

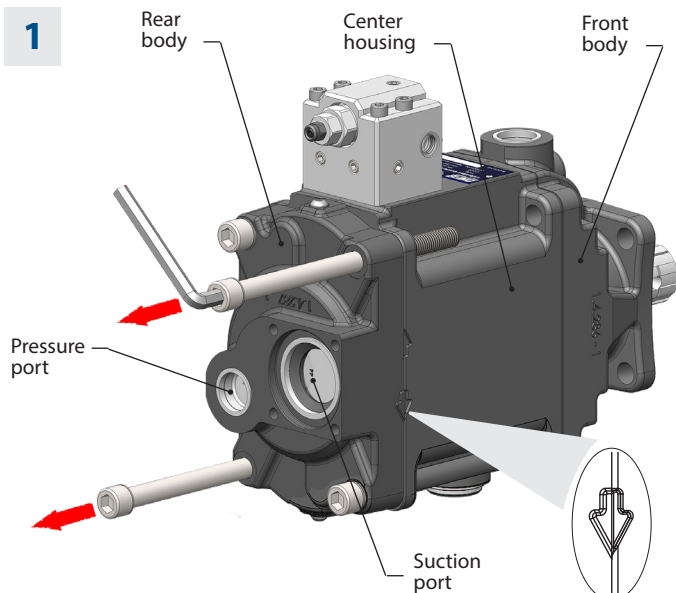
PPV 60-90-110 REVERSING THE ROTATION DIRECTION



The change of pump rotation for PPV130 - PPV150 can only be carried out at the authorized producer's or distributor's.

PRELIMINARY OPERATIONS

1



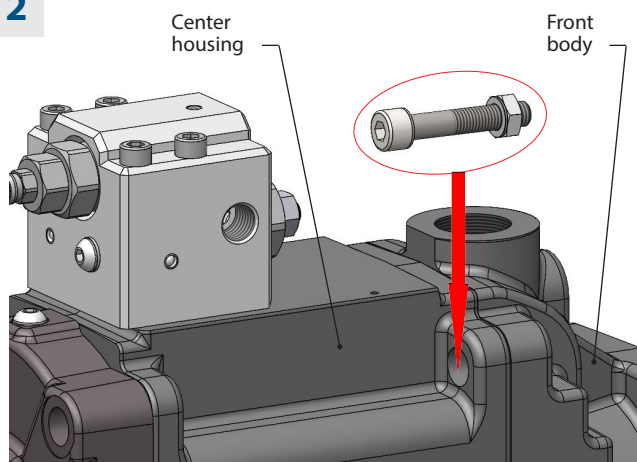
Attention!

Best for dismantling is with shaft directing downwards.

Diassembly rear cover

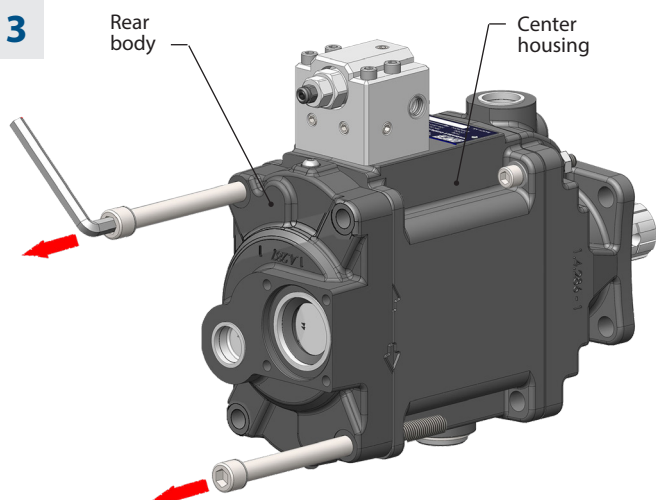
Unlock and remove ONLY the 2 screws indicated by using an Allen key.

2



On indicated position as well as the one on the other side just released from the screws, maintain held together the intermediate body and the front body with screws, washers and M8 nuts included.

3



Then unscrew the other 2 long screws and separate the rear body from the intermediate body.

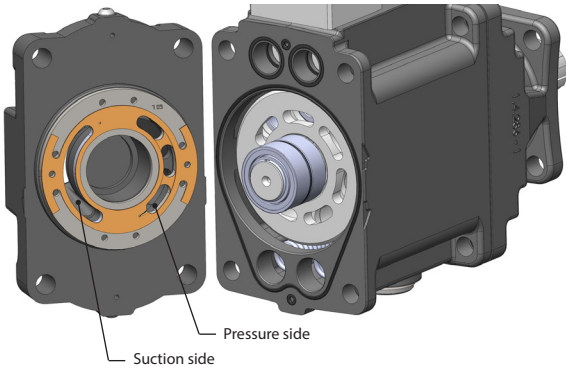
PPV 60-90-110

REVERSING THE ROTATION DIRECTION

CHANGE THE PORT PLATE

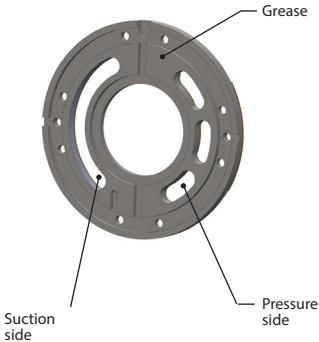
- 4

The separate the port plate from the rear housing / cylinder block. The new port plate should be mounted with a few spots of grease.



