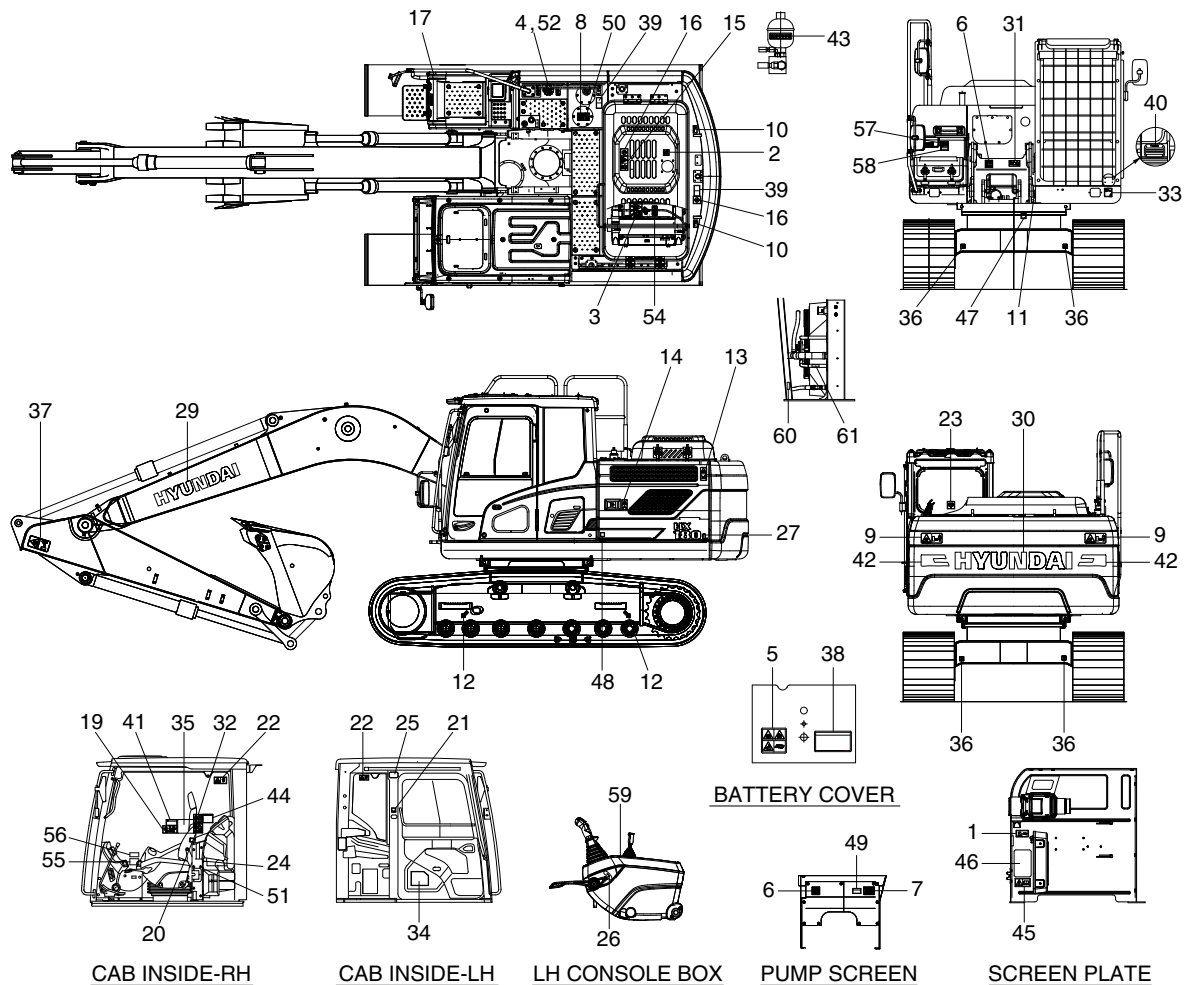


## SAFETY LABELS

### 1. LOCATION

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



180F0SL01

- |                          |  |                                       |
|--------------------------|--|---------------------------------------|
| 1 Air cleaner filter     | 21 Hammer                                  | 42 Reflecting-counterweight           |
| 2 Turbocharger cover     | 22 Safety front window                     | 43 Accumulator                        |
| 3 Radiator cap           | 23 Safety rear window                      | 44 M/control pattern change valve     |
| 4 Fueling                | 24 Air conditioner filter                  | 45 M/control pattern change-w/o valve |
| 5 Battery accident       | 25 ROPS plate                              | 46 M/control pattern change-w/valve   |
| 6 High pressure hose     | 26 Safety knob                             | 47 Swing bearing grease               |
| 7 Hydraulic oil level    | 27 Model name                              | 48 Battery position                   |
| 8 Hydraulic oil lub      | 29 Trade mark (boom)                       | 49 Lubrication oil                    |
| 9 Keep clear-rear        | 30 Trade mark (CWT)                        | 50 Fuel shut off                      |
| 10 Lifting eye           | 31 Reduction gear grease                   | 51 MCU/ECM connector                  |
| 11 Name plate            | 32 Clamp locking                           | 52 Ultra low sulfur diesel            |
| 12 Slingside ideogram    | 33 Noise level LWA                         | 54 Surge tank                         |
