

PARTS MANUAL

May 2017



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It is strongly recommended to use A&V spare parts including orifice and nozzles. Any possible defects that may cause by not using A&V Waterjet spare parts could result in earlier termination of first year warranty

PART 1.Intensifier

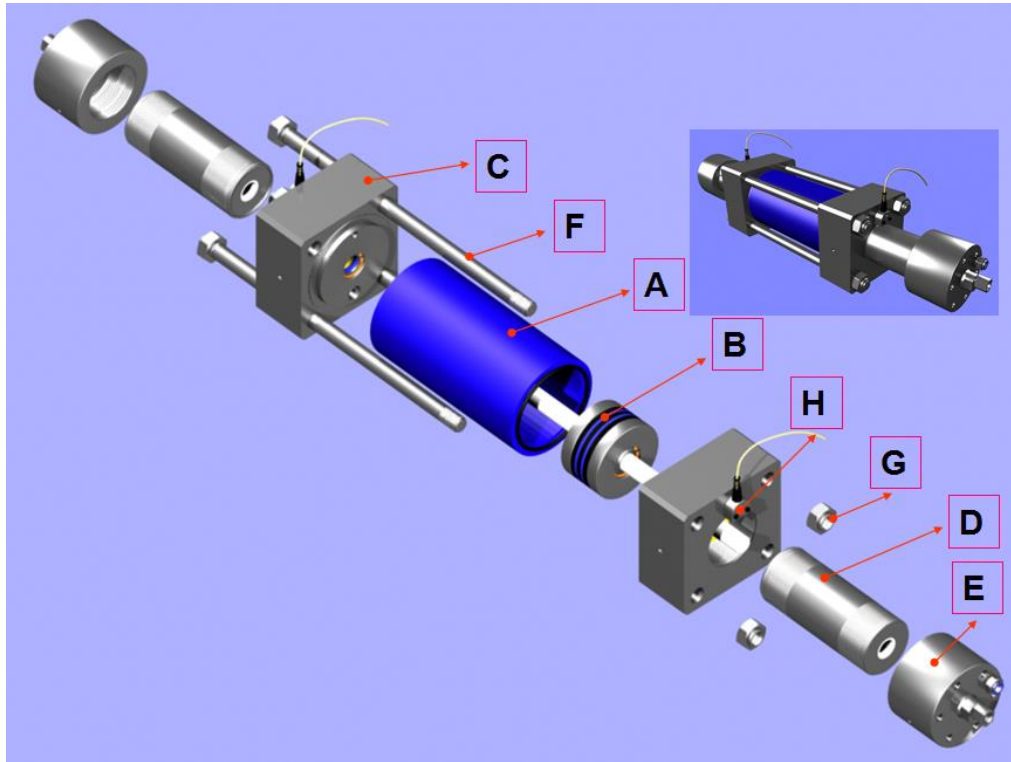


Figure.1

- A: low pressure cylinder (110-20003-0101)
- B: piston assembly (figure.2)
- C: end bell (figure.5)
- D: High-pressure cylinder assembly (figure.3)
- E: end cap (figure.4)
- F: tie rod
- G: tie rod nut
- H: magnetic sensor switch

