PART NO. EM18K-1-1T

HITACHI

Operator's Manual

EX1900-6

Hydraulic Excavator

Serial No 001001 and up

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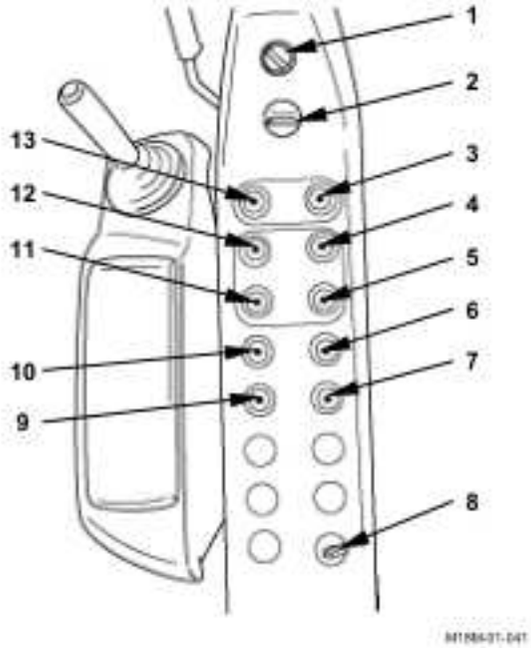
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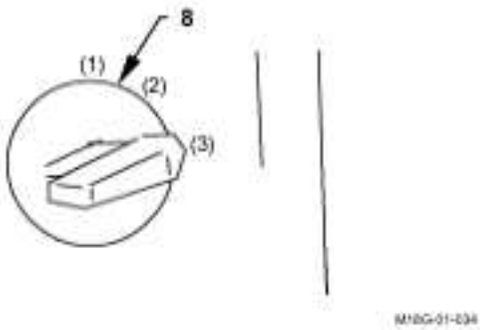
RIGHT CONSOLE

1- Emergency Engine Stop Switch
2- Engine Speed Control Dial
3- Engine Start Switch
4- Dome Light Switch
5- Entrance Light Switch
6- Auto Idle Switch
7- Not Available
8- Key Switch
9- Buzzer Stop Switch
10- Travel Mode Switch
11- Maintenance Light Switch
12- Work Light Switch
13- Engine Stop Switch



KEY SWITCH

1- OFF (Power OFF)
2- ACC (Horn, Radio, etc)
3- ON (Power ON)



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B. ENGINE

Parts			Classification of Oil	Quantity	Interval (hours)						
					10	50	250	500	1000	1500	2000
1. Engine Oil	Check Oil Level	Engine Oil Pan		1							
		Reserve Tank ✷		1							
2. Check LED Monitor Signal (on Reserve Tank) ✷				1							
3. Engine Oil	Change	Engine Oil Pan	Premium	166L (44 US gal)		✱ ★		★			
	Change	Engine Oil Pan	Standard	166L (44 US gal)		✱ ★		★			
		Reserve Tank ✷		150L ※ (40 US gal)							
4. Replace Engine Oil Filter				3		✱					

NOTE: ✱ *First time only*

★ *When change engine oil, change the oil in engine oil pan and reserve tank at the same time.*

※ *Total quantity of oil (Engine Oil Pan and Reserve Tank) achieves 500 hours replacement interval. It differs according to the kind of engine oil used.*

The capacity of reserve tank is 220L (58 US gal).

NOTE: ✷ *The machine has a reserve system.(OPTIONAL)*
Reserve system is the system that oil is circulated between engine oil pan and reserve tank by the pump on reserve tank.

