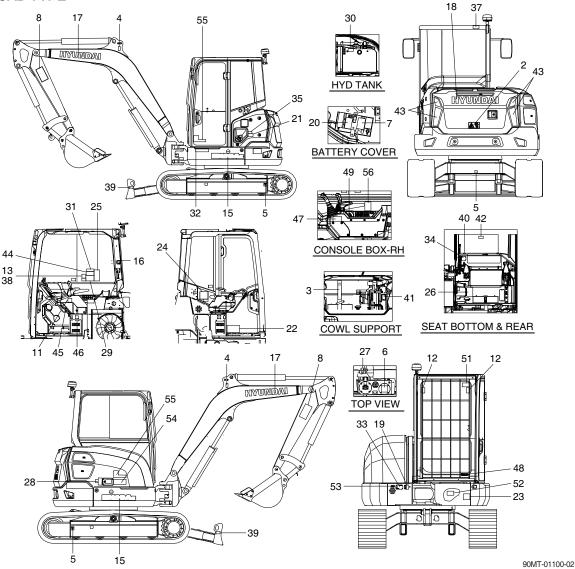
## SAFETY LABELS

## 1. LOCATION

Always keep these labels clean. If they are lost or damage, attach them again or replace them with a new label.

1) CAB TYPE



- 2 Keep clear (rear)
- 3 Engine room caution
- 4 Lifting point
- 5 Tie
- 6 High pressure
- 7 Battery accident
- 8 Keep clear (attach)
- 11 Console tilting
- 12 Front window safety
- 13 Dozer control ideogram
- 15 Model name
- 17 Hyundai logo (boom)
- 18 Hyundai logo (engine hood)
- 19 Grease
- 20 Electric welding
- 21 Fueling
- 22 Service instruction

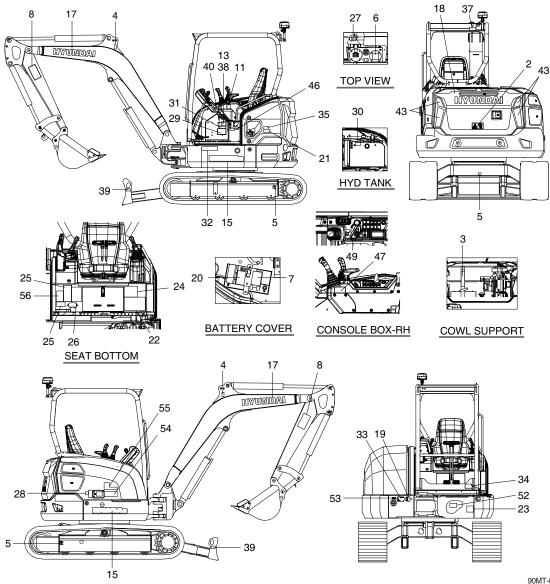
- 23 Noise level
- 24 Lifting chart
  - 25 General caution (cab)
  - 26 Pattern change
- 27 Accumulator
- 28 Battery position
- 29 Control ideogram
- 30 Fuel shut off
- 31 Water separator
- 32 General caution (frame)
- 33 Name plate
- 34 ROPS plate
- 35 Ultra low sulfur diesel
- 37 Beacon lamp
- 38 Angle dozer control (opt)
- 39 Lifting point/tie down
- 40 Fire extinguisher

- Refrigerant
- 42 Emergency exit

41

- 43 Reflecting-LH/RH
- 44 Boom caution
- 46 MCU/ECU connector
- 47 Caution key
- 48 FOG plate
- 49 Key box
- 51 Front window safety
- 52 Leftover fuel
- 53 EMC
- 54 Bio oil
- 55 Reddot logo
- 56 Fuse caution
- 57 California65 caution

## 2) CANOPY TYPE



- 2 Keep clear (rear)
- 3 Engine room caution
- 4 Lifting point
- 5 Tie
- 6 High pressure
- 7 Battery accident
- 8 Keep clear (attach)
- 11 Console tilting
- 13 Dozer control ideogram
- 15 Model name
- 17 Hyundai logo (boom)
- 18 Hyundai logo (engine hood)
- 19 Grease
- 20 Electric welding
- 21 Fueling

