

CASE Engines 668T/M2 and 668T/E2

Service Manual

Bur 6-47950NA

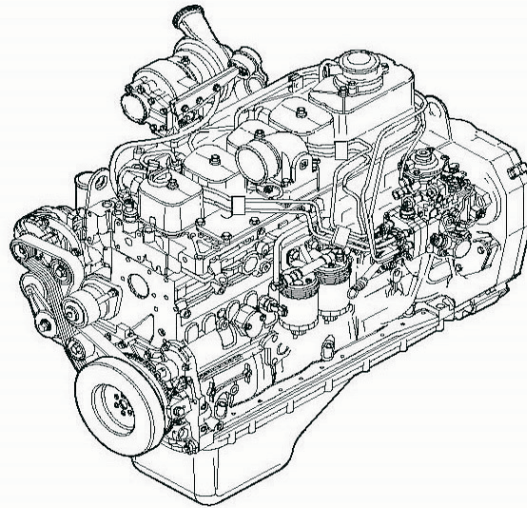


REPAIR MANUAL FOR ENGINES

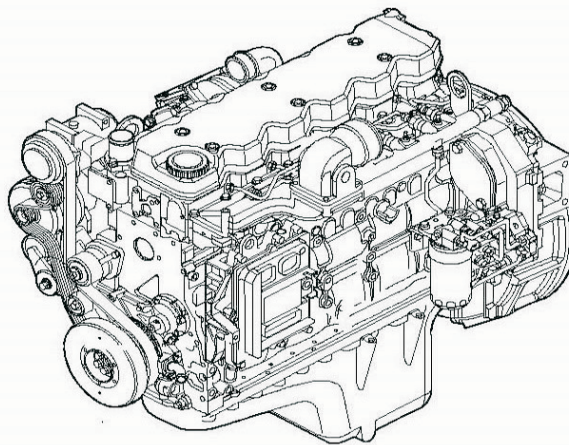
F4GE0684F - (668T/M2)

F4HE0684J - (668T/E2)

6-47950NA



F4GE0684F



F4HE0684J

Every information, illustration and specification contained in the present manual is based on the most recent information available at the time of printing.

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INTRODUCTION

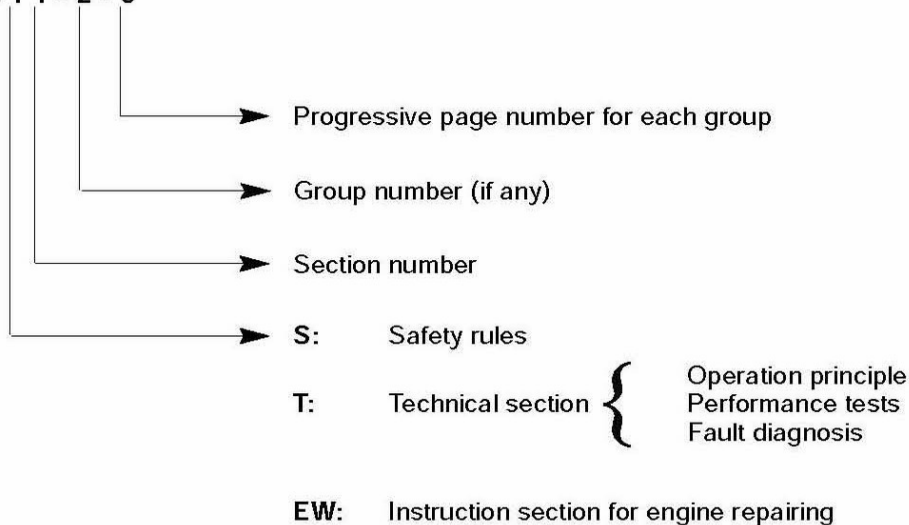
TO THE READER

- This manual was written for a skilled technician and contains all the technical information needed to repair this vehicle.
- Read this manual carefully for the information concerning repairing operations.

FURTHER REFERENCES**PAGE NUMBER**

- Every page carries a number on the top right corner. Every page contains the following information:

Example:: T 1 - 2 - 3

**SYMBOLS**

This manual contains safety warning symbols and indications referring to possible injuries or vehicle damages.



