

### SEASHIELD 2000FD™ SYSTEM

### HYDRAULIC TENSIONING EQUIPMENT

### INSTRUCTIONS FOR USE

### **SCOPE & EQUIPMENT**

These instructions are for the SeaShield 2000FD™ hydraulic tensioning tool used to tension and fit the SeaShield 2000FD™ system. This equipment should not be used for any other task without the authority of the manufacturer.

The following parts make up one tool. Three tools are required to fit one, 1.9m tall SeaShield 2000FD jacket. In addition to the parts below, PTFE tape, a 14mm spanner, a 19mm spanner and an adjustable spanner are also required for assembly or disassembly of the tool. PTFE tape shall be used on all threaded connections.



Fig. 1: The kit of parts.

DESCRIPTION	CODE NUMBER	PART NUMBER	QUANTITY
Cylinder Mount	8651058	WC00537b	1
Pulling Rods		WC00538d or WC00569c	2
Jacking Bars		WC00539d	2
M12 Full Nut		-	4
M12 Plain Washer		-	4
Enerpac Gauge 10000psi	8651059	GP-10S	1
Enerpac 5 ton s/a Cylinder		RC-59	1
Enerpac Gauge Adaptor		GA-4	1
Enerpac Hand Pump Two Speed 10000psi (pre-filled with hydraulic oil)		P-142	1
Enerpac 5m Hose 3/8" NPT		EH110500B	1
Enerpac Male Half Coupler		CH604	1

#### IMPORTANT:

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### **ASSEMBLY INSTRUCTIONS**

The tools are typically supplied pre-assembled however some assembly may be required. The below instructions detail the full assembly of the tool.

The parts shall be removed from their packaging.

The oil fill/vent cap on the hand pump shall be completely closed. The flow control valve shall be completely closed in the clockwise direction (see Fig. 2). The flow control valve will prevent hydraulic fluid from flowing out of the hand pump.

The plug which is fixed into the end of the pump shall be removed using a 14mm spanner (see Fig. 2).

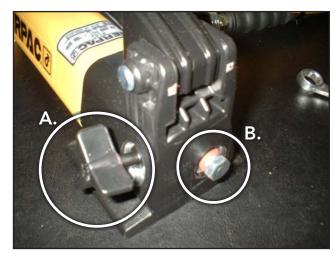


Fig. 2: Flow control valve (ring A) and the plug to be removed (B).

The gauge adaptor shall be attached to the end of the hand pump. The gauge shall be fitted to the gauge adaptor so that it faces the operator when they are using the tool (see Fig. 3).



Fig. 3: The gauge and gauge adaptor in place.

The hose shall be connected to the gauge adaptor (see Fig. 4).

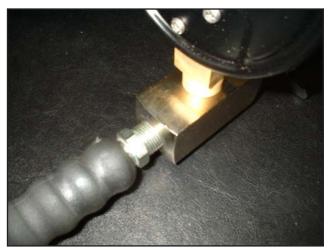


Fig. 4: The hose connected to the gauge adaptor.



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The other end of the hose shall be fitted with the quick release coupling.

The couplings are fitted with dust caps (see Fig. 5). When the couplings are disconnected the dust caps must be used. The dust caps must be removed for the couplings to be connected. To connect the couplings the two halves are pushed together, and the threaded part fastened until tight (see Fig. 6).

If the tool has been assembled or any of the hydraulic parts have been replaced the system shall be bled to remove any air.

- 1. Open the oil fill/vent cap to the "vent" position on the pump.
- 2. Close the flow control valve.
- 3. Position pump at higher elevation than cylinder.
- 4. Operate pump to extend the cylinder by 200mm.
- 5. Open the flow control valve.
- 6. It should be possible to hear air travel into the hand pump. The cylinder may not retract smoothly.
- 7. Repeat the steps 2 5 until air cannot be heard travelling into the hand pump and the cylinder retracts smoothly.
- 8. Add additional hydraulic oil to the hand pump if necessary (Enerpac hydraulic oil is recommended).
- 9. Close the oil fill/vent cap to the "closed" position.

Now fit the hydraulic tensioner cylinder mount to the cylinder (see Fig. 7). A protective cap may have to be removed to expose the thread on the cylinder.



Fig. 5: The dust caps in position.



Fig. 6: An assembled coupling. Note the stowage of the dust caps.



Fig. 7: The front mount fitted to the cylinder.