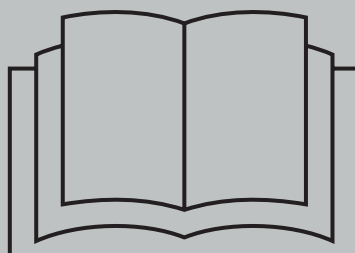


REPAIR MANUAL

H-300/4 UAP



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HEAD ASSEMBLY



Head assembly H300/4 SAP.

Fig. 01



Mounting kit repair

Fig. 02



Put O-Ring in Basket Cap.

Fig. 03



Put Bak ring, making sure that it is to the outside as well as the chamfer Bak Ring (indicated with the pen).

Fig. 04



First side.

Fig. 05



Perform the same process on the other hand, stressing attention on the chamfer bak ring.

Fig. 06



Mounted.

Fig. 07



Fit the pressure spring (Pos. 15) in the Pressure Valve.

Fig. 08



Set mounted.

Fig. 09



Place the set in Basket Cap.

Fig. 10



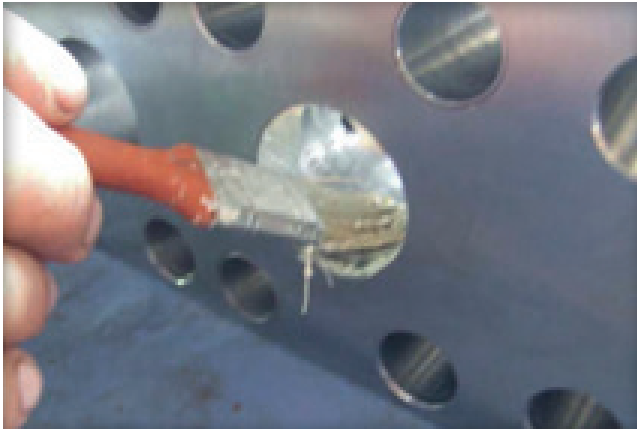
Attach the spring in Basket Cap, with the help of a key to attach it securely.

Fig. 11



Set mounted.

Fig. 12



Skip desingripante grease on the head with a brush.

Fig. 13



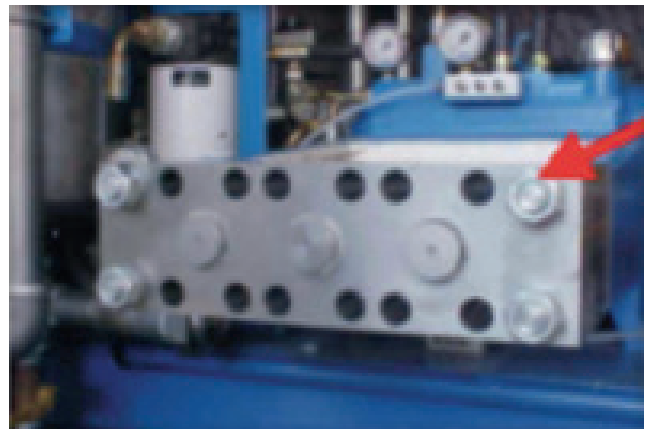
Pass desingripante grease also in Basket cap and place it on the head.

Fig. 14



Place the Basket cap on the head with the help of Nylon beater.

Fig. 15



Fix using the nuts with a torque of 320 Nm.

Fig. 16



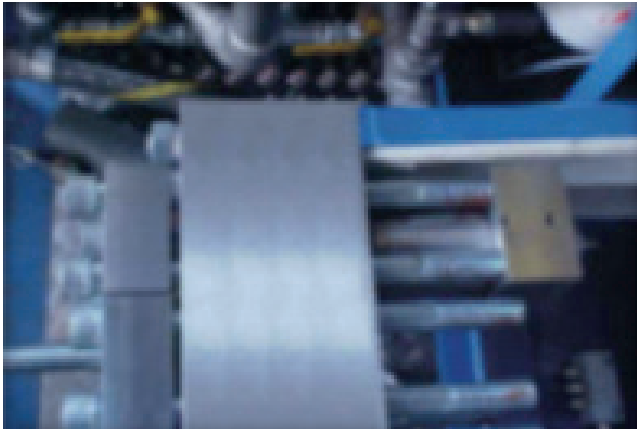
Position the flanges.

Fig. 17



Fit the flange to the head.

Fig. 18



Auto Centering mount and Piston Kit.

Fig. 19



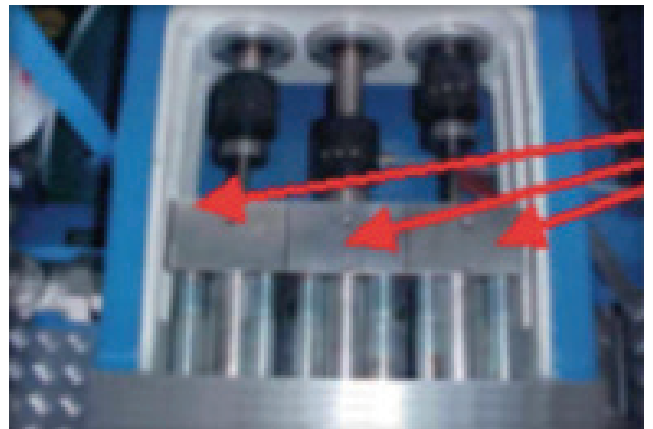
With the Assistance of an allen key, pull the screws, pressing the "X".

Fig. 20



a) With the aid of a torque wrench, tighten the screws "X", with torque of 320 Nm.
b) With the Assistance of an allen Wrench, pull the grub screws in "X".

Fig. 21



Check alignment

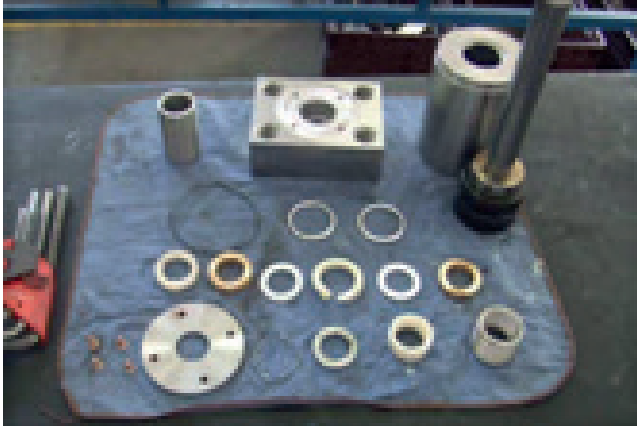
M24x375 screws have capacity of 20 torques, after this amount may lose their mechanical characteristics.

