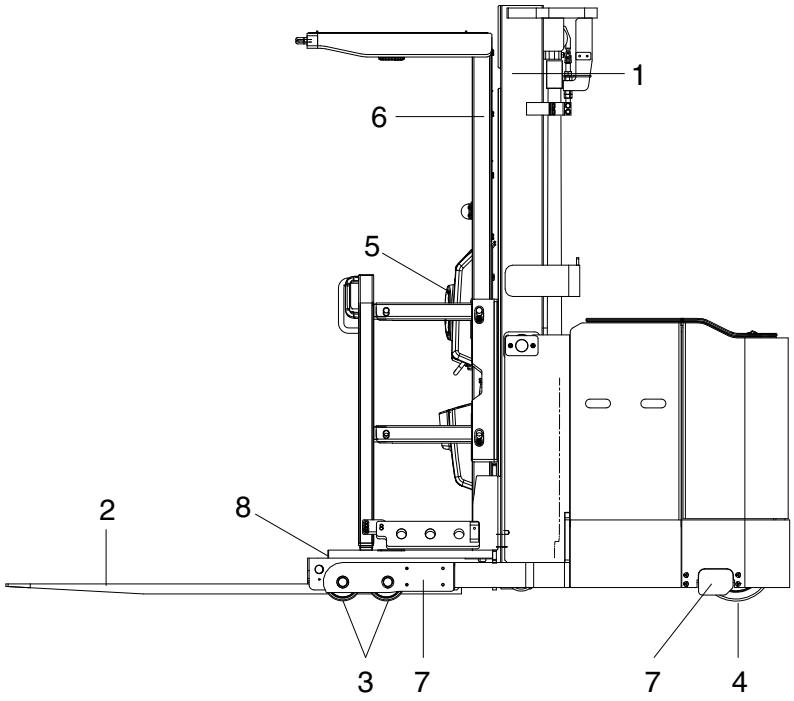
1. GENERAL LOCATIONS

1) OUTLINE

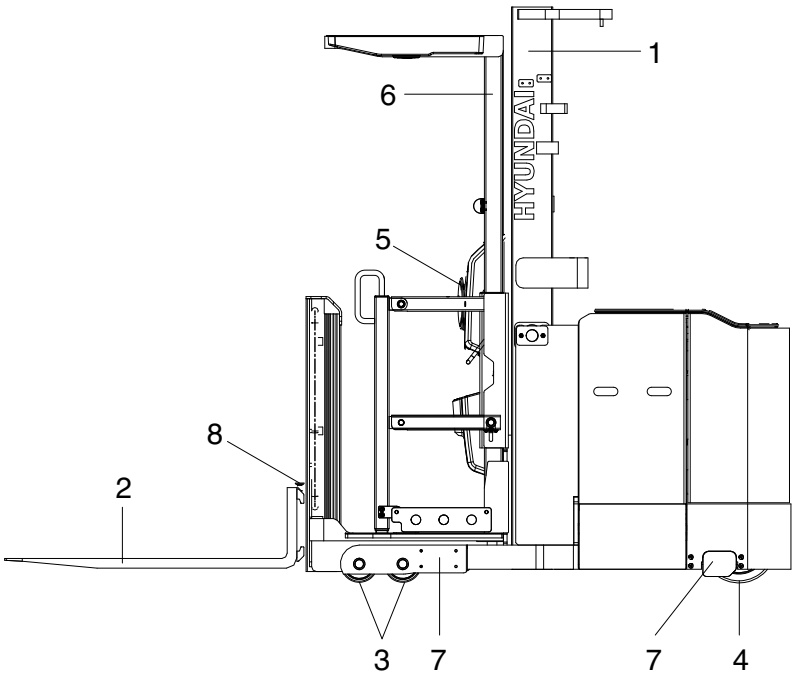
(1) PLATFORM



13BOP93KY01

1	Mast	4	Drive unit and tire	7	Guide roller
2	Fork	5	Steering wheel	8	Platform
3	Load tire	6	Overhead guard		

(2) ADDITIONAL LIFT (OPT)

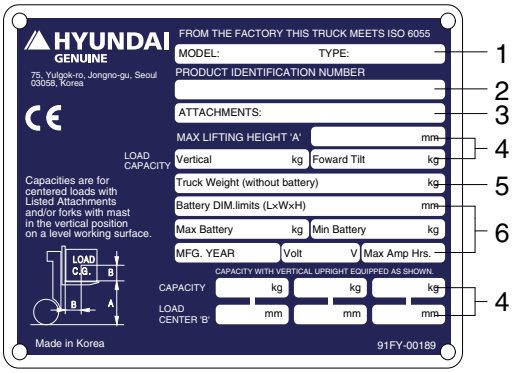


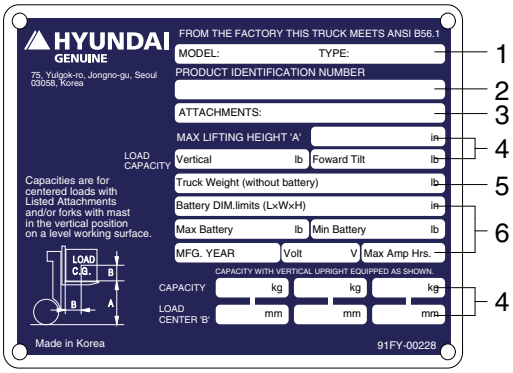
13BOP9KY02

1	Mast	4	Drive unit and tire	7	Guide roller
2	Fork	5	Steering wheel	8	Additional lift
3	Load tire	6	Overhead guard		

2. DATA PLATES

1) TRUCK DATA AND CAPACITY PLATE





(1) Truck model number or registered name

(2) 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.

(3) 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.

(4) 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.

