

Service guide

Photo Guide

APP 21 - 46

for claim or repair issue

1. General information

In connection with a claim or a repair issue of the Danfoss APP 21 - 46 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:
---------------	--------------	----------------

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:

2. Identification

PUMP		 MADE IN DENMARK
Type	APP 46	
Code no.	180B3072	
Serial no.	XXXXXX03-XXX	
		Danfoss A/S, 6430 Nordborg, Denmark

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)

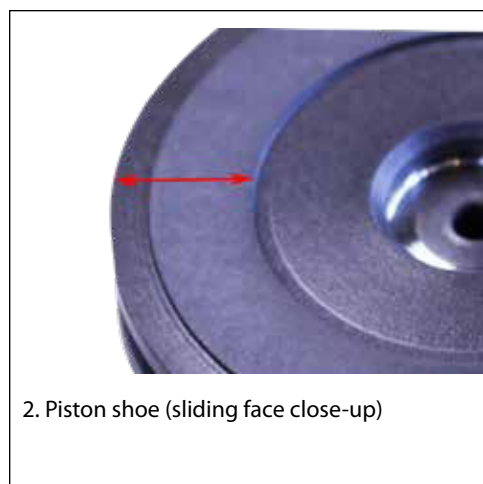


3. Shaft seal (Dynamic part)

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)

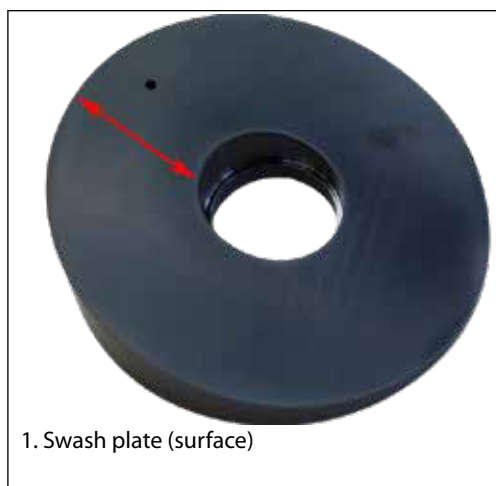


5. Piston shoe (back side, joint bearing)

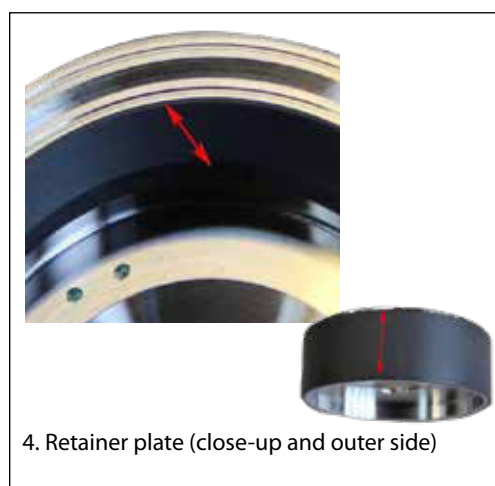
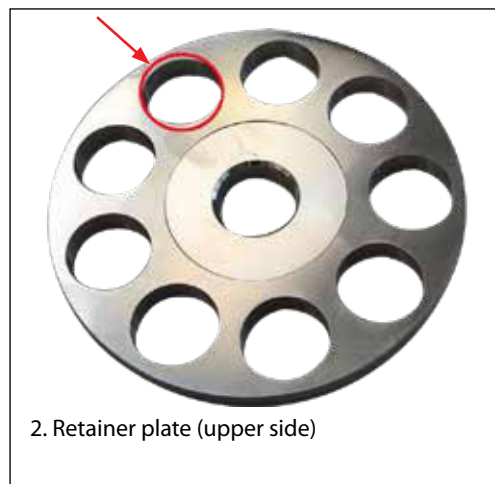
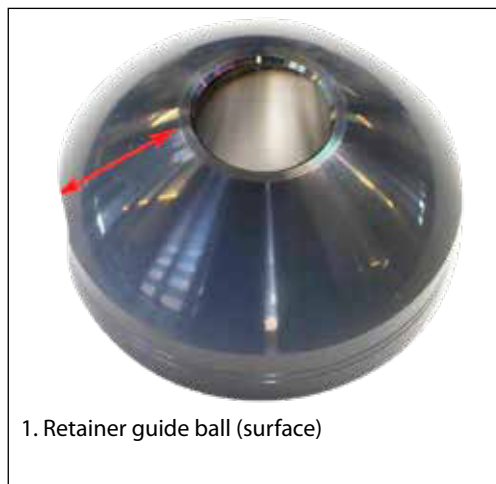


