


# MAINTENANCE PROGRAM PILATUS PORTER PC6

## Appendix – WHEEL AND BRAKES INSPECTION

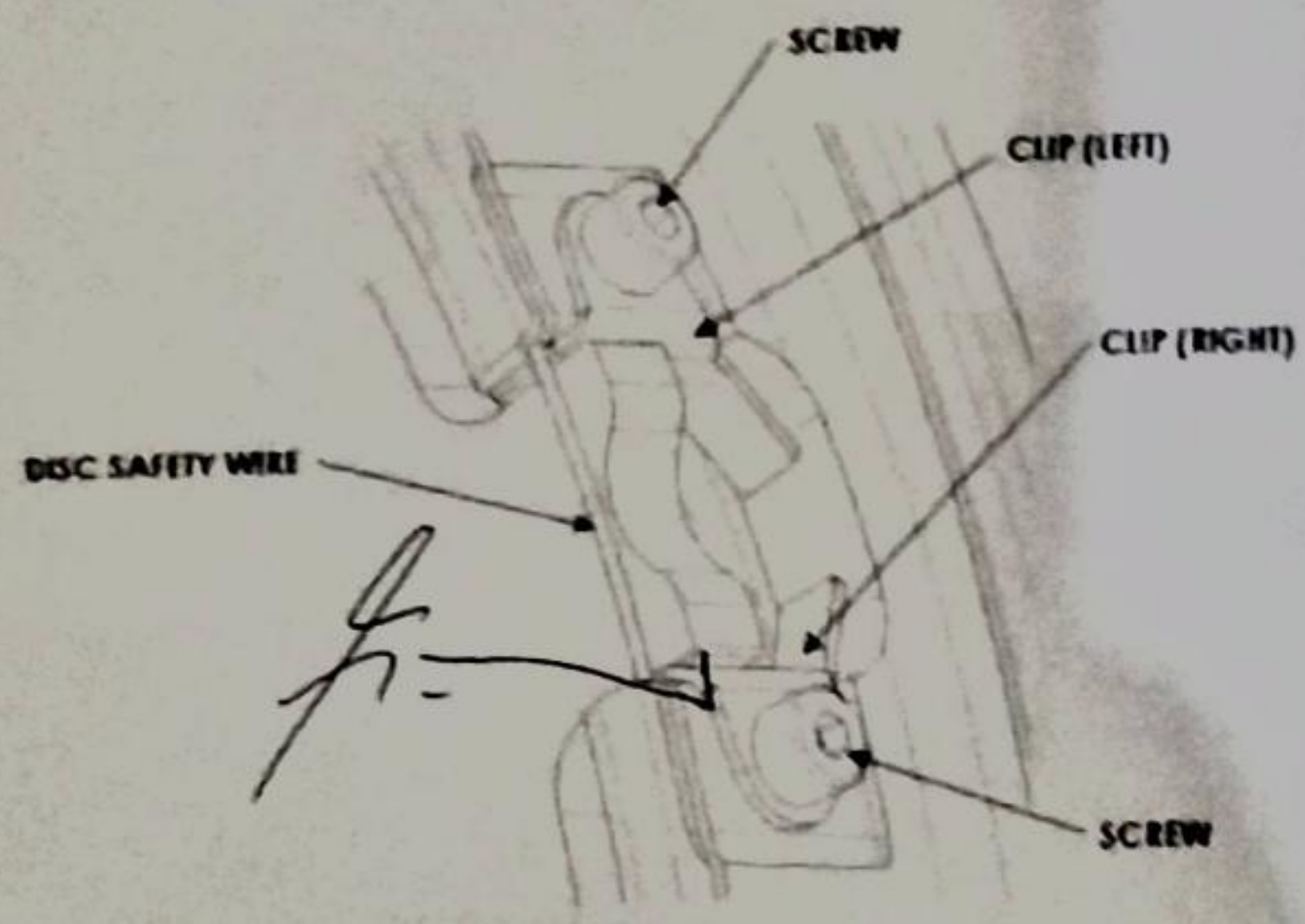
 Aeropole, 05140 TALLARD - FRANCE Tel: +33 (0)4 92 20 16 19 Fax: +33 (0)4 92 52 89 66 e-mail: contact@beringer-aero.com	<b>TIME LIMITS / MAINTENANCE CHECKS</b>	Revision : 01-01-2019 <b>BRG-ALTP-02</b>
		Revisé par : J. J. J. J. <b>MC-STC-002</b>

### 2. Scheduled maintenance checks

#### 2.1. Flight maintenance checks

Next flight maintenance checks are in addition to PC-6 maintenance manual.

