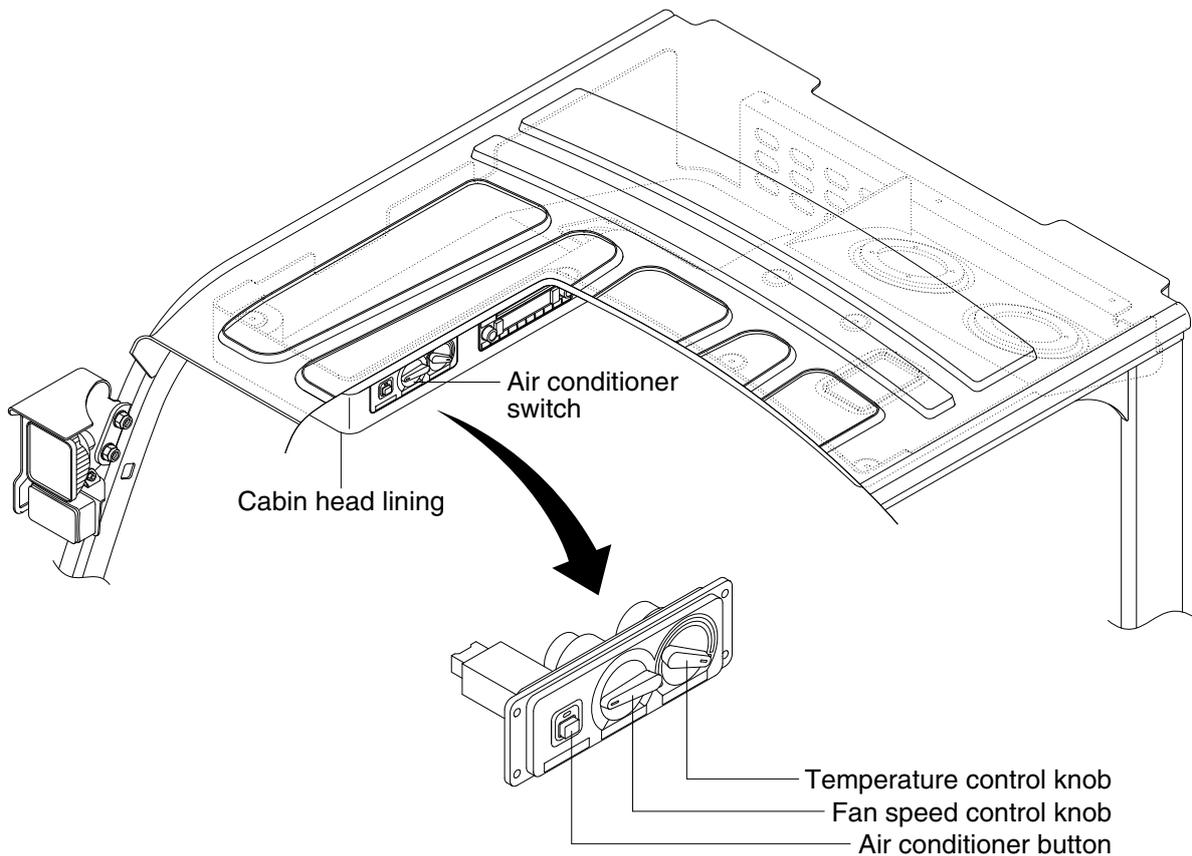
12) BONNET LATCH



- (1) Pull the latch and raise the bonnet to open it.
- (2) Inspection and maintenance can then be carried out easily.

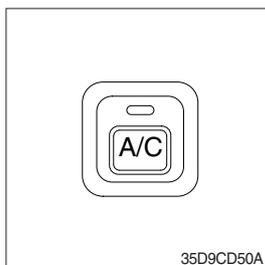
7. AIR CONDITIONER AND HEATER (OPTION)

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



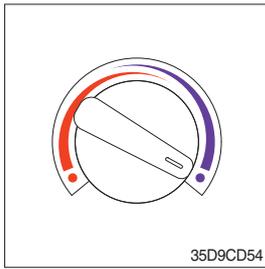
35D9CD90

1) AIR CONDITIONER BUTTON



- (1) When you push this button, air conditioner system is operated.
 - (2) Determines whether to perform a cooling function of air conditioner.
 - ① Pilot lamp ON : Air conditioner operation
 - ② Pilot lamp OFF : Fan only
- ※ The pilot lamp ON when this button is pushed.

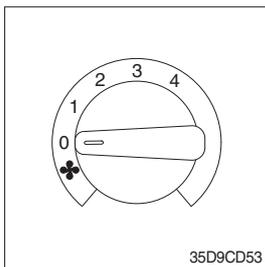
2) TEMPERATURE CONTROL KNOB



This knob regulates the temperature of air.

- ① Left side (red zone) : Heat up air temperature
- ② Right side (blue zone) : Cool down air temperature

3) FAN SPEED CONTROL KNOB

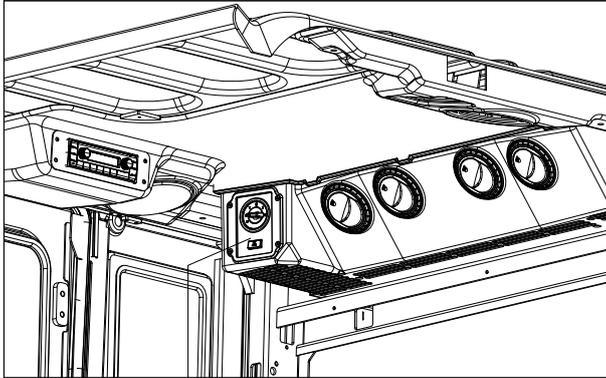


- ① It is possible to control the fan speed to four steps.