(5) Truck weight

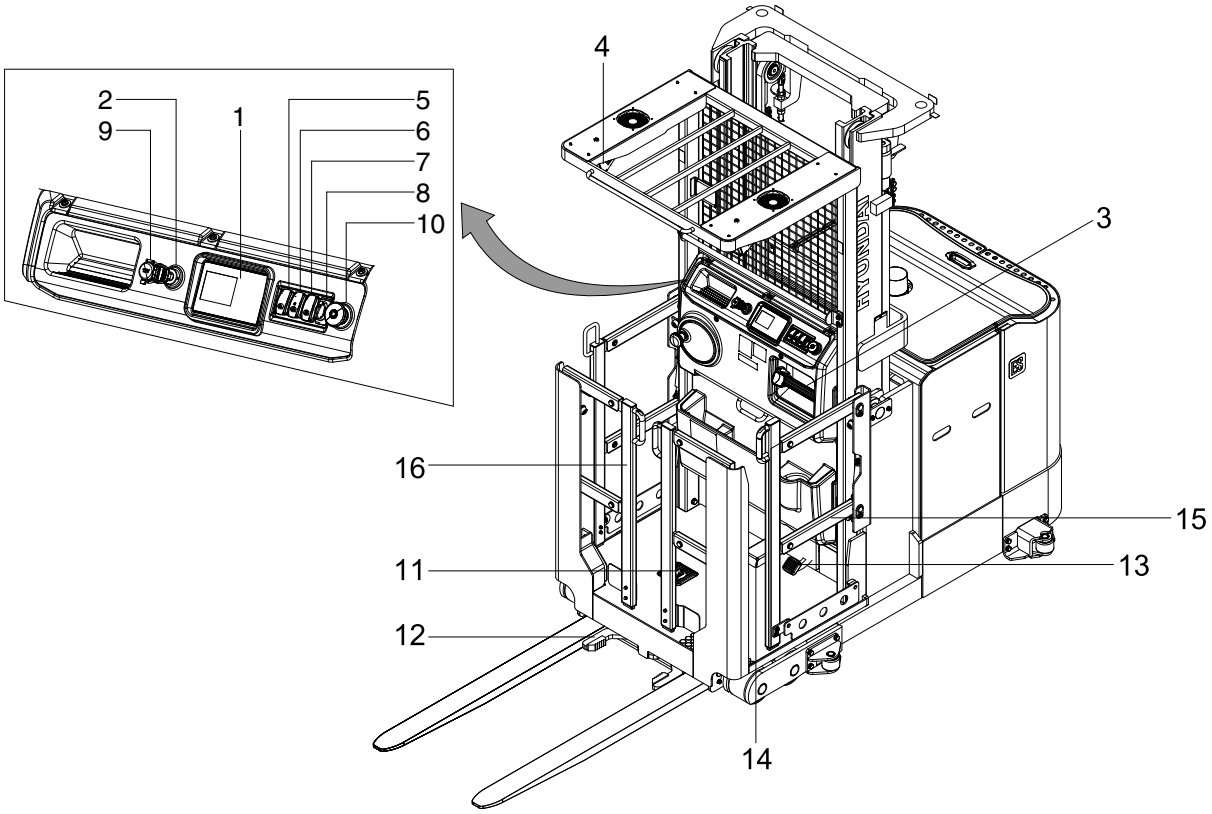
The approximate weight of the truck without a load on the forks. This weight plus the weight of the load must be considered when operating on elevators, elevated floors, etc. to be sure they are safe.

(6) Battery weight and system voltage

⚠ 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.

3. INSTRUMENTS AND CONTROLS

1) PLATFORM

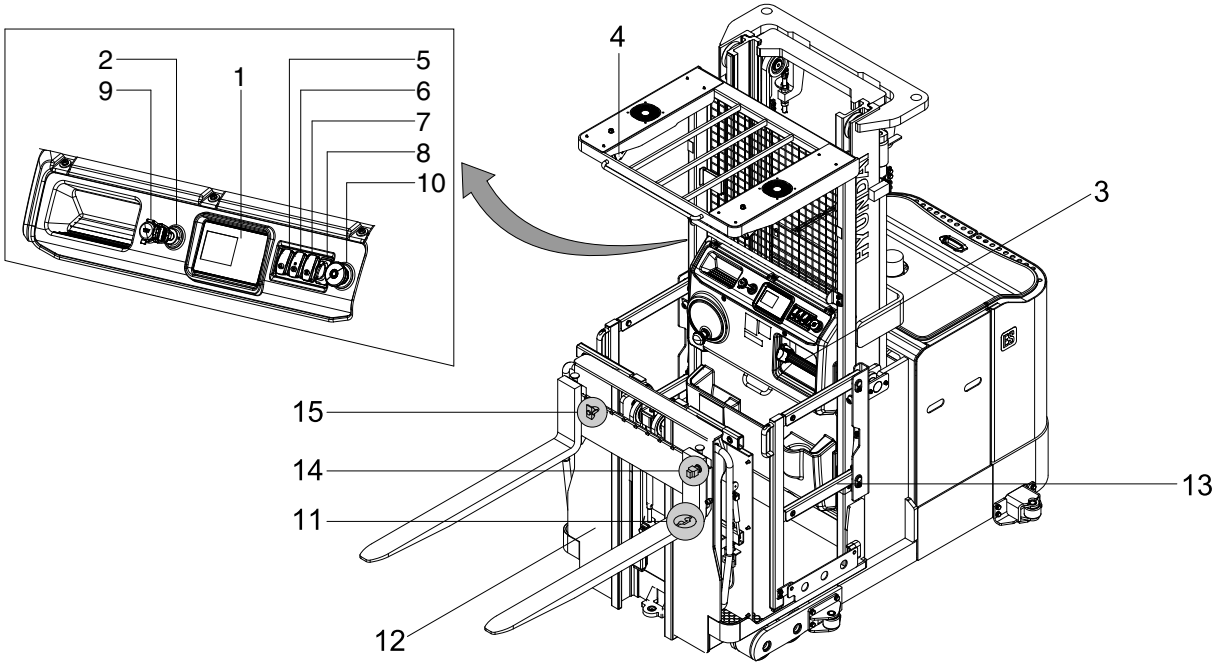


13BOP93KY03

1	Display	7	Wire guidance switch (OPT)	13	Pallet clamp pedal
2	Key switch	8	Zone select switch (OPT)	14	Pallet clamp release pedal
3	Multifunction lever	9	Socket (12 V)	15	Side gate
4	Work lamp	10	Emergency switch	16	Rear gate (EU : STD, Other : OPT)
5	Work Lamp switch	11	Dead man switch		
6	Fan switch	12	Pallet clamp		

※ The multifunction lever, steering wheel, display, lamps and all switches, (key, emergency stop, light etc) are located on the console.
Familiarize yourself with the controls and follow safe operating procedures.

