

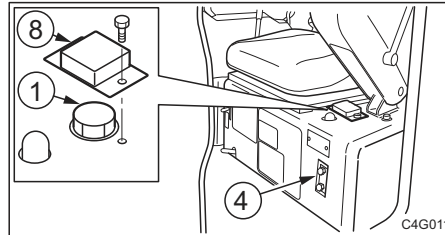


Replacing the Hydraulic Oil and Cleaning the Suction Strainer

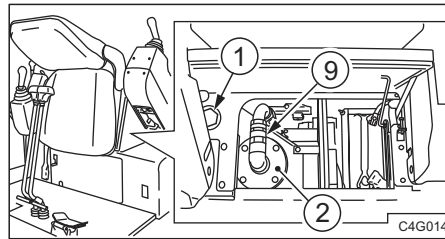
WARNING

- Stop the engine and allow the machine to cool down before performing maintenance.
- The engine, hydraulic lines and many other parts of the machine are hot directly after the engine is stopped. Touching these parts will cause burns.
- The hydraulic fluid is also hot and under high pressure. Be careful when loosening caps and plugs. Working on the machine under these conditions could result in burns or injuries due to the hot oil spurting out.
- Oil may spurt out if caps or filters are removed or pipes disconnected before releasing the pressure in the hydraulic system.
- Gradually loosen the vent plug to relieve tank pressure.
- When removing plugs or screws or disconnecting hoses, stand to the side and loosen slowly to gradually release the internal pressure before removing.

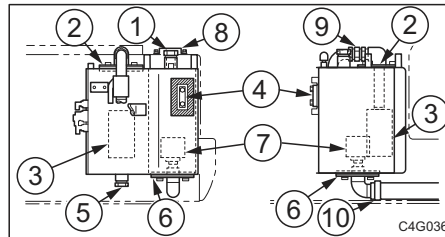
1. Slew 45° counterclockwise and set the machine to the hydraulic oil level inspection posture. Refer to page 109 "Inspecting the Hydraulic Oil Level and Replenishing".
2. Set the left safety lock lever to the locked position.



3. Loosen the bolt and remove the cover (8). (For cab models)
4. Slowly turn the vent plug (1) to relieve tank pressure, then remove.



5. Open the maintenance cover.
6. Remove the four bolts from the cover (2).
7. Remove the adapter (9), then remove the cover (2).



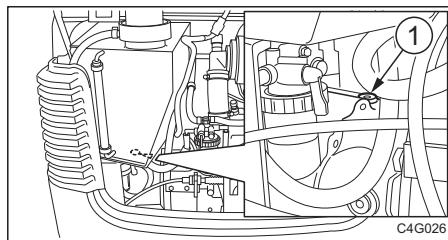
8. Remove the return filter (3).
9. Place a pan for catching the spent oil under the drain plug (5).
10. Loosen the drain plug (5) and drain the hydraulic oil.
11. Loosen the hose clip (10).
12. Remove the bolt, then remove the flange (6).



13. Remove the suction strainer (7) and clean it.
14. Clean the inside of the hydraulic tank.
15. Install the new return filter and suction strainer (7).
16. Install the cover (2) and connect the adapter (9).
17. Install the flange (6) and connect the hose.
18. Tighten the drain plug (5).
19. Insert hydraulic oil through the hole in the vent plug (1), adding hydraulic oil to between the upper limit (H) and lower limit (L) of the sight gauge (4).
20. Follow the procedure under "Bleeding the air" to bleed the air from the hydraulic oil circuit.
21. Set the machine to the hydraulic oil level inspection posture and inspect the level once the temperature of the oil has dropped.
Refer to page 109 "Inspecting the Hydraulic Oil Level and Replenishing".
22. Pressurize the hydraulic tank.
Refer to page 110 "Pressurizing the hydraulic tank".

Bleeding the air

IMPORTANT: After replacing the hydraulic oil, bleed the air from the hydraulic oil circuit and hydraulic devices. Failure to do so may damage the hydraulic devices.



1. Loosen the hydraulic pump's air bleeding plug (1).

2. Once hydraulic oil overflows from the hole in the air bleeding plug (1), tighten the plug.
3. Start the engine and run it at low idle for 10 minutes.
4. Set the engine to a low idle, then extend and contract all the cylinders 4 or 5 times, without going to the stroke end.
5. Run the engine at high speed, then extend and contract all the cylinders 4 or 5 times, without going to the stroke end.
6. Set the engine back to a low idle, then extend and contract all the cylinders 4 or 5 times to the stroke ends.

Inspecting the Engine Fuel Injection Timing

This operation requires experience. Have it performed by a Takeuchi sales or service outlet.

Inspecting the Engine Fuel Injection Valve

This operation requires experience. Have it performed by a Takeuchi sales or service outlet.