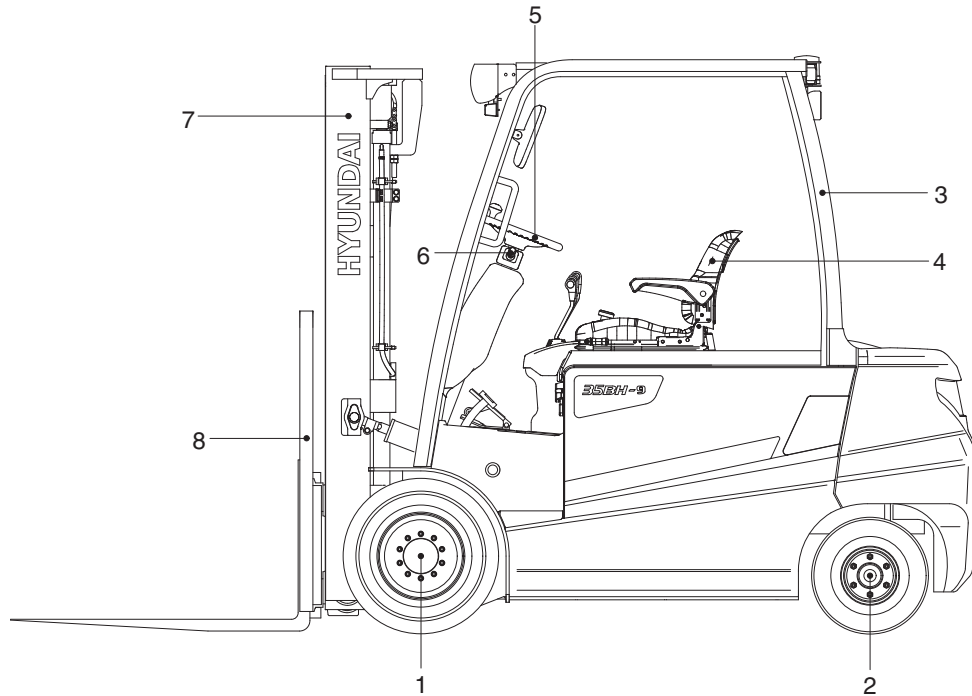


3. KNOW YOUR TRUCK

1. GENERAL LOCATIONS



22BH90M54

TRUCK TYPE : Electric Sit-Down Rider, 80 Volt.

- | | | | |
|---|---------------------------------|---|---------------------------|
| 1 | Drive unit, tires and wheels | 5 | Steering wheel |
| 2 | Steering axle, tires and wheels | 6 | Directional control lever |
| 3 | Overhead guard | 7 | Mast |
| 4 | Seat | 8 | Carriage and backrest |

2. DATA/SAFETY PLATES AND DECALS

1) TRUCK DATA AND CAPACITY PLATE

HYUNDAI GENUINE FROM THE FACTORY THIS TRUCK MEETS ISO 6055
75, Yulgok-ro, Jongno-gu, Seoul 03058, Korea

MODEL: _____ TYPE: _____
PRODUCT IDENTIFICATION NUMBER: _____

ATTACHMENTS: _____

MAX LIFTING HEIGHT 'A' _____ mm
Vertical _____ kg Forward Tilt _____ kg

Truck Weight (without battery) _____ kg

Battery DIM. limits (LxWxH) _____ mm
Max Battery _____ kg Min Battery _____ kg

MFG. YEAR _____ Volt _____ V Max Amp Hrs. _____

LOAD CAPACITY CAPACITY WITH VERTICAL UPRIGHT EQUIPPED AS SHOWN
CAPACITY _____ kg _____ kg _____ kg
LOAD CENTER 'B' _____ mm _____ mm _____ mm

Capacities are for centered loads with Listed Attachments and/or forks with mast in the vertical position on a level working surface.

LOAD C.G. B A
B A

Made in Korea 91FY-00189

HYUNDAI GENUINE FROM THE FACTORY THIS TRUCK MEETS ANSI B56.1
75, Yulgok-ro, Jongno-gu, Seoul 03058, Korea

MODEL: _____ TYPE: _____
PRODUCT IDENTIFICATION NUMBER: _____

ATTACHMENTS: _____

MAX LIFTING HEIGHT 'A' _____ in
Vertical _____ lb Forward Tilt _____ lb

Truck Weight (without battery) _____ lb

Battery DIM. limits (LxWxH) _____ in
Max Battery _____ lb Min Battery _____ lb

MFG. YEAR _____ Volt _____ V Max Amp Hrs. _____

LOAD CAPACITY CAPACITY WITH VERTICAL UPRIGHT EQUIPPED AS SHOWN
CAPACITY _____ kg _____ kg _____ kg
LOAD CENTER 'B' _____ mm _____ mm _____ mm

Capacities are for centered loads with Listed Attachments and/or forks with mast in the vertical position on a level working surface.

LOAD C.G. B A
B A

Made in Korea 91FY-00228

(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.