Fig. 22

SHELL ASSEMBLY

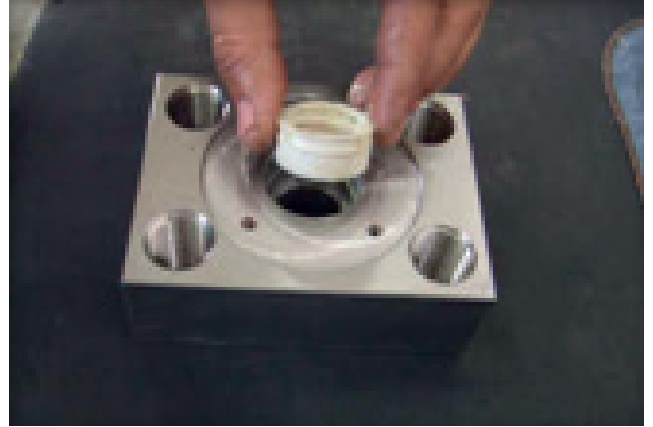
For fitting shirt SAP separate the following items:

1. Piston - 2. Allen screws (12 pcs) - 3. Disk Support - 4. Vedaseal - 5. Straight Connection
6. Flange - 7. Seal Metallic - 8. O-ring - 9. Sliding Sleeve - 10. O-ring - 11. Shirt - 12. Support ring infer.
13. Scraper ring - 14. Lamela Kevlar - 15. Lamela Rami - 16. Super support ring - 17. Spring
18. Support sleeve - 19. Seal top Metallic



1° - Piston SAP dismantled.

Fig. 23



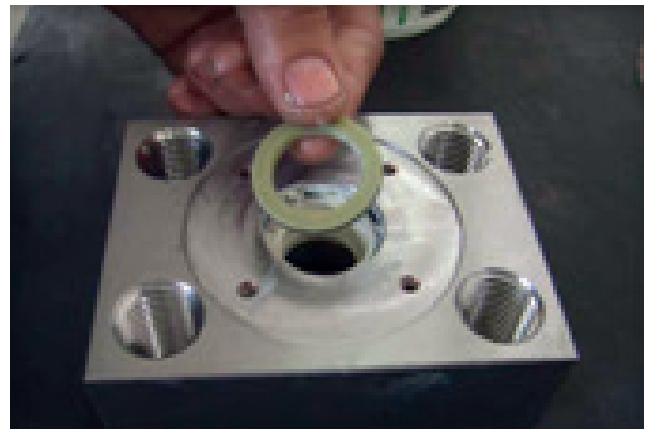
2° - Insert the Sliding Sleeve in Flange.

Fig. 24



3° - Overlap with the O-ring.

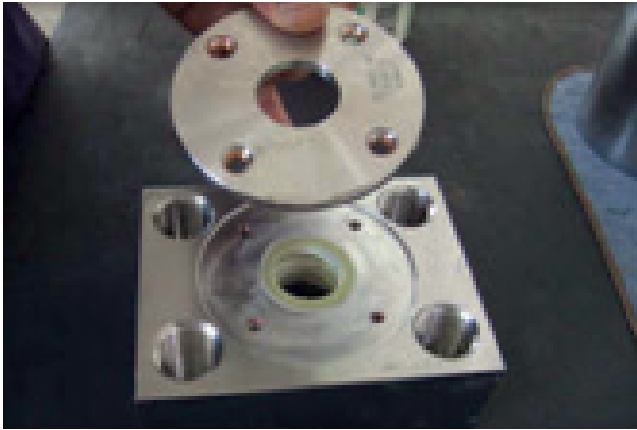
Fig. 25



4° - Enter the Vedaseal with the opening facing shirt use grease "Rocol" type for better sealing.

Fig. 26

(continues on the next page)



5° - Cover the pool using the Disk Support.

Fig. 27



6° - Screw Disk Support "X".

Fig. 28



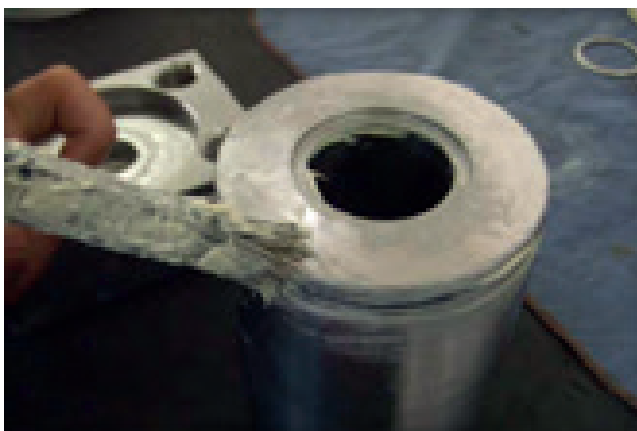
7° - Enter the O-Ring on tear shirt.

Fig. 29



8° - When installing the shirt with the flange, the O-ring will be placed in recess.

Fig. 30



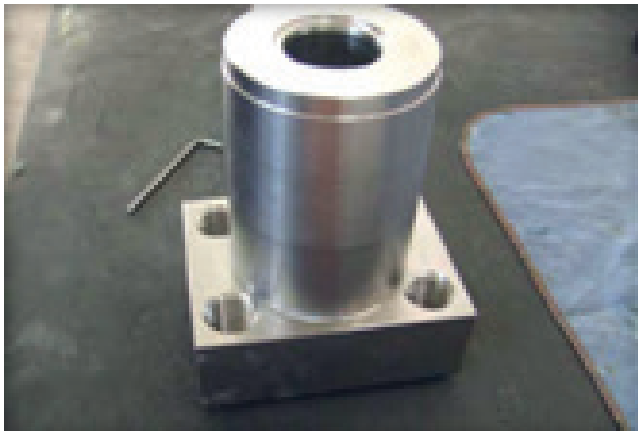
9° - Use grease type "Rocol" for better sealing.

Fig. 31



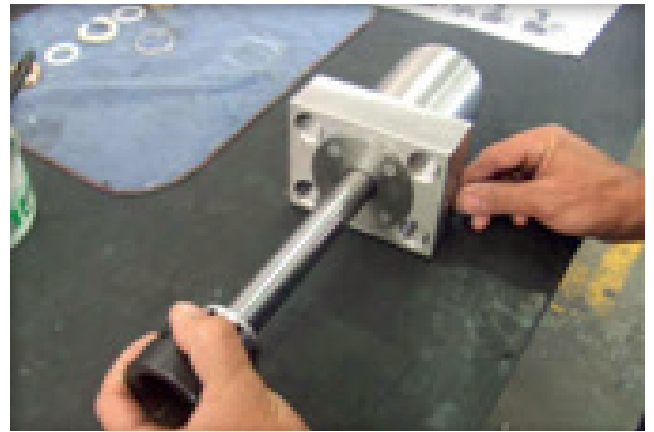
10° - Mount the shirt on SAP Flange.