1. Piston assembly

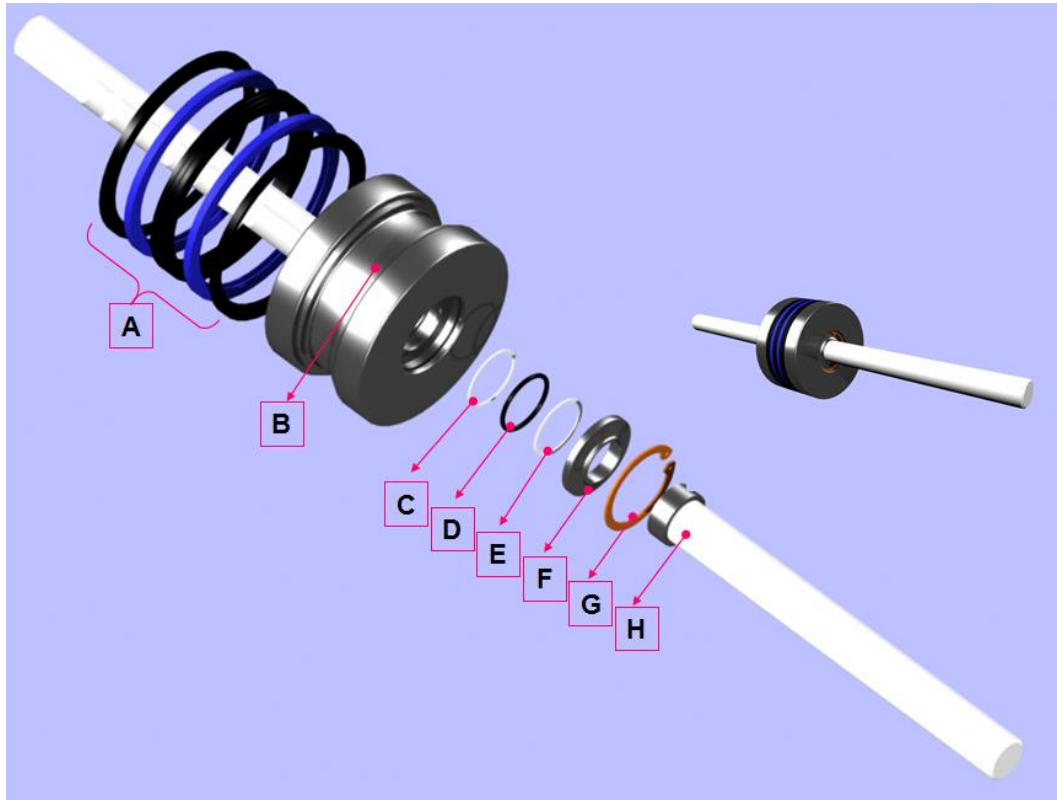


Figure.2

- A: obturator rings assembly (17-900017-02232)
- B: Piston (110-20053-0101)
- C: White O-ring (110-20001-0101)
- D: Black O-ring (210-08030-01)
- E: White O-ring (110-20001-0101)
- F: spacer
- G: snap ring (202-89378-02)
- H: plunger (110-20004-0101)

