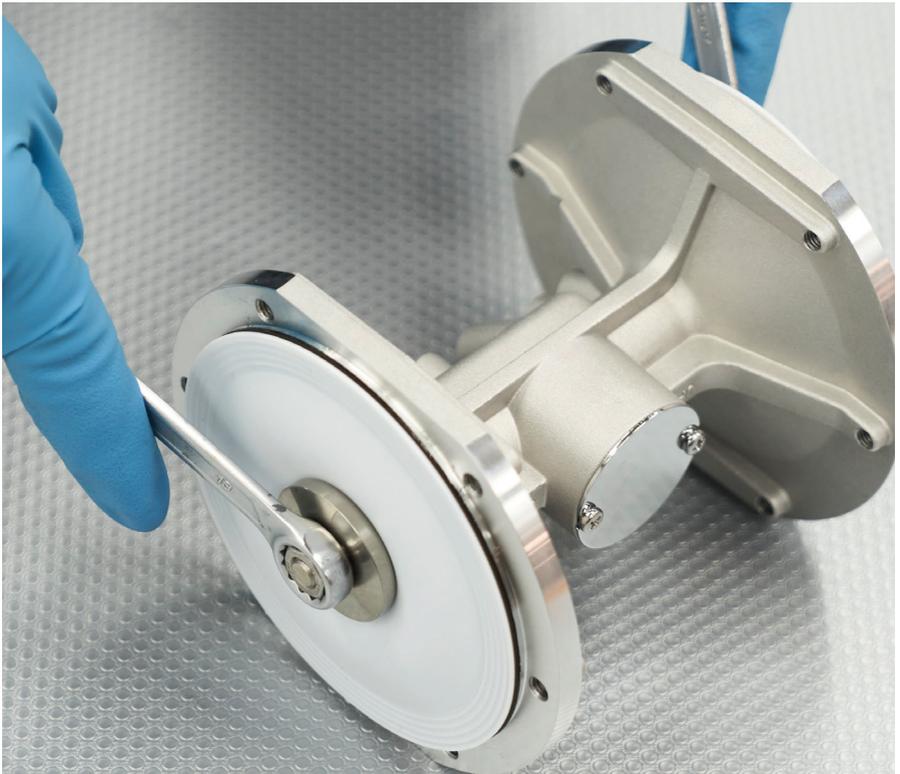


Double Diaphragm Pumps ORDINARY SCHEDULED MAINTENANCE

a good start is halfway to success.

DIAPHRAGM PUMPS SMART GUIDE



RECOMMENDED MAINTENANCE OPERATIONS

A suitable maintenance is important for a longer duration of the equipment in good working conditions and efficiency ensuring functional safety as time goes by.

All maintenance operations must be carried out by a qualified staff. The pump design and the materials used to manufacture it limit the maintenance interventions to a simple periodic cleaning.

The staff must be provided with the individual protections that are generally used for similar operations.

01. SCHEDULED MAINTENANCE

EVERY 50 WORKING HOURS

DISASSEMBLE AND CLEAN THE DELIVERY AND SUCTION FILTERS AS WELL AS THE FLUID PASSAGE DUCTS.

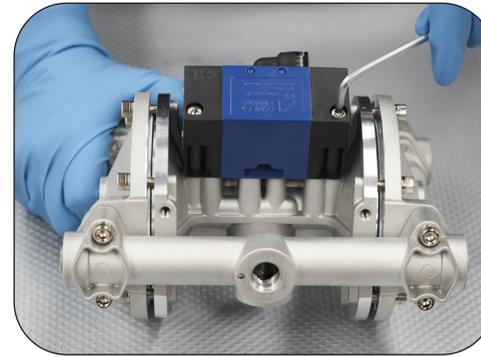
EVERY 2000 WORKING HOURS

OVERHAUL THE WHOLE PAINTING UNIT AND REPLACE THE WORN COMPONENTS.