Fig. 32



11°

Fig. 33



12° - Insert the piston in the set.

Fig. 34



13° - Turn the complete unit and enter the Lower support ring with the bevel facing down.

Fig. 35



14° - Use a Nylon beater to pull the components.

Fig. 36



15° - Insert the first scraper ring.

Fig. 37



16° - Use a Nylon beater to pull the components.

Fig. 38



17° - Enter Lamela Klever.

Fig. 39



18° - Use a Nylon beater to pull the components.

Fig. 40



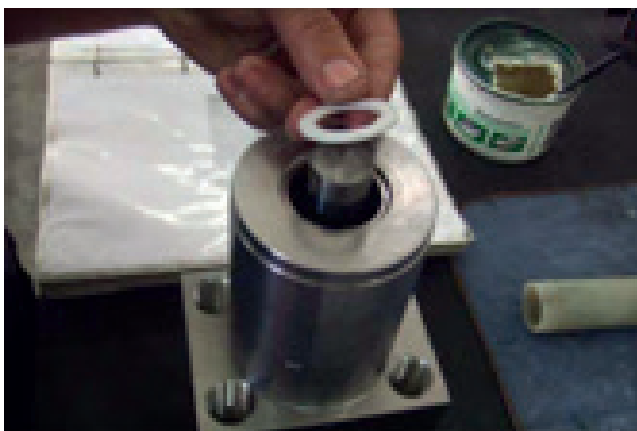
19° - Enter Rami slide, taking care to leave 180° away from the rip and tear this the anterior lamella.

Fig. 41



20° - Use a Nylon beater to pull the components.

Fig. 42



21° - Insert the other scraper ring.

Fig. 43



22° - Use a Nylon beater to pull the components.

Fig. 44



23° - Place the upper support ring (no bevel).

Fig. 45



24° - Use a Nylon beater to pull the components.

Fig. 46



25° - Insert the spring.

Fig. 47



26° - Insert the bushing Support.

Fig. 48



27° - Insert the upper metal seal.

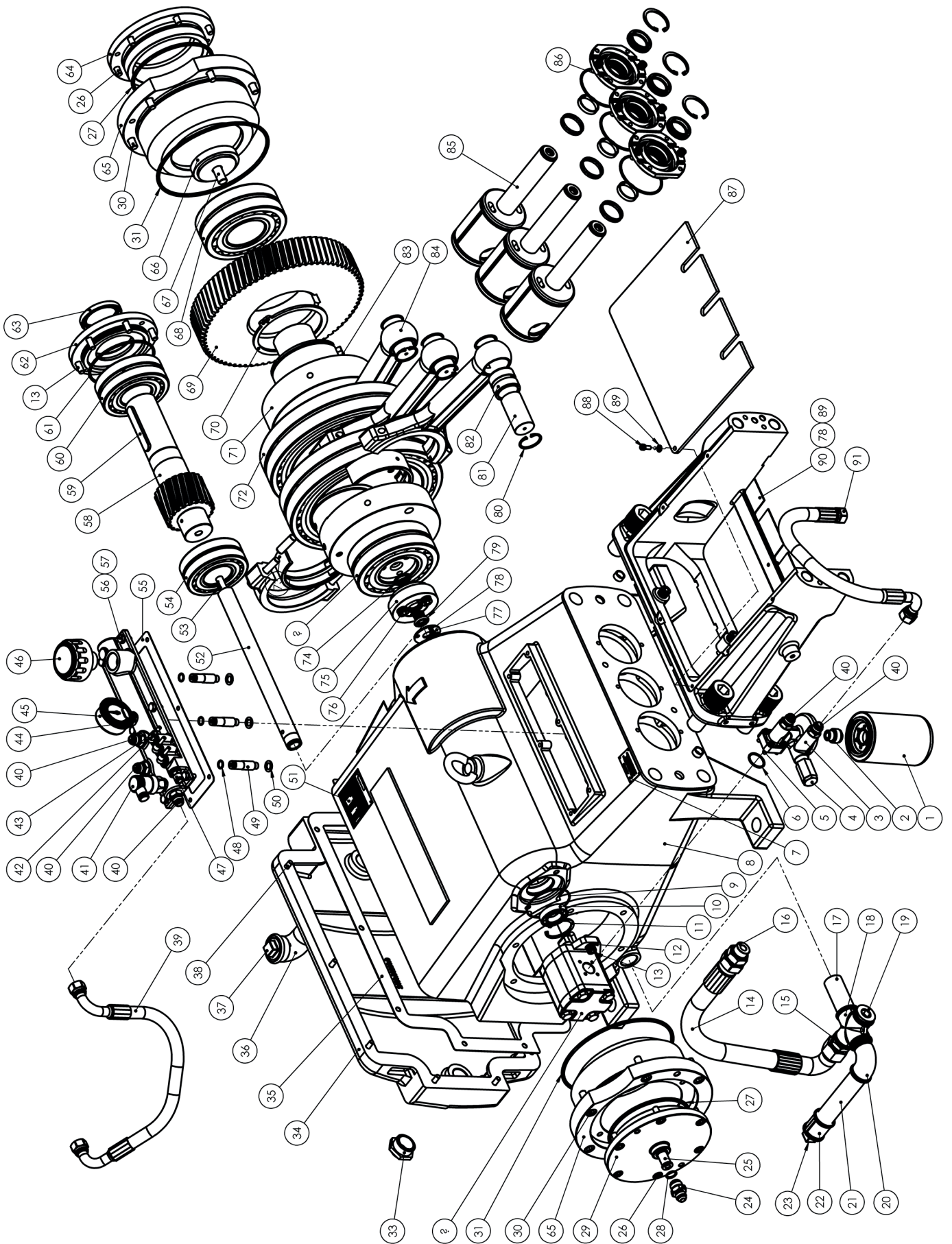
Fig. 49



28° - Mounted piston.