2) ADDITIONAL LIFT (OPT)



13BOP93KY04A

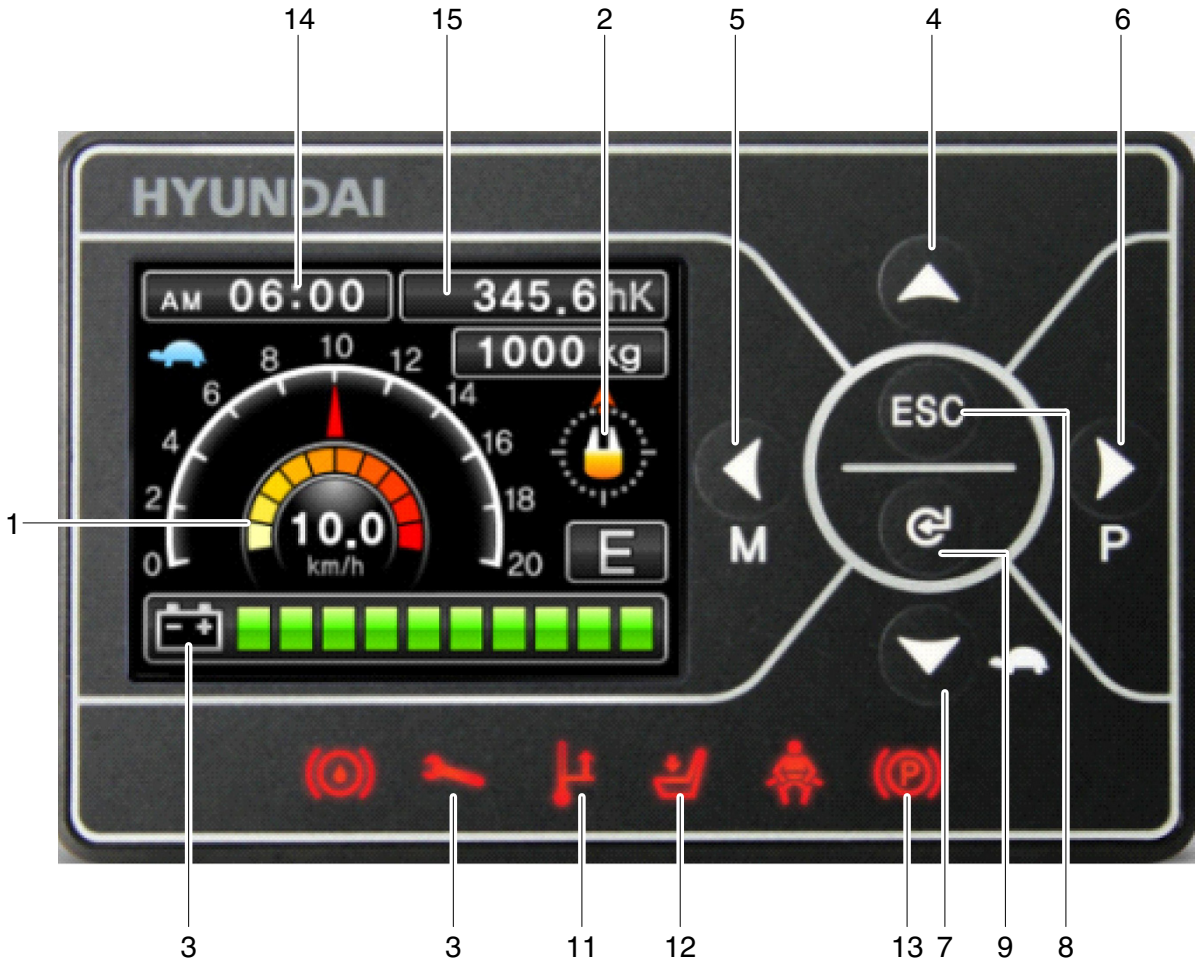
1	Display	6	Fan switch	11	Dead man switch
2	Key switch	7	Wire guidance switch (OPT)	12	Additional lift
3	Multifunction lever	8	Zone select switch (OPT)	13	Side gate
4	Work lamp	9	Socket (12 V)	14	Additional lift enable button
5	Work Lamp switch	10	Emergency switch	15	Additional lift lever

※ The multifunction lever, steering wheel, display, lamps and all switches, (key, emergency stop, light etc) are located on the console.
Familiarize yourself with the controls and follow safe operating procedures.

4. INSTRUMENT PANEL

1) STRUCTURE

The instrument panel (display) has six built-in red LED, which provide the operator with an easy information about the status of some truck devices.