2. High-pressure Cylinder

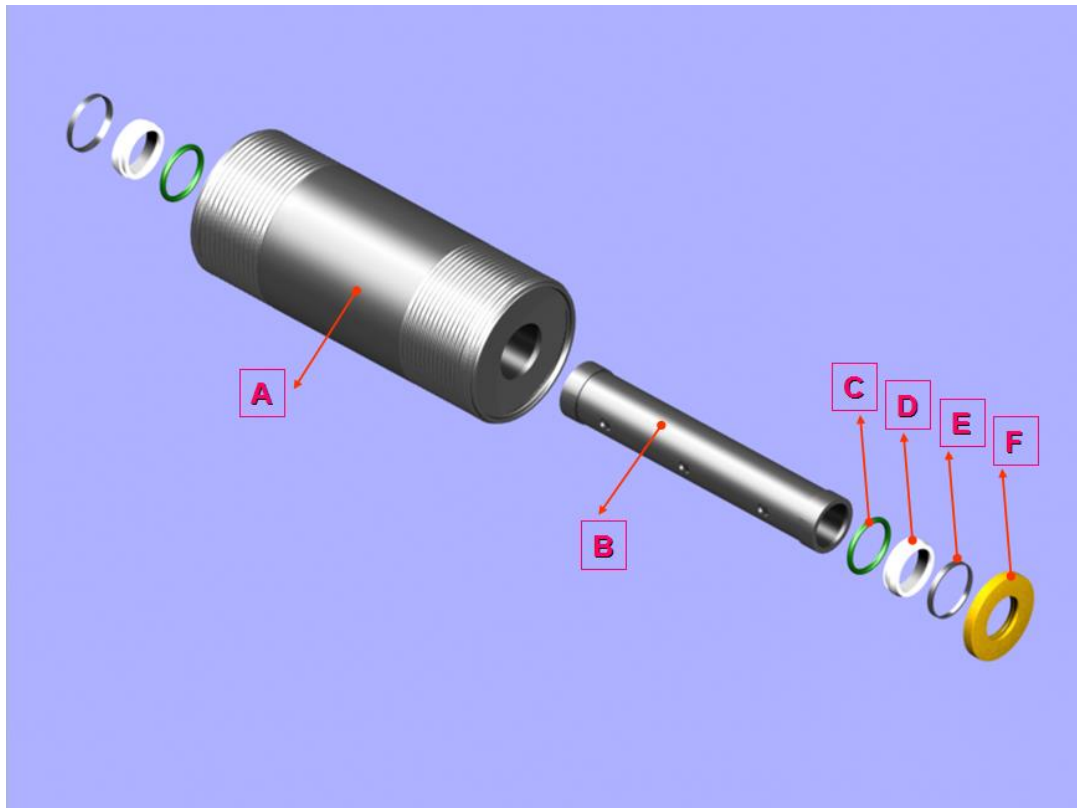


Figure.3

A: high-pressure cylinder (110-20082-0101)

B: seal back-up sleeve (110-20038-0101)

C: O-RING *

D: seal plunger *

E: SEAL HOOP *

F: SEAL RING (110-20039-0101)

*For C, D, E, a package (110-20078-0101) contains all these three parts.

3. End Cap

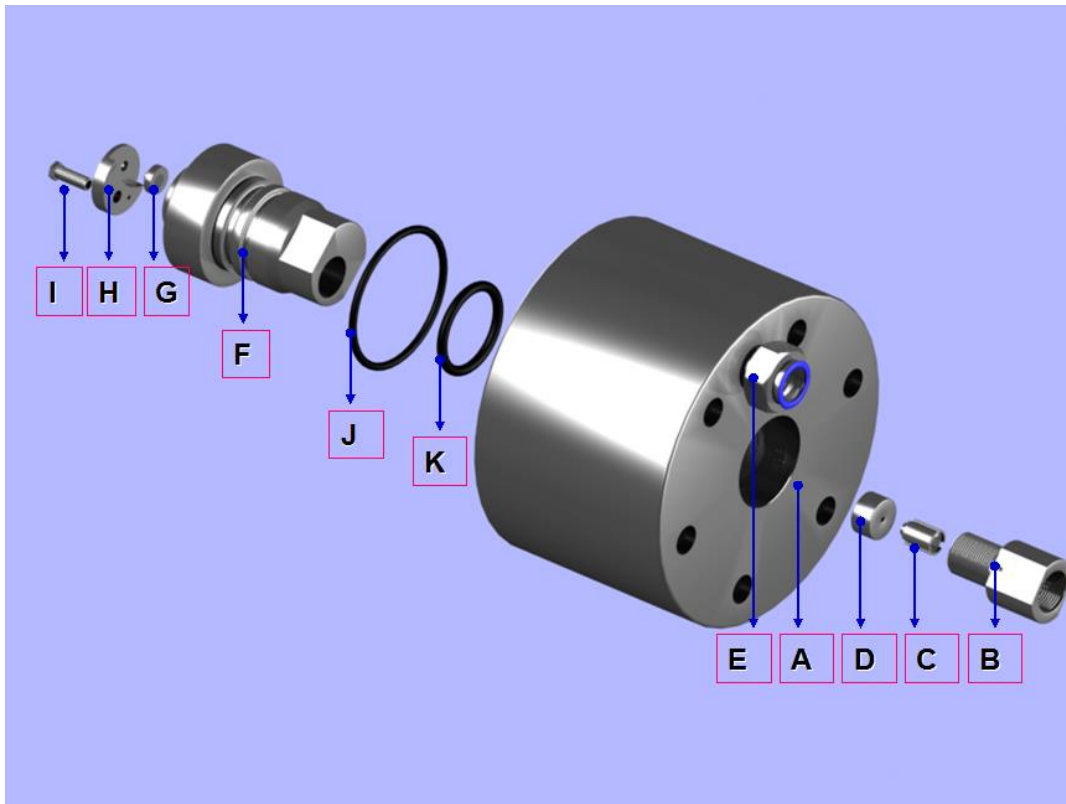


Figure.4

- A: end cap (110-20047-0102)
- B: outlet check valve (110-20076-0101)*
- C: Outlet poppet (110-20075-0101)
- D: choke plug valve pad (110-20074-0101)
- E: Fast-plug connectors (205-31214-0101)
- F: chock valve body (110-20081-0101)
- G: Inlet poppet (110-20150-0101)
- H: Inlet poppet housing (110-10132-0101)**
- I: retaining screw (110-10133-0101)
- J: O-RING1 (210-07335-10)
- K: O-RING2 (210-07335-10)

