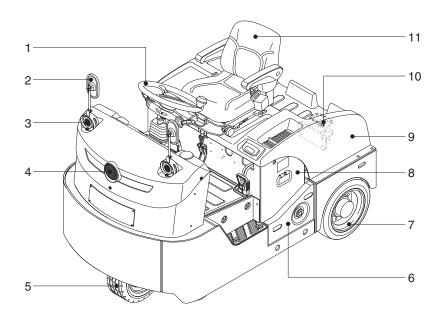
# 2. KNOW YOUR TOW TRACTOR

# 1. GENERAL LOCATIONS



15P9GEN01

- 1 Steering wheel
- 2 Rear view mirror
- 3 Flasher lamp
- 4 Head lamp

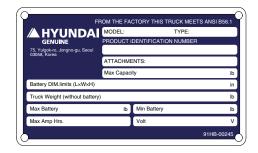
- 5 Front wheel
- 6 Battery support
- 7 Rear wheel
- 8 Battery

- 9 Battery cover
- 10 Hook
- 11 Seat

# 2. DATA/SAFETY PLATES AND DECALS

#### 1) TRACTOR DATA AND CAPACITY PLATE





#### 2) SAFETY

- Before attempting to operate this battery tractor, carefully read and understand the operating procedures.
- (2) Do not carry or draw the load exceeded rated capacity. Pay attention to the bulky load, although it does not exceed rated capacity.
- (3) Rapid turn is dangerous, especially, do not rapid turn in a downward slope.



91HB-00310

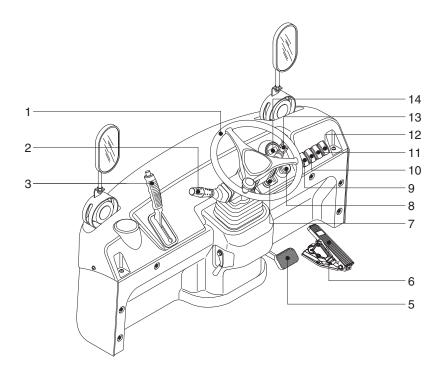
#### 3) BATTERY HANDLING

- (1) Open the battery cover when charging battery being charged, not only heat but also inflammable hydrogen gas is produced. Keep fire away.
- (2) Hoisting the battery case, use 4 wires with hook and handle carefully, not to shock.
- (3) The electrolyte solution of battery is dilute sulfuric acid (H<sub>2</sub>SO<sub>4</sub>). Be careful not to drop on clothes and mechanical parts.



91FH-00351

# 3. INSTRUMENTS AND CONTROLS



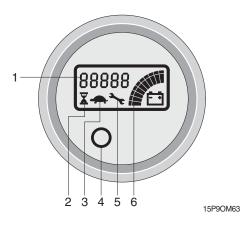
15P9OM62

- 1 Steering wheel
- 2 Direction control lever
- 3 Parking brake lever
- 5 Brake pedal
- 6 Accelerator pedal
- 7 Start key switch
- 8 Emergency switch

- 9 Hazard switch
- 10 Head lamp switch
- 11 Beacon lamp switch
- 12 Turtle mode switch
- 13 Flasher lamp switch
- 14 MDI CAN

<sup>\*</sup> Familiarize yourself with the controls and follow safe operating procedures.

## 4. DISPLAY



- 1 Letter indicator
- 2 Hourmeter indicator
- 3 Speed reduction indicator
- 4 Alarm LED
- 5 Maintenance indicator
- 6 Battery charge indicator

The MDI-CAN has only a LED. This LED is red and lights and blinks when an alarm is present. When the key switch is ON, the MDI-CAN makes a general test lighting all the display liquid crystals, the LED and the backlight.

#### 1) LETTER INDICATOR



#### (1) Hour meter

An alpha-numeric liquid crystal diaplay is fitted in the center of the unit that shows the hours worked. The display is backlight (the backlight is normally lighted).

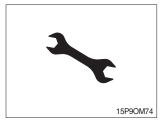
#### (2) Alarms

The same display can also indicate the alarm state, showing a code corresponding to the type of alarm. To attract attention, the red LED will start blinking when an alarm is generated.

#### (3) Software version

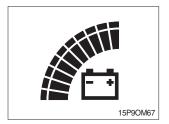
When the key switch is initially ON, the display shows the EPROM version for a few seconds (EPXXX where XXX represents the version): MDI-CAN and then traction controller EPROM version appears, each one for 2 seconds. Simultaneously the maintenance indicator appears.

