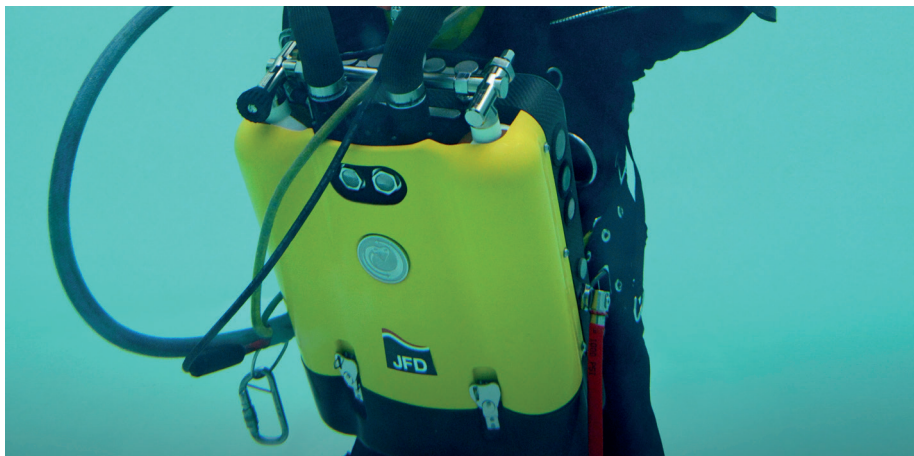




ADVISORY NOTICE

Background

Since issuing the previous COBRA guidance note DB500-PGN-2, JFD have been working on improving the flow capacity of the hot water relief valve on the COBRA set.



ISSUE

During a recent investigation into a COBRA set which experienced water ingress into the scrubber, it was identified that the existing PRV could not vent the full amount of water diverted to the COBRA set by the splitter block (approx. 3 L/min), whilst limiting the pressure rise within the water jacket to an acceptable value. This would only be necessary in the very unlikely event of a full blockage of the COBRA hot water outlet.



SOLUTION

JFD have supplied a replacement PRV spring and spring retainer / adjuster. This will enable the PRV to open further for the same pressure rise and will limit the pressure within the water jacket to 5 psi in the case of full blockage of the hot water outlet. Replacement components are being free-issued to all COBRA users, and this guidance note provides instructions on how to fit these items.

Additionally, as detailed in the previous guidance note DB500-PGN-2, the relief valve should now be set at 3 psi +/- 0.2 psi, rather than 4 psi as originally specified in the manual. JFD recommends checking this setting every fortnight.

JFD continues to recommend opening the scrubber and checking for water ingress between dives, irrespective of whether it is intended to change the sodalime at this time. This guarantees that the set is serviceable at the beginning of the next dive.

Please see following pages for procedure.

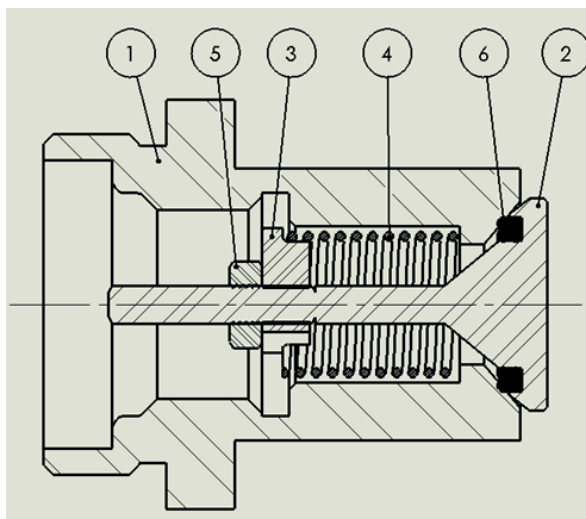


Procedure to fit the replacement parts

Refer to drawing DB5002050S1 (contained in manual).

