TM 09135B-24/2

TEREX

SHOP MANUAL

Document 57.4400.0100 Edition 05-10-02

Light Capability Rough Terrain Forklift (LCRTF)

TX 51-19M

CONTRACT NO. M67854-00-C-3014



PCN 184 091352 00

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Problems and possible causes

Problem	Possible causes	
	Checks by the user	Checks by the workshop personnel
The starter motor turns the engine too slowly	1, 2, 3, 4	
The engine does not start	5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 17	34, 35, 36, 37, 38, 42, 43
The engine is difficult to start	5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19	34, 36, 37, 38, 40, 42, 43, 44
Not enough power	8, 9, 10, 11, 12, 13, 16, 8, 9, 20, 21	34, 36, 37, 38, 39, 42, 43, 44, 63, 64, 66
Misfire	8, 9, 10, 12, 13, 15, 20, 22	34, 36, 37, 38, 39, 40, 41, 43
High fuel consumption	11, 13, 15, 17, 18, 19, 23, 22	34, 36, 37, 38, 39, 40, 42, 43, 44, 63
Black exhaust smoke	11, 13, 15, 17, 19, 21, 22	34, 36, 37, 38, 39, 40, 42, 43, 44, 63, 64
Blue or white exhaust smoke	4, 15, 21, 23	36, 37, 38, 39, 42, 44, 45, 52, 58, 61, 62
The pressure of the lubricating oil system is too low	4, 24, 25, 26	46, 47, 48, 50, 51, 59,
The engine knocks	9, 13, 15, 17, 20, 22, 23	36, 37, 40, 42, 44, 46, 52, 53, 60
The egine runs erratically	8, 9, 10, 11, 12, 13, 15, 16, 18, 20, 22, 23	34, 38, 40, 41, 44, 52, 60
Vibration	13, 18, 20, 27, 28	34, 38, 39, 40, 41, 44, 52, 54
The pressure of the lubricating oil system is too high	4, 25	49
The engine oil temperature is too high	11, 13, 15, 19, 27, 29, 30, 32, 65	34, 36, 37, 39, 52, 55, 56, 57, 66
Crankcase pressure	31, 33	39, 42, 44, 45, 52, 61
Bad compression	11, 22	37, 39, 40, 42, 43, 44, 45, 53, 60
The engine starts and stops	10, 11, 12	

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Printed in England

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Lubricating oil pump

Type ... Differential rotor, gear driven
Number of lobes ... Inner rotor 4, outer rotor 5
Maximum permissible clearance of outer rotor to pump body ... 0,19 mm (0.007in)
Inner rotor to outer rotor ... 0,25 mm (0.010 in)
Inner and outer rotor end clearance ... 0,15 mm (0.006 in)

Lubricating oil relief valve

Diameter of bore in pump body ... 11,000/11,018 mm (0.5605/0.5625 in)
Outside diameter of plunger ... 10,970/10,982 mm (0.5585/0.5595 in)
Clearance fit of plunger in bore ... 0,018/0,048 mm (0.0007/0.0019 in)
Length of spring (fitted) ... 25,5 mm (1.004 in)
Load on spring (fitted) ... 26,2/27,7 N (5.9/6.2 lbf) 2,7/2,8 kgf
Pressure to open valve ... 240/290 kPa (34.8/42.1 lbf/in^2) 2,4/3,0 kgf m^2

Lubricating oil filter

Type ... Full flow, screw-on type canister
Pressure to open by-pass valve ... 55/83 kPa (8/12 lbf/in^2) 0,6/0,8 kgf/cm^2

