Correct pre-charge/replace accumulator

Does this solve the problem?

1] Yes
2] No
3] I don't know

- **Explanation**

Test accumulators in accordance with 941918 Recharging of Nitrogen Accumulators. Replace or repair (if approved) any failed accumulators.

Relevant tools	
Description	**Item No.**
V82 accumulator charge kit	222826

Relevant documentation	
Description	**DMS No.**
Charging of Nitrogen Accumulators	941918

Test/replace pressure transducer

Does this solve the problem?

1] Yes
2] No
3] I don't know

- **Explanation**

If the turbine is in operation, monitor the pressures on all three blades.

Watch for erratic changes in one of the three pressures.

If one of the values changes frequently compared to the other two, the pressure transducer for that blade could be faulty.

With the turbine stopped, fix a manometer to test port MSP and measure the pressure on the suspect blade.

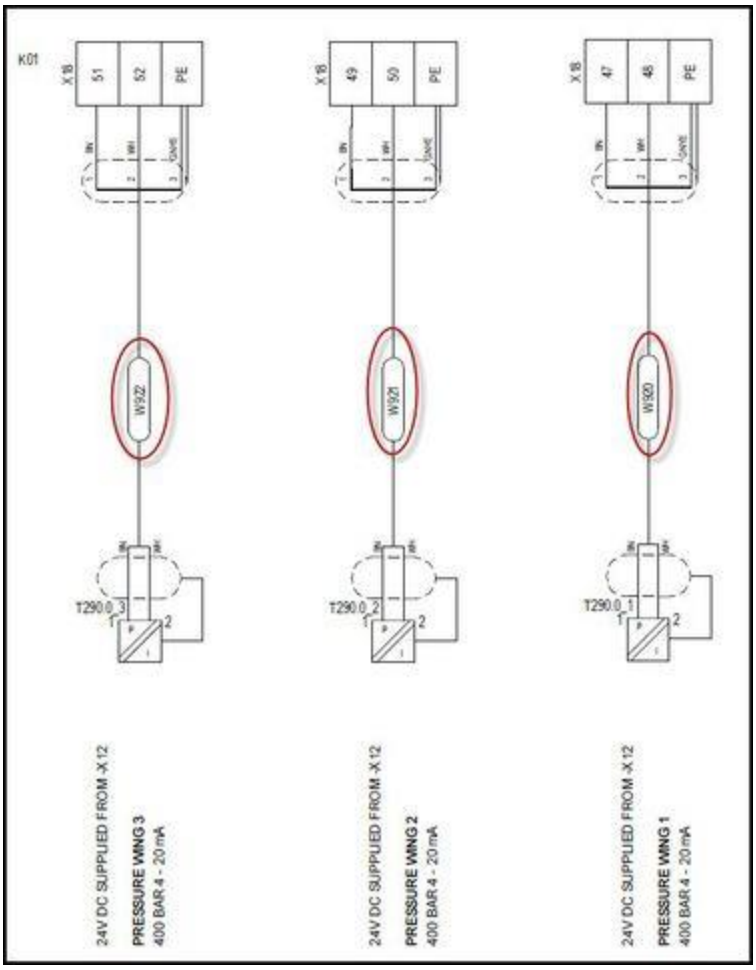
Compare the monometer reading to the TAC reading.

If the value in the TAC is lower than the measured value at MSP by several bars, the pressure transducer is faulty and must be replaced.

Relevant spare parts	
Description	**Item No.**
PRESSURE TRANSDUCER MBS3000-36	60096497

Check for the cable W920, W921 and W922 Pressure transmitter for faulty. Check the continuity test for open circuit. If found open replace the same

Relevant spare parts	
Description	**Item No.**
CABLE W920 T290 1 PRESSURE	60021524
CABLE W921 T290 2 PRESSURE	60021525
CABLE W922 T290 3 PRESSURE	60021526



Check and Replace the defective valve/ cable

Does this solve the problem?