## 2) MAINTENANCE INDICATOR



- (1) It is normally off; when it appears (fixed) it shows the request of programmed maintenance or the alarm state.
- (2) In this case the relative code will be displayed. The information supplied by the MDI-CAN can be extremely useful. Failures can be quickly identified by the operator or service technician thereby finding the fastest solution to the problem.

#### 3) BATTERY CHARGE INDICATOR



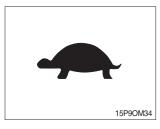
- (1) The battery's state of charge indication is integrated in the LCD display; it is shown by ten notches.
- (2) Each notch represent the 10% of the battery charge. As the battery becomes discharged, the notches turn off progressively, one after the other, in proportion to the value of the residual battery charge. This value, sent to the MDI-CAN by the controller via CAN-BUS, is displayed in the tester menu of the Zapi console connected to the controller.
- (3) When battery low alarm appears in the controller, the battery symbol which is under the notches blinks.

#### 4) HOUR METER INDICATOR



- (1) It is normally off; it blinks when the hour meter is working.
- (2) When the key switch is ON, the MDI-CAN makes a general test lighting all the display liquid crystals, the LED and the backlight.

#### 5) SPEED REDUCTION INDICATOR



(1) It is normally off; when it appears (fixed) it shows activation of the "soft" mode of the tractor, in which maximum speed and acceleration are reduced;

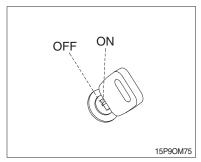
#### 6) ALARM LED



(1) This red alarm LED will start blinking when an alarm is generated.

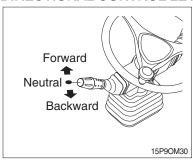
## 5. OPERATING SWITCHES AND LEVERS

#### 1) KEY SWITCH



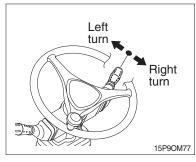
- (1) Power is supplied to the control circuit through this switch, which is placed on OFF→ ON clockwise.
- ① OFF: The Key can be removed or inserted and power is turned off.
- ② ON :Both control circuits for hydraulics and running can be activated.

#### 2) DIRECTIONAL CONTROL LEVER



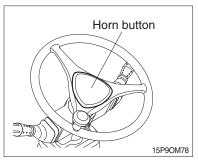
- (1) This lever serves to make forward/backward directional changes. For the forward directions, place the lever on the FORWARD position.
- (2) In the neutral, the running control circuits is turned off.
- (3) For the backward direction, place the lever on the BACKWARD position.
- (4) The electrical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

#### 3) FLASHER SWITCH



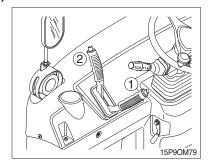
- (1) When making a left or right turn, use this switch to flash the flash lamp to indicate which direction the vehicle is turning to.
- (2) For a right turn, place the switch on the BACKWARD position.
- (3) For a left turn, place the switch on the FORWARD position.

#### 4) HORN BUTTON



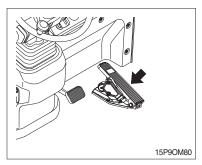
(1) When the horn button is pressed, the horn will sound.

#### 5) PARKING BRAKE LEVER



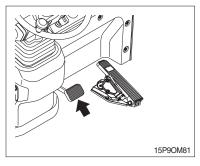
- (1) Position ①
  Parking brake is applied and front wheel is locked.
- (2) Position ②
  Parking brake is released.
- \* Before the tractor starts, confirm the parking brake is released position.

#### 6) ACCELERATOR PEDAL



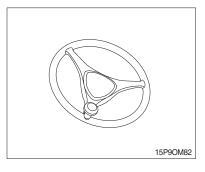
- (1) This pedal is used to vary running speed, which depends upon how far the pedal is depressed.
- (2) In running, the electrical brake will be smoothly applied by shifting the direction lever to the position opposite to the direction of vehicle advanced, and if the pedal is further depressed, the vehicle will run to the opposite direction after stopping once.

## 7) BRAKE PEDAL



- (1) When this pedal is pressed, the mechanical brake will be activated. While the braking lamps attached on the rear light.
- ▲ Special care should be required for the operation of the brake at loading.

#### 8) STEERING WHEEL



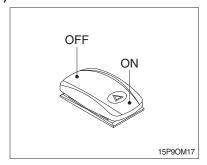
- (1) The steering wheel of the vehicle is provided with the knob to allow steering with one hand.
- (2) Adjustable steering column enables selection of the best driving position.
- ▲ Particular care should be taken for the rapid operation of the steering wheel.