- 22 Service instruction
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- 26 Pattern change
- 27 Accumulator
- 28 Battery position
- 29 Control ideogram
- 30 Fuel shut off
- 31 Water separator
- 32 General caution (frame)
- 33 Name plate
- 34 ROPS plate
- 35 Ultra low sulfur diesel
- 37 Beacon lamp

- 90MT-01200-02
- 38 Angle dozer control (opt)
- 39 Lifting point/tie down
- 40 Fire extinguisher
- 43 Reflecting-LH/RH
- 46 MCU/ECU connector
- 47 Caution key
- 49 Key box
- 52 Leftover fuel
- 53 EMC
- 54 Bio oil
- 55 Reddot logo
- 56 Fuse caution
- 57 California65 caution

## 2. DESCRIPTION

There are labels on this machine please become familiarized with all warning labels and descriptions are based on the cab type.

Replace any safety label that is damaged, or missing.

- 1) KEEP CLEAR (REAR) (item 2) This label is positioned on the rear side of
- the engine hood. **A** To prevent serious personal injury or death keep clear of machine swing radius.
- ▲ Do not deface or remove this label from the machine.



94MS-07010

- 2) ENGINE ROOM CAUTION (item 3) This label is positioned on the cowl support of the inside engine room.
- A Do not open the engine hood while the engine is running.
- A Escaping fluid under pressure can penetrate the skin causing serious injury.
- Study the service manual before service job.
- A Never open the filler cap while engine running or at high coolant oil temperature.
- ▲ Do not touch turbocharger or it may cause severe burn, while the engine is running or immediately after the engine is shut down.
- ▲ Relieve all pressure before disconnecting any hydraulic, coolant or fuel lines etc.
- ▲ Study the operator's manual before starting and operating machine.



81M8-07111-00

3) LIFTING POINT (item 4)

This label is positioned on the both sides of the boom.

\* In order to lift the machine, attach the lifting devices to the lifting points.



91M8-05110-00

4) TIE (item 5)

This label is positioned on the LH, RH and rear sides of the lower frame.

- Never tow the machine using tie down eyelet as it may break resulting in personal injury or death.
- \* See page 4-10 for detail.



91N6-05120

- 5) HIGH PRESSURE (item 6) This label is positioned on the top side of the hydraulic tank.
- $\ensuremath{\overset{\scriptstyle \otimes}{_{\scriptstyle -}}}$  Do not mix with different brand oils.
- Never open the filler cap while engine running or at high hydraulic oil temperature.
- A Loosen the cap slowly and release internal pressure completely.



94K8-01110

## 6) BATTERY ACCIDENT (item 7)

This label is positioned on the inside of the battery cover.

▲ Electrolyte containing sulfuric acid can cause severe burns. Avoid allowing contact with the skin, eyes or clothes. In the event of accident flush with sufficient water and contact a physician immediately.

Failure to comply may result in serious injury or death.

Maintain the electrolyte at the recommended level. Add distilled water to the battery only when starting up, never when shutting down.

With electrolyte at proper level, less space may cause the gases to be accumulated in the battery.

- A Extinguish all smoking materials and open flames before checking the battery.
- ▲ Do not allow any open flames or excessive heat near or when checking the battery.
- ▲ Do not allow unauthorized personnel to change the battery or to use booster cables.
- A To prevent electric shock, do not touch battery terminal with wet hands.
- 7) KEEP CLEAR (ATTACH) (item 8) This label is positioned on both sides of the arm.
- ▲ Serious injury or death can result from a falling attachment.
- ▲ To prevent serious injury or death, do not walk near, under implements or attachments.

This applies when machine is in use, the implements are suspended in air or while the machine is being worked on.



94MT-02120



R5570FW31

- 8) CONSOLE TILTING (item 11) This label is positioned on the left side of the LH console box.
- Sefore you get off the machine be sure to tilt the LH console box.



91M8-07300-00

- 9) FRONT WINDOW SAFETY (item 12) This label is positioned on the both sides front window of inside the cab.
- ▲ Be careful that the front window may be promptly closed.