Additional flight maintenance checks		Preflight inspection
Component	Operation	
Safety wire of brake disc	Visual inspection	
Brake pads	Inspect for wear and damage	



**CAUTION:** Disc safety wire must be in place, it prevents disc from sliding out the slots.

FIGURE 1



# MAINTENANCE PROGRAM PILATUS PORTER PC6

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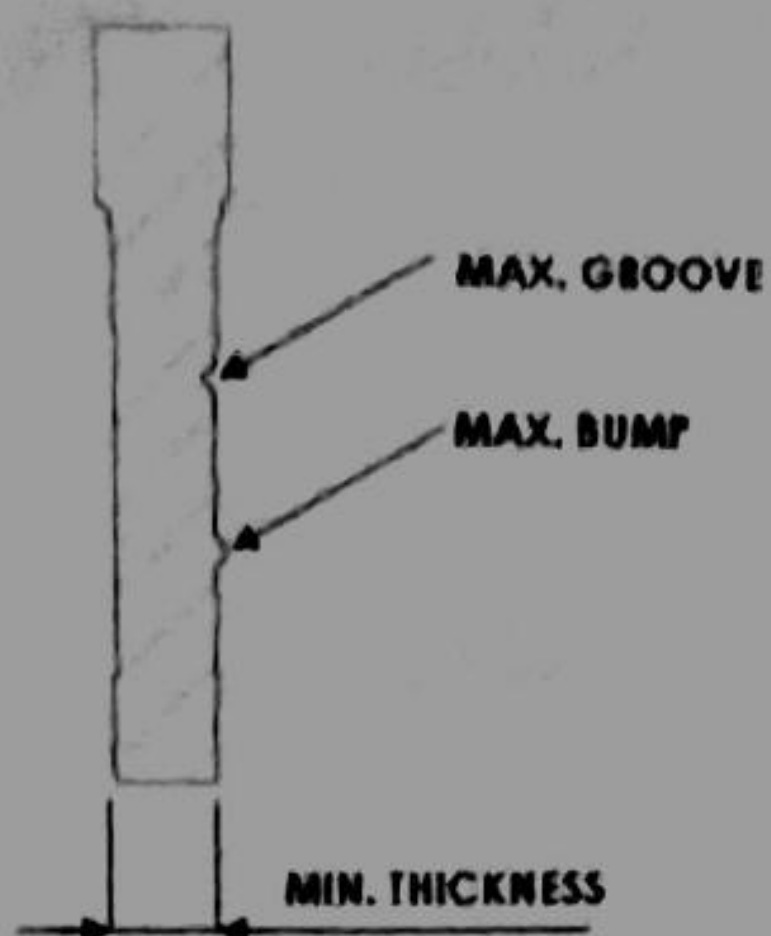


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### TIME LIMITS / MAINTENANCE CHECKS

Montage / référence :  
**BRQ-ALTP-02**

Référence document :  
**MC-STC-002**



#### DISC WEAR LIMITS:

Min. Thickness DSC-011	6.4mm	0.252 in
Min. Thickness DSC-011.2	7.0mm	0.276 in
	6.4mm	0.252 in
Max. Coning	0.3mm	0.012 in
Max. Groove	0.2mm	0.008 in
Max. Bump	0.2mm	0.008 in