| 13 Keep clear-side       | 34 Service instruction                     | 55 Key off caution                    |
| 14 Stay fix              | 36 Tie                                     | 56 RCV lever                          |
| 15 Engine hood shearing  | 37 Keep clear-boom/arm                     | 57 Diesel exhaust fluid               |
| 16 No step               | 38 Electric welding                        | 58 DEF/AdBlue® fill-up                |
| 17 Transporting          | 39 Falling                                 | 59 Dozer ideogram                     |
| 19 M/control pattern     | 40 FOPS FOG plate                          | 60 Refrigerant                        |
| 20 Ref operator's manual | 41 Caution (water separator, turbocharger) | 61 Use handrail                       |

## 2. DESCRIPTION

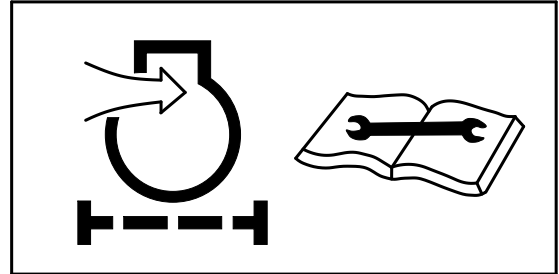
There are several specific warning labels on this machine please become familiarized with all warning labels.

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 screen plate.

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

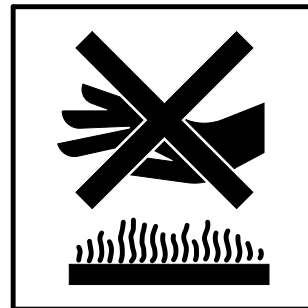


21070FW01

### 2) TURBOCHARGER COVER (item 2)

This warning label is positioned on the engine hood.

- ⚠ **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.**

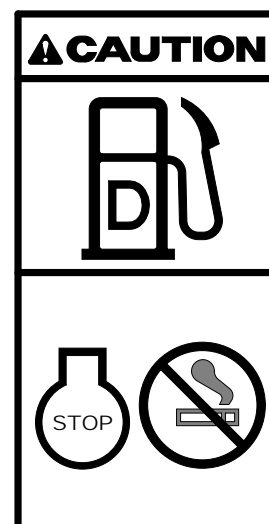


14070FW03

### 4) FUELING (item 4)

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

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

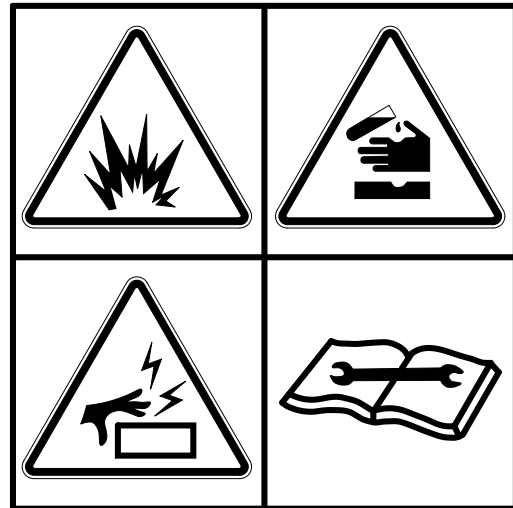


290F0FW02

#### 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 pump screen 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.**

