

## **EMERGENCY PITCH SETTING**

### **OD-BOX ON FORWARD OF GEARBOX**

(Pitch setting mechanism type B)

#### **Failure of remote electronic control**

If the main remote control system does not work, nor does the emergency system through push buttons in the bridge panel, but the hydraulic system is operational and no mechanical failure, it is possible to manoeuvre the pitch acting directly above electro valve coil.

Change the control switch “REMOTE” / “LOCAL”, located on the front of the connecting box of hydraulic power, to position “LOCAL” and act directly on ahead or astern coil of the booster valve **V2** is achieved more quickly when manoeuvring the pitch.

#### **Emergency pump EP**

If what fails is the hydraulic system itself or the Oil Distribution Box has problems, it can be possible to fix the pitch in full ahead, which will make it possible to reach port.

Note: For vessels with double shaft lines, the supply of the emergency manual pump is optional upon request.

The pitch adjustment in emergency can be made on two levels:

##### Level I:

No oil pressure but the pipes and the oil distribution box are not damaged.

##### Level II:

It does not work the oil distribution box.

### **PITCH ADJUSTMENT WITH DAMAGE IN LEVEL I:**

1. Stop the propeller, the main engine and hydraulic pumps group.
2. Open throttle valves **VE1** and **VE2** of hydraulic group.
3. Acting manually the pump **EP** (usually located on the side of the hydraulic group) to reach the position of maximum ahead.
4. Back to close the valves **VE1** and **VE2**.
5. Starting the main engine not exceeding 70% of its speed checking that the engine does not overload.

## PITCH ADJUSTMENT WITH DAMAGE IN **LEVEL II**

1. Stop the main engine and immobilize the shaft.
2. Putting a bucket under the OD Box and remove the plug to drain it.
3. Open the cover of the oil distribution box.
4. Remove the two retaining screws and the washer, and extract the shaft adapter with the OD Ring.
5. Mount the emergency coupling located in the toolbox directly on the distribution tube using the short screws that are also in the toolbox.
6. Connect a flexible hose to the emergency coupling, the hose is also found in the toolbox.
7. Connect the other end of the hose to the connection **E** located in the tank of hydraulic group.
8. Act manually the pump **EP** reaching the max. ahead position, the returns oil will be drained to the bucket.
9. Disconnect the hose from emergency coupling.
10. Mount the distributor cover.
11. Start the main engine not exceeding 70% of its maximum speed checking that the engine does not overload.