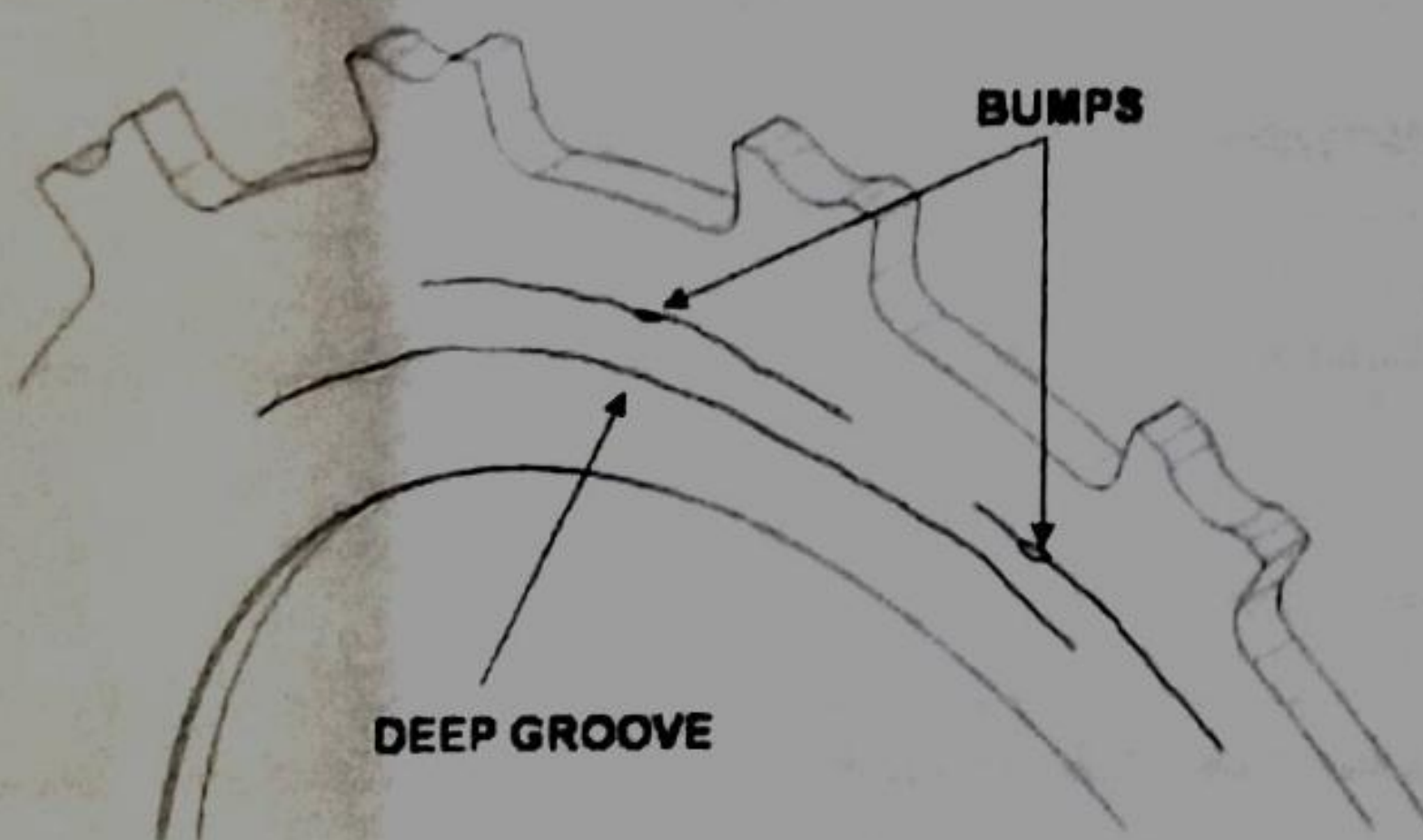
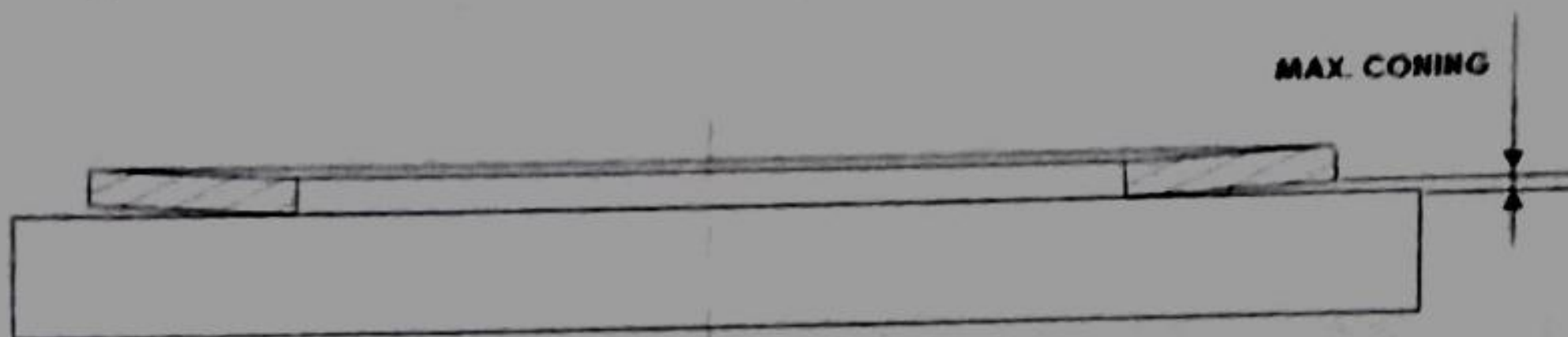


