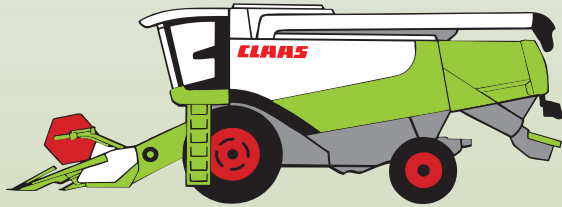


# **CLAAS**



**LEXION 580 – 510**

## **Technical Systems**

## **Hydraulic System**

## ***SERVICE & PARTS***



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**1****Hydraulic System  
- General**

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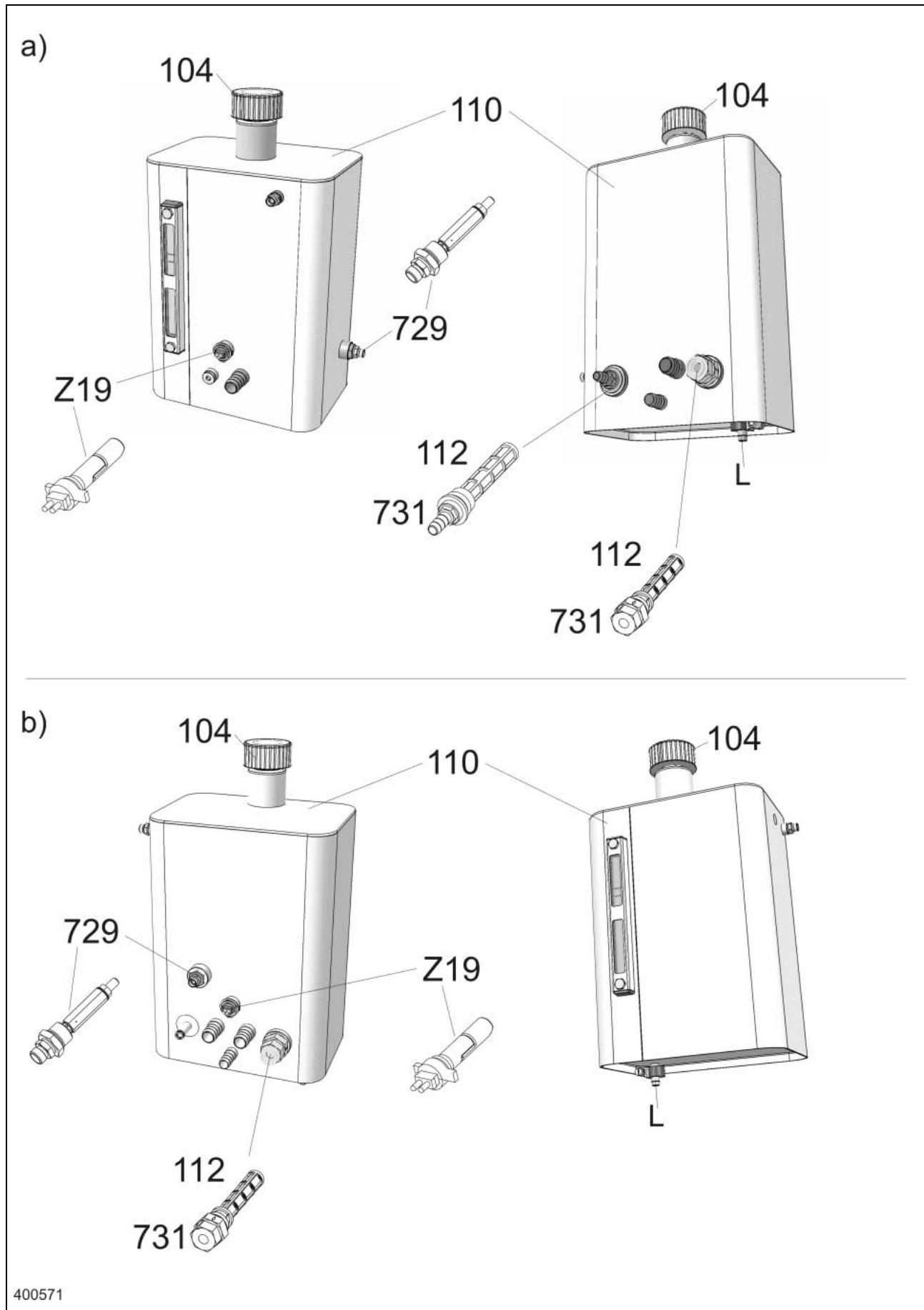