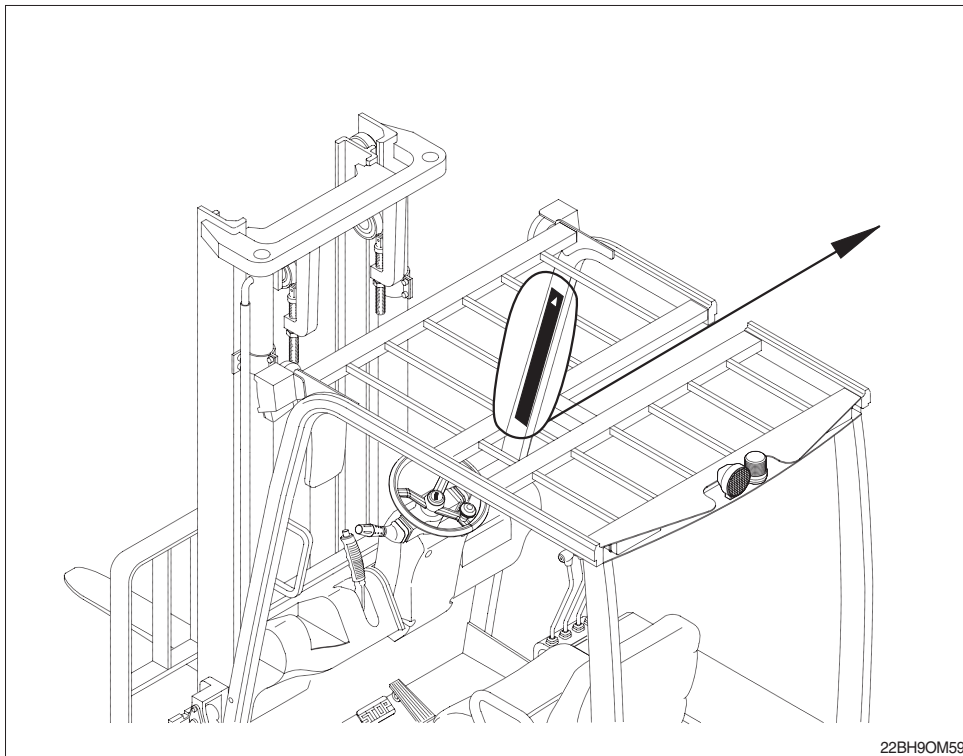
(5) Truck weight

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.

2) OPERATOR SAFETY WARNING DECAL



⚠ 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 your parts manual for the location of all decals.

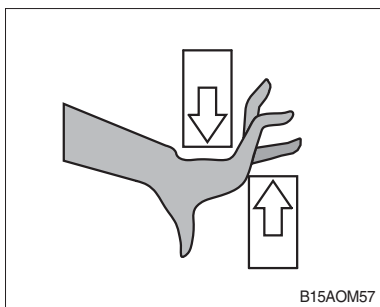
⚠ Operator/Tip-over warning decal

This decal is located on the front right hand leg of the driver's 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.