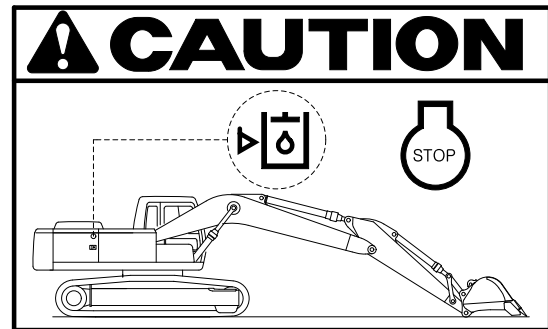


14070FW29

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

This warning label is positioned on the pump screen.

- ▲ 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.

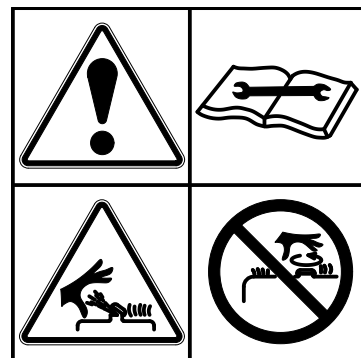


21070FW07

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

This warning label is positioned on the top 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.

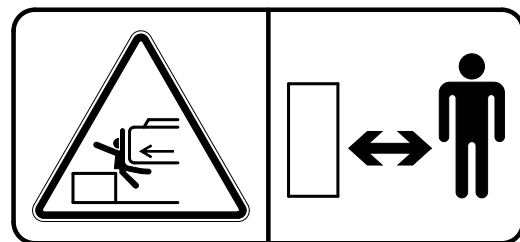


14070FW08

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

This warning label is positioned on the rear 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.

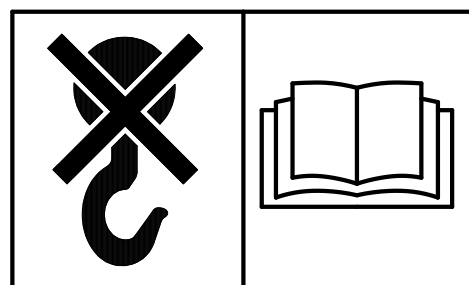


21090FW09

#### 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 5-8 for proper lifting method of the machine.

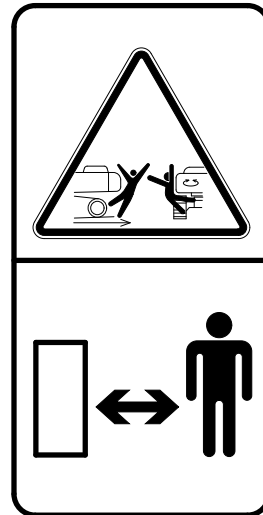


21070FW10

**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.**

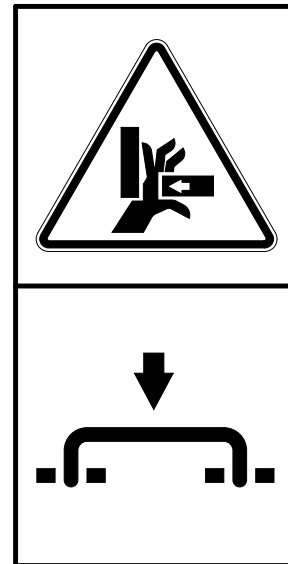


21070FW13

**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.**

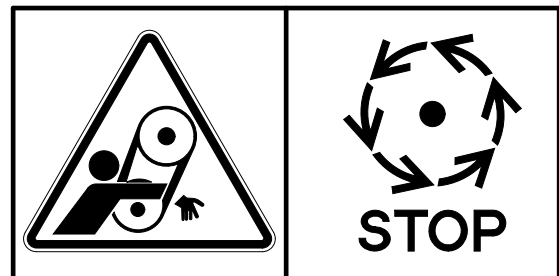


21070FW14

**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.**

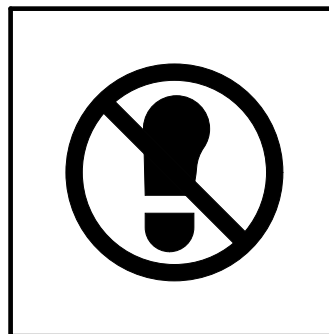


21070FW15

**14) NO STEP (item 16)**

This warning label is positioned on the engine hood and counterweight.