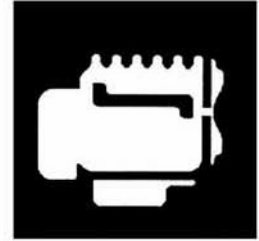
This symbol regards safety.

Use great care when you see this symbol because possible injuries to the personnel may occur. Strictly observe the precautions marked with this symbol.

The safety warning symbol is used also to draw attention on the weight of a component or an element. Make sure you are always using the right equipment and lifting techniques when handling heavy loads, in order to prevent injuries or damages.

ENGINES

F4GE0684F - F4HE0684J OVERHAUL



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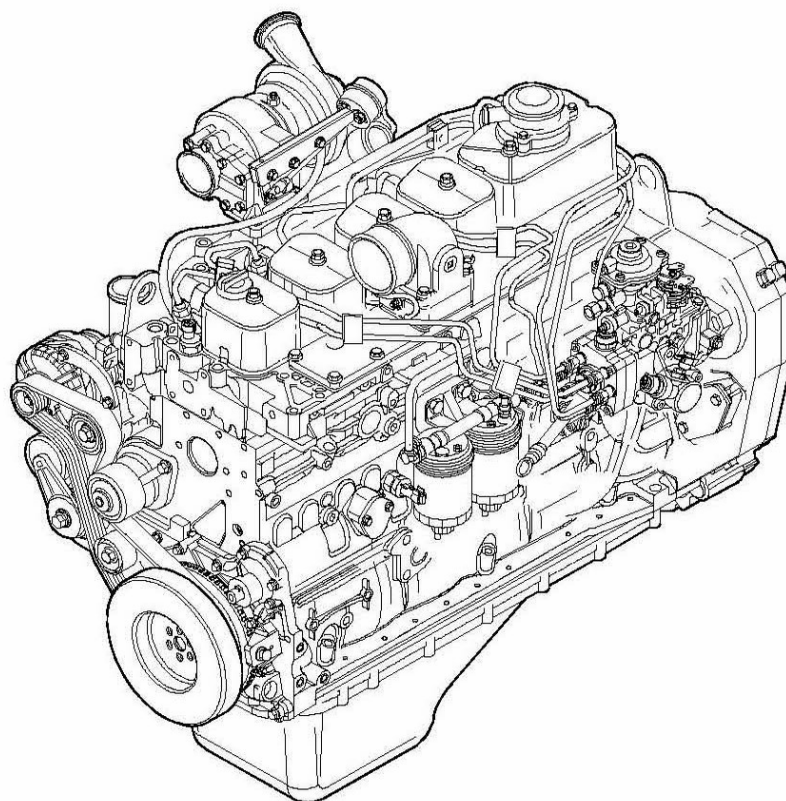
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ENGINE F4GE0684F - F4HE0684J OVERHAUL

