VOLVO

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Description	**000**	**Service Information**	**16-02-2022**
Profile:			

Description

The L70D is a four-wheel drive loader with articulated frame steering.

Loader L70D is powered by a six-cylinder, four-stroke, direct-injection turbocharged diesel engine with intercooler, type designation TD63KDE. The engine is of low-emission type.

The hydraulic transmission is hydro-mechanical and all gears are in constant mesh. Its designation is HT90.

Fitted between the engine and hydraulic transmission is a single-stage hydraulic torque converter.

The front and rear axles have fully-floating drive shafts with planetary gears in the wheel hubs.

The service brakes are of oil-cooled multi-disc type integrated with the planetary gearing of each wheel hub.
The parking brake is of drum type and mounted on the front axle.

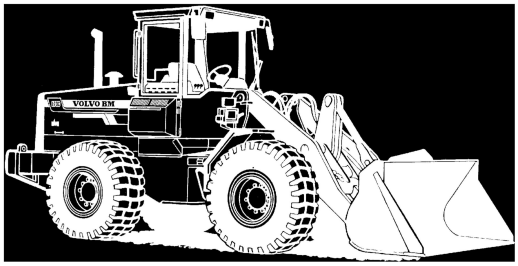

Figure 1
Wheel loader L70D

The machine is equipped with two load-sensing variable hydraulic pumps connected in parallel. Through a central valve they supply oil to the steering system, brakes, servo and working hydraulics.

For a more detailed description of the various functions and components, refer to the relevant section.

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Document Title: **Product identification plates**	Function Group: **000**	Information Type: **Service Information**	Date: **16-02-2022**
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Product identification plates

The identification plates that should be present on the machine will be evident from the following illustrations and text.

The model designation and Product Identification Number (PIN) should be stated when ordering spare parts and making enquiries by telephone or mail.

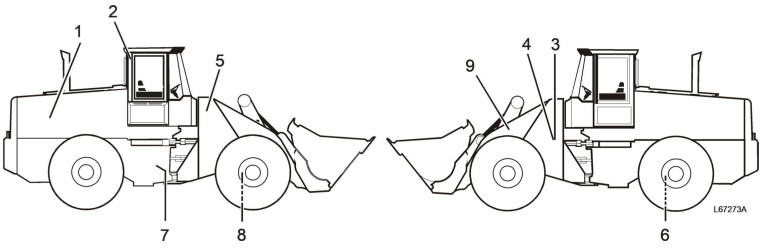

Figure 1

1. **Engine**
   The type designation and part number of the engine are given on a plate affixed beside the dipstick on the right-hand side of the machine. The serial number of the machine is given on a plate affixed beside the injection pump on the right-hand side of the machine.
2. **Cab**
   The serial number, machine type, manufacturer's name and address, ROPS/FOPS number and max. machine weight are located on the right-hand rear roof pillar inside the cab.
3. **Product identification plate**
   Includes the machine type and the manufacturer's name and address. The Product Identification Number (PIN) of the complete machine (the PIN includes the model designation, engine code and serial number) is located on the left-hand side of the front frame.
4. **Additional plate**
   A plate in addition to the identification plate and showing the machine weight (only EU/EEA countries) is located below the identification plate on the left-hand side of the front frame.
5. **Primary marking**
   The PIN, model designation, engine code and serial number are stamped on the right-hand side of the front frame (showing same PIN number as on the identification plate).
6. **Rear axle**
   The rear drive shaft's component plate Component Identification Number (CIN) with product number, serial number and manufacturer is located on the front of the axle housing to the left.
7. **Transmission**
   The product number, serial number and manufacturer of the transmission are located on the front of it.
8. **Front axle**
   The front drive shaft's component plate Component Identification Number (CIN) with product number, serial number and manufacturer is located on the rear of the axle housing to the right.
9. **Lifting frame**
   The lifting frame's product identification number, serial number and manufacturer are located on its left-hand side.

