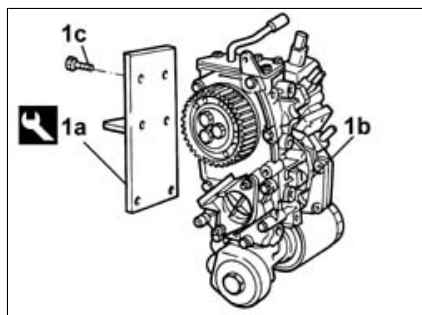
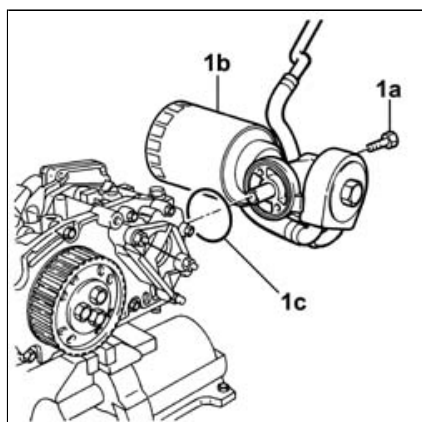


## DUCATO 2.8 JTD 8V AUXILIARY UNIT, REMOVED - DISMANTLING AND REASSEMBLY 1020F20

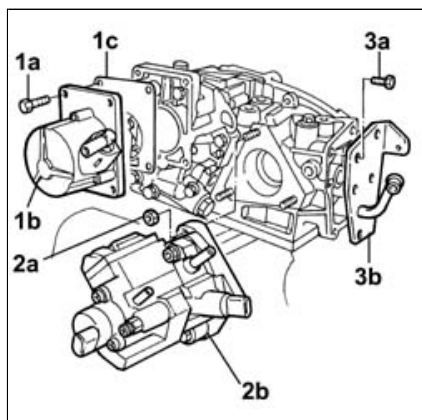


Removing ( [Refitting](#) ) - Place the head on the workbench.1. Fit the tool (1a) on the auxiliary unit (1b) and fasten it using the bolts (1c).


	Description	Code	Function
-	Support	1.860.635.000	Auxiliary shaft assembly support



- Place the tool in the vice.1. Undo the centre fixing bolt (1a) and remove the heat exchanger/oil filter assembly (1b) complete with gasket (1c).



1. Undo the fixing bolts (1a) and remove the vacuum unit (1b) and the gasket (1c).2. Undo the fixing nuts (2a) and remove the pressure pump (2b).

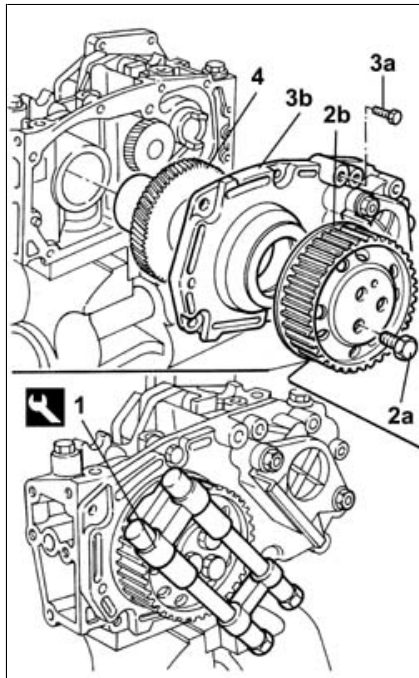
 Do not separate the spacer from the pump.

3. Undo the fixing bolts (3a) and remove the cover (3b).

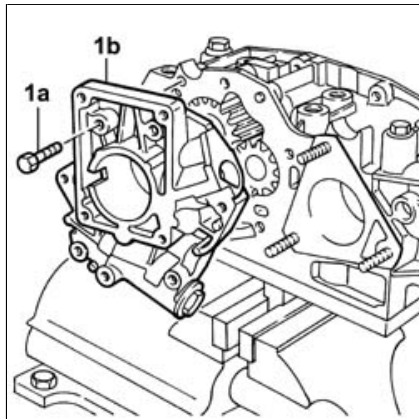
1. Fit the tool.