*There is a spring in B. Check valve spring (110-20084-0101)

**There is a locating pin here. (211-22508-10)



4. End bell

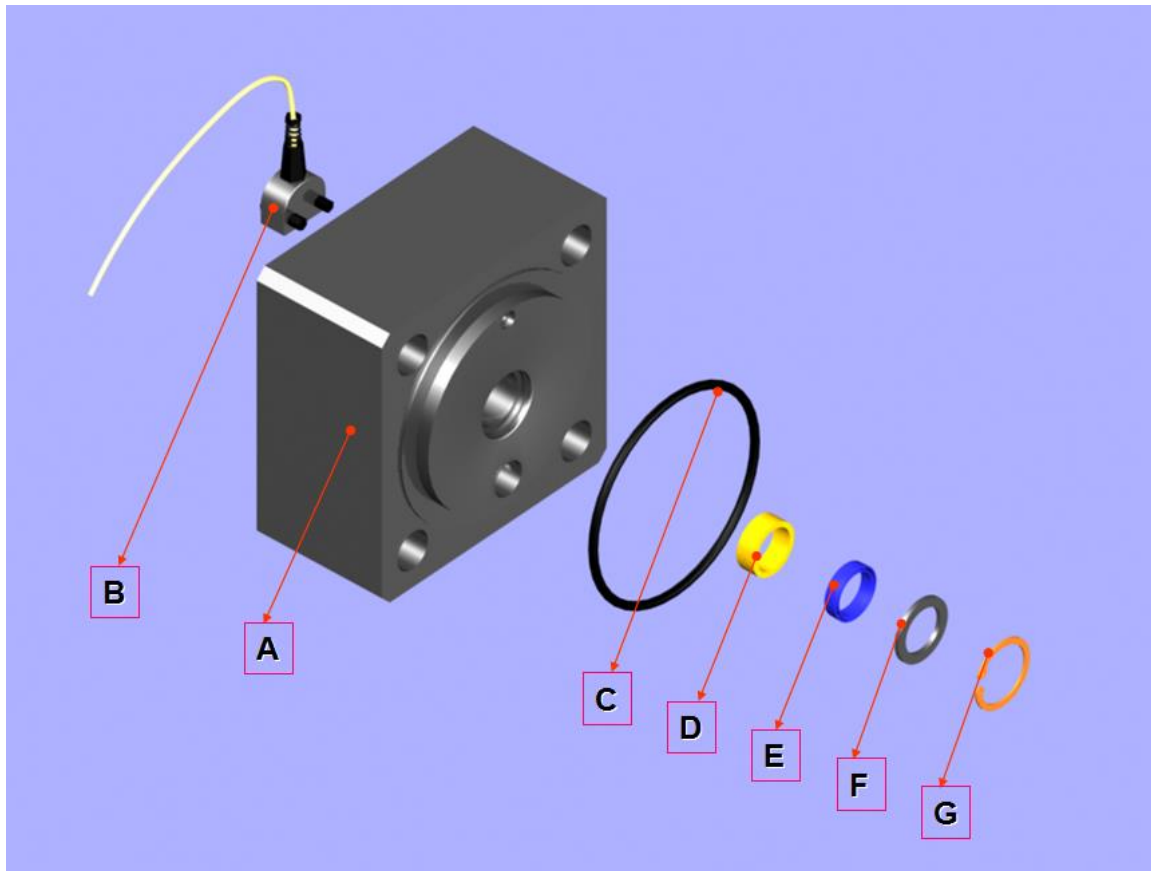


Figure.5

- A: end bell (110-20048-SY-01 110-20049-SY01)
- B: Electric sensor suite (107-11057-0101)
- C: O-ring (11680-240 and 11679-240)
- D: sleeve guide
- E: U-ring (206-12100-01)
- F: spacer
- G: snap ring (202-89334-01)