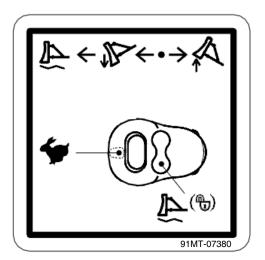
97MH-07351-00

- **10) DOZER CONTROL IDEOGRAM** (item 13) This label is positioned on the right side window of inside the cab.
- \* See page 4-7 for details.
- % Guidlines for using the general dozer blade.
  - Be careful not to apply an excessive load when using a blade.
- Avoid impacts and loads on the bottom due to machine modification or excessive working conditions.
- Check the BLADE UP status before traveling the machine.
- Avoid any collision with the upper working device and the blade.
- Do not move machine in the blade jack up state.
- When using blade jack up, use it in an environment where the ground is not rough and the machine and ground are same level.

## 11) ELECTRIC WELDING (item 20)

This label is positioned on the inside of the battery cover.

- A Before carrying out any electric welding on this machine, follow the below procedure.
- Pull the connectors out of all electric control units.
- Connect the ground lead of the welding equipment as close to the welding point as possible.
- Be sure to remove paint where ground will be applied to ensure proper grounding of welder. Once welding is complete, clean and repaint area.
- \* See page 6-38 for detail.



91MT-07380-00

## 🛕 W A R N I N G

Before carrying out any electric welding on this machine

- Pull the connectors out of all electronic control units.

- Connect the ground lead of the welding equipment as close to the welding point as possible.

Read the instructions in operator's manual for details.

7807AFW20

## 12) FUELING (item 21)

This label is positioned on the left cover of the cowl.

- ▲ Stop the engine when refueling. Any lights or flames must be kept at a safe distance while refueling.
- \* Use ultra low sulfur fuel only.
- ※ Ultra low sulfur fuel sulfur content ≤ 10 ppm
- 13) GENERAL CAUTION (CAB) (item 25)

This label is positioned on the right side window of inside the cab.

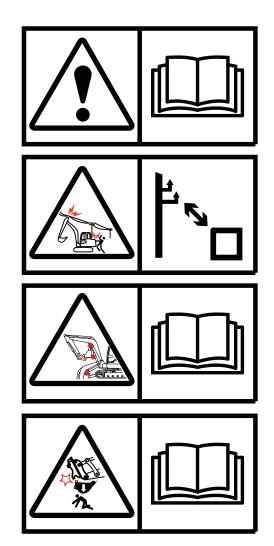
▲ Serious injury or death can result from contact with electric lines.

It is possible to receive shock by merely coming into the vicinity of electric lines, the minimum distance based on supply voltage should never be exceeded. Refer to page 1-17.

- ▲ Serious injury or death can result from dropping bucket.
- ▲ Operating the machine with quick coupler switch unlocked or without safety pin of moving hook can cause the bucket to drop off.
- ▲ Be careful to operate machine equipped with quick coupler or extensions.
- ▲ Bucket may hit cab, canopy, boom and boom cylinders when it reached vicinity of them.



91MT-01130

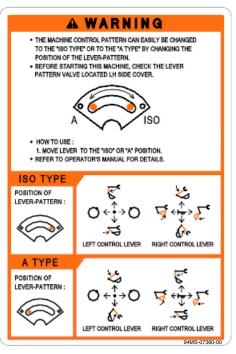


94MS-07240-00

#### 14) PATTERN CHANGE (item 26)

This label is positioned on the left rear side of the cabin inside.

- Check the machine control pattern for conformance to the pattern on this label. If not, change label to match pattern before operating machine.
- ▲ Failure to do so could result in serious injury or death.
- \* See page 4-22 for details.



94MS-07360

## 15) ACCUMULATOR (item 27)

This label is positioned on the accumulator of the solenoid valve located at the right side of the hydraulic tank..

- \* The accumulator is filled with high-pressure nitrogen gas, and it is extremely dangerous if it is handled in the wrong way. Always observe the following precautions.
- A Never make any holes in the accumulator or expose it to open flame or fire.
- A Do not weld anything to the accumulator.
- When carrying out disassembly or maintenance of the accumulator, or when disposing of the accumulator. It is necessary to release the gas from the accumulator. A special air bleed valve is necessary for this operation, so please contact your HD Hyundai Construction Equipment distributor.

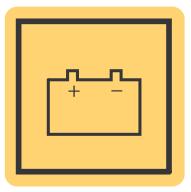


91N6-03201

## 16) BATTERY POSITION (item 28)

This label is positioned on the right cover of the cowl.