FIGURE 2











# MAINTENANCE PROGRAM PILATUS PORTER PC6

## Appendix – MAIN WHEEL INSPECTION

### MAIN WHEEL INSPECTION SHEET OF PILATUS PORTER PC6

Reg. Mark : PK - SNC  
MSN : 1016  
TSN / CSN : 97:47 / 54


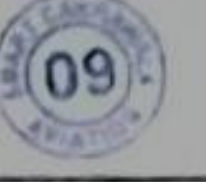
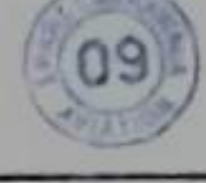


Date : 03-DEC-2021  
Station : BERAU  
WO No. : WO/001-SNC/X1/2021

NO	TASK	SIGNATURE	
		SIGN	STAMP
DISSASSEMBLY:			
<b>WARNING:</b> Do not attempt to disassemble wheel until tire has been completely deflated. Otherwise, serious injury to personnel or damage to equipment can result.			
<b>WARNING:</b> Do not attempt to remove valve core until tire has been completely deflated. Valve core will be ejected at high velocities if unscrewed before air pressure has been released.			
1	Remove valve cap and apply a tire deflator to release tire pressure completely.	N/A	
2	Remove wheel from aircraft, be careful not to drop the wheel bearing cones.	N/A	
3	Remove outer wheel bearing cone (inner wheel bearing cone is retained by Lip seal).	N/A	
4	Break the beads away from the wheel flanges by applying pressure by hand or using a wood tool all around the entire sidewall as close to the tire beads as possible.	N/A	
	<b>CAUTION:</b> Do not pry between tire bead and wheel flange this may destroy the structural and sealing properties of the wheel and tire.		
5	Remove all screws holding wheel halves together. (All screws must be changed at the same time – Send for Magnetic Particle Inspection).	N/A	
6	Separate wheel halves and remove tire, carefully remove O-rings and lay on a flat clean surface.	N/A	
	<b>CAUTION:</b> Do not use impact or power wrenches.		
7	Carefully lay the wheel halves on a flat clean bench.	N/A	
8	If inner bearing cones have to be greased, Lipseal must be removed and replaced	N/A	



