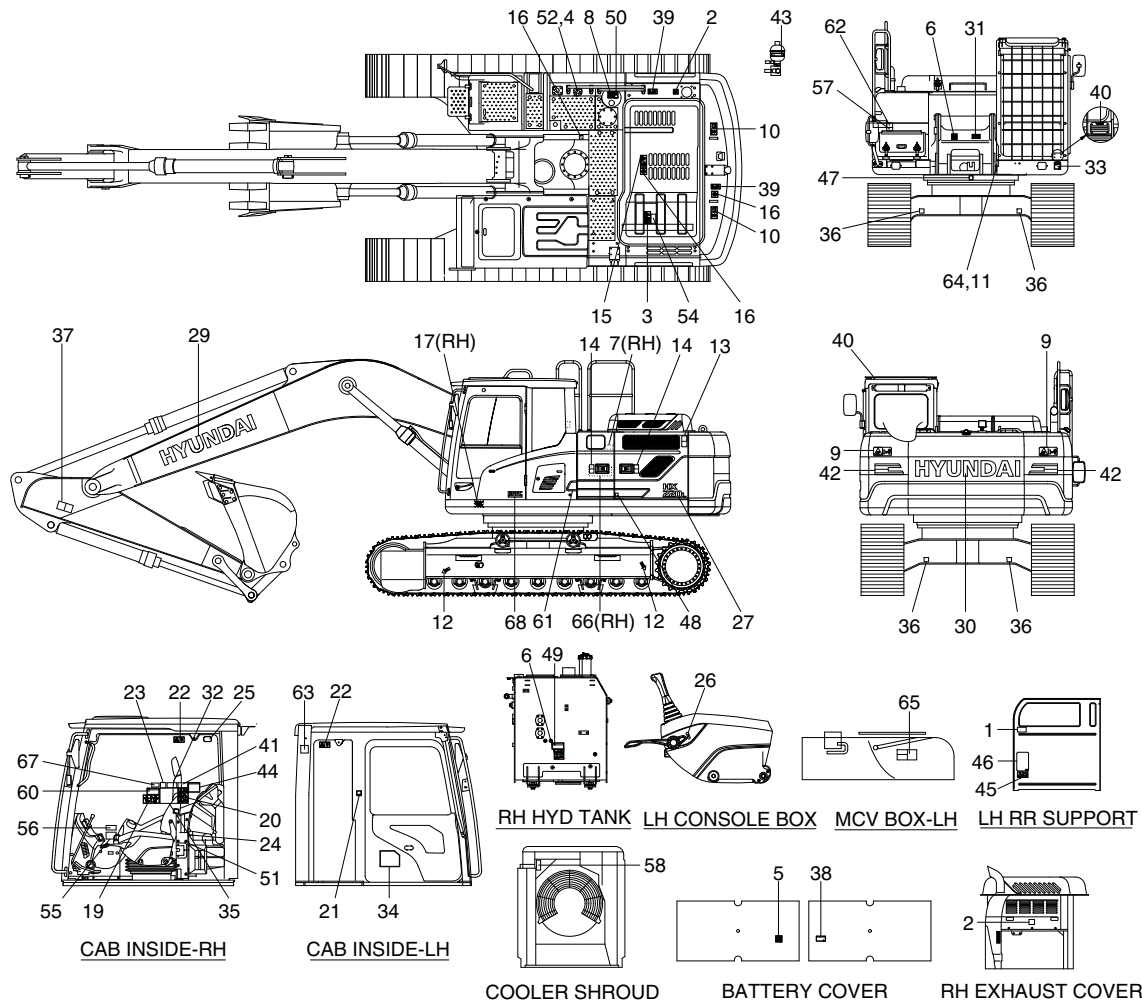


## SAFETY LABELS

### 1. LOCATION

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



1 Air cleaner filter	23 Safety rear window	45 M/control pattern change-w/o valve
2 Turbocharger cover	24 Air conditioner filter	46 M/control pattern change-w/valve
3 Radiator cap	25 ROPS plate	47 Swing bearing grease
4 Fueling	26 Safety knob	48 Battery position
5 Battery accident	27 Model name	49 Lubrication oil
6 High pressure hose	29 Trade mark (boom)	50 Fuel shut off
7 Hydraulic oil level	30 Trade mark (CWT)	51 MCU/ECM connector
8 Hydraulic oil lub	31 Reduction gear grease	52 Ultra low sulfur diesel
9 Keep clear-rear	32 Clamp locking	54 Surge tank
10 Lifting eye	33 Noise level LWA	55 Key off caution
11 Name plate	34 Service instruction	56 RCV lever
12 Sliding ideogram	35 Lifting chart	57 Diesel exhaust fluid
13 Keep clear-side	36 Tie	58 Refrigerant
14 Stay fix	37 Keep clear-attachment	60 Control RCV
15 Engine hood shearing	38 Electric welding	61 Band
16 No step	39 Falling	62 DEF/AdBlue® fill-up
17 Transporting	40 FOPS FOG plate	63 Fire extinguisher
19 M/control pattern	41 Caution (water separator, turbocharger)	64 EMC
20 Ref operator's manual	42 Reflecting	65 Leftover fuel
21 Hammer	43 Accumulator	66 BIO oil
22 Safety front window	44 M/control pattern change valve	67 California 65 warning
		68 EPFC (#1247-)

## 2. DESCRIPTION

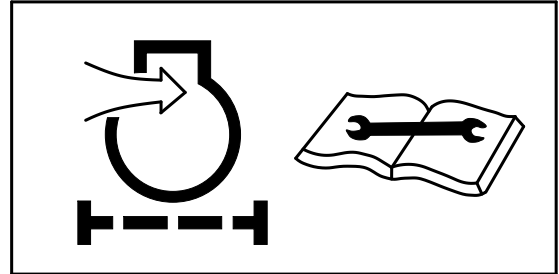
There are several specific warning labels on this machine please become familiarized with all warning labels.

