

**MK20 & MK10plus  
INFORMATION**

**NOTICE: THIS BULLETIN IS TO INFORM DEALERS AND SERVICE TECHNICIANS ABOUT SOME FUNDAMENTAL DIFFERENCES IN SETTING UP SCUBAPRO'S TWO NEW FIRST STAGES COMPARED TO SET UP PROCEDURES THAT HAVE BEEN STANDARD FOR SCUBAPRO REGULATORS IN THE PAST.**

These new 1st stage designs utilize a different seating concept than we have used in the past. The seat itself is a much harder, more durable material than previous seats. The piston also has a significant radius on the sealing edge rather than the preceding knife edge design.

What does this mean to you? This new design increases the durability of our seat and in turn, the reliability of our regulator. In fact, in our SCUBA research lab, we have run over 1 million cycles on these seats without any noticeable engraving of the piston sealing edge into the seat. In fact, even under a microscope, we can hardly discern any difference between the seats with 1 million cycles and a new seat. Because of this new seating configuration, these 1st stages might have a tendency to drift slightly due to the hardness of the seat material.

**Please note the following points when rebuilding, setting-up or testing either the MK20 or MK10 plus:**

- *Both 1st stages should be lubricated with CHRISTO-LUBE \* lubricant versus the standard silicone which has been used in the past. If silicone grease is used, you will find in general, that the intermediate pressure range will be higher than what we recommend.*
- *These 1st stages, because of the new seating configuration, might have a tendency to drift upon pressurization. This is normal for these 1st stages. Please follow the guidelines below for what we consider to be an acceptable drift.*

SUPPLY PRESSURE	1ST STAGE INTERMEDIATE PRESSURE RANGE
<b>500 PSI</b>	<b>120 - 145 PSI (MK10 plus), 125 - 145 PSI (MK20)</b>
<b>3300 PSI</b>	<b>125 - 145 PSI</b>
<b>ALLOWABLE INTERMEDIATE PRESSURE SPREAD ± 12 PSI (MEASURED AT TIME OF INITIAL PRESSURIZATION)</b>	
<b>ALLOWABLE DRIFT IS MEASURED OVER A ONE MINUTE PERIOD OF TIME, AT HIGH PRESSURE, AND MUST MEET THE FOLLOWING CRITERIA:</b>	
0 - 45 SECONDS: DRIFT OF LESS THAN 8 PSI AND THE UNIT IS STILL WITHIN ACCEPTABLE PRESSURE RANGE ABOVE.	
45 - 60 SECONDS: DRIFT OF LESS THAN 1 PSI AND TAPERING TO 0 PSI. (MAY EXCEED PRESSURE RANGE BY AN ADDITIONAL 1 PSI, UP TO 146 PSI)	

\* CHRISTO-LUBE may be obtained through SCUBAPRO starting in Jan. 1996, p/n 41-047-000

- **Shims** - **MK10 plus** may have up to **3 shims** under the seat retainer to adjust intermediate pressure.

**MK20** may have up to **3 shims** under the seat retaining plug to adjust intermediate pressure. In addition, there may be up to **3 shims** under the spring inside the ambient chamber (opposite from the T.I.B.).

*If you have any additional questions, please contact:*

**SCUBAPRO<sup>®</sup> TECH SERVICES**

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