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



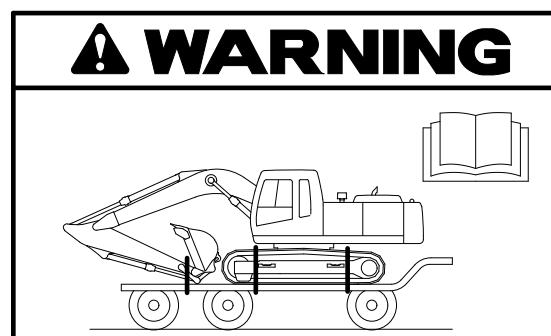
21070FW16

**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 5-7 for details.



14070FW17

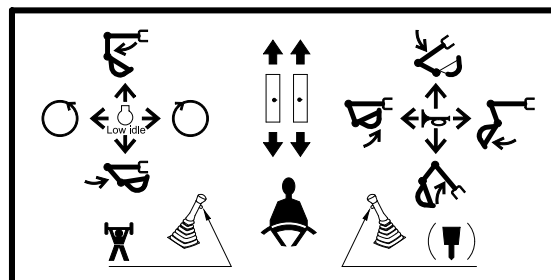
**16) MACHINE CONTROL PATTERN (item 19)**

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.



36070FW19

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

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

#### (1) Ref operator manual

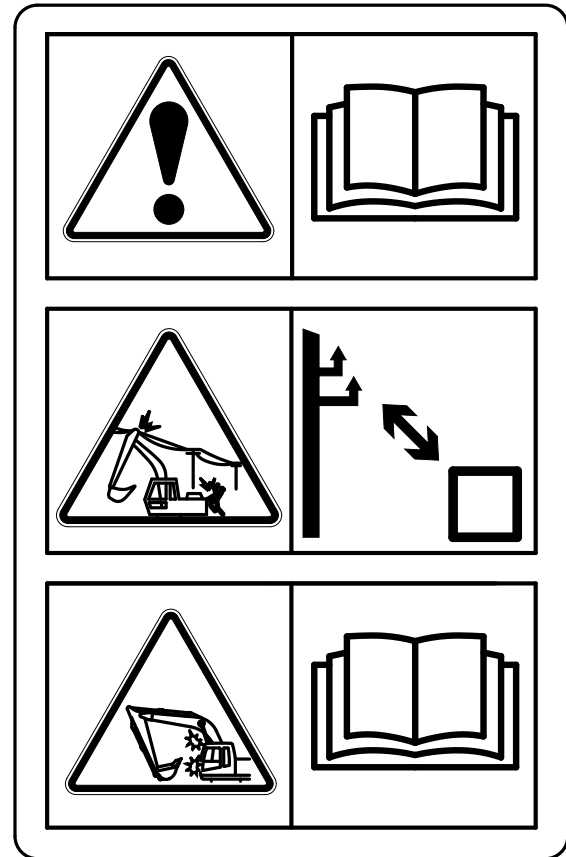
- ▲ Study the operator's manual before starting and operating machine.
- ▲ Do not operate this machine unless you have read and understand the instructions and warnings in this manual. Failure to follow the instructions or warnings could result in injury or death.

#### (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.

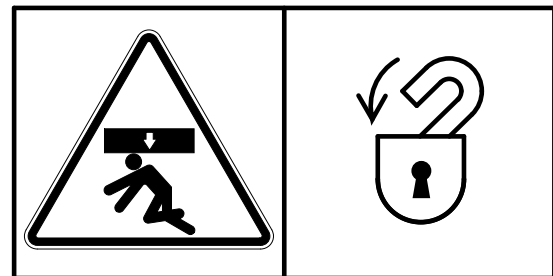


2609A0SL05

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

This warning label is positioned on the LH and RH side window of the cab.

- ▲ Be careful that the front window may be promptly closed.
- ※ See page 3-71 for details.