Refer to Figure 1

- Remove locknut (item 5) and retain
- Remove items 3 and 4 and discard
- Fit new spring (part number DB5004075) and new adjuster (part number DB5003819)
- Re-fit the locknut to the piston (item2) but do not tighten



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	DB5003181	ADAPTOR, RELIEF INLET, HOT WATER, COBRA	1
2	DB5003818	PISTON, HOT WATER RELIEF VALVE, COBRA	1
3	DB5003819	ADJUSTER, RELIEF, HOT WATER, COBRA	1
4	DB5004075	SPRING, 3 PSI HOTWATER RELIEF, COBRA	1
5	PN658	NUT, HEX, M3	1
6	MC54201	GUAD RING, 80012	1

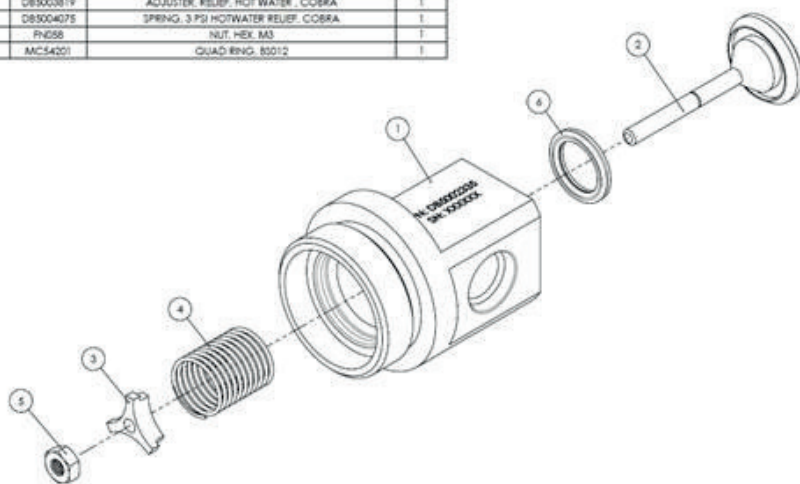


Figure 1 - Hot water relief valve

- Now follow the procedure below to set the relief valve.

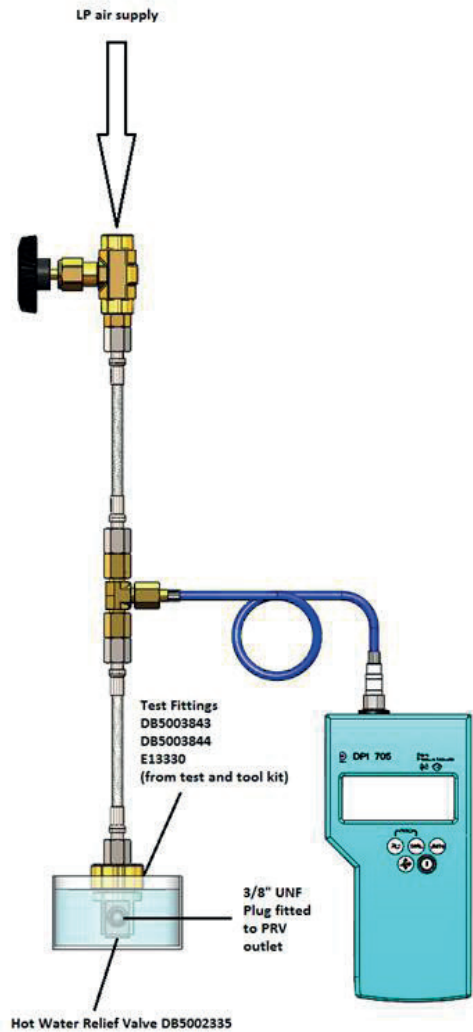


Figure 2 - Test equipment

See Figure 2.

- Fit the test plug (DB5003843), test nut (DB5003844) and o-ring (E13330) to the hot water relief valve DB5002335 as shown in figure 1. These items are contained in the COBRA Tool and Test Kit. Fit a 3/8" UNF plug to the outlet of the relief valve
- Connect an LP air supply and a calibrated LP gauge. Care should be taken when applying pressure if a very low range gauge is used until it is confirmed the PRV will vent correctly.

NOTE: Ensure that the 3/8" plug does not interfere with the spring inside the PRV. It may be preferable to fit the Hot Water Inlet Hose from the COBRA set (which has a specially shortened 3/8" fitting) and fit a 9/16" UNF blank to the other end of this hose.

- Immerse the hot water relief valve in water (minimum depth to cover relief outlet)
- Gently apply air pressure to the relief valve inlet and note the pressure reading when bubbles start to form in the water

NOTE: The reading is taken when the first bubbles begin to form. Any appreciable flow through the PRV will cause a higher reading on the gauge due to the port size on the test fitting.

- See Figure 1
- Hold the stem (item 2) and turn the adjuster (item 3) clockwise to increase the set pressure or anticlockwise to decrease the set pressure, then retest.
- When 3psi +/- 0.2 psi has been achieved, tighten the locknut (item 5) against the adjuster, ensuring components are locked together.
- Confirm set pressure has not changed.
- Remove test equipment and re-fit relief valve to set.