

This kit contains all of the necessary components to upgrade your current Scubapro Mark 10 first stage to a Mark 10PLUS. Installation of these components must be done by an Authorized Scubapro Service Technician.

A. Disassembly of the Mark 10:

1. Remove the five port swivel assembly from the main body using the Scubapro Multi-Tool.
2. Remove the piston assembly, spring, and any shim washers from the main body. Discard the piston assembly and shim washers. The spring will be reused.
3. Remove the seat retainer assembly (seat retainer, HP seat, and seat retainer o-ring) and 01-050-147 o-ring (purple) from the main body. Discard all of these parts.
4. Carefully remove the piston stem o-ring (01-050-137) from the internal groove in the main body and discard. A replacement is supplied in the upgrade kit.

B. Assembly of the Mark 10PLUS:

1. Lubricate* and install the new piston stem o-ring (01-050-137) into the main body.
2. Install the spring centering washer into the main body with the flat side against the bottom of the hole.
3. Install the thermal insulating bushing (TIB) onto the piston. Apply a generous amount of environmental silicone grease between the TIB and the piston before installation. The silicone grease should completely seal the TIB to the piston preventing excessive water exchange. The TIB will snap into place as the retention ribs index with the piston shoulder.
4. Lubricate and install the new piston head o-ring (supplied in the kit, 01-050-162, amber) into the piston o-ring groove.
5. Install the trim boot onto the main body. There is a molded post on the inside of the trim boot that indexes with one of the ambient holes in the main body. When properly installed, all of the remaining ambient holes in the main body will align with the holes in the trim boot.
6. Place the original spring around the piston assembly and insert the piston stem into the main body. (Note: Due the new rounded piston sealing edge, it is no longer necessary to use a piston bullet when performing this operation.)
7. Reinstall the 5 port swivel assembly onto the main body and tighten with the Scubapro Multi-Tool.
8. Install 2 shim washers onto the base of the seat retainer (see IP adjustment procedure below).
9. Install the O-ring (01-050-157, red) around the base of the new seat retainer.
10. Install the O-ring (01-050-142, amber) into the groove in the HP seat.
11. Insert the HP seat/o-ring assembly into the seat retainer with the concave surface facing outward.
12. Thread the seat retainer assembly into the main body making sure that the shims remain aligned with the base of the seat retainer and tighten using the Scubapro Multi-Tool.
13. The Mark 10PLUS can now be pressurized and the intermediate pressure checked. IP pressures should be between 125-145 psig (at 500 psig and 3000 psig supply pressure).
14. Install The new Mark 10PLUS decal to the top of the yoke screw knob.
15. **IP Adjustment:*** Intermediate pressure can be altered in the Mark 10PLUS. This is accomplished by removing/adding shim washers between the HP cap and the main body. The IP can be increased by adding shims and decreased by removing shims. Each shim added or removed alters the IP by approximately 5 psi. A maximum of three shims are allowed to adjust IP. Be sure that the regulator is fully depressurized before attempting to remove the HP seat retainer to change the shims.
- 16.* IP fluctuations can be attributed to the type of lubricant applied to the piston head and internal piston stem o-rings. Scubapro recommends the use of CHRISTO-LUBE lubricant (Scubapro PN 41-047-000), as the lubricant of choice for assembly of the Mark 10PLUS 1st stage. All moving parts and surfaces should be thoroughly cleaned and relubricated with CHRISTO-LUBE for the best IP performance and stability.

Legend:

- The top row of parts are Mark 10 parts that are discarded and/or replaced with new parts.
- The middle row of parts and assemblies are reused in the Mark 10PLUS upgrade.
- The bottom row of parts are the parts included in the Mark 10PLUS upgrade kit.