Cooling system

Type ... Thermostat controlled - pump assistance

Coolant pump

Type ... Centrifugal, belt driven

Thermostat

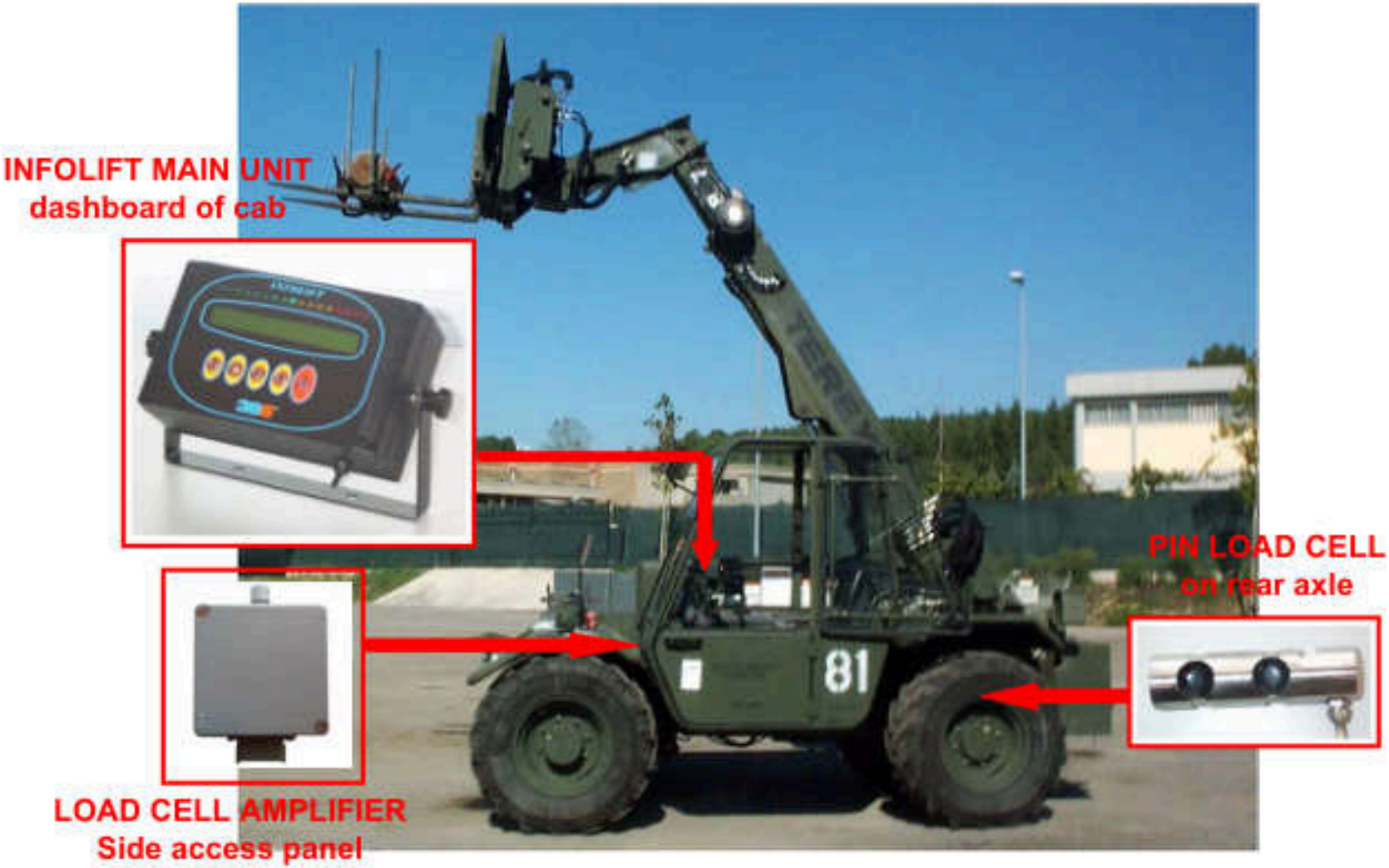
Type ... Single, wax element

Nominal temperature stamped on the base of the by-pass valve	"Start to open" temperature	"Fully open" temperature	Minimum valve lift, fully open
82,0°C (179.6°F)	77/85°C (170.6/185.0°F)	92/98°C (197.6/208.4°F)	9 mm (0.35 in)
71,0°C (159.8°F)	67/75°C (152.6/167.0°F)	85/88°C (185.0/190.4°F)	9 mm (0.35 in)