Replace any safety label that is damaged, or missing. If a safety label is attached to a part that is replaced, install a safety label on the replacement part.

### 1) AIR CLEANER FILTER (item 1)

This warning label is positioned on the left side of the front support.

- ※ **Periodic and proper inspection, cleaning and change of elements prolong engine life time and maintain the good performance of engine.**



21070FW01

### 2) TURBOCHARGER COVER (item 2)

This warning label is positioned on the pump cover and RH side of the exhaust cover

- ⚠ **Do not touch turbocharger or it may cause severe burn. When the engine is running or immediately after engine shut down.**



21070FW02

### 3) RADIATOR CAP (item 3)

This warning label is positioned on the radiator.

- ⚠ **Never open the filler cap while engine running or at high coolant temperature. Hot coolant can cause serious burns, injury or death.**

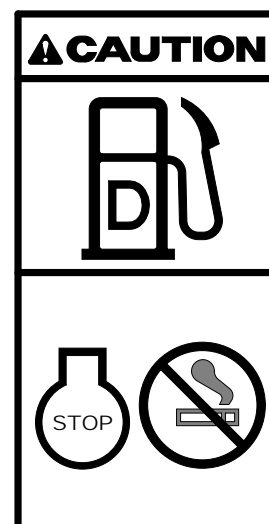


14070FW03

### 4) FUELING (item 4)

This warning label is positioned on the right side of fuel filler neck.

- ⚠ **Stop the engine when refueling. All lights or flames shall be kept at a safe distance while refueling.**

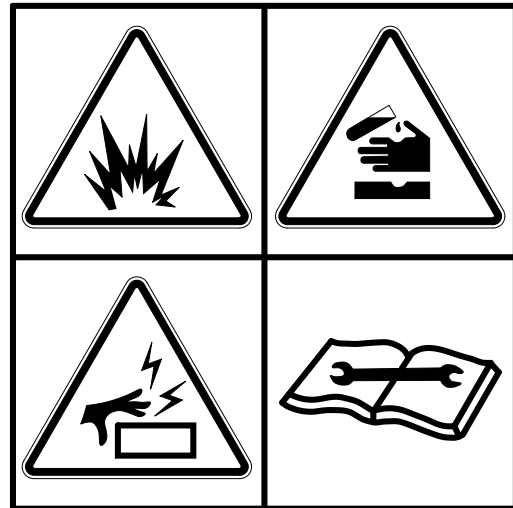


290F0FW02

#### 5) BATTERY ACCIDENT (item 5)

This warning label is positioned on the battery cover.

- ⚠ **Electrolyte containing sulfuric acid cause severe burns. Avoid being in contact with skin, eyes or clothes. In the event of accident flush with sufficient water, call a physician immediately.**
- ※ **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.
- ⚠ **Extinguish all smoking materials and open flames before checking the battery.**
- ⚠ **Do not use matches, lighters or torches as a light source near the battery for the probable presence of explosive gas.**
- ⚠ **Do not allow unauthorized personnel to change the battery or to use booster cables.**
- ⚠ **For safety from electric shock, do not battery terminal with a wet hand.**



36070FW05

#### 6) HIGH PRESSURE HOSE (item 6)

This warning label is positioned on the right side of the hydraulic tank and front of the upper frame.

- ⚠ **Escaping fluid under pressure can penetrate the skin causing serious injury.**
- ⚠ **Avoid the hazard by relieving pressure before disconnecting hydraulic lines or other lines.**
- ※ **See the maintenance section for details.**

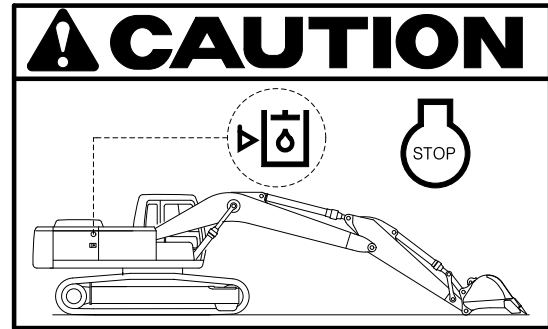


14070FW29

#### 7) HYDRAULIC OIL LEVEL (item 7)

This warning label is positioned on the tank cover.

- ▲ 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.