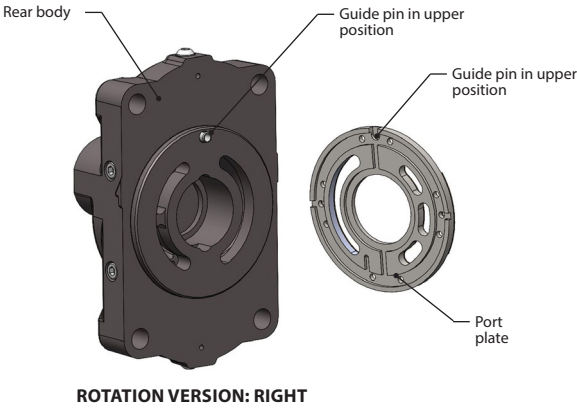
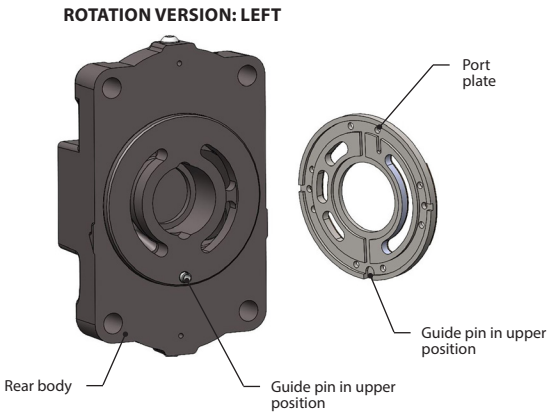
Pump type		Port plate spare part kit
PPV 60	DX	10896020604
	SX	10896010606
PPV 90	DX	10896020908
	SX	10896010900
PPV 110	DX	10896021103
	SX	10896011105

DX = port plate for clockwise rotation
SX = port plate for counter rotation

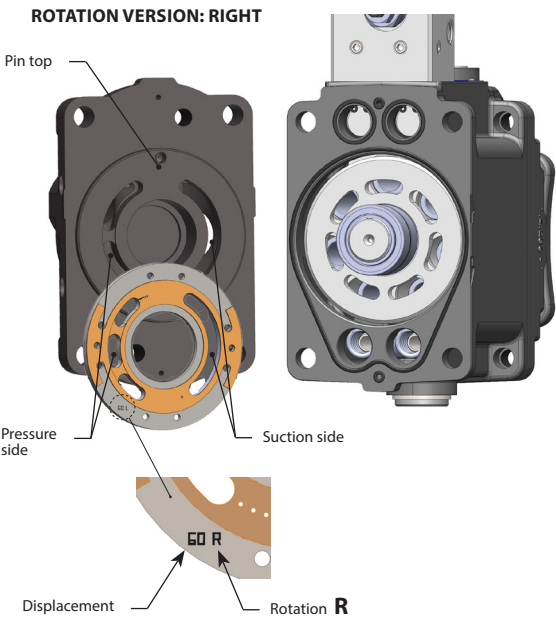
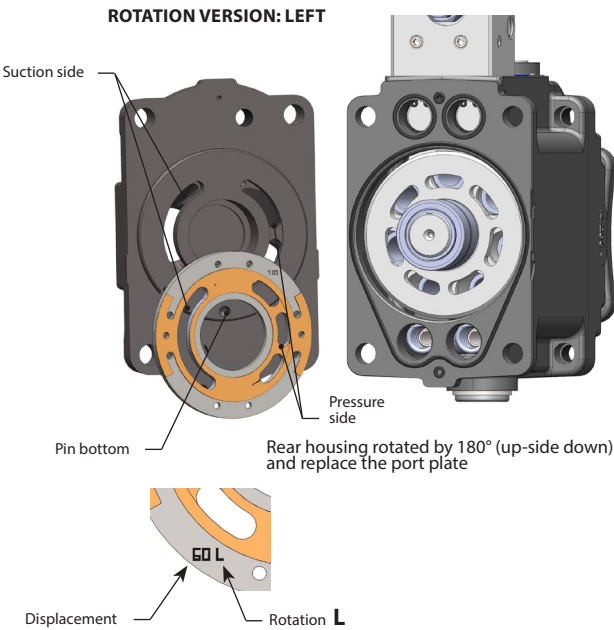


- 5

The new distributor plate must be positioned in pump's rear body in such a way that the guide pin enters the corresponding hole on plate itself.



