



MK25 First Stage Features and Retrofit Kit Information

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The MK25 first stages, in all versions (Brass, UltraLight and Titanium), feature the following advantages over the MK20 first stages:

- 1) Quick adjustment of intermediate pressure (to be performed only when the regulator is not pressurized to prevent quick wear of components): a new seat retainer and other components allow for an adjustment of the intermediate pressure via an allen wrench from the outside (similar to MK14, MK16 and MK18). This is a patented feature for a piston first stage regulator and simplifies the fine-tuning of the regulator at the time of servicing. See attached schematic for component description.
- 2) Improved cold water resistance: referring to the attached figure, the following has been modified to attain a higher cold water resistance.
 - a) The bushing at the base of the piston has been thickened, to provide more thermal insulation (detail T in figure).
 - b) There is a step on the bushing that presses on the upper head o-ring. This, in conjunction with a new o-ring on the neck (detail O2 in the figure, o-ring type 01.050.360), maintains a dry volume, which also provides additional thermal insulation (no lubricant is needed in this dry volume).
 - c) A small rib at the edge of the bushing increases the path followed by ice if it forms (ice typically would form at the stem of the piston then travel outwards toward the spring base coil).
 - d) The piston stem is now mirror finished. This provides the lowest possible friction, even in the absence of lubricant. Lubricant is now added, in very small amounts, only to the piston stem o-ring, and not directly to the stem itself. At very low temperatures typical in ice diving, traces of lubricant on the piston stem act as nucleation sites for ice.
 - e) The sleeve (detail S in figure) is now made of a new material that retains its softness and elasticity even at very low temperatures typical of ice diving. This sleeve can be either black or neutral color.
 - f) We reversed our approach to the bushing 01.060.607. We had introduced a cut along its axial length to allow it to shrink in cold water without choking the piston. With the new modifications this is no longer necessary, and the removal of the cut diminishes the chances of whistling by better centering the piston.

If you have any additional questions, please contact:

SCUBAPRO Technical Services
1-800-382-2211

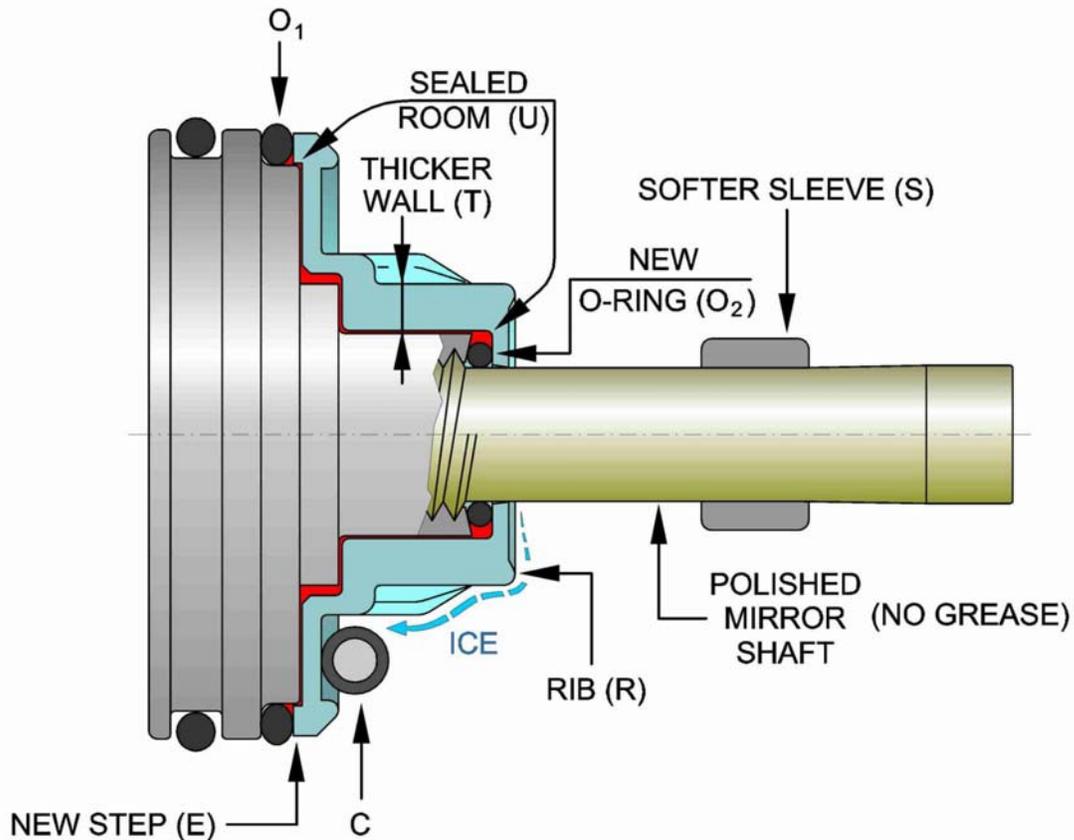
Retrofit Kit Information:

Kits are available to upgrade all MK20s to MK25s. These kits do not include the new piston (which is available separately under P/N 10.600.155) or MK25 Decal (which is available separately under P/N 01.006.929). The part numbers are:

- 41.300.010 for MK25UL
- 41.300.020 for MK25 Brass

Note that when installing these kits, no shims (01.060.219 or 01.060.220) should be used.

MK25 PISTON: IMPROVED COLD RESISTANCE



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