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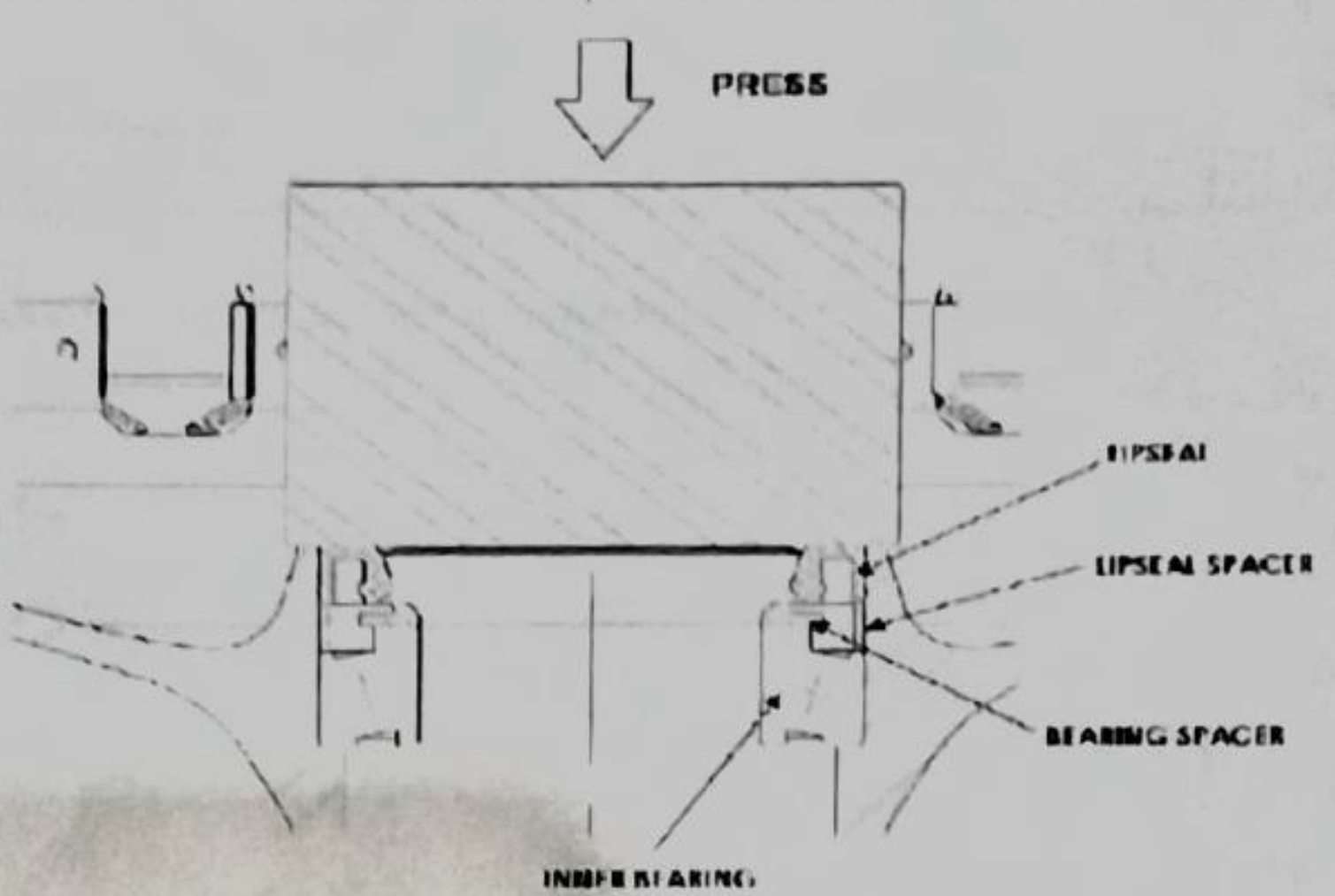

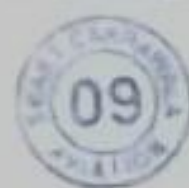



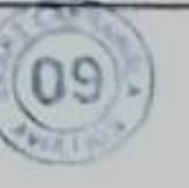
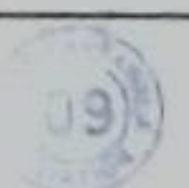
## Appendix – MAIN WHEEL INSPECTION