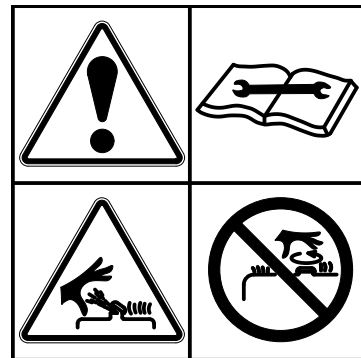


21070FW07

#### 8) HYDRAULIC OIL LUBRICATION (item 8)

This warning label is positioned on the top side of the hydraulic tank.

- ※ Do not mix with different brand oils.
- ▲ Never open the filler cap while high temperature.
- ▲ Loosen the cap slowly and release internal pressure completely.

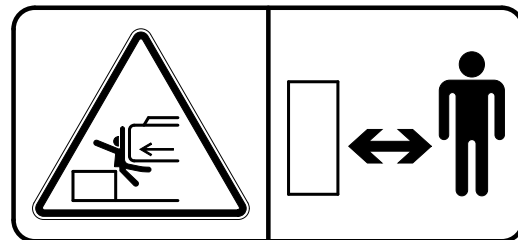


14070FW08

#### 9) KEEP CLEAR-REAR (item 9)

This warning label is positioned on the rear side of counterweight.

- ▲ To prevent serious personal injury or death keep clear of machine swing radius.
- ▲ Do not deface or remove this label from the machine.

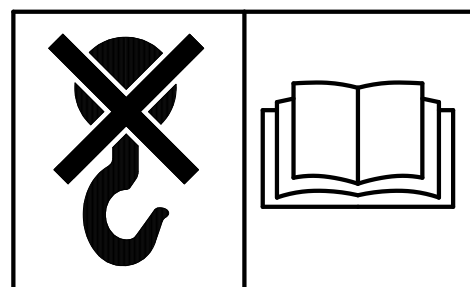


21090FW09

#### 10) LIFTING EYE (item 10)

This warning label is positioned on the counterweight.

- ▲ Do not lift the machine by using lifting eyes on the counterweight or the lifting eyes may be subject to overload causing its breaking and possible personal injury.
- ※ See page 5-9 for proper lifting method of the machine.

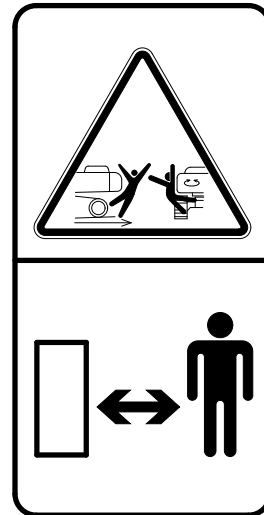


21070FW10

**11) KEEP CLEAR-SIDE (item 13)**

This warning label is positioned on the LH and RH side cover.

- ⚠ **To prevent serious personal injury or death keep clear of machine swing radius.**
- ⚠ **Do not deface or remove this label from the machine.**



21070FW13

**12) STAY FIX (item 14)**

This warning label is positioned on the LH and RH side cover.

- ⚠ **Be sure to support the stay when the door needs to be opened.**
- ⚠ **Be careful that the opened door may be closed by the external or natural force like strong wind.**

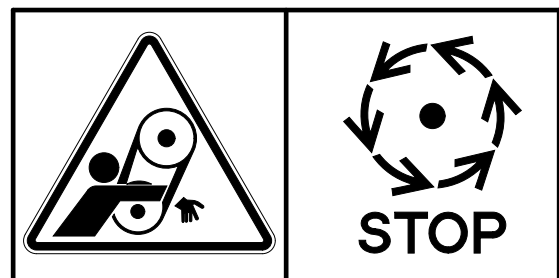


21070FW14

**13) ENGINE HOOD SHEARING (item 15)**

This warning label is positioned on the engine hood.

- ⚠ **Don't open the engine hood during the engine's running. Stay clear of rotating parts.**
- ⚠ **Don't touch exhaust pipe or it may cause severe burn.**

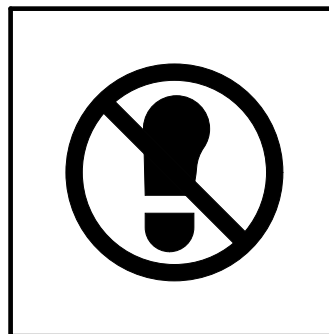


21070FW15

#### 14) NO STEP (item 16)

This warning label is positioned on the top side of engine hood and counterweight and top left side of fuel tank.

- △ Don't step on the engine hood and counterweight.



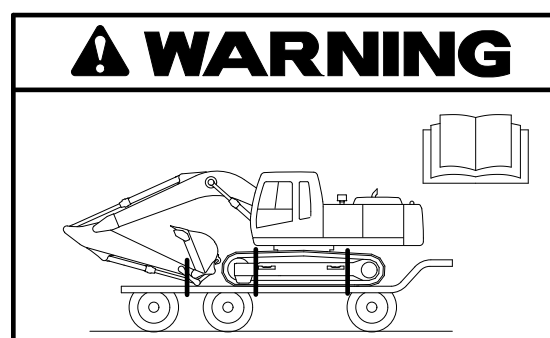
21070FW16

#### 15) TRANSPORTING (item 17)

This warning label is positioned on the front right side of upper frame.

- ▲ 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.



