

MK10 ENRICHED AIR (NITROX) CONVERSION KIT (PN 10-500-021)
IMPORTANT- READ THIS CAREFULLY BEFORE INSTALLATION

This kit contains the internal components needed to convert the Scubapro MK10 or MK9 first stage from compressed air use to Enriched Air Nitrox containing oxygen concentrations up to 40%. In addition to these parts, you will need an oxygen compatible lubricant such as Christolube MGC-111 or MGC-129 (Lubrication Technologies, Jackson Ohio) not supplied with this kit.

The standard MK10 as received from the factory contains o-rings, seat materials and silicone based lubricants that are not compatible with high pressure Enriched Air, and should not be used. Use of these materials with high pressure Enriched Air could increase the risk of ignition and result in serious personal injury.

This kit is meant to be installed by qualified Scubapro service technicians only, who additionally are knowledgeable in the safe handling of oxygen and oxygen enriched mixtures and oxygen cleaning procedures such as described in CGA pamphlet G-4.1 (Compressed Gas Assoc. Arlington VA.) or ASTM G93-88 (American Society for Testing and Materials, Philadelphia, PA).

Scubapro second stage regulators and inflators which operate at low pressure (approx. 135-150 psi) are Enriched Air compatible from the factory (to oxygen concentrations of 40% or less) without additional cleaning or modification.

In order to make this regulator Enriched Air compatible you will need to do the following:

1. Completely disassemble the MK10 first stage.
2. Remove and discard all o-rings and the high pressure seat.
3. Remove all traces of silicone lubricant and degrease until oxygen clean according to cleaning procedures acceptable for breathing equipment.
4. Reassemble and test with the o-rings and the high pressure seat supplied in this kit. Lubricate all o-rings with an oxygen approved lubricant (not supplied) **Do not use silicone greases.** Refer to the schematic for part number identification. The kit includes both fluoro-carbon (brown color) o-rings and new, silicone free (standard compound) o-rings. The new fluoro-carbon o-rings are identified and placed as follows:

#01-050-143	replaces	01-050-142	(HP plug and yoke retainer o-rings)
#01-050-394	"	01-050-137	(piston shaft o-ring)
#01-050-395	"	01-050-162	(large piston o-ring)
#01-050-151	"	01-050-147	(HP seat o-ring)
#01-050-396	"	01-050-157	(seat retainer o-ring)
#01-050-397	"	01-050-193	(optional DIN adapter o-ring)
5. Clean any excess lubricant from the outside of the seat retainer and apply the warning/identification decal to the completed regulator.
6. Inform the customer that this first stage must be dedicated to Enriched Air service. **Once oxygen cleaned, if subsequently used with normal compressed air pumped from an oil lubricated compressor, the regulator may become contaminated with potentially flammable residues that could render it unsafe for Enriched Air use until disassembled and recleaned.** The first stage must remain oxygen clean throughout its service life if used with Enriched Air.
7. For additional information regarding the compatibility of other Scubapro products with Enriched Air, refer to Engineering Bulletin #226. **Other Scubapro products may not be compatible with Enriched Air Systems.**