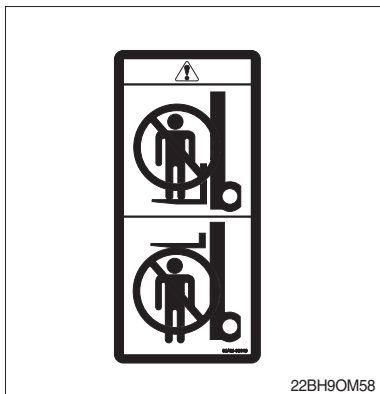


25L7AOM09



⚠ Mast warning decal

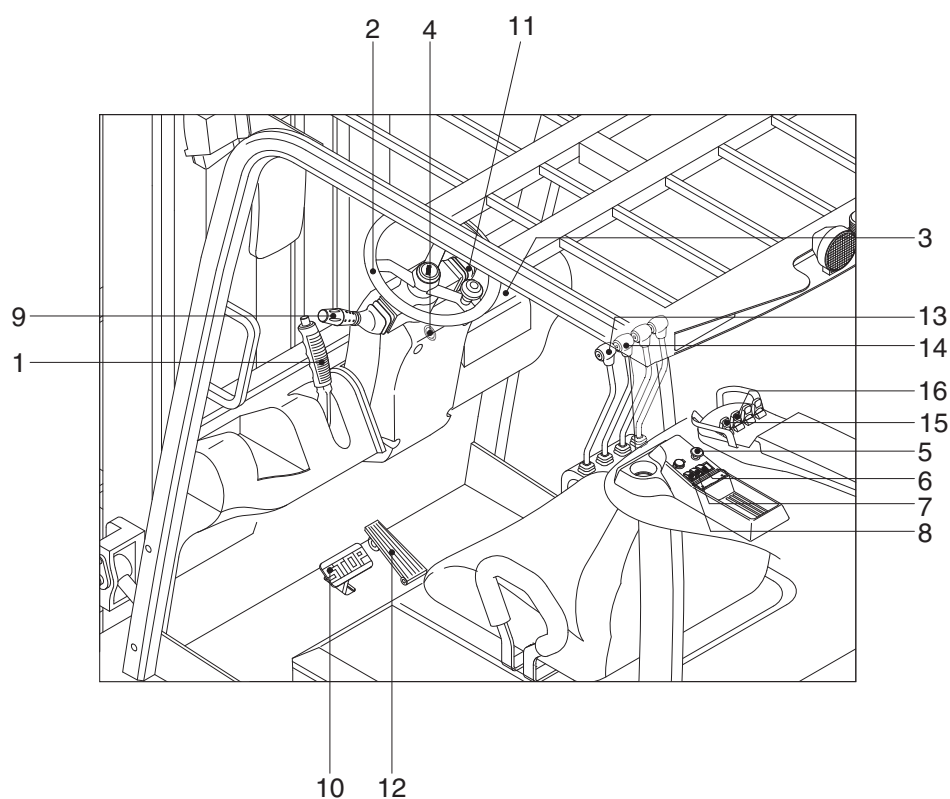
This safety decal is placed on the mast to warn of the danger of injury from movement between rails, chains, sheaves, fork carriage, and other parts of the mast assembly. Do not climb on or reach into the mast. Personal injury will result if any part of your body is put between moving parts of the mast.



⚠ Keep away from forks decal

This safety decal is placed on the mast to warn of the danger of injury from forks when they are in the raised position. Do not ride on or stand under forks or attachments. The forks can fall and cause injury or death. Always make sure that the forks are in the fully lowered position when they are not handling a load.

3. INSTRUMENTS AND CONTROLS



22BH9OM62A

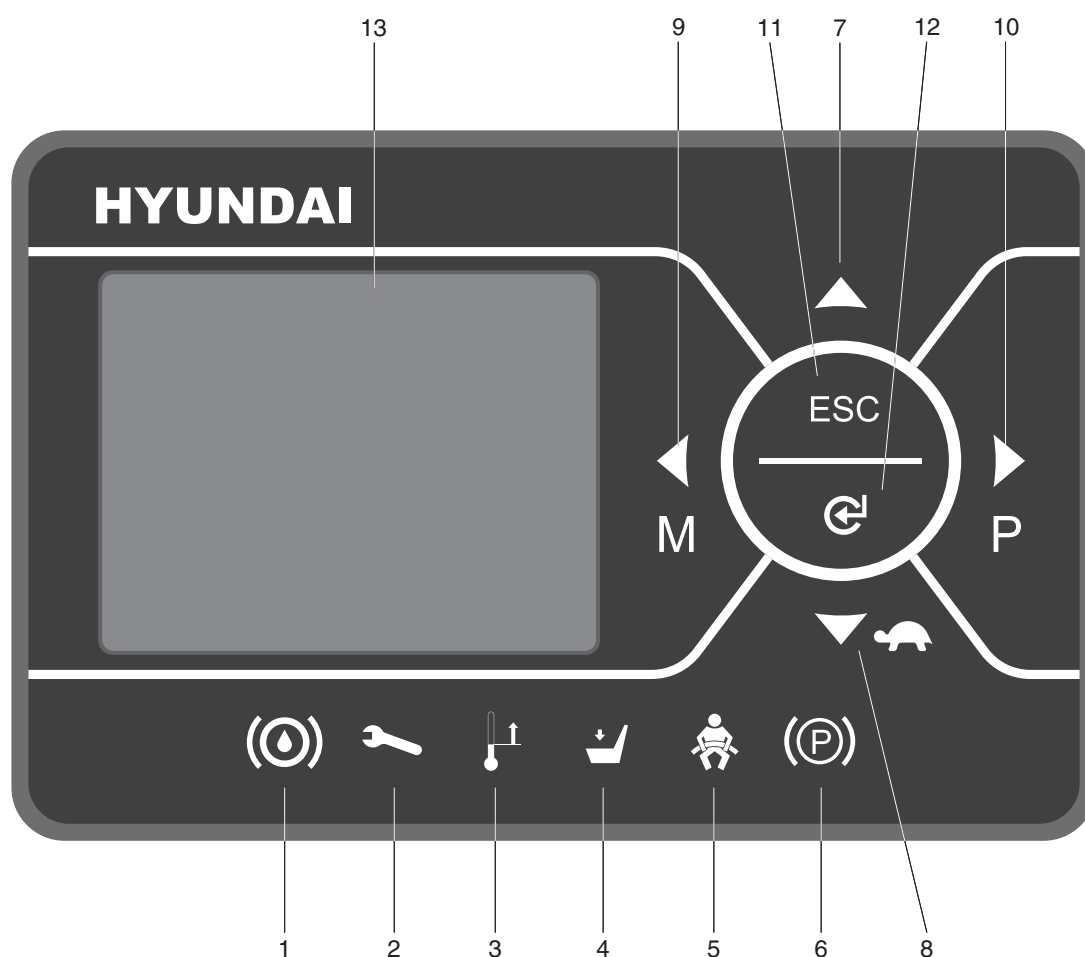
- | | | | |
|---|---------------------|----|---------------------------|
| 1 | Parking brake lever | 9 | Directional control lever |
| 2 | Steering wheel | 10 | Brake pedal |
| 3 | Instruments panel | 11 | Turn signal lever pedal |
| 4 | Key switch | 12 | Accelerator |
| 5 | Emergency switch | 13 | Lift lever |
| 6 | Beacon switch | 14 | Tilt lever |
| 7 | Work lamp switch | 15 | Lift fingertip (option) |
| 8 | Head lamp switch | 16 | Tilt fingertip (option) |