## 1.1

### Hydraulic System - General

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1.1.1 Oil Tank (entire hydraulic system)



400571



**Key to diagram:**

104	Vent opening
110	Oil tank
112	Return filter (with return line valve)
729	Low-pressure hydraulic system pressure relief valve ..... 19 <sup>+4</sup> bar
731	Return line valve (non-return valve)
Z19	Hydraulic oil level actual value switch (min.)
a)	Tank version for LEXION 570-510
b)	Tank version for LEXION 580
L)	Oil drain

## Oil specifications:

## Filling quantities:

Hydraulic system, total	= approx. 70 litres (depending on components fitted)
Hydraulic oil tank	= approx. 20 litres

## Oil change:

Once a year or after 500 operating hours.  
Check oil only with cutterbar cylinders retracted!

## Oil filter:

Working hydraulics	= Sieve filter in tank (100 µm)
Steering	= Sieve filter in tank (100 µm)
Ground drive	= Filter cartridge (10 µm)

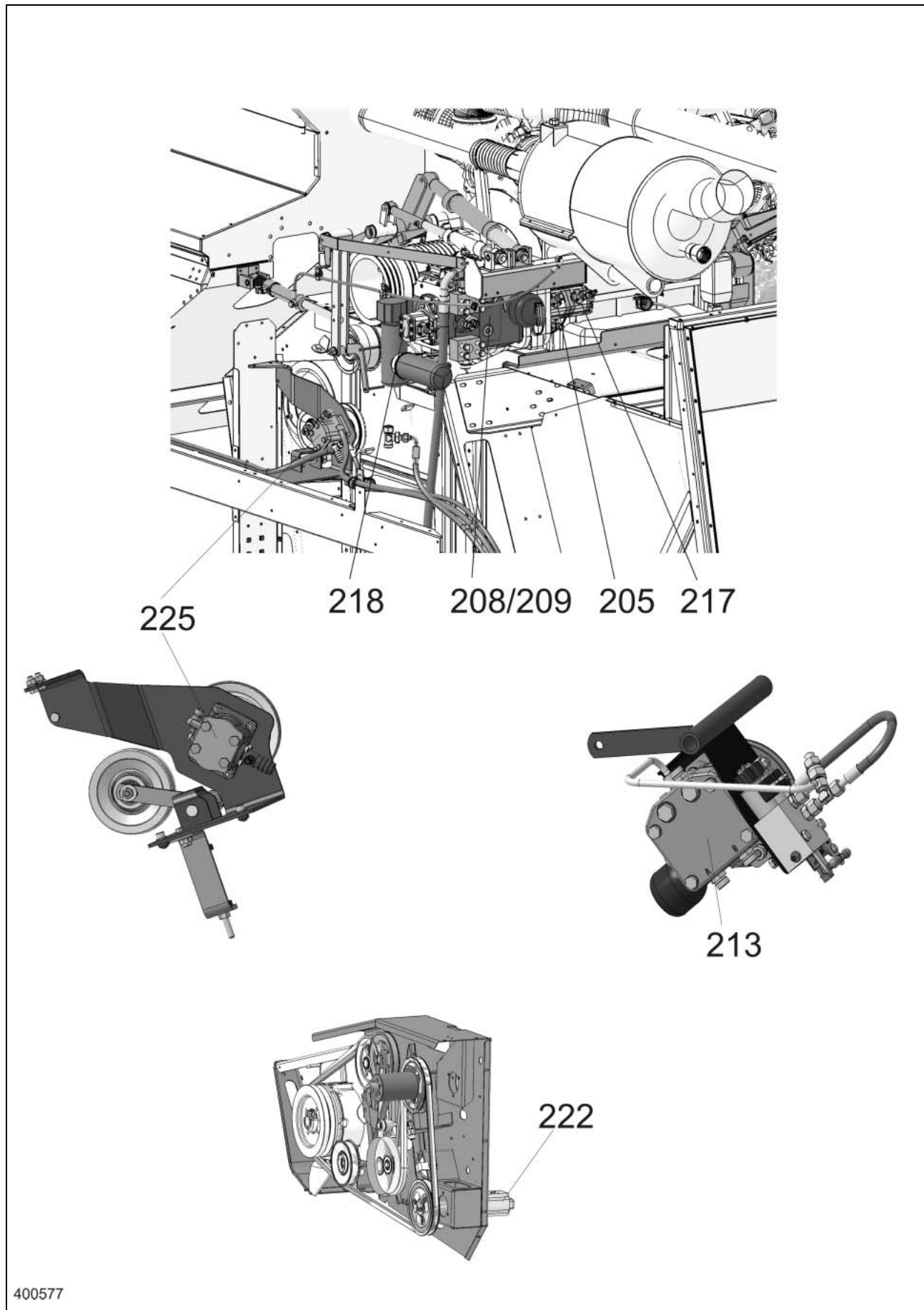
Change filters once a year or after 500 operating hours.