Fig. 50

TRASMISSION PARTS H300/4 - CODE 1010.01107.2



TRANSMISSION PARTS LIST H 300-4 - CODE 1010.01107.2

| ITEM | CODE | DESCRIPTION | QTY. |
|------|--------------|---|------|
| 1 | 3000.02147.0 | OIL FILTER | 1 |
| 2 | 2320.01708.0 | 3/4" BSP X 3/4" UNF REDUCING NIPPLE | 1 |
| 3 | 1110.03036.0 | LUBRICATION MANIFOLD | 1 |
| 4 | 3000.01020.0 | RELIEF VALVE | 1 |
| 5 | 1200.00222.0 | ALLEN SCREW M6X25mm | 4 |
| 6 | 1300.00256.0 | O-RING | 1 |
| 7 | 3000.01794.0 | TORQUE NAMEPLATE | 1 |
| 8 | 1010.01106.0 | HULL 300-4 | 1 |
| 9 | 1300.00582.0 | O-RING | 1 |
| 10 | 1700.00195.0 | RIGID BALL BEARING | 1 |
| 11 | 1200.00826.0 | ELASTIC RING | 1 |
| 12 | 1200.00103.0 | PRESSURE WASHER M10 | 2 |
| 13 | 1200.00140.0 | ALLEN BOLT M10X25mm | 8 |
| 14 | 1010.00792.0 | PUMP-OIL PUMP CONNECTION HOSE | 1 |
| 15 | 2320.00667.0 | 1" BSP X 1.5/16" UNF NIPPLE | 1 |
| 16 | 2320.00992.0 | NETWORK NIPPLE 1.5/16" UNF JIC X 1/16" VNF PL | 1 |
| 17 | 2370.00501.0 | SCH 40 150mm PIPE | 1 |
| 18 | 2320.00237.0 | 1" BSP YOKE | 1 |
| 19 | 2320.01677.0 | BMA 1" BSP MAGNETIC PLUG | 1 |
| 20 | 2320.00229.0 | MF 1" BSP ELBOW | 1 |
| 21 | 2370.00501.0 | SCH 40 150mm PIPE | 1 |
| 22 | 2320.00924.0 | 1" BSP SLEEVE | 1 |
| 23 | 2320.00214.0 | 1" BSP PLUG | 1 |
| 24 | 2320.00778.0 | M22 X 1.5 PL X 3/4" UNF JIC REDUCING NIPPLE | 1 |
| 25 | 1110.02304.0 | GLYD ROTOR SHAFT | 1 |
| 26 | 1200.00229.0 | ALLEN SCREW M10x20mm | 12 |
| 27 | 1300.00439.0 | O-RING | 2 |
| 28 | 1300.00848.0 | O-RING | 1 |
| 29 | 1110.02264.0 | CRANKSHAFT COVER H300-4 | 1 |
| 30 | 1200.00293.0 | ALLEN SCREW M12x35mm | 12 |
| 31 | 1300.00438.0 | O-RING | 2 |
| 32 | 3000.01773.0 | LUBRICATION PUMP | 1 |
| 33 | 3000.00208.0 | OIL LEVEL SIGHT GLASS | 1 |
| 34 | 1110.03254.0 | COVER L300-4 | 1 |
| 35 | 1300.00824.0 | JUNTA COVER H300-4 | 1 |
| 36 | 2320.01610.0 | 1.1/4" BSP ELBOW | 1 |
| 37 | 2320.01611.0 | 1.1/4" BSP PLUG | 1 |
| 38 | 1200.00268.0 | ALLEN SCREW M8X30mm | 10 |
| 39 | 1010.00731.0 | DUCT-CRANKSHAFT CONNECTION HOSE | 1 |
| 40 | 2320.00283.0 | NIPPLE 3/4" UNF PI x 3/4" UNF JIC | 5 |
| 41 | 1010.01074.0 | PRESSURE SWITCH | 1 |
| 42 | 2320.00309.0 | ADJUSTABLE L CONNECTION 1/4"x6mm | 3 |

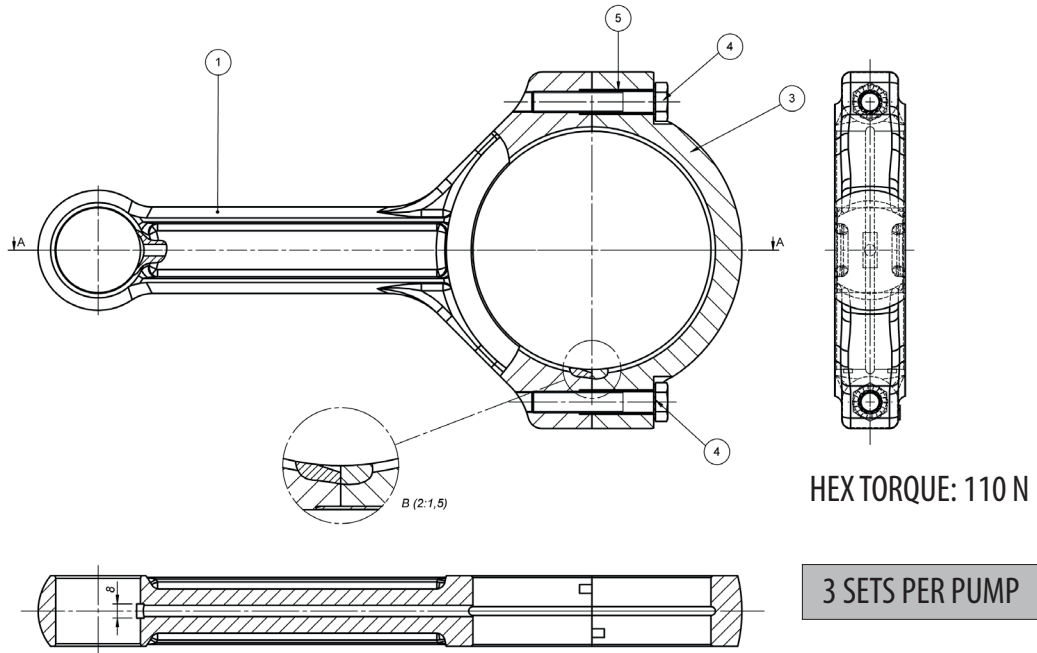
TRANSMISSION PARTS LIST H 300-4 - CODE 1010.01107.2