※ 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.



22BH90M65

- | | |
|------------------------------|-----------------------------|
| 1 Oil level warning lamp | 8 Down/turtle button |
| 2 Wrench warning lamp | 9 Left/menu button |
| 3 Thermometer warning lamp | 10 Right/performance button |
| 4 Seat warning lamp | 11 ESC button |
| 5 Seat belt warning lamp | 12 Enter button |
| 6 Parking brake warning lamp | 13 LCD function |
| 7 Up button | |

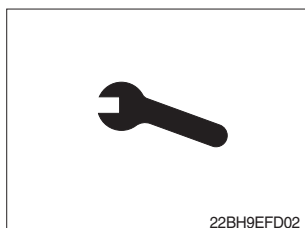
2) WARNING LAMP

(1) Brake oil level warning lamp



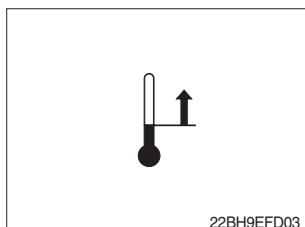
This LED lights when measured level of brake oil stored in reservoir tank is below the minimum acceptable mark.

(2) Wrench warning lamp



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

(3) Thermometer warning lamp



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

(4) Seat warning lamp



This LED lights when the operator is not on the seat.

(5) Seat belt warning lamp



(1) This LED blinks in following 2 cases.

- ① When operator starts the truck, LED blinks for 5 seconds, which means initial diagnosis is on going, and buttons on display will work properly just after the diagnosis is completed.
- ② LED blinks when the seat belt is not correctly fastened.

(6) Parking brake warning lamp

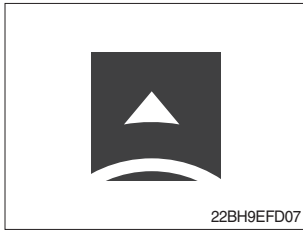


(1) This LED lights when the parking brake is activated.

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



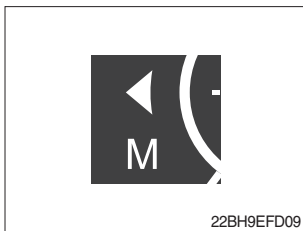
Press to select upward move.

(2) DOWN/TURTLE button



Press to select downward move.
TURTLE MODE ON/OFF

(3) LEFT/MENU button



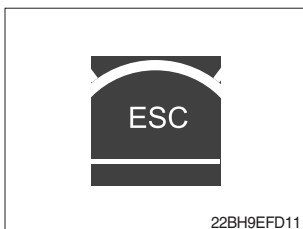
Press to select leftward move.
Go into the menu.

(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




22BH9EFD13

- | | | | |
|---|---------------------|----|--------------------------------------|
| 1 | Current time | 6 | Hour meter |
| 2 | Turtle mode | 7 | Wheel position and running direction |
| 3 | Truck speed pointer | 8 | Power mode |
| 4 | Speed level | 9 | BDI (Battery Discharge Indicator) |
| 5 | Truck speed | 10 | Load weight (option) |

(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)