## Oil pressure:

Working hydraulics	= 180 <sup>+15</sup> bar	Circulation press.	3 <sup>+6</sup> bar
Steering	= 160 <sup>+15</sup> bar	Circulation press.	10 <sup>+7</sup> bar
Low-pressure hydr. circuit	= 19 <sup>+4</sup> bar		
Reel drive	= 160 <sup>+15</sup> bar		
Rotary chaff screen	= 150 bar		
Ground drive high pressure	= 420 <sup>+30</sup> bar		
Ground drive feed pressure	= 30 <sup>+2</sup> bar		
Chaff spreader / straw spreader	= 150 <sup>+15</sup> bar		
Uni-spreader fan	= 55 <sup>+15</sup> bar		

Note: The figures above refer to measurements made at diesel engine rated speed and a hydraulic oil temperature of approx. 60°C.

1.1.2 Hydraulic Pumps



400577

**Key to diagram:**

205	Working hydraulics pump
208/209	Ground drive pump (with ground drive feed pump)
213	Reel drive pump
217	Rotary chaff screen pump
218	Steering hydraulics pump
222	Rape cutter drive pump
224	Chaff / straw spreader drive pump
225	Uni-spreader fan drive pump
243	Radial spreader disc drive pump
247	Chaff spreader fan pump

**Working hydraulics**

LEXION 580 - 540	Drive $n_{max}$ = 2640 rpm Drive $n_{rated}$ = 2539 rpm Volumetric displacement =	48 l/min at 19 cm <sup>3</sup>
LEXION 530 - 510	Drive $n_{max}$ = 3004 rpm Drive $n_{rated}$ = 2889 rpm Volumetric displacement =	40 l/min at 14 cm <sup>3</sup>

**Steering hydraulics**

LEXION 580 - 540	Drive $n_{max}$ = 2640 rpm Drive $n_{rated}$ = 2539 rpm Volumetric displacement =	28 l/min at 11 cm <sup>3</sup>
LEXION 530 - 510	Drive $n_{max}$ = 3004 rpm Drive $n_{rated}$ = 2889 rpm Volumetric displacement =	23 l/min at 8 cm <sup>3</sup>

**Uni-spreader fan**

LEXION 580	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	14 l/min at 5.5 cm <sup>3</sup>
------------	---	---------------------------------

**Chaff spreader**

LEXION 570	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	20 l/min at 8 cm <sup>3</sup>
LEXION 530 - 510	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	20 l/min at 8 cm <sup>3</sup>

