

# HML 32 SERVICE-MANUAL

# **List of Contents**

- 1 General
- 2 Technical Data
- 3 Diesel Engine
- 4 Hydraulic System
- 5 Setting Instructions
- **6** Functioning Description
- 7 Electrical System
- 8 Maintenance
- 9 Operation
- 10 Options
- 11 Repair Instructions
- 12 Service-Bulletins

## **DIESEL ENGINE**

Manufacturer: Mitsubishi

Type: L 3 E - W 262 KL

Performance acc. to DIN 70020 + ECE-R24: kW/PS 13.3 / 18 at 2,400 min<sup>-1</sup> Construction: 3 cylinders in line

Cooling: water / anti-freeze agent

Capacity: cm<sup>3</sup> 952 2,580 <sup>+35</sup>/<sub>-10</sub> 1,020 <sup>+50</sup> min<sup>-1</sup> High idle:

min<sup>-1</sup> Low idle: g/kWh Spec. fuel consumption (full load): 247

Fuel bleeding: automatic

 $3.0^{\pm0.3}$ Engine oil pressure: at 1.000 min <sup>-1</sup> har

Tappet clearance - inlet / exhaust: 0.25 (cold) mm

Injection timing: 17 before upper dead centre

Torque of cylinder head studs: Nm M 10: 75 - 85 20 - 30

M 8: Electrical fuel pump: bar 0.18

I/min 0.37 Injection pressure: bar 140

Further data: see engine operating manual

#### **ELECTRICAL SYSTEM**

Voltage: 12 Battery: V/Ah 12 / 74 Generator: V/A 12 / 40 Starter: V/kW 12 / 1.7

Starting aid: 3 glow plugs, glow time controlled

Lighting: working headlight H3

#### **TRANSMISSION**

Travel motors: make/type SOM MOR 15 Travel gears: make/type SOM PGR 132 N

Travel speed: km/h 0 to 2.7

# **EXCAVATOR AND TRAVEL HYDRAULICS**

Haldex WP 09 A2 Hydaulic pump: make Flow rate: I/min 33,6 + 19,2

Pilot pressure (high idle): bar 28 (service temperature)

Valve bank: Rexroth 9SX10 type Cross servo control stick: tpye Rexroth 4TH 5

Servo control unit: make Hydac Cut off valve: make Bergin

Cut off pressure (high idle): bar 110 (service temperature)

## **SLEW DRIVE**

Slew motor with gearbox: make Dinamic Oil VS 45 (up to s/n: 1100/0252) Slew pressure (valves at slew motor):

bar 130 (high idle and service temperature, measured at pressure gauge P1)

Slew motor with gearbox: SOM SD50+GWS200 (from s/n: 1100/0253) make Slew pressure (valves at slew motor): bar 140 (high idle and service temperature,

measured at pressure gauge P1)

#### PRESSURE AND SETTING VALUES

Main pressure relief valve (high idle):

max. bar 165

#### **LINE RELIEF PRESSURES**

<ul> <li>travel left</li> </ul>	(valves in the motor):	bar	
<ul> <li>travel right</li> </ul>	(valves in the motor):	bar	
-1		1	400

- slewing (valves at the slew motor): bar 130 (up to s/n: 1100/0252)

140 (from s/n: 1100/0253) (high idle and service temperature, measured at pressure gauge P1)

- dipperstick: bar 210 / 210 - bucket: bar 210 / 210 - boom lift / lower: bar 210 / 160

breaker / slew bucket / grab rotation:articulation:baranti cavitation

- dozer blade: bar ----

# **CYCLE TIMES**

Boom up / down to the ground:	S	3.2 / 3.0
Dipperstick extend / retract:	S	2.4 / 2.8
Bucket extend / retract:	s	1.9 / 2.8

#### **LUBRICANTS**

Engine oil: Hydraulic oil: Transmission oil:

Multiple-purpose grease:

see engine instruction book

see hydraulic oil recommendation table

MIL-L-2105 B or API-GL5, SAE 85 W 90 LS or SAE 90 LS

acc. to DIN 51825. Dripping point over

170° C. With lithium.

# **MAINTENANCE PARTS**

see operation manual

# **CAPACITIES**

Fuel:
Engine oil, engine and filter:
Hydraulic oil, tank and system:
Hydraulic oil tank:
Travel gear:
Slew gear:
Cooling agent:

The values stated are approximate. The level indicator is always decisive.

ltr.

approx.	30.0	diesel
approx.	3.4 + 0.2	HD-oil (change)
approx.	35.0	hydraulic oil
approx.	25.0	hydraulic oil (change)
approx.	0.3	transmission oil, each
approx.	0.15	transmission oil
approx.	4.2	water with anticorrosive
		and anti-freeze agent

# **BUY NOW**

Then Instant Download the Complete Manual Thank you very much!