

Installation (ship): Recon  
 Engine type: Wichman

Cylinder head No.: 3360  
 Engine No.:

Ordrenr: 14012

## RECONDITIONING OF CYLINDER HEAD

### 1. Cleaning and washing:

- Sand Blast Machine
- Washing Machine
- Pressure Washing

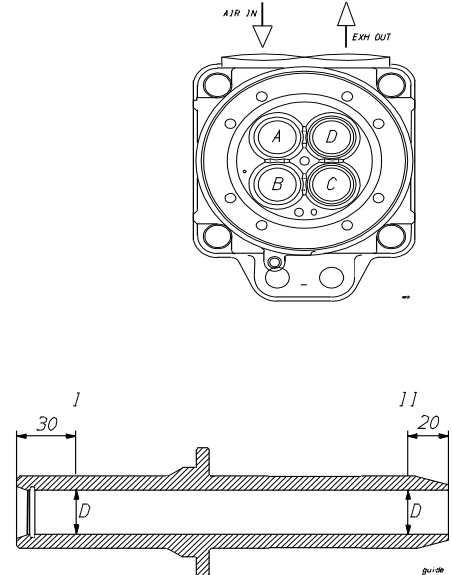
### 2. Pressure testing

- Pressure tested air  4 Bar
- Pressure tested water  Bar

### 3. Recon of valves and seat rings

- |                              | A                        | B                        | C                        | D                        |
|------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Grinding of valves           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Grinding of valve seat rings | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Change of valves             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Change of valve seat rings   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Rotocaps renewed             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Oversize valve seat          |                          |                          |                          |                          |
| Angle (deg.)                 |                          |                          |                          |                          |
| Change of valve guides       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### VALVE GUIDES



Nominal diameter: 24 mm  
 Reference diameter: 24 mm  
 Deviations in 1/100 mm.

### 4. Injection valve sleeve

- Valve sleeve renewed
- Valve sleeve reused

### 5. Starting valve:

- Visual inspection / cleaning
- Overhaul of starting valve

### 6. Safety valve:

- Visual inspection / cleaning
- Overhaul of safety valve  Bar

### 7. Lapping of sealing surface

### 8. Machining of sealing surface

 /100mm

### 9. Rotocap:

- Inspection no overhaul
- Inspection full overhaul

### 10. Valve spring Inspection

### 11. Valve yoke:

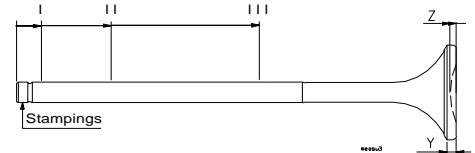
- Adjusted

### 12. Tightening with torque:

- Injection valve  125 Nm
- Starting valve  55 Nm
- Rocker arm  400 Nm
- Safety valves  85 Nm

INLET	A	I	EXHAUST	D	I
		II			II
B	B	I	C	C	I
		II			II

### VALVES



Min x dia valve surface inlet 92mm  
 Min x dia valve surface exh 82 mm  
 Burn-off area: Zmax= 1 mm  
 Valve Y – Min 7,8 mm  
 Max outer dia valve seat:  
 Inlet : 113 mm Exhaust: 110 mm

Stem stampings	Valve location
	A
	B
	C
	D

Reference diameter: 24 mm  
 Wear limit valve stem 23.95 mm

Deviations to be given in 1/100 mm.

INLET	A	I	EXHAUST	A	I
		II			II
B	B	III <th rowspan="2">C</th> <th rowspan="2">C</th> <th>III </th>	C	C	III
		Z			Z
Y	Y	I	Y	Y	I
		II			II
Y	Y	III <th rowspan="2">Y</th> <th rowspan="2">Y</th> <th>III </th>	Y	Y	III
		Z			Z
Y	Y	Y	Y	Y	Y