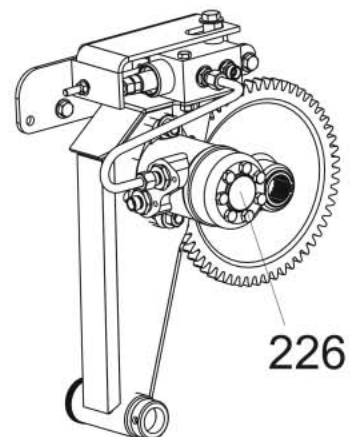
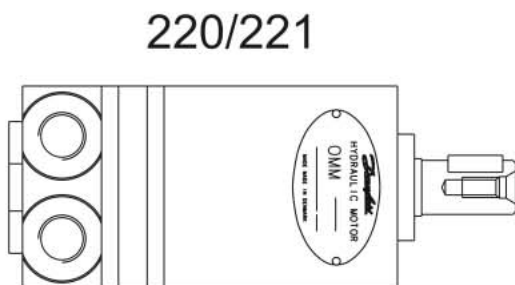
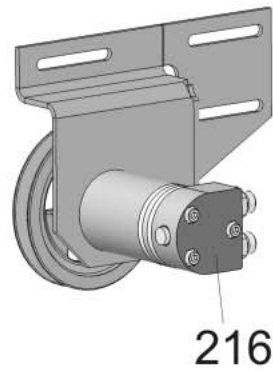
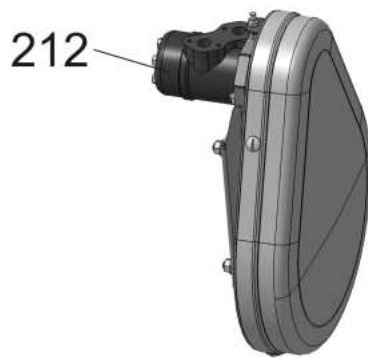
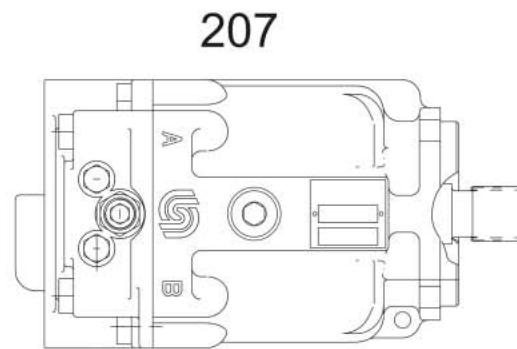
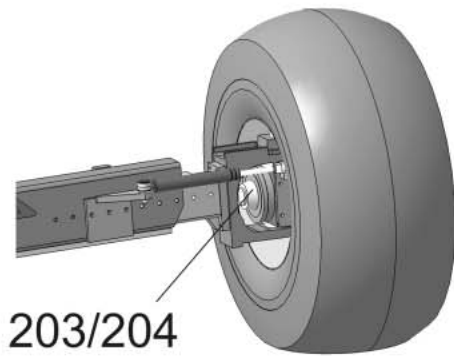
**Straw spreader**

LEXION 570 - 540	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	20 l/min at 8 cm <sup>3</sup>
LEXION 530 - 510	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	20 l/min at 8 cm <sup>3</sup>

