SCUBAPRO®

Engineering Bulletin

February 14, 2000

D400 Orifice and Housing Changes

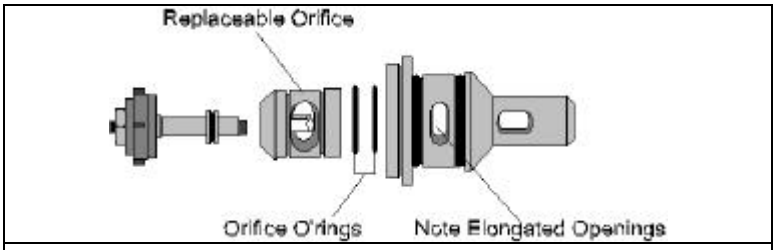
SCUBAPRO has implemented the following changes in the D400 orifice and housing. These changes are also reflected in individual replacement parts for the D400, and are listed on page 2 of this bulletin.

What's New About The D400?

Replaceable seating surface

The LP poppet seating surface (orifice) has been re-designed so that it is now possible to replace it without having to replace the entire poppet housing. This will benefit the customer by reducing the cost of replacement of a damaged orifice.

The new techno-polymer orifice is snap-fit, and is o'ring sealed into the housing. It is NOT an annual replacement part and the o'rings are static, requiring only periodic inspection and lubrication.



Replaceable D400 Orifice Assembly

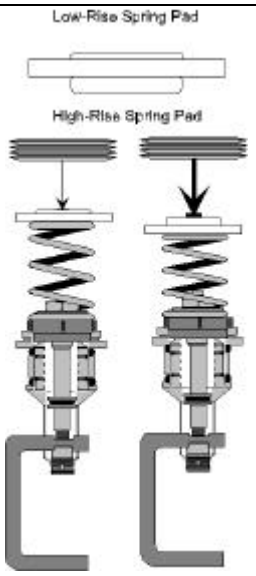
Because of the re-design of the orifice, the brass poppet housing is also of a different design. All D400 configurations fit into older and more recent regulator bodies, but a complete replacement of the brass poppet housing must be made in order to take advantage of this snap-in orifice improvement.

Spring Pad/Adjustment Pad

The spring pad is now designed with different spring rest thickness on each side. This means that the pad can be used to set different initial tension on the demand spring, affecting the cracking effort of the regulator.

With the spring pad turned so that less tension is put on the demand spring, the cracking effort will be less. The technician can determine the appropriate side of the pad that should be in contact with the spring.

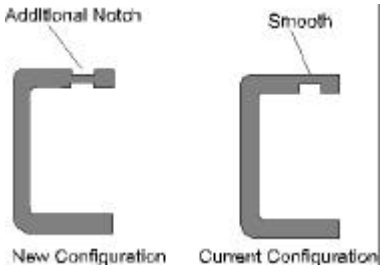
To accommodate the re-designed spring pad, the demand spring adjustment pad has been constructed of stainless steel.



Spring adjustments made with Spring Pad

Demand Lever

The demand lever has been re-designed so that it provides more movement of the poppet each time the diver takes a breath. The extra movement of the poppet means that a greater volume of air can be delivered during high periods of demand, such as hard work or greater depths.



Re-designed Demand Lever

Compatibility of D400 Parts

All D400 parts are cross compatible. This means that when an older regulator body is used, it is possible to use the newer orifice assembly and the newer demand lever, adjustment pad and spring pad.

Older parts can also be used with newer configurations. For example, the new body can be used with the older orifice assembly and older demand lever.

Ordering parts replacements

Because of the configuration change, effective immediately, when ordering the poppet housing for the D400 (p/n 11.014.010), dealers will receive a complete kit designed to make the upgrade to the new parts easy. The kit # is 11.014.040.

If you have any additional questions, please contact:	***SCUBAPRO Technical Services*** ***1-800-382-2211***

PLEASE SHARE WITH YOUR SALES STAFF!

D400 Second Stage



Selling Features	Benefits
• Air Balanced Coaxial Flow Valve	Minimal effort to initiate air flow
• VIVA Flow Assist	Smooth, full, air flow
• Dive/Pre Dive Switch	Allows regulator to be adjusted to minimal breathing effort
• Cold Water Resistant	Functions well in a variety of environmental conditions
• All breathing features are automatic or pre-set.	No need for the diver to make adjustments to get the best breathing effort.
• Uniquely designed housing/diaphragm	Exhalation is easier and smoother - more “natural - smooth’ air flow than second stages of a standard design.
• Limited Lifetime Warranty	Regulator is good for life if serviced annually by an Authorized SCUBAPRO Service Technician.