NO	TASK	SIGNATURE	
		SIGN	STAMP
<b>CLEANING:</b>			
9	Clean all metal parts using soaped water and wipe dry with a clean cloth. Rubber valve must not be cleaned with solvent.	N/A	
	<b>CAUTION:</b> Do not use basic or acid agent on wheel halves. Anodizing can be totally removed within few minutes in contact with basic agent. Make sure that cleaning soap is not basic.		
10	Clean wheel bead seat with dry-cleaning solvent and wipe dry with a clean cloth.	N/A	
<b>CAUTION:</b> Oily solvent must not be used on wheel bead seat because tire will not stick properly on the wheel.			
11	Clean O-ring groove with dry-cleaning solvent and wipe dry with a clean cloth.	N/A	
	<b>WARNING:</b> Dry-cleaning solvent are toxic and volatile. Use a well-ventilated room.		
	Avoid contact with skin or clothing. Do not inhale the vapor.		
<b>NOTE:</b> If the seal must be reused clean with soaped water and dry with a soft cloth. Do not use thinner or alcohol for seals cleaning.			
12	Apply air pressure to dry internal thread.	N/A	
	<b>CAUTION:</b> Oily solvent or oily air pressure must not be used on internal thread because threadlocker will not properly lock the screws.		
<b>INSPECTION :</b>			
13	a. Perform Visual Inspection of wheel halves for cracks, nicks, corrosion or other damage. b. Causes for replacement of wheel half. <ol style="list-style-type: none"> <li>Signs of corrosion.</li> <li>Anodizing colour removed from more than 15% of external surface.</li> <li>Heavy nicks.</li> <li>Deformed flanges.</li> <li>Damaged bearing bore.</li> </ol>	N/A	
<b>REASSEMBLY :</b>			
<b>NOTE:</b> It is recommended that O-rings be replaced at each tire change. Rubber valve must be changed if damaged or corroded.			
<b>CAUTION:</b> A tubeless tire that has been already mounted on another wheel type must not be installed. Tubeless tire will not stick properly on the wheel and may leak.			



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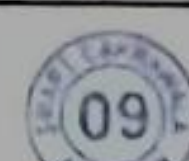








## Appendix – MAIN WHEEL INSPECTION

NO	TASK	SIGNATURE	
		SIGN	STAMP
	If lip seal has been removed, install inner bearing cone, bearing spacer, Lip seal spacer and press a new Lip seal in the inner wheel half.	N/A	
	<p><b>NOTE:</b> Lip seal must be replaced at each removal from inner wheel half.</p> <p><b>CAUTION:</b> Do not forget bearing spacer, it cannot be installed after lip seal.</p> <p><b>NOTE:</b> Bearing cone cannot be removed without removing lipseal.</p>		
14			
15	Place inner wheel half on a clean bench.	N/A	
16	Clean tire bead seat with a cloth impregnated with dry-cleaning solvent to remove residual grease or wax.	N/A	
	<b>CAUTION:</b> Oily solvent must not be used on tire bead seat because tire will not stick properly on the wheel.		
17	Apply appropriate mounting soap from tire manufacturer on tire bead seat. Tubeless mounting soap in box or in spray (preferred) must be used.	N/A	
18	Install only the correct "tubeless" tire on the inner wheel half.	N/A	
19	Clean o-rings grooves with dry cloth and install small and large o-rings.	N/A	
20	Place the separator disc <b>NOTE:</b> Only when required.	N/A	
21	Place the outer wheel half with the valve positioned at the red balance dot on the tire and align the bolt holes.	N/A	



# **MAINTENANCE PROGRAM** **PILATUS PORTER PC6**




## **Appendix – MAIN WHEEL INSPECTION**

NO	TASK	SIGNATURE	
		SIGN	STAMP
	<b>NOTE:</b> Assembly screw must be replaced at each tire change.		
22	Put a drop of thread locker medium strength (Loctite 243 recommended) on each end of assembly screw.	N/A	
	<b>CAUTION:</b> Using a wrong thread locker or not from recommended type may cause loose of screws or removal problem.		
23	Install all screws to contact.	N/A	
	<b>CAUTION:</b> Do not use impact or power wrenches.		
24	Torque all screws to 12 N.m (105 in-lb).	N/A	
25	Torque all screws a second time to 12 N.m (105 in-lb).	N/A	
26	Inflate tire just enough to seat beads.	N/A	
	<b>WARNING:</b> Place wheel in an inflation cage for initial inflation. do not inflate tire to full operating pressure until wheel has been installed on aircraft. tire and / or wheel failure may occur causing injury to personnel or damage to equipment if the tire is inflated from any high-pressure source. tire and wheel assemblies must be serviced with inflation equipment that has been specifically designed for this operation.		
27	Check bearing cups and cones	N/A	
28	Pack bearing cones with clean bearing grease to specification MIL-G-81322 and coat bearing cups with a light coat of grease.	N/A	
29	Install outer bearing cone in wheel and install on aircraft helping disc to take place in wheel slots.	N/A	
30	Adjust bearings to aircraft manufacturer's recommendations and safety.	N/A	
31	Install o-ring on wheel cap and screw the cap.	N/A	
32	Torque the cap to contact with hand force using BERINGER tool AV-PIL-101.	N/A	
	<b>CAUTION:</b> Excessive torque on the cap may cause problem to unscrew.		