PART 2. On/off valve assembly

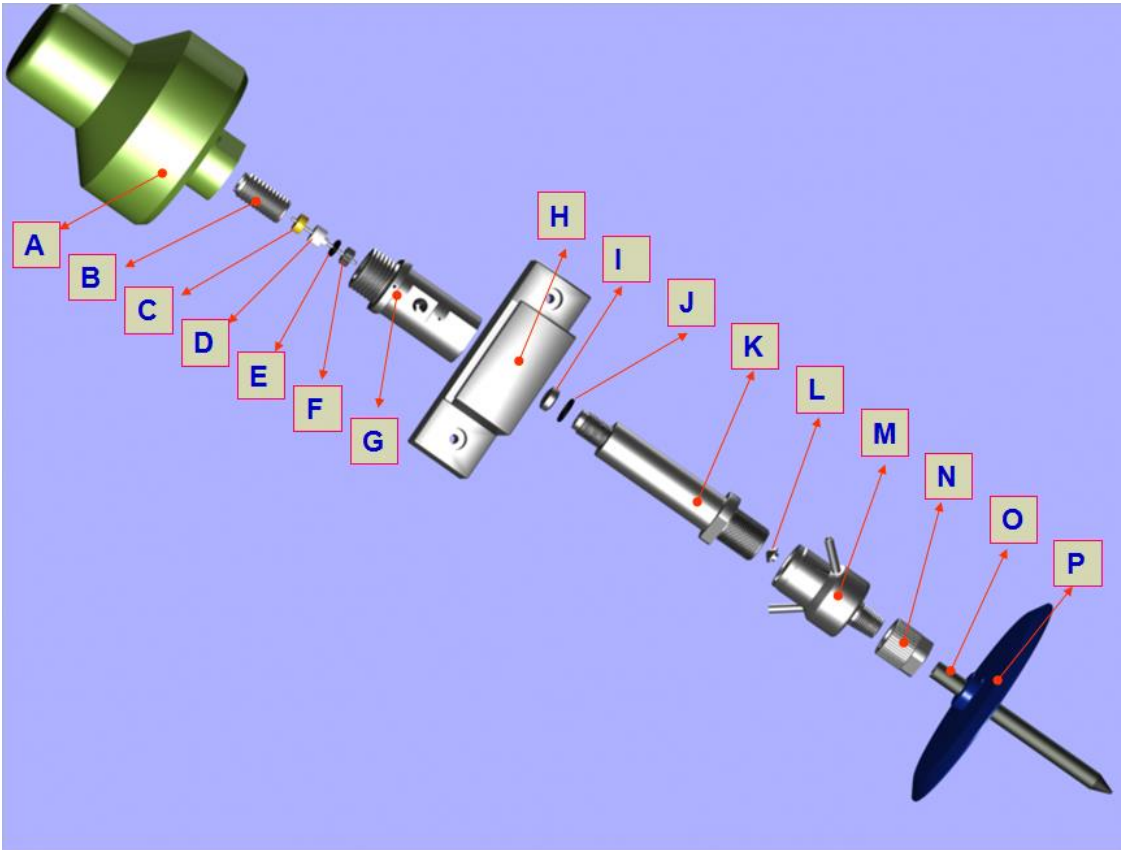