| ITEM | CODE | DESCRIPTION | QTY. |
|-------------|--------------|--------------------------------|-------------|
| 43 | 2370.00605.0 | HOSE PU Ø6mm | 1 |
| 44 | 1110.03092.0 | LUBRICATION DUCT | 1 |
| 45 | 3000.00321.0 | PRESSURE GAUGE | 1 |
| 46 | 3000.00119.0 | BREATHER 1" BSP | 1 |
| 47 | 2320.00563.0 | STRAIGHT CONNECTION 1/4"x10mm | 1 |
| 48 | 1300.00213.0 | O-RING | 3 |
| 49 | 1110.02620.0 | DUCT CONNECTING PIPE | 3 |
| 50 | 1300.00176.0 | COPPER RING | 3 |
| 51 | 3000.00120.0 | NAMEPLATE | 1 |
| 52 | 1110.02621.0 | EXPANDER | 1 |
| 53 | 1200.00300.0 | WOODRUFF KEY | 1 |
| 54 | 1700.00131.0 | ROTO GLYD BACKBOARD BEARING | 1 |
| 55 | 1300.00224.0 | OIL DUCT GASKET | 1 |
| 56 | 1200.00828.0 | HEX SCREW M8x20mm | 6 |
| 57 | 1200.00402.0 | FLAT WASHER M8 | 6 |
| 58 | 1110.00876.0 | PINION L300-4 | 1 |
| 59 | 1200.00283.0 | COTTER | 1 |
| 60 | 1700.00115.0 | ROTO GLYD BACKBOARD BEARING | 1 |
| 61 | 1300.00381.0 | O-RING | 1 |
| 62 | 1110.02205.0 | TRANSMISSION AXIS | 1 |
| 63 | 1300.00478.0 | BEARING | 1 |
| 64 | 1110.00843.0 | CRANKSHAFT COVER L300-4 | 1 |
| 65 | 1110.00845.0 | BEARING BOX | 2 |
| 66 | 1110.00848.0 | SUPPORT BUSHING | 1 |
| 67 | 1200.00186.0 | ALLEN SCREW M16X40mm | 1 |
| 68 | 1700.00133.0 | ROTO GLYD BACKBOARD BEARING | 2 |
| 69 | 1110.00877.0 | GEAR L300-4 | 1 |
| 70 | 1200.00285.0 | ELASTIC RING | 1 |
| 71 | 1010.00773.0 | CRANKSHAFT H300-4 | 1 |
| 72 | 1700.00132.0 | ROTO GLYD BACKBOARD BEARING | 2 |
| 73 | 1700.00134.0 | BEARING H300-4 | 3 |
| 74 | 1300.00254.0 | O-RING | 1 |
| 75 | 1110.01009.0 | SUPPORT BEARING | 1 |
| 76 | 1200.00184.0 | ALLEN SCREW M12x30mm | 3 |
| 77 | 1110.03064.0 | ROTO GLYD COVER H120-H200-H300 | 1 |
| 78 | 1200.00161.0 | ALLEN SCREW M6X12mm | 5 |
| 79 | 1300.00502.0 | ROTO GLYD | 1 |
| 80 | 1200.00278.0 | ELASTIC RING 1-39 | 6 |
| 81 | 1100.00196.0 | ROD PIN | 3 |
| 82 | 1700.00135.0 | ROD BUSHING | 3 |
| 83 | 1200.00284.0 | KEY | 1 |

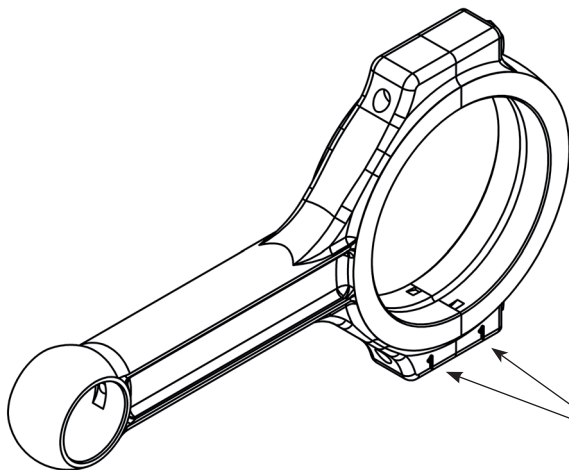
TRANSMISSION PARTS LIST H 300-4 - CODE 1010.01107.2

| ITEM | CODE | DESCRIPTION | QTY. |
|-------------|--------------|-------------------------------|-------------|
| 84 | 1010.01113.0 | ROD H300-4 | 3 |
| 85 | 1010.00885.0 | GUIDE PISTION | 3 |
| 86 | 1010.01097.0 | SEAL CAGE | 3 |
| 87 | 1110.00840.0 | PISTION COVER | 1 |
| 88 | 1200.00265.0 | ALLEN SCREW M6X15mm | 1 |
| 89 | 1200.00191.0 | FLAT WASHER M6 | 5 |
| 90 | 1110.03223.0 | PISTON COVER | 1 |
| 91 | 1010.01489.0 | MANIFOLD-DUCT CONNECTION HOSE | 1 |

CONNECTING RODS - CODE 1010.01113.0



| ITEM | CODE | DESCRIPTION | QTY. |
|------|--------------|-----------------------|------|
| 1 | 1110.02207.0 | ARM ROD | 1 |
| 2 | 1200.00190.0 | TOOTHED WASHER M12 | 2 |
| 3 | 1110.02210.0 | MANCAL ROD | 1 |
| 4 | 1200.00187.0 | HEX BOLT M12X70 | 2 |
| 5 | 1200.00881.0 | ELASTIC GUIDE BUSHING | 2 |

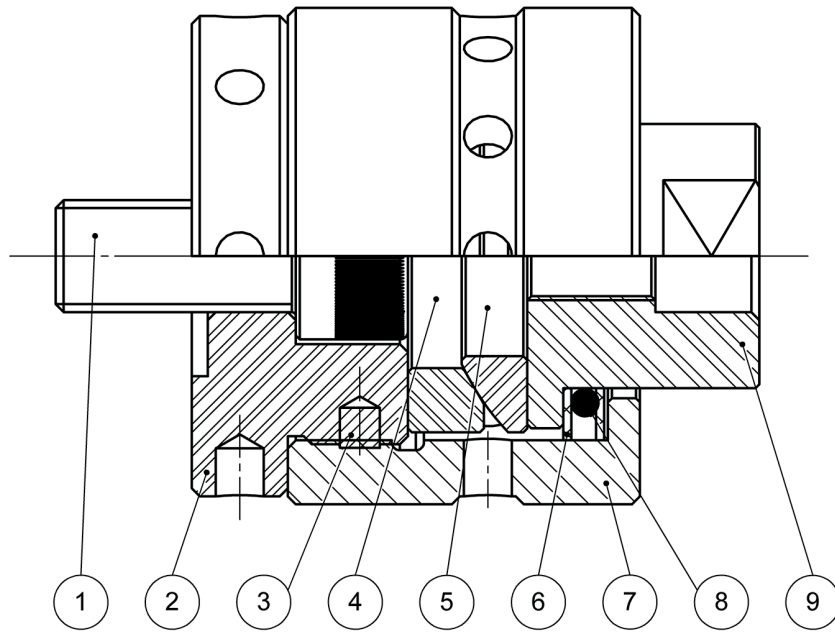


ATTENTION!
ASSEMBLE WITH NUMBERS
FACING THE SAME SIDE

⚠ Attention!