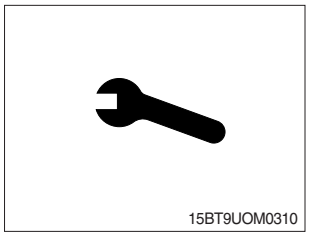


13BOP93KY05A

1	Speed (Digital)	6	Performance / Scroll right	13	Park brake
2	Steering wheel position and travle direction	7	Turtle / Scroll down	14	Time / Height select (OPT)
3	Battery discharge indicator	8	ESC / Back	15	Hour-mater / Height present (OPT)
4	Scroll up / Height indicator (OPT)	9	Enter		
5	Menu / Scroll left	10	Error warning lamp		
		11	High temp warning lamp		
		12	Dead man switch		

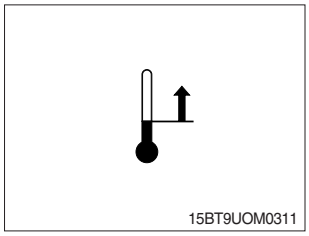
2) WARNING LAMP

(1) Error warning lamp



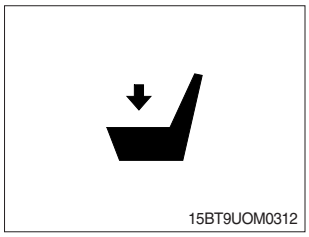
This LED lights when an electric device (controller, motor, cable, etc.) is in abnormal condition.

(2) High temp warning lamp



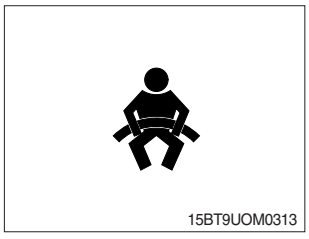
This LED lights when the controller or motor temperature is high.

(3) Dead man switch



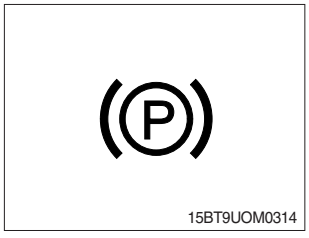
This LED light when the operator step on the dead man switch.

(4) Seat belt warning lamp



This LED blinks When operator starts the truck, LED blinks for 5 seconds, which means initial diagnosis is on going, and buttons on display will work properely just after the diagnosis is completed.

(5) Parking brake warning lamp



This LED lights when the parking brake is activated.

3) BUTTON

These buttons are used to select or change the menu and input value of the LCD function and display menu.

(1) Up button

Press to select upward move.

(2) DOWN/TURTLE button

Press to select downward move.
TURTLE MODE ON/OFF

(3) LEFT/MENU button

Press to select leftward move.
Go into the menu.

(4) RIGHT/PERFORMANCE button

Press to select rightward move.
POWER MODE H/N/E

(5) Cancel (ESC) button

Press to select cancel.
Keep pressing this button shows PASSWORD entry field.

(6) ENTER button

Press to select Enter.

4) LCD FUNCTION

13BOP93KY06

1 Current time
2 Turtle mode
3 Truck speed pointer
4 Speed level
5 Truck speed
6 Hour meter
7 Wheel position and running direction
8 Power mode
9 BDI (Battery Discharge Indicator)

(1) Current time

The number shows the current time according to the setting, which can be changed by display setting at page 3-11.

(2) Turtle mode

The turtle symbol is normally off. When this symbol appears, the turtle mode is activated regardless of the power mode of the truck to reduce the maximum speed to the set-point. This mode can be activated by pressing the button.

(3) Truck speed pointer

The speed of the truck is indicated with a pointer.

(4) Speed level

It indicates the speed level by 2 km.

(5) Truck speed

The truck speed is shown in number. The unit can be km/h or mph according to the display setting (see 3-11 page).

(6) Hour meter

The number shows the hours worked. The letter present beside the hour meter number shows which hour meter is displayed.

– hK : the Key Hour shows the truck Key ON time;
– hT : the Traction Hour shows the Gate ON (driven) time of the traction motor.
– hP : the Pump Hour shows the Gate ON (driven) time of the pump motor.

(7) Wheel position and running direction

The arrow point is up when the truck is forward running and points down when the truck is reverse running. The arrow points the direction of the steering angle.

(8) Power mode

The letter H, N, or E, shows the power mode which is being used in the controller. The mode can be scrolled by pressing the button sequentially. When a mode is selected, the related information will be sent via CAN-BUS to traction and pump controllers that will manage this data.

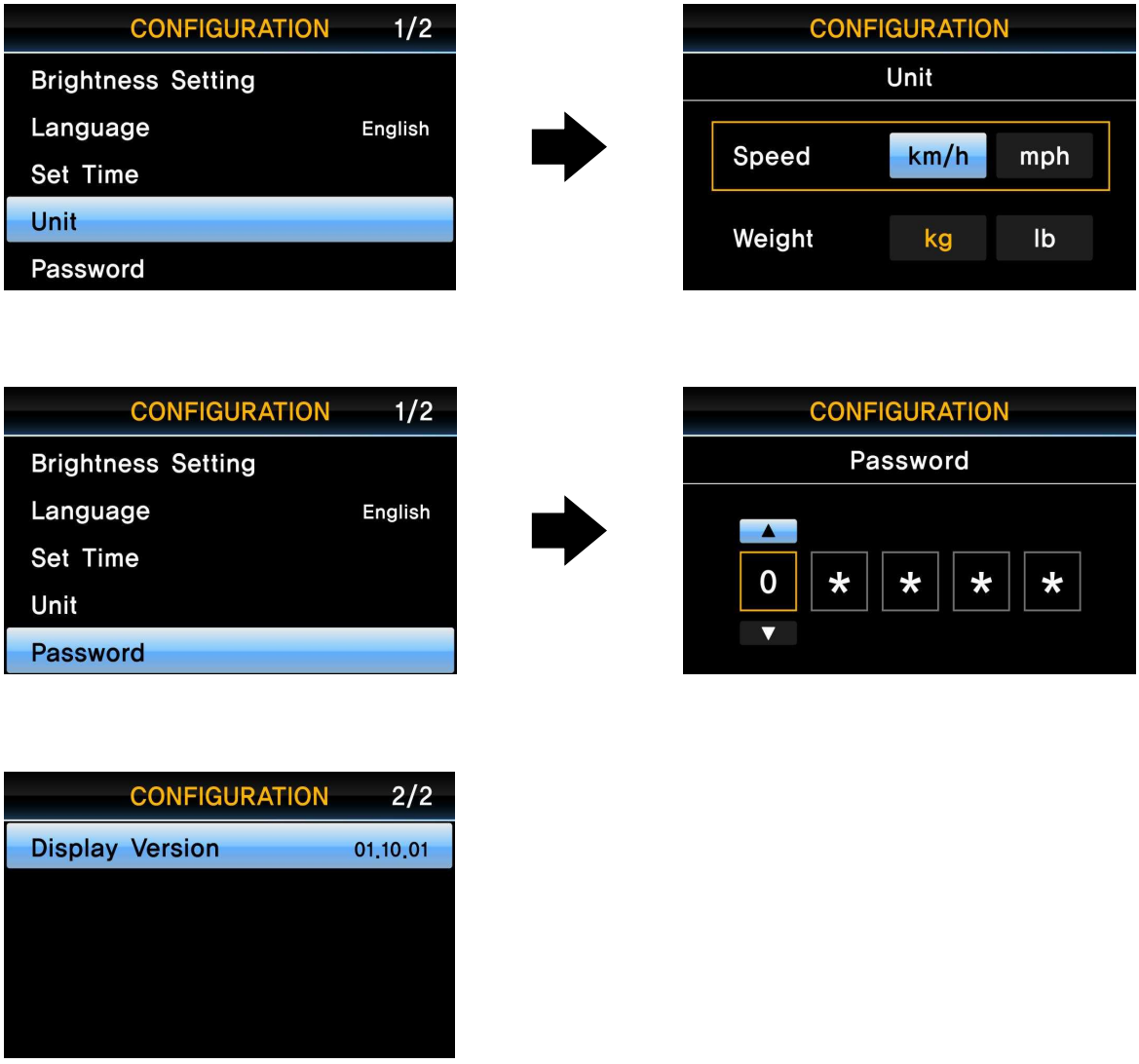
H (High) – corresponds to the highest performance
N (Normal) – corresponds to normal performance
E (Economic) – corresponds to economic performance

