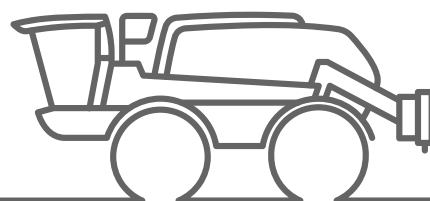




Maintenance manual

Self-propelled field sprayer

Pantera 7004



SmartLearning



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Initial operation

1

CMS-T-00014676-A.1

Date of initial operation	Handover check performed	Yes	No
		<input type="checkbox"/>	<input type="checkbox"/>
Procedure no.:	Document case present	<input type="checkbox"/>	<input type="checkbox"/>
Operating hours (engine)	Initial instruction has occurred	<input type="checkbox"/>	<input type="checkbox"/>
Supporting dealer	Service consultant, dealer		
Phone	Phone		
Date, signature, stamp of the dealer			

CMS-I-00009326



CMS-I-00009327

Technical data

2

CMS-T-00014678-B.1

2.1 Operating liquids

CMS-T-00014562-C.1

<p>Fuel</p> <p>Diesel:</p> <ul style="list-style-type: none">• DIN 51628 or EN 590 with sulphur content up to max. 10 mg/kg• ASTM D 975 grade 1-D S15 or ASTM D 975 grade 2-D S15 with sulphur content up to max. 15 mg/kg <p>Light heating oil:</p> <ul style="list-style-type: none">• According to EN 590 with sulphur content up to max. 10 mg/kg	<p>290 l</p>
Fuel, with auxiliary diesel tank	400 l
DEF	20 l
<p>Engine oil for Deutz engine</p> <p>Permitted Deutz quality classes:</p> <ul style="list-style-type: none">• DQC III LA• DQC IV LA <p>The viscosity class depends on the ambient temperature, refer to the operating manual for the Deutz engine.</p>	<p>Approx. 23 l</p> <p>Standard: SAE 15W 40 at -20 °C to 40 °C</p>
Cooling liquid for Deutz engine	Approx. 38 l
<p>Hydraulic oil in the hydraulic system</p> <p>Purity class:</p> <ul style="list-style-type: none">• 9 according to NAS 1638• 18/16/13 according to ISO 4406/1999 <p>Viscosity index of at least 150</p>	<p>Approx. 120 l in the hydraulic oil tank</p> <p>Approx. 180 l in the overall system</p> <p>Finke AVIATICON HV 46</p>

Wheel transmission oil	Approx. 1.2 l EP oils MIL-L-2105 C or API GL5, SAE 80 W/90
Air conditioning system	870 g Refrigerant R1234YF
	5 g Refrigerant oil PAO AA1 ISO68
	25 g UV leak detector
Oil for the spray liquid pump	2 x 1.7 l SAE 15W 40

Cooling system protective agent	
Brand	Designation
Deutz AG	TN 0101 7990 5 l
	TN 0101 7991 20 l
ARAL	Antifreeze Extra
AVIA	Antifreeze APN
BASF	Glysantin G48 Protect Plus
Castrol	Castrol Antifreeze NF
Mobil	Mobil Antifreez Extra
Shell	GlycoShell
TOTAL	Glacelf MDX

Wheel gear oils		
Brand	Mineral	Synthetic
Shell	SpiraxA	Transaxle 75W90
Agip	Rotra MP 80W90	Gear Synth 75W90
Aral	EP Plus 80W90	Hyp Syn 75W90
BP	Energear Hypo 80W90	Energear SHX-M 75W90

2.2 Lubricating greases

CMS-T-00015243-A.1

Lithium saponified with EP additive, NLGI Class 2

Brand	Designation
Agip	GR MU EP 2
Aral	Aralub HLP 2
Avia	Avialith 2 EP
BP	Energrease LS 2- EP 2
Castrol	Spheerol AP 2

Brand	Designation
Esso	Beacon EP 2
Fina	Marson EPL2A
Fuchs	Renolit FLM 2
Mobil	Mobililux EP 2
Shell	Alvania EP 2