21070FW24

**19) SAFETY REAR WINDOW** (item 23)

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

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

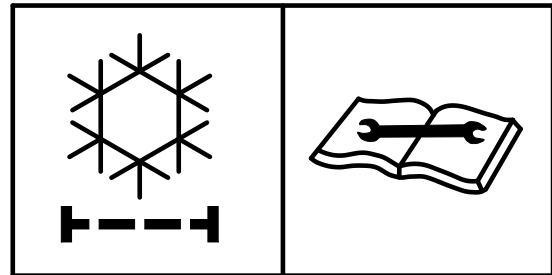


2609A0SL02

**20) 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.

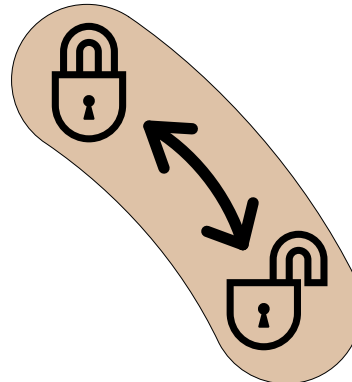


21070FW26

**21) 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.

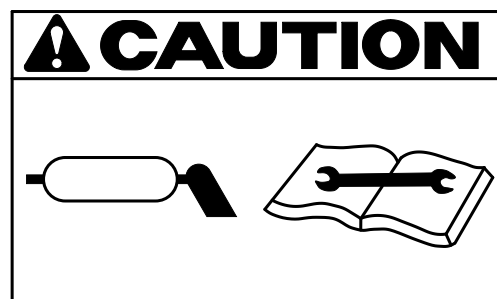


30007A1FW07A

**22) REDUCTION GEAR GREASE** (item 31)

This warning label is positioned on 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.



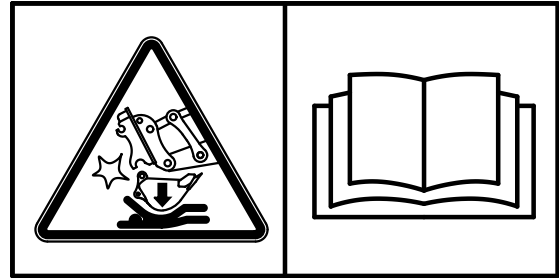
21070FW35



### 23) 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.**

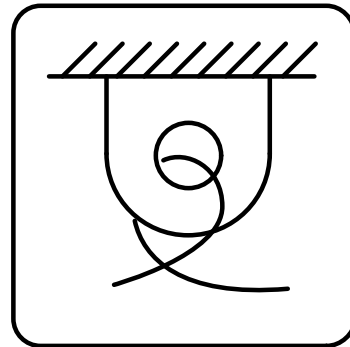


14070FW60

### 24) TIE (item 36)

This warning label is positioned on the front and rear side of the lower frame.

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



4507A0FW02

### 25) 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.**

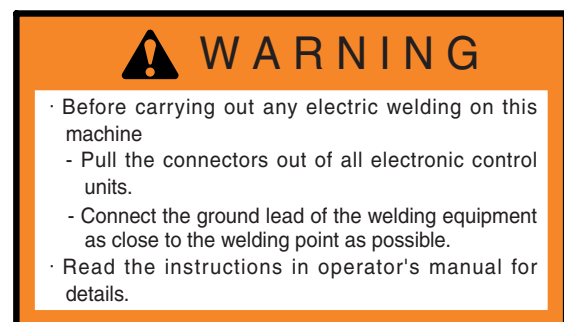


14070FW31

### 26) 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 6-44 for detail.**



7807AFW20

## 27) FALLING (item 39)

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

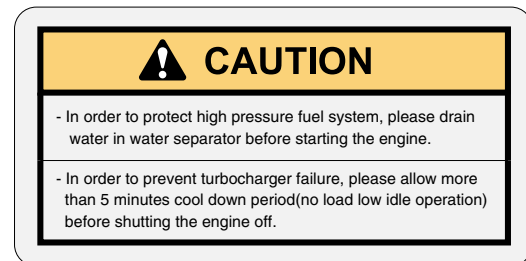


14070FW30

## 28) 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

## 29) REFLECTING-COUNTERWEIGHT (item 42)

This warning label is positioned on the rear 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.