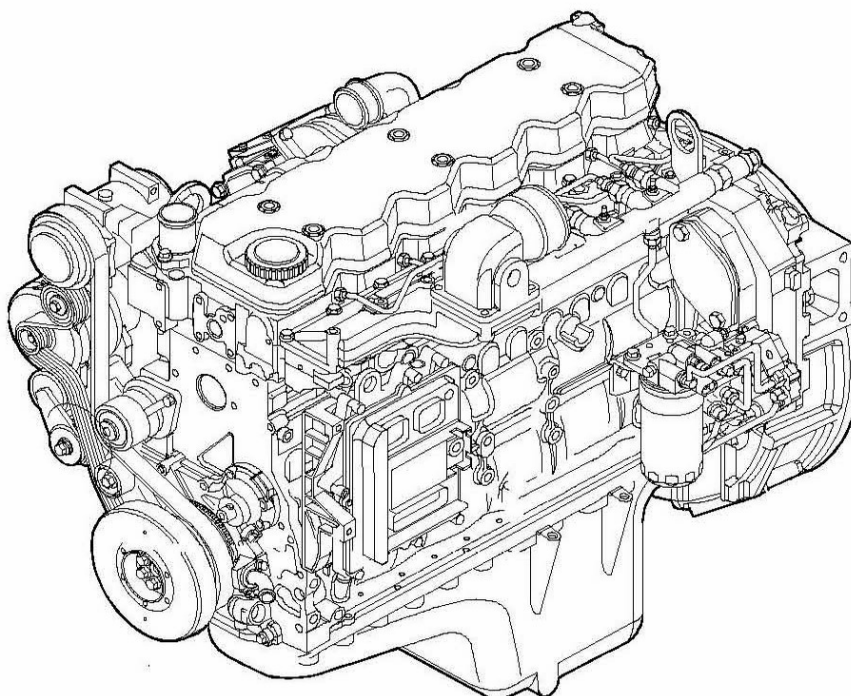
Figure 1



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ENGINE F4GE0684F

Figure 2

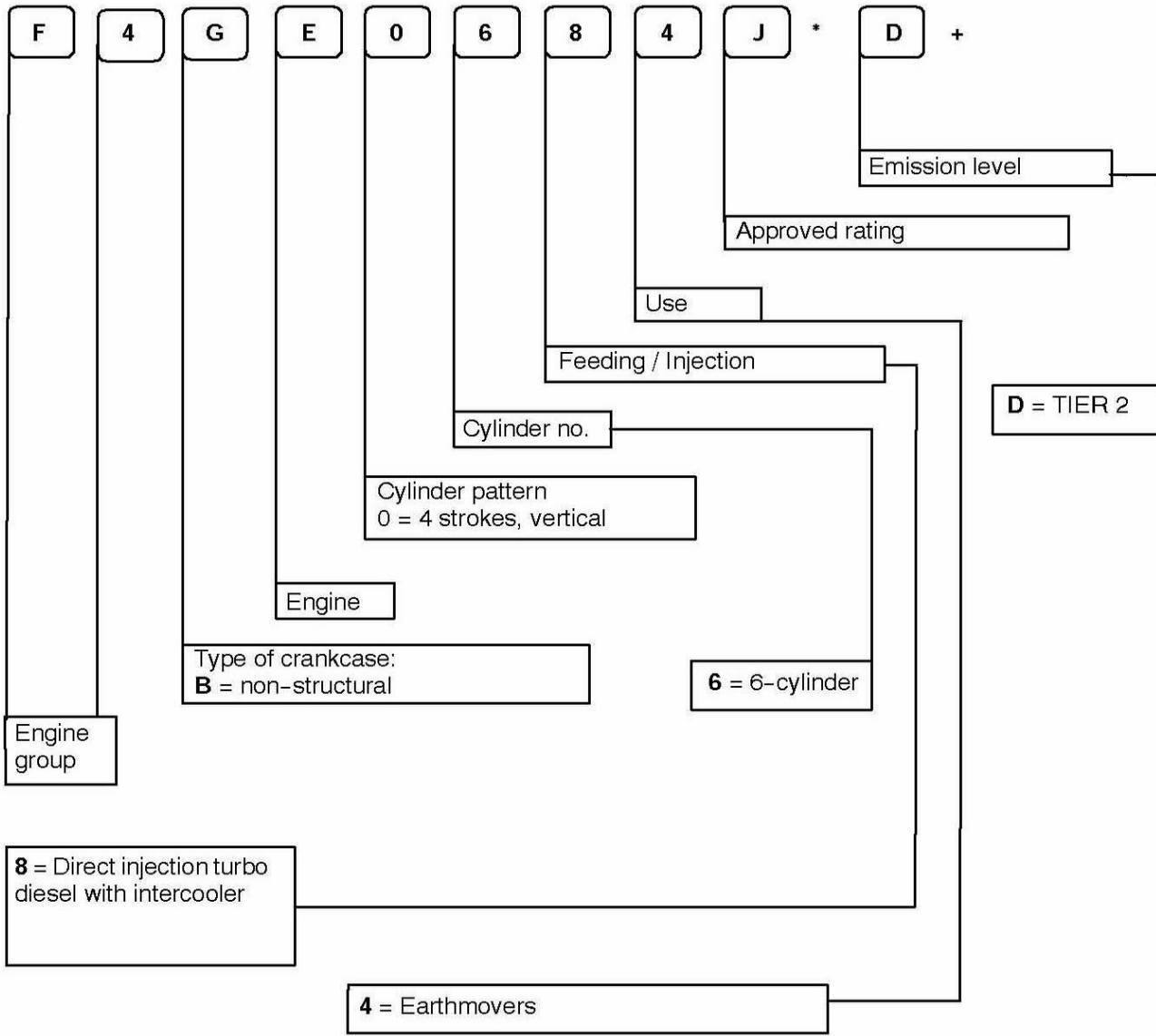


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ENGINE F4HE0684J

ENGINE F4GE0684F - F4HE0684J OVERHAUL

ENGINE CODING



X Y Y


X = 4 in-line, 2-valve injection pump
 Y = Engine model
 X = X= 1 4-valve Common Rail

