

Additional Spares

Beyond class requirements or recommendation, for easier maintenance and increased security in operation.

Cylinder cover, plate 2272-0300 (90101)

- 4 Studs for exhaust valve
- 4 Nuts for exhaust valve
- ½ set O-rings for cooling jacket
- 1 Cooling jacket
- ½ set Sealing between cylinder cover and liner
- 4 Spring housings for fuel valve

Hydraulic tool for cylinder cover, plates 2270-0310/0315 (901)

- 1 set Hydraulic hoses with protection hose complete with couplings
- 8 pcs O-rings with backup rings, upper
- 8 pcs O-rings with backup rings, lower

Piston and piston rod, plates 2272-0400/0420 (902)

- 1 box Locking wire, L=63 m
- 5 Piston rings of each kind
- 2 D-rings for piston skirt
- 2 D-rings for piston rod

Piston rod stuffing box, plate 2272-0500 (90202)

- 15 Self-locking nuts
- 5 O-rings
- 5 Top scraper rings
- 15 Pack sealing rings
- 10 Cover sealing rings
- 120 Lamellas for scraper rings
- 30 Springs for top scraper and sealing rings
- 20 Springs for scraper rings

Cylinder frame, plate 1072-0710 (90301)

- ½ set Studs for cylinder cover for one cylinder
- 1 Bushing

Cylinder liner and cooling jacket, plate 2272-0600 (90301)

- 1 Cooling jacket of each kind
- 4 Non return valves
- 1 set O-rings for one cylinder liner
- ½ set Gaskets for cooling water connection
- ½ set O-rings for cooling water pipes
- 1 set Cooling water pipes between liner and cover for one cylinder

Cylinder Lubricating Oil System, plate 3072-0600 (90302)

- 1 set Spares for MAN B&W Alpha lubricating oil system for one cylinder
- 1 Lubricator
- 2 Feed back sensor, complete
- 1 Complete sets of O-rings for lubricator (depending on number of lubricating nozzles per cylinder)

Connecting rod and crosshead bearing, plates 1472-0300, 2572-0200 (90401 and more)

- 1 Telescopic pipe
- 2 Thrust piece

HPS Hydraulic Power Supply, plates 4572-1000/0750, 4572-1100 (906)

- 1 Delivery pump
- 1 Start up pump
- 1 Pressure relief valve
- 1 Pumps short cutting valve
- 1 set Check valve Cartridge (3 pcs)

Engine Control System, plate 4772-1550 (906)

- 1 set Fuses for MPC, TSA, CNR
- 1 Segment for trigger ring

HCU Hydraulic Cylinder Unit, plate 4572-0500 (906)

- 1 set Packings

Main starting valve, plate 3472-0300 (90702)

- 1 Repair kit for main actuator
- 1 Repair kit for main ball valve
- 1 *) Repair kit for actuator, slow turning
- 1 *) Repair kit for ball valve, slow turning

*) if fitted

Starting valve, plate 3472-0200 (907)

- 2 Locking plates
- 2 Piston
- 2 Spring
- 2 Bushing
- 1 set O-ring
- 1 Valve spindle

Fig. 19.07.01a: Additional spare parts beyond class requirements or recommendation, option: 4 87 603

Exhaust valve, plates 2272-0200/0210 (908)

- 1 Exhaust valve spindle
- 1 Exhaust valve seat
- ½ set O-ring exhaust valve/cylinder cover
- 4 Piston rings
- ½ set Guide rings
- ½ set Sealing rings
- ½ set Safety valves
- 1 set Gaskets and O-rings for safety valve
- 1 Piston complete
- 1 Damper piston
- 1 set O-rings and sealings between air piston and exhaust valve housing/spindle
- 1 Liner for spindle guide
- 1 set Gaskets and O-rings for cooling water connection
- 1 Conical ring in 2/2
- 1 set O-rings for spindle and piston
- 1 set Non-return valve

Exhaust valve, plate 2272-0200 (908)

- 1 Sealing oil control unit

Exhaust valve actuator, plate 4572-0100 (908)

- 1 Hydraulic exhaust valve actuator complete for one cylinder
- 1 Electronic exhaust valve control valve

Cooling water outlet, plate 5072-0100 (908)

- 2 Ball valve
- 1 Butterfly valve
- 1 Compensator
- 1 set Gaskets for butterfly valve and compensator

Fuel valve, plate 4272-0200 (909)

- 1 set Fuel nozzles
- 1 set O-rings for fuel valve
- 3 Spindle guides, complete
- ½ set Springs
- ½ set Discs, +30 bar
- 3 Thrust spindles
- 3 Non return valve (if mounted)

High-pressure oil pipes, plates 4272-0100, 2272-0240 (90914)

- 1 High-pressure pipe, from fuel oil pressure booster to fuel valve
- 1 High-pressure pipe from actuator to exhaust valve
- 1 set O-rings for high-pressure pipes

Fuel oil low-pressure system, plate 4272-0110 (909)

- 1 Overflow valve, complete
- 1 O-rings of each kind

Fuel injection system, plates 4272-0500, 4572-0500 (909)

- 1 Fuel oil pressure booster complete, for one cylinder
- 1 Hydraulic cylinder unit
- 1 set Gaskets and sealings
- 1 Electronic fuel injection control valve
- 1 Hydraulic cylinder unit

Scavenge air receiver, plates 5472-0400/0630 (91002)

- 2 Non-return valves complete
- 1 Compensator

Exhaust pipes and receiver, plates 5472-0750/0900 (910)

- 1 Compensator between TC and receiver
- 2 Compensator between exhaust valve and receiver
- 1 set Gaskets for each compensator

Auxiliary blower, plate 5472-0500 (91003)

- 1 set Bearings for electric motor
- 1 set Shaft sealings
- 1 set Bearings/belt/sealings for gearbox (only for belt-driven blowers)

Turbocharger, plate 5472-0700 (910)

- 1 Spare rotor for one turbocharger, complete with bearing
- 1 set Spare parts for one turbocharger

Fig. 19.07.01b: Additional spare parts beyond class requirements or recommendation, option: 4 87 603

Arrangement of safety cap, plate 3472-0900 (911)

1 set Bursting disc

ME filter, plate 4572-0800 (912)

1 set Filter elements for main filter



Note: Plate numbers refer to the Instruction Manual containing plates with spare parts (older three-/five-digit numbers are included for reference)

Fig. 19.07.01c: Additional spare parts beyond class requirements or recommendation, option: 4 87 603