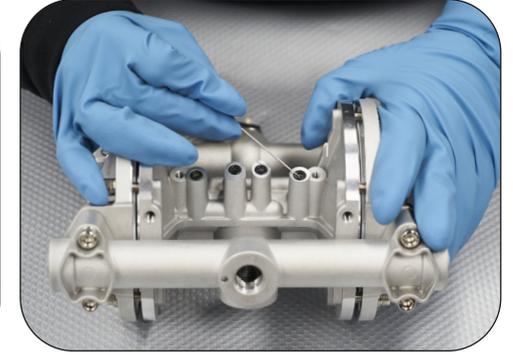
02. PRE-SERVICE PROCEDURES

1. BEFORE STARTING THE DISASSEMBLY OF THE UNIT FOR MAINTENANCE, RELEASE THE PRESSURE FROM THE PUMP.
2. DISCONNECT THE PUMP FROM THE COMPRESSED AIR SUPPLY.
3. DISASSEMBLE THE SUCTION FILTER FROM THE PUMP.
4. REMOVE THE RECIRCULATION PIPE.
5. DISASSEMBLE THE PAINT PRESSURE REGULATOR FROM THE PUMP.
6. DISASSEMBLE THE PUMP BODY FROM THE SUPPORT BASE BY REMOVING THE FOUR SPECIAL SCREWS. (In reference to the version used)

03. AIR OPERATING VALVE DISASSEMBLY



- 1 To disassembly the Air Operating Valve, remove the two Hex. Fixing Bolts by using a 4 mm Allen Key.



- 2 Remove all 4 O-rings from their seats and replace them if they are worn or deformed.

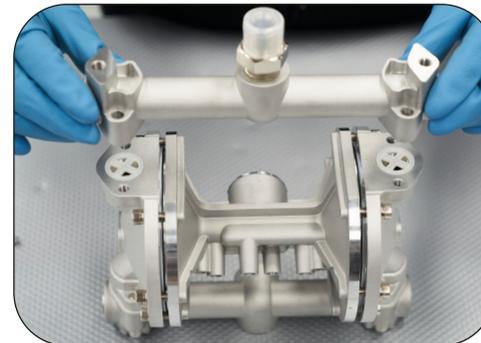
04. DISASSEMBLY of PUMP SUCTION SIDE



- 1 Reverse the main body and proceed with the Lower Adaptor disassembly. (on the SUCTION SIDE of the Pump)



- 2 To remove the Lower Adaptor, loosen the 4 Hex. Socket Bolts by using a 5 mm Allen Key and unscrew them by hand.

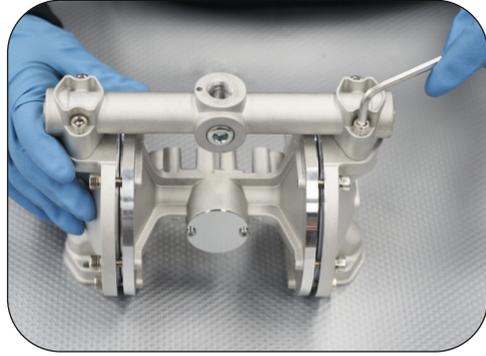


- 3 Disassemble the Lower Adaptor from its seat. (on the SUCTION SIDE of the Pump)



- 4 Carefully extract the two Intake Valve Packings from their housings. (on the SUCTION SIDE of the Pump)

05. DISASSEMBLY of PUMP DELIVERY SIDE



1 Reverse the main body to the opposite side (DELIVERY SIDE) and proceed with the disassembly of the Upper Adaptor by loosening the 4 Hex. Socket Bolts by a 5 mm Allen Key.



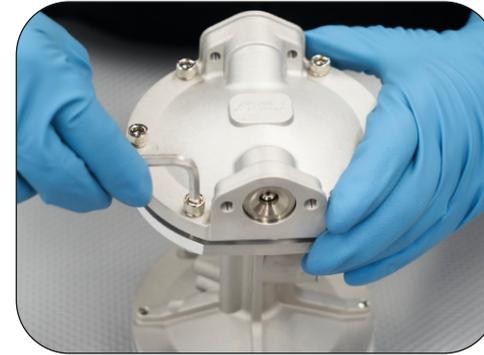
2 After removing the all the Hex. Socket Bolts, disassemble the Upper Adaptor from its seat. (DELIVERY SIDE)