Engine Oil Viscosity Requirements

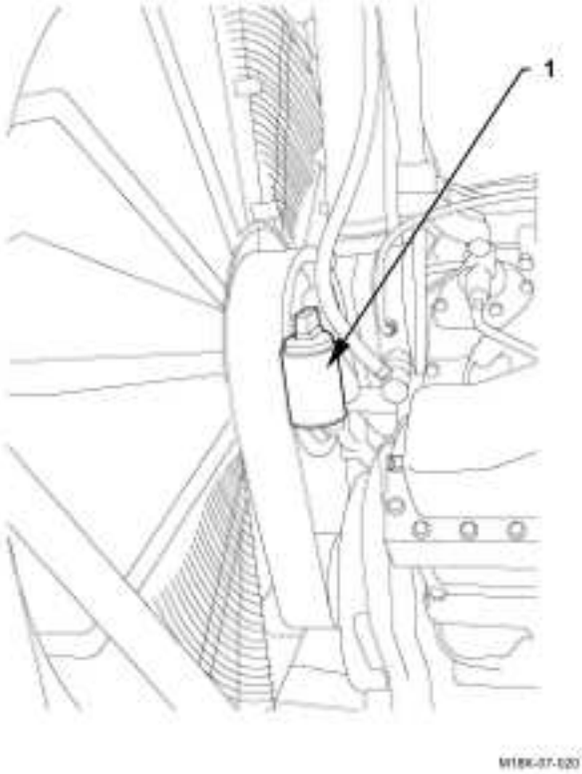
Classification of Oil	API Service Class	Type	Viscosity Grade (SAE)	Temperature Ranges
Standard	CF-4	All Season Multigrade	15W-40	-18° to 50°C (0° to 122°F)
	CG-4	All Season Multigrade	15W-40	-18° to 50°C (0° to 122°F)
Premium	CH-4	All Season Multigrade	15W-40	-18° to 50°C (0° to 122°F)
	CI-4	All Season Multigrade	15W-40	-18° to 50°C (0° to 122°F)

NOTE:
- *Oils with nominal ash content must be 1.0 to 1.5 percent mass. Oils with higher ash content, up to 1.85 percent ash, can be used in areas where the sulfur content of the fuel is normally 1 to 1.5 percent mass. Limiting ash content is critical to the prevention of valve and piston deposit formation.*
- *The machine is shipped from the factory is filled with lubricants, Hitachi Super Wide DH-1 15W-40 (Class CF-4 (API Service Classification)).*
- *Refer to the manual for Cummins Engine.*
- *For further details, refer to Cummins B/No. 3810470-01 "Maintenance and Operation Practices for Maximum Engine Life".*

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3 Replace Coolant Filter --- every 500 hours

Check the DCA4 concentration every 500 hours. (Refer to page 7-82 for the checking procedure.) If the concentration is lower than the acceptable range, and if the coolant filter has to be replaced as a result (Refer to "Concentration Check Table" section on page 7-80.), replace the WF-2075 coolant filter, following the procedure below:

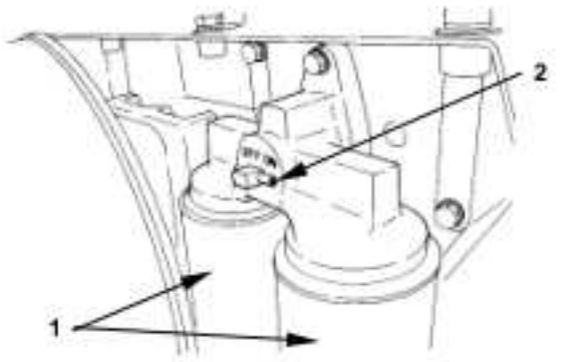


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WARNING: Do not attempt to loosen coolant filter (1) until the engine is cool.

IMPORTANT:
- **Be sure to prepare a container large enough to collect coolant when replacing water filter to avoid ground contamination and for safety.**
- **Be sure to tighten the filter by hand. If any tools are used for tightening, breakage or deformation of the filter head may arise. For details other than filter replacement intervals, refer to Cummins Engine Operation and Maintenance Manual.**

1. Move shut-off valves knob (2) to the OFF position.
2. Remove filter (1) and discard it.
3. Apply a thin film of lubricating oil to the gasket sealing surface prior to installing new filter (1).
4. Position new filter (1) to the filter head. Tighten until the seal touches the filter head; tighten an additional one-half to three-fourths turn.
5. Move shut-off valves knob (2) back to the ON position.



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