

Testing and Adjusting

303C CR and 303.5C CR Mini Hydraulic Excavators Hydraulic System
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Engine Performance - Test - Engine Speed

SMCS - 1000-081

Table 1

Required Tools		
Part Number	Description	Qty
1U-6602	Photo-Tachometer	1

1. Position the machine on level ground.
2. Stop the engine.
3. Install a piece of reflective tape on the fan or a pulley on the engine.
4. Start the engine.
5. Increase the hydraulic oil temperature to $55^{\circ} \pm 5^{\circ}\text{C}$ ($131^{\circ} \pm 9^{\circ}\text{F}$).
6. Read the engine speed display (rpm) on the photo-tachometer. Refer to Table 2 for the specifications for engine speed at the desired engine operation.

Table 2

Engine Speed		
Item	Specification	
	303C CR	303.5C CR
High Idle ⁽¹⁾	2400 - 2500 rpm	2500 - 2600 rpm
Low Idle ⁽¹⁾	1130 - 1230 rpm	1150 - 1250 rpm
Auto Idle ⁽¹⁾	1130 - 1230 rpm	1150 - 1250 rpm
Engine speed with load ⁽²⁾	2300 rpm ⁽³⁾	2400 rpm ⁽³⁾

⁽¹⁾ No load

⁽²⁾ Pressure is relieved from both pumps.

⁽³⁾ Minimum RPM