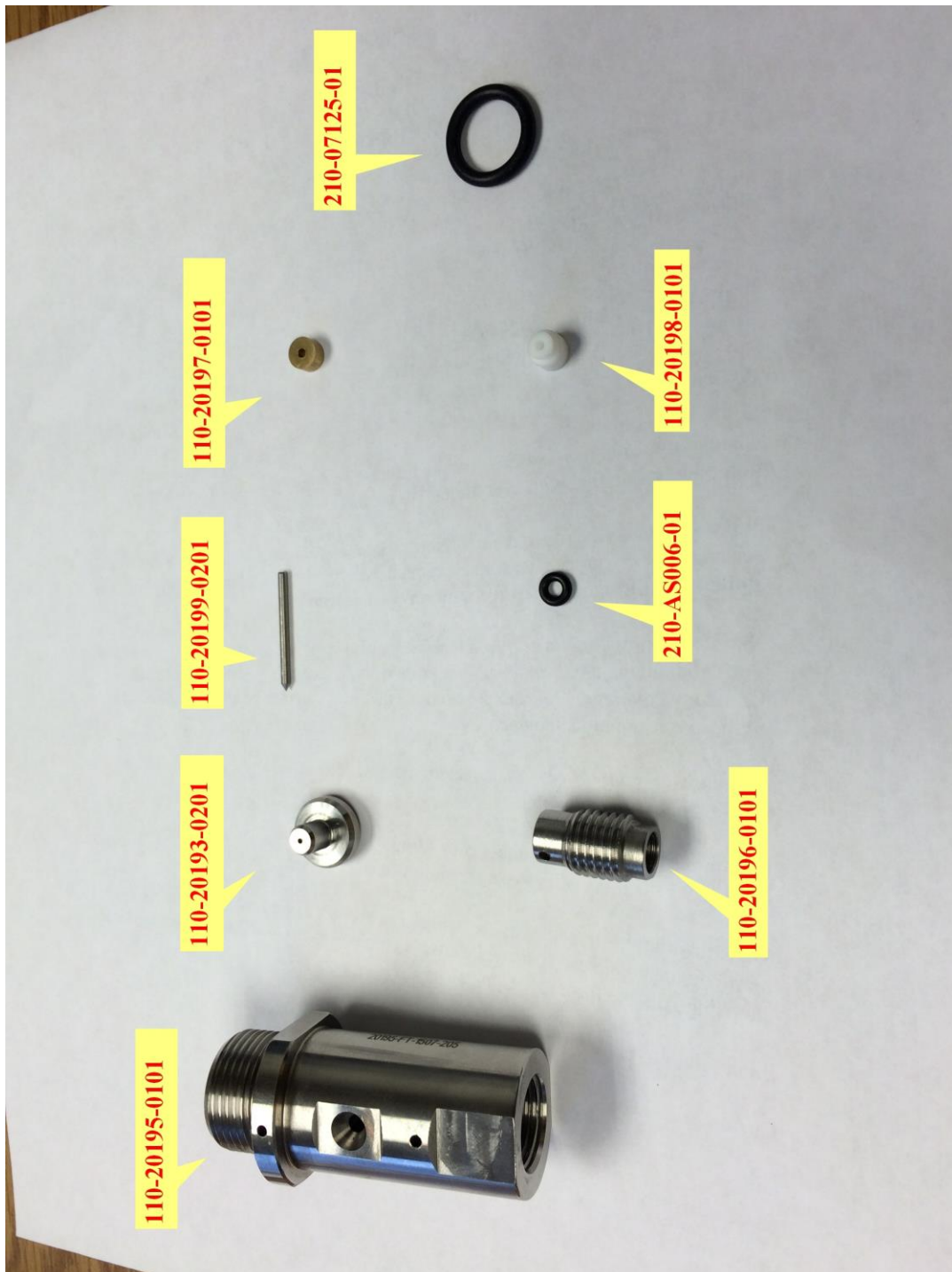