Document Title: **Section 8 Cab, interior fittings and machine superstructure**	Function Group: **030**	Information Type: **Service Information**	Date: **16-02-2022**
Profile:			

Section 8 Cab, interior fittings and machine superstructure

Weights	
Amount of refrigerant R134a	1.9 ±0.1 kg (4.2 ±0.2 lbs)

Air conditioning temperature values during performance test				
Temperature values in °C at different ambient temperatures in relation to relative humidity.				
	Ambient temperature Air conditioning temperature values			
Relative humidity of the air	25 °C (77 °F)	30 °C (86 °F)	35 °C (95 °F)	40 °C (104 °F)
10%	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)	
20%	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)
30%	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)
40%	7 °C (45 °F)	7 °C (45 °F)	7 °C (45 °F)	8 °C (46 °F)
50%	7 °C (45 °F)	7 °C (45 °F)	8 °C (46 °F)	11 °C (52 °F)
60%	7 °C (45 °F)	8 °C (46 °F)	10 °C (50 °F)	14 °C (57 °F)
70%	7 °C (45 °F)	10 °C (50 °F)	13 °C (55 °F)	17 °C (63 °F)
80%	7 °C (45 °F)	11 °C (52 °F)	15 °C (59 °F)	20 °C (68 °F)
90%	7 °C (45 °F)	12 °C (54 °F)	18 °C (64 °F)	23 °C (73 °F)

Normal system pressure of air conditioning unit, engine speed 1 800 rpm

The system pressure varies depending on ambient temperature.
The values should be considered as guide values. Occasionally, a lower pressure is noticeable on the low-pressure side.

At ambienttemperatures below +30 °C (86 °F)

Low-pressure side	0.3–2.7 bar (4.35–39.15 psi)
High-pressure side	6.5–15.5 bar (94.25–224.75 psi)

At ambienttemperatures above +30 °C (86 °F)

Low-pressure side	0.7–2.3 bar (10.15–33.35 psi)
High-pressure side	14–18 bar (203–261 psi)

Document Title: **Transporting the machine**	Function Group: **050**	Information Type: **Service Information**	Date: **16-02-2022**
Profile:			

Transporting the machine

On the platform of another vehicle

If the machine is lifted onto the platform of another vehicle the frame joint must be locked.

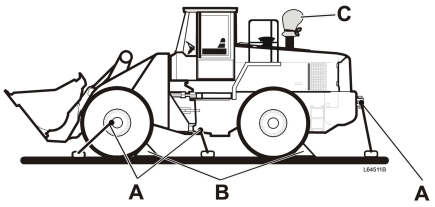

Figure 1
Transport safety

A. The front frame attaching eyes (ahead of the front axle retaining bolt) and in the towing hook.
B. Chock the wheels.
C. Exhaust pipe guards.

Transport the machine with the bucket facing in the vehicle's direction of travel.

- Make sure the machine is completely straight and stop the engine.
- Take out the pin and move the frame joint lock over to its designated place, insert the pin and lock it.

If the machine is driven up onto another vehicle the frame joint should not be locked.

Lash the machine to the platform of the transport vehicle so that it cannot overturn or start rolling. The following attachment points as in should be used.

NOTE!
To avoid air being pressed down into the exhaust pipe during transport, which could damage the turbocharger, the exhaust pipe must be covered with a suitable form of protection (not plastic).

Lifting

Use the lifting eyes intended for this purpose and lock the frame joint.

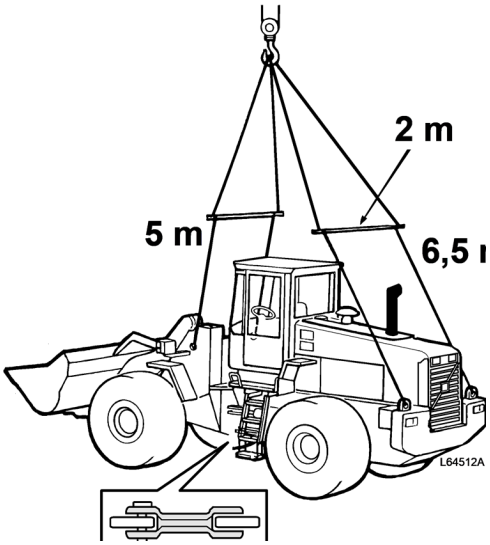

Figure 2
Lifting eyes

Over gangway

Check that the gangway is of sufficient width and strength to ensure that it cannot move out of position.

In a lift or other confined space

- Reverse the machine in
- Apply the parking brake and stop the engine before the lift is started.

WARNING

If the machine is to be driven from a loading dock to the platform of a truck or wagon, make sure that this vehicle is securely braked (wheels chocked) and that there is no danger of it overturning or heeling over in a dangerous manner when the machine is driven onto it.

In other respects follow the national rules and regulations.