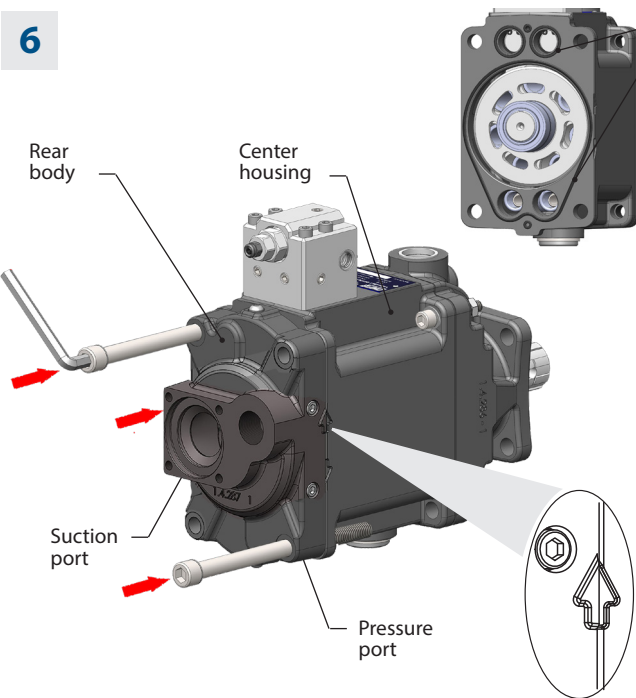
To change sense of rotation rotate 180° around bearing axis the pump rear body+distributor plate assembly.



PPV 60-90-110
REVERSING THE ROTATION DIRECTION

REASSEMBLY OF REAR BODY

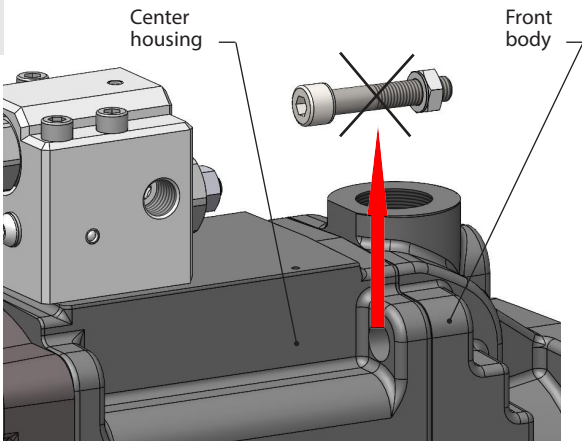
6



Check correct fit of all seals and O-rings.
Insert rear body and tighten the two indicated screws **WITHOUT TIGHTENING THEM COMPLETELY**.

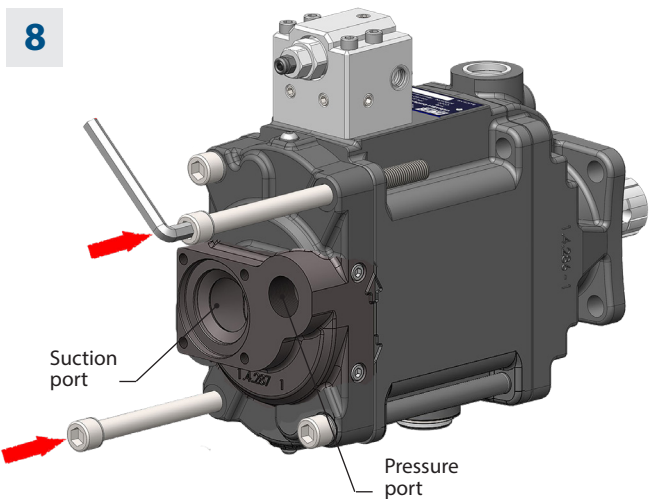
Attention!
The half of an arrow is applied to both center housing and end cover.
The new rotation direction is indicated when both halves form a complete arrow.

7



Remove the two bolts previously inserted (step 2) between intermediate body and front body.

8



Fit the 2 remaining screws, **WITHOUT TIGHTENING THEM COMPLETELY**.

Assemble all 4 tierod bolts and tighten crosswise with a torque wrench in 3 steps.

Pump type	STEP 1	STEP 2	STEP 3	Tierod bolts	Allen key
PPV 60	40 Nm	80 Nm	110 Nm	M12x170 DIN 912-10.9	10
PPV 90 - 110	80 Nm	120 Nm	160 Nm	M14x210 UNI 5931	12

± 10 Nm



WARNING! Manually test shaft free rotation once completed the change of pump rotation.