(9) BDI (battery's state of charge)

The battery's state of charge is shown by ten bars. Each bar represents the 10% of the battery charge. As the battery becomes discharged, the bars turn off progressively, one after another, in proportion to the value of the residual battery charge. When the residual battery charge is 20% or under, the bars displayed become red.

5) HOW TO SET THE DISPLAY MENU

13BOP93KY23



13BOP93KY23

6) OPERATING HEIGHT INDICATOR (OPT)

(1) Height indicator functions

① The real-time height of the fork is on the display.

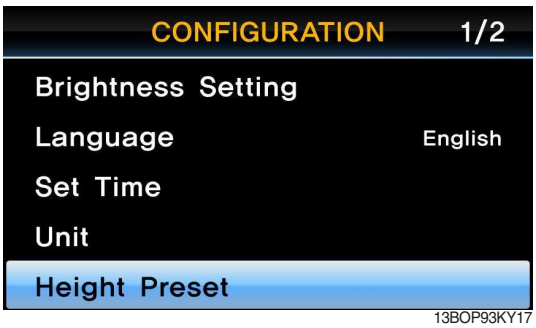
② If you pre-set the heights(Max. 50) on the display and lift or lower the fork, the fork could be automatically stopped at the height.

③ The maximum height can be changed by switching the zone selector swtich.

(2) Height preset setting

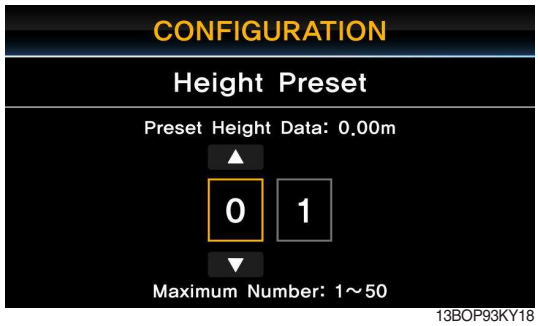
Set the height preset as bleow.

① Press the left button on the main screen to access the configuration.



13BOP93KY17

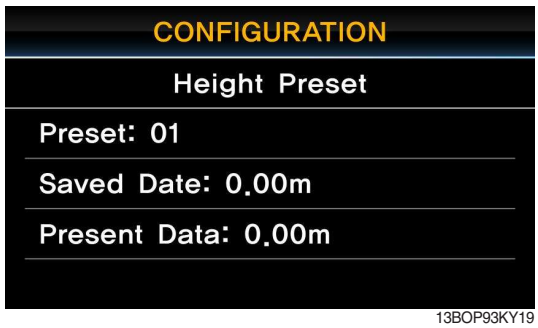
② Select the number of height preset(Max. 50) and press the enter button.



13BOP93KY18

③ Lift the fork up to the height you want to save and press the enter button to save.

※ Preset : The number of HEIGHT PRESET
Saved Data : The height saved in the number.
Present Data : Real-time height.



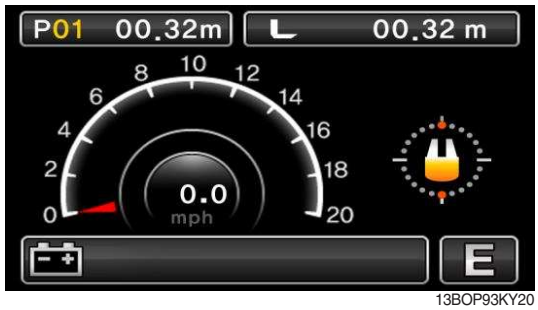
13BOP93KY19

(3) Height preset operation

The height preset is operated as below.

① Press the up button to display height indicator screen.

※ P01 : The number of preset is blinking.
Left 00.32m : Saved in the number.
Right 00.32m : Real-time height.