1] Yes
2] No
3] I don't know

- **Explanation**

IN THE HUB:

Check the three blade pitch pressures through the TACII controller for any pressure drop while the turbine is in operation.

If all three pitch pressures drop – check the main distribution block hydraulic system.

Relevant documentation	
Description	**DMS No.**
Pitch Hydraulic circuit (Rexroth) Main manifold Diagram	D5003347
Pitch Hydraulic circuit (Parker) Main manifold Diagram	D5003018

REXROTH SYSTEM -MAIN MANIFOLD:

Check the 440 and 445 valves solenoid coil, cable and hub computer.

Defective electrical component need to be replaced.

Relevant spare parts	
Description	**Item No.**
Cable W952 Idle valve Y445.0	60021541
Cable W954 Flushing valve Y440.0	60021543
SIF HUB COMPUTER CABINET EVOII	51701801

If valves are defect replace with new.

Part number for valves:

Relevant spare parts		
Description	**Item No.**	**Position**
ACCUM HYDR 0BAR 0.7L 1/2" BS	103805	475
SOL VAL KSDEU1CA/HCG24N0K4M	780430	440
CHECK VALVE: M-SR 15 KE02-1X/	60096479	410, 425
PRESSURE CONTROL VALVE: KBD2HO	60096503	437
CHECK VALVE COFA-XBN	60099554	430

