

Document Title:	Function Group:	Information Type:	Date:
Engine, description	200	Service Information	2015/2/16
Profile: ART, A25D 4x4 [GB]			

Engine, description

Engine D10, description

Machine	Place of manufacture, serial number		
	Brazil		
A25D	11001–12999	61001–61118	71001–71999
A30D	10001–11999	60001–60093	70001–72999

The engine is a straight six cylinder, direct-injected diesel with 9.6 litres cylinder capacity, turbo, intercooler and electronically controlled fuel injection. The valve mechanism receives its movement from the camshaft via valve rods and rocker arms. The injection pump is equipped with a smoke limiter for torque limitation of the engine. The injectors are mounted in copper sleeves that are pressed into the cylinder head and directly surrounded by the coolant. The engine also has an electronic control unit (E-ECU), located on the right radiator bow.



Figure 1 Engine D10B, left side





Engine D9, description

Machine	Place of manufacture, serial number			
	EU US Brazil			
A25D	13001–	-	72000–	
A30D	12001-	-	73000–	

Engine D9 is a straight six cylinder, direct-injected diesel with 9.4 litres cylinder capacity, turbo, intercooler and electronically controlled fuel injection. The valve mechanism receives its movement from the camshaft via valve rods and rocker arms. The engine has an overhead camshaft and unit injectors, which are centred above the pistons and controlled by the camshaft and a control unit (E-ECU). The control unit is located on the engine's left side.











Document Title:	Function Group:	Information Type:	Date:
Engine, sensor positions	200	Service Information	2015/2/16
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Engine, sensor positions

Control unit sensors

The following is a brief summary of the parts on the engine. There are a number of other parts that affect the system, for example, the throttle pedal sensor.

The central part of the system, the control unit is positioned on the left side of the engine. All cable connectors for the engine's sensors are of DIN–standard and are connected in a so-called cable box.



Figure 1 Engine D9, sensors (some have double functions)

- 1. Sensor for coolant level, SE2603
- 2. Sensor for coolant temperature, cooling circuit converter, SE2601
- 3. Sensor for charge air pressure/temperature, SE2507/SE2508
- 4. Tachometer sensor, flywheel, SE2701

- 5. Sensor for oil level/temperature, SE2205/SE2202
- 6. Sensor for crankcase pressure, SE2509
- 7. Sensor for oil pressure, SE2203
- 8. Camshaft sensor, engine position, SE2703
- 9. Sensor for air pressure/temperature, SE2501/SE2502
- 10. Sensor for feed pressure, fuel, SE2301
- 11. Sensor for water indicator, SE2302
- 12. Sensor for coolant temperature, cooling circuit engine/retarder, SE2602



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Engine, identification	200	Service Information	2015/2/16
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Engine, identification

Identification plate 1

Engine designation, serial number, part number and assembly plant are stamped in one field on the engine block's left front edge.

Identification plate 2

A decal with the software's ID-number, the engine's serial number and assembly plant is located on the valve cover to ensure installation of correct ECU on the engine in production. On the back of the ECU, there is a decal indicating its hardware number. The E-ECU is located on the engine's left side.

Assembly plants:

- A = Skövde, Sweden
- E = Curitiba, Brazil
- F = Flen, Sweden
- L = Lyon, France



Figure 1

Identification plate 3

The certification decal is located on the valve cover as well as on the left side, at the back of the machine's front frame inside of the steps.





Document Title: E-ECU, MID 128, changing pre-programmed ECU	Function Group: 200	Information Type: Service Information	Date: 2015/2/16
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E-ECU, MID 128, changing pre-programmed ECU

Op nbr 200-070

Applies to machine equipped with engine D10, with serial number according to the table.

Machine	Place of manufacture, serial number			
	EU US Brazil			
A25D	11001–12077	61001–61118	-	
A30D	10001–10682	60001–60093	70001–72999	

1. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.

- Use the function Save all read parameters to job card.
- 2. Perform 200 E-ECU, MID 128, changing non-programmed ECU step 2-15.
- 3. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.
 - Program earlier read-out parameters according to the job card.



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E-ECU, MID 128, changing pre-programmed ECU

Op nbr 200-070

Applies to machine equipped with engine D9A, with serial number according to the table.

Machine	Place of manufacture, serial number			
	EU US Brazil			
A25D	13001–	_	_	
A30D	12001–	_	73000–	

1. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.

- Use the function Save all read parameters to job card.
- 2. Perform 200 E-ECU, MID 128, changing non-programmed ECU step 2–17.
- 3. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.
 - Program earlier read-out parameters according to the job card.



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E-ECU, MID 128, changing pre-programmed ECU

Op nbr 200-070

This operation also includes required tools and times for applicable parts of the following operations:

- O 200 E-ECU, MID 128, changing non-programmed ECU
 - 1. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.
 - O Use the function: Save all read parameters to job card.
 - 2. Perform 200 E-ECU, MID 128, changing non-programmed ECU step 2-14.
 - 3. Connect VCADS Pro computer and perform 17030-3 Parameter, programming.
 - O Program earlier read-out parameters according to the job card.



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E-ECU, MID 128, changing non-programmed ECU

Op nbr 200-068

Applies to machine equipped with engine D10, with serial number according to the table.

Machine	Place of manufacture, serial number			
	EU US Brazil			
A25D	11001–12077	61001–61118	-	
A30D	10001–10682	60001–60093	70001–72999	

1. Connect VCADS Pro computer and perform 28423-3 MID 128 ECU, programming.

• When instructed to connect the new control unit, perform steps 2–15.



Always follow instructions according to Electrical system, work instructions, electronic components

3001 Electrical system, special instructions for servicing, electronic components

Removing E-ECU

Always follow instructions according to Electrical system, work instructions, electronic components

2. Place the machine in service position.

NOTICE

Turn off the electric power with the battery disconnect switch before starting any work. Also remove the fuse for respective component.

- 3. Open the engine hood.
- 4. Press in the catch and unplug the connector EA/EB from the E-ECU.





5. Remove the screws (8 screws) that hold the cooling coil on the E-ECU.





6. Remove two of the four bolts that hold the E-ECU against the console.





7. Hold the E-ECU and remove the two remaining bolts.

Thank you very much for reading. This is part of the demo page. **GET MORE:** Hydraulic System, Setting **Instructions, Functional Description**, Electrical System And more..... **Click Here BUY NOW**

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