3 After taking out the balls, disassemble the Exhaust Valves by pulling up them with your finger.

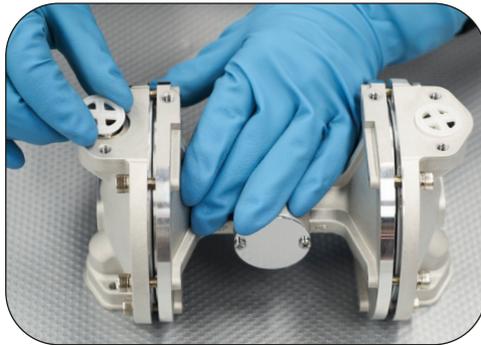


4 Carefully remove the Exhaust Valves O'ring from their seats.

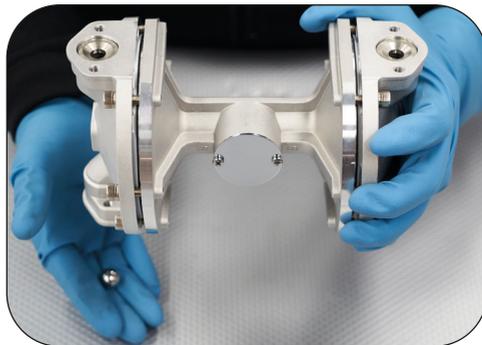


5 Now proceed with the disassembly of the lids by loosening the 6 Hex. Socket Bolts from both sides of the main body, by a 5 mm Allen Key.

06. DISASSEMBLY of the EXHAUST VALVES



1 Carefully extract the two Exhaust Valve Packings from their housings.



2 Turn over the pump body to allow the disengage of the balls from the Exhaust Valves seats, ensuring they don't fall to prevent damage.

07. DISASSEMBLY of the INTAKE VALVES

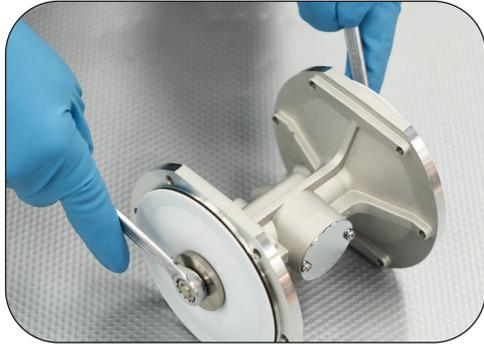


1 Carefully remove the Intake Valves O'ring from their seats.



2 Press down the ball with a screw driver by using stopper of the lid to remove the Intake Valves and the Balls from the lids.

08. DIAPHRAGM SETS DISASSEMBLY



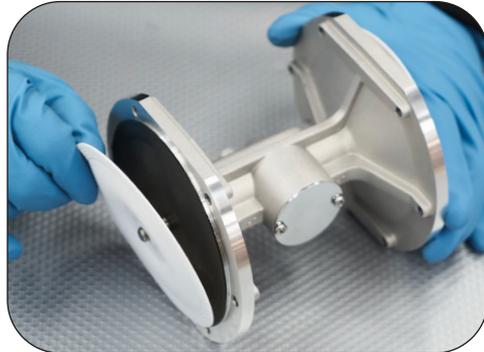
1 Remove the Hex. Nut by loosening it by a 13 mm wrench.



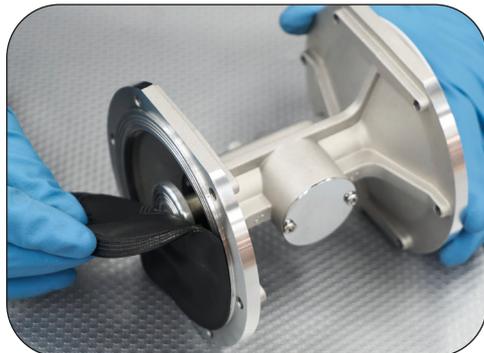
2 Remove the Hex. Nut and the Spring Washer.



