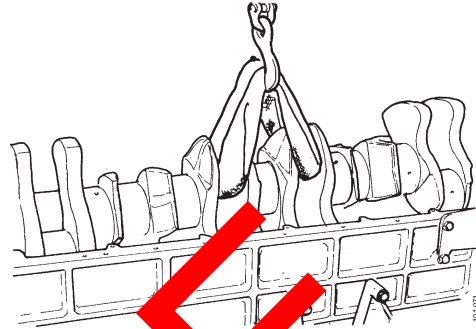


Crankshaft

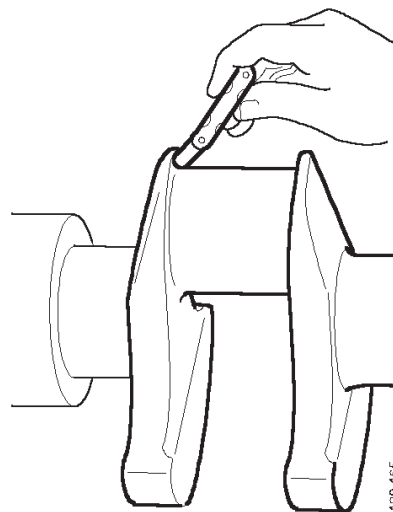
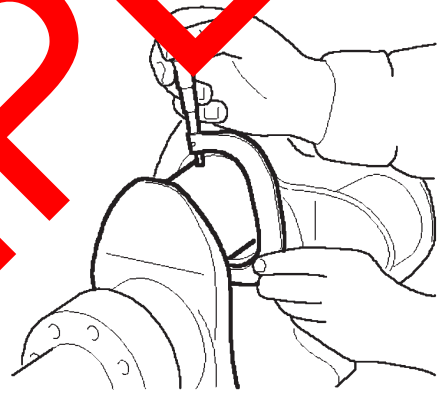
Removal

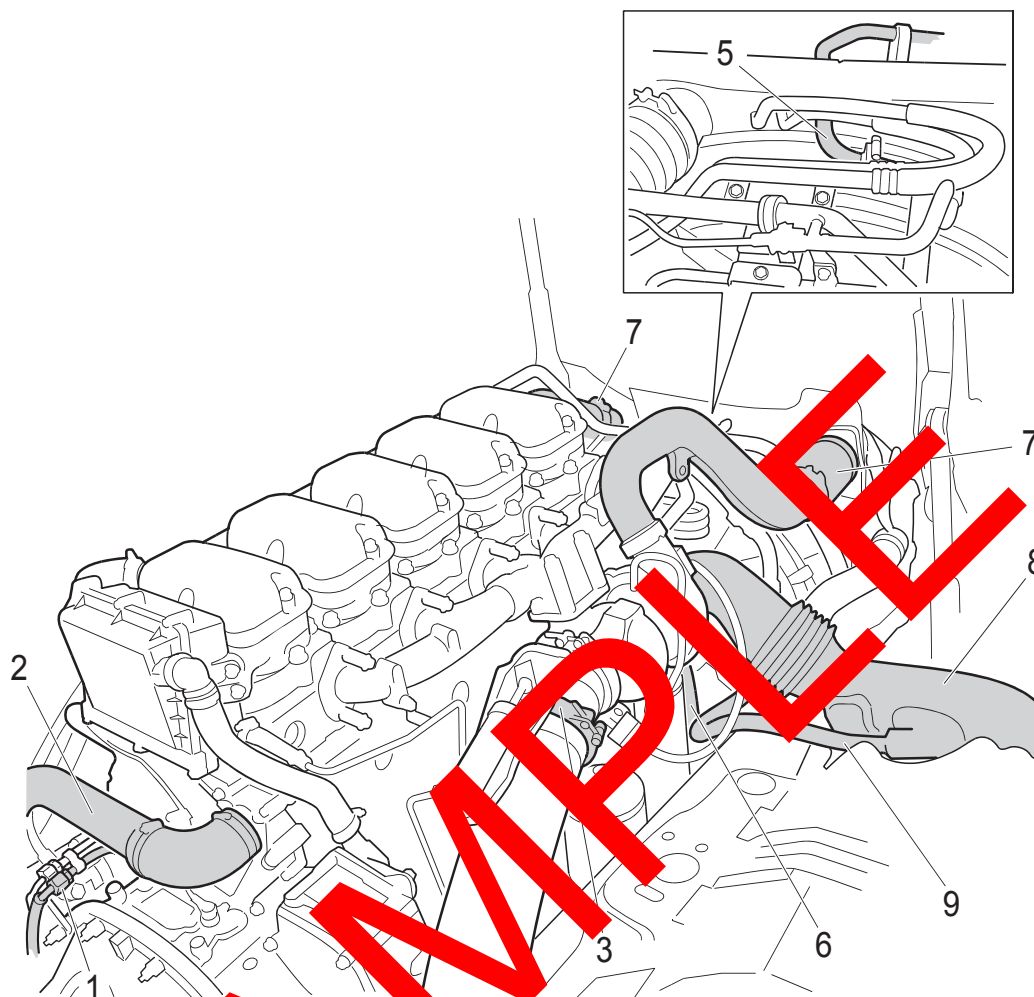
- 1 Remove the cylinder heads and pushrods.
- 2 Remove the flywheel and flywheel housing.
- 3 Remove the fan, fan hub, oil sump, timing gear casing and intermediate gear.
- 4 Remove the oil pump and all pistons and connecting rods.
- 5 Remove all main bearing caps and carefully lift out the crankshaft using a lifting strap for example, which will not damage the shaft journals.
- 6 Remove all main bearing shells and guide washers by the 7th main bearing.



