Oil Cooler Circuit Bleeding

When carrying out routine oil changes, the oil quantity contained in the twin oil coolers and associated pipework is not disturbed and is considered perfectly satisfactory for routine maintenance operations. In instances of major engine failure where the oil system may be contaminated with metallic debris, all oil cooler lines should be thoroughly flushed out and the oil cooler radiators replaced.

If the oil cooler circuit is drained or replaced, the following procedure should be adopted to fill the cooler system before starting the engine:

1. Attach a tube to the bleed nipple on the sandwich plate between oil filter and engine block, and lead into a catch tank. Open the bleed nipple.

2. Disconnect the outlet hose from the top of the LH oil cooler, and pour engine oil into the cooler until oil reaches the bleed nipple (approx. 2.5 litres). Close the bleed nipple, tightening to 8 Nm.

3. Connect the LH cooler outlet hose and tighten to 40 Nm.

4. Add a further 0.7 litres of oil into the engine to accommodate the volume of the return hose between LH oil cooler and engine.

5. After starting the engine, restrict running to idle speed for a minimum of 5 minutes, to allow the oil cooler lines to be purged of air. Stop engine and re-check oil level.