	Description	Code	Function
1	Counter-torque	1.860.765.001	Loosen/tighten auxiliary shaft toothed drive pulley bolt

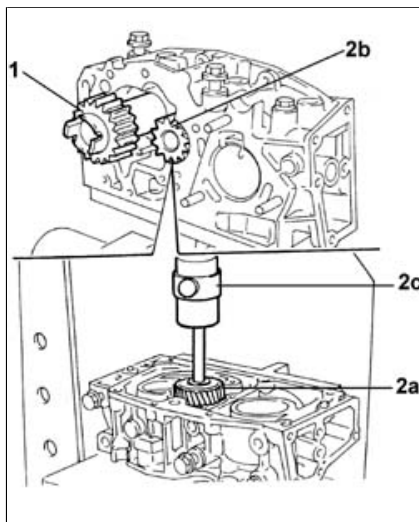
2. Undo the fixing bolts (2a) and remove the driven timing pulley (2b).3. Undo the fixing bolts (3a) and remove the front cover (3b).4. Release the main gear.



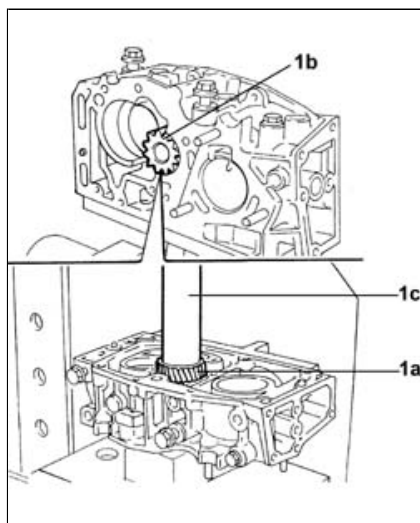
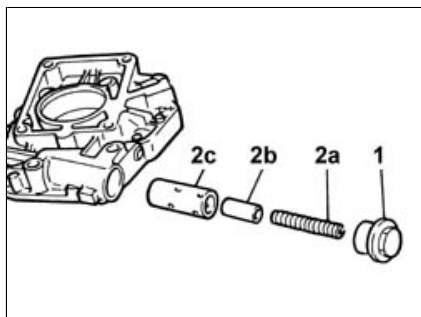
1. Undo the fixing bolts (1a) and remove the cover (1b).



1. Release the oil pump driven gear. 2. Remove the gear (2a) from the drive gear shaft (2b) for the oil pump using a hydraulic press (2c).



1. Undo the oil pressure relief valve cap. 2. Release the spring (2a), the piston (2b) and the cylinder (2c).



Refitting ( [Removing](#) ) - Using a torque wrench, check that the specifications of the oil pressure relief valve spring correspond to the recommended figures; if this it not the case, replace it.

	Subject	Value
-	Length	39 mm
-	Under a load of	10.5 +- 0.4 daNm
	Subject	Value
-	Length	32 mm
-	Under a load of	14.5 +-0.6 daNm

- Fit the spring, the piston and the cylinder for the oil pressure relief valve.- Tighten the cap to the recommended torque.

	Value - daNm	Fastening	Component	Ø
-	6,5	Plug	-	M24

1. Fit the gear (1a) on the drive gear shaft (2b) for the oil pump using a hydraulic press (1c).

1. Fit the tool.

	Description	Code	Function
1	Counter-torque	1.860.637.000	Oil pump drive gear fitting check

1. Fit the tool.

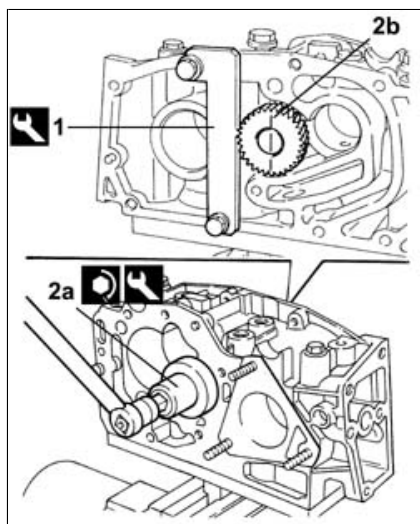
	Description	Code	Function
1	Counter-torque	1.860.637.000	Oil pump drive gear fitting check

2. Using the tool (2a), tighten the oil pump drive gear (2b) to the recommended torque to check that it is correctly fitted on the shaft.