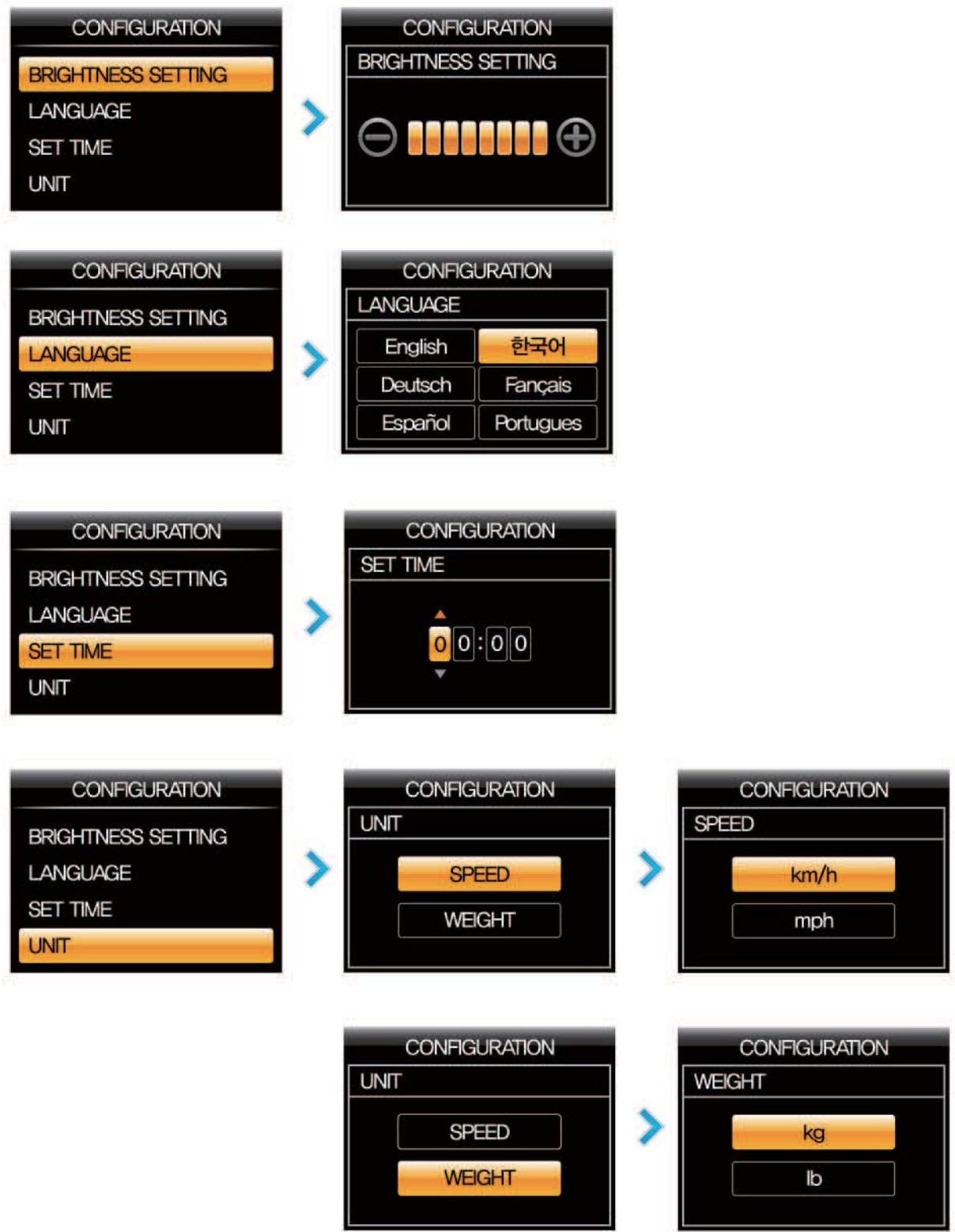
The battery's state of charge is shown by ten bars. Each bar represents the 10% of the battery charge. As the battery becomes discharged, the bars turn off progressively, one after another, in proportion to the value of the residual battery charge. When the residual battery charge is 20% or under, the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

(10) Load weight (option)

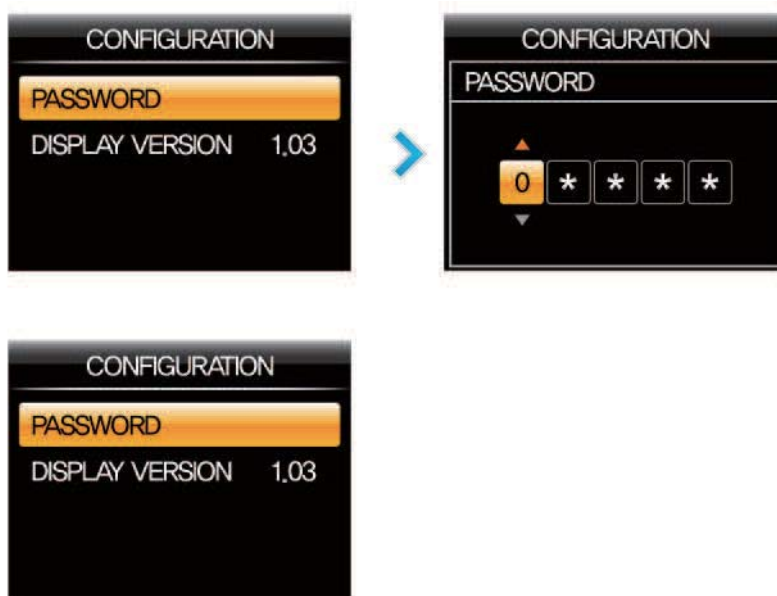
The indicator shows the weight the machine carrying at load.