7. AIR CONDITIONER AND HEATER (OPTION)

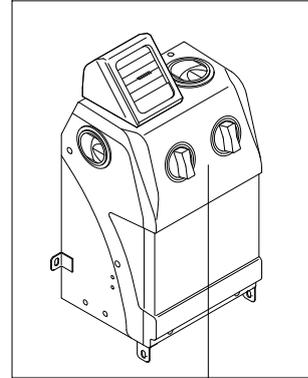
Full auto air conditioner and heater are equipped for pleasant operation against outside temperature and defrost on window glass.

Air conditioner



Air conditioner controller

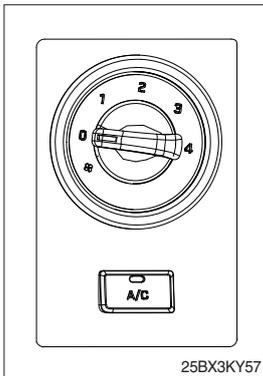
Heater



Heater controller

35D9VB3KY169

1) AIR CONDITIONER CONTROLLER



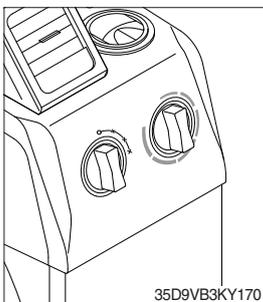
25BX3KY57

(1) The A/C button determines whether to perform a cooling function of the air conditioner. Push the button and the A/C lamp is ON or OFF.

- A/C lamp ON : Air conditioner operation
- A/C lamp OFF : Fan only

(2) The knob is possible to control fan speed to 4 steps.

2) HEATER CONTROLLER

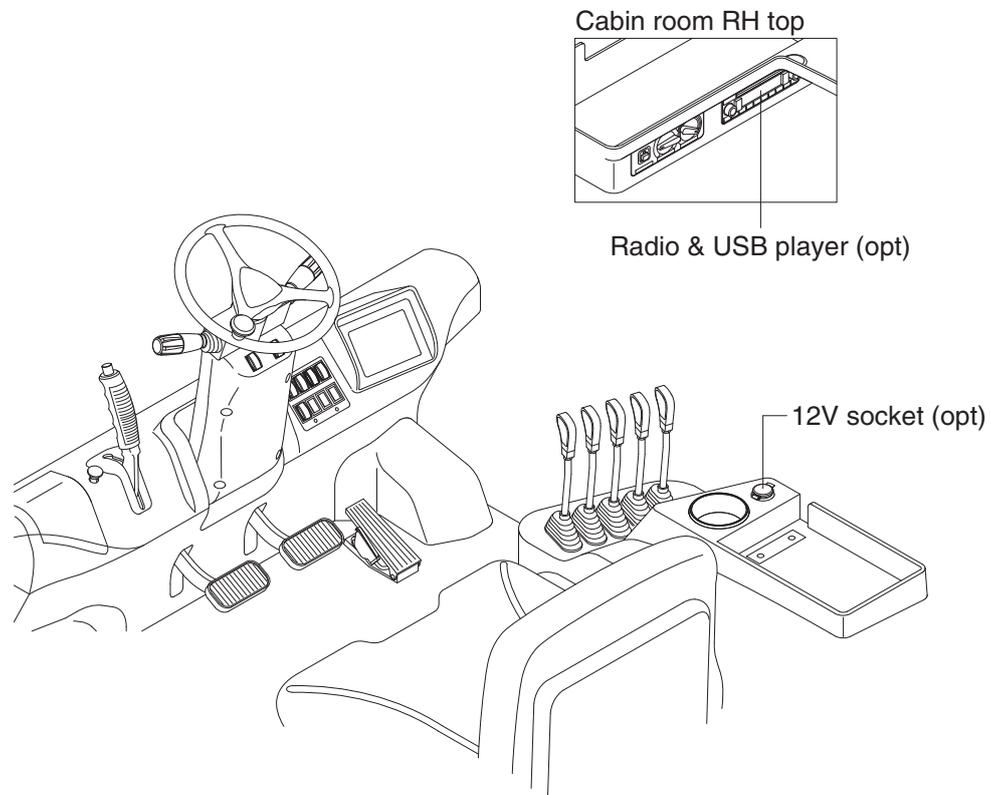


35D9VB3KY170

(1) The left knob turns the system ON/OFF and controls fan speed to 3 steps.

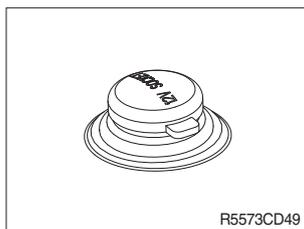
(2) The right knob controls the air temperature of the heater.

8. OTHERS



35D9FCD09

1) 12V SOCKET (OPT)



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