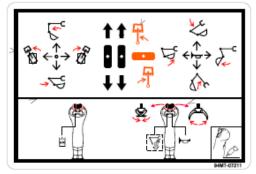
\* See page 6-36 for the battery handling.



38090FW03

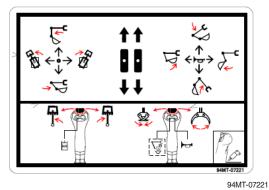
- 17) CONTROL IDEOGRAM (item 29) This label is positioned on the right side window of inside the cab.
- Always ensure the label matches the control pattern. If it does not, replace label with appropriate control pattern label.
- ▲ Failure to do so could result in serious injury or death
- \* See page 4-7 for details.

Without proportional+pedal boom swing

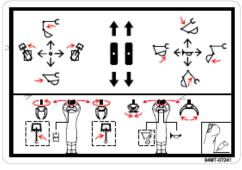


94MT-07211

## Without proportional+RCV boom swing



With proportional + RCV boom swing



18) FUEL SHUT-OFF (item 30)

This label is positioned on the right side of the hydraulic tank.

- Fill only the hydraulic oil.Do not fill the diesel fuel.
- ▲ Relieve tank pressure with the engine off by removing the cap slowly to prevent burns from hot oil.



140WH90FW51

## 19) WATER SEPARATOR (item 31)

This label is positioned on the right side window of inside the cab.

- In order to protect high pressure fuel system, please drain water in water separator before starting the engine.
- 20) GENERAL CAUTION (FRAME) (item 32) This label is positioned on the left side of the frame.
- A Study the operator's manual before transporting the machine, if provided and tie down arm and track to the carrier with lashing wire.
- \* See page 5-8 for details.
- A Make sure wire rope is proper size and keep correct hoisting method.
- \* See page 5-9 for details.
- A Place the bucket on the ground whenever servicing the hydraulic system.
- \* Check oil level on the level gauge.
- Refill the recommended hydraulic oil up to specified level if necessary.

# A CAUTION

In order to protect high pressure fuel system, please drain water in water separator before starting the engine.

91Q4-07180



BOOM STAY	
	H

97MK-04100

21) ULTRA LOW SULFUR DIESEL (item 35) This label is positioned on the left cover of

This label is positioned on the left cover of the cowl.

- \* Use ultra low sulfur fuel only.
- \* Ultra low sulfur fuel sulfur content  $\leq$  10 ppm
- If ultra low sulfur diesel is not used, the aftertreatment diesel particulate filter can be damaged.

## 22) BEACON LAMP (item 37)

This label is positioned on the rear top outside of the cab.

Make sure the beacon lamp maintains a vertical position.

A horizontal position can result in a decrease in life time of the lamp due to the infiltration of foreign substances such as dust or water.

While the machine transfer, the beacon lamp is easy to break. In the case, change the position of the lamp to the horizontal.

## 23) ANGLE BLADE CONTROL (item 38)

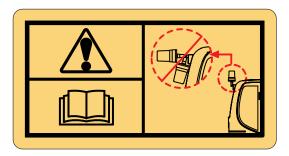
This label is positioned on the right side window of the cab.

- A To avoid personal injury or death,
  - Never jack up or lift the machine with the angle blade placed at an angle.
  - Stability of the machine is affected with blade at angle, keep at neutral position.
  - Before starting the job or when travelling up or down a slope, position and keep the angle blade at neutral.
  - Do not work under the machine.
- ※ Do not angle blade up with the angle blade placed at an angle.
- ※ Refer to page 0-12 for additional descriptions.

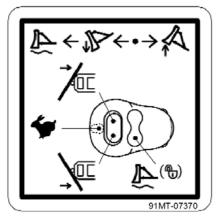
# **A** CAUTION

ULTRA LOW SULFUR FUEL ONLY PLEASE REFER TO THE DRIVER'S MANUAL.

2609A0SL03



91MK-02221-00



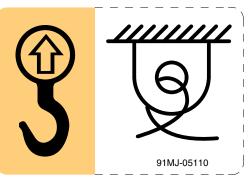
91MT-07370-00

## 24) LIFTING POINT/TIE DOWN (item 39)

This label is positioned on the LH and RH sides of the dozer blade.

