

## BRIGADE ORDER TECHNICAL NO. 2

### PART 5 - STANDARD TESTS - ALL PUMPS

#### INTRODUCTION

All major pumps and portable pumps shall be subject to a quarterly test. It is vital that before the test is carried out the pump is completely wetted by pumping water through the pump using one delivery length and a branch, for at least 2 minutes.

FAILURE TO DO THIS MAY RESULT IN SEVERE DAMAGE TO THE PUMP ASSEMBLY.

#### MAJOR AND LIGHT PORTABLE PUMPS

#### PUMP TEST PROCEDURE

An initial visual inspection of all lengths of suction hose to be tested shall be conducted. Washers, screw threads and the general condition of the suction hose must be inspected.

All the lengths of the suction hose will then be coupled to the suction inlet of the pump and fitted with a blank cap. The blank caps should be removed from all deliveries.

The pump shall then be operated at the appropriate priming speed to obtain 0.8 bar vacuum which should be achieved within 45 seconds. Having achieved this, the compound gauge shall then not fall to 0.3 bar within 1 minute.

Failure to achieve the above performance indicates an excessive air leak within the system which may be due to leakage at pressure gauge connectors, delivery valves or couplings.

If by retightening the suction hose couplings the fault persists, inform Control accordingly. Place the Pump off the run. Record the defect in the appropriate log book.

#### SUBMERSIBLE PUMPS

The pump should be tested as set out below and the results recorded on Form FB77(S).

- On acceptance
- After use
- On other occasions as deemed necessary by the Officer-in-Charge

The pump should be visually examined for wear and tear, with particular attention being paid to the insulation of the power leads, control box and connectors. It should then be got to work to ensure that it is operating satisfactorily.

The pump should be given an annual electrical test by a qualified electrician. Technical Services will recall the pump when the test is due.

The pump should be cleaned by flushing with clean water. The strainer should be examined and any debris removed. The power leads and control box should be wiped clean with a damp cloth.

## **EJECTOR PUMPS**

The pump should be tested:

- on acceptance;
- after use;
- quarterly; and
- on other occasions as deemed necessary by the Officer-in-Charge.

The pump should first be subjected to a thorough visual examination, then set to work and checked for correct operation.

The results of standard tests should be recorded on Form FB 77(S).

The pump should be cleaned by flushing with clean water after use.

The coupling threads should be treated with grease or oil which serves both as a lubricant and as a preventative against corrosion.