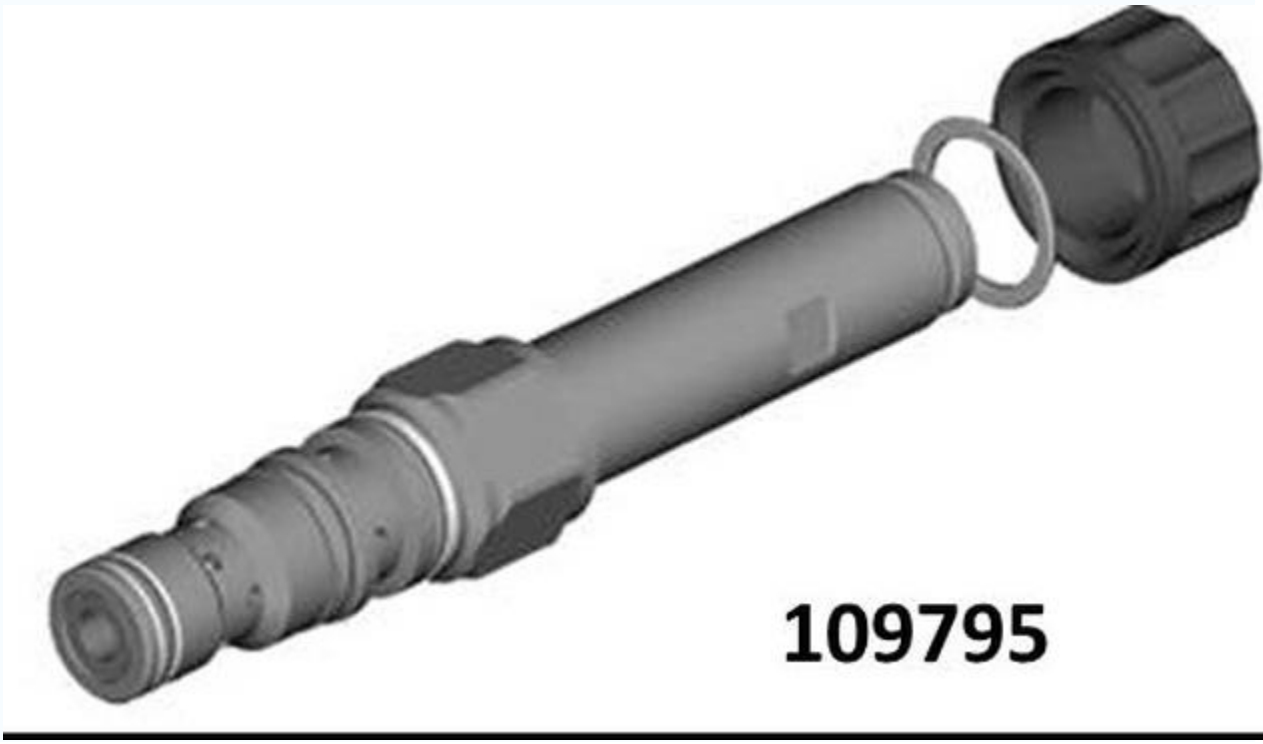
Part Number for Solenoid Valve

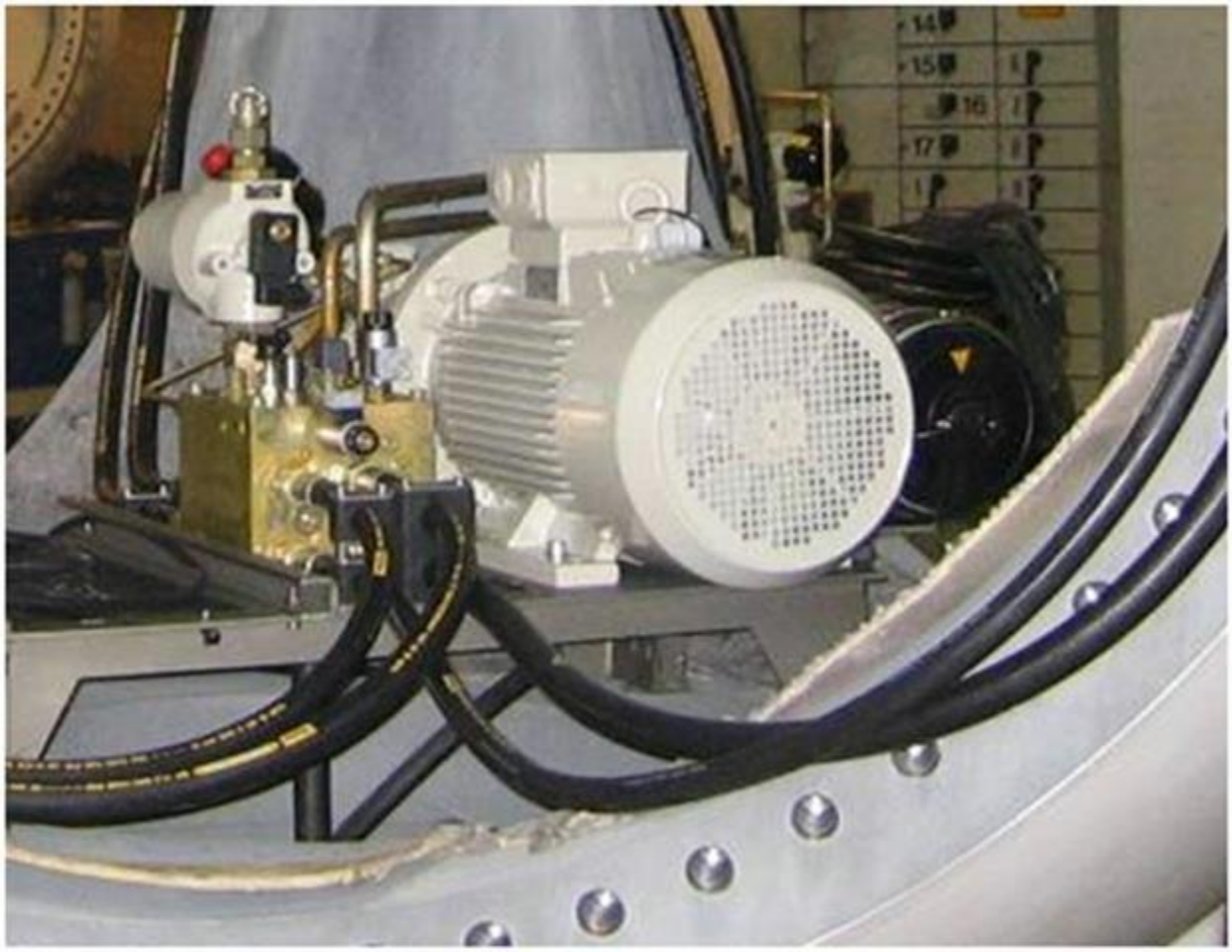
The part No.105101 is phased out and henceforth replaced by 109795 & 60106201.