14070FW17

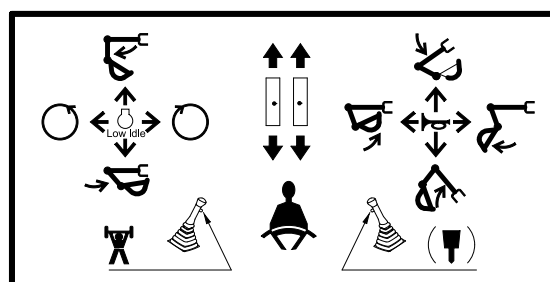
#### 16) MACHINE CONTROL PATTERN (item 19)

This warning label is positioned in right window of the cab.

- ▲ Check the machine control pattern for conformance to pattern on this label. If not, change label to match pattern before operating machine.
- ▲ Failure to do so could result in injury or death.

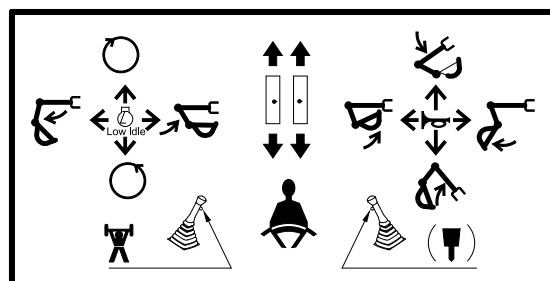
See page 4-12 for details.

#### ISO TYPE-MONO



91N6-07201

#### SOUTHEAST ASIA TYPE-MONO



91N6-08200

### 17) REF OPERATOR'S MANUAL (item 20)

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

#### (1) Ref operator manual

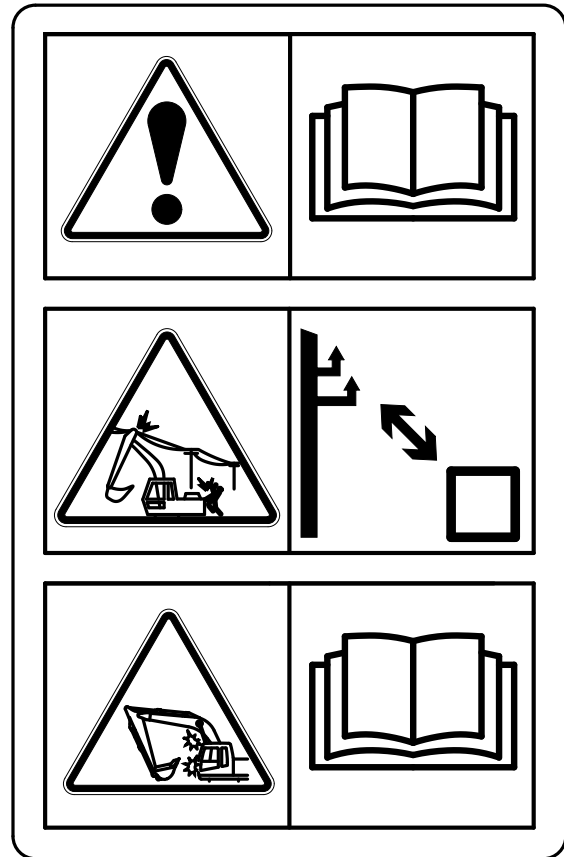
- ▲ Study the operator's manual before starting and operating machine.
- ▲ Do not operate this machine unless you have read and understand the instructions and warnings in this manual. Failure to follow the instructions or warnings could result in injury or death.

#### (2) Max height

- ▲ Serious injury or death can result from contact with electric lines. An electric shock being received by merely coming into the vicinity of an electric lines, the minimum distance should be kept considering the supply voltage as page 1-7.

#### (3) Interference

- ▲ Be careful to operate machine equipped with quick clamp or extensions. Bucket may hit cab or boom, boom cylinders when it reached vicinity of them.



2609A0SL05

### 18) HAMMER (item 21)

This label is located on the right center stay of the cabin inside.

- ※ The window serves as an alternate exit.
- ※ In emergency, break out the window using the hammer and escape from the cabin.

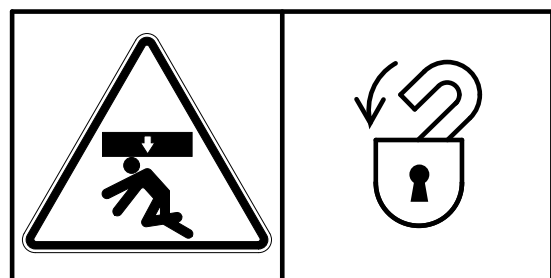


91Q6-07280

### 19) SAFETY FRONT WINDOW (item 22)

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

- ▲ Be careful that the front window may be promptly closed.
- ※ See page 3-70 for details.



21070FW24

## 20) SAFETY REAR WINDOW (item 23)

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

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

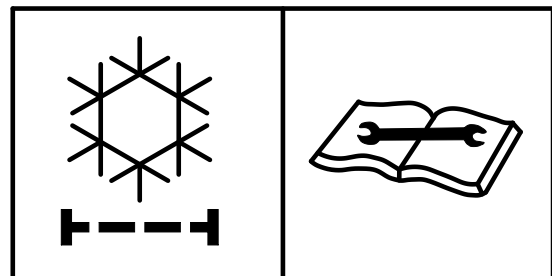


2609A0SL02

## 21) AIR CONDITIONER FILTER (item 24)

This warning label is positioned on the air conditioner cover.