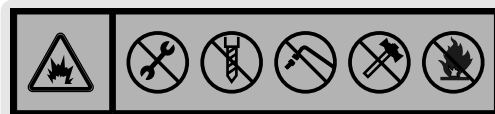
290F0FW01

### 30) 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.

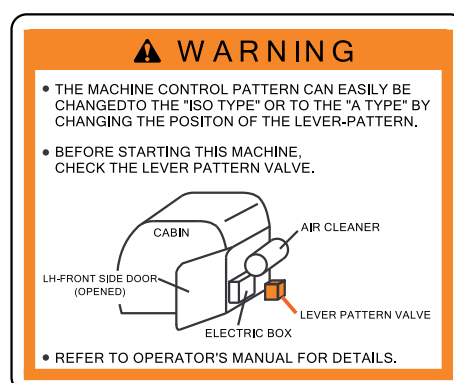


1107A0FW46

### 31) 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.



2609A0SL11

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

This warning label is positioned on the pump screen.

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

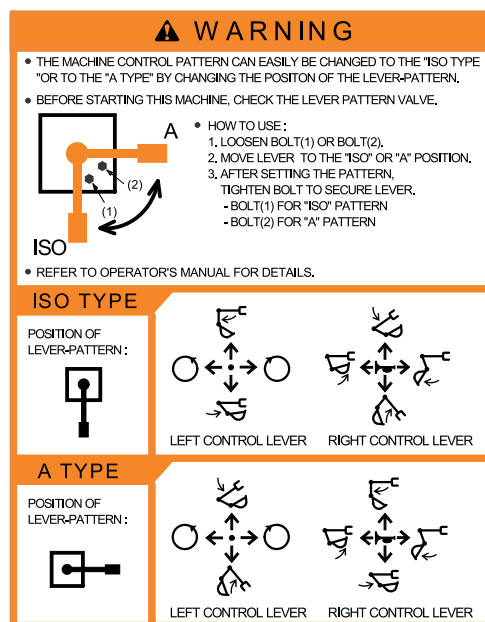


14W90FW47

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

This warning label is positioned on the pump screen.

- ▲ 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.

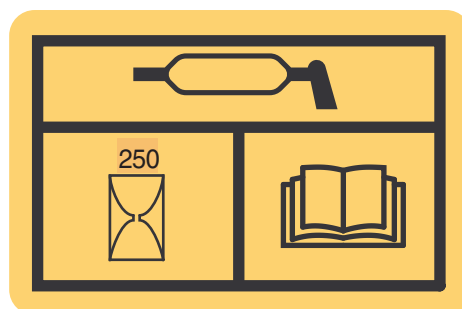


38090FW01A

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

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

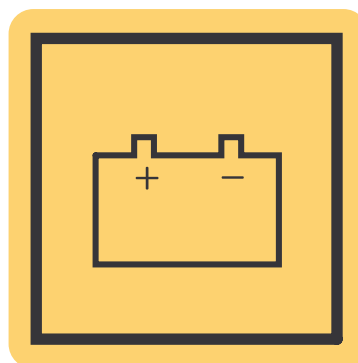
- ※ See page 6-35 for details.



38090FW02

### 35) BATTERY POSITION (item 48)

This warning label is positioned on the LH side cover.

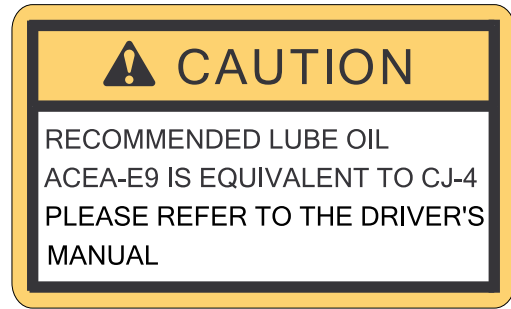


38090FW03

### 36) LUBRICATION OIL (item 49)

This warning label is positioned on the pump screen.