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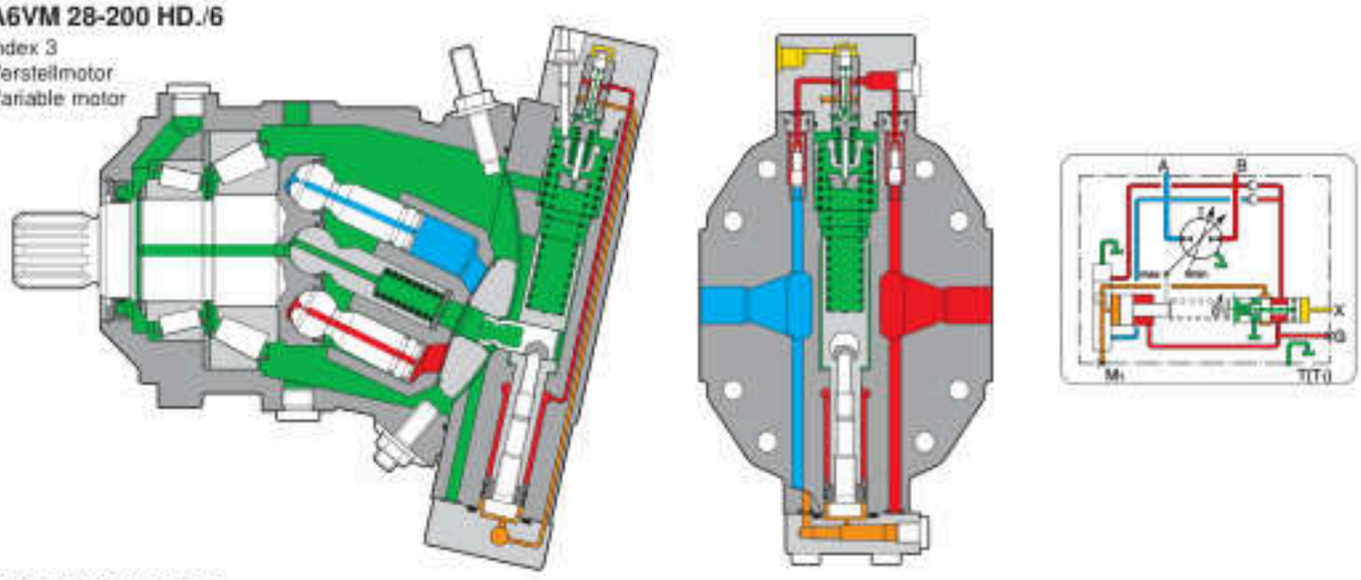
COMPONENTS LOCATION ON THE MACHINE