- ※ Periodic and proper inspection, cleaning and change of filter prolong air conditioner life time and maintain good performance.

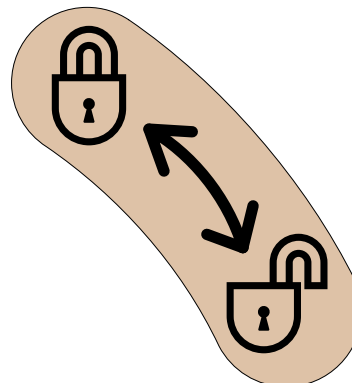


21070FW26

## 22) SAFETY KNOB (item 26)

This warning label is positioned on the cover of the safety knob.

- ⚠ Before you get off the machine be sure to place the safety knob LOCKED position.

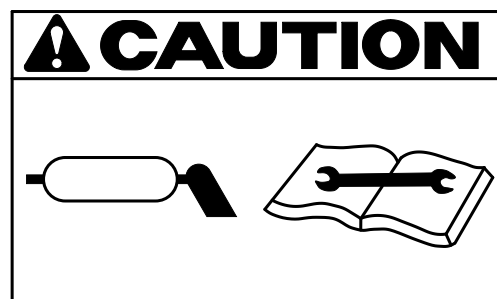


30007A1FW07A

## 23) REDUCTION GEAR GREASE (item 31)

This warning label is positioned in the front side of upper frame.

- ⚠ Grease is under high pressure. Grease coming out of the grease plug under pressure can penetrate the body causing injury or death.



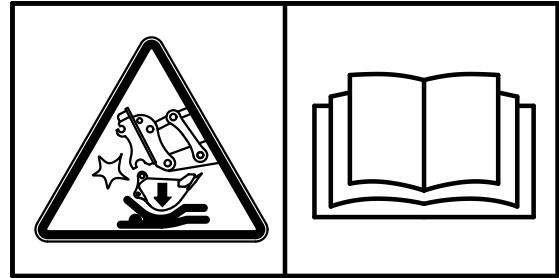
21070FW35



#### 24) CLAMP LOCKING (item 32)

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

- ⚠ **Serious injury or death can result from dropping bucket.**
- ⚠ **Operating the machine with quick clamp switch unlocked or without safety pin of moving hook can cause the bucket to drop off.**

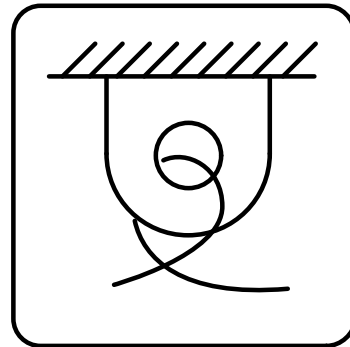


14070FW60

#### 25) TIE (item 36)

This warning label is positioned on the lower frame.

- ⚠ **Never tow the machine using tie hole, because this may break.**
- ⚠ **See page 4-15 for detail.**



4507A0FW02

#### 26) KEEP CLEAR-BOOM/ARM (item 37)

This warning label is positioned on both side of the arm.

- ⚠ **Serious injury or death can result from falling of the attachment.**
- ⚠ **To prevent serious injury or death, keep clear the underneath of attachment.**

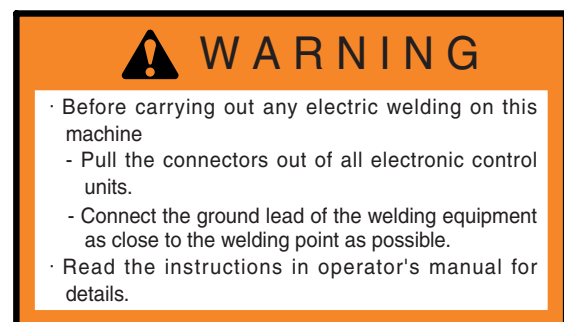


14070FW31

#### 27) ELECTRIC WELDING (item 38)

This warning label is positioned on the battery cover.

- ⚠ **Before carrying out any electric welding on this machine, follow the below procedure.**
  - Pull the connector out of all electric control units.
  - Connector the ground lead of the welding equipment as close to the welding point as possible.
- ※ **See page 6-45 for detail.**



7807AFW20

### 28) FALLING (item 39)

This warning label is positioned on the top side of pump cover and counterweight.

- ⚠ Falling is one of the major cause of personal injury.
- ⚠ Be careful of slippery conditions on the platforms, steps and handrails when standing on the machine.

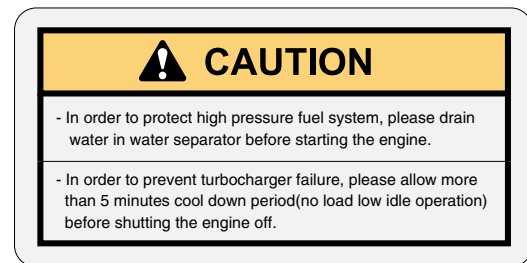


14070FW30

### 29) CAUTION (W/SEPARATOR, TURBOCHARGER) (item 41)

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

- ⚠ In order to protect high pressure fuel system, please drain water in water separator before starting the engine.
- ⚠ In order to prevent turbocharger failure, please allow more than 5 minutes' cool down period (no load low idle operation) before shutting the engine off.