Figure.6

- A: Actuator assembly (205-00015-01-1)
- B: Pressure screw (110-20196-0101)
- C: Gasket (110-20197-0101)
- D: Pressure valve seal (110-20198-0101)
- E: O-ring (210-AS006-01)
- F: Needle valve (110-20199-0101)
- G: On/off valve body (110-20195-0101)
- H: Mounting collar
- I: Poppet seat (110-20193-0101)
- J: O-ring (210-07125-10)
- K: Nozzle body (110-20200-0103)
- L: Orifice mount assembly*
- M: Cutting head (110-21018-0101) **
- N: Narrow nozzle nut (110-21018-0101) **
- O: Nozzle (218-23005-01)
- P: Dust guard ***

- *There are three kind orifice: Normal orifice; Diamond orifice; Pure water orifice.
- ** For M, N, a package (110-21018-0101) contain these two parts.
- ** For N, there is a small plastic retainer collet which is already in it. The plastic retainer collet can be ordered by number (110-20203-0101).
- *** For P, for 3-axis and 4-axis, the part number of the dust guard is (110-20189-0101);
For 5-axis, the part number of the dust guard is (110-20185-0101).



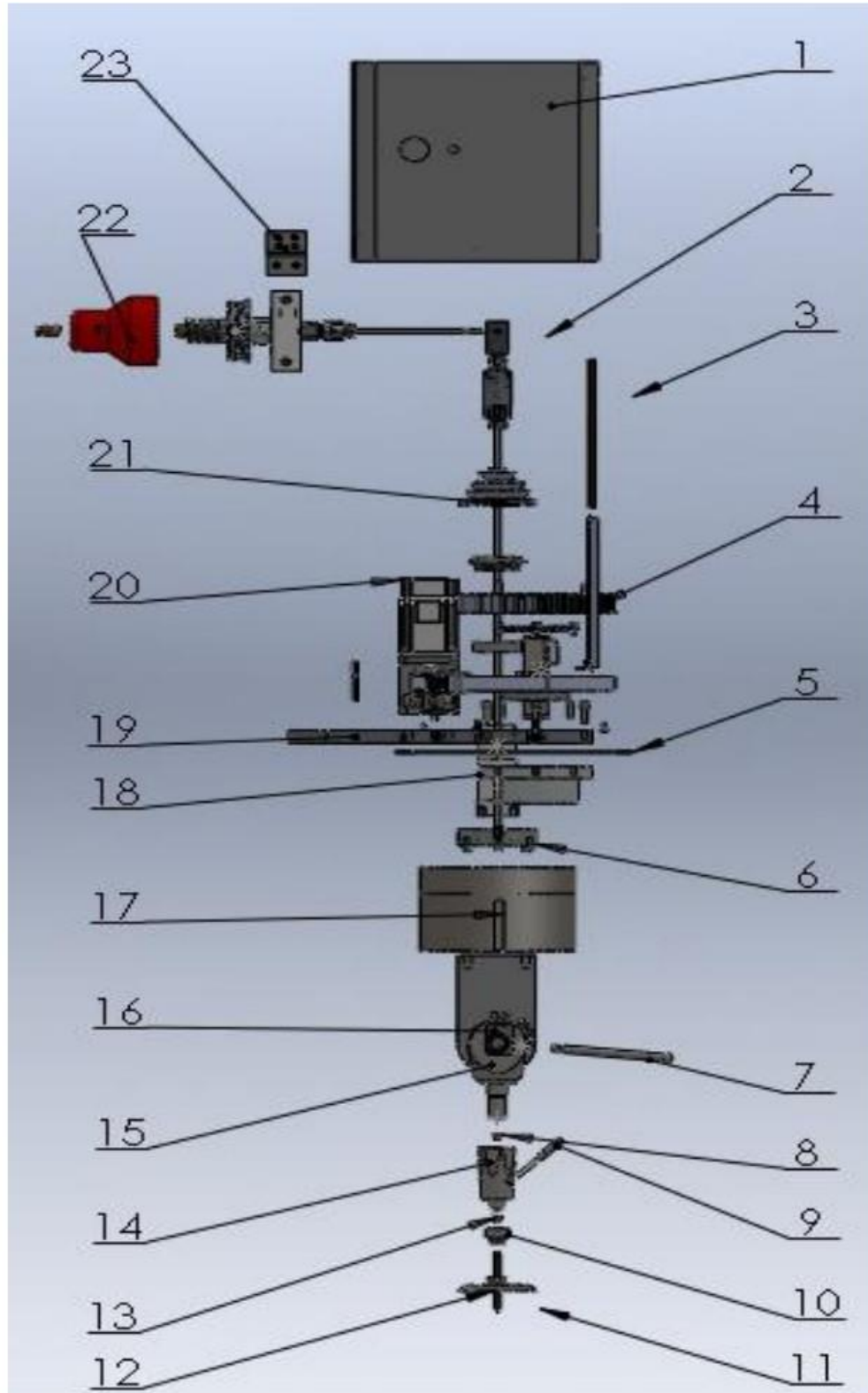


Figure.7



Figure. 8

- A: new high accuracy nozzle body 3-axis (110-20200-s002)
- B: new high accuracy nozzle body 4-axis (108-10186-DW01)
- C: new high accuracy cutting head (110-21046-0101)
- D: nozzle body 3-axis (110-20200-0103)

E: nozzle body 4-axis (108-10186-0102)
F: cutting head (110-21018-0101)
G: rotating shaft 110-20152-0101
H: rotating joint (108-11017-0101)