## 9) SEAT SWITCH



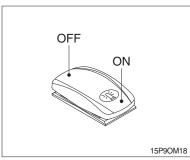
- (1) This switch is closed automatically when an operator sits down on the seat.
- ▲ Before starting the tractor seat switch must be closed, otherwise, the tractor cannot be started.

### 10) HAZARD SWITCH



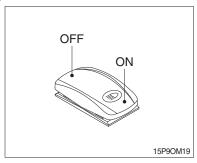
- (1) Use for parking or loading machine.
- \* If the switch is left ON for a long time, the battery may be discharged.

## 11) BEACON SWITCH



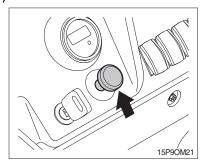
(1) This switch turns ON the rotary light on the cab.

#### 12) HEAD LAMP SWITCH



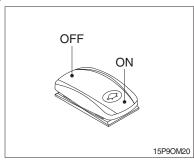
- (1) This switch is used to operate work lamps.
- (2) Press this switch to turn on work lamps.

## 13) EMERGENCY SWITCH



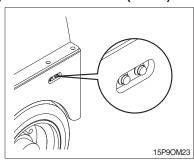
(1) When pressing the emergency switch downward, the electric circuit is broken, all electrical function switches are off.

## 14) TURTLE MODE SWITCH



(1) This switch used to limit the tow tractor speed below 5 km/hr.

## 15) INCHING SWITCH (40T-9)



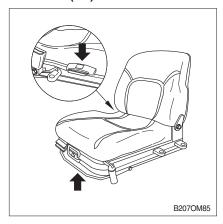
- (1) This switch used to control the inching operation.
  - ① Push the FWD button for the forward moving.
  - ② Push the BWD button for the reverse moving.

#### 6. SEAT ADJUSTMENT

#### 1) SEAT ADJUSTMENT

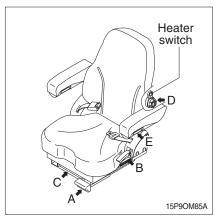
The seat is adjustable to fit the contours of the operator's body. It will reduce operator fatigue due to long work hours and enhance work efficiency.

#### Hanil seat (std)



- (1) The seat adjustment lever is located on the front side under the seat. To unlock, pull the lever up and adjust the seat so that all controls may be comfortably reached. Then release the lever.
- (2) Be sure that the seat locking mechanism is engaged. The seat mounting base provides an 3 inch fore-and-after adjustment of its slide.

#### Grammer seat (option)



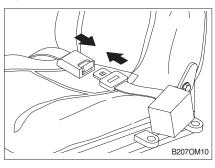
- (1) Forward/Backward adjustment (A)
  Pull lever A to adjust seat forward or back ward.
- (2) Reclining adjustment (B)
  Pull lever B to adjustment seat back rest.
- (3) Weight adjustment (C)
  Pull the handle C to adjust weight.
- (4) Lumbar adjustment (D)

  Turn line knob D to adjust lumbar support up and down.
- (5) Armrest angle adjustment (E)

  Turn knob E to adjust armrest angle.
- (6) Heater switch (option)

  Press this switch in order to heat the seat.

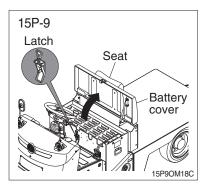
#### 2) BUCKLING UP



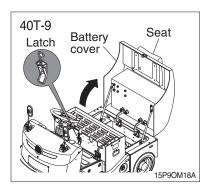
- (1) Buckling up. Be sure that you put on the seat belt. Connect and adjust the seat belt strap to a snug, comfortable position.
- ▲ Always wear your seat belt when operating a lift truck. Failure to wear seat belt will result in injury or death in an event of an accident.
- ♠ Always check the condition 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

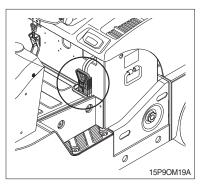
#### 1) COMPARTMENT ACCESS



- (1) Pull the latch to release the cover.
- (2) The cover is held closed by weight of seat located on the battery cover.



## 2) BATTERY CONNECTOR



(1) Be sure to connect the connector for the battery and body.

## 8. SUPPORT AND SAFETY PARTS

## 1) OVERHEAD GUARD



(1) The head guard is of rugged construction that serves to ensure the safety of the operator.