- Indicator range : 0~6375 kg

5) HOW TO SET THE DISPLAY MENU



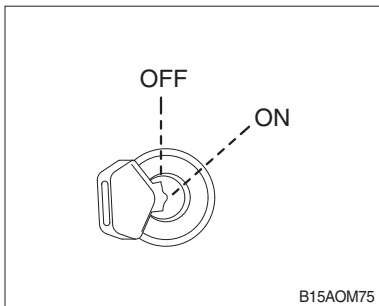
22BH9EFD14



22BH9EFD15

5. OPERATING SWITCHES AND LEVERS

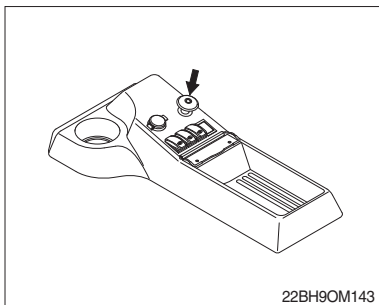
1) KEY SWITCH



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

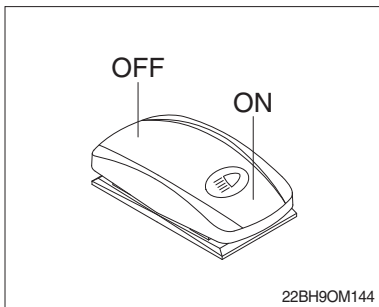
- ① OFF : The key can be removed or inserted and power is turned off.
- ② ON : Both control circuits for hydraulics and running can be activated.

2) EMERGENCY SWITCH



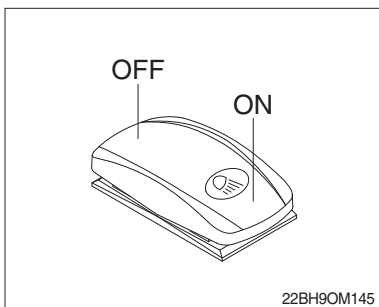
(1) When pressing the emergency switch downward the electric circuit is broken, all electrical function switch is off.

3) HEAD LAMP SWITCH



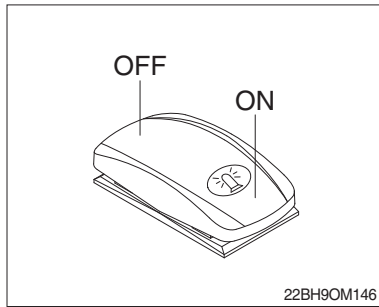
(1) This switch is used to operate head lamps.
Press this switch to turn on head lamps.

4) WORK LAMP SWITCH



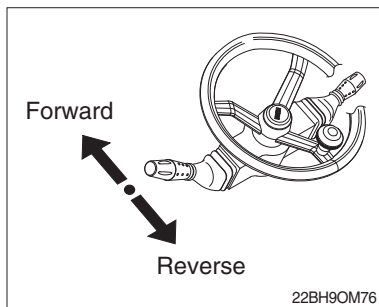
(1) This switch is used to operate work lamps.
Press this switch to turn on work lamps.

5) BEACON SWITCH



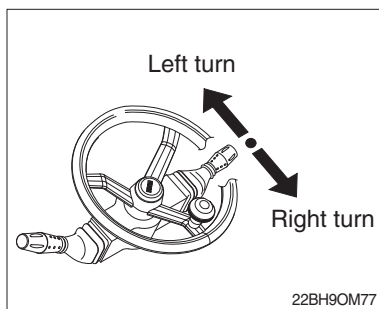
- (1) This switch turns ON the rotary light on the cab.

6) DIRECTIONAL CONTROL LEVER



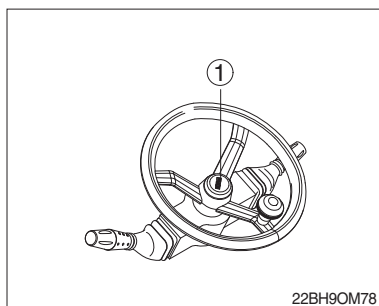
- (1) This lever serves to make forward/backward directional changes. For the forward directions, place the lever on the FORWARD position.
- (2) In the neutral, the running control circuits is turned off.
- (3) For the backward direction, place the lever on the REVERSE position.
- (4) The electrical brake will be applied by shifting the lever to the opposite position of running direction.

7) FLASHER SWITCH



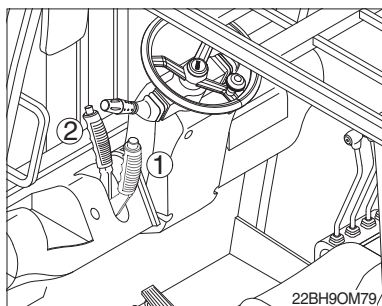
- (1) When making a left or right turn, use this switch to flash the flash lamp to indicate which direction the vehicle is turning to.
- (2) For a right turn, place the switch on the BACKWARD position.
- (3) For a left turn, place the switch on the FORWARD position.

8) HORN BUTTON



- (1) When the button (①) is pressed, the horn will sound.
- ① Steering wheel center

9) PARKING BRAKE LEVER



(1) Position ①

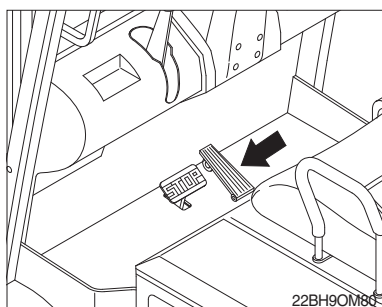
Parking brake is applied and front wheel is locked.

