

## Service guide

# Photo Guide

APP 11 - 22

for claim or repair issue

## 1. General information

In connection with a claim or a repair issue of the Danfoss APP 11 - 22 pumps, it is important that we have appropriate information and photos.

This guide provides information about the 'Claim/Repair Information Document' and the required information. Similarly, this guide also provides the specific part group photos needed for review by your Danfoss service technician\*.

\*Note: we request ALL photos be provided, not just photos of parts that appear damaged.

Information form shown on the right:

### Pump - product information:

- Pump type
- Danfoss code no.
- Serial number


### Pump - operation conditions:

- Inlet pressure
- Outlet pressure
- Rpm
- Hours of operation
- Filtration in micron if Nominal or Absolute
- Flow
- Water temperature
- TDS

### Pump - additional if possible:

- Permeate flush before shut down (yes or no)
- Number of starts per day (average)
- If VFD is used - Ramp up and down time

### Reason for pump failure / break down:



Claim/Repair Information Document - pump & motor

Product information (see label on product)  
Only 1 product on each report. If same product type has same failure can 1 report be used for more products.  
After receiving document will Danfoss send return shipment document.

Issued by:	Date:
Customer name:	E-mail (contact person):
Contact person:	Contact phone number:

Product type:	Code number:	Serial number:
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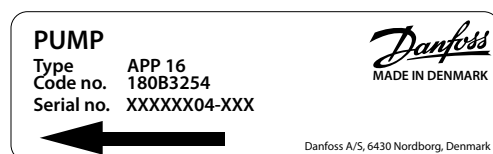
**Operational Conditions**

Application:	Inlet pressure:	RPM (pump/motor only):
Hours of operation:	Outlet pressure:	(duty cycles valves only)
Filtration (µm, absolute/nominal):	Flow:	Water temperature:
Fluid type:	TDS (ppm):	Pumps in parallel (yes/no):

Explain the system/component fault and any troubleshooting:

AX424651412040en-000101

## 2. Identification



Pump identification label (Serial no.)

### 3. Coupling



1. Coupling distance (check before disassembling)

### 4. Shaft seal



1. Shaft seal (Dynamic rubber bellow part)



2. Shaft seal (Static part surface)

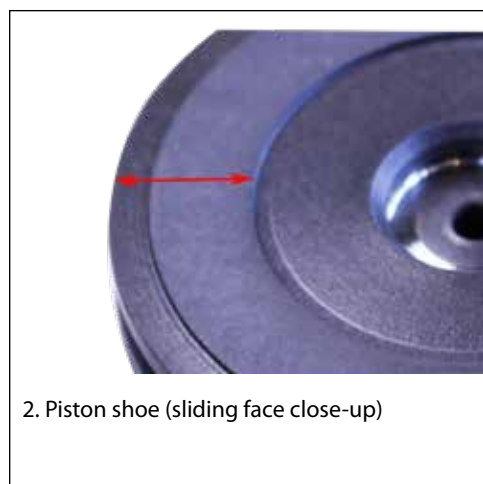


3. Shaft seal (Dynamic part)

## 5. Piston shoe



1. Piston shoe (sliding face)



2. Piston shoe (sliding face close-up)



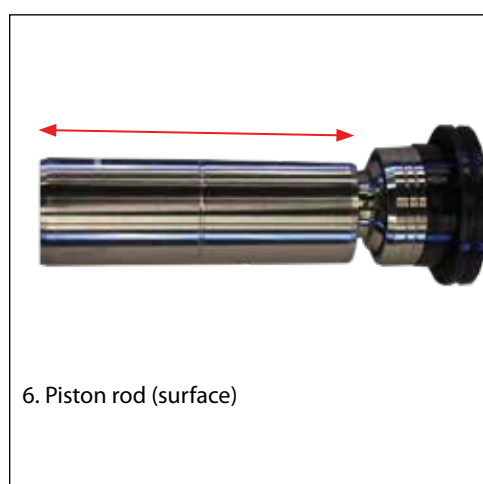
3. Piston shoe (back side)