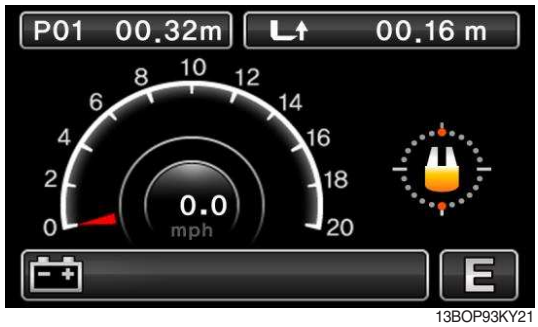
13BOP93KY20

② Press up and down button to select the number you want.

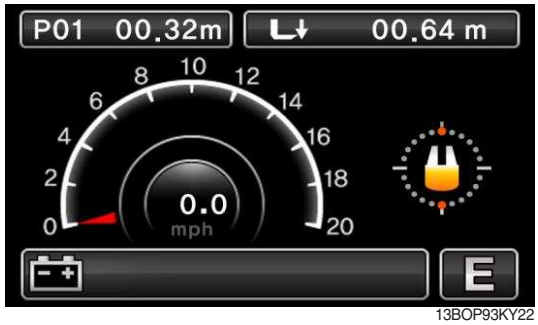
③ Press the enter button to target the height.

④ Lift or lower the fork to approach to preset height.

※ If the real-time height is 0.16m and preset height is 0.32m, the fork could be only lift.
If the real-time height approach to the height, the fork is automatically stopped and the preset height screen is exited.



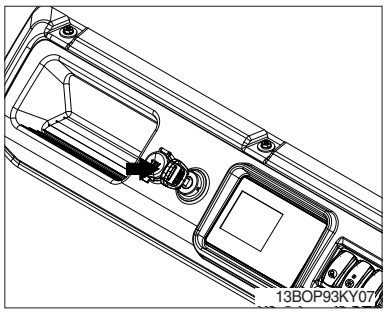
13BOP93KY21



13BOP93KY22

5. OPERATING SWITCHES, LEVERS AND PEDALS

1) KEY SWITCH



(1) Power is supplied to the control circuit through this switch, which is placed on OFF → ON clockwise.

① OFF : The key can be removed or inserted and power is turned off.

② ON : Both control circuits for hydraulics and running can be activated.

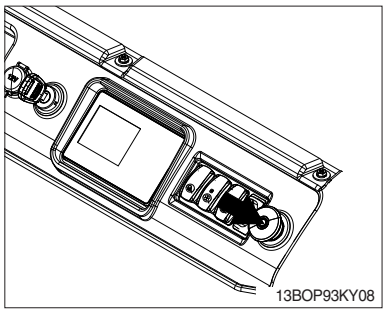
※ Automatic centering (AUTC)

AUTC turns the steered wheel straight ahead to keep the steer aligned meanwhile traveling.

When autocentering is ON, the AUTC at key-on is always performed.

The AUTC at key-on is used to initialize the encoder counting. When it is not performed, the truck travels slow speed only, until the driver moves the steering wheel and an edge is detected on the straight ahead sensor getting possible the initialization of the encoder counting.

2) EMERGENCY SWITCH



(1) The emergency switch is located on the right side of the console.

(2) When pressing the emergency switch downward, the electric circuit is broken, all electrical function switch is off and the vehicle brakes are automatically applied.

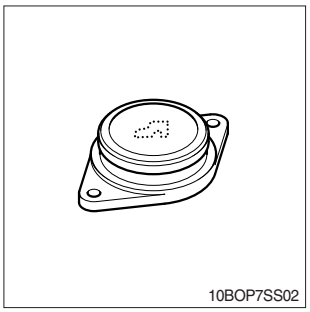
(3) If problem is detected in the EPS system, a notice appears on the operator display.

(4) During traveling the vehicle, if a problem occurs EPS system that could endanger the safety of the operator, the vehicle automatically comes to a controlled stop as well as EPS operation.

※ The emergency switch should be used in dangerous situations all the times.

※ EPS : Electric power steering.

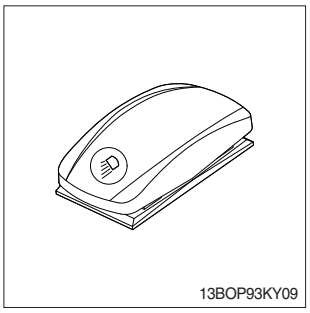
3) DEAD MAN SWITCH



(1) The dead man switch always keeps the operator's foot in place during driving the machine or hydraulic operation.

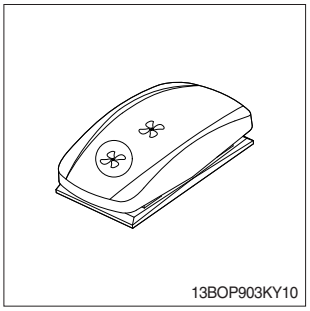
(2) If the dead man switch is not pressed, all the electrical functions are taken out of operation with exception of the steering, the display and the horn.

4) WORK LAMP SWITCH



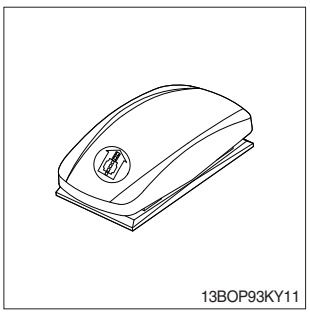
(1) This switch is used to operate work lamps.
Press this switch to turn on work lamps.

5) FAN SWITCH



(1) This switch is used for operation of the fan on the overhead guard.
In order to operate the fan, press the weathercock symbol downward.

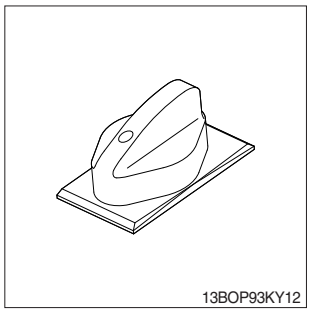
6) WIRE GUIDANCE SWITCH (OPT)



(1) This switch is used for operation of the wire guidance function.

