TESTING AND ADJUSTMENT OF THE REGULATOR OCEANAIR Art. No. 2940

First stage valve:

1. Connect the regulator to the test equipment.
2. Connect the test manometer hose to one of the low pressure outlets.
3. Open the LP valve (=20 bar).
4. Set the secondary pressure at 11.5 bar, and intermittently purge the second stage by means of the purge button. NOTE that the second stage valve must be fully tight during this test. When the pressure gauge needle stops at the preset pressure, a maximum rise in pressure of 1 bar is allowed before the needle finally stops. If the needle continues to move to a higher pressure reading there is a fault in the seal between the valve seat and piston or the O-ring.
5. Close the LP valve, and open the HP valve (=200/300 bar). Purge intermittently with the purge button, check the tightness, and adjust the pressure to 8.5-9 bar.

Second stage valve: Tightness testing of the low pressure valve with servo valve.

1. Close the HP valve and purge fully by means of the purge button.
2. Remove the low pressure valve from the second stage housing.
3. Place the low pressure valve in the test fixture and screw on the hose.
4. Open the LP valve, push the servo valve's needle carefully, and purge a few times. Immerse the valve below the surface of the water in a special water tank and check to make sure that the valve is absolutely tight.
5. Move the low pressure valve to the second stage valve and fit the low pressure valve's outlet to the guide fitting in the second stage housing. Make sure that the valve is inserted straight to prevent the servo valve from becoming damaged.
6. Lubricate the external thread on the second stage housing and the end of the hose nipple. Screw on the low pressure hose.

Adjustment of the inhalation resistance:

1. Open the HP valve.
2. Connect the oval connecting pipe on the inhalation resistance gauge to the mouth-piece on the regulator.
3. Test-breathe very carefully. Check the reading of the gauge needle, which should rise to 35-40 mm/vp and then move back. The turning point reading equals the inhalation resistance. If the reading is too low, screw the valve tube away from the diaphragm as shown in the illustration. If the reading is too high, screw the valve tube towards the diaphragm.

Checking the purge button function:

1. Press the purge button. The second stage valve should now provide a generous supply of air.
2. Cover the mouth-piece and press the purge button. The second stage valve should then supply a reduced flow of air.