Checking and grinding

- 1 Measure the diameter on the crankshaft's bearing journals using a micrometer as illustrated. Measure at several points around the bearing journal. If any of the diameters is lower than the minimum indicated limit, regrinding of the crankshaft should be considered. Oil pressure should also be checked as it is affected by such factors as wear in the main bearings and connecting rod bearings.
- 2 When regrinding, keep to the specified minimum dimensions. Suitable bearings are available for these sizes. It is important that the fillet radius of the bearing journals is correct. Check the fillet radius using a template as illustrated.
- 3 After grinding the bearing journals, round off and polish the oil hole openings on the bearing surfaces.



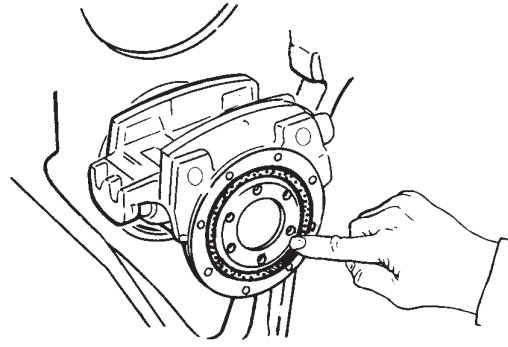


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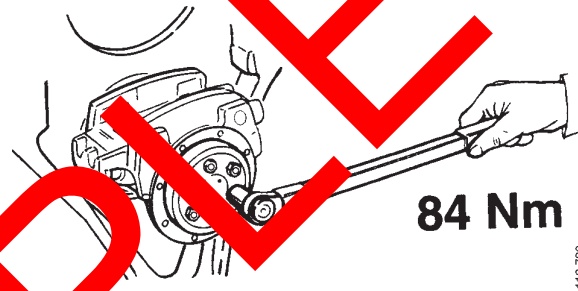
Standard finishing operations

Action	Comments
1 Refit the front mudguard.	
2 Tilt the cab back.	Refer to group 18 for work description.
3 Fit the negative battery cable.	
4 Fill the cooling system.	Refer to group 02 for work description.

- 5 Fit the washer in the spring bearing spring pins. The sliding surface must face outwards.
- 6 Grease the sliding surface thoroughly so that all holes are filled with grease.



- 7 Fit the thrust washer and nuts. Tighten the nuts diagonally to 84 Nm.



- 8 Clean the cover and fit the washer on the spring pins of the cover. The sliding surface must face the thrust washer.
- 9 Grease the sliding surface thoroughly so that all holes are filled with grease.
- 10 Fit a new O-ring in the cover.
- 11 Completely fill the cover with grease.