(2) Position ②

Parking brake is released .

※ Before the truck start, confirm the parking brake is in released position.

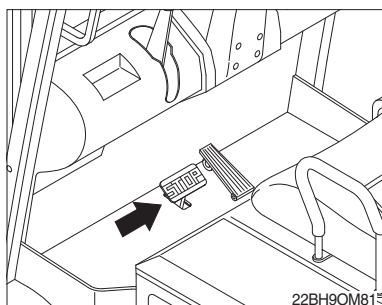
10) ACCELERATOR PEDAL



(1) This pedal is used to vary running speed, which depends upon how far the pedal is depressed.

(2) In running, the electrical brake will be smoothly applied by shifting the direction lever to the position opposite to the direction of vehicle advanced, and if the pedal is further depressed, the vehicle will run to the opposite direction after stopping once.

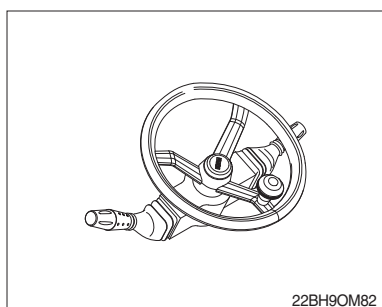
11) BRAKE PEDAL



(1) When this pedal is depressed, the vehicle is braked, while the braking lamps attached on the rear light.

▲ Special care should be required for the operation of the brake at loading.

12) STEERING WHEEL



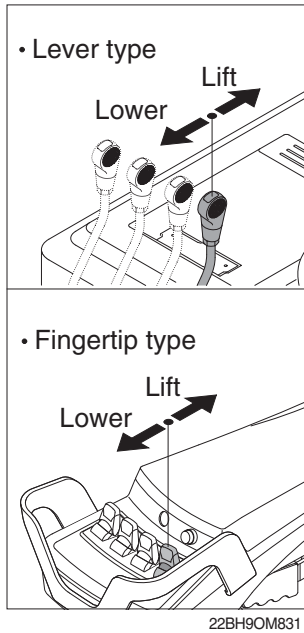
(1) The steering wheel of the vehicle is provided with the knob to allow steering with one hand.

(2) Perform the loading operation with the right hand and operate the steering wheel with the left hand.

(3) Adjustable steering column enables selection of the best driving position.

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

13) LIFT LEVER / LIFT FINGERTIP (Option)



(1) LIFT

PULL the lever (fingertip) BACK to LIFT the load.

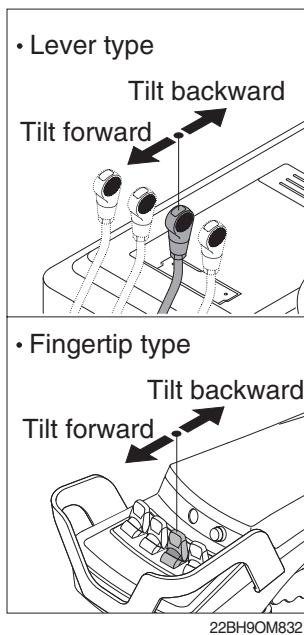
(2) LOWER

PUSH the lever (fingertip) FORWARD to LOWER the load.

(3) HOLDING

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

14) TILT LEVER / TILT FINGERTIP (Option)



(1) TILT FORWARD

PUSH the lever (fingertip) FORWARD to tilt mast FORWARD.

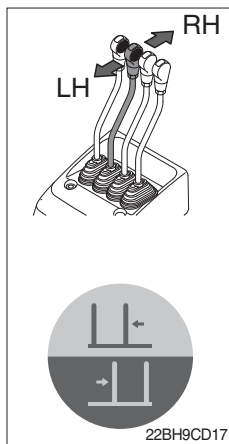
(2) TILT BACK

PULL the lever (fingertip) BACK to tilt mast BACKWARD.

(3) HOLDING

When the lever (fingertip) is released, tilting action stops.

15) LEVER FOR SIDE SHIFT



(1) LH MOVEMENT

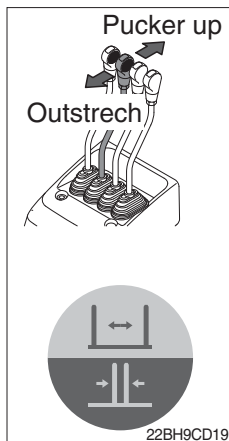
Push the lever forward to move the left hand for the side shift.