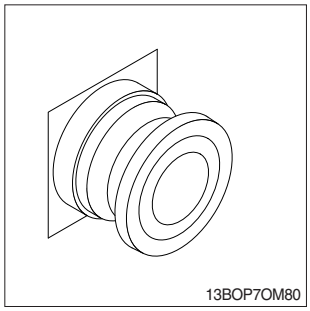
(2) To align truck to the wire
① Turn the Wire Guidance Switch (WGS) to ON.
② Approach to the wire.
※ When forward direction, approach angle should not exceed 30°. When reverse direction, approach angle should not exceed 5°.
※ Automatically drive speed down for the safety until aligning.
※ The steering is impossible manually when starting automatic steering.
③ Turn the WGS to OFF to steer manually.

7) ZONE SELECTOR SWITCH (OPT)



(1) This switch is used to change max height 1 or 2 of the fork.
- Left : Max height 1
- Right : Max height 2

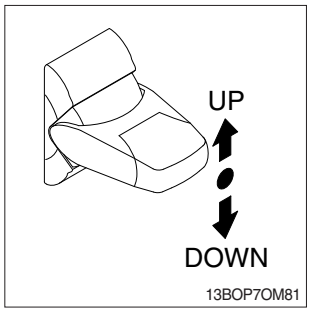
8) ADDITIONAL LIFT ENABLE SWITCH (OPT)



(1) As the auto return type switch, when pressing this switch, additional lift is enable.

(2) This switch always keeps the operator's left hand in place during opreating additional lift for safety.

9) ADDITIONAL LIFT LEVER (OPT)



(1) Pushing the lever upward the additional lift fork is moving up.

(2) Pulling the lever downward the additional lift fork is moving down.

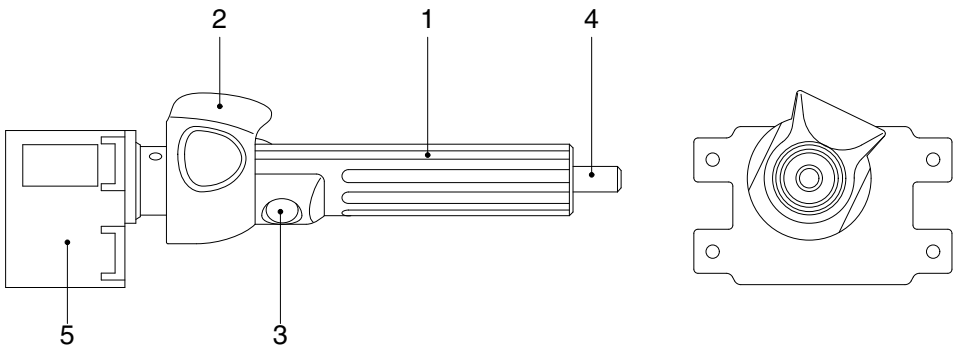
10) MULTIFUNCTION LEVER

The multifunction lever is located on the right side of the console.

The multifunction lever allows on-handed operation for the following functions :

- Driving direction and speed for forward and backward.
- Lifting and lowering for the fork along with platform.
- Horn sounding.

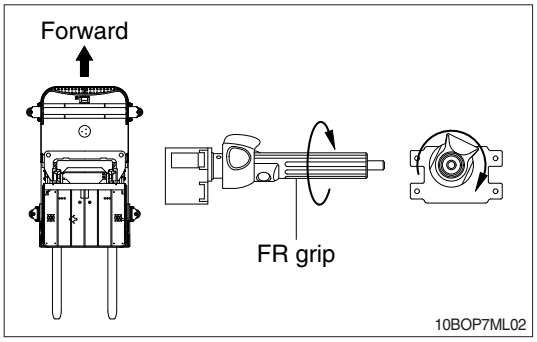
(1) Structure



10BOP7ML01

1	Fwd/Rev grip	3	Horn switch	5	Body
2	Lift/Lower grip	4	Center pin		

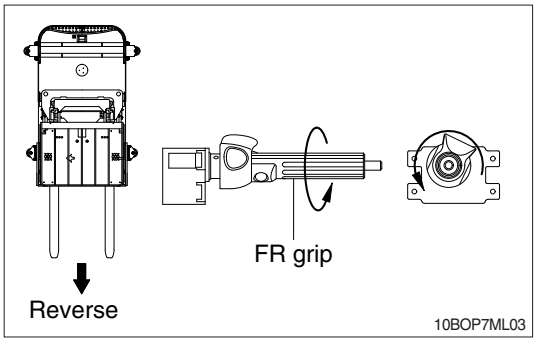
(2) Operation



① **Driving**

- **Forward driving**

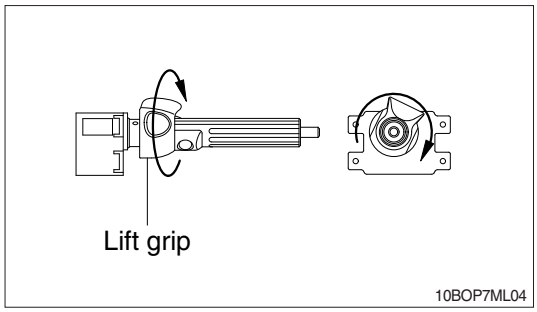
  Turn the FR grip of the multifunction lever to clockwise for forward driving.



- **Reverse driving**

  Turn the FR grip of the multifunction lever to counterclockwise for reverse driving.

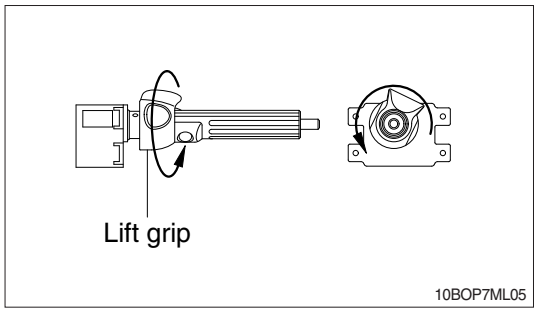
※ When driving the machine to backward, the back buzzer should be sounded.