6. Piston rod (surface)

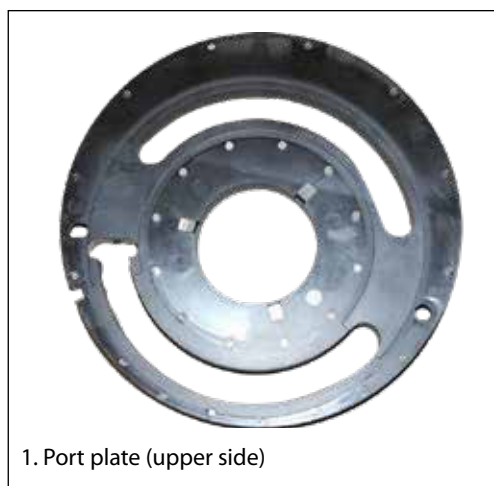
6. Swash plate



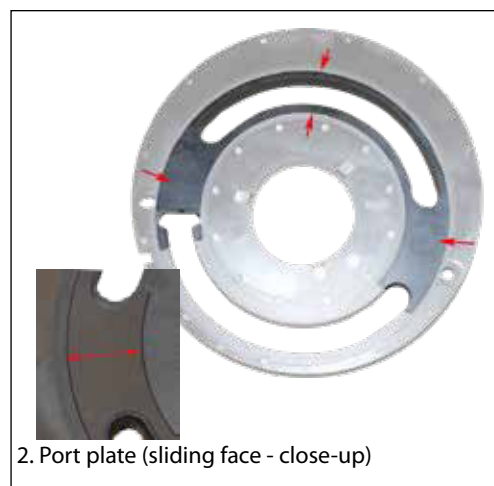
7. Retainer ball and plate



8. Port plate



1. Port plate (upper side)



2. Port plate (sliding face - close-up)

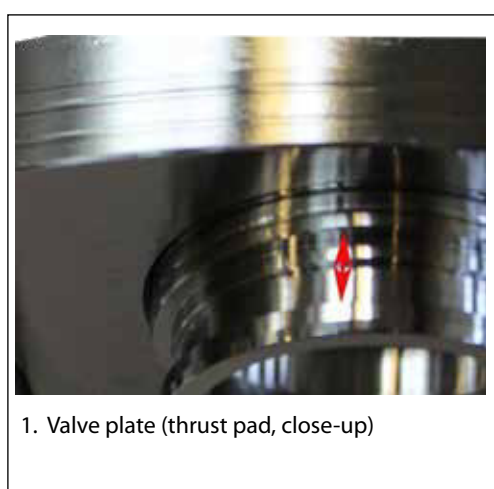
8. Valve plate



1. Valve plate (surface)



2. Valve plate (thrust pad)



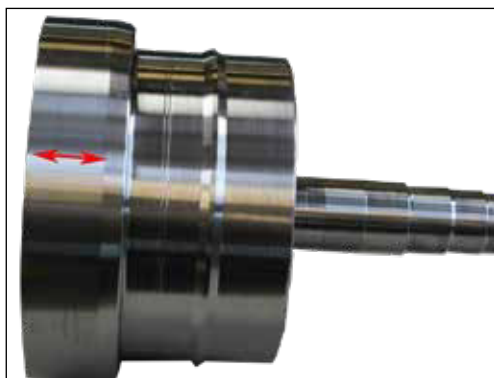
1. Valve plate (thrust pad, close-up)

9. Housing



1. Housing (bearing inside)

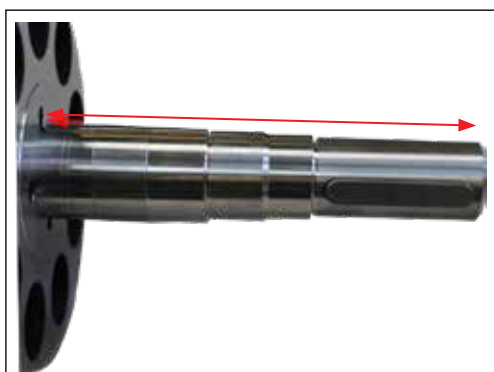
10. Cylinder barrel



1. Cylinder barrel (out side surface)



2. Cylinder barrel (in side bushings)



3. Cylinder barrel (shaft surface)

Danfoss A/S

High Pressure Pumps • danfoss.com • +45 7488 2222 • highpressurepumps@danfoss.com

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product.

All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.