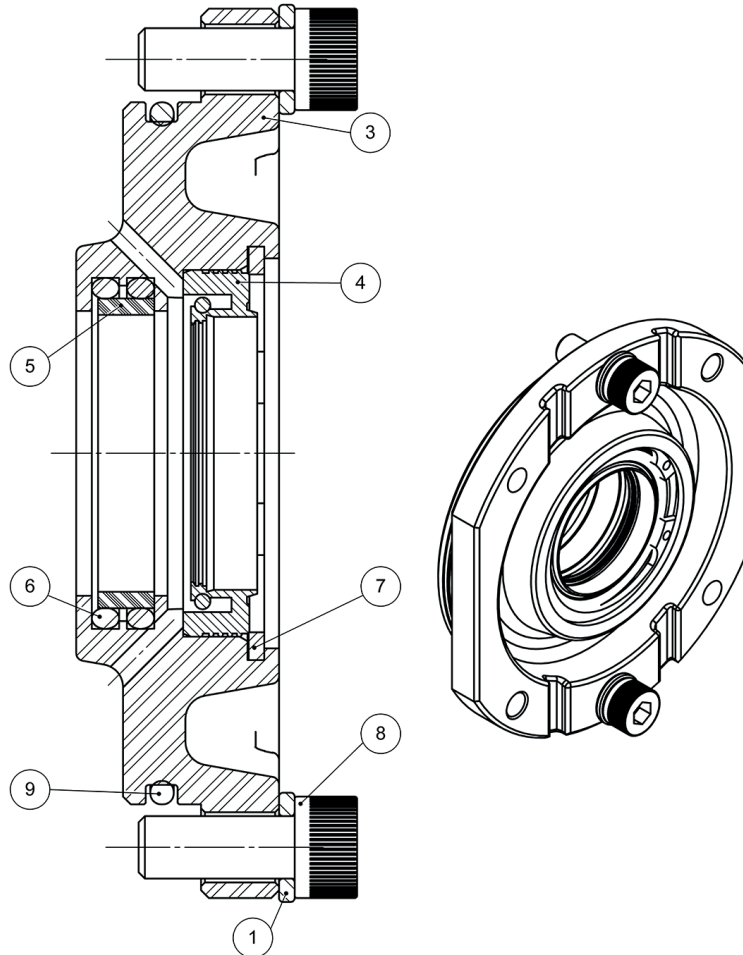
- ▶ All connecting rods are numbered.
- ▶ Always assemble arm and bearing of the connecting rod so that the unsequenced number is shown.
- ▶ Never replace arms and bearing by a connecting rod from a different set.

SELF CENTERING - CODE 1010.00268.0



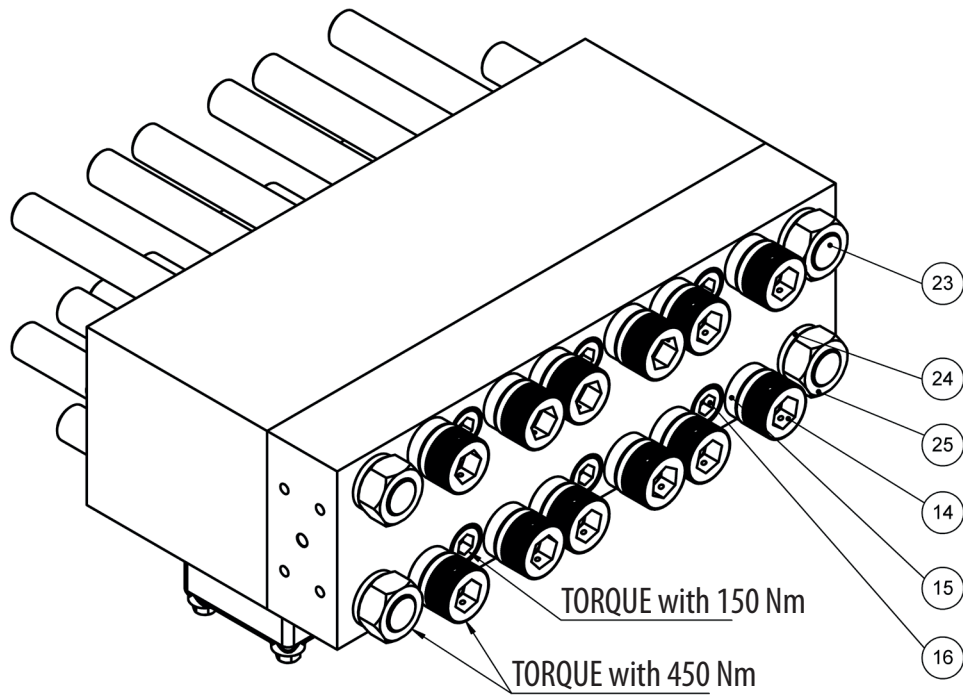
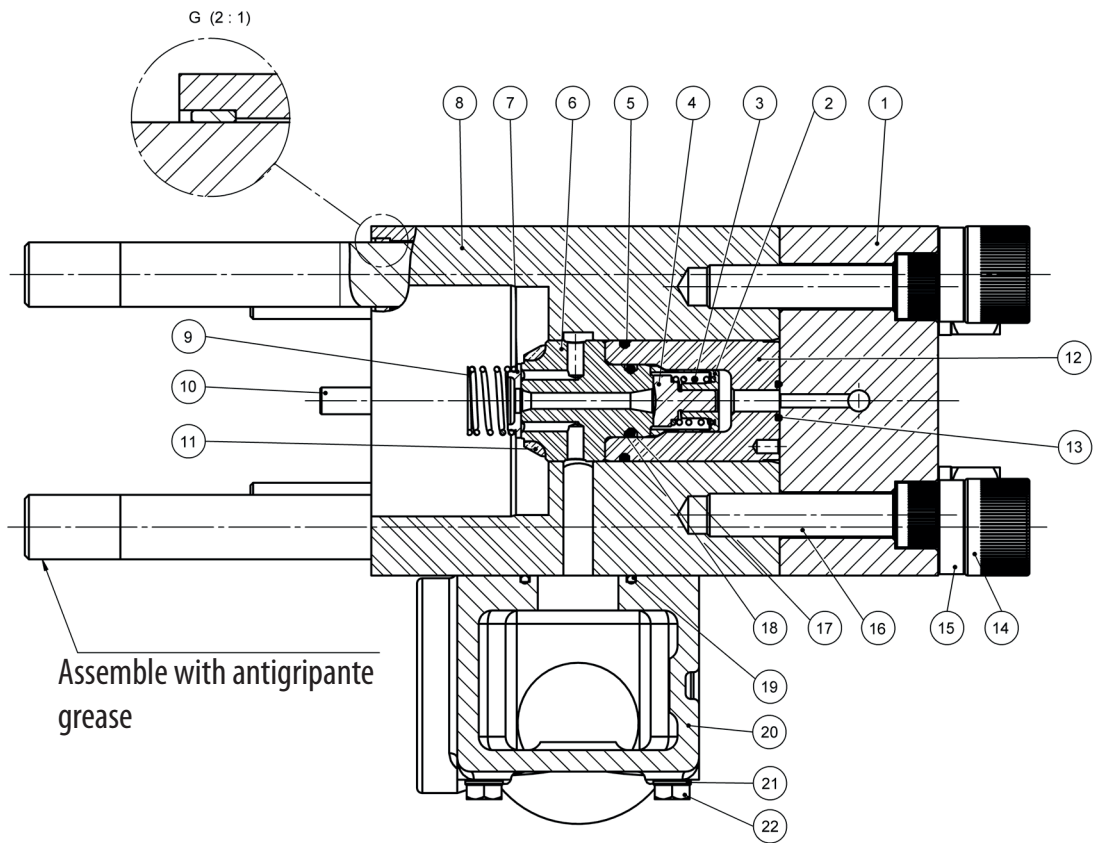
| ITEM | CODE | DESCRIPTION | QTY. |
|------|--------------|----------------------------|------|
| 1 | 1200.00297.0 | ALLEN SCREW M14x30 DIN 919 | 1 |
| 2 | 1110.00719.0 | SELF CENTERING P-14 / P-30 | 1 |
| 3 | 2380.01467.0 | SPIGOT | 1 |
| 4 | 1110.00631.0 | SPHERICAL RING | 1 |
| 5 | 1110.00630.0 | SPHERICAL RING | 1 |
| 6 | 1110.00724.0 | BACK UP RING | 2 |
| 7 | 1110.00721.0 | SELF CENTERING SCREW | 1 |
| 8 | 1300.00361.0 | O-RING | 1 |
| 9 | 1110.00820.0 | CONECT BUSHING | 1 |