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

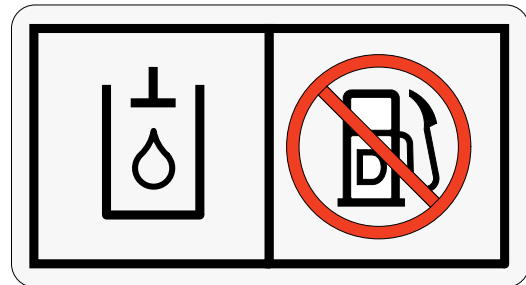


290F0SL03

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

This warning label is positioned on 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

### 38) 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 3-70 for details.

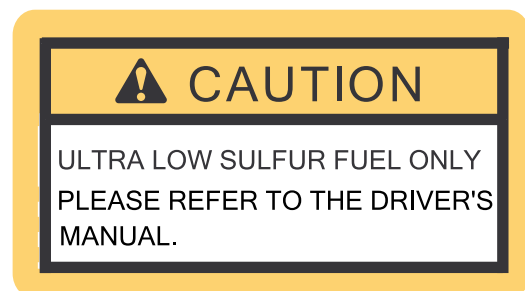


235Z90FW52

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

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

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



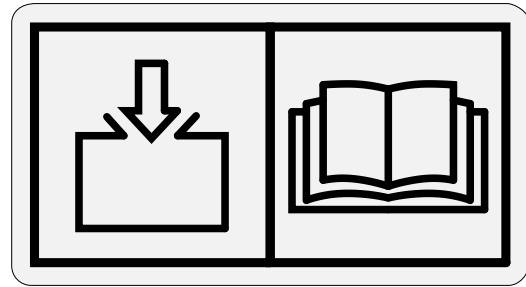
2609A0SL03

#### 40) 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



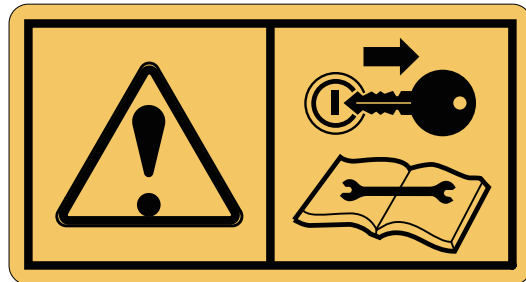
3009A0FW54

#### 41) 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

#### 42) 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

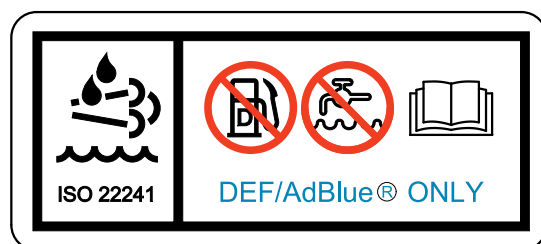
#### 43) DIESEL EXHAUST FLUID (item 57)

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

- ※ 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

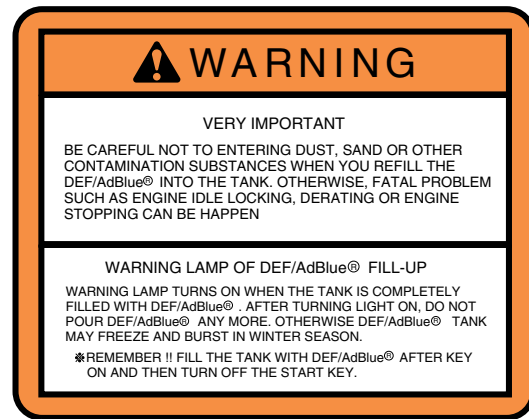
#### 44) DEF/ADBLUE® FILL-UP (item 58)

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

- △ **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.**
- ※ **See page 6-28 for detail.**

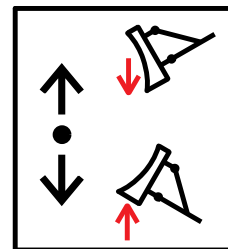


480F0SL06

#### 45) DOZER IDEOGRAM (item 59)

This warning label is positioned on the LH console box.

- ※ **See page 4-12 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.**



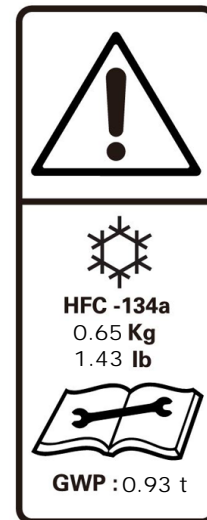
R25Z9A0FW06

**46) REFRIGERANT** (item 60)

This warning label is positioned on the right side of engine hood.

- ▲ 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 6-47.



140F0FW30