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## Appendix – MAIN WHEEL INSPECTION

NO	TASK	SIGNATURE	
		SIGN	STAMP
33	Install disc safety wire diameter 1.01 mm (0.040") from stainless steel grade 302 in wheel ring groove.	N/A	
	<b>CAUTION:</b> Disc safety wire must be in place it prevents disc from sliding out the slots.		
34	Inflate tires to operating pressure and install valve caps.	N/A	
35	Check inflation pressure after 24 hours.	N/A	
	<b>CAUTION:</b> After 24 hours, inflate pressure should not be less than 90%. if so, check for a leakage at valve, o-ring or bead seat. <b>NOTE:</b> The installation of the small wheel 24x7.7 is identical to the standard wheel		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER
/	/	/	/
/	/	/	/
/	/	/	/

RETURN TO SERVICE			
The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.			
Name	:	N/A	Stamp : N/A
Signature	:	N/A	Place/Date : N/A





## Parts Used Sheet

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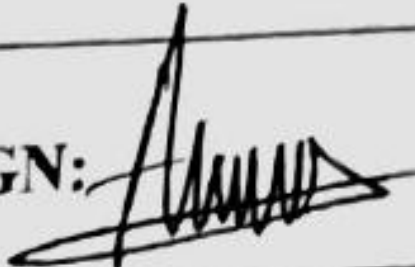








	<b>EMERGENCY EQUIPMENT LIST INSPECTION &amp; MONITOR</b>	<b>PT. SMART CAKRAWALA AVIATION</b>
		DEPARTMENT TEKNIK Form: SCA/MTC/023

DATE : 05 / 12 - 2021	A/C REG : PK-SNC
A/C TYPE : PC-6   B2-H4	CHECKER : ARUS KURNIAWAN SIGN: 

No.	Description	P/N	S/N	Next Insp.	Remarks
1	Pilot Life Vest	P01074-101	12062000022	28/OCT-2022	GOOD / SEALED
2	Co-Pilot Life Vest	63600-167	L157063	28/OCT-2022	GOOD / SEALED
3	Pax Life Vest	P01074-101W	17060500010	28/OCT-2022	GOOD / SEALED
4	Pax Life Vest	P01074-101	12062000025	28/OCT-2022	GOOD / SEALED
5	Pax Life Vest	63600-167	L273003	28/OCT-2022	GOOD / SEALED
6	Pax Life Vest	D21343-135	L849507	28/OCT-2022	GOOD / SEALED
7	Pax Life Vest	P01074-101	12062000034	28/OCT-2022	GOOD / SEALED
8	Pax Life Vest	S-21250-6300	42210-1161	28/OCT-2022	GOOD / SEALED
9	Pax Life Vest	P01074-101W	17060500025	28/OCT-2022	GOOD / SEALED
10	Pax Life Vest				
11	Pax Life Vest				
12	Pax Life Vest				
13	First Aid Kit	AMC 1 NCO, 10EA 145	LI110820D	31/AUG-2023	GOOD / SEALED
14	Crash Axe Installed	303, 813, 71, 112	NSW	NEXT INSP	GOOD / LOCKED
15	Fire Extinguisher	BAS101SR-5	113254	18/NOV-2022	GOOD / PINEP
16	Life Raft (If Installed)	N/A	N/A	N/A	N/A
17	Survival Kit (If Installed)	100001-1	NSN	APRIL / 2024	GOOD / SEALED
OTHERS					





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# MAINTENANCE PROGRAM PILATUS PORTER PC6