Y Y Y Y Y Y

Manufacturing sequence number

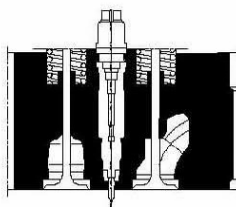
ENGINE F4GE0684F - F4HE0684J OVERHAUL

MAIN ENGINE FEATURES

A	LW130.B	LW170.B
B	F4GE0684F	F4HE0684J
C	*D601	*D100
D		
E	6728 cm ³	
F	110 kW 2000 rpm	145 kW 2000 rpm

G

Direct injection



H

In-line injection pump

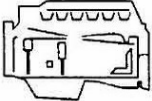
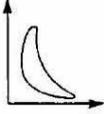
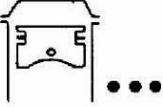
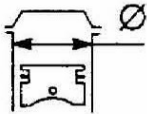
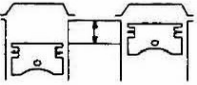
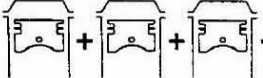

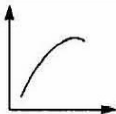

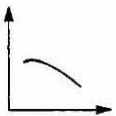





I

T.A.A.
(Boosted by intercooler)

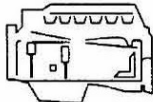

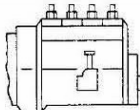
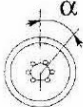
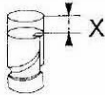
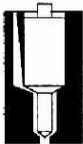
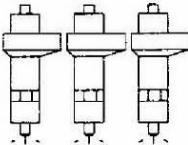

- A Wheeled loaders
- B Type of engine
- C Engine model
- D Number of cylinders
- E Total displacement
- F Max. power currently available
- G Type of injection
- H Injection system
- I Air supply system

ENGINE F4GE0684F - F4HE0684J OVERHAUL

MAIN ENGINE FEATURES

	Type	F4GE6484F	F4HE6484J	
		*D601	*D100	
	Cycle	4-stroke diesel engine		
	Feeding	Boosted by intercooler		
	Injection	Direct		
	Number of cylinders	In-line, 6-cylinder		
	Bore	mm	11042	
	Stroke	mm	132	
	Total displacement	cm ³	6728 cm ³	
	Compression ratio			
 	Max. rating	kW min ⁻¹	110 2000	145 2000
 	Max. torque	Nm (kgm) min ⁻¹	675 1400	850 1400
	No-load idle rpm	min ⁻¹	700	
	No-load peak rpm	min ⁻¹	-	
	BOOSTING Type of turbocompressor:	With intercooler HOLSET HX35W		
	LUBRICATION Oil pressure with hot engine: at idle rpm at peak rpm	bar bar	Forced by means of gear pump, pressure relief valve, oil filter 1.2 3.8	

ENGINE F4GE0684F - F4HE0684J OVERHAUL

	Type	F4GE0684F	F4HE0684J
		*D601	*D100
COOLING		By fluid	
Water pump drive:		By means of belt	
Thermostat: start of opening: °C		81 ± 2	
	REFUELLING		
	Ambra Super Gold 15W40 10W30	Full filling capacity 1° litres	-
		kg	
	- engine sump	litres	-
	kg		
	- engine sump + filter	litres	
		kg	
	FEEDING Bosch-type injection	VE6/12F9000 L968	High pressure Common Rail
	Pump setting	0° ± 0°.5	
	Start of delivery	mm	1
	Type of nozzle	DSLA 145 P1174	Electro-injectors
	Injection sequence	1 - 5 - 3 - 6 - 2 - 4	
	Injection pressure bar	245 bar	250 - 1450 bar
