

13.1 Maintenance

The best system to guarantee perfect efficiency in the piston accumulator is to periodically check every 3 months, the pressure of the pre-charge. By doing so, it is possible to obtain the state of health of the equipment. Whilst carrying out this check, the contingent ambient temperature must be noted, which could be different of that at the time that the pre-charge was affected and this could be the cause of an error. It is necessary to ensure that this measure is taken while the piston is at the extremity of its stroke on the oil side. This in fact was the same position at the time of pre-charge operations. The life span of the gasket depends on the condition of cleanliness of oil in the system. The presence of metal particles and impurities has an abrasive effect on the cylinder and above all on the seal. It is recommended the filter be used as a precautionary measure, be it for the piston accumulator and all the components (Valves pumps etc.)

13.2 Repairs

For the sudden break down or a planned check, it could be necessary to dismantle the accumulator and check the components. It is necessary to carry out the operations in order as indicated, remembering never to disassemble anything unless it has been ensured that the liquid and gas pressure has been completely relieved.

13.3 Disassembly the accumulator

- If it is possible not to dismantle the equipment from the plant, completely discharge the pre-charge. Charge the accumulator with fluid under pressure in a way to bring the piston and the end of the stroke at the gas side.
- Completely discharge fluid pressure.
- Dismantle pre-charge valve
- Before removing flanges, tap the flanges with aluminum hammer in order to release tension on the side of the thread.
- Screw two screws into the threaded holes and using a bar as a lever, unscrew the flanges.
- Push out the piston if you have access at the sides or else pull piston out using an eyebolt.
- If the accumulator is attached to the plant, discharge all the fluid.
- Clean and degrease all stripped components and carry out all visual inspection.
- Check the internal surface of the cylinder body which should be bright and free from scratches

13.4 Replacement of gasket

Remove all gaskets from pistons and flanges taking precaution not to scratch or damage the faces.

Clean the faces

Use an original EPE gasket kit; lubricate all the gaskets and guide in the piston, taking care not to damage during assembly. Fit to respective faces.

13.5 Assembly of accumulators

- Position the assembly sleeve (See chapter 9.5 and 9.7) from the end where the piston is to be inserted, and after having lubricated; push the piston towards the internal of the accumulator body.
- With the accumulator vertically positioned, with gas side towards the top, pour approximately 0,1 litre of mineral oil on the internal surface of the accumulator, in order to keep the gaskets lubricated the nitrogen chamber and to avoid oxidation as a result of eventual humid residue of gas.
- After having replaced gaskets and the empty extraction rings fitted on the closure flanges, re-screw them on the accumulator body.
- Re-assemble pre-charge valve.
- Execute pre-charge with nitrogen as indicated in Chapter 12.

13.6 Service EPE

For any question and to together find solutions to any of your problems, do not hesitate to contact the Technical Service or Sales Departments of EPE ITALIANA, either directly or through our branches and representatives all over the world.



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