(Rexroth) Valve/Solenoid- 445

Relevant spare parts		
Description	**Item No.**	**Status**
ELECTRIAL SEATVALVE, HYDR VAL	105101	Phased out
ELECTRIC SEAT VALVE	109795	Available
COIL GZ37-4 24VDC 19W	60106201	Available

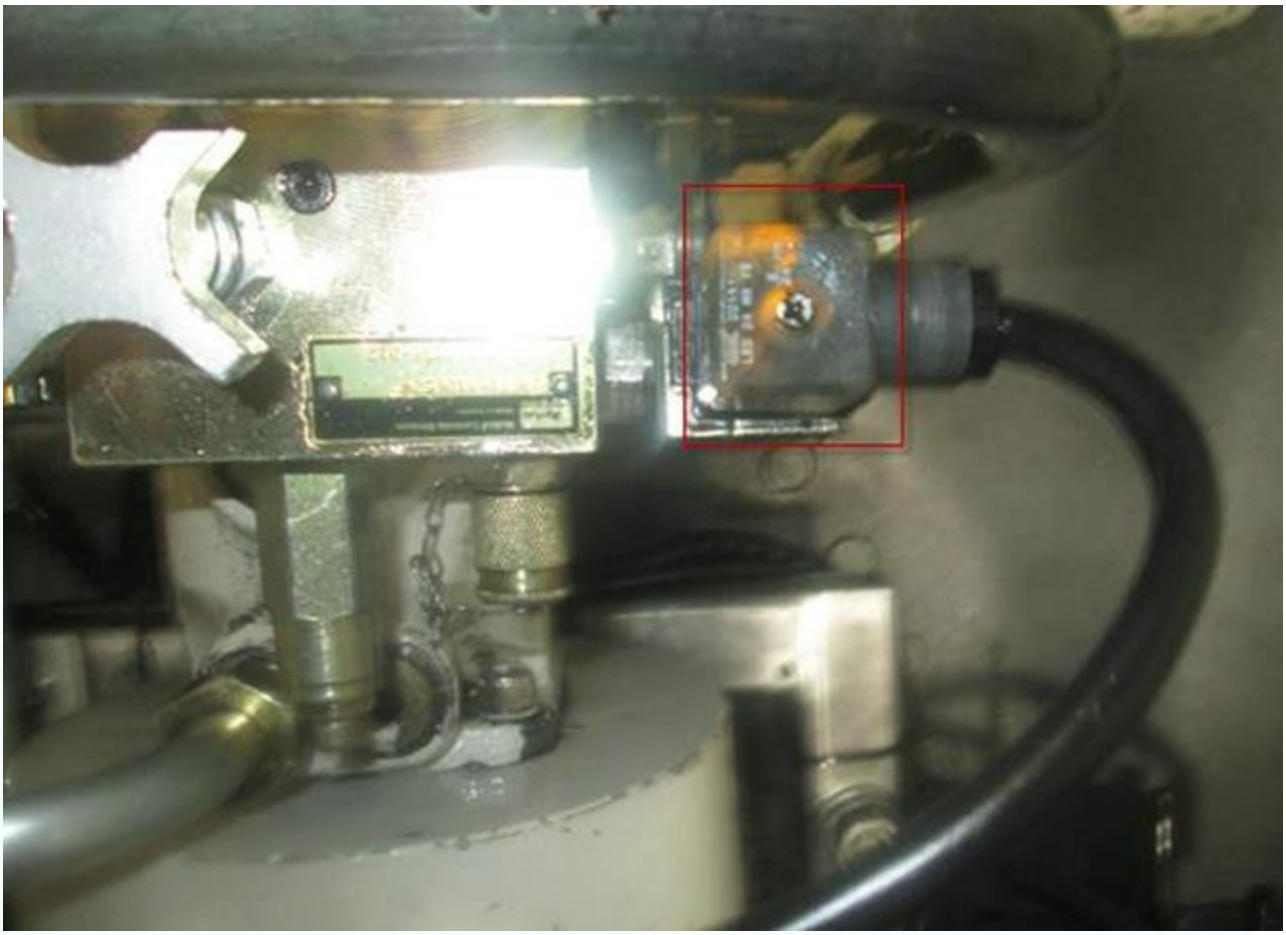

60106201


109795



PARKER SYSTEM -MAIN MANIFOLD:
Check the 440 and 445 valves solenoid coil, cable and hub computer.

NOTE: Check the valve for proper functioning of magnetisation using screw driver while coil energised