## Appendix – Engine Ground Run Check Sheet

	<b>ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)</b>

<b>WORK ORDER NO.</b>		: WO / 001 - SNC / x1 / 2021	
<b>Aircraft Registration</b>	PK-SNC	<b>Aircraft Total Hours</b>	97 : 47
<b>Aircraft Serial No.</b>	10K6	<b>Aircraft Total Landings</b>	54
<b>Engine Serial No.</b>	PCE - PG0567	<b>Engine</b> (TSN) / TSO	97 : 47
<b>Propeller Serial No</b>		<b>Propeller</b> (TSN) / TSO	97 : 47
<b>Ambient Temp</b>	34. °C	<b>FBP (Field Barometric Pressure)</b>	29 : 74 In.Hg
<b>Date</b>	05-DEC-2021	<b>Time</b>	07:50 UTC
<b>Mechanic / Engineer</b>	FEBRI H	<b>Authorized Engineer</b>	ARIS. K.
<b>Reason For Ground Run</b>		AFTER AIRCRAFT MAINTENANCE - 100 HRS.	

<b>Checks to be carried out. No:</b>	1 2 4 5 7 8 9 10 11 12 13 14 15 <i>JK</i>
--------------------------------------	---

### Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any of the following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Revision No. : 00  
SCA/TEK/1-004  
12 April 2021

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# MAINTENANCE PROGRAM PILATUS PORTER PC6

## Appendix – Engine Ground Run Check Sheet

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
1	ENGINE START		
	ITT (Troubleshoot if More Than 925°C)	Max. 1090 °C	533 °C
	Cabin Heat	OFF	✓ OK?
	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	52.4 % Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi ✓	✓ OK?
	ITT		525 °C
2	Oil Pressure		90 psi
	Oil Temperature		67 °C
	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	1990 rpm
	Py Disconnected		% Ng
	Py Connected		91 % Ng
3	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
4	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	1 mm
	Minimum Pitch in Flight		
5	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
	FCU Maximum Governing Speed (Ng)	97.1 % Ng	97 % Ng
	(Trim stop deployed)		



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## Appendix – Engine Ground Run Check Sheet

NO.	CHECK	TARGET	ACTUAL
7	<b>Engine Performance</b> Target Torque Pressure Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr) Target Ng Maximum ITT	Ref: AMM 71-00-00 41 psi 342.165 / lb/hr 95.5% % Ng 702 °C	41.5 psi 51.45 GAL lb/hr 94.2 % Ng 591 °C
8	<b>Reverse Power Setting</b> Np Torque	1880 - 1925 rpm (85.5 - 87.5 %) psi	1890 rpm 24 psi
9	<b>Propeller Overspeed Governor</b> Test Lever Selected to: TEST NORMAL	1880 - 1920 rpm (85.5 - 87.3 %) 1980 - 2000 rpm (90.0 - 90.9 %)	1880 rpm rpm
10	<b>Acceleration</b> 64 % – 90 % Ng <b>Deceleration</b> 85% to 60% Ng or low idle speed (Whichever comes first)	2.5 – 4 secs Maximum 6-12 sec (Dependent upon altitude)	3 secs 4 secs altitude (kFt)
11	<b>Manual Override (MOR)</b> (Aircraft with SB 164) Use Toggle Switch In Small Increment (REF. to WARNINGS and CAUTIONS in Check 11)	Increase to 15% above Idle (Max Increase less than 4 % per Second) Decrease To Idle (Max Decrease less Than 4% per Second)	✓ OK? ✓ OK?
12	<b>Oil Pressure</b>	80 -100 psi	89 psi
13	<b>Generator (Ref. 24-30-00)</b>	Online by 60% Ng	% Ng
14	<b>Suction (High Idle)</b>	4.5 – 5.2 in. Hg	N/A in. Hg
15	<b>Engine Rundown Time After Stop</b>	MIN 30 secs	33 secs
<b>Additional</b>			
<b>Generator Check (High Idle Under Load)</b>		27.75 – 28.25 VDC	28.1 VDC
<b>After Engine Run</b>			
<b>Check Eng. For Signs of Fuel/Oil/Air Leaks</b>		NO LEAKS FOUND	✓ OK?
<b>Safety All Screws, Bolts, Locknuts as Req.</b>			✓ OK?