SEAL CAGE - CODE 1010.01097.0



| * | ITEM | CODE | DESCRIPTION | QTY. |
|---|------|--------------|---------------------|------|
| | 1 | 1200.00107.0 | PRESSURE WASHER | 2 |
| * Note: Common wear parts or disposable | | | | |
| | 3 | 1110.02618.0 | SEAL CAGE | 1 |
| | 4 | 1300.00750.0 | SEAL | 1 |
| | 5 | 1300.00751.0 | SLIDING RING | 1 |
| | 6 | 1300.00191.0 | O-RING | 2 |
| | 7 | 1200.00154.0 | ELASTIC RING | 1 |
| | 8 | 1200.00550.0 | ALLEN SCREW M8X20mm | 2 |
| | 9 | 1300.00117.0 | O-RING | 1 |

HEAD UAP - CODE 1010.01485.0

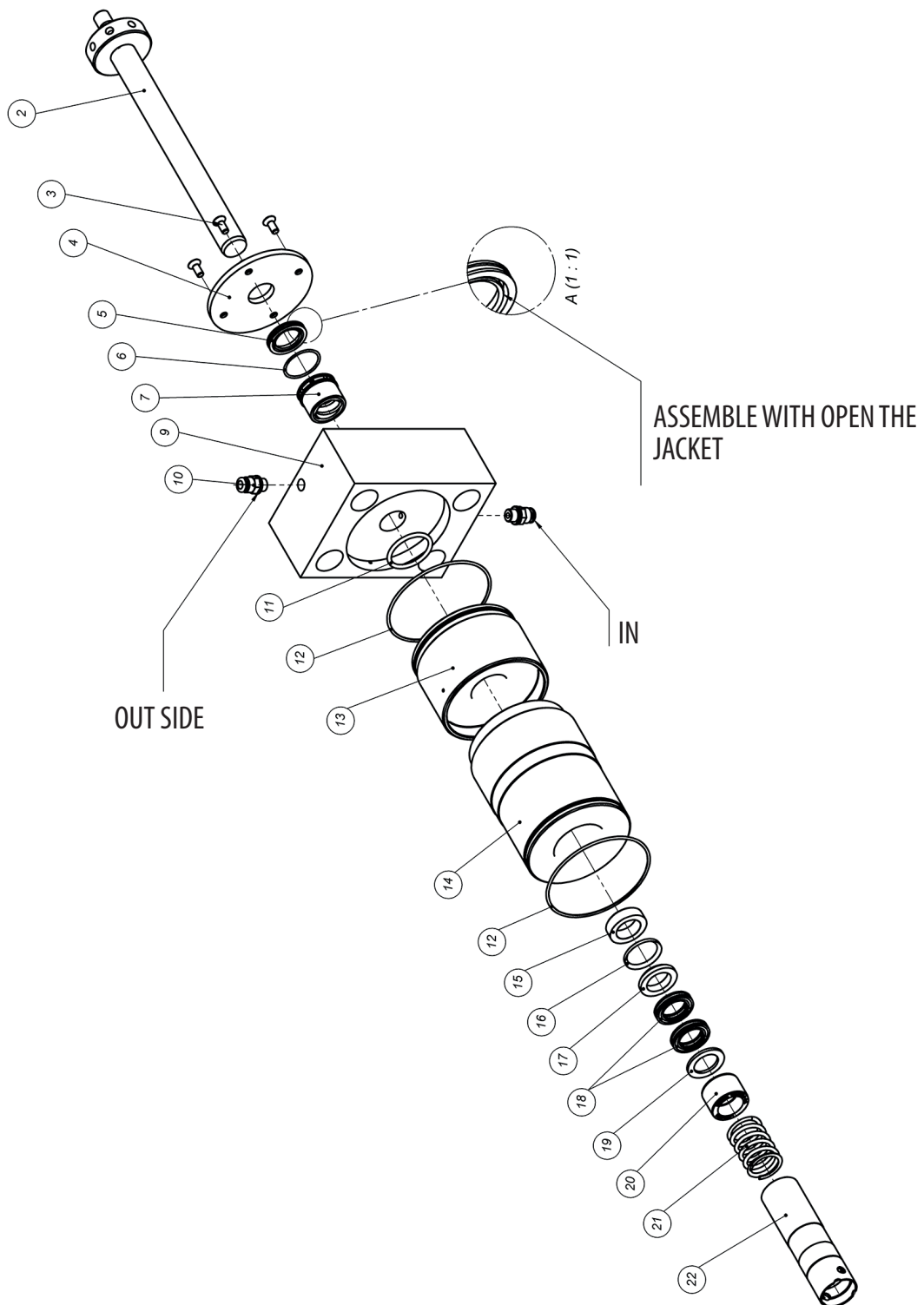


| HEAD UAP PARTS LIST - CODE 1010.01485.0 | | | | |
|--|-------------|---------------------|--------------------------|-------------|
| NOTE | ITEM | CODE | DESCRIPTION | QTY. |
| | 1 | 1110.01186.0 | MANIFOLD | 1 |
| | 2 | 1110.01195.0 | GUIDE SPRING UAP | 3 |
| * | 3 | 1500.00145.0 | SPRING | 3 |
| * | 4 | 1100.00179.0 | PRESSURE VALVE UAP | 3 |
| | 5 | 1300.00601.0 | O-RING | 3 |
| * | 6 | 1100.00224.0 | DOUBLE SEAT UAP | 3 |
| * | 7 | 1100.00180.0 | SUCTION VALVE UAP | 3 |
| | 8 | 1010.01120.0 | HEAD UAP III | 1 |
| * | 9 | 1500.00144.0 | SPRING | 3 |
| | 10 | 1200.00369.0 | GUIDE PIN | 2 |
| * | 11 | 1300.00576.0 | SUCTION SEAL UAP-III 40K | 3 |
| * | 12 | 1110.01279.0 | COVER | 3 |
| | 13 | 1300.00146.0 | O-RING | 3 |
| | 14 | 1200.00384.0 | ALLEN SCREW M24x350mm | 12 |
| | 15 | 1110.01309.0 | DISTANCE BUSHING | 12 |
| | 16 | 1200.00186.0 | ALLEN SCREW M16X40mm | 6 |
| | 17 | 1300.00443.0 | O-RING | 3 |
| | 18 | 1300.00406.0 | BACK RING | 3 |
| | 19 | 1300.00193.0 | O-RING | 3 |
| | 20 | 1110.01677.0 | SUCTION DUTE | 1 |
| | 21 | 1200.00107.0 | PRESSURE WASHER | 8 |
| | 22 | 1200.00726.0 | SCREW M8x90mm | 8 |
| | 23 | 1200.00375.0 | PRISIONER M24x280mm | 4 |
| | 24 | 1200.00363.0 | PRESSURE WASHER | 4 |
| | 25 | 1200.00149.0 | NUT | 4 |
| | | 1020.00133.1 | REPAIR KIT | 1 |

Note: * Common wear parts.

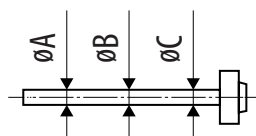
| REPAIR KIT – CODE 1020.00133.1 | | | | |
|---------------------------------------|-------------|--------------|--------------------|-------------|