condition. Do not conclude with the lights ‘ON’ condition for confirming proper coil functioning. Sometimes, LED will be in ‘ON’ condition as shown below, but it is not necessary that coil is in good condition.



Defective electrical components need to be replaced.

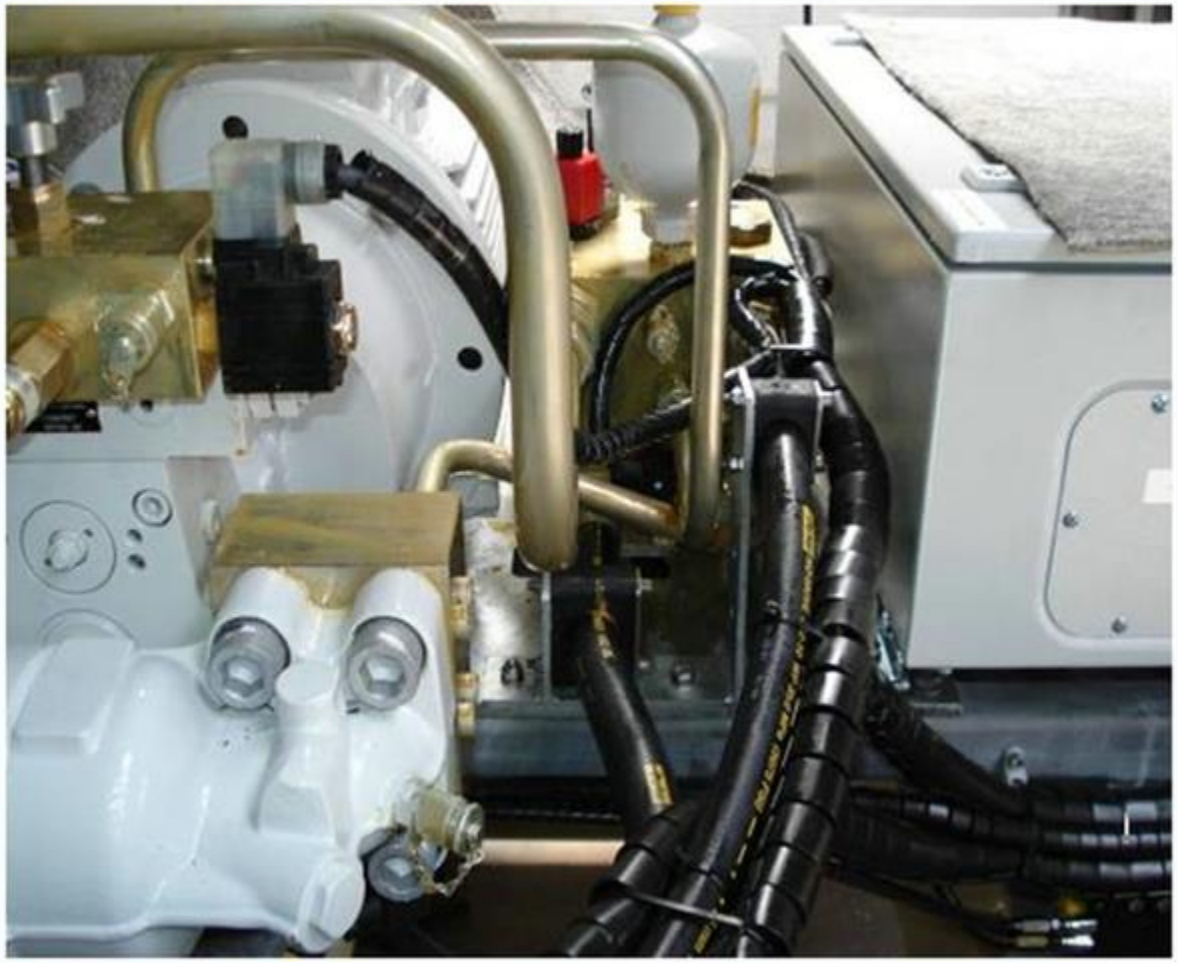
Relevant spare parts	
Description	**Item No.**
Cable W952 Idle valve Y445.0	60021541
Cable W954 Flushing valve Y440.0	60021543
SIF HUB COMPUTER CABINET EVOII	51701801