120090SL02

### 30) REFLECTING (item 42)

This warning label is positioned on the rear side of counterweight.

- ⚠ To prevent serious personal injury or death keep clear of machine swing radius.
- ⚠ Do not deface or remove this label from the machine.



290F0FW01

### 31) ACCUMULATOR (item 43)

This warning label is positioned on the accumulator of the solenoid valve.

- ※ 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.

- ▲ Never make any hole in the accumulator expose it to flame or fire.
- ▲ 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.



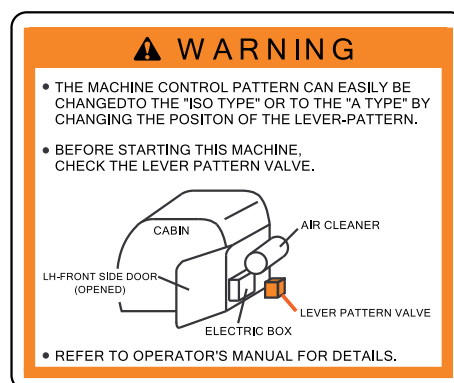
1107A0FW46

### 32) MACHINE CONTROL PATTERN CHANGE VALVE (item 44)

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

- ※ The machine control pattern can easily be changed to the "ISO type" or to the "A type" by changing the position of the lever of the pattern change valve.
- ▲ Before starting this machine, check the lever pattern valve.
- ※ See page 4-27 for detail.

### 2 PATTERN CHANGE VALVE



91N6-07400

### 33) MACHINE CONTROL PATTERN CHANGE-W/O VALVE (item 45)

This warning label is positioned on the LH support of cowl.

- ▲ Check the machine control pattern before starting this machine.
- ※ See page 4-26 for detail.



14W90FW47

### 34) MACHINE CONTROL PATTERN CHANGE- W/VALVE (item 46)

This warning label is positioned on the LH front support of cowl.

⚠ Check the machine control pattern for conformance to pattern on this label. If not, change label to match pattern before operating machine.

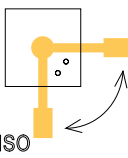
⚠ Failure to do so could result in injury or death.

※ See page 4-27 for details.

### 2 PATTERN CHANGE VALVE

**⚠ WARNING**

- THE MACHINE CONTROL PATTERN CAN EASILY BE CHANGED TO THE "ISO TYPE" OR TO THE "A TYPE" BY CHANGING THE POSITION OF THE LEVER-PATTERN.
- BEFORE STARTING THIS MACHINE, CHECK THE LEVER PATTERN VALVE.




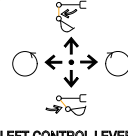
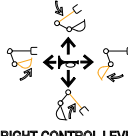
ISO

- HOW TO USE :
- MOVE LEVER TO THE "ISO" OR "A" POSITION.
- REFER TO OPERATOR'S MANUAL FOR DETAILS.

**ISO TYPE**

POSITION OF LEVER-PATTERN :




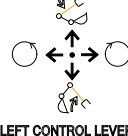
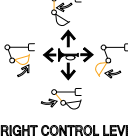



LEFT CONTROL LEVER
RIGHT CONTROL LEVER

**A TYPE**

POSITION OF LEVER-PATTERN :



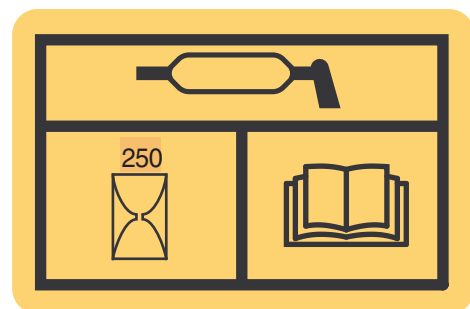
LEFT CONTROL LEVER
RIGHT CONTROL LEVER

91N6-07411

### 35) SWING BEARING GREASE (item 47)

This warning label is positioned in the front side of swing ring gear.

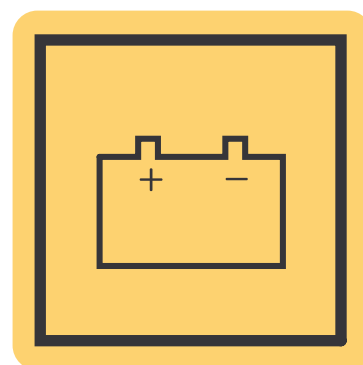
※ See page 6-36 for details.



38090FW02

### 36) BATTERY POSITION (item 48)

This warning label is positioned left inside of side cover.

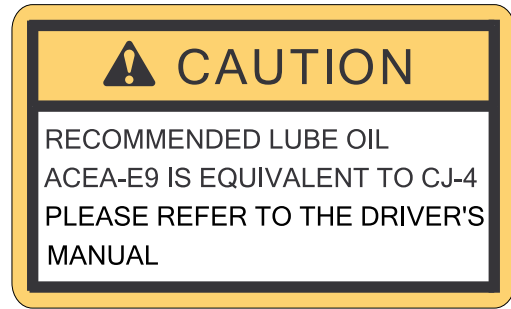


38090FW03

### 37) LUBRICATION OIL (item 49)

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

- ※ Recommended lubrication oil ACEA-E9 is equivalent to API CJ-4.
- ※ See page 6-9 for details.