4. Piston shoe (back side close-up)

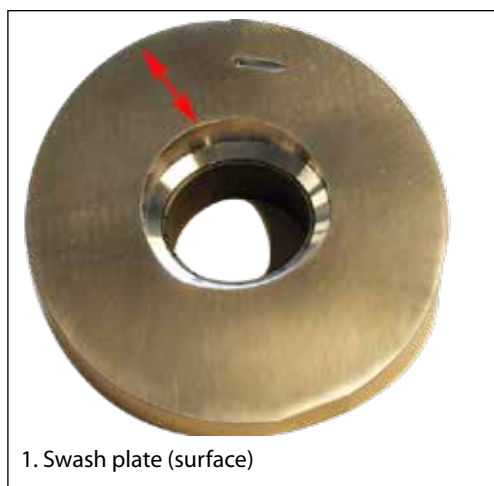


5. Piston shoe (back side, joint bearing)

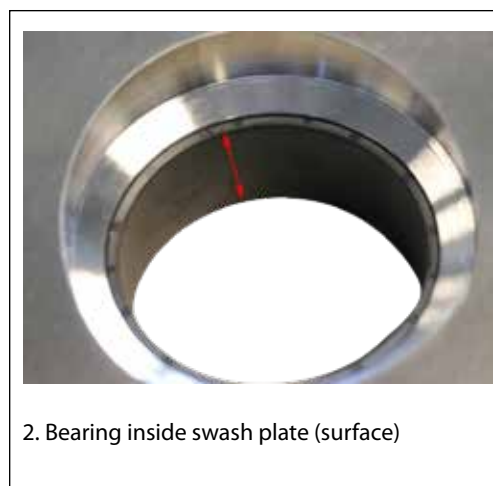


6. Piston rod (surface)

## 6. Swash plate



1. Swash plate (surface)

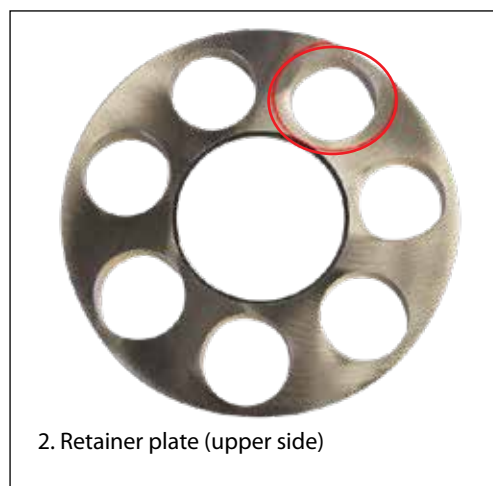


2. Bearing inside swash plate (surface)

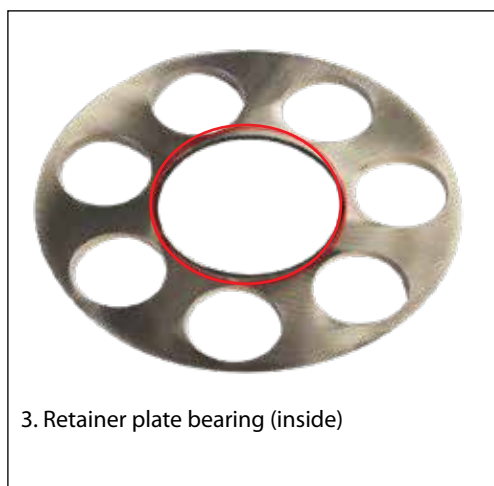
## 7. Retainer ball and plate



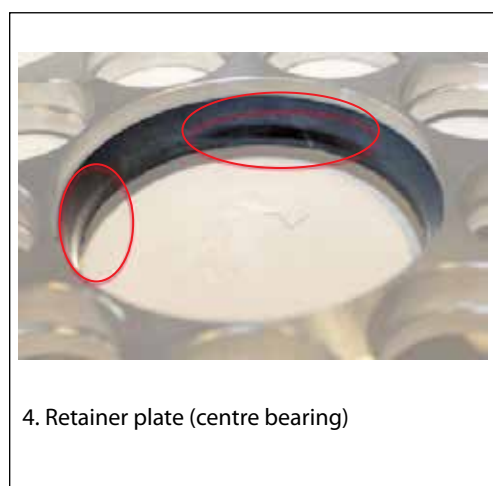
1. Retainer guide ball (surface)



2. Retainer plate (upper side)

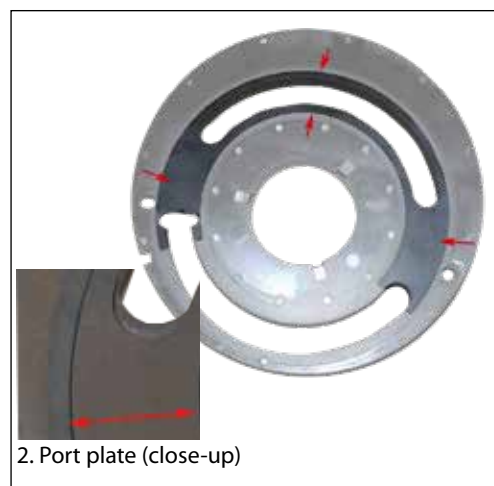


3. Retainer plate bearing (inside)



4. Retainer plate (centre bearing)

## 8. Port plate



## 9. Valve plate





1. Valve plate (thrust pad, close-up)

## 10. Housing

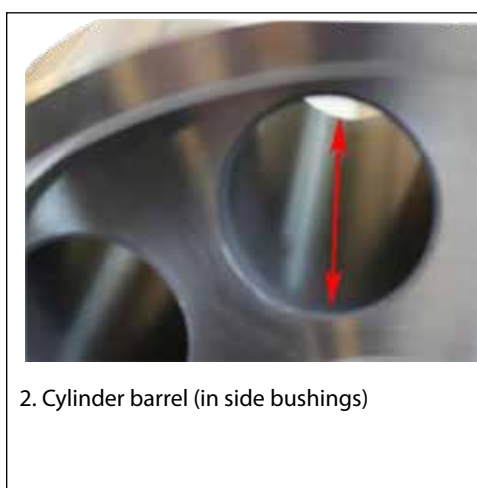


1. Housing

## 11. Cylinder barrel



1. Cylinder barrel (out side surface)



2. Cylinder barrel (in side bushings)



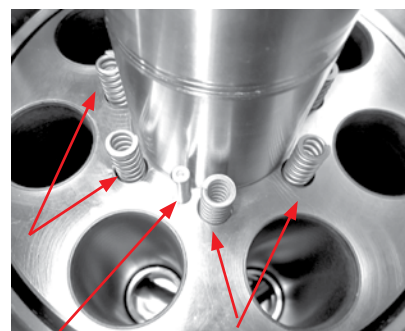
3. Cylinder barrel (shaft surface)



4. Place where shaft is screwed into barrel



5. Place where shaft is screwed into barrel



6. Pins and springs (surface)



## Danfoss A/S

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