If valves are defective, replace with new.

Part number for valves:

Relevant spare parts		
Description	**Item No.**	**Position**
CHECK VALVE, 0,3 BAR, 375L	60111616	410

CHECK VALVE, 0,3 BAR, 82L	60111613	425, 455
SOL. VALVE NO, DS201 NR	60112645	440
COIL, 30 WATT 24 VDC DIN PLUG	60112646	
RELIEF VALVE, RDH-08-2-S-50, 138 - 345 BAR	60112643	435
RELIEF VALVE, RDH-08-2-S-30, 69 - 207 BAR	60104030	437
SOL. VALVE NO, DSH081 NL	60112647	445
COIL 24VDC DIN PLUG S8LDD024	60104025	445A



Relevant documentation	
Description	**DMS No.**
Change of Valve in Parker Pitch Manifold	0002-4365
Distribution Manifold Replacement	0021-3758

If anyone blade pitch pressure drops –check the affected blade pitch hydraulic system.

Refer the hydraulic diagrams

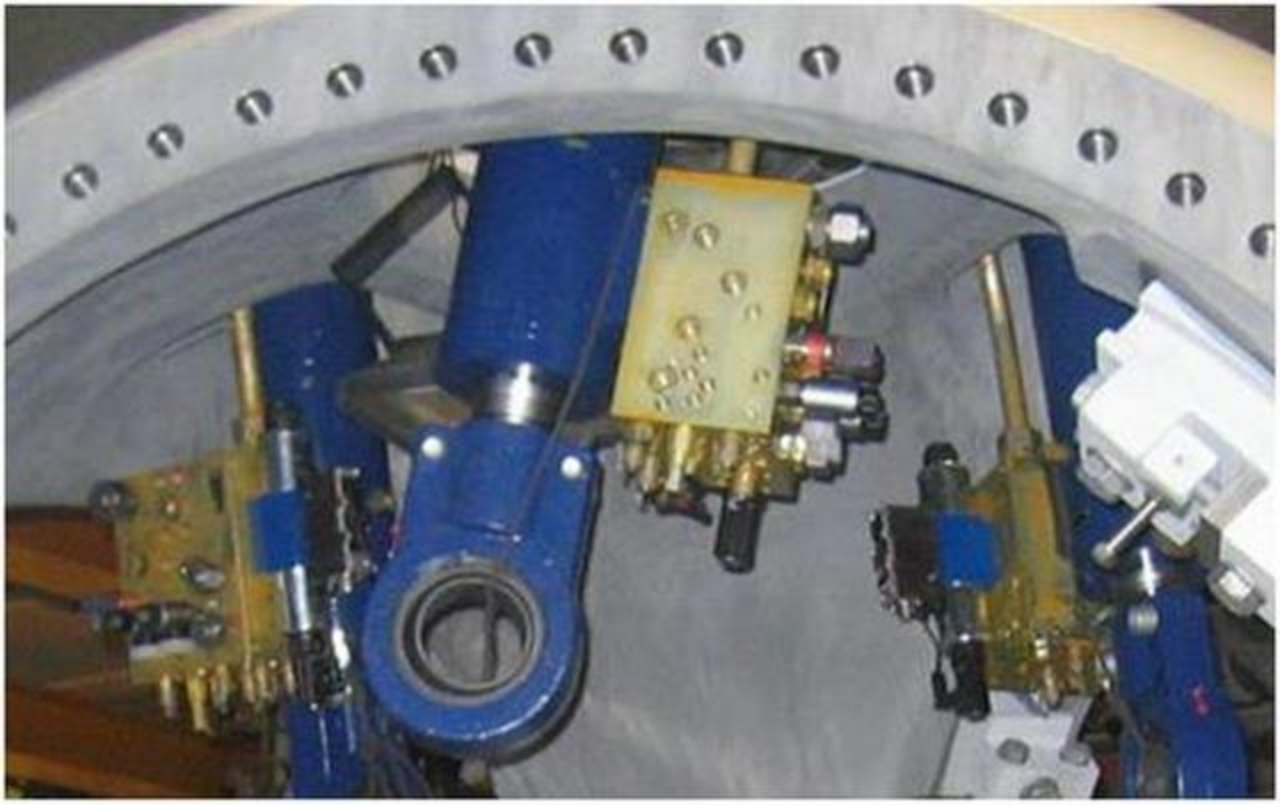
Relevant documentation	
Description	**DMS No.**
Pitch Hydraulic circuit (Rexroth) Pitch manifold Diagram	D5003025
Pitch Hydraulic circuit (Rexroth) Filter manifold Diagram	D5002046
Pitch Hydraulic circuit (Parker) Pitch manifold Diagram	D5003013

REXROTH SYSTEM -PITCH MANIFOLD:

Check the below valve positions.
Swap the valves one by one in to other manifolds and check valve operation.
If the fault shifts to other blades the valve is likely defective. If not continue to check the other valves.

Part number for valves:

Relevant spare parts		
Description	**Item No.**	**Position**
THROTTEL VAVLE NFCC-LCN A40122	105103	222
PROP VAL 4WREE 10R975-2X/G24K31	60078979	205
PRESSURE CONTROLVALVE:RDDT-QWN	60096477	220
CHECK VALVE: M-SR 15 KE02-1X/	60096479	225
CHECK VALVE: CXFA-XFN A30314JG	60096480	226
CHECK VALVE PILOT:CVEV-XCN A30	60096481	230, 235, 250
VALVE CHECK PILOT COFA-XAN A30	60096493	240, 245
SOL VAL KSDEU1CA/HCG24N0K4M	780430	210, 215



PARKER SYSTEM -PITCH MANIFOLD:

Check the below position valves,
Swap the valves one by one in to other manifolds and check valve operation.
If fault shifted to other blades the valve likely defect. If not, check the other valves.

Part number for valves:

Relevant spare parts		
Description	**Item No.**	**Position**
CHECK VALVE PILOT:CVEV-XCN A30	60096481	230 , 250 -
3/2 DIRECTIONAL VALVE	60111617	210, 215 -
LOGIC ELEMENT PIL. OPERATED	60111630	240, 245 -
PRESSURE CONTROLVALVE:RDDT-QWN	60096477	220 -
CHECK VALVE CVH103P20	60112628	235 -
PROP. VALVE D31FHE01C	60112621	205 -