

**MK10 1ST STAGE**  
**HIGH INTERMEDIATE PRESSURES**  
**AND DRIFTING**

**THIS BULLETIN IS TO INFORM DEALERS AND SERVICE TECHNICIANS THAT THERE HAVE BEEN SEVERAL INSTANCES BROUGHT TO OUR ATTENTION THAT WHEN UPGRADING A MK10 OR SERVICING A MK10 PLUS 1ST STAGE, HIGH INTERMEDIATE PRESSURES AND/OR SEVERE DRIFTING CAN BE ENCOUNTERED. IF THESE CONDITIONS OCCUR, THE FOLLOWING SHOULD BE EXAMINED.**

Most of these occurrences were encountered when upgrading a MK10 1st Stage to a MK10 plus. If high intermediate pressures or drifting occurs, there are usually four main areas to look at.

1. Lubrication - The MK10 plus and MK20 1st stages are assembled using *Christo-Lube*® lubricant, p/n 41-047-000. Your choice of lubricant **will** affect the intermediate pressure. If standard silicone grease is used, the intermediate pressure could increase by as much as 20 psi. SCUBAPRO recommends using *Christo-Lube* for these two first stages.
2. Seating surfaces - If there are any imperfections on the seat surface or piston sealing edge, then drifting will probably be apparent. This new design, consisting of a hard seat material and radiused piston edge, can be affected by slight scratches or nicks which might cause air leakage or drifting. To avoid damage to the sealing surfaces of the seat and piston, use care during handling and installation. In some instances, scratches might be so minute that a powerful microscope is necessary to detect them. If a drift is detected, try substituting a new seat first, and then a new piston.
3. Seat Retainer - See Engineering Bulletin #247 for a full explanation.
4. Concentricity (alignment) of mating components - Concentricity plays a major part in the proper sealing of the MK10 plus 1st stage. An example is the new design of the MK20 1st stage where the seat is positioned in the same machined bore as the piston to provide perfect alignment. Components for the new seating arrangement are machined to tight tolerances. If not matched to parts that were manufactured to similar controls satisfactorily, sealing of the first stage while incorporating this upgrade may be difficult. If attempts have been made to substitute the seat, piston and seat retainer to accomplish this upgrade without success, please contact **Tech Services** for further assistance. Attempts can be made to substitute another seat retainer. Differences in the concentricity of the threads might allow one to work and not another.

If you have any additional questions, please contact: **SCUBAPRO Tech Services**  
**(800) 382-2211**