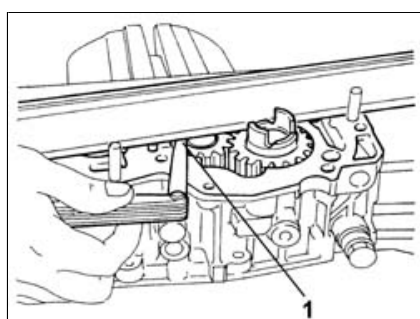


Trace a straight vertical line and check that after applying the recommended torque the trace remains aligned.

	Description	Code	Function
2b	Counter-torque	1.860.636.000	Oil pump drive gear

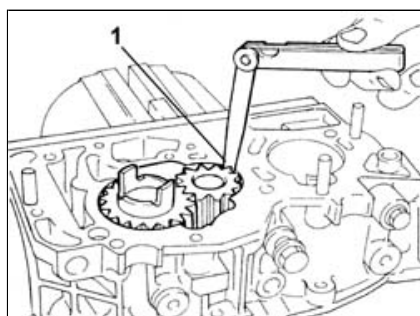


				fitting check
	Value - daNm	Fastening	Component	Ø
2b	11,3	-	oil pump drive gear	-



- Fit the oil pump driven gear.1. Check that the axial clearance between the gears and the pump casing plane is within the recommended limits.

	Subject	Value
1	End float	0.055 -0.099 mm

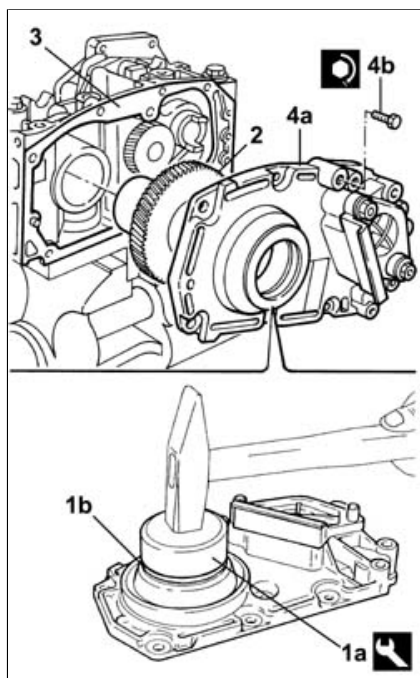


1. Check that the radial clearance between the gears and the pump casing is within the recommended limits.

	Subject	Value
1	Radial clearance	0.030 -0.085 mm

1. Using the tool (1a), fit the oil seal (1b) on the front cover.2. Fit the main gear.3. Fit the cover gasket.4. Fit the cover (4a) and tighten the fixing bolts (4b) to the recommended torque.

torque.				
		Description	Code	Function
1a		Fitting tool	1.860.627.000	Fit oil seal
	Value - daNm	Fastening	Component	Ø
4b	2,3	Bolt	-	M8



- Apply the sealant.

	Description	Qty.	Component	Type	Classification
-	-	-	-	Silicone sealant	Dow Corning 7091

- Fit the oil pump cover and tighten the fixing bolts to the recommended torque.

	Value - daNm	Fastening	Component	Ø
-	1,8	Bolt	-	M8

- Fit the pressure pump and tighten the fixing nuts to the recommended torque.

	Value - daNm	Fastening	Component	Ø
-	2,5	Nut	-	M8

- Fit the side cover and tighten the fixing bolts to the recommended torque.

	Value - daNm	Fastening	Component	Ø
-	1,8	Bolt	-	M8

1. Fit the gasket. 2. Fit the vacuum unit (2a) and tighten the fixing bolts (2b) to the recommended torque.



Fit the dog correctly on the teeth on the oil pump gear.

	Value - daNm	Fastening	Component	Ø
-	1,8	Bolt	-	M8

- Fit the tool

	Description	Code	Function

1	Counter-torque	1.860.765.000	Loosen/tighten auxiliary shaft toothed drive pulley bolt
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- Fit the toothed driven pulley and tighten the fixing bolts to the recommended torque.

	Value - daNm	Fastening	Component	Ø
-	2,5	Bolt	-	M8

- Remove the tool.

	Description	Code	Function
-	Counter-torque	1.860.765.001	Loosen/tighten auxiliary shaft toothed drive pulley bolt

- Remove the auxiliary unit from the vice.- Remove the support tool from the auxiliary unit.

	Description	Code	Function
-	Support	1.860.635.001	Auxiliary support units