

## Testing and Adjusting

### 302.5C Mini Hydraulic Excavator Hydraulic System

Media Number -REN9145-02

Publication Date -01/03/2009

Date Updated -25/03/2009

i02981602

## Relief Valve (Swing) - Test and Adjust

SMCS - 5454-036

Table 1

Required Tools		
Part Number	Description	Qty
8T-0860	Pressure Gauge	1
6V-3014	Hose As	1
6V-3989	Fitting	1
6V-4143	Quick Connect Coupler	2

**Note:** The following tests require operating the engine at the HIGH IDLE position. Refer to Testing and Adjusting, "Engine Performance - Test (Engine Speed)".

**Note:** A temporary setting of the main relief valve is required before the relief valve can be tested. Temporarily adjust main relief valve (P3) in order to test the swing relief valves. Refer to Testing and Adjusting, "Relief Valve (Main) - Test and Adjust".

1. Release the hydraulic system pressure. Refer to Testing and Adjusting, "Hydraulic System Pressure - Release" for the proper procedure.
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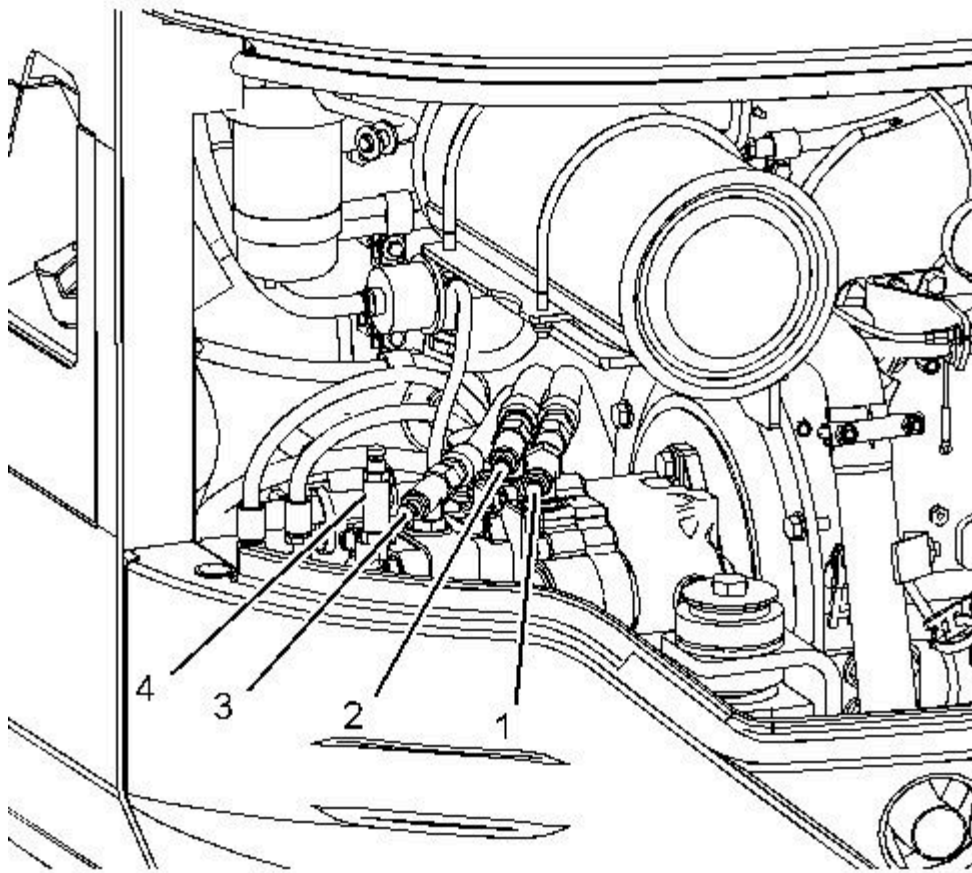


Illustration 1

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Main pump compartment

- (1) Pressure tap (P1)
- (2) Pressure tap (P2)
- (3) Pressure tap (P3)
- (4) Pressure tap (Pilot Pump)

2. Open the door for the main pump compartment in order to access the pressure taps for the main relief valves.
3. Connect a 40000 kPa (5800 psi) pressure gauge to pressure tap (3) .
4. Start the engine.
5. Increase the engine speed lever to the HIGH IDLE position.
6. Increase the hydraulic oil temperature to  $55^{\circ} \pm 5^{\circ}\text{C}$  ( $131^{\circ} \pm 9^{\circ}\text{F}$ ).
7. Position the machine near a stationary object. Carefully place the right side of the bucket against the object.

**Note:** Move the swing joystick slowly and ensure that the machine will not swing.

8. Move the swing joystick into the SWING RIGHT position and hold. Make a note of the reading on the

gauge attached to pressure tap (3) .

9. The pressure gauge reading should be  $18050 \pm 450$  kPa ( $2620 \pm 65$  psi).
10. Reposition the machine. Carefully place the left side of the bucket against the object.  
**Note:** Move the swing joystick slowly and ensure that the machine will not swing.
11. Move the swing joystick into the SWING LEFT position and hold. Make a note of the reading on the gauge attached to pressure tap (3) .
12. The pressure gauge reading should be  $18050 \pm 450$  kPa ( $2620 \pm 65$  psi).
13. Return the engine speed lever to the LOW IDLE position.
14. Stop the engine.
15. If the pressure readings are not set to the correct specifications adjust the relief valve to  $18050 \pm 450$  kPa ( $2620 \pm 65$  psi).

**Note:** Adjust the main relief valve to the correct specifications. Refer to Testing and Adjusting, "Relief Valve (Main) - Test and Adjust".

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