| NOTE | ITEM | CODE | DESCRIPTION | QTY. |
| | 5 | 1300.00601.0 | O-RING | 3 |
| | 12 | 1110.01279.0 | COVER | 3 |
| | 18 | 1300.00406.0 | BACK RING | 3 |
| | 19 | 1300.00193.0 | O-RING | 3 |

PISTON KIT (P-20) - CODE 1010.01115.1



REPLACE SEAL KIT EVERY 500 HOURS TO ENSURE SMOOTH EQUIPMENT OPERATION

NOTE: THE WATER QUALITY DIRECTLY INFLUENCES SEAL LIFECYCLE AND CHANGING TIME MUST BE REDUCED.



| Ø Nominal | Appropriate | Critical | Change |
|-----------|-------------|----------|--------|
| 20 mm | -0,01 | -0,07 | -0,1 |
| | -0,06 | -0,09 | |

ANALYSE PISTON DIMENSIONS WHEN CHANGING THE SEALS OR EVERY 500 HOURS RESPECT THE WEAR LIMIT.

PISTON KIT P-20 UAP PARTS LIST - CODE 1010.01115.1

| NOTE | ITEM | CODE | DESCRIPTION | QTY. |
|------|------|---------------|----------------------|------|
| | 1 | 1010.01038.0 | PISTION P-20 | 3 |
| | 2 | 1200.000327.0 | ALLEN SCREW | 12 |
| | 3 | 1110.00855.0 | SUPPORT DISC P-20 | 3 |
| *** | 6 | 1010.01036.0 | BUSHING | 3 |
| | 7 | 1110.02546.0 | FLANGE P-20 | 3 |
| | 8 | 2320.00303.0 | STRAIGHT CONNECT | 6 |
| | 10 | 1300.00242.0 | O-RING | 6 |
| | 11 | 1110.03253.0 | SEAL FLANGE | 3 |
| | 12 | 1110.03160.0 | JACKET UAP | 3 |
| ** | 19 | 1500.00206.0 | PISTION KIT SPRING | 3 |
| | 20 | 1110.03037.0 | SUCTION SPRING GUIDE | 3 |
| | | 1020.00220.1 | SEAL KIT P-20 UAP | 1 |

Note: * Common wear parts.

Note: ** Replace with 1000h.

Note: *** Replace with 500h, or with wear parts.

SEAL KIT P-20 UAP PARTS LIST - CODE 1020.00220.1

| NOTE | ITEM | DESCRIPTION | QTY. |
|------|------|-------------------------|------|
| * | 4 | VEDASEAL P-20 | 3 |
| * | 5 | O-RING | 3 |
| * | 9 | O-RING | 3 |
| * | 13 | LOWER SUPPORT RING P-20 | 3 |
| * | 14 | BACKUP RING | 3 |
| * | 15 | UAP SEAL P-20 | 3 |
| * | 16 | BLACK LAMELA | 6 |
| * | 17 | SCRAPER RING P-20 | 3 |
| * | 18 | UPPER SUPPORT RING P-20 | 3 |

CAUTION!

ALL SEAL KITS INCLUDE VEDASEAL HOWEVER; MAY BE PURCHASED SEPARATELY.



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