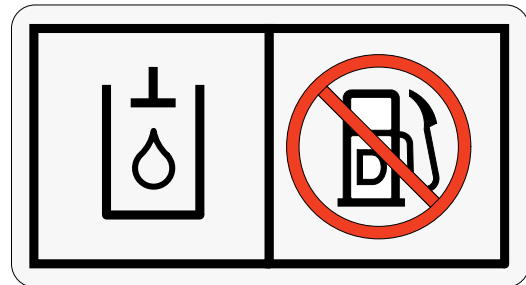


290F0SL03

### 38) FUEL SHUT OFF (item 50)

This warning label is positioned on the top 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

### 39) MCU/ECM CONNECTOR (item 51)

This warning label is positioned on the low cover of the air conditioner in the cab.

- ※ MCU communicates the machine data with Laptop computer through RS232 service socket.
- ※ ECM communicates the engine data with cummins INSITE tool adapter through J1939 service socket.
- ※ See page 3-69 for details.

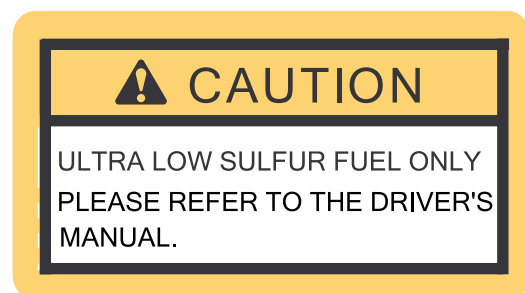


235Z90FW52

### 40) ULTRA LOW SULFUR DIESEL (item 52)

This warning label is positioned on the right side of fuel filler neck.

- ※ Use ultra low sulfur fuel only.
- ※ Ultra low sulfur fuel sulfur content  $\leq 15$  ppm



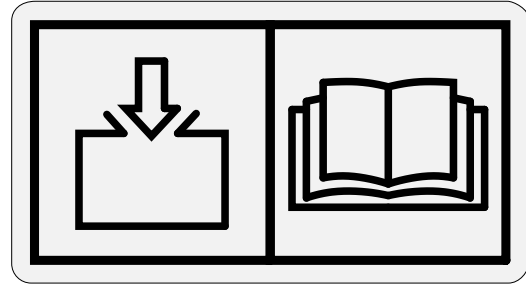
2609A0SL03

#### 41) SURGE TANK (item 54)

This warning label is positioned on the top of the surge tank.

This system must be filled slowly to prevent air locks.

- ※ **Fill rate  $\leq 11$  lpm**



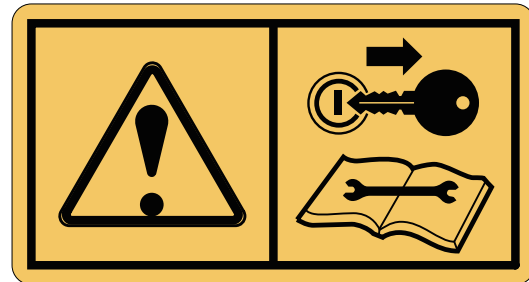
3009A0FW54

#### 42) KEY OFF CAUTION (item 55)

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

- ※ **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.**



290F0FW05

#### 43) RCV LEVER (item 56)

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

- ※ **When you work by moving the seat to the front of cab, it is possible to take place interference between cluster and RCV lever at specific position.**

**To prevent this interference, handle below works.**

- (1) Rotate cluster.
- (2) Adjust seat position for up-and-downward using seat height adjuster knob in suspension.
- (3) Lower the console box height using knob between RH console box and seat cushion.
- (4) Push back console and seat position using seat and console box adjust knob between LH console box and seat cushion.



290F0FW04

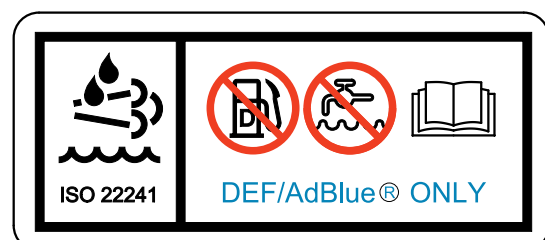
#### 44) DIESEL EXHAUST FLUID (item 57)

This warning label is positioned on the front side of DEF/AdBlue® tank.

- ※ **Fill only the DEF/AdBlue® (Diesel Exhaust Fluid, standardised as ISO 22241).**

**Aqueous urea solution made with 32.5% high-purity urea and 67.5% deionized water.**

- ※ **Do not fill the diesel fuel.**



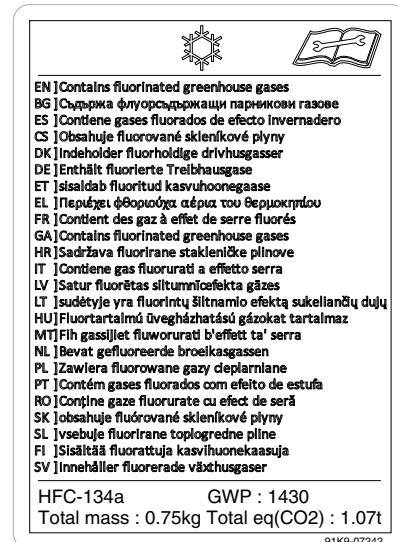
290F0SL04

#### 45) REFRIGERANT (item 58)

This warning label is positioned on the shroud.