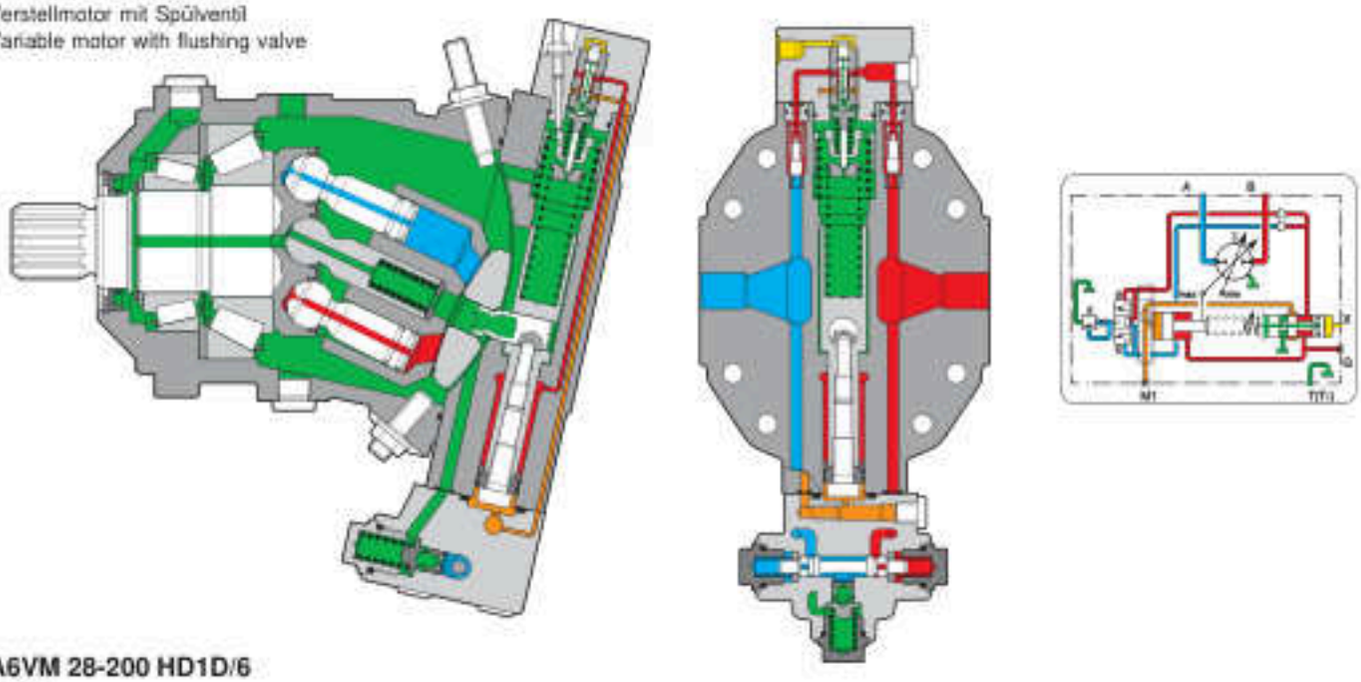
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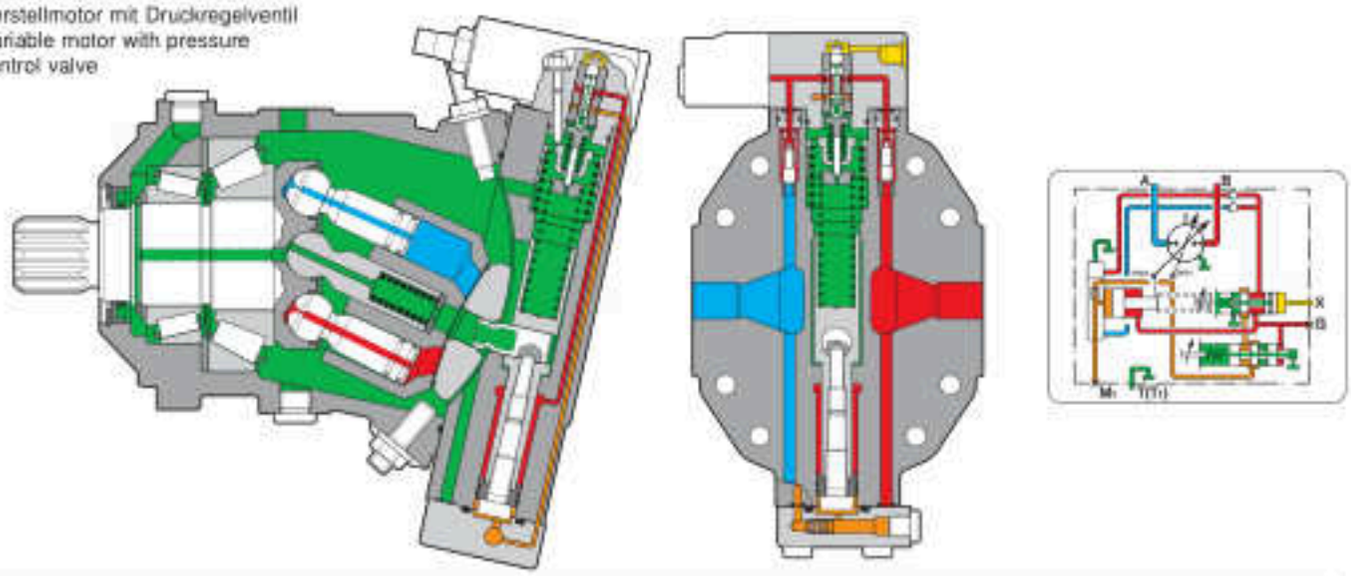
A6VM 28-200 HD./6
Index 3
Verstellmotor
Variable motor



A6VM 28-200 HD./6
Index 3
Verstellmotor mit Spülventil
Variable motor with flushing valve



A6VM 28-200 HD1D/6
Index 3
Verstellmotor mit Druckregelventil
Variable motor with pressure control valve



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