- Lifting point In order to lift the machine, attach the lifting devices to the lifting points.
- Tie down

In order to tie down the machine, attach the tie-downs to the tying points.



91MJ-05110-00

## 25) FIRE EXTINGUISHER (item 40)

This label is located on the rear side of the cabin inside.

Read and understand the instructions adhered decal on the fire extinguisher.



94MS-07290

## 26) REFRIGERANT (item 41)

This label is positioned on the cowl support of the inside of the engine room.

- ▲ Inhalation of A/C refrigerant gas in any form can result in serious injury or death.
- \* Refer to page 6-40.



## 27) EMERGENCY EXIT (item 42)

This label is positioned on the rear window of inside the cab.

- \* The rear window serves as an alternate exit.
- \* To remove rear window, pull the ring and push out the glass.

## 28) BOOM CAUTION (item 44)

This label is positioned on the right side window of inside the cab.

Be careful to operate the boom. The boom may hit cab when boom reaches vicinity of cab.

## 29) MCU/ECU CONNECTOR (item 46)

This label is positioned on the right side of inside the cab.

- MCU communicates the machine data through Laptop computer through RS232 service socket.
- ECU communicates the engine data with cummins INSITE tool adapter through J1939 service socket.
- \* See page 3-43 for details.

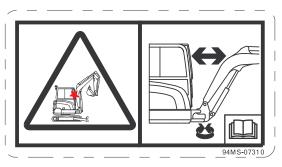
## 30) CAUTION KEY (item 47)

This label is positioned on the left side of the RH console box.

- ▲ Park on a flat place and stop the engine for inspecting and repairing. Properly TAG machine is not operational. (remove start key)
- Extreme care shall be taken during maintenance work.



94MT-07280



94MS-07310-00



91Q4-15860



91M9-01211-00

- **31) FRONT WINDOW SAFETY** (item 51) This label is positioned on the left top side front window of the cab.
- A Be careful that the front window may be promptly closed.



91Q6-07251-00

## 32) LEFTOVER FUEL (item 52)

This label is positioned on the inside the front cover.

- ▲ Do not fuel a machine near open flames or sparks. Failure to comply may result in serious injury or death.
- A Properly clean areas of spillage.



91K4-02700

#### 33) EMC (item 53)

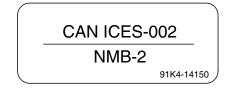
This label is positioned on the front side of the upper frame near the PIN plate.

- \* This machine complies with the EMC directive ICES-002.
- ※ EMC : ElectroMagntic Compatibility

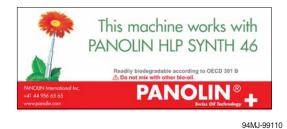
## 34) BIO OIL (item 54)

This label is positioned on the right cover of the cowl.

- \* This machine works with PANOLIN HLP SYNTH 46.
- ※ Readily biodegradable according to OECD 301 B.
- ▲ Do not mix with other bio-oil.



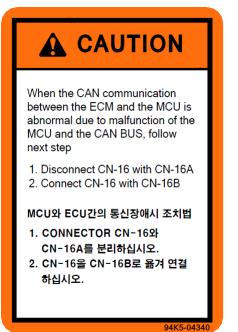
91K4-14150



## 35) FUSE CAUTION (item 56)

This label is positioned on the right side of the inside the cab.

- When the CAN communication between the ECM and the MCU is abnormal due to malfunction of the MCU and the CAN BUS, follow next step.
- (1) Disconnect CN-16 with CN-16A
- (2) Connect CN-16 with CN-16B
- ※ See page 3-47 for details.

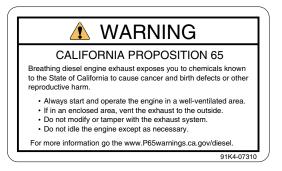


94K5-04340

## 36) PROPOSITION (item 57)

This warning label is positioned on the right side window of inside the cab.

- ▲ Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
- (1) Always start and operate the engine in a well-ventilated area.
- (2) If in an enclosed area, vent the exhaust to the outside.
- (3) Do not modify or tamper with the exhaust system.
- (4) Do not idle the engine except as necessary.
- \* For more informat ion go to www. P65warnings.ca.gov/diesel.



91K4-07310