

[Previous Screen](#)

◀Product: MINI HYD EXCAVATOR

Model: 303 MINI HYD EXCAVATOR DMA

Configuration: 303 CR Mini Hydraulic Excavator DMA00001-UP (MACHINE) POWERED BY S3L2 Engine

## Operation and Maintenance Manual

### 303 CR Mini Hydraulic Excavator

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## Monitoring System

SMCS - 7451; 7490

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### NOTICE

**When the monitor provides a warning, immediately check the monitor and perform the required action or maintenance as indicated by the monitor.**

**The monitor indicator does not guarantee that the machine is in a good condition. Do not use the monitor panel as the only method of inspection. Maintenance and inspection of the machine must be performed on a regular basis. See the Maintenance Section of this Operation and Maintenance Manual.**

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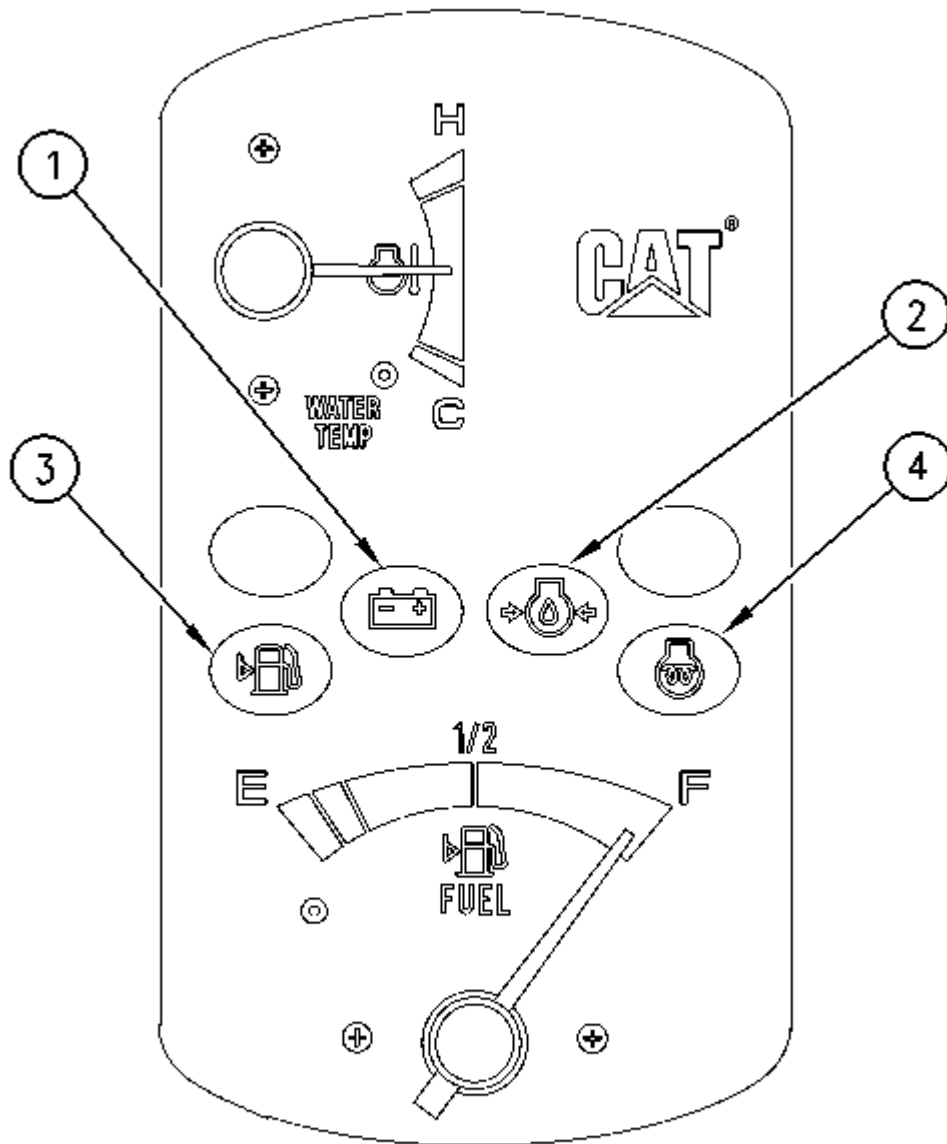


Illustration 1

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The instrument panel is located on the right console.



**(1) Alternator Indicator Light** - The alert indicator comes on when the engine start switch key is turned to the ON position. The alert indicator goes off after the engine is

started. The alert indicator will light when there is a malfunction in the electrical system. If this alert indicator comes on, the system voltage is too high for normal machine operation or too low for normal machine operation.

If electrical loads are high and the engine speed is near idle, increase the engine speed to high idle. This will generate more output from the alternator. If the alert indicator for the electrical system turns off within one minute, the electrical system is probably operating in a normal manner. However, the electrical system may be overloaded during periods of low engine speeds. If an overload occurs at low engine speed you should perform one or a combination of the following actions.

- Increase the engine speed.
- Lower or turn off the heater fan.
- Turn off any auxiliary electrical equipment.

If the alert indicator does not turn off, consult your Caterpillar dealer.

## **(2) Engine Oil Pressure Indicator**

- The alert indicator comes on when the engine start switch key is turned to the ON position. The alert indicator goes off after the engine is started. The engine oil pressure indicator will come on, and the alarm will sound, if the engine oil pressure is insufficient. If the alert indicator comes on, stop the engine immediately and check the engine oil level. Make any necessary repairs before starting the engine again. In cold weather, the indicator and the alarm may remain on for more than ten seconds after the engine is started. In this case, stop the engine once and start the engine again.



**(3) Fuel Level Indicator Light** - If the fuel level in the tank goes below the specified level, the alarm indicator will come on. Add fuel immediately.





**(4) Preheat Light** - The indicator comes on when the engine start switch key is turned to the ON position. The glow plug will preheat at this time to aid in cold weather starting. The indicator goes off after the engine is started.

## Warning Categories

The monitoring system provides two warning categories. The first category requires only operator awareness and the earliest possible response. The second category requires immediate shutdown of the machine systems.

### Warning Category 1

In this category, only the alert indicator is activated. This makes the operator aware that the machine needs attention.

### Warning Category 2

In this category, the alert indicator is activated and the action alarm will sound. The machine must be shut down immediately in order to prevent the following conditions:

- Operator injury
- Severe system damage
- Severe machine damage

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