(2) RH MOVEMENT

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

16) LEVER FOR FORK POSITIONER ONLY

(1) Fork positioner (synchronizer type)



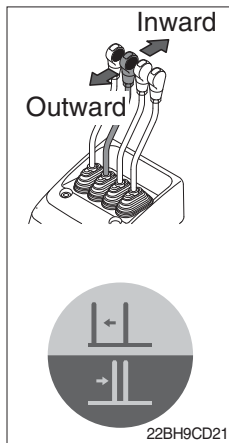
① OUTSTRECH THE FORKS

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

② PUCKER UP THE FORKS

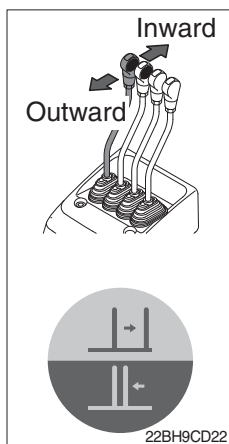
Pull the lever backward to pucker up simultaneously inward of the both forks.

(2) Fork positioner (independent type)



① LH FORK MOVEMENT

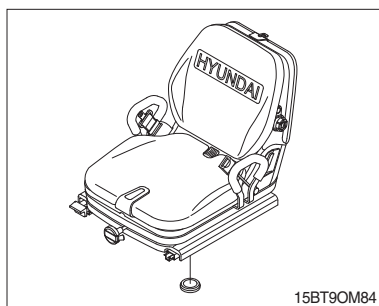
- Push the lever forward to move outward for the LH fork.
- Pull the lever backward to move inward for the LH fork.



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.

17) SEAT SWITCH



- (1) This switch is closed automatically when an operator sits down on the seat.

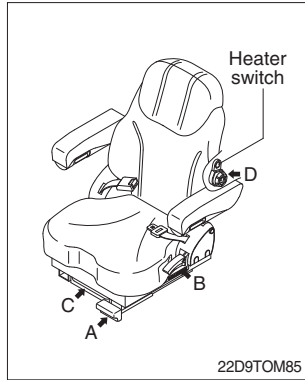
⚠ Before starting the truck seat switch must be closed, otherwise the truck cannot be started.

6. SEAT ADJUSTMENT

1) SEAT ADJUSTMENT

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

Grammer seat



(1) Forward/Backward adjustment (A)

- ① Pull lever A to adjust seat forward or back ward.
- ② The seat can be moved forward 120 mm and backward 90 mm (stroke : 210 mm).

(2) Reclining adjustment (B)

Pull lever B to adjustment seat back rest.

(3) Weight adjustment (C)

Adjustment range : 45~170 kg

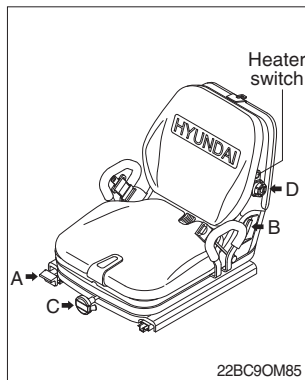
(4) Lumbar adjustment (D)

Turn line knob D to adjust lumbar support up and down.

(5) Heated seat switch (option)

Press this switch in order to heat the seat.

KAB seat



(1) Forward/Backward adjustment (A)

- ① Pull lever A to adjust seat forward or back ward.
- ② The seat can be moved forward and backward 80 mm (stroke : 160 mm).

(2) Reclining adjustment (B)

Pull lever B to adjustment seat back rest.

(3) Weight adjustment (C)

Adjustment range : 50~140 kg

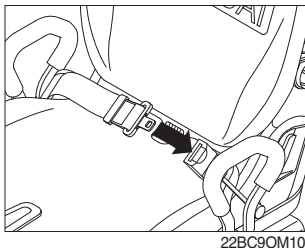
(4) Lumbar adjustment (D)

Turn line knob D to adjust lumbar support up and down.

(5) Heated seat switch (option)

Press this switch in order to heat the seat.

2) BUCKLING UP



- (1) Buckling up. Be sure that you put on the seat belt. Connect and adjust the seat belt strap to a snug, comfortable position.

▲ Always wear your seat belt when operating a lift truck.
Failure to wear seat belt will result in injury or death in an event of an accident.

▲ Always check the condition of the seat belt and mounting hardware before operating the machine.

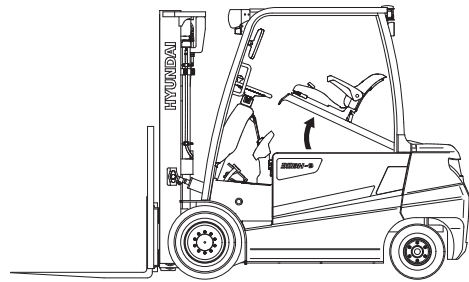
▲ Replace the seat belt at least once every three years, regardless of appearance.

7. BATTERY COMPARTMENT ACCESS

The combination seat deck/battery compartment cover pivots mast to provide access to the battery compartment.

- ※ **You must tilt the steering column & lever forward before raising the cover.**

The cover is closed by a spring latch located at the front edge. Pull the latch to release the cover. A gas spring helps you pivot the cover upward and hold it in the raised position.



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