3 Remove the Diaphragm Holder (OUTER) and the O'ring.



4 Remove the Diaphragm (OUT) in PTFE.



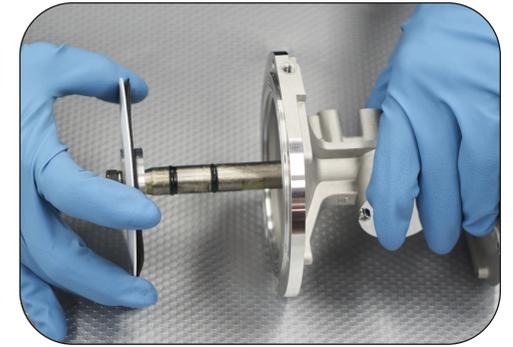
5 Remove the Diaphragm (IN) in Rubber.



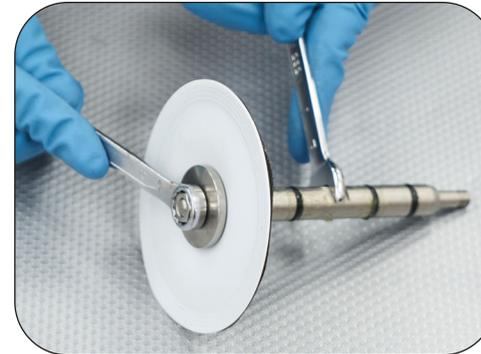
6 Remove the Diaphragm Holder (INNER).



7 Press lightly on the main body to disengage the rod from its housing.



8 Pull out the Rod from its seat.



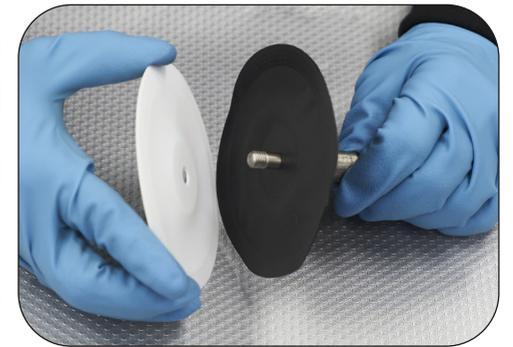
9 Hold flat face of center of the rod with a 12 mm spanner, and loosen the Nut with a 13mm spanner on the side where the diaphragm has not been removed yet.



10 Proceed with the disassembly of the Hex. Nut, and the Spring Washer,



11 afterwards with the disassembly of the Diaphragm Holder (OUTER), the O'ring, the Diaphragm (OUT) in PTFE, the Diaphragm (IN) in Rubber, the Diaphragm Holder (INNER) and the Rod.

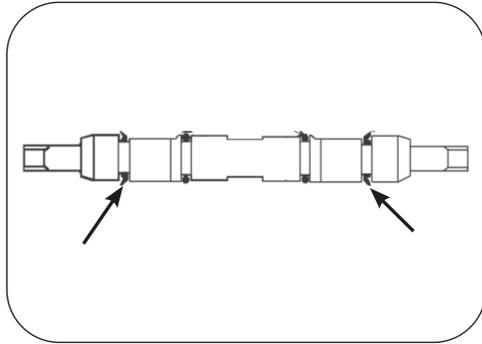


09. "Y" PACKINGS & O'RINGS DISASSEMBLY



1 Remove the "Y" packings on both sides of the Rod by sliding out them by hand.....

2 and the "O-rings" on both sides of the Rod by sliding out them by hand.



3 During the assembling, place the "Y" packings to the direction that they open outward.

4 Pay attention to the assembly direction of the "Y" Packings". (SEE PICTURE)



5 After replacing all the "Y" packings, lubricate their grooves and the O-rings with lithium grease.

10. PUMP REASSEMBLY

TO REASSEMBLY THE PUMP REVERSE THE DISASSEMBLY PROCEDURES.

PRECAUTIONS: DURING THE REASSEMBLY OF THE LIDS ON MAIN BODY, DO NOT REVERSE THE DELIVERY SIDE WITH THE SUCTION ONE.



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