② **Lifting and lowering**

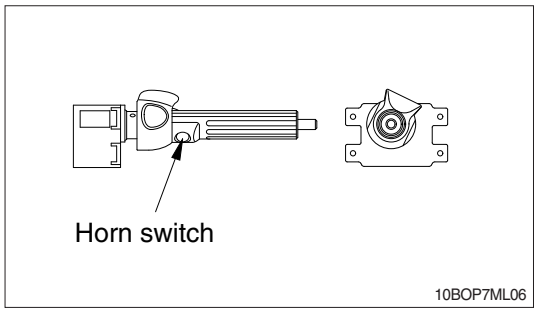
- **Lifting work**

  Turn the lift grip of the multifunction lever to clockwise for lifting the forks.



- **Lowering work**

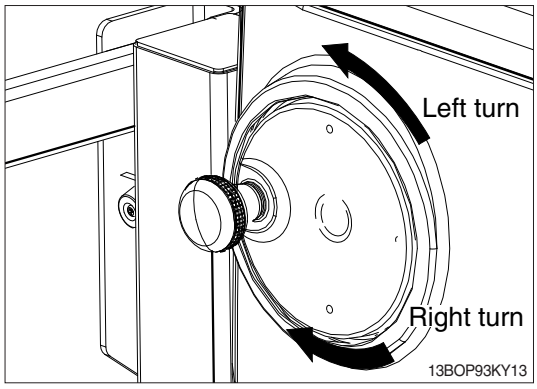
  Turn the lift grip of the multifunction lever to counterclockwise for lowering the forks.



③ **Horn sounding**

- The horn sounds when the horn switch is pressed.

11) STEERING WHEEL



(1) The steering wheel is mounted on the left side of the console.

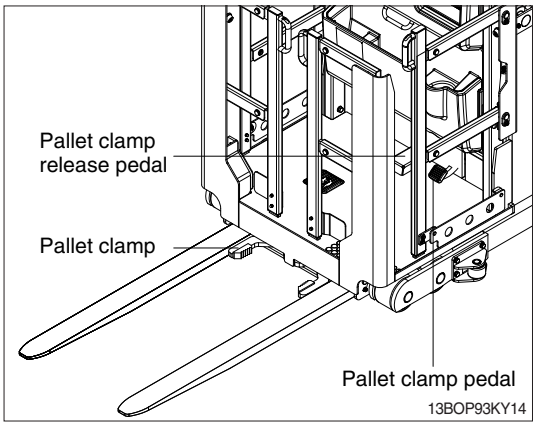
(2) The steering wheel of the vehicle is provided with the knob to allow steering with one hand.

(3) Turn the steering wheel to clockwise in order that you may turn the machine to right direction.

On the contrary, turn the steering wheel to counterclockwise in order that you may turn the machine to left direction.

⚠ **Particular care should be taken for the rapid operation of the steering wheel.**

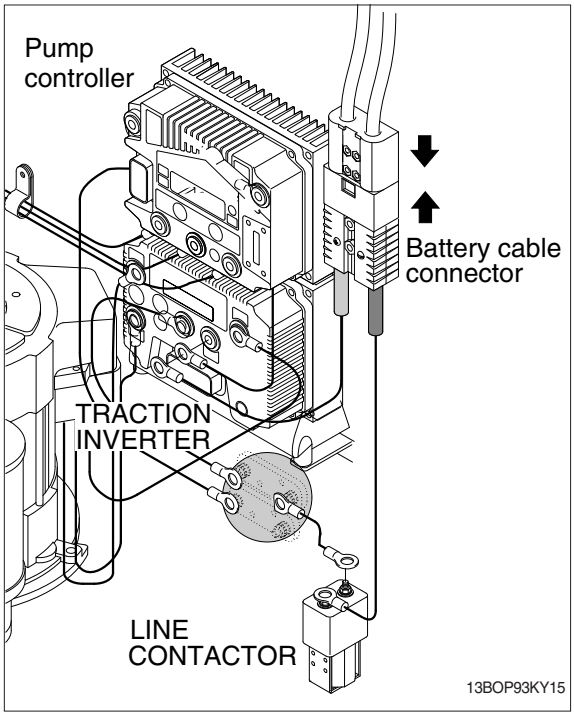
12) PALLET PEDAL



(1) The pallet pedal is mounted on the platform weld assy to hold pulling power of the ratchet cable.
Step down the pallet pedal in order to pucker up the pallet clamps.

(2) The release pedal is mounted on the platform weld assy to release pulling power of the ratchet cable.
Step down the release pedal in order to outstretch the pallet clamps.

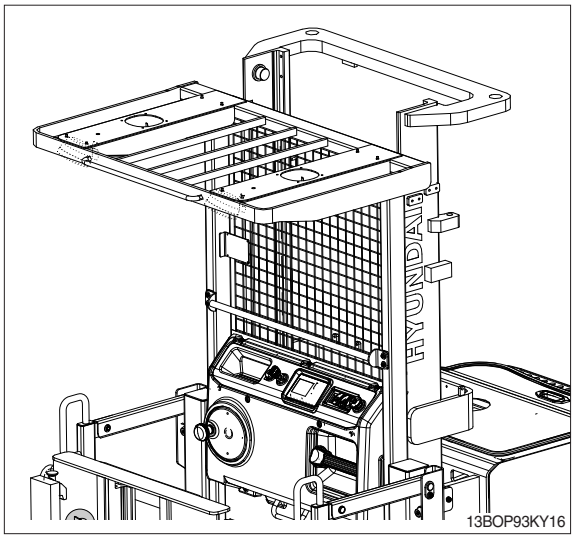
6. BATTERY CONNECTOR



Be sure to connect the connector for the battery and body.

7. SUPPORT AND SAFETY PARTS

OVERHEAD GUARD



The overhead guard is of rugged construction that serves to ensure the safety of the operator.