- ▲ Inhaling air conditioner refrigerant gas through a lit cigarette or other smoking method or inhaling fumes released from a flame contacting air conditioner refrigerant gas, can cause bodily harm or death.

※ Refer to the page 6-48.

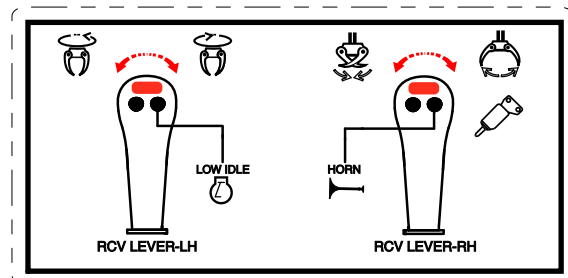


91K9-07242

#### 46) CONTROL RCV (item 60)

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

- ※ Read and understand the operation of the RCV lever.



330F0SL05

#### 47) DEF/AdBlue® (item 62)

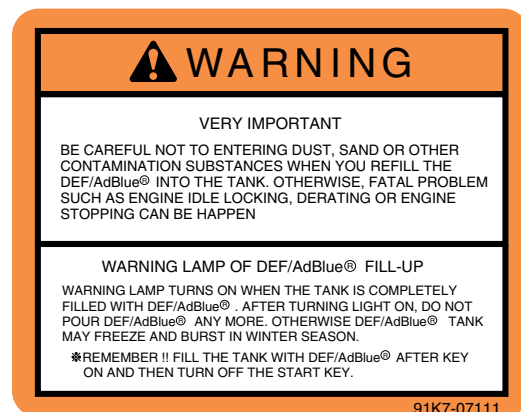
This warning label is positioned on the front of DEF/AdBlue® tank.

- ▲ Be careful not to entering dust, sand or other contamination substances when you refill the DEF/AdBlue® into the tank. otherwise, fatal problem such as engine idle locking, derating or engine stopping can be happen.

※ Warning lamp turns on when the tank is completely filled with DEF/AdBlue®.

After turning light on, do not pour DEF/AdBlue® any more. Otherwise DEF/AdBlue® tank may freeze and burst in winter season.

※ Fill the tank with DEF/AdBlue® after key on and then turn off the start key.



91K7-07111

#### 48) FIRE EXTINGUISHER (item 63)

This label is located on the left rear stay of the cabin inside.

- ※ **Read and understand the instructions adhered decal on the fire extinguisher.**



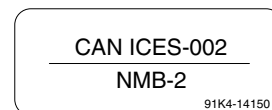
91Q6-07290

#### 49) EMC (item 64)

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

This machine comply with the EMC directive ICES-002.

- ※ **EMC : ElectroMagnetic Compatibility**



91K4-14150

#### 50) LEFTOVER FUEL (item 65)

This warning label is positioned on the RH side of the MCV box.

- ⚠ **Do not fuel a machine near open flames or sparks.**
- ⚠ **Properly clean areas of spillage.**

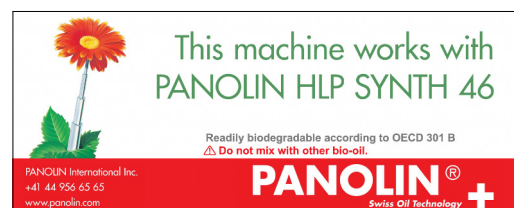


91K4-02700

#### 51) BIO OIL (item 66)

This warning label is positioned on the side cover of the RH cowl.

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



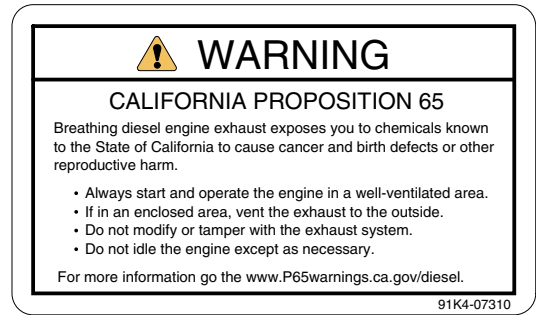
91WD-99110



**52) CALIFORNIA 65 WARNING (item 67)**

This warning label is positioned on the right side window of 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.**
- Always start and operate the engine in a well-ventilated area.
  - If in an enclosed area, vent the exhaust to the outside.
  - Do not modify or tamper with the exhaust system.
  - Do not idle the engine except as necessary.
- ※ For more information go the [www.P65warnings.ca.gov/diesel](http://www.P65warnings.ca.gov/diesel).



91K4-07310

**53) EPFC (item 68) Machine serial no.: #1247-**

This warning label is positioned on the left outside of the cab.

- ※ This machine works with the EPFC (Electric Positive Flow Control) for fuel saving and fine control.



91K6-07410