<b>Radial spreader</b>	LEXION 570	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	80 l/min at 32 cm <sup>3</sup>
<b>Chaff spreader fan</b>	LEXION 570	Drive $n_{max}$ = 2623 rpm Drive $n_{rated}$ = 2522 rpm Volumetric displacement =	35 l/min at 14 cm <sup>3</sup>
<b>Reel drive</b>	LEXION 580 - 510	Drive $n_{max}$ = 2912 rpm Drive $n_{rated}$ = 2800 rpm Volumetric displacement =	max. 42 l/min at 15 cm <sup>3</sup>
<b>Rotary chaff screen drive</b>	LEXION 580 - 540	Drive $n_{max}$ = 2640 rpm Drive $n_{rated}$ = 2539 rpm Volume =	15 l/min at 6 cm <sup>3</sup>
	LEXION 530 - 510	Drive $n_{max}$ = 3004 rpm Drive $n_{rated}$ = 2889 rpm Volumetric displacement =	17 l/min at 6 cm <sup>3</sup>
<b>Ground drive</b>	LEXION 580 - 540	Drive $n_{max}$ = 2640 rpm Drive $n_{rated}$ = 2539 rpm Volumetric displacement =	330 l/min at 130 cm <sup>3</sup>
	LEXION 530 - 510	Drive $n_{max}$ = 3004 rpm Drive $n_{rated}$ = 2889 rpm Volumetric displacement =	288 l/min at 100 cm <sup>3</sup>



1.1.3 Hydraulic Motors



400579

**Key to diagram:**

203/204	4 -Trac radial piston motor, left / right
207	Ground drive fixed displacement motor
212	Reel drive motor
216	Rotary chaff screen drive motor
226	Front attachment reverser drive motor
220/221	Rape cutter drive left / right motor

**4-Trac (All-wheel drive)**

LEXION 580 - 540	Volume	=	1250 cm <sup>3</sup>
LEXION 530 - 510	Volume	=	1250 cm <sup>3</sup>

**Ground drive**

LEXION 580	Drive n <sub>max</sub>	=	3436 rpm
	Drive n <sub>rated</sub>	=	3304 rpm
	20 km/h	=	2326 rpm
LEXION 580 MTS	20 km/h	=	2659 rpm
	Volume	=	100 cm <sup>3</sup>
	LEXION 570 - 540	Drive n <sub>max</sub>	=
Drive n <sub>rated</sub>		=	3301 rpm
20 km/h		=	2465 rpm
Volume		=	100 cm <sup>3</sup>
LEXION 530 - 510	Drive n <sub>max</sub>	=	3004 rpm
	Drive n <sub>rated</sub>	=	2889 rpm
	20 km/h	=	2094 rpm
	Volume	=	100 cm <sup>3</sup>

**Reel drive**

LEXION 580 - 510	Volume	=	160 cm <sup>3</sup>
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**Rotary chaff screen drive**

LEXION 580 - 510	Volume	=	12.5 cm <sup>3</sup>
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**Reversing drive**