Maintenance schedule

3

CMS-T-00014712-C.1

After the first 50 operating hours

Replace the pressure filter of the hydraulic system

Change the oil in the wheel gears

Replace the return filter in the oil tank

every 3 months

Replace the Category 4 cab air filter

Check the coolant hoses

Every 500 operating hours / every 6 months

Perform maintenance measures E30 on the Deutz engine

Replace the return filter in the oil tank

Clean or replace the circulation filter

Replace the hydraulic pump pressure filter

Every 1000 operating hours / every 12 months

Perform maintenance measures E40 on the Deutz engine

Check the engine monitoring and warning system

Replace the fuel filter, fuel pre-filter, lubricant and lubricant filter

Change the oil in the wheel gears

Check the hydraulic accumulator

Change the hydraulic oil

Check the hydraulic system

Check hoses that convey spray liquid

Change the oil for the spray liquid pump

Check the valves of the spray liquid pump

Check the piston diaphragm of the spray liquid pump

Check the wheel bearing

Check the pressure of the diaphragm accumulator with the spring suspension lowered: 45 bar at the front and 30 bar at the rear

Every 2000 operating hours / every 2 years

Perform maintenance measures E50 on the Deutz engine

Replace the dry air filter

Check the air conditioning system

Every 2000 operating hours / every 3 years

Replace the filter insert for the SCR feed pump

Every 4000 operating hours / every 4 years

Perform maintenance measures E55 on the Deutz engine

Replace the cooling system protective agent

Every 6000 operating hours / every 4 years

Perform maintenance measures E60 on the Deutz engine

Every 9000 operating hours / every 4 years

Perform maintenance measures E70 on the Deutz engine

As required

Replace the diesel particle filter

Replace the piston diaphragm of the spray liquid pump

Replace the wheels or tyres

Scope of maintenance

4

CMS-T-00014680-B.1

4.1 Scope of maintenance after the first 50 operating hours

CMS-T-00014681-B.1

Scope of maintenance After the first 50 operating hours		Next inspection	
Date	Procedure no.:		Installer
Operating hours			Area efficiency
Change the oil in the wheel gears	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Hydraulic filter replaced
			Yes <input type="checkbox"/>
			No <input type="checkbox"/>
Motor and oil filter replaced	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Air filter replaced
			Yes <input type="checkbox"/>
			No <input type="checkbox"/>
<div>Date, signature, stamp of the dealer</div>			

CMS-I-00009372

4.2 Scope of maintenance according to interval

CMS-T-00014682-A.1

Scope of maintenance		Next inspection	
Date	Procedure no.:	Installer	
Operating hours		Area efficiency	
Motor and oil filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>	Air filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Deutz engine valves set	Yes <input type="checkbox"/> No <input type="checkbox"/>	Hydraulic pressure and suction filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Hydraulic oil replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>	Other	Yes <input type="checkbox"/> No <input type="checkbox"/>
<hr/> <p style="text-align: center;">Date, signature, stamp of the dealer</p>			

CMS-I-00009371

Scope of maintenance		Next inspection	
Date	Procedure no.:	Installer	
Operating hours		Area efficiency	
Motor and oil filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>	Air filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Deutz engine valves set	Yes <input type="checkbox"/> No <input type="checkbox"/>	Hydraulic pressure and suction filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Hydraulic oil replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>	Other	Yes <input type="checkbox"/> No <input type="checkbox"/>
<hr/> <p style="text-align: center;">Date, signature, stamp of the dealer</p>			

CMS-I-00009371

4 | Scope of maintenance

Scope of maintenance according to interval

Scope of maintenance			Next inspection	
Date	Procedure no.:		Installer	
Operating hours			Area efficiency	
Motor and oil filter replaced	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Air filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Deutz engine valves set	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Hydraulic pressure and suction filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
Hydraulic oil replaced	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Other	Yes <input type="checkbox"/> No <input type="checkbox"/>
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CMS-I-00009371

Scope of maintenance			Next inspection	
Date	Procedure no.:		Installer	
Operating hours			Area efficiency	
Motor and oil filter replaced	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Air filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
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CMS-I-00009371

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CMS-I-00009371

4 | Scope of maintenance

Scope of maintenance according to interval

Scope of maintenance			Next inspection	
Date	Procedure no.:		Installer	
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Motor and oil filter replaced	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Air filter replaced	Yes <input type="checkbox"/> No <input type="checkbox"/>
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Scope of maintenance according to interval

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Operating hours			Area efficiency	
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Date, signature, stamp of the dealer				

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Scope of maintenance according to interval

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CMS-I-00009371



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