LEXION 570 - 510	Volume	=	200 cm <sup>3</sup>
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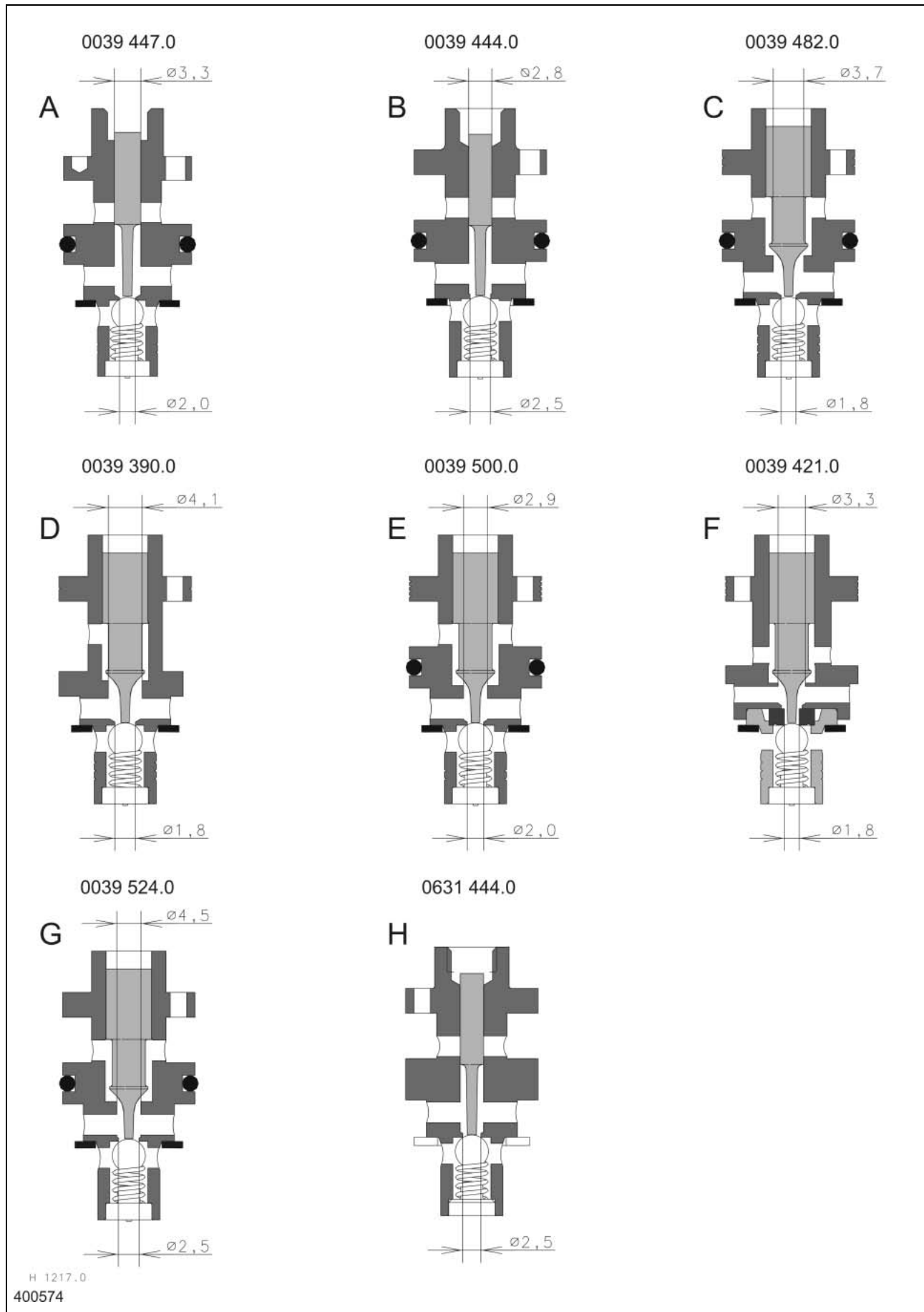
**Chaff spreader**

LEXION 570 - 510	Volume	=	19 cm <sup>3</sup>
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**Straw spreader**

LEXION 570 - 510	Volume	=	19 cm <sup>3</sup>
------------------	--------	---	--------------------

1.1.4 Valve Inserts





**Valve Inserts:**

Item	Application	Marking at top	Marking at bottom	Spare part no.
A	Autopilot	None	2	0039 447.0
B	Threshing drum fast Concave wide (only LEXION 580/570) Feeder speed fast Rotor speed fast (only LEXION 580/570) Swing grain tank unloading tube in/out Fold straw guide plate / uni-spreader Lock / unlock cutterbar springs Reel forward/backward Raise reel Extend/retract Vario table Cutterbar cross levelling Reverse pilot valve Fold cutterbar in/out Grain tank unloading aid	None	None	0039 444.0
C	Quick stop	2	3	0039 482.0
D	Lower reel	1	3	0039 390.0
E	Concave narrow / wide (only LEXION 560-510)	4	2	0039 500.0
F	Threshing drum slow Feeder slow Concave narrow (only LEXION 580/570) Rotor slow (only LEXION 580/570)	3	3	0039 421.0
G	Uni-spreader control (only Lexion 580)	None	None	0039 524.0
H	Fold maize picker Extend/retract snapping plates	None	None	0631 444.0

**Note:** When removing and replacing the valve inserts A - G, the sheet gasket **0084 076.0** (black) must also be replaced.

When removing and replacing valve insert H, the sheet gasket **0094 001.0** (copper) must also be replaced.

In case of doubt